CITY OF GREEN COVE SPRINGS
CITY COUNCIL REGULAR SESSION

321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA
TUESDAY, JULY 16, 2024 – 7:00 PM

Anyone wishing to address the city council regarding any topic on this agenda is requested to complete a card available at the city clerk's desk. Speakers are respectfully requested to limit their comments to three (3) minutes.

The city council prohibits the use of cell phones and other electronic devices which emit an audible sound during all meetings with the exception of law enforcement, fire and rescue or health care providers on call. Persons in violation may be requested to leave the meeting

AGENDA

Invocation & Pledge of Allegiance to the Flag - **Chaplain Joseph Williams, CCSO**

Roll Call

Mayor to call on members of the audience wishing to address the Council on matters not on the Agenda.

AWARDS & RECOGNITION

1. Police Department Promotion ***Chief Guzman***
   Sergeant Nick Rulon

PRESENTATIONS

2. FMPA - July 2024 ***Bob Page***

PUBLIC HEARINGS

3. Second and Final Reading of Ordinance O-01-2024, regarding the Large-Scale Future Land Use Map Amendment for property located at the Southeast corner of US 17 and SR 16 for approximately 58.12 acres of parcel #016451-000-00 and a portion of parcel #016451-003-00. Future Land Use Amendment: from: Mixed Use to: Industrial ***Michael Daniels***

4. Second and Final Reading of Ordinance O-02-2024, regarding the Large-Scale Future Land Use Text Amendment for property located at the Southeast corner of US 17 and SR 16 for approximately 58.12 acres of parcel #016451-000-00 and a portion of parcel #016451-003-00. Future Land Use Amendment: from: Mixed Use to: Industrial ***Michael Daniels***

5. Second and final reading of Ordinance O-10-2024 PUD Rezoning request for property located at the Southeast corner of US 17 and SR 16 for approximately 112 acres of parcel #016451-003-00 and 016451-000-00. Zoning Amendment: from: C-2, General Commercial to: PUD, Planned Unit Development. ***Michael Daniels***

CONSENT AGENDA

All matters under the consent agenda are considered to be routine by the city council and will be enacted by one motion in the form listed below. There will be no separate discussion on these items. If discussion is desired, that item will be removed from the consent agenda and will be considered separately. Backup documentation and staff recommendations have been previously submitted to the city council on these items.

6. City Council approval of the updated ACL 2025 Docking Schedule - Additional dated added to list. ***Kimberly Thomas***

7. City Council review of a Site Development Plan for the Clay County Economic Development Building at 633 N Orange Avenue. ***Michael Daniels***

8. City Council approval of an Interlocal Agreement Between Clay County and Green Cove Springs Community Redevelopment Agency. ***Michael Daniels***

9. City Council approval of Pay Application #3- Walnut Street Improvements, to provide roadway, utility, pedestrian and streetscape improvements on Walnut St from Palmetto Ave to the River in the amount of $709,763.39 to CGC, Inc. ***Greg Bauer***

10. City Council approval of Pay Application #3 for the West Street CDBG Stormwater Improvements and Highland Sidewalk Improvements to Besch and Smith in the amount of $913,522.06. ***Greg Bauer***

11. City Council approval of Minutes. ***Erin West***
    Regular Sessions: 5/21/2024 and 6/18/2024
    Special Session: 6/26/2024

12. City Council approval of the Sawcross (Tender Contractor) Pay Request #2, in the amount of $788,500.00, for construction of the Harbor Road Advanced Wastewater Treatment Facility (HRAWWTF), as part of the Florida Department of Environmental Protection (FDEP), State Revolving Fund (SRF), Harbor Road Water Reclamation Facility (WRF) Expansion, Phase 2, SRF Agreement No. WW1000420. ***Scott Schultz***

13. City Council approval of the School Safety Interlocal Agreement among the School Board of Clay County, Florida; the City of Green Cove Springs, Florida; and the Green Cove Springs Police Department. ***Kimberly Thomas***

14. City Council approval of the Final Plat for phase 1 of the Rookery Development for a portion of parcel #: 016515-008-00. ***Michael Daniels***

15. City Council approval of Change Order #1 to contract with CGC, Inc for Walnut Street Improvements in the additive amount of $32,232.00, bringing the total contract amount to $3,204,979.00. ***Mike Null***

COUNCIL BUSINESS

16. Consider adoption of Resolution No. R-09-2024, a Resolution estimating the cost of Stormwater Management Services provided by the City, determining certain tax parcels will be benefited

thereby and related issues, including setting a Public Hearing for Final Proposed Stormwater Assessments. ***L. J. Arnold III***

17. Consider adoption of Resolution No. R-10-2024, a Resolution relating to collection of Solid Waste and Recyclable Material within the Magnolia West Subdivision, including setting a Public Hearing for Final Proposed Solid Waste Service Assessments. ***L. J. Arnold III***

18. City Council discussion of proposed rates for Water, Wastewater, Reclaimed Water, Electric, Solid Waste and Stormwater for Fiscal Year 2025. ***Mike Null***

19. City Council designation of Voting Delegate for the Annual Florida League of Cities Conference in Hollywood, Florida on August 15-17, 2024. ***Erin West***

20. City Manager & City Attorney Reports / Correspondence

21. City Council Reports / Correspondence

Adjournment

The City Council meets the first and third Tuesday of each month beginning at 7:00 p.m., unless otherwise scheduled. Meetings are held in City Hall at 321 Walnut Street. Video and audio recordings of the meetings are available in the City Clerk's Office upon request.

City may take action on any matter during this meeting, including items that are not set forth within this agenda.

Minutes of the City Council meetings can be obtained from the City Clerk's office. The Meetings are usually recorded, but are not transcribed verbatim for the minutes. Persons requiring a verbatim transcript may make arrangements with the City Clerk to duplicate the recordings, if available, or arrange to have a court reporter present at the meeting. The cost of duplication and/or court reporter will be at the expense of the requesting party.

Persons who wish to appeal any decision made by the City Council with respect to any matter considered at this meeting will need a record of the proceedings, and for such purpose may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based. The City is not responsible if the in-house recording is incomplete for any reason.

ADA NOTICE

In accordance with Section 286.26, Florida Statutes, persons with disabilities needing special accommodations to participate in this meeting should contact the City Clerk's office no later than 5:00 p.m. on the day prior to the meeting.

PUBLIC PARTICIPATION:

Pursuant to Section 286.0114, Florida Statutes, effective October 1, 2013, the public is invited to speak on any "proposition" before a board, commission, council, or appointed committee takes official action regardless of whether the issue is on the Agenda. Certain exemptions for emergencies, ministerial acts,

etc. apply. This public participation does not affect the right of a person to be heard as otherwise provided by law.

EXPARTE COMMUNICATIONS

Oral or written exchanges (sometimes referred to as lobbying or information gathering) between a Council Member and others, including staff, where there is a substantive discussion regarding a quasi-judicial decision by the City Council. The exchanges must be disclosed by the City Council so the public may respond to such exchanges before a vote is taken.

FMPA Report

July 2024

Rate Call

The average price of natural gas for the month was $2.83. Daily natural gas prices for the past month have begun to move upward; they have ranged from $2.49 to 3.10. A very warm June has drawn down storage levels to the historical upper limit.

Natural gas accounted for 80% of the generation mix. Coal was 6%; nuclear was 4%. Solar generation was 1%.

The peak for the month was 29 May at 5 PM.

Board of Directors

The Board approved the FY25 budgets for small projects and the Agency allocation. Additionally, Juneteenth was approved as an official FMPA holiday.

Information items covered a solar project update, Stanton 1& 2 negotiations update and a regulator compliance update.

Executive Committee

The Executive Committee approved the appointment of Lynn Tejeda as the Chairperson for the Solar III project, the FY25 All Requirements Project budget and the natural gas price stability targets for fourth quarter 2024.

Information items included a solar project update, regulator compliance update and a Florida Municipal Power Pool strategic effort update.

Energy Resource

2024 Statistical Review of World Energy

8c– Approval of Natural Gas Price Stability Price Targets for Quarter 4 FY 2024

Executive Committee

June 20, 2024

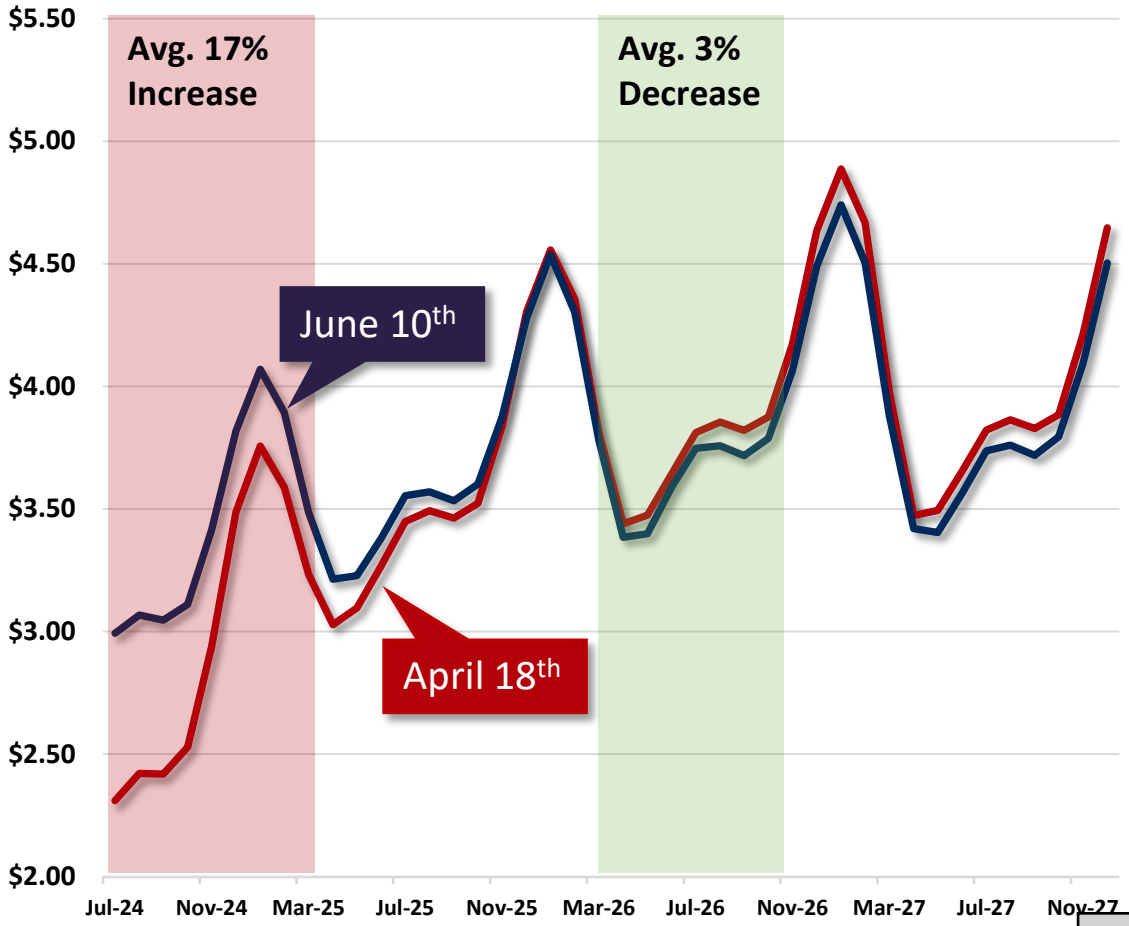
Review of Power Price Management Efforts

- **Quarterly Review and Alignment:**
  - Provide comprehensive reviews of current positions and market dynamics
  - Actively review alignment with EC's strategic rate goals
  - Define monthly percentages to manage risk by period, ensuring avoidance of overexposure
  - Review actions whenever minimum thresholds were met
  - Review discretionary actions after minimum thresholds were met

Market Factors Driving Changes Since April

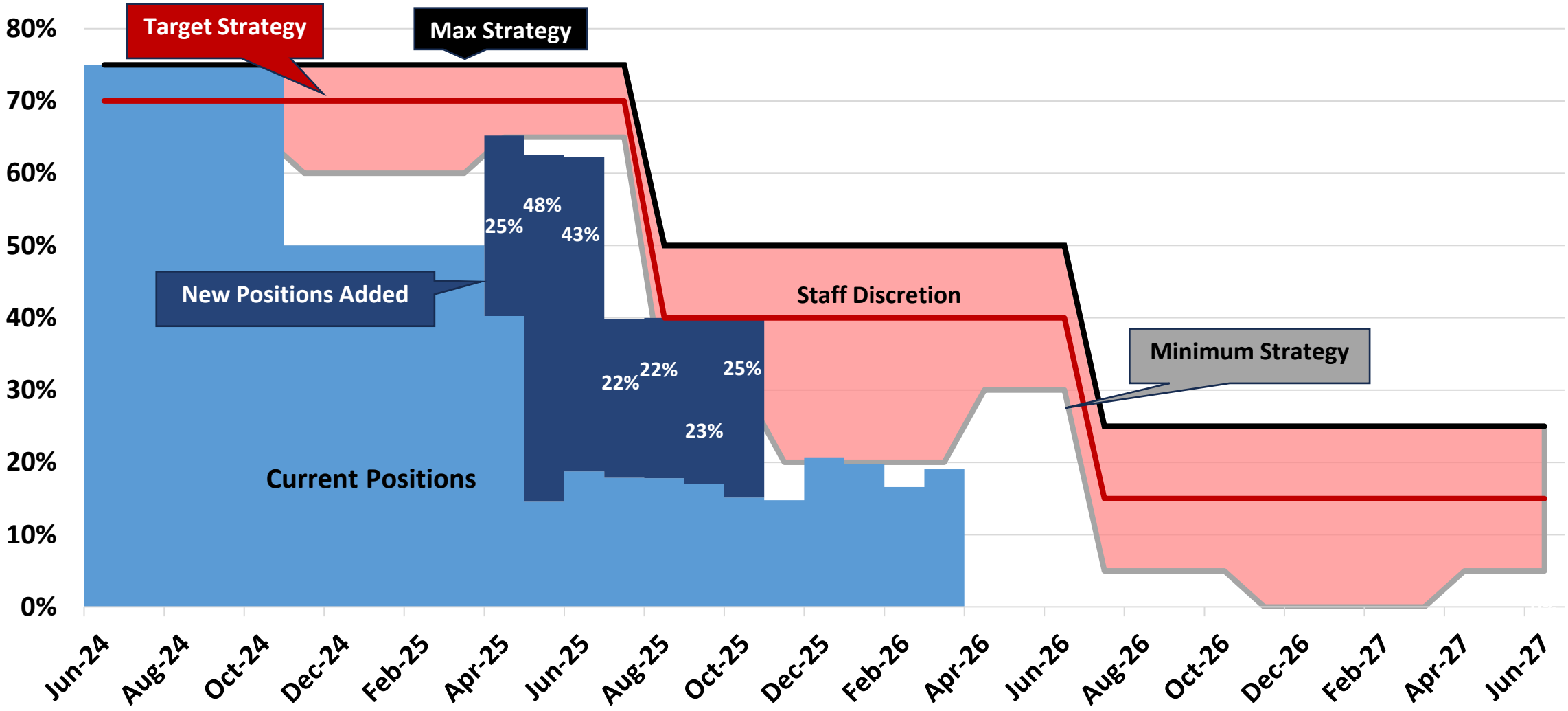
Forward Curve Flatting Due to Several Factors

- Supply Down 2 BCF/day
- LNG up 2 Bcf/day
  - EU price spike due to unplanned outages
  - Russia's declining imports
- Over 115 million U.S. households facing extreme heat
- Despite 5-year high storage levels, injection is down as compared to last year



Current Position as of June 1st

Positions were left under target to allow weighted averaging of fall positions



Monthly Breakdown of New Positions

All contracts added below EC approved $3.33 threshold

MONTH	MMBTU	PRICE	PERCENT ADDED	TOTAL SAVINGS
Apr-2025	600,000	$ 3.293	25%	$ 22,450
May-2025	1,450,000	$ 3.281	48%	$ 69,350
Jun-2025	1,575,000	$ 3.280	43%	$ 75,600
Jul-2025	700,000	$ 3.281	22%	$ 31,850
Aug-2025	747,500	$ 3.292	22%	$ 24,700
Sep-2025	712,500	$ 3.292	23%	$ 23,005
Oct-2025	717,500	$ 3.276	25%	$ 35,295
Total	**6,502,500**	**$ 3.285**		**$ 282,250**

FMPA MUNICIPAL POWER

Current EC Approved Rate Targets

Seasonal Pricing Targeting Rates

Summer Date Ranges	Target Gas Price ($/MMBtu)	Target Rate ($/MWh)
Apr 24 – Oct 24	N/A (75% Fixed)	
April 25 - Oct 25	$3.33	$73.30
April 26 - Oct 26	$3.50	$76.40

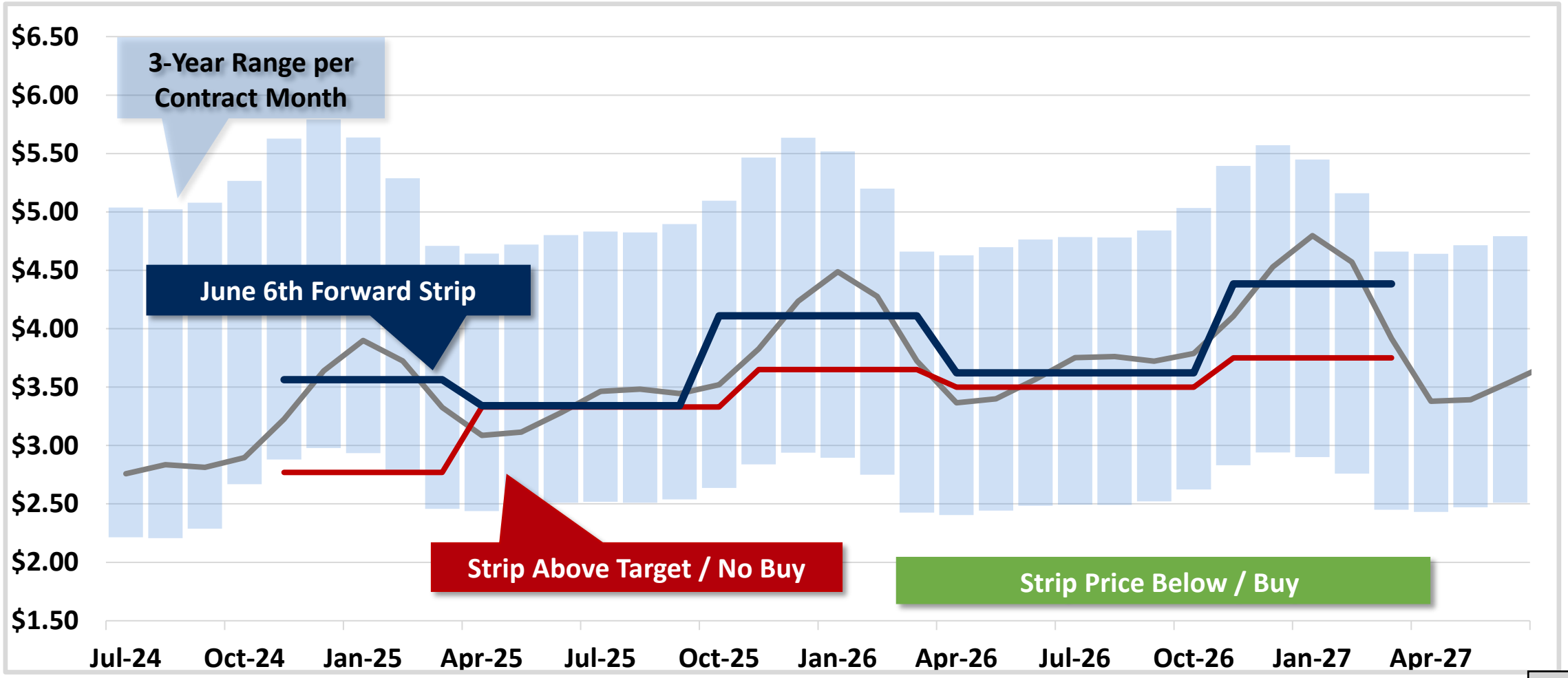
Winter Date Ranges	Target Gas Price ($/MMBtu)	Target Rate ($/MWh)
Nov 24 - Mar 25	$2.77	$82.37
Nov 25 - Mar 26	$3.65	$88.70
Nov 26 - Mar 27	$3.75	$89.60

Fiscal Year	Target Rate ($/MWh)
2024	$80.00
2025	$81.00
2026	$83.00

FMPA MUNICIPAL POWER

Setting Achievable Targets for Long-Term Rate Stability

No Current "Buy Signal" at this time



Revised Rate Projections Targets

Upward Movement Changing Pricing Targeting Rates

Summer Date Ranges	Target Gas Price ($/MMBtu)	Target Rate ($/MWh)
Apr 24 – Oct 24	N/A (75% Fixed)	
April 25 - Oct 25	$3.33	$73.30
April 26 - Oct 26	↑ $3.60 (+0.10)	↑ $76.90 (+$0.50)

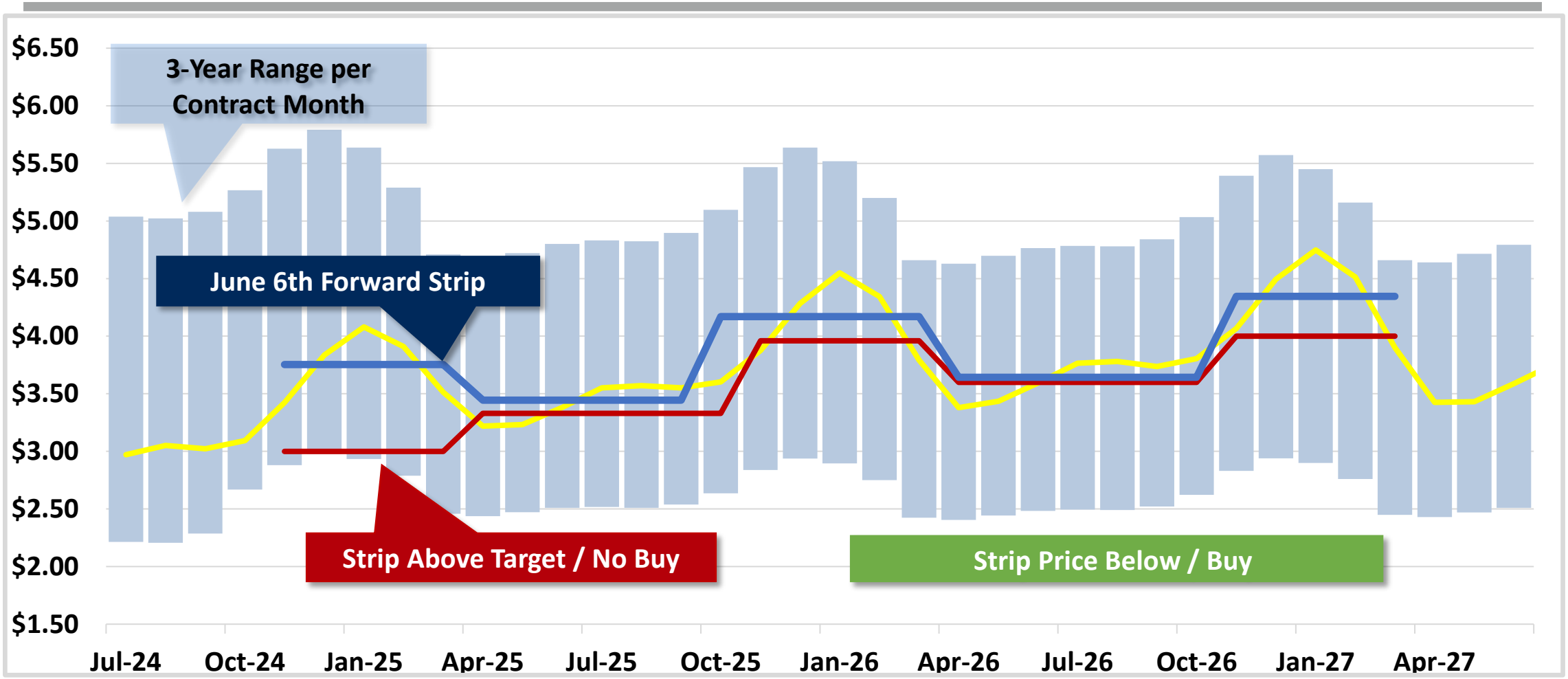
Winter Date Ranges	Target Gas Price ($/MMBtu)	Target Rate ($/MWh)
Nov 24 - Mar 25	↑ $3.00 (+$0.23)	↑ $82.37 ($1.14)
Nov 25 - Mar 26	↑ $3.96 (+$0.31)	↑ $90.20 (+$1.50)
Nov 26 - Mar 27	↑ $4.00 (+$0.25)	↑ $91.80 (+$2.20)

Fiscal Year	Target Rate ($/MWh)
2024	↑ $80.51 ($0.51)
2025	↑ $81.75 (+$0.75)
2026	↑ $84.35 (+$1.35)

FMPA MUNICIPAL POWER

Setting Achievable Targets for Long-Term Rate Stability

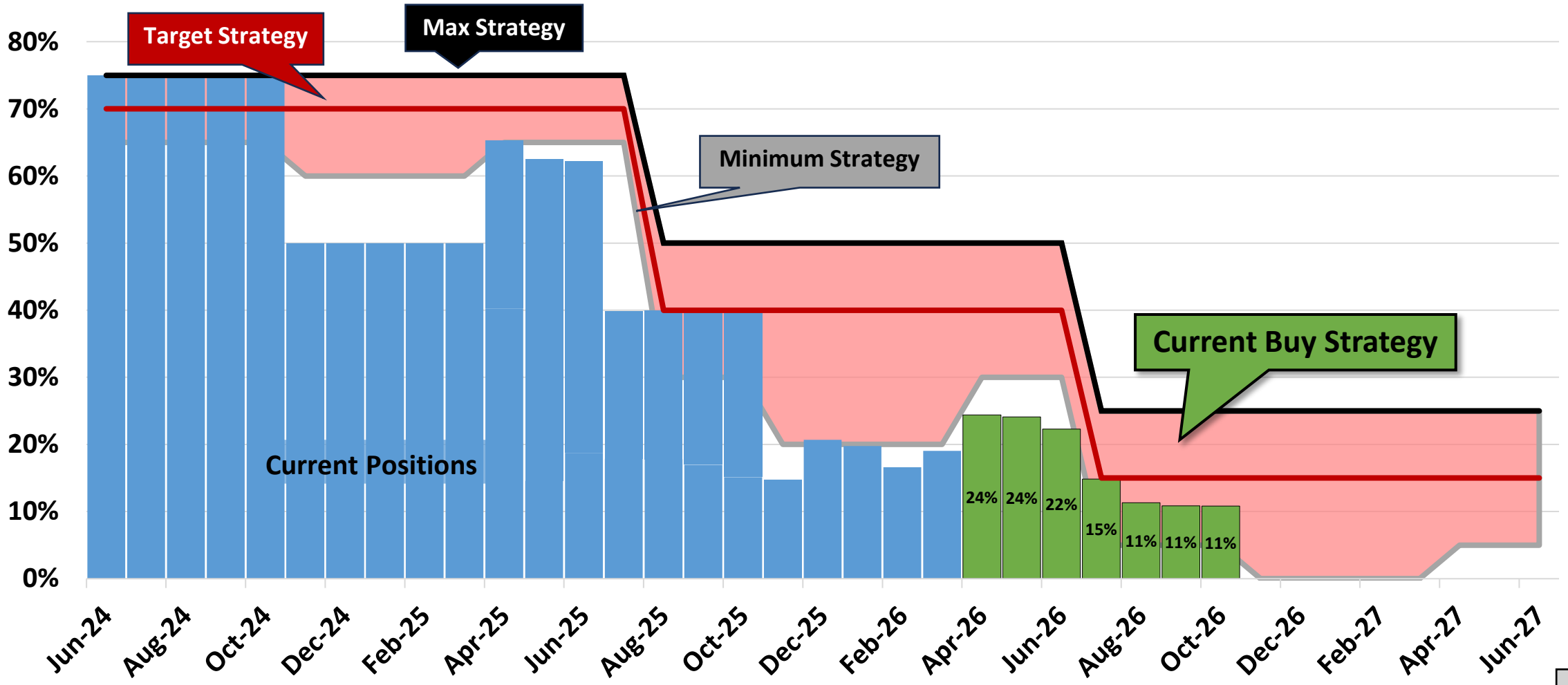
Weighted Average Creates Buying Opportunities for Summer Strips



FMPA MUNICIPAL POWER

Summer 2026 Targeted For Next Opportunity

Will Fill Gaps Once Full Summer Strip Becomes Available



FMPA MUNICIPAL POWER

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council **MEETING DATE:** June 18, 2024

FROM: Michael Daniels, AICP, Development Services Director

SUBJECT: Second and Final Reading of Ordinance O-01-2024, regarding the Large-Scale Future Land Use Map Amendment for property located at the Southeast corner of US 17 and SR 16 for approximately 58.12 acres of parcel #016451-000-00 and a portion of parcel #016451-003-00.

Future Land Use Amendment: from: Mixed Use

to: Industrial

PROPERTY DESCRIPTION

APPLICANT: David Smith, Louis L Huntley Enterprises **OWNER:** Louis Ward Huntley

PROPERTY LOCATION: 965 Leonard C Taylor Highway

PARCEL NUMBER: 016451-000-00

FILE NUMBER: FLUS-24-001

CURRENT ZONING*:* C-2 General Commercial

FUTURE LAND USE DESIGNATION*:* Mixed Use

SURROUNDING LAND USE

NORTH: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

SOUTH: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

EAST: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

WEST: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

BACKGROUND

The applicant has applied for a Future Land Use and Zoning Change for the subject property for the construction of industrial development. There is an existing building on the site that had been used for manufacturing plant which has been closed in 2010. However industrial businesses such as Woodford Plywood, Meever USA and Front Runner Boatworks have been located at this location as nonconforming industrial uses.

The property is surrounded by the HLM property on all sides. Property access to SR 16 is provided through a vehicular and utility easement.

To the south and east of the property there is an extension of the CSX rail line that is owned by the City and has fallen into disrepair. The applicant has expressed an interest in entering an agreement with the City to repair the existing Rail line and add a Railroad spur to serve potential future Industrial users on the property. These actions would require a separate agreement to be approved by the City.

All proposed new development will be required to meet the City's Site Development Plan code requirements and be submitted to the Planning Commission and City Council for approval.

The site is located within the City's Water, Sewer, and Electric Service Boundaries. It will be served by the City's sanitation services.

Additionally, the applicant has previously submitted the following future land use and rezoning requests:

Application #	Description
FLUS-23-005	Future Land Use Application from Mixed Use to Industrial
ZON-23-007	Rezoning Application from C-2 General Business to M-2 Heavy Industrial
FLUS-23-006	Future Land Use Application from Mixed Use to Industrial
ZON-23-007	Rezoning Application from C-2 General Business to M-2 Heavy Industrial

These previous cases were approved at the Planning Commission in August of 2023 and table by the City Council on the September 19, 2023 meeting due to concerns by Council regarding the impact of approving additional industrial development along a key gateway corridor coming into the City. The applicant agreed to submit a Future Land Use text amendment to address the following issues:

- Land uses
- Site Design
- Buffering
- Traffic

The text amendment will be required to be a large-scale amendment, so as a result, the map amendment will now be taken as a large-scale amendment as well.

Site Specific Text Amendment

Objective 1.8 The City shall adopt, as necessary, Future Land Use Map Amendments with specific development conditions that are consistent with the City's adopted Level of Service (LOS) standards and Future Land Use Element, and compatible with the surrounding uses.
Policy 1.8.1: Future Land Use Map (FLUM) Amendment adopted by Ordinance Number O-01-2024 on XXX,XX, 2024 changes the future land use on the amendment area from Mixed Use to Industrial. Development shall meet the requirements of all applicable goals, objectives and policies of the Comprehensive Plan; however, the land use and development potential made available by the FLUM Amendment Ordinance O-01-2024 is hereby limited based on the following:

1. Prior to the approval of a subsequent development order such as but not limited to a subdivision or site development plan, the property owner/developer must submit a developer's agreement addressing the following development requirements for the Amendment parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17:
    a) Address screening and buffering requirements between the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 and SR 16 and US 17.
    b) Address Building, site and streetscape design requirements for the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 adjacent to SR 16 and US 17. These requirements shall include but are not limited to:
        a. Block Standards
        b. Building Placement
        c. Building Typology and Massing
        d. Building Frontage Design
        e. Façade Articulation
        f. Entrances
        g. Building Materials
        h. Lighting
        i. Service Area and Mechanical Equipment Screening
        j. Signage
2. Prior to approval of a subsequent development order, such as but not limited a zoning, subdivision or site development plan, the property owner/developer will be required to provide an Access Management Plan and Traffic Impact Analysis and to address site access and traffic capacity, the plan must be developed in cooperation with Florida Department of Transportation, Clay County and the City of Green Cove Springs. The Access Management Plan and traffic capacity plan shall be completed prior to the approval of a subsequent development order such as a Zoning, Subdivision or Site Development Plan for the Amendment Parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17;
3. Limit uses on the Amendment Parcels by allowing M-1 Uses by right and M-2 uses as a special exception.

4. Property shall be rezoned to a Planned Unit Development (PUD). A conceptual plan and written description shall be included with the PUD submittal.

Aerial

Environmental Conditions Analysis

Maps of Environmental Features

Wetlands

There are Riverines or Riparian wetlands located in the northeast area of the property.

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Floodplain

A portion of the subject property is located in Flood zone A which are areas subject to inundation by the 1 percent annual chance flood event generally determined using approximate methodologies.

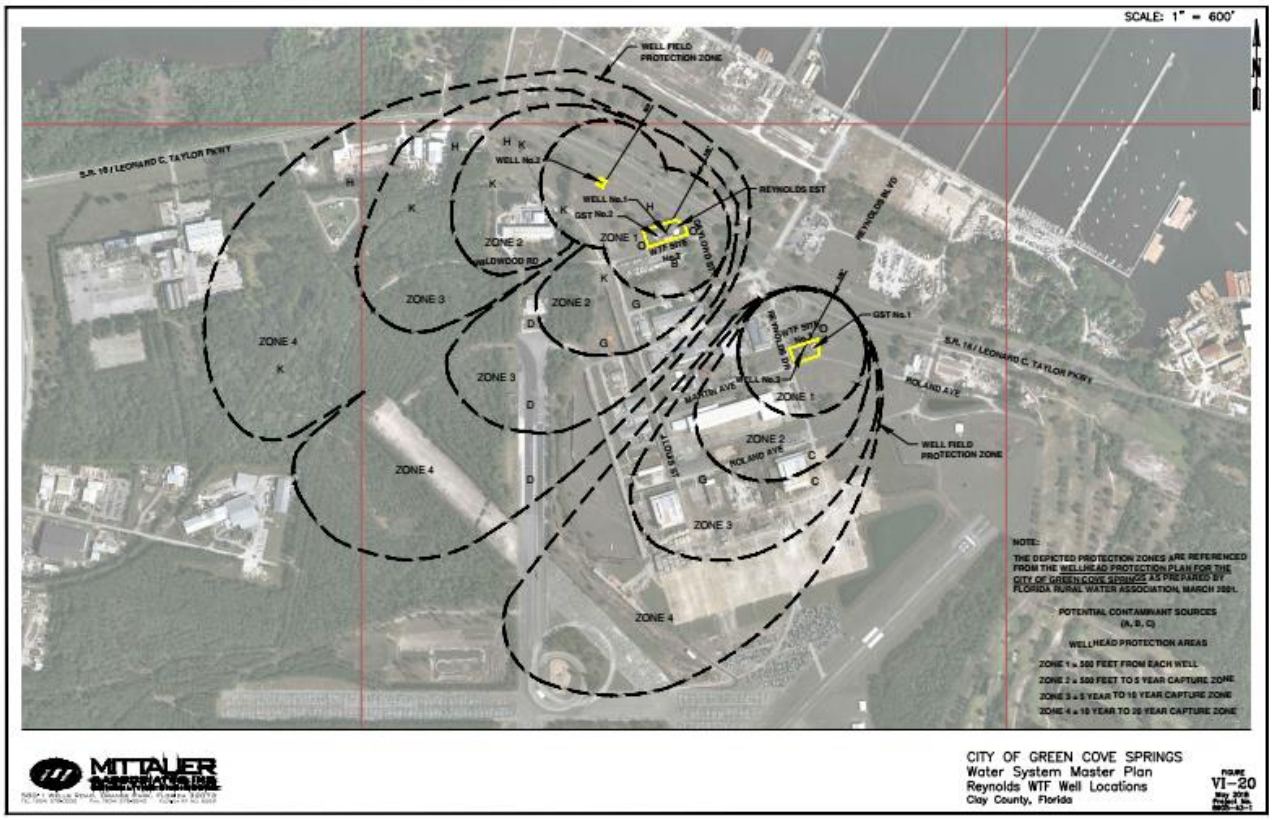
Additional Environmental Issues:

The Florida Department of Environmental Protection (FDEP) became aware of groundwater contamination on the property in July 2015 and subsequently provided a Declaration of Restrictive Covenant on the property which was recorded with the Clay County Clerk of Court in March 2020 and is attached for your review. Pursuant to FDEP's investigation chlorinated hydorcarbons were detected on the subject property and adjacent property as set forth in Exhibit D of the 1st Amendment to the DRCGCS Town Center which is enclosed. In April of 2022, a Conditional Site Rehabilitation Completion Order was approved by FDEP that limited the contamination issue to the groundwater. As a result, the following improvements are prohibited without meeting the requirements set forth in the Completion Order:

a) Dewatering activities
b) Stormwater management systems (including swales and ditches) can be constructed.
c) Drinking, irrigation or monitoring well installation.

<u>Wellfield Protection Zone</u>

The project site is located within Zone 4 of the wellfield protection zone. They are outside of the 500' requirement which limits the types of uses on this site.



URBAN SPRAWL ANALYSIS

Section 163.3177, Florida Statutes, requires that any amendment to the Future Land Use Element to discourage the proliferation of urban sprawl. Section 163.3177(6)(a)9.a., Florida Statutes, identifies 13 primary urban sprawl indicators and states that, "[t]he evaluation of the presence of these indicators shall consist of an analysis of the plan or plan amendment within the context of features and characteristics unique to each locality…"

An evaluation of each primary indicator is provided below.

(I) Promotes, allows, or designates for development substantial areas of the jurisdiction to develop as low-intensity, low-density, or single-use development or uses.

Evaluation & Findings: The proposed amendment will revise the FLUM designation to Industrial. The area along the US 17 and SR 16 Corridors will remain as Mixed Use allowing for a mix of uses but at the same time allowing for increased employment opportunities.

(II) Promotes, allows, or designates significant amounts of urban development to occur in rural areas at substantial distances from existing urban areas while not using undeveloped lands that are available and suitable for development.

Evaluation & Findings: The project site is located within the US 17 Corridor that is currently Land Used and Zoned for predominantly commercial/industrial development The project site is located within the City's water and sewer and electric urban service areas.

(III) Promotes, allows, or designates urban development in radial, strip, isolated, or ribbon patterns generally emanating from existing urban developments.

Evaluation & Findings: The proposed Industrial designation allows for industrial uses, thereby providing a balance of uses to complement the Mixed Use designation adjacent along the US 17 and SR 16 Corridors.

(IV) Fails to adequately protect and conserve natural resources, such as wetlands, floodplains, native vegetation, environmentally sensitive areas, natural groundwater aquifer recharge areas, lakes, rivers, shorelines, beaches, bays, estuarine systems, and other significant natural systems.

Evaluation & Findings: The site has existing wetlands, floodplains and is within the wellhead protection area. In order to ensure that natural resources are protected, a site specific land use amendment requiring future development to comply with Development Restrictions regarding protecting groundwater.

(V) Fails to adequately protect adjacent agricultural areas and activities, including silviculture, active agricultural and silvicultural activities, passive agricultural activities, and dormant, unique, and prime farmlands and soils.

Evaluation & Findings: The project site is located within an urban area with surrounding commercial development. There are no adjacent agricultural areas and activities.

(VI) Fails to maximize use of existing public facilities and services.

Evaluation & Findings: With the project site being located within an area with existing development, the proposed development will utilize existing public facilities and services.

(VII) Allows for land use patterns or timing which disproportionately increase the cost in time, money, and energy of providing and maintaining facilities and services, including roads, potable

water, sanitary sewer, stormwater management, law enforcement, education, health care, fire and emergency response, and general government.

Evaluation & Findings: The project site is located within an existing commercial area with existing public facilities and services. The proposed development will utilize existing public facilities and services and shall mitigate for the increase in time, money, and energy for providing and maintaining these facilities through the payment of impact fees for utilities including roads, government services, and on-going ad valorem taxes.

(VIII) Fails to provide a clear separation between rural and urban uses.

Evaluation & Findings: The site is located within the City's water and sewer and electric urban service areas and is not adjacent to any rural zoned properties.

(X) Discourages or inhibits infill development or the redevelopment of existing neighborhoods and communities.

Evaluation & Findings: The proposed application will not discourage infill development and is located within an existing developed area.

(XI) Fails to encourage a functional mix of uses.

Evaluation & Findings: The project site will allow for industrial uses in an area that is suitable for industrial development.

(XII) Results in poor accessibility among linked or related land uses.

Evaluation & Findings: The project site shall have access via an easement to SR 16.

(XIII) Results in the loss of significant amounts of functional open space.

Evaluation & Findings: All proposed development shall comply with the City's landscape ordinance to ensure there shall be open space provided within the development.

In addition to the preceding urban sprawl indicators, Florida Statutes Section 163.3177 also establishes eight (8) "Urban Form" criteria. An amendment to the Future Land Use Map is presumed to not be considered urban sprawl if it meets four (4) of the (8) urban form criteria. These urban form criteria, and an evaluation of each as each may relate to this application, are provided below. The applicant has provided an analysis of the application's consistency with Section 163.3177 within the application materials and contends that the proposed amendment will not encourage urban sprawl by showing it meets four of the eight urban form criteria.

1. Directs or locates economic growth and associated land development to geographic areas of the community in a manner that does not have an adverse impact on and protects natural resources and ecosystems.

Evaluation & Findings: The project site is located within the City's water and sewer and electric urban service areas which have been planned to accommodate growth which allows for the preservation of the natural resources of outlying areas. In addition, all new development shall comply with the City's landscaping, tree preservation and resource protection ordinances.

2. Promotes the efficient and cost-effective provision or extension of public infrastructure and services.

Evaluation & Findings: This application, as well as the companion rezoning application, will result in utilizing existing public infrastructure and existing services.

3. Promotes walkable and connected communities and provides for compact development and a mix of uses at densities and intensities that will support a range of housing choices and a multimodal transportation system, including pedestrian, bicycle, and transit, if available.

Evaluation & Findings: Sidewalks are provided along US 17 and shall be provided as part of future development along SR 16.

Promotes conservation of water and energy.

Evaluation & Findings: The project site is located within an urban area with surrounding commercial development. Development in core urban areas reduces the pressure to develop in areas further outside of the urban areas.

5. Preserves agricultural areas and activities, including silviculture, and dormant, unique, and prime farmlands and soils.

Evaluation & Findings: The project site is located within an urban area with surrounding development. There are no adjacent agricultural areas and activities. Development in core urban areas reduces the pressure to develop in agricultural areas.

6. Preserves open space and natural lands and provides for public open space and recreation needs.

Evaluation & Findings: All proposed development shall comply with the City's landscape ordinance to ensure there shall be open space provided within the development.

7. Creates a balance of land uses based upon demands of the residential population for the nonresidential needs of an area.

Evaluation & Findings: The proposed site is located within close proximity to a variety of nonresidential uses. The proposed development will provide additional employment opportunities to the residents of this community, providing a balance of land uses to the area.

8. Provides uses, densities, and intensities of use and urban form that would remediate an existing or planned development pattern in the vicinity that constitutes sprawl or if it provides for an innovative development pattern such as transit-oriented developments or new towns as defined in s. 163.3164.

Evaluation & Findings: N/A

CONSISTENCY WITH THE COMPREHENSIVE PLAN

The following Goals, Objectives, and Policies (GOPs) support the proposed amendment to the Future Land Use Map of the City of Green Cove Springs Comprehensive Plan:

FUTURE LAND USE ELEMENT

Goal 1: To develop and maintain land use programs and activities to provide for the most appropriate use of the land and direct growth to suitable areas while protecting the public, health, safety and welfare of the public.

Objective 1.1. New development and Redevelopment shall be directed to appropriate areas of the City.

e. Industrial (IND): This FLUC is intended to accommodate primarily light and heavy manufacturing, distribution, and storage, in addition to heavy commercial and professional office uses. Maximum Intensity: 0.6 FAR

Objective 1.2. The City shall strive to cultivate a sustainable land use pattern by preventing the proliferation of urban sprawl, ensuring the efficient provision of services, and implementing smart growth principles.

Policy 1.2.1. The location and timing of new development and the issuance of permits shall be coordinated with the availability of public facilities through implementation of various smart growth management measures.

Policy 1.2.6. The City shall require new development to connect to the City's centralized potable water and sanitary sewer system.

Policy 1.2.7. The City shall condition development orders upon the provision of essential facilities and services which meet and would not result in the failure of each service's established level of service (LOS).

Policy 1.2.8. The City shall ensure the availability and protection of lands designated for the future expansion of public infrastructure.

Objective 1.4. The City shall strive to preserve its natural resources.

Policy 1.4.5. Development orders shall not be issued in areas where soils conditions are not adequate for building construction, drainage, roads, and other development-related facilities.

TRANSPORTATION ELEMENT

Policy 2.3.1. The City shall rely on level of service (LOS) standards adopted in the Capital Improvements Element to ensure that acceptable traffic conditions are maintained*.

*The City is in the process of implementing a mobility plan and fee for new development to ensure that needed transportation improvements are provided to ensure that the City is addressing transportation congestion issues and providing for multimodal improvements.

Policy 2.5.3. The City shall review development applications to ensure that adequate capacity is available to serve the proposed project. The latest version of Trip Generation Manual published by the
Institute of Transportation Engineers (ITE) shall be used to determine the number of trips that the
proposed development will produce or attract.

SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER, AND AQUIFER RECHARGE ELEMENT

Objective 4.2. The City shall continue to provide safe and adequate sanitary sewer service to all existing and future developments located within the City limits. Existing Sanitary Sewer deficiencies shall be scheduled for correction in the Capital Improvements Element.

Policy 4.2.1 All Future Development shall be required to connect to the City's Sanitary Sewer Collection

Policy 4.2.1. All Future Development shall be required to connect to the City's Sanitary Sewer Collection.

Objective 4.6. Future Development shall be required to connect with central water systems and provide stormwater facilities which maximize the use of existing facilities and discourage urban sprawl.

Policy 4.6.1. The City shall annually monitor the condition of level of service standards for solid waste, potable water, wastewater, and stormwater facilities. The Planning and Zoning Department shall be assigned the task of reviewing all development orders to determine their current and future impacts on the capacities of existing public facilities.

Policy 4.6.2. No permit shall be issued for new development which will result in an increase in demand on deficient capacities or if adequate facility capacities for solid waste, potable water, sanitary sewer, and drainage facilities are not available prior to or concurrent with the development's impact.

CONSERVATION ELEMENT

Policy 5.3.2. The City shall ensure that public potable water wellfields will be located in areas where they will be least impacted by development and contamination.

INTERGOVERNMENTAL COORDINATION ELEMENT

Objective 7.1. The City shall act to ensure that all planning and development related activities are coordinated with the comprehensive plan or any other plans of Clay County, the Northeast Florida Regional Council (NEFRC), and the School Board.

Policy 7.1.1. Maintain procedures to review comprehensive plans and comprehensive plan amendments of the County and the plans of the Clay County School Board and the Northeast Florida Regional Council.

ECONOMIC DEVELOPMENT ELEMENT

Policy 9.1.6. Continue collaboration through the Clay County EDC and the Clay County Chamber of Commerce with Florida Chamber of Commerce and Enterprise Florida Inc for sector strategy development, regional incentive updates and statewide attraction and site selection programs.

Objective 9.5. The City shall collaborate economic development efforts with state, regional and local partners to foster a system of enhanced communication and partnerships within the Northeast Florida region.

PRIVATE PROPERTY RIGHTS ELEMENT

Objective 10.1. The City shall recognize that each property owner has constitutionally protected private property rights and shall consider these property rights in local decision making by referring to a set of statement of rights identified in this element.

Policy 10.1.1. The following rights shall be considered in local decision making:

a. The right of a property owner to physically possess and control his or her interests in the property, including easements, leases, or mineral rights.

b. The right of a property owner to use, maintain, develop, and improve his or her property for personal use or for the use of any other person, subject to state law and local ordinances.

c. The right of the property owner to privacy and to exclude others from the property to protect the owner's possessions and property.

d. The right of a property owner to dispose of his or her property through sale or gift.

PUBLIC FACILITIES IMPACT

Traffic Impacts

Land Use[1] (ITE)	Square Footage/Dwelling Units	Daily		AM Peak		PM Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Industrial	2,531	6.83	3,554	.82	476	.85	496

1. *Source: Institute of Transportation Engineers: Trip Generation Manual 9th Edition*

Conclusion: There are no development plans at this time as a result, the traffic impacts were calculated on the total acreage of the proposed industrial park.

Potable Water Impacts
Industrial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	4,200,000
Less actual Potable Water Flows[1]	1,013,000
Residual Capacity[1]	3,187,000
Projected Potable Water Demand from Proposed Project[2]	167,092
Residual Capacity after Proposed Project	3,019,907

1. *Source: City of Green Cove Springs Public Works Department*
2. *Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)*

Conclusion: The impact was calculated based on potential industrial uses. As shown in the table above, there is adequate capacity this use type. The City has existing water lines installed at this location.

Sanitary Sewer Impacts – South Plant WWTP
Industrial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	350,000
Current Loading[1]	270,000
Committed Loading [1]	330,000
Projected Sewer Demand from Proposed Project[2]	167,092
Residual Capacity after Proposed Project	-321,874

1. *Source: City of Green Cove Springs Public Works Department*
2. *Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)*

Conclusion: The impact was calculated based on potential commercial or residential uses. The project site is served by the South Plant Wastewater Treatment Plant (WWTP). As shown in the table above, when factoring in the current loading and the committed loading, this WWTP is over capacity to handle the estimated impacts resulting from the proposed application. The committed loading is related to the Rookery Development which will be completed in two years prior to the commencement of this project. At such time, the Rookery capacity will be served by a new wastewater treatment facility provided by the Clay County Utility Authority. Once the facility is built, the capacity temporarily reserved to the Rookery shall be available for this development. In addition, the remaining demand will be sent via force main to the Harbor Road plant, where the City has an excess capacity of approximately 700,000 gallons per day. As a result, there is adequate capacity. The City has existing sewer lines at this location.

Solid Waste Impacts
Industrial

System Category	LBs Per Day / Tons per Year
Solid Waste Generated by Proposed Project[1]	None
Solid Waste Facility Capacity[2]	Minimum 3 Years Capacity

1. *Source: City of Green Cove Springs does not provide commercial sanitation services, prospective sanitation collection franchisees shall comply with City Code Section 66-10.*

Solid Waste Impacts

The City of Green Cove Springs' solid waste is disposed of at the Rosemary Hill Solid Waste Management Facility operated by Clay County. Per the Clay County Comprehensive Plan, a minimum of three (3) years capacity shall be maintained at the County's solid waste management facility. For commercial developments, the City does not provide Curbside Service; commercial locations must instead contract with an approved franchisee for containerized collection.

Conclusion: The proposed future land use amendment and rezoning are not expected to negatively impact the City's adopted LOS or exceed the County solid waste management facility's capacity.

Compatibility

The Subject Property is located adjacent to a Mixed Use Land Use District to the north and west and to the east the property is the Reynolds AirPark which is zoned Industrial. The properties to the south along Hall Park Road are also Zoned Industrial. In addition, the subject property is in close proximity to a Railroad which is conducive for Industrial Development and had previously been used as a Manufacturing facility. The property along US 17 and SR 16 shall remain as commercial properties in keeping with providing a commercial gateway into the City. As a result, the proposed Future Land Use and Zoning application is suitable for the property and compatible with the surrounding uses.

Intent of Existing Future Land Use District

This Designation encompasses lands along major transportation corridors and is intended to accommodate primarily nonresidential uses including light and heavy commercial uses, lodging, and professional offices, interspersed with medium density residential uses and public/semi-public facilities.

Intent of Proposed Future Land Use District

This Designation is intended to accommodate primarily light and heavy manufacturing, distribution, and storage, in addition to heavy commercial and professional office uses.

Existing Future Land Use

Proposed Future Land Use

STAFF RECOMMENDATION

Staff recommends approval of the second and final reading of ordinance O-01-2024, to amend the Future Land Use of the property described therein from Mixed Use to Industrial. The first reading of the proposed amendment was approved by City Council on a 4-1 to transmit to the State Commerce Department for review. On, February 6, 2024, the state determined that they had no additional comments on the proposed amendment. State Comments from the Department of Commerce, FDOT, Water Management District, and Regional Planning Council are enclosed for your review.

RECOMMENDED MOTIONS:

Future Land Use

Motion to approve for second and final reading of Ordinance O-01-2024 and approve the adoption of the Future Land Use Designation from Mixed Use to Industrial for property located at the Southeast corner of US 17 and SR 16 for approximately 58.12 acres of parcel #016451-000-00 and a portion of parcel #016451-003-00.

FOR OFFICE USE ONLY

P Z File #_____

Application Fee:_____

Filing Date: _____ Acceptance Date:_____

Review Date: SRDT_____ P & Z _____ CC _____

Comprehensive Plan Amendment Application Map & Text Amendment

A. PROJECT

1. Project Name: Huntley Commerce Center-or 17-16 Commerce Center
2. Address of Subject Property: Leonard C taylor Parway
3. Parcel ID Number(s): 38-06-26-016451-000-00 and 016451-003-00
4. Existing Use of Property: Commercial Industrial
5. Future Land Use Map Designation : Commercial
6. Existing Zoning Designation: C-2
7. Proposed Future Land Use Map Designation: Industrial
8. Acreage: 58 acre

B. APPLICANT

1. Applicant's Status ☐ wner (title holder) ☑ gent
2. Name of Applicant(s) or Contact Person(s): Kelly Hartwig Title:_____

   Company (if applicable): Cypress Management and Design

   Mailing address: PO Box 8880,

   City: Fleming Island State: Florida ZIP: 32006

   Telephone: 904-759-9576 FAX: (___)_____ e-mail: Siteopt@bellsouth.net

3. If the applicant is agent for the property owner*

   Name of Owner (title holder): HLM Investments

   Mailing address: 1890 Kingsley ave.

   City: Orange Park State: Florida ZIP: 32073

   Telephone: (___)_____ FAX: (___)_____ e-mail:_____

* Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property?

   ☐ Yes ☑ No If yes, list names of all parties involved:

   If yes, is the contract/option contingent or absolute?

   ☐ Contingent ☐ Absolute

D. ATTACHMENTS (One copy reduced to no greater than 11 x 17, plus one copy in PDF format.)

1. Statement of proposed change, including a map showing the proposed Future Land Use Map change and Future Land Use Map designations on surrounding properties
2. Concurrency Impact Analysis which considers the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools.
3. Needs Analysis which demonstrates the necessity of the proposed change. This analysis may consist, in whole or part, of a market impact study or real estate needs analysis.
4. Analysis of Consistency with the City of Green Cove Springs Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)
5. A current aerial map (Maybe obtained from the Clay County Property Appraiser.)
6. Legal description with tax parcel number.
7. Boundary survey
8. Vicinity Map
9. Warranty Deed or the other proof of ownership
10. Fee.
    a. Future Land Use Map Amendments - $1,500 plus $20 per acre
    b. Text Amendment to Comprehensive Plan - $1,500 per element
    c. All applications are subject 10% administrative fee and must pay the cost of postage, signs, advertisements, and the fee for any outside consultants.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees necessary for technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

All 10 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge:

Signature of Applicant

Kelly Hartwig
Typed or printed name and title of applicant

2/1/2024
Date

Signature of Co-applicant

Typed or printed name of co-applicant

Date

State of Florida County of Clay

The foregoing application is acknowledged before me this 1st day of February, 2024 by Kelly Hartwig, who is/are personally known to me, or who has/have produced _____ as identification.

NOTARY SEAL

Notary Public State of Florida
Lyndie B Knowles
My Commission HH 407812
Expires 8/20/2027

Signature of Notary Public, State of Florida

Existing Future Land Use

- Downtown
- Industrial
- Mixed-Use
- Mixed-Use RP
- Neighborhood
- Public

0 375 750

Proposed Future Land Use

- Downtown
- Industrial
- Mixed-Use
- Mixed-Use RP
- Neighborhood
- Public

0 375 750

March 15, 2024

The Honorable Connie Butler
Mayor, City of Green Cove Springs
321 Walnut Street
Green Cove Springs, Florida 32403

Dear Mayor Butler:

The Florida Department of Commerce (FloridaCommerce) has reviewed the proposed comprehensive plan amendment for the City of Green Cove Springs (Amendment No. 24-01ESR) received on February 15, 2024. The review was completed under the expedited state review process. We have no comment on the proposed amendment.

The City should act by choosing to adopt, adopt with changes, or not adopt the proposed amendment. For your assistance, we have enclosed the procedures for adoption and transmittal of the comprehensive plan amendment. In addition, the City is reminded that:

- Section 163.3184(3)(b), F.S., authorizes other reviewing agencies to provide comments directly to the City. **If the City receives reviewing agency comments and they are not resolved, these comments could form the basis for a challenge to the amendment after adoption.**

- **The second public hearing,** which shall be a hearing on whether to adopt one or more comprehensive plan amendments, **must be held within 180 days** of your receipt of agency comments or the amendment shall be **deemed withdrawn** unless extended by agreement with notice to FloridaCommerce and any affected party that provided comment on the amendment pursuant to Section 163.3184(3)(c)1., F.S.

- **The adopted amendment must be transmitted to FloridaCommerce within ten working days after the second public hearing pursuant to 163.3184(3)(c)2., F.S.** Under Section 163.3184(3)(c)2. and 4., F.S., the **amendment effective date** is 31 days after FloridaCommerce notifies the City that the amendment package is complete or, if challenged, until it is found to be in compliance by FloridaCommerce or the Administration Commission.

If you have any questions concerning this review, please contact Matthew Martinez, Planning Analyst, by telephone at (850)-717-8534 or by email at matthew.martinez@commerce.fl.gov.

Sincerely,

James D. Stansbury, Chief
Bureau of Community Planning and Growth

JDS /mm

Enclosure(s): Procedures for Adoption

cc: Michael Daniels, AICP, Development Services Director, Green Cove Springs
Elizabeth Payne, Chief Executive Officer, Northeast Florida Regional Council

SUBMITTAL OF ADOPTED COMPREHENSIVE PLAN AMENDMENTS

FOR EXPEDITED STATE REVIEW

Section 163.3184(3), Florida Statutes

NUMBER OF COPIES TO BE SUBMITTED: Please submit electronically using FloridaCommerce's electronic amendment submittal portal "**Comprehensive Plan and Amendment Upload**" (*https://fldeo.my.salesforce-sites.com/cp/*) **or** submit three complete copies of all comprehensive plan materials, of which one complete paper copy and two complete electronic copies on CD ROM in Portable Document Format (PDF) to the State Land Planning Agency and one copy to each entity below that provided timely comments to the local government: the appropriate Regional Planning Council; Water Management District; Department of Transportation; Department of Environmental Protection; Department of State; the appropriate county (municipal amendments only); the Florida Fish and Wildlife Conservation Commission and the Department of Agriculture and Consumer Services (county plan amendments only); and the Department of Education (amendments relating to public schools); and for certain local governments, the appropriate military installation and any other local government or governmental agency that has filed a written request.

SUBMITTAL LETTER: Please include the following information in the cover letter transmitting the adopted amendment:

_____ State Land Planning Agency identification number for adopted amendment package;

_____ Summary description of the adoption package, including any amendments proposed but not adopted;

_____ Identify if concurrency has been rescinded and indicate for which public facilities. (Transportation, schools, recreation and open space).

_____ Ordinance number and adoption date;

_____ Certification that the adopted amendment(s) has been submitted to all parties that provided timely comments to the local government;

_____ Name, title, address, telephone, FAX number and e-mail address of local government contact;

_____ Letter signed by the chief elected official or the person designated by the local government.

ADOPTION AMENDMENT PACKAGE: Please include the following information in the amendment package:

_____ In the case of text amendments, changes should be shown in strike-through/underline format.

_____ In the case of future land use map amendments, an adopted future land use map, **in color format,** clearly depicting the parcel, its future land use designation, and its adopted designation.

_____ A copy of any data and analyses the local government deems appropriate.

Note: If the local government is relying on previously submitted data and analysis, no additional data and analysis is required;

_____ Copy of the executed ordinance adopting the comprehensive plan amendment(s);

Suggested effective date language for the adoption ordinance for expedited review:

> "The effective date of this plan amendment, if the amendment is not timely challenged, shall be 31 days after the state land planning agency notifies the local government that the plan amendment package is complete. If the amendment is timely challenged, this amendment shall become effective on the date the state land planning agency or the Administration Commission enters a final order determining this adopted amendment to be in compliance."

_____ List of additional changes made in the adopted amendment that the State Land Planning Agency did not previously review;

_____ List of findings of the local governing body, if any, that were not included in the ordinance and which provided the basis of the adoption or determination not to adopt the proposed amendment;

_____ Statement indicating the relationship of the additional changes not previously reviewed by the State Land Planning Agency in response to the comment letter from the State Land Planning Agency.

Michael P. Daniels

From: Linton, Jacob <Jacob.Linton@dot.state.fl.us> on behalf of D2 Growth Management <D2GRMGMT@dot.state.fl.us>
Sent: Wednesday, February 21, 2024 3:34 PM
To: Michael P. Daniels; james.stansbury@commerce.fl.gov; DCPexternalagencycomments@deo.myflorida.com; D2 Growth Management
Cc: Rose, Kaisha; Brown, Achaia
Subject: RE: City of Green Cove Springs Map and Text Amendment 24-01 ESR

FDOT has reviewed the transmitted City of Green Cove Springs 24-01ESR Comprehensive Plan Amendment pursuant to Section 163.3184(3), Florida Statutes. The proposal is anticipated to have significant adverse impacts to both US 17 and SR 16 near the project site. FDOT agrees with City of Green Cove Springs staff condition of approval requiring the completion an Access Management Plan and Traffic Impact Analysis prior to the approval of a subsequent development order for the project.

We appreciate the opportunity to review the proposed comprehensive plan amendment and request that a copy of the adopted amendment, along with the supporting data and analysis be transmitted within ten working days after the second public hearing for FDOT review.

Thank you,

Jacob Linton

Planner I
Florida Department of Transportation
District Two GEC
AtkinsRéalis
Office (D): 904-360-5547
Office (TF): 800-749-2967
jacob.linton@dot.state.fl.us
jacob.linton@atkinsrealis.com

From: Michael P. Daniels <mdaniels@greencovesprings.com>
Sent: Thursday, February 15, 2024 5:22 PM
To: ed.lehman@claycountygov.com; CompliancePermits@dos.myflorida.com; compplans@freshfromflorida.com; Powell, Barbara <barbara.powell@deo.myflorida.com>; compplans@fldoe.org; plan.review@dep.state.fl.us; fwcconservation@myfwc.com; D2 Growth Management

<D2GRMGMT@dot.state.fl.us>; stfitzgibbons@sjrwmd.com; eanderson@nefrc.org
Subject: City of Green Cove Springs Map and Text Amendment 24-01 ESR

Good afternoon,

Please see attachment for the proposed map and text amendment for property located east of the Southeast corner of US 17 and SR 16. The proposed amendment is submitted for expedited review. If you have any questions, please let me know.

Thank you.

Michael Daniels, AICP
Development Services Director
City of Green Cove Springs, Florida
(904) 297-7049

ORDINANCE NO. O-01-2024

AN ORDINANCE OF THE CITY OF GREEN COVE SPRINGS, FLORIDA AMENDING THE FUTURE LAND USE MAP FOR ±15 ACRES OF REAL PROPERTY GENERALLY LOCATED ON OFF OF THE SOUTHEAST CORNER OF LEONARD C TAYLOR PARKWAY AND US 17, IDENTIFIED AS TAX ID NUMBER 016541-000-00 AND ±43.12 ACRES OF PROPERTY LOCATED AT LEONARD C TAYLOR PARKWAY, IDENTIFIED AS A PORTION OF TAX ID NUMBER 016451-003-00, MORE PARTICULARLY DESCRIBED BY EXHIBIT "A", FROM MIXED USE TO INDUSTRIAL AND; PROVIDING FOR REPEALER, SEVERABILITY AND SETTING AN EFFECTIVE DATE.

RECITALS

WHEREAS, an application for a large-scale comprehensive plan amendment, as described below, to the Comprehensive Plan Future Land Use Map has been filed with the City; and

WHEREAS, a duly advertised public hearing was conducted on the proposed amendment on January 23, 2024 by the Planning and Zoning Board, sitting as the Local Planning Agency (LPA) and the LPA reviewed and considered comments received during the public hearing concerning the application and made its recommendation for approval to the City Council; and,

WHEREAS, the City Council considered the recommendations of the LPA at a duly advertised public hearings on February 6, 2024, June 18, and July 16, 2024 and provided for and receivedpublic participation; and,

WHEREAS, the City Council has determined and found said application for the amendment, to be consistent with the City of Green Cove Springs Comprehensive Plan and Land Development Regulations; and,

WHEREAS, for reasons set forth in this Ordinance that is hereby adopted and incorporated as findings of fact, that the Green Cove Springs City Council finds and declares that the enactment of this amendment is in the furtherance of the public health, safety, morals, order, comfort, convenience, appearance, prosperity, or general welfare.

NOW, THEREFORE BE IT ENACTED BY THE CITY COUNCIL OF GREEN COVE SPRINGS, FLORIDA AS FOLLOWS:

Section 1. Findings of Fact and Conclusions of Law.

1. The above recitals are true and correct and incorporated herein by reference.

2. The proposed Future Land Use Map amendment is consistent with the Comprehensive Plan.
3. The amendment will not cause a reduction in the adopted level of service standards for transportation, potable water, sanitary sewer, solid waste, stormwater, recreation, or public schools.

Section 2. Comprehensive Plan Future Land Use Map Amended. The Comprehensive Plan Future Land Use Map is hereby amended from Mixed Use to Industrial on a portion of Tax Parcel Number 38-06-26-016541-003-00 and Tax Parcel Number 38-06-26-016541-000-00 in accordance with the legal description found in Exhibit "A" and map found in Exhibit "B" attached hereto.

Section 3. Ordinance to be Construed Liberally. This ordinance shall be liberally construed in order to effectively carry out the purposes hereof which are deemed to be in the best interest of the public health, safety and welfare of the citizens and residents of Green Cove Springs, Florida.

Section 4. Repealing Clause. All ordinance or parts of ordinances in conflict herewith are, to the extent of the conflict, hereby repealed.

Section 5. Severability. It is the declared intent of the City Council of the City of Green Cove Springs that, if any section, sentence, clause, phrase, or provision of this ordinance is for any reason held or declared to be unconstitutional, void, or inoperative by any court or agency of competent jurisdiction, such holding of invalidity or unconstitutionality shall not affect the remaining provisions of this ordinance, and the remainder of the ordinance after the exclusions of such part or parts shall be deemed to be valid.

Section 6. Effective Date. The effective date of this plan amendment, if the amendment is not timely challenged, shall be 31 days after the state land planning agency notifies the City that the plan amendment package is complete in accordance with Chapter 163.3184 F.S. If timely challenged, this amendment shall become effective on the date the state land planning agency, or the Administrative Council enters a final order determining this adopted amendment to be in compliance in accordance with Chapter 163.3184 F.S. No development orders, development permits, or land uses dependent on this amendment may be issued or commenced before this plan amendment has become effective.

INTRODUCED AND APPROVED AS TO FORM ONLY ON THE FIRST READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, ON THIS 6th DAY OF FEBRUARY 2024.

CITY OF GREEN COVE SPRINGS, FLORIDA

Constance Butler, Mayor

ATTEST:

Erin West, City Clerk

PASSED ON SECOND AND FINAL READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, THIS 16TH DAY OF JULY 2024.

CITY OF GREEN COVE SPRINGS, FLORIDA

Steven R Kelley, Mayor

ATTEST:

Erin West, City Clerk

APPROVED AS TO FORM:

L. J. Arnold, III, City Attorney

EXHIBIT "A"

EXHIBIT "A"

A parcel of land situated in the G.I.F. Clark Grant, Section 38, Township 6 South, Range 26 East, Clay County, Florida, being a part of Lots 3, 4 and 5, Block 1, Gould T. Butler's survey of the Clinch Estate, according to plat thereof, recorded in Plat Book 1 pages 31 through 34 of the public records of said County, together with part of Lots 2, 3, 4 and 5, Block 4, South Green Cove Springs, according to map thereof recorded in Deed Book "Z" page 748 of said public records, and a portion of River Road as shown on said plats, said parcel being more particularly described as follows:

Commence at the intersection of the Easterly right of way line of State Road No. 15 (U.S. Highway No. 17) with the Southerly line of State Road No. 16; thence on said Southerly line, North 79 degrees 05 minutes 46 seconds East, 678.00 feet; thence South 10 degrees 54 minutes 14 seconds East, 370.00 feet to the Point of Beginning; thence continue South 10 degrees 54 minutes 14 seconds East, 398.00 feet; thence North 79 degrees 05 minutes 46 seconds East, 27.00 feet; thence South 10 degrees 54 minutes 14 seconds East, 262.70 feet; thence North 79 degrees 05 minutes 46 seconds East, 918.22 feet; thence North 34 degrees 26 minutes 00 seconds East, 97.16 feet; thence North 10 degrees 54 minutes 14 seconds West, 258.24 feet; thence South 79 degrees 05 minutes 46 seconds West, 86.77 feet; thence North 10 degrees 54 minutes 14 seconds West, 379.17 feet; thence South 79 degrees 05 minutes 46 seconds West, 481.82 feet; thence South 10 degrees 54 minutes 14 seconds East, 45.00 feet; thence South 79 degrees 05 minutes 46 seconds West, 445.74 feet to the point of beginning.

TOGETHER WITH A NON-EXCLUSIVE EASEMENT DESCRIBED AS FOLLOWS:

Easement "A-2"
An easement for ingress, egress and utilities covering a parcel of land consisting of a portion of Block 1, Gould T. Butlers survey of the Clinch Estate, Clay County, Florida, according to plat thereof recorded in Plat Book 1, pages 31 through 34 of the public records of said county, a portion of Block 4, South Green Cove Springs, according to plat thereof recorded in Deed Book "Z", page 748 of said public records, and a portion of River Road as shown on said plats, said parcel being more particularly described as follows:

Commence at the intersection of the Easterly right of way line of State Road No. 15 (U.S. Highway No. 17) with the Southerly R/W line of State Road No. 16; thence on said Southerly R/W line, North 79 degrees 05 minutes 46 seconds East, 1277.20 feet to the Point of Beginning; thence continue on said Southerly R/W line, North 79 degrees 05 minutes 46 seconds East 30.00 feet; thence South 10 degrees 54 minutes 14 seconds East, 325.00 feet; thence South 79 degrees 05 minutes 46 seconds West, 30.00 feet; thence North 10 degrees 54 minutes 14 seconds West, 325.00 feet to the point of beginning.

EXHIBIT “A”

MAP OF

Parcel 'A'

A tract of land in the G.I.F. Clark Grant, Section 38, Township 6 South, Range 26 East, Clay County, Florida, being a part of Sections 39 and part of Lots 2 and 3, Block 1, Gould T. Butlers survey of the Cinch Estate, according to plat recorded in Plat Book 1, pages 31 through 34 of the public records of said county, together with part of Lots 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12 and 13, Block 4, and part of Lots 8 and 9, Block 1, according to plat of South Green Cove Springs, recorded in said records in Deed Book "Z", page 748, also part of River Road, part of Palmetto Street and part of Chestnut Avenue, as shown on both of said plats, said parcel being more particularly described as follows:

Commence at the intersection of the southerly line of State Road No. 16 with the easterly line of State Road No. 15; thence on the southerly line of State Road No. 16, North 79 degrees 05 minutes 46 seconds East, 2,150.00 feet; thence South 27 degrees 10 minutes 14 seconds East 958.08 feet to the northwesterly line of a CSX Transportation Spur Tract as described in Official Records Book 75, page 87 of said public records; thence on said northwesterly line, South 34 degrees 26 minutes 00 seconds West, 157.88 feet to the point of beginning; thence continue on said northwesterly line, South 34 degrees 26 minutes 00 seconds West, 1,699.00 feet; thence North 84 degrees 32 minutes 05 seconds West, 142.45 feet; thence North 10 degrees 51 minutes 41 seconds West, 789.91 feet; thence South 78 degrees 30 minutes 34 seconds West, 490.80 feet; thence North 11 degrees 29 minutes 26 seconds West, 407.11 feet; thence South 79 degrees 01 minute 50 seconds West, 103.02 feet; thence North 10 degrees 58 minutes 10 seconds West, 599.78 feet; thence North 79 degrees 30 minutes 26 seconds East, 367.10 feet to the southwesterly line of those lands described in Official Records Book 4938, page 312 of said public records; thence on said southwesterly line, South 10 degrees 54 minutes 14 seconds East, 369.96 feet; thence continue on said southwesterly line, North 79 degrees 05 minutes 46 seconds East, 27.00 feet; thence continue on said southwesterly line, South 10 degrees 54 minutes 14 seconds East, 262.70 feet to the southeasterly line thereof; thence on said southeasterly line, and on a northeasterly extension thereof, North 79 degrees 05 minutes 46 seconds East, 1,601.08 feet to the point of beginning; being 31.23 acres, more or less, in area.

Parcel 'B'

A tract of land in the G.I.F. Clark Grant, Section 38, Township 6 South, Range 26 East, Clay County, Florida, being a part of Sections 39 and part of Lot 6, Block 1, Gould T. Butlers survey of the Cinch Estate, according to plat recorded in Plat Book 1, pages 31 through 34 of the public records of said county, together with part of Lots 7 and 8, Block 4, and part of Lots 9 and 10, Block 1, according to plat of South Green Cove Springs, recorded in said records in Deed Book "Z", page 748, also part of Lightwood Avenue and part of Chestnut Avenue, as shown on both of said plats, said parcel being more particularly described as follows:

Commence at the intersection of the southerly line of State Road No. 16 with the easterly line of State Road No. 15; thence on the southerly line of State Road No. 16, North 79 degrees 05 minutes 46 seconds East, 2,150.00 feet; thence South 27 degrees 10 minutes 14 seconds East 1,071.76 feet to the southeasterly line of a CSX Transportation Railroad Spur Track as described in Official Records Book 75, page 87 of said public records and the point of beginning; thence continue South 27 degrees 10 minutes 14 seconds East, 0.78 feet to the westerly line of those lands described in Official Records Book 111 page 125 of said public records; thence on said westerly line, South 10 degrees 17 minutes 16 seconds West, 1,460.00 feet; thence North 84 degrees 32 minutes 05 seconds West, 720.94 feet to said southeasterly line of CSX Transportation Spur Track; thence on said southeasterly line, North 34 degrees 26 minutes 00 seconds East, 1,735.44 feet to the point of beginning; being 11.84 acres, more or less, in area.

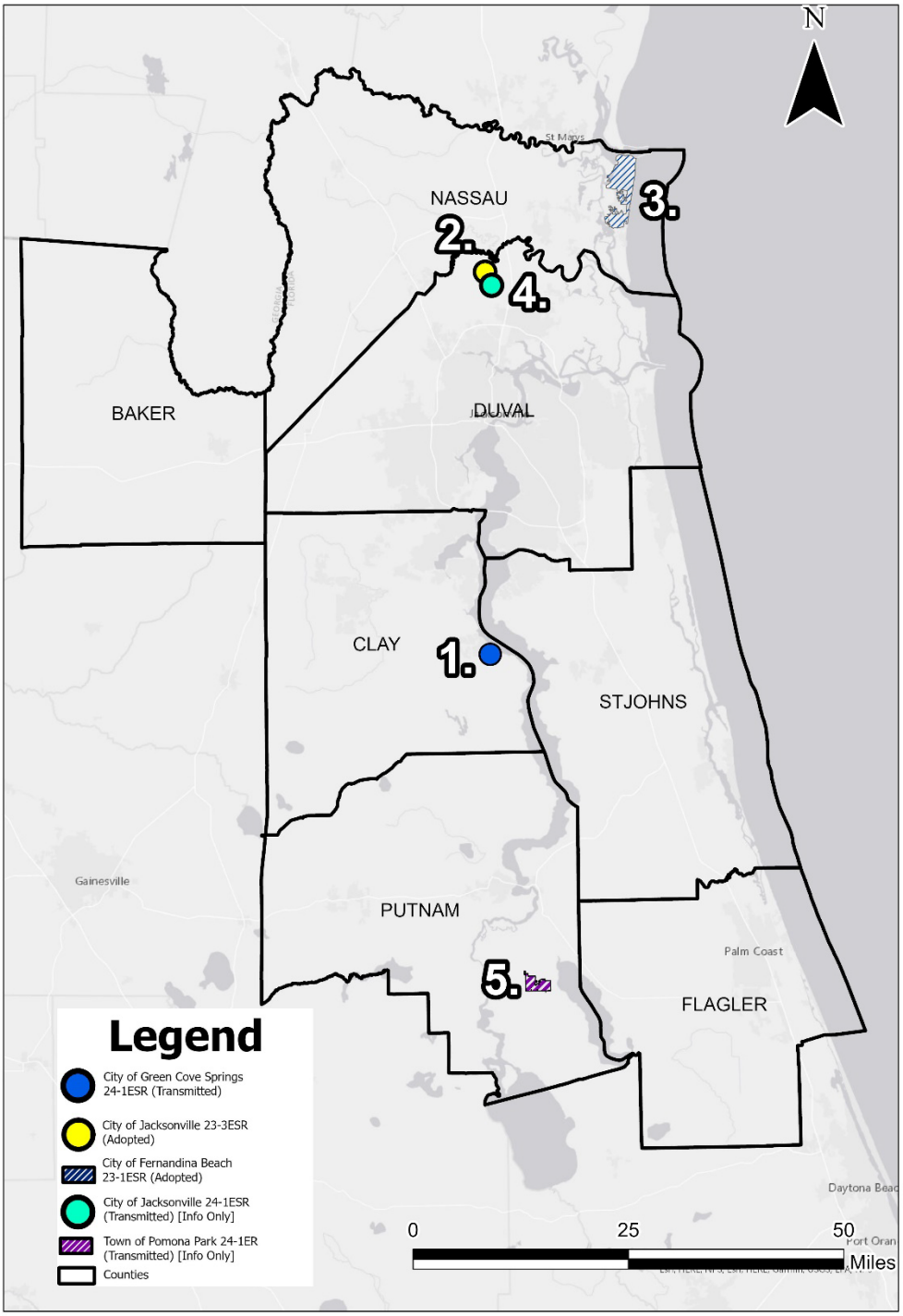
For: Marketmasters of the Southeast, Inc.

EXHIBIT "B"


Subject Property
CITY OF GREEN COVE SPRINGS
Est. 1874
FLORIDA
Proposed Future Land Use
Downtown
Industrial
Mixed-Use
Mixed-Use RP
Neighborhood
Public
0 375 750 1,500 Feet

REGIONAL MAP OF AMENDMENT LOCATION SITES

March 2024 Board
Comprehensive Plan Amendments



Local Govt. & Plan Amendment	No. on Regional Map	Transmitted	Adopted	County Location	Due Date to be Mailed to Local and State Govt.	Local Govt. Item Number
City of Green Cove Springs 24-1ESR	1	X		Clay	3-8-2024	Ordinance 0-01-2024

- **Type:** Future Land Use

- **Issue:** This is a proposed Future Land Use Map Amendment for a property located at the southeast corner of U.S. 17 and S.R. 16 for approximately 58.12 acres from Mixed-Use to Industrial.

- **Background:** The applicant has applied for a Future Land Use and Zoning Change for the subject property for the construction of industrial development. There is an existing building on the site that had been used for a manufacturing plant which was closed in 2010. However industrial businesses such as Woodford Plywood, Meever USA, and Front Runner Boatworks have been located at this location for nonconforming industrial uses.

  Property access to SR 16 is provided through a vehicular and utility easement. To the south and east of the property, there is an extension of the CSX rail line that is owned by the City and has fallen into disrepair. The applicant has expressed an interest in entering an agreement with the City to repair the existing Rail line and add a Railroad spur to serve potential future Industrial users on the property. These actions would require a separate agreement to be approved by the City. The site is located within the City's Water, Sewer, and Electric Service Boundaries. The City's sanitation services will serve it. The applicant has agreed to submit a Future Land Use text amendment to address the following issues: land uses, site design, buffering, and traffic. A draft of the site-specific text amendment is included in the Appendix as Exhibit 1. For more information on the site, please look at Maps 1-3 in the Appendix.

- **Impacts:** Both U.S. 17 and S.R. 16 are considered Transportation Resources of Regional Significance. Staff recommended to the City's Local Governing Body approval with the condition that there be a comprehensive traffic study meeting the City Traffic Impact Analysis (TIA) for new development before approval of a subsequent development order.

- **Recommended Intergovernmental Coordination:** No intergovernmental coordination is recommended for the amendment.

Local Govt. & Plan Amendment	No. on Regional Map	Transmitted	Adopted	County	Due Date to be Mailed to Local and State Govt.	Local Govt. Item Number
City of Jacksonville 23-3ESR	2		X	Duval	3-8-2024	Ordinance 2023-848-E

- **Type:** Future Land Use

- **Issue:** This Future Land Use Map (FLUM) amendment changed approximately 200 acres from Agriculture (AGR) to Light Industrial (LI) and Conservation (CSV).

- **Background:** The 200-acre site is located north of Arnold Road, between Arnold Road and Lannie Road. According to the City's Functional Highways Classification Map, this segment of Arnold Road is an unclassified private road. The subject site currently includes undeveloped land. The applicant amended the Future Land Use Map series (FLUMs) of the Future Land Use Element (FLUE) of the 2045 Comprehensive Plan from Agriculture (AGR) in the Rural Development Area to Light Industrial (LI) and Conservation (CSV) in the Suburban Development Area to allow for industrial and conservation uses. While the subject property is located within the Rural Development Area, it is surrounded on three sides by land in the Suburban Development Area. The companion rezoning was submitted within the adoption round of this amendment. Please see maps 4 and 5 in the appendix for additional information.

- **Impacts:** The amendment is located within the 150-foot height and Hazard Zone for the Jacksonville International Airport, a Transportation Resource of Regional Significance. Zoning will limit development to a maximum height of less than 150 feet unless approved by the Jacksonville Aviation Authority or the Federal Aviation Administration. Uses located within the Height and Hazard Zone must not create or increase the potential for such hazards as electronic interference, light glare, bird strike hazards, or other potential hazards to the safe navigation of aircraft.

- **Recommended Intergovernmental Coordination:** Intergovernmental coordination was recommended between the City of Jacksonville and Nassau County. The City Planning Department contacted the Nassau County Planning Department regarding the development, and the Nassau County Planning Department had no comment.

Local Govt. & Plan Amendment	No. on Regional Map	Transmitted	Adopted	County	Due Date to be Mailed to Local and State Govt.	Local Govt. Item Number
City of Fernandina Beach 23-1ESR	3		X	Nassau	3-8-2024	Ordinance 2023-24

- **Type:** Text

- **Issue:** This adopted amendment to the City of Fernandina Beach's 2030 Comprehensive Plan removes policies requiring pervious materials for parking lots relative to standards in the Land Development Code and a text amendment to the City's Land Development Code. The developer and the City believe that this requirement hinders the commercial development's ability to maintain and upgrade facilities. They believe the costs are prohibitive, hindering the developer's ability to invest in other aspects for the maintenance or improvement of a project. As a result, properties are obligated to demonstrate a hardship to obtain a variance. Variances are considered a risky investment of time and money for developers, given municipal staff has difficulty recommending approval, including when a site or user-specific special conditions prevent full compliance with the Land Development Code.

- **Background:** In Fernandina Beach, "large-scale" commercial development has historically been concentrated along roadways leading to the Central Business District including Sadler Road, S. 14th Street, and 8th Street stemming from the late 1970s and 1980s. It was a time when typical commercial development patterns included large expanses of asphalt vehicle parking, to accommodate strip malls with one or more anchor tenants. Since then, the City's established shopping centers have been maintained and updated several times including through façade and interior renovations as well as with new roofs and updates to mechanical aspects (Heating, Ventilation, and Air Conditioning (HVAC), electrical, and plumbing).

  The retrofit of parking areas to incorporate additional landscaping has occurred incrementally but mostly remains far from compliant with current standards. One of the issues addressed by this amendment that impacts commercial re-investment is a requirement within the City's Comprehensive Plan and Land Development Code which says that all new development and redevelopment projects must include parking with 75 percent pervious materials. This standard was adopted in late 2012 when Florida was considering changes in stormwater regulations through water management districts to recognize low-impact development strategies and reduce stormwater runoff. Due to administrative shifts following the gubernatorial election, the respective rulemaking process stopped between 2013 and 2014. Subsequently, today, stormwater calculations have not been updated and there is no credit for incorporating pervious materials in site design. Further, there is no incentive to incorporate alternative paving materials to reduce land/surface for stormwater management.

- **Impacts:** No adverse impacts to Resources of Regional Significance were identified in the Strategic Regional Policy Plan and no adverse impacts to adjacent jurisdiction's comprehensive plans have been identified.

- **Recommended Intergovernmental Coordination:** No intergovernmental coordination is recommended for this amendment.

Local Govt. & Plan Amendment	No. on Regional Map	Transmitted	Adopted	County	Due Date to be Mailed to Local and State Govt.	Local Govt. Item Number
City of Jacksonville 24-1ESR [Info Only]	4	X		Duval	3-1-2024	Ordinance 2023-821-E

- **Type:** Future Land Use

- **Issue:** The proposed amendment to the Comprehensive Plan Future Land Use Map (FLUM) encompasses 229.01 acres. The amendment area is located between Arnold Road and Jacksonville International Airport. The property is currently designated on the FLUM as Agriculture (AGR) and Public Buildings and Facilities (PBF). The applicant is requesting a map change to Light Industrial (LI) to facilitate light industrial development.

- **Background:** The 229.01 acres subject site is located south of Arnold Road and north of Jacksonville International Airport (JIA) off Pecan Park Road. While the site has an Arnold Road address, the site does not abut Arnold Road; a small portion of the site abuts Pecan Park Road. According to the City's Functional Highways Classification Map, this segment of Arnold Road to the north of the site is a minor arterial roadway and Pecan Park Road is a collector roadway. The subject site currently includes undeveloped land. The applicant seeks an amendment to the Future Land Use Map series (FLUMs) of the Future Land Use Element (FLUE) of the 2045 Comprehensive Plan from Agriculture (AGR) and Public Buildings and Facilities (PBF) in the Suburban Development Area to Light Industrial (LI) to allow for industrial uses. The companion rezoning is not required for the transmittal review of this large-scale land use amendment and will be submitted with the adoption round of the amendment. Please see Maps 6 and 7 in the Appendix for additional information.

- **Impacts:** The site abuts the Jacksonville International Airport to the south. A portion of the site is located in the 0-foot Height Restriction Zone for the Jacksonville International Airport (JIA). Section 656.1005.1 would require a maximum height of 0 feet unless approved by the Jacksonville Aviation Authority (JAA) or the Federal Aviation Administration. This portion of the Height Restriction Zone for JIA was put into place with the anticipation of a future runway for the airport. According to the JAA, plans for a future runway in this location have been changed allowing for compatible development north of the JIA. JAA does not object to the development of the property with Light Industrial uses as long as the height restrictions under the Title 14 Code of Federal Regulations (CFR) Part 77 are adhered to for the property and wildlife hazard management practices are reasonably implemented. According to the JAA Height Limit Zone according to Title 14 Code of Federal Regulations (CFR) Part 77, the property has a 180' MSL (Mean Sea Level) height restriction. The applicant provided an analysis indicating that 180' MSL is equivalent to a 156-foot maximum height of development on the property.

- **Recommended Intergovernmental Coordination:** No intergovernmental coordination is recommended for this amendment.

Local Govt. & Plan Amendment	No. on Regional Map	Transmitted	Adopted	County	Due Date to be Mailed to Local and State Govt.	Local Govt. Item Number
Town of Pomona Park 24-1ER [Info Only]	5	X		Putnam	3-8-2024	Ordinance 2024-02

- **Type:** Text

- **Issue:** This proposed amendment is a compliance update within the Town's Evaluation and Appraisal Review Period for the Town's Comprehensive Plan. The Northeast Florida Regional Council assisted the Town with the compliance update.

- **Background:** In the amendment, the Town's Planning time frame was updated to 2035 to reflect the Shimberg Center's most recent projections. An updated map series was included as an appendix to the Future Land Use Element. A Water Supply Facility Work Plan was updated to address changes to the Regional Water Supply Plan, and updated policies are proposed to address recent statutory changes including a proposed Town Property Rights Element.

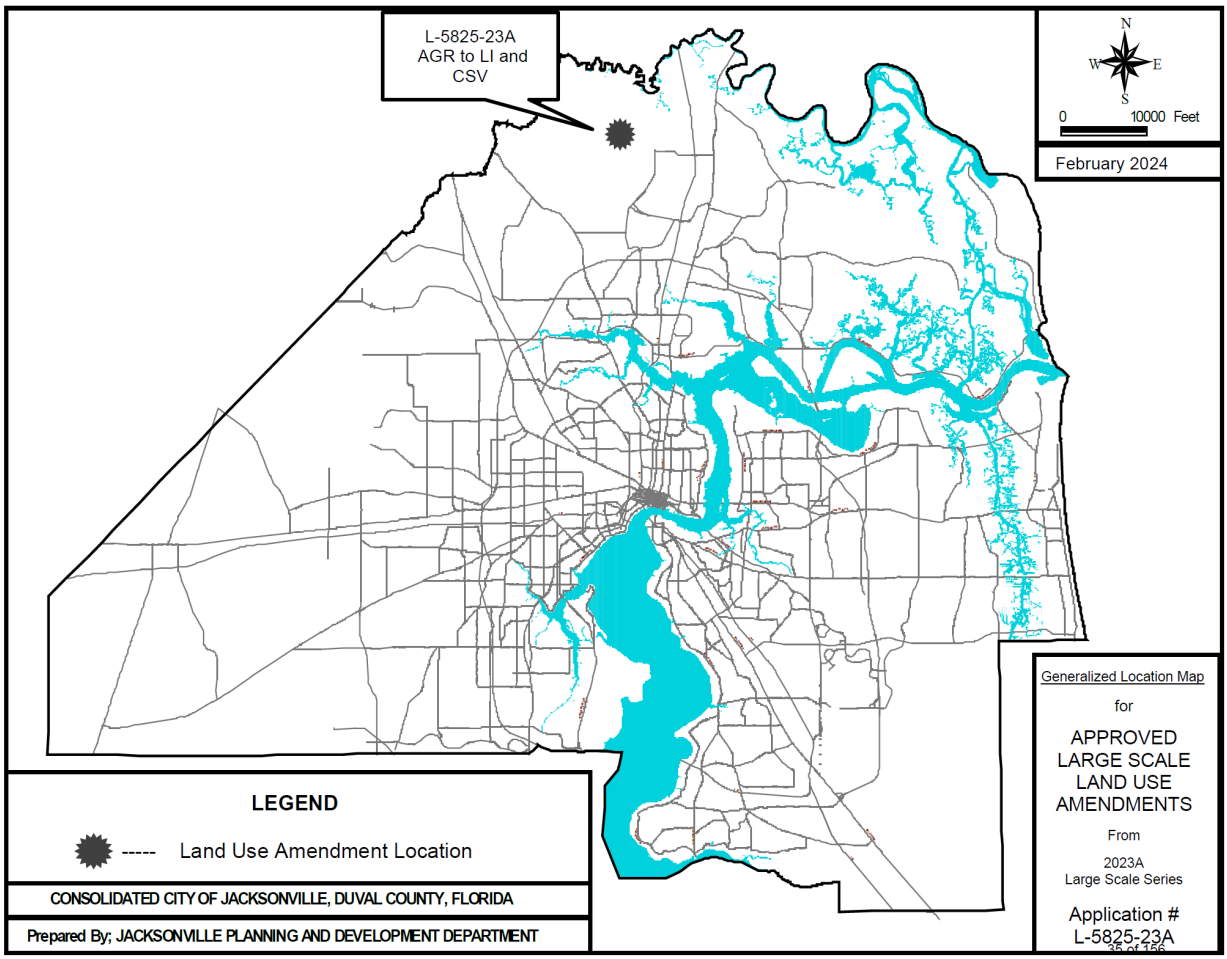
Appendix

Map 1: City of Green Cove Springs 24-1ESR (Location Map)

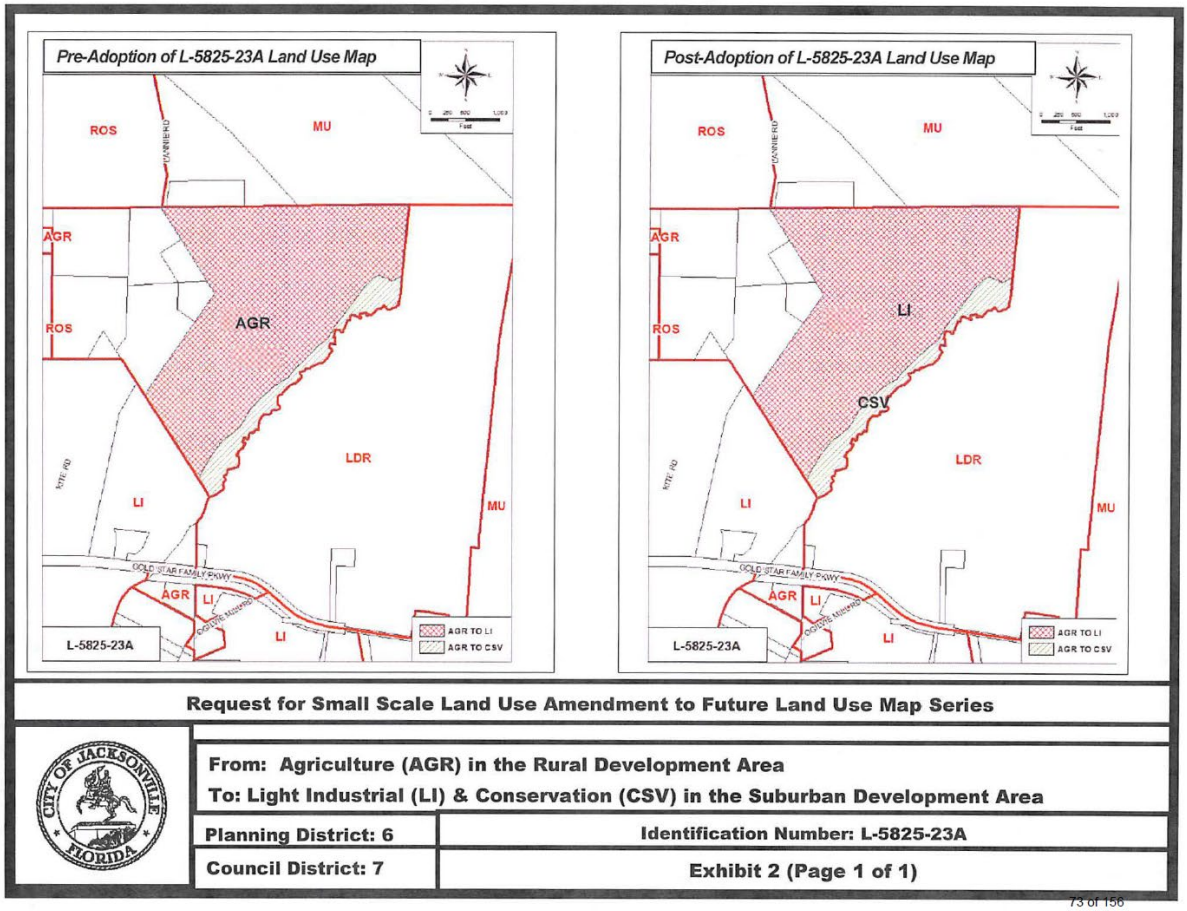
Map 2: City of Green Cove Springs 24-1ESR (Existing Future Land Use Map)

Map 3: City of Green Cove Springs 24-1ESR (Proposed Future Land Use Map)

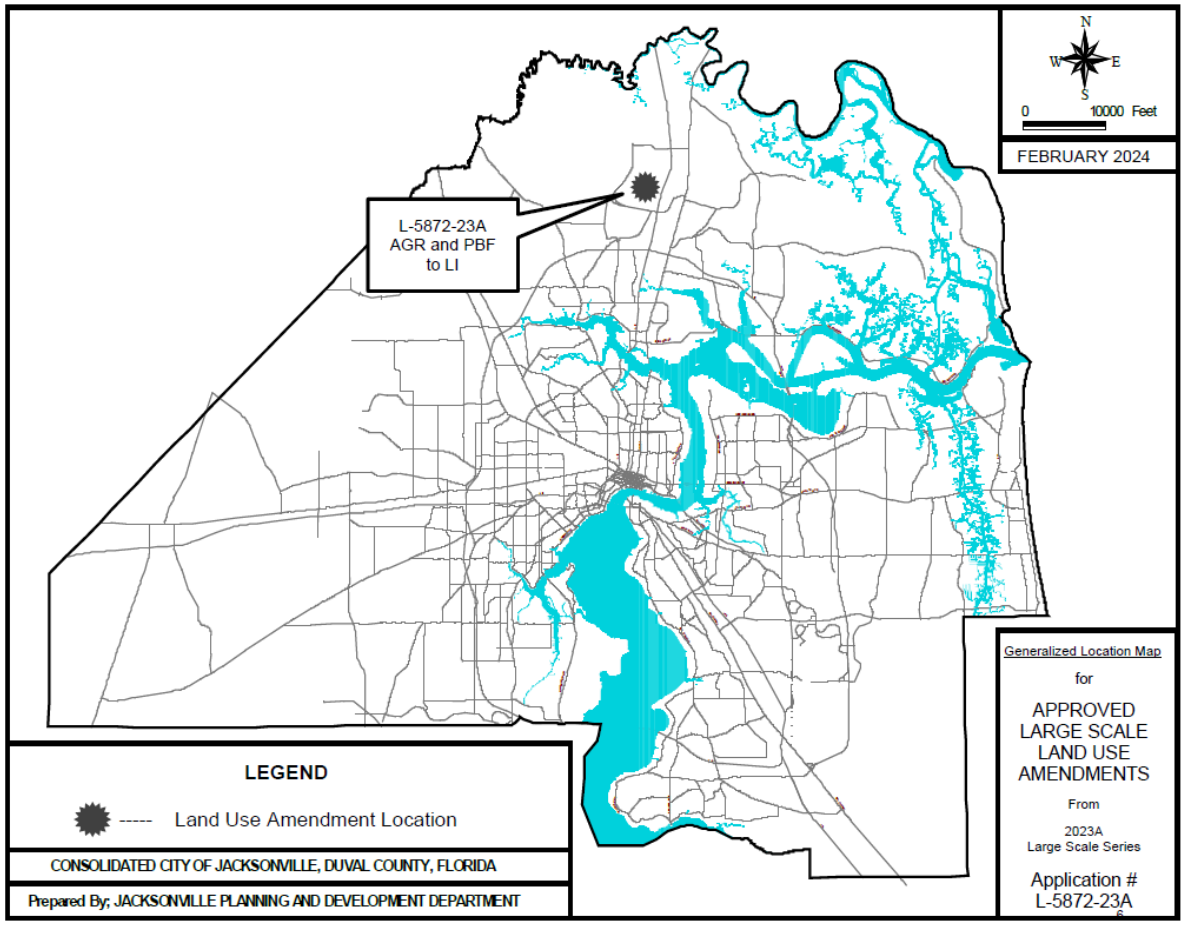
Map 4: City of Jacksonville 23-3ESR (Subject Site)



Map 5: City of Jacksonville 23-3ESR (Existing and Proposed Future Land Use Map)



Map 6: City of Jacksonville 24-1ESR (Location Map)



Map 7: City of Jacksonville 24-1ESR (Existing and Proposed Future Land Use Map)

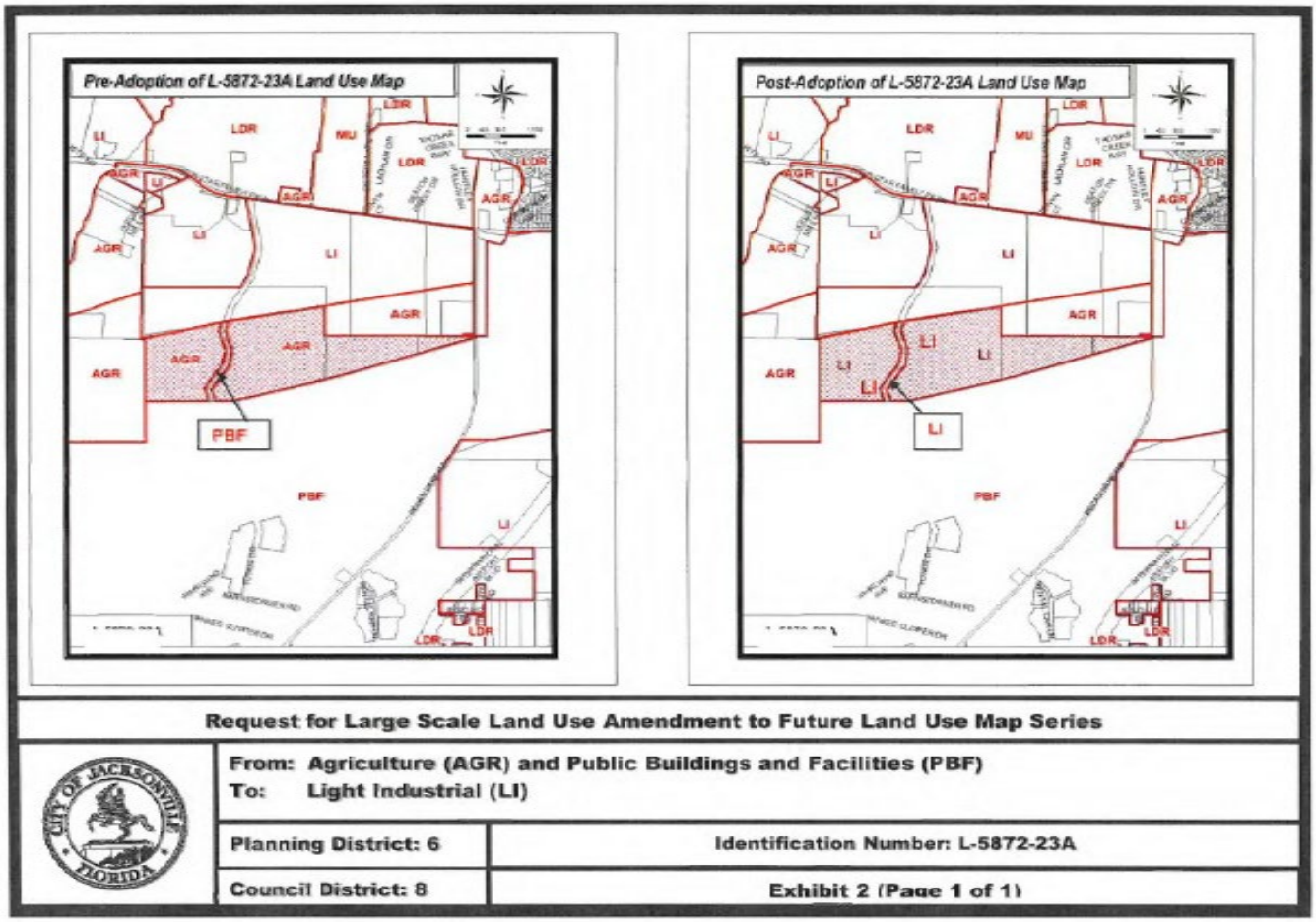


Exhibit 1: City of Green Cove Springs 24-1ESR (Proposed Site Specific Text Amendment)

Objective 1.8 The City shall adopt, as necessary, Future Land Use Map Amendments with specific development conditions that are consistent with the City's adopted Level of Service (LOS) standards and Future Land Use Element, and compatible with the surrounding uses.
Policy 1.8.1: Future Land Use Map (FLUM) Amendment adopted by Ordinance Number O-01- 2024 on XXX,XX, 2024 changes the future land use on the amendment area from Mixed Use to Industrial. Development shall meet the requirements of all applicable goals, objectives and policies of the Comprehensive Plan; however, the land use and development potential made available by the FLUM Amendment Ordinance O-01-2024 is hereby limited based on the following:

1. Prior to the approval of a subsequent development order such as but not limited to a subdivision or site development plan, the property owner/developer must submit a developer's agreement addressing the following development requirements for the Amendment parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17:
    a) Address screening and buffering requirements between the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 and SR 16 and US 17.
    b) Address Building, site and streetscape design requirements for the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 adjacent to SR 16 and US 17. These requirements shall include but are not limited to:
        a. Block Standards
        b. Building Placement
        c. Building Typology and Massing
        d. Building Frontage Design
        e. Façade Articulation
        f. Entrances
        g. Building Materials
        h. Lighting
        i. Service Area and Mechanical Equipment Screening
        j. Signage
2. Prior to approval of a subsequent development order, such as but not limited a zoning, subdivision or site development plan, the property owner/developer will be required to provide an Access Management Plan and Traffic Impact Analysis and to address site access and traffic capacity, the plan must be developed in cooperation with Florida Department of Transportation, Clay County and the City of Green Cove Springs. The Access Management Plan and traffic capacity plan shall be completed prior to the approval of a subsequent development order such as a Zoning, Subdivision or Site Development Plan for the Amendment Parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17;
3. Limit uses on the Amendment Parcels by allowing M-1 Uses by right and M-2 uses as a special exception.
4. Property shall be rezoned to a Planned Unit Development (PUD). A conceptual plan and written description shall be included with the PUD submittal.

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council **MEETING DATE:** June 18, 2024

FROM: Michael Daniels, AICP, Development Services Director

SUBJECT: Second and Final Reading of Ordinance O-24-002, regarding the Large-Scale Future Land Use Text Amendment for property located at the Southeast corner of US 17 and SR 16 for approximately 58.12 acres of parcel #016451-000-00 and a portion of parcel #016451-003-00.

Future Land Use Amendment: from: Mixed Use

to: Industrial

PROPERTY DESCRIPTION

APPLICANT: David Smith, Louis L Huntley Enterprises **OWNER:** Louis Ward Huntley

PROPERTY LOCATION: 965 Leonard C Taylor Highway

PARCEL NUMBER: 016451-000-00

FILE NUMBER: FLUS-24-001

CURRENT ZONING*:* C-2 General Commercial

FUTURE LAND USE DESIGNATION*:* Mixed Use

SURROUNDING LAND USE

NORTH: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

SOUTH: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

EAST: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

WEST: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

BACKGROUND

The applicant has applied for a Future Land Use and Zoning Change for the subject property for the construction of industrial development. There is an existing building on the site that had been used for manufacturing plant which has been closed in 2010. However industrial businesses such as Woodford Plywood, Meever USA and Front Runner Boatworks have been located at this site as nonconforming industrial uses.

The property is surrounded by the HLM property on all sides. Property access to SR 16 is provided through a vehicular and utility easement.

To the south and east of the property there is an extension of the CSX rail line that is owned by the City and has fallen into disrepair. The applicant has expressed an interest in entering an agreement with the City to repair the existing Rail line and add a Railroad spur to serve potential future Industrial users on the property. These actions would require a separate agreement to be approved by the City.

All proposed new development will be required to meet the City's Site Development Plan code requirements and be submitted to the Planning Commission and City Council for approval.

The site is located within the City's Water, Sewer, and Electric Service Boundaries. It will be served by the City's sanitation services.

Additionally, the applicant has previously submitted the following future land use and rezoning requests:

Application #	Description
FLUS-23-005	Future Land Use Application from Mixed Use to Industrial
ZON-23-007	Rezoning Application from C-2 General Business to M-2 Heavy Industrial
FLUS-23-006	Future Land Use Application from Mixed Use to Industrial
ZON-23-007	Rezoning Application from C-2 General Business to M-2 Heavy Industrial

These previous cases were approved at the Planning Commission in August of 2023 and table by the City Council on the September 19, 2023 meeting due to concerns by Council regarding the impact of approving additional industrial development along a key gateway corridor coming into the City. The applicant agreed to submit a Future Land Use text amendment to address the following issues:

- Land uses
- Site Design
- Buffering
- Traffic

The text amendment will be required to be a large-scale amendment, so as a result, the map amendment will now be taken as a large-scale amendment as well.

Site Specific Text Amendment

Objective 1.8 The City shall adopt, as necessary, Future Land Use Map Amendments with specific development conditions that are consistent with the City's adopted Level of Service (LOS) standards and Future Land Use Element, and compatible with the surrounding uses.
Policy 1.8.1: Future Land Use Map (FLUM) Amendment adopted by Ordinance Number O-01-2024 on XXX,XX, 2024 changes the future land use on the amendment area from Mixed Use to Industrial. Development shall meet the requirements of all applicable goals, objectives and policies of the Comprehensive Plan; however, the land use and development potential made available by the FLUM Amendment Ordinance O-01-2024 is hereby limited based on the following:

1. Prior to the approval of a subsequent development order such as but not limited to a subdivision or site development plan, the property owner/developer must submit a developer's agreement addressing the following development requirements for the Amendment parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17:
    a) Address screening and buffering requirements between the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 and SR 16 and US 17.
    b) Address Building, site and streetscape design requirements for the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 adjacent to SR 16 and US 17. These requirements shall include but are not limited to:
        a. Block Standards
        b. Building Placement
        c. Building Typology and Massing
        d. Building Frontage Design
        e. Façade Articulation
        f. Entrances
        g. Building Materials
        h. Lighting
        i. Service Area and Mechanical Equipment Screening
        j. Signage
2. Prior to approval of a subsequent development order, such as but not limited a zoning, subdivision or site development plan, the property owner/developer will be required to provide an Access Management Plan and Traffic Impact Analysis and to address site access and traffic capacity, the plan must be developed in cooperation with Florida Department of Transportation, Clay County and the City of Green Cove Springs. The Access Management Plan and traffic capacity plan shall be completed prior to the approval of a subsequent development order such as a Zoning, Subdivision or Site Development Plan for the Amendment Parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17;
3. Limit uses on the Amendment Parcels by allowing M-1 Uses by right and M-2 uses as a special exception.

4. Property shall be rezoned to a Planned Unit Development (PUD). A conceptual plan and written description shall be included with the PUD submittal.

Staff recommended approval of the Future Land Use designation from Mixed Use to Industrial subject to the Site-Specific Text Amendment with the following conditions:
1. Provide a comprehensive traffic study meeting the City Traffic Impact Analysis (TIA) for new development prior to approval of a subsequent development order.
2. Limit Uses within the amendment parcels to permitted uses in the M-1 Light Industrial Zoning Classification.

During the Tuesday, January 23rd meeting of the Planning and Zoning Commission, the board recommended that M-1 should be allowed by right and M-2 should be allowed as a special exception as requested by the applicant. The board also, at the request of the applicant, amended the condition that the traffic study be submitted prior to a new development order to instead allow that traffic study to be provided at a date certain to be negotiated between staff and the applicant. The motion was made, seconded, and passed unanimously.

Aerial

Environmental Conditions Analysis

Maps of Environmental Features

Wetlands

There are Riverines or Riparian wetlands located in the northeast area of the property.

.

Floodplain

A portion of the subject property is located in Flood zone A which are areas subject to inundation by the 1 percent annual chance flood event generally determined using approximate methodologies.

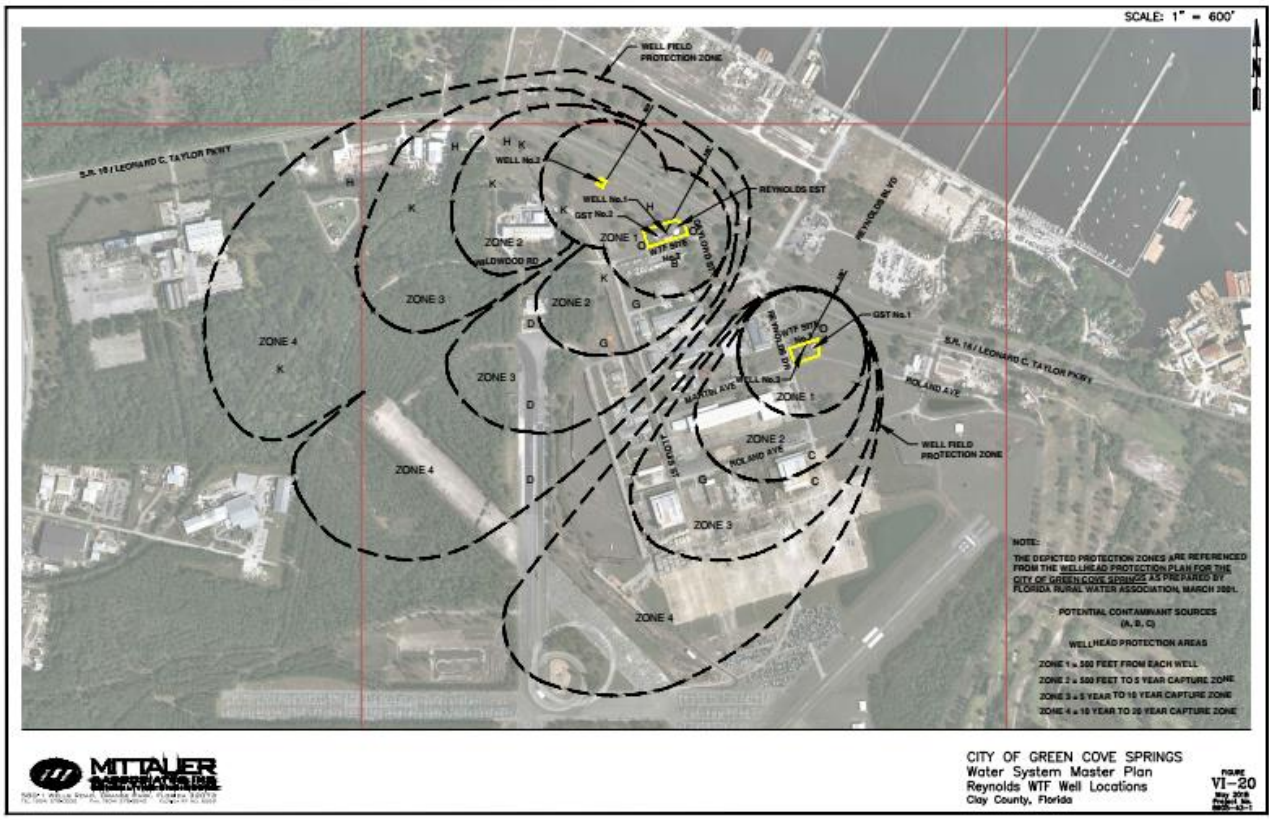
Additional Environmental Issues:

The Florida Department of Environmental Protection (FDEP) became aware of groundwater contamination on the property in July 2015 and subsequently provided a Declaration of Restrictive Covenant on the property which was recorded with the Clay County Clerk of Court in March 2020 and is attached for your review. Pursuant to FDEP's investigation chlorinated hydorcarbons were detected on the subject property and adjacent property as set forth in Exhibit D of the 1st Amendment to the DRCGCS Town Center which is enclosed. In April of 2022, a Conditional Site Rehabilitation Completion Order was approved by FDEP that limited the contamination issue to the groundwater. As a result, the following improvements are prohibited without meeting the requirements set forth in the Completion Order:

a) Dewatering activities
b) Stormwater management systems (including swales and ditches) can be constructed.
c) Drinking, irrigation or monitoring well installation.

<u>Wellfield Protection Zone</u>

The project site is located within Zone 4 of the wellfield protection zone. They are outside of the 500' requirement which limits the types of uses on this site.



URBAN SPRAWL ANALYSIS

Section 163.3177, Florida Statutes, requires that any amendment to the Future Land Use Element to discourage the proliferation of urban sprawl. Section 163.3177(6)(a)9.a., Florida Statutes, identifies 13 primary urban sprawl indicators and states that, "[t]he evaluation of the presence of these indicators shall consist of an analysis of the plan or plan amendment within the context of features and characteristics unique to each locality…"

An evaluation of each primary indicator is provided below.

(I) Promotes, allows, or designates for development substantial areas of the jurisdiction to develop as low-intensity, low-density, or single-use development or uses.

Evaluation & Findings: The proposed amendment will revise the FLUM designation to Industrial. The area along the US 17 and SR 16 Corridors will remain as Mixed Use allowing for a mix of uses but at the same time allowing for increased employment opportunities.

(II) Promotes, allows, or designates significant amounts of urban development to occur in rural areas at substantial distances from existing urban areas while not using undeveloped lands that are available and suitable for development.

Evaluation & Findings: The project site is located within the US 17 Corridor that is currently Land Used and Zoned for predominantly commercial/industrial development The project site is located within the City's water and sewer and electric urban service areas.

(III) Promotes, allows, or designates urban development in radial, strip, isolated, or ribbon patterns generally emanating from existing urban developments.

Evaluation & Findings: The proposed Industrial designation allows for industrial uses, thereby providing a balance of uses to complement the Mixed Use designation adjacent along the US 17 and SR 16 Corridors.

(IV) Fails to adequately protect and conserve natural resources, such as wetlands, floodplains, native vegetation, environmentally sensitive areas, natural groundwater aquifer recharge areas, lakes, rivers, shorelines, beaches, bays, estuarine systems, and other significant natural systems.

Evaluation & Findings: The site has existing wetlands, floodplains and is within the wellhead protection area. In order to ensure that natural resources are protected, a site specific land use amendment requiring future development to comply with Development Restrictions regarding protecting groundwater.

(V) Fails to adequately protect adjacent agricultural areas and activities, including silviculture, active agricultural and silvicultural activities, passive agricultural activities, and dormant, unique, and prime farmlands and soils.

Evaluation & Findings: The project site is located within an urban area with surrounding commercial development. There are no adjacent agricultural areas and activities.

(VI) Fails to maximize use of existing public facilities and services.

Evaluation & Findings: With the project site being located within an area with existing development, the proposed development will utilize existing public facilities and services.

(VII) Allows for land use patterns or timing which disproportionately increase the cost in time, money, and energy of providing and maintaining facilities and services, including roads, potable

water, sanitary sewer, stormwater management, law enforcement, education, health care, fire and emergency response, and general government.

Evaluation & Findings: The project site is located within an existing commercial area with existing public facilities and services. The proposed development will utilize existing public facilities and services and shall mitigate for the increase in time, money, and energy for providing and maintaining these facilities through the payment of impact fees for utilities including roads, government services, and on-going ad valorem taxes.

(VIII) Fails to provide a clear separation between rural and urban uses.

Evaluation & Findings: The site is located within the City's water and sewer and electric urban service areas and is not adjacent to any rural zoned properties.

(X) Discourages or inhibits infill development or the redevelopment of existing neighborhoods and communities.

Evaluation & Findings: The proposed application will not discourage infill development and is located within an existing developed area.

(XI) Fails to encourage a functional mix of uses.

Evaluation & Findings: The project site will allow for industrial uses in an area that is suitable for industrial development.

(XII) Results in poor accessibility among linked or related land uses.

Evaluation & Findings: The project site shall have access via an easement to SR 16.

(XIII) Results in the loss of significant amounts of functional open space.

Evaluation & Findings: All proposed development shall comply with the City's landscape ordinance to ensure there shall be open space provided within the development.

In addition to the preceding urban sprawl indicators, Florida Statutes Section 163.3177 also establishes eight (8) "Urban Form" criteria. An amendment to the Future Land Use Map is presumed to not be considered urban sprawl if it meets four (4) of the (8) urban form criteria. These urban form criteria, and an evaluation of each as each may relate to this application, are provided below. The applicant has provided an analysis of the application's consistency with Section 163.3177 within the application materials and contends that the proposed amendment will not encourage urban sprawl by showing it meets four of the eight urban form criteria.

1. Directs or locates economic growth and associated land development to geographic areas of the community in a manner that does not have an adverse impact on and protects natural resources and ecosystems.

Evaluation & Findings: The project site is located within the City's water and sewer and electric urban service areas which have been planned to accommodate growth which allows for the preservation of the natural resources of outlying areas. In addition, all new development shall comply with the City's landscaping, tree preservation and resource protection ordinances.

2. Promotes the efficient and cost-effective provision or extension of public infrastructure and services.

Evaluation & Findings: This application, as well as the companion rezoning application, will result in utilizing existing public infrastructure and existing services.

3. Promotes walkable and connected communities and provides for compact development and a mix of uses at densities and intensities that will support a range of housing choices and a multimodal transportation system, including pedestrian, bicycle, and transit, if available.

Evaluation & Findings: Sidewalks are provided along US 17 and shall be provided as part of future development along SR 16.

Promotes conservation of water and energy.

Evaluation & Findings: The project site is located within an urban area with surrounding commercial development. Development in core urban areas reduces the pressure to develop in areas further outside of the urban areas.

5. Preserves agricultural areas and activities, including silviculture, and dormant, unique, and prime farmlands and soils.

Evaluation & Findings: The project site is located within an urban area with surrounding development. There are no adjacent agricultural areas and activities. Development in core urban areas reduces the pressure to develop in agricultural areas.

6. Preserves open space and natural lands and provides for public open space and recreation needs.

Evaluation & Findings: All proposed development shall comply with the City's landscape ordinance to ensure there shall be open space provided within the development.

7. Creates a balance of land uses based upon demands of the residential population for the nonresidential needs of an area.

Evaluation & Findings: The proposed site is located within close proximity to a variety of nonresidential uses. The proposed development will provide additional employment opportunities to the residents of this community, providing a balance of land uses to the area.

8. Provides uses, densities, and intensities of use and urban form that would remediate an existing or planned development pattern in the vicinity that constitutes sprawl or if it provides for an innovative development pattern such as transit-oriented developments or new towns as defined in s. 163.3164.

Evaluation & Findings: N/A

CONSISTENCY WITH THE COMPREHENSIVE PLAN

The following Goals, Objectives, and Policies (GOPs) support the proposed amendment to the Future Land Use Map of the City of Green Cove Springs Comprehensive Plan:

FUTURE LAND USE ELEMENT

Goal 1: To develop and maintain land use programs and activities to provide for the most appropriate use of the land and direct growth to suitable areas while protecting the public, health, safety and welfare of the public.

Objective 1.1. New development and Redevelopment shall be directed to appropriate areas of the City.

e. Industrial (IND): This FLUC is intended to accommodate primarily light and heavy manufacturing, distribution, and storage, in addition to heavy commercial and professional office uses. Maximum Intensity: 0.6 FAR

Objective 1.2. The City shall strive to cultivate a sustainable land use pattern by preventing the proliferation of urban sprawl, ensuring the efficient provision of services, and implementing smart growth principles.

Policy 1.2.1. The location and timing of new development and the issuance of permits shall be coordinated with the availability of public facilities through implementation of various smart growth management measures.

Policy 1.2.6. The City shall require new development to connect to the City's centralized potable water and sanitary sewer system.

Policy 1.2.7. The City shall condition development orders upon the provision of essential facilities and services which meet and would not result in the failure of each service's established level of service (LOS).

Policy 1.2.8. The City shall ensure the availability and protection of lands designated for the future expansion of public infrastructure.

Objective 1.4. The City shall strive to preserve its natural resources.

Policy 1.4.5. Development orders shall not be issued in areas where soils conditions are not adequate for building construction, drainage, roads, and other development-related facilities.

TRANSPORTATION ELEMENT

Policy 2.3.1. The City shall rely on level of service (LOS) standards adopted in the Capital Improvements Element to ensure that acceptable traffic conditions are maintained*.

*The City is in the process of implementing a mobility plan and fee for new development to ensure that needed transportation improvements are provided to ensure that the City is addressing transportation congestion issues and providing for multimodal improvements.

Policy 2.5.3. The City shall review development applications to ensure that adequate capacity is available to serve the proposed project. The latest version of Trip Generation Manual published by the
Institute of Transportation Engineers (ITE) shall be used to determine the number of trips that the
proposed development will produce or attract.

SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER, AND AQUIFER RECHARGE ELEMENT

Objective 4.2. The City shall continue to provide safe and adequate sanitary sewer service to all existing and future developments located within the City limits. Existing Sanitary Sewer deficiencies shall be scheduled for correction in the Capital Improvements Element.

Policy 4.2.1 All Future Development shall be required to connect to the City's Sanitary Sewer Collection

Policy 4.2.1. All Future Development shall be required to connect to the City's Sanitary Sewer Collection.

Objective 4.6. Future Development shall be required to connect with central water systems and provide stormwater facilities which maximize the use of existing facilities and discourage urban sprawl.

Policy 4.6.1. The City shall annually monitor the condition of level of service standards for solid waste, potable water, wastewater, and stormwater facilities. The Planning and Zoning Department shall be assigned the task of reviewing all development orders to determine their current and future impacts on the capacities of existing public facilities.

Policy 4.6.2. No permit shall be issued for new development which will result in an increase in demand on deficient capacities or if adequate facility capacities for solid waste, potable water, sanitary sewer, and drainage facilities are not available prior to or concurrent with the development's impact.

CONSERVATION ELEMENT

Policy 5.3.2. The City shall ensure that public potable water wellfields will be located in areas where they will be least impacted by development and contamination.

INTERGOVERNMENTAL COORDINATION ELEMENT

Objective 7.1. The City shall act to ensure that all planning and development related activities are coordinated with the comprehensive plan or any other plans of Clay County, the Northeast Florida Regional Council (NEFRC), and the School Board.

Policy 7.1.1. Maintain procedures to review comprehensive plans and comprehensive plan amendments of the County and the plans of the Clay County School Board and the Northeast Florida Regional Council.

ECONOMIC DEVELOPMENT ELEMENT

Policy 9.1.6. Continue collaboration through the Clay County EDC and the Clay County Chamber of Commerce with Florida Chamber of Commerce and Enterprise Florida Inc for sector strategy development, regional incentive updates and statewide attraction and site selection programs.

Objective 9.5. The City shall collaborate economic development efforts with state, regional and local partners to foster a system of enhanced communication and partnerships within the Northeast Florida region.

PRIVATE PROPERTY RIGHTS ELEMENT

Objective 10.1. The City shall recognize that each property owner has constitutionally protected private property rights and shall consider these property rights in local decision making by referring to a set of statement of rights identified in this element.

Policy 10.1.1. The following rights shall be considered in local decision making:

a. The right of a property owner to physically possess and control his or her interests in the property, including easements, leases, or mineral rights.

b. The right of a property owner to use, maintain, develop, and improve his or her property for personal use or for the use of any other person, subject to state law and local ordinances.

c. The right of the property owner to privacy and to exclude others from the property to protect the owner's possessions and property.

d. The right of a property owner to dispose of his or her property through sale or gift.

PUBLIC FACILITIES IMPACT

Traffic Impacts

Land Use[1] (ITE)	Square Footage/Dwelling Units	Daily		AM Peak		PM Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Industrial	2,531	6.83	3,554	.82	476	.85	496

1. *Source: Institute of Transportation Engineers: Trip Generation Manual 9th Edition*

Conclusion: There are no development plans at this time as a result, the traffic impacts were calculated on the total acreage of the proposed industrial park.

Potable Water Impacts
Industrial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	4,200,000
Less actual Potable Water Flows[1]	1,013,000
Residual Capacity[1]	3,187,000
Projected Potable Water Demand from Proposed Project[2]	167,092
Residual Capacity after Proposed Project	3,019,907

1. *Source: City of Green Cove Springs Public Works Department*
2. *Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)*

Conclusion: The impact was calculated based on potential industrial uses. As shown in the table above, there is adequate capacity this use type. The City has existing water lines installed at this location.

Sanitary Sewer Impacts – South Plant WWTP
Industrial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	350,000
Current Loading[1]	270,000
Committed Loading [1]	330,000
Projected Sewer Demand from Proposed Project[2]	167,092
Residual Capacity after Proposed Project	-321,874

1. *Source: City of Green Cove Springs Public Works Department*
2. *Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)*

Conclusion: The impact was calculated based on potential commercial or residential uses. The project site is served by the South Plant Wastewater Treatment Plant (WWTP). As shown in the table above, when factoring in the current loading and the committed loading, this WWTP is over capacity to handle the estimated impacts resulting from the proposed application. The committed loading is related to the Rookery Development which will be completed in two years prior to the commencement of this project. At such time, the Rookery capacity will be served by a new wastewater treatment facility provided by the Clay

County Utility Authority. Once the facility is built, the capacity temporarily reserved to the Rookery shall be available for this development. In addition, the remaining demand will be sent via force main to the Harbor Road plant, where the City has an excess capacity of approximately 700,000 gallons per day. As a result, there is adequate capacity. The City has existing sewer lines at this location.

Solid Waste Impacts
Industrial

System Category	LBs Per Day / Tons per Year
Solid Waste Generated by Proposed Project[1]	None
Solid Waste Facility Capacity[2]	Minimum 3 Years Capacity

1. *Source: City of Green Cove Springs does not provide commercial sanitation services, prospective sanitation collection franchisees shall comply with City Code Section 66-10.*

Solid Waste Impacts

The City of Green Cove Springs' solid waste is disposed of at the Rosemary Hill Solid Waste Management Facility operated by Clay County. Per the Clay County Comprehensive Plan, a minimum of three (3) years capacity shall be maintained at the County's solid waste management facility. For commercial developments, the City does not provide Curbside Service; commercial locations must instead contract with an approved franchisee for containerized collection.

Conclusion: The proposed future land use amendment and rezoning are not expected to negatively impact the City's adopted LOS or exceed the County solid waste management facility's capacity.

Compatibility

The Subject Property is located adjacent to a Mixed Use Land Use District to the north and west and to the east the property is the Reynolds AirPark which is zoned Industrial. The properties to the south along Hall Park Road are also Zoned Industrial. In addition, the subject property is in close proximity to a Railroad which is conducive for Industrial Development and had previously been used as a Manufacturing facility. The property along US 17 and SR 16 shall remain as commercial properties in keeping with providing a commercial gateway into the City. As a result, the proposed Future Land Use and Zoning application is suitable for the property and compatible with the surrounding uses.

Intent of Existing Future Land Use District

This Designation encompasses lands along major transportation corridors and is intended to accommodate primarily nonresidential uses including light and heavy commercial uses, lodging, and professional offices, interspersed with medium density residential uses and public/semi-public facilities.

Intent of Proposed Future Land Use District

This Designation is intended to accommodate primarily light and heavy manufacturing, distribution, and storage, in addition to heavy commercial and professional office uses.

Existing Future Land Use

Proposed Future Land Use

STAFF RECOMMENDATION

Staff recommends approval of the second and final reading of ordinance O-02-2024, regarding a site-specific text amendment regarding the Future Land Use of the property described therein from Mixed Use to Industrial. On February 6, 2024, the first reading of the proposed was approved by City Council on a 4-1 vote to transmit to the State Commerce Department for a large scale Future Land Use Amendment review. On March 15, 2024, the state determined that they had no comments on the proposed amendment. State Comments from the Department of Commerce, FDOT, Water Management District, and Regional Planning Council are enclosed for your review.

RECOMMENDED MOTIONS:

Future Land Use

Motion to approve on second and final reading of Ordinance O-02-2024 and approve transmittal to the Florida Department of Commerce a Site-Specific Policy Amendment regarding development restrictions for the proposed Future Land Use Amendment in Ordinance O-01-2024.

FOR OFFICE USE ONLY

P Z File #_____

Application Fee:_____

Filing Date: _____ Acceptance Date:_____

Review Date: SRDT_____ P & Z _____ CC _____

Comprehensive Plan Amendment Application Map & Text Amendment

A. PROJECT

1. Project Name: Huntley Commerce Center-or 17-16 Commerce Center
2. Address of Subject Property: Leonard C taylor Parway
3. Parcel ID Number(s): 38-06-26-016451-000-00 and 016451-003-00
4. Existing Use of Property: Commercial Industrial
5. Future Land Use Map Designation : Commercial
6. Existing Zoning Designation: C-2
7. Proposed Future Land Use Map Designation: Industrial
8. Acreage: 58 acre

B. APPLICANT

1. Applicant's Status ☐ wner (title holder) ☑ gent
2. Name of Applicant(s) or Contact Person(s): Kelly Hartwig Title:_____

   Company (if applicable): Cypress Management and Design

   Mailing address: PO Box 8880,

   City: Fleming Island State: Florida ZIP: 32006

   Telephone: 904-759-9576 FAX: (___) _____ e-mail: Siteopt@bellsouth.net

3. If the applicant is agent for the property owner*

   Name of Owner (title holder): HLM Investments

   Mailing address: 1890 Kingsley ave.

   City: Orange Park State: Florida ZIP: 32073

   Telephone: (___) _____ FAX: (___) _____ e-mail:_____

* Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property?

   ☐ Yes ☑ No If yes, list names of all parties involved:

   If yes, is the contract/option contingent or absolute?

   ☐ Contingent ☐ Absolute

D. ATTACHMENTS (One copy reduced to no greater than 11 x 17, plus one copy in PDF format.)

1. Statement of proposed change, including a map showing the proposed Future Land Use Map change and Future Land Use Map designations on surrounding properties
2. Concurrency Impact Analysis which considers the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools.
3. Needs Analysis which demonstrates the necessity of the proposed change. This analysis may consist, in whole or part, of a market impact study or real estate needs analysis.
4. Analysis of Consistency with the City of Green Cove Springs Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)
5. A current aerial map (Maybe obtained from the Clay County Property Appraiser.)
6. Legal description with tax parcel number.
7. Boundary survey
8. Vicinity Map
9. Warranty Deed or the other proof of ownership
10. Fee.
    a. Future Land Use Map Amendments - $1,500 plus $20 per acre
    b. Text Amendment to Comprehensive Plan - $1,500 per element
    c. All applications are subject 10% administrative fee and must pay the cost of postage, signs, advertisements, and the fee for any outside consultants.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees necessary for technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

All 10 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge:

Signature of Applicant

Kelly Hartwig

Typed or printed name and title of applicant

2/1/2024

Date

Signature of Co-applicant

Typed or printed name of co-applicant

Date

State of Florida County of Clay

The foregoing application is acknowledged before me this 1st day of February, 2024 by Kelly Hartwig, who is/are personally known to me, or who has/have produced _____ as identification.

NOTARY SEAL

Notary Public State of Florida
Lyndie B Knowles
My Commission HH 407812
Expires 8/20/2027

Signature of Notary Public, State of Florida

ORDINANCE O-2-2024

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, AMENDING THE COMPREHENSIVE PLAN OF GREEN COVE SPRINGS, FLORIDA, BY ADDING FUTURE LAND USE OBJECTIVE 1.8 TO ADD SITE SPECIFIC DEVELOPMENT CONDITIONS FOR NEW DEVELOPMENT PROJECTS; AND ADDING FUTURE LAND USE POLICY 1.8.1 REGARDING SITE SPECIFIC DEVELOPMENT CONDITIONS RELATED TO FUTURE LAND USE AMENDMENT (ORDINANCE NO. O-01-2024) CHANGING THE FUTURE LAND USE FROM MIXED USE TO INDUSTRIAL FOR ±15 ACRES OF REAL PROPERTY GENERALLY LOCATED OFF OF THE SOUTHEAST CORNER OF LEONARD C TAYLOR PARKWAY AND US 17, IDENTIFIED AS A PORTION OF TAX ID NUMBER 016541-000-00 AND ±43.12 ACRES OF PROPERTY LOCATED AT LEONARD C TAYLOR PARKWAY, IDENTIFIED AS TAX ID NUMBER 016451-003-00, MORE PARTICULARLY DESCRIBED BY EXHIBIT "A", FROM MIXED USE TO INDUSTRIAL AND; PROVIDING FOR REPEALER, SEVERABILITY AND SETTING AN EFFECTIVE DATE.

WHEREAS, Chapter 166, Florida Statutes, empowers the City Council of Green Cove Springs to prepare and enforce a Comprehensive Plan for the development of the City; and

WHEREAS, Sections 163.3161 through 163.3215, Florida Statutes, the Local Government Comprehensive Planning and Land Development Regulation Act, empowers and requires the City Council of Green Cove Springs to (a) plan for the City's future development and growth; (b) adopt and amend Comprehensive Plans, or elements or portions thereof, to guide the future growth and development of the City, (c) implement adopted or amended Comprehensive Plans by the adoption of appropriate land development regulations; and (d) establish, support, and maintain administrative instruments and procedures to carry out the provisions and purpose of the action; and

WHEREAS, the City Council believes adding site specific policies for Future Land Use Amendments related to new development projects are necessary to ensure the quality of life; and

WHEREAS, the City Council believes adding a site-specific policy related to Future Land Use Amendment (Ordinance No. O-01-2024) is necessary to ensure the City's adopted Level of Service, quality of life and to ensure compatibility with surrounding uses; and

WHEREAS, the City Council has been established pursuant to Article II of the City Charter of the City of Green Cove Springs duly adopted July 15, 1980; and

WHEREAS, the City Council, empowered by the above-cited laws and ordinances, and by Sections 163.3161 through 163.3215, Florida Statutes, prepared an amendment to the Comprehensive Plan 2025 to address more adequately and prepare for Green Cove Springs' future development and growth; and

WHEREAS, in exercise of its authority, the City Council of Green Cove Springs has determined it necessary and desirable to adopt the amendments to the Comprehensive Plan 2025 as identified in Attachment "A", to encourage the most appropriate use of land, water and resources, consistent with the public interest; to deal effectively with future problems that may result from the use and development of land within Green Cove Springs.

NOW, THEREFORE, BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, AS FOLLOWS:

Section 1. Purpose and Intent. This Ordinance is enacted to carry out the purpose and intent and exercise the authority set out in the Local Government Comprehensive Planning and Land Development Regulation Act, Sections 163.3161 through 163.3215, Florida Statutes, and Chapter 166, Florida Statutes, as amended.

Section 2. Adoption of Future Land Use Element Objective 1.14 and Policy 1.14.1, for the Comprehensive Plan 2025. The City Council of Green Cove Springs hereby adopts Future Land Use Element Objective 1.14 and Policy 1.14.1 of the Green Cove Springs Comprehensive Plan 2025 as specified in Attachment "A" attached hereto and by reference made a part hereof.

Section 3. Applicability and Effect. The applicability and effect of the amendments to the Green Cove Springs Comprehensive Plan 2045 shall be as provided by the Local Government Comprehensive Planning and Land Development Regulation Act, Sections 163.3161 through 163.3215, Florida Statutes, and this Ordinance.

Section 4. Copy on file.

(a) A certified copy of the enacting ordinance, as well as certified copies of the amendments to the City of Green Cove Springs' Comprehensive Plan 2045 and any amendments thereof, shall be filed with the City Clerk of Green Cove Springs.

(b) To make amendments to the Comprehensive Plan 2045 available to the public, a certified copy of the enacting ordinance, as well as certified copies of the amended City of Green Cove Springs Comprehensive Plan 2025 and any amendments thereto, shall be located in the Planning and Zoning Department of the City of Green Cove Springs and shall be available to the public for a reasonable publication charge.

Section 5. Repealer. All ordinances or part of Ordinances in conflict herewith be and the same are hereby repealed.

Section 6. Severability. If any portion or portions of this Ordinance is declared by any court of competent jurisdiction to be void, unconstitutional or unenforceable, then all remaining provisions of this Ordinance shall remain in full force and effect.

Section 7. Effective Date. If this ordinance becomes effective, the effective date of the comprehensive plan text amendment adopted hereby shall be the later of:

a. The date that the amendment to the local government's future land use map that is the subject of Ordinance No. O-01-2024 becomes effective; or

b. If this amendment is not timely challenged, the effective date shall be 31 days after the state land planning agency notifies the local government that this plan amendment package is complete. If timely challenged, this amendment shall become effective on the date the state land planning agency or the Administration Commission enters a final order determining this adopted amendment to be in compliance. No development orders, development permits, or land uses dependent on this amendment may be issued or commence before it has become effective. If a

final order of noncompliance is issued by the Administration Commission, this amendment may nevertheless be made effective by adoption of a resolution affirming its effective status, a copy of which resolution shall be sent to the state land planning agency at 107 East Madison Street, MSC 160, Tallahassee, Florida 32399-4120.

INTRODUCED AND PASSED AS TO FORM ONLY ON THE FIRST READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, THIS 6th DAY OF FEBRUARY 2024.

CITY OF GREEN COVE SPRINGS, FLORIDA

By:_____
Constance Butler, Mayor

ATTEST:_____
Erin West, City Clerk

PASSED ON SECOND AND FINAL READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, THIS 16th DAY OF JULY 2024.

CITY OF GREEN COVE SPRINGS, FLORIDA

By:_____
Steven R. Kelley, Mayor

ATTEST:_____
Erin West, City Clerk

APPROVED AS TO FORM ONLY:

_____
L. J. Arnold, III, City Attorney

ATTACHMENT "A"

Objective 1.8 The City shall adopt, as necessary, Future Land Use Map Amendments with specific development conditions that are consistent with the City's adopted Level of Service (LOS) standards and Future Land Use Element, and compatible with the surrounding uses.

Policy 1.8.1: Future Land Use Map (FLUM) Amendment adopted by Ordinance Number O-01-2024 on June 18, 2024 changes the future land use on the amendment area from Mixed Use to Industrial. Development shall meet the requirements of all applicable goals, objectives and policies of the Comprehensive Plan; however, the land use and development potential made available by the FLUM Amendment Ordinance O-01-2024 is hereby limited based on the following:

1. Prior to the approval of a subsequent development order such as but not limited to a subdivision or site development plan, the property owner/developer must submit a developer's agreement addressing the following development requirements for the Amendment parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17:
   a) Address screening and buffering requirements between the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 and SR 16 and US 17.
   b) Address Building, site and streetscape design requirements for the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 adjacent to SR 16 and US 17. These requirements shall include but are not limited to:
      a. Block Standards
      b. Building Placement
      c. Building Typology and Massing
      d. Building Frontage Design
      e. Façade Articulation
      f. Entrances
      g. Building Materials
      h. Lighting
      i. Service Area and Mechanical Equipment Screening
      j. Signage

2. Prior to approval of a subsequent development order, such as but not limited a zoning, subdivision or site development plan, the property owner/developer will be required to provide an Access Management Plan and Traffic Impact Analysis to address site access and traffic capacity, the plan must be developed in cooperation with Florida Department of Transportation, Clay County and the City of Green Cove Springs.
      a. Traffic Study shall be completed prior to issuance of building permits for new onsite development and a building final inspection is issued for expansion of existing development.
      b. Traffic Study shall address truck traffic and rail traffic as part of their analysis.
      c. Traffic Study methodology approval shall be secured prior to approval of a subsequent development order, such as but not limited to Zoning, Subdivision or Site Development Plan.
      d. A Development Agreement shall be completed prior to issuance of building permits for new onsite development and a building final inspection is issued for expansion of existing development to address the timing and costs associated with offsite improvements.

3. Limit uses on the Amendment Parcels or any portion thereof to permitted uses in the M-1 Zoning District and M-2 Zoning District Permitted Uses as a Special Exception.

4. Property shall be rezoned to a Planned Unit Development (PUD). A conceptual plan and written description shall be included with the PUD submittal.

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council **MEETING DATE:** July 16, 2024

FROM: Michael Daniels, AICP, Planning & Zoning Director

SUBJECT: Second and final reading of Ordinance O-10-2024 PUD Rezoning request for property located at the Southeast corner of US 17 and SR 16 for approximately 112 acres of parcel #016451-003-00 and 016451-000-00.

Zoning Amendment: from: C-2, General Commercial

to: PUD, Planned Unit Development

PROPERTY DESCRIPTION

APPLICANT: Kelly Hartwig, Cypress Management and Design

OWNER: HLM Investments LLC & Louis L Huntley Enterprises Inc.

PROPERTY LOCATION: 965 Leonard C Taylor Highway

PARCEL NUMBER: 016451-003-00 & 016451-000-00

FILE NUMBER: PUD-24-0001

CURRENT ZONING*:* C-2 General Commercial

FUTURE LAND USE DESIGNATION*:* Mixed Use

SURROUNDING LAND USE

NORTH: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

SOUTH: **FLU**: INDUSTRIAL (COUNTY)
Z: Heavy Industrial (COUNTY)
Use: Undeveloped

EAST: **FLU**: MIXED USE REYNOLDS PARK
Z: M-2
Use: Reynolds Airpark

WEST: **FLU**: MIXED USE
Z: C-2
Use: Undeveloped

BACKGROUND

The applicant applied for a Future Land Use and Zoning Change for the subject property for the construction of industrial development in September of 2023. The application was approved by the Planning and Zoning Commission however due to concerns about the impact of adding industrial uses to the property, City Council recommended that the request be tabled subject to a requirement that the applicant submit a site-specific Future Land Use text amendment addressing:

- Land uses
- Site Design
- Buffering
- Traffic

Subsequent to the request being tabled by City Council, the applicant submitted a Future Land Use Text Amendment which was transmitted by City Council to the State Commerce Department for review on February 6, 2024. After the completion of the state review, the request will be reviewed by City Council for adoption. The request for a PUD rezoning cannot be approved until the approval of the Future Land map and text amendment. The text amendment is enclosed.

The property includes an extension of the CSX Rail line which runs south to north located in the eastern portion of the property. The rail line is owned by the City and is in disrepair. The applicant has expressed an interest in entering an agreement with the City to repair the existing Rail line and add a Railroad spur to serve potential future Industrial users on the property. These actions would require a separate agreement to be approved by the City.

There is an existing building on the site that had been used for manufacturing plant which has been closed in 2010. However industrial businesses such as Woodford Plywood, Meever USA and Front Runner Boatworks have been located at this location as nonconforming industrial uses.

The property is sparsely wooded with the exception of the area to the east of the railroad tracks which has a thick tree cover.

The site is located within the City's Water, Sewer, and Electric Service Boundaries. It will be served by the City's sanitation services.

ZONING AND DEVELOPMENT DESCRIPTION

The applicant is proposing to rezone the property to a Planned Unit Development (PUD). As shown on the Preliminary Zoning Plan, the area fronting on US 17 and SR 16 shall be restricted to C-2, general commercial uses. The area behind the commercial, shown in green on the preliminary zoning plan, shall allow M-1 light industrial uses. Uses proposed as M-2 heavy industrial uses shall require a special exception from the Planning and Zoning Commission prior to approval.

The applicant is proposing a commercial / industrial development consisting of

- 119,000 sf of manufacturing space,
- 231,200 sf of retail space (including one gas station with convenience market on southeast corner of the US 17/SR 16 intersection),
- 264,000 sf of warehouse space,
- 130,500 sf of light industrial space, and
- A train-delivery system to above facility

As shown in the PUD Plan, Phase 1 will be the restoration and upgrades of the existing 80,000 square foot Building as shown on the preliminary phasing plan. Phase 2 shall consist of:

- 81,500sf of manufacturing space
- 56,600sfof retail space, and
- 70,500 sf of warehouse space

Phase 3 will be the commercial of the remaining industrial and commercial square footage and submittal of primary commercial road access. Staff is requiring that site plans for both phase 2 and phase 3 be coordinated with the development of the primary commercial road access to ensure that vehicular and pedestrian access as well as the installation of utilities are efficiently provided.

TRAFFIC AND ACCESS

As shown on Exhibit B of the Traffic Study Methodology submittal, the applicant is proposing 5 access points to US 17 and SR 16. All access points shall require FDOT approval.

Access A- Directional
Located on US 17 across from Energy Cove Court is proposed to be a directional right-in, right-out, left-out access.

Access B-
Located on US 17 across from the Cove Shopping Center, will be a right turn-in - right turn out only access point.

Access C-
Located as the westernmost access on SR 16, this is proposed as right turn-in - right turn out only access point.

Access D- Directional
This is the existing access point on SR 16 which is proposed to be a directional right turn in- right turn out- and Left turn in.

Access E- Full access
This is the easternmost access point on SR 16 that connects to the City Wastewater it is proposed to be a full access point and if it meets the warrant analysis would be a signalized intersection.

UTILITY CONNECTIONS AND SOLID WASTE

Master Utility Plan is enclosed. All development will be served by City Water and Sewer.

LANDSCAPE PLAN

Shall be required to meet the requirements set forth in the City's Land Development Regulations.

Aerial


US-17 N
LEONARD C TAYLOR PKW
COOK LN
GREEN COVE AVE
US-17 S
Energy Cove Ct

.

CONSISTENCY WITH THE COMPREHENSIVE PLAN

The following Goals, Objectives, and Policies (GOPs) support the proposed zoning amendment to Planned Unit Development in the City's 2045 Comprehensive Plan:

FUTURE LAND USE ELEMENT

Goal 1: To develop and maintain land use programs and activities to provide for the most appropriate use of the land and direct growth to suitable areas while protecting the public, health, safety and welfare of the public.

Objective 1.1. New development and Redevelopment shall directed to appropriate areas of the City.

e. Industrial (IND): This FLUC is intended to accommodate primarily light and heavy manufacturing, distribution, and storage, in addition to heavy commercial and professional office uses. iii. Density: NA iv. Maximum Intensity: 0.6 FAR

Objective 1.2. The City shall strive to cultivate a sustainable land use pattern by preventing the proliferation of urban sprawl, ensuring the efficient provision of services, and implementing smart growth principles.

Policy 1.2.1. The location and timing of new development and the issuance of permits shall be coordinated with the availability of public facilities through implementation of various smart growth management measures.

Policy 1.2.6. The City shall require new development to connect to the City's centralized potable water and sanitary sewer system.

Policy 1.2.7. The City shall condition development orders upon the provision of essential facilities and services which meet and would not result in the failure of each service's established level of service (LOS).

Policy 1.2.8. The City shall ensure the availability and protection of lands designated for the future expansion of public infrastructure.

Objective 1.4. The City shall strive to preserve its natural resources.

Policy 1.4.5. Development orders shall not be issued in areas where soils conditions are not adequate for building construction, drainage, roads, and other development-related facilities.

TRANSPORTATION ELEMENT

Policy 2.3.1. The City shall rely on level of service (LOS) standards adopted in the Capital Improvements Element to ensure that acceptable traffic conditions are maintained*.

*The City is in the process of implementing a mobility plan and fee for new development to ensure that needed transportation improvements are provided to ensure that the City is addressing transportation congestion issues and providing for multimodal improvements.

Policy 2.5.3. The City shall review development applications to ensure that adequate capacity is available to serve the proposed project. The latest version of Trip Generation Manual published by the Institute of Transportation Engineers (ITE) shall be used to determine the number of trips that the proposed development will produce or attract.

SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER, AND AQUIFER RECHARGE ELEMENT

Objective 4.2. The City shall continue to provide safe and adequate sanitary sewer service to all existing and future developments located within the City limits. Existing Sanitary Sewer deficiencies shall be scheduled for correction in the Capital Improvements Element.

Policy 4.2.1 All Future Development shall be required to connect to the City's Sanitary Sewer Collection

Policy 4.2.1. All Future Development shall be required to connect to the City's Sanitary Sewer Collection.

Objective 4.6. Future Development shall be required to connect with central water systems and provide stormwater facilities which maximize the use of existing facilities and discourage urban sprawl.

Policy 4.6.1. The City shall annually monitor the condition of level of service standards for solid waste, potable water, wastewater, and stormwater facilities. The Planning and Zoning Department shall be assigned the task of reviewing all development orders to determine their current and future impacts on the capacities of existing public facilities.

Policy 4.6.2. No permit shall be issued for new development which will result in an increase in demand on deficient capacities or if adequate facility capacities for solid waste, potable water, sanitary sewer, and drainage facilities are not available prior to or concurrent with the development's impact.

CONSERVATION ELEMENT

Policy 5.3.2. The City shall ensure that public potable water wellfields will be located in areas where they will be least impacted by development and contamination.

Policy 5.4.3. The City shall prohibit development activities that would potentially endanger lives, and/or harm property, water quality and quantity.

INTERGOVERNMENTAL COORDINATION ELEMENT

Objective 7.1. The City shall act to ensure that all planning and development related activities are coordinated with the comprehensive plan or any other plans of Clay County, the Northeast Florida Regional Council (NEFRC), and the School Board.

Policy 7.1.1. Maintain procedures to review comprehensive plans and comprehensive plan amendments of the County and the plans of the Clay County School Board and the Northeast Florida Regional Council.

ECONOMIC DEVELOPMENT ELEMENT

Policy 9.1.6. Continue collaboration through the Clay County EDC and the Clay County Chamber of Commerce with Florida Chamber of Commerce and Enterprise Florida Inc for sector strategy development, regional incentive updates and statewide attraction and site selection programs.

Objective 9.5. The City shall collaborate economic development efforts with state, regional and local partners to foster a system of enhanced communication and partnerships within the Northeast Florida region.

PRIVATE PROPERTY RIGHTS ELEMENT

Objective 10.1. The City shall recognize that each property owner has constitutionally protected private property rights and shall consider these property rights in local decision making by referring to a set of statement of rights identified in this element.

Policy 10.1.1. The following rights shall be considered in local decision making:

a. The right of a property owner to physically possess and control his or her interests in the property, including easements, leases, or mineral rights.

b. The right of a property owner to use, maintain, develop, and improve his or her property for personal use or for the use of any other person, subject to state law and local ordinances.

c. The right of the property owner to privacy and to exclude others from the property to protect the owner's possessions and property.

d. The right of a property owner to dispose of his or her property through sale or gift.

PUBLIC FACILITIES IMPACT

Traffic Impacts

Land Use[1] (ITE)	Square Footage/Dwelling Units	Daily		AM Peak		PM Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Warehousing	264,000	n/a	456	n/a	55	n/a	58
Light Industrial	130,500	n/a	542	n/a	93	n/a	49
Manufacturing	119,000	n/a	650	n/a	82	n/a	86
Shopping Center	231,200	n/a	11,900	n/a	270	n/a	1,032
Total	744,700	n/a	13,548	n/a	500	n/a	1,225

1. *Source: Institute of Transportation Engineers: Trip Generation Manual 11th Edition as provided in the Huntley Traffic Methodology*

Conclusion: Pursuant to the requirements of the site-specific Future Land Use text amendment, a traffic study methodology has been submitted to staff for review. A completed methodology has been approved by staff and is included in the packet. The traffic methodology provides:

- ***Description of the Proposed Development***
- ***Timeframe***
- ***Trip Generation included projected truck traffic from industrial development***
- ***Preliminary Site Access and Trip Distribution***
- ***Existing Conditions Inventory/Analysis including existing train US 17 crossing inventory***
- ***Committed Projects***

Potable Water Impacts

Industrial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	4,200,000
Less actual Potable Water Flows[1]	1,013,000
Residual Capacity[1]	3,187,000
Projected Potable Water Demand from Proposed Project[2]	81,917
Residual Capacity after Proposed Project	3,105,803

1. *Source: City of Green Cove Springs Public Works Department*
2. *Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)*

Conclusion: The impact was calculated based on potential industrial uses. As shown in the table above, there is adequate capacity this use type. The City has existing water lines installed at this location.

Sanitary Sewer Impacts – South Plant WWTP

Commercial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	350,000
Current Loading[1]	254,000
Committed Loading [1]	65,000
Residual Capacity after Proposed Project	31,000
Projected Sewer Demand from Proposed Project[2]	81,917
Residual Capacity after Proposed Project	-49,083

1. *Source: City of Green Cove Springs Public Works Department*
2. *Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)*

Conclusion: The impact was calculated based on potential commercial or residential uses. The project site is served by the South Plant Wastewater Treatment Plant (WWTP). As shown in the table above, when factoring in the current loading and the committed loading, this WWTP is over capacity to handle the estimated impacts resulting from the proposed application. The remaining demand will be sent via force main to the Harbor Road plant, where the City has an excess capacity of approximately 700,000 gallons per day. As a result, there is adequate capacity. The City has existing sewer lines at this location.

Solid Waste Impacts

Commercial

System Category	LBs Per Day / Tons per Year
Solid Waste Generated by Proposed Project[1]	None
Solid Waste Facility Capacity[2]	Minimum 3 Years Capacity

1. *Source: City of Green Cove Springs does not provide commercial sanitation services, prospective sanitation collection franchisees shall comply with City Code Section 66-10.*

Solid Waste Impacts

The City of Green Cove Springs' solid waste is disposed of at the Rosemary Hill Solid Waste Management Facility operated by Clay County. Per the Clay County Comprehensive Plan, a minimum of three (3) years capacity shall be maintained at the County's solid waste management facility. For commercial developments, the City does not provide Curbside Service; commercial locations must instead contract with an approved franchisee for containerized collection.

Conclusion: The proposed rezoning shall provide a complete methodology prior to rezoning approval and provide a complete traffic study prior to development approval.

STAFF ANALYSIS

Compatibility

The Subject Property is located adjacent to a Mixed Use Land Use District to the north and west, to the south are industrial uses located along Hall Park Road and to the east the property is adjacent the Reynolds AirPark which is zoned Industrial. The property line of the proposed request is within 400' of an existing Runway. The Reynolds Air Park is a private airpark operated by Pegasus Technology, Inc., who is a tenant of the landowner, Clay County Port, Inc. The airpark is not open to the public and therefore is not required to have an Airport Master Plan as is required for a Public use airport pursuant to Chapter 333 of the Florida Statutes. Regardless of the fact that the Airpark is a private airport, proposed development within that area will be reviewed to ensure compatibility with the existing facility. The property along US 17 and SR 16 shall remain as commercial properties in keeping with providing a commercial gateway into the City. As a result, the proposed Future Land Use and Zoning application is suitable for the property and compatible with the surrounding uses.

The transmitted Future Land Use Text Amendment include the following requirements:

1. *Prior to the approval of a subsequent development order such as but not limited to a subdivision or site development plan, the property owner/developer must submit a developer's agreement addressing the following development requirements for the Amendment parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17:*
   a) *Address screening and buffering requirements between the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 and SR 16 and US 17.*
   b) *Address Building, site and streetscape design requirements for the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 adjacent to SR 16 and US 17. These requirements shall include but are not limited to:*
      a. *Block Standards*
      b. *Building Placement*
      c. *Building Typology and Massing*
      d. *Building Frontage Design*
      e. *Façade Articulation*
      f. *Entrances*
      g. *Building Materials*
      h. *Lighting*
      i. *Service Area and Mechanical Equipment Screening*
      j. *Signage*
2. *Prior to approval of a subsequent development order, such as but not limited a zoning, subdivision or site development plan, the property owner/developer will be required to provide an Access Management Plan and Traffic Impact Analysis to address site access and traffic capacity, the plan must be developed in cooperation with Florida Department of Transportation, Clay County and the City of Green Cove Springs.*
      a. *Traffic Study shall be completed prior to issuance of building permits for new onsite development and certificate of occupancies (CO) are issued for expansion of existing development.*
      b. *Traffic Study shall address truck traffic and rail traffic as part of their analysis.*

c. *Traffic Study methodology approval shall be secured prior to approval of a subsequent development order, such as but not limited to Zoning, Subdivision or Site Development Plan.*
d. *A Development Agreement shall be completed prior to issuance of building permits for new onsite development and certificate of occupancies (CO) are issued for expansion of existing development to address the timing and costs associated with offsite improvements.*

3. *Limit uses on the Amendment Parcels by allowing M-1 Uses by right and M-2 uses as a special exception.*
4. *Property shall be rezoned to a Planned Unit Development (PUD). A conceptual plan and written description shall be included with the PUD submittal.*

Pursuant to the requirements of the site-specific text amendment, the applicant has submitted a Planned Unit Development Concept Plan and Written Description. The written description includes a Project Description Uses and Restrictions, Design Guidelines, Development Plan Approval and a justification for a Planned Unit Development. The Concept Plan shows the location of commercial development along SR 16 and US 17 with the industrial uses within the interior of the development.

Intent of Existing Zoning Districts

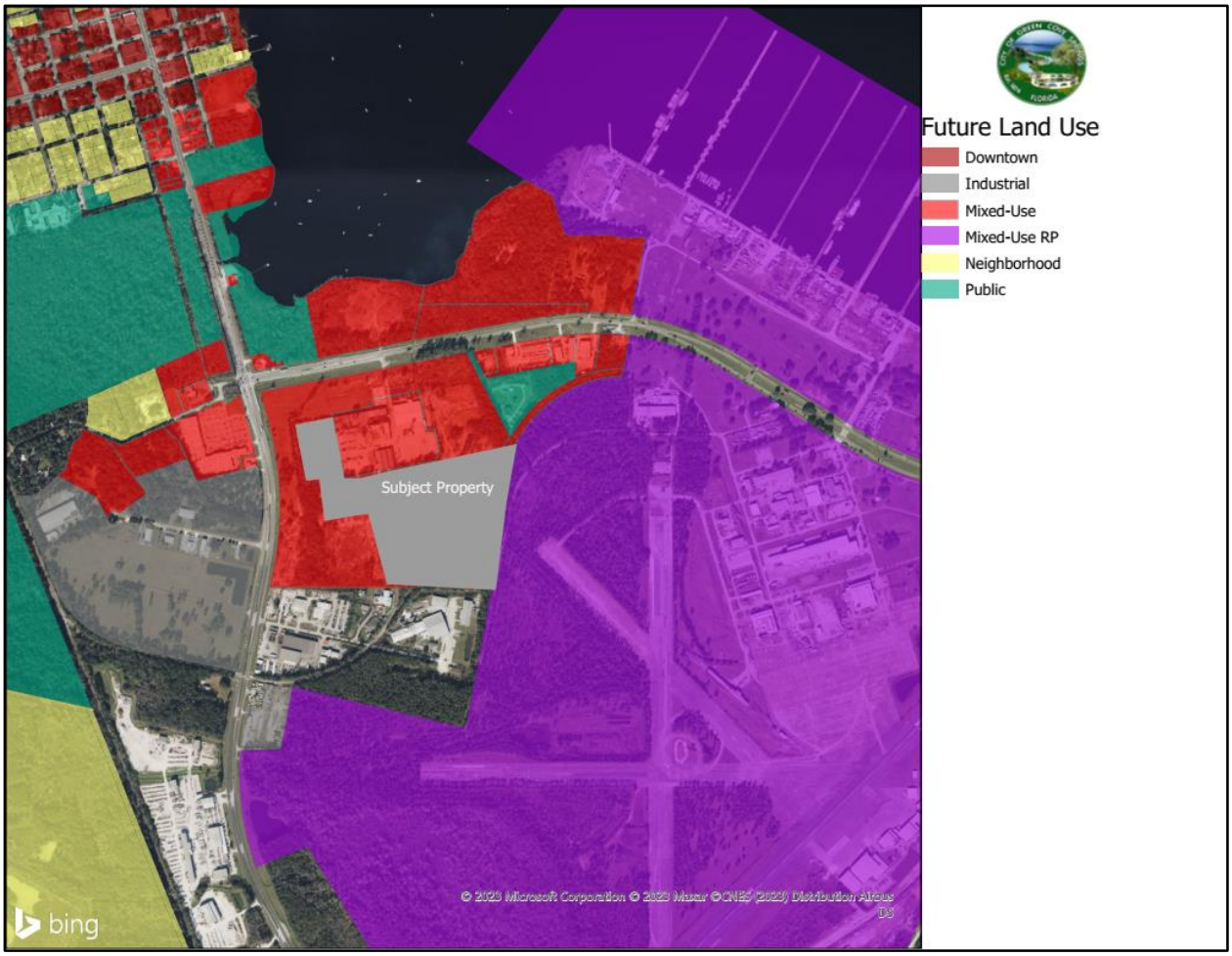
The commercial high intensity (CHI), C-2 general commercial zoning category district is intended for intensive commercial uses which generally require a conspicuous and accessible location convenient to streets carrying large volumes of traffic.

The M-2 industrial district is intended to be for an industrial park. A variety of industrial and supported uses are allowed.

Intent of Proposed Zoning District: Planned Unit Development

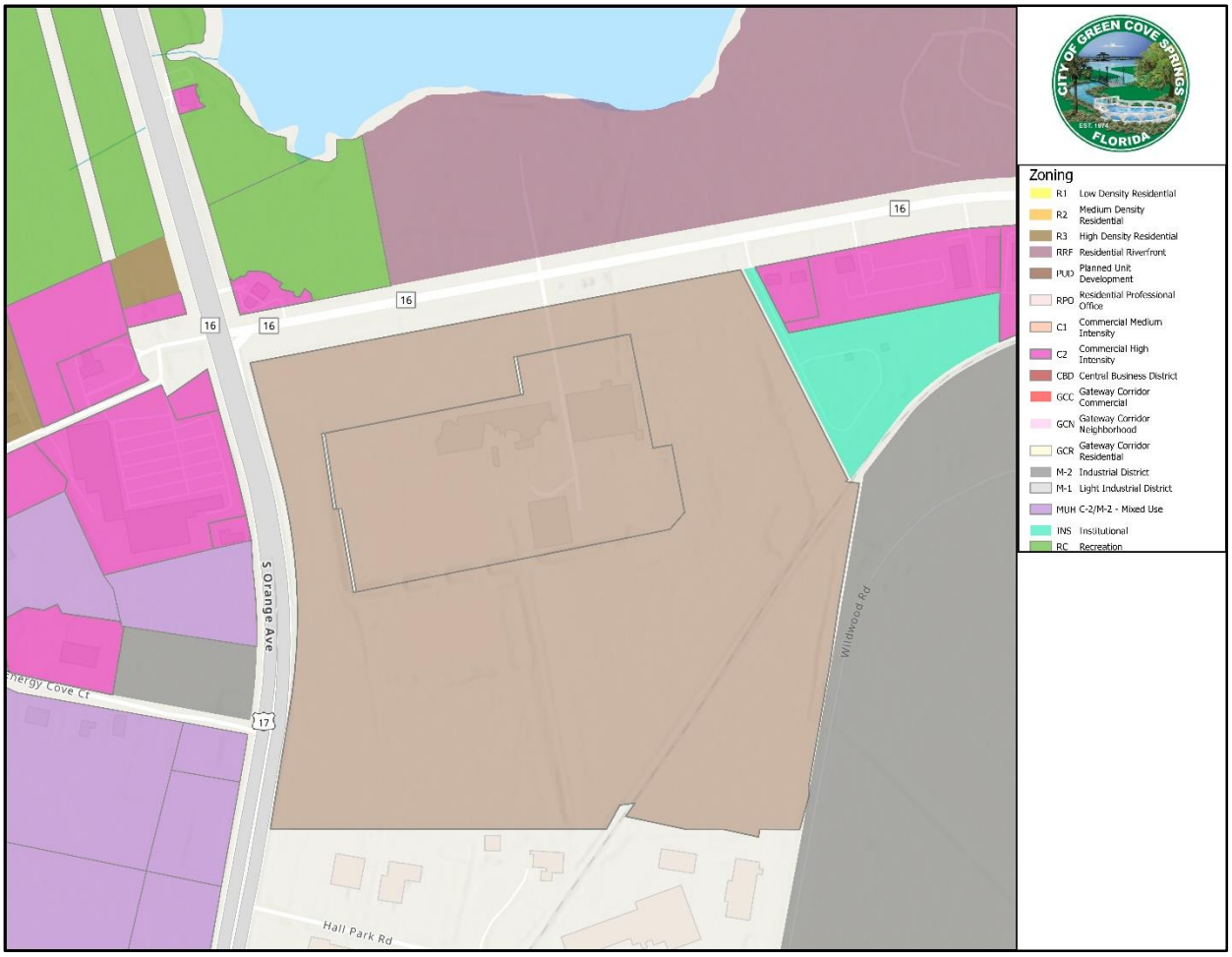
It is the purpose of this part to encourage new development and redevelopment, flexibility in design with the overall development consistent with this subpart and the city comprehensive plan. A planned unit development is permitted on a parcel of land under common control or ownership, where it would be beneficial for the city and improve the quality of the development, to permit flexibility in the location of land uses that are shown on the future land use map. The density or intensity of the development shall not exceed development approved in the future land use map.

Proposed Future Land Use


Future Land Use
Downtown
Industrial
Mixed-Use
Mixed-Use RP
Neighborhood
Public
Subject Property
bing

Existing Zoning

Proposed Zoning



Attachments Include:

- PUD Written Description (from 6/18/24 Council meeting)
- PUD Written Description (Applicant revisions redline)
- PUD Exhibit G (Applicant submitted, Aggregate setback concept plan)
- Traffic Methodology Final
- Application
- Ordinance O-10-2024
- Powerpoint Presentation

STAFF RECOMMENDATION

Staff recommends approval of the requested Rezoning from C-2, General Business to Planned Unit Development based on compliance with the identified elements of the Comprehensive Plan, PUD Requirements and Site-Specific Future Land Use Text Amendment, Ordinance O-02-2024. The Planning and Zoning Commission approved the submittal on a 4-1 vote on May 28, 2024. City Council unanimously approved the first reading for form and legality on June 4th . City Council directed staff to work with the applicant to include language regarding restrictions regarding outside storage of aggregate materials. Staff has made the following changes (which are shown in the clean version of the PUD Written Description) since the June 4th public hearing:

- Staff has provided a definition and prohibited outdoor storage of aggregate materials within all of the preliminary zoning areas within the Planned Unit Development which has been added to Section II of the Written Description: Exhibit C.
- Removed language in Section I of the Written Description that the City and owner will share in the costs associated with utilities.
- Clarified that all utilities proposed to be owned and maintained by the City are subject to City approval and acceptance.
- Clarified process of Site Plan, Zoning and Use Interpretation and modification process.

Since the June 18th meeting: the applicant has submitted a revised Written Description with the following changes:

- Defines and prohibits a truck stop in all areas of the PUD
- Allows outdoor storage of aggregate materials as a permitted use in the M-1 Zoning District subject to the following conditions:
    - Limited to one facility in the PUD.
    - Stockpile area limited to 12 acres.
    - Stockpile area must be setback from US 17 and SR 16 a minimum of 1,000 feet.
    - Permanent stockpile height and equipment shall not exceed 28’ in height.
    - All stockpiles shall be screened with either an existing building and/ or a 12’ masonry concrete with:
        - Large trees as defined in the City Land Development Code (Sec. 113-243) shall be provided at a maximum of 25’ on center and a minimum of 4” caliper at time of planting.
        - Shall comply with Architectural Guidelines as set forth in Exhibit D regarding outdoor storage.
    - Dust Control Measures shall be taken to ensure dust does not encroach beyond the limits of the facility.

- Provide type, height and outline of equipment used to off load rail cars.
- Traffic patterns of vehicles onsite shall be provided, traffic shall be separated from commercial entrances.
- Identify materials to be handled. Specific material storage are subject to City Council approval.
- Hours of Operation shall be provided.

RECOMMENDED MOTIONS:

Rezoning

Motion to approve the Second and Final Reading of Ordinance O-10-2024 for the Rezoning of Parcel IDs 016451-000-00 and 016451-003-00 from C-2, General Business to Planned Unit Development based on the factual support provided in the staff report with the additional condition to provide revisions as shown on the staff version of the PUD Written Description; or

Motion to approve the Second and Final Reading of Ordinance O-10-2024 for the Rezoning of Parcel IDs 016451-000-00 and 016451-003-00 from C-2, General Business to Planned Unit Development based on the factual support provided in the staff report with the additional condition to provide revisions as shown on the applicant's version of the PUD Written Description.

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Exhibit C

WRITTEN DESCRIPTION

17-16 Commerce Center
Date: 6-13-2024
Current Zoning District: C-2
Proposed Zoning District: PUD
Parcel #'s: 38-06-26-016451-003-00---
38-06-26-016451-000-00

I. PROJECT DESCRIPTION

It is the purpose and intent of this PUD to provide flexibility in planning, design and development; to provide a development compatible with surrounding land use; to encourage development along the 17- 16 corridor yet creating an entrance to the City of Green Cove Springs. The PUD will create a unified development plan incorporating a similar design theme and other development criteria. The property is a 120-acre site located in Green Cove Springs, Florida. The land is currently zoned Residential Light Manufacturing and Commercial.

The owner's vision of the use of the property is a multi-use facility which can provide an upscale commercial C-2 corridor along U.S 17 and State Road 16 and Industrial, both M-1 and M-2 utilizing the existing infrastructure. M-1 will be allowed. M-2 will be allowed by Special Exception.

Building constraints- all the buildings will have upscale architectural facades. Exterior portions of buildings which are visible to the 17- 16 corridor shall be enhanced with architectural features such as stucco- brick- stone.

Onsite parking and access will be asphalt paved. The main entrance and exit will be on US 17 and State Road 16. Secondary access may be allowed from neighboring property. There will be an internal access road built with curb and gutter.

Outside Storage- In order to create an upscale commercial entrance, the owners recognize that commercial outside storage is prohibited in the C-2 Zoning District and outdoor sales (retail display) shall require a special exception and must be approved by the City of Green Cove Springs. All industrial outside storage shall be screened from US 17 and State Road 16 by either a Building façade, Masonry wall or vegetative screen.

Existing and new facilities will utilize municipal water and sewer services. The owner would design all new utility services on the site. All new services would be underground to enhance the appearance of the surrounding areas.

The creation of a master planned development affords an efficient use of the land. Each new tenant will be required to submit a individual site plan for city approval. Attached is a preliminary masterplan. The masterplan will be updated with each site development

plan.

A. Project Name: 17/16 Commerce Center PUD

B. Current Project Manager/Planner: Kelly Hartwig

C. Project Developer: HLM Investments LLC

D. Quantitative Data Summary:

1. Total Acreage: 112 acres
2. Proposed Number of sites may vary.
3. Total amount of active space- impervious space will be based on SJRWMD master permit.
4. Total amount of parking: - Shared parking can be used in all calculations.
5. Phase schedule of construction – Phase 1 will be restoration and upgrades to existing 80,000 Building 3. Phase 2 will be site plan submittal and approval for individual tenants. Phase 3- Site plan submittal and approval of Phase 1 Commercial Road access. As outlined in the Site Phasing Plan (Exhibit G).
6. Restoration of Façade of Building 1 will be completed within 3 years of start of restoration of Building 3

II. USES AND RESTRICTIONS

A. Permitted Uses, Special Exceptions and Structures

1. Permitted uses set forth in Sec. 117-253 of the Commercial C-2 Zoning District shall apply in the C-2 zoned area of the preliminary zoning plan as shown on Exhibit E.
2. Special exception requirements set forth in Sec. 117-254 of the Commercial C-2 Zoning District, in addition, all outdoor sales/retail display of merchandise shall require a Special Exception.
3. Permitted uses set forth in Sec. 117-297 of the Light Industrial M-1 Zoning District shall apply in the M-1/M-2 zoned area of the preliminary zoning plan as shown on Exhibit E.
4. Permitted uses within the M-2 Industrial Zoning District shall apply in the M-1/M-2 zoned area of the preliminary zoning plan as shown on Exhibit E shall require a Special Exception.
5. Outdoor Storage of Aggregate Materials defined as a broad category of construction materials such as sand, gravel, crushed stone, slag and recycled materials shall be prohibited in all zoning areas identified on the preliminary zoning plan as shown on Exhibit E.
6. A Commercial Association will be formed to set up guidelines and rules which all owners or tenants will be required to follow.

7. The attached preliminary zoning map will be included as part of the PUD, but minor changes may be approved by the City Council.

B. Essential Services

Essential services, including water, sewer, gas, telephone, radio, television and electric meeting the performance standards and development criteria set forth in the Land Development Regulations. All new services will be underground.

C. Permitted Accessory Use and Structures

All accessory structure shall match architectural facades of building if visible for US 17 or State Road 16

III. DESIGN GUIDELINES

A. Future principal structures. Minimum lot requirements and building requirements shall be in accordance with the requirements provided herein.

(1)	Minimum lot area:	0 square feet
(2)	Minimum lot width:	0 feet
(3)	Maximum lot coverage:	70% percent
(4)	Minimum front yard:	25 feet
(5)	Minimum side yard:	10’
	With a minimum separation of Buildings 20’	
(6)	Minimum rear yard:	10’
(7)	Maximum height of structures:	Per City of Green Cove Land Development Code

B. Architectural Review/Compatibility

1. Future development shall be in accordance with City of Green Cove Springs Site Plan Review requirements. Additionally, Site Plan Review shall include an architectural sketch plan at an appropriate scale supporting consistency with the proposed architectural elements of the structures, including size, scale, façade, and color as approved by the association. Architectural guides for association (see exhibit ~~A~~ D attached). These architectural guides are to be part of the PUD.

C. Ingress, Egress and Circulation, Storage

1. Parking Requirements.

   Will be determined by Article lll Chapter 13 Development standards except for parking spaces will be minimum of 9’ wide by 18’ with 24’ minimum Drive lanes. If shared parking or a reduction in parking is requested, it will be supported by a parking study created by a licensed

professional – then approved by the planning and zoning board.

2. Vehicular Access.
   a. Primary vehicular access to the Property shall be by way of US 17 and State Road 16. A secondary main entrance will be east on State Road 16- through existing water plant entrance- This road if used will be improved to city standards. The final location of all access points is subject to the review and approval of the FDOT. The initial access points and distribution for the traffic study will be based on Exhibit B of the Traffic Study Methodology.
   b. A complete traffic study shall be completed to determine the amount of work required for vehicles entering and leaving the site. This will be based on our tenant projections. Since this study and work is normally paid by the Mobility fee, with city approval the owner will provide the study and the cost deducted from the Mobility fees.
   c. The owner will work with the city of Green Cove Springs, The FDOT and Clay County to finalize the traffic study methodology and study limits. Based on this the study may impact access points, turning radius and other requirements determined by a complete traffic study. Once these requirements are determined, they will be incorporated into the master plan.
   d. Once accessing the site from the primary access points, the developer will provide an internal vehicular pathway access driving that connect to the primary access for the commercial and industrial traffic and provide for the installation of utilities. The timing of internal access shall be set forth in the Development Agreement upon finalization of the Traffic Study.
   e. Timing of building permitting, and occupancy (except for Phase 1) are dependent upon timing of traffic study and development approvals as set forth in the Future Land Use Site Specific Text Amendment (Ordinance O-02-2024).
3. Pedestrian Access and Other Items.

   Existing sidewalks are located on the north side of State Road 16. Proposed pedestrian access will be coordinated with crossings and future intermodal path (possibly in FDOT ROW) Sidewalks will be installed per city code to allow ADA pathway from all buildings to the city ROW. A sidewalk along St rd. 16 will be installed if required by city code, All sidewalks will be installed as the buildings are being constructed. Interconnected sidewalks or internal sidewalks from building to building will be encouraged and used to accommodate ADA connections.
4. Outdoor Storage.

   All outdoor storage will be screened from US 17 and State Road 16 by either a building or a 12’ architectural masonry or masonry wall with a landscape hedge at the base of the wall and trees every 40’. Trees can be ornamental or shade trees and may count as part of landscape requirements. No outdoor storage allowed within 800’ of US 17 or State

Road 16.

5. Signage.

   Signage shall be in accordance with the Land Development Regulations by city of Green Cove Springs. Interior site signs will provide architectural elements (shown on association documents)

6. Landscaping.

   The Property will be developed in accordance with Article V of the Land Development Regulations. Tree preservation and landscape requirements will be as set forth in city codes". Except- Street trees will be a minimum of 4" caliper. Landscape Islands may be omitted every 10 spaces- if linear island is proposed parallel to parking- Parking Island shade trees may be replaced with ornamental tree- if required shade tree required is relocated to another landscape space adjacent to parking. Interior Landscape space will not be required in industrial laydown areas. Hedges located to screen Parking or vehicular access will only be required next to public ROW. Dumpsters must be screened with masonry walls and opaque gates- No chain link fences.

7. Utilities.

   All utilities and improvements which are being given or built for city ownership will be designed and constructed in accordance with the standards and specifications of the City of Green Cove Springs, Public Works Department. Cost of those Installation and material for utilities will be by owner. Once installed they will be maintained by the city. If primary or secondary utilities are to be privately owned, they will be built to industry standards and maintained by the owner/developer.

   a. Water meters and meter boxes will be provided by the owner. All utilities to be installed that are proposed to be owned and maintained by the City of Green Cove Springs are subject to City approval and acceptance. Typically, this will be new water mains up to new water meters. Secondary connections will be installed, maintained, and owned by the owner. Typically, from water meter to building.

   b. Sanitary sewers will be installed and be privately owned.

   c. Electric will be provided by City of Green Cove Springs. The owner will provide main electric conduits and transformer pads. City of Green Cove will own and maintain primary main electric lines. City of Green Cove will install main wire and transformers. Secondary electrical to the buildings will be installed, maintained, and owned by landowner.

      i. Owner will use architectural street lights which are similar to those in Spring Park in all public areas. All lights in rear of industrial building will be LED standard light poles.

   d. The developer will provide maintenance and access easements

over any new utility which is to be city owned.

e. All new backflow devices will be screened from US 17 or State Road 16. Developer understands city desire to avoid unsightly mass of utilitarian objects from passing cars or pedestrians.

8. Wetlands.

   Wetlands will be permitted according to local, state and federal requirements.

9. Site Plan and Modifications.

   The site plan approved as part of this PUD is conceptual. Final design is subject to change through final site planning, engineering design, permitting and other regulatory approvals. Deviations from the Ordinance creating the PUD may be approved by the Planning and Zoning Commission and City Council. Any use not specifically listed, but similar to uses outlined in the Land Development Code, in the alternative, may be permitted administratively pursuant to Land Development Code Section 101-6 and can be appealed to the Planning and Zoning Commission and City Council pursuant to Land Development Code Section 101-246~248. PUD amendments, including deviations or rezonings, may be sought for individual parcels or to access points within the PUD. All development improvements are subject to appropriate local, State and Federal permitting agencies. Phasing plans exhibits are attached to PUD.

IV. DEVELOPMENT PLAN APPROVAL

With each request for certification of substantial compliance with this PUD, a preliminary development plan shall be submitted to the City of Green Cove Springs identifying all the existing and proposed uses within the Property and showing the general layout of the overall property.

V. JUSTIFICATION FOR THE PLANNED UNIT DEVELOPMENT CLASSICATION FOR THIS PROJECT

The proposed project is compatible with the City of Green Cove Springs Comprehensive Plan. The proposed development will be beneficial to the surrounding neighborhood and community as it set forth a specific design plan.

The design and layout of the PUD accomplishes the following:

1. Provide a more desirable development than would be possible through the strict application of the requirements of the Land Development Regulations;
2. More efficient use of land.
3. Provide for the redevelopment of the subject property that will continue to maintain architectural consistency with the surrounding area and improve the characteristics of the surrounding area specifically development to the immediate south.
4. Proposes land uses and intensities which will meet applicable planning

goals.

VI. SUCCESSORS IN TITLE

All successors in title to the Property or any portion of the Property shall be bound to all development standards and conditions of the PUD, as contained herein and in the Ordinance approving the same.

VII. STATEMENTS

1. How does the proposed PUD differ from the usual application of the Zoning Code?

The site is designed around and along existing architectural and existing land uses. It provides architectural controls for future development.

2. Describe the intent for the continued operation and maintenance of those areas and functions described herein and facilities which are not to be provided, operated or maintained by the City.

An association document will be provided outlining maintenance.

3. A preliminary association outline and examples is included and part of this PUD.

Exhibit C

WRITTEN DESCRIPTION

17-16 Commerce Center
Date: 6-13-2024
Current Zoning District: C-2
Proposed Zoning District: PUD
Parcel #'s: 38-06-26-016451-003-00---
38-06-26-016451-000-00

I. PROJECT DESCRIPTION

It is the purpose and intent of this PUD to provide flexibility in planning, design and development; to provide a development compatible with surrounding land use; to encourage development along the 17- 16 corridor yet creating an entrance to the City of Green Cove Springs. The PUD will create a unified development plan incorporating a similar design theme and other development criteria. The property is a 120-acre site located in Green Cove Springs, Florida. The land is currently zoned Residential Light Manufacturing and Commercial.

The owner's vision of the use of the property is a multi-use facility which can provide an upscale commercial C-2 corridor along U.S 17 and State Road 16 and Industrial, both M-1 and M-2 utilizing the existing infrastructure. M-1 will be allowed. M-2 will be allowed by Special Exception.

Building constraints- all the buildings will have upscale architectural facades. Exterior portions of buildings which are visible to the 17- 16 corridor shall be enhanced with architectural features such as stucco- brick- stone.

Onsite parking and access will be asphalt paved. The main entrance and exit will be on US 17 and State Road 16. Secondary access may be allowed from neighboring property. There will be an internal access road built with curb and gutter.

Outside Storage- In order to create a upscale commercial entrance, the owners recognize that commercial outside storage is prohibited in the C-2 Zoning District and outdoor sales (retail display) shall require a special exception, and must be approved by the City of Green Cove Springs. All industrial outside storage shall be screened from US 17 and State Road 16 by either a Building façade, Masonry wall or vegetative screen.

Existing and new facilities will utilize municipal water and sewer services. The owner would design all new utility services on the site. All new services would be underground to enhance the appearance of the surrounding areas.

The creation of a master planned development affords an efficient use of the land. Each new tenant will be required to submit a individual site plan for city approval. Attached is a preliminary masterplan. The masterplan will be updated with each site development

plan.

A. Project Name: 17/16 Commerce Center PUD

B. Current Project Manager/Planner: Kelly Hartwig

C. Project Developer: HLM Investments LLC

D. Quantitative Data Summary:

1. Total Acreage: 112 acres
2. Proposed Number of sites may vary.
3. Total amount of active space- impervious space will be based on SJRWMD master permit.
4. Total amount of parking: - Shared parking can be used in all calculations.
5. Phase schedule of construction – Phase 1 will be restoration and upgrades to existing 80,000 Building 3. Phase 2 will be site plan submittal and approval for individual tenants. Phase 3- Site plan submittal and approval of Phase 1 Commercial Road access. As outlined in the Site Phasing Plan (Exhibit G).
6. Restoration of Façade of Building 1 will be completed within 3 years of start of restoration of Building 3

II. USES AND RESTRICTIONS

A. Permitted Uses, Special Exceptions and Structures

1. Permitted uses set forth in Sec. 117-253 of the Commercial C-2 Zoning District shall apply in the C-2 zoned area of the preliminary zoning plan as shown on Exhibit E.
2. Special exception requirements set forth in Sec. 117-254 of the Commercial C-2 Zoning District, in addition, all outdoor sales/retail display of merchandise shall require a Special Exception.
3. Permitted uses set forth in Sec. 117-297 of the Light Industrial M-1 Zoning District shall apply in the M-1/M-2 zoned area of the preliminary zoning plan as shown on Exhibit E.
    a. Outdoor Storage of Aggregate Materials defined as a broad category of construction materials such as sand, gravel, crushed stone, slag shall be classified as an M-1 Use subject to the requirements set forth in section III.C.4.(a).

~~3.~~

4. Permitted uses within the M-2 Industrial Zoning District shall apply in the M-2 zoned area of the preliminary zoning plan as shown on Exhibit E shall require a Special Exception.

~~a. Outdoor Storage of Aggregate Materials defined as a broad category of construction materials such as sand, gravel, crushed stone, slag and recycled materials shall be classified as an M-2 Use. The Special exception shall include but is not limited to:~~

~~i. Dust Control Measures~~

~~ii. Use of walls and barriers to block noise from adjacent properties~~

~~iii. Location and maximum height of storage piles~~

~~iv. Operational Hour Restrictions~~

~~v. Shall meet the screening requirements set forth in the PUD Written Description and Architectural Guidelines.~~

5. A truck stop is prohibited within all zones of the PUD and is defined as: An establishment where the principal use is the refueling and servicing of trucks and tractor-trailer rigs, and may also include ancillary facilities.
6. A Commercial Association will be formed to set up guidelines and rules which all owners or tenants will be required to follow.
7. The attached preliminary zoning map will be included as part of the PUD, but minor changes may be approved by the City Council.

B. Essential Services

Essential services, including water, sewer, gas, telephone, radio, television and electric meeting the performance standards and development criteria set forth in the Land Development Regulations. All new services will be underground.

C. Permitted Accessory Use and Structures

All accessory structure shall match architectural facades of building if visible for US 17 or State Road 16

III. DESIGN GUIDELINES

A. Future principal structures. Minimum lot requirements and building requirements shall be in accordance with the requirements provided herein.

(1)	Minimum lot area:	0 square feet
(2)	Minimum lot width:	0 feet
(3)	Maximum lot coverage:	70% percent
(4)	Minimum front yard:	25 feet
(5)	Minimum side yard:	10’
	With a minimum separation of Buildings 20’	
(6)	Minimum rear yard:	10’
(7)	Maximum height of structures:	Per City of Green Cove Land Development Code

B. Architectural Review/Compatibility

1. Future development shall be in accordance with City of Green Cove Springs Site Plan Review requirements. Additionally, Site Plan Review shall include an architectural sketch plan at an appropriate scale supporting consistency with the proposed architectural elements of the structures, including size, scale, façade, and color as approved by the association. Architectural guides for association (see exhibit ~~A~~ D attached). These architectural guides are to be part of the PUD.

C. Ingress, Egress and Circulation, Storage

1. Parking Requirements.

   Will be determined by Article lll Chapter 13 Development standards except for parking spaces will be minimum of 9’ wide by 18’ with 24’ minimum Drive lanes. If shared parking or a reduction in parking is requested, it will be supported by a parking study created by a licensed professional – then approved by the planning and zoning board.

2. Vehicular Access.

   a. Primary vehicular access to the Property shall be by way of US 17 and State Road 16. A secondary main entrance will be east on State Road 16- through existing water plant entrance- This road if used will be improved to city standards. The final location of all access points is subject to the review and approval of the FDOT. The initial access points and distribution for the traffic study will be based on Exhibit B of the Traffic Study Methodology.

   b. A complete traffic study shall be completed to determine the amount of work required for vehicles entering and leaving the site. This will be based on our tenant projections. Since this study and work is normally paid by the Mobility fee, with city approval the owner will provide the study and the cost deducted from the Mobility fees.

   c. The owner will work with the city of Green Cove Springs, The FDOT and Clay County to finalize the traffic study methodology and study limits. Based on this the study may impact access points, turning radius and other requirements determined by a complete traffic study. Once these requirements are determined, they will be incorporated into the master plan.

   d. Once accessing the site from the primary access points, the developer will provide an internal vehicular pathway access driving that connect to the primary access for the commercial and industrial traffic and provide for the installation of utilities. The timing of internal access shall be set forth in the Development Agreement upon finalization of the Traffic Study.

   e. Timing of building permitting, and occupancy (except for Phase 1) are dependent upon timing of traffic study and development approvals as

set forth in the Future Land Use Site Specific Text Amendment (Ordinance O-02-2024).

3. Pedestrian Access and Other Items.

   Existing sidewalks are located on the north side of State Road 16. Proposed pedestrian access will be coordinated with crossings and future intermodal path (possibly in FDOT ROW) Sidewalks will be installed per city code to allow ADA pathway from all buildings to the city ROW. A sidewalk along St rd. 16 will be installed if required by city code, All sidewalks will be installed as the buildings are being constructed. Interconnected sidewalks or internal sidewalks from building to building will be encouraged and used to accommodate ADA connections.

4. Outdoor Storage.

   All outdoor storage will be screened from US 17 and State Road 16 by either a building or a 12' architectural masonry or masonry wall with a landscape hedge at the base of the wall and trees every 40'. Trees can be ornamental or shade trees and may count as part of landscape requirements. No outdoor storage allowed within 800' of US 17 or State Road 16.

   Outdoor storage of ~~a~~aggregate material storage shall meet the following additional requirements as part of Site Development Approval: ~~.~~

   A. Outdoor storage of aggregate materials as defined in Section II (A)(4)(a) is subject to the following requirements:

      i. Limited to one facility in the PUD.
      ii. Stockpile area limited to 12 acres.
      iii. Stockpile area must be setback from US 17 and SR 16 a minimum of 1,000 feet.
      iv. Permanent stockpile height and equipment shall not exceed 28' in height.
      v. All stockpiles shall be screened with either an existing building and/ or a 12' masonry concrete with:
         1. Large trees as defined in the City Land Development Code (Sec. 113-243) shall be provided at a maximum of 25' on center and a minimum of 4" caliper at time of planting.
         2. Shall comply with Architectural Guidelines as set forth in Exhibit D regarding outdoor storage.

      vi. Dust Control Measures shall be taken to ensure dust does not encroach beyond the limits of the facility.
      vii. Provide type, height and outline of equipment used to off load rail cars.

viii. Traffic patterns of vehicles onsite shall be provided, traffic shall be separated from commercial entrances.
ix. Identify materials to be handled. Specific material storage are subject to City Council approval.
x. Hours of Operation shall be provided.

5. Signage.

   Signage shall be in accordance with the Land Development Regulations by city of Green Cove Springs. Interior site signs will provide architectural elements (shown on association documents)

6. Landscaping.

   The Property will be developed in accordance with Article V of the Land Development Regulations. Tree preservation and landscape requirements will be as set forth in city codes". Except- Street trees will be a minimum of 4" caliper. Landscape Islands may be omitted every 10 spaces- if linear island is proposed parallel to parking- Parking Island shade trees may be replaced with ornamental tree- if required shade tree required is relocated to another landscape space adjacent to parking. Interior Landscape space will not be required in industrial laydown areas. Hedges located to screen Parking or vehicular access will only be required next to public ROW. Dumpsters must be screened with masonry walls and opaque gates- No chain link fences.

7. Utilities.

   All utilities and improvements which are being given or built for city ownership will be designed and constructed in accordance with the standards and specifications of the City of Green Cove Springs, Public Works Department. Cost of those Installation and material for utilities will be by owner. Once installed they will be maintained by the city. If primary or secondary utilities are to be privately owned, they will be built to industry standards and maintained by the owner/developer.

   a. Water meters and meter boxes will be provided by the owner. All utilities to be installed that are proposed to be owned and maintained by the City of Green Cove Springs are subject to City approval and acceptance. Typically, this will be new water mains up to new water meters. Secondary connections will be installed, maintained, and owned by the owner. Typically, from water meter to building.

   b. Sanitary sewers will be installed and be privately owned.

   c. Electric will be provided by City of Green Cove Springs. The owner will provide main electric conduits and transformer pads. City of Green Cove will own and maintain primary main electric lines. City of Green Cove will install main wire and transformers. Secondary electrical to the buildings will be installed, maintained, and owned

by landowner.

i. Owner will use architectural street lights which are similar to those in Spring Park in all public areas. All lights in rear of industrial building will be LED standard light poles.

d. The developer will provide maintenance and access easements over any new utility which is to be city owned.

e. All new backflow devices will be screened from US 17 or State Road 16. Developer understands city desire to avoid unsightly mass of utilitarian objects from passing cars or pedestrians.

8. Wetlands.

Wetlands will be permitted according to local, state and federal requirements.

9. Site Plan and Modifications.

The site plan approved as part of this PUD is conceptual. Final design is subject to change through final site planning, engineering design, permitting and other regulatory approvals. Deviations from the Ordinance creating the PUD may be approved by the Planning and Zoning Commission and City Council. Any use not specifically listed, but similar to uses outlined in the Land Development Code, in the alternative, may be permitted administratively pursuant to Land Development Code Section 101-6 and can be appealed to the Planning and Zoning Commission and City Council pursuant to Land Development Code Section 101-246~248. PUD amendments, including deviations or rezonings, may be sought for individual parcels or to access points within the PUD. All development improvements are subject to appropriate local, State and Federal permitting agencies. Phasing plans exhibits are attached to PUD.

IV. DEVELOPMENT PLAN APPROVAL

With each request for certification of substantial compliance with this PUD, a preliminary development plan shall be submitted to the City of Green Cove Springs identifying all the existing and proposed uses within the Property and showing the general layout of the overall property.

V. JUSTIFICATION FOR THE PLANNED UNIT DEVELOPMENT CLASSICATION FOR THIS PROJECT

The proposed project is compatible with the City of Green Cove Springs Comprehensive Plan. The proposed development will be beneficial to the surrounding neighborhood and community as it set forth a specific design plan.

The design and layout of the PUD accomplishes the following:

1. Provide a more desirable development than would be possible through the strict application of the requirements of the Land Development Regulations;

2. More efficient use of land.

3. Provide for the redevelopment of the subject property that will continue to maintain architectural consistency with the surrounding area and improve the characteristics of the surrounding area specifically development to the immediate south.

4. Proposes land uses and intensities which will meet applicable planning goals.

VI. SUCCESSORS IN TITLE

All successors in title to the Property or any portion of the Property shall be bound to all development standards and conditions of the PUD, as contained herein and in the Ordinance approving the same.

VII. STATEMENTS

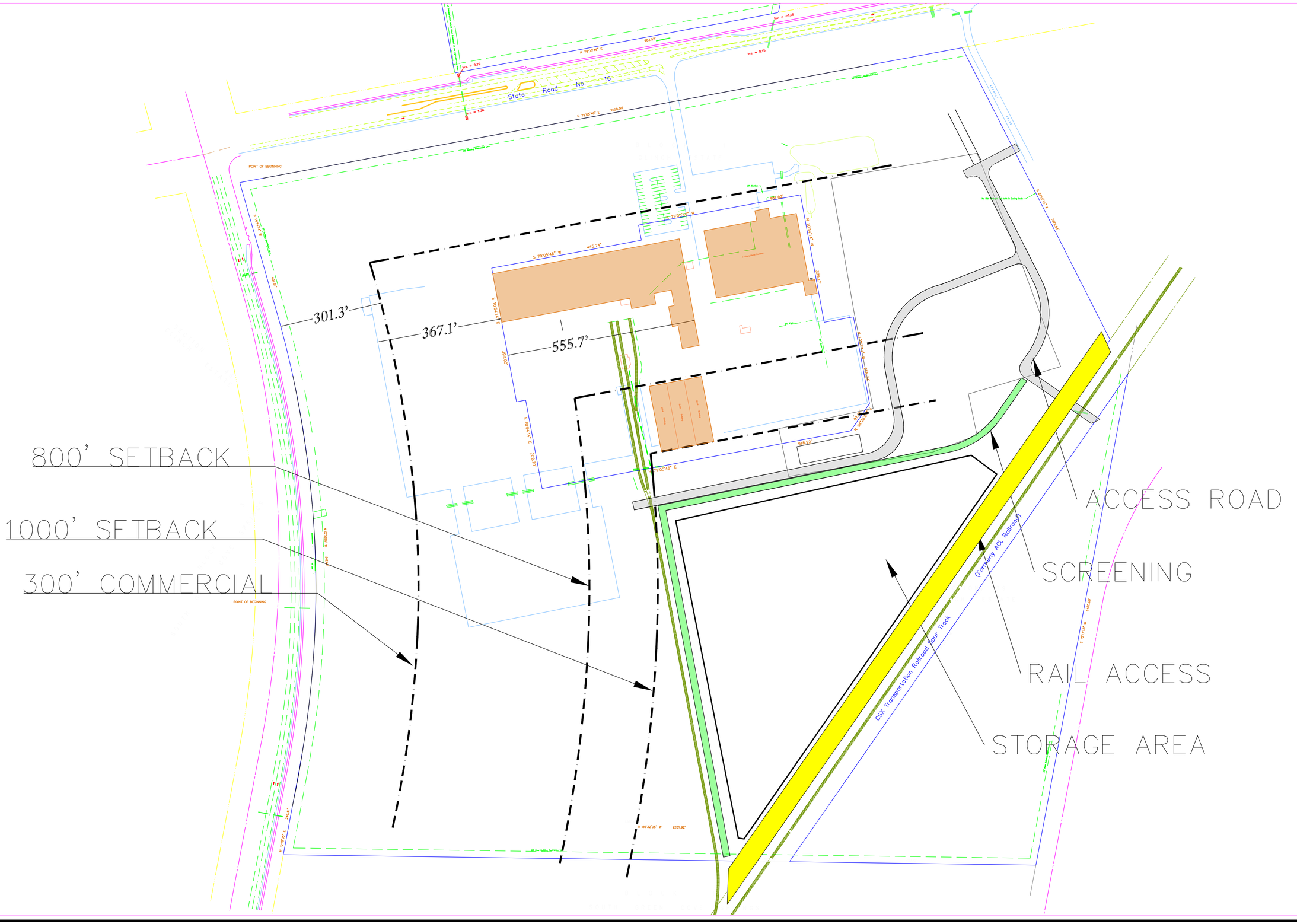
1. How does the proposed PUD differ from the usual application of the Zoning Code?

The site is designed around and along existing architectural and existing land uses. It provides architectural controls for future development.

2. Describe the intent for the continued operation and maintenance of those areas and functions described herein and facilities which are not to be provided, operated or maintained by the City.

An association document will be provided outlining maintenance.

3. A preliminary association outline and examples is included and part of this PUD.



CYPRESS MANAGEMENT
AND DESIGN
P.O. BOX 8880 FLEMING ISLAND, FL. 32006
904-759-9576---- SITEOPT@BELLSOUTH.NET

REVISIONS

DATE	REVISION#
XXX	
6-9-2023	

17-16 COMMERCE PARK
EXHIBIT G-AGGREGATE

DATE 5-9--2023
DRAWN BY
CHKD. BY
JOB NO.

KELLY W HARTWIG
LA 1252

SHT. LC-3.1

CYPRESS MANAGEMENT AND DESIGN

P.O. Box 8880
Fleming Island, Florida
32006

TRAFFIC METHOLODGY

Commerce Center US 17 and State Road 16

The following traffic methodology is being supplied by the owners of the 17-16 Commerce center. It has been a joint effort with the city of Green Cove Springs.

This document includes:

1. Traffic Methodology-Introduction and written Summary
2. Tables 1-4 Trip Generation Calculations
3. Existing Road segment- description
4. LOS Map
5. Description of Site access Points
6. Preliminary Master plan

Traffic Study Timeline:

The traffic study will begin upon certain events:

1. Completion and approval of PUD
2. Start of School (required for a traffic study)

The hope is to have the study completed prior to December of 2024, but this is a large study and may be completed in several phases to allow review by City and FDOT prior to final completion.

INTRODUCTION

This proposed commercial development will be located in the southeast quadrant of the US 17/SR 16 intersection in Green Cove Springs, Florida. As currently proposed, the development will have two full access driveways (one existing and one new) and one new right-in-right-out only driveway on SR 16 as well as two new full access driveways on US 17 (one opposite the entrance to the shopping center). Exclusive left turn lanes will be provided at all site driveways except driveways limited to right turns. This commercial center is planned for completion and full occupancy in 2035 and is expected to include the following new land uses:

- 119,000 sf of manufacturing space,
- 231,200 sf of retail space (including one gas station with convenience market on southeast corner of the US 17/SR 16 intersection),
- 264,000 sf of warehouse space,
- 130,500 sf of light industrial space, and
- A train-delivery system to above facility

The proposed site plan is provided in Attachment A. The development will proceed in phases with Phase 1 scheduled for completion by the end of 2025. This Phase is expected to include the following new land uses:

- 81,500 sf of manufacturing space, and
- 25,600 sf of retail space.

The proposed Phase 1 site plan is included in Attachment A. Access for this phase will be provided via the three SR 16 driveways.

The Phase 2 development is scheduled for completion in 2030 and is expected to include the following cumulative new land uses:

- 81,500 sf of manufacturing space
- 56,600 sf of retail space, and
- 30,500 sf of warehouse space
- 40,000 Light Industrial

The proposed Phase 2 site plan is included in Attachment A. Access for this phase will be provided using the same access scheme as for full development.

The existing full access driveway on SR 16 currently provides access to a boat manufacturing facility which will remain in place. The facility occupies two existing buildings (Buildings 1 and 2) that total 87,200 sf in size. The third existing building (Building 3) is 81,500 sf in size. This building will be renovated, and its square footage is included in the future manufacturing space listed above. US 17 (S. Orange Avenue) is a four-lane divided urban principal arterial with an FDOT access management classification of 3 and a posted speed limit of 45 mph in the vicinity of the site. SR 16 (Leonard C. Taylor Parkway) is also a four-lane divided urban principal arterial in the vicinity of the site with an FDOT access management classification of 3 and a posted speed limit of 45 mph.

STUDY AREA

The study area will consist of all roadway segments where site traffic represents at least 5% of the maximum service volume for the adopted level of service or where truck traffic increases by 5% or more. An estimated pre-model trip distribution of both total vehicles and trucks will be used to test the 5% criterion. This trip-distribution will be provided to the City of Green Cove Springs for review and approval prior to final establishment of the study area. Major intersections within these segments and all site driveway intersections will be evaluated. At a minimum include all road segments and signalized intersections on US 17 from the new Outer Beltway to Governor's Creek and on SR 16 from Oakridge Avenue to just east of the Shand's Bridge.

FUTURE ROADWAY IMPROVEMENTS

The Outer Beltway, which is scheduled for completion in November of 2024, will be included as a future roadway for all three phases. Other future roadway improvements, as reflected in the NERPM-AB areawide model, will be included in the future road network.

EXISTING TRAFFIC VOLUMES

During fall of 2024 weekday AM and PM peak period manual turning movement counts will be conducted at the existing intersections listed above - as well as at the SR 16/Existing Site Entrance intersection. The data will be recorded at 15-minute intervals and will include a separate tabulation for trucks and pedestrians. Weekday AM and PM peak hours for analysis will be identified from a review of the peak period counts. Counts will be adjusted to the peak season using the latest set of FDOT seasonal adjustment factors for Clay County. In addition the existing traffic Exhibit-E is provided using FDOT traffic information.

SITE TRIP GENERATION

Trip generation calculations will be carried out using the 11th edition of ITE's Trip Generation Manual and referencing land use codes 110 (General Light Industrial), 140 (Manufacturing), 150 (Warehousing) and 820 (Shopping Center). Attached Tables 1 through 5 provide the trip generation calculations for the full development. Trip generation for the Train-to-Truck Transfer Facility was calculated using reasonable trip generation rates based on truck and employee activity. No internal trip-making reduction will be made although a reduction for retail pass-by traffic will be taken for road segments and off-site intersections. The expected total daily trip generation for the new development is 13,634 (6817 entering and 6817 exiting) with 516 trips occurring during the AM peak hour (366 entering and 150 exiting) and 1241 occurring during the PM peak hour (548 entering and 693 exiting). Expected truck trip generation will also be developed using available ITE trip rates. Any trip-making reductions taken for pass-by traffic will be limited to 10% of the

adjacent street traffic.

SITE TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

Weekday AM and PM peak hour site trips will be directionally distributed and assigned to the future road network based on the results of an areawide model run supplemented by engineering judgment. Trucks will be distributed separately, and a map provided showing expected truck volumes.

DIVERTED TRAFFIC

Opening of the Outer Beltway can be expected to significantly alter traffic patterns and traffic volumes in the study area. The NERPM-AB areawide model will be used to estimate this diversion as well as the level of anticipated traffic growth through the development of growth-diversion factors for each intersection turning movement. Future model years include 2030 and 2045. 2035 growth-diversion factors will be identified via interpolation.

FUTURE TRAFFIC VOLUMES

The expected weekday AM and PM peak hour background (No Build) traffic volumes and total (Build) traffic volumes using road segments and intersections in the study area will be calculated for 2025 (Phase 1), 2030 (Phase 2) and 2035 (Full Build-Out). These volumes will be used in subsequent analyses. Traffic associated with the planned Rookery development will be included in future No Build traffic.

TURN LANE ANALYSIS

A formal analysis will be conducted to determine if an exclusive right turn lane is warranted on US 17 or SR 16 at any of the Site Drives under Build conditions. The methodology contained in NCHRP Report 457 will be used to conduct the right turn lane evaluation.

ROADWAY LINK ANALYSIS

The expected level of service for each roadway segment will be evaluated under 2025, 2030 and 2035 No Build and Build conditions using FDOT Generalized Level of Service Tables. Tables will be provided that contain for each segment the following items: number of lanes, FDOT group classification, adopted level of service, maximum service volume for the adopted level of service, current traffic count, existing v/c ratio, future projected traffic counts, future v/c ratios.

INTERSECTION CAPACITY ANALYSIS

Signalized intersections will be analyzed under both Existing and Build conditions using the operational control methodology contained in the 2024 version of the Highway Capacity Software. Unsignalized intersections will be analyzed under both Existing, No Build and Build conditions using the two-way stop control methodology contained in the 2024 version of the Highway Capacity Software. The effect of truck traffic will be included in the analysis.

ACCESS MANAGEMENT EVALUATION

FDOT access management guidelines will be evaluated based on the proposed driveway and median opening locations.

TRAIN CROSSING REVIEW

Determine the number of trains expected to use the at-grade crossing on US 17 and the expected delay to US 17 traffic. Current train activity will be determined through existing CSX data. Current Train crossing to Spur is limited to two trains a week based on CSX. We anticipate no additional train crossings to Spur. All future development projects generating additional train activity shall be required to project their impact on US 17 train crossings as part of the Site Development review.

TRUCK TRAFFIC

The truck trip generation for industrial uses is based on cite ITE 11th Edition. See attached truck trip generation exhibit.

RECOMMENDED IMPROVEMENTS

Recommended roadway and intersection improvements for each of the three development phases will be identified. Mitigation requirements shall comply with the City of Green Cove Springs Traffic Study Guidelines set forth in Resolution R-29-2020.

FINAL REPORT

A signed and sealed traffic engineering report will be submitted complying with the guidelines set forth in the City of Green Cove Springs Traffic Study, Resolution R-29-2020.

Addendum to Huntley Commerce Center Traffic Impact Study Methodology

Below is an addendum to the previously submitted Traffic Study Methodology Document.

Proposed Development Trip Generation

Traffic analysis will be performed based on the trip generation for the following proposed land uses:

- 119,000 SF of manufacturing space,
- 231,200 SF of retail space (including one gas station with convenience market on southeast corner of the US 17/SR 16 intersection),
- 264,000 SF of warehouse space,
- 130,500 SF of light industrial space, and
- A train-delivery system to above facility

Project Phases:

The proposed development is anticipated to be developed in Three (3) Phases. Hence the traffic analysis will include evaluation of the study roadway segments and intersection in three phases.

Project Traffic Distribution:

As stated previously, the project traffic distribution will be obtained based on the distribution obtained from the MERPM_AB travel demand model runs for each of the development phases. The model runs will include the following improvements by phases.

Bonded and Approved Projects:

As suggested in the previously submitted Methodology Document, traffic volumes on US 17 at Ferris Street/SR 16 West and SR 16 East/Green Cove Avenue are anticipated to be reduced upon completion of the following projects:

- County Road 209 (Clay County Bonded Project 2): From CR 315B to US 17 and from CR 315B to South of Peters Creek - 100% Project Complete (04/2026)
- County Road 209 (Clay County Bonded Project 3A & 3B): from Sandridge Road to Peters Creek Bridge Operational Improvements - Widening and Pavement. Project Completed (10/2025)
- CR 739B/Sandridge Rd (Clay County Bonded Project 4): from Henley Rd to West of CR 209 - 100% Project Complete (03/2025)
- CR 315 Group 2 (Clay County Bonded Project 6A. 1 & 6A. 2): from Maryland Ave to US 17 - 100% Project Complete (03/2026)
- CR 216/Cathedral Oak (Clay County Bonded Project 6B): from SR 23 to Maryland Ave (Design-Build) - 100% Project Complete (06/2025)
- FDOT Funded First Coast Expressway – West of US 17 Completed by year 2028 and east of US 17 to St. Johns County to be Completed by year 2030.

Intersection Analysis:

Intersection capacity analysis for the US 17 intersections at SR 16 West/Ferris Street and SR 16 East/Green Cove Avenue will be conducted under each of the project build phases. The analysis will be consistent with both FDOT and City of Green Cove Springs traffic study procedures. The traffic study will determine deficiencies at the study intersections and identify any improvements that could

be implemented to improve operational conditions at the study intersections and at each of the project access locations under each of the project development phases. Any improvements to the above stated intersections will be subject to FDOT's Intersection Control Evaluation (ICE Analysis) review and approval process. Additionally, all the project access intersections are also subject to FDOT review and approvals.

Traffic Counts and Study Time Line:

The traffic counts data for the study intersections and the project access intersections will be obtained when the schools are in session. A complete traffic study will be submitted with the project construction plan approvals.

