



CITY OF LEEDS, ALABAMA

PLANNING AND ZONING COMMISSION AGENDA

1412 9th St - Annex

November 03, 2022 @ 5:00 PM

CALL TO ORDER:

ROLL CALL:

DETERMINATION OF QUORUM:

APPROVAL OF MINUTES FROM PREVIOUS MEETING(S):

OLD BUSINESS:

NEW BUSINESS:

1. SA22-000020 - A request by Crystal Grimmer, Applicant, AMIC, Property Owner, for preliminary plat approval for Rockhampton Phase One (1) Sector Two (2) and Rockhampton Phase Two (2) located at 1250 Maitland Rd, Leeds, AL 35094, TPID 2500153001004001, Jefferson County, Zoned R-2, Single Family District
2. SA22-000021 - A request by Kenneth and Sandra Simmons, Applicant and Owner for two (2) lot subdivision at 8681 Spruiell St., TPID 250022100008004, Jefferson County, Zoned - I-2, Heavy Industrial District
3. Administrative - Release of bond - Spring Valley
4. Administrative - Construction Plan Review - Parkstone Meadows Apartments - 1198 Maplewood Dr - TPID 250020400202000 - Zoned R-3, Multi-Family District.
5. Administrative - Determination of Bond/Surety for Southern Trace Sector 5
6. Administrative - A request by MainStreet Leeds, LLC, for the Planning Commission to develop regulations to permit short term rentals in the City of Leeds.

PUBLIC ADDRESS:

OTHER BUSINESS:

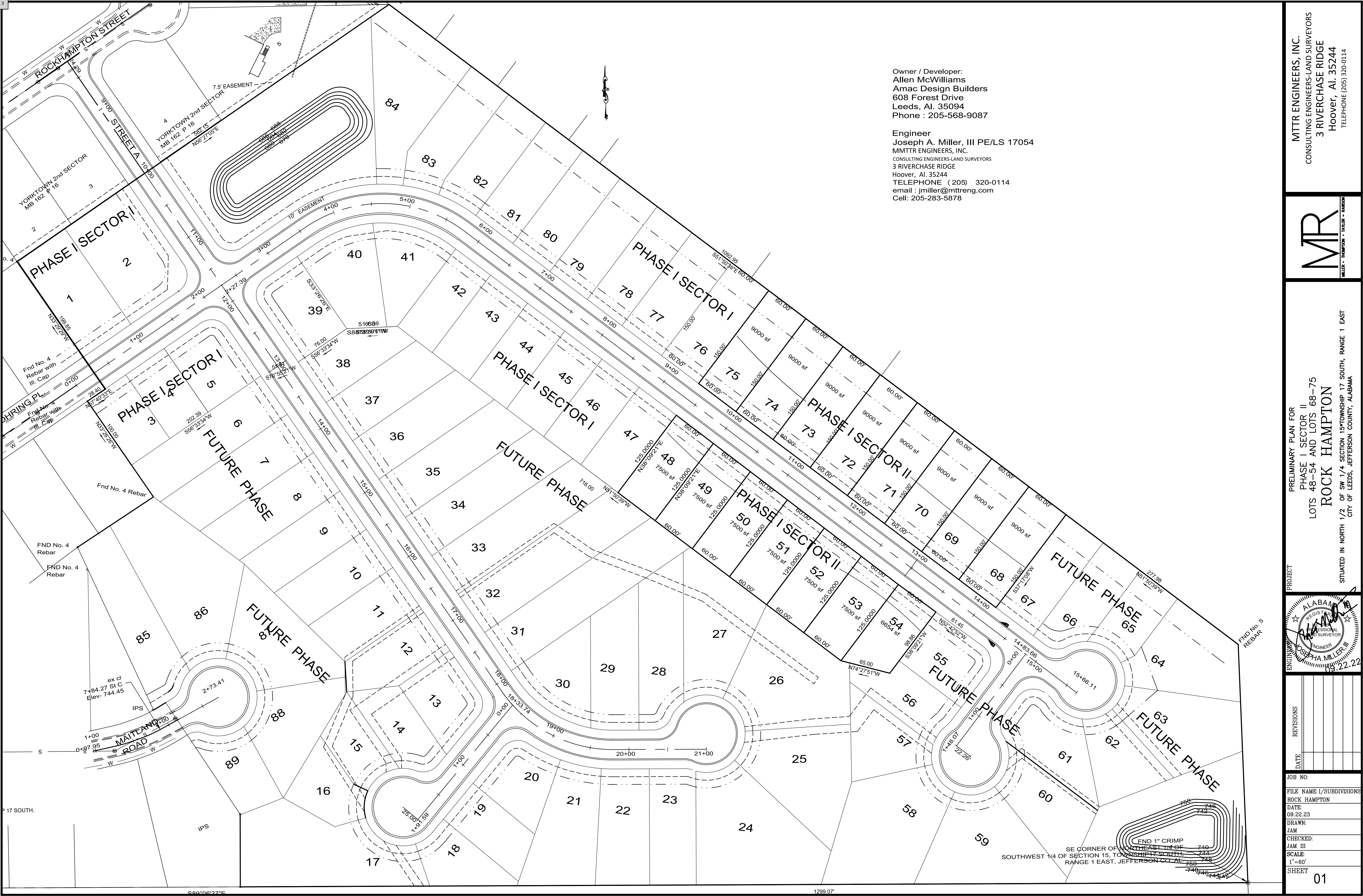
CHAIRPERSON'S COMMUNICATION:

ADJOURNMENT:

In compliance with the Americans with Disabilities Act, those requiring accommodation for Council meetings should notify the City Clerk's Office at least 24 hours prior to the meeting at 205-699-2585.

File Attachments for Item:

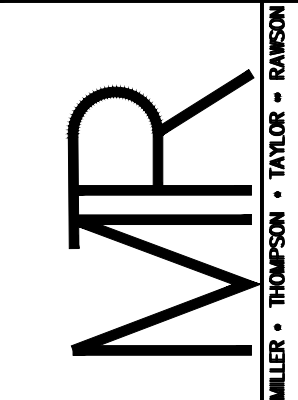
1. SA22-000020 - A request by Crystal Grimmer, Applicant, AMIC, Property Owner, for preliminary plat approval for Rockhampton Phase One (1) Sector Two (2) and Rockhampton Phase Two (2) located at 1250 Maitland Rd, Leeds, AL 35094, TPID 2500153001004001, Jefferson County, Zoned R-2, Single Family District



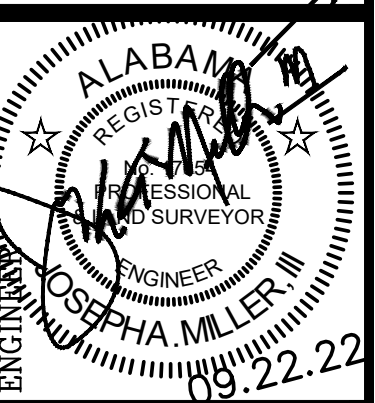
Owner / Developer:
Allen McWilliams
Amac Design Builders
608 Forest Drive
Leeds, AL 35094
Phone : 205-568-9087

Engineer
Joseph A. Miller, III PE/LS 17054
MMTTR ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
3 RIVERCHASE RIDGE
Hoover, AL 35244
TELEPHONE (205) 320-0114
email : jmiller@mttreng.com
Cell: 205-283-5878

MTTR ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
3 RIVERCHASE RIDGE
Hoover, AL 35244
TELEPHONE (205) 320-0114



PRELIMINARY PLAN FOR
PHASE I SECTOR II
LOTS 48-54 AND LOTS 68-75
ROCK HAMPTON
SITUATED IN NORTH 1/2 OF SW 1/4 SECTION 15, TOWNSHIP 17 SOUTH, RANGE 1 EAST
CITY OF LEEDS, JEFFERSON COUNTY, ALABAMA



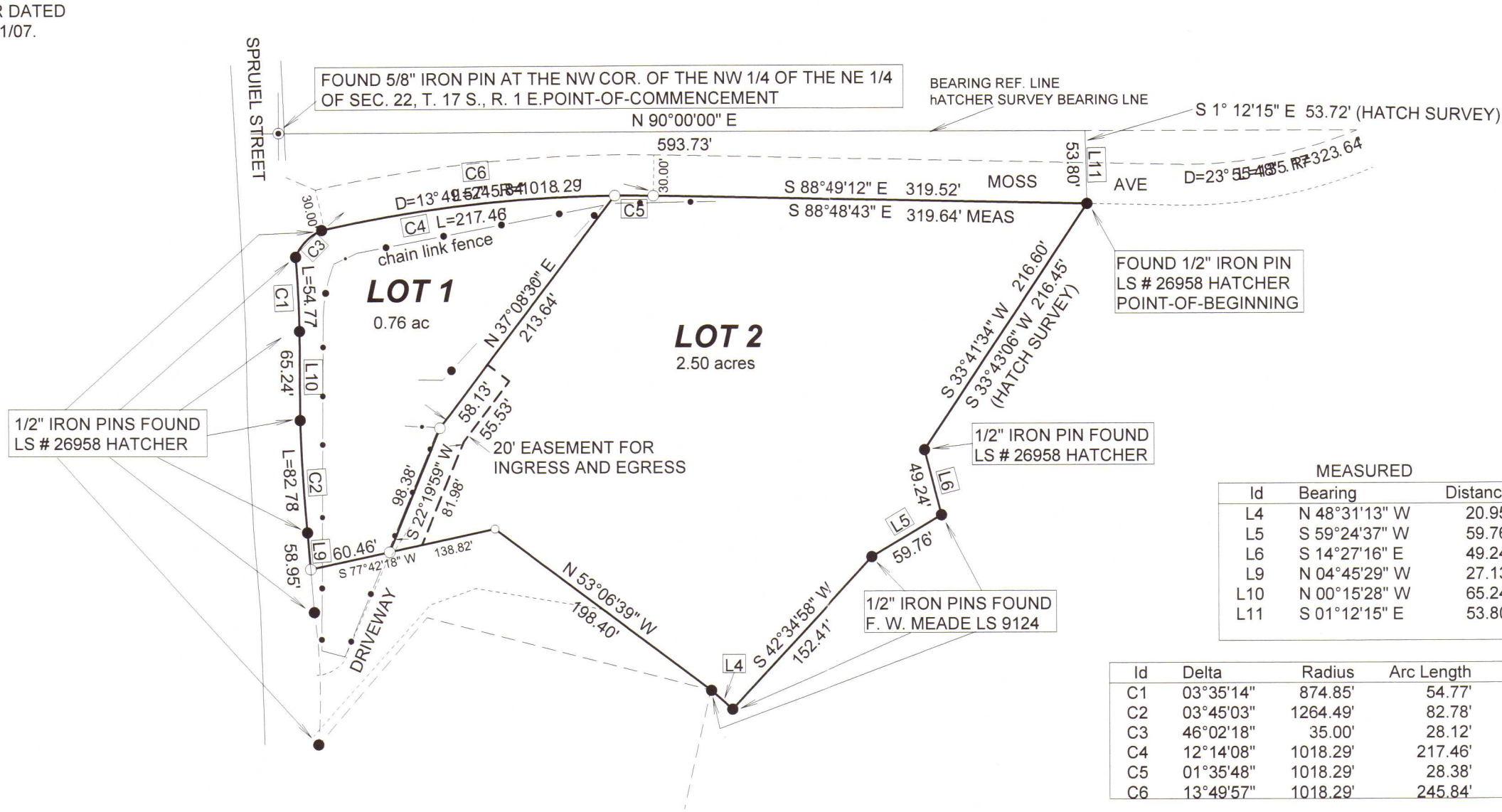
DATE	REVISIONS

JOB NO:
FILE NAME: I/SUBDIVISIONS
ROCK HAMPTON
DATE:
09.22.23
DRAWN:
JAM
CHECKED:
JAM III
SCALE:
1"=60'
SHEET

File Attachments for Item:

2. SA22-000021 - A request by Kenneth and Sandra Simmons, Applicant and Owner for two (2) lot subdivision at 8681 Spruiell St., TPID 250022100008004, Jefferson County, Zoned - I-2, Heavy Industrial District

BASIS OF SURVEY: SURVEYS BY
CHARLES R. HATCHER DATED
SEPT. 8, 2007, AND 9/11/07.

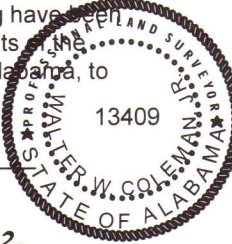


DESCRIPTION:
Comemnce at a 5/8" iron pin at the Northwest corner of the Northwest 1/4 of the Northeast 1/4 of Section 22, Township 17 South, Range 1 East; thence North 90 degrees East a distance of 593.73 feet; thence South 1 degree 12 minutes 15 seconds East a distance of 53.80 feet to a 1/2" iron pin for a point-of-beginning; thence South 33 degrees 41 minutes 34 seconds West a distance of 216.60 feet to a 1/2" iron pin; thence South 14 degres 27 minutes 16 seconds East a distance of 49.24 feet to a 1/2" iron pin; thence South 59 degrees 24 minutes 37 seconds West a distance of 59.76 feet to a 1/2" iron pin; thence South 42 degrees 34 minutes 58 seconds West a distance of 152.41 feet to a 1/2" iron pin; thence North 48 degrees 13 minutes 13 seconds West a distance of 20.95 feet to a 1/2" iron pin; thence North 53 degrees 06 minutes 39 seconds West a distance of 198.40 feet to a mark in concrete; thence South 77 degrees 42 minutes 18 seconds West a distance of 138.82 feet to a 1/2" iron pin on the easterly right-of-way of Spruiel Street; thence North 4 degrees 45 minutes 29 seconds West a distance of 27.13 feet to a 1/2" iron pin at the beginning of a curve to the right which has a radius of 1264.49 feet, a delta angle of 3 degrees 45 minutes 03 seconds and a chord of North 3 degrees 29 minutes 59 seconds West, 82.76 feet(chord length); thence along the arc of said curve a distance of 82.78 feet to a 1/2" iron pin; thence North 0 degrees 15 minutes 28 seconds West a distance of 65.24 feet to the beginning of a curve to the left which has a radius of 874.85 feet, a delta angle of 3 degrees 35 minutes 14 seconds and a chord of North 2 degrees 46 minutes 32 seconds West, 54.77 feet(chord length); thence along the arc of said curve a distance of 54.77 feet to a 1/2" iron pin at the beginning of a curve to the right which has a radius of 35 feet, a delta angle of 46 degrees 02 minutes 18 seconds and a chord of North 44 degrees 17 minutes 43 seconds East, 27.37 feet(chord length); thence along the arc of said curve a distance of 28.12 feet to a 1/2" iron pin at the beginning of a curve to the right which has a radius of 1018.269 feet, a delta angle of 13 degrees 49 minutes 57 seconds and a chord of North 84 degrees 15 minutes 00 seconds East, 245.24 feet(chord length); thence along the arc of said curve a distance of 245.84 feet to a 1/2" iron pin; thence South 88 degrees 49 minutes 12 seconds East a distance of 319.64 feet to the point-of-beginning. Containing 3.25 acres and lying in the Northwest 1/4 of the Northeast 1/4 of Section 22, Township 17 South, Range 1 East, Jefferson County, Alabama.

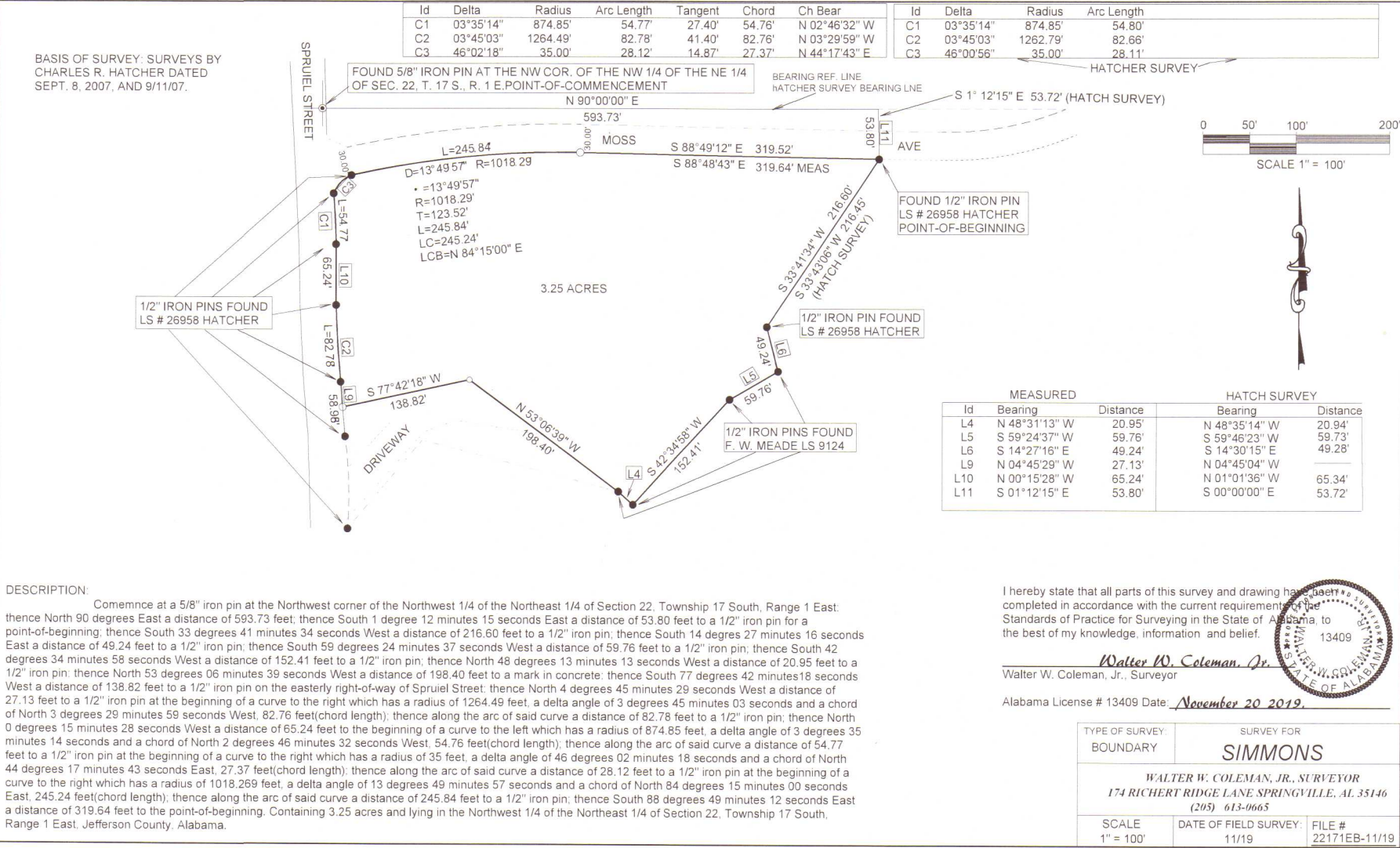
I hereby state that all parts of this survey and drawing have been completed in accordance with the current requirements of the Standards of Practice for Surveying in the State of Alabama, to the best of my knowledge, information and belief.

Walter W. Coleman, Jr.
Walter W. Coleman, Jr., Surveyor

Alabama License # 13409 Date: April 7, 2022.



TYPE OF SURVEY: BOUNDARY	SURVEY FOR SIMMONS
WALTER W. COLEMAN, JR., SURVEYOR 174 RICHERT RIDGE LANE SPRINGVILLE, AL 35146 (205) 613-0665	
SCALE 1" = 100'	DATE OF FIELD SURVEY: 11/19 & 3/22 FILE # 22171EB2-4/22

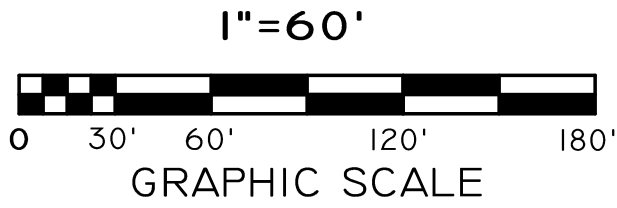


File Attachments for Item:

4. Administrative - Construction Plan Review - Parkstone Meadows Apartments - 1198 Maplewood Dr - TPID 250020400202000 - Zoned R-3, Multi-Family District.

Owner / Developer:
Steve French
Parkstone Meadows, LLC,
1309 Coffeen Avenue, Suite 1200
Sheridan, Wyoming, 82801

Engineer:
Joseph A. Miller, III
MTTR ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
3Riverchase Ridge
Hoover, Al. 35244



SITE DATA TABLE

PROPERTY AREA= 7.82 AC.

