



HIDEOUT, UTAH TOWN COUNCIL REGULAR MEETING AND PUBLIC HEARING

January 9, 2025

Agenda

PUBLIC NOTICE IS HEREBY GIVEN that the Town Council of Hideout, Utah will hold its Regular Meeting and Public Hearing electronically and in-person at Hideout Town Hall, located at 10860 N. Hideout Trail, Hideout Utah, for the purposes and at the times as described below on Thursday, January 9, 2025.

All public meetings are available via ZOOM conference call and YouTube Live.

Interested parties may join by dialing in as follows:

Zoom Meeting URL: <https://zoom.us/j/4356594739>
To join by telephone dial: US: +1 408 638 0986 **Meeting ID:** 435 659 4739
YouTube Live Channel: <https://www.youtube.com/channel/UCKdWnJad-WwvcAK75QjRb1w/>

Regular Meeting and Public Hearing
6:00 PM

I. Call to Order

II. Roll Call

III. Public Hearing Items

1. [Consideration and possible approval of Resolution 2025-R-XX adopting the Hideout Town Engineering Standard Specifications and Drawings Manual](#)
2. [Consideration and possible approval of Ordinance 2025-O-XX amending Title 10 related to Engineering, Development and Design Standards](#)

IV. Agenda Items

1. [Review of Q1 of the FY25 Financials](#)
2. Introduction of Trudy Brereton with Jordanelle Communities Coalition
3. Discussion and appointment of Hideout representatives for the Legislative Policy Committee
4. [Discussion of HB80 which requiring Ethics and Financial Disclosures by elected municipal officials to be published on the Hideout website](#)

V. Public Input - Floor open for any attendee to speak on items not listed on the agenda

VI. Committee Updates

1. Planning Commission – *Thomas Eddington, Town Planner*
2. Design Review Committee - *Thomas Eddington, Town Planner*
3. Economic Development Committee - *Council Member Severini*
4. Parks, Open Space and Trails (POST) Committee - *Council Member Baier*
5. Transportation Committee - *Council Member Haselton*

VII. Closed Executive Session - Discussion of pending or reasonably imminent litigation, personnel matters, deployment of security personnel, devices or systems, and/or sale or acquisition of real property as needed

VIII. Meeting Adjournment

Pursuant to the Americans with Disabilities Act, individuals needing special accommodations during the meeting should notify the Mayor or City Recorder at 435-659-4739 at least 24 hours prior to the meeting.

HIDEOUT TOWN COUNCIL

10860 N. Hideout Trail
Hideout, UT 84036
Phone: 435-659-4739

Posted 01/08/2025

File Attachments for Item:

1. Consideration and possible approval of Resolution 2025-R-XX adopting the Hideout Town Engineering Standard Specifications and Drawings Manual

Staff Update Regarding the Proposed Engineering Standard Specifications and Drawing Manual

To: Mayor Philip Rubin
Town Council

From: Thomas Eddington Jr., AICP, ASLA
Town Planner

Re: Proposed Engineering Standard Specifications and Drawing Manual

Date: January 9, 2025

Submittals: Proposed Engineering Standard Specifications and Drawing Manual

Review of the Planning Commission Meeting

The Planning Commission discussed the street width and curb standards at length. The existing streets for new residential subdivisions are considered “neighborhood streets.” The most recently built streets have a pavement width (drivable pavement) of 29’-0” (24’-0” of asphalt + 2.5’-0” rolled curb and gutter on both sides of the road). This width allows for on-street parking on one side of the road.

The proposed street width (drivable pavement) for a “local access road” is 33’-0” (30’-0” of asphalt + 3’-0” shoulder/high back curb on both sides of the road). I mistakenly stated to the Planning Commission that the proposed width would be a total of 36’-0” but, upon clarification with the Town Engineer after the Planning Commission meeting, have confirmed the proposed street width at 33’-0”. This width allows for on-street parking on both sides of the road.

The Planning Commission indirectly or directly daylighted and/or discussed the following issues:

- Concerns that the increased widths will increase the speed of traffic.
- Is the community comfortable with on-street parking on both sides of the road? If so, would that be disallowed in the winter months to allow for ease of snow removal?
- The existing roads have rolled curb and gutter – keeping the character for the residential neighborhoods is important. High-back curb (6” high vertical curb) does not exist anywhere in the Town.

The Planning Commission's Recommendation

- Keep the rolled curb and gutter rather than the high-back curb
- Allow for an increase in street width – to the proposed 33'-0" of drivable pavement (effective June 1, 2025 so that any existing development applications would not be negatively impacted)

For Town Council Consideration

The approved Site Plan for the Richardson Flat annexation area (+/-350 acres) has a "main street" commercial area that would certainly benefit from a high-backed curb style street with parallel parking on both sides (like Park City's Main Street). The Town Council should consider including this type of street in the Engineering Standard Specifications and Drawing Manual – for the annexation area or, at minimum, for the "Town Center" area (or similar commercial zoning designation) as proposed.

The Following Exhibits Are Included with This Staff Report

Exhibit A – The Staff Report Submitted to the Planning Commission for the December 16, 2024 meeting

Exhibit B – The DRAFT minutes from the December 16, 2024 Planning Commission meeting

Exhibit C – Comparison of Existing Street Widths to Proposed Street Widths (also presented to the Planning Commission on December 16, 2024)

Exhibit D - An Ordinance Amending Sections to Update Items Within The Land Use Code in Titles 8, 9, And 10



Staff Report for Proposed Changes to the Municipal Code

To: Chairman Tony Matyszczyk
Hideout Planning Commission

From: Thomas Eddington Jr., AICP, ASLA
Town Planner

Re: Proposed Changes to the Hideout Municipal Code, Titles 8, 9, and 10

Date: December 16, 2024 Planning Commission Meeting

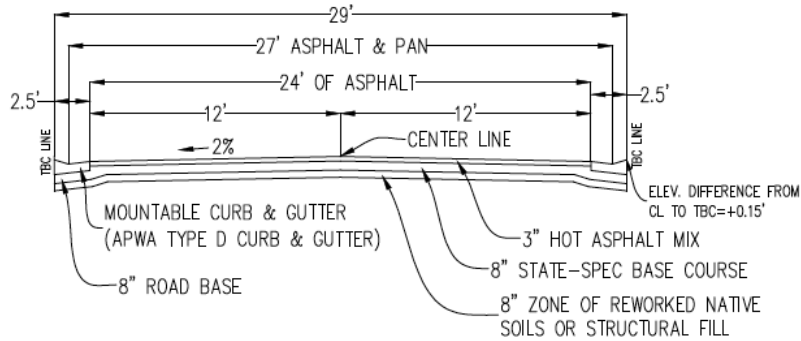
The following is a series of recommendations by the Town Engineer, Gordon Miner, to remove the engineering standards that are currently included in the Town's Municipal Code and incorporate them into an Engineering Standard Specifications and Drawing Manual. This is a common practice that creates an easy-to-use manual for future development projects. Rather than have designers and developers look through multiple code sections, all engineering standards are easily reviewed in one document.

The Town Engineer will be at this meeting to walk the Planning Commission through the proposed changes to the code.

Most of the Town's Engineering Standards will remain essentially the same and will generally be relocated in the new Standard Specifications and Drawing Manual. However, the Town Planner and Engineer would like the Planning Commissioners to specifically look at the newly proposed road widths which are slightly wider than current standards. In addition, the Planning Commission should review and discuss curbs for streets. Historically, the Town has required a rolled curb and gutter, which is essentially a slightly sloped gutter that helps to direct stormwater. The Standard Specifications and Drawing Manual currently detail a high-back curb (i.e., a 6" high curb that cannot be traversed in a car) that requires defined curb cuts for driveways.

The images on the following page are for comparison and discussion purposes.

A typical road section to date (from the Shoreline Development plan set):



29' ROAD CROSS SECTION – PUBLIC STREET

The proposed road section:

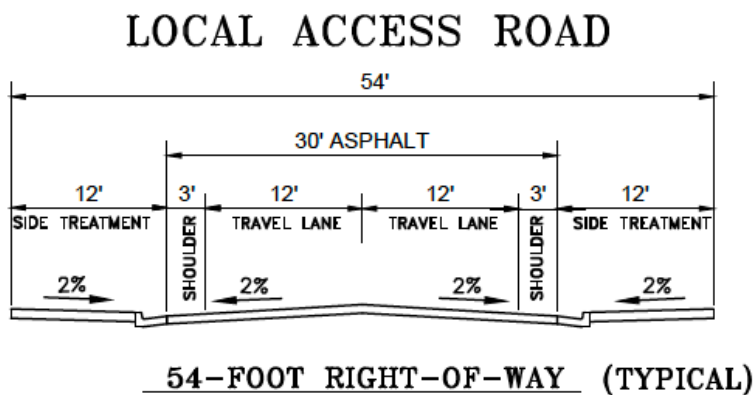


Exhibit A, following this page, provides a visual comparison for local, minor collector and major collector roads.

Recommendation

The Planning Commission should review the roads and curbs, in particular, and provide direction and forward a recommendation to the Town Council for these, and all, proposed changes to the Hideout Municipal Code.

Minutes

Town of Hideout Planning Commission Regular Meeting and Public Hearing (Rescheduled) December 16, 2024 6:00 PM

The Planning Commission of Hideout, Wasatch County, Utah met in Rescheduled Regular Meeting and Public Hearing on December 16, 2024 at 6:00 PM in person and electronically via Zoom meeting.

Regular Meeting and Public Hearing

I. Call to Order

Chair Tony Matyszczyk called the meeting to order at 6:03 PM and reminded participants that this was a hybrid meeting held both electronically and in-person.

II. Roll Call

Present: Chair Tony Matyszczyk
Commissioner Joel Pieper
Commissioner Glynnis Tihansky
Commissioner Donna Turner

Attending Remotely: Commissioner Rachel Cooper
Commissioner Chase Winder (alternate)

Excused: Commissioner Peter Ginsberg (alternate)

Staff Present: Polly McLean, Town Attorney
Alicia Fairbourne, Recorder for Hideout
Kathleen Hopkins, Deputy Recorder for Hideout

Staff Attending Remotely: Thomas Eddington, Town Planner
Gordon Miner, Town Engineer

Public In Person or Attending Remotely:

None

III. Approval of Meeting Minutes

1. November 21, 2024 Planning Commission Minutes DRAFT

There were no comments on the November 21, 2024 draft minutes.

Motion: Commissioner Turner moved to approve the November 21, 2024 Planning Commission Minutes. Commissioner Pieper made the second. Voting Yes: Commissioner Cooper, Chair Matyszczyk, Commissioner Pieper, Commissioner Tihansky and Commissioner Turner. Voting No: None. Abstaining from Voting: None. Absent from Voting: None. The motion carried.

IV. Agenda Items

1. Consideration of establishing the 2025 Planning Commission Regular Meeting Schedule.

Chair Matyszczyk referred to the proposed 2025 meeting dates included in the meeting materials which continued the regular meeting schedule as the third Thursday of each month, with the possible exception of the June meeting which may change due to the Juneteenth holiday.

Motion: Commissioner Pieper moved to adopt the proposed 2025 Planning Commission meeting schedule. Commissioner Tihansky made the second. Voting Yes: Commissioner Cooper, Chair Matyszczyk, Commissioner Pieper, Commissioner Tihansky and Commissioner Turner. Voting No: None. Abstaining from Voting: None. Absent from Voting: None. The motion carried.

V. Public Hearing

1. Consideration and possible recommendation to the Hideout Town Council of a resolution adopting the Hideout Town Engineering Standard Specifications and Drawings Manual and an ordinance amending Title 10 related to Engineering, Development and Design Standards.

Town Attorney Polly McLean introduced this matter which involved adoption of a resolution to adopt the proposed engineering standards, as well as adoption of an ordinance to remove the Standards from Town Code and to reference them in a new manual which would be more accessible for builders and developers.

Town Planner Thomas Eddington highlighted sections of the proposed standards including changes to roads widths and Right-of-Way configurations. He noted the proposal increased local access road widths for new developments to approximately 36-feet from the existing 29-feet to provide for on-street parking on both sides of the street. He also noted the proposal changed the curb construction from a rolled structure to a 6-inch high backed curb design which could not be mounted.

Town Engineer Gordon Miner led a discussion of the proposals and noted the standards would still be part of Town Code but codified by reference in this new manual. He discussed the background on the proposed road-width specifications which were based on fire code and were meant to provide access for emergency vehicles while still allowing for on-street parking.

Chair Matyszczyk asked how these new standards would impact the existing winter street parking restrictions, which did not seem to be enforced. Mr. Miner noted that enforcement was a different matter than the standards for engineering design. Mr. Eddington stated these new standards would impact annexations, new subdivisions and new phases of some existing subdivisions.

Mr. Miner discussed the confusion and problems which arise when parking is allowed on just one side of a street, and noted wider streets would eliminate those issues. He added winter parking restrictions were common, and enforcement would always be necessary to manage violations. He also noted these proposed street widths were still narrow, although wider than some of the existing town streets.

Chair Matyszczyk asked if wider roads would lead to more speeding. Mr. Miner responded that speeding could be an issue which would need to be addressed through law enforcement, but stressed the new standards were meant to make new streets safer than many of the existing streets in Hideout.

1 Commissioner Rachel Cooper asked if roads should be designed to accommodate construction
2 crews, as well as whether there were guidelines for guest parking in each development. Mr. Miner
3 stated those were planning policies, not specific to engineering standards. Commissioner Glynnis
4 Tihansky shared her observations that most of the street parking issues were due to construction
5 parking which would not be permanent.

6 Commissioner Donna Turner stated she felt wider streets would be safer, especially along curved
7 sections of streets. Mr. Miner discussed the new curb design recommendations, which were
8 intended to better channel storm water and help snowplow drivers in their work. Chair Matyszczyk
9 stated he would like to see curb designs be consistent throughout the town, and felt the proposed
10 design was too urban for the town's mountain setting.

11 In response to a question from Commissioner Tihansky regarding the current street widths, Mr.
12 Miner stated the existing streets were built to meet fire code based on parking on a single side of
13 the street. Mr. Eddington noted roads built prior to 2020 were narrower than current standards.

14 Mr. Miner stated the proposed road width standards would add four feet of traversable pavement
15 which would resolve disputations among neighbors about parking on one side of the street, provide
16 more parking capacity and provide sufficient access for emergency vehicles.

17 Chair Matyszczyk asked if these new standards would impact developments under consideration;
18 Mr. Miner stated any preliminary applications would be vested under the existing standards. Ms.
19 McLean discussed the status of the subdivision applications currently under consideration, and
20 noted Elk Horn Springs was still in the concept plan stage, and subdivisions with a Master
21 Development Agreement would not be impacted.

22 Mr. Miner referenced the marked-up document included in the meeting materials which noted all
23 proposed changes and increased specifications.

24 Discussion ensued regarding the impact on subdivisions under current consideration, including Elk
25 Horn Springs which was in concept discussions. Commissioner Joel Pieper shared his concerns
26 with changing the standards at this stage of the subdivision's concept plan, although the subdivision
27 application was not yet filed. Mr. Eddington noted the Wild Horse development proposed private
28 roads rather than public, so might not be impacted.

29 Ms. McLean suggested the Planning Commissioners consider whether various policy changes were
30 necessary, and if so, to recommend them to the Town Council.

31 There being no further questions from the Planning Commission, the meeting was opened for public
32 comment at 6:55 PM. There was no public comment, and the public hearing was closed at 6:56
33 PM.

34 Ms. McLean suggested the timing for adoption of the changes to street widths and rights-of-way
35 could be made effective at a future date in order to allow developers with concept plans under
36 consideration to finalize their applications under the current Code.

37 ***Motion: Commissioner Tihansky moved to make a positive recommendation to the Hideout***
38 ***Town Council to adopt the proposed Hideout Town Engineering Standard Specifications and***
39 ***Drawings Manual, with the exceptions of 1) the proposed curb design and 2) the proposed***
40 ***road width standards to be made effective on June 1, 2025. Commissioner Pieper made the***
41 ***second. Voting Yes: Commissioner Cooper, Commissioner Pieper, Commissioner Tihansky***
42 ***and Commissioner Turner. Voting No: Chair Matyszczyk. Absent from Voting: None. The***
43 ***motion carried.***

Motion: Commissioner Tihansky moved to make a positive recommendation to the Hideout Town Council to adopt an ordinance amending Town Code related to Engineering, Development and Design Standards. Commissioner Turner made the second. Voting Yes: Commissioner Cooper, Chair Matyszczyk, Commissioner Pieper, Commissioner Tihansky and Commissioner Turner. Voting: None. Absent from Voting: None. The motion carried.

VI. Meeting Adjournment

Mr. Eddington advised the Planning Commissioners there would be a discussion at the January 2025 meeting regarding an update to the Town's General Plan. He asked the Planning Commissioners to reach out to him prior to the meeting with any comments or suggestions to be included in this discussion.

There being no further business, Chair Matyszczyk asked for a motion to adjourn.

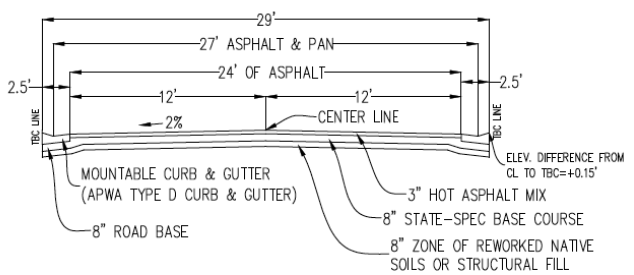
Motion: Commissioner Tihansky moved to adjourn the meeting. Commissioner Turner made the second. Voting Yes: Commissioner Cooper, Chair Matyszczyk, Commissioner Pieper, Commissioner Tihansky and Commissioner Turner. Voting No: None. Absent from Voting: None. The motion carried.

The meeting adjourned at 7:07 PM.

Kathleen Hopkins
Deputy Recorder for Hideout

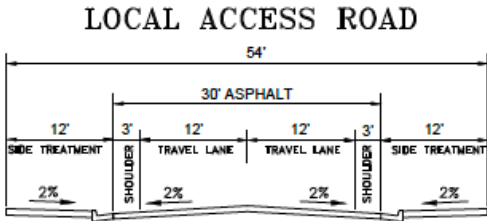
Current Standards

Proposed Standards



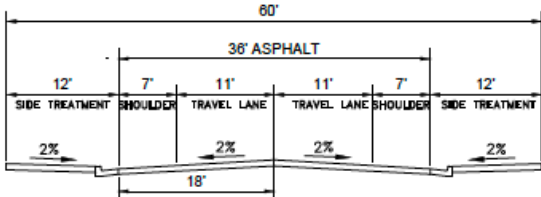
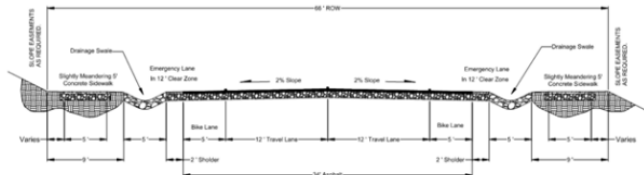
29' ROAD CROSS SECTION – PUBLIC STREET

From Shoreline Submittals for Phase 3



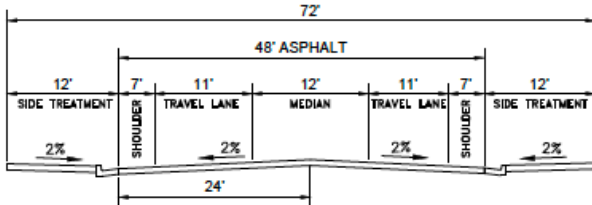
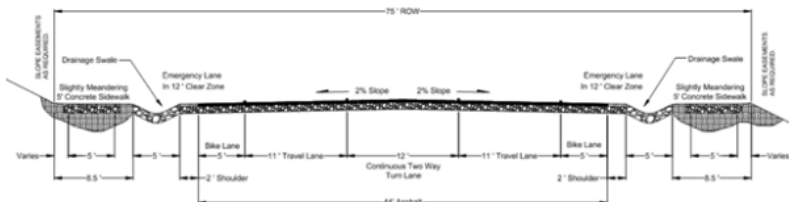
54-FOOT RIGHT-OF-WAY (TYPICAL)

66' Minor Collector Cross Section
Figure 3



60-FOOT RIGHT-OF-WAY (TYPICAL)

75' Major Collector Cross Section
Figure 2



72-FOOT RIGHT-OF-WAY (TYPICAL)

TOWN OF HIDEOUT

RESOLUTION 2025-R- ____

**A RESOLUTION ADOPTING THE HIDEOUT TOWN STANDARD SPECIFICATIONS
AND DRAWINGS**

WHEREAS, the Town of Hideout maintains standards related to private and public construction within the Town; and

WHEREAS, the Hideout Engineering department has prepared these Standards; and

WHEREAS, pursuant to Utah Code 10-9a-103 and 502, the Town has the authority to implement specifications or rules that govern the use of land; and

WHEREAS, Hideout Town Code 10.10.02 allows for standards to be adopted by Council by resolution; and

WHEREAS, the Hideout Town Planning Commission held a public hearing and forwarded a recommendation to the Town Council; and

WHEREAS, the Hideout Town Council conducted a public meeting on January 9, 2025; and

WHEREAS, the Council does hereby find that it is in the best interest of the health, safety and welfare of the citizens of the Town of Hideout to adopt these Standards;

NOW, THEREFORE BE IT RESOLVED by the Hideout Town Council as follows:

Section 1. The Hideout Town Standard Specifications and Drawings Manual is hereby adopted as attached (see Attachment A).

Adopted and approved this ____ day of _____, in the year 2025.

TOWN OF HIDEOUT:

Signed: _____
Phil Rubin, Mayor

ATTEST:

Alicia Fairbourne, Recorder for Hideout



HIDEOUT
UTAH

Adopted:
December XX, 2024

Hideout Town
Engineering Department

STANDARD SPECIFICATIONS AND DRAWINGS MANUAL

TABLE OF CONTENTS

1.0	GENERAL
1.1	DEFINITIONS
1.2	ADOPTION OF HIDEOUT TOWN STANDARD SPECIFICATIONS AND DRAWINGS MANUAL
1.3	AMENDMENTS TO THE APWA STANDARDS
	A. APWA SPECIFICATIONS
	B. APWA PLANS
1.4	TOWN ENGINEER'S AUTHORITY
1.5	CONSTRUCTION NOTES
	A. TYPICAL
	B. TRENCHES AND UTILITIES
	C. ROADWAY CONSTRUCTION AND RESTORATION
1.6	SUBMITTALS
	A. ENGINEERING PLAN REVIEW CHECKLIST
	B. SUPPLEMENTAL ENGINEERING REPORTS
	C. BOUNDARY SURVEY
	D. EASEMENT AGREEMENT
	E. SUBDIVISION PLAT
	F. LEGAL DESCRIPTION
	G. STORM WATER POLLUTION PREVENTION PLAN
	H. ENGINEERING PLANS
2.0	STORM DRAIN SYSTEM
2.1	HYDROLOGY
	A. PRECIPITATION FOR USE WITH THE RATIONAL METHOD
	B. PRECIPITATION FOR USE WITH THE TR-55 METHOD
	C. DESIGN STORM FREQUENCIES
	D. RUNOFF COEFFICIENTS FOR USE WITH THE RATIONAL METHOD
	E. REQUIRED METHODOLOGIES
2.2	DESIGN REQUIREMENTS
	A. GENERAL
	B. COLLECTION AND CONVEYANCE
	C. DETENTION AND RETENTION
3.0	DRINKING WATER SYSTEM
3.1	DESIGN REQUIREMENTS
4.0	SANITARY SEWER SYSTEM
5.0	STREET SYSTEM
5.1	DESIGN REQUIREMENTS
	A. COMMERCIAL DRIVEWAY APPROACH REQUIRED FOR NON-RESIDENTIAL
	B. CURB RETURNS FOR ADA
	C. GEOMETRIC DESIGN OF STREETS
	D. TRAFFIC CALMING REQUIRED
	E. ACCESS MANAGEMENT
	F. STREET LIGHTING

TABLES

TABLE 1	– PRECIPITATION FOR USE WITH THE RATIONAL METHOD
TABLE 2	– PRECIPITATION FOR USE WITH THE TR-55 METHOD
TABLE 3	– DESIGN STORM FREQUENCIES
TABLE 4	– RUNOFF COEFFICIENTS FOR USE WITH THE RATIONAL METHOD
TABLE 5	– GEOMETRIC DESIGN OF STREETS
TABLE 6	– ACCESS MANAGEMENT

FIGURES

APPENDIX A	– GUO “AVERAGING PARAMETER” METHOD
APPENDIX B	– SUBDIVISION PLAT TEMPLATE
APPENDIX C	– AS-BUILT DRAWINGS CHECKLIST
APPENDIX D	– TOWN STANDARD PLANS

DRAWINGS

STREETS

ST-1	Street Sign
ST-2	Combination Street and Regulatory Sign
ST-3	Regulatory Sign
ST-4	Functional Classification Dimensions
ST-5	Utility Locations and Intersection Curb Radii
ST-6	Typical Section
ST-7	Cul-de-Sacs
ST-8	Trails
ST-9	ADA Ramp Clear Space
ST-10	Trench
ST-11	Trench Plating
ST-12	Pot Hole
ST-13	Traffic Calming Intersection
ST-14	Bituminous Concrete Patch

STORM DRAIN

SD-1	Detention Pond Inlet/Outlet
------	-----------------------------

STREET LIGHTS

LP-A	Street Light Wiring and Installation
LP-B	Street Light Concrete Pole Base
LP-C	Street Light Stinger Base with Optional Breakaway
LP-1	Street Light and Pole

1.0 GENERAL

1.1 DEFINITIONS

ACCESS: Any driveway or other point of entry or exit, such as a street, road, or highway that connects to the general street system. Where two public streets intersect, the secondary street is considered the access.

ACKNOWLEDGEMENT: Recognition by the Town that the Engineer of Record, has certified his or her construction Plans and supporting information to be in compliance with the Hideout Town Code and Standard Specifications and Drawings.

APPLICANT: Any person, corporation, entity, designee, or agency applying for a permit.

APPROVED EQUAL: Equipment or material which, in the opinion of the Town's Representative, is equal in quality, durability, appearance, strength, design, performance, physical dimensions, and arrangement to the equipment or material specified, and will function adequately in accordance with the general design.

AS-BUILT DRAWINGS: Drawings which show the Project as actually-constructed, and which include any and all changes made to the construction Plans before and during construction.

BEST MANAGEMENT PRACTICE (BMP): Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the State.

TOWN INSPECTOR: The authorized representative of the Town or Engineer assigned to make detailed inspections of the Work performed, or of materials furnished by the Contractor.

TOWN/OWNER: Wherever, in the Contract Documents the word "Town", "Town", or "Owner" appears, it shall be interpreted to mean "Hideout Town", unless otherwise denoted.

CONSTRUCTION ACTIVITIES: Clearing, dredging, excavating, and grading of land and other activities associated with buildings, structures or other types of real property such as utilities, bridges, dams, and roads. Includes mobilization/demobilization and any other activity that occurs on site.

DRIVEWAY: A grade-separated access constructed within the right-of-way connecting the public street with adjacent property.

EASEMENT: An interest in real property that conveys use, but not ownership, of a portion of an owner's property.

EIGHTIETH PERCENTILE STORM EVENT: The depth of rainfall which is not exceeded in 80 percent of all runoff-producing rainfall events within the time period analyzed. In other words, 80 percent of the rainfall storm events that produce runoff are less than or equal to this depth. In Hideout Town, this depth is 0.50 inches.

ENGINEER: The Town Engineer or his or her representative.

ENGINEER-OF-RECORD: The professional engineer, licensed in the State of Utah, who prepared, or directly supervised the preparation of the engineering Plans and documents presented to the Town for acknowledgement, and who shall accept sole responsibility for the completeness and accuracy of the Plans and documents presented to the Town.

ESSENTIAL INFRASTRUCTURE: Essential infrastructure during construction includes temporary all weather surface roads, fire hydrants, and street signs for emergency wayfinding. The access requirements of IFC Chapter 5 and Appendix D must be installed and approved prior to final inspection and the issuance of a Certificate of Occupancy. Temporary roads are required to be capable of supporting vehicle loading under all weather conditions, and must meet the following criteria:

- A. The surface of the road should be capable of carrying the load of the anticipated emergency response vehicles and be drivable in all kinds of weather.
- B. Compacted road base to APWA Standards at least 8 inches thick.
- C. Access roads shall be maintained for emergency and fire access throughout the duration of the project.
- D. Fire hydrants must be installed and functional prior to combustible materials arrival on the site.

FINAL ACCEPTANCE OF PUBLIC INFRASTRUCTURE: The date specified in writing by the Engineer when all work, including all punch list work designated by the Engineer, is complete and accepted by the Town after the completion of the warranty period following the Project Acceptance for Maintenance.

INSPECTED AND ACCEPTED or ACCEPTANCE: Town recognition of infrastructure conformance to all applicable Town Standards.

INTERSECTION: The general area where two or more streets join or cross at grade.

LAW: Any applicable Town, County, State, or Federal statutes or regulations governing anything relating to the Work embodied in the Agreement.

PARTIAL STREET: A street that has full frontage improvements on one side and has at least 25 feet of pavement.

PAVEMENT: The uppermost layer of bituminous or Portland-cement concrete material placed on the traveled way or shoulders for a riding surface, whether rigid or flexible in composition. This term is used interchangeably with "surfacing."

PEER REVIEW: A process through which professional engineers, with expertise and experience in the appropriate fields of engineering equal to or greater than the Engineer-of-Record, evaluate, maintain, or monitor the quality and utilization of engineering services, prepare internal lessons learned, or exercise any combination of such responsibilities.

PROFESSIONAL ENGINEER: An engineer who is licensed to practice in the State of Utah.

PROFESSIONAL LAND SURVEYOR: A land surveyor who is licensed to practice in the State of Utah.

PUBLIC UTILITY EASEMENT (PUE): A property right provided for "dry" utilities (gas, power, telecom) that are regulated by the Public Service Commission. Town utilities are not public utilities.

RECOGNIZED-AND-GENERALLY-ACCEPTED GOOD ENGINEERING PRACTICES (RAGAGEPs): Practices that are based on established codes, standards, published technical reports or recommended practices or similar documents. RAGAGEPs are not practices from other cities or practices promoted by individuals based on their individual professional judgement.

RIGHT-OF-WAY (ROW): All public rights-of-way and easements, public footpaths, walkways and sidewalks, streets, roads, highways, alleys, and water or drainage ways. It does not, however, include Public Utility easements not within Public Ways of the Town.

STANDARD SPECIFICATIONS AND DRAWINGS: The Hideout Town Standard Specifications and Drawings and other specifications and drawings adopted by reference.

STREET: A general term for denoting a public way or private way for the purpose of transporting people, materials, and goods.

SUBGRADE: That portion of the roadbed surface which has been prepared, as specified, and upon which a layer of specified roadbed material or base, or sub-surfacing, or pavement is to be placed.

SUBSTANTIVE REVIEW: A general evaluation of the overall design and general compliance with the Town Code and engineering standards. It is not an exhaustive review for compliance with each specific provision of the Town Code, other applicable standards or regulations, or RAGAGEPs. Substantive review shall not shift the responsibility and liability for the completeness and accuracy of the Plans and related designs from the Engineer-of-Record to the Town.

SURFACE OR SURFACING: The uppermost layer of material placed on the traveled way or shoulders, and is usually of asphalt or concrete. This term is used interchangeably with "pavement."

WORK: The construction services performed including materials on Town infrastructure and includes all labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations to construct a project. The term also includes the supervision, inspection, and other on-site functions incidental to the construction.

1.2 ADOPTION OF THE HIDEOUT TOWN STANDARD SPECIFICATIONS AND DRAWINGS

Hideout Town has adopted the following as the basis for the Hideout Town Standard Specifications and Drawings, in the following hierarchy. In the event of a discrepancy, the strictest standard shall apply:

- A. Hideout Town Standard Specifications and Drawings Manual as included herein.
- B. Jordanelle Special Service District Design Standards, Construction Specifications, and Standard Drawings (JSSD)
- C. American Public Works Association Manual of Standard Specifications (APWA), current edition of the Utah Chapter of APWA and the Associated General Contractors (AGC) of America.
- D. APWA Manual of Standard Plans, current edition of the Utah Chapter of APWA and the Associated General Contractors of America.
- E. All storm-drainage-related work not specifically described in these Standards shall conform to Mile High Flood District Urban Storm Drainage Manual, current edition (MHFD Manual).
- F. Washington Department of Ecology, Technology Assessment Protocol Technology – Ecology (TAPE) Program, Storm Water Pre-Treatment Technologies, General Use Level Designations (GULD).
- G. Federal Highway Administration (FHWA) Hydraulic Engineering Circulars (HEC).
- H. International Fire Code (IFC), current edition, Appendix D.
- I. All transportation-related work not specifically described in these Standards shall conform to the latest editions of: policies and practices published by the American Association of State Highway Transportation Officials (AASHTO), or the Institute of Transportation Engineers (ITE), or the Utah Department of Transportation (UDOT) Roadway Design Manual, the selection of which shall be at the sole discretion of the Town Engineer.
- J. FHWA and Utah Manual on Uniform Traffic Control Devices for Highways and Streets (MUTCD).
- K. All work not specifically described in these Standards, JSSD, APWA, MHFD, AASHTO, ITE, IFC Appendix D, and MUTCD shall conform to RAGAGEPS.

The Hideout Town Standard Specifications and Drawings Manual is available for download at www.hideoututah.gov. The APWA Manual of Standard Specifications and Manual of Standard Plans are available for purchase at select cities within the State of Utah (see <http://utah.apwa.net/> for more information).

Contract Documents and Conditions of the Contract as found in the Current APWA Manual of Standard Specifications and Plans Manual are to be used as the basis for Town contracts. Modifications to these specifications may apply to specific projects.

1.3 AMENDMENTS TO THE APWA STANDARDS

- A. APWA Specifications
- B. APWA Plans
 1. Storm drain boxes shall have no dead volume. Pipe flow lines shall be flush with the floors of the boxes.

1.4 TOWN ENGINEER'S AUTHORITY

- A. The Town Engineer has the authority to provide substantive review of submitted construction Plans, studies, and supporting documentation.
- B. The Town Engineer shall provide feedback pursuant to his/her substantive review of the construction Plans, studies, and supporting documentation.
- C. Changes to address the Town Engineer's feedback shall be made to the construction Plans and returned to the Town Engineer for Town acknowledgement of the Construction Plans for construction.
- D. The Town Engineer has authority to issue Stop Work Orders when construction is progressing contrary to the Town Code, the Town's Standard Specifications and Drawings, or an acknowledged set of construction Plans.
- E. The Town Engineer has additional authority, such as stated in these Specifications and the Town Code.

1.5 CONSTRUCTION NOTES

A. TYPICAL

1. Contractor assumes all responsibility for job site conditions during construction of this project, including the safety and well-being of all persons and property. This responsibility shall apply continuously and not be limited to normal working hours.
2. Contractor shall obtain all applicable permits and/or written agreements necessary to complete the work.
3. Contractor shall schedule a pre-construction meeting with the Town's Engineering Department at least 5 business days prior to the start of construction. Contractor must attend and bring one set of the acknowledged construction Plans and a copy of the current Hideout Town Standard Specifications and Drawings Manual (available at hideout.tah.gov).
4. Contractor shall have in possession and on-site at all times one copy of the current acknowledged construction Plans stamped, signed, and dated by the Engineer of Record, the Applicant, and the Town.
5. Developer's Engineers (Civil and Geotechnical) shall perform sufficient inspections and surveys during grading and construction to render an opinion in writing as to adherence to the accepted Plans and compliance with the Town Standard Specifications and Drawings Manual.
6. Survey monuments must be installed in accordance with the current Wasatch County Surveyor's Office requirements.
7. All disturbed property survey markers shall be reset in their original locations upon completion of all construction activities.
8. Contractor shall provide all traffic control which must conform to the current MUTCD. Provide site specific Traffic Control Plans [prepared by an American Traffic Safety Services Association (ATSSA) or AGC Certified Individual] prior to installation of any traffic control device.