Trip Attractors vs Trip Generators

Commercial and industrial developments are considered trip attractors because they draw trips from existing origins rather than creating new ones. They reassign trips by offering new or better destinations for activities that people are already undertaking. To understand why commercial and industrial developments are considered trip attractors rather than trip generators, and how they reassign trips rather than create entirely new ones, it is important to delve into the concepts of trip generation and trip attraction within the context of urban planning and transportation studies.

Definitions:

- **Trip Generators**: These are places or activities that create new trips. For instance, residential areas generate trips as people need to travel to work, school, shopping, or other activities from their homes.
- **Trip Attractors**: These are destinations that attract trips from various origins. Commercial and industrial developments fall into this category because they draw people from different locations who need to access these sites for work, shopping, services, or other purposes.

Key Points:

1. **Reassignment of Trips**:
   - When a new commercial or industrial development is proposed, it typically shifts the destination of existing trips rather than creating new trips. For example, if a new shopping mall is built, people who previously shopped at a different location may now choose to shop at the new mall. Similarly, a new industrial park may attract employees who previously commuted to different work locations.
   - This reassignment is influenced by factors such as convenience, accessibility, and the attractiveness of the new development compared to existing options.

2. **Impact on Trip Patterns**:
   - **Redistribution**: The new development redistributes the existing trip demand rather than increasing the overall number of trips. This redistribution can alleviate congestion in some areas while potentially increasing it in others.
   - **Proximity and Convenience**: People tend to prefer destinations that are closer or more convenient. New developments that offer better facilities, services, or employment opportunities can draw trips away from less favorable destinations.

3. **Examples**:
   - **Shopping Centers**: A new retail center will attract shoppers who might have previously visited other retail locations. Thus, it doesn't generate new shoppers but attracts existing ones from different locations.
   - **Office Parks**: A new office park may attract businesses and their employees from various other office locations. Employees who used to commute to one part of the city may now commute to the new office park.

4. **Transportation Planning Implications:**
   - **Traffic Flow and Infrastructure:** Understanding that these developments are trip attractors helps planners design infrastructure that accommodates redirected traffic flows. For example, they might need to enhance road networks, public transportation, and parking facilities around the new development.
   - **Economic Considerations:** Recognizing the role of commercial and industrial developments as trip attractors can aid in economic planning and zoning decisions, ensuring that new developments contribute positively to the urban landscape.

TABLE 1

TRIP GENERATION CALCULATIONS

WAREHOUSING

Land Use Code 150

T = Number of Vehicle Trip Ends

Size of Building = 264,000 gsf (X = 264)

TIME PERIOD	TOTAL TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
AVERAGE WEEKDAY						
Daily	T = 1.58 (X) + 38.29	456	50%	50%	228	228
AM Peak Hour	T = 0.12 (X) + 23.62	55	77%	23%	42	13
PM Peak Hour	T = 0.12 (X) + 26.48	58	28%	72%	16	42

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

TRAFFIC

TABLE 2

TRIP GENERATION CALCULATIONS

GENERAL LIGHT INDUSTRIAL

Land Use Code 110

T = Number of Vehicle Trip Ends

Size of Building = 130,500 gsf (X = 130.5)

TIME PERIOD	TOTAL TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
WEEKDAY						
Daily	T = 3.76 (X) + 50.47	542	50%	50%	271	271
AM Peak Hour	T = 0.68 (X) + 3.81	93	88%	12%	82	11
PM Peak Hour	Ln(T) = 0.72 Ln(X) + 0.38	49	14%	86%	7	42

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

TABLE 3

TRIP GENERATION CALCULATIONS

MANUFACTURING

Land Use Code 140

T = Number of Vehicle Trip Ends

Size of Buildings = 119,000 gsf (X = 119.0 kgsf)

TIME PERIOD	TOTAL TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
WEEKDAY						
Daily	T = 3.77 (X) + 201.98	650	50%	50%	325	325
AM Peak Hour	T = 0.61 (X) + 9.54	82	76%	24%	62	20
PM Peak Hour	T = 0.87 (X) - 17.50	86	31%	69%	27	59

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

TABLE 4
TRIP GENERATION CALCULATIONS

SHOPPING CENTER (> 150,000 gsf)

Land Use Code 820
T = Number of Vehicle Trip Ends
Size of Buildings = 231,200 gsf -----> X= 231.2

TIME PERIOD AVERAGE WEEKDAY	TOTAL TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
Daily	T = 26.11 (X) + 5863.73	11900	50%	50%	5950	5950
AM Peak Hour	T = 0.59 (X) + 133.55	270	62%	38%	167	103
PM Peak Hour	Ln(T) = 0.72 Ln(X) + 3.02	1032	48%	52%	495	537

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

NEW TRIPS

TIME PERIOD AVERAGE WEEKDAY	PERCENT NEW TRIPS	NEW TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	NEW TRIP ENDS ENTERING	NEW TRIP ENDS EXITING
Daily	71.0%	8450	50%	50%	4225	4225
AM Peak Hour	71.0%	192	62%	38%	119	73
PM Peak Hour	71.0%	733	48%	52%	352	381

SOURCE: ITE, "Trip Generation", 11th Edition, Excel Spreadsheet (LUC 820), < 300,000 gsf

Estimated Value

TRAFFIC

Truck Trip Generation Exhibit

Huntley 17/16 Commerce Center
Based on Phase 1-2 Buildout

Use	ite code	trip type	square ft	truck rt	trips
Light Industrial	110	Daily	40	0.25	**10**
Light Industrial	110	am	40	0.03	**1**
Light Industrial	110	Pm	40	0.05	**2**
Warehousing	150	Daily	30.5	0.6	**18**
Warehousing	150	am	30.5	0.06	**2**
Warehousing	150	Pm	30.5	0.06	**2**
Manufacturing	140	Daily	81.5	0.45	**37**
Manufacturing	140	am	81.5	0.02	**2**
Manufacturing	140	Pm	81.5	0.05	**4**

Total Industrial Daily Truck Trips **65**
Total Industrial AM PH Truck Trips **5**
Total Industrial PM PH Truck Trips **8**
ITE 11th Edition

Based on 100% Buildout

Use	ite code	trip type	square ft	truck rt	trips
Light Industrial	110	Daily	130.5	0.25	**33**
Light Industrial	110	am	130.5	0.03	**4**
Light Industrial	110	Pm	130.5	0.05	**7**
Warehousing	150	Daily	264	0.6	**158**
Warehousing	150	am	264	0.06	**16**
Warehousing	150	Pm	264	0.06	**16**
Manufacturing	140	Daily	119	0.45	**54**
Manufacturing	140	am	119	0.02	**2**
Manufacturing	140	Pm	119	0.05	**6**

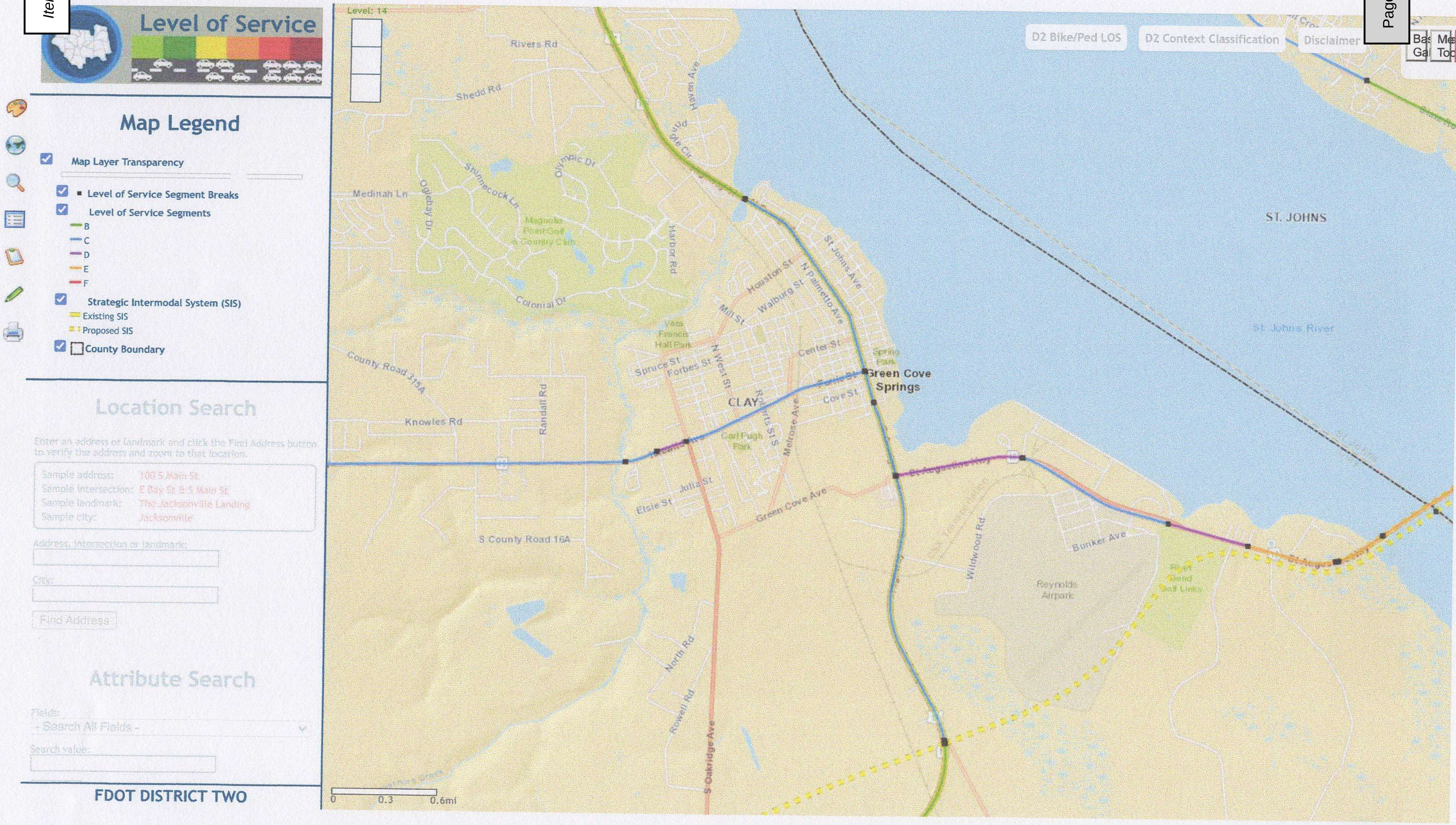
Total Industrial Daily Truck Trips **245**
Total Industrial AM PH Truck Trips **22**
Total Industrial PM PH Truck Trips **28**
ITE 11th Edition

Huntley 17-16 Commerce Center-Traffic-

Exisitng Road Segments

US 17	Roadway Classification	Classification Description	Annual Av. Daily Traffic AADT	Annual Av. Truck-Daily Traffic truck-AADT	Current LOS
CR-15a toCR 209s	C3C	Suburban-Commercial	15300	1943	B
CR 209 s to SR 16	C3C	Suburban-Commercial	15300	1943	C
SR 16 to Oak	C3C	Suburban-Commercial	19,500	4,583	C
Oak to Ferris	C4	Urban General	22,500	4,583	C
Ferris to Center	C-4	Urban General	22,500	2,115	C
Center to Governors	C-4	Urban General	22,500	2,115	C
SR 16					
US 17 to Clark Rd	C3C	Suburban-Commercial	20,500	1,866	D
Clark Rd to Bridge	C-2	Rural town	20,500	1,866	C

Item #5.



Level of Service
Map Legend
Map Layer Transparency
Level of Service Segment Breaks
Level of Service Segments
B
C
D
E
F
Strategic Intermodal System (SIS)
Existing SIS
Proposed SIS
County Boundary
Location Search
Enter an address or landmark and click the Find Address button to verify the address and zoom to that location.
Sample address: 100 S Main St
Sample intersection: E Bay St & S Main St
Sample landmark: The Jacksonville Landing
Sample city: Jacksonville
Address, intersection or landmark:
City:
Find Address
Attribute Search
Fields:
- Search All Fields -
Search value:
FDOT DISTRICT TWO
Level: 14
D2 Bike/Ped LOS
D2 Context Classification
Disclaimer
ST. JOHNS
St. Johns River
Green Cove Springs
CLAY
Reynolds Airpark
Magnolia Point Golf & Country Club
Rivers Rd
Shedd Rd
Medinah Ln
Oglebay Dr
Shinnecock Ln
Olympic Dr
Harbor Rd
Colonial Dr
Houston St
Walburg St
Mill St
N Palmetto Ave
St Johns Ave
Center St
Spruce St
Forbes St
N West St
Cove St
Melrose Ave
Knowles Rd
Randall Rd
County Road 315A
Julia St
Elsie St
Green Cove Ave
S County Road 16A
Wildwood Rd
Bunker Ave
North Rd
Rowell Rd
S Oakridge Ave
0 0.3 0.6mi

CYPRESS MANAGEMENT AND DESIGN

P.O. Box 8880
Fleming Island, Florida
32006

EXHIBIT B

Commerce Center US 17 and State Road 16

Site Access:
The following will be the starting point for the traffic study. The owner may determine in the future that access points or controls of access points may change. But any change will require FDOT approval.

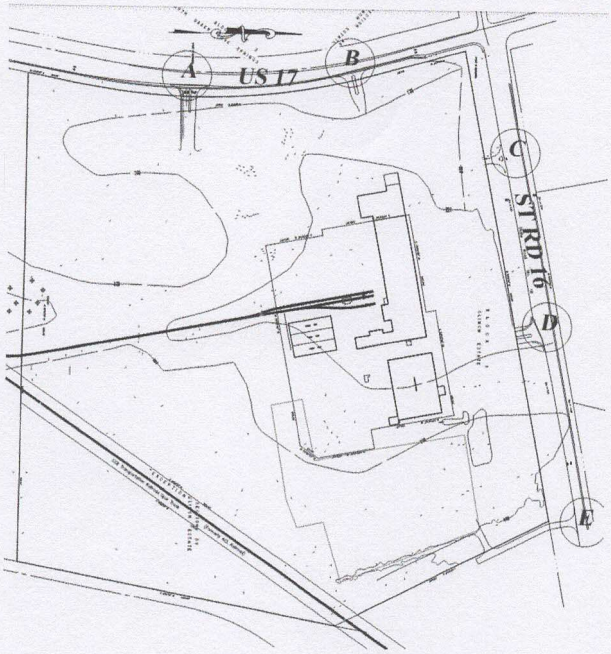
Access A- Directional
This will be a wide entrance- Right turn in- right turn out- and at this time a Left turn out. Our initial analysis will be on 30% of the Commercial vehicles entering and exiting the site. We will attribute 10% of truck traffic to this entrance.

Access B-
This will be right turn-in - right turn out only access point. Our initial analysis will be on 20% of the Commercial vehicles entering and 15 % exiting the site. We will attribute 40% of Convenience store to this entrance.

Access C-
This will be right turn-in - right turn out only access point. Our initial analysis will be on 10% of the Commercial vehicles entering and 15 % exiting the site. We will attribute 40% of Convenience store to this entrance.

Access D- Directional
This will be a wide entrance- Right turn in- right turn out- and at this time a Left turn in. Our initial analysis will be on 20% of the Commercial vehicles entering and exiting the site. We will attribute 20% of truck traffic to this entrance.

Access E- Full access
This will be an full access entrance- Our initial analysis will be on 10% of the Commercial vehicles entering and 20% exiting the site. We will attribute 70% of truck traffic to this entrance.



FOR OFFICE USE ONLY

P Z File #_____

Application Fee:_____

Filing Date: _____Acceptance Date:_____

Review Date: SRDT_____ P & Z _____ CC _____

PUD Rezoning Application

A. PROJECT

1. Project Name: Huntley Commerce Center-or 17-16 Commerce Center
2. Address of Subject Property: Leonard C Taylor Parkway
3. Parcel ID Number(s): 38-06-26-016451-000-00 and 016451-003-00
4. Existing Use of Property: Commercial
5. Future Land Use Map Designation : Pending- Industrial- Commercial
6. Existing Zoning Designation: Mixed Use Commercial
7. Proposed Zoning Designation: PUD
8. Acreage: 112

B. APPLICANT

1. Applicant's Status ☐Owner (title holder) ☐Agent
2. Name of Applicant(s) or Contact Person(s): Kelly Hartwig Title:_____

   Company (if applicable): Cypress Management and Design

   Mailing address: PO Box 8880

   City: Fleming Island State: Florida ZIP: 32006

   Telephone: (___)_____ FAX: (___)_____ e-mail: Siteopt@bellsouth.net

3. If the applicant is agent for the property owner*

   Name of Owner (titleholder):): HLM Investments

   Mailing address: 1890 Kingsley ave.

   City: Orange Park State: Florida ZIP: 32073

   Telephone: (___)_____ FAX: (___)_____ e-mail:_____

* Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property?

   ☐Yes ☐No If yes, list names of all parties involved:

   If yes, is the contract/option contingent or absolute?
   ☐Contingent ☐Absolute

D. ATTACHMENTS

1. Statement of proposed change, including a map showing the proposed zoning change and zoning designations on surrounding properties
2. A current aerial map (Maybe obtained from the Clay County Property Appraiser.)
3. Plat of the property (Maybe obtained from the Clay County Property Appraiser.)
4. Legal description with tax parcel number.
5. Boundary survey
6. Warranty Deed or the other proof of ownership
7. Site Plan
8. Written Description
9. Binding Letter
10. Fee.

    a. $2,000 plus $20 per acre

    b. All applications are subject 10% administrative fee and must pay the cost of postage, signs, advertisements and the fee for any outside consultants.

    No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees necessary for technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

All 10 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge:

Signature of Applicant

Kelly Hartwig
Typed or printed name and title of applicant

12/14/2024
Date

Signature of Co-applicant

Typed or printed name of co-applicant

Date

State of Florida County of Clay

The foregoing application is acknowledged before me this 14 day of February, 2024 by Kelly Hartwig, who is/are personally known to me, or who has/have produced FLDL#H632519594690 as identification.

NOTARY SEAL

CHELSEA SEARLES
Notary Public - State of Florida
Commission # HH 297359
My Comm. Expires Aug 3, 2026
Bonded through National Notary Assn.

Signature of Notary Public, State of Florida

ORDINANCE NO. O-10-2024

AN ORDINANCE OF THE CITY COUNCIL OF GREEN COVE SPRINGS, FLORIDA REZONING ±112 ACRES OF PROPERTY LOCATED ON THE SOUTHEAST CORNER OF US 17 AND SR 16, IDENTIFIED AS TAX ID NUMBER 016451-003-00 AND 016451-000-00, MORE PARTICULARLY DESCRIBED BY EXHIBIT "A", FROM C-2, GENERAL COMMERCIAL TO PUD, PLANNED UNIT DEVELOPMENT.

WHEREAS, the City has received a request to rezone the subject parcel from C-2 General Commercial Residential to PUD, Planned Unit Development and

WHEREAS, the City has the authority pursuant to its home rule and other statutory powers to rezone properties within the City; and

WHEREAS, a duly advertised public hearing was conducted on the proposed rezoning on May 28, 2024 by the Planning and Zoning Board, sitting as the Local Planning Agency (LPA), and the LPA reviewed and considered comments received during the public hearing concerning the application and made its recommendation for approval to the City Council; and,

WHEREAS, the City Council considered the recommendations of the LPA at a duly advertised public hearing on May 28, 2024 provided for and received public participation; and,

WHEREAS, the City Council has determined and found said application for the amendment, to be consistent with the City of Green Cove Springs Comprehensive Plan and Land Development Regulations; and,

WHEREAS, for reasons set forth in this Ordinance that is hereby adopted and incorporated as findings of fact, that the Green Cove Springs City Council finds and declares that the enactment of this amendment is in the furtherance of the public health, safety, morals, order, comfort, convenience, appearance, prosperity, or general welfare.

NOW THEREFORE, BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA AS FOLLOWS:

Section 1. Zoning Map Amended. The Zoning Map is hereby amended for the following property from C-2 General Commercial to Planned Unit Development (PUD).

Tax Parcel ID# 016451-003-00 and 016451-00-00, in accordance with the legal description found in Exhibit "A" and map found in Exhibit "B" attached hereto.

Section 2. Development Parameters. The development shall consist of the following commercial and industrial development as shown on the PUD Master Plan:

1. Total Development Buildout
    a. 119,000 square feet of manufacturing uses
    b. 231,200 square feet of retail uses
    c. 264,000 square feet of warehouse uses
    d. 130,500 square feet of light industrial uses
2. All requirements set forth in the PUD written description and corresponding conceptual maps PUD documents as set forth in Exhibits C-I
3. Requirements set forth in the Site Specific Text Amendment, Ordinance #O-02-2024
4. Unless specifically stated within these aforementioned requirements, the Huntley PUD shall develop consistent with all requirements for the City of Green Cove Springs Land Development Regulations.

Section 3. Ordinance to be Construed Liberally. This ordinance shall be liberally construed in order to effectively carry out the purposes hereof which are deemed to be in the best interest of the public health, safety and welfare of the citizens and residents of Green Cove Springs, Florida.

Section 4. Repealing Clause. All ordinance or parts of ordinances in conflict herewith are, to the extent of the conflict, hereby repealed.

Section 5. Severability. It is the declared intent of the City Council of the City of Green Cove Springs that, if any section, sentence, clause, phrase, or provision of this ordinance is for any reason held or declared to be unconstitutional, void, or inoperative by any court or agency of competent jurisdiction, such holding of invalidity or unconstitutionality shall not affect the remaining provisions of this ordinance, and the remainder of the ordinance after the exclusions of such part or parts shall be deemed to be valid.

Section 6 Effective Date. This Ordinance shall become effective upon passage.

INTRODUCED AND APPROVED AS TO FORM ONLY ON THE FIRST READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, ON THIS 4TH DAY OF JUNE 2024.

CITY OF GREEN COVE SPRINGS, FLORIDA

_____
Steven R. Kelley, Mayor

ATTEST:

_____
Erin West, City Clerk

PASSED ON SECOND AND FINAL READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, THIS 16TH DAY OF JULY 2024

CITY OF GREEN COVE SPRINGS, FLORIDA

_____
Steven R. Kelley, Mayor

ATTEST:

_____
Erin West, City Clerk

APPROVED AS TO FORM:

_____
L. J. Arnold, III, City Attorney

EXHIBIT A

Legal Discription

Parcel "A"

A tract of land in the G.I.F. Clark Grant, Section 38, Township 6 South, Range 26 East, Clay County, Florida, being a part of Section 39 and 46 and part of Lots 2, 3, 4, 5 and 6, Block 1, Gould T. Butlers survey of the Clinch Estate, according to plat recorded in Plat Book 1, pages 31 through 34 of the public records of said county, together with part of Block 3, and Lots 2, 3, 4, 5, 7, 8, 9, 10, 11, 12 and part of Lots 1, 6 and 13, Block 4, and part of Lots 5, 6, 7, 8, 9 and 10, Block 1, according to plat of South Green Cove Springs, recorded in said records in Deed Book "Z", page 748, also part of Lightwood Avenue, part of River Road, part of Plametto Street and part of Chestnut Avenue, as shown on both of said plats, said parcel being more particularly described as follows:

Begin at the intersection of the southerly line of State Road No. 16 with the easterly line of State Road No. 15; thence on the southerly line of State Road No. 16, North 79 degrees 05 minutes 46 seconds East, 2,150.00 feet; thence South 27 degrees 10 minutes 14 seconds East 1,072.54 feet; thence South 10 degrees 17 minutes 16 seconds West, 1,460.00 feet; thence North 89 degrees 32 minutes 05 seconds West, 2,201.92 feet; thence on the easterly line of State Road No. 15, North 10 degrees 18 minutes 05 seconds East, 243.41 feet; thence northerly 1,354.72 feet along the arc of a curve concave to the west and having a radius of 2,924.79 feet, said arc being a portion of the easterly line of State Road No. 15; thence continue along last said easterly line, North 16 degrees 14 minutes 14 seconds West, 401.87 feet to the point of beginning.

EXCEPTING THE FOLLOWING:

(1) A strip of land 100 feet wide lying 50 feet on either side of the centerline line of ACL Railroad spur tracks as presently located across the southeast portion of said Parcel "A".

(2) A parcel of land in Lot 13, Block 4, South Green Cove Springs, comprising approximately one acres, as more particularly described in deed recorded in Deed Book 48, page 456, EXCEPT that portion lying within the right-of-way of U.S. Highway No. 17.

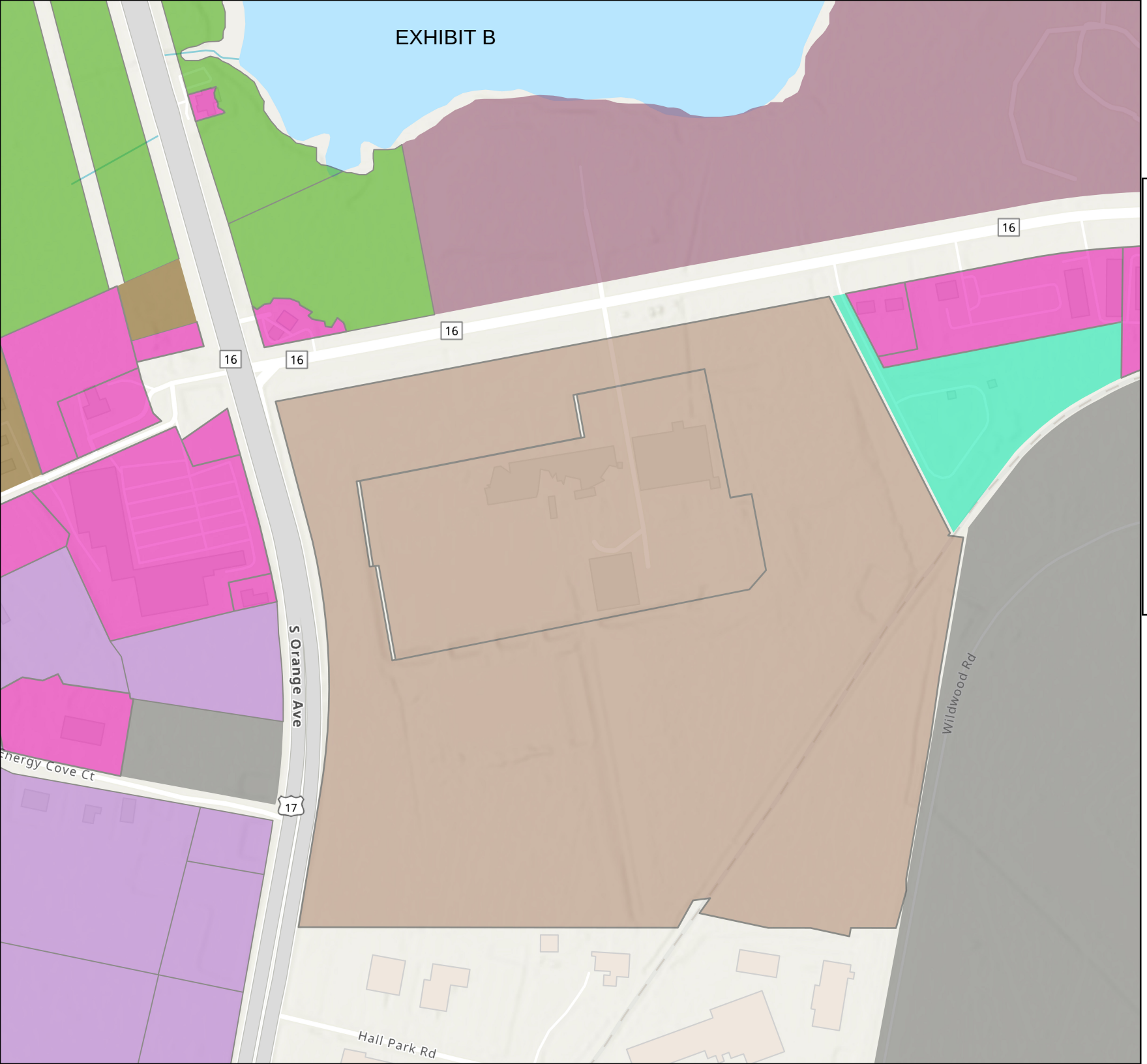
Parcel "C"

From the intersection of railroad on Spring Avenue with Green Cove Walkill and West Tocoi Road in the center of road, North 10 degrees East, 1672 feet; thence from center of Road South 80 degrees East to the beginning corner, 40 feet; thence continue South 80 degrees East, 210 feet; thence North 10 degrees East, 210 Feet; thence North 80 degrees West, 210 feet; thence South 10 degrees West, 210 feet to the beginning corner, containing one acre in Block 4, South Green Cove Springs, as recorded in the public records of Clay County, Florida, Excepting therefrom that portion lying within the right-of-way of U.S. Highway No. 17.

For: HKM Investments, LLC

Parcel Number- 38-06-26-016451-000-00 and 06451-003-00

EXHIBIT B



Zoning

R1	Low Density Residential
R2	Medium Density Residential
R3	High Density Residential
RRF	Residential Riverfront
PUD	Planned Unit Development
RPO	Residential Professional Office
C1	Commercial Medium Intensity
C2	Commercial High Intensity
CBD	Central Business District
GCC	Gateway Corridor Commercial
GCN	Gateway Corridor Neighborhood
GCR	Gateway Corridor Residential
M-2	Industrial District
M-1	Light Industrial District
MUH	C-2/M-2 - Mixed Use
INS	Institutional
RC	Recreation

Exhibit C
Written Description

CYPRESS MANAGEMENT AND DESIGN

P.O. Box 8880
Fleming Island, Florida
32006

Architectural Guidelines

HLM Investments LLC
Louis Huntley Enterprises
1890 Kingsly Ave
Orange Park FI
32073

Ref: 965 Leonard C Taylor Parkway

Architectural Guide:

Overall Site:

1. An association will be set up with guidelines and rules which all owners and tenants will be required to follow.
2. All areas will utilize commerce center standards for signage and wayfinding.
3. Monument signs will be used in lieu of pole signs for main signage.
4. All lighting will conform to commerce center standards.
5. All roads and parking shall be asphalt and curbed.
6. All buildings shall be accessed via the 5 access points from US 17 and St. Rd 16 through internal roads, No additional access points.
   to US 17 or St. Rd. 16 other than the 5 identified in the master plan without FDOT and city approval.
7. All tenants and owners will maintain sites per association standards.
8. Landscape standards- All street trees will be live oaks-
9. Request city of Green Cove to use architectural traffic light arms.
10. Buildings will be located with-in the site to provide access for fire protection and access for delivery's from internal roads or drive aisles.

M-l and M-2 areas

In addition to Land development Codes of Green Cove Springs,

1. No outdoor storage in front on Buildings.
2. All storage areas must be screened from US 17 and St. Rd 16. With:
   a. A building or a

b. A vertical masonry screening wall- Must be 100 % opaque and minimum of 12' tall. or a
c. A vegetative buffer of 100'with varying heights of trees and plant material to achieve a 100 %screen.

3. No business will be allowed which produces obnoxious odors or noise as set forth under City LDR Sec. 117-4
4. All buildings which are visible from US 17 and St. Rd 16 will have an architectural facade which will meet associations guidelines.
5. No loading docks shall be allowed in front of Buildings.
6. No roll up doors visible from US 17 or St Rd 16
7. Pole lighting in Outdoor areas hidden from public areas- owners may use standard 30' poles with LED fixtures. Specified by association.
8. All dumpsters and trash receptacles will be in the rear of buildings and be screened for all public areas.
9. Existing building which faces ST. Rd 17 Currently Metal fabricated building housing Front runner boat, this building facade will be upgraded to meet association guidelines or screened by January 1st 2027.

C-2 areas

1. All buildings shall conform to architectural guidelines set for by the commerce association. The association will maintain a architectural review committee which will have full authority over all building facades.
   A. Commercial Buildings:
   (a) All commercial buildings shall have all sides with a architectural facade.
   (b) No pre-manufactured metal sides (corrugated metal look on any side of buildings)
   (c) Each building shall have accented masonry on the fronts of buildings.

   B. All dumpsters and trash receptacles will be screened with masonry walls and 100% opaque gates.
   C. Drive up windows must be on side of buildings and not access US 17 or St Rd 16, but to an internal road
   D. Any canopy's or covered outdoor areas shall utilize architectural guidelines to match building facades.

   E. Requirements of Land Development Codes of Green Cove Springs

Architecture:

a. Exterior wall finish materials shall include brick, stucco and stone. Horizontal masonry siding, artificial wood planking, Architectural metal panels may be utilized for architectural effect on gables and in other limited applications.

b. All exposed sides of a building shall be designed with the same finish as the front facade. Exceptions include stucco with stone or brick accents on front,.
c. Buildings will be massed in such a way to create a commercial frontage yet screen the industrial buildings.
d. Height of buildings shall not exceed city guidelines

THIS AREARESTRICTED TO COMMERCIAL USES C-2

THIS AREA RESTRICTED TO M-1 ZONING USES
AND M-2 BY EXCEPTION

PARCEL 1 REZONE FROM C-2
TO M-2 INDUSTRIAL
15.00 ACRES

THIS AREA RESTRICTED TO M-1 ZONING USES
AND M-2 BY EXCEPTION

" E X C E P T I O N "

CSX Transportation Railroad Spur Track
(Formerly ACL Railroad)

State Road No. 16

POINT OF BEGINNING

N 10°18'05" E 243.41'

S 10°54'14" E 262.70'

S 79°05'46" W

N 79°05'46" E 2000.00'

N 10°54'14" W 979.37'

N 10°54'14" W 258.24'

S 10°17'19" W 1460.00'

N 79°05'46" E 1053.24'

S 79°05'46" W 1681.39'

N 10°54'14" W 401.87'

N 10°54'14" W 1124.04'

N 79°05'46" E 2000.00'

N 79°05'46" E 1053.24'

S 10°54'14" E 918.22'

N 10°54'14" W 258.24'

N 79°05'46" E 1053.24'

N 10°54'14" W 1124.04'

S 10°54'14" E 262.70'

S 79°05'46" W 1681.39'

N 10°54'14" W 401.87'

N 79°05'46" E 2000.00'

N 10°54'14" W 979.37'

S 10°54'14" E 918.22'

N 10°54'14" W 258.24'

S 10°17'19" W 1460.00'

N 79°05'46" E 1053.24

ENTRANCE

FUTURE BIG BOX AND RETAIL

M-1 WAREHOUSE

OUTSIDE STORAGE

RAIL SPURS

OUTSIDE STORAGE

M-1 INDUSTRIAL
M-2 BY EXCEPTION

EXISTING RETENTION

COMMERCIAL DEVELOPMENT AREA

M-1 WAREHOUSE

ENTRANCES

COMMERCIAL DEVELOPMENT AREA

NEW MAIN RETENTION AREA

M-2 INDUSTRIAL

ENTRANCE

NEW MAIN RETENTION AREA

ENTRANCE

M-1 WAREHOUSE
M-2 BY EXCEPTION

SHEET 2 OF 5 SHEETS

BUILDING 2
30,200

BUILDING 1
57,000

1.57 ac

4.59 ac

1.0 ac

10,000

GRAPHIC SCALE
1" = 120'

SCALE 1"= 120'-0"

FINAL PROJECTED USES:
119,000 SF MANUFACTURING
231,200 SF RETAIL WHICH INCLUDES CONVENIENCE STORE OR GAS STATION
264,000 SF WAREHOUSE
130,500 LIGHT INDUSTRIAL SPACE
POSSIBLE TRUCK TO TRAIN TRANSFER FACILITY AS PART OF EITHER MANUFACTURING OR LIGHT INDUSTRIAL

CYPRESS MANAGEMENT AND DESIGN
P.O. BOX 8880 FLEMING ISLAND, FL. 32006
904-759-9576---- SITEOPT@BELLSOUTH.NET

REVISIONS

DATE	DATE
12-14-2023	XXX
5-1-2024	

17-16 COMMERCE PARK
PRELIMINARY MASTER
SITE PLAN

DATE 5-24--2023
DRAWN BY
CHKD. BY
JOB NO.

KELLY W HARTWIG
LA 1252

SHT. LC-1.0

TRY AND DEVELOP A NEW M-1 BUILDING TO SCREEN OUTSIDE ACTIVITY- THIS IS A MAJOR COMPONENT OF OUR PHASING PLAN- PHASE 2-3 BUT IT WILL BE BASED ON TENANT NEEDS

INSTALL ENTRANCES AREAS
PHASE 2

BEGIN COMMERCIAL CONSTRUCTION
PHASE 4

MASS GRADING- INSTALL BASE RETENTION AREAS
GRADE REMAINING COMMERCIAL AREA
PHASE 2- (UPON ACCEPTABLE PERMITS)

EXISTING BUILDING 3- TO BE RENOVATED
IN PHASE 1
SEE BUILDING PHASING DRAWING LC-2.1

EXISTING LARGE SEWER PUMP STATION

THIS STATION WILL BE EVALUATED TO DETERMINE:
SIZE AND VOLUME - EXISTING USE
CAPACITY FOR FUTURE USE
SIZE OF PUMPS AND DISCHARGE
PHASE 1

BUILDING 1- EXISTING METAL BUILDING-MANUFACTURING
CERTIFICATE OF OCCUPANCY GRANTED FOR FRONT RUNNER BOATS

DEVELOP TENANT FOR USE OF
EXISTING RAIL SPUR LINES
PHASE 4

PHASE 3 OR 4- DEVELOP INDUSTRIAL SITE WHICH
INCORPORATES IMPERVIOUS CAP OVER
ENVIRONMENTAL AREAS

CYPRESS MANAGEMENT
AND DESIGN
P.O. BOX 8880 FLEMING ISLAND, FL. 32006
904-759-9576---- SITEOPT@BELLSOUTH.NET

REVISIONS

DATE	
DATE#	XXX
5-1-2024	

HUNTLEY COMMERCE PARK
SITE PHASING PLAN

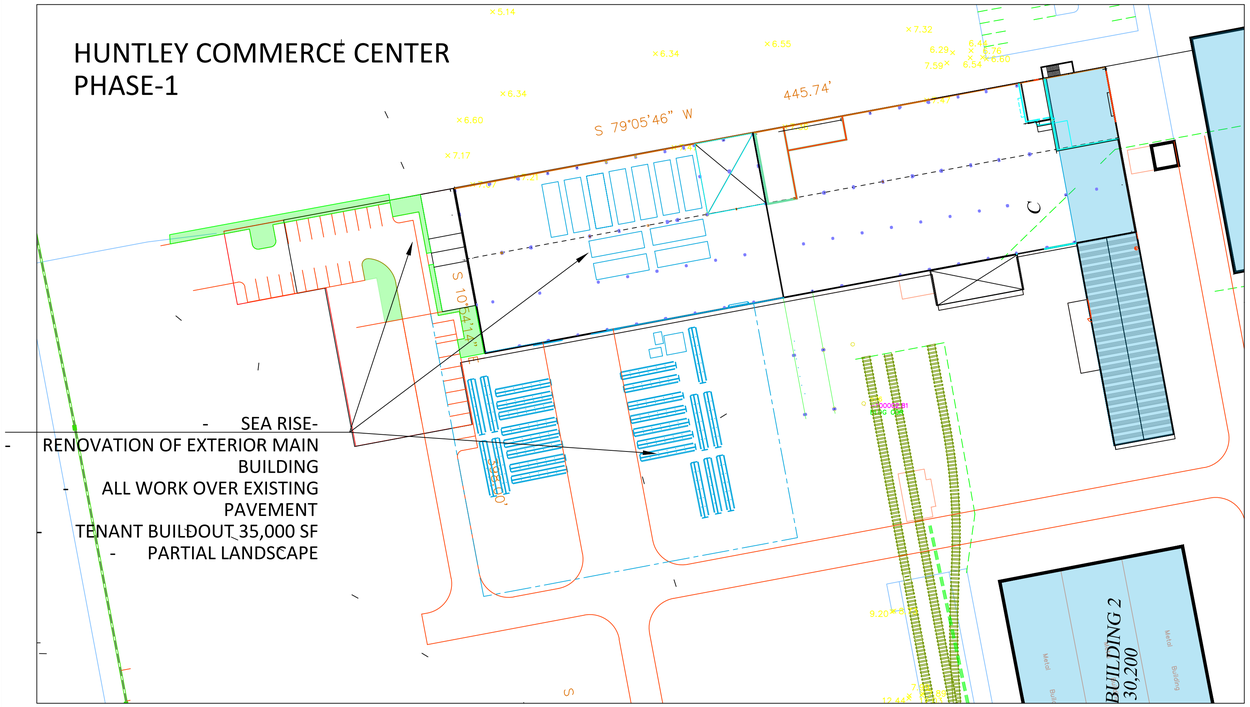
DATE 11-12--2023
DRAWN BY
CHKD. BY
JOB NO.

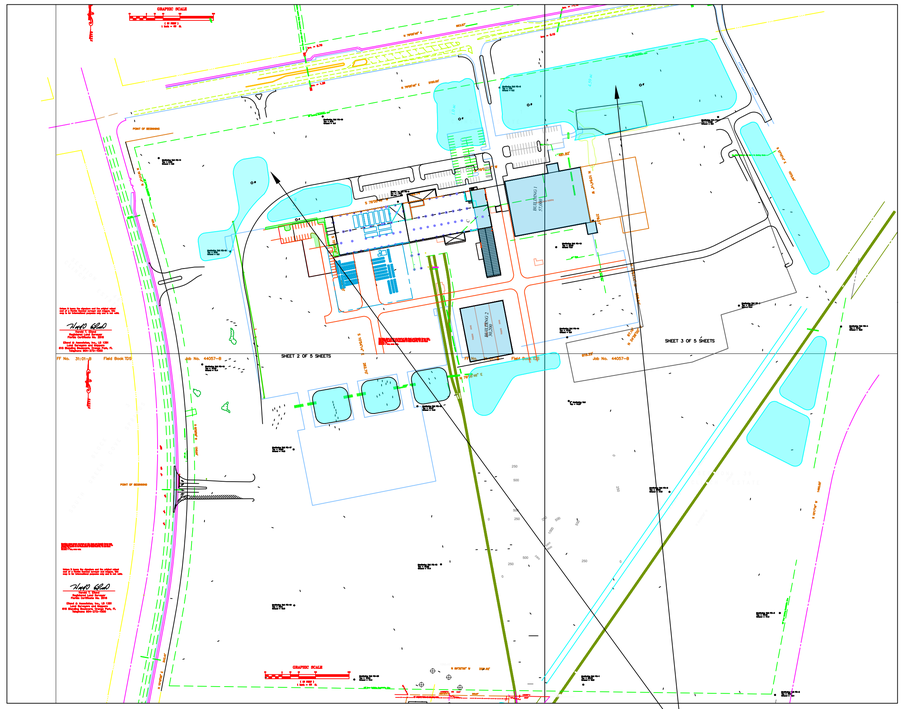
KELLY W HARTWIG
LA 1252

SHT. LC-2.0

HUNTLEY COMMERCE CENTER PHASE-1

- SEA RISE-
- RENOVATION OF EXTERIOR MAIN BUILDING
- ALL WORK OVER EXISTING PAVEMENT
- TENANT BUILDOUT 35,000 SF
- PARTIAL LANDSCAPE

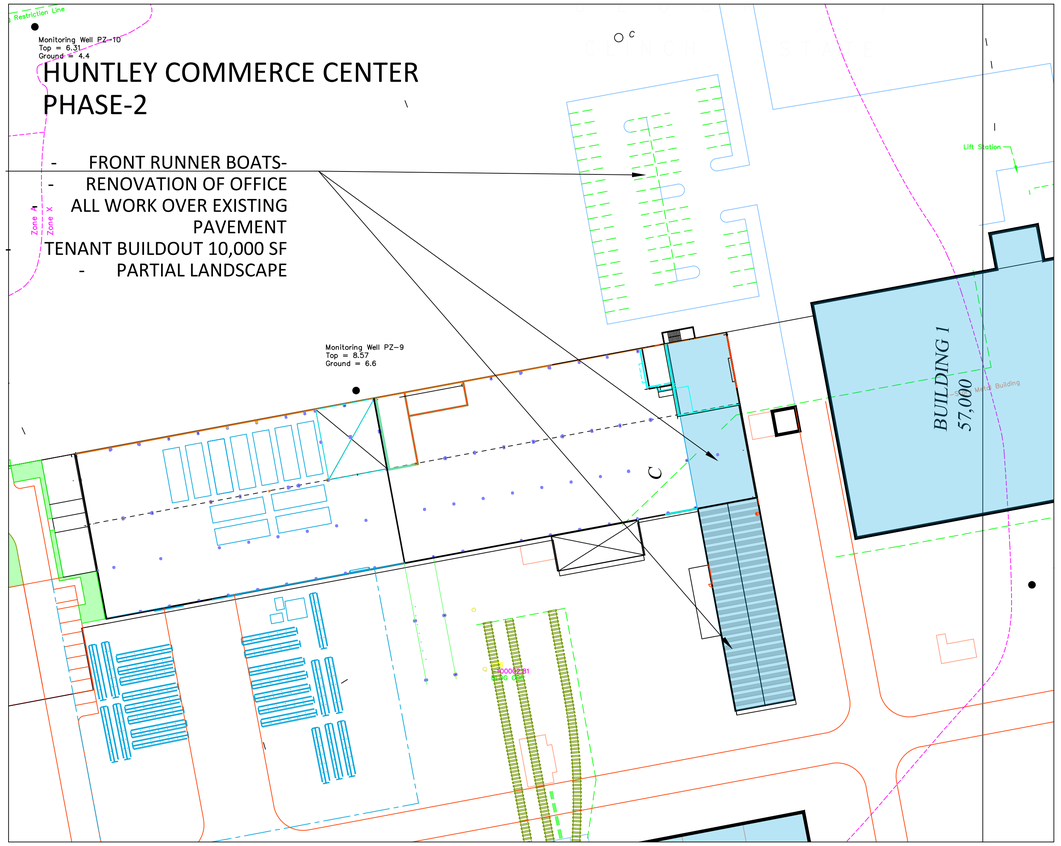


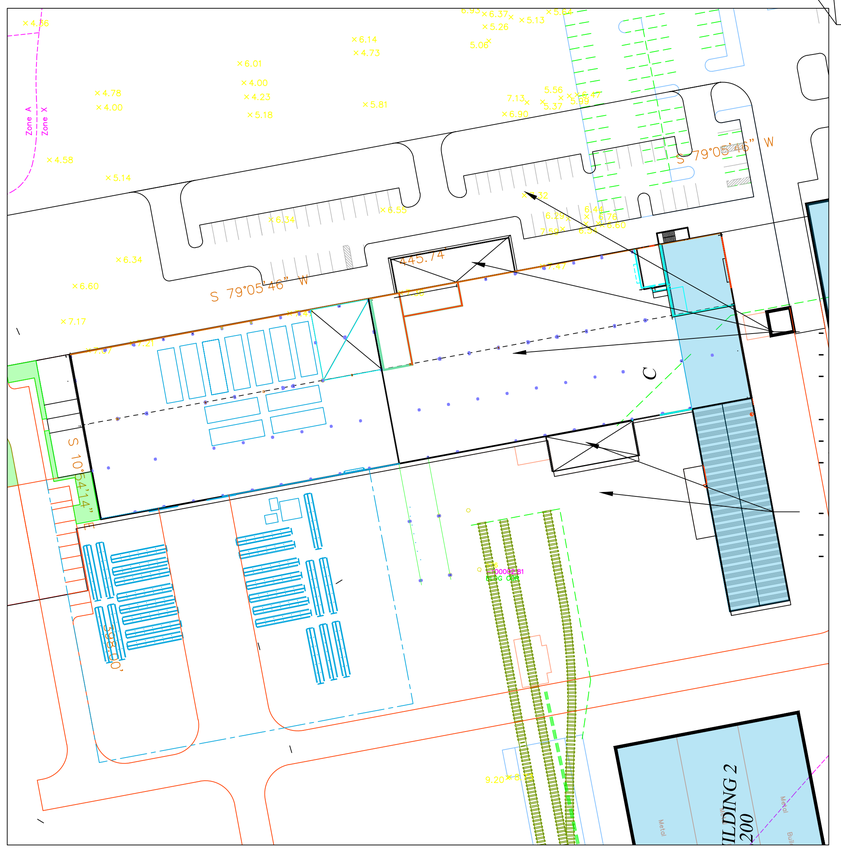


- MASTER STORM WATER PONDS
- OVERALL SITE GRADING
- CONVEYANCE SYSTEM FOR NEXT PHASE- CONSTRUCTION
- NEW FDOT ENTRANCES

HUNTLEY COMMERCE CENTER PHASE-2

- FRONT RUNNER BOATS-
- RENOVATION OF OFFICE
- ALL WORK OVER EXISTING PAVEMENT
- TENANT BUILDOUT 10,000 SF
- PARTIAL LANDSCAPE





HUNTLEY COMMERCE CENTER PHASE-3-OPTIONS

NEW TENANT-
- NEW OFFICE- EXTENSION
- EXPANDED- RENOVATED PARKING LOT
- TENANT BUILDOUT
- 30,000-SF
- PARTIAL LANDSCAPE

RENOVATION INTERIOR TOWER
- NEW OFFICE- EXTENSION

30' 15' 0 30' 60'
SCALE IN FEET
1" = 30'

CYPRESS MANAGEMENT AND DESIGN
P.O. BOX 8880 FLEMING ISLAND, FL. 32006
904-759-9576----- SITEOPT@BELLSOUTH.NET

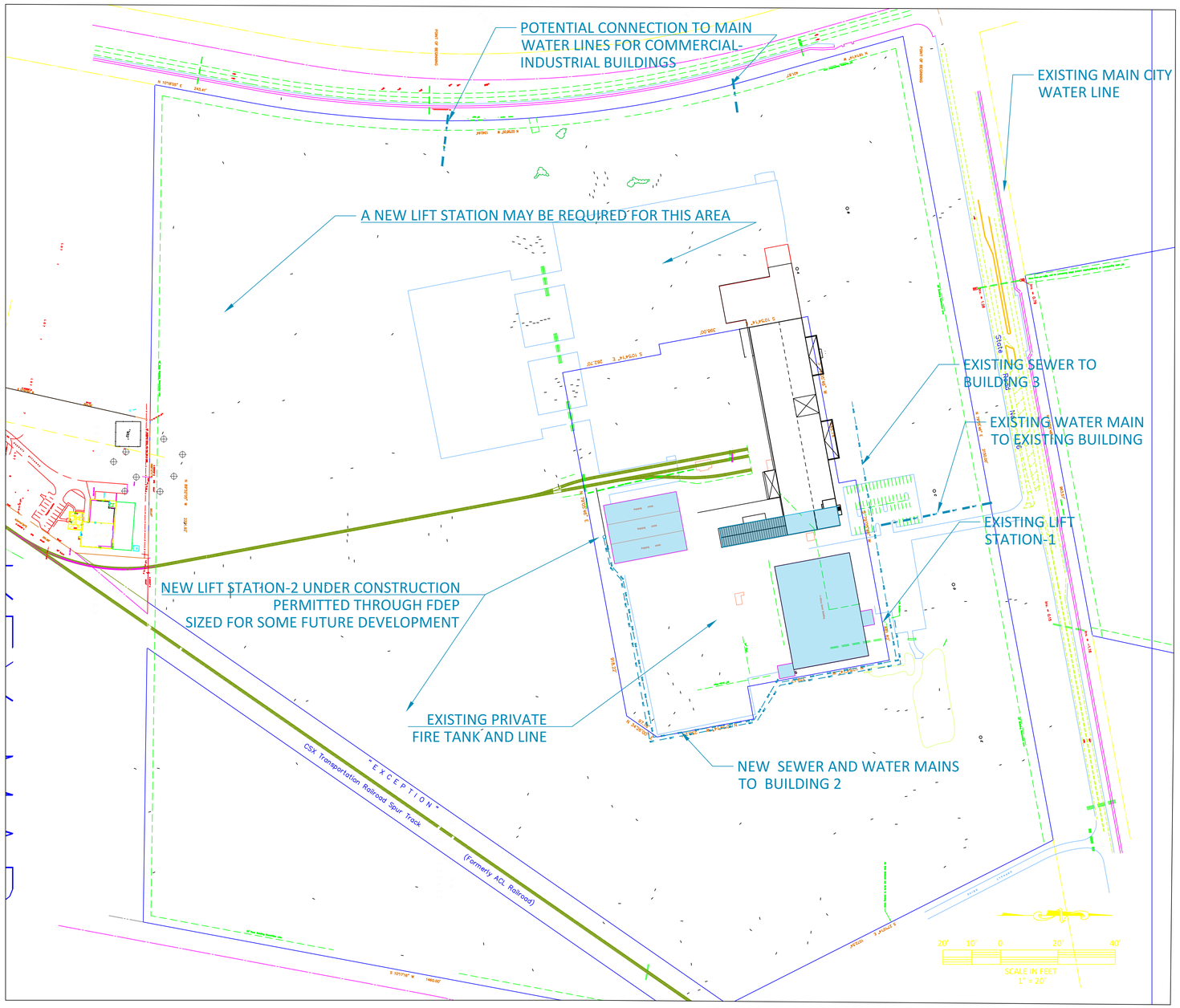
REVISIONS	DATE
XXX	
SITE PLAN REVISIONS	5-17-2023
	4-10-2024

HUNTLEY COMMERCE CENTER
PRELIMINARY PHASING PLAN
PRELIMINARY

DATE 5-24-2024
DRAWN BY
CHKD. BY
JOB NO.

KELLY W HARTWIG
LA 1252

SHT. LC-2.1



EXISTING MAIN CITY SEWER FORCE MAIN IS LOCATED ST. RD. 16 AND US 17

EXISTING WATER MAIN IS LOCATED ST. RD. 16 AND US 17

MAPS PROVIDED BY CITY

STEP 1-
A COMPLETE EVALUATION OF THE EXISTING SEWER LIFT STATION WILL BE UNDERTAKING TO DETERMINE ITS TOTAL CAPACITY AND ITS CURRENT USE

STEP 2- A EVALUATION OF LIFT STATION -2 WILL BE COMPLETED TO DETERMINE ITS TOTAL CAPACITY

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CYPRESS MANAGEMENT AND DESIGN
P.O. BOX 8880 FLEMING ISLAND, FL. 32006
904-759-9576---- SITEOPT@BELLSOUTH.NET

REVISIONS
SITE PLAN REVISIONS XXX

DATE
5-17-2023
5-14-2024

HUNTLEY COMMERCE CENTER
PRELIMINARY UTILITY PLAN

DATE 5-24-2024
DRAWN BY
CHKD. BY
JOB NO.

KELLY W HARTWIG
LA 1252

SHT. LC-3.0

Request for a PUD Rezoning for parcel 016451-000-00 & parcel 016451-003-00 consisting of 112 acres for property located at the Southeast corner of US 17 and SR 16 Ordinance O-10-2024

Property and Applicant Information

SUBJECT:	**Request for rezoning of parcel 016451-000-00 and parcel 016451-003-00 consisting of 112 acres for property located at the Southeast corner of US 17 and SR 16 to Planned Unit Development**
APPLICANT/AGENT:	Kelly Hartwig, Cypress Management and Design
PROPERTY OWNER:	HLM Investments LLC & Louis L Huntley Enterprises Inc.
LOCATION:	965 Leonard C Taylor Highway
ACREAGE:	±112 acres (Per boundary survey and legal description)

Property Location

Existing Zoning

Zoning

R1	Low Density Residential
R2	Medium Density Residential
R3	High Density Residential
RRF	Residential Riverfront
PUD	Planned Unit Development
RPO	Residential Professional Office
C1	Commercial Medium Intensity
C2	Commercial High Intensity
CBD	Central Business District
GCC	Gateway Corridor Commercial
GCN	Gateway Corridor Neighborhood
GCR	Gateway Corridor Residential
M-2	Industrial District
M-1	Light Industrial District
MUH	C-2/M-2 - Mixed Use
INS	Institutional
RC	Recreation

Proposed Zoning

Zoning

R1	Low Density Residential
R2	Medium Density Residential
R3	High Density Residential
RRF	Residential Riverfront
PUD	Planned Unit Development
RPO	Residential Professional Office
C1	Commercial Medium Intensity
C2	Commercial High Intensity
CBD	Central Business District
GCC	Gateway Corridor Commercial
GCN	Gateway Corridor Neighborhood
GCR	Gateway Corridor Residential
M-2	Industrial District
M-1	Light Industrial District
MUH	C-2/M-2 - Mixed Use
INS	Institutional
RC	Recreation

Development Process

- Transmittal Hearing for Future Land Use Map and Text Amendment
- Review by Florida Department of Commerce
- City Adoption of Map and Text Amendment
- Action on Zoning/Planned Unit Development Plan
- City Adoption of Map and Text Amendment

Future Land Use Text Amendment

1. Prior to the approval of a subsequent development order such as but not limited to a subdivision or site development plan, the property owner/developer must submit a developer's agreement addressing the following development requirements for the Amendment parcels that is currently owned by HLM Investments that is adjacent to SR 16 and US 17:

   a) Address screening and buffering requirements between the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 and SR 16 and US 17.

   b) Address Building, site and streetscape design requirements for the Amendment parcels or portion thereof and the remaining portion of parcel 016451-0000 adjacent to SR 16 and US 17. These requirements shall include but are not limited to:

      i. Block Standards
      ii. Building Placement
      iii. Building Typology and Massing
      iv. Building Frontage Design
      v. Façade Articulation
      vi. Entrances
      vii. Building Materials
      viii. Lighting
      ix. Service Area and Mechanical Equipment Screening
      x. Signage

Future Land Use Text Amendment

2. Prior to approval of a subsequent development order, such as but not limited a zoning, subdivision or site development plan, the property owner/developer will be required to provide an Access Management Plan and Traffic Impact Analysis to address site access and traffic capacity, the plan must be developed in cooperation with Florida Department of Transportation, Clay County and the City of Green Cove Springs.

   a. Traffic Study shall be completed prior to issuance of building permits for new onsite development and certificate of occupancies (CO) are issued for expansion of existing development.
   b. Traffic Study shall address truck traffic and rail traffic as part of their analysis.
   c. Traffic Study methodology approval shall be secured prior to approval of a subsequent development order, such as but not limited to Zoning, Subdivision or Site Development Plan.
   d. A Development Agreement shall be completed prior to issuance of building permits for new onsite development and certificate of occupancies (CO) are issued for expansion of existing development to address the timing and costs associated with offsite improvements.

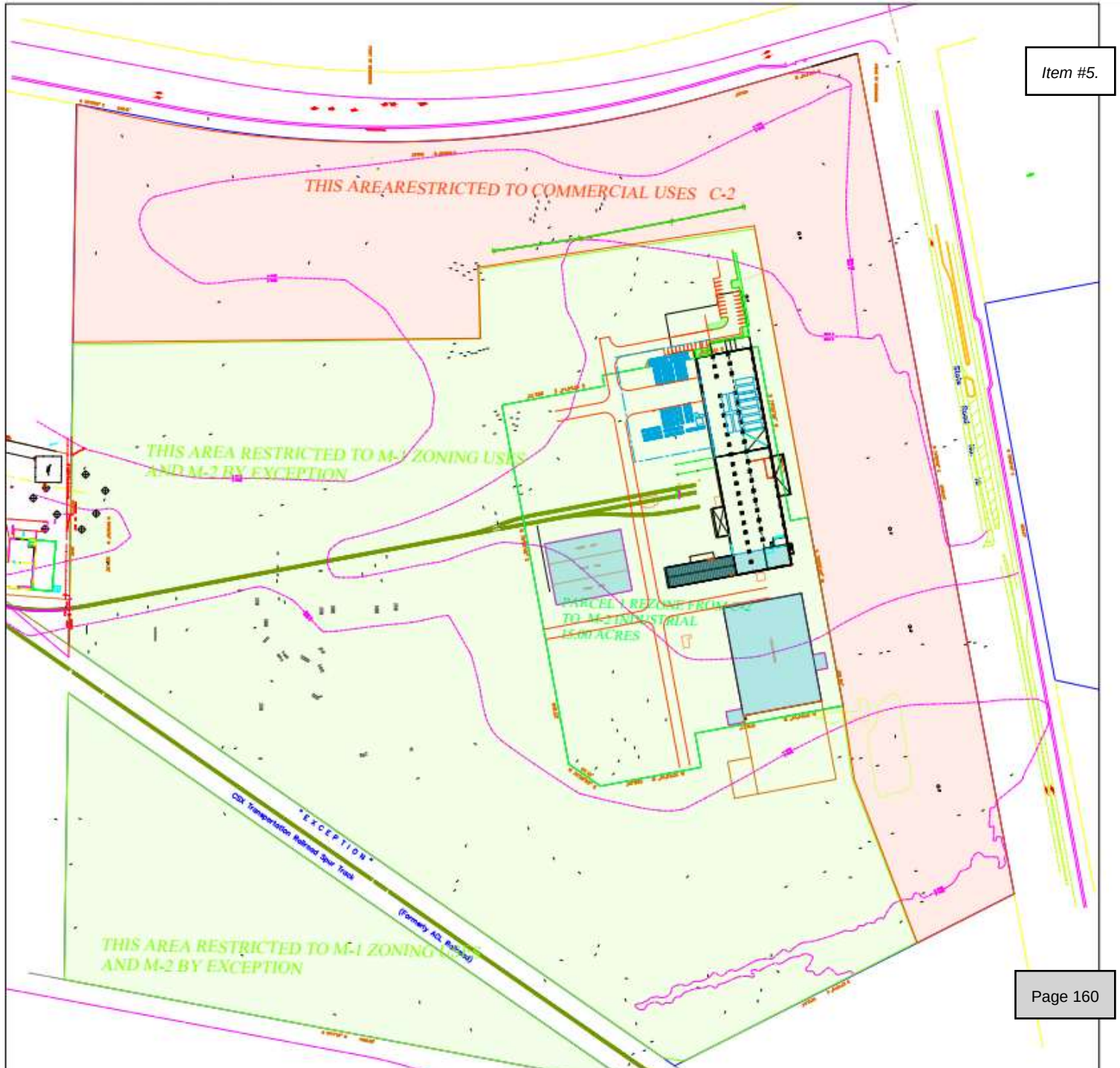
3. Limit uses by allowing M-1 Uses by right and M-2 uses as a special exception, as well as C-2 Commercial Uses along the corridor frontages on US 17 and SR 16.

4. Property shall be rezoned to a Planned Unit Development (PUD). A conceptual plan and written description shall be included with the PUD submittal.

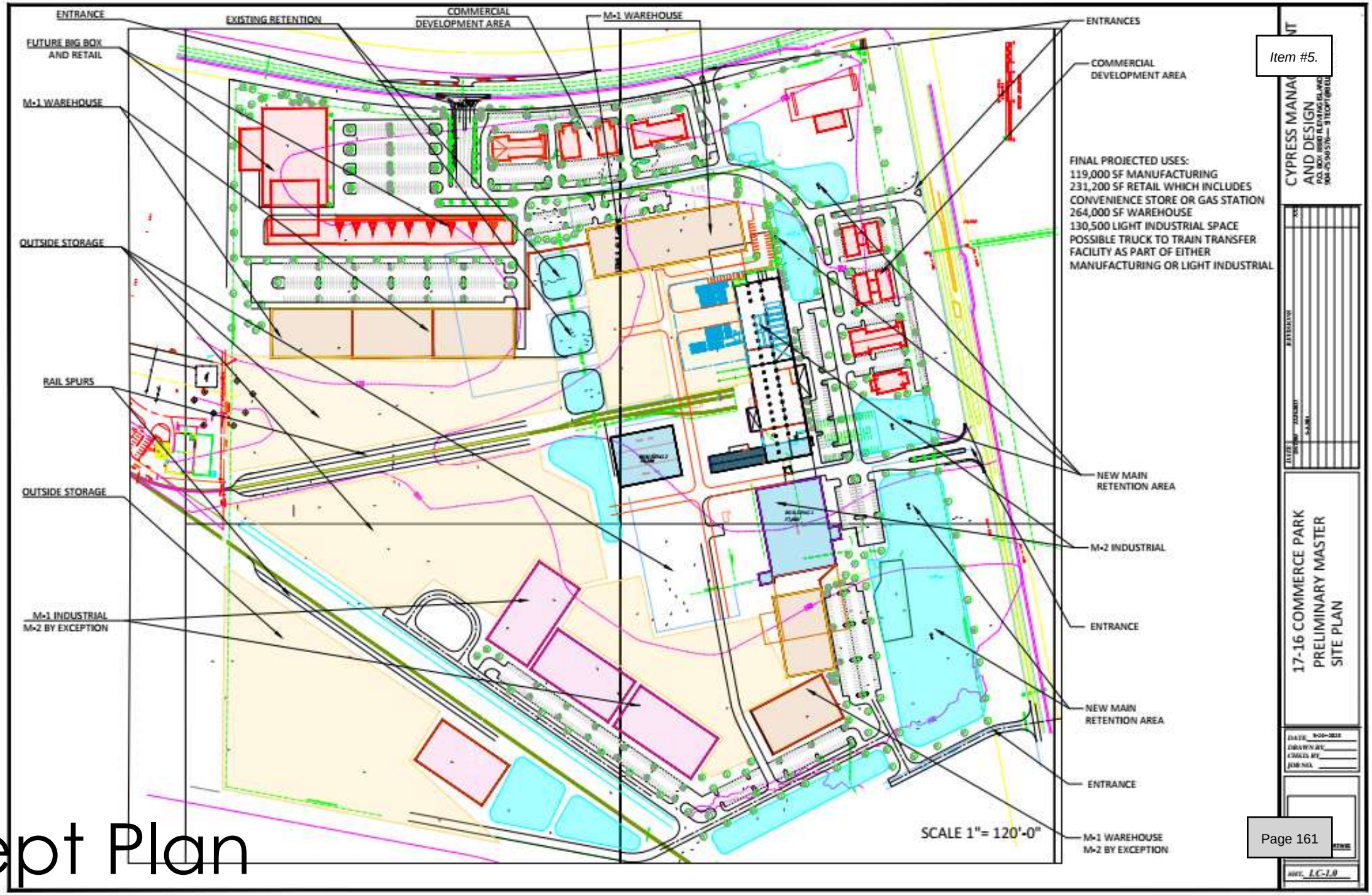
PUD

- Existing PUD Concept Plan
- Written Description
  - Project Description
  - Uses and Restrictions
  - Design Guidelines
  - Development Plan Approval
  - Justification for the Planned Unit Development Classification for this Project
  - Successors in Title
  - Statements

Zoning Areas

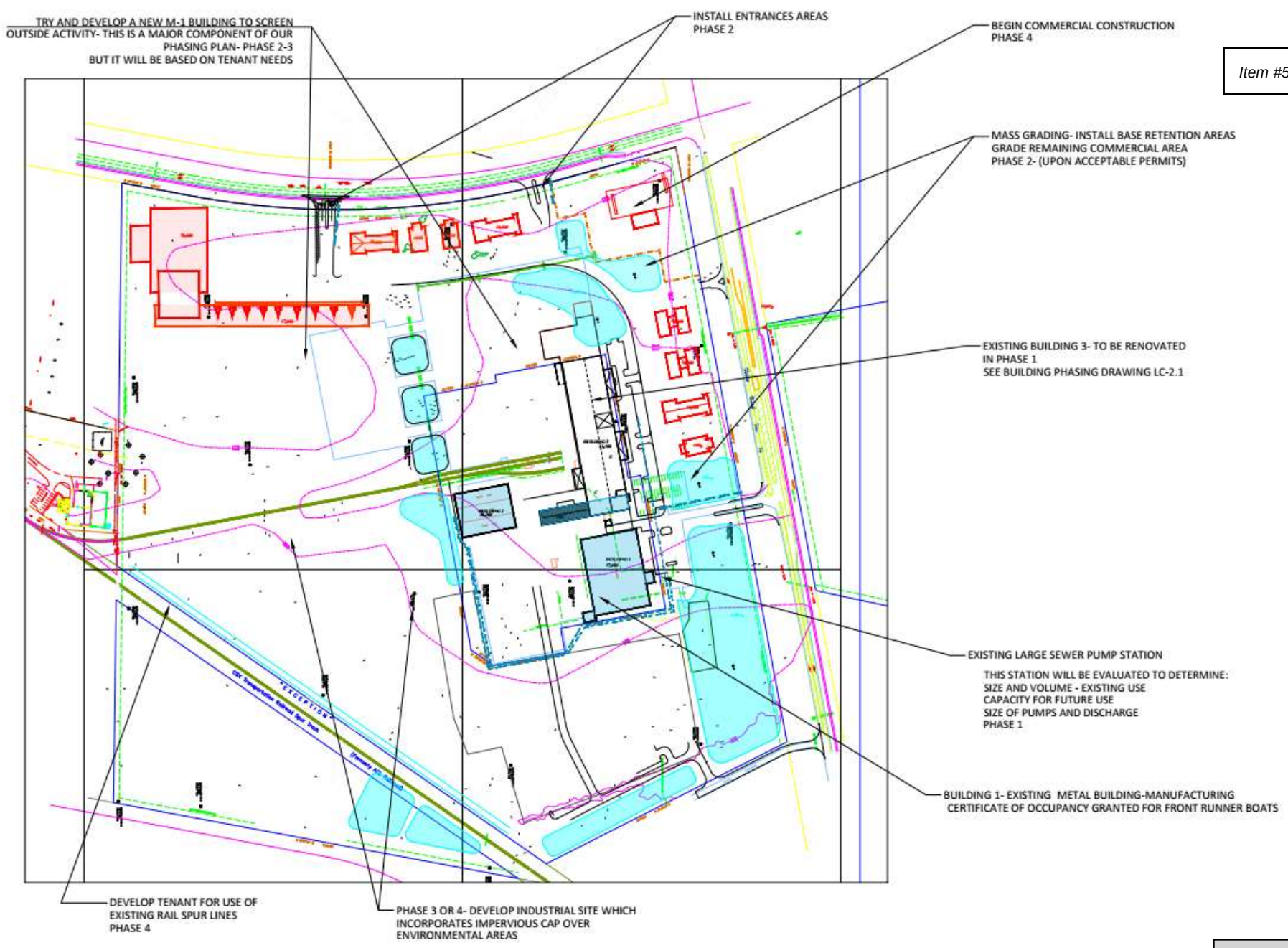


PUD Concept Plan



PUD Phase 1 Existing Building

Phasing Plan

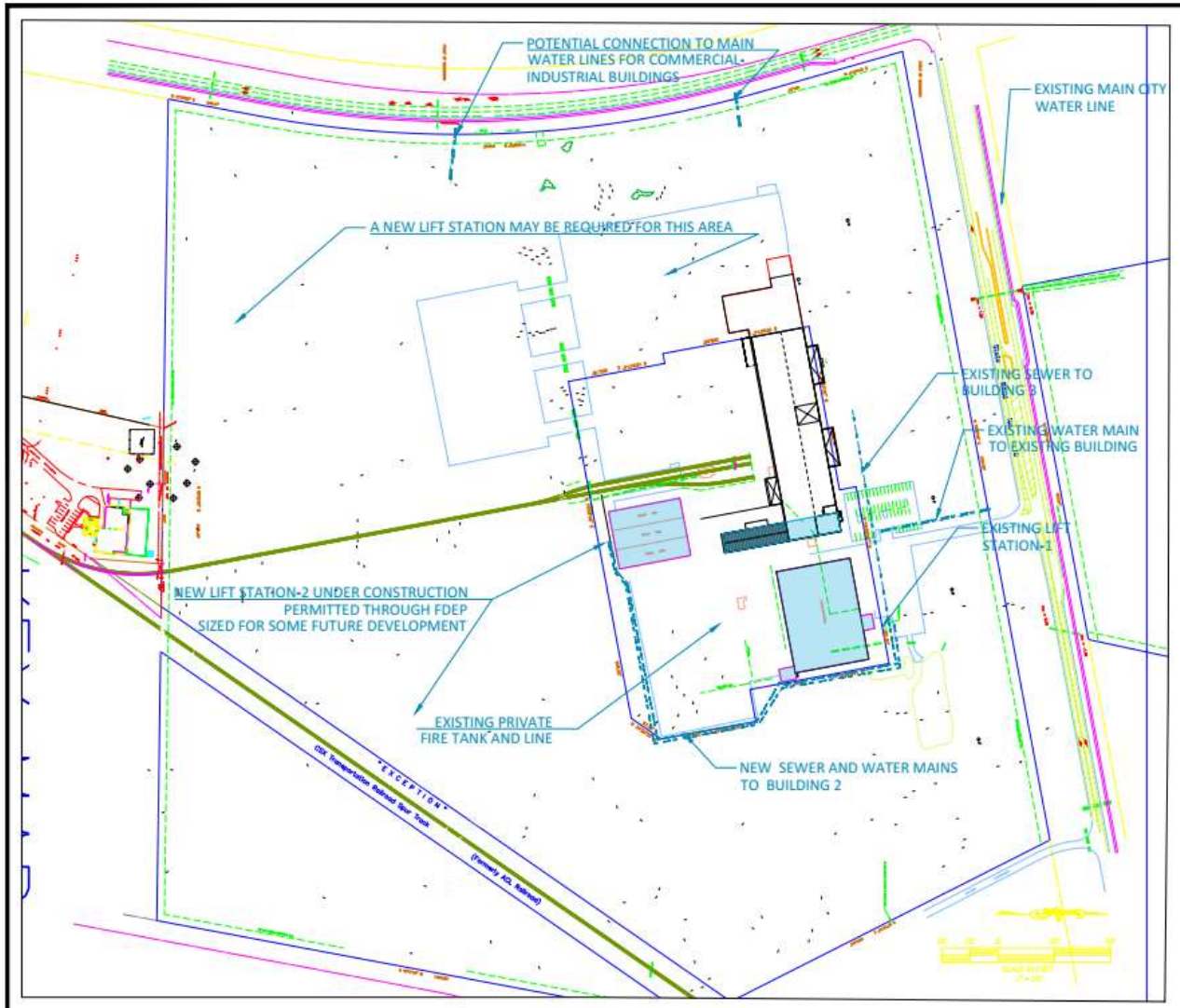


Architectural Requirements

- M-1/M-2 Areas:
  - No Outdoor Storage in front of buildings
  - All outdoor storage must be screened from US 17/SR 16
  - Buildings visible from US 17/SR 16 shall have architectural facades as set forth in the guidelines.
  - Rollup doors/loading docks/sanitation areas shall be screened from public view

- C-2 Areas
  - A. Commercial Buildings:
  - (a)All commercial buildings shall have all sides with architectural facades meeting the association guidelines.
  - (b)No pre-manufactured metal sides (corrugated metal look on any side of buildings)
  - (c)Each building shall have accented masonry on the fronts of buildings.
  - All dumpsters and trash receptacles will be screened with masonry walls and 100% opaque gates.
  - Drive up windows must be on side of buildings and not access US17 or StRd16 but to an internal road
  - Any canopy or covered outdoor area shall utilize architectural guidelines to match building facades.
  - Outdoor display of merchandise shall require a special exception, outdoor storage is prohibited.

Utility Master Plan



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Traffic Study Methodology

- Project will generate 13,634 daily trips, 1,241 pm peak hour trips
- Train Crossing Data along US 17 has been provided
- Projected Truck Traffic for industrial uses is provided as part of the traffic methodology
- Roadway access drives shall require approval from FDOT
- Internal commercial access drives shall be constructed in coordination with new development
- Upon traffic study completion, a Development Agreement shall be provided to address mitigation for failures identified in the traffic study.
- No Certificate of Occupancy can be provided for existing buildings or building permits for new building can be provided until a completed traffic/development agreement are approved.

US17 Corridor Study

TABLE 8: Signalized Intersection Synchro Results

Intersection	Weekday A.M. Peak Hour (Existing) Weekday A.M. Peak Hour (2045 No Build)			Weekday P.M. Peak Hour (Existing) Weekday P.M. Peak Hour (2045 No Build)		
	LOS	Delay (sec)	Max V/C*	LOS	Delay (sec)	Max V/C*
SR 16 (Leonard C Taylor Parkway)	C	29.8	0.88 (SBL)	D	42.4	0.98 (SBL)
	F	170.3	1.74 (SBL)	F	201.0	1.81 (WBR)
SR 16 (Ferris Street)	C	23.7	1.01 (EBR)	D	49.1	1.21 (NBL)
	D	49.1	1.19 (EBR)	F	118.8	1.93 (NBL)
Walnut Street	A	0.6	0.33 (SBT)	A	2.4	0.45 (NBT)
	A	0.8	0.47 (SBT)	A	2.7	0.66 (NBT)
Center Street	A	3.4	0.44 (EBL)	A	3.5	0.59 (EBL)
	A	3.5	0.61 (EBL)	A	4.8	0.72 (EBL)
Gum Street	A	2.2	0.37 (SBT)	A	1.4	0.44 (NBT)
	A	3.0	0.52 (SBT)	A	2.4	0.65 (NBT)
Houston Street	B	12.3	0.47 (EBL)	C	25.6	0.76 (NBT)
	B	16.7	0.78 (SBT)	E	68.6	1.37 (EBL)
Harbor Road	B	10.6	0.78 (EBL)	B	17.0	0.90 (EBL)
	B	19.1	0.90 (SBT)	D	48.9	1.10 (EBL)

* Volume/capacity ratio

Source: Kimley-Horn

Changes from the June 4th Submittal

- Staff has provided a definition and prohibited outdoor storage of aggregate materials within all of the preliminary zoning areas within the Planned Unit Development which has been added to Section II of the Written Description: Exhibit C.
- Removed language in Section I of the Written Description that the City and owner will share in the costs associated with utilities.
- Clarified that all utilities proposed to be owned and maintained by the City are subject to City approval and acceptance.
- Clarified process of Site Plan, Zoning and Use Interpretation and modification process.

Changes from the June 4th Submittal

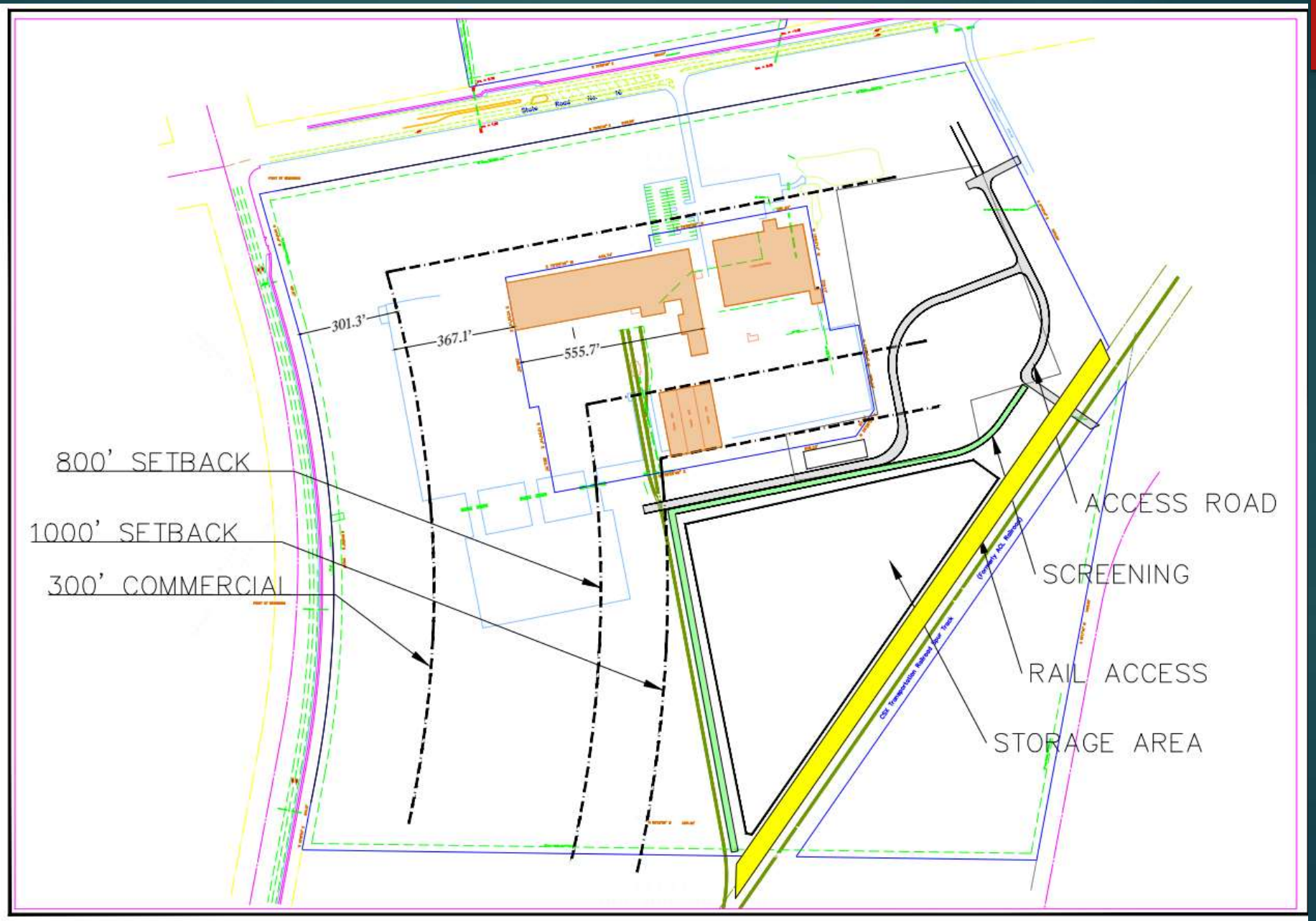
- Outdoor Storage of Aggregate Materials defined as a broad category of construction materials such as sand, gravel, crushed stone, slag and recycled materials shall be prohibited in all zoning areas identified on the preliminary zoning plan as shown on Exhibit E.

- *Alternative Language regarding Outdoor Storage of Aggregate Materials:
  - Outdoor Storage of Aggregate Materials defined as a broad category of construction materials such as sand, gravel, crushed stone, slag and recycled materials shall be classified as an M-2 Use. The Special exception shall include but is not limited to:
  - Dust Control Measures
  - Use of walls and barriers to block noise from adjacent properties
  - Location and maximum height of storage piles and equipment
  - Operational Hour Restrictions
  - Shall meet the screening requirements set forth in the PUD Written Description and Architectural Guidelines.

Applicant Proposed Changes from the June 18th Submittal

- Defines and prohibits a truck stop in all areas of the PUD
- Allows outdoor storage of aggregate materials as a permitted use in the M-1 Zoning District subject to the following conditions:
  - Limited to one facility in the PUD.
  - Stockpile area limited to 12 acres.
  - Stockpile area must be setback from US 17 and SR 16 a minimum of 1,000 feet.
  - Permanent stockpile height and equipment shall not exceed 28' in height.
  - All stockpiles shall be screened with either an existing building and/ or a 12' masonry concrete with:
    - Large trees as defined in the City Land Development Code (Sec. 113-243) shall be provided at a maximum of 25' on center and a minimum of 4" caliper at time of planting.
    - Shall comply with Architectural Guidelines as set forth in Exhibit D regarding outdoor storage.
  - Dust Control Measures shall be taken to ensure dust does not encroach beyond the limits of the facility.
  - Provide type, height and outline of equipment used to off load rail cars.
  - Traffic patterns of vehicles onsite shall be provided, traffic shall be separated from commercial entrances.
  - Identify materials to be handled. Specific material storage are subject to City Council approval.
  - Hours of Operation shall be provided.

Exhibit G Aggregate Outdoor Storage Concept Plan



Proposed Motion

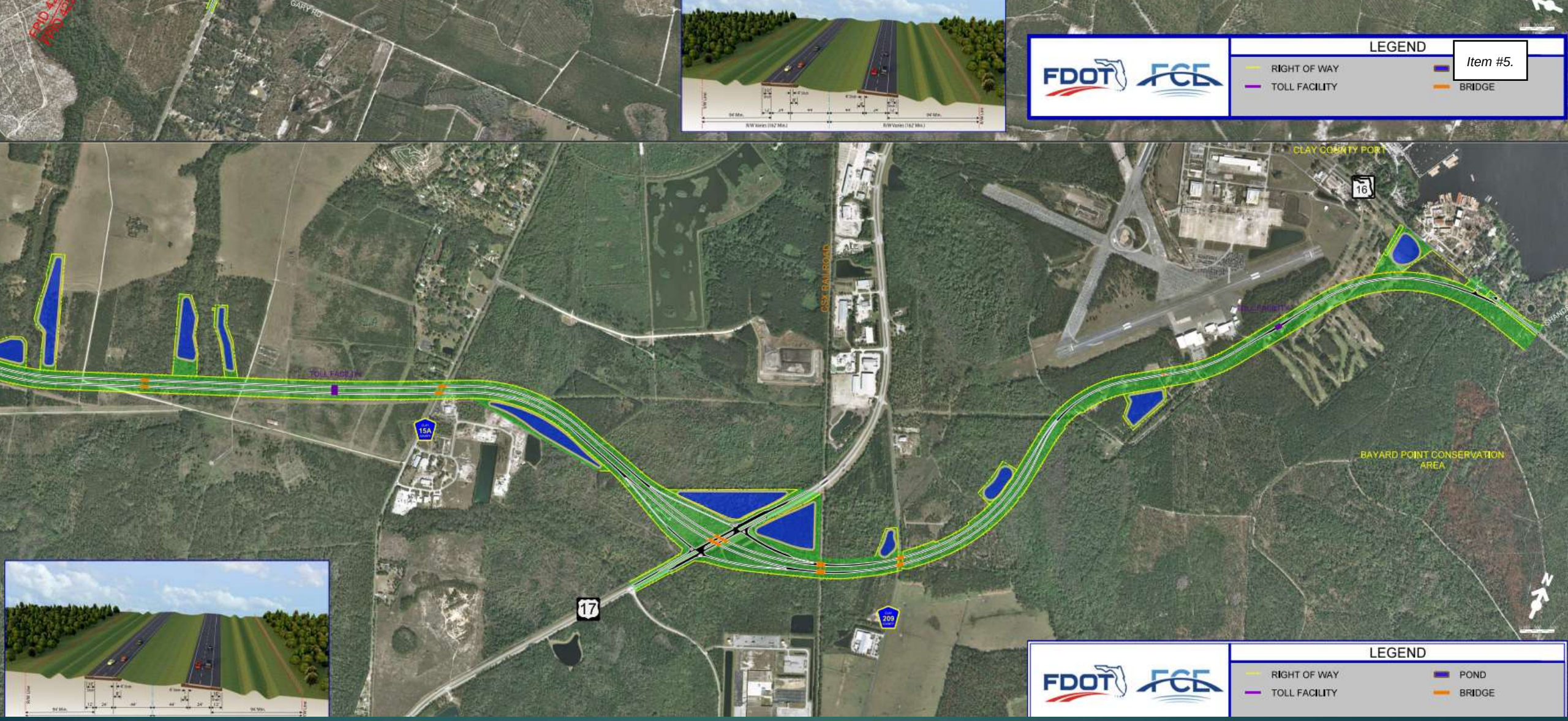
- Motion to approve for second and final reading of Ordinance O-01-2024 and approve the adoption of the Future Land Use Designation from Mixed Use to Industrial for property located at the Southeast corner of US 17 and SR 16 for approximately 58.12 acres of parcel #016451-000-00 and a portion of parcel #016451-003-00.

- Motion to approve on second and final reading of Ordinance O-02-2024 and approve transmittal to the Florida Department of Commerce a Site-Specific Policy Amendment regarding development restrictions for the proposed Future Land Use Amendment in Ordinance O-01-2024.

Proposed Motion

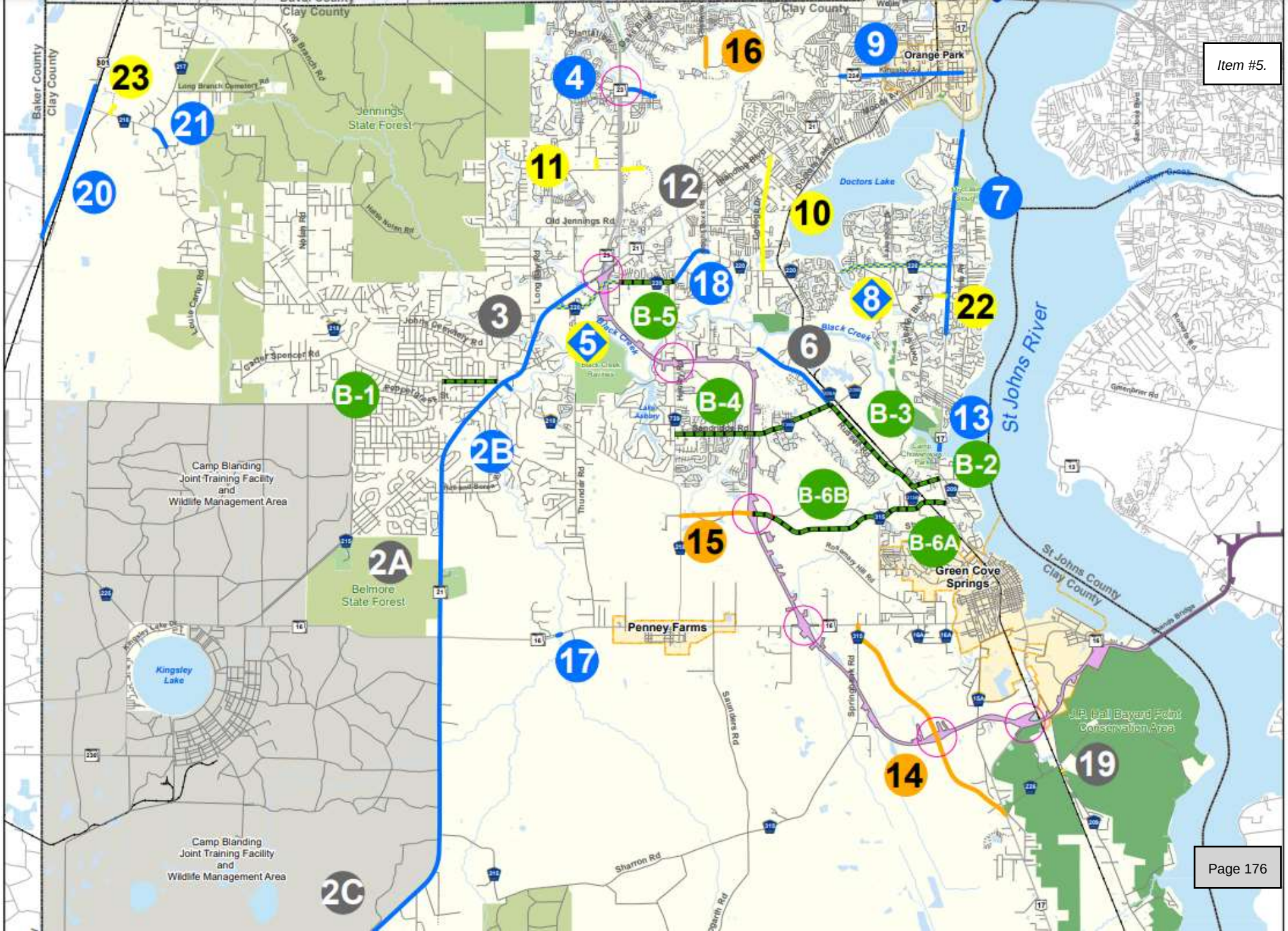
- Motion to approve the Second and Final Reading of Ordinance O-10-2024 for the Rezoning of Parcel IDs 016451-000-00 and 016451-003-00 from C-2, General Business to Planned Unit Development based on the factual support provided in the staff report with the additional condition to provide revisions as shown on the staff version of the PUD Written Description; or

- Motion to approve the Second and Final Reading of Ordinance O-10-2024 for the Rezoning of Parcel IDs 016451-000-00 and 016451-003-00 from C-2, General Business to Planned Unit Development based on the factual support provided in the staff report with the additional condition to provide revisions as shown on the applicant's version of the PUD Written Description.


LEGEND
RIGHT OF WAY
TOLL FACILITY
BRIDGE
POND
CLAY COUNTY PORT
BAYARD POINT CONSERVATION AREA
CSX RAILROAD
16
15A
17
209

First Coast Expressway New St Johns River Bridge (Clay County side)

Clay County Road Projects



Docking Confirmation Summary - 2025

Dock Location: Green Cove Springs, FL - City Dock

This document contains three tabs below, including our full schedule for the year and any updates since it was sent last.
Please review the Docking Schedule on the next tab and alert us of any inaccuracies or issues.

Dock Information

Dock	Address	Dockings
City Dock	229 Walnut St Green Cove Springs, FL 32034	10

Dock Terms

$2.75 per ft./ night

Dock Notes

Dock Type: Floating - Gangway1st Deck STBD - 1 Boat Capacity. Rec Boats often anchored off dock. Contact MarOps Staff to coord City Dock and FL MarPatrol resources with anchored boats.

Dock Fees

Dock Fee	2.75
Trash Fee	
Water Fee	

City Dock Contact Information

Name	Title	Phone	Email
Mike Null	Assistant City Manager/Public Works Director		mnull@greencovesprings.com
Kimberly Thomas	City Event Coordinator	904-297-7054	kthomas@greencovesprings.com
Connie	Public Works Coordinator	904-297-7012	

American Cruise Lines Contact Information

Name	Title	Phone	Email
Marine Operations Team		203-453-6800	docking@americancruiselines.com

American Cruise Lines 2025 Docking Schedule at Green Cove Springs, FL - City Dock

Dockings marked "Confirmed" have been guaranteed by the port, while Dockings marked "Requested" or "Flagged" have not been guaranteed.

Company	Vessel	Arrival Date	Arrival Time	Departure Date	Departure Time	Hours	Status
American Cruise Lines	American Eagle	Mon. Feb. 03, 2025	4:30PM	Tue. Feb. 04, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Eagle	Mon. Feb. 10, 2025	4:30PM	Tue. Feb. 11, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Eagle	Mon. Feb. 17, 2025	4:30PM	Tue. Feb. 18, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Eagle	Mon. Feb. 24, 2025	4:30PM	Tue. Feb. 25, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Eagle	Mon. Mar. 03, 2025	4:30PM	Tue. Mar. 04, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Glory	Wed. Mar. 26, 2025	4:30PM	Thu. Mar. 27, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Eagle	Fri. Nov. 21, 2025	4:30PM	Sat. Nov. 22, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Eagle	Fri. Nov. 28, 2025	4:30PM	Sat. Nov. 29, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Eagle	Sat. Dec. 20, 2025	4:30PM	Sun. Dec. 21, 2025	12:00PM	20.0	Requested
American Cruise Lines	American Eagle	Sat. Dec. 27, 2025	4:30PM	Sun. Dec. 28, 2025	12:00PM	20.0	Requested

Company	Vessel	Length
American Cruise Lines	American Eagle	241
	American Glory	241
	American Patriot	248
	American Pioneer	248
	American Star	205

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Planning and Zoning Commission **MEETING DATE:** July 16, 2024

FROM: Michael Daniels, Development Services Director

SUBJECT: Review of a Site Development Plan for the Clay County Economic Development Building at 633 N Orange Avenue

PROPERTY DESCRIPTION

APPLICANT: Travis Hastay, PE, CHW **OWNER:** Clay County

PROPERTY LOCATION: 633 Orange Avenue

PARCEL NUMBER: 017628-000-00

FILE NUMBER: SPL-23-007

CURRENT ZONING: Gateway Corridor Commercial (GCC)

FUTURE LAND USE DESIGNATION: Mixed-Use (MU)

SURROUNDING LAND USE

NORTH: **FLU**: Public
Z: Institutional (INS)
Use: Government

SOUTH: **FLU**: Mixed Use
Z: Gateway Corridor Commercial (GCC)
Use: Financial

EAST: **FLU**: Mixed Use
Z: Gateway Corridor Commercial (GCC)
Use: Restaurant

WEST: **FLU**: Public
Z: Gateway Corridor Neighborhood (GCN)
Use: Church

BACKGROUND

Travis Hastay, PE with CHW as an agent for Clay County has applied for Site Development approval for the subject property for the development of a two story, 18,731 square-foot administrative building.

PROPERTY DESCRIPTION

The property, consisting of 1.55 acres, is currently being used as a parking lot for Clay County government vehicles. There is currently a one-story concrete block building on the site.

DEVELOPMENT DESCRIPTION

The applicant has submitted a site development plan for an administrative building for the Clay County government. The proposed building consists of 18,731 square feet. They are proposing to demolish the existing building and redevelop the site. The applicant is proposing to provide a decorative wall and landscape buffer along N Orange Ave. as part of a special exception to allow for a parking lot to be placed in front of the building.

PARKING, LOADING, & STACKING

The plan shows 100 onsite parking spaces and 5 handicapped spaces. The applicant will need to demonstrate how they are in compliance with the city code parking requirements as set forth in Section 113-157.

DRAINAGE RETENTION

A drainage retention pond already exists on the site. In addition, stormwater chambers will be placed underground on site. The site will be graded to direct stormwater towards storm drains located across the project site.

TRAFFIC AND ACCESS

The plan shows two vehicular access point on Walburg St. A crosswalk and on street parking will be constructed on Walburg St. The current access to N Orange Ave. will be removed and blocked off by the decorative wall and landscape buffer. Walburg Street is to remain a public street.

UTILITY CONNECTIONS & SOLID WASTE

The new buildings will connect to City utilities. The utility plan (sheet 14) points show location water and sewer connections. Electrical connections and transformer locations have been provided.

Solid Waste will be serviced by a commercial franchise. Dumpster location is provided on the Utility and Site Plans and is shown to be on the southwestern corner of the current Clay County Administration building. The dumpster enclosure shall comply with screening requirements set forth in City Code Sec. 113-246(8).

LANDSCAPE PLAN

The landscape plan is showing 20 new trees and shrubs being planted onsite. One tree must be planted every 50 feet. Planted trees must be 2.5” in DBH. The plan shall be required to comply with the landscape requirements as set forth in section 113-244 of the City Code.

SPECIAL EXCEPTION

Pursuant to City Code a street wall is allowed within the gateway corridor commercial to mask parking located between the building and US 17 subject to the following criteria:

a. Street walls are freestanding walls that are intended to mask parking areas from the street and shall have a minimum height of 3 feet and a maximum height of six feet (measured from the elevation of the public sidewalk). The portion of the street wall 3 feet and below shall be solid (e.g. brick and masonry or similar material). The portion of the street wall above 4 feet shall be transparent (e.g.,wrought iron or similar material). Street walls shall have columns/posts (one foot by one foot minimum) spaced every 24 feet.
b. Street walls shall have openings no larger than necessary to allow automobile and/or pedestrian access.
c. Street walls shall not be permitted within the right-of-way.

d. Street walls shall be constructed of wrought iron, brick, masonry, stone, powder-coated aluminum, or other decorative materials that complement the finish on the primary building. Chain link, wood and PVC street walls/fences shall be prohibited.
e. The area in front and behind the street wall/fences shall include a landscaped strip pursuant to the requirements forth in Sec. 117-626 and Sec. 113-244(d)(3).
f. Street walls shall meet clear site line requirements set forth in Sec. 113-76.
g. Secure a special exception pursuant to the requirements set forth in section 101-352.

The Planning and Zoning Commission approved the proposed street wall special exception subject to the following conditions:

1. Provide building rendering and materials to match street wall.
2. Wall must be a minimum of 3' in height
3. Provide additional landscape around street wall:
   - Provide a continuous shrub, a minimum of 24" in height at time of planting between street wall and US 17.
   - Provide 5 small trees (ie.crapemyrtle, littlegem magnolia etc, min 6'-8'in height) between street wall and US 17.
4. Provide continuous hedge and a min of 3 small trees (6'-8' in height) to buffer maintenance area on Palmetto Avenue.

Attachments:

1. Site Plan Application
2. Civil Plans
3. Landscape Plan

PUBLIC FACILITIES IMPACT

Traffic Impacts

Land Use[1] (ITE)	Square Footage/Dwelling Units	Daily		AM Peak		PM Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Government Office	30,772	n/a	695	n/a	114	n/a	98
Total	30,772	n/a	695	n/a	114	n/a	98

1. *Source: Institute of Transportation Engineers: Trip Generation Manual 11th Edition*

Conclusion: Pursuant to the requirements of the site-specific Future Land Use text amendment, a traffic study methodology has been submitted to staff for review. A completed methodology has been approved by staff and is included in the packet. The traffic methodology provides:

- ***Description of the Proposed Development***
- ***Timeframe***
- ***Trip Generation included projected truck traffic from industrial development***
- ***Preliminary Site Access and Trip Distribution***
- ***Committed Projects***

Potable Water Impacts

Industrial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	4,200,000
Less actual Potable Water Flows[1]	1,013,000
Residual Capacity[1]	3,187,000
Projected Potable Water Demand from Proposed Project[2]	5,143
Residual Capacity after Proposed Project	3,181,857

1. *Source: City of Green Cove Springs Public Works Department*
2. *Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)*

Conclusion: The impact was calculated based on potential industrial uses. As shown in the table above, there is adequate capacity this use type. The City has existing water lines installed at this location.

Sanitary Sewer Impacts – South Plant WWTP

Commercial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity[1]	350,000
Current Loading[1]	0
Committed Loading [1]	5,143
Residual Capacity after Proposed Project	344,857
Projected Sewer Demand from Proposed Project[2]	5,143
Residual Capacity after Proposed Project	344,857

1. *Source: City of Green Cove Springs Public Works Department*
2. *Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)*

Conclusion: The impact was calculated based on potential commercial or residential uses. The project site is served by the South Plant Wastewater Treatment Plant (WWTP). As shown in the table above, when factoring in the current loading and the committed loading, this WWTP is over capacity to handle the estimated impacts resulting from the proposed application. The remaining demand will be sent via force main to the Harbor Road plant, where the City has an excess capacity of approximately 700,000 gallons per day. As a result, there is adequate capacity. The City has existing sewer lines at this location.

Solid Waste Impacts

Commercial

System Category	LBs Per Day / Tons per Year
Solid Waste Generated by Proposed Project[1]	None
Solid Waste Facility Capacity[2]	Minimum 3 Years Capacity

1. *Source: City of Green Cove Springs does not provide commercial sanitation services, prospective sanitation collection franchisees shall comply with City Code Section 66-10.*

Solid Waste Impacts

The City of Green Cove Springs' solid waste is disposed of at the Rosemary Hill Solid Waste Management Facility operated by Clay County. Per the Clay County Comprehensive Plan, a minimum of three (3) years capacity shall be maintained at the County's solid waste management facility. For

commercial developments, the City does not provide Curbside Service; commercial locations must instead contract with an approved franchisee for containerized collection.

The Planning and Zoning Commission recommended unanimous approval of the Site Development Plan and Special Exception for the street wall on June 23, 2024.

STAFF RECOMMENDATION

Staff recommends approval of the Clay County Economic Development Building Site Development Plan

Recommended Motion:

Motion to recommend of the Clay County Economic Development Building Site Development Plan

City of Green Cove Springs Site Plan Application

FOR OFFICE USE ONLY

P Z File #_____

Application Fee:_____

Filing Date: _____ Acceptance Date:_____

Review Type: SRDT ☐ P & Z ☐ CC ☐

A. PROJECT

1. Project Name: Clay County Economic Development
2. Address of Subject Property: 633 N Orange Ave, Green Cove Springs, FL 32043
3. Parcel ID Number(s): 38-06026-017628-000-00
4. Existing Use of Property: Vehicle Sales
5. Future Land Use Map Designation : Mixed use
6. Zoning Designation: Gateway Corridor Commercial (GCC)
7. Acreage: +/- 1.46

B. APPLICANT

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): Travis Hastay, PE Title: Senior Project Manager

   Company (if applicable): CHW

   Mailing address: 11801 Research Dr

   City: Alachua State: FL ZIP: 32615

   Telephone: (___) (352) 331-1976 FAX: (___)_____ e-mail: travish@chw-inc.com
3. If the applicant is agent for the property owner*:

   Name of Owner (title holder): Clay County

   Company (if applicable): Clay County

   Mailing address: PO Box 1366

   City: Green Cove Springs State: FL ZIP: 32043

   Telephone: (___) (352) 331-1976 FAX: (___)_____ e-mail: permiteng@chw-inc.com

   * Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

1. Is there any contract for sale of, or options to purchase the subject property? ☐ Yes ☒ No

   If yes, list names of all parties involved: _____

   If yes, is the contract/option contingent or absolute? ☐ Contingent ☐ Absolute

D. ATTACHMENTS (One copy reduced to no greater than 11 x 17, plus one copy in PDF format)

1. Site Plan and Survey including but not limited to:
   a. Name, location, owner, and designer of the proposed development.
   b. Vicinity map - indicating general location of the site and all abutting streets and properties.
   d. Complete legal description.
   e. Statement of Proposed Uses.
   f. Location of the site in relation to adjacent properties, including the means of ingress and egress to such properties and any screening or buffers along adjacent properties.
   g. Location of nearest fire hydrant, adjacent pedestrian sidewalks and bicycle paths.
   h. Date, north arrow, and graphic scale (not to exceed one (1) inch equal to fifty (50) feet).
   i. Area and dimensions of site.
   j. Location of all property lines, existing right-of-way approaches, sidewalks, curbs, and gutters.
   k. Access and points of connection to utilities (electric, potable water, sanitary sewer, gas, etc.).
   m. Location and dimensions of all existing and proposed parking areas, loading areas, curb cuts.
   n. Location and size of any lakes, ponds, canals, or other waters and waterways.
   o. Structures and major features – fully dimensioned – including setbacks, distances between structures, floor area, width of driveways, parking spaces, proposed surface materials of driveways and parking areas, property or lot lines, and floor area ratio.
   p. Required buffers.
   q. Location of existing trees, identifying any trees to be removed.
   r. Landscaping plan depicting type, size, and design of landscaped areas, buffers, and tree mitigation calculations.
   s. Percent of pervious surface.
   t. Lighting plan.
   u. Location, design, height, and orientation of signs.
   v. Location of dumpsters and detail of dumpster enclosure.
   w. For development consisting of Multi-family residential;
      i. Tabulation of gross acreage.
      ii. Tabulation of density.
      iii. Number of dwelling units proposed.
      iv. Location and percent of total open space and recreation areas.
      v. Floor area of dwelling units.
      vi. Number of proposed parking spaces.
      vii. Street layout.
2. Stormwater management plan - including the following:
   a. Existing contours at one (1) foot intervals.
   b. Proposed finished floor elevation of each building site.
   c. Existing and proposed stormwater management facilities with size and grades.
   d. Proposed orderly disposal of surface water runoff.
   e. Centerline elevations along adjacent streets.
3. Legal description with tax parcel number.
4. Warranty Deed or other proof of ownership.
5. Permit or Letter of Exemption from the St. Johns River Water Management District.

6. Fee**.**

   a. Based on size of site:

      i. For sites <10,000 s.f. - $500

      ii. For sites >10,000 s.f.- $1,000 + $20 per acre

   b. All applications are subject 10% administrative fee and must pay the cost of any outside consultants' fees.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees necessary for technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

All 6 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge:

_____ _____

Signature of Applicant Signature of Co-applicant

_____ _____

Typed or printed name and title of applicant Typed or printed name of co-applicant

_____ _____

Date Date

State of _____ County of _____

The foregoing application is acknowledged before me this _____ day of _____, 20__, by _____

_____, who is/are personally known to me, or who has/have produced _____

as identification.

NOTARY SEAL _____

Signature of Notary Public, State of _____

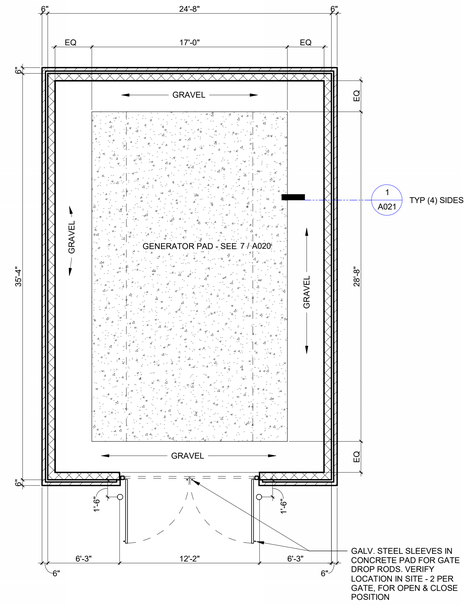
Travis J. Hastay
State of Florida
Professional Engineer, License No. 84295

This item has been digitally signed and sealed by Travis J. Hastay, PE, on the date indicated here.

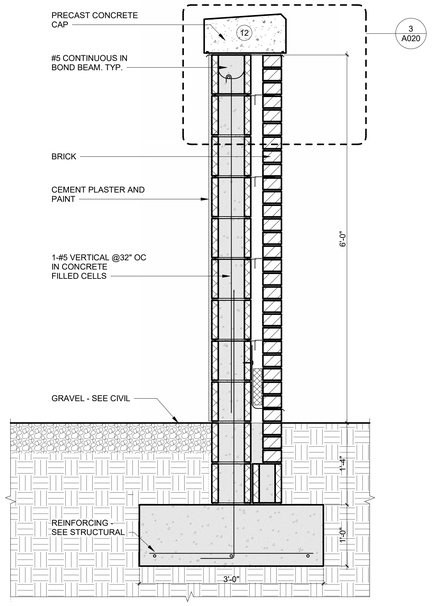
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Travis J Hastay

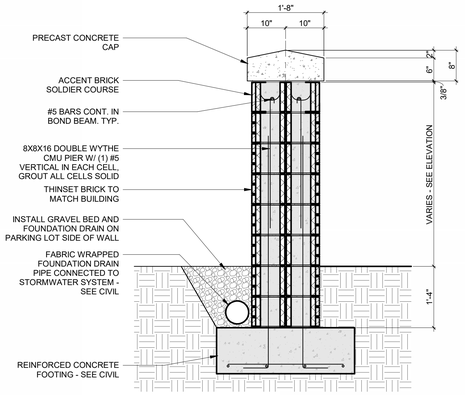
Digitally signed by Travis J Hastay
DN: E=travish@chw-inc.com, CN=Travis J Hastay, O=Travis J. Hastay, L=Gainesville, S=Florida, C=US
Date: 2023.10.12 13:28:50-04'00'



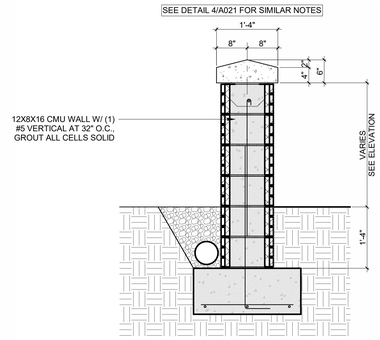
2 MECHANICAL YARD PLAN
3/16" = 1'-0"



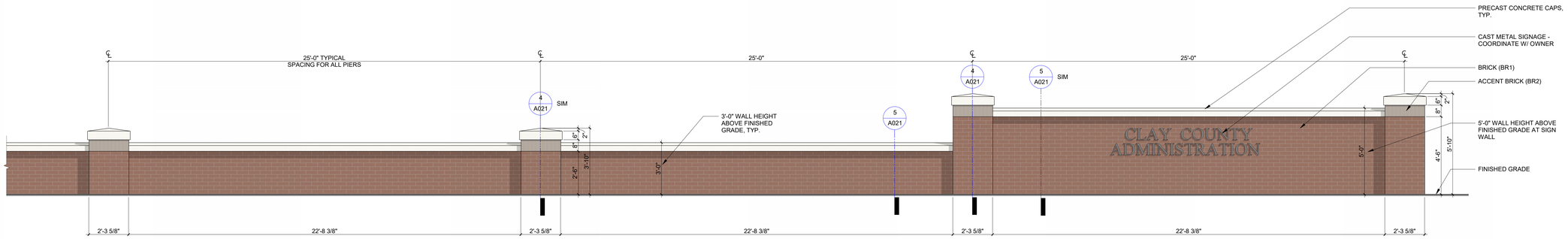
1 MECHANICAL YARD TYPICAL WALL SECTION
1" = 1'-0"



4 SITE WALL PIER DETAIL
3/4" = 1'-0"



5 SITE WALL SECTION DETAIL
3/4" = 1'-0"



3 SITE WALL ELEVATION
3/8" = 1'-0"

Walker Architects
2035 NW 13TH STREET GAINESVILLE, FL 32609
T: 352.672.6448 www.walker-arch.com AA26002009

JOSEPH B. WALKER, AIA
LICENSE NO.: AR0017272

CHW Professional Consultants
11801 RESEARCH DRIVE
ALACHUA, FL 32615
T: 352.331.1976 F: 352.331.2476
CA Lic. No: 5075

MG engineering
MITCHELL GULLEDGE ENGINEERING, INC.
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GAINESVILLE, FL 32601
FL LICENSE EB-31501
T: 352.745.3991
www.mitchellgulledge.com

IMEG The FUTURE. Built Smarter.
9133 R.G. SKINNER PARKWAY
JACKSONVILLE, FL 32256

SUBMITTAL:		ISSUE DATE:
CONSTRUCTION DOCUMENTS		04/11/2024
REVISION	DESCRIPTION	DATE
1	Addendum 01	05/31/2024

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

ENLARGED SITE PLANS AND DETAILS

PROJECT NO.: 22068	DRAWN BY:	AS
	CHECKED BY:	MB

A021

DEVELOPMENT PLANS
FOR
CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITIES
SECTION 38, TOWNSHIP 6 SOUTH, RANGE 26 EAST
SUBMITTED TO
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
CLAY COUNTY
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEVELOPER
GAURAV LOHIYA
WALKER ARCHITECTS
2035 NW 13TH STREET
GAINESVILLE, FLORIDA 32609

OWNERS
CLAY COUNTY
PO BOX 1366
GREEN COVE SPRINGS, FL 32043

ENGINEER OF RECORD
TRAVIS J. HASTAY, P.E.
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

SURVEYOR OF RECORD
CLINTON N. RICKNER, P.S.M.
CHW
2100 SE 17TH STREET, UNIT 802
OCALA, FL 34471
(352) 414-4621

LANDSCAPE
CAELI TOLAR, P.L.A.
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

VICINITY MAP

DEVELOPMENT DATA:

	ON-SITE	
DEVELOPMENT AREA:	82,135 S.F.	1.78 AC
BUILDING AREA	18,731 S.F.	22.80%
ROADS/CURB/CONCRETE:	45,384 S.F.	55.26%
IMPERVIOUS AREA:	64,775 S.F.	78.86%
OPEN SPACE:	17,360 S.F.	21.14%
PARKING SPACES:	102	
FAR	0.397	
MAX BUILDING HEIGHT:	LESS THAN 21 FEET	
LEGAL DESCRIPTION: REFER TO SURVEY		

SHEET INDEX

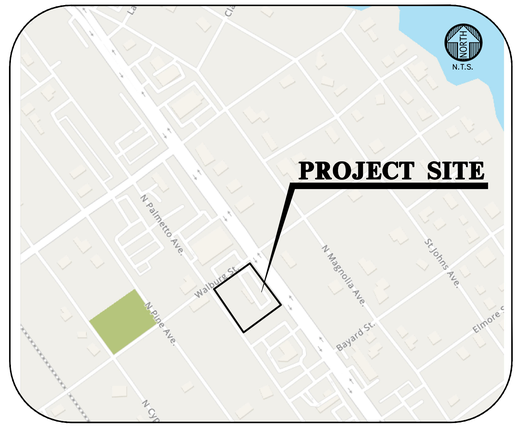
BEFORE YOU DIG !
CALL SUNSHINE STATE ONE CALL OF FLORIDA
AT LEAST TWO FULL BUSINESS DAYS BEFORE
DIGGING OR DISTURBING EARTH
811
Know what's below. Call before you dig.
1-800-432-4770

TRAFFIC STATEMENT:

PROPOSED LAND USE	ITE LU	AREA	AADT	AM PEAK	PM PEAK
GOVERNMENT OFFICE BUILDING	(730)	30,772 S.F.	695	114	98
NET TRIP GENERATION			695	114	98

1.) BASED ON ITE TRIP GENERATION MANUAL 11TH EDITION

PARKING REQUIREMENT:
PARKING REQUIRED: 30,772 SF AT 1 SPACE PER 333 SF = 30,772 / 333 = 92 SPACES
PARKING PROVIDED: 104 SPACES
ACCESSIBLE PARKING REQUIRED: 5 SPACES
ACCESSIBLE PARKING PROVIDED: 5 SPACES
ADDITIONAL SPACES PROVIDED BY NEIGHBORING COUNTY BUILDINGS.



LOCATION MAP

Walker Architects
2035 NW 13TH STREET GAINESVILLE, FL 32609
T: 352.672.6448 www.walker-arch.com AA26002009

DANIEL H. YOUNG
Digitally signed by Daniel H. Young
Date: 2024.07.11 10:54:49 -04'00'
Daniel H. Young, Professional Engineer, License No. 70780
This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
FL PE No. 70780

CHW Professional Consultants
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www.mitchellgulledge.com

IMEG The FUTURE. Built Smarter.
9133 R.G. SKINEER PARKWAY, SUITE 1
JACKSONVILLE, FL

SUBMITTAL:	ISSUE DATE:
100% CONSTRUCTION DOCUMENTS	4/11/2024

REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY
633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
COVER SHEET AND INDEX

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C0.00

7/27/2023 8:57:42 AM
Tech: nicolas Plot Date: Jun 19,2024 8:59am Filename: N:\2023\23-0204\Department\04_Engineering\01_Sheets\Production Files\23-0204 CV.dwg

Walker Architects
2035 NW 13TH STREET GAINESVILLE, FL 32609
T: 352.672.6448 www.walker-arch.com AA26002009

CLAY COUNTY GENERAL NOTES (COMMERCIAL)

1. CLAY COUNTY ENGINEERING DIVISION REQUIRES TWENTY-FOUR HOURS (24-HR) NOTICE ON ALL MEETINGS AND OR TESTING PROCEDURES.

2. CONSTRUCTION WARNING SIGNS ARE TO BE POST MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE AND ALL TRAFFIC CONTROL DEVICES SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND DETAILS.

3. ALL CONSTRUCTION PROJECTS 1 ACRE OR MORE IN SIZE SHALL BE REQUIRED TO ABIDE BY THE PROVISIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION (NPDES) PERMIT. THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR PREPARING THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMITTING THE NPDES "NOTICE OF INTENT" (NOI) AND "NOTICE OF TERMINATION" (NOT) TO THE EPA OR LOCAL STATE AGENCY HAVING JURISDICTION OVER THE NPDES PROGRAM. THE CONTACTOR SHALL KEEP ONSITE COPIES OF THE SWPPP, NOI, AND WATER MANAGEMENT DISTRICT PERMITS.

4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RECOGNIZE AND ABIDE BY ALL OSHA SAFETY STANDARDS.

5. ALL DISTURBED CLAY COUNTY RIGHTS-OF-WAY SHALL BE SODDED TO THE DISCRETION AND APPROVAL OF THE CLAY COUNTY ENGINEERING DIVISION.

6. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, THE ENGINEER, AND THE COUNTY.

CALL BEFORE YOU DIG
1-800-432-4770
&
904-269-6359

- CALL 800-432-4770 TWO FULL BUSINESS DAYS BEFORE DIGGING. CALL 10 DAYS BEFORE DIGGING WHEN DIGGING UNDER WATER.
- CALL 904-269-6359 (CLAY COUNTY SIGNAL & MAINTENANCE DIVISION) TWO FULL BUSINESS DAYS BEFORE DIGGING
- WAIT THE REQUIRED TIME FOR BURIED UTILITIES TO BE LOCATED AND MARKED.
- PROTECT THE MARKS DURING YOUR PROJECT. IF MARKS ARE DESTROYED, CALL AGAIN.
- DIG SAFELY, USING EXTREME CAUTION WHEN DIGGING WITHIN 24 INCHES ON EITHER SIDE OF THE MARKS TO AVOID HITTING THE BURIED UTILITY LINES.

7. BEFORE WORKING IN EXISTING COUNTY RIGHTS-OF-WAY, THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN A RIGHT-OF-WAY PERMIT. THE PERMIT CAN BE OBTAINED AT THE CLAY COUNTY ENGINEERING DIVISION, 477 HOUSTON STREET, 3RD FLOOR, GREEN COVE SPRINGS, FLORIDA.

8. ALL SWALE SECTIONS AND PONDS ARE TO BE SODDED WITHIN 15 DAYS OF THEIR FINAL GRADING.

9. ANY OFFSITE SWALES OR DITCHES IMPACTED BY THE DEVELOPMENT, THE CONTACTOR SHALL RE-GRADE AND RESTORE, TO OBTAIN POSITIVE DRAINAGE.

10. A COPY OF THE CONTRACTORS' GENERAL LICENSE AND THE UNDER GROUND UTILITY LICENSE SHALL BE PROVIDED AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.

11. ANY APPLICABLE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD), FDEP (GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES, ARMY CORP OF ENGINEERS, AND A FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) PERMITS SHALL BE PROVIDED TO THE COUNTY BY THE PRE-CONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN WITHOUT ALL APPLICABLE PERMITS ON FILE.

12. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) BEFORE THE COUNTY WILL ACCEPT THE PROJECT.

13. ALL STORM PIPES SHALL BE VIDEOED PRIOR TO A FINAL INSPECTION AND ALL DATA SHALL BE RECORDED IN HIGH QUALITY DVD FORMAT WITH SOUND OR ANY EQUIPMENT APPROVED BY THE ENGINEERING DIVISION (REF. FDOT SSRBC LATEST EDITION).

14. THERE SHALL BE A MINIMUM FIVE (5) DAYS NOTICE GIVEN FOR SCHEDULING THE FINAL INSPECTION.

15. AT THE FINAL INSPECTION A LETTER OF COMPLIANCE WILL NEED TO BE FILLED OUT AND SIGNED BY THE STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER OF RECORD FOR THE PROJECT. THE LETTER SHALL STATE THAT THE PROJECT HAS BEEN BUILT IN ACCORDANCE OF THE APPROVED DESIGN PLANS AND OTHER AGENCY PERMITS.

16. ALL SOIL AND DEBRIS TRACKED OUT OF THE PROJECT SHALL BE CLEANED IN ACCORDANCE WITH THE APPROVED SWPPP OR AT THE DISCRETION OF THE CLAY COUNTY ENGINEERING DIVISION.

17. PRIOR TO ANY INSPECTION OR TESTING, ALL PIPE LINE, STRUCTURES, ROADWAY, ETC. SHALL BE CLEANED.

EROSION CONTROL

1. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, THE USE OF ONE OR MORE EROSION CONTROL MEASURES, AS REQUESTED BY THE CLAY COUNTY ENGINEERING DIVISION, SHALL BE USED DURING CONSTRUCTION. THESE WILL BE, BUT NOT LIMITED TO, ITEMS SUCH AS TEMPORARY GRASS COVER, SEDIMENT BASINS OR PONDS, MULCHING, TEMPORARY FENCES, DIVERSION CHANNELS, AND HAY BALES.

2. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, SCHEDULING OF CONSTRUCTION SHALL BE GIVEN SPECIAL CONSIDERATION TO MINIMIZE EXPOSURE OF BARE SOIL. THE CONTRACTOR WILL FORMULATE A CONSTRUCTION SCHEDULE TO BE GIVEN TO THE COUNTY REPRESENTATIVE.

3. THE GOVERNING PUBLICATIONS FOR EROSION CONTROL ARE CURRENT FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 100-105, CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST., SECTION 104, AND THE NPDES STORMWATER AND EROSION CONTROL MANUAL LATEST EDITION.

4. THE CONTRACTOR SHALL CHECK EACH DAY TO INSURE THAT ALL EROSION CONTROL DEVICES ARE IN PLACE AND WORKING PROPERLY.

5. ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE RULES, REGULATIONS AND STANDARDS OF THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT, THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND THE UNITED STATES ARMY CORP OF ENGINEERS AND CLAY COUNTY REGULATIONS AND ORDINANCES.

6. THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT THE EROSION OF SOIL AND DEPOSITION OF SEDIMENT ON ADJACENT AND DOWNSTREAM PROPERTIES.

7. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. SEDIMENT CONTROL CONSISTS OF SILT FENCING, HAY BALES, AND FLOATING TURBIDITY BARRIERS PER FDOT INDEX NO. 102 &103. EROSION CONTROL CONSISTS OF SEEDING AND MULCHING, SODDING, WETTING SURFACES, PLACEMENT OF COARSE AGGREGATE, TEMPORARY PAVING.

8. THE CONTACTOR SHALL RESPOND TO EROSION AND SEDIMENT CONTROL MAINTENANCE WITH 24-HOURS OF BEING INFORMED BY CLAY COUNTY, UNLESS THE SITUATION REQUIRES AN IMMEDIATE RESPONSE. THE CONTRACTOR WILL THEN RESPOND IMMEDIATELY AFTER NOTIFICATION BY THE COUNTY. THE CONTACTORS EROSION CONTROL INSPECTOR SHALL BE A QUALIFIED STORMWATER MANAGEMENT INSPECTOR BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

9. THE CONTRACTOR SHALL BE REQUIRED TO INCORPORATE PERMANENT EROSION CONTROL MEASURES AT THE EARLIEST PRACTICAL TIME SO AS TO MINIMIZE THE NEED FOR TEMPORARY CONTROLS.

10. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL EROSION CONTROL MEASURES AS DETERMINED BY THE COUNTY OR THE CONTACTOR TO INSURE QUALITY CONTROL.

11. ALL DISTURBED AREAS SHALL BE GRASSED WITHIN 7 DAYS OF THE INITIAL DISTURBANCE. TYPES OF GRASSING SHALL BE AS FOLLOWS: SODDING IS REQUIRED FOR AROUND ALL DRAINAGE STRUCTURES, RETENTION/DETENTION AREAS, SWALES, DITCHES, AND WHERE 4:1 SLOPES ARE EXCEEDED. SEED AND MULCH MAY BE USED AT ALL OTHER LOCATIONS UNLESS SPECIFICALLY CALLED OUT FOR ON THESE DRAWINGS. THERE SHALL BE A STANDING ROW OF GRASS AT THE TIME OF FINAL ACCEPTANCE. IF SEED AND MULCH HAS BEEN USED AND HAS NOT TAKEN TO, SOD WILL BE REQUIRED FOR ESTABLISHED GRASS.

12. THE CONTRACTOR SHALL INSPECT AND REPORT EROSION AND SEDIMENT CONTROL METHODS EVERY WEEK AND AFTER ½ INCH OF RAIN DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE ANY SEDIMENT BUILD UP, REPAIR OR REINSTALL ANY CONTROL MEASURES.

13. THE COUNTY REQUIRES BACKGROUND TESTING OF LOCAL WATERWAYS AND ADDITIONAL PERIODIC TESTING DURING CONSTRUCTION FOR WATER QUALITY AND CONFORMITY WITH CLAY COUNTY STANDARDS.

DRAINAGE STRUCTURES & PIPE INSTALLATION

1. THE GOVERNING PUBLICATIONS FOR PIPE ARE THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION INDEX 430 AND THE CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST. SECTION 430.

2. THE GOVERNING PUBLICATIONS FOR INLETS, JUNCTION BOXES AND MANHOLES ARE THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX 425 AND THE CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST. SECTION 425.

3. ALL JOINTS OF PIPE REGARDLESS OF MATERIAL TYPE SHALL BE WRAPPED WITH FABRIC FILTER CLOTH PER FDOT STD. SPEC FOR ROADWAY AND BRIDGE CONSTRUCTION INDEX 985 TYPE D-3, A.O.S. 70-100. THE FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH FDOT INDEX NUMBER 430. THE CONTRACTOR WILL PROVIDE A MINIMUM 12" OVERLAP IN THE FABRIC.

4. ALL STORM SEWER PIPES ARE TO BE STEEL REINFORCED CONCRETE PIPE (SRCP) UNLESS OTHERWISE NOTED ON THESE DRAWINGS. ROUND CONCRETE PIPE SHALL COMPLY WITH ASTM C76. ELLIPTICAL PIPE SHALL COMPLY WITH ASTM C507. PIPE JOINTS AND O RING GASKETS SHALL COMPLY WITH ASTM C443.

5. ALL STORM SEWER PIPES SHALL BE SUBJECTED TO LEAKAGE TESTING AND SHALL BE VIDEOED/ TV PRIOR TO THE FINAL INSPECTION.

6. ALL STORM SEWER PIPES SHALL BE CUT FLUSH WITH THE INTERIOR WALL OF ANY TYPE MANHOLE OR CURB AND DITCH BOTTOM INLETS.

7. IF THE APPROVED DESIGN REQUIRES THE INLET OR STORM RUN BE SURCHARGED, ALL INLETS SHALL BE INSPECTED BEFORE BEING EXPOSED TO THE SYSTEM.

8. MITERED END SECTIONS SHALL MEET THE REQUIREMENTS UNDER THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX 430.

9. NO MANHOLE SHALL BE PLACED WITHIN 2.5' OF THE CURB.

10. NO BRICK ADJUSTMENT SHALL BE ALLOWED FOR MANHOLES UNDERNEATH THE PAVEMENT.

11. THE MAXIMUM THRESHOLD FOR MANHOLE ADJUSTMENT UNDERNEATH THE ROADWAY SHALL BE BETWEEN 0 TO 4".

12. FINAL PIPE INSPECTION IN THE RIGHT-OF-WAY OR COUNTY'S EASEMENT: AFTER THE FINAL PAVEMENT OPERATION, THE CONTRACTOR SHALL DEWATER AND VIDEO THE PIPE/CULVERT; THE COUNTY WILL ONLY REVIEW THE VIDEO DATA POST ASPHALT CONSTRUCTION SUPPLIED BY THE CONTRACTOR/DEVELOPER, AND THE TESTS AND DVD MUST MEET SECTION 430 OF THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

SIGNAGE & PAVEMENT MARKINGS

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE LATEST IMPLEMENTED ADDITION OF THE FDOT STANDARD PLANS FOR ROAD CONSTRUCTION INDEX NUMBERS 700, 706 & 711.

2. ALL FINAL PAVEMENT MARKINGS WITHIN THE RIGHTS-OF-WAY SHALL BE THERMOPLASTIC.

3. ALL SIGNS SHALL BE ON A TEN-FOOT (10') POLE A MINIMUM SEVEN FEET (7') FROM THE GROUND.

4. STREET SIGNS SHALL BE MOUNTED WITH TEE CAPS.

5. STREET SIGNS SHALL BE A SIX INCHES (6") WIDE WITH GREEN BACKINGS AND WHITE LETTERS AND BORDERING.

6. STOP SIGNS SHALL MEET THE MINIMUM SIZE REQUIREMENTS OF THE MUTCD.

7. STOP SIGNS ARE TO BE PLACED FOUR FEET (4') FROM BACK OF CURB, FOUR FEET (4') BEHIND CROSS WALKS AND ON THE RIGHT HAND SIDE OF THE ROAD.

8. ALL REGULATORY SIGNS SHALL BE BLACK AND WHITE. ALL CONSTRUCTION WARNING SIGNS SHALL BE ORANGE AND BLACK. ALL WARNING SIGNS SHALL BE YELLOW AND BLACK. ALL NO PARKING AND STOP SIGNS SHALL BE RED AND WHITE.

9. STOP BARS SHALL BE TWENTY-FOUR INCHES (24") WIDE AND LANE WIDTH. ALL STOP BARS SHALL BE THERMOPLASTIC.

10. ALL SIGNS MUST MEET FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS FOR ENGINEERING GRADE SIGN FACES IN REFLECTIVITY.

11. FOR COUNTY MAINTAINED ROADS, STREET SIGNS SHALL BE COLORED WITH A GREEN BACKGROUND AND WHITE LETTERING. FOR PRIVATE ROADS, THE SIGN SHALL BE A WHITE BACKGROUND WITH GREEN LETTERING.

12. ALL PAVEMENT MARKINGS REQUIRE LAYOUT APPROVAL BY CLAY COUNTY.

SIDEWALKS

1. THE GOVERNING PUBLICATIONS FOR SIDEWALK ARE THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX 522-001 AND THE CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST. SECTION 522.

2. SIDEWALKS ARE A MINIMUM OF 5' IN WIDTH FOR A LOCAL ROAD AND 6' IN WIDTH FOR A RESIDENTIAL COLLECTOR. ALL OTHER ROADWAY CLASSIFICATIONS SHALL REFER TO THE DETAILS HEREIN. IN NO CASE SHALL THE SIDEWALK BE LESS THAN 5' WITHOUT WRITTEN APPROVAL FROM THE ENGINEERING DIVISION.

3. ALL SIDEWALKS THAT ARE NOT IN FRONT OF A BUILD ABLE LOT, SHALL BE INSTALLED PRIOR TO THE FINAL INSPECTION

4. PEDESTRIAN CROSSING/HANDICAP RAMPS SHALL BE INSTALLED WHEREVER THE SIDEWALK MEETS THE CURB. THE RAMPS SHALL BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR ROAD CONSTRUCTION INDEX 522-002. ALL ADA RAMPS SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE UNLESS OTHERWISE APPROVED BY THE ENGINEERING DIVISION.

5. WHETHER DEPICTED ON THE PLANS OR NOT, A SIDEWALK IS TO BE INSTALLED AT THE SUBDIVISION ENTRANCE RUNNING PARALLEL TO THE RIGHT OF WAY FOR THE EXTENT OF THE PROPERTY.

6. SIDEWALKS ARE TO BE PLACED, AT A MINIMUM, 3' FROM THE PROPERTY LINE OR AS OTHERWISE APPROVED BY THE ENGINEERING DIVISION.

MAINTENANCE OF TRAFFIC (MOT) NOTES

1. THE GOVERNING PUBLICATIONS FOR MAINTENANCE OF TRAFFIC ARE THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION INDEX 102 AND THE CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST., SECTION 102, AND THE LATEST EDITION OF THE MUTCD.

AS-BUILT REQUIREMENTS

GENERAL

1. SUBMIT TWO (2) SIGNED AND SEALED SETS OF PRINTS AND ONE DIGITAL COPY (AUTOCAD FORMAT; PLEASE DO NOT USE REFERENCE FILES) WITH THE DESIGN INFORMATION (ELEVATIONS, PIPE LENGTHS, STATIONING, ETC.) LINED THROUGH (28.48) AND THE AS-BUILT INFORMATION PLACED ADJACENT TO IT.

NOTE: THE FIRM OR LICENSED SURVEYOR SHALL USE THE ORIGINAL PAVING AND DRAINAGE SHEET(S)) SPECIFICALLY FOR AS-BUILT INFORMATION. THE DRAWING(S) ARE TO BE ON 24" X 36" SHEET(S) AND CONTAIN THE FOLLOWING IN ADDITION TO THE AS-BUILT INFORMATION:

- PROJECT NAME AS IT APPEARS ON THE PLAT
- PROJECT/DEVELOPMENT NUMBER
- STREET NAMES
- ALL COMMERCIAL SITES SHALL SHOW THE SITE PHYSICAL ADDRESS IN THE TITLE BLOCK
- DESIGN INFORMATION FOR ALL AS-BUILT INFORMATION PROVIDED LINED THROUGH
- NORTH ARROW
- SCALE
- SHOW AND LABEL ALL SURVEY-LINES USED FOR LOCATIONS

2. THE WORDS "AS-BUILT" IN AT LEAST ONE-INCH HIGH LETTERS

3. MATERIALS CERTIFICATION STATEMENT SIGNED BY THE CONTRACTOR

4. SIGNED ENGINEER'S CERTIFICATION STATEMENT

5. INFORMATION PERTAINING TO BENCHMARK(S) (LOCATION, ELEVATION, AND REFERENCE TYPE)

6. SHOW STATE PLANE COORDINATE (NAD. 83)

REFERENCES ON AT LEAST FOUR (4) BOUNDARY CORNERS AND ON ALL PRM(S) (ONE POSITION, TO BE KNOWN AS THE "NORTHING," SHALL GIVE THE POSITION IN A NORTH AND SOUTH DIRECTION; THE OTHER, TO BE KNOWN AS THE "EASTING," SHALL GIVE THE POSITION IN AN EAST AND WEST DIRECTION, REF. F.S CH. 177.151) FOR PLATS AND AS-BUILTS.

BENCHMARKS

PERMANENT BENCHMARKS ARE TO BE SITUATED AS TO FACILITATE LOT GRADING (I.E. TOP OF METAL CURB HOODS, MANHOLE RIMS, ETC.). AT LEAST TWO (2) PERMANENT BENCHMARKS SHALL BE ESTABLISHED WITHIN A SUBDIVISION OR IN EACH PHASE OF A SUBDIVISION AND LOCATED SO THAT NO LOT IS MORE THAN ONE THOUSAND FEET (1,000') FROM A BENCHMARK. PLEASE REFERENCE EACH BENCHMARK BY STATION.

PAVING

STATIONS, OFFSETS, AND ELEVATIONS ON

- CENTER-LINE OR PROFILE GRADE LINE
- TOP OF CURB
- GUTTER OR EDGE OF PAVEMENT (SPECIFY WHICH)
- BACK OF SIDEWALKS

A MINIMUM OF EVERY 100 FEET AND AT THE FOLLOWING CHANGES IN VERTICAL AND HORIZONTAL ALIGNMENT:

- PVC, PC AND PVT
- LOW AND HIGH POINTS
- CURB RETURNS
- CENTERLINE INTERSECTIONS
- BEGIN AND END VALLEY GUTTER
- BEGIN AND END SUPERELEVATION TRANSITION
- BEGIN AND END FULL SUPERELEVATION
- BEGIN AND END ROADWAY TRANSITION
- GUTTER LINE (CUL-DE-SAC EVERY 25')

DRAINAGE

7. LOCATION OF ALL DRAINAGE STRUCTURES. LOCATION SHOULD BE BY STATION AND OFFSET WHENEVER POSSIBLE, OTHERWISE STRUCTURES MUST BE TIED DOWN FROM AT LEAST TWO DIRECTIONS.

8. SIZES, LENGTHS, AND TYPES OF DRAINAGE PIPES INCLUDING UNDERDRAIN.

9. INFORMATION FOR ALL STRUCTURES TO INCLUDE:

- PIPE INVERT ELEVATIONS INCLUDING UNDERDRAIN
- TOP OR GRATE ELEVATIONS (SPECIFY WHICH)
- WEIR OR SLOT ELEVATIONS AND SIZES

10. CROSS SECTIONS THROUGH ALL SWALE AND DITCH CONSTRUCTION A MINIMUM OF EVERY 25 FEET TO INCLUDE ELEVATIONS AND LOCATIONS OF THE CENTERLINE OR TOES OF SLOPE (SPECIFY WHICH) AND THE TOPS OF BANK.

11. INFORMATION FOR RETENTION / DETENTION BASINS TO INCLUDE:

- ELEVATIONS AND LOCATIONS ALONG THE TOP OF BANK A MINIMUM OF EVERY 100 FEET
- DATED ELEVATION OF THE WATER STAGE AT THE TIME OF AS-BUILT
- TIES FROM THE TOP OF BANK TO THE WATERS EDGE A MINIMUM OF EVERY 100 FEET
- ELEVATIONS ALONG THE BOTTOM OF BASIN (2 SHOTS PER AVERAGE POND ACREAGE)

12. INFORMATION FOR CONTROL STRUCTURE TO INCLUDE:

- LOCATION
- TOP ELEVATION
- WEIR OR SLOT ELEVATION AND SIZE
- ELEVATION AND SIZE OF DRAWDOWN ORIFICE
- LENGTH, SIZE, AND INVERTS (AT HIGH AND LOW POINTS) OF FILTER DRAIN
- INVERT OF OUTFALL PIPE

13. SHOW ALL DRAINAGE EASEMENTS, ENCROACHMENTS WITHIN THE EASEMENTS, AND ANY ENCROACHMENTS OF DRAINAGE OUTSIDE OF EASEMENTS.

SIGNAGE

14. THE LOCATION OF ALL STREET SIGNS SHALL BE SHOWN BY STATION AND OFFSET WHENEVER POSSIBLE, OTHERWISE, THE SIGNS MUST BE TIED DOWN FROM AT LEAST TWO DIRECTIONS.

ADDITIONAL NOTES

15. ALL PROPOSED ELEVATIONS SHALL BE CHECKED FOR APPROVAL; ADDITIONAL ELEVATIONS MAY BE REQUIRED TO CHECK FOR POSITIVE DRAINAGE.

16. ALL CUL-DE-SAC CURBING SHALL BE SURVEYED EVERY 25'.

17. SUBMIT THE BLUE-LINE OR BLACK-LINE (THE FINAL SET MUST BE SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR, LICENSED BY THE STATE OF FLORIDA) WITH THE CAD DISK FIVE (5) DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION.

18. WATER MANAGEMENT APPROVALS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE.

19. AS-BUILTS SHALL BE SIGNED IN, IF REVISIONS ARE REQUIRED, THE COMPANY WILL BE NOTIFIED TO PICK THEM UP AND SIGN THEM OUT. ONCE REVISIONS HAVE BEEN MADE, THE DOCUMENTS SHALL BE SIGNED BACK IN.

20. THE FILES ON THE CAD DISK SHOULD REFLECT THE SITE WITHOUT ADDITIONAL EDITING.

DANIEL H. YOUNG

Daniel H. Young, State of Florida, Professional Engineer, License No. 70780

This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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SUBMITTAL:	ISSUE DATE:
100% CONSTRUCTION DOCUMENTS	4/11/2024

REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
GENERAL NOTES

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C0.10

Walker Architects
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ABBREVIATIONS

	SYMBOLS
'	FEET (WHEN USED WITH LENGTHS)
°	DEGREES
'	MINUTES (WHEN USED WITH ANGLES)
"	SECONDS
%	PERCENT
@	AT
	A
AASHTO	ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AC	ACRES
ADA	AMERICAN WITH DISABILITIES ACT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARCH	ARCHITECT
ARV	AIR RELEASE VALVE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
	B
BC	BACK OF CURB
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BM	BENCHMARK
BMP	BEST MANAGEMENT PRACTICE
BOC	BACK OF CURB
BVCS	BEGIN VERTICAL CURVE STATION
BVCE	BEGIN VERTICAL CURVE ELEVATION
BW	BOTTOM OF WALL
BSL	BUILDING SETBACK LINE
	C
CATV	CABLE TELEVISION
CI	CURB INLET
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
COORD	COORDINATE
CR	COUNTY ROAD
C/O	CLEANOUT
	D
DBH	DIAMETER AT BREAST HEIGHT
DE	DRAINAGE EASEMENT
DEG	DEGREE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWG	DRAWING
	E
e	RATE OF ELEVATION
E	EAST
EA	EACH
EL	ELEVATION
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EOR	ENGINEER OF RECORD
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
ESMT	EASEMENT
EVCS	END VERTICAL CURVE STATION
EVCE	END VERTICAL CURVE ELEVATION
EX	EXISTING
	F
FAC	FLORIDA ADMINISTRATIVE CODE
FBR	FLORIDA BEARING RATIO
FC	FRICTION COURSE
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FHWA	FLORIDA HIGHWAY ADMINISTRATION
FIG	FIGURE
FM	FORCE MAIN
FOC	FACE OF CURB
FS	FLORIDA STATUTES
FT	FEET
	G
GALV	GALVANIZED
GM	GAS MAIN
GV	GATE VALVE
	H
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
	I
ID	IDENTIFICATION
INV	INVERT
INV EL	INVERT ELEVATION
IP	IRON PIPE
	K
K	VERTICAL CURVE RATE OF CHANGE
	L
L	LENGTH
LA	LANDSCAPE ARCHITECT
LBR	LIMEROCK BEARING RATIO
LDR	LAND DEVELOPMENT REGULATION
LF	LINEAR FEET
LP	LOW POINT
LT	LEFT
	M
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
	N
N	NORTH
N-E	NORTHING - EASTING
N/A	NOT APPLICABLE
NAVD	NORTH AMERICAN VERTICAL DATUM OF 1988
NGVD	NATIONAL GEODETIC VERTICAL DATUM OF 1929
NO	NUMBER
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NTS	NOT TO SCALE
	O
OC	ON CENTER
OHW	OVERHEAD WIRE
ORB	OFFICIAL RECORDS BOOK
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
	P
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PERF	PERFORATED
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
	R
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RPM	RAISED REFLECTIVE PAVEMENT MARKER
RPZ	REDUCED PRESSURE ZONE
RT	RIGHT
RWM	RECLAIMED WATER MAIN
R/W	RIGHT-OF-WAY
	S
S	SOUTH
SAN	SANITARY
SHWE	SEASONAL HIGH WATER ELEVATION
SL	SLOPE
SP	SUPERPAVE
SR	STATE ROAD
SS	SANITARY SEWER
ST	STORM
STA	STATION
STD	STANDARD
	T
TCE	TEMPORARY CONSTRUCTION EASEMENT
TEMP	TEMPORARY
TOB	TOP OF BANK
TV	TELEVISION
TW	TOP OF WALL
TYP	TYPICAL
	U
USF	UNITED STATES FOUNDRY
USGS	UNITED STATES GEOLOGICAL SURVEY
UTIL	UTILITY
	V
V	VERTICAL
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
	W
W	WEST
W	WATER
W/	WITH
WM	WATER MAIN
WW	WASTEWATER
WWF	WELDED WIRE FABRIC

SIGNAGE

SIGNS ARE PER FDOT SPECIFICATIONS OR PER MUTCD. SIGN POSTS AND INSTALLATION SHALL BE PER FDOT INDEX NO. 700-010. SIGN PLACEMENT SHALL BE PER FDOT INDEX NO. 700-101.

PARKING BY DISABLED PERMIT ONLY — FTP-20-06 (12" X 18") PER FDOT INDEX NO. 700-102

STOP — R1-1 "STOP" - SEE PLANS FOR SIZE

SITE INFORMATION

- EX. PROPERTY LINE
- LANDSCAPE BUFFER LINE
- BUILDING SETBACK LINE
- WETLAND LIMITS LINE
- WETLAND SETBACK LINE
- CENTER LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SF — SILT FENCE LINE
- TB — TREE BARRICADE LINE
- EX. STRUCTURE OR BUILDING
- PROPOSED BUILDING
- PROPOSED ASPHALTIC PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED DETECTABLE WARNING SURFACE
- DIRECTIONAL TRAFFIC ARROW PER FDOT INDEX NO. 17346
- WATERSHED DIVIDE
- 99 — EX. ELEVATION CONTOUR
- 99 — PROPOSED CONTOUR
- 93.2× — EX. SPOT ELEVATION
- 93.23 — PROPOSED SPOT ELEVATION
- DIRECTION OF SURFACE DRAINAGE FLOW
- PROPOSED SWALE LINE
- X — EX. FENCE
- PROPOSED FENCE
- 12" PINE — EX. TREE (SIZE & TYPE)
- 1234 — EX. TREE (TREE ID)
- 12" PINE — EX. TREE TO BE REMOVED (SIZE & TYPE)
- 1234 — EX. TREE TO BE REMOVED (TREE ID)
- PROJECT BENCHMARK

STORMWATER

THE PROPOSED STORMWATER STRUCTURES DEPICTED BELOW ARE DRAWN PER FDOT SPECIFICATIONS AND TO SCALE WHEN SHOWN ON THE PLAN SHEETS.

- ST — EX. GRAVITY STORMWATER MAIN
- PROPOSED GRAVITY STORMWATER MAIN (PIPE LENGTHS ARE FROM N-E LOCATION OF A STRUCTURE TO N-E LOCATION OF A STRUCTURE)
- ST — EX. STORMWATER MANHOLE
- N-E LOCATION / TOP/RIM ELEV. LOCATION — PROPOSED 48" DIA. STORMWATER MANHOLE PER FDOT INDEX. NO. 425-001 AND 425-010
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED CIRCULAR AREA DRAIN
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED SQUARE AREA DRAIN
- N-E LOCATION / TOP ELEV. LOCATION — PROPOSED TYPE 1 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP ELEV. LOCATION — PROPOSED TYPE 2 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP ELEV. LOCATION — PROPOSED TYPE 3 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP ELEV. LOCATION — PROPOSED TYPE 4 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP ELEV. LOCATION — PROPOSED TYPE 5 CURB INLET TOP PER FDOT INDEX NO. 425-021 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP ELEV. LOCATION — PROPOSED TYPE 6 CURB INLET TOP PER FDOT INDEX NO. 425-021 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED TYPE 9 CURB INLET TOP PER FDOT INDEX NO. 425-024 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED TYPE 'C' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED TYPE 'D' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED TYPE 'E' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED TYPE 'F' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-053 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED TYPE 'G' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-053 (SEE PLANS FOR BOTTOM SPECIFICATION)
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED TYPE 'H' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)
- N-E LOCATION / TOP/GRATE ELEV. LOCATION — PROPOSED TYPE 'J' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-054 (SEE PLANS FOR BOTTOM SPECIFICATION)
- PIPE INV. LOCATION / N-E LOCATION — PROPOSED U-TYPE CONCRETE ENDWALLS WITH GRATES PER FDOT INDEX NO. 430-010 (SEE PLANS FOR SIZE)
- N-E LOCATION / INV. ELEV. LOCATION — PROPOSED FLARED END SECTION PER FDOT INDEX NO. 430-020 (SEE PLANS FOR SIZE)
- N-E LOCATION / PIPE INV. ELEV. LOCATION — PROPOSED CROSS DRAIN MITERED END SECTION PER FDOT INDEX NO. 430-021 (SEE PLANS FOR SIZE)
- N-E LOCATION / PIPE INV. ELEV. LOCATION — PROPOSED SIDE DRAIN MITERED END SECTION PER FDOT INDEX NO. 430-022 (SEE PLANS FOR SIZE)
- S-10 — PROPOSED STORMWATER STRUCTURE ID TAG

POTABLE AND RECLAIMED WATER

- W — EX. POTABLE WATER MAIN
- P-W — PROPOSED POTABLE WATER MAIN
- RCW — EX. RECLAIMED WATER MAIN
- P-RCW — PROPOSED RECLAIMED WATER MAIN
- 11.25° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)
- 22.5° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)
- 45° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)
- 90° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)
- TEE (POTABLE AND RCW)
- CROSS (POTABLE AND RCW)
- BLOWOFF ASSEMBLY (POTABLE AND RCW)
- REDUCER (POTABLE AND RCW)
- EX. GATE VALVE AND BOX (POTABLE AND RCW)
- PROPOSED GATE VALVE AND BOX (POTABLE AND RCW)
- EX. AIR RELEASE VALVE (POTABLE AND RCW)
- PROPOSED AIR RELEASE VALVE (POTABLE AND RCW)
- EX. FIRE HYDRANT ASSEMBLY
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED SAMPLE POINT
- EX. WATER METER (POTABLE AND RCW)
- PROPOSED POTABLE WATER METER
- PROPOSED POTABLE WATER BACK FLOW PREVENTER
- PROPOSED RECLAIMED WATER METER
- W — EX. WATER WELL
- EX, HOSE BIB (POTABLE AND RECLAIMED)
- PROPOSED HOSE BIB (POTABLE AND RECLAIMED)
- 11 — PROPOSED FITTING ID TAG (POTABLE AND RECLAIMED)

WASTEWATER

- SS — EX. GRAVITY WASTEWATER MAIN
- P-WW — PROPOSED GRAVITY WASTEWATER MAIN (PIPE LENGTHS ARE FROM N-E LOCATION OF A STRUCTURE TO N-E LOCATION OF A STRUCTURE)
- FM — EX. WASTEWATER FORCE MAIN
- P-FM — PROPOSED WASTEWATER FORCE MAIN
- SS — EX. WASTEWATER MANHOLE
- N-E LOCATION / RIM ELEV. LOCATION — PROPOSED WASTEWATER MANHOLE
- EX. WASTEWATER CLEANOUT
- PROPOSED WASTEWATER CLEANOUT
- PROPOSED WASTEWATER GREASE TRAP
- MH# — PROPOSED WASTEWATER MANHOLE ID
- 11.25° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- 22.5° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- 45° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- 90° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- WYE W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- EX. PLUG VALVE AND BOX (WW FORCE MAIN)
- PROPOSED PLUG VALVE AND BOX (WW FORCE MAIN)
- EX. AIR RELEASE VALVE (WW FORCE MAIN)
- PROPOSED AIR RELEASE VALVE (WW FORCE MAIN)

MISCELLANEOUS UTILITIES

THE PROPOSED UTILITIES BELOW ARE DESIGN BY OTHERS AND ARE DEPICTED FOR COORDINATION PURPOSES ONLY. REFER TO PLANS BY OTHERS FOR EXACT LOCATIONS, DIMENSION, AND DETAILS.

- P-ATT — PROPOSED AT&T LINE
- BC — EX. BURIED CABLE LINE
- P-BC — PROPOSED BURIED CABLE LINE
- BTEL — EX. BURIED TELEPHONE LINE
- P-TEL — PROPOSED TELEPHONE LINE
- CATV — EX. CABLE TELEVISION LINE
- P-TV — PROPOSED CABLE/TELEVISION LINE
- FO — EX. FIBER OPTIC LINE
- UGTEL — EX. UNDERGROUND TELEPHONE LINE
- te — EX. TELEPHONE PEDESTAL
- TV — EX. TELEVISION/CABLE PEDESTAL
- CHW — EX. CHILLED WATER MAIN
- P-CHW — PROPOSED CHILLED WATER MAIN
- FIRE — EX. FIRE MAIN
- P-FIRE — PROPOSED FIRE MAIN
- IRR — EX. IRRIGATION LINE
- P-IRR — PROPOSED IRRIGATION LINE
- STEAM — EX. STEAM LINE
- P-STEAM — PROPOSED STEAM LINE
- P-CLAY — PROPOSED CLAY ELECTRIC LINE
- E — EX. ELECTRIC LINE
- P-E — PROPOSED ELECTRIC LINE
- EN — EX. ENERGY LINE
- P-LIGHT — PROPOSED PRIVATE LIGHTING LINE
- OHW — EX. OVERHEAD WIRE LINE
- UGE — EX. UNDERGROUND ELECTRIC LINE
- EX. LIGHT
- EX. UTILITY POLE
- EX. UTILITY POLE
- EX. WOOD POWER POLE
- EX. GUY ANCHOR
- T — PROPOSED TRANSFORMER
- GAS — EX. GAS LINE
- P-GAS — PROPOSED GAS LINE
- G — EX. GAS MARKER
- G — EX. GAS MARKER

NOTES:
1. THIS LEGEND IS ALL INCLUSIVE AND MAY INCLUDE ITEMS NOT A PART OF THIS PLAN SET.

2. SYMBOLS SHOWN ON THIS SHEET ARE FOR ILLUSTRATIVE PURPOSES ONLY. UNLESS NOTED OTHERWISE, SYMBOLS IN THESE PLANS MAY NOT BE REPRESENTATIVE OF SIZE.

DANIEL H. YOUNG

Daniel H. Young, State of Florida, Professional Engineer, License No. 70780

This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Signature.

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SUBMITTAL:		ISSUE DATE:
100% CONSTRUCTION DOCUMENTS		4/11/2024
REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
LEGEND

PROJECT NO.: 23-204	DRAWN BY: TFC
	CHECKED BY: TJH

C0.11

I. INTRODUCTION

THIS DOCUMENT WAS PREPARED IN ORDER TO ILLUSTRATE COMPLIANCE WITH CHAPTER 62-621.300 (4) OF THE FLORIDA ADMINISTRATIVE CODE, WHICH PERTAINS TO THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. THE ADMINISTRATIVE CODE GRANTS THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) THE AUTHORITY TO REGULATE POINT SOURCE DISCHARGE OF STORMWATER FROM CONSTRUCTION SITES. THIS DOCUMENT ESTABLISHES A STORMWATER POLLUTION PREVENTION PLAN FOR THE SITE USING STANDARD PRACTICE AND BEST MANAGEMENT PRACTICES (BMPs) AND IS ORGANIZED TO CORRESPOND TO 62-621.300(4)(a) GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES FDEP FORM 62-621.300(4)(b) IS TO BE SUBMITTED IN CONJUNCTION WITH THIS DOCUMENT. CONTRACTOR(S) MUST FILL IN THE ACTIVITIES SEQUENCE (SECTION II. B. BELOW) AND SIGN THIS SHEET (REFER TO SIGNATURE TABLE THIS SHEET) AND RETAIN THIS SHEET AND ALL FOLLOWING SWPPP SHEETS ON SITE. ALTERNATIVELY, CONTRACTOR(S) MAY PREPARE AND SIGN THEIR OWN SWPP PLAN MEETING THE REQUIREMENTS. IF THE SITE OR CONTRACTOR ACTIVITIES REQUIRE ANY BMPs THAT ARE NOT DESCRIBED ON THIS SHEET, THE CONTRACTOR MUST PREPARE AN ALTERNATIVE OR ADDITIONAL SWPPP DOCUMENT CONTAINING THE NECESSARY BMPs.

II. SITE DESCRIPTION

COUNTY:	*CLAY COUNTY, FLORIDA*
SECTION, TOWNSHIP, RANGE:	*SECTION 38, TOWNSHIP 06 SOUTH, RANGE 26 EAST*
COUNTY PARCEL NO.:	*36-06-26-017628-000-00*
STREET ADDRESS:	*633 N ORANGE AVE, GREEN COVE SPRINGS, FL 32043*
PROJECT AREA:	*1.65 ACRES*
SITE LOCATION MAP:	*SEE COVER SHEET OF CONSTRUCTION DRAWINGS*

A. NATURE OF CONSTRUCTION ACTIVITY

THE PROPOSED DEVELOPMENT IS THE CONSTRUCTION OF A ±36,000 ECONOMIC DEVELOPMENT BUILDING FOR CLAY COUNTY AND ASSOCIATED PAVEMENT FOR DRIVEWAYS AND PARKING, SIDEWALKS, UTILITIES, AND SEVEN UNDERGROUND STORMWATER MANAGEMENT FACILITIES. THE PROJECT SITE IS LOCATED AT 633 NO ORANGE AVE, GREEN COVE SPRINGS, FLORIDA. THE PROJECT SITE TOTAL AREA IS APPROXIMATELY 1.65 ACRES.

B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES - CONTRACTOR MUST FILL IN DAYS

DAYS	
FROM_____TO_____	*PRIOR TO CONSTRUCTION, SILT FENCING AND TREE PROTECTION FENCING SHALL BE INSTALLED AND ALL EXISTING STORM DRAINAGE SWALE AND INLETS SHALL BE PROTECTED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, DATED JULY 2013, AND THESE PLANS.*
FROM_____TO_____	*THE CONSTRUCTION SERVICE ENTRANCE SHALL BE STABILIZED TO MINIMIZE THE CREATION OF DUST AND OFF-SITE TRACKING OF SEDIMENTS.*
FROM_____TO_____	*ONLY THE AREA COMPRISING THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CLEARED AND GRUBBED OF UNWANTED VEGETATION.*
FROM_____TO_____	*THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CONSTRUCTED.*
FROM_____TO_____	*IF SUITABLE, THE EXCAVATED SOIL FROM THE FACILITY(S) MAY BE USED AS FILL FOR ON-SITE GRADING THAT IS DEPICTED IN THESE CONSTRUCTION PLANS. THE CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIAL ON-SITE OR OFF-SITE TO A PERMITTED LOCATION.*
FROM_____TO_____	*THE REMAINING PORTION OF THE SITE THAT IS TREATED BY THE CONSTRUCTED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CLEARED AND GRUBBED.*
FROM_____TO_____	*THE PERMANENT ROADWAYS/DRIVEWAYS SHALL BE ROUGHLY GRADED.*
FROM_____TO_____	*THE UNDERGROUND UTILITIES INFRASTRUCTURE AND STORMWATER PIPING SYSTEM SHALL BE INSTALLED. ANY DE-WATERING (PUMPED) SHALL BE DIVERTED TO THE ASSOCIATED STORMWATER MANAGEMENT FACILITY(S).*
FROM_____TO_____	*THE PERMANENT ROADWAY/DRIVEWAY SUBGRADE SHALL BE COMPACTED, A LIMEROCK BASE SHALL BE ESTABLISHED, AND THEN FOLLOWED BY AN OVERLAY OF ASPHALT.*
FROM_____TO_____	*UPON SIGNIFICANT COMPLETION OF CONSTRUCTION, THE STORMWATER PIPING SYSTEM SHALL BE FLUSHED OUT TO REMOVE ACCUMULATED DEBRIS AND SEDIMENT.*
FROM_____TO_____	*UPON COMPLETION OF THE DEBRIS AND SEDIMENT REMOVAL FROM THE STORMWATER PIPING SYSTEM, THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE FINE GRADED AND SHALL BE EXCAVATED A MINIMUM OF SIX INCHES BELOW THE DESIGN BOTTOM ELEVATION AND REPLACED WITH FILL HAVING A MINIMUM PERMEABILITY RATE OF 20 FEET/DAY WITH A MAXIMUM OF 5% SOIL FINES PASSING THE NO. 200 SIEVE. THE BOTTOM SHALL BE SCARIFIED AND STABILIZED ACCORDING TO THESE PLANS. ONCE COMPLETED, NO HEAVY MACHINERY SHALL BE ALLOWED WITHIN THE STORMWATER MANAGEMENT FACILITY(S).*
FROM_____TO_____	*ALL REMAINING DISTURBED AREAS WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETELY GRASSED AND/OR LANDSCAPED ACCORDING TO THESE PLANS. TURF ESTABLISHMENT SHALL BE PER FDOT STANDARD SPECIFICATIONS SECTION 570. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO REMOVAL OF SILT FENCING AND OTHER EROSION CONTROL APPLICATIONS.*

C. SITE DEVELOPMENT DATA:

TOTAL PROJECT SITE AREA:	*1.23 ACRES*
TOTAL SITE AREA TO BE DISTURBED:	*1.78 ACRES*
TOTAL IMPERVIOUS AREA (AS SHOWN IN CONSTRUCTION DRAWINGS):	*1.20 ACRES*
TOTAL DETENTION VOLUME:	*0.35 ACRE-FEET*
TOTAL OPEN AREA:	*0.03 ACRES*

D. SOIL CONDITIONS AND STORMWATER QUALITY

THE NRCS DATA FOR THE SITE REVEALS THAT THE SITE SOILS ARE COMPRISED OF LEON FINE SAND. GSE ENGINEERING & CONSULTING, INC. CONDUCTED A GEOTECHNICAL EXPLORATION OF THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) LOCATION IN JULY OF 2023. THE INVESTIGATION REVEALED THAT THE PROJECT SITE'S SURFACE SOILS HAVE THE FOLLOWING CHARACTERISTICS:

DEPTH TO EFFECTIVE OR MOBILIZED AQUIFER:	*25 FEET BLS*
DEPTH OF SEASONAL HIGH WATER TABLE:	*2.0 FEET BLS*
HORIZONTAL HYDRAULIC CONDUCTIVITY:	*6 FEET/DAY*
UNSATURATED VERTICAL INFILTRATION:	*20 FEET/DAY*

DESIGN PERCOLATION RATES FOR THE STORMWATER MANAGEMENT FACILITY(S) WERE DETERMINED BASED ON LABORATORY PERMEABILITY TEST RESULTS FROM BORING SAMPLES TAKEN WITHIN THE LIMITS OF THE STORMWATER MANAGEMENT FACILITY(S).

THE STORMWATER MANAGEMENT FACILITY(S) WAS DESIGNED TO PROVIDE RATE CONTROL AND WATER QUALITY TREATMENT OF THE STORMWATER RUNOFF RESULTING FROM THE POST-DEVELOPMENT SITE UNDER 25-YEAR & MEAN ANNUAL 24-HOUR STORM EVENT RAINFALL CONDITIONS. THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) DEPICTS THE POST-DEVELOPMENT WATERSHED(S) LIMITS AND THE TABLE BELOW SUMMARIZES EACH WATERSHED.

WATERSHED ID	*POST DEVELOPMENT AREA (ACRES)*	*POST DEVELOPMENT RUNOFF FACTOR (CN)*	*POST DEVELOPMENT IMPERVIOUS AREA (ACRES)*	*STORMWATER MANAGEMENT FACILITY TYPE*	*FACILITY DETENTION CAPACITY (ACRE-FEET)*	*25-YEAR FLOOD ELEVATION (FT)*
1	*0.25*	*97*	*0.24*	*DRY RETENTION*	*0.092*	*14.82*
2	*0.56*	*97*	*0.55*	*DRY RETENTION*	*0.193*	*13.57*
3	*0.42*	*97*	*0.41*	*DRY RETENTION*	*0.063*	*13.95*

E. SITE MAP

PLEASE SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS.

F. STORMWATER OUTFALL LOCATION AND RECEIVING WATER BODY

THE STORMWATER MANAGEMENT FACILITY OUTFALL STRUCTURE IS LOCATED AT THE EAST PORTION OF THE PROJECT (39°00'00.76" N, 81°41'01.32" W) AND THE ASSOCIATED RECEIVING WATER BODY IS ST JOHNS RIVER.

III. CONTROLS TO REDUCE POLLUTION

AS OUTLINED IN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) PERMIT, ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED IN A MANNER AS TO NOT VIOLATE STATE WATER QUALITY STANDARDS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE. IF SITE CONDITIONS ARE SUCH THAT ADDITIONAL CONTROL MEASURES ARE REQUIRED OTHER THAN WHAT IS SPECIFIED IN THE EROSION AND SEDIMENTATION CONTROL PLAN, THEN THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES. THESE MEASURES MUST BE INSPECTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PHASE AND UNTIL AS DIRECTED BY THESE PLANS. THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) AND SECTION IV BELOW PROVIDE DETAILS ON THE SPECIFIC CONTROL MEASURES TO REDUCE STORMWATER POLLUTION.

IV. EROSION AND SEDIMENT CONTROLS

A. STABILIZATION PRACTICES

EXISTING TREES AND NATURAL VEGETATION TO REMAIN ON-SITE SHALL BE PROTECTED BY TREE BABRICADE FENCING AS DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21). TYPE III SILT FENCING SHALL PROTECT ALL DRAINAGE STRUCTURES AND SHALL BUFFER AREAS WITH POTENTIAL TO CONTRIBUTE OFF-SITE RUNOFF AND AS SPECIFICALLY DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21). STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS, IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED. AS SPECIFIED IN SECTION II.B. ABOVE, UPON COMPLETION OF CONSTRUCTION, ALL STORMWATER MANAGEMENT FACILITIES SHALL BE SCRAPED CLEAN OF ACCUMULATED SEDIMENT AFTER THE COMPLETION OF CONSTRUCTION. ALL TURF ESTABLISHMENT SHALL BE PERFORMED MEETING THE REQUIREMENTS OF SECTION 570 OF THE STANDARD SPECIFICATIONS. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO FINAL RELEASE.

B. STRUCTURE PRACTICES

AS DEPICTED IN THE STORMWATER POLLUTION PREVENTION PLAN (C0.21), A STORMWATER MANAGEMENT SYSTEM WILL BE CONSTRUCTED AND WILL BE COMPRISED OF A WET RETENTION FACILITY AND A STORM PIPE CONVEYANCE SYSTEM. TO PREVENT EROSION DURING CONSTRUCTION, TYPE III SILT FENCING WILL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS. ALL EXISTING AND PROPOSED STORM DRAINS AND DRAINAGE SWALES SHALL BE PROTECTED ACCORDING TO THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, DATED JULY 2013 OR PER DETAILS PROVIDED ON SHEET C0.21 UNTIL CONSTRUCTION IS COMPLETE. THE STORM PIPE CONVEYANCE SYSTEM SHALL BE FLUSHED OUT TO REMOVE ALL ACCUMULATED DEBRIS AND SEDIMENT UPON COMPLETION OF CONSTRUCTION.

C. DRAINAGE LOCATIONS THAT SERVE AREAS WITH LESS THAN 10 DISTURBED ACRES

AS SPECIFIED IN THE "SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES," THE SMF(S) WILL BE CONSTRUCTED PRIOR TO CLEARING AND GRUBBING OUTSIDE OF THE SMF(S) AREAS AND CONSTRUCTION OF THE PERMANENT PAVED AREAS. THE TOTAL CONTRIBUTING DRAINAGE AREA TO THE STORMWATER MANAGEMENT SYSTEM IS APPROXIMATELY 1.23 ACRES AND WILL CONSIST OF APPROXIMATELY 1.65 ACRES OF DISTURBED CONSTRUCTION AREA. THEREFORE, NO ADDITIONAL SEDIMENT TRAP BASINS ARE NECESSARY TO PROVIDE SEDIMENT STORAGE ON-SITE DURING CONSTRUCTION. AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21), THE PROPOSED STORMWATER MANAGEMENT SYSTEM WILL PREVENT OFF-SITE EROSION DURING CONSTRUCTION. SILT FENCES OR EQUIVALENT SEDIMENT CONTROLS SHALL BE INSTALLED AT SIDE SLOPE AND DOWN SLOPE BOUNDARIES, INLET LOCATION, OUTLET LOCATIONS, AND OTHER LOCATIONS AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN, AS REQUIRED. BY COMPLETION OF CONSTRUCTION, THE SIDE SLOPES, SWALES, AND ALL DISTURBED AREAS SHALL BE STABILIZED WITH GRASS AND LANDSCAPING AS SPECIFIED ON THE CONSTRUCTION DRAWINGS.

D. DRAINAGE LOCATIONS THAT SERVE AREAS WITH MORE THAN 10 DISTURBED ACRES

NOT APPLICABLE, SEE SECTION C, ABOVE.

V. STORMWATER MANAGEMENT

A. BEST MANAGEMENT PRACTICES

AFTER CONSTRUCTION, THE STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH THE SPECIFIED STORMWATER MAINTENANCE NOTES IN THE INCLUDED CONSTRUCTION DRAWINGS AND/OR RESPECTIVE MAINTENANCE REPORTS. SPECIFICALLY, THE PROPOSED SMF(S) SHALL BE MOWED REGULARLY IN THE SPECIFIED AREAS, STORM PIPES AND STRUCTURES WILL BE INSPECTED SEMI-ANNUALLY AND CLEANED ANNUALLY, SMF(S) SIDE SLOPES SHALL BE MAINTAINED TO PREVENT EROSION, AND LANDSCAPING AND GRASS THAT PREVENTS EROSION SHALL BE MAINTAINED. ADDITIONALLY, REMEDIAL ACTIONS SHALL BE TAKEN SHOULD THE SMF(S) NOT PERFORM AS DESIGNED.

B. VEGETATED SWALES

WHEN VEGETATED SWALES ARE UTILIZED, SILT FENCING OR EQUIVALENT SEDIMENT CONTROLS SHALL BE INSTALLED AT ADEQUATE INTERVALS TO COLLECT SEDIMENT ALONG THE SWALE. THE SEDIMENT SHALL BE REMOVED WHEN SEDIMENT REACHES ONE-THIRD OF THE HEIGHT OF THE SILT FENCING. SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS AND LOCATIONS, AS REQUIRED.

C. VELOCITY DISSIPATION DEVICES AT DISCHARGE POINTS

WHEN DISCHARGE POINTS ARE NOT LOCATED UNDER WATER, RIP RAP PADS HAVE BEEN PROVIDED AT LOCATIONS WHERE NECESSARY DUE TO ANTICIPATED DISCHARGE VELOCITIES. PLEASE SEE THE CONSTRUCTION PLANS FOR DETAILS AND LOCATIONS, AS NEEDED.

VI. CONTROLS FOR OTHER POTENTIAL POLLUTANTS

A. WASTE DISPOSAL

THE CONTRACTOR SHALL PROVIDE LITTER COLLECTION CONTAINERS WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION. CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIALS AND CONSTRUCTION DEBRIS IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.

B. DUST CONTROL

TO PREVENT OFF-SITE VEHICULAR TRACKING OF SEDIMENTS AND DUST GENERATION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE ESTABLISHED BY THE SITE CONTRACTOR. PLEASE SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS AND LOCATION(S).

C. EXISTING VERSUS PROPOSED POTABLE AND SANITARY SEWER SYSTEMS

THERE ARE EXISTING SANITARY SEWER AND POTABLE WATER SYSTEMS LOCATED ON THE PROJECT SITE. EXTENSION AND UPGRADES ARE PROPOSED. IF TEMPORARY SANITARY SYSTEMS ARE UTILIZED DURING CONSTRUCTION, THE CONTRACTOR SHALL PROPERLY CONTROL AND DISCHARGE ANY SANITARY WASTE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

D. FERTILIZER & PESTICIDES

THE USE OF FERTILIZERS, HERBICIDES, AND PESTICIDES ON THE PROJECT SITE, WILL BE DIRECTED BY THE LANDSCAPE PLAN AND THE FDOT STANDARD SPECIFICATIONS SECTION 570, TO SUPPORT THE GROWTH OF THE PROPOSED VEGETATION. ESTABLISHING THIS VEGETATION WILL AID IN THE STABILIZATION OF THE PROJECT SITE AND REDUCE EROSION. APPLICATION RATES FOR THE FERTILIZERS, HERBICIDES, AND PESTICIDES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO GUARD AGAINST OVER-USE, WHICH CAN LEAD TO VIOLATIONS OF STATE WATER QUALITY STANDARDS.

E. TOXIC MATERIAL

THE CONSTRUCTION SITE WILL BE IN FULL COMPLIANCE WITH STATE AND FEDERAL REQUIREMENTS. A PLASTIC MAT, TAR PAPER, OR OTHER IMPERVIOUS MATERIAL SHALL BE PLACED UNDER AREAS WHERE TOXIC LIQUIDS ARE TO BE OPENED AND STORED.

F. HAZARDOUS MATERIALS

ALL HAZARDOUS MATERIALS SHALL BE STORED IN A SECURE LOCATION, UNDER COVER, AND IN APPROPRIATE TIGHTLY, SEALED CONTAINERS WHEN NOT IN USE. ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE. THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL.

ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH THE INSTRUCTIONS ON THE PRODUCT LABEL.

SUFFICIENT EQUIPMENT AND/OR MATERIALS SHALL BE KEPT ONSITE TO CONTAIN AND CLEAN UP SPILLS OF HAZARDOUS MATERIALS IN THE AREAS WHERE THESE MATERIALS ARE STORED OR USED. SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME.

CONTRACTOR TO CONTAIN AND CLEAN UP ANY SPILLS IMMEDIATELY AFTER THEY OCCUR. ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES AS DEFINED BY EPA, STATE, OR LOCAL AGENCY REGULATIONS SHALL BE REPORTED TO THE APPROPRIATE AGENCIES IN THE REQUIRED TIME FRAMES. THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE TO THE OWNER IMMEDIATELY UPON IDENTIFICATION OF ANY SPILL.

ALL EXCESS, USED, OR SPILLED PRODUCTS, INCLUDING CONTAMINATED SOIL, SHALL BE DISPOSED OF BY THE CONTRACTOR IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL AND ALL APPLICABLE REGULATIONS.

VII. APPROVED STATE AND LOCAL PLANS

THE CONSTRUCTION DRAWINGS FOR THE PROJECT WERE APPROVED AND PERMITTED BY THE FOLLOWING AGENCIES:

- *CITY OF GREEN COVE SPRINGS*
- *FLORIDA DEPARTMENT OF TRANSPORTATION*
- *ST. JOHNS RIVER WATER MANAGEMENT DISTRICT*
- *FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION*

VIII. CONSTRUCTION ACTIVITY DISCHARGES

IN ACCORDANCE WITH THIS PLAN, THERE ARE NO ANTICIPATED DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

IX. CHANGES TO THE POLLUTION PREVENTION PLAN

THIS STORMWATER POLLUTION PREVENTION PLAN SHALL BE AMENDED TO REFLECT ANY APPLICABLE CHANGE IN A STATE, REGIONAL, OR LOCAL PERMIT FOR WHICH THE PERMITTEE RECEIVES WRITTEN NOTICE. WHEN WRITTEN NOTICE IS RECEIVED, THE PERMITTEE SHALL PROVIDE A RE-CERTIFICATION OF THIS POLLUTION PREVENTION PLAN, WHICH HAS BEEN REVISED TO ADDRESS SUCH CHANGES. AMENDMENTS TO THE PLAN SHALL BE PREPARED, SIGNED, DATE, AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN.

X. ALTERNATIVE PERMIT REQUIREMENTS

NO ALTERNATIVE PERMIT REQUIREMENTS ARE REQUESTED.

XI. MAINTENANCE

THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE, INSPECTION SCHEDULE, AND REPAIRS OUTLINED IN THIS PLAN. MAINTENANCE SHALL CONTINUE THROUGHOUT THE PROJECT UNTIL WORK IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER CONSTRUCTION IS COMPLETE. IN ADDITION TO THE TIMES MENTIONED IN THE PREVIOUS SECTIONS, THE CONTRACTOR SHALL INITIATE ANY REPAIRS WITHIN 24 HOURS OF BEING REPORTED. IN THE EVENT THAT THE SMF(S) DO NOT PERFORM PROPERLY OR IF A SINKHOLE DEVELOPS, THE PROJECT ENGINEER SHALL BE NOTIFIED TO ASSIST IN COORDINATING REMEDIAL ACTION. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM SILT FENCING WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE SILT FENCE. UPON FINAL COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY BOTH THE CITY AND OWNER, THE OPERATION AND MAINTENANCE ENTITY WILL BE "?????????????????????????????".

XII. INSPECTIONS

THE CONTRACTOR SHALL INSPECT ALL POINTS OF POTENTIAL DISCHARGE FROM THE PROJECT SITE FOR ALL DISTURBED AREAS ON THE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER. FOR POINTS OF DISCHARGE INTO SURFACE WATERS OF THE STATE OR AN MS4, A QUALIFIED INSPECTOR (PROVIDED BY THE OPERATOR) SHALL PERFORM THE REQUIRED INSPECTIONS. THE CONTRACTOR SHALL INSTALL A RAIN GAUGE AT THE SITE TO MONITOR AND DOCUMENT RAINFALL EVENTS 0.50 INCHES OR GREATER. LOCATIONS WHERE THE SITE IS COMPLETELY CONSTRUCTED AND STABILIZED, SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE A MONTH. ALL INSPECTIONS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION FORM. THE CONTRACTOR MAY USE THEIR OWN FORM (MEETING FDEP SWPPP REQUIREMENTS) OR A SAMPLE FORM FROM FDEP. A SAMPLE CONSTRUCTION FORM IS AVAILABLE AT: "HTTPS://FLORIDADEP.GOV/WATER/STORMWATER/DOCUMENTS/CONSTRUCTION-SWPPP". MORE SPECIFICALLY, THE INSPECTION SHALL ENSURE THE FOLLOWING CATEGORIES.

A. DISTURBED AREAS

ALL DISTURBED AREAS AND AREAS USED FOR MATERIAL STORAGE SHALL BE INSPECTED FOR POLLUTANTS ENTERING THE STORMWATER SYSTEM. THE STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE INSPECTED TO ENSURE THEY ARE OPERATING CORRECTLY. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

B. MAINTENANCE PERFORMANCE

BASED ON THE RESULTS OF THE INSPECTION, ALL MAINTENANCE OPERATIONS NEEDED TO ASSURE PROPER COMPLIANCE WITH THIS PLAN SHALL BE DONE IN A TIMELY MANNER, BUT IN NO CASE LATER THAN 7 DAYS FOLLOWING THE INSPECTION.

C. REPORTING REQUIREMENTS

ALL INSPECTIONS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION FORM. THIS FORM IS CREATED TO SUMMARIZE THE SCOPE OF THE INSPECTION, THE NAME(S) AND QUALIFICATION OF THE INSPECTOR(S), THE DATE OF INSPECTION, RAINFALL DATA, OBSERVATIONS, THE ACTIONS TAKEN TO CORRECT INCIDENTS OF NON-COMPLIANCE WITH THE PROVISIONS OF THIS PLAN. IF NO INCIDENTS OF NON-COMPLIANTS ARE OBSERVED, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE ASSOCIATED PERMIT.

XIII. NON-STORMWATER DISCHARGES

IN ADDITION TO STORMWATER RUNOFF, THIS PLAN APPLIES TO RUNOFF FROM IRRIGATION OPERATIONS AND CONSTRUCTION PRACTICES. THIS PLAN DOES NOT PERTAIN TO DISCHARGES FROM FIRE FIGHTING ACTIVITIES.

XIV. CONTRACTORS CERTIFICATION

THE CONTRACTORS OR SUB-CONTRACTORS SHALL PHOTOCOPY AND COMPLETE THE FORM ON THIS PAGE. IT SHALL BE PROVIDED TO THE OWNER AND KEPT ON FILE PURSUANT TO SECTION XV REGARDING PROJECT RECORDS.

XV. RETENTION OF RECORDS

THE PERMITTEE SHALL RETAIN COPIES OF STORMWATER POLLUTION PREVENTION PLANS AND ALL REPORTS REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED.

THE PERMITTEE SHALL RETAIN A COPY OF THE STORMWATER POLLUTION PREVENTION PLAN AND ALL REPORTS, RECORDS, AND DOCUMENTATION REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE, OR AN APPROPRIATE ALTERNATIVE LOCATION AS SPECIFIED IN THE NOTICE OF INTENT, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

XVI. NOTICE OF TERMINATION

NOTICE OF TERMINATION:

1. *WHERE A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES AUTHORIZED BY THIS PERMIT ARE ELIMINATED, THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION (DEP FORM 62-621.300(6)), SIGNED IN ACCORDANCE WITH PART VII.C OF DEP DOCUMENT NO. 62-621.300(4)(a), WITHIN 14 DAYS OF FINAL STABILIZATION OF THE SITE TO TERMINATE COVERAGE UNDER THIS PERMIT.*
2. *ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY MEANS THAT ALL DISTURBED SOILS AT THE SITE HAVE BEEN FINALLY STABILIZED AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR WILL BE REMOVED AT AN APPROPRIATE TIME, OR THAT ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE THAT ARE AUTHORIZED BY THIS GENERIC PERMIT HAVE OTHERWISE BEEN ELIMINATED.*
3. *FOR CONSTRUCTION ACTIVITIES WHERE THE OPERATOR CHANGES, THE EXISTING OPERATOR SHALL FILE AN N.O.T. IN ACCORDANCE WITH THIS PART WITHIN 14 DAYS OF RELINQUISHING CONTROL OF THE PROJECT TO A NEW OPERATOR.*

THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE FOLLOWING ADDRESS:

NPDES STORMWATER NOTICES CENTER, MS# 2510
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

PROJECTS THAT DISCHARGED STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY TO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) SHALL SUBMIT A COPY OF THE N.O.T. TO THE OPERATOR OF THE MS4.

Contractor/Subcontractor Certification Statement
Stormwater Pollution Prevention Plan

Site Name: Clay County Economic Development Building
Site Location: 633 N Orange Ave
Clay County, Florida

THE CONTRACTOR(S) OR SUB-CONTRACTOR(S) RESPONSIBLE FOR COMPLYING WITH THIS STORMWATER POLLUTION PREVENTION PLAN SHALL SIGN THE CERTIFICATION STATEMENT BELOW. MULTIPLE COPIES OF THIS CERTIFICATION STATEMENT MAY BE NECESSARY DEPENDING ON THE NUMBER OF SUB-CONTRACTORS ASSOCIATED WITH THE PROJECT

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

DATE	RESPONSIBLE INDIVIDUAL'S NAME	RESPONSIBLE INDIVIDUAL'S SIGNATURE	TITLE	COMPANY NAME, ADDRESS, AND PHONE NUMBER

7/27/2023 8:57:42 AM
Tech: nicolas Plot Date: Jun 19,2024 8:59am Filename: N:\2023\23-0204\Department\14_Engineering\01_DWGs\Production Files\23-0204 SWPP.dwg

Walker Architects
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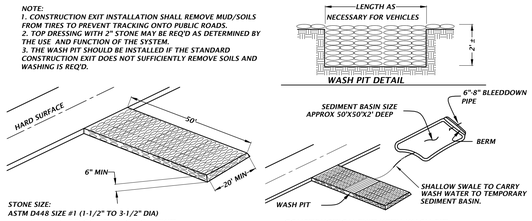
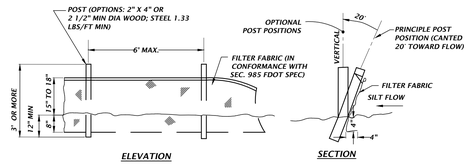
T: 352.672.6448 www.walker-arch.com AA26002009

DANIEL H. YOUNG
Daniel H. Young, State of Florida, Professional Engineer, License No. 70780
This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Sign

NOTE:
1. CONSTRUCTION EXIT INSTALLATION SHALL REMOVE MUD/SOILS FROM TIRES TO PREVENT TRACKING ONTO PUBLIC ROADS.
2. TOP DRESSING WITH 2" STONE MAY BE REQ'D AS DETERMINED BY THE USE AND FUNCTION OF THE SYSTEM.
3. THE WASH PIT SHOULD BE INSTALLED IF THE STANDARD CONSTRUCTION EXIT DOES NOT SUFFICIENTLY REMOVE SOILS AND WASHING IS REQ'D.



TEMPORARY CONSTRUCTION EXIT DETAIL
NTS



TYPE III SILT FENCE DETAIL
NTS

TYPICAL INSTALLATION SEQUENCE FOR SILT-SAVER FRAME AND FILTER

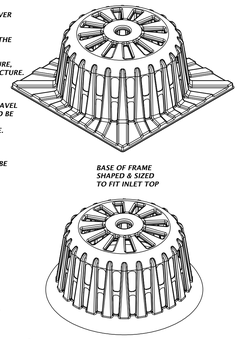
1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.

2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.

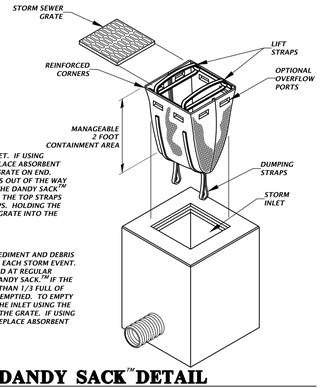
3. SLIDE THE FILTER OVER THE FRAME.

4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.

5. BACK FILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACK FILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.



SILT-SAVER® DETAIL
NTS



INSTALLATION:

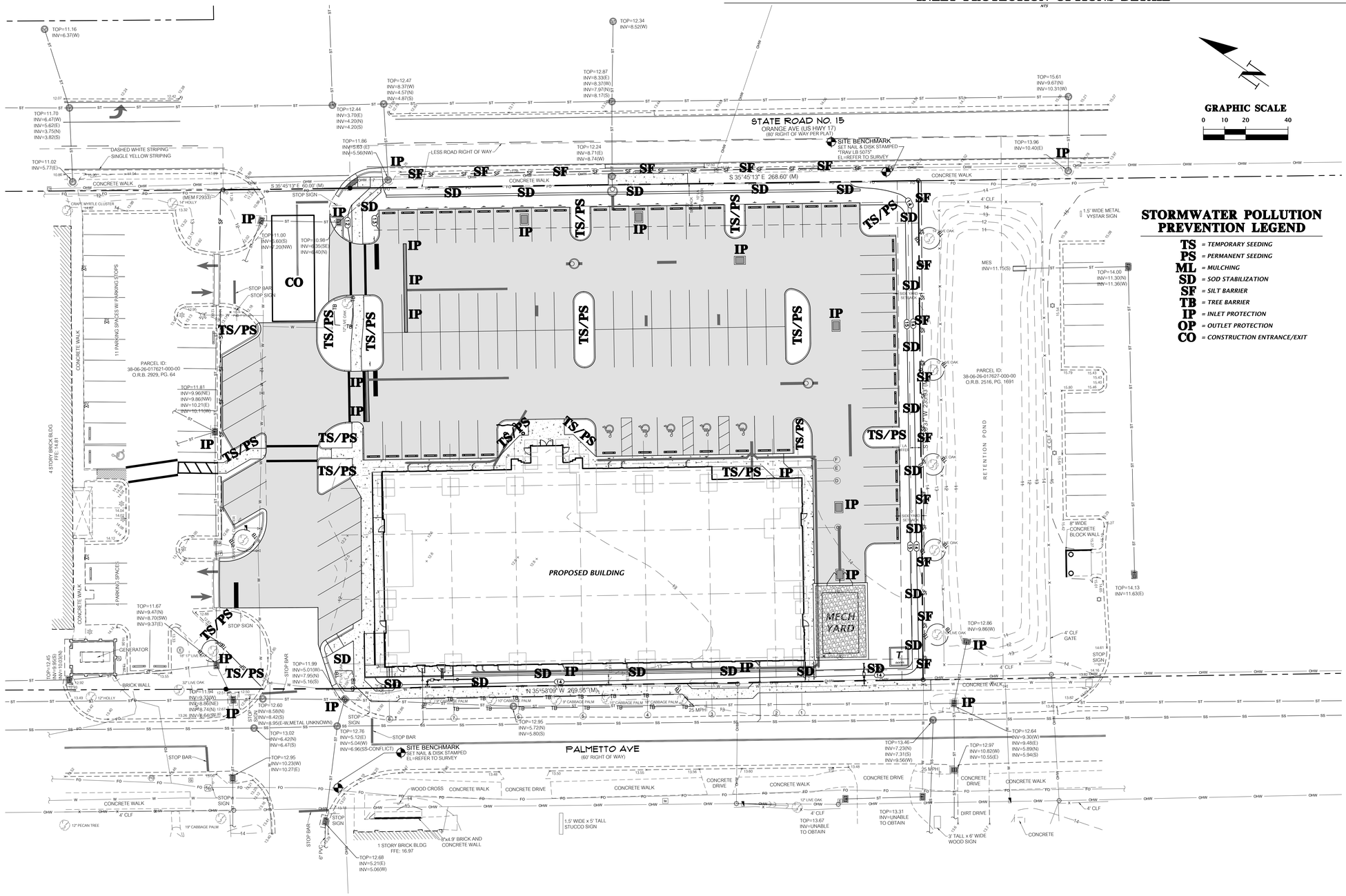
REMOVE THE GRATE FROM INLET. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY SACK™ SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE:

REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY SACK™ IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

DANDY SACK™ DETAIL
NTS

INLET PROTECTION OPTIONS DETAIL
NTS



GRAPHIC SCALE
0 10 20 40

STORMWATER POLLUTION PREVENTION LEGEND

TS	= TEMPORARY SEEDING
PS	= PERMANENT SEEDING
ML	= MULCHING
SD	= SOD STABILIZATION
SF	= SILT BARRIER
TB	= TREE BARRIER
IP	= INLET PROTECTION
OP	= OUTLET PROTECTION
CO	= CONSTRUCTION ENTRANCE/EXIT

7/27/2023 8:57:42 AM
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www.mitchellgulledge.com

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JACKSONVILLE, FL

SUBMITTAL:	ISSUE DATE:
100% CONSTRUCTION DOCUMENTS	4/11/2024

REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

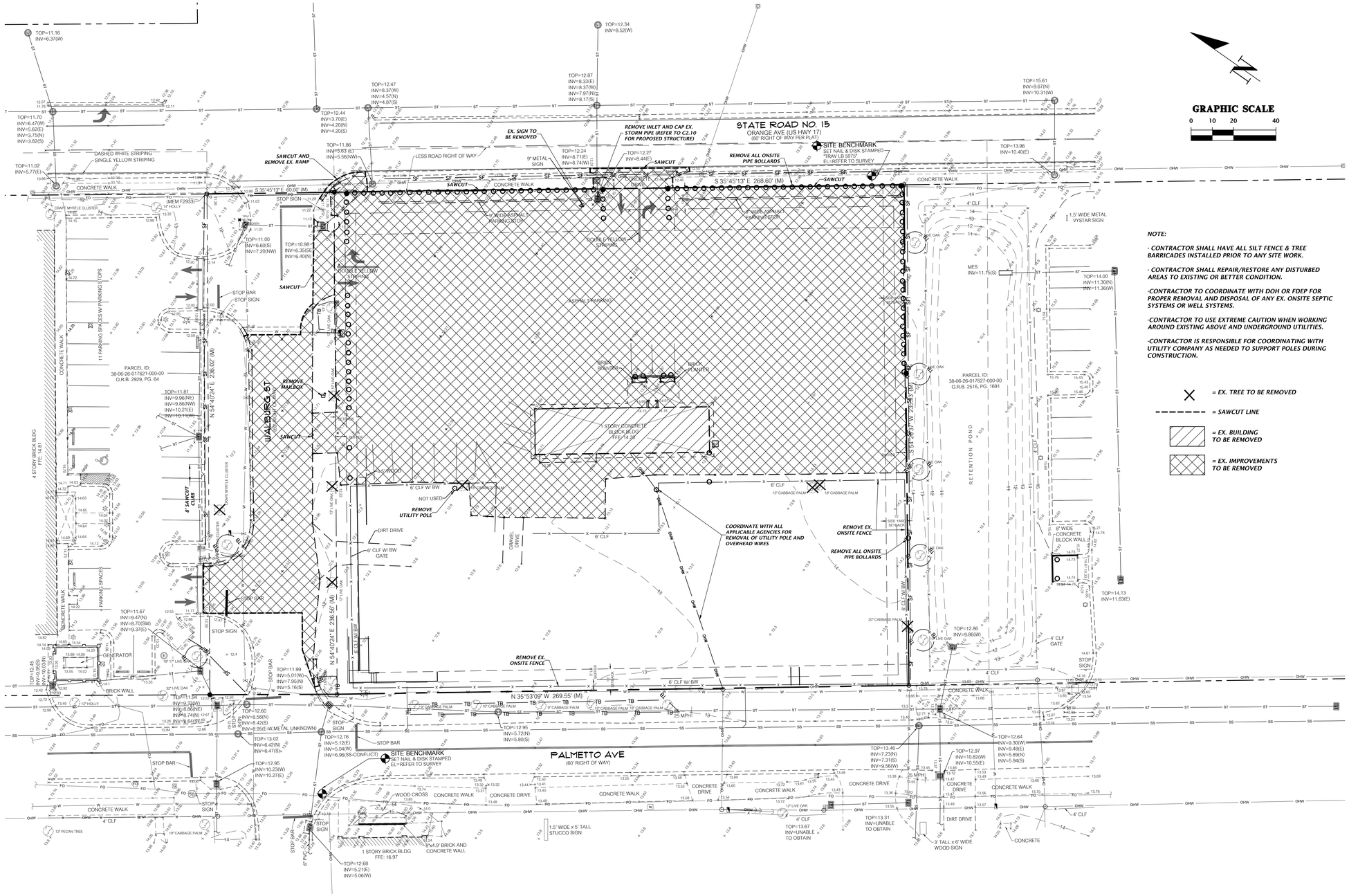
633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
STORMWATER POLLUTION PREVENTION PLAN

PROJECT NO.: 23-204	DRAWN BY: TFC
	CHECKED BY: TJH

C0.21



NOTE:

- *CONTRACTOR SHALL HAVE ALL SILT FENCE & TREE BARRICADES INSTALLED PRIOR TO ANY SITE WORK.*
- *CONTRACTOR SHALL REPAIR/RESTORE ANY DISTURBED AREAS TO EXISTING OR BETTER CONDITION.*
- *CONTRACTOR TO COORDINATE WITH DOH OR FDEP FOR PROPER REMOVAL AND DISPOSAL OF ANY EX. ONSITE SEPTIC SYSTEMS OR WELL SYSTEMS.*
- *CONTRACTOR TO USE EXTREME CAUTION WHEN WORKING AROUND EXISTING ABOVE AND UNDERGROUND UTILITIES.*
- *CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY COMPANY AS NEEDED TO SUPPORT POLES DURING CONSTRUCTION.*

× = *EX. TREE TO BE REMOVED*

= *SAWCUT LINE*

= *EX. BUILDING TO BE REMOVED*

= *EX. IMPROVEMENTS TO BE REMOVED*

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REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

DEMOLITION AND TREE PROTECTION PLAN

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C0.30

Tech: ThomasC Plot Date: Jul 11,2024 3:55pm Filename: N:\2023\23-204\Department\04_Engineering\01_Civil\Production Files\23-204 DM.dwg
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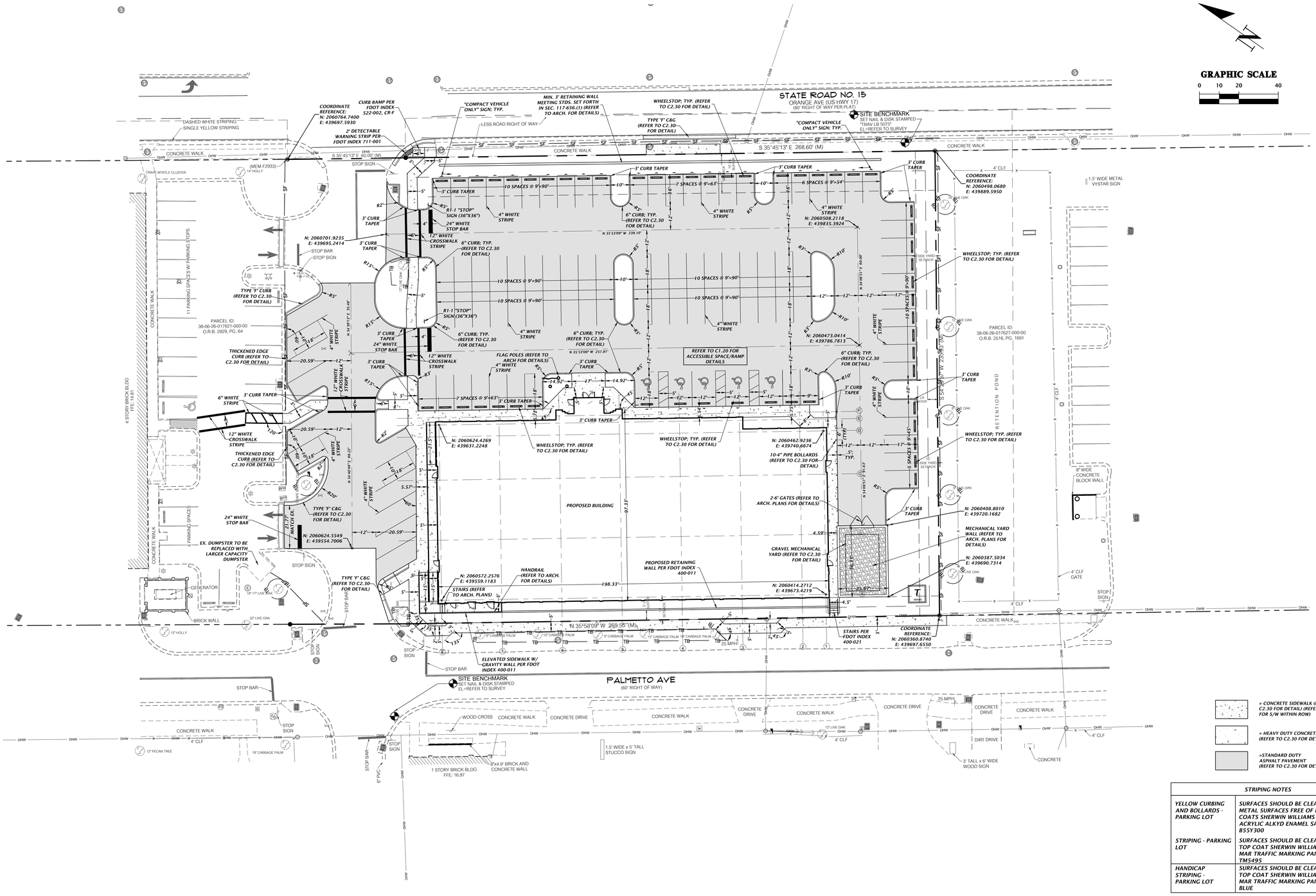

STRIPING NOTES	
YELLOW CURBING AND BOLLARDS - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY AND METAL SURFACES FREE OF HEAVY RUST 2 COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL SAFETY YELLOW B55Y300
STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT WHITE TM5495
HANDICAP STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT "H.C." BLUE

STRIPING SHALL BE THE RESPONSIBILITY OF CURRENT AND ALL SUBSEQUENT PROPERTY OWNERS.

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REVISION DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

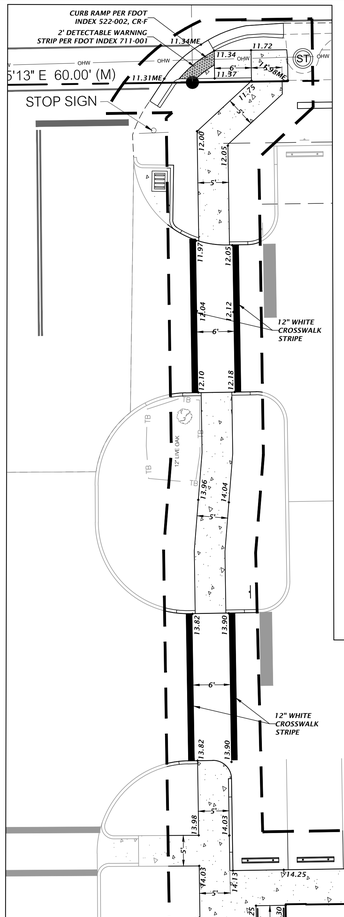
KEY PLAN

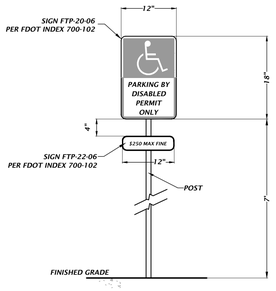
DRAWING TITLE:

DETAILED HORIZONTAL CONTROL AND SITE PLAN

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C1.10



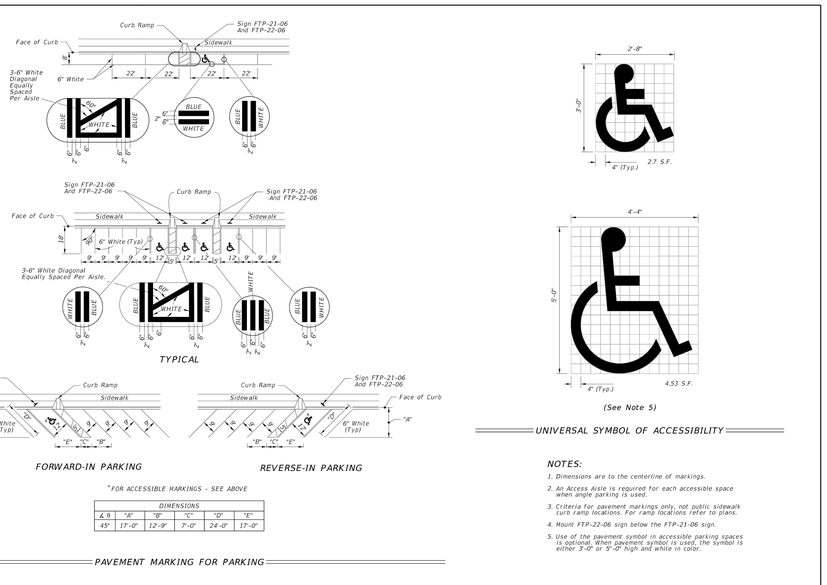


SIGN NOTES:

1. SIGN CONSTRUCTION, DESIGN AND PLACEMENT SHALL COMPLY WITH STATE AND LOCAL STATUTES.

ACCESSIBLE PARKING SIGN DETAIL

NTS



*FOR ACCESSIBLE MARKINGS - SEE ABOVE

DIMENSIONS					
∠ θ	"A"	"B"	"C"	"D"	"E"
45°	17'-0"	12'-9"	7'-0"	24'-0"	17'-0"

PAVEMENT MARKING FOR PARKING

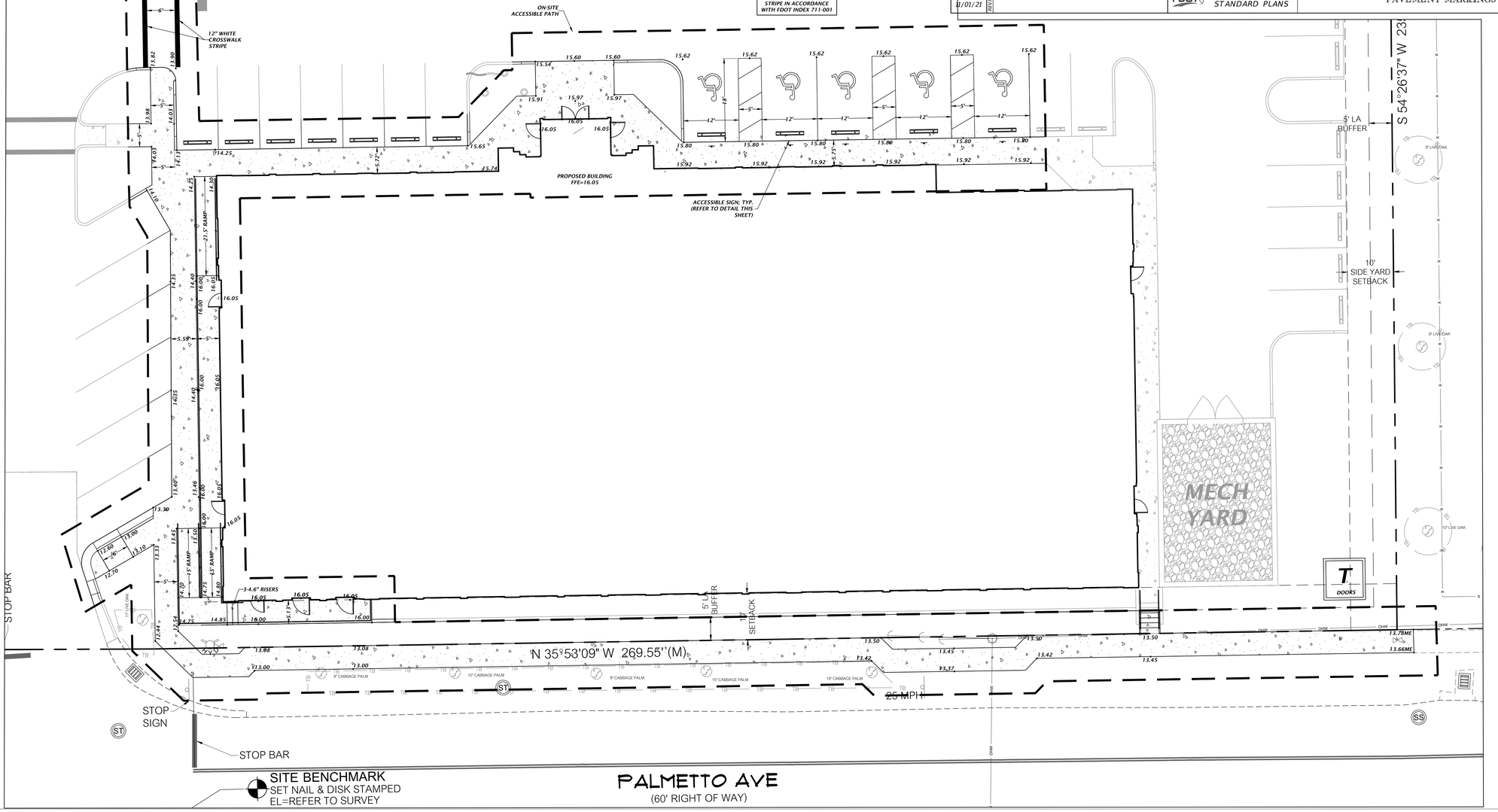
UNIVERSAL SYMBOL OF ACCESSIBILITY

NOTES:

1. Dimensions are to the centerline of markings.
2. An Access Aisle is required for each accessible space when angle parking is used.
3. Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to plans.
4. Mount FTP-22-06 sign below the FTP-21-06 sign.
5. Use of the pavement symbol in accessible parking spaces is optional. When pavement symbol is used, the symbol is either 3'-0" or 5'-0" high and white in color.