ZONING: R-3 City of Leeds

LAND USE
CURRENT: VACANT R-3
PROPOSED 60 2 Bedroom Apt. Units
126 Proposed 9' x 19' Parking Spaces, 120 Required Parking Spaces

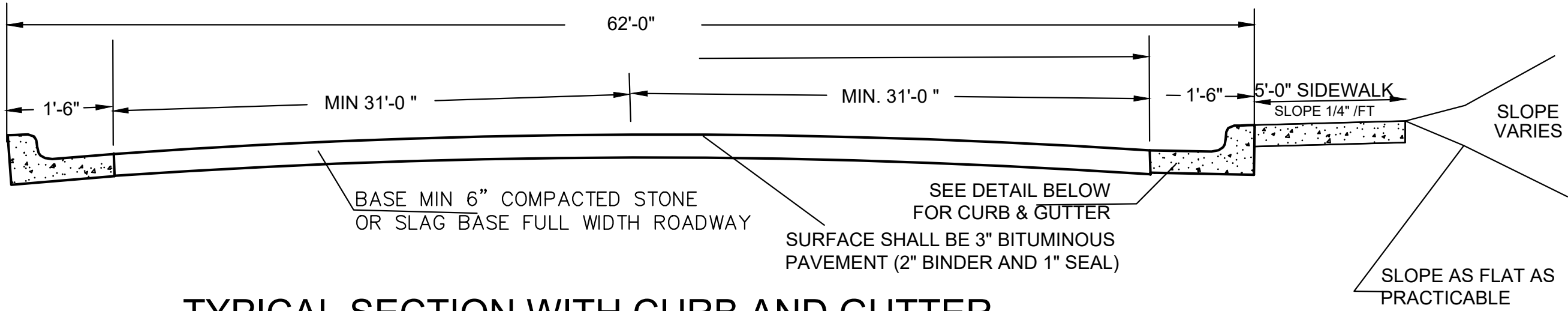
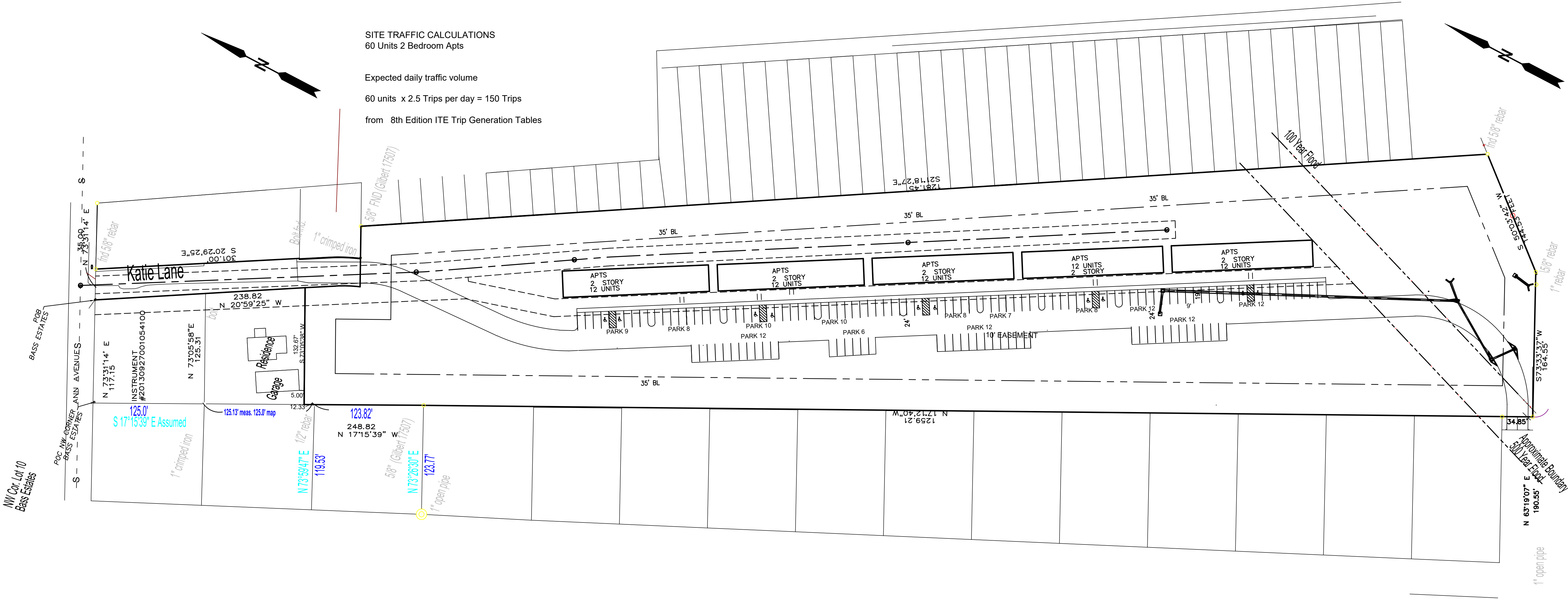
BUILDING SETBACKS:
Front: 35'feet
Rear: 35' feet
Side: 10 feet

SITE TRAFFIC CALCULATIONS
60 Units 2 Bedroom Apts

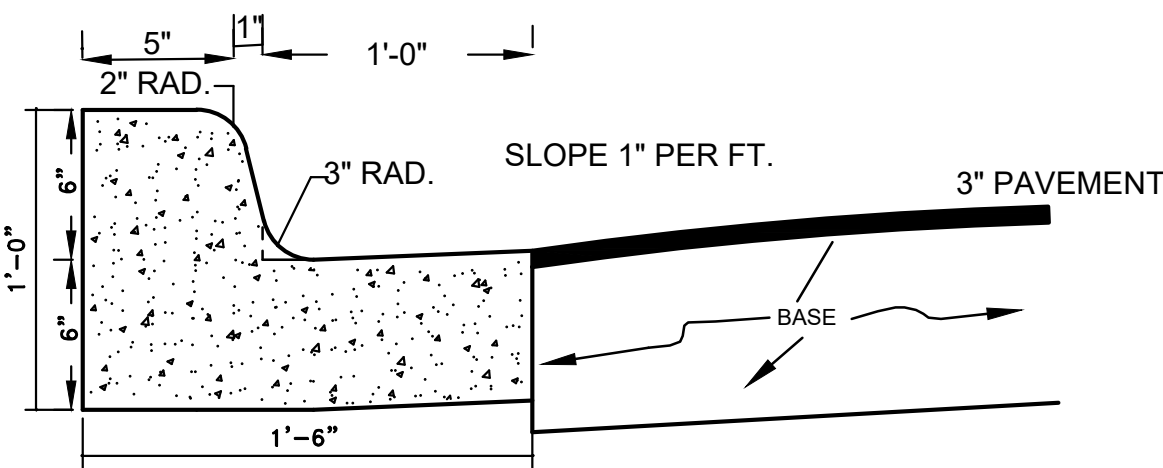
Expected daily traffic volume

60 units x 2.5 Trips per day = 150 Trips

from 8th Edition ITE Trip Generation Tables



TYPICAL SECTION WITH CURB AND GUTTER

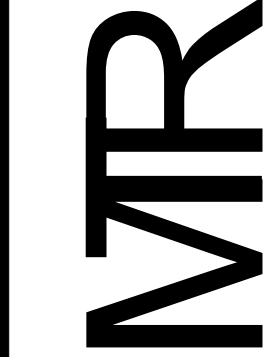


1' CONCRETE COMBINED
CURB & GUTTER

GENERAL NOTES FOR CURB AND CURB AND GUTTER

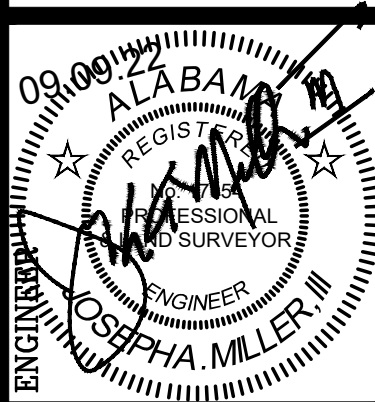
- EXPANSION JOINTS SHALL BE PLACED IN CURB AND/OR GUTTER TO MATCH THOSE IN CONCRETE PAVEMENT WHERE THE TWO ARE ADJACENT.
- EXPANSION JOINTS 3/4 INCH WIDE SHALL BE PLACED WHERE CURB AND/OR GUTTER TERMINATES AGAINST RIGID OBJECTS.
- EXPANSION JOINT FILLER AND SEALER SHALL MEET THE REQUIREMENTS OF ARTICLES 832.01 AND 832.02. EXPANSION JOINT FILLER SHALL EXTEND FROM THE BOTTOM FO THE CURB AND/OR GUTTER TO WITHIN ONE INCH OF THE TOP. THE SEALER SHALL BE 3/4 INCH. THICK AND SHALL BE RECESSED 1/4 INCH FROM THE TOP.
- CONTRACTION JOINTS SHALL BE PLACED IN CURB AND/OR GUTTER TO MATCH THOSE IN CONCRETE PAVEMENT WHERE THE TWO ARE ADJACENT, BUT IN NO INSTANCE MORE THAN 20 FEET BETWEEN JOINTS. THE CONTRACTION JOINTS SHALL BE SAWED OR OTHERWISE CUT 2 INCHES DEEP BY 1/8 INCH WIDE AND SHALL EXTEND 2 INCHES BELOW THE PAVEMENT SURFACE.
- CONTRACTOR MAY BE PERMITTED TO EXCEED MIN. CURB HEIGHT IN ORDER TO PLACE CURB ON BASE LAYER, IF HE SO DESIRES.

MTTR
ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
3 Riverchase Ridge, Hoover, Al. 35244
TELEPHONE (205) 320-0114



PRELIMINARY PLAN
PARKSTONE MEADOWS
KATIE LANE
LEEDS ALABAMA
Parkstone Meadows, LLC,
Sheridan, Wyoming, 82801

PROJECT

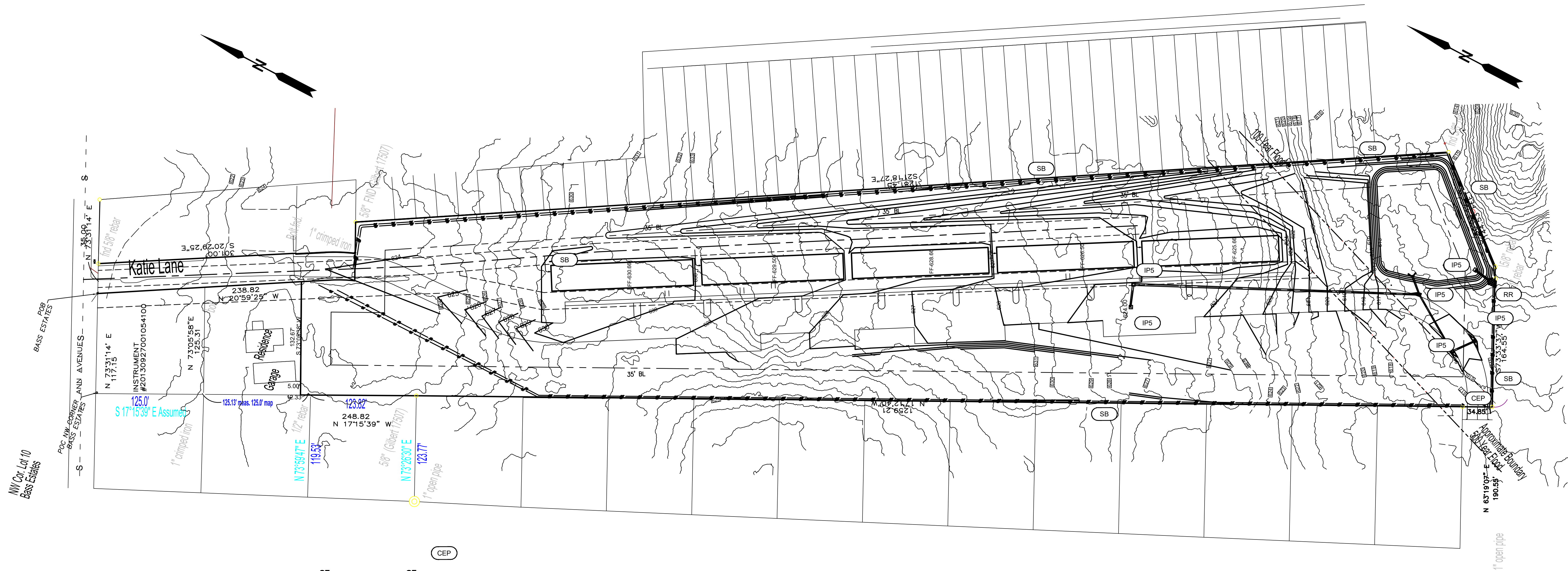


REVISIONS

DATE

JOB NO:
SUBDIVISIONS
FILE NAME: PARKSTONE
MEADOWS
SUB_03.08.22
DATE:
03.10.22
DRAWN:
JAM III
CHECKED:
JAM III
SCALE:
1"=60'
SHEET

Engineer:
Joseph A. Miller, III
MTTR ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
2500 Southlake Park , Suite 100
Hoover, AL 35244



- EROSION CONTROL PHASING NOTES**
1. INSTALL STABILIZED CONSTRUCTION EXIT AND CEMMP ENTRANCE SIGN.
 2. INSTALL PERIMETER SILT FENCE ON THE SITE (CLEAR ALL AREAS NECESSARY TO INSTALL SILT FENCE).
INSTALL AND STABILIZE PERIMETER HYDRAULIC CONTROL STRUCTURES (SWALES, CHECK DAMS, ETC.).
 3. REQUIRE ALL EXPOSED HOME SITES TO BE PROTECTED BY A PERMANENT EROSION CONTROL MEASURE.
 4. INSTALL REMAINING HYDRAULIC CONTROL STRUCTURES (BERMS, SWALES, CHECK DAMS, ETC.) AND STABILIZE.
 5. BEGIN GRADING THE SITE.
 6. REQUIRE ALL EXPOSED AREAS TO BE PROTECTED BY A PERMANENT EROSION CONTROL MEASURE. STABILIZATION IS COMPLETE.
 7. CONTRACT CDP FOR FINAL INSPECTION AND ISSUE NOTICE OF TERMINATION TO ADE.

DATE	REVISIONS

JOB NO:
SUBDIVISIONS
FILE NAME: PARKSTONE
MEADOWS
SUB: 03-00-22
DATE:
03.10.22
DRAWN:
JAM III
CHECKED:
JAM III
SCALE:
1"=60'
SHEET

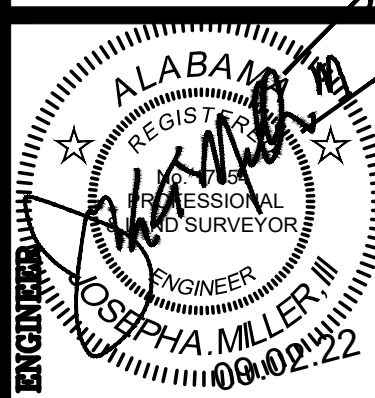
GRADING EROSION CONTROL PLAN

PARKSTONE MEADOWS

Parkstone Meadows, LLC,
Sheridan, Wyoming 82801

Sheridan, Wyoming. 82

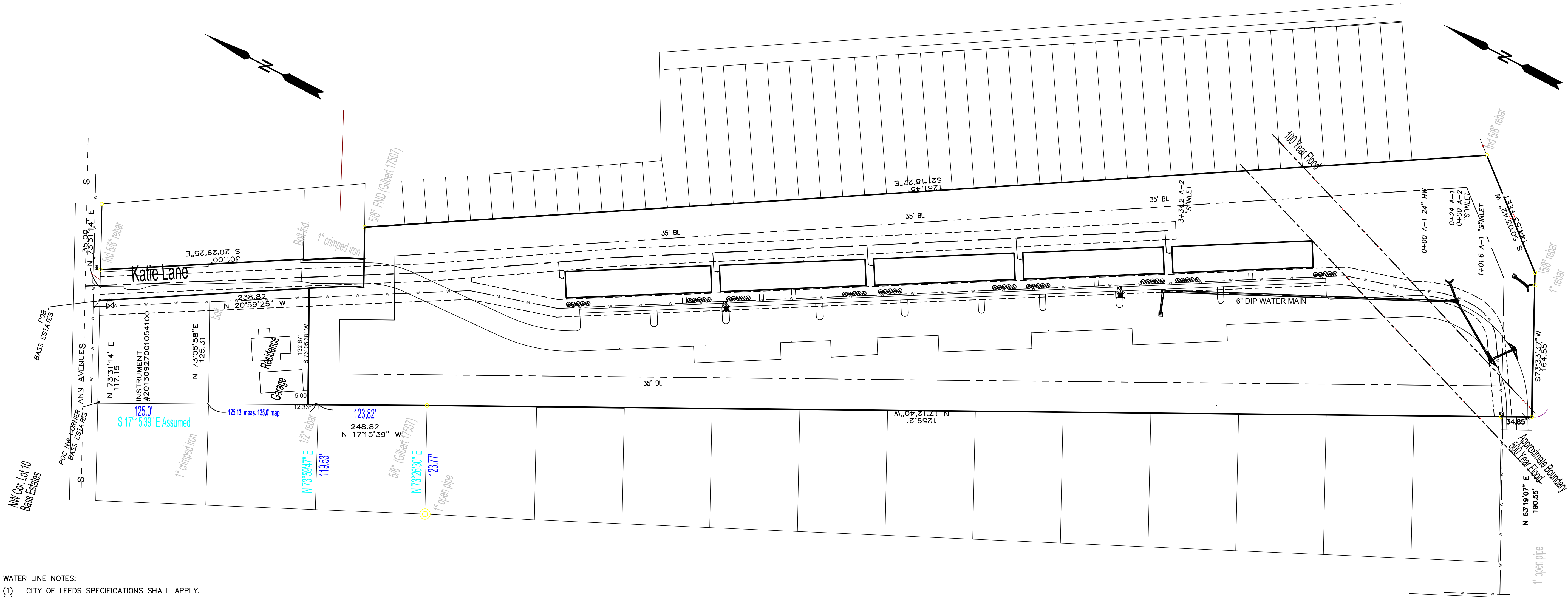
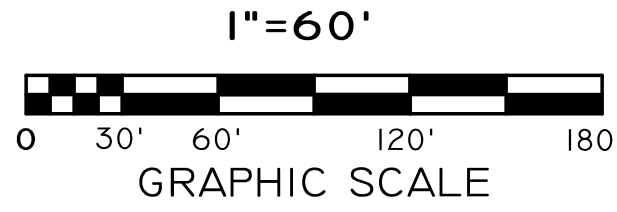
PROJECT



MTRR
ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
3 Riverchase Ridge
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TELEPHONE (205) 320-0114



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WATER LINE NOTES:

- (1) CITY OF LEEDS SPECIFICATIONS SHALL APPLY.
- (2) CONTRACTOR IS TO NOTIFY CITY OF LEEDS 72 HOURS BEFORE BEGINNING CONSTRUCTION.
- (3) CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS.
- (4) ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE CURRENT ALABAMA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- (5) CONTRACTOR SHALL INSTALL EROSION CONTROL DEVICES BEFORE CONSTRUCTION BEGINS. SUCH DEVICES SHALL BE INSPECTED AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
- (6) JOB SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
- (7) THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE CITY OF LEEDS WATER DEPARTMENT.
- (8) ALL WATER MAINS SHALL BE PER LWWB REQUIREMENTS AND SPECS.
- (9) ALL SERVICE SHALL BE REHAU/MUNIPLEX AND SHALL BE EXTEND PAST SIDEWALK.
- (10) FIRE HYDRANTS LOCATIONS SHALL BE DETERMINED BY THE CITY OF LEEDS FIRE CHIEF AND/OR CITY ENGINEER.
- (11) ALL FITTINGS TO BE LWWB REQUIREMENTS AND SPECIFICATIONS.
- (12) THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE CITY OF LEEDS WATER DEPARTMENT.
- (13) ALL WATER LINES SHALL BE PRESSURE TESTED AND TEST REPORTS SHALL BE PRESENTED TO LWWB.
- (14) ALL VALVES SHALL HAVE VALVE BOXES INSTALLED. PVC, D.I. PIPE SHALL NOT BE USED AS VALVE BOXES.
- (15) ALL VALVES BOXES SHALL BE UNCOVERED, BROUGHT TO GRADE LEVEL AND CONCRETE COLLARS INSTALLED.
- (16) ALL FIRE HYDRANTS ON POTABLE WATER SYSTEM SHALL BE AT GRADE LEVEL.
- (17) ALL SERVICE LINES SHALL BE EXPOSED WITH 3" PVC AND EXTEND A MINIMUM 2 FEET ABOVE GRADE.

MATERIALS REQUIRED 01.26.22

1750 LF 6" DIP CLASS 350/350
2 FIRE DEPARTMENT CONNECTION
2 FIRE HYDRANTS WITH LOCKING FH TEE AND VALVE
2-6" VALVE
500 LBS. FITTINGS
PRESSURE TEST OF SYSTEM
TIE INTO EXISTING WATER MAINS
HEALTH DEPT. WATER SAMPLES