B. TRENCHES AND UTILITIES

1. Contractor is responsible to locate, avoid, protect, and repair all utilities encountered during construction, whether or not they are shown on the Plans. Locations of underground utilities shown on Plans are approximate and require field verification by Contractor.
2. All trenches within public right-of-way must be backfilled or securely plated per JSSD during non-working hours. Trenches outside these areas shall be back-filled or protected by approved temporary fencing and/or barricades during non-working hours. Trenches in roadway must be backfilled, compacted and asphalted per JSSD within 48 hours of road-cut. Paint striping shall be replaced in accordance with Town Standards within 48-hours of restoration of pavement.

C. ROADWAY CONSTRUCTION AND RESTORATION

1. Subgrade must be approved prior to construction of asphalt and untreated base course pavement sections. Subgrade approval requires that all utilities be installed, connections to main lines completed, inspected, and accepted by the Town.
2. Asphalt patching to roads between October 15 and April 15 will be considered temporary only, and must be replaced according to APWA Standards and Specifications between the following April 16 and June 1.
3. Material submittals are required for all items placed within the Town Right of Way. All submittals must be dated within 90 days of Construction Date (unless specified otherwise) and be submitted prior to the start of construction activities.
4. Moratorium Standard (New, Reconstructed, and Overlaid Streets): No cuts permitted for two (2) years from the time of construction/ reconstruction/overlay)
5. Special Restoration Standard: This standard applies to new, reconstructed, overlaid, and slurried streets:
 - a. *New, Reconstructed, and Overlaid Streets (for 5 years after end of moratorium):* The asphalt surface shall be milled a minimum depth of two (2) inches, and fifteen (15) feet each way from the edge of the cut. Milling shall be done in widths equivalent to existing striped traffic lanes.

The Town Engineer reserves the right to require additional area and/or depth if deemed appropriate to restore roadway to original condition. Approved fabric is required when existing pavement included a fabric prior to the permitted cut.

- b. *Slurried Streets (for one year after slurry application)*: The asphalt surface shall be re-slurried a minimum of fifteen (15) feet each way from the edge of the cut, in widths equivalent to existing striped traffic lanes.
6. Roads shall be opened for traffic during peak hours. Lane closures may only be in effect from 9am-3pm, and 7pm-7am.
7. Paint striping shall be replaced in accordance with Town Standards within 48-hours of restoration of pavement.

1.6 SUBMITTALS

- A. **ENGINEERING PLAN REVIEW CHECKLIST** – The Town provides an Engineering Plan Review Checklist with the permit application to assist developers and their professionals in the preparation of the engineering submittals for the acceptance of a development project. The Engineering Checklist does not replace the Town Code or Engineering Standards and Specifications. The Engineering Checklist must be completed and signed by the Applicant and the Engineer-of-Record.
- B. **SUPPLEMENTAL ENGINEERING REPORTS** – All engineering reports submitted for final acceptance shall be stamped, signed, and dated by a professional engineer **ON THE FIRST SUBMITTAL**.
 1. **Drainage Report** – Drainage reports must be prepared in accordance with the design criteria and methodologies specified in these Standards. Drainage reports shall include an Infiltration Feasibility Determination in accordance with Utah Rule 317-4-4. In addition to the required engineer's stamp, signature, and date, drainage reports must include a certification from the engineer stating:

I hereby certify that this report/design for the management of storm water and snow of this development was prepared by me, or under my direct supervision, according to applicable engineering standards. I understand that the Town assumes no responsibility or liability whatsoever for the feasibility and long-term viability of the facilities addressed herein.
 2. **Geotechnical Report** – Geotechnical reports shall include pavement designs that comply with the Town Standards. Geotechnical reports shall include percolation tests performed in accordance with Utah Rule 317-4-14, Appendix D, and shall be submitted on a signed "Percolation Test Certificate". The Percolation Test Certificate shall report the median measured percolation rate.
 3. **Traffic Impact Study (TIS)** – A traffic study is necessary to identify, review, and make recommendations for mitigation of the potential impacts a development may have on the roadway system. Identification of impacts and appropriate mitigation measures allows the Town to assess the existing and future system safety, performance, maintenance, and Town needs. TISs shall follow the Utah Department of Transportation's TIS Requirements, including the Levels of Study and associated Thresholds. Additional requirements and investigation may be imposed upon the applicant as necessary. Likely information presented in a TIS may include, but is not limited to, site location and proposed access point(s), phased and/or full development trip generation, connection point design elements, adjacent and relevant development, existing and future traffic volumes, assessment of the system impacts, and mitigation measures as appropriate.
 4. **Reimbursement Agreement Exhibits** – Reimbursements for all infrastructure upsizing (system improvements) beyond the project improvement needs must be presented to the Town Council at the plat or site plan step for authorization to have staff work on a reimbursement agreement with the applicant. Reimbursement agreements must be accepted by the Town Council and executed by both parties **before** construction can begin on the project. If the applicant wishes to begin construction before there is an agreement in place with the Town, they must sign a waiver stating they accept the risk that they may not be reimbursed for any improvements installed, even if they are system improvements. The following exhibits are required to initiate a reimbursement agreement:
 - a. **Exhibit A -- Itemized Schedule of Values** – Include quantities and unit prices of reimbursable items. Correlate it with an accompanying map. It shall be stamped, signed, and dated by the Engineer-of-Record.

- b. Exhibit B – Contractor bids or engineer estimates that support the prices shown in the Itemized Schedule of Values.
 - c. Exhibit C -- Map of Reimbursable Items – Show the locations of all of the reimbursable items. Correlate it with the accompanying Itemized Schedule of Values.
- C. BOUNDARY SURVEY – Boundary surveys, also known as record of survey, shall be stamped, signed, and dated by a professional land surveyor. If performed within the last 90 days, the survey shall have been filed in the Office of the County Surveyor and include evidence of filing.
- D. EASEMENT AGREEMENT – All easement agreements shall be submitted to the Town Engineer on the Town's Standard Easement template (available upon request from the Town Engineer) for Town acceptance. Easements in the name of the Town shall not be recorded by anyone except the Town. After Town acceptance, the recordation at the County Recorder's Office of which shall be referenced on the subject plat. Right-of-Discharge easements (available upon request from the Town Engineer) shall be granted to and indemnify the Town whenever storm water drainage, or snow, from Town ROW discharges, or is placed, onto private property.
- E. SUBDIVISION PLAT – Subdivision plats submitted for final acceptance shall be stamped, signed, and dated by a professional land surveyor ON THE FIRST SUBMITTAL.
- F. LEGAL DESCRIPTION – Legal descriptions submitted for final acceptance shall be accompanied by an illustration of the legal description, both of which shall be stamped, signed, and dated by a professional land surveyor ON THE FIRST SUBMITTAL.
- G. STORM WATER POLLUTION PREVENTION PLAN for Construction Activities (SWPPP) – SWPPPs shall NOT be part of the engineering design Plans. They shall be submitted by the general contractor prior to a pre-construction meeting. SWPPPs shall follow the Utah Division of Water Quality Template, and shall be prepared by a Utah-Registered SWPPP Writer.
- H. ENGINEERING DESIGN PLANS – Engineering Design Plans, including but not limited to:
1. Reference to the Town's Construction Notes (Section 1.4)
 2. Boundary Survey or ALTA Survey
 3. Topographical (existing conditions) Survey
 4. Subdivision Plat
 5. Demolition Plan (as necessary)
 6. Site Plan
 7. Grading, Drainage, and Snow Management Plan
 8. Utility Plan
 9. Signing and Striping Plan
 10. Plan/Profile Sheets
 11. Detail Sheets (not including copies of Town, JSSD, and APWA Standard Drawings). Standard Drawings shall be referenced in ONE place for all applicable infrastructure.

The Grading, Drainage, and Snow Management Plan shall include a certification from the Engineer-of-Record stating:

I hereby certify that this design for the management of storm water and snow from this development was prepared by me, or under my direct supervision, according to applicable engineering standards. I understand that the Town assumes no responsibility or liability whatsoever for the feasibility and long-term viability of the facilities addressed herein.

Certification of Peer Review

The Engineering Design Plans shall be peer reviewed and shall be certified by the Peer Reviewer with the following language.

The undersigned hereby certifies and verify that a thorough professional peer review of these plans and the required designs was conducted by me, a professional engineer with expertise and experience in the appropriate fields of engineering equal to or greater than the Engineer-of-Record, and that all appropriate corrections have been made to comply with the Hideout Town Code and Standard Specifications and Drawings.

The Engineering Design Plans, simultaneously with the acknowledgement by the Applicant and Town Engineer, shall be certified by the Engineer-of-Record with the following language.

Engineer's Certification

As the Engineer-of-Record, I hereby certify that these construction Plans and supporting information ("Plans") comply with the Hideout Town Code and Standard Specifications and Drawings ("Standards"). I understand and agree that:

1. The Town's acknowledgment of these Plans shall not be construed to be a permit for, or an approval of, any variance from any of the provisions of the Standards.
2. Any communication from the Town giving feedback on the Plans shall be construed as feedback only and shall not be interpreted as authorization to vary from or cancel the provisions of the Standards.
3. The Town's acknowledgement of these Plans or feedback from the Town on whether the Plans meet the Standards shall not prevent the Town from requiring the correction of errors in the Plans at any time, including after construction of improvements.
4. The Town's acknowledgement of these Plans does not constitute a permit from the Federal or State Government or permission to deviate from Federal or State Laws or Regulations.
5. The Town's acknowledgement of these Plans does not grant permission to work on the properties of others.

2.0 STORM DRAIN SYSTEM

2.1 HYDROLOGY

A. TABLE 1 – PRECIPITATION FOR USE WITH THE RATIONAL METHOD (inches)

Duration	Recurrence Interval (years)		
	2	10	100
5-min	0.16	0.27	0.54
10-min	0.24	0.42	0.82
15-min	0.31	0.52	1.02
30-min	0.41	0.70	1.37
60-min	0.50	0.86	1.69
2-hr	0.63	1.00	1.92
3-hr	0.72	1.10	1.97
6-hr	0.95	1.36	2.15
12-hr	1.21	1.68	2.57
24-hr	1.51	2.08	3.08

B. TABLE 2 – PRECIPITATION FOR USE WITH THE TR-55 METHOD (inches)

Duration	Precipitation (inches)		
	2-yr	10-yr	100-yr
5	0.004	0.005	0.006
10	0.006	0.006	0.006
15	0.007	0.007	0.008
20	0.008	0.008	0.008
25	0.008	0.008	0.011
30	0.009	0.010	0.011
35	0.009	0.010	0.011
40	0.010	0.011	0.011
45	0.011	0.012	0.014
50	0.012	0.013	0.017
55	0.013	0.014	0.017
60	0.014	0.016	0.020
65	0.140	0.241	0.473
70	0.114	0.195	0.384
75	0.078	0.133	0.262
80	0.049	0.084	0.165
85	0.033	0.057	0.112
90	0.023	0.040	0.079
95	0.016	0.028	0.055

Duration	Precipitation (inches)		
	2-yr	10-yr	100-yr
100	0.012	0.021	0.042
105	0.010	0.016	0.032
110	0.008	0.014	0.028
115	0.008	0.014	0.027
120	0.009	0.016	0.031
125	0.011	0.016	0.012
130	0.013	0.014	0.017
135	0.012	0.013	0.017
140	0.011	0.012	0.014
145	0.010	0.011	0.011
150	0.009	0.010	0.011
155	0.009	0.010	0.011
160	0.008	0.008	0.011
165	0.008	0.008	0.008
170	0.007	0.007	0.008
175	0.006	0.006	0.006
180	0.004	0.005	0.006
Total	0.72	1.10	1.96

*These design storms capture the critical elements of shorter-duration storms that often control in subbasins with short times of concentration.

TABLE 3 – DESIGN STORM FREQUENCIES

Type of Structure	Minimum Design Storm Frequency
Water Quality Treatment Devices	2-Year Storm – Peak Flow
Water Quality Capture Volume	0.50 inches using 2-yr Rational Coefficients
Storm Drain (gutters, street, inlets, M.I.s, pipes, etc.)	10-Year Storm – Peak Flow
Streets, channels, swales, creeks, bridges, culverts, and other surface routes	100-Year Storm – Peak Flow 10-Year Storm – Peak Flow for Erosion Protection
Flood Control Detention Systems	100-Year Storm – Critical intensity within 24 hours
Flood Control Retention Systems	100-Year 24-hour Storm Depth

C. TABLE 4 – RUNOFF COEFFICIENTS FOR USE WITH THE RATIONAL METHOD

Surface Type	2-Year Storm	10-Year Storm	100-Year Storm
Paved and Roof	0.79	0.83	0.87
Landscaped	0.14	0.28	0.57
Native Open Space	0.03	0.17	0.50
Retention Pond	0.84	0.87	0.89
Other	As Determined by the Town Engineer per MHFCD.		

D. REQUIRED MEHODOLOGIES

1. Runoff for areas less than 90 acres – Rational Method.
2. Runoff for areas 90 acres and greater – NRCS Technical Release 55 (TR-55) within Autodesk Storm and Sanitary Analysis (SSA) with a precipitation distribution and duration from Table 2. The NRCS Unit Hydrograph Transform Method shall be used with the lag time assumed to be equal to the time of concentration. The Muskingum-Cunge Routing Method shall be used for routing hydrographs. Pervious and directly-connected impervious areas must be modeled using separate subbasins. Composite Curve Numbers of these dissimilar areas is not allowed. Mapped Hydrologic Soil Groups (HSG) shall not be used on areas where soil has been or will be disturbed. In areas of disturbed soils, a site-specific soil study shall be conducted to determine its HSG. The applicant must provide the Town with pdf copies of all input and output computer files in sufficient detail and format to perform a design review.
3. Flood control detention for less than 90 acres – Federal Aviation Administration (FAA) Method modified with the Guo “Averaging Parameter” Method in Appendix A. Multi-stage control facilities shall be modeled using TR-55 per Section 2 above.
4. Flood control detention for greater than 90 acres – Regional flood control detention facilities shall be modeled using TR-55 per Section 2 above.
5. Water Quality Volume – $WQV = 0.50 \text{ in.} \times C_{2\text{-yr}} \times DCIA$, where:

$C_{2\text{-yr}}$ is the Rational Runoff Coefficient for the 2-year return period. See Table 4.

6. DCIA is the directly-connected (to the outfall) impervious area. For single-family residential (SFR) developments, this area shall be: the area of all of the streets between the backs of curbs; the area of all of the driveways, assuming 30-foot-wide driveway the depth of the setback plus 10 feet; and one-fourth of the roof areas. Developments other than SFR shall be calculated individually. The Water Quality Volume can be included as part of the flood control volume.

2.2 DESIGN REQUIRMENTS

A. GENERAL

1. The impact of any proposed storm drainage system on the existing storm drainage system will be reviewed by the Town Engineer. The developer may be required to add off-site storm drain project improvements to provide adequate drainage control for their development.
2. The peak flow from the 2-year storm must be treated for water quality using a water quality detention volume or a GULD water quality treatment device approved by the Washington Department of Ecology.
3. Areas that will be drained through the proposed development will be considered and the method of drainage for those areas will be determined by the Town Engineer. Accommodations for pre-existing pass-through drainage are project improvements.
4. Public storm drainage shall not flow onto private property and public and private storm drainage shall not be comingled unless the private property owner chooses to accept public storm drainage onto their property, grant an easement to the Town accepting the drainage as theirs, and release and indemnify the Town from potential liabilities associated with it.
5. Snow from public rights-of-way shall be stored on adjacent private properties. Private properties on which snow from public rights-of-way is stored shall grant an easement to the Town accepting the snow as theirs, and release and indemnify the Town from potential liabilities associated with it.

B. COLLECTION AND CONVEYANCE

1. The piped and surface drainage system together shall be capable of passing the storm runoff from a 100-year event without flooding buildings, with 1 foot of freeboard.
2. The piped system shall be sized for the 10-year event without pressurizing. If the developer desires, the piped system can be used to convey the 100-year event if it is sized from the top of the catchment to receive the 100-year event.
3. Except for when the piped system is sized for the 100-year event, the 100-year system shall remain on the surface, be directed to the street ROW, and shall terminate at a 100-year flood control pond.
4. Natural drainage channels shall be:
 - a. left in their natural state whenever possible. Street crossings are acceptable if sized with the 1 foot of freeboard AND debris flow is accounted for.
 - b. remediated as a project improvement with adjacent land development
 - c. modeled using HEC-RAS if directed by the Town Engineer

- d. protected from erosion pursuant to HEC-15 and North American Green methodologies. Drop structures shall be employed where possible.
- e. configured with side slopes not exceeding 3:1.
- 5. Buildings shall not be located within 50 feet of one foot above the 100-year water surface elevation of open channels.
- 6. Inlet boxes shall be placed:
 - f. on lot lines.
 - g. at sags.
 - h. at curb returns, preferably on the upstream side.
 - i. a maximum spacing based on gutter-spread, not exceeding $\frac{1}{2}$ of the drive lane, calculations using HEC-22, Appendix A, Chart 1B.
 - j. to eliminate the need for street intersection waterways.
- 7. Street sags shall have an overland runoff route to a flood control pond or to another street.
- 8. Downhill cul-de-sacs shall have an overland runoff route sized for the 100-year event along a lot line with an easement in the name of the Town, but maintained by the property owner(s), with the required channel cross section recorded on the plat.
- 9. Cleanout boxes shall be:
 - a. placed at junctions and changes in alignment and slope.
 - b. placed a maximum of 400 feet apart.
 - c. self-cleaning. Storm drain boxes shall have no dead volume. Pipe flow lines shall be flush with the floors of the boxes.
 - d. labeled with "Storm Drain" on the manhole cover.
 - e. labeled with "[water quality message]" on hooded inlets.
- 10. Pipelines shall be placed within Town ROW and shall:
 - a. be located pursuant to the Town's Standard Drawings.
 - b. be made of reinforced concrete.
 - c. have a minimum diameter of 15 inches, or as shown in the Capital Facilities Plan.
 - d. have a minimum slope in accordance with HEC-22 Table 7-7 (3.0 fps flowing full).
 - e. have a maximum velocity of 20 feet per second.
 - f. have a minimum cover pursuant to the manufacture's recommendations, or below the roadbase, whichever is greater.
 - g. come together in cleanout boxes with crown elevations matching.
 - h. extend to property lines to accommodate future development.
 - i. Install fabricated galvanized steel trash gates over the ends of all exposed pipes 15 inches in diameter and larger.
 - j. include energy dissipation at enclosed-to-open-channel and open-channel-to-enclosed transitions pursuant to the MHFD Manual.
 - f. be inspected by video at the expense of the developer prior to acceptance.
- 11. Open channels shall:
 - k. have at least one foot of freeboard
 - l. be designed to protect from erosion pursuant to HEC 15

C. DETENTION, RETENTION, AND SNOW STORAGE

Detention and retention facilities shall be privately-owned-and-maintained unless specifically agreed to by the Town Council. Private surface ponds shall be designed the same as public ponds.

- 1. The maximum release rate from detention facilities shall be historical or based on the capacity of the downstream system, whichever is less, as calculated using the methods required above.
- 2. The WQV shall not be counted as part of the flood control volume.
- 3. Infiltration may be considered in detention and retention system volume calculations.
- 4. Flood control detention is not required when there is a surface runoff route directly to Jordanelle Reservoir, excluding all tributary channels that might receive flow downstream of the subject area.
- 5. Retention facilities must:
 - a. be assumed to be half of the full depth for infiltration calculations.
 - b. be designed using the median measured percolation rate divided by 2.
 - c. drain within 48 hours.
 - d. provide a means for inspecting water levels in underground retention systems.
 - e. , if underground, be protected on the upstream side with a water quality treatment device approved by Washington Department of Ecology, TAPE Program, Pre-treatment General-Use Level Designation.

6. Surface ponds shall:
 - a. have at least 1 foot of freeboard above the water surface elevation of the 100-year flow through the emergency spillway, assuming the primary outlets are plugged. Above ground detention ponds in parking lots shall have 1 foot of freeboard to the finished-floor elevation of adjacent structures.
 - b. have a maximum depth of 4 feet. In parking lots, the maximum depth is 8 inches in parking stalls.
 - c. have side slopes not exceeding 3h:1v,
 - d. have a bottom slope of at least 1.5 percent.
 - e. have a pipeline under the pond, or a concrete-lined low-flow channel through the bottom of the pond, to convey flows that are less than the capacity of the outlet.
 - f. have inside corner radii of at least 10 feet.
 - g. spill to a street or other safe discharge point approved by the Town Engineer.
 - h. have a structural BMP upstream of the orifice to catch trash and debris.
 - i. , if they are used, locate orifice plates such that they can be cleaned off when the pond is full. The minimum size of an orifice shall be 3.14 square inches. Every effort shall be made by the Engineer-of-Record to minimize the head over the orifice
 - j. be landscaped pursuant to Town Standards, except for above-ground detention in private parking lots.
 - k. have inlet and outlet structures that match the side slope and top-of-bank of the pond, with the following two options:
 - i. Grated: Grates shall be made of galvanized steel with the bars oriented parallel to the side slope of the pond, spaced a maximum of 2 inches apart, with sufficient supporting cross bars.
 - ii. Fenced: Fenced structures shall be surrounded by an 8-foot simulated wrought-iron aluminum fence, with a gate with a 3/8-inch padlock mechanism, and a 6-inch concrete mow strip.
 - l. have a maintenance access road and ramp into the bottom of the pond. Maintenance access roads shall:
 - i. be at least 15-feet wide.
 - ii. have an all-weather surface, such as reinforced sod, traversable architectural rock, or other traversable pervious surface, with a punch bearing capacity of at least 40,000 pounds.
 - iii. Have a maximum slope of 15 percent
 - iv. Have breakover angles pursuant to APWA Plan 225 for service truck access.
 - v. Provide a jet truck work zone that: does not block a street lane, is not more that 7 feet from the front of the truck to the farthest inside wall of the box, and is not more than 15 feet from the side of the truck to the farthest inside wall of the box.
7. A detention pond is permitted to be located within a single residential lot, but only in a single-phase subdivision. The property owner of the residential lot on which a detention pond is located shall be responsible to maintain the pond and its underground infrastructure. This responsibility shall be noted on the subject lot on the plat.
8. Provide pervious, landscaped, and readily-accessible snow storage areas that are equivalent to at least fifteen percent of the total adjacent impervious areas, including public rights-of-way. Snow storage areas shall accommodate snow removal. Snow storage areas shall be shown on the subdivision plat. Easements and easement agreements, as necessary, shall be granted and shown on the subdivision plat. Easement agreements shall obligate the property owner for snow management and include a detailed description of snow removal methods and annual management.

3.0 DRINKING WATER SYSTEM

Private systems shall be designed the same as public systems. Private systems shall be inspected for cross connections the same as public systems. Systems that serve private development shall be master-metered and privately-owned-and-maintained.

3.1 DESIGN REQUIREMENTS

A. PIPELINES

1. Pipelines shall be as shown in the Capital Facilities Plan, or at least 8 inches in diameter unless the Town Engineer allows a smaller diameter down to 4 inches to improve water quality in dead-end lines. Pipelines that supply fire hydrants shall be at least 8 inches in diameter.
2. Pipelines in private streets shall be on the same sides as in public streets.
3. The minimum fire flow shall be pursuant to State Standards, or more if determined by the Fire Marshall.

4. The minimum operating pressure in all parts of the system shall be 40 pounds per square inch during peak day demand.
5. The minimum operating pressure in all parts of the system shall be 30 pounds per square inch during peak instantaneous demand.
6. The maximum operating pressure in all parts of the system shall be 120 pounds per square inch.
7. Systems shall be designed so that pressures conform to the pressure zones shown in the Town's Capital Facilities Plan.
8. The maximum flow velocity shall be 6 feet per second.
9. The impact of any proposed system on the existing system will be reviewed by the Town Engineer. The developer may be required to add infrastructure to mitigate impacts to the existing system and provide adequate water supply to their development.
10. If required by the Town Engineer, the Engineer-of-Record shall provide a computer network model, for the Town Engineer's review, of the proposed system showing compliance with this Standard. The Town will provide boundary conditions, based on the system, for the model.
11. Individual booster pumps are not allowed.
12. Permanent dead-ends shall not be longer than 600 feet.
13. The maximum allowable deflection of pipe joints shall be less than or equal to half of the manufacturer recommended maximum deflection.
14. Pipelines shall extend to property lines to accommodate future development.
15. Public pipelines through private property shall be in dedicated home-owner-association or business-owner-association open space centered in a 20-foot-wide easement in favor of the Town.

B. VALVES

1. Valves smaller than 10 inches shall be gate valves. Valves 10 inches and larger shall be butterfly valves.
2. Valves shall be placed at intervals not exceeding 300 feet.
3. At junctions, valves shall be placed on all legs, minus one, as directed by the Town Engineer.
4. Valves shall be placed within 5 feet to 10 feet of the ends of casings.
5. Valves shall be placed at connections to the existing system.
6. Blow-offs shall be placed at the ends of and low points in pipelines. Fire hydrants may be used as blow-offs.
7. Air vacuum valve stations shall be placed at high points of the system and other locations as required for proper system operation.

C. FIRE HYDRANTS

1. Fire hydrants shall be placed at the ends of cul-de-sacs, the ends of dead-end streets, and every 1000 feet of off-site pipelines.
2. Fire hydrants shall be placed as directed by the Fire Marshall.
3. The minimum fire flow shall be pursuant to State Standards, or more if required by the Fire Marshall.

D. JSSD

4.0 SANITARY SEWER SYSTEM

JSSD

5.0 STREET SYSTEM

Private Streets -- Private streets shall be privately-owned-and-maintained. The pavement design (subbase, roadbase, and asphalt) for private streets shall be at least the same as public streets. The pavement width of private streets shall be at least as wide as required by the latest edition of Appendix D of the International Fire Code.

5.1 DESIGN REQUIREMENTS

- A. Because preference is given to pedestrians, a driveway approach is required for all private accesses (APWA Plan 225 for non-single-family residential accesses and private streets, and APWA Plan 221 for single-family residential accesses) unless recommended otherwise by the Town Engineer, based on site-specific considerations, such as:

1. speed, slope, and functional classifications of the adjacent street
 2. width of the proposed access
 3. volume of the proposed access
 4. drainage
- B. Curb returns adjacent to ADA ramps shall have a maximum slope of 2 percent where possible. Where the base of the curb ramp, or the edge of the flush landing must join an intersection of two streets with running grades greater than 2 percent, the base of the curb ramp or the edge of the flush landing may be warped to meet the street running grade. Every effort shall be made to minimize this grade by warping the street cross slope plus or minus 4 percent on both legs of the intersection.
- C. The following Table 5 serves as a guide to design professionals by providing a summary of the Town's Street Design Standards. These Standards are required unless specifically accepted otherwise by the Town Council. In the absence of standards specified by the Town, street design shall conform to the latest edition of the American Association of State Highway and Transportation Officials (AASHTO) "A Policy on Geometric Design of Highways and Streets." Selections from other published professional standards, i.e. ITE, ASCE, may be considered at the sole discretion of the Town Engineer.
- D. A physical traffic calming measure is required on street segments longer than 1000 feet without at least a 45-degree turn.
- E. Partial streets are allowed when developing a street along a property line and the other property owner is unwilling to participate in the development. But, storm drainage must still be managed according to these Standards, which might require additional right-of-way and infrastructure.
- F. School crosswalks and associated STOP bars shall be placed along Safe Routes to School routes. Other crosswalks shall be placed as directed by the Town Engineer.
- G. Street Names -- New street names shall not duplicate those names already existing. A street that is obviously a continuation of another street shall bear the same name. All street names shall be approved by the Planning Commission and the Wasatch County Information Systems Department.
- H. Relation to Adjoining Street System -- The arrangement of roads in new subdivisions shall provide for the continuation of existing streets to adjacent areas at the same (or at least the minimum) or greater width. Where the Planning Commission determines that it is necessary, for orderly development and the health and safety of the community, to provide street access to adjacent properties, proposed streets shall be extended by dedication to the boundaries of adjacent properties.
- I. Cuts in Pavement -- No cuts shall be made in street pavement for at least five years without approval by the Mayor with the advice of the Town Engineer, except to protect public health and safety.

TABLE 5 – GEOMETRIC DESIGN OF STREETS

DESIGN ELEMENT	LOCAL (Class II)	MINOR COLLECTOR (Class III)	MAJOR COLLECTOR (Class IV)
Average Daily Traffic Maximum	3,000	6,000	15,000
Design Speed (mph)	25	30	
Posted Speed (mph)	20	30	
Typical Section Elements			
Right-of-Way Width	54'	64'	73'
Pavement Width (excluding C&G)	30'	40'	54'
Number of Lanes	2	2	3
Side Cut/Fill Slopes (outside ROW)	3:1 up to 5 feet high and 2:1 above 5 feet high		
20 Year ESAL Requirement	60,000	50,000	250,000
Vertical Design Elements			
Vehicle Design	Passenger, School Buses, Delivery Trucks, Dump Trucks		
Minimum Centerline Grade		0.5%	
Maximum Centerline Grade	10%*		3%
Maximum Centerline Grade Across Designated Crosswalks	5%		4%
Maximum Grade in Cul-de-Sacs	5%	Cul-de-Sacs Not Allowed	
Maximum Centerline Grade Break w/o Vertical Curve	1%		0.5%
Maximum TBC Grade Break w/o a Vertical Curve**	2%		2%
Minimum Crest Vertical Curve "K" Value	12		19
Minimum Sag Vertical Curve "K" Value	16		37
Minimum Length of Vertical Curve	75'		90'
Horizontal Design Elements			
Minimum Mid-Block Centerline Curve Radius	198'		333'
Superelevation	Not Allowed		
Intersections			
Intersection Sight Distance	AASHTO "A Policy on Geometric Design", Latest Edition		
Corner Curb Radius	See Standard Drawing ST-5.		
Minimum Angle of Intersection	60°		80°
Maximum Centerline Offset	5'		2'
Maximum Centerline Grade***	5%		4%
Vertical Tie-In	Lower streets shall match the centerline crowns in an intersection. Higher streets shall tie in 10' off the centerline of local streets and at the edge of the outside travel lane of other streets.		

* 12% for lengths not exceeding 500 feet.

** Maximum grade break of 2% along TBC with Minimum length of 25 feet between breaks.

*** Grade must extend to the F/C/P of the intersecting street.

TABLE 6 – ACCESS MANAGEMENT

Hideout Town Access Management Standards										
Functional Classification	Minimum Driveway Spacing (feet) ^{1,2,3,4}			Cross Street Unsignalized Intersection Spacing (feet)	Geometric Design of Driveway Access ⁵					Minimum Signal Spacing (feet)
	Upstream and Downstream (feet)	Opposing Upstream (feet)	Opposing Downstream (feet)		Single-Family Residential Driveways			Other Driveways		
					Approach Width (feet) ⁶	Edge Clearance (feet) ⁷	Curb Return Radius (feet)	Approach Width (feet) ⁶	Edge Clearance (feet) ⁷	
Major Arterial w/o Median Barrier	350	175	160	660						2640
Major Arterial w/ Median Barrier	200	130	160	400				Two Way		2640
Minor Arterial w/o Median Barrier	200	115	105	660	12 min		10 min	25 min		1320
Minor Arterial w/ Median Barrier	150	65	105	400				40 max		1320
Collector w/o Median Barrier	150	105	90	250		6 min			20 min	1320
Collector w/ Median Barrier	85	70	70	150				One Way		1320
Minor Collector w/o Median Barrier	85	100	90	250			15 max	16 min		1320
Minor Collector w/ Median Barrier	50	50	70	150	30 max			30 max		1320
Local w/ or w/o Median Barrier	-	-	-	150						N/A

1. Driveway spacing is measured as shown in Figure 1.

2. Corner clearance requirements for access points should meet or exceed the minimum driveway spacing requirements. Curb cuts on major arterials should be spaced at distances greater than 230 feet apart, measured from face-of-curb to face-of-curb, with the preferred distance being 300 feet.

3. For corner properties, access to public streets should be provided from the lesser (lowest functional classification) street.

4. Driveways in right-turn lane transition areas are prohibited.

5. For the benefit of traffic safety and flow, access points may be required to be designed to prohibit certain types of turning movements.

6. Wider driveway widths may be permitted to accommodate additional turning and/or acceptance lanes.

7. Distance between side property line and edge nearest drive as measured along traveled way.

Figure 1: Measurements for Minimum Access Spacing Standards

1. Driveway spacing is measured as shown in Figure 1.
2. Corner clearance requirements for access points should meet or exceed the minimum driveway spacing requirements. Curb cuts on major arterials should be spaced at distances greater than 230 feet apart, measured from face-of-curb to face-of-curb, with the preferred distance being 300 feet.
3. For corner properties, access to public streets should be provided from the lesser (lowest functional classification) street.
4. Driveways in right-turn lane transition areas are prohibited.
5. For the benefit of traffic safety and flow, access points may be required to be designed to prohibit certain types of turning movements.
6. Wider driveway widths may be permitted to accommodate additional turning and/or acceptance lanes.
7. Distance between side property line and edge nearest drive as measured along traveled way.

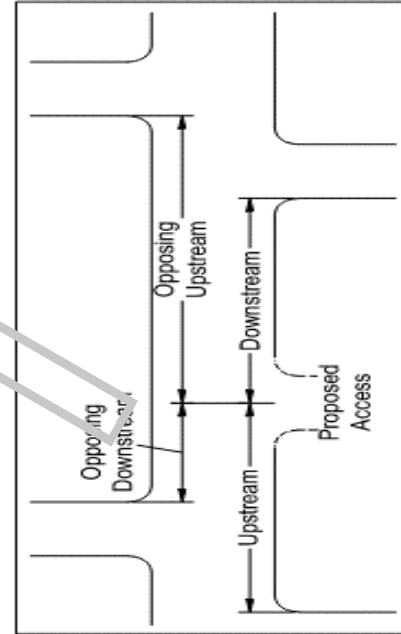


Figure 1: Measurements for Minimum Access Spacing Standards

J. STREET LIGHTING

When private street lighting is required by Town ordinance, the location and spacing of private street lighting shall be the same as public street lighting. Other aspects of private street lighting shall be at the discretion of the developer.

All public street lighting shall be installed in accordance with the most current Town Standards, Utah APWA, Rocky Mountain Power Standards and N.E.C. (National Electric Code). A streetlight plan showing wiring location, wiring type, voltage, power source location, conduit size and location shall be submitted to the Town and be approved prior to construction. No deviation to location of streetlight, pull boxes, conduits, etc., shall be permitted without prior written approval from the Town Engineer or his/her representative.