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	PAVEMENT MARKINGS	INDEX	SHEET
11/01/21				711-001	11 of 13

STRIPE IN ACCORDANCE WITH FDOT INDEX 711-001



GRAPHIC SCALE

0 5 10 20

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CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
ON-SITE ACCESSIBILITY PLAN

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C1.20

Tech: nicolas Plot Date: Jun 19,2024 9:05am Filename: N:\2023\23-0204\Department\04_Engineering\02_CIVIL\Production Files\23-0204 4C.dwg
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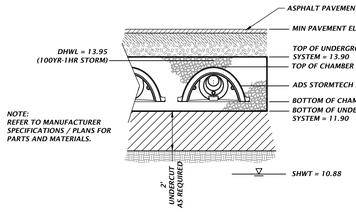
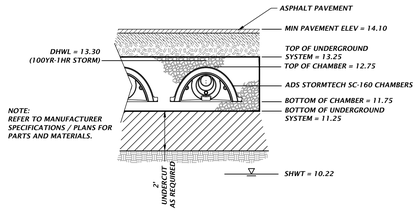


SMF-3A TYPICAL CROSS SECTION

NTS



SMF-3B TYPICAL CROSS SECTION

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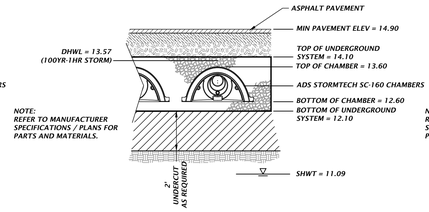

SMF-2A TYPICAL CROSS SECTION

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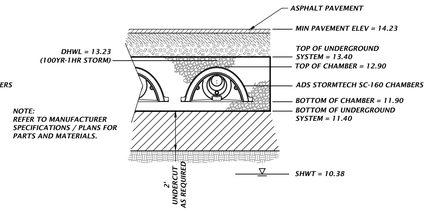

SMF-2B TYPICAL CROSS SECTION

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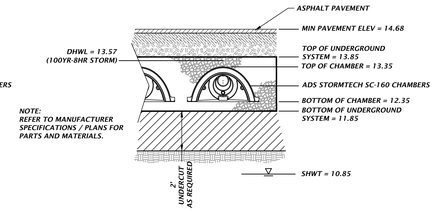
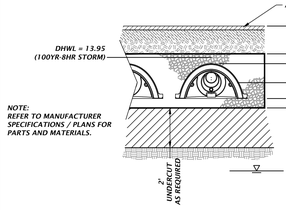


SMF-2C TYPICAL CROSS SECTION

NTS

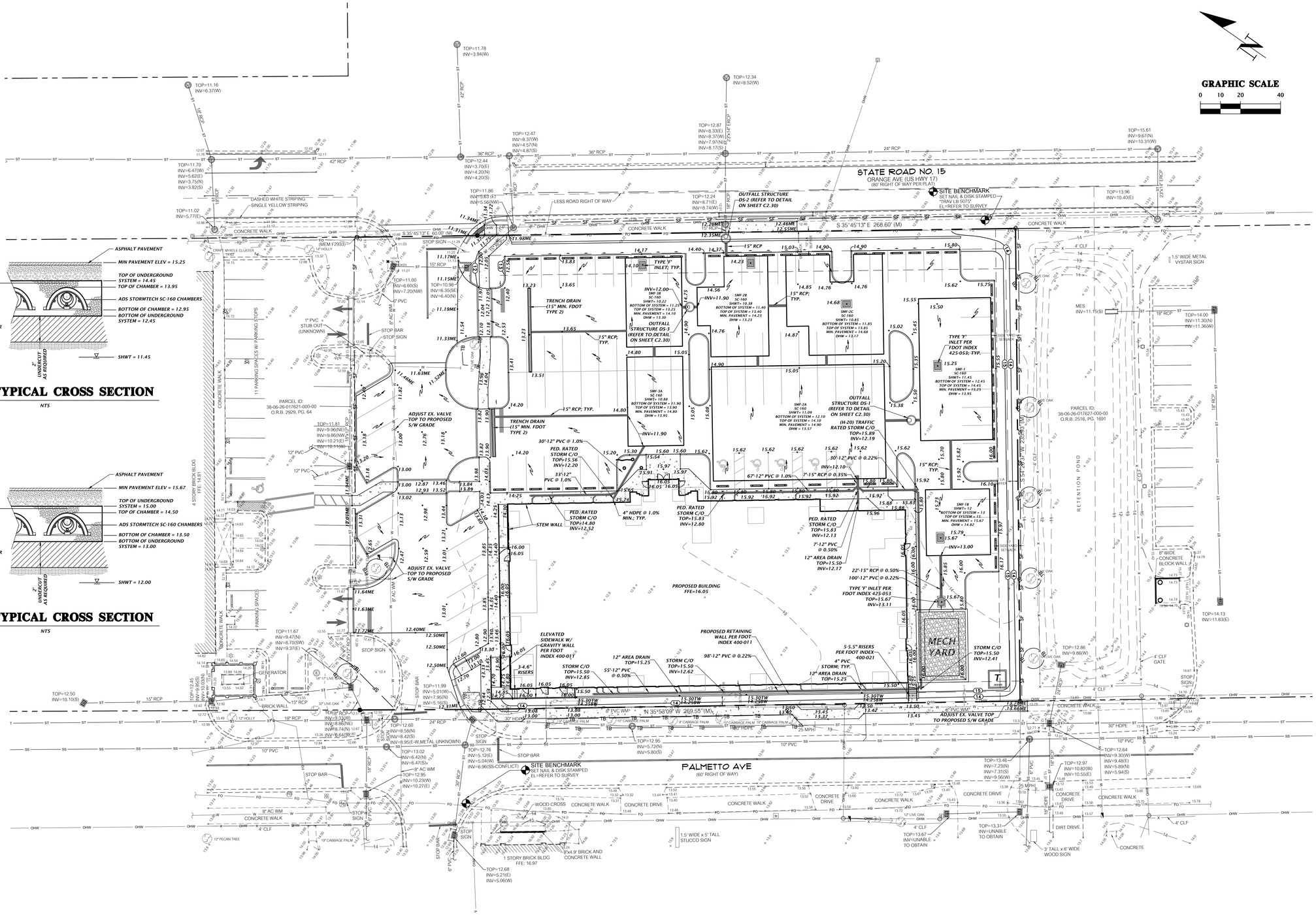


SMF-1A TYPICAL CROSS SECTION

NTS

SMF-1B TYPICAL CROSS SECTION

NTS


GRAPHIC SCALE
0 10 20 40
STATE ROAD NO. 15
ORANGE AVE (US HWY 17)
(80' RIGHT OF WAY PER PLAT)
SITE BENCHMARK
SET NAIL & DISK STAMPED
"TRAV LB 5072"
EL=REFER TO SURVEY
PALMETTO AVE
(60' RIGHT OF WAY)
S 35°45'13" E 268.60' (M)
N 35°53'09" W 269.55'(M)
PROPOSED BUILDING
FFE=16.05
MECH. YARD
PARCEL ID:
38-06-26-017621-000-00
O.R.B. 2929, PG. 64
PARCEL ID:
38-06-26-017627-000-00
O.R.B. 2516, PG. 1691
RETENTION POND
1 STORY BRICK BLDG
FFE: 14.81
1 STORY BRICK BLDG
FFE: 16.97
4 STORY BRICK BLDG
FFE: 14.81
1.5' WIDE METAL
VYSTAR SIGN
1.5' WIDE x 5' TALL
STUCCO SIGN
9' TALL x 6' WIDE
WOOD SIGN
8' WIDE
CONCRETE
BLOCK WALL
4' CLF GATE
STOP SIGN
DASHED WHITE STRIPING
SINGLE YELLOW STRIPING
CONCRETE WALK
LESS ROAD RIGHT OF WAY
OUTFALL STRUCTURE
DS-2 (REFER TO DETAIL
ON SHEET C2.30)
TYPE 'F'
INLET; TYP.
TRENCH DRAIN
(15" MIN. FDOT
TYPE 2)
OUTFALL
STRUCTURE DS-1
(REFER TO DETAIL
ON SHEET C2.30)
(H-20) TRAFFIC
RATED STORM C/O
TOP=15.89
INV=12.19
ADJUST EX. VALVE
TOP TO PROPOSED
S/W GRADE
PED. RATED
STORM C/O
TOP=15.96
INV=12.20
PED. RATED
STORM C/O
TOP=15.83
INV=12.80
PED. RATED
STORM C/O
TOP=15.83
INV=12.13
7'-12" PVC
@ 0.50%
12" AREA DRAIN
TOP=15.50
INV=12.17
22'-15" RCP @ 0.50%
100'-12" PVC @ 0.22%
TYPE 'F' INLET PER
FDOT INDEX 425-053
TOP=15.67
INV=13.11
STEM WALL
INV=12.52
4" HDPE @ 1.0%
MIN.; TYP.
30'-12" PVC @ 1.0%
33'-12"
PVC @ 1.0%
67'-12" PVC @ 1.0%
7'-15" RCP @ 0.35%
30'-12" PVC @ 0.22%
INV=12.10
15" RCP; TYP.
ELEVATED
SIDEWALK W/
GRAVITY WALL
PER FDOT
INDEX 400-011
3'-4.6"
RISERS
STORM C/O
TOP=15.50
INV=12.85
12" AREA DRAIN
TOP=15.25
55'-12" PVC
@ 0.50%
STORM C/O
TOP=15.50
INV=12.62
98'-12" PVC @ 0.22%
PROPOSED RETAINING
WALL PER FDOT
INDEX 400-011
5'-5.5" RISERS
PER FDOT INDEX
400-021
4" PVC
STORM; TYP.
12" AREA DRAIN
TOP=15.25
STORM C/O
TOP=15.50
INV=12.41
ADJUST EX. VALVE TOP
TO PROPOSED S/W GRADE
SITE BENCHMARK
SET NAIL & DISK STAMPED
EL=REFER TO SURVEY
TOP=11.78
INV=3.94(W)
TOP=11.16
INV=6.37(W)
TOP=11.70
INV=6.47(W)
INV=5.62(E)
INV=3.75(N)
INV=3.82(S)
TOP=11.02
INV=5.77(E)
TOP=12.47
INV=8.37(W)
INV=4.57(N)
INV=4.87(S)
TOP=12.44
INV=3.70(E)
INV=4.20(N)
INV=4.20(S)
TOP=11.86
INV=5.63 (E)
INV=5.56(W)
TOP=12.34
INV=8.52(W)
TOP=12.87
INV=8.33(E)
INV=8.37(W)
INV=7.97(N)
INV=8.17(S)
TOP=12.24
INV=8.71(E)
INV=8.74(W)
TOP=15.61
INV=9.67(N)
INV=10.31(W)
TOP=13.96
INV=10.40(E)
TOP=14.00
INV=11.30(N)
INV=11.36(W)
TOP=14.13
INV=11.63(E)
TOP=11.81
INV=9.96(NE)
INV=9.86(NW)
INV=10.21(E)
INV=10.11(W)
TOP=11.67
INV=9.47(N)
INV=8.70(SW)
INV=9.37(E)
TOP=12.45
INV=9.95(E)
INV=9.90(S)
TOP=12.50
INV=10.10(S)
TOP=11.00
INV=6.60(S)
INV=7.20(W)
TOP=11.98
INV=6.35(SE)
INV=6.40(N)
TOP=11.99
INV=5.01(W)
INV=7.95(N)
INV=5.16(S)
TOP=13.02
INV=6.42(N)
INV=6.47(S)
TOP=12.95
INV=10.23(W)
INV=10.27(E)
TOP=12.60
INV=8.58(N)
INV=8.42(S)
INV=8.95(E-W,METAL UNKNOWN)
TOP=12.76
INV=5.12(E)
INV=5.04(W)
INV=6.96(SS-CONFLICT)
TOP=12.95
INV=5.72(N)
INV=5.80(S)
TOP=12.68
INV=5.21(E)
INV=5.06(W)
TOP=12.97
INV=10.82(W)
INV=10.55(E)
TOP=12.64
INV=9.30(W)
INV=9.48(E)
INV=5.89(N)
INV=5.94(S)
TOP=13.46
INV=7.23(N)
INV=7.31(S)
INV=9.56(W)
TOP=13.31
INV=UNABLE
TO OBTAIN
TOP=13.67
INV=UNABLE
TO OBTAIN
TOP=12.86
INV=9.86(W)
TOP=12.45
INV=8.86(NE)
INV=8.74(N)
INV=8.64(SE)
MES
INV=11.15(S)
MES
INV=11.30(N)
TOP=12.86
(18.66ME)
11 PARKING SPACES W/ PARKING STOPS
12 PARKING SPACES
CRAPE MYRTLE CLUSTER
14" HOLLY
36" LIVE OAK
18" LIVE OAK
30" LIVE OAK
12" PECAN TREE
19' CABBAGE PALM
25 MPH
SIDE YARD SETBACK
REAR YARD SETBACK
11.34ME
11.37ME
11.98ME
12.46ME
12.55ME
12.33ME
11.17ME
11.15ME
11.19ME
11.33ME
11.54
11.63ME
11.52ME
11.82
11.46ME
11.64ME
11.63ME
11.72ME
12.40ME
12.50ME
12.50ME
12.50ME
12.31ME
12.66ME
12.86ME
12.86ME
12.86

PROJECT INFORMATION

ENGINEERED PRODUCT MANAGER:	RYAN RAFFERTY 904-673-6572 RYAN.RAFFERTY@ADS-PIPE.COM
ADS SALES REP:	DREW LANE 407-697-9796 DREW.LANE@ADSPIPE.COM
PROJECT NO:	S371901

Advanced Drainage Systems, Inc.

ADS SiteAssist® FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

GREEN COVE SPRINGS, FL

SC-160LP STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-160LP.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 1.5".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-160LP SYSTEM

1. STORMTECH SC-160LP CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-160LP CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-160LP CONSTRUCTION GUIDE".
3. FOUNDATION STONE AND EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE; AASHTO M43 #3,357, 4, 467, 5, 56, OR 57.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. THE DEPTH OF FOUNDATION STONE SHALL BE DETERMINED BASED ON THE SUBGRADE BEARING CAPACITY PROVIDED BY THE SITE DESIGN ENGINEER.
6. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES CONCERNING CHAMBER FOUNDATION DESIGN AND SUBGRADE BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
7. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
8. CHAMBERS SHALL BE INSTALLED "TOE TO TOE". NO ADDITIONAL SPACING BETWEEN ROWS IS REQUIRED.
9. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
10. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-160LP CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-160LP CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-106LP CONSTRUCTION GUIDE".
2. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT SMF-1A

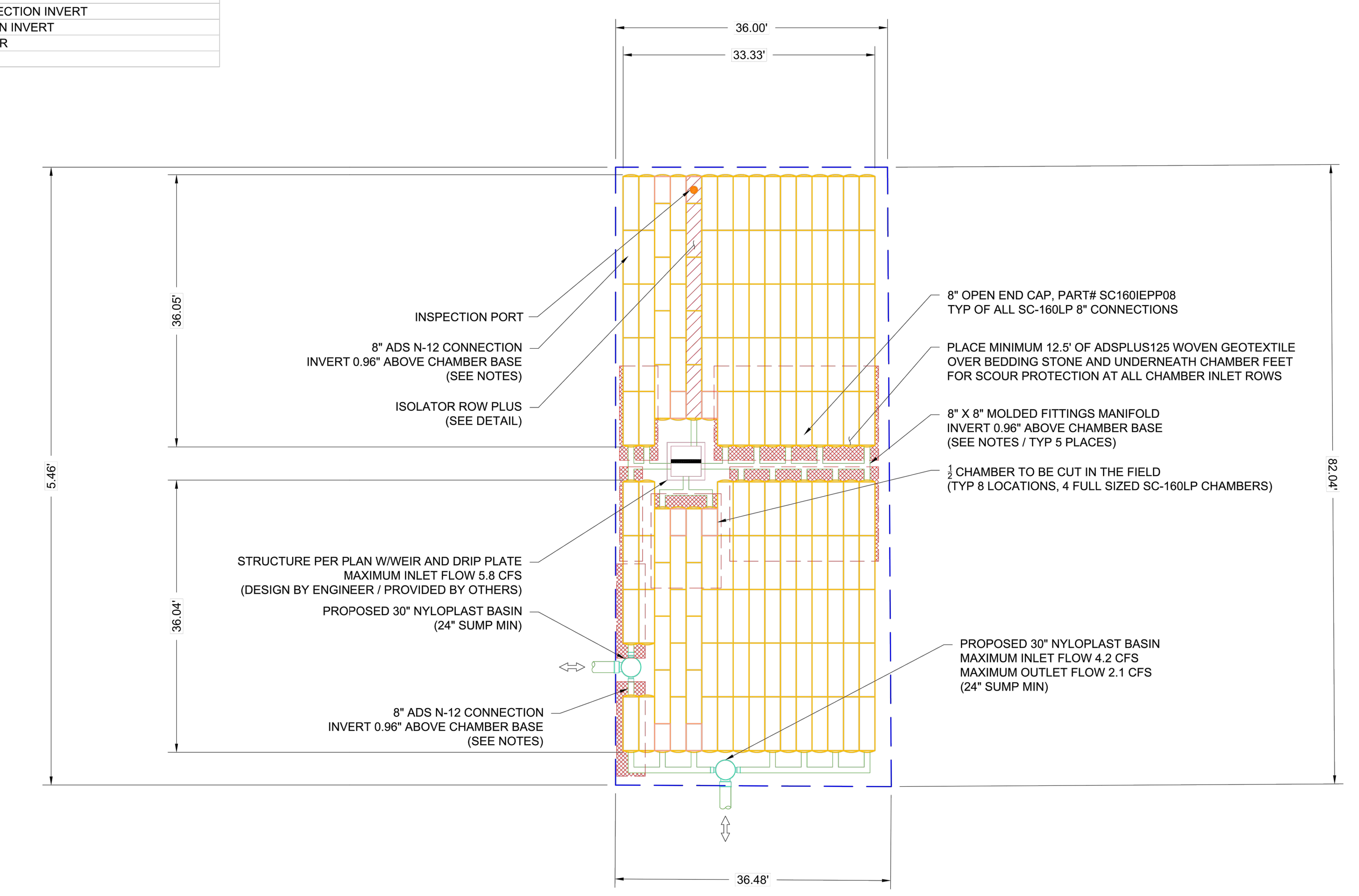
154	STORMTECH SC-160LP CHAMBERS
68	STORMTECH SC-160LP END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
2970	SYSTEM AREA (ft²)
236	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS SMF-1A

23.95	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
15.62	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
15.12	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
15.12	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
15.12	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
14.45	TOP OF STONE
13.95	TOP OF SC-160LP CHAMBER
13.03	8" ISOLATOR ROW PLUS CONNECTION INVERT
13.03	8" X 8" MANIFOLD / CONNECTION INVERT
12.95	BOTTOM OF SC-160LP CHAMBER
12.45	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.



CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL — DATE: 08-20-23 DRAWN: AVM — PROJECT #: S371901 CHECKED: JEK

StormTech® Chamber System — 888-892-2694 | WWW.STORMTECH.COM — 4640 TRUEMAN BLVD HILLIARD, OH 43026

SHEET 2 OF 11

PROPOSED LAYOUT SMF-1B

42	STORMTECH SC-160LP CHAMBERS
50	STORMTECH SC-160LP END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
1140	SYSTEM AREA (ft²)
135	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS SMF-1B

24.50	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
16.17	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
15.67	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
15.67	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
15.67	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
15.00	TOP OF STONE
14.50	TOP OF SC-160LP CHAMBER
13.58	8" ISOLATOR ROW PLUS CONNECTION INVERT
13.58	8" X 8" MANIFOLD / CONNECTION INVERT
13.50	BOTTOM OF SC-160LP CHAMBER
13.00	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
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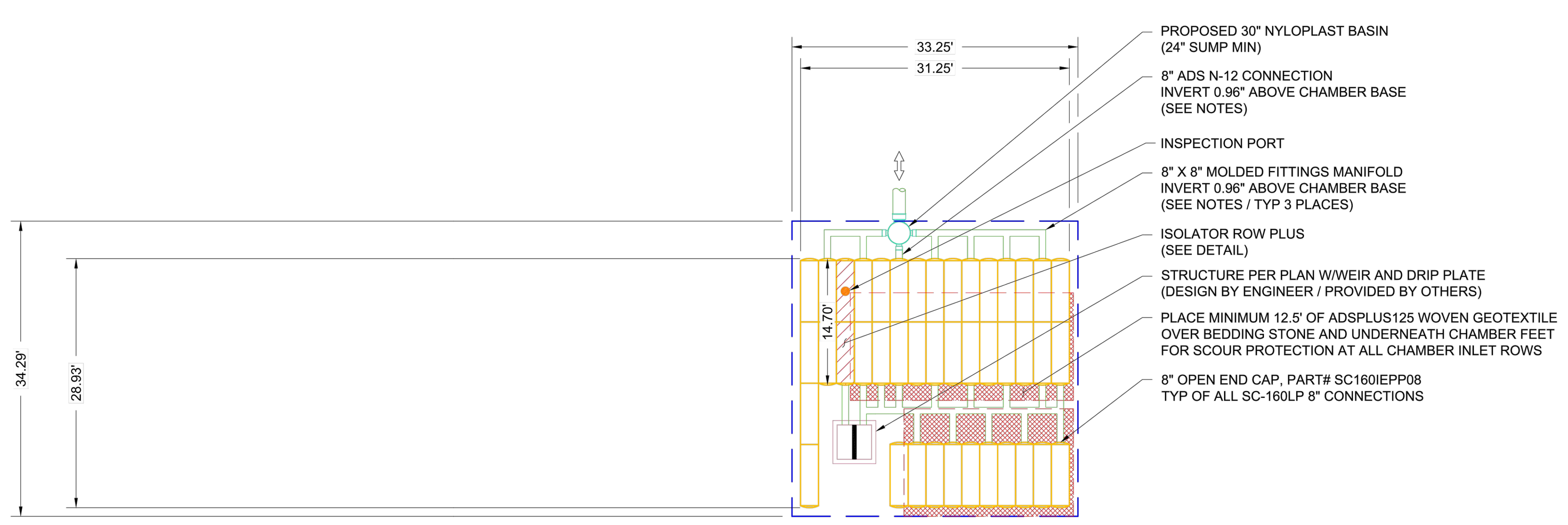

CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL — DATE: 08-20-23 DRAWN: AVM — PROJECT #: S371901 CHECKED: JEK

StormTech® Chamber System — 888-892-2694 | WWW.STORMTECH.COM — 4640 TRUEMAN BLVD HILLIARD, OH 43026

SHEET 3 OF 11

PROPOSED LAYOUT SMF-2A

267	STORMTECH SC-160LP CHAMBERS
60	STORMTECH SC-160LP END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
4760	SYSTEM AREA (ft²)
282	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS SMF-2A

23.60	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
15.27	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
14.77	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
14.77	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
14.77	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
14.10	TOP OF STONE
13.60	TOP OF SC-160LP CHAMBER
12.68	8" X 8" MANIFOLD / CONNECTION INVERT
12.60	BOTTOM OF SC-160LP CHAMBER
12.10	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
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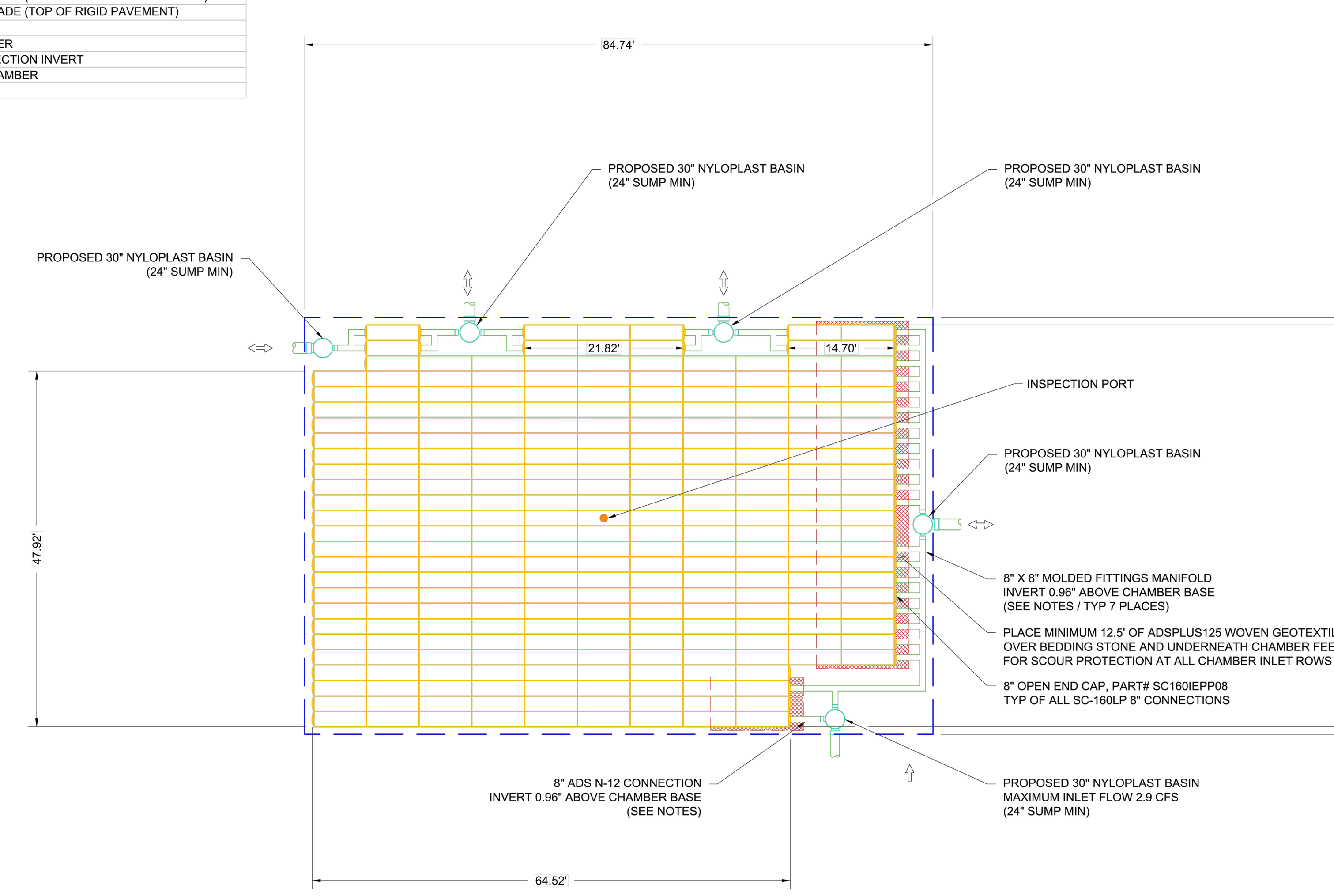

CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL — DATE: 08-20-23 DRAWN: AVM — PROJECT #: S371901 CHECKED: JEK

StormTech® Chamber System — 888-892-2694 | WWW.STORMTECH.COM — 4640 TRUEMAN BLVD HILLIARD, OH 43026

SHEET 4 OF 11

Walker Architects
2035 NW 13TH STREET GAINESVILLE, FL 32609
T: 352.672.6448 www.walker-arch.com AA26002009

DANIEL H. YOUNG

Daniel H. Young, State of Florida, Professional Engineer, License No. 70780

This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Signature.

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MG mitchell + gulledge engineering
MITCHELL GULLEDGE ENGINEERING, INC.
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GAINESVILLE, FL 32601
FL LICENSE EB-31501
T: 352.745.3991
www.mitchellgulledge.com

IMEG The FUTURE. Built Smarter.
9133 R.G. SKINEER PARKWAY, SUITE 1
JACKSONVILLE, FL

SUBMITTAL:		ISSUE DATE:
100% CONSTRUCTION DOCUMENTS		4/11/2024
REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

UNDERGROUND STORMWATER MANAGEMENT FACILITY DETAILS

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C2.20

Walker Architects
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T: 352.672.6448 www.walker-arch.com AA26002009

DANIEL H. YOUNG

Daniel H. Young, State of Florida, Professional Engineer, License No. 70780
This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Signature.
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CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

UNDERGROUND STORMWATER MANAGEMENT FACILITY DETAILS

PROJECT NO.:	23-204	DRAWN BY:	TFC
		CHECKED BY:	TJH

C2.21

PROPOSED LAYOUT SMF-2B

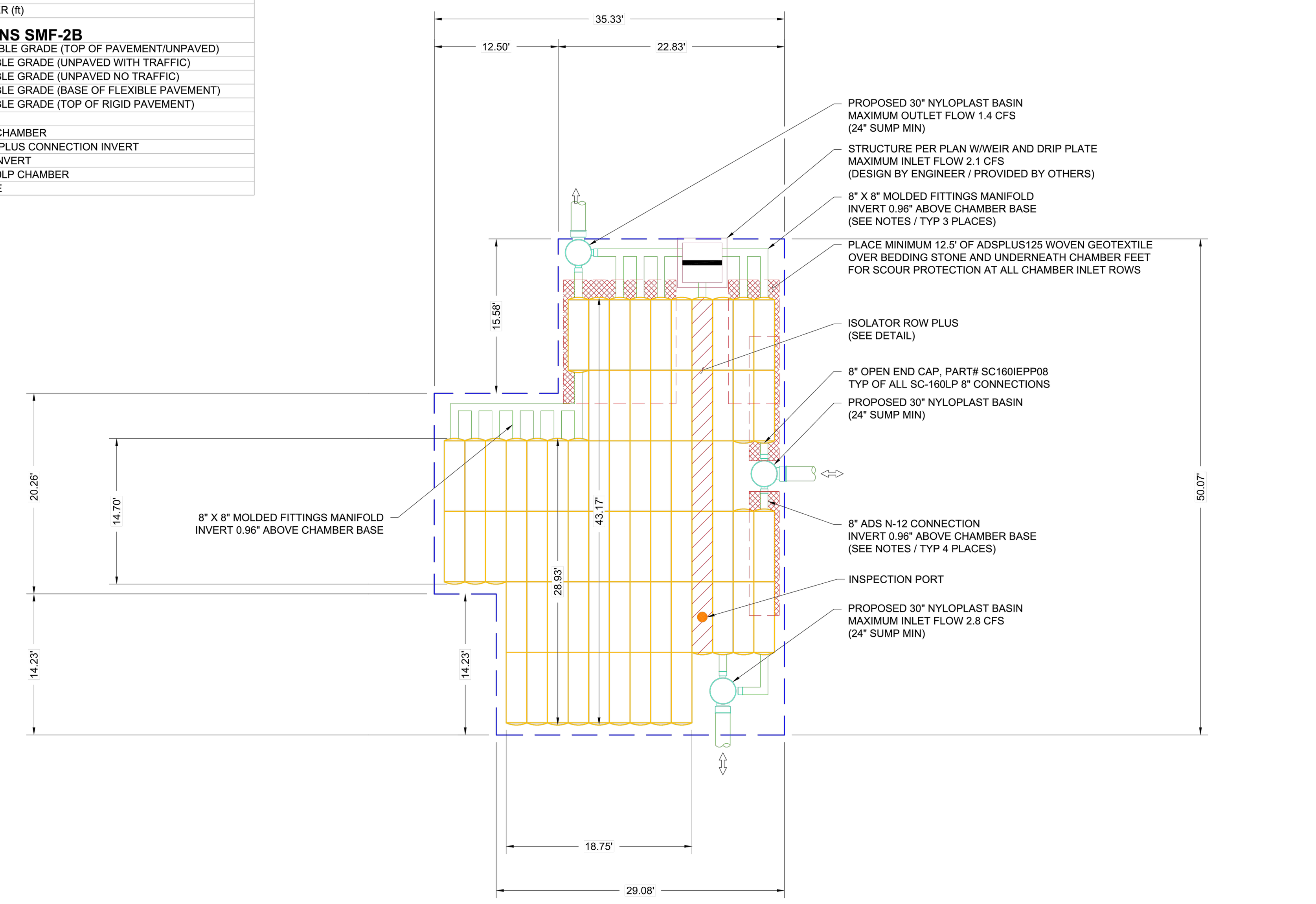
71	STORMTECH SC-160LP CHAMBERS
38	STORMTECH SC-160LP END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
1486	SYSTEM AREA (ft²)
171	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS SMF-2B

22.90	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
14.57	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
14.07	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
14.07	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
14.07	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
13.40	TOP OF STONE
12.90	TOP OF SC-160LP CHAMBER
11.98	8" ISOLATOR ROW PLUS CONNECTION INVERT
11.98	8" X 8" MANIFOLD INVERT
11.90	BOTTOM OF SC-160LP CHAMBER
11.40	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.



CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL
DATE: 09-20-23 DRAWN: AVM
PROJECT #: S371901 CHECKED: JEK
StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM
ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026
SHEET 5 OF 11

PROPOSED LAYOUT SMF-2C

105	STORMTECH SC-160LP CHAMBERS
76	STORMTECH SC-160LP END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
2252	SYSTEM AREA (ft²)
224	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS SMF-2C

23.35	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
15.02	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
14.52	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
14.52	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
14.52	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
13.85	TOP OF STONE
13.35	TOP OF SC-160LP CHAMBER
12.43	8" ISOLATOR ROW PLUS CONNECTION INVERT
12.43	8" X 8" MANIFOLD INVERT
12.35	BOTTOM OF SC-160LP CHAMBER
11.85	BOTTOM OF STONE

NOTES

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- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
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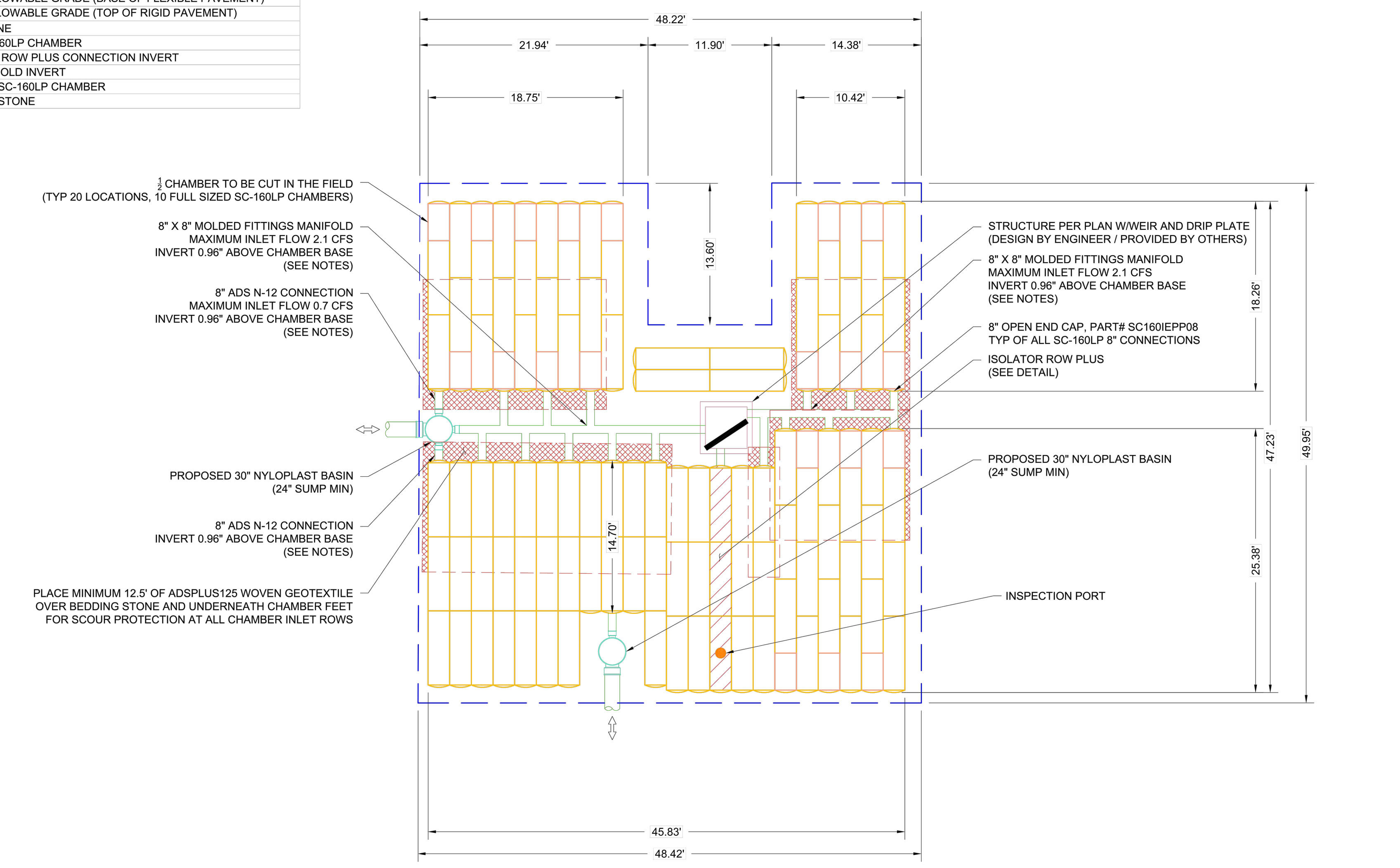

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SHEET 6 OF 11

PROPOSED LAYOUT SMF-3A

52	STORMTECH SC-160LP CHAMBERS
36	STORMTECH SC-160LP END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
1252	SYSTEM AREA (ft²)
146	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS SMF-3A

23.40	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
15.07	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
14.57	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
14.57	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
14.57	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
13.90	TOP OF STONE
13.40	TOP OF SC-160LP CHAMBER
12.48	8" ISOLATOR ROW PLUS CONNECTION INVERT
12.48	8" X 8" MANIFOLD INVERT
12.40	BOTTOM OF SC-160LP CHAMBER
11.90	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
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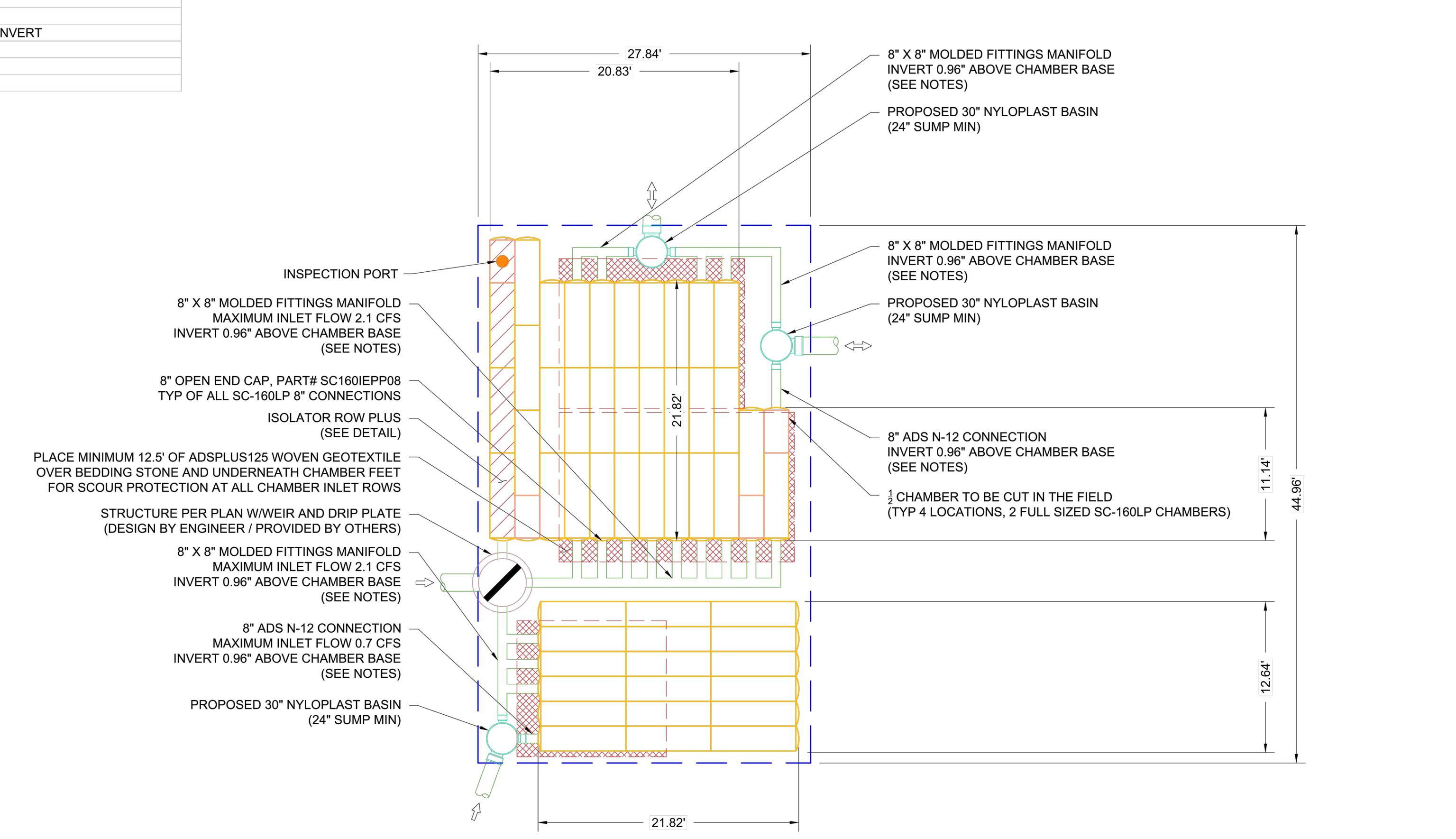

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SHEET 7 OF 11

PROPOSED LAYOUT SMF-3B

53	STORMTECH SC-160LP CHAMBERS
24	STORMTECH SC-160LP END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
1197	SYSTEM AREA (ft²)
143	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS SMF-3B

22.75	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
14.42	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
13.92	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
13.92	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
13.92	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
13.25	TOP OF STONE
12.75	TOP OF SC-160LP CHAMBER
11.83	8" ISOLATOR ROW PLUS CONNECTION INVERT
11.83	8" X 8" MANIFOLD INVERT
11.75	BOTTOM OF SC-160LP CHAMBER
11.25	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
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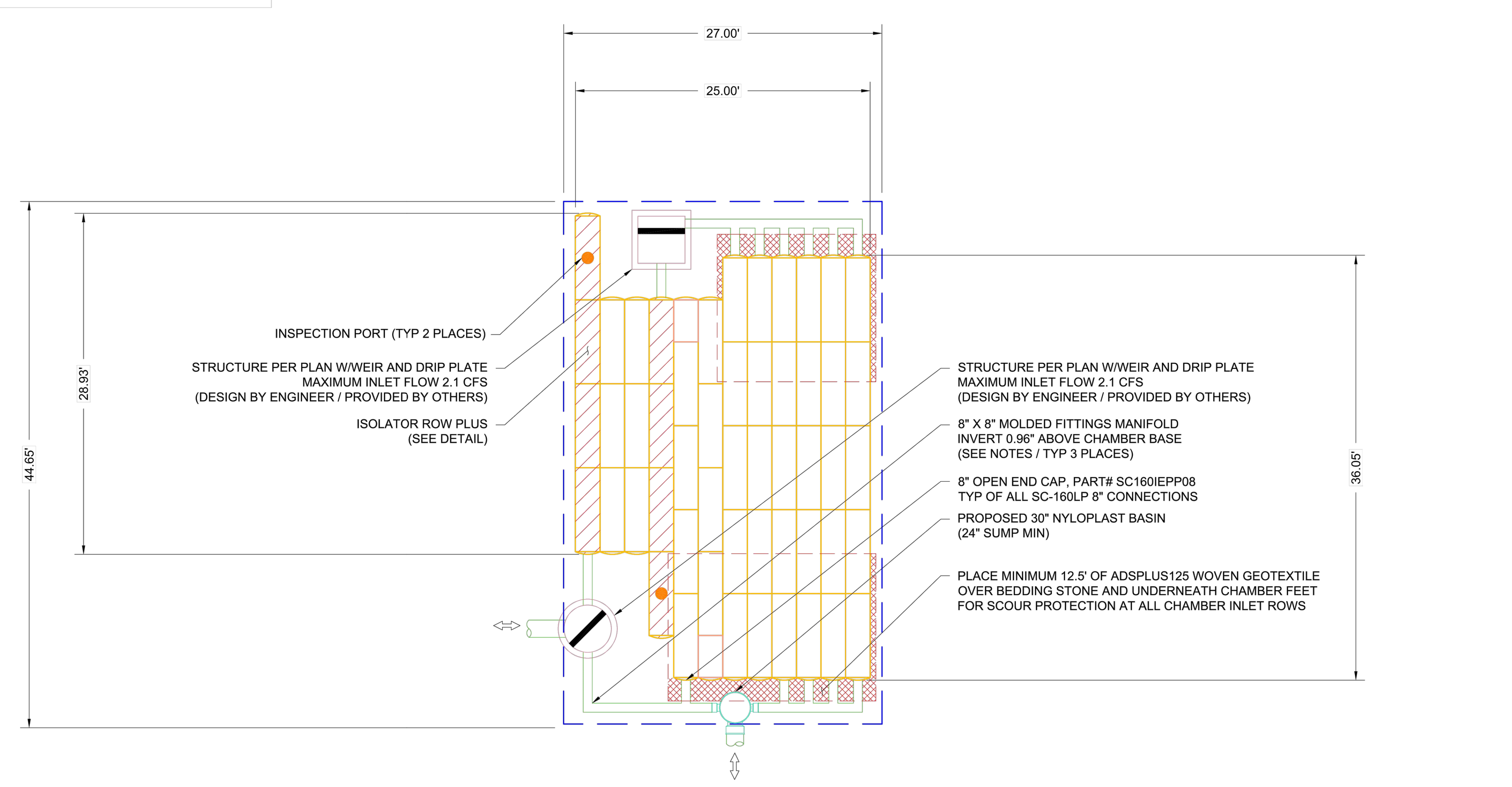

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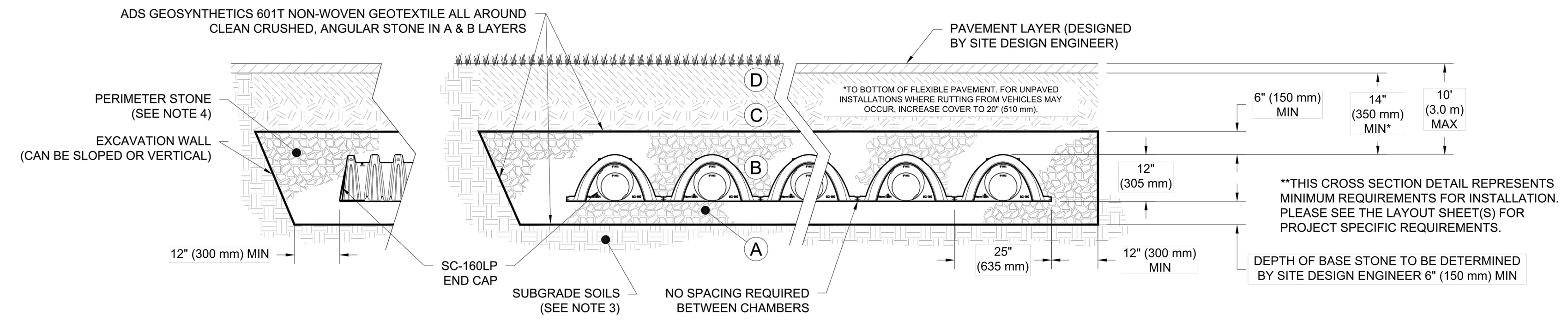
ACCEPTABLE FILL MATERIALS: STORMTECH SC-160LP CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 14" (355 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 1.5"
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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ADS
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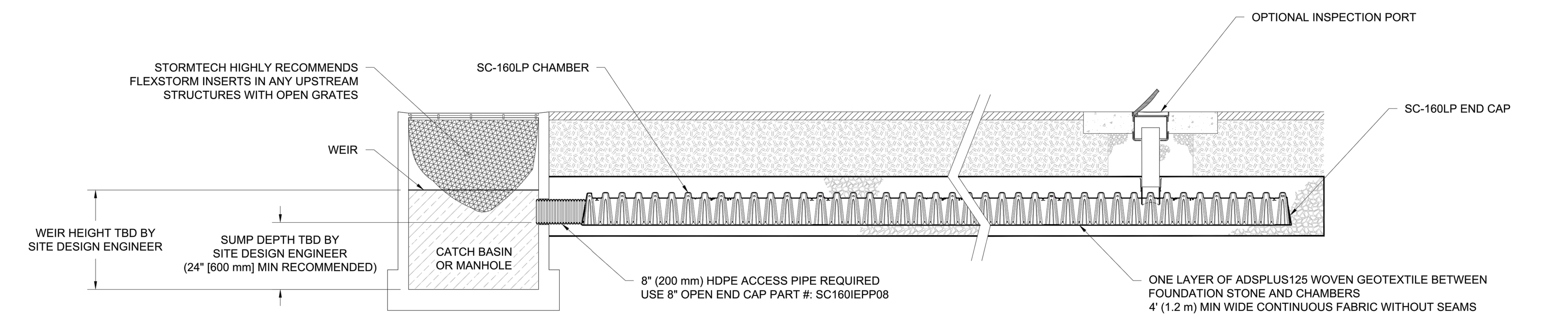


SC-160LP ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

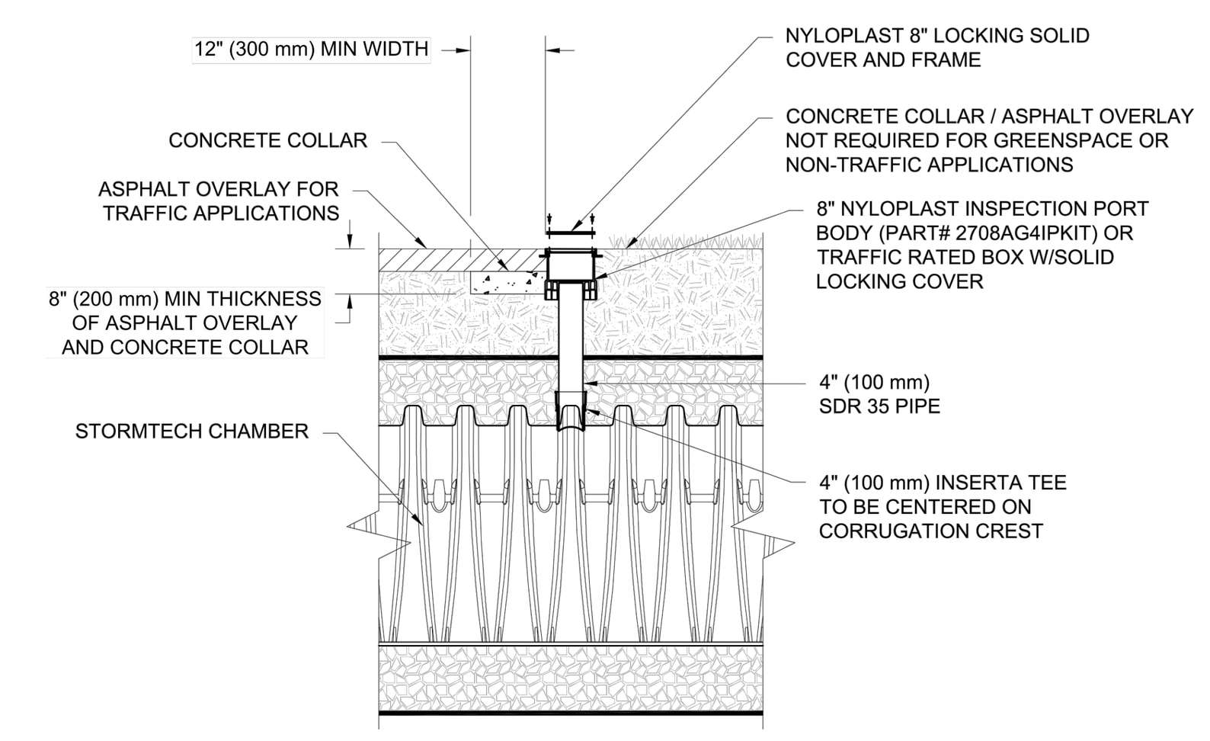
STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)
NTS

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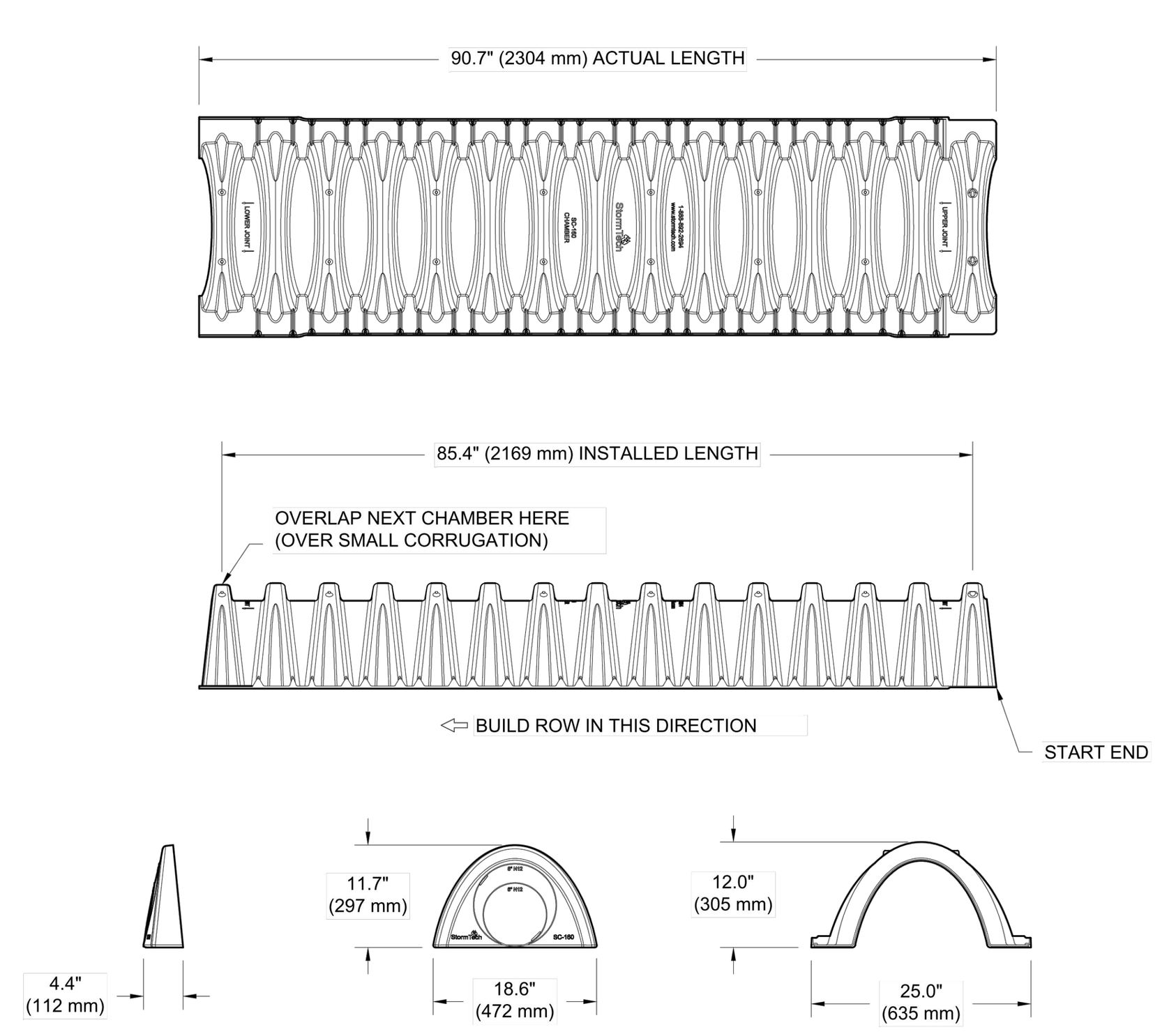
SC-160LP TECHNICAL SPECIFICATION
NTS

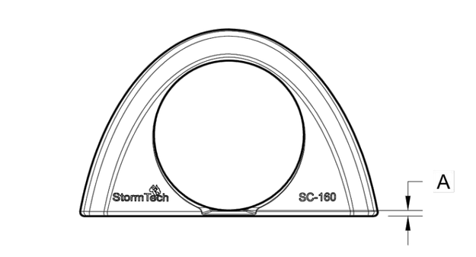


NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	25.0" X 12.0" X 85.4"	(635 mm X 305 mm X 2169 mm)
CHAMBER STORAGE	6.85 CUBIC FEET	(0.19 m³)
MINIMUM INSTALLED STORAGE*	16.0 CUBIC FEET	(0.45 m³)
WEIGHT	24.0 lbs.	(10.9 kg)

*ASSUMES 6" (152 mm) ABOVE, 6" (152 mm) BELOW, AND STONE BETWEEN CHAMBERS WITH 40% STONE POROSITY.

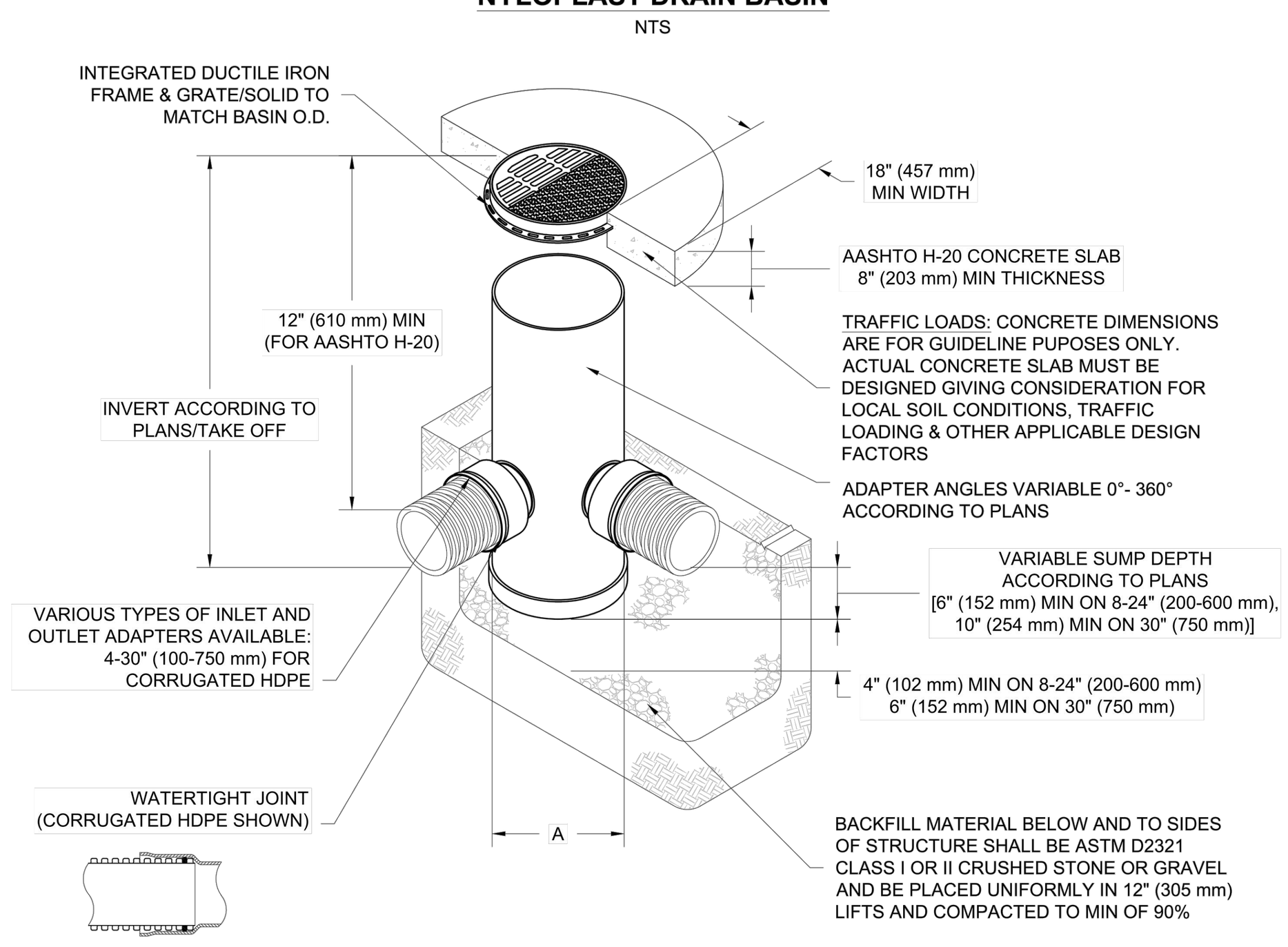
PART #	STUB	A
SC160EPP	6" (150 mm)	0.66" (16 mm)
	8" (200 mm)	0.80" (20 mm)
SC160EPP08	8" (200 mm)	0.96" (24 mm)



ALL STUBS ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

NOTE: ALL DIMENSIONS ARE NOMINAL

NYLOPLAST DRAIN BASIN
NTS



NOTES
1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: **WWW.NYLOPLAST-US.COM**
6. TO ORDER CALL: **800-821-6710**

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

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2035 NW 13TH STREET GAINESVILLE, FL 32609
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DANIEL H. YOUNG
Daniel H. Young, State of Florida, Professional Engineer, License No. 70780
This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Signature.
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FL PE No. 70780

CHW Professional Consultants
11801 RESEARCH DRIVE
ALACHUA, FL 32615
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CA Lic. No: 5075

MG mitchell + gulledge engineering
MITCHELL GULLEDGE ENGINEERING, INC.
204 SW 4TH AVENUE
GAINESVILLE, FL 32601
FL LICENSE EB-31501
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www.mitchellgulledge.com

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JACKSONVILLE, FL

SUBMITTAL:		ISSUE DATE:
100% CONSTRUCTION DOCUMENTS		4/11/2024
REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

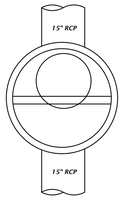
633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

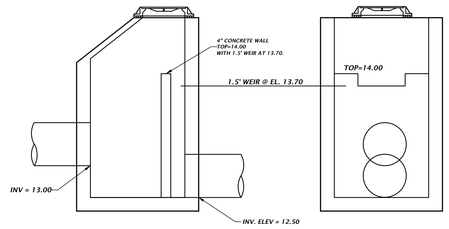
DRAWING TITLE:
UNDERGROUND STORMWATER MANAGEMENT FACILITY DETAILS

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C2.22

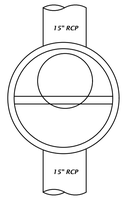


TOP VIEW

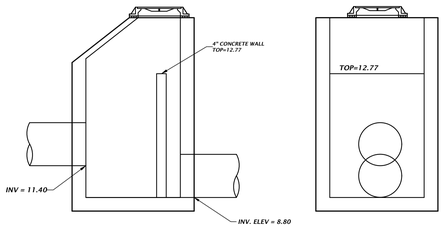


FRONT VIEW SIDE VIEW

OUTFALL STRUCTURE DS-1
NTS

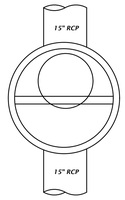


TOP VIEW



FRONT VIEW SIDE VIEW

OUTFALL STRUCTURE DS-2
NTS



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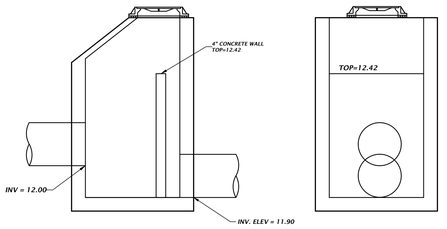
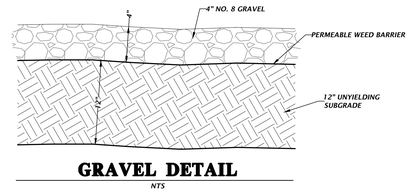
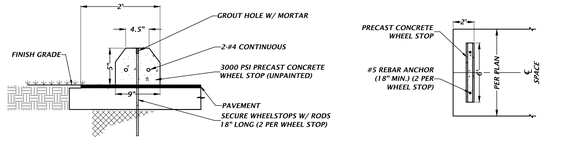


FRONT VIEW SIDE VIEW

OUTFALL STRUCTURE DS-3
NTS



GRAVEL DETAIL
NTS



WHEEL STOP DETAIL
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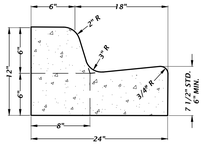
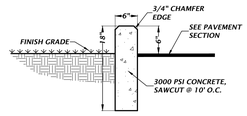


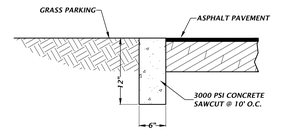
NOTE:

WHEN USED ON THE HIGH SIDE OF ROADWAY, THE CROSS-SLOPE OF THE GUTTER SHALL MATCH THE CROSS-SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6".

TYPE F CONCRETE CURB AND GUTTER DETAIL
NTS



6" BOX CURB DETAIL
NTS



FLUSH CURB DETAIL
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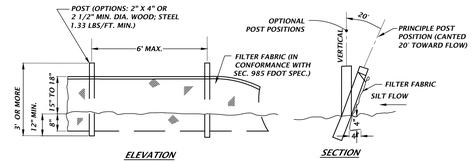

ELEVATION SECTION

TYPE III SILT FENCE DETAIL
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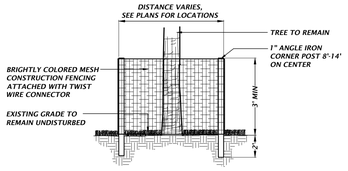
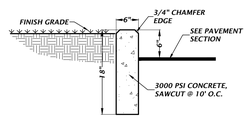


TREE PROTECTION DETAIL
NTS



TYPICAL 6" CURB DETAIL
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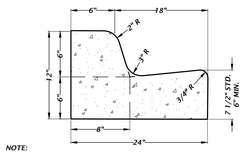
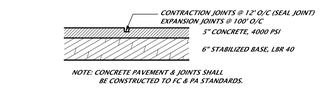


NOTE:

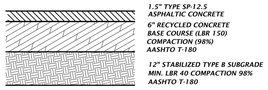
WHEN USED ON THE HIGH SIDE OF ROADWAY, THE CROSS-SLOPE OF THE GUTTER SHALL MATCH THE CROSS-SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6".

TYPE F CONCRETE CURB AND GUTTER DETAIL
NTS



NOTE: CONCRETE PAVEMENT & JOINTS SHALL BE CONSTRUCTED TO FC & FA STANDARDS.

HEAVY DUTY CONCRETE DETAIL
NTS

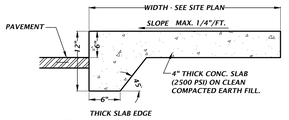


STANDARD DUTY ASPHALT DETAIL
NTS

NOTES:

1. SAWCUT CONTROL JOINTS SHALL BE CONSTRUCTED 5 FEET ON CENTER
2. EXPANSION JOINTS WITH PREFORMED JOINT FILLER SHALL BE CONSTRUCTED BETWEEN ALL FIXED OBJECTS AND WALK AND AT CONSTRUCTION JOINTS.

NOT ADJACENT TO PAVEMENT
NTS

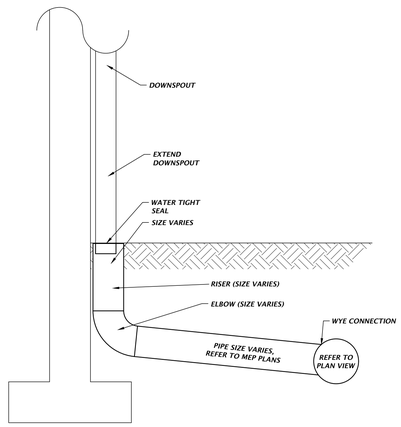


NOTES:

1. SAWCUT CONTROL JOINTS SHALL BE CONSTRUCTED 5 FEET ON CENTER
2. EXPANSION JOINTS WITH PREFORMED JOINT FILLER SHALL BE CONSTRUCTED BETWEEN ALL FIXED OBJECTS AND WALK AND AT CONSTRUCTION JOINTS.

ADJACENT TO PAVEMENT
NTS

CONCRETE SIDEWALK DETAILS
NTS



DOWNSPOUT CONNECTION DETAIL
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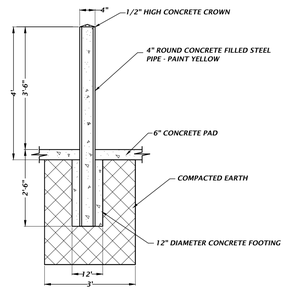

PIPE BOLLARD DETAIL
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Walker Architects
2035 NW 13TH STREET GAINESVILLE, FL 32609
T: 352.672.6448 www.walker-arch.com AA26002009

DANIEL H. YOUNG

Daniel H Young, State of Florida, Professional Engineer, License No. 70780

This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Signature.

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FL PE No. 70780

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CA Lic. No: 5075

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204 SW 4TH AVENUE
GAINESVILLE, FL 32601
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www.mitchellgulledge.com

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9133 R.G. SKINEER PARKWAY, SUITE 1
JACKSONVILLE, FL

SUBMITTAL:	ISSUE DATE:
100% CONSTRUCTION DOCUMENTS	4/11/2024

REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

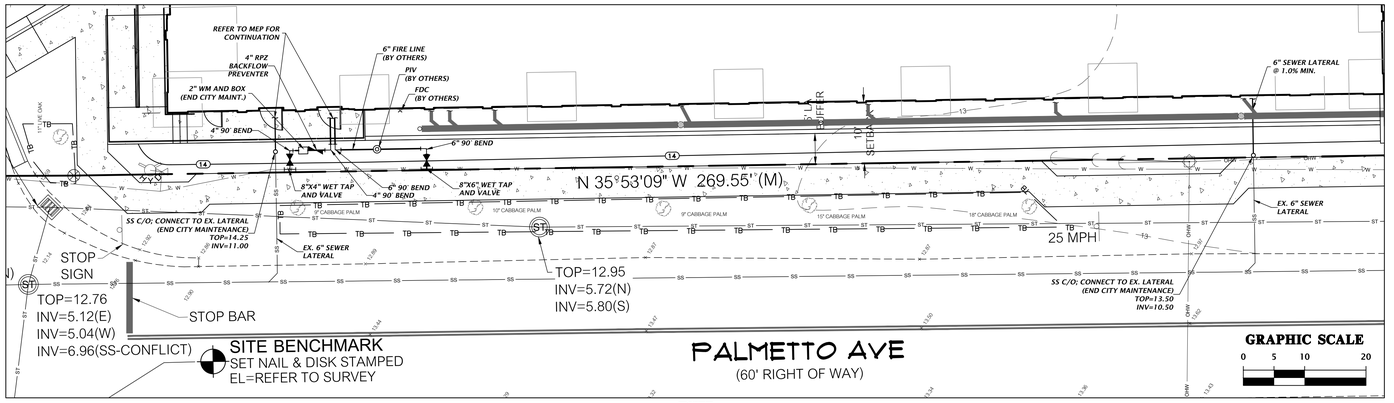
633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
CONSTRUCTION DETAILS

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C2.30



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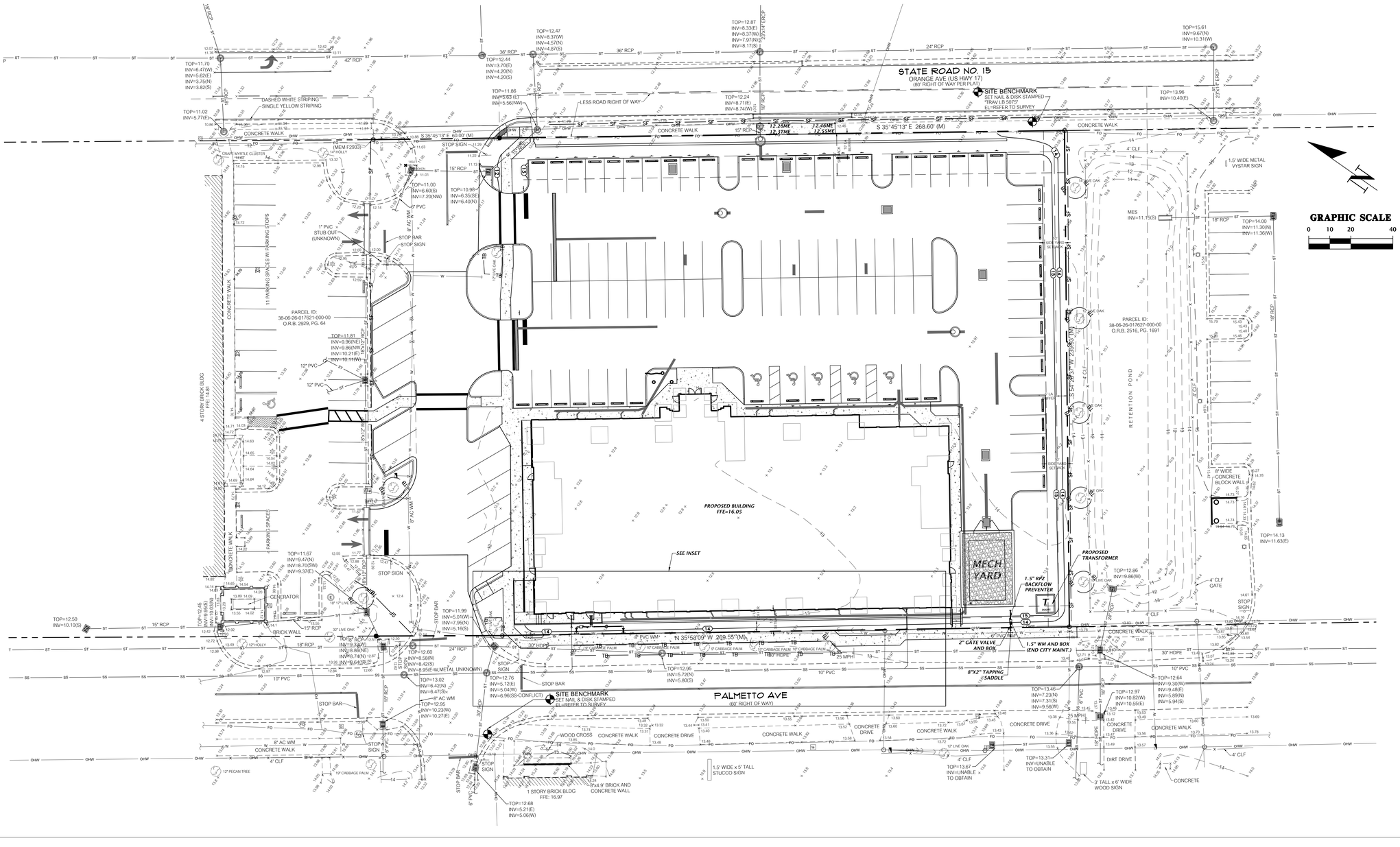

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T: 352.672.6448 www.walker-arch.com AA26002009

DANIEL H. YOUNG
Daniel H. Young, State of Florida, Professional Engineer, License No. 70780
This item has been electronically signed and sealed by Daniel H. Young, P.E. on 07/11/2024 using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
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SUBMITTAL:	ISSUE DATE:
100% CONSTRUCTION DOCUMENTS	4/11/2024

REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

DETAILED UTILITY SITE PLAN

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C3.10

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Item #7.

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REGISTERED LANDSCAPE ARCHITECT CAELI MCGOWAN TOLAR LA 6667260 STATE OF FLORIDA

CHW Professional Consultants
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LA0001683

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SUBMITTAL:	ISSUE DATE:
100% CONSTRUCTION DOCUMENTS	7/9/2024

REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

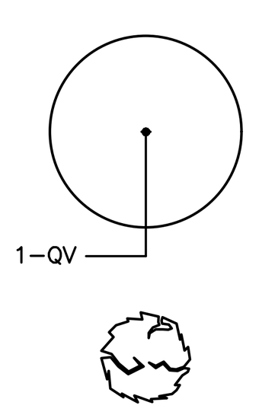
DRAWING TITLE:

LANDSCAPE DETAILS, NOTES, AND CALCULATIONS

PROJECT NO.: 23-0204	DRAWN BY: LR
	CHECKED BY: JMS

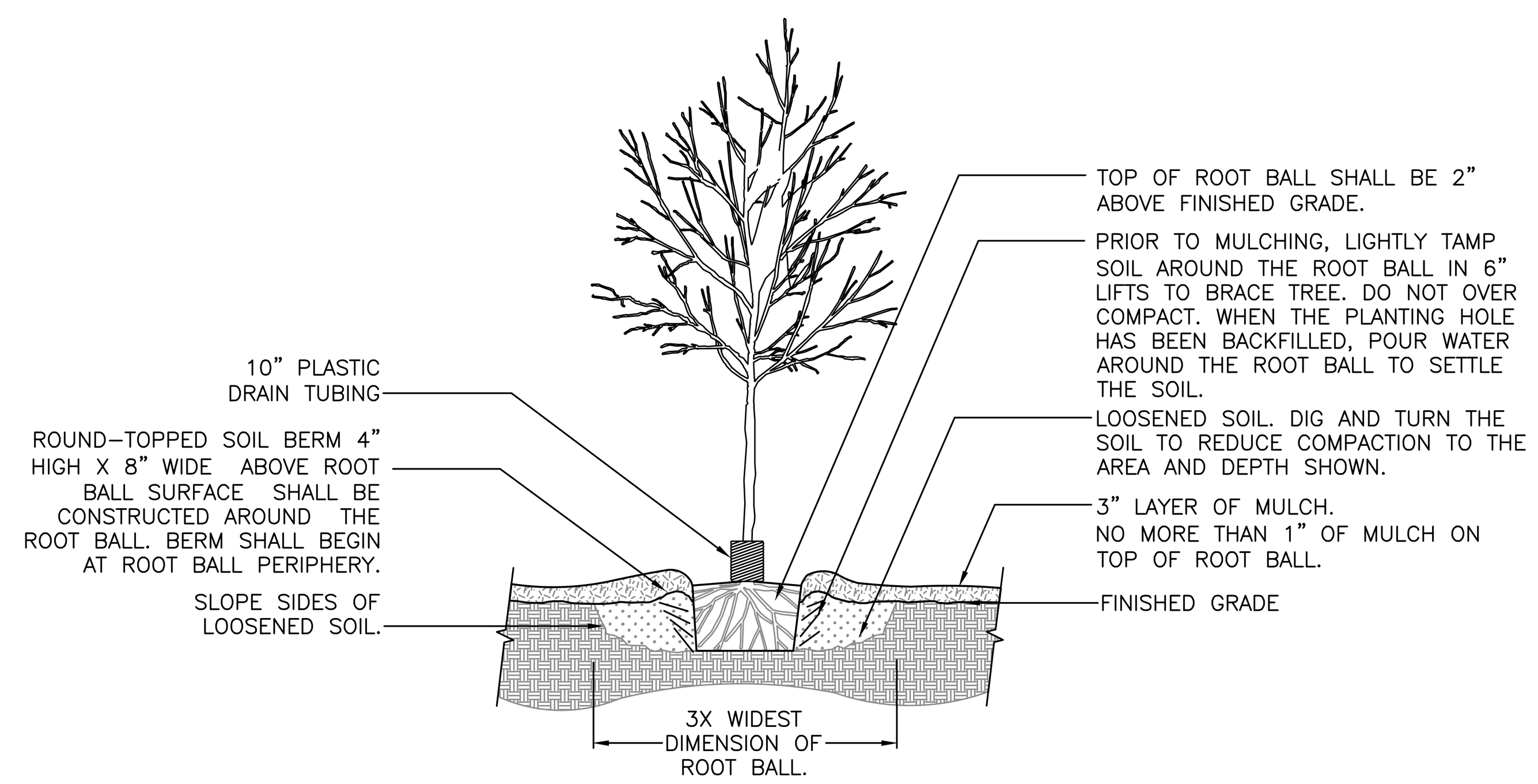
LS-1

LEGEND

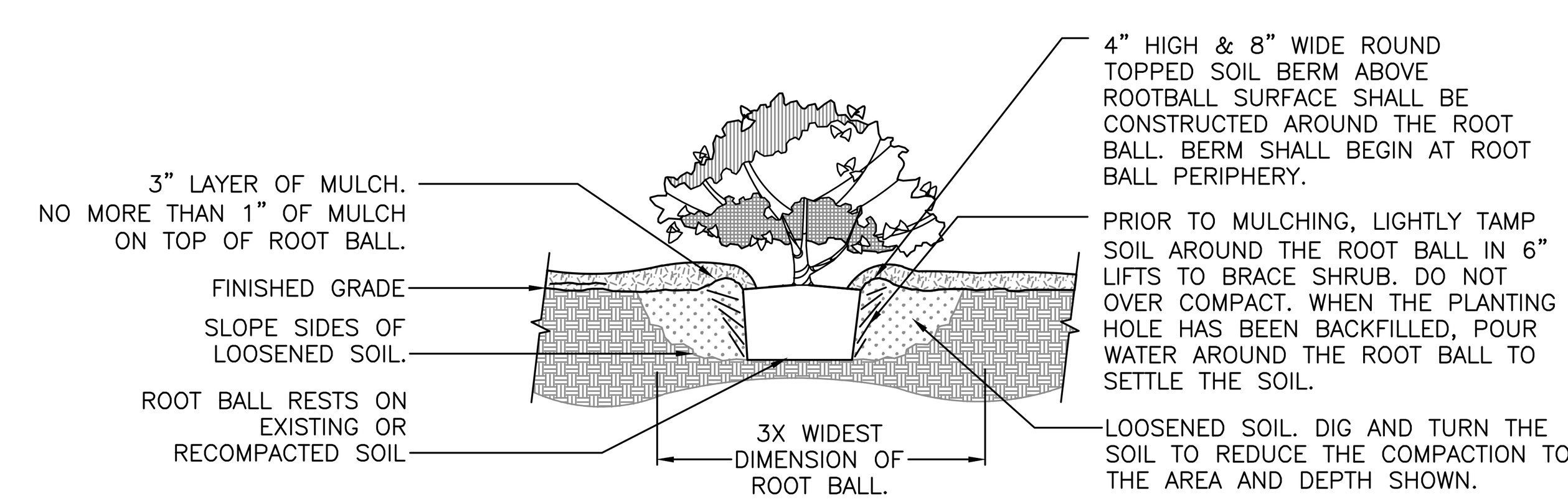


NEW TREES TO BE ADDED

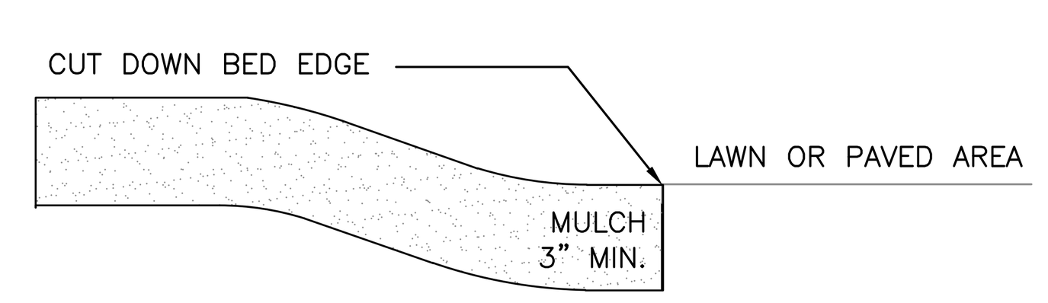
EXISTING TREES TO REMAIN



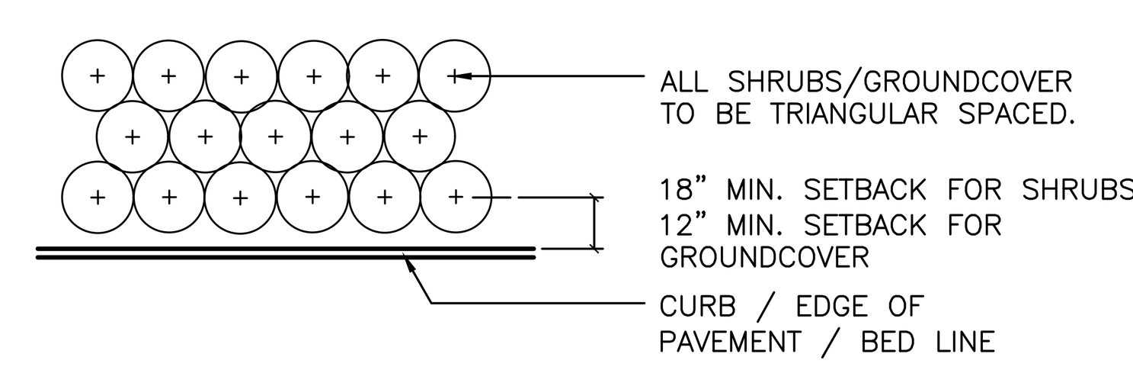
1 TREE PLANTING DETAIL
SCALE: N.T.S.



2 SHRUB PLANTING DETAIL
SCALE: N.T.S.



3 MULCH DETAIL
SCALE: N.T.S.



NOTE: THE PERIMETER OF ALL CURVED PLANTING BEDS SHALL BE PLANTED WITH A ROW OF SHRUBS AS SHOWN IN THE PLANS AND AT THE SPACING SHOWN IN THE PLANT LIST. INTERIOR PORTIONS OF EACH BED SHALL BE PLANTED AT APPROPRIATE SPACING ACCORDING TO THIS PLANT SPACING DETAIL.

4 SHRUB PLANTING DETAIL
SCALE: N.T.S.

GENERAL NOTES

ALL ASPHALT, LIMEROCK, AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM PLANTING BEDS AND SOD AREAS PRIOR TO LANDSCAPE INSTALLATION. IF ENCOUNTERED DURING CONSTRUCTION OR INSTALLATION, THESE SHALL BE EXCAVATED AND REMOVED FROM THE SITE. PLANTING DEPTH OF SOIL IN SUCH AREAS SHOULD BE AT LEAST 3'. IF FILL MUST BE ADDED, IT MUST BE FLORIDA CLEAN DEEP FILL (FREE OF WEED SEEDS) WITH pH 6.0 – 7.5.

ALL LANDSCAPED AREAS SHALL BE MULCHED WITH 3" THICKNESS OF MULCH. PINE BARK MULCH SHALL BE USED IN ALL AREAS.

NEW TREES OUTSIDE OF MULCHED LANDSCAPED BEDS WILL BE PROTECTED FROM MOWER AND STRING TRIMMER DAMAGE WITH 10" OF PLASTIC DRAIN TUBING.

LEADER SHOOTS AND MAIN STRUCTURAL LIMBS OF TREES SHALL NOT BE TOPPED OR PRUNED. TREES WILL BE STAKED AS NEEDED. GUYLINES WILL BE OF NON-SYNTHETIC BIODEGRADABLE MATERIAL.

REFER TO CIVIL PLANS FOR TREE BARRICADE DETAILS AND INFORMATION.

INVASIVE EXOTIC PLANT MATERIAL

ALL INVASIVE PLANT SPECIES TO BE REMOVED FROM SITE PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

GRASSING

ALL DISTURBED AND UNPAVED AREAS TO BE GRASSED WITH SOD THAT IS FREE OF NOXIOUS WEEDS INCLUDING TROPICAL SODA APPLE OR SHALL BE SEEDED AND MULCHED. SEE CIVIL SITE PLANS FOR ADDITIONAL RELATED INFORMATION.

PLANT MATERIAL

ALL PLANT MATERIAL TO BE FLORIDA NO.1 OR BETTER, GRADED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF AGRICULTURE, DIVISION OF PLANT INDUSTRY'S 'GRADES AND STANDARDS FOR NURSERY PLANTS', CURRENT EDITION AT THE TIME PLANS ARE ISSUED. CALL LANDSCAPE ARCHITECT PRIOR TO PURCHASING ANY PLANT MATERIAL FOR AN ON SITE INSPECTION AND REVIEW OF LANDSCAPE PLAN.

PLANT QUANTITIES SHOWN ARE FOR PERMITTING PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM ALL QUANTITIES SHOWN ON THE PLAN.

IRRIGATION

LANDSCAPE IRRIGATION TO BE PROVIDED BY AUTOMATIC IRRIGATION SYSTEM. BUBBLERS SHALL BE INSTALLED BY EACH TREE AS PART OF THE IRRIGATION SYSTEM.

TREE CREDITS Sec. 113-279(b)

TREES PRESERVED ABOVE 12"

DBH/SPECIES	TREE CREDITS
32" LO	48"
18"17" LO	35"
11" LO	11"
12" LO	12"
14" HOLLY	7"

= 113" TOTAL TREE CREDITS AGAINST LANDSCAPE REQUIREMENTS

PERIMETER LANDSCAPING CALCULATIONS Sec. 113-244(b)(1)

LOCATION	BUFFER LENGTH	REQUIRED LANDSCAPE	PROVIDED LANDSCAPE
NORTHERN PERIMETER ALONG ORANGE AVE	250 L.F.	1 SHADE TREE PROVIDED EVERY 50 LINEAR FEET & CONTINUOUS SHRUB = 5 SHADE TREES & CONTINOUS HEDGE	5 SHADE TREES CONTINOUS HEDGE
SOUTHERN PERIMETER ALONG PALMETTO AVE	215 L.F.	1 SHADE TREE PROVIDED EVERY 50 LINEAR FEET & CONTINUOUS SHRUB = 4 SHADE TREES & CONTINOUS HEDGE	4 TREE CREDITS CONTINOUS HEDGE

INTERIOR LANDSCAPING CALCULATIONS Sec. 113-244(b)(2)

PROJECT SITE AREA....................63,600 S.F.

TOTAL REQUIRED TREES PER 1,500 S.F.
(FOR THE FIRST 10,500 S.F.
OF THE PROJECT SITE AREA)....................7 TREES

TOTAL REQUIRED TREES PER 4,000 S.F.
(FOR THE REMAINDER OF THE
PROJECT SITE AREA)....................13 TREES

TOTAL REQUIRED TREES....................20 TREES

TOTAL REQUIRED INCHES
(AT 2"/TREE)....................40"

TOTAL PROVIDED INCHES
(FROM APPLIED TREE CREDITS)....................40"

TOTAL REMAINDER TREE CREDITS....................76"

TREE MITIGATION CALCULATIONS Sec. 113-279(a)

CATEGORY	MITIGATION CALCULATIONS
INCH-FOR-INCH REPLACEMENT	REMOVED LIVES OAKS DBH/SPECIES 10" LO 12" LO 13" LO TOTAL REMOVED LIVE OAK INCHES....................35" TOTAL REQUIRED REPLACEMENT LIVE OAKS INCHES....................35" TOTAL PROVIDED LIVE OAK INCHES....................26" TOTAL DEFICIT LIVE OAK INCHES....................9"
⅓ REPLACEMENT	REMOVED TREES ABOVE 12" DBH/SPECIES 18" PALM 18" PALM 15" PALM 20" PALM TOTAL REMOVED TREE INCHES....................71" TOTAL REQUIRED REPLACEMENT TREE INCHES (AT ⅓ REPLACEMENT)....................24"
TOTAL TREE MITIGATION	TOTAL MITIGATION INCHES REQUIRED....................33" TOTAL MITIGATION PROVIDED....................30" 2 AR @ 2.0" = 4" 8 CV @ 1.5" = 12" 2 LIM @ 2.0" = 4" 5 QO @ 2.0" = 10" TOTAL MITIGATION INCHES DEFICIT....................3" TOTAL MITIGATION PAYMENT: DEFICIT PAYMENT ($148/INCH)....................$444.00 **TOTAL PAYMENT REQUIRED....................$444.00**

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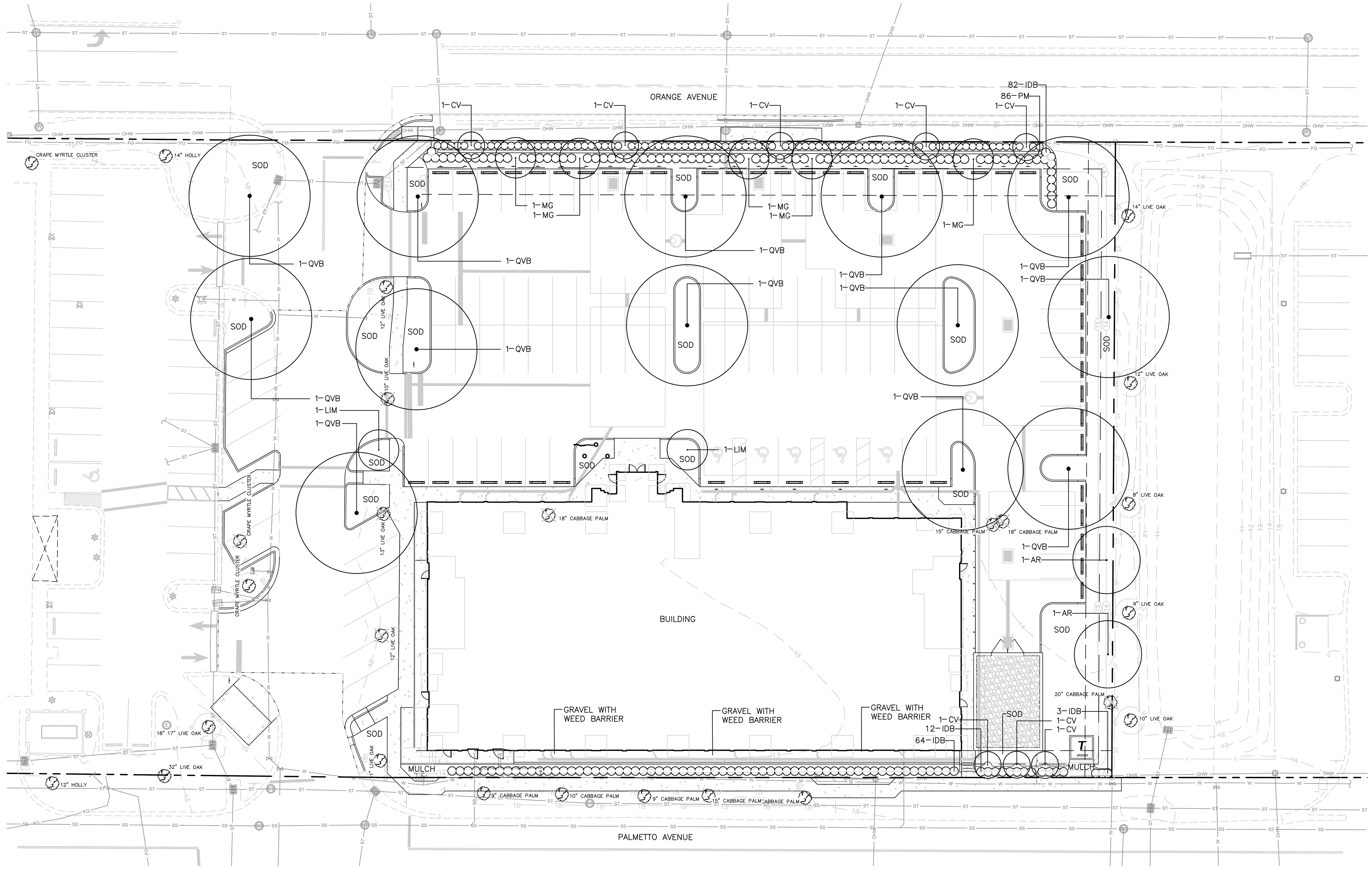

KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG
It's fast, it's free, it's the law.
Call 811 two business days before digging

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
TREES				
AR	2	ACER RUBRUM 'FLORIDA FLAME'	FLORIDA FLAME RED MAPLE	30 GAL, 11' HT, 3' SPR, 2" CAL
CV	8	CHIONANTHUS VIRGINICUS	WHITE FRINGETREE	15 GAL., 9' HT., 30" SPR., 1-1/2" CAL
LIM	2	LAGERSTROEMIA INDICA 'MUSKOGEE'	MUSKOGEE CRAPE MYRTLE	30 GAL, 10' HT, 4' SPR, 2" CAL
MG	5	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM SOUTHERN MAGNOLIA	30 GAL, 12' HT, 42" SPR, 2" CAL
QVB	13	QUERCUS VIRGINIANA 'BOARDWALK'	BOARDWALK LIVE OAK	30 GAL, 12' HT, 54" SPR, 2" CAL
SHRUBS				
IDB	161	ILEX CORNUTA 'DWARF BURFORDII'	DWARF BURFORD HOLLY	3 GAL, 24" HT, 16" SPR
PM	86	PODOCARPUS MACROPHYLLUS 'DWARF PRINGLES'	DWARF PRINGLES PODOCARPUS	3 GAL., 24" HT., 18"SPR.

CODE	BOTANICAL NAME	COMMON NAME	SIZE
SOD/SEED			
SOD	PASPALUM NOTATUM 'ARGENTINE'	BAHIA GRASS	WEED FREE AND SAND GROWN SOD

GRAPHIC SCALE
0 10 20 40

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LA0001683

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JACKSONVILLE, FL

SUBMITTAL:	ISSUE DATE:
100% CONSTRUCTION DOCUMENTS	7/9/2024

REVISION	DESCRIPTION	DATE

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

LANDSCAPE PLAN

PROJECT NO.: 23-0204 DRAWN BY: LR
CHECKED BY: JMS

LS-2

Stormwater Management System Report

Clay County Economic Development Building

Prepared For: Clay County

Submitted To: City of Green Cove Springs, Florida Department of Environmental Protection, and Florida Department of Transportation

Date: 10/2/2023
PN# 23-0204
PM: Travis Hastay

Clay County
P.O. Box 1366
Green Cove Springs, FL 32043

www.chw-inc.com

CHW Professional Consultants

Engineer's Certification Statement

I hereby certify that the design of the stormwater management systems for the project known as Clay County Eco Development has been designed substantially in accordance with the City of Green Cove Springs, Florida Department of Transportation, and St. Johns River Water Management District applicable rules and regulations.

Nicola R Cowap

Digitally signed by Nicola R Cowap
DN: CN=Nicola R Cowap, O=Nicola R Cowap, L=Alachua, S=Florida, C=US
Date: 2024.06.19 09:54:53-04'00'

Nicola R. Cowap,
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Introduction

The Clay County Eco Development project proposes the construction of a 2 story building with associated parking, underground stormwater, and utility infrastructure that will be completed over several phases. The total proposed site area is ±1.78 acres with a drainage area of ±1.23 acres, located along the southwest corner of Hwy 17 (Orange Avenue) and Walburg St. in Green Cove Springs, Florida.

The project site is located on tax parcel #38-06-26-017628-000-00 according to the Clay County Property Appraiser's website. Figure 1 provides a Location Map and Figure 2 depicts the site on a portion of the Green Cove Springs USGS Quadrangle Map. The site is located in Section 38, Township 6, Range 26 in Clay County, Florida.

Refer to the accompanying engineering plans for details about the proposed construction and demolition regarding this project.

Design Criteria

The design criteria for the proposed stormwater management facility (SMF) are based upon the criteria set forth by the City of Green Cove Springs (GCS), Florida Department of Transportation (FDOT) and the St. Johns River Water Management District (SJRWMD) for dry underground retention systems designed in an open watershed. The criteria are as follows:

1. Provide Peak Discharge Rate Attenuation: Attenuate the post-development peak discharge rates to be less than the pre-development peak discharge rates for:
    a. the 25-year 24-hour and the Mean Annual 24-hour storm events (SJRWMD).
    b. the 1-hour, 2-hour, 4-hour, 8-hour, and 72-hour storms for the 3-year, 5-year, 10-year, 25-year, 50-year, and 100-year return periods (FDOT).
    c. the 100-year, 24-hour storm (GCS).

2. Provide Water Quality Treatment Volume (WQTV): The minimum stormwater treatment volume shall be the runoff from the first 0.5 inch of runoff over the entire drainage area or 1.25 inches times the impervious area, whichever is greater, plus an additional 0.5 inch of runoff over the drainage area that must recover within 72 hours (SJRWMD).

3. Provide Volume Recovery: The retention system must provide capacity for:
    a. the appropriate treatment volume of the WQTV stormwater to infiltrate completely within 72 hours. The total volume must be available in the pond within 14 days after the end of the design storm event (SJRWMD).
    b. half of the volume to be infiltrated in 7 days and the total volume in 30 days (FDOT).

City of Green Cove Springs, FDOT, and SJRWMD also require that best management practices be employed to control erosion, sedimentation, and that an operation and maintenance entity be established.

Site Characteristics

Physical characteristics of the site are described in the following sections. Additional details are provided in the accompanying Engineering plans.

Site Topography

The existing site is mostly an impervious area consisting of landscaping, buildings, drive aisles, and parking that drains to Walburg Street right-of-way to the northeast and Orange Ave (US-HWY 17) to the east. The project site is bordered by Orange Ave to the east, Bayard St. to the south, Palmetto Ave to the west, and Walburg St to the north. The site is moderately sloping from the southwest corner of the site to the north and northeast corner of the site. Elevations (NAVD 88) range from EL. ± 14.0' at the southwest corner to EL. ± 12.0' to the northeast. The site is located in an open basin and drains to the ROW on Orange Ave through Walburg St and by direct connection.

The entire site consists of Type 'A/D' soils per NRCS, which were modeled as Type 'D' soils. Refer to Figure 5 for a NRCS Soils Map.

Pre-Development Drainage

Pre-development drainage on the site consists of one watershed, Pre-development watershed #1 (Pre DA-1).

Pre-Development Watershed #1 (Pre DA-1) comprises the entirety of the site and is half developed. The watershed is ±1.21 acres in size and includes ±0.71 acres of existing impervious. Stormwater runoff occurs via sheet flow offsite into a storm pipe in the Walburg St. ROW as well as a direct connection located on the northwest property line.

Refer to Figure 6 for more information on the pre-development watershed.

Post-Development Drainage

Post-Development drainage on the site consists of three watersheds: Post-Development Watershed #1 (WS-1), Post-Development Watershed #2 (WS-2), and Post-Development Watershed #3 (WS-3).

WS-1 consists of ±0.25 acres and includes ±0.23 acres of proposed impervious area including parking areas and drive aisles. Stormwater runoff from WS-1 will be routed via a stormwater pipe conveyance system and into SMF-1A and SMF-1B.

SMF-1A and SMF-1B are designed as interconnected dry retention underground stormwater management facilities. SMF-1A is designed with a bottom at el. 12.45' and a top at el. 14.45' and SMF-1B is designed with a bottom at el. 13 and a top at el. 15. Both systems will be constructed using ADS Stormtech SC-160LP and connected via an equalizer pipe. SMF-1A will discharge to SMF-2C via a 1.5' weir at el. 13.70'.

WS-2 consists of ±0.56 acres and includes ±0.28 acres of proposed building and ±0.27 acres of proposed parking areas, sidewalks, and drive aisles. Stormwater runoff from WS-2 will be routed via a stormwater pipe conveyance system and into SMF-2A, SMF-2B, and SMF-2C.

SMF-2A, SMF-2B and SMF-2C are designed as interconnected dry retention underground stormwater management facilities. SMF-2A is designed with a bottom at el. 12.10' and a top at el. 14.10', SMF-2B is designed with a bottom at el. 11.40' and a top at el. 13.40', and SMF-2C is designed with a bottom at el. 11.85' and a top at el. 13.85'. All three systems will be constructed using ADS Stormtech SC-160LP and connected via equalizer pipes. SMF-2B will discharge via a 3.50' weir at el. 12.77 to the adjacent Orange Ave ROW. This is the overall discharge point for the project where the peak discharge rates were determined.

WS-3 consists of ±0.42 acres and includes ±0.15 acres of proposed building and ±0.26 acres of proposed parking areas, sidewalks, and drive aisles. Stormwater runoff from WS-3 will be routed via a stormwater pipe conveyance system and into SMF-3A and SMF-3B.

SMF-3A and SMF-3B are designed as interconnected dry retention underground stormwater management facilities. SMF-3A is designed with a bottom at el. 11.90' and a top at el. 13.90' and SMF-3B is designed with a bottom at el. 11.25' and a top at el. 13.25'. Both systems will be constructed using ADS Stormtech SC-160LP and connected via equalizer pipes. SMF-3A will discharge via a 3.50' weir at el. 12.90 to SMF-2A.

Refer to Figure 7 for more information on the post-development watershed.

Soils Information

The National Resource Conservation Service (NRCS) Soil Survey for Clay County describes the near surface soil profile for the project area as *Leon fine sand (0-2%)* with a hydrologic soil group rating of 'A/D'. Refer to Figure 4 for the NRCS Soils Map.

Drainage Analysis

The proposed stormwater management systems have been designed to provide attenuation of the discharge rates for the FDOT open basin design storms and the Mean Annual, 24-hour storm. In addition, the stormwater management system provides the required water quality treatment volume.

Pre-development calculations were completed to determine the runoff rates for the existing conditions. Calculations for Pre-1, WS-1, WS-2, and WS-3 were completed to demonstrate that the required water quality treatment volume and discharge rate attenuation were met.

Appendix A contains details and calculations as well as a section for routing results, recovery analysis, hydraulic calculations, and general drainage calculations.

Analysis Methodology

The drainage analysis was conducted using the computer program ICPR (v4.07.02) to generate runoff hydrographs and route the runoff hydrographs through the proposed stormwater system. The required storm events were analyzed using SJRWMD and FDOT rainfall amounts for the pre-development and post-development watersheds.

Unit Hydrograph Parameters

Unit hydrograph parameters required for the drainage analysis include run-off curve number (CN), time of concentration (Tc), and drainage area. Values used in the analysis are summarized as follows:

Pre-Development Watershed #1 (Pre-1):

	Area (sf)	Area (ac)	Percent
Total Area:	52,615	1.21	100%
Existing Pavement	31,024	0.71	59%
Existing Building	1,795	0.04	3%
Open Space (Fair Condition, Type D Soil)	19,796	0.45	38%
CN =	**93**		
Tc =	10	min*	

Post-Development Watershed #1 (WS-1):

	Area (sf)	Area (ac)	Percent
Total Area:	10,810	0.25	100%
Proposed Building	0	0.00	0.0%
Proposed Pavement	10,030	0.23	92.8%
Proposed Sidewalk	652	0.01	6.0%
Open Space (Fair Condition, Type D Soil)	128	0.00	1.2%
		0.00	0.0%
CN =	97		
Tc =	10	min*	

Post-Development Watershed #2 (WS-2):

	Area (sf)	Area (ac)	Percent
Total Area:	10,810	0.25	100%
Proposed Building	0	0.00	0.0%
Proposed Pavement	10,030	0.23	92.8%
Proposed Sidewalk	652	0.01	6.0%
Open Space (Fair Condition, Type D Soil)	128	0.00	1.2%
		0.00	0.0%
CN =	97		
Tc =	10	min*	

Post-Development Watershed #3 (WS-3):

	Area (sf)	Area (ac)	Percent
Total Area:	24,344	0.56	100%
Proposed Building	12,007	0.28	49.3%
Proposed Pavement	11,103	0.25	45.6%
Proposed Sidewalk	924	0.02	3.8%
Open Space (Fair Condition, Type A Soil)	309	0.01	1.3%
		0.00	0.0%

CN =	97	
Tc =	10	min*

*Time of Concentration is assumed to be 10 minutes based on the FDOT minimum time of concentration.

Pond Storage

Stage-storage values for the proposed stormwater management facilities are provided in Appendix A.

Water Quality Treatment Volume (WQTV)

Per SJRWMD, the required water quality treatment volume (WQTV) required for a dry retention system is 0.5 inch of runoff over the drainage area or 1.25 inches over the impervious area plus another 0.5 inch of runoff over the drainage area for online systems. The SJRWMD also requires that the WQTV is drawn down in 72 hours. The WQTV per watershed is shown in Table 1, with recovery times for each SMF shown in Table 2. WQTV calculations are shown in Appendix A.

Table 1: Post Development Watershed Water Quality Treatment

Watershed	Required WQTV (cf)	Provided WQTV (cf)	Remaining WQTV (cf)*
WS-1	1,563	2,646	-1,083
WS-2	3,518	3,518	0
WS-3	2,601	1,713	950.57

*As the SMFs in WS-3 cannot provide the necessary WQTV for WS-3, overcompensation was provided in WS-1.

Table 2: Post Development Watershed Water Quality Treatment Recovery

Stormwater Management Facility	Peak Elevation at WQTV (ft)	Time to Recovery (hours)
SMF-1A	13.70	65
SMF-1B	14.00	11
SMF-2A	12.77	12
SMF-2B	12.77	48
SMF-2C	12.77	18
SMF-3A	13.00	19
SMF-3B	12.60	58

Run-off and Facility Routing Results

The routing results are summarized in the tables below which includes peak stage elevations and discharge rates for the analyzed storm events. In all cases, total post-development discharge rates did not exceed the pre-development conditions, and the peak stage elevations never exceeded the top of the facility. Detailed results can be found in Appendix A.

Table 3: Pre-1 vs. DS-2 Peak Discharge

Storm Event	Discharge Rates (cfs)		
	Pre	Post	Change
3 year, 1 hour	5.28	0	-5.28
3 year, 2 hour	3.96	0	-3.96
3 year, 4 hour	2.07	0.35	-1.72
3 year, 8 hour	2.10	0.4	-1.7
3 year, 24 hour	0.68	0.24	-0.44
3 year, 72 hour	0.45	0.26	-0.19
5 year, 1 hour	5.79	0	-5.79
5 year, 2 hour	4.41	0.3	-4.11
5 year, 4 hour	2.40	0.78	-1.62
5 year, 8 hour	2.36	0.53	-1.83
5 year, 24 hour	0.77	0.27	-0.5
5 year, 72 hour	0.48	0.33	-0.15
10 year, 1 hour	6.56	0.39	-6.17
10 year, 2 hour	5.02	0.56	-4.46
10 year, 4 hour	2.73	1.28	-1.45
10 year, 8 hour	2.78	1.41	-1.37
10 year, 24 hour	0.90	0.47	-0.43
10 year, 72 hour	0.53	0.39	-0.14
25 year, 1 hour	7.83	1.48	-6.35
25 year, 2 hour	5.77	1.23	-4.54
25 year, 4 hour	3.13	1.85	-1.28
25 year, 8 hour	3.10	2.17	-0.93
25 year, 24 hour	1.02	0.7	-0.32
25 year, 72 hour	0.66	0.63	-0.03
50 year, 1 hour	8.85	2.37	-6.48
50 year, 2 hour	6.67	2.11	-4.56
50 year, 4 hour	3.52	2.14	-1.38
50 year, 8 hour	3.52	2.57	-0.95
50 year, 24 hour	1.15	0.78	-0.37
50 year, 72 hour	0.72	0.69	-0.03
100 year, 1 hour	9.86	3.54	-6.32
100 year, 2 hour	7.41	3.08	-4.33
100 year, 4 hour	3.98	2.39	-1.59
100 year, 8 hour	3.78	3.22	-0.56
100 year, 24 hour	1.34	0.97	-0.37
100 year, 72 hour	0.83	0.8	-0.03
SJRWMD Mean Annual, 24 hour	3.92	0.31	-3.61

Table 5: SMF-1A Max Stage and Recovery Analysis

Storm Event	Max Stage (ft)	Freeboard (ft)	Time to Recovery (days after storm)
3 year, 1 hour	13.41	1.04	<1
3 year, 2 hour	13.40	1.05	<1
3 year, 4 hour	13.57	0.88	<3
3 year, 8 hour	13.65	0.80	<4
3 year, 24 hour	13.74	0.71	<9
3 year, 72 hour	13.75	0.70	<8
5 year, 1 hour	13.46	0.99	<1
5 year, 2 hour	13.49	0.96	<2
5 year, 4 hour	13.72	0.73	<3
5 year, 8 hour	13.73	0.72	<5
5 year, 24 hour	13.75	0.70	<11
5 year, 72 hour	13.76	0.69	<14
10 year, 1 hour	13.56	0.89	<2
10 year, 2 hour	13.60	0.85	<3
10 year, 4 hour	13.79	0.66	<5
10 year, 8 hour	13.80	0.65	<7
10 year, 24 hour	13.77	0.68	<12
10 year, 72 hour	13.77	0.68	<17
25 year, 1 hour	13.73	0.72	<3
25 year, 2 hour	13.75	0.70	<5
25 year, 4 hour	13.84	0.61	<7
25 year, 8 hour	13.84	0.61	<9
25 year, 24 hour	13.78	0.67	<13
25 year, 72 hour	13.79	0.66	<21
50 year, 1 hour	13.83	0.62	<4
50 year, 2 hour	13.82	0.63	<7
50 year, 4 hour	13.88	0.57	<8
50 year, 8 hour	13.91	0.54	<9
50 year, 24 hour	13.81	0.64	<13
50 year, 72 hour	13.79	0.66	<21
100 year, 1 hour	13.91	0.54	<6
100 year, 2 hour	13.88	0.57	<7
100 year, 4 hour	13.92	0.53	<8
100 year, 8 hour	13.94	0.51	<10
100 year, 24 hour	13.84	0.61	<13
100 year, 72 hour	13.80	0.65	<23
SJRWMD Mean Annual, 24 hour	13.57	0.88	<3

Table 6: SMF-1B Max Stage and Recovery Analysis

Storm Event	Max Stage (ft)	Freeboard (ft)	Time to Recovery (days after storm)
3 year, 1 hour	13.38	1.62	<3
3 year, 2 hour	13.39	1.61	<3
3 year, 4 hour	13.56	1.44	<4
3 year, 8 hour	13.65	1.35	<5
3 year, 24 hour	13.73	1.27	<7
3 year, 72 hour	13.75	1.25	<14
5 year, 1 hour	13.45	1.55	<3
5 year, 2 hour	13.49	1.51	<3
5 year, 4 hour	13.72	1.28	<4
5 year, 8 hour	13.73	1.27	<5
5 year, 24 hour	13.75	1.25	<8
5 year, 72 hour	13.76	1.24	<14
10 year, 1 hour	13.56	1.44	<3
10 year, 2 hour	13.60	1.40	<3
10 year, 4 hour	13.79	1.21	<4
10 year, 8 hour	13.80	1.20	<5
10 year, 24 hour	13.77	1.23	<8
10 year, 72 hour	13.77	1.23	<15
25 year, 1 hour	13.73	1.27	<3
25 year, 2 hour	13.75	1.25	<3
25 year, 4 hour	13.84	1.16	<4
25 year, 8 hour	13.84	1.16	<5
25 year, 24 hour	13.78	1.22	<8
25 year, 72 hour	13.79	1.21	<15
50 year, 1 hour	13.83	1.17	<3
50 year, 2 hour	13.81	1.19	<3
50 year, 4 hour	13.88	1.12	<4
50 year, 8 hour	13.91	1.09	<5
50 year, 24 hour	13.81	1.19	<8
50 year, 72 hour	13.79	1.21	<15
100 year, 1 hour	13.91	1.09	<3
100 year, 2 hour	13.88	1.12	<3
100 year, 4 hour	13.92	1.08	<4
100 year, 8 hour	13.94	1.06	<5
100 year, 24 hour	13.83	1.17	<8
100 year, 72 hour	13.80	1.20	<15
SJRWMD Mean Annual, 24 hour	13.57	1.43	<7

Table 7: SMF-2A Max Stage and Recovery Analysis

Storm Event	Max Stage (ft)	Freeboard (ft)	Time to Recovery (days after storm)
3 year, 1 hour	13.22	0.88	<4
3 year, 2 hour	13.17	0.93	<5
3 year, 4 hour	13.19	0.91	<6
3 year, 8 hour	13.22	0.88	<7
3 year, 24 hour	13.15	0.95	<10
3 year, 72 hour	13.15	0.95	<16
5 year, 1 hour	13.28	0.82	<4
5 year, 2 hour	13.26	0.84	<6
5 year, 4 hour	13.26	0.84	<7
5 year, 8 hour	13.25	0.85	<8
5 year, 24 hour	13.16	0.94	<10
5 year, 72 hour	13.17	0.93	<17
10 year, 1 hour	13.36	0.74	<5
10 year, 2 hour	13.32	0.78	<6
10 year, 4 hour	13.33	0.77	<7
10 year, 8 hour	13.33	0.77	<8
10 year, 24 hour	13.20	0.90	<11
10 year, 72 hour	13.19	0.91	<17
25 year, 1 hour	13.45	0.65	<6
25 year, 2 hour	13.40	0.70	<6
25 year, 4 hour	13.41	0.69	<7
25 year, 8 hour	13.44	0.66	<8
25 year, 24 hour	13.25	0.85	<11
25 year, 72 hour	13.25	0.85	<18
50 year, 1 hour	13.50	0.60	<6
50 year, 2 hour	13.47	0.63	<6
50 year, 4 hour	13.44	0.66	<7
50 year, 8 hour	13.49	0.61	<8
50 year, 24 hour	13.26	0.84	<11
50 year, 72 hour	13.26	0.84	<18
100 year, 1 hour	13.57	0.53	<6
100 year, 2 hour	13.52	0.58	<6
100 year, 4 hour	13.47	0.63	<7
100 year, 8 hour	13.57	0.53	<8
100 year, 24 hour	13.31	0.79	<11
100 year, 72 hour	13.29	0.81	<18
SJRWMD Mean Annual, 24 hour	13.30	0.80	<9

Table 8: SMF-2B Max Stage and Recovery Analysis

Storm Event	Max Stage (ft)	Freeboard (ft)	Time to Recovery (days after storm)
3 year, 1 hour	12.43	0.97	<2
3 year, 2 hour	12.63	0.77	<3
3 year, 4 hour	12.87	0.53	<4
3 year, 8 hour	12.88	0.52	<6
3 year, 24 hour	12.85	0.55	<8
3 year, 72 hour	12.85	0.55	<11
5 year, 1 hour	12.65	0.75	<3
5 year, 2 hour	12.86	0.54	<4
5 year, 4 hour	12.94	0.46	<5
5 year, 8 hour	12.90	0.50	<6
5 year, 24 hour	12.85	0.55	<8
5 year, 72 hour	12.87	0.53	<12
10 year, 1 hour	12.88	0.52	<4
10 year, 2 hour	12.91	0.49	<4
10 year, 4 hour	13.01	0.39	<5
10 year, 8 hour	13.02	0.38	<6
10 year, 24 hour	12.89	0.51	<9
10 year, 72 hour	12.88	0.52	<14
25 year, 1 hour	13.03	0.37	<4
25 year, 2 hour	13.00	0.40	<5
25 year, 4 hour	13.07	0.33	<5
25 year, 8 hour	13.10	0.30	<5
25 year, 24 hour	12.93	0.47	<9
25 year, 72 hour	12.92	0.48	<15
50 year, 1 hour	13.13	0.27	<4
50 year, 2 hour	13.10	0.30	<5
50 year, 4 hour	13.10	0.30	<5
50 year, 8 hour	13.15	0.25	<6
50 year, 24 hour	12.94	0.46	<9
50 year, 72 hour	12.93	0.47	<16
100 year, 1 hour	13.23	0.17	<4
100 year, 2 hour	13.19	0.21	<5
100 year, 4 hour	13.13	0.27	<5
100 year, 8 hour	13.21	0.19	<6
100 year, 24 hour	12.97	0.43	<9
100 year, 72 hour	12.94	0.46	<17
SJRWMD Mean Annual, 24 hour	12.86	0.54	<8

Table 9: SMF-2C Max Stage and Recovery Analysis

Storm Event	Max Stage (ft)	Freeboard (ft)	Time to Recovery (days after storm)
3 year, 1 hour	12.68	1.17	<2
3 year, 2 hour	13.01	0.84	<4
3 year, 4 hour	13.17	0.68	<6
3 year, 8 hour	13.18	0.67	<7
3 year, 24 hour	13.14	0.71	<10
3 year, 72 hour	13.15	0.70	<14
5 year, 1 hour	12.98	0.87	<4
5 year, 2 hour	13.15	0.70	<5
5 year, 4 hour	13.26	0.59	<6
5 year, 8 hour	13.21	0.64	<7
5 year, 24 hour	13.15	0.70	<10
5 year, 72 hour	13.17	0.68	<15
10 year, 1 hour	13.18	0.67	<5
10 year, 2 hour	13.21	0.64	<6
10 year, 4 hour	13.32	0.53	<6
10 year, 8 hour	13.33	0.52	<7
10 year, 24 hour	13.20	0.65	<10
10 year, 72 hour	13.18	0.67	<17
25 year, 1 hour	13.35	0.50	<5
25 year, 2 hour	13.32	0.53	<6
25 year, 4 hour	13.40	0.45	<6
25 year, 8 hour	13.43	0.42	<8
25 year, 24 hour	13.25	0.60	<11
25 year, 72 hour	13.25	0.60	<18
50 year, 1 hour	13.44	0.41	<5
50 year, 2 hour	13.41	0.44	<6
50 year, 4 hour	13.43	0.42	<7
50 year, 8 hour	13.48	0.37	<8
50 year, 24 hour	13.26	0.59	<11
50 year, 72 hour	13.26	0.59	<19
100 year, 1 hour	13.54	0.31	<5
100 year, 2 hour	13.51	0.34	<6
100 year, 4 hour	13.46	0.39	<7
100 year, 8 hour	13.57	0.28	<8
100 year, 24 hour	13.30	0.55	<11
100 year, 72 hour	13.28	0.57	<20
SJRWMD Mean Annual, 24 hour	13.17	0.68	<9

Table 10: SMF-3A Max Stage and Recovery Analysis

Storm Event	Max Stage (ft)	Freeboard (ft)	Time to Recovery (days after storm)
3 year, 1 hour	13.76	0.14	<4
3 year, 2 hour	13.68	0.22	<5
3 year, 4 hour	13.54	0.36	<6
3 year, 8 hour	13.54	0.36	<7
3 year, 24 hour	13.39	0.51	<10
3 year, 72 hour	13.34	0.56	<19
5 year, 1 hour	13.79	0.11	<4
5 year, 2 hour	13.71	0.19	<5
5 year, 4 hour	13.56	0.34	<6
5 year, 8 hour	13.55	0.35	<7
5 year, 24 hour	13.39	0.51	<10
5 year, 72 hour	13.35	0.55	<18
10 year, 1 hour	13.83	0.07	<4
10 year, 2 hour	13.74	0.16	<5
10 year, 4 hour	13.59	0.31	<6
10 year, 8 hour	13.58	0.32	<7
10 year, 24 hour	13.41	0.49	<10
10 year, 72 hour	13.37	0.53	<18
25 year, 1 hour	13.88	0.02	<4
25 year, 2 hour	13.78	0.12	<5
25 year, 4 hour	13.63	0.27	<6
25 year, 8 hour	13.62	0.28	<7
25 year, 24 hour	13.43	0.47	<11
25 year, 72 hour	13.39	0.51	<20
50 year, 1 hour	13.91	-0.01	<4
50 year, 2 hour	13.81	0.09	<5
50 year, 4 hour	13.65	0.25	<6
50 year, 8 hour	13.64	0.26	<7
50 year, 24 hour	13.44	0.46	<11
50 year, 72 hour	13.39	0.51	<20
100 year, 1 hour	13.95	-0.05	<4
100 year, 2 hour	13.85	0.05	<5
100 year, 4 hour	13.67	0.23	<6
100 year, 8 hour	13.67	0.23	<7
100 year, 24 hour	13.46	0.44	<11
100 year, 72 hour	13.41	0.49	<20
SJRWMD Mean Annual, 24 hour	13.67	0.23	<9

Table 10: SMF-3B Max Stage and Recovery Analysis

Storm Event	Max Stage (ft)	Freeboard (ft)	Time to Recovery (days after storm)
3 year, 1 hour	12.70	0.55	<3
3 year, 2 hour	12.64	0.61	<5
3 year, 4 hour	12.88	0.37	<6
3 year, 8 hour	12.89	0.36	<8
3 year, 24 hour	12.85	0.40	<11
3 year, 72 hour	12.86	0.39	<17
5 year, 1 hour	12.77	0.48	<3
5 year, 2 hour	12.87	0.38	<5
5 year, 4 hour	12.95	0.30	<6
5 year, 8 hour	12.91	0.34	<8
5 year, 24 hour	12.86	0.39	<11
5 year, 72 hour	12.87	0.38	<19
10 year, 1 hour	12.89	0.36	<5
10 year, 2 hour	12.92	0.33	<6
10 year, 4 hour	13.03	0.22	<7
10 year, 8 hour	13.04	0.21	<8
10 year, 24 hour	12.90	0.35	<12
10 year, 72 hour	12.88	0.37	<21
25 year, 1 hour	13.05	0.20	<5
25 year, 2 hour	13.02	0.23	<6
25 year, 4 hour	13.10	0.15	<7
25 year, 8 hour	13.14	0.11	<8
25 year, 24 hour	12.94	0.31	<12
25 year, 72 hour	12.92	0.33	<23
50 year, 1 hour	13.17	0.08	<6
50 year, 2 hour	13.14	0.11	<6
50 year, 4 hour	13.13	0.12	<7
50 year, 8 hour	13.19	0.06	<8
50 year, 24 hour	12.95	0.30	<13
50 year, 72 hour	12.93	0.32	<24
100 year, 1 hour	13.30	-0.05	<6
100 year, 2 hour	13.26	-0.01	<7
100 year, 4 hour	13.16	0.09	<7
100 year, 8 hour	13.25	0.00	<9
100 year, 24 hour	12.98	0.27	<13
100 year, 72 hour	12.95	0.30	<24
SJRWMD Mean Annual, 24 hour	12.87	0.38	<10

Summary and Conclusions

The proposed drainage system meets GCS, FDOT, and SJRWMD criteria for a dry retention system design in an open watershed. The criteria are as follows:

1. Provide Peak Discharge Rate Attenuation: The SMF attenuates the post-development discharge rates to be less than the pre-development rates for the Mean Annual 24-hour storm events (SJRWMD) as well as the 36 critical storms for an open basin (FDOT).

2. Provide Water Quality Treatment Volume (WQTV): The SMFs have been sized to capture and treat the 1.25 inches of runoff from the impervious site area plus 0.5 inches of runoff from the total site. The water quality treatment volume recovers in less than 72 hours for all SMFs. (SJRWMD).

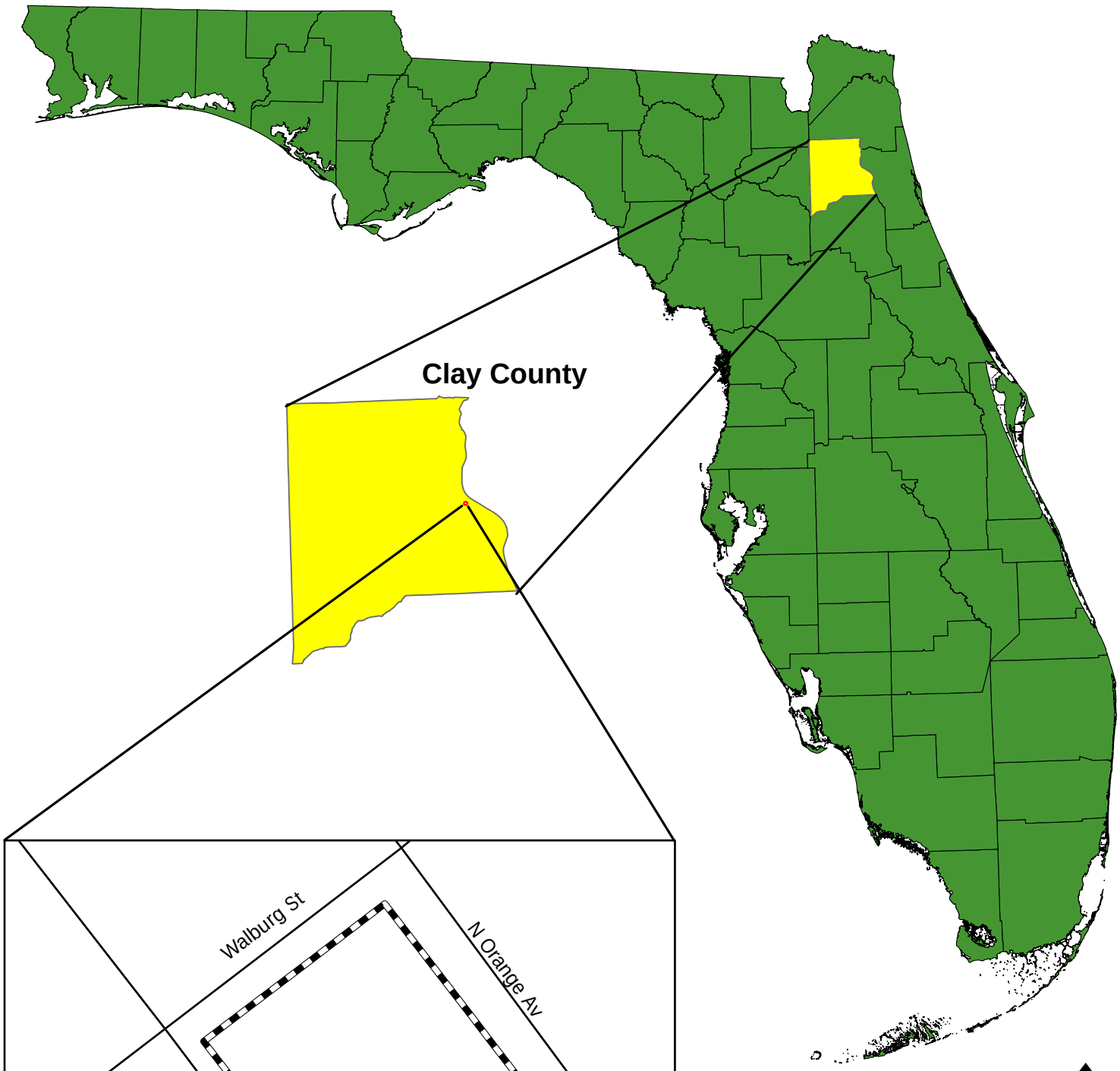
3. Provide Volume Recovery: The SMFs recover the FDOT storms within 30 days and the SJRWMD storms within 14 days.

Based on the information provided, the project is eligible for approval by the City of Green Cove Springs, FDOT, and SJRWMD.

Figure 1

Project Location Map

Project Location Map
Clay County Eco



NORTH

CHW Professional Consultants
11801 Research Drive,
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 198

Figure 2

USGS Quadrangle Map

CHW Professional Consultants
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www.chw-inc.com
est. 1988 FLORIDA
CA-5075

Clay County Eco Quad Map

0 500 1,000
Feet

Figure 3

Aerial Map

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Alachua, Florida 32615
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www.chw-inc.com
est. 1988 FLORIDA
CA-5075

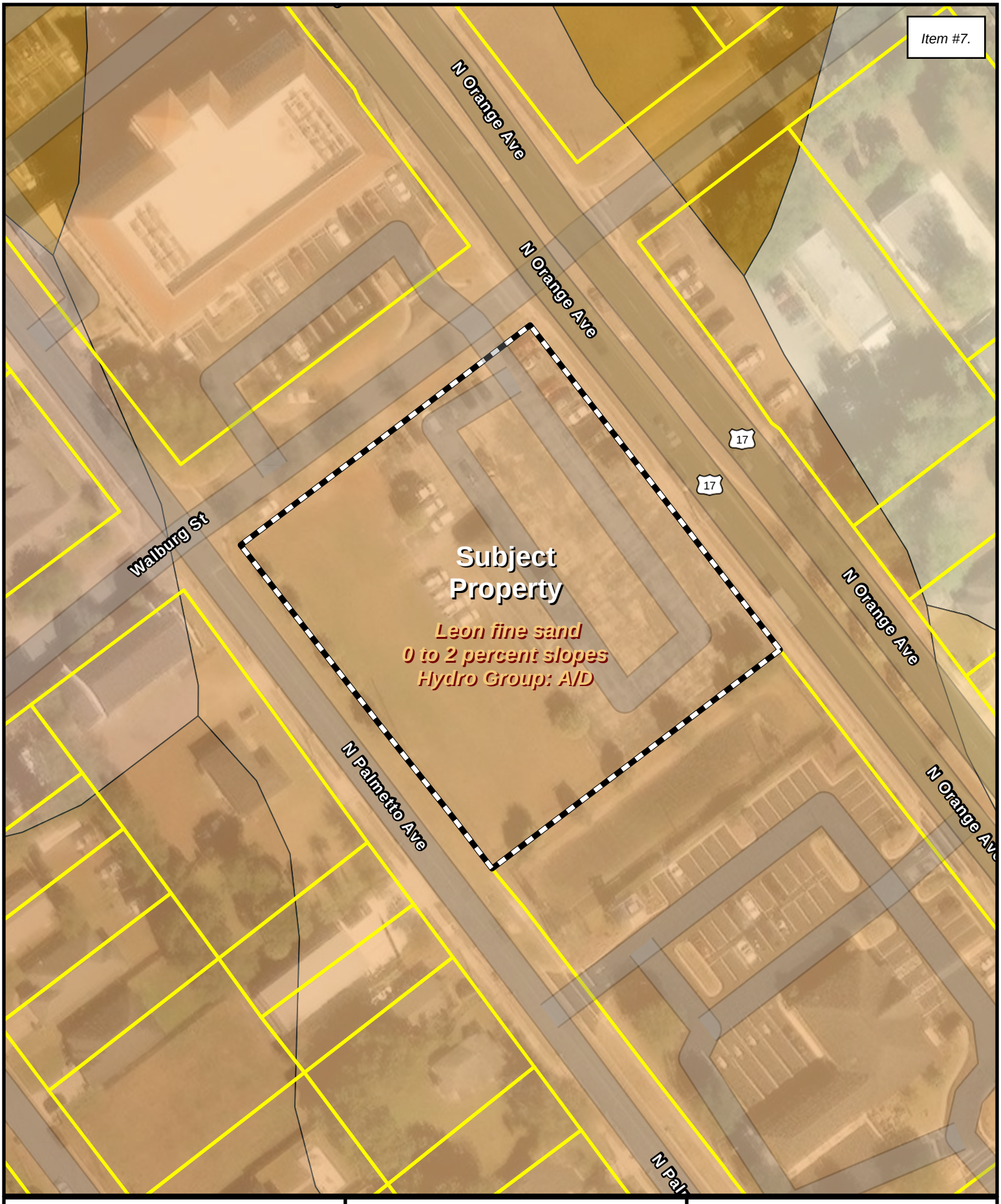
Clay County Eco Aerial Map

0 40 80
Feet

Document Path: N:\2023\23-0204\Admin & Information\07_Maps\GIS\APRXs\Clay Eco\Clay Eco.aprx Prepared by Employee ### Date: 7/28/2023 For informational purposes only

Figure 4

NRCS Soils Map



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Clay County Eco Soils Map

0 40 80
Feet

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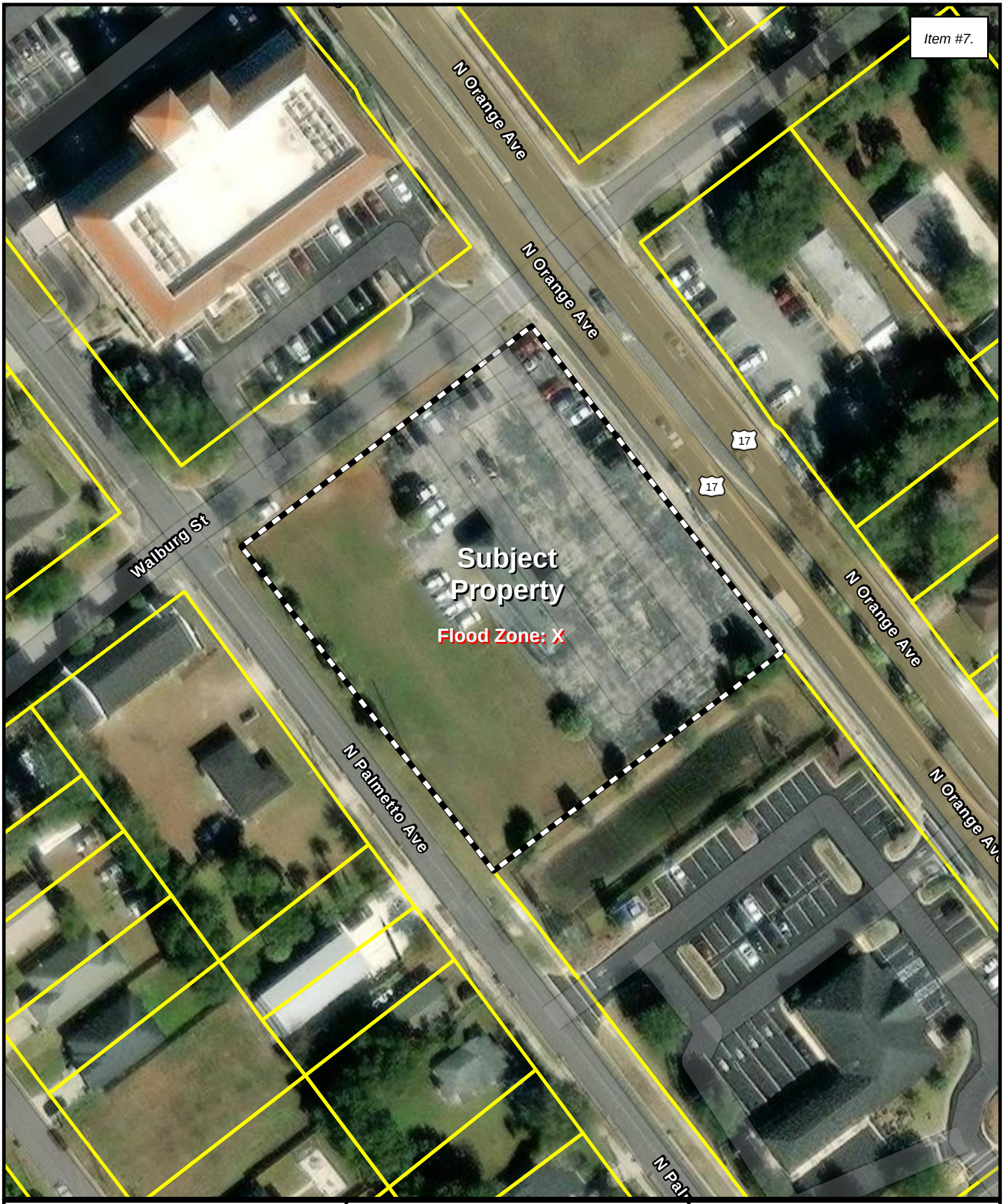
Figure 5

FEMA Flood Map



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CA-5075

Clay County Eco FEMA Map

0 40 80
Feet

Document Path: N:\2023\23-0204\Admin & Information\07_Maps\GIS\APRXs\Clay Eco\Clay Eco.aprx Prepared by Employee ### Date: 7/28/2023 For informational purposes only

Figure 6

Pre-Development Drainage Map

LEGEND

PRE-DEVELOPMENT ONSITE WATERSHED:

EXISTING IMPERVIOUS AREA: 0.88 ac.

PRE-DEVELOPMENT DRAINAGE FLOW PATTERNS:

PRE-DEVELOPMENT DISCHARGE POINT:

NOTE: ALL SOILS ARE TYPE 'D' UNLESS OTHERWISE NOTED

SCALE: 1"=60'

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: CAUSSEAUX, HEWETT, & WALPOLE, INC. ENGINEERING - SURVEYING - PLANNING

PROJECT: CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

SHEET TITLE: PRE-DEVELOPMENT DRAINAGE MAP

TECHNICIAN:

DESIGNER:

QUALITY CONTROL:

PROJECT NUMBER: 23-0204

Figure 7

Post-Development Drainage Map

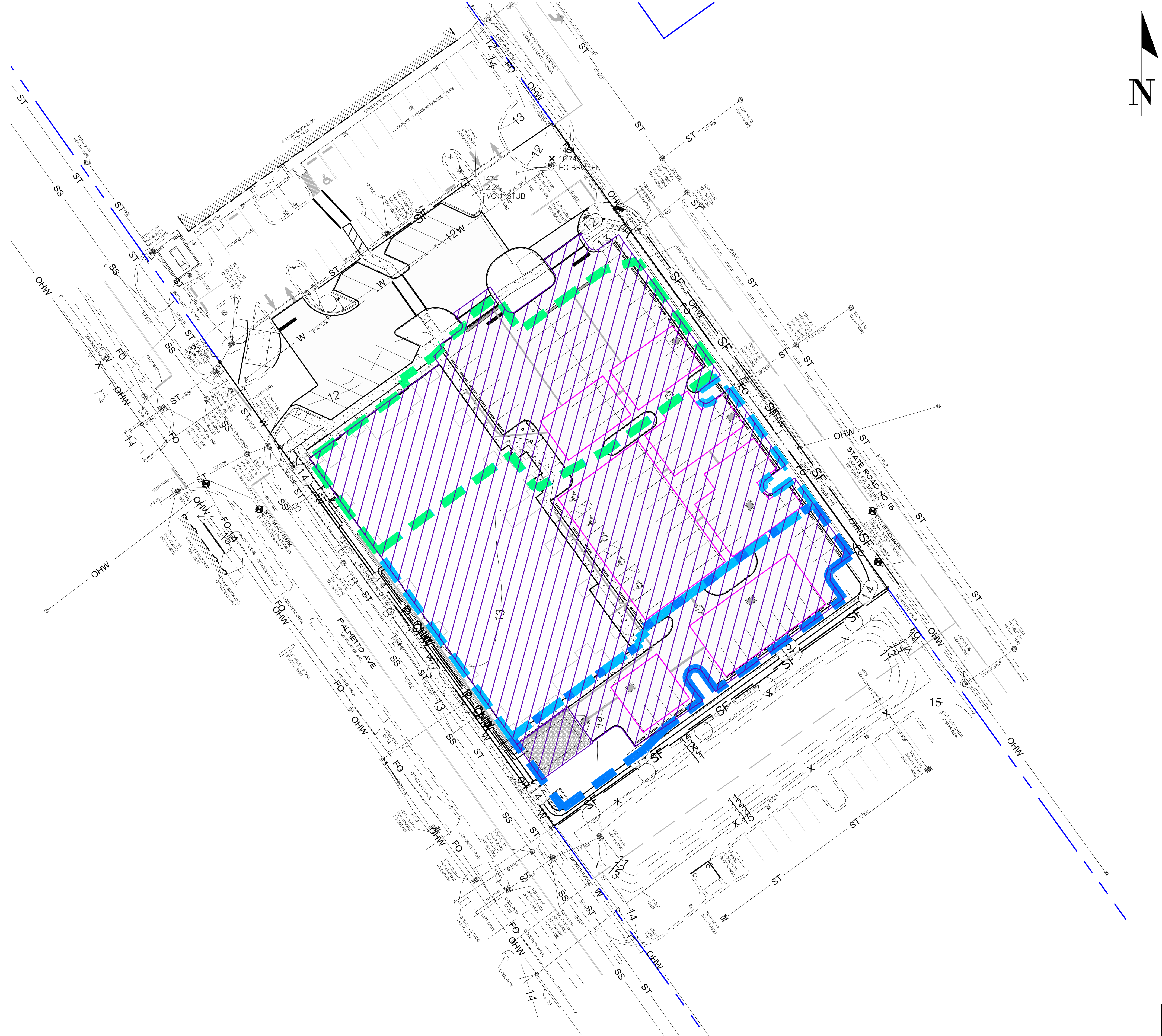
LEGEND

POST-DEVELOPMENT WATERSHED #1:

POST-DEVELOPMENT WATERSHED #2:

POST-DEVELOPMENT WATERSHED #3:

PROPOSED ONSITE IMPERVIOUS AREA:



SCALE: 1"=40'

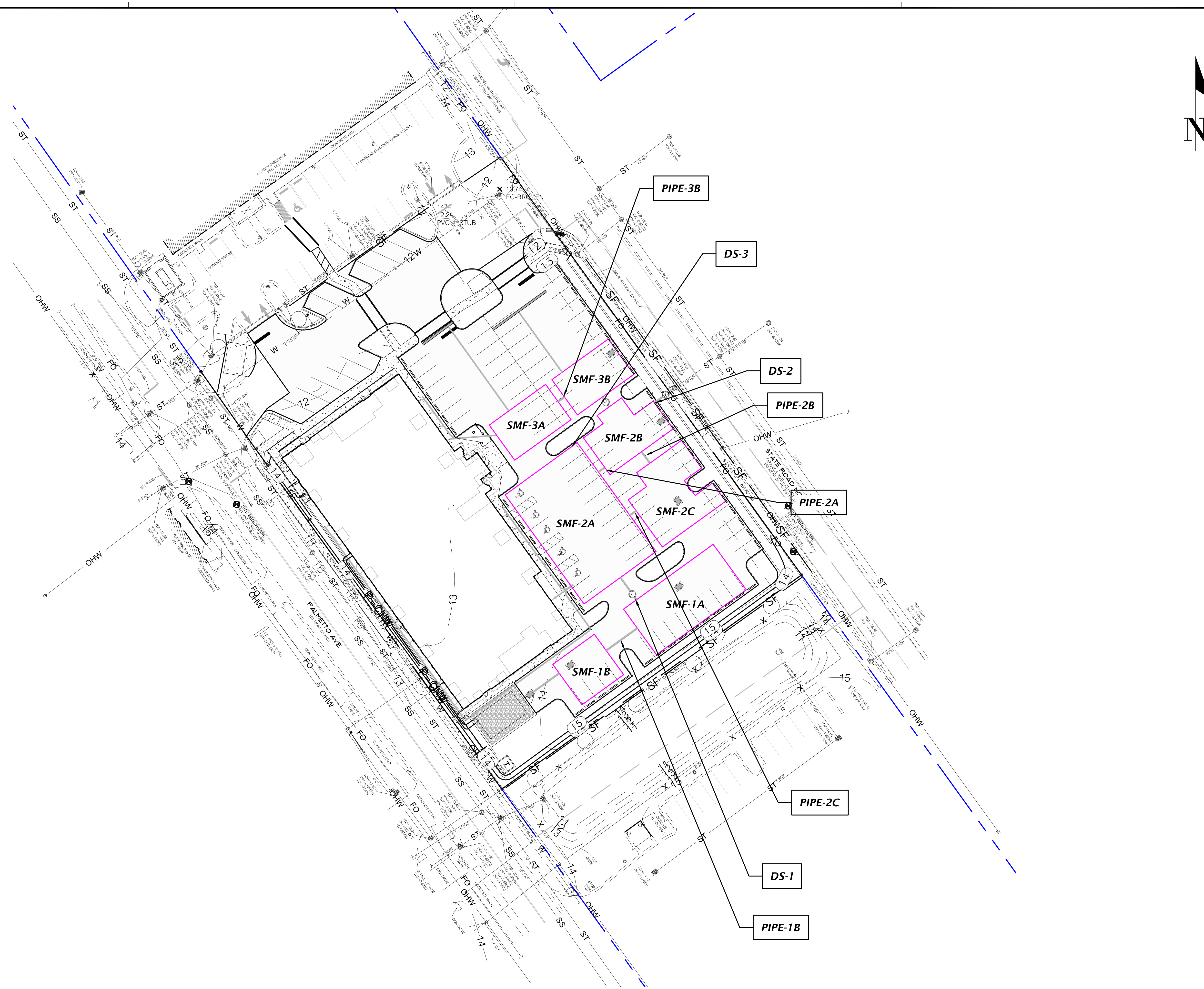
CLIENT: CAUSSEAUX, HEWETT, & WALPOLE, INC. ENGINEERING - SURVEYING - PLANNING

PROJECT: CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

SHEET TITLE: POST-DEVELOPMENT DRAINAGE MAP

PROJECT NUMBER: 23-0204

Item #7.



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Professional Consultants
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Alachua, Flor...
est. 1988

SCALE: 1"=40'

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: CAUSSEAUX, HEWETT, & WALPOLE, INC. ENGINEERING - SURVEYING - PLANNING

PROJECT: CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

SHEET TITLE: POST-DEVELOPMENT NODAL DIAGRAM

TECHNICIAN:

DESIGNER:

QUALITY CONTROL:

PROJECT NUMBER: 23-0204

Appendix A

Drainage Calculations and
Computer Model Output

Proposed:

Pre-1

Pre-Development Watershed	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	52,615	1.21	100%		
Existing Pavement	31,024	0.71	59%	98	69.79637
Existing Building	1,795	0.04	3%	98	4.038364
Open Space (Fair Condition, Type D Soil)	19,796	0.45	38%	84	38.17467

CN = 93

WS-1

Post-Development Watershed	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	10,810	0.25	100%		
Proposed Building	0	0.00	0.0%	98	0.0
Proposed Pavement	10,030	0.23	92.8%	98	22.6
Proposed Sidewalk	652	0.01	6.0%	98	1.5
Open Space (Fair Condition, Type A Soil)	128	0.00	1.2%	39	0.1
		0.00	0.0%		0.0

CN = 97

Tc = 10 min*

***FDOT minimum TOC, used to be conservative**

WQTV Calculations - Post-1

TOTAL DRAINAGE AREA	10,810	sf
TOTAL IMPERVIOUS AREA	10,682	sf

SJRWMD Requirement

0.5" x Drainage Area =	450	cf
OR		
Runoff from first 1.25" of impervious rainfall	1,113	CF
PLUS		
0.5" x Drainage Area =	450	cf

Required WQTV = 1,563 cf

WS-2

Post-Development Watershed	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	24,344	0.56	100%		
Proposed Building	12,007	0.28	49.3%	98	27.0
Proposed Pavement	11,103	0.25	45.6%	98	25.0
Proposed Sidewalk	924	0.02	3.8%	98	2.1
Open Space (Fair Condition, Type A Soil)	309	0.01	1.3%	39	0.3
		0.00	0.0%		0.0

CN = 97

Tc = 10 min*

***FDOT minimum TOC, used to be conservative**

WQTV Calculations - Post-2

TOTAL DRAINAGE AREA	24,344	sf
TOTAL IMPERVIOUS AREA	24,034	sf

SJRWMD Requirement

0.5" x Drainage Area =	1,014	cf
OR		
Runoff from first 1.25" of impervious rainfall	2,504	CF
PLUS		
0.5" x Drainage Area =	1,014	cf

Required WQTV =	**3,518**	**cf**

WS-3

Post-Development Watershed	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	18,125	0.42	168%		
Proposed Building	6,338	0.15	58.6%	98	14.3
Proposed Pavement	10,456	0.24	96.7%	98	23.5
Proposed Sidewalk	922	0.02	8.5%	98	2.1
Open Space (Fair Condition, Type A Soil)	409	0.01	3.8%	39	0.4
		0.00	0.0%		0.0

CN = 97

Tc = 10 min*

***FDOT minimum TOC, used to be conservative**

WQTV Calculations - Post-3

TOTAL DRAINAGE AREA	18,125	sf
TOTAL IMPERVIOUS AREA	17,716	sf

SJRWMD Requirement

0.5" x Drainage Area =	755	cf
OR		
Runoff from first 1.25" of impervious rainfall	1,845	CF
PLUS		
0.5" x Drainage Area =	755	cf

Required WQTV =	**2,601**	**cf**

STAGE-STORAGE CALCULATIONS:

Post-Development SMF-1A: Stage-Storage Relationship

ELEV. (FT.)	AREA (SF)	AREA (AC)	VOLUME (CF)	VOLUME (AC-FT)
12.45	1141.27	0.0262	0	0.00000
12.53	1141.27	0.0262	95.11	0.00218
12.62	1141.27	0.0262	190.21	0.00437
12.70	1141.27	0.0262	285.32	0.00655
12.78	1141.27	0.0262	380.42	0.00873
12.87	1141.27	0.0262	475.53	0.01092
12.95	1141.27	0.0262	570.63	0.01310
13.03	2274.97	0.0522	760.22	0.01745
13.12	2231.51	0.0512	946.17	0.02172
13.20	2186.59	0.0502	1128.39	0.02590
13.28	2133.99	0.0490	1306.22	0.02999
13.37	2073.77	0.0476	1479.04	0.03395
13.45	2003.91	0.0460	1646.03	0.03779
13.53	1922.29	0.0441	1806.22	0.04147
13.62	1824.49	0.0419	1958.26	0.04496
13.70	1701.28	0.0391	2100.03	0.04821
13.78	1509.50	0.0347	2225.83	0.05110
13.87	1311.61	0.0301	2335.13	0.05361
13.95	1206.17	0.0277	2435.64	0.05591
14.03	1141.27	0.0262	2530.75	0.05810
14.12	1141.27	0.0262	2625.85	0.06028
14.20	1141.27	0.0262	2720.96	0.06246
14.28	1141.27	0.0262	2816.06	0.06465
14.37	1141.27	0.0262	2911.17	0.06683
14.45	1141.27	0.0262	3006.28	0.06901

Required WQTV =	**1563.14**	**cf**
	0.04	**ac-ft**
SMF-1A WQTV =	2,100	cf
SMF-1A WQTV El. =	13.70	ft
SMF-1B WQTV =	546	cf
SMF-1B WQTV El =	14.00	ft
Excess WQTV from Post-3 =	950.57	cf
Remaining WQTV =	-132.56	cf
Depth=	2.00	ft

STAGE-STORAGE CALCULATIONS:

Post-Development SMF-1B: Stage-Storage Relationship

ELEV. (FT.)	AREA (SF)	AREA (AC)	VOLUME (CF)	VOLUME (AC-FT)
13.00	385.64	0.0089	0	0.00000
13.08	385.64	0.0089	32.14	0.00074
13.17	385.64	0.0089	64.27	0.00148
13.25	385.64	0.0089	96.41	0.00221
13.33	385.64	0.0089	128.55	0.00295
13.42	385.64	0.0089	160.68	0.00369
13.50	385.64	0.0089	192.82	0.00443
13.58	746.36	0.0171	255.01	0.00585
13.67	732.53	0.0168	316.06	0.00726
13.75	718.24	0.0165	375.91	0.00863
13.83	701.50	0.0161	434.37	0.00997
13.92	682.34	0.0157	491.23	0.01128
14.00	660.11	0.0152	546.24	0.01254
14.08	634.14	0.0146	599.09	0.01375
14.17	603.03	0.0138	649.34	0.01491
14.25	563.82	0.0129	696.32	0.01599
14.33	502.80	0.0115	738.22	0.01695
14.42	439.84	0.0101	774.88	0.01779
14.50	406.29	0.0093	808.73	0.01857
14.58	385.64	0.0089	840.87	0.01930
14.67	385.64	0.0089	873.01	0.02004
14.75	385.64	0.0089	905.14	0.02078
14.83	385.64	0.0089	937.28	0.02152
14.92	385.64	0.0089	969.42	0.02225
15.00	385.64	0.0089	1001.55	0.02299

Required WQTV =	**1563.14**	**cf**
	0.04	**ac-ft**
SMF-1A WQTV =	2,100	cf
SMF-1A WQTV El. =	13.70	ft
SMF-1B WQTV =	546	cf
SMF-1B WQTV El =	14.00	ft
Excess WQTV from Post-3 =	950.57	cf
Remaining WQTV =	-132.56	cf
Depth=	2.00	ft

STAGE-STORAGE CALCULATIONS:

Post-Development SMF-2A: Stage-Storage Relationship

ELEV. (FT.)	AREA (SF)	AREA (AC)	VOLUME (CF)	VOLUME (AC-FT)
12.10	1784.60	0.0089	0	0.00000
12.18	1784.60	0.0089	148.72	0.00341
12.27	1784.60	0.0089	297.43	0.00683
12.35	1784.60	0.0089	446.15	0.01024
12.43	1784.60	0.0089	594.87	0.01366
12.52	1784.60	0.0089	743.59	0.01707
12.60	1784.60	0.0089	892.30	0.02048
12.68	3588.23	0.0171	1191.32	0.02735
12.77	3519.07	0.0168	1484.58	0.03408
12.85	3447.62	0.0165	1771.88	0.04068
12.93	3363.94	0.0161	2052.21	0.04711
13.02	3268.14	0.0157	2324.55	0.05336
13.10	3156.99	0.0152	2587.63	0.05940
13.18	3027.14	0.0146	2839.90	0.06520
13.27	2871.55	0.0138	3079.19	0.07069
13.35	2675.53	0.0129	3302.15	0.07581
13.43	2370.42	0.0115	3499.69	0.08034
13.52	2055.60	0.0101	3670.99	0.08427
13.60	1887.86	0.0093	3828.31	0.08789
13.68	1784.60	0.0089	3977.03	0.09130
13.77	1784.60	0.0089	4125.74	0.09471
13.85	1784.60	0.0089	4274.46	0.09813
13.93	1784.60	0.0089	4423.18	0.10154
14.02	1784.60	0.0089	4571.89	0.10496
14.10	1784.60	0.0089	4720.61	0.10837

Required WQTV =	**3517.90**	**cf**
Additional WQTV =	**-**	**cf**
Total WQTV =	**3,518**	**cf**
	0.081	ac-ft
WQTV Elevation =	**12.77**	**ft**
Depth=	2.00	ft

STAGE-STORAGE CALCULATIONS:

Post-Development SMF-2B: Stage-Storage Relationship

ELEV. (FT.)	AREA (SF)	AREA (AC)	VOLUME (CF)	VOLUME (AC-FT)
11.40	582.80	0.0386	0	0.00000
11.48	582.80	0.0386	48.57	0.00111
11.57	582.80	0.0386	97.13	0.00223
11.65	582.80	0.0386	145.70	0.00334
11.73	582.80	0.0386	194.27	0.00446
11.82	582.80	0.0386	242.84	0.00557
11.90	582.80	0.0386	291.40	0.00669
11.98	1085.24	0.0746	381.84	0.00877
12.07	1065.98	0.0739	470.67	0.01081
12.15	1046.07	0.0729	557.84	0.01281
12.23	1022.76	0.0719	643.07	0.01476
12.32	996.07	0.0706	726.08	0.01667
12.40	965.11	0.0691	806.51	0.01851
12.48	928.94	0.0676	883.92	0.02029
12.57	885.60	0.0661	957.72	0.02199
12.65	830.99	0.0641	1026.97	0.02358
12.73	746.00	0.0618	1089.13	0.02500
12.82	658.30	0.0593	1143.99	0.02626
12.90	611.57	0.0563	1194.95	0.02743
12.98	582.80	0.0523	1243.52	0.02855
13.07	582.80	0.0453	1292.09	0.02966
13.15	582.80	0.0425	1340.66	0.03078
13.23	582.80	0.0401	1389.22	0.03189
13.32	582.80	0.0386	1437.79	0.03301
13.40	582.80	0.0386	1486.36	0.03412

Required WQTV =	**3517.90**	**cf**
Additional WQTV =	**-**	**cf**
Total WQTV =	**3,518**	**cf**
	0.081	ac-ft
WQTV Elevation =	**12.77**	**ft**
Depth=	2.00	ft

STAGE-STORAGE CALCULATIONS:

Post-Development SMF-2C: Stage-Storage Relationship

ELEV. (FT.)	AREA (SF)	AREA (AC)	VOLUME (CF)	VOLUME (AC-FT)
11.85	902.36	0.0386	0	0.00000
11.93	902.36	0.0386	75.20	0.00173
12.02	902.36	0.0386	150.39	0.00345
12.10	902.36	0.0386	225.59	0.00518
12.18	902.36	0.0386	300.79	0.00691
12.27	902.36	0.0386	375.98	0.00863
12.35	902.36	0.0386	451.18	0.01036
12.43	1688.22	0.0746	591.87	0.01359
12.52	1658.09	0.0739	730.04	0.01676
12.60	1626.96	0.0729	865.62	0.01987
12.68	1590.50	0.0719	998.16	0.02291
12.77	1548.76	0.0706	1127.22	0.02588
12.85	1500.33	0.0691	1252.25	0.02875
12.93	1443.75	0.0676	1372.56	0.03151
13.02	1375.96	0.0661	1487.23	0.03414
13.10	1290.55	0.0641	1594.77	0.03661
13.18	1157.61	0.0618	1691.24	0.03883
13.27	1020.44	0.0593	1776.28	0.04078
13.35	947.35	0.0563	1855.22	0.04259
13.43	902.36	0.0523	1930.42	0.04432
13.52	902.36	0.0453	2005.62	0.04604
13.60	902.36	0.0425	2080.81	0.04777
13.68	902.36	0.0401	2156.01	0.04950
13.77	902.36	0.0386	2231.21	0.05122
13.85	902.36	0.0386	2306.40	0.05295

Required WQTV =	**3517.90**	**cf**
Additional WQTV* =	**-**	**cf**
Total WQTV =	**3,518**	**cf**
	0.081	ac-ft
WQTV Elevation =	**12.77**	**ft**
Depth=	2.00	ft

STAGE-STORAGE CALCULATIONS:

Post-Development SMF-3A: Stage-Storage Relationship

ELEV. (FT.)	AREA (SF)	AREA (AC)	VOLUME (CF)	VOLUME (AC-FT)
11.90	525.44	0.0386	0	0.00000
11.98	525.44	0.0386	43.79	0.00101
12.07	525.44	0.0386	87.57	0.00201
12.15	525.44	0.0386	131.36	0.00302
12.23	525.44	0.0386	175.15	0.00402
12.32	525.44	0.0386	218.93	0.00503
12.40	525.44	0.0386	262.72	0.00603
12.48	1027.88	0.0746	348.38	0.00800
12.57	1008.61	0.0739	432.43	0.00993
12.65	988.71	0.0729	514.82	0.01182
12.73	965.40	0.0719	595.27	0.01367
12.82	938.71	0.0706	673.50	0.01546
12.90	907.75	0.0691	749.14	0.01720
12.98	871.58	0.0676	821.77	0.01887
13.07	828.23	0.0661	890.79	0.02045
13.15	773.63	0.0641	955.26	0.02193
13.23	688.63	0.0618	1012.65	0.02325
13.32	600.93	0.0593	1062.72	0.02440
13.40	554.20	0.0563	1108.91	0.02546
13.48	525.44	0.0523	1152.69	0.02646
13.57	525.44	0.0453	1196.48	0.02747
13.65	525.44	0.0425	1240.27	0.02847
13.73	525.44	0.0401	1284.05	0.02948
13.82	525.44	0.0386	1327.84	0.03048
13.90	525.44	0.0386	1371.63	0.03149

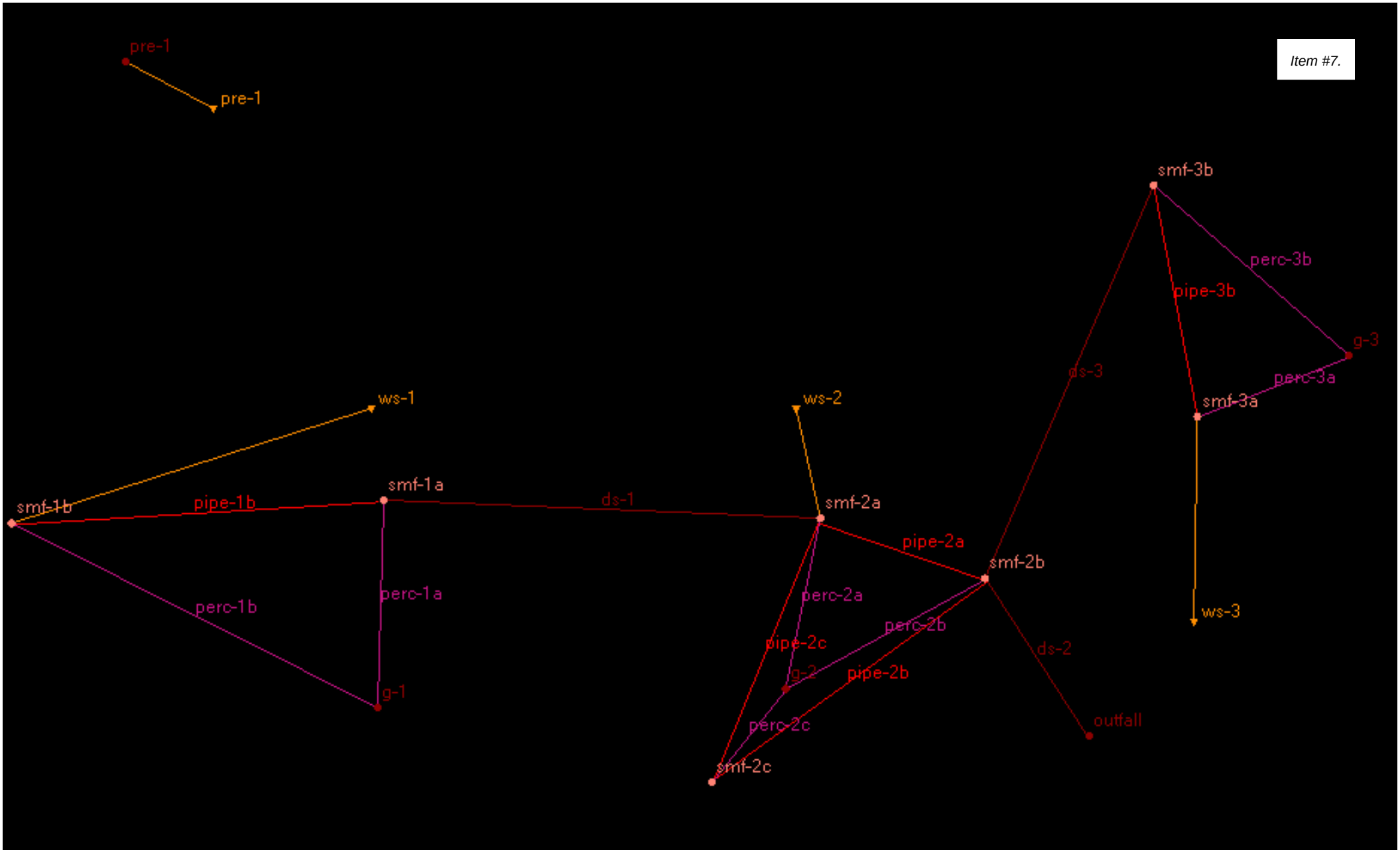
Required WQTV =	**2600.57**	**cf**
	0.06	**ac-ft**
WQTV Elevation =	13.42	ft
SMF-3A WQTV =	822	cf
SMF-3A WQTV El. =	13.00	ft
SMF-3B WQTV =	828	cf
SMF-3B WQTV El =	12.42	ft
Remaining WQTV =	950.57	cf
Depth=	2.00	ft

STAGE-STORAGE CALCULATIONS:

Post-Development SMF-3B: Stage-Storage Relationship

ELEV. (FT.)	AREA (SF)	AREA (AC)	VOLUME (CF)	VOLUME (AC-FT)
11.25	525.44	0.0386	0	0.00000
11.33	525.44	0.0386	43.79	0.00101
11.42	525.44	0.0386	87.57	0.00201
11.50	525.44	0.0386	131.36	0.00302
11.58	525.44	0.0386	175.15	0.00402
11.67	525.44	0.0386	218.93	0.00503
11.75	525.44	0.0386	262.72	0.00603
11.83	1027.88	0.0746	348.38	0.00800
11.92	1008.61	0.0739	432.43	0.00993
12.00	988.71	0.0729	514.82	0.01182
12.08	965.40	0.0719	595.27	0.01367
12.17	938.71	0.0706	673.50	0.01546
12.25	907.75	0.0691	749.14	0.01720
12.33	871.58	0.0676	821.77	0.01887
12.42	828.23	0.0661	890.79	0.02045
12.50	773.63	0.0641	955.26	0.02193
12.58	688.63	0.0618	1012.65	0.02325
12.67	600.93	0.0593	1062.72	0.02440
12.75	554.20	0.0563	1108.91	0.02546
12.83	525.44	0.0523	1152.69	0.02646
12.92	525.44	0.0453	1196.48	0.02747
13.00	525.44	0.0425	1240.27	0.02847
13.08	525.44	0.0401	1284.05	0.02948
13.17	525.44	0.0386	1327.84	0.03048
13.25	525.44	0.0386	1371.63	0.03149

Required WQTV =	**2600.57**	**cf**
	0.06	**ac-ft**
WQTV Elevation =	13.42	ft
SMF-3A WQTV =	822	cf
SMF-3A WQTV El. =	13.00	ft
SMF-3B WQTV =	828	cf
SMF-3B WQTV El =	12.42	ft
Remaining WQTV =	950.57	cf
Depth=	2.00	ft



Clay County Economic Development Building Nodal Diagram

11801 Research Drive
Alachua, Florida
CHW Professional Consultants
est. 1988

SCALE: 1"=40'

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: CAUSSEAUX, HEWETT, & WALPOLE, INC. ENGINEERING - SURVEYING - PLANNING

PROJECT: CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

SHEET TITLE: POST-DEVELOPMENT NODAL DIAGRAM

TECHNICIAN:

DESIGNER:

QUALITY CONTROL:

PROJECT NUMBER: 23-0204

Inputs

Simple Basin: pre-1

Scenario:	Icpr3
Node:	pre-1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1.2100 ac
Curve Number:	93.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: ws-1

Scenario:	Icpr3
Node:	smf-1b
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.2500 ac
Curve Number:	97.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: ws-2

Scenario:	Icpr3
Node:	smf-2a
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999999.00 cfs

Inputs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.5600 ac
Curve Number:	97.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: ws-3

Scenario:	Icpr3
Node:	smf-3a
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	Uh484
Peaking Factor:	484.0
Area:	0.4300 ac
Curve Number:	97.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: g-1

Scenario:	Icpr3
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	0.00 ft
Warning Stage:	0.00 ft
Boundary Stage:	

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	99999.0000	0.00

Comment:

Node: g-2

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	99999.0000	0.00

Comment:

Node: g-3

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	99999.0000	0.00

Comment:

Node: outfall

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 7.65 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	7.65
0	0	0	99999.0000	7.65

Comment:

Node: pre-1

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 14.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	14.00
0	0	0	99999.0000	14.00

Comment:

Node: smf-1a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.45 ft
Warning Stage: 14.40 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.45	0.00	0
12.53	0.00	95
12.62	0.00	190
12.70	0.01	285
12.78	0.01	380
12.87	0.01	476
12.95	0.01	571
13.03	0.02	760
13.12	0.02	946
13.20	0.03	1128
13.28	0.03	1306
13.37	0.03	1479
13.45	0.04	1646
13.53	0.04	1806
13.62	0.04	1958
13.70	0.05	2100
13.78	0.05	2226
13.87	0.05	2335
13.95	0.06	2435
14.03	0.06	2531
14.12	0.06	2626
14.20	0.06	2721
14.28	0.06	2816
14.37	0.07	2911
14.45	0.07	3006

Comment:

Node: smf-1b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 13.00 ft
Warning Stage: 14.75 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
13.00	0.00	0
13.08	0.00	32
13.17	0.00	64
13.25	0.00	96
13.33	0.00	129
13.42	0.00	161
13.50	0.00	193
13.58	0.01	255
13.67	0.01	316
13.75	0.01	376
13.83	0.01	434
13.92	0.01	491
14.00	0.01	546
14.08	0.01	599
14.17	0.01	649
14.25	0.02	697
14.33	0.02	738
14.42	0.02	775
14.50	0.02	809
14.58	0.02	841
14.67	0.02	873
14.75	0.02	905
14.83	0.02	937
14.92	0.02	969
15.00	0.02	1001

Comment:

Node: smf-2a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.10 ft
Warning Stage: 14.00 ft

Inputs

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.10	0.00	0
12.18	0.00	149
12.27	0.01	298
12.35	0.01	446
12.43	0.01	595
12.52	0.02	744
12.60	0.02	892
12.68	0.03	1191
12.77	0.03	1485
12.85	0.04	1772
12.93	0.05	2052
13.02	0.05	2324
13.10	0.06	2587
13.18	0.07	2840
13.27	0.07	3079
13.35	0.08	3302
13.43	0.08	3500
13.52	0.08	3671
13.60	0.09	3828
13.68	0.09	3977
13.77	0.09	4126
13.85	0.10	4275
13.93	0.10	4423
14.02	0.10	4572
14.10	0.11	4721

Comment:

Node: smf-2b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.40 ft
Warning Stage: 13.30 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.40	0.00	0
11.48	0.00	48
11.57	0.00	97
11.65	0.00	145
11.73	0.00	194
11.82	0.01	243
11.90	0.01	291
11.98	0.01	382
12.07	0.01	471

Inputs

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.15	0.01	558
12.23	0.01	643
12.32	0.02	726
12.40	0.02	806
12.48	0.02	884
12.57	0.02	958
12.65	0.02	1027
12.73	0.03	1089
12.82	0.03	1144
12.90	0.03	1195
12.98	0.03	1244
13.07	0.03	1292
13.15	0.03	1341
13.23	0.03	1389
13.32	0.03	1438
13.40	0.03	1486

Comment:

Node: smf-2c

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.85 ft
Warning Stage: 14.30 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.85	0.00	0
11.93	0.00	75
12.02	0.00	150
12.10	0.01	226
12.18	0.01	301
12.27	0.01	376
12.35	0.01	451
12.43	0.01	592
12.52	0.02	730
12.60	0.02	866
12.68	0.02	998
12.77	0.03	1127
12.85	0.03	1252
12.93	0.03	1373
13.02	0.03	1487
13.10	0.04	1595
13.18	0.04	1691
13.27	0.04	1776
13.35	0.04	1855

Inputs

Stage [ft]	Volume [ac-ft]	Volume [ft3]
13.43	0.04	1931
13.52	0.05	2006
13.60	0.05	2081
13.68	0.05	2156
13.77	0.05	2231
13.85	0.05	2307

Comment:

Node: smf-3a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.90 ft
Warning Stage: 13.80 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.90	0.00	0
11.98	0.00	44
12.07	0.00	88
12.15	0.00	132
12.23	0.00	175
12.32	0.01	219
12.40	0.01	263
12.48	0.01	348
12.57	0.01	433
12.65	0.01	515
12.73	0.01	595
12.82	0.02	673
12.90	0.02	749
12.98	0.02	822
13.07	0.02	891
13.15	0.02	955
13.23	0.02	1013
13.32	0.02	1063
13.40	0.03	1109
13.48	0.03	1153
13.57	0.03	1197
13.65	0.03	1240
13.73	0.03	1284
13.82	0.03	1328
13.90	0.03	1372

Comment:

Inputs

Node: smf-3b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.25 ft
Warning Stage: 13.10 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.25	0.00	0
11.33	0.00	44
11.42	0.00	88
11.50	0.00	132
11.58	0.00	175
11.67	0.01	219
11.75	0.01	263
11.83	0.01	348
11.92	0.01	433
12.00	0.01	515
12.08	0.01	595
12.17	0.02	673
12.25	0.02	749
12.33	0.02	822
12.42	0.02	891
12.50	0.02	955
12.58	0.02	1013
12.67	0.02	1063
12.75	0.03	1109
12.83	0.03	1153
12.92	0.03	1197
13.00	0.03	1240
13.08	0.03	1284
13.17	0.03	1328
13.25	0.03	1372

Comment:

Drop Structure Link: ds-1

Scenario: Icpr3
From Node: smf-1a
To Node: smf-2a
Link Count: 1
Flow Direction: Both
Solution: Combine
Increments: 10
Pipe Count: 1
Damping: 0.0000 ft
Length: 15.00 ft

Upstream Pipe

Invert: 13.00 ft
Manning's N: 0.0110

Geometry: Circular

Max Depth: 1.25 ft

Bottom Clip

Default: 0.00 ft
Op Table:
Ref Node:
Manning's N: 0.0000

Top Clip

Downstream Pipe

Invert: 12.25 ft
Manning's N: 0.0110

Geometry: Circular

Max Depth: 1.25 ft

Bottom Clip

Default: 0.00 ft
Op Table:
Ref Node:
Manning's N: 0.0000

Top Clip

Inputs

FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Sharp Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	13.70 ft	Ref Node:	
Control Elevation:	13.70 ft	**Discharge Coefficients**	
Max Depth:	1.50 ft	Weir Default:	3.200
Max Width:	1.50 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: ds-2		Upstream Pipe		Downstream Pipe	
Scenario:	Icpr3	Invert:	11.40 ft	Invert:	6.40 ft
From Node:	smf-2b	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	outfall	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	20.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip
Weir:	1	

Inputs

Weir Count:	1		
Weir Flow Direction:	Both	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:	
Weir Type:	Sharp Crested Vertical	Ref Node:	
Geometry Type:	Rectangular	**Top Clip**	
Invert:	12.77 ft	Default:	0.00 ft
Control Elevation:	12.77 ft	Op Table:	
Max Depth:	0.90 ft	Ref Node:	
Max Width:	3.50 ft	**Discharge Coefficients**	
Fillet:	0.00 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: ds-3		Upstream Pipe		Downstream Pipe	
Scenario:	Icpr3	Invert:	12.00 ft	Invert:	11.90 ft
From Node:	smf-3b	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2b	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	29.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component			
Weir:	1	**Bottom Clip**	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Sharp Crested Vertical	**Top Clip**	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	12.42 ft	Op Table:	
Control Elevation:	12.42 ft	Ref Node:	
Max Depth:	0.83 ft	**Discharge Coefficients**	
Max Width:	3.50 ft	Weir Default:	3.200

Inputs

Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Percolation Link: perc-1a

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-1a		
To Node:	g-1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	225.00 ft
Flow Direction:	Both	Perimeter 2:	226.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	227.00 ft
Water Table Elevation:	11.45 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-1b

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-1b		
To Node:	g-1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	130.00 ft
Flow Direction:	Both	Perimeter 2:	131.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	132.00 ft
Water Table Elevation:	12.00 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-2a

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-2a		
To Node:	g-2	Vertical Flow Termination:	Horizontal Flow Algorithm

Inputs

Link Count:	1		
Flow Direction:	Both	Perimeter 1:	286.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 2:	287.00 ft
Water Table Elevation:	11.09 ft	Perimeter 3:	288.00 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	3.000 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	10.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.250	# of Cells P2 to P3:	45
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-2b

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-2b		
To Node:	g-2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	171.00 ft
Flow Direction:	Both	Perimeter 2:	172.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	173.00 ft
Water Table Elevation:	10.38 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-2c

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-2c		
To Node:	g-2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	224.00 ft
Flow Direction:	Both	Perimeter 2:	225.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	226.00 ft
Water Table Elevation:	10.85 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-3a

Inputs

Scenario:	Icpr3		
From Node:	smf-3a	Surface Area Option:	User Specified
To Node:	g-3	Bottom Elevation:	11.90 ft
Link Count:	1	Surface Area:	0.0234 ac
Flow Direction:	Both	Vertical Flow Termination:	Horizontal Flow Algorithm
Aquifer Base Elevation:	0.00 ft	Perimeter 1:	145.00 ft
Water Table Elevation:	10.88 ft	Perimeter 2:	146.00 ft
Annual Recharge Rate:	0 ipy	Perimeter 3:	147.00 ft
Horizontal Conductivity:	3.000 fpd	Distance P1 to P2:	50.00 ft
Vertical Conductivity:	10.000 fpd	Distance P2 to P3:	450.00 ft
Fillable Porosity:	0.250	# of Cells P1 to P2:	10
Layer Thickness:	1.00 ft	# of Cells P2 to P3:	45

Comment:

Percolation Link: perc-3b

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-3b		
To Node:	g-3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	144.00 ft
Flow Direction:	Both	Perimeter 2:	145.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	146.00 ft
Water Table Elevation:	10.22 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Pipe Link: pipe-1b

		Upstream		Downstream	
Scenario:	Icpr3	Invert:	14.25 ft	Invert:	12.95 ft
From Node:	smf-1b	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-1a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	23.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Inputs

Pipe Link: pipe-2a		Upstream		Downstream	
Scenario:	Icpr3	Invert:	13.25 ft	Invert:	12.60 ft
From Node:	smf-2a	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2c	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	5.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: pipe-2b		Upstream		Downstream	
Scenario:	Icpr3	Invert:	13.00 ft	Invert:	12.60 ft
From Node:	smf-2c	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2b	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	20.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: pipe-2c		Upstream		Downstream	
Scenario:	Icpr3	Invert:	12.80 ft	Invert:	12.80 ft
From Node:	smf-2c	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	5.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			

Inputs

Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: pipe-3b		Upstream		Downstream	
Scenario:	Icpr3	Invert:	13.20 ft	Invert:	11.75 ft
From Node:	smf-3a	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-3b	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	5.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Simulation: 003YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:06:07 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]

Inputs

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 2.60 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 003YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:15:45 PM

Inputs

Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

IA Recovery Time: 2.0000 hr

Smp/Man Basin Rain Opt: Global

Inputs

Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-2
		Rainfall Amount:	3.10 in
Edge Length Option:	Automatic	Storm Duration:	2.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 003YR004HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:25:17 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Inputs

Resources		Lookup Tables	
Rainfall Folder:	Icpr3	Boundary Stage Set:	
		Extern Hydrograph Set:	
Unit Hydrograph Folder:	Icpr3	Curve Number Set:	
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	

Tolerances & Options			
Time Marching:	SAOR	IA Recovery Time:	4.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-4
		Rainfall Amount:	3.60 in
Edge Length Option:	Automatic	Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 003YR008HR

Scenario:	Icpr3
Run Date/Time:	9/19/2023 6:36:29 PM
Program Version:	ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Inputs

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 4.30 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 003YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:45:44 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 24.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-24
		Rainfall Amount:	5.80 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 003YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:55:14 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 6.50 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 005YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:05:55 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 2.80 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 005YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:17:31 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-2
		Rainfall Amount:	3.50 in
Edge Length Option:	Automatic	Storm Duration:	2.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 005YR004HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:26:52 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 4.10 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 005YR008HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:38:07 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 4.70 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 005YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:47:31 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-24
		Rainfall Amount:	6.20 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 005YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:57:13 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	72.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-72
		Rainfall Amount:	7.60 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 010YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:07:50 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-1

Rainfall Amount: 3.10 in

Storm Duration: 1.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 010YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:17:25 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-2
		Rainfall Amount:	3.80 in
Edge Length Option:	Automatic	Storm Duration:	2.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 010YR004HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:27:23 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 4.70 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 010YR008HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:36:49 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 5.40 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 010YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:46:07 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-24
		Rainfall Amount:	7.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 010YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:55:48 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 8.80 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 025YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:06:52 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-1

Rainfall Amount: 3.50 in

Storm Duration: 1.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 025YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:16:36 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-2
		Rainfall Amount:	4.30 in
Edge Length Option:	Automatic	Storm Duration:	2.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 025YR004HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:27:23 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	4.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-4
		Rainfall Amount:	5.50 in
Edge Length Option:	Automatic	Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 025YR008HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:36:51 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 6.40 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 025YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:46:24 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		60.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000
0	0	0	999999.0000	5.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: ICPR3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 24.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-24
		Rainfall Amount:	8.60 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	113 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 025YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:01:30 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 11.00 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 050YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:16:34 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 3.80 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 050YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:30:10 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-2
		Rainfall Amount:	4.80 in
Edge Length Option:	Automatic	Storm Duration:	2.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 050YR004YR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:43:15 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 6.00 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 050YR008HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:56:46 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 7.10 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 050YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:10:05 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-24
		Rainfall Amount:	9.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 050YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:21:20 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 12.00 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:33:14 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 4.20 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 100YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:43:07 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-2
		Rainfall Amount:	5.30 in
Edge Length Option:	Automatic	Storm Duration:	2.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100YR004YR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:53:05 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 6.50 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100YR008HR

Scenario: Icpr3
Run Date/Time: 9/20/2023 12:02:26 AM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 7.90 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 100YR024HR

Scenario: Icpr3
Run Date/Time: 9/20/2023 12:12:07 AM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-24
		Rainfall Amount:	10.60 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100YR072HR

Scenario: Icpr3
Run Date/Time: 9/20/2023 12:21:52 AM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 13.75 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: MN024HR

Scenario: Icpr3
Run Date/Time: 9/20/2023 12:32:33 AM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 4.70 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Max Stages

Sim	Node Name	Maximum Stage [ft]
003YR001HR	smf-1a	13.04
003YR001HR	smf-1b	14.67
003YR001HR	smf-2a	13.22
003YR001HR	smf-2b	12.43
003YR001HR	smf-2c	12.68
003YR001HR	smf-3a	13.76
003YR001HR	smf-3b	12.70
003YR002HR	smf-1a	13.02
003YR002HR	smf-1b	14.61
003YR002HR	smf-2a	13.17
003YR002HR	smf-2b	12.63
003YR002HR	smf-2c	13.01
003YR002HR	smf-3a	13.68
003YR002HR	smf-3b	12.64
003YR004HR	smf-1a	13.23
003YR004HR	smf-1b	14.50
003YR004HR	smf-2a	13.19
003YR004HR	smf-2b	12.87
003YR004HR	smf-2c	13.17
003YR004HR	smf-3a	13.54
003YR004HR	smf-3b	12.88
003YR008HR	smf-1a	13.19
003YR008HR	smf-1b	14.50
003YR008HR	smf-2a	13.22
003YR008HR	smf-2b	12.88
003YR008HR	smf-2c	13.18
003YR008HR	smf-3a	13.54
003YR008HR	smf-3b	12.89
003YR024HR	smf-1a	13.51
003YR024HR	smf-1b	14.39
003YR024HR	smf-2a	13.15
003YR024HR	smf-2b	12.85
003YR024HR	smf-2c	13.14
003YR024HR	smf-3a	13.39
003YR024HR	smf-3b	12.85
003YR072HR	smf-1a	13.33
003YR072HR	smf-1b	14.36
003YR072HR	smf-2a	13.15
003YR072HR	smf-2b	12.85
003YR072HR	smf-2c	13.15
003YR072HR	smf-3a	13.34
003YR072HR	smf-3b	12.86

Max Stages

Sim	Node Name	Maximum Stage [ft]
005YR001HR	smf-1a	13.10
005YR001HR	smf-1b	14.69
005YR001HR	smf-2a	13.28
005YR001HR	smf-2b	12.64
005YR001HR	smf-2c	12.98
005YR001HR	smf-3a	13.79
005YR001HR	smf-3b	12.77
005YR002HR	smf-1a	13.12
005YR002HR	smf-1b	14.64
005YR002HR	smf-2a	13.26
005YR002HR	smf-2b	12.86
005YR002HR	smf-2c	13.15
005YR002HR	smf-3a	13.71
005YR002HR	smf-3b	12.87
005YR004HR	smf-1a	13.26
005YR004HR	smf-1b	14.52
005YR004HR	smf-2a	13.26
005YR004HR	smf-2b	12.94
005YR004HR	smf-2c	13.26
005YR004HR	smf-3a	13.56
005YR004HR	smf-3b	12.95
005YR008HR	smf-1a	13.31
005YR008HR	smf-1b	14.51
005YR008HR	smf-2a	13.25
005YR008HR	smf-2b	12.90
005YR008HR	smf-2c	13.21
005YR008HR	smf-3a	13.55
005YR008HR	smf-3b	12.91
005YR024HR	smf-1a	13.66
005YR024HR	smf-1b	14.39
005YR024HR	smf-2a	13.16
005YR024HR	smf-2b	12.85
005YR024HR	smf-2c	13.15
005YR024HR	smf-3a	13.39
005YR024HR	smf-3b	12.86
005YR072HR	smf-1a	13.66
005YR072HR	smf-1b	14.37
005YR072HR	smf-2a	13.17
005YR072HR	smf-2b	12.87
005YR072HR	smf-2c	13.17
005YR072HR	smf-3a	13.35
005YR072HR	smf-3b	12.87

Max Stages

Sim	Node Name	Maximum Stage [ft]
010YR001HR	smf-1a	13.20
010YR001HR	smf-1b	14.72
010YR001HR	smf-2a	13.36
010YR001HR	smf-2b	12.88
010YR001HR	smf-2c	13.18
010YR001HR	smf-3a	13.83
010YR001HR	smf-3b	12.89
010YR002HR	smf-1a	13.23
010YR002HR	smf-1b	14.65
010YR002HR	smf-2a	13.32
010YR002HR	smf-2b	12.91
010YR002HR	smf-2c	13.21
010YR002HR	smf-3a	13.74
010YR002HR	smf-3b	12.92
010YR004HR	smf-1a	13.50
010YR004HR	smf-1b	14.54
010YR004HR	smf-2a	13.33
010YR004HR	smf-2b	13.01
010YR004HR	smf-2c	13.32
010YR004HR	smf-3a	13.59
010YR004HR	smf-3b	13.03
010YR008HR	smf-1a	13.57
010YR008HR	smf-1b	14.54
010YR008HR	smf-2a	13.33
010YR008HR	smf-2b	13.02
010YR008HR	smf-2c	13.33
010YR008HR	smf-3a	13.58
010YR008HR	smf-3b	13.04
010YR024HR	smf-1a	13.74
010YR024HR	smf-1b	14.41
010YR024HR	smf-2a	13.20
010YR024HR	smf-2b	12.89
010YR024HR	smf-2c	13.20
010YR024HR	smf-3a	13.41
010YR024HR	smf-3b	12.90
010YR072HR	smf-1a	13.74
010YR072HR	smf-1b	14.37
010YR072HR	smf-2a	13.19
010YR072HR	smf-2b	12.88
010YR072HR	smf-2c	13.18
010YR072HR	smf-3a	13.37
010YR072HR	smf-3b	12.88

Max Stages

Sim	Node Name	Maximum Stage [ft]
025YR001HR	smf-1a	13.36
025YR001HR	smf-1b	14.76
025YR001HR	smf-2a	13.45
025YR001HR	smf-2b	13.03
025YR001HR	smf-2c	13.35
025YR001HR	smf-3a	13.88
025YR001HR	smf-3b	13.05
025YR002HR	smf-1a	13.47
025YR002HR	smf-1b	14.68
025YR002HR	smf-2a	13.40
025YR002HR	smf-2b	13.00
025YR002HR	smf-2c	13.32
025YR002HR	smf-3a	13.78
025YR002HR	smf-3b	13.02
025YR004HR	smf-1a	13.76
025YR004HR	smf-1b	14.57
025YR004HR	smf-2a	13.41
025YR004HR	smf-2b	13.07
025YR004HR	smf-2c	13.40
025YR004HR	smf-3a	13.63
025YR004HR	smf-3b	13.10
025YR008HR	smf-1a	13.81
025YR008HR	smf-1b	14.56
025YR008HR	smf-2a	13.44
025YR008HR	smf-2b	13.10
025YR008HR	smf-2c	13.43
025YR008HR	smf-3a	13.62
025YR008HR	smf-3b	13.14
025YR024HR	smf-1a	13.77
025YR024HR	smf-1b	14.42
025YR024HR	smf-2a	13.25
025YR024HR	smf-2b	12.93
025YR024HR	smf-2c	13.25
025YR024HR	smf-3a	13.43
025YR024HR	smf-3b	12.94
025YR072HR	smf-1a	13.79
025YR072HR	smf-1b	14.39
025YR072HR	smf-2a	13.25
025YR072HR	smf-2b	12.92
025YR072HR	smf-2c	13.25
025YR072HR	smf-3a	13.39
025YR072HR	smf-3b	12.92

Max Stages

Sim	Node Name	Maximum Stage [ft]
050YR001HR	smf-1a	13.49
050YR001HR	smf-1b	14.79
050YR001HR	smf-2a	13.50
050YR001HR	smf-2b	13.13
050YR001HR	smf-2c	13.44
050YR001HR	smf-3a	13.91
050YR001HR	smf-3b	13.17
050YR002HR	smf-1a	13.72
050YR002HR	smf-1b	14.71
050YR002HR	smf-2a	13.47
050YR002HR	smf-2b	13.10
050YR002HR	smf-2c	13.41
050YR002HR	smf-3a	13.81
050YR002HR	smf-3b	13.14
050YR004YR	smf-1a	13.85
050YR004YR	smf-1b	14.59
050YR004YR	smf-2a	13.44
050YR004YR	smf-2b	13.10
050YR004YR	smf-2c	13.43
050YR004YR	smf-3a	13.65
050YR004YR	smf-3b	13.13
050YR008HR	smf-1a	13.87
050YR008HR	smf-1b	14.58
050YR008HR	smf-2a	13.49
050YR008HR	smf-2b	13.15
050YR008HR	smf-2c	13.48
050YR008HR	smf-3a	13.64
050YR008HR	smf-3b	13.19
050YR024HR	smf-1a	13.78
050YR024HR	smf-1b	14.43
050YR024HR	smf-2a	13.26
050YR024HR	smf-2b	12.94
050YR024HR	smf-2c	13.26
050YR024HR	smf-3a	13.44
050YR024HR	smf-3b	12.95
050YR072HR	smf-1a	13.79
050YR072HR	smf-1b	14.40
050YR072HR	smf-2a	13.26
050YR072HR	smf-2b	12.93
050YR072HR	smf-2c	13.26
050YR072HR	smf-3a	13.39
050YR072HR	smf-3b	12.93

Max Stages

Sim	Node Name	Maximum Stage [ft]
100YR001HR	smf-1a	13.70
100YR001HR	smf-1b	14.82
100YR001HR	smf-2a	13.57
100YR001HR	smf-2b	13.23
100YR001HR	smf-2c	13.54
100YR001HR	smf-3a	13.95
100YR001HR	smf-3b	13.30
100YR002HR	smf-1a	13.81
100YR002HR	smf-1b	14.74
100YR002HR	smf-2a	13.52
100YR002HR	smf-2b	13.19
100YR002HR	smf-2c	13.51
100YR002HR	smf-3a	13.85
100YR002HR	smf-3b	13.26
100YR004YR	smf-1a	13.88
100YR004YR	smf-1b	14.60
100YR004YR	smf-2a	13.47
100YR004YR	smf-2b	13.13
100YR004YR	smf-2c	13.46
100YR004YR	smf-3a	13.67
100YR004YR	smf-3b	13.16
100YR008HR	smf-1a	13.95
100YR008HR	smf-1b	14.60
100YR008HR	smf-2a	13.57
100YR008HR	smf-2b	13.21
100YR008HR	smf-2c	13.57
100YR008HR	smf-3a	13.67
100YR008HR	smf-3b	13.25
100YR024HR	smf-1a	13.81
100YR024HR	smf-1b	14.45
100YR024HR	smf-2a	13.31
100YR024HR	smf-2b	12.97
100YR024HR	smf-2c	13.30
100YR024HR	smf-3a	13.46
100YR024HR	smf-3b	12.98
100YR072HR	smf-1a	13.80
100YR072HR	smf-1b	14.41
100YR072HR	smf-2a	13.29
100YR072HR	smf-2b	12.94
100YR072HR	smf-2c	13.28
100YR072HR	smf-3a	13.41
100YR072HR	smf-3b	12.95

Max Stages

Sim	Node Name	Maximum Stage [ft]
MN024HR	smf-1a	13.06
MN024HR	smf-1b	14.60
MN024HR	smf-2a	13.30
MN024HR	smf-2b	12.86
MN024HR	smf-2c	13.17
MN024HR	smf-3a	13.67
MN024HR	smf-3b	12.87

Node Max Conditions [Icpr3]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
pre-1	003YR001HR	0.00	14.00	0.0000	5.28	0.00	0
pre-1	003YR002HR	0.00	14.00	0.0000	3.96	0.00	0
pre-1	003YR004HR	0.00	14.00	0.0000	2.07	0.00	0
pre-1	003YR008HR	0.00	14.00	0.0000	2.10	0.00	0
pre-1	003YR024HR	0.00	14.00	0.0000	0.68	0.00	0
pre-1	003YR072HR	0.00	14.00	0.0000	0.45	0.00	0
pre-1	005YR001HR	0.00	14.00	0.0000	5.79	0.00	0
pre-1	005YR002HR	0.00	14.00	0.0000	4.41	0.00	0
pre-1	005YR004HR	0.00	14.00	0.0000	2.40	0.00	0
pre-1	005YR008HR	0.00	14.00	0.0000	2.36	0.00	0
pre-1	005YR024HR	0.00	14.00	0.0000	0.77	0.00	0
pre-1	005YR072HR	0.00	14.00	0.0000	0.48	0.00	0
pre-1	010YR001HR	0.00	14.00	0.0000	6.56	0.00	0
pre-1	010YR002HR	0.00	14.00	0.0000	5.02	0.00	0
pre-1	010YR004HR	0.00	14.00	0.0000	2.73	0.00	0
pre-1	010YR008HR	0.00	14.00	0.0000	2.78	0.00	0
pre-1	010YR024HR	0.00	14.00	0.0000	0.90	0.00	0
pre-1	010YR072HR	0.00	14.00	0.0000	0.53	0.00	0
pre-1	025YR001HR	0.00	14.00	0.0000	7.83	0.00	0
pre-1	025YR002HR	0.00	14.00	0.0000	5.77	0.00	0
pre-1	025YR004HR	0.00	14.00	0.0000	3.13	0.00	0
pre-1	025YR008HR	0.00	14.00	0.0000	3.10	0.00	0
pre-1	025YR024HR	0.00	14.00	0.0000	1.02	0.00	0
pre-1	025YR072HR	0.00	14.00	0.0000	0.66	0.00	0
pre-1	050YR001HR	0.00	14.00	0.0000	8.85	0.00	0
pre-1	050YR002HR	0.00	14.00	0.0000	6.67	0.00	0
pre-1	050YR004YR	0.00	14.00	0.0000	3.52	0.00	0
pre-1	050YR008HR	0.00	14.00	0.0000	3.52	0.00	0
pre-1	050YR024HR	0.00	14.00	0.0000	1.15	0.00	0
pre-1	050YR072HR	0.00	14.00	0.0000	0.72	0.00	0
pre-1	100YR001HR	0.00	14.00	0.0000	9.86	0.00	0
pre-1	100YR002HR	0.00	14.00	0.0000	7.41	0.00	0
pre-1	100YR004YR	0.00	14.00	0.0000	3.98	0.00	0
pre-1	100YR008HR	0.00	14.00	0.0000	3.78	0.00	0
pre-1	100YR024HR	0.00	14.00	0.0000	1.34	0.00	0
pre-1	100YR072HR	0.00	14.00	0.0000	0.83	0.00	0
pre-1	MN024HR	0.00	14.00	0.0000	3.92	0.00	0

Node Max Conditions w/ Times [Icpr3]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]	Time to Max Stage [hr]	Time to Min/Max Delta Stage	Time to Max Total Inflow	Time to Max Total Outflow

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]	Time to Max Stage [hr]	Time to Min/Max Delta Stage [hr]	Time to Max Total Inflow [hr]	Time to Max Total Outflow [hr]
pre-1	003YR001HR	0.00	14.00	0.0000	5.28	0.00	0	0.0000	0.0000	0.6000	0.0000
pre-1	003YR002HR	0.00	14.00	0.0000	3.96	0.00	0	0.0000	0.0000	0.8000	0.0000
pre-1	003YR004HR	0.00	14.00	0.0000	2.07	0.00	0	0.0000	0.0000	2.0167	0.0000
pre-1	003YR008HR	0.00	14.00	0.0000	2.10	0.00	0	0.0000	0.0000	4.0002	0.0000
pre-1	003YR024HR	0.00	14.00	0.0000	0.68	0.00	0	0.0000	0.0000	11.9983	0.0000
pre-1	003YR072HR	0.00	14.00	0.0000	0.45	0.00	0	0.0000	0.0000	59.9154	0.0000
pre-1	005YR001HR	0.00	14.00	0.0000	5.79	0.00	0	0.0000	0.0000	0.5834	0.0000
pre-1	005YR002HR	0.00	14.00	0.0000	4.41	0.00	0	0.0000	0.0000	0.8000	0.0000
pre-1	005YR004HR	0.00	14.00	0.0000	2.40	0.00	0	0.0000	0.0000	2.0168	0.0000
pre-1	005YR008HR	0.00	14.00	0.0000	2.36	0.00	0	0.0000	0.0000	3.9998	0.0000
pre-1	005YR024HR	0.00	14.00	0.0000	0.77	0.00	0	0.0000	0.0000	11.9987	0.0000
pre-1	005YR072HR	0.00	14.00	0.0000	0.48	0.00	0	0.0000	0.0000	59.9149	0.0000
pre-1	010YR001HR	0.00	14.00	0.0000	6.56	0.00	0	0.0000	0.0000	0.5833	0.0000
pre-1	010YR002HR	0.00	14.00	0.0000	5.02	0.00	0	0.0000	0.0000	0.8001	0.0000
pre-1	010YR004HR	0.00	14.00	0.0000	2.73	0.00	0	0.0000	0.0000	2.0167	0.0000
pre-1	010YR008HR	0.00	14.00	0.0000	2.78	0.00	0	0.0000	0.0000	3.9992	0.0000
pre-1	010YR024HR	0.00	14.00	0.0000	0.90	0.00	0	0.0000	0.0000	11.9998	0.0000
pre-1	010YR072HR	0.00	14.00	0.0000	0.53	0.00	0	0.0000	0.0000	59.9162	0.0000
pre-1	025YR001HR	0.00	14.00	0.0000	7.83	0.00	0	0.0000	0.0000	0.5833	0.0000
pre-1	025YR002HR	0.00	14.00	0.0000	5.77	0.00	0	0.0000	0.0000	0.8000	0.0000
pre-1	025YR004HR	0.00	14.00	0.0000	3.13	0.00	0	0.0000	0.0000	2.0164	0.0000
pre-1	025YR008HR	0.00	14.00	0.0000	3.10	0.00	0	0.0000	0.0000	4.0000	0.0000
pre-1	025YR0	0.00	14.00	0.0000	1.02	0.00	0	0.0000	0.0000	11.9988	0.0000

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]	Time to Max Stage [hr]	Time to Min/Max Delta Stage [hr]	Time to Max Total Inflow [hr]	Time to Max Total Outflow [hr]
	24HR										
pre-1	025YR072HR	0.00	14.00	0.0000	0.66	0.00	0	0.0000	0.0000	59.9153	0.0000
pre-1	050YR001HR	0.00	14.00	0.0000	8.85	0.00	0	0.0000	0.0000	0.5833	0.0000
pre-1	050YR002HR	0.00	14.00	0.0000	6.67	0.00	0	0.0000	0.0000	0.7999	0.0000
pre-1	050YR004YR	0.00	14.00	0.0000	3.52	0.00	0	0.0000	0.0000	2.0166	0.0000
pre-1	050YR008HR	0.00	14.00	0.0000	3.52	0.00	0	0.0000	0.0000	3.9985	0.0000
pre-1	050YR024HR	0.00	14.00	0.0000	1.15	0.00	0	0.0000	0.0000	11.9961	0.0000
pre-1	050YR072HR	0.00	14.00	0.0000	0.72	0.00	0	0.0000	0.0000	59.9166	0.0000
pre-1	100YR001HR	0.00	14.00	0.0000	9.86	0.00	0	0.0000	0.0000	0.5833	0.0000
pre-1	100YR002HR	0.00	14.00	0.0000	7.41	0.00	0	0.0000	0.0000	0.8000	0.0000
pre-1	100YR004YR	0.00	14.00	0.0000	3.98	0.00	0	0.0000	0.0000	2.0000	0.0000
pre-1	100YR008HR	0.00	14.00	0.0000	3.78	0.00	0	0.0000	0.0000	3.9993	0.0000
pre-1	100YR024HR	0.00	14.00	0.0000	1.34	0.00	0	0.0000	0.0000	11.9977	0.0000
pre-1	100YR072HR	0.00	14.00	0.0000	0.83	0.00	0	0.0000	0.0000	59.9124	0.0000
pre-1	MN024HR	0.00	14.00	0.0000	3.92	0.00	0	0.0000	0.0000	12.0166	0.0000

Peak Discharge

Sim	Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs
003YR001HR	ds-2	0.00	0.0000
003YR002HR	ds-2	0.00	0.0000
003YR004HR	ds-2	0.35	3.1818
003YR008HR	ds-2	0.40	5.0824
003YR024HR	ds-2	0.24	15.0904
003YR072HR	ds-2	0.26	60.0798
005YR001HR	ds-2	0.00	0.0000
005YR002HR	ds-2	0.30	1.7114
005YR004HR	ds-2	0.78	3.0684
005YR008HR	ds-2	0.53	4.2860
005YR024HR	ds-2	0.27	15.0735
005YR072HR	ds-2	0.33	59.5825
010YR001HR	ds-2	0.39	0.9749
010YR002HR	ds-2	0.56	1.4584
010YR004HR	ds-2	1.28	2.6319
010YR008HR	ds-2	1.41	4.1035
010YR024HR	ds-2	0.47	12.1225
010YR072HR	ds-2	0.39	59.8328
025YR001HR	ds-2	1.48	0.9353
025YR002HR	ds-2	1.23	1.1696
025YR004HR	ds-2	1.85	2.5887
025YR008HR	ds-2	2.17	4.0700
025YR024HR	ds-2	0.70	12.0597
025YR072HR	ds-2	0.63	59.7396
050YR001HR	ds-2	2.37	0.8887
050YR002HR	ds-2	2.11	1.0668
050YR004YR	ds-2	2.14	2.5735
050YR008HR	ds-2	2.57	4.0714
050YR024HR	ds-2	0.78	12.0748
050YR072HR	ds-2	0.69	59.9842
100YR001HR	ds-2	3.54	0.8365
100YR002HR	ds-2	3.08	0.9958
100YR004YR	ds-2	2.39	2.5475
100YR008HR	ds-2	3.22	4.0790
100YR024HR	ds-2	0.97	12.1087
100YR072HR	ds-2	0.80	59.2680
MN024HR	ds-2	0.31	12.6464

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR001HR	smf-1a	10.5030	12.51
003YR001HR	smf-1a	10.7530	12.50
003YR001HR	smf-1a	11.0030	12.50
003YR001HR	smf-1a	11.2530	12.49
003YR001HR	smf-1a	11.5030	12.49
003YR001HR	smf-1a	11.7530	12.48
003YR001HR	smf-1a	12.0030	12.48
003YR001HR	smf-1a	12.2530	12.48
003YR001HR	smf-1a	12.5030	12.47
003YR001HR	smf-1a	12.7530	12.47
003YR001HR	smf-1a	13.0030	12.46
003YR001HR	smf-1a	13.2530	12.46
003YR001HR	smf-1a	13.5030	12.46
003YR001HR	smf-1a	13.7530	12.45
003YR001HR	smf-1a	14.0030	12.45
003YR001HR	smf-1a	14.2530	12.45
003YR001HR	smf-1a	14.5030	12.45
003YR001HR	smf-1a	14.7530	12.45
003YR001HR	smf-1a	15.0030	12.45
003YR001HR	smf-1a	15.2530	12.45
003YR001HR	smf-1a	15.5030	12.45
003YR001HR	smf-1a	15.7530	12.45
003YR001HR	smf-1a	16.0030	12.45
003YR001HR	smf-1a	16.2530	12.45
003YR001HR	smf-1a	16.5030	12.45
003YR001HR	smf-1a	16.7530	12.45
003YR001HR	smf-1a	17.0030	12.45
003YR001HR	smf-1a	17.2530	12.45
003YR001HR	smf-1a	17.5030	12.45
003YR001HR	smf-1a	17.7530	12.45
003YR001HR	smf-1a	18.0030	12.45
003YR001HR	smf-1a	18.2530	12.45
003YR001HR	smf-1a	18.5030	12.45
003YR001HR	smf-1a	18.7530	12.45
003YR001HR	smf-1a	19.0030	12.45
003YR001HR	smf-1a	19.2530	12.45
003YR001HR	smf-1a	19.5030	12.45
003YR001HR	smf-1a	19.7530	12.45
003YR001HR	smf-1a	20.0030	12.45
003YR001HR	smf-1a	20.2530	12.45
003YR001HR	smf-1a	20.5030	12.45
003YR001HR	smf-1a	20.7530	12.45

3yr-1hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR001HR	smf-1b	45.2530	13.06
003YR001HR	smf-1b	45.5030	13.05
003YR001HR	smf-1b	45.7530	13.05
003YR001HR	smf-1b	46.0030	13.05
003YR001HR	smf-1b	46.2530	13.05
003YR001HR	smf-1b	46.5030	13.05
003YR001HR	smf-1b	46.7530	13.04
003YR001HR	smf-1b	47.0030	13.04
003YR001HR	smf-1b	47.2530	13.04
003YR001HR	smf-1b	47.5030	13.04
003YR001HR	smf-1b	47.7530	13.03
003YR001HR	smf-1b	48.0030	13.03
003YR001HR	smf-1b	48.2530	13.03
003YR001HR	smf-1b	48.5030	13.03
003YR001HR	smf-1b	48.7530	13.03
003YR001HR	smf-1b	49.0030	13.03
003YR001HR	smf-1b	49.2530	13.02
003YR001HR	smf-1b	49.5030	13.02
003YR001HR	smf-1b	49.7530	13.02
003YR001HR	smf-1b	50.0030	13.02
003YR001HR	smf-1b	50.2530	13.02
003YR001HR	smf-1b	50.5030	13.01
003YR001HR	smf-1b	50.7530	13.01
003YR001HR	smf-1b	51.0030	13.01
003YR001HR	smf-1b	51.2530	13.01
003YR001HR	smf-1b	51.5030	13.01
003YR001HR	smf-1b	51.7530	13.00
003YR001HR	smf-1b	52.0030	13.00
003YR001HR	smf-1b	52.2530	13.00
003YR001HR	smf-1b	52.5030	13.00
003YR001HR	smf-1b	52.7530	13.00
003YR001HR	smf-1b	53.0030	13.00
003YR001HR	smf-1b	53.2530	13.00
003YR001HR	smf-1b	53.5030	13.00
003YR001HR	smf-1b	53.7530	13.00
003YR001HR	smf-1b	54.0030	13.00
003YR001HR	smf-1b	54.2530	13.00
003YR001HR	smf-1b	54.5030	13.00
003YR001HR	smf-1b	54.7530	13.00
003YR001HR	smf-1b	55.0030	13.00
003YR001HR	smf-1b	55.2530	13.00
003YR001HR	smf-1b	55.5030	13.00

3yr-1hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR001HR	smf-2a	80.0030	12.13
003YR001HR	smf-2a	80.2530	12.13
003YR001HR	smf-2a	80.5030	12.13
003YR001HR	smf-2a	80.7530	12.13
003YR001HR	smf-2a	81.0030	12.13
003YR001HR	smf-2a	81.2530	12.13
003YR001HR	smf-2a	81.5030	12.13
003YR001HR	smf-2a	81.7530	12.13
003YR001HR	smf-2a	82.0030	12.12
003YR001HR	smf-2a	82.2530	12.12
003YR001HR	smf-2a	82.5030	12.12
003YR001HR	smf-2a	82.7530	12.12
003YR001HR	smf-2a	83.0030	12.12
003YR001HR	smf-2a	83.2530	12.12
003YR001HR	smf-2a	83.5030	12.12
003YR001HR	smf-2a	83.7530	12.12
003YR001HR	smf-2a	84.0030	12.12
003YR001HR	smf-2a	84.2530	12.12
003YR001HR	smf-2a	84.5030	12.12
003YR001HR	smf-2a	84.7530	12.12
003YR001HR	smf-2a	85.0030	12.11
003YR001HR	smf-2a	85.2530	12.11
003YR001HR	smf-2a	85.5030	12.11
003YR001HR	smf-2a	85.7530	12.11
003YR001HR	smf-2a	86.0030	12.11
003YR001HR	smf-2a	86.2530	12.11
003YR001HR	smf-2a	86.5030	12.11
003YR001HR	smf-2a	86.7530	12.11
003YR001HR	smf-2a	87.0030	12.11
003YR001HR	smf-2a	87.2530	12.11
003YR001HR	smf-2a	87.5030	12.11
003YR001HR	smf-2a	87.7530	12.11
003YR001HR	smf-2a	88.0030	12.10
003YR001HR	smf-2a	88.2530	12.10
003YR001HR	smf-2a	88.5030	12.10
003YR001HR	smf-2a	88.7530	12.10
003YR001HR	smf-2a	89.0030	12.10
003YR001HR	smf-2a	89.2530	12.10
003YR001HR	smf-2a	89.5030	12.10
003YR001HR	smf-2a	89.7530	12.10
003YR001HR	smf-2a	90.0030	12.10
003YR001HR	smf-2a	90.2530	12.10

3yr-1hr SMF-2a

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR001HR	smf-2b	30.7530	11.40
003YR001HR	smf-2b	31.0030	11.40
003YR001HR	smf-2b	31.2530	11.40
003YR001HR	smf-2b	31.5030	11.40
003YR001HR	smf-2b	31.7530	11.40
003YR001HR	smf-2b	32.0030	11.40
003YR001HR	smf-2b	32.2530	11.40
003YR001HR	smf-2b	32.5030	11.40
003YR001HR	smf-2b	32.7530	11.40
003YR001HR	smf-2b	33.0030	11.40
003YR001HR	smf-2b	33.2530	11.40
003YR001HR	smf-2b	33.5030	11.40
003YR001HR	smf-2b	33.7530	11.40
003YR001HR	smf-2b	34.0030	11.40
003YR001HR	smf-2b	34.2530	11.40
003YR001HR	smf-2b	34.5030	11.40
003YR001HR	smf-2b	34.7530	11.40
003YR001HR	smf-2b	35.0030	11.40
003YR001HR	smf-2b	35.2530	11.40
003YR001HR	smf-2b	35.5030	11.40
003YR001HR	smf-2b	35.7530	11.40
003YR001HR	smf-2b	36.0030	11.40
003YR001HR	smf-2b	36.2530	11.40
003YR001HR	smf-2b	36.5030	11.40
003YR001HR	smf-2b	36.7530	11.40
003YR001HR	smf-2b	37.0030	11.40
003YR001HR	smf-2b	37.2530	11.40
003YR001HR	smf-2b	37.5030	11.40
003YR001HR	smf-2b	37.7530	11.40
003YR001HR	smf-2b	38.0030	11.40
003YR001HR	smf-2b	38.2530	11.40
003YR001HR	smf-2b	38.5030	11.40
003YR001HR	smf-2b	38.7530	11.40
003YR001HR	smf-2b	39.0030	11.40
003YR001HR	smf-2b	39.2530	11.40
003YR001HR	smf-2b	39.5030	11.40
003YR001HR	smf-2b	39.7530	11.40
003YR001HR	smf-2b	40.0030	11.40
003YR001HR	smf-2b	40.2530	11.40
003YR001HR	smf-2b	40.5030	11.40
003YR001HR	smf-2b	40.7530	11.40
003YR001HR	smf-2b	41.0030	11.40

3yr-1hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR001HR	smf-2c	34.0030	11.93
003YR001HR	smf-2c	34.2530	11.93
003YR001HR	smf-2c	34.5030	11.93
003YR001HR	smf-2c	34.7530	11.93
003YR001HR	smf-2c	35.0030	11.92
003YR001HR	smf-2c	35.2530	11.92
003YR001HR	smf-2c	35.5030	11.92
003YR001HR	smf-2c	35.7530	11.92
003YR001HR	smf-2c	36.0030	11.91
003YR001HR	smf-2c	36.2530	11.91
003YR001HR	smf-2c	36.5030	11.91
003YR001HR	smf-2c	36.7530	11.91
003YR001HR	smf-2c	37.0030	11.91
003YR001HR	smf-2c	37.2530	11.90
003YR001HR	smf-2c	37.5030	11.90
003YR001HR	smf-2c	37.7530	11.90
003YR001HR	smf-2c	38.0030	11.90
003YR001HR	smf-2c	38.2530	11.89
003YR001HR	smf-2c	38.5030	11.89
003YR001HR	smf-2c	38.7530	11.89
003YR001HR	smf-2c	39.0030	11.89
003YR001HR	smf-2c	39.2530	11.89
003YR001HR	smf-2c	39.5030	11.88
003YR001HR	smf-2c	39.7530	11.88
003YR001HR	smf-2c	40.0030	11.88
003YR001HR	smf-2c	40.2530	11.88
003YR001HR	smf-2c	40.5030	11.88
003YR001HR	smf-2c	40.7530	11.87
003YR001HR	smf-2c	41.0030	11.87
003YR001HR	smf-2c	41.2530	11.87
003YR001HR	smf-2c	41.5030	11.87
003YR001HR	smf-2c	41.7530	11.87
003YR001HR	smf-2c	42.0030	11.87
003YR001HR	smf-2c	42.2530	11.86
003YR001HR	smf-2c	42.5030	11.86
003YR001HR	smf-2c	42.7530	11.86
003YR001HR	smf-2c	43.0030	11.86
003YR001HR	smf-2c	43.2530	11.86
003YR001HR	smf-2c	43.5030	11.85
003YR001HR	smf-2c	43.7530	11.85
003YR001HR	smf-2c	44.0030	11.85
003YR001HR	smf-2c	44.2530	11.85

3yr-1hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR001HR	smf-3a	79.2530	11.94
003YR001HR	smf-3a	79.5030	11.94
003YR001HR	smf-3a	79.7530	11.94
003YR001HR	smf-3a	80.0030	11.94
003YR001HR	smf-3a	80.2530	11.94
003YR001HR	smf-3a	80.5030	11.94
003YR001HR	smf-3a	80.7530	11.94
003YR001HR	smf-3a	81.0030	11.94
003YR001HR	smf-3a	81.2530	11.93
003YR001HR	smf-3a	81.5030	11.93
003YR001HR	smf-3a	81.7530	11.93
003YR001HR	smf-3a	82.0030	11.93
003YR001HR	smf-3a	82.2530	11.93
003YR001HR	smf-3a	82.5030	11.93
003YR001HR	smf-3a	82.7530	11.93
003YR001HR	smf-3a	83.0030	11.93
003YR001HR	smf-3a	83.2530	11.93
003YR001HR	smf-3a	83.5030	11.92
003YR001HR	smf-3a	83.7530	11.92
003YR001HR	smf-3a	84.0030	11.92
003YR001HR	smf-3a	84.2530	11.92
003YR001HR	smf-3a	84.5030	11.92
003YR001HR	smf-3a	84.7530	11.92
003YR001HR	smf-3a	85.0030	11.92
003YR001HR	smf-3a	85.2530	11.92
003YR001HR	smf-3a	85.5030	11.92
003YR001HR	smf-3a	85.7530	11.91
003YR001HR	smf-3a	86.0030	11.91
003YR001HR	smf-3a	86.2530	11.91
003YR001HR	smf-3a	86.5030	11.91
003YR001HR	smf-3a	86.7530	11.91
003YR001HR	smf-3a	87.0030	11.91
003YR001HR	smf-3a	87.2530	11.91
003YR001HR	smf-3a	87.5030	11.91
003YR001HR	smf-3a	87.7530	11.91
003YR001HR	smf-3a	88.0030	11.90
003YR001HR	smf-3a	88.2530	11.90
003YR001HR	smf-3a	88.5030	11.90
003YR001HR	smf-3a	88.7530	11.90
003YR001HR	smf-3a	89.0030	11.90
003YR001HR	smf-3a	89.2530	11.90
003YR001HR	smf-3a	89.5030	11.90