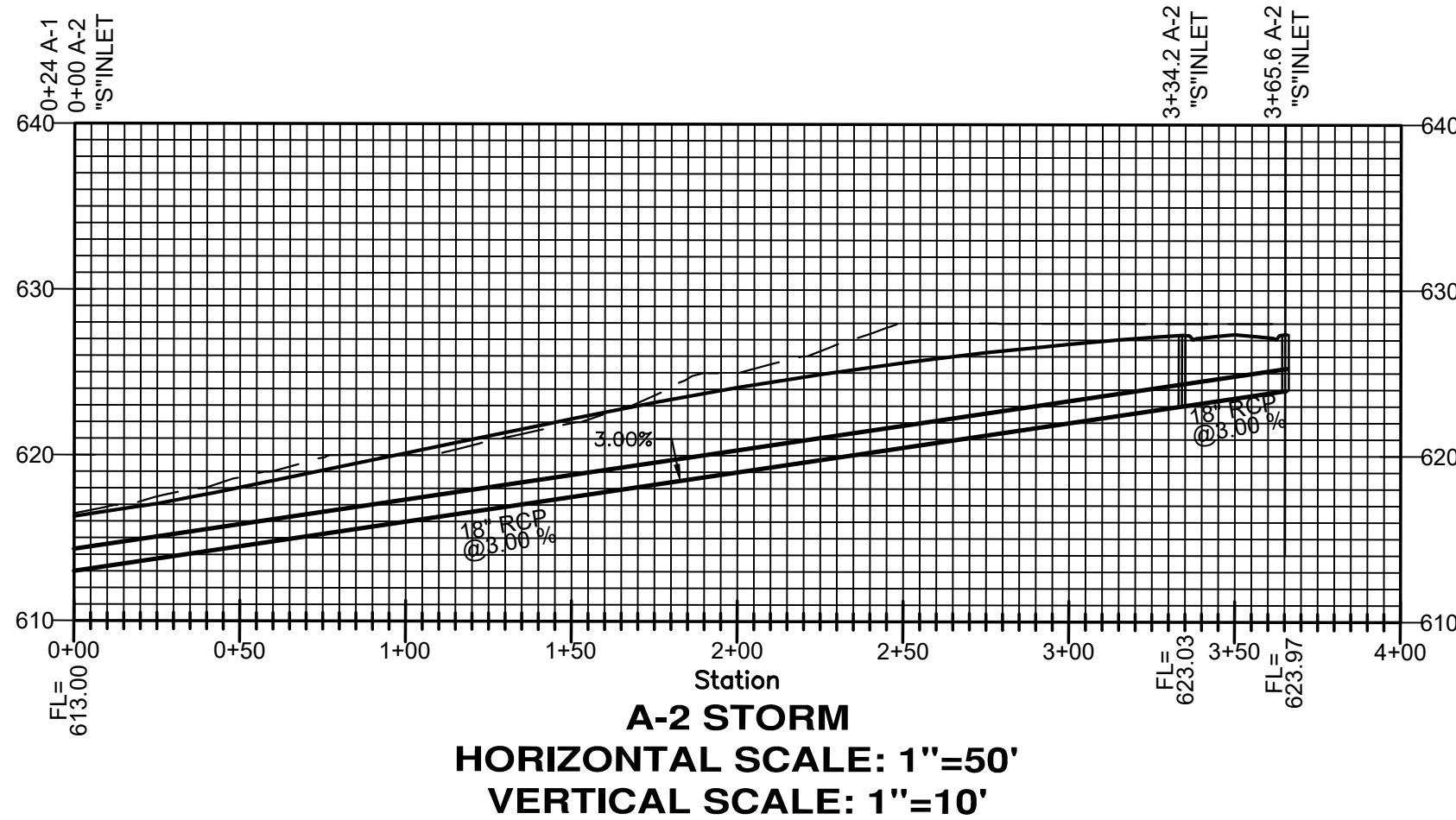
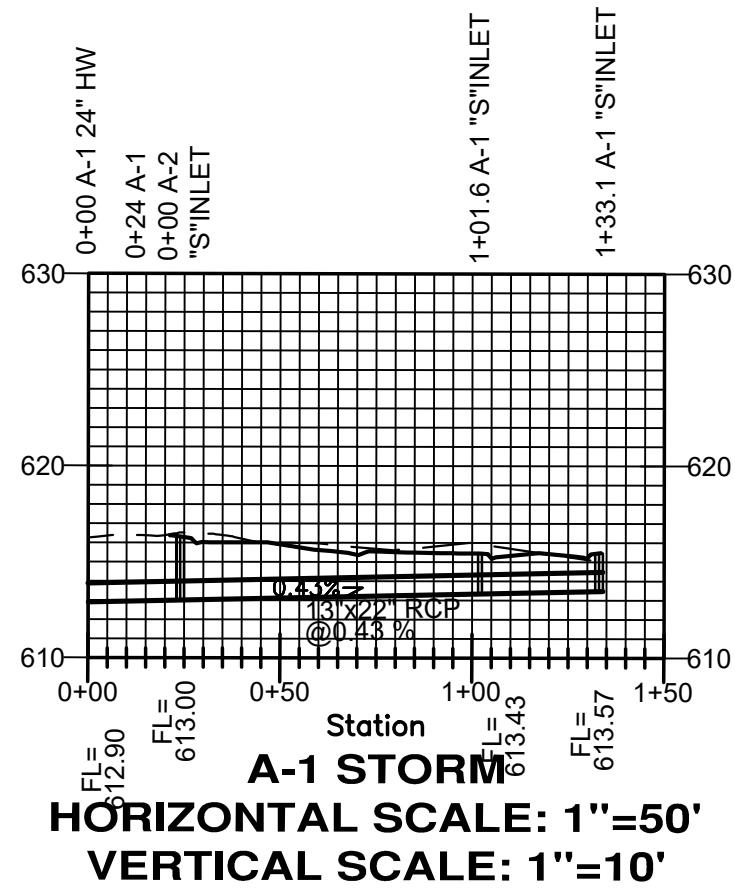
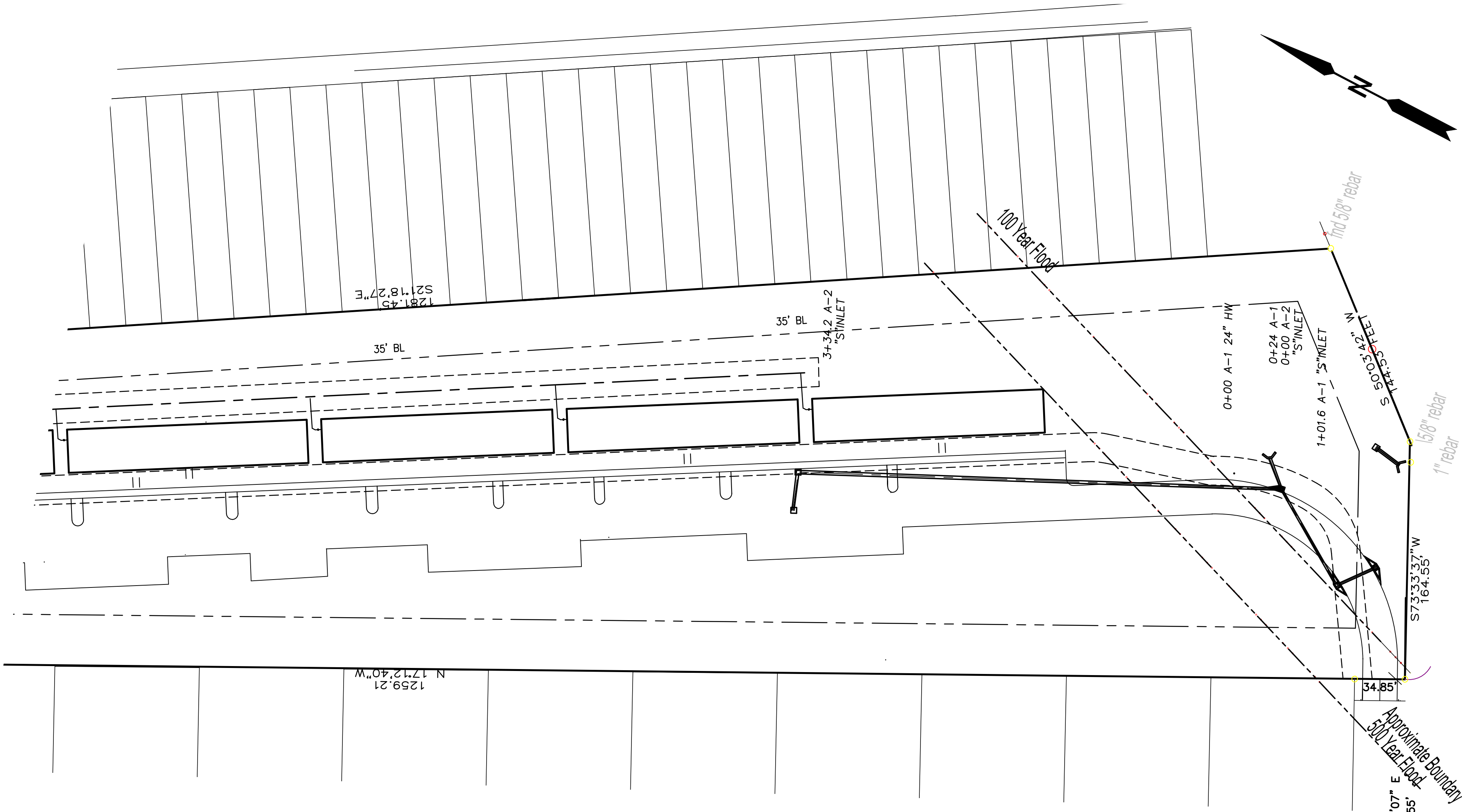
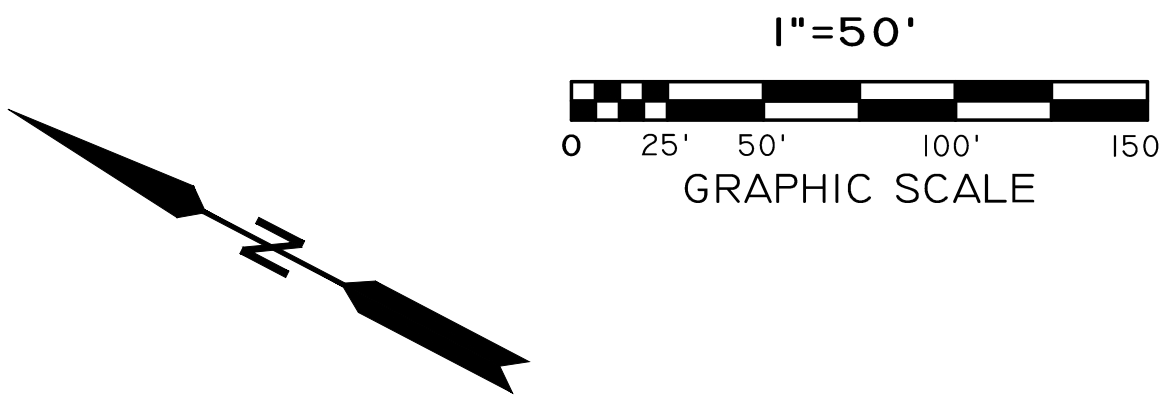
NOTE: LOCATION AND NUMBER OF FIRE HYDRANTS
TO BE DETERMINED BY LEEDS FIRE CHIEF.

DATE	REVISIONS
.	

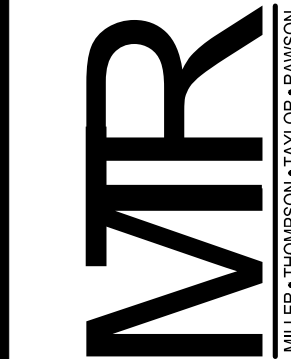
Owner / Developer:
Steve French
Parkstone Meadows, LLC,
1309 Coffeen Avenue, Suite 1200
Sheridan, Wyoming, 82801

Engineer:
Joseph A. Miller, III
MTTR ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
2500 Southlake Park , Suite 100
Hoover, AL 35244

815910.3 Sq. Feet
18.73 Acres

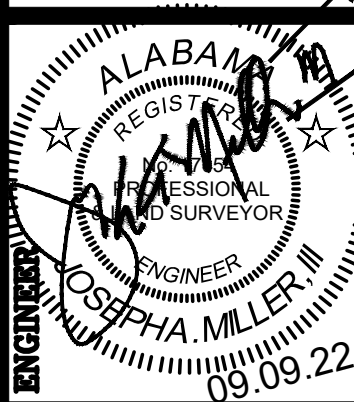


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TELEPHONE (205) 320-0114



STORM PLAN PROFILES
PARKSTONE MEADOWS
KATIE LANE
LEEDS ALABAMA
Parkstone Meadows, LLC,
Sheridan, Wyoming, 82801

PROJECT

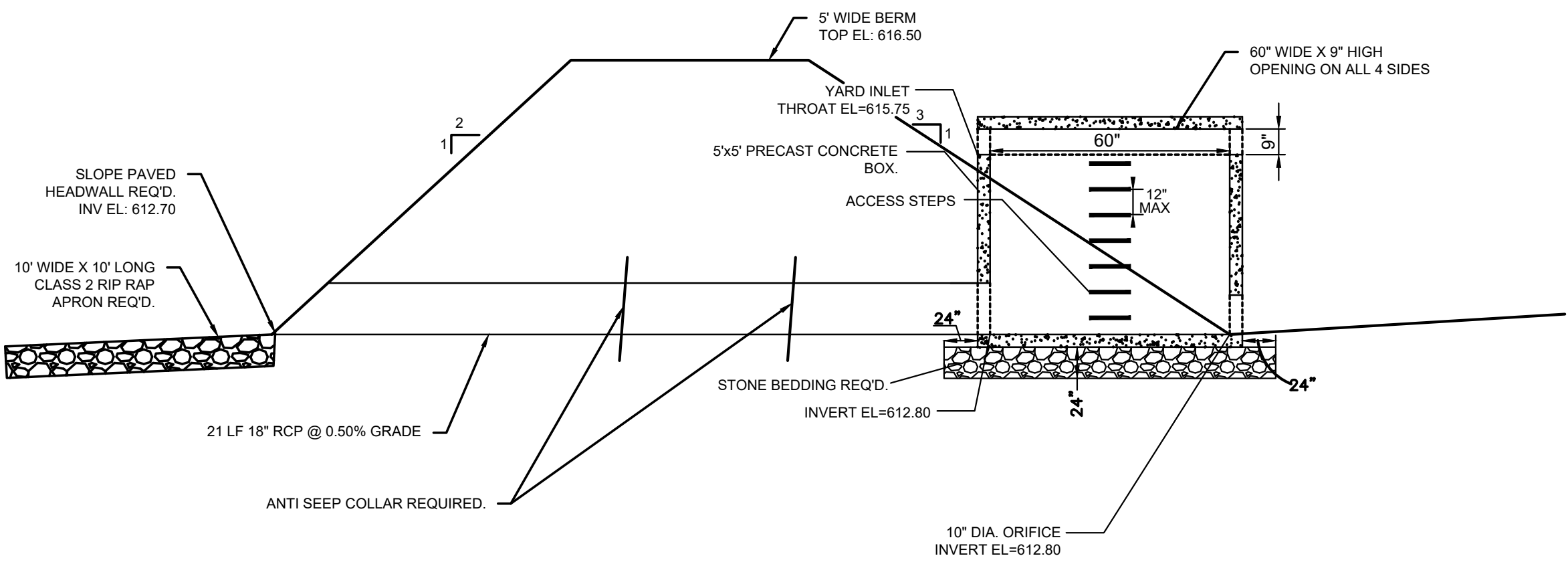
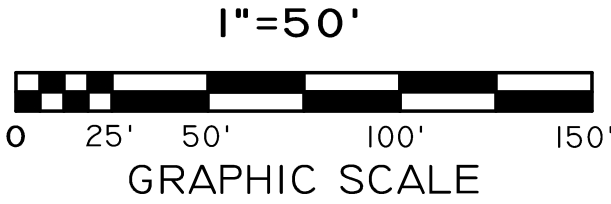
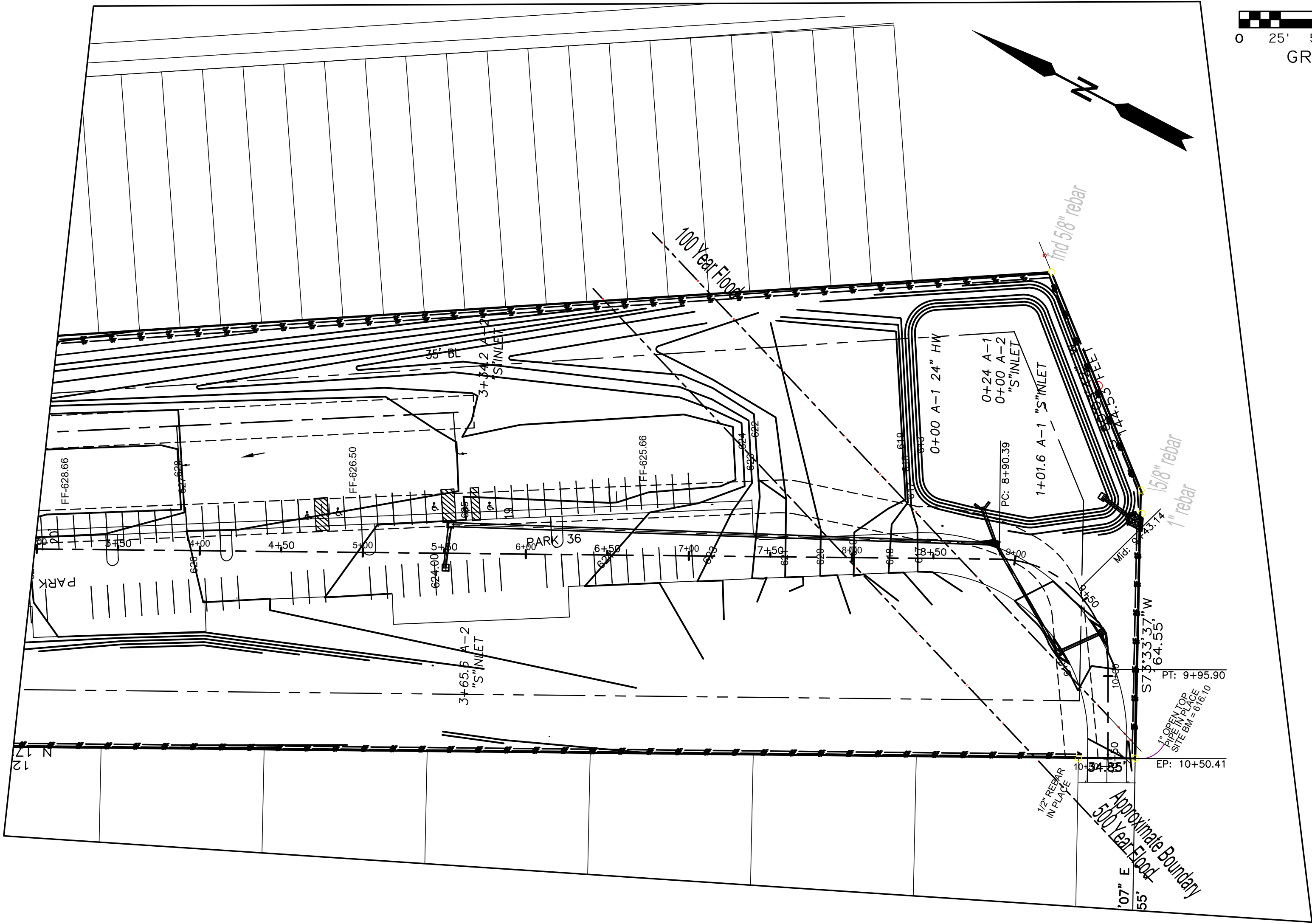


DATE

REVISIONS

JOB NO:
SUBDIVISIONS
FILE NAME: PARKSTONE
MEADOWS
DATE: 03.10.22
DRAWN:
JAM III
CHECKED:
JAM III
SCALE:
1"=50'
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CONTROL STRUCTURE DETAIL (SOUTH POND)
N.T.S.

DATE	REVISIONS
.	

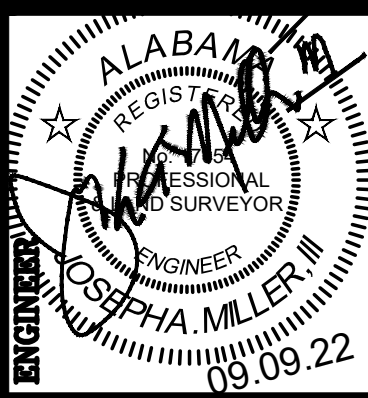
JOB NO:
SUBDIVISIONS
FILE NAME: PARKSTONE
MEADOWS
SUB: 03.00.22
DATE:
03.10.22
DRAWN:
JAM III
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SHEET

MTR
MILLER • THOMPSON • TAYLOR • RAWSON

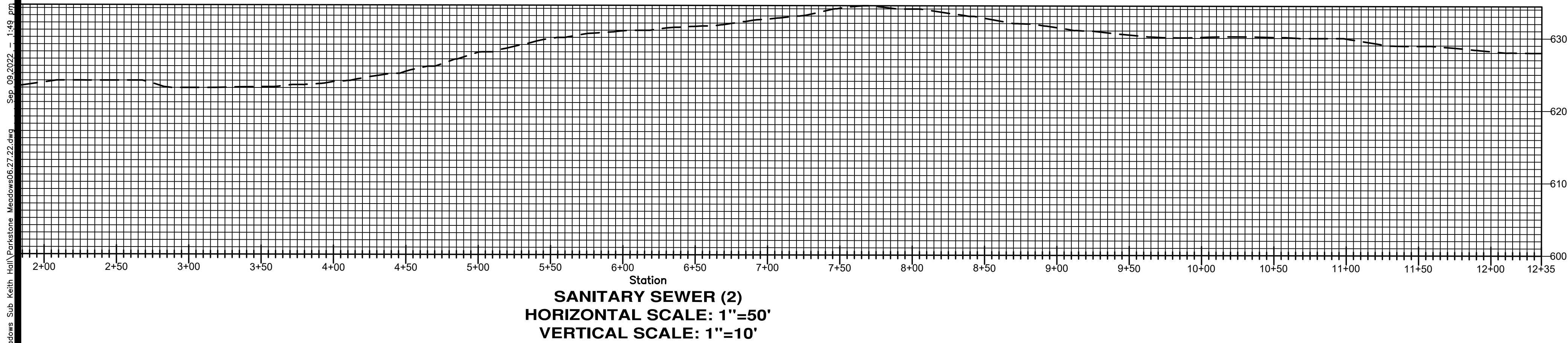
DETENTION PONDS
PARKSTONE MEADOWS
KATIE LANE
LEEDS ALABAMA
Parkstone Meadows, LLC,
Sheridan, Wyoming 82801

**MTTR
ENGINEERS, INC.**
CONSULTING ENGINEERS-LAND SURVEYORS
3 Riverchase Ridge, HOOVER, AL 35244
TELEPHONE (205) 320-0114

PROJECT



Engineer:
Joseph A. Miller, III |
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CONSULTING ENGINEERS-LAND SURVEYORS
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Hoover, AL 35244



1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF JEFFERSON COUNTY, THE LOCAL MUNICIPALITY AND/OR THE STATE HIGHWAY DEPARTMENT, AND APPLICABLE O.S.H.A. REGULATIONS, AS APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE JEFFERSON COUNTY ENVIRONMENTAL SERVICES DEPARTMENT 325--5127 AT LEAST 24 HOURS PRIOR TO BEGINNING CONSTRUCTION. THERE SHALL BE NO CHANGES IN DRAWINGS WITHOUT WRITTEN APPROVAL BY THE JEFFERSON COUNTY ENVIRONMENTAL SERVICES DEPARTMENT.
3. DUCTILE IRON PIPE SHALL BE CLASS 52 OR BETTER.
4. PVC PIPE SHALL BE AWWA C900, CAST IRON (CI) STANDARD DIMENSIONS. DIMENSION RATIO (DR) 18. PRESSURE CLASS (PC) 150 PSI OR BETTER.
5. IN EARTH TRENCH, FOUR INCHES OF CRUSHED STONE SHALL BE PLACED UNDER SEWER LINES OF 12 INCHES IN DIAMETER OR SMALLER AND SIX INCHES OF CRUSHED STONE SHALL BE PLACED UNDER SEWER LINES LARGER THAN 12 INCHES IN DIAMETER. IN ROCK TRENCHES, SIX INCHES OF CRUSHED STONE SHALL BE PLACED UNDER ALL SEWERS. THE DITCH SHALL BE BACKFILLED WITH CRUSHED STONE TO A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE. WHEN CROSSING EXISTING ROADS, STREETS, AND ALL PAVEMENT IN AND OUT OF THE R.O.W., THE TOTAL BACKFILL SHALL BE CRUSHED STONE AND PROPERLY CHOKED.
6. AT THE DIRECTION OF THE ESD INSPECTOR, A CONNECTION OF SANITARY SEWER PIPES (8 INCH THROUGH 16 INCH) OF DISSIMILAR SIZES OR FOR REPAIR OF SANITARY SEWER PIPES OF SIMILAR MATERIALS MAY BE MADE BY MEANS OF AN APPROVED MECHANICAL SEAL TYPE ADJUSTABLE COUPLING. COUPLINGS WITH ANY REQUIRED ADAPTING BUSHINGS SHALL BE MANUFACTURED OF AN APPROVED PREFORMED ELASTOMERIC MATERIAL SPECIFICALLY FOR DIMENSIONS OF THE PIPE MATERIALS TO BE CONNECTED. COUPLINGS OF THE MECHANICAL SEAL TYPE SHALL HAVE NUT AND BOLT TIGHTENING CLAMPS OR DEVICES MADE OF 316 STAINLESS STEEL, WITH AN ADJUSTABLE STAINLESS STEEL SHEAR RING, AND STAINLESS STEEL HARDWARE. A CONCRETE COLLAR AS SHOWN ON APPENDIX STANDARD DRAWING SD2060 IS REQUIRED. THE ADJUSTABLE COUPLING SHALL BE INSTALLED AS RECOMMENDED AND SPECIFIED BY THE MANUFACTURER. EACH COUPLING SHALL BEAR THE MANUFACTURER'S NAME AND REQUIRED MARKINGS.
7. MANHOLES SHALL MEET ASTM SPECIFICATION C-478. JOINTS BETWEEN THE MANHOLE SECTIONS SHALL BE OFFSET TONGUE AND GROOVE "PUSH ON" TYPE, SUPPLIED WITH TYLOX SUPER SEAL PRE-LUBRICATED GASKET AS MANUFACTURED BY HAMILTON KENT MEETING THE REQUIREMENTS OF ASTM C443. EACH JOINT SHALL ALSO BE SUPPLIED WITH CONSEAL CS-231 WATERSTOP SEALANT AS MANUFACTURED BY CONCRETE SEALANTS, IN WIDTHS AS RECOMMENDED BY THE MANUFACTURER. MANHOLES SHALL HAVE A MINIMUM DIAMETER OF 48 INCHES AND A MINIMUM THICKNESS OF 8 INCHES. ALL MANHOLE CONES SHALL BE OF THE CONCENTRIC TYPE. MANHOLES MUST BE FINISHED TO STREET GRADE WITH BRICK AND MORTAR. THIS ADJUSTMENT HEIGHT SHALL NOT EXCEED 16 INCHES.
8. STUBOUTS FOR SANITARY SEWER SERVICE LINES SHALL END ON OR NEAR THE PROPERTY LINE UNLESS OTHERWISE NOTED ON "DOWNHILL" SIDE LOTS INSTALL LATERALS ON A MINIMUM 1 LINE TO GRADE THAT WILL TERMINATE A MAXIMUM DEPTH OF 10 FEET. THE FIRST JOINT OUT OF A MANHOLE, FOR BUILDING OR HOUSE SERVICE, SHALL BE DUCTILE IRON PIPE CLASS 52 OR BETTER (MINIMUM 8 FEET). ANY BUILDING SERVICE LINE SET OUTSIDE OF EASEMENT OR R.O.W. MUST BE INSTALLED BY A MASTER PLUMBER AND HAVE A SEWER CONNECTION PERMIT FOR EACH LOT.
9. IF THE CONTRACTOR IS INSTALLING SERVICE LINES AT THE SAME TIME AS MAIN LINE, THE SERVICE LINE SHALL BE INSTALLED IN ACCORDANCE WITH JEFFERSON COUNTY STANDARDS FOR CONSTRUCTION OF SERVICE LINES AND CONNECTIONS, AND INSPECTED/TESTED BY COUNTY INSPECTOR BEFORE IT IS BACKFILLED.
10. ALL SERVICE LINE STUBOUTS INSTALLED IN ROAD ROW OR UNDER ASPHALT SHALL BE PER STANDARD SPECIFICATIONS FOR SANITARY SEWER SERVICE LINES AND CONNECTIONS SECTION 4.
11. CONSTRUCTION SIGNS FOR WORK WITHIN AND ADJACENT TO PUBLIC ROADS, HIGHWAYS, AND ALLEYS SHALL BE IN ACCORDANCE WITH ALDOT STANDARDS.
12. CONTRACTOR WILL BE RESPONSIBLE FOR THE CONTINUOUS AND PROPER OPERATION OF ALL EXISTING UTILITIES LOCATED ON OR ADJACENT TO THE PROJECT SITE AND WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT.
13. ALL EMBANKMENT FILL AREAS SHALL BE FILLED AND COMPACTED PRIOR TO EXCAVATION OF SEWER LINE TRENCHES.
14. CONTRACTOR WILL BE RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS AND FOR ACQUISITION OF ALL PERMITS DURING CONSTRUCTION TO INSURE THAT DAMAGE DOES NOT OCCUR TO ADJACENT PROPERTIES, PUBLIC ROADS AND/OR DITCHES (CREEKS, STREAMS).
15. UPON COMPLETION OF ALL OR ANY PART OF A SANITARY SEWER LINE, THE CONTRACTOR WILL BE REQUIRED TO TEST SAID SEWER FOR ACCEPTABILITY. GRAVITY SEWERS WILL BE PRESSURE TESTED WITH AIR, FORCE MAIN SEWERS WILL BE PRESSURE TESTED WITH WATER. MANHOLES WILL BE VACUUM TESTED. ALL TESTS WILL BE CONDUCTED IN THE PRESENCE OF THE COUNTY SEWER CONSTRUCTION INSPECTOR IN ACCORDANCE WITH SECTION 5.00 STANDARDS FOR COMMERCIAL AND RESIDENTIAL CONSTRUCTION OF SANITARY SEWER SYSTEMS. GRAVITY SANITARY SEWERS WILL BE TELEVISION INSPECTED FOLLOWING AIR TESTING WITH THE FINAL VIDEO TAPE AND LOG FURNISHED TO THE COUNTY FOR RECORD INFORMATION.