1. Location and Spacing
 - a. Every intersection and access that has a street name sign, corner, and bend in road, shall have a street light.
 - b. Shall be installed along property lines where attainable.
 - c. Shall not be installed within 5 feet of a fire hydrant. The location shall be such that it does not hinder the operation of the fire hydrant and water line operation valves.
 - d. Shall be a minimum of 5 feet from any tree, unless written approval is received from the Town Engineer. Branches may need to be pruned as determined by the Engineering Inspector in the field at the time of installation.
 - e. Shall not be installed within 5 feet from the edge of any driveway.
 - f. Any structure such as block walls, chain link fences, retaining walls, etc., shall leave a minimum of eighteen (18) inches to the face of the street light pole on all sides.
 - g. Wherever there is an overhead utility that may conflict with the installation of the street light circuits and/or street light poles, those conflicts must be resolved between the developer and the utilities involved before the street light bases are constructed at no expense to the Town or Rocky Mountain Power. The resolution must be approved by the Town and Rocky Mountain Power.
2. Voltage – All street lights shall have 120 (nominal) volt input voltage.
3. Conductors
 - a. The minimum wire size shall be #6 AWG RHW-2 copper lines from power source to the ground boxes.
 - b. From the pole base or (hand hole) to the fixture head #10 or #12 THHN copper will be only allowed.
 - c. No aluminum wire allowed.
 - d. Wire to be black, white, green or phased taped at both ends.
 - e. Run conduit to the back side of transformer. Leave 8 feet excess wire to transformer or 6 feet excess wire to secondary box as per Rocky Mountain Power ("RMP") requirements, so that RMP will make the connection. Contractor is able to use HDPE conduit so long as it is schedule 40, grey in color, the wire is the correct size and listed for this use. All installations of HDPE shall be installed according to the current edition of the NEC Section 353 and UL labeled and listed.
 - f. Multiple Pole Installation: Wire size shall be designed by an electrical engineer with no more than a 3% of a drop in the nominal voltage at the base of each pole. The minimum wire size shall be a #6 AWG RHW copper wire suitable for wet conditions. Electrical engineer to submit design drawings to the Town for review.
 - g. It shall be required that in the absence of an existing workable circuit to attach to, that all installations shall require new service for operation of the circuits in this case developer and/or his engineer shall contact Rocky Mountain Power. The new service shall be located within the utility right of way and shall be provided at the developers cost.
 - h. All electrical work must be performed by a licensed electrician.
 - i. All service point(s) shall be coordinated with Rocky Mountain Power and whenever possible be located near the center of the circuit. Service point(s) shall be shown on the Plans.
 - j. Photo cells must face north.
4. Conduit
 - a. All conduits shall be a minimum of 1-1/2 inch PVC, Schedule 40 and grey in color. Contractor is able to use HDPE conduit so long as it is 1-1/2 inch, schedule 40, grey in color, and the wire

- is the correct size and listed for this use. All installations of HDPE shall be installed according to the current edition of the NEC Section 353 and UL labeled and listed.
- b. 90° sweeps/bends shall have a maximum of 24 inch radius and a minimum of 18 inch radius.
 - c. Conduit shall have a minimum of 18 inches of cover in a utility trench and a maximum of 30 inches of cover (refer to details – diagram sheet.)*
 - d. All conduits shall have an approve cap or duct seal on ends to prevent debris from entering conduit during construction.
 - e. All empty conduits shall have a pull string.
 - f. Conduit shall extend a maximum of 3 inches and a minimum of 1 inch above the finished streetlight concrete base.
 - g. Multiple Pole Installations: Conduits will be allowed to be of a larger size as required to accommodate the larger wire sizes.
 - h. Mark all buried conduits by placing plastic marker tape (minimum 6" wide) along the entire length of run 12-inches below grade.
 - i. Inspection: Prior to backfilling, buried conduit shall be inspected and recorded by a Town GIS Technician.
5. Bases
- a. All bases shall be a maximum of 2 inches above sidewalk or top back of curb grade or whichever is higher.
 - b. Bases shall be located in the park strip as indicated on Town Standard Plan ST-6.
 - c. Allow the concrete pole base to cure for at least 7-days prior to installing the street light.
6. Ground Box
- a. Known as box, vault, flush mount, pull box, enclosure, and junction box.
 - b. Box and cover shall be Oldcastle Precast, Carson H Series #H1118-12 (11"W X 18" L 12" D) or approved equivalent with the words "Street Lighting" on the cover.
 - c. Lid must be secured with the proper stainless steel bolts.
 - d. 6" of gravel (3/4 minus) shall be placed prior to setting the ground box.
 - e. Top of ground box shall be placed at finished grade.
 - f. Conduit shall extend a maximum of 3 inches above the gravel in the base of the ground box and a minimum of 2 inches above gravel in the base of the ground box.
 - g. One ground box shall be installed within 4 to 10 feet of the power sources (as per Rocky Mountain Power specifications)
 - h. One ground box shall be installed within 2 feet of street light pole base. This item may be modified or deleted as determined by the Engineering Inspector in the field during construction, with input from the Town Street Light Manager.
 - i. Wire must extend 18 inches above grade to splice in ground box.
7. Connections
- a. Wire nuts are allowed in the pole base assembly.
 - b. Mechanical lugs NSI EC SLK – 2/0 Gel packs or equivalent may only be used in the ground box and shall meet NEC specifications, be UL labeled & listed and be designed for this purpose.
 - c. A Littelfuse LEBJJ fuse holder (or equivalent) with weatherproof rubber boots, mechanical connection, 600 volt rated and 30 AMP rated shall be used.
 - d. Fuse shall be 10 AMP BLN, 20 AMP BLN and 30 AMP BLN or equivalent one time fuse.
 - e. Fuse holder shall be placed on all hot leads.
 - f. Crimp connections not are allowed.
8. Grounding
- a. All grounding shall be installed according to the current Edition of the NEC Section 250 and UL labeled and listed.
 - b. The ground rod shall be a minimum of 2 inches above finished concrete grade for the street light base and a maximum of 3 inches above finished concrete grade for street light base. See detail sheet.
 - c. When non-metered street lights are installed, article 250.24 shall be applied for bonding & grounding applications for service supplied AC systems.
 - d. Conductor: Solid, cu, bare, soft drawn.
 - e. Ground Rod or Ground Ring:
 - i. Ground Rod – 8 feet x 5/8 inch diameter Copper weld/bonded, cu.
 - ii. Ground Ring – #6 AWG copper clad per NEC Section 250.
 - iii. At any time the Town may require third party testing at the expense of contractor in addition to any costs to remedy deficiency.
9. Clam: 5/8-inch copper-clad.
10. Burndy KA24U 14 – 1/10 AWG AL/CU mechanical lugs or equivalent shall be used to connect the ground wire to the group clip inside the street light pole.

Appendix A

Guo “Averaging Parameter” Method

Guo, James C.Y. (1999). "*Detention Basin Sizing for Small Urban Catchments*," ASCE J. of Water Resources Planning and Management, Vol 125, No.6, Nov.

DETENTION BASIN SIZING FOR SMALL URBAN CATCHMENTS

by James C.Y. Guo, *PhD, P.E., Professor,*
Department of Civil Engineering, University of Colorado at Denver, Denver, Colorado.

Abstract

The Federal Aviation Administration (FAA) method for sizing small detention and retention basins is a volume-based approach that is sensitive to the release rate. In practice, such a release rate is often approximated by open channel hydraulics or culvert hydraulics. Without a consistent guideline, this practice of approximation can result in significant discrepancy or violation of the volume balance between the inflow and outflow hydrographs. In this study, a consistent procedure was developed to derive the average release from the allowable peak outflow. The required parameters for this method include peak inflow, design storm duration, and the time of concentration of the watershed. With this modification, the detention storage volume maximized by the FAA method can satisfy the volume conservation between hydrographs.

Key Words: Detention, Rational, FAA

INTRODUCTION

Urban stormwater facilities are designed to pass the peak flow through conveyance systems or to store a portion of the runoff volume in detention systems. For a small urban catchment with a tributary area less than 100 acres, the rational method is suitable for peak runoff predictions and the Federal Aviation Administration (FAA) method is recommended for detention storage volume predictions. The FAA's procedure is to maximize the required storage volume by the volume difference between the inflow and outflow volumes produced by a series of rain storms on the watershed. During the optimization process, the outflow volumes are calculated by an approximate average release from the detention basin. In current practice, there is not any guidance as to how to estimate the average release.

As a volume-based method, the FAA procedure has been widely used for small urban catchments in spite of its ambiguity in estimating the average release from the basin. For instance, the average release may be calculated by open channel flow, orifice formula, or culvert hydraulics. These hydraulic approaches result in violation of the hydrologic principle of volume conservation between the inflow and outflow hydrographs and inaccurate calculations on the required detention storage volume. To improve the current practice, this study suggests that the average release be a fraction of the allowable release rate. This fraction can be further derived by the volume conservation principle between inflow and outflow hydrographs during the maximization process. In this study, this ratio was found to vary with respect to storm duration, and is not a constant as recommended in many design criteria such as the Denver Design Criteria Manuals, and FAA Airfield and Heliports Design Criteria. The revised procedure can also be applied to other volume-based methods such as the capture runoff volume method (Guo and Urbonas, 1996) for sizing storm water quality control ponds. It provides a

consistent guideline to the estimation of the average release from a basin, and warrants volume conservation between the inflow and outflow hydrographs.

DETENTION STORAGE VOLUME BY THE FAA METHOD

The volume-based approach such as the FAA method is applicable to urban catchments with a tributary area less than 150 acres. To predict the peak runoff from such a small urban watershed, the Rational method states:

$$Q_d = \alpha C I_d A \quad (1)$$

The rainfall intensity in Eq 1 can be described as:

$$I_d = \frac{aP}{(b + T_d)^n} \quad (2)$$

in which α = unit conversion factor, equal to 1 for English units, and 1/360 for SI units, C = runoff coefficient, A = watershed area in acres (hectare), I_d = rainfall intensity in inch/hr (mm/hr), T_d = rainfall duration in minutes, Q_d = peak runoff rate in cfs (cms) and a , b , and n = constants on the Intensity- Duration- Frequency (IDF) formula.

Storm water detention process is to reduce the peak runoff and to delay the time to peak as well. In practice, the allowable release rate from a basin is defined by the downstream critical capacity, or the pre-development condition.

In this study, the average release is suggested to be a fraction of the allowable peak runoff, Q_a . Therefore, we have:

$$Q_m = mQ_a \quad (4)$$

in which Q_a = the allowable release which occurs at time T_a in Figure 1, Q_m = average release rate, and m = ratio of the average release to the allowable peak runoff rate. For a storm event, the detention storage volume is equal to the volume difference of the inflow and outflow as:

$$V_i = \alpha C I_d A T_d \quad (5)$$

$$V_o = Q_m T_d = mQ_a T_d \quad (6)$$

$$V_d = 60[\alpha C I_d A T_d - Q_m T_d] = 60[Q_d T_d - Q_m T_d] \quad (7)$$

in which V_i = inflow volume, V_o = outflow volume, and V_d = the required storage volume in cubic feet or cubic meter. The factor of 60 is to convert seconds to minutes. The reliability of Eq 7 depends on the specified average outflow in Eq 4. Without an adequate guidance, Eq 7 may lead to any result based on engineer's best estimation. Although an adjustment factor have been recommended to avoid underestimation of the detention volume by Urbonas and Stahle (1991) and Guo (1990), it is necessary to develop a consistent guideline for Eq 4.

MAXIMIZATION OF DETENTION STORAGE VOLUME

The peak runoff flow that occurs at the time of concentration, T_c is recommended for conveyance designs. It is well understood that the design storm duration for a detention basin is usually longer than T_c . As illustrated in Figure 1, the peak flow, Q_d , is produced by the design storm for the detention design. To estimate the required storage volume with no prior knowledge of the outlet hydraulics, it is suggested that the storage volume be calculated using the linear rising outflow hydrograph, i.e. line OB in Figure 1 (Malcom 1982) (Guo 1997). Based on the volume difference between the inflow and outflow hydrographs in Figure 1, the detention storage volume, i.e. the shaded area, is:

$$V_d = 60 \left[Q_d T_d - \frac{Q_a}{2} (T_d + T_c) \right] \quad (8)$$

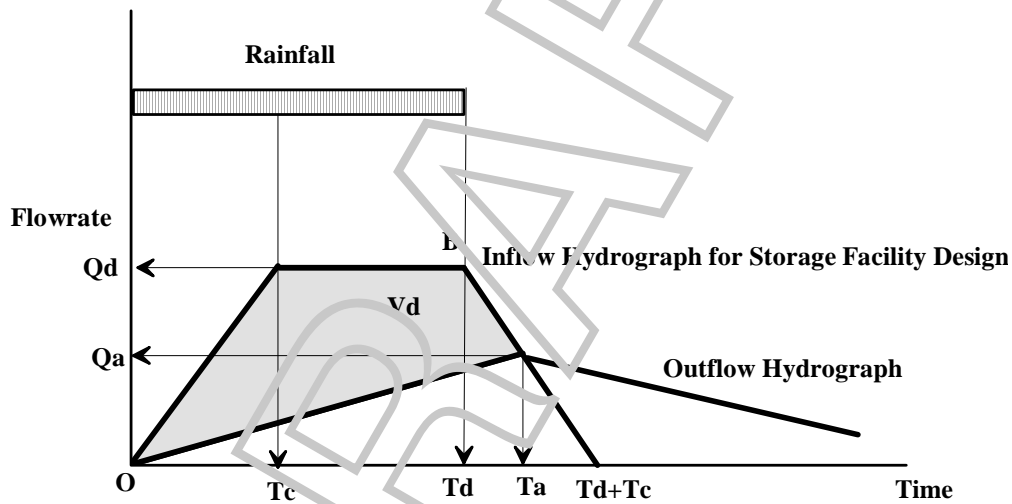


Figure 1. Detention Storage Volume Estimated by Hydrographs

Equating Eq 7 to Eq 8, the value of m is derived as:

$$m = \frac{1}{2} \left(1 + \frac{T_c}{T_d} \right) \quad \text{for } 0.5 \leq m \leq 1 \text{ and } T_d > T_c \quad (9)$$

Often the value of m is recommended to be a constant between 0.80 and 0.90 for all storm events (Urbanos and Stahre in 1991). Eq 19 indicates that the value of m varies with respect to the rain storm duration and can not be applied to a storm with duration less than T_c because the maximized operation of a detention basin requires the entire catchment to be tributary. The current practice does not have any limitation on storm duration and results in a maximization procedure starting from 5-minute rainfall. Eq. 9 begins with a value equal to unity when the storm duration is equal to T_c and then reduces to 0.5 when T_d is much longer than T_c . In comparison, the current practice of applying a constant value of m to all storm events can lead

to significant mistake. Substituting Eq 9 into Eq. 5 with the aid of Eq 3, the FAA method is modified to:

$$V_d = 60 \left[\alpha C I_d A - \frac{Q_a}{2} \left(1 + \frac{T_c}{T_d} \right) \right] T_d \quad (10)$$

The basic concept in the FAA method is to find the maximum volume difference between the inflow and outflow volumes under a series of storm events with different durations. Eq 10 shall be tested for a range of T_d until Eq 10 is maximized as:

$$V_m = 60 \left[\alpha C I_m A - \frac{Q_a}{2} \left(1 + \frac{T_c}{T_m} \right) \right] T_m \quad \text{at } T_d = T_m \quad (11)$$

where the subscript m represents the maximized solution.

DESIGN SCHEMATICS AND EXAMPLES

The example watershed used in this study is located in the City of Denver, Colorado. The 100-year IDF in Denver is specified by $a = 74.1$, $b = 10$, and $n = 0.786$. The developed watershed of 100 acres has a time of concentration of 25 minutes and runoff coefficient of 0.65. It produces a 100-year developed peak runoff of 296.86 cfs. The allowable release is 33% of the developed peak runoff. As a result, the allowable release rate is

$$Q_a = 0.33 Q_p = 97.96 \text{ cfs} \quad (12)$$

The detention volumes for various periods of storm duration are calculated in Table 1. The maximized volume is found to be 8.52 acre-ft for this example.

Duration	Rainfall Intensity	Inflow Volume	Average Parameter	Average Outflow	Outflow Volume	Storage Volume
minutes	inch/hr	acre-ft	M	cfs	acre-ft	acre-ft
		Eq5	Eq 9	Eq 4	Eq 6	Eq 10
50.00	2.97	13.28	0.75	72.36	4.98	8.30
60.00	2.63	14.12	0.71	68.34	5.65	8.47
70.00	2.37	14.33	0.68	65.47	6.31	8.52
80.00	2.16	15.45	0.66	63.32	6.98	8.47
90.00	1.99	16.00	0.64	61.64	7.64	8.36

Table 1. Example for Maximization of Detention Volume.

CONCLUSIONS

Different hydrologic methods were developed for different hydrologic conditions. In the development of technical design criteria, it is a continual effort to maintain consistency among various design methods. The FAA method intends to be a simplified volume-based approach.

However, the current practice falls short in the estimation of the average outflow. This study presents a modification to the volume-based approach such as the FAA method so that the estimated detention volume can be consistent with the hydrograph method. Modifications to the FAA procedures shall not change its original intention as a simplified approach. As a result, this study applies the volume conservation principle between the simplified hydrographs to relate the average outflow as a fraction of the allowable release rate.

In this study, it was found that the average outflow can be determined by the allowable release from the basin, design storm duration, and the time of concentration of the watershed. In practice, the average release was often considered to be the average flow rate over the base time of the outflow hydrograph. This study indicates that this average outflow in fact is the equivalent average release rate that drains the basin storage volume over the storm duration time. Secondly, the ratio of average release to allowable release was not so constant as recommended by the current practice. Instead, it varies between one and 0.5, depending on storm duration. Applying a constant ratio to all storm events may result in a significant discrepancy against the volume conservation between the inflow and outflow hydrographs. Eq 9 provides a consistent guideline that modifies the current FAA procedures to satisfy the hydrograph volume balance.

APPENDIX I. REFERENCES

1. Adams County, Colorado. (1990) "Storm Drainage Design and Technical Criteria."
2. Department of the army and the Air Force. (1977) "Surface Drainage Facilities for Airfields and Heliports." Technical Manual No 5-820-1, Washington DC.
3. Federal Aviation Administration, Department of Transportation. (1970) "Airport Drainage.", AC No. 150/5320-5B.
4. Guo, James C.Y. (1977). "Detention Basin Design and Sizing." Research Report, Department of Civil Engineering, University of Colorado at Denver, to be published by the Water Resources Publication, Inc. Littleton, Colorado.
5. Guo, James C.Y. and Urbona, Ben. (1996) "Maximized Detention Volume Determined by Runoff Capture Ratio." ASCE J. of Water Resources Planning and Management, Vol. 122, No. 1.
6. Malcom, H. Rooney. (1982) "Some Detention Design Ideals." ASCE Proceedings of the Conference on Stormwater Detention Facilities, held in New England College, Hanniker, New Hampshire, edited by William DeGroot.
7. Shueler, Thomas R., and Helfrich, Mike. (1989) "Design of Extended Detention Wet Pond System." Design of Urban Runoff Quality Controls, Edited by Larry A. Roesner, Ben Urbonas, and Michael B. Sonnen, American Society of Civil Engineers, New York, New York.
8. Urbonas, Ben and Stahre, Peter. (1991) "Storm Water Detention." Prentice Hall, Englewood Cliffs, New Jersey.

Appendix B

Subdivision Plat Template

Appendix C

As-Built Drawing Checklist

AS-BUILT DRAWINGS REQUIREMENT CHECKLIST

Project Name: _____

Submittal # _____ Date: _____ Submitted by: _____

Received by: _____

As-Built (not record) Drawings, sealed by a Professional Engineer, shall include only the following information on at least two sheets in plan view, as indicated at a clearly readable scale (maximum 1"=60'). Multiple sheets of each type may be necessary to provide clearly readable drawings. Do not submit plan/profile sheets. Remove all unnecessary information from the drawings. Drawings must be field checked for completeness and accuracy.

AutoCad record electronic drawing files must be submitted and approved following approval of drawings.

As-built Drawing Plan Sheets: <u>GENERAL REQUIREMENTS</u>	TOWN USE ONLY	
	ACCEPTED	
The following must be shown on each sheet:	YES	NO
Title block including project/subdivision name, drawing title and sheet number, date, engineering firm's name and address	<input type="checkbox"/>	<input type="checkbox"/>
Developer and Contractor signature blocks stating "I have field verified that these record drawings are complete and accurately represent what was constructed for this project".	<input type="checkbox"/>	<input type="checkbox"/>
North arrow and drawing scale	<input type="checkbox"/>	<input type="checkbox"/>
Legend of symbols and abbreviations	<input type="checkbox"/>	<input type="checkbox"/>
Benchmark location and elevation	<input type="checkbox"/>	<input type="checkbox"/>
Subdivision boundary and lots (labeled)	<input type="checkbox"/>	<input type="checkbox"/>
Roadway improvements (curb & gutter, sidewalk, driveways). Label streets names.	<input type="checkbox"/>	<input type="checkbox"/>

As-built Drawing Plan Sheet 1: <u>OVERALL</u>	TOWN USE ONLY	
	ACCEPTED	
The following must be shown: (when applicable)	YES	NO
Street lights Indicate type: LP-1, LP-4 Show wiring to power source	<input type="checkbox"/>	<input type="checkbox"/>
Signage Indicate type ST-1, ST-2 or description	<input type="checkbox"/>	<input type="checkbox"/>
Asphalt striping and markings	<input type="checkbox"/>	<input type="checkbox"/>
Fencing Indicate size and type	<input type="checkbox"/>	<input type="checkbox"/>

Traffic calming devices	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrian sidewalk ramps Indicate ADA truncated dome material type	<input type="checkbox"/>	<input type="checkbox"/>
Removal of unnecessary information	<input type="checkbox"/>	<input type="checkbox"/>

As-built Drawing Plan Sheet 2: <u>GRADING AND DRAINAGE</u>	TOWN USE ONLY	
	ACCEPTED	
	YES	NO
Finish contours – One foot intervals (labeled) and including all related flood and low impact infrastructure grades. Including but not limited to grades and measurements for Detention-retention storage, swales, channels, storage capacity, spillway, high-water levels, free-board, flood route, etc.	<input type="checkbox"/>	<input type="checkbox"/>
Drain Structures: Provide all drainage structure elevations and dimensions for, including but limited to: Pipes, inlets, outlets, manholes, water quality devices, etc.	<input type="checkbox"/>	<input type="checkbox"/>
Storm Drain Ponds, swales, spillways channels, etc - show contours, high-water mark, overflow and/or outfall structures, and as-built storage capacity.	<input type="checkbox"/>	<input type="checkbox"/>
Field Survey Drawing: The project engineer shall review as-built survey points and verify conformity to the constructed flood and water quality requirements. Provide a PDF copy of the site survey points and any linework.	<input type="checkbox"/>	<input type="checkbox"/>
Project As-built Drawing: Provide 11x17 PDF of project engineer's as-built, stamped and signed. Project engineer shall oversee and insure correction of all design plan non-conforming items prior to as-built submission. All minor constructed differences must be justified by project engineer. Justifications shall be explained in a stamped and signed PDF letter.	<input type="checkbox"/>	<input type="checkbox"/>
Removal of unnecessary information	<input type="checkbox"/>	<input type="checkbox"/>

As-built Drawing Plan Sheet 3: DRINKING WATER

All valves, meters, air-vacs and drains must show measured dimensions from two stationary locations. Acceptable locations are: top back of curb @ property line, subdivision monument, manhole (sewer or storm drain), catch basin, street light, fire hydrant or corner of permanent building or structure.

TOWN USE ONLY**ACCEPTED**

	YES	NO
Main drinking water lines. Label size and type.	<input type="checkbox"/>	<input type="checkbox"/>
Fire hydrants, Tees, crosses, bends and elbows.	<input type="checkbox"/>	<input type="checkbox"/>
Valves (gate, butterfly, blow-off, stop & waste, check).	<input type="checkbox"/>	<input type="checkbox"/>
Service lines and water meters.	<input type="checkbox"/>	<input type="checkbox"/>
Pressure reducing stations.	<input type="checkbox"/>	<input type="checkbox"/>
Air-vacs. Label size and type.	<input type="checkbox"/>	<input type="checkbox"/>
Removal of unnecessary information.	<input type="checkbox"/>	<input type="checkbox"/>

As-built Drawing Plan Sheet 4: SANITARY SEWER**TOWN USE ONLY****ACCEPTED**

The following must be shown: (when applicable)	YES	NO
Main secondary sewer lines. Label size and type.	<input type="checkbox"/>	<input type="checkbox"/>
Manholes. Label size.	<input type="checkbox"/>	<input type="checkbox"/>
Service laterals.	<input type="checkbox"/>	<input type="checkbox"/>
Removal of unnecessary information	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Drawings Approved By: _____

Date: _____

Appendix D

Town Standard Plans

Minimum Letter and Number Heights

Speed Limit	Upper Case	Lower Case	Supplemental Letters and Numbers*	
			Upper Case	Lower Case
25 mph or less	4"	3"	3"	2.25"
30 to 40 mph	6"	4.5"	3"	2.25"

* Type of street (i.e. Road, Drive, Circle or abbreviation) or street coordinates when not part of the street name.

PRIVATE STREET SIGN
(SEE NOTE 6)

PRIVATE Private Street Name
1900 West



on Street Name
1900 West

9" HIGH (.080" THICK) 5052-H32 ALUMINUM (MIN.) SIGN BLANK MOUNTED TO POST WITH 3/8" ZINC PLATED STEEL DRIVE RIVETS W/ NYLON BACKING WASHERS (# VCR231 OR APPROVED EQUAL). THE SIGN WIDTH SHALL VARY FROM 38" TO 48" DEPENDING ON THE NUMBER OF CHARACTERS IN THE STREET NAME.

MUTCD R1-1
30" X 30" MIN. (OR AS SPECIFIED BY CITY ENGINEER)
HIGH INTENSITY PRISMATIC SHEETING
ASTM TYPE III,IV,X

APPLY 3M #963-32 FLEXIBLE PRISMATIC CONSPICUITY MARKING TAPE, 2" WIDE (11" RED / 7" WHITE) (OR APPROVED EQUAL) TO THE TOP 5' FEET OF POST BELOW THE SIGN. APPLY TAPE TO THE TRAFFIC FACING SIDE OF POST ONLY.

SIGNPOST:
2" X 2", 14 GAUGE, SQUARE GALVANIZED STEEL TUBING, CORNER WELDED WITH 7/16" PRE-PUNCHED OR KNOCKOUT HOLES ON 1" CENTERS ON ALL FOUR SIDES (ALLIED TELES PAR OR APPROVED EQUAL).
OPTIONAL: BLACK POWDER COAT

MINIMUM
TOP OF SIDEWALK
TO BOTTOM EDGE
OF SIGN

BOLT SIGNPOST TO THE ANCHOR POST WITH
A CORNER BOLT
(TELES PAR #TLCB516M OR APPROVED EQUAL)

SIDEWALK

ANCHOR POST: (FOR AVERAGE SOIL TYPES)
2-1/4" X 2-1/4" X 30", 12 GAUGE, SQUARE GALVANIZED STEEL TUBING, CORNER WELDED WITH 7/16" PRE-PUNCHED OR KNOCKOUT HOLES ON 1" CENTERS ON ALL FOUR SIDES (ALLIED TELES PAR OR APPROVED EQUAL).
ANCHOR: (FOR SANDY, LOOSE SOIL OR CLAY)
2-1/4" X 30" ALLIED TELES PAR OMNI-DIRECTIONAL ANCHOR OR APPROVED EQUAL.

CURB AND GUTTER

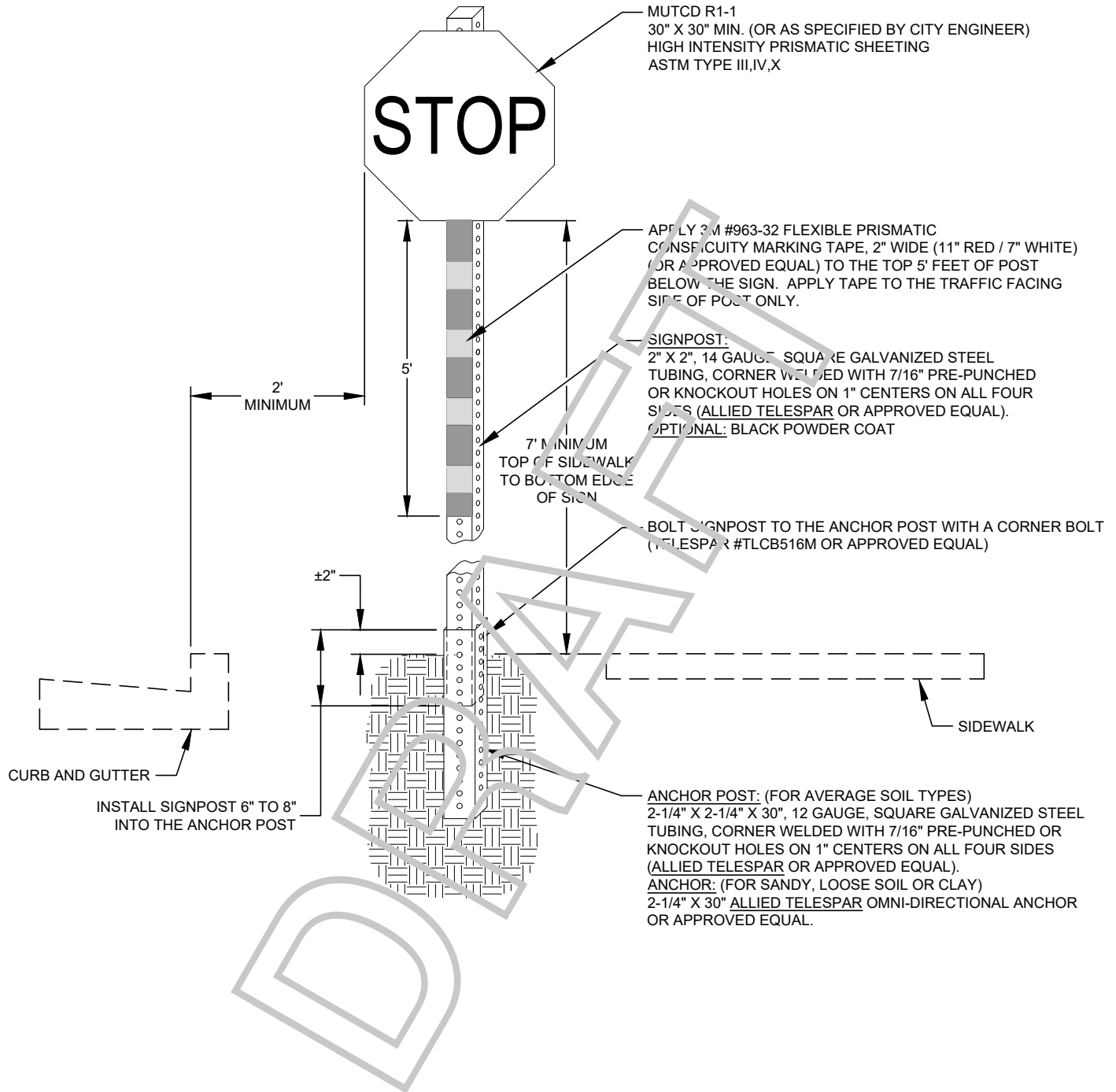
INSTALL SIGNPOST 6" TO 8"
INTO THE ANCHOR POST

NOTES:

1. SECURE CITY'S APPROVAL OF SIGN FORMAT AND INSTALLATION.
2. ALL MOUNTING HARDWARE, POST, AND ANCHOR MAY BE POWDER COATED BLACK (OPTIONAL).
3. INSTALL THE EDGE OF THE SIGN TWO FEET FROM THE VERTICAL EXTENSION OF THE FACE OF THE CURB AS NEAR AS POSSIBLE TO THE APPROACH CURB POINT OF CURVATURE. SIGNS SHOULD NOT OVERHANG SIDEWALK OR CURB & GUTTER.
4. ALL SIGNS SHALL BE 7' MINIMUM FROM GROUND TO BOTTOM OF SIGN.
5. LETTERING AND NUMBERING SHALL BE WHITE ON GREEN BACKGROUND AND MADE OF HIGH INTENSITY PRISMATIC (HIP) SHEETING, ASTM TYPE III, IV, X. FONT SHALL BE ARIAL. UPPER AND LOWER CASE LETTERS SHALL BE USED. NAMED STREETS ALSO REQUIRE COORDINATES ON THE SIGN. SEE TABLE ABOVE FOR REQUIRED MINIMUM LETTER AND NUMBER HEIGHTS. SIGN SHALL HAVE A 9"X9" HIDEOUT TOWN LOGO ON THE LEFT SIDE MADE OF HIGH INTENSITY PRISMATIC (HIP) SHEETING ASTM TYPE III, IV, X.
6. PRIVATE STREET SIGN LETTERING SHALL BE BLUE ON A WHITE BACKGROUND, MADE OF HIGH INTENSITY PRISMATIC (HIP) SHEETING, ASTM TYPE III, IV, X, AND SHALL **NOT** INCLUDE THE HIDEOUT TOWN LOGO. THE LEFT SIDE OF THE SIGN SHALL HAVE THE WORD "PRIVATE" IN WHITE LETTERING (1" MINIMUM, UPPER CASE ARIAL FONT) ON A 9"X9" BLUE BACKGROUND MADE OF HIGH INTENSITY PRISMATIC (HIP) SHEETING ASTM TYPE III, IV, X.

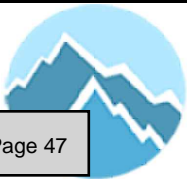


#	BY	DATE



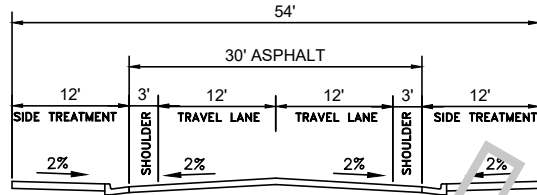
NOTES:

1. SECURE CITY'S APPROVAL OF SIGN FORMAT AND INSTALLATION.
2. ALL MOUNTING HARDWARE, POST, AND ANCHOR MAY BE POWDER COATED BLACK (OPTIONAL).
3. INSTALL THE EDGE OF THE SIGN TWO FEET FROM THE VERTICAL EXTENSION OF THE FACE OF THE CURB AS NEAR AS POSSIBLE TO THE APPROACH CURB POINT OF CURVATURE. SIGNS SHOULD NOT OVERHANG SIDEWALK OR CURB & GUTTER.
4. ALL SIGNS SHALL BE 7' MINIMUM FROM GROUND TO BOTTOM OF SIGN.



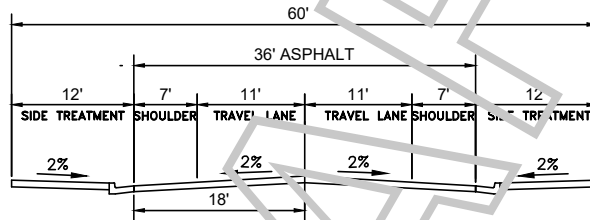
#	BY	DATE

LOCAL ACCESS ROAD



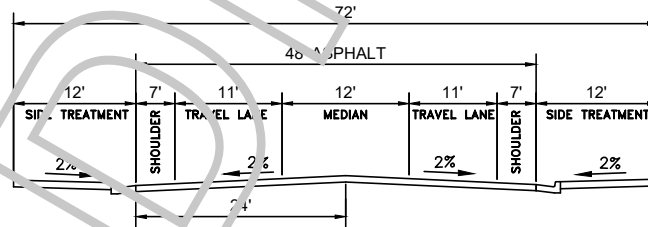
54-FOOT RIGHT-OF-WAY (TYPICAL)

MINOR COLLECTOR

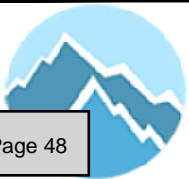


60-FOOT RIGHT-OF-WAY (TYPICAL)

MAJOR COLLECTOR



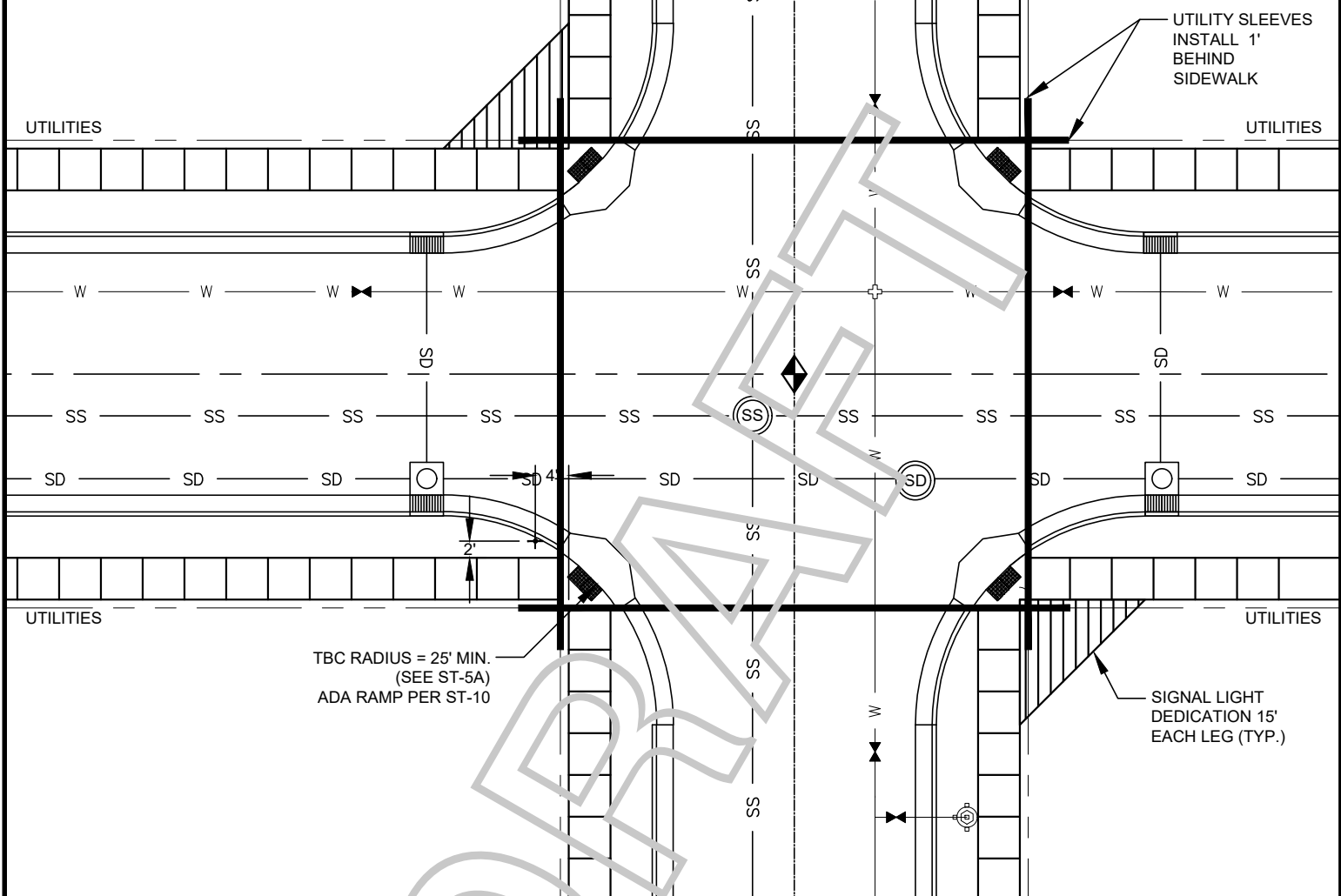
72-FOOT RIGHT-OF-WAY (TYPICAL)



SEPTEMBER 2024		
REVISIONS		
#	BY	DATE

Item # 1.