3yr-1hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR001HR	smf-3b	61.5030	11.30
003YR001HR	smf-3b	61.7530	11.30
003YR001HR	smf-3b	62.0030	11.29
003YR001HR	smf-3b	62.2530	11.29
003YR001HR	smf-3b	62.5030	11.29
003YR001HR	smf-3b	62.7530	11.29
003YR001HR	smf-3b	63.0030	11.29
003YR001HR	smf-3b	63.2530	11.29
003YR001HR	smf-3b	63.5030	11.29
003YR001HR	smf-3b	63.7530	11.28
003YR001HR	smf-3b	64.0030	11.28
003YR001HR	smf-3b	64.2530	11.28
003YR001HR	smf-3b	64.5030	11.28
003YR001HR	smf-3b	64.7530	11.28
003YR001HR	smf-3b	65.0030	11.28
003YR001HR	smf-3b	65.2530	11.28
003YR001HR	smf-3b	65.5030	11.27
003YR001HR	smf-3b	65.7530	11.27
003YR001HR	smf-3b	66.0030	11.27
003YR001HR	smf-3b	66.2530	11.27
003YR001HR	smf-3b	66.5030	11.27
003YR001HR	smf-3b	66.7530	11.27
003YR001HR	smf-3b	67.0030	11.27
003YR001HR	smf-3b	67.2530	11.27
003YR001HR	smf-3b	67.5030	11.26
003YR001HR	smf-3b	67.7530	11.26
003YR001HR	smf-3b	68.0030	11.26
003YR001HR	smf-3b	68.2530	11.26
003YR001HR	smf-3b	68.5030	11.26
003YR001HR	smf-3b	68.7530	11.26
003YR001HR	smf-3b	69.0030	11.26
003YR001HR	smf-3b	69.2530	11.25
003YR001HR	smf-3b	69.5030	11.25
003YR001HR	smf-3b	69.7530	11.25
003YR001HR	smf-3b	70.0030	11.25
003YR001HR	smf-3b	70.2530	11.25
003YR001HR	smf-3b	70.5030	11.25
003YR001HR	smf-3b	70.7530	11.25
003YR001HR	smf-3b	71.0030	11.25
003YR001HR	smf-3b	71.2530	11.25
003YR001HR	smf-3b	71.5030	11.25
003YR001HR	smf-3b	71.7530	11.25

3yr-1hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR002HR	smf-1a	22.7562	12.48
003YR002HR	smf-1a	23.0062	12.48
003YR002HR	smf-1a	23.2562	12.47
003YR002HR	smf-1a	23.5062	12.47
003YR002HR	smf-1a	23.7562	12.47
003YR002HR	smf-1a	24.0062	12.47
003YR002HR	smf-1a	24.2562	12.46
003YR002HR	smf-1a	24.5062	12.46
003YR002HR	smf-1a	24.7562	12.46
003YR002HR	smf-1a	25.0062	12.46
003YR002HR	smf-1a	25.2562	12.46
003YR002HR	smf-1a	25.5062	12.45
003YR002HR	smf-1a	25.7562	12.45
003YR002HR	smf-1a	26.0062	12.45
003YR002HR	smf-1a	26.2562	12.45
003YR002HR	smf-1a	26.5062	12.45
003YR002HR	smf-1a	26.7562	12.45
003YR002HR	smf-1a	27.0062	12.45
003YR002HR	smf-1a	27.2562	12.45
003YR002HR	smf-1a	27.5062	12.45
003YR002HR	smf-1a	27.7562	12.45
003YR002HR	smf-1a	28.0062	12.45
003YR002HR	smf-1a	28.2562	12.45
003YR002HR	smf-1a	28.5062	12.45
003YR002HR	smf-1a	28.7562	12.45
003YR002HR	smf-1a	29.0062	12.45
003YR002HR	smf-1a	29.2562	12.45
003YR002HR	smf-1a	29.5062	12.45
003YR002HR	smf-1a	29.7562	12.45
003YR002HR	smf-1a	30.0062	12.45
003YR002HR	smf-1a	30.2562	12.45
003YR002HR	smf-1a	30.5062	12.45
003YR002HR	smf-1a	30.7562	12.45
003YR002HR	smf-1a	31.0062	12.45
003YR002HR	smf-1a	31.2562	12.45
003YR002HR	smf-1a	31.5062	12.45
003YR002HR	smf-1a	31.7562	12.45
003YR002HR	smf-1a	32.0062	12.45
003YR002HR	smf-1a	32.2562	12.45
003YR002HR	smf-1a	32.5062	12.45
003YR002HR	smf-1a	32.7562	12.45
003YR002HR	smf-1a	33.0062	12.45

3yr-2hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR002HR	smf-1b	56.5062	13.07
003YR002HR	smf-1b	56.7562	13.07
003YR002HR	smf-1b	57.0062	13.06
003YR002HR	smf-1b	57.2562	13.06
003YR002HR	smf-1b	57.5062	13.06
003YR002HR	smf-1b	57.7562	13.06
003YR002HR	smf-1b	58.0062	13.06
003YR002HR	smf-1b	58.2562	13.06
003YR002HR	smf-1b	58.5062	13.05
003YR002HR	smf-1b	58.7562	13.05
003YR002HR	smf-1b	59.0062	13.05
003YR002HR	smf-1b	59.2562	13.05
003YR002HR	smf-1b	59.5062	13.05
003YR002HR	smf-1b	59.7562	13.04
003YR002HR	smf-1b	60.0062	13.04
003YR002HR	smf-1b	60.2562	13.04
003YR002HR	smf-1b	60.5062	13.04
003YR002HR	smf-1b	60.7562	13.04
003YR002HR	smf-1b	61.0062	13.04
003YR002HR	smf-1b	61.2562	13.03
003YR002HR	smf-1b	61.5062	13.03
003YR002HR	smf-1b	61.7562	13.03
003YR002HR	smf-1b	62.0062	13.03
003YR002HR	smf-1b	62.2562	13.03
003YR002HR	smf-1b	62.5062	13.03
003YR002HR	smf-1b	62.7562	13.02
003YR002HR	smf-1b	63.0062	13.02
003YR002HR	smf-1b	63.2562	13.02
003YR002HR	smf-1b	63.5062	13.02
003YR002HR	smf-1b	63.7562	13.02
003YR002HR	smf-1b	64.0062	13.02
003YR002HR	smf-1b	64.2562	13.02
003YR002HR	smf-1b	64.5062	13.01
003YR002HR	smf-1b	64.7562	13.01
003YR002HR	smf-1b	65.0062	13.01
003YR002HR	smf-1b	65.2562	13.01
003YR002HR	smf-1b	65.5062	13.01
003YR002HR	smf-1b	65.7562	13.01
003YR002HR	smf-1b	66.0062	13.01
003YR002HR	smf-1b	66.2562	13.00
003YR002HR	smf-1b	66.5062	13.00
003YR002HR	smf-1b	66.7562	13.00

3yr-2hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR002HR	smf-2a	100.7562	12.13
003YR002HR	smf-2a	101.0062	12.13
003YR002HR	smf-2a	101.2562	12.13
003YR002HR	smf-2a	101.5062	12.13
003YR002HR	smf-2a	101.7562	12.13
003YR002HR	smf-2a	102.0062	12.12
003YR002HR	smf-2a	102.2562	12.12
003YR002HR	smf-2a	102.5062	12.12
003YR002HR	smf-2a	102.7562	12.12
003YR002HR	smf-2a	103.0062	12.12
003YR002HR	smf-2a	103.2562	12.12
003YR002HR	smf-2a	103.5062	12.12
003YR002HR	smf-2a	103.7562	12.12
003YR002HR	smf-2a	104.0062	12.12
003YR002HR	smf-2a	104.2562	12.12
003YR002HR	smf-2a	104.5062	12.12
003YR002HR	smf-2a	104.7562	12.12
003YR002HR	smf-2a	105.0062	12.12
003YR002HR	smf-2a	105.2562	12.12
003YR002HR	smf-2a	105.5062	12.11
003YR002HR	smf-2a	105.7562	12.11
003YR002HR	smf-2a	106.0062	12.11
003YR002HR	smf-2a	106.2562	12.11
003YR002HR	smf-2a	106.5062	12.11
003YR002HR	smf-2a	106.7562	12.11
003YR002HR	smf-2a	107.0062	12.11
003YR002HR	smf-2a	107.2562	12.11
003YR002HR	smf-2a	107.5062	12.11
003YR002HR	smf-2a	107.7562	12.11
003YR002HR	smf-2a	108.0062	12.11
003YR002HR	smf-2a	108.2562	12.11
003YR002HR	smf-2a	108.5062	12.11
003YR002HR	smf-2a	108.7562	12.11
003YR002HR	smf-2a	109.0062	12.10
003YR002HR	smf-2a	109.2562	12.10
003YR002HR	smf-2a	109.5062	12.10
003YR002HR	smf-2a	109.7562	12.10
003YR002HR	smf-2a	110.0062	12.10
003YR002HR	smf-2a	110.2562	12.10
003YR002HR	smf-2a	110.5062	12.10
003YR002HR	smf-2a	110.7562	12.10
003YR002HR	smf-2a	111.0062	12.10

3yr-2hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR002HR	smf-2b	61.0062	11.44
003YR002HR	smf-2b	61.2562	11.43
003YR002HR	smf-2b	61.5062	11.43
003YR002HR	smf-2b	61.7562	11.43
003YR002HR	smf-2b	62.0062	11.43
003YR002HR	smf-2b	62.2562	11.43
003YR002HR	smf-2b	62.5062	11.43
003YR002HR	smf-2b	62.7562	11.42
003YR002HR	smf-2b	63.0062	11.42
003YR002HR	smf-2b	63.2562	11.42
003YR002HR	smf-2b	63.5062	11.42
003YR002HR	smf-2b	63.7562	11.42
003YR002HR	smf-2b	64.0062	11.42
003YR002HR	smf-2b	64.2562	11.42
003YR002HR	smf-2b	64.5062	11.41
003YR002HR	smf-2b	64.7562	11.41
003YR002HR	smf-2b	65.0062	11.41
003YR002HR	smf-2b	65.2562	11.41
003YR002HR	smf-2b	65.5062	11.41
003YR002HR	smf-2b	65.7562	11.41
003YR002HR	smf-2b	66.0062	11.41
003YR002HR	smf-2b	66.2562	11.40
003YR002HR	smf-2b	66.5062	11.40
003YR002HR	smf-2b	66.7562	11.40
003YR002HR	smf-2b	67.0062	11.40
003YR002HR	smf-2b	67.2562	11.40
003YR002HR	smf-2b	67.5062	11.40
003YR002HR	smf-2b	67.7562	11.40
003YR002HR	smf-2b	68.0062	11.40
003YR002HR	smf-2b	68.2562	11.40
003YR002HR	smf-2b	68.5062	11.40
003YR002HR	smf-2b	68.7562	11.40
003YR002HR	smf-2b	69.0062	11.40
003YR002HR	smf-2b	69.2562	11.40
003YR002HR	smf-2b	69.5062	11.40
003YR002HR	smf-2b	69.7562	11.40
003YR002HR	smf-2b	70.0062	11.40
003YR002HR	smf-2b	70.2562	11.40
003YR002HR	smf-2b	70.5062	11.40
003YR002HR	smf-2b	70.7562	11.40
003YR002HR	smf-2b	71.0062	11.40
003YR002HR	smf-2b	71.2562	11.40

3yr-2hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR002HR	smf-2c	84.2562	11.89
003YR002HR	smf-2c	84.5062	11.89
003YR002HR	smf-2c	84.7562	11.89
003YR002HR	smf-2c	85.0062	11.89
003YR002HR	smf-2c	85.2562	11.89
003YR002HR	smf-2c	85.5062	11.89
003YR002HR	smf-2c	85.7562	11.88
003YR002HR	smf-2c	86.0062	11.88
003YR002HR	smf-2c	86.2562	11.88
003YR002HR	smf-2c	86.5062	11.88
003YR002HR	smf-2c	86.7562	11.88
003YR002HR	smf-2c	87.0062	11.88
003YR002HR	smf-2c	87.2562	11.88
003YR002HR	smf-2c	87.5062	11.88
003YR002HR	smf-2c	87.7562	11.88
003YR002HR	smf-2c	88.0062	11.87
003YR002HR	smf-2c	88.2562	11.87
003YR002HR	smf-2c	88.5062	11.87
003YR002HR	smf-2c	88.7562	11.87
003YR002HR	smf-2c	89.0062	11.87
003YR002HR	smf-2c	89.2562	11.87
003YR002HR	smf-2c	89.5062	11.87
003YR002HR	smf-2c	89.7562	11.87
003YR002HR	smf-2c	90.0062	11.87
003YR002HR	smf-2c	90.2562	11.87
003YR002HR	smf-2c	90.5062	11.86
003YR002HR	smf-2c	90.7562	11.86
003YR002HR	smf-2c	91.0062	11.86
003YR002HR	smf-2c	91.2562	11.86
003YR002HR	smf-2c	91.5062	11.86
003YR002HR	smf-2c	91.7562	11.86
003YR002HR	smf-2c	92.0062	11.86
003YR002HR	smf-2c	92.2562	11.86
003YR002HR	smf-2c	92.5062	11.86
003YR002HR	smf-2c	92.7562	11.86
003YR002HR	smf-2c	93.0062	11.85
003YR002HR	smf-2c	93.2562	11.85
003YR002HR	smf-2c	93.5062	11.85
003YR002HR	smf-2c	93.7562	11.85
003YR002HR	smf-2c	94.0062	11.85
003YR002HR	smf-2c	94.2562	11.85
003YR002HR	smf-2c	94.5062	11.85

3yr-2hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR002HR	smf-3a	97.0062	11.94
003YR002HR	smf-3a	97.2562	11.94
003YR002HR	smf-3a	97.5062	11.94
003YR002HR	smf-3a	97.7562	11.94
003YR002HR	smf-3a	98.0062	11.94
003YR002HR	smf-3a	98.2562	11.94
003YR002HR	smf-3a	98.5062	11.94
003YR002HR	smf-3a	98.7562	11.94
003YR002HR	smf-3a	99.0062	11.93
003YR002HR	smf-3a	99.2562	11.93
003YR002HR	smf-3a	99.5062	11.93
003YR002HR	smf-3a	99.7562	11.93
003YR002HR	smf-3a	100.0062	11.93
003YR002HR	smf-3a	100.2562	11.93
003YR002HR	smf-3a	100.5062	11.93
003YR002HR	smf-3a	100.7562	11.93
003YR002HR	smf-3a	101.0062	11.93
003YR002HR	smf-3a	101.2562	11.93
003YR002HR	smf-3a	101.5062	11.92
003YR002HR	smf-3a	101.7562	11.92
003YR002HR	smf-3a	102.0062	11.92
003YR002HR	smf-3a	102.2562	11.92
003YR002HR	smf-3a	102.5062	11.92
003YR002HR	smf-3a	102.7562	11.92
003YR002HR	smf-3a	103.0062	11.92
003YR002HR	smf-3a	103.2562	11.92
003YR002HR	smf-3a	103.5062	11.92
003YR002HR	smf-3a	103.7562	11.92
003YR002HR	smf-3a	104.0062	11.92
003YR002HR	smf-3a	104.2562	11.91
003YR002HR	smf-3a	104.5062	11.91
003YR002HR	smf-3a	104.7562	11.91
003YR002HR	smf-3a	105.0062	11.91
003YR002HR	smf-3a	105.2562	11.91
003YR002HR	smf-3a	105.5062	11.91
003YR002HR	smf-3a	105.7562	11.91
003YR002HR	smf-3a	106.0062	11.91
003YR002HR	smf-3a	106.2562	11.91
003YR002HR	smf-3a	106.5062	11.91
003YR002HR	smf-3a	106.7562	11.91
003YR002HR	smf-3a	107.0062	11.90
003YR002HR	smf-3a	107.2562	11.90

3yr-2hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR002HR	smf-3b	99.2562	11.27
003YR002HR	smf-3b	99.5062	11.27
003YR002HR	smf-3b	99.7562	11.27
003YR002HR	smf-3b	100.0062	11.26
003YR002HR	smf-3b	100.2562	11.26
003YR002HR	smf-3b	100.5062	11.26
003YR002HR	smf-3b	100.7562	11.26
003YR002HR	smf-3b	101.0062	11.26
003YR002HR	smf-3b	101.2562	11.26
003YR002HR	smf-3b	101.5062	11.26
003YR002HR	smf-3b	101.7562	11.26
003YR002HR	smf-3b	102.0062	11.26
003YR002HR	smf-3b	102.2562	11.26
003YR002HR	smf-3b	102.5062	11.25
003YR002HR	smf-3b	102.7562	11.25
003YR002HR	smf-3b	103.0062	11.25
003YR002HR	smf-3b	103.2562	11.25
003YR002HR	smf-3b	103.5062	11.25
003YR002HR	smf-3b	103.7562	11.25
003YR002HR	smf-3b	104.0062	11.25
003YR002HR	smf-3b	104.2562	11.25
003YR002HR	smf-3b	104.5062	11.25
003YR002HR	smf-3b	104.7562	11.25
003YR002HR	smf-3b	105.0062	11.25
003YR002HR	smf-3b	105.2562	11.25
003YR002HR	smf-3b	105.5062	11.25
003YR002HR	smf-3b	105.7562	11.25
003YR002HR	smf-3b	106.0062	11.25
003YR002HR	smf-3b	106.2562	11.25
003YR002HR	smf-3b	106.5062	11.25
003YR002HR	smf-3b	106.7562	11.25
003YR002HR	smf-3b	107.0062	11.25
003YR002HR	smf-3b	107.2562	11.25
003YR002HR	smf-3b	107.5062	11.25
003YR002HR	smf-3b	107.7562	11.25
003YR002HR	smf-3b	108.0062	11.25
003YR002HR	smf-3b	108.2562	11.25
003YR002HR	smf-3b	108.5062	11.25
003YR002HR	smf-3b	108.7562	11.25
003YR002HR	smf-3b	109.0062	11.25
003YR002HR	smf-3b	109.2562	11.25
003YR002HR	smf-3b	109.5062	11.25

3yr-2hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR004HR	smf-1a	59.5074	12.49
003YR004HR	smf-1a	59.7574	12.49
003YR004HR	smf-1a	60.0074	12.49
003YR004HR	smf-1a	60.2574	12.49
003YR004HR	smf-1a	60.5074	12.49
003YR004HR	smf-1a	60.7574	12.49
003YR004HR	smf-1a	61.0074	12.48
003YR004HR	smf-1a	61.2574	12.48
003YR004HR	smf-1a	61.5074	12.48
003YR004HR	smf-1a	61.7574	12.48
003YR004HR	smf-1a	62.0074	12.48
003YR004HR	smf-1a	62.2574	12.48
003YR004HR	smf-1a	62.5074	12.48
003YR004HR	smf-1a	62.7574	12.47
003YR004HR	smf-1a	63.0074	12.47
003YR004HR	smf-1a	63.2574	12.47
003YR004HR	smf-1a	63.5074	12.47
003YR004HR	smf-1a	63.7574	12.47
003YR004HR	smf-1a	64.0074	12.47
003YR004HR	smf-1a	64.2574	12.47
003YR004HR	smf-1a	64.5074	12.47
003YR004HR	smf-1a	64.7574	12.47
003YR004HR	smf-1a	65.0074	12.46
003YR004HR	smf-1a	65.2574	12.46
003YR004HR	smf-1a	65.5074	12.46
003YR004HR	smf-1a	65.7574	12.46
003YR004HR	smf-1a	66.0074	12.46
003YR004HR	smf-1a	66.2574	12.46
003YR004HR	smf-1a	66.5074	12.46
003YR004HR	smf-1a	66.7574	12.46
003YR004HR	smf-1a	67.0074	12.45
003YR004HR	smf-1a	67.2574	12.45
003YR004HR	smf-1a	67.5074	12.45
003YR004HR	smf-1a	67.7574	12.45
003YR004HR	smf-1a	68.0074	12.45
003YR004HR	smf-1a	68.2574	12.45
003YR004HR	smf-1a	68.5074	12.45
003YR004HR	smf-1a	68.7574	12.45
003YR004HR	smf-1a	69.0074	12.45
003YR004HR	smf-1a	69.2574	12.45
003YR004HR	smf-1a	69.5074	12.45
003YR004HR	smf-1a	69.7574	12.45

3yr-4hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR004HR	smf-1b	80.7574	13.02
003YR004HR	smf-1b	81.0074	13.02
003YR004HR	smf-1b	81.2574	13.02
003YR004HR	smf-1b	81.5074	13.01
003YR004HR	smf-1b	81.7574	13.01
003YR004HR	smf-1b	82.0074	13.01
003YR004HR	smf-1b	82.2574	13.01
003YR004HR	smf-1b	82.5074	13.01
003YR004HR	smf-1b	82.7574	13.01
003YR004HR	smf-1b	83.0074	13.01
003YR004HR	smf-1b	83.2574	13.01
003YR004HR	smf-1b	83.5074	13.00
003YR004HR	smf-1b	83.7574	13.00
003YR004HR	smf-1b	84.0074	13.00
003YR004HR	smf-1b	84.2574	13.00
003YR004HR	smf-1b	84.5074	13.00
003YR004HR	smf-1b	84.7574	13.00
003YR004HR	smf-1b	85.0074	13.00
003YR004HR	smf-1b	85.2574	13.00
003YR004HR	smf-1b	85.5074	13.00
003YR004HR	smf-1b	85.7574	13.00
003YR004HR	smf-1b	86.0074	13.00
003YR004HR	smf-1b	86.2574	13.00
003YR004HR	smf-1b	86.5074	13.00
003YR004HR	smf-1b	86.7574	13.00
003YR004HR	smf-1b	87.0074	13.00
003YR004HR	smf-1b	87.2574	13.00
003YR004HR	smf-1b	87.5074	13.00
003YR004HR	smf-1b	87.7574	13.00
003YR004HR	smf-1b	88.0074	13.00
003YR004HR	smf-1b	88.2574	13.00
003YR004HR	smf-1b	88.5074	13.00
003YR004HR	smf-1b	88.7574	13.00
003YR004HR	smf-1b	89.0074	13.00
003YR004HR	smf-1b	89.2574	13.00
003YR004HR	smf-1b	89.5074	13.00
003YR004HR	smf-1b	89.7574	13.00
003YR004HR	smf-1b	90.0074	13.00
003YR004HR	smf-1b	90.2574	13.00
003YR004HR	smf-1b	90.5074	13.00
003YR004HR	smf-1b	90.7574	13.00
003YR004HR	smf-1b	91.0074	13.00

3yr-4hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR004HR	smf-2a	144.0074	12.11
003YR004HR	smf-2a	144.2574	12.11
003YR004HR	smf-2a	144.5074	12.11
003YR004HR	smf-2a	144.7574	12.11
003YR004HR	smf-2a	145.0074	12.11
003YR004HR	smf-2a	145.2574	12.11
003YR004HR	smf-2a	145.5074	12.11
003YR004HR	smf-2a	145.7574	12.10
003YR004HR	smf-2a	146.0074	12.10
003YR004HR	smf-2a	146.2574	12.10
003YR004HR	smf-2a	146.5074	12.10
003YR004HR	smf-2a	146.7574	12.10
003YR004HR	smf-2a	147.0074	12.10
003YR004HR	smf-2a	147.2574	12.10
003YR004HR	smf-2a	147.5074	12.10
003YR004HR	smf-2a	147.7574	12.10
003YR004HR	smf-2a	148.0074	12.10
003YR004HR	smf-2a	148.2574	12.10
003YR004HR	smf-2a	148.5074	12.10
003YR004HR	smf-2a	148.7574	12.10
003YR004HR	smf-2a	149.0074	12.10
003YR004HR	smf-2a	149.2574	12.10
003YR004HR	smf-2a	149.5074	12.10
003YR004HR	smf-2a	149.7574	12.10
003YR004HR	smf-2a	150.0074	12.10
003YR004HR	smf-2a	150.2574	12.10
003YR004HR	smf-2a	150.5074	12.10
003YR004HR	smf-2a	150.7574	12.10
003YR004HR	smf-2a	151.0074	12.10
003YR004HR	smf-2a	151.2574	12.10
003YR004HR	smf-2a	151.5074	12.10
003YR004HR	smf-2a	151.7574	12.10
003YR004HR	smf-2a	152.0074	12.10
003YR004HR	smf-2a	152.2574	12.10
003YR004HR	smf-2a	152.5074	12.10
003YR004HR	smf-2a	152.7574	12.10
003YR004HR	smf-2a	153.0074	12.10
003YR004HR	smf-2a	153.2574	12.10
003YR004HR	smf-2a	153.5074	12.10
003YR004HR	smf-2a	153.7574	12.10
003YR004HR	smf-2a	154.0074	12.10
003YR004HR	smf-2a	154.2574	12.10

3yr-4hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR004HR	smf-2b	91.7574	11.44
003YR004HR	smf-2b	92.0074	11.44
003YR004HR	smf-2b	92.2574	11.43
003YR004HR	smf-2b	92.5074	11.43
003YR004HR	smf-2b	92.7574	11.43
003YR004HR	smf-2b	93.0074	11.43
003YR004HR	smf-2b	93.2574	11.43
003YR004HR	smf-2b	93.5074	11.43
003YR004HR	smf-2b	93.7574	11.43
003YR004HR	smf-2b	94.0074	11.43
003YR004HR	smf-2b	94.2574	11.43
003YR004HR	smf-2b	94.5074	11.42
003YR004HR	smf-2b	94.7574	11.42
003YR004HR	smf-2b	95.0074	11.42
003YR004HR	smf-2b	95.2574	11.42
003YR004HR	smf-2b	95.5074	11.42
003YR004HR	smf-2b	95.7574	11.42
003YR004HR	smf-2b	96.0074	11.42
003YR004HR	smf-2b	96.2574	11.42
003YR004HR	smf-2b	96.5074	11.42
003YR004HR	smf-2b	96.7574	11.42
003YR004HR	smf-2b	97.0074	11.41
003YR004HR	smf-2b	97.2574	11.41
003YR004HR	smf-2b	97.5074	11.41
003YR004HR	smf-2b	97.7574	11.41
003YR004HR	smf-2b	98.0074	11.41
003YR004HR	smf-2b	98.2574	11.41
003YR004HR	smf-2b	98.5074	11.41
003YR004HR	smf-2b	98.7574	11.41
003YR004HR	smf-2b	99.0074	11.41
003YR004HR	smf-2b	99.2574	11.41
003YR004HR	smf-2b	99.5074	11.40
003YR004HR	smf-2b	99.7574	11.40
003YR004HR	smf-2b	100.0074	11.40
003YR004HR	smf-2b	100.2574	11.40
003YR004HR	smf-2b	100.5074	11.40
003YR004HR	smf-2b	100.7574	11.40
003YR004HR	smf-2b	101.0074	11.40
003YR004HR	smf-2b	101.2574	11.40
003YR004HR	smf-2b	101.5074	11.40
003YR004HR	smf-2b	101.7574	11.40
003YR004HR	smf-2b	102.0074	11.40

3yr-4hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR004HR	smf-2c	123.5074	11.88
003YR004HR	smf-2c	123.7574	11.88
003YR004HR	smf-2c	124.0074	11.88
003YR004HR	smf-2c	124.2574	11.88
003YR004HR	smf-2c	124.5074	11.88
003YR004HR	smf-2c	124.7574	11.88
003YR004HR	smf-2c	125.0074	11.87
003YR004HR	smf-2c	125.2574	11.87
003YR004HR	smf-2c	125.5074	11.87
003YR004HR	smf-2c	125.7574	11.87
003YR004HR	smf-2c	126.0074	11.87
003YR004HR	smf-2c	126.2574	11.87
003YR004HR	smf-2c	126.5074	11.87
003YR004HR	smf-2c	126.7574	11.87
003YR004HR	smf-2c	127.0074	11.87
003YR004HR	smf-2c	127.2574	11.87
003YR004HR	smf-2c	127.5074	11.87
003YR004HR	smf-2c	127.7574	11.87
003YR004HR	smf-2c	128.0074	11.87
003YR004HR	smf-2c	128.2574	11.86
003YR004HR	smf-2c	128.5074	11.86
003YR004HR	smf-2c	128.7574	11.86
003YR004HR	smf-2c	129.0074	11.86
003YR004HR	smf-2c	129.2574	11.86
003YR004HR	smf-2c	129.5074	11.86
003YR004HR	smf-2c	129.7574	11.86
003YR004HR	smf-2c	130.0074	11.86
003YR004HR	smf-2c	130.2574	11.86
003YR004HR	smf-2c	130.5074	11.86
003YR004HR	smf-2c	130.7574	11.86
003YR004HR	smf-2c	131.0074	11.86
003YR004HR	smf-2c	131.2574	11.86
003YR004HR	smf-2c	131.5074	11.85
003YR004HR	smf-2c	131.7574	11.85
003YR004HR	smf-2c	132.0074	11.85
003YR004HR	smf-2c	132.2574	11.85
003YR004HR	smf-2c	132.5074	11.85
003YR004HR	smf-2c	132.7574	11.85
003YR004HR	smf-2c	133.0074	11.85
003YR004HR	smf-2c	133.2574	11.85
003YR004HR	smf-2c	133.5074	11.85
003YR004HR	smf-2c	133.7574	11.85

3yr-4hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR004HR	smf-3a	123.7574	11.91
003YR004HR	smf-3a	124.0074	11.91
003YR004HR	smf-3a	124.2574	11.91
003YR004HR	smf-3a	124.5074	11.91
003YR004HR	smf-3a	124.7574	11.91
003YR004HR	smf-3a	125.0074	11.90
003YR004HR	smf-3a	125.2574	11.90
003YR004HR	smf-3a	125.5074	11.90
003YR004HR	smf-3a	125.7574	11.90
003YR004HR	smf-3a	126.0074	11.90
003YR004HR	smf-3a	126.2574	11.90
003YR004HR	smf-3a	126.5074	11.90
003YR004HR	smf-3a	126.7574	11.90
003YR004HR	smf-3a	127.0074	11.90
003YR004HR	smf-3a	127.2574	11.90
003YR004HR	smf-3a	127.5074	11.90
003YR004HR	smf-3a	127.7574	11.90
003YR004HR	smf-3a	128.0074	11.90
003YR004HR	smf-3a	128.2574	11.90
003YR004HR	smf-3a	128.5074	11.90
003YR004HR	smf-3a	128.7574	11.90
003YR004HR	smf-3a	129.0074	11.90
003YR004HR	smf-3a	129.2574	11.90
003YR004HR	smf-3a	129.5074	11.90
003YR004HR	smf-3a	129.7574	11.90
003YR004HR	smf-3a	130.0074	11.90
003YR004HR	smf-3a	130.2574	11.90
003YR004HR	smf-3a	130.5074	11.90
003YR004HR	smf-3a	130.7574	11.90
003YR004HR	smf-3a	131.0074	11.90
003YR004HR	smf-3a	131.2574	11.90
003YR004HR	smf-3a	131.5074	11.90
003YR004HR	smf-3a	131.7574	11.90
003YR004HR	smf-3a	132.0074	11.90
003YR004HR	smf-3a	132.2574	11.90
003YR004HR	smf-3a	132.5074	11.90
003YR004HR	smf-3a	132.7574	11.90
003YR004HR	smf-3a	133.0074	11.90
003YR004HR	smf-3a	133.2574	11.90
003YR004HR	smf-3a	133.5074	11.90
003YR004HR	smf-3a	133.7574	11.90
003YR004HR	smf-3a	134.0074	11.90

3yr-4hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR004HR	smf-3b	134.5074	11.28
003YR004HR	smf-3b	134.7574	11.27
003YR004HR	smf-3b	135.0074	11.27
003YR004HR	smf-3b	135.2574	11.27
003YR004HR	smf-3b	135.5074	11.27
003YR004HR	smf-3b	135.7574	11.27
003YR004HR	smf-3b	136.0074	11.27
003YR004HR	smf-3b	136.2574	11.27
003YR004HR	smf-3b	136.5074	11.27
003YR004HR	smf-3b	136.7574	11.27
003YR004HR	smf-3b	137.0074	11.27
003YR004HR	smf-3b	137.2574	11.27
003YR004HR	smf-3b	137.5074	11.27
003YR004HR	smf-3b	137.7574	11.27
003YR004HR	smf-3b	138.0074	11.26
003YR004HR	smf-3b	138.2574	11.26
003YR004HR	smf-3b	138.5074	11.26
003YR004HR	smf-3b	138.7574	11.26
003YR004HR	smf-3b	139.0074	11.26
003YR004HR	smf-3b	139.2574	11.26
003YR004HR	smf-3b	139.5074	11.26
003YR004HR	smf-3b	139.7574	11.26
003YR004HR	smf-3b	140.0074	11.26
003YR004HR	smf-3b	140.2574	11.26
003YR004HR	smf-3b	140.5074	11.26
003YR004HR	smf-3b	140.7574	11.26
003YR004HR	smf-3b	141.0074	11.26
003YR004HR	smf-3b	141.2574	11.26
003YR004HR	smf-3b	141.5074	11.25
003YR004HR	smf-3b	141.7574	11.25
003YR004HR	smf-3b	142.0074	11.25
003YR004HR	smf-3b	142.2574	11.25
003YR004HR	smf-3b	142.5074	11.25
003YR004HR	smf-3b	142.7574	11.25
003YR004HR	smf-3b	143.0074	11.25
003YR004HR	smf-3b	143.2574	11.25
003YR004HR	smf-3b	143.5074	11.25
003YR004HR	smf-3b	143.7574	11.25
003YR004HR	smf-3b	144.0074	11.25
003YR004HR	smf-3b	144.2574	11.25
003YR004HR	smf-3b	144.5074	11.25
003YR004HR	smf-3b	144.7574	11.25

3yr-4hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR008HR	smf-1a	71.7575	12.48
003YR008HR	smf-1a	72.0075	12.48
003YR008HR	smf-1a	72.2575	12.48
003YR008HR	smf-1a	72.5075	12.48
003YR008HR	smf-1a	72.7575	12.48
003YR008HR	smf-1a	73.0075	12.47
003YR008HR	smf-1a	73.2575	12.47
003YR008HR	smf-1a	73.5075	12.47
003YR008HR	smf-1a	73.7575	12.47
003YR008HR	smf-1a	74.0075	12.47
003YR008HR	smf-1a	74.2575	12.47
003YR008HR	smf-1a	74.5075	12.47
003YR008HR	smf-1a	74.7575	12.47
003YR008HR	smf-1a	75.0075	12.47
003YR008HR	smf-1a	75.2575	12.46
003YR008HR	smf-1a	75.5075	12.46
003YR008HR	smf-1a	75.7575	12.46
003YR008HR	smf-1a	76.0075	12.46
003YR008HR	smf-1a	76.2575	12.46
003YR008HR	smf-1a	76.5075	12.46
003YR008HR	smf-1a	76.7575	12.46
003YR008HR	smf-1a	77.0075	12.46
003YR008HR	smf-1a	77.2575	12.46
003YR008HR	smf-1a	77.5075	12.45
003YR008HR	smf-1a	77.7575	12.45
003YR008HR	smf-1a	78.0075	12.45
003YR008HR	smf-1a	78.2575	12.45
003YR008HR	smf-1a	78.5075	12.45
003YR008HR	smf-1a	78.7575	12.45
003YR008HR	smf-1a	79.0075	12.45
003YR008HR	smf-1a	79.2575	12.45
003YR008HR	smf-1a	79.5075	12.45
003YR008HR	smf-1a	79.7575	12.45
003YR008HR	smf-1a	80.0075	12.45
003YR008HR	smf-1a	80.2575	12.45
003YR008HR	smf-1a	80.5075	12.45
003YR008HR	smf-1a	80.7575	12.45
003YR008HR	smf-1a	81.0075	12.45
003YR008HR	smf-1a	81.2575	12.45
003YR008HR	smf-1a	81.5075	12.45
003YR008HR	smf-1a	81.7575	12.45
003YR008HR	smf-1a	82.0075	12.45

3yr-8hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR008HR	smf-1b	99.5075	13.05
003YR008HR	smf-1b	99.7575	13.05
003YR008HR	smf-1b	100.0075	13.04
003YR008HR	smf-1b	100.2575	13.04
003YR008HR	smf-1b	100.5075	13.04
003YR008HR	smf-1b	100.7575	13.04
003YR008HR	smf-1b	101.0075	13.04
003YR008HR	smf-1b	101.2575	13.04
003YR008HR	smf-1b	101.5075	13.04
003YR008HR	smf-1b	101.7575	13.04
003YR008HR	smf-1b	102.0075	13.04
003YR008HR	smf-1b	102.2575	13.03
003YR008HR	smf-1b	102.5075	13.03
003YR008HR	smf-1b	102.7575	13.03
003YR008HR	smf-1b	103.0075	13.03
003YR008HR	smf-1b	103.2575	13.03
003YR008HR	smf-1b	103.5075	13.03
003YR008HR	smf-1b	103.7575	13.03
003YR008HR	smf-1b	104.0075	13.03
003YR008HR	smf-1b	104.2575	13.03
003YR008HR	smf-1b	104.5075	13.02
003YR008HR	smf-1b	104.7575	13.02
003YR008HR	smf-1b	105.0075	13.02
003YR008HR	smf-1b	105.2575	13.02
003YR008HR	smf-1b	105.5075	13.02
003YR008HR	smf-1b	105.7575	13.02
003YR008HR	smf-1b	106.0075	13.02
003YR008HR	smf-1b	106.2575	13.02
003YR008HR	smf-1b	106.5075	13.02
003YR008HR	smf-1b	106.7575	13.02
003YR008HR	smf-1b	107.0075	13.01
003YR008HR	smf-1b	107.2575	13.01
003YR008HR	smf-1b	107.5075	13.01
003YR008HR	smf-1b	107.7575	13.01
003YR008HR	smf-1b	108.0075	13.01
003YR008HR	smf-1b	108.2575	13.01
003YR008HR	smf-1b	108.5075	13.01
003YR008HR	smf-1b	108.7575	13.01
003YR008HR	smf-1b	109.0075	13.01
003YR008HR	smf-1b	109.2575	13.01
003YR008HR	smf-1b	109.5075	13.00
003YR008HR	smf-1b	109.7575	13.00

3yr-8hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR008HR	smf-2a	169.2575	12.12
003YR008HR	smf-2a	169.5075	12.12
003YR008HR	smf-2a	169.7575	12.12
003YR008HR	smf-2a	170.0075	12.11
003YR008HR	smf-2a	170.2575	12.11
003YR008HR	smf-2a	170.5075	12.11
003YR008HR	smf-2a	170.7575	12.11
003YR008HR	smf-2a	171.0075	12.11
003YR008HR	smf-2a	171.2575	12.11
003YR008HR	smf-2a	171.5075	12.11
003YR008HR	smf-2a	171.7575	12.11
003YR008HR	smf-2a	172.0075	12.11
003YR008HR	smf-2a	172.2575	12.11
003YR008HR	smf-2a	172.5075	12.11
003YR008HR	smf-2a	172.7575	12.11
003YR008HR	smf-2a	173.0075	12.11
003YR008HR	smf-2a	173.2575	12.11
003YR008HR	smf-2a	173.5075	12.11
003YR008HR	smf-2a	173.7575	12.11
003YR008HR	smf-2a	174.0075	12.11
003YR008HR	smf-2a	174.2575	12.11
003YR008HR	smf-2a	174.5075	12.11
003YR008HR	smf-2a	174.7575	12.11
003YR008HR	smf-2a	175.0075	12.10
003YR008HR	smf-2a	175.2575	12.10
003YR008HR	smf-2a	175.5075	12.10
003YR008HR	smf-2a	175.7575	12.10
003YR008HR	smf-2a	176.0075	12.10
003YR008HR	smf-2a	176.2575	12.10
003YR008HR	smf-2a	176.5075	12.10
003YR008HR	smf-2a	176.7575	12.10
003YR008HR	smf-2a	177.0075	12.10
003YR008HR	smf-2a	177.2575	12.10
003YR008HR	smf-2a	177.5075	12.10
003YR008HR	smf-2a	177.7575	12.10
003YR008HR	smf-2a	178.0075	12.10
003YR008HR	smf-2a	178.2575	12.10
003YR008HR	smf-2a	178.5075	12.10
003YR008HR	smf-2a	178.7575	12.10
003YR008HR	smf-2a	179.0075	12.10
003YR008HR	smf-2a	179.2575	12.10
003YR008HR	smf-2a	179.5075	12.10

3yr-8hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR008HR	smf-2b	123.5075	11.43
003YR008HR	smf-2b	123.7575	11.43
003YR008HR	smf-2b	124.0075	11.43
003YR008HR	smf-2b	124.2575	11.43
003YR008HR	smf-2b	124.5075	11.43
003YR008HR	smf-2b	124.7575	11.43
003YR008HR	smf-2b	125.0075	11.43
003YR008HR	smf-2b	125.2575	11.43
003YR008HR	smf-2b	125.5075	11.43
003YR008HR	smf-2b	125.7575	11.43
003YR008HR	smf-2b	126.0075	11.43
003YR008HR	smf-2b	126.2575	11.43
003YR008HR	smf-2b	126.5075	11.42
003YR008HR	smf-2b	126.7575	11.42
003YR008HR	smf-2b	127.0075	11.42
003YR008HR	smf-2b	127.2575	11.42
003YR008HR	smf-2b	127.5075	11.42
003YR008HR	smf-2b	127.7575	11.42
003YR008HR	smf-2b	128.0075	11.42
003YR008HR	smf-2b	128.2575	11.42
003YR008HR	smf-2b	128.5075	11.42
003YR008HR	smf-2b	128.7575	11.42
003YR008HR	smf-2b	129.0075	11.42
003YR008HR	smf-2b	129.2575	11.42
003YR008HR	smf-2b	129.5075	11.41
003YR008HR	smf-2b	129.7575	11.41
003YR008HR	smf-2b	130.0075	11.41
003YR008HR	smf-2b	130.2575	11.41
003YR008HR	smf-2b	130.5075	11.41
003YR008HR	smf-2b	130.7575	11.41
003YR008HR	smf-2b	131.0075	11.41
003YR008HR	smf-2b	131.2575	11.41
003YR008HR	smf-2b	131.5075	11.41
003YR008HR	smf-2b	131.7575	11.41
003YR008HR	smf-2b	132.0075	11.41
003YR008HR	smf-2b	132.2575	11.41
003YR008HR	smf-2b	132.5075	11.40
003YR008HR	smf-2b	132.7575	11.40
003YR008HR	smf-2b	133.0075	11.40
003YR008HR	smf-2b	133.2575	11.40
003YR008HR	smf-2b	133.5075	11.40
003YR008HR	smf-2b	133.7575	11.40

3yr-8hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR008HR	smf-2c	161.7575	11.86
003YR008HR	smf-2c	162.0075	11.86
003YR008HR	smf-2c	162.2575	11.86
003YR008HR	smf-2c	162.5075	11.86
003YR008HR	smf-2c	162.7575	11.86
003YR008HR	smf-2c	163.0075	11.85
003YR008HR	smf-2c	163.2575	11.85
003YR008HR	smf-2c	163.5075	11.85
003YR008HR	smf-2c	163.7575	11.85
003YR008HR	smf-2c	164.0075	11.85
003YR008HR	smf-2c	164.2575	11.85
003YR008HR	smf-2c	164.5075	11.85
003YR008HR	smf-2c	164.7575	11.85
003YR008HR	smf-2c	165.0075	11.85
003YR008HR	smf-2c	165.2575	11.85
003YR008HR	smf-2c	165.5075	11.85
003YR008HR	smf-2c	165.7575	11.85
003YR008HR	smf-2c	166.0075	11.85
003YR008HR	smf-2c	166.2575	11.85
003YR008HR	smf-2c	166.5075	11.85
003YR008HR	smf-2c	166.7575	11.85
003YR008HR	smf-2c	167.0075	11.85
003YR008HR	smf-2c	167.2575	11.85
003YR008HR	smf-2c	167.5075	11.85
003YR008HR	smf-2c	167.7575	11.85
003YR008HR	smf-2c	168.0075	11.85
003YR008HR	smf-2c	168.2575	11.85
003YR008HR	smf-2c	168.5075	11.85
003YR008HR	smf-2c	168.7575	11.85
003YR008HR	smf-2c	169.0075	11.85
003YR008HR	smf-2c	169.2575	11.85
003YR008HR	smf-2c	169.5075	11.85
003YR008HR	smf-2c	169.7575	11.85
003YR008HR	smf-2c	170.0075	11.85
003YR008HR	smf-2c	170.2575	11.85
003YR008HR	smf-2c	170.5075	11.85
003YR008HR	smf-2c	170.7575	11.85
003YR008HR	smf-2c	171.0075	11.85
003YR008HR	smf-2c	171.2575	11.85
003YR008HR	smf-2c	171.5075	11.85
003YR008HR	smf-2c	171.7575	11.85
003YR008HR	smf-2c	172.0075	11.85

3yr-8hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR008HR	smf-3a	147.5075	11.93
003YR008HR	smf-3a	147.7575	11.93
003YR008HR	smf-3a	148.0075	11.93
003YR008HR	smf-3a	148.2575	11.93
003YR008HR	smf-3a	148.5075	11.93
003YR008HR	smf-3a	148.7575	11.93
003YR008HR	smf-3a	149.0075	11.93
003YR008HR	smf-3a	149.2575	11.93
003YR008HR	smf-3a	149.5075	11.92
003YR008HR	smf-3a	149.7575	11.92
003YR008HR	smf-3a	150.0075	11.92
003YR008HR	smf-3a	150.2575	11.92
003YR008HR	smf-3a	150.5075	11.92
003YR008HR	smf-3a	150.7575	11.92
003YR008HR	smf-3a	151.0075	11.92
003YR008HR	smf-3a	151.2575	11.92
003YR008HR	smf-3a	151.5075	11.92
003YR008HR	smf-3a	151.7575	11.92
003YR008HR	smf-3a	152.0075	11.92
003YR008HR	smf-3a	152.2575	11.92
003YR008HR	smf-3a	152.5075	11.92
003YR008HR	smf-3a	152.7575	11.92
003YR008HR	smf-3a	153.0075	11.92
003YR008HR	smf-3a	153.2575	11.91
003YR008HR	smf-3a	153.5075	11.91
003YR008HR	smf-3a	153.7575	11.91
003YR008HR	smf-3a	154.0075	11.91
003YR008HR	smf-3a	154.2575	11.91
003YR008HR	smf-3a	154.5075	11.91
003YR008HR	smf-3a	154.7575	11.91
003YR008HR	smf-3a	155.0075	11.91
003YR008HR	smf-3a	155.2575	11.91
003YR008HR	smf-3a	155.5075	11.91
003YR008HR	smf-3a	155.7575	11.91
003YR008HR	smf-3a	156.0075	11.91
003YR008HR	smf-3a	156.2575	11.91
003YR008HR	smf-3a	156.5075	11.91
003YR008HR	smf-3a	156.7575	11.91
003YR008HR	smf-3a	157.0075	11.90
003YR008HR	smf-3a	157.2575	11.90
003YR008HR	smf-3a	157.5075	11.90
003YR008HR	smf-3a	157.7575	11.90

3yr-8hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR008HR	smf-3b	175.2575	11.27
003YR008HR	smf-3b	175.5075	11.27
003YR008HR	smf-3b	175.7575	11.27
003YR008HR	smf-3b	176.0075	11.27
003YR008HR	smf-3b	176.2575	11.27
003YR008HR	smf-3b	176.5075	11.27
003YR008HR	smf-3b	176.7575	11.27
003YR008HR	smf-3b	177.0075	11.27
003YR008HR	smf-3b	177.2575	11.26
003YR008HR	smf-3b	177.5075	11.26
003YR008HR	smf-3b	177.7575	11.26
003YR008HR	smf-3b	178.0075	11.26
003YR008HR	smf-3b	178.2575	11.26
003YR008HR	smf-3b	178.5075	11.26
003YR008HR	smf-3b	178.7575	11.26
003YR008HR	smf-3b	179.0075	11.26
003YR008HR	smf-3b	179.2575	11.26
003YR008HR	smf-3b	179.5075	11.26
003YR008HR	smf-3b	179.7575	11.26
003YR008HR	smf-3b	180.0075	11.26
003YR008HR	smf-3b	180.2575	11.26
003YR008HR	smf-3b	180.5075	11.26
003YR008HR	smf-3b	180.7575	11.26
003YR008HR	smf-3b	181.0075	11.26
003YR008HR	smf-3b	181.2575	11.26
003YR008HR	smf-3b	181.5075	11.25
003YR008HR	smf-3b	181.7575	11.25
003YR008HR	smf-3b	182.0075	11.25
003YR008HR	smf-3b	182.2575	11.25
003YR008HR	smf-3b	182.5075	11.25
003YR008HR	smf-3b	182.7575	11.25
003YR008HR	smf-3b	183.0075	11.25
003YR008HR	smf-3b	183.2575	11.25
003YR008HR	smf-3b	183.5075	11.25
003YR008HR	smf-3b	183.7575	11.25
003YR008HR	smf-3b	184.0075	11.25
003YR008HR	smf-3b	184.2575	11.25
003YR008HR	smf-3b	184.5075	11.25
003YR008HR	smf-3b	184.7575	11.25
003YR008HR	smf-3b	185.0075	11.25
003YR008HR	smf-3b	185.2575	11.25
003YR008HR	smf-3b	185.5075	11.25

3yr-8hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR024HR	smf-1a	213.5013	12.47
003YR024HR	smf-1a	213.7513	12.47
003YR024HR	smf-1a	214.0013	12.47
003YR024HR	smf-1a	214.2513	12.47
003YR024HR	smf-1a	214.5013	12.47
003YR024HR	smf-1a	214.7513	12.47
003YR024HR	smf-1a	215.0013	12.47
003YR024HR	smf-1a	215.2513	12.47
003YR024HR	smf-1a	215.5013	12.47
003YR024HR	smf-1a	215.7513	12.47
003YR024HR	smf-1a	216.0013	12.47
003YR024HR	smf-1a	216.2513	12.46
003YR024HR	smf-1a	216.5013	12.46
003YR024HR	smf-1a	216.7513	12.46
003YR024HR	smf-1a	217.0013	12.46
003YR024HR	smf-1a	217.2513	12.46
003YR024HR	smf-1a	217.5013	12.46
003YR024HR	smf-1a	217.7513	12.46
003YR024HR	smf-1a	218.0013	12.46
003YR024HR	smf-1a	218.2513	12.46
003YR024HR	smf-1a	218.5013	12.46
003YR024HR	smf-1a	218.7513	12.46
003YR024HR	smf-1a	219.0013	12.46
003YR024HR	smf-1a	219.2513	12.46
003YR024HR	smf-1a	219.5013	12.46
003YR024HR	smf-1a	219.7513	12.46
003YR024HR	smf-1a	220.0013	12.46
003YR024HR	smf-1a	220.2513	12.46
003YR024HR	smf-1a	220.5013	12.46
003YR024HR	smf-1a	220.7513	12.46
003YR024HR	smf-1a	221.0013	12.46
003YR024HR	smf-1a	221.2513	12.46
003YR024HR	smf-1a	221.5013	12.46
003YR024HR	smf-1a	221.7513	12.45
003YR024HR	smf-1a	222.0013	12.45
003YR024HR	smf-1a	222.2513	12.45
003YR024HR	smf-1a	222.5013	12.45
003YR024HR	smf-1a	222.7513	12.45
003YR024HR	smf-1a	223.0013	12.45
003YR024HR	smf-1a	223.2513	12.45
003YR024HR	smf-1a	223.5013	12.45
003YR024HR	smf-1a	223.7513	12.45

3yr-24hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR024HR	smf-1b	183.2513	13.02
003YR024HR	smf-1b	183.5013	13.02
003YR024HR	smf-1b	183.7513	13.02
003YR024HR	smf-1b	184.0013	13.02
003YR024HR	smf-1b	184.2513	13.02
003YR024HR	smf-1b	184.5013	13.02
003YR024HR	smf-1b	184.7513	13.02
003YR024HR	smf-1b	185.0013	13.02
003YR024HR	smf-1b	185.2513	13.02
003YR024HR	smf-1b	185.5013	13.02
003YR024HR	smf-1b	185.7513	13.02
003YR024HR	smf-1b	186.0013	13.02
003YR024HR	smf-1b	186.2513	13.02
003YR024HR	smf-1b	186.5013	13.02
003YR024HR	smf-1b	186.7513	13.01
003YR024HR	smf-1b	187.0013	13.01
003YR024HR	smf-1b	187.2513	13.01
003YR024HR	smf-1b	187.5013	13.01
003YR024HR	smf-1b	187.7513	13.01
003YR024HR	smf-1b	188.0013	13.01
003YR024HR	smf-1b	188.2513	13.01
003YR024HR	smf-1b	188.5013	13.01
003YR024HR	smf-1b	188.7513	13.01
003YR024HR	smf-1b	189.0013	13.01
003YR024HR	smf-1b	189.2513	13.01
003YR024HR	smf-1b	189.5013	13.01
003YR024HR	smf-1b	189.7513	13.01
003YR024HR	smf-1b	190.0013	13.01
003YR024HR	smf-1b	190.2513	13.01
003YR024HR	smf-1b	190.5013	13.01
003YR024HR	smf-1b	190.7513	13.01
003YR024HR	smf-1b	191.0013	13.00
003YR024HR	smf-1b	191.2513	13.00
003YR024HR	smf-1b	191.5013	13.00
003YR024HR	smf-1b	191.7513	13.00
003YR024HR	smf-1b	192.0013	13.00
003YR024HR	smf-1b	192.2513	13.00
003YR024HR	smf-1b	192.5013	13.00
003YR024HR	smf-1b	192.7513	13.00
003YR024HR	smf-1b	193.0013	13.00
003YR024HR	smf-1b	193.2513	13.00
003YR024HR	smf-1b	193.5013	13.00

3yr-24hr SMF-1b

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR024HR	smf-2a	258.0013	12.11
003YR024HR	smf-2a	258.2513	12.11
003YR024HR	smf-2a	258.5013	12.11
003YR024HR	smf-2a	258.7513	12.11
003YR024HR	smf-2a	259.0013	12.11
003YR024HR	smf-2a	259.2513	12.11
003YR024HR	smf-2a	259.5013	12.10
003YR024HR	smf-2a	259.7513	12.10
003YR024HR	smf-2a	260.0013	12.10
003YR024HR	smf-2a	260.2513	12.10
003YR024HR	smf-2a	260.5013	12.10
003YR024HR	smf-2a	260.7513	12.10
003YR024HR	smf-2a	261.0013	12.10
003YR024HR	smf-2a	261.2513	12.10
003YR024HR	smf-2a	261.5013	12.10
003YR024HR	smf-2a	261.7513	12.10
003YR024HR	smf-2a	262.0013	12.10
003YR024HR	smf-2a	262.2513	12.10
003YR024HR	smf-2a	262.5013	12.10
003YR024HR	smf-2a	262.7513	12.10
003YR024HR	smf-2a	263.0013	12.10
003YR024HR	smf-2a	263.2513	12.10
003YR024HR	smf-2a	263.5013	12.10
003YR024HR	smf-2a	263.7513	12.10
003YR024HR	smf-2a	264.0013	12.10
003YR024HR	smf-2a	264.2513	12.10
003YR024HR	smf-2a	264.5013	12.10
003YR024HR	smf-2a	264.7513	12.10
003YR024HR	smf-2a	265.0013	12.10
003YR024HR	smf-2a	265.2513	12.10
003YR024HR	smf-2a	265.5013	12.10
003YR024HR	smf-2a	265.7513	12.10
003YR024HR	smf-2a	266.0013	12.10
003YR024HR	smf-2a	266.2513	12.10
003YR024HR	smf-2a	266.5013	12.10
003YR024HR	smf-2a	266.7513	12.10
003YR024HR	smf-2a	267.0013	12.10
003YR024HR	smf-2a	267.2513	12.10
003YR024HR	smf-2a	267.5013	12.10
003YR024HR	smf-2a	267.7513	12.10
003YR024HR	smf-2a	268.0013	12.10
003YR024HR	smf-2a	268.2513	12.10

3yr-24hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR024HR	smf-2b	206.7513	11.41
003YR024HR	smf-2b	207.0013	11.41
003YR024HR	smf-2b	207.2513	11.41
003YR024HR	smf-2b	207.5013	11.41
003YR024HR	smf-2b	207.7513	11.41
003YR024HR	smf-2b	208.0013	11.41
003YR024HR	smf-2b	208.2513	11.41
003YR024HR	smf-2b	208.5013	11.41
003YR024HR	smf-2b	208.7513	11.41
003YR024HR	smf-2b	209.0013	11.41
003YR024HR	smf-2b	209.2513	11.41
003YR024HR	smf-2b	209.5013	11.40
003YR024HR	smf-2b	209.7513	11.40
003YR024HR	smf-2b	210.0013	11.40
003YR024HR	smf-2b	210.2513	11.40
003YR024HR	smf-2b	210.5013	11.40
003YR024HR	smf-2b	210.7513	11.40
003YR024HR	smf-2b	211.0013	11.40
003YR024HR	smf-2b	211.2513	11.40
003YR024HR	smf-2b	211.5013	11.40
003YR024HR	smf-2b	211.7513	11.40
003YR024HR	smf-2b	212.0013	11.40
003YR024HR	smf-2b	212.2513	11.40
003YR024HR	smf-2b	212.5013	11.40
003YR024HR	smf-2b	212.7513	11.40
003YR024HR	smf-2b	213.0013	11.40
003YR024HR	smf-2b	213.2513	11.40
003YR024HR	smf-2b	213.5013	11.40
003YR024HR	smf-2b	213.7513	11.40
003YR024HR	smf-2b	214.0013	11.40
003YR024HR	smf-2b	214.2513	11.40
003YR024HR	smf-2b	214.5013	11.40
003YR024HR	smf-2b	214.7513	11.40
003YR024HR	smf-2b	215.0013	11.40
003YR024HR	smf-2b	215.2513	11.40
003YR024HR	smf-2b	215.5013	11.40
003YR024HR	smf-2b	215.7513	11.40
003YR024HR	smf-2b	216.0013	11.40
003YR024HR	smf-2b	216.2513	11.40
003YR024HR	smf-2b	216.5013	11.40
003YR024HR	smf-2b	216.7513	11.40
003YR024HR	smf-2b	217.0013	11.40

3yr-24hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR024HR	smf-2c	239.5013	11.87
003YR024HR	smf-2c	239.7513	11.87
003YR024HR	smf-2c	240.0013	11.87
003YR024HR	smf-2c	240.2513	11.86
003YR024HR	smf-2c	240.5013	11.86
003YR024HR	smf-2c	240.7513	11.86
003YR024HR	smf-2c	241.0013	11.86
003YR024HR	smf-2c	241.2513	11.86
003YR024HR	smf-2c	241.5013	11.86
003YR024HR	smf-2c	241.7513	11.86
003YR024HR	smf-2c	242.0013	11.86
003YR024HR	smf-2c	242.2513	11.86
003YR024HR	smf-2c	242.5013	11.86
003YR024HR	smf-2c	242.7513	11.86
003YR024HR	smf-2c	243.0013	11.86
003YR024HR	smf-2c	243.2513	11.86
003YR024HR	smf-2c	243.5013	11.86
003YR024HR	smf-2c	243.7513	11.86
003YR024HR	smf-2c	244.0013	11.86
003YR024HR	smf-2c	244.2513	11.86
003YR024HR	smf-2c	244.5013	11.86
003YR024HR	smf-2c	244.7513	11.86
003YR024HR	smf-2c	245.0013	11.86
003YR024HR	smf-2c	245.2513	11.86
003YR024HR	smf-2c	245.5013	11.86
003YR024HR	smf-2c	245.7513	11.86
003YR024HR	smf-2c	246.0013	11.86
003YR024HR	smf-2c	246.2513	11.85
003YR024HR	smf-2c	246.5013	11.85
003YR024HR	smf-2c	246.7513	11.85
003YR024HR	smf-2c	247.0013	11.85
003YR024HR	smf-2c	247.2513	11.85
003YR024HR	smf-2c	247.5013	11.85
003YR024HR	smf-2c	247.7513	11.85
003YR024HR	smf-2c	248.0013	11.85
003YR024HR	smf-2c	248.2513	11.85
003YR024HR	smf-2c	248.5013	11.85
003YR024HR	smf-2c	248.7513	11.85
003YR024HR	smf-2c	249.0013	11.85
003YR024HR	smf-2c	249.2513	11.85
003YR024HR	smf-2c	249.5013	11.85
003YR024HR	smf-2c	249.7513	11.85

3yr-24hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR024HR	smf-3a	251.2513	11.92
003YR024HR	smf-3a	251.5013	11.91
003YR024HR	smf-3a	251.7513	11.91
003YR024HR	smf-3a	252.0013	11.91
003YR024HR	smf-3a	252.2513	11.91
003YR024HR	smf-3a	252.5013	11.91
003YR024HR	smf-3a	252.7513	11.91
003YR024HR	smf-3a	253.0013	11.91
003YR024HR	smf-3a	253.2513	11.91
003YR024HR	smf-3a	253.5013	11.91
003YR024HR	smf-3a	253.7513	11.91
003YR024HR	smf-3a	254.0013	11.91
003YR024HR	smf-3a	254.2513	11.91
003YR024HR	smf-3a	254.5013	11.91
003YR024HR	smf-3a	254.7513	11.91
003YR024HR	smf-3a	255.0013	11.91
003YR024HR	smf-3a	255.2513	11.91
003YR024HR	smf-3a	255.5013	11.91
003YR024HR	smf-3a	255.7513	11.91
003YR024HR	smf-3a	256.0013	11.91
003YR024HR	smf-3a	256.2513	11.91
003YR024HR	smf-3a	256.5013	11.91
003YR024HR	smf-3a	256.7513	11.91
003YR024HR	smf-3a	257.0013	11.91
003YR024HR	smf-3a	257.2513	11.91
003YR024HR	smf-3a	257.5013	11.91
003YR024HR	smf-3a	257.7513	11.90
003YR024HR	smf-3a	258.0013	11.90
003YR024HR	smf-3a	258.2513	11.90
003YR024HR	smf-3a	258.5013	11.90
003YR024HR	smf-3a	258.7513	11.90
003YR024HR	smf-3a	259.0013	11.90
003YR024HR	smf-3a	259.2513	11.90
003YR024HR	smf-3a	259.5013	11.90
003YR024HR	smf-3a	259.7513	11.90
003YR024HR	smf-3a	260.0013	11.90
003YR024HR	smf-3a	260.2513	11.90
003YR024HR	smf-3a	260.5013	11.90
003YR024HR	smf-3a	260.7513	11.90
003YR024HR	smf-3a	261.0013	11.90
003YR024HR	smf-3a	261.2513	11.90
003YR024HR	smf-3a	261.5013	11.90

3yr-24hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR024HR	smf-3b	273.5013	11.27
003YR024HR	smf-3b	273.7513	11.27
003YR024HR	smf-3b	274.0013	11.27
003YR024HR	smf-3b	274.2513	11.27
003YR024HR	smf-3b	274.5013	11.27
003YR024HR	smf-3b	274.7513	11.27
003YR024HR	smf-3b	275.0013	11.27
003YR024HR	smf-3b	275.2513	11.27
003YR024HR	smf-3b	275.5013	11.27
003YR024HR	smf-3b	275.7513	11.27
003YR024HR	smf-3b	276.0013	11.27
003YR024HR	smf-3b	276.2513	11.27
003YR024HR	smf-3b	276.5013	11.27
003YR024HR	smf-3b	276.7513	11.27
003YR024HR	smf-3b	277.0013	11.26
003YR024HR	smf-3b	277.2513	11.26
003YR024HR	smf-3b	277.5013	11.26
003YR024HR	smf-3b	277.7513	11.26
003YR024HR	smf-3b	278.0013	11.26
003YR024HR	smf-3b	278.2513	11.26
003YR024HR	smf-3b	278.5013	11.26
003YR024HR	smf-3b	278.7513	11.26
003YR024HR	smf-3b	279.0013	11.26
003YR024HR	smf-3b	279.2513	11.26
003YR024HR	smf-3b	279.5013	11.26
003YR024HR	smf-3b	279.7513	11.26
003YR024HR	smf-3b	280.0013	11.26
003YR024HR	smf-3b	280.2513	11.26
003YR024HR	smf-3b	280.5013	11.26
003YR024HR	smf-3b	280.7513	11.26
003YR024HR	smf-3b	281.0013	11.26
003YR024HR	smf-3b	281.2513	11.26
003YR024HR	smf-3b	281.5013	11.26
003YR024HR	smf-3b	281.7513	11.26
003YR024HR	smf-3b	282.0013	11.26
003YR024HR	smf-3b	282.2513	11.26
003YR024HR	smf-3b	282.5013	11.26
003YR024HR	smf-3b	282.7513	11.26
003YR024HR	smf-3b	283.0013	11.26
003YR024HR	smf-3b	283.2513	11.26
003YR024HR	smf-3b	283.5013	11.25
003YR024HR	smf-3b	283.7513	11.25

3yr-24hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR072HR	smf-1a	243.2575	12.47
003YR072HR	smf-1a	243.5075	12.47
003YR072HR	smf-1a	243.7575	12.47
003YR072HR	smf-1a	244.0075	12.47
003YR072HR	smf-1a	244.2575	12.47
003YR072HR	smf-1a	244.5075	12.47
003YR072HR	smf-1a	244.7575	12.47
003YR072HR	smf-1a	245.0075	12.47
003YR072HR	smf-1a	245.2575	12.47
003YR072HR	smf-1a	245.5075	12.47
003YR072HR	smf-1a	245.7575	12.47
003YR072HR	smf-1a	246.0075	12.47
003YR072HR	smf-1a	246.2575	12.47
003YR072HR	smf-1a	246.5075	12.47
003YR072HR	smf-1a	246.7575	12.47
003YR072HR	smf-1a	247.0075	12.46
003YR072HR	smf-1a	247.2575	12.46
003YR072HR	smf-1a	247.5075	12.46
003YR072HR	smf-1a	247.7575	12.46
003YR072HR	smf-1a	248.0075	12.46
003YR072HR	smf-1a	248.2575	12.46
003YR072HR	smf-1a	248.5075	12.46
003YR072HR	smf-1a	248.7575	12.46
003YR072HR	smf-1a	249.0075	12.46
003YR072HR	smf-1a	249.2575	12.46
003YR072HR	smf-1a	249.5075	12.46
003YR072HR	smf-1a	249.7575	12.46
003YR072HR	smf-1a	250.0075	12.46
003YR072HR	smf-1a	250.2575	12.46
003YR072HR	smf-1a	250.5075	12.46
003YR072HR	smf-1a	250.7575	12.46
003YR072HR	smf-1a	251.0075	12.46
003YR072HR	smf-1a	251.2575	12.46
003YR072HR	smf-1a	251.5075	12.46
003YR072HR	smf-1a	251.7575	12.46
003YR072HR	smf-1a	252.0075	12.46
003YR072HR	smf-1a	252.2575	12.46
003YR072HR	smf-1a	252.5075	12.45
003YR072HR	smf-1a	252.7575	12.45
003YR072HR	smf-1a	253.0075	12.45
003YR072HR	smf-1a	253.2575	12.45
003YR072HR	smf-1a	253.5075	12.45

3yr-72hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR072HR	smf-1b	385.5075	13.01
003YR072HR	smf-1b	385.7575	13.01
003YR072HR	smf-1b	386.0075	13.01
003YR072HR	smf-1b	386.2575	13.01
003YR072HR	smf-1b	386.5075	13.01
003YR072HR	smf-1b	386.7575	13.01
003YR072HR	smf-1b	387.0075	13.01
003YR072HR	smf-1b	387.2575	13.01
003YR072HR	smf-1b	387.5075	13.01
003YR072HR	smf-1b	387.7575	13.01
003YR072HR	smf-1b	388.0075	13.01
003YR072HR	smf-1b	388.2575	13.01
003YR072HR	smf-1b	388.5075	13.01
003YR072HR	smf-1b	388.7575	13.01
003YR072HR	smf-1b	389.0075	13.01
003YR072HR	smf-1b	389.2575	13.01
003YR072HR	smf-1b	389.5075	13.01
003YR072HR	smf-1b	389.7575	13.01
003YR072HR	smf-1b	390.0075	13.01
003YR072HR	smf-1b	390.2575	13.01
003YR072HR	smf-1b	390.5075	13.01
003YR072HR	smf-1b	390.7575	13.01
003YR072HR	smf-1b	391.0075	13.01
003YR072HR	smf-1b	391.2575	13.01
003YR072HR	smf-1b	391.5075	13.01
003YR072HR	smf-1b	391.7575	13.01
003YR072HR	smf-1b	392.0075	13.01
003YR072HR	smf-1b	392.2575	13.01
003YR072HR	smf-1b	392.5075	13.01
003YR072HR	smf-1b	392.7575	13.00
003YR072HR	smf-1b	393.0075	13.00
003YR072HR	smf-1b	393.2575	13.00
003YR072HR	smf-1b	393.5075	13.00
003YR072HR	smf-1b	393.7575	13.00
003YR072HR	smf-1b	394.0075	13.00
003YR072HR	smf-1b	394.2575	13.00
003YR072HR	smf-1b	394.5075	13.00
003YR072HR	smf-1b	394.7575	13.00
003YR072HR	smf-1b	395.0075	13.00
003YR072HR	smf-1b	395.2575	13.00
003YR072HR	smf-1b	395.5075	13.00
003YR072HR	smf-1b	395.7575	13.00

3yr-72hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR072HR	smf-2a	433.2575	12.11
003YR072HR	smf-2a	433.5075	12.11
003YR072HR	smf-2a	433.7575	12.11
003YR072HR	smf-2a	434.0075	12.11
003YR072HR	smf-2a	434.2575	12.11
003YR072HR	smf-2a	434.5075	12.11
003YR072HR	smf-2a	434.7575	12.11
003YR072HR	smf-2a	435.0075	12.11
003YR072HR	smf-2a	435.2575	12.11
003YR072HR	smf-2a	435.5075	12.11
003YR072HR	smf-2a	435.7575	12.11
003YR072HR	smf-2a	436.0075	12.11
003YR072HR	smf-2a	436.2575	12.11
003YR072HR	smf-2a	436.5075	12.11
003YR072HR	smf-2a	436.7575	12.11
003YR072HR	smf-2a	437.0075	12.11
003YR072HR	smf-2a	437.2575	12.11
003YR072HR	smf-2a	437.5075	12.11
003YR072HR	smf-2a	437.7575	12.11
003YR072HR	smf-2a	438.0075	12.11
003YR072HR	smf-2a	438.2575	12.11
003YR072HR	smf-2a	438.5075	12.11
003YR072HR	smf-2a	438.7575	12.10
003YR072HR	smf-2a	439.0075	12.10
003YR072HR	smf-2a	439.2575	12.10
003YR072HR	smf-2a	439.5075	12.10
003YR072HR	smf-2a	439.7575	12.10
003YR072HR	smf-2a	440.0075	12.10
003YR072HR	smf-2a	440.2575	12.10
003YR072HR	smf-2a	440.5075	12.10
003YR072HR	smf-2a	440.7575	12.10
003YR072HR	smf-2a	441.0075	12.10
003YR072HR	smf-2a	441.2575	12.10
003YR072HR	smf-2a	441.5075	12.10
003YR072HR	smf-2a	441.7575	12.10
003YR072HR	smf-2a	442.0075	12.10
003YR072HR	smf-2a	442.2575	12.10
003YR072HR	smf-2a	442.5075	12.10
003YR072HR	smf-2a	442.7575	12.10
003YR072HR	smf-2a	443.0075	12.10
003YR072HR	smf-2a	443.2575	12.10
003YR072HR	smf-2a	443.5075	12.10

3yr-72hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR072HR	smf-2b	313.0075	11.40
003YR072HR	smf-2b	313.2575	11.40
003YR072HR	smf-2b	313.5075	11.40
003YR072HR	smf-2b	313.7575	11.40
003YR072HR	smf-2b	314.0075	11.40
003YR072HR	smf-2b	314.2575	11.40
003YR072HR	smf-2b	314.5075	11.40
003YR072HR	smf-2b	314.7575	11.40
003YR072HR	smf-2b	315.0075	11.40
003YR072HR	smf-2b	315.2575	11.40
003YR072HR	smf-2b	315.5075	11.40
003YR072HR	smf-2b	315.7575	11.40
003YR072HR	smf-2b	316.0075	11.40
003YR072HR	smf-2b	316.2575	11.40
003YR072HR	smf-2b	316.5075	11.40
003YR072HR	smf-2b	316.7575	11.40
003YR072HR	smf-2b	317.0075	11.40
003YR072HR	smf-2b	317.2575	11.40
003YR072HR	smf-2b	317.5075	11.40
003YR072HR	smf-2b	317.7575	11.40
003YR072HR	smf-2b	318.0075	11.40
003YR072HR	smf-2b	318.2575	11.40
003YR072HR	smf-2b	318.5075	11.40
003YR072HR	smf-2b	318.7575	11.40
003YR072HR	smf-2b	319.0075	11.40
003YR072HR	smf-2b	319.2575	11.40
003YR072HR	smf-2b	319.5075	11.40
003YR072HR	smf-2b	319.7575	11.40
003YR072HR	smf-2b	320.0075	11.40
003YR072HR	smf-2b	320.2575	11.40
003YR072HR	smf-2b	320.5075	11.40
003YR072HR	smf-2b	320.7575	11.40
003YR072HR	smf-2b	321.0075	11.40
003YR072HR	smf-2b	321.2575	11.40
003YR072HR	smf-2b	321.5075	11.40
003YR072HR	smf-2b	321.7575	11.40
003YR072HR	smf-2b	322.0075	11.40
003YR072HR	smf-2b	322.2575	11.40
003YR072HR	smf-2b	322.5075	11.40
003YR072HR	smf-2b	322.7575	11.40
003YR072HR	smf-2b	323.0075	11.40
003YR072HR	smf-2b	323.2575	11.40

3yr-72hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR072HR	smf-2c	392.2575	11.86
003YR072HR	smf-2c	392.5075	11.86
003YR072HR	smf-2c	392.7575	11.86
003YR072HR	smf-2c	393.0075	11.86
003YR072HR	smf-2c	393.2575	11.86
003YR072HR	smf-2c	393.5075	11.86
003YR072HR	smf-2c	393.7575	11.86
003YR072HR	smf-2c	394.0075	11.86
003YR072HR	smf-2c	394.2575	11.86
003YR072HR	smf-2c	394.5075	11.86
003YR072HR	smf-2c	394.7575	11.86
003YR072HR	smf-2c	395.0075	11.86
003YR072HR	smf-2c	395.2575	11.86
003YR072HR	smf-2c	395.5075	11.86
003YR072HR	smf-2c	395.7575	11.85
003YR072HR	smf-2c	396.0075	11.85
003YR072HR	smf-2c	396.2575	11.85
003YR072HR	smf-2c	396.5075	11.85
003YR072HR	smf-2c	396.7575	11.85
003YR072HR	smf-2c	397.0075	11.85
003YR072HR	smf-2c	397.2575	11.85
003YR072HR	smf-2c	397.5075	11.85
003YR072HR	smf-2c	397.7575	11.85
003YR072HR	smf-2c	398.0075	11.85
003YR072HR	smf-2c	398.2575	11.85
003YR072HR	smf-2c	398.5075	11.85
003YR072HR	smf-2c	398.7575	11.85
003YR072HR	smf-2c	399.0075	11.85
003YR072HR	smf-2c	399.2575	11.85
003YR072HR	smf-2c	399.5075	11.85
003YR072HR	smf-2c	399.7575	11.85
003YR072HR	smf-2c	400.0075	11.85
003YR072HR	smf-2c	400.2575	11.85
003YR072HR	smf-2c	400.5075	11.85
003YR072HR	smf-2c	400.7575	11.85
003YR072HR	smf-2c	401.0075	11.85
003YR072HR	smf-2c	401.2575	11.85
003YR072HR	smf-2c	401.5075	11.85
003YR072HR	smf-2c	401.7575	11.85
003YR072HR	smf-2c	402.0075	11.85
003YR072HR	smf-2c	402.2575	11.85
003YR072HR	smf-2c	402.5075	11.85

3yr-72hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR072HR	smf-3a	513.5075	11.91
003YR072HR	smf-3a	513.7575	11.91
003YR072HR	smf-3a	514.0075	11.91
003YR072HR	smf-3a	514.2575	11.91
003YR072HR	smf-3a	514.5075	11.91
003YR072HR	smf-3a	514.7575	11.91
003YR072HR	smf-3a	515.0075	11.91
003YR072HR	smf-3a	515.2575	11.91
003YR072HR	smf-3a	515.5075	11.90
003YR072HR	smf-3a	515.7575	11.90
003YR072HR	smf-3a	516.0075	11.90
003YR072HR	smf-3a	516.2575	11.90
003YR072HR	smf-3a	516.5075	11.90
003YR072HR	smf-3a	516.7575	11.90
003YR072HR	smf-3a	517.0075	11.90
003YR072HR	smf-3a	517.2575	11.90
003YR072HR	smf-3a	517.5075	11.90
003YR072HR	smf-3a	517.7575	11.90
003YR072HR	smf-3a	518.0075	11.90
003YR072HR	smf-3a	518.2575	11.90
003YR072HR	smf-3a	518.5075	11.90
003YR072HR	smf-3a	518.7575	11.90
003YR072HR	smf-3a	519.0075	11.90
003YR072HR	smf-3a	519.2575	11.90
003YR072HR	smf-3a	519.5075	11.90
003YR072HR	smf-3a	519.7575	11.90
003YR072HR	smf-3a	520.0075	11.90
003YR072HR	smf-3a	520.2575	11.90
003YR072HR	smf-3a	520.5075	11.90
003YR072HR	smf-3a	520.7575	11.90
003YR072HR	smf-3a	521.0075	11.90
003YR072HR	smf-3a	521.2575	11.90
003YR072HR	smf-3a	521.5075	11.90
003YR072HR	smf-3a	521.7575	11.90
003YR072HR	smf-3a	522.0075	11.90
003YR072HR	smf-3a	522.2575	11.90
003YR072HR	smf-3a	522.5075	11.90
003YR072HR	smf-3a	522.7575	11.90
003YR072HR	smf-3a	523.0075	11.90
003YR072HR	smf-3a	523.2575	11.90
003YR072HR	smf-3a	523.5075	11.90
003YR072HR	smf-3a	523.7575	11.90

3yr-72hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
003YR072HR	smf-3b	456.2575	11.26
003YR072HR	smf-3b	456.5075	11.25
003YR072HR	smf-3b	456.7575	11.25
003YR072HR	smf-3b	457.0075	11.25
003YR072HR	smf-3b	457.2575	11.25
003YR072HR	smf-3b	457.5075	11.25
003YR072HR	smf-3b	457.7575	11.25
003YR072HR	smf-3b	458.0075	11.25
003YR072HR	smf-3b	458.2575	11.25
003YR072HR	smf-3b	458.5075	11.25
003YR072HR	smf-3b	458.7575	11.25
003YR072HR	smf-3b	459.0075	11.25
003YR072HR	smf-3b	459.2575	11.25
003YR072HR	smf-3b	459.5075	11.25
003YR072HR	smf-3b	459.7575	11.25
003YR072HR	smf-3b	460.0075	11.25
003YR072HR	smf-3b	460.2575	11.25
003YR072HR	smf-3b	460.5075	11.25
003YR072HR	smf-3b	460.7575	11.25
003YR072HR	smf-3b	461.0075	11.25
003YR072HR	smf-3b	461.2575	11.25
003YR072HR	smf-3b	461.5075	11.25
003YR072HR	smf-3b	461.7575	11.25
003YR072HR	smf-3b	462.0075	11.25
003YR072HR	smf-3b	462.2575	11.25
003YR072HR	smf-3b	462.5075	11.25
003YR072HR	smf-3b	462.7575	11.25
003YR072HR	smf-3b	463.0075	11.25
003YR072HR	smf-3b	463.2575	11.25
003YR072HR	smf-3b	463.5075	11.25
003YR072HR	smf-3b	463.7575	11.25
003YR072HR	smf-3b	464.0075	11.25
003YR072HR	smf-3b	464.2575	11.25
003YR072HR	smf-3b	464.5075	11.25
003YR072HR	smf-3b	464.7575	11.25
003YR072HR	smf-3b	465.0075	11.25
003YR072HR	smf-3b	465.2575	11.25
003YR072HR	smf-3b	465.5075	11.25
003YR072HR	smf-3b	465.7575	11.25
003YR072HR	smf-3b	466.0075	11.25
003YR072HR	smf-3b	466.2575	11.25
003YR072HR	smf-3b	466.5075	11.25

3yr-72hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR001HR	smf-1a	10.5014	12.56
005YR001HR	smf-1a	10.7514	12.55
005YR001HR	smf-1a	11.0014	12.55
005YR001HR	smf-1a	11.2514	12.54
005YR001HR	smf-1a	11.5014	12.54
005YR001HR	smf-1a	11.7514	12.53
005YR001HR	smf-1a	12.0014	12.53
005YR001HR	smf-1a	12.2514	12.53
005YR001HR	smf-1a	12.5014	12.52
005YR001HR	smf-1a	12.7514	12.52
005YR001HR	smf-1a	13.0014	12.51
005YR001HR	smf-1a	13.2514	12.51
005YR001HR	smf-1a	13.5014	12.50
005YR001HR	smf-1a	13.7514	12.50
005YR001HR	smf-1a	14.0014	12.50
005YR001HR	smf-1a	14.2514	12.49
005YR001HR	smf-1a	14.5014	12.49
005YR001HR	smf-1a	14.7514	12.49
005YR001HR	smf-1a	15.0014	12.48
005YR001HR	smf-1a	15.2514	12.48
005YR001HR	smf-1a	15.5014	12.48
005YR001HR	smf-1a	15.7514	12.47
005YR001HR	smf-1a	16.0014	12.47
005YR001HR	smf-1a	16.2514	12.47
005YR001HR	smf-1a	16.5014	12.46
005YR001HR	smf-1a	16.7514	12.46
005YR001HR	smf-1a	17.0014	12.46
005YR001HR	smf-1a	17.2514	12.45
005YR001HR	smf-1a	17.5014	12.45
005YR001HR	smf-1a	17.7514	12.45
005YR001HR	smf-1a	18.0014	12.45
005YR001HR	smf-1a	18.2514	12.45
005YR001HR	smf-1a	18.5014	12.45
005YR001HR	smf-1a	18.7514	12.45
005YR001HR	smf-1a	19.0014	12.45
005YR001HR	smf-1a	19.2514	12.45
005YR001HR	smf-1a	19.5014	12.45
005YR001HR	smf-1a	19.7514	12.45
005YR001HR	smf-1a	20.0014	12.45
005YR001HR	smf-1a	20.2514	12.45
005YR001HR	smf-1a	20.5014	12.45
005YR001HR	smf-1a	20.7514	12.45

5yr-1hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR001HR	smf-1b	45.2514	13.06
005YR001HR	smf-1b	45.5014	13.06
005YR001HR	smf-1b	45.7514	13.05
005YR001HR	smf-1b	46.0014	13.05
005YR001HR	smf-1b	46.2514	13.05
005YR001HR	smf-1b	46.5014	13.05
005YR001HR	smf-1b	46.7514	13.05
005YR001HR	smf-1b	47.0014	13.04
005YR001HR	smf-1b	47.2514	13.04
005YR001HR	smf-1b	47.5014	13.04
005YR001HR	smf-1b	47.7514	13.04
005YR001HR	smf-1b	48.0014	13.04
005YR001HR	smf-1b	48.2514	13.03
005YR001HR	smf-1b	48.5014	13.03
005YR001HR	smf-1b	48.7514	13.03
005YR001HR	smf-1b	49.0014	13.03
005YR001HR	smf-1b	49.2514	13.03
005YR001HR	smf-1b	49.5014	13.02
005YR001HR	smf-1b	49.7514	13.02
005YR001HR	smf-1b	50.0014	13.02
005YR001HR	smf-1b	50.2514	13.02
005YR001HR	smf-1b	50.5014	13.02
005YR001HR	smf-1b	50.7514	13.01
005YR001HR	smf-1b	51.0014	13.01
005YR001HR	smf-1b	51.2514	13.01
005YR001HR	smf-1b	51.5014	13.01
005YR001HR	smf-1b	51.7514	13.01
005YR001HR	smf-1b	52.0014	13.01
005YR001HR	smf-1b	52.2514	13.00
005YR001HR	smf-1b	52.5014	13.00
005YR001HR	smf-1b	52.7514	13.00
005YR001HR	smf-1b	53.0014	13.00
005YR001HR	smf-1b	53.2514	13.00
005YR001HR	smf-1b	53.5014	13.00
005YR001HR	smf-1b	53.7514	13.00
005YR001HR	smf-1b	54.0014	13.00
005YR001HR	smf-1b	54.2514	13.00
005YR001HR	smf-1b	54.5014	13.00
005YR001HR	smf-1b	54.7514	13.00
005YR001HR	smf-1b	55.0014	13.00
005YR001HR	smf-1b	55.2514	13.00
005YR001HR	smf-1b	55.5014	13.00

5yr-1hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR001HR	smf-2a	90.5014	12.12
005YR001HR	smf-2a	90.7514	12.12
005YR001HR	smf-2a	91.0014	12.12
005YR001HR	smf-2a	91.2514	12.12
005YR001HR	smf-2a	91.5014	12.12
005YR001HR	smf-2a	91.7514	12.11
005YR001HR	smf-2a	92.0014	12.11
005YR001HR	smf-2a	92.2514	12.11
005YR001HR	smf-2a	92.5014	12.11
005YR001HR	smf-2a	92.7514	12.11
005YR001HR	smf-2a	93.0014	12.11
005YR001HR	smf-2a	93.2514	12.11
005YR001HR	smf-2a	93.5014	12.11
005YR001HR	smf-2a	93.7514	12.11
005YR001HR	smf-2a	94.0014	12.11
005YR001HR	smf-2a	94.2514	12.11
005YR001HR	smf-2a	94.5014	12.11
005YR001HR	smf-2a	94.7514	12.11
005YR001HR	smf-2a	95.0014	12.10
005YR001HR	smf-2a	95.2514	12.10
005YR001HR	smf-2a	95.5014	12.10
005YR001HR	smf-2a	95.7514	12.10
005YR001HR	smf-2a	96.0014	12.10
005YR001HR	smf-2a	96.2514	12.10
005YR001HR	smf-2a	96.5014	12.10
005YR001HR	smf-2a	96.7514	12.10
005YR001HR	smf-2a	97.0014	12.10
005YR001HR	smf-2a	97.2514	12.10
005YR001HR	smf-2a	97.5014	12.10
005YR001HR	smf-2a	97.7514	12.10
005YR001HR	smf-2a	98.0014	12.10
005YR001HR	smf-2a	98.2514	12.10
005YR001HR	smf-2a	98.5014	12.10
005YR001HR	smf-2a	98.7514	12.10
005YR001HR	smf-2a	99.0014	12.10
005YR001HR	smf-2a	99.2514	12.10
005YR001HR	smf-2a	99.5014	12.10
005YR001HR	smf-2a	99.7514	12.10
005YR001HR	smf-2a	100.0014	12.10
005YR001HR	smf-2a	100.2514	12.10
005YR001HR	smf-2a	100.5014	12.10
005YR001HR	smf-2a	100.7514	12.10

5yr-1hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR001HR	smf-2b	41.2514	11.48
005YR001HR	smf-2b	41.5014	11.48
005YR001HR	smf-2b	41.7514	11.48
005YR001HR	smf-2b	42.0014	11.48
005YR001HR	smf-2b	42.2514	11.47
005YR001HR	smf-2b	42.5014	11.47
005YR001HR	smf-2b	42.7514	11.47
005YR001HR	smf-2b	43.0014	11.47
005YR001HR	smf-2b	43.2514	11.46
005YR001HR	smf-2b	43.5014	11.46
005YR001HR	smf-2b	43.7514	11.46
005YR001HR	smf-2b	44.0014	11.46
005YR001HR	smf-2b	44.2514	11.46
005YR001HR	smf-2b	44.5014	11.45
005YR001HR	smf-2b	44.7514	11.45
005YR001HR	smf-2b	45.0014	11.45
005YR001HR	smf-2b	45.2514	11.45
005YR001HR	smf-2b	45.5014	11.45
005YR001HR	smf-2b	45.7514	11.44
005YR001HR	smf-2b	46.0014	11.44
005YR001HR	smf-2b	46.2514	11.44
005YR001HR	smf-2b	46.5014	11.44
005YR001HR	smf-2b	46.7514	11.44
005YR001HR	smf-2b	47.0014	11.43
005YR001HR	smf-2b	47.2514	11.43
005YR001HR	smf-2b	47.5014	11.43
005YR001HR	smf-2b	47.7514	11.43
005YR001HR	smf-2b	48.0014	11.43
005YR001HR	smf-2b	48.2514	11.42
005YR001HR	smf-2b	48.5014	11.42
005YR001HR	smf-2b	48.7514	11.42
005YR001HR	smf-2b	49.0014	11.42
005YR001HR	smf-2b	49.2514	11.42
005YR001HR	smf-2b	49.5014	11.42
005YR001HR	smf-2b	49.7514	11.41
005YR001HR	smf-2b	50.0014	11.41
005YR001HR	smf-2b	50.2514	11.41
005YR001HR	smf-2b	50.5014	11.41
005YR001HR	smf-2b	50.7514	11.41
005YR001HR	smf-2b	51.0014	11.41
005YR001HR	smf-2b	51.2514	11.40
005YR001HR	smf-2b	51.5014	11.40

5yr-1hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR001HR	smf-2c	76.0014	11.86
005YR001HR	smf-2c	76.2514	11.86
005YR001HR	smf-2c	76.5014	11.86
005YR001HR	smf-2c	76.7514	11.86
005YR001HR	smf-2c	77.0014	11.86
005YR001HR	smf-2c	77.2514	11.86
005YR001HR	smf-2c	77.5014	11.86
005YR001HR	smf-2c	77.7514	11.86
005YR001HR	smf-2c	78.0014	11.85
005YR001HR	smf-2c	78.2514	11.85
005YR001HR	smf-2c	78.5014	11.85
005YR001HR	smf-2c	78.7514	11.85
005YR001HR	smf-2c	79.0014	11.85
005YR001HR	smf-2c	79.2514	11.85
005YR001HR	smf-2c	79.5014	11.85
005YR001HR	smf-2c	79.7514	11.85
005YR001HR	smf-2c	80.0014	11.85
005YR001HR	smf-2c	80.2514	11.85
005YR001HR	smf-2c	80.5014	11.85
005YR001HR	smf-2c	80.7514	11.85
005YR001HR	smf-2c	81.0014	11.85
005YR001HR	smf-2c	81.2514	11.85
005YR001HR	smf-2c	81.5014	11.85
005YR001HR	smf-2c	81.7514	11.85
005YR001HR	smf-2c	82.0014	11.85
005YR001HR	smf-2c	82.2514	11.85
005YR001HR	smf-2c	82.5014	11.85
005YR001HR	smf-2c	82.7514	11.85
005YR001HR	smf-2c	83.0014	11.85
005YR001HR	smf-2c	83.2514	11.85
005YR001HR	smf-2c	83.5014	11.85
005YR001HR	smf-2c	83.7514	11.85
005YR001HR	smf-2c	84.0014	11.85
005YR001HR	smf-2c	84.2514	11.85
005YR001HR	smf-2c	84.5014	11.85
005YR001HR	smf-2c	84.7514	11.85
005YR001HR	smf-2c	85.0014	11.85
005YR001HR	smf-2c	85.2514	11.85
005YR001HR	smf-2c	85.5014	11.85
005YR001HR	smf-2c	85.7514	11.85
005YR001HR	smf-2c	86.0014	11.85
005YR001HR	smf-2c	86.2514	11.85

5yr-1hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR001HR	smf-3a	79.2514	11.95
005YR001HR	smf-3a	79.5014	11.95
005YR001HR	smf-3a	79.7514	11.94
005YR001HR	smf-3a	80.0014	11.94
005YR001HR	smf-3a	80.2514	11.94
005YR001HR	smf-3a	80.5014	11.94
005YR001HR	smf-3a	80.7514	11.94
005YR001HR	smf-3a	81.0014	11.94
005YR001HR	smf-3a	81.2514	11.94
005YR001HR	smf-3a	81.5014	11.94
005YR001HR	smf-3a	81.7514	11.93
005YR001HR	smf-3a	82.0014	11.93
005YR001HR	smf-3a	82.2514	11.93
005YR001HR	smf-3a	82.5014	11.93
005YR001HR	smf-3a	82.7514	11.93
005YR001HR	smf-3a	83.0014	11.93
005YR001HR	smf-3a	83.2514	11.93
005YR001HR	smf-3a	83.5014	11.93
005YR001HR	smf-3a	83.7514	11.93
005YR001HR	smf-3a	84.0014	11.92
005YR001HR	smf-3a	84.2514	11.92
005YR001HR	smf-3a	84.5014	11.92
005YR001HR	smf-3a	84.7514	11.92
005YR001HR	smf-3a	85.0014	11.92
005YR001HR	smf-3a	85.2514	11.92
005YR001HR	smf-3a	85.5014	11.92
005YR001HR	smf-3a	85.7514	11.92
005YR001HR	smf-3a	86.0014	11.92
005YR001HR	smf-3a	86.2514	11.91
005YR001HR	smf-3a	86.5014	11.91
005YR001HR	smf-3a	86.7514	11.91
005YR001HR	smf-3a	87.0014	11.91
005YR001HR	smf-3a	87.2514	11.91
005YR001HR	smf-3a	87.5014	11.91
005YR001HR	smf-3a	87.7514	11.91
005YR001HR	smf-3a	88.0014	11.91
005YR001HR	smf-3a	88.2514	11.91
005YR001HR	smf-3a	88.5014	11.90
005YR001HR	smf-3a	88.7514	11.90
005YR001HR	smf-3a	89.0014	11.90
005YR001HR	smf-3a	89.2514	11.90
005YR001HR	smf-3a	89.5014	11.90

5yr-1hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR001HR	smf-3b	82.5014	11.27
005YR001HR	smf-3b	82.7514	11.27
005YR001HR	smf-3b	83.0014	11.27
005YR001HR	smf-3b	83.2514	11.26
005YR001HR	smf-3b	83.5014	11.26
005YR001HR	smf-3b	83.7514	11.26
005YR001HR	smf-3b	84.0014	11.26
005YR001HR	smf-3b	84.2514	11.26
005YR001HR	smf-3b	84.5014	11.26
005YR001HR	smf-3b	84.7514	11.26
005YR001HR	smf-3b	85.0014	11.26
005YR001HR	smf-3b	85.2514	11.26
005YR001HR	smf-3b	85.5014	11.25
005YR001HR	smf-3b	85.7514	11.25
005YR001HR	smf-3b	86.0014	11.25
005YR001HR	smf-3b	86.2514	11.25
005YR001HR	smf-3b	86.5014	11.25
005YR001HR	smf-3b	86.7514	11.25
005YR001HR	smf-3b	87.0014	11.25
005YR001HR	smf-3b	87.2514	11.25
005YR001HR	smf-3b	87.5014	11.25
005YR001HR	smf-3b	87.7514	11.25
005YR001HR	smf-3b	88.0014	11.25
005YR001HR	smf-3b	88.2514	11.25
005YR001HR	smf-3b	88.5014	11.25
005YR001HR	smf-3b	88.7514	11.25
005YR001HR	smf-3b	89.0014	11.25
005YR001HR	smf-3b	89.2514	11.25
005YR001HR	smf-3b	89.5014	11.25
005YR001HR	smf-3b	89.7514	11.25
005YR001HR	smf-3b	90.0014	11.25
005YR001HR	smf-3b	90.2514	11.25
005YR001HR	smf-3b	90.5014	11.25
005YR001HR	smf-3b	90.7514	11.25
005YR001HR	smf-3b	91.0014	11.25
005YR001HR	smf-3b	91.2514	11.25
005YR001HR	smf-3b	91.5014	11.25
005YR001HR	smf-3b	91.7514	11.25
005YR001HR	smf-3b	92.0014	11.25
005YR001HR	smf-3b	92.2514	11.25
005YR001HR	smf-3b	92.5014	11.25
005YR001HR	smf-3b	92.7514	11.25

5yr-1hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR002HR	smf-1a	33.2528	12.50
005YR002HR	smf-1a	33.5028	12.49
005YR002HR	smf-1a	33.7528	12.49
005YR002HR	smf-1a	34.0028	12.49
005YR002HR	smf-1a	34.2528	12.49
005YR002HR	smf-1a	34.5028	12.49
005YR002HR	smf-1a	34.7528	12.48
005YR002HR	smf-1a	35.0028	12.48
005YR002HR	smf-1a	35.2528	12.48
005YR002HR	smf-1a	35.5028	12.48
005YR002HR	smf-1a	35.7528	12.48
005YR002HR	smf-1a	36.0028	12.47
005YR002HR	smf-1a	36.2528	12.47
005YR002HR	smf-1a	36.5028	12.47
005YR002HR	smf-1a	36.7528	12.47
005YR002HR	smf-1a	37.0028	12.47
005YR002HR	smf-1a	37.2528	12.47
005YR002HR	smf-1a	37.5028	12.46
005YR002HR	smf-1a	37.7528	12.46
005YR002HR	smf-1a	38.0028	12.46
005YR002HR	smf-1a	38.2528	12.46
005YR002HR	smf-1a	38.5028	12.46
005YR002HR	smf-1a	38.7528	12.46
005YR002HR	smf-1a	39.0028	12.45
005YR002HR	smf-1a	39.2528	12.45
005YR002HR	smf-1a	39.5028	12.45
005YR002HR	smf-1a	39.7528	12.45
005YR002HR	smf-1a	40.0028	12.45
005YR002HR	smf-1a	40.2528	12.45
005YR002HR	smf-1a	40.5028	12.45
005YR002HR	smf-1a	40.7528	12.45
005YR002HR	smf-1a	41.0028	12.45
005YR002HR	smf-1a	41.2528	12.45
005YR002HR	smf-1a	41.5028	12.45
005YR002HR	smf-1a	41.7528	12.45
005YR002HR	smf-1a	42.0028	12.45
005YR002HR	smf-1a	42.2528	12.45
005YR002HR	smf-1a	42.5028	12.45
005YR002HR	smf-1a	42.7528	12.45
005YR002HR	smf-1a	43.0028	12.45
005YR002HR	smf-1a	43.2528	12.45
005YR002HR	smf-1a	43.5028	12.45

5yr-2hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR002HR	smf-1b	67.0028	13.00
005YR002HR	smf-1b	67.2528	13.00
005YR002HR	smf-1b	67.5028	13.00
005YR002HR	smf-1b	67.7528	13.00
005YR002HR	smf-1b	68.0028	13.00
005YR002HR	smf-1b	68.2528	13.00
005YR002HR	smf-1b	68.5028	13.00
005YR002HR	smf-1b	68.7528	13.00
005YR002HR	smf-1b	69.0028	13.00
005YR002HR	smf-1b	69.2528	13.00
005YR002HR	smf-1b	69.5028	13.00
005YR002HR	smf-1b	69.7528	13.00
005YR002HR	smf-1b	70.0028	13.00
005YR002HR	smf-1b	70.2528	13.00
005YR002HR	smf-1b	70.5028	13.00
005YR002HR	smf-1b	70.7528	13.00
005YR002HR	smf-1b	71.0028	13.00
005YR002HR	smf-1b	71.2528	13.00
005YR002HR	smf-1b	71.5028	13.00
005YR002HR	smf-1b	71.7528	13.00
005YR002HR	smf-1b	72.0028	13.00
005YR002HR	smf-1b	72.2528	13.00
005YR002HR	smf-1b	72.5028	13.00
005YR002HR	smf-1b	72.7528	13.00
005YR002HR	smf-1b	73.0028	13.00
005YR002HR	smf-1b	73.2528	13.00
005YR002HR	smf-1b	73.5028	13.00
005YR002HR	smf-1b	73.7528	13.00
005YR002HR	smf-1b	74.0028	13.00
005YR002HR	smf-1b	74.2528	13.00
005YR002HR	smf-1b	74.5028	13.00
005YR002HR	smf-1b	74.7528	13.00
005YR002HR	smf-1b	75.0028	13.00
005YR002HR	smf-1b	75.2528	13.00
005YR002HR	smf-1b	75.5028	13.00
005YR002HR	smf-1b	75.7528	13.00
005YR002HR	smf-1b	76.0028	13.00
005YR002HR	smf-1b	76.2528	13.00
005YR002HR	smf-1b	76.5028	13.00
005YR002HR	smf-1b	76.7528	13.00
005YR002HR	smf-1b	77.0028	13.00
005YR002HR	smf-1b	77.2528	13.00

5yr-2hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR002HR	smf-2a	121.7528	12.13
005YR002HR	smf-2a	122.0028	12.13
005YR002HR	smf-2a	122.2528	12.12
005YR002HR	smf-2a	122.5028	12.12
005YR002HR	smf-2a	122.7528	12.12
005YR002HR	smf-2a	123.0028	12.12
005YR002HR	smf-2a	123.2528	12.12
005YR002HR	smf-2a	123.5028	12.12
005YR002HR	smf-2a	123.7528	12.12
005YR002HR	smf-2a	124.0028	12.12
005YR002HR	smf-2a	124.2528	12.12
005YR002HR	smf-2a	124.5028	12.12
005YR002HR	smf-2a	124.7528	12.12
005YR002HR	smf-2a	125.0028	12.12
005YR002HR	smf-2a	125.2528	12.12
005YR002HR	smf-2a	125.5028	12.12
005YR002HR	smf-2a	125.7528	12.12
005YR002HR	smf-2a	126.0028	12.12
005YR002HR	smf-2a	126.2528	12.11
005YR002HR	smf-2a	126.5028	12.11
005YR002HR	smf-2a	126.7528	12.11
005YR002HR	smf-2a	127.0028	12.11
005YR002HR	smf-2a	127.2528	12.11
005YR002HR	smf-2a	127.5028	12.11
005YR002HR	smf-2a	127.7528	12.11
005YR002HR	smf-2a	128.0028	12.11
005YR002HR	smf-2a	128.2528	12.11
005YR002HR	smf-2a	128.5028	12.11
005YR002HR	smf-2a	128.7528	12.11
005YR002HR	smf-2a	129.0028	12.11
005YR002HR	smf-2a	129.2528	12.11
005YR002HR	smf-2a	129.5028	12.11
005YR002HR	smf-2a	129.7528	12.11
005YR002HR	smf-2a	130.0028	12.11
005YR002HR	smf-2a	130.2528	12.10
005YR002HR	smf-2a	130.5028	12.10
005YR002HR	smf-2a	130.7528	12.10
005YR002HR	smf-2a	131.0028	12.10
005YR002HR	smf-2a	131.2528	12.10
005YR002HR	smf-2a	131.5028	12.10
005YR002HR	smf-2a	131.7528	12.10
005YR002HR	smf-2a	132.0028	12.10

5yr-2hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR002HR	smf-2b	82.0028	11.45
005YR002HR	smf-2b	82.2528	11.45
005YR002HR	smf-2b	82.5028	11.45
005YR002HR	smf-2b	82.7528	11.45
005YR002HR	smf-2b	83.0028	11.44
005YR002HR	smf-2b	83.2528	11.44
005YR002HR	smf-2b	83.5028	11.44
005YR002HR	smf-2b	83.7528	11.44
005YR002HR	smf-2b	84.0028	11.44
005YR002HR	smf-2b	84.2528	11.44
005YR002HR	smf-2b	84.5028	11.44
005YR002HR	smf-2b	84.7528	11.44
005YR002HR	smf-2b	85.0028	11.43
005YR002HR	smf-2b	85.2528	11.43
005YR002HR	smf-2b	85.5028	11.43
005YR002HR	smf-2b	85.7528	11.43
005YR002HR	smf-2b	86.0028	11.43
005YR002HR	smf-2b	86.2528	11.43
005YR002HR	smf-2b	86.5028	11.43
005YR002HR	smf-2b	86.7528	11.43
005YR002HR	smf-2b	87.0028	11.42
005YR002HR	smf-2b	87.2528	11.42
005YR002HR	smf-2b	87.5028	11.42
005YR002HR	smf-2b	87.7528	11.42
005YR002HR	smf-2b	88.0028	11.42
005YR002HR	smf-2b	88.2528	11.42
005YR002HR	smf-2b	88.5028	11.42
005YR002HR	smf-2b	88.7528	11.42
005YR002HR	smf-2b	89.0028	11.42
005YR002HR	smf-2b	89.2528	11.41
005YR002HR	smf-2b	89.5028	11.41
005YR002HR	smf-2b	89.7528	11.41
005YR002HR	smf-2b	90.0028	11.41
005YR002HR	smf-2b	90.2528	11.41
005YR002HR	smf-2b	90.5028	11.41
005YR002HR	smf-2b	90.7528	11.41
005YR002HR	smf-2b	91.0028	11.41
005YR002HR	smf-2b	91.2528	11.41
005YR002HR	smf-2b	91.5028	11.41
005YR002HR	smf-2b	91.7528	11.40
005YR002HR	smf-2b	92.0028	11.40
005YR002HR	smf-2b	92.2528	11.40

5yr-2hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR002HR	smf-2c	115.7528	11.86
005YR002HR	smf-2c	116.0028	11.86
005YR002HR	smf-2c	116.2528	11.86
005YR002HR	smf-2c	116.5028	11.86
005YR002HR	smf-2c	116.7528	11.86
005YR002HR	smf-2c	117.0028	11.86
005YR002HR	smf-2c	117.2528	11.86
005YR002HR	smf-2c	117.5028	11.86
005YR002HR	smf-2c	117.7528	11.86
005YR002HR	smf-2c	118.0028	11.86
005YR002HR	smf-2c	118.2528	11.86
005YR002HR	smf-2c	118.5028	11.86
005YR002HR	smf-2c	118.7528	11.86
005YR002HR	smf-2c	119.0028	11.85
005YR002HR	smf-2c	119.2528	11.85
005YR002HR	smf-2c	119.5028	11.85
005YR002HR	smf-2c	119.7528	11.85
005YR002HR	smf-2c	120.0028	11.85
005YR002HR	smf-2c	120.2528	11.85
005YR002HR	smf-2c	120.5028	11.85
005YR002HR	smf-2c	120.7528	11.85
005YR002HR	smf-2c	121.0028	11.85
005YR002HR	smf-2c	121.2528	11.85
005YR002HR	smf-2c	121.5028	11.85
005YR002HR	smf-2c	121.7528	11.85
005YR002HR	smf-2c	122.0028	11.85
005YR002HR	smf-2c	122.2528	11.85
005YR002HR	smf-2c	122.5028	11.85
005YR002HR	smf-2c	122.7528	11.85
005YR002HR	smf-2c	123.0028	11.85
005YR002HR	smf-2c	123.2528	11.85
005YR002HR	smf-2c	123.5028	11.85
005YR002HR	smf-2c	123.7528	11.85
005YR002HR	smf-2c	124.0028	11.85
005YR002HR	smf-2c	124.2528	11.85
005YR002HR	smf-2c	124.5028	11.85
005YR002HR	smf-2c	124.7528	11.85
005YR002HR	smf-2c	125.0028	11.85
005YR002HR	smf-2c	125.2528	11.85
005YR002HR	smf-2c	125.5028	11.85
005YR002HR	smf-2c	125.7528	11.85
005YR002HR	smf-2c	126.0028	11.85

5yr-2hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR002HR	smf-3a	107.5028	11.91
005YR002HR	smf-3a	107.7528	11.91
005YR002HR	smf-3a	108.0028	11.90
005YR002HR	smf-3a	108.2528	11.90
005YR002HR	smf-3a	108.5028	11.90
005YR002HR	smf-3a	108.7528	11.90
005YR002HR	smf-3a	109.0028	11.90
005YR002HR	smf-3a	109.2528	11.90
005YR002HR	smf-3a	109.5028	11.90
005YR002HR	smf-3a	109.7528	11.90
005YR002HR	smf-3a	110.0028	11.90
005YR002HR	smf-3a	110.2528	11.90
005YR002HR	smf-3a	110.5028	11.90
005YR002HR	smf-3a	110.7528	11.90
005YR002HR	smf-3a	111.0028	11.90
005YR002HR	smf-3a	111.2528	11.90
005YR002HR	smf-3a	111.5028	11.90
005YR002HR	smf-3a	111.7528	11.90
005YR002HR	smf-3a	112.0028	11.90
005YR002HR	smf-3a	112.2528	11.90
005YR002HR	smf-3a	112.5028	11.90
005YR002HR	smf-3a	112.7528	11.90
005YR002HR	smf-3a	113.0028	11.90
005YR002HR	smf-3a	113.2528	11.90
005YR002HR	smf-3a	113.5028	11.90
005YR002HR	smf-3a	113.7528	11.90
005YR002HR	smf-3a	114.0028	11.90
005YR002HR	smf-3a	114.2528	11.90
005YR002HR	smf-3a	114.5028	11.90
005YR002HR	smf-3a	114.7528	11.90
005YR002HR	smf-3a	115.0028	11.90
005YR002HR	smf-3a	115.2528	11.90
005YR002HR	smf-3a	115.5028	11.90
005YR002HR	smf-3a	115.7528	11.90
005YR002HR	smf-3a	116.0028	11.90
005YR002HR	smf-3a	116.2528	11.90
005YR002HR	smf-3a	116.5028	11.90
005YR002HR	smf-3a	116.7528	11.90
005YR002HR	smf-3a	117.0028	11.90
005YR002HR	smf-3a	117.2528	11.90
005YR002HR	smf-3a	117.5028	11.90
005YR002HR	smf-3a	117.7528	11.90

5yr-2hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR002HR	smf-3b	130.7528	11.26
005YR002HR	smf-3b	131.0028	11.25
005YR002HR	smf-3b	131.2528	11.25
005YR002HR	smf-3b	131.5028	11.25
005YR002HR	smf-3b	131.7528	11.25
005YR002HR	smf-3b	132.0028	11.25
005YR002HR	smf-3b	132.2528	11.25
005YR002HR	smf-3b	132.5028	11.25
005YR002HR	smf-3b	132.7528	11.25
005YR002HR	smf-3b	133.0028	11.25
005YR002HR	smf-3b	133.2528	11.25
005YR002HR	smf-3b	133.5028	11.25
005YR002HR	smf-3b	133.7528	11.25
005YR002HR	smf-3b	134.0028	11.25
005YR002HR	smf-3b	134.2528	11.25
005YR002HR	smf-3b	134.5028	11.25
005YR002HR	smf-3b	134.7528	11.25
005YR002HR	smf-3b	135.0028	11.25
005YR002HR	smf-3b	135.2528	11.25
005YR002HR	smf-3b	135.5028	11.25
005YR002HR	smf-3b	135.7528	11.25
005YR002HR	smf-3b	136.0028	11.25
005YR002HR	smf-3b	136.2528	11.25
005YR002HR	smf-3b	136.5028	11.25
005YR002HR	smf-3b	136.7528	11.25
005YR002HR	smf-3b	137.0028	11.25
005YR002HR	smf-3b	137.2528	11.25
005YR002HR	smf-3b	137.5028	11.25
005YR002HR	smf-3b	137.7528	11.25
005YR002HR	smf-3b	138.0028	11.25
005YR002HR	smf-3b	138.2528	11.25
005YR002HR	smf-3b	138.5028	11.25
005YR002HR	smf-3b	138.7528	11.25
005YR002HR	smf-3b	139.0028	11.25
005YR002HR	smf-3b	139.2528	11.25
005YR002HR	smf-3b	139.5028	11.25
005YR002HR	smf-3b	139.7528	11.25
005YR002HR	smf-3b	140.0028	11.25
005YR002HR	smf-3b	140.2528	11.25
005YR002HR	smf-3b	140.5028	11.25
005YR002HR	smf-3b	140.7528	11.25
005YR002HR	smf-3b	141.0028	11.25

5yr-2hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR004HR	smf-1a	70.0040	12.46
005YR004HR	smf-1a	70.2540	12.46
005YR004HR	smf-1a	70.5040	12.46
005YR004HR	smf-1a	70.7540	12.45
005YR004HR	smf-1a	71.0040	12.45
005YR004HR	smf-1a	71.2540	12.45
005YR004HR	smf-1a	71.5040	12.45
005YR004HR	smf-1a	71.7540	12.45
005YR004HR	smf-1a	72.0040	12.45
005YR004HR	smf-1a	72.2540	12.45
005YR004HR	smf-1a	72.5040	12.45
005YR004HR	smf-1a	72.7540	12.45
005YR004HR	smf-1a	73.0040	12.45
005YR004HR	smf-1a	73.2540	12.45
005YR004HR	smf-1a	73.5040	12.45
005YR004HR	smf-1a	73.7540	12.45
005YR004HR	smf-1a	74.0040	12.45
005YR004HR	smf-1a	74.2540	12.45
005YR004HR	smf-1a	74.5040	12.45
005YR004HR	smf-1a	74.7540	12.45
005YR004HR	smf-1a	75.0040	12.45
005YR004HR	smf-1a	75.2540	12.45
005YR004HR	smf-1a	75.5040	12.45
005YR004HR	smf-1a	75.7540	12.45
005YR004HR	smf-1a	76.0040	12.45
005YR004HR	smf-1a	76.2540	12.45
005YR004HR	smf-1a	76.5040	12.45
005YR004HR	smf-1a	76.7540	12.45
005YR004HR	smf-1a	77.0040	12.45
005YR004HR	smf-1a	77.2540	12.45
005YR004HR	smf-1a	77.5040	12.45
005YR004HR	smf-1a	77.7540	12.45
005YR004HR	smf-1a	78.0040	12.45
005YR004HR	smf-1a	78.2540	12.45
005YR004HR	smf-1a	78.5040	12.45
005YR004HR	smf-1a	78.7540	12.45
005YR004HR	smf-1a	79.0040	12.45
005YR004HR	smf-1a	79.2540	12.45
005YR004HR	smf-1a	79.5040	12.45
005YR004HR	smf-1a	79.7540	12.45
005YR004HR	smf-1a	80.0040	12.45
005YR004HR	smf-1a	80.2540	12.45

5yr-4hr SMF-1a

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR004HR	smf-1b	80.7540	13.02
005YR004HR	smf-1b	81.0040	13.02
005YR004HR	smf-1b	81.2540	13.02
005YR004HR	smf-1b	81.5040	13.02
005YR004HR	smf-1b	81.7540	13.02
005YR004HR	smf-1b	82.0040	13.02
005YR004HR	smf-1b	82.2540	13.02
005YR004HR	smf-1b	82.5040	13.01
005YR004HR	smf-1b	82.7540	13.01
005YR004HR	smf-1b	83.0040	13.01
005YR004HR	smf-1b	83.2540	13.01
005YR004HR	smf-1b	83.5040	13.01
005YR004HR	smf-1b	83.7540	13.01
005YR004HR	smf-1b	84.0040	13.01
005YR004HR	smf-1b	84.2540	13.01
005YR004HR	smf-1b	84.5040	13.00
005YR004HR	smf-1b	84.7540	13.00
005YR004HR	smf-1b	85.0040	13.00
005YR004HR	smf-1b	85.2540	13.00
005YR004HR	smf-1b	85.5040	13.00
005YR004HR	smf-1b	85.7540	13.00
005YR004HR	smf-1b	86.0040	13.00
005YR004HR	smf-1b	86.2540	13.00
005YR004HR	smf-1b	86.5040	13.00
005YR004HR	smf-1b	86.7540	13.00
005YR004HR	smf-1b	87.0040	13.00
005YR004HR	smf-1b	87.2540	13.00
005YR004HR	smf-1b	87.5040	13.00
005YR004HR	smf-1b	87.7540	13.00
005YR004HR	smf-1b	88.0040	13.00
005YR004HR	smf-1b	88.2540	13.00
005YR004HR	smf-1b	88.5040	13.00
005YR004HR	smf-1b	88.7540	13.00
005YR004HR	smf-1b	89.0040	13.00
005YR004HR	smf-1b	89.2540	13.00
005YR004HR	smf-1b	89.5040	13.00
005YR004HR	smf-1b	89.7540	13.00
005YR004HR	smf-1b	90.0040	13.00
005YR004HR	smf-1b	90.2540	13.00
005YR004HR	smf-1b	90.5040	13.00
005YR004HR	smf-1b	90.7540	13.00
005YR004HR	smf-1b	91.0040	13.00

5yr-4hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR004HR	smf-2a	144.0040	12.12
005YR004HR	smf-2a	144.2540	12.12
005YR004HR	smf-2a	144.5040	12.12
005YR004HR	smf-2a	144.7540	12.12
005YR004HR	smf-2a	145.0040	12.12
005YR004HR	smf-2a	145.2540	12.12
005YR004HR	smf-2a	145.5040	12.12
005YR004HR	smf-2a	145.7540	12.12
005YR004HR	smf-2a	146.0040	12.11
005YR004HR	smf-2a	146.2540	12.11
005YR004HR	smf-2a	146.5040	12.11
005YR004HR	smf-2a	146.7540	12.11
005YR004HR	smf-2a	147.0040	12.11
005YR004HR	smf-2a	147.2540	12.11
005YR004HR	smf-2a	147.5040	12.11
005YR004HR	smf-2a	147.7540	12.11
005YR004HR	smf-2a	148.0040	12.11
005YR004HR	smf-2a	148.2540	12.11
005YR004HR	smf-2a	148.5040	12.11
005YR004HR	smf-2a	148.7540	12.11
005YR004HR	smf-2a	149.0040	12.11
005YR004HR	smf-2a	149.2540	12.11
005YR004HR	smf-2a	149.5040	12.11
005YR004HR	smf-2a	149.7540	12.11
005YR004HR	smf-2a	150.0040	12.11
005YR004HR	smf-2a	150.2540	12.11
005YR004HR	smf-2a	150.5040	12.10
005YR004HR	smf-2a	150.7540	12.10
005YR004HR	smf-2a	151.0040	12.10
005YR004HR	smf-2a	151.2540	12.10
005YR004HR	smf-2a	151.5040	12.10
005YR004HR	smf-2a	151.7540	12.10
005YR004HR	smf-2a	152.0040	12.10
005YR004HR	smf-2a	152.2540	12.10
005YR004HR	smf-2a	152.5040	12.10
005YR004HR	smf-2a	152.7540	12.10
005YR004HR	smf-2a	153.0040	12.10
005YR004HR	smf-2a	153.2540	12.10
005YR004HR	smf-2a	153.5040	12.10
005YR004HR	smf-2a	153.7540	12.10
005YR004HR	smf-2a	154.0040	12.10
005YR004HR	smf-2a	154.2540	12.10

5yr-4hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR004HR	smf-2b	102.2540	11.42
005YR004HR	smf-2b	102.5040	11.42
005YR004HR	smf-2b	102.7540	11.42
005YR004HR	smf-2b	103.0040	11.42
005YR004HR	smf-2b	103.2540	11.42
005YR004HR	smf-2b	103.5040	11.41
005YR004HR	smf-2b	103.7540	11.41
005YR004HR	smf-2b	104.0040	11.41
005YR004HR	smf-2b	104.2540	11.41
005YR004HR	smf-2b	104.5040	11.41
005YR004HR	smf-2b	104.7540	11.41
005YR004HR	smf-2b	105.0040	11.41
005YR004HR	smf-2b	105.2540	11.41
005YR004HR	smf-2b	105.5040	11.41
005YR004HR	smf-2b	105.7540	11.41
005YR004HR	smf-2b	106.0040	11.40
005YR004HR	smf-2b	106.2540	11.40
005YR004HR	smf-2b	106.5040	11.40
005YR004HR	smf-2b	106.7540	11.40
005YR004HR	smf-2b	107.0040	11.40
005YR004HR	smf-2b	107.2540	11.40
005YR004HR	smf-2b	107.5040	11.40
005YR004HR	smf-2b	107.7540	11.40
005YR004HR	smf-2b	108.0040	11.40
005YR004HR	smf-2b	108.2540	11.40
005YR004HR	smf-2b	108.5040	11.40
005YR004HR	smf-2b	108.7540	11.40
005YR004HR	smf-2b	109.0040	11.40
005YR004HR	smf-2b	109.2540	11.40
005YR004HR	smf-2b	109.5040	11.40
005YR004HR	smf-2b	109.7540	11.40
005YR004HR	smf-2b	110.0040	11.40
005YR004HR	smf-2b	110.2540	11.40
005YR004HR	smf-2b	110.5040	11.40
005YR004HR	smf-2b	110.7540	11.40
005YR004HR	smf-2b	111.0040	11.40
005YR004HR	smf-2b	111.2540	11.40
005YR004HR	smf-2b	111.5040	11.40
005YR004HR	smf-2b	111.7540	11.40
005YR004HR	smf-2b	112.0040	11.40
005YR004HR	smf-2b	112.2540	11.40
005YR004HR	smf-2b	112.5040	11.40

5yr-4hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR004HR	smf-2c	134.0040	11.87
005YR004HR	smf-2c	134.2540	11.86
005YR004HR	smf-2c	134.5040	11.86
005YR004HR	smf-2c	134.7540	11.86
005YR004HR	smf-2c	135.0040	11.86
005YR004HR	smf-2c	135.2540	11.86
005YR004HR	smf-2c	135.5040	11.86
005YR004HR	smf-2c	135.7540	11.86
005YR004HR	smf-2c	136.0040	11.86
005YR004HR	smf-2c	136.2540	11.86
005YR004HR	smf-2c	136.5040	11.86
005YR004HR	smf-2c	136.7540	11.86
005YR004HR	smf-2c	137.0040	11.86
005YR004HR	smf-2c	137.2540	11.86
005YR004HR	smf-2c	137.5040	11.86
005YR004HR	smf-2c	137.7540	11.85
005YR004HR	smf-2c	138.0040	11.85
005YR004HR	smf-2c	138.2540	11.85
005YR004HR	smf-2c	138.5040	11.85
005YR004HR	smf-2c	138.7540	11.85
005YR004HR	smf-2c	139.0040	11.85
005YR004HR	smf-2c	139.2540	11.85
005YR004HR	smf-2c	139.5040	11.85
005YR004HR	smf-2c	139.7540	11.85
005YR004HR	smf-2c	140.0040	11.85
005YR004HR	smf-2c	140.2540	11.85
005YR004HR	smf-2c	140.5040	11.85
005YR004HR	smf-2c	140.7540	11.85
005YR004HR	smf-2c	141.0040	11.85
005YR004HR	smf-2c	141.2540	11.85
005YR004HR	smf-2c	141.5040	11.85
005YR004HR	smf-2c	141.7540	11.85
005YR004HR	smf-2c	142.0040	11.85
005YR004HR	smf-2c	142.2540	11.85
005YR004HR	smf-2c	142.5040	11.85
005YR004HR	smf-2c	142.7540	11.85
005YR004HR	smf-2c	143.0040	11.85
005YR004HR	smf-2c	143.2540	11.85
005YR004HR	smf-2c	143.5040	11.85
005YR004HR	smf-2c	143.7540	11.85
005YR004HR	smf-2c	144.0040	11.85
005YR004HR	smf-2c	144.2540	11.85

5yr-4hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR004HR	smf-3a	123.7540	11.91
005YR004HR	smf-3a	124.0040	11.91
005YR004HR	smf-3a	124.2540	11.91
005YR004HR	smf-3a	124.5040	11.91
005YR004HR	smf-3a	124.7540	11.91
005YR004HR	smf-3a	125.0040	11.91
005YR004HR	smf-3a	125.2540	11.91
005YR004HR	smf-3a	125.5040	11.91
005YR004HR	smf-3a	125.7540	11.91
005YR004HR	smf-3a	126.0040	11.91
005YR004HR	smf-3a	126.2540	11.91
005YR004HR	smf-3a	126.5040	11.90
005YR004HR	smf-3a	126.7540	11.90
005YR004HR	smf-3a	127.0040	11.90
005YR004HR	smf-3a	127.2540	11.90
005YR004HR	smf-3a	127.5040	11.90
005YR004HR	smf-3a	127.7540	11.90
005YR004HR	smf-3a	128.0040	11.90
005YR004HR	smf-3a	128.2540	11.90
005YR004HR	smf-3a	128.5040	11.90
005YR004HR	smf-3a	128.7540	11.90
005YR004HR	smf-3a	129.0040	11.90
005YR004HR	smf-3a	129.2540	11.90
005YR004HR	smf-3a	129.5040	11.90
005YR004HR	smf-3a	129.7540	11.90
005YR004HR	smf-3a	130.0040	11.90
005YR004HR	smf-3a	130.2540	11.90
005YR004HR	smf-3a	130.5040	11.90
005YR004HR	smf-3a	130.7540	11.90
005YR004HR	smf-3a	131.0040	11.90
005YR004HR	smf-3a	131.2540	11.90
005YR004HR	smf-3a	131.5040	11.90
005YR004HR	smf-3a	131.7540	11.90
005YR004HR	smf-3a	132.0040	11.90
005YR004HR	smf-3a	132.2540	11.90
005YR004HR	smf-3a	132.5040	11.90
005YR004HR	smf-3a	132.7540	11.90
005YR004HR	smf-3a	133.0040	11.90
005YR004HR	smf-3a	133.2540	11.90
005YR004HR	smf-3a	133.5040	11.90
005YR004HR	smf-3a	133.7540	11.90
005YR004HR	smf-3a	134.0040	11.90

5yr-4hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR004HR	smf-3b	145.0040	11.27
005YR004HR	smf-3b	145.2540	11.27
005YR004HR	smf-3b	145.5040	11.26
005YR004HR	smf-3b	145.7540	11.26
005YR004HR	smf-3b	146.0040	11.26
005YR004HR	smf-3b	146.2540	11.26
005YR004HR	smf-3b	146.5040	11.26
005YR004HR	smf-3b	146.7540	11.26
005YR004HR	smf-3b	147.0040	11.26
005YR004HR	smf-3b	147.2540	11.26
005YR004HR	smf-3b	147.5040	11.26
005YR004HR	smf-3b	147.7540	11.26
005YR004HR	smf-3b	148.0040	11.26
005YR004HR	smf-3b	148.2540	11.26
005YR004HR	smf-3b	148.5040	11.26
005YR004HR	smf-3b	148.7540	11.26
005YR004HR	smf-3b	149.0040	11.25
005YR004HR	smf-3b	149.2540	11.25
005YR004HR	smf-3b	149.5040	11.25
005YR004HR	smf-3b	149.7540	11.25
005YR004HR	smf-3b	150.0040	11.25
005YR004HR	smf-3b	150.2540	11.25
005YR004HR	smf-3b	150.5040	11.25
005YR004HR	smf-3b	150.7540	11.25
005YR004HR	smf-3b	151.0040	11.25
005YR004HR	smf-3b	151.2540	11.25
005YR004HR	smf-3b	151.5040	11.25
005YR004HR	smf-3b	151.7540	11.25
005YR004HR	smf-3b	152.0040	11.25
005YR004HR	smf-3b	152.2540	11.25
005YR004HR	smf-3b	152.5040	11.25
005YR004HR	smf-3b	152.7540	11.25
005YR004HR	smf-3b	153.0040	11.25
005YR004HR	smf-3b	153.2540	11.25
005YR004HR	smf-3b	153.5040	11.25
005YR004HR	smf-3b	153.7540	11.25
005YR004HR	smf-3b	154.0040	11.25
005YR004HR	smf-3b	154.2540	11.25
005YR004HR	smf-3b	154.5040	11.25
005YR004HR	smf-3b	154.7540	11.25
005YR004HR	smf-3b	155.0040	11.25
005YR004HR	smf-3b	155.2540	11.25

5yr-4hr SMF-3b

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR008HR	smf-1a	103.2530	12.46
005YR008HR	smf-1a	103.5030	12.46
005YR008HR	smf-1a	103.7530	12.46
005YR008HR	smf-1a	104.0030	12.46
005YR008HR	smf-1a	104.2530	12.46
005YR008HR	smf-1a	104.5030	12.46
005YR008HR	smf-1a	104.7530	12.46
005YR008HR	smf-1a	105.0030	12.46
005YR008HR	smf-1a	105.2530	12.46
005YR008HR	smf-1a	105.5030	12.46
005YR008HR	smf-1a	105.7530	12.45
005YR008HR	smf-1a	106.0030	12.45
005YR008HR	smf-1a	106.2530	12.45
005YR008HR	smf-1a	106.5030	12.45
005YR008HR	smf-1a	106.7530	12.45
005YR008HR	smf-1a	107.0030	12.45
005YR008HR	smf-1a	107.2530	12.45
005YR008HR	smf-1a	107.5030	12.45
005YR008HR	smf-1a	107.7530	12.45
005YR008HR	smf-1a	108.0030	12.45
005YR008HR	smf-1a	108.2530	12.45
005YR008HR	smf-1a	108.5030	12.45
005YR008HR	smf-1a	108.7530	12.45
005YR008HR	smf-1a	109.0030	12.45
005YR008HR	smf-1a	109.2530	12.45
005YR008HR	smf-1a	109.5030	12.45
005YR008HR	smf-1a	109.7530	12.45
005YR008HR	smf-1a	110.0030	12.45
005YR008HR	smf-1a	110.2530	12.45
005YR008HR	smf-1a	110.5030	12.45
005YR008HR	smf-1a	110.7530	12.45
005YR008HR	smf-1a	111.0030	12.45
005YR008HR	smf-1a	111.2530	12.45
005YR008HR	smf-1a	111.5030	12.45
005YR008HR	smf-1a	111.7530	12.45
005YR008HR	smf-1a	112.0030	12.45
005YR008HR	smf-1a	112.2530	12.45
005YR008HR	smf-1a	112.5030	12.45
005YR008HR	smf-1a	112.7530	12.45
005YR008HR	smf-1a	113.0030	12.45
005YR008HR	smf-1a	113.2530	12.45
005YR008HR	smf-1a	113.5030	12.45

5yr-8hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR008HR	smf-1b	110.0030	13.01
005YR008HR	smf-1b	110.2530	13.01
005YR008HR	smf-1b	110.5030	13.00
005YR008HR	smf-1b	110.7530	13.00
005YR008HR	smf-1b	111.0030	13.00
005YR008HR	smf-1b	111.2530	13.00
005YR008HR	smf-1b	111.5030	13.00
005YR008HR	smf-1b	111.7530	13.00
005YR008HR	smf-1b	112.0030	13.00
005YR008HR	smf-1b	112.2530	13.00
005YR008HR	smf-1b	112.5030	13.00
005YR008HR	smf-1b	112.7530	13.00
005YR008HR	smf-1b	113.0030	13.00
005YR008HR	smf-1b	113.2530	13.00
005YR008HR	smf-1b	113.5030	13.00
005YR008HR	smf-1b	113.7530	13.00
005YR008HR	smf-1b	114.0030	13.00
005YR008HR	smf-1b	114.2530	13.00
005YR008HR	smf-1b	114.5030	13.00
005YR008HR	smf-1b	114.7530	13.00
005YR008HR	smf-1b	115.0030	13.00
005YR008HR	smf-1b	115.2530	13.00
005YR008HR	smf-1b	115.5030	13.00
005YR008HR	smf-1b	115.7530	13.00
005YR008HR	smf-1b	116.0030	13.00
005YR008HR	smf-1b	116.2530	13.00
005YR008HR	smf-1b	116.5030	13.00
005YR008HR	smf-1b	116.7530	13.00
005YR008HR	smf-1b	117.0030	13.00
005YR008HR	smf-1b	117.2530	13.00
005YR008HR	smf-1b	117.5030	13.00
005YR008HR	smf-1b	117.7530	13.00
005YR008HR	smf-1b	118.0030	13.00
005YR008HR	smf-1b	118.2530	13.00
005YR008HR	smf-1b	118.5030	13.00
005YR008HR	smf-1b	118.7530	13.00
005YR008HR	smf-1b	119.0030	13.00
005YR008HR	smf-1b	119.2530	13.00
005YR008HR	smf-1b	119.5030	13.00
005YR008HR	smf-1b	119.7530	13.00
005YR008HR	smf-1b	120.0030	13.00
005YR008HR	smf-1b	120.2530	13.00

5yr-8hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR008HR	smf-2a	169.2530	12.12
005YR008HR	smf-2a	169.5030	12.12
005YR008HR	smf-2a	169.7530	12.12
005YR008HR	smf-2a	170.0030	12.12
005YR008HR	smf-2a	170.2530	12.12
005YR008HR	smf-2a	170.5030	12.12
005YR008HR	smf-2a	170.7530	12.12
005YR008HR	smf-2a	171.0030	12.12
005YR008HR	smf-2a	171.2530	12.12
005YR008HR	smf-2a	171.5030	12.12
005YR008HR	smf-2a	171.7530	12.12
005YR008HR	smf-2a	172.0030	12.12
005YR008HR	smf-2a	172.2530	12.12
005YR008HR	smf-2a	172.5030	12.11
005YR008HR	smf-2a	172.7530	12.11
005YR008HR	smf-2a	173.0030	12.11
005YR008HR	smf-2a	173.2530	12.11
005YR008HR	smf-2a	173.5030	12.11
005YR008HR	smf-2a	173.7530	12.11
005YR008HR	smf-2a	174.0030	12.11
005YR008HR	smf-2a	174.2530	12.11
005YR008HR	smf-2a	174.5030	12.11
005YR008HR	smf-2a	174.7530	12.11
005YR008HR	smf-2a	175.0030	12.11
005YR008HR	smf-2a	175.2530	12.11
005YR008HR	smf-2a	175.5030	12.11
005YR008HR	smf-2a	175.7530	12.11
005YR008HR	smf-2a	176.0030	12.11
005YR008HR	smf-2a	176.2530	12.11
005YR008HR	smf-2a	176.5030	12.11
005YR008HR	smf-2a	176.7530	12.11
005YR008HR	smf-2a	177.0030	12.11
005YR008HR	smf-2a	177.2530	12.11
005YR008HR	smf-2a	177.5030	12.10
005YR008HR	smf-2a	177.7530	12.10
005YR008HR	smf-2a	178.0030	12.10
005YR008HR	smf-2a	178.2530	12.10
005YR008HR	smf-2a	178.5030	12.10
005YR008HR	smf-2a	178.7530	12.10
005YR008HR	smf-2a	179.0030	12.10
005YR008HR	smf-2a	179.2530	12.10
005YR008HR	smf-2a	179.5030	12.10

5yr-8hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR008HR	smf-2b	134.0030	11.41
005YR008HR	smf-2b	134.2530	11.41
005YR008HR	smf-2b	134.5030	11.41
005YR008HR	smf-2b	134.7530	11.41
005YR008HR	smf-2b	135.0030	11.41
005YR008HR	smf-2b	135.2530	11.41
005YR008HR	smf-2b	135.5030	11.40
005YR008HR	smf-2b	135.7530	11.40
005YR008HR	smf-2b	136.0030	11.40
005YR008HR	smf-2b	136.2530	11.40
005YR008HR	smf-2b	136.5030	11.40
005YR008HR	smf-2b	136.7530	11.40
005YR008HR	smf-2b	137.0030	11.40
005YR008HR	smf-2b	137.2530	11.40
005YR008HR	smf-2b	137.5030	11.40
005YR008HR	smf-2b	137.7530	11.40
005YR008HR	smf-2b	138.0030	11.40
005YR008HR	smf-2b	138.2530	11.40
005YR008HR	smf-2b	138.5030	11.40
005YR008HR	smf-2b	138.7530	11.40
005YR008HR	smf-2b	139.0030	11.40
005YR008HR	smf-2b	139.2530	11.40
005YR008HR	smf-2b	139.5030	11.40
005YR008HR	smf-2b	139.7530	11.40
005YR008HR	smf-2b	140.0030	11.40
005YR008HR	smf-2b	140.2530	11.40
005YR008HR	smf-2b	140.5030	11.40
005YR008HR	smf-2b	140.7530	11.40
005YR008HR	smf-2b	141.0030	11.40
005YR008HR	smf-2b	141.2530	11.40
005YR008HR	smf-2b	141.5030	11.40
005YR008HR	smf-2b	141.7530	11.40
005YR008HR	smf-2b	142.0030	11.40
005YR008HR	smf-2b	142.2530	11.40
005YR008HR	smf-2b	142.5030	11.40
005YR008HR	smf-2b	142.7530	11.40
005YR008HR	smf-2b	143.0030	11.40
005YR008HR	smf-2b	143.2530	11.40
005YR008HR	smf-2b	143.5030	11.40
005YR008HR	smf-2b	143.7530	11.40
005YR008HR	smf-2b	144.0030	11.40
005YR008HR	smf-2b	144.2530	11.40

5yr-8hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR008HR	smf-2c	161.7530	11.87
005YR008HR	smf-2c	162.0030	11.86
005YR008HR	smf-2c	162.2530	11.86
005YR008HR	smf-2c	162.5030	11.86
005YR008HR	smf-2c	162.7530	11.86
005YR008HR	smf-2c	163.0030	11.86
005YR008HR	smf-2c	163.2530	11.86
005YR008HR	smf-2c	163.5030	11.86
005YR008HR	smf-2c	163.7530	11.86
005YR008HR	smf-2c	164.0030	11.86
005YR008HR	smf-2c	164.2530	11.86
005YR008HR	smf-2c	164.5030	11.86
005YR008HR	smf-2c	164.7530	11.86
005YR008HR	smf-2c	165.0030	11.86
005YR008HR	smf-2c	165.2530	11.86
005YR008HR	smf-2c	165.5030	11.86
005YR008HR	smf-2c	165.7530	11.86
005YR008HR	smf-2c	166.0030	11.86
005YR008HR	smf-2c	166.2530	11.85
005YR008HR	smf-2c	166.5030	11.85
005YR008HR	smf-2c	166.7530	11.85
005YR008HR	smf-2c	167.0030	11.85
005YR008HR	smf-2c	167.2530	11.85
005YR008HR	smf-2c	167.5030	11.85
005YR008HR	smf-2c	167.7530	11.85
005YR008HR	smf-2c	168.0030	11.85
005YR008HR	smf-2c	168.2530	11.85
005YR008HR	smf-2c	168.5030	11.85
005YR008HR	smf-2c	168.7530	11.85
005YR008HR	smf-2c	169.0030	11.85
005YR008HR	smf-2c	169.2530	11.85
005YR008HR	smf-2c	169.5030	11.85
005YR008HR	smf-2c	169.7530	11.85
005YR008HR	smf-2c	170.0030	11.85
005YR008HR	smf-2c	170.2530	11.85
005YR008HR	smf-2c	170.5030	11.85
005YR008HR	smf-2c	170.7530	11.85
005YR008HR	smf-2c	171.0030	11.85
005YR008HR	smf-2c	171.2530	11.85
005YR008HR	smf-2c	171.5030	11.85
005YR008HR	smf-2c	171.7530	11.85
005YR008HR	smf-2c	172.0030	11.85

5yr-8hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR008HR	smf-3a	158.0030	11.91
005YR008HR	smf-3a	158.2530	11.90
005YR008HR	smf-3a	158.5030	11.90
005YR008HR	smf-3a	158.7530	11.90
005YR008HR	smf-3a	159.0030	11.90
005YR008HR	smf-3a	159.2530	11.90
005YR008HR	smf-3a	159.5030	11.90
005YR008HR	smf-3a	159.7530	11.90
005YR008HR	smf-3a	160.0030	11.90
005YR008HR	smf-3a	160.2530	11.90
005YR008HR	smf-3a	160.5030	11.90
005YR008HR	smf-3a	160.7530	11.90
005YR008HR	smf-3a	161.0030	11.90
005YR008HR	smf-3a	161.2530	11.90
005YR008HR	smf-3a	161.5030	11.90
005YR008HR	smf-3a	161.7530	11.90
005YR008HR	smf-3a	162.0030	11.90
005YR008HR	smf-3a	162.2530	11.90
005YR008HR	smf-3a	162.5030	11.90
005YR008HR	smf-3a	162.7530	11.90
005YR008HR	smf-3a	163.0030	11.90
005YR008HR	smf-3a	163.2530	11.90
005YR008HR	smf-3a	163.5030	11.90
005YR008HR	smf-3a	163.7530	11.90
005YR008HR	smf-3a	164.0030	11.90
005YR008HR	smf-3a	164.2530	11.90
005YR008HR	smf-3a	164.5030	11.90
005YR008HR	smf-3a	164.7530	11.90
005YR008HR	smf-3a	165.0030	11.90
005YR008HR	smf-3a	165.2530	11.90
005YR008HR	smf-3a	165.5030	11.90
005YR008HR	smf-3a	165.7530	11.90
005YR008HR	smf-3a	166.0030	11.90
005YR008HR	smf-3a	166.2530	11.90
005YR008HR	smf-3a	166.5030	11.90
005YR008HR	smf-3a	166.7530	11.90
005YR008HR	smf-3a	167.0030	11.90
005YR008HR	smf-3a	167.2530	11.90
005YR008HR	smf-3a	167.5030	11.90
005YR008HR	smf-3a	167.7530	11.90
005YR008HR	smf-3a	168.0030	11.90
005YR008HR	smf-3a	168.2530	11.90

5yr-8hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR008HR	smf-3b	175.2530	11.28
005YR008HR	smf-3b	175.5030	11.28
005YR008HR	smf-3b	175.7530	11.28
005YR008HR	smf-3b	176.0030	11.28
005YR008HR	smf-3b	176.2530	11.27
005YR008HR	smf-3b	176.5030	11.27
005YR008HR	smf-3b	176.7530	11.27
005YR008HR	smf-3b	177.0030	11.27
005YR008HR	smf-3b	177.2530	11.27
005YR008HR	smf-3b	177.5030	11.27
005YR008HR	smf-3b	177.7530	11.27
005YR008HR	smf-3b	178.0030	11.27
005YR008HR	smf-3b	178.2530	11.27
005YR008HR	smf-3b	178.5030	11.27
005YR008HR	smf-3b	178.7530	11.27
005YR008HR	smf-3b	179.0030	11.27
005YR008HR	smf-3b	179.2530	11.27
005YR008HR	smf-3b	179.5030	11.27
005YR008HR	smf-3b	179.7530	11.27
005YR008HR	smf-3b	180.0030	11.27
005YR008HR	smf-3b	180.2530	11.27
005YR008HR	smf-3b	180.5030	11.26
005YR008HR	smf-3b	180.7530	11.26
005YR008HR	smf-3b	181.0030	11.26
005YR008HR	smf-3b	181.2530	11.26
005YR008HR	smf-3b	181.5030	11.26
005YR008HR	smf-3b	181.7530	11.26
005YR008HR	smf-3b	182.0030	11.26
005YR008HR	smf-3b	182.2530	11.26
005YR008HR	smf-3b	182.5030	11.26
005YR008HR	smf-3b	182.7530	11.26
005YR008HR	smf-3b	183.0030	11.26
005YR008HR	smf-3b	183.2530	11.26
005YR008HR	smf-3b	183.5030	11.26
005YR008HR	smf-3b	183.7530	11.26
005YR008HR	smf-3b	184.0030	11.26
005YR008HR	smf-3b	184.2530	11.26
005YR008HR	smf-3b	184.5030	11.26
005YR008HR	smf-3b	184.7530	11.25
005YR008HR	smf-3b	185.0030	11.25
005YR008HR	smf-3b	185.2530	11.25
005YR008HR	smf-3b	185.5030	11.25

5yr-8hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR024HR	smf-1a	266.0066	12.47
005YR024HR	smf-1a	266.2566	12.47
005YR024HR	smf-1a	266.5066	12.47
005YR024HR	smf-1a	266.7566	12.47
005YR024HR	smf-1a	267.0066	12.46
005YR024HR	smf-1a	267.2566	12.46
005YR024HR	smf-1a	267.5066	12.46
005YR024HR	smf-1a	267.7566	12.46
005YR024HR	smf-1a	268.0066	12.46
005YR024HR	smf-1a	268.2566	12.46
005YR024HR	smf-1a	268.5066	12.46
005YR024HR	smf-1a	268.7566	12.46
005YR024HR	smf-1a	269.0066	12.46
005YR024HR	smf-1a	269.2566	12.46
005YR024HR	smf-1a	269.5066	12.46
005YR024HR	smf-1a	269.7566	12.46
005YR024HR	smf-1a	270.0066	12.46
005YR024HR	smf-1a	270.2566	12.46
005YR024HR	smf-1a	270.5066	12.46
005YR024HR	smf-1a	270.7566	12.46
005YR024HR	smf-1a	271.0066	12.46
005YR024HR	smf-1a	271.2566	12.46
005YR024HR	smf-1a	271.5066	12.46
005YR024HR	smf-1a	271.7566	12.46
005YR024HR	smf-1a	272.0066	12.46
005YR024HR	smf-1a	272.2566	12.46
005YR024HR	smf-1a	272.5066	12.46
005YR024HR	smf-1a	272.7566	12.46
005YR024HR	smf-1a	273.0066	12.46
005YR024HR	smf-1a	273.2566	12.46
005YR024HR	smf-1a	273.5066	12.46
005YR024HR	smf-1a	273.7566	12.45
005YR024HR	smf-1a	274.0066	12.45
005YR024HR	smf-1a	274.2566	12.45
005YR024HR	smf-1a	274.5066	12.45
005YR024HR	smf-1a	274.7566	12.45
005YR024HR	smf-1a	275.0066	12.45
005YR024HR	smf-1a	275.2566	12.45
005YR024HR	smf-1a	275.5066	12.45
005YR024HR	smf-1a	275.7566	12.45
005YR024HR	smf-1a	276.0066	12.45
005YR024HR	smf-1a	276.2566	12.45

5yr-24hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR024HR	smf-1b	183.2566	13.03
005YR024HR	smf-1b	183.5066	13.03
005YR024HR	smf-1b	183.7566	13.03
005YR024HR	smf-1b	184.0066	13.02
005YR024HR	smf-1b	184.2566	13.02
005YR024HR	smf-1b	184.5066	13.02
005YR024HR	smf-1b	184.7566	13.02
005YR024HR	smf-1b	185.0066	13.02
005YR024HR	smf-1b	185.2566	13.02
005YR024HR	smf-1b	185.5066	13.02
005YR024HR	smf-1b	185.7566	13.02
005YR024HR	smf-1b	186.0066	13.02
005YR024HR	smf-1b	186.2566	13.02
005YR024HR	smf-1b	186.5066	13.02
005YR024HR	smf-1b	186.7566	13.02
005YR024HR	smf-1b	187.0066	13.02
005YR024HR	smf-1b	187.2566	13.02
005YR024HR	smf-1b	187.5066	13.02
005YR024HR	smf-1b	187.7566	13.02
005YR024HR	smf-1b	188.0066	13.01
005YR024HR	smf-1b	188.2566	13.01
005YR024HR	smf-1b	188.5066	13.01
005YR024HR	smf-1b	188.7566	13.01
005YR024HR	smf-1b	189.0066	13.01
005YR024HR	smf-1b	189.2566	13.01
005YR024HR	smf-1b	189.5066	13.01
005YR024HR	smf-1b	189.7566	13.01
005YR024HR	smf-1b	190.0066	13.01
005YR024HR	smf-1b	190.2566	13.01
005YR024HR	smf-1b	190.5066	13.01
005YR024HR	smf-1b	190.7566	13.01
005YR024HR	smf-1b	191.0066	13.01
005YR024HR	smf-1b	191.2566	13.01
005YR024HR	smf-1b	191.5066	13.01
005YR024HR	smf-1b	191.7566	13.01
005YR024HR	smf-1b	192.0066	13.01
005YR024HR	smf-1b	192.2566	13.01
005YR024HR	smf-1b	192.5066	13.00
005YR024HR	smf-1b	192.7566	13.00
005YR024HR	smf-1b	193.0066	13.00
005YR024HR	smf-1b	193.2566	13.00
005YR024HR	smf-1b	193.5066	13.00

5yr-24hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR024HR	smf-2a	258.0066	12.11
005YR024HR	smf-2a	258.2566	12.11
005YR024HR	smf-2a	258.5066	12.11
005YR024HR	smf-2a	258.7566	12.11
005YR024HR	smf-2a	259.0066	12.11
005YR024HR	smf-2a	259.2566	12.11
005YR024HR	smf-2a	259.5066	12.11
005YR024HR	smf-2a	259.7566	12.11
005YR024HR	smf-2a	260.0066	12.11
005YR024HR	smf-2a	260.2566	12.11
005YR024HR	smf-2a	260.5066	12.11
005YR024HR	smf-2a	260.7566	12.11
005YR024HR	smf-2a	261.0066	12.11
005YR024HR	smf-2a	261.2566	12.11
005YR024HR	smf-2a	261.5066	12.11
005YR024HR	smf-2a	261.7566	12.11
005YR024HR	smf-2a	262.0066	12.10
005YR024HR	smf-2a	262.2566	12.10
005YR024HR	smf-2a	262.5066	12.10
005YR024HR	smf-2a	262.7566	12.10
005YR024HR	smf-2a	263.0066	12.10
005YR024HR	smf-2a	263.2566	12.10
005YR024HR	smf-2a	263.5066	12.10
005YR024HR	smf-2a	263.7566	12.10
005YR024HR	smf-2a	264.0066	12.10
005YR024HR	smf-2a	264.2566	12.10
005YR024HR	smf-2a	264.5066	12.10
005YR024HR	smf-2a	264.7566	12.10
005YR024HR	smf-2a	265.0066	12.10
005YR024HR	smf-2a	265.2566	12.10
005YR024HR	smf-2a	265.5066	12.10
005YR024HR	smf-2a	265.7566	12.10
005YR024HR	smf-2a	266.0066	12.10
005YR024HR	smf-2a	266.2566	12.10
005YR024HR	smf-2a	266.5066	12.10
005YR024HR	smf-2a	266.7566	12.10
005YR024HR	smf-2a	267.0066	12.10
005YR024HR	smf-2a	267.2566	12.10
005YR024HR	smf-2a	267.5066	12.10
005YR024HR	smf-2a	267.7566	12.10
005YR024HR	smf-2a	268.0066	12.10
005YR024HR	smf-2a	268.2566	12.10

5yr-24hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR024HR	smf-2b	206.7566	11.42
005YR024HR	smf-2b	207.0066	11.42
005YR024HR	smf-2b	207.2566	11.42
005YR024HR	smf-2b	207.5066	11.42
005YR024HR	smf-2b	207.7566	11.42
005YR024HR	smf-2b	208.0066	11.41
005YR024HR	smf-2b	208.2566	11.41
005YR024HR	smf-2b	208.5066	11.41
005YR024HR	smf-2b	208.7566	11.41
005YR024HR	smf-2b	209.0066	11.41
005YR024HR	smf-2b	209.2566	11.41
005YR024HR	smf-2b	209.5066	11.41
005YR024HR	smf-2b	209.7566	11.41
005YR024HR	smf-2b	210.0066	11.41
005YR024HR	smf-2b	210.2566	11.41
005YR024HR	smf-2b	210.5066	11.41
005YR024HR	smf-2b	210.7566	11.41
005YR024HR	smf-2b	211.0066	11.41
005YR024HR	smf-2b	211.2566	11.41
005YR024HR	smf-2b	211.5066	11.41
005YR024HR	smf-2b	211.7566	11.41
005YR024HR	smf-2b	212.0066	11.41
005YR024HR	smf-2b	212.2566	11.41
005YR024HR	smf-2b	212.5066	11.41
005YR024HR	smf-2b	212.7566	11.40
005YR024HR	smf-2b	213.0066	11.40
005YR024HR	smf-2b	213.2566	11.40
005YR024HR	smf-2b	213.5066	11.40
005YR024HR	smf-2b	213.7566	11.40
005YR024HR	smf-2b	214.0066	11.40
005YR024HR	smf-2b	214.2566	11.40
005YR024HR	smf-2b	214.5066	11.40
005YR024HR	smf-2b	214.7566	11.40
005YR024HR	smf-2b	215.0066	11.40
005YR024HR	smf-2b	215.2566	11.40
005YR024HR	smf-2b	215.5066	11.40
005YR024HR	smf-2b	215.7566	11.40
005YR024HR	smf-2b	216.0066	11.40
005YR024HR	smf-2b	216.2566	11.40
005YR024HR	smf-2b	216.5066	11.40
005YR024HR	smf-2b	216.7566	11.40
005YR024HR	smf-2b	217.0066	11.40

5yr-24hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR024HR	smf-2c	239.5066	11.87
005YR024HR	smf-2c	239.7566	11.87
005YR024HR	smf-2c	240.0066	11.87
005YR024HR	smf-2c	240.2566	11.87
005YR024HR	smf-2c	240.5066	11.87
005YR024HR	smf-2c	240.7566	11.87
005YR024HR	smf-2c	241.0066	11.87
005YR024HR	smf-2c	241.2566	11.87
005YR024HR	smf-2c	241.5066	11.87
005YR024HR	smf-2c	241.7566	11.87
005YR024HR	smf-2c	242.0066	11.87
005YR024HR	smf-2c	242.2566	11.87
005YR024HR	smf-2c	242.5066	11.87
005YR024HR	smf-2c	242.7566	11.87
005YR024HR	smf-2c	243.0066	11.87
005YR024HR	smf-2c	243.2566	11.87
005YR024HR	smf-2c	243.5066	11.86
005YR024HR	smf-2c	243.7566	11.86
005YR024HR	smf-2c	244.0066	11.86
005YR024HR	smf-2c	244.2566	11.86
005YR024HR	smf-2c	244.5066	11.86
005YR024HR	smf-2c	244.7566	11.86
005YR024HR	smf-2c	245.0066	11.86
005YR024HR	smf-2c	245.2566	11.86
005YR024HR	smf-2c	245.5066	11.86
005YR024HR	smf-2c	245.7566	11.86
005YR024HR	smf-2c	246.0066	11.86
005YR024HR	smf-2c	246.2566	11.86
005YR024HR	smf-2c	246.5066	11.86
005YR024HR	smf-2c	246.7566	11.86
005YR024HR	smf-2c	247.0066	11.86
005YR024HR	smf-2c	247.2566	11.86
005YR024HR	smf-2c	247.5066	11.86
005YR024HR	smf-2c	247.7566	11.86
005YR024HR	smf-2c	248.0066	11.86
005YR024HR	smf-2c	248.2566	11.86
005YR024HR	smf-2c	248.5066	11.86
005YR024HR	smf-2c	248.7566	11.86
005YR024HR	smf-2c	249.0066	11.86
005YR024HR	smf-2c	249.2566	11.86
005YR024HR	smf-2c	249.5066	11.85
005YR024HR	smf-2c	249.7566	11.85

5yr-24hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR024HR	smf-3a	251.2566	11.92
005YR024HR	smf-3a	251.5066	11.92
005YR024HR	smf-3a	251.7566	11.92
005YR024HR	smf-3a	252.0066	11.92
005YR024HR	smf-3a	252.2566	11.92
005YR024HR	smf-3a	252.5066	11.92
005YR024HR	smf-3a	252.7566	11.92
005YR024HR	smf-3a	253.0066	11.92
005YR024HR	smf-3a	253.2566	11.92
005YR024HR	smf-3a	253.5066	11.91
005YR024HR	smf-3a	253.7566	11.91
005YR024HR	smf-3a	254.0066	11.91
005YR024HR	smf-3a	254.2566	11.91
005YR024HR	smf-3a	254.5066	11.91
005YR024HR	smf-3a	254.7566	11.91
005YR024HR	smf-3a	255.0066	11.91
005YR024HR	smf-3a	255.2566	11.91
005YR024HR	smf-3a	255.5066	11.91
005YR024HR	smf-3a	255.7566	11.91
005YR024HR	smf-3a	256.0066	11.91
005YR024HR	smf-3a	256.2566	11.91
005YR024HR	smf-3a	256.5066	11.91
005YR024HR	smf-3a	256.7566	11.91
005YR024HR	smf-3a	257.0066	11.91
005YR024HR	smf-3a	257.2566	11.91
005YR024HR	smf-3a	257.5066	11.91
005YR024HR	smf-3a	257.7566	11.91
005YR024HR	smf-3a	258.0066	11.91
005YR024HR	smf-3a	258.2566	11.91
005YR024HR	smf-3a	258.5066	11.91
005YR024HR	smf-3a	258.7566	11.91
005YR024HR	smf-3a	259.0066	11.91
005YR024HR	smf-3a	259.2566	11.91
005YR024HR	smf-3a	259.5066	11.90
005YR024HR	smf-3a	259.7566	11.90
005YR024HR	smf-3a	260.0066	11.90
005YR024HR	smf-3a	260.2566	11.90
005YR024HR	smf-3a	260.5066	11.90
005YR024HR	smf-3a	260.7566	11.90
005YR024HR	smf-3a	261.0066	11.90
005YR024HR	smf-3a	261.2566	11.90
005YR024HR	smf-3a	261.5066	11.90

5yr-24hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR024HR	smf-3b	284.0066	11.26
005YR024HR	smf-3b	284.2566	11.26
005YR024HR	smf-3b	284.5066	11.26
005YR024HR	smf-3b	284.7566	11.26
005YR024HR	smf-3b	285.0066	11.26
005YR024HR	smf-3b	285.2566	11.26
005YR024HR	smf-3b	285.5066	11.26
005YR024HR	smf-3b	285.7566	11.26
005YR024HR	smf-3b	286.0066	11.26
005YR024HR	smf-3b	286.2566	11.26
005YR024HR	smf-3b	286.5066	11.26
005YR024HR	smf-3b	286.7566	11.26
005YR024HR	smf-3b	287.0066	11.26
005YR024HR	smf-3b	287.2566	11.26
005YR024HR	smf-3b	287.5066	11.26
005YR024HR	smf-3b	287.7566	11.26
005YR024HR	smf-3b	288.0066	11.25
005YR024HR	smf-3b	288.2566	11.25
005YR024HR	smf-3b	288.5066	11.25
005YR024HR	smf-3b	288.7566	11.25
005YR024HR	smf-3b	289.0066	11.25
005YR024HR	smf-3b	289.2566	11.25
005YR024HR	smf-3b	289.5066	11.25
005YR024HR	smf-3b	289.7566	11.25
005YR024HR	smf-3b	290.0066	11.25
005YR024HR	smf-3b	290.2566	11.25
005YR024HR	smf-3b	290.5066	11.25
005YR024HR	smf-3b	290.7566	11.25
005YR024HR	smf-3b	291.0066	11.25
005YR024HR	smf-3b	291.2566	11.25
005YR024HR	smf-3b	291.5066	11.25
005YR024HR	smf-3b	291.7566	11.25
005YR024HR	smf-3b	292.0066	11.25
005YR024HR	smf-3b	292.2566	11.25
005YR024HR	smf-3b	292.5066	11.25
005YR024HR	smf-3b	292.7566	11.25
005YR024HR	smf-3b	293.0066	11.25
005YR024HR	smf-3b	293.2566	11.25
005YR024HR	smf-3b	293.5066	11.25
005YR024HR	smf-3b	293.7566	11.25
005YR024HR	smf-3b	294.0066	11.25
005YR024HR	smf-3b	294.2566	11.25

5yr-24hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR072HR	smf-1a	400.7567	12.46
005YR072HR	smf-1a	401.0067	12.46
005YR072HR	smf-1a	401.2567	12.46
005YR072HR	smf-1a	401.5067	12.46
005YR072HR	smf-1a	401.7567	12.46
005YR072HR	smf-1a	402.0067	12.46
005YR072HR	smf-1a	402.2567	12.46
005YR072HR	smf-1a	402.5067	12.46
005YR072HR	smf-1a	402.7567	12.46
005YR072HR	smf-1a	403.0067	12.46
005YR072HR	smf-1a	403.2567	12.46
005YR072HR	smf-1a	403.5067	12.46
005YR072HR	smf-1a	403.7567	12.46
005YR072HR	smf-1a	404.0067	12.46
005YR072HR	smf-1a	404.2567	12.45
005YR072HR	smf-1a	404.5067	12.45
005YR072HR	smf-1a	404.7567	12.45
005YR072HR	smf-1a	405.0067	12.45
005YR072HR	smf-1a	405.2567	12.45
005YR072HR	smf-1a	405.5067	12.45
005YR072HR	smf-1a	405.7567	12.45
005YR072HR	smf-1a	406.0067	12.45
005YR072HR	smf-1a	406.2567	12.45
005YR072HR	smf-1a	406.5067	12.45
005YR072HR	smf-1a	406.7567	12.45
005YR072HR	smf-1a	407.0067	12.45
005YR072HR	smf-1a	407.2567	12.45
005YR072HR	smf-1a	407.5067	12.45
005YR072HR	smf-1a	407.7567	12.45
005YR072HR	smf-1a	408.0067	12.45
005YR072HR	smf-1a	408.2567	12.45
005YR072HR	smf-1a	408.5067	12.45
005YR072HR	smf-1a	408.7567	12.45
005YR072HR	smf-1a	409.0067	12.45
005YR072HR	smf-1a	409.2567	12.45
005YR072HR	smf-1a	409.5067	12.45
005YR072HR	smf-1a	409.7567	12.45
005YR072HR	smf-1a	410.0067	12.45
005YR072HR	smf-1a	410.2567	12.45
005YR072HR	smf-1a	410.5067	12.45
005YR072HR	smf-1a	410.7567	12.45
005YR072HR	smf-1a	411.0067	12.45

5yr-72hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR072HR	smf-1b	406.5067	13.01
005YR072HR	smf-1b	406.7567	13.01
005YR072HR	smf-1b	407.0067	13.00
005YR072HR	smf-1b	407.2567	13.00
005YR072HR	smf-1b	407.5067	13.00
005YR072HR	smf-1b	407.7567	13.00
005YR072HR	smf-1b	408.0067	13.00
005YR072HR	smf-1b	408.2567	13.00
005YR072HR	smf-1b	408.5067	13.00
005YR072HR	smf-1b	408.7567	13.00
005YR072HR	smf-1b	409.0067	13.00
005YR072HR	smf-1b	409.2567	13.00
005YR072HR	smf-1b	409.5067	13.00
005YR072HR	smf-1b	409.7567	13.00
005YR072HR	smf-1b	410.0067	13.00
005YR072HR	smf-1b	410.2567	13.00
005YR072HR	smf-1b	410.5067	13.00
005YR072HR	smf-1b	410.7567	13.00
005YR072HR	smf-1b	411.0067	13.00
005YR072HR	smf-1b	411.2567	13.00
005YR072HR	smf-1b	411.5067	13.00
005YR072HR	smf-1b	411.7567	13.00
005YR072HR	smf-1b	412.0067	13.00
005YR072HR	smf-1b	412.2567	13.00
005YR072HR	smf-1b	412.5067	13.00
005YR072HR	smf-1b	412.7567	13.00
005YR072HR	smf-1b	413.0067	13.00
005YR072HR	smf-1b	413.2567	13.00
005YR072HR	smf-1b	413.5067	13.00
005YR072HR	smf-1b	413.7567	13.00
005YR072HR	smf-1b	414.0067	13.00
005YR072HR	smf-1b	414.2567	13.00
005YR072HR	smf-1b	414.5067	13.00
005YR072HR	smf-1b	414.7567	13.00
005YR072HR	smf-1b	415.0067	13.00
005YR072HR	smf-1b	415.2567	13.00
005YR072HR	smf-1b	415.5067	13.00
005YR072HR	smf-1b	415.7567	13.00
005YR072HR	smf-1b	416.0067	13.00
005YR072HR	smf-1b	416.2567	13.00
005YR072HR	smf-1b	416.5067	13.00
005YR072HR	smf-1b	416.7567	13.00

5yr-72hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR072HR	smf-2a	454.2567	12.11
005YR072HR	smf-2a	454.5067	12.11
005YR072HR	smf-2a	454.7567	12.11
005YR072HR	smf-2a	455.0067	12.11
005YR072HR	smf-2a	455.2567	12.11
005YR072HR	smf-2a	455.5067	12.11
005YR072HR	smf-2a	455.7567	12.11
005YR072HR	smf-2a	456.0067	12.11
005YR072HR	smf-2a	456.2567	12.11
005YR072HR	smf-2a	456.5067	12.11
005YR072HR	smf-2a	456.7567	12.11
005YR072HR	smf-2a	457.0067	12.11
005YR072HR	smf-2a	457.2567	12.11
005YR072HR	smf-2a	457.5067	12.11
005YR072HR	smf-2a	457.7567	12.11
005YR072HR	smf-2a	458.0067	12.11
005YR072HR	smf-2a	458.2567	12.11
005YR072HR	smf-2a	458.5067	12.11
005YR072HR	smf-2a	458.7567	12.11
005YR072HR	smf-2a	459.0067	12.11
005YR072HR	smf-2a	459.2567	12.10
005YR072HR	smf-2a	459.5067	12.10
005YR072HR	smf-2a	459.7567	12.10
005YR072HR	smf-2a	460.0067	12.10
005YR072HR	smf-2a	460.2567	12.10
005YR072HR	smf-2a	460.5067	12.10
005YR072HR	smf-2a	460.7567	12.10
005YR072HR	smf-2a	461.0067	12.10
005YR072HR	smf-2a	461.2567	12.10
005YR072HR	smf-2a	461.5067	12.10
005YR072HR	smf-2a	461.7567	12.10
005YR072HR	smf-2a	462.0067	12.10
005YR072HR	smf-2a	462.2567	12.10
005YR072HR	smf-2a	462.5067	12.10
005YR072HR	smf-2a	462.7567	12.10
005YR072HR	smf-2a	463.0067	12.10
005YR072HR	smf-2a	463.2567	12.10
005YR072HR	smf-2a	463.5067	12.10
005YR072HR	smf-2a	463.7567	12.10
005YR072HR	smf-2a	464.0067	12.10
005YR072HR	smf-2a	464.2567	12.10
005YR072HR	smf-2a	464.5067	12.10

5yr-72hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR072HR	smf-2b	344.5067	11.42
005YR072HR	smf-2b	344.7567	11.41
005YR072HR	smf-2b	345.0067	11.41
005YR072HR	smf-2b	345.2567	11.41
005YR072HR	smf-2b	345.5067	11.41
005YR072HR	smf-2b	345.7567	11.41
005YR072HR	smf-2b	346.0067	11.41
005YR072HR	smf-2b	346.2567	11.41
005YR072HR	smf-2b	346.5067	11.41
005YR072HR	smf-2b	346.7567	11.41
005YR072HR	smf-2b	347.0067	11.41
005YR072HR	smf-2b	347.2567	11.41
005YR072HR	smf-2b	347.5067	11.41
005YR072HR	smf-2b	347.7567	11.41
005YR072HR	smf-2b	348.0067	11.41
005YR072HR	smf-2b	348.2567	11.41
005YR072HR	smf-2b	348.5067	11.41
005YR072HR	smf-2b	348.7567	11.41
005YR072HR	smf-2b	349.0067	11.41
005YR072HR	smf-2b	349.2567	11.41
005YR072HR	smf-2b	349.5067	11.41
005YR072HR	smf-2b	349.7567	11.41
005YR072HR	smf-2b	350.0067	11.41
005YR072HR	smf-2b	350.2567	11.41
005YR072HR	smf-2b	350.5067	11.41
005YR072HR	smf-2b	350.7567	11.41
005YR072HR	smf-2b	351.0067	11.41
005YR072HR	smf-2b	351.2567	11.41
005YR072HR	smf-2b	351.5067	11.41
005YR072HR	smf-2b	351.7567	11.41
005YR072HR	smf-2b	352.0067	11.41
005YR072HR	smf-2b	352.2567	11.40
005YR072HR	smf-2b	352.5067	11.40
005YR072HR	smf-2b	352.7567	11.40
005YR072HR	smf-2b	353.0067	11.40
005YR072HR	smf-2b	353.2567	11.40
005YR072HR	smf-2b	353.5067	11.40
005YR072HR	smf-2b	353.7567	11.40
005YR072HR	smf-2b	354.0067	11.40
005YR072HR	smf-2b	354.2567	11.40
005YR072HR	smf-2b	354.5067	11.40
005YR072HR	smf-2b	354.7567	11.40

5yr-72hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR072HR	smf-2c	423.7567	11.86
005YR072HR	smf-2c	424.0067	11.86
005YR072HR	smf-2c	424.2567	11.86
005YR072HR	smf-2c	424.5067	11.85
005YR072HR	smf-2c	424.7567	11.85
005YR072HR	smf-2c	425.0067	11.85
005YR072HR	smf-2c	425.2567	11.85
005YR072HR	smf-2c	425.5067	11.85
005YR072HR	smf-2c	425.7567	11.85
005YR072HR	smf-2c	426.0067	11.85
005YR072HR	smf-2c	426.2567	11.85
005YR072HR	smf-2c	426.5067	11.85
005YR072HR	smf-2c	426.7567	11.85
005YR072HR	smf-2c	427.0067	11.85
005YR072HR	smf-2c	427.2567	11.85
005YR072HR	smf-2c	427.5067	11.85
005YR072HR	smf-2c	427.7567	11.85
005YR072HR	smf-2c	428.0067	11.85
005YR072HR	smf-2c	428.2567	11.85
005YR072HR	smf-2c	428.5067	11.85
005YR072HR	smf-2c	428.7567	11.85
005YR072HR	smf-2c	429.0067	11.85
005YR072HR	smf-2c	429.2567	11.85
005YR072HR	smf-2c	429.5067	11.85
005YR072HR	smf-2c	429.7567	11.85
005YR072HR	smf-2c	430.0067	11.85
005YR072HR	smf-2c	430.2567	11.85
005YR072HR	smf-2c	430.5067	11.85
005YR072HR	smf-2c	430.7567	11.85
005YR072HR	smf-2c	431.0067	11.85
005YR072HR	smf-2c	431.2567	11.85
005YR072HR	smf-2c	431.5067	11.85
005YR072HR	smf-2c	431.7567	11.85
005YR072HR	smf-2c	432.0067	11.85
005YR072HR	smf-2c	432.2567	11.85
005YR072HR	smf-2c	432.5067	11.85
005YR072HR	smf-2c	432.7567	11.85
005YR072HR	smf-2c	433.0067	11.85
005YR072HR	smf-2c	433.2567	11.85
005YR072HR	smf-2c	433.5067	11.85
005YR072HR	smf-2c	433.7567	11.85
005YR072HR	smf-2c	434.0067	11.85

5yr-72hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR072HR	smf-3a	524.0067	11.90
005YR072HR	smf-3a	524.2567	11.90
005YR072HR	smf-3a	524.5067	11.90
005YR072HR	smf-3a	524.7567	11.90
005YR072HR	smf-3a	525.0067	11.90
005YR072HR	smf-3a	525.2567	11.90
005YR072HR	smf-3a	525.5067	11.90
005YR072HR	smf-3a	525.7567	11.90
005YR072HR	smf-3a	526.0067	11.90
005YR072HR	smf-3a	526.2567	11.90
005YR072HR	smf-3a	526.5067	11.90
005YR072HR	smf-3a	526.7567	11.90
005YR072HR	smf-3a	527.0067	11.90
005YR072HR	smf-3a	527.2567	11.90
005YR072HR	smf-3a	527.5067	11.90
005YR072HR	smf-3a	527.7567	11.90
005YR072HR	smf-3a	528.0067	11.90
005YR072HR	smf-3a	528.2567	11.90
005YR072HR	smf-3a	528.5067	11.90
005YR072HR	smf-3a	528.7567	11.90
005YR072HR	smf-3a	529.0067	11.90
005YR072HR	smf-3a	529.2567	11.90
005YR072HR	smf-3a	529.5067	11.90
005YR072HR	smf-3a	529.7567	11.90
005YR072HR	smf-3a	530.0067	11.90
005YR072HR	smf-3a	530.2567	11.90
005YR072HR	smf-3a	530.5067	11.90
005YR072HR	smf-3a	530.7567	11.90
005YR072HR	smf-3a	531.0067	11.90
005YR072HR	smf-3a	531.2567	11.90
005YR072HR	smf-3a	531.5067	11.90
005YR072HR	smf-3a	531.7567	11.90
005YR072HR	smf-3a	532.0067	11.90
005YR072HR	smf-3a	532.2567	11.90
005YR072HR	smf-3a	532.5067	11.90
005YR072HR	smf-3a	532.7567	11.90
005YR072HR	smf-3a	533.0067	11.90
005YR072HR	smf-3a	533.2567	11.90
005YR072HR	smf-3a	533.5067	11.90
005YR072HR	smf-3a	533.7567	11.90
005YR072HR	smf-3a	534.0067	11.90
005YR072HR	smf-3a	534.2567	11.90

5yr-72hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
005YR072HR	smf-3b	498.2567	11.26
005YR072HR	smf-3b	498.5067	11.26
005YR072HR	smf-3b	498.7567	11.26
005YR072HR	smf-3b	499.0067	11.26
005YR072HR	smf-3b	499.2567	11.26
005YR072HR	smf-3b	499.5067	11.26
005YR072HR	smf-3b	499.7567	11.26
005YR072HR	smf-3b	500.0067	11.26
005YR072HR	smf-3b	500.2567	11.26
005YR072HR	smf-3b	500.5067	11.26
005YR072HR	smf-3b	500.7567	11.26
005YR072HR	smf-3b	501.0067	11.26
005YR072HR	smf-3b	501.2567	11.26
005YR072HR	smf-3b	501.5067	11.26
005YR072HR	smf-3b	501.7567	11.26
005YR072HR	smf-3b	502.0067	11.26
005YR072HR	smf-3b	502.2567	11.26
005YR072HR	smf-3b	502.5067	11.26
005YR072HR	smf-3b	502.7567	11.26
005YR072HR	smf-3b	503.0067	11.26
005YR072HR	smf-3b	503.2567	11.26
005YR072HR	smf-3b	503.5067	11.26
005YR072HR	smf-3b	503.7567	11.26
005YR072HR	smf-3b	504.0067	11.26
005YR072HR	smf-3b	504.2567	11.26
005YR072HR	smf-3b	504.5067	11.26
005YR072HR	smf-3b	504.7567	11.26
005YR072HR	smf-3b	505.0067	11.26
005YR072HR	smf-3b	505.2567	11.26
005YR072HR	smf-3b	505.5067	11.26
005YR072HR	smf-3b	505.7567	11.26
005YR072HR	smf-3b	506.0067	11.25
005YR072HR	smf-3b	506.2567	11.25
005YR072HR	smf-3b	506.5067	11.25
005YR072HR	smf-3b	506.7567	11.25
005YR072HR	smf-3b	507.0067	11.25
005YR072HR	smf-3b	507.2567	11.25
005YR072HR	smf-3b	507.5067	11.25
005YR072HR	smf-3b	507.7567	11.25
005YR072HR	smf-3b	508.0067	11.25
005YR072HR	smf-3b	508.2567	11.25
005YR072HR	smf-3b	508.5067	11.25

5yr-72hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR001HR	smf-1a	21.0066	12.52
010YR001HR	smf-1a	21.2566	12.52
010YR001HR	smf-1a	21.5066	12.51
010YR001HR	smf-1a	21.7566	12.51
010YR001HR	smf-1a	22.0066	12.51
010YR001HR	smf-1a	22.2566	12.51
010YR001HR	smf-1a	22.5066	12.50
010YR001HR	smf-1a	22.7566	12.50
010YR001HR	smf-1a	23.0066	12.50
010YR001HR	smf-1a	23.2566	12.50
010YR001HR	smf-1a	23.5066	12.49
010YR001HR	smf-1a	23.7566	12.49
010YR001HR	smf-1a	24.0066	12.49
010YR001HR	smf-1a	24.2566	12.48
010YR001HR	smf-1a	24.5066	12.48
010YR001HR	smf-1a	24.7566	12.48
010YR001HR	smf-1a	25.0066	12.48
010YR001HR	smf-1a	25.2566	12.48
010YR001HR	smf-1a	25.5066	12.47
010YR001HR	smf-1a	25.7566	12.47
010YR001HR	smf-1a	26.0066	12.47
010YR001HR	smf-1a	26.2566	12.47
010YR001HR	smf-1a	26.5066	12.46
010YR001HR	smf-1a	26.7566	12.46
010YR001HR	smf-1a	27.0066	12.46
010YR001HR	smf-1a	27.2566	12.46
010YR001HR	smf-1a	27.5066	12.45
010YR001HR	smf-1a	27.7566	12.45
010YR001HR	smf-1a	28.0066	12.45
010YR001HR	smf-1a	28.2566	12.45
010YR001HR	smf-1a	28.5066	12.45
010YR001HR	smf-1a	28.7566	12.45
010YR001HR	smf-1a	29.0066	12.45
010YR001HR	smf-1a	29.2566	12.45
010YR001HR	smf-1a	29.5066	12.45
010YR001HR	smf-1a	29.7566	12.45
010YR001HR	smf-1a	30.0066	12.45
010YR001HR	smf-1a	30.2566	12.45
010YR001HR	smf-1a	30.5066	12.45
010YR001HR	smf-1a	30.7566	12.45
010YR001HR	smf-1a	31.0066	12.45
010YR001HR	smf-1a	31.2566	12.45

10yr-1hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR001HR	smf-1b	45.2566	13.06
010YR001HR	smf-1b	45.5066	13.06
010YR001HR	smf-1b	45.7566	13.06
010YR001HR	smf-1b	46.0066	13.06
010YR001HR	smf-1b	46.2566	13.05
010YR001HR	smf-1b	46.5066	13.05
010YR001HR	smf-1b	46.7566	13.05
010YR001HR	smf-1b	47.0066	13.05
010YR001HR	smf-1b	47.2566	13.05
010YR001HR	smf-1b	47.5066	13.04
010YR001HR	smf-1b	47.7566	13.04
010YR001HR	smf-1b	48.0066	13.04
010YR001HR	smf-1b	48.2566	13.04
010YR001HR	smf-1b	48.5066	13.04
010YR001HR	smf-1b	48.7566	13.03
010YR001HR	smf-1b	49.0066	13.03
010YR001HR	smf-1b	49.2566	13.03
010YR001HR	smf-1b	49.5066	13.03
010YR001HR	smf-1b	49.7566	13.03
010YR001HR	smf-1b	50.0066	13.02
010YR001HR	smf-1b	50.2566	13.02
010YR001HR	smf-1b	50.5066	13.02
010YR001HR	smf-1b	50.7566	13.02
010YR001HR	smf-1b	51.0066	13.02
010YR001HR	smf-1b	51.2566	13.01
010YR001HR	smf-1b	51.5066	13.01
010YR001HR	smf-1b	51.7566	13.01
010YR001HR	smf-1b	52.0066	13.01
010YR001HR	smf-1b	52.2566	13.01
010YR001HR	smf-1b	52.5066	13.01
010YR001HR	smf-1b	52.7566	13.00
010YR001HR	smf-1b	53.0066	13.00
010YR001HR	smf-1b	53.2566	13.00
010YR001HR	smf-1b	53.5066	13.00
010YR001HR	smf-1b	53.7566	13.00
010YR001HR	smf-1b	54.0066	13.00
010YR001HR	smf-1b	54.2566	13.00
010YR001HR	smf-1b	54.5066	13.00
010YR001HR	smf-1b	54.7566	13.00
010YR001HR	smf-1b	55.0066	13.00
010YR001HR	smf-1b	55.2566	13.00
010YR001HR	smf-1b	55.5066	13.00

10yr-1hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR001HR	smf-2a	111.5066	12.11
010YR001HR	smf-2a	111.7566	12.11
010YR001HR	smf-2a	112.0066	12.11
010YR001HR	smf-2a	112.2566	12.11
010YR001HR	smf-2a	112.5066	12.11
010YR001HR	smf-2a	112.7566	12.11
010YR001HR	smf-2a	113.0066	12.11
010YR001HR	smf-2a	113.2566	12.11
010YR001HR	smf-2a	113.5066	12.11
010YR001HR	smf-2a	113.7566	12.11
010YR001HR	smf-2a	114.0066	12.11
010YR001HR	smf-2a	114.2566	12.11
010YR001HR	smf-2a	114.5066	12.11
010YR001HR	smf-2a	114.7566	12.11
010YR001HR	smf-2a	115.0066	12.11
010YR001HR	smf-2a	115.2566	12.10
010YR001HR	smf-2a	115.5066	12.10
010YR001HR	smf-2a	115.7566	12.10
010YR001HR	smf-2a	116.0066	12.10
010YR001HR	smf-2a	116.2566	12.10
010YR001HR	smf-2a	116.5066	12.10
010YR001HR	smf-2a	116.7566	12.10
010YR001HR	smf-2a	117.0066	12.10
010YR001HR	smf-2a	117.2566	12.10
010YR001HR	smf-2a	117.5066	12.10
010YR001HR	smf-2a	117.7566	12.10
010YR001HR	smf-2a	118.0066	12.10
010YR001HR	smf-2a	118.2566	12.10
010YR001HR	smf-2a	118.5066	12.10
010YR001HR	smf-2a	118.7566	12.10
010YR001HR	smf-2a	119.0066	12.10
010YR001HR	smf-2a	119.2566	12.10
010YR001HR	smf-2a	119.5066	12.10
010YR001HR	smf-2a	119.7566	12.10
010YR001HR	smf-2a	120.0066	12.10
010YR001HR	smf-2a	120.2566	12.10
010YR001HR	smf-2a	120.5066	12.10
010YR001HR	smf-2a	120.7566	12.10
010YR001HR	smf-2a	121.0066	12.10
010YR001HR	smf-2a	121.2566	12.10
010YR001HR	smf-2a	121.5066	12.10
010YR001HR	smf-2a	121.7566	12.10

10yr-1hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR001HR	smf-2b	72.7566	11.43
010YR001HR	smf-2b	73.0066	11.43
010YR001HR	smf-2b	73.2566	11.43
010YR001HR	smf-2b	73.5066	11.42
010YR001HR	smf-2b	73.7566	11.42
010YR001HR	smf-2b	74.0066	11.42
010YR001HR	smf-2b	74.2566	11.42
010YR001HR	smf-2b	74.5066	11.42
010YR001HR	smf-2b	74.7566	11.42
010YR001HR	smf-2b	75.0066	11.42
010YR001HR	smf-2b	75.2566	11.41
010YR001HR	smf-2b	75.5066	11.41
010YR001HR	smf-2b	75.7566	11.41
010YR001HR	smf-2b	76.0066	11.41
010YR001HR	smf-2b	76.2566	11.41
010YR001HR	smf-2b	76.5066	11.41
010YR001HR	smf-2b	76.7566	11.41
010YR001HR	smf-2b	77.0066	11.41
010YR001HR	smf-2b	77.2566	11.40
010YR001HR	smf-2b	77.5066	11.40
010YR001HR	smf-2b	77.7566	11.40
010YR001HR	smf-2b	78.0066	11.40
010YR001HR	smf-2b	78.2566	11.40
010YR001HR	smf-2b	78.5066	11.40
010YR001HR	smf-2b	78.7566	11.40
010YR001HR	smf-2b	79.0066	11.40
010YR001HR	smf-2b	79.2566	11.40
010YR001HR	smf-2b	79.5066	11.40
010YR001HR	smf-2b	79.7566	11.40
010YR001HR	smf-2b	80.0066	11.40
010YR001HR	smf-2b	80.2566	11.40
010YR001HR	smf-2b	80.5066	11.40
010YR001HR	smf-2b	80.7566	11.40
010YR001HR	smf-2b	81.0066	11.40
010YR001HR	smf-2b	81.2566	11.40
010YR001HR	smf-2b	81.5066	11.40
010YR001HR	smf-2b	81.7566	11.40
010YR001HR	smf-2b	82.0066	11.40
010YR001HR	smf-2b	82.2566	11.40
010YR001HR	smf-2b	82.5066	11.40
010YR001HR	smf-2b	82.7566	11.40
010YR001HR	smf-2b	83.0066	11.40

10yr-1hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR001HR	smf-2c	97.0066	11.88
010YR001HR	smf-2c	97.2566	11.88
010YR001HR	smf-2c	97.5066	11.88
010YR001HR	smf-2c	97.7566	11.88
010YR001HR	smf-2c	98.0066	11.88
010YR001HR	smf-2c	98.2566	11.88
010YR001HR	smf-2c	98.5066	11.87
010YR001HR	smf-2c	98.7566	11.87
010YR001HR	smf-2c	99.0066	11.87
010YR001HR	smf-2c	99.2566	11.87
010YR001HR	smf-2c	99.5066	11.87
010YR001HR	smf-2c	99.7566	11.87
010YR001HR	smf-2c	100.0066	11.87
010YR001HR	smf-2c	100.2566	11.87
010YR001HR	smf-2c	100.5066	11.87
010YR001HR	smf-2c	100.7566	11.87
010YR001HR	smf-2c	101.0066	11.86
010YR001HR	smf-2c	101.2566	11.86
010YR001HR	smf-2c	101.5066	11.86
010YR001HR	smf-2c	101.7566	11.86
010YR001HR	smf-2c	102.0066	11.86
010YR001HR	smf-2c	102.2566	11.86
010YR001HR	smf-2c	102.5066	11.86
010YR001HR	smf-2c	102.7566	11.86
010YR001HR	smf-2c	103.0066	11.86
010YR001HR	smf-2c	103.2566	11.86
010YR001HR	smf-2c	103.5066	11.86
010YR001HR	smf-2c	103.7566	11.86
010YR001HR	smf-2c	104.0066	11.85
010YR001HR	smf-2c	104.2566	11.85
010YR001HR	smf-2c	104.5066	11.85
010YR001HR	smf-2c	104.7566	11.85
010YR001HR	smf-2c	105.0066	11.85
010YR001HR	smf-2c	105.2566	11.85
010YR001HR	smf-2c	105.5066	11.85
010YR001HR	smf-2c	105.7566	11.85
010YR001HR	smf-2c	106.0066	11.85
010YR001HR	smf-2c	106.2566	11.85
010YR001HR	smf-2c	106.5066	11.85
010YR001HR	smf-2c	106.7566	11.85
010YR001HR	smf-2c	107.0066	11.85
010YR001HR	smf-2c	107.2566	11.85

10yr-1hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR001HR	smf-3a	79.2566	11.95
010YR001HR	smf-3a	79.5066	11.95
010YR001HR	smf-3a	79.7566	11.95
010YR001HR	smf-3a	80.0066	11.95
010YR001HR	smf-3a	80.2566	11.95
010YR001HR	smf-3a	80.5066	11.94
010YR001HR	smf-3a	80.7566	11.94
010YR001HR	smf-3a	81.0066	11.94
010YR001HR	smf-3a	81.2566	11.94
010YR001HR	smf-3a	81.5066	11.94
010YR001HR	smf-3a	81.7566	11.94
010YR001HR	smf-3a	82.0066	11.94
010YR001HR	smf-3a	82.2566	11.94
010YR001HR	smf-3a	82.5066	11.93
010YR001HR	smf-3a	82.7566	11.93
010YR001HR	smf-3a	83.0066	11.93
010YR001HR	smf-3a	83.2566	11.93
010YR001HR	smf-3a	83.5066	11.93
010YR001HR	smf-3a	83.7566	11.93
010YR001HR	smf-3a	84.0066	11.93
010YR001HR	smf-3a	84.2566	11.93
010YR001HR	smf-3a	84.5066	11.92
010YR001HR	smf-3a	84.7566	11.92
010YR001HR	smf-3a	85.0066	11.92
010YR001HR	smf-3a	85.2566	11.92
010YR001HR	smf-3a	85.5066	11.92
010YR001HR	smf-3a	85.7566	11.92
010YR001HR	smf-3a	86.0066	11.92
010YR001HR	smf-3a	86.2566	11.92
010YR001HR	smf-3a	86.5066	11.92
010YR001HR	smf-3a	86.7566	11.91
010YR001HR	smf-3a	87.0066	11.91
010YR001HR	smf-3a	87.2566	11.91
010YR001HR	smf-3a	87.5066	11.91
010YR001HR	smf-3a	87.7566	11.91
010YR001HR	smf-3a	88.0066	11.91
010YR001HR	smf-3a	88.2566	11.91
010YR001HR	smf-3a	88.5066	11.91
010YR001HR	smf-3a	88.7566	11.91
010YR001HR	smf-3a	89.0066	11.91
010YR001HR	smf-3a	89.2566	11.90
010YR001HR	smf-3a	89.5066	11.90

10yr-1hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR001HR	smf-3b	103.5066	11.29
010YR001HR	smf-3b	103.7566	11.29
010YR001HR	smf-3b	104.0066	11.28
010YR001HR	smf-3b	104.2566	11.28
010YR001HR	smf-3b	104.5066	11.28
010YR001HR	smf-3b	104.7566	11.28
010YR001HR	smf-3b	105.0066	11.28
010YR001HR	smf-3b	105.2566	11.28
010YR001HR	smf-3b	105.5066	11.28
010YR001HR	smf-3b	105.7566	11.28
010YR001HR	smf-3b	106.0066	11.28
010YR001HR	smf-3b	106.2566	11.28
010YR001HR	smf-3b	106.5066	11.27
010YR001HR	smf-3b	106.7566	11.27
010YR001HR	smf-3b	107.0066	11.27
010YR001HR	smf-3b	107.2566	11.27
010YR001HR	smf-3b	107.5066	11.27
010YR001HR	smf-3b	107.7566	11.27
010YR001HR	smf-3b	108.0066	11.27
010YR001HR	smf-3b	108.2566	11.27
010YR001HR	smf-3b	108.5066	11.27
010YR001HR	smf-3b	108.7566	11.27
010YR001HR	smf-3b	109.0066	11.27
010YR001HR	smf-3b	109.2566	11.26
010YR001HR	smf-3b	109.5066	11.26
010YR001HR	smf-3b	109.7566	11.26
010YR001HR	smf-3b	110.0066	11.26
010YR001HR	smf-3b	110.2566	11.26
010YR001HR	smf-3b	110.5066	11.26
010YR001HR	smf-3b	110.7566	11.26
010YR001HR	smf-3b	111.0066	11.26
010YR001HR	smf-3b	111.2566	11.26
010YR001HR	smf-3b	111.5066	11.26
010YR001HR	smf-3b	111.7566	11.26
010YR001HR	smf-3b	112.0066	11.26
010YR001HR	smf-3b	112.2566	11.25
010YR001HR	smf-3b	112.5066	11.25
010YR001HR	smf-3b	112.7566	11.25
010YR001HR	smf-3b	113.0066	11.25
010YR001HR	smf-3b	113.2566	11.25
010YR001HR	smf-3b	113.5066	11.25
010YR001HR	smf-3b	113.7566	11.25

10yr-1hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR002HR	smf-1a	54.2525	12.47
010YR002HR	smf-1a	54.5025	12.46
010YR002HR	smf-1a	54.7525	12.46
010YR002HR	smf-1a	55.0025	12.46
010YR002HR	smf-1a	55.2525	12.46
010YR002HR	smf-1a	55.5025	12.46
010YR002HR	smf-1a	55.7525	12.46
010YR002HR	smf-1a	56.0025	12.46
010YR002HR	smf-1a	56.2525	12.46
010YR002HR	smf-1a	56.5025	12.46
010YR002HR	smf-1a	56.7525	12.45
010YR002HR	smf-1a	57.0025	12.45
010YR002HR	smf-1a	57.2525	12.45
010YR002HR	smf-1a	57.5025	12.45
010YR002HR	smf-1a	57.7525	12.45
010YR002HR	smf-1a	58.0025	12.45
010YR002HR	smf-1a	58.2525	12.45
010YR002HR	smf-1a	58.5025	12.45
010YR002HR	smf-1a	58.7525	12.45
010YR002HR	smf-1a	59.0025	12.45
010YR002HR	smf-1a	59.2525	12.45
010YR002HR	smf-1a	59.5025	12.45
010YR002HR	smf-1a	59.7525	12.45
010YR002HR	smf-1a	60.0025	12.45
010YR002HR	smf-1a	60.2525	12.45
010YR002HR	smf-1a	60.5025	12.45
010YR002HR	smf-1a	60.7525	12.45
010YR002HR	smf-1a	61.0025	12.45
010YR002HR	smf-1a	61.2525	12.45
010YR002HR	smf-1a	61.5025	12.45
010YR002HR	smf-1a	61.7525	12.45
010YR002HR	smf-1a	62.0025	12.45
010YR002HR	smf-1a	62.2525	12.45
010YR002HR	smf-1a	62.5025	12.45
010YR002HR	smf-1a	62.7525	12.45
010YR002HR	smf-1a	63.0025	12.45
010YR002HR	smf-1a	63.2525	12.45
010YR002HR	smf-1a	63.5025	12.45
010YR002HR	smf-1a	63.7525	12.45
010YR002HR	smf-1a	64.0025	12.45
010YR002HR	smf-1a	64.2525	12.45
010YR002HR	smf-1a	64.5025	12.45

10yr-2hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR002HR	smf-1b	67.0025	13.01
010YR002HR	smf-1b	67.2525	13.01
010YR002HR	smf-1b	67.5025	13.00
010YR002HR	smf-1b	67.7525	13.00
010YR002HR	smf-1b	68.0025	13.00
010YR002HR	smf-1b	68.2525	13.00
010YR002HR	smf-1b	68.5025	13.00
010YR002HR	smf-1b	68.7525	13.00
010YR002HR	smf-1b	69.0025	13.00
010YR002HR	smf-1b	69.2525	13.00
010YR002HR	smf-1b	69.5025	13.00
010YR002HR	smf-1b	69.7525	13.00
010YR002HR	smf-1b	70.0025	13.00
010YR002HR	smf-1b	70.2525	13.00
010YR002HR	smf-1b	70.5025	13.00
010YR002HR	smf-1b	70.7525	13.00
010YR002HR	smf-1b	71.0025	13.00
010YR002HR	smf-1b	71.2525	13.00
010YR002HR	smf-1b	71.5025	13.00
010YR002HR	smf-1b	71.7525	13.00
010YR002HR	smf-1b	72.0025	13.00
010YR002HR	smf-1b	72.2525	13.00
010YR002HR	smf-1b	72.5025	13.00
010YR002HR	smf-1b	72.7525	13.00
010YR002HR	smf-1b	73.0025	13.00
010YR002HR	smf-1b	73.2525	13.00
010YR002HR	smf-1b	73.5025	13.00
010YR002HR	smf-1b	73.7525	13.00
010YR002HR	smf-1b	74.0025	13.00
010YR002HR	smf-1b	74.2525	13.00
010YR002HR	smf-1b	74.5025	13.00
010YR002HR	smf-1b	74.7525	13.00
010YR002HR	smf-1b	75.0025	13.00
010YR002HR	smf-1b	75.2525	13.00
010YR002HR	smf-1b	75.5025	13.00
010YR002HR	smf-1b	75.7525	13.00
010YR002HR	smf-1b	76.0025	13.00
010YR002HR	smf-1b	76.2525	13.00
010YR002HR	smf-1b	76.5025	13.00
010YR002HR	smf-1b	76.7525	13.00
010YR002HR	smf-1b	77.0025	13.00
010YR002HR	smf-1b	77.2525	13.00

10yr-2hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR002HR	smf-2a	132.2525	12.11
010YR002HR	smf-2a	132.5025	12.11
010YR002HR	smf-2a	132.7525	12.11
010YR002HR	smf-2a	133.0025	12.11
010YR002HR	smf-2a	133.2525	12.11
010YR002HR	smf-2a	133.5025	12.11
010YR002HR	smf-2a	133.7525	12.11
010YR002HR	smf-2a	134.0025	12.11
010YR002HR	smf-2a	134.2525	12.11
010YR002HR	smf-2a	134.5025	12.10
010YR002HR	smf-2a	134.7525	12.10
010YR002HR	smf-2a	135.0025	12.10
010YR002HR	smf-2a	135.2525	12.10
010YR002HR	smf-2a	135.5025	12.10
010YR002HR	smf-2a	135.7525	12.10
010YR002HR	smf-2a	136.0025	12.10
010YR002HR	smf-2a	136.2525	12.10
010YR002HR	smf-2a	136.5025	12.10
010YR002HR	smf-2a	136.7525	12.10
010YR002HR	smf-2a	137.0025	12.10
010YR002HR	smf-2a	137.2525	12.10
010YR002HR	smf-2a	137.5025	12.10
010YR002HR	smf-2a	137.7525	12.10
010YR002HR	smf-2a	138.0025	12.10
010YR002HR	smf-2a	138.2525	12.10
010YR002HR	smf-2a	138.5025	12.10
010YR002HR	smf-2a	138.7525	12.10
010YR002HR	smf-2a	139.0025	12.10
010YR002HR	smf-2a	139.2525	12.10
010YR002HR	smf-2a	139.5025	12.10
010YR002HR	smf-2a	139.7525	12.10
010YR002HR	smf-2a	140.0025	12.10
010YR002HR	smf-2a	140.2525	12.10
010YR002HR	smf-2a	140.5025	12.10
010YR002HR	smf-2a	140.7525	12.10
010YR002HR	smf-2a	141.0025	12.10
010YR002HR	smf-2a	141.2525	12.10
010YR002HR	smf-2a	141.5025	12.10
010YR002HR	smf-2a	141.7525	12.10
010YR002HR	smf-2a	142.0025	12.10
010YR002HR	smf-2a	142.2525	12.10
010YR002HR	smf-2a	142.5025	12.10

10yr-2hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR002HR	smf-2b	92.5025	11.42
010YR002HR	smf-2b	92.7525	11.42
010YR002HR	smf-2b	93.0025	11.42
010YR002HR	smf-2b	93.2525	11.42
010YR002HR	smf-2b	93.5025	11.42
010YR002HR	smf-2b	93.7525	11.42
010YR002HR	smf-2b	94.0025	11.42
010YR002HR	smf-2b	94.2525	11.42
010YR002HR	smf-2b	94.5025	11.41
010YR002HR	smf-2b	94.7525	11.41
010YR002HR	smf-2b	95.0025	11.41
010YR002HR	smf-2b	95.2525	11.41
010YR002HR	smf-2b	95.5025	11.41
010YR002HR	smf-2b	95.7525	11.41
010YR002HR	smf-2b	96.0025	11.41
010YR002HR	smf-2b	96.2525	11.41
010YR002HR	smf-2b	96.5025	11.41
010YR002HR	smf-2b	96.7525	11.41
010YR002HR	smf-2b	97.0025	11.40
010YR002HR	smf-2b	97.2525	11.40
010YR002HR	smf-2b	97.5025	11.40
010YR002HR	smf-2b	97.7525	11.40
010YR002HR	smf-2b	98.0025	11.40
010YR002HR	smf-2b	98.2525	11.40
010YR002HR	smf-2b	98.5025	11.40
010YR002HR	smf-2b	98.7525	11.40
010YR002HR	smf-2b	99.0025	11.40
010YR002HR	smf-2b	99.2525	11.40
010YR002HR	smf-2b	99.5025	11.40
010YR002HR	smf-2b	99.7525	11.40
010YR002HR	smf-2b	100.0025	11.40
010YR002HR	smf-2b	100.2525	11.40
010YR002HR	smf-2b	100.5025	11.40
010YR002HR	smf-2b	100.7525	11.40
010YR002HR	smf-2b	101.0025	11.40
010YR002HR	smf-2b	101.2525	11.40
010YR002HR	smf-2b	101.5025	11.40
010YR002HR	smf-2b	101.7525	11.40
010YR002HR	smf-2b	102.0025	11.40
010YR002HR	smf-2b	102.2525	11.40
010YR002HR	smf-2b	102.5025	11.40
010YR002HR	smf-2b	102.7525	11.40

10yr-2hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR002HR	smf-2c	115.7525	11.88
010YR002HR	smf-2c	116.0025	11.88
010YR002HR	smf-2c	116.2525	11.88
010YR002HR	smf-2c	116.5025	11.88
010YR002HR	smf-2c	116.7525	11.88
010YR002HR	smf-2c	117.0025	11.88
010YR002HR	smf-2c	117.2525	11.88
010YR002HR	smf-2c	117.5025	11.88
010YR002HR	smf-2c	117.7525	11.88
010YR002HR	smf-2c	118.0025	11.87
010YR002HR	smf-2c	118.2525	11.87
010YR002HR	smf-2c	118.5025	11.87
010YR002HR	smf-2c	118.7525	11.87
010YR002HR	smf-2c	119.0025	11.87
010YR002HR	smf-2c	119.2525	11.87
010YR002HR	smf-2c	119.5025	11.87
010YR002HR	smf-2c	119.7525	11.87
010YR002HR	smf-2c	120.0025	11.87
010YR002HR	smf-2c	120.2525	11.87
010YR002HR	smf-2c	120.5025	11.87
010YR002HR	smf-2c	120.7525	11.87
010YR002HR	smf-2c	121.0025	11.86
010YR002HR	smf-2c	121.2525	11.86
010YR002HR	smf-2c	121.5025	11.86
010YR002HR	smf-2c	121.7525	11.86
010YR002HR	smf-2c	122.0025	11.86
010YR002HR	smf-2c	122.2525	11.86
010YR002HR	smf-2c	122.5025	11.86
010YR002HR	smf-2c	122.7525	11.86
010YR002HR	smf-2c	123.0025	11.86
010YR002HR	smf-2c	123.2525	11.86
010YR002HR	smf-2c	123.5025	11.86
010YR002HR	smf-2c	123.7525	11.86
010YR002HR	smf-2c	124.0025	11.86
010YR002HR	smf-2c	124.2525	11.85
010YR002HR	smf-2c	124.5025	11.85
010YR002HR	smf-2c	124.7525	11.85
010YR002HR	smf-2c	125.0025	11.85
010YR002HR	smf-2c	125.2525	11.85
010YR002HR	smf-2c	125.5025	11.85
010YR002HR	smf-2c	125.7525	11.85
010YR002HR	smf-2c	126.0025	11.85

10yr-2hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR002HR	smf-3a	107.5025	11.91
010YR002HR	smf-3a	107.7525	11.91
010YR002HR	smf-3a	108.0025	11.91
010YR002HR	smf-3a	108.2525	11.91
010YR002HR	smf-3a	108.5025	11.90
010YR002HR	smf-3a	108.7525	11.90
010YR002HR	smf-3a	109.0025	11.90
010YR002HR	smf-3a	109.2525	11.90
010YR002HR	smf-3a	109.5025	11.90
010YR002HR	smf-3a	109.7525	11.90
010YR002HR	smf-3a	110.0025	11.90
010YR002HR	smf-3a	110.2525	11.90
010YR002HR	smf-3a	110.5025	11.90
010YR002HR	smf-3a	110.7525	11.90
010YR002HR	smf-3a	111.0025	11.90
010YR002HR	smf-3a	111.2525	11.90
010YR002HR	smf-3a	111.5025	11.90
010YR002HR	smf-3a	111.7525	11.90
010YR002HR	smf-3a	112.0025	11.90
010YR002HR	smf-3a	112.2525	11.90
010YR002HR	smf-3a	112.5025	11.90
010YR002HR	smf-3a	112.7525	11.90
010YR002HR	smf-3a	113.0025	11.90
010YR002HR	smf-3a	113.2525	11.90
010YR002HR	smf-3a	113.5025	11.90
010YR002HR	smf-3a	113.7525	11.90
010YR002HR	smf-3a	114.0025	11.90
010YR002HR	smf-3a	114.2525	11.90
010YR002HR	smf-3a	114.5025	11.90
010YR002HR	smf-3a	114.7525	11.90
010YR002HR	smf-3a	115.0025	11.90
010YR002HR	smf-3a	115.2525	11.90
010YR002HR	smf-3a	115.5025	11.90
010YR002HR	smf-3a	115.7525	11.90
010YR002HR	smf-3a	116.0025	11.90
010YR002HR	smf-3a	116.2525	11.90
010YR002HR	smf-3a	116.5025	11.90
010YR002HR	smf-3a	116.7525	11.90
010YR002HR	smf-3a	117.0025	11.90
010YR002HR	smf-3a	117.2525	11.90
010YR002HR	smf-3a	117.5025	11.90
010YR002HR	smf-3a	117.7525	11.90

10yr-2hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR002HR	smf-3b	130.7525	11.27
010YR002HR	smf-3b	131.0025	11.27
010YR002HR	smf-3b	131.2525	11.27
010YR002HR	smf-3b	131.5025	11.27
010YR002HR	smf-3b	131.7525	11.27
010YR002HR	smf-3b	132.0025	11.27
010YR002HR	smf-3b	132.2525	11.27
010YR002HR	smf-3b	132.5025	11.27
010YR002HR	smf-3b	132.7525	11.27
010YR002HR	smf-3b	133.0025	11.27
010YR002HR	smf-3b	133.2525	11.26
010YR002HR	smf-3b	133.5025	11.26
010YR002HR	smf-3b	133.7525	11.26
010YR002HR	smf-3b	134.0025	11.26
010YR002HR	smf-3b	134.2525	11.26
010YR002HR	smf-3b	134.5025	11.26
010YR002HR	smf-3b	134.7525	11.26
010YR002HR	smf-3b	135.0025	11.26
010YR002HR	smf-3b	135.2525	11.26
010YR002HR	smf-3b	135.5025	11.26
010YR002HR	smf-3b	135.7525	11.26
010YR002HR	smf-3b	136.0025	11.26
010YR002HR	smf-3b	136.2525	11.26
010YR002HR	smf-3b	136.5025	11.26
010YR002HR	smf-3b	136.7525	11.25
010YR002HR	smf-3b	137.0025	11.25
010YR002HR	smf-3b	137.2525	11.25
010YR002HR	smf-3b	137.5025	11.25
010YR002HR	smf-3b	137.7525	11.25
010YR002HR	smf-3b	138.0025	11.25
010YR002HR	smf-3b	138.2525	11.25
010YR002HR	smf-3b	138.5025	11.25
010YR002HR	smf-3b	138.7525	11.25
010YR002HR	smf-3b	139.0025	11.25
010YR002HR	smf-3b	139.2525	11.25
010YR002HR	smf-3b	139.5025	11.25
010YR002HR	smf-3b	139.7525	11.25
010YR002HR	smf-3b	140.0025	11.25
010YR002HR	smf-3b	140.2525	11.25
010YR002HR	smf-3b	140.5025	11.25
010YR002HR	smf-3b	140.7525	11.25
010YR002HR	smf-3b	141.0025	11.25

10yr-2hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR004HR	smf-1a	112.0049	12.48
010YR004HR	smf-1a	112.2549	12.48
010YR004HR	smf-1a	112.5049	12.47
010YR004HR	smf-1a	112.7549	12.47
010YR004HR	smf-1a	113.0049	12.47
010YR004HR	smf-1a	113.2549	12.47
010YR004HR	smf-1a	113.5049	12.47
010YR004HR	smf-1a	113.7549	12.47
010YR004HR	smf-1a	114.0049	12.47
010YR004HR	smf-1a	114.2549	12.47
010YR004HR	smf-1a	114.5049	12.47
010YR004HR	smf-1a	114.7549	12.47
010YR004HR	smf-1a	115.0049	12.47
010YR004HR	smf-1a	115.2549	12.47
010YR004HR	smf-1a	115.5049	12.47
010YR004HR	smf-1a	115.7549	12.46
010YR004HR	smf-1a	116.0049	12.46
010YR004HR	smf-1a	116.2549	12.46
010YR004HR	smf-1a	116.5049	12.46
010YR004HR	smf-1a	116.7549	12.46
010YR004HR	smf-1a	117.0049	12.46
010YR004HR	smf-1a	117.2549	12.46
010YR004HR	smf-1a	117.5049	12.46
010YR004HR	smf-1a	117.7549	12.46
010YR004HR	smf-1a	118.0049	12.46
010YR004HR	smf-1a	118.2549	12.46
010YR004HR	smf-1a	118.5049	12.46
010YR004HR	smf-1a	118.7549	12.46
010YR004HR	smf-1a	119.0049	12.46
010YR004HR	smf-1a	119.2549	12.45
010YR004HR	smf-1a	119.5049	12.45
010YR004HR	smf-1a	119.7549	12.45
010YR004HR	smf-1a	120.0049	12.45
010YR004HR	smf-1a	120.2549	12.45
010YR004HR	smf-1a	120.5049	12.45
010YR004HR	smf-1a	120.7549	12.45
010YR004HR	smf-1a	121.0049	12.45
010YR004HR	smf-1a	121.2549	12.45
010YR004HR	smf-1a	121.5049	12.45
010YR004HR	smf-1a	121.7549	12.45
010YR004HR	smf-1a	122.0049	12.45
010YR004HR	smf-1a	122.2549	12.45

10yr-4hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR004HR	smf-1b	80.7549	13.03
010YR004HR	smf-1b	81.0049	13.03
010YR004HR	smf-1b	81.2549	13.03
010YR004HR	smf-1b	81.5049	13.02
010YR004HR	smf-1b	81.7549	13.02
010YR004HR	smf-1b	82.0049	13.02
010YR004HR	smf-1b	82.2549	13.02
010YR004HR	smf-1b	82.5049	13.02
010YR004HR	smf-1b	82.7549	13.02
010YR004HR	smf-1b	83.0049	13.02
010YR004HR	smf-1b	83.2549	13.02
010YR004HR	smf-1b	83.5049	13.01
010YR004HR	smf-1b	83.7549	13.01
010YR004HR	smf-1b	84.0049	13.01
010YR004HR	smf-1b	84.2549	13.01
010YR004HR	smf-1b	84.5049	13.01
010YR004HR	smf-1b	84.7549	13.01
010YR004HR	smf-1b	85.0049	13.01
010YR004HR	smf-1b	85.2549	13.01
010YR004HR	smf-1b	85.5049	13.01
010YR004HR	smf-1b	85.7549	13.00
010YR004HR	smf-1b	86.0049	13.00
010YR004HR	smf-1b	86.2549	13.00
010YR004HR	smf-1b	86.5049	13.00
010YR004HR	smf-1b	86.7549	13.00
010YR004HR	smf-1b	87.0049	13.00
010YR004HR	smf-1b	87.2549	13.00
010YR004HR	smf-1b	87.5049	13.00
010YR004HR	smf-1b	87.7549	13.00
010YR004HR	smf-1b	88.0049	13.00
010YR004HR	smf-1b	88.2549	13.00
010YR004HR	smf-1b	88.5049	13.00
010YR004HR	smf-1b	88.7549	13.00
010YR004HR	smf-1b	89.0049	13.00
010YR004HR	smf-1b	89.2549	13.00
010YR004HR	smf-1b	89.5049	13.00
010YR004HR	smf-1b	89.7549	13.00
010YR004HR	smf-1b	90.0049	13.00
010YR004HR	smf-1b	90.2549	13.00
010YR004HR	smf-1b	90.5049	13.00
010YR004HR	smf-1b	90.7549	13.00
010YR004HR	smf-1b	91.0049	13.00

10yr-4hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR004HR	smf-2a	144.0049	12.13
010YR004HR	smf-2a	144.2549	12.13
010YR004HR	smf-2a	144.5049	12.13
010YR004HR	smf-2a	144.7549	12.12
010YR004HR	smf-2a	145.0049	12.12
010YR004HR	smf-2a	145.2549	12.12
010YR004HR	smf-2a	145.5049	12.12
010YR004HR	smf-2a	145.7549	12.12
010YR004HR	smf-2a	146.0049	12.12
010YR004HR	smf-2a	146.2549	12.12
010YR004HR	smf-2a	146.5049	12.12
010YR004HR	smf-2a	146.7549	12.12
010YR004HR	smf-2a	147.0049	12.12
010YR004HR	smf-2a	147.2549	12.12
010YR004HR	smf-2a	147.5049	12.12
010YR004HR	smf-2a	147.7549	12.12
010YR004HR	smf-2a	148.0049	12.12
010YR004HR	smf-2a	148.2549	12.12
010YR004HR	smf-2a	148.5049	12.12
010YR004HR	smf-2a	148.7549	12.12
010YR004HR	smf-2a	149.0049	12.12
010YR004HR	smf-2a	149.2549	12.11
010YR004HR	smf-2a	149.5049	12.11
010YR004HR	smf-2a	149.7549	12.11
010YR004HR	smf-2a	150.0049	12.11
010YR004HR	smf-2a	150.2549	12.11
010YR004HR	smf-2a	150.5049	12.11
010YR004HR	smf-2a	150.7549	12.11
010YR004HR	smf-2a	151.0049	12.11
010YR004HR	smf-2a	151.2549	12.11
010YR004HR	smf-2a	151.5049	12.11
010YR004HR	smf-2a	151.7549	12.11
010YR004HR	smf-2a	152.0049	12.11
010YR004HR	smf-2a	152.2549	12.11
010YR004HR	smf-2a	152.5049	12.11
010YR004HR	smf-2a	152.7549	12.11
010YR004HR	smf-2a	153.0049	12.11
010YR004HR	smf-2a	153.2549	12.11
010YR004HR	smf-2a	153.5049	12.11
010YR004HR	smf-2a	153.7549	12.10
010YR004HR	smf-2a	154.0049	12.10
010YR004HR	smf-2a	154.2549	12.10