MTR
WILLER • THOMPSON • TAYLOR • RAWSON

SANITARY SEWER PLAN PROFILE
PARKSTONE MEADOWS
KATIE LANE
LEEDS ALABAMA
Parkstone Meadows, LLC,
20000 PARKSTONE MEADOWS, LEEDS, AL 36054

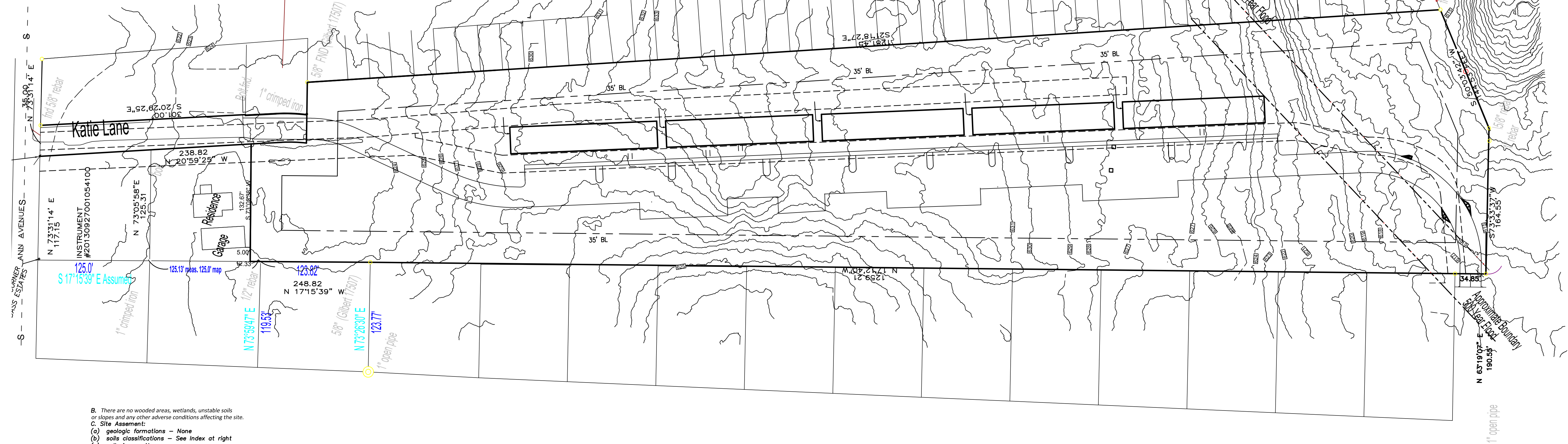
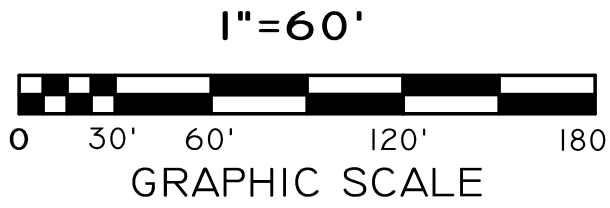
DATE	REVISIONS
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JOB NO: SUBDIVISIONS
FILE NAME: PARKSTONE MEADOWS
SUB: 03-00-22 DATE: 03.10.22
DRAWN: JAM III
CHECKED: JAM III
SCALE: 1"=50'
SHEET



Owner / Developer:
Steve French
Parkstone Meadows, LLC,
1309 Coffeen Avenue, Suite 1200
Sheridan, Wyoming, 82801

Engineer:
Joseph A. Miller, III
MTTR ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
2500 Southlake Park , Suite 100
Hoover, AL 35244



- B. There are no wooded areas, wetlands, unstable soils or slopes and any other adverse conditions affecting the site.
- C. Site Assessment:
- (a) geologic formations – None
 - (b) soils classifications – See Index at right
 - (c) colluvium – None
 - (d) bluffs – None
 - (e) sinkholes – None
 - (f) caves – None
 - (g) landslides (active and inactive) – None
 - (h) lineaments – None
 - (i) springs – None
 - (j) seeps – None
 - (k) streams (perennial, intermittent, wet weather) – None
 - (l) wetlands – None
 - (m) Groundwater recharge points – None
 - (n) vegetative communities, including the five most abundant tree and floral species for each community, in order of abundance and including the approximate age of each community. See table at right.
 - (o) endangered and threatened species as determined by the US Fish and Wildlife Service – None
 - (p) evidence of recent or ancient quarry operations – None
 - (q) spoils areas– None
 - (r) dump sites (active, inactive, or covered/reclaimed)– None
 - (s) existing fills and excavations– None
- D. There are wetlands, unstable soils or slopes and any other adverse condition affecting the site.

- E. Site Assessment:
- (a) geologic formations – None
 - (b) soils classifications – See Index
 - (c) colluvium – None
 - (d) bluffs – None
 - (e) sinkholes – None
 - (f) caves – None
 - (g) landslides (active and inactive) – None
 - (h) lineaments – None
 - (i) springs – None
 - (j) seeps – None
 - (k) streams (perennial, intermittent, wet weather) – None
 - (l) wetlands – None
 - (m) Groundwater recharge points – None
 - (n) vegetative communities, including the five most abundant tree and floral species for each community, in order of abundance and including the approximate age of each community. See table at right.
 - (o) endangered and threatened species as determined by the US Fish and Wildlife Service – None
 - (p) evidence of recent or ancient quarry operations – None
 - (q) spoils areas– None
 - (r) dump sites (active, inactive, or covered/reclaimed)– None
 - (s) existing fills and excavations– the streets and detention pond were graded in 2003.
 - (t) existing drainage retention and detention areas– See Sheet # 9
 - (u) wells, whether active or inactive, open or closed storage tanks, regardless of contents, both above ground and underground–None

- F. Site assessment map
- (a) Joseph A. Miller, III, PE/LS 17054, Observed during site walk through for items a–u
 - (b) Soils types by graphic plotting from Soils Conservation Service Map: Bodine–Fullerton association, steep
- No other findings
- (d) There are no adverse effects from items a–u.
 - (e) There are no adverse effects from items a–u.
 - (f) 20' Required front and 30' rear

G. Site Information:

Site acreage = 18.73 Acres
60 Apartment Units
126 Parking Spaces

9 The entire site soils type :
Fullerton-Bodine complex, 8 to 12 percent slopes
Vegetative communities

Trees

- 1. Pine trees over 6" in diameter = 155 , age 15 years
- 2. Clusters of mimosa trees over 6" in diameter = 43, age 15 years
- 3. Oak trees over 6", larger ones 15-24" in diameter = 10, age 150 years
- 4. Oak trees 6"-12" in diameter = 25, age 50 years
- 5. Sweetgum Trees 6" in diameter = 20, age 15 years
- 6. Elm Trees, 6" in diameter = 8, age 15 years

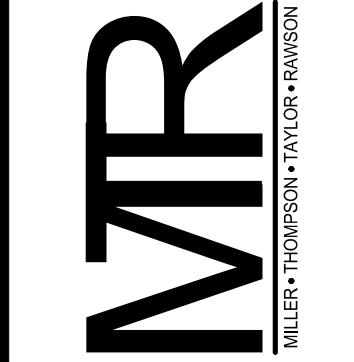
Flowers :

No flowers were observed.

Note:

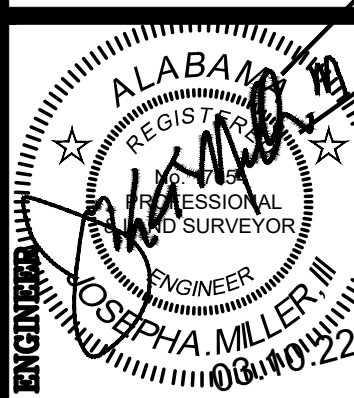
1. No part of this subdivisions subtending land falls within 200 ft. of any Gas Transmission Pipeline or Fiber optic trunk line.

MTTR
ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
2500 SOUTHLAKE PARK, SUITE 100, HOOVER, AL 35244
TELEPHONE (205) 320-0114



SITE ASSESSMENT MAP
PARKSTONE MEADOWS
KATIE LANE
LEEDS ALABAMA
Parkstone Meadows, LLC,
Sheridan, Wyoming, 82801

PROJECT



REVISIONS

DATE

JOB NO:
SUBDIVISIONS
FILE NAME: PARKSTONE
MEADOWS
DATE: 03-10-22
DRAWN:
JAM III
CHECKED:
JAM III
SCALE:
1"=60'
SHEET

ADEM NPDES GENERAL PERMIT NOTES: (THESE NOTES ARE NOT ALL INCLUSIVE OF THE ADEM NPDES GENERAL PERMIT REQUIREMENTS. IT SHALL BE THE PERMITTEE'S RESPONSIBILITY TO ASSURE COMPLIANCE WITH ALL STORMWATER GENERAL PERMIT REQUIREMENTS)**PART I (Part I) Coverage Under this General Permit****A. Permit Coverage**

This permit authorizes, subject to the conditions of this permit, discharges associated with construction activity that will result in the discharge of stormwater to a greater than one (1) acre or from construction activities involving less than one (1) acre and which are part of a common plan of development or sale equal to or greater than one (1) acre occurring on or before, and continuing after the effective date of this permit, except for discharges identified under Part I.C. of the permit. Coverage under this permit is not required for discharges associated with minor land disturbing activities (such as home gardens or individual home landscape repairs, maintenance work, fences and other related activities which result in minor soil erosion), animal feeding operation (AFO) or concentrated animal feeding operation (CAFO) construction activity that has been granted NPDES registration coverage pursuant to Chapter 335-6-7, normal agricultural practices and silvicultural operations as defined in Part V.

B. Eligibility**1. Allowable Stormwater Discharges**

This permit authorizes the following stormwater discharges:

- Stormwater associated with construction activities defined in Part I.A. of this permit;
- The following stormwater discharges have been determined by the Director to require coverage under this permit:
 - Sites, irrespective of size, whose stormwater discharges have a reasonable potential to be a significant contributor of pollutants to a water of the state, as determined by the Department;
 - Sites, in respect of size, whose stormwater discharges have a reasonable potential to cause or contribute to a violation of an applicable Alabama water quality standard as determined by the Department;
 - Discharges from support activities (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:
 - The support activity is solely related to the construction site covered under this permit;
 - The support activity is not a commercial operation serving multiple unrelated construction projects by different operators, and does not operate beyond the completion of the construction activity at the last construction project it supports; and
 - Pollutant discharges from support activity areas are minimized to the maximum extent practicable and do not pose a reasonable potential to exceed applicable water quality standards.

2. Allowable Non-Stormwater Discharges

This permit authorizes the following non-stormwater discharges provided the non-stormwater component of the discharge is in compliance with the following:

- Discharges from fire-fighting activities;
- Fire hydrant flushings;
- Water used to wash vehicles where detergents are not used;
- Water used to control dust;
- Potable water including uncontaminated water line flushings not associated with hydrostatic testing;
- Routine external building wash down associated with construction that does not use detergents;
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used. The operator is prohibited from directing pavement wash waters directly into any surface water, storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;
- Uncontaminated air conditioning or compressor condensate associated with temporary office trailers and other similar buildings;
- Uncontaminated ground water or spring water;
- Foundation or footing drains where flows are not contaminated with process materials such as solvents;
- Landscape irrigation;

C. Prohibited Discharges

The following discharges associated with construction are not authorized by this permit:

- Stormwater discharges that are mixed with sources of non-stormwater unless such stormwater discharges are:
 - In compliance with a separate NPDES permit; or
 - Determined by the Department not to be a contributor of pollutants to waters of the State.
- Stormwater discharges currently covered under another NPDES permit;
- Wastewater from washout of concrete, unless managed by an appropriate control. (Wastewater from Concrete Batch Plants are prohibited unless discharges are authorized by and in compliance with a separate NPDES permit);
- Wastewater from washout and cleanup of trucks, paint, form release oils, curing compounds and other construction materials;
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
- Soaps or solvents used in vehicle and equipment washing;
- Discharges from dewatering activities, including discharges of ground water or accumulated stormwater from dewatering of trenches, excavations, foundations, vaults, or other similar points of accumulation, unless managed by appropriate controls;
- OMIT
- Discharges where the turbidity of such discharge will cause or contribute to a substantial visible contrast with the natural appearance of the receiving water;
- Discharges where the turbidity of such discharge will cause or contribute to an increase in the turbidity of the receiving water by more than 50 NTUs above background. For the purposes of determining compliance with this limitation, background will be interpreted as the natural condition of the receiving water without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels;
- Discharges to any pollutant into any water for which a total maximum daily load (TMDL) has been finalized or approved by EPA unless the discharge is consistent with the TMDL; and
- Discharges to waters listed on the most recently approved 303(d) list of impaired streams unless the discharge will not cause or contribute to the listed impairment.

PART I Notice of Intent (NOI) Requirements**D. Submittal of Documents**

The Permittee must complete and submit the NOI electronically, using the Department's eNOI system, unless the Permittee submits in writing valid justification as to why the electronic submittal process cannot be utilized and the Department approves in writing the utilization of the hard copy submittal. The eNOI system will be accessed at the following link <https://asp.adem.alabama.gov/eNOI/Default.aspx>. Permit requests for initial issuance and modifications of the existing permit should all be submitted through the eNOI system. All other documents required to be submitted to the Department by this general permit shall be delivered to the following address:

Alabama Department of Environmental Management

Water Division

Stormwater Management Branch

Post Office Box 301463 (Zip Code: 36310-1463)

1400 Coliseum Boulevard (Zip Code: 36110-2059)

Montgomery, Alabama

PART II Stormwater Pollution Prevention Requirements**B. Provide Natural Riparian Buffers or Equivalent Sediment Controls**

Natural riparian buffer requirements apply to all waters of the state adjacent to construction sites or contained within their overall project boundary. A 25-foot natural riparian buffer zone adjacent to all waters of the state at the construction site is preserved, to the maximum extent practicable, during construction activities at the site. The natural riparian buffer shall be preserved between the top of stream bank and the disturbed construction area. The water quality buffer zone aids in the protection of waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project. Natural riparian buffers ARE NOT PRIMARY SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED ON AS SUCH. THE NATURAL RIPARIAN BUFFER REQUIREMENT ONLY APPLIES TO NEW CONSTRUCTION SITES.

1. COMPLIANCE ALTERNATIVES

- PROVIDE AND MAINTAIN A 25-FOOT UNDISTURBED NATURAL RIPARIAN BUFFER, OR
- IF LAND DISTURBANCES ARE LOCATED 25 FEET OR FURTHER FROM SURFACE WATER, THEN COMPLIANCE WITH THIS ALTERNATIVE HAS BEEN ACHIEVED.
- REHABILITATION AND ENHANCEMENT OF A NATURAL RIPARIAN BUFFER IS ALLOWED, IF NECESSARY, FOR IMPROVEMENT OF ITS EFFECTIVENESS OF PROTECTION OF THE WATERS OF THE STATE.
- ANY PREEXISTING STRUCTURES (E.G., BUILDINGS, PARKING LOTS, ROADWAYS, UTILITY LINES, STRUCTURES, IMPERVIOUS SURFACES) ARE ALLOWED IN THE NATURAL RIPARIAN BUFFER, PROVIDED THE PERMITTEE RETAINS AND PROTECTS FROM DISTURBANCE ANY ADDITIONAL NATURAL RIPARIAN BUFFER AREA CONTAINED WITHIN THE NATURAL RIPARIAN BUFFER BUT OUTSIDE THE PREEXISTING STRUCTURES FOOTPRINT.
- PROVIDE AND MAINTAIN AN UNDISTURBED NATURAL RIPARIAN BUFFER THAT IS LESS THAN 25 FEET AND IS SUPPLEMENTED BY ADDITIONAL EROSION AND SEDIMENT CONTROLS, WHICH IN COMBINATION ACHIEVES THE SEDIMENT LOAD REDUCTION EQUIVALENT TO A 25-FOOT UNDISTURBED NATURAL RIPARIAN BUFFER, OR
- IF IT IS INFEASIBLE TO PROVIDE AND MAINTAIN AN UNDISTURBED NATURAL RIPARIAN BUFFER OF ANY SIZE, THE PERMITTEE MUST IMPLEMENT EROSION AND SEDIMENT CONTROLS THAT ACHIEVE THE SEDIMENT LOAD REDUCTION EQUIVALENT TO A 25-FOOT UNDISTURBED NATURAL RIPARIAN BUFFER.
- ALL DISCHARGES FROM THE AREA OF EARTH DISTURBANCE TO THE NATURAL RIPARIAN BUFFER MUST FIRST BE TREATED BY THE SITE'S EROSION AND SEDIMENT CONTROLS, AND USE VELOCITY DESIGNATION DEVICES IF NECESSARY TO PREVENT EROSION CAUSED BY STORMWATER WITHIN THE NATURAL RIPARIAN BUFFER.
- ALL COMPLIANCE ALTERNATIVES MUST BE DOCUMENTED IN THE CEMP AND COMPLY WITH ALL REQUIREMENTS. THE NATURAL RIPARIAN BUFFER BOUNDARY SHOULD BE INDICATED ON THE SITE PLAN.
- COMPLIANCE ALTERNATIVES MUST BE MAINTAINED THROUGHOUT THE DURATION OF PERMIT COVERAGE.
- ALL NATURAL RIPARIAN BUFFER AREAS MUST BE DELINEATED, AND CLEARLY MARKED OFF WITH FLAGS, TAPE, OR SIMILAR MARKING DEVICE.

2. CONSTRUCTION ACTIVITIES AT SITES THAT HAVE BEEN PERMITTED PRIOR TO APRIL 1, 2016, ARE EXEMPT FROM THE REQUIREMENTS OF THIS PART II.B. CONFIRMATION OF PERMIT COVERAGE PRIOR TO APRIL 1, 2016, MUST BE SUBMITTED WITH THE NOI.

3. IF THERE IS NO DISCHARGE OF STORMWATER TO WATERS OF THE STATE THROUGH THE AREAS BETWEEN THE CONSTRUCTION SITE AND ANY WATERS OF THE STATE LOCATED WITHIN 25 FEET OF THE CONSTRUCTION SITE, COMPLIANCE WITH THIS REQUIREMENT IS ACHIEVED.

4. WHERE NO NATURAL RIPARIAN BUFFER EXISTS DUE TO PREEXISTING DEVELOPMENT DISTURBANCES (E.G., BUILDINGS, PARKING LOTS, ROADWAYS, UTILITY LINES, STRUCTURES, IMPERVIOUS SURFACES) THAT OCCURRED PRIOR TO THE INITIATION OF PLANNING FOR THE CURRENT DEVELOPMENT OF THE SITE, THE PERMITTEE IS NOT REQUIRED TO COMPLY WITH THE REQUIREMENTS IN THIS SECTION, UNLESS PORTIONS OF THE PREEXISTING DEVELOPMENT WILL BE REMOVED.

- WHEREAS SOME NATURAL RIPARIAN BUFFER EXISTS BUT PORTIONS OF THE AREA WITHIN 25 FEET OF THE WATERS OF THE STATE ARE OCCUPYING PREEXISTING DEVELOPMENT DISTURBANCES (E.G., BUILDINGS, PARKING LOTS, ROADWAYS, UTILITY LINES, STRUCTURES, AND IMPERVIOUS SURFACES), THE PERMITTEE IS REQUIRED TO COMPLY WITH THE REQUIREMENTS IN THIS SECTION.

ONLY THE PORTION OF THE BUFFER ZONE THAT CONTAINS THE FOOTPRINT OF THE EXISTING "STRUCTURE" IS EXEMPT FROM THE NATURAL RIPARIAN BUFFER ACTIVITIES NECESSARY TO MAINTAIN USES ARE ALLOWED PROVIDED THAT NO ADDITIONAL VEGETATION IS REMOVED FROM THE NATURAL RIPARIAN BUFFER.

6. FOR "LINEAR CONSTRUCTION PROJECTS", THE PERMITTEE IS NOT REQUIRED TO COMPLY WITH THE REQUIREMENTS IN THIS SECTION IF SITE CONSTRAINTS (E.G., LIMITED RIGHT-OF-WAY) PREVENT THE PERMITTEE FROM MEETING ANY OF THE COMPLIANCE ALTERNATIVES PROVIDED THAT, TO THE EXTENT PRACTICABLE, DISTURBANCES WITHIN 25 FEET OF THE WATER OF THE STATE ARE LIMITED AND/OR SUPPLEMENTAL EROSION AND SEDIMENT CONTROLS TO TREAT STORMWATER DISCHARGES FROM EARTH DISTURBANCES WITHIN 25 FEET OF THE WATERS OF THE STATE ARE PROVIDED. IT MUST BE DOCUMENTED IN THE CEMP AS TO WHY COMPLIANCE WITH THIS SECTION IS INFEASIBLE, AND DESCRIBE ANY BUFFER WIDTH RETAINED AND/OR SUPPLEMENTAL EROSION AND SEDIMENT CONTROLS INSTALLED.