CROSS STREET	MAIN STREET				
	MAJOR ARTERIAL	MINOR ARTERIAL	MAJOR COLLECTOR	MINOR COLLECTOR	LOCAL
MAJOR COLLECTOR	35'	30'	30'	30'	25'
MINOR COLLECTOR	30'	30'	30'	25'	25'
LOCAL	25'	25'	25'	25'	25'



SURVEY MONUMENT PER
WASATCH CO. REQUIREMENTS

W

DRINKING WATER LINE TO BE
INSTALLED ON NORTH AND EAST
SIDES OF STREET

SS

SANITARY SEWER

SS

SEWER MANHOLE



STORM DRAIN MANHOLE PER
APWA #331B, 341



COMBO BOX PER APWA #316



CURB INLET PER PWA #315



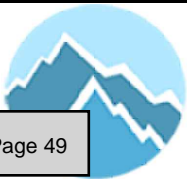
STREET/STOP SIGN LOCATION TYPICAL PLACEMENT (ST-1, ST-2, ST-3)



FIRE HYDRANT



DRINKING WATER VALVE. ALL VALVES
TO BE PLACED ON CURB AND GUTTER
PC (POINT OF CURVATURE)



**HIDEOUT TOWN
ENGINEERING DEPT.**
10860 N HIDEOUT TRAIL
HIDEOUT, UTAH 84036
(435) 659-4739

UTILITY LOCATIONS AND INTERSECTION CURB RADII

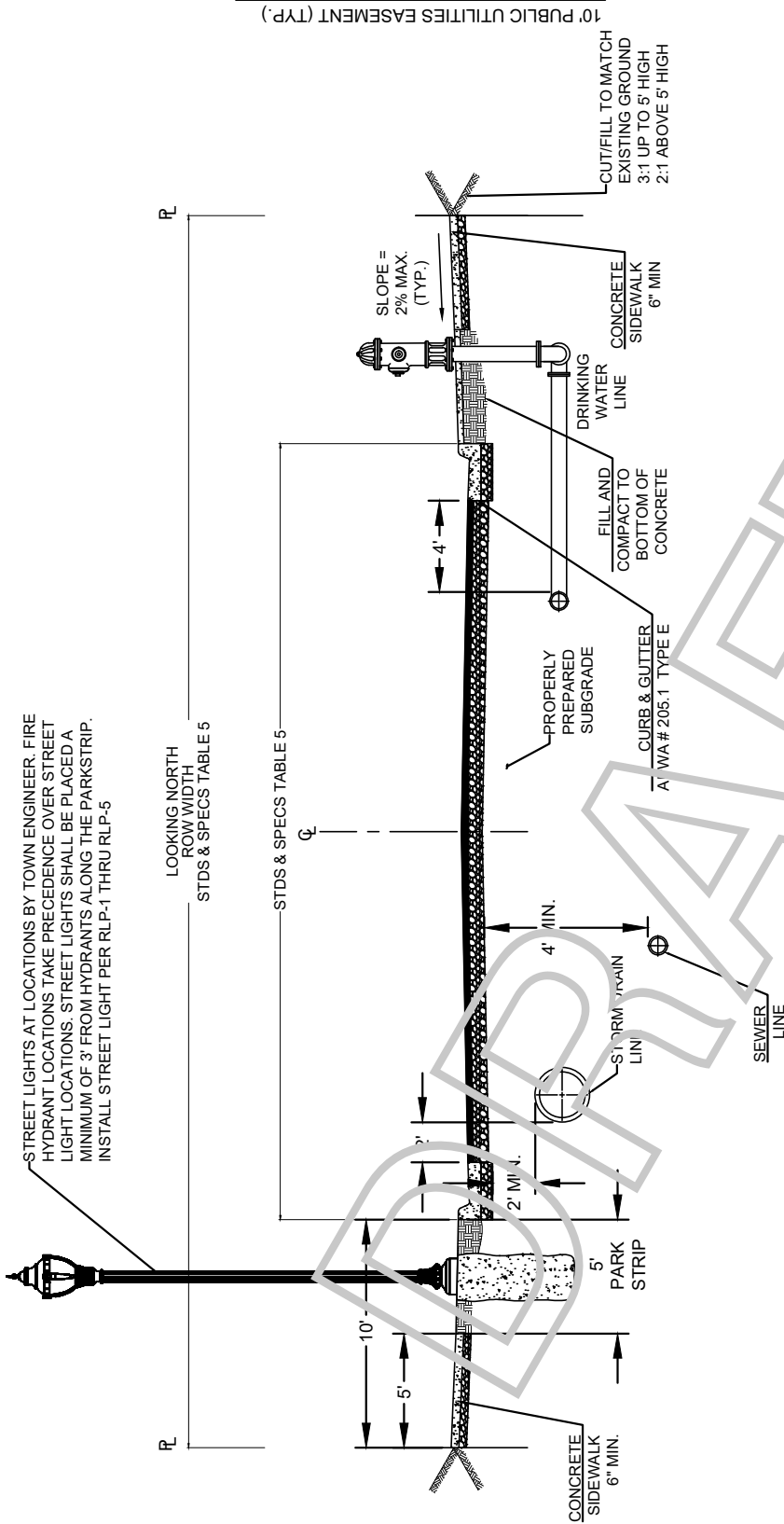
SEPTEMBER 2024

REVISIONS

#	BY	DATE
---	----	------

PLAN

ST-5



STANDARD URBAN	STANDARD URBAN ROADWAY SECTION	STANDARD URBAN, ROADWAY SECTION
LOCAL	PG 58-28 DM-1/2"	3" / 8" (SEE NOTE 2)
MINOR COLLECTOR	PG 58-28 DM-1/2"	4" / 9" COMMERCIAL (SEE NOTE 2)
MAJOR COLLECTOR	PG 64-34 DM-3/4"	5" / 10" (SEE NOTE 2)
MOUNTAIN	PG 58-28 DM-3/4"	3" / 8" (SEE NOTE 2)
ARTERIAL	PG 64-34 DM-3/4"	6" / 10" (SEE NOTE 2)

NOTES:

1. PAVEMENT DESIGN SHALL BE BASED ON THE MAXIMUM DAILY TRAFFIC CAPACITY AND AS RECOMMENDED BY A SOILS REPORT. LOCATION OF SIDEWALK AND CURB AND GUTTER MAY VARY ON INDIVIDUAL STREETS PER DIRECTION OF TOWN ENGINEER. SEE APWA SECTION 32 12 05 (ASPHALT CONCRETE) FOR SPECIFICATIONS.
2. A TYPE II SLURRY SEAL (OR APPROVED EQUAL) SHALL BE PLACED PER APWA 32 01 13.61 AT THE CONCLUSION OF THE WARRANTY PERIOD AND PRIOR TO WARRANTY RELEASE.
3. SEE APWA 32 12 05 2.3.D FOR RAP

REQUIREMENTS FOR DEAD-END ACCESSWAYS

WASATCH FIRE DISTRICT

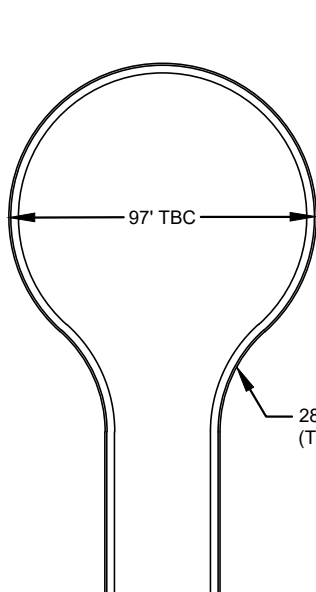
LENGTH	MINIMUM CLEAR WIDTH**	GRADE***	TURNAROUND REQUIREMENTS
0' - 150' *	20'	10% MAX.	NONE REQUIRED
151' - 500' *	20'	10% MAX.	120' HAMMERHEAD 80' DIA. CUL-DE-SAC
501' - 750'	26'	10% MAX.	120' HAMMERHEAD 97' DIA. CUL-DE-SAC
751' & LARGER	SPECIAL APPROVAL REQUIRED		

* CURVES AND TOPOGRAPHICAL CONDITIONS COULD ALTER THE REQUIREMENTS FOR TURNAROUNDS AND THE WIDTH OF ACCESSWAYS.

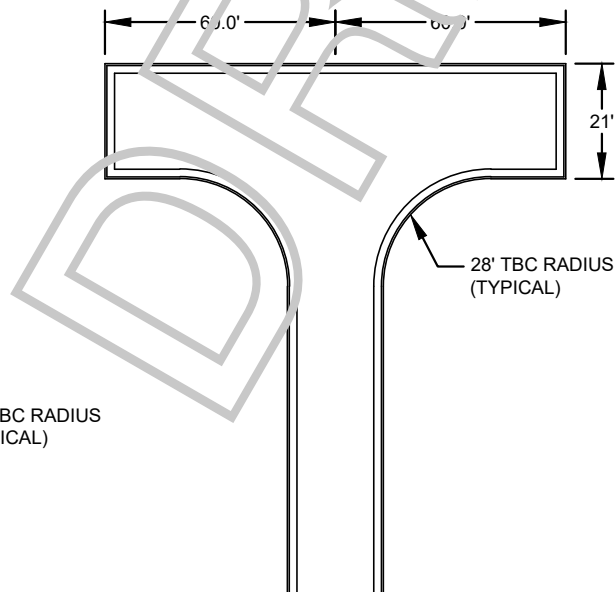
** PARKING RESTRICTIONS MAY APPLY.

*** 5% MAXIMUM IN TURNAROUND

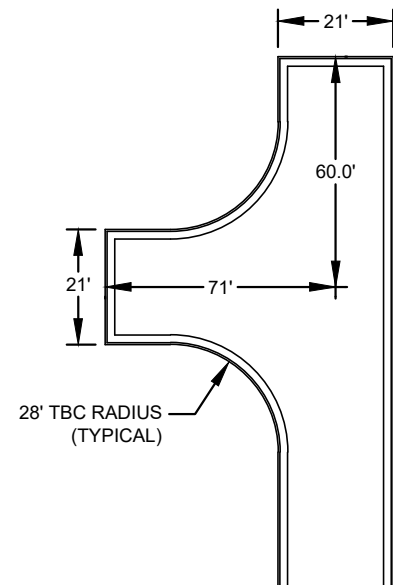
TBC=TOP BACK OF CURB



97' DIA. CUL-DE-SAC

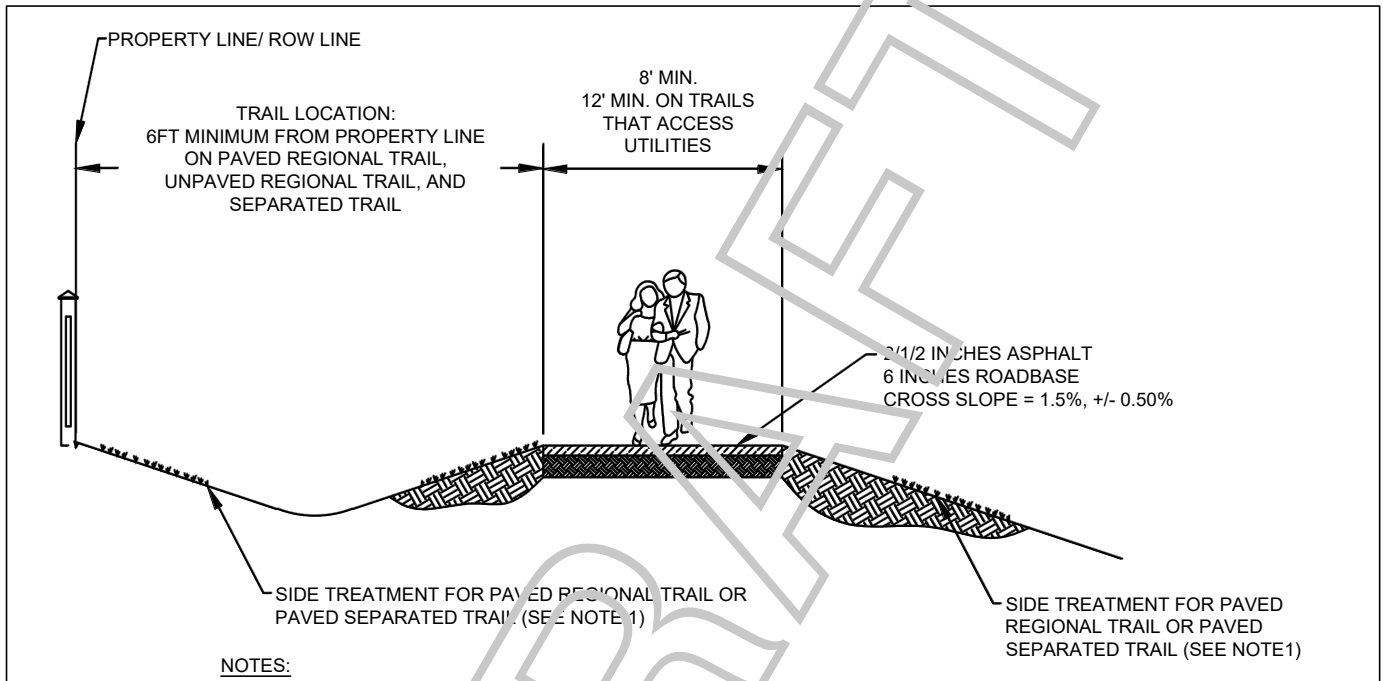


120' HAMMERHEAD

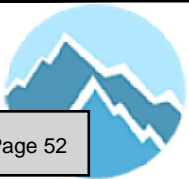


**120' HAMMERHEAD
ALTERNATIVE**

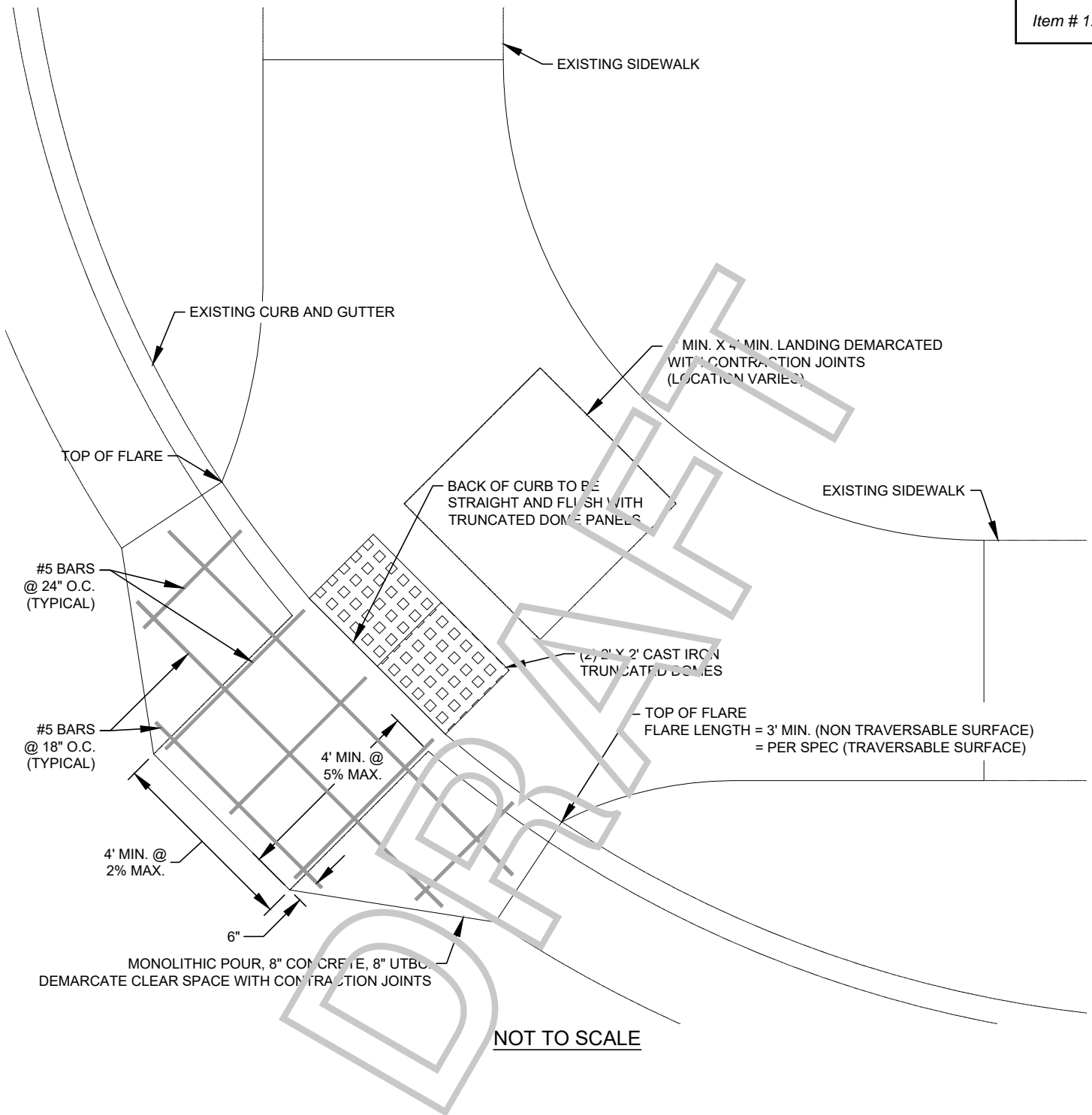




1. SIDE TREATMENTS OF PAVED REGIONAL TRAILS AND PAVED SEPARATED TRAILS SHALL BE 4:1 LANDSCAPED V-DITCH ON THE UPHILL SIDE OF TRAIL WITH 6FT MINIMUM WIDTH OF V-DITCH AND ON THE DOWNHILL SIDE OF TRAIL A 4:1 LANDSCAPED SLOPE FOR 4-FT MINIMUM. PROVIDE DRAINS UNDER THE TRAIL AT APPROPRIATE LOCATIONS.
2. RUNNING SLOPE - PREFERRED = 5 PERCENT. MAXIMUM = 12 PERCENT. NO MORE THAN 30 PERCENT OF THE TOTAL LENGTH OF A TRAIL SHALL EXCEED 8.33 PERCENT.



#	BY	DATE

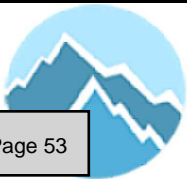
**NOTES:**

1. THIS STANDARD PLAN SUPPLEMENTS APWA PLAN NUMBERS 235 AND 236. APWA MATERIAL SPECIFICATIONS APPLY EXCEPT FOR THE DETECTABLE WARNING SURFACE.
2. RAMP CONSTRUCTION MUST COMPLY WITH CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN.

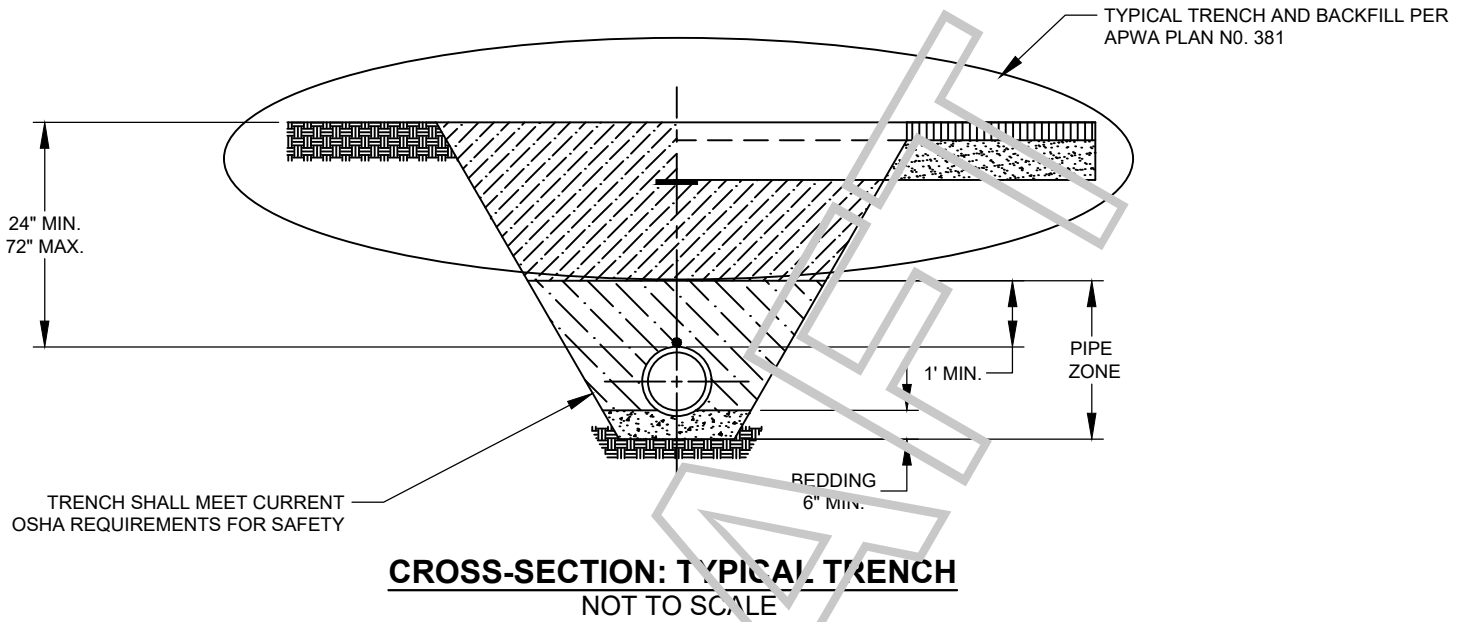
3. MATERIALS -

TRUNCATED DOMES: ADA COMPLIANT, CAST IRON PLATES, W/ NON-SLIP SURFACE AND NATURAL FINISH. SET TWO (2) 24"X24" PLATES TOGETHER IN WET CONCRETE WITH SMOOTH, EVEN SEAM IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

REBAR: GALVANIZED OR EPOXY COATED, DEFORMED, 60 KSI YIELD GRADE STEEL, ASTM A 615, WITH 2" MIN. COVER.



#	BY	DATE

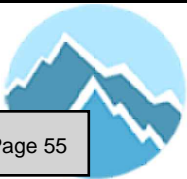
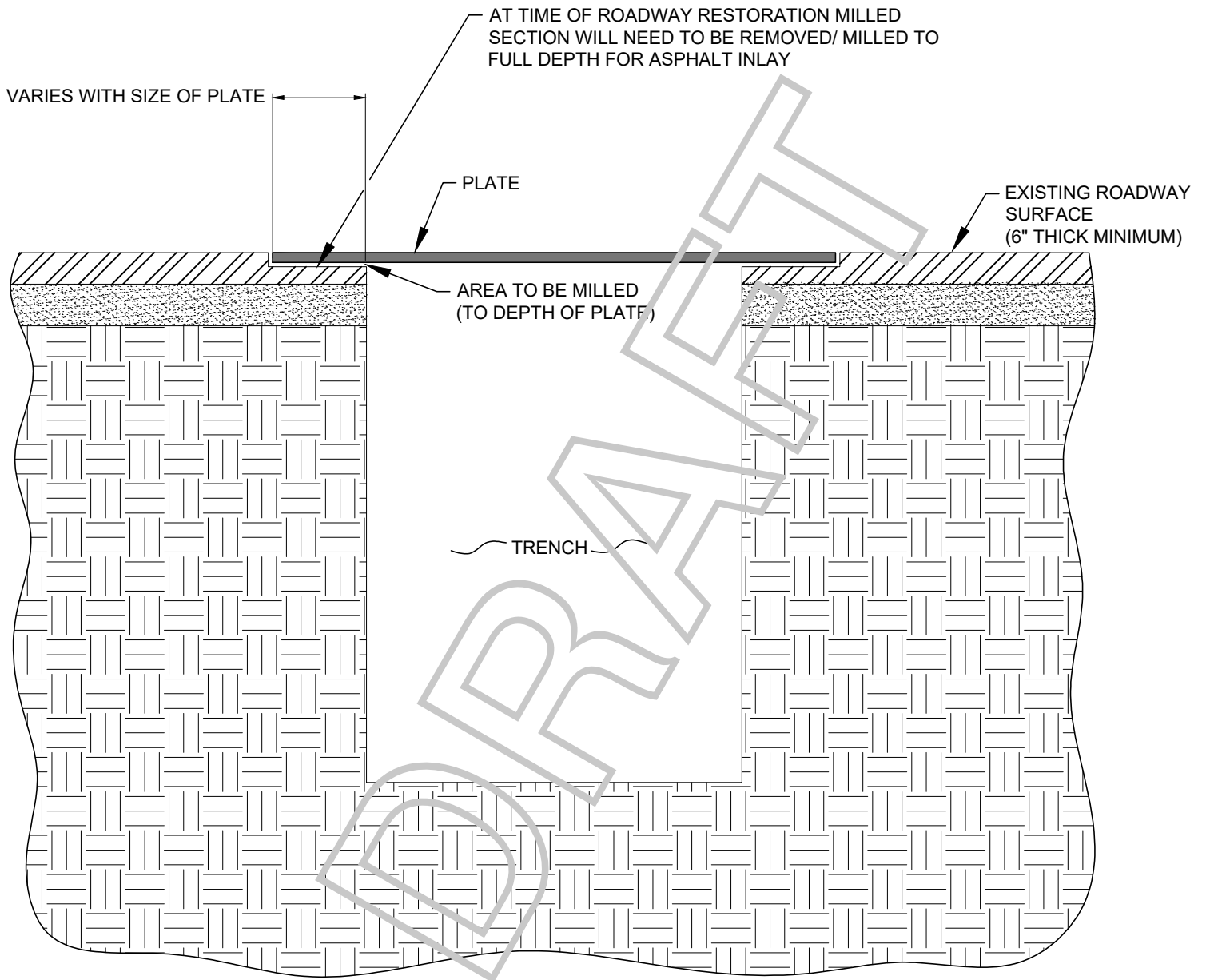


NOTES:

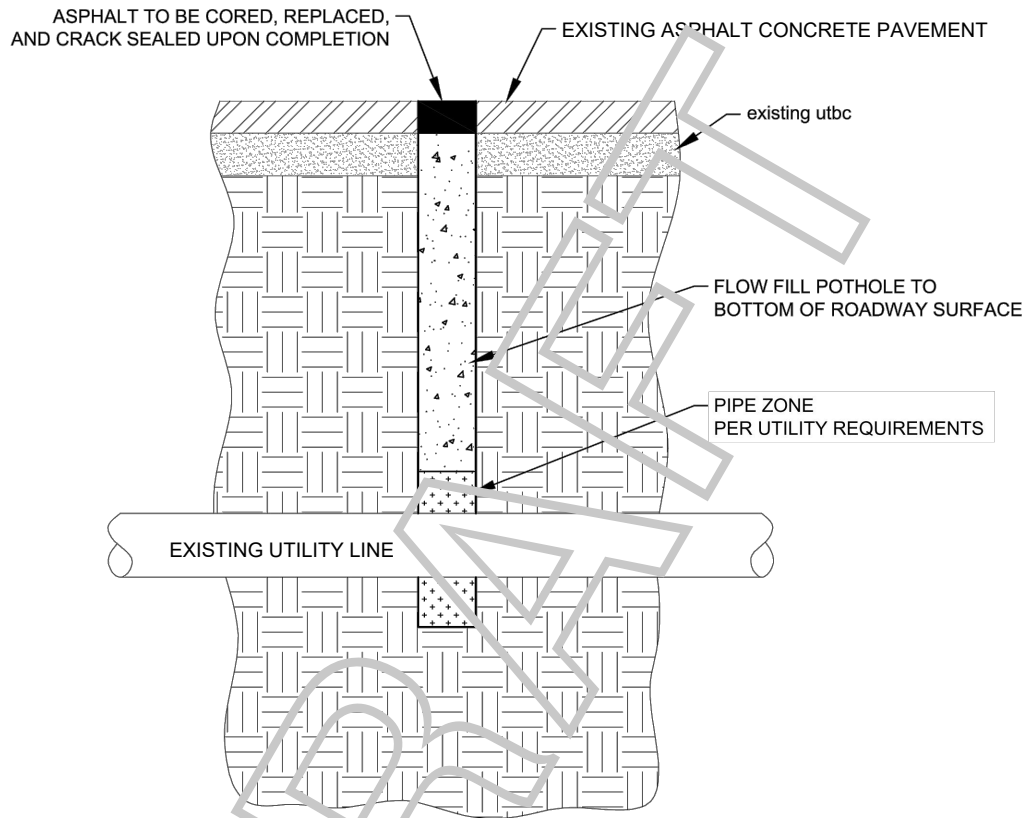
1. COVER DEPTHS ARE FOR STORM DRAIN ONLY. FOLLOW THE JSSD STANDARDS FOR DEPTHS OF OTHER UTILITIES



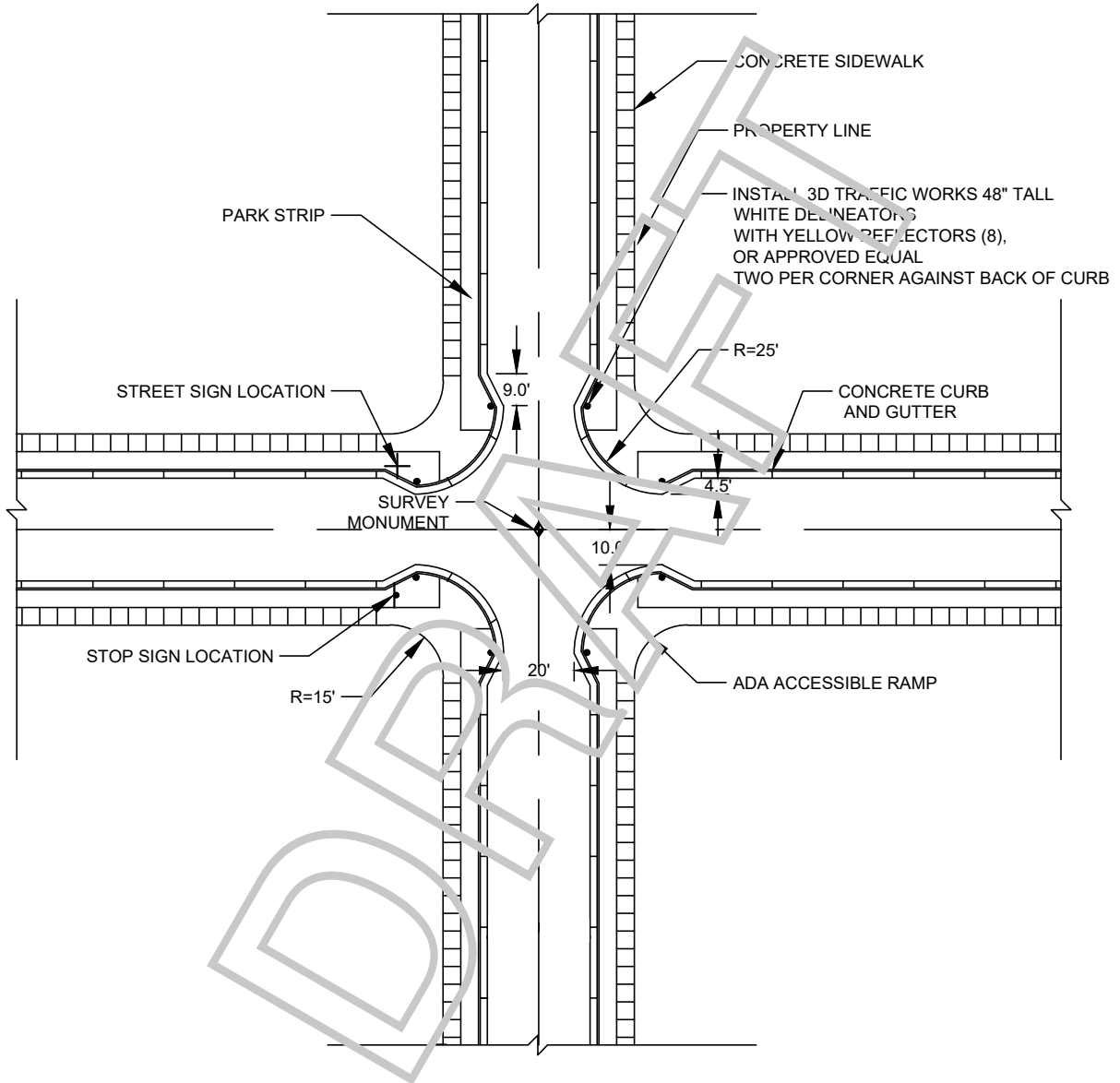
SEPTEMBER 2024		
REVISIONS		
#	BY	DATE



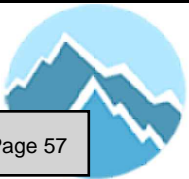
#	BY	DATE



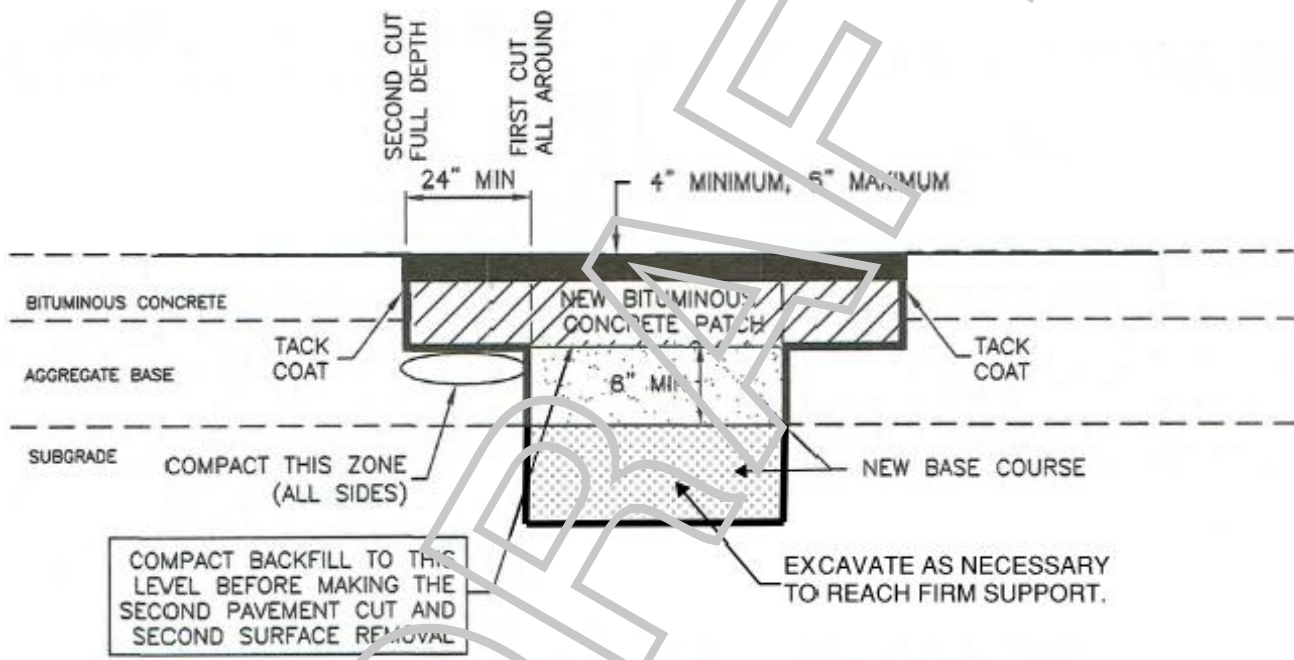
#	BY	DATE



NOT TO SCALE

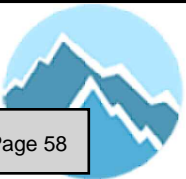


#	BY	DATE



* INSTALLATION SHALL BE PURSUANT TO APWA SPECIFICATION 33 05 25 PAVEMENT RESTORATION.