10yr-4hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR004HR	smf-2b	102.2549	11.44
010YR004HR	smf-2b	102.5049	11.44
010YR004HR	smf-2b	102.7549	11.44
010YR004HR	smf-2b	103.0049	11.43
010YR004HR	smf-2b	103.2549	11.43
010YR004HR	smf-2b	103.5049	11.43
010YR004HR	smf-2b	103.7549	11.43
010YR004HR	smf-2b	104.0049	11.43
010YR004HR	smf-2b	104.2549	11.43
010YR004HR	smf-2b	104.5049	11.43
010YR004HR	smf-2b	104.7549	11.43
010YR004HR	smf-2b	105.0049	11.43
010YR004HR	smf-2b	105.2549	11.43
010YR004HR	smf-2b	105.5049	11.42
010YR004HR	smf-2b	105.7549	11.42
010YR004HR	smf-2b	106.0049	11.42
010YR004HR	smf-2b	106.2549	11.42
010YR004HR	smf-2b	106.5049	11.42
010YR004HR	smf-2b	106.7549	11.42
010YR004HR	smf-2b	107.0049	11.42
010YR004HR	smf-2b	107.2549	11.42
010YR004HR	smf-2b	107.5049	11.42
010YR004HR	smf-2b	107.7549	11.42
010YR004HR	smf-2b	108.0049	11.42
010YR004HR	smf-2b	108.2549	11.41
010YR004HR	smf-2b	108.5049	11.41
010YR004HR	smf-2b	108.7549	11.41
010YR004HR	smf-2b	109.0049	11.41
010YR004HR	smf-2b	109.2549	11.41
010YR004HR	smf-2b	109.5049	11.41
010YR004HR	smf-2b	109.7549	11.41
010YR004HR	smf-2b	110.0049	11.41
010YR004HR	smf-2b	110.2549	11.41
010YR004HR	smf-2b	110.5049	11.41
010YR004HR	smf-2b	110.7549	11.41
010YR004HR	smf-2b	111.0049	11.40
010YR004HR	smf-2b	111.2549	11.40
010YR004HR	smf-2b	111.5049	11.40
010YR004HR	smf-2b	111.7549	11.40
010YR004HR	smf-2b	112.0049	11.40
010YR004HR	smf-2b	112.2549	11.40
010YR004HR	smf-2b	112.5049	11.40

10yr-4hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR004HR	smf-2c	134.0049	11.88
010YR004HR	smf-2c	134.2549	11.88
010YR004HR	smf-2c	134.5049	11.88
010YR004HR	smf-2c	134.7549	11.88
010YR004HR	smf-2c	135.0049	11.87
010YR004HR	smf-2c	135.2549	11.87
010YR004HR	smf-2c	135.5049	11.87
010YR004HR	smf-2c	135.7549	11.87
010YR004HR	smf-2c	136.0049	11.87
010YR004HR	smf-2c	136.2549	11.87
010YR004HR	smf-2c	136.5049	11.87
010YR004HR	smf-2c	136.7549	11.87
010YR004HR	smf-2c	137.0049	11.87
010YR004HR	smf-2c	137.2549	11.87
010YR004HR	smf-2c	137.5049	11.87
010YR004HR	smf-2c	137.7549	11.87
010YR004HR	smf-2c	138.0049	11.87
010YR004HR	smf-2c	138.2549	11.87
010YR004HR	smf-2c	138.5049	11.86
010YR004HR	smf-2c	138.7549	11.86
010YR004HR	smf-2c	139.0049	11.86
010YR004HR	smf-2c	139.2549	11.86
010YR004HR	smf-2c	139.5049	11.86
010YR004HR	smf-2c	139.7549	11.86
010YR004HR	smf-2c	140.0049	11.86
010YR004HR	smf-2c	140.2549	11.86
010YR004HR	smf-2c	140.5049	11.86
010YR004HR	smf-2c	140.7549	11.86
010YR004HR	smf-2c	141.0049	11.86
010YR004HR	smf-2c	141.2549	11.86
010YR004HR	smf-2c	141.5049	11.86
010YR004HR	smf-2c	141.7549	11.86
010YR004HR	smf-2c	142.0049	11.86
010YR004HR	smf-2c	142.2549	11.85
010YR004HR	smf-2c	142.5049	11.85
010YR004HR	smf-2c	142.7549	11.85
010YR004HR	smf-2c	143.0049	11.85
010YR004HR	smf-2c	143.2549	11.85
010YR004HR	smf-2c	143.5049	11.85
010YR004HR	smf-2c	143.7549	11.85
010YR004HR	smf-2c	144.0049	11.85
010YR004HR	smf-2c	144.2549	11.85

10yr-4hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR004HR	smf-3a	123.7549	11.92
010YR004HR	smf-3a	124.0049	11.92
010YR004HR	smf-3a	124.2549	11.92
010YR004HR	smf-3a	124.5049	11.92
010YR004HR	smf-3a	124.7549	11.91
010YR004HR	smf-3a	125.0049	11.91
010YR004HR	smf-3a	125.2549	11.91
010YR004HR	smf-3a	125.5049	11.91
010YR004HR	smf-3a	125.7549	11.91
010YR004HR	smf-3a	126.0049	11.91
010YR004HR	smf-3a	126.2549	11.91
010YR004HR	smf-3a	126.5049	11.91
010YR004HR	smf-3a	126.7549	11.91
010YR004HR	smf-3a	127.0049	11.91
010YR004HR	smf-3a	127.2549	11.91
010YR004HR	smf-3a	127.5049	11.91
010YR004HR	smf-3a	127.7549	11.91
010YR004HR	smf-3a	128.0049	11.90
010YR004HR	smf-3a	128.2549	11.90
010YR004HR	smf-3a	128.5049	11.90
010YR004HR	smf-3a	128.7549	11.90
010YR004HR	smf-3a	129.0049	11.90
010YR004HR	smf-3a	129.2549	11.90
010YR004HR	smf-3a	129.5049	11.90
010YR004HR	smf-3a	129.7549	11.90
010YR004HR	smf-3a	130.0049	11.90
010YR004HR	smf-3a	130.2549	11.90
010YR004HR	smf-3a	130.5049	11.90
010YR004HR	smf-3a	130.7549	11.90
010YR004HR	smf-3a	131.0049	11.90
010YR004HR	smf-3a	131.2549	11.90
010YR004HR	smf-3a	131.5049	11.90
010YR004HR	smf-3a	131.7549	11.90
010YR004HR	smf-3a	132.0049	11.90
010YR004HR	smf-3a	132.2549	11.90
010YR004HR	smf-3a	132.5049	11.90
010YR004HR	smf-3a	132.7549	11.90
010YR004HR	smf-3a	133.0049	11.90
010YR004HR	smf-3a	133.2549	11.90
010YR004HR	smf-3a	133.5049	11.90
010YR004HR	smf-3a	133.7549	11.90
010YR004HR	smf-3a	134.0049	11.90

10yr-4hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR004HR	smf-3b	145.0049	11.28
010YR004HR	smf-3b	145.2549	11.28
010YR004HR	smf-3b	145.5049	11.28
010YR004HR	smf-3b	145.7549	11.28
010YR004HR	smf-3b	146.0049	11.28
010YR004HR	smf-3b	146.2549	11.28
010YR004HR	smf-3b	146.5049	11.28
010YR004HR	smf-3b	146.7549	11.28
010YR004HR	smf-3b	147.0049	11.28
010YR004HR	smf-3b	147.2549	11.27
010YR004HR	smf-3b	147.5049	11.27
010YR004HR	smf-3b	147.7549	11.27
010YR004HR	smf-3b	148.0049	11.27
010YR004HR	smf-3b	148.2549	11.27
010YR004HR	smf-3b	148.5049	11.27
010YR004HR	smf-3b	148.7549	11.27
010YR004HR	smf-3b	149.0049	11.27
010YR004HR	smf-3b	149.2549	11.27
010YR004HR	smf-3b	149.5049	11.27
010YR004HR	smf-3b	149.7549	11.27
010YR004HR	smf-3b	150.0049	11.27
010YR004HR	smf-3b	150.2549	11.27
010YR004HR	smf-3b	150.5049	11.27
010YR004HR	smf-3b	150.7549	11.26
010YR004HR	smf-3b	151.0049	11.26
010YR004HR	smf-3b	151.2549	11.26
010YR004HR	smf-3b	151.5049	11.26
010YR004HR	smf-3b	151.7549	11.26
010YR004HR	smf-3b	152.0049	11.26
010YR004HR	smf-3b	152.2549	11.26
010YR004HR	smf-3b	152.5049	11.26
010YR004HR	smf-3b	152.7549	11.26
010YR004HR	smf-3b	153.0049	11.26
010YR004HR	smf-3b	153.2549	11.26
010YR004HR	smf-3b	153.5049	11.26
010YR004HR	smf-3b	153.7549	11.26
010YR004HR	smf-3b	154.0049	11.26
010YR004HR	smf-3b	154.2549	11.26
010YR004HR	smf-3b	154.5049	11.25
010YR004HR	smf-3b	154.7549	11.25
010YR004HR	smf-3b	155.0049	11.25
010YR004HR	smf-3b	155.2549	11.25

10yr-4hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR008HR	smf-1a	166.2534	12.47
010YR008HR	smf-1a	166.5034	12.47
010YR008HR	smf-1a	166.7534	12.47
010YR008HR	smf-1a	167.0034	12.47
010YR008HR	smf-1a	167.2534	12.47
010YR008HR	smf-1a	167.5034	12.46
010YR008HR	smf-1a	167.7534	12.46
010YR008HR	smf-1a	168.0034	12.46
010YR008HR	smf-1a	168.2534	12.46
010YR008HR	smf-1a	168.5034	12.46
010YR008HR	smf-1a	168.7534	12.46
010YR008HR	smf-1a	169.0034	12.46
010YR008HR	smf-1a	169.2534	12.46
010YR008HR	smf-1a	169.5034	12.46
010YR008HR	smf-1a	169.7534	12.46
010YR008HR	smf-1a	170.0034	12.46
010YR008HR	smf-1a	170.2534	12.46
010YR008HR	smf-1a	170.5034	12.46
010YR008HR	smf-1a	170.7534	12.46
010YR008HR	smf-1a	171.0034	12.46
010YR008HR	smf-1a	171.2534	12.46
010YR008HR	smf-1a	171.5034	12.46
010YR008HR	smf-1a	171.7534	12.46
010YR008HR	smf-1a	172.0034	12.45
010YR008HR	smf-1a	172.2534	12.45
010YR008HR	smf-1a	172.5034	12.45
010YR008HR	smf-1a	172.7534	12.45
010YR008HR	smf-1a	173.0034	12.45
010YR008HR	smf-1a	173.2534	12.45
010YR008HR	smf-1a	173.5034	12.45
010YR008HR	smf-1a	173.7534	12.45
010YR008HR	smf-1a	174.0034	12.45
010YR008HR	smf-1a	174.2534	12.45
010YR008HR	smf-1a	174.5034	12.45
010YR008HR	smf-1a	174.7534	12.45
010YR008HR	smf-1a	175.0034	12.45
010YR008HR	smf-1a	175.2534	12.45
010YR008HR	smf-1a	175.5034	12.45
010YR008HR	smf-1a	175.7534	12.45
010YR008HR	smf-1a	176.0034	12.45
010YR008HR	smf-1a	176.2534	12.45
010YR008HR	smf-1a	176.5034	12.45

10yr-8hr SMF-1a

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR008HR	smf-1b	110.0034	13.01
010YR008HR	smf-1b	110.2534	13.01
010YR008HR	smf-1b	110.5034	13.01
010YR008HR	smf-1b	110.7534	13.01
010YR008HR	smf-1b	111.0034	13.01
010YR008HR	smf-1b	111.2534	13.01
010YR008HR	smf-1b	111.5034	13.01
010YR008HR	smf-1b	111.7534	13.00
010YR008HR	smf-1b	112.0034	13.00
010YR008HR	smf-1b	112.2534	13.00
010YR008HR	smf-1b	112.5034	13.00
010YR008HR	smf-1b	112.7534	13.00
010YR008HR	smf-1b	113.0034	13.00
010YR008HR	smf-1b	113.2534	13.00
010YR008HR	smf-1b	113.5034	13.00
010YR008HR	smf-1b	113.7534	13.00
010YR008HR	smf-1b	114.0034	13.00
010YR008HR	smf-1b	114.2534	13.00
010YR008HR	smf-1b	114.5034	13.00
010YR008HR	smf-1b	114.7534	13.00
010YR008HR	smf-1b	115.0034	13.00
010YR008HR	smf-1b	115.2534	13.00
010YR008HR	smf-1b	115.5034	13.00
010YR008HR	smf-1b	115.7534	13.00
010YR008HR	smf-1b	116.0034	13.00
010YR008HR	smf-1b	116.2534	13.00
010YR008HR	smf-1b	116.5034	13.00
010YR008HR	smf-1b	116.7534	13.00
010YR008HR	smf-1b	117.0034	13.00
010YR008HR	smf-1b	117.2534	13.00
010YR008HR	smf-1b	117.5034	13.00
010YR008HR	smf-1b	117.7534	13.00
010YR008HR	smf-1b	118.0034	13.00
010YR008HR	smf-1b	118.2534	13.00
010YR008HR	smf-1b	118.5034	13.00
010YR008HR	smf-1b	118.7534	13.00
010YR008HR	smf-1b	119.0034	13.00
010YR008HR	smf-1b	119.2534	13.00
010YR008HR	smf-1b	119.5034	13.00
010YR008HR	smf-1b	119.7534	13.00
010YR008HR	smf-1b	120.0034	13.00
010YR008HR	smf-1b	120.2534	13.00

10yr-8hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR008HR	smf-2a	179.7534	12.11
010YR008HR	smf-2a	180.0034	12.11
010YR008HR	smf-2a	180.2534	12.11
010YR008HR	smf-2a	180.5034	12.11
010YR008HR	smf-2a	180.7534	12.10
010YR008HR	smf-2a	181.0034	12.10
010YR008HR	smf-2a	181.2534	12.10
010YR008HR	smf-2a	181.5034	12.10
010YR008HR	smf-2a	181.7534	12.10
010YR008HR	smf-2a	182.0034	12.10
010YR008HR	smf-2a	182.2534	12.10
010YR008HR	smf-2a	182.5034	12.10
010YR008HR	smf-2a	182.7534	12.10
010YR008HR	smf-2a	183.0034	12.10
010YR008HR	smf-2a	183.2534	12.10
010YR008HR	smf-2a	183.5034	12.10
010YR008HR	smf-2a	183.7534	12.10
010YR008HR	smf-2a	184.0034	12.10
010YR008HR	smf-2a	184.2534	12.10
010YR008HR	smf-2a	184.5034	12.10
010YR008HR	smf-2a	184.7534	12.10
010YR008HR	smf-2a	185.0034	12.10
010YR008HR	smf-2a	185.2534	12.10
010YR008HR	smf-2a	185.5034	12.10
010YR008HR	smf-2a	185.7534	12.10
010YR008HR	smf-2a	186.0034	12.10
010YR008HR	smf-2a	186.2534	12.10
010YR008HR	smf-2a	186.5034	12.10
010YR008HR	smf-2a	186.7534	12.10
010YR008HR	smf-2a	187.0034	12.10
010YR008HR	smf-2a	187.2534	12.10
010YR008HR	smf-2a	187.5034	12.10
010YR008HR	smf-2a	187.7534	12.10
010YR008HR	smf-2a	188.0034	12.10
010YR008HR	smf-2a	188.2534	12.10
010YR008HR	smf-2a	188.5034	12.10
010YR008HR	smf-2a	188.7534	12.10
010YR008HR	smf-2a	189.0034	12.10
010YR008HR	smf-2a	189.2534	12.10
010YR008HR	smf-2a	189.5034	12.10
010YR008HR	smf-2a	189.7534	12.10
010YR008HR	smf-2a	190.0034	12.10

10yr-8hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR008HR	smf-2b	134.0034	11.42
010YR008HR	smf-2b	134.2534	11.42
010YR008HR	smf-2b	134.5034	11.42
010YR008HR	smf-2b	134.7534	11.42
010YR008HR	smf-2b	135.0034	11.42
010YR008HR	smf-2b	135.2534	11.42
010YR008HR	smf-2b	135.5034	11.42
010YR008HR	smf-2b	135.7534	11.41
010YR008HR	smf-2b	136.0034	11.41
010YR008HR	smf-2b	136.2534	11.41
010YR008HR	smf-2b	136.5034	11.41
010YR008HR	smf-2b	136.7534	11.41
010YR008HR	smf-2b	137.0034	11.41
010YR008HR	smf-2b	137.2534	11.41
010YR008HR	smf-2b	137.5034	11.41
010YR008HR	smf-2b	137.7534	11.41
010YR008HR	smf-2b	138.0034	11.41
010YR008HR	smf-2b	138.2534	11.41
010YR008HR	smf-2b	138.5034	11.41
010YR008HR	smf-2b	138.7534	11.41
010YR008HR	smf-2b	139.0034	11.40
010YR008HR	smf-2b	139.2534	11.40
010YR008HR	smf-2b	139.5034	11.40
010YR008HR	smf-2b	139.7534	11.40
010YR008HR	smf-2b	140.0034	11.40
010YR008HR	smf-2b	140.2534	11.40
010YR008HR	smf-2b	140.5034	11.40
010YR008HR	smf-2b	140.7534	11.40
010YR008HR	smf-2b	141.0034	11.40
010YR008HR	smf-2b	141.2534	11.40
010YR008HR	smf-2b	141.5034	11.40
010YR008HR	smf-2b	141.7534	11.40
010YR008HR	smf-2b	142.0034	11.40
010YR008HR	smf-2b	142.2534	11.40
010YR008HR	smf-2b	142.5034	11.40
010YR008HR	smf-2b	142.7534	11.40
010YR008HR	smf-2b	143.0034	11.40
010YR008HR	smf-2b	143.2534	11.40
010YR008HR	smf-2b	143.5034	11.40
010YR008HR	smf-2b	143.7534	11.40
010YR008HR	smf-2b	144.0034	11.40
010YR008HR	smf-2b	144.2534	11.40

10yr-8hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR008HR	smf-2c	161.7534	11.87
010YR008HR	smf-2c	162.0034	11.87
010YR008HR	smf-2c	162.2534	11.87
010YR008HR	smf-2c	162.5034	11.87
010YR008HR	smf-2c	162.7534	11.87
010YR008HR	smf-2c	163.0034	11.87
010YR008HR	smf-2c	163.2534	11.87
010YR008HR	smf-2c	163.5034	11.87
010YR008HR	smf-2c	163.7534	11.87
010YR008HR	smf-2c	164.0034	11.87
010YR008HR	smf-2c	164.2534	11.87
010YR008HR	smf-2c	164.5034	11.87
010YR008HR	smf-2c	164.7534	11.87
010YR008HR	smf-2c	165.0034	11.87
010YR008HR	smf-2c	165.2534	11.87
010YR008HR	smf-2c	165.5034	11.87
010YR008HR	smf-2c	165.7534	11.87
010YR008HR	smf-2c	166.0034	11.86
010YR008HR	smf-2c	166.2534	11.86
010YR008HR	smf-2c	166.5034	11.86
010YR008HR	smf-2c	166.7534	11.86
010YR008HR	smf-2c	167.0034	11.86
010YR008HR	smf-2c	167.2534	11.86
010YR008HR	smf-2c	167.5034	11.86
010YR008HR	smf-2c	167.7534	11.86
010YR008HR	smf-2c	168.0034	11.86
010YR008HR	smf-2c	168.2534	11.86
010YR008HR	smf-2c	168.5034	11.86
010YR008HR	smf-2c	168.7534	11.86
010YR008HR	smf-2c	169.0034	11.86
010YR008HR	smf-2c	169.2534	11.86
010YR008HR	smf-2c	169.5034	11.86
010YR008HR	smf-2c	169.7534	11.86
010YR008HR	smf-2c	170.0034	11.85
010YR008HR	smf-2c	170.2534	11.85
010YR008HR	smf-2c	170.5034	11.85
010YR008HR	smf-2c	170.7534	11.85
010YR008HR	smf-2c	171.0034	11.85
010YR008HR	smf-2c	171.2534	11.85
010YR008HR	smf-2c	171.5034	11.85
010YR008HR	smf-2c	171.7534	11.85
010YR008HR	smf-2c	172.0034	11.85

10yr-8hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR008HR	smf-3a	158.0034	11.91
010YR008HR	smf-3a	158.2534	11.91
010YR008HR	smf-3a	158.5034	11.91
010YR008HR	smf-3a	158.7534	11.91
010YR008HR	smf-3a	159.0034	11.91
010YR008HR	smf-3a	159.2534	11.91
010YR008HR	smf-3a	159.5034	11.91
010YR008HR	smf-3a	159.7534	11.91
010YR008HR	smf-3a	160.0034	11.90
010YR008HR	smf-3a	160.2534	11.90
010YR008HR	smf-3a	160.5034	11.90
010YR008HR	smf-3a	160.7534	11.90
010YR008HR	smf-3a	161.0034	11.90
010YR008HR	smf-3a	161.2534	11.90
010YR008HR	smf-3a	161.5034	11.90
010YR008HR	smf-3a	161.7534	11.90
010YR008HR	smf-3a	162.0034	11.90
010YR008HR	smf-3a	162.2534	11.90
010YR008HR	smf-3a	162.5034	11.90
010YR008HR	smf-3a	162.7534	11.90
010YR008HR	smf-3a	163.0034	11.90
010YR008HR	smf-3a	163.2534	11.90
010YR008HR	smf-3a	163.5034	11.90
010YR008HR	smf-3a	163.7534	11.90
010YR008HR	smf-3a	164.0034	11.90
010YR008HR	smf-3a	164.2534	11.90
010YR008HR	smf-3a	164.5034	11.90
010YR008HR	smf-3a	164.7534	11.90
010YR008HR	smf-3a	165.0034	11.90
010YR008HR	smf-3a	165.2534	11.90
010YR008HR	smf-3a	165.5034	11.90
010YR008HR	smf-3a	165.7534	11.90
010YR008HR	smf-3a	166.0034	11.90
010YR008HR	smf-3a	166.2534	11.90
010YR008HR	smf-3a	166.5034	11.90
010YR008HR	smf-3a	166.7534	11.90
010YR008HR	smf-3a	167.0034	11.90
010YR008HR	smf-3a	167.2534	11.90
010YR008HR	smf-3a	167.5034	11.90
010YR008HR	smf-3a	167.7534	11.90
010YR008HR	smf-3a	168.0034	11.90
010YR008HR	smf-3a	168.2534	11.90

10yr-8hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR008HR	smf-3b	185.7534	11.26
010YR008HR	smf-3b	186.0034	11.26
010YR008HR	smf-3b	186.2534	11.26
010YR008HR	smf-3b	186.5034	11.26
010YR008HR	smf-3b	186.7534	11.26
010YR008HR	smf-3b	187.0034	11.26
010YR008HR	smf-3b	187.2534	11.26
010YR008HR	smf-3b	187.5034	11.26
010YR008HR	smf-3b	187.7534	11.26
010YR008HR	smf-3b	188.0034	11.26
010YR008HR	smf-3b	188.2534	11.26
010YR008HR	smf-3b	188.5034	11.26
010YR008HR	smf-3b	188.7534	11.26
010YR008HR	smf-3b	189.0034	11.25
010YR008HR	smf-3b	189.2534	11.25
010YR008HR	smf-3b	189.5034	11.25
010YR008HR	smf-3b	189.7534	11.25
010YR008HR	smf-3b	190.0034	11.25
010YR008HR	smf-3b	190.2534	11.25
010YR008HR	smf-3b	190.5034	11.25
010YR008HR	smf-3b	190.7534	11.25
010YR008HR	smf-3b	191.0034	11.25
010YR008HR	smf-3b	191.2534	11.25
010YR008HR	smf-3b	191.5034	11.25
010YR008HR	smf-3b	191.7534	11.25
010YR008HR	smf-3b	192.0034	11.25
010YR008HR	smf-3b	192.2534	11.25
010YR008HR	smf-3b	192.5034	11.25
010YR008HR	smf-3b	192.7534	11.25
010YR008HR	smf-3b	193.0034	11.25
010YR008HR	smf-3b	193.2534	11.25
010YR008HR	smf-3b	193.5034	11.25
010YR008HR	smf-3b	193.7534	11.25
010YR008HR	smf-3b	194.0034	11.25
010YR008HR	smf-3b	194.2534	11.25
010YR008HR	smf-3b	194.5034	11.25
010YR008HR	smf-3b	194.7534	11.25
010YR008HR	smf-3b	195.0034	11.25
010YR008HR	smf-3b	195.2534	11.25
010YR008HR	smf-3b	195.5034	11.25
010YR008HR	smf-3b	195.7534	11.25
010YR008HR	smf-3b	196.0034	11.25

10yr-8hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR024HR	smf-1a	308.0082	12.46
010YR024HR	smf-1a	308.2582	12.46
010YR024HR	smf-1a	308.5082	12.46
010YR024HR	smf-1a	308.7582	12.46
010YR024HR	smf-1a	309.0082	12.46
010YR024HR	smf-1a	309.2582	12.46
010YR024HR	smf-1a	309.5082	12.46
010YR024HR	smf-1a	309.7582	12.46
010YR024HR	smf-1a	310.0082	12.46
010YR024HR	smf-1a	310.2582	12.46
010YR024HR	smf-1a	310.5082	12.46
010YR024HR	smf-1a	310.7582	12.45
010YR024HR	smf-1a	311.0082	12.45
010YR024HR	smf-1a	311.2582	12.45
010YR024HR	smf-1a	311.5082	12.45
010YR024HR	smf-1a	311.7582	12.45
010YR024HR	smf-1a	312.0082	12.45
010YR024HR	smf-1a	312.2582	12.45
010YR024HR	smf-1a	312.5082	12.45
010YR024HR	smf-1a	312.7582	12.45
010YR024HR	smf-1a	313.0082	12.45
010YR024HR	smf-1a	313.2582	12.45
010YR024HR	smf-1a	313.5082	12.45
010YR024HR	smf-1a	313.7582	12.45
010YR024HR	smf-1a	314.0082	12.45
010YR024HR	smf-1a	314.2582	12.45
010YR024HR	smf-1a	314.5082	12.45
010YR024HR	smf-1a	314.7582	12.45
010YR024HR	smf-1a	315.0082	12.45
010YR024HR	smf-1a	315.2582	12.45
010YR024HR	smf-1a	315.5082	12.45
010YR024HR	smf-1a	315.7582	12.45
010YR024HR	smf-1a	316.0082	12.45
010YR024HR	smf-1a	316.2582	12.45
010YR024HR	smf-1a	316.5082	12.45
010YR024HR	smf-1a	316.7582	12.45
010YR024HR	smf-1a	317.0082	12.45
010YR024HR	smf-1a	317.2582	12.45
010YR024HR	smf-1a	317.5082	12.45
010YR024HR	smf-1a	317.7582	12.45
010YR024HR	smf-1a	318.0082	12.45
010YR024HR	smf-1a	318.2582	12.45

10yr-24hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR024HR	smf-1b	193.7582	13.01
010YR024HR	smf-1b	194.0082	13.01
010YR024HR	smf-1b	194.2582	13.01
010YR024HR	smf-1b	194.5082	13.01
010YR024HR	smf-1b	194.7582	13.01
010YR024HR	smf-1b	195.0082	13.01
010YR024HR	smf-1b	195.2582	13.01
010YR024HR	smf-1b	195.5082	13.01
010YR024HR	smf-1b	195.7582	13.01
010YR024HR	smf-1b	196.0082	13.00
010YR024HR	smf-1b	196.2582	13.00
010YR024HR	smf-1b	196.5082	13.00
010YR024HR	smf-1b	196.7582	13.00
010YR024HR	smf-1b	197.0082	13.00
010YR024HR	smf-1b	197.2582	13.00
010YR024HR	smf-1b	197.5082	13.00
010YR024HR	smf-1b	197.7582	13.00
010YR024HR	smf-1b	198.0082	13.00
010YR024HR	smf-1b	198.2582	13.00
010YR024HR	smf-1b	198.5082	13.00
010YR024HR	smf-1b	198.7582	13.00
010YR024HR	smf-1b	199.0082	13.00
010YR024HR	smf-1b	199.2582	13.00
010YR024HR	smf-1b	199.5082	13.00
010YR024HR	smf-1b	199.7582	13.00
010YR024HR	smf-1b	200.0082	13.00
010YR024HR	smf-1b	200.2582	13.00
010YR024HR	smf-1b	200.5082	13.00
010YR024HR	smf-1b	200.7582	13.00
010YR024HR	smf-1b	201.0082	13.00
010YR024HR	smf-1b	201.2582	13.00
010YR024HR	smf-1b	201.5082	13.00
010YR024HR	smf-1b	201.7582	13.00
010YR024HR	smf-1b	202.0082	13.00
010YR024HR	smf-1b	202.2582	13.00
010YR024HR	smf-1b	202.5082	13.00
010YR024HR	smf-1b	202.7582	13.00
010YR024HR	smf-1b	203.0082	13.00
010YR024HR	smf-1b	203.2582	13.00
010YR024HR	smf-1b	203.5082	13.00
010YR024HR	smf-1b	203.7582	13.00
010YR024HR	smf-1b	204.0082	13.00

10yr-24hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR024HR	smf-2a	268.5082	12.11
010YR024HR	smf-2a	268.7582	12.11
010YR024HR	smf-2a	269.0082	12.11
010YR024HR	smf-2a	269.2582	12.10
010YR024HR	smf-2a	269.5082	12.10
010YR024HR	smf-2a	269.7582	12.10
010YR024HR	smf-2a	270.0082	12.10
010YR024HR	smf-2a	270.2582	12.10
010YR024HR	smf-2a	270.5082	12.10
010YR024HR	smf-2a	270.7582	12.10
010YR024HR	smf-2a	271.0082	12.10
010YR024HR	smf-2a	271.2582	12.10
010YR024HR	smf-2a	271.5082	12.10
010YR024HR	smf-2a	271.7582	12.10
010YR024HR	smf-2a	272.0082	12.10
010YR024HR	smf-2a	272.2582	12.10
010YR024HR	smf-2a	272.5082	12.10
010YR024HR	smf-2a	272.7582	12.10
010YR024HR	smf-2a	273.0082	12.10
010YR024HR	smf-2a	273.2582	12.10
010YR024HR	smf-2a	273.5082	12.10
010YR024HR	smf-2a	273.7582	12.10
010YR024HR	smf-2a	274.0082	12.10
010YR024HR	smf-2a	274.2582	12.10
010YR024HR	smf-2a	274.5082	12.10
010YR024HR	smf-2a	274.7582	12.10
010YR024HR	smf-2a	275.0082	12.10
010YR024HR	smf-2a	275.2582	12.10
010YR024HR	smf-2a	275.5082	12.10
010YR024HR	smf-2a	275.7582	12.10
010YR024HR	smf-2a	276.0082	12.10
010YR024HR	smf-2a	276.2582	12.10
010YR024HR	smf-2a	276.5082	12.10
010YR024HR	smf-2a	276.7582	12.10
010YR024HR	smf-2a	277.0082	12.10
010YR024HR	smf-2a	277.2582	12.10
010YR024HR	smf-2a	277.5082	12.10
010YR024HR	smf-2a	277.7582	12.10
010YR024HR	smf-2a	278.0082	12.10
010YR024HR	smf-2a	278.2582	12.10
010YR024HR	smf-2a	278.5082	12.10
010YR024HR	smf-2a	278.7582	12.10

10yr-24hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR024HR	smf-2b	217.2582	11.41
010YR024HR	smf-2b	217.5082	11.41
010YR024HR	smf-2b	217.7582	11.41
010YR024HR	smf-2b	218.0082	11.41
010YR024HR	smf-2b	218.2582	11.41
010YR024HR	smf-2b	218.5082	11.41
010YR024HR	smf-2b	218.7582	11.41
010YR024HR	smf-2b	219.0082	11.41
010YR024HR	smf-2b	219.2582	11.41
010YR024HR	smf-2b	219.5082	11.41
010YR024HR	smf-2b	219.7582	11.41
010YR024HR	smf-2b	220.0082	11.41
010YR024HR	smf-2b	220.2582	11.41
010YR024HR	smf-2b	220.5082	11.41
010YR024HR	smf-2b	220.7582	11.41
010YR024HR	smf-2b	221.0082	11.41
010YR024HR	smf-2b	221.2582	11.40
010YR024HR	smf-2b	221.5082	11.40
010YR024HR	smf-2b	221.7582	11.40
010YR024HR	smf-2b	222.0082	11.40
010YR024HR	smf-2b	222.2582	11.40
010YR024HR	smf-2b	222.5082	11.40
010YR024HR	smf-2b	222.7582	11.40
010YR024HR	smf-2b	223.0082	11.40
010YR024HR	smf-2b	223.2582	11.40
010YR024HR	smf-2b	223.5082	11.40
010YR024HR	smf-2b	223.7582	11.40
010YR024HR	smf-2b	224.0082	11.40
010YR024HR	smf-2b	224.2582	11.40
010YR024HR	smf-2b	224.5082	11.40
010YR024HR	smf-2b	224.7582	11.40
010YR024HR	smf-2b	225.0082	11.40
010YR024HR	smf-2b	225.2582	11.40
010YR024HR	smf-2b	225.5082	11.40
010YR024HR	smf-2b	225.7582	11.40
010YR024HR	smf-2b	226.0082	11.40
010YR024HR	smf-2b	226.2582	11.40
010YR024HR	smf-2b	226.5082	11.40
010YR024HR	smf-2b	226.7582	11.40
010YR024HR	smf-2b	227.0082	11.40
010YR024HR	smf-2b	227.2582	11.40
010YR024HR	smf-2b	227.5082	11.40

10yr-24hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR024HR	smf-2c	250.0082	11.87
010YR024HR	smf-2c	250.2582	11.87
010YR024HR	smf-2c	250.5082	11.87
010YR024HR	smf-2c	250.7582	11.87
010YR024HR	smf-2c	251.0082	11.87
010YR024HR	smf-2c	251.2582	11.87
010YR024HR	smf-2c	251.5082	11.87
010YR024HR	smf-2c	251.7582	11.87
010YR024HR	smf-2c	252.0082	11.87
010YR024HR	smf-2c	252.2582	11.87
010YR024HR	smf-2c	252.5082	11.87
010YR024HR	smf-2c	252.7582	11.86
010YR024HR	smf-2c	253.0082	11.86
010YR024HR	smf-2c	253.2582	11.86
010YR024HR	smf-2c	253.5082	11.86
010YR024HR	smf-2c	253.7582	11.86
010YR024HR	smf-2c	254.0082	11.86
010YR024HR	smf-2c	254.2582	11.86
010YR024HR	smf-2c	254.5082	11.86
010YR024HR	smf-2c	254.7582	11.86
010YR024HR	smf-2c	255.0082	11.86
010YR024HR	smf-2c	255.2582	11.86
010YR024HR	smf-2c	255.5082	11.86
010YR024HR	smf-2c	255.7582	11.86
010YR024HR	smf-2c	256.0082	11.86
010YR024HR	smf-2c	256.2582	11.86
010YR024HR	smf-2c	256.5082	11.86
010YR024HR	smf-2c	256.7582	11.86
010YR024HR	smf-2c	257.0082	11.86
010YR024HR	smf-2c	257.2582	11.86
010YR024HR	smf-2c	257.5082	11.86
010YR024HR	smf-2c	257.7582	11.86
010YR024HR	smf-2c	258.0082	11.86
010YR024HR	smf-2c	258.2582	11.86
010YR024HR	smf-2c	258.5082	11.86
010YR024HR	smf-2c	258.7582	11.86
010YR024HR	smf-2c	259.0082	11.85
010YR024HR	smf-2c	259.2582	11.85
010YR024HR	smf-2c	259.5082	11.85
010YR024HR	smf-2c	259.7582	11.85
010YR024HR	smf-2c	260.0082	11.85
010YR024HR	smf-2c	260.2582	11.85

10yr-24hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR024HR	smf-3a	261.7582	11.91
010YR024HR	smf-3a	262.0082	11.91
010YR024HR	smf-3a	262.2582	11.91
010YR024HR	smf-3a	262.5082	11.91
010YR024HR	smf-3a	262.7582	11.91
010YR024HR	smf-3a	263.0082	11.91
010YR024HR	smf-3a	263.2582	11.91
010YR024HR	smf-3a	263.5082	11.91
010YR024HR	smf-3a	263.7582	11.90
010YR024HR	smf-3a	264.0082	11.90
010YR024HR	smf-3a	264.2582	11.90
010YR024HR	smf-3a	264.5082	11.90
010YR024HR	smf-3a	264.7582	11.90
010YR024HR	smf-3a	265.0082	11.90
010YR024HR	smf-3a	265.2582	11.90
010YR024HR	smf-3a	265.5082	11.90
010YR024HR	smf-3a	265.7582	11.90
010YR024HR	smf-3a	266.0082	11.90
010YR024HR	smf-3a	266.2582	11.90
010YR024HR	smf-3a	266.5082	11.90
010YR024HR	smf-3a	266.7582	11.90
010YR024HR	smf-3a	267.0082	11.90
010YR024HR	smf-3a	267.2582	11.90
010YR024HR	smf-3a	267.5082	11.90
010YR024HR	smf-3a	267.7582	11.90
010YR024HR	smf-3a	268.0082	11.90
010YR024HR	smf-3a	268.2582	11.90
010YR024HR	smf-3a	268.5082	11.90
010YR024HR	smf-3a	268.7582	11.90
010YR024HR	smf-3a	269.0082	11.90
010YR024HR	smf-3a	269.2582	11.90
010YR024HR	smf-3a	269.5082	11.90
010YR024HR	smf-3a	269.7582	11.90
010YR024HR	smf-3a	270.0082	11.90
010YR024HR	smf-3a	270.2582	11.90
010YR024HR	smf-3a	270.5082	11.90
010YR024HR	smf-3a	270.7582	11.90
010YR024HR	smf-3a	271.0082	11.90
010YR024HR	smf-3a	271.2582	11.90
010YR024HR	smf-3a	271.5082	11.90
010YR024HR	smf-3a	271.7582	11.90
010YR024HR	smf-3a	272.0082	11.90

10yr-24hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR024HR	smf-3b	294.5082	11.26
010YR024HR	smf-3b	294.7582	11.26
010YR024HR	smf-3b	295.0082	11.26
010YR024HR	smf-3b	295.2582	11.26
010YR024HR	smf-3b	295.5082	11.26
010YR024HR	smf-3b	295.7582	11.26
010YR024HR	smf-3b	296.0082	11.26
010YR024HR	smf-3b	296.2582	11.26
010YR024HR	smf-3b	296.5082	11.26
010YR024HR	smf-3b	296.7582	11.26
010YR024HR	smf-3b	297.0082	11.26
010YR024HR	smf-3b	297.2582	11.26
010YR024HR	smf-3b	297.5082	11.26
010YR024HR	smf-3b	297.7582	11.26
010YR024HR	smf-3b	298.0082	11.26
010YR024HR	smf-3b	298.2582	11.26
010YR024HR	smf-3b	298.5082	11.26
010YR024HR	smf-3b	298.7582	11.26
010YR024HR	smf-3b	299.0082	11.25
010YR024HR	smf-3b	299.2582	11.25
010YR024HR	smf-3b	299.5082	11.25
010YR024HR	smf-3b	299.7582	11.25
010YR024HR	smf-3b	300.0082	11.25
010YR024HR	smf-3b	300.2582	11.25
010YR024HR	smf-3b	300.5082	11.25
010YR024HR	smf-3b	300.7582	11.25
010YR024HR	smf-3b	301.0082	11.25
010YR024HR	smf-3b	301.2582	11.25
010YR024HR	smf-3b	301.5082	11.25
010YR024HR	smf-3b	301.7582	11.25
010YR024HR	smf-3b	302.0082	11.25
010YR024HR	smf-3b	302.2582	11.25
010YR024HR	smf-3b	302.5082	11.25
010YR024HR	smf-3b	302.7582	11.25
010YR024HR	smf-3b	303.0082	11.25
010YR024HR	smf-3b	303.2582	11.25
010YR024HR	smf-3b	303.5082	11.25
010YR024HR	smf-3b	303.7582	11.25
010YR024HR	smf-3b	304.0082	11.25
010YR024HR	smf-3b	304.2582	11.25
010YR024HR	smf-3b	304.5082	11.25
010YR024HR	smf-3b	304.7582	11.25

10yr-24hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR072HR	smf-1a	463.7552	12.45
010YR072HR	smf-1a	464.0052	12.45
010YR072HR	smf-1a	464.2552	12.45
010YR072HR	smf-1a	464.5052	12.45
010YR072HR	smf-1a	464.7552	12.45
010YR072HR	smf-1a	465.0052	12.45
010YR072HR	smf-1a	465.2552	12.45
010YR072HR	smf-1a	465.5052	12.45
010YR072HR	smf-1a	465.7552	12.45
010YR072HR	smf-1a	466.0052	12.45
010YR072HR	smf-1a	466.2552	12.45
010YR072HR	smf-1a	466.5052	12.45
010YR072HR	smf-1a	466.7552	12.45
010YR072HR	smf-1a	467.0052	12.45
010YR072HR	smf-1a	467.2552	12.45
010YR072HR	smf-1a	467.5052	12.45
010YR072HR	smf-1a	467.7552	12.45
010YR072HR	smf-1a	468.0052	12.45
010YR072HR	smf-1a	468.2552	12.45
010YR072HR	smf-1a	468.5052	12.45
010YR072HR	smf-1a	468.7552	12.45
010YR072HR	smf-1a	469.0052	12.45
010YR072HR	smf-1a	469.2552	12.45
010YR072HR	smf-1a	469.5052	12.45
010YR072HR	smf-1a	469.7552	12.45
010YR072HR	smf-1a	470.0052	12.45
010YR072HR	smf-1a	470.2552	12.45
010YR072HR	smf-1a	470.5052	12.45
010YR072HR	smf-1a	470.7552	12.45
010YR072HR	smf-1a	471.0052	12.45
010YR072HR	smf-1a	471.2552	12.45
010YR072HR	smf-1a	471.5052	12.45
010YR072HR	smf-1a	471.7552	12.45
010YR072HR	smf-1a	472.0052	12.45
010YR072HR	smf-1a	472.2552	12.45
010YR072HR	smf-1a	472.5052	12.45
010YR072HR	smf-1a	472.7552	12.45
010YR072HR	smf-1a	473.0052	12.45
010YR072HR	smf-1a	473.2552	12.45
010YR072HR	smf-1a	473.5052	12.45
010YR072HR	smf-1a	473.7552	12.45
010YR072HR	smf-1a	474.0052	12.45

10yr-72hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR072HR	smf-1b	417.0052	13.00
010YR072HR	smf-1b	417.2552	13.00
010YR072HR	smf-1b	417.5052	13.00
010YR072HR	smf-1b	417.7552	13.00
010YR072HR	smf-1b	418.0052	13.00
010YR072HR	smf-1b	418.2552	13.00
010YR072HR	smf-1b	418.5052	13.00
010YR072HR	smf-1b	418.7552	13.00
010YR072HR	smf-1b	419.0052	13.00
010YR072HR	smf-1b	419.2552	13.00
010YR072HR	smf-1b	419.5052	13.00
010YR072HR	smf-1b	419.7552	13.00
010YR072HR	smf-1b	420.0052	13.00
010YR072HR	smf-1b	420.2552	13.00
010YR072HR	smf-1b	420.5052	13.00
010YR072HR	smf-1b	420.7552	13.00
010YR072HR	smf-1b	421.0052	13.00
010YR072HR	smf-1b	421.2552	13.00
010YR072HR	smf-1b	421.5052	13.00
010YR072HR	smf-1b	421.7552	13.00
010YR072HR	smf-1b	422.0052	13.00
010YR072HR	smf-1b	422.2552	13.00
010YR072HR	smf-1b	422.5052	13.00
010YR072HR	smf-1b	422.7552	13.00
010YR072HR	smf-1b	423.0052	13.00
010YR072HR	smf-1b	423.2552	13.00
010YR072HR	smf-1b	423.5052	13.00
010YR072HR	smf-1b	423.7552	13.00
010YR072HR	smf-1b	424.0052	13.00
010YR072HR	smf-1b	424.2552	13.00
010YR072HR	smf-1b	424.5052	13.00
010YR072HR	smf-1b	424.7552	13.00
010YR072HR	smf-1b	425.0052	13.00
010YR072HR	smf-1b	425.2552	13.00
010YR072HR	smf-1b	425.5052	13.00
010YR072HR	smf-1b	425.7552	13.00
010YR072HR	smf-1b	426.0052	13.00
010YR072HR	smf-1b	426.2552	13.00
010YR072HR	smf-1b	426.5052	13.00
010YR072HR	smf-1b	426.7552	13.00
010YR072HR	smf-1b	427.0052	13.00
010YR072HR	smf-1b	427.2552	13.00

10yr-72hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR072HR	smf-2a	464.7552	12.11
010YR072HR	smf-2a	465.0052	12.11
010YR072HR	smf-2a	465.2552	12.11
010YR072HR	smf-2a	465.5052	12.11
010YR072HR	smf-2a	465.7552	12.11
010YR072HR	smf-2a	466.0052	12.11
010YR072HR	smf-2a	466.2552	12.11
010YR072HR	smf-2a	466.5052	12.11
010YR072HR	smf-2a	466.7552	12.11
010YR072HR	smf-2a	467.0052	12.11
010YR072HR	smf-2a	467.2552	12.11
010YR072HR	smf-2a	467.5052	12.11
010YR072HR	smf-2a	467.7552	12.11
010YR072HR	smf-2a	468.0052	12.11
010YR072HR	smf-2a	468.2552	12.11
010YR072HR	smf-2a	468.5052	12.11
010YR072HR	smf-2a	468.7552	12.11
010YR072HR	smf-2a	469.0052	12.11
010YR072HR	smf-2a	469.2552	12.11
010YR072HR	smf-2a	469.5052	12.11
010YR072HR	smf-2a	469.7552	12.11
010YR072HR	smf-2a	470.0052	12.11
010YR072HR	smf-2a	470.2552	12.11
010YR072HR	smf-2a	470.5052	12.11
010YR072HR	smf-2a	470.7552	12.11
010YR072HR	smf-2a	471.0052	12.11
010YR072HR	smf-2a	471.2552	12.11
010YR072HR	smf-2a	471.5052	12.11
010YR072HR	smf-2a	471.7552	12.11
010YR072HR	smf-2a	472.0052	12.11
010YR072HR	smf-2a	472.2552	12.11
010YR072HR	smf-2a	472.5052	12.11
010YR072HR	smf-2a	472.7552	12.11
010YR072HR	smf-2a	473.0052	12.11
010YR072HR	smf-2a	473.2552	12.11
010YR072HR	smf-2a	473.5052	12.11
010YR072HR	smf-2a	473.7552	12.11
010YR072HR	smf-2a	474.0052	12.11
010YR072HR	smf-2a	474.2552	12.11
010YR072HR	smf-2a	474.5052	12.10
010YR072HR	smf-2a	474.7552	12.10
010YR072HR	smf-2a	475.0052	12.10

10yr-72hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR072HR	smf-2b	386.5052	11.41
010YR072HR	smf-2b	386.7552	11.41
010YR072HR	smf-2b	387.0052	11.41
010YR072HR	smf-2b	387.2552	11.41
010YR072HR	smf-2b	387.5052	11.41
010YR072HR	smf-2b	387.7552	11.41
010YR072HR	smf-2b	388.0052	11.41
010YR072HR	smf-2b	388.2552	11.41
010YR072HR	smf-2b	388.5052	11.41
010YR072HR	smf-2b	388.7552	11.41
010YR072HR	smf-2b	389.0052	11.41
010YR072HR	smf-2b	389.2552	11.41
010YR072HR	smf-2b	389.5052	11.41
010YR072HR	smf-2b	389.7552	11.41
010YR072HR	smf-2b	390.0052	11.41
010YR072HR	smf-2b	390.2552	11.41
010YR072HR	smf-2b	390.5052	11.41
010YR072HR	smf-2b	390.7552	11.41
010YR072HR	smf-2b	391.0052	11.41
010YR072HR	smf-2b	391.2552	11.41
010YR072HR	smf-2b	391.5052	11.41
010YR072HR	smf-2b	391.7552	11.40
010YR072HR	smf-2b	392.0052	11.40
010YR072HR	smf-2b	392.2552	11.40
010YR072HR	smf-2b	392.5052	11.40
010YR072HR	smf-2b	392.7552	11.40
010YR072HR	smf-2b	393.0052	11.40
010YR072HR	smf-2b	393.2552	11.40
010YR072HR	smf-2b	393.5052	11.40
010YR072HR	smf-2b	393.7552	11.40
010YR072HR	smf-2b	394.0052	11.40
010YR072HR	smf-2b	394.2552	11.40
010YR072HR	smf-2b	394.5052	11.40
010YR072HR	smf-2b	394.7552	11.40
010YR072HR	smf-2b	395.0052	11.40
010YR072HR	smf-2b	395.2552	11.40
010YR072HR	smf-2b	395.5052	11.40
010YR072HR	smf-2b	395.7552	11.40
010YR072HR	smf-2b	396.0052	11.40
010YR072HR	smf-2b	396.2552	11.40
010YR072HR	smf-2b	396.5052	11.40
010YR072HR	smf-2b	396.7552	11.40

10yr-72hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR072HR	smf-2c	455.2552	11.86
010YR072HR	smf-2c	455.5052	11.86
010YR072HR	smf-2c	455.7552	11.86
010YR072HR	smf-2c	456.0052	11.86
010YR072HR	smf-2c	456.2552	11.86
010YR072HR	smf-2c	456.5052	11.86
010YR072HR	smf-2c	456.7552	11.86
010YR072HR	smf-2c	457.0052	11.86
010YR072HR	smf-2c	457.2552	11.86
010YR072HR	smf-2c	457.5052	11.86
010YR072HR	smf-2c	457.7552	11.86
010YR072HR	smf-2c	458.0052	11.86
010YR072HR	smf-2c	458.2552	11.86
010YR072HR	smf-2c	458.5052	11.86
010YR072HR	smf-2c	458.7552	11.86
010YR072HR	smf-2c	459.0052	11.85
010YR072HR	smf-2c	459.2552	11.85
010YR072HR	smf-2c	459.5052	11.85
010YR072HR	smf-2c	459.7552	11.85
010YR072HR	smf-2c	460.0052	11.85
010YR072HR	smf-2c	460.2552	11.85
010YR072HR	smf-2c	460.5052	11.85
010YR072HR	smf-2c	460.7552	11.85
010YR072HR	smf-2c	461.0052	11.85
010YR072HR	smf-2c	461.2552	11.85
010YR072HR	smf-2c	461.5052	11.85
010YR072HR	smf-2c	461.7552	11.85
010YR072HR	smf-2c	462.0052	11.85
010YR072HR	smf-2c	462.2552	11.85
010YR072HR	smf-2c	462.5052	11.85
010YR072HR	smf-2c	462.7552	11.85
010YR072HR	smf-2c	463.0052	11.85
010YR072HR	smf-2c	463.2552	11.85
010YR072HR	smf-2c	463.5052	11.85
010YR072HR	smf-2c	463.7552	11.85
010YR072HR	smf-2c	464.0052	11.85
010YR072HR	smf-2c	464.2552	11.85
010YR072HR	smf-2c	464.5052	11.85
010YR072HR	smf-2c	464.7552	11.85
010YR072HR	smf-2c	465.0052	11.85
010YR072HR	smf-2c	465.2552	11.85
010YR072HR	smf-2c	465.5052	11.85

10yr-72hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR072HR	smf-3a	524.0052	11.91
010YR072HR	smf-3a	524.2552	11.91
010YR072HR	smf-3a	524.5052	11.91
010YR072HR	smf-3a	524.7552	11.91
010YR072HR	smf-3a	525.0052	11.91
010YR072HR	smf-3a	525.2552	11.91
010YR072HR	smf-3a	525.5052	11.91
010YR072HR	smf-3a	525.7552	11.91
010YR072HR	smf-3a	526.0052	11.91
010YR072HR	smf-3a	526.2552	11.91
010YR072HR	smf-3a	526.5052	11.91
010YR072HR	smf-3a	526.7552	11.91
010YR072HR	smf-3a	527.0052	11.91
010YR072HR	smf-3a	527.2552	11.91
010YR072HR	smf-3a	527.5052	11.91
010YR072HR	smf-3a	527.7552	11.91
010YR072HR	smf-3a	528.0052	11.91
010YR072HR	smf-3a	528.2552	11.91
010YR072HR	smf-3a	528.5052	11.91
010YR072HR	smf-3a	528.7552	11.91
010YR072HR	smf-3a	529.0052	11.91
010YR072HR	smf-3a	529.2552	11.91
010YR072HR	smf-3a	529.5052	11.90
010YR072HR	smf-3a	529.7552	11.90
010YR072HR	smf-3a	530.0052	11.90
010YR072HR	smf-3a	530.2552	11.90
010YR072HR	smf-3a	530.5052	11.90
010YR072HR	smf-3a	530.7552	11.90
010YR072HR	smf-3a	531.0052	11.90
010YR072HR	smf-3a	531.2552	11.90
010YR072HR	smf-3a	531.5052	11.90
010YR072HR	smf-3a	531.7552	11.90
010YR072HR	smf-3a	532.0052	11.90
010YR072HR	smf-3a	532.2552	11.90
010YR072HR	smf-3a	532.5052	11.90
010YR072HR	smf-3a	532.7552	11.90
010YR072HR	smf-3a	533.0052	11.90
010YR072HR	smf-3a	533.2552	11.90
010YR072HR	smf-3a	533.5052	11.90
010YR072HR	smf-3a	533.7552	11.90
010YR072HR	smf-3a	534.0052	11.90
010YR072HR	smf-3a	534.2552	11.90

10yr-72hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
010YR072HR	smf-3b	550.7552	11.26
010YR072HR	smf-3b	551.0052	11.26
010YR072HR	smf-3b	551.2552	11.26
010YR072HR	smf-3b	551.5052	11.26
010YR072HR	smf-3b	551.7552	11.26
010YR072HR	smf-3b	552.0052	11.26
010YR072HR	smf-3b	552.2552	11.26
010YR072HR	smf-3b	552.5052	11.26
010YR072HR	smf-3b	552.7552	11.26
010YR072HR	smf-3b	553.0052	11.26
010YR072HR	smf-3b	553.2552	11.26
010YR072HR	smf-3b	553.5052	11.26
010YR072HR	smf-3b	553.7552	11.26
010YR072HR	smf-3b	554.0052	11.26
010YR072HR	smf-3b	554.2552	11.26
010YR072HR	smf-3b	554.5052	11.26
010YR072HR	smf-3b	554.7552	11.26
010YR072HR	smf-3b	555.0052	11.26
010YR072HR	smf-3b	555.2552	11.26
010YR072HR	smf-3b	555.5052	11.26
010YR072HR	smf-3b	555.7552	11.26
010YR072HR	smf-3b	556.0052	11.26
010YR072HR	smf-3b	556.2552	11.26
010YR072HR	smf-3b	556.5052	11.26
010YR072HR	smf-3b	556.7552	11.26
010YR072HR	smf-3b	557.0052	11.26
010YR072HR	smf-3b	557.2552	11.26
010YR072HR	smf-3b	557.5052	11.26
010YR072HR	smf-3b	557.7552	11.26
010YR072HR	smf-3b	558.0052	11.26
010YR072HR	smf-3b	558.2552	11.26
010YR072HR	smf-3b	558.5052	11.26
010YR072HR	smf-3b	558.7552	11.25
010YR072HR	smf-3b	559.0052	11.25
010YR072HR	smf-3b	559.2552	11.25
010YR072HR	smf-3b	559.5052	11.25
010YR072HR	smf-3b	559.7552	11.25
010YR072HR	smf-3b	560.0052	11.25
010YR072HR	smf-3b	560.2552	11.25
010YR072HR	smf-3b	560.5052	11.25
010YR072HR	smf-3b	560.7552	11.25
010YR072HR	smf-3b	561.0052	11.25

10yr-72hr SMF-3b

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR001HR	smf-1a	52.5050	12.46
025YR001HR	smf-1a	52.7550	12.45
025YR001HR	smf-1a	53.0050	12.45
025YR001HR	smf-1a	53.2550	12.45
025YR001HR	smf-1a	53.5050	12.45
025YR001HR	smf-1a	53.7550	12.45
025YR001HR	smf-1a	54.0050	12.45
025YR001HR	smf-1a	54.2550	12.45
025YR001HR	smf-1a	54.5050	12.45
025YR001HR	smf-1a	54.7550	12.45
025YR001HR	smf-1a	55.0050	12.45
025YR001HR	smf-1a	55.2550	12.45
025YR001HR	smf-1a	55.5050	12.45
025YR001HR	smf-1a	55.7550	12.45
025YR001HR	smf-1a	56.0050	12.45
025YR001HR	smf-1a	56.2550	12.45
025YR001HR	smf-1a	56.5050	12.45
025YR001HR	smf-1a	56.7550	12.45
025YR001HR	smf-1a	57.0050	12.45
025YR001HR	smf-1a	57.2550	12.45
025YR001HR	smf-1a	57.5050	12.45
025YR001HR	smf-1a	57.7550	12.45
025YR001HR	smf-1a	58.0050	12.45
025YR001HR	smf-1a	58.2550	12.45
025YR001HR	smf-1a	58.5050	12.45
025YR001HR	smf-1a	58.7550	12.45
025YR001HR	smf-1a	59.0050	12.45
025YR001HR	smf-1a	59.2550	12.45
025YR001HR	smf-1a	59.5050	12.45
025YR001HR	smf-1a	59.7550	12.45
025YR001HR	smf-1a	60.0050	12.45
025YR001HR	smf-1a	60.2550	12.45
025YR001HR	smf-1a	60.5050	12.45
025YR001HR	smf-1a	60.7550	12.45
025YR001HR	smf-1a	61.0050	12.45
025YR001HR	smf-1a	61.2550	12.45
025YR001HR	smf-1a	61.5050	12.45
025YR001HR	smf-1a	61.7550	12.45
025YR001HR	smf-1a	62.0050	12.45
025YR001HR	smf-1a	62.2550	12.45
025YR001HR	smf-1a	62.5050	12.45
025YR001HR	smf-1a	62.7550	12.45

25yr-1hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR001HR	smf-1b	45.2550	13.07
025YR001HR	smf-1b	45.5050	13.07
025YR001HR	smf-1b	45.7550	13.06
025YR001HR	smf-1b	46.0050	13.06
025YR001HR	smf-1b	46.2550	13.06
025YR001HR	smf-1b	46.5050	13.06
025YR001HR	smf-1b	46.7550	13.05
025YR001HR	smf-1b	47.0050	13.05
025YR001HR	smf-1b	47.2550	13.05
025YR001HR	smf-1b	47.5050	13.05
025YR001HR	smf-1b	47.7550	13.05
025YR001HR	smf-1b	48.0050	13.04
025YR001HR	smf-1b	48.2550	13.04
025YR001HR	smf-1b	48.5050	13.04
025YR001HR	smf-1b	48.7550	13.04
025YR001HR	smf-1b	49.0050	13.04
025YR001HR	smf-1b	49.2550	13.03
025YR001HR	smf-1b	49.5050	13.03
025YR001HR	smf-1b	49.7550	13.03
025YR001HR	smf-1b	50.0050	13.03
025YR001HR	smf-1b	50.2550	13.03
025YR001HR	smf-1b	50.5050	13.02
025YR001HR	smf-1b	50.7550	13.02
025YR001HR	smf-1b	51.0050	13.02
025YR001HR	smf-1b	51.2550	13.02
025YR001HR	smf-1b	51.5050	13.02
025YR001HR	smf-1b	51.7550	13.02
025YR001HR	smf-1b	52.0050	13.01
025YR001HR	smf-1b	52.2550	13.01
025YR001HR	smf-1b	52.5050	13.01
025YR001HR	smf-1b	52.7550	13.01
025YR001HR	smf-1b	53.0050	13.01
025YR001HR	smf-1b	53.2550	13.00
025YR001HR	smf-1b	53.5050	13.00
025YR001HR	smf-1b	53.7550	13.00
025YR001HR	smf-1b	54.0050	13.00
025YR001HR	smf-1b	54.2550	13.00
025YR001HR	smf-1b	54.5050	13.00
025YR001HR	smf-1b	54.7550	13.00
025YR001HR	smf-1b	55.0050	13.00
025YR001HR	smf-1b	55.2550	13.00
025YR001HR	smf-1b	55.5050	13.00

25yr-1hr SMF-1b

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR001HR	smf-2a	122.0050	12.11
025YR001HR	smf-2a	122.2550	12.11
025YR001HR	smf-2a	122.5050	12.11
025YR001HR	smf-2a	122.7550	12.11
025YR001HR	smf-2a	123.0050	12.11
025YR001HR	smf-2a	123.2550	12.11
025YR001HR	smf-2a	123.5050	12.11
025YR001HR	smf-2a	123.7550	12.10
025YR001HR	smf-2a	124.0050	12.10
025YR001HR	smf-2a	124.2550	12.10
025YR001HR	smf-2a	124.5050	12.10
025YR001HR	smf-2a	124.7550	12.10
025YR001HR	smf-2a	125.0050	12.10
025YR001HR	smf-2a	125.2550	12.10
025YR001HR	smf-2a	125.5050	12.10
025YR001HR	smf-2a	125.7550	12.10
025YR001HR	smf-2a	126.0050	12.10
025YR001HR	smf-2a	126.2550	12.10
025YR001HR	smf-2a	126.5050	12.10
025YR001HR	smf-2a	126.7550	12.10
025YR001HR	smf-2a	127.0050	12.10
025YR001HR	smf-2a	127.2550	12.10
025YR001HR	smf-2a	127.5050	12.10
025YR001HR	smf-2a	127.7550	12.10
025YR001HR	smf-2a	128.0050	12.10
025YR001HR	smf-2a	128.2550	12.10
025YR001HR	smf-2a	128.5050	12.10
025YR001HR	smf-2a	128.7550	12.10
025YR001HR	smf-2a	129.0050	12.10
025YR001HR	smf-2a	129.2550	12.10
025YR001HR	smf-2a	129.5050	12.10
025YR001HR	smf-2a	129.7550	12.10
025YR001HR	smf-2a	130.0050	12.10
025YR001HR	smf-2a	130.2550	12.10
025YR001HR	smf-2a	130.5050	12.10
025YR001HR	smf-2a	130.7550	12.10
025YR001HR	smf-2a	131.0050	12.10
025YR001HR	smf-2a	131.2550	12.10
025YR001HR	smf-2a	131.5050	12.10
025YR001HR	smf-2a	131.7550	12.10
025YR001HR	smf-2a	132.0050	12.10
025YR001HR	smf-2a	132.2550	12.10

25yr-1hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR001HR	smf-2b	83.2550	11.41
025YR001HR	smf-2b	83.5050	11.41
025YR001HR	smf-2b	83.7550	11.41
025YR001HR	smf-2b	84.0050	11.41
025YR001HR	smf-2b	84.2550	11.41
025YR001HR	smf-2b	84.5050	11.40
025YR001HR	smf-2b	84.7550	11.40
025YR001HR	smf-2b	85.0050	11.40
025YR001HR	smf-2b	85.2550	11.40
025YR001HR	smf-2b	85.5050	11.40
025YR001HR	smf-2b	85.7550	11.40
025YR001HR	smf-2b	86.0050	11.40
025YR001HR	smf-2b	86.2550	11.40
025YR001HR	smf-2b	86.5050	11.40
025YR001HR	smf-2b	86.7550	11.40
025YR001HR	smf-2b	87.0050	11.40
025YR001HR	smf-2b	87.2550	11.40
025YR001HR	smf-2b	87.5050	11.40
025YR001HR	smf-2b	87.7550	11.40
025YR001HR	smf-2b	88.0050	11.40
025YR001HR	smf-2b	88.2550	11.40
025YR001HR	smf-2b	88.5050	11.40
025YR001HR	smf-2b	88.7550	11.40
025YR001HR	smf-2b	89.0050	11.40
025YR001HR	smf-2b	89.2550	11.40
025YR001HR	smf-2b	89.5050	11.40
025YR001HR	smf-2b	89.7550	11.40
025YR001HR	smf-2b	90.0050	11.40
025YR001HR	smf-2b	90.2550	11.40
025YR001HR	smf-2b	90.5050	11.40
025YR001HR	smf-2b	90.7550	11.40
025YR001HR	smf-2b	91.0050	11.40
025YR001HR	smf-2b	91.2550	11.40
025YR001HR	smf-2b	91.5050	11.40
025YR001HR	smf-2b	91.7550	11.40
025YR001HR	smf-2b	92.0050	11.40
025YR001HR	smf-2b	92.2550	11.40
025YR001HR	smf-2b	92.5050	11.40
025YR001HR	smf-2b	92.7550	11.40
025YR001HR	smf-2b	93.0050	11.40
025YR001HR	smf-2b	93.2550	11.40
025YR001HR	smf-2b	93.5050	11.40

25yr-1hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR001HR	smf-2c	107.5050	11.88
025YR001HR	smf-2c	107.7550	11.88
025YR001HR	smf-2c	108.0050	11.87
025YR001HR	smf-2c	108.2550	11.87
025YR001HR	smf-2c	108.5050	11.87
025YR001HR	smf-2c	108.7550	11.87
025YR001HR	smf-2c	109.0050	11.87
025YR001HR	smf-2c	109.2550	11.87
025YR001HR	smf-2c	109.5050	11.87
025YR001HR	smf-2c	109.7550	11.87
025YR001HR	smf-2c	110.0050	11.87
025YR001HR	smf-2c	110.2550	11.87
025YR001HR	smf-2c	110.5050	11.87
025YR001HR	smf-2c	110.7550	11.86
025YR001HR	smf-2c	111.0050	11.86
025YR001HR	smf-2c	111.2550	11.86
025YR001HR	smf-2c	111.5050	11.86
025YR001HR	smf-2c	111.7550	11.86
025YR001HR	smf-2c	112.0050	11.86
025YR001HR	smf-2c	112.2550	11.86
025YR001HR	smf-2c	112.5050	11.86
025YR001HR	smf-2c	112.7550	11.86
025YR001HR	smf-2c	113.0050	11.86
025YR001HR	smf-2c	113.2550	11.86
025YR001HR	smf-2c	113.5050	11.86
025YR001HR	smf-2c	113.7550	11.85
025YR001HR	smf-2c	114.0050	11.85
025YR001HR	smf-2c	114.2550	11.85
025YR001HR	smf-2c	114.5050	11.85
025YR001HR	smf-2c	114.7550	11.85
025YR001HR	smf-2c	115.0050	11.85
025YR001HR	smf-2c	115.2550	11.85
025YR001HR	smf-2c	115.5050	11.85
025YR001HR	smf-2c	115.7550	11.85
025YR001HR	smf-2c	116.0050	11.85
025YR001HR	smf-2c	116.2550	11.85
025YR001HR	smf-2c	116.5050	11.85
025YR001HR	smf-2c	116.7550	11.85
025YR001HR	smf-2c	117.0050	11.85
025YR001HR	smf-2c	117.2550	11.85
025YR001HR	smf-2c	117.5050	11.85
025YR001HR	smf-2c	117.7550	11.85

25yr-1hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR001HR	smf-3a	89.7550	11.91
025YR001HR	smf-3a	90.0050	11.90
025YR001HR	smf-3a	90.2550	11.90
025YR001HR	smf-3a	90.5050	11.90
025YR001HR	smf-3a	90.7550	11.90
025YR001HR	smf-3a	91.0050	11.90
025YR001HR	smf-3a	91.2550	11.90
025YR001HR	smf-3a	91.5050	11.90
025YR001HR	smf-3a	91.7550	11.90
025YR001HR	smf-3a	92.0050	11.90
025YR001HR	smf-3a	92.2550	11.90
025YR001HR	smf-3a	92.5050	11.90
025YR001HR	smf-3a	92.7550	11.90
025YR001HR	smf-3a	93.0050	11.90
025YR001HR	smf-3a	93.2550	11.90
025YR001HR	smf-3a	93.5050	11.90
025YR001HR	smf-3a	93.7550	11.90
025YR001HR	smf-3a	94.0050	11.90
025YR001HR	smf-3a	94.2550	11.90
025YR001HR	smf-3a	94.5050	11.90
025YR001HR	smf-3a	94.7550	11.90
025YR001HR	smf-3a	95.0050	11.90
025YR001HR	smf-3a	95.2550	11.90
025YR001HR	smf-3a	95.5050	11.90
025YR001HR	smf-3a	95.7550	11.90
025YR001HR	smf-3a	96.0050	11.90
025YR001HR	smf-3a	96.2550	11.90
025YR001HR	smf-3a	96.5050	11.90
025YR001HR	smf-3a	96.7550	11.90
025YR001HR	smf-3a	97.0050	11.90
025YR001HR	smf-3a	97.2550	11.90
025YR001HR	smf-3a	97.5050	11.90
025YR001HR	smf-3a	97.7550	11.90
025YR001HR	smf-3a	98.0050	11.90
025YR001HR	smf-3a	98.2550	11.90
025YR001HR	smf-3a	98.5050	11.90
025YR001HR	smf-3a	98.7550	11.90
025YR001HR	smf-3a	99.0050	11.90
025YR001HR	smf-3a	99.2550	11.90
025YR001HR	smf-3a	99.5050	11.90
025YR001HR	smf-3a	99.7550	11.90
025YR001HR	smf-3a	100.0050	11.90

25yr-1hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR001HR	smf-3b	114.0050	11.28
025YR001HR	smf-3b	114.2550	11.28
025YR001HR	smf-3b	114.5050	11.28
025YR001HR	smf-3b	114.7550	11.28
025YR001HR	smf-3b	115.0050	11.27
025YR001HR	smf-3b	115.2550	11.27
025YR001HR	smf-3b	115.5050	11.27
025YR001HR	smf-3b	115.7550	11.27
025YR001HR	smf-3b	116.0050	11.27
025YR001HR	smf-3b	116.2550	11.27
025YR001HR	smf-3b	116.5050	11.27
025YR001HR	smf-3b	116.7550	11.27
025YR001HR	smf-3b	117.0050	11.27
025YR001HR	smf-3b	117.2550	11.27
025YR001HR	smf-3b	117.5050	11.27
025YR001HR	smf-3b	117.7550	11.26
025YR001HR	smf-3b	118.0050	11.26
025YR001HR	smf-3b	118.2550	11.26
025YR001HR	smf-3b	118.5050	11.26
025YR001HR	smf-3b	118.7550	11.26
025YR001HR	smf-3b	119.0050	11.26
025YR001HR	smf-3b	119.2550	11.26
025YR001HR	smf-3b	119.5050	11.26
025YR001HR	smf-3b	119.7550	11.26
025YR001HR	smf-3b	120.0050	11.26
025YR001HR	smf-3b	120.2550	11.26
025YR001HR	smf-3b	120.5050	11.26
025YR001HR	smf-3b	120.7550	11.25
025YR001HR	smf-3b	121.0050	11.25
025YR001HR	smf-3b	121.2550	11.25
025YR001HR	smf-3b	121.5050	11.25
025YR001HR	smf-3b	121.7550	11.25
025YR001HR	smf-3b	122.0050	11.25
025YR001HR	smf-3b	122.2550	11.25
025YR001HR	smf-3b	122.5050	11.25
025YR001HR	smf-3b	122.7550	11.25
025YR001HR	smf-3b	123.0050	11.25
025YR001HR	smf-3b	123.2550	11.25
025YR001HR	smf-3b	123.5050	11.25
025YR001HR	smf-3b	123.7550	11.25
025YR001HR	smf-3b	124.0050	11.25
025YR001HR	smf-3b	124.2550	11.25

25yr-1hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR002HR	smf-1a	96.2515	12.47
025YR002HR	smf-1a	96.5015	12.47
025YR002HR	smf-1a	96.7515	12.47
025YR002HR	smf-1a	97.0015	12.47
025YR002HR	smf-1a	97.2515	12.47
025YR002HR	smf-1a	97.5015	12.47
025YR002HR	smf-1a	97.7515	12.47
025YR002HR	smf-1a	98.0015	12.47
025YR002HR	smf-1a	98.2515	12.46
025YR002HR	smf-1a	98.5015	12.46
025YR002HR	smf-1a	98.7515	12.46
025YR002HR	smf-1a	99.0015	12.46
025YR002HR	smf-1a	99.2515	12.46
025YR002HR	smf-1a	99.5015	12.46
025YR002HR	smf-1a	99.7515	12.46
025YR002HR	smf-1a	100.0015	12.46
025YR002HR	smf-1a	100.2515	12.46
025YR002HR	smf-1a	100.5015	12.46
025YR002HR	smf-1a	100.7515	12.46
025YR002HR	smf-1a	101.0015	12.46
025YR002HR	smf-1a	101.2515	12.45
025YR002HR	smf-1a	101.5015	12.45
025YR002HR	smf-1a	101.7515	12.45
025YR002HR	smf-1a	102.0015	12.45
025YR002HR	smf-1a	102.2515	12.45
025YR002HR	smf-1a	102.5015	12.45
025YR002HR	smf-1a	102.7515	12.45
025YR002HR	smf-1a	103.0015	12.45
025YR002HR	smf-1a	103.2515	12.45
025YR002HR	smf-1a	103.5015	12.45
025YR002HR	smf-1a	103.7515	12.45
025YR002HR	smf-1a	104.0015	12.45
025YR002HR	smf-1a	104.2515	12.45
025YR002HR	smf-1a	104.5015	12.45
025YR002HR	smf-1a	104.7515	12.45
025YR002HR	smf-1a	105.0015	12.45
025YR002HR	smf-1a	105.2515	12.45
025YR002HR	smf-1a	105.5015	12.45
025YR002HR	smf-1a	105.7515	12.45
025YR002HR	smf-1a	106.0015	12.45
025YR002HR	smf-1a	106.2515	12.45
025YR002HR	smf-1a	106.5015	12.45

25yr-2hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR002HR	smf-1b	67.0015	13.01
025YR002HR	smf-1b	67.2515	13.01
025YR002HR	smf-1b	67.5015	13.01
025YR002HR	smf-1b	67.7515	13.01
025YR002HR	smf-1b	68.0015	13.01
025YR002HR	smf-1b	68.2515	13.00
025YR002HR	smf-1b	68.5015	13.00
025YR002HR	smf-1b	68.7515	13.00
025YR002HR	smf-1b	69.0015	13.00
025YR002HR	smf-1b	69.2515	13.00
025YR002HR	smf-1b	69.5015	13.00
025YR002HR	smf-1b	69.7515	13.00
025YR002HR	smf-1b	70.0015	13.00
025YR002HR	smf-1b	70.2515	13.00
025YR002HR	smf-1b	70.5015	13.00
025YR002HR	smf-1b	70.7515	13.00
025YR002HR	smf-1b	71.0015	13.00
025YR002HR	smf-1b	71.2515	13.00
025YR002HR	smf-1b	71.5015	13.00
025YR002HR	smf-1b	71.7515	13.00
025YR002HR	smf-1b	72.0015	13.00
025YR002HR	smf-1b	72.2515	13.00
025YR002HR	smf-1b	72.5015	13.00
025YR002HR	smf-1b	72.7515	13.00
025YR002HR	smf-1b	73.0015	13.00
025YR002HR	smf-1b	73.2515	13.00
025YR002HR	smf-1b	73.5015	13.00
025YR002HR	smf-1b	73.7515	13.00
025YR002HR	smf-1b	74.0015	13.00
025YR002HR	smf-1b	74.2515	13.00
025YR002HR	smf-1b	74.5015	13.00
025YR002HR	smf-1b	74.7515	13.00
025YR002HR	smf-1b	75.0015	13.00
025YR002HR	smf-1b	75.2515	13.00
025YR002HR	smf-1b	75.5015	13.00
025YR002HR	smf-1b	75.7515	13.00
025YR002HR	smf-1b	76.0015	13.00
025YR002HR	smf-1b	76.2515	13.00
025YR002HR	smf-1b	76.5015	13.00
025YR002HR	smf-1b	76.7515	13.00
025YR002HR	smf-1b	77.0015	13.00
025YR002HR	smf-1b	77.2515	13.00

25yr-2hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR002HR	smf-2a	132.2515	12.12
025YR002HR	smf-2a	132.5015	12.12
025YR002HR	smf-2a	132.7515	12.12
025YR002HR	smf-2a	133.0015	12.12
025YR002HR	smf-2a	133.2515	12.12
025YR002HR	smf-2a	133.5015	12.12
025YR002HR	smf-2a	133.7515	12.12
025YR002HR	smf-2a	134.0015	12.11
025YR002HR	smf-2a	134.2515	12.11
025YR002HR	smf-2a	134.5015	12.11
025YR002HR	smf-2a	134.7515	12.11
025YR002HR	smf-2a	135.0015	12.11
025YR002HR	smf-2a	135.2515	12.11
025YR002HR	smf-2a	135.5015	12.11
025YR002HR	smf-2a	135.7515	12.11
025YR002HR	smf-2a	136.0015	12.11
025YR002HR	smf-2a	136.2515	12.11
025YR002HR	smf-2a	136.5015	12.11
025YR002HR	smf-2a	136.7515	12.11
025YR002HR	smf-2a	137.0015	12.11
025YR002HR	smf-2a	137.2515	12.11
025YR002HR	smf-2a	137.5015	12.11
025YR002HR	smf-2a	137.7515	12.11
025YR002HR	smf-2a	138.0015	12.11
025YR002HR	smf-2a	138.2515	12.10
025YR002HR	smf-2a	138.5015	12.10
025YR002HR	smf-2a	138.7515	12.10
025YR002HR	smf-2a	139.0015	12.10
025YR002HR	smf-2a	139.2515	12.10
025YR002HR	smf-2a	139.5015	12.10
025YR002HR	smf-2a	139.7515	12.10
025YR002HR	smf-2a	140.0015	12.10
025YR002HR	smf-2a	140.2515	12.10
025YR002HR	smf-2a	140.5015	12.10
025YR002HR	smf-2a	140.7515	12.10
025YR002HR	smf-2a	141.0015	12.10
025YR002HR	smf-2a	141.2515	12.10
025YR002HR	smf-2a	141.5015	12.10
025YR002HR	smf-2a	141.7515	12.10
025YR002HR	smf-2a	142.0015	12.10
025YR002HR	smf-2a	142.2515	12.10
025YR002HR	smf-2a	142.5015	12.10

25yr-2hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR002HR	smf-2b	92.5015	11.44
025YR002HR	smf-2b	92.7515	11.44
025YR002HR	smf-2b	93.0015	11.44
025YR002HR	smf-2b	93.2515	11.43
025YR002HR	smf-2b	93.5015	11.43
025YR002HR	smf-2b	93.7515	11.43
025YR002HR	smf-2b	94.0015	11.43
025YR002HR	smf-2b	94.2515	11.43
025YR002HR	smf-2b	94.5015	11.43
025YR002HR	smf-2b	94.7515	11.43
025YR002HR	smf-2b	95.0015	11.43
025YR002HR	smf-2b	95.2515	11.43
025YR002HR	smf-2b	95.5015	11.42
025YR002HR	smf-2b	95.7515	11.42
025YR002HR	smf-2b	96.0015	11.42
025YR002HR	smf-2b	96.2515	11.42
025YR002HR	smf-2b	96.5015	11.42
025YR002HR	smf-2b	96.7515	11.42
025YR002HR	smf-2b	97.0015	11.42
025YR002HR	smf-2b	97.2515	11.42
025YR002HR	smf-2b	97.5015	11.42
025YR002HR	smf-2b	97.7515	11.42
025YR002HR	smf-2b	98.0015	11.41
025YR002HR	smf-2b	98.2515	11.41
025YR002HR	smf-2b	98.5015	11.41
025YR002HR	smf-2b	98.7515	11.41
025YR002HR	smf-2b	99.0015	11.41
025YR002HR	smf-2b	99.2515	11.41
025YR002HR	smf-2b	99.5015	11.41
025YR002HR	smf-2b	99.7515	11.41
025YR002HR	smf-2b	100.0015	11.41
025YR002HR	smf-2b	100.2515	11.41
025YR002HR	smf-2b	100.5015	11.40
025YR002HR	smf-2b	100.7515	11.40
025YR002HR	smf-2b	101.0015	11.40
025YR002HR	smf-2b	101.2515	11.40
025YR002HR	smf-2b	101.5015	11.40
025YR002HR	smf-2b	101.7515	11.40
025YR002HR	smf-2b	102.0015	11.40
025YR002HR	smf-2b	102.2515	11.40
025YR002HR	smf-2b	102.5015	11.40
025YR002HR	smf-2b	102.7515	11.40

25yr-2hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR002HR	smf-2c	126.2515	11.86
025YR002HR	smf-2c	126.5015	11.86
025YR002HR	smf-2c	126.7515	11.86
025YR002HR	smf-2c	127.0015	11.86
025YR002HR	smf-2c	127.2515	11.86
025YR002HR	smf-2c	127.5015	11.86
025YR002HR	smf-2c	127.7515	11.86
025YR002HR	smf-2c	128.0015	11.86
025YR002HR	smf-2c	128.2515	11.86
025YR002HR	smf-2c	128.5015	11.86
025YR002HR	smf-2c	128.7515	11.86
025YR002HR	smf-2c	129.0015	11.86
025YR002HR	smf-2c	129.2515	11.85
025YR002HR	smf-2c	129.5015	11.85
025YR002HR	smf-2c	129.7515	11.85
025YR002HR	smf-2c	130.0015	11.85
025YR002HR	smf-2c	130.2515	11.85
025YR002HR	smf-2c	130.5015	11.85
025YR002HR	smf-2c	130.7515	11.85
025YR002HR	smf-2c	131.0015	11.85
025YR002HR	smf-2c	131.2515	11.85
025YR002HR	smf-2c	131.5015	11.85
025YR002HR	smf-2c	131.7515	11.85
025YR002HR	smf-2c	132.0015	11.85
025YR002HR	smf-2c	132.2515	11.85
025YR002HR	smf-2c	132.5015	11.85
025YR002HR	smf-2c	132.7515	11.85
025YR002HR	smf-2c	133.0015	11.85
025YR002HR	smf-2c	133.2515	11.85
025YR002HR	smf-2c	133.5015	11.85
025YR002HR	smf-2c	133.7515	11.85
025YR002HR	smf-2c	134.0015	11.85
025YR002HR	smf-2c	134.2515	11.85
025YR002HR	smf-2c	134.5015	11.85
025YR002HR	smf-2c	134.7515	11.85
025YR002HR	smf-2c	135.0015	11.85
025YR002HR	smf-2c	135.2515	11.85
025YR002HR	smf-2c	135.5015	11.85
025YR002HR	smf-2c	135.7515	11.85
025YR002HR	smf-2c	136.0015	11.85
025YR002HR	smf-2c	136.2515	11.85
025YR002HR	smf-2c	136.5015	11.85

25yr-2hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR002HR	smf-3a	107.5015	11.91
025YR002HR	smf-3a	107.7515	11.91
025YR002HR	smf-3a	108.0015	11.91
025YR002HR	smf-3a	108.2515	11.91
025YR002HR	smf-3a	108.5015	11.91
025YR002HR	smf-3a	108.7515	11.91
025YR002HR	smf-3a	109.0015	11.91
025YR002HR	smf-3a	109.2515	11.91
025YR002HR	smf-3a	109.5015	11.90
025YR002HR	smf-3a	109.7515	11.90
025YR002HR	smf-3a	110.0015	11.90
025YR002HR	smf-3a	110.2515	11.90
025YR002HR	smf-3a	110.5015	11.90
025YR002HR	smf-3a	110.7515	11.90
025YR002HR	smf-3a	111.0015	11.90
025YR002HR	smf-3a	111.2515	11.90
025YR002HR	smf-3a	111.5015	11.90
025YR002HR	smf-3a	111.7515	11.90
025YR002HR	smf-3a	112.0015	11.90
025YR002HR	smf-3a	112.2515	11.90
025YR002HR	smf-3a	112.5015	11.90
025YR002HR	smf-3a	112.7515	11.90
025YR002HR	smf-3a	113.0015	11.90
025YR002HR	smf-3a	113.2515	11.90
025YR002HR	smf-3a	113.5015	11.90
025YR002HR	smf-3a	113.7515	11.90
025YR002HR	smf-3a	114.0015	11.90
025YR002HR	smf-3a	114.2515	11.90
025YR002HR	smf-3a	114.5015	11.90
025YR002HR	smf-3a	114.7515	11.90
025YR002HR	smf-3a	115.0015	11.90
025YR002HR	smf-3a	115.2515	11.90
025YR002HR	smf-3a	115.5015	11.90
025YR002HR	smf-3a	115.7515	11.90
025YR002HR	smf-3a	116.0015	11.90
025YR002HR	smf-3a	116.2515	11.90
025YR002HR	smf-3a	116.5015	11.90
025YR002HR	smf-3a	116.7515	11.90
025YR002HR	smf-3a	117.0015	11.90
025YR002HR	smf-3a	117.2515	11.90
025YR002HR	smf-3a	117.5015	11.90
025YR002HR	smf-3a	117.7515	11.90

25yr-2hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR002HR	smf-3b	130.7515	11.29
025YR002HR	smf-3b	131.0015	11.28
025YR002HR	smf-3b	131.2515	11.28
025YR002HR	smf-3b	131.5015	11.28
025YR002HR	smf-3b	131.7515	11.28
025YR002HR	smf-3b	132.0015	11.28
025YR002HR	smf-3b	132.2515	11.28
025YR002HR	smf-3b	132.5015	11.28
025YR002HR	smf-3b	132.7515	11.28
025YR002HR	smf-3b	133.0015	11.28
025YR002HR	smf-3b	133.2515	11.28
025YR002HR	smf-3b	133.5015	11.28
025YR002HR	smf-3b	133.7515	11.28
025YR002HR	smf-3b	134.0015	11.27
025YR002HR	smf-3b	134.2515	11.27
025YR002HR	smf-3b	134.5015	11.27
025YR002HR	smf-3b	134.7515	11.27
025YR002HR	smf-3b	135.0015	11.27
025YR002HR	smf-3b	135.2515	11.27
025YR002HR	smf-3b	135.5015	11.27
025YR002HR	smf-3b	135.7515	11.27
025YR002HR	smf-3b	136.0015	11.27
025YR002HR	smf-3b	136.2515	11.27
025YR002HR	smf-3b	136.5015	11.27
025YR002HR	smf-3b	136.7515	11.27
025YR002HR	smf-3b	137.0015	11.27
025YR002HR	smf-3b	137.2515	11.26
025YR002HR	smf-3b	137.5015	11.26
025YR002HR	smf-3b	137.7515	11.26
025YR002HR	smf-3b	138.0015	11.26
025YR002HR	smf-3b	138.2515	11.26
025YR002HR	smf-3b	138.5015	11.26
025YR002HR	smf-3b	138.7515	11.26
025YR002HR	smf-3b	139.0015	11.26
025YR002HR	smf-3b	139.2515	11.26
025YR002HR	smf-3b	139.5015	11.26
025YR002HR	smf-3b	139.7515	11.26
025YR002HR	smf-3b	140.0015	11.26
025YR002HR	smf-3b	140.2515	11.26
025YR002HR	smf-3b	140.5015	11.26
025YR002HR	smf-3b	140.7515	11.25
025YR002HR	smf-3b	141.0015	11.25

25yr-2hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR004HR	smf-1a	164.5036	12.47
025YR004HR	smf-1a	164.7536	12.47
025YR004HR	smf-1a	165.0036	12.47
025YR004HR	smf-1a	165.2536	12.47
025YR004HR	smf-1a	165.5036	12.47
025YR004HR	smf-1a	165.7536	12.47
025YR004HR	smf-1a	166.0036	12.47
025YR004HR	smf-1a	166.2536	12.47
025YR004HR	smf-1a	166.5036	12.47
025YR004HR	smf-1a	166.7536	12.47
025YR004HR	smf-1a	167.0036	12.46
025YR004HR	smf-1a	167.2536	12.46
025YR004HR	smf-1a	167.5036	12.46
025YR004HR	smf-1a	167.7536	12.46
025YR004HR	smf-1a	168.0036	12.46
025YR004HR	smf-1a	168.2536	12.46
025YR004HR	smf-1a	168.5036	12.46
025YR004HR	smf-1a	168.7536	12.46
025YR004HR	smf-1a	169.0036	12.46
025YR004HR	smf-1a	169.2536	12.46
025YR004HR	smf-1a	169.5036	12.46
025YR004HR	smf-1a	169.7536	12.46
025YR004HR	smf-1a	170.0036	12.46
025YR004HR	smf-1a	170.2536	12.46
025YR004HR	smf-1a	170.5036	12.46
025YR004HR	smf-1a	170.7536	12.46
025YR004HR	smf-1a	171.0036	12.46
025YR004HR	smf-1a	171.2536	12.46
025YR004HR	smf-1a	171.5036	12.46
025YR004HR	smf-1a	171.7536	12.45
025YR004HR	smf-1a	172.0036	12.45
025YR004HR	smf-1a	172.2536	12.45
025YR004HR	smf-1a	172.5036	12.45
025YR004HR	smf-1a	172.7536	12.45
025YR004HR	smf-1a	173.0036	12.45
025YR004HR	smf-1a	173.2536	12.45
025YR004HR	smf-1a	173.5036	12.45
025YR004HR	smf-1a	173.7536	12.45
025YR004HR	smf-1a	174.0036	12.45
025YR004HR	smf-1a	174.2536	12.45
025YR004HR	smf-1a	174.5036	12.45
025YR004HR	smf-1a	174.7536	12.45

25yr-4hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR004HR	smf-1b	80.7536	13.02
025YR004HR	smf-1b	81.0036	13.02
025YR004HR	smf-1b	81.2536	13.02
025YR004HR	smf-1b	81.5036	13.02
025YR004HR	smf-1b	81.7536	13.01
025YR004HR	smf-1b	82.0036	13.01
025YR004HR	smf-1b	82.2536	13.01
025YR004HR	smf-1b	82.5036	13.01
025YR004HR	smf-1b	82.7536	13.01
025YR004HR	smf-1b	83.0036	13.01
025YR004HR	smf-1b	83.2536	13.01
025YR004HR	smf-1b	83.5036	13.01
025YR004HR	smf-1b	83.7536	13.01
025YR004HR	smf-1b	84.0036	13.00
025YR004HR	smf-1b	84.2536	13.00
025YR004HR	smf-1b	84.5036	13.00
025YR004HR	smf-1b	84.7536	13.00
025YR004HR	smf-1b	85.0036	13.00
025YR004HR	smf-1b	85.2536	13.00
025YR004HR	smf-1b	85.5036	13.00
025YR004HR	smf-1b	85.7536	13.00
025YR004HR	smf-1b	86.0036	13.00
025YR004HR	smf-1b	86.2536	13.00
025YR004HR	smf-1b	86.5036	13.00
025YR004HR	smf-1b	86.7536	13.00
025YR004HR	smf-1b	87.0036	13.00
025YR004HR	smf-1b	87.2536	13.00
025YR004HR	smf-1b	87.5036	13.00
025YR004HR	smf-1b	87.7536	13.00
025YR004HR	smf-1b	88.0036	13.00
025YR004HR	smf-1b	88.2536	13.00
025YR004HR	smf-1b	88.5036	13.00
025YR004HR	smf-1b	88.7536	13.00
025YR004HR	smf-1b	89.0036	13.00
025YR004HR	smf-1b	89.2536	13.00
025YR004HR	smf-1b	89.5036	13.00
025YR004HR	smf-1b	89.7536	13.00
025YR004HR	smf-1b	90.0036	13.00
025YR004HR	smf-1b	90.2536	13.00
025YR004HR	smf-1b	90.5036	13.00
025YR004HR	smf-1b	90.7536	13.00
025YR004HR	smf-1b	91.0036	13.00

25yr-4hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR004HR	smf-2a	154.5036	12.11
025YR004HR	smf-2a	154.7536	12.11
025YR004HR	smf-2a	155.0036	12.11
025YR004HR	smf-2a	155.2536	12.11
025YR004HR	smf-2a	155.5036	12.11
025YR004HR	smf-2a	155.7536	12.11
025YR004HR	smf-2a	156.0036	12.11
025YR004HR	smf-2a	156.2536	12.11
025YR004HR	smf-2a	156.5036	12.11
025YR004HR	smf-2a	156.7536	12.11
025YR004HR	smf-2a	157.0036	12.11
025YR004HR	smf-2a	157.2536	12.11
025YR004HR	smf-2a	157.5036	12.11
025YR004HR	smf-2a	157.7536	12.10
025YR004HR	smf-2a	158.0036	12.10
025YR004HR	smf-2a	158.2536	12.10
025YR004HR	smf-2a	158.5036	12.10
025YR004HR	smf-2a	158.7536	12.10
025YR004HR	smf-2a	159.0036	12.10
025YR004HR	smf-2a	159.2536	12.10
025YR004HR	smf-2a	159.5036	12.10
025YR004HR	smf-2a	159.7536	12.10
025YR004HR	smf-2a	160.0036	12.10
025YR004HR	smf-2a	160.2536	12.10
025YR004HR	smf-2a	160.5036	12.10
025YR004HR	smf-2a	160.7536	12.10
025YR004HR	smf-2a	161.0036	12.10
025YR004HR	smf-2a	161.2536	12.10
025YR004HR	smf-2a	161.5036	12.10
025YR004HR	smf-2a	161.7536	12.10
025YR004HR	smf-2a	162.0036	12.10
025YR004HR	smf-2a	162.2536	12.10
025YR004HR	smf-2a	162.5036	12.10
025YR004HR	smf-2a	162.7536	12.10
025YR004HR	smf-2a	163.0036	12.10
025YR004HR	smf-2a	163.2536	12.10
025YR004HR	smf-2a	163.5036	12.10
025YR004HR	smf-2a	163.7536	12.10
025YR004HR	smf-2a	164.0036	12.10
025YR004HR	smf-2a	164.2536	12.10
025YR004HR	smf-2a	164.5036	12.10
025YR004HR	smf-2a	164.7536	12.10

25yr-4hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR004HR	smf-2b	112.7536	11.42
025YR004HR	smf-2b	113.0036	11.42
025YR004HR	smf-2b	113.2536	11.41
025YR004HR	smf-2b	113.5036	11.41
025YR004HR	smf-2b	113.7536	11.41
025YR004HR	smf-2b	114.0036	11.41
025YR004HR	smf-2b	114.2536	11.41
025YR004HR	smf-2b	114.5036	11.41
025YR004HR	smf-2b	114.7536	11.41
025YR004HR	smf-2b	115.0036	11.41
025YR004HR	smf-2b	115.2536	11.41
025YR004HR	smf-2b	115.5036	11.41
025YR004HR	smf-2b	115.7536	11.41
025YR004HR	smf-2b	116.0036	11.41
025YR004HR	smf-2b	116.2536	11.40
025YR004HR	smf-2b	116.5036	11.40
025YR004HR	smf-2b	116.7536	11.40
025YR004HR	smf-2b	117.0036	11.40
025YR004HR	smf-2b	117.2536	11.40
025YR004HR	smf-2b	117.5036	11.40
025YR004HR	smf-2b	117.7536	11.40
025YR004HR	smf-2b	118.0036	11.40
025YR004HR	smf-2b	118.2536	11.40
025YR004HR	smf-2b	118.5036	11.40
025YR004HR	smf-2b	118.7536	11.40
025YR004HR	smf-2b	119.0036	11.40
025YR004HR	smf-2b	119.2536	11.40
025YR004HR	smf-2b	119.5036	11.40
025YR004HR	smf-2b	119.7536	11.40
025YR004HR	smf-2b	120.0036	11.40
025YR004HR	smf-2b	120.2536	11.40
025YR004HR	smf-2b	120.5036	11.40
025YR004HR	smf-2b	120.7536	11.40
025YR004HR	smf-2b	121.0036	11.40
025YR004HR	smf-2b	121.2536	11.40
025YR004HR	smf-2b	121.5036	11.40
025YR004HR	smf-2b	121.7536	11.40
025YR004HR	smf-2b	122.0036	11.40
025YR004HR	smf-2b	122.2536	11.40
025YR004HR	smf-2b	122.5036	11.40
025YR004HR	smf-2b	122.7536	11.40
025YR004HR	smf-2b	123.0036	11.40

25yr-4hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR004HR	smf-2c	144.5036	11.86
025YR004HR	smf-2c	144.7536	11.86
025YR004HR	smf-2c	145.0036	11.86
025YR004HR	smf-2c	145.2536	11.86
025YR004HR	smf-2c	145.5036	11.86
025YR004HR	smf-2c	145.7536	11.86
025YR004HR	smf-2c	146.0036	11.86
025YR004HR	smf-2c	146.2536	11.86
025YR004HR	smf-2c	146.5036	11.86
025YR004HR	smf-2c	146.7536	11.86
025YR004HR	smf-2c	147.0036	11.86
025YR004HR	smf-2c	147.2536	11.85
025YR004HR	smf-2c	147.5036	11.85
025YR004HR	smf-2c	147.7536	11.85
025YR004HR	smf-2c	148.0036	11.85
025YR004HR	smf-2c	148.2536	11.85
025YR004HR	smf-2c	148.5036	11.85
025YR004HR	smf-2c	148.7536	11.85
025YR004HR	smf-2c	149.0036	11.85
025YR004HR	smf-2c	149.2536	11.85
025YR004HR	smf-2c	149.5036	11.85
025YR004HR	smf-2c	149.7536	11.85
025YR004HR	smf-2c	150.0036	11.85
025YR004HR	smf-2c	150.2536	11.85
025YR004HR	smf-2c	150.5036	11.85
025YR004HR	smf-2c	150.7536	11.85
025YR004HR	smf-2c	151.0036	11.85
025YR004HR	smf-2c	151.2536	11.85
025YR004HR	smf-2c	151.5036	11.85
025YR004HR	smf-2c	151.7536	11.85
025YR004HR	smf-2c	152.0036	11.85
025YR004HR	smf-2c	152.2536	11.85
025YR004HR	smf-2c	152.5036	11.85
025YR004HR	smf-2c	152.7536	11.85
025YR004HR	smf-2c	153.0036	11.85
025YR004HR	smf-2c	153.2536	11.85
025YR004HR	smf-2c	153.5036	11.85
025YR004HR	smf-2c	153.7536	11.85
025YR004HR	smf-2c	154.0036	11.85
025YR004HR	smf-2c	154.2536	11.85
025YR004HR	smf-2c	154.5036	11.85
025YR004HR	smf-2c	154.7536	11.85

25yr-4hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR004HR	smf-3a	123.7536	11.92
025YR004HR	smf-3a	124.0036	11.92
025YR004HR	smf-3a	124.2536	11.92
025YR004HR	smf-3a	124.5036	11.92
025YR004HR	smf-3a	124.7536	11.92
025YR004HR	smf-3a	125.0036	11.92
025YR004HR	smf-3a	125.2536	11.92
025YR004HR	smf-3a	125.5036	11.92
025YR004HR	smf-3a	125.7536	11.92
025YR004HR	smf-3a	126.0036	11.92
025YR004HR	smf-3a	126.2536	11.92
025YR004HR	smf-3a	126.5036	11.91
025YR004HR	smf-3a	126.7536	11.91
025YR004HR	smf-3a	127.0036	11.91
025YR004HR	smf-3a	127.2536	11.91
025YR004HR	smf-3a	127.5036	11.91
025YR004HR	smf-3a	127.7536	11.91
025YR004HR	smf-3a	128.0036	11.91
025YR004HR	smf-3a	128.2536	11.91
025YR004HR	smf-3a	128.5036	11.91
025YR004HR	smf-3a	128.7536	11.91
025YR004HR	smf-3a	129.0036	11.91
025YR004HR	smf-3a	129.2536	11.91
025YR004HR	smf-3a	129.5036	11.91
025YR004HR	smf-3a	129.7536	11.90
025YR004HR	smf-3a	130.0036	11.90
025YR004HR	smf-3a	130.2536	11.90
025YR004HR	smf-3a	130.5036	11.90
025YR004HR	smf-3a	130.7536	11.90
025YR004HR	smf-3a	131.0036	11.90
025YR004HR	smf-3a	131.2536	11.90
025YR004HR	smf-3a	131.5036	11.90
025YR004HR	smf-3a	131.7536	11.90
025YR004HR	smf-3a	132.0036	11.90
025YR004HR	smf-3a	132.2536	11.90
025YR004HR	smf-3a	132.5036	11.90
025YR004HR	smf-3a	132.7536	11.90
025YR004HR	smf-3a	133.0036	11.90
025YR004HR	smf-3a	133.2536	11.90
025YR004HR	smf-3a	133.5036	11.90
025YR004HR	smf-3a	133.7536	11.90
025YR004HR	smf-3a	134.0036	11.90

25yr-4hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR004HR	smf-3b	155.5036	11.27
025YR004HR	smf-3b	155.7536	11.27
025YR004HR	smf-3b	156.0036	11.27
025YR004HR	smf-3b	156.2536	11.27
025YR004HR	smf-3b	156.5036	11.27
025YR004HR	smf-3b	156.7536	11.27
025YR004HR	smf-3b	157.0036	11.26
025YR004HR	smf-3b	157.2536	11.26
025YR004HR	smf-3b	157.5036	11.26
025YR004HR	smf-3b	157.7536	11.26
025YR004HR	smf-3b	158.0036	11.26
025YR004HR	smf-3b	158.2536	11.26
025YR004HR	smf-3b	158.5036	11.26
025YR004HR	smf-3b	158.7536	11.26
025YR004HR	smf-3b	159.0036	11.26
025YR004HR	smf-3b	159.2536	11.26
025YR004HR	smf-3b	159.5036	11.26
025YR004HR	smf-3b	159.7536	11.26
025YR004HR	smf-3b	160.0036	11.26
025YR004HR	smf-3b	160.2536	11.26
025YR004HR	smf-3b	160.5036	11.26
025YR004HR	smf-3b	160.7536	11.25
025YR004HR	smf-3b	161.0036	11.25
025YR004HR	smf-3b	161.2536	11.25
025YR004HR	smf-3b	161.5036	11.25
025YR004HR	smf-3b	161.7536	11.25
025YR004HR	smf-3b	162.0036	11.25
025YR004HR	smf-3b	162.2536	11.25
025YR004HR	smf-3b	162.5036	11.25
025YR004HR	smf-3b	162.7536	11.25
025YR004HR	smf-3b	163.0036	11.25
025YR004HR	smf-3b	163.2536	11.25
025YR004HR	smf-3b	163.5036	11.25
025YR004HR	smf-3b	163.7536	11.25
025YR004HR	smf-3b	164.0036	11.25
025YR004HR	smf-3b	164.2536	11.25
025YR004HR	smf-3b	164.5036	11.25
025YR004HR	smf-3b	164.7536	11.25
025YR004HR	smf-3b	165.0036	11.25
025YR004HR	smf-3b	165.2536	11.25
025YR004HR	smf-3b	165.5036	11.25
025YR004HR	smf-3b	165.7536	11.25

25yr-4hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR008HR	smf-1a	218.7536	12.46
025YR008HR	smf-1a	219.0036	12.46
025YR008HR	smf-1a	219.2536	12.46
025YR008HR	smf-1a	219.5036	12.46
025YR008HR	smf-1a	219.7536	12.46
025YR008HR	smf-1a	220.0036	12.46
025YR008HR	smf-1a	220.2536	12.45
025YR008HR	smf-1a	220.5036	12.45
025YR008HR	smf-1a	220.7536	12.45
025YR008HR	smf-1a	221.0036	12.45
025YR008HR	smf-1a	221.2536	12.45
025YR008HR	smf-1a	221.5036	12.45
025YR008HR	smf-1a	221.7536	12.45
025YR008HR	smf-1a	222.0036	12.45
025YR008HR	smf-1a	222.2536	12.45
025YR008HR	smf-1a	222.5036	12.45
025YR008HR	smf-1a	222.7536	12.45
025YR008HR	smf-1a	223.0036	12.45
025YR008HR	smf-1a	223.2536	12.45
025YR008HR	smf-1a	223.5036	12.45
025YR008HR	smf-1a	223.7536	12.45
025YR008HR	smf-1a	224.0036	12.45
025YR008HR	smf-1a	224.2536	12.45
025YR008HR	smf-1a	224.5036	12.45
025YR008HR	smf-1a	224.7536	12.45
025YR008HR	smf-1a	225.0036	12.45
025YR008HR	smf-1a	225.2536	12.45
025YR008HR	smf-1a	225.5036	12.45
025YR008HR	smf-1a	225.7536	12.45
025YR008HR	smf-1a	226.0036	12.45
025YR008HR	smf-1a	226.2536	12.45
025YR008HR	smf-1a	226.5036	12.45
025YR008HR	smf-1a	226.7536	12.45
025YR008HR	smf-1a	227.0036	12.45
025YR008HR	smf-1a	227.2536	12.45
025YR008HR	smf-1a	227.5036	12.45
025YR008HR	smf-1a	227.7536	12.45
025YR008HR	smf-1a	228.0036	12.45
025YR008HR	smf-1a	228.2536	12.45
025YR008HR	smf-1a	228.5036	12.45
025YR008HR	smf-1a	228.7536	12.45
025YR008HR	smf-1a	229.0036	12.45

25yr-8hr SMF-1a

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR008HR	smf-1b	110.0036	13.02
025YR008HR	smf-1b	110.2536	13.02
025YR008HR	smf-1b	110.5036	13.02
025YR008HR	smf-1b	110.7536	13.01
025YR008HR	smf-1b	111.0036	13.01
025YR008HR	smf-1b	111.2536	13.01
025YR008HR	smf-1b	111.5036	13.01
025YR008HR	smf-1b	111.7536	13.01
025YR008HR	smf-1b	112.0036	13.01
025YR008HR	smf-1b	112.2536	13.01
025YR008HR	smf-1b	112.5036	13.01
025YR008HR	smf-1b	112.7536	13.01
025YR008HR	smf-1b	113.0036	13.01
025YR008HR	smf-1b	113.2536	13.00
025YR008HR	smf-1b	113.5036	13.00
025YR008HR	smf-1b	113.7536	13.00
025YR008HR	smf-1b	114.0036	13.00
025YR008HR	smf-1b	114.2536	13.00
025YR008HR	smf-1b	114.5036	13.00
025YR008HR	smf-1b	114.7536	13.00
025YR008HR	smf-1b	115.0036	13.00
025YR008HR	smf-1b	115.2536	13.00
025YR008HR	smf-1b	115.5036	13.00
025YR008HR	smf-1b	115.7536	13.00
025YR008HR	smf-1b	116.0036	13.00
025YR008HR	smf-1b	116.2536	13.00
025YR008HR	smf-1b	116.5036	13.00
025YR008HR	smf-1b	116.7536	13.00
025YR008HR	smf-1b	117.0036	13.00
025YR008HR	smf-1b	117.2536	13.00
025YR008HR	smf-1b	117.5036	13.00
025YR008HR	smf-1b	117.7536	13.00
025YR008HR	smf-1b	118.0036	13.00
025YR008HR	smf-1b	118.2536	13.00
025YR008HR	smf-1b	118.5036	13.00
025YR008HR	smf-1b	118.7536	13.00
025YR008HR	smf-1b	119.0036	13.00
025YR008HR	smf-1b	119.2536	13.00
025YR008HR	smf-1b	119.5036	13.00
025YR008HR	smf-1b	119.7536	13.00
025YR008HR	smf-1b	120.0036	13.00
025YR008HR	smf-1b	120.2536	13.00

25yr-8hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR008HR	smf-2a	179.7536	12.12
025YR008HR	smf-2a	180.0036	12.12
025YR008HR	smf-2a	180.2536	12.12
025YR008HR	smf-2a	180.5036	12.12
025YR008HR	smf-2a	180.7536	12.12
025YR008HR	smf-2a	181.0036	12.11
025YR008HR	smf-2a	181.2536	12.11
025YR008HR	smf-2a	181.5036	12.11
025YR008HR	smf-2a	181.7536	12.11
025YR008HR	smf-2a	182.0036	12.11
025YR008HR	smf-2a	182.2536	12.11
025YR008HR	smf-2a	182.5036	12.11
025YR008HR	smf-2a	182.7536	12.11
025YR008HR	smf-2a	183.0036	12.11
025YR008HR	smf-2a	183.2536	12.11
025YR008HR	smf-2a	183.5036	12.11
025YR008HR	smf-2a	183.7536	12.11
025YR008HR	smf-2a	184.0036	12.11
025YR008HR	smf-2a	184.2536	12.11
025YR008HR	smf-2a	184.5036	12.11
025YR008HR	smf-2a	184.7536	12.11
025YR008HR	smf-2a	185.0036	12.11
025YR008HR	smf-2a	185.2536	12.11
025YR008HR	smf-2a	185.5036	12.11
025YR008HR	smf-2a	185.7536	12.11
025YR008HR	smf-2a	186.0036	12.11
025YR008HR	smf-2a	186.2536	12.10
025YR008HR	smf-2a	186.5036	12.10
025YR008HR	smf-2a	186.7536	12.10
025YR008HR	smf-2a	187.0036	12.10
025YR008HR	smf-2a	187.2536	12.10
025YR008HR	smf-2a	187.5036	12.10
025YR008HR	smf-2a	187.7536	12.10
025YR008HR	smf-2a	188.0036	12.10
025YR008HR	smf-2a	188.2536	12.10
025YR008HR	smf-2a	188.5036	12.10
025YR008HR	smf-2a	188.7536	12.10
025YR008HR	smf-2a	189.0036	12.10
025YR008HR	smf-2a	189.2536	12.10
025YR008HR	smf-2a	189.5036	12.10
025YR008HR	smf-2a	189.7536	12.10
025YR008HR	smf-2a	190.0036	12.10

25yr-8hr SMF-2a

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR008HR	smf-2b	144.5036	11.40
025YR008HR	smf-2b	144.7536	11.40
025YR008HR	smf-2b	145.0036	11.40
025YR008HR	smf-2b	145.2536	11.40
025YR008HR	smf-2b	145.5036	11.40
025YR008HR	smf-2b	145.7536	11.40
025YR008HR	smf-2b	146.0036	11.40
025YR008HR	smf-2b	146.2536	11.40
025YR008HR	smf-2b	146.5036	11.40
025YR008HR	smf-2b	146.7536	11.40
025YR008HR	smf-2b	147.0036	11.40
025YR008HR	smf-2b	147.2536	11.40
025YR008HR	smf-2b	147.5036	11.40
025YR008HR	smf-2b	147.7536	11.40
025YR008HR	smf-2b	148.0036	11.40
025YR008HR	smf-2b	148.2536	11.40
025YR008HR	smf-2b	148.5036	11.40
025YR008HR	smf-2b	148.7536	11.40
025YR008HR	smf-2b	149.0036	11.40
025YR008HR	smf-2b	149.2536	11.40
025YR008HR	smf-2b	149.5036	11.40
025YR008HR	smf-2b	149.7536	11.40
025YR008HR	smf-2b	150.0036	11.40
025YR008HR	smf-2b	150.2536	11.40
025YR008HR	smf-2b	150.5036	11.40
025YR008HR	smf-2b	150.7536	11.40
025YR008HR	smf-2b	151.0036	11.40
025YR008HR	smf-2b	151.2536	11.40
025YR008HR	smf-2b	151.5036	11.40
025YR008HR	smf-2b	151.7536	11.40
025YR008HR	smf-2b	152.0036	11.40
025YR008HR	smf-2b	152.2536	11.40
025YR008HR	smf-2b	152.5036	11.40
025YR008HR	smf-2b	152.7536	11.40
025YR008HR	smf-2b	153.0036	11.40
025YR008HR	smf-2b	153.2536	11.40
025YR008HR	smf-2b	153.5036	11.40
025YR008HR	smf-2b	153.7536	11.40
025YR008HR	smf-2b	154.0036	11.40
025YR008HR	smf-2b	154.2536	11.40
025YR008HR	smf-2b	154.5036	11.40
025YR008HR	smf-2b	154.7536	11.40

25yr-8hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR008HR	smf-2c	172.2536	11.86
025YR008HR	smf-2c	172.5036	11.86
025YR008HR	smf-2c	172.7536	11.86
025YR008HR	smf-2c	173.0036	11.86
025YR008HR	smf-2c	173.2536	11.86
025YR008HR	smf-2c	173.5036	11.86
025YR008HR	smf-2c	173.7536	11.86
025YR008HR	smf-2c	174.0036	11.86
025YR008HR	smf-2c	174.2536	11.86
025YR008HR	smf-2c	174.5036	11.86
025YR008HR	smf-2c	174.7536	11.86
025YR008HR	smf-2c	175.0036	11.86
025YR008HR	smf-2c	175.2536	11.86
025YR008HR	smf-2c	175.5036	11.86
025YR008HR	smf-2c	175.7536	11.86
025YR008HR	smf-2c	176.0036	11.86
025YR008HR	smf-2c	176.2536	11.86
025YR008HR	smf-2c	176.5036	11.85
025YR008HR	smf-2c	176.7536	11.85
025YR008HR	smf-2c	177.0036	11.85
025YR008HR	smf-2c	177.2536	11.85
025YR008HR	smf-2c	177.5036	11.85
025YR008HR	smf-2c	177.7536	11.85
025YR008HR	smf-2c	178.0036	11.85
025YR008HR	smf-2c	178.2536	11.85
025YR008HR	smf-2c	178.5036	11.85
025YR008HR	smf-2c	178.7536	11.85
025YR008HR	smf-2c	179.0036	11.85
025YR008HR	smf-2c	179.2536	11.85
025YR008HR	smf-2c	179.5036	11.85
025YR008HR	smf-2c	179.7536	11.85
025YR008HR	smf-2c	180.0036	11.85
025YR008HR	smf-2c	180.2536	11.85
025YR008HR	smf-2c	180.5036	11.85
025YR008HR	smf-2c	180.7536	11.85
025YR008HR	smf-2c	181.0036	11.85
025YR008HR	smf-2c	181.2536	11.85
025YR008HR	smf-2c	181.5036	11.85
025YR008HR	smf-2c	181.7536	11.85
025YR008HR	smf-2c	182.0036	11.85
025YR008HR	smf-2c	182.2536	11.85
025YR008HR	smf-2c	182.5036	11.85

25yr-8hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR008HR	smf-3a	158.0036	11.92
025YR008HR	smf-3a	158.2536	11.91
025YR008HR	smf-3a	158.5036	11.91
025YR008HR	smf-3a	158.7536	11.91
025YR008HR	smf-3a	159.0036	11.91
025YR008HR	smf-3a	159.2536	11.91
025YR008HR	smf-3a	159.5036	11.91
025YR008HR	smf-3a	159.7536	11.91
025YR008HR	smf-3a	160.0036	11.91
025YR008HR	smf-3a	160.2536	11.91
025YR008HR	smf-3a	160.5036	11.91
025YR008HR	smf-3a	160.7536	11.91
025YR008HR	smf-3a	161.0036	11.91
025YR008HR	smf-3a	161.2536	11.91
025YR008HR	smf-3a	161.5036	11.91
025YR008HR	smf-3a	161.7536	11.91
025YR008HR	smf-3a	162.0036	11.91
025YR008HR	smf-3a	162.2536	11.90
025YR008HR	smf-3a	162.5036	11.90
025YR008HR	smf-3a	162.7536	11.90
025YR008HR	smf-3a	163.0036	11.90
025YR008HR	smf-3a	163.2536	11.90
025YR008HR	smf-3a	163.5036	11.90
025YR008HR	smf-3a	163.7536	11.90
025YR008HR	smf-3a	164.0036	11.90
025YR008HR	smf-3a	164.2536	11.90
025YR008HR	smf-3a	164.5036	11.90
025YR008HR	smf-3a	164.7536	11.90
025YR008HR	smf-3a	165.0036	11.90
025YR008HR	smf-3a	165.2536	11.90
025YR008HR	smf-3a	165.5036	11.90
025YR008HR	smf-3a	165.7536	11.90
025YR008HR	smf-3a	166.0036	11.90
025YR008HR	smf-3a	166.2536	11.90
025YR008HR	smf-3a	166.5036	11.90
025YR008HR	smf-3a	166.7536	11.90
025YR008HR	smf-3a	167.0036	11.90
025YR008HR	smf-3a	167.2536	11.90
025YR008HR	smf-3a	167.5036	11.90
025YR008HR	smf-3a	167.7536	11.90
025YR008HR	smf-3a	168.0036	11.90
025YR008HR	smf-3a	168.2536	11.90

25yr-8hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR008HR	smf-3b	185.7536	11.28
025YR008HR	smf-3b	186.0036	11.28
025YR008HR	smf-3b	186.2536	11.28
025YR008HR	smf-3b	186.5036	11.28
025YR008HR	smf-3b	186.7536	11.27
025YR008HR	smf-3b	187.0036	11.27
025YR008HR	smf-3b	187.2536	11.27
025YR008HR	smf-3b	187.5036	11.27
025YR008HR	smf-3b	187.7536	11.27
025YR008HR	smf-3b	188.0036	11.27
025YR008HR	smf-3b	188.2536	11.27
025YR008HR	smf-3b	188.5036	11.27
025YR008HR	smf-3b	188.7536	11.27
025YR008HR	smf-3b	189.0036	11.27
025YR008HR	smf-3b	189.2536	11.27
025YR008HR	smf-3b	189.5036	11.27
025YR008HR	smf-3b	189.7536	11.27
025YR008HR	smf-3b	190.0036	11.27
025YR008HR	smf-3b	190.2536	11.27
025YR008HR	smf-3b	190.5036	11.27
025YR008HR	smf-3b	190.7536	11.27
025YR008HR	smf-3b	191.0036	11.27
025YR008HR	smf-3b	191.2536	11.26
025YR008HR	smf-3b	191.5036	11.26
025YR008HR	smf-3b	191.7536	11.26
025YR008HR	smf-3b	192.0036	11.26
025YR008HR	smf-3b	192.2536	11.26
025YR008HR	smf-3b	192.5036	11.26
025YR008HR	smf-3b	192.7536	11.26
025YR008HR	smf-3b	193.0036	11.26
025YR008HR	smf-3b	193.2536	11.26
025YR008HR	smf-3b	193.5036	11.26
025YR008HR	smf-3b	193.7536	11.26
025YR008HR	smf-3b	194.0036	11.26
025YR008HR	smf-3b	194.2536	11.26
025YR008HR	smf-3b	194.5036	11.26
025YR008HR	smf-3b	194.7536	11.26
025YR008HR	smf-3b	195.0036	11.26
025YR008HR	smf-3b	195.2536	11.26
025YR008HR	smf-3b	195.5036	11.26
025YR008HR	smf-3b	195.7536	11.25
025YR008HR	smf-3b	196.0036	11.25

25yr-8hr SMF-3b

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR024HR	smf-1a	318.5070	12.46
025YR024HR	smf-1a	318.7570	12.46
025YR024HR	smf-1a	319.0070	12.46
025YR024HR	smf-1a	319.2570	12.46
025YR024HR	smf-1a	319.5070	12.46
025YR024HR	smf-1a	319.7570	12.46
025YR024HR	smf-1a	320.0070	12.46
025YR024HR	smf-1a	320.2570	12.46
025YR024HR	smf-1a	320.5070	12.46
025YR024HR	smf-1a	320.7570	12.46
025YR024HR	smf-1a	321.0070	12.46
025YR024HR	smf-1a	321.2570	12.46
025YR024HR	smf-1a	321.5070	12.46
025YR024HR	smf-1a	321.7570	12.46
025YR024HR	smf-1a	322.0070	12.46
025YR024HR	smf-1a	322.2570	12.45
025YR024HR	smf-1a	322.5070	12.45
025YR024HR	smf-1a	322.7570	12.45
025YR024HR	smf-1a	323.0070	12.45
025YR024HR	smf-1a	323.2570	12.45
025YR024HR	smf-1a	323.5070	12.45
025YR024HR	smf-1a	323.7570	12.45
025YR024HR	smf-1a	324.0070	12.45
025YR024HR	smf-1a	324.2570	12.45
025YR024HR	smf-1a	324.5070	12.45
025YR024HR	smf-1a	324.7570	12.45
025YR024HR	smf-1a	325.0070	12.45
025YR024HR	smf-1a	325.2570	12.45
025YR024HR	smf-1a	325.5070	12.45
025YR024HR	smf-1a	325.7570	12.45
025YR024HR	smf-1a	326.0070	12.45
025YR024HR	smf-1a	326.2570	12.45
025YR024HR	smf-1a	326.5070	12.45
025YR024HR	smf-1a	326.7570	12.45
025YR024HR	smf-1a	327.0070	12.45
025YR024HR	smf-1a	327.2570	12.45
025YR024HR	smf-1a	327.5070	12.45
025YR024HR	smf-1a	327.7570	12.45
025YR024HR	smf-1a	328.0070	12.45
025YR024HR	smf-1a	328.2570	12.45
025YR024HR	smf-1a	328.5070	12.45
025YR024HR	smf-1a	328.7570	12.45

25yr-24hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR024HR	smf-1b	193.7570	13.02
025YR024HR	smf-1b	194.0070	13.02
025YR024HR	smf-1b	194.2570	13.01
025YR024HR	smf-1b	194.5070	13.01
025YR024HR	smf-1b	194.7570	13.01
025YR024HR	smf-1b	195.0070	13.01
025YR024HR	smf-1b	195.2570	13.01
025YR024HR	smf-1b	195.5070	13.01
025YR024HR	smf-1b	195.7570	13.01
025YR024HR	smf-1b	196.0070	13.01
025YR024HR	smf-1b	196.2570	13.01
025YR024HR	smf-1b	196.5070	13.01
025YR024HR	smf-1b	196.7570	13.01
025YR024HR	smf-1b	197.0070	13.01
025YR024HR	smf-1b	197.2570	13.01
025YR024HR	smf-1b	197.5070	13.01
025YR024HR	smf-1b	197.7570	13.01
025YR024HR	smf-1b	198.0070	13.01
025YR024HR	smf-1b	198.2570	13.01
025YR024HR	smf-1b	198.5070	13.01
025YR024HR	smf-1b	198.7570	13.00
025YR024HR	smf-1b	199.0070	13.00
025YR024HR	smf-1b	199.2570	13.00
025YR024HR	smf-1b	199.5070	13.00
025YR024HR	smf-1b	199.7570	13.00
025YR024HR	smf-1b	200.0070	13.00
025YR024HR	smf-1b	200.2570	13.00
025YR024HR	smf-1b	200.5070	13.00
025YR024HR	smf-1b	200.7570	13.00
025YR024HR	smf-1b	201.0070	13.00
025YR024HR	smf-1b	201.2570	13.00
025YR024HR	smf-1b	201.5070	13.00
025YR024HR	smf-1b	201.7570	13.00
025YR024HR	smf-1b	202.0070	13.00
025YR024HR	smf-1b	202.2570	13.00
025YR024HR	smf-1b	202.5070	13.00
025YR024HR	smf-1b	202.7570	13.00
025YR024HR	smf-1b	203.0070	13.00
025YR024HR	smf-1b	203.2570	13.00
025YR024HR	smf-1b	203.5070	13.00
025YR024HR	smf-1b	203.7570	13.00
025YR024HR	smf-1b	204.0070	13.00

25yr-24hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR024HR	smf-2a	268.5070	12.11
025YR024HR	smf-2a	268.7570	12.11
025YR024HR	smf-2a	269.0070	12.11
025YR024HR	smf-2a	269.2570	12.11
025YR024HR	smf-2a	269.5070	12.11
025YR024HR	smf-2a	269.7570	12.11
025YR024HR	smf-2a	270.0070	12.11
025YR024HR	smf-2a	270.2570	12.11
025YR024HR	smf-2a	270.5070	12.11
025YR024HR	smf-2a	270.7570	12.11
025YR024HR	smf-2a	271.0070	12.11
025YR024HR	smf-2a	271.2570	12.11
025YR024HR	smf-2a	271.5070	12.11
025YR024HR	smf-2a	271.7570	12.11
025YR024HR	smf-2a	272.0070	12.11
025YR024HR	smf-2a	272.2570	12.11
025YR024HR	smf-2a	272.5070	12.11
025YR024HR	smf-2a	272.7570	12.11
025YR024HR	smf-2a	273.0070	12.11
025YR024HR	smf-2a	273.2570	12.11
025YR024HR	smf-2a	273.5070	12.11
025YR024HR	smf-2a	273.7570	12.11
025YR024HR	smf-2a	274.0070	12.11
025YR024HR	smf-2a	274.2570	12.11
025YR024HR	smf-2a	274.5070	12.11
025YR024HR	smf-2a	274.7570	12.11
025YR024HR	smf-2a	275.0070	12.11
025YR024HR	smf-2a	275.2570	12.10
025YR024HR	smf-2a	275.5070	12.10
025YR024HR	smf-2a	275.7570	12.10
025YR024HR	smf-2a	276.0070	12.10
025YR024HR	smf-2a	276.2570	12.10
025YR024HR	smf-2a	276.5070	12.10
025YR024HR	smf-2a	276.7570	12.10
025YR024HR	smf-2a	277.0070	12.10
025YR024HR	smf-2a	277.2570	12.10
025YR024HR	smf-2a	277.5070	12.10
025YR024HR	smf-2a	277.7570	12.10
025YR024HR	smf-2a	278.0070	12.10
025YR024HR	smf-2a	278.2570	12.10
025YR024HR	smf-2a	278.5070	12.10
025YR024HR	smf-2a	278.7570	12.10

25yr-24hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR024HR	smf-2b	227.7570	11.41
025YR024HR	smf-2b	228.0070	11.41
025YR024HR	smf-2b	228.2570	11.41
025YR024HR	smf-2b	228.5070	11.41
025YR024HR	smf-2b	228.7570	11.41
025YR024HR	smf-2b	229.0070	11.40
025YR024HR	smf-2b	229.2570	11.40
025YR024HR	smf-2b	229.5070	11.40
025YR024HR	smf-2b	229.7570	11.40
025YR024HR	smf-2b	230.0070	11.40
025YR024HR	smf-2b	230.2570	11.40
025YR024HR	smf-2b	230.5070	11.40
025YR024HR	smf-2b	230.7570	11.40
025YR024HR	smf-2b	231.0070	11.40
025YR024HR	smf-2b	231.2570	11.40
025YR024HR	smf-2b	231.5070	11.40
025YR024HR	smf-2b	231.7570	11.40
025YR024HR	smf-2b	232.0070	11.40
025YR024HR	smf-2b	232.2570	11.40
025YR024HR	smf-2b	232.5070	11.40
025YR024HR	smf-2b	232.7570	11.40
025YR024HR	smf-2b	233.0070	11.40
025YR024HR	smf-2b	233.2570	11.40
025YR024HR	smf-2b	233.5070	11.40
025YR024HR	smf-2b	233.7570	11.40
025YR024HR	smf-2b	234.0070	11.40
025YR024HR	smf-2b	234.2570	11.40
025YR024HR	smf-2b	234.5070	11.40
025YR024HR	smf-2b	234.7570	11.40
025YR024HR	smf-2b	235.0070	11.40
025YR024HR	smf-2b	235.2570	11.40
025YR024HR	smf-2b	235.5070	11.40
025YR024HR	smf-2b	235.7570	11.40
025YR024HR	smf-2b	236.0070	11.40
025YR024HR	smf-2b	236.2570	11.40
025YR024HR	smf-2b	236.5070	11.40
025YR024HR	smf-2b	236.7570	11.40
025YR024HR	smf-2b	237.0070	11.40
025YR024HR	smf-2b	237.2570	11.40
025YR024HR	smf-2b	237.5070	11.40
025YR024HR	smf-2b	237.7570	11.40
025YR024HR	smf-2b	238.0070	11.40

25yr-24hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR024HR	smf-2c	260.5070	11.87
025YR024HR	smf-2c	260.7570	11.86
025YR024HR	smf-2c	261.0070	11.86
025YR024HR	smf-2c	261.2570	11.86
025YR024HR	smf-2c	261.5070	11.86
025YR024HR	smf-2c	261.7570	11.86
025YR024HR	smf-2c	262.0070	11.86
025YR024HR	smf-2c	262.2570	11.86
025YR024HR	smf-2c	262.5070	11.86
025YR024HR	smf-2c	262.7570	11.86
025YR024HR	smf-2c	263.0070	11.86
025YR024HR	smf-2c	263.2570	11.86
025YR024HR	smf-2c	263.5070	11.86
025YR024HR	smf-2c	263.7570	11.86
025YR024HR	smf-2c	264.0070	11.86
025YR024HR	smf-2c	264.2570	11.86
025YR024HR	smf-2c	264.5070	11.86
025YR024HR	smf-2c	264.7570	11.86
025YR024HR	smf-2c	265.0070	11.86
025YR024HR	smf-2c	265.2570	11.86
025YR024HR	smf-2c	265.5070	11.86
025YR024HR	smf-2c	265.7570	11.86
025YR024HR	smf-2c	266.0070	11.86
025YR024HR	smf-2c	266.2570	11.86
025YR024HR	smf-2c	266.5070	11.86
025YR024HR	smf-2c	266.7570	11.86
025YR024HR	smf-2c	267.0070	11.86
025YR024HR	smf-2c	267.2570	11.85
025YR024HR	smf-2c	267.5070	11.85
025YR024HR	smf-2c	267.7570	11.85
025YR024HR	smf-2c	268.0070	11.85
025YR024HR	smf-2c	268.2570	11.85
025YR024HR	smf-2c	268.5070	11.85
025YR024HR	smf-2c	268.7570	11.85
025YR024HR	smf-2c	269.0070	11.85
025YR024HR	smf-2c	269.2570	11.85
025YR024HR	smf-2c	269.5070	11.85
025YR024HR	smf-2c	269.7570	11.85
025YR024HR	smf-2c	270.0070	11.85
025YR024HR	smf-2c	270.2570	11.85
025YR024HR	smf-2c	270.5070	11.85
025YR024HR	smf-2c	270.7570	11.85

25yr-24hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR024HR	smf-3a	261.7570	11.91
025YR024HR	smf-3a	262.0070	11.91
025YR024HR	smf-3a	262.2570	11.91
025YR024HR	smf-3a	262.5070	11.91
025YR024HR	smf-3a	262.7570	11.91
025YR024HR	smf-3a	263.0070	11.91
025YR024HR	smf-3a	263.2570	11.91
025YR024HR	smf-3a	263.5070	11.91
025YR024HR	smf-3a	263.7570	11.91
025YR024HR	smf-3a	264.0070	11.91
025YR024HR	smf-3a	264.2570	11.91
025YR024HR	smf-3a	264.5070	11.91
025YR024HR	smf-3a	264.7570	11.91
025YR024HR	smf-3a	265.0070	11.91
025YR024HR	smf-3a	265.2570	11.91
025YR024HR	smf-3a	265.5070	11.91
025YR024HR	smf-3a	265.7570	11.91
025YR024HR	smf-3a	266.0070	11.91
025YR024HR	smf-3a	266.2570	11.91
025YR024HR	smf-3a	266.5070	11.91
025YR024HR	smf-3a	266.7570	11.91
025YR024HR	smf-3a	267.0070	11.91
025YR024HR	smf-3a	267.2570	11.91
025YR024HR	smf-3a	267.5070	11.90
025YR024HR	smf-3a	267.7570	11.90
025YR024HR	smf-3a	268.0070	11.90
025YR024HR	smf-3a	268.2570	11.90
025YR024HR	smf-3a	268.5070	11.90
025YR024HR	smf-3a	268.7570	11.90
025YR024HR	smf-3a	269.0070	11.90
025YR024HR	smf-3a	269.2570	11.90
025YR024HR	smf-3a	269.5070	11.90
025YR024HR	smf-3a	269.7570	11.90
025YR024HR	smf-3a	270.0070	11.90
025YR024HR	smf-3a	270.2570	11.90
025YR024HR	smf-3a	270.5070	11.90
025YR024HR	smf-3a	270.7570	11.90
025YR024HR	smf-3a	271.0070	11.90
025YR024HR	smf-3a	271.2570	11.90
025YR024HR	smf-3a	271.5070	11.90
025YR024HR	smf-3a	271.7570	11.90
025YR024HR	smf-3a	272.0070	11.90

25yr-24hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR024HR	smf-3b	305.0070	11.26
025YR024HR	smf-3b	305.2570	11.26
025YR024HR	smf-3b	305.5070	11.26
025YR024HR	smf-3b	305.7570	11.26
025YR024HR	smf-3b	306.0070	11.26
025YR024HR	smf-3b	306.2570	11.26
025YR024HR	smf-3b	306.5070	11.26
025YR024HR	smf-3b	306.7570	11.26
025YR024HR	smf-3b	307.0070	11.26
025YR024HR	smf-3b	307.2570	11.26
025YR024HR	smf-3b	307.5070	11.26
025YR024HR	smf-3b	307.7570	11.26
025YR024HR	smf-3b	308.0070	11.26
025YR024HR	smf-3b	308.2570	11.26
025YR024HR	smf-3b	308.5070	11.25
025YR024HR	smf-3b	308.7570	11.25
025YR024HR	smf-3b	309.0070	11.25
025YR024HR	smf-3b	309.2570	11.25
025YR024HR	smf-3b	309.5070	11.25
025YR024HR	smf-3b	309.7570	11.25
025YR024HR	smf-3b	310.0070	11.25
025YR024HR	smf-3b	310.2570	11.25
025YR024HR	smf-3b	310.5070	11.25
025YR024HR	smf-3b	310.7570	11.25
025YR024HR	smf-3b	311.0070	11.25
025YR024HR	smf-3b	311.2570	11.25
025YR024HR	smf-3b	311.5070	11.25
025YR024HR	smf-3b	311.7570	11.25
025YR024HR	smf-3b	312.0070	11.25
025YR024HR	smf-3b	312.2570	11.25
025YR024HR	smf-3b	312.5070	11.25
025YR024HR	smf-3b	312.7570	11.25
025YR024HR	smf-3b	313.0070	11.25
025YR024HR	smf-3b	313.2570	11.25
025YR024HR	smf-3b	313.5070	11.25
025YR024HR	smf-3b	313.7570	11.25
025YR024HR	smf-3b	314.0070	11.25
025YR024HR	smf-3b	314.2570	11.25
025YR024HR	smf-3b	314.5070	11.25
025YR024HR	smf-3b	314.7570	11.25
025YR024HR	smf-3b	315.0070	11.25
025YR024HR	smf-3b	315.2570	11.25

25yr-24hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR072HR	smf-1a	547.7515	12.46
025YR072HR	smf-1a	548.0015	12.46
025YR072HR	smf-1a	548.2515	12.46
025YR072HR	smf-1a	548.5015	12.46
025YR072HR	smf-1a	548.7515	12.46
025YR072HR	smf-1a	549.0015	12.46
025YR072HR	smf-1a	549.2515	12.46
025YR072HR	smf-1a	549.5015	12.46
025YR072HR	smf-1a	549.7515	12.46
025YR072HR	smf-1a	550.0015	12.46
025YR072HR	smf-1a	550.2515	12.46
025YR072HR	smf-1a	550.5015	12.46
025YR072HR	smf-1a	550.7515	12.46
025YR072HR	smf-1a	551.0015	12.46
025YR072HR	smf-1a	551.2515	12.46
025YR072HR	smf-1a	551.5015	12.46
025YR072HR	smf-1a	551.7515	12.46
025YR072HR	smf-1a	552.0015	12.46
025YR072HR	smf-1a	552.2515	12.46
025YR072HR	smf-1a	552.5015	12.46
025YR072HR	smf-1a	552.7515	12.45
025YR072HR	smf-1a	553.0015	12.45
025YR072HR	smf-1a	553.2515	12.45
025YR072HR	smf-1a	553.5015	12.45
025YR072HR	smf-1a	553.7515	12.45
025YR072HR	smf-1a	554.0015	12.45
025YR072HR	smf-1a	554.2515	12.45
025YR072HR	smf-1a	554.5015	12.45
025YR072HR	smf-1a	554.7515	12.45
025YR072HR	smf-1a	555.0015	12.45
025YR072HR	smf-1a	555.2515	12.45
025YR072HR	smf-1a	555.5015	12.45
025YR072HR	smf-1a	555.7515	12.45
025YR072HR	smf-1a	556.0015	12.45
025YR072HR	smf-1a	556.2515	12.45
025YR072HR	smf-1a	556.5015	12.45
025YR072HR	smf-1a	556.7515	12.45
025YR072HR	smf-1a	557.0015	12.45
025YR072HR	smf-1a	557.2515	12.45
025YR072HR	smf-1a	557.5015	12.45
025YR072HR	smf-1a	557.7515	12.45
025YR072HR	smf-1a	558.0015	12.45

25yr-72hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR072HR	smf-1b	417.0015	13.01
025YR072HR	smf-1b	417.2515	13.01
025YR072HR	smf-1b	417.5015	13.01
025YR072HR	smf-1b	417.7515	13.01
025YR072HR	smf-1b	418.0015	13.01
025YR072HR	smf-1b	418.2515	13.01
025YR072HR	smf-1b	418.5015	13.01
025YR072HR	smf-1b	418.7515	13.01
025YR072HR	smf-1b	419.0015	13.01
025YR072HR	smf-1b	419.2515	13.01
025YR072HR	smf-1b	419.5015	13.01
025YR072HR	smf-1b	419.7515	13.01
025YR072HR	smf-1b	420.0015	13.01
025YR072HR	smf-1b	420.2515	13.01
025YR072HR	smf-1b	420.5015	13.01
025YR072HR	smf-1b	420.7515	13.01
025YR072HR	smf-1b	421.0015	13.01
025YR072HR	smf-1b	421.2515	13.01
025YR072HR	smf-1b	421.5015	13.01
025YR072HR	smf-1b	421.7515	13.01
025YR072HR	smf-1b	422.0015	13.01
025YR072HR	smf-1b	422.2515	13.01
025YR072HR	smf-1b	422.5015	13.01
025YR072HR	smf-1b	422.7515	13.01
025YR072HR	smf-1b	423.0015	13.01
025YR072HR	smf-1b	423.2515	13.01
025YR072HR	smf-1b	423.5015	13.01
025YR072HR	smf-1b	423.7515	13.01
025YR072HR	smf-1b	424.0015	13.01
025YR072HR	smf-1b	424.2515	13.00
025YR072HR	smf-1b	424.5015	13.00
025YR072HR	smf-1b	424.7515	13.00
025YR072HR	smf-1b	425.0015	13.00
025YR072HR	smf-1b	425.2515	13.00
025YR072HR	smf-1b	425.5015	13.00
025YR072HR	smf-1b	425.7515	13.00
025YR072HR	smf-1b	426.0015	13.00
025YR072HR	smf-1b	426.2515	13.00
025YR072HR	smf-1b	426.5015	13.00
025YR072HR	smf-1b	426.7515	13.00
025YR072HR	smf-1b	427.0015	13.00
025YR072HR	smf-1b	427.2515	13.00

25yr-72hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR072HR	smf-2a	485.7515	12.11
025YR072HR	smf-2a	486.0015	12.11
025YR072HR	smf-2a	486.2515	12.11
025YR072HR	smf-2a	486.5015	12.11
025YR072HR	smf-2a	486.7515	12.11
025YR072HR	smf-2a	487.0015	12.11
025YR072HR	smf-2a	487.2515	12.11
025YR072HR	smf-2a	487.5015	12.11
025YR072HR	smf-2a	487.7515	12.11
025YR072HR	smf-2a	488.0015	12.11
025YR072HR	smf-2a	488.2515	12.11
025YR072HR	smf-2a	488.5015	12.11
025YR072HR	smf-2a	488.7515	12.10
025YR072HR	smf-2a	489.0015	12.10
025YR072HR	smf-2a	489.2515	12.10
025YR072HR	smf-2a	489.5015	12.10
025YR072HR	smf-2a	489.7515	12.10
025YR072HR	smf-2a	490.0015	12.10
025YR072HR	smf-2a	490.2515	12.10
025YR072HR	smf-2a	490.5015	12.10
025YR072HR	smf-2a	490.7515	12.10
025YR072HR	smf-2a	491.0015	12.10
025YR072HR	smf-2a	491.2515	12.10
025YR072HR	smf-2a	491.5015	12.10
025YR072HR	smf-2a	491.7515	12.10
025YR072HR	smf-2a	492.0015	12.10
025YR072HR	smf-2a	492.2515	12.10
025YR072HR	smf-2a	492.5015	12.10
025YR072HR	smf-2a	492.7515	12.10
025YR072HR	smf-2a	493.0015	12.10
025YR072HR	smf-2a	493.2515	12.10
025YR072HR	smf-2a	493.5015	12.10
025YR072HR	smf-2a	493.7515	12.10
025YR072HR	smf-2a	494.0015	12.10
025YR072HR	smf-2a	494.2515	12.10
025YR072HR	smf-2a	494.5015	12.10
025YR072HR	smf-2a	494.7515	12.10
025YR072HR	smf-2a	495.0015	12.10
025YR072HR	smf-2a	495.2515	12.10
025YR072HR	smf-2a	495.5015	12.10
025YR072HR	smf-2a	495.7515	12.10
025YR072HR	smf-2a	496.0015	12.10

25yr-72hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR072HR	smf-2b	407.5015	11.41
025YR072HR	smf-2b	407.7515	11.41
025YR072HR	smf-2b	408.0015	11.41
025YR072HR	smf-2b	408.2515	11.41
025YR072HR	smf-2b	408.5015	11.41
025YR072HR	smf-2b	408.7515	11.41
025YR072HR	smf-2b	409.0015	11.41
025YR072HR	smf-2b	409.2515	11.41
025YR072HR	smf-2b	409.5015	11.41
025YR072HR	smf-2b	409.7515	11.41
025YR072HR	smf-2b	410.0015	11.41
025YR072HR	smf-2b	410.2515	11.41
025YR072HR	smf-2b	410.5015	11.41
025YR072HR	smf-2b	410.7515	11.41
025YR072HR	smf-2b	411.0015	11.41
025YR072HR	smf-2b	411.2515	11.41
025YR072HR	smf-2b	411.5015	11.41
025YR072HR	smf-2b	411.7515	11.41
025YR072HR	smf-2b	412.0015	11.41
025YR072HR	smf-2b	412.2515	11.41
025YR072HR	smf-2b	412.5015	11.41
025YR072HR	smf-2b	412.7515	11.41
025YR072HR	smf-2b	413.0015	11.41
025YR072HR	smf-2b	413.2515	11.41
025YR072HR	smf-2b	413.5015	11.40
025YR072HR	smf-2b	413.7515	11.40
025YR072HR	smf-2b	414.0015	11.40
025YR072HR	smf-2b	414.2515	11.40
025YR072HR	smf-2b	414.5015	11.40
025YR072HR	smf-2b	414.7515	11.40
025YR072HR	smf-2b	415.0015	11.40
025YR072HR	smf-2b	415.2515	11.40
025YR072HR	smf-2b	415.5015	11.40
025YR072HR	smf-2b	415.7515	11.40
025YR072HR	smf-2b	416.0015	11.40
025YR072HR	smf-2b	416.2515	11.40
025YR072HR	smf-2b	416.5015	11.40
025YR072HR	smf-2b	416.7515	11.40
025YR072HR	smf-2b	417.0015	11.40
025YR072HR	smf-2b	417.2515	11.40
025YR072HR	smf-2b	417.5015	11.40
025YR072HR	smf-2b	417.7515	11.40

25yr-72hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR072HR	smf-2c	486.7515	11.86
025YR072HR	smf-2c	487.0015	11.86
025YR072HR	smf-2c	487.2515	11.86
025YR072HR	smf-2c	487.5015	11.86
025YR072HR	smf-2c	487.7515	11.86
025YR072HR	smf-2c	488.0015	11.86
025YR072HR	smf-2c	488.2515	11.86
025YR072HR	smf-2c	488.5015	11.86
025YR072HR	smf-2c	488.7515	11.86
025YR072HR	smf-2c	489.0015	11.86
025YR072HR	smf-2c	489.2515	11.86
025YR072HR	smf-2c	489.5015	11.86
025YR072HR	smf-2c	489.7515	11.86
025YR072HR	smf-2c	490.0015	11.86
025YR072HR	smf-2c	490.2515	11.86
025YR072HR	smf-2c	490.5015	11.86
025YR072HR	smf-2c	490.7515	11.86
025YR072HR	smf-2c	491.0015	11.86
025YR072HR	smf-2c	491.2515	11.86
025YR072HR	smf-2c	491.5015	11.86
025YR072HR	smf-2c	491.7515	11.86
025YR072HR	smf-2c	492.0015	11.86
025YR072HR	smf-2c	492.2515	11.86
025YR072HR	smf-2c	492.5015	11.86
025YR072HR	smf-2c	492.7515	11.86
025YR072HR	smf-2c	493.0015	11.86
025YR072HR	smf-2c	493.2515	11.86
025YR072HR	smf-2c	493.5015	11.86
025YR072HR	smf-2c	493.7515	11.86
025YR072HR	smf-2c	494.0015	11.86
025YR072HR	smf-2c	494.2515	11.86
025YR072HR	smf-2c	494.5015	11.86
025YR072HR	smf-2c	494.7515	11.86
025YR072HR	smf-2c	495.0015	11.86
025YR072HR	smf-2c	495.2515	11.86
025YR072HR	smf-2c	495.5015	11.86
025YR072HR	smf-2c	495.7515	11.86
025YR072HR	smf-2c	496.0015	11.86
025YR072HR	smf-2c	496.2515	11.86
025YR072HR	smf-2c	496.5015	11.86
025YR072HR	smf-2c	496.7515	11.86
025YR072HR	smf-2c	497.0015	11.85

25yr-72hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR072HR	smf-3a	534.5015	11.91
025YR072HR	smf-3a	534.7515	11.91
025YR072HR	smf-3a	535.0015	11.91
025YR072HR	smf-3a	535.2515	11.91
025YR072HR	smf-3a	535.5015	11.91
025YR072HR	smf-3a	535.7515	11.91
025YR072HR	smf-3a	536.0015	11.91
025YR072HR	smf-3a	536.2515	11.91
025YR072HR	smf-3a	536.5015	11.91
025YR072HR	smf-3a	536.7515	11.91
025YR072HR	smf-3a	537.0015	11.91
025YR072HR	smf-3a	537.2515	11.91
025YR072HR	smf-3a	537.5015	11.90
025YR072HR	smf-3a	537.7515	11.90
025YR072HR	smf-3a	538.0015	11.90
025YR072HR	smf-3a	538.2515	11.90
025YR072HR	smf-3a	538.5015	11.90
025YR072HR	smf-3a	538.7515	11.90
025YR072HR	smf-3a	539.0015	11.90
025YR072HR	smf-3a	539.2515	11.90
025YR072HR	smf-3a	539.5015	11.90
025YR072HR	smf-3a	539.7515	11.90
025YR072HR	smf-3a	540.0015	11.90
025YR072HR	smf-3a	540.2515	11.90
025YR072HR	smf-3a	540.5015	11.90
025YR072HR	smf-3a	540.7515	11.90
025YR072HR	smf-3a	541.0015	11.90
025YR072HR	smf-3a	541.2515	11.90
025YR072HR	smf-3a	541.5015	11.90
025YR072HR	smf-3a	541.7515	11.90
025YR072HR	smf-3a	542.0015	11.90
025YR072HR	smf-3a	542.2515	11.90
025YR072HR	smf-3a	542.5015	11.90
025YR072HR	smf-3a	542.7515	11.90
025YR072HR	smf-3a	543.0015	11.90
025YR072HR	smf-3a	543.2515	11.90
025YR072HR	smf-3a	543.5015	11.90
025YR072HR	smf-3a	543.7515	11.90
025YR072HR	smf-3a	544.0015	11.90
025YR072HR	smf-3a	544.2515	11.90
025YR072HR	smf-3a	544.5015	11.90
025YR072HR	smf-3a	544.7515	11.90

25yr-72hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
025YR072HR	smf-3b	603.2515	11.26
025YR072HR	smf-3b	603.5015	11.26
025YR072HR	smf-3b	603.7515	11.26
025YR072HR	smf-3b	604.0015	11.26
025YR072HR	smf-3b	604.2515	11.26
025YR072HR	smf-3b	604.5015	11.26
025YR072HR	smf-3b	604.7515	11.26
025YR072HR	smf-3b	605.0015	11.26
025YR072HR	smf-3b	605.2515	11.26
025YR072HR	smf-3b	605.5015	11.26
025YR072HR	smf-3b	605.7515	11.26
025YR072HR	smf-3b	606.0015	11.26
025YR072HR	smf-3b	606.2515	11.26
025YR072HR	smf-3b	606.5015	11.26
025YR072HR	smf-3b	606.7515	11.26
025YR072HR	smf-3b	607.0015	11.26
025YR072HR	smf-3b	607.2515	11.26
025YR072HR	smf-3b	607.5015	11.26
025YR072HR	smf-3b	607.7515	11.26
025YR072HR	smf-3b	608.0015	11.26
025YR072HR	smf-3b	608.2515	11.26
025YR072HR	smf-3b	608.5015	11.26
025YR072HR	smf-3b	608.7515	11.26
025YR072HR	smf-3b	609.0015	11.25
025YR072HR	smf-3b	609.2515	11.25
025YR072HR	smf-3b	609.5015	11.25
025YR072HR	smf-3b	609.7515	11.25
025YR072HR	smf-3b	610.0015	11.25
025YR072HR	smf-3b	610.2515	11.25
025YR072HR	smf-3b	610.5015	11.25
025YR072HR	smf-3b	610.7515	11.25
025YR072HR	smf-3b	611.0015	11.25
025YR072HR	smf-3b	611.2515	11.25
025YR072HR	smf-3b	611.5015	11.25
025YR072HR	smf-3b	611.7515	11.25
025YR072HR	smf-3b	612.0015	11.25
025YR072HR	smf-3b	612.2515	11.25
025YR072HR	smf-3b	612.5015	11.25
025YR072HR	smf-3b	612.7515	11.25
025YR072HR	smf-3b	613.0015	11.25
025YR072HR	smf-3b	613.2515	11.25
025YR072HR	smf-3b	613.5015	11.25

25yr-72hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR001HR	smf-1a	73.5011	12.46
050YR001HR	smf-1a	73.7511	12.46
050YR001HR	smf-1a	74.0011	12.46
050YR001HR	smf-1a	74.2511	12.46
050YR001HR	smf-1a	74.5011	12.45
050YR001HR	smf-1a	74.7511	12.45
050YR001HR	smf-1a	75.0011	12.45
050YR001HR	smf-1a	75.2511	12.45
050YR001HR	smf-1a	75.5011	12.45
050YR001HR	smf-1a	75.7511	12.45
050YR001HR	smf-1a	76.0011	12.45
050YR001HR	smf-1a	76.2511	12.45
050YR001HR	smf-1a	76.5011	12.45
050YR001HR	smf-1a	76.7511	12.45
050YR001HR	smf-1a	77.0011	12.45
050YR001HR	smf-1a	77.2511	12.45
050YR001HR	smf-1a	77.5011	12.45
050YR001HR	smf-1a	77.7511	12.45
050YR001HR	smf-1a	78.0011	12.45
050YR001HR	smf-1a	78.2511	12.45
050YR001HR	smf-1a	78.5011	12.45
050YR001HR	smf-1a	78.7511	12.45
050YR001HR	smf-1a	79.0011	12.45
050YR001HR	smf-1a	79.2511	12.45
050YR001HR	smf-1a	79.5011	12.45
050YR001HR	smf-1a	79.7511	12.45
050YR001HR	smf-1a	80.0011	12.45
050YR001HR	smf-1a	80.2511	12.45
050YR001HR	smf-1a	80.5011	12.45
050YR001HR	smf-1a	80.7511	12.45
050YR001HR	smf-1a	81.0011	12.45
050YR001HR	smf-1a	81.2511	12.45
050YR001HR	smf-1a	81.5011	12.45
050YR001HR	smf-1a	81.7511	12.45
050YR001HR	smf-1a	82.0011	12.45
050YR001HR	smf-1a	82.2511	12.45
050YR001HR	smf-1a	82.5011	12.45
050YR001HR	smf-1a	82.7511	12.45
050YR001HR	smf-1a	83.0011	12.45
050YR001HR	smf-1a	83.2511	12.45
050YR001HR	smf-1a	83.5011	12.45
050YR001HR	smf-1a	83.7511	12.45

50yr-1hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR001HR	smf-1b	45.2511	13.07
050YR001HR	smf-1b	45.5011	13.07
050YR001HR	smf-1b	45.7511	13.07
050YR001HR	smf-1b	46.0011	13.06
050YR001HR	smf-1b	46.2511	13.06
050YR001HR	smf-1b	46.5011	13.06
050YR001HR	smf-1b	46.7511	13.06
050YR001HR	smf-1b	47.0011	13.05
050YR001HR	smf-1b	47.2511	13.05
050YR001HR	smf-1b	47.5011	13.05
050YR001HR	smf-1b	47.7511	13.05
050YR001HR	smf-1b	48.0011	13.05
050YR001HR	smf-1b	48.2511	13.04
050YR001HR	smf-1b	48.5011	13.04
050YR001HR	smf-1b	48.7511	13.04
050YR001HR	smf-1b	49.0011	13.04
050YR001HR	smf-1b	49.2511	13.04
050YR001HR	smf-1b	49.5011	13.03
050YR001HR	smf-1b	49.7511	13.03
050YR001HR	smf-1b	50.0011	13.03
050YR001HR	smf-1b	50.2511	13.03
050YR001HR	smf-1b	50.5011	13.03
050YR001HR	smf-1b	50.7511	13.02
050YR001HR	smf-1b	51.0011	13.02
050YR001HR	smf-1b	51.2511	13.02
050YR001HR	smf-1b	51.5011	13.02
050YR001HR	smf-1b	51.7511	13.02
050YR001HR	smf-1b	52.0011	13.02
050YR001HR	smf-1b	52.2511	13.01
050YR001HR	smf-1b	52.5011	13.01
050YR001HR	smf-1b	52.7511	13.01
050YR001HR	smf-1b	53.0011	13.01
050YR001HR	smf-1b	53.2511	13.01
050YR001HR	smf-1b	53.5011	13.01
050YR001HR	smf-1b	53.7511	13.00
050YR001HR	smf-1b	54.0011	13.00
050YR001HR	smf-1b	54.2511	13.00
050YR001HR	smf-1b	54.5011	13.00
050YR001HR	smf-1b	54.7511	13.00
050YR001HR	smf-1b	55.0011	13.00
050YR001HR	smf-1b	55.2511	13.00
050YR001HR	smf-1b	55.5011	13.00

50yr-1hr SMF-1b

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR001HR	smf-2a	122.0011	12.12
050YR001HR	smf-2a	122.2511	12.11
050YR001HR	smf-2a	122.5011	12.11
050YR001HR	smf-2a	122.7511	12.11
050YR001HR	smf-2a	123.0011	12.11
050YR001HR	smf-2a	123.2511	12.11
050YR001HR	smf-2a	123.5011	12.11
050YR001HR	smf-2a	123.7511	12.11
050YR001HR	smf-2a	124.0011	12.11
050YR001HR	smf-2a	124.2511	12.11
050YR001HR	smf-2a	124.5011	12.11
050YR001HR	smf-2a	124.7511	12.11
050YR001HR	smf-2a	125.0011	12.11
050YR001HR	smf-2a	125.2511	12.11
050YR001HR	smf-2a	125.5011	12.11
050YR001HR	smf-2a	125.7511	12.11
050YR001HR	smf-2a	126.0011	12.11
050YR001HR	smf-2a	126.2511	12.10
050YR001HR	smf-2a	126.5011	12.10
050YR001HR	smf-2a	126.7511	12.10
050YR001HR	smf-2a	127.0011	12.10
050YR001HR	smf-2a	127.2511	12.10
050YR001HR	smf-2a	127.5011	12.10
050YR001HR	smf-2a	127.7511	12.10
050YR001HR	smf-2a	128.0011	12.10
050YR001HR	smf-2a	128.2511	12.10
050YR001HR	smf-2a	128.5011	12.10
050YR001HR	smf-2a	128.7511	12.10
050YR001HR	smf-2a	129.0011	12.10
050YR001HR	smf-2a	129.2511	12.10
050YR001HR	smf-2a	129.5011	12.10
050YR001HR	smf-2a	129.7511	12.10
050YR001HR	smf-2a	130.0011	12.10
050YR001HR	smf-2a	130.2511	12.10
050YR001HR	smf-2a	130.5011	12.10
050YR001HR	smf-2a	130.7511	12.10
050YR001HR	smf-2a	131.0011	12.10
050YR001HR	smf-2a	131.2511	12.10
050YR001HR	smf-2a	131.5011	12.10
050YR001HR	smf-2a	131.7511	12.10
050YR001HR	smf-2a	132.0011	12.10
050YR001HR	smf-2a	132.2511	12.10

50yr-1hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR001HR	smf-2b	83.2511	11.42
050YR001HR	smf-2b	83.5011	11.42
050YR001HR	smf-2b	83.7511	11.42
050YR001HR	smf-2b	84.0011	11.42
050YR001HR	smf-2b	84.2511	11.42
050YR001HR	smf-2b	84.5011	11.42
050YR001HR	smf-2b	84.7511	11.41
050YR001HR	smf-2b	85.0011	11.41
050YR001HR	smf-2b	85.2511	11.41
050YR001HR	smf-2b	85.5011	11.41
050YR001HR	smf-2b	85.7511	11.41
050YR001HR	smf-2b	86.0011	11.41
050YR001HR	smf-2b	86.2511	11.41
050YR001HR	smf-2b	86.5011	11.41
050YR001HR	smf-2b	86.7511	11.41
050YR001HR	smf-2b	87.0011	11.40
050YR001HR	smf-2b	87.2511	11.40
050YR001HR	smf-2b	87.5011	11.40
050YR001HR	smf-2b	87.7511	11.40
050YR001HR	smf-2b	88.0011	11.40
050YR001HR	smf-2b	88.2511	11.40
050YR001HR	smf-2b	88.5011	11.40
050YR001HR	smf-2b	88.7511	11.40
050YR001HR	smf-2b	89.0011	11.40
050YR001HR	smf-2b	89.2511	11.40
050YR001HR	smf-2b	89.5011	11.40
050YR001HR	smf-2b	89.7511	11.40
050YR001HR	smf-2b	90.0011	11.40
050YR001HR	smf-2b	90.2511	11.40
050YR001HR	smf-2b	90.5011	11.40
050YR001HR	smf-2b	90.7511	11.40
050YR001HR	smf-2b	91.0011	11.40
050YR001HR	smf-2b	91.2511	11.40
050YR001HR	smf-2b	91.5011	11.40
050YR001HR	smf-2b	91.7511	11.40
050YR001HR	smf-2b	92.0011	11.40
050YR001HR	smf-2b	92.2511	11.40
050YR001HR	smf-2b	92.5011	11.40
050YR001HR	smf-2b	92.7511	11.40
050YR001HR	smf-2b	93.0011	11.40
050YR001HR	smf-2b	93.2511	11.40
050YR001HR	smf-2b	93.5011	11.40

50yr-1hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR001HR	smf-2c	107.5011	11.89
050YR001HR	smf-2c	107.7511	11.89
050YR001HR	smf-2c	108.0011	11.88
050YR001HR	smf-2c	108.2511	11.88
050YR001HR	smf-2c	108.5011	11.88
050YR001HR	smf-2c	108.7511	11.88
050YR001HR	smf-2c	109.0011	11.88
050YR001HR	smf-2c	109.2511	11.88
050YR001HR	smf-2c	109.5011	11.88
050YR001HR	smf-2c	109.7511	11.88
050YR001HR	smf-2c	110.0011	11.88
050YR001HR	smf-2c	110.2511	11.88
050YR001HR	smf-2c	110.5011	11.88
050YR001HR	smf-2c	110.7511	11.87
050YR001HR	smf-2c	111.0011	11.87
050YR001HR	smf-2c	111.2511	11.87
050YR001HR	smf-2c	111.5011	11.87
050YR001HR	smf-2c	111.7511	11.87
050YR001HR	smf-2c	112.0011	11.87
050YR001HR	smf-2c	112.2511	11.87
050YR001HR	smf-2c	112.5011	11.87
050YR001HR	smf-2c	112.7511	11.87
050YR001HR	smf-2c	113.0011	11.87
050YR001HR	smf-2c	113.2511	11.87
050YR001HR	smf-2c	113.5011	11.87
050YR001HR	smf-2c	113.7511	11.86
050YR001HR	smf-2c	114.0011	11.86
050YR001HR	smf-2c	114.2511	11.86
050YR001HR	smf-2c	114.5011	11.86
050YR001HR	smf-2c	114.7511	11.86
050YR001HR	smf-2c	115.0011	11.86
050YR001HR	smf-2c	115.2511	11.86
050YR001HR	smf-2c	115.5011	11.86
050YR001HR	smf-2c	115.7511	11.86
050YR001HR	smf-2c	116.0011	11.86
050YR001HR	smf-2c	116.2511	11.86
050YR001HR	smf-2c	116.5011	11.86
050YR001HR	smf-2c	116.7511	11.85
050YR001HR	smf-2c	117.0011	11.85
050YR001HR	smf-2c	117.2511	11.85
050YR001HR	smf-2c	117.5011	11.85
050YR001HR	smf-2c	117.7511	11.85

50yr-1hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR001HR	smf-3a	89.7511	11.91
050YR001HR	smf-3a	90.0011	11.91
050YR001HR	smf-3a	90.2511	11.91
050YR001HR	smf-3a	90.5011	11.91
050YR001HR	smf-3a	90.7511	11.90
050YR001HR	smf-3a	91.0011	11.90
050YR001HR	smf-3a	91.2511	11.90
050YR001HR	smf-3a	91.5011	11.90
050YR001HR	smf-3a	91.7511	11.90
050YR001HR	smf-3a	92.0011	11.90
050YR001HR	smf-3a	92.2511	11.90
050YR001HR	smf-3a	92.5011	11.90
050YR001HR	smf-3a	92.7511	11.90
050YR001HR	smf-3a	93.0011	11.90
050YR001HR	smf-3a	93.2511	11.90
050YR001HR	smf-3a	93.5011	11.90
050YR001HR	smf-3a	93.7511	11.90
050YR001HR	smf-3a	94.0011	11.90
050YR001HR	smf-3a	94.2511	11.90
050YR001HR	smf-3a	94.5011	11.90
050YR001HR	smf-3a	94.7511	11.90
050YR001HR	smf-3a	95.0011	11.90
050YR001HR	smf-3a	95.2511	11.90
050YR001HR	smf-3a	95.5011	11.90
050YR001HR	smf-3a	95.7511	11.90
050YR001HR	smf-3a	96.0011	11.90
050YR001HR	smf-3a	96.2511	11.90
050YR001HR	smf-3a	96.5011	11.90
050YR001HR	smf-3a	96.7511	11.90
050YR001HR	smf-3a	97.0011	11.90
050YR001HR	smf-3a	97.2511	11.90
050YR001HR	smf-3a	97.5011	11.90
050YR001HR	smf-3a	97.7511	11.90
050YR001HR	smf-3a	98.0011	11.90
050YR001HR	smf-3a	98.2511	11.90
050YR001HR	smf-3a	98.5011	11.90
050YR001HR	smf-3a	98.7511	11.90
050YR001HR	smf-3a	99.0011	11.90
050YR001HR	smf-3a	99.2511	11.90
050YR001HR	smf-3a	99.5011	11.90
050YR001HR	smf-3a	99.7511	11.90
050YR001HR	smf-3a	100.0011	11.90

50yr-1hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR001HR	smf-3b	114.0011	11.29
050YR001HR	smf-3b	114.2511	11.29
050YR001HR	smf-3b	114.5011	11.29
050YR001HR	smf-3b	114.7511	11.28
050YR001HR	smf-3b	115.0011	11.28
050YR001HR	smf-3b	115.2511	11.28
050YR001HR	smf-3b	115.5011	11.28
050YR001HR	smf-3b	115.7511	11.28
050YR001HR	smf-3b	116.0011	11.28
050YR001HR	smf-3b	116.2511	11.28
050YR001HR	smf-3b	116.5011	11.28
050YR001HR	smf-3b	116.7511	11.28
050YR001HR	smf-3b	117.0011	11.28
050YR001HR	smf-3b	117.2511	11.28
050YR001HR	smf-3b	117.5011	11.27
050YR001HR	smf-3b	117.7511	11.27
050YR001HR	smf-3b	118.0011	11.27
050YR001HR	smf-3b	118.2511	11.27
050YR001HR	smf-3b	118.5011	11.27
050YR001HR	smf-3b	118.7511	11.27
050YR001HR	smf-3b	119.0011	11.27
050YR001HR	smf-3b	119.2511	11.27
050YR001HR	smf-3b	119.5011	11.27
050YR001HR	smf-3b	119.7511	11.27
050YR001HR	smf-3b	120.0011	11.27
050YR001HR	smf-3b	120.2511	11.27
050YR001HR	smf-3b	120.5011	11.26
050YR001HR	smf-3b	120.7511	11.26
050YR001HR	smf-3b	121.0011	11.26
050YR001HR	smf-3b	121.2511	11.26
050YR001HR	smf-3b	121.5011	11.26
050YR001HR	smf-3b	121.7511	11.26
050YR001HR	smf-3b	122.0011	11.26
050YR001HR	smf-3b	122.2511	11.26
050YR001HR	smf-3b	122.5011	11.26
050YR001HR	smf-3b	122.7511	11.26
050YR001HR	smf-3b	123.0011	11.26
050YR001HR	smf-3b	123.2511	11.26
050YR001HR	smf-3b	123.5011	11.25
050YR001HR	smf-3b	123.7511	11.25
050YR001HR	smf-3b	124.0011	11.25
050YR001HR	smf-3b	124.2511	11.25

50yr-1hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR002HR	smf-1a	148.7541	12.46
050YR002HR	smf-1a	149.0041	12.46
050YR002HR	smf-1a	149.2541	12.46
050YR002HR	smf-1a	149.5041	12.46
050YR002HR	smf-1a	149.7541	12.46
050YR002HR	smf-1a	150.0041	12.46
050YR002HR	smf-1a	150.2541	12.46
050YR002HR	smf-1a	150.5041	12.46
050YR002HR	smf-1a	150.7541	12.46
050YR002HR	smf-1a	151.0041	12.46
050YR002HR	smf-1a	151.2541	12.46
050YR002HR	smf-1a	151.5041	12.46
050YR002HR	smf-1a	151.7541	12.46
050YR002HR	smf-1a	152.0041	12.46
050YR002HR	smf-1a	152.2541	12.46
050YR002HR	smf-1a	152.5041	12.46
050YR002HR	smf-1a	152.7541	12.45
050YR002HR	smf-1a	153.0041	12.45
050YR002HR	smf-1a	153.2541	12.45
050YR002HR	smf-1a	153.5041	12.45
050YR002HR	smf-1a	153.7541	12.45
050YR002HR	smf-1a	154.0041	12.45
050YR002HR	smf-1a	154.2541	12.45
050YR002HR	smf-1a	154.5041	12.45
050YR002HR	smf-1a	154.7541	12.45
050YR002HR	smf-1a	155.0041	12.45
050YR002HR	smf-1a	155.2541	12.45
050YR002HR	smf-1a	155.5041	12.45
050YR002HR	smf-1a	155.7541	12.45
050YR002HR	smf-1a	156.0041	12.45
050YR002HR	smf-1a	156.2541	12.45
050YR002HR	smf-1a	156.5041	12.45
050YR002HR	smf-1a	156.7541	12.45
050YR002HR	smf-1a	157.0041	12.45
050YR002HR	smf-1a	157.2541	12.45
050YR002HR	smf-1a	157.5041	12.45
050YR002HR	smf-1a	157.7541	12.45
050YR002HR	smf-1a	158.0041	12.45
050YR002HR	smf-1a	158.2541	12.45
050YR002HR	smf-1a	158.5041	12.45
050YR002HR	smf-1a	158.7541	12.45
050YR002HR	smf-1a	159.0041	12.45

50yr-2hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR002HR	smf-1b	67.0041	13.01
050YR002HR	smf-1b	67.2541	13.01
050YR002HR	smf-1b	67.5041	13.01
050YR002HR	smf-1b	67.7541	13.01
050YR002HR	smf-1b	68.0041	13.01
050YR002HR	smf-1b	68.2541	13.01
050YR002HR	smf-1b	68.5041	13.01
050YR002HR	smf-1b	68.7541	13.00
050YR002HR	smf-1b	69.0041	13.00
050YR002HR	smf-1b	69.2541	13.00
050YR002HR	smf-1b	69.5041	13.00
050YR002HR	smf-1b	69.7541	13.00
050YR002HR	smf-1b	70.0041	13.00
050YR002HR	smf-1b	70.2541	13.00
050YR002HR	smf-1b	70.5041	13.00
050YR002HR	smf-1b	70.7541	13.00
050YR002HR	smf-1b	71.0041	13.00
050YR002HR	smf-1b	71.2541	13.00
050YR002HR	smf-1b	71.5041	13.00
050YR002HR	smf-1b	71.7541	13.00
050YR002HR	smf-1b	72.0041	13.00
050YR002HR	smf-1b	72.2541	13.00
050YR002HR	smf-1b	72.5041	13.00
050YR002HR	smf-1b	72.7541	13.00
050YR002HR	smf-1b	73.0041	13.00
050YR002HR	smf-1b	73.2541	13.00
050YR002HR	smf-1b	73.5041	13.00
050YR002HR	smf-1b	73.7541	13.00
050YR002HR	smf-1b	74.0041	13.00
050YR002HR	smf-1b	74.2541	13.00
050YR002HR	smf-1b	74.5041	13.00
050YR002HR	smf-1b	74.7541	13.00
050YR002HR	smf-1b	75.0041	13.00
050YR002HR	smf-1b	75.2541	13.00
050YR002HR	smf-1b	75.5041	13.00
050YR002HR	smf-1b	75.7541	13.00
050YR002HR	smf-1b	76.0041	13.00
050YR002HR	smf-1b	76.2541	13.00
050YR002HR	smf-1b	76.5041	13.00
050YR002HR	smf-1b	76.7541	13.00
050YR002HR	smf-1b	77.0041	13.00
050YR002HR	smf-1b	77.2541	13.00

50yr-2hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR002HR	smf-2a	132.2541	12.12
050YR002HR	smf-2a	132.5041	12.12
050YR002HR	smf-2a	132.7541	12.12
050YR002HR	smf-2a	133.0041	12.12
050YR002HR	smf-2a	133.2541	12.12
050YR002HR	smf-2a	133.5041	12.12
050YR002HR	smf-2a	133.7541	12.12
050YR002HR	smf-2a	134.0041	12.12
050YR002HR	smf-2a	134.2541	12.12
050YR002HR	smf-2a	134.5041	12.12
050YR002HR	smf-2a	134.7541	12.12
050YR002HR	smf-2a	135.0041	12.12
050YR002HR	smf-2a	135.2541	12.12
050YR002HR	smf-2a	135.5041	12.12
050YR002HR	smf-2a	135.7541	12.12
050YR002HR	smf-2a	136.0041	12.12
050YR002HR	smf-2a	136.2541	12.12
050YR002HR	smf-2a	136.5041	12.11
050YR002HR	smf-2a	136.7541	12.11
050YR002HR	smf-2a	137.0041	12.11
050YR002HR	smf-2a	137.2541	12.11
050YR002HR	smf-2a	137.5041	12.11
050YR002HR	smf-2a	137.7541	12.11
050YR002HR	smf-2a	138.0041	12.11
050YR002HR	smf-2a	138.2541	12.11
050YR002HR	smf-2a	138.5041	12.11
050YR002HR	smf-2a	138.7541	12.11
050YR002HR	smf-2a	139.0041	12.11
050YR002HR	smf-2a	139.2541	12.11
050YR002HR	smf-2a	139.5041	12.11
050YR002HR	smf-2a	139.7541	12.11
050YR002HR	smf-2a	140.0041	12.11
050YR002HR	smf-2a	140.2541	12.11
050YR002HR	smf-2a	140.5041	12.11
050YR002HR	smf-2a	140.7541	12.10
050YR002HR	smf-2a	141.0041	12.10
050YR002HR	smf-2a	141.2541	12.10
050YR002HR	smf-2a	141.5041	12.10
050YR002HR	smf-2a	141.7541	12.10
050YR002HR	smf-2a	142.0041	12.10
050YR002HR	smf-2a	142.2541	12.10
050YR002HR	smf-2a	142.5041	12.10

50yr-2hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR002HR	smf-2b	103.0041	11.40
050YR002HR	smf-2b	103.2541	11.40
050YR002HR	smf-2b	103.5041	11.40
050YR002HR	smf-2b	103.7541	11.40
050YR002HR	smf-2b	104.0041	11.40
050YR002HR	smf-2b	104.2541	11.40
050YR002HR	smf-2b	104.5041	11.40
050YR002HR	smf-2b	104.7541	11.40
050YR002HR	smf-2b	105.0041	11.40
050YR002HR	smf-2b	105.2541	11.40
050YR002HR	smf-2b	105.5041	11.40
050YR002HR	smf-2b	105.7541	11.40
050YR002HR	smf-2b	106.0041	11.40
050YR002HR	smf-2b	106.2541	11.40
050YR002HR	smf-2b	106.5041	11.40
050YR002HR	smf-2b	106.7541	11.40
050YR002HR	smf-2b	107.0041	11.40
050YR002HR	smf-2b	107.2541	11.40
050YR002HR	smf-2b	107.5041	11.40
050YR002HR	smf-2b	107.7541	11.40
050YR002HR	smf-2b	108.0041	11.40
050YR002HR	smf-2b	108.2541	11.40
050YR002HR	smf-2b	108.5041	11.40
050YR002HR	smf-2b	108.7541	11.40
050YR002HR	smf-2b	109.0041	11.40
050YR002HR	smf-2b	109.2541	11.40
050YR002HR	smf-2b	109.5041	11.40
050YR002HR	smf-2b	109.7541	11.40
050YR002HR	smf-2b	110.0041	11.40
050YR002HR	smf-2b	110.2541	11.40
050YR002HR	smf-2b	110.5041	11.40
050YR002HR	smf-2b	110.7541	11.40
050YR002HR	smf-2b	111.0041	11.40
050YR002HR	smf-2b	111.2541	11.40
050YR002HR	smf-2b	111.5041	11.40
050YR002HR	smf-2b	111.7541	11.40
050YR002HR	smf-2b	112.0041	11.40
050YR002HR	smf-2b	112.2541	11.40
050YR002HR	smf-2b	112.5041	11.40
050YR002HR	smf-2b	112.7541	11.40
050YR002HR	smf-2b	113.0041	11.40
050YR002HR	smf-2b	113.2541	11.40

50yr-2hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR002HR	smf-2c	126.2541	11.87
050YR002HR	smf-2c	126.5041	11.87
050YR002HR	smf-2c	126.7541	11.87
050YR002HR	smf-2c	127.0041	11.87
050YR002HR	smf-2c	127.2541	11.87
050YR002HR	smf-2c	127.5041	11.87
050YR002HR	smf-2c	127.7541	11.87
050YR002HR	smf-2c	128.0041	11.87
050YR002HR	smf-2c	128.2541	11.87
050YR002HR	smf-2c	128.5041	11.87
050YR002HR	smf-2c	128.7541	11.87
050YR002HR	smf-2c	129.0041	11.86
050YR002HR	smf-2c	129.2541	11.86
050YR002HR	smf-2c	129.5041	11.86
050YR002HR	smf-2c	129.7541	11.86
050YR002HR	smf-2c	130.0041	11.86
050YR002HR	smf-2c	130.2541	11.86
050YR002HR	smf-2c	130.5041	11.86
050YR002HR	smf-2c	130.7541	11.86
050YR002HR	smf-2c	131.0041	11.86
050YR002HR	smf-2c	131.2541	11.86
050YR002HR	smf-2c	131.5041	11.86
050YR002HR	smf-2c	131.7541	11.86
050YR002HR	smf-2c	132.0041	11.86
050YR002HR	smf-2c	132.2541	11.86
050YR002HR	smf-2c	132.5041	11.85
050YR002HR	smf-2c	132.7541	11.85
050YR002HR	smf-2c	133.0041	11.85
050YR002HR	smf-2c	133.2541	11.85
050YR002HR	smf-2c	133.5041	11.85
050YR002HR	smf-2c	133.7541	11.85
050YR002HR	smf-2c	134.0041	11.85
050YR002HR	smf-2c	134.2541	11.85
050YR002HR	smf-2c	134.5041	11.85
050YR002HR	smf-2c	134.7541	11.85
050YR002HR	smf-2c	135.0041	11.85
050YR002HR	smf-2c	135.2541	11.85
050YR002HR	smf-2c	135.5041	11.85
050YR002HR	smf-2c	135.7541	11.85
050YR002HR	smf-2c	136.0041	11.85
050YR002HR	smf-2c	136.2541	11.85
050YR002HR	smf-2c	136.5041	11.85

50yr-2hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR002HR	smf-3a	107.5041	11.92
050YR002HR	smf-3a	107.7541	11.91
050YR002HR	smf-3a	108.0041	11.91
050YR002HR	smf-3a	108.2541	11.91
050YR002HR	smf-3a	108.5041	11.91
050YR002HR	smf-3a	108.7541	11.91
050YR002HR	smf-3a	109.0041	11.91
050YR002HR	smf-3a	109.2541	11.91
050YR002HR	smf-3a	109.5041	11.91
050YR002HR	smf-3a	109.7541	11.91
050YR002HR	smf-3a	110.0041	11.91
050YR002HR	smf-3a	110.2541	11.91
050YR002HR	smf-3a	110.5041	11.90
050YR002HR	smf-3a	110.7541	11.90
050YR002HR	smf-3a	111.0041	11.90
050YR002HR	smf-3a	111.2541	11.90
050YR002HR	smf-3a	111.5041	11.90
050YR002HR	smf-3a	111.7541	11.90
050YR002HR	smf-3a	112.0041	11.90
050YR002HR	smf-3a	112.2541	11.90
050YR002HR	smf-3a	112.5041	11.90
050YR002HR	smf-3a	112.7541	11.90
050YR002HR	smf-3a	113.0041	11.90
050YR002HR	smf-3a	113.2541	11.90
050YR002HR	smf-3a	113.5041	11.90
050YR002HR	smf-3a	113.7541	11.90
050YR002HR	smf-3a	114.0041	11.90
050YR002HR	smf-3a	114.2541	11.90
050YR002HR	smf-3a	114.5041	11.90
050YR002HR	smf-3a	114.7541	11.90
050YR002HR	smf-3a	115.0041	11.90
050YR002HR	smf-3a	115.2541	11.90
050YR002HR	smf-3a	115.5041	11.90
050YR002HR	smf-3a	115.7541	11.90
050YR002HR	smf-3a	116.0041	11.90
050YR002HR	smf-3a	116.2541	11.90
050YR002HR	smf-3a	116.5041	11.90
050YR002HR	smf-3a	116.7541	11.90
050YR002HR	smf-3a	117.0041	11.90
050YR002HR	smf-3a	117.2541	11.90
050YR002HR	smf-3a	117.5041	11.90
050YR002HR	smf-3a	117.7541	11.90

50yr-2hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR002HR	smf-3b	141.2541	11.26
050YR002HR	smf-3b	141.5041	11.26
050YR002HR	smf-3b	141.7541	11.26
050YR002HR	smf-3b	142.0041	11.26
050YR002HR	smf-3b	142.2541	11.26
050YR002HR	smf-3b	142.5041	11.26
050YR002HR	smf-3b	142.7541	11.26
050YR002HR	smf-3b	143.0041	11.26
050YR002HR	smf-3b	143.2541	11.26
050YR002HR	smf-3b	143.5041	11.25
050YR002HR	smf-3b	143.7541	11.25
050YR002HR	smf-3b	144.0041	11.25
050YR002HR	smf-3b	144.2541	11.25
050YR002HR	smf-3b	144.5041	11.25
050YR002HR	smf-3b	144.7541	11.25
050YR002HR	smf-3b	145.0041	11.25
050YR002HR	smf-3b	145.2541	11.25
050YR002HR	smf-3b	145.5041	11.25
050YR002HR	smf-3b	145.7541	11.25
050YR002HR	smf-3b	146.0041	11.25
050YR002HR	smf-3b	146.2541	11.25
050YR002HR	smf-3b	146.5041	11.25
050YR002HR	smf-3b	146.7541	11.25
050YR002HR	smf-3b	147.0041	11.25
050YR002HR	smf-3b	147.2541	11.25
050YR002HR	smf-3b	147.5041	11.25
050YR002HR	smf-3b	147.7541	11.25
050YR002HR	smf-3b	148.0041	11.25
050YR002HR	smf-3b	148.2541	11.25
050YR002HR	smf-3b	148.5041	11.25
050YR002HR	smf-3b	148.7541	11.25
050YR002HR	smf-3b	149.0041	11.25
050YR002HR	smf-3b	149.2541	11.25
050YR002HR	smf-3b	149.5041	11.25
050YR002HR	smf-3b	149.7541	11.25
050YR002HR	smf-3b	150.0041	11.25
050YR002HR	smf-3b	150.2541	11.25
050YR002HR	smf-3b	150.5041	11.25
050YR002HR	smf-3b	150.7541	11.25
050YR002HR	smf-3b	151.0041	11.25
050YR002HR	smf-3b	151.2541	11.25
050YR002HR	smf-3b	151.5041	11.25

50yr-2hr SMF-3b

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR004YR	smf-1a	175.0081	12.46
050YR004YR	smf-1a	175.2581	12.46
050YR004YR	smf-1a	175.5081	12.46
050YR004YR	smf-1a	175.7581	12.46
050YR004YR	smf-1a	176.0081	12.46
050YR004YR	smf-1a	176.2581	12.46
050YR004YR	smf-1a	176.5081	12.45
050YR004YR	smf-1a	176.7581	12.45
050YR004YR	smf-1a	177.0081	12.45
050YR004YR	smf-1a	177.2581	12.45
050YR004YR	smf-1a	177.5081	12.45
050YR004YR	smf-1a	177.7581	12.45
050YR004YR	smf-1a	178.0081	12.45
050YR004YR	smf-1a	178.2581	12.45
050YR004YR	smf-1a	178.5081	12.45
050YR004YR	smf-1a	178.7581	12.45
050YR004YR	smf-1a	179.0081	12.45
050YR004YR	smf-1a	179.2581	12.45
050YR004YR	smf-1a	179.5081	12.45
050YR004YR	smf-1a	179.7581	12.45
050YR004YR	smf-1a	180.0081	12.45
050YR004YR	smf-1a	180.2581	12.45
050YR004YR	smf-1a	180.5081	12.45
050YR004YR	smf-1a	180.7581	12.45
050YR004YR	smf-1a	181.0081	12.45
050YR004YR	smf-1a	181.2581	12.45
050YR004YR	smf-1a	181.5081	12.45
050YR004YR	smf-1a	181.7581	12.45
050YR004YR	smf-1a	182.0081	12.45
050YR004YR	smf-1a	182.2581	12.45
050YR004YR	smf-1a	182.5081	12.45
050YR004YR	smf-1a	182.7581	12.45
050YR004YR	smf-1a	183.0081	12.45
050YR004YR	smf-1a	183.2581	12.45
050YR004YR	smf-1a	183.5081	12.45
050YR004YR	smf-1a	183.7581	12.45
050YR004YR	smf-1a	184.0081	12.45
050YR004YR	smf-1a	184.2581	12.45
050YR004YR	smf-1a	184.5081	12.45
050YR004YR	smf-1a	184.7581	12.45
050YR004YR	smf-1a	185.0081	12.45
050YR004YR	smf-1a	185.2581	12.45

50yr-4hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR004YR	smf-1b	80.7581	13.02
050YR004YR	smf-1b	81.0081	13.02
050YR004YR	smf-1b	81.2581	13.02
050YR004YR	smf-1b	81.5081	13.02
050YR004YR	smf-1b	81.7581	13.02
050YR004YR	smf-1b	82.0081	13.02
050YR004YR	smf-1b	82.2581	13.01
050YR004YR	smf-1b	82.5081	13.01
050YR004YR	smf-1b	82.7581	13.01
050YR004YR	smf-1b	83.0081	13.01
050YR004YR	smf-1b	83.2581	13.01
050YR004YR	smf-1b	83.5081	13.01
050YR004YR	smf-1b	83.7581	13.01
050YR004YR	smf-1b	84.0081	13.01
050YR004YR	smf-1b	84.2581	13.00
050YR004YR	smf-1b	84.5081	13.00
050YR004YR	smf-1b	84.7581	13.00
050YR004YR	smf-1b	85.0081	13.00
050YR004YR	smf-1b	85.2581	13.00
050YR004YR	smf-1b	85.5081	13.00
050YR004YR	smf-1b	85.7581	13.00
050YR004YR	smf-1b	86.0081	13.00
050YR004YR	smf-1b	86.2581	13.00
050YR004YR	smf-1b	86.5081	13.00
050YR004YR	smf-1b	86.7581	13.00
050YR004YR	smf-1b	87.0081	13.00
050YR004YR	smf-1b	87.2581	13.00
050YR004YR	smf-1b	87.5081	13.00
050YR004YR	smf-1b	87.7581	13.00
050YR004YR	smf-1b	88.0081	13.00
050YR004YR	smf-1b	88.2581	13.00
050YR004YR	smf-1b	88.5081	13.00
050YR004YR	smf-1b	88.7581	13.00
050YR004YR	smf-1b	89.0081	13.00
050YR004YR	smf-1b	89.2581	13.00
050YR004YR	smf-1b	89.5081	13.00
050YR004YR	smf-1b	89.7581	13.00
050YR004YR	smf-1b	90.0081	13.00
050YR004YR	smf-1b	90.2581	13.00
050YR004YR	smf-1b	90.5081	13.00
050YR004YR	smf-1b	90.7581	13.00
050YR004YR	smf-1b	91.0081	13.00

50yr-4hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR004YR	smf-2a	154.5081	12.12
050YR004YR	smf-2a	154.7581	12.12
050YR004YR	smf-2a	155.0081	12.12
050YR004YR	smf-2a	155.2581	12.11
050YR004YR	smf-2a	155.5081	12.11
050YR004YR	smf-2a	155.7581	12.11
050YR004YR	smf-2a	156.0081	12.11
050YR004YR	smf-2a	156.2581	12.11
050YR004YR	smf-2a	156.5081	12.11
050YR004YR	smf-2a	156.7581	12.11
050YR004YR	smf-2a	157.0081	12.11
050YR004YR	smf-2a	157.2581	12.11
050YR004YR	smf-2a	157.5081	12.11
050YR004YR	smf-2a	157.7581	12.11
050YR004YR	smf-2a	158.0081	12.11
050YR004YR	smf-2a	158.2581	12.11
050YR004YR	smf-2a	158.5081	12.11
050YR004YR	smf-2a	158.7581	12.11
050YR004YR	smf-2a	159.0081	12.11
050YR004YR	smf-2a	159.2581	12.11
050YR004YR	smf-2a	159.5081	12.11
050YR004YR	smf-2a	159.7581	12.11
050YR004YR	smf-2a	160.0081	12.10
050YR004YR	smf-2a	160.2581	12.10
050YR004YR	smf-2a	160.5081	12.10
050YR004YR	smf-2a	160.7581	12.10
050YR004YR	smf-2a	161.0081	12.10
050YR004YR	smf-2a	161.2581	12.10
050YR004YR	smf-2a	161.5081	12.10
050YR004YR	smf-2a	161.7581	12.10
050YR004YR	smf-2a	162.0081	12.10
050YR004YR	smf-2a	162.2581	12.10
050YR004YR	smf-2a	162.5081	12.10
050YR004YR	smf-2a	162.7581	12.10
050YR004YR	smf-2a	163.0081	12.10
050YR004YR	smf-2a	163.2581	12.10
050YR004YR	smf-2a	163.5081	12.10
050YR004YR	smf-2a	163.7581	12.10
050YR004YR	smf-2a	164.0081	12.10
050YR004YR	smf-2a	164.2581	12.10
050YR004YR	smf-2a	164.5081	12.10
050YR004YR	smf-2a	164.7581	12.10

50yr-4hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR004YR	smf-2b	112.7581	11.43
050YR004YR	smf-2b	113.0081	11.43
050YR004YR	smf-2b	113.2581	11.42
050YR004YR	smf-2b	113.5081	11.42
050YR004YR	smf-2b	113.7581	11.42
050YR004YR	smf-2b	114.0081	11.42
050YR004YR	smf-2b	114.2581	11.42
050YR004YR	smf-2b	114.5081	11.42
050YR004YR	smf-2b	114.7581	11.42
050YR004YR	smf-2b	115.0081	11.42
050YR004YR	smf-2b	115.2581	11.42
050YR004YR	smf-2b	115.5081	11.42
050YR004YR	smf-2b	115.7581	11.42
050YR004YR	smf-2b	116.0081	11.41
050YR004YR	smf-2b	116.2581	11.41
050YR004YR	smf-2b	116.5081	11.41
050YR004YR	smf-2b	116.7581	11.41
050YR004YR	smf-2b	117.0081	11.41
050YR004YR	smf-2b	117.2581	11.41
050YR004YR	smf-2b	117.5081	11.41
050YR004YR	smf-2b	117.7581	11.41
050YR004YR	smf-2b	118.0081	11.41
050YR004YR	smf-2b	118.2581	11.41
050YR004YR	smf-2b	118.5081	11.41
050YR004YR	smf-2b	118.7581	11.40
050YR004YR	smf-2b	119.0081	11.40
050YR004YR	smf-2b	119.2581	11.40
050YR004YR	smf-2b	119.5081	11.40
050YR004YR	smf-2b	119.7581	11.40
050YR004YR	smf-2b	120.0081	11.40
050YR004YR	smf-2b	120.2581	11.40
050YR004YR	smf-2b	120.5081	11.40
050YR004YR	smf-2b	120.7581	11.40
050YR004YR	smf-2b	121.0081	11.40
050YR004YR	smf-2b	121.2581	11.40
050YR004YR	smf-2b	121.5081	11.40
050YR004YR	smf-2b	121.7581	11.40
050YR004YR	smf-2b	122.0081	11.40
050YR004YR	smf-2b	122.2581	11.40
050YR004YR	smf-2b	122.5081	11.40
050YR004YR	smf-2b	122.7581	11.40
050YR004YR	smf-2b	123.0081	11.40

50yr-4hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR004YR	smf-2c	144.5081	11.87
050YR004YR	smf-2c	144.7581	11.87
050YR004YR	smf-2c	145.0081	11.87
050YR004YR	smf-2c	145.2581	11.87
050YR004YR	smf-2c	145.5081	11.87
050YR004YR	smf-2c	145.7581	11.87
050YR004YR	smf-2c	146.0081	11.87
050YR004YR	smf-2c	146.2581	11.86
050YR004YR	smf-2c	146.5081	11.86
050YR004YR	smf-2c	146.7581	11.86
050YR004YR	smf-2c	147.0081	11.86
050YR004YR	smf-2c	147.2581	11.86
050YR004YR	smf-2c	147.5081	11.86
050YR004YR	smf-2c	147.7581	11.86
050YR004YR	smf-2c	148.0081	11.86
050YR004YR	smf-2c	148.2581	11.86
050YR004YR	smf-2c	148.5081	11.86
050YR004YR	smf-2c	148.7581	11.86
050YR004YR	smf-2c	149.0081	11.86
050YR004YR	smf-2c	149.2581	11.86
050YR004YR	smf-2c	149.5081	11.86
050YR004YR	smf-2c	149.7581	11.86
050YR004YR	smf-2c	150.0081	11.85
050YR004YR	smf-2c	150.2581	11.85
050YR004YR	smf-2c	150.5081	11.85
050YR004YR	smf-2c	150.7581	11.85
050YR004YR	smf-2c	151.0081	11.85
050YR004YR	smf-2c	151.2581	11.85
050YR004YR	smf-2c	151.5081	11.85
050YR004YR	smf-2c	151.7581	11.85
050YR004YR	smf-2c	152.0081	11.85
050YR004YR	smf-2c	152.2581	11.85
050YR004YR	smf-2c	152.5081	11.85
050YR004YR	smf-2c	152.7581	11.85
050YR004YR	smf-2c	153.0081	11.85
050YR004YR	smf-2c	153.2581	11.85
050YR004YR	smf-2c	153.5081	11.85
050YR004YR	smf-2c	153.7581	11.85
050YR004YR	smf-2c	154.0081	11.85
050YR004YR	smf-2c	154.2581	11.85
050YR004YR	smf-2c	154.5081	11.85
050YR004YR	smf-2c	154.7581	11.85

50yr-4hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR004YR	smf-3a	123.7581	11.93
050YR004YR	smf-3a	124.0081	11.93
050YR004YR	smf-3a	124.2581	11.93
050YR004YR	smf-3a	124.5081	11.92
050YR004YR	smf-3a	124.7581	11.92
050YR004YR	smf-3a	125.0081	11.92
050YR004YR	smf-3a	125.2581	11.92
050YR004YR	smf-3a	125.5081	11.92
050YR004YR	smf-3a	125.7581	11.92
050YR004YR	smf-3a	126.0081	11.92
050YR004YR	smf-3a	126.2581	11.92
050YR004YR	smf-3a	126.5081	11.92
050YR004YR	smf-3a	126.7581	11.92
050YR004YR	smf-3a	127.0081	11.92
050YR004YR	smf-3a	127.2581	11.92
050YR004YR	smf-3a	127.5081	11.91
050YR004YR	smf-3a	127.7581	11.91
050YR004YR	smf-3a	128.0081	11.91
050YR004YR	smf-3a	128.2581	11.91
050YR004YR	smf-3a	128.5081	11.91
050YR004YR	smf-3a	128.7581	11.91
050YR004YR	smf-3a	129.0081	11.91
050YR004YR	smf-3a	129.2581	11.91
050YR004YR	smf-3a	129.5081	11.91
050YR004YR	smf-3a	129.7581	11.91
050YR004YR	smf-3a	130.0081	11.91
050YR004YR	smf-3a	130.2581	11.91
050YR004YR	smf-3a	130.5081	11.91
050YR004YR	smf-3a	130.7581	11.90
050YR004YR	smf-3a	131.0081	11.90
050YR004YR	smf-3a	131.2581	11.90
050YR004YR	smf-3a	131.5081	11.90
050YR004YR	smf-3a	131.7581	11.90
050YR004YR	smf-3a	132.0081	11.90
050YR004YR	smf-3a	132.2581	11.90
050YR004YR	smf-3a	132.5081	11.90
050YR004YR	smf-3a	132.7581	11.90
050YR004YR	smf-3a	133.0081	11.90
050YR004YR	smf-3a	133.2581	11.90
050YR004YR	smf-3a	133.5081	11.90
050YR004YR	smf-3a	133.7581	11.90
050YR004YR	smf-3a	134.0081	11.90

50yr-4hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR004YR	smf-3b	155.5081	11.28
050YR004YR	smf-3b	155.7581	11.28
050YR004YR	smf-3b	156.0081	11.28
050YR004YR	smf-3b	156.2581	11.27
050YR004YR	smf-3b	156.5081	11.27
050YR004YR	smf-3b	156.7581	11.27
050YR004YR	smf-3b	157.0081	11.27
050YR004YR	smf-3b	157.2581	11.27
050YR004YR	smf-3b	157.5081	11.27
050YR004YR	smf-3b	157.7581	11.27
050YR004YR	smf-3b	158.0081	11.27
050YR004YR	smf-3b	158.2581	11.27
050YR004YR	smf-3b	158.5081	11.27
050YR004YR	smf-3b	158.7581	11.27
050YR004YR	smf-3b	159.0081	11.27
050YR004YR	smf-3b	159.2581	11.27
050YR004YR	smf-3b	159.5081	11.27
050YR004YR	smf-3b	159.7581	11.27
050YR004YR	smf-3b	160.0081	11.26
050YR004YR	smf-3b	160.2581	11.26
050YR004YR	smf-3b	160.5081	11.26
050YR004YR	smf-3b	160.7581	11.26
050YR004YR	smf-3b	161.0081	11.26
050YR004YR	smf-3b	161.2581	11.26
050YR004YR	smf-3b	161.5081	11.26
050YR004YR	smf-3b	161.7581	11.26
050YR004YR	smf-3b	162.0081	11.26
050YR004YR	smf-3b	162.2581	11.26
050YR004YR	smf-3b	162.5081	11.26
050YR004YR	smf-3b	162.7581	11.26
050YR004YR	smf-3b	163.0081	11.26
050YR004YR	smf-3b	163.2581	11.26
050YR004YR	smf-3b	163.5081	11.26
050YR004YR	smf-3b	163.7581	11.26
050YR004YR	smf-3b	164.0081	11.25
050YR004YR	smf-3b	164.2581	11.25
050YR004YR	smf-3b	164.5081	11.25
050YR004YR	smf-3b	164.7581	11.25
050YR004YR	smf-3b	165.0081	11.25
050YR004YR	smf-3b	165.2581	11.25
050YR004YR	smf-3b	165.5081	11.25
050YR004YR	smf-3b	165.7581	11.25

50yr-4hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR008HR	smf-1a	218.7543	12.46
050YR008HR	smf-1a	219.0043	12.46
050YR008HR	smf-1a	219.2543	12.46
050YR008HR	smf-1a	219.5043	12.46
050YR008HR	smf-1a	219.7543	12.46
050YR008HR	smf-1a	220.0043	12.46
050YR008HR	smf-1a	220.2543	12.46
050YR008HR	smf-1a	220.5043	12.46
050YR008HR	smf-1a	220.7543	12.46
050YR008HR	smf-1a	221.0043	12.46
050YR008HR	smf-1a	221.2543	12.46
050YR008HR	smf-1a	221.5043	12.46
050YR008HR	smf-1a	221.7543	12.46
050YR008HR	smf-1a	222.0043	12.46
050YR008HR	smf-1a	222.2543	12.46
050YR008HR	smf-1a	222.5043	12.46
050YR008HR	smf-1a	222.7543	12.46
050YR008HR	smf-1a	223.0043	12.46
050YR008HR	smf-1a	223.2543	12.46
050YR008HR	smf-1a	223.5043	12.45
050YR008HR	smf-1a	223.7543	12.45
050YR008HR	smf-1a	224.0043	12.45
050YR008HR	smf-1a	224.2543	12.45
050YR008HR	smf-1a	224.5043	12.45
050YR008HR	smf-1a	224.7543	12.45
050YR008HR	smf-1a	225.0043	12.45
050YR008HR	smf-1a	225.2543	12.45
050YR008HR	smf-1a	225.5043	12.45
050YR008HR	smf-1a	225.7543	12.45
050YR008HR	smf-1a	226.0043	12.45
050YR008HR	smf-1a	226.2543	12.45
050YR008HR	smf-1a	226.5043	12.45
050YR008HR	smf-1a	226.7543	12.45
050YR008HR	smf-1a	227.0043	12.45
050YR008HR	smf-1a	227.2543	12.45
050YR008HR	smf-1a	227.5043	12.45
050YR008HR	smf-1a	227.7543	12.45
050YR008HR	smf-1a	228.0043	12.45
050YR008HR	smf-1a	228.2543	12.45
050YR008HR	smf-1a	228.5043	12.45
050YR008HR	smf-1a	228.7543	12.45
050YR008HR	smf-1a	229.0043	12.45

50yr-8hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR008HR	smf-1b	110.0043	13.02
050YR008HR	smf-1b	110.2543	13.02
050YR008HR	smf-1b	110.5043	13.02
050YR008HR	smf-1b	110.7543	13.02
050YR008HR	smf-1b	111.0043	13.02
050YR008HR	smf-1b	111.2543	13.02
050YR008HR	smf-1b	111.5043	13.01
050YR008HR	smf-1b	111.7543	13.01
050YR008HR	smf-1b	112.0043	13.01
050YR008HR	smf-1b	112.2543	13.01
050YR008HR	smf-1b	112.5043	13.01
050YR008HR	smf-1b	112.7543	13.01
050YR008HR	smf-1b	113.0043	13.01
050YR008HR	smf-1b	113.2543	13.01
050YR008HR	smf-1b	113.5043	13.01
050YR008HR	smf-1b	113.7543	13.01
050YR008HR	smf-1b	114.0043	13.01
050YR008HR	smf-1b	114.2543	13.00
050YR008HR	smf-1b	114.5043	13.00
050YR008HR	smf-1b	114.7543	13.00
050YR008HR	smf-1b	115.0043	13.00
050YR008HR	smf-1b	115.2543	13.00
050YR008HR	smf-1b	115.5043	13.00
050YR008HR	smf-1b	115.7543	13.00
050YR008HR	smf-1b	116.0043	13.00
050YR008HR	smf-1b	116.2543	13.00
050YR008HR	smf-1b	116.5043	13.00
050YR008HR	smf-1b	116.7543	13.00
050YR008HR	smf-1b	117.0043	13.00
050YR008HR	smf-1b	117.2543	13.00
050YR008HR	smf-1b	117.5043	13.00
050YR008HR	smf-1b	117.7543	13.00
050YR008HR	smf-1b	118.0043	13.00
050YR008HR	smf-1b	118.2543	13.00
050YR008HR	smf-1b	118.5043	13.00
050YR008HR	smf-1b	118.7543	13.00
050YR008HR	smf-1b	119.0043	13.00
050YR008HR	smf-1b	119.2543	13.00
050YR008HR	smf-1b	119.5043	13.00
050YR008HR	smf-1b	119.7543	13.00
050YR008HR	smf-1b	120.0043	13.00
050YR008HR	smf-1b	120.2543	13.00

50yr-8hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR008HR	smf-2a	179.7543	12.12
050YR008HR	smf-2a	180.0043	12.12
050YR008HR	smf-2a	180.2543	12.12
050YR008HR	smf-2a	180.5043	12.12
050YR008HR	smf-2a	180.7543	12.12
050YR008HR	smf-2a	181.0043	12.12
050YR008HR	smf-2a	181.2543	12.12
050YR008HR	smf-2a	181.5043	12.12
050YR008HR	smf-2a	181.7543	12.12
050YR008HR	smf-2a	182.0043	12.12
050YR008HR	smf-2a	182.2543	12.12
050YR008HR	smf-2a	182.5043	12.12
050YR008HR	smf-2a	182.7543	12.12
050YR008HR	smf-2a	183.0043	12.12
050YR008HR	smf-2a	183.2543	12.11
050YR008HR	smf-2a	183.5043	12.11
050YR008HR	smf-2a	183.7543	12.11
050YR008HR	smf-2a	184.0043	12.11
050YR008HR	smf-2a	184.2543	12.11
050YR008HR	smf-2a	184.5043	12.11
050YR008HR	smf-2a	184.7543	12.11
050YR008HR	smf-2a	185.0043	12.11
050YR008HR	smf-2a	185.2543	12.11
050YR008HR	smf-2a	185.5043	12.11
050YR008HR	smf-2a	185.7543	12.11
050YR008HR	smf-2a	186.0043	12.11
050YR008HR	smf-2a	186.2543	12.11
050YR008HR	smf-2a	186.5043	12.11
050YR008HR	smf-2a	186.7543	12.11
050YR008HR	smf-2a	187.0043	12.11
050YR008HR	smf-2a	187.2543	12.11
050YR008HR	smf-2a	187.5043	12.11
050YR008HR	smf-2a	187.7543	12.11
050YR008HR	smf-2a	188.0043	12.11
050YR008HR	smf-2a	188.2543	12.11
050YR008HR	smf-2a	188.5043	12.11
050YR008HR	smf-2a	188.7543	12.10
050YR008HR	smf-2a	189.0043	12.10
050YR008HR	smf-2a	189.2543	12.10
050YR008HR	smf-2a	189.5043	12.10
050YR008HR	smf-2a	189.7543	12.10
050YR008HR	smf-2a	190.0043	12.10

50yr-8hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR008HR	smf-2b	144.5043	11.41
050YR008HR	smf-2b	144.7543	11.41
050YR008HR	smf-2b	145.0043	11.41
050YR008HR	smf-2b	145.2543	11.41
050YR008HR	smf-2b	145.5043	11.41
050YR008HR	smf-2b	145.7543	11.41
050YR008HR	smf-2b	146.0043	11.41
050YR008HR	smf-2b	146.2543	11.41
050YR008HR	smf-2b	146.5043	11.41
050YR008HR	smf-2b	146.7543	11.41
050YR008HR	smf-2b	147.0043	11.40
050YR008HR	smf-2b	147.2543	11.40
050YR008HR	smf-2b	147.5043	11.40
050YR008HR	smf-2b	147.7543	11.40
050YR008HR	smf-2b	148.0043	11.40
050YR008HR	smf-2b	148.2543	11.40
050YR008HR	smf-2b	148.5043	11.40
050YR008HR	smf-2b	148.7543	11.40
050YR008HR	smf-2b	149.0043	11.40
050YR008HR	smf-2b	149.2543	11.40
050YR008HR	smf-2b	149.5043	11.40
050YR008HR	smf-2b	149.7543	11.40
050YR008HR	smf-2b	150.0043	11.40
050YR008HR	smf-2b	150.2543	11.40
050YR008HR	smf-2b	150.5043	11.40
050YR008HR	smf-2b	150.7543	11.40
050YR008HR	smf-2b	151.0043	11.40
050YR008HR	smf-2b	151.2543	11.40
050YR008HR	smf-2b	151.5043	11.40
050YR008HR	smf-2b	151.7543	11.40
050YR008HR	smf-2b	152.0043	11.40
050YR008HR	smf-2b	152.2543	11.40
050YR008HR	smf-2b	152.5043	11.40
050YR008HR	smf-2b	152.7543	11.40
050YR008HR	smf-2b	153.0043	11.40
050YR008HR	smf-2b	153.2543	11.40
050YR008HR	smf-2b	153.5043	11.40
050YR008HR	smf-2b	153.7543	11.40
050YR008HR	smf-2b	154.0043	11.40
050YR008HR	smf-2b	154.2543	11.40
050YR008HR	smf-2b	154.5043	11.40
050YR008HR	smf-2b	154.7543	11.40

50yr-8hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR008HR	smf-2c	172.2543	11.87
050YR008HR	smf-2c	172.5043	11.87
050YR008HR	smf-2c	172.7543	11.87
050YR008HR	smf-2c	173.0043	11.87
050YR008HR	smf-2c	173.2543	11.87
050YR008HR	smf-2c	173.5043	11.87
050YR008HR	smf-2c	173.7543	11.87
050YR008HR	smf-2c	174.0043	11.87
050YR008HR	smf-2c	174.2543	11.87
050YR008HR	smf-2c	174.5043	11.87
050YR008HR	smf-2c	174.7543	11.86
050YR008HR	smf-2c	175.0043	11.86
050YR008HR	smf-2c	175.2543	11.86
050YR008HR	smf-2c	175.5043	11.86
050YR008HR	smf-2c	175.7543	11.86
050YR008HR	smf-2c	176.0043	11.86
050YR008HR	smf-2c	176.2543	11.86
050YR008HR	smf-2c	176.5043	11.86
050YR008HR	smf-2c	176.7543	11.86
050YR008HR	smf-2c	177.0043	11.86
050YR008HR	smf-2c	177.2543	11.86
050YR008HR	smf-2c	177.5043	11.86
050YR008HR	smf-2c	177.7543	11.86
050YR008HR	smf-2c	178.0043	11.86
050YR008HR	smf-2c	178.2543	11.86
050YR008HR	smf-2c	178.5043	11.86
050YR008HR	smf-2c	178.7543	11.86
050YR008HR	smf-2c	179.0043	11.86
050YR008HR	smf-2c	179.2543	11.85
050YR008HR	smf-2c	179.5043	11.85
050YR008HR	smf-2c	179.7543	11.85
050YR008HR	smf-2c	180.0043	11.85
050YR008HR	smf-2c	180.2543	11.85
050YR008HR	smf-2c	180.5043	11.85
050YR008HR	smf-2c	180.7543	11.85
050YR008HR	smf-2c	181.0043	11.85
050YR008HR	smf-2c	181.2543	11.85
050YR008HR	smf-2c	181.5043	11.85
050YR008HR	smf-2c	181.7543	11.85
050YR008HR	smf-2c	182.0043	11.85
050YR008HR	smf-2c	182.2543	11.85
050YR008HR	smf-2c	182.5043	11.85

50yr-8hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR008HR	smf-3a	158.0043	11.92
050YR008HR	smf-3a	158.2543	11.92
050YR008HR	smf-3a	158.5043	11.92
050YR008HR	smf-3a	158.7543	11.92
050YR008HR	smf-3a	159.0043	11.92
050YR008HR	smf-3a	159.2543	11.92
050YR008HR	smf-3a	159.5043	11.91
050YR008HR	smf-3a	159.7543	11.91
050YR008HR	smf-3a	160.0043	11.91
050YR008HR	smf-3a	160.2543	11.91
050YR008HR	smf-3a	160.5043	11.91
050YR008HR	smf-3a	160.7543	11.91
050YR008HR	smf-3a	161.0043	11.91
050YR008HR	smf-3a	161.2543	11.91
050YR008HR	smf-3a	161.5043	11.91
050YR008HR	smf-3a	161.7543	11.91
050YR008HR	smf-3a	162.0043	11.91
050YR008HR	smf-3a	162.2543	11.91
050YR008HR	smf-3a	162.5043	11.91
050YR008HR	smf-3a	162.7543	11.91
050YR008HR	smf-3a	163.0043	11.91
050YR008HR	smf-3a	163.2543	11.91
050YR008HR	smf-3a	163.5043	11.90
050YR008HR	smf-3a	163.7543	11.90
050YR008HR	smf-3a	164.0043	11.90
050YR008HR	smf-3a	164.2543	11.90
050YR008HR	smf-3a	164.5043	11.90
050YR008HR	smf-3a	164.7543	11.90
050YR008HR	smf-3a	165.0043	11.90
050YR008HR	smf-3a	165.2543	11.90
050YR008HR	smf-3a	165.5043	11.90
050YR008HR	smf-3a	165.7543	11.90
050YR008HR	smf-3a	166.0043	11.90
050YR008HR	smf-3a	166.2543	11.90
050YR008HR	smf-3a	166.5043	11.90
050YR008HR	smf-3a	166.7543	11.90
050YR008HR	smf-3a	167.0043	11.90
050YR008HR	smf-3a	167.2543	11.90
050YR008HR	smf-3a	167.5043	11.90
050YR008HR	smf-3a	167.7543	11.90
050YR008HR	smf-3a	168.0043	11.90
050YR008HR	smf-3a	168.2543	11.90

50yr-8hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR008HR	smf-3b	196.2543	11.26
050YR008HR	smf-3b	196.5043	11.26
050YR008HR	smf-3b	196.7543	11.26
050YR008HR	smf-3b	197.0043	11.26
050YR008HR	smf-3b	197.2543	11.26
050YR008HR	smf-3b	197.5043	11.26
050YR008HR	smf-3b	197.7543	11.26
050YR008HR	smf-3b	198.0043	11.26
050YR008HR	smf-3b	198.2543	11.26
050YR008HR	smf-3b	198.5043	11.26
050YR008HR	smf-3b	198.7543	11.26
050YR008HR	smf-3b	199.0043	11.25
050YR008HR	smf-3b	199.2543	11.25
050YR008HR	smf-3b	199.5043	11.25
050YR008HR	smf-3b	199.7543	11.25
050YR008HR	smf-3b	200.0043	11.25
050YR008HR	smf-3b	200.2543	11.25
050YR008HR	smf-3b	200.5043	11.25
050YR008HR	smf-3b	200.7543	11.25
050YR008HR	smf-3b	201.0043	11.25
050YR008HR	smf-3b	201.2543	11.25
050YR008HR	smf-3b	201.5043	11.25
050YR008HR	smf-3b	201.7543	11.25
050YR008HR	smf-3b	202.0043	11.25
050YR008HR	smf-3b	202.2543	11.25
050YR008HR	smf-3b	202.5043	11.25
050YR008HR	smf-3b	202.7543	11.25
050YR008HR	smf-3b	203.0043	11.25
050YR008HR	smf-3b	203.2543	11.25
050YR008HR	smf-3b	203.5043	11.25
050YR008HR	smf-3b	203.7543	11.25
050YR008HR	smf-3b	204.0043	11.25
050YR008HR	smf-3b	204.2543	11.25
050YR008HR	smf-3b	204.5043	11.25
050YR008HR	smf-3b	204.7543	11.25
050YR008HR	smf-3b	205.0043	11.25
050YR008HR	smf-3b	205.2543	11.25
050YR008HR	smf-3b	205.5043	11.25
050YR008HR	smf-3b	205.7543	11.25
050YR008HR	smf-3b	206.0043	11.25
050YR008HR	smf-3b	206.2543	11.25
050YR008HR	smf-3b	206.5043	11.25