7. THE FOLLOWING DISTURBANCES WITHIN 25 FEET OF A WATER OF THE STATE ARE EXEMPT FROM THE REQUIREMENTS IN THIS PART:

- CONSTRUCTION APPROVED UNDER A CWA SECTION 404 PERMIT; OR
- CONSTRUCTION OF A WATER-DEPENDENT STRUCTURE OR WATER ACCESS AREA (E.G., PIER, BOAT RAMP, SEAWALL, BRIDGE, DRAINAGE STRUCTURE, TRAIL, ETC.)

C. SOIL STABILIZATION

FINAL STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE.

TEMPORARY STABILIZATION OF DISTURBED AREAS MUST BE INITIATED IMMEDIATELY WHENEVER WORK TOWARD PROJECT COMPLETION AND FINAL STABILIZATION OF ANY PORTION OF THE SITE HAS TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING THIRTEEN (13) CALENDAR DAYS.

D. POLLUTION PREVENTION MEASURES

THE PERMITTEE MUST DESIGN, INSTALL, IMPLEMENT, AND MAINTAIN EFFECTIVE POLLUTION PREVENTION MEASURES TO MINIMIZE THE DISCHARGE OF POLLUTANTS. AT A MINIMUM, SUCH MEASURES MUST BE DESIGNED, INSTALLED, IMPLEMENTED AND MAINTAINED TO:

- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, CONCRETE WASHOUT, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
 - LIQUID WASTE SHALL NOT BE DIRECTLY DISCHARGED INTO STORM SEWERS.
 - WASHOUT AND CLEAUFOUT ACTIVITIES SHOULD BE LOCATED AS FAR AWAY AS POSSIBLE FROM SURFACE WATERS, NATURAL BUFFER AREAS, STORMWATER INLETS, AND CONVEYANCES.
- MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS PRESENT ON THE SITE TO PRECIPITATION AND TO STORMWATER;
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM ANY SPILLS AND LEAKS FROM, INCLUDING BUT NOT LIMITED TO VEHICLES; MECHANICAL EQUIPMENT; CHEMICAL STORAGE; AND REFUELING ACTIVITIES; AND
- USE OF POLYMERS, FLOCCULANTS, OR OTHER TREATMENT CHEMICALS AT THE SITE MAY ONLY BE APPLIED WHERE TREATED STORMWATER IS DIRECTED TO A SEDIMENT CONTROL PRIOR TO DISCHARGE.

E. CONSTRUCTION BEST MANAGEMENT PRACTICES PLAN (CEMP)**1. MAINTAIN AN UPDATED CEMP**

- THE CEMP SHALL BE UPDATED AS NECESSARY TO ADDRESS CHANGES IN THE CONSTRUCTION ACTIVITY, SITE WEATHER PATTERNS, NEW TMDLS FINALIZED OR APPROVED BY EPA, NEW 303(d) LISTINGS APPROVED BY EPA, OR MANUFACTURER SPECIFIC REVISIONS FOR SPECIAL CONTROL TECHNOLOGIES.
- THE CEMP SHALL BE AMENDED IF NECESSARY OR INVESTIGATIONS BY SITE STAFF OR BY LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE EXISTING SEDIMENT CONTROL MEASURES, EROSION CONTROL MEASURES, OR OTHER SITE MANAGEMENT PRACTICES ARE INEFFECTIVE OR DO NOT MEET THE REQUIREMENTS OF THIS PERMIT. ALL NECESSARY MODIFICATIONS TO THE CEMP SHALL BE MADE WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING NOTIFICATION OF THE INSPECTION UNLESS GRANTED AN EXTENSION OF TIME BY THE DEPARTMENT.

- IF EXISTING SEDIMENT CONTROL MEASURES, EROSION CONTROL MEASURES, OR OTHER SITE MANAGEMENT PRACTICES PROVE INEFFECTIVE IN PROTECTING WATER QUALITY OR NEED TO BE MODIFIED, OR IF ADDITIONAL SEDIMENT CONTROL MEASURES, EROSION CONTROL MEASURES, OR OTHER SITE MANAGEMENT PRACTICES ARE NECESSARY TO MEET THE REQUIREMENTS OF PART II.B. C. D. AND E., IMPLEMENTATION SHALL BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THEN NEW LAND DISTURBANCE ACTIVITIES MUST CEASE UNTIL THE MODIFIED OR ADDITIONAL CONTROLS CAN BE IMPLEMENTED.
- A COPY OF THE CEMP SHALL BE MAINTAINED AT THE SITE DURING NORMAL OPERATING HOURS AS DEFINED BY PART V OF THIS PERMIT WHEN REGULATED LAND DISTURBING ACTIVITIES ARE OCCURRING.

F. SPILL PREVENTION, CONTROL, AND MANAGEMENT

THE PERMITTEE SHALL PREPARE, IMPLEMENT, AND MAINTAIN A SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC) PLAN IN ACCORDANCE WITH 40 CFR PART 112 AND ADEM ADMIN CODE R. 335-6-6-.12(f) FOR ALL APPLICABLE ON-SITE PETROLEUM STORAGE TANKS. THE PERMITTEE SHALL ALSO PREPARE, IMPLEMENT, AND MAINTAIN A SPCC PLAN IN ACCORDANCE WITH ADEM ADMIN CODE R. 335-6-6-.12(f) FOR ANY STORED POLLUTANTS THAT MAY, IF SPILLED, BE REASONABLY EXPECTED TO ENTER A WATER OF THE STATE OR THE COLLECTION SYSTEM FOR A PUBLICLY OR PRIVATELY OWNED TREATMENT WORKS. THE SPCC PLAN SHALL BE MAINTAINED AS A SEPARATE DOCUMENT OR AS PART OF THE CEMP PLAN REQUIRED BY PART II.B. ABOVE. THE PERMITTEE SHALL IMPLEMENT APPROPRIATE STRUCTURAL AND/OR NON-STRUCTURAL SPILL PREVENTION, CONTROL, AND/OR MANAGEMENT SUFFICIENT TO PREVENT ANY SPILLS OF POLLUTANTS FROM ENTERING A WATER OF THE STATE OR A PUBLICLY OR PRIVATELY OWNED TREATMENT WORKS. THE PLAN(S) MUST BE CONSISTENT WITH THE REQUIREMENTS OF 40 CFR PART 112 AND/OR ADEM ADMIN CODE R. 335-6-6-.12(f). ANY CONTAINMENT SYSTEM USED TO IMPLEMENT THE SPILL PREVENTION PLAN SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE SUBSTANCES CONTAINED AND OF MATERIALS WHICH SHALL PREVENT THE CONTAMINATION OF GROUNDWATER AND SHALL BE CAPABLE OF RETAINING 100 PERCENT OF THE VOLUME OF THE LARGEST CONTAINER OF POLLUTANTS FOR WHICH THE CONTAINMENT SYSTEM IS PROVIDED. THE PERMITTEE SHALL MAINTAIN ON-SITE OR HAVE READILY AVAILABLE SUFFICIENT OIL & GREASE ABSORBING MATERIALS AND ABSORPTION BOARDS TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS. SPILLS AND LEAKS IDENTIFIED BY PAINT OR CHEMICAL SPILLS, OIL SPILLS, ETC. MUST BE IMMEDIATELY CLEANED UP, REMEDIATED, OR BE REMOVED AND DISPOSED OF IN A DEPARTMENT APPROVED MANNER.

G. TRAINING

UNLESS THE PERMITTEE HAS EMPLOYED OR CONTRACTED WITH A QCP THAT PERFORMS DUTIES AS REQUIRED BY THIS PERMIT, AND THE QCP IS READILY AVAILABLE AND ABLE TO BE PRESENT ON-SITE AS OFTEN AS IS NECESSARY TO ENSURE FULL COMPLIANCE WITH THE REQUIREMENTS OF THIS PERMIT, THE PERMITTEE MUST ENSURE THAT:

- AT LEAST ONE ON-SITE EMPLOYEE SHALL BE CERTIFIED AS A QUALIFIED CREDENTIALLED INSPECTOR (QCI) BY COMPLETING AN INITIAL TRAINING AND ANNUAL REFRESHERS THROUGH AN ADEM-APPROVED QUALIFIED CREDENTIALLED INSPECTOR PROGRAM (QICP) CONDUCTED BY A COOPERATING TRAINING ENTITY.
- THE QCI MUST BE APPROVED BY THE DEPARTMENT PRIOR TO USE AND PROVIDE TRAINING IN THE FOLLOWING AREAS:
 - THE APPLICABLE REQUIREMENTS OF THE ALABAMA NPDES RULES;
 - THE REQUIREMENTS OF THIS PERMIT;
 - THE EVALUATION OF CONSTRUCTION SITES TO ENSURE THAT QCP DESIGNED AND CERTIFIED EROSION CONTROLS AND SEDIMENT CONTROLS DETAILED IN A CEMP ARE EFFECTIVELY IMPLEMENTED AND MAINTAINED;
 - THE EVALUATION OF CONVEYANCE STRUCTURES, RECEIVING WATERS AND ADJACENT IMPACTED OFFSITE AREAS TO ENSURE THE PROTECTION OF WATER QUALITY AND COMPLIANCE WITH THE REQUIREMENTS OF THIS PERMIT; AND
 - THE GENERAL OPERATION OF A TURBIDITY METER OR SIMILAR DEVICE INTENDED FOR THE MEASUREMENT OF TURBIDITY.
- EACH INDIVIDUAL HOLDING A QCI CERTIFICATION NEED NOT BE ON-SITE CONTINUOUSLY AND THEY MAY CONDUCT SITE INSPECTIONS AT MULTIPLE SITES PERMITTED BY THEM OR THEIR EMPLOYER.
- EACH INDIVIDUAL HOLDING QCI CERTIFICATION SHALL OBTAIN ANNUAL CERTIFICATION OF SATISFACTORY COMPLETION OF FORMAL REFRESHER EDUCATION OR TRAINING REGARDING GENERAL EROSION CONTROLS AND SEDIMENT CONTROLS, THE REQUIREMENTS OF THIS PERMIT, AND THE GENERAL OPERATION OF A TURBIDITY METER OR SIMILAR DEVICE INTENDED FOR THE MEASUREMENT OF TURBIDITY. THE REFRESHER TRAINING REQUIREMENTS, INCLUDING BUT NOT LIMITED TO, APPROPRIATE CURRICULA, COURSE CONTENT, COURSE LENGTH, AND ANY PARTICIPANT TESTING, SHALL BE SUBJECT TO ACCEPTANCE BY THE DIRECTOR PRIOR TO USE.

H. INSPECTION REQUIREMENTS**1. PRE-CONSTRUCTION OBSERVATIONS**

- A PRE-CONSTRUCTION SITE INSPECTION SHALL BE CONDUCTED PRIOR TO THE PLACEMENT OF ANY BMPS, OR THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES.
- PRE-CONSTRUCTION INSPECTION SHALL CONSIST OF A COMPLETE AND COMPREHENSIVE INSPECTION OF THE ENTIRE PROPOSED CONSTRUCTION SITE INCLUDING ALL PROPOSED AREAS OF LAND DISTURBANCE, PROPOSED AREAS USED FOR STORAGE OF MATERIALS THAT MAY BE EXPOSED TO PRECIPITATION, AFFECTED DITCHES, AND OTHER STORMWATER CONVEYANCES, AS WELL AS ALL PROPOSED OUTFALLS, RECEIVING WATERS AND STREAM BANKS TO DETERMINE IF THERE ARE PRE-EXISTING AREAS OF CONCERN.
- PRE-CONSTRUCTION INSPECTIONS SHALL BE CONDUCTED BY THE QCP/A QUALIFIED PERSON UNDER THE DIRECT SUPERVISION OF A QCP.
- THE INSPECTION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST.
- PRE-CONSTRUCTION INSPECTION SHALL INCLUDE DATED ELECTRONIC PHOTOGRAPHIC DOCUMENTATION OF ALL AREAS DESCRIBED IN PARAGRAPHS (B) ABOVE;
- THE PERMITTEE SHALL MAINTAIN RECORD OF THE PRE-CONSTRUCTION SITE INSPECTION PURSUANT TO PART IV.K.

2. DAILY OBSERVATIONS

- EACH DAY THERE IS ACTIVITY AT THE SITE, THE PERMITTEE SHALL VISUALLY OBSERVE THAT PORTION OF THE CONSTRUCTION PROJECT WHERE ACTIVE DISTURBANCE, WORK, OR CONSTRUCTION OCCURRED TO NOTE ANY RAINFALL MEASUREMENTS OCCURRING SINCE THE PREVIOUS OBSERVATION, AND ANY APPARENT BMP DEFICIENCIES IN THE AREA OF ACTIVE DISTURBANCE.
- SUCH DAILY OBSERVATIONS MAY BE PERFORMED BY APPROPRIATE SITE PERSONNEL.
- THE PERMITTEE SHALL MAINTAIN A LOG OF ALL DAILY OBSERVATIONS AND RECORD IN SUCH LOG ANY RAINFALL MEASUREMENTS AND BMP DEFICIENCIES OBSERVED.
- SITE INSPECTIONS SHALL CONSIST OF A COMPLETE AND COMPREHENSIVE OBSERVATION OF THE ENTIRE CONSTRUCTION SITE INCLUDING ALL AREAS OF LAND DISTURBANCE, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, EQUIPMENT STORAGE AND MAINTENANCE AREAS, AFFECTED DITCHES AND OTHER STORMWATER CONVEYANCES, AS WELL AS ALL OUTFALLS, RECEIVING WATERS AND STREAM BANKS TO DETERMINE IF, AND ENSURE THAT:
 - THE SITE INSPECTION SHALL BE CONDUCTED BY THE QCP/A QUALIFIED PERSON UNDER THE DIRECT SUPERVISION OF A QCP.
 - THE INSPECTION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST.
 - PRE-CONSTRUCTION INSPECTION SHALL INCLUDE DATED ELECTRONIC PHOTOGRAPHIC DOCUMENTATION OF ALL AREAS DESCRIBED IN PARAGRAPHS (B) ABOVE;
 - THE PERMITTEE SHALL MAINTAIN RECORD OF THE PRE-CONSTRUCTION SITE INSPECTION PURSUANT TO PART IV.K.

3. SITE INSPECTIONS

- SITE INSPECTION SHALL CONSIST OF A COMPLETE AND COMPREHENSIVE OBSERVATION OF THE ENTIRE CONSTRUCTION SITE INCLUDING ALL AREAS OF LAND DISTURBANCE, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, EQUIPMENT STORAGE AND MAINTENANCE AREAS, AFFECTED DITCHES AND OTHER STORMWATER CONVEYANCES, AS WELL AS ALL OUTFALLS, RECEIVING WATERS AND STREAM BANKS TO DETERMINE IF, AND ENSURE THAT:
 - THE SITE INSPECTION SHALL BE CONDUCTED BY THE QCP/A QUALIFIED PERSON UNDER THE DIRECT SUPERVISION OF A QCP.
 - THE INSPECTION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST.
 - PRE-CONSTRUCTION INSPECTION SHALL INCLUDE DATED ELECTRONIC PHOTOGRAPHIC DOCUMENTATION OF ALL AREAS DESCRIBED IN PARAGRAPHS (B) ABOVE;
 - THE PERMITTEE SHALL MAINTAIN RECORD OF THE PRE-CONSTRUCTION SITE INSPECTION PURSUANT TO PART IV.K.

4. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

IT SHALL NOT BE A DEFENSE FOR THE PERMITTEE IN AN ENFORCEMENT ACTION THAT IT WOULD HAVE BEEN NECESSARY TO HALT OR REDUCE CONSTRUCTION ACTIVITIES IN ORDER TO MAINTAIN COMPLIANCE WITH THE CONDITIONS OF THE PERMIT.

D. DUTY TO MITIGATE

THE PERMITTEE SHALL TAKE ALL REASONABLE STEPS TO MITIGATE OR PREVENT ANY VIOLATION OF THE PERMIT OR TO MINIMIZE OR PREVENT ANY ADVERSE IMPACT OF ANY PERMIT VIOLATION.

- EFFECTIVE EROSION CONTROLS AND SEDIMENT CONTROLS HAVE BEEN FULLY IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH THIS PERMIT, THE SITE CEMP, AND THE ALABAMA HANDBOOK;
- POLLUTANT DISCHARGES ARE BEING PREVENTED/MINIMIZED AND
- DISCHARGES DO RESULT IN A CONTRAVENTION OF APPLICABLE STATE WATER QUALITY STANDARDS FOR THE RECEIVING STREAM(S) OR OTHER WATERS IMPACTED OR AFFECTED BY THE PERMITTEE.
- SITE INSPECTIONS SHALL BE PERFORMED BY A QCP, QCP, OR A QUALIFIED PERSON UNDER THE DIRECT SUPERVISION OF A QCP.
- FOR NON-LINEAR PROJECTS, A SITE INSPECTION SHALL BE PERFORMED EACH MONTH AND AFTER ANY QUALIFYING PRECIPITATION EVENT, COMMENCING AS PROMPTLY AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER RESUMING OR CONTINUING ACTIVE CONSTRUCTION OR DISTURBANCE, AND COMPLETED NO LATER THAN 72 HOURS FOLLOWING THE PRECIPITATION EVENT.
- FOR LINEAR PROJECTS WHERE ACTIVE CONSTRUCTION OR AREAS WHERE PERENNIAL VEGETATION HAS NOT BEEN FULLY ESTABLISHED, MEETING THE DEFINITION OF FINAL STABILIZATION, A SITE INSPECTION SHALL BE PERFORMED AT LEAST ONE MONTH AND AFTER ANY QUALIFYING PRECIPITATION EVENT SINCE THE LAST INSPECTION, BEGINNING AS PROMPTLY AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER RESUMING OR CONTINUING ACTIVE CONSTRUCTION OR DISTURBANCE, AND COMPLETED NO LATER THAN FIVE (5) DAYS AFTER THE QUALIFYING PRECIPITATION EVENT.
- A SITE INSPECTION SHALL ALSO BE PERFORMED AS OFTEN AS IS NECESSARY UNTIL ANY POORLY FUNCTIONING EROSION CONTROLS OR SEDIMENT CONTROLS, NON-COMPLIANT DISCHARGES, OR ANY OTHER DEFICIENCIES OBSERVED DURING A PRIOR INSPECTION ARE CORRECTED AND DOCUMENTED AS BEING IN COMPLIANCE WITH THE REQUIREMENTS OF THIS PERMIT.
- ON ALL ACTIVE DISTURBANCE, DREDGING, EXCAVATION, OR CONSTRUCTION UNDERTAKEN OR LOCATED WITHIN THE BANKS OF A WATERBODY, INCLUDING BUT NOT LIMITED TO, EQUIPMENT CROSSINGS, PIPELINES, OR OTHER TRANSMISSION LINE INSTALLATION, CONVEYOR STRUCTURE INSTALLATION, AND WATERBODY RELICATION, STREAMBANK STABILIZATION, OR OTHER ALTERATIONS, A SITE INSPECTION SHALL BE PERFORMED AT LEAST ONE WEEK AND AS OFTEN AS IS NECESSARY UNTIL THE DISTURBANCE/ACTIVITY IMPACTING THE WATERBODY IS COMPLETE AND RECLAMATION OR EFFECTIVE STORMWATER QUALITY REMEDIATION IS ACHIEVED.
- THE INSPECTION SHALL BE RECORDED IN A WRITTEN FORMAT ACCEPTABLE TO THE DEPARTMENT. THE INSPECTION RECORD SHALL INCLUDE:
 - THE SITE NAME AND LOCATION, DISCHARGE POINT NUMBER, DATE, TIME AND EXACT PLACE OF ANY SAMPLING PERFORMED;
 - THE NAME(S) OF PERSON(S) WHO PERFORMED THE INSPECTION AND/OR OBTAINED ANY SAMPLES OR MEASUREMENTS TAKEN;
 - THE DATES AND TIMES OF THE INSPECTION AND ANY SAMPLES OR MEASUREMENTS TAKEN;
 - A DESCRIPTION OF ANY SAMPLING AND ANALYTICAL TECHNIQUES OR METHODS USED, INCLUDING SOURCE OF METHOD AND METHOD NUMBER;
 - THE RESULTS OF ANY ANALYSES PERFORMED;
 - WEATHER CONDITIONS AT THE TIME OF THE INSPECTION;
 - DESCRIPTION OF ANY DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
 - LOCATIONS OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
 - LOCATIONS OF BMPS THAT NEED TO BE MAINTAINED;
 - LOCATIONS OF BMPS THAT FAILED TO OPERATE AS DESIGNED;
 - LOCATIONS WHERE BMPS REQUIRED BY THE CEMP ARE NOT INSTALLED OR INSTALLED IN A MANNER INCONSISTENT WITH THE CEMP; AND
 - LOCATIONS WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION. THIS REQUIREMENT IS APPLICABLE ONLY TO SITE INSPECTIONS PERFORMED BY A QCP OR QUALIFIED PERSONS UNDER THE DIRECT SUPERVISION OF A QCP.
- RESULTS OF ALL REQUIRED INSPECTIONS SHALL BE AVAILABLE FOR INSPECTION NO LATER THAN 15 DAYS FOLLOWING THE DATE OF THE INSPECTIONS, MONITORING OR SAMPLING.
- REPORTS SHALL BE LEGIBLE AND BEAR AN ORIGINAL SIGNATURE OR IN THE CASE OF ELECTRONIC REPORTS, AN ELECTRONIC SIGNATURE.

4. CEMP EVALUATIONS

- THE QCP SHALL PERFORM AN ON-SITE EVALUATION OF ALL EROSION AND SEDIMENT CONTROLS BEING IMPLEMENTED FOR ADEQUACY AND CONSISTENCY WITH SITE CONDITIONS.
- THE CEMP EVALUATION SHALL BE PERFORMED AS OFTEN AS NECESSARY UNTIL POORLY FUNCTIONING OR DAMAGED EROSION CONTROLS OR SEDIMENT CONTROLS ARE CORRECTED, AND, AT A MINIMUM, EVERY SIX MONTHS.
- IF, BASED ON THE CEMP EVALUATION, THE QCP IDENTIFIES ANY NEEDED MODIFICATIONS OR ADDITIONS TO EROSION AND SEDIMENT CONTROLS, THE CEMP SHALL BE UPDATED IN ACCORDANCE WITH PART II.B.
- THE PERMITTEE SHALL MAINTAIN APPROPRIATE DOCUMENTATION OF THE CEMP EVALUATION.

I. CORRECTIVE ACTION

- ANY POORLY FUNCTIONING EROSION CONTROLS OR SEDIMENT CONTROLS, NON-COMPLIANT DISCHARGES, OR ANY OTHER DEFICIENCIES OBSERVED DURING THE INSPECTIONS REQUIRED UNDER PART II.G.2 SHALL BE CORRECTED AS SOON AS POSSIBLE, BUT NOT TO EXCEED FIVE (5) DAYS OF THE INSPECTION UNLESS PREVENTED BY WEATHER CONDITIONS. IF UNSAFE WEATHER CONDITIONS ARE PRESENT, THEY SHOULD BE DOCUMENTED.
- IN THE EVENT OF A BREACH OF A SEDIMENT BASIN/POND TEMPORARY CONTAINMENT MEASURES SHALL BE TAKEN WITHIN 24 HOURS AFTER THE INSPECTION. PERMANENT CORRECTIVE MEASURES SHALL BE IMPLEMENTED WITHIN FIVE (5) DAYS OF THE INSPECTION; HOWEVER, IF PERMANENT CORRECTIVE MEASURES CANNOT BE IMPLEMENTED WITHIN THE TIMEFRAMES PROVIDED HEREIN THE PERMITTEE SHALL CONTACT THE DEPARTMENT; AND
- THE OPERATOR SHALL PROMPTLY TAKE ALL REASONABLE STEPS TO REMOVE, TO THE MAXIMUM EXTENT PRACTICAL, POLLUTANTS DEPOSITED OFFSITE DURING THE INSPECTION OR AFTER ANY CONVEYANCE STRUCTURE.