NOT TO SCALE

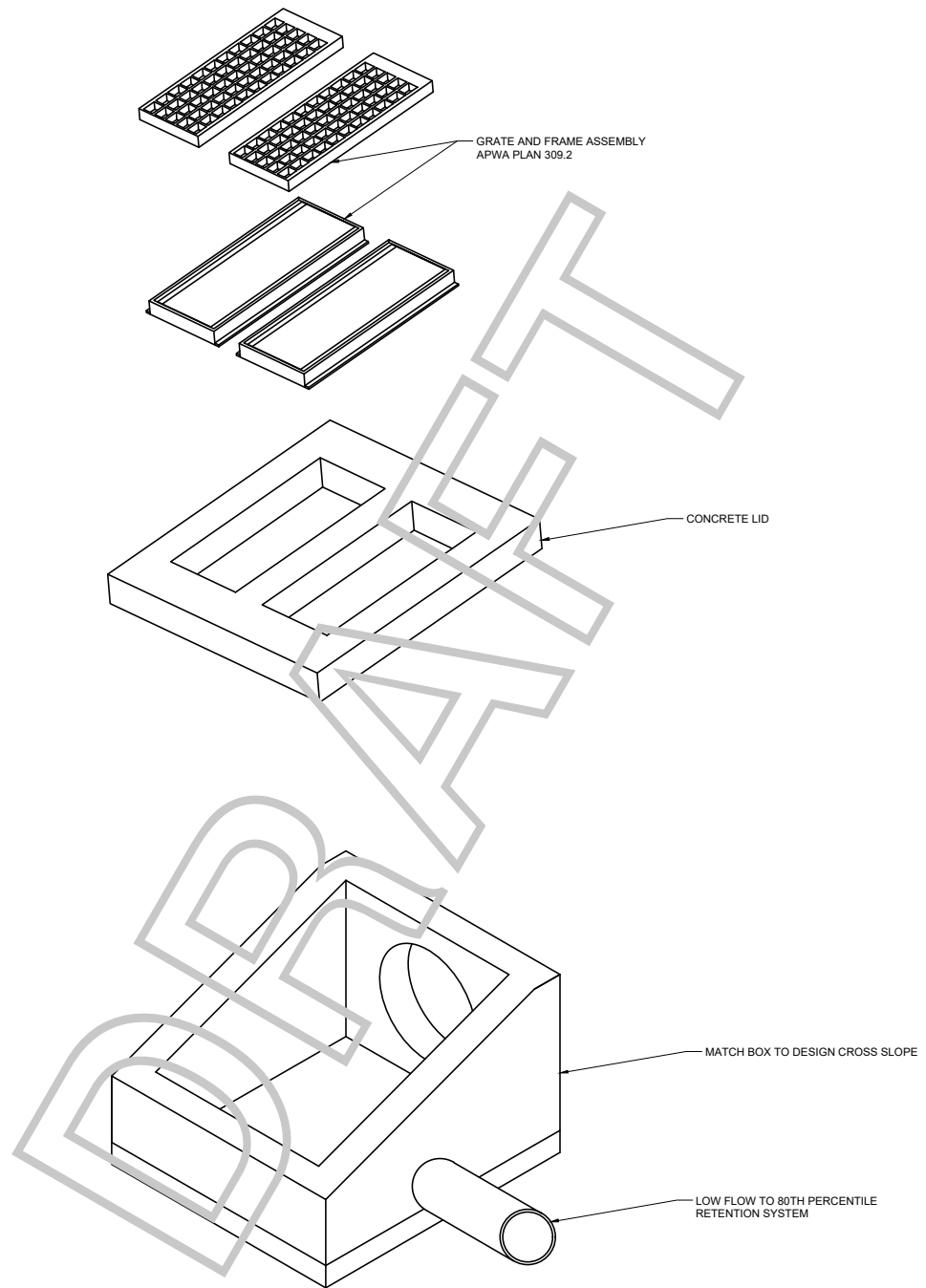


HIDEOUT TOWN
ENGINEERING DEPT.
10860 N HIDEOUT TRAIL
HIDEOUT, UTAH 84036
(435) 659-4739

BITUMINOUS CONCRETE PATCH

SEPTEMBER 2024		
REVISIONS		
#	BY	DATE

PLAN
ST-14



NOTES:

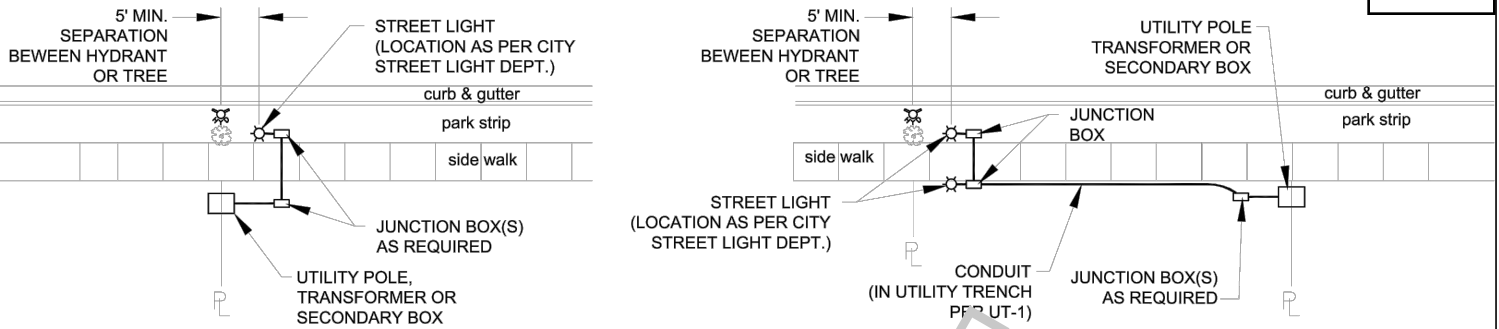
1. DESIGN SLOPE STRUCTURE
REINFORCEMENT PER APWA PLAN 331.3
TYPE C.
2. SUBMIT SHOP DRAWINGS



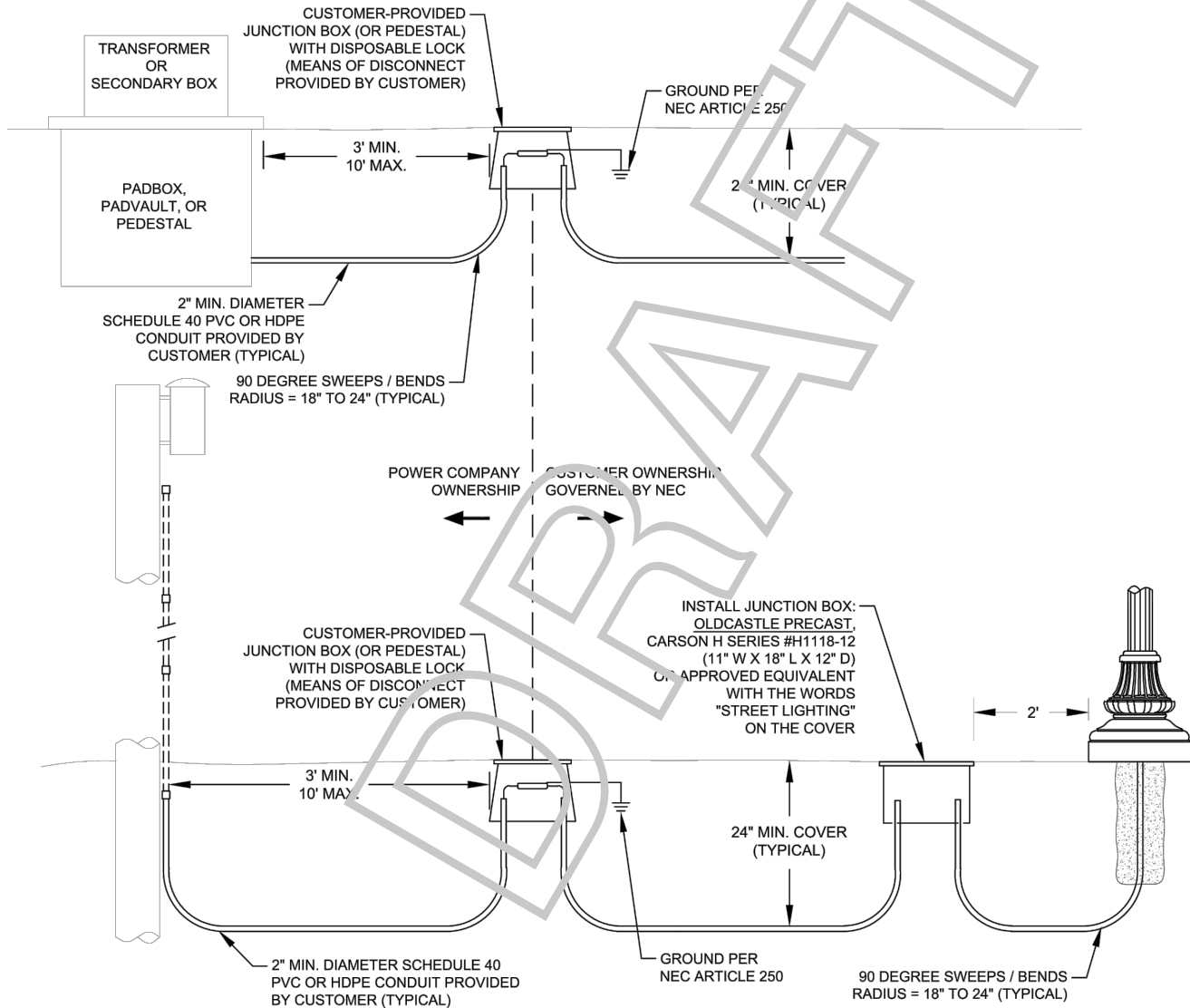
SEPTEMBER 2024		
REVISIONS		
#	BY	DATE

TYPICAL 2

Item # 1.

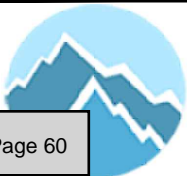


TYPICAL CONNECTION FROM POWER SOURCE

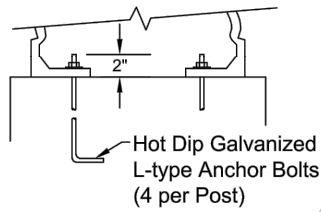
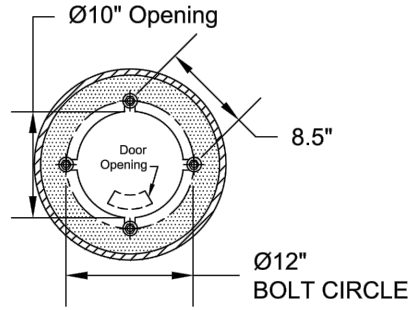


NOTES:

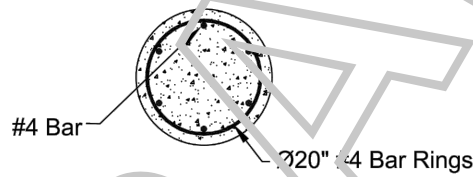
1. The customer shall consult the Power Company on the junction box location, pedestal location, conduit location and digging prior to installation.
2. The customer shall provide and install a junction box or pedestal, conduit, disconnect (fusing), a disposable lock, and customer-owned wire.
3. Any customer-owned metallic equipment within 72 inches (72") of the Power Company's metallic equipment shall be bonded.
4. The minimum dimensions of the junction box are 11-3/4" wide (at the top), 17" long, and 12" high and must be strong enough for incidental traffic areas.
5. Streetlight facilities with associated electrical outlets shall be metered.
6. The customer shall provide all conduit from the Power Company source to the customer-provided junction box or pedestal.
7. The customer's junction box or pedestal shall be located as shown.



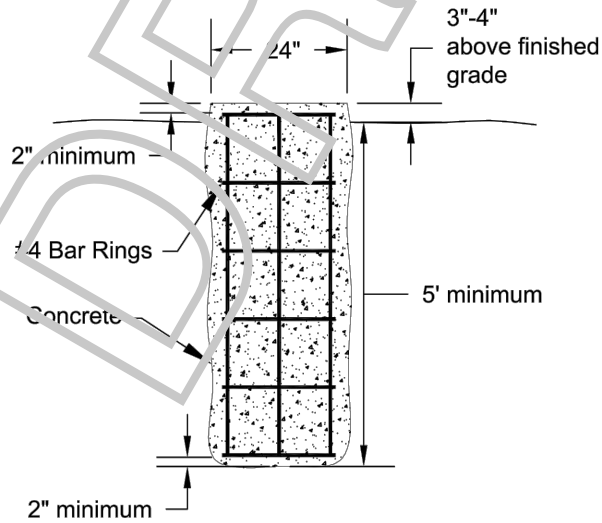
#	BY	DATE



ANCHOR DETAIL



TOP VIEW

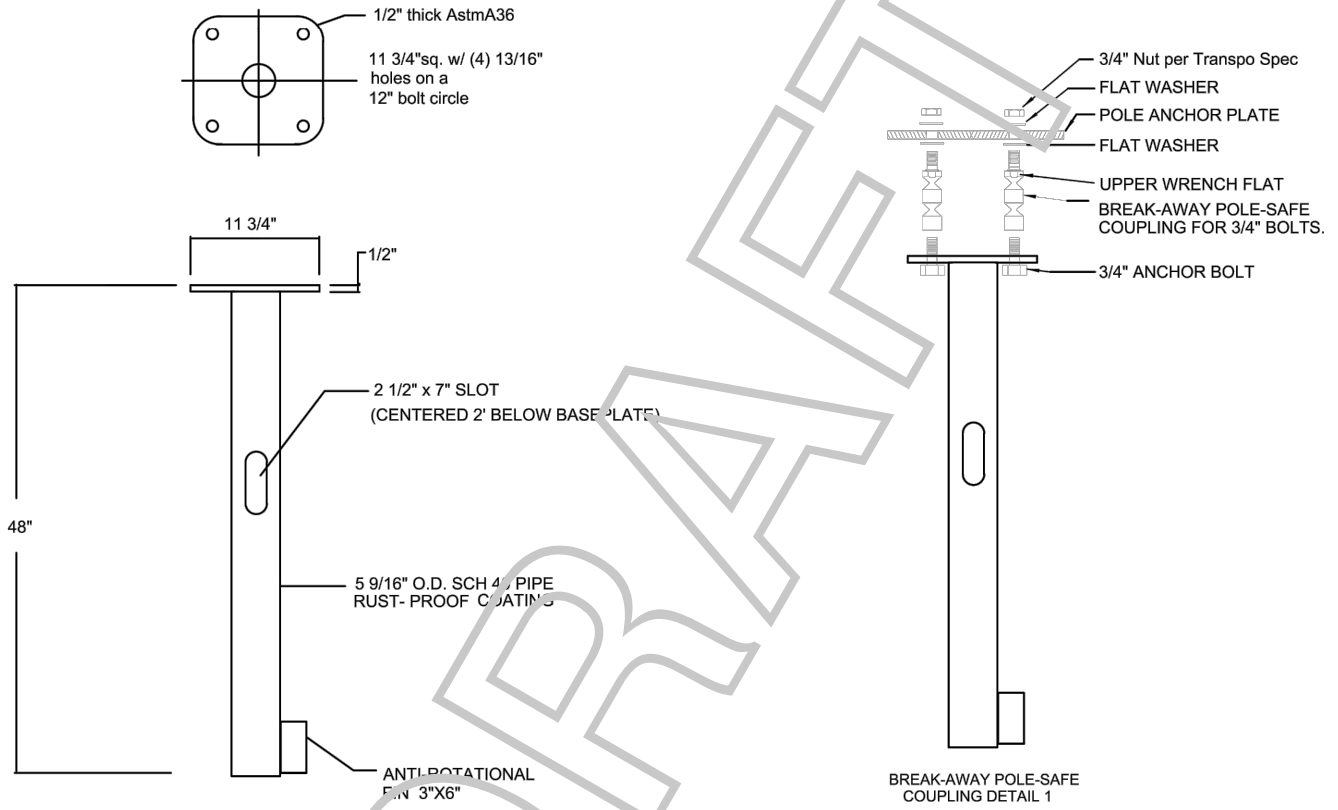


SIDE VIEW

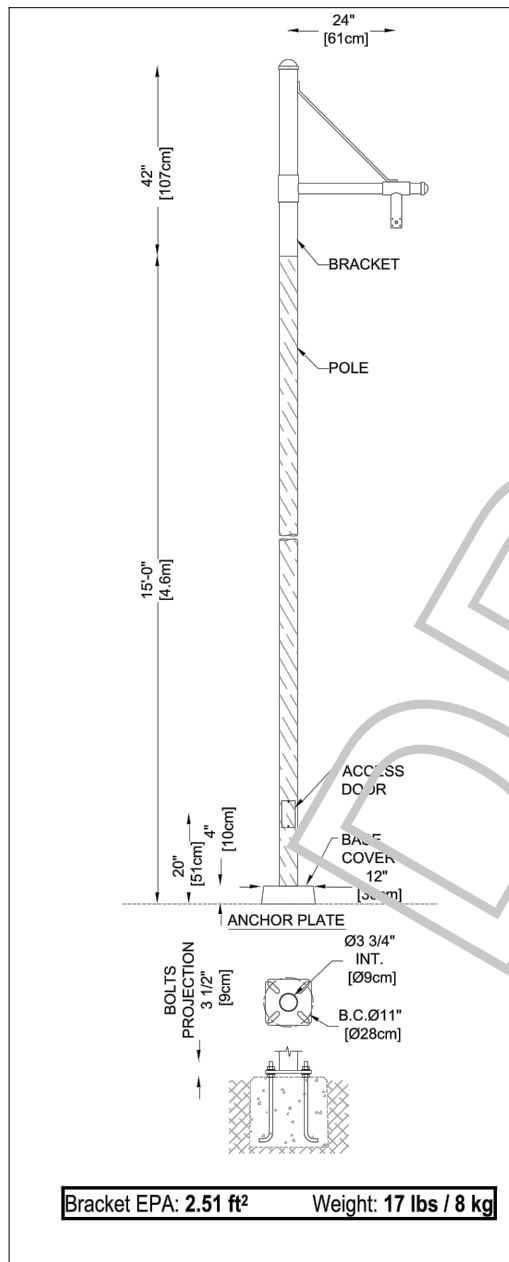
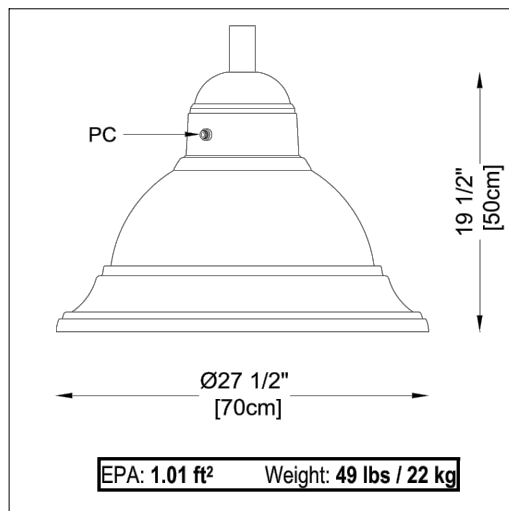
BASE DETAIL



SEPTEMBER 2024		
REVISIONS		
#	BY	DATE



#	BY	DATE



COMPONENTS

THE BASE SHALL BE A SQUARE SHAPED TWO-PIECE BASE MADE FROM ALUMINUM (BS15) MECHANICALLY SECURED TOGETHER.

Item # 1.

THE BRACKET SHALL BE A ROUND SHAPED CENTRAL TUBE MADE FROM 4" DIAMETER ROUND DECORATIVE ELEMENT AND A TENON FOR LUMINAIRE SUSPENSION (M203), WELDED TOGETHER IN A SINGLE CONFIGURATION. SLIP FITS INSIDE THE POLE WITH A 12" LONG X 3 3/4" DIAMETER TENON.

THE POLE SHALL BE ROUND SHAPED, MADE FROM 4" DIAMETER HIGH TENSILE STRENGTH ASTM A500 GRADE C TUBE, WITH A WALL THICKNESS OF 1/8" (PS40). THE POLE IS WELDED TO BOTH THE TOP AND THE BOTTOM OF AN ANCHOR PLATE. INCLUDES HARDWARE TO SECURE THE BRACKET'S PENETRATING TENON (INS).

THE ACCESS DOOR, COVERING 2" X 5" OPENING, WITH A SEALING JOINT GIVING ACCESS TO THE COPPER GROUND LUG.

THE BASE COVER SHALL BE SQUARED SHAPED TWO-PIECES BASE COVER, MADE FORMED ALUMINUM (BS15), MECHANICALLY SECURED TOGETHER.

THE HEAD MODULE SHALL BE ROUND, BELL SHAPED CASE A356 ALUMINUM HOOD WITH AN ASSEMBLED CAST ALUMINUM LENS FRAME FOR OPTIC MODULE. TOPPED WITH A WELDED TENON, FOR LUMINAIRE SUSPENSION, TO BE LOCKED WITH A LOCKING BOLT AND SEC SCREWS. INCLUDES A "STREET SIDE" STICKER. FOR A BRACKET HAVING A 2 3/8" DIAMETER TENON WITH 0.154" OF WALL THICKNESS.

DIMENSIONS

THE POST SHALL BE 18'-7 3/4" IN HEIGHT WITH A 12" DIAMETER BASE. THE STREET DIAMETER SHALL BE 3 3/4". INSTALLATION

THE POST SHALL BE PROVIDED WITH FOUR, GALVANIZED ANCHOR BOLTS TO BE INSTALLED ON A SLOTTED 12" DIAMETER BOLT CIRCLE.

FINISH

BLACK RAL9005 (BK) TEXTURED FINISH FOR THE BRACKET AND BASE COVER. THE POLE SHALL HAVE A SMOOTH FINISH WITH A DURABLE POLYESTER POWDER COATING TO BE APPLIED AND MEETS THE AAMA 2604 REQUIREMENTS. THE FINISH SHALL MEET THE ASTM G7, B117, D1654 AND D2247 REQUIREMENTS RELATIVE TO SALT SPRAY AND HUMIDITY RESISTANCE.



#	BY	DATE

8.02.100 PATCHING REQUIREMENTS

Patching requirements shall meet the following standards:

- A. Cuts Parallel to Street: For cuts parallel to the street, the patch required is the lane width by thirty feet (30') minimum or ten feet (10') beyond the cut at each end, whichever is larger.
- B. Cuts Perpendicular to Street: For cuts perpendicular to the street or diagonal, the patch required is the lane width by twelve feet (12') minimum or five feet (5') beyond the cut on each side, whichever is larger.

9.01.010 ADOPTING AMERICAN PUBLIC WORKS ASSOCIATION (APWA) STANDARD PLANS AND SPECIFICATIONS

The most recent addition of the American Public Works Association ("APWA") Utah Chapter Manual of Standard Plans and Specifications for all public works construction (with the exception of water and sewer standards and specifications) including Utah Chapter APWA supplements and updates are hereby adopted.

HISTORY

Adopted by Ord. [20-02](#) on 1/23/2020

9.01.020 ADOPTING JORDANELLE SPECIAL SERVICE DISTRICT (JSSD) STANDARD PLANS AND SPECIFICATIONS

The most recent adopted Jordanelle Special Service District ("JSSD") standard plans and specifications for all water and sewer public works construction are hereby adopted.

HISTORY

Adopted by Ord. [20-02](#) on 1/23/2020

10.08.14.1 ROAD GRADE AND MINIMUM WIDTH

- A. The minimum allowed grade for all roadways is one-half percent (0.5%).
- B. The maximum allowed grade for all local roadways is 10% (and 8% for all collectors). Council may allow local roadway slopes of up to 12% for lengths not exceeding 500 feet. For roadways greater than 10%, the applicant shall demonstrate a technical infeasibility to construct the roadway at or below 10% standard.
- C. Unless otherwise specifically provided for in this Code, the minimum width for all new roadways within the Town is 26 feet of pavement (exclusive of curb and gutter).

HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

10.08.14.2 UTILITY LOCATIONS

Utilities in the road will be located as shown in typical sections in this chapter.

HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

10.08.14.3 GENERAL ROAD DESIGN STANDARDS

Roads shall be designed at a minimum in accordance with AASHTO design criteria and per street cross sections shown in Section 10.08.14.5 of this Title. The roadway design standards shall be the same for publicly owned and all privately owned roadways. The standards shall be applicable to new developments in The Town of Hideout.

A. Major Collector (75 Foot ROW)

To be used where the potential of traffic at build out is greater than 8000 AADT requiring two 12' travel lanes, and 5' asphalt shoulders for bike/emergency lanes. Drainage is to be controlled with a drainage swale or curb and gutter. In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric or rip rap. There will be no private residential access allowed except for very specific exceptions for existing buildable lots bordering a 75' town right of way in circumstances where the applicant has proven safety concerns can be adequately mitigated. These exceptions can only be approved by the Mayor and Town Engineer. There will be no on-street parking. A right-of-way of 18' is established behind the back of the curb. This allows for the potential of two meandering five-foot (5') walkways on each side of the road. The Town Council may approve a deviation from the standard section for this type of roadway for specific alignments.

B. Minor Collector (66 Foot ROW)

To be used where the potential of traffic at build out is between 2000 and 8000 AADT. Roadway to have two 11' driving lanes with 5' asphalt shoulders for bike/emergency lanes. Drainage to be controlled with a drainage swale or curb and gutter. In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric or rip rap. There will be no private resident access allowed except for very specific exceptions for existing properties bordering a 61' town right-of-way. A right-of-way of 18' is established behind the back of the curb. Right-of-way allows for two five-foot (5') walkways on each side of the road. Exceptions to be approved by the Mayor or Town Engineer. There will be no on street parking.

C. Neighborhood Road (51-Foot ROW)

This is the minimum allowed right-of-way and road standard designed for all non-collecting neighborhood roads throughout the Town of Hideout without specific Town Council exception. Potential traffic is less than 1000 AADT. Drainage to be controlled by either a drainage swale or curb and gutter. There are to be 10' travel lanes and 3' asphalt shoulders for bike/emergency lanes. A 10' right-of-way shall be dedicated behind the back of the curb and gutter. Exceptions to be approved by the Mayor or Town Engineer. There will be no on-street parking except where asphalt exceeds 32'.

D. Arterial Roadways (106 Foot ROW)

One Hundred and Six Foot (106') width Roads shall be designed at a minimum in accordance with AASHTO design criteria and per street cross section between the property line and the drainage swale.: To be used where the potential of traffic at build out is greater than 8000 ADT requiring a minimum of 3 driving lanes (including the turn lane) and 5' asphalt shoulders for bike/emergency lane. Drainage to be controlled with a drainage swale, no curb and gutter. In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric or rip rap. There will be no private resident access allowed. There will be no on street parking allowed. Larger rights-of-way allow for two meandering ten-foot (10') asphalt paths on each side of the road. 1. The town council may approve an alternate section for construction depending on location and site-specific needs.

E. Mountain Road

This road standard is designed for connective road traffic through mountainous terrain. It is not to allow frontage for any residential use. Potential traffic is less than 1000 AADT. Drainage to be controlled with a drainage swale, no curb and gutter. In areas where the profile grade is steeper

than 5% the drainage swale must be lined with an approved fabric or rip rap. No d
access is allowed. The Town may not plow an unpaved mountain road may not be plowed in the
winter. Emergency services may not be available in areas accessed on Mountain Roads when
there is snow on the road.

Item # 1.

F. **Emergency access / fire road**

Only to be used in legally non-conforming subdivisions or lots of record and must be expressly approved by the Town Engineer and the town council on a case by case basis where the applicant has proven and the Town Council finds health, safety, and welfare of the road and the public will not be negatively impacted. The Fire/ Emergency Road may not be used as a secondary access. A fire/emergency road must have controlled access on each end point to prevent ordinary daily traffic.

G. **Alley Way**

In some circumstances, alleys can be used to enhance the pedestrian experience by removing driveways, garage openings, loading docks, garbage containers, utility services and other drive activities from the front of buildings. Alleys shall be used on a limited basis and will be private with public access and public utility easements. By utilizing alleys, some utilities, loading docks, dumpsters and other service needs are kept to the back of the buildings and away from the pedestrian amenities. Alleys are not intended as a tool to avoid having a public street or private pedestrian plaza that meets the standards of a public street at the front of the buildings. The use of alleys must be approved by the Town of Hideout Council, the Town Engineer, and also the Wasatch County Fire District.

1. **Definition:** "Alley" means a public access privately maintained within a block primarily intended for service and access to abutting property by vehicles and not designed for general travel and only allowed when units have frontage on a road or pedestrian plaza built to the applicable Town standard.
2. **General Conditions:** Alley or access may be permitted under the following conditions. If all conditions are not met, then the use of alleys is prohibited.
 - a. Building access must be available from a public street or private street/plaza built to the public standard as well as the alley.
 - b. Alleys or Lanes are built to specific standards.
3. **Water and Sewer:** Water and sewer utilities shall be in the street unless approved by the Town Engineer. If underground wet utilities, sanitary sewer, waterlines, storm drains, etc. are installed in alleys, they shall be constructed prior to the surfacing of the alley and per Town of Hideout Standards.

If utilities are constructed within the alley then connections for all underground utilities and sanitary sewers shall be laid prior to the asphalt or concrete to avert the necessity for disturbing the alley improvements, when service connections thereto are made.

4. **Alleys:** Alleys constructed of concrete will be 20' wide with an inverted crown and a centerline drainage collection system. Alleys constructed of concrete shall have a minimum pavement section of 8 inches of PCC over 6 inches of base rock, placed over geotextile fabric, or approved per geotechnical recommendations and approved by the Mayor or the Town Engineer for H²O loading. Asphalt construction may only be used with a concrete water way for drainage at the center of the alley. A minimum of 3" of asphalt over 9" of road base will be required. In conditions where asphalt construction is used, concrete ribbon curbing will be required outside the 20' width of the asphalt section to protect the edge of the asphalt. Said curbing shall be 2' wide for a total drivable surface of 24'. If the natural soils have a CBR under 20, then a thicker section will be required as determined by the developer's geotechnical engineer, with approval of the

Town Engineer. The applicant must show all private improvements and how they will impact the alley, including garages or other structures, stairs, vaults, fences, walls, driveways, parking lots, walkways, or other improvements. The applicant must indicate existing drainage patterns and show private drainage inlets, outlets, and pipes beyond the alley right-of-way that will be impacted by the alley construction.

- a. **Joint Pattern:** The PCC pavement shall be placed full width in one pour, with no longitudinal joints. The alley design shall include a transverse joint pattern, shown on the plans, so that the joints are spaced to create panel lengths that are 0.75 to 1.25 times the alley width. The joint pattern will be coordinated to intersect with utility features such as poles, manholes, and catch basins.
 - b. **Alley Approaches:** The alley approaches shall be constructed as commercial driveways in all respects, except that the structural section will be increased to 10 inches, or shall match the alley pavement structure for which it provides access, or as approved per geotechnical recommendations by the Mayor or the Town Engineer for H-2O loading, whichever is greater. Alley approaches with a standard curb return shall not be used without approval of the Town Engineer.
5. **Alley Length:** Alleys shall be continuous from street to street wherever possible. If an alley is not through and longer than 150 feet, then a turnaround must be provided to accommodate a fire truck, or such additional standards as may be required by the fire code.
 6. **Alley Parking:** No person shall park a vehicle within an "alley" except during the necessary and expeditious loading and unloading of merchandise. No parking signs are required at 100-foot intervals. The alley must remain open at all times.
 7. **Alley Setbacks:** Alley garage setbacks in residential uses shall be 20 feet or greater as measured from the edge of the alley paving. Alley's leading to parking structures or to commercial/hospitality uses such as hotels or retail shall have a minimum setback of 4 feet as measured from the edge of the alley paving. The four-foot setback shall remain open and unobstructed. If an alley exceeds 150 feet and is adjacent to buildings exceeding 30 feet, then the alley must have 26 feet of hard surface for fire truck downriggers. Parking garage structures shall have a side yard setback of no less than 15 ft.
 8. **Alley Snow Storage:** An additional area of 15% of the alley paved area must be set aside for snow storage. A snow storage plan exhibit must be submitted as part of the alley plan to show that the required amount of snow storage has been provided.

HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

10.08.14.4 ROADWAY SECTION

- A. **Road Section:** Prior to preliminary approval of a development, the developer must provide a geotechnical, and geological review performed by a licensed geotechnical engineer and professional geologist. The review must address onsite soil conditions and make recommendations for a typical road section for the project. The reviewer must take into consideration the amount of full build out traffic ADT's based on an approved traffic control plan. The town has minimum section requirements as shown below.
- B. **Roadway Excavation:** For new road construction, the entire road platform, including cut and fill areas, must be cleared of all vegetation, topsoil, organic material, and soft clays. If the geotechnical engineer classifies the sub grade soils to be collapsible, further actions may be necessary to prepare the sub grade based on the geotechnical engineer's recommendation. The Town of Hideout engineer has the option to require additional sub grade preparation and section materials above and beyond the geotechnical review engineer's recommendation.
- C. **Sub Grade:** Minimum Sub Grade preparation will meet the requirements of the table below:

AASHTO Soil Classification	Requirement
All A-1, A-2, A-3 and A-4 classifications	Native sub-grade shall be scarified to a minimum depth of 12 inches. Loosened material shall be moistened and compacted to at least 95% of maximum dry density based on ASTM D1557.
All A-5 to A-7 classifications	Over-excavate and replace 12 inches of depth with a soil classifying as AASHTO A-1 through A-4. New material shall be moistened and compacted to at least 95% of maximum dry density based on ASTM D1557.

- D. **Road Base and Asphalt:** The values in the following table are minimum thicknesses based on the roadway classifications. A geotechnical analysis and pavement design report is necessary to qualify these minimums, or these values may be increased due to further investigation based on local conditions. The Town Engineer may also require additional thickness or cross section improvements in addition to these minimums:

Roadway Classification	Requirement
Major Collector	5" Hot Mix Asphalt, 10" State-spec Base Course.
Minor Collector	4" Hot Mix Asphalt, 9" State-spec Base Course.
Neighborhood Roads	3" Hot Mix Asphalt, 8" State-spec Base Course.

- E. **Excavation Through an Existing Street:** This section covers any trench excavation through an existing road and is anticipated to be used mainly to install utilities across existing roads. If possible, the preferred method for installing utilities under existing paved roads is to have them bored.

- Any excavation work in a town road (including the right of way) requires a permit.

2. A traffic control plan meeting the MUTCD guidelines is required and must be approved by the Town Engineer. Minimal traffic impact including full road width or lane closures is required on existing roads.
3. Material removed by the excavation is not to be used as backfill for any portion of the trench under the road paved section unless it meets an A-1 granular requirement.
4. Pipe bedding to conform to the specific utility companies' requirement, including the dry utility companies (communication, electric, and gas), and Town standards for water sewer and storm drain piping.
5. The remaining trench to be filled with select A-1-A granular product up to the existing road section.
6. The top of the trench will have a minimum of 4" of asphalt placed in 2 lifts over road base to match the existing section or 8" minimum. Trench work shall be scheduled so that the trench can be completed including asphalt within a minimum of 2 days. Trenches left unpaved for longer than 2 days require specific approval in writing from the Town Engineer.
7. Any work within an existing road requires inspection from the town to be scheduled by the contractor completing the work.