50yr-8hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR024HR	smf-1a	318.5054	12.47
050YR024HR	smf-1a	318.7554	12.47
050YR024HR	smf-1a	319.0054	12.46
050YR024HR	smf-1a	319.2554	12.46
050YR024HR	smf-1a	319.5054	12.46
050YR024HR	smf-1a	319.7554	12.46
050YR024HR	smf-1a	320.0054	12.46
050YR024HR	smf-1a	320.2554	12.46
050YR024HR	smf-1a	320.5054	12.46
050YR024HR	smf-1a	320.7554	12.46
050YR024HR	smf-1a	321.0054	12.46
050YR024HR	smf-1a	321.2554	12.46
050YR024HR	smf-1a	321.5054	12.46
050YR024HR	smf-1a	321.7554	12.46
050YR024HR	smf-1a	322.0054	12.46
050YR024HR	smf-1a	322.2554	12.46
050YR024HR	smf-1a	322.5054	12.46
050YR024HR	smf-1a	322.7554	12.46
050YR024HR	smf-1a	323.0054	12.46
050YR024HR	smf-1a	323.2554	12.46
050YR024HR	smf-1a	323.5054	12.46
050YR024HR	smf-1a	323.7554	12.46
050YR024HR	smf-1a	324.0054	12.46
050YR024HR	smf-1a	324.2554	12.46
050YR024HR	smf-1a	324.5054	12.46
050YR024HR	smf-1a	324.7554	12.46
050YR024HR	smf-1a	325.0054	12.46
050YR024HR	smf-1a	325.2554	12.46
050YR024HR	smf-1a	325.5054	12.46
050YR024HR	smf-1a	325.7554	12.46
050YR024HR	smf-1a	326.0054	12.46
050YR024HR	smf-1a	326.2554	12.46
050YR024HR	smf-1a	326.5054	12.46
050YR024HR	smf-1a	326.7554	12.46
050YR024HR	smf-1a	327.0054	12.46
050YR024HR	smf-1a	327.2554	12.46
050YR024HR	smf-1a	327.5054	12.45
050YR024HR	smf-1a	327.7554	12.45
050YR024HR	smf-1a	328.0054	12.45
050YR024HR	smf-1a	328.2554	12.45
050YR024HR	smf-1a	328.5054	12.45
050YR024HR	smf-1a	328.7554	12.45

50yr-24hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR024HR	smf-1b	193.7554	13.02
050YR024HR	smf-1b	194.0054	13.02
050YR024HR	smf-1b	194.2554	13.02
050YR024HR	smf-1b	194.5054	13.02
050YR024HR	smf-1b	194.7554	13.02
050YR024HR	smf-1b	195.0054	13.02
050YR024HR	smf-1b	195.2554	13.02
050YR024HR	smf-1b	195.5054	13.02
050YR024HR	smf-1b	195.7554	13.01
050YR024HR	smf-1b	196.0054	13.01
050YR024HR	smf-1b	196.2554	13.01
050YR024HR	smf-1b	196.5054	13.01
050YR024HR	smf-1b	196.7554	13.01
050YR024HR	smf-1b	197.0054	13.01
050YR024HR	smf-1b	197.2554	13.01
050YR024HR	smf-1b	197.5054	13.01
050YR024HR	smf-1b	197.7554	13.01
050YR024HR	smf-1b	198.0054	13.01
050YR024HR	smf-1b	198.2554	13.01
050YR024HR	smf-1b	198.5054	13.01
050YR024HR	smf-1b	198.7554	13.01
050YR024HR	smf-1b	199.0054	13.01
050YR024HR	smf-1b	199.2554	13.01
050YR024HR	smf-1b	199.5054	13.01
050YR024HR	smf-1b	199.7554	13.01
050YR024HR	smf-1b	200.0054	13.01
050YR024HR	smf-1b	200.2554	13.01
050YR024HR	smf-1b	200.5054	13.00
050YR024HR	smf-1b	200.7554	13.00
050YR024HR	smf-1b	201.0054	13.00
050YR024HR	smf-1b	201.2554	13.00
050YR024HR	smf-1b	201.5054	13.00
050YR024HR	smf-1b	201.7554	13.00
050YR024HR	smf-1b	202.0054	13.00
050YR024HR	smf-1b	202.2554	13.00
050YR024HR	smf-1b	202.5054	13.00
050YR024HR	smf-1b	202.7554	13.00
050YR024HR	smf-1b	203.0054	13.00
050YR024HR	smf-1b	203.2554	13.00
050YR024HR	smf-1b	203.5054	13.00
050YR024HR	smf-1b	203.7554	13.00
050YR024HR	smf-1b	204.0054	13.00

50yr-24hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR024HR	smf-2a	268.5054	12.12
050YR024HR	smf-2a	268.7554	12.12
050YR024HR	smf-2a	269.0054	12.12
050YR024HR	smf-2a	269.2554	12.12
050YR024HR	smf-2a	269.5054	12.12
050YR024HR	smf-2a	269.7554	12.12
050YR024HR	smf-2a	270.0054	12.12
050YR024HR	smf-2a	270.2554	12.12
050YR024HR	smf-2a	270.5054	12.12
050YR024HR	smf-2a	270.7554	12.11
050YR024HR	smf-2a	271.0054	12.11
050YR024HR	smf-2a	271.2554	12.11
050YR024HR	smf-2a	271.5054	12.11
050YR024HR	smf-2a	271.7554	12.11
050YR024HR	smf-2a	272.0054	12.11
050YR024HR	smf-2a	272.2554	12.11
050YR024HR	smf-2a	272.5054	12.11
050YR024HR	smf-2a	272.7554	12.11
050YR024HR	smf-2a	273.0054	12.11
050YR024HR	smf-2a	273.2554	12.11
050YR024HR	smf-2a	273.5054	12.11
050YR024HR	smf-2a	273.7554	12.11
050YR024HR	smf-2a	274.0054	12.11
050YR024HR	smf-2a	274.2554	12.11
050YR024HR	smf-2a	274.5054	12.11
050YR024HR	smf-2a	274.7554	12.11
050YR024HR	smf-2a	275.0054	12.11
050YR024HR	smf-2a	275.2554	12.11
050YR024HR	smf-2a	275.5054	12.11
050YR024HR	smf-2a	275.7554	12.11
050YR024HR	smf-2a	276.0054	12.11
050YR024HR	smf-2a	276.2554	12.11
050YR024HR	smf-2a	276.5054	12.11
050YR024HR	smf-2a	276.7554	12.11
050YR024HR	smf-2a	277.0054	12.11
050YR024HR	smf-2a	277.2554	12.11
050YR024HR	smf-2a	277.5054	12.11
050YR024HR	smf-2a	277.7554	12.11
050YR024HR	smf-2a	278.0054	12.11
050YR024HR	smf-2a	278.2554	12.11
050YR024HR	smf-2a	278.5054	12.10
050YR024HR	smf-2a	278.7554	12.10

50yr-24hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR024HR	smf-2b	227.7554	11.41
050YR024HR	smf-2b	228.0054	11.41
050YR024HR	smf-2b	228.2554	11.41
050YR024HR	smf-2b	228.5054	11.41
050YR024HR	smf-2b	228.7554	11.41
050YR024HR	smf-2b	229.0054	11.41
050YR024HR	smf-2b	229.2554	11.41
050YR024HR	smf-2b	229.5054	11.41
050YR024HR	smf-2b	229.7554	11.41
050YR024HR	smf-2b	230.0054	11.41
050YR024HR	smf-2b	230.2554	11.41
050YR024HR	smf-2b	230.5054	11.41
050YR024HR	smf-2b	230.7554	11.41
050YR024HR	smf-2b	231.0054	11.41
050YR024HR	smf-2b	231.2554	11.41
050YR024HR	smf-2b	231.5054	11.41
050YR024HR	smf-2b	231.7554	11.41
050YR024HR	smf-2b	232.0054	11.41
050YR024HR	smf-2b	232.2554	11.41
050YR024HR	smf-2b	232.5054	11.41
050YR024HR	smf-2b	232.7554	11.41
050YR024HR	smf-2b	233.0054	11.40
050YR024HR	smf-2b	233.2554	11.40
050YR024HR	smf-2b	233.5054	11.40
050YR024HR	smf-2b	233.7554	11.40
050YR024HR	smf-2b	234.0054	11.40
050YR024HR	smf-2b	234.2554	11.40
050YR024HR	smf-2b	234.5054	11.40
050YR024HR	smf-2b	234.7554	11.40
050YR024HR	smf-2b	235.0054	11.40
050YR024HR	smf-2b	235.2554	11.40
050YR024HR	smf-2b	235.5054	11.40
050YR024HR	smf-2b	235.7554	11.40
050YR024HR	smf-2b	236.0054	11.40
050YR024HR	smf-2b	236.2554	11.40
050YR024HR	smf-2b	236.5054	11.40
050YR024HR	smf-2b	236.7554	11.40
050YR024HR	smf-2b	237.0054	11.40
050YR024HR	smf-2b	237.2554	11.40
050YR024HR	smf-2b	237.5054	11.40
050YR024HR	smf-2b	237.7554	11.40
050YR024HR	smf-2b	238.0054	11.40

50yr-24hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR024HR	smf-2c	271.0054	11.86
050YR024HR	smf-2c	271.2554	11.86
050YR024HR	smf-2c	271.5054	11.85
050YR024HR	smf-2c	271.7554	11.85
050YR024HR	smf-2c	272.0054	11.85
050YR024HR	smf-2c	272.2554	11.85
050YR024HR	smf-2c	272.5054	11.85
050YR024HR	smf-2c	272.7554	11.85
050YR024HR	smf-2c	273.0054	11.85
050YR024HR	smf-2c	273.2554	11.85
050YR024HR	smf-2c	273.5054	11.85
050YR024HR	smf-2c	273.7554	11.85
050YR024HR	smf-2c	274.0054	11.85
050YR024HR	smf-2c	274.2554	11.85
050YR024HR	smf-2c	274.5054	11.85
050YR024HR	smf-2c	274.7554	11.85
050YR024HR	smf-2c	275.0054	11.85
050YR024HR	smf-2c	275.2554	11.85
050YR024HR	smf-2c	275.5054	11.85
050YR024HR	smf-2c	275.7554	11.85
050YR024HR	smf-2c	276.0054	11.85
050YR024HR	smf-2c	276.2554	11.85
050YR024HR	smf-2c	276.5054	11.85
050YR024HR	smf-2c	276.7554	11.85
050YR024HR	smf-2c	277.0054	11.85
050YR024HR	smf-2c	277.2554	11.85
050YR024HR	smf-2c	277.5054	11.85
050YR024HR	smf-2c	277.7554	11.85
050YR024HR	smf-2c	278.0054	11.85
050YR024HR	smf-2c	278.2554	11.85
050YR024HR	smf-2c	278.5054	11.85
050YR024HR	smf-2c	278.7554	11.85
050YR024HR	smf-2c	279.0054	11.85
050YR024HR	smf-2c	279.2554	11.85
050YR024HR	smf-2c	279.5054	11.85
050YR024HR	smf-2c	279.7554	11.85
050YR024HR	smf-2c	280.0054	11.85
050YR024HR	smf-2c	280.2554	11.85
050YR024HR	smf-2c	280.5054	11.85
050YR024HR	smf-2c	280.7554	11.85
050YR024HR	smf-2c	281.0054	11.85
050YR024HR	smf-2c	281.2554	11.85

50yr-24hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR024HR	smf-3a	261.7554	11.92
050YR024HR	smf-3a	262.0054	11.92
050YR024HR	smf-3a	262.2554	11.92
050YR024HR	smf-3a	262.5054	11.92
050YR024HR	smf-3a	262.7554	11.92
050YR024HR	smf-3a	263.0054	11.92
050YR024HR	smf-3a	263.2554	11.91
050YR024HR	smf-3a	263.5054	11.91
050YR024HR	smf-3a	263.7554	11.91
050YR024HR	smf-3a	264.0054	11.91
050YR024HR	smf-3a	264.2554	11.91
050YR024HR	smf-3a	264.5054	11.91
050YR024HR	smf-3a	264.7554	11.91
050YR024HR	smf-3a	265.0054	11.91
050YR024HR	smf-3a	265.2554	11.91
050YR024HR	smf-3a	265.5054	11.91
050YR024HR	smf-3a	265.7554	11.91
050YR024HR	smf-3a	266.0054	11.91
050YR024HR	smf-3a	266.2554	11.91
050YR024HR	smf-3a	266.5054	11.91
050YR024HR	smf-3a	266.7554	11.91
050YR024HR	smf-3a	267.0054	11.91
050YR024HR	smf-3a	267.2554	11.91
050YR024HR	smf-3a	267.5054	11.91
050YR024HR	smf-3a	267.7554	11.91
050YR024HR	smf-3a	268.0054	11.91
050YR024HR	smf-3a	268.2554	11.91
050YR024HR	smf-3a	268.5054	11.91
050YR024HR	smf-3a	268.7554	11.91
050YR024HR	smf-3a	269.0054	11.91
050YR024HR	smf-3a	269.2554	11.91
050YR024HR	smf-3a	269.5054	11.90
050YR024HR	smf-3a	269.7554	11.90
050YR024HR	smf-3a	270.0054	11.90
050YR024HR	smf-3a	270.2554	11.90
050YR024HR	smf-3a	270.5054	11.90
050YR024HR	smf-3a	270.7554	11.90
050YR024HR	smf-3a	271.0054	11.90
050YR024HR	smf-3a	271.2554	11.90
050YR024HR	smf-3a	271.5054	11.90
050YR024HR	smf-3a	271.7554	11.90
050YR024HR	smf-3a	272.0054	11.90

50yr-24hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR024HR	smf-3b	305.0054	11.27
050YR024HR	smf-3b	305.2554	11.27
050YR024HR	smf-3b	305.5054	11.27
050YR024HR	smf-3b	305.7554	11.27
050YR024HR	smf-3b	306.0054	11.26
050YR024HR	smf-3b	306.2554	11.26
050YR024HR	smf-3b	306.5054	11.26
050YR024HR	smf-3b	306.7554	11.26
050YR024HR	smf-3b	307.0054	11.26
050YR024HR	smf-3b	307.2554	11.26
050YR024HR	smf-3b	307.5054	11.26
050YR024HR	smf-3b	307.7554	11.26
050YR024HR	smf-3b	308.0054	11.26
050YR024HR	smf-3b	308.2554	11.26
050YR024HR	smf-3b	308.5054	11.26
050YR024HR	smf-3b	308.7554	11.26
050YR024HR	smf-3b	309.0054	11.26
050YR024HR	smf-3b	309.2554	11.26
050YR024HR	smf-3b	309.5054	11.26
050YR024HR	smf-3b	309.7554	11.26
050YR024HR	smf-3b	310.0054	11.26
050YR024HR	smf-3b	310.2554	11.26
050YR024HR	smf-3b	310.5054	11.26
050YR024HR	smf-3b	310.7554	11.26
050YR024HR	smf-3b	311.0054	11.26
050YR024HR	smf-3b	311.2554	11.26
050YR024HR	smf-3b	311.5054	11.26
050YR024HR	smf-3b	311.7554	11.26
050YR024HR	smf-3b	312.0054	11.26
050YR024HR	smf-3b	312.2554	11.26
050YR024HR	smf-3b	312.5054	11.26
050YR024HR	smf-3b	312.7554	11.26
050YR024HR	smf-3b	313.0054	11.26
050YR024HR	smf-3b	313.2554	11.26
050YR024HR	smf-3b	313.5054	11.25
050YR024HR	smf-3b	313.7554	11.25
050YR024HR	smf-3b	314.0054	11.25
050YR024HR	smf-3b	314.2554	11.25
050YR024HR	smf-3b	314.5054	11.25
050YR024HR	smf-3b	314.7554	11.25
050YR024HR	smf-3b	315.0054	11.25
050YR024HR	smf-3b	315.2554	11.25

50yr-24hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR072HR	smf-1a	558.2525	12.46
050YR072HR	smf-1a	558.5025	12.46
050YR072HR	smf-1a	558.7525	12.46
050YR072HR	smf-1a	559.0025	12.46
050YR072HR	smf-1a	559.2525	12.46
050YR072HR	smf-1a	559.5025	12.46
050YR072HR	smf-1a	559.7525	12.46
050YR072HR	smf-1a	560.0025	12.46
050YR072HR	smf-1a	560.2525	12.46
050YR072HR	smf-1a	560.5025	12.46
050YR072HR	smf-1a	560.7525	12.46
050YR072HR	smf-1a	561.0025	12.46
050YR072HR	smf-1a	561.2525	12.46
050YR072HR	smf-1a	561.5025	12.46
050YR072HR	smf-1a	561.7525	12.46
050YR072HR	smf-1a	562.0025	12.46
050YR072HR	smf-1a	562.2525	12.46
050YR072HR	smf-1a	562.5025	12.46
050YR072HR	smf-1a	562.7525	12.46
050YR072HR	smf-1a	563.0025	12.46
050YR072HR	smf-1a	563.2525	12.46
050YR072HR	smf-1a	563.5025	12.46
050YR072HR	smf-1a	563.7525	12.46
050YR072HR	smf-1a	564.0025	12.46
050YR072HR	smf-1a	564.2525	12.46
050YR072HR	smf-1a	564.5025	12.46
050YR072HR	smf-1a	564.7525	12.46
050YR072HR	smf-1a	565.0025	12.46
050YR072HR	smf-1a	565.2525	12.46
050YR072HR	smf-1a	565.5025	12.46
050YR072HR	smf-1a	565.7525	12.46
050YR072HR	smf-1a	566.0025	12.46
050YR072HR	smf-1a	566.2525	12.46
050YR072HR	smf-1a	566.5025	12.46
050YR072HR	smf-1a	566.7525	12.46
050YR072HR	smf-1a	567.0025	12.46
050YR072HR	smf-1a	567.2525	12.46
050YR072HR	smf-1a	567.5025	12.46
050YR072HR	smf-1a	567.7525	12.46
050YR072HR	smf-1a	568.0025	12.46
050YR072HR	smf-1a	568.2525	12.45
050YR072HR	smf-1a	568.5025	12.45

50yr-72hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR072HR	smf-1b	417.0025	13.01
050YR072HR	smf-1b	417.2525	13.01
050YR072HR	smf-1b	417.5025	13.01
050YR072HR	smf-1b	417.7525	13.01
050YR072HR	smf-1b	418.0025	13.01
050YR072HR	smf-1b	418.2525	13.01
050YR072HR	smf-1b	418.5025	13.01
050YR072HR	smf-1b	418.7525	13.01
050YR072HR	smf-1b	419.0025	13.01
050YR072HR	smf-1b	419.2525	13.01
050YR072HR	smf-1b	419.5025	13.01
050YR072HR	smf-1b	419.7525	13.01
050YR072HR	smf-1b	420.0025	13.01
050YR072HR	smf-1b	420.2525	13.01
050YR072HR	smf-1b	420.5025	13.01
050YR072HR	smf-1b	420.7525	13.01
050YR072HR	smf-1b	421.0025	13.01
050YR072HR	smf-1b	421.2525	13.01
050YR072HR	smf-1b	421.5025	13.01
050YR072HR	smf-1b	421.7525	13.01
050YR072HR	smf-1b	422.0025	13.01
050YR072HR	smf-1b	422.2525	13.01
050YR072HR	smf-1b	422.5025	13.01
050YR072HR	smf-1b	422.7525	13.01
050YR072HR	smf-1b	423.0025	13.01
050YR072HR	smf-1b	423.2525	13.01
050YR072HR	smf-1b	423.5025	13.01
050YR072HR	smf-1b	423.7525	13.01
050YR072HR	smf-1b	424.0025	13.01
050YR072HR	smf-1b	424.2525	13.01
050YR072HR	smf-1b	424.5025	13.01
050YR072HR	smf-1b	424.7525	13.01
050YR072HR	smf-1b	425.0025	13.01
050YR072HR	smf-1b	425.2525	13.01
050YR072HR	smf-1b	425.5025	13.01
050YR072HR	smf-1b	425.7525	13.01
050YR072HR	smf-1b	426.0025	13.01
050YR072HR	smf-1b	426.2525	13.01
050YR072HR	smf-1b	426.5025	13.00
050YR072HR	smf-1b	426.7525	13.00
050YR072HR	smf-1b	427.0025	13.00
050YR072HR	smf-1b	427.2525	13.00

50yr-72hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR072HR	smf-2a	485.7525	12.11
050YR072HR	smf-2a	486.0025	12.11
050YR072HR	smf-2a	486.2525	12.11
050YR072HR	smf-2a	486.5025	12.11
050YR072HR	smf-2a	486.7525	12.11
050YR072HR	smf-2a	487.0025	12.11
050YR072HR	smf-2a	487.2525	12.11
050YR072HR	smf-2a	487.5025	12.11
050YR072HR	smf-2a	487.7525	12.11
050YR072HR	smf-2a	488.0025	12.11
050YR072HR	smf-2a	488.2525	12.11
050YR072HR	smf-2a	488.5025	12.11
050YR072HR	smf-2a	488.7525	12.11
050YR072HR	smf-2a	489.0025	12.11
050YR072HR	smf-2a	489.2525	12.11
050YR072HR	smf-2a	489.5025	12.11
050YR072HR	smf-2a	489.7525	12.11
050YR072HR	smf-2a	490.0025	12.11
050YR072HR	smf-2a	490.2525	12.11
050YR072HR	smf-2a	490.5025	12.11
050YR072HR	smf-2a	490.7525	12.11
050YR072HR	smf-2a	491.0025	12.11
050YR072HR	smf-2a	491.2525	12.11
050YR072HR	smf-2a	491.5025	12.11
050YR072HR	smf-2a	491.7525	12.11
050YR072HR	smf-2a	492.0025	12.11
050YR072HR	smf-2a	492.2525	12.11
050YR072HR	smf-2a	492.5025	12.11
050YR072HR	smf-2a	492.7525	12.11
050YR072HR	smf-2a	493.0025	12.11
050YR072HR	smf-2a	493.2525	12.11
050YR072HR	smf-2a	493.5025	12.11
050YR072HR	smf-2a	493.7525	12.11
050YR072HR	smf-2a	494.0025	12.11
050YR072HR	smf-2a	494.2525	12.11
050YR072HR	smf-2a	494.5025	12.10
050YR072HR	smf-2a	494.7525	12.10
050YR072HR	smf-2a	495.0025	12.10
050YR072HR	smf-2a	495.2525	12.10
050YR072HR	smf-2a	495.5025	12.10
050YR072HR	smf-2a	495.7525	12.10
050YR072HR	smf-2a	496.0025	12.10

50yr-72hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR072HR	smf-2b	439.0025	11.41
050YR072HR	smf-2b	439.2525	11.41
050YR072HR	smf-2b	439.5025	11.41
050YR072HR	smf-2b	439.7525	11.41
050YR072HR	smf-2b	440.0025	11.41
050YR072HR	smf-2b	440.2525	11.41
050YR072HR	smf-2b	440.5025	11.41
050YR072HR	smf-2b	440.7525	11.41
050YR072HR	smf-2b	441.0025	11.41
050YR072HR	smf-2b	441.2525	11.41
050YR072HR	smf-2b	441.5025	11.41
050YR072HR	smf-2b	441.7525	11.41
050YR072HR	smf-2b	442.0025	11.41
050YR072HR	smf-2b	442.2525	11.41
050YR072HR	smf-2b	442.5025	11.41
050YR072HR	smf-2b	442.7525	11.41
050YR072HR	smf-2b	443.0025	11.41
050YR072HR	smf-2b	443.2525	11.41
050YR072HR	smf-2b	443.5025	11.41
050YR072HR	smf-2b	443.7525	11.41
050YR072HR	smf-2b	444.0025	11.41
050YR072HR	smf-2b	444.2525	11.41
050YR072HR	smf-2b	444.5025	11.41
050YR072HR	smf-2b	444.7525	11.40
050YR072HR	smf-2b	445.0025	11.40
050YR072HR	smf-2b	445.2525	11.40
050YR072HR	smf-2b	445.5025	11.40
050YR072HR	smf-2b	445.7525	11.40
050YR072HR	smf-2b	446.0025	11.40
050YR072HR	smf-2b	446.2525	11.40
050YR072HR	smf-2b	446.5025	11.40
050YR072HR	smf-2b	446.7525	11.40
050YR072HR	smf-2b	447.0025	11.40
050YR072HR	smf-2b	447.2525	11.40
050YR072HR	smf-2b	447.5025	11.40
050YR072HR	smf-2b	447.7525	11.40
050YR072HR	smf-2b	448.0025	11.40
050YR072HR	smf-2b	448.2525	11.40
050YR072HR	smf-2b	448.5025	11.40
050YR072HR	smf-2b	448.7525	11.40
050YR072HR	smf-2b	449.0025	11.40
050YR072HR	smf-2b	449.2525	11.40

50yr-72hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR072HR	smf-2c	507.7525	11.86
050YR072HR	smf-2c	508.0025	11.86
050YR072HR	smf-2c	508.2525	11.86
050YR072HR	smf-2c	508.5025	11.86
050YR072HR	smf-2c	508.7525	11.86
050YR072HR	smf-2c	509.0025	11.86
050YR072HR	smf-2c	509.2525	11.86
050YR072HR	smf-2c	509.5025	11.86
050YR072HR	smf-2c	509.7525	11.86
050YR072HR	smf-2c	510.0025	11.86
050YR072HR	smf-2c	510.2525	11.86
050YR072HR	smf-2c	510.5025	11.86
050YR072HR	smf-2c	510.7525	11.86
050YR072HR	smf-2c	511.0025	11.86
050YR072HR	smf-2c	511.2525	11.86
050YR072HR	smf-2c	511.5025	11.86
050YR072HR	smf-2c	511.7525	11.86
050YR072HR	smf-2c	512.0025	11.86
050YR072HR	smf-2c	512.2525	11.85
050YR072HR	smf-2c	512.5025	11.85
050YR072HR	smf-2c	512.7525	11.85
050YR072HR	smf-2c	513.0025	11.85
050YR072HR	smf-2c	513.2525	11.85
050YR072HR	smf-2c	513.5025	11.85
050YR072HR	smf-2c	513.7525	11.85
050YR072HR	smf-2c	514.0025	11.85
050YR072HR	smf-2c	514.2525	11.85
050YR072HR	smf-2c	514.5025	11.85
050YR072HR	smf-2c	514.7525	11.85
050YR072HR	smf-2c	515.0025	11.85
050YR072HR	smf-2c	515.2525	11.85
050YR072HR	smf-2c	515.5025	11.85
050YR072HR	smf-2c	515.7525	11.85
050YR072HR	smf-2c	516.0025	11.85
050YR072HR	smf-2c	516.2525	11.85
050YR072HR	smf-2c	516.5025	11.85
050YR072HR	smf-2c	516.7525	11.85
050YR072HR	smf-2c	517.0025	11.85
050YR072HR	smf-2c	517.2525	11.85
050YR072HR	smf-2c	517.5025	11.85
050YR072HR	smf-2c	517.7525	11.85
050YR072HR	smf-2c	518.0025	11.85

50yr-72hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR072HR	smf-3a	534.5025	11.91
050YR072HR	smf-3a	534.7525	11.91
050YR072HR	smf-3a	535.0025	11.91
050YR072HR	smf-3a	535.2525	11.91
050YR072HR	smf-3a	535.5025	11.91
050YR072HR	smf-3a	535.7525	11.91
050YR072HR	smf-3a	536.0025	11.91
050YR072HR	smf-3a	536.2525	11.91
050YR072HR	smf-3a	536.5025	11.91
050YR072HR	smf-3a	536.7525	11.91
050YR072HR	smf-3a	537.0025	11.91
050YR072HR	smf-3a	537.2525	11.91
050YR072HR	smf-3a	537.5025	11.91
050YR072HR	smf-3a	537.7525	11.91
050YR072HR	smf-3a	538.0025	11.91
050YR072HR	smf-3a	538.2525	11.91
050YR072HR	smf-3a	538.5025	11.91
050YR072HR	smf-3a	538.7525	11.91
050YR072HR	smf-3a	539.0025	11.91
050YR072HR	smf-3a	539.2525	11.91
050YR072HR	smf-3a	539.5025	11.91
050YR072HR	smf-3a	539.7525	11.91
050YR072HR	smf-3a	540.0025	11.91
050YR072HR	smf-3a	540.2525	11.91
050YR072HR	smf-3a	540.5025	11.90
050YR072HR	smf-3a	540.7525	11.90
050YR072HR	smf-3a	541.0025	11.90
050YR072HR	smf-3a	541.2525	11.90
050YR072HR	smf-3a	541.5025	11.90
050YR072HR	smf-3a	541.7525	11.90
050YR072HR	smf-3a	542.0025	11.90
050YR072HR	smf-3a	542.2525	11.90
050YR072HR	smf-3a	542.5025	11.90
050YR072HR	smf-3a	542.7525	11.90
050YR072HR	smf-3a	543.0025	11.90
050YR072HR	smf-3a	543.2525	11.90
050YR072HR	smf-3a	543.5025	11.90
050YR072HR	smf-3a	543.7525	11.90
050YR072HR	smf-3a	544.0025	11.90
050YR072HR	smf-3a	544.2525	11.90
050YR072HR	smf-3a	544.5025	11.90
050YR072HR	smf-3a	544.7525	11.90

50yr-72hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
050YR072HR	smf-3b	624.2525	11.26
050YR072HR	smf-3b	624.5025	11.26
050YR072HR	smf-3b	624.7525	11.26
050YR072HR	smf-3b	625.0025	11.26
050YR072HR	smf-3b	625.2525	11.26
050YR072HR	smf-3b	625.5025	11.26
050YR072HR	smf-3b	625.7525	11.25
050YR072HR	smf-3b	626.0025	11.25
050YR072HR	smf-3b	626.2525	11.25
050YR072HR	smf-3b	626.5025	11.25
050YR072HR	smf-3b	626.7525	11.25
050YR072HR	smf-3b	627.0025	11.25
050YR072HR	smf-3b	627.2525	11.25
050YR072HR	smf-3b	627.5025	11.25
050YR072HR	smf-3b	627.7525	11.25
050YR072HR	smf-3b	628.0025	11.25
050YR072HR	smf-3b	628.2525	11.25
050YR072HR	smf-3b	628.5025	11.25
050YR072HR	smf-3b	628.7525	11.25
050YR072HR	smf-3b	629.0025	11.25
050YR072HR	smf-3b	629.2525	11.25
050YR072HR	smf-3b	629.5025	11.25
050YR072HR	smf-3b	629.7525	11.25
050YR072HR	smf-3b	630.0025	11.25
050YR072HR	smf-3b	630.2525	11.25
050YR072HR	smf-3b	630.5025	11.25
050YR072HR	smf-3b	630.7525	11.25
050YR072HR	smf-3b	631.0025	11.25
050YR072HR	smf-3b	631.2525	11.25
050YR072HR	smf-3b	631.5025	11.25
050YR072HR	smf-3b	631.7525	11.25
050YR072HR	smf-3b	632.0025	11.25
050YR072HR	smf-3b	632.2525	11.25
050YR072HR	smf-3b	632.5025	11.25
050YR072HR	smf-3b	632.7525	11.25
050YR072HR	smf-3b	633.0025	11.25
050YR072HR	smf-3b	633.2525	11.25
050YR072HR	smf-3b	633.5025	11.25
050YR072HR	smf-3b	633.7525	11.25
050YR072HR	smf-3b	634.0025	11.25
050YR072HR	smf-3b	634.2525	11.25
050YR072HR	smf-3b	634.5025	11.25

50yr-72hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR001HR	smf-1a	115.5019	12.48
100YR001HR	smf-1a	115.7519	12.48
100YR001HR	smf-1a	116.0019	12.48
100YR001HR	smf-1a	116.2519	12.48
100YR001HR	smf-1a	116.5019	12.48
100YR001HR	smf-1a	116.7519	12.48
100YR001HR	smf-1a	117.0019	12.48
100YR001HR	smf-1a	117.2519	12.48
100YR001HR	smf-1a	117.5019	12.48
100YR001HR	smf-1a	117.7519	12.48
100YR001HR	smf-1a	118.0019	12.48
100YR001HR	smf-1a	118.2519	12.48
100YR001HR	smf-1a	118.5019	12.48
100YR001HR	smf-1a	118.7519	12.47
100YR001HR	smf-1a	119.0019	12.47
100YR001HR	smf-1a	119.2519	12.47
100YR001HR	smf-1a	119.5019	12.47
100YR001HR	smf-1a	119.7519	12.47
100YR001HR	smf-1a	120.0019	12.47
100YR001HR	smf-1a	120.2519	12.47
100YR001HR	smf-1a	120.5019	12.47
100YR001HR	smf-1a	120.7519	12.47
100YR001HR	smf-1a	121.0019	12.47
100YR001HR	smf-1a	121.2519	12.47
100YR001HR	smf-1a	121.5019	12.47
100YR001HR	smf-1a	121.7519	12.47
100YR001HR	smf-1a	122.0019	12.47
100YR001HR	smf-1a	122.2519	12.46
100YR001HR	smf-1a	122.5019	12.46
100YR001HR	smf-1a	122.7519	12.46
100YR001HR	smf-1a	123.0019	12.46
100YR001HR	smf-1a	123.2519	12.46
100YR001HR	smf-1a	123.5019	12.46
100YR001HR	smf-1a	123.7519	12.46
100YR001HR	smf-1a	124.0019	12.46
100YR001HR	smf-1a	124.2519	12.46
100YR001HR	smf-1a	124.5019	12.46
100YR001HR	smf-1a	124.7519	12.46
100YR001HR	smf-1a	125.0019	12.46
100YR001HR	smf-1a	125.2519	12.46
100YR001HR	smf-1a	125.5019	12.46
100YR001HR	smf-1a	125.7519	12.45

100yr-1hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR001HR	smf-1b	45.2519	13.07
100YR001HR	smf-1b	45.5019	13.07
100YR001HR	smf-1b	45.7519	13.07
100YR001HR	smf-1b	46.0019	13.07
100YR001HR	smf-1b	46.2519	13.06
100YR001HR	smf-1b	46.5019	13.06
100YR001HR	smf-1b	46.7519	13.06
100YR001HR	smf-1b	47.0019	13.06
100YR001HR	smf-1b	47.2519	13.06
100YR001HR	smf-1b	47.5019	13.05
100YR001HR	smf-1b	47.7519	13.05
100YR001HR	smf-1b	48.0019	13.05
100YR001HR	smf-1b	48.2519	13.05
100YR001HR	smf-1b	48.5019	13.04
100YR001HR	smf-1b	48.7519	13.04
100YR001HR	smf-1b	49.0019	13.04
100YR001HR	smf-1b	49.2519	13.04
100YR001HR	smf-1b	49.5019	13.04
100YR001HR	smf-1b	49.7519	13.04
100YR001HR	smf-1b	50.0019	13.03
100YR001HR	smf-1b	50.2519	13.03
100YR001HR	smf-1b	50.5019	13.03
100YR001HR	smf-1b	50.7519	13.03
100YR001HR	smf-1b	51.0019	13.03
100YR001HR	smf-1b	51.2519	13.02
100YR001HR	smf-1b	51.5019	13.02
100YR001HR	smf-1b	51.7519	13.02
100YR001HR	smf-1b	52.0019	13.02
100YR001HR	smf-1b	52.2519	13.02
100YR001HR	smf-1b	52.5019	13.01
100YR001HR	smf-1b	52.7519	13.01
100YR001HR	smf-1b	53.0019	13.01
100YR001HR	smf-1b	53.2519	13.01
100YR001HR	smf-1b	53.5019	13.01
100YR001HR	smf-1b	53.7519	13.01
100YR001HR	smf-1b	54.0019	13.00
100YR001HR	smf-1b	54.2519	13.00
100YR001HR	smf-1b	54.5019	13.00
100YR001HR	smf-1b	54.7519	13.00
100YR001HR	smf-1b	55.0019	13.00
100YR001HR	smf-1b	55.2519	13.00
100YR001HR	smf-1b	55.5019	13.00

100yr-1hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR001HR	smf-2a	122.0019	12.12
100YR001HR	smf-2a	122.2519	12.12
100YR001HR	smf-2a	122.5019	12.12
100YR001HR	smf-2a	122.7519	12.12
100YR001HR	smf-2a	123.0019	12.12
100YR001HR	smf-2a	123.2519	12.12
100YR001HR	smf-2a	123.5019	12.12
100YR001HR	smf-2a	123.7519	12.12
100YR001HR	smf-2a	124.0019	12.12
100YR001HR	smf-2a	124.2519	12.11
100YR001HR	smf-2a	124.5019	12.11
100YR001HR	smf-2a	124.7519	12.11
100YR001HR	smf-2a	125.0019	12.11
100YR001HR	smf-2a	125.2519	12.11
100YR001HR	smf-2a	125.5019	12.11
100YR001HR	smf-2a	125.7519	12.11
100YR001HR	smf-2a	126.0019	12.11
100YR001HR	smf-2a	126.2519	12.11
100YR001HR	smf-2a	126.5019	12.11
100YR001HR	smf-2a	126.7519	12.11
100YR001HR	smf-2a	127.0019	12.11
100YR001HR	smf-2a	127.2519	12.11
100YR001HR	smf-2a	127.5019	12.11
100YR001HR	smf-2a	127.7519	12.11
100YR001HR	smf-2a	128.0019	12.11
100YR001HR	smf-2a	128.2519	12.10
100YR001HR	smf-2a	128.5019	12.10
100YR001HR	smf-2a	128.7519	12.10
100YR001HR	smf-2a	129.0019	12.10
100YR001HR	smf-2a	129.2519	12.10
100YR001HR	smf-2a	129.5019	12.10
100YR001HR	smf-2a	129.7519	12.10
100YR001HR	smf-2a	130.0019	12.10
100YR001HR	smf-2a	130.2519	12.10
100YR001HR	smf-2a	130.5019	12.10
100YR001HR	smf-2a	130.7519	12.10
100YR001HR	smf-2a	131.0019	12.10
100YR001HR	smf-2a	131.2519	12.10
100YR001HR	smf-2a	131.5019	12.10
100YR001HR	smf-2a	131.7519	12.10
100YR001HR	smf-2a	132.0019	12.10
100YR001HR	smf-2a	132.2519	12.10

100yr-1hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR001HR	smf-2b	83.2519	11.43
100YR001HR	smf-2b	83.5019	11.42
100YR001HR	smf-2b	83.7519	11.42
100YR001HR	smf-2b	84.0019	11.42
100YR001HR	smf-2b	84.2519	11.42
100YR001HR	smf-2b	84.5019	11.42
100YR001HR	smf-2b	84.7519	11.42
100YR001HR	smf-2b	85.0019	11.42
100YR001HR	smf-2b	85.2519	11.42
100YR001HR	smf-2b	85.5019	11.42
100YR001HR	smf-2b	85.7519	11.41
100YR001HR	smf-2b	86.0019	11.41
100YR001HR	smf-2b	86.2519	11.41
100YR001HR	smf-2b	86.5019	11.41
100YR001HR	smf-2b	86.7519	11.41
100YR001HR	smf-2b	87.0019	11.41
100YR001HR	smf-2b	87.2519	11.41
100YR001HR	smf-2b	87.5019	11.41
100YR001HR	smf-2b	87.7519	11.41
100YR001HR	smf-2b	88.0019	11.40
100YR001HR	smf-2b	88.2519	11.40
100YR001HR	smf-2b	88.5019	11.40
100YR001HR	smf-2b	88.7519	11.40
100YR001HR	smf-2b	89.0019	11.40
100YR001HR	smf-2b	89.2519	11.40
100YR001HR	smf-2b	89.5019	11.40
100YR001HR	smf-2b	89.7519	11.40
100YR001HR	smf-2b	90.0019	11.40
100YR001HR	smf-2b	90.2519	11.40
100YR001HR	smf-2b	90.5019	11.40
100YR001HR	smf-2b	90.7519	11.40
100YR001HR	smf-2b	91.0019	11.40
100YR001HR	smf-2b	91.2519	11.40
100YR001HR	smf-2b	91.5019	11.40
100YR001HR	smf-2b	91.7519	11.40
100YR001HR	smf-2b	92.0019	11.40
100YR001HR	smf-2b	92.2519	11.40
100YR001HR	smf-2b	92.5019	11.40
100YR001HR	smf-2b	92.7519	11.40
100YR001HR	smf-2b	93.0019	11.40
100YR001HR	smf-2b	93.2519	11.40
100YR001HR	smf-2b	93.5019	11.40

100yr-1hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR001HR	smf-2c	118.0019	11.86
100YR001HR	smf-2c	118.2519	11.86
100YR001HR	smf-2c	118.5019	11.86
100YR001HR	smf-2c	118.7519	11.86
100YR001HR	smf-2c	119.0019	11.85
100YR001HR	smf-2c	119.2519	11.85
100YR001HR	smf-2c	119.5019	11.85
100YR001HR	smf-2c	119.7519	11.85
100YR001HR	smf-2c	120.0019	11.85
100YR001HR	smf-2c	120.2519	11.85
100YR001HR	smf-2c	120.5019	11.85
100YR001HR	smf-2c	120.7519	11.85
100YR001HR	smf-2c	121.0019	11.85
100YR001HR	smf-2c	121.2519	11.85
100YR001HR	smf-2c	121.5019	11.85
100YR001HR	smf-2c	121.7519	11.85
100YR001HR	smf-2c	122.0019	11.85
100YR001HR	smf-2c	122.2519	11.85
100YR001HR	smf-2c	122.5019	11.85
100YR001HR	smf-2c	122.7519	11.85
100YR001HR	smf-2c	123.0019	11.85
100YR001HR	smf-2c	123.2519	11.85
100YR001HR	smf-2c	123.5019	11.85
100YR001HR	smf-2c	123.7519	11.85
100YR001HR	smf-2c	124.0019	11.85
100YR001HR	smf-2c	124.2519	11.85
100YR001HR	smf-2c	124.5019	11.85
100YR001HR	smf-2c	124.7519	11.85
100YR001HR	smf-2c	125.0019	11.85
100YR001HR	smf-2c	125.2519	11.85
100YR001HR	smf-2c	125.5019	11.85
100YR001HR	smf-2c	125.7519	11.85
100YR001HR	smf-2c	126.0019	11.85
100YR001HR	smf-2c	126.2519	11.85
100YR001HR	smf-2c	126.5019	11.85
100YR001HR	smf-2c	126.7519	11.85
100YR001HR	smf-2c	127.0019	11.85
100YR001HR	smf-2c	127.2519	11.85
100YR001HR	smf-2c	127.5019	11.85
100YR001HR	smf-2c	127.7519	11.85
100YR001HR	smf-2c	128.0019	11.85
100YR001HR	smf-2c	128.2519	11.85

100yr-1hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR001HR	smf-3a	89.7519	11.91
100YR001HR	smf-3a	90.0019	11.91
100YR001HR	smf-3a	90.2519	11.91
100YR001HR	smf-3a	90.5019	11.91
100YR001HR	smf-3a	90.7519	11.91
100YR001HR	smf-3a	91.0019	11.91
100YR001HR	smf-3a	91.2519	11.90
100YR001HR	smf-3a	91.5019	11.90
100YR001HR	smf-3a	91.7519	11.90
100YR001HR	smf-3a	92.0019	11.90
100YR001HR	smf-3a	92.2519	11.90
100YR001HR	smf-3a	92.5019	11.90
100YR001HR	smf-3a	92.7519	11.90
100YR001HR	smf-3a	93.0019	11.90
100YR001HR	smf-3a	93.2519	11.90
100YR001HR	smf-3a	93.5019	11.90
100YR001HR	smf-3a	93.7519	11.90
100YR001HR	smf-3a	94.0019	11.90
100YR001HR	smf-3a	94.2519	11.90
100YR001HR	smf-3a	94.5019	11.90
100YR001HR	smf-3a	94.7519	11.90
100YR001HR	smf-3a	95.0019	11.90
100YR001HR	smf-3a	95.2519	11.90
100YR001HR	smf-3a	95.5019	11.90
100YR001HR	smf-3a	95.7519	11.90
100YR001HR	smf-3a	96.0019	11.90
100YR001HR	smf-3a	96.2519	11.90
100YR001HR	smf-3a	96.5019	11.90
100YR001HR	smf-3a	96.7519	11.90
100YR001HR	smf-3a	97.0019	11.90
100YR001HR	smf-3a	97.2519	11.90
100YR001HR	smf-3a	97.5019	11.90
100YR001HR	smf-3a	97.7519	11.90
100YR001HR	smf-3a	98.0019	11.90
100YR001HR	smf-3a	98.2519	11.90
100YR001HR	smf-3a	98.5019	11.90
100YR001HR	smf-3a	98.7519	11.90
100YR001HR	smf-3a	99.0019	11.90
100YR001HR	smf-3a	99.2519	11.90
100YR001HR	smf-3a	99.5019	11.90
100YR001HR	smf-3a	99.7519	11.90
100YR001HR	smf-3a	100.0019	11.90

100yr-1hr SMF-3a

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR001HR	smf-3b	124.5019	11.26
100YR001HR	smf-3b	124.7519	11.26
100YR001HR	smf-3b	125.0019	11.26
100YR001HR	smf-3b	125.2519	11.26
100YR001HR	smf-3b	125.5019	11.25
100YR001HR	smf-3b	125.7519	11.25
100YR001HR	smf-3b	126.0019	11.25
100YR001HR	smf-3b	126.2519	11.25
100YR001HR	smf-3b	126.5019	11.25
100YR001HR	smf-3b	126.7519	11.25
100YR001HR	smf-3b	127.0019	11.25
100YR001HR	smf-3b	127.2519	11.25
100YR001HR	smf-3b	127.5019	11.25
100YR001HR	smf-3b	127.7519	11.25
100YR001HR	smf-3b	128.0019	11.25
100YR001HR	smf-3b	128.2519	11.25
100YR001HR	smf-3b	128.5019	11.25
100YR001HR	smf-3b	128.7519	11.25
100YR001HR	smf-3b	129.0019	11.25
100YR001HR	smf-3b	129.2519	11.25
100YR001HR	smf-3b	129.5019	11.25
100YR001HR	smf-3b	129.7519	11.25
100YR001HR	smf-3b	130.0019	11.25
100YR001HR	smf-3b	130.2519	11.25
100YR001HR	smf-3b	130.5019	11.25
100YR001HR	smf-3b	130.7519	11.25
100YR001HR	smf-3b	131.0019	11.25
100YR001HR	smf-3b	131.2519	11.25
100YR001HR	smf-3b	131.5019	11.25
100YR001HR	smf-3b	131.7519	11.25
100YR001HR	smf-3b	132.0019	11.25
100YR001HR	smf-3b	132.2519	11.25
100YR001HR	smf-3b	132.5019	11.25
100YR001HR	smf-3b	132.7519	11.25
100YR001HR	smf-3b	133.0019	11.25
100YR001HR	smf-3b	133.2519	11.25
100YR001HR	smf-3b	133.5019	11.25
100YR001HR	smf-3b	133.7519	11.25
100YR001HR	smf-3b	134.0019	11.25
100YR001HR	smf-3b	134.2519	11.25
100YR001HR	smf-3b	134.5019	11.25
100YR001HR	smf-3b	134.7519	11.25

100yr-1hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR002HR	smf-1a	159.2553	12.46
100YR002HR	smf-1a	159.5053	12.46
100YR002HR	smf-1a	159.7553	12.46
100YR002HR	smf-1a	160.0053	12.46
100YR002HR	smf-1a	160.2553	12.46
100YR002HR	smf-1a	160.5053	12.46
100YR002HR	smf-1a	160.7553	12.46
100YR002HR	smf-1a	161.0053	12.46
100YR002HR	smf-1a	161.2553	12.46
100YR002HR	smf-1a	161.5053	12.46
100YR002HR	smf-1a	161.7553	12.46
100YR002HR	smf-1a	162.0053	12.45
100YR002HR	smf-1a	162.2553	12.45
100YR002HR	smf-1a	162.5053	12.45
100YR002HR	smf-1a	162.7553	12.45
100YR002HR	smf-1a	163.0053	12.45
100YR002HR	smf-1a	163.2553	12.45
100YR002HR	smf-1a	163.5053	12.45
100YR002HR	smf-1a	163.7553	12.45
100YR002HR	smf-1a	164.0053	12.45
100YR002HR	smf-1a	164.2553	12.45
100YR002HR	smf-1a	164.5053	12.45
100YR002HR	smf-1a	164.7553	12.45
100YR002HR	smf-1a	165.0053	12.45
100YR002HR	smf-1a	165.2553	12.45
100YR002HR	smf-1a	165.5053	12.45
100YR002HR	smf-1a	165.7553	12.45
100YR002HR	smf-1a	166.0053	12.45
100YR002HR	smf-1a	166.2553	12.45
100YR002HR	smf-1a	166.5053	12.45
100YR002HR	smf-1a	166.7553	12.45
100YR002HR	smf-1a	167.0053	12.45
100YR002HR	smf-1a	167.2553	12.45
100YR002HR	smf-1a	167.5053	12.45
100YR002HR	smf-1a	167.7553	12.45
100YR002HR	smf-1a	168.0053	12.45
100YR002HR	smf-1a	168.2553	12.45
100YR002HR	smf-1a	168.5053	12.45
100YR002HR	smf-1a	168.7553	12.45
100YR002HR	smf-1a	169.0053	12.45
100YR002HR	smf-1a	169.2553	12.45
100YR002HR	smf-1a	169.5053	12.45

100yr-2hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR002HR	smf-1b	67.0053	13.02
100YR002HR	smf-1b	67.2553	13.02
100YR002HR	smf-1b	67.5053	13.02
100YR002HR	smf-1b	67.7553	13.01
100YR002HR	smf-1b	68.0053	13.01
100YR002HR	smf-1b	68.2553	13.01
100YR002HR	smf-1b	68.5053	13.01
100YR002HR	smf-1b	68.7553	13.01
100YR002HR	smf-1b	69.0053	13.01
100YR002HR	smf-1b	69.2553	13.01
100YR002HR	smf-1b	69.5053	13.00
100YR002HR	smf-1b	69.7553	13.00
100YR002HR	smf-1b	70.0053	13.00
100YR002HR	smf-1b	70.2553	13.00
100YR002HR	smf-1b	70.5053	13.00
100YR002HR	smf-1b	70.7553	13.00
100YR002HR	smf-1b	71.0053	13.00
100YR002HR	smf-1b	71.2553	13.00
100YR002HR	smf-1b	71.5053	13.00
100YR002HR	smf-1b	71.7553	13.00
100YR002HR	smf-1b	72.0053	13.00
100YR002HR	smf-1b	72.2553	13.00
100YR002HR	smf-1b	72.5053	13.00
100YR002HR	smf-1b	72.7553	13.00
100YR002HR	smf-1b	73.0053	13.00
100YR002HR	smf-1b	73.2553	13.00
100YR002HR	smf-1b	73.5053	13.00
100YR002HR	smf-1b	73.7553	13.00
100YR002HR	smf-1b	74.0053	13.00
100YR002HR	smf-1b	74.2553	13.00
100YR002HR	smf-1b	74.5053	13.00
100YR002HR	smf-1b	74.7553	13.00
100YR002HR	smf-1b	75.0053	13.00
100YR002HR	smf-1b	75.2553	13.00
100YR002HR	smf-1b	75.5053	13.00
100YR002HR	smf-1b	75.7553	13.00
100YR002HR	smf-1b	76.0053	13.00
100YR002HR	smf-1b	76.2553	13.00
100YR002HR	smf-1b	76.5053	13.00
100YR002HR	smf-1b	76.7553	13.00
100YR002HR	smf-1b	77.0053	13.00
100YR002HR	smf-1b	77.2553	13.00

100yr-2hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR002HR	smf-2a	142.7553	12.11
100YR002HR	smf-2a	143.0053	12.11
100YR002HR	smf-2a	143.2553	12.11
100YR002HR	smf-2a	143.5053	12.11
100YR002HR	smf-2a	143.7553	12.11
100YR002HR	smf-2a	144.0053	12.10
100YR002HR	smf-2a	144.2553	12.10
100YR002HR	smf-2a	144.5053	12.10
100YR002HR	smf-2a	144.7553	12.10
100YR002HR	smf-2a	145.0053	12.10
100YR002HR	smf-2a	145.2553	12.10
100YR002HR	smf-2a	145.5053	12.10
100YR002HR	smf-2a	145.7553	12.10
100YR002HR	smf-2a	146.0053	12.10
100YR002HR	smf-2a	146.2553	12.10
100YR002HR	smf-2a	146.5053	12.10
100YR002HR	smf-2a	146.7553	12.10
100YR002HR	smf-2a	147.0053	12.10
100YR002HR	smf-2a	147.2553	12.10
100YR002HR	smf-2a	147.5053	12.10
100YR002HR	smf-2a	147.7553	12.10
100YR002HR	smf-2a	148.0053	12.10
100YR002HR	smf-2a	148.2553	12.10
100YR002HR	smf-2a	148.5053	12.10
100YR002HR	smf-2a	148.7553	12.10
100YR002HR	smf-2a	149.0053	12.10
100YR002HR	smf-2a	149.2553	12.10
100YR002HR	smf-2a	149.5053	12.10
100YR002HR	smf-2a	149.7553	12.10
100YR002HR	smf-2a	150.0053	12.10
100YR002HR	smf-2a	150.2553	12.10
100YR002HR	smf-2a	150.5053	12.10
100YR002HR	smf-2a	150.7553	12.10
100YR002HR	smf-2a	151.0053	12.10
100YR002HR	smf-2a	151.2553	12.10
100YR002HR	smf-2a	151.5053	12.10
100YR002HR	smf-2a	151.7553	12.10
100YR002HR	smf-2a	152.0053	12.10
100YR002HR	smf-2a	152.2553	12.10
100YR002HR	smf-2a	152.5053	12.10
100YR002HR	smf-2a	152.7553	12.10
100YR002HR	smf-2a	153.0053	12.10

100yr-2hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR002HR	smf-2b	103.0053	11.42
100YR002HR	smf-2b	103.2553	11.42
100YR002HR	smf-2b	103.5053	11.42
100YR002HR	smf-2b	103.7553	11.42
100YR002HR	smf-2b	104.0053	11.41
100YR002HR	smf-2b	104.2553	11.41
100YR002HR	smf-2b	104.5053	11.41
100YR002HR	smf-2b	104.7553	11.41
100YR002HR	smf-2b	105.0053	11.41
100YR002HR	smf-2b	105.2553	11.41
100YR002HR	smf-2b	105.5053	11.41
100YR002HR	smf-2b	105.7553	11.41
100YR002HR	smf-2b	106.0053	11.41
100YR002HR	smf-2b	106.2553	11.41
100YR002HR	smf-2b	106.5053	11.40
100YR002HR	smf-2b	106.7553	11.40
100YR002HR	smf-2b	107.0053	11.40
100YR002HR	smf-2b	107.2553	11.40
100YR002HR	smf-2b	107.5053	11.40
100YR002HR	smf-2b	107.7553	11.40
100YR002HR	smf-2b	108.0053	11.40
100YR002HR	smf-2b	108.2553	11.40
100YR002HR	smf-2b	108.5053	11.40
100YR002HR	smf-2b	108.7553	11.40
100YR002HR	smf-2b	109.0053	11.40
100YR002HR	smf-2b	109.2553	11.40
100YR002HR	smf-2b	109.5053	11.40
100YR002HR	smf-2b	109.7553	11.40
100YR002HR	smf-2b	110.0053	11.40
100YR002HR	smf-2b	110.2553	11.40
100YR002HR	smf-2b	110.5053	11.40
100YR002HR	smf-2b	110.7553	11.40
100YR002HR	smf-2b	111.0053	11.40
100YR002HR	smf-2b	111.2553	11.40
100YR002HR	smf-2b	111.5053	11.40
100YR002HR	smf-2b	111.7553	11.40
100YR002HR	smf-2b	112.0053	11.40
100YR002HR	smf-2b	112.2553	11.40
100YR002HR	smf-2b	112.5053	11.40
100YR002HR	smf-2b	112.7553	11.40
100YR002HR	smf-2b	113.0053	11.40
100YR002HR	smf-2b	113.2553	11.40

100yr-2hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR002HR	smf-2c	126.2553	11.88
100YR002HR	smf-2c	126.5053	11.88
100YR002HR	smf-2c	126.7553	11.88
100YR002HR	smf-2c	127.0053	11.88
100YR002HR	smf-2c	127.2553	11.88
100YR002HR	smf-2c	127.5053	11.88
100YR002HR	smf-2c	127.7553	11.88
100YR002HR	smf-2c	128.0053	11.88
100YR002HR	smf-2c	128.2553	11.88
100YR002HR	smf-2c	128.5053	11.88
100YR002HR	smf-2c	128.7553	11.88
100YR002HR	smf-2c	129.0053	11.88
100YR002HR	smf-2c	129.2553	11.88
100YR002HR	smf-2c	129.5053	11.87
100YR002HR	smf-2c	129.7553	11.87
100YR002HR	smf-2c	130.0053	11.87
100YR002HR	smf-2c	130.2553	11.87
100YR002HR	smf-2c	130.5053	11.87
100YR002HR	smf-2c	130.7553	11.87
100YR002HR	smf-2c	131.0053	11.87
100YR002HR	smf-2c	131.2553	11.87
100YR002HR	smf-2c	131.5053	11.87
100YR002HR	smf-2c	131.7553	11.87
100YR002HR	smf-2c	132.0053	11.87
100YR002HR	smf-2c	132.2553	11.87
100YR002HR	smf-2c	132.5053	11.87
100YR002HR	smf-2c	132.7553	11.86
100YR002HR	smf-2c	133.0053	11.86
100YR002HR	smf-2c	133.2553	11.86
100YR002HR	smf-2c	133.5053	11.86
100YR002HR	smf-2c	133.7553	11.86
100YR002HR	smf-2c	134.0053	11.86
100YR002HR	smf-2c	134.2553	11.86
100YR002HR	smf-2c	134.5053	11.86
100YR002HR	smf-2c	134.7553	11.86
100YR002HR	smf-2c	135.0053	11.86
100YR002HR	smf-2c	135.2553	11.86
100YR002HR	smf-2c	135.5053	11.86
100YR002HR	smf-2c	135.7553	11.86
100YR002HR	smf-2c	136.0053	11.86
100YR002HR	smf-2c	136.2553	11.85
100YR002HR	smf-2c	136.5053	11.85

100yr-2hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR002HR	smf-3a	107.5053	11.92
100YR002HR	smf-3a	107.7553	11.92
100YR002HR	smf-3a	108.0053	11.92
100YR002HR	smf-3a	108.2553	11.92
100YR002HR	smf-3a	108.5053	11.91
100YR002HR	smf-3a	108.7553	11.91
100YR002HR	smf-3a	109.0053	11.91
100YR002HR	smf-3a	109.2553	11.91
100YR002HR	smf-3a	109.5053	11.91
100YR002HR	smf-3a	109.7553	11.91
100YR002HR	smf-3a	110.0053	11.91
100YR002HR	smf-3a	110.2553	11.91
100YR002HR	smf-3a	110.5053	11.91
100YR002HR	smf-3a	110.7553	11.91
100YR002HR	smf-3a	111.0053	11.91
100YR002HR	smf-3a	111.2553	11.90
100YR002HR	smf-3a	111.5053	11.90
100YR002HR	smf-3a	111.7553	11.90
100YR002HR	smf-3a	112.0053	11.90
100YR002HR	smf-3a	112.2553	11.90
100YR002HR	smf-3a	112.5053	11.90
100YR002HR	smf-3a	112.7553	11.90
100YR002HR	smf-3a	113.0053	11.90
100YR002HR	smf-3a	113.2553	11.90
100YR002HR	smf-3a	113.5053	11.90
100YR002HR	smf-3a	113.7553	11.90
100YR002HR	smf-3a	114.0053	11.90
100YR002HR	smf-3a	114.2553	11.90
100YR002HR	smf-3a	114.5053	11.90
100YR002HR	smf-3a	114.7553	11.90
100YR002HR	smf-3a	115.0053	11.90
100YR002HR	smf-3a	115.2553	11.90
100YR002HR	smf-3a	115.5053	11.90
100YR002HR	smf-3a	115.7553	11.90
100YR002HR	smf-3a	116.0053	11.90
100YR002HR	smf-3a	116.2553	11.90
100YR002HR	smf-3a	116.5053	11.90
100YR002HR	smf-3a	116.7553	11.90
100YR002HR	smf-3a	117.0053	11.90
100YR002HR	smf-3a	117.2553	11.90
100YR002HR	smf-3a	117.5053	11.90
100YR002HR	smf-3a	117.7553	11.90

100yr-2hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR002HR	smf-3b	141.2553	11.27
100YR002HR	smf-3b	141.5053	11.27
100YR002HR	smf-3b	141.7553	11.27
100YR002HR	smf-3b	142.0053	11.27
100YR002HR	smf-3b	142.2553	11.27
100YR002HR	smf-3b	142.5053	11.27
100YR002HR	smf-3b	142.7553	11.27
100YR002HR	smf-3b	143.0053	11.27
100YR002HR	smf-3b	143.2553	11.27
100YR002HR	smf-3b	143.5053	11.27
100YR002HR	smf-3b	143.7553	11.27
100YR002HR	smf-3b	144.0053	11.27
100YR002HR	smf-3b	144.2553	11.27
100YR002HR	smf-3b	144.5053	11.26
100YR002HR	smf-3b	144.7553	11.26
100YR002HR	smf-3b	145.0053	11.26
100YR002HR	smf-3b	145.2553	11.26
100YR002HR	smf-3b	145.5053	11.26
100YR002HR	smf-3b	145.7553	11.26
100YR002HR	smf-3b	146.0053	11.26
100YR002HR	smf-3b	146.2553	11.26
100YR002HR	smf-3b	146.5053	11.26
100YR002HR	smf-3b	146.7553	11.26
100YR002HR	smf-3b	147.0053	11.26
100YR002HR	smf-3b	147.2553	11.26
100YR002HR	smf-3b	147.5053	11.26
100YR002HR	smf-3b	147.7553	11.26
100YR002HR	smf-3b	148.0053	11.25
100YR002HR	smf-3b	148.2553	11.25
100YR002HR	smf-3b	148.5053	11.25
100YR002HR	smf-3b	148.7553	11.25
100YR002HR	smf-3b	149.0053	11.25
100YR002HR	smf-3b	149.2553	11.25
100YR002HR	smf-3b	149.5053	11.25
100YR002HR	smf-3b	149.7553	11.25
100YR002HR	smf-3b	150.0053	11.25
100YR002HR	smf-3b	150.2553	11.25
100YR002HR	smf-3b	150.5053	11.25
100YR002HR	smf-3b	150.7553	11.25
100YR002HR	smf-3b	151.0053	11.25
100YR002HR	smf-3b	151.2553	11.25
100YR002HR	smf-3b	151.5053	11.25

100yr-2hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR004YR	smf-1a	175.0075	12.46
100YR004YR	smf-1a	175.2575	12.46
100YR004YR	smf-1a	175.5075	12.46
100YR004YR	smf-1a	175.7575	12.46
100YR004YR	smf-1a	176.0075	12.46
100YR004YR	smf-1a	176.2575	12.46
100YR004YR	smf-1a	176.5075	12.46
100YR004YR	smf-1a	176.7575	12.46
100YR004YR	smf-1a	177.0075	12.46
100YR004YR	smf-1a	177.2575	12.46
100YR004YR	smf-1a	177.5075	12.46
100YR004YR	smf-1a	177.7575	12.46
100YR004YR	smf-1a	178.0075	12.46
100YR004YR	smf-1a	178.2575	12.46
100YR004YR	smf-1a	178.5075	12.46
100YR004YR	smf-1a	178.7575	12.46
100YR004YR	smf-1a	179.0075	12.46
100YR004YR	smf-1a	179.2575	12.46
100YR004YR	smf-1a	179.5075	12.45
100YR004YR	smf-1a	179.7575	12.45
100YR004YR	smf-1a	180.0075	12.45
100YR004YR	smf-1a	180.2575	12.45
100YR004YR	smf-1a	180.5075	12.45
100YR004YR	smf-1a	180.7575	12.45
100YR004YR	smf-1a	181.0075	12.45
100YR004YR	smf-1a	181.2575	12.45
100YR004YR	smf-1a	181.5075	12.45
100YR004YR	smf-1a	181.7575	12.45
100YR004YR	smf-1a	182.0075	12.45
100YR004YR	smf-1a	182.2575	12.45
100YR004YR	smf-1a	182.5075	12.45
100YR004YR	smf-1a	182.7575	12.45
100YR004YR	smf-1a	183.0075	12.45
100YR004YR	smf-1a	183.2575	12.45
100YR004YR	smf-1a	183.5075	12.45
100YR004YR	smf-1a	183.7575	12.45
100YR004YR	smf-1a	184.0075	12.45
100YR004YR	smf-1a	184.2575	12.45
100YR004YR	smf-1a	184.5075	12.45
100YR004YR	smf-1a	184.7575	12.45
100YR004YR	smf-1a	185.0075	12.45
100YR004YR	smf-1a	185.2575	12.45

100yr-4hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR004YR	smf-1b	80.7575	13.02
100YR004YR	smf-1b	81.0075	13.02
100YR004YR	smf-1b	81.2575	13.02
100YR004YR	smf-1b	81.5075	13.02
100YR004YR	smf-1b	81.7575	13.02
100YR004YR	smf-1b	82.0075	13.02
100YR004YR	smf-1b	82.2575	13.02
100YR004YR	smf-1b	82.5075	13.02
100YR004YR	smf-1b	82.7575	13.01
100YR004YR	smf-1b	83.0075	13.01
100YR004YR	smf-1b	83.2575	13.01
100YR004YR	smf-1b	83.5075	13.01
100YR004YR	smf-1b	83.7575	13.01
100YR004YR	smf-1b	84.0075	13.01
100YR004YR	smf-1b	84.2575	13.01
100YR004YR	smf-1b	84.5075	13.01
100YR004YR	smf-1b	84.7575	13.00
100YR004YR	smf-1b	85.0075	13.00
100YR004YR	smf-1b	85.2575	13.00
100YR004YR	smf-1b	85.5075	13.00
100YR004YR	smf-1b	85.7575	13.00
100YR004YR	smf-1b	86.0075	13.00
100YR004YR	smf-1b	86.2575	13.00
100YR004YR	smf-1b	86.5075	13.00
100YR004YR	smf-1b	86.7575	13.00
100YR004YR	smf-1b	87.0075	13.00
100YR004YR	smf-1b	87.2575	13.00
100YR004YR	smf-1b	87.5075	13.00
100YR004YR	smf-1b	87.7575	13.00
100YR004YR	smf-1b	88.0075	13.00
100YR004YR	smf-1b	88.2575	13.00
100YR004YR	smf-1b	88.5075	13.00
100YR004YR	smf-1b	88.7575	13.00
100YR004YR	smf-1b	89.0075	13.00
100YR004YR	smf-1b	89.2575	13.00
100YR004YR	smf-1b	89.5075	13.00
100YR004YR	smf-1b	89.7575	13.00
100YR004YR	smf-1b	90.0075	13.00
100YR004YR	smf-1b	90.2575	13.00
100YR004YR	smf-1b	90.5075	13.00
100YR004YR	smf-1b	90.7575	13.00
100YR004YR	smf-1b	91.0075	13.00

100yr-4hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR004YR	smf-2a	154.5075	12.12
100YR004YR	smf-2a	154.7575	12.12
100YR004YR	smf-2a	155.0075	12.12
100YR004YR	smf-2a	155.2575	12.12
100YR004YR	smf-2a	155.5075	12.12
100YR004YR	smf-2a	155.7575	12.12
100YR004YR	smf-2a	156.0075	12.12
100YR004YR	smf-2a	156.2575	12.12
100YR004YR	smf-2a	156.5075	12.12
100YR004YR	smf-2a	156.7575	12.12
100YR004YR	smf-2a	157.0075	12.11
100YR004YR	smf-2a	157.2575	12.11
100YR004YR	smf-2a	157.5075	12.11
100YR004YR	smf-2a	157.7575	12.11
100YR004YR	smf-2a	158.0075	12.11
100YR004YR	smf-2a	158.2575	12.11
100YR004YR	smf-2a	158.5075	12.11
100YR004YR	smf-2a	158.7575	12.11
100YR004YR	smf-2a	159.0075	12.11
100YR004YR	smf-2a	159.2575	12.11
100YR004YR	smf-2a	159.5075	12.11
100YR004YR	smf-2a	159.7575	12.11
100YR004YR	smf-2a	160.0075	12.11
100YR004YR	smf-2a	160.2575	12.11
100YR004YR	smf-2a	160.5075	12.11
100YR004YR	smf-2a	160.7575	12.11
100YR004YR	smf-2a	161.0075	12.11
100YR004YR	smf-2a	161.2575	12.11
100YR004YR	smf-2a	161.5075	12.11
100YR004YR	smf-2a	161.7575	12.10
100YR004YR	smf-2a	162.0075	12.10
100YR004YR	smf-2a	162.2575	12.10
100YR004YR	smf-2a	162.5075	12.10
100YR004YR	smf-2a	162.7575	12.10
100YR004YR	smf-2a	163.0075	12.10
100YR004YR	smf-2a	163.2575	12.10
100YR004YR	smf-2a	163.5075	12.10
100YR004YR	smf-2a	163.7575	12.10
100YR004YR	smf-2a	164.0075	12.10
100YR004YR	smf-2a	164.2575	12.10
100YR004YR	smf-2a	164.5075	12.10
100YR004YR	smf-2a	164.7575	12.10

100yr-4hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR004YR	smf-2b	112.7575	11.43
100YR004YR	smf-2b	113.0075	11.43
100YR004YR	smf-2b	113.2575	11.43
100YR004YR	smf-2b	113.5075	11.43
100YR004YR	smf-2b	113.7575	11.43
100YR004YR	smf-2b	114.0075	11.43
100YR004YR	smf-2b	114.2575	11.43
100YR004YR	smf-2b	114.5075	11.43
100YR004YR	smf-2b	114.7575	11.43
100YR004YR	smf-2b	115.0075	11.43
100YR004YR	smf-2b	115.2575	11.42
100YR004YR	smf-2b	115.5075	11.42
100YR004YR	smf-2b	115.7575	11.42
100YR004YR	smf-2b	116.0075	11.42
100YR004YR	smf-2b	116.2575	11.42
100YR004YR	smf-2b	116.5075	11.42
100YR004YR	smf-2b	116.7575	11.42
100YR004YR	smf-2b	117.0075	11.42
100YR004YR	smf-2b	117.2575	11.42
100YR004YR	smf-2b	117.5075	11.42
100YR004YR	smf-2b	117.7575	11.42
100YR004YR	smf-2b	118.0075	11.41
100YR004YR	smf-2b	118.2575	11.41
100YR004YR	smf-2b	118.5075	11.41
100YR004YR	smf-2b	118.7575	11.41
100YR004YR	smf-2b	119.0075	11.41
100YR004YR	smf-2b	119.2575	11.41
100YR004YR	smf-2b	119.5075	11.41
100YR004YR	smf-2b	119.7575	11.41
100YR004YR	smf-2b	120.0075	11.41
100YR004YR	smf-2b	120.2575	11.41
100YR004YR	smf-2b	120.5075	11.41
100YR004YR	smf-2b	120.7575	11.41
100YR004YR	smf-2b	121.0075	11.40
100YR004YR	smf-2b	121.2575	11.40
100YR004YR	smf-2b	121.5075	11.40
100YR004YR	smf-2b	121.7575	11.40
100YR004YR	smf-2b	122.0075	11.40
100YR004YR	smf-2b	122.2575	11.40
100YR004YR	smf-2b	122.5075	11.40
100YR004YR	smf-2b	122.7575	11.40
100YR004YR	smf-2b	123.0075	11.40

100yr-4hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR004YR	smf-2c	144.5075	11.87
100YR004YR	smf-2c	144.7575	11.87
100YR004YR	smf-2c	145.0075	11.87
100YR004YR	smf-2c	145.2575	11.87
100YR004YR	smf-2c	145.5075	11.87
100YR004YR	smf-2c	145.7575	11.87
100YR004YR	smf-2c	146.0075	11.87
100YR004YR	smf-2c	146.2575	11.87
100YR004YR	smf-2c	146.5075	11.87
100YR004YR	smf-2c	146.7575	11.87
100YR004YR	smf-2c	147.0075	11.87
100YR004YR	smf-2c	147.2575	11.87
100YR004YR	smf-2c	147.5075	11.87
100YR004YR	smf-2c	147.7575	11.87
100YR004YR	smf-2c	148.0075	11.87
100YR004YR	smf-2c	148.2575	11.86
100YR004YR	smf-2c	148.5075	11.86
100YR004YR	smf-2c	148.7575	11.86
100YR004YR	smf-2c	149.0075	11.86
100YR004YR	smf-2c	149.2575	11.86
100YR004YR	smf-2c	149.5075	11.86
100YR004YR	smf-2c	149.7575	11.86
100YR004YR	smf-2c	150.0075	11.86
100YR004YR	smf-2c	150.2575	11.86
100YR004YR	smf-2c	150.5075	11.86
100YR004YR	smf-2c	150.7575	11.86
100YR004YR	smf-2c	151.0075	11.86
100YR004YR	smf-2c	151.2575	11.86
100YR004YR	smf-2c	151.5075	11.86
100YR004YR	smf-2c	151.7575	11.86
100YR004YR	smf-2c	152.0075	11.85
100YR004YR	smf-2c	152.2575	11.85
100YR004YR	smf-2c	152.5075	11.85
100YR004YR	smf-2c	152.7575	11.85
100YR004YR	smf-2c	153.0075	11.85
100YR004YR	smf-2c	153.2575	11.85
100YR004YR	smf-2c	153.5075	11.85
100YR004YR	smf-2c	153.7575	11.85
100YR004YR	smf-2c	154.0075	11.85
100YR004YR	smf-2c	154.2575	11.85
100YR004YR	smf-2c	154.5075	11.85
100YR004YR	smf-2c	154.7575	11.85

100yr-4hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR004YR	smf-3a	123.7575	11.93
100YR004YR	smf-3a	124.0075	11.93
100YR004YR	smf-3a	124.2575	11.93
100YR004YR	smf-3a	124.5075	11.93
100YR004YR	smf-3a	124.7575	11.93
100YR004YR	smf-3a	125.0075	11.93
100YR004YR	smf-3a	125.2575	11.92
100YR004YR	smf-3a	125.5075	11.92
100YR004YR	smf-3a	125.7575	11.92
100YR004YR	smf-3a	126.0075	11.92
100YR004YR	smf-3a	126.2575	11.92
100YR004YR	smf-3a	126.5075	11.92
100YR004YR	smf-3a	126.7575	11.92
100YR004YR	smf-3a	127.0075	11.92
100YR004YR	smf-3a	127.2575	11.92
100YR004YR	smf-3a	127.5075	11.92
100YR004YR	smf-3a	127.7575	11.92
100YR004YR	smf-3a	128.0075	11.92
100YR004YR	smf-3a	128.2575	11.91
100YR004YR	smf-3a	128.5075	11.91
100YR004YR	smf-3a	128.7575	11.91
100YR004YR	smf-3a	129.0075	11.91
100YR004YR	smf-3a	129.2575	11.91
100YR004YR	smf-3a	129.5075	11.91
100YR004YR	smf-3a	129.7575	11.91
100YR004YR	smf-3a	130.0075	11.91
100YR004YR	smf-3a	130.2575	11.91
100YR004YR	smf-3a	130.5075	11.91
100YR004YR	smf-3a	130.7575	11.91
100YR004YR	smf-3a	131.0075	11.91
100YR004YR	smf-3a	131.2575	11.91
100YR004YR	smf-3a	131.5075	11.90
100YR004YR	smf-3a	131.7575	11.90
100YR004YR	smf-3a	132.0075	11.90
100YR004YR	smf-3a	132.2575	11.90
100YR004YR	smf-3a	132.5075	11.90
100YR004YR	smf-3a	132.7575	11.90
100YR004YR	smf-3a	133.0075	11.90
100YR004YR	smf-3a	133.2575	11.90
100YR004YR	smf-3a	133.5075	11.90
100YR004YR	smf-3a	133.7575	11.90
100YR004YR	smf-3a	134.0075	11.90

100yr-4hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR004YR	smf-3b	166.0075	11.26
100YR004YR	smf-3b	166.2575	11.26
100YR004YR	smf-3b	166.5075	11.25
100YR004YR	smf-3b	166.7575	11.25
100YR004YR	smf-3b	167.0075	11.25
100YR004YR	smf-3b	167.2575	11.25
100YR004YR	smf-3b	167.5075	11.25
100YR004YR	smf-3b	167.7575	11.25
100YR004YR	smf-3b	168.0075	11.25
100YR004YR	smf-3b	168.2575	11.25
100YR004YR	smf-3b	168.5075	11.25
100YR004YR	smf-3b	168.7575	11.25
100YR004YR	smf-3b	169.0075	11.25
100YR004YR	smf-3b	169.2575	11.25
100YR004YR	smf-3b	169.5075	11.25
100YR004YR	smf-3b	169.7575	11.25
100YR004YR	smf-3b	170.0075	11.25
100YR004YR	smf-3b	170.2575	11.25
100YR004YR	smf-3b	170.5075	11.25
100YR004YR	smf-3b	170.7575	11.25
100YR004YR	smf-3b	171.0075	11.25
100YR004YR	smf-3b	171.2575	11.25
100YR004YR	smf-3b	171.5075	11.25
100YR004YR	smf-3b	171.7575	11.25
100YR004YR	smf-3b	172.0075	11.25
100YR004YR	smf-3b	172.2575	11.25
100YR004YR	smf-3b	172.5075	11.25
100YR004YR	smf-3b	172.7575	11.25
100YR004YR	smf-3b	173.0075	11.25
100YR004YR	smf-3b	173.2575	11.25
100YR004YR	smf-3b	173.5075	11.25
100YR004YR	smf-3b	173.7575	11.25
100YR004YR	smf-3b	174.0075	11.25
100YR004YR	smf-3b	174.2575	11.25
100YR004YR	smf-3b	174.5075	11.25
100YR004YR	smf-3b	174.7575	11.25
100YR004YR	smf-3b	175.0075	11.25
100YR004YR	smf-3b	175.2575	11.25
100YR004YR	smf-3b	175.5075	11.25
100YR004YR	smf-3b	175.7575	11.25
100YR004YR	smf-3b	176.0075	11.25
100YR004YR	smf-3b	176.2575	11.25

100yr-4hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR008HR	smf-1a	218.7546	12.47
100YR008HR	smf-1a	219.0046	12.47
100YR008HR	smf-1a	219.2546	12.47
100YR008HR	smf-1a	219.5046	12.47
100YR008HR	smf-1a	219.7546	12.47
100YR008HR	smf-1a	220.0046	12.47
100YR008HR	smf-1a	220.2546	12.46
100YR008HR	smf-1a	220.5046	12.46
100YR008HR	smf-1a	220.7546	12.46
100YR008HR	smf-1a	221.0046	12.46
100YR008HR	smf-1a	221.2546	12.46
100YR008HR	smf-1a	221.5046	12.46
100YR008HR	smf-1a	221.7546	12.46
100YR008HR	smf-1a	222.0046	12.46
100YR008HR	smf-1a	222.2546	12.46
100YR008HR	smf-1a	222.5046	12.46
100YR008HR	smf-1a	222.7546	12.46
100YR008HR	smf-1a	223.0046	12.46
100YR008HR	smf-1a	223.2546	12.46
100YR008HR	smf-1a	223.5046	12.46
100YR008HR	smf-1a	223.7546	12.46
100YR008HR	smf-1a	224.0046	12.46
100YR008HR	smf-1a	224.2546	12.46
100YR008HR	smf-1a	224.5046	12.46
100YR008HR	smf-1a	224.7546	12.46
100YR008HR	smf-1a	225.0046	12.46
100YR008HR	smf-1a	225.2546	12.46
100YR008HR	smf-1a	225.5046	12.46
100YR008HR	smf-1a	225.7546	12.46
100YR008HR	smf-1a	226.0046	12.46
100YR008HR	smf-1a	226.2546	12.45
100YR008HR	smf-1a	226.5046	12.45
100YR008HR	smf-1a	226.7546	12.45
100YR008HR	smf-1a	227.0046	12.45
100YR008HR	smf-1a	227.2546	12.45
100YR008HR	smf-1a	227.5046	12.45
100YR008HR	smf-1a	227.7546	12.45
100YR008HR	smf-1a	228.0046	12.45
100YR008HR	smf-1a	228.2546	12.45
100YR008HR	smf-1a	228.5046	12.45
100YR008HR	smf-1a	228.7546	12.45
100YR008HR	smf-1a	229.0046	12.45

100yr-8hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR008HR	smf-1b	110.0046	13.02
100YR008HR	smf-1b	110.2546	13.02
100YR008HR	smf-1b	110.5046	13.02
100YR008HR	smf-1b	110.7546	13.02
100YR008HR	smf-1b	111.0046	13.02
100YR008HR	smf-1b	111.2546	13.02
100YR008HR	smf-1b	111.5046	13.02
100YR008HR	smf-1b	111.7546	13.02
100YR008HR	smf-1b	112.0046	13.02
100YR008HR	smf-1b	112.2546	13.02
100YR008HR	smf-1b	112.5046	13.01
100YR008HR	smf-1b	112.7546	13.01
100YR008HR	smf-1b	113.0046	13.01
100YR008HR	smf-1b	113.2546	13.01
100YR008HR	smf-1b	113.5046	13.01
100YR008HR	smf-1b	113.7546	13.01
100YR008HR	smf-1b	114.0046	13.01
100YR008HR	smf-1b	114.2546	13.01
100YR008HR	smf-1b	114.5046	13.01
100YR008HR	smf-1b	114.7546	13.01
100YR008HR	smf-1b	115.0046	13.01
100YR008HR	smf-1b	115.2546	13.00
100YR008HR	smf-1b	115.5046	13.00
100YR008HR	smf-1b	115.7546	13.00
100YR008HR	smf-1b	116.0046	13.00
100YR008HR	smf-1b	116.2546	13.00
100YR008HR	smf-1b	116.5046	13.00
100YR008HR	smf-1b	116.7546	13.00
100YR008HR	smf-1b	117.0046	13.00
100YR008HR	smf-1b	117.2546	13.00
100YR008HR	smf-1b	117.5046	13.00
100YR008HR	smf-1b	117.7546	13.00
100YR008HR	smf-1b	118.0046	13.00
100YR008HR	smf-1b	118.2546	13.00
100YR008HR	smf-1b	118.5046	13.00
100YR008HR	smf-1b	118.7546	13.00
100YR008HR	smf-1b	119.0046	13.00
100YR008HR	smf-1b	119.2546	13.00
100YR008HR	smf-1b	119.5046	13.00
100YR008HR	smf-1b	119.7546	13.00
100YR008HR	smf-1b	120.0046	13.00
100YR008HR	smf-1b	120.2546	13.00

100yr-8hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR008HR	smf-2a	190.2546	12.11
100YR008HR	smf-2a	190.5046	12.11
100YR008HR	smf-2a	190.7546	12.11
100YR008HR	smf-2a	191.0046	12.10
100YR008HR	smf-2a	191.2546	12.10
100YR008HR	smf-2a	191.5046	12.10
100YR008HR	smf-2a	191.7546	12.10
100YR008HR	smf-2a	192.0046	12.10
100YR008HR	smf-2a	192.2546	12.10
100YR008HR	smf-2a	192.5046	12.10
100YR008HR	smf-2a	192.7546	12.10
100YR008HR	smf-2a	193.0046	12.10
100YR008HR	smf-2a	193.2546	12.10
100YR008HR	smf-2a	193.5046	12.10
100YR008HR	smf-2a	193.7546	12.10
100YR008HR	smf-2a	194.0046	12.10
100YR008HR	smf-2a	194.2546	12.10
100YR008HR	smf-2a	194.5046	12.10
100YR008HR	smf-2a	194.7546	12.10
100YR008HR	smf-2a	195.0046	12.10
100YR008HR	smf-2a	195.2546	12.10
100YR008HR	smf-2a	195.5046	12.10
100YR008HR	smf-2a	195.7546	12.10
100YR008HR	smf-2a	196.0046	12.10
100YR008HR	smf-2a	196.2546	12.10
100YR008HR	smf-2a	196.5046	12.10
100YR008HR	smf-2a	196.7546	12.10
100YR008HR	smf-2a	197.0046	12.10
100YR008HR	smf-2a	197.2546	12.10
100YR008HR	smf-2a	197.5046	12.10
100YR008HR	smf-2a	197.7546	12.10
100YR008HR	smf-2a	198.0046	12.10
100YR008HR	smf-2a	198.2546	12.10
100YR008HR	smf-2a	198.5046	12.10
100YR008HR	smf-2a	198.7546	12.10
100YR008HR	smf-2a	199.0046	12.10
100YR008HR	smf-2a	199.2546	12.10
100YR008HR	smf-2a	199.5046	12.10
100YR008HR	smf-2a	199.7546	12.10
100YR008HR	smf-2a	200.0046	12.10
100YR008HR	smf-2a	200.2546	12.10
100YR008HR	smf-2a	200.5046	12.10

100yr-8hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR008HR	smf-2b	144.5046	11.42
100YR008HR	smf-2b	144.7546	11.42
100YR008HR	smf-2b	145.0046	11.42
100YR008HR	smf-2b	145.2546	11.42
100YR008HR	smf-2b	145.5046	11.42
100YR008HR	smf-2b	145.7546	11.42
100YR008HR	smf-2b	146.0046	11.41
100YR008HR	smf-2b	146.2546	11.41
100YR008HR	smf-2b	146.5046	11.41
100YR008HR	smf-2b	146.7546	11.41
100YR008HR	smf-2b	147.0046	11.41
100YR008HR	smf-2b	147.2546	11.41
100YR008HR	smf-2b	147.5046	11.41
100YR008HR	smf-2b	147.7546	11.41
100YR008HR	smf-2b	148.0046	11.41
100YR008HR	smf-2b	148.2546	11.41
100YR008HR	smf-2b	148.5046	11.41
100YR008HR	smf-2b	148.7546	11.41
100YR008HR	smf-2b	149.0046	11.41
100YR008HR	smf-2b	149.2546	11.41
100YR008HR	smf-2b	149.5046	11.41
100YR008HR	smf-2b	149.7546	11.40
100YR008HR	smf-2b	150.0046	11.40
100YR008HR	smf-2b	150.2546	11.40
100YR008HR	smf-2b	150.5046	11.40
100YR008HR	smf-2b	150.7546	11.40
100YR008HR	smf-2b	151.0046	11.40
100YR008HR	smf-2b	151.2546	11.40
100YR008HR	smf-2b	151.5046	11.40
100YR008HR	smf-2b	151.7546	11.40
100YR008HR	smf-2b	152.0046	11.40
100YR008HR	smf-2b	152.2546	11.40
100YR008HR	smf-2b	152.5046	11.40
100YR008HR	smf-2b	152.7546	11.40
100YR008HR	smf-2b	153.0046	11.40
100YR008HR	smf-2b	153.2546	11.40
100YR008HR	smf-2b	153.5046	11.40
100YR008HR	smf-2b	153.7546	11.40
100YR008HR	smf-2b	154.0046	11.40
100YR008HR	smf-2b	154.2546	11.40
100YR008HR	smf-2b	154.5046	11.40
100YR008HR	smf-2b	154.7546	11.40

100yr-8hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR008HR	smf-2c	172.2546	11.88
100YR008HR	smf-2c	172.5046	11.88
100YR008HR	smf-2c	172.7546	11.88
100YR008HR	smf-2c	173.0046	11.88
100YR008HR	smf-2c	173.2546	11.87
100YR008HR	smf-2c	173.5046	11.87
100YR008HR	smf-2c	173.7546	11.87
100YR008HR	smf-2c	174.0046	11.87
100YR008HR	smf-2c	174.2546	11.87
100YR008HR	smf-2c	174.5046	11.87
100YR008HR	smf-2c	174.7546	11.87
100YR008HR	smf-2c	175.0046	11.87
100YR008HR	smf-2c	175.2546	11.87
100YR008HR	smf-2c	175.5046	11.87
100YR008HR	smf-2c	175.7546	11.87
100YR008HR	smf-2c	176.0046	11.87
100YR008HR	smf-2c	176.2546	11.87
100YR008HR	smf-2c	176.5046	11.87
100YR008HR	smf-2c	176.7546	11.87
100YR008HR	smf-2c	177.0046	11.87
100YR008HR	smf-2c	177.2546	11.87
100YR008HR	smf-2c	177.5046	11.86
100YR008HR	smf-2c	177.7546	11.86
100YR008HR	smf-2c	178.0046	11.86
100YR008HR	smf-2c	178.2546	11.86
100YR008HR	smf-2c	178.5046	11.86
100YR008HR	smf-2c	178.7546	11.86
100YR008HR	smf-2c	179.0046	11.86
100YR008HR	smf-2c	179.2546	11.86
100YR008HR	smf-2c	179.5046	11.86
100YR008HR	smf-2c	179.7546	11.86
100YR008HR	smf-2c	180.0046	11.86
100YR008HR	smf-2c	180.2546	11.86
100YR008HR	smf-2c	180.5046	11.86
100YR008HR	smf-2c	180.7546	11.86
100YR008HR	smf-2c	181.0046	11.86
100YR008HR	smf-2c	181.2546	11.86
100YR008HR	smf-2c	181.5046	11.86
100YR008HR	smf-2c	181.7546	11.86
100YR008HR	smf-2c	182.0046	11.85
100YR008HR	smf-2c	182.2546	11.85
100YR008HR	smf-2c	182.5046	11.85

100yr-8hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR008HR	smf-3a	158.0046	11.92
100YR008HR	smf-3a	158.2546	11.92
100YR008HR	smf-3a	158.5046	11.92
100YR008HR	smf-3a	158.7546	11.92
100YR008HR	smf-3a	159.0046	11.92
100YR008HR	smf-3a	159.2546	11.92
100YR008HR	smf-3a	159.5046	11.92
100YR008HR	smf-3a	159.7546	11.92
100YR008HR	smf-3a	160.0046	11.92
100YR008HR	smf-3a	160.2546	11.92
100YR008HR	smf-3a	160.5046	11.92
100YR008HR	smf-3a	160.7546	11.91
100YR008HR	smf-3a	161.0046	11.91
100YR008HR	smf-3a	161.2546	11.91
100YR008HR	smf-3a	161.5046	11.91
100YR008HR	smf-3a	161.7546	11.91
100YR008HR	smf-3a	162.0046	11.91
100YR008HR	smf-3a	162.2546	11.91
100YR008HR	smf-3a	162.5046	11.91
100YR008HR	smf-3a	162.7546	11.91
100YR008HR	smf-3a	163.0046	11.91
100YR008HR	smf-3a	163.2546	11.91
100YR008HR	smf-3a	163.5046	11.91
100YR008HR	smf-3a	163.7546	11.91
100YR008HR	smf-3a	164.0046	11.91
100YR008HR	smf-3a	164.2546	11.91
100YR008HR	smf-3a	164.5046	11.91
100YR008HR	smf-3a	164.7546	11.90
100YR008HR	smf-3a	165.0046	11.90
100YR008HR	smf-3a	165.2546	11.90
100YR008HR	smf-3a	165.5046	11.90
100YR008HR	smf-3a	165.7546	11.90
100YR008HR	smf-3a	166.0046	11.90
100YR008HR	smf-3a	166.2546	11.90
100YR008HR	smf-3a	166.5046	11.90
100YR008HR	smf-3a	166.7546	11.90
100YR008HR	smf-3a	167.0046	11.90
100YR008HR	smf-3a	167.2546	11.90
100YR008HR	smf-3a	167.5046	11.90
100YR008HR	smf-3a	167.7546	11.90
100YR008HR	smf-3a	168.0046	11.90
100YR008HR	smf-3a	168.2546	11.90

100yr-8hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR008HR	smf-3b	196.2546	11.27
100YR008HR	smf-3b	196.5046	11.27
100YR008HR	smf-3b	196.7546	11.27
100YR008HR	smf-3b	197.0046	11.27
100YR008HR	smf-3b	197.2546	11.27
100YR008HR	smf-3b	197.5046	11.27
100YR008HR	smf-3b	197.7546	11.26
100YR008HR	smf-3b	198.0046	11.26
100YR008HR	smf-3b	198.2546	11.26
100YR008HR	smf-3b	198.5046	11.26
100YR008HR	smf-3b	198.7546	11.26
100YR008HR	smf-3b	199.0046	11.26
100YR008HR	smf-3b	199.2546	11.26
100YR008HR	smf-3b	199.5046	11.26
100YR008HR	smf-3b	199.7546	11.26
100YR008HR	smf-3b	200.0046	11.26
100YR008HR	smf-3b	200.2546	11.26
100YR008HR	smf-3b	200.5046	11.26
100YR008HR	smf-3b	200.7546	11.26
100YR008HR	smf-3b	201.0046	11.26
100YR008HR	smf-3b	201.2546	11.26
100YR008HR	smf-3b	201.5046	11.26
100YR008HR	smf-3b	201.7546	11.26
100YR008HR	smf-3b	202.0046	11.26
100YR008HR	smf-3b	202.2546	11.26
100YR008HR	smf-3b	202.5046	11.25
100YR008HR	smf-3b	202.7546	11.25
100YR008HR	smf-3b	203.0046	11.25
100YR008HR	smf-3b	203.2546	11.25
100YR008HR	smf-3b	203.5046	11.25
100YR008HR	smf-3b	203.7546	11.25
100YR008HR	smf-3b	204.0046	11.25
100YR008HR	smf-3b	204.2546	11.25
100YR008HR	smf-3b	204.5046	11.25
100YR008HR	smf-3b	204.7546	11.25
100YR008HR	smf-3b	205.0046	11.25
100YR008HR	smf-3b	205.2546	11.25
100YR008HR	smf-3b	205.5046	11.25
100YR008HR	smf-3b	205.7546	11.25
100YR008HR	smf-3b	206.0046	11.25
100YR008HR	smf-3b	206.2546	11.25
100YR008HR	smf-3b	206.5046	11.25

100yr-8hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR024HR	smf-1a	329.0068	12.46
100YR024HR	smf-1a	329.2568	12.46
100YR024HR	smf-1a	329.5068	12.46
100YR024HR	smf-1a	329.7568	12.46
100YR024HR	smf-1a	330.0068	12.46
100YR024HR	smf-1a	330.2568	12.46
100YR024HR	smf-1a	330.5068	12.46
100YR024HR	smf-1a	330.7568	12.46
100YR024HR	smf-1a	331.0068	12.46
100YR024HR	smf-1a	331.2568	12.46
100YR024HR	smf-1a	331.5068	12.46
100YR024HR	smf-1a	331.7568	12.46
100YR024HR	smf-1a	332.0068	12.46
100YR024HR	smf-1a	332.2568	12.46
100YR024HR	smf-1a	332.5068	12.46
100YR024HR	smf-1a	332.7568	12.46
100YR024HR	smf-1a	333.0068	12.46
100YR024HR	smf-1a	333.2568	12.46
100YR024HR	smf-1a	333.5068	12.46
100YR024HR	smf-1a	333.7568	12.46
100YR024HR	smf-1a	334.0068	12.46
100YR024HR	smf-1a	334.2568	12.46
100YR024HR	smf-1a	334.5068	12.46
100YR024HR	smf-1a	334.7568	12.46
100YR024HR	smf-1a	335.0068	12.45
100YR024HR	smf-1a	335.2568	12.45
100YR024HR	smf-1a	335.5068	12.45
100YR024HR	smf-1a	335.7568	12.45
100YR024HR	smf-1a	336.0068	12.45
100YR024HR	smf-1a	336.2568	12.45
100YR024HR	smf-1a	336.5068	12.45
100YR024HR	smf-1a	336.7568	12.45
100YR024HR	smf-1a	337.0068	12.45
100YR024HR	smf-1a	337.2568	12.45
100YR024HR	smf-1a	337.5068	12.45
100YR024HR	smf-1a	337.7568	12.45
100YR024HR	smf-1a	338.0068	12.45
100YR024HR	smf-1a	338.2568	12.45
100YR024HR	smf-1a	338.5068	12.45
100YR024HR	smf-1a	338.7568	12.45
100YR024HR	smf-1a	339.0068	12.45
100YR024HR	smf-1a	339.2568	12.45

100yr-24hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR024HR	smf-1b	193.7568	13.02
100YR024HR	smf-1b	194.0068	13.02
100YR024HR	smf-1b	194.2568	13.02
100YR024HR	smf-1b	194.5068	13.02
100YR024HR	smf-1b	194.7568	13.02
100YR024HR	smf-1b	195.0068	13.02
100YR024HR	smf-1b	195.2568	13.02
100YR024HR	smf-1b	195.5068	13.02
100YR024HR	smf-1b	195.7568	13.02
100YR024HR	smf-1b	196.0068	13.02
100YR024HR	smf-1b	196.2568	13.02
100YR024HR	smf-1b	196.5068	13.02
100YR024HR	smf-1b	196.7568	13.02
100YR024HR	smf-1b	197.0068	13.02
100YR024HR	smf-1b	197.2568	13.02
100YR024HR	smf-1b	197.5068	13.02
100YR024HR	smf-1b	197.7568	13.02
100YR024HR	smf-1b	198.0068	13.01
100YR024HR	smf-1b	198.2568	13.01
100YR024HR	smf-1b	198.5068	13.01
100YR024HR	smf-1b	198.7568	13.01
100YR024HR	smf-1b	199.0068	13.01
100YR024HR	smf-1b	199.2568	13.01
100YR024HR	smf-1b	199.5068	13.01
100YR024HR	smf-1b	199.7568	13.01
100YR024HR	smf-1b	200.0068	13.01
100YR024HR	smf-1b	200.2568	13.01
100YR024HR	smf-1b	200.5068	13.01
100YR024HR	smf-1b	200.7568	13.01
100YR024HR	smf-1b	201.0068	13.01
100YR024HR	smf-1b	201.2568	13.01
100YR024HR	smf-1b	201.5068	13.01
100YR024HR	smf-1b	201.7568	13.01
100YR024HR	smf-1b	202.0068	13.01
100YR024HR	smf-1b	202.2568	13.01
100YR024HR	smf-1b	202.5068	13.01
100YR024HR	smf-1b	202.7568	13.00
100YR024HR	smf-1b	203.0068	13.00
100YR024HR	smf-1b	203.2568	13.00
100YR024HR	smf-1b	203.5068	13.00
100YR024HR	smf-1b	203.7568	13.00
100YR024HR	smf-1b	204.0068	13.00

100yr-24hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR024HR	smf-2a	279.0068	12.11
100YR024HR	smf-2a	279.2568	12.11
100YR024HR	smf-2a	279.5068	12.11
100YR024HR	smf-2a	279.7568	12.11
100YR024HR	smf-2a	280.0068	12.11
100YR024HR	smf-2a	280.2568	12.11
100YR024HR	smf-2a	280.5068	12.11
100YR024HR	smf-2a	280.7568	12.11
100YR024HR	smf-2a	281.0068	12.11
100YR024HR	smf-2a	281.2568	12.11
100YR024HR	smf-2a	281.5068	12.11
100YR024HR	smf-2a	281.7568	12.11
100YR024HR	smf-2a	282.0068	12.11
100YR024HR	smf-2a	282.2568	12.11
100YR024HR	smf-2a	282.5068	12.11
100YR024HR	smf-2a	282.7568	12.11
100YR024HR	smf-2a	283.0068	12.11
100YR024HR	smf-2a	283.2568	12.10
100YR024HR	smf-2a	283.5068	12.10
100YR024HR	smf-2a	283.7568	12.10
100YR024HR	smf-2a	284.0068	12.10
100YR024HR	smf-2a	284.2568	12.10
100YR024HR	smf-2a	284.5068	12.10
100YR024HR	smf-2a	284.7568	12.10
100YR024HR	smf-2a	285.0068	12.10
100YR024HR	smf-2a	285.2568	12.10
100YR024HR	smf-2a	285.5068	12.10
100YR024HR	smf-2a	285.7568	12.10
100YR024HR	smf-2a	286.0068	12.10
100YR024HR	smf-2a	286.2568	12.10
100YR024HR	smf-2a	286.5068	12.10
100YR024HR	smf-2a	286.7568	12.10
100YR024HR	smf-2a	287.0068	12.10
100YR024HR	smf-2a	287.2568	12.10
100YR024HR	smf-2a	287.5068	12.10
100YR024HR	smf-2a	287.7568	12.10
100YR024HR	smf-2a	288.0068	12.10
100YR024HR	smf-2a	288.2568	12.10
100YR024HR	smf-2a	288.5068	12.10
100YR024HR	smf-2a	288.7568	12.10
100YR024HR	smf-2a	289.0068	12.10
100YR024HR	smf-2a	289.2568	12.10

100yr-24hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR024HR	smf-2b	238.2568	11.41
100YR024HR	smf-2b	238.5068	11.41
100YR024HR	smf-2b	238.7568	11.41
100YR024HR	smf-2b	239.0068	11.41
100YR024HR	smf-2b	239.2568	11.40
100YR024HR	smf-2b	239.5068	11.40
100YR024HR	smf-2b	239.7568	11.40
100YR024HR	smf-2b	240.0068	11.40
100YR024HR	smf-2b	240.2568	11.40
100YR024HR	smf-2b	240.5068	11.40
100YR024HR	smf-2b	240.7568	11.40
100YR024HR	smf-2b	241.0068	11.40
100YR024HR	smf-2b	241.2568	11.40
100YR024HR	smf-2b	241.5068	11.40
100YR024HR	smf-2b	241.7568	11.40
100YR024HR	smf-2b	242.0068	11.40
100YR024HR	smf-2b	242.2568	11.40
100YR024HR	smf-2b	242.5068	11.40
100YR024HR	smf-2b	242.7568	11.40
100YR024HR	smf-2b	243.0068	11.40
100YR024HR	smf-2b	243.2568	11.40
100YR024HR	smf-2b	243.5068	11.40
100YR024HR	smf-2b	243.7568	11.40
100YR024HR	smf-2b	244.0068	11.40
100YR024HR	smf-2b	244.2568	11.40
100YR024HR	smf-2b	244.5068	11.40
100YR024HR	smf-2b	244.7568	11.40
100YR024HR	smf-2b	245.0068	11.40
100YR024HR	smf-2b	245.2568	11.40
100YR024HR	smf-2b	245.5068	11.40
100YR024HR	smf-2b	245.7568	11.40
100YR024HR	smf-2b	246.0068	11.40
100YR024HR	smf-2b	246.2568	11.40
100YR024HR	smf-2b	246.5068	11.40
100YR024HR	smf-2b	246.7568	11.40
100YR024HR	smf-2b	247.0068	11.40
100YR024HR	smf-2b	247.2568	11.40
100YR024HR	smf-2b	247.5068	11.40
100YR024HR	smf-2b	247.7568	11.40
100YR024HR	smf-2b	248.0068	11.40
100YR024HR	smf-2b	248.2568	11.40
100YR024HR	smf-2b	248.5068	11.40

100yr-24hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR024HR	smf-2c	271.0068	11.87
100YR024HR	smf-2c	271.2568	11.87
100YR024HR	smf-2c	271.5068	11.86
100YR024HR	smf-2c	271.7568	11.86
100YR024HR	smf-2c	272.0068	11.86
100YR024HR	smf-2c	272.2568	11.86
100YR024HR	smf-2c	272.5068	11.86
100YR024HR	smf-2c	272.7568	11.86
100YR024HR	smf-2c	273.0068	11.86
100YR024HR	smf-2c	273.2568	11.86
100YR024HR	smf-2c	273.5068	11.86
100YR024HR	smf-2c	273.7568	11.86
100YR024HR	smf-2c	274.0068	11.86
100YR024HR	smf-2c	274.2568	11.86
100YR024HR	smf-2c	274.5068	11.86
100YR024HR	smf-2c	274.7568	11.86
100YR024HR	smf-2c	275.0068	11.86
100YR024HR	smf-2c	275.2568	11.86
100YR024HR	smf-2c	275.5068	11.86
100YR024HR	smf-2c	275.7568	11.86
100YR024HR	smf-2c	276.0068	11.86
100YR024HR	smf-2c	276.2568	11.86
100YR024HR	smf-2c	276.5068	11.86
100YR024HR	smf-2c	276.7568	11.86
100YR024HR	smf-2c	277.0068	11.86
100YR024HR	smf-2c	277.2568	11.86
100YR024HR	smf-2c	277.5068	11.86
100YR024HR	smf-2c	277.7568	11.86
100YR024HR	smf-2c	278.0068	11.86
100YR024HR	smf-2c	278.2568	11.85
100YR024HR	smf-2c	278.5068	11.85
100YR024HR	smf-2c	278.7568	11.85
100YR024HR	smf-2c	279.0068	11.85
100YR024HR	smf-2c	279.2568	11.85
100YR024HR	smf-2c	279.5068	11.85
100YR024HR	smf-2c	279.7568	11.85
100YR024HR	smf-2c	280.0068	11.85
100YR024HR	smf-2c	280.2568	11.85
100YR024HR	smf-2c	280.5068	11.85
100YR024HR	smf-2c	280.7568	11.85
100YR024HR	smf-2c	281.0068	11.85
100YR024HR	smf-2c	281.2568	11.85

100yr-24hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR024HR	smf-3a	272.2568	11.91
100YR024HR	smf-3a	272.5068	11.90
100YR024HR	smf-3a	272.7568	11.90
100YR024HR	smf-3a	273.0068	11.90
100YR024HR	smf-3a	273.2568	11.90
100YR024HR	smf-3a	273.5068	11.90
100YR024HR	smf-3a	273.7568	11.90
100YR024HR	smf-3a	274.0068	11.90
100YR024HR	smf-3a	274.2568	11.90
100YR024HR	smf-3a	274.5068	11.90
100YR024HR	smf-3a	274.7568	11.90
100YR024HR	smf-3a	275.0068	11.90
100YR024HR	smf-3a	275.2568	11.90
100YR024HR	smf-3a	275.5068	11.90
100YR024HR	smf-3a	275.7568	11.90
100YR024HR	smf-3a	276.0068	11.90
100YR024HR	smf-3a	276.2568	11.90
100YR024HR	smf-3a	276.5068	11.90
100YR024HR	smf-3a	276.7568	11.90
100YR024HR	smf-3a	277.0068	11.90
100YR024HR	smf-3a	277.2568	11.90
100YR024HR	smf-3a	277.5068	11.90
100YR024HR	smf-3a	277.7568	11.90
100YR024HR	smf-3a	278.0068	11.90
100YR024HR	smf-3a	278.2568	11.90
100YR024HR	smf-3a	278.5068	11.90
100YR024HR	smf-3a	278.7568	11.90
100YR024HR	smf-3a	279.0068	11.90
100YR024HR	smf-3a	279.2568	11.90
100YR024HR	smf-3a	279.5068	11.90
100YR024HR	smf-3a	279.7568	11.90
100YR024HR	smf-3a	280.0068	11.90
100YR024HR	smf-3a	280.2568	11.90
100YR024HR	smf-3a	280.5068	11.90
100YR024HR	smf-3a	280.7568	11.90
100YR024HR	smf-3a	281.0068	11.90
100YR024HR	smf-3a	281.2568	11.90
100YR024HR	smf-3a	281.5068	11.90
100YR024HR	smf-3a	281.7568	11.90
100YR024HR	smf-3a	282.0068	11.90
100YR024HR	smf-3a	282.2568	11.90
100YR024HR	smf-3a	282.5068	11.90

100yr-24hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR024HR	smf-3b	315.5068	11.26
100YR024HR	smf-3b	315.7568	11.26
100YR024HR	smf-3b	316.0068	11.26
100YR024HR	smf-3b	316.2568	11.26
100YR024HR	smf-3b	316.5068	11.26
100YR024HR	smf-3b	316.7568	11.26
100YR024HR	smf-3b	317.0068	11.26
100YR024HR	smf-3b	317.2568	11.26
100YR024HR	smf-3b	317.5068	11.26
100YR024HR	smf-3b	317.7568	11.26
100YR024HR	smf-3b	318.0068	11.26
100YR024HR	smf-3b	318.2568	11.26
100YR024HR	smf-3b	318.5068	11.26
100YR024HR	smf-3b	318.7568	11.26
100YR024HR	smf-3b	319.0068	11.26
100YR024HR	smf-3b	319.2568	11.26
100YR024HR	smf-3b	319.5068	11.26
100YR024HR	smf-3b	319.7568	11.26
100YR024HR	smf-3b	320.0068	11.26
100YR024HR	smf-3b	320.2568	11.26
100YR024HR	smf-3b	320.5068	11.26
100YR024HR	smf-3b	320.7568	11.26
100YR024HR	smf-3b	321.0068	11.25
100YR024HR	smf-3b	321.2568	11.25
100YR024HR	smf-3b	321.5068	11.25
100YR024HR	smf-3b	321.7568	11.25
100YR024HR	smf-3b	322.0068	11.25
100YR024HR	smf-3b	322.2568	11.25
100YR024HR	smf-3b	322.5068	11.25
100YR024HR	smf-3b	322.7568	11.25
100YR024HR	smf-3b	323.0068	11.25
100YR024HR	smf-3b	323.2568	11.25
100YR024HR	smf-3b	323.5068	11.25
100YR024HR	smf-3b	323.7568	11.25
100YR024HR	smf-3b	324.0068	11.25
100YR024HR	smf-3b	324.2568	11.25
100YR024HR	smf-3b	324.5068	11.25
100YR024HR	smf-3b	324.7568	11.25
100YR024HR	smf-3b	325.0068	11.25
100YR024HR	smf-3b	325.2568	11.25
100YR024HR	smf-3b	325.5068	11.25
100YR024HR	smf-3b	325.7568	11.25

100yr-24hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR072HR	smf-1a	600.2558	12.46
100YR072HR	smf-1a	600.5058	12.46
100YR072HR	smf-1a	600.7558	12.46
100YR072HR	smf-1a	601.0058	12.46
100YR072HR	smf-1a	601.2558	12.46
100YR072HR	smf-1a	601.5058	12.45
100YR072HR	smf-1a	601.7558	12.45
100YR072HR	smf-1a	602.0058	12.45
100YR072HR	smf-1a	602.2558	12.45
100YR072HR	smf-1a	602.5058	12.45
100YR072HR	smf-1a	602.7558	12.45
100YR072HR	smf-1a	603.0058	12.45
100YR072HR	smf-1a	603.2558	12.45
100YR072HR	smf-1a	603.5058	12.45
100YR072HR	smf-1a	603.7558	12.45
100YR072HR	smf-1a	604.0058	12.45
100YR072HR	smf-1a	604.2558	12.45
100YR072HR	smf-1a	604.5058	12.45
100YR072HR	smf-1a	604.7558	12.45
100YR072HR	smf-1a	605.0058	12.45
100YR072HR	smf-1a	605.2558	12.45
100YR072HR	smf-1a	605.5058	12.45
100YR072HR	smf-1a	605.7558	12.45
100YR072HR	smf-1a	606.0058	12.45
100YR072HR	smf-1a	606.2558	12.45
100YR072HR	smf-1a	606.5058	12.45
100YR072HR	smf-1a	606.7558	12.45
100YR072HR	smf-1a	607.0058	12.45
100YR072HR	smf-1a	607.2558	12.45
100YR072HR	smf-1a	607.5058	12.45
100YR072HR	smf-1a	607.7558	12.45
100YR072HR	smf-1a	608.0058	12.45
100YR072HR	smf-1a	608.2558	12.45
100YR072HR	smf-1a	608.5058	12.45
100YR072HR	smf-1a	608.7558	12.45
100YR072HR	smf-1a	609.0058	12.45
100YR072HR	smf-1a	609.2558	12.45
100YR072HR	smf-1a	609.5058	12.45
100YR072HR	smf-1a	609.7558	12.45
100YR072HR	smf-1a	610.0058	12.45
100YR072HR	smf-1a	610.2558	12.45
100YR072HR	smf-1a	610.5058	12.45

100yr-72hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR072HR	smf-1b	427.5058	13.01
100YR072HR	smf-1b	427.7558	13.01
100YR072HR	smf-1b	428.0058	13.01
100YR072HR	smf-1b	428.2558	13.01
100YR072HR	smf-1b	428.5058	13.01
100YR072HR	smf-1b	428.7558	13.01
100YR072HR	smf-1b	429.0058	13.01
100YR072HR	smf-1b	429.2558	13.01
100YR072HR	smf-1b	429.5058	13.01
100YR072HR	smf-1b	429.7558	13.01
100YR072HR	smf-1b	430.0058	13.00
100YR072HR	smf-1b	430.2558	13.00
100YR072HR	smf-1b	430.5058	13.00
100YR072HR	smf-1b	430.7558	13.00
100YR072HR	smf-1b	431.0058	13.00
100YR072HR	smf-1b	431.2558	13.00
100YR072HR	smf-1b	431.5058	13.00
100YR072HR	smf-1b	431.7558	13.00
100YR072HR	smf-1b	432.0058	13.00
100YR072HR	smf-1b	432.2558	13.00
100YR072HR	smf-1b	432.5058	13.00
100YR072HR	smf-1b	432.7558	13.00
100YR072HR	smf-1b	433.0058	13.00
100YR072HR	smf-1b	433.2558	13.00
100YR072HR	smf-1b	433.5058	13.00
100YR072HR	smf-1b	433.7558	13.00
100YR072HR	smf-1b	434.0058	13.00
100YR072HR	smf-1b	434.2558	13.00
100YR072HR	smf-1b	434.5058	13.00
100YR072HR	smf-1b	434.7558	13.00
100YR072HR	smf-1b	435.0058	13.00
100YR072HR	smf-1b	435.2558	13.00
100YR072HR	smf-1b	435.5058	13.00
100YR072HR	smf-1b	435.7558	13.00
100YR072HR	smf-1b	436.0058	13.00
100YR072HR	smf-1b	436.2558	13.00
100YR072HR	smf-1b	436.5058	13.00
100YR072HR	smf-1b	436.7558	13.00
100YR072HR	smf-1b	437.0058	13.00
100YR072HR	smf-1b	437.2558	13.00
100YR072HR	smf-1b	437.5058	13.00
100YR072HR	smf-1b	437.7558	13.00

100yr-72hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR072HR	smf-2a	496.2558	12.11
100YR072HR	smf-2a	496.5058	12.11
100YR072HR	smf-2a	496.7558	12.11
100YR072HR	smf-2a	497.0058	12.11
100YR072HR	smf-2a	497.2558	12.11
100YR072HR	smf-2a	497.5058	12.11
100YR072HR	smf-2a	497.7558	12.11
100YR072HR	smf-2a	498.0058	12.11
100YR072HR	smf-2a	498.2558	12.11
100YR072HR	smf-2a	498.5058	12.11
100YR072HR	smf-2a	498.7558	12.11
100YR072HR	smf-2a	499.0058	12.11
100YR072HR	smf-2a	499.2558	12.11
100YR072HR	smf-2a	499.5058	12.11
100YR072HR	smf-2a	499.7558	12.11
100YR072HR	smf-2a	500.0058	12.11
100YR072HR	smf-2a	500.2558	12.11
100YR072HR	smf-2a	500.5058	12.11
100YR072HR	smf-2a	500.7558	12.11
100YR072HR	smf-2a	501.0058	12.11
100YR072HR	smf-2a	501.2558	12.11
100YR072HR	smf-2a	501.5058	12.11
100YR072HR	smf-2a	501.7558	12.11
100YR072HR	smf-2a	502.0058	12.11
100YR072HR	smf-2a	502.2558	12.11
100YR072HR	smf-2a	502.5058	12.11
100YR072HR	smf-2a	502.7558	12.11
100YR072HR	smf-2a	503.0058	12.11
100YR072HR	smf-2a	503.2558	12.11
100YR072HR	smf-2a	503.5058	12.11
100YR072HR	smf-2a	503.7558	12.11
100YR072HR	smf-2a	504.0058	12.10
100YR072HR	smf-2a	504.2558	12.10
100YR072HR	smf-2a	504.5058	12.10
100YR072HR	smf-2a	504.7558	12.10
100YR072HR	smf-2a	505.0058	12.10
100YR072HR	smf-2a	505.2558	12.10
100YR072HR	smf-2a	505.5058	12.10
100YR072HR	smf-2a	505.7558	12.10
100YR072HR	smf-2a	506.0058	12.10
100YR072HR	smf-2a	506.2558	12.10
100YR072HR	smf-2a	506.5058	12.10

100yr-72hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR072HR	smf-2b	460.0058	11.41
100YR072HR	smf-2b	460.2558	11.41
100YR072HR	smf-2b	460.5058	11.41
100YR072HR	smf-2b	460.7558	11.41
100YR072HR	smf-2b	461.0058	11.41
100YR072HR	smf-2b	461.2558	11.41
100YR072HR	smf-2b	461.5058	11.41
100YR072HR	smf-2b	461.7558	11.41
100YR072HR	smf-2b	462.0058	11.41
100YR072HR	smf-2b	462.2558	11.41
100YR072HR	smf-2b	462.5058	11.41
100YR072HR	smf-2b	462.7558	11.41
100YR072HR	smf-2b	463.0058	11.41
100YR072HR	smf-2b	463.2558	11.41
100YR072HR	smf-2b	463.5058	11.41
100YR072HR	smf-2b	463.7558	11.41
100YR072HR	smf-2b	464.0058	11.41
100YR072HR	smf-2b	464.2558	11.41
100YR072HR	smf-2b	464.5058	11.41
100YR072HR	smf-2b	464.7558	11.41
100YR072HR	smf-2b	465.0058	11.41
100YR072HR	smf-2b	465.2558	11.41
100YR072HR	smf-2b	465.5058	11.41
100YR072HR	smf-2b	465.7558	11.41
100YR072HR	smf-2b	466.0058	11.41
100YR072HR	smf-2b	466.2558	11.40
100YR072HR	smf-2b	466.5058	11.40
100YR072HR	smf-2b	466.7558	11.40
100YR072HR	smf-2b	467.0058	11.40
100YR072HR	smf-2b	467.2558	11.40
100YR072HR	smf-2b	467.5058	11.40
100YR072HR	smf-2b	467.7558	11.40
100YR072HR	smf-2b	468.0058	11.40
100YR072HR	smf-2b	468.2558	11.40
100YR072HR	smf-2b	468.5058	11.40
100YR072HR	smf-2b	468.7558	11.40
100YR072HR	smf-2b	469.0058	11.40
100YR072HR	smf-2b	469.2558	11.40
100YR072HR	smf-2b	469.5058	11.40
100YR072HR	smf-2b	469.7558	11.40
100YR072HR	smf-2b	470.0058	11.40
100YR072HR	smf-2b	470.2558	11.40

100yr-72hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR072HR	smf-2c	528.7558	11.86
100YR072HR	smf-2c	529.0058	11.86
100YR072HR	smf-2c	529.2558	11.86
100YR072HR	smf-2c	529.5058	11.86
100YR072HR	smf-2c	529.7558	11.86
100YR072HR	smf-2c	530.0058	11.86
100YR072HR	smf-2c	530.2558	11.86
100YR072HR	smf-2c	530.5058	11.86
100YR072HR	smf-2c	530.7558	11.86
100YR072HR	smf-2c	531.0058	11.86
100YR072HR	smf-2c	531.2558	11.86
100YR072HR	smf-2c	531.5058	11.86
100YR072HR	smf-2c	531.7558	11.86
100YR072HR	smf-2c	532.0058	11.86
100YR072HR	smf-2c	532.2558	11.86
100YR072HR	smf-2c	532.5058	11.86
100YR072HR	smf-2c	532.7558	11.86
100YR072HR	smf-2c	533.0058	11.86
100YR072HR	smf-2c	533.2558	11.86
100YR072HR	smf-2c	533.5058	11.86
100YR072HR	smf-2c	533.7558	11.86
100YR072HR	smf-2c	534.0058	11.86
100YR072HR	smf-2c	534.2558	11.86
100YR072HR	smf-2c	534.5058	11.86
100YR072HR	smf-2c	534.7558	11.86
100YR072HR	smf-2c	535.0058	11.86
100YR072HR	smf-2c	535.2558	11.86
100YR072HR	smf-2c	535.5058	11.86
100YR072HR	smf-2c	535.7558	11.86
100YR072HR	smf-2c	536.0058	11.85
100YR072HR	smf-2c	536.2558	11.85
100YR072HR	smf-2c	536.5058	11.85
100YR072HR	smf-2c	536.7558	11.85
100YR072HR	smf-2c	537.0058	11.85
100YR072HR	smf-2c	537.2558	11.85
100YR072HR	smf-2c	537.5058	11.85
100YR072HR	smf-2c	537.7558	11.85
100YR072HR	smf-2c	538.0058	11.85
100YR072HR	smf-2c	538.2558	11.85
100YR072HR	smf-2c	538.5058	11.85
100YR072HR	smf-2c	538.7558	11.85
100YR072HR	smf-2c	539.0058	11.85

100yr-72hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR072HR	smf-3a	545.0058	11.91
100YR072HR	smf-3a	545.2558	11.90
100YR072HR	smf-3a	545.5058	11.90
100YR072HR	smf-3a	545.7558	11.90
100YR072HR	smf-3a	546.0058	11.90
100YR072HR	smf-3a	546.2558	11.90
100YR072HR	smf-3a	546.5058	11.90
100YR072HR	smf-3a	546.7558	11.90
100YR072HR	smf-3a	547.0058	11.90
100YR072HR	smf-3a	547.2558	11.90
100YR072HR	smf-3a	547.5058	11.90
100YR072HR	smf-3a	547.7558	11.90
100YR072HR	smf-3a	548.0058	11.90
100YR072HR	smf-3a	548.2558	11.90
100YR072HR	smf-3a	548.5058	11.90
100YR072HR	smf-3a	548.7558	11.90
100YR072HR	smf-3a	549.0058	11.90
100YR072HR	smf-3a	549.2558	11.90
100YR072HR	smf-3a	549.5058	11.90
100YR072HR	smf-3a	549.7558	11.90
100YR072HR	smf-3a	550.0058	11.90
100YR072HR	smf-3a	550.2558	11.90
100YR072HR	smf-3a	550.5058	11.90
100YR072HR	smf-3a	550.7558	11.90
100YR072HR	smf-3a	551.0058	11.90
100YR072HR	smf-3a	551.2558	11.90
100YR072HR	smf-3a	551.5058	11.90
100YR072HR	smf-3a	551.7558	11.90
100YR072HR	smf-3a	552.0058	11.90
100YR072HR	smf-3a	552.2558	11.90
100YR072HR	smf-3a	552.5058	11.90
100YR072HR	smf-3a	552.7558	11.90
100YR072HR	smf-3a	553.0058	11.90
100YR072HR	smf-3a	553.2558	11.90
100YR072HR	smf-3a	553.5058	11.90
100YR072HR	smf-3a	553.7558	11.90
100YR072HR	smf-3a	554.0058	11.90
100YR072HR	smf-3a	554.2558	11.90
100YR072HR	smf-3a	554.5058	11.90
100YR072HR	smf-3a	554.7558	11.90
100YR072HR	smf-3a	555.0058	11.90
100YR072HR	smf-3a	555.2558	11.90

100yr-72hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
100YR072HR	smf-3b	634.7558	11.26
100YR072HR	smf-3b	635.0058	11.26
100YR072HR	smf-3b	635.2558	11.26
100YR072HR	smf-3b	635.5058	11.26
100YR072HR	smf-3b	635.7558	11.26
100YR072HR	smf-3b	636.0058	11.26
100YR072HR	smf-3b	636.2558	11.26
100YR072HR	smf-3b	636.5058	11.26
100YR072HR	smf-3b	636.7558	11.26
100YR072HR	smf-3b	637.0058	11.26
100YR072HR	smf-3b	637.2558	11.26
100YR072HR	smf-3b	637.5058	11.26
100YR072HR	smf-3b	637.7558	11.26
100YR072HR	smf-3b	638.0058	11.26
100YR072HR	smf-3b	638.2558	11.26
100YR072HR	smf-3b	638.5058	11.26
100YR072HR	smf-3b	638.7558	11.26
100YR072HR	smf-3b	639.0058	11.26
100YR072HR	smf-3b	639.2558	11.25
100YR072HR	smf-3b	639.5058	11.25
100YR072HR	smf-3b	639.7558	11.25
100YR072HR	smf-3b	640.0058	11.25
100YR072HR	smf-3b	640.2558	11.25
100YR072HR	smf-3b	640.5058	11.25
100YR072HR	smf-3b	640.7558	11.25
100YR072HR	smf-3b	641.0058	11.25
100YR072HR	smf-3b	641.2558	11.25
100YR072HR	smf-3b	641.5058	11.25
100YR072HR	smf-3b	641.7558	11.25
100YR072HR	smf-3b	642.0058	11.25
100YR072HR	smf-3b	642.2558	11.25
100YR072HR	smf-3b	642.5058	11.25
100YR072HR	smf-3b	642.7558	11.25
100YR072HR	smf-3b	643.0058	11.25
100YR072HR	smf-3b	643.2558	11.25
100YR072HR	smf-3b	643.5058	11.25
100YR072HR	smf-3b	643.7558	11.25
100YR072HR	smf-3b	644.0058	11.25
100YR072HR	smf-3b	644.2558	11.25
100YR072HR	smf-3b	644.5058	11.25
100YR072HR	smf-3b	644.7558	11.25
100YR072HR	smf-3b	645.0058	11.25

100yr-72hr SMF-3b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
MN024HR	smf-1a	84.0081	12.46
MN024HR	smf-1a	84.2581	12.46
MN024HR	smf-1a	84.5081	12.45
MN024HR	smf-1a	84.7581	12.45
MN024HR	smf-1a	85.0081	12.45
MN024HR	smf-1a	85.2581	12.45
MN024HR	smf-1a	85.5081	12.45
MN024HR	smf-1a	85.7581	12.45
MN024HR	smf-1a	86.0081	12.45
MN024HR	smf-1a	86.2581	12.45
MN024HR	smf-1a	86.5081	12.45
MN024HR	smf-1a	86.7581	12.45
MN024HR	smf-1a	87.0081	12.45
MN024HR	smf-1a	87.2581	12.45
MN024HR	smf-1a	87.5081	12.45
MN024HR	smf-1a	87.7581	12.45
MN024HR	smf-1a	88.0081	12.45
MN024HR	smf-1a	88.2581	12.45
MN024HR	smf-1a	88.5081	12.45
MN024HR	smf-1a	88.7581	12.45
MN024HR	smf-1a	89.0081	12.45
MN024HR	smf-1a	89.2581	12.45
MN024HR	smf-1a	89.5081	12.45
MN024HR	smf-1a	89.7581	12.45
MN024HR	smf-1a	90.0081	12.45
MN024HR	smf-1a	90.2581	12.45
MN024HR	smf-1a	90.5081	12.45
MN024HR	smf-1a	90.7581	12.45
MN024HR	smf-1a	91.0081	12.45
MN024HR	smf-1a	91.2581	12.45
MN024HR	smf-1a	91.5081	12.45
MN024HR	smf-1a	91.7581	12.45
MN024HR	smf-1a	92.0081	12.45
MN024HR	smf-1a	92.2581	12.45
MN024HR	smf-1a	92.5081	12.45
MN024HR	smf-1a	92.7581	12.45
MN024HR	smf-1a	93.0081	12.45
MN024HR	smf-1a	93.2581	12.45
MN024HR	smf-1a	93.5081	12.45
MN024HR	smf-1a	93.7581	12.45
MN024HR	smf-1a	94.0081	12.45
MN024HR	smf-1a	94.2581	12.45

MnAnn24hr SMF-1a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
MN024HR	smf-1b	169.2581	13.02
MN024HR	smf-1b	169.5081	13.02
MN024HR	smf-1b	169.7581	13.02
MN024HR	smf-1b	170.0081	13.02
MN024HR	smf-1b	170.2581	13.02
MN024HR	smf-1b	170.5081	13.02
MN024HR	smf-1b	170.7581	13.02
MN024HR	smf-1b	171.0081	13.02
MN024HR	smf-1b	171.2581	13.01
MN024HR	smf-1b	171.5081	13.01
MN024HR	smf-1b	171.7581	13.01
MN024HR	smf-1b	172.0081	13.01
MN024HR	smf-1b	172.2581	13.01
MN024HR	smf-1b	172.5081	13.01
MN024HR	smf-1b	172.7581	13.01
MN024HR	smf-1b	173.0081	13.01
MN024HR	smf-1b	173.2581	13.01
MN024HR	smf-1b	173.5081	13.01
MN024HR	smf-1b	173.7581	13.01
MN024HR	smf-1b	174.0081	13.01
MN024HR	smf-1b	174.2581	13.01
MN024HR	smf-1b	174.5081	13.01
MN024HR	smf-1b	174.7581	13.01
MN024HR	smf-1b	175.0081	13.00
MN024HR	smf-1b	175.2581	13.00
MN024HR	smf-1b	175.5081	13.00
MN024HR	smf-1b	175.7581	13.00
MN024HR	smf-1b	176.0081	13.00
MN024HR	smf-1b	176.2581	13.00
MN024HR	smf-1b	176.5081	13.00
MN024HR	smf-1b	176.7581	13.00
MN024HR	smf-1b	177.0081	13.00
MN024HR	smf-1b	177.2581	13.00
MN024HR	smf-1b	177.5081	13.00
MN024HR	smf-1b	177.7581	13.00
MN024HR	smf-1b	178.0081	13.00
MN024HR	smf-1b	178.2581	13.00
MN024HR	smf-1b	178.5081	13.00
MN024HR	smf-1b	178.7581	13.00
MN024HR	smf-1b	179.0081	13.00
MN024HR	smf-1b	179.2581	13.00
MN024HR	smf-1b	179.5081	13.00

MnAnn24hr SMF-1b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
MN024HR	smf-2a	233.5081	12.11
MN024HR	smf-2a	233.7581	12.11
MN024HR	smf-2a	234.0081	12.11
MN024HR	smf-2a	234.2581	12.11
MN024HR	smf-2a	234.5081	12.11
MN024HR	smf-2a	234.7581	12.11
MN024HR	smf-2a	235.0081	12.11
MN024HR	smf-2a	235.2581	12.11
MN024HR	smf-2a	235.5081	12.11
MN024HR	smf-2a	235.7581	12.11
MN024HR	smf-2a	236.0081	12.11
MN024HR	smf-2a	236.2581	12.11
MN024HR	smf-2a	236.5081	12.11
MN024HR	smf-2a	236.7581	12.11
MN024HR	smf-2a	237.0081	12.11
MN024HR	smf-2a	237.2581	12.11
MN024HR	smf-2a	237.5081	12.11
MN024HR	smf-2a	237.7581	12.11
MN024HR	smf-2a	238.0081	12.10
MN024HR	smf-2a	238.2581	12.10
MN024HR	smf-2a	238.5081	12.10
MN024HR	smf-2a	238.7581	12.10
MN024HR	smf-2a	239.0081	12.10
MN024HR	smf-2a	239.2581	12.10
MN024HR	smf-2a	239.5081	12.10
MN024HR	smf-2a	239.7581	12.10
MN024HR	smf-2a	240.0081	12.10
MN024HR	smf-2a	240.2581	12.10
MN024HR	smf-2a	240.5081	12.10
MN024HR	smf-2a	240.7581	12.10
MN024HR	smf-2a	241.0081	12.10
MN024HR	smf-2a	241.2581	12.10
MN024HR	smf-2a	241.5081	12.10
MN024HR	smf-2a	241.7581	12.10
MN024HR	smf-2a	242.0081	12.10
MN024HR	smf-2a	242.2581	12.10
MN024HR	smf-2a	242.5081	12.10
MN024HR	smf-2a	242.7581	12.10
MN024HR	smf-2a	243.0081	12.10
MN024HR	smf-2a	243.2581	12.10
MN024HR	smf-2a	243.5081	12.10
MN024HR	smf-2a	243.7581	12.10

MnAnn24hr SMF-2a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
MN024HR	smf-2b	192.7581	11.42
MN024HR	smf-2b	193.0081	11.42
MN024HR	smf-2b	193.2581	11.42
MN024HR	smf-2b	193.5081	11.42
MN024HR	smf-2b	193.7581	11.42
MN024HR	smf-2b	194.0081	11.42
MN024HR	smf-2b	194.2581	11.42
MN024HR	smf-2b	194.5081	11.41
MN024HR	smf-2b	194.7581	11.41
MN024HR	smf-2b	195.0081	11.41
MN024HR	smf-2b	195.2581	11.41
MN024HR	smf-2b	195.5081	11.41
MN024HR	smf-2b	195.7581	11.41
MN024HR	smf-2b	196.0081	11.41
MN024HR	smf-2b	196.2581	11.41
MN024HR	smf-2b	196.5081	11.41
MN024HR	smf-2b	196.7581	11.41
MN024HR	smf-2b	197.0081	11.41
MN024HR	smf-2b	197.2581	11.41
MN024HR	smf-2b	197.5081	11.41
MN024HR	smf-2b	197.7581	11.41
MN024HR	smf-2b	198.0081	11.41
MN024HR	smf-2b	198.2581	11.41
MN024HR	smf-2b	198.5081	11.41
MN024HR	smf-2b	198.7581	11.41
MN024HR	smf-2b	199.0081	11.40
MN024HR	smf-2b	199.2581	11.40
MN024HR	smf-2b	199.5081	11.40
MN024HR	smf-2b	199.7581	11.40
MN024HR	smf-2b	200.0081	11.40
MN024HR	smf-2b	200.2581	11.40
MN024HR	smf-2b	200.5081	11.40
MN024HR	smf-2b	200.7581	11.40
MN024HR	smf-2b	201.0081	11.40
MN024HR	smf-2b	201.2581	11.40
MN024HR	smf-2b	201.5081	11.40
MN024HR	smf-2b	201.7581	11.40
MN024HR	smf-2b	202.0081	11.40
MN024HR	smf-2b	202.2581	11.40
MN024HR	smf-2b	202.5081	11.40
MN024HR	smf-2b	202.7581	11.40
MN024HR	smf-2b	203.0081	11.40

MnAnn24hr SMF-2b

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
MN024HR	smf-2c	225.5081	11.86
MN024HR	smf-2c	225.7581	11.86
MN024HR	smf-2c	226.0081	11.86
MN024HR	smf-2c	226.2581	11.86
MN024HR	smf-2c	226.5081	11.86
MN024HR	smf-2c	226.7581	11.85
MN024HR	smf-2c	227.0081	11.85
MN024HR	smf-2c	227.2581	11.85
MN024HR	smf-2c	227.5081	11.85
MN024HR	smf-2c	227.7581	11.85
MN024HR	smf-2c	228.0081	11.85
MN024HR	smf-2c	228.2581	11.85
MN024HR	smf-2c	228.5081	11.85
MN024HR	smf-2c	228.7581	11.85
MN024HR	smf-2c	229.0081	11.85
MN024HR	smf-2c	229.2581	11.85
MN024HR	smf-2c	229.5081	11.85
MN024HR	smf-2c	229.7581	11.85
MN024HR	smf-2c	230.0081	11.85
MN024HR	smf-2c	230.2581	11.85
MN024HR	smf-2c	230.5081	11.85
MN024HR	smf-2c	230.7581	11.85
MN024HR	smf-2c	231.0081	11.85
MN024HR	smf-2c	231.2581	11.85
MN024HR	smf-2c	231.5081	11.85
MN024HR	smf-2c	231.7581	11.85
MN024HR	smf-2c	232.0081	11.85
MN024HR	smf-2c	232.2581	11.85
MN024HR	smf-2c	232.5081	11.85
MN024HR	smf-2c	232.7581	11.85
MN024HR	smf-2c	233.0081	11.85
MN024HR	smf-2c	233.2581	11.85
MN024HR	smf-2c	233.5081	11.85
MN024HR	smf-2c	233.7581	11.85
MN024HR	smf-2c	234.0081	11.85
MN024HR	smf-2c	234.2581	11.85
MN024HR	smf-2c	234.5081	11.85
MN024HR	smf-2c	234.7581	11.85
MN024HR	smf-2c	235.0081	11.85
MN024HR	smf-2c	235.2581	11.85
MN024HR	smf-2c	235.5081	11.85
MN024HR	smf-2c	235.7581	11.85

MnAnn24hr SMF-2c

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
MN024HR	smf-3a	226.7581	11.92
MN024HR	smf-3a	227.0081	11.92
MN024HR	smf-3a	227.2581	11.92
MN024HR	smf-3a	227.5081	11.92
MN024HR	smf-3a	227.7581	11.92
MN024HR	smf-3a	228.0081	11.92
MN024HR	smf-3a	228.2581	11.92
MN024HR	smf-3a	228.5081	11.92
MN024HR	smf-3a	228.7581	11.92
MN024HR	smf-3a	229.0081	11.92
MN024HR	smf-3a	229.2581	11.92
MN024HR	smf-3a	229.5081	11.92
MN024HR	smf-3a	229.7581	11.92
MN024HR	smf-3a	230.0081	11.92
MN024HR	smf-3a	230.2581	11.92
MN024HR	smf-3a	230.5081	11.92
MN024HR	smf-3a	230.7581	11.91
MN024HR	smf-3a	231.0081	11.91
MN024HR	smf-3a	231.2581	11.91
MN024HR	smf-3a	231.5081	11.91
MN024HR	smf-3a	231.7581	11.91
MN024HR	smf-3a	232.0081	11.91
MN024HR	smf-3a	232.2581	11.91
MN024HR	smf-3a	232.5081	11.91
MN024HR	smf-3a	232.7581	11.91
MN024HR	smf-3a	233.0081	11.91
MN024HR	smf-3a	233.2581	11.91
MN024HR	smf-3a	233.5081	11.91
MN024HR	smf-3a	233.7581	11.91
MN024HR	smf-3a	234.0081	11.91
MN024HR	smf-3a	234.2581	11.91
MN024HR	smf-3a	234.5081	11.91
MN024HR	smf-3a	234.7581	11.91
MN024HR	smf-3a	235.0081	11.91
MN024HR	smf-3a	235.2581	11.91
MN024HR	smf-3a	235.5081	11.91
MN024HR	smf-3a	235.7581	11.91
MN024HR	smf-3a	236.0081	11.91
MN024HR	smf-3a	236.2581	11.90
MN024HR	smf-3a	236.5081	11.90
MN024HR	smf-3a	236.7581	11.90
MN024HR	smf-3a	237.0081	11.90

MnAnn24hr SMF-3a

Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
MN024HR	smf-3b	259.5081	11.26
MN024HR	smf-3b	259.7581	11.26
MN024HR	smf-3b	260.0081	11.26
MN024HR	smf-3b	260.2581	11.26
MN024HR	smf-3b	260.5081	11.26
MN024HR	smf-3b	260.7581	11.26
MN024HR	smf-3b	261.0081	11.26
MN024HR	smf-3b	261.2581	11.25
MN024HR	smf-3b	261.5081	11.25
MN024HR	smf-3b	261.7581	11.25
MN024HR	smf-3b	262.0081	11.25
MN024HR	smf-3b	262.2581	11.25
MN024HR	smf-3b	262.5081	11.25
MN024HR	smf-3b	262.7581	11.25
MN024HR	smf-3b	263.0081	11.25
MN024HR	smf-3b	263.2581	11.25
MN024HR	smf-3b	263.5081	11.25
MN024HR	smf-3b	263.7581	11.25
MN024HR	smf-3b	264.0081	11.25
MN024HR	smf-3b	264.2581	11.25
MN024HR	smf-3b	264.5081	11.25
MN024HR	smf-3b	264.7581	11.25
MN024HR	smf-3b	265.0081	11.25
MN024HR	smf-3b	265.2581	11.25
MN024HR	smf-3b	265.5081	11.25
MN024HR	smf-3b	265.7581	11.25
MN024HR	smf-3b	266.0081	11.25
MN024HR	smf-3b	266.2581	11.25
MN024HR	smf-3b	266.5081	11.25
MN024HR	smf-3b	266.7581	11.25
MN024HR	smf-3b	267.0081	11.25
MN024HR	smf-3b	267.2581	11.25
MN024HR	smf-3b	267.5081	11.25
MN024HR	smf-3b	267.7581	11.25
MN024HR	smf-3b	268.0081	11.25
MN024HR	smf-3b	268.2581	11.25
MN024HR	smf-3b	268.5081	11.25
MN024HR	smf-3b	268.7581	11.25
MN024HR	smf-3b	269.0081	11.25
MN024HR	smf-3b	269.2581	11.25
MN024HR	smf-3b	269.5081	11.25
MN024HR	smf-3b	269.7581	11.25

MnAnn24hr SMF-3b

Inputs

Simple Basin: pre-1

Scenario:	Icpr3
Node:	pre-1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1.2100 ac
Curve Number:	93.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: ws-1

Scenario:	Icpr3
Node:	smf-1a
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.2500 ac
Curve Number:	98.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: ws-2

Scenario:	Icpr3
Node:	smf-2a
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999999.00 cfs

Inputs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.5600 ac
Curve Number:	98.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: ws-3

Scenario:	Icpr3
Node:	smf-3a
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	Uh484
Peaking Factor:	484.0
Area:	0.4300 ac
Curve Number:	98.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: g-1

Scenario:	Icpr3
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	0.00 ft
Warning Stage:	0.00 ft
Boundary Stage:	

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	99999.0000	0.00

Comment:

Node: g-2

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	99999.0000	0.00

Comment:

Node: g-3

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	99999.0000	0.00

Comment:

Node: outfall

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 7.65 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	7.65
0	0	0	99999.0000	7.65

Comment:

Node: pre-1

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 14.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	14.00
0	0	0	99999.0000	14.00

Comment:

Node: smf-1a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.45 ft
Warning Stage: 14.40 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.45	0.00	0
12.53	0.00	87
12.62	0.00	173
12.70	0.01	260
12.78	0.01	347
12.87	0.01	433
12.95	0.01	521
13.03	0.02	693
13.12	0.02	862
13.20	0.02	1028
13.28	0.03	1190
13.37	0.03	1347
13.45	0.03	1500
13.53	0.04	1645
13.62	0.04	1784
13.70	0.04	1913

Comment:

Node: smf-1b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs

Inputs

Initial Stage: 13.00 ft
Warning Stage: 14.75 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
13.00	0.00	0
13.08	0.00	32
13.17	0.00	64
13.25	0.00	96
13.33	0.00	129
13.42	0.00	161
13.50	0.00	193
13.58	0.01	255
13.67	0.01	316
13.75	0.01	376
13.83	0.01	434
13.92	0.01	491
14.00	0.01	546
14.08	0.01	599
14.17	0.01	649
14.25	0.02	697
14.33	0.02	738
14.42	0.02	775
14.50	0.02	809
14.58	0.02	841
14.67	0.02	873
14.75	0.02	905
14.83	0.02	937
14.92	0.02	969
15.00	0.02	1001

Comment:

Node: smf-2a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.10 ft
Warning Stage: 14.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.10	0.00	0
12.18	0.00	149
12.27	0.01	298
12.35	0.01	446
12.43	0.01	595
12.52	0.02	744
12.60	0.02	892

Inputs

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.68	0.03	1191
12.77	0.03	1485
12.85	0.04	1772
12.93	0.05	2052
13.02	0.05	2324
13.10	0.06	2587
13.18	0.07	2840
13.27	0.07	3079
13.35	0.08	3302
13.43	0.08	3500
13.52	0.08	3671
13.60	0.09	3828
13.68	0.09	3977
13.77	0.09	4126
13.85	0.10	4275
13.93	0.10	4423
14.02	0.10	4572
14.10	0.11	4721

Comment:

Node: smf-2b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.40 ft
Warning Stage: 13.30 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.40	0.00	0
11.48	0.00	48
11.57	0.00	97
11.65	0.00	145
11.73	0.00	194
11.82	0.01	243
11.90	0.01	291
11.98	0.01	382
12.07	0.01	471
12.15	0.01	558
12.23	0.01	643
12.32	0.02	726
12.40	0.02	806
12.48	0.02	884
12.57	0.02	958
12.65	0.02	1027
12.73	0.03	1089

Inputs

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.82	0.03	1144
12.90	0.03	1195
12.98	0.03	1244
13.07	0.03	1292
13.15	0.03	1341
13.23	0.03	1389
13.32	0.03	1438
13.40	0.03	1486

Comment:

Node: smf-2c

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.85 ft
Warning Stage: 14.30 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.85	0.00	0
11.93	0.00	68
12.02	0.00	136
12.10	0.00	205
12.18	0.01	273
12.27	0.01	341
12.35	0.01	409
12.43	0.01	537
12.52	0.02	662
12.60	0.02	785
12.68	0.02	904
12.77	0.02	1021
12.85	0.03	1134
12.93	0.03	1243
13.02	0.03	1347
13.10	0.03	1444
13.18	0.04	1532
13.27	0.04	1609
13.35	0.04	1681
13.43	0.04	1749
13.52	0.04	1817
13.60	0.04	1885
13.68	0.04	1954
13.77	0.05	2022
13.85	0.05	2090

Comment:

Node: smf-3a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.90 ft
Warning Stage: 13.80 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.90	0.00	0
11.98	0.00	44
12.07	0.00	88
12.15	0.00	132
12.23	0.00	175
12.32	0.01	219
12.40	0.01	263
12.48	0.01	348
12.57	0.01	433
12.65	0.01	515
12.73	0.01	595
12.82	0.02	673
12.90	0.02	749
12.98	0.02	822
13.07	0.02	891
13.15	0.02	955
13.23	0.02	1013
13.32	0.02	1063
13.40	0.03	1109
13.48	0.03	1153
13.57	0.03	1197
13.65	0.03	1240
13.73	0.03	1284
13.82	0.03	1328
13.90	0.03	1372

Comment:

Node: smf-3b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.25 ft
Warning Stage: 13.10 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.25	0.00	0
11.33	0.00	44
11.42	0.00	88

Inputs

Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.50	0.00	132
11.58	0.00	175
11.67	0.01	219
11.75	0.01	263
11.83	0.01	348
11.92	0.01	433
12.00	0.01	515
12.08	0.01	595
12.17	0.02	673
12.25	0.02	749
12.33	0.02	822
12.42	0.02	891
12.50	0.02	955
12.58	0.02	1013
12.67	0.02	1063
12.75	0.03	1109
12.83	0.03	1153
12.92	0.03	1197
13.00	0.03	1240
13.08	0.03	1284
13.17	0.03	1328
13.25	0.03	1372

Comment:

Drop Structure Link: ds-1		Upstream Pipe		Downstream Pipe	
Scenario:	Icpr3	Invert:	13.00 ft	Invert:	12.25 ft
From Node:	smf-1a	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	15.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir:	1

Bottom Clip

Inputs

Weir Count:	1		
Weir Flow Direction:	Both	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:	
Weir Type:	Sharp Crested Vertical	Ref Node:	
Geometry Type:	Rectangular	**Top Clip**	
Invert:	13.70 ft	Default:	0.00 ft
Control Elevation:	13.70 ft	Op Table:	
Max Depth:	1.50 ft	Ref Node:	
Max Width:	1.50 ft	**Discharge Coefficients**	
Fillet:	0.00 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: ds-2		Upstream Pipe		Downstream Pipe	
Scenario:	Icpr3	Invert:	11.40 ft	Invert:	6.40 ft
From Node:	smf-2a	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	outfall	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	20.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component			
Weir:	1	**Bottom Clip**	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Sharp Crested Vertical	**Top Clip**	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	12.77 ft	Op Table:	
Control Elevation:	12.77 ft	Ref Node:	
Max Depth:	0.90 ft	**Discharge Coefficients**	
Max Width:	3.50 ft	Weir Default:	3.200

Inputs

Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: ds-3		Upstream Pipe		Downstream Pipe	
Scenario:	Icpr3	Invert:	12.00 ft	Invert:	11.90 ft
From Node:	smf-3a	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2b	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	29.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Sharp Crested Vertical	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	12.90 ft	Op Table:	
Control Elevation:	12.90 ft	Ref Node:	
Max Depth:	0.35 ft	Discharge Coefficients	
Max Width:	3.50 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Inputs

Percolation Link: perc-1a

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-1a		
To Node:	g-1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	214.00 ft
Flow Direction:	Both	Perimeter 2:	215.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	216.00 ft
Water Table Elevation:	11.45 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	180.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-1b

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-1b		
To Node:	g-1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	130.00 ft
Flow Direction:	Both	Perimeter 2:	131.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	132.00 ft
Water Table Elevation:	12.00 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	180.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-2a

Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-2a		
To Node:	g-2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	338.00 ft
Flow Direction:	Both	Perimeter 2:	339.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	340.00 ft
Water Table Elevation:	11.09 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	180.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-2b			
Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-2b		
To Node:	g-2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	158.00 ft
Flow Direction:	Both	Perimeter 2:	159.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	160.00 ft
Water Table Elevation:	10.38 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	180.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-2c			
Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-2c		
To Node:	g-2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	175.00 ft
Flow Direction:	Both	Perimeter 2:	176.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	177.00 ft
Water Table Elevation:	10.85 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	180.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-3			
Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-3b		
To Node:	g-3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	144.00 ft
Flow Direction:	Both	Perimeter 2:	145.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	146.00 ft
Water Table Elevation:	10.22 ft	Distance P1 to P2:	10.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	180.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: perc-3a			
Scenario:	Icpr3	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	smf-3a		
To Node:	g-3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	145.00 ft
Flow Direction:	Both	Perimeter 2:	146.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	147.00 ft
Water Table Elevation:	10.88 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	180.00 ft
Horizontal Conductivity:	3.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Pipe Link: pipe-1b		Upstream		Downstream	
Scenario:	Icpr3	Invert:	13.15 ft	Invert:	12.95 ft
From Node:	smf-1b	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-1a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.23 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	23.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: pipe-2a		Upstream		Downstream	
Scenario:	Icpr3	Invert:	12.60 ft	Invert:	12.60 ft
From Node:	smf-2b	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	5.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	

Inputs

Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: pipe-2b		Upstream		Downstream	
Scenario:	Icpr3	Invert:	12.35 ft	Invert:	12.35 ft
From Node:	smf-2c	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2b	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	20.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: pipe-2c		Upstream		Downstream	
Scenario:	Icpr3	Invert:	12.60 ft	Invert:	12.60 ft
From Node:	smf-2c	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-2a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	5.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: pipe-3b		Upstream		Downstream	
Scenario:	Icpr3	Invert:	13.00 ft	Invert:	11.75 ft
From Node:	smf-3a	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	smf-3b	Geometry: Circular		Geometry: Circular	

Inputs

Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	5.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Simulation: 003YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 12:24:28 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Inputs

Resources & Lookup Tables

Resources		Lookup Tables	
Rainfall Folder:	Icpr3	Boundary Stage Set:	
		Extern Hydrograph Set:	
Unit Hydrograph Folder:	ICPR3	Curve Number Set:	
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	1.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-1
		Rainfall Amount:	2.60 in
Edge Length Option:	Automatic	Storm Duration:	1.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 003YR002HR

Scenario:	Icpr3
Run Date/Time:	9/15/2023 12:33:53 PM
Program Version:	ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-2

Rainfall Amount: 3.10 in

Storm Duration: 2.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 003YR004HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 12:44:19 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 4.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-4
		Rainfall Amount:	3.60 in
Edge Length Option:	Automatic	Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 003YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 12:55:16 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	8.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-8
		Rainfall Amount:	4.30 in
Edge Length Option:	Automatic	Storm Duration:	8.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 003YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:06:38 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-24

Rainfall Amount: 5.80 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 003YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:16:41 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 72.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-72
		Rainfall Amount:	7.60 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 005YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:27:09 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 2.80 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 005YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:39:27 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-2
Rainfall Amount: 3.40 in
Storm Duration: 2.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 005YR004HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:48:58 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 4.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-4
		Rainfall Amount:	4.10 in
Edge Length Option:	Automatic	Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 005YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:02:33 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	8.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-8
		Rainfall Amount:	4.80 in
Edge Length Option:	Automatic	Storm Duration:	8.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 005YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:12:19 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-24

Rainfall Amount: 6.50 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 005YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:22:32 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-72
		Rainfall Amount:	8.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 010YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:33:03 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 3.10 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 010YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:42:33 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-2

Rainfall Amount: 3.80 in

Storm Duration: 2.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 010YR004HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:52:06 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 4.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-4
		Rainfall Amount:	4.60 in
Edge Length Option:	Automatic	Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 010YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:03:02 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 5.60 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 010YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:12:44 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 7.60 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 010YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:23:36 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-72
		Rainfall Amount:	8.90 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 025YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:33:54 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 3.60 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 025YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:44:08 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-2
Rainfall Amount: 4.30 in
Storm Duration: 2.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 025YR004HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:53:58 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 4.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-4
		Rainfall Amount:	5.20 in
Edge Length Option:	Automatic	Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 025YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:03:24 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 6.20 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 025YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:13:09 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		60.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000
0	0	0	999999.0000	5.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: ICPR3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 8.50 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 113 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 025YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:28:29 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-72
		Rainfall Amount:	11.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 050YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:39:04 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 4.00 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 050YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:48:27 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-2
Rainfall Amount: 4.90 in
Storm Duration: 2.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 050YR004YR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:59:04 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 4.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-4
		Rainfall Amount:	5.80 in
Edge Length Option:	Automatic	Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 050YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:08:59 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 7.00 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 050YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:18:28 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 9.60 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 050YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:28:25 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-72
		Rainfall Amount:	12.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:38:39 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	721.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	99999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 4.40 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:48:02 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	722.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-2

Rainfall Amount: 5.40 in

Storm Duration: 2.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 100YR004YR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:58:02 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	724.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 4.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-4
		Rainfall Amount:	6.50 in
Edge Length Option:	Automatic	Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 6:07:43 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	728.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 7.50 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 6:17:33 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

Hydrology [sec]	Surface Hydraulics [sec]

		Inputs
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 11.10 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

Simulation: 100YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 6:27:25 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	792.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-72
		Rainfall Amount:	13.80 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: MN024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 6:37:51 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	744.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	9999999.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000
0	0	0	999999999.0000	15.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 4.70 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-1a	0.0000	13.70	SMF-1a WQTV begin
WQTV	smf-1a	0.2503	13.60	
WQTV	smf-1a	0.5010	13.49	
WQTV	smf-1a	0.7522	13.39	
WQTV	smf-1a	1.0013	13.32	
WQTV	smf-1a	1.2534	13.29	
WQTV	smf-1a	1.5063	13.26	
WQTV	smf-1a	1.7549	13.24	
WQTV	smf-1a	2.0038	13.23	
WQTV	smf-1a	2.2522	13.21	
WQTV	smf-1a	2.5005	13.20	
WQTV	smf-1a	2.7505	13.19	
WQTV	smf-1a	3.0005	13.18	
WQTV	smf-1a	3.2505	13.17	
WQTV	smf-1a	3.5005	13.16	
WQTV	smf-1a	3.7505	13.15	
WQTV	smf-1a	4.0005	13.14	
WQTV	smf-1a	4.2505	13.13	
WQTV	smf-1a	4.5005	13.12	
WQTV	smf-1a	4.7505	13.12	
WQTV	smf-1a	5.0005	13.11	
WQTV	smf-1a	5.2505	13.10	
WQTV	smf-1a	5.5005	13.10	
WQTV	smf-1a	5.7505	13.09	
WQTV	smf-1a	6.0005	13.08	
WQTV	smf-1a	6.2505	13.08	
WQTV	smf-1a	6.5005	13.07	
WQTV	smf-1a	6.7505	13.07	
WQTV	smf-1a	7.0005	13.06	
WQTV	smf-1a	7.2505	13.05	
WQTV	smf-1a	7.5005	13.05	
WQTV	smf-1a	7.7505	13.04	
WQTV	smf-1a	8.0005	13.04	
WQTV	smf-1a	8.2505	13.03	
WQTV	smf-1a	8.5005	13.03	
WQTV	smf-1a	8.7505	13.02	
WQTV	smf-1a	9.0005	13.02	
WQTV	smf-1a	9.2505	13.02	
WQTV	smf-1a	9.5005	13.01	
WQTV	smf-1a	9.7505	13.01	
WQTV	smf-1a	10.0005	13.00	
WQTV	smf-1a	10.2505	13.00	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-1a	10.5005	12.99
WQTV	smf-1a	10.7505	12.99
WQTV	smf-1a	11.0005	12.98
WQTV	smf-1a	11.2505	12.98
WQTV	smf-1a	11.5005	12.98
WQTV	smf-1a	11.7505	12.97
WQTV	smf-1a	12.0005	12.97
WQTV	smf-1a	12.2505	12.96
WQTV	smf-1a	12.5005	12.96
WQTV	smf-1a	12.7505	12.95
WQTV	smf-1a	13.0005	12.95
WQTV	smf-1a	13.2505	12.95
WQTV	smf-1a	13.5005	12.94
WQTV	smf-1a	13.7505	12.94
WQTV	smf-1a	14.0005	12.93
WQTV	smf-1a	14.2505	12.93
WQTV	smf-1a	14.5005	12.92
WQTV	smf-1a	14.7505	12.92
WQTV	smf-1a	15.0005	12.92
WQTV	smf-1a	15.2505	12.91
WQTV	smf-1a	15.5005	12.91
WQTV	smf-1a	15.7505	12.90
WQTV	smf-1a	16.0005	12.90
WQTV	smf-1a	16.2505	12.89
WQTV	smf-1a	16.5005	12.89
WQTV	smf-1a	16.7505	12.88
WQTV	smf-1a	17.0005	12.88
WQTV	smf-1a	17.2505	12.87
WQTV	smf-1a	17.5005	12.87
WQTV	smf-1a	17.7505	12.86
WQTV	smf-1a	18.0005	12.86
WQTV	smf-1a	18.2505	12.85
WQTV	smf-1a	18.5005	12.85
WQTV	smf-1a	18.7505	12.85
WQTV	smf-1a	19.0005	12.84
WQTV	smf-1a	19.2505	12.84
WQTV	smf-1a	19.5005	12.83
WQTV	smf-1a	19.7505	12.83
WQTV	smf-1a	20.0005	12.82
WQTV	smf-1a	20.2505	12.82
WQTV	smf-1a	20.5005	12.82
WQTV	smf-1a	20.7505	12.81

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-1a	21.0005	12.81
WQTV	smf-1a	21.2505	12.80
WQTV	smf-1a	21.5005	12.80
WQTV	smf-1a	21.7505	12.80
WQTV	smf-1a	22.0005	12.79
WQTV	smf-1a	22.2505	12.79
WQTV	smf-1a	22.5005	12.78
WQTV	smf-1a	22.7505	12.78
WQTV	smf-1a	23.0005	12.78
WQTV	smf-1a	23.2505	12.77
WQTV	smf-1a	23.5005	12.77
WQTV	smf-1a	23.7505	12.77
WQTV	smf-1a	24.0005	12.76
WQTV	smf-1a	24.2505	12.76
WQTV	smf-1a	24.5005	12.76
WQTV	smf-1a	24.7505	12.75
WQTV	smf-1a	25.0005	12.75
WQTV	smf-1a	25.2505	12.75
WQTV	smf-1a	25.5005	12.74
WQTV	smf-1a	25.7505	12.74
WQTV	smf-1a	26.0005	12.74
WQTV	smf-1a	26.2505	12.73
WQTV	smf-1a	26.5005	12.73
WQTV	smf-1a	26.7505	12.73
WQTV	smf-1a	27.0005	12.72
WQTV	smf-1a	27.2505	12.72
WQTV	smf-1a	27.5005	12.72
WQTV	smf-1a	27.7505	12.71
WQTV	smf-1a	28.0005	12.71
WQTV	smf-1a	28.2505	12.71
WQTV	smf-1a	28.5005	12.71
WQTV	smf-1a	28.7505	12.70
WQTV	smf-1a	29.0005	12.70
WQTV	smf-1a	29.2505	12.70
WQTV	smf-1a	29.5005	12.70
WQTV	smf-1a	29.7505	12.69
WQTV	smf-1a	30.0005	12.69
WQTV	smf-1a	30.2505	12.69
WQTV	smf-1a	30.5005	12.68
WQTV	smf-1a	30.7505	12.68
WQTV	smf-1a	31.0005	12.68
WQTV	smf-1a	31.2505	12.68

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-1a	31.5005	12.67
WQTV	smf-1a	31.7505	12.67
WQTV	smf-1a	32.0005	12.67
WQTV	smf-1a	32.2505	12.67
WQTV	smf-1a	32.5005	12.66
WQTV	smf-1a	32.7505	12.66
WQTV	smf-1a	33.0005	12.66
WQTV	smf-1a	33.2505	12.66
WQTV	smf-1a	33.5005	12.65
WQTV	smf-1a	33.7505	12.65
WQTV	smf-1a	34.0005	12.65
WQTV	smf-1a	34.2505	12.65
WQTV	smf-1a	34.5005	12.65
WQTV	smf-1a	34.7505	12.64
WQTV	smf-1a	35.0005	12.64
WQTV	smf-1a	35.2505	12.64
WQTV	smf-1a	35.5005	12.64
WQTV	smf-1a	35.7505	12.63
WQTV	smf-1a	36.0005	12.63
WQTV	smf-1a	36.2505	12.63
WQTV	smf-1a	36.5005	12.63
WQTV	smf-1a	36.7505	12.62
WQTV	smf-1a	37.0005	12.62
WQTV	smf-1a	37.2505	12.62
WQTV	smf-1a	37.5005	12.62
WQTV	smf-1a	37.7505	12.62
WQTV	smf-1a	38.0005	12.61
WQTV	smf-1a	38.2505	12.61
WQTV	smf-1a	38.5005	12.61
WQTV	smf-1a	38.7505	12.61
WQTV	smf-1a	39.0005	12.61
WQTV	smf-1a	39.2505	12.60
WQTV	smf-1a	39.5005	12.60
WQTV	smf-1a	39.7505	12.60
WQTV	smf-1a	40.0005	12.60
WQTV	smf-1a	40.2505	12.60
WQTV	smf-1a	40.5005	12.59
WQTV	smf-1a	40.7505	12.59
WQTV	smf-1a	41.0005	12.59
WQTV	smf-1a	41.2505	12.59
WQTV	smf-1a	41.5005	12.59
WQTV	smf-1a	41.7505	12.58

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-1a	42.0005	12.58
WQTV	smf-1a	42.2505	12.58
WQTV	smf-1a	42.5005	12.58
WQTV	smf-1a	42.7505	12.58
WQTV	smf-1a	43.0005	12.57
WQTV	smf-1a	43.2505	12.57
WQTV	smf-1a	43.5005	12.57
WQTV	smf-1a	43.7505	12.57
WQTV	smf-1a	44.0005	12.57
WQTV	smf-1a	44.2505	12.57
WQTV	smf-1a	44.5005	12.56
WQTV	smf-1a	44.7505	12.56
WQTV	smf-1a	45.0005	12.56
WQTV	smf-1a	45.2505	12.56
WQTV	smf-1a	45.5005	12.56
WQTV	smf-1a	45.7505	12.55
WQTV	smf-1a	46.0005	12.55
WQTV	smf-1a	46.2505	12.55
WQTV	smf-1a	46.5005	12.55
WQTV	smf-1a	46.7505	12.55
WQTV	smf-1a	47.0005	12.55
WQTV	smf-1a	47.2505	12.54
WQTV	smf-1a	47.5005	12.54
WQTV	smf-1a	47.7505	12.54
WQTV	smf-1a	48.0005	12.54
WQTV	smf-1a	48.2505	12.54
WQTV	smf-1a	48.5005	12.54
WQTV	smf-1a	48.7505	12.54
WQTV	smf-1a	49.0005	12.53
WQTV	smf-1a	49.2505	12.53
WQTV	smf-1a	49.5005	12.53
WQTV	smf-1a	49.7505	12.53
WQTV	smf-1a	50.0005	12.53
WQTV	smf-1a	50.2505	12.53
WQTV	smf-1a	50.5005	12.52
WQTV	smf-1a	50.7505	12.52
WQTV	smf-1a	51.0005	12.52
WQTV	smf-1a	51.2505	12.52
WQTV	smf-1a	51.5005	12.52
WQTV	smf-1a	51.7505	12.52
WQTV	smf-1a	52.0005	12.52
WQTV	smf-1a	52.2505	12.51

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-1a	52.5005	12.51
WQTV	smf-1a	52.7505	12.51
WQTV	smf-1a	53.0005	12.51
WQTV	smf-1a	53.2505	12.51
WQTV	smf-1a	53.5005	12.51
WQTV	smf-1a	53.7505	12.51
WQTV	smf-1a	54.0005	12.50
WQTV	smf-1a	54.2505	12.50
WQTV	smf-1a	54.5005	12.50
WQTV	smf-1a	54.7505	12.50
WQTV	smf-1a	55.0005	12.50
WQTV	smf-1a	55.2505	12.50
WQTV	smf-1a	55.5005	12.50
WQTV	smf-1a	55.7505	12.49
WQTV	smf-1a	56.0005	12.49
WQTV	smf-1a	56.2505	12.49
WQTV	smf-1a	56.5005	12.49
WQTV	smf-1a	56.7505	12.49
WQTV	smf-1a	57.0005	12.49
WQTV	smf-1a	57.2505	12.49
WQTV	smf-1a	57.5005	12.49
WQTV	smf-1a	57.7505	12.48
WQTV	smf-1a	58.0005	12.48
WQTV	smf-1a	58.2505	12.48
WQTV	smf-1a	58.5005	12.48
WQTV	smf-1a	58.7505	12.48
WQTV	smf-1a	59.0005	12.48
WQTV	smf-1a	59.2505	12.48
WQTV	smf-1a	59.5005	12.48
WQTV	smf-1a	59.7505	12.48
WQTV	smf-1a	60.0005	12.47
WQTV	smf-1a	60.2505	12.47
WQTV	smf-1a	60.5005	12.47
WQTV	smf-1a	60.7505	12.47
WQTV	smf-1a	61.0005	12.47
WQTV	smf-1a	61.2505	12.47
WQTV	smf-1a	61.5005	12.47
WQTV	smf-1a	61.7505	12.47
WQTV	smf-1a	62.0005	12.47
WQTV	smf-1a	62.2505	12.46
WQTV	smf-1a	62.5005	12.46
WQTV	smf-1a	62.7505	12.46

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-1a	63.0005	12.46	
WQTV	smf-1a	63.2505	12.46	
WQTV	smf-1a	63.5005	12.46	
WQTV	smf-1a	63.7505	12.46	
WQTV	smf-1a	64.0005	12.46	
WQTV	smf-1a	64.2505	12.46	
WQTV	smf-1a	64.5005	12.45	SMF-1a WQTV end
WQTV	smf-1a	64.7505	12.45	
WQTV	smf-1a	65.0005	12.45	
WQTV	smf-1a	65.2505	12.45	
WQTV	smf-1a	65.5005	12.45	
WQTV	smf-1a	65.7505	12.45	
WQTV	smf-1a	66.0005	12.45	
WQTV	smf-1a	66.2505	12.45	
WQTV	smf-1a	66.5005	12.45	
WQTV	smf-1a	66.7505	12.45	
WQTV	smf-1a	67.0005	12.45	
WQTV	smf-1a	67.2505	12.45	
WQTV	smf-1a	67.5005	12.45	
WQTV	smf-1a	67.7505	12.45	
WQTV	smf-1a	68.0005	12.45	
WQTV	smf-1a	68.2505	12.45	
WQTV	smf-1a	68.5005	12.45	
WQTV	smf-1a	68.7505	12.45	
WQTV	smf-1a	69.0005	12.45	
WQTV	smf-1a	69.2505	12.45	
WQTV	smf-1a	69.5005	12.45	
WQTV	smf-1a	69.7505	12.45	
WQTV	smf-1a	70.0005	12.45	
WQTV	smf-1a	70.2505	12.45	
WQTV	smf-1a	70.5005	12.45	
WQTV	smf-1a	70.7505	12.45	
WQTV	smf-1a	71.0005	12.45	
WQTV	smf-1a	71.2505	12.45	
WQTV	smf-1a	71.5005	12.45	
WQTV	smf-1a	71.7505	12.45	
WQTV	smf-1a	72.0005	12.45	
WQTV	smf-1a	72.2505	12.45	
WQTV	smf-1a	72.5005	12.45	
WQTV	smf-1a	72.7505	12.45	
WQTV	smf-1a	73.0005	12.45	
WQTV	smf-1a	73.2505	12.45	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-1a	73.5005	12.45	
WQTV	smf-1a	73.7505	12.45	
WQTV	smf-1a	74.0005	12.45	
WQTV	smf-1a	74.2505	12.45	
WQTV	smf-1a	74.5005	12.45	
WQTV	smf-1a	74.7505	12.45	
WQTV	smf-1a	75.0005	12.45	
WQTV	smf-1a	75.2505	12.45	
WQTV	smf-1a	75.5005	12.45	
WQTV	smf-1a	75.7505	12.45	
WQTV	smf-1a	76.0005	12.45	
WQTV	smf-1a	76.2505	12.45	
WQTV	smf-1a	76.5005	12.45	
WQTV	smf-1a	76.7505	12.45	
WQTV	smf-1a	77.0005	12.45	
WQTV	smf-1a	77.2505	12.45	
WQTV	smf-1a	77.5005	12.45	
WQTV	smf-1a	77.7505	12.45	
WQTV	smf-1a	78.0005	12.45	
WQTV	smf-1a	78.2505	12.45	
WQTV	smf-1a	78.5005	12.45	
WQTV	smf-1a	78.7505	12.45	
WQTV	smf-1a	79.0005	12.45	
WQTV	smf-1a	79.2505	12.45	
WQTV	smf-1a	79.5005	12.45	
WQTV	smf-1a	79.7505	12.45	
WQTV	smf-1a	80.0005	12.45	
WQTV	smf-1b	0.0000	14.00	SMF-1b WQTV begin
WQTV	smf-1b	0.2503	13.90	
WQTV	smf-1b	0.5010	13.79	
WQTV	smf-1b	0.7522	13.69	
WQTV	smf-1b	1.0013	13.60	
WQTV	smf-1b	1.2534	13.55	
WQTV	smf-1b	1.5063	13.51	
WQTV	smf-1b	1.7549	13.48	
WQTV	smf-1b	2.0038	13.45	
WQTV	smf-1b	2.2522	13.41	
WQTV	smf-1b	2.5005	13.38	
WQTV	smf-1b	2.7505	13.36	
WQTV	smf-1b	3.0005	13.33	
WQTV	smf-1b	3.2505	13.31	
WQTV	smf-1b	3.5005	13.29	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-1b	3.7505	13.27	
WQTV	smf-1b	4.0005	13.26	
WQTV	smf-1b	4.2505	13.24	
WQTV	smf-1b	4.5005	13.23	
WQTV	smf-1b	4.7505	13.21	
WQTV	smf-1b	5.0005	13.20	
WQTV	smf-1b	5.2505	13.18	
WQTV	smf-1b	5.5005	13.17	
WQTV	smf-1b	5.7505	13.16	
WQTV	smf-1b	6.0005	13.15	
WQTV	smf-1b	6.2505	13.14	
WQTV	smf-1b	6.5005	13.12	
WQTV	smf-1b	6.7505	13.11	
WQTV	smf-1b	7.0005	13.10	
WQTV	smf-1b	7.2505	13.09	
WQTV	smf-1b	7.5005	13.09	
WQTV	smf-1b	7.7505	13.08	
WQTV	smf-1b	8.0005	13.07	
WQTV	smf-1b	8.2505	13.06	
WQTV	smf-1b	8.5005	13.05	
WQTV	smf-1b	8.7505	13.04	
WQTV	smf-1b	9.0005	13.04	
WQTV	smf-1b	9.2505	13.03	
WQTV	smf-1b	9.5005	13.02	
WQTV	smf-1b	9.7505	13.02	
WQTV	smf-1b	10.0005	13.01	
WQTV	smf-1b	10.2505	13.00	SMF-1b WQTV end
WQTV	smf-1b	10.5005	13.00	
WQTV	smf-1b	10.7505	13.00	
WQTV	smf-1b	11.0005	13.00	
WQTV	smf-1b	11.2505	13.00	
WQTV	smf-1b	11.5005	13.00	
WQTV	smf-1b	11.7505	13.00	
WQTV	smf-1b	12.0005	13.00	
WQTV	smf-1b	12.2505	13.00	
WQTV	smf-1b	12.5005	13.00	
WQTV	smf-1b	12.7505	13.00	
WQTV	smf-1b	13.0005	13.00	
WQTV	smf-1b	13.2505	13.00	
WQTV	smf-1b	13.5005	13.00	
WQTV	smf-1b	13.7505	13.00	
WQTV	smf-1b	14.0005	13.00	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-1b	77.2505	13.00	
WQTV	smf-1b	77.5005	13.00	
WQTV	smf-1b	77.7505	13.00	
WQTV	smf-1b	78.0005	13.00	
WQTV	smf-1b	78.2505	13.00	
WQTV	smf-1b	78.5005	13.00	
WQTV	smf-1b	78.7505	13.00	
WQTV	smf-1b	79.0005	13.00	
WQTV	smf-1b	79.2505	13.00	
WQTV	smf-1b	79.5005	13.00	
WQTV	smf-1b	79.7505	13.00	
WQTV	smf-1b	80.0005	13.00	
WQTV	smf-2a	0.0000	12.77	SMF-2a WQTV begin
WQTV	smf-2a	0.2503	12.67	
WQTV	smf-2a	0.5010	12.57	
WQTV	smf-2a	0.7522	12.50	
WQTV	smf-2a	1.0013	12.46	
WQTV	smf-2a	1.2534	12.43	
WQTV	smf-2a	1.5063	12.40	
WQTV	smf-2a	1.7549	12.38	
WQTV	smf-2a	2.0038	12.37	
WQTV	smf-2a	2.2522	12.35	
WQTV	smf-2a	2.5005	12.34	
WQTV	smf-2a	2.7505	12.33	
WQTV	smf-2a	3.0005	12.32	
WQTV	smf-2a	3.2505	12.30	
WQTV	smf-2a	3.5005	12.29	
WQTV	smf-2a	3.7505	12.28	
WQTV	smf-2a	4.0005	12.27	
WQTV	smf-2a	4.2505	12.27	
WQTV	smf-2a	4.5005	12.26	
WQTV	smf-2a	4.7505	12.25	
WQTV	smf-2a	5.0005	12.24	
WQTV	smf-2a	5.2505	12.23	
WQTV	smf-2a	5.5005	12.23	
WQTV	smf-2a	5.7505	12.22	
WQTV	smf-2a	6.0005	12.21	
WQTV	smf-2a	6.2505	12.21	
WQTV	smf-2a	6.5005	12.20	
WQTV	smf-2a	6.7505	12.19	
WQTV	smf-2a	7.0005	12.19	
WQTV	smf-2a	7.2505	12.18	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-2a	7.5005	12.18	
WQTV	smf-2a	7.7505	12.17	
WQTV	smf-2a	8.0005	12.16	
WQTV	smf-2a	8.2505	12.16	
WQTV	smf-2a	8.5005	12.15	
WQTV	smf-2a	8.7505	12.15	
WQTV	smf-2a	9.0005	12.14	
WQTV	smf-2a	9.2505	12.14	
WQTV	smf-2a	9.5005	12.14	
WQTV	smf-2a	9.7505	12.13	
WQTV	smf-2a	10.0005	12.13	
WQTV	smf-2a	10.2505	12.12	
WQTV	smf-2a	10.5005	12.12	
WQTV	smf-2a	10.7505	12.12	
WQTV	smf-2a	11.0005	12.11	
WQTV	smf-2a	11.2505	12.11	
WQTV	smf-2a	11.5005	12.10	SMF-2a WQTV end
WQTV	smf-2a	11.7505	12.10	
WQTV	smf-2a	12.0005	12.10	
WQTV	smf-2a	12.2505	12.10	
WQTV	smf-2a	12.5005	12.10	
WQTV	smf-2a	12.7505	12.10	
WQTV	smf-2a	13.0005	12.10	
WQTV	smf-2a	13.2505	12.10	
WQTV	smf-2a	13.5005	12.10	
WQTV	smf-2a	13.7505	12.10	
WQTV	smf-2a	14.0005	12.10	
WQTV	smf-2a	14.2505	12.10	
WQTV	smf-2a	14.5005	12.10	
WQTV	smf-2a	14.7505	12.10	
WQTV	smf-2a	15.0005	12.10	
WQTV	smf-2a	15.2505	12.10	
WQTV	smf-2a	15.5005	12.10	
WQTV	smf-2a	15.7505	12.10	
WQTV	smf-2a	16.0005	12.10	
WQTV	smf-2a	16.2505	12.10	
WQTV	smf-2a	16.5005	12.10	
WQTV	smf-2a	16.7505	12.10	
WQTV	smf-2a	17.0005	12.10	
WQTV	smf-2a	17.2505	12.10	
WQTV	smf-2a	17.5005	12.10	
WQTV	smf-2a	17.7505	12.10	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-2a	70.5005	12.10	
WQTV	smf-2a	70.7505	12.10	
WQTV	smf-2a	71.0005	12.10	
WQTV	smf-2a	71.2505	12.10	
WQTV	smf-2a	71.5005	12.10	
WQTV	smf-2a	71.7505	12.10	
WQTV	smf-2a	72.0005	12.10	
WQTV	smf-2a	72.2505	12.10	
WQTV	smf-2a	72.5005	12.10	
WQTV	smf-2a	72.7505	12.10	
WQTV	smf-2a	73.0005	12.10	
WQTV	smf-2a	73.2505	12.10	
WQTV	smf-2a	73.5005	12.10	
WQTV	smf-2a	73.7505	12.10	
WQTV	smf-2a	74.0005	12.10	
WQTV	smf-2a	74.2505	12.10	
WQTV	smf-2a	74.5005	12.10	
WQTV	smf-2a	74.7505	12.10	
WQTV	smf-2a	75.0005	12.10	
WQTV	smf-2a	75.2505	12.10	
WQTV	smf-2a	75.5005	12.10	
WQTV	smf-2a	75.7505	12.10	
WQTV	smf-2a	76.0005	12.10	
WQTV	smf-2a	76.2505	12.10	
WQTV	smf-2a	76.5005	12.10	
WQTV	smf-2a	76.7505	12.10	
WQTV	smf-2a	77.0005	12.10	
WQTV	smf-2a	77.2505	12.10	
WQTV	smf-2a	77.5005	12.10	
WQTV	smf-2a	77.7505	12.10	
WQTV	smf-2a	78.0005	12.10	
WQTV	smf-2a	78.2505	12.10	
WQTV	smf-2a	78.5005	12.10	
WQTV	smf-2a	78.7505	12.10	
WQTV	smf-2a	79.0005	12.10	
WQTV	smf-2a	79.2505	12.10	
WQTV	smf-2a	79.5005	12.10	
WQTV	smf-2a	79.7505	12.10	
WQTV	smf-2a	80.0005	12.10	
WQTV	smf-2b	0.0000	12.77	SMF-2b WQTV begin
WQTV	smf-2b	0.2503	12.67	
WQTV	smf-2b	0.5010	12.57	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-2b	0.7522	12.47
WQTV	smf-2b	1.0013	12.39
WQTV	smf-2b	1.2534	12.33
WQTV	smf-2b	1.5063	12.30
WQTV	smf-2b	1.7549	12.27
WQTV	smf-2b	2.0038	12.24
WQTV	smf-2b	2.2522	12.22
WQTV	smf-2b	2.5005	12.20
WQTV	smf-2b	2.7505	12.19
WQTV	smf-2b	3.0005	12.17
WQTV	smf-2b	3.2505	12.16
WQTV	smf-2b	3.5005	12.15
WQTV	smf-2b	3.7505	12.13
WQTV	smf-2b	4.0005	12.12
WQTV	smf-2b	4.2505	12.11
WQTV	smf-2b	4.5005	12.10
WQTV	smf-2b	4.7505	12.09
WQTV	smf-2b	5.0005	12.08
WQTV	smf-2b	5.2505	12.07
WQTV	smf-2b	5.5005	12.06
WQTV	smf-2b	5.7505	12.06
WQTV	smf-2b	6.0005	12.05
WQTV	smf-2b	6.2505	12.04
WQTV	smf-2b	6.5005	12.03
WQTV	smf-2b	6.7505	12.02
WQTV	smf-2b	7.0005	12.02
WQTV	smf-2b	7.2505	12.01
WQTV	smf-2b	7.5005	12.00
WQTV	smf-2b	7.7505	12.00
WQTV	smf-2b	8.0005	11.99
WQTV	smf-2b	8.2505	11.98
WQTV	smf-2b	8.5005	11.98
WQTV	smf-2b	8.7505	11.97
WQTV	smf-2b	9.0005	11.96
WQTV	smf-2b	9.2505	11.96
WQTV	smf-2b	9.5005	11.95
WQTV	smf-2b	9.7505	11.95
WQTV	smf-2b	10.0005	11.94
WQTV	smf-2b	10.2505	11.93
WQTV	smf-2b	10.5005	11.93
WQTV	smf-2b	10.7505	11.92
WQTV	smf-2b	11.0005	11.92

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-2b	11.2505	11.91
WQTV	smf-2b	11.5005	11.90
WQTV	smf-2b	11.7505	11.90
WQTV	smf-2b	12.0005	11.89
WQTV	smf-2b	12.2505	11.89
WQTV	smf-2b	12.5005	11.88
WQTV	smf-2b	12.7505	11.88
WQTV	smf-2b	13.0005	11.87
WQTV	smf-2b	13.2505	11.86
WQTV	smf-2b	13.5005	11.86
WQTV	smf-2b	13.7505	11.85
WQTV	smf-2b	14.0005	11.85
WQTV	smf-2b	14.2505	11.84
WQTV	smf-2b	14.5005	11.83
WQTV	smf-2b	14.7505	11.83
WQTV	smf-2b	15.0005	11.82
WQTV	smf-2b	15.2505	11.81
WQTV	smf-2b	15.5005	11.81
WQTV	smf-2b	15.7505	11.80
WQTV	smf-2b	16.0005	11.80
WQTV	smf-2b	16.2505	11.79
WQTV	smf-2b	16.5005	11.78
WQTV	smf-2b	16.7505	11.78
WQTV	smf-2b	17.0005	11.77
WQTV	smf-2b	17.2505	11.77
WQTV	smf-2b	17.5005	11.76
WQTV	smf-2b	17.7505	11.76
WQTV	smf-2b	18.0005	11.75
WQTV	smf-2b	18.2505	11.74
WQTV	smf-2b	18.5005	11.74
WQTV	smf-2b	18.7505	11.73
WQTV	smf-2b	19.0005	11.73
WQTV	smf-2b	19.2505	11.72
WQTV	smf-2b	19.5005	11.72
WQTV	smf-2b	19.7505	11.72
WQTV	smf-2b	20.0005	11.71
WQTV	smf-2b	20.2505	11.71
WQTV	smf-2b	20.5005	11.70
WQTV	smf-2b	20.7505	11.70
WQTV	smf-2b	21.0005	11.69
WQTV	smf-2b	21.2505	11.69
WQTV	smf-2b	21.5005	11.68

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-2b	21.7505	11.68
WQTV	smf-2b	22.0005	11.68
WQTV	smf-2b	22.2505	11.67
WQTV	smf-2b	22.5005	11.67
WQTV	smf-2b	22.7505	11.66
WQTV	smf-2b	23.0005	11.66
WQTV	smf-2b	23.2505	11.66
WQTV	smf-2b	23.5005	11.65
WQTV	smf-2b	23.7505	11.65
WQTV	smf-2b	24.0005	11.64
WQTV	smf-2b	24.2505	11.64
WQTV	smf-2b	24.5005	11.64
WQTV	smf-2b	24.7505	11.63
WQTV	smf-2b	25.0005	11.63
WQTV	smf-2b	25.2505	11.63
WQTV	smf-2b	25.5005	11.62
WQTV	smf-2b	25.7505	11.62
WQTV	smf-2b	26.0005	11.62
WQTV	smf-2b	26.2505	11.61
WQTV	smf-2b	26.5005	11.61
WQTV	smf-2b	26.7505	11.61
WQTV	smf-2b	27.0005	11.60
WQTV	smf-2b	27.2505	11.60
WQTV	smf-2b	27.5005	11.60
WQTV	smf-2b	27.7505	11.59
WQTV	smf-2b	28.0005	11.59
WQTV	smf-2b	28.2505	11.59
WQTV	smf-2b	28.5005	11.58
WQTV	smf-2b	28.7505	11.58
WQTV	smf-2b	29.0005	11.58
WQTV	smf-2b	29.2505	11.57
WQTV	smf-2b	29.5005	11.57
WQTV	smf-2b	29.7505	11.57
WQTV	smf-2b	30.0005	11.56
WQTV	smf-2b	30.2505	11.56
WQTV	smf-2b	30.5005	11.56
WQTV	smf-2b	30.7505	11.56
WQTV	smf-2b	31.0005	11.55
WQTV	smf-2b	31.2505	11.55
WQTV	smf-2b	31.5005	11.55
WQTV	smf-2b	31.7505	11.54
WQTV	smf-2b	32.0005	11.54

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-2b	32.2505	11.54
WQTV	smf-2b	32.5005	11.54
WQTV	smf-2b	32.7505	11.53
WQTV	smf-2b	33.0005	11.53
WQTV	smf-2b	33.2505	11.53
WQTV	smf-2b	33.5005	11.52
WQTV	smf-2b	33.7505	11.52
WQTV	smf-2b	34.0005	11.52
WQTV	smf-2b	34.2505	11.52
WQTV	smf-2b	34.5005	11.51
WQTV	smf-2b	34.7505	11.51
WQTV	smf-2b	35.0005	11.51
WQTV	smf-2b	35.2505	11.51
WQTV	smf-2b	35.5005	11.50
WQTV	smf-2b	35.7505	11.50
WQTV	smf-2b	36.0005	11.50
WQTV	smf-2b	36.2505	11.50
WQTV	smf-2b	36.5005	11.49
WQTV	smf-2b	36.7505	11.49
WQTV	smf-2b	37.0005	11.49
WQTV	smf-2b	37.2505	11.49
WQTV	smf-2b	37.5005	11.48
WQTV	smf-2b	37.7505	11.48
WQTV	smf-2b	38.0005	11.48
WQTV	smf-2b	38.2505	11.48
WQTV	smf-2b	38.5005	11.48
WQTV	smf-2b	38.7505	11.47
WQTV	smf-2b	39.0005	11.47
WQTV	smf-2b	39.2505	11.47
WQTV	smf-2b	39.5005	11.47
WQTV	smf-2b	39.7505	11.46
WQTV	smf-2b	40.0005	11.46
WQTV	smf-2b	40.2505	11.46
WQTV	smf-2b	40.5005	11.46
WQTV	smf-2b	40.7505	11.46
WQTV	smf-2b	41.0005	11.45
WQTV	smf-2b	41.2505	11.45
WQTV	smf-2b	41.5005	11.45
WQTV	smf-2b	41.7505	11.45
WQTV	smf-2b	42.0005	11.45
WQTV	smf-2b	42.2505	11.44
WQTV	smf-2b	42.5005	11.44

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-2b	42.7505	11.44	
WQTV	smf-2b	43.0005	11.44	
WQTV	smf-2b	43.2505	11.44	
WQTV	smf-2b	43.5005	11.44	
WQTV	smf-2b	43.7505	11.43	
WQTV	smf-2b	44.0005	11.43	
WQTV	smf-2b	44.2505	11.43	
WQTV	smf-2b	44.5005	11.43	
WQTV	smf-2b	44.7505	11.43	
WQTV	smf-2b	45.0005	11.42	
WQTV	smf-2b	45.2505	11.42	
WQTV	smf-2b	45.5005	11.42	
WQTV	smf-2b	45.7505	11.42	
WQTV	smf-2b	46.0005	11.42	
WQTV	smf-2b	46.2505	11.42	
WQTV	smf-2b	46.5005	11.41	
WQTV	smf-2b	46.7505	11.41	
WQTV	smf-2b	47.0005	11.41	
WQTV	smf-2b	47.2505	11.41	
WQTV	smf-2b	47.5005	11.41	
WQTV	smf-2b	47.7505	11.41	
WQTV	smf-2b	48.0005	11.40	SMF-2b WQTV end
WQTV	smf-2b	48.2505	11.40	
WQTV	smf-2b	48.5005	11.40	
WQTV	smf-2b	48.7505	11.40	
WQTV	smf-2b	49.0005	11.40	
WQTV	smf-2b	49.2505	11.40	
WQTV	smf-2b	49.5005	11.40	
WQTV	smf-2b	49.7505	11.40	
WQTV	smf-2b	50.0005	11.40	
WQTV	smf-2b	50.2505	11.40	
WQTV	smf-2b	50.5005	11.40	
WQTV	smf-2b	50.7505	11.40	
WQTV	smf-2b	51.0005	11.40	
WQTV	smf-2b	51.2505	11.40	
WQTV	smf-2b	51.5005	11.40	
WQTV	smf-2b	51.7505	11.40	
WQTV	smf-2b	52.0005	11.40	
WQTV	smf-2b	52.2505	11.40	
WQTV	smf-2b	52.5005	11.40	
WQTV	smf-2b	52.7505	11.40	
WQTV	smf-2b	53.0005	11.40	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-2b	74.2505	11.40	
WQTV	smf-2b	74.5005	11.40	
WQTV	smf-2b	74.7505	11.40	
WQTV	smf-2b	75.0005	11.40	
WQTV	smf-2b	75.2505	11.40	
WQTV	smf-2b	75.5005	11.40	
WQTV	smf-2b	75.7505	11.40	
WQTV	smf-2b	76.0005	11.40	
WQTV	smf-2b	76.2505	11.40	
WQTV	smf-2b	76.5005	11.40	
WQTV	smf-2b	76.7505	11.40	
WQTV	smf-2b	77.0005	11.40	
WQTV	smf-2b	77.2505	11.40	
WQTV	smf-2b	77.5005	11.40	
WQTV	smf-2b	77.7505	11.40	
WQTV	smf-2b	78.0005	11.40	
WQTV	smf-2b	78.2505	11.40	
WQTV	smf-2b	78.5005	11.40	
WQTV	smf-2b	78.7505	11.40	
WQTV	smf-2b	79.0005	11.40	
WQTV	smf-2b	79.2505	11.40	
WQTV	smf-2b	79.5005	11.40	
WQTV	smf-2b	79.7505	11.40	
WQTV	smf-2b	80.0005	11.40	
WQTV	smf-2c	0.0000	12.77	SMF-2c WQTV begin
WQTV	smf-2c	0.2503	12.67	
WQTV	smf-2c	0.5010	12.57	
WQTV	smf-2c	0.7522	12.47	
WQTV	smf-2c	1.0013	12.41	
WQTV	smf-2c	1.2534	12.37	
WQTV	smf-2c	1.5063	12.35	
WQTV	smf-2c	1.7549	12.33	
WQTV	smf-2c	2.0038	12.31	
WQTV	smf-2c	2.2522	12.29	
WQTV	smf-2c	2.5005	12.27	
WQTV	smf-2c	2.7505	12.25	
WQTV	smf-2c	3.0005	12.24	
WQTV	smf-2c	3.2505	12.22	
WQTV	smf-2c	3.5005	12.21	
WQTV	smf-2c	3.7505	12.20	
WQTV	smf-2c	4.0005	12.18	
WQTV	smf-2c	4.2505	12.17	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-2c	4.5005	12.16
WQTV	smf-2c	4.7505	12.15
WQTV	smf-2c	5.0005	12.14
WQTV	smf-2c	5.2505	12.13
WQTV	smf-2c	5.5005	12.12
WQTV	smf-2c	5.7505	12.11
WQTV	smf-2c	6.0005	12.11
WQTV	smf-2c	6.2505	12.10
WQTV	smf-2c	6.5005	12.09
WQTV	smf-2c	6.7505	12.08
WQTV	smf-2c	7.0005	12.08
WQTV	smf-2c	7.2505	12.07
WQTV	smf-2c	7.5005	12.06
WQTV	smf-2c	7.7505	12.05
WQTV	smf-2c	8.0005	12.05
WQTV	smf-2c	8.2505	12.04
WQTV	smf-2c	8.5005	12.03
WQTV	smf-2c	8.7505	12.03
WQTV	smf-2c	9.0005	12.02
WQTV	smf-2c	9.2505	12.02
WQTV	smf-2c	9.5005	12.01
WQTV	smf-2c	9.7505	12.01
WQTV	smf-2c	10.0005	12.00
WQTV	smf-2c	10.2505	11.99
WQTV	smf-2c	10.5005	11.99
WQTV	smf-2c	10.7505	11.98
WQTV	smf-2c	11.0005	11.98
WQTV	smf-2c	11.2505	11.97
WQTV	smf-2c	11.5005	11.97
WQTV	smf-2c	11.7505	11.96
WQTV	smf-2c	12.0005	11.96
WQTV	smf-2c	12.2505	11.95
WQTV	smf-2c	12.5005	11.95
WQTV	smf-2c	12.7505	11.95
WQTV	smf-2c	13.0005	11.94
WQTV	smf-2c	13.2505	11.94
WQTV	smf-2c	13.5005	11.93
WQTV	smf-2c	13.7505	11.93
WQTV	smf-2c	14.0005	11.92
WQTV	smf-2c	14.2505	11.92
WQTV	smf-2c	14.5005	11.92
WQTV	smf-2c	14.7505	11.91

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-2c	15.0005	11.91	
WQTV	smf-2c	15.2505	11.91	
WQTV	smf-2c	15.5005	11.90	
WQTV	smf-2c	15.7505	11.90	
WQTV	smf-2c	16.0005	11.89	
WQTV	smf-2c	16.2505	11.89	
WQTV	smf-2c	16.5005	11.89	
WQTV	smf-2c	16.7505	11.88	
WQTV	smf-2c	17.0005	11.88	
WQTV	smf-2c	17.2505	11.88	
WQTV	smf-2c	17.5005	11.88	
WQTV	smf-2c	17.7505	11.87	
WQTV	smf-2c	18.0005	11.87	
WQTV	smf-2c	18.2505	11.87	
WQTV	smf-2c	18.5005	11.86	
WQTV	smf-2c	18.7505	11.86	
WQTV	smf-2c	19.0005	11.86	
WQTV	smf-2c	19.2505	11.85	SMF-2c WQTV end
WQTV	smf-2c	19.5005	11.85	
WQTV	smf-2c	19.7505	11.85	
WQTV	smf-2c	20.0005	11.85	
WQTV	smf-2c	20.2505	11.85	
WQTV	smf-2c	20.5005	11.85	
WQTV	smf-2c	20.7505	11.85	
WQTV	smf-2c	21.0005	11.85	
WQTV	smf-2c	21.2505	11.85	
WQTV	smf-2c	21.5005	11.85	
WQTV	smf-2c	21.7505	11.85	
WQTV	smf-2c	22.0005	11.85	
WQTV	smf-2c	22.2505	11.85	
WQTV	smf-2c	22.5005	11.85	
WQTV	smf-2c	22.7505	11.85	
WQTV	smf-2c	23.0005	11.85	
WQTV	smf-2c	23.2505	11.85	
WQTV	smf-2c	23.5005	11.85	
WQTV	smf-2c	23.7505	11.85	
WQTV	smf-2c	24.0005	11.85	
WQTV	smf-2c	24.2505	11.85	
WQTV	smf-2c	24.5005	11.85	
WQTV	smf-2c	24.7505	11.85	
WQTV	smf-2c	25.0005	11.85	
WQTV	smf-2c	25.2505	11.85	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-2c	78.0005	11.85	
WQTV	smf-2c	78.2505	11.85	
WQTV	smf-2c	78.5005	11.85	
WQTV	smf-2c	78.7505	11.85	
WQTV	smf-2c	79.0005	11.85	
WQTV	smf-2c	79.2505	11.85	
WQTV	smf-2c	79.5005	11.85	
WQTV	smf-2c	79.7505	11.85	
WQTV	smf-2c	80.0005	11.85	
WQTV	smf-3a	0.0000	13.00	SMF-3a WQTV begin
WQTV	smf-3a	0.2503	12.85	
WQTV	smf-3a	0.5010	12.74	
WQTV	smf-3a	0.7522	12.64	
WQTV	smf-3a	1.0013	12.56	
WQTV	smf-3a	1.2534	12.52	
WQTV	smf-3a	1.5063	12.49	
WQTV	smf-3a	1.7549	12.46	
WQTV	smf-3a	2.0038	12.44	
WQTV	smf-3a	2.2522	12.43	
WQTV	smf-3a	2.5005	12.41	
WQTV	smf-3a	2.7505	12.39	
WQTV	smf-3a	3.0005	12.38	
WQTV	smf-3a	3.2505	12.36	
WQTV	smf-3a	3.5005	12.34	
WQTV	smf-3a	3.7505	12.33	
WQTV	smf-3a	4.0005	12.31	
WQTV	smf-3a	4.2505	12.29	
WQTV	smf-3a	4.5005	12.28	
WQTV	smf-3a	4.7505	12.26	
WQTV	smf-3a	5.0005	12.25	
WQTV	smf-3a	5.2505	12.24	
WQTV	smf-3a	5.5005	12.23	
WQTV	smf-3a	5.7505	12.21	
WQTV	smf-3a	6.0005	12.20	
WQTV	smf-3a	6.2505	12.19	
WQTV	smf-3a	6.5005	12.18	
WQTV	smf-3a	6.7505	12.17	
WQTV	smf-3a	7.0005	12.16	
WQTV	smf-3a	7.2505	12.15	
WQTV	smf-3a	7.5005	12.15	
WQTV	smf-3a	7.7505	12.14	
WQTV	smf-3a	8.0005	12.13	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]	
WQTV	smf-3a	8.2505	12.12	
WQTV	smf-3a	8.5005	12.11	
WQTV	smf-3a	8.7505	12.10	
WQTV	smf-3a	9.0005	12.10	
WQTV	smf-3a	9.2505	12.09	
WQTV	smf-3a	9.5005	12.08	
WQTV	smf-3a	9.7505	12.07	
WQTV	smf-3a	10.0005	12.07	
WQTV	smf-3a	10.2505	12.06	
WQTV	smf-3a	10.5005	12.05	
WQTV	smf-3a	10.7505	12.05	
WQTV	smf-3a	11.0005	12.04	
WQTV	smf-3a	11.2505	12.04	
WQTV	smf-3a	11.5005	12.03	
WQTV	smf-3a	11.7505	12.02	
WQTV	smf-3a	12.0005	12.02	
WQTV	smf-3a	12.2505	12.01	
WQTV	smf-3a	12.5005	12.01	
WQTV	smf-3a	12.7505	12.00	
WQTV	smf-3a	13.0005	12.00	
WQTV	smf-3a	13.2505	11.99	
WQTV	smf-3a	13.5005	11.98	
WQTV	smf-3a	13.7505	11.98	
WQTV	smf-3a	14.0005	11.97	
WQTV	smf-3a	14.2505	11.97	
WQTV	smf-3a	14.5005	11.96	
WQTV	smf-3a	14.7505	11.96	
WQTV	smf-3a	15.0005	11.96	
WQTV	smf-3a	15.2505	11.95	
WQTV	smf-3a	15.5005	11.95	
WQTV	smf-3a	15.7505	11.94	
WQTV	smf-3a	16.0005	11.94	
WQTV	smf-3a	16.2505	11.93	
WQTV	smf-3a	16.5005	11.93	
WQTV	smf-3a	16.7505	11.93	
WQTV	smf-3a	17.0005	11.92	
WQTV	smf-3a	17.2505	11.92	
WQTV	smf-3a	17.5005	11.92	
WQTV	smf-3a	17.7505	11.91	
WQTV	smf-3a	18.0005	11.91	
WQTV	smf-3a	18.2505	11.90	SMF-3a WQTV end
WQTV	smf-3a	18.5005	11.90	

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-3a	71.2505	11.90
WQTV	smf-3a	71.5005	11.90
WQTV	smf-3a	71.7505	11.90
WQTV	smf-3a	72.0005	11.90
WQTV	smf-3a	72.2505	11.90
WQTV	smf-3a	72.5005	11.90
WQTV	smf-3a	72.7505	11.90
WQTV	smf-3a	73.0005	11.90
WQTV	smf-3a	73.2505	11.90
WQTV	smf-3a	73.5005	11.90
WQTV	smf-3a	73.7505	11.90
WQTV	smf-3a	74.0005	11.90
WQTV	smf-3a	74.2505	11.90
WQTV	smf-3a	74.5005	11.90
WQTV	smf-3a	74.7505	11.90
WQTV	smf-3a	75.0005	11.90
WQTV	smf-3a	75.2505	11.90
WQTV	smf-3a	75.5005	11.90
WQTV	smf-3a	75.7505	11.90
WQTV	smf-3a	76.0005	11.90
WQTV	smf-3a	76.2505	11.90
WQTV	smf-3a	76.5005	11.90
WQTV	smf-3a	76.7505	11.90
WQTV	smf-3a	77.0005	11.90
WQTV	smf-3a	77.2505	11.90
WQTV	smf-3a	77.5005	11.90
WQTV	smf-3a	77.7505	11.90
WQTV	smf-3a	78.0005	11.90
WQTV	smf-3a	78.2505	11.90
WQTV	smf-3a	78.5005	11.90
WQTV	smf-3a	78.7505	11.90
WQTV	smf-3a	79.0005	11.90
WQTV	smf-3a	79.2505	11.90
WQTV	smf-3a	79.5005	11.90
WQTV	smf-3a	79.7505	11.90
WQTV	smf-3a	80.0005	11.90
WQTV	smf-3b	0.0000	12.60
WQTV	smf-3b	0.2503	12.50
WQTV	smf-3b	0.5010	12.39
WQTV	smf-3b	0.7522	12.29
WQTV	smf-3b	1.0013	12.18
WQTV	smf-3b	1.2534	12.13

SMF-3b WQTV begin

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-3b	1.5063	12.09
WQTV	smf-3b	1.7549	12.06
WQTV	smf-3b	2.0038	12.04
WQTV	smf-3b	2.2522	12.02
WQTV	smf-3b	2.5005	12.01
WQTV	smf-3b	2.7505	11.99
WQTV	smf-3b	3.0005	11.98
WQTV	smf-3b	3.2505	11.96
WQTV	smf-3b	3.5005	11.95
WQTV	smf-3b	3.7505	11.94
WQTV	smf-3b	4.0005	11.93
WQTV	smf-3b	4.2505	11.92
WQTV	smf-3b	4.5005	11.91
WQTV	smf-3b	4.7505	11.90
WQTV	smf-3b	5.0005	11.89
WQTV	smf-3b	5.2505	11.88
WQTV	smf-3b	5.5005	11.87
WQTV	smf-3b	5.7505	11.86
WQTV	smf-3b	6.0005	11.86
WQTV	smf-3b	6.2505	11.85
WQTV	smf-3b	6.5005	11.84
WQTV	smf-3b	6.7505	11.83
WQTV	smf-3b	7.0005	11.83
WQTV	smf-3b	7.2505	11.82
WQTV	smf-3b	7.5005	11.81
WQTV	smf-3b	7.7505	11.81
WQTV	smf-3b	8.0005	11.80
WQTV	smf-3b	8.2505	11.79
WQTV	smf-3b	8.5005	11.79
WQTV	smf-3b	8.7505	11.78
WQTV	smf-3b	9.0005	11.78
WQTV	smf-3b	9.2505	11.77
WQTV	smf-3b	9.5005	11.76
WQTV	smf-3b	9.7505	11.76
WQTV	smf-3b	10.0005	11.75
WQTV	smf-3b	10.2505	11.74
WQTV	smf-3b	10.5005	11.74
WQTV	smf-3b	10.7505	11.73
WQTV	smf-3b	11.0005	11.73
WQTV	smf-3b	11.2505	11.72
WQTV	smf-3b	11.5005	11.71
WQTV	smf-3b	11.7505	11.71

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-3b	12.0005	11.70
WQTV	smf-3b	12.2505	11.69
WQTV	smf-3b	12.5005	11.69
WQTV	smf-3b	12.7505	11.68
WQTV	smf-3b	13.0005	11.67
WQTV	smf-3b	13.2505	11.67
WQTV	smf-3b	13.5005	11.66
WQTV	smf-3b	13.7505	11.65
WQTV	smf-3b	14.0005	11.65
WQTV	smf-3b	14.2505	11.64
WQTV	smf-3b	14.5005	11.63
WQTV	smf-3b	14.7505	11.63
WQTV	smf-3b	15.0005	11.62
WQTV	smf-3b	15.2505	11.62
WQTV	smf-3b	15.5005	11.61
WQTV	smf-3b	15.7505	11.61
WQTV	smf-3b	16.0005	11.60
WQTV	smf-3b	16.2505	11.59
WQTV	smf-3b	16.5005	11.59
WQTV	smf-3b	16.7505	11.58
WQTV	smf-3b	17.0005	11.58
WQTV	smf-3b	17.2505	11.57
WQTV	smf-3b	17.5005	11.57
WQTV	smf-3b	17.7505	11.57
WQTV	smf-3b	18.0005	11.56
WQTV	smf-3b	18.2505	11.56
WQTV	smf-3b	18.5005	11.55
WQTV	smf-3b	18.7505	11.55
WQTV	smf-3b	19.0005	11.54
WQTV	smf-3b	19.2505	11.54
WQTV	smf-3b	19.5005	11.53
WQTV	smf-3b	19.7505	11.53
WQTV	smf-3b	20.0005	11.53
WQTV	smf-3b	20.2505	11.52
WQTV	smf-3b	20.5005	11.52
WQTV	smf-3b	20.7505	11.52
WQTV	smf-3b	21.0005	11.51
WQTV	smf-3b	21.2505	11.51
WQTV	smf-3b	21.5005	11.51
WQTV	smf-3b	21.7505	11.50
WQTV	smf-3b	22.0005	11.50
WQTV	smf-3b	22.2505	11.49

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-3b	22.5005	11.49
WQTV	smf-3b	22.7505	11.49
WQTV	smf-3b	23.0005	11.49
WQTV	smf-3b	23.2505	11.48
WQTV	smf-3b	23.5005	11.48
WQTV	smf-3b	23.7505	11.48
WQTV	smf-3b	24.0005	11.47
WQTV	smf-3b	24.2505	11.47
WQTV	smf-3b	24.5005	11.47
WQTV	smf-3b	24.7505	11.46
WQTV	smf-3b	25.0005	11.46
WQTV	smf-3b	25.2505	11.46
WQTV	smf-3b	25.5005	11.46
WQTV	smf-3b	25.7505	11.45
WQTV	smf-3b	26.0005	11.45
WQTV	smf-3b	26.2505	11.45
WQTV	smf-3b	26.5005	11.44
WQTV	smf-3b	26.7505	11.44
WQTV	smf-3b	27.0005	11.44
WQTV	smf-3b	27.2505	11.44
WQTV	smf-3b	27.5005	11.43
WQTV	smf-3b	27.7505	11.43
WQTV	smf-3b	28.0005	11.43
WQTV	smf-3b	28.2505	11.43
WQTV	smf-3b	28.5005	11.42
WQTV	smf-3b	28.7505	11.42
WQTV	smf-3b	29.0005	11.42
WQTV	smf-3b	29.2505	11.42
WQTV	smf-3b	29.5005	11.41
WQTV	smf-3b	29.7505	11.41
WQTV	smf-3b	30.0005	11.41
WQTV	smf-3b	30.2505	11.41
WQTV	smf-3b	30.5005	11.40
WQTV	smf-3b	30.7505	11.40
WQTV	smf-3b	31.0005	11.40
WQTV	smf-3b	31.2505	11.40
WQTV	smf-3b	31.5005	11.40
WQTV	smf-3b	31.7505	11.39
WQTV	smf-3b	32.0005	11.39
WQTV	smf-3b	32.2505	11.39
WQTV	smf-3b	32.5005	11.39
WQTV	smf-3b	32.7505	11.39

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-3b	33.0005	11.38
WQTV	smf-3b	33.2505	11.38
WQTV	smf-3b	33.5005	11.38
WQTV	smf-3b	33.7505	11.38
WQTV	smf-3b	34.0005	11.38
WQTV	smf-3b	34.2505	11.37
WQTV	smf-3b	34.5005	11.37
WQTV	smf-3b	34.7505	11.37
WQTV	smf-3b	35.0005	11.37
WQTV	smf-3b	35.2505	11.37
WQTV	smf-3b	35.5005	11.36
WQTV	smf-3b	35.7505	11.36
WQTV	smf-3b	36.0005	11.36
WQTV	smf-3b	36.2505	11.36
WQTV	smf-3b	36.5005	11.36
WQTV	smf-3b	36.7505	11.36
WQTV	smf-3b	37.0005	11.35
WQTV	smf-3b	37.2505	11.35
WQTV	smf-3b	37.5005	11.35
WQTV	smf-3b	37.7505	11.35
WQTV	smf-3b	38.0005	11.35
WQTV	smf-3b	38.2505	11.35
WQTV	smf-3b	38.5005	11.34
WQTV	smf-3b	38.7505	11.34
WQTV	smf-3b	39.0005	11.34
WQTV	smf-3b	39.2505	11.34
WQTV	smf-3b	39.5005	11.34
WQTV	smf-3b	39.7505	11.34
WQTV	smf-3b	40.0005	11.33
WQTV	smf-3b	40.2505	11.33
WQTV	smf-3b	40.5005	11.33
WQTV	smf-3b	40.7505	11.33
WQTV	smf-3b	41.0005	11.33
WQTV	smf-3b	41.2505	11.33
WQTV	smf-3b	41.5005	11.33
WQTV	smf-3b	41.7505	11.32
WQTV	smf-3b	42.0005	11.32
WQTV	smf-3b	42.2505	11.32
WQTV	smf-3b	42.5005	11.32
WQTV	smf-3b	42.7505	11.32
WQTV	smf-3b	43.0005	11.32
WQTV	smf-3b	43.2505	11.32

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-3b	43.5005	11.31
WQTV	smf-3b	43.7505	11.31
WQTV	smf-3b	44.0005	11.31
WQTV	smf-3b	44.2505	11.31
WQTV	smf-3b	44.5005	11.31
WQTV	smf-3b	44.7505	11.31
WQTV	smf-3b	45.0005	11.31
WQTV	smf-3b	45.2505	11.31
WQTV	smf-3b	45.5005	11.30
WQTV	smf-3b	45.7505	11.30
WQTV	smf-3b	46.0005	11.30
WQTV	smf-3b	46.2505	11.30
WQTV	smf-3b	46.5005	11.30
WQTV	smf-3b	46.7505	11.30
WQTV	smf-3b	47.0005	11.30
WQTV	smf-3b	47.2505	11.30
WQTV	smf-3b	47.5005	11.29
WQTV	smf-3b	47.7505	11.29
WQTV	smf-3b	48.0005	11.29
WQTV	smf-3b	48.2505	11.29
WQTV	smf-3b	48.5005	11.29
WQTV	smf-3b	48.7505	11.29
WQTV	smf-3b	49.0005	11.29
WQTV	smf-3b	49.2505	11.29
WQTV	smf-3b	49.5005	11.29
WQTV	smf-3b	49.7505	11.28
WQTV	smf-3b	50.0005	11.28
WQTV	smf-3b	50.2505	11.28
WQTV	smf-3b	50.5005	11.28
WQTV	smf-3b	50.7505	11.28
WQTV	smf-3b	51.0005	11.28
WQTV	smf-3b	51.2505	11.28
WQTV	smf-3b	51.5005	11.28
WQTV	smf-3b	51.7505	11.28
WQTV	smf-3b	52.0005	11.27
WQTV	smf-3b	52.2505	11.27
WQTV	smf-3b	52.5005	11.27
WQTV	smf-3b	52.7505	11.27
WQTV	smf-3b	53.0005	11.27
WQTV	smf-3b	53.2505	11.27
WQTV	smf-3b	53.5005	11.27
WQTV	smf-3b	53.7505	11.27

WQTV Recovery Analysis

Sim	Node Name	Relative Time [hrs]	Stage [ft]
WQTV	smf-3b	54.0005	11.27
WQTV	smf-3b	54.2505	11.27
WQTV	smf-3b	54.5005	11.27
WQTV	smf-3b	54.7505	11.26
WQTV	smf-3b	55.0005	11.26
WQTV	smf-3b	55.2505	11.26
WQTV	smf-3b	55.5005	11.26
WQTV	smf-3b	55.7505	11.26
WQTV	smf-3b	56.0005	11.26
WQTV	smf-3b	56.2505	11.26
WQTV	smf-3b	56.5005	11.26
WQTV	smf-3b	56.7505	11.26
WQTV	smf-3b	57.0005	11.26
WQTV	smf-3b	57.2505	11.25
WQTV	smf-3b	57.5005	11.25
WQTV	smf-3b	57.7505	11.25
WQTV	smf-3b	58.0005	11.25
WQTV	smf-3b	58.2505	11.25
WQTV	smf-3b	58.5005	11.25
WQTV	smf-3b	58.7505	11.25
WQTV	smf-3b	59.0005	11.25
WQTV	smf-3b	59.2505	11.25
WQTV	smf-3b	59.5005	11.25
WQTV	smf-3b	59.7505	11.25
WQTV	smf-3b	60.0005	11.25
WQTV	smf-3b	60.2505	11.25
WQTV	smf-3b	60.5005	11.25
WQTV	smf-3b	60.7505	11.25
WQTV	smf-3b	61.0005	11.25
WQTV	smf-3b	61.2505	11.25
WQTV	smf-3b	61.5005	11.25
WQTV	smf-3b	61.7505	11.25
WQTV	smf-3b	62.0005	11.25
WQTV	smf-3b	62.2505	11.25
WQTV	smf-3b	62.5005	11.25
WQTV	smf-3b	62.7505	11.25
WQTV	smf-3b	63.0005	11.25
WQTV	smf-3b	63.2505	11.25
WQTV	smf-3b	63.5005	11.25
WQTV	smf-3b	63.7505	11.25
WQTV	smf-3b	64.0005	11.25
WQTV	smf-3b	64.2505	11.25

SMF-3b WQTV end

Appendix B

Operation and Maintenance Requirements and
Erosion and Sedimentation Control Requirements

Proposed operation and maintenance and soil erosion and sediment control practices are outlined in the following paragraphs.