J. SUSPENSION OF MONITORING

SUSPENSION OF APPLICABLE MONITORING AND INSPECTION REQUIREMENTS FOR PHASED PROJECTS OR DEVELOPMENTS MAY BE GRANTED PROVIDED:

- THE DEPARTMENT IS NOTIFIED IN WRITING AT LEAST THIRTY DAYS PRIOR TO THE REQUESTED SUSPENSION;
- THE PERMITTEE AND THE QCP CERTIFY IN THE REQUEST THAT ALL DISTURBANCE HAS BEEN GRADED, STABILIZED, AND/OR FULLY VEGETATED OR OTHERWISE PERMANENTLY COVERED, AND THAT APPROPRIATE, EFFECTIVE STEPS HAVE BEEN AND WILL BE TAKEN BY THE PERMITTEE TO ENSURE COMPLIANCE WITH THE REQUIREMENTS OF THIS PERMIT AND COMMIT THAT THESE MEASURES WILL REMAIN CONTINUALLY EFFECTIVE UNTIL THE PERMIT IS PROPERLY TERMINATED;
- THE REQUEST SHOULD BE ACCOMPANIED BY A CONSTRUCTION STORMWATER INSPECTION REPORT CONFIRMING PERMANENT STABILIZATION OF ALL PREVIOUSLY DISTURBED AREAS, INCLUDING MATERIAL STORAGE AREAS, AND ASSOCIATED SUPPORT ACTIVITIES. IN ADDITION, PHOTO DOCUMENTATION MAY BE SUBMITTED FOR INFORMATION PURPOSES; AND
- THE PERMITTEE NOTIFIES THE DEPARTMENT IN WRITING WITHIN 15 DAYS PRIOR TO RESUMPTION OF DISTURBANCE OR COMMENCEMENT OF THE NEXT PHASE OF DEVELOPMENT AND THE PERMITTEE COMPLIES WITH THE REQUIREMENTS OF THIS PERMIT PRIOR TO COMMENCEMENT OF ADDITIONAL DISTURBANCE.

K. PRECIPITATION MEASUREMENT

- THE PERMITTEE SHALL MEASURE AND RECORD ALL PRECIPITATION OCCURRING AT THE CONSTRUCTION SITE (INCLUDING RAINFALL AND SNOWFALL). PRECIPITATION MEASUREMENTS SHALL BE TAKEN USING CONTINUOUS RECORDERS, DAILY READINGS OF AN ON-SITE RAIN GAUGE, DAILY READINGS OF AN OFFSITE PRECIPITATION GAUGE LOCATED ADJACENT TO OR IN CLOSE PROXIMITY (FOR NON-LINEAR PROJECTS A MAXIMUM 1 MILE DISTANCE) TO THE FACILITY, OR BY OTHER MEASUREMENT DEVICES ACCEPTABLE TO THE DEPARTMENT (E.G. ONLINE RESOURCES). PRECIPITATION MEASUREMENTS MUST BE PROPERLY TERMINATED.
- IMPAIRED WATERS AND TOTAL MAXIMUM DAILY LOAD (TMDL) WATERS
 - THE PERMITTEE MUST DETERMINE WHETHER THE DISCHARGE FROM ANY PART OF THE CONSTRUCTION SITE CONTRIBUTES DIRECTLY OR INDIRECTLY TO A WATERBODY THAT IS INCLUDED ON THE LATEST 303(d) LIST OR DESIGNATED BY THE DEPARTMENT AS IMPAIRED;
 - IF THE PERMITTEE'S CONSTRUCTION SITE DISCHARGES TO A WATERBODY INCLUDED ON THE LATEST 303(d) OR DESIGNATED BY THE DEPARTMENT AS IMPAIRED, IT MUST DEMONSTRATE THE DISCHARGES, AS CONTROLLED BY THE PERMITTEE, DO NOT CAUSE OR CONTRIBUTE TO THE IMPAIRMENT. THE CEMP MUST INCLUDE MEASURES THAT THE BMPS THAT ARE BEING UTILIZED TO CONTROL DISCHARGES OF POLLUTANTS ASSOCIATED WITH THE IMPAIRMENT, IF EXISTING BMPS ARE NOT SUFFICIENT TO ACHIEVE THIS DEMONSTRATION, THE PERMITTEE MUST, WITHIN SIXTY (60) DAYS FOLLOWING THE PUBLICATION OF THE LATEST FINAL 303(d) LIST, DEPARTMENT DESIGNATION, OR THE EFFECTIVE DATE OF THIS PERMIT, SUBMIT A REVISED CEMP DETAILING NEW OR MODIFIED BMPS. THE QCI MUST BE REVISED AS DIRECTED BY THE DEPARTMENT AND NEW OR MODIFIED BMPS MUST BE IMPLEMENTED WITHIN NINETY (90) DAYS FROM THE PUBLICATION OF THE LATEST FINAL 303(d) LIST OR DEPARTMENT DESIGNATION.
- PERMITTEES DISCHARGING FROM CONSTRUCTION SITES INTO WATERS WITH EPA-APPROVED TMDLS AND/OR EPA ESTABLISHED TMDLS
 - THE PERMITTEE MUST DETERMINE WHETHER ITS CONSTRUCTION SP
 - IT CHARGES TO A WATERBODY FOR WHICH A TOTAL MAXIMUM DAILY LOAD (TMDL) HAS BEEN ESTABLISHED OR APPROVED BY EPA. IF A CONSTRUCTION SITE DISCHARGES INTO A WATER BODY WITH AN EPA APPROVED OR ESTABLISHED TMDL, THEN THE CEMP MUST INCLUDE BMPS TARGETED TO MEET THE ASSUMPTIONS AND REQUIREMENTS OF THE TMDL. IF ADDITIONAL BMPS WILL BE NECESSARY TO MEET THE REQUIREMENTS OF THE TMDL, THE CEMP MUST INCLUDE A SCHEDULE FOR INSTALLATION AND/OR IMPLEMENTATION OF SUCH BMPS.
 - IF, DURING THIS PERMIT CYCLE, A TMDL IS APPROVED BY EPA OR A TMDL IS ESTABLISHED BY EPA FOR ANY WATERBODY TO WHICH A CONSTRUCTION SITE DISCHARGES, THE PERMITTEE MUST REVIEW THE APPLICABLE TMDL TO SEE IF IT INCLUDES REQUIREMENTS FOR CONTROL OF STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE.
 - IF IT IS FOUND THAT THE PERMITTEE MUST IMPLEMENT SPECIFIC ALLOCATIONS OF THE TMDL, IT MUST ASSESS WHETHER THE ASSUMPTIONS AND REQUIREMENTS OF THE TMDL ARE BEING MET THROUGH IMPLEMENTATION OF EXISTING BMPS OR IF ADDITIONAL BMPS ARE NECESSARY. THE CEMP MUST INCLUDE BMPS TARGETED TO MEET THE ASSUMPTIONS AND REQUIREMENTS OF THE TMDL. IF EXISTING BMPS ARE NOT SUFFICIENT, THE PERMITTEE MUST, WITHIN SIXTY (60) DAYS FOLLOWING THE APPROVAL OR ESTABLISHMENT OF THE TMDL BY EPA, SUBMIT A REVISED CEMP DETAILING NEW OR MODIFIED BMPS TO BE UTILIZED ALONG WITH A SCHEDULE OF INSTALLATION AND/OR IMPLEMENTATION OF SUCH BMPS. ANY NEW OR MODIFIED BMPS MUST BE IMPLEMENTED WITHIN NINETY (90) DAYS, UNLESS AN ALTERNATE DATE IS APPROVED BY THE DEPARTMENT, FROM THE ESTABLISHMENT OR APPROVAL OF THE TMDL BY EPA.

PART IV STANDARD AND GENERAL PERMIT CONDITIONS**A. DUTY TO COMPLY**

- THE PERMITTEE MUST COMPLY WITH ALL TERMS AND CONDITIONS OF THIS PERMIT. ANY PERMIT NONCOMPLIANCE CONSTITUTES A VIOLATION OF THE AWPAC AND THE FWPCA AND IS GROUNDS FOR: ENFORCEMENT ACTION, TERMINATION, OR SUSPENSION OF COVERAGE UNDER THIS PERMIT; DENIAL OF A NOI FOR RENEWAL; A REQUIREMENT THAT THE PERMITTEE SUBMIT AN APPLICATION FOR AN INDIVIDUAL NPDES PERMIT.
- FOR ANY VIOLATION(S) OF THIS PERMIT, THE PERMITTEE MAY BE SUBJECT TO A CIVIL PENALTY AS AUTHORIZED BY THE AWPAC, THE FWPCA, AND CODE OF ALABAMA 1975, 922-2-21 ET. SEQ., AS AMENDED, AND/OR A CRIMINAL PENALTY AS AUTHORIZED BY CODE OF ALABAMA 197

SITE DESCRIPTION & INTENDED PURPOSE

THE PROPOSED PROJECT IS THE DEVELOPMENT OF EXISTING RESIDENTIAL AND UNDEVELOPED PROPERTIES. THE SITE IS LOCATED ODENVILLE, ALABAMA. DISTURBED ACREAGE IS 4.0 ACRES TO INCLUDE PROPOSED HOUSE SITES, ROADWAY IMPROVEMENTS AND REQUIRED UTILITY WORK. THIS PLAN INTENDS TO CONTROL SEDIMENT LADEN RUN-OFF DURING THE DEVELOPMENT (CUT/FILL, INSTALLATION OF DRAINAGE STRUCTURES, DEMOLITION AND/OR REQUIRED UTILITY WORK).

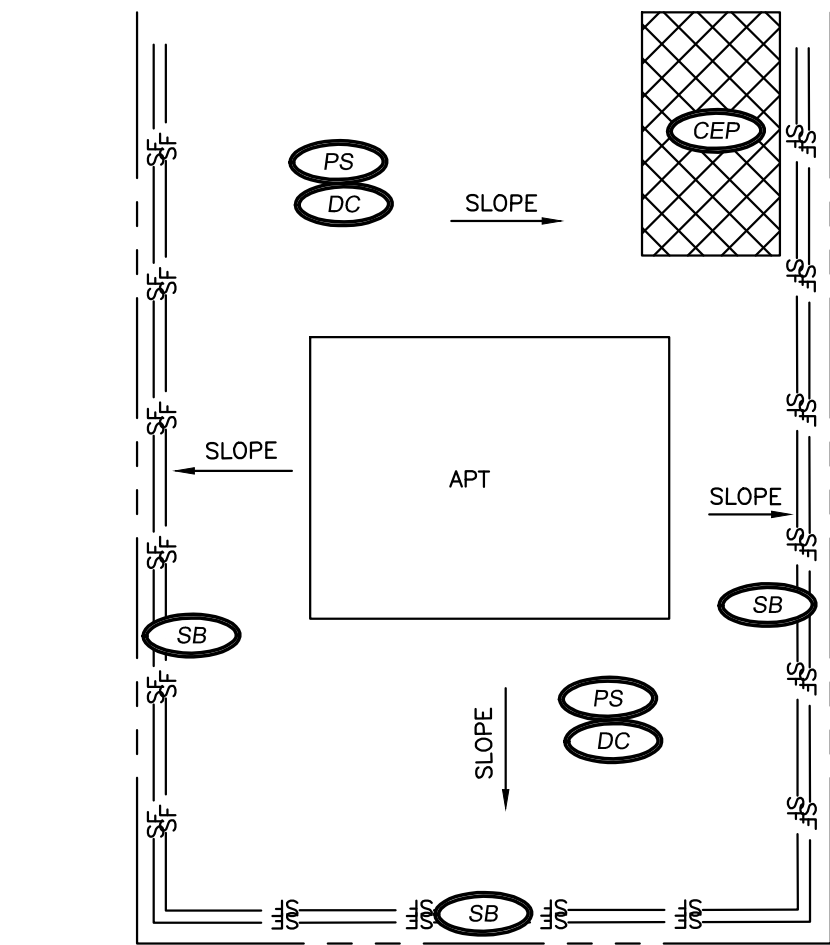
BMP NARRATIVE

THE CONTRACTOR SHALL ADHERE TO ALL EROSION CONTROL REQUIREMENTS OF ADEM AND ANY OTHER GOVERNING AGENCY, WHETHER LISTED HEREIN OR NOT. THE CONTRACTOR IS CAUTIONED THAT APPROPRIATE BMP CONTROL SHALL BE INSTALLED TO ENSURE THAT SEDIMENT LADEN RUNOFF OR SILT DOES NOT LEAVE THE SITE. ANY FILL PLACEMENT OF EARTH MATERIALS ON SITE WILL CAUSE EXISTING DRAINAGE DIRECTIONS OF STORMWATER TO BE ALTERED. THEREFORE, THE CONTRACTOR SHALL INSTALL ALL NECESSARY BMP CONTROLS (WHETHER INCLUDED AS PART OF THIS PLAN OR NOT) SO AS TO NOT PERMIT SEDIMENT LADEN RUNOFF OR SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORESEEN CONDITIONS, ACCIDENTS OR HOW THE WORK IS EXECUTED.

EROSION AND SEDIMENT CONTROL NOTES

- THE CONTRACTOR SHALL TAKE REASONABLE MEASURES TO PROTECT ALL PUBLIC AND PRIVATE PROPERTY FROM DAMAGE CAUSED BY INSTALLATION OF CONTROLS OR GRADING OPERATIONS AND TO REDUCE STORM WATER POLLUTION TO THE MAXIMUM PRACTICABLE. NO LAND-DISTURBING ACTIVITIES SHALL BE UNDERTAKEN EXCEPT IN ACCORDANCE WITH THE FOLLOWING:
- CONTRACTOR SHALL FOLLOW THE PROJECT PHASING SHOWN ON THE PLANS. THE CONTRACTOR SHALL INSURE THAT THE MINIMUM AREA IS STRIPPED OF ITS NATURAL COVER AND FOR A MINIMUM AMOUNT OF TIME AS PRACTICAL THROUGH OUT THE GRADING PHASES.
 - CONTRACTOR SHALL KEEP A COPY OF THE APPROVED LAND DISTURBANCE PERMIT AND ALL OTHER REQUIRED DOCUMENTS REQUIRED BY ADEM AND LOCAL OFFICIALS.
 - CONTRACTOR SHALL MAINTAIN EROSION CONTROL DEVICES THROUGHOUT CONSTRUCTION. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT SHALL BE REPLACED AT THE END OF THE WORK DAY OR SOONER IF UNFAVORABLE WEATHER IS EXPECTED.
 - ANY SLOPE OR FILL WHICH HAS BEEN GRADED SHALL, WITHIN THIRTEEN (13) DAYS OF THE COMPLETION OF SUCH GRADING OR THE COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH GROUND COVER, MATERIALS, DEVICES OR STRUCTURES SUFFICIENT TO PREVENT EROSION. THE BMPs SHALL REMAIN IN PLACE IN ACCORDANCE WITH THE BMP PLAN UNTIL THE GRADED SLOPE OR FILL IS STABILIZED. PERMANENT VEGETATION SHALL BE INSTALLED AS SOON AS POSSIBLE AFTER THE AREA IS AT FINAL GRADE.
 - THE CONSTRUCTION BEST MANAGEMENT PRACTICE PLAN (CBMPP) IS COMPRISED OF THESE DRAWINGS, STANDARD DETAILS, THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
 - ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF ALABAMA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
 - CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
 - BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORMWATER MANAGEMENT, WHICHEVER IS MORE STRINGENT. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
 - CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA, WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, & AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE COLLECTED IN WATERTIGHT CONTAINERS AND COLLECTED MATERIAL TO BE DISPOSED OF IN AN APPROVED LANDFILL WHEN THE CONTAINER REACHES 75% OF ITS CAPACITY. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON-SITE AND READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS. DUST ON THE SITE SHALL BE CONTROLLED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST CONTROL IS NOT ALLOWED.

- ALL EROSION CONTROL MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE, BUT PRIOR TO THE COMMENCEMENT OF EARTH MOVING OPERATIONS.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM WATER DRAINAGE OUTLET IN CONJUNCTION WITH STABILIZATION OF THE SITE.
- ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.
- ADDITIONAL PROTECTION: ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT FROM LEAVING THE PROJECT CONFINES DUE TO UNFORESEEN CONDITIONS, ACCIDENT OR HOW WORK IS EXECUTED.
- ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD AND PARKING CONSTRUCTION.
- USE OF DETERGENTS FOR LARGE SCALE WASHING IS PROHIBITED. CHEMICALS, PAINT, SOLVENTS, FERTILIZERS AND OTHER TOXIC MATERIAL MUST BE STORED IN WATERPROOF CONTAINERS, EXCEPT DURING APPLICATION. THE CONTENT MUST BE KEPT IN TRUCKS OR WITHIN STORAGE FACILITIES. RUNOFF CONTAINING SUCH MATERIAL MUST BE COLLECTED, REMOVED FROM THE SITE OR TREATED AND DISPOSED AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY.
- NO BELOW GROUND STORAGE WILL BE ALLOWED.
- CONTRACTOR SHALL PROVIDE EMERGENCY CONTAINMENT FOR ANY HAZARDOUS MATERIAL STORED ON-SITE. THIS CONTAINMENT SHALL BE EARTHEN BERM'S OR EQUIVALENT. THE CONTAINMENT SHALL COMPLY WITH SPILL PREVENTION CONTROL AND COUNTER MEASURES (SPCC) REGULATIONS FOR PAINT, OIL, GREASE, OTHER PETROLEUM PRODUCTS, OR ANY OTHER MATERIALS.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
- CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EROSION AND SEDIMENT CONTROL DEVICES ON-SITE DURING CONSTRUCTION IN ACCORDANCE WITH THE ABOVE, AS A MINIMUM STANDARD, AND SHALL REMOVE ANY SILT BEYOND THE PROPERTY RESULTING FROM CONSTRUCTION, ONCE THE SITE IS STABILIZED AND ACCEPTED.
- CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL DEVICES.



TYPICAL LOT BMP PLAN

N.T.S.



TABLE SOD-2 Adaptation and Maintenance of Grasses Used for Sodding

SPECIES	VARIETY					MAINTENANCE	
	SHADE	HEAT	COLD	DROUGHT	WEAR	MOWING HEIGHT	MOWING FREQ.
BERMUDAGRASS	NO	GOOD	POOR	EXCEL.	EXCEL.	1"	HIGH
BAHIAGRASS	FAIR	GOOD	POOR	EXCEL.	GOOD	2-3"	HIGH
CENTIPEDE	FAIR	GOOD	POOR	GOOD	POOR	1.5"	LOW
TALL FESCUE	GOOD	FAIR	GOOD	GOOD	GOOD	3"	HIGH
ST. AUGUSTINE	GOOD	GOOD	POOR	POOR	POOR	2-3"	MEDIUM
ZOYSIA	FAIR	GOOD	FAIR	EXCEL.	GOOD	1"	HIGH

TABLE SOD-1 Grasses Adapted for Sodding in Alabama

WARM SEASON SPECIES	VARIETY	AREA ADAPTED
BERMUDAGRASS	Tifway, TifSport, Celebration, TifGrand, Common	North, Central, South
BAHIAGRASS	Pensacola	Central, South
CENTIPEDE	Common, TifBlair	Central, South
ST. AUGUSTINE	Common, and a few commercial varieties	South
ZOYSIA	Any selection available in Alabama, Zenith is Seeded	Central, South
COOL SEASON SPECIES		
TALL FESCUE	Kentucky 31, Rebel (turf type)	North

TABLE MU-1 Mulching Materials and Application Rates

MATERIAL	RATE PER ARCE	NOTES
STRAW (WITH SEED)	1.5 - 2 TONS	Spread by hand or machine; Anchor when subject to blowing
STRAW (NO SEED)	2.5 - 3 TONS	Spread by hand or machine; Anchor when subject to blowing
WOOD CHIPS	5 - 6 TONS	Treat with 12 lbs. nitrogen / ton.
BARK	35 CUBIC YARDS	Can apply with mulch blower.
PINE STRAW	1 - 2 TONS	Spread by hand or machine.
PEANUT HULLS	10 - 20 TONS	Will wash off slopes. Treat with 12 lbs. nitrogen / ton.
HECPs	0.75 - 2.25 TONS	Refer to ECTC or Manufacturer's recommendations.

TABLE TS-1 Commonly Used for Temporary Cover

SPECIES	SEEDING RATE/AC	SEEDING DATES		
		NORTH	CENTRAL	SOUTH
MILLET, BROWNTOP OR GERMAN	40 LBS.	MAY 1-AUG 1	APR 1-AUG 15	APR 1-AUG 15
RYE	3 BU.	SEP 1-NOV 15	SEP 15-NOV 15	SEP 15-NOV 15
RYEGRASS	30 LBS.	AUG 1-SEP 15	SEP 1-OCT 15	SEP 1-OCT 15
RYEGHUM-SUDAN HYBRIDS	40 LBS.	MAY 1-AUG 1	APR 15-AUG 1	APR 1-AUG 5
SUDANGRASS	40 LBS.	MAY 1-AUG 1	APR 15-AUG 1	APR 1-AUG 15
WHEAT	3 BU.	SEP 1-NOV 1	SEP 15-NOV 15	SEP 15-NOV 15
COMMON BERMUDAGRASS	10 LBS.	APR 1-JULY 1	MAR 15-JULY 15	MAR 1-JULY 15
CRIMSON CLOVER	10 LBS.	SEP 1-NOV 1	SEP 1-NOV 1	SEP 1-NOV 1

STRUCTURAL PRACTICES		VEGETATIVE MEASURES	
CODE	PRACTICE	CODE	PRACTICE
CEP	CONSTRUCTION EXIT	PS	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
SB	SILT FENCE (TYPE A)	DC	DUST CONTROL ON DISTURBED AREAS

SURFACE PREPARATION FOR PERMANENT SEEDING AND SOD
Clear the area of clods, rocks, etc. and smooth the area. Grade and loosen the soil to a smooth firm surface to enhance rooting. Break up large clods and loosen compacted, hard or crusted soil surfaces with a disk, ripper, chisel, harrow or other tillage equipment. Avoid preparing the seedbed under excessively wet conditions. Operate the equipment on the contour.

Where topsoil is specified, additional steps will be done based on the design plan.

APPLICATION OF SOIL AMENDMENTS

Apply fertilizer and lime according to the plan or by soil test recommendations. In the absence of a plan or soil test recommendations apply agricultural limestone at a rate of 2 tons per acre (90 lbs. per 1000 s.f.) and 10-10-10 fertilizer at the rate of 1000 lbs. per acre (25 lbs per 1000 s.f.). Apply ground agricultural limestone unless a soil test shows a pH of 6.0 or greater. Incorporate amendments to a depth of 4" to 6" with a disk or rotary tiller.

Rake or harrow to achieve a smooth, final grade on which to lay the sod. Surface should be loose, and free of plants, trash and other debris.

During high temperatures, moisten the soil immediately prior to laying sod. This cools the soil reduces root burning and dieback.