F. Roadway Design Tables:

REPLACED BY TABLE 5

Roadway Functional Classification								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
ROW Width	106'	75'	66'	60'	60'	60'	60'	60'
Average Daily Trips	> 8000	> 8000	8,000-2,001	2,000-0	< 500	Emergency Only	< 200	< 200
Single Family Units	< 800	< 800	< 500	< 200	150-0	0	Minimal	1-3
Pavement Width	46'	44'	37'	30'	24'	16'	24	20
Side cut/fill slopes	3:1 up to 5 feet high and 2:1 above 5 feet					2:1	2:1	2:1
Horizontal Design Elements								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum mid block centerline curve	Varies with V and superelevation				100'	60'	75'	60'
Minimum tangent distance between reverse centerline curves	Varies with V and superelevation				50'	40'	50'	40'
Maximum cul-de-sac length ³	Not Allowed				The lesser of 1,300' or 30 dwelling units			
Cul-de-sac travelway turnaround diameter	Not Allowed				80'	80'	80'	80'
Maximum superelevation	6%	6%	6%	6%	N/A			
Vertical Design Elements								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum crest vertical curve K value ⁵	Varies with speed limit				19	19	19	19
Minimum sag vertical curve K value ⁵	Varies with speed limit				37	37	37	37
Minimum length of vertical curve	Per traffic engineer	3*V	120'	80'	60'	50'	60'	60'
Minimum centerline grade ⁶	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Maximum grade in cul-de-	Not Allowed				5%	5%	5%	5%
Maximum centerline grade across designated	4%	4%	4%	5%	5%	5%	5%	5%
Maximum grade break without vertical curve	0.50%	0.50%	0.50%	1%	2%	2%	2%	2%

Intersections								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum angle of intersection	80°	80°	70°	60°	60°	50°	50°	50°
Minimum offset between intersection	Study required	Study required	150'	125'	125'	125'	125'	125'
Maximum centerline offset	0'	5'	5'	5'	5'	5'	5'	5'
Maximum centerline grade across intersections ⁶	4%	4%	4%	5%	5%	5%	5%	5%
Minimum corner radius (edge of travelway)	30'	30'	30'	25'	25'	25'	25'	25'
Pavement Component Minimum Thickness								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Asphaltic Concrete	Per geotechnical report, 4" minimum			3"	3"	3"	3"	3"
Road Base	8" minimum			8"	8"	8"	8"	8"
Subbase	Per geotechnical report							

Notes:

- A. Roads shall be designed at a minimum in accordance with AASHTO design criteria. **REPLACED BY ST-6**
- B. See Section 10.08.16 of this chapter for sidewalk requirements.
- C. The length of a cul-de-sac is measured along the centerline from the intersection to the center of the turnaround. **REPLACED BY ST-7**
- D. Physical terrain may require exceptions to the maximum grade. See section 10.08.10 for further discussion.
- E. Design speed for vertical curves shall be 5 miles per hour greater than the anticipated speed limit. **REPLACED BY TABLE 5**
- F. Grade must extend at least 100 feet beyond the edge of the traveled way of the outside lane of the intersecting street. **REPLACED BY TABLE 5**
- G. A geotechnical report including pavement design shall be submitted. The thickness of 1 or more of the pavement components shall be increased as needed to achieve the required strength as specified in the geotechnical report approved by the Town Engineer. **REPLACED BY ST-6**
- H. The primary street of an intersection shall not exceed the maximum centerline grades as allowed for each of the roadway functional classifications. Stop-controlled secondary intersecting grades must not exceed the reduced approach values as given in this table. The intersection centerline approach grades of the secondary or intersecting street must exceed at least 100 feet beyond the edge of the paved traveled way of the outside lane of the primary through street before exceeding these values. **REPLACED BY TABLE 5**

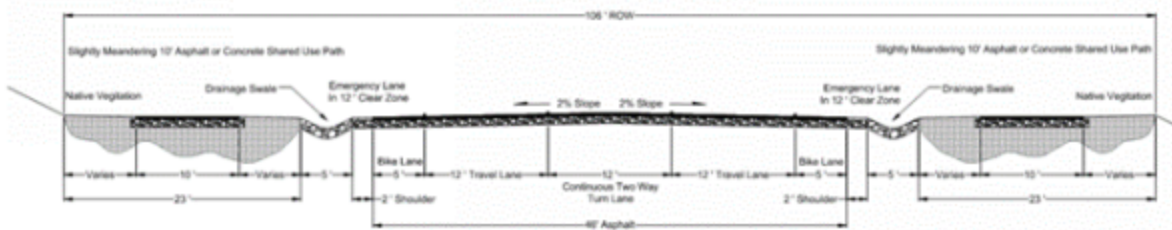
HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

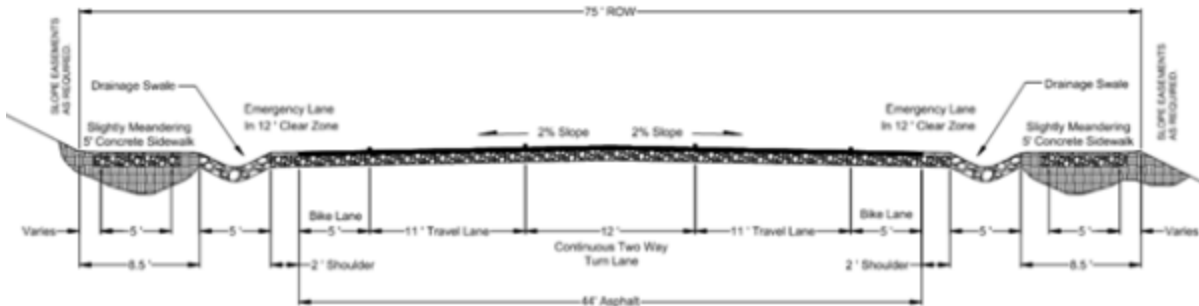
Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

- A. All disturbed surfaces shall be covered with 6 inches of topsoil and seeded.
- B. Lane striping as per cross section including the required bike lane painting.
- C. Shoulder will be constructed with compacted road base.
- D. The subtle meandering shared use path will have 3 inches of asphalt over 9 inches of road base. Road will have a minimum of four inches (4") of asphalt.
- E. Permanent erosion control mat* or minimum 6" thick rip rap required in drainage swale for road slopes greater than 5%. Permanent mats shall have ground cover of 74% or greater and a ultraviolet stabilization of 1,000 hours.

106' Arterial Cross Section
Figure 1

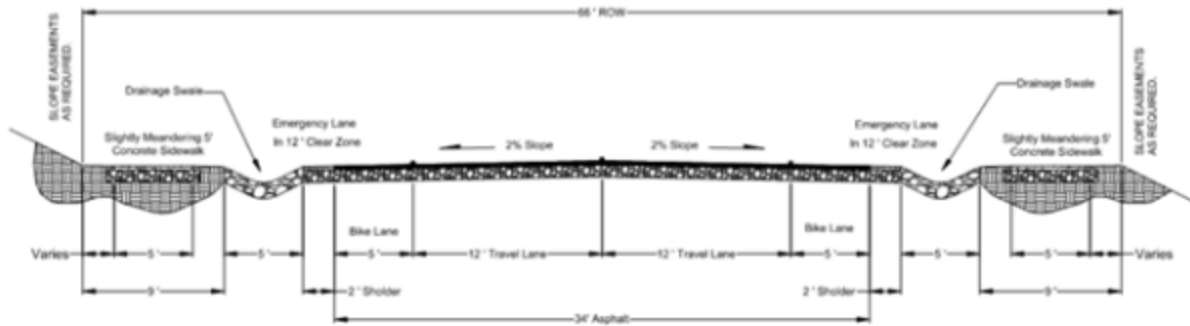


75' Major Collector Cross Section
Figure 2



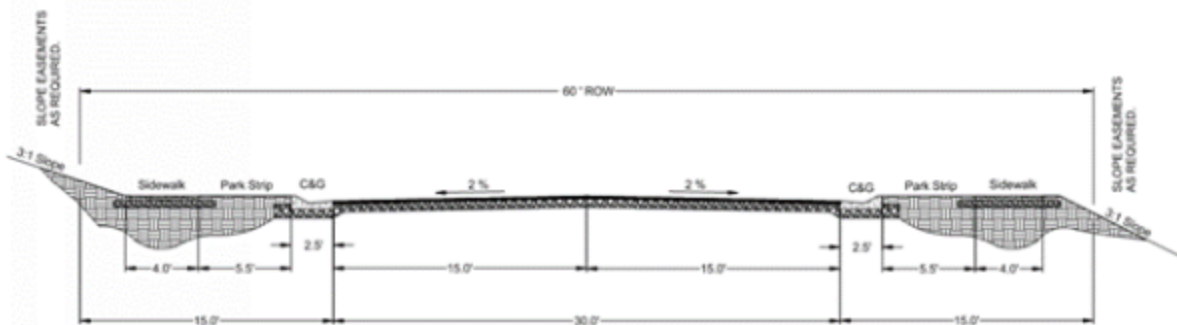
66' Minor Collector Cross Section

Figure 3



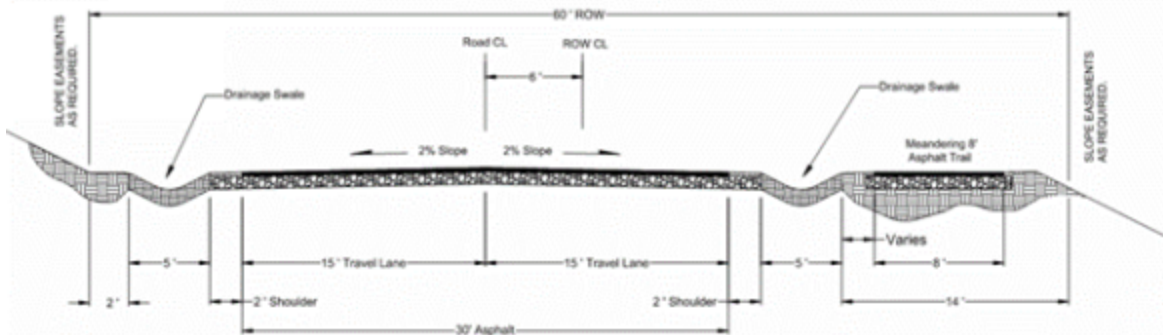
60' Major Local Cross Section

Figure 4



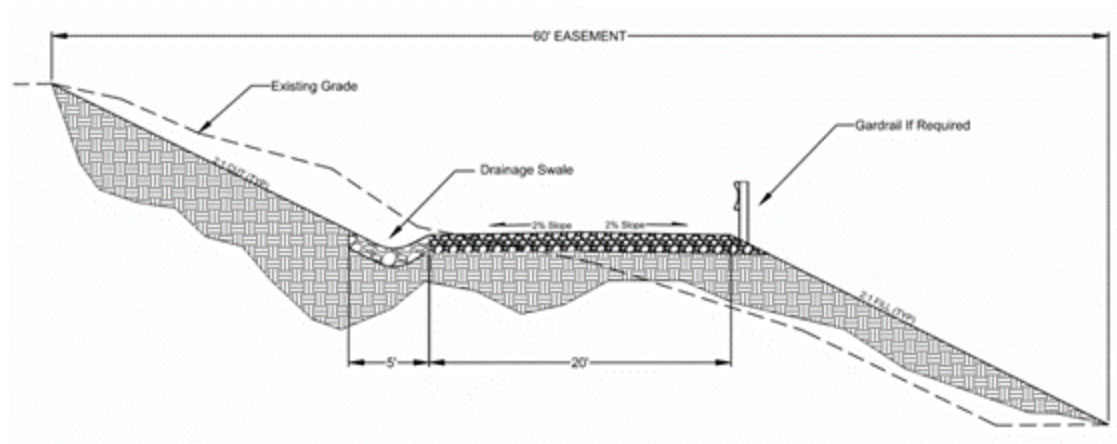
60' Major Local with Swales Cross Section

Figure 5



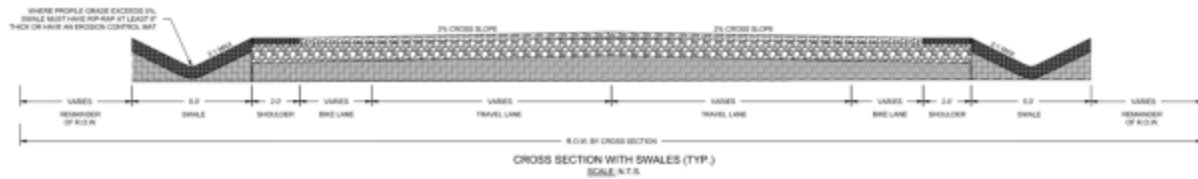
Fire / Emergency Road

Figure 7



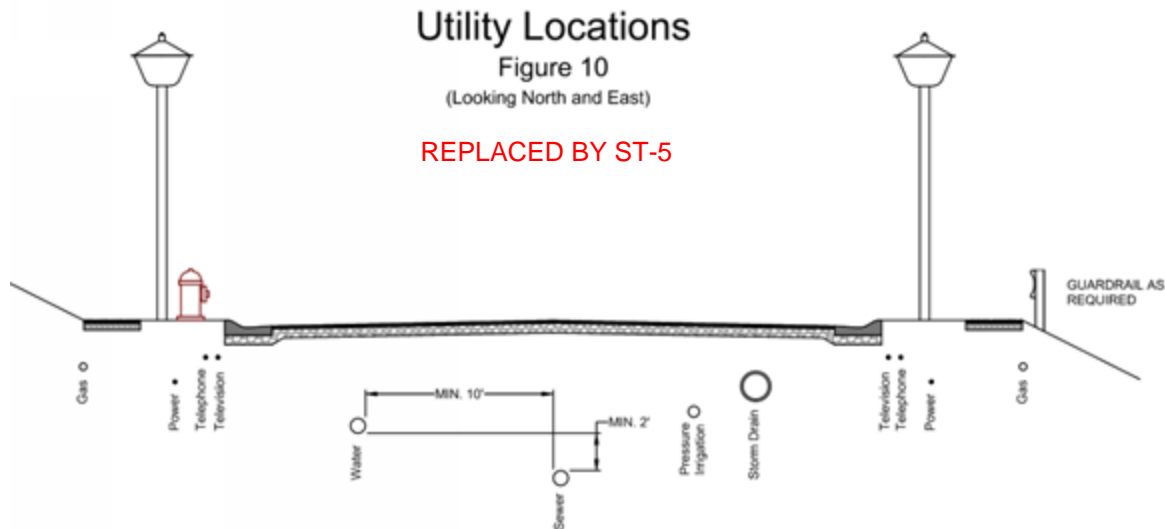
Typical Cross Section with Swales

Figure 6



Permanent Erosion Control Mat Specifications:

Thickness	0.4 inches
Ground Cover Factor	74 percent
Tensile Strength	170 X 125 pound/foot
Tensile Elongation	50 percent maximum
Ultraviolet Stabilization 1,000 hrs	80 percent



The Town Council may adopt Town construction standards and specifications for roadways and cross sections. Where the provisions of this section impose different restrictions than those required in the Town construction standards and specifications, the provisions of the Town construction standards and specifications shall prevail.

- A. **Roads.** Planned roads within a development shall always be kept open to the public, unless special approval is granted by the Town Council to allow a gated community. OMITTED -- VAGUE AND OBVIOUS
- B. **Cul-De-Sacs.** A publicly dedicated Cul-de-sac shall have a right-of way width of at least sixty (60) feet; shall have a length of not in excess of eight hundred (800) feet; shall be terminated by a right-of-way turnaround of not less than ninety-six (96) feet in diameter; and shall be identified as such by appropriate signage within twenty (20) feet of the entrance thereof, measured from the frontage road Property line. REPLACED BY ST-7
- C. **Easements.** Public Utility Easements of not less than ten (10) feet on rear lot lines, side lines, and front lines will be required to serve utility companies for poles, wire, conduits, storm or sanitary sewers, gas and water mains, and other public utilities. Easements of greater width may be required along Property lines where necessary for surface overflow or for the extension of sewer mains or similar utilities. REPLACED BY STD PLAT
- D. **Intersections.** Roads shall intersect each other as near as possible at right angles. Minor roads shall approach the arterial or collector roads at an angle of not less than eighty degrees for a distance of at least one hundred feet. Offsets across roads in road alignment between ten (10) feet and one hundred fifty (150) feet shall be prohibited. REPLACED BY TABLE 5
- E. **Curbs.** Curbs at all intersections shall be rounded with curves having a minimum radius of twenty-five (25) feet. Property lines at road intersections shall be rounded with a curve where necessary. REPLACED BY ST-5
- F. **Street Names.** New street names shall not duplicate those names already existing. A street obviously a continuation of another already in existence shall bear the same name. All road designations shall be approved by the Planning Commission and Wasatch County Information Systems Department. Street names shall be signed and said signing shall be discernable from the road. REPLACED BY 5.1.G
- G. **Dedications.** All roads shall be dedicated for public use. Private roads shall be permitted only as recommended by the Planning Commission and approved by the Town Council. REPLACED BY 5.0

H. **Bridges and Culverts.** All bridges and culverts shall be constructed to support HS-20 loading requirements in accordance with DOT and ASHTO standards. **REPLACED BY 1.2**

I. **Relation to Adjoining Road System.** The arrangement of roads in new Subdivisions shall make provision for the continuation of the existing roads in adjoining areas for their proper protection (where adjoining land is not subdivided) at the same or greater width (but in no case less than the required minimum width). Where the Planning Commission determines that it is necessary for the orderly development of the community and health and safety concerns to provide for road access to adjoining Property in order to provide an orderly development of a road system, proposed roads shall be extended by dedication to the boundary of such adjoining property. **REPLACED BY 5.1.H**

J. **Cuts in Pavement.** No cuts shall be made in road pavement for at least five years after hard surfacing without approval by the Mayor with the advice of the Town Engineer, except in cases when public safety is at risk. **REPLACED BY 5.1.I**

HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

10.08.16 SIDEWALKS, CURBS, PLANTER STRIPS, AND GUTTERS

- A. Curbs, and gutters shall be required on both sides of all new roads to be dedicated to the public.
- B. Sidewalks, paved trails and planter strips may be required by the Planning Commission or Town Council; to be dedicated to the public.
- C. Sidewalks, curbs, planter strips and gutters may be required by the Planning Commission and Town Council on existing roads bordering the new Subdivision lots.
- D. Sidewalks shall be included within the dedicated non-pavement Right-of-Way of all roads unless an alternate location has been specifically approved by the Planning Commission.
- E. Sidewalks shall be a minimum of sixty (60) inches wide and Americans with Disabilities Act (ADA) compliant for safe and easy passage for pedestrians.
- F. Concrete curbs are required where sidewalks are required.

HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

10.08.20 DRAINAGE AND STORM WATER FACILITIES

Storm drainage and erosion control planning submittal requirements are outlined in this chapter. Criteria can also be found in the "Wasatch County - A Guide For Erosion And Sediment Control" (1996).

A. Planning Submittal Requirements: Unless provided otherwise, the criteria and methods presented in the following references should be used in planning and design of the drainage system:

1. "Urban Drainage Design Manual", hydraulic engineering circular no. 22, November 1996, federal highway administration, FHWA-SA-96-078, <http://www.fhwa.dot.gov/bridge/hydpub.htm>.
2. "Urban Storm Drainage Criteria Manual", June 2001, urban drainage and flood control district, <http://www.udfcd.org/>.
3. "Design And Construction Of Urban Stormwater Management Systems", ASCE manuals and reports of engineering practice no. 77, 1992, <https://www.asce.org/bookstore/book.cfm?book=2800>.

The drainage plan should provide for control of erosion at the source, noneroding conveyance facilities, and water quality/detention basins.

B. Control Of Erosion And Contaminants At The Source: The ability to control erosion and other pollutants at the source is the most important single mitigation factor. Every practical effort should be made to prevent erosion from occurring at the source. The objective should be to prevent erosion during construction and to reestablish vegetation as soon as possible after construction on all areas with exposed topsoil.

Slope soil erosion, after revegetation, should be less than or equal to predevelopment rates and should be less than the topsoil development rate (generally assumed as 0.01 inch per year or 2 tons per acre per year).

C. Conveyance Facilities: The initial drainage system (i.e., curb and gutter, storm drains, culverts, ditches, realigned natural channels, etc.) should be designed to convey runoff from a minor storm event (10-year event, the storm event having a 10 percent chance of being equaled or exceeded in any given year) without nuisance flooding and without erosion. If tributary runoff flows (either peak or volume) are increased to a natural drainage, the drainage should be shown to be noneroding in a ten (10) year event.

The drainage system should be capable of passing the storm runoff from a major storm (100-year event, the storm event having a 1 percent chance of being equaled or exceeded in any given year) without flooding buildings.

D. Water Quality/Detention Basin: The criteria for design of the water quality/detention basin should include both water quality mitigation and mitigation for downstream erosion and flooding effects. The effects of development (i.e., increased impervious area and decreased time of concentration) should be mitigated such as to prevent increased flooding of downstream properties (100-year design event) and to prevent increased erosion of downstream conveyance channels (10-year design event). The level of mitigation required is dependent upon the capacity of the downstream drainage system. A common practice is to provide for on site detention, reducing storm runoff peaks from the development to at or below historic (predevelopment) levels. If downstream conveyance capacities are severely limited, it may be

necessary to reduce storm runoff peak flow rates from the developed property to much less than historic runoff flow rates to offset the impacts of the increased runoff volume.

Item # 1.

1. The basins should be designed to adequately capture and treat runoff from the water quality design storm. Wasatch County criteria ("A Guide For Erosion And Sediment Control", pages 11 and 18) require capturing and containing the runoff volume from a two (2) year, twenty-four (24) hour storm (minimum). The water quality capture volume should be discharged at a rate such as to allow a minimum residence time of twelve (12) hours (defined as the time from the centroid of the inflowing hydrograph to the centroid of the outflowing hydrograph). The maximum allowable discharge rate for the water quality capture volume discharge orifice may be computed using the simplified equation:

$$Q_{wq} = (WQCV/30) * C$$

Q _{wq}	=	Maximum allowable water quality capture volume release rate (cfs)
WQCV	=	Water quality capture volume (acre-feet)
	=	2-year 24-hour runoff volume
C	=	Conversion from acre-feet/hour to cubic feet per second = 12.1

2. The water quality pond should have sufficient additional storage below the lowest outlet to accommodate sediment accumulation. The minimum volume of provided sediment storage should be either computed from a slope erosion analysis for the three (3) year slope soil loss (revised universal soil loss equation reference: "Design Hydrology And Sedimentology For Small Catchments", C.T. Haan, B.J. Farfield, and J.C. Hayes, 1994, Academic Press, Inc., San Diego, California) or may be taken as equal to twenty percent (20%) of the water quality capture volume. If subsoils are such that water captured in the sediment storage area cannot infiltrate within a reasonable period of time (to avoid mosquitoes, etc.), then a subdrain system should be considered.
3. The analysis for designing the required detention volume to mitigate downstream flooding and erosion effects should be performed assuming that the pond is full to the water quality capture volume level prior to the start of the design storms (10-year and 100-year).
4. An emergency spillway (preferably open channel type) is required with a one hundred (100) year flood event minimum design capacity assuming that the primary outlets are plugged. The elevation of the top of the embankment should be a minimum of one foot (1') above the water surface elevation when the emergency spillway is conveying the maximum design or emergency flow. The design height of the embankment should be increased by roughly five percent (5%) to account for settlement.

E. Water Quality/Detention Basins Maintenance Requirements: Key components include nonplugging outlets design, maintenance access design, and pond side slope erosion protection design.

1. Detention basin outlets should be designed to be nonplugging as much as possible. A possible option for the water quality capture volume discharge orifice is to provide an orifice (set with the orifice invert at the bottom of the water quality capture volume level) with a connected pipe inlet placed a minimum of six inches (6") below the water level at

which water begins to discharge. Outlet pipes should be protected by inlet grates are sized, spaced, and oriented such as to minimize plugging of the outlets.

Item # 1.

2. Maintenance access to the ponds should be provided. Required access includes access with heavy equipment to the pond floor (generally 15 inches minimum width with 15 percent maximum slope) and all weather access should be provided to the pond outlet facilities.
 3. Interior pond side slopes should preferably be four horizontal to one vertical (4:1) or flatter and should not be steeper than three horizontal to one vertical (3:1). Pond side slopes (both interior and exterior) should meet the same criteria for slope erosion control stated above (2 tons per acre per year maximum mean annual slope soil erosion rate). Riprap is not permitted unless approved by the Town Planner and only under special circumstances. Steep slopes that might otherwise necessitate riprap should be designed at a reduced slope, one that allows the basin to be landscaped appropriately and in coordination with the Town Planner.
 4. Provisions for low maintenance landscaping and irrigation must be provided. Landscaping will be maintained by the homeowners' association.
- F. Open Channels: Wherever possible open channels shall be preserved for all major drainages shown on the Final Drainage Control Plan. No building shall be located within 50 feet of a natural drainage. Culverting of these channels is not permitted.
- G. Landscaping: A landscape plan must be included with all stormwater plans. This plan shall include flood tolerant species within the basin as well as the appropriate screening of the basin. Slopes should be gradual enough so that fencing is not needed around a basin and native landscape plant materials can be reintroduced after construction in coordination with the Town Planner.
- H. Health and Safety: Upon recommendation of the Town Engineer or Town Planner, and when necessary to conserve or promote the health, safety, or welfare of the present and future population of the Town and necessary to the conserve or promote water drainage , the Town prohibit the Subdivision of any portion of the property which lies within a floodplain or any stream or drainage course, as identified in the most current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map. Except as approved by the Town Engineer, such areas should be preserved from any and all destruction or damage resulting from clearing, grading, or dumping of earth, waste material, etc.

HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

10.08.22 WATER SYSTEM

- A. The water distribution system shall deliver water at pressures meeting state requirements, as measured at the main line adjacent to each system connection. Pressure reducing valves shall be placed on the mains to regulate pressures in excess of 120 PSI. Pressure reducing valves shall be installed on service laterals for residential neighborhoods as a back-up to main lines. At no time shall water pressure exceed 120 psi to each system connection. At no time shall services be connected to transmission lines.
- B. The water system pumps, storage tanks, transmission and distribution mains, etc. must meet JSSD design standards.
- C. The system shall be designed to provide the following fire flows and to meet adopted codes and Fire District standards:
 - 1. Residential Connections: 2,000 gpm for 2 hours
 - 2. Commercial Connections: 3,500 gpm for 3 hours
- D. Fire hydrants are required along public ways or walks or drives which are to be snow-plowed. Fire hydrant spacing shall be in accordance with applicable codes, or a maximum of 500 feet.
- E. All water design and construction shall comply with the latest JSSD design requirements.

HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

10.08.24 SEWER SYSTEM

- A. Sanitary Sewers shall be designed in accordance with all applicable State of Utah standards and adopted codes.
- B. All sanitary sewer systems shall be designed to exclude all storm water runoff, or water from field drainage systems, foundation drains, underground parking structures, roofs, roads, and other paved areas.
- C. Downspout connections, foundation and basement drains, sumps and storm drain connections shall be prohibited from discharging into the sanitary sewer system.
- D. Grease traps or oil separators shall be sized for peak flows and average loading of grease/oil by an engineer and approved by the Town Engineer prior to placement. The grease traps or oil separators shall be placed to allow access for inspection and cleaning. This applies to commercial and institutional facilities, and any building or lot with the potential of introducing substances that would be detrimental to treatment facilities.
- E. Sewer systems shall be designed to eliminate possible cross connections with culinary water system.
- F. Design Period: The sewer system shall be designed to serve the estimated ultimate tributary area and shall be based on the best information available, including Master Plan Study, current zoning regulations and approved planning and zoning reports when available.
- G. Wastewater Pumping Stations: Use of wastewater pumping stations will be avoided whenever possible. Pumping stations are subject to approval and review by the Town Engineer.

HISTORY

Adopted by Ord. [2020-06](#) Zoning Amendments on 7/23/2020

Amended by Ord. [2020-11](#) Technical Corrections to Ordinance 2020-06 on 11/12/2020

File Attachments for Item:

2. Consideration and possible approval of Ordinance 2025-O-XX amending Title 10 related to Engineering, Development and Design Standards

TOWN OF HIDEOUT
ORDINANCE #2025 – O-_____

AN ORDINANCE AMENDING SECTIONS TO UPDATE ITEMS WITHIN THE LAND USE
 CODE IN TITLES 8, 9, AND 10

WHEREAS, Staff recognizes that many of the engineering standards currently codified are better incorporated in a separate engineering manual;

WHEREAS, many communities have moved their engineering and technical standards to an separate manual for ease of use for developers and the public;

WHEREAS, certain updates to application and submittal requirements will help with the application and review process;

WHEREAS, a public hearing was duly held before the Planning Commission on December 16, 2024 and before the Town Council on January __, 2025;

WHEREAS, the Standard Specifications and Drawing Manual is concurrently being considered by resolution and being reviewed by both the Planning Commission and the Town Council as a Land Use Regulation pursuant to UCA 10-9a-502.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF HIDEOUT, UTAH, THAT:

SECTION I: Titles 8, 9 and 10 will be amended and the following sections removed from the Hideout Municipal Code and incorporated into a Standard Specifications and Drawing Manual as shown in Exhibit A attached to this Ordinance.

SECTION II: Section 9.01.050 is hereby adopted:

9.01.050 ADOPTING HIDEOUT TOWN STANDARD SPECIFICATIONS AND DRAWING

The Hideout Town Standard Specifications and Drawing Manual, as amended, adopted by the Town Council by Resolution, is the Standards, Specification and Drawings required in the Town of Hideout.

SECTION III: Effective Date. This Ordinance shall take effect upon publication.

PASSED AND ADOPTED by the Town Council of Hideout, Utah, this ____ day of _____ in the year 2025.

TOWN OF HIDEOUT

 Phil Rubin, Mayor

ATTEST:

Alicia Fairbourne, Recorder for the Town of Hideout

Exhibit A

8.02.100 PATCHING REQUIREMENTS

Patching requirements shall meet the following standards:

1. Cuts Parallel to Street: For cuts parallel to the street, the patch required is the lane width by thirty feet (30') minimum or ten feet (10') beyond the cut at each end, whichever is larger.
2. Cuts Perpendicular to Street: For cuts perpendicular to the street or diagonal, the patch required is the lane width by twelve feet (12') minimum or five feet (5') beyond the cut on each side, whichever is larger.

9.01.010 ADOPTING AMERICAN PUBLIC WORKS ASSOCIATION (APWA) STANDARD PLANS AND SPECIFICATIONS

The most recent addition of the American Public Works Association ("APWA") Utah Chapter Manual of Standard Plans and Specifications for all public works construction (with the exception of water and sewer standards and specifications) including Utah Chapter APWA supplements and updates are hereby adopted.

9.01.020 ADOPTING JORDANELLE SPECIAL SERVICE DISTRICT (JSSD) STANDARD PLANS AND SPECIFICATIONS

The most recent adopted Jordanelle Special Service District ("JSSD") standard plans and specifications for all water and sewer public works construction are hereby adopted.

10.08.14.1 ROAD GRADE AND MINIMUM WIDTH

1. The minimum allowed grade for all roadways is one-half percent (0.5%).
2. The maximum allowed grade for all local roadways is 10% (and 8% for all collectors). Council may allow local roadway slopes of up to 12% for lengths not exceeding 500 feet. For roadways greater than 10%, the applicant shall demonstrate a technical infeasibility to construct the roadway at or below 10% standard.
3. Unless otherwise specifically provided for in this Code, the minimum width for all new roadways within the Town is 26 feet of pavement (exclusive of curb and gutter).

10.08.14.2 UTILITY LOCATIONS

Utilities in the road will be located as shown in typical sections in this chapter.

10.08.14.3 GENERAL ROAD DESIGN STANDARDS

Roads shall be designed at a minimum in accordance with AASHTO design criteria and per street cross sections shown in Section 10.08.14.5 of this Title. The roadway design standards shall be the same for publicly owned and all privately owned roadways. The standards shall be applicable to new developments in The Town of Hideout.

1. Major Collector (75 Foot ROW)

To be used where the potential of traffic at build out is greater than 8000 AADT requiring two 12' travel lanes, and 5' asphalt shoulders for bike/emergency lanes. Drainage is to be controlled with a drainage swale or curb and gutter. In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric or rip rap. There will be no private residential access allowed except for very specific exceptions for existing buildable lots bordering a 75' town right of way in circumstances where the applicant has proven safety concerns can be adequately mitigated. These exceptions can only be approved by the Mayor and Town Engineer. There will be no on-street parking. A right-of-way of 18' is established behind the back of the curb. This allows for the potential of two meandering five-foot (5') walkways on each side of the road. The Town Council may approve a deviation from the standard section for this type of roadway for specific alignments.

2. Minor Collector (66 Foot ROW)

To be used where the potential of traffic at build out is between 2000 and 8000 AADT. Roadway to have two 11' driving lanes with 5' asphalt shoulders for bike/emergency lanes. Drainage to be controlled with a drainage swale or curb and gutter. In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric or rip rap. There will be no private resident access allowed except for very specific exceptions for existing properties bordering a 61' town right-of-way. A right-of-way of 18' is established behind the back of the curb. Right-of-way allows for two five-foot (5') walkways on each side of the road. Exceptions to be approved by the Mayor or Town Engineer. There will be no on street parking.

3. Neighborhood Road (51-Foot ROW)

This is the minimum allowed right-of-way and road standard designed for all non-collecting neighborhood roads throughout the Town of Hideout without specific Town Council exception. Potential traffic is less than 1000 AADT. Drainage to be controlled by either a drainage swale or curb and gutter. There are to be 10' travel lanes and 3' asphalt shoulders for bike/emergency lanes. A 10' right-of-way shall be dedicated behind the back of the curb and gutter. Exceptions to be approved by the Mayor or Town Engineer. There will be no on-street parking except where asphalt exceeds 32'.

4. Arterial Roadways (106 Foot ROW)

One Hundred and Six Foot (106') width Roads shall be designed at a minimum in accordance with AASHTO design criteria and per street cross section between the property line and the drainage swale.: To be used where the potential of traffic at

build out is greater than 8000 ADT requiring a minimum of 3 driving lanes (including the turn lane) and 5' asphalt shoulders for bike/emergency lane. Drainage to be controlled with a drainage swale, no curb and gutter. In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric or rip rap. There will be no private resident access allowed. There will be no on street parking allowed. Larger rights-of-way allow for two meandering ten-foot (10') asphalt paths on each side of the road. 1. The town council may approve an alternate section for construction depending on location and site-specific needs.

5. **Mountain Road**

This road standard is designed for connective road traffic through mountainous terrain. It is not to allow frontage for any residential use. Potential traffic is less than 1000 AADT. Drainage to be controlled with a drainage swale, no curb and gutter. In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric or rip rap. No driveway access is allowed. The Town may not plow an unpaved mountain road may not be plowed in the winter. Emergency services may not be available in areas accessed on Mountain Roads when there is snow on the road.

6. **Emergency access / fire road**

Only to be used in legally non-conforming subdivisions or lots of record and must be expressly approved by the Town Engineer and the town council on a case by case basis where the applicant has proven and the Town Council finds health, safety, and welfare of the road and the public will not be negatively impacted. The Fire/ Emergency Road may not be used as a secondary access. A fire/emergency road must have controlled access on each end point to prevent ordinary daily traffic.

7. **Alley Way**

In some circumstances, alleys can be used to enhance the pedestrian experience by removing driveways, garage openings, loading docks, garbage containers, utility services and other drive activities from the front of buildings. Alleys shall be used on a limited basis and will be private with public access and public utility easements. By utilizing alleys, some utilities, loading docks, dumpsters and other service needs are kept to the back of the buildings and away from the pedestrian amenities. Alleys are not intended as a tool to avoid having a public street or private pedestrian plaza that meets the standards of a public street at the front of the buildings. The use of alleys must be approved by the Town of Hideout Council, the Town Engineer, and also the Wasatch County Fire District.