Surface water Management Facilities

The man-made surface water facility shall be maintained free of sediments and debris. Areas shall be inspected on a routine basis and nuisance plants shall be removed a minimum of twice annually. Grassed areas shall be mowed a minimum of 6 times per year. The natural systems shall be least disturbed as possible. Minimal maintenance is required for the natural and undisturbed areas. All ponds shall be inspected monthly. Monthly documentation shall be noted based upon the inspection findings.

Erosion Control

All erosion damage at spillways, outfall structures, and along pond side slopes shall be repaired (grading and grassing) as conditions occur. All side slopes and other areas disturbed by construction shall be stabilized by sodding, hydro-mulching or other appropriate vegetative or non-vegetative erosion control measures.

Swale/Ditch

All swales, if any, shall be maintained free of debris and sediment. Sediments shall be removed when the depth has been reduced by 20 percent. Sediments removed from swales/ditches should be evenly spread over grassed areas away from the stormwater management facilities.

Culverts, Pipes and Structures

All pipes, if any, shall be inspected bi-annually. Culverts and pipes shall be maintained free of debris and sediment. Sediments removed from culverts and pipes should be evenly spread over grassed areas away from the stormwater management facilities.

The structures and paved flow lines, if any, shall be maintained clear of debris. Remove any debris and silt collected in inlets and pipes as routine inspections dictates.

Inspection Reporting

Annual inspection reports, prepared by a properly licensed professional engineer, should be submitted to the water management district as appropriate. The engineer shall inspect the site and report on the status and function of the system. Noted deficiencies and/or maintenance requirements shall be reported to the owner with recommendations for repairs. Repairs shall be executed.

Limerock/Sinkhole

If continuous limerock is encountered during excavation of the swales/pond or if a sinkhole forms in the area of a drainage swale/pond the engineer of record shall be notified by either the contractor or the established operation and maintenance entity. The engineer of record shall inspect the repaired area upon completion of the repair.

Where continuous limerock is encountered during excavation of the swales/ponds, the limerock shall be over excavated by 2 feet and replaced with clayey soils that extend 2 feet beyond the perimeter of the limerock outcropping. The clayey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum.

All swales/ponds shall be inspected monthly for sinkhole occurrence. Should a sinkhole occur, the area shall be repaired as soon as possible. Repair shall include filling (limerock such as road base material, clay/sand mixture, or concrete if necessary). A 2-foot deep cap that extends 2 feet beyond the perimeter of the sinkhole shall be constructed with clayey soils. The clayey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum. The clay soil cap shall be re-graded to prevent concentration of waters (ponding) and re-vegetated.

Outfall Structures

All outfall and drawdown orifices are to be inspected bi-annually for sediment or debris in the flow line of weirs or orifices. All sediment and debris should be removed and disposed of in an approved manner.

Operation & Maintenance Entity:

Clay County
P.O. Box 1366
Green Cove Springs, FL 32043

Appendix C

Geotechnical Report

Engineering & Consulting, Inc.

SUMMARY REPORT OF A GEOTECHNICAL SITE EXPLORATION

PROPOSED CLAY COUNTY ECONOMIC DEVELOPMENT OFFICE GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA

GSE PROJECT NO. 16102

Prepared For:

WALKER ARCHITECTS

JULY 2023

GSE Engineering & Consulting, Inc.

July 10, 2023

Gaurav Lohiya, Principal
Walker Architects
2035 NW 13th Street
Gainesville, Florida 32609

Subject: Summary Report of a Geotechnical Site Exploration
Proposed Clay County Economic Development Office
Green Cove Springs, Clay County, Florida
GSE Project No. 16102

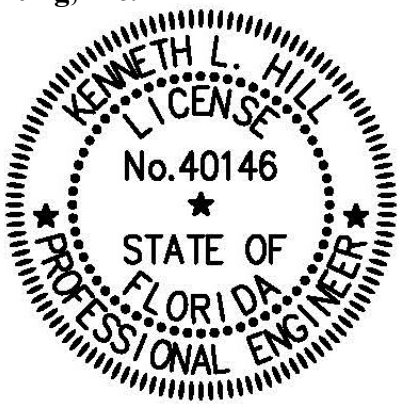
GSE Engineering & Consulting, Inc. (GSE) is pleased to submit this geotechnical site exploration report for the above referenced project.

Presented herein are the findings and conclusions of our exploration, including the geotechnical parameters and recommendations to assist with building foundation, pavement, and stormwater management designs.

GSE appreciates this opportunity to have assisted you on this project. If you have any questions or comments concerning this report, please contact us.

Sincerely,

GSE Engineering & Consulting, Inc.



This item has been digitally signed and sealed by

on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Angelina X. Liu, E.I.
Staff Engineer

Kenneth L. Hill, P.E.
Principal Engineer
Florida Registration No. 40146

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1.0 INTRODUCTION

1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed Clay County Economic Development office in Green Cove Springs, Clay County, Florida. This exploration was performed in accordance with GSE Proposal No. 2023-176 (Rev.2) dated March 22, 2023. Gaurav Lohiya, Principal of Walker Architects, authorized our services on March 22, 2023.

1.2 Project Description

This project consists of a four-story building and associated improvements. The site is located at the south corner of the U.S. Highway 17 and Walburg Street intersection in Green Cove Springs, Clay County, Florida (Figure 1).

Walker Architects provided information about the project and survey of the existing site conditions. The project will consist of a four-story building with a 20,000 square ground floor area (80,000 square feet total area). The building will be constructed in two phases, with two stories initially constructed and two stories planned for the future. The project is also expected to include a parking lot and underground stormwater management facilities. You provided preliminary site plans that show the layout of the proposed improvements.

We anticipate the structure will be either concrete masonry unit or steel and concrete frame construction. Preliminary structural loads were provided and will be on the order of 4 to 10 kips per foot for load bearing walls, and less than 500 kips for columns. Based on the encountered groundwater depth, we anticipate the finished floor of the structure will be set about 2 feet above the existing site grades.

A recent aerial photograph of the site was obtained and reviewed. The site plan and aerial photograph were used in preparation of this exploration and report.

1.3 Purpose

The purpose of this geotechnical exploration was to determine the general subsurface conditions, evaluate these conditions with respect to the proposed construction, and prepare geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs.

2.0 FIELD AND LABORATORY TESTS

2.1 General Description

The procedures used for field sampling and testing are in general accordance with industry standards of care and established geotechnical engineering practices for this geographic region. This exploration consisted of performing six (6) Standard Penetration Test (SPT) borings to a depth of 40 feet below land surface (bls) within the proposed building area, and six (6) auger borings to a depth of 15 feet bls within the proposed underground stormwater management facilities and pavement areas.

The soil borings were performed at the approximate locations as shown on Figure 2. The borings were located at the site using the provided site plan, Global Positioning System (GPS) coordinates, and obvious site features as reference. The boring locations should be considered approximate. The soil borings were performed from June 22 to 26, 2023.

2.2 Auger Borings

The auger borings were performed in accordance with ASTM D1452. The borings were performed with flight auger equipment that was rotated into the ground in a manner that reduces soil disturbance. After penetrating to the required depth, the auger was retracted and the soils collected on the auger flights were field classified and placed in sealed containers. Representative samples of each stratum were retained from the auger boring. Results from the auger borings are provided in Section 5.1.

2.3 Standard Penetration Test Borings

The soil borings were performed with a drill rig employing flight auger drilling techniques and Standard Penetration Testing (SPT) in accordance with ASTM D1586. The SPTs were performed continuously to 10 feet and at 5-foot intervals thereafter. Soil samples were obtained at the depths where the SPTs were performed. The soil samples were classified in the field, placed in sealed containers, and returned to our laboratory for further evaluation.

After drilling to the sampling depth, the standard two-inch O.D. split-barrel sampler was seated by driving it 6 inches into the undisturbed soil. The sampler was then driven an additional 12 inches by blows of a 140-pound hammer falling 30 inches. The number of blows required to produce the next 12 inches of penetration were recorded as the penetration resistance (N-value). These values and the complete SPT boring logs are provided in Section 5.2.

Upon completion of the sampling, the boreholes were abandoned in accordance with Water Management District guidelines.

2.4 Soil Laboratory Tests

The soil samples recovered from the soil borings were returned to our laboratory, and examined to confirm the field descriptions. Representative samples were then selected for laboratory testing. The laboratory tests consisted of nine (9) percent soil fines passing the No. 200 sieve determinations, nine (9) natural moisture content determinations, and four (4) constant head hydraulic conductivity tests. These tests were performed in order to aid in classifying the soils and to further evaluate their engineering properties. The laboratory tests are provided in Section 5.3.

3.0 FINDINGS

3.1 Surface Conditions

Angelina X Liu, E.I. with GSE visited the site on June 9, 2023 to observe the site conditions and mark the boring locations.

The site is open and easily accessible. There is an existing one-story building near the center of the site, with a parking lot in the eastern portion of the site. The western portion of the site is a mowed lawn. The site is bordered by Palmetto Avenue to the northwest, by Walburg Street to northeast, and by U.S. Highway 17 to the southeast. Developed land border the site on the south.

The topography at the site is relatively flat. Regional topography is gently to moderately sloping. The provided topographic survey indicates the ground surface elevations at the site are near 12 to 14 feet[1], very gently sloping down to the west.

3.2 Subsurface Conditions

The locations of the auger and SPT borings are provided on Figure 2. Complete logs for the borings are provided in Sections 5.1 and 5.2. Descriptions for the soils encountered are accompanied by the Unified Soil Classification System symbol (SM, SP-SM, etc.) and are based on visual examination of the recovered soil samples and the laboratory tests performed. Stratification boundaries between the soil types should be considered approximate, as the actual transition between soil types may be gradual.

The auger borings P-1 to P-5 located in the exist pavement area encountered surficial asphalt overlying limerock base course. The asphalt was 0.75 to 2.0 inches thick, and the limerock was approximately 3.5 to 5.0 inches thick.

The auger borings located in the proposed parking lot, driveways, and underground stormwater management facility areas encountered relatively consistent soil conditions. Auger borings initially encountered 1 to 2.5 feet of silty sand (SM) overlying sand with silt, and poorly graded sand (SP, SP-SM) to the explored depths of 15 feet bls.

The SPT borings located within the proposed building area generally encountered soil conditions similar to those in the stormwater management facility borings. The borings initially encountered 22 to 29 feet of silty sand, sand with silt, poorly graded sand, and sand with silt and clay (SM, SP-SM, SP, SP-SM/SC). This was underlain by silty clayey sand, sand with silt and clay, poorly graded sand (SM-SC, SP-SM/SC, SP) with 3 to 9 feet of interbedded layers of clay-rich soils (CL/CH) to the explored depths of 40 feet bls.

The layers of poorly graded sand, sand with silt, sand with silt and clay and silty sand (SP, SP-SM, SP-SM/SC, SM) are generally in a very loose to very dense condition with N-values ranging from 0 to over 50 blows per foot. The underlying silty clayey sand (SM-SC) is generally in a very loose to medium dense condition with N-values ranging from 1 to 21 blows per foot. The clay-rich soils (CL/CH) are generally in a soft to stiff condition with N-values ranging from 3 to 10 blows per foot.

[1] Conceptual Layout, Sheet No. C-1, Project Number 23-0204.

Weight-of-hammer strength materials were encountered in boring B-3 at depths from 34.5 to 36 feet bls, and boring B-6 at depths from 39 to 40 feet bls. Overall, the borings encountered a lower relative soil strength profile within the clay-rich soil layers.

The groundwater table was encountered in the auger and SPT borings at depths of 2.5 to 3.5 feet bls at the time of our investigation.

3.3 Review of Published Data

The majority of the site is mapped as one soil series by the Soil Conservation Service (SCS) Soil Survey for Clay County[2]. The following soil description is from the Soil Survey.

Leon fine sand – This soil is nearly level and poorly drained. It is in broad areas on the flatwoods. The mapped areas are irregular in shape or elongated and range from 10 to 100 acres. Slopes are smooth and range from 0-2 percent.

Typically, this soil has a surface layer of very dark gray fine sand about 4 inches thick. The subsurface layer, to a depth of about 16 inches, is light gray fine sand. The subsoil is fine sand. The upper part, to a depth of 20 inches, is black. The sand grains are well coated with organic material. The next layer, to a depth of 26 inches, is very dark grayish brown with organic coatings on the sand grains. Below that layer, to depth of 67 inches, the subsoil is dark brown. The low part to a depth of 80 inches, is black with organic coatings on most of the sand grains.

Included with this soil in mapping are small areas of Lynn Haven, Mandarin, Ona, Pottsburg, and Sapelo soils. Also included are soils that are similar to Leon soil, but they are very poorly drained and have a thick surface layer. The included soils make up about 20 percent or less of the map unit.

This soil has a high-water table at a depth of less than 12 inches for 1 to 4 months during most years. It recedes to a depth of more than 40 inches during very dry periods. The available water capacity is low. The permeability is moderate or moderately rapid.

3.4 Laboratory Soil Analysis

Selected soil samples recovered from the soil borings were analyzed for the percent soil fines passing the No. 200 sieve, natural moisture content, and hydraulic conductivity. Samples selected for laboratory testing were collected at depths ranging from 0.5 to 30 feet bls. These tests were performed to confirm visual soil classification and evaluate their engineering properties. The complete laboratory report is provided in Section 5.3.

The laboratory tests indicate the tested soils consist of poorly graded sand (SP), sand with silt (SP-SM), and clay (CL/CH). The tested poorly graded sand (SP) contains approximately 2.8 percent soil fines passing the No. 200 sieve with a natural moisture content of about 29 percent.

The tested sand with silt (SP-SM) contains approximately 5.5 to11 percent soil fines passing the No. 200 sieve with natural moisture contents of about 8.8 to 21 percent. The tested clay (CH) contains approximately 89 percent soil fines passing the No. 200 sieve with a natural moisture content of about 64 percent.

[2] Soil Survey of Hamilton County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

The constant head hydraulic conductivity test results indicate the tested sand with silt (SP-SM) has hydraulic conductivity values of 2.6 to 10 feet per day.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General

The following recommendations are made based upon our understanding of the proposed construction, a review of the attached soil borings and laboratory test data, and experience with similar projects and subsurface conditions. If plans or the location of proposed construction changes from those discussed previously, GSE requests the opportunity to review and possibly amend our recommendations with respect to those changes.

The final design of a foundation system is dependent upon adequate integration of geotechnical and structural engineering considerations. Consequently, GSE must review the final foundation design in order to evaluate the effectiveness and applicability of our initial analyses, and to determine if additional recommendations may be warranted. Without such a review, the recommendations presented herein could be misinterpreted or misapplied resulting in potentially unacceptable performance of the foundation system.

The performance of site improvements may be sensitive to their post-construction relationship to site groundwater levels, seepage zones, or soil/rock characteristics exposed at final site grades. GSE recommends that use of boring information for final design of all site improvements be predicated on proper horizontal and vertical control of borings.

In this section of the report, we present our geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs as well as our general site preparation guidelines.

4.2 Groundwater

The groundwater table was encountered in the auger and SPT borings at depths of 2.5 to 3.5 feet bls at the time of our exploration. We anticipate the seasonal high groundwater table to be 2 to 2.5 feet bls. Estimates for the seasonal high groundwater tables are presented on the individual boring logs.

4.3 Building Foundations

The soil borings near the proposed building footprint encountered relatively consistent soil conditions. The borings initially encountered 22 to 29 feet of silty sand, sand with silt, poorly graded sand, and sand with silt and clay (SM, SP-SM, SP, SP-SM/SC). This was underlain by silty clayey sand, sand with silt and clay, poorly graded sand (SM-SC, SP-SM/SC, SP) with 3 to 9 feet of interbedded layers of clay-rich soils (CL/CH) to the explored depths of 20 feet bls.

Based upon the soil conditions encountered and our limited understanding of the structural loads and site grading, we recommend the building be supported by conventional, shallow strip and/or spread foundations. We recommend the shallow foundations be designed for a maximum allowable gross bearing pressure of 4,000 psf. The gross bearing pressure is defined as the soil contact pressure that can be imposed from the maximum structural loads, weight of the concrete foundations, and weight of the soil above the foundations. The foundations should be designed based upon the maximum load that could be imposed by all loading conditions.

The foundations should be embedded a minimum of 18 inches below the lowest adjacent grade. Interior foundations or thickened sections should be embedded a minimum of 12 inches. The foundations should have minimum widths of 18 inches for strip footings, and 24 inches for columns, even though the maximum soil bearing pressure may not be fully developed.

Due to the mostly sandy nature of the majority of the near-surface soils, we expect settlement to be mostly elastic in nature. The majority of the settlement will occur on application of the loads, during and immediately following construction. Using the recommended maximum bearing pressure, the assumed maximum structural loads, and the field and laboratory test data which we have correlated into the strength and compressibility characteristics of the subsurface soils, we estimate the total settlements of the structure to be 1 inch or less, with approximately half of it occurring upon load application (during construction).

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. For the building pad prepared as recommended, we anticipate differential settlement of less than 1/2 inch.

Post-construction settlement of the structures will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundation; (3) site preparation and earthwork construction techniques used by the contractor, and (4) external factors, including but not limited to vibration from off-site sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present.

Our settlement estimates for the structure are based upon our limited understanding of the structural loads and site grading and the use of successful adherence to the site preparation recommendations presented later in this report. Any deviation from our project understanding and/or our site preparation recommendations could result in an increase in the estimated post-construction settlement of the structure.

4.4 Flexible Pavement

Overall soil conditions encountered by our borings at this site are suitable for supporting conventional limerock base and asphalt wearing surface pavements. We have not been provided the anticipated traffic loading conditions; therefore, the following pavement component recommendations should be used only as guidelines. The below recommendations are intended to be minimums. Increasing base course and asphalt thicknesses would increase the design life of the pavement.

We recommend a minimum of either 12 to 24 inches of separation (depending upon the pavement section design) be present between the bottom of the base course and the estimated seasonal high groundwater table. If this separation cannot be achieved by site grading, GSE recommends underdrains be used beneath the base course.

4.4.1 Stabilized Subgrade

If a crushed limerock or recycled concrete base is used, we recommend a stabilized subgrade be located beneath the base. The stabilized subgrade should have a minimum Limerock Bearing Ratio (LBR) of 40, with minimum thicknesses of 6 inches for automobile parking areas and 12 inches for driveways.

The stabilized subgrade can be imported material or a mixture of imported and on-site material. If a mix is proposed, a mix design should be performed to determine the optimum mix proportions. The stabilized subgrade should be compacted to a minimum of 98 percent of the Modified Proctor maximum dry density (ASTM D1557) for soils with less than 15 percent fines content. Soils with 15 percent or greater fines content should be compacted to 100 percent of the Standard Proctor maximum dry density (ASTM D698).

4.4.2 Base Course

The base course can consist of either crushed limerock, soil cement, or recycled concrete. If you should use a soil cement base course, a stabilized subgrade is not required.

Limerock should have a LBR of at least 100, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 6 inches in automobile parking areas, and 8 inches in driveway areas. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 24 inches separation between the bottom of the limerock base course and the estimated seasonal high-water table. If site grading does not allow for this separation, we recommend underdrains be considered.

Soil cement can consist of an imported material or a blend of the on-site soils and cement. A mix design should be performed to determine the optimum cement content. We recommend the soil cement have a minimum 28-day compressive strength of 500 psi. Soil cement can be blended off-site (in a pug mill) or on site. Soil cement pills should be cast from each day's production to verify the recommended compressive strength has been achieved at 28 days. We recommend the soil cement base course be a minimum of 8 inches thick throughout the project. We recommend a minimum 18 inches separation between the bottom of the soil cement base course and the estimated seasonal high water table. If site grading does not allow for this separation, we recommend underdrains be considered.

Recycled concrete should have an LBR of at least 150, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 8 inches. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 12 inches separation between the bottom of the recycled concrete base course and the estimated seasonal high water table. If site grading does not allow for this separation, we recommend underdrains be considered.

4.4.3 Wearing Surface

The asphalt-wearing surface should consist of an FDOT Type SP Hot Mix Asphalt mixture. For automobile parking areas, the thickness should be a minimum of 1.5 inches. For driveway areas, the thickness should be a minimum of 2 inches. The asphalt-wearing surface should consist of an SP-12.5 mix. The asphalt should be compacted to at least 95 percent of the mix design density.

The constructability of differing asphalt thicknesses may be difficult, and having a uniform 2-inch-thick asphalt wearing surface may be more practical.

4.5 Rigid Pavement

Concrete pavement is a rigid pavement that results in smaller load transfers to the subgrade soils than flexible pavement. For concrete pavement subgrade, we recommend using the existing surficial sands or recommended clean sand (SP) fill, compacted to at least 98 percent of the Modified Proctor maximum dry density without additional stabilization with the following stipulations:

1. Subgrade soils must be compacted to at least 98 percent of Modified Proctor maximum dry density to a depth of at least 2 feet prior to placement of concrete.
2. The surface of the subgrade soils must be smooth and any disturbances or wheel rutting corrected prior to placement of the concrete.
3. The subgrade soils must be moistened prior to placement of concrete.
4. Concrete pavement thickness should be uniform throughout, with the exception of thickened edges (curb or footing).
5. The bottom of the pavement should be separated from the estimated seasonal high groundwater level by at least 18 inches.
6. Limerock or any other impermeable base is not suitable unless it meets the minimum recommended permeability of 10 ft/day.
7. The upper 12 inches of subgrade underlying the base course must also be "free-draining" and water that enters the base and subgrade must be allowed to seep out by gravity or if this is not possible, underdrains must be incorporated into the subgrade. A "bathtub" condition within the base/subgrade must be avoided.

Our recommendations for slab thickness for heavy-duty concrete pavements is based on a.) subgrade soils are compacted to 98 percent of the Modified Proctor maximum dry density, b.) modulus of subgrade reaction (k) of 200 pounds per cubic inch, c.) a 20-year design life, and d.) previously stated design parameters. For an anticipated heavy-duty traffic group, a minimum pavement thickness of 8 inches is recommended, using Table 3.4 from the FDOT *Rigid Pavement Design Manual*, January 2019. For a light-duty traffic group, a minimum pavement thickness of 5.5 inches is recommended, using Table 2.4 from the ACI 330 Guide for Design and Construction of Concrete Parking Lots, ACI 330R-01.

We recommend using concrete with a minimum 28-day compressive strength of 4,000 pounds per square inch and a minimum 28-day flexural strength (modulus of rupture) of at least 600 pounds per square inch based on the third point loading of concrete beam test samples. Minimum control joint spacing of 15 by 15 feet is suggested for heavy duty and 12.5 by 12.5 feet for light duty. Layout of sawcut control joints should form square panels, and the depth of sawcut joint should be at least 1/4 of the concrete slab thickness (a minimum 2-inch sawcut control joint depth for the recommended 8-inch slab thickness). The joints should be sawed within six hours of concrete placement or as soon as the concrete has developed sufficient strength to support workers and equipment.

For further details on concrete pavement construction, refer to "Guide to Jointing Non-reinforced Concrete Pavements" published by the Florida Concrete and Products Associates, Inc. and "Building Quality Concrete Parking Areas", published by the Portland Cement Association.

4.6 Site Preparation

The soils at this site should be suitable for supporting the proposed construction using normal, good practice site preparation procedures. The following recommendations are our general guidelines for site preparation.

4.6.1 Stripping

Strip the construction limits and 10 feet beyond the perimeter of all grass, roots, topsoil, pavement, and other deleterious materials. You should expect to strip to depths of 12 or more inches. Deeper stripping will likely be necessary due to major root systems present at the site.

4.6.2 Dewatering

Temporary dewatering maybe necessary for this project. However, if needed, we anticipate dewatering can be accomplished with sumps placed near the construction area, or with underdrains connected to a vacuum pump.

In any case, the site should always be graded to promote runoff and limit the amount of ponding. Localized ponding of stormwater is expected without proper grading during construction, and could render previously acceptable surfaces unacceptable.

4.6.3 Proof-Rolling

Proof-roll the subgrade with heavy rubber-tired equipment, such as a loaded front-end loader or dump truck, to identify any loose or soft zones not found by the soil borings. The proof-rolling should be monitored by a geotechnical engineer or qualified technician. Undercut or otherwise treat these zones as recommended by the geotechnical engineer in this report.

4.6.4 Proof Compaction

Compact the subgrade to a density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). The specified compaction should be obtained to a depth of **2 feet** below the foundation bottoms and the existing grade prior to placing fill. Vibratory roller equipment should not be used within approximately 100 feet of existing structures. Lighter “walk-behind” compaction equipment may be used to achieve the degree of compaction.

Should clayey sand be encountered at the bearing surface, this material should be probed and visually confirmed to be unyielding in the upper 12 inches in lieu of density testing. If the foundation excavations penetrate the clayey sand, the excavation should be performed in a manner that reduces soil disturbance. Clayey sand soils (with fines content in excess of 15 percent) that are removed and replaced or appreciably disturbed need to be re-compacted to 98 percent of the Standard Proctor maximum dry density (ASTM D698).

4.6.5 Fill Placement

Imported fill placed to raise the site grades should consist of clean sand having less than 10 percent passing the No. 200 sieve. On-site soils meeting the requirements of Section 4.9 may also be used as structural fill. The fill should be placed in maximum 12-inch loose lifts that are compacted to at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). If lighter “walk-behind” compaction equipment is used, this may require lifts of 4 inches or less to achieve the required degree of compaction.

4.7 Quality Control and Construction Materials Testing

It should be noted that the geotechnical engineering design does not end with the advertisement of the construction documents. As the geotechnical engineer of record, GSE is the most qualified to perform the construction materials testing that will be required for this project. The benefits of having the geotechnical engineer of record also perform the construction materials testing are numerous. If GSE continues to be involved with the project through construction, we will be able to constantly re-evaluate and possibly alter our geotechnical recommendations in a timely and cost-effective manner once final design and construction techniques are developed. This often results in cost savings for the project.

We recommend performing compaction testing beneath the concrete floor slab and the building foundations. We recommend one test be performed every 50 linear feet of continuous footing and every other column footing, per foot depth of fill or native material. We recommend a compaction test be performed for each 2,500 square feet of floor area or 10,000 square feet of pavement area per foot of fill or native material, or a minimum of three tests each, whichever is greater. Test all footing excavations to a depth of **24 inches** at the frequencies stated above.

4.8 Stormwater Management

The soil conditions at the stormwater management facility are relatively consistent. The borings initially encountered 1 to 2.5 feet of sand with silt to silty sand (SP/SM, SM) overlying sand with silt, and poorly graded sand (SP, SP-SM) to the explored depths of 15 feet bls.

The water table was encountered in the auger borings at 3 to 3.5 feet bls at the time of our exploration. We anticipate the seasonal high groundwater table to be 2.0 feet bls.

The laboratory permeability tests indicate the tested sand with silt (SP-SM) has hydraulic conductivity values of 2.6 to 10 feet per day. The sand with silt encountered just below land surface was not tested for hydraulic conductivity, but these soils are very fine and are expected to have hydraulic conductivity values at least one order of magnitude lower than the deeper sand with silt. In our opinion, this upper soil layer will significantly limit the recovery of the stormwater facilities. To improve the overall infiltration characteristics of the subgrade beneath the stormwater facilities, ***we recommend the areas of stormwater management facilities, and to a distance of 5 feet beyond the perimeter of underground systems, we be excavated/undercut and replaced with clean sand fill having less than 5 percent soil fines passing the No. 200 sieve. The intent is to remove these semi-confining soils from beneath the stormwater systems to improve their recovery characteristics. These soils consist of the dark brown sand with silt to silty sand. Excavating to depths of 2 to 3 feet is anticipated. These excavated soils are suitable for use as fill in other areas of the site.***

Based upon our findings and test results and our recommended subgrade remediation beneath the stormwater systems, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The parameters below do not consider a factor of safety.

Proposed Stormwater Management Facility

1. Base elevation of effective or mobilized aquifer (average depth of confining layer) equal to 25 feet bls (based upon adjacent SPT borings).
2. Unsaturated vertical infiltration rate of 20 feet per day (based upon expected values for clean sand fill beneath the systems).
3. Horizontal hydraulic conductivity equal to 6 feet per day.
4. Specific yield (fillable porosity) of 25 percent.
5. Average seasonal high groundwater table depth equal to 2 feet bls.

4.9 Fill Suitability

The soils encountered at this site within the explored depths range from sands (SP) to clays (CL/CH). A discussion of the suitability for reuse as structural fill for each soil classification according to the Unified Soil Classification System (USCS) designation is provided below.

SP, SP/SM – Sands (SP) and sand with silt (SP/SM) have less than 5 percent and 12 percent soil fines passing the No. 200 sieve, respectively, and are typically well draining soils that are suitable for reuse as structural fill. The sands with silt may require moisture conditioning (drying) to make the material more workable. These soils will require stockpiling and drying before they are reused if they are excavated from below the water table.

SM – Silty sands (SM) can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Silty sands are typically non-plastic or have low plasticity, and can be reused as structural fill with precautions. Silty sands can be moisture sensitive and difficult to work and compact and can rut if the moisture content is near or above the optimum moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun are typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable silty sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Silty sands with more than 30 percent soil fines are especially moisture sensitive, and are not recommended for reuse as structural fill. These soils will behave more as sandy silt, and for this reason, very silty sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SM/ML. Silty sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

SC – Clayey sand (SC) soils can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Clayey sands can have a high range of plasticity, varying from a PI of 7 or greater and plotting above the A-line to highly plastic. Friable clayey sands are typically suitable for use as structural fill with precautions. Clayey sands will be moisture sensitive and difficult to work and compact and can rut during placement if the moisture content is near or above the natural moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun are typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable clayey sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Clayey sands with more than 30 percent soil fines passing the No. 200 sieve are especially moisture sensitive and are typically highly plastic, and are not recommended for reuse as structural fill. These soils will behave more as sandy clay, and for this reason, very clayey sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SC/CH or SC/CL. Clayey sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

ML, MH, CL, CH – Silts and clays are not suitable materials for reuse as structural fill.

When using on-site soils as fill materials, we recommend the silty and clayey sand soils (SM, SC) be used in the lower depths of the fill. Sand and sand with silt (SP, SP-SM) should be used in the upper portions of the fill. We recommend a minimum of 2 feet of sand (SP, SP-SM) cover the silty and clayey sand fill materials to reduce the potential for soggy surface conditions due to the low permeability characteristics of the silty and clayey sand materials.

4.10 Surface Water Control and Landscaping

Roof gutters should be considered to divert runoff away from the building. The gutter downspouts should discharge a minimum of 10 feet from the structure to reduce the amount of water collecting around the foundations. Where possible, the gutter downspouts should discharge directly into the storm sewer system or onto the asphalt paved areas in order to reduce the amount of water collecting around the foundations. Grading of the site should be such that water is diverted away from the building on all sides to reduce the potential for erosion and water infiltration along the foundation.

With respect to landscaping, it is recommended that any trees and large “tree-like” shrubbery with potential for developing large root systems be planted a minimum distance of half their mature height, and preferably their expected final height, away from the structure. The purpose of this is to reduce the potential for foundation or slab movements from the growth of root systems as the landscaping matures. Consideration should also be given to using landscaping that has a low water demand, so that excessive irrigation is not conducted around the structures.

5.0 FIELD DATA

5.1 Auger Boring Logs

GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida

BORING NUMBER P-1

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.2 ft
ESTIMATED SEASONAL HIGH 2.0 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 12 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0		ASPHALT (0.75") 0.1
		LIMEROCK (4") 0.4
	AU 1	(SP-SM) Dark brown SAND with silt *%PASS-200 = 10.4* *MC = 14.5*
		2.0
2.5	AU 2	(SP-SM) Brown SAND with silt
5.0		
7.5	AU 3	
10.0		
12.5		13.0
	AU 4	(SP-SM) Gray SAND with silt
15.0		15.0
		Bottom of borehole at 15.0 feet.

BORING NUMBER P-2

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.5 ft
ESTIMATED SEASONAL HIGH 2.0 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 12.5 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0		ASPHALT (2") 0.2
		LIMEROCK (4") 0.5
	AU 1	(SM) Dark brown silty SAND 1.0
		(SP-SM) Brown SAND with silt
	AU 2 PS	*%PASS-200 = 8.4* *MC = 8.9* *k_h = 2.6 ft/day*
2.5		
5.0		
7.5	AU 3	
10.0		
12.5		
	AU 4	
15.0		15.0
		Bottom of borehole at 15.0 feet.

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CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida

BORING NUMBER P-3

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.0 ft
ESTIMATED SEASONAL HIGH 2.5 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 13.5 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0		ASPHALT (1.5") 0.2
		LIMEROCK (5") 0.5
	AU 1	(SM) Dark brown silty SAND 1.0
		(SP-SM) Brown SAND with silt
	AU 2 PS	*%PASS-200 = 6.4*
2.5		*MC = 12*
		k_h = 4.6 ft/day
5.0		
7.5	AU 3	
10.0		
12.5	AU 4	
15.0		15.0
		Bottom of borehole at 15.0 feet.

BORING NUMBER P-4

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.0 ft
ESTIMATED SEASONAL HIGH 2.5 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 14 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0		ASPHALT (0.75") 0.1
		LIMEROCK (3.5") 0.4
	AU 1	(SM) Dark brown silty SAND
		2.0
		(SP-SM) Brown SAND with silt
2.5	AU 2 PS	*%PASS-200 = 7.3*
		MC = 12
		k_h = 5.1 ft/day
5.0		
7.5	AU 3	
10.0		
12.5	AU 4	
15.0		15.0
		Bottom of borehole at 15.0 feet.

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CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida

BORING NUMBER P-5

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.0 ft
ESTIMATED SEASONAL HIGH 2.5 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 14 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0		ASPHALT (1") 0.1
		LIMEROCK (4") 0.4
	AU 1	(SM) Dark brown silty SAND
2.5		2.5
	AU 2	(SP-SM) Brown SAND with silt
5.0		
7.5		
10.0		
12.5	AU 3	
15.0		15.0
		Bottom of borehole at 15.0 feet.

BORING NUMBER P-6

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.3 ft
ESTIMATED SEASONAL HIGH 2.5 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 14 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0	AU 1	(SM) Dark brown silty SAND
		1.0
	AU 2 PS	(SP-SM) Brown SAND with silt
2.5		*%PASS-200 = 5.5*
		MC = 8.8
		k_h = 10 ft/day
5.0		6.0
7.5	AU 3	(SP) Pale brown and gray SAND
10.0		
12.5	AU 4	
15.0		15.0
		Bottom of borehole at 15.0 feet.

5.2 Standard Penetration Test Soil Boring Logs

GSE Engineering & Consulting, Inc.
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BORING NUMBE

CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida
DATE STARTED 6/22/23 **COMPLETED** 6/22/23
GROUND ELEVATION 12 ft **HOLE SIZE**
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
DRILLING METHOD Mud Rotary
AT TIME OF DRILLING 2.6 ft
LOGGED BY WDI **CHECKED BY** AXL
ESTIMATED SEASONAL HIGH 2.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SM) Loose gray SAND with silt									20 40 60 80
		(SP-SM) Loose to medium dense brown SAND with silt	2.5	SPT 1	3-3-3 (6)						
				SPT 2	3-3-4 (7)						
5				SPT 3	3-4-4 (8)						
				SPT 4	7-8-10 (18)						
				SPT 5	9-10-15 (25)						
10				SPT 6	6-9-12 (21)						
				SPT 7	9-9-10 (19)						
15											
				SPT 8	4-7-8 (15)						
20											

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BORING NUMBE

CLIENT Walker Architects

PROJECT NAME Proposed Clay County Economic Development Office

PROJECT NUMBER 16102

PROJECT LOCATION Green Cove Springs, Clay County, Florida

DEPTH (ft)	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲ (20 40 60 80)
	(SP-SM) Loose to medium dense brown SAND with silt *(continued)*	23.5								
25	(SM-SC) Medium dense gray silty clayey SAND		SPT 9	11-10-11 (21)						
		28.5								
30	(CL/CH) Soft gray CLAY		SPT 10	1-1-2 (3)				89	64	
		33.5								
35	(SM-SC) Loose gray silty clayey SAND		SPT 11	3-2-2 (4)						
		36								
	(SP-SM/SC) Very hard gray SAND with silt and clay									
		39.4	SPT 12	30-50/5" 50/5"						>>
	Bottom of borehole at 39.4 feet.									

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GSE Engineering & Consulting, Inc.
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Gainesville, FL 32608
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BORING NUMBE

CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida
DATE STARTED 6/26/23 **COMPLETED** 6/26/23
GROUND ELEVATION 12 ft **HOLE SIZE**
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
DRILLING METHOD Mud Rotary
AT TIME OF DRILLING 3.5 ft
LOGGED BY WDI **CHECKED BY** AXL
ESTIMATED SEASONAL HIGH 2.0 ft
NOTES

DEPTH (ft)	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)
0	(SM) Medium dense dark gray silty SAND	2	SPT 1	3-3-9 (12)
	(SP-SM) Medium dense to dense brown SAND with silt		SPT 2	10-10-12 (22)
5			SPT 3	13-14-17 (31)
		6.5	SPT 4	13-16-20 (36)
	(SP) Dense pale brown and gray SAND		SPT 5	13-17-21 (38)
10			SPT 6	15-20-25 (45)
		13.5		
	(SP) Loose brown SAND		SPT 7	4-5-3 (8)
15				
		18.5		
	(SP-SM) Loose to medium dense gray SAND with silt		SPT 8	6-6-7 (13)
20				

LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, %

▲ SPT N VALUE ▲
20 40 60 80

(Continued Next Page)

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BORING NUMBE

CLIENT Walker Architects

PROJECT NAME Proposed Clay County Economic Development Office

PROJECT NUMBER 16102

PROJECT LOCATION Green Cove Springs, Clay County, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲ (20 40 60 80)
		(SP-SM) Loose to medium dense gray SAND with silt *(continued)*									
25				SPT 9	7-4-5 (9)						
			28.5								
		(SM-SC) Very loose gray silty clayey SAND		SPT 10	2-2-2 (4)						
30											
			33.5								
		(CL/CH) Firm gray sandy CLAY		SPT 11	3-2-3 (5)						
35											
			36.5								
		(SP-SM/SC) Loose gray SAND with silt and clay and shells									
40			40	SPT 12	5-5-4 (9)						
		Bottom of borehole at 40.0 feet.									

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BORING NUMBE

CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida
DATE STARTED 6/26/23 **COMPLETED** 6/26/23
GROUND ELEVATION 13 ft **HOLE SIZE**
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
DRILLING METHOD Mud Rotary
AT TIME OF DRILLING 3.0 ft
LOGGED BY WDI **CHECKED BY** AXL
ESTIMATED SEASONAL HIGH 2.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SM) Loose dark gray SAND with silt									20 40 60 80
			2	SPT 1	2-3-5 (8)				11	12	
		(SP) Loose to medium dense pale brown SAND		SPT 2	4-5-6 (11)						
			4								
5		(SP) Medium dense pale brown SAND		SPT 3	7-10-10 (20)						
				SPT 4	9-9-8 (17)						
				SPT 5	8-9-10 (19)						
10				SPT 6	7-14-16 (30)						
15				SPT 7	5-8-8 (16)						
			18.5								
		(SP) Loose brown SAND		SPT 8	3-4-5 (9)						
20											

(Continued Next Page)

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BORING NUMBE

CLIENT Walker Architects **PROJECT NAME** Proposed Clay County Economic Development Office

PROJECT NUMBER 16102 **PROJECT LOCATION** Green Cove Springs, Clay County, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲ 20 40 60 80
		(SP) Loose brown SAND *(continued)*	23.5								
25		(SP-SM/SC) Loose gray SAND with silt and clay		SPT 9	7-4-4 (8)						
			29								
30		(CL/CH) Soft gray CLAY with sand		SPT 10	1-1-2 (3)						
			33.5								
35		(SM-SC) Very loose gray silty clayey SAND with shell *Weight-of-Hammer from 34.5 to 36 ft bls.*		SPT 11	1-1-0 (1)						
			38.5								
40		(SM-SC) Loose gray silty clayey SAND	40	SPT 12	3-3-4 (7)						
		Bottom of borehole at 40.0 feet.									

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BORING NUMBE

CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida
DATE STARTED 6/22/23 **COMPLETED** 6/22/23
GROUND ELEVATION 14 ft **HOLE SIZE**
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
DRILLING METHOD Mud Rotary
▼ **AT TIME OF DRILLING** 3.3 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 2.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SM) Loose gray SAND with silt									20 40 60 80
			2.5	SPT 1	2-3-3 (6)						
		(SP-SM) Very loose to loose brown SAND with silt		SPT 2	3-3-1 (4)						
5				SPT 3	1-1-1 (2)						
				SPT 4	1-2-3 (5)						
			7.5	SPT 5	1-5-9 (14)						
		(SP) Medium dense pale brown SAND		SPT 6	7-13-17 (30)						
10											
				SPT 7	9-7-9 (16)						
15											
				SPT 8	6-4-8 (12)						
20											

(Continued Next Page)

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PROJECT NAME Proposed Clay County Economic Development Office

PROJECT NUMBER 16102

PROJECT LOCATION Green Cove Springs, Clay County, Florida

DEPTH (ft)	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)
	(SP) Medium dense pale brown SAND *(continued)*	23.5		
25	(SP) Medium dense gray SAND		SPT 9	8-10-13 (23)
		28.5		
30	(SM-SC) Very loose gray silty clayey SAND		SPT 10	1-1-1 (2)
35			SPT 11	2-2-2 (4)
		38.5		
40	(SM-SC) Loose gray silty clayey SAND with shells	40	SPT 12	3-3-4 (7)
	Bottom of borehole at 40.0 feet.			

LIQUID LIMIT, %
PLASTIC LIMIT, %
PLASTICITY INDEX
PERCENT PASS NO. 200 SIEVE
MOISTURE CONTENT, %

▲ SPT N VALUE ▲
20 40 60 80

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BORING NUMBE

CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida
DATE STARTED 6/22/23 **COMPLETED** 6/22/23
GROUND ELEVATION 13.5 ft **HOLE SIZE**
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
DRILLING METHOD Mud Rotary
▼ **AT TIME OF DRILLING** 3.0 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 2.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SM) Loose dark gray silty SAND with roots									20 40 60 80
			2	SPT 1	2-3-6 (9)						
		(SP-SM) Loose to medium dense brown SAND with silt		SPT 2	4-6-7 (13)						
5				SPT 3	4-4-5 (9)						
			5.5								
		(SP-SM/SC) Medium dense brown, gray, and orange SAND with silt and clay		SPT 4	3-4-9 (13)						
			7.5	SPT 5	4-6-8 (14)						
		(SP-SM) Medium dense brown SAND with silt		SPT 6	3-10-11 (21)				6.5	21	
10											
				SPT 7	12-11-11 (22)						
15											
				SPT 8	4-5-9 (14)						
20											

(Continued Next Page)

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BORING NUMBE

CLIENT Walker Architects

PROJECT NAME Proposed Clay County Economic Development Office

PROJECT NUMBER 16102

PROJECT LOCATION Green Cove Springs, Clay County, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲ (20 40 60 80)
		(SM-SC) Medium dense gray silty clayey SAND	22								
25				SPT 9	8-7-6 (13)						
			28								
		(CL/CH) Soft to firm gray CLAY with lenses of sand									
30				SPT 10	1-2-4 (6)						
35				SPT 11	3-2-2 (4)						
			37								
		(SM-SC) Medium dense gray silty clayey SAND with shells									
40			40	SPT 12	5-7-9 (16)						
		Bottom of borehole at 40.0 feet.									

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BORING NUMBE

CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida
DATE STARTED 6/22/23 **COMPLETED** 6/22/23
GROUND ELEVATION 13 ft **HOLE SIZE**
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
DRILLING METHOD Mud Rotary
AT TIME OF DRILLING 2.5 ft
LOGGED BY WDI **CHECKED BY** AXL
ESTIMATED SEASONAL HIGH 2.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SM) Loose dark brown SAND with silt		SPT 1	3-2-3 (5)						20 40 60 80
			3	SPT 2	4-5-5 (10)						
5		(SP) Loose to medium dense pale brown SAND		SPT 3	5-7-8 (15)						
				SPT 4	7-7-8 (15)						
				SPT 5	7-9-13 (22)						
			9	SPT 6	7-13-18 (31)						
10		(SP) Dense pale brown and gray SAND									
			13.5								
		(SP) Medium dense brown SAND		SPT 7	4-5-6 (11)						
15											
				SPT 8	4-5-9 (14)				2.8	29	
20											

(Continued Next Page)

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BORING NUMBE

CLIENT Walker Architects
PROJECT NAME Proposed Clay County Economic Development Office
PROJECT NUMBER 16102
PROJECT LOCATION Green Cove Springs, Clay County, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲ 20 40 60 80
		(SP) Medium dense brown SAND *(continued)*	23.5								
25		(SP-SM/SC) Loose gray SAND with silt and clay		SPT 9	4-5-4 (9)						
			28.5								
30		(CL/CH) Stiff gray CLAY		SPT 10	5-7-3 (10)						
			31.5								
35		(SP) Medium dense gray SAND with shell		SPT 11	7-9-7 (16)						
			37								
40		(SP) Very loose to medium dense gray SAND *Weight-of-Hammer from 39 to 40 ft bls.*		SPT 12	1-0-0 (0)						
45			45	SPT 13	3-4-10 (14)						
		Bottom of borehole at 45.0 feet.									

5.3 Laboratory Results

GSE Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 16102

Project Name: Proposed Clay County Economic Devlopment Office

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
P-1	0.5-1	Dark brown SAND with silt	14.5				10.4			SP-SM
P-2	1-3	Brown SAND with silt	8.9				8.4		2.6	SP-SM
P-3	1-3	Brown SAND with silt	12				6.4		4.6	SP-SM
P-4	2-4	Brown SAND with silt	12				7.3		5.1	SP-SM
P-6	1-3	Brown SAND with silt	8.8				5.5		10	SP-SM
B-1	28.5-30	Gray CLAY	64				89			CL/CH
B-3	1-2.5	Dark brown SAND with silt	12				11			SP-SM
B-5	8.5-10	Brown SAND with silt	21				6.5			SP-SM
B-6	18.5-20	Gray SAND	29				2.8			SP

5.4 Key to Soil Classification

KEY TO SOIL CLASSIFICATION CHART

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests				SYMBOLS		GROUP NAME
				GRAPHIC	LETTER	
COARSE-GRAINED SOILS	Gravels	Clean Gravels	Cu ≥ 4 and 1 ≤ Cc ≤ 3		**GW**	Well graded GRAVEL
More than 50% retained on No. 200 sieve	More than 50% of coarse fraction retained on No. 4 sieve	Less than 5% fines	Cu < 4 and/or 1 > Cc > 3		**GP**	Poorly graded GRAVEL
		Gravels with fines	Fines classify as ML or MH		**GM**	Silty GRAVEL
		More than 12% fines	Fines classify as CL or CH		**GC**	Clayey GRAVEL
	Sands	Clean Sands	Cu ≥ 6 and 1 ≤ Cc ≤ 3		**SW**	Well graded SAND
	50% or more of coarse fraction passes No. 4 sieve	Less than 5% fines	Cu < 6 and/or 1 > Cc > 3		**SP**	Poorly graded SAND
		Sand with fines	Fines classify as ML or MH		**SP-SM**	SAND with silt
		5% ≤ fines < 12%	Fines classify as CL or CH		**SP-SC**	SAND with clay
		Sand with fines	Fines classify as ML or MH		**SM**	Silty SAND
		12% ≤ fines < 30%	Fines classify as CL or CH		**SC**	Clayey SAND
		Sand with fines	Fines classify as ML or MH		**SM**	Very silty SAND
		30% fines or more	Fines classify as CL or CH		**SC**	Very clayey SAND
FINE-GRAINED SOILS	Clays	inorganic	50% ≤ fines < 70%		**CL/CH**	Sandy CLAY
50% or more passes the No. 200 sieve			70% ≤ fines < 85%		**CL/CH**	CLAY with sand
			fines ≥ 85%		**CL/CH**	CLAY
	Silts and Clays	inorganic	PI > 7 and plots on/above "A" line		**CL**	Lean CLAY
	Liquid Limit less than 50		PI < 4 or plots below "A" line		**ML**	SILT
		organic	Liquid Limit - oven dried / Liquid Limit - not dried < 0.75		**OL**	Organic clay / Organic silt
	Silts and Clays	inorganic	PI plots on or above "A" line		**CH**	Fat CLAY
	Liquid Limit 50 or more		PI plots below "A" line		**MH**	Elastic SILT
		organic	Liquid Limit - oven dried / Liquid Limit - not dried < 0.75		**OH**	Organic clay / Organic silt
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor				**PT**	PEAT

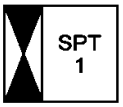
CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

	No. OF BLOWS, N	RELATIVE DENSITY
	0 - 4	Very Loose
	5 - 10	Loose
SANDS:	11 - 30	Medium dense
	31 - 50	Dense
	OVER 50	Very Dense

	No. OF BLOWS, N	CONSISTENCY
	0 - 2	Very Soft
SILTS	3 - 4	Soft
&	5 - 8	Firm
CLAYS:	9 - 15	Stiff
	16 - 30	Very Stiff
	31 - 50	Hard
	OVER 50	Very Hard

	No. OF BLOWS, N	RELATIVE DENSITY
	0 - 8	Very Soft
	9 - 18	Soft
LIMESTONE:	19 - 32	Moderately Hard
	33 - 50	Hard
	OVER 50	Very Hard

SAMPLE GRAPHIC TYPE LEGEND



Location of SPT Sample

Location of Auger Sample

PARTICLE SIZE IDENTIFICATION

BOULDERS:		Greater than 300 mm
COBBLES:		75 mm to 300 mm
GRAVEL:	Coarse -	19.0 mm to 75 mm
	Fine -	4.75 mm to 19.0 mm
SANDS:	Coarse -	2.00 mm to 4.75 mm
	Medium -	0.425 mm to 2.00 mm
	Fine -	0.075 mm to 0.425 mm
SILTS & CLAYS:		Less than 0.075 mm

LABORATORY TEST LEGEND

LL	=	Liquid Limit, %
PL	=	Plastic Limit, %
PI	=	Plasticity Index, %
% PASS - 200	=	Percent Passing the No. 200 Sieve
MC	=	Moisture Content, %
ORG	=	Organic Content, %
k_h	=	Horizontal Hydraulic Conductivity,

6.0 LIMITATIONS

6.1 Warranty

This report has been prepared for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

6.2 Auger and SPT Borings

The determination of soil type and conditions was performed from the ground surface to the maximum depth of the borings, only. Any changes in subsurface conditions that occur between or below the borings would not have been detected or reflected in this report.

Soil classifications that were made in the field are based upon identifiable textural changes, color changes, changes in composition or changes in resistance to penetration in the intervals from which the samples were collected. Abrupt changes in soil type, as reflected in boring logs and/or cross sections may not actually occur, but instead, be transitional.

Depth to the water table is based upon observations made during the performance of the auger and SPT borings. This depth is an estimate and does not reflect the annual variations that would be expected in this area due to fluctuations in rainfall and rates of evapotranspiration.

6.3 Site Figures

The measurements used for the preparation of the figures in this report were made using the provided site plan and by estimating distances from existing structures and site features. Figures in this report were not prepared by a licensed land surveyor and should not be interpreted as such.

6.4 Unanticipated Soil Conditions

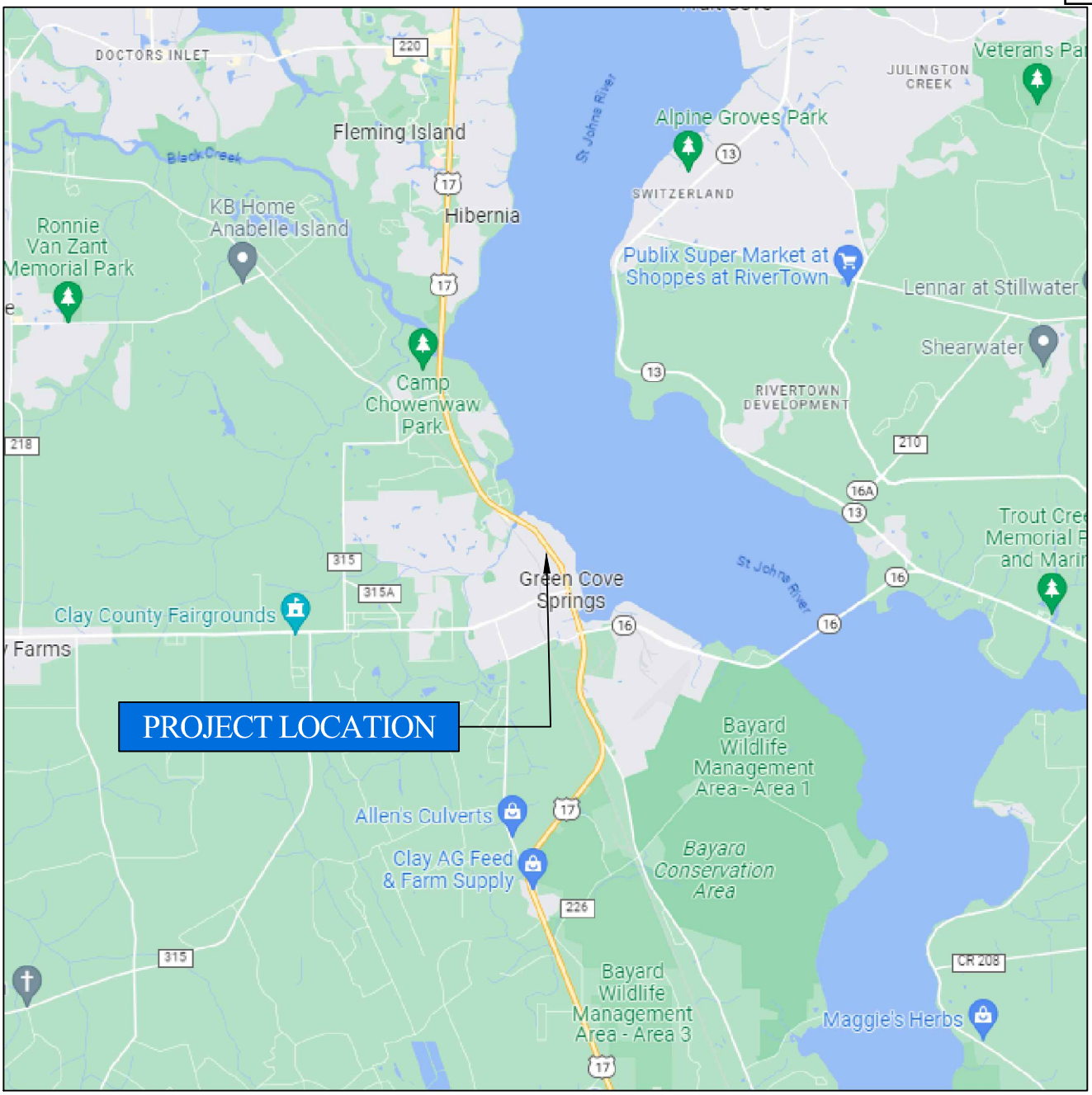
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

6.5 Misinterpretation of Soil Engineering Report

GSE Engineering & Consulting, Inc. is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If others make the conclusions or recommendations based upon the data presented, those conclusions or recommendations are not the responsibility of GSE.

FIGURES



NORTH

NOT TO SCALE

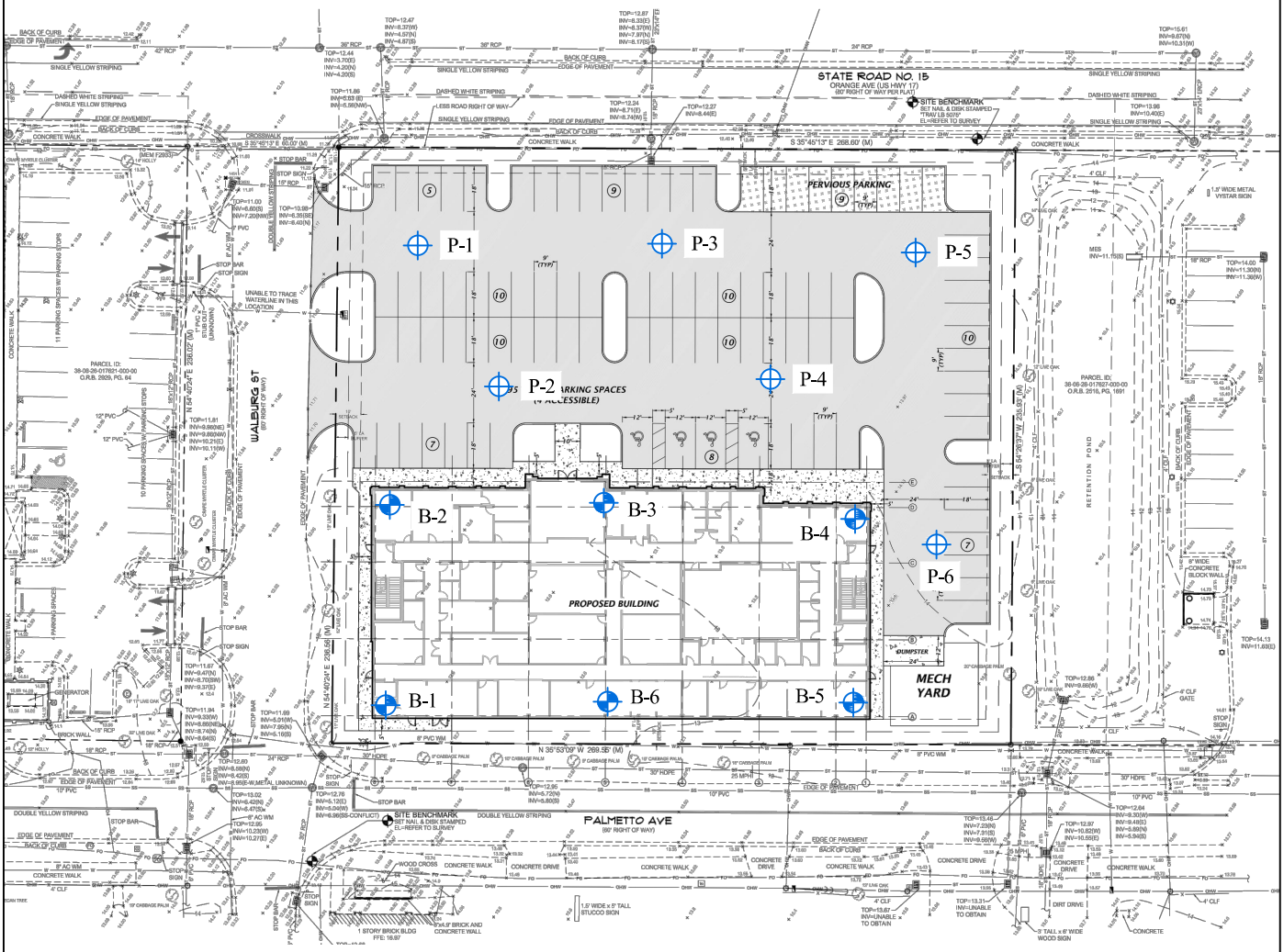
PROPOSED CLAY COUNTY ECONOMIC DEVELOPMENT OFFICE
GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA
GSE PROJECT NO. 16102

PROJECT SITE LOCATION MAP

DESIGNED BY: AXL
CHECKED BY : KLH
DRAWN BY : AXL

GSE Engineering & Consulting, Inc.

FIGURE 1



LEGEND:

- SPT BORING
- AUGER BORING

NORTH

0 70'

SCALE: 1" = 70' APPROX.

PROPOSED CLAY COUNTY ECONOMIC DEVELOPMENT OFFICE
GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA
GSE PROJECT NO. 16102

SITE PLAN SHOWING APPROXIMATE LOCATIONS OF FIELD TESTS

DESIGNED BY: AXL
CHECKED BY : KLH
DRAWN BY : AXL

GSE Engineering & Consulting, Inc.

FIGURE 2

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council **MEETING DATE:** July 16, 2024

FROM: Michael Daniels, AICP, Development Services Director

SUBJECT: Interlocal Agreement Between Clay County and Green Cove Springs Community Redevelopment Agency. ***Michael Daniels***

BACKGROUND

On May 16, 2023, the City Council approved a resolution (R-06-2023) for the Community Redevelopment Area Redevelopment Plan and Interlocal Agreement.

The Interlocal Agreement the Green Cove Springs City Council, the Clay County Commission and the Community Redevelopment Agency establish the terms pursuant to Florida Statute under which a Community Redevelopment Agency.

The resolution for the Community Redevelopment Plan was approved by both the City, County and CRA in 2023, however a separate signature page for the Interlocal Agreement was included in the document and not signed. Pursuant to discussion between the City and County legal staff, it was determined that the Agreement should be taken back to their respective bodies to reapprove the Agreement. There are no changes to the Agreement that was approved by City Council on May 16, 2023.

The Board of County Commissioners unanimously approved the Agreement on July 9, 2024 and the Green Cove Springs CRA unanimously approved the agreement on July 11, 2024.

FISCAL IMPACT

An estimated $18.9 to $36.1 Million could be generated within the proposed Community Redevelopment Area if said area comes to fruition.

RECOMMENDATION

Staff recommends approval of the CRA Interlocal Agreement.

RECOMMENDED MOTION:

Motion to approve CRA Interlocal Agreement

INTERLOCAL AGREEMENT
BETWEEN CLAY COUNTY,
CITY OF GREEN COVE SPRINGS AND
GREEN COVE SPRINGS COMMUNITY REDEVELOPMENT AGENCY

This Interlocal Agreement (hereinafter "Interlocal Agreement" or "Agreement") by and between Clay County, a charter county and political subdivision of the State of Florida (hereinafter "County"), the City of Green Cove Springs, a Florida municipality (hereinafter "City") and the Green Cove Springs Community Redevelopment Agency, a public body corporate created pursuant to Section 163.357, Florida Statutes (hereinafter "Agency"), (County, City and Agency collectively, the "Parties"), is made and entered into and shall be effective as of May 25, 2023.

WHEREAS, on April 19, 2022, the City approved Resolution R-03-2022 finding the existence of blight in an area of the City (the "Redevelopment Area") based on a study containing evidence, data, analysis and facts dated March, 2022 ("City's Study"); making certain findings and determinations; and finding a need for creating a Community Redevelopment Agency pursuant to Chapter 163 Part III, Florida Statutes; and

WHEREAS, the Redevelopment Area is generally described as the downtown and US 17 corridor, which is specifically described in the City's Study; and

WHEREAS, the County, as a charter county, is vested with all of the powers under the Community Redevelopment Act of 1969; and

WHEREAS, Section 163.410, Florida Statutes, authorizes the delegation by the County, in its discretion, to the City the exercise of certain powers related to community redevelopment under Chapter 163, Part III, Florida Statutes, subject to such conditions and limitations as the County may impose; and

WHEREAS, Chapter 163, Florida Statutes, authorizes public agencies to enter into agreements to provide services and to exercise jointly any power, privilege, or authority they share in common and which each might exercise separately; and

WHEREAS, on August 9, 2022, the County approved Resolution 2021/2022 – 56 declaring and finding a need to create a Community Redevelopment Agency for the Redevelopment Area within the City and delegating the exercise of certain limited powers to the City to establish a Community Redevelopment Agency and delegate to the Community Redevelopment Agency to prepare and adopt a plan of redevelopment to be submitted to the City and the County for review and approval; and

WHEREAS, on November 29, 2022, the City Planning and Zoning Commission, as the Local Planning Agency, unanimously approved a Redevelopment Plan (the "Plan"); and

WHEREAS, on December 13, 2022, the City established the Green Cove Springs Community Redevelopment Agency (the "Agency") pursuant to Ordinance O-24-2022; and

WHEREAS, on January 12, 2023, the Community Redevelopment Agency approved the Plan; and

WHEREAS, the County approved the Plan on April 25, 2023, pursuant to Resolution 2022/2023-39; and

WHEREAS, Section 6 of the County's Resolution 2021/2022 – 56 provided the County would consider the delegation of additional community redevelopment powers to the Agency by an interlocal agreement; and

WHEREAS, the County approved this Interlocal Agreement on April 25, 2023; and

WHEREAS, on May 16, 2023, the City approved the Plan and this Interlocal Agreement pursuant to Resolution R-06-2023; and

WHEREAS, on June 6, 2023, the City established the Green Cove Springs Redevelopment Trust Fund pursuant to Ordinance O-15-2023; and

WHEREAS, the Agency approved this Interlocal Agreement on May 25, 2023; and

WHEREAS, the City, the County, and the Agency now wish to enter into this Agreement to establish procedures for the governance of the City, County and Community Redevelopment Agency and to further provide for the delegation of authority and powers by the County to the City and the Agency.

NOW THEREFORE, in consideration of the mutual covenants declared herein and other good and valuable consideration each Party agrees as follows:

This Interlocal Agreement is entered into pursuant to Section 163.400, Florida Statutes, and the Florida Interlocal Cooperation Act contained in Sections 163.01, et.al., Florida Statutes.

Section 1. Intent of Parties.

It is the intent of the Parties that provisions in this Agreement which conflict with provisions of the Community Redevelopment Act of 1969, Chapter 163, Part III, Florida Statutes (the "Act"), as amended, shall control. The County, the City and the Agency intend to bind themselves to the terms and obligations of this Agreement.

Section 2. CRA Redevelopment Plan and Base Year.

The Parties agree that:

A. Pursuant to the Act and the terms of this Agreement, the Agency may adopt a Community Redevelopment Plan for a term of 30 years beginning January 2023, and the City and the County shall appropriate funds to a redevelopment trust fund in accordance with the Act and this Agreement through January 1, 2054, each with approval of the City and the County.

(1) The Agency may amend its plan to extend the term of the Plan only with an affirmative vote of both the City and the County.

(2) Neither the Agency nor the City may expand the boundaries of the Redevelopment Area without express authorization of the County evidenced by an additional delegating resolution.

B. The "base year" taxable property assessment roll, used for the calculation in Section 163.387(1), Florida Statutes, shall be the values used for taxation in calendar year 2023.

Section 3. County delegation of powers.

A. With the exception of the community redevelopment powers that continue to vest in the County pursuant to Section 163.358 of the Act, the Agency shall have the right and sole responsibility to exercise the following redevelopment powers specifically delegated by the County pursuant to section 163.370 of the Act only within the Redevelopment Area:

(1) The power to make and execute contracts and other instruments necessary or convenient to the exercise of its powers pursuant to the Act.

(2) The power to disseminate information regarding slum clearance and community redevelopment.

(3) The power to undertake and carry out community redevelopment and related activities within the Redevelopment Area, which redevelopment may include:

(a) Acquisition of a slum area or a blighted area or portion thereof by purchase, lease, option, gift, grant, bequest, devise, or other voluntary method of acquisition.

(b) Demolition and removal of buildings and improvements.

(c) Installation, construction, or reconstruction of streets, utilities, parks, playgrounds, public areas of major hotels that are constructed in support of convention centers, including meeting rooms, banquet facilities, parking garages, lobbies, and passageways, and other improvements necessary for carrying out in the Redevelopment Area the community redevelopment objectives of the Act in accordance with the Plan.

(d) The power to dispose of any property acquired in the Redevelopment Area at its fair value as provided in Section 163.380 of the Act, for uses in accordance with the Plan.

(e) The power to carry out plans for a program of voluntary or compulsory repair and rehabilitation of buildings or other improvements in accordance with the Plan.

(f) The power to acquire real property in the Redevelopment Area by purchase, lease, option, gift, grant, bequest, devise, or other voluntary method of acquisition which, under the Plan, is to be repaired or rehabilitated for dwelling use or related facilities, repair or rehabilitation of the structures for guidance purposes, and resale of the property, or otherwise put to use for the public good as set forth in the Plan.

(g) The power to acquire any other real property in the Redevelopment Area by purchase, lease, option, gift, grant, bequest, devise, or other voluntary method of acquisition, when necessary to eliminate unhealthful, unsanitary or unsafe conditions; eliminate obsolete or other uses detrimental to the public welfare; or otherwise to remove or

prevent the spread of blight or deterioration or to provide land for needed public facilities.

(h) The power to acquire, without regard to any requirement that the area be a slum or blighted area, air rights in an area consisting principally of land over highways, railway or subway tracks, bridge or tunnel entrances, or other similar facilities which have a blighting influence on the surrounding area and over which air rights sites are to be developed for the elimination of such blighting influences and for the provision of housing (and related facilities and uses) designed specifically for, and limited to, families and individuals of low or moderate income.

(i) The power to construct the foundations and platforms necessary for the provision of air rights sites of housing (and related facilities and uses) designed specifically for, and limited to, families and individuals of low or moderate income.

(4) The power to provide, or to arrange or contract for, the furnishing or repair by any qualified, licensed person or agency, public or private, of services, privileges, works, streets, roads, bridges, public utilities, or other facilities for, or in connection with, the Plan; to install, construct, and reconstruct streets, bridges, utilities, parks, playgrounds, and other public improvements; and to agree to any conditions that it deems necessary and appropriate, which are attached to federal financial assistance and imposed pursuant to federal law relating to the determination of prevailing salaries or wages or compliance with labor standards, in the undertaking or carrying out the Plan and related activities, and to include in any contract authorized by the Agency in connection with such redevelopment and related activities, provisions to fulfill such of the conditions as it deems reasonable and appropriate.

(5) The power to enter into any building or property in the Redevelopment Area in order to make inspections, surveys, appraisals, soundings, test borings, or contamination tests, with the permission of the owner(s) and to request an order for this purpose from a court of competent jurisdiction in the event entry is denied or resisted.

(6) The power to acquire by purchase, lease, option, gift, grant, bequest, devise or otherwise any real property within the Redevelopment Area (or personal property for its administrative purposes), together with any improvements thereon.

(7) The power to hold, improve, clear or prepare for redevelopment any property within the Redevelopment Area acquired by the Agency.

(8) The power to mortgage, pledge, hypothecate, or otherwise encumber or dispose of any real property acquired by the Agency within the Redevelopment Area.

(9) The power to insure or provide for the insurance of any real or personal property acquired by the Agency within the Redevelopment Area or operations of the Agency against any risks or hazards, including the power to pay premiums on any such insurance.

(10) The power to enter into any contracts necessary to effectuate the purposes of the Act.

(11) The power to solicit requests for proposals for redevelopment of parcels of real property within the Redevelopment Area contemplated by the Plan to be acquired for redevelopment purposes by the Agency and, as a result of such requests for proposals, to advertise for the disposition of such real property to

private persons or entities pursuant to Section 163.380 of the Act, prior to acquisition of such real property by the Agency.

(12) The power to invest any community redevelopment funds held in reserves or sinking funds or any such funds not required for immediate disbursement in property or securities in which savings banks may legally invest funds subject to their control and to redeem such bonds as have been issued pursuant to Section 163.385 of the Act, at redemption price established therein or to purchase such bonds at less than the redemption price, all such bonds so redeemed or purchased to be canceled.

(13) Subject to prior approval of both the City and the County, which approval or disapproval shall be in the sole and absolute discretion of the City and the County, the power to borrow money and to apply for and accept advances, loans, contributions, and any other form of financial assistance from the Federal Government or the state, county, or other public body or from any sources, public or private, for the purposes of the Act, and as a condition of the award of such loan or contribution, to give such security as may be required and to enter into and carry out contracts or agreements in connection therewith; and to include in any contract for financial assistance with the Federal Government for or with respect to community redevelopment and related activities such conditions imposed pursuant to federal laws as the Agency deems reasonable and appropriate which are not inconsistent with the purposes of the Act.

(14) The power to make or have made all surveys and plans necessary to the carrying out of the purposes of the Act; to contract with any person, public or private, in making and carrying out such plans; and to adopt or approve, modify, and amend such plans, which plans may include, but are not limited to:

(a) Plans for carrying out a program of voluntary or compulsory repair and rehabilitation or buildings and improvements.

(b) Plans for the enforcement of state and local laws, codes, and regulations relating to the use of land and the use and occupancy of buildings and improvements and to the compulsory repair, rehabilitation, demolition, or removal of buildings and improvements.

(c) Appraisals, title searches, surveys, studies, and other plans and work necessary to prepare for the undertaking of community redevelopment and related activities.

(15) The power to develop, test, and report methods and techniques, and carry out demonstrations and other activities, for the prevention and the elimination of slums and urban blight and developing and demonstrating new or improved means of providing housing for families and persons of low income.

(16) The power to apply for, accept, and utilize grants of funds from the Federal Government for such purposes.

(17) The power to prepare plans for and assist in the relocation of persons (including individuals, families, business concerns, nonprofit organizations, and others) displaced from the Redevelopment Area and to make relocation payments to or with respect to such persons for moving expenses and losses of property for which reimbursement or compensation is not otherwise made, including the making of such payments financed by the Federal Government.

(18) The power to appropriate such funds and make such expenditures as are necessary to carry out the purposes of the Act; to make a request to the City or the County to rezone any part of the Redevelopment Area or make exceptions from, or revisions to, building regulations; and to enter into

agreements with a housing authority, which agreements may extend over any period, notwithstanding any provision or rule of law to the contrary, respecting action to be taken by such county or municipality pursuant to any of the powers granted by the Act.

(19) The power to make a request to the appropriate authority to close, vacate, plan, or replan streets, roads, sidewalks, ways, or other places and to plan or replan any part of the City or the County located within the Redevelopment Area.

(20) The power to provide funding to support the development and implementation of community policing innovations, subject to any budgetary limitations set forth in this Agreement.

(21) The right to exercise any other power that the Florida Legislature grants to community redevelopment agencies after the date of this Agreement, subject to approval of the exercise of such power by the City, and if approved by the City, subsequent approval by the County.

(22) The Agency shall have the power and obligation to procure all commodities and services under the same purchasing processes and requirements that apply to the City.

(23) Nothing in this Agreement is intended to prohibit the County and the City from exercising their sovereign powers as prescribed by law.

B. The following powers may <u>not</u> be paid for or financed by increment revenues:

(1) Construction or expansion of administrative building for public bodies or police and fire buildings, unless each taxing authority agrees to such method of financing for the construction or expansion, or unless the construction or expansion is contemplated as part of a community policing innovation.

(2) Installation, construction, reconstruction, repair or alteration of any publicly owned capital improvements or projects, if such projects or improvements were scheduled to be installed, constructed, reconstructed, repaired, or altered within three years of the approval of the Plan by the County pursuant to a previously approved public capital improvement or project schedule or plan of the County as the governing body which approved the Plan, or schedule or plan of the City, unless and until such projects or improvements have been removed from such schedule or plan of the County or the City and three years have elapsed since such removal or such projects or improvements were identified in such schedule or plan to be funded, in whole or in part, with funds on deposit within the community redevelopment Trust Fund.

(3) General government operating expenses unrelated to the planning and carrying out of the Plan.

Section 4. Agency, City and County Obligations.

A. Community Redevelopment Trust Fund

(1) The City shall establish by ordinance and administer the redevelopment trust fund (the "Trust Fund") in accordance with the provisions of Section 163.387, Florida Statutes.

(2) The City and the County shall comply with all of the provisions of the Act and this Agreement to fund the Trust Fund.

(3) The Parties shall comply with all provisions of the Act and this Agreement regarding the Trust Fund.

B. Implementation of the Plan

(1) The County has delegated to the Agency all the powers for redevelopment set forth above in Section 3 with respect to the Redevelopment Area and only with respect to the Plan as approved by the County, together with any amendments to the Plan, provided that such are approved by the County.

(2) The Plan and all amendments to the Plan shall meet all the requirements of the applicable statutes, including the requirement that the Plan contain a detailed statement of the projected costs of redevelopment, "including the amounts to be expended on publicly funded capital projects in the redevelopment area and any indebtedness of the community redevelopment agency... if such indebtedness is to be repaid with increment revenues." *See* Sec. 163.362(9), Fla. Stat.

(3) For purposes of this Agreement, tax increment funds are such funds or revenues as defined by Section 163.387(1)(a) of the Act and further defined for the County as solely the Ad Valorem Taxes- County Wide Services levied on taxable real property contained within the Redevelopment Area and shall not include the Ad Valorem Taxes – Fire Control MSTU-9 levied therein, nor any other ad valorem taxes that may be levied now or in the future in the Redevelopment Area.

(4) Beginning in October, 2024 but no later than January 1, 2025, and annually thereafter through and including October, 2053, the City shall appropriate and deposit ninety-five percent (95%) of an amount based on the calculation of increment using the City's millage in the applicable year into the Trust Fund in accordance with the Act.

(5) Beginning in October, 2024 but no later than January 1, 2025, and annually thereafter as described in this subsection (5), the County shall appropriate and deposit ninety percent (90%) of the tax increment funds as defined above and derived from the Redevelopment Area in the applicable year into the Trust Fund

for years one through twenty (through and including October, 2043). For years twenty-one through thirty (October, 2044 through and including October, 2053), the County shall appropriate and deposit eighty percent (80%) of the tax increment funds as defined above and derived from the Redevelopment Area in the applicable year into the Trust Fund.

(6) The monies in the Trust Fund shall be used to fund the Agency projects identified in the Plan. The Agency shall not substantially deviate from the projects set forth in the Plan without a plan amendment approved by both the City and the County.

(7) The Agency shall review the Plan annually and update it at least every five years.

(8) Redevelopment activities and projects in the Plan shall be designed to mitigate the slum/blighted conditions of the Redevelopment Area in accordance with the provisions of the Act.

(9) Subject to the provisions of Section 3.A. (13) hereof, the Agency may issue bonds and execute notes, and enter into other forms of debt or leveraging, as well as collateral documents, to finance capital improvements deemed necessary by the Agency for redevelopment purposes in accordance with the powers delegated in Section 3 hereof; provided, however, all such forms of indebtedness shall be paid in full no later than the sunset date, January 1, 2054, unless agreed to otherwise in writing by the Parties.

C. Budget

(1) The Agency shall adopt an annual budget in accordance with the provisions of Section 163.387(6), Florida Statutes and after approval by the Agency and the City submit such to the County.

(2) Each annual budget shall include a section outlining the accomplishments of the

prior fiscal year.

(3) Any amendments to the adopted annual budget shall be submitted to the County in accordance with the provisions of Section 163.387(6), Florida Statutes.

D. The Agency shall abide by all provisions of this Agreement, any implementing regulations, and to the extent not inconsistent, the Act.

E. The composition of the Agency shall at all times consist of two (2) members appointed by the City, two (2) members appointed by the County and one (1) at-large member appointed by the other four (4) members.

F. Sunset

Unless extended by approval of the Parties pursuant to an amendment to this Interlocal Agreement, the sunset date for the Agency, the Area and the Plan shall be January 1, 2054. In addition, unless the Parties agree in writing to a different timeframe, beginning in October, 2052, the Agency, the City and the County will negotiate an interlocal agreement to account for the sunset of the Agency, Area and Plan. Such agreement shall include but not be limited to the methodology for disbursement of Trust Fund revenues remaining in the Trust Fund on the sunset date to the taxing authorities (County and City), the disposition of real and personal property purchased with the Agency funds, and any other issues associated with the dissolution of the Agency. Further, unless otherwise agreed to by the Parties in writing, beginning on October 1, 2052, the Agency will not fund any new projects, grants, initiatives, or other plans in order to complete all previously funded projects, grants, initiatives or other plans, in order to provide for the proper closeout of the Agency by the sunset date.

Section 5. Entire Agreement.

This Agreement constitutes the entire agreement, including all attachments, and supersedes all prior written or oral agreements, understandings, or representations.

Section 6. Default and Termination.

This Agreement shall be effective on the effective date above and remain in effect until the sunset of the Agency, unless terminated earlier as follows:

A. If any Party fails to fulfill its obligations under this Agreement in a timely and satisfactory manner, or if any Party breaches any of the provisions, covenants or stipulations under this Agreement, a Party may give a written notice to all Parties stating the failure or breach and provide a reasonable time period for correction of same. In the event the correction is not made in the allotted time, the representatives of the Parties shall meet to resolve the dispute.

B. If the representatives are unable to resolve the dispute, the Parties shall agree to mediate any dispute according to the provisions of Chapter 164, Florida Statutes. If mediation is unsuccessful, a non- breaching party may terminate this Agreement upon affirmative vote of the respective governing body for a material breach. The termination would then be effective at the time the next payment to the Trust Fund by the non-breaching party is due provided however there are no outstanding bonds or other forms of Agency indebtedness. If at the time of termination, the Agency has outstanding bonds or other forms of indebtedness, termination shall be subject to the provisions of Florida Statutes Section 163.3755.

C. If any unallocated funds remain in the Trust Fund at the termination of the Agency, the funds shall be divided proportionally based on the percentage of contribution between the County and the City.

Section 7. Indemnification.

Each Party hereby assumes responsibility for, and hereby agrees to indemnify and hold the other Parties harmless from any and all liability, claims or damages imposed on another Party up to the monetary limits provided in Sec. 768.28, Fla. Stat., arising out of or in connection with the negligent acts, omissions or misconduct of a Party, and its agents and employees relating to the responsibilities of the Parties under this Agreement.

Section 8. Liability.

Each Party shall be solely responsible for the negligent acts or omissions of its employees, ang agents which in any way relate to or arise out of this Agreement. Nothing contained herein shall be construed as consent to be used by third parties in any matter arising out of this Agreement or constitute a waiver by any Party of its sovereign immunity or provisions of Sec. 768.28, Fla. Stat. This Agreement does not create any relationship with, or any rights in favor of any third party.

Section 9. Filing of Agreement.

The County, upon execution of this Agreement, shall file the same with the Clerk of the Circuit Court in the Official Records of Clay County, as required by Sec. 163.01(11), Fla. Stat.

Section 10. Project Records.

Each Party shall meet the requirements of Chapter 119, Fla. Stat., for retaining public records and transfer, at no cost, to any other requesting Party, copies of all public records regarding the subject of this Agreement which are in the possession of the Party. All records stored electronically shall be provided to the requesting Party in a format that is compatible with the information technology systems of the requesting Party.

Section 11. Applicable Law.

The laws of the State of Florida shall govern this Agreement, and the venue is Clay County, Florida, for any legal actions arising hereunder. In the event of any legal actions or litigation arising hereunder, the prevailing party shall be entitled to its attorneys' fees and costs from trial through any appellate action subject to and without waiving the monetary limits provided in Sec. 768.28, Fla. Stat.

Section 12. Notices.

Except as otherwise provided herein, any notice, acceptance, request or approval from any Party to any other Party shall be in writing and sent by certified mail, return receipt requested, to all Parties and shall be deemed to have been received when either deposited in a United States Postal Service mailbox or personally delivered with signed proof of delivery. For the purposes of this Agreement, the Parties' representatives are:

COUNTY
County Manager
Clay County, Florida
477 Houston Street
PO Box 1366
Green Cove Springs, FL 32043

With a copy to:
County Attorney
477 Houston Street
PO Box 1366
Green Cove Springs, FL 32043

CITY
City Manager
321 Walnut Street
Green Cove Springs, FL 32043

With a copy to:
City Attorney
321 Walnut Street
Green Cove Springs, FL 32043

With a copy to:
Development Services Director
321 Walnut Street
Green Cove Springs, FL 32043

AGENCY
Chair, Green Cove Springs Community Redevelopment Agency
321 Walnut Street
Green Cove Springs, FL 32043

Section 13. Non-Waiver.

Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other breach and shall not be construed to be a modification of the terms of this Agreement.

Section 14. Amendment.

The Parties may amend this Agreement only by a mutual written agreement.

Section 15. Severability.

If any provision of this Agreement shall be declared illegal, void, or unenforceable, this Agreement shall be deemed void and of no further effect. The provisions of this Agreement are not severable.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed on the day and year as shown below.

Clay County, Florida

By: _____
Jim Renninger, Chair
Board of County Commissioners

Date: _____

_____
Tara S. Green
Clerk of Court and Comptroller
Ex Officio Clerk to the Board

City of Green Cove Springs

By: _____
Steven Kelley
Mayor

Date: _____

_____
Erin West, City Clerk
Green Cove Springs

Date: _____

Approved as to form:

_____
Jim Arnold, City Attorney

Date: _____

Green Cove Springs Community
Redevelopment Agency

By: _____
Van Royal, Chair

Date: _____

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council Regular Session **MEETING DATE:** July 16th, 2024

FROM: Greg Bauer, Assistant Public Works Director

SUBJECT: Approve Pay Application #3- Walnut Street Improvements, to provide roadway, utility, pedestrian and streetscape improvements on Walnut St from Palmetto Ave to the River in the amount of $709,763.39 to CGC, Inc.

BACKGROUND

This project has been in the pipeline for a while, so following is a history as relates to design and bidding:

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START BACKGROUND FROM MARCH 7, 2023 COUNCIL MEETING UPDATE

At the May 3, 2022 City Council meeting, Council authorized a task order to WGI to design improvements to Walnut Street based on a presentation at the March 15, 2022 City Council Meeting. At the March 15, 2022 meeting, staff presented, and council approved, a design concept for Walnut Street that incorporated design elements of several recently-completed studies in the downtown area. Following is the background information from that March 15, 2022 staff report:

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START BACKGROUND FROM MARCH 15, 2022 MEETING

Over the last several months, staff has completed a Walnut Street Design project and a Downtown Parking Study. We are in the midst of completing a Downtown Master Plan and a US17 Corridor Study. We have two development projects in the Central Business District that are in different stages of approval. We have funding available from the American Rescue Plan Act (ARPA), the regular CIP budget and a tentative EPA 319 Grant.

Staff is working to bring all of these puzzle pieces together and develop a construction project for the downtown area that will address elements of the Walnut Street streetscape, parking, and redevelopment. The idea is to address all elements of a block of roadway at one time. For example, when we design the 300 block of Walnut Street, we will consider:

- Potable Water
- Sewer
- Stormwater
- Electric
- Roadway Surface

- Parking
- Sidewalks
- Landscape
- Bike Lanes
- Pedestrian and Vehicular movement and interaction.

Attached to this staff report, you will find excerpted pages from the Walnut Street Design Study (Pages 1-11) and one sheet that resulted from the 5-day charette associated with the Downtown Master Plan (Page 12). Based on all the public, stakeholder, professional and Council input from the previously mentioned studies, staff is moving forward with design as follows:

1. The 400 Block of Walnut Street (Palmetto to Orange) – Proposed Option 1 on page 5 of the attached excerpted sheets. This option offers the best combination of bike and pedestrian mobility, retention of some on-street parking and maximization of sidewalk space for outdoor sales or dining.
2. The 300 and 200 Block of Walnut Street (Orange to the River) – Following Page 12 from the design charette, we will move forward with the assumption that the ultimate goal is to line the streets with buildings while maximizing on-street parking. Proposed Option 1 will be the basis for design and be adapted as appropriate.
3. The roadway surface will be real brick from Palmetto to Magnolia. Beyond those areas, the surface of Walnut Street will be stamped asphalt to be re-painted regularly. Intersections will vary. The surface of side streets will be determined based on the life-cycle costs of those streets along with aesthetics.
4. The sidewalks will be concrete with brick inlay bands.
5. The other design concepts and considerations in the attached pages will be included in the project as appropriate including but not limited to:
    a. The mid-block crossing with planting beds and removable bollards shown on page 4
    b. Proposed improvements to the pedestrian connection
    c. Landscaping and lighting improvements.

The next steps will be to reach out to one of our continuing services engineers to design the project. Staff will discuss with the engineer the most economical way to review and design the area that is bounded by Palmetto Ave on the west, Center Street on the north, the River on the east and Cove Street on the south. The intent is that the first phase of construction will include total permanent construction of the Walnut Street right-of-way from Palmetto to the River, to the extent practical. Staff will also include cosmetic and surface parking improvements throughout the design area to the extent practical while minimizing sunk costs when permanent construction does occur.

(END BACKGROUND FROM MARCH 15, 2022 MEETING)

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Included in the backup materials this evening are selected sheets from the current plan set that show the proposed roadway, hardscape and landscape improvements.

The design portion of the project is behind schedule for two reasons. First, about two months into the design, the project manager from WGI left the company and there was no communication through the transition. This led to a significant learning curve for the new project manager. Second, the engineer's cost estimate came in significantly over budget, so the City and engineering team have been working continuously over the last few months on value engineering options to reduce the estimated cost without sacrificing the desired project elements. Following is the anticipated schedule as of this writing:

Milestone	Date
Submit SJRWMD permit for parking lot	March 3, 2023
Update Council with options for value-engineering	March 7, 2023
Public Update Workshop	March 23, 2023
100% plans completed	April 1, 2023
Receive SJRWMD construction permit	April 28, 2023
Advertise Project for bid	May 4, 2023
Bids due	June 1, 2023
Council Award bid	June 20, 2023
Notice to Proceed (Construction Begins)	July 3, 2023
Construction Complete (9 months)	March 30, 2024

This update is being provided to Council this evening to answer any questions prior to bid advertisement. Staff will conduct a workshop on March 23 at 6:30 PM to provide an update to the public, with special emphasis on the affected property owners immediately adjacent to the project. Once the plans are complete and the SJRWMD permit is issued, we will advertise the project for bid and bring back to Council for an award recommendation.

(END BACKGROUND FROM MARCH 7, 2023 MEETING)

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Per the schedule given at the March 7 Council meeting, the bid was advertised May 4, 2023 with an opening date of June 6, 2023. There were at least nine (9) general contractors that downloaded the plans from the city website, but only one bid was received. That bid was in the amount of $5,656,747, almost double the engineer's estimate, from CGC, Inc. Staff reached out to the non-responsive bidders and most indicated that the project was too complicated to take on while they have a full plate of easier projects at present. Therefore, city staff decided to work with the low bidder to reduce the cost to an awardable amount.

Since then, CGC and city staff have been working diligently to analyze the bid. We verified that the quantities of work estimated by CGC matched the quantities of work estimated by the design engineers, WGI. We evaluated the removal of certain scopes of work to reduce the project. Council should keep in mind from the previous update that staff had already worked with WGI on value-engineering, so there was very little left to value-engineer the project without losing the desired design components of this streetscape and walkability project. In the end, staff felt that the removal of components such as landscaping, lighting and hardscape would not be acceptable given the nature and intent of the project.

Therefore, staff asked CGC to provide quotes for phases; (1) to complete all work from Palmetto Ave to Orange Ave, and (2) to complete all work from Palmetto Ave to Magnolia Ave. Simultaneously, city staff worked to obtain quotes for various project components as if we were the general contractor, since

we were also considering this option. However, we were unsuccessful in obtaining bids from some of the trades.

CGC provided a price of $2,392,751.00 for the block from Palmetto Ave to Orange Ave as a base bid and a price of $779,996.00 to add the block from Orange Ave to Magnolia Ave. This total amount of $3,172,747.00 is proportionate to the same scope of work in the breakdown of the engineers estimate, so staff feels this is a reasonable price based on the initial bid and the revised scope of work. Staff recommends awarding Bid 2023-08 with the revised scope and revised price to CGC as presented. CGC estimates that work can begin in January 2024 given their current workload and take approximately six (6) months to complete. If Council approves this award, the City will work with the property owners in this area regarding schedule and access to create the least impact to their businesses as possible.

FISCAL IMPACT

Funding is available from:

- Approximately $1,000,000 in the FY 23 budget that was not expended on the Public Works Compound (in anticipation that it would be needed for this project).
- Funding programmed for this project in the FY 23 budget.
- Funding programmed for this project in the FY 24 budget.
- **Original Contract Amount- $3,172,747.00**
- **Remaining contract Amount- $1,225,324.39**

RECOMMENDATION

Approve Pay Application #3- Walnut Street Improvements, to provide roadway, utility, pedestrian and streetscape improvements on Walnut St from Palmetto Ave to the River to CGC, Inc. in the amount $709,763.39.

APPLICATION AND CERTIFICATION FOR PAYMENT

AIA DOCUMENT G702

PAGE ONE OF TWO PAGES

TO OWNER **City of Green Cove Springs**
Attn: Mike Null
321 Walnut Street
Green Cove Springs, FL 32043

FROM CONTRACTOR:
CGC, Inc.
7036 12th Street W.
Jacksonville, Florida 32220

PROJECT: Walnut Street Improvements Green Cove Springs, Florida

VIA ARCHITECT: WGI, Inc.
4371 US Hwy 17 S.
Ste 203
Fleming Island, FL 32003

APPLICATION NO: 3-THREE

PERIOD TO: 6/30/2024

PROJECT NOS: 2023-08

PO DATE: 9/19/23

Distribution to:

X	OWNER
	ARCHITECT
	CONTRACTOR

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM		$ 3,172,747.00
2. Net change by Change Orders		$ 0.00
3. CONTRACT SUM TO DATE (Line 1 ± 2)		$ 3,172,747.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)		$ 2,049,918.23
5. RETAINAGE:		
a. 5 % of Completed Work (Column D + E on G703)	$ $102,495.91	
b. 0 % of Stored Material (Column F on G703)	$ Included in above	
Total Retainage (Lines 5a + 5b or Total in Column I of G703)		$ 102,495.91
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)		$ 1,947,422.32
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)		$ 1,237,658.93
8. CURRENT PAYMENT DUE		$ 709,763.39
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6)	$	1,225,324.68

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner		
Total approved this Month		
TOTALS		
NET CHANGES by Change Order	$0.00	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: CGC, Inc.

By: _____ Date: 06/26/24
Richard C. Gaskin, Jr., President

State of: FL County of: Duval
Subscribed and sworn to before me this 26th day of June , 2024
Notary Public: _____ ,Tammy Burkard
My Commission expires: 10/11/26

Notary Public State of Florida
Tammy Burkard
My Commission
HH 280898
Exp.10/11/2026

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED . . . . . $ _____

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and onthe Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

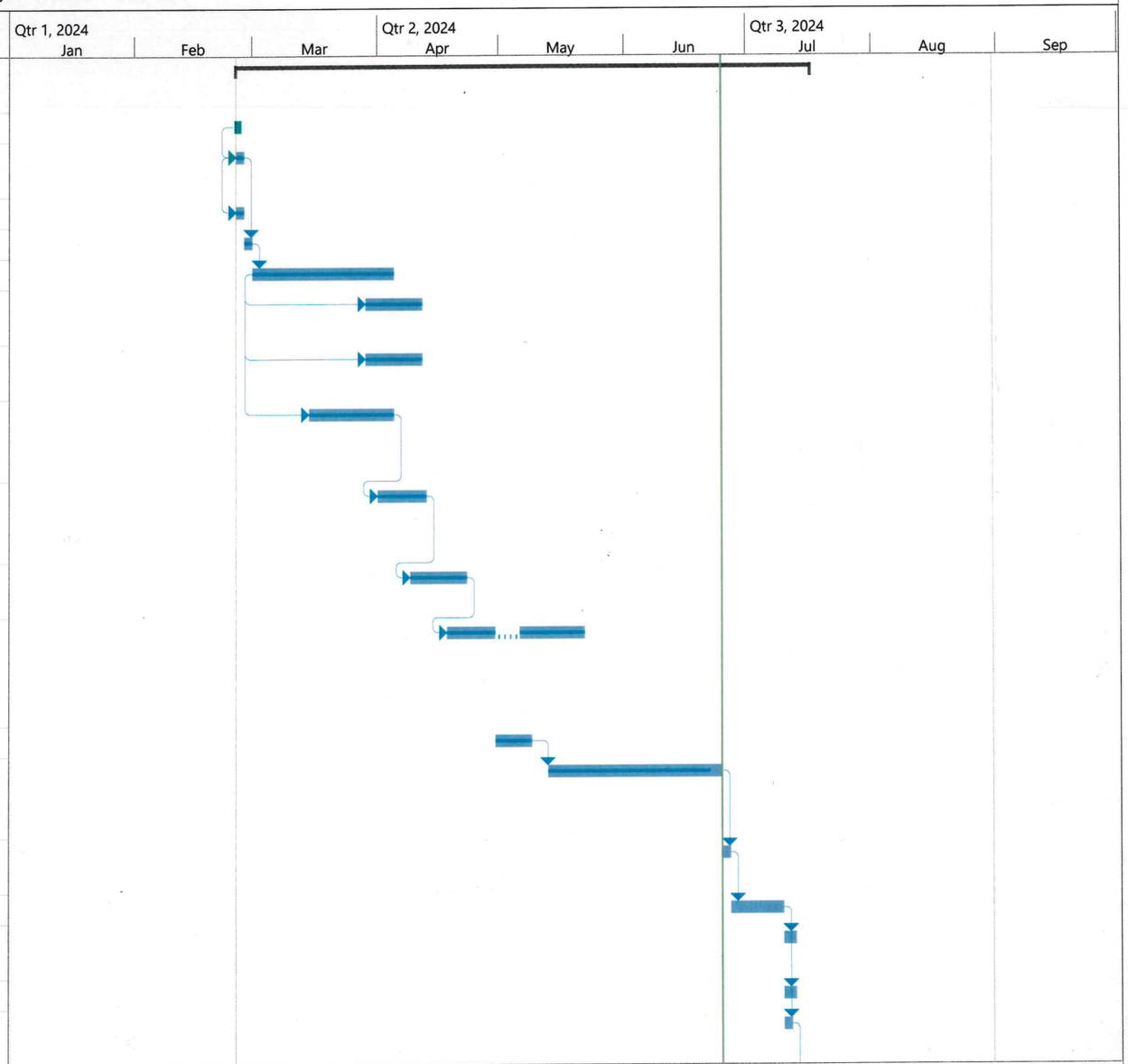
APPLICATION NO: 3-THREE
APPLICATION DATE: 6/26/2024
PERIOD TO: 6/30/2024
ARCHITECT'S PROJECT NO: 2023-08

A	B	C	D	E	F	G	H	I	J
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)	BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD					
1	BASE BID - WEST (Palmetto Ave. to US17/Orange Ave.)	$2,392,751.00	$1,302,798.87	$747,119.36	$0.00	$2,049,918.23	85.67%	$342,832.77	$102,495.91
2	ALTERNAT #1 - EAST (US17/Orange Ave. to Magnolia Ave.)	$779,996.00	$0.00		$0.00	$0.00	0.00%	$779,996.00	$0.00
	GRAND TOTALS	**$3,172,747.00**	**$1,302,798.87**	**$747,119.36**	**$0.00**	**$2,049,918.23**	**65%**	**$1,122,828.77**	**$102,495.91**

Project Schedule Update: 6/26/2024

WALNUT STREET IMPROVEMENTS PROJECT - PHASE 1
CITY OF GREEN COVE SPRINGS BID NUMBER 2023-08
CGC, INC. Project Number: C-23-10

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		**Palmetto Ave to U.S. 17**	**102 days**	**Mon 2/26/24**	**Tue 7/16/24**		
2		Notice to Proceed	1 day	Mon 2/26/24	Mon 2/26/24		
3	✓	Maintenance of Traffic	2 days	Mon 2/26/24	Tue 2/27/24	2SS	
4	✓	Mobilization	2 days	Mon 2/26/24	Tue 2/27/24	3SS	
5	✓	Erosion Control	2 days	Wed 2/28/24	Thu 2/29/24	3	
6	✓	Demolition	25 days	Fri 3/1/24	Thu 4/4/24	5	
7	✓	Storm Drainage Work	10 days	Fri 3/29/24	Thu 4/11/24	6SS+20 days	
8	✓	Irrigation Installation	10 days	Fri 3/29/24	Thu 4/11/24	6SS+20 days	
9	✓	Underground Electrical Installation	15 days	Fri 3/15/24	Thu 4/4/24	6SS+10 days	
10	✓	Subgrading for Sidewalk and Roadway	10 days	Mon 4/1/24	Fri 4/12/24	9FS-4 days	
11	✓	Concrete Curb Installation	10 days	Tue 4/9/24	Mon 4/22/24	10FS-4 days	
12	✓	Optional Base Group 1 Installation and Grading	20 days	Thu 4/18/24	Tue 5/21/24	11FS-3 days	
13	✓	Structural Soils	7 days	Tue 4/30/24	Wed 5/8/24		
14		Concrete Sidewalk Installation	31 days	Mon 5/13/24	Mon 6/24/24	13FS+2 days	
15		Subgrading For Pavers	2 days	Tue 6/25/24	Wed 6/26/24	14	
16		Paver Installation	9 days	Thu 6/27/24	Tue 7/9/24	15	
17		Landscaping and Irrigation	3 days	Wed 7/10/24	Fri 7/12/24	16	
18		Lighting	3 days	Wed 7/10/24	Fri 7/12/24	16	
19		Site Furnishings and Signage	2 days	Wed 7/10/24	Thu 7/11/24	16	



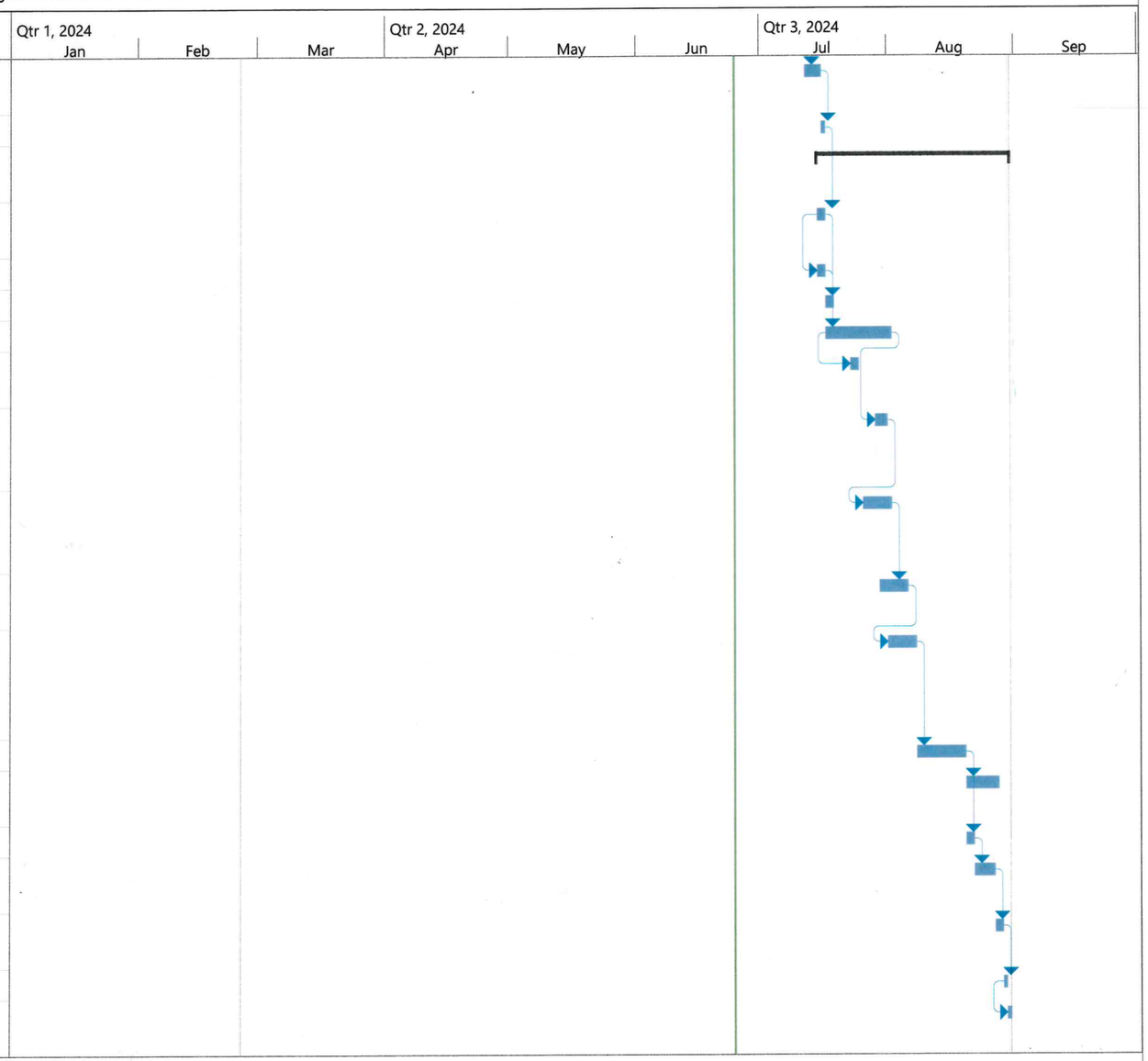
Project: Update #2 - Walnut Str
Date: Tue 6/25/24

Task	Project Summary	Manual Task	Start-only	Deadline	
Split	Inactive Task	Duration-only	Finish-only	Progress	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress	
Summary	Inactive Summary	Manual Summary	External Milestone		

Project Schedule Update: 6/26/2024

WALNUT STREET IMPROVEMENTS PROJECT - PHASE 1
CITY OF GREEN COVE SPRINGS BID NUMBER 2023-08
CGC, INC. Project Number: C-23-10

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
20		Site Restoration and Cleanup	2 days	Fri 7/12/24	Mon 7/15/24	19	
21		Remove MOT	1 day	Tue 7/16/24	Tue 7/16/24	20	
22		**U.S. 17 to Magnolia Ave**	**35 days**	**Mon 7/15/24**	**Fri 8/30/24**		
23		Maintenance of Traffic	2 days	Mon 7/15/24	Tue 7/16/24	21FS-2 days	
24		Mobilization	2 days	Mon 7/15/24	Tue 7/16/24	23SS	
25		Erosion Control	2 days	Wed 7/17/24	Thu 7/18/24	23	
26		Demolition	12 days	Wed 7/17/24	Thu 8/1/24	24	
27		Irrigation Sleeve Installation	2 days	Tue 7/23/24	Wed 7/24/24	26SS+4 days	
28		Underground Electrical Installation	3 days	Mon 7/29/24	Wed 7/31/24	26FS-4 days	
29		Subgrading for Sidewalk and Roadway	5 days	Fri 7/26/24	Thu 8/1/24	28FS-4 days	
30		Concrete Installation	5 days	Tue 7/30/24	Mon 8/5/24	29FS-3 days	
31		Optional Base Group 1 Installation and Grading	5 days	Thu 8/1/24	Wed 8/7/24	30FS-3 days	
32		Paver Installation	8 days	Thu 8/8/24	Mon 8/19/24	31	
33		Landscaping and Irrigation	6 days	Tue 8/20/24	Tue 8/27/24	32	
34		Lighting	2 days	Tue 8/20/24	Wed 8/21/24	32	
35		Site Furnishings and Signage	3 days	Thu 8/22/24	Mon 8/26/24	34	
36		Site Restoration and Cleanup	2 days	Tue 8/27/24	Wed 8/28/24	35	
37		Remove MOT	1 day	Thu 8/29/24	Thu 8/29/24	36	
38		Substantial Completion	1 day	Fri 8/30/24	Fri 8/30/24	37SS+1 day	



Project: Update #2 - Walnut Str
Date: Tue 6/25/24

Task	Project Summary	Manual Task	Start-only	Deadline	
Split	Inactive Task	Duration-only	Finish-only	Progress	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress	
Summary	Inactive Summary	Manual Summary	External Milestone		

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council Regular Session **MEETING DATE:** July 16th, 2024

FROM: Greg Bauer, Assistant Public Works Director

SUBJECT: City Council Approve Pay Application #3 for the West Street CDBG Stormwater Improvements and Highland Sidewalk Improvements to Besch and Smith in the amount of $913,522.06.

BACKGROUND

This project award incorporates two sections of the 2020 CDBG-NR grant that the City received in 2021. This project will construct the sidewalk portion as well as the stormwater portion of the grant project, with the CDBG grant funding $600,000 of the work.

The city received two bids on this project. Besch and Smith submitted a bid of $4,963,773.23 and CGC submitted a bid of $9,111,431.00. The Besch and Smith bid is approximately $2,000,000 over budget. Staff met with Besch and Smith and identified $263,413.53 is value engineering opportunities as well as at least $334,400.50 in direct purchasing opportunities, which will result in approximately $23,000 in tax savings by the City purchasing the materials directly.

The recommended award amount of $4,700,359.70 includes the reduction of $263,413.53 in value engineering items for the stormwater portion of the project. The direct purchase items will be removed from the contract by change order once awarded to realize the tax savings to be applied to the stormwater portion of the project as well. Staff recommends award of the project to Besch and Smith in the amount of $4,700,359.70.

FISCAL IMPACT

As presented, the sidewalk portion of the project is $670,223.49. This item is not specifically included in the FY 2024 approved budget; rather it was not completed in FY 2023. This portion of the contract will be funded by:

- $267,000 in CDBG grant funds, and
- $403,223.49 in funds re-allocated from the “Dirt Road Paving Program” line item upon Council approval.
    - As discussed during the budget process this year, the City does not intend to use dirt road funding to pave dirt roads.

The stormwater portion of the project represents the remaining $4,030,136.21. This portion of the project will be funded by:

- $1,000,000 of unexpended funds from the FY 2023 CIP budget for this project,
- $333,000 in CDBG grant funds,
- $1,176,936 in stormwater loan proceeds intended for this project, and

- $1,520,200.21 in stormwater loan proceeds intended for the Oakridge and Highland project upon Council approval.

This stormwater funding plan along with the incorporation of the $8,500,000 loan and additional loan-funded projects will be presented to Council at a future meeting in a formal budget amendment.

Original contract price- $4,030,136.21

Remaining contract amount- $3,027,683.74

Please note for record keeping purposes pay application #1 was submitted in April with the amount of $0.00 requested. The contractor began construction on the sidewalk portion of the project during this time period.

RECOMMENDATION

Approve Pay Application #3 for the West Street CDBG Stormwater Improvements and Highland Sidewalk Improvements to Besch and Smith in the amount of $913,522.06.

APPLICATION AND CERTIFICATE FOR PAYMENT

Owner: City of Green Cove Springs
321 Walnut Street
Green Cove Springs, FL 32043

PROJECT: West Street Drainage & Highland Ave Sidewalk
West Street
Green Cove Springs, FL 32043

APPLICATION NO. 3

PERIOD TO:6/30/2024

Distribution to:
☐ OWNER
☐ ENGINEER
☐ CONTRACTOR
☐ PROGRAM MNGR

CONTRACTOR: Besch and Smith Civil Group, Inc.
345 Cumberland Industrial Ct.
St Augustine, FL 32095
904-260-6393

Project # 2023-14

CONTRACT DATE: 4/11/2024

CONTRACT FOR: SITEWORK

CONTRACTOR'S APPLICATION FOR PAYMENT

CHANGE ORDER SUMMARY		
Change Orders approved in	ADDITIONS	DEDUCTIONS
Total	$0.00	$0.00
Approved this Month		
Number / Date Approved		
TOTALS	$0.00	$0.00
Net change by Change Orders	$0.00	$0.00

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payments has been completed in accordance with the Contract Documents, that the amounts have been paid by the Contractor for work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Besch and Smith Civil Group, Inc.

By: Nicole Beal /President 6/19/2024

Application is made for Payment, as shown below, in connection with the Contract Continuation Sheet, AIA Document G703, is attached

1.	ORIGINAL CONTRACT SUM			$ 4,700,359.70
2.	Net Change by Change Orders			$ 0.00
3.	CONTRACT SUM TO DATE (Line 1 +/- 2)			$ 4,700,359.70
4.	TOTAL COMPLETED & STORED TO DATE (Column I on G703)			$ 1,858,528.84
5.	RETAINAGE			
	a. 10 % of Completed Work (Column L on G703)	$	185,852.88	
	b. 10 % of Stored Material	$	0.00	
	Total Retainage (Line 5a + 5b or (Total in Column L of G703)			$ 185,852.88
6.	TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5 Total)			$ 1,672,675.96
7.	LESS PREVIOUS CERTIFICATES FOR PAYMENT			$ 759,153.90
8.	CURRENT PAYMENT DUE			$ 913,522.06
9.	BALANCE TO FINISH, PLUS RETAINAGE (Line 3 less Line 6)			$ 3,027,683.74

State of Florida,
Subscribed and sworn to before me this date

Notary Public

My Commission Expires:

ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Engineer certifies to the Owner that to the best of the Engineer's knowledge, information and belief the Work has progressed as indicated, the quality of Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED
(Attach explanation if amount certified differs from the applied for) $913,522.06

OWNER:
By: Date:

ENGINEER:
By: Date:

This certificate is not negotiable. THE AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this contract.

APPLICATION AND CERTIFICATE FOR PAYMENT

Owner: City of Green Cove Springs
321 Walnut Street
Green Cove Springs, FL 32043

PROJECT: Highlands Ave Sidewalk
West Street
Green Cove Springs, FL 32043

APPLICATION NO. 3

PERIOD TO:6/30/2024

Distribution to:
☐ OWNER
☐ ENGINEER
☐ CONTRACTOR
☐ PROGRAM MNGR

CONTRACTOR: Besch and Smith Civil Group, Inc.
345 Cumberland Industrial Ct.
St Augustine, FL 32095
904-260-6393

Project # 2023-14

CONTRACT FOR: SITEWORK

CONTRACT DATE: 4/11/2024

CONTRACTOR'S APPLICATION FOR PAYMENT

CHANGE ORDER SUMMARY		
Change Orders approved in	ADDITIONS	DEDUCTIONS
Total	$0.00	$0.00
Approved this Month		
Number / Date Approved		
TOTALS	$0.00	$0.00
Net change by Change Orders	$0.00	$0.00

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payments has been completed in accordance with the Contract Documents, that the amounts have been paid by the Contractor for work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Besch and Smith Civil Group, Inc.

By: Nicole Beach /President 6/19/2024

Application is made for Payment, as shown below, in connection with the Contract Continuation Sheet, AIA Document G703, is attached

1.	ORIGINAL CONTRACT SUM			$ 670,223.49
2.	Net Change by Change Orders			$ 0.00
3.	CONTRACT SUM TO DATE (Line 1 +/- 2)			$ 670,223.49
4.	TOTAL COMPLETED & STORED TO DATE (Column I on G703)			$ 569,994.96
5.	RETAINAGE			
	a. 10 % of Completed Work (Column L on G703)	$	56,999.50	
	b. 10 % of Stored Material	$	0.00	
	Total Retainage (Line 5a + 5b or (Total in Column L of G703)			$ 56,999.50
6.	TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5 Total)			$ 512,995.46
7.	LESS PREVIOUS CERTIFICATES FOR PAYMENT			$ 462,595.23
8.	CURRENT PAYMENT DUE			$ 50,400.23
9.	BALANCE TO FINISH, PLUS RETAINAGE (Line 3 less Line 6)			$ 157,228.03

State of Florida,
Subscribed and sworn to before me this date

Notary Public

My Commission Expires:

ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Engineer certifies to the Owner that to the best of the Engineer's knowledge, information and belief the Work has progressed as indicated, the quality of Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED
(Attach explanation if amount certified differs from the applied for) $50,400.23

OWNER:
By: Date:

ENGINEER:
By: Date:

This certificate is not negotiable. THE AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this contract.

CONTINUATION SHEET

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing
Contractor's signed Certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NUMBER: 3
APPLICATION DATE: 6/25/2024
PERIOD TO: 6/30/2024

PROJECT NAME: Highlands Ave Sidewalk

A ITEM NO.	B DESCRIPTION OF WORK	C ORIGINAL SCHEDULED VALUE	D FROM PREVIOUS APPLICATION VALUE	E THIS PERIOD VALUE	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	G % (G/C)	H BALANCE TO FINISH (C-G)	I RETAINAGE
1	**GENERAL CONDITIONS HIGHLANDS AVE SIDEWALKS**	$120,173.46	$ 81,718.16	$ 17,365.00		$99,083.16	82.45%	$21,090.30	$9,908.32
2	SILT FENCE	$30,756.17	$ 26,766.33	$ 3,000.00		$29,766.33	96.78%	$989.84	$2,976.63
3	INLET PROTECTION	$12,353.02	$ 5,717.66	$ 3,000.00		$8,717.66	70.57%	$3,635.36	$871.77
4	NPDES PERMIT AND MONITORING	$9,546.48	$ 4,100.23	$ 2,000.00		$6,100.23	63.90%	$3,446.25	$610.02
5	CLEARING GRUBBING AND STRIPPING	$44,249.53	$ 44,249.53			$44,249.53	100.00%	$0.00	$4,424.95
6	SAW CUT CONCRETE	$4,768.98	$ 4,768.98			$4,768.98	100.00%	$0.00	$476.90
7	SAW CUT ASPHALT	$1,576.80	$ 1,576.80			$1,576.80	100.00%	$0.00	$157.68
8	REMOVE EXISTING PLANTERS	$2,431.22	$ 2,431.22			$2,431.22	100.00%	$0.00	$243.12
9	SIDEWALK REMOVAL INCLUDES FLUMES	$1,523.34	$ 1,523.34			$1,523.34	100.00%	$0.00	$152.33
10	REMOVE ASPHALT (ROADWAY)	$1,233.54	$ 1,233.54			$1,233.54	100.00%	$0.00	$123.35
11	REMOVE 6" CONCRETE PAVING	$4,811.94	$ 4,811.94			$4,811.94	100.00%	$0.00	$481.19
12	CURB REMOVAL	$1,875.65	$ 1,875.65			$1,875.65	100.00%	$0.00	$187.57
13	REMOVE & REPLACE DOT MAILBOX	$12,394.89	$ 12,394.89			$12,394.89	100.00%	$0.00	$1,239.49
14	RELOCATE EXISTING FIRE HYDRANT	$21,411.45	$ 21,411.45			$21,411.45	100.00%	$0.00	$2,141.15
15	RELOCATE EXISTING SIGNS	$2,100.14		$ 2,100.14		$2,100.14	100.00%	$0.00	$210.01
16	ADJUST WATER METER BOX	$3,466.92	$ 3,466.92			$3,466.92	100.00%	$0.00	$346.69
17	ADJUST AT&T HAND BOX	$3,150.27	$ 3,150.27			$3,150.27	100.00%	$0.00	$315.03
18	STRIP TOPSOIL (HAUL OFFSITE)	$15,543.00	$ 15,543.00			$15,543.00	100.00%	$0.00	$1,554.30
19	BORROW FILL (TRUCK MEASURE)	$22,618.08	$ 22,618.08			$22,618.08	100.00%	$0.00	$2,261.81
20	ROUGH GRADING SITE	$9,355.50	$ 9,355.50			$9,355.50	100.00%	$0.00	$935.55
21	FINE GRADING SITE (ROUGH GRADE MINUS CONCRETE AREAS)	$16,582.72	$ 8,000.00	$ 4,000.00		$12,000.00	72.36%	$4,582.72	$1,200.00
22	6" CONCRETE PAVING	$50,004.27	$ 50,004.27			$50,004.27	100.00%	$0.00	$5,000.43
23	TURNDOWN SIDEWALK (SUBCONTRACTOR)	$5,802.06	$ 5,802.06			$5,802.06	100.00%	$0.00	$580.21
24	4" CONCRETE SIDEWALK (SUBCONTRACTOR)	$163,465.20	$ 149,104.00	$ 14,361.20		$163,465.20	100.00%	$0.00	$16,346.52
25	CONCRETE SIDEWALK RAMPS (SUBCONTRACTOR)	$25,769.92	$ 21,370.88	$ 4,399.04		$25,769.92	100.00%	$0.00	$2,576.99
26	18" CITY STANDARD CURB (SUBCONTRACTOR)	$6,774.88	$4,000.00	$ 2,774.88		$6,774.88	100.00%	$0.00	$677.49
27	SLAB SOD (BAHIA) SUB (FINE GRADE AREAS)	$14,586.88	$7,000.00	$ 3,000.00		$10,000.00	68.55%	$4,586.88	$1,000.00
28	HYDROBLAST EXISTING STOP BARS AND CROSSWALKS	$600.51				$0.00	0.00%	$600.51	$0.00
29	NEW STRIPING STOP BARS AND CROSSWALKS	$13,042.52				$0.00	0.00%	$13,042.52	$0.00
30	NEW SIGNAGE INCLUDING SOLAR POWERED SIGN	$25,354.79				$0.00	0.00%	$25,354.79	$0.00
31	HANDRAIL	$22,899.36				$0.00	0.00%	$22,899.36	$0.00
	TOTAL:	***$670,223.49***	***$513,994.70***	***$ 56,000.26***	***$0.00***	**$569,994.96**	**85.05%**	***$100,228.53***	**$56,999.50**

APPLICATION AND CERTIFICATE FOR PAYMENT

Owner: City of Green Cove Springs
321 Walnut Street
Green Cove Springs, FL 32043

PROJECT: West Street Drainage
West Street
Green Cove Springs, FL 32043

APPLICATION NO. 3

PERIOD TO:6/30/2024

Project # 2023-14

CONTRACT DATE: 4/11/2024

Distribution to:
☐ OWNER
☐ ENGINEER
☐ CONTRACTOR
☐ PROGRAM MNGR

CONTRACTOR: Besch and Smith Civil Group, Inc.
345 Cumberland Industrial Ct.
St Augustine, FL 32095
904-260-6393

CONTRACT FOR: SITEWORK

CONTRACTOR'S APPLICATION FOR PAYMENT

CHANGE ORDER SUMMARY		
Change Orders approved in	ADDITIONS	DEDUCTIONS
Total	$0.00	$0.00
Approved this Month		
Number / Date Approved		
TOTALS	$0.00	$0.00
Net change by Change Orders	$0.00	$0.00

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payments has been completed in accordance with the Contract Documents, that the amounts have been paid by the Contractor for work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Besch and Smith Civil Group, Inc.

By: Nicole Besch / President 6/19/2024

Application is made for Payment, as shown below, in connection with the Contract
Continuation Sheet, AIA Document G703, is attached

1.	ORIGINAL CONTRACT SUM			$ 4,030,136.21
2.	Net Change by Change Orders			$ 0.00
3.	CONTRACT SUM TO DATE (Line 1 +/- 2)			$ 4,030,136.21
4.	TOTAL COMPLETED & STORED TO DATE (Column I on G703)			$ 1,288,533.88
5.	RETAINAGE			
	a. 10 % of Completed Work (Column L on G703)	$	128,853.39	
	b. 10 % of Stored Material	$	0.00	
	Total Retainage (Line 5a + 5b or (Total in Column L of G703)			$ 128,853.39
6.	TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5 Total)			$ 1,159,680.49
7.	LESS PREVIOUS CERTIFICATES FOR PAYMENT			$ 296,558.67
8.	CURRENT PAYMENT DUE			$ 863,121.82
9.	BALANCE TO FINISH, PLUS RETAINAGE (Line 3 less Line 6)			$ 2,870,455.72

State of Florida,
Subscribed and sworn to before me this date

Notary Public

My Commission Expires:

ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Engineer certifies to the Owner that to the best of the Engineer's knowledge, information and belief the Work has progressed as indicated, the quality of Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED
(Attach explanation if amount certified differs from the applied for) $863,121.82

OWNER:
By: Date:

ENGINEER:
By: Date:

This certificate is not negotiable. THE AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this contract.

CONTINUATION SHEET

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing
Contractor's signed Certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NUMBER: 3
APPLICATION DATE: 6/25/2024
PERIOD TO: 6/30/2024

PROJECT NAME: West Street Drainage

A	B	C	D	E	F	G		H	I
ITEM NO.	DESCRIPTION OF WORK	ORIGINAL SCHEDULED VALUE	FROM PREVIOUS APPLICATION VALUE	THIS PERIOD VALUE	MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G/C)	BALANCE TO FINISH (C-G)	RETAINAGE
1	**GENERAL CONDITIONS- WEST ST DRAINAGE**	$659,888.90	$ 46,192.22	$ 142,140.00		$188,332.22	28.54%	$471,556.68	$18,833.22
2	SILT FENCE	$21,776.22				$0.00	0.00%	$21,776.22	$0.00
3	INLET PROTECTION	$8,745.22				$0.00	0.00%	$8,745.22	$0.00
4	NPDES PERMIT AND MONITORING	$6,756.62		$ 1,000.00		$1,000.00	14.80%	$5,756.62	$100.00
5	CLEARING GRUBBING AND STRIPPING	$34,895.63	$ 5,000.00	$ 20,000.00		$25,000.00	71.64%	$9,895.63	$2,500.00
6	HOLD POWER POLES	$17,348.02		$ 17,348.02		$17,348.02	100.00%	$0.00	$1,734.80
7	SIDEWALK REMOVAL	$14,221.69	$ 2,000.00	$ 5,000.00		$7,000.00	49.22%	$7,221.69	$700.00
8	CURB REMOVAL	$21,753.60	$ 4,000.00	$ 8,000.00		$12,000.00	55.16%	$9,753.60	$1,200.00
9	ADJUST/RELOCATE WATER VALVES	$17,563.32				$0.00	0.00%	$17,563.32	$0.00
10	REMOVE 6" CONCRETE PAVING	$2,882.88				$0.00	0.00%	$2,882.88	$0.00
11	REMOVE EXIST. CL FENCE	$2,607.60	$ 2,607.60			$2,607.60	100.00%	$0.00	$260.76
12	8" SEWER MAIN REMOVAL 5.90LB/LF	$3,644.40				$0.00	0.00%	$3,644.40	$0.00
13	REMOVE WATERMAIN (8")	$6,631.20		$ 6,631.20		$6,631.20	100.00%	$0.00	$663.12
14	REMOVE 18" CMP	$49,271.82		$ 5,000.00		$5,000.00	10.15%	$44,271.82	$500.00
15	REMOVE 30" CMP	$112,403.06		$ 15,000.00		$15,000.00	13.34%	$97,403.06	$1,500.00
16	REMOVE 36" CMP	$59,455.03		$ 10,000.00		$10,000.00	16.82%	$49,455.03	$1,000.00
17	REMOVE 54" CMP	$141,001.50	$ 32,515.10	$ 60,000.00		$92,515.10	65.61%	$48,486.40	$9,251.51
18	REMOVE EXISTING PRECAST STRUCTURES (0/4)	$7,551.48		$ 2,000.00		$2,000.00	26.48%	$5,551.48	$200.00
19	REMOVE EXISTING PRECAST STRUCTURES (4/6)	$14,987.40		$ 3,000.00		$3,000.00	20.02%	$11,987.40	$300.00
20	REMOVE EXISTING PRECAST STRUCTURES (6/8)	$19,482.82		$ 5,000.00		$5,000.00	25.66%	$14,482.82	$500.00
21	REMOVE EXISTING PRECAST STRUCTURES (8/10)	$22,877.26		$ 10,000.00		$10,000.00	43.71%	$12,877.26	$1,000.00
22	REMOVE EXISTING PRECAST STRUCTURES (10/12)	$16,426.65		$ 16,426.65		$16,426.65	100.00%	$0.00	$1,642.67
23	SAW CUT ASPHALT	$6,531.32	$ 9,855.49			$9,855.49	150.90%	($3,324.17)	$985.55
24	R AND R FENCE AT POND	$4,003.39	$ 6,531.32			$6,531.32	163.14%	($2,527.93)	$653.13
25	DEWATER FOR STORM INSTALLATION	$129,501.73	$ 2,000.00	$ 30,000.00		$32,000.00	24.71%	$97,501.73	$3,200.00
26	STRIP TOPSOIL (HAUL OFFSITE)	$7,446.00	$ 15,000.00			$15,000.00	201.45%	($7,554.00)	$1,500.00
27	BORROW FILL (TRUCK MEASURE) FILL FOR SIDEWALK REMOVAL	$110,915.00	$ 2,000.00	$ 15,000.00		$17,000.00	15.33%	$93,915.00	$1,700.00
28	REMOVAL AND REPLACEMENT OF UNSUITABLE SOILS IN PIPE TR	$223,968.00	$ 5,000.00	$ 45,000.00		$50,000.00	22.32%	$173,968.00	$5,000.00
29	SWALE GRADING	$3,155.20	$ 10,000.00			$10,000.00	316.94%	($6,844.80)	$1,000.00
30	ROUGH GRADING SITE	$17,992.92		$ 5,000.00		$5,000.00	27.79%	$12,992.92	$500.00
31	FINE GRADING SITE (ROUGH GRADE MINUS CONCRETE AREA)	$21,069.40				$0.00	0.00%	$21,069.40	$0.00
32	FINE GRADING POND SLOPES	$2,037.74				$0.00	0.00%	$2,037.74	$0.00
33	CURB GRADING	$9,081.60		$ 1,000.00		$1,000.00	11.01%	$8,081.60	$100.00
34	R&R 4' CHAINLINK FENCE	$10,121.67				$0.00	0.00%	$10,121.67	$0.00
35	8" DR-18 PIPE WATER	$9,661.80		$ 9,661.80		$9,661.80	100.00%	$0.00	$966.18
36	CONNECT TO EXIST 8"	$6,642.46		$ 6,642.46		$6,642.46	100.00%	$0.00	$664.25
37	8"SDR-26 6/8' GRAVITY SEWER	$17,208.20				$0.00	0.00%	$17,208.20	$0.00
38	CONNECT TO EXIST (SEWER)	$20,122.80				$0.00	0.00%	$20,122.80	$0.00
39	SEWER BYPASS PUMPING	$28,863.63		$ 28,863.63		$28,863.63	100.00%	$0.00	$2,886.36
40	18" HDPE (0/6") DRAINAGE 7 RUNS	$69,084.00		$ 11,019.62		$11,019.62	15.95%	$58,064.38	$1,101.96
41	18" HDPE (6/8") DRAINAGE 1 RUN	$23,100.40				$0.00	0.00%	$23,100.40	$0.00
42	30" HDPE 6/8 DRAINAGE 4 RUNS	$317,842.20				$0.00	0.00%	$317,842.20	$0.00
43	30" HDPE (8/10) DRAINAGE 2 RUNS	$37,237.80				$0.00	0.00%	$37,237.80	$0.00
44	36" HDPE (8/10) DRAINAGE 4 RUNS	$159,984.00		$ 130,000.00		$130,000.00	81.26%	$29,984.00	$13,000.00
45	36" HDPE (10/12) DRAINAGE 2 RUNS	$73,029.60		$ 73,029.60		$73,029.60	100.00%	$0.00	$7,302.96

46	48" HDPE (8/10) DRAINAGE 2 RUNS	$147,984.20		$ 45,000.00		$45,000.00	30.41%	$102,984.20	$4,500.00
47	48" HDPE (10/12) DRAINAGE 6 RUNS	$336,160.00	$ 89,817.75	$ 75,000.00		$164,817.75	49.03%	$171,342.25	$16,481.78
48	48" HDPE (12/14) DRAINAGE 1 RUN	$36,372.40	$ 36,372.40			$36,372.40	100.00%	$0.00	$3,637.24
49	CURB INLET (0/4') (WE-6,WE-16,WE-18)	$38,370.54		$ 15,191.88		$15,191.88	39.59%	$23,178.66	$1,519.19
50	CURB INLET (4/6') (WE-10,WE-12,WE-14,WE-17)	$52,199.04				$0.00	0.00%	$52,199.04	$0.00
51	CURB INLET (6/8') (WE-4,WE-15,WE-19)	$44,448.63		$ 34,284.42		$34,284.42	77.13%	$10,164.21	$3,428.44
52	CURB INLET (8/10') (WE-8,WE-11,WE-13)	$56,870.25		$ 56,870.25		$56,870.25	100.00%	$0.00	$5,687.03
53	CURB INLET (10/12') (WE-5,WE-7,WE-9)	$62,314.62	$ 20,771.54	$ 41,543.08		$62,314.62	100.00%	$0.00	$6,231.46
54	CURB INLET (12/14') (WE-3)	$20,149.20	$ 20,149.20			$20,149.20	100.00%	$0.00	$2,014.92
55	STORM MANHOLE (6/8') (D-7,D-8)	$22,179.94				$0.00	0.00%	$22,179.94	$0.00
56	STORM MANHOLE (8/10') (D-5,D-6,WE-59B,WE-61)	$55,234.92		$ 27,617.46		$27,617.46	50.00%	$27,617.46	$2,761.75
57	STORM CONFLICT MANHOLE (8/10') (D-5A)	$11,241.81		$ 11,241.81		$11,241.81	100.00%	$0.00	$1,124.18
58	STEEL CASING FOR CONFLICT STRUCTURE	$12,264.05				$0.00	0.00%	$12,264.05	$0.00
59	STORM MANHOLE (10/12') (D-2,D-3,D-4)	$47,061.03	$ 15,697.01	$ 31,364.02		$47,061.03	100.00%	$0.00	$4,706.10
60	48"POURED IN PLACE MES SUBCONTRACTOR (D-1)	$8,241.19	$ 4,000.00			$4,000.00	48.54%	$4,241.19	$400.00
61	6" CONCRETE PAVING	$10,276.06				$0.00	0.00%	$10,276.06	$0.00
62	18" CITY STANDARD CURB (SUBCONTRACTOR)	$64,574.40				$0.00	0.00%	$64,574.40	$0.00
63	CONCRETE FLUMES	$2,133.84				$0.00	0.00%	$2,133.84	$0.00
64	4" CONCRETE SIDEWALK (SUBCONTRACTOR)	$88,098.21				$0.00	0.00%	$88,098.21	$0.00
65	CONCRETE SIDEWALK RAMPS (SUBCONTRACTOR)	$11,754.45				$0.00	0.00%	$11,754.45	$0.00
66	TEMP ASPHALT	$153,201.88		$ 153,201.88		$153,201.88	100.00%	$0.00	$15,320.19
67	LIMEROCK & SUBGRADE RESTORATION	$297,497.72		$ 25,000.00		$25,000.00	8.40%	$272,497.72	$2,500.00
68	1.5" S-III ASPHALT PAVING (SP-9.5)	$120,417.50				$0.00	0.00%	$120,417.50	$0.00
69	STRIPING & SIGNS	$7,480.28				$0.00	0.00%	$7,480.28	$0.00
70	SLAB SOD (BAHIA) SUB (FINE GRADE AREAS)	$16,250.40				$0.00	0.00%	$16,250.40	$0.00
71	CREDIT LAY DOWN AREA	($13,000.00)		$ (3,640.00)		($3,640.00)	28.00%	($9,360.00)	($364.00)
72	CREDIT QC MANUAL	($1,000.00)		$ (1,000.00)		($1,000.00)	100.00%	$0.00	($100.00)
73	CREDIT TELEVISING STORM PIPE	($30,000.00)		$ (15,000.00)		($15,000.00)	50.00%	($15,000.00)	($1,500.00)
74	CREDIT HOLDING OF POWER POLES	($17,348.02)		$ (17,348.02)		($17,348.02)	100.00%	$0.00	($1,734.80)
75	CREDIT SEWER BY-PASS	($28,863.63)		$ (28,863.63)		($28,863.63)	100.00%	$0.00	($2,886.36)
76	CREDIT TEMPORARY ASPHALT	($153,201.88)		$ (153,201.88)		($153,201.88)	100.00%	$0.00	($15,320.19)
77	CREDIT OF MATERIALS CONTINGENCY	($10,000.00)		$ (10,000.00)		($10,000.00)	100.00%	$0.00	($1,000.00)
78	CREDIT FOR DETOURS	($10,000.00)		$ (10,000.00)		($10,000.00)	100.00%	$0.00	($1,000.00)
	TOTAL:	***$4,030,136.21***	***$329,509.63***	***$ 959,024.25***	***$0.00***	**$1,288,533.88**	**31.97%**	***$2,741,602.33***	**$128,853.39**

CITY OF GREEN COVE SPRINGS
CITY COUNCIL REGULAR SESSION

321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA
TUESDAY, MAY 21, 2024 – 7:00 PM

MINUTES

Invocation & Pledge of Allegiance to the Flag - **Chaplain Marshall MacClellan, GCSPD**

Roll Call
COUNCIL MEMBERS PRESENT: Mayor Connie Butler, Vice Mayor Steven Kelley, Council Member Ed Gaw, Council Member Matt Johnson, Council Member Thomas Smith

STAFF MEMBERS PRESENT: L.J. Arnold, III, City Attorney, Steve Kennedy, City Manager, Mike Null, Assistant City Manager (arrived at 7:07 p.m.), Erin West, City Clerk

Mayor to call on members of the audience wishing to address the Council on matters not on the Agenda.

1. Sandra Dunnavant 303 N. Magnolia Ave. GCS speaks to the Council concerning a preservation ordinance and the Swanson home.
2. Sean Hatfield 301 Tucker St. GCS speaks to the Council concerning a shed on his property and Code Enforcement.
3. John Whiteman 723 N. Magnolia Ave. GCS speaks to the Council concerning the Swanson home and the zoning.
   Council Member Smith suggests taking the preservation ordinance request to the CAC.
4. Susan Bonura 103 Park St. advises they were at the meeting to be advised of the steps to take. Development Services Director Michael Daniels advises the zoning in the area is residential and explains the steps for creating a perseveration ordinance and society.
5. Darren Stutts 25 Palmetto Ave. GCS speaks on behalf of his wife and speaks to the Council concerning a sign for the VIA and the requirements the City has for placing a sign.
6. Joe Sobotta 212 North St. GCS speaks to the Council concerning the zoning and the form based code concerning residential and commercial.
7. Joseph Smith 1817 Heartpine Dr. Middleburg speaks to the Council about the Vineyard Center and the non-profit magazine that is being produced.
8. Van Royal 3688 LaCosta Ct. GCS speaks to the Council to clarify the property in question is zoned as residential.
9. Larianne Stutts 25 S. Palmetto Ave. GCS speaks to the Council concerning a sign for the VIA and the requirements the City has for placing a sign.
10. Chris Willis 630 N. Magnolia Ave. GCS speaks to the Council concerning the Swanson property.
11. Felicia Hampshire 508 Franklin St. GCS speaks to the Council about the upcoming events at the Augusta Savage Community Center. Ms. Hampshire speaks about the Fun in the Sun event being held at Vera Francis Park on July 11th.

AWARDS & RECOGNITION

1. Proclamation - National Safe Boating Week
   Mayor Butler reads the proclamations and presents to members of the U.S. Coast Guard Auxiliary.

2. Proclamation - Mental Health Awareness Month
   Mayor Butler reads the proclamation and presents to representatives from NAMI Jax.

3. Recognition of Steve Thomas for 37 years with the City of Green Cove Springs
   Assistant Water Utilities Director Scott Schultz speaks about Steve Thomas and his 37 years with the City.
   City Manager Steve Kennedy speaks about Mr. Thomas and his contributions to the City.

REORGANIZATION

4. City Council election of a Mayor and Vice Mayor to serve from May 21, 2024 to May 20, 2025. ***Erin West***

   Motion to elect Vice Mayor Kelley as Mayor.
   Motion made by Council Member Johnson, Seconded by Council Member Smith.
   Voting Yea: Mayor Butler, Vice Mayor Kelley, Council Member Gaw, Council Member Johnson, Council Member Smith

   Motion to elect Council Member Smith as Vice Mayor.
   Motion made by Council Member Butler, Seconded by Council Member Johnson.
   Voting Yea: Mayor Kelley, Council Member Butler, Council Member Gaw, Council Member Johnson, Council Member Smith

PUBLIC HEARINGS

5. Second and final reading of Ordinance O-14-2024 regarding the proposed zoning of a portion of Parcel 016564-002-00 for approximately 6.03 acres ***Michael Daniels***
   Zoning Amendment From: Unzoned To: M-1 Light Industrial
   City Attorney Arnold reads Ordinance No. O-14-2024 by title.
   Development Services Director Michael Daniels presents the ordinance.
   Mayor Kelley opens the public hearing.
   Following no public comments, Mayor Kelley closes the public hearing.
   Council discussion followed concerning the number of units that will be in the development and the amount of traffic the development will add.

   Motion to approve the second and final reading of Ordinance O-14-2024 for form and legality, to amend the zoning of a portion of Parcel ID 016564-002-00 from Un-zoned to M-1, Ligh Industrial.
   Motion made by Council Member Johnson, Seconded by Council Member Butler.
   Voting Yea: Mayor Kelley, Vice Mayor Smith, Council Member Butler, Council Member Gaw, Council Member Johnson

6. Second and Final Reading of Ordinance O-13-2024 Form Based Code Companion Ordinance ***Michael Daniels***
   City Attorney Arnold reads Ordinance No. O-13-2024 by title.
   Development Services Director Michael Daniels presents the ordinance.
   Mayor Kelley opens the public hearing.
   Following no public comments, Mayor Kelley closes the public hearing.

   Motion to approve the second and final reading of Ordinance O-13-2024, regarding amending applicable sections of City Code Chapter 78, 101, 113, 117, 125 as described herein, for form and legality.
   Motion made by Council Member Butler, Seconded by Council Member Johnson.
   Voting Yea: Mayor Kelley, Vice Mayor Smith, Council Member Butler, Council Member Gaw, Council Member Johnson

7. Second and Final Reading of Ordinance O-36-2023, Adding Street Walls as an alternative design standard in the Gateway Corridor District as a special exception. ***Michael Daniels***
   City Attorney Arnold reads Ordinance No. O-36-2023 by title.
   Development Services Director Michael Daniels presents the ordinance.
   Mayor Kelley opens the public hearing.
   Van Royal 3688 LaCosta Ct. GCS speaks about the use of shade trees and supports the project to include a little more buffering.
   Following no further public comments, Mayor Kelley closes the public hearing.
   County Manager Howard Wanamaker speaks to the Council about the new Administration Building that will be built.
   Council discussion followed concerning street walls.

   Motion to recommend approval of Second and Final Reading of Ordinance O-36-2023, Adding Street Walls as an alternative design standard in the Gateway Corridor District as a special exception.
   Motion made by Council Member Butler, Seconded by Vice Mayor Smith.
   Voting Yea: Mayor Kelley, Vice Mayor Smith, Council Member Butler, Council Member Gaw, Council Member Johnson

CONSENT AGENDA

All matters under the consent agenda are considered to be routine by the city council and will be enacted by one motion in the form listed below. There will be no separate discussion on these items. If discussion is desired, that item will be removed from the consent agenda and will be considered separately. Backup documentation and staff recommendations have been previously submitted to the city council on these items.

City Manager Steve Kennedy pulled item 10, City Clerk Erin West pulled item 11 and Council Member Gaw pulled item 10.

Motion to approve Consent Agenda items 8 and 12.
Motion made by Council Member Butler, Seconded by Vice Mayor Smith.
Voting Yea: Mayor Kelley, Vice Mayor Smith, Council Member Butler, Council Member Gaw, Council Member Johnson

8. City Council approval to "piggyback" the existing Pasco County contract with Synagro for residuals (sludge) dewatering at the city's wastewater treatment facilities. ***Scott Schultz***

9. City Council approval of and authorization of the mayor to execute a Florida Department of Transportation (FDOT) Resolution delegating authority for designated staff to execute FDOT Documents and Agreements on behalf of the City. ***Scott Schultz***
   Assistant Water Utilities Director Scott Schultz explains the resolution and advises it was pulled to get a separate vote that needs input on the resolution.

   Motion to approve Consent Agenda item 9.
   Motion made by Council Member Johnson, Seconded by Council Member Butler.
   Voting Yea: Mayor Kelley, Vice Mayor Smith, Council Member Butler, Council Member Gaw, Council Member Johnson

10. City Council approval of the River Oaks Site Development Plan for property located on the south side of the 800 block of Cooks Lane for approximately 8.88 acres of parcel #016564-002-00. ***Michael Daniels***
    Development Services Director Michael Daniels speaks about the site development plan.
    Council discussion followed concerning the site development plan.

    Motion to approve Consent Agenda item 10.
    Motion made by Council Member Johnson, Seconded by Council Member Butler.
    Voting Yea: Mayor Kelley, Vice Mayor Smith, Council Member Butler, Council Member Gaw, Council Member Johnson

11. City Council approval of, and authorization for the mayor to execute, the Tender & Release Agreement as the contract between Lexon Insurance Company, the City and Sawcross, Inc., for completion of the construction of the Harbor Road Wastewater Treatment Facility (HRWWTF). ***Scott Schultz***
    Assistant Water Utilities Director Scott Schultz updates the Council on the Wastewater Treatment Facility.
    City Attorney Arnold speaks on the project.

    Motion to approve Consent Agenda item 11.
    Motion made by Council Member Johnson, Seconded by Council Member Butler.
    Voting Yea: Mayor Kelley, Vice Mayor Smith, Council Member Butler, Council Member Gaw, Council Member Johnson

12. City Council approval of Minutes. ***Erin West***
    Regular Sessions: 4/2/2024 and 4/16/2024

COUNCIL BUSINESS

13. City Manager & City Attorney Reports / Correspondence
    The City Manager and City Attorney made comments regarding various city activities, events, operations, and projects.

14. City Council Reports / Correspondence
    The City Council made comments regarding various city activities, events, operations, and projects.

Adjournment
There being no further business to come before the City Council, the meeting was adjourned at 10:07 p.m.

CITY OF GREEN COVE SPRINGS, FLORIDA

Steven R. Kelley, Mayor

Attest:

Erin West, City Clerk

CITY OF GREEN COVE SPRINGS
CITY COUNCIL REGULAR SESSION

321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA
TUESDAY, JUNE 18, 2024 – 7:00 PM

MINUTES

Invocation & Pledge of Allegiance to the Flag - **Chaplain Joseph Williams, CCSO**

Roll Call
COUNCIL MEMBERS PRESENT: Mayor Steven Kelley, Council Member Connie Butler, Council Member Ed Gaw

COUNCIL MEMBERS ABSENT: Vice Mayor Thomas Smith, Council Member Matt Johnson

STAFF MEMBERS PRESENT: L.J. Arnold, III, City Attorney, Steve Kennedy, City Manager, Mike Null, Assistant City Manager, Erin West, City Clerk

Mayor to call on members of the audience wishing to address the Council on matters not on the Agenda.

1. Sandra Dunnavant 303 N. Magnolia Ave. GCS advises the Council a Green Cove Springs Preservation Society has been formed and they are working to bring a draft ordinance to the Council for review.
2. Larianne Stutts 25 S. Palmetto Ave. GCS speaks to the Council and advises there are still issues with the VIA sign requirements.
   Development Services Director Michael Daniels advises the department has met with the contractor the VIA is using and the information was submitted back to staff today for review.
3. Felicia Hampshire 508 Franklin St. GCS speaks the Council about the Thomas Hogan Gym and possibly getting an activities director to start providing activities to the public.

PUBLIC HEARINGS

Mayor Kelley advises the three public hearings will be tabled.
Development Services Director Michael Daniels advises the applicant would like to table all of the public hearings to the July 16, 2024 meeting.
Council discussion followed about restricted uses and traffic.

1. Second and Final Reading of Ordinance O-01-2024, regarding the Large-Scale Future Land Use Map Amendment for property located at the Southeast corner of US 17 and SR 16 for approximately 58.12 acres of parcel #016451-000-00 and a portion of parcel #016451-003-00. Future Land Use Amendment: from: Mixed Use to: Industrial ***Michael Daniels***

2. Second and Final Reading of Ordinance O-24-002, regarding the Large-Scale Future Land Use Text Amendment for property located at the Southeast corner of US 17 and SR 16 for approximately 58.12 acres of parcel #016451-000-00 and a portion of parcel #016451-003-00. Future Land Use Amendment: from: Mixed Use to: Industrial ***Michael Daniels***

3. Second and final reading of Ordinance O-10-2024 PUD Rezoning request for property located at the Southeast corner of US 17 and SR 16 for approximately 112 acres of parcel #016451-003-00 and 016451-000-00. Zoning Amendment: from: C-2, General Commercial to: PUD, Planned Unit Development ***Michael Daniels***

CONSENT AGENDA

All matters under the consent agenda are considered to be routine by the city council and will be enacted by one motion in the form listed below. There will be no separate discussion on these items. If discussion is desired, that item will be removed from the consent agenda and will be considered separately. Backup documentation and staff recommendations have been previously submitted to the city council on these items.

Motion to approve Consent Agenda items 4 through 10.
Motion made by Council Member Butler, Seconded by Council Member Gaw.
Voting Yea: Mayor Kelley, Council Member Butler, Council Member Gaw

4. City Council review and approval Fun in the Sun Community Event. ***Michael Daniels***

5. City Council approval of demolition debris removal from property 713 Martin Luther King Blvd. ***Michael Daniels***

6. City Council approval of demolition of property at 502 Cypress Ave. ***Michael Daniels***

7. City Council approval of Pay Application #2 for the West Street CDBG Stormwater Improvements to Besch and Smith in the amount of $296,558.67. ***Greg Bauer***

8. City Council approval of Minutes. ***Erin West***
   Regular Sessions: 5/7/2024

9. City Council approval of Change Order #1 for the West Street CDBG Stormwater and Sidewalk Improvements to Besch and Smith in the amount of $23,507.04 and 3 days contract time. ***Greg Bauer***

10. City Council approval of Change Order #2 for the West Street CDBG Stormwater and Sidewalk Improvements to Besch and Smith in the amount of $1,461.18 and 3 contract days. ***Greg Bauer***

COUNCIL BUSINESS

11. City Manager & City Attorney Reports / Correspondence
    The City Manager and City Attorney made comments regarding various city activities, events, operations, and projects.

12. City Council Reports / Correspondence
    The City Council made comments regarding various city activities, events, operations, and projects.

Adjournment
There being no further business to come before the City Council, the meeting was adjourned at 7:42 p.m.

CITY OF GREEN COVE SPRINGS, FLORIDA

Steven R. Kelley, Mayor

Attest:

Erin West, City Clerk

CITY OF GREEN COVE SPRINGS
CITY COUNCIL SPECIAL SESSION

321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA
WEDNESDAY, JUNE 26, 2024 – 5:00 PM

MINUTES

Invocation & Pledge of Allegiance to the Flag – **Council Member Butler**

Roll Call
COUNCIL MEMBERS PRESENT: Mayor Steven Kelley, Vice Mayor Thomas Smith, Council Member Connie Butler, Council Member Ed Gaw (via Teams), Council Member Matt Johnson

STAFF MEMBERS PRESENT: Mike Null, Assistant City Manager, Kimberly Thomas, Executive Assistant

Mayor to call on members of the audience wishing to address the Council on matters not on the Agenda. No comments.

COUNCIL BUSINESS

1. Presentation by Purvis, Gray & Company of the Audited Financial Statements for the period ending September 30, 2023. ***Sue Wang***
   Finance Director Sue Wang speaks and introduces Ron Whitesides and Kevin Smith from Purvis Gray.
   Mr. Whitesides presents the Audited Financial Statements for the period ending September 30, 2023.

   Motion to accept the Audited Financial Statements for the Fiscal Year ended September 30, 2023.
   Motion made by Council Member Butler, Seconded by Council Member Johnson.
   Voting Yea: Mayor Kelley, Vice Mayor Smith, Council Member Butler, Council Member Gaw, Council Member Johnson

Adjournment
There being no further business to come before the City Council, the meeting was adjourned at 5:20 p.m.

CITY OF GREEN COVE SPRINGS, FLORIDA

Steven R. Kelley, Mayor

Attest:

Erin West, City Clerk

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council Regular Meeting **MEETING DATE:** July 16, 2024

FROM: Scott Schultz, Asst. Water Utilities Director

SUBJECT: City Council approval of the Sawcross (Tender Contractor) Pay Request #2, in the amount of $788,500.00, for construction of the Harbor Road Advanced Wastewater Treatment Facility (HRAWWTF), as part of the Florida Department of Environmental Protection (FDEP), State Revolving Fund (SRF), Harbor Road Water Reclamation Facility (WRF) Expansion, Phase 2, SRF Agreement No. WW1000420.

BACKGROUND

On June 7, 2016, Council provided direction for staff to pursue "Scenario #3" (See excerpt from the June 7th staff report) sewer system expansion/improvements.

Excerpt from the June 7, 2016 Staff Report

"At the October 20, 2015 meeting, Council authorized submittal of a loan application under the Florida Department of Environmental Protection (FDEP) State Revolving Fund (SRF) program for the "Phase I" planning portion of the project which would be completed by Mittauer & Associates. In addition, the Council approved a task order to Mittauer & Associates to prepare the planning documents necessary to secure capital financing under the SRF Program to complete a Facilities Plan, Environmental Plan, Capital Financing Plan, and associated Special Studies."

The staff report reviewed additional aspects of the analysis to date, and summarized three main development scenarios the City was considering. They are outlined as follows:

Scenario 1: AWWTP only (no reclaimed water improvements)
Scenario 2: AWWTP and Reclaimed Water System Improvements
Scenario 3: AWWTP, Reclaimed Water System, and Existing Collection System Improvements

As a result of the discussions and preliminary analysis, the City selected Scenario 3, which had the following implications:

"Scenario 3 – AWWTP, reclaimed water system improvements and collection system improvements (repair and replacement of clay lines city-wide)

Project Cost	$35,181,000
Loan Amount	$28,681,000
Retained Earnings	$1,000,000
Impact Fee Revenue	$1,200,000
Grants	$4,300,000
Annual Loan Payment	$1,316,100"

The costs are planning-level values and the annual loan payment will be based on final bid prices, interest rates at the time of construction loan acquisition, and accumulated grants/retained earnings/impact-fee

revenue. Each scenario was reviewed with the following common variables: All scenarios assumed a 2% increase in the number of wastewater customers each year through FY'20 and a 0.5% increase each year from FY'21 through FY'25.All scenarios assumed $6,500,000 available in grant funding, retained earnings, and impact fee revenue dedicated to the project up front in order to reduce the total loan repayment amount. Retained earnings is estimated at $1,000,000. Impact fee revenue is estimated at $1,200,000. Grant funding from all sources is estimated at $4,300,000. Although, as indicated earlier in this writing, we may qualify for 45% grant funds from SRF, the total dollar amount available each year for grant funding is limited. Staff feels that $4,300,000 is a reasonably conservative and prudent estimate as to the amount of grant dollars we may receive. However, depending on the number of projects funded by the SRF program in the next two years and the amount of grant funding available, that number can certainly increase. All scenarios assume a 2.2%, 30-year loan repayment which is in line with the Capital Financing Plan formulas. However, based on recent interest rate history in the SRF program and use of interest rate buy-downs such as requiring Davis-Bacon wage requirements and Buy-American provisions of the contractor, we may be able to realize lower interest rates when our loan is actually processed. The 30-year loan timeline contemplates repayments from FY'21 through FY'50.Reynolds Park re-development is not factored in to any of the scenarios.

On August 10, 2016, SRF staff approved SRF Project # 100400 granting the City of Green Cove Springs a $2,261,200.00 loan with a principal forgiveness amount of $1,491,035.00 to address the project's design, permitting, and SSES needs. These tasks were completed and the project has been completed / closed.

On October 18, 2016, the City Council adopted after second and final reading, Ordinance O-13-2016, authorizing the expenditures of up to $34,158,100.00 for capital improvements to the City's wastewater treatment, wastewater collection and reclaimed water systems

On August 8, 2018, FDER SRF staff approved SRF Project # 100400 granting the City of Green Cove Springs a $6,120,600.00 loan with a principal forgiveness amount of $4,063,425.00 for Phase I Construction which includes reclaimed water, electrical and improvements to Lift Stations #2 and #4.

On October 2, 2018 Council approved Resolution No. R-29-2018, a Resolution authorizing staff to submit and mayor to execute a loan application to the Florida Department of Environmental Protection (FDEP) State Revolving Fund (SRF) loan program for Phase I Construction of the Consolidated Advanced Wastewater Treatment Plant (AWWTP) and associated Lift Station Improvements.

On December 4, 2018, council approved and authorized the execution of the contract for SRF Project # 100400 granting the City of Green Cove Springs a $6,120,600.00 loan with a principal forgiveness amount of $4,063,425.00 for Phase I Construction which includes reclaimed water, electrical and improvements to Lift Stations #2 and #4.

On March 19, 2019, Council approved bid tabulations and awarded Sawcross the plant portion, and R2T the lift station portion, of the Phase I construction.

Phase I construction being completed in May of 2020, Council authorized staff to submit a Request for Inclusion (RFI) to the Florida Department of Environmental Protection (FDEP) State Revolving Fund (SRF) for Construction Phase II, which includes construction of a 1.25 million gallon per day (MGD) - annual average daily flow (AADF), advanced wastewater treatment facility (AWWTF), in the amount of $18,165,500.00.

On August 12, 2020, the FDEP SRF program awarded the City a $12,000,000.00, 20 year loan, with $4,452,835.00 in principal forgiveness (grant). Due to a limitation of available funds, the SRF program withheld $6,186,500.00 in requested funds, which will be reviewed for award and addition to the current loan the next award period.

On 10/6/2020 City Council approved Resolution No. R-27-2020, a Resolution authorizing staff to submit and Mayor to execute the loan application for SRF Loan # 100401 to the Florida Department of Environmental Protection (FDEP) State Revolving Fund (SRF) loan program for Phase II Construction of the Consolidated

Advanced Wastewater Treatment Plant (AWWTP) in the amount of $12,000,000.00 with a principal forgiveness (grant) amount of $4,452,835.00 providing for an actual repayment amount of $7,547,165.00.

On 1/19/2021 the City Council approved of, and authorized the Mayor, City Attorney and City Clerk to execute, the Clean Water State Revolving Fund (SRF), Construction Loan Agreement WW100420, Grant Agreement SG 100421 for Phase II Construction of the Consolidated Advanced Wastewater Treatment Plant (AWWTP) in the amount of $12,000,000.00 with a principal forgiveness (grant) amount of $4,452,835.00 providing for an actual repayment amount of $7,547,165.00. The original loan request was for $18,106,500.00. Due to limited funds, the SRF program limited the award to $12,000,000.00, with the plan to award the city an additional $6,106,500.00 in July 2021.

On February 2, 2021, eight Sealed Bids were opened for the construction of the above referenced project. Williams Industrial was determined to be the lowest qualified bidder. The estimated budget / original SRF loan request was for $18,106,500.00. This project came in under projected budget, including the Additive Alternates.

On February 16, 2021 Council approved the Engineers Recommendation of Award to Williams Industrial Services, LLC.

On March 16, 2021, Council approved and executed the contract between the city and Williams Industrial.

On July 19, 2023, Williams Industrial abandoned the site and filed bankruptcy. Since that time staff have been working with the Surety (performance bond insurance company) to replace Williams Industrial with a substitute contractor to finish construction.

The Surety, in cooperation with city staff, has selected Sawcross Inc. as the completion contractor (referred to in legal documents as the Tender Contractor). The City and Sawcross now have the standard Owner / Contractor relationship and Sawcross is completing the construction of the facility.

The following items have been received.

- Fully Executed Tender & Release Agreement
- Performance and Payment Bond from Sawcross to the City
- Executed Debarment Form from Sawcross to the City.

FISCAL IMPACT

$788,500.00 from the Wastewater CIP Budget

RECOMMENDATION

Approve the Sawcross (Tender Contractor) Pay Request #2, in the amount of $788,500.00, for construction of the Harbor Road Advanced Wastewater Treatment Facility.

MITTAUER & ASSOCIATES, INC.
CONSULTING ENGINEERS & PROJECT FUNDING SPECIALISTS

35 Years 1989-2024 ENGINEERING EXCELLENCE

580-1 WELLS ROAD
ORANGE PARK, FL 32073
PHONE: (904) 278-0030
FAX: (904) 278-0840
WWW.MITTAUER.COM

June 27, 2024 VIA EMAIL

Mr. Scott Schultz, Assistant Water Utilities Director
City of Green Cove Springs
321 Walnut Street
Green Cove Springs, FL 32043

RE: Tender Contractor's Pay Request No. 2
DEP SRF Harbor Road WRF Expansion, Ph. 2
SRF Agreement No. WW100420
City of Green Cove Springs, Florida
Mittauer & Associates, Inc. Project No. 8905-56-1

Dear Mr. Schultz:

We have reviewed Pay Request No. 2 from Sawcross, Inc. and find it acceptable. We have, accordingly, indicated our approval and are forwarding an electronic copy to you for approval and payment. This pay request totals $788,500.00.

Please do not hesitate to call should you have any questions.

Sincerely yours,
Mittauer & Associates, Inc.

Jason R. Shepler, P.E.
Vice President of Environmental Services

JRS/pj
Enclosure
cc: Sawcross, Inc.

#2406

E-MAILED 6/27/24 SCOTT

E-MAILED 6/26/24

Contractor's Application for Payment

Owner:	City of Green Cove Springs	**Owner's Project No.:**	
Engineer:	Mittauer & Associates	**Engineer's Project No.:**	8905-56-1
Contractor:	Sawcross, Inc	**Contractor's Project No.:**	2314
Project:	DEP SRF Harbor Road WRF Expansion Ph. 2		
Contract:			
Application No.:	2	**Application Date:**	6/30/2024
Application Period:	From 6/1/2024	to	6/30/2024

1. Original Contract Price		$ 4,713,218.00
2. Net change by Change Orders		$ -
3. Current Contract Price (Line 1 + Line 2)		$ 4,713,218.00
4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total)		$ 1,328,000.00
5. Retainage		
a. 5% X $ 1,328,000.00 Work Completed =	$ 66,400.00	
b. 5% X $ - Stored Materials =	$ -	
c. Total Retainage (Line 5.a + Line 5.b)		$ 66,400.00
6. Amount eligible to date (Line 4 - Line 5.c)		$ 1,261,600.00
7. Less previous payments (Line 6 from prior application)		$ 473,100.00
8. Amount due this application		$ 788,500.00
9. Balance to finish, including retainage (Line 3 - Line 4 + Line 5.c)		$ 3,451,618.00

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;

(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and

(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor: SAWCROSS INCORPORATED

Signature: [signature] **Date:** 6/30/2024

Recommended by Engineer	**Approved by Owner**
By: [signature]	**By:**
Title: VP of Environmental Serv.	**Title:**
Date: 6/26/24	**Date:**
Approved by Funding Agency	
By:	**By:**
Title:	**Title:**
Date:	**Date:**

RECEIVED

JUN 27 2024

MITTAUER & ASSOC

Progress Estimate - Lump Sum Work

Contractor's Application for Payment

Owner:	City of Green Cove Springs	**Owner's Project No.:**	
Engineer:	Mittauer & Associates	**Engineer's Project No.:**	8905-56-1
Contractor:	Sawcross, Inc	**Contractor's Project No.:**	2314
Project:	DEP SRF Harbor Road WRF Expansion Ph. 2		
Contract:			

Application No.: 2 **Application Period:** From 06/01/24 to 06/30/24 **Application Date:** 06/30/24

A	B	C	D	E	F	G	H	I
			Work Completed					
Item No.	Description	Scheduled Value ($)	(D + E) From Previous Application ($)	This Period ($)	Materials Currently Stored (not in D or E) ($)	Work Completed and Materials Stored to Date (D + E + F) ($)	% of Scheduled Value (G / C) (%)	Balance to Finish (C - G) ($)
	Original Contract							
	General Conditions	1,250,000.00	125,000.00	125,000.00		250,000.00	20%	1,000,000.00
	Payment & Performance Bonds	60,000.00	30,000.00	30,000.00		60,000.00	100%	-
	Project Documentation	2,000.00				-	0%	2,000.00
	Survey and As Built Drawings	15,000.00				-	0%	15,000.00
	Sitework	500,000.00				-	0%	500,000.00
	Asphalt Paving	400,000.00				-	0%	400,000.00
	Chain Link Fencing	100,000.00				-	0%	100,000.00
	Concrete	100,000.00		50,000.00		50,000.00	50%	50,000.00
	Miscellaneous Metals	150,000.00	15,000.00	-		15,000.00	10%	135,000.00
	Protective Coatings	150,000.00	100,000.00	-		100,000.00	67%	50,000.00
	Miscelleanous Specialties	25,000.00				-	0%	25,000.00
	Security System	65,000.00				-	0%	65,000.00
	Vertical Turbine Pumps	30,000.00				-	0%	30,000.00
	Secondary Clarifier Equipment	500,000.00		500,000.00		500,000.00	100%	-
	RAS/WAS Pumps	10,000.00				-	0%	10,000.00
	In-Plant Pump Station	10,000.00				-	0%	10,000.00
	Chemical Feed System	10,000.00				-	0%	10,000.00
	Disc Filter System	25,000.00				-	0%	25,000.00
	Sample Pumps	15,000.00				-	0%	15,000.00
	Floating Surface Aerator	20,000.00				-	0%	20,000.00
	Refrigerated Samplers	10,000.00				-	0%	10,000.00
	Influent Structure Davit Crane	20,000.00				-	0%	20,000.00
	Screening Dumpsters	10,000.00				-	0%	10,000.00
	Fiberglass Ladders	5,000.00				-	0%	5,000.00
	Eyewash Station	5,000.00				-	0%	5,000.00
	Pre-Engineered Metal Building System	80,000.00	8,000.00	-		8,000.00	10%	72,000.00
	Prestressed Concrete Tanks	130,000.00	120,000.00	-		120,000.00	92%	10,000.00
	Precast Concrete Buildings	5,000.00				-	0%	5,000.00
	Pipe, Valves and Fittings	151,218.00				-	0%	151,218.00
	Chemcial Piping	180,000.00		50,000.00		50,000.00	28%	130,000.00
	Plumbing	20,000.00				-	0%	20,000.00
	Electrical	350,000.00	75,000.00	75,000.00		150,000.00	43%	200,000.00
	Instrumentation	60,000.00				-	0%	60,000.00
	Disk Filter - Spares/Media/CP	65,000.00	6,500.00	-		6,500.00	10%	58,500.00

Progress Estimate - Lump Sum Work

Contractor's Application for Payment

Owner:	City of Green Cove Springs	**Owner's Project No.:**	
Engineer:	Mittauer & Associates	**Engineer's Project No.:**	8905-56-1
Contractor:	Sawcross, Inc	**Contractor's Project No.:**	2314
Project:	DEP SRF Harbor Road WRF Expansion Ph. 2		
Contract:			

Application No.: 2 **Application Period:** From 06/01/24 to 06/30/24 **Application Date:** 06/30/24

A	B	C	D	E	F	G	H	I
			Work Completed					
Item No.	Description	Scheduled Value ($)	(D + E) From Previous Application ($)	This Period ($)	Materials Currently Stored (not in D or E) ($)	Work Completed and Materials Stored to Date (D + E + F) ($)	% of Scheduled Value (G / C) (%)	Balance to Finish (C - G) ($)
	Oxidation Ditch - Equipment Rebuild	105,000.00	10,500.00	-		10,500.00	10%	94,500.00
	Mechanical Screen - Equipment Rebuild	80,000.00	8,000.00	-		8,000.00	10%	72,000.00
	Original Contract Totals	**$ 4,713,218.00**	**$ 498,000.00**	**$ 830,000.00**	**$ -**	**$ 1,328,000.00**	**28%**	**$ 3,385,218.00**

Progress Estimate - Lump Sum Work

Contractor's Application for Payment

Owner:	City of Green Cove Springs	**Owner's Project No.:**	
Engineer:	Mittauer & Associates	**Engineer's Project No.:**	8905-56-1
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Project:	DEP SRF Harbor Road WRF Expansion Ph. 2		
Contract:			

Application No.: 2 **Application Period:** From 06/01/24 to 06/30/24 **Application Date:** 06/30/24

A	B	C	D	E	F	G	H	I
			Work Completed					
Item No.	Description	Scheduled Value ($)	(D + E) From Previous Application ($)	This Period ($)	Materials Currently Stored (not in D or E) ($)	Work Completed and Materials Stored to Date (D + E + F) ($)	% of Scheduled Value (G / C) (%)	Balance to Finish (C - G) ($)
			Change Orders					
						-		-
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						-		-
	Change Order Totals	$ -	$ -	$ -	$ -	$ -		$ -
			Original Contract and Change Orders					
	Project Totals	$ 4,713,218.00	$ 498,000.00	$ 830,000.00	$ -	$ 1,328,000.00	28%	$ 3,385,218.00

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner:	City of Green Cove Springs	Owner's Project No.:	
Engineer:	Mittauer & Associates	Engineer's Project No.:	8905-56-1
Contractor:	Sawcross, Inc	Contractor's Project No.:	2314
Project:	DEP SRF Harbor Road WRF Expansion Ph. 2		
Contract:			

Application No.: 2 Application Period: From 06/01/24 to 06/30/24 Application Date: 06/30/24

A	B	C	D	E	F	G	H	I	J	K	L
		Contract Information				Work Completed					
Bid Item No.	Description	Item Quantity	Units	Unit Price ($)	Value of Bid Item (C X E) ($)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) ($)	Materials Currently Stored (not in G) ($)	Work Completed and Materials Stored to Date (H + I) ($)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) ($)
Original Contract											
					-		-		-		-
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				Original Contract Totals	$ -		$ -	$ -	$ -		$ -

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner:	City of Green Cove Springs	**Owner's Project No.:**	
Engineer:	Mittauer & Associates	**Engineer's Project No.:**	8905-56-1
Contractor:	Sawcross, Inc	**Contractor's Project No.:**	2314
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Contract:			

Application No.: 2 **Application Period:** From 06/01/24 to 06/30/24 **Application Date:** 06/30/24

A	B	C	D	E	F	G	H	I	J	K	L
		Contract Information				Work Completed					
Bid Item No.	Description	Item Quantity	Units	Unit Price ($)	Value of Bid Item (C X E) ($)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) ($)	Materials Currently Stored (not in G) ($)	Work Completed and Materials Stored to Date (H + I) ($)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) ($)
					Change Orders						
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				Change Order Totals	$ -		$ -	$ -	$ -		$ -
					Original Contract and Change Orders						
				Project Totals	$ -		$ -	$ -	$ -		$ -

Stored Materials Summary

Contractor's Application for Payment

Owner:	City of Green Cove Springs	**Owner's Project No.:**	
Engineer:	Mittauer & Associates	**Engineer's Project No.:**	8905-56-1
Contractor:	Sawcross, Inc	**Contractor's Project No.:**	2314
Project:	DEP SRF Harbor Road WRF Expansion Ph. 2		
Contract:			

Application No.: 2 **Application Period:** From 06/01/24 to 06/30/24 **Application Date:** 06/30/24

A	B	C	D	E	F	G	H	I	J	K	L	M
						Materials Stored			Incorporated in Work			
Item No. (Lump Sum Tab) or Bid Item No. (Unit Price Tab)	Supplier Invoice No.	Submittal No. (with Specification Section No.)	Description of Materials or Equipment Stored	Storage Location	Application No. When Materials Placed in Storage	Previous Amount Stored ($)	Amount Stored this Period ($)	Amount Stored to Date (G+H) ($)	Amount Previously Incorporated in the Work ($)	Amount Incorporated in the Work this Period ($)	Total Amount Incorporated in the Work (J+K) ($)	Materials Remaining in Storage (I-L) ($)
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					Totals	$ -	$ -	$ -	$ -	$ -	$ -	$ -

CERTIFICATION REGARDING DEBARMENT SUSPENSION, INELIGIBILITY

The Respondent certifies that:

a. This Contract is a covered transaction for purposes of 2 CFR, Part 180. As such, the Consultant is required to verify that none of the Consultant, its principals (defined at 2 CFR 180.995), or its affiliates (defined at 2 CFR 180.905) are excluded (defined at 2 CFR 180.940) or disqualified (defined at 2 CFR 180.935).

b. The Consultant must comply with 2 CFR Part 180, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

c. This certification is a material representation of fact relied upon by the City. If it is later determined that the Consultant did not comply with 2 CFR Part 180, subpart C, in addition to remedies available to the City, the Federal Government may pursue available remedies, including but not limited to suspension and/ or debarment.

d. The Consultant agrees to comply with the requirements of 2 CFR Part 180, subpart C while this proposal is valid and throughout the period of any contract that may arise from this proposal. The Consultant further agrees to include a provision requiring such compliance in its lower tier covered transactions, including submission to Consultant of this Certification completed by its subconsultant.

Entity: Sawcross, Inc.

By: KEVIN DIQUISTO

Its: Vice President of Operations

Date: 5/30/24

Electronically Certified Official Record

DOCUMENT INFORMATION

Agency Name:	Clay County Clerk of Court and Comptroller
Clerk of the Circuit Court:	The Honorable Tara S. Green
Date Issued:	6/26/2024 1:31:18 PM
Unique Reference Number:	BAA-BAA-BCABJ-CACEACJHJE-DFHCGH-A
Instrument Number:	2024029794
Requesting Party Code:	100
Requesting Party Reference:	11670072

CERTIFICATION

Pursuant to Sections 90.955(1) and 90.902(1), Florida Statutes, and Federal Rules of Evidence 901(a), 901(b)(7), and 902(1), the attached document is electronically certified by The Honorable Tara S. Green, Clay County Clerk of Court and Comptroller, to be a true and correct copy of an official record or document authorized by law to be recorded or filed and actually recorded or filed in the office of the Clay Clerk of Court. The document may have redactions as required by law.

HOW TO VERIFY THIS DOCUMENT

This document contains a Unique Reference Number for identification purposes and a tamper-evident seal to indicate if the document has been tampered with. To view the tamper-evident seal and verify the certifier's digital signature, open this document with Adobe Reader software. You can also verify this document by scanning the QR code or visiting https://clayclerk.com/online-options/e-certify.

**The web address shown above contains an embedded link to the verification page for this particular document.

EJCDC
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

PERFORMANCE BOND

CONTRACTOR *(name and address)*:
Sawcross, Inc.
10970 New Berlin Road, Jacksonville, FL 32226
(904) 751-7500

SURETY *(name and address of principal place of business)*:
Western Surety Company
151 N. Franklin Street, Chicago, IL 60606
(312) 822-5000

OWNER *(name and address)*:
City of Green Cove Springs
321 Walnut Street, Green Cove Springs, FL 32043, (904) 297-7500

CONSTRUCTION CONTRACT
Effective Date of the Agreement: 6/5/2024
Amount: $4,713,219.00, Four Million Seven Hundred Thirteen Thousand Two Hundred Nineteen And No/100
Description *(name and location)*: Purchase Order: 2725932, Completion of the Harbor Road WWTF as the "Tender Contractor", 1277 Harbor Road, Green Cove Springs, FL 32043

BOND
Bond Number: 30206897
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*: 6/24/2024
Amount: $4,713,219.00, Four Million Seven Hundred Thirteen Thousand Two Hundred Nineteen And No/100
Modifications to this Bond Form: [x] None [ ] See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	SURETY
Sawcross, Inc. *(seal)*	Western Surety Company *(seal)*
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal
By:	By:
Signature	Signature *(attach power of attorney)*
Mark Hickinbotham	Allyson Foss Wing
Print Name	Print Name
President	Attorney-in-Fact & FL Licensed Resident Agent
Title	Title
Attest:	Attest:
Signature	Signature
Mikayla Parker, Witness	Christine Morton, Witness
Title 10970 New Berlin Road, Jacksonville, FL 32226	Title 1904 Boothe Circle, Longwood, FL 32750
	Inquiries (407) 834-0022

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

EJCDC
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

PAYMENT BOND

CONTRACTOR *(name and address)*:
Sawcross, Inc.
10970 New Berlin Road, Jacksonville, FL 32226
(904) 751-7500

SURETY *(name and address of principal place of business)*:
Western Surety Company
151 N. Franklin Street, Chicago, IL 60606
(312) 822-5000

OWNER *(name and address)*:
City of Green Cove Springs, 321 Walnut Street, Green Cove Springs, FL 32043, (904) 297-7500

CONSTRUCTION CONTRACT
Effective Date of the Agreement: 6/5/2024
Amount: $4,713,219.00, Four Million Seven Hundred Thirteen Thousand Two Hundred Nineteen And No/100
Description *(name and location)*: Purchase Order: 2725932, Completion of the Harbor Road WWTF as the "Tender Contractor", 1277 Harbor Road, Green Cove Springs, FL 32043

BOND
Bond Number: 30206897
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*: 6/24/2024
Amount: $4,713,219.00, Four Million Seven Hundred Thirteen Thousand Two Hundred Nineteen And No/100
Modifications to this Bond Form: ☐ None ☒ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

Sawcross, Inc. *(seal)*
Contractor's Name and Corporate Seal

By: _____
Signature

Mark Hickinbotham
Print Name

President
Title

Attest: _____
Signature

Mikayla Parker, Witness
Title 10970 New Berlin Road, Jacksonville, FL 32226

SURETY

Western Surety Company *(seal)*
Surety's Name and Corporate Seal

By: _____
Signature *(attach power of attorney)*

Allyson Foss Wing
Print Name

Attorney-in-Fact & FL Licensed Resident Agent
Title

Attest: _____
Signature

Christine Morton, Witness
Title 1904 Boothe Circle, Longwood, FL 32750
Inquiries (407) 834-0022

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.

4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.

5. The Surety's obligations to a Claimant under this Bond shall arise after the following:

   5.1 Claimants who do not have a direct contract with the Contractor,

      5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

      5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).

   5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).

6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.

7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

   7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

   7.2 Pay or arrange for payment of any undisputed amounts.

   7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. **Definitions**

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom the labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default**: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

Public Construction Bond: FL Stat. 255.05:
This bond is given to comply with section 255.05 Florida Statutes, and any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2) and Section 255.05(10), Florida Statutes.

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Bryce R Guignard, M Gary Francis, April L Lively, Jennifer L Hindley, Margie L Morris, Allyson Foss Wing, Deborah Ann Defoe, Christine A Morton, Kelly Phelan, David R Turcios, Mariel Urchipia, Amanda Jo Herstine, Individually

of Longwood, FL, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the Authorizing By-Laws and Resolutions printed at the bottom of this page, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 14th day of February, 2024.

WESTERN SURETY COMPANY

Larry Kasten, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 14th day of February, 2024, before me personally came Larry Kasten, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires
March 2, 2026

M. BENT NOTARY PUBLIC SOUTH DAKOTA

M. Bent, Notary Public

CERTIFICATE

I, Paula Kolsrud, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law and Resolutions of the corporation printed below this certificate are still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 24th day of June , 2024

WESTERN SURETY COMPANY

Paula Kolsrud, Assistant Secretary

Authorizing By-Laws and Resolutions

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

This Power of Attorney is signed by Larry Kasten, Vice President, who has been authorized pursuant to the above Bylaw to execute power of attorneys on behalf of Western Surety Company.

This Power of Attorney may be signed by digital signature and sealed by a digital or otherwise electronic-formatted corporate seal under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 27th day of April, 2022:

"RESOLVED: That it is in the best interest of the Company to periodically ratify and confirm any corporate documents signed by digital signatures and to ratify and confirm the use of a digital or otherwise electronic-formatted corporate seal, each to be considered the act and deed of the Company."

Go to www.cnasurety.com > Owner / Obligee Services > Validate Bond Coverage, if you want to verify bond authenticity.

Form F4280-6-2023

TENDER AND RELEASE AGREEMENT

THIS TENDER AND RELEASE AGREEMENT (the "Agreement") is made this 13th day of June, 2024, by and between **Lexon Insurance Company** ("Lexon" or "Surety"), the **City of Green Cove Springs** ("Green Cove" or "Owner"), and **Sawcross, Inc. d/b/a Sawcross Contractors & Engineers, Inc.** ("Sawcross" or "Tender Contractor")(Lexon, Green Cove and Sawcross individually a "Party" or collectively the "Parties").

RECITALS

WHEREAS, Green Cove is the owner of a project commonly known as "DEP SRF Harbor Road WRF Expansion, Ph. 2, SRF Agreement No. WW100420, Green Cove Springs, Florida" (the "Project"); and

WHEREAS, the Owner awarded contract number WW100420, dated March 1, 2021, in the amount of $15,426,644.33 to Williams Industrial Services, LLC ("Williams") for the Project (the "Contract"), which Contract had an original substantial completion date of October 13, 2022 and, through executed contract modifications during the Project, ultimately had a revised contractual substantial completion date of March 1, 2023, with a copy of the Contract and all modifications thereto annexed hereto as Exhibit A; and

WHEREAS, Lexon, as surety, issued a payment bond (the "Payment Bond") and a performance bond (the "Performance Bond") (collectively the "Bonds"), each bearing Bond No. LICX1200727 and each in the penal sum of $15,426,644.33, on behalf of Williams, as principal, and in favor of the Owner, as obligee, in connection with the Project, with a copy of the Bonds annexed hereto as Exhibit B; and

WHEREAS, on July 22, 2023, Williams filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code (the "Bankruptcy Petition"); and

WHEREAS, after the filing of the Bankruptcy Petition, the Owner declared Williams in default, terminated the Contract (the "Termination") and made a demand against the Performance Bond for the Surety to arrange for the completion of Williams' work under the Contract on account of the Termination; and

WHEREAS, the Surety secured relief from the automatic stay applicable to the Williams' contract agreements, including the Contract herein, in the form of an "Order Authorizing the Debtors to Reject Certain Executory Contracts Effective as of the Rejection Date", dated August 18, 2023, with a copy of said Order, along with a companion Order lifting the freeze on debtor's contract assets, annexed hereto as Exhibit C; and

WHEREAS, on January 2, 2024, the Owner and Surety entered into a Takeover Agreement for the completion of Phase 1 of the remaining work to be completed under the Contract, a copy of which is annexed hereto as Exhibit D, with Sawcross serving as contractor for the purposes of the January 2, 2024 Agreement ("Phase 1 Work"); and

WHEREAS, upon completion of all Phase 1 Work under the Takeover Agreement, Lexon arranged to have the Tender Contractor complete all remaining work under the Contract ("Phase 2 Work"); and

WHEREAS, the Tender Contractor agrees to perform all remaining Phase 2 Work under the Contract in accordance with the existing contract documents, which include, but are not limited to all General, Supplementary and Special Conditions, drawings, specifications, plans, field details, approved change orders, addenda, amendments, responses to RFIs, bidding information, submittals, and documents forming a part of the Contract (collectively the "Contract Documents"); and

WHEREAS, the Owner has accepted Surety's proposal to tender Sawcross as the Tender Contractor to complete all remaining work under the Contract in accordance with the terms and conditions set forth herein.

AGREEMENT

NOW THEREFORE, in consideration of these promises and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties to this Agreement do covenant and agree as follows:

1. Precatory Clauses. The precatory (Whereas) clauses above are made part of this Agreement as if fully set forth herein.

2. Contract Accounting. In accordance with the Project accounting set forth below, the Owner and the Surety agree that the Remaining Contract Balance is **$2,640,255.19**, which sum shall be made available in full to the Tender Contractor for the completion of the remaining work under the Contract.

Original Contract Amount:	$ 15,426,644.33
Approved Change Orders:	$ 126,728.34
Adjusted Contract Amount:	$ 15,553,372.67
Paid to Date:	$ 12,890,751.38
Additional Owner Payments	$ 22,366.10
Remaining Contract Balance:	**$ 2,640,255.19**

3. Acknowledgments. The Remaining Contract Balance figure set forth in Paragraph 2 above includes the total amount of retainage held by the Owner in the amount of $685,898.10. Excepting any corrective work as identified by Sawcross as part of its Phase 2 completion scope, the Owner acknowledges that it has accepted the pre-Termination work performed by Williams as being compliant with the Contract. Nothing set forth in this paragraph shall be deemed a waiver or release of the Owner's potential claims for latent defects as provided for in Paragraph 11.4 below. The Owner further acknowledges that the Contract Accounting set forth in Paragraph 2 and in this Paragraph 3 is true and accurate.

4. Payment in Lieu of Warranties. In consideration for the Surety's additional payment of an agreed-upon sum of **$129,372.42** (the "Payment in Lieu of Warranties"), the Owner agrees to release the Surety from any and all continuing warranty obligations which may exist in respect of Williams' pre-Termination work on the Project. Nothing set forth in this paragraph shall be deemed a waiver or release of the Owner's potential claims for latent defects as provided for in Paragraph 11.4 below.

5. Tender. Lexon tenders to the Owner and the Owner accepts Sawcross as the Tender Contractor for the purpose of completing all of the remaining obligations under the Contract. The Owner agrees to administer the Contract with the Tender Contractor in the same manner and under the same terms as set forth in the Contract. The Tender Contractor will replace Williams as contractor of record for the Project for the completion of all remaining work under the Contract and shall be in direct contractual privity with the Owner by virtue of Sawcross' execution of this Agreement and its status as contractor of record for the completion of all Phase 2 Work on the Project.

6. Scope of Completion Work. The Tender Contractor hereby agrees to perform all remaining work required under the Contract in accordance with the Contract Documents. The Tender Contractor further agrees to otherwise furnish and pay for all labor, materials, services and equipment and shall do everything necessary to perform and satisfactorily complete the Contract as required by the Contract Documents. The Tender Contractor is to obtain all necessary approvals, permits and inspections as required by the Contract Documents and otherwise comply with all contractual, legal and regulatory requirements.

6.1. Tender Contractor's Assumption of Contract and Warranty Obligations. Except as otherwise provided, the Tender Contractor acknowledges and agrees, that from and after the date of this Agreement, it assumes all of Williams' and Lexon's performance obligations to the Owner under the Contract and agrees to be firmly bound by and to comply with all terms and conditions of the Contract. In respect of Tender Contractor's warranty obligations, it is understood and agreed that Tender Contractor will

warranty all of its work performed as part of the Phase 1 Work and Phase 2 Work on the Project, but will not warranty any pre-Termination work performed by Williams, and the Tender Contractor shall not be responsible for any debt owed by Williams to any of Williams' subcontractors, suppliers, and/or materialmen.

6.2. Work to be Performed in Accordance with the Contract. Subject to the terms of this Agreement, the Tender Contractor shall be responsible for the performance of the Contract and the Owner shall, in accordance with the Contract, look solely to the Tender Contractor or its Surety for the performance of the Contract.

6.3. Full Inspection. The Tender Contractor has examined all Contract Documents pertaining to the Contract and is fully familiar with the contents thereof. The Tender Contractor has examined and inspected the Project and the nature and status of any and all work performed by Williams and/or Williams' subcontractors, as well as the work to be performed in order to complete the Contract. No representations or warranties with respect to the status and condition of the work performed by Williams and/or Williams' subcontractors and/or the conditions affecting the work to be done by the Tender Contractor have been made to the Tender Contractor by Lexon or any of its representatives. Lexon makes no warranties or representations, express or implied, to the Tender Contractor with respect to the Contract Documents, the Project or the work performed by Williams and/or Williams' subcontractors on the Project.

7. Tender Contractor Price. The Tender Contractor agrees to perform all of the remaining work required under the Contract for the agreed upon price of Four-Million, Eight-Hundred, Seventy-Six Thousand, Seven-Hundred, Fifty-Eight Dollars and no cents **($4,713,219.00)** ("Tender Contractor Price"), subject to adjustment for increases or decreases in actual quantities and by any change orders to the Contract executed by the Owner and the Tender Contractor, which Tender Contractor Price has been accepted by the Owner.

8. Tender Contractor Payment. The Owner agrees to pay the Tender Contractor the Tender Contractor Price for the performance of all remaining work and the performance of any other obligations owed to the Owner under the Contract (the "Tender Contractor Payment"). The Tender Contractor Payment shall be made in accordance with terms agreed to by the Owner and the Tender Contractor (the "Payment Schedule"). Any failure of the Owner and the Tender Contractor to agree on a Payment Schedule shall have no effect on the Owner's release of Lexon's performance obligations under the terms of this Agreement, including but not limited to the releases set forth in Paragraphs 4, 11.3 and 11.4 herein.

9. Final Surety Payment to Owner. The final payment to be tendered by the Surety to the Owner ("Final Surety Payment") is calculated as follows:

Tender Contractor Price (TCP):	$ 4,713,219.00
Remaining Contract Balance (RCB):	$ 2,640,255.19
Difference between TCP and RCB:	$ 2,072,963.81
Payment in lieu of Warranties:	$ 129,372.74
Final Surety Payment to Owner:	**$ 2,202,336.55**

The Final Surety Payment shall be paid by the Surety to the Owner in full and final settlement of all claims against the Performance Bond and against the Surety, except as otherwise noted in Articles 11.3 and 11.4.

10. Time. The Parties hereby agree that the Tender Contractor shall commence work on the Contract immediately upon execution of this Agreement, and that the Contract is to be completed on or before **December 31, 2024** ("Completion Date"). The Parties further agree that the Contract shall be amended to reflect the granting of a time extension to the Tender Contractor to finish all remaining work under the Contract to the Completion Date set forth herein. It is understood and agreed that the Owner's claims for liquidated damages through the Completion Date are reserved as to the Surety. Surety disputes such claims and reserves all its defenses to Owner's claims for liquidated damages. The Parties shall proceed to non-binding mediation as provided in Paragraph 11.3 below.

11. Surety Bonds

11.1 Tender Contractor Performance Bond. Simultaneous with the execution of this Agreement, the Tender Contractor shall deliver to the Owner a separate performance bond in the form required by the Contract in the penal sum of $4,713,219.00, naming the City of Green Cove Springs as obligee on the bond.

11.2 Tender Contractor Payment Bond. Simultaneous with the execution of this Agreement, the Tender Contractor shall deliver to the Owner a separate payment bond in the form required by the Contract in the penal sum of $4,713,219.00, naming the City of Green Cove Springs as obligee on the bond.

11.3 Release of Performance Bond. In consideration for the terms of this Agreement, including but not limited to the tendering of the Final Surety Payment by Lexon, the Owner agrees to forever discharge and release Lexon, together with its representatives, owners, officers, directors, employees, attorneys, successors, and assigns, from any and all performance obligations, claims, causes of action, costs, expenses, losses, damages or other claims or rights concerning the Contract, the Project and the Performance Bond. It is understood and agreed that the Owner's claim for recovery of liquidated damages is excepted from this Release and that the Parties to this Agreement reserve all claims, rights and defenses possessed by them in respect of the Owner's claim for liquidated damages, which is the sole exception to the list of released claims hereunder. The Parties further agree that they shall proceed to non-binding mediation in respect of the Owner's reserved liquidated damages claim as soon as practical upon final execution of this Agreement, but in no event later than the extended completion date for all remaining Phase 2 Work.

11.4 Release of Claims. Subject to the Owner's acceptance of the Tender Contractor for completion of all remaining work under the Contract and the Surety's compliance with all other terms of this Agreement, including but not limited to the tendering of the Final Surety Payment, the Owner releases any and all claims against the Surety for the imposition of any damages, costs, fees and expenses, which have been applied, or could have been applied, against the Contract and/or the Performance Bond, excepting the Owner's claim for recovery of liquidated damages as set forth in Article 11.3, as well as any potential claims for latent defects which are hereby reserved. Further, the Parties agree that they shall not be entitled to seek any indirect, incidental, extra-contractual, punitive, special or other like damages in any action as a result, directly or indirectly, of any Party's actions or inactions, with respect to this Agreement.

11.5 No Waiver. Nothing contained in this Term Sheet, or the Parties' ultimate Tender and Release Agreement, shall alter, amend, affect, or constitute a waiver of any rights and claims of Surety, whether contractual, at common law, or otherwise, that Surety, or any of its affiliates or reinsurers, may have against any other third-parties not a party to this Agreement.

11.6 Payment Bond to Remain in Effect. The Payment Bond shall remain in full force and effect, subject its terms and conditions.

12 Reduction of Bond Penalty. Upon the execution of this Agreement and the tendering of the Final Surety Payment, the Parties agree that the Bond Penalty associated with the Performance Bond shall be reduced to **$12,258,343.25** as set forth below. The total amount of the Final Surety Payment plus all monies expended by the Surety as part of the January 2, 2024 Takeover Agreement comprise the total amount reduced from the Bond Penalty amount as follows:

Penal Sum of Bond:	$ 15,426,644.33
Payments for Phase 1 Work:	$ 346,944.61
Payments for pre-Agreement Phase 2 Work:	$ 163,539.00
Other Reconciled Payments: (including Subcontractor Ratification Costs)	$ 455,480.92
Final Surety Payment:	$ 2,202,336.55
Reduced Bond Penalty Amount:	**$ 12,258,343.25**

13. Insurance Coverage. Prior to commencing any work under this Agreement or the Contract, the Tender Contractor shall procure and thereafter maintain at its sole expense until the final acceptance of all of its work under the Completion Contract, or longer if so provided by the Contract, the insurance coverages required by the Contract. The Tender Contractor further agrees to deliver all Certificates of Insurance and/or Certifications required by the Contract to the Owner prior to the commencement of any work on the Project.

14. No Modification. This Agreement, and all the documents referenced herein, constitute the entire understanding between the Parties with respect to the subject matter contained herein and cannot be amended or modified except by a writing duly executed by all of the Parties.

15. Choice of Law. This Agreement and any dispute of any nature, any claim or any suit arising out of either this Agreement or the Contract shall be governed by the laws of the State of Florida in every respect. Any action or suit brought with respect to the Tender and Release Agreement, or any breach thereof, shall be commenced and pursued in a single proceeding as set forth in the dispute resolution provisions of the Bonds or the Contract, with the specific provisions of the Bonds controlling in the event of a discrepancy.

16. Construction and Interpretation of Agreement. In the event of an ambiguity in or dispute regarding the interpretation of this Agreement, it shall not be construed strictly for or against any Party. In the event that one or more provisions of this Agreement shall be declared to be invalid, illegal or unenforceable in any respect, unless such invalidity, illegality or unenforceability shall be tantamount to a failure of consideration, the validity, legality and enforceability of the remaining provisions contained in this Agreement shall not, in any way, be affected or impaired thereby.

17. No Third-Party Rights. Nothing contained in this Agreement is intended to create any rights in favor of, or otherwise in any manner inure to the benefit of, any person or legal entity not a signatory hereto and the Parties hereto reserve all rights, remedies and defenses they may have against any such person or legal entity not a signatory hereto. This Agreement binds and inures to the benefit of and is enforceable by the successors and assigns of the Parties.

18. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

19. Alterations to Agreement. The modification, amendment and/or waiver of the Agreement, or of any of the provisions of the Agreement, shall not become effective unless executed in writing by the Party affected by any such modification, amendment or waiver, in each case by a duly authorized representative.

20. Review of Agreement. All Parties acknowledge that they had an opportunity to review this Agreement with counsel of their choosing prior to executing same.

21. Effective Date. The Effective Date of this Agreement shall be the date on which this Agreement is executed by all Parties.

22. No Joint Venture or Partnership Created. The relationship between the Parties shall be limited to the performance of this Agreement, which shall be construed and be deemed to be a specific arrangement for the tendering of a replacement contractor to perform the remaining work under the Contract and the payment of the Final Surety Payment only. Nothing herein contained shall be construed to constitute the Parties as partners or joint venturers or to constitute any Party as general agent of any other Party. The Surety is entitled to act for its own benefit in this matter and owes no duties, fiduciary or otherwise, except as expressly set forth herein.

23. No Admission of Liability. Nothing contained herein shall be deemed an admission of liability on the part of any Party to this Agreement.

24. Headings. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

25. Numbers. Words shall take precedence over numerals in the event of a discrepancy.

26. Facsimile and Email Signatures. Signatures transmitted by facsimile or email shall be accepted and deemed to be original signatures and shall be binding on the Parties upon signing.

27. Entire Agreement. The Parties hereto agree that the Agreement constitutes the entire agreement between the Parties relating to the subject matter of the Agreement and that there are no other agreements, understandings, representations or warranties made or given, except as expressly set forth herein. All prior agreements, understandings, letters and/or communications relating to the subject matter of the Agreement shall be null and void and shall be superseded by the Agreement, except as expressly set forth herein.

28. Authorization to Execute. Each of the undersigned individuals represents, warrants and certifies that s/he is authorized to execute this Agreement in the capacity indicated.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

EXECUTION

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date(s) appearing below:

LEXON INSURANCE COMPANY

By: _____

Print Name: Jeremy T. Sentman

Title: Senior Vice President - Head of Surety Claims

Date: June 12, 2024

CITY OF GREEN COVE SPRINGS

By: _____

Print Name: Steven Kelley

Title: Mayor

Date: 6/13/24

SAWCROSS, INC. d/b/a
SAWCROSS CONTRACTORS & ENGINEERS, INC.

By: _____

Print Name: KEVIN DIQUISTO

Title: VP OF OPERATIONS

Date: 6/13/24

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Regular Meeting **MEETING DATE:** July 16, 2024

FROM: Kimberly Thomas, Exec. Asst. to the City Manager

SUBJECT: Interlocal Agreement

BACKGROUND

School Safety Interlocal Agreement with CCSB

FISCAL IMPACT

RECOMMENDATION

City Council approval of the School Safety Interlocal Agreement among the School Board of Clay County, Florida; the City of Green Cove Springs, Florida; and the Green Cove Springs Police Department. The agreement pertains to the School Resource Officer Program

INTERLOCAL AGREEMENT
BETWEEN
THE SCHOOL BOARD OF CLAY COUNTY, FLORIDA,
THE CITY OF GREEN COVE SPRINGS, FLORIDA; AND
THE GREEN COVE SPRINGS POLICE DEPARTMENT
FOR THE SCHOOL RESOURCE OFFICER PROGRAM

This agreement is made among and executed by the SCHOOL BOARD OF CLAY COUNTY, FLORIDA ("BOARD"), GREEN COVE SPRINGS ("CITY"), AND THE CITY OF GREEN COVE SPRINGS POLICE DEPARTMENT ("GCSPD"), collectively ("the Parties").

WITNESSETH:

WHEREAS, Chapter 163, Florida Statutes, permits local governmental units to make the most efficient use of their powers by enabling them to cooperate with other localities on a basis of mutual advantage; and"

WHEREAS, the BOARD and the GCSPD have entered into this Agreement pursuant to section 1006.12, Florida Statutes: and

WHEREAS the BOARD and the GCSPD desire to provide law enforcement-related services to certain public schools within Clay County in compliance with 1006.12, Florida Statutes;

WHEREAS the BOARD and the GCSPD realize the potential benefits of the School Resource Officer (SRO) Program to the citizens of Clay County; and

WHEREAS, the BOARD agrees to contract with the GCSPD and the GCSPD agrees to provide the BOARD with an SRO Program in the Clay County School District "DISTRICT" for its public schools, and the BOARD agrees to reimburse the GCSPD for predetermined expenses in providing the SRO Program in accordance with the attached Appendices; and

WHEREAS, the BOARD and the GCSPD desire to set forth in this Agreement the specific terms and conditions of the services to be performed and provided by SROs and the GCSPD.

WHEREAS, the BOARD approved an interlocal agreement on June 6, 2024 between the BOARD, the CITY, and the GCSPD concerning the same subject matter as this Agreement. That certain agreement approved by the BOARD on June 6, 2024, is unsigned by the GCSPD and the CITY. Because the agreement originally signed by the BOARD is not fully executed, the BOARD desires to

re-execute and the CITY and the GCSPD desire to execute this Agreement to reflect changes in co requested by the CITY and the GCSPD.

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

Article I. Establishment of the SRO Program

A School Resource Officer Program is established within the public schools of Clay County.

Article II. Goals and Objectives

The BOARD and the GCSPD share the following goals and objectives with regard to the SRO Program:

i. For GCSPD and the DISTRICT to work collaboratively to create and support educational programs and activities that will increase student's knowledge of, and respect for, the law and law enforcement agencies; and support programs that are equally beneficial to the DISTRICT, GCSPD, and the SRO Program;

ii. For SROs to serve as mentors and positive role models for students;

iii. GCSPD and the DISTRICT shall act swiftly and cooperatively when responding to disruptions, threats to school safety, and reports of criminal activities on school property;

iv. To report **ALL** criminal and non-criminal police-related activities (Baker Act, property damage, vehicle accidents, etc.) that occur on school campuses and threats to school safety, whether on or off campus to the District Office of Safety & Security (School Safety Specialist or their Designee) in addition to any other action that GCSPD may take

v. To cooperate with the District Office of Safety & Security and other law enforcement officials in their investigation of criminal and non-criminal activities detailed in Article II, section iv;

vi. To cooperate with the DISTRICT in regard to accessing school videos, facility use coverage and securing reports regarding vehicle accidents, assault claims, etc. and other law enforcement related issues.

vii. In cases where school discipline is the result of alleged criminal activity, GCSPD and the DISTRICT should cooperate in the best interests of the school and the community.

viii. In accordance with Florida Statute 1006.12, The DISTRICT will retain the Guardian program and all oversight, costs, and administration of the program. The Guardian program and supervision thereof falls within the area of the District Office of Safety & Security. Guardians serve at the direction of the District Office of Safety & Security.

Article III. Employment, Assignment, and Dismissal

i. The GCSPD agrees to provide deputies at the current staffing and service levels as reflected in Appendix A – List of all Clay County District Schools 2024.

ii. Both parties acknowledge at the signing of this agreement that SRO positions will be assigned to the following schools located within Clay County:

1. Charles E Bennett Elementary
2. Green Cove Springs Junior High

iii. The SROs shall be employees of GCSPD and shall be subject to the administration, supervision, and control of the GCSPD and are also subject to the terms and conditions of this Agreement. GCSPD agrees to provide and to pay the SRO salary and employment benefits in accordance with the applicable salary schedule and employment practices of GCSPD, including but not limited to sick leave, personal leave, retirement compensation, disability salary continuation, workers compensation, unemployment compensation, life insurance, dental and medical insurance along with the costs of operations and equipment. The BOARD shall pay to the CITY the sum of **$218,937.00** in exchange for certain services provided to the BOARD by GCSPD from July 1, 2024, through June 30, 2025. Such payment shall be made in twelve (12) installments after execution of this Agreement and upon receipt of a monthly detailed invoice submitted by GCSPD to the BOARD. The SROs shall be subject to all personnel policies and practices of GCSPD and Clay County District Schools policy per Florida Statute 1006.12(1)(b),

iv. The SROs must, at a minimum, meet all State requirements for training and certification as described within the Marjory Stoneman Douglas Public Safety Act (MSDPSA) and all revisions contained within the Act. In addition, the SROs must maintain compliance as it pertains to any future revisions with the MSDPSA.

v. In the event the Principal of a school believes the assigned SRO fails to engage in a productive working relationship with the DISTRICT employees of the school, the following progressive steps shall be followed:

1. The principal shall meet with the SRO Unit Supervisor (GCSPD designee) to express the concerns;
2. The SRO Unit Supervisor shall investigate and determine an appropriate resolution, and will notify both the SRO Assistant Chief and the affected Principal of the outcome;
3. If the situation remains unresolved, it shall be reviewed by the Superintendent or designee and the Director of the GCSPD SRO Department or designee. If the Superintendent requests removal of an SRO from the assigned school or from the SRO unit entirely, the Superintendent or designee and the Director of the GCSPD SRO Department or designee, shall determine the proper course of

action.

vi. The assignment of an SRO to a school and/or the SRO Unit shall remain with GCSPD. The GCSPD, with sole discretion, shall have the power and authority to hire, discharge, and discipline SROs. The GCSPD shall hold the BOARD free, harmless, and indemnified from and against any and all claims, suits, or causes of action arising out of the allegations of unfair or unlawful employment practices brought by SROs.

vii. The SRO's assignment/reassignment to his/her specific school and any new hire of an SRO shall be at the sole discretion of the GCSPD with input from the Superintendent or designee of the DISTRICT.

viii. The DISTRICT shall include GCSPD in the planning for summer school. GCSPD shall assign an appropriate number of School Resource Officers to provide security for the duration of the summer sessions as this is part of their regular duties and responsibilities.

ix. The DISTRICT shall include GCSPD in the planning for any events on campus that require more officers be present at a school than assigned under this Agreement, including, but not limited to, FHSAA events and other events taking place outside of the entire school day as defined by Florida Statute 1001.60(2). In the case of a FHSAA event, GCSPD agrees to provide officers to the DISTRICT to conform with guidelines set by FHSAA and the DISTRICT to ensure the safety of students and the public that are present at such events.

x. Any Deputy who accepts the assignment to the SRO Unit shall commit to remain in the assignment for the duration of the school year before seeking a transfer from the SRO Unit.

xi. If an SRO is discharged, disciplined, or discharges his or her firearm in the course of his or her duties as a safe-school officer, as defined in Florida Statute 1006.12, other than for training purposes, GCSPD shall notify the District's School Safety Specialist as soon as practical, in compliance with Florida Statute 1006.12. The Safety Specialist is mandated to report such incidents to the Florida Department of Education Safe Schools within 72 hours.

Article IV: Duty Hours

i. The SRO shall be on duty for eight (8) hours including the entire school day as defined by Florida Statute 1011.60(2) and Florida Administrative Code Rule 6A-1.045111. In the event an SRO is absent from work, the SRO shall notify both the SRO Supervisor and the Principal at the assigned school.

ii. Both parties understand and agree that time spent by SROs attending court and/or criminal cases arising from their assignment, as an SRO, shall be considered as hours worked under this agreement. However, the DISTRICT will not incur any

additional costs associated with the SRO's coverage.

iii. Any staffing deficiency (gap in coverage) shall be reported to the District's School Safety Specialist immediately by the affected SRO sergeant.

Article V: Duties

i. The duties of the SRO include, but are not limited to, the following:

1. Maintain a Certification of Basic Law Enforcement issued by the Criminal Justice Standard and Training Commission.
2. To enforce Federal, State, and Local laws and ordinances.
3. To investigate reported and alleged criminal activity on, or adjacent to, school property or to investigate reported acts that pose a threat to school safety, in compliance with Marjorie Stoneman Douglas Act.
4. To be available to answer questions that students, parents, faculty, and staff may have regarding police procedure.
5. To investigate and handle any motor vehicle accidents occurring on-campus, and provide associated reports to the DISTRICT upon request.
6. To assist other Law Enforcement Agencies with official investigations involving students attending the school to which the SRO is assigned;
7. The assigned SROs may provide law enforcement services and traffic control for special school events or functions such as athletic events, dances, meetings, etc.
8. The assigned SROs may provide traffic control during the arrival and departure of students when deemed necessary for the safety and security of students;
9. To make recommendations to the school that will add to the safe and orderly arrival and departure of students, parents, and visitors.
10. To notify the principal or designee as soon as possible of an arrest or Baker Act, and if possible, prior to removing the student from campus; The DISTRICT'S procedures shall be followed for parent notification, in accordance with the requirements imposed by Florida Statutes.
11. SROs shall participate as a Behavioral Threat Assessment ("BTA") Team Member at a BTA Meeting located at respective Participating DISTRICT Schools. As a BTA Team Member, the SRO may assist the school in gathering information, evaluating facts, and helping to make institutional determinations, such as whether a health or safety emergency exists, and how the school should respond.
12. Pursuant to Florida Statute 1006.12(2)(c), SROs shall complete mental health crisis intervention training (CIT) using a curriculum developed by a national organization with expertise in mental health crisis intervention. If an SRO has not completed CIT training prior to being assigned to a school, the SRO will attend CIT training at the earliest possible opportunity. All SRO training

records are maintained by GCSPD and are available to the DISTRICT upo request.

13. Receive the required training in the Florida Harm Prevention and Threat Management Model (Florida Model).
14. To coordinate Emergency Medical Services, crowd, and traffic control in the event of an emergency on-campus;
15. To follow and conform with all DISTRICT policies and regulations that do not conflict with the policies and procedures of GCSPD.
16. SROs shall not be assigned a fixed duty post.
17. SROs shall be considered a supplemental resource to the school faculty, staff, and administration.
18. SROs shall be visible to students, faculty, and staff during peak hours (i.e.: lunch, class changes, assemblies, bus lines, arrival, and dismissal, etc.).
19. SROs shall be available to attend faculty/staff meetings as well as administrative meetings with Principals or designees as requested.
20. The Sheriff or designee shall meet with the Superintendent or designee on a monthly basis to ensure consistency within the SRO Unit and DISTRICT.
21. As set forth in Florida Statute 1006.07, Law Enforcement Officers (Deputies) responsible for responding to the school, in the event of an active assailant emergency, as determined necessary by the GCSPD in coordination with the District's School Safety Specialist, must be physically present on campus and directly involved in the execution of active assailant emergency drills. The school must notify law enforcement officers at least 24 hours before conducting an active assailant emergency drill, at which such law enforcement officers are expected to attend.
22. The SRO will utilize the DISTRICT's visitor management system "Raptor" for daily sign-in and sign-out activities. This will provide data to the DISTRICT Staff with GCSPD for required state-mandated auditing and compliance purposes. Use of other law enforcement visitor management or tracking systems may be used as necessary with the agreement and coordination with the DISTRICT.

Article VI: Training/Briefing

i. Required Law Enforcement in-service training for SROs shall be managed by GCSPD. Every effort shall be made to schedule required training in a manner that reduces the impact on the schools and associated SRO coverage. In all cases GCSPD shall provide advance notice to the DISTRICT.

ii. All SROs shall attend training provided by the Superintendent or designee on topics

considered germane and timely, with the approval of the Sheriff or designee.

iii. When requested, Faculty, Staff, and Administration in each school shall receive training from the SRO on the following topics including but not limited to:

1. Mandatory Child Abuse Reporting Requirements;
2. Legal updates that affect schools;
3. Active Assailant Standard Response Protocol;
4. Current trends with Clay County youth (i.e.: drugs, gangs, weapons, etc.)
5. Active shooter and family reunification (CHIRP) procedures.

iv. The CIT can be facilitated on a teacher workday or a time designated by the Principal or a supervisory member of the GCSPD.

Article VII: BOARD Support

i. The District's School Safety Specialist or designee (also referred to as the liaison) will coordinate the SRO program for the school DISTRICT and will be the primary contact at the DISTRICT with the GCSPD.

1. The liaison will provide student information, including but not limited to student disciplinary records, when requested by an SRO, in matters dealing with school safety concerns.

ii. The BOARD and Superintendent shall support the ability of the SRO to perform his/her duties by adequately supplying the following equipment:

1. A private, secure, air-conditioned, properly lighted, and centrally located office. Only the SRO and certain DISTRICT Administrators shall have access to this office.
2. A private desk telephone for confidential business purposes;
3. A computer with a direct printer for report writing and other job-related duties;
4. A desk or file cabinet with locking drawers for storage of confidential files;
5. Basic office supplies.
6. A secure gun locker for a GCSPD-issued rifle, which shall not be left overnight in the school.
7. A DISTRICT-issued smart access card for ingress and egress into the school(s).
8. DISTRICT issued keys to the appropriate assigned school(s).
9. GCSPD shall provide all other equipment normally issued to a Deputy Sheriff and all other equipment that is required to fulfill the SRO role.

Article VIII: Dress Code

The SRO shall wear the uniform of the day issued by GCSPD. Any deviation from the

above shall be at the discretion of the Sheriff or his/her designee.

Article IX: Transporting Students

i. The SROs shall only transport students in their patrol vehicles under the following conditions:

1. The student is the victim of a crime;
2. The student has been arrested; or
3. There are exigent circumstances or an emergency.
4. In accordance with GCSPD policies regarding the transportation of civilians. (GCSPD SOP 3000.17)

ii. The SRO shall not transport students who have been suspended from school, barring exigent circumstances.

iii. The SRO shall not transport a sick or ill student, barring exigent circumstances.

iv. The SRO shall notify the Principal or designee prior to removing any student from campus and the cause of such removal, unless a clearly defined exigency exists.