INSTALLING THE SOD

Lay the first row of sod in a straight line with subsequent rows placed parallel to and butting tightly against each other. Stagger joints to create a brick-like pattern and promote more uniform growth and strength. Ensure that sod is not stretched, or overlapped and that all joints are butted tight to prevent spaces which would cause drying of the roots

On slopes 3:1 or steeper, or wherever concentrated flow may be a problem, lay sod with staggered joints and secure by stapling or pegging. Install sod with the length perpendicular to the water flow on the contour.

Staple firmly at the corners and middle of each strip. Jute and synthetic netting may be pegged over the sod of further protection against washout during establishment.

IRRIGATION

Immediately after laying the sod, roll or tamp it to provide firm contact between roots and soil, then irrigate sod deeply so that the underside of the sod pad and the soil 6" below the sod is thoroughly wet.

Until a good root system develops, water sod during dry periods as often as necessary to maintain moist soil to a depth of at least 4".

SITE PREPARATION AND SOIL AMENDMENTS FOR TEMP. SEEDING

COMPLETE GRADING AND SHAPING BEFORE APPLYING SOIL AMENDMENTS IF GRADING AND SHAPING ARE NEEDED TO PROVIDE A SURFACE ON WHICH EQUIPMENT CAN SAFELY AND EFFICIENTLY BE USED TO APPLY SOIL AMENDMENTS AND ACCOMPLISH SEEDED PREPARATION AND SEEDING.

LIME

APPLY LIME ACCORDING TO SOIL TEST RECOMMENDATIONS. IF A SOIL TEST IS NOT AVAILABLE, USE 1 TON OF AGRICULTURAL LIMESTONE OR EQUIVALENT PER ACRE ON COARSE TEXTURED SOILS AND 3 TONS PER ACRE ON FINE TEXTURED SOILS. DO NOT APPLY LIME TO ALKALINE SOILS OR TO AREAS WHICH HAVE BEEN LIMED DURING THE PRECEDING 2 YEARS.

FERTILIZER

APPLY FERTILIZER ACCORDING TO SOIL TEST RESULTS. IF A SOIL TEST IS NOT AVAILABLE, APPLY 8-24-24 FERTILIZER.

WHEN VEGETATION HAS EMERGED TO A STAND AND IS GROWING, 30 TO 40 LBS/ACRE (APPROXIMATELY 0.8 LBS./10000 FT²) OF ADDITIONAL NITROGEN FERTILIZER SHOULD BE APPLIED.

NOTE: FERTILIZER CAN BE BLENDED TO MEET EXACT FERTILIZER RECOMMENDATIONS. TAKE SOIL TEST RECOMMENDATIONS TO LOCAL FERTILIZER DEALER FOR BULK FERTILIZER BLENDS. THIS MAY BE MORE ECONOMICAL THAN BAGGED FERTILIZER.

APPLICATION OF SOIL AMENDMENTS

INCORPORATE LIME AND FERTILIZER INTO THE TOP 6" OF SOIL DURING SEEDED PREPARATION.

SEEDBED PREPERATION

GOOD SEEDED PREPARATION IS ESSENTIAL TO SUCCESSFUL PLANT ESTABLISHMENT. A GOOD SEEDED IS WELL FULVERIZED, LOOSE, AND SMOOTH. IF SOILS BECOME COMPACTED DURING GRADING, LOOSEN THEM TO A DEPTH OF 6" TO 8" USING A RIPPER OR CHISEL PLOW.

IF RAINFALL HAS CAUSED THE SURFACE TO BECOME SEALED OR CRUSTED, LOOSEN IT JUST PRIOR TO SEEDING BY DISKING, RAKING, HARROWING, OR OTHER SUITABLE METHODS. WHEN HYDROSEEDING METHODS ARE USED, THE SURFACE SHOULD BE LEFT WITH A MORE IRREGULAR SURFACE OF COLDS.

PLANTING METHODS SEEDING

EVENLY APPLY SEED USING A CYCLONE SEEDER (BROADCAST), DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. BROADCAST SEEDING AND HYDROSEEDING ARE APPROPRIATE FOR STEP SLOPES WHERE EQUIPMENT CANNOT OPERATE SAFELY. SMALL GRAINS SHOULD BE PLANTED NO MORE THAN 1" DEEP, AND GRASSES AND LEGUMES NO MORE THAN ½" DEEP. BROADCAST SEED MUST BE COVERED BY RAKING OR CHAIN DRAGGING, AND THEN LIGHTLY FIRMED WITH A ROLLER OR CULTIPACKER.

HYDROSEEDING

SURFACE ROUGHENING IS PARTICULARLY IMPORTANT WHEN HYDROSEEDING. AS ROUGHENED SLOPE WILL PROVIDE SOME NATURAL COVERAGE FOR LIME, FERTILIZER, AND SEED. THE SURFACE SHOULD NOT BE COMPACTED OR SMOOTH. FINE SEEDED PREPARATION IS NOT NECESSARY FOR HYDROSEEDING OPERATIONS; LARGE CLODS, STONES, AND IRREGULARITIES PROVIDE CAVITIES IN WHICH SEEDS CAN LODGE. HYDROSEEDING MIXTURES SHOULD INCLUDE A WOOD FIBER MULCH WHICH IS DYED AN APPROPRIATE COLOR TO FACILITATE UNIFORM APPLICATIONS OF THE SEED.

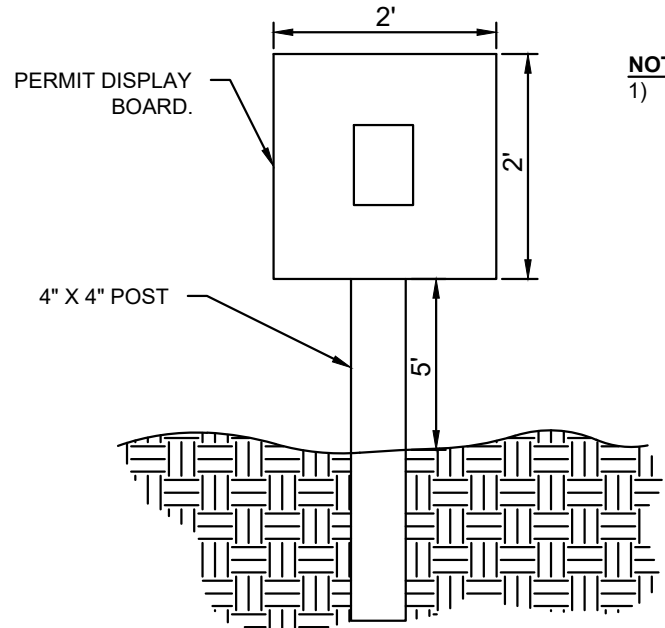
MIX SEED, INOCULANT IF REQUIRED, AND A SEED CARRIER WITH WATER AND APPLY AS A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. THE SEED CARRIER SHOULD BE A CELLULOSE FIBER, NATURAL WOOD FIBER OR CANE FIBER MULCH MATERIAL WHICH IS DYED AN APPROPRIATE COLOR TO RECOMMENDED RATE WHEN ADDING INOCULANT TO A HYDROSEEDER SLURRY. THE MIXTURE SHOULD BE APPLIED WITHIN 1 HOUR AFTER MIXING TO REDUCE DAMAGE TO SEED.

FERTILIZER SHOULD NOT BE MIXED WITH THE SEED-INOCULANT MIXTURE BECAUSE FERTILIZER SALTS MAY DAMAGE SEED AND REDUCE GERMINATION AND SEEDING VIGOR. FERTILIZER MAY BE APPLIED WITH HYDRO SEEDER AS A SEPARATE OPERATION AFTER SEEDLINGS ARE ESTABLISHED.

MULCHING

THE USE OF AN APPROPRIATE MULCH WILL HELP ENSURE ESTABLISHMENT OF VEGETATIVE COVER UNDER NORMAL CONDITIONS AND IS ESSENTIAL TO SEEDING SUCCESS UNDER HARSH SITE CONDITIONS (SEE THE MULCHING PRACTICE FOR GUIDANCE). HARSH SITE CONDITIONS INCLUDE THE FOLLOWING:

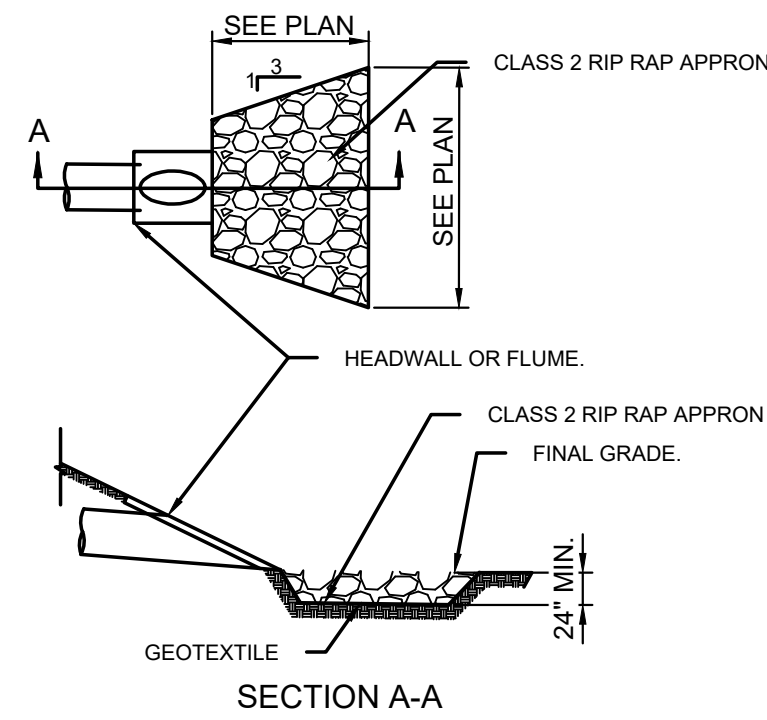
- SEEDING IN LATE FALL FOR WINTER COVER (WOOD FIBER MULCHES ARE NOT CONSIDERED ADEQUATE FOR THIS USE).



NOTES:
1) THE CONTRACTOR SHALL POST AND MAINTAIN SIGN(S) AT THE FRONT GATE/ENTRANCE. TO ADEQUATELY IDENTIFY THE SITE PRIOR TO COMMENCEMENT OF AND DURING CONSTRUCTION UNTIL NPDES PERMIT COVERAGE IS PROPERLY TERMINATED. SUCH SIGN SHALL DISPLAY THE NAME OF THE PERMITTEE, "ADEM NPDES ALR10" FOLLOWED BY THE FOUR DIGIT 25 NPDES PERMIT NUMBER, FACILITY OR PROJECT NAME.

ADEM PERMIT SIGN DETAIL

N.T.S.



CLASS 2 RIP RAP APRON

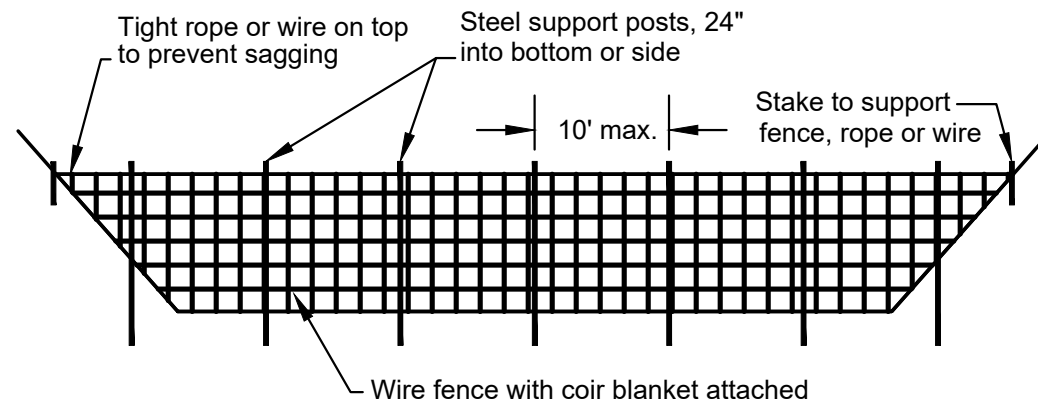
CLASS 2 RIP RAP APRON

FINAL GRADE.

NOTES:
1. INSPECT RIPRAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION IS OBSERVED AROUND THE RIPRAP OR IF STONES HAVE BEEN DISLOADED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

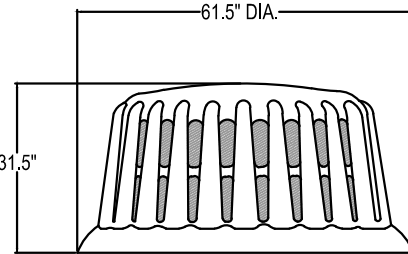
OP - RIP-RAP APRON DETAIL

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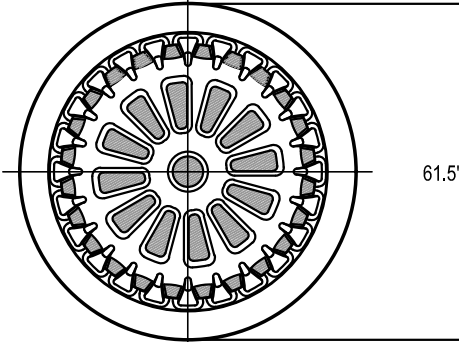


SBB - SEDIMENTATION BASIN BAFFLE DETAIL

N.T.S.

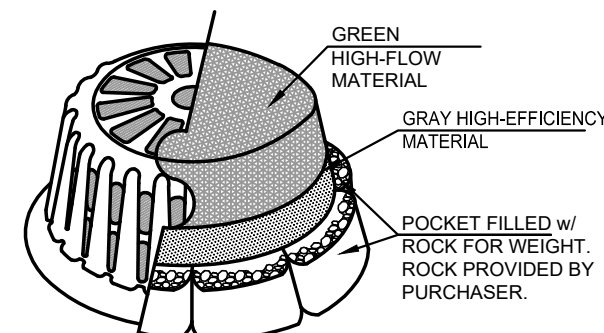


ELEVATION VIEW



PLAN VIEW

ISOMETRIC VIEW



ISOMETRIC VIEW

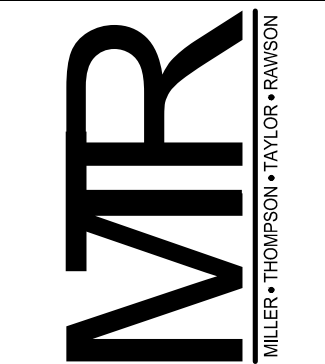
SHOWN WITH DOT FILTER

ROUND FRAME & FILTER ASSEMBLY Model # R-100A AKA "SS-100A (Round)" 60" DIAMETER		FRAME MATERIAL: BLACK 0.20" HWMP FILTER FABRIC MATERIAL: REFER TO SPEC SCALE: NOT TO SCALE LAST UPDATED: AUGUST 2019
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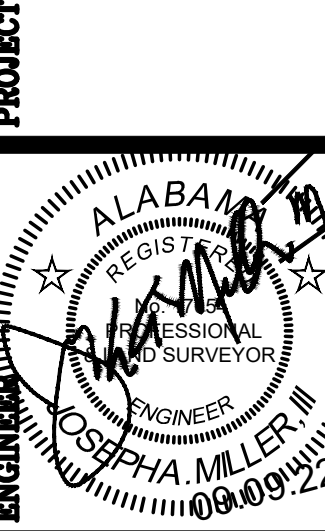
IP 7 DOMED INLET PROTECTION DETAIL

N.T.S.

MTTR
ENGINEERS, INC.
CONSULTING ENGINEERS-LAND SURVEYORS
3 Riverchase Ridge, HOOPER, AL 35244
TELEPHONE (205) 320-0114



BMP NOTES DETAILS/DETAILS
PARKSTONE MEADOWS
KATIE LANE
LEEDS ALABAMA
Parkstone Meadows, LLC,
Sheridan, Womring, 82801



ENGINEER	DATE	REVISIONS

JOB NO:	SUBDIVISIONS
FILE NAME:	PARKSTONE MEADOWS
DATE:	03-10-22
DRAWN:	JAM III
CHECKED:	JAM III
SCALE:	1"=60'
SHEET	

SITE DESCRIPTION & INTENDED PURPOSE

THE PROPOSED PROJECT IS THE DEVELOPMENT OF EXISTING RESIDENTIAL AND UNDEVELOPED PROPERTIES. THE SITE IS LOCATED ODENVILLE, ALABAMA. DISTURBED ACREAGE IS 4.0 ACRES TO INCLUDE PROPOSED HOUSE SITES, ROADWAY IMPROVEMENTS AND REQUIRED UTILITY WORK. THIS PLAN INTENDS TO CONTROL SEDIMENT LADEN RUN-OFF DURING THE DEVELOPMENT (CUT/FILL, INSTALLATION OF DRAINAGE STRUCTURES, DEMOLITION AND/OR REQUIRED UTILITY WORK).

BMP NARRATIVE

THE CONTRACTOR SHALL ADHERE TO ALL EROSION CONTROL REQUIREMENTS OF ADEM AND ANY OTHER GOVERNING AGENCY, WHETHER LISTED HEREIN OR NOT. THE CONTRACTOR IS CAUTIONED THAT APPROPRIATE BMP CONTROL SHALL BE INSTALLED TO ENSURE THAT SEDIMENT LADEN RUNOFF OR SILT DOES NOT LEAVE THE SITE. ANY FILL PLACEMENT OF EARTH MATERIALS ON SITE WILL CAUSE EXISTING DRAINAGE DIRECTIONS OF STORMWATER TO BE ALTERED. THEREFORE, THE CONTRACTOR SHALL INSTALL ALL NECESSARY BMP CONTROLS (WHETHER INCLUDED AS PART OF THIS PLAN OR NOT) SO AS TO NOT PERMIT SEDIMENT LADEN RUNOFF OR SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORESEEN CONDITIONS, ACCIDENTS OR HOW THE WORK IS EXECUTED.

EROSION AND SEDIMENT

CONTROL NOTES

- THE CONTRACTOR SHALL TAKE REASONABLE MEASURES TO PROTECT ALL PUBLIC AND PRIVATE PROPERTY FROM DAMAGE CAUSED BY INSTALLATION OF CONTROLS OR GRADING OPERATIONS AND TO REDUCE STORM WATER POLLUTION TO THE MAXIMUM PRACTICABLE. NO LAND-DISTURBING ACTIVITIES SHALL BE UNDERTAKEN EXCEPT IN ACCORDANCE WITH THE FOLLOWING:
- CONTRACTOR SHALL FOLLOW THE PROJECT PHASING SHOWN ON THE PLANS. THE CONTRACTOR SHALL INSURE THAT THE MINIMUM AREA IS STRIPPED OF ITS NATURAL COVER AND FOR A MINIMUM AMOUNT OF TIME AS PRACTICAL THROUGH OUT THE GRADING PHASES.
- CONTRACTOR SHALL KEEP A COPY OF THE APPROVED LAND DISTURBANCE PERMIT AND ALL OTHER REQUIRED DOCUMENTS REQUIRED BY ADEM AND LOCAL OFFICIALS.
- ##### SHALL MAINTAIN EROSION CONTROL DEVICES THROUGHOUT CONSTRUCTION. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY BUT SHALL BE REPLACED AT THE END OF THE WORK DAY OR SOONER IF UNFAVORABLE WEATHER IS EXPECTED.
- ANY SLOPE OR FILL WHICH HAS BEEN GRADED SHALL, WITHIN THIRTEEN (13) DAYS OF THE COMPLETION OF SUCH GRADING OR THE COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH GROUND COVER, MATERIALS, DEVICES OR STRUCTURES SUFFICIENT TO PREVENT EROSION. THE BMPs SHALL REMAIN IN PLACE IN ACCORDANCE WITH THE BMP PLAN UNTIL THE GRADED SLOPE OR FILL IS STABILIZED. PERMANENT VEGETATION SHALL BE INSTALLED AS SOON AS POSSIBLE AFTER THE AREA IS AT FINAL GRADE.
- THE CONSTRUCTION BEST MANAGEMENT PRACTICE PLAN (CBMPP) IS COMPRISED OF THESE DRAWINGS, STANDARD DETAILS, THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF ALABAMA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- ##### SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORMWATER MANAGEMENT, WHICHEVER IS MORE STRINGENT. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- ##### SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, & AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE COLLECTED IN WATERTIGHT CONTAINERS AND COLLECTED MATERIAL TO BE DISPOSED OF IN AN APPROVED LANDFILL WHEN THE CONTAINER REACHES 75% OF ITS CAPACITY. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLotation BOOMS SHALL BE MAINTAINED ON-SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS. DUST ON THE SITE SHALL BE CONTROLLED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST CONTROL IS NOT ALLOWED.
- ALL EROSION CONTROL MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE, BUT PRIOR TO THE COMMENCEMENT OF EARTH MOVING OPERATIONS.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM WATER DRAINAGE OUTLET IN CONJUNCTION WITH STABILIZATION OF THE SITE.
- ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, ##### SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.
- ADDITIONAL PROTECTION: ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT FROM LEAVING THE PROJECT CONFINES DUE TO UNFORESEEN CONDITIONS, ACCIDENT OR HOW WORK IS EXECUTED.
- ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD AND PARKING CONSTRUCTION.
- USE OF DETERGENTS FOR LARGE SCALE WASHING IS PROHIBITED. CHEMICALS, PAINT, SOLVENTS, FERTILIZERS AND OTHER TOXIC MATERIALS MUST BE STORED IN WATERPROOF CONTAINERS, EXCEPT DURING APPLICATION. THE CONTENT MUST BE KEPT IN TRUCKS OR WITHIN STORAGE FACILITIES. RUNOFF CONTAINING SUCH MATERIAL MUST BE COLLECTED, REMOVED FROM THE SITE OR TREATED AND DISPOSED AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY.
- NO BELOW GROUND STORAGE WILL BE ALLOWED.
- ##### SHALL PROVIDE EMERGENCY CONTAINMENT FOR ANY HAZARDOUS MATERIAL STORED ON-SITE. THIS CONTAINMENT SHALL BE EARTHEN BERM'S OR EQUIVALENT. THE CONTAINMENT SHALL COMPLY WITH SPILL PREVENTION CONTROL AND COUNTER MEASURES (SPCC) REGULATIONS FOR PAINT, OIL, GREASE, OTHER PETROLEUM PRODUCTS, OR ANY OTHER MATERIALS.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ##### SHALL INSURE THAT ALL DRAINAGE STRUCTURES, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
- ##### SHALL CONSTRUCT AND MAINTAIN EROSION AND SEDIMENT CONTROL DEVICES ON-SITE DURING CONSTRUCTION IN ACCORDANCE WITH THE ABOVE, AS A MINIMUM STANDARD, AND SHALL REMOVE ANY SILT BEYOND THE PROPERTY RESULTING FROM CONSTRUCTION. ONCE THE SITE IS STABILIZED AND ACCEPTED, ##### SHALL REMOVE TEMPORARY EROSION CONTROL DEVICES.