1. **Definition:** "Alley" means a public access privately maintained within a block primarily intended for service and access to abutting property by vehicles and not designed for general travel and only allowed when units have frontage on a road or pedestrian plaza built to the applicable Town standard.
2. **General Conditions:** Alley or access may be permitted under the following conditions. If all conditions are not met, then the use of alleys is prohibited.

1. Building access must be available from a public street or private street/plaza built to the public standard as well as the alley.
2. Alleys or Lanes are built to specific standards.
3. **Water and Sewer:** Water and sewer utilities shall be in the street unless approved by the Town Engineer. If underground wet utilities, sanitary sewer, waterlines, storm drains, etc. are installed in alleys, they shall be constructed prior to the surfacing of the alley and per Town of Hideout Standards.

If utilities are constructed within the alley then connections for all underground utilities and sanitary sewers shall be laid prior to the asphalt or concrete to avert the necessity for disturbing the alley improvements, when service connections thereto are made.

4. **Alleys:** Alleys constructed of concrete will be 20' wide with an inverted crown and a centerline drainage collection system. Alleys constructed of concrete shall have a minimum pavement section of 8 inches of PCC over 6 inches of base rock, placed over geotextile fabric, or approved per geotechnical recommendations and approved by the Mayor or the Town Engineer for H²O loading. Asphalt construction may only be used with a concrete water way for drainage at the center of the alley. A minimum of 3" of asphalt over 9" of road base will be required. In conditions where asphalt construction is used, concrete ribbon curbing will be required outside the 20' width of the asphalt section to protect the edge of the asphalt. Said curbing shall be 2' wide for a total drivable surface of 24'. If the natural soils have a CBR under 20, then a thicker section will be required as determined by the developer's geotechnical engineer, with approval of the Town Engineer. The applicant must show all private improvements and how they will impact the alley, including garages or other structures, stairs, vaults, fences, walls, driveways, parking lots, walkways, or other improvements. The applicant must indicate existing drainage patterns and show private drainage inlets, outlets, and pipes beyond the alley right-of-way that will be impacted by the alley construction.

1. **Joint Pattern:** The PCC pavement shall be placed full width in one pour, with no longitudinal joints. The alley design shall include a transverse joint pattern, shown on the plans, so that the joints are spaced to create panel lengths that are 0.75 to 1.25 times the alley width. The joint pattern will be coordinated to intersect with utility features such as poles, manholes, and catch basins.
2. **Alley Approaches:** The alley approaches shall be constructed as commercial driveways in all respects, except that the structural section will be increased to 10 inches, or shall match the alley pavement structure for which it provides access, or as approved per geotechnical recommendations by the Mayor or the Town Engineer for H-20 loading, whichever is greater. Alley approaches with a

standard curb return shall not be used without approval of the Town Engineer.

5. **Alley Length:** Alleys shall be continuous from street to street wherever possible. If an alley is not through and longer than 150 feet, then a turnaround must be provided to accommodate a fire truck, or such additional standards as may be required by the fire code.
6. **Alley Parking:** No person shall park a vehicle within an "alley" except during the necessary and expeditious loading and unloading of merchandise. No parking signs are required at 100-foot intervals. The alley must remain open at all times.
7. **Alley Setbacks:** Alley garage setbacks in residential uses shall be 20 feet or greater as measured from the edge of the alley paving. Alley's leading to parking structures or to commercial/hospitality uses such as hotels or retail shall have a minimum setback of 4 feet as measured from the edge of the alley paving. The four-foot setback shall remain open and unobstructed. If an alley exceeds 150 feet and is adjacent to buildings exceeding 30 feet, then the alley must have 26 feet of hard surface for fire truck downriggers. Parking garage structures shall have a side yard setback of no less than 15 ft.
8. **Alley Snow Storage:** An additional area of 15% of the alley paved area must be set aside for snow storage. A snow storage plan exhibit must be submitted as part of the alley plan to show that the required amount of snow storage has been provided.

10.08.14.4 ROADWAY SECTION

1. **Road Section:** Prior to preliminary approval of a development, the developer must provide a geotechnical, and geological review performed by a licensed geotechnical engineer and professional geologist. The review must address onsite soil conditions and make recommendations for a typical road section for the project. The reviewer must take into consideration the amount of full build out traffic ADT's based on an approved traffic control plan. The town has minimum section requirements as shown below.
2. **Roadway Excavation:** For new road construction, the entire road platform, including cut and fill areas, must be cleared of all vegetation, topsoil, organic material, and soft clays. If the geotechnical engineer classifies the sub grade soils to be collapsible, further actions may be necessary to prepare the sub grade based on the geotechnical engineer's recommendation. The Town of Hideout engineer has the option to require additional sub grade preparation and section materials above and beyond the geotechnical review engineer's recommendation.

3. **Sub Grade:** Minimum Sub Grade preparation will meet the requirements of the table below:

AASHTO Soil Classification	Requirement
All A-1, A-2, A-3 and A-4 classifications	Native sub-grade shall be scarified to a minimum depth of 12 inches. Loosened material shall be moistened and compacted to at least 95% of maximum dry density based on ASTM D1557.
All A-5 to A-7 classifications	Over-excavate and replace 12 inches of depth with a soil classifying as AASHTO A-1 through A-4. New material shall be moistened and compacted to at least 95% of maximum dry density based on ASTM D1557.

4. **Road Base and Asphalt:** The values in the following table are minimum thicknesses based on the roadway classifications. A geotechnical analysis and pavement design report is necessary to qualify these minimums, or these values may be increased due to further investigation based on local conditions. The Town Engineer may also require additional thickness or cross section improvements in addition to these minimums:

Roadway Classification	Requirement
Major Collector	5" Hot Mix Asphalt, 10" State-spec Base Course.
Minor Collector	4" Hot Mix Asphalt, 9" State-spec Base Course.
Neighborhood Roads	3" Hot Mix Asphalt, 8" State-spec Base Course.

5. **Excavation Through an Existing Street:** This section covers any trench excavation through an existing road and is anticipated to be used mainly to install utilities across existing roads. If possible, the preferred method for installing utilities under existing paved roads is to have them bored.
1. Any excavation work in a town road (including the right of way) requires a permit.
 2. A traffic control plan meeting the MUTCD guidelines is required and must be approved by the Town Engineer. Minimal traffic impact including full road width or lane closures is required on existing roads.
 3. Material removed by the excavation is not to be used as backfill for any portion of the trench under the road paved section unless it meets an A-1 granular requirement.
 4. Pipe bedding to conform to the specific utility companies' requirement, including the dry utility companies (communication, electric, and gas), and Town standards for water sewer and storm drain piping.
 5. The remaining trench to be filled with select A-1-A granular product up to the existing road section.
 6. The top of the trench will have a minimum of 4" of asphalt placed in 2 lifts over road base to match the existing section or 8" minimum. Trench work shall be scheduled so that the trench can be completed including asphalt within a minimum of 2 days. Trenches left unpaved for longer than 2 days require specific approval in writing from the Town Engineer.
 7. Any work within an existing road requires inspection from the town to be scheduled by the contractor completing the work.

6. **Roadway****Design****Tables:**

Roadway Functional Classification								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
ROW Width	106'	75'	66'	60'	60'	60'	60'	60'
Average Daily Trips	> 8000	> 8000	8,000-2,001	2,000-0	< 500	Emergency Only	< 200	< 200
Single Family Units	< 800	< 800	< 500	< 200	150-0	0	Minimal	1-3
Pavement Width	46'	44'	37'	30'	24'	16'	24	20
Side cut/fill slopes	3:1 up to 5 feet high and 2:1 above 5 feet					2:1	2:1	2:1
Horizontal Design Elements								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum mid block centerline curve	Varies with V and superelevation				100'	60'	75'	60'
Minimum tangent distance between reverse centerline curves	Varies with V and superelevation				50'	40'	50'	40'
Maximum cul-de-sac length ³	Not Allowed				The lesser of 1,300' or 30 dwelling units			
Cul-de-sac travelway turnaround diameter	Not Allowed				80'	80'	80'	80'
Maximum superelevation	6%	6%	6%	6%	N/A			
Vertical Design Elements								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum crest vertical curve K value ⁵	Varies with speed limit				19	19	19	19
Minimum sag vertical curve K value ⁵	Varies with speed limit				37	37	37	37
Minimum length of vertical curve	Per traffic engineer	3*V	120'	80'	60'	50'	60'	60'
Minimum centerline grade ⁴	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Maximum grade in cul-de-	Not Allowed				5%	5%	5%	5%
Maximum centerline grade across designated	4%	4%	4%	5%	5%	5%	5%	5%
Maximum grade break without vertical curve	0.50%	0.50%	0.50%	1%	2%	2%	2%	2%

Intersections								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum angle of intersection	80°	80°	70°	60°	60°	50°	50°	50°
Minimum offset between intersection	Study required	Study required	150'	125'	125'	125'	125'	125'
Maximum centerline offset	0'	5'	5'	5'	5'	5'	5'	5'
Maximum centerline grade across intersections ⁶	4%	4%	4%	5%	5%	5%	5%	5%
Minimum corner radius (edge of travelway)	30'	30'	30'	25'	25'	25'	25'	25'
Pavement Component Minimum Thickness								
	Arterial	Major Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Asphaltic Concrete	Per geotechnical report, 4" minimum			3"	3"	3"	3"	3"
Road Base	8" minimum			8"	8"	8"	8"	8"
Subbase	Per geotechnical report							

Notes:

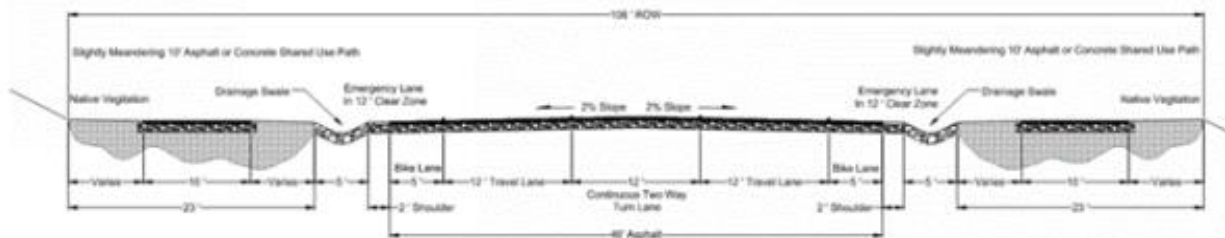
1. Roads shall be designed at a minimum in accordance with AASHTO design criteria.
2. See Section 10.08.16 of this chapter for sidewalk requirements.
3. The length of a cul-de-sac is measured along the centerline from the intersection to the center of the turnaround.
4. Physical terrain may require exceptions to the maximum grade. See section 10.08.10 for further discussion.
5. Design speed for vertical curves shall be 5 miles per hour greater than the anticipated speed limit.
6. Grade must extend at least 100 feet beyond the edge of the traveled way of the outside lane of the intersecting street.
7. A geotechnical report including pavement design shall be submitted. The thickness of 1 or more of the pavement components shall be increased as needed to achieve the required strength as specified in the geotechnical report approved by the Town Engineer.
8. The primary street of an intersection shall not exceed the maximum centerline grades as allowed for each of the roadway functional classifications. Stop-controlled secondary intersecting grades must not exceed the reduced approach values as given in this table. The intersection centerline approach grades of the secondary or intersecting street must exceed at least 100 feet beyond the edge of the paved traveled way of the outside lane of the primary through street before exceeding these values.

10.08.14.5 STANDARD CROSS SECTIONS

1. All disturbed surfaces shall be covered with 6 inches of topsoil and seeded.
2. Lane striping as per cross section including the required bike lane painting.
3. Shoulder will be constructed with compacted road base.
4. The subtle meandering shared use path will have 3 inches of asphalt over 9 inches of road base. Road will have a minimum of four inches (4") of asphalt.
5. Permanent erosion control mat* or minimum 6" thick rip rap required in drainage swale for road slopes greater than 5%. Permanent mats shall have ground cover of 74% or greater and a ultraviolet stabilization of 1,000 hours.

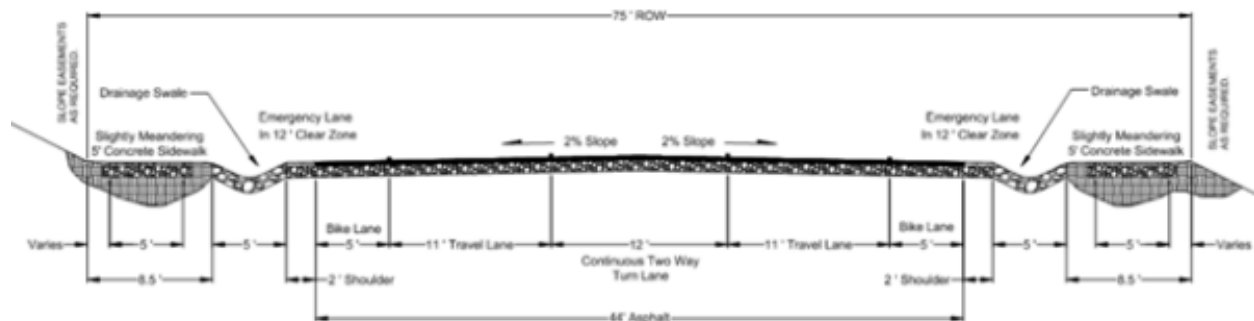
106' Arterial Cross Section

Figure 1

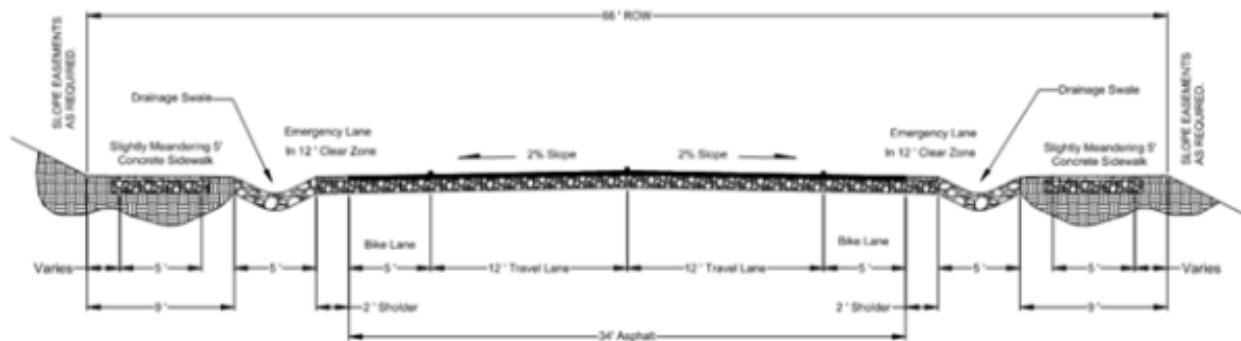


75' Major Collector Cross Section

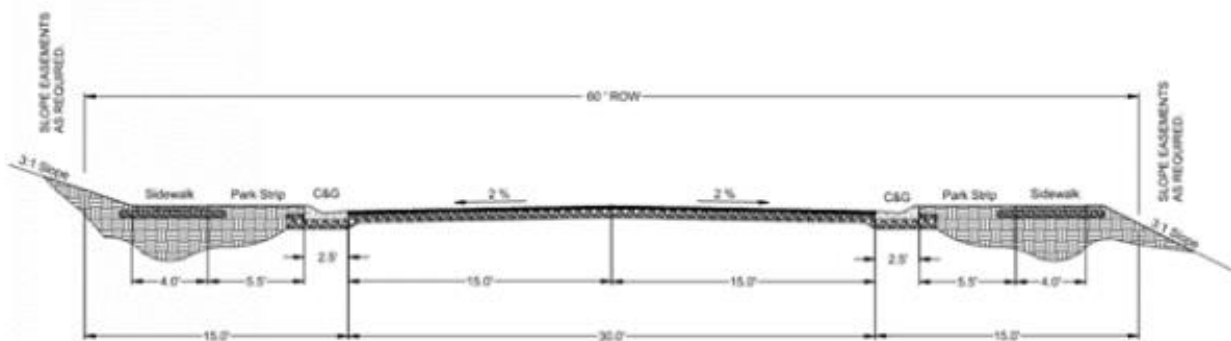
Figure 2



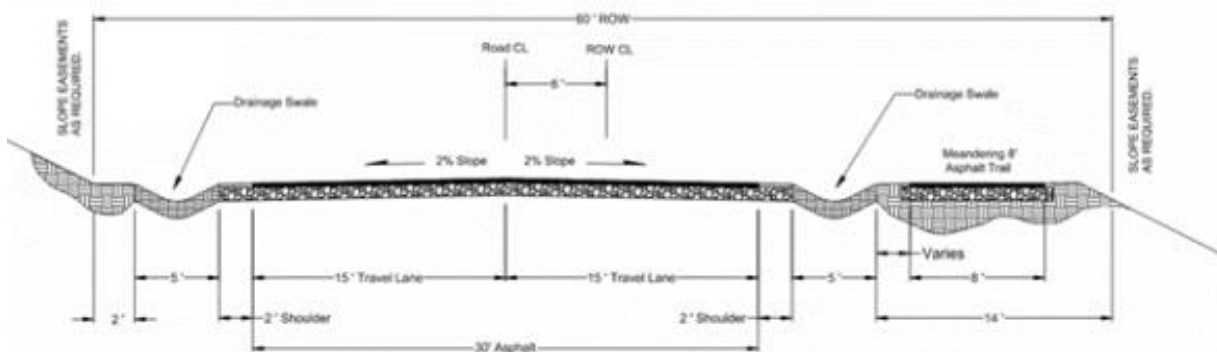
66' Minor Collector Cross Section
Figure 3



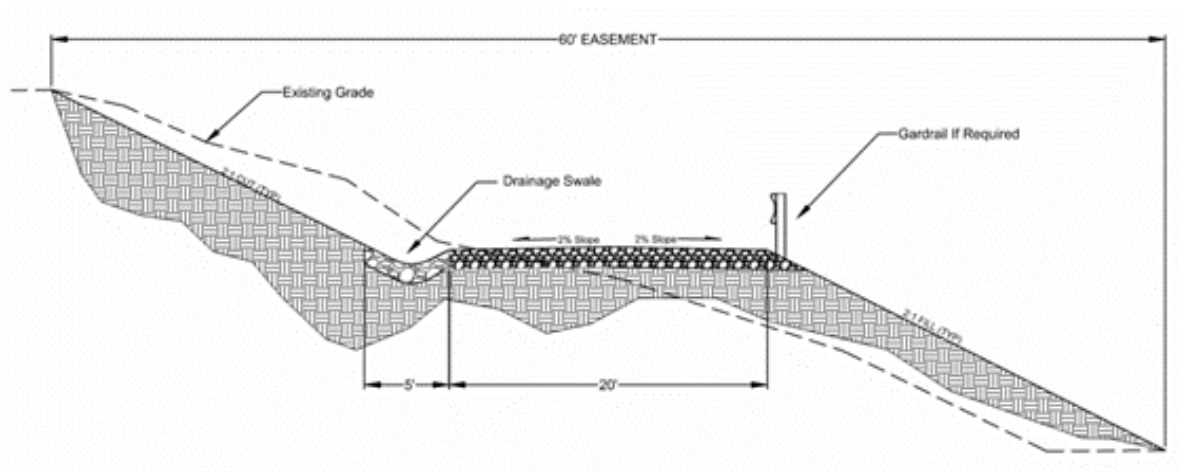
60' Major Local Cross Section
Figure 4



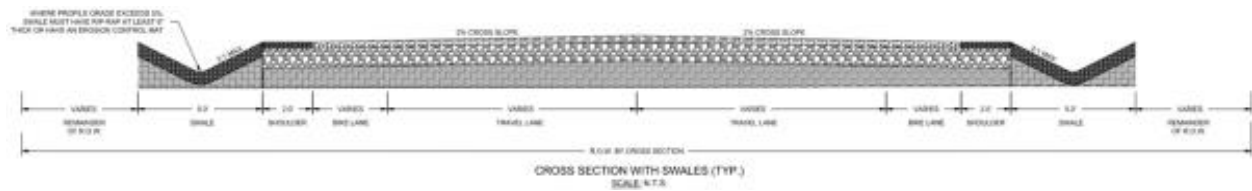
60' Major Local with Swales Cross Section
Figure 5



Fire / Emergency Road
Figure 7

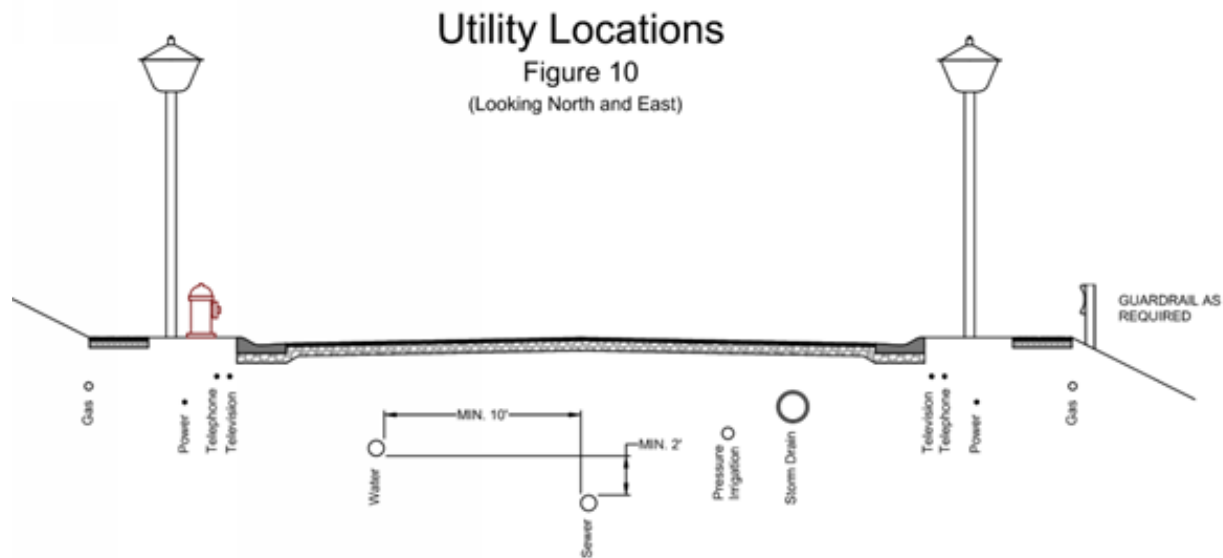


Typical Cross Section with Swales
Figure 6



Permanent Erosion Control Mat Specifications:

Thickness	0.4 inches
Ground Cover Factor	74 percent
Tensile Strength	170 X 125 pound/foot
Tensile Elongation	50 percent maximum
Ultraviolet Stabilization 1,000 hrs	80 percent



The Town Council may adopt Town construction standards and specifications for roadways and cross sections. Where the provisions of this section impose different restrictions than those required in the Town construction standards and specifications, the provisions of the Town construction standards and specifications shall prevail.

1. **Roads.** Planned roads within a development shall always be kept open to the public, unless special approval is granted by the Town Council to allow a gated community.
2. **Cul-De-Sacs.** A publicly dedicated Cul-de-sac shall have a right-of way width of at least sixty (60) feet; shall have a length of not in excess of eight hundred (800) feet; shall be terminated by a right-of-way turnaround of not less than ninety-six (96) feet in diameter; and shall be identified as such by appropriate signage within twenty (20) feet of the entrance thereof, measured from the frontage road Property line.
3. **Easements.** Public Utility Easements of not less than ten (10) feet on rear lot lines, side lines, and front lines will be required to serve utility companies for poles, wire, conduits, storm or sanitary sewers, gas and water mains, and other public utilities. Easements of greater width may be required along Property lines where necessary for surface overflow or for the extension of sewer mains or similar utilities.
4. **Intersections.** Roads shall intersect each other as near as possible at right angles. Minor roads shall approach the arterial or collector roads at an angle of not less than eighty degrees for a distance of at least one hundred feet. Offsets across roads in road alignment between ten (10) feet and one hundred fifty (150) feet shall be prohibited.
5. **Curbs.** Curbs at all intersections shall be rounded with curves having a minimum radius of twenty-five (25) feet. Property lines at road intersections shall be rounded with a curve where necessary.
6. **Street Names.** New street names shall not duplicate those names already existing. A street obviously a continuation of another already in existence shall bear the same name. All road designations shall be approved by the Planning Commission and

Wasatch County Information Systems Department. Street names shall be signed and said signing shall be discernable from the road.

7. **Dedications.** All roads shall be dedicated for public use. Private roads shall be permitted only as recommended by the Planning Commission and approved by the Town Council.
8. **Bridges and Culverts.** All bridges and culverts shall be constructed to support HS-20 / HL-93 loading requirements in accordance with DOT and ASHTO standards.
9. **Relation to Adjoining Road System.** The arrangement of roads in new Subdivisions shall make provision for the continuation of the existing roads in adjoining areas for their proper protection (where adjoining land is not subdivided) at the same or greater width (but in no case less than the required minimum width). Where the Planning Commission determines that it is necessary for the orderly development of the community and health and safety concerns to provide for road access to adjoining Property in order to provide an orderly development of a road system, proposed roads shall be extended by dedication to the boundary of such adjoining property.
10. **Cuts in Pavement.** No cuts shall be made in road pavement for at least five years after hard surfacing without approval by the Mayor with the advice of the Town Engineer, except in cases when public safety is at risk.

10.08.16 SIDEWALKS, CURBS, PLANTER STRIPS, AND GUTTERS

1. Curbs, and gutters shall be required on both sides of all new roads to be dedicated to the public.
2. Sidewalks, paved trails and planter strips may be required by the Planning Commission or Town Council; to be dedicated to the public.
3. Sidewalks, curbs, planter strips and gutters may be required by the Planning Commission and Town Council on existing roads bordering the new Subdivision lots.
4. Sidewalks shall be included within the dedicated non-pavement Right-of-Way of all roads unless an alternate location has been specifically approved by the Planning Commission.
5. Sidewalks shall be a minimum of sixty (60) inches wide and Americans with Disabilities Act (ADA) compliant for safe and easy passage for pedestrians.
6. Concrete curbs are required where sidewalks are required.

10.08.20 DRAINAGE AND STORM WATER FACILITIES

Storm drainage and erosion control planning submittal requirements are outlined in this chapter. Criteria can also be found in the "Wasatch County - A Guide For Erosion And Sediment Control" (1996).

1. Planning Submittal Requirements: Unless provided otherwise, the criteria and methods presented in the following references should be used in planning and design of the drainage system:
 1. "Urban Drainage Design Manual", hydraulic engineering circular no. 22, November 1996, federal highway administration, FHWA-SA-96-078, <http://www.fhwa.dot.gov/bridge/hydpub.htm>.
 2. "Urban Storm Drainage Criteria Manual", June 2001, urban drainage and flood control district, <http://www.udfcd.org/>.
 3. "Design And Construction Of Urban Stormwater Management Systems", ASCE manuals and reports of engineering practice no. 77, 1992, <https://www.asce.org/bookstore/book.cfm?book=2800>.

The drainage plan should provide for control of erosion at the source, noneroding conveyance facilities, and water quality/detention basins.

2. Control Of Erosion And Contaminants At The Source: The ability to control erosion and other pollutants at the source is the most important single mitigation factor. Every practical effort should be made to prevent erosion from occurring at the source. The objective should be to prevent erosion during construction and to reestablish vegetation as soon as possible after construction on all areas with exposed topsoil.

Slope soil erosion, after revegetation, should be less than or equal to predevelopment rates and should be less than the topsoil development rate (generally assumed as 0.01 inch per year or 2 tons per acre per year).

3. Conveyance Facilities: The initial drainage system (i.e., curb and gutter, storm drains, culverts, ditches, realigned natural channels, etc.) should be designed to convey runoff from a minor storm event (10-year event, the storm event having a 10 percent chance of being equaled or exceeded in any given year) without nuisance flooding and without erosion. If tributary runoff flows (either peak or volume) are increased to a natural drainage, the drainage should be shown to be noneroding in a ten (10) year event.

The drainage system should be capable of passing the storm runoff from a major storm (100-year event, the storm event having a 1 percent chance of being equaled or exceeded in any given year) without flooding buildings.

4. Water Quality/Detention Basin: The criteria for design of the water quality/detention basin should include both water quality mitigation and mitigation for downstream erosion and flooding effects. The effects of development (i.e., increased impervious area and decreased time of concentration) should be mitigated such as to prevent increased flooding of downstream properties (100-year design event) and to prevent increased erosion of downstream conveyance channels (10-year design event). The level of mitigation required is dependent upon the capacity of the downstream drainage system. A common practice is to provide for on site detention, reducing storm runoff peaks from the development to at or below historic (predevelopment)

levels. If downstream conveyance capacities are severely limited, it may be necessary to reduce storm runoff peak flow rates from the developed property to much less than historic runoff flow rates to offset the impacts of the increased runoff volume.

1. The basins should be designed to adequately capture and treat runoff from the water quality design storm. Wasatch County criteria ("A Guide For Erosion And Sediment Control", pages 11 and 18) require capturing and containing the runoff volume from a two (2) year, twenty-four (24) hour storm (minimum). The water quality capture volume should be discharged at a rate such as to allow a minimum residence time of twelve (12) hours (defined as the time from the centroid of the inflowing hydrograph to the centroid of the outflowing hydrograph). The maximum allowable discharge rate for the water quality capture volume discharge orifice may be computed using the simplified equation:

$$Q_{wq} = (WQCV/30) * C$$

Q_{wq}	=	Maximum allowable water quality capture volume release rate (cfs)
$WQCV$	=	Water quality capture volume (acre-feet)
	=	2-year 24-hour runoff volume
C	=	Conversion from acre-feet/hour to cubic feet per second = 12.1

- 2.
3. The water quality pond should have sufficient additional storage below the lowest outlet to accommodate sediment accumulation. The minimum volume of provided sediment storage should be either computed from a slope erosion analysis for the three (3) year slope soil loss (revised universal soil loss equation reference: "Design Hydrology And Sedimentology For Small Catchments", C.T. Haan, B.J. Farfield, and J.C. Hayes, 1994, Academic Press, Inc., San Diego, California) or may be taken as equal to twenty percent (20%) of the water quality capture volume. If subsoils are such that water captured in the sediment storage area cannot infiltrate within a reasonable period of time (to avoid mosquitoes, etc.), then a subdrain system should be considered.
4. The analysis for designing the required detention volume to mitigate downstream flooding and erosion effects should be performed assuming that the pond is full to the water quality capture volume level prior to the start of the design storms (10-year and 100-year).

5. An emergency spillway (preferably open channel type) is required with a one hundred (100) year flood event minimum design capacity assuming that the primary outlets are plugged. The elevation of the top of the embankment should be a minimum of one foot (1') above the water surface elevation when the emergency spillway is conveying the maximum design or emergency flow. The design height of the embankment should be increased by roughly five percent (5%) to account for settlement.
5. Water Quality/Detention Basins Maintenance Requirements: Key components include nonplugging outlets design, maintenance access design, and pond side slope erosion protection design.
 1. Detention basin outlets should be designed to be nonplugging as much as possible. A possible option for the water quality capture volume discharge orifice is to provide an orifice (set with the orifice invert at the bottom of the water quality capture volume level) with a connected pipe inlet placed a minimum of six inches (6") below the water level at which water begins to discharge. Outlet pipes should be protected by inlet grates which are sized, spaced, and oriented such as to minimize plugging of the outlets.
 2. Maintenance access to the ponds should be provided. Required access includes access with heavy equipment to the pond floor (generally 15 inches minimum width with 15 percent maximum slope) and all weather access should be provided to the pond outlet facilities.
 3. Interior pond side slopes should preferably be four horizontal to one vertical (4:1) or flatter and should not be steeper than three horizontal to one vertical (3:1). Pond side slopes (both interior and exterior) should meet the same criteria for slope erosion control stated above (2 tons per acre per year maximum mean annual slope soil erosion rate). Riprap is not permitted unless approved by the Town Planner and only under special circumstances. Steep slopes that might otherwise necessitate riprap should be designed at a reduced slope, one that allows the basin to be landscaped appropriately and in coordination with the Town Planner.
 4. Provisions for low maintenance landscaping and irrigation must be provided. Landscaping will be maintained by the homeowners' association.
6. Open Channels: Wherever possible open channels shall be preserved for all major drainages shown on the Final Drainage Control Plan. No building shall be located within 50 feet of a natural drainage. Culverting of these channels is not permitted.
7. Landscaping: A landscape plan must be included with all stormwater plans. This plan shall include flood tolerant species within the basin as well as the appropriate screening of the basin. Slopes should be gradual enough so that fencing is not needed around a basin and native landscape plant materials can be reintroduced after construction in coordination with the Town Planner.
8. Health and Safety: Upon recommendation of the Town Engineer or Town Planner, and when necessary to conserve or promote the health, safety, or welfare of the present and future population of the Town and necessary to the conserve or promote water drainage , the Town prohibit the Subdivision of any portion of the property

which lies within a floodplain or any stream or drainage course, as identified in the most current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map. Except as approved by the Town Engineer, such areas should be preserved from any and all destruction or damage resulting from clearing, grading, or dumping of earth, waste material, etc.

10.08.22 WATER SYSTEM

1. The water distribution system shall deliver water at pressures meeting state requirements, as measured at the main line adjacent to each system connection. Pressure reducing valves shall be placed on the mains to regulate pressures in excess of 120 PSI. Pressure reducing valves shall be installed on service laterals for residential neighborhoods as a back-up to main lines. At no time shall water pressure exceed 120 psi to each system connection. At no time shall services be connected to transmission lines.
2. The water system pumps, storage tanks, transmission and distribution mains, etc. must meet JSSD design standards.
3. The system shall be designed to provide the following fire flows and to meet adopted codes and Fire District standards:
 1. Residential Connections: 2,000 gpm for 2 hours
 2. Commercial Connections: 3,500 gpm for 3 hours
4. Fire hydrants are required along public ways or walks or drives which are to be snow-plowed. Fire hydrant spacing shall be in accordance with applicable codes, or a maximum of 500 feet.
5. All water design and construction shall comply with the latest JSSD design requirements.

10.08.24 SEWER SYSTEM

1. Sanitary Sewers shall be designed in accordance with all applicable State of Utah standards and adopted codes.
2. All sanitary sewer systems shall be designed to exclude all storm water runoff, or water from field drainage systems, foundation drains, underground parking structures, roofs, roads, and other paved areas.
3. Downspout connections, foundation and basement drains, sumps and storm drain connections shall be prohibited from discharging into the sanitary sewer system.
4. Grease traps or oil separators shall be sized for peak flows and average loading of grease/oil by an engineer and approved by the Town Engineer prior to placement. The grease traps or oil separators shall be placed to allow access for inspection and cleaning. This applies to commercial and institutional facilities, and any building or

lot with the potential of introducing substances that would be detrimental to treatment facilities.

5. Sewer systems shall be designed to eliminate possible cross connections with culinary water system.
6. Design Period: The sewer system shall be designed to serve the estimated ultimate tributary area and shall be based on the best information available, including Master Plan Study, current zoning regulations and approved planning and zoning reports when available.
7. Wastewater Pumping Stations: Use of wastewater pumping stations will be avoided whenever possible. Pumping stations are subject to approval and review by the Town Engineer.

File Attachments for Item:

1. Review of Q1 of the FY25 Financials

Town of Hideout – General Fund FY25 as of December 31, 2024

Item # 1.