Article X: Reporting Crimes and Delinquent Acts

i. The SHERIFF and the BOARD agree that a safe and crime-free school campus is required to ensure a healthy educational environment. Both parties acknowledge the BOARD's "Zero Tolerance" policies for drugs, weapons, and violence on school grounds. However, the SRO retains full discretion regarding enforcement of the law, making arrests, and taking appropriate law enforcement action.

ii. Pursuant to Florida Statute 1006.13(4)(a), Fla. Stat., the BOARD shall ensure any acts that pose a threat to school safety, whether committed by a student or adult, shall be reported to GCSPD and the School District's School Safety Specialist. GCSPD shall handle reported acts in accordance with GCSPD policies. The outcome of the investigations will be reported to the School District's School Safety Specialist.

1. The School Principal shall notify school personnel that criminal acts and acts which pose a threat to school safety are to be reported to the school principal or designee. The Principal or designee shall ensure that the disposition of the incident is properly documented. This notification is in addition to the requirement to report acts to GCSPD.

iii. Pursuant to Florida Statute 1006.13(4)(b), school personnel will consult with SRO concerning appropriate delinquent acts and crimes.

iv. It is agreed the Principal of each school is the ultimate decision-maker regarding disciplinary issues resulting from a non-criminal act. Decisions will be made by the Principal based on the DISTRICT'S Code of Student Conduct. Should the situation become a law enforcement issue, the GCSPD shall maintain discretion in pursuing

criminal charges or alternative options, such as a Delinquent Citation, for incidents that occur on school grounds.

v. Pursuant to Florida Statute 985.04, the GCSPD or designee must notify the Superintendent or their designees when a student under the age of 21 is taken into custody for an offense that would have been a felony if committed by an adult, or a crime of violence.

ARTICLE XI: GCSPD Safeguarding Confidentiality of Education Records

i. Notwithstanding any provision to the contrary within this Agreement, GCSPD shall:

1. fully comply with the requirements of Florida Statutes 1002.22, 1002.221, and 1002.222, the Family Educational Rights and Privacy Act, 20 U.S.C. 1232g (FERPA) and its implementing regulations (34 C.F.R. Part 99), and any other state or federal law or regulation regarding the confidentiality of student information and records;

2. hold any education records in strict confidence and not use or redisclose same except as required by this Agreement or as required or permitted by law unless the parent of each student or a student age 18 years or older whose education records are to be shared provides written consent for their release;

3. ensure that, at all times, all of its employees who have access to any education records during the term of their employment shall abide strictly by its obligations under this Agreement and that access to education records is limited only to its employees that require the information to carry out the responsibilities under this Agreement and shall provide said list of employees to the DISTRICT upon request;

4. safeguard each education records through administrative, physical, and technological safety standards to ensure that adequate controls are in place to protect the education records and information in accordance with FERPA's privacy requirements;

5. utilize the education records solely for the purposes for which the disclosure was made or as contemplated under this Agreement; and shall not share, publish, sell, distribute, target advertising, display, or otherwise redisclose education records to any third party without consent unless the redisclosure fits within one of the exceptions to FERPA's consent requirements;

6. notify the DISTRICT immediately upon discovery of a breach of confidentiality of education records by telephone at 904-336-9603 (Manager, Information Security), and 904-336-6851 (Safety and Security Department), and take all necessary notification steps as may be required by federal and Florida law, including, but not limited to, those required by Florida Statute 501.171;

7. fully cooperate with appropriate DISTRICT staff, including its SSO and/or Information Technology staff to resolve any privacy investigations and concerns in

a timely manner;

8. prepare and distribute, at its own cost, any and all required breach notifications, under federal and Florida law, or reimburse the DISTRICT any direct costs incurred by the DISTRICT for doing so, including, but not limited to, those required by Florida Statute 501.171;

9. be responsible for any fines or penalties for failure to meet breach notice requirements pursuant to federal and/or Florida law;

10. provide the DISTRICT with the name and contact information of its employee who shall serve as the DISTRICT's primary security contact and shall be available to assist the DISTRICT in resolving obligations associated with a security breach of confidentiality of education records; and

11. purge education records from any media once the media is no longer in use or is to be disposed of.

ii. Unless otherwise specified in this Agreement, all education records shall remain the property of the DISTRICT, and any Party contracting with the DISTRICT serves solely as custodian of such information pursuant to this Agreement and claims no ownership or property rights thereto and, upon termination of this Agreement shall, at the DISTRICT's request, return to the DISTRICT or purge the education records in compliance with the applicable Florida Retention Schedules and provide the DISTRICT with a written acknowledgment of said disposition.

Article XII: Consideration

All consideration of costs associated with GCSPD services for School Resource Officers will be outlined and contained within the long-term funding agreement.

Article XIII: Fiscal Transparency of GCSPD Records

i. GCSPD shall establish and maintain books, records, and documents (including electronic storage media) sufficient to reflect all income and expenditures of funds provided by CCDS under this Agreement.

ii. All GCSPD's Records relating to the SRO Program, regardless of the form in which they are kept, shall be provided to the Board upon written request and given 30 days written notice. These records are kept in accordance with GAAP and the Uniform Accounting Systems Manual for Florida Local Government and are also independently audited by a qualified CPA firm annually as part of the annual financial statement audit scope of work

iii. GCSPD and the Board and/or the DISTRICT will meet at a minimum on a quarterly basis to review the year to date funds received and actual expenditures summary related to this Agreement. Intermittent meetings will be held upon request.

iv. **Article XIV: Modifications**

This Agreement along with Appendix A constitutes the full understanding of the parties, and no terms, conditions, understandings, or agreement purporting to modify or vary the terms of this Agreement shall be binding unless made in writing and agreed to by both parties.

Article XV: Terms of Agreement

i. The term of this Agreement shall remain in full force for one year, commencing on the 1st of July 2024, and ending on the 30th of June 2025. This Agreement may be renewed and extended annually for additional and successive one-year terms unless notice of non-renewal is given by either party, in writing, prior to April 1stt, of the initial or any succeeding term. However, GCSPD will provide to the Board the proposed annual budget for the subsequent year before May 1st of each year.

ii. This Agreement is entered into and governed by the Florida lnter-local Cooperation Act of 1969, section 163.01, Fla. Stat., and all applicable portions of the same are hereby incorporated by reference.

Article XVII: Indemnification

i. The Parties are political subdivisions of the State of Florida. Notwithstanding any language in this contract to the contrary, nothing in this indemnification agreement shall be construed or interpreted to increase the scope or dollar limit of the Parties' liability beyond that which is set forth in Florida Statute 768.28, or to otherwise waive the Parties' sovereign immunity, or to require the Parties to indemnify each other or any other person, corporation, or legal entity of any kind or nature whatsoever for injury or loss resulting from any acts other than the negligent acts of the Parties or its agents or employees. The Parties shall not indemnify any party for attorney's fees or costs other than those court costs which are set forth by Florida Statute or other Florida law as recoverable costs of court.

ii. The parties agree, however, that nothing contained herein shall be construed or interpreted as (1) denying to either party any remedy or defense available to either party under the laws of the State of Florida: or (2) a waiver of either party's right to sovereign immunity beyond the waiver provided in Florida Statute 768.28. The limits of liability on either party set forth in Florida Statute 768.28 are hereby fully incorporated herein by this reference. This Paragraph shall survive termination of this Agreement and shall remain in effect until such time as the statute of limitations has expired to bring a claim under this Agreement.

In Witness Whereof, The parties hereto have caused this Agreement to be executed as written above.

#673

7/10/24

party under the laws of the State of Florida: or (2) a waiver of either party's right to sovereign immunity beyond the waiver provided in Florida Statute 768.28. The limits of liability on either party set forth in Florida Statute 768.28 are hereby fully incorporated herein by this reference. This Paragraph shall survive termination of this Agreement and shall remain in effect until such time as the statute of limitations has expired to bring a claim under this Agreement.

In Witness Whereof, The parties hereto have caused this Agreement to be executed as written above.

_____ _____

ELVIS GUZMAN
Chief of Police, City of Green Cove Springs

_____ _____

STEVEN KELLEY
Mayor of Green Cove Springs, Florida Date

_____ _____

STEVE KENEDY
City Manager, Green Cove Springs, Florida Date:

_____ _____

ASHLEY GILHOUSEN, Chair
School Board of Clay County, Florida Date:

_____ _____

DAVID S. BROSKIE
Superintendent of Schools
School Board of Clay County, Florida Date:

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council **MEETING DATE:** July 16, 2024

FROM: Michael Daniels

SUBJECT: Final Plat for phase 1 of the Rookery Development for a portion of parcel #: 016515-008-00

PROPERTY DESCRIPTION

APPLICANT: Ellen Avery-Smith, Esq. of Rogers Tower, PA **OWNER:** Gustafson's Cattle, Inc.

PROPERTY LOCATION: CR 15 A

PARCEL NUMBER: 016515-008-00

FILE NUMBER: FLUS-22-001, ZON-22-001, FLUS-22-002, PUD-22-001, CDA-22-001

CURRENT ZONING*:* PUD

FUTURE LAND USE DESIGNATION*:* NEIGHBORHOOD

SURROUNDING LAND USE

NORTH: **FLU**: Recreation
Z: Recreation
Use: Undeveloped

SOUTH: **FLU**: RLD
Z: PUD
Use: Undeveloped

EAST: **FLU**: Neighborhood/Industrial (County)
Z: PUD / Heavy Industrial (County)
Use: Undeveloped / Industrial

WEST: **FLU**: Industrial (County) / Recreation
Z: Heavy Industrial (County) / Recreation
Use: Commercial / Undeveloped

BACKGROUND

DEVELOPMENT DESCRIPTION:

The first phase of the Rookery Development is proposed for 231 units on 73.57 acres. The entire Rookery property, consisting of 560 acres was annexed into the City in 2021 and was approved for a Zoning designation of Planned Unit Development and a corresponding Development Agreement for the development of 2,100 residential dwelling units. The requirements set forth in the PUD and the Development Agreement are attached. As part of the approved Development Agreement, the applicant is required to construct Pearce Boulevard which shall traverse through the development and head north into property that is currently owned by the City and then head east over the railroad tracks and connect to US 17. In order to compensate the City for the acreage needed for the development of the roadway, the applicant has executed a land exchange where the applicant will provide property to the City in exchange for the acreage needed for the development of the

roadway. The City property was purchased as a part of a grant provided by the Florida Communities Trust for the development of a Regional Park.

The enclosed plan set includes:

- Final Plat
- Home Owners Association Documents
- Performance Bond

STAFF RECOMMENDATION

Staff recommends approval of the Final Plat for the Phase 1 of the Rookery Subdivision subject to the following conditions:

1. The final plat shall be recorded in the official Clay County records within 30 days after City Council approval

RECOMMENDED MOTIONS:

Recommend approval of the Rookery Phase 1 Final Plat subject to staff comments.

ROOKERY PHASE 1

A PORTION OF SECTION 38 OF THE GEORGE I.F. CLARKE GRANT, TOWNSHIP 6 SOUTH, RANGE 26 EAST, CITY OF GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA.

PLAT BOOK PAGE

SHEET 1 OF 14 SHEETS

SEE SHEET 3 FOR NOTES

CAPTION

A portion of Section 38 of the George I.F. Clarke Grant, Township 6 South, Range 26 East, Clay County, Florida, being a portion of those lands described and recorded in Official Records Book 1545, page 513, of the Public Records of said county, being more particularly described as follows:

For a Point of Reference, commence at the intersection of the Northerly right of way line of State Road No. 23 (First Coast Outer Beltway), a variable width right of way per Florida Department of Transportation Right of Way Map Section 71493, with the Easterly right of way line of County Road No. 15A (South Oakridge Avenue), a 100' right of way per State Road Department Right of Way Map Section 7101–105; thence North 02°07'57" East, along said Easterly right of way line, 4742.08 feet to the Point of Beginning.

From said Point of Beginning, thence continue North 02°07'57" East, along said Easterly right of way line, 2469.78 feet to the Southwesterly corner of those lands described and recorded in Official Records Book 4580, page 2153, of said Public Records; thence Easterly along the boundary line of last said lands the following 9 courses: Course 1, thence South 88°31'42" East, departing said Easterly right of way line, 282.59 feet; Course 2, thence North 21°17'17" East, 161.55 feet; Course 3, thence South 68°42'43" East, 287.10 feet; Course 4, thence South 58°52'43" East, 32.90 feet; Course 5, thence South 37°48'54" East, 22.40 feet; Course 6, thence North 70°53'31" East, 15.20 feet; Course 7, thence North 34°14'49" East, 52.23 feet; Course 8, thence South 88°17'22" East, 94.17 feet; Course 9, thence North 31°43'31" East, 427.82 feet; thence South 58°16'29" East, departing said boundary line, 30.00 feet to a point on a non–tangent curve concave Southeasterly having a radius of 175.00 feet; thence Northeasterly along the arc of said curve, through a central angle of 16°53'45", an arc length of 51.61 feet to a point on said curve, said arc being subtended by a chord bearing and distance of North 40°10'24" East, 51.42 feet; thence North 41°22'44" West, along a non–tangent line, 29.96 feet to a point on a non–tangent curve concave Southerly having a radius of 198.38 feet; thence Easterly along the arc of said curve, through a central angle of 47°45'50", an arc length of 165.38 feet to a point on said curve, said arc being subtended by a chord bearing and distance of North 73°41'49" East, 160.63 feet; thence South 05°22'04" West, along a non–tangent line, 24.76 feet to a point on a non–tangent curve concave Southwesterly having a radius of 175.00 feet; thence Southeasterly along the arc of said curve, through a central angle of 67°09'24", an arc length of 205.12 feet to a point on said curve, said arc being subtended by a chord bearing and distance of South 51°03'13" East, 193.58 feet; thence South 77°07'44" East, along a non–tangent line, 159.64 feet; thence South 07°36'26" East, 27.75 feet to a point on a non–tangent curve concave Westerly having a radius of 329.63 feet; thence Southerly along the arc of said curve, through a central angle of 18°48'59", an arc length of 108.25 feet to a point of compound curvature, said arc being subtended by a chord bearing and distance of South 05°32'51" East, 107.77 feet; thence Southwesterly along the arc of a curve concave Northwesterly having a radius of 114.19 feet, through a central angle of 42°20'42", an arc length of 84.40 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 25°02'00" West, 82.49 feet; thence Southerly along the arc of a curve concave Easterly having a radius of 100.00 feet, through a central angle of 49°48'01", an arc length of 86.92 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South 21°18'21" West, 84.21 feet; thence South 03°35'40" East, 137.02 feet to the point of curvature of a curve concave Northeasterly having a radius of 100.00 feet; thence Southeasterly along the arc of said curve, through a central angle of 67°44'41", an arc length of 118.24 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South 37°28'01" East, 111.47 feet; thence South 71°20'21" East, 100.70 feet to the point of curvature of a curve concave Southwesterly having a radius of 100.00 feet; thence Southeasterly along the arc of said curve, through a central angle of 33°25'02", an arc length of 58.32 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South 54°37'50" East, 57.50 feet; thence South 37°55'20" East, 92.83 feet to the point of curvature of a curve concave Westerly having a radius of 30.00 feet; thence Southerly along the arc of said curve, through a central angle of 109°39'38", an arc length of 57.42 feet to a point of compound curvature, said arc being subtended by a chord bearing and distance of South 16°54'30" West, 49.05 feet; thence Westerly along the arc of a curve concave Northerly having a radius of 565.00 feet, through a central angle of 26°23'26", an arc length of 260.24 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 84°56'02" West, 257.95 feet; thence Westerly along the arc of a curve concave Southerly having a radius of 3150.00 feet, through a central angle of 01°46'01", an arc length of 97.15 feet to a point on said curve, said arc being subtended by a chord bearing and distance of North 82°45'16" West, 97.14 feet; thence South 06°21'43" West, along a non–tangent line, 120.00 feet to a point on a non–tangent curve concave Southerly having a radius of 3030.00 feet; thence Easterly along the arc of said curve, through a central angle of 00°05'48", an arc length of 5.11 feet to a point on said curve, said arc being subtended by a chord bearing and distance of South 83°35'22" East, 5.11 feet; thence South 06°27'32" West, along a non–tangent line, 60.00 feet; thence South 02°10'52" West, 86.73 feet; thence South 87°49'08" East, 76.56 feet; thence South 02°10'52" West, 45.00 feet; thence South 87°49'08" East, 36.97 feet; thence South 02°10'52" West, 100.00 feet to a point on a non–tangent curve concave Southeasterly having a radius of 25.00 feet; thence Southwesterly along the arc of said curve, through a central angle of 90°00'00", an arc length of 39.27 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South 47°10'52" West, 35.36 feet; thence South 02°10'52" West, 90.00 feet to the point of curvature of a curve concave Northeasterly having a radius of 25.00 feet; thence Southeasterly along the arc of said curve, through a central angle of 90°00'00", an arc length of 39.27 feet to a point on said curve, said arc being subtended by a chord bearing and distance of South 42°49'08" East, 35.36 feet; thence South 02°10'52" West, 60.00 feet; thence North 87°49'08" West, 1.00 feet to the point of curvature of a curve concave Southeasterly having a radius of 30.00 feet; thence Southwesterly along the arc of said curve, through a central angle of 90°00'00", an arc length of 47.12 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South 47°10'52" West, 42.43 feet; thence South 02°10'52" West, 95.00 feet; thence North 87°49'08" West, 60.00 feet; thence South 02°10'52" West, 19.32 feet to the point of curvature of a curve concave Easterly having a radius of 530.00 feet; thence Southerly along the arc of said curve, through a central angle of 01°15'19", an arc length of 11.61 feet to a point on said curve, said arc being subtended by a chord bearing and distance of South 01°33'13" West, 11.61 feet; thence North 87°49'08" West, along a non–tangent line, 148.85 feet to a point on a non–tangent curve concave Southwesterly having a radius of 30.00 feet; thence Southeasterly along the arc of said curve, through a central angle of 86°29'30", an arc length of 45.29 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 44°34'23" East, 41.11 feet; thence Southerly along the arc of a curve concave Easterly having a radius of 650.00 feet, through a central angle of 16°22'41", an arc length of 185.80 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 09°30'58" East, 185.17 feet; thence Southwesterly along the arc of a curve concave Northwesterly having a radius of 30.00 feet, through a central angle of 100°37'35", an arc length of 52.69 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South 32°36'29" West, 46.17 feet; thence South 82°55'17" West, 49.39 feet to the point of curvature of a curve concave Southerly having a radius of 450.00 feet; thence Westerly along the arc of said curve, through a central angle of 17°01'13", an arc length of 133.68 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 74°24'40" West, 133.19 feet; thence Westerly along the arc of a curve concave Northerly having a radius of 30.00 feet, through a central angle of 69°35'32", an arc length of 36.44 feet to a point on said curve, said arc being subtended by a chord bearing and distance of North 79°18'10" West, 34.24 feet; thence South 45°29'35" West, along a non–tangent line, 290.34 feet to a point on a non–tangent curve concave Westerly having a radius of 30.00 feet; thence Southerly along the arc of said curve, through a central angle of 78°57'15", an arc length of 41.34 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 16°18'54" East, 38.15 feet; thence Southerly along the arc of a curve concave Easterly having a radius of 450.00 feet, through a central angle of 19°41'49", an arc length of 154.70 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 13°18'49" West, 153.94 feet; thence Southwesterly along the arc of a curve concave Northwesterly having a radius of 30.00 feet, through a central angle of 68°18'06", an arc length of 35.76 feet to a point on said curve, said arc being subtended by a chord bearing and distance of South 37°36'58" West, 33.68 feet; thence South 18°13'59" East, along a non–tangent line, 76.77 feet to the point of curvature of a curve concave Northwesterly having a radius of 175.00 feet; thence Southwesterly along the arc of said curve, through a central angle of 93°45'36", an arc length of 286.37 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South 28°38'49" West, 255.47 feet; thence South 75°31'36" West, 76.77 feet to a point on a non–tangent curve concave Westerly having a radius of 30.00 feet; thence Southerly along the arc of said curve, through a central angle of 58°59'24", an arc length of 30.89 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 15°01'18" West, 29.54 feet;

CAPTION CONTINUATION

thence Southerly along the arc of a curve concave Easterly having a radius of 175.00 feet, through a central angle of 55°04'23", an arc length of 168.21 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 16°58'48" West, 161.81 feet; thence Southwesterly along the arc of a curve concave Northwesterly having a radius of 30.00 feet, through a central angle of 117°16'24", an arc length of 61.40 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 48°04'49" West, 51.23 feet; thence Southwesterly along the arc of a curve concave Southeasterly having a radius of 175.00 feet, through a central angle of 102°05'52", an arc length of 311.84 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South 55°40'05" West, 272.19 feet; thence Southwesterly along the arc of a curve concave Northwesterly having a radius of 30.00 feet, through a central angle of 75°39'04", an arc length of 39.61 feet to a point on said curve, said arc being subtended by a chord bearing and distance of South 42°26'41" West, 36.80 feet; thence South 09°44'30" East, along a non–tangent line, 51.18 feet; thence South 42°13'32" West, 15.22 feet; thence South 84°56'54" West, 32.56 feet; thence North 55°45'45" West, 43.43 feet; thence North 51°15'09" West, 213.61 feet; thence North 87°52'03" West, 115.00 feet to the Point of Beginning.

Containing 74.06 acres, more or less.

CONSENT AND JOINDER

The undersigned hereby certifies that it is the holder of the mortgage, lien or other encumbrance recorded in Official Records Book 4750, Page 2139, of the Public Records of Clay County, Florida ("Mortgage"), encumbering the lands described in the caption hereon. The undersigned hereby joins and consents to the dedications by the Owner of the lands described in the Adoption and Dedication section herein, and agrees that the Mortgage shall be subordinated to said dedications.

Signed in the presence of:

_____

Print Name: _____

_____

Print Name: _____

D.R. Horton, Inc. – Jacksonville
A Delaware corporation

By: _____

Print Name: Philip A. Fremento

Its: Vice President

STATE OF FLORIDA, COUNTY OF _____

The foregoing instrument was acknowledged before me, by means of [__] physical presence or [__] online notarization, this _____ day of _____ , 2024, by Philip A. Fremento, the Vice President of D.R. Horton, Inc. – Jacksonville, a Delaware corporation, who [__] is personally known to me or who [__] has produced _____ as identification.

_____
Notary Public, State of Florida at Large

My Commission expires_____

_____
Printed Name

Commission Number_____

CONSENT AND JOINDER

The undersigned hereby certifies that it is the holder of the mortgage, lien or other encumbrance recorded in Official Records Book 4750, Page 558, of the Public Records of Clay County, Florida ("Mortgage"), encumbering the lands described in the caption hereon. The undersigned hereby joins and consents to the dedications by the Owner of the lands described in the Adoption and Dedication section herein, and agrees that the Mortgage shall be subordinated to said dedications.

Signed in the presence of:

_____

Print Name: _____

_____

Print Name: _____

Flagstar Bank, N.A., A NATIONAL BANK
formerly known as Flagstar Bank, FSB, a federally chartered savings bank

By: _____

Print Name: Drew Szilagyi

Its: First Vice President

STATE OF TEXAS, COUNTY OF HARRIS

The foregoing instrument was acknowledged before me, by means of [__] physical presence or [__] online notarization, this _____ day of _____ , 2024, by Drew Szilagyi, the First Vice President of Flagstar Bank, N.A., a national bank formerly known as Flagstar Bank, a federally chartered savings bank, who [__] is personally known to me or who [__] has produced _____ as identification.

_____
Notary Public, State of Texas at Large

My Commission expires_____

_____
Printed Name

Commission Number_____

ADOPTION AND DEDICATION

This is to certify that ADJ Rookery, LLC, a Florida limited liability company, hereinafter "Dedicator", is the lawful owner of the lands described in the caption hereon and that they have caused the same to be surveyed and subdivided, and that this plat known as ROOKERY PHASE 1 made in accordance with said survey is hereby adopted as the true and correct plat of said lands. All of the property that is designated on this plat as , Tracts "B", "C", "D", "E", "F", "G" and "H" (Stormwater Management Facility), Tracts "I", "J" (Perimeter Buffer), Tracts "K", "W" and "V" (Open Space), Tracts "L", "M", "N", "O", Tract "U" (Utility Tract), Tracts "P", "Q", "R", "S" and "X" (Landscape Buffer), Tract "T" (Recreation/Open Space), Fire Department Access Easements are hereby irrevocably and without reservation dedicated to the _____ Community Development District, its successors and assigns.

Palm Warbler Road, Anhinga Island Lane, Pearce Boulevard, Little Heron Place, Lark Sparrow Street, Audubon Avenue White Ibis Lane, Hatchling Court, Horned Lark Court, maintenance easements and unobstructed drainage and access easements and drainage easements are hereby irrevocably and without reservation dedicated to the City of Green Cove Springs, its successors and assigns.

The drainage easements through and over the lakes and filtration systems shown on this plat are hereby irrevocably dedicated to the Community Development District, its successors and and assigns, and are subject to the following covenants which shall run with the land.

ADOPTION AND DEDICATION CONTINUATION

(1) The drainage easements hereby dedicated shall permit the City of Green Cove Springs, its successors and assigns, to discharge into said Stormwater Management Facility which these easements traverse, all water which may fall or come upon the land hereby dedicated, together with all soil. nutrients. chemicals and all other substances which may flow or pass from Pearce Boulevard, Little Heron Place, Lark Sparrow Street, Audubon Avenue, White Ibis Lane, Hatchling Court, Horned Lark Court: from adjacent land or from any other source of public waters into or through said Stormwater Management Facility, without any liability whatsoever on the part of the City of Green Cove Springs, its successors and assigns for any damage, injuries or losses to persons or property resulting from the acceptance or use of the drainage easements by the City of Green Cove Springs, Its successors and assigns.

(2) Tracts "B", "C", "D", "E", "F", "G" and "H" shown on this plat, dedicated to the _____Community Development District, is established for the placement and maintenance of stormwater retention/detention in the Stormwater Management Facility. _____Community Development District shall remain responsible for the maintenance and/or repair of said Stormwater Management Facility in accordance with all applicable permits and laws. unless the tracts are conveyed to an owners association which has the duty and authority, and has accepted responsibility therefor, Clay County by acceptance of this plat assumes no responsibility for the removal or treatment of aquatic plants, animals, soil, chemicals or any other substance or thing that may ever be or come within said Stormwater Management Facility which these easements traverse, or any responsibility for maintenance or preservation of the water purity. water level or water depth, which responsibilities shall be those of Community Development District. The City of Green Cove Springs, its successors and assigns are hereby granted an easement for drainage purposes across said Tracts "B", "C", "D", "E", "F", "G" and "H" .

(3) The City of Green Cove Springs, its successors and assigns shall not be liable or responsible for the creation. operation. failure or destruction of Water level control equipment which may be constructed or installed by the developer or any other person within the area of the lands hereby platted, or of the Stormwater Management Facility shown on this plat, but shall have he right to modify the existence of the Stormwater Management Facility and that which retains it to effect adequate drainage including but not limited to, the right to remove any water level control structures or any part thereof. _____, developer and owner of the Stormwater Management Facility depicted in this plat, shall indemnify the City of Green Cove Springs and hold it harmless from suits, actions, damages and liability and expense in connection with loss of life, bodily or personal injury or property damage or any other damage arising from or out of any occurrence in, upon, at or from the Stormwater Management Facility described above, or any part thereof, occasioned wholly or in part by any act or omission of _____, its agents, contractors, employees, servants, licensees or concessionaires with ROOKERY PHASE 1. This indemnification shall run with the land and the successors and assigns of _____, shall be bound by and subject to it.

None of the foregoing shall prohibit the City of Green Cove Springs, from establishing a municipal service benefit unit, stormwater utility, transportation utility, or any other special assessment/fee system within any subdivision for the furnishing of roads, streets, drainage, or other benefits. Nor shall any of the foregoing prohibit the acceptance for maintenance of roads or common facilities by the City Council if after any filing of any plat the facilities to be accepted by the City Council for maintenance are upgraded to County acceptance standards by contribution of the local developer or homeowners or by establishment of a municipal service benefit district.

All easements for water and sewer systems, marked CCUA and shown on plat are hereby irrevocably and without reservation dedicated to Clay County Utility Authority (CCUA), its successors and assigns.

All easements for underground electrical distribution system, marked GCS and shown on plat are hereby irrevocably and without reservation dedicated to the City of Green Cove Springs (GCS), its successors and assigns.

Tract "A" (Lift Station Tract) is hereby irrevocably and without reservation dedicated to Clay County Utility Authority, its successors and assigns.

Tracts "B", "C", "D", "E", "F", "G" and "H" (Stormwater Management Facility), Tracts "I", "J" (Perimeter Buffer), Tracts "K", "W" and "V" (Open Space), Tracts "L", "M", "N", "O", Tract "U" (Utility Tract), Tracts "P", "Q", "R", "S" and "X" (Landscape Buffer), Tract "T" (Recreation/Open Space) and Fire Department Access Easements are hereby reserved unto the Dedicator, its successors and assigns.

Those easements designated as "AT&T Easements" are hereby irrevocably dedicated to Bellsouth Telecommunications, LLC, D/B/A AT&T Florida, its successors and assigns, for their exclusive use. Those easements designated as "AT&T Ingress and Egress" are hereby irrevocably dedicated to Bellsouth Telecommunications, LLC, D/B/A AT&T Florida, its successors and assigns, for their non–exclusive use.

In witness whereof, the undersigned Owner has executed this plat on the _____ day of _____ , 2024.

ADJ Rookery, LLC,
a Florida limited liability company

By: RS–JDG Fund I, LLC,
a Florida limited liability company,
its Manager

By: AJ–DJ Stokes, LLC,
a Florida limited liability company,
its Manager

By: _____
Anand Jobalia
Manager

_____
Witness

_____
Print Name

_____
Witness

_____
Print Name

STATE OF _____, COUNTY OF _____

The foregoing instrument was acknowledged before me, by means of [__] physical presence or [__] online notarization, this _____ day of _____, 2024, by Anand Jobalia, as the Manager of AJ–DJ Stokes, LLC, a Florida limited liability company, the Manager of RS–JDG Fund I, LLC, a Florida limited liability company, the Manager of ADJ Rookery, LLC, a Florida limited liability company, on behalf of the company, who [__] is personally known to me or who [__] has produced _____ as identification.

_____
Notary Public, State of Florida at Large

My Commission expires_____

_____
Printed Name

Commission Number_____

PREPARED BY:
ETM SURVEYING & MAPPING, INC.
14775 OLD ST. AUGUSTINE ROAD
JACKSONVILLE, FL 32258 (904) 642–8550
CERTIFICATE OF AUTHORIZATION NO. L.B. 3624

ROOKERY PHASE 1

A PORTION OF SECTION 38 OF THE GEORGE I.F. CLARKE GRANT, TOWNSHIP 6 SOUTH, RANGE 26 EAST, CITY OF GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA.

PLAT BOOK PAGE

SHEET 2 OF 14 SHEETS

SEE SHEET 3 FOR NOTES

CLERK'S CERTIFICATE

I certify that this plat was filed for recording on this _____ day of _____, 2024 in Plat Book _____, Pages _____ through _____, of the Public Records of Clay County, Florida,

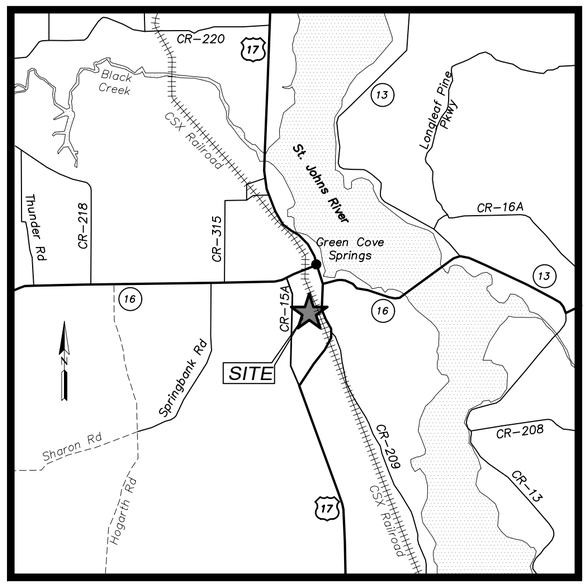
_____
Tara S. Green, Clay County Clerk of Court

CERTIFICATE OF APPROVAL BY THE CITY COUNCIL

The City of Green Cove Springs City Council hereby approves this final plat of Rookery Phase 1 this _____ day of _____, 2024.

_____
Clerk of the City of Green Cove Springs

_____
Mayor of the City of Green Cove Springs



VICINITY MAP
(NOT TO SCALE)

CERTIFICATE OF APPROVAL BY THE CITY ATTORNEY

The city of Green Cove Springs City Attorney approves this final plat of Rookery Phase 1 this ____ day of _____, 2024.

_____
City Attorney

SURVEYOR'S CERTIFICATE

Know all men by these presents, that the undersigned, being currently licensed and registered by the State of Florida as a Professional Surveyor and Mapper, does hereby certify that the above plat is a true and correct representation of the lands surveyed, platted and described, and was made under the undersigned's responsible direction and supervision, and that the plat complies with all of the survey requirements of Part 1, Chapter 177, Florida Statutes.

Signed and sealed this _____ day of _____ , 2024.

_____
Bob L. Pittman
Professional Surveyor and Mapper
State of Florida Registered Surveyor No. 4827

SURVEYOR'S CERTIFICATE OF REVIEW

The undersigned surveyor hereby certifies that he has reviewed this plat on behalf of Clay County, Florida, in accordance with the requirements of Part 1, Section 177 Florida Statutes, and has determined that said plat conforms with requirements of said Part 1, Chapter 177, Florida Statutes. The undersigned did not prepare this plat. However, my review and certification does not include computation or field verification of any points or measurements.

This certificate is made as of the _____ day of _____ , 2024.

Signed: _____

Print Name: Austin Blazs

Florida Registration No.: LS 7401

Print Address: 11801 Research Drive
Alachua, FL. 32615

PREPARED BY:
ETM SURVEYING & MAPPING, INC.
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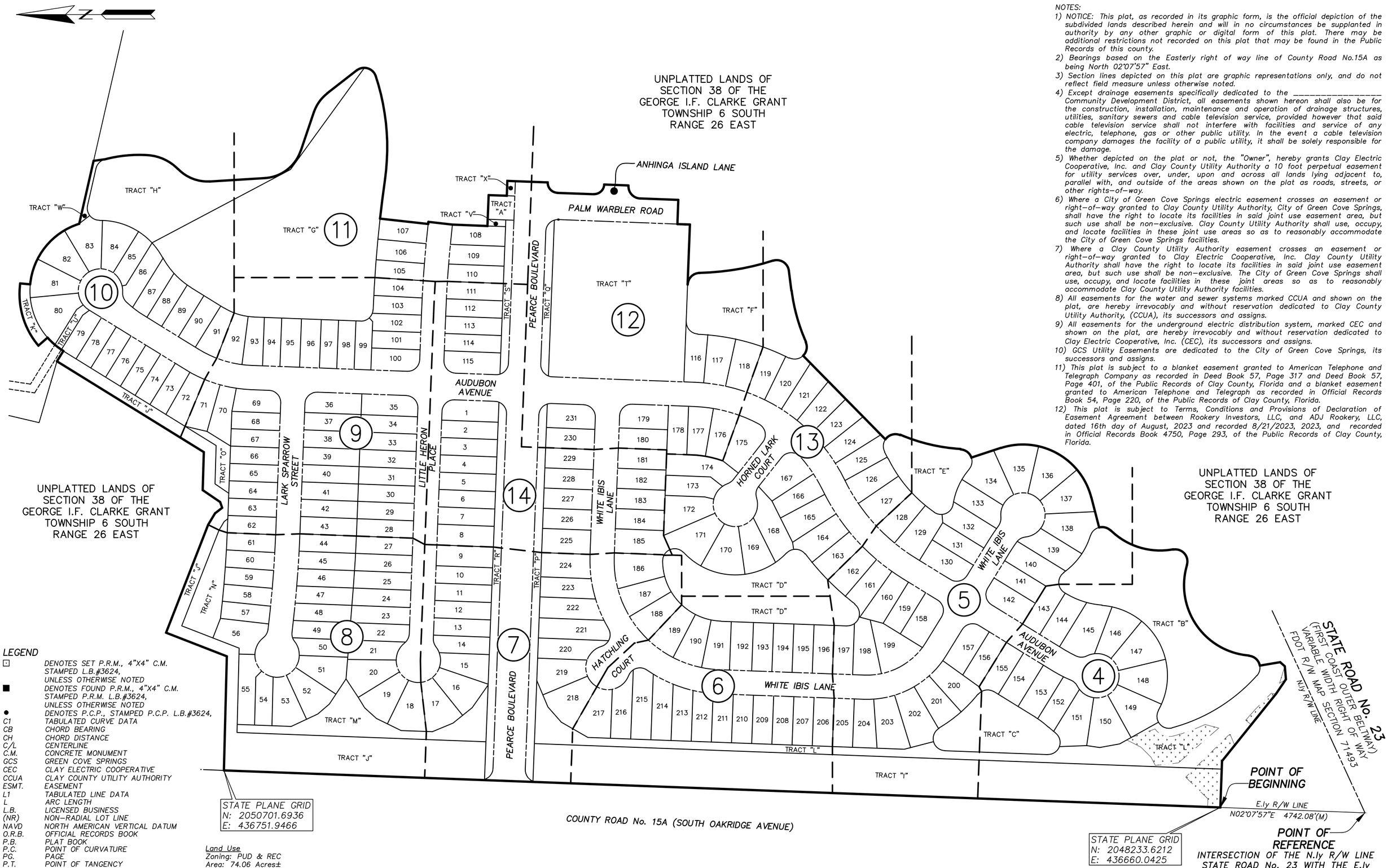
PLAT BOOK PAGE

SHEET 3 OF 14 SHEETS



NOTES:

1) NOTICE: This plat, as recorded in its graphic form, is the official depiction of the subdivided lands described herein and will in no circumstances be supplanted in authority by any other graphic or digital form of this plat. There may be additional restrictions not recorded on this plat that may be found in the Public Records of this county.
2) Bearings based on the Easterly right of way line of County Road No.15A as being North 02°07'57" East.
3) Section lines depicted on this plat are graphic representations only, and do not reflect field measure unless otherwise noted.
4) Except drainage easements specifically dedicated to the _____ Community Development District, all easements shown hereon shall also be for the construction, installation, maintenance and operation of drainage structures, utilities, sanitary sewers and cable television service, provided however that said cable television service shall not interfere with facilities and service of any electric, telephone, gas or other public utility. In the event a cable television company damages the facility of a public utility, it shall be solely responsible for the damage.
5) Whether depicted on the plat or not, the "Owner", hereby grants Clay Electric Cooperative, Inc. and Clay County Utility Authority a 10 foot perpetual easement for utility services over, under, upon and across all lands lying adjacent to, parallel with, and outside of the areas shown on the plat as roads, streets, or other rights–of–way.
6) Where a City of Green Cove Springs electric easement crosses an easement or right–of–way granted to Clay County Utility Authority, City of Green Cove Springs, shall have the right to locate its facilities in said joint use easement area, but such use shall be non–exclusive. Clay County Utility Authority shall use, occupy, and locate facilities in these joint use areas so as to reasonably accommodate the City of Green Cove Springs facilities.
7) Where a Clay County Utility Authority easement crosses an easement or right–of–way granted to Clay Electric Cooperative, Inc. Clay County Utility Authority shall have the right to locate its facilities in said joint use easement area, but such use shall be non–exclusive. The City of Green Cove Springs shall use, occupy, and locate facilities in these joint areas so as to reasonably accommodate Clay County Utility Authority facilities.
8) All easements for the water and sewer systems marked CCUA and shown on the plat, are hereby irrevocably and without reservation dedicated to Clay County Utility Authority, (CCUA), its successors and assigns.
9) All easements for the underground electric distribution system, marked CEC and shown on the plat, are hereby irrevocably and without reservation dedicated to Clay Electric Cooperative, Inc. (CEC), its successors and assigns.
10) GCS Utility Easements are dedicated to the City of Green Cove Springs, its successors and assigns.
11) This plat is subject to a blanket easement granted to American Telephone and Telegraph Company as recorded in Deed Book 57, Page 317 and Deed Book 57, Page 401, of the Public Records of Clay County, Florida and a blanket easement granted to American Telephone and Telegraph as recorded in Official Records Book 54, Page 220, of the Public Records of Clay County, Florida.
12) This plat is subject to Terms, Conditions and Provisions of Declaration of Easement Agreement between Rookery Investors, LLC, and ADJ Rookery, LLC, dated 16th day of August, 2023 and recorded 8/21/2023, 2023, and recorded in Official Records Book 4750, Page 293, of the Public Records of Clay County, Florida.

LEGEND

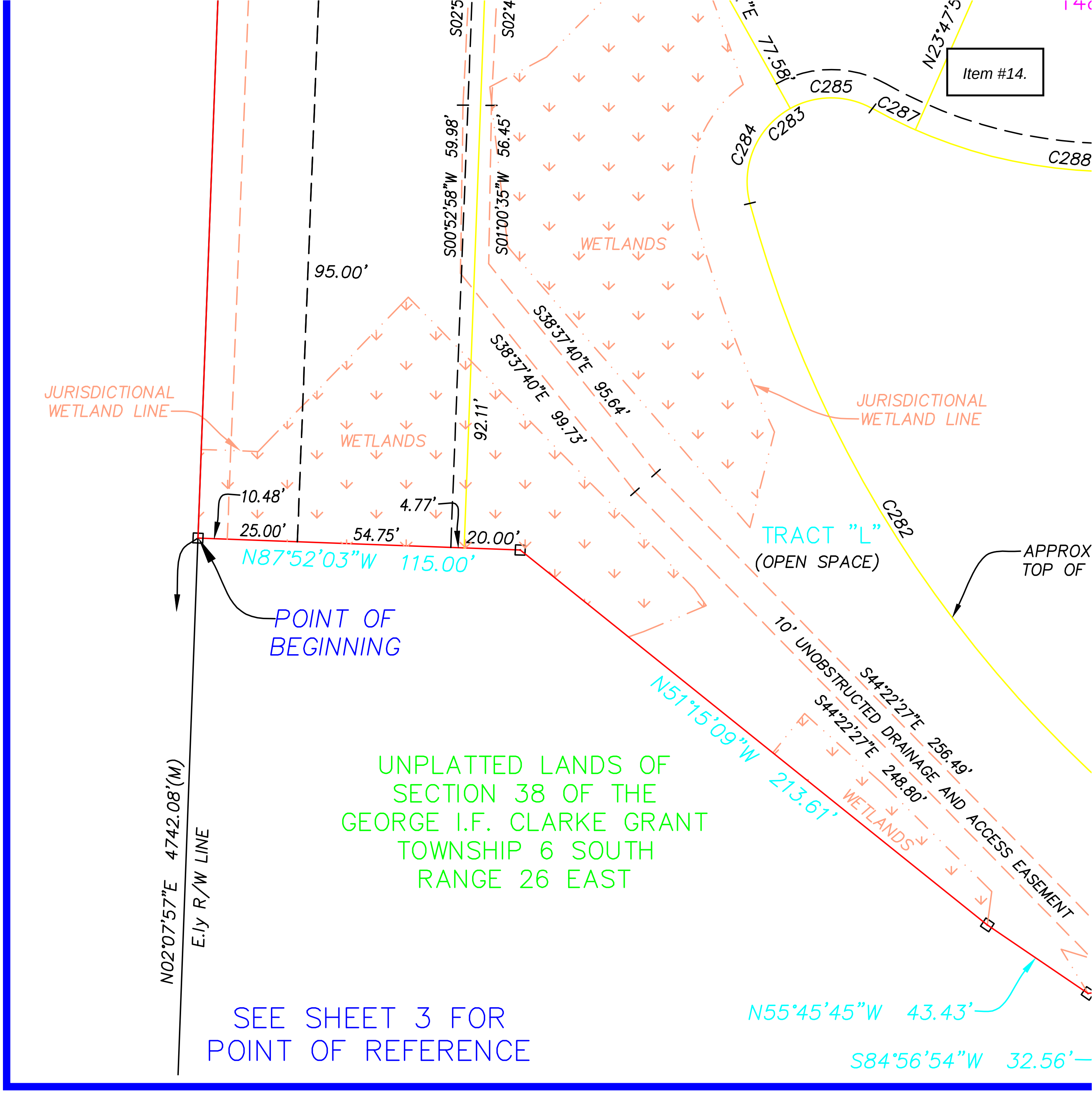
⊡	DENOTES SET P.R.M., 4"X4" C.M. STAMPED L.B.#3624, UNLESS OTHERWISE NOTED
■	DENOTES FOUND P.R.M., 4"X4" C.M. STAMPED P.R.M. L.B.#3624, UNLESS OTHERWISE NOTED
●	DENOTES P.C.P., STAMPED P.C.P. L.B.#3624,
C1	TABULATED CURVE DATA
CB	CHORD BEARING
CH	CHORD DISTANCE
C/L	CENTERLINE
C.M.	CONCRETE MONUMENT
GCS	GREEN COVE SPRINGS
CEC	CLAY ELECTRIC COOPERATIVE
CCUA	CLAY COUNTY UTILITY AUTHORITY
ESMT.	EASEMENT
L1	TABULATED LINE DATA
L	ARC LENGTH
L.B.	LICENSED BUSINESS
(NR)	NON–RADIAL LOT LINE
NAVD	NORTH AMERICAN VERTICAL DATUM
O.R.B.	OFFICIAL RECORDS BOOK
P.B.	PLAT BOOK
P.C.	POINT OF CURVATURE
PG.	PAGE
P.T.	POINT OF TANGENCY
P.C.C.	POINT OF COMPOUND CURVATURE
P.C.P.	PERMANENT CONTROL POINT
P.R.C.	POINT OF REVERSE CURVATURE
P.R.M.	PERMANENT REFERENCE MONUMENT
(R)	RADIAL LOT LINE
R	RADIUS
R/W	RIGHT OF WAY
△	CENTRAL ANGLE
③	SHEET REFERENCE NUMBER
— — —	MATCHLINE

Land Use
Zoning: PUD & REC
Area: 74.06 Acres±
Number of Lots: 231
Minimum Lot Width: 43 feet

Building Setbacks
Minimum Front Setback: 20 feet for front (face of garage)
15 feet for front facade;
Minimum Side Setback: 43' lots 6.5 feet, wider lots 5 feet
Minimum Rear Setback: 10 feet

0 75 150 300
GRAPHIC SCALE IN FEET
1"= 150'

PREPARED BY:
ETM SURVEYING & MAPPING, INC.
14775 OLD ST. AUGUSTINE ROAD
JACKSONVILLE, FL 32258 (904) 642–8550
CERTIFICATE OF AUTHORIZATION NO. L.B. 3624


Item #14.
C285
C287
C288
C283
C284
77.58'
95.00'
S00°52'58"W 59.98'
S01°00'35"W 56.45'
WETLANDS
S38°37'40"E 95.64'
S38°37'40"E 99.73'
JURISDICTIONAL WETLAND LINE
JURISDICTIONAL WETLAND LINE
WETLANDS
92.11'
10.48'
4.77'
25.00'
54.75'
20.00'
N87°52'03"W 115.00'
TRACT "L"
(OPEN SPACE)
C282
POINT OF BEGINNING
10' UNOBSTRUCTED DRAINAGE AND ACCESS EASEMENT
S44°22'27"E 256.49'
S44°22'27"E 248.80'
N51°15'09"W 213.61'
WETLANDS
UNPLATTED LANDS OF SECTION 38 OF THE GEORGE I.F. CLARKE GRANT TOWNSHIP 6 SOUTH RANGE 26 EAST
N02°07'57"E 4742.08'(M)
E.ly R/W LINE
SEE SHEET 3 FOR POINT OF REFERENCE
N55°45'45"W 43.43'
S84°56'54"W 32.56'

CURVE TABLE					
CURVE	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
C4	500.00'	32°23'20"	282.65'	S47°48'43"W	278.90'
C6	500.00'	8°59'41"	78.49'	N53°53'07"W	78.41'
C7	200.00'	60°30'54"	211.24'	S28°07'30"E	201.56'
C35	230.00'	6°01'56"	24.22'	S00°53'01"E	24.20'
C36	230.00'	13°10'23"	52.88'	S10°29'11"E	52.76'
C37	230.00'	13°10'23"	52.88'	S23°39'33"E	52.76'
C38	230.00'	11°25'57"	45.89'	S35°57'43"E	45.82'
C39	230.00'	12°38'18"	50.73'	S47°59'51"E	50.63'
C40	230.00'	4°03'57"	16.32'	S56°20'58"E	16.32'
C41	30.00'	90°00'00"	47.12'	N13°22'57"W	42.43'
C55	30.00'	90°00'00"	47.12'	S76°37'03"W	42.43'
C56	470.00'	3°58'39"	32.63'	N56°23'37"W	32.62'
C57	30.00'	4°53'40"	2.56'	N51°57'28"W	2.56'
C58	30.00'	43°35'40"	22.83'	N27°42'48"W	22.28'
C59	55.00'	46°57'35"	45.08'	S29°23'46"E	43.83'
C60	55.00'	39°48'31"	38.21'	S72°46'49"E	37.45'
C61	55.00'	37°14'58"	35.76'	N68°41'27"E	35.13'
C62	55.00'	37°14'58"	35.76'	N31°26'29"E	35.13'
C63	55.00'	37°14'58"	35.76'	N05°48'29"W	35.13'
C64	55.00'	39°29'36"	37.91'	N44°10'46"W	37.16'
C65	55.00'	32°01'24"	30.74'	N79°56'16"W	30.34'
C66	30.00'	42°17'21"	22.14'	S74°48'17"E	21.64'
C67	530.00'	0°55'50"	8.61'	N54°07'32"W	8.61'
C68	530.00'	3°47'30"	35.07'	N56°29'12"W	35.07'
C69	30.00'	90°00'00"	47.12'	S13°22'57"E	42.43'
C70	470.00'	7°50'32"	64.33'	S35°32'19"W	64.28'
C71	470.00'	7°32'24"	61.85'	S43°13'47"W	61.81'

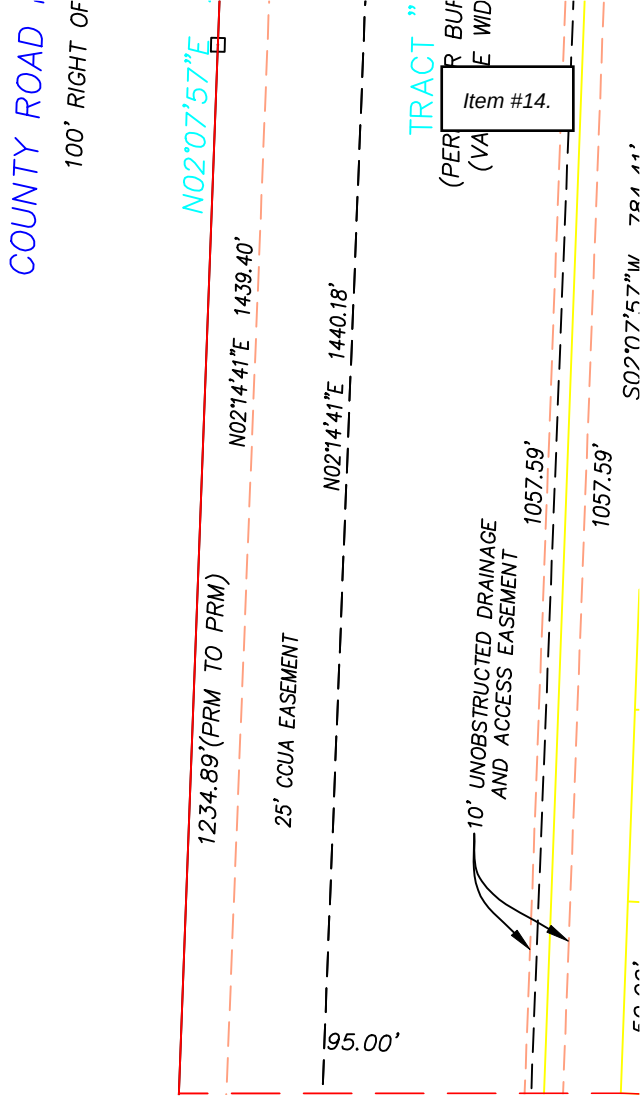
MATCHLINE SEE

0 25 50

GRAPHIC SCALE I
1"= 50'

Land Use
Zoning: PUD & REC
Area: 74.06 Acres±
Number of Lots: 231
Minimum Lot Width: 43 feet

Building Setbacks
Minimum Front Setback: 20 feet for
15 feet for f
Minimum Side Setback: 43' lots 6.5
Minimum Rear Setback: 10 feet



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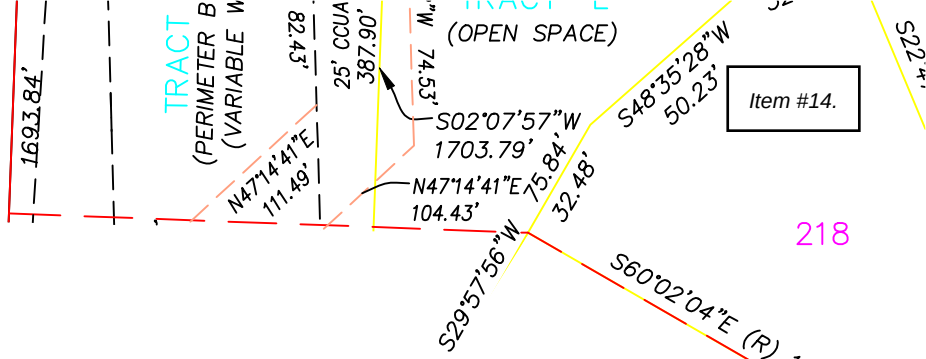

MATCHLINE SEE SHEET

LEGEND

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C/L	CENTERLINE
C.M.	CONCRETE MONUMENT
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CCUA	CLAY COUNTY UTILITY AUTHORITY
ESMT.	EASEMENT
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L.B.	LICENSED BUSINESS
(NR)	NON-RADIAL LOT LINE
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P.B.	PLAT BOOK
P.C.	POINT OF CURVATURE
PG.	PAGE
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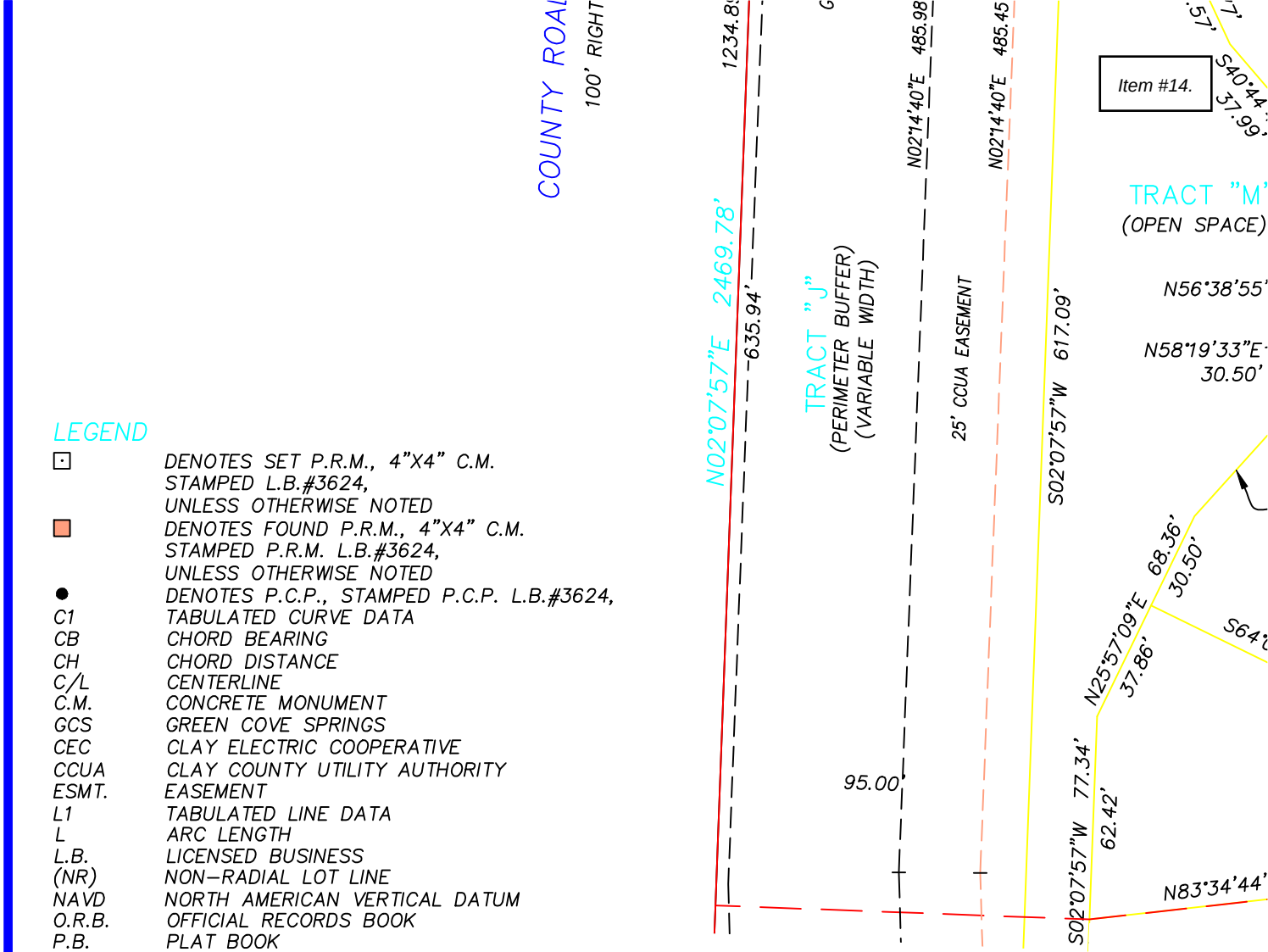

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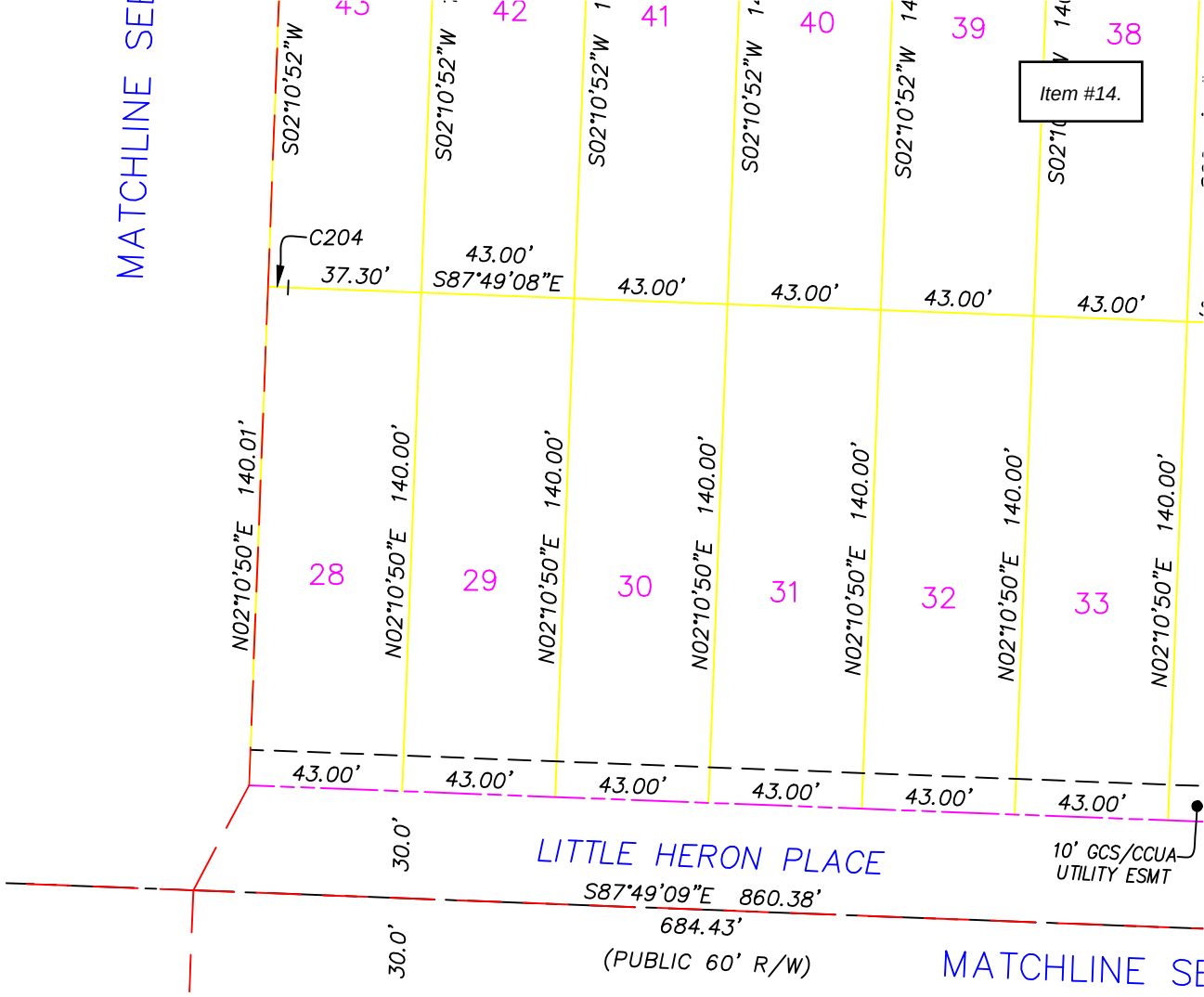

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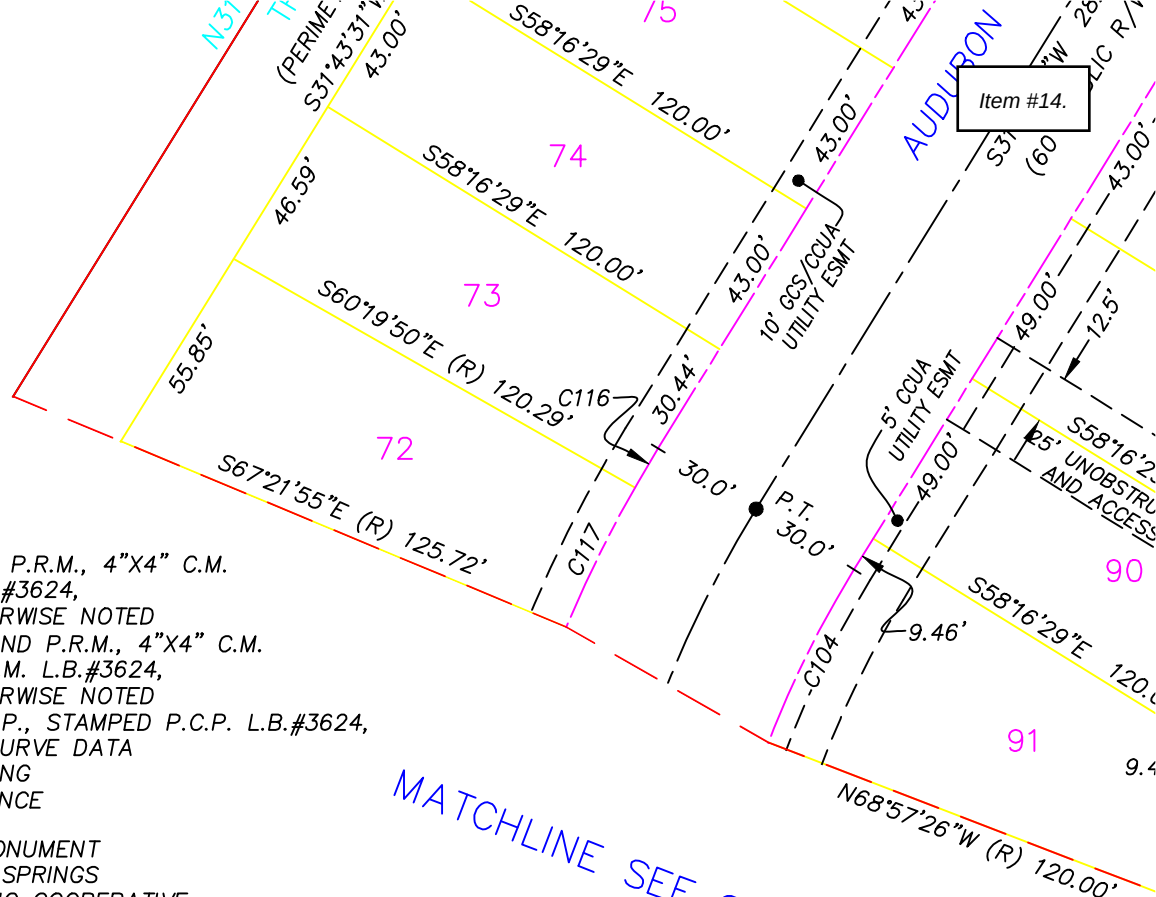

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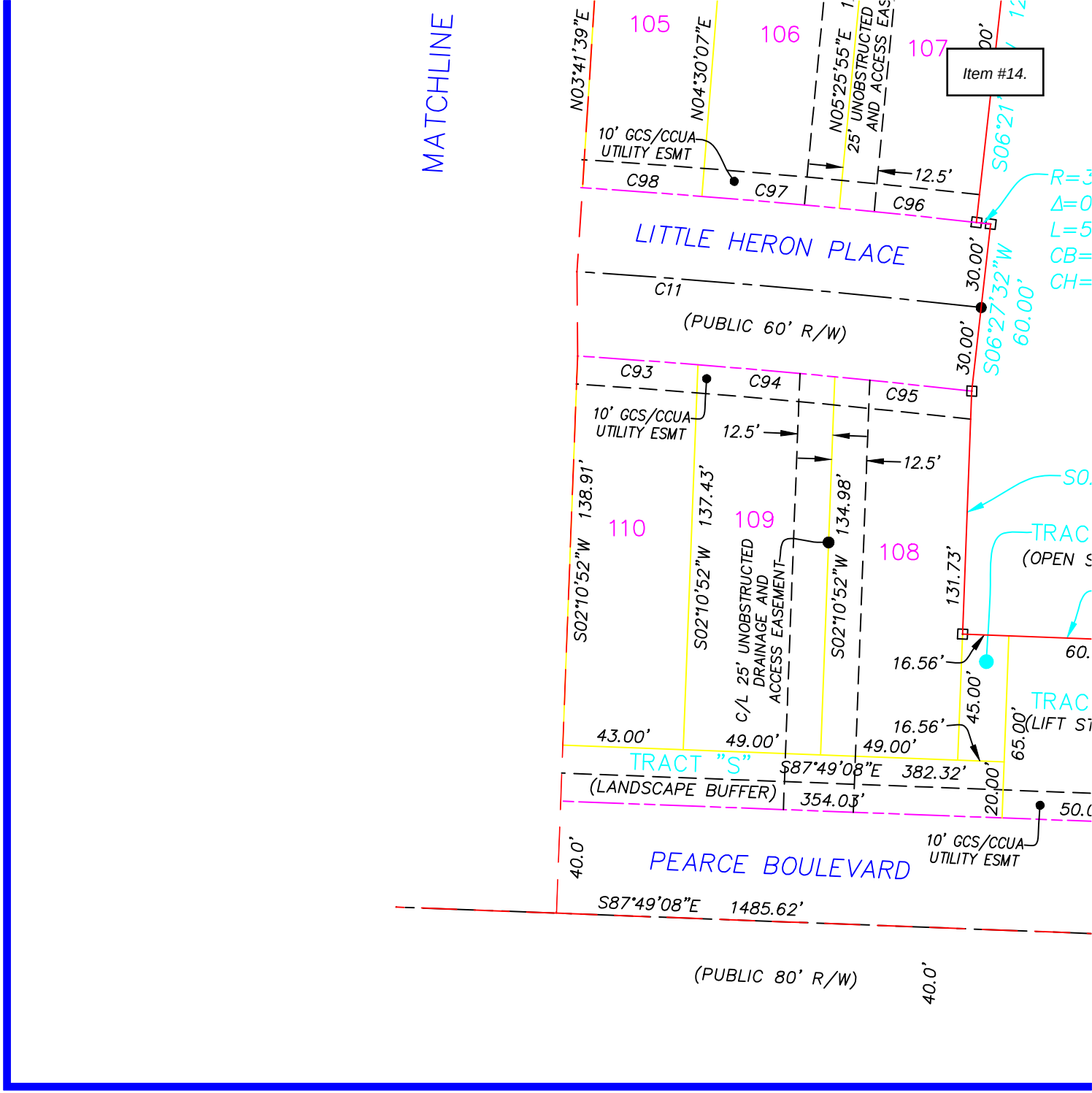
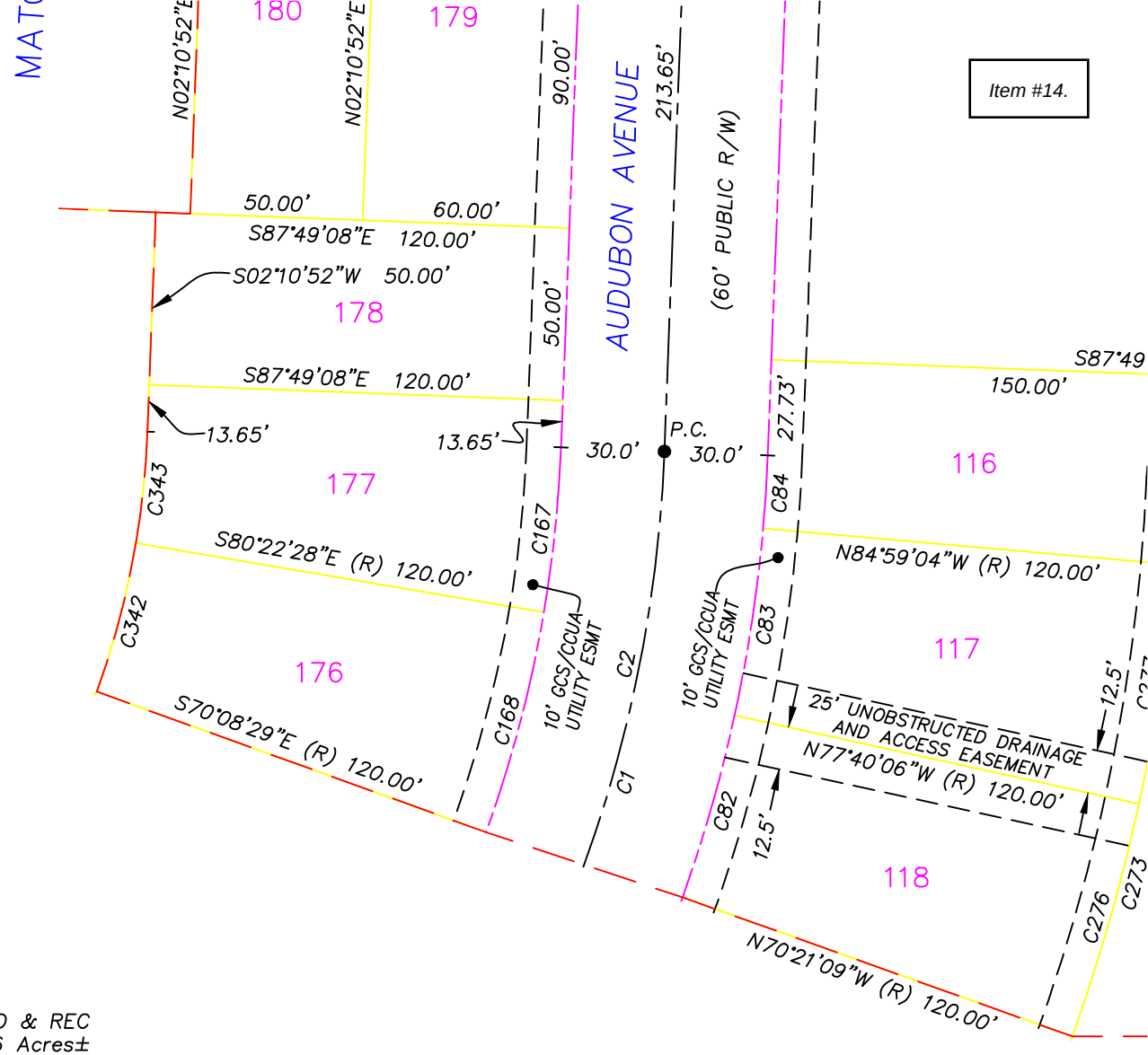
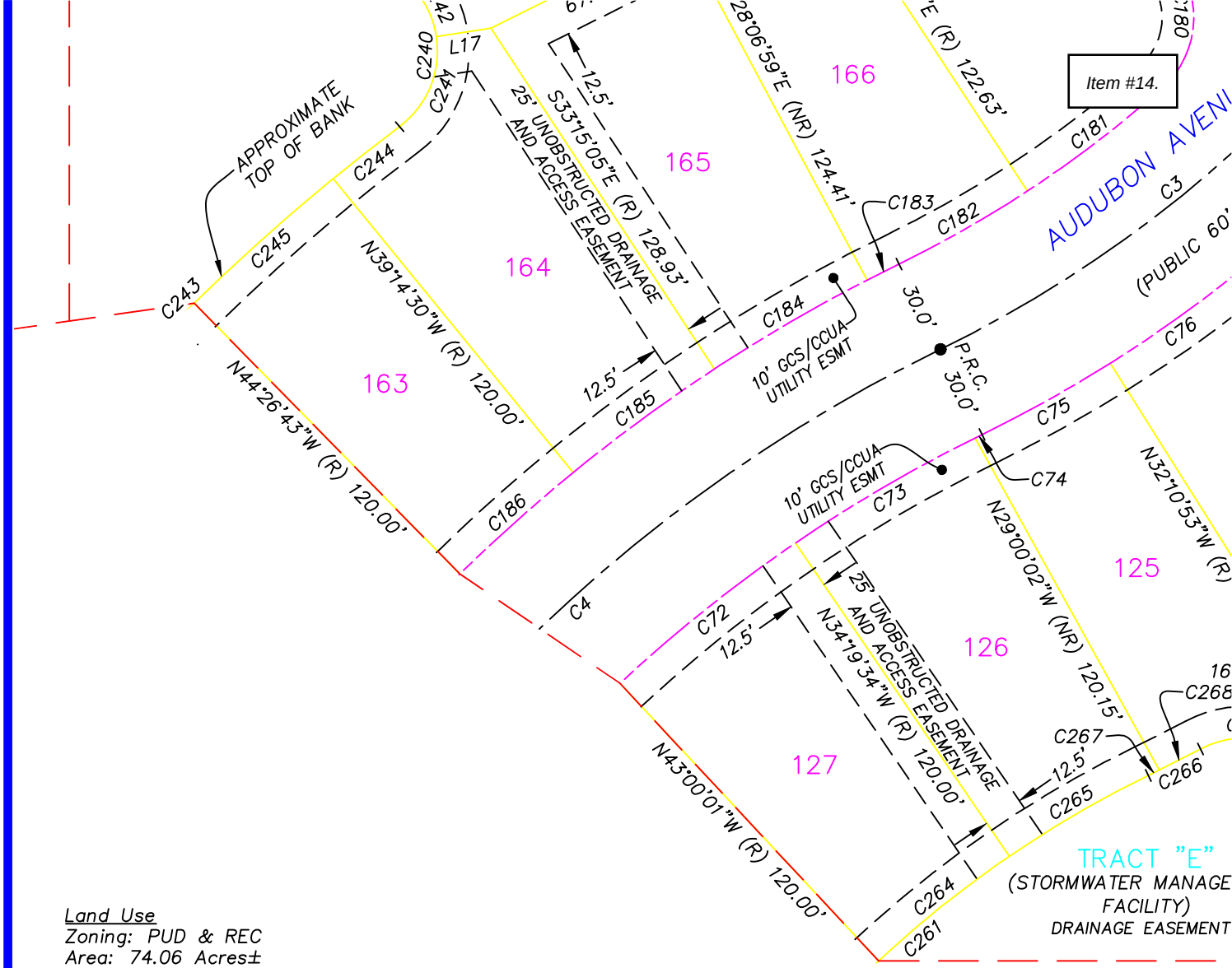

MATCHLINE
105
106
107
N03°41'39"E
N04°30'07"E
N05°25'55"E
25' UNOBSTRUCTED AND ACCESS EASEMENT
10' GCS/CCUA UTILITY ESMT
12.5'
C98
C97
C96
LITTLE HERON PLACE
C11
(PUBLIC 60' R/W)
30.00'
S06°27'32"W
60.00'
C93
C94
C95
10' GCS/CCUA UTILITY ESMT
12.5'
12.5'
110
109
108
S02°10'52"W 138.91'
S02°10'52"W 137.43'
S02°10'52"W 134.98'
131.73'
C/L 25' UNOBSTRUCTED DRAINAGE AND ACCESS EASEMENT
16.56'
45.00'
16.56'
43.00'
49.00'
49.00'
65.00'
TRACT "S"
(LANDSCAPE BUFFER)
S87°49'08"E 382.32'
354.03'
20.00'
10' GCS/CCUA UTILITY ESMT
40.0'
PEARCE BOULEVARD
S87°49'08"E 1485.62'
(PUBLIC 80' R/W)
40.0'
Item #14.



Land Use
Zoning: PUD & REC
Area: 74.06 Acres±
Number of Lots: 231
Minimum Lot Width: 43 feet

Building Setbacks
Minimum Front Setback: 20 feet for front (face of garage)
15 feet for front facade;
Minimum Side Setback: 43' lots 6.5 feet, wider lots 5 feet
Minimum Rear Setback: 10 feet



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PERFORMANCE BOND

(City of Green Cove Springs)

Bond No.: 101179100

KNOW ALL MEN BY THESE PRESENTS, that we, ADJ Rookery, LLC, as Principal, and Merchants National Bonding, Inc. authorized to do business in the State of Florida, as Surety, are held and firmly bound unto the City of Green Cove Springs, Florida as Obligee, in the penal sum of Five Million Five Hundred Twenty-One Thousand Five Hundred Forty-Six Dollars and 93/100 cents ($5,521,546.93), lawful money of the United States of America, for the payment of which well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has agreed to construct in the City of Green Cove Springs, Florida the following improvements: See plans and specifications submitted to the Obligee for Rookery Phase 1 (see attached Engineer's estimate dated 06/21/2023).

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall construct, or have constructed, the improvements herein described and shall save the Obligee harmless from any loss, cost or damage by reason of its failure to complete said work, then this obligation shall be null and void; otherwise to remain in full force and effect.

Signed, sealed, and dated this 28th day of June, 2024.

Witness:

As to Principal

ADJ Rookery, LLC

Principal

By: _____

Witness:

As to Surety

Merchants National Bonding, Inc.

Surety

By: _____

Sonja Amanda Floree Harris, Attorney-in-Fact

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, d/b/a Merchants National Indemnity Company (in California only) (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Cheryl A Foley; Emily J Golecki; Jeffrey W Reich; Kim E Niv; Lisa A Roseland; Nathan K Reich; Robert P OLinn; Sarah K OLinn; Sonja Amanda Floree Harris; Susan L Reich; Teresa L Durham

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and aut hority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 3rd day of February , 2024 .

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
d/b/a MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 3rd day of February 2024 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 28th day of June , 2024 .

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

William Warner Jr.
Secretary

BID PROPOSAL

Biditem	Description	Quantity	Units	Unit Price	Bid Total
110	MOBILIZATION	1.000	LS	16125	16,125.00
120	SURVEY LAYOUT (PERIMETER)	19,600.000	LF	2.07	40,572.00
130	CONSTRUCTION ENTRANCE	1.000	LS	13942.67	13,942.67
140	CLEARING & GRUBBING	71.000	AC	9128	648,088.00
	**** C&G PHASE 1 ****				**$718,727.67**
160	CLEARING & GRUBBING - PEARCE	3.400	AC	9128	31,035.20
	**** C&G PEARCE ****				**$31,035.20**
180	CLEARING & GRUBBING - OFFSITE	1.000	LS	15480	15,480.00
	**** C&G OFFSITE ****				**$15,480.00**
200	DEMOLITION - BUILDING	1.000	LS	547500	547,500.00
210	REMOVE FENCE	1,300.000	LF	6.45	8,385.00
220	DEMO HEADWALL	2.000	EA	543.43	1,086.86
230	DEMO 18" RCP	53.000	LF	10.9	577.70
240	DEMO 15" CMP	200.000	LF	8.16	1,632.00
250	DEMO 15" MES	6.000	EA	407.98	2,447.88
260	DEMO 18" MES	2.000	EA	407.98	815.96
270	DEMO INLET	6.000	EA	543.98	3,263.88
280	DEMO 24" PVC	710.000	LF	13.06	9,272.60
290	DEMO 12" CMP	550.000	LF	8.16	4,488.00
300	DEMO 16" CMP	140.000	LF	8.16	1,142.40
310	DEMO 24" CMP	400.000	LF	8.16	3,264.00
315	DUMPSTER	12.000	EA	838.5	10,062.00
320	CAP WELL	15.000	EA	645	9,675.00
	**** DEMOLITION ****				**$603,613.28**
340	LOT AS-BUILTS	232.000	EA	129	29,928.00
350	DENSITY TESTING	696.000	EA	45.15	31,424.40
360	PROCTOR	3.000	EA	387	1,161.00
370	STRIP SITE (6")	54,000.000	CY	1.92	103,680.00
380	STRIP/BURY/MOVE TO SITE FILL	54,000.000	CY	2.95	159,300.00
390	POND CUT TO SITE FILL	205,000.000	CY	2.95	604,750.00
420	STATION BALANCE	10,000.000	CY	3.78	37,800.00
430	DEWATERING	396,000.000	CY	0.37	146,520.00
440	DEWATER FOR CUT OFF WALL	3,150.000	LF	1.51	4,756.50
450	EXCAVATE FOR CUT-OFF WALL	3,150.000	LF	5.38	16,947.00

460	INSTALL CUT-OFF WALL	3,150.000	LF	11.34	35,721.
470	BACKFILL CUT-OFF WALL	3,150.000	LF	2.15	6,772.50
475	REMOVE SURCHARGE	45,000.000	CY	2.1	94,500.00
490	SPREAD & COMP DIRT ON SITE	215,000.000	CY	0.65	139,750.00
500	SPREAD & COMP IMPORT	152,000.000	CY	1	152,000.00
510	REGRADE AFTER UGE	38,852.000	CY	0.64	24,865.28
520	MACHINE DRESS LOTS	227,429.000	SY	0.62	141,005.98
530	MACHINE DRESS PONDS	22,880.000	SY	0.62	14,185.60
	**** EARTHWORK PH 1 ****				**$1,745,067.26**
550	STRIP SITE (6")	3,200.000	CY	1.92	6,144.00
560	STRIP/BURY/MOVE TO SITE FILL	3,200.000	CY	2.94	9,408.00
570	POND CUT TO SITE FILL	12,000.000	CY	2.95	35,400.00
580	SPREAD & COMP DIRT ON SITE	12,000.000	CY	0.65	7,800.00
590	MACHINE DRESS RW	7,070.000	SY	0.62	4,383.40
	**** EARTHWORK PEARCE ****				**$63,135.40**
610	STRIP SITE (6")	4,300.000	CY	1.92	8,256.00
620	STRIP/BURY/MOVE TO SITE FILL	4,300.000	CY	2.95	12,685.00
630	POND CUT TO SITE FILL	3,000.000	CY	2.94	8,820.00
640	STATION BALANCE	481.000	CY	3.78	1,818.18
650	SPREAD & COMP DIRT ON SITE	3,481.000	CY	0.65	2,262.65
660	MACHINE DRESS SITE	11,521.000	SY	0.62	7,143.02
	**** EARTHWORK OAKRIDGE ****				**$40,984.85**
680	POND CUT TO SITE FILL (P2A SWMF 21)	152,000.000	CY	2.95	448,400.00
690	MAINTAIN HAUL ROAD	42.000	DAYS	2023.16	84,972.72
	**** EARTHWORK P2A ****				**$533,372.72**
710	SURVEY LAYOUT (ROADWAY)	15,779.000	LF	2.07	32,662.53
720	AS-BUILTS (ROADWAY)	15,779.000	LF	2.06	32,504.74
730	DENSITY TESTING	136.000	EA	32.25	4,386.00
740	PROCTOR	3.000	EA	322.5	967.50
750	LBR TESTING	64.000	EA	258	16,512.00
760	12" STAB. S/G (TN)	30,526.000	SY	5.81	177,356.06
765	4" PVC SLEEVES	1,440.000	LF	16.53	23,803.20
770	GRADE CURB PAD	15,779.000	LF	1.04	16,410.16
780	18" MIAMI CURB	13,092.000	LF	13.2	172,814.40
790	18" CITY STANDARD CURB	2,687.000	LF	20.14	54,116.18
800	VALLEY GUTTER	81.000	LF	49.59	4,016.79
810	SIDEWALKS	1,107.000	SY	52.94	58,604.

820	H/C RAMPS	24.000	EA	322.5	7,740.
830	ADA MATS	360.000	SF	49.02	17,647.20
840	MAIL KIOSK	1.000	LS	16239.72	16,239.72
850	CONCRETE CYLINDER TESTING	21.000	EA	129	2,709.00
860	FINE GRADE SUBGRADE (ON-SITE)	28,030.000	SY	2.01	56,340.30
870	6" CRUSHCRETE BASE/ FIRE LANE	1,100.000	SY	30.02	33,022.00
880	6" LIMEROCK BASE (TN)	28,732.000	SY	14.61	419,774.52
882	CREDIT - USE CRUSHCRETE IN LIEU OF LIMEROCK	9,481.000	TN	-10.5	-99,550.50
884	HAUL CRUSHCRETE ON SITE	9,481.000	TN	2.25	21,332.25
890	PRIME	27,722.000	SY	0.84	23,286.48
900	1.5" ASPHALT PAVING ROADWAY	23,540.000	SY	14.1	331,914.00
910	1.5" ASPHALT AMENITY AREA	4,182.000	SY	14.59	61,015.38
920	ASPHALT CORES	65.000	EA	206.4	13,416.00
930	STRIPING & SIGNAGE	1.000	LS	36966.24	36,966.24
	** **ROADWAY PHASE 1** **				**$1,536,006.73**
950	SURVEY LAYOUT (ROADWAY)	2,684.000	LF	2.07	5,555.88
960	AS-BUILTS (ROADWAY)	2,684.000	LF	2.06	5,529.04
970	DENSITY TESTING	29.000	EA	32.25	935.25
980	PROCTOR	1.000	EA	322.5	322.50
990	LBR TESTING	13.000	EA	258	3,354.00
1000	12" STAB. S/G (TN)	6,582.000	SY	5.81	38,241.42
1010	GRADE CURB PAD	2,684.000	SY	1.04	2,791.36
1020	18" CITY STANDARD CURB	2,684.000	SY	20.14	54,055.76
1030	SIDEWALKS	1,266.000	SY	52.94	67,022.04
1040	H/C RAMPS	8.000	EA	322.5	2,580.00
1050	ADA MATS	120.000	SF	49.02	5,882.40
1060	FINE GRADE SUBGRADE (ON-SITE)	5,986.000	SY	2.01	12,031.86
1070	8" LIMEROCK BASE (TN)	5,986.000	SY	20.55	123,012.30
1072	CREDIT - USE CRUSHCRETE IN LIEU OF LIMEROCK	2,633.000	TN	-10.5	-27,646.50
1074	HAUL CRUSHCRETE ON SITE	2,633.000	TN	2.25	5,924.25
1080	PRIME	5,986.000	SY	0.84	5,028.24
1090	2" ASPHALT PAVING	5,986.000	SY	17.84	106,790.24
1100	ASPHALT CORES	14.000	EA	206.4	2,889.60
1110	STRIPING & SIGNAGE	1.000	LS	17247.3	17,247.30
	** **ROADWAY PEARCE** **				**$431,546.94**
1130	SURVEY LAYOUT (ROADWAY)	11,300.000	LF	2.07	23,391.00
1140	AS-BUILTS (ROADWAY)	11,300.000	LF	2.06	23,278.00

1150	MOT	1.000	LS	19350	19,350.
1160	DENSITY TESTING	10.000	EA	32.25	322.50
1170	PROCTOR	1.000	EA	322.5	322.50
1180	LBR TESTING	5.000	EA	258	1,290.00
1190	12" STAB. S/G (TN)	2,361.000	SY	5.81	13,717.41
1200	GRADE CURB PAD	332.000	LF	1.05	348.60
1210	18" MIAMI CURB	28.000	LF	38.7	1,083.60
1220	18" CITY STANDARD CURB	152.000	LF	39.13	5,947.76
1230	HEADER CURB	107.000	LF	34.61	3,703.27
1240	RIBBON CURB	45.000	LF	39.13	1,760.85
1250	SIDEWALKS	3,483.000	SY	52.94	184,390.02
1260	6" SIDEWALKS	90.000	SY	63.27	5,694.30
1270	H/C RAMPS	18.000	EA	322.5	5,805.00
1280	ADA MATS	270.000	SF	49.02	13,235.40
1290	6" CONCRETE DRIVE	536.000	SY	63.27	33,912.72
1300	SUBGRADE FOR SIDEWALK	4,109.000	SY	3.13	12,861.17
1310	DRESS RIGHT OF WAY	9,300.000	SY	1.24	11,532.00
1320	CONCRETE CYLINDER TESTING	12.000	EA	129	1,548.00
1330	FINE GRADE SUBGRADE (OFF-SITE)	2,117.000	SY	2.01	4,255.17
1340	10" LIMEROCK BASE (TN)	2,072.000	SY	31.31	64,874.32
1342	CREDIT - USE CRUSHCRETE IN LIEU OF LIMEROCK	1,140.000	TN	-10.5	-11,970.00
1344	HAUL CRUSHCRETE ON SITE	1,140.000	TN	2.25	2,565.00
1350	WIDEN - 2" ASPHALT	1,928.000	SY	20.65	39,813.20
1360	MILLING	3,290.000	SY	5.15	16,943.50
1370	OVERLAY - 1.25" ASPHALT	3,290.000	SY	17.17	56,489.30
1375	1" FRICTION COURSE	5,218.000	SY	17.67	92,202.06
1380	OBG FULL DEPTH ASPHALT	331.000	SY	53.54	17,721.74
1390	ASPHALT CORES	12.000	EA	206.4	2,476.80
1400	STRIPING & SIGNAGE	1.000	LS	24423.57	24,423.57
	**** ROADWAY OAKRIDGE ****				**$673,288.76**
1420	SEED-N-MULCH ROW	25,901.000	SY	0.77	19,943.77
1430	SEED-N-MULCH LOTS	214,000.000	SY	0.77	164,780.00
1440	4.5' SOD STRIP @ B.O.C.	7,890.000	SY	4.84	38,187.60
1450	SOD SWALES	3,850.000	SY	4.19	16,131.50
1455	SOD COMMON AREA	11,000.000	SY	4.19	46,090.00
1460	SOD BACKSLOPES	3,100.000	SY	4.19	12,989.00
1470	SOD PONDS	31,060.000	SY	4.19	130,141.40

	**** GRASS PH 1 ****				**$428,263.**
1490	SOD R/W	12,900.000	SY	4.19	54,051.00
1500	4.5' SOD STRIP @ BOC	1,350.000	SY	4.84	6,534.00
	**** GRASSING PEARCE ****				**$60,585.00**
1520	SOD OFF-SITE ROW	14,600.000	SY	4.19	61,174.00
1530	SOD UTILITY EASEMENT	4,912.000	SY	4.19	20,581.28
	**** GRASSING 0FFSITE ****				**$81,755.28**
1550	SURVEY LAYOUT (STORM DRAIN)	7,533.000	LF	2.07	15,593.31
1560	AS-BUILTS (STORM DRAIN)	7,533.000	LF	2.06	15,517.98
1570	T.V. STORM DRAIN	7,533.000	LF	5.81	43,766.73
1580	DEWATER (6' OR DEEPER)	7,533.000	LF	13.23	99,661.59
1590	15" HP (4-6)	1,271.000	LF	47.21	60,003.91
1600	15" HP (6-8)	264.000	LF	48.53	12,811.92
1610	18" HP (4-6)	384.000	LF	52.66	20,221.44
1620	18" HP (6-8)	322.000	LF	52.66	16,956.52
1630	24" HP (4-6)	595.000	LF	75.15	44,714.25
1640	24" HP (6-8)	322.000	LF	75.16	24,201.52
1650	30" HP (4-6)	228.000	LF	108.24	24,678.72
1660	30" HP (6-8)	155.000	LF	112.39	17,420.45
1670	36" HP (4-6)	180.000	LF	123.82	22,287.60
1680	36" HP (6-8)	1,437.000	LF	123.82	177,929.34
1690	36" HP (8-10)	1,331.000	LF	130.34	173,482.54
1700	36" HP (10-12)	399.000	LF	142.07	56,685.93
1710	36" HP (12-14)	31.000	LF	152.39	4,724.09
1720	48" HP (6-8)	75.000	LF	209.32	15,699.00
1730	48" HP (8-10)	342.000	LF	219.58	75,096.36
1740	48" HP (10-12)	156.000	LF	226.51	35,335.56
1750	12"X18" ERCP	42.000	LF	83.45	3,504.90
1760	6" UNDERDRAIN (ON PLANS)	4,360.000	LF	45.28	197,420.80
1770	6" UNDERDRAIN C/O	30.000	EA	671.77	20,153.10
1780	YARD DRAIN (4-6)	6.000	EA	4789.18	28,735.08
1790	TYPE (C) INLET (4-6)	5.000	EA	3508.15	17,540.75
1800	SINGLE CURB INLET (4-6)	17.000	EA	5188.13	88,198.21
1810	SINGLE CURB INLET (6-8)	10.000	EA	8210.19	82,101.90
1820	SINGLE CURB INLET (8-10)	7.000	EA	10510.91	73,576.37
1830	SINGLE CURB INLET (10-12)	2.000	EA	13248.45	26,496.90
1840	DOUBLE CURB INLET (4-6)	6.000	EA	6975.22	41,851.32

1850	DOUBLE CURB INLET (6-8)	1.000	EA	10144.79	10,144.
1860	DOUBLE CURB INLET (8-10)	1.000	EA	11978.42	11,978.42
1870	DOUBLE CURB INLET (10-12)	2.000	EA	12663.42	25,326.84
1880	STORM MANHOLE (6-8)	9.000	EA	6418.56	57,767.04
1890	STORM MANHOLE (8-10)	3.000	EA	12003.54	36,010.62
1900	STORM MANHOLE (10-12)	1.000	EA	13101.37	13,101.37
1910	STORM MANHOLE (12-14)	1.000	EA	13647.57	13,647.57
1920	RAISE STRUCTURES	70.000	EA	928.15	64,970.50
1930	INVERTS	65.000	EA	619.36	40,258.40
1940	15" PRECAST MES	2.000	EA	2176.14	4,352.28
1950	18" PRECAST MES	5.000	EA	2176.13	10,880.65
1960	24" PRECAST MES	1.000	EA	2700.66	2,700.66
1970	30" PRECAST MES	2.000	EA	3337.86	6,675.72
1980	36" PRECAST MES	11.000	EA	4788.02	52,668.22
1990	48" PIPE MES	3.000	EA	4292.31	12,876.93
2000	48" CIP APRON	3.000	EA	3870	11,610.00
2010	48" HEADWALL	2.000	EA	3284.27	6,568.54
2020	RIP RAP PADS	144.000	SF	76.19	10,971.36
2030	MISCELLANEOUS MATERIALS	1.000	LS	17253.75	17,253.75
2040	UNDERDRAIN STUBS	1,840.000	LF	49.16	90,454.40
2050	PUNCH OUT STORM DRAIN	7,533.000	LF	1.62	12,203.46
	**** STORM PH 1 ******				**$2,048,789.61**
2070	SURVEY LAYOUT (STORM DRAIN)	630.000	LF	2.07	1,304.10
2080	AS-BUILTS (STORM DRAIN)	630.000	LF	2.06	1,297.80
2090	T.V. STORM DRAIN	630.000	LF	5.81	3,660.30
2100	DEWATER (6' OR DEEPER)	325.000	LF	13.23	4,299.75
2110	15" HP (4-6)	80.000	LF	47.23	3,778.40
2120	18" HP (4-6)	184.000	LF	52.67	9,691.28
2130	18" HP (6-8)	200.000	LF	52.66	10,532.00
2140	24" HP (4-6)	41.000	LF	75.17	3,081.97
2150	36" HP (6-8)	125.000	LF	123.81	15,476.25
2160	SINGLE CURB INLET (4-6)	6.000	EA	5186.75	31,120.50
2170	SINGLE CURB INLET (6-8)	2.000	EA	8210.19	16,420.38
2180	STORM MANHOLE (6-8)	2.000	EA	6418.56	12,837.12
2190	INVERTS	8.000	EA	619.36	4,954.88
2200	UNDERDRAIN STUBS	320.000	LF	49.16	15,731.20
2210	PUNCH OUT STORM DRAIN	630.000	LF	1.62	1,020.60

	** STORM PEARCE **				$135,206.
2230	SURVEY LAYOUT (STORM DRAIN)	594.000	LF	2.07	1,229.58
2240	AS-BUILTS (STORM DRAIN)	594.000	LF	2.06	1,223.64
2250	T.V. STORM DRAIN	594.000	LF	5.81	3,451.14
2260	DEWATER (6' OR DEEPER)	594.000	LF	13.23	7,858.62
2270	18" RCP (4-6)	95.000	LF	71.03	6,747.85
2280	24" RCP (4-6)	390.000	LF	100.22	39,085.80
2290	30" RCP (4-6)	20.000	LF	141.21	2,824.20
2300	12"X18" ERCP	57.000	LF	83.44	4,756.08
2310	14"X23" ERCP	32.000	LF	100.22	3,207.04
2320	TYPE (C) INLET (0-4)	2.000	EA	4190.75	8,381.50
2330	TYPE (E) INLET (0-4)	1.000	EA	5499.29	5,499.29
2340	INVERTS	3.000	EA	619.37	1,858.11
2350	12X18" HEADWALL	2.000	EA	2977.09	5,954.18
2360	30" HEADWALL	1.000	EA	6598.01	6,598.01
2370	18" PRECAST MES	3.000	EA	2176.13	6,528.39
2380	24" PRECAST MES	6.000	EA	2708.92	16,253.52
2390	12 X 18" MES	1.000	EA	2449.62	2,449.62
2400	14 X 23" MES	2.000	EA	2573.85	5,147.70
2410	RIP RAP PADS	950.000	SF	68.14	64,733.00
2420	PUNCH OUT STORM DRAIN	594.000	LF	1.62	962.28
	** STORM OFFSITE **				$194,749.55
2440	SURVEY LAYOUT (SEWER)	7,284.000	LF	2.02	14,713.68
2450	AS-BUILTS (SEWER)	7,284.000	LF	1.81	13,184.04
2460	T.V. SEWER MAIN	7,284.000	LF	5.16	37,585.44
2470	DEWATER (6' OR DEEPER)	5,710.000	LF	15.81	90,275.10
2480	8" SDR-26 PVC (4-6)	1,574.000	LF	39.37	61,968.38
2490	8" SDR-26 PVC (6-8)	2,420.000	LF	40.6	98,252.00
2500	8" SDR-26 PVC (8-10)	1,055.000	LF	42	44,310.00
2510	8" SDR-26 PVC (10-12)	456.000	LF	42	19,152.00
2520	8" SDR-26 PVC (12-14)	913.000	LF	42	38,346.00
2530	8" SDR-26 PVC (14-16)	426.000	LF	56.48	24,060.48
2540	8" SDR-26 PVC (16-18)	440.000	LF	63.32	27,860.80
2550	(A) MANHOLE (4-6)	9.000	EA	5207.86	46,870.74
2560	(A) MANHOLE (6-8)	11.000	EA	5721.9	62,940.90
2570	(A) MANHOLE (8-10)	5.000	EA	6383.35	31,916.75
2580	(A) MANHOLE (10-12)	2.000	EA	7558.57	15,117.14

2590	(A) MANHOLE (12-14)	5.000	EA	8487.51	42,437.
2600	(A) MANHOLE (14-16)	2.000	EA	8948.08	17,896.16
2610	(A) MANHOLE (16-18)	1.000	EA	9729.18	9,729.18
2620	BOOTS	106.000	EA	69.02	7,316.12
2630	TOP ADJUSTMENTS	35.000	EA	928.15	32,485.25
2640	DROP BOWL ASSY	1.000	EA	1630.72	1,630.72
2650	6" SEWER SERVICES	241.000	EA	1113.11	268,259.51
2660	PUNCH OUT SEWER MAIN	7,284.000	LF	1.62	11,800.08
	**** SANITARY PH 1 ****				**$1,018,108.02**
2680	SURVEY LAYOUT (SEWER)	528.000	LF	2.01	1,061.28
2690	AS-BUILTS (SEWER)	528.000	LF	1.81	955.68
2700	T.V. SEWER MAIN	528.000	LF	5.16	2,724.48
2710	DEWATER (6' OR DEEPER)	528.000	LF	15.81	8,347.68
2720	8" SDR-26 PVC (16-18)	443.000	LF	56.48	25,020.64
2730	10" SDR-26 PVC (18-20)	85.000	LF	74.42	6,325.70
2740	(A) MANHOLE (16-18)	2.000	EA	9727.41	19,454.82
2750	LINED (A) MANHOLE (18-20)	1.000	EA	22521.8	22,521.80
2760	BOOTS	7.000	EA	69.02	483.14
2770	TOP ADJUSTMENTS	3.000	EA	928.15	2,784.45
2780	PUNCH OUT SEWER MAIN	528.000	LF	1.62	855.36
	**** SANITARY PEARCE ****				**$90,535.03**
2800	SURVEY LAYOUT LIFT STATION	1.000	LS	2693.32	2,693.32
2810	LIFT STATION AS-BUILTS	1.000	LS	2693.32	2,693.32
2820	COMPACTION AND DENSITIES	1.000	LS	3870	3,870.00
2830	DEWATER	1.000	LS	15881.56	15,881.56
2840	57 STONE	20.000	TN	186.16	3,723.20
2850	CRANE RENTAL	10.000	HRS	967.5	9,675.00
2860	WET WELL - LIFT STATION	1.000	EA	108644.41	108,644.41
2870	MECHANICAL SUB	1.000	LS	368940	368,940.00
2880	TRENCH BOX	1.000	LS	3450.75	3,450.75
2890	LIFT STATION WATER SERVICE	1.000	EA	2381.85	2,381.85
	**** PUMP STATION ****				**$521,953.41**
2910	SURVEY LAYOUT FM	1,000.000	LF	2.07	2,070.00
2920	AS-BUILT FM	1,000.000	LF	2.06	2,060.00
2930	PRESSURE TEST	1,000.000	LF	1.34	1,340.00
2940	6" DR-18 FORCE MAIN	1,000.000	LF	31.07	31,070.00
2950	6" BELL RESTRAINTS	12.000	EA	162.22	1,946.

2960	6" MJ GATE VALVE	1.000	EA	1814.18	1,814.
2970	SET VALVE BOX	1.000	EA	442.89	442.89
2980	6" MJ 45 BEND	1.000	EA	882.3	882.30
2990	6" CASE (B) CROSSING	1.000	EA	4625.15	4,625.15
3000	6" MJ 22.5 BEND	4.000	EA	864.49	3,457.96
3010	PUNCH OUT FORCE MAIN	1,000.000	LF	2.69	2,690.00
	**** FORCEMAIN PH 1 ****				**$52,399.12**
3030	SURVEY LAYOUT FM	2,250.000	LF	2.07	4,657.50
3040	AS-BUILT FM	2,250.000	LF	2.06	4,635.00
3050	PRESSURE TEST	2,250.000	LF	1.35	3,037.50
3060	12" DR-18 FORCE MAIN	1,500.000	LF	81.7	122,550.00
3070	10" DR-18 FORCE MAIN	120.000	LF	61.15	7,338.00
3080	8" DR-18 FORCE MAIN	350.000	LF	43.51	15,228.50
3090	6" DR-18 FORCE MAIN	280.000	LF	29.57	8,279.60
3100	12" BELL RESTRAINTS	37.000	EA	352.78	13,052.86
3110	10" BELL RESTRAINTS	5.000	EA	327.97	1,639.85
3120	8" BELL RESTRAINTS	8.000	EA	200.03	1,600.24
3130	6" BELL RESTRAINTS	4.000	EA	140.95	563.80
3140	12" MJ GATE VALVE	3.000	EA	4616.23	13,848.69
3150	10" MJ GATE VALVE	1.000	EA	3752.12	3,752.12
3160	8" MJ GATE VALVE	1.000	EA	2357.12	2,357.12
3170	6" MJ GATE VALVE	2.000	EA	1618.65	3,237.30
3180	SET VALVE BOX	7.000	EA	443.53	3,104.71
3190	12" CASE (B) CROSSING	1.000	EA	11154.54	11,154.54
3200	12" MJ 45 BEND	4.000	EA	1931.48	7,725.92
3210	8" MJ 45 BEND	2.000	EA	1003.91	2,007.82
3220	6" MJ 45 BEND	2.000	EA	722.57	1,445.14
3230	6" MJ 90 BEND	2.000	EA	907.53	1,815.06
3240	12"X8" MJ TEE	2.000	EA	2416.37	4,832.74
3250	12"X6" MJ TEE	1.000	EA	1938.8	1,938.80
3260	12"X10" MJ REDUCER	1.000	EA	1716.91	1,716.91
3270	12"X2" TAP CAP	1.000	EA	1222.34	1,222.34
3280	10"X2" TAP CAP	1.000	EA	982.16	982.16
3290	8"X2" TAP CAP	1.000	EA	748.89	748.89
3300	PUNCH OUT FORCE MAIN	2,250.000	LF	2.69	6,052.50
	**** FORCEMAIN PEARCE ****				**$250,525.61**
3320	SURVEY LAYOUT FM	2,280.000	LF	2.07	4,719.60

3330	AS-BUILT FM	2,280.000	LF	2.06	4,696.
3340	PRESSURE TEST	2,280.000	LF	1.35	3,078.00
3350	6" DR-18 FORCE MAIN	2,280.000	LF	29.58	67,442.40
3360	6" BELL RESTRAINTS	20.000	EA	140.86	2,817.20
3370	CORE EXISTING MH/ LINE	1.000	EA	9581.38	9,581.38
3380	6" MJ GATE VALVE	3.000	EA	1618.66	4,855.98
3390	SET VALVE BOX	3.000	EA	443.64	1,330.92
3400	AIR RELEASE VALVE & MH	1.000	EA	7140.88	7,140.88
3410	6" CASE (B) CROSSING	4.000	EA	6086.08	24,344.32
3420	6" MJ 45 BEND	7.000	EA	860.81	6,025.67
3430	6" MJ 22.5 BEND	4.000	EA	907.53	3,630.12
3440	PUNCH OUT FORCE MAIN	2,280.000	LF	2.69	6,133.20
	**** FORCEMAIN CUL DE SAC ****				**$145,796.47**
3460	SURVEY LAYOUT WM	7,840.000	LF	2.07	16,228.80
3470	AS-BUILT WM	7,840.000	LF	2.06	16,150.40
3480	FLUSH, PT, B.T.	7,840.000	LF	1.35	10,584.00
3490	12" DR-18 WATER MAIN	1,420.000	LF	80.6	114,452.00
3500	10" DR-18 WATER MAIN	440.000	LF	60.21	26,492.40
3510	8" DR-18 WATER MAIN	1,960.000	LF	43.51	85,279.60
3520	6" DR-18 WATER MAIN	1,800.000	LF	29.58	53,244.00
3530	4" DR-18 WATER MAIN	2,220.000	LF	19.51	43,312.20
3540	12" BELL RESTRAINTS	50.000	EA	352.82	17,641.00
3550	10" BELL RESTRAINTS	34.000	EA	327.96	11,150.64
3560	8" BELL RESTRAINTS	25.000	EA	210.94	5,273.50
3570	6" BELL RESTRAINTS	30.000	EA	140.82	4,224.60
3580	4" BELL RESTRAINTS	24.000	EA	113.49	2,723.76
3590	12"x 12" TAP & VALVE	1.000	EA	14576.95	14,576.95
3600	12" MJ GATE VALVE	4.000	EA	4616.24	18,464.96
3610	10" MJ GATE VALVE	3.000	EA	3751.39	11,254.17
3620	8" MJ GATE VALVE	5.000	EA	2357.12	11,785.60
3630	6" MJ GATE VALVE	13.000	EA	1618.66	21,042.58
3640	4" MJ GATE VALVE	5.000	EA	1335.7	6,678.50
3650	SET VALVE BOX	31.000	EA	443.6	13,751.60
3660	FLUSHING HYDRANT	11.000	EA	2681.05	29,491.55
3670	SAMPLE POINT	10.000	EA	356.59	3,565.90
3680	FIRE HYDRANT ASSY	8.000	EA	5833.73	46,669.84
3690	12" CASE (B) CROSSING	1.000	EA	7720.35	7,720.

3700	12" MJ 45 BEND	16.000	EA	1072.8	17,164.
3710	12" MJ 22.5 BEND	2.000	EA	1021.93	2,043.86
3720	12" MJ 11.25 BEND	3.000	EA	1000.79	3,002.37
3730	10" CASE (B) CROSSING	1.000	EA	5263.12	5,263.12
3740	10" MJ 45 BEND	9.000	EA	894.99	8,054.91
3750	8" MJ 45 BEND	5.000	EA	624.56	3,122.80
3760	8" MJ 11.25 BEND	8.000	EA	602.23	4,817.84
3770	6" CASE (B) CROSSING	3.000	EA	3095.77	9,287.31
3780	6" MJ 45 BEND	9.000	EA	478.42	4,305.78
3790	6" MJ 22.5 BEND	1.000	EA	468.45	468.45
3800	6" MJ 11.25 BEND	12.000	EA	472.95	5,675.40
3810	4" MJ 45 BEND	5.000	EA	166.36	831.80
3820	4" MJ 22.5 BEND	30.000	EA	391.49	11,744.70
3830	4" MJ 11.25 BEND	6.000	EA	387.2	2,323.20
3840	12"X12" MJ TEE	1.000	EA	1733.13	1,733.13
3850	12"X10" MJ TEE	1.000	EA	1726.23	1,726.23
3860	12"X8" MJ TEE	1.000	EA	1481.92	1,481.92
3870	12"X6" MJ TEE	2.000	EA	1379.76	2,759.52
3880	12"X4" MJ TEE	1.000	EA	1361.83	1,361.83
3890	10"X8" MJ TEE	2.000	EA	1287.38	2,574.76
3900	8"X8" MJ TEE	1.000	EA	1012.7	1,012.70
3910	8"X6" MJ TEE	4.000	EA	921.61	3,686.44
3920	6"X6" MJ TEE	2.000	EA	775.21	1,550.42
3930	12"X10" MJ REDUCER	2.000	EA	951.95	1,903.90
3940	8"X6" MJ REDUCER	4.000	EA	598.05	2,392.20
3950	6"X4" MJ REDUCER	3.000	EA	445.3	1,335.90
3960	10"X2" TAP CAP	2.000	EA	476.81	953.62
3970	8"X2" TAP CAP	1.000	EA	355.51	355.51
3980	6"X2" TAP CAP	1.000	EA	282.35	282.35
3990	4"X2" TAP CAP	7.000	EA	224.88	1,574.16
4000	SET METER BOXES WM	232.000	EA	499.23	115,821.36
4010	SHORT SINGLE SERVICES	22.000	EA	589.62	12,971.64
4020	SHORT DOUBLE SERVICES	50.000	EA	1236.31	61,815.50
4030	LONG SINGLE SERVICES	6.000	EA	734.74	4,408.44
4040	LONG DOUBLE SERVICES	52.000	EA	1065.05	55,382.60
4050	PUNCH OUT WATER MAIN	7,840.000	LF	2.69	21,089.60
	**** WATERMAIN PH 1 ****				**$968,038.**

4070	SURVEY LAYOUT WM	1,550.000	LF	2.07	3,208.
4080	AS-BUILT WM	1,550.000	LF	1.94	3,007.00
4090	FLUSH, PT, B.T.	1,550.000	LF	2.88	4,464.00
4100	16" DR-18 WATER MAIN	1,180.000	LF	145.27	171,418.60
4110	12" DR-18 WATER MAIN	300.000	LF	80.6	24,180.00
4120	10" DR-18 WATER MAIN	50.000	LF	60.2	3,010.00
4130	8" DR-18 WATER MAIN	20.000	LF	43.46	869.20
4140	6" DR-18 WATER MAIN	20.000	LF	29.61	592.20
4150	16" BELL RESTRAINTS	40.000	EA	746.22	29,848.80
4160	12" BELL RESTRAINTS	15.000	EA	352.82	5,292.30
4170	10" BELL RESTRAINTS	2.000	EA	328.46	656.92
4180	16" MJ GATE VALVE	4.000	EA	8822.45	35,289.80
4190	12" MJ GATE VALVE	3.000	EA	4616.23	13,848.69
4200	10" MJ GATE VALVE	2.000	EA	3751.03	7,502.06
4210	6" MJ GATE VALVE	3.000	EA	1618.66	4,855.98
4220	SET VALVE BOX	12.000	EA	443.63	5,323.56
4230	FLUSHING HYDRANT	3.000	EA	2682.43	8,047.29
4240	SAMPLE POINT	2.000	EA	356.56	713.12
4250	FIRE HYDRANT ASSY	3.000	EA	5833.73	17,501.19
4260	16" CASE (B) CROSSING	1.000	EA	11980.78	11,980.78
4270	16" MJ 45 BEND	2.000	EA	2207.99	4,415.98
4280	8" MJ 45 BEND	1.000	EA	625.56	625.56
4290	6" MJ 45 BEND	3.000	EA	478.66	1,435.98
4300	6" MJ 90 BEND	3.000	EA	521.45	1,564.35
4310	16"X16" MJ TEE	1.000	EA	3523.46	3,523.46
4320	16"X12" MJ TEE	1.000	EA	2873.34	2,873.34
4330	16"X6" MJ TEE	3.000	EA	2456.45	7,369.35
4340	12"X12" MJ TEE	1.000	EA	1733.13	1,733.13
4350	12"X10" MJ TEE	1.000	EA	1726.23	1,726.23
4360	12"X6" MJ TEE	1.000	EA	1379.78	1,379.78
4370	16"X12" MJ REDUCER	1.000	EA	1471.22	1,471.22
4380	12"X10" MJ REDUCER	1.000	EA	950.84	950.84
4390	16"X2" TAP CAP	2.000	EA	772.2	1,544.40
4400	10"X2" TAP CAP	1.000	EA	475.59	475.59
4410	2IN WATER SERVICE	1.000	EA	1726	1,726.00
4420	PUNCH OUT WATER MAIN	1,550.000	LF	2.69	4,169.50
	**** WATERMAIN PEARCE ****				**$388,594.**

4440	SURVEY LAYOUT RM	7,680.000	LF	2.07	15,897.
4450	AS-BUILT RM	7,680.000	LF	2.06	15,820.80
4460	PRESSURE TEST	7,680.000	LF	1.35	10,368.00
4470	8" DR-18 REUSE MAIN	480.000	LF	45.25	21,720.00
4480	6" DR-18 REUSE MAIN	460.000	LF	30.27	13,924.20
4490	4" DR-18 REUSE MAIN	6,740.000	LF	20.12	135,608.80
4500	8" BELL RESTRAINTS	18.000	EA	221.63	3,989.34
4510	6" BELL RESTRAINTS	12.000	EA	162.22	1,946.64
4520	4" BELL RESTRAINTS	52.000	EA	124.23	6,459.96
4530	12" MJ LONG SLEEVE	1.000	EA	4026.12	4,026.12
4540	8" MJ GATE VALVE	2.000	EA	1276.32	2,552.64
4550	4" MJ GATE VALVE	15.000	EA	1335.7	20,035.50
4560	SET VALVE BOXES	17.000	EA	443.68	7,542.56
4570	FLUSHING HYDRANT	7.000	EA	2544.4	17,810.80
4580	6" MJ 45 BEND	4.000	EA	478.25	1,913.00
4590	4" CASE (B) CROSSING	6.000	EA	2575.39	15,452.34
4600	4" MJ 45 BEND	21.000	EA	395.64	8,308.44
4610	4" MJ 22.5 BEND	32.000	EA	391.48	12,527.36
4620	4" MJ 11.25 BEND	26.000	EA	387.37	10,071.62
4630	8"X8" MJ TEE	1.000	EA	1012.7	1,012.70
4640	6"X4" MJ TEE	3.000	EA	740.63	2,221.89
4650	4"X4" MJ TEE	5.000	EA	620.59	3,102.95
4660	8"X2" TAP CAP	2.000	EA	356.73	713.46
4670	4"X2" TAP CAP	8.000	EA	237.69	1,901.52
4680	SET METER BOXES RM	233.000	EA	499.23	116,320.59
4690	SHORT SINGLE SERVICES	22.000	EA	643.45	14,155.90
4700	SHORT DOUBLE SERVICES	46.000	EA	1360.54	62,584.84
4710	LONG SINGLE SERVICES	10.000	EA	737.66	7,376.60
4720	LONG DOUBLE SERVICES	54.000	EA	1498.46	80,916.84
4730	PUNCH OUT REUSE MAIN	7,680.000	LF	2.69	20,659.20
	**** REUSE PH 1 ****				**$636,942.21**
4750	SURVEY LAYOUT RM	1,780.000	LF	2.07	3,684.60
4760	AS-BUILT RM	1,780.000	LF	2.06	3,666.80
4770	PRESSURE TEST	1,780.000	LF	1.35	2,403.00
4780	12" DR-18 REUSE MAIN	1,780.000	LF	80.6	143,468.00
4790	12" BELL RESTRAINTS	51.000	EA	352.78	17,991.78
4800	12" MJ GATE VALVE	7.000	EA	4616.23	32,313.

4810	8" MJ GATE VALVE	1.000	EA	2552.64	2,552.
4820	6" MJ GATE VALVE	2.000	EA	1618.65	3,237.30
4830	SET VALVE BOX	10.000	EA	442.18	4,421.80
4840	12" BFP	1.000	EA	39873.93	39,873.93
4850	FLUSHING HYD	3.000	EA	2544.4	7,633.20
4860	2" IRRIGATION SERVICE	2.000	EA	1382.19	2,764.38
4870	12" CASE (B) CROSSING	1.000	EA	7720.35	7,720.35
4880	12" MJ 90 BEND	1.000	EA	1155.93	1,155.93
4890	12" MJ 45 BEND	20.000	EA	1072.83	21,456.60
4900	12"X12" MJ TEE	3.000	EA	1733.12	5,199.36
4910	12"X8" MJ TEE	1.000	EA	1481.92	1,481.92
4920	12"X6" MJ TEE	2.000	EA	1379.76	2,759.52
4930	12"X8" MJ REDUCER	1.000	EA	950.84	950.84
4940	12"X2" TAP CAP	3.000	EA	552.26	1,656.78
4950	PUNCH OUT REUSE MAIN	1,780.000	LF	2.69	4,788.20
	**** REUSE PEARCE *8**				**$311,180.54**
4970	SURVEY LAYOUT WM	2,280.000	LF	2.07	4,719.60
4980	AS-BUILT WM	2,280.000	LF	2.06	4,696.80
4990	PRESSURE TEST	2,280.000	LF	1.35	3,078.00
5000	12" DR-18 WATER MAIN	2,280.000	LF	80.6	183,768.00
5040	12" BELL RESTRAINTS	50.000	EA	352.82	17,641.00
5050	12" MJ GATE VALVE	3.000	EA	4616.23	13,848.69
5060	SET VALVE BOX	3.000	EA	442.25	1,326.75
5070	FLUSHING HYDRANT	1.000	EA	2682.42	2,682.42
5080	SAMPLE POINT	3.000	EA	356.57	1,069.71
5090	ARV AND MANHOLE	1.000	EA	5423.79	5,423.79
5100	12" CASE (B) CROSSING	4.000	EA	7720.35	30,881.40
5110	12" MJ 90 BEND	2.000	EA	1157.2	2,314.40
5120	12" MJ 45 BEND	3.000	EA	1072.57	3,217.71
5130	12" MJ 22.5 BEND	2.000	EA	1021.93	2,043.86
5140	12" MJ 11.25 BEND	1.000	EA	999.96	999.96
5150	12"X12" MJ TEE	2.000	EA	1733.12	3,466.24
5160	PUNCH OUT WATER MAIN	2,280.000	LF	2.69	6,133.20
	**** WATERMAIN CUL DE SAC ****				**$287,311.53**
5300	SILT FENCE	19,590.000	LF	1.94	38,004.60
5310	STAKED TURBIDITY BARRIER	540.000	LF	10.32	5,572.80
5320	INLET PROTECTION	62.000	EA	469.56	29,112.72

5330	MAINT. OF EROSION CTRL.	19,590.000	LF	1.34	26,250.
	**** EROSION**				**$98,940.72**
5400	SWPPP	1.000	LS	25800	25,800.00
	**** SWPPP ****				**$25,800.00**
5500	BOND	1.000	LS	128193.75	128,193.75
	**** BOND ****				**$128,193.75**
	Bid Total				**$14,265,928.13**

OLD PRICE	14998724.05
CHANGE	$732,795.92

Dunn & Associates, Inc.
CIVIL ENGINEERS / LAND PLANNERS
8647 Baypine Road, Suite 200 Jacksonville, Florida 32256
Phone: (904) 363-8916 Fax: (904) 363-8917

June 21, 2023

Mike Null
Assistant City Manager
City of Green Cove Springs
321 Walnut Street
Green Cove Springs, FL 32043

Re: Rookery Phase 1
Performance Bond Cost Estimate Submittal
PLIP-22-001
Engineer's Job No. 2008-499

Dear Mr. Null,

On behalf of D.R. Horton, Inc. - Jacksonville we are submitting the Engineers Estimate of Cost for the Performance Bond for the referenced project. This estimate is based on the contractor's schedule of values (attached).

Roadway	$ 2,640,842.43
Drainage	$ 2,378,745.69
TOTAL	$ 5,019,588.12
Plat Bond (110% of total)	$ 5,521,546.93

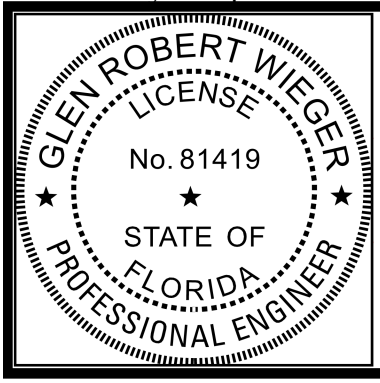
Sincerely,

Dunn & Associates, Inc.

Glen R Wieger
Digitally signed by Glen R Wieger
Date: 2023.06.21 14:03:50 -04'00'

Glen R. Wieger, P.E.
Vice President
FL PE #81419

cc Anthony Sharp



This item has been electronically signed and sealed by Glen R. Wieger, P.E. on 06/21/2023 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council Regular Session **MEETING DATE:** July 16, 2024

FROM: Mike Null, Asst. City Manager

SUBJECT: Approval of Change Order #1 to contract with CGC, Inc for Walnut Street Improvements in the additive amount of $32,232.00, bringing the total contract amount to $3,204,979.00. ***Mike Null***

BACKGROUND

Council awarded this project to CGC, Inc. on September 19, 2023, in the amount of $3,172,747. This award was a portion of Bid Number 2023-08. This change order is added at the request of City Staff. The plans call for hanging planters to be installed on all light poles, whether new, relocated or remaining in place. Four (4) light poles were to remain in place. However, during construction it was discovered that the concrete bases on these light poles were much smaller than the new ones and, therefore, insufficient to bear the weight of the new hanging planters, so staff asked that the concrete bases be replaced. This estimate is in line with the original engineer's lighting estimates. Therefore, staff feels that the price is reasonable.

FISCAL IMPACT

Funding is available from restricted surtax funds.

RECOMMENDATION

Approve Change Order #1 to contract with CGC, Inc for Walnut Street Improvements in the additive amount of $32,232.00, bringing the total contract amount to $3,204,979.00.

CHANGE ORDER NO. 01

321 Walnut St.
Green Cove Springs, FL 32043

TO: CGC Inc.
7036W. 12th Street
Jacksonville, FL 32220

DATE:
BID #: 2023-08

ATTN: Jonathan Barton

PROJECT: Walnut Street Improvements Phase 1
BID #: 2023-08

DESCRIPTION

1. Remove and Replace Existing Light Pole Bases (4)

CGC's quote is part of this change order to reference the scope of work.

All other terms and conditions included in the original contract remain unchanged.

Facsimile or electronic versions of the the change order and the signatures contained in it shall be considered and used for all purposes as originals.

ITEM #	DESCRIPTION	QTY	UM	UNIT PRICE	EXTENSION
1	Cost Proposal - Remove and Replace Existing Light Pole Bases (4)	1.00	LS	$32,232.00	$32,232.00
	Total				**$32,232.00**

ORIGINAL CONTRACT AMOUNT:
CHANGE ORDER NO. 01: $32,232.00
REVISED CONTRACT AMOUNT:

By: _____
CGC Inc.

By: _____
City of Green Cove Springs

Date: _____

Date: _____

CIVIL | GENERAL

June 07, 2024

Mr. Mike Null, Assistant City Manager
City of Green Cove Springs
321 Walnut St.
Green Cove Springs, FL 32043

Re: Walnut Street Improvements Phase 1
Bid # 2023-08
CGC, Inc. Project No.: C-24-01
Cost Proposal – Remove and Replace Existing Light Pole Bases

Dear Mr. Null,

Per your request, CGC, Inc. submits the following proposal to remove and replace 4 (four) EA existing light pole bases for lighting from Palmetto Ave to U.S. 17.

We include in our scope of work:

1. Removal and replacement of concrete pole bases of the 4 (four) EA light poles shown "to remain" in the Project Drawings.
2. New pole bases will be the same bases submitted and approved for the remaining site lighting.

    - **Total Lump Sum Price for Above Scope of Work = Thirty-Two Thousand Two Hundred Thirty Two Dollars and Zero Cents - $32,232.00**

We exclude from our scope of work:

1. Permits and/or fees of any kind
2. Night and/or weekend work. (Work to be performed during normal work hours)
3. Any additional MOT (All work to be performed during current phase)
4. Repair or relocation of unforeseen conduit/utilities/structures.
5. Any additional demolition and replacement of pavement base, curb, and sidewalk other than the area described above.
6. Guarantee that existing poles are in sound structural condition for reuse.
7. Any Items not specifically listed in the scope of work above.

Notes:

7036 W. 12th Street / Jacksonville, Florida 32220 / Office (904) 783-4119 Fax (904) 783-3401
Email: office@cgccivil.com
CGC1524573 CUC1225351

We thank you for the opportunity to provide this proposal. Should you have any questions and/or direction, please contact this office.

Sincerely,

Jonathan Barton
Project Manager

7036 W. 12th Street / Jacksonville, Florida 32220 / Office (904) 783-4119 Fax (904) 783-3401
Email: office@cgccivil.com
CGC1524573 CUC1225351

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Special Session **MEETING DATE:** July 16, 2024

FROM: L. J. Arnold III, City Attorney

Mike Null, Assistant City Manager

SUBJECT: Consider adoption of Resolution No. R-09-2024, a Resolution estimating the cost of Stormwater Management Services provided by the City, determining certain tax parcels will be benefited thereby and related issues, including setting a Public Hearing for Final Proposed Stormwater Assessments. ***L. J. Arnold III***

BACKGROUND

The City has previously adopted Ordinance No. O-04-2016, and a copy of such Ordinance is attached hereto. This Assessment Resolution is a required legal step in the process for assessing and collecting non-ad valorem stormwater assessments against all non-exempt real property tax parcels within the City.

This assessment includes a one dollar ($1) per month per parcel increase to the base fee, for which a formal Ordinance will be presented to City Council for first reading on September 3, 2024.

Staff recommends setting the Public Hearing for Tuesday, September 3, 2024 at 7:00p.m.

FISCAL IMPACT

The City should be able to collect a very high percentage of the $84.00 yearly Stormwater Base Service Cost Assessment. On an annual basis we estimate $338,604.00 will be collected citywide by this method. The City should also be able to collect a very high percentage of the Stormwater Usage Service Cost estimated to be $1,290,686.40 on an annual basis.

RECOMMENDATION

Approve Resolution No. R-09-2024, a Resolution estimating the cost of Stormwater Management Services provided by the City, determining certain tax parcels will be benefited thereby and related issues, and setting a Public Hearing for Tuesday, September 3, 2024 at 7:00p.m.

RESOLUTION NO. R-09-2024

A RESOLUTION OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, RELATING TO THE PROVISIONS OF STORMWATER MANAGEMENT SERVICES; ESTIMATING THE COST OF STORMWATER MANAGEMENT SERVICES PROVIDED BY THE CITY'S STORMWATER UTILITY; DESCRIBING THE METHOD OF CHARGING THE COST OF STORMWATER MANAGEMENT SERVICES AGAINST ASSESSED PROPERTY; DIRECTING THE CITY MANAGER TO PREPARE OR DIRECT THE PREPARATION OF A STORMWATER SERVICE ASSESSMENT ROLL; AUTHORIZING A PUBLIC HEARING FOR THE PROPOSED STORMWATER SERVICE ASSESSMENTS AND DIRECTING THE PROVISION OF NOTICE THEREOF; PROVIDING FOR COLLECTION; AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, AS FOLLOWS:

SECTION 1. AUTHORITY. This Resolution is adopted pursuant to the provisions of Ordinance No. O-04-2016, as codified in Article VII, Chapter 78 of the Green Cove Springs Code of Ordinances (the "Code"), Chapter 70 of the City of Green Cove Springs Code of Ordinances (the "Stormwater Ordinance"), Resolution No. R-12-2020 (the "Amended and Restated Initial Assessment Resolution"), Resolution No. R-15-2020 (the "Amended and Restated Final Assessment Resolution"), Article VIII, Section 2(b), Florida Constitution, sections 166.021 and 166.041, Florida Statutes, the City Charter of the City of Green Cove Springs, and other applicable provisions of law.

SECTION 2. PURPOSE AND DEFINITIONS.

(A) This Resolution constitutes the Preliminary Rate Resolution as defined in Section 78-167 of the Code which initiates the annual process for updating the Stormwater Assessment Roll and directs the reimposition of Stormwater Service Assessments for the Fiscal Year beginning October 1, 2024.

(B) All capitalized words and terms not otherwise defined herein shall have the meanings set forth in Sections 78-167 of the Code, Section 70-4 of the Stormwater Ordinance, the Amended and Restated Initial Assessment Resolution, and the Amended and Restated Final Assessment Resolution.

(C) Unless the context indicates otherwise, words imparting the singular number, include the plural number, and vice versa; and the term "hereafter" means after, and the term "heretofore" means before, the effective date of this resolution. Words of any gender include the correlative words of the other genders, unless the sense indicates otherwise.

SECTION 3. LEGISLATIVE DETERMINATIONS. The legislative determinations embodied in the Section 78-164 of the Code, the Amended and Restated Initial Assessment Resolution, and the Amended and Restated Final Assessment Resolution are affirmed and incorporated herein by reference.

SECTION 4. PROVISION OF STORMWATER MANAGEMENT SERVICES; DETERMINATION OF STORMWATER SERVICE COST; ESTABLISHMENT OF STORMWATER SERVICE ASSESSMENTS.

(A) The Stormwater Base Service Cost to be assessed and apportioned among benefited Tax Parcels of Assessed Property within the Stormwater Service Area for the Fiscal Year beginning October 1, 2024, is $338,604.00. For each Fiscal Year in which Stormwater Assessments for Stormwater Management Services are imposed, the Stormwater Base Service Cost shall be allocated among all Tax Parcels of Assessed Property within the Stormwater Service Area equally on a per Tax Parcel basis. A rate of assessment equal to $84.00 for each Tax Parcel to fund the Stormwater Base Service Cost is hereby approved for the Fiscal Year beginning October 1, 2024.

(B) The Stormwater Usage Service Cost to be assessed and apportioned among benefited Tax Parcels of Developed Property within the Stormwater Service Area for the Fiscal Year beginning October 1, 2024, is $1,290,686.40. For each Fiscal Year in which Stormwater Assessments for Stormwater Management Services are imposed, the Stormwater Usage Service Cost shall be allocated among all Tax Parcels of Developed Property within the Stormwater Service at a rate of assessment based upon the special benefit accruing to such Developed Property from the City's provision of Stormwater Management Services, measured by the number of ESUs attributable to each Tax Parcel, as determined in accordance with Section 70-9 of the Stormwater Ordinance after the application of any Mitigation Credits as determined in accordance with the City's Mitigation Credit Policy adopted in Resolution R-10-2020. A rate of assessment equal to $300.00 for each Net ESU to fund the Stormwater Usage Service Cost is hereby approved for the Fiscal Year beginning October 1, 2024.

(C) The Stormwater Assessment will be computed for each Tax Parcel within the Stormwater Service Area by (1) multiplying the number of Net ESUs attributable each Tax Parcel of Developed Property by the per Net ESU rate of $300.00 to fund that Tax Parcel's portion of the Stormwater Usage Service Cost and then (2) adding the applicable $84.00 rate per Tax Parcel to fund that Tax Parcel's portion of the Stormwater Base Service Cost.

(D) The rate of the Stormwater Service Assessments established in this Preliminary Rate Resolution shall be the rates applied by the City Manager in the preparation of the updated Stormwater Assessment Roll for the Fiscal Year commencing October 1, 2024, as provided in Section 5 of this Preliminary Rate Resolution.

(E) Upon the imposition of Stormwater Service Assessments for Stormwater Management Services against Tax Parcels located within the Stormwater Service Area, the Stormwater Utility created in Section 70-5 of the Stormwater Ordinance shall provide Stormwater Management Services to such property. All or any portion of the Stormwater Service Cost to provide such Stormwater Management Services shall be funded from proceeds of the Stormwater Service Assessments. The remaining cost, if any, required to provide Stormwater Management Services shall be funded by legally available City revenues.

(F) The Stormwater Service Area created in Section 4 of the Amended and Restated Initial Assessment Resolution is hereby confirmed and established as the service area for the Fiscal year beginning on October 1, 2024, and it is hereby ascertained, determined, and declared each

Tax Parcel of Assessed Property located within the Stormwater Service Area will be benefited by the City's provision of Stormwater Management Services in an amount not less than the Stormwater Service Assessment imposed against such parcel, computed in the manner set forth in this Preliminary Rate Resolution.

SECTION 5. STORMWATER ASSESSMENT ROLL.

(A) The City Manager is hereby directed to prepare, or direct the preparation of, the updated Stormwater Assessment Roll for the Fiscal Year beginning October 1, 2024, in the manner provided in Section 78-204 of the Code.

(B) Such updated Stormwater Assessment Roll shall contain the following: (1) a summary description of all Assessed Property within the Stormwater Service Area conforming to the description contained on the Tax Roll; (2) the name and address of the Owner of each Tax Parcel as shown on the Tax Roll, if available; (3) the number of Assessment Units attributable to the Tax Parcel; and (4) the amount of the Stormwater Service Assessment for Stormwater Management Services.

(C) The updated Stormwater Assessment Roll shall be open to public inspection. The foregoing shall not be construed to require that the Stormwater Assessment Roll be in printed form if the amount of the Stormwater Service Assessment for each Tax Parcel can be determined by use of computer terminal available to the public.

(D) It is hereby ascertained, determined, and declared that the foregoing method of determining the Stormwater Service Assessments for Stormwater Management Services (1) is a fair and reasonable method of apportioning the Stormwater Service Cost among parcels of Assessed Property; and (2) is an equitable and efficient mechanism to address payment delinquencies and recover funds advanced for Stormwater Management Services which are allocable to specific parcels of Assessed Property.

SECTION 6. AUTHORIZATION OF PUBLIC HEARING. There is hereby established a public hearing to be held at 7:00 p.m. on September 3, 2024, in the City Council Chambers, City Hall, 321 Walnut Street, Green Cove Springs, Florida, for the purpose of (1) receiving and considering any comments on the Stormwater Service Assessments from affected property owners; and (2) authorizing the imposition of such Stormwater Service Assessments for Stormwater Management Services and collection on the same bill as ad valorem taxes.

SECTION 7. NOTICE BY PUBLICATION. The City Clerk shall publish a notice, as required by Section 78-205 of the Code, in substantially the form attached hereto as Appendix A. Such notice shall be published not later than August 13, 2024, in a newspaper generally circulated in the City.

SECTION 8. NOTICE BY MAIL.

(A) If required by Section 78-209(f) of the Code, the City Manager shall provide notice by first class mail to the Owner of each Tax Parcel of Assessed Property, as required by Section 78-206 of the Code, in substantially the form attached hereto as Appendix B. Such notices shall be mailed not later than August 13, 2024.

(B) For Tax Parcels with exempt "home addresses" pursuant to Section 119.071(4), Florida Statutes, the City Manager shall work with the Property Appraiser and/or Tax Collector for provision of notice.

SECTION 9. METHOD OF COLLECTION. The Stormwater Service Assessments shall be collected from all Assessed Property pursuant to the Uniform Assessment Collection Act as provided in Section 78-266 of the Code.

SECTION 10. EFFECTIVE DATE. This Preliminary Rate Resolution shall take effect immediately upon its adoption.

DONE AND RESOLVED BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, IN REGULAR SESSION THIS 16th DAY OF JULY, 2024.

CITY OF GREEN COVE SPRINGS, FLORIDA

_____
Steven R. Kelley, Mayor

ATTEST:

_____
Erin West, City Clerk

APPROVED AS TO FORM ONLY:

_____
L. J. Arnold, III, City Attorney

APPENDIX A

FORM OF NOTICE TO BE PUBLISHED

To Be Published by August 13, 2024

NOTICE OF HEARING TO IMPOSE AND PROVIDE FOR COLLECTION OF STORMWATER SERVICE NON-AD VALOREM ASSESSMENTS

Notice is hereby given that the City Council of the City of Green Cove Springs, Florida, will conduct a public hearing to consider reimposing Stormwater Service Assessments within the entire incorporated area of the City, as shown below, for fiscal year October 1, 2024 – September 30, 2025, and future fiscal years to fund the cost of providing Stormwater Management Services to such properties and to authorize collection of such assessments on the tax bill.

The hearing will be held at 7:00 p.m. on September 3, 2024, in the City Council Chambers, City Hall, 321 Walnut Street, Green Cove Springs, Florida, for the purpose of receiving public comment on the proposed assessments. All affected property owners have a right to appear at the hearing and to file written objections with the City Council within 20 days of this notice. If a person decides to appeal any decision made by the City Council with respect to any matter considered at the hearing, such person will need a record of the proceedings and may need to ensure that a verbatim record is made, including the testimony and evidence upon which the appeal is to be made. In accordance with the Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the City Clerk, Erin West, (904) 297-7500, ext. 3307, at least three (3) business days prior to the meeting.

The Stormwater Assessment contains two, separate components. The first component – the Base Charge -- will fund the City's baseline, citywide management, operations and maintenance services for the stormwater management system and will be generally allocated equally among all Tax Parcels within the City. The annual Stormwater Assessment rate for the Base Charge for the upcoming Fiscal Year and future fiscal years will be $84.00 for each Tax Parcel.

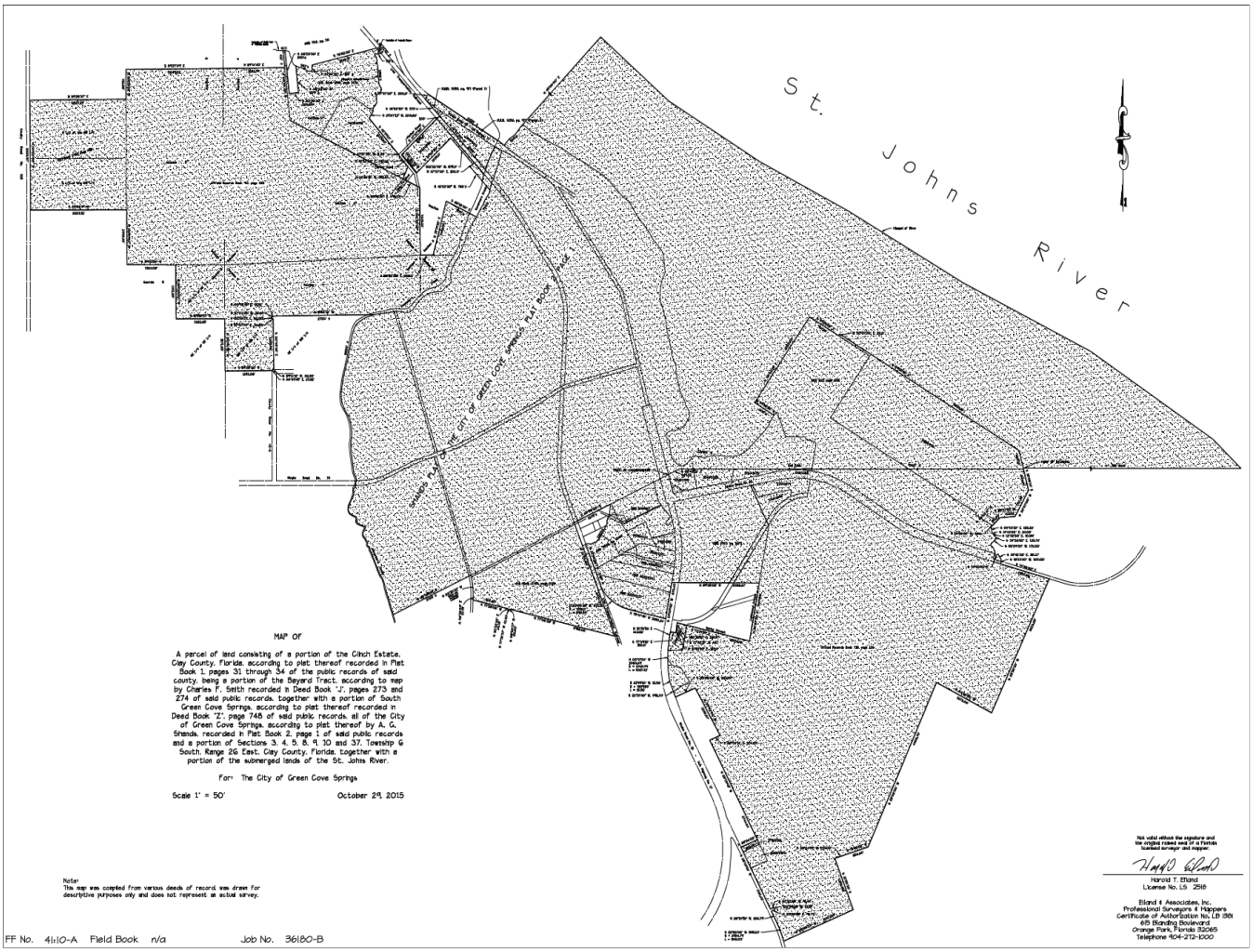
The second component – the Usage Charge -- will fund the City's additional Stormwater Management Services provided to developed property. These stormwater management services are necessitated by the existence of Impervious Area that impedes or restricts infiltration of rainfall into the soil, which then increases the need for City services and facilities to convey, retain, and treat increased volume of Stormwater runoff from developed property and the Usage Charge is based upon the estimated amount of stormwater runoff generated by impervious surface on the Developed Property, as measured by the number of Net ESUs assigned to each parcel of property. The City has determined that a typical single-family residence in the Stormwater Service Area includes 3,000 square feet of impervious surface, which is defined as the "equivalent stormwater unit value" or "ESU Value." Generally, the number of ESUs were calculated individually for each parcel of developed property by dividing the impervious surface area by 3,000 square feet. Credit for privately maintained Stormwater management facilities and other factors affecting the quantity or quality of Stormwater runoff has also been applied, resulting in an assignment of Net ESUs. The annual Stormwater Assessment rate for the Usage Charge for the upcoming Fiscal Year and future fiscal years will be $300.00 for each Net ESU.

Copies of the Master Service Assessment Ordinance, the Amended and Restated Initial Assessment Resolution, the Amended and Restated Final Assessment Resolution, the Preliminary Rate Resolution, and the updated assessment roll are available for inspection at the office of the City Clerk, located at City Hall, 321 Walnut Street, Green Cove Springs, Florida.

The Stormwater Assessments will be collected on the ad valorem tax bill to be mailed in November 2024, as authorized by section 197.3632, Florida Statutes. Failure to pay the assessment will cause a tax certificate to be issued against the assessed property which may result in a loss of title. Unless prope

steps are initiated in a court of competent jurisdiction to secure relief within 20 days from the date of City Council action at the above hearing (including the method of apportionment, the rate of assessment and the imposition of assessments), such action shall be the final adjudication of the issues presented.

If you have any questions, please contact the City at (904) 297-7500, Monday through Thursday, between 7:00 a.m. and 5:30 p.m.



City of Green Cove Springs

Erin West, City Clerk
321 Walnut Street
Green Cove Springs, FL 32043

Steve Kennedy, City Manager

APPENDIX B

FORM OF NOTICE TO BE MAILED

FORM OF NOTICE TO BE MAILED

* * * * * NOTICE TO PROPERTY OWNER * * * * *

City of Green Cove Springs
321 Walnut Street
Green Cove Springs, FL 32043-3441

CITY OF GREEN COVE SPRINGS, FLORIDA

NOTICE OF HEARING TO IMPOSE AND PROVIDE FOR COLLECTION OF STORMWATER SERVICE NON-AD VALOREM ASSESSMENTS

NOTICE DATE: AUGUST 13, 2024

Owner Name
Address
City, State Zip

Tax Parcel # _____

As required by Section 197.3632, Florida Statutes, notice is given by the City of Green Cove Springs (the "City"), that an annual assessment for Stormwater management services using the tax bill collection method, may be levied on your property for the fiscal year October 1, 2024 – September 30, 2025, and future fiscal years. The purpose of this assessment is to fund stormwater management services benefiting all property located within the City. The Stormwater Assessment contains two, separate components. The first component – the Base Charge -- will fund the City's baseline, citywide management, operations and maintenance services for the stormwater management system and will be generally allocated equally among all Tax Parcels within the City. The total annual assessment revenue to be collected within the City is estimated to be $338,604.00 for the stormwater base service cost.

The second component – the Usage Charge -- will fund the City's additional Stormwater Management Services provided to developed property. The total annual assessment revenue to be collected within the City is estimated to be $1,290,686.40 for the stormwater usage service cost. These stormwater management services are necessitated by the existence of Impervious Area that impedes or restricts infiltration of rainfall into the soil, which then increases the need for City services and facilities to convey, retain, and treat increased volume of Stormwater runoff from developed property and the Usage Charge is based upon the estimated amount of stormwater runoff generated by impervious surface on the Developed Property, as measured by the number of Net ESUs assigned to each parcel of property. The City has determined that a typical single-family residence in the Stormwater Service Area includes 3,000 square feet of impervious surface, which is defined as the "equivalent stormwater unit value" or "ESU Value." Generally, the number of ESUs were calculated individually for each parcel of developed property by dividing the impervious surface area by 3,000 square feet. Credit for privately maintained Stormwater management facilities and other factors affecting the quantity or quality of Stormwater runoff has also been applied, resulting in an assignment of Net ESUs.

The total number of Tax Parcels associated with the above parcel is_____.

The total number of Net ESUs assigned to the above parcel is _____.

The maximum stormwater assessment for the above parcel for the Base Charge is $84.00 for Fiscal Year 2024-25 and future fiscal years.

The maximum stormwater assessment of the above parcel for the Usage Charge is $____ for Fiscal Year 2024-25 and future fiscal years.

The TOTAL MAXIMUM STORMWATER ASSESSMENT for the above parcel is $____ for Fiscal Year 2024-25 and future fiscal years.

A public hearing will be held at 7:00 p.m. on September 3, 2024, in the City Council Chambers, City Hall, 321 Walnut Street, Green Cove Springs, Florida, for the purpose of receiving public comment on the proposed assessments. You and all other affected property owners have a right to appear at the hearing and to file written objections with the City Council within 20 days of this notice. If you decide to appeal any decision made by the City Council with respect to any matter considered at the hearing, you will need a record of the proceedings and may need to ensure that a verbatim record is made, including the testimony and evidence upon which the appeal is to be made. In accordance with the

Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the City Clerk, Erin West, at least three (3) business days prior to the meeting.

Unless proper steps are initiated in a court of competent jurisdiction to secure relief within 20 days from the date of City Council action at the above hearing (including the method of apportionment, the rate of assessment and the imposition of assessments), such action shall be the final adjudication of the issues presented.

Copies of the Master Service Assessment Ordinance, the Amended and Restated Initial Assessment Resolution, the Amended and Restated Final Assessment Resolution, the Preliminary Rate Resolution, and the updated assessment roll are available for inspection at the City Clerk's Office, 321 Walnut Street, Green Cove Springs, Florida.

Both the stormwater service non-ad valorem assessment amount shown on this notice and the ad valorem taxes for the above parcel will be collected on the ad valorem tax bill mailed in November 2024. Failure to pay the assessment will cause a tax certificate to be issued against the property which may result in a loss of title.

If there is a mistake on this notice, it will be corrected. If you have any questions regarding your stormwater service assessment, please contact the City at (904) 297-7500, Monday through Thursday, between 7:00 a.m. and 5:30 p.m.

*****THIS IS NOT A BILL*****

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council, Regular Session **MEETING DATE:** July 16, 2024

FROM: L. J. Arnold III, City Attorney

Mike Null, Assistant City Manager

SUBJECT: Consider adoption of Resolution No. R-10-2024, a Resolution relating to collection of Solid Waste and Recyclable Material within the Magnolia West Subdivision, including setting a Public Hearing for Final Proposed Solid Waste Service Assessments. ***L. J. Arnold III***

BACKGROUND

The City has previously adopted Ordinance No. O-04-2016, and a copy of such Ordinance is attached hereto. This Assessment Resolution is a required legal step in the process for assessing and collecting non-ad valorem solid waste assessments on all non-exempt residential property within the Magnolia West subdivision. This assessment includes a ten percent rate increase, for which a formal Ordinance will be presented to City Council for first reading on September 3, 2024.

Staff recommends setting the Public Hearing for Tuesday, September 3, 2024 at 7:00p.m.

FISCAL IMPACT

The City should be able to collect a very high percentage of the $263.40 yearly Solid Waste Service Assessment on each residential parcel within Magnolia West. On an annual basis, we estimate $138,285.00 will be collected from Magnolia West by this method.

RECOMMENDATION

Approve Resolution No. R-10-2024, a Resolution relating to collection of Solid Waste and Recyclable Material within the Magnolia West Subdivision and related issues, and setting a Public Hearing for Tuesday, September 3, 2024 at 7:00p.m.

RESOLUTION NO. R-10-2024

A RESOLUTION OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, RELATING TO THE COLLECTION OF SOLID WASTE AND RECYCLABLE MATERIALS WITHIN THE MAGNOLIA WEST ASSESSMENT AREA IN THE CITY OF GREEN COVE SPRINGS, FLORIDA; DESCRIBING THE METHOD OF ASSESSING SOLID WASTE COSTS AGAINST RESIDENTIAL PROPERTY; DIRECTING THE CITY MANAGER TO PREPARE OR DIRECT THE PREPARATION OF A SOLID WASTE ASSESSMENT ROLL; AUTHORIZING A PUBLIC HEARING FOR THE PROPOSED SOLID WASTE SERVICE ASSESSMENTS AND DIRECTING THE PROVISION OF NOTICE THEREOF; PROVIDING FOR COLLECTION; AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, AS FOLLOWS:

SECTION 1. AUTHORITY. This Resolution is adopted pursuant to the provisions of Ordinance No. O-04-2016, as codified in Article VII, Chapter 78 of the Green Cove Springs Code of Ordinances (the "Code"), Resolution No. R-09-2016, as amended (the "Initial Assessment Resolution"), Resolution No. R-14-2016 (the "Final Assessment Resolution"), Article VIII, Section 2(b), Florida Constitution, sections 166.021 and 166.041, Florida Statutes, the City Charter of the City of Green Cove Springs, and other applicable provisions of law.

SECTION 2. PURPOSE AND DEFINITIONS.

(A) This Resolution constitutes the Preliminary Rate Resolution as defined in Section 78-167 of the Code which initiates the annual process for updating the Solid Waste Assessment Roll and directs the reimposition of Solid Waste Assessments for the Fiscal Year beginning October 1, 2024.

(B) All capitalized words and terms not otherwise defined herein shall have the meanings set forth in Sections 78-167 and 66-1 of the Code, the Initial Assessment Resolution, and the Final Assessment Resolution.

(C) Unless the context indicates otherwise, words imparting the singular number, include the plural number, and vice versa; the terms "hereof," "hereby," "herein," "hereto," "hereunder" and similar terms refer to this Resolution; and the term "hereafter" means after, and the term "heretofore" means before, the effective date of this Resolution. Words of any gender include the correlative words of the other genders, unless the sense indicates otherwise.

SECTION 3. LEGISLATIVE DETERMINATIONS. The legislative determinations embodied in Section 78-164 of the Code, the Initial Assessment Resolution, and the Final Assessment Resolution are affirmed and incorporated herein by reference.

SECTION 4. PROVISION OF SOLID WASTE AND RECYCLABLE MATERIALS COLLECTION; DETERMINATION OF SOLID WASTE COST; ESTABLISHMENT OF SOLID WASTE SERVICE ASSESSMENTS.

(A) The Solid Waste Cost to be assessed and apportioned among benefited parcels for the Fiscal Year beginning October 1, 2024, is $138,285.00. The approval of this Preliminary Rate Resolution determines the amount of the Solid Waste Cost. The remainder of such Fiscal Year budget for Solid Waste and Recyclable Materials collection services, facilities, and programs shall be funded from available City revenue other than Solid Waste Service Assessments.

(B) For the Fiscal Year in which Solid Waste Service Assessments for Solid Waste and Recyclable Materials collection services, facilities, and programs are imposed, the Solid Waste Cost shall be allocated among all Tax Parcels of Residential Property, based upon each parcels' classification as Residential Property and the number of Dwelling Units for such parcels.

(C) A rate of assessment equal to $263.40 for each Dwelling Unit on each Tax Parcel of Residential Property within the Magnolia West Assessment Area for Solid Waste and Recyclable Materials collection services, facilities, and programs is hereby approved for the Fiscal Year beginning October 1, 2024.

(D) The rate of the Solid Waste Service Assessments established in this Preliminary Rate Resolution shall be the rates applied by the City Manager in the preparation of the updated Solid Waste Assessment Roll for the Fiscal Year commencing October 1, 2024, as provided in Section 5 of this Preliminary Rate Resolution.

(E) Upon the imposition of Solid Waste Assessments for Solid Waste and Recyclable Materials collection services, facilities, and programs against Residential Property located within the Magnolia West Assessment Area, the City shall provide Solid Waste and Recyclable Materials collection services, facilities, and programs to such Residential Property. All or any portion of the Solid Waste Cost to provide such Solid Waste and Recyclable Materials collection services, facilities, and programs shall be funded from proceeds of the Solid Waste Service Assessments. The remaining cost, if any, required to provide Solid Waste and Recyclable Materials collection services, facilities, and programs shall be funded by legally available City revenues.

(F) The Magnolia West Assessment Area created in Section 4 of the Initial Assessment Resolution, as amended by Section 3 of the Final Assessment Resolution, is hereby confirmed and established as the service area for the Fiscal year beginning on October 1, 2024, and it is hereby ascertained, determined, and declared each parcel of Residential Property located within the Magnolia West Assessment Area will be benefited by the City's provision of Solid Waste and Recyclable Materials collection services, facilities, and programs in an amount not less than the Solid Waste Service Assessment imposed against such parcel, computed in the manner set forth in this Preliminary Rate Resolution

SECTION 5. SOLID WASTE ASSESSMENT ROLL.

(A) The City Manager is hereby directed to prepare, or direct the preparation of, the updated Solid Waste Assessment Roll for the Fiscal Year beginning October 1, 2024, in the manner provided in Section 78-204 of the Code.

(B) Such updated Solid Waste Assessment Roll shall contain the following: (1) a summary description of all Residential Property within the Magnolia West Assessment Area conforming to the description contained on the Tax Roll; (2) the name and address of the Owner of each Tax Parcel as shown on the Tax Roll, if available; (3) the number of Dwelling Units attributable to the Tax Parcel; and (4) the amount of the Solid Waste Service Assessment for Solid Waste and Recyclable Materials collection services, facilities, and programs.

(C) The updated Solid Waste Assessment Roll shall be open to public inspection. The foregoing shall not be construed to require that the updated Solid Waste Assessment Roll be in printed form if the amount of the Solid Waste Service Assessment for each Tax Parcel can be determined by use of a computer terminal available to the public.

(D) It is hereby ascertained, determined, and declared that the foregoing method of determining the Solid Waste Service Assessments for Solid Waste and Recyclable Materials collection services, facilities, and programs (1) is a fair and reasonable method of apportioning the Solid Waste Cost among parcels of Residential Property; and (2) is an equitable and efficient mechanism to address payment delinquencies and recover funds advanced for Solid Waste and Recyclable Materials collection services, facilities, and programs which are allocable to the specific parcels of Residential Property.

SECTION 6. AUTHORIZATION OF PUBLIC HEARING. There is hereby established a public hearing to be held at 7:00 p.m. on September 3, 2024, in the City Council Chambers, City Hall, 321 Walnut Street, Green Cove Springs, Florida, for the purpose of (1) receiving and considering any comments on the Solid Waste Service Assessments from affected property owners; and (2) authorizing the imposition of such Solid Waste Service Assessments for Solid Waste and Recyclable Materials collection services, facilities, and programs and collection on the same bill as ad valorem taxes.

SECTION 7. NOTICE BY PUBLICATION. The City Clerk shall publish a notice, as required by Section 78-205 of the Code, in substantially the form attached hereto as Appendix A. Such notice shall be published not later than August 13, 2024, in a newspaper generally circulated in the City.

SECTION 8. NOTICE BY MAIL.

(A) If required by Section 78-209(f) of the Code, the City Manager shall provide notice by first class mail to the Owner of each Tax Parcel of Residential Property, as required by Section 78-206 of the Code, in substantially the form attached hereto as Appendix B. Such notices shall be mailed not later than August 13, 2024.

(B) For Tax Parcels with exempt "home addresses" pursuant to Section 119.071(4), Florida Statutes, the City Manager shall work with the Property Appraiser and/or Tax Collector for provision of notice.

SECTION 9. METHOD OF COLLECTION. The Solid Waste Service Assessments shall be collected from all Residential Property within the Magnolia West Assessment Area pursuant to the Uniform Assessment Collection Act as provided in Section 78-266 of the Code.

SECTION 10. EFFECTIVE DATE. This Preliminary Rate Resolution shall take effect immediately upon its adoption.

DONE AND RESOLVED BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, IN REGULAR SESSION THIS 16TH DAY OF JULY, 2024.

CITY OF GREEN COVE SPRINGS, FLORIDA

Steven R. Kelley, Mayor

ATTEST:

Erin West, City Clerk

APPROVED AS TO FORM ONLY:

L. J. Arnold, III, City Attorney

APPENDIX A

FORM OF NOTICE TO BE PUBLISHED

To Be Published by August 13, 2024

NOTICE OF HEARING TO IMPOSE AND PROVIDE FOR COLLECTION OF SOLID WASTE SERVICE NON-AD VALOREM ASSESSMENTS

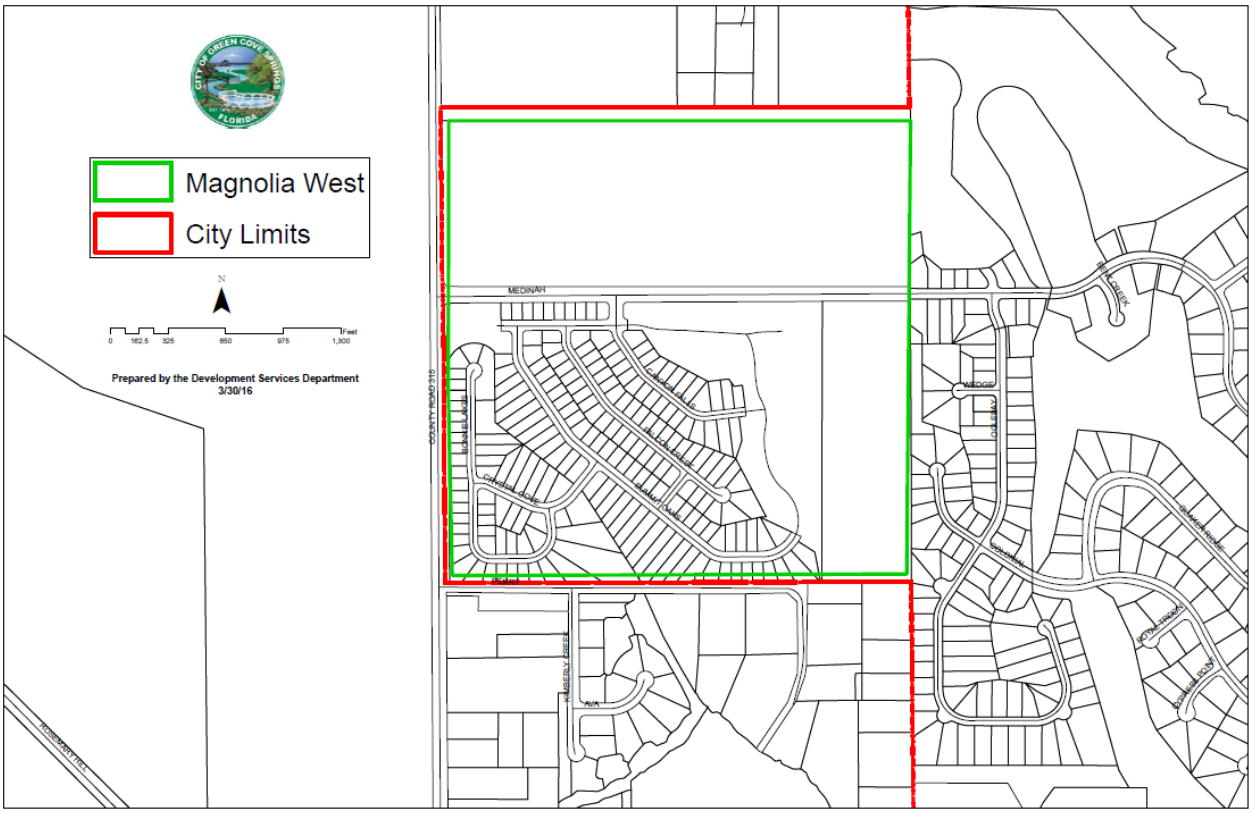
Notice is hereby given that the City Council of the City of Green Cove Springs, will conduct a public hearing to consider reimposing Solid Waste Service Assessments against certain improved residential properties located within the Magnolia West assessment area of the City, as shown below, for the fiscal year October 1, 2024 – September 30, 2025 and future fiscal years to fund the cost of solid waste and recyclable materials collection services, facilities, and programs, provided to such properties and to authorize collection of such assessments on the tax bill.

The hearing will be held at 7:00 p.m. on September 3, 2024, in the City Council Chambers, City Hall, 321 Walnut Street, Green Cove Springs, Florida, for the purpose of receiving public comment on the proposed assessments. All affected property owners have a right to appear at the hearing and to file written objections with the City Council within 20 days of this notice. If a person decides to appeal any decision made by the City Council with respect to any matter considered at the hearing, such person will need a record of the proceedings and may need to ensure that a verbatim record is made, including the testimony and evidence upon which the appeal is to be made. In accordance with the Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the City Clerk, Erin West, (904) 297-7500, ext. 3307, at least three (3) business days prior to the meeting.

The Solid Waste Service Assessments will be generally computed by multiplying the number of dwelling units on each parcel by the rate of assessment. The rate of assessment for the upcoming fiscal year and future fiscal years shall be $263.40 for each dwelling unit. Copies of the updated assessment roll, showing the amount of the assessment to be imposed against each parcel of property, and the legal documentation relating to the assessments are available for inspection at the office of the City Clerk, located at City Hall, 321 Walnut Street, Green Cove Springs, Florida.

The Solid Waste Service Assessments will be collected on the ad valorem tax bill to be mailed in November 2024, as authorized by section 197.3632, Florida Statutes. Failure to pay the assessment will cause a tax certificate to be issued against the assessed property which may result in a loss of title. Unless proper steps are initiated in a court of competent jurisdiction to secure relief within 20 days from the date of City Council action at the above hearing (including the method of apportionment, the rate of assessment and the imposition of assessments), such action shall be the final adjudication of the issues presented.

If you have any questions, please contact the City at (904) 297-7500, Monday through Thursday between 7:00 a.m. and 5:30 p.m.



City of Green Cove Springs

Erin West, City Clerk
321 Walnut Street
Green Cove Springs, FL 32043

Steve Kennedy, City Manager

APPENDIX B

FORM OF NOTICE TO BE MAILED

FORM OF NOTICE TO BE MAILED

* * * * * NOTICE TO PROPERTY OWNER * * * * *

City of Green Cove Springs
321 Walnut Street
Green Cove Springs, Florida 32043-3441

CITY OF GREEN COVE SPRINGS, FLORIDA

NOTICE OF HEARING TO IMPOSE AND PROVIDE FOR COLLECTION OF SOLID WASTE SERVICE NON-AD VALOREM ASSESSMENTS

NOTICE DATE: AUGUST 13, 2024

Owner Name
Address
City, State Zip

Tax Parcel # _____

As required by Section 197.3632, Florida Statutes, notice is given by the City of Green Cove Springs (the "City"), that an annual assessment for solid waste and recyclable materials collection services, facilities, and programs using the tax bill collection method, may be levied on your property for the fiscal year October 1, 2024 – September 30, 2025 and future fiscal years. The purpose of this assessment is to fund solid waste and recyclable materials collection services, facilities, and programs benefiting residential property located within the Magnolia West assessment area of the City. The total annual solid waste assessment revenue to be collected within the City, is estimated to be $138,285.00 The annual solid waste service assessment is based on the number of residential dwelling units contained on each parcel of property. The rate of assessment for the upcoming fiscal year shall be $263.40 for each dwelling unit.

The total number of residential dwelling units on the above parcel is 1.

The maximum solid waste service assessment for the above parcel is $263.40 for Fiscal Year 2024-25 and future fiscal years.

A public hearing will be held at 7:00 p.m. on September 3, 2024, in the City Council Chambers, City Hall, 321 Walnut Street, Green Cove Springs, Florida, for the purpose of receiving public comment on the proposed assessments. You and all other affected property owners have a right to appear at the hearing and to file written objections with the City Council within 20 days of this notice. If you decide to appeal any decision made by the City Council with respect to any matter considered at the hearing, you will need a record of the proceedings and may need to ensure that a verbatim record is made, including the testimony and evidence upon which the appeal is to be made. In accordance with the Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the City Clerk, Erin West, at least three (3) business days prior to the meeting.

Unless proper steps are initiated in a court of competent jurisdiction to secure relief within 20 days from the date of City Council action at the above hearing (including the method of apportionment, the rate of assessment and the imposition of assessments), such action shall be the final adjudication of the issues presented.

Copies of the Master Service Assessment Ordinance, the Initial Assessment Resolution, the Final Assessment Resolution, the Preliminary Rate Resolution, and the updated assessment roll are available for inspection at the City Clerk's office, 321 Walnut Street, Green Cove Springs, Florida.

Both the solid waste service non-ad valorem assessment amount shown on this notice and the ad valorem taxes for the above parcel will be collected on the ad valorem tax bill mailed in November 2024. Failure to pay the assessment will cause a tax certificate to be issued against the property which may result in a loss of title.

If there is a mistake on this notice, it will be corrected. If you have any questions regarding your solid waste service assessment, please contact the City at (904) 297-7500, Monday through Thursday between 7:00 a.m. and 5:30 p.m.

*** * * * * THIS IS NOT A BILL * * * * ***

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council Regular Meeting **MEETING DATE:** July 16, 2024

FROM: Mike Null, Asst. City Manager

SUBJECT: City Council discussion of proposed rates for Water, Wastewater, Reclaimed Water, Electric, Solid Waste and Stormwater for Fiscal Year 2025. ***Mike Null***

BACKGROUND

Water, Wastewater and Reclaimed Water:

In late 2023 / early 2024 city staff in collaboration with the city's consultant, Mittauer & Associates, conducted a review of the capital improvement program (CIP) and operating expenses for the next ten years in the water, wastewater and reclaimed water funds. The review included depreciation of assets, projected increases in operating costs, infrastructure improvements for regulatory compliance and population growth, and financing options for capital projects. The result was an updated rate study which was reviewed by the council in January of 2024.

Since council review, staff have worked with the finance department and the FY23 auditor's report / findings to further refine the rate structure. As a result of the rate study, increase cost of doing business and overall financial needs to operate each department, staff is recommending a 20% increase to water rates, a 5% increase to wastewater rates, and adjusting reclaimed water rates to match potable water irrigation rates.

Electric:

In 2023, city staff in collaboration with the city's consultant, Leidos, conducted a review of the capital improvement program (CIP) and operating expenses for the next ten years in the electric fund. The review included depreciation of assets, projected increases in operating costs, infrastructure improvements for system reliability and population growth, and financing options for capital projects. The result was an updated rate study which was reviewed by the council in July of 2023.

Since council review, staff have worked with the finance department and the FY23 auditor's report / findings to further refine the rate structure. As a result of the rate study, increase cost of doing business and overall financial needs to operate the electric department, staff in recommending a 5% increase to electric rates.

Solid Waste:

Each year, staff reviews the solid waste fund projections and considers rate adjustments as needed to fund the operations of the solid waste department. Staff, in working with the finance department and the FY23 auditor's report / findings, is recommending a 10% rate increase to cover increase operational costs of the department.

Stormwater Utility:

In FY24, staff recommended, and council adopted, significant increases to the stormwater base and user fee utility rates. This has allowed for the stormwater utility to secure a loan for $550,000 to purchase a Vac-Con truck as well as an $8,500,000 loan to accelerate the stormwater utility capital improvement program, which had been stagnant for several years.

At that time, staff advised council that another smaller increase to the base fee may be needed in FY25 to purchase a new street sweeper. The purchase of a new street sweeper has become necessary as repairs to the current street sweeper have become cost-prohibitive. As a result, staff is recommending an increase of $1 per month per parcel to the base fee for all stormwater utility customers. This increase will generate approximately $40,000 per year to cover the annual debt service on a $300,000 loan to purchase a new street sweeper.

Summary:

Staff is recommending these increases to each utility rate, which are necessary to maintain the existing level of service in each utility for FY25. Should Council vote to proceed with these increases, the attached flier will be mailed to every utility customer in their August bills. Staff will then bring back ordinances to adopt each new utility rate on September 3, 2024 and September 17, 2024, with proposed rates becoming effective October 1, 2024.

FISCAL IMPACT

Outlined in the Rate study for each fund as well as the attached flier.

RECOMMENDATION

- Approve advertisements in each customer's August 2024 utility bill of proposed rates for Water, Wastewater, Reclaimed Water, Electric, Solid Waste and Stormwater for Fiscal Year 2025.
- Direct staff to prepare ordinances to effect each proposed utility rate as of October 1, 2024.
- Set September 3, 2024, at 7:00 PM as the first reading of each proposed utility rate ordinance reviewed in this staff report.
- Set September 17, 2024, at 7:00 PM as the second and final reading of each proposed utility rate ordinance reviewed in this staff report.

Notice to all Billing Customers of the City of Green Cove Springs Water and Wastewater Utilities

Pursuant to Section 180.136, Florida Statutes

The City of Green Cove Springs City Council will consider rate increases to its Water, Wastewater and Reclaimed Water rates and charges at public hearings to be held on Tuesday, September 3, 2024, and Tuesday, September 17, 2024. The hearing will be held in the City Council Chambers in City Hall, located at 321 Walnut Street, Green Cove Springs, FL 32043, and will begin at 7:00 p.m.

Attendance is not required; however, utility customers will have an opportunity to comment on these matters at that time.

PROPOSED WATER RATES (20% Increase)

Monthly Base Charge: Each customer must pay a monthly base charge for each metered point of connection to the City's water system based upon the water meter size associated with each connection point.

3/4"	$16.60	per month	3"	$66.38	per month
1"	$24.65	per month	4"	$265.51	per month
1 1/2"	$35.09	per month	6"	$489.60	per month
2"	$48.55	per month	8"	$697.07	per month
			10"	$912.83	per month

Water Consumption Charge(s): Each customer must pay for water consumed through each connection point based upon service type:

Residential Potable Service			*Commercial Potable Service*		
0-3,000 gallons	$0.86	per 1,000 gallons	0-10,000 gallons	$2.82	per 1,000 gallons
3,001-10,000 gallons	$2.82	per 1,000 gallons	10,001-15,000	$2.89	per 1,000 gallons
10,001-15,000 gallons	$2.89	per 1,000 gallons	15,001-20,000	$2.99	per 1,000 gallons
15,001-20,000 gallons	$2.99	per 1,000 gallons	20,001 gallons and over	$3.07	per 1,000 gallons
20,001 gallons and over	$3.07	per 1,000 gallons			

Residential Irrigation Service			*Commercial Irrigation Service*		
0-10,000 gallons	$2.89	per 1,000 gallons	0-10,000 gallons	$2.89	per 1,000 gallons
10,001-15,000 gallons	$2.99	per 1,000 gallons	10,001-15,000	$2.99	per 1,000 gallons
15,001-20,000 gallons	$3.80	per 1,000 gallons	15,001-20,000	$3.80	per 1,000 gallons
20,001 gallons and over	$4.98	per 1,000 gallons	20,001 gallons and over	$4.98	per 1,000 gallons

PROPOSED WASTEWATER RATES (5% Increase)

Monthly Base Charge: Each customer must pay for wastewater discharged into the City's wastewater collection system based upon customer class:

3/4"	$37.61	per month	3"	$246.84	per month
1"	$66.63	per month	4"	$654.10	per month
1 1/2"	$130.81	per month	6"	$1234.13	per month
2"	$187.56	per month	8"	$2073.34	per month
			10"	$2961.89	per month

Residential Service			*Commercial Service*		
0-3,000 gallons	$0.71	per 1,000 gallons	0-3,000 gallons	$0.71	per 1,000 gallons
3,001-10,000 gallons	$6.84	per 1,000 gallons	3,001-10,000	$6.84	per 1,000 gallons
10,001-15,000 gallons	$7.05	per 1,000 gallons	10,001-15,000	$7.05	per 1,000 gallons
15,001-20,000 gallons	$7.28	per 1,000 gallons	15,001-20,000	$7.28	per 1,000 gallons
20,001 gallons and over	$7.54	per 1,000 gallons	20,001-50,000	$7.54	per 1,000 gallons
Residential wastewater shall not exceed $200.00 per month			50,001 gallons and over	$7.77	per 1,000 gallons

The Reclaimed Water Fund (Utility) and proposed rates were established in 2016. As the city has not had a fully functional **residential** reclaimed water system, there has been no update or review of the rates since 2016. Beginning in early 2025, upon completion of improvements to the Harbor Road Water Reclamation Facility, the city will begin supplying reclaimed water to customers that have reclaimed water infrastructure in their development.

The proposed reclaimed water rates mirror the potable water irrigation rates.

PROPOSED RECLAIMED WATER RATES

Monthly Base Charge: Each customer must pay a monthly base charge for each metered point of connection to the City's water system based upon the water meter size associated with each connection point.

4"	$16.60	per month	3"	$66.38	per month
1"	$24.65	per month	4"	$265.51	per month
1 1/2"	$35.09	per month	6"	$489.60	per month
2"	$48.55	per month	8"	$697.07	per month
			10"	$912.83	per month

Water Consumption Charge(s): Each customer must pay for water consumed through each connection point based upon service type:

Residential Irrigation Service			*Commercial Irrigation Service*		
0-10,000 gallons	$2.89	per 1,000 gallons	0-10,000 gallons	$2.89	per 1,000 gallons
10,001-15,000 gallons	$2.99	per 1,000 gallons	10,001-15,000	$2.99	per 1,000 gallons
15,001-20,000 gallons	$3.80	per 1,000 gallons	15,001-20,000	$3.80	per 1,000 gallons
20,001 gallons and over	$4.98	per 1,000 gallons	20,001 gallons and over	$4.98	per 1,000 gallons

All water, wastewater, and reclaimed water utility users outside the city limits shall pay 125 percent of the equivalent rate charged to those users within the city limits.

The City of Green Cove Springs City Council will consider rate increases to its Electric rates and charges at public hearings to be held on Tuesday, September 3, 2024, and Tuesday, September 17, 2024. The hearing will be held in the City Council Chambers in City Hall, located at 321 Walnut Street, Green Cove Springs, FL 32043, and will begin at 7:00 p.m.

Attendance is not required; however, utility customers will have an opportunity to comment on these matters at that time.

PROPOSED ELECTRIC RATES (5% increase)

Monthly Customer Service Charge (Base Rate)

- Residential: $15.75
- General Service Non-Demand (Commercial): $15.75
- General Service Demand (Commercial): $63
- Master-Metered: $56.18
- General Service Large Demand (Industrial): $262.50

Monthly Energy Charges

- Residential under 1,000 kwh: 0.11330
- Residential above 1,000 kwh: 0.11783
- General Service Non-Demand (Commercial): 0.12044
- General Service Demand (Commercial): 0.08854
- Master-Metered: 0.1155
- General Service Large Demand (Industrial): 0..07772

Monthly Demand Charges

- Residential: N/A
- General Service Non-Demand (Commercial): N/A
- General Service Demand (Commercial): $9.46
- Master-Metered: N/A
- General Service Large Demand (Industrial): $10.57

The City of Green Cove Springs City Council will consider rate increases to its Solid Waste rates and charges at public hearings to be held on Tuesday, September 3, 2024, and Tuesday, September 17, 2024. The hearing will be held in the City Council Chambers in City Hall, located at 321 Walnut Street, Green Cove Springs, FL 32043, and will begin at 7:00 p.m.

Attendance is not required; however, utility customers will have an opportunity to comment on these matters at that time.

PROPOSED SOLID WASTE RATES (10% INCREASE)

Residential: $21.95

Commercial: $29.75

The City of Green Cove Springs City Council will consider rate increases to its Stormwater Utility rates and charges at public hearings to be held on Tuesday, September 3, 2024, and Tuesday, September 17, 2024. The hearing will be held in the City Council Chambers in City Hall, located at 321 Walnut Street, Green Cove Springs, FL 32043, and will begin at 7:00 p.m.

Attendance is not required; however, utility customers will have an opportunity to comment on these matters at that time.

PROPOSED STORMWATER UTILITY RATES

Base Fee

- Residential & Commercial: $84 per parcel/per year **(INCREASE $1/PARCEL/MONTH OR 16.7%)**

User Fee

- Residential Single-Family Home: $300 per year **(UNCHANGED)**
- Non-Single-Family Parcels: $300 per ESU (Equivalent Stormwater Unit) per year **(UNCHANGED)**

FLC
FLORIDA LEAGUE OF CITIES

To: Key Official

From: Eryn Russell, Florida League of Cities

Date: June 10, 2024

Subject: 2024 Annual Conference Voting Delegate Information

The Florida League of Cities Annual Conference will be held at the Diplomat Beach Resort in Hollywood, Florida, from August 15-17, 2024. This conference will provide valuable educational opportunities to help Florida's municipal officials serve their citizenry more effectively.

We ask that each member municipality sending delegates to the Annual Conference designate one of their officials to cast their votes at the Annual Business Session, which will be held on **Saturday, August 17**. Election of League leadership and adoption of resolutions are undertaken during the business meeting. One official from each municipality will vote on matters affecting the League.

In accordance with the League's by-laws, each municipality's vote is determined by population, and the League will use the Estimates of Population from the University of Florida.

Conference registration materials were sent to each municipality via the League's e-newsletter and are available online at *flcities.com*.

If you have any questions about voting delegates, please email *erussell@flcities.com*.
Voting delegate forms must be received by the League no later than July 31, 2024.

Attachments: Form Designating Voting Delegate

2024 Annual Conference
Florida League of Cities, Inc.
August 15-17, 2024
Hollywood, Florida

It is important that each member municipality sending delegates to the Annual Conference of the Florida League of Cities designate one of their officials to cast their votes at the Annual Business Session. League By-Laws require each municipality to select one person to serve as the municipality's voting delegate. *Municipalities do not need to adopt a resolution to designate a voting delegate.*

Please fill out this form and return it to the League office so that your voting delegate may be properly identified. **Voting delegate forms must be received by the League no later than July 31, 2024.**

Designation of Voting Delegate

Name of Voting Delegate: _____

Title: _____

Delegate Email: _____

Municipality of: _____

AUTHORIZED BY:

_____
Name

_____
Title

Return this form to:
Eryn Russell
Florida League of Cities, Inc.
Post Office Box 1757
Tallahassee, FL 32302-1757
Email: *erussell@flcities.com*

Public Works
Monthly Executive Summary
June 2024

Street Department

During the month of June, The Street Department has been busy throughout the city. Additional activities included:

- Assisted with the Stormwater and Sidewalk Improvements.
- Clean storm drains City Wide.
- Setup for traffic control for Food Truck Friday, June 7th.
- Setup for traffic control for Third Saturday Market in the Park, June 22nd.
- Clear back tree debris on City rights-of-way.

The Street Department completed **71** additional work orders that pertained to street and stormwater issues.

Parks Department

During the month of June, the Parks Department mowed, trimmed, and edged all areas one time including the DOT rights-of-way, City Parks, and FCT property. Additional activities included:

- Clean the pool 4 times.
- Prep our Spring Park for Food Truck Friday, June 7th.
- Prep City Hall for Third Saturday Market in the Park, June 22nd.

The Parks Department completed **3** additional work order outside of their normal daily work schedules**.**

Equipment Maintenance

The Equipment Maintenance Shop, as always, works hard to keep the equipment and vehicles going so the city can continue to provide our citizens with the exceptional service they are accustomed to. During the month of June, Levi and John, completed **73** work orders.

Tradesworker

During the month of June **24** work orders were completed.

Solid Waste Department

Cove Life, Litter Cleanup Program & New Services:

- Picked up everything around the rollout cans.
- Picked up as much loose trash, palm fronds, and sticks as possible on the streets, along the R.O.W. and ditches regardless of if it is near a container or not.
- Delivered 1 trash can and 3 recycle bins to new customers.
- Delivered 2 recycling bins to current customers.
- Repaired 5 trash cans.
- Replaced 45 trash cans.

This month **June** the city collected:

- **334.81** tons of Class I garbage (0.6 % decrease)
- **1.41** tons of recycling (93% decrease)
- **108.08** tons of yard waste (15% decrease)
- **52.21 tons of Sludge**
- **4.15 Street Sweepings**
- **18.16** tons of white goods and other junk
- **70 tons Commercial pickup**

For comparison during June 2023, the city collected:

- **336.77** tons of Class I garbage
- **19.73** tons of recycling
- **127.36** tons of yard waste
- **104.80 tons of sludge**
- **12.01** tons of white goods and other junk
- **57 tons** Commercial pickup

Water/Wastewater

- W/WW crews/management had personal interaction with several citizens regarding water/sewer issues.
- Contacted all customers on water and irrigation "Highest Users" report that had unusual consumption (not usually on report)
- Staff continues to refine the scope and financials of the consolidated AWWTP, expanded reclaimed water system, wastewater collection system improvements and water system capital improvements to obtain maximum grant potential, optimize loan conditions and minimize impact to customers.
- W/WW/RW Projects;
    - Design of the improvements to the city's wastewater treatment system (all phases) is complete. In order to maximize grant opportunities, the initial construction phase was split into two pieces, for a total of four phases;
        - Phase I is construction of the on-site reclaimed water system (storage tanks, high service pumps, electrical) at the existing Harbor Road Facility, and rehabilitation of Master Lift Stations #2 and #4. This phase went out to bid in January in two parts – plant reclaimed water improvements & lift station #2 & #4. **Construction was completed in June 2020**. The total Phase I cost is

$6,120,600. Staff received $4,063,425.00 in "Principal Forgiveness" (grant) from FDEP (SRF).

- Phase II:
  - Construction of the new 1.25 million gallon per day (MGD) advanced wastewater treatment plant (AWWTP) at the Harbor Road site. **Construction approximately 75% complete**
- Phase III:
  - A new force main from Lift Station #2 diverting the sewage from the South Plant to Harbor Road (all sewage generated in the City will be treated at the new Harbor Road AWWTP).
  - Decommissioning and "mothballing" of the South Wastewater Treatment Plant. The permit will remain in place and the plant could be re-commissioned at a later date depending on future activities at the Reynolds site.
- Phase IV (future – determined by growth) is a second identical 1.25 MGD AWWTP built at the Harbor Road site. An alternative would be construction of this train at the South Plant site in Reynolds Park if the southern /Reynolds portion of our service territory is where significant growth occurs
- Phase V (future – determined by growth) is a third identical 1.25 MGD AWWTP built at the Harbor Road or Reynolds site.

- Sanitary Sewer Evaluation Survey (SSES) of the Core City wastewater collection system is **complete**, including Mittauer final report. Staff utilizes this data daily in evaluating collection system repairs and requests for sewer connections.
- Continuing to work with FDOT and Clay County on utility relocations associated with the First Coast Expressway and Clay County road expansions (CR 315 & CR 209 / Russel Road).

- **Senate Bill 64 – Surface Water Discharge Elimination Act:** In 2021 the Florida Senate approved SB 64, which requires wastewater treatment plants to eliminate surface water discharges by 2035, which has become a significant financial burden to utilities. This requires the city to eliminate effluent discharge from the Harbor Road and South wastewater treatment plants to the St. Johns River. While the city has been implementing reclaimed water projects for several years, there are not enough uses to take all of the city's treated wastewater. In November 2021 the city submitted to FDEP a plan as to how surface water discharges will be eliminated.

Potable Water:

- Staff and Mittauer have completed a full review of the future capital needs of the water system. A comprehensive capital improvement program (CIP) has been developed as part of the Water Master Plan. As in the past, the timing of many of these improvements is driven by future activities in Reynolds Industrial Park and other areas of our service territory. The city has received an FDEP – SRF loan for Planning and Engineering of several of the CIP improvements so that as the need for the improvements occur, the City is ahead of the game and can apply very quickly to SRF for actual construction dollars as "shovel-ready" projects. The total design project cost is $356,800.00, with a $178,400.00 (50%) principal forgiveness (grant), leaving an actual loan of $180,100.00.
- Reynolds Water System Improvements:
  - New water mains along two primary streets to remedy fire hydrants that were inadequate.
  - New 12" water main crossing under SR 16 to replace aging mains that endanger the integrity of the road. This eliminated four existing crossings.

- New water main along Red Bay Road eliminating existing aging and leaking pipes. In addition remediating fire hydrants that were inadequate.
- New water main and sewer force main extension from Reynolds Park to and across the MOBRO complex. This extension is designed to supply water, fire protection & sewer needs to MOBRO and future developments to the east.
- **Completed September 2021**

South Service Territory Improvements:

- New 12" water main loop from US17 along CR 209 S to the existing 12" water main that terminated at 4600 CR 209 S. This also included a new 4" sewer force main from US 17 along CR 209 S to the First Coast Expressway crossing. **Completed September 2021**

- The City has received grants from the State of Florida Hazard Mitigation Grant Program (HMGP) to install auxiliary generators at 17 sewage lift stations, and install generators / raise infrastructure at four additional stations. The grant funds 75% of the improvements. **Approximately 99% complete**
- Continued remediation of malfunctioning or out-of-service hydrants.
- Operated and maintained the Harbor Rd. and South Wastewater Treatment Plants as well as the Harbor Rd. and Reynolds Water Treatment Plants to meet the requirements of Regulatory Agencies.
- Continued to make process control adjustments at the Harbor Rd. and South WWTP in efforts to further lower Total Nitrogen and Total Phosphorus levels being discharged to the St. Johns River.
- Continued landscape maintenance at Water and Wastewater Treatment Facilities as well as lift stations.
- Continued preventative maintenance on all treatment facility generators.
- Completed 6 new services.
- Completed 94 water-related work orders.
- Completed 16 sewer related work orders.
- Responded to 69 utilities locate requests.

TOP 10 WATER CUSTOMERS JUNE 2024

Largest (By Consumption)

Rank	CONSUMER
1	Sheriff's Department
2	St Johns Landing
3	Oak Street OPCO LLC
4	Kindred Health
5	Clay County Court House
6	Clay Port INC
7	Premier Surface Design LLC
8	Spring Coin Laundry
9	Garber Realty/Car Wash
10	Heritage Signs INC

Largest (By Dollar Amount)

Rank	CONSUMER
1	Sheriff's Department
2	St Johns Landing
3	Oak Street OPCO LLC
4	Kindred Health
5	Clay County Court House
6	Clay High
7	Clay Port INC
8	Garber Realty/Car Wash
9	Premier Surface Design LLC
10	DREH Holdings LLC

TOP 10 IRRIGATION CUSTOMERS JUNE 2024

Rank	Largest (By Consumption) CONSUMER	Rank	Largest (By Dollar Amount) CONSUMER
1	CITY Of Green Cove Springs	1	City Of Green Cove Springs
2	Urban Jax INC (Council on A)	2	Urban Jax INC (Council on Aging)
3	Magnolia Point Investments	3	Magnolia Point Investments
4	Magnolia Point Association	4	Magnolia Point Assocation
5	DMV Tax Collector	5	DMV Tax Collector
6	Sheriff's Department	6	Sheriff's Department
7	Permabase Building Products	7	Green Cove Springs Junior High
8	Green Cove Springs Junior High	8	Permabase Builing Products
9	Vallencourt Construction	9	Vallencourt Construction
10	Governors Point Yacht Club	10	Governors Point Yacht Club

TOP 10 SEWER CUSTOMERS JUNE 2024

Rank	Largest (By Consumption) CONSUMER	Rank	Largest (By Dollar Amount) CONSUMER
1	Sheriff's Department	1	Sheriff's Department
2	St John's Landing	2	St John's Landing
3	Oak Street OPCO LLC	3	Oak Street OPCO LLC
4	Kindred Health	4	Kindred Health
5	Clay County Court House	5	Clay County Court House
6	Clay Port INC	6	CLAY Port INC
7	Premier Surface Design LLC	7	Clay High
8	Springs Coin Laundry	8	Garber Realty/Car Wash
9	Garber Realty/Car Wash	9	Premier Surface Design LLC
10	Heritage Signs INC	10	Springs Coin Laundry

Wastewater Plant Capacity Status

South Plant: TMDL Capacity 0.350 MGD*,

- Current Loading 0.276 MGD*, 78% Capacity (May 2024 Annual Average)
- Current & Committed (.065) Loading 0.341 MGD*, 97% Capacity
- Current, Committed (.065) & Requested (0.05) Loading 0.346 MGD*, 98% Capacity

Harbor Road: TMDL Capacity 0.650 MGD*

- Current Loading 0.517 MGD*, 79% Capacity (May 2024 Annual Average)
- Current & Committed (0) Loading 0.517 MGD*, 79% Capacity
- Current, Committed & Requested (0) Loading 0.517 MGD*, 79% Capacity

*MGD = Million Gallons per Day

Note: No Reynolds growth or loading projections included in above.

CITY OF GREEN COVE SPRINGS POLICE DEPARTMENT

Chief E.J. Guzman ▪ 1001 Idlewild Avenue ▪ Green Cove Springs, FL 32043 ▪ Main (904) 297-7300 ▪ Fax (904) 284-1436 ▪ www.gcspd.com

The following is the official summary of activity conducted by members of the Green Cove Springs Police Department for the month of June 2024:

Total # Calls for Service: **942**
Total # Arrests: **28**
Total # Traffic Stops: **396** Total # Citations: **121** % Citations to stops: **30%**
Total # Building and business security checks: **1,582**
Total # Police Related Services: **4,305**
Response Times: Not Available
Dispatch Phone Communication: 911 calls: **292** Non-Emergency calls:**365** Walk-In: **31**

Marine Enforcement:

6/1/2024 - Hines
6/7/2024 - Hines (Boater Skip Day)
6/30/2024 - Hines

Red Light Camera Program:

Video Review:
Officer Gann reviewed 882 violations, approved 618 and rejected 264

Total violations reviewed for the month: **882** Approval Rating: **70.07%**
Total hours reviewing video: **14.06**

Traffic complaints received/completed:

Location	Issue	# Officer # Times	Traffic Stops	Traffic Citations	Traffic Warnings	Parking Citations	Issue Y/N
Magnolia Ave/Gum St	Red Lights/Speed	1/3	0	0	0	0	N
Mag West Exits	Stop signs	2/2	1	0	1	0	N
400 Melrose Ave	Speeding	5/9	0	0	0	0	Y
Click it or Ticket	Traffic/Seatbelt		135	107	28	0	Y

***When evaluating traffic complaints, low numbers of stops/citations are a good indication that the issue may not be as prevalent as the citizen believes.17*

Notable Arrests:

2024000817: Battery Domestic Violence
2024000831: Battery Domestic Violence
2024000834: DUI/Accident
2024000850: Battery/Strangulation Domestic Violence
2024000788: Possession of Marijuana/Firearms post search warrant
2024000900: Stolen Vehicle
2024000915: Burglary to Vehicle/Criminal Mischief

Notable K-9 Activity:

Apprehensions: 0 Training Sessions: 2 Total Time Training: 8.5 Hrs
K9 Searches: 2 #Finds: 0 #No Finds: 2
Mutual Aid Calls: 0

Narcotics Finds: 2

Training:

Axon Taser 10 and Body Worn Camera (BWC) 4 training completed for all officers
New Taser Weapons deployed into service.

Chief of Police Activity:

Interviews for the Administrative Assistant position
Budget meeting
Meeting with Chief Herrera, from Clay County Fire-Rescue, in reference to AED machine and Narcan
Swearing In of 6 newer officers
Florida Chief of Police Association Conference in Ponte Vedra
Anniversary meeting with Communications Officer Harris
Riverfest after-action meeting
Police Academy graduation for Shawn Green and Kolby Hancock
League of Cities Dinner in Orange Park

#673

ELECTRIC DEPARTMENT

Significant activities for the month of June 2024

- 11 Streetlights repaired
- 6 Streetlights removed
- 2 Streetlights installed
- 1 New pole installed
- 17 Poles removed
- 7 permanent meters installed
- 1 New meter installed
- 1 Temporary meter installed
- 2 Voltage checks
- 1 Utility verification
- 2 Disconnects for demolition

In addition to the activities listed above, the Electric Department also:

- Conducted daily morning safety meetings.
- Conducted daily truck inspections.
- Trimmed limbs and vines from power lines and poles.
- Unloaded transformers and supplies when they came in.
- Inspect/locate ROW permits.
- Conduct warehouse inventory/order supplies.
- 3106 Hwy 17, build 3 phase riser pole and 4” conduit with 1/0 URD to sectionalize.
- 1289 Harbor Rd., replaced URD transformer for Water Department pump.
- City wide, reset all reclosure alarms and got reads.
- 619 Ferris St., re-route secondarys for clearance.
- Spruce St & West St., made slack span, added anchor.
- 1 Oakridge Ave., removed school zone #6 duplex wire and all hardware.
- 229 Pringle Circle., installed new triplex and all connections.
- 1517 Ball Rd., covered up 2 phase line for tree removal.
- 4 Robert St., disconnected service for panel changed out.

During the month of June, the Electric Department responded to the following outages:

06/08/2024 – Between 6:00 p.m. – 8:00 p.m., 309 Florida Ct., refused cutouts, 5 customers affected.

06/09/2024 – Between 5:00 p.m. – 7:30 p.m., 3383 CR 209, squirrel blown fuse replaced, 2 customers affected.

06/13/2024 – Between 5:00 p.m. – 7:30 p.m., 226 Pringle Circle, tree came down we removed service and re-energized transformer, 2 customers affected.

06/20/2024 – Between 6:30 a.m. – 7:30 a.m., 1601 Hwy 17, removed tree limb from switch, 7 customers affected.

06/23/2024 – Between 4:30 p.m. – 7:30 p.m., 3179 River Rd., blown fuse in 2 transformers, 10 customers affected.

06/24-25/2024 – Between 11:25 p.m. – 3:30 a.m., 1243 Governors Creek, customers tree fell on service, replaced primary, neutral and re-fuse switch cabinet, 35 customers affected.

06/26/2024 – Between 10:54 a.m. – 12:45 p.m., 1453 Wilkies Point, blown fuse, 2 customers affected.

06/26/2024 – Between 2:00 p.m. – 4:30 p.m., 1411 & 1423 Wilkies Point, refuse 4 cut outs, 6 customers affected.

06/26/2024 – Between 4:00 p.m. – 4:30 p.m.,1268 LeBlanc Rd., blown fuse, refused lateral, 5 customers affected.

06/26-27/2024 – Between 8:00 p.m. – 3:00 a.m., City Wide (Chapman Sub), bus bar insulation damaged by lightning, repaired and replaced, 250 customers affected.

06/28/2024 – Between 1:30 a.m. – 8:15 a.m., 1734 Muirfield Dr & 3597 Oglebay Dr., 2 blown underground transformers and switch gear fuses and we replaced 2 each transformers, 100 customers affected.

06/28/2024 – Between 7:23 a.m. – 8:00 a.m.,1944 Hwy 16W., lateral fuse blown, 2 customers affected.

Electric Utility Top Consumption Customers (kwh/meter) for June:

NAME	SERVICE ADDRESS	KWH	AMOUNT
St. Johns Landing	1408 N. Orange Ave.	287,020	$ 41,671.40
Clay County Jail	901 N. Orange Ave.	244,240	$ 34,441.66
Winn Dixie Stores, Inc	3260 Hwy. 17 N.	200,000	$ 27,257.70
Kindred Health	801 Oak St.	164,600	$ 22,475.15
Clay County Court House	825 N. Orange Ave.	135,400	$ 19,045.07
Permabase Building Products	1767 Wildwood Rd	135,360	$ 19,079.94
BD Of Public Instruction	2025 State Road 16	121,600	$ 18,425.59
Tamko Roofing Products	914 Hall Park Rd.	117,600	$ 18,200.59
BD Of County Commissioner	825 N. Orange Ave.	109,760	$ 15,261.29
Oak Street Opco LLC	803 Oak St.	92,000	$ 12,983.60
City of Green Cove Springs	1277 Harbor Road	82,640	$ 11,160.37
BD Of Public Instruction	Clay High School	81,600	$ 13,537.46
BD Of County Commissioner	477 Houston St (DMV)	66,880	$ 9,755.62
City of Green Cove Springs	Set Street Lights	66,392	$ 9,953.88
Garber Realty/GMC	3340 Highway 17	63,680	$ 9,229.64
BD Of Public Instruction	1 N Oakridge Ave.	63,120	$ 7,591.48
Coral Ridge Foods, GC	1165 N Orange AVE	58,480	$ 8,133.44
City of Green Cove Springs	1277 Harbor Road (WWP)	56,880	$ 8,447.09
BD Of Public Instruction	801 Center St	53,920	$ 7,935.33
AMMCON CORP	1503 CR 315 STE 201	53,700	$ 8,089.28
BD Of Public Instruction	608 Mill St.	52,640	$ 8,164.62
Direct TV/ ATT Services, Inc.	512 Center St	47,520	$ 6,595.05
BD Of Public Instruction	1220 Bonaventure Ave	46,400	$ 6,893.89
Pegasus Technologies	932 Pilot DR HANGER 3 & 4	43,680	$ 6,655.83

Electric Utility Department Capital Projects:

Pole top switch replacement

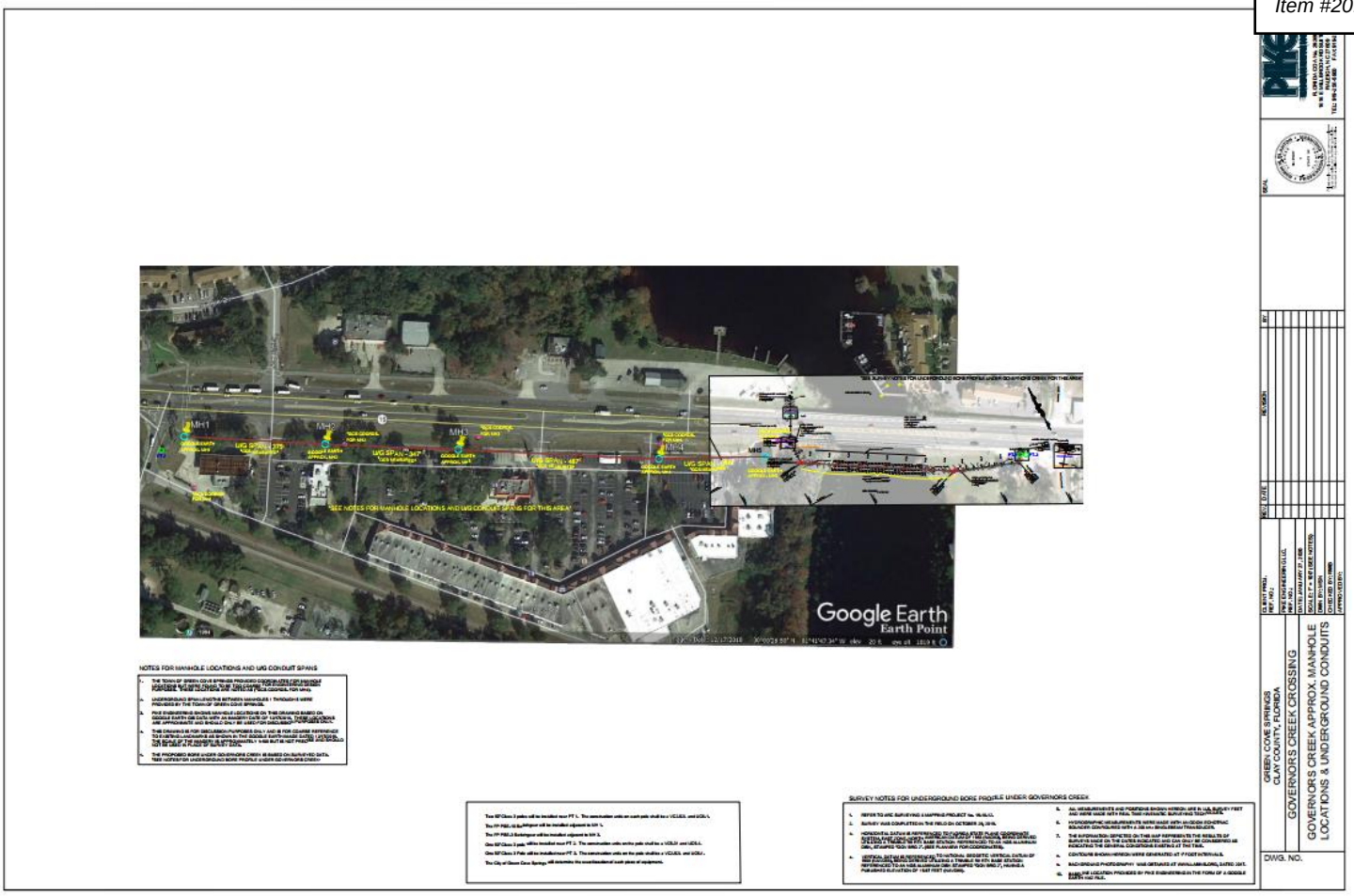
This project began 09-18-2019 with the installation of switches at Governors Creek for restoration plan of isolation of north feeder across Governors Creek Bridge during extreme emergencies. Project is now in the inspection and evaluation process involving Chapman 2 extension to Harbor Rd and load transfer of Chapman 1 to Chapman 2.

13kV to 23kv Conversion – US17 from Harbor Road to CR 315

Planning for this project has begun. This project will continue the Chapman 1 and Chapman 2 circuits north of Harbor Road to provide capacity and reliability for existing and future customers north of Governors Creek. Materials for this project are being funded by a DEO Grant. Materials have arrived and installed

Governors Creek Hardening Project

This project will allow the overhead conductor crossing Governors Creek to be placed underground from Grove Street to Harbor Road. This project has been split into two phases: (1) design and permitting and (2) construction. It is being 75% funded by a FEMA HMGP grant. Phase 1 is complete. The project is now being evaluated by FDEM and FEMA funding for the construction phase. Once funding is in place and a contract is executed, bidding and construction should take approximately 9 months. This project will also support to extension of Chapman 1 and Chapman 2 circuits north of Governors Creek to provide additional capacity and reliability for all customers north of Governors Creek.



North and South Substation Improvements

North and South substation sub-station upgrades have begun with directional bore designs completed to install URD 23KV feeds to substation transformers eliminating the possibility of catastrophic failure in the event of lightning or material failure which could cause conductor to fall into existing bus work.

City of Green Cove Springs
(904) 297-7500 321 Walnut Street Green Cove Springs, FL 32043
Florida Relay – Dial 7-1-1 www.greencovesprings.com

MEMORANDUM

To: Steve Kennedy, City Manager

From: Development Services Department

Date: July 15, 2024

Subject: Monthly Planning, Code Enforcement and Building Report for June 2024

PLANNING

1 new business license was issued, and one business was renewed. New business is:

- Three Sisters Coffee

Total Business Tax Revenue for **June** was **$110.00**

During the month of June:

- Began or continued reviewing the following planning applications:
  - **US16/17 Map Amendment, Text Amendment and PUD Rezoning**
  - **Clay Habitat Palmer Street Re-Plat**
  - **Clay County Economic Development Building Site Plan**
  - **Rookery PUD Modification**
  - **Rookery US17 Rezoning Request**
  - **1689 Idlewild Minor Site Plan**
  - **Worth Metals Minor Site Plan**
  - **Shands Bridge Construction Trailer Minor Site Plan**
- The following applications were approved:
  - **Fun in the Sun Special Event**
  - **Springs Chapel Special Exception**
  - **Clay County EDC Special Exception**
- **20 lien search requests**, and **4 new permit applications were submitted.**
- Revenues for Planning related fees for **June** were **$4,834.50**.

CODE ENFORCEMENT

In June, there were twenty-five new enforcement complaints filed. Voluntary compliance was achieved for three of the cases resulting in case closure. For Fiscal Year 2023-2024, Code Enforcement has collected $15,605.56 in Code Enforcement fines.

Compliance for June courtesy notice of violation/notice of violations:

Compliance for June courtesy notice of violation/notice of violations:

• 3 of 25 (12%) courtesy notices of violation/notice of violation were complied with.

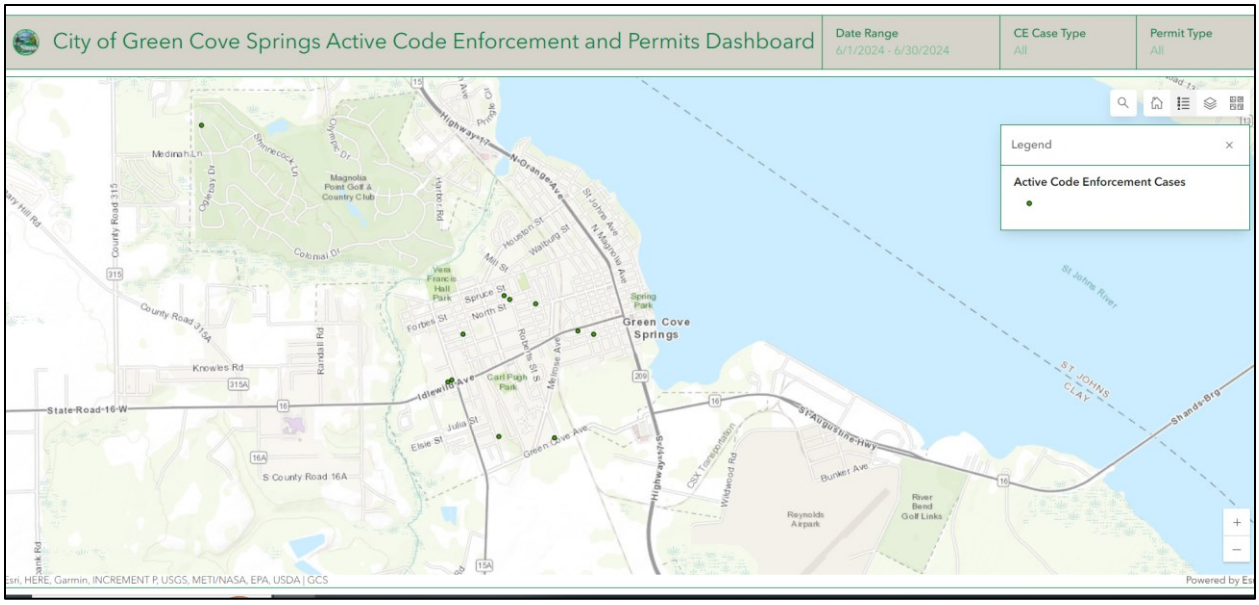
• 1 of 14 (7%) notices of violation were voluntarily complied with.

• 14 notices of violation from previous months compliance were achieved resulting in case closure.

• 5 courtesy notices of violation from previous months compliance were achieved resulting in closure.

• 238 cases courtesy notices of violation/notice of violation complied year to date.

New Code Enforcement Cases for June 2024

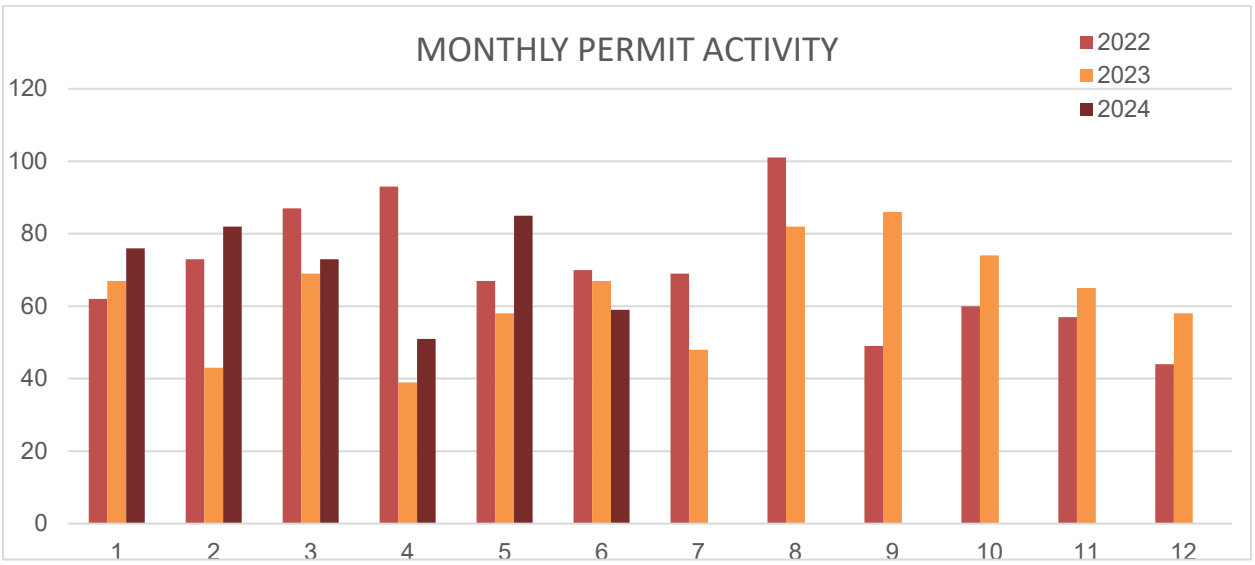


BUILDING

Building permit activity decreased 69.41% from May to June. The total number of building permits issued in May was 85 compared to 59 in June. Permit activity for June 2024 decreased by 88.06% from June 2023.

Revenues for Building related fees for **June** were **$8,672.00**.

JUNE 2024 PERMIT SUMMARY	
RESIDENTIAL NEW	0
COMMERCIAL NEW	1
RESIDENTIAL ADDITION	8
COMMERCIAL ADDITION	0
RESIDENTIAL REMODEL / IMPROVEMENT	6
COMMERCIAL REMODEL / IMPROVEMENT	0
DEMOLITION	0
SIGNS	2
POOLS	0
RE-ROOFING	9
FENCES	4
MECHANICAL / ELECTRICAL / PLUMBING	22
OTHER PERMITS	7
TOTAL PERMITS ISSUED	**59**



Active Building Permits 6/1 to 6/30/24