TABLE SOD-2 Adaptation and Maintenance of Grasses Used for Sodding

SPECIES	VARIETY				MAINTENANCE		
	SHADE	HEAT	COLD	DROUGHT	WEAR	MOWING HEIGHT	MOWING FREQ.
BERMUDAGRASS	NO	GOOD	POOR	EXCEL.	EXCEL.	1"	HIGH
BAHIAGRASS	FAIR	GOOD	POOR	EXCEL.	GOOD	2-3"	HIGH
CENTPEDE	FAIR	GOOD	POOR	GOOD	POOR	1.5"	LOW
TALL FESCUE	GOOD	FAIR	GOOD	GOOD	GOOD	3"	HIGH
ST. AUGUSTINE	GOOD	GOOD	POOR	POOR	POOR	2-3"	MEDIUM
ZOYSIA	FAIR	GOOD	FAIR	EXCEL.	GOOD	1"	HIGH

TABLE SOD-1 Grasses Adapted for Sodding in Alabama

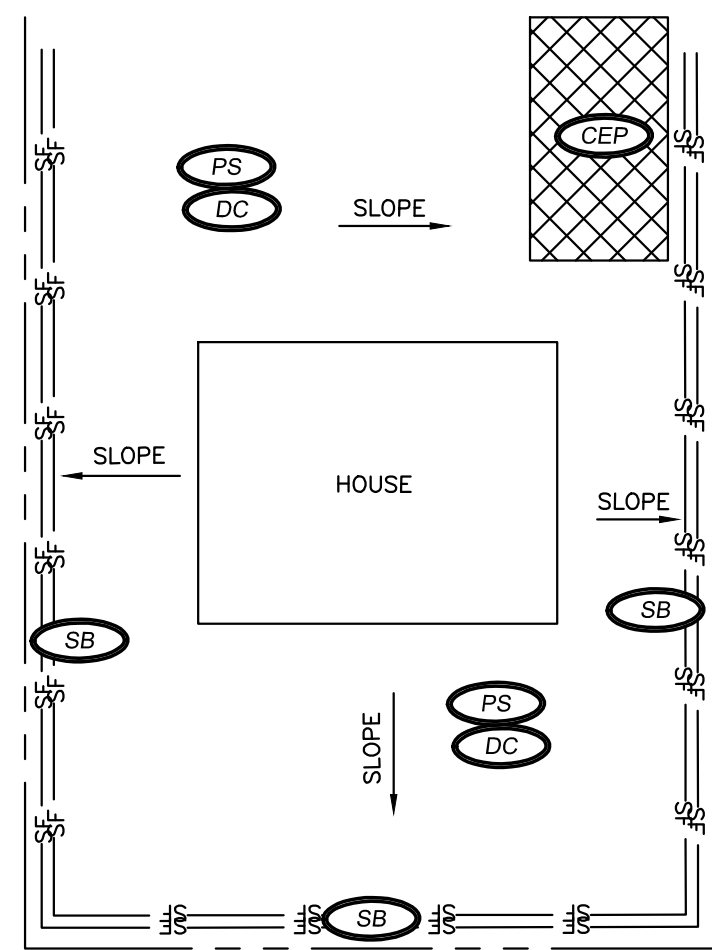
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BAHIAGRASS	Pensacola	Central, South
CENTPEDE	Common, TifBlair	Central, South
ST. AUGUSTINE	Common, and a few commercial varieties	South
ZOYSIA	Any selection available in Alabama, Zenith is Seeded	Central, South
COOL SEASON SPECIES		
TALL FESCUE	Kentucky 31, Rebel (turf type)	North

TABLE MU-1 Mulching Materials and Application Rates

MATERIAL	RATE PER ARCE	NOTES
STRAW (WITH SEED)	1.5 - 2 TONS	Spread by hand or machine; Anchor when subject to blowing
STRAW (NO SEED)	2.5 - 3 TONS	Spread by hand or machine; Anchor when subject to blowing
WOOD CHIPS	5 - 6 TONS	Treat with 12 lbs. nitrogen / ton.
BARK	35 CUBIC YARDS	Can apply with mulch blower.
PINE STRAW	1 - 2 TONS	Spread by hand or machine.
PEANUT HULLS	10 - 20 TONS	Will wash off slopes. Treat with 12 lbs. nitrogen / ton.
HECPs	0.75 - 2.25 TONS	Refer to ECTC or Manufacturer's recommendations.

TABLE TS-1 Commonly Used for Temporary Cover

SPECIES	SEEDING RATE/AC	SEEDING DATES		
		NORTH	CENTRAL	SOUTH
MILLET, BROWNTOP OR GERMAN	40 LBS.	MAY 1-AUG 1	APR 1-AUG 15	APR 1-AUG 15
RYE	3 BU.	SEP 1-NOV 15	SEP 15-NOV 15	SEP 15-NOV 15
RYEGRASS	30 LBS.	AUG 1-SEP 15	SEP 1-OCT 15	SEP 1-OCT 15
SORGHUM-SUDAN HYBRIDS	40 LBS.	MAY 1-AUG 1	APR 15-AUG 1	APR 1-AUG 5
SUDANGRASS	40 LBS.	MAY 1-AUG 1	APR 15-AUG 1	APR 1-AUG 15
WHEAT	3 BU.	SEP 1-NOV 1	SEP 15-NOV 15	SEP 15-NOV 15
COMMON BERMUDAGRASS	10 LBS.	APR 1-JULY 1	MAR 15-JULY 15	MAR 1-JULY 15
CRIMSON CLOVER	10 LBS.	SEP 1-NOV 1	SEP 1-NOV 1	SEP 1-NOV 1



TYPICAL LOT BMP PLAN

N.T.S.

STRUCTURAL PRACTICES		VEGETATIVE MEASURES	
CODE	PRACTICE	CODE	PRACTICE
CEP	CONSTRUCTION EXIT	PS	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
SB	SILT FENCE (TYPE A)	DC	DUST CONTROL ON DISTURBED AREAS

SURFACE PREPARATION FOR PERMANENT SEEDING AND SOD

Clear the area of clods, rocks, etc. and smooth the area. Grade and loosen the soil to a smooth firm surface to enhance rooting. Break up large clods and loosen compacted, hard or crusted soil surfaces with a disk, ripper, chisel, harrow or other tillage equipment. Avoid preparing the seedbed under excessively wet conditions. Operate the equipment on the contour.

Where topsoil is specified, additional steps will be done based on the design plan.

APPLICATION OF SOIL AMENDMENTS

Apply fertilizer and lime according to the plan or by soil test recommendations. In the absence of a plan or soil test recommendations apply agricultural limestone at a rate of 2 tons per acre (90 lbs. per 1000 s.f.) and 10-10-10 fertilizer at the rate of 1000 lbs. per acre (25 lbs per 1000 s.f.). Apply ground agricultural limestone unless a soil test shows a pH of 6.0 or greater. Incorporate amendments to a depth of 4" to 6" with a disk or rotary tiller.

Rake or harrow to achieve a smooth, final grade on which to lay the sod. Surface should be loose, and free of plants, trash and other debris.

During high temperatures, moisten the soil immediately prior to laying sod. This cools the soil reduces root burning and dieback.

INSTALLING THE SOD

Lay the first row of sod in a straight line with subsequent rows placed parallel to and butting tightly against each other. Stagger joints to create a brick-like pattern and promote more uniform growth and strength. Ensure that sod is not stretched, or overlapped and that all joints are butted tight to prevent spaces which would cause drying of the roots.

On slopes 3:1 or steeper, or wherever concentrated flow may be a problem, lay sod with staggered joints and secure by stapling or pegging. Install sod with the length perpendicular to the water flow on the contour.

Staple firmly at the corners and middle of each strip. Jute and synthetic netting may be pegged over the sod of further protection against washout during establishment.

IRRIGATION

Immediately after laying the sod, roll or tamp it to provide firm contact between roots and soil, then irrigate sod deeply so that the underside of the sod pad and the soil 6" below the sod is thoroughly wet.

Until a good root system develops, water sod during dry periods as often as necessary to maintain moist soil to a depth of at least 4".

SITE PREPARATION AND SOIL AMENDMENTS FOR TEMP. SEEDING

COMPLETE GRADING AND SHAPING BEFORE APPLYING SOIL AMENDMENTS IF GRADING AND SHAPING ARE NEEDED TO PROVIDE A SURFACE ON WHICH EQUIPMENT CAN SAFELY AND EFFICIENTLY BE USED TO APPLY SOIL AMENDMENTS AND ACCOMPLISH SEEDED PREPARATION AND SEEDING.

LIME

APPLY LIME ACCORDING TO SOIL TEST RECOMMENDATIONS. IF A SOIL TEST IS NOT AVAILABLE, USE 1 TON OF AGRICULTURAL LIMESTONE OR EQUIVALENT PER ACRE ON COARSE TEXTURED SOILS AND 3 TONS PER ACRE ON FINE TEXTURED SOILS. DO NOT APPLY LIME TO ALKALINE SOILS OR TO AREAS WHICH HAVE BEEN LIMED DURING THE PRECEDING 2 YEARS.

FERTILIZER

APPLY FERTILIZER ACCORDING TO SOIL TEST RESULTS. IF A SOIL TEST IS NOT AVAILABLE, APPLY 8-24-24 FERTILIZER.

WHEN VEGETATION HAS EMERGED TO A STAND AND IS GROWING, 30 TO 40 LBS/ACRE (APPROXIMATELY 0.8 LBS./1000 FT²) OF ADDITIONAL NITROGEN FERTILIZER SHOULD BE APPLIED.

NOTE: FERTILIZER CAN BE BLENDED TO MEET EXACT FERTILIZER RECOMMENDATIONS. TAKE SOIL TEST RECOMMENDATIONS TO LOCAL FERTILIZER DEALER FOR BULK FERTILIZER BLENDS. THIS MAY BE MORE ECONOMICAL THAN BAGGED FERTILIZER.

APPLICATION OF SOIL AMENDMENTS

INCORPORATE LIME AND FERTILIZER INTO THE TOP 6" OF SOIL DURING SEEDBED PREPARATION.

SEEDBED PREPARATION

GOOD SEEDBED PREPARATION IS ESSENTIAL TO SUCCESSFUL PLANT ESTABLISHMENT. A GOOD SEEDBED IS WELL PULVERIZED, LOOSE, AND SMOOTH. IF SOILS BECOME COMPACTED DURING GRADING, LOOSEN THEM TO A DEPTH OF 6" TO 8" USING A RIPPER OR CHISEL PLOW.

IF RAINFALL HAS CAUSED THE SURFACE TO BECOME SEALED OR CRUSTED, LOOSEN IT JUST PRIOR TO SEEDING BY DISKING, RAKING, HARROWING, OR OTHER SUITABLE METHODS. WHEN HYDROSEEDING METHODS ARE USED, THE SURFACE SHOULD BE LEFT WITH A MORE IRREGULAR SURFACE OF COLDS.

PLANTING METHODS SEEDING

EVENLY APPLY SEED USING A CYCLONE SEEDER (BROADCAST), DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. BROADCAST SEEDING AND HYDROSEEDING ARE APPROPRIATE FOR STEP SLOPES WHERE EQUIPMENT CANNOT OPERATE SAFELY. SMALL GRAINS SHOULD BE PLANTED NO MORE THAN 1" DEEP AND GRASSES AND LEGUMES NO MORE THAN 2" DEEP. BROADCAST SEED MUST BE COVERED BY RAKING OR CHAIN DRAGGING, AND THEN LIGHTLY FIRMED WITH A ROLLER OR CULTIPACKER.

HYDROSEEDING

SURFACE ROUGHENING IS PARTICULARLY IMPORTANT WHEN HYDROSEEDING. AS ROUGHENED SLOPE WILL PROVIDE SOME NATURAL COVERAGE FOR LIME, FERTILIZER, AND SEED. THE SURFACE SHOULD NOT BE COMPACTED OR SMOOTH. FINE SEEDBED PREPARATION IS NOT NECESSARY FOR HYDROSEEDING OPERATIONS. LARGE CLODS, STONES, AND IRREGULARITIES PROVIDE CAVITIES IN WHICH SEEDS CAN LODGE. HYDROSEEDING MIXTURES SHOULD INCLUDE A WOOD FIBER MULCH WHICH IS DYED AN APPROPRIATE COLOR TO FACILITATE UNIFORM APPLICATIONS OF THE SEED.

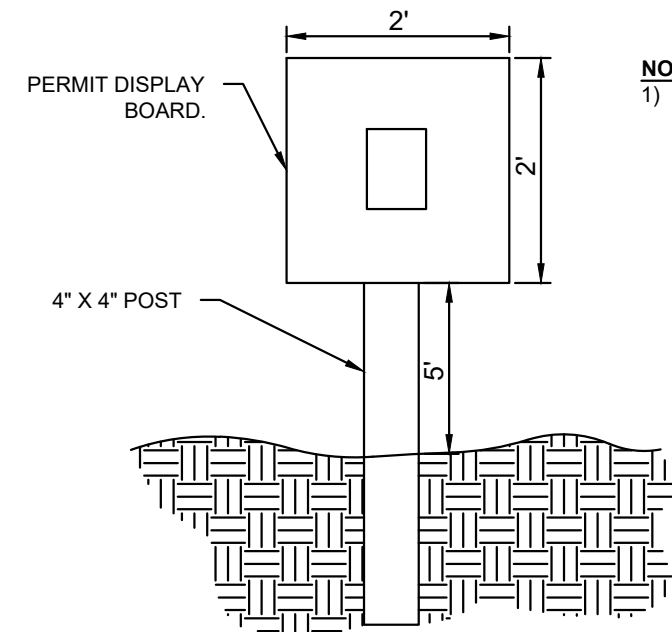
MIX SEED, INOCULANT IF REQUIRED, AND A SEED CARRIER WITH WATER AND APPLY AS A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. THE SEED CARRIER SHOULD BE A CELLULOSE FIBER, NATURAL WOOD FIBER OR CANE FIBER MULCH MATERIAL WHICH IS DYED AN APPROPRIATE COLOR TO RECOMMENDED RATE WHEN ADDING INOCULANT TO A HYDROSEEDER SLURRY. THE MIXTURE SHOULD BE APPLIED WITHIN 1 HOUR AFTER MIXING TO REDUCE DAMAGE TO SEED.

FERTILIZER SHOULD NOT BE MIXED WITH THE SEED-INOCULANT MIXTURE BECAUSE FERTILIZER SALTS MAY DAMAGE SEED AND REDUCE GERMINATION AND SEEDING VIGOR. FERTILIZER MAY BE APPLIED WITH HYDRO SEEDER AS A SEPARATE OPERATION AFTER SEEDLINGS ARE ESTABLISHED.

MULCHING

THE USE OF AN APPROPRIATE MULCH WILL HELP ENSURE ESTABLISHMENT OF VEGETATIVE COVER UNDER NORMAL CONDITIONS AND IS ESSENTIAL TO SEEDING SUCCESS UNDER HARSH SITE CONDITIONS (SEE THE MULCHING PRACTICE FOR GUIDANCE). HARSH SITE CONDITIONS INCLUDE THE FOLLOWING.

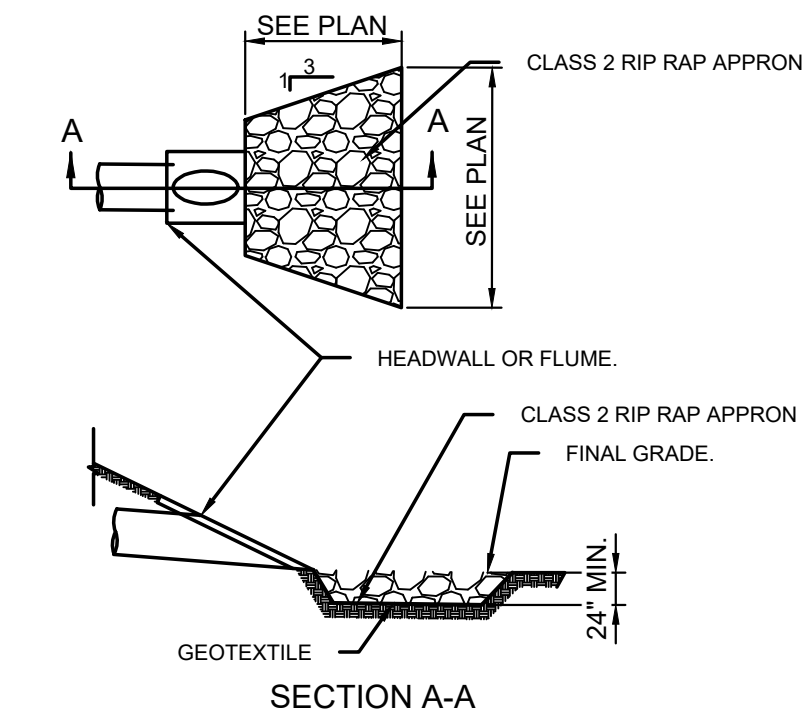
- SEEDING IN LATE FALL FOR WINTER COVER (WOOD FIBER MULCHES ARE NOT CONSIDERED ADEQUATE FOR THIS USE).



NOTES:
1) THE CONTRACTOR SHALL POST AND MAINTAIN SIGN(S) AT THE FRONT GATE/ENTRANCE. TO ADEQUATELY IDENTIFY THE SITE PRIOR TO COMMENCEMENT OF AND DURING CONSTRUCTION UNTIL NPDES PERMIT COVERAGE IS PROPERLY TERMINATED. SUCH SIGN SHALL DISPLAY THE NAME OF THE PERMITTEE, ADEM NPDES ALR10 FOLLOWED BY THE FOUR DIGIT 53 NPDES PERMIT NUMBER, FACILITY OR PROJECT NAME.

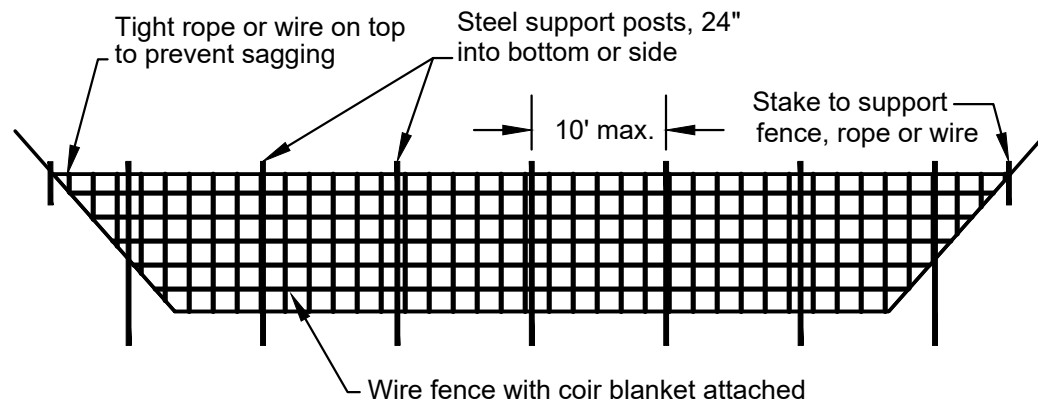
ADEM PERMIT SIGN DETAIL

N.T.S.



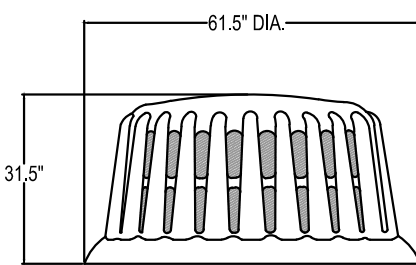
OP - RIP-RAP APRON DETAIL

N.T.S.

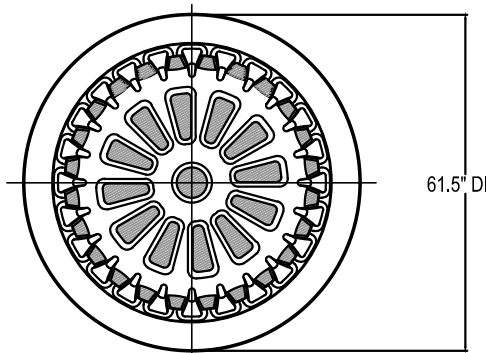


BBB - SEDIMENTATION BASIN BAFFLE DETAIL

N.T.S.



ELEVATION VIEW

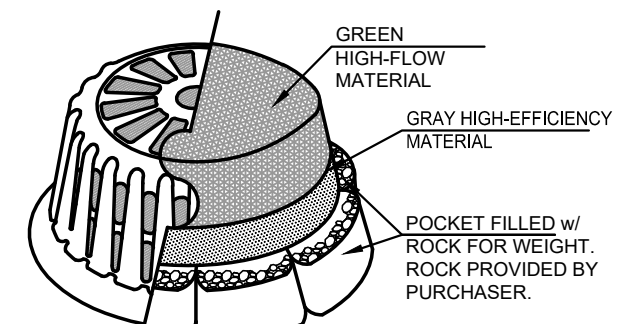


PLAN VIEW

FILTER OPTIONS
FILTER IS AVAILABLE IN TWO OPTIONS:
1) ALL HIGH-FLOW FILTER
2) HIGH-FLOW MATERIAL ON TOP HALF, HIGH-EFFICIENCY MATERIAL ON BOTTOM HALF (THIS FILTER COVER IS RECOMMENDED FOR ALL ROADWAY PROJECTS.) (DOT FILTER)
IT IS THE PURCHASERS RESPONSIBILITY TO PURCHASE APPROPRIATE FILTER. PURCHASER SHALL PROVIDE ROCK FOR FILTER POCKETS.

FILTER INSTALLATION
FILTER SLIDES DIRECTLY OVER FILTER FRAME. TO KEEP FILTER FRAME IN PLACE OVER STORM STRUCTURE, ROCK POCKETS ARE SEWN DIRECTLY INTO FILTER. EVERY FILTER COMES IN ONE PIECE FOR EASY INSTALLATION.

MAINTENANCE
ALL TEMPORARY EROSION, SEDIMENTATION, & POLLUTION CONTROL PRACTICES SHOULD BE INSPECTED DAILY. CONTRACTOR SHALL REMOVE SEDIMENT AND DISPOSE OF IN A PROPER MANNER. INSPECT FRAME AND FILTER DAILY FOR CUTS, ABRASIONS, AND PROPER INSTALLATION. REPLACE OR REPOSITION AS NECESSARY.



ISOMETRIC VIEW

SHOWN WITH DOT FILTER

ROUND FRAME & FILTER ASSEMBLY	
Model # R-100A	AKA "SS-100A (Round)"
60" DIAMETER	
FRAME MATERIAL: BLACK 0.25" HWY#6	
FILTER FABRIC MATERIAL: REFER TO SPEC	
SCALE: NOT TO SCALE	
LAST UPDATED: AUGUST 2019	

IP 7 DOMED INLET PROTECTION DETAIL

N.T.S.

MTTR

ENGINEERS, INC.

CONSULTING ENGINEERS-LAND SURVEYORS
2500 SOUTHLAKE PARK, SUITE 100, HOOVER, AL 35244
TELEPHONE (205) 320-0114

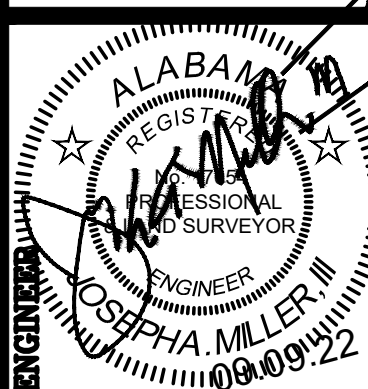
MTTR
TALLER • THOMPSON • TAYLOR • TAVENOR

BMP NOTES DETAILS/DETAILS
PARKSTONE MEADOWS

KATIE LANE
LEEDS ALABAMA

Parkstone Meadows, LLC,
Sheridan, Wyoming, 82801

PROJECT



REVISIONS

DATE

JOB NO.:
SUBDIVISIONS:
FILE NAME: PARKSTONE MEADOWS
DATE: 03-10-22
DRAWN: JAM III
CHECKED: JAM III
SCALE: 1"=60'
SHEET

12