Operating Income	FY24	FY25 Actual + Forecast	FY25 Budget	Act/Fcst vs. Budget \$	Act.Fcst vs. Budget %
Taxes	\$654,731	\$803,405	\$814,188	(\$10,783)	-1.3%
License and Permits	\$655,900	\$961,779	\$872,532	\$89,247	10.2%
Miscellaneous Revenues	\$133,073	\$79,850	\$86,590	(\$6,740)	-7.8%
Contributions & Transfers	\$189,843	\$231,958	\$365,230	(\$133,272)	-36.5%
Operating Income	\$1,633,548	\$2,076,991	\$2,138,540	(\$61,549)	-2.9%
Operating Expense					
Salary/Wages/Benefits	\$529,623	\$439,836	\$569,562	\$129,725	22.8%
Administration	\$92,514	\$96,215	\$96,215	\$0	0.0%
Professional Services	\$587,462	\$995,221	\$956,121	(\$39,100)	-4.1%
Public Safety	\$90,579	\$94,202	\$94,202	\$0	0.0%
Streets	\$486,143	\$301,862	\$301,927	\$65	0.0%
Parks and Community Development	\$9,956	\$77,000	\$77,000	\$0	0.0%
Debt Service	\$38,013	\$72,656	\$43,513	(\$29,143)	-67.0%
Operating Expense	\$1,834,291	\$2,076,992	\$2,138,540	\$61,548	2.9%
Surplus/(Deficit)	(\$200,743)	(\$0)	\$0	(\$0)	0.0%

FY25 is flat to budget primarily due to:

- ✓ **Unfavorable revenue** due to fewer contributions from the MIDA Fund (not needed due to operational savings) as well as lower municipal energy taxes partially offset by additional building permit revenue (more building permits issued), developer contributions and excavation fees for rocky mountain power lines and comcast cable.
- ✓ **Favorable operating expenses** associated with lower salaries/benefits due to not hiring a new public works employee or engineer as well as lower consulting costs partially offset by the loan repayment of an asset written off in FY24 and higher engineering costs associated with not hiring an internal engineer.

Town of Hideout – Enterprise Fund FY25 as of December 31, 2024

Item # 1.

Town of Hideout - Enterprise Fund FY25 Actual plus Forecast versus FY25 Budget					
	FY24	FY25 Actual + Forecast	FY25 Budget	Act/Fcst vs. Budget \$	Act.Fcst vs. Budget %
Operating Income					
Water Service Revenue	\$1,627,467	\$1,812,320	\$1,855,238	(\$42,918)	-2.3%
Miscellaneous Revenue	\$64,771	\$45,644	\$58,938	(\$13,294)	-22.6%
Operating Income	\$1,692,238	\$1,857,964	\$1,914,176	(\$56,212)	-2.9%
Operating Expense					
Salaries and Benefits	\$671,632	\$661,111	\$861,378	\$200,267	23.2%
Public Works Department	\$129,625	\$236,114	\$255,206	\$19,092	7.5%
General Water Service Expense	\$395,425	\$447,082	\$454,868	\$7,787	1.7%
Administrative Expense	\$85,228	\$88,637	\$88,637	\$0	0.0%
Professional	\$86,178	\$68,000	\$68,000	\$0	0.0%
Bad Debt and Depreciation Expense	\$239,990	\$244,017	\$244,017	\$0	0.0%
Operating Expense	\$1,608,077	\$1,744,961	\$1,972,106	\$227,145	11.5%
Surplus/(Deficit)	\$84,161	\$113,003	(\$57,930)	\$170,933	295.1%

\$171k favorable to budget is primarily due to:

- ✓ **Revenue unfavorability of \$56k** due to no price increase to residents for water, sewer or storm (no increase from JSSD to the town) as well as lower late fee revenue associated with stand by fees.
- ✓ **Expense favorability of \$227k** due to lower salaries/benefits resulting from the Town not hiring a new public works employee or engineer, reduced smart meter and consulting expense as well as lower JSSD charges (resulting from the delayed price increase) offset by higher engineering costs associated with the town not hiring internal employees.

Town of Hideout – MIDA Fund FY25 as of December 31, 2024

Item # 1.

Operating Income	FY24	FY25 Actual + Forecast	FY25 Budget	FY25 Act./Fcast vs. Budget	Act/Fcast vs. FY24
Property taxes - Current MIDA	\$120,951	\$590,596	\$586,713	\$3,883	\$469,645
Energy - Current MIDA	\$12,646	\$12,571	\$12,571	\$0	(\$75)
Interest	\$0	\$22,000	\$18,000	\$4,000	\$22,000
MIDA - Sales tax	\$24,851	\$26,262	\$26,262	\$0	\$1,411
Transient Room Tax	\$524	\$600	\$600	\$0	\$76
Total Revenues	\$158,973	\$652,029	\$644,146	\$7,883	\$493,056
Operating Expense					
Admin expense	\$3,802	\$3,883	\$0	(\$3,883)	(\$81)
Transfer to General Fund	\$0	\$81,958	\$215,230	\$133,272	(\$81,958)
Total Expenses	\$3,802	\$85,841	\$215,230	\$129,389	(\$82,039)
Surplus/(Deficit)	\$155,170	\$566,188	\$428,916	\$137,272	\$411,017

\$137k favorable to budget is primarily due to:

- ✓ General Fund not needing funds from MIDA due to General Fund operational efficiencies. Offsetting unfavorability in the General Fund.

\$411k favorable to Prior Year (FY24) is primarily due to:

- ✓ An increase in property tax associated with additional Certificates of Occupancy in the MIDA area as well as higher interest revenue on invested funds offset by a transfer of funds to the General Fund to support operating costs as well as growth initiatives.

Town of Hideout
Fund 10: General Fund
FY25 Financials - YTD Actuals plus Forecast as of December 31, 2024

Revenue	FY24	FY25 Actual + Forecast	FY25 Budget	Act/Fcst vs. Budget \$	Act/Fcst vs. Budget %	Comments
Taxes						
3110 Property Taxes - current	\$267,619	\$388,195	\$388,195	\$0	0.0%	Trending on Budget. Will get final installment in January/February
3120 PY property taxes - delinq. paid	\$44,010	\$46,908	\$46,908	\$0	0.0%	Trending on Budget. Will get final installment in January/February
3124 Fee-in-lieu of property taxes	\$5,847	\$6,232	\$6,232	\$0	0.0%	Trending on Budget.
3130 Sales Tax	\$245,132	\$271,077	\$271,077	(\$0)	0.0%	Sales tax anticipated to be on budget - may have slight risk
3136 Transient Room Tax	\$1,476	\$1,080	\$1,535	(\$455)	-29.7%	Not many homes reporting rental income. Few business licenses
3137 Franchise Fee Revenue	\$3,715	\$4,162	\$4,108	\$54	1.3%	Assumed sales tax through November .
3140 Municipal energy taxes	\$86,932	\$85,752	\$96,133	(\$10,382)	-10.8%	Higher usage expected in Q3 - monitor.
Total Taxes	\$654,731	\$803,405	\$814,188	(\$10,783)	-1.3%	
Licenses and Permits						
3210 Business Licenses	\$2,375	\$996	\$2,494	(\$1,498)	-60.1%	Business licenses (BL) should renew yearly? Put req. for BP in news letter
3215 MDA Revenue/Developer Contributions	\$108,000	\$158,000	\$108,000	\$50,000	46.3%	\$50k - Deer Springs contribution. Should these be utilized over multiple years?
3221 Building Permits	\$312,160	\$490,342	\$430,463	\$59,879	13.9%	59 building permits - 120 for the full year. Strong spring expected
3222 Roadway Fee	\$33,150	\$36,145	\$34,808	\$1,337	3.8%	59 building permits - 120 for the full year.
3223 Excavation Permit Fee Rev	\$1,704	\$21,660	\$1,789	\$19,871	1110.7%	Rocky mountain power (power lines) and comcast (fiber lines) - one time
3225 Application Fee Revenue	\$500	\$3,356	\$525	\$2,831	539.2%	59 building permits with 120 for the remainder of the year. Strong spring
3227 Construction/Other Sign Fee	\$6,260	\$4,068	\$6,573	(\$2,505)	-38.1%	59 building permits with 120 for the remainder of the year. Strong spring
3229 Subdivision Fees	\$5,000	\$28,210	\$20,000	\$8,210	41.1%	Shoreline 4. Forecast for Nate with Salzman Property/Other.
3230 Prof. Serv. Billed/5.5% inspection fee	\$36,003	\$60,000	\$60,000	\$0	0.0%	Shoreline 4. Saltzman in Forecast
3231 Planning & Zoning Fees (building permit)	\$150,749	\$159,002	\$207,880	(\$48,878)	-23.5%	More repeat plans; therefore, lower fee revenue (offset by lower prof. exp.)
Total Licenses and Permits	\$655,900	\$961,779	\$872,532	\$89,247	10.2%	
Miscellaneous						
3310 Grant Revenue	\$0	\$8,500	\$0	\$8,500	#DIV/0!	Perimeter access trail - Wasatch County Auditors office.
3490 Other Services Revenue	\$600	\$2,874	\$624	\$2,250	360.5%	Community ticket for June concert event
3510 Forfeitures and Fines	\$262	\$0	\$262	(\$262)	-100.0%	
3610 Interest	\$102,101	\$51,000	\$55,570	(\$4,570)	-8.2%	Lower interest rate as well as less funds invested
3615 Street impact Fees	\$17,298	\$17,298	\$17,298	\$0	0.0%	
3690 Other Income	\$633	\$178	\$656	(\$478)	-72.9%	
3691 Gain/Loss on Sale of Assets	\$12,180	\$0	\$12,180	(\$12,180)	-100.0%	Assets sold in FY24. Should not have been budgeted
3848 Transfer From Class C Road Fund	\$189,843	\$150,000	\$150,000	\$0	0.0%	Transfer funds from Class C Road Fund to partially cover roadways/street repairs
3850 Transfer from MIDA Muncipal Fund	\$0	\$81,958	\$215,230	(\$133,272)	-61.9%	Less MIDA dollars needed. <u>Offseting favorability in the MIDA Fund</u>
3890 General Fund Bal. to be approp	\$0	\$0	\$0	\$0	#DIV/0!	
Total Miscellaneous Revenue	\$322,916	\$311,808	\$451,820	(\$140,012)	-31.0%	
Total Operating Income	\$1,633,547	\$2,076,991	\$2,138,540	(\$61,549)	-2.9%	
Expenditures						
General Government						
Salaries and Benefits						
5001.8 Admin Personnel	\$315,767	\$278,629	\$380,342	\$101,713	26.7%	Will not hire new engineer or PW person. Partially offset by higher engineering costs
5003 Admin Benefits	\$213,857	\$161,208	\$189,220	\$28,012	14.8%	Will not hire new engineer or PW person. Partially offset by higher engineering costs
Total Salaries and Benefits	\$529,623	\$439,836	\$569,562	\$129,725	22.8%	
Administrative						
5001.1 Admin Contract Services	\$5,634	\$5,859	\$5,859	\$0	0.0%	
5001.2 Admin Council Pay	\$480	\$499	\$499	\$0	0.0%	
5001.4 Admin Insurance	\$11,710	\$12,178	\$12,178	\$0	0.0%	
Admin Mileage Reimbursement	\$1,846	\$1,920	\$1,920	\$0	0.0%	
Admin Office Supplies	\$4,255	\$4,425	\$4,425	\$0	0.0%	

5001.9 Admin Public Notices	\$2,016	\$2,096	\$2,096	\$0	0.0%	
5001.A Admin Security Alarm Monitoring	\$671	\$698	\$698	\$0	0.0%	
5004 Admin Other	\$4,611	\$4,795	\$4,795	\$0	0.0%	On target with budget. Higher insurance may result is slight unfavorability
5010 Admin Information Technology	\$29,098	\$30,262	\$30,262	\$0	0.0%	
5016 Admin Telephone	\$7,194	\$7,482	\$7,482	\$0	0.0%	
5017 Admin Training	\$3,016	\$3,137	\$3,137	\$0	0.0%	
5018 Admin Website	\$20	\$21	\$21	\$0	0.0%	
5019 Admin Membership	\$5,678	\$5,905	\$5,905	\$0	0.0%	
5030 Admin Repairs & Maintenance	\$6,623	\$6,888	\$6,888	\$0	0.0%	
5050 Admin Utilities	\$9,662	\$10,049	\$10,049	\$0	0.0%	
Total Administrative	\$92,514	\$96,215	\$96,215	\$0	0.0%	
Professional Services						
5002 Advisory Committee	\$0	\$215,000	\$215,000	\$0	0.0%	Anticipated to spend. Project analysis to follow
5002.1 Accounting	\$44,815	\$45,000	\$60,000	\$15,000	25.0%	Fewer finance projects
5002.2 Legal	\$154,130	\$290,000	\$290,000	\$0	0.0%	Anticipated to spend due to upcoming legal activity
5002.3 Engineering - TO 5% inspection fee	\$67,020	\$46,522	\$60,000	\$13,478	22.5%	developed.
5002.35: Town engineering expenses - TO ongoing	\$111,425	\$139,833	\$55,712	(\$84,121)	-151.0%	Not hiring new engineer; therefore, higher outside eng. exp. Unfavorability partially
5002.36 - Town engineering - Projects	\$31,061	\$44,615	\$16,152	(\$28,463)	-176.2%	offsets salary/benefit favorability.
5002.4 Building Permit Inspection	\$132,431	\$140,620	\$187,918	\$47,298	25.2%	Direct Sunrise contract (no Ardurra mark-up) and higher repeat plans (fewer hrs.
5002.5 Bdg Permit Plan Prints-Integrated Planning	\$1,409	\$3,191	\$1,999	(\$1,192)	-59.6%	
5002.6 Auditor	\$18,600	\$15,000	\$15,000	\$0	0.0%	External auditor for year end financials
5002.60 Planning - Town Exp. Integrated Planning	\$52,250	\$55,440	\$54,340	(\$1,100)	-2.0%	
5002.65 Bldg Plan Review - IP 5% insp. Fees/escrow	(\$25,679)	\$0	\$0	\$0	#DIV/0!	Expense applies to escrow.
Total Professional Services	\$587,462	\$995,221	\$956,121	(\$39,100)	-4.1%	
Total General Government	\$679,976	\$1,091,435	\$1,052,336	(\$39,100)	-3.7%	
Public Safety						
5105 Safety Police Department	\$80,124	\$83,329	\$83,329	\$0	0.0%	Expected on target
5305 Animal Control Services	\$10,455	\$10,873	\$10,873	\$0	0.0%	Expected on target
Total Police Department	\$90,579	\$94,202	\$94,202	\$0	0.0%	
Streets						
5201 Steet Pesonnel	\$0	\$0	\$0	\$0	#DIV/0!	
5202 Streets Auto Maintenance	\$28,156	\$7,074	\$6,283	(\$792)	-12.6%	Higher costs in spring expected therefore higher than runrate
5204 Streets Fuel	\$10,477	\$10,896	\$10,896	\$0	0.0%	Seasonal - snow plows will increase in Q3. On budget
5205 Streets Material & Supplies	\$53,588	\$48,232	\$48,232	\$0	0.0%	Higher costs in spring - on budget (split budget with snow plow - contractor)
5206 Potential snow plow - contractor	\$0	\$15,000	\$15,000	\$0	0.0%	New Account to segregate snow removal from all other street repairs. On budget
5207 City Road Repair	\$322,110	\$150,000	\$150,000	\$0	0.0%	\$86k in Oct. for asphalt company. No major exp.expected in Q3/Q4. On budget
5208 Streets Repair & Maintenance	\$56,424	\$58,681	\$58,681	\$0	0.0%	Higher costs in Spring. On budget
5209 Streets Equipment Lease	\$14,563	\$11,978	\$11,978	\$0	0.0%	New lease - on budget
5215 Street Utilities	\$824	\$0	\$857	\$857	100.0%	Account consolidated with Administrative costs
Total Streets	\$486,143	\$301,862	\$301,927	\$65	0.0%	
Miscellaneous						
5450 Parks & Recreation	\$2,310	\$15,000	\$15,000	\$0	0.0%	Haven't spent money in two years. May combine with matching grant expense
5650 Community Development	\$7,646	\$12,000	\$12,000	\$0	0.0%	Anticipated spend in Spring and Summer as in prior years
Grant Matching	\$0	\$50,000	\$50,000	\$0	0.0%	Grants are being requested that require matching expense - exp. By 6/30/2025
5660 Fire Station Expenses	\$0	\$0	\$0	\$0	#DIV/0!	Used to track fire station expense and associated donations. Should be zero.
5480 Capital Projects	\$0	\$0	\$0	\$0	#DIV/0!	
Total Miscellaneous	\$9,956	\$77,000	\$77,000	\$0	0.0%	
Debt Service						
Principal	\$30,889	\$58,708	\$30,889	(\$27,819)	-90.1%	Pay off loan for mini-excavator (written off in FY24 but loan was not paid until FY25).

5801 Interest	\$12,468	\$13,791	\$12,468	(\$1,323)	-10.6%	Higher interest on Town Hall Bond.
5070 Bad Debt	(\$5,500)	\$0	\$0	\$0	#DIV/0!	
5802 Penalties and Fees	\$157	\$157	\$157	\$0	0.0%	
Total Debt Service	\$38,013	\$72,656	\$43,513	(\$29,143)	-67.0%	
Total Expenditures	\$1,834,291	\$2,076,992	\$2,138,540	\$61,548	2.9%	
TOTAL CHANGE IN NET POSITION - AS IS	(\$200,744)	(\$0)	\$0	(\$0)	0.0%	

Town of Hideout
Fund 51: Enterprise Fund

Item # 1.

Town of Hideout
Fund 51 - Water Fund

FY25 Financials - YTD Actuals plus Forecast as of December 31, 2024

	FY24	FY25 Actual + Forecast	FY25 Budget	Act/Fcst vs. Budget \$	Act/Fcst vs. Budget %	Comments
Operating Income						
3310 Grant Revenue	\$0	\$0	\$0	\$0	NA	
5110 Interest revenue - PTIF	\$41,753	\$39,000	\$35,000	\$4,000	11.4%	Lower due to lower interest rate and lower funds being invested
5140 Water Service - billing to residents	\$1,023,055	\$1,132,768	\$1,198,946	(\$66,178)	-5.5%	increase of 8% anticipated but no increase as of Dec. 31, 2024
5141 Standby Water/Infrastructure Maint.	\$200,745	\$200,916	\$200,916	\$0	0.0%	Billing in March 2025. Need to follow up with Jan on status of charges
5143 Meter Rental	\$3,550	\$3,692	\$3,692	\$0	0.0%	
5145 Storm Water Ser. - billing to residents	\$45,766	\$47,080	\$53,599	(\$6,519)	-12.2%	increase of 8% anticipated but no increase as of Dec. 31, 2024
5150 Sewer Service - billing to residents	\$254,350	\$256,847	\$297,974	(\$41,127)	-13.8%	increase of 8% anticipated but no increase as of Dec. 31, 2024
5310 Connection Fees	\$97,253	\$118,365	\$67,253	\$51,112	76.0%	Budgeted 71 Cert. of Occucpacy - 44 ytd. Potential add'l opport.
5312 Sewer Connection	\$0	\$49,795	\$30,000	\$19,795	66.0%	Investigating why so high year-to-date
5315 Water Transfer Fees	\$2,748	\$2,858	\$2,858	\$0	0.0%	
5410 Late Penalties & Fees	\$23,018	\$6,642	\$23,938	(\$17,296)	-72.3%	Stopped charging stand by fee interest until water analysis complete.
5490 Other Operating Income	\$0	\$2	-	NA	NA	
Total Operating Income	\$1,692,238	\$1,857,964	\$1,914,176	(\$56,214)	-2.9%	
Expenses						
6355 Benefits	\$179,010	\$243,516	\$307,968	\$64,452	20.9%	No new engineer or Public Works person
6350 Salaries & Wages	\$492,622	\$417,595	\$553,411	\$135,815	24.5%	No new engineer or Public Works person
Total Salaries and Benefits	\$671,632	\$661,111	\$861,378	\$200,267	23.2%	
6006 Consulting Services - PW	\$10,000	\$0	\$10,400	\$10,400	NA	Expense incurred in FY24
6205 Material and Supplies	\$9,908	\$10,304	\$10,304	\$0	0.0%	
6210 Meters (smart meter cost & replacement)	\$72,466	\$82,966	\$97,966	\$15,000	15.3%	Adv. purchase of \$15k in FY24. Assess plan to replace all 50 in FY25
6209 Leases	\$24,188	\$34,258	\$27,950	(\$6,308)	-22.6%	Higher lease cost - partial offset in Fund 10
6305 Repairs & Maintenance - Sewer	\$7,446	\$87,744	\$87,744	\$0	0.0%	Minimal costs year to date. Potential opportunity; however, we need to
6310 Repairs & Maintenance - Water	\$5,617	\$5,842	\$5,842	\$0	0.0%	assess spend for the remainder of the year. Meeting with Dan (PW
6315 Repairs & Maintnenace - Storm	\$0	\$15,000	\$15,000	\$0	0.0%	Director) in mid-January
PW Department	\$129,625	\$236,114	\$255,205	\$19,092	7.5%	
6140 Engineering - Ongoing	\$14,254	\$7,824	\$7,824	\$0	0.0%	
6141 Engineering - projects	(\$2,382)	\$32,126	\$7,000	(\$25,126)	-358.9%	External eng. doing work due to town not hiring a PW person or eng.
6405 JSSD - Sewer charges to town	\$50,980	\$55,345	\$59,827	\$4,482	7.5%	JSSD has yet to increase their rates for FY25 (budgeted 8%)
6410 JSSD - Water charges to town	\$274,536	\$293,749	\$322,180	\$28,431	8.8%	JSSD has yet to increase their rates for FY25 (budgeted 8%)
6412 Water Reservation	\$58,037	\$58,037	\$58,037	\$0	0.0%	Bill anticipated in January
General Enterprise Expense	\$395,425	\$447,082	\$454,868	\$7,787	1.7%	
6150 Legal	\$39,254	\$43,000	\$43,000	\$0	0.0%	Monitor. May have slight risk
6005 Accounting and Audit	\$46,924	\$25,000	\$25,000	\$0	0.0%	Potential minor opportunity
Professional Expense	\$86,178	\$68,000	\$68,000	\$0	0.0%	
Contract Services	\$4,723	\$4,912	\$4,912	\$0	0.0%	

5001.2 Admin Council Pay	\$465	\$484	\$484	\$0	0.0%	
5001.6 Admin Milesage Reimbursement	\$1,505	\$1,565	\$1,565	\$0	0.0%	
5001.7 Admin Office Supplies	\$3,359	\$3,493	\$3,493	\$0	0.0%	
5001.9 Admin Public Notices	\$1,952	\$2,030	\$2,030	\$0	0.0%	
5001.A Admin Security Alarm Monitoring	\$649	\$675	\$675	\$0	0.0%	
5004 Admin Other	\$4,251	\$4,421	\$4,421	\$0	0.0%	
5019 - Admin Membership	\$5,609	\$5,833	\$5,833	\$0	0.0%	
5030 - Admin Repairs and Maintenance	\$6,411	\$6,667	\$6,667	\$0	0.0%	On target with budget. Higher insurance may result is slight unfavorability
5050 - Admin Utilities	\$8,668	\$9,015	\$9,015	\$0	0.0%	
5069 Miscellaneous	\$0	\$0	\$0	\$0	#DIV/0!	
6001.1 Insurance	\$0	\$0	\$0	\$0	#DIV/0!	
6010 and 6360 Information tech and software	\$27,377	\$28,472	\$28,472	\$0	0.0%	
6016 Telephone	\$6,107	\$6,351	\$6,351	\$0	0.0%	
6017 Training	\$2,796	\$2,908	\$2,908	\$0	0.0%	
6018 Website	\$20	\$21	\$21	\$0	0.0%	
Admin Insurance	\$11,336	\$11,789	\$11,789	\$0	0.0%	
5001.6 Mileage Reimbursement	\$0	\$0	\$0	\$0	#DIV/0!	
Total Administrative Expense	\$85,228	\$88,637	\$88,637	\$0	0.0%	
5070 Bad Debt Expense	(\$2,492)	\$0	\$0	\$0	#DIV/0!	
5080 Interest expense - Bond	\$93	\$93	\$93	\$0	0.0%	
Gain/Loss on sale of assets	\$10,080	\$0	\$0	\$0	#DIV/0!	
6120 Depreciation Expense	\$232,309	\$243,924	\$243,924	\$0	0.0%	Depreciation on target
Badk Debt and Depreciation Expense	\$239,990	\$244,017	\$244,017	\$0	0.0%	
Total Operating Expenses	\$1,608,077	\$1,744,960	\$1,972,106	\$227,145	11.5%	
TOTAL CHANGE IN NET POSITION	\$84,161	\$113,003	(\$57,930)	\$170,931	295.1%	

Town of Hideout - General Fund
FY25 Actual plus Forecast versus FY25 Budget

Operating Income	FY24	FY25 Actual + Forecast	FY25 Budget	Act/Fcst vs. Budget \$	Act.Fcst vs. Budget %
Taxes	\$654,731	\$803,405	\$814,188	(\$10,783)	-1.3%
License and Permits	\$655,900	\$961,779	\$872,532	\$89,247	10.2%
Miscellaneous Revenues	\$133,073	\$79,850	\$86,590	(\$6,740)	-7.8%
Contributions & Transfers	\$189,843	\$231,958	\$365,230	(\$133,272)	-36.5%
Operating Income	\$1,633,548	\$2,076,991	\$2,138,540	(\$61,549)	-2.9%
Operating Expense					
Salary/Wages/Benefits	\$529,623	\$439,836	\$569,562	\$129,725	22.8%
Administration	\$92,514	\$96,215	\$96,215	\$0	0.0%
Professional Services	\$587,462	\$995,221	\$956,121	(\$39,100)	-4.1%
Public Safety	\$90,579	\$94,202	\$94,202	\$0	0.0%
Streets	\$486,143	\$301,862	\$301,927	\$65	0.0%
Parks and Community Development	\$9,956	\$77,000	\$77,000	\$0	0.0%
Debt Service	\$38,013	\$72,656	\$43,513	(\$29,143)	-67.0%
Operating Expense	\$1,834,291	\$2,076,992	\$2,138,540	\$61,548	2.9%
Surplus/(Deficit)	(\$200,743)	(\$0)	\$0	(\$0)	0.0%

Town of Hideout - Enterprise Fund
FY25 Actual plus Forecast versus FY25 Budget

Operating Income	FY24	FY25 Actual + Forecast	FY25 Budget	Act/Fcst vs. Budget \$	Act.Fcst vs. Budget %
Water Service Revenue	\$1,627,467	\$1,812,320	\$1,855,238	(\$42,918)	-2.3%
Miscellaneous Revenue	\$64,771	\$45,644	\$58,938	(\$13,294)	-22.6%
Operating Income	\$1,692,238	\$1,857,964	\$1,914,176	(\$56,212)	-2.9%
Operating Expense					
Operating Expense	\$1,608,077	\$1,744,960	\$1,972,106	\$227,145	11.5%
Surplus/(Deficit)	\$84,161	\$113,003	(\$57,930)	\$170,933	295.1%

Town of Hideout - MIDA
FY25 Actual plus Forecast versus FY24

Operating Income	FY24	FY25 Actual + Forecast	FY25 Budget	FY25 Act./Fcst vs. Budget	Act/Fcst vs. FY24
Property taxes - Current MIDA	\$120,951	\$590,596	\$586,713	\$3,883	\$469,645
Energy - Current MIDA	\$12,646	\$12,571	\$12,571	\$0	(\$75)
Interest	\$0	\$22,000	\$18,000	\$4,000	\$22,000
MIDA - Sales tax	\$24,851	\$26,262	\$26,262	\$0	\$1,411
Transient Room Tax	\$524	\$600	\$600	\$0	\$76
Total Revenues	\$158,973	\$652,029	\$644,146	\$7,883	\$493,056
Operating Expense					
Admin expense	\$3,802	\$3,883	\$0	(\$3,883)	(\$81)
Transfer to General Fund	\$0	\$81,958	\$215,230	\$133,272	(\$81,958)
Total Expenses	\$3,802	\$85,841	\$215,230	\$129,389	(\$82,039)
Surplus/(Deficit)	\$155,170	\$566,188	\$428,916	\$137,272	\$411,017

Town of Hideout - General Fund
FY25 Actual plus Forecast versus FY25 Budget

Operating Income	FY24	FY25 Actual + Forecast	FY25 Budget	Act/Fcst vs. Budget \$	Act.Fcst vs. Budget %
Taxes	\$654,731	\$803,405	\$814,188	(\$10,783)	-1.3%
License and Permits	\$655,900	\$961,779	\$872,532	\$89,247	10.2%
Miscellaneous Revenues	\$133,073	\$79,850	\$86,590	(\$6,740)	-7.8%
Contributions & Transfers	\$189,843	\$231,958	\$365,230	(\$133,272)	-36.5%
Operating Income	\$1,633,548	\$2,076,991	\$2,138,540	(\$61,549)	-2.9%
Operating Expense					
Salary/Wages/Benefits	\$529,623	\$439,836	\$569,562	\$129,725	22.8%
Administration	\$92,514	\$96,215	\$96,215	\$0	0.0%
Professional Services	\$587,462	\$995,221	\$956,121	(\$39,100)	-4.1%
Public Safety	\$90,579	\$94,202	\$94,202	\$0	0.0%
Streets	\$486,143	\$301,862	\$301,927	\$65	0.0%
Parks and Community Development	\$9,956	\$77,000	\$77,000	\$0	0.0%
Debt Service	\$38,013	\$72,656	\$43,513	(\$29,143)	-67.0%
Operating Expense	\$1,834,291	\$2,076,992	\$2,138,540	\$61,548	2.9%
Surplus/(Deficit)	(\$200,743)	(\$0)	\$0	(\$0)	0.0%

Town of Hideout - Enterprise Fund
FY25 Actual plus Forecast versus FY25 Budget

Operating Income	FY24	FY25 Actual + Forecast	FY25 Budget	Act/Fcst vs. Budget \$	Act.Fcst vs. Budget %
Water Service Revenue	\$1,627,467	\$1,812,320	\$1,855,238	(\$42,918)	-2.3%
Miscellaneous Revenue	\$64,771	\$45,644	\$58,938	(\$13,294)	-22.6%
Operating Income	\$1,692,238	\$1,857,964	\$1,914,176	(\$56,212)	-2.9%
Operating Expense					
Operating Expense	\$1,608,077	\$1,744,960	\$1,972,106	\$227,145	11.5%
Surplus/(Deficit)	\$84,161	\$113,003	(\$57,930)	\$170,933	295.1%

Town of Hideout - MIDA
FY25 Actual plus Forecast versus FY24

Operating Income	FY24	FY25 Actual + Forecast	FY25 Budget	FY25 Act./Fcst vs. Budget	Act/Fcst vs. FY24
Property taxes - Current MIDA	\$120,951	\$590,596	\$586,713	\$3,883	\$469,645
Energy - Current MIDA	\$12,646	\$12,571	\$12,571	\$0	(\$75)
Interest	\$0	\$22,000	\$18,000	\$4,000	\$22,000
MIDA - Sales tax	\$24,851	\$26,262	\$26,262	\$0	\$1,411
Transient Room Tax	\$524	\$600	\$600	\$0	\$76
Total Revenues	\$158,973	\$652,029	\$644,146	\$7,883	\$493,056
Operating Expense					
Admin expense	\$3,802	\$3,883	\$0	(\$3,883)	(\$81)
Transfer to General Fund	\$0	\$81,958	\$215,230	\$133,272	(\$81,958)
Total Expenses	\$3,802	\$85,841	\$215,230	\$129,389	(\$82,039)
Surplus/(Deficit)	\$155,170	\$566,188	\$428,916	\$137,272	\$411,017

File Attachments for Item:

4. Discussion of HB80 requiring Ethics and Financial Disclosures by elected municipal officials to be published on the Hideout website

To: Town of Hideout Mayor and Council
From: Polly McLean, Cameron Platt
Date: January 2, 2025
Re: Updated Ethics Disclosure Form

This staff report explains the changes made by the Utah Legislature to ethics disclosures required by elected municipal officials in 2024. House Bill 80 ([HB80](#)) amended existing statutes and enacted new requirements for local, county, and state elected officials. The summary of the bill is as follows:

- Requires an elected officer of a political subdivision and a member of a state land use authority to annually file a conflict of interest disclosure statement;
- Requires the clerk of the political subdivision or state land use authority to:
 - post an electronic copy of the conflict of interest disclosure statement on the political subdivision's or state land use authority's website; and
 - provide the lieutenant governor's office with a link to the electronic posting described above;
- Requires the lieutenant governor to post the link described above on the state conflict of interest disclosure website;
- Standardizes the monetary amount that triggers an elected officer's disclosure obligation as \$5,000.00;
- Establishes penalties for an elected officer or a member of a state land use authority who fails to file the required conflict of interest disclosure statement;

One of the more significant additions to HB80 is enacting [UCA 10-3-1313 Annual conflict of interest disclosure](#). This section lists the required disclosures, timing of the disclosures, and penalties for failing to comply.

The required disclosures are incorporated by reference in 10-3-1313 but are listed in [UCA 20A-11-1604\(6\)](#). In summary they are:

- Officeholders name, spouse's name (if applicable), and name of adults living in officeholders residence who is not related by marriage or blood;
- Current employment and previous calendar year employment for those named above;
- Disclosure of ownership or officer position in businesses;
- Disclosure of income of \$5,000.00 or greater from any person or business;
- Disclosure of stocks/bonds ownership having a fair market value of \$5,000 or more as of the date of the disclosure form or during the preceding year;

- Disclosure of positions held in a paid leadership capacity or in a paid or unpaid position on a board of directors
- Optional disclosure of real property interests or other financial interest that the regulated officeholder believes may constitute a conflict of interest.

The disclosure requirements are similar to what was previously required when filing as a candidate for public office. The amendments require the disclosures annually. We have prepared a form to comply with the disclosure requirements and the form is included with this staff report.

The disclosures must also be filed between January 1-31 of “each year during which the elected officer holds the office of mayor, commissioner, or council member.” [UCA 10-3-1313\(1\)](#).

If the elected officer fails to complete and sign the disclosure statement as required, the clerk or recorder must notify the elected officer within 5 days and the elected officer must submit the statement within 7 days after receiving notice from the clerk or recorder. Failure to comply with the disclosure requirements constitutes a class B misdemeanor (with a \$100 fine) and must be reported to the Utah Attorney General’s Office.

Based on the above, we strongly recommend that each elected officer complete the disclosure form no later than January 31, 2025. If you have any questions about these disclosure requirements, please contact Polly or Cameron.



ELECTED OFFICER CONFLICT OF INTEREST DISCLOSURE

Elected officers of Town of Hideout are required to comply with the provisions and requirements outlined in Utah Code §§ 10-3-1301, *et seq.* (*Municipal Officers' and Employees' Ethics Act*). Elected officials are required to complete this form and submit it to the City Recorder between January 1-31 each calendar year. Pursuant to Utah Code § 10-3-1313(5), any elected official who fails to complete and submit this form within seven calendar days after receiving

notice of their failure to do so may be guilty of a class B misdemeanor, requires reporting to the Utah Attorney General's Office, and may be subject to a \$100 fine. If additional space is needed for responses and you are not using the fillable PDF, attach additional pages as necessary.

HOUSEHOLD INFORMATION

Your name: _____

Spouse's name (if applicable): _____

Name of all adults residing in your household not related by marriage or blood:

DISCLOSURE OF EMPLOYMENT

For all individuals listed above, identify all current employers, and all employers during the preceding calendar year, including a brief description of the employment, occupation, and job title:

DISCLOSURE OF BUSINESS INTERESTS

Identify by name all entities that you currently own(ed), in whole or in part, or serve(d) as an officer, or did during the preceding calendar year, including the business or activity conducted by the entity and your position in the entity:

DISCLOSURE OF INCOME

Identify by name all individuals or entities from whom you received \$5,000 or more in income during the preceding year, include a brief description of the type of business or activity conducted by the individual or entity:

DISCLOSURE OF STOCKS & BONDS

Identify by name all entities in which you currently, or during the preceding year, own(ed) stocks or bonds having a fair market value of \$5,000 or more (excluding funds managed by a third-party - i.e. blind trusts, managed investment accounts, and mutual funds), and the type of business or activity conducted by the entity:

DISCLOSURE OF LEADERSHIP POSITIONS

If not listed above, identify by name all entities that you currently, or during the preceding year, serve(d) in a paid leadership capacity or as a paid or unpaid director, describe the type of business or activity conducted by the entity, and the type of position you hold in the entity:

OTHER OPTIONAL DISCLOSURES

Identify any other information, including real property interests, or a description of any other matter or interest that the you believe may constitute a conflict of interest:

ACKNOWLEDGEMENT

I acknowledge that I have read and understand Utah Code §§ 10-3-1301, *et seq.* (*Municipal Officers' and Employees' Ethics Act*), I have included and made all required disclosures, I have accurately and truthfully represented all information disclosed on this form, and I understand the penalties for improper disclosure or otherwise violating applicable provisions of State law.

Name:	
Signature:	Date:

RECEIVED	
Clerk/Recorder:	Date: