



Berryville Town Council

MEETING AGENDA

Berryville-Clarke County Government Center
101 Chalmers Court, Second Floor
Main Meeting Room
Regular Session

November 12, 2025

7:00 PM

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1. Call to Order	
2. Pledge of Allegiance	
3. Approval of Agenda	
4. Presentations/Awards and Recognitions	
Resolution honoring the service of Diane Harrison	3
5. Public Hearings	
Construction Standards- The Berryville Town Council will consider updates and revisions to the whole of the Berryville Construction Standards and Specifications Manual, including a modified restoration standard for "test pits" excavated in streets at fiber optic crossings of utilities to Section 10- Work on Highways and Streets.	4
Lease for 36 Smithy Lane- The Town proposes to re-lease the property known as the "Smithy Cottage" which is located at 36 Smithy Lane, Berryville, Virginia to the Barns of Rose Hill, Inc.	157
6. Discussion of Public Hearing Items	
7. Citizens' Forum	
8. Consent Agenda	
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9. Unfinished Business	
10. New Business	

11. Council Member Reports

Mayor

Vice Mayor

Ward 1

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Deputy Town Manager

Town Manager

13. Committee Updates

Budget and Finance

Community Development

Personnel, Appointments, and Policy

Public Safety

Streets and Utilities

14. Closed Session

The Council of the Town of Berryville will conduct a closed session in accordance with Code of Virginia §2.2-3711.A.1 to consult with the town manager regarding the appointment of a chief of police.

15. Adjourn



A RESOLUTION OF THE COUNCIL OF THE TOWN OF BERRYVILLE HONORING

Diane Harrison

WHEREAS, Diane Harrison has lived and worked in Berryville for over twenty years, becoming a valued volunteer and organizer in local service groups and artistic circles. Diane was elected as the Ward 2 Representative to the Town Council of the Town of Berryville in July 2018 and reelected in November 2022; and

WHEREAS, she embraced her calling wholeheartedly, driven by a desire to make a difference in the lives of her neighbors. In pursuit of this, she served on the Community Development Committee, Berryville Area Development Authority, Joint Clarke County/Berryville Economic Development Committee, was co-chair of the Clarke County Fire and EMS Commission, and was chair of Streets and Utilities Committee; and

WHEREAS, Diane sought engagement with the residents of her Ward and the Town as a whole, building rapport and consensus with her constituents, always remembering that a journey of service is one of the most rewarding paths; and

WHEREAS, she fostered community feel, recognizing that a Town requires resilient infrastructure but also relies on open channels of communication and deep respect; and

WHEREAS, Diane promoted policies of economic resilience, led traffic calming efforts, brought her artistic talents to bear in the rebrand of the Town logo, and supported technological innovation and accessibility for the Town, particularly the Town website's design and functionality.

NOW, THEREFORE, BE IT RESOLVED, that the Council of the Town of Berryville honors Diane Harrison, and considers the time collaborating on Council a privilege. Her insight, trust, and teamwork are deeply appreciated.

By order of the Town Council this 12th day of November, 2025.

Harry Lee Arnold Jr., Mayor

Erecka L. Gibson, Vice Mayor

Item Title

Construction Standards and Specifications Manual Revision

Prepared By

Jean Petti

Background/History/General Information

Under the terms of a 2024 franchise agreement, Shenandoah Cable Television (SHENTEL) is expanding of Glo Fiber service to the Berryville market.

Findings/Current Activity

SHENTEL requests that the Town apply a relaxed asphalt restoration standard developed by the county of Frederick, Maryland. As this amendment requires a public hearing to amend Berryville's *Construction Standards Manual and Specifications*, staff undertook a review of the document as a whole. In addition to adding potential language for a relaxed asphalt restoration standard, references were updated as necessary, revisions were made to bring erosion and sediment control language into line with the newly adopted (2025) *Virginia Stormwater Management Handbook*, and provisions for submersible grinder pumps were added to *Chapter 14- Minimum Standards for Wastewater Pumping Stations*.

Attachments

1. Draft of revision to *Construction Standards and Specifications Manual*.

Draft Motion

I move that the Council of the Town of Berryville adopt the *Town of Berryville Construction Standards and Specifications Manual* as amended.

Section 1

General Information

I. *Purpose and Authority*

- A. This document, entitled *Town of Berryville Construction Standards and Specifications*, establishes standards for design and construction of public facilities being built for dedication to the Town of Berryville. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied. This document shall be an administrative document that is approved by the Town Council.

II. *Interpretation and Revision*

- A. These standards and guidelines are intended to supplement the provisions of applicable Federal and State regulations. Nothing herein shall be deemed to waive or modify other requirements of existing codes. Except as expressly provided otherwise in this document, the Director of Community Development is the designated official charged with the administration of the standards and requirements contained in this manual. The Director of Community Development may allow for variations of given standards where the effect of such variations is in keeping with established engineering practices and procedures and shall make the final decision on all questions regarding interpretation of this document, after reviewing recommendations from the designated departments, authorities, boards, and committees. For any areas where this document or the reference documents provide conflicting requirements, the Town of Berryville exceptions shall be followed. For other conflicts between requirements, the stricter of the two requirements shall be followed.
- B. Qualified professionals are encouraged to seek innovative solutions to technical problems. However, to promote orderly development and to expedite plan processing and subsequent construction, standardized procedures and the use of minimum design standards must be employed. Familiarity with, and use of the standards set forth herein by designers, contractors, and inspection personnel, will result in more timely and economical project review, approval, and completion.
- C. New information on design criteria and changes in pertinent Federal and State laws, regulations, and standards will be reflected in periodic reviews and subsequent changes to the document. Appropriate notice will be given for public input and comment during the updating process. Any record plats, final site plans, or construction plans and profiles submitted prior to the approval of any revisions shall comply with the standards in effect at the time of formal application.
- D. Where standards of organizations such as the American Society for Testing and Materials (ASTM), the American Waterworks Association (AWWA), the American National Standards Institute (ANSI), the Commonwealth of Virginia, or Virginia Department of Transportation (VDOT), the Occupational Safety and Health Administration (OSHA), the Federal Highway

Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO) are referenced, the most current edition of the standard shall apply.

III. Severability

- A. Should any section or provision of the document be decided by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the document as a whole, or any section thereof, other than the section or part thereof so held to be unconstitutional or invalid.

IV. Materials Specification Manual

- A. The *Materials Specifications Manual* shall be approved by the Director of Public Works. These materials have been specified because they most suit the specific design criteria, maintenance needs, and cost requirements for the Town of Berryville. No substitutions beyond those listed in this book will be allowed. The *Manual* will be updated regularly so care should be taken to ensure that contractors are using the latest version when preparing bids.

V. Noise

- A. All contractors and deliveries must comply with Town of Berryville Code Chapter 11 Noise.

VI. Hours of Work

- A. Work requiring inspections must be scheduled Monday-Friday between 8:00 a.m. and 3:00 p.m., excluding Town observed holidays. If Contractor seeks to work outside these hours, a Town approved inspector must be present and their compensation paid by Contractor.
- B. Hours of construction and deliveries as regulated in the Code of the Town of Berryville Section 11-4(e) must be posted at each vehicular access point of the site under construction.

VII. Dust Control

- A. All contractors shall be responsible for minimizing dust and preventing erosion while performing work associated with any approved permit or job award. The contractor, at the discretion of the Director of Public Works, may be required to water down job sites. The contractor shall keep all road surfaces clean and free of debris in accordance with the current version of the *Virginia Stormwater Management Handbook*

VIII. Acceptance of Improvements by Town

- A. Notwithstanding other requirements herein, improvements are eligible for acceptance by the Town of Berryville after inspection determines that all improvements meet standards and conform to plans, regulations, and best practices. A maintenance bond may be required. Such acceptance is evidenced by written notice from Director of Public Works.

Section 2

General Design Standards

I. Provision for Future Growth

- A. The Town may require the modification of certain proposed public improvements to provide adequate capacity for the logical extension of said improvements. Proposed facilities would include, but not be limited to, water lines, booster stations, manholes, water pressure control valves, sewer lines, sewer pump stations, streets, and stormwater management facilities. Costs for the provision of additional capacity or modifications as required above may be reimbursed by the Town or through agreements with other owners/developers.
- B. Plans and specifications shall be prepared and certified by a professional engineer registered in the Commonwealth of Virginia, in accordance *with Title 54.1, Chapter 3 of the Code of Virginia*, as amended. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.

II. Phased Construction

- A. Delineation
If development is to be constructed in phases, plans shall clearly indicate by phase lines and notes which facilities are to be constructed under each phase. Plans shall indicate locations of contour tie-ins for each phase and specific measures for phased termination of all water, sewer, storm drainage, streets, and other public improvements. Construction plans for public improvements and utilities shall be designed so as to be fully functional at the completion of each phase and allow for construction of the next phase with a minimal impact to existing improvements. A temporary marker identifying the location of the utility termination shall be provided.
- B. Bonding
Bonding of public improvements and erosion and sediment control measures as required by Town Ordinance shall be provided independently for each proposed phase.

III. Drainage

- A. General
 1. An evaluation shall be performed for all proposed drainage systems to ensure adequate hydraulic capacity for conveyance of the minimum ten-year event including, but not limited to, channels, storm water management facilities, and conduits.

2. Hydraulic capacity must be verified with engineering calculations in accordance with the procedures outlined in the *Virginia Stormwater Management Handbook*, the *Virginia Department of Transportation Drainage Manual*, *Town of Berryville Stormwater Management Ordinance*, and this manual. Submit an electronic and a printed copy of drainage calculations with construction plans.

Calculations shall include a copy of the site grading and drainage plan, at the plan scale, upon which the boundaries, acreages, time of concentration paths, and C-factors of the interior drainage areas shall be shown. Calculations shall also include a map at an appropriate scale delineating the boundaries, acreages, time of concentration paths, and C-factors of the drainage areas upstream of the development which would contribute storm water to the development.

3. Due consideration must be given to infrequent events (100-year) resulting in runoff quantities greater than minor system design capacity. The design for the major drainage system shall provide for overland relief of the 100-year event without flooding or damaging buildings and structures and without reliance upon the minor drainage system. The limits of the area affected by the 100-year event shall be represented on construction plans.
4. The drainage system shall be designed to honor all natural drainage divides and create no adverse impact on downstream properties. It shall account for all off-site storm water and convey discharge surface waters to the flow line of a natural watercourse or an existing underground or above-ground adequate conveyance system.
5. The owner or developer may not create a new discharge or concentrated storm water from a pipe, culvert, channel, or other drainage structure onto or through lands of another, without first obtaining a permanent storm drainage easement and constructing improvements to guarantee continuity of an outfall from the point of discharge to the nearest natural or man-made watercourse.
6. If off-site downstream construction and easements are required to construct an adequate channel outfall, no plans shall be approved until such storm drainage easements, extending to the nearest natural or man-made watercourse, have been obtained and recorded. It will be the responsibility of the developer to obtain all off-site easements.
7. Energy dissipation devices and/or friction channel lining shall be used at and downstream of outfalls when discharge velocities exceed the maximum permissible as defined by the *Virginia Stormwater Management Handbook*.
8. Plans shall be prepared to preclude adverse impacts because of higher flow rates that may occur during construction.

9. Construction plans shall show the location, size, flow line elevations, profiles, and details of all drainage facilities and structures, existing or proposed, including, but not limited to, swales, ditches, culverts under public streets and private drives, drop inlets, storm sewers, and detention/retention ponds and pond outlet structures. Typical cross sections of all swales and ditches shall be shown.
10. Profiles of streets shall show profiles of storm sewers and cross sections of culverts together with point of intersection. Profiles shall show clearance of such drainage facilities with water mains and sanitary sewer.

B. Storm Sewer Systems

1. General

- A. The following minimum requirements are considered acceptable to the Town of Berryville for the collection and detention of stormwater runoff. Deviation from these may be allowed if: a) the deviation is in accordance with sound engineering standards; b) the deviation will not increase the likelihood of a system failure; and c) the deviation will not adversely impact the environment or others.
- B. As a general guideline, standards shall be those set forth in the latest editions of the *Virginia Stormwater Management Handbook* and the *Virginia Department of Transportation Drainage Manual*. If the standards set forth in this manual conflict for a particular application, the Director of Public Works and the Town Engineer shall determine which standard is to be applied.
- C. When the Town of Berryville standards differ from state and/or federal requirements, the most stringent requirement shall apply.
- D. All drawings, specifications, and engineer's reports submitted for approval shall be prepared by or under the supervision of a registered professional engineer with a current registration in the Commonwealth of Virginia in accordance with *Title 54.1, Chapter 3 of the Code of Virginia*, as amended. Where applicable, design may be performed under the direction of a certified Land Surveyor B, in accordance with § 54.1-408 of the above-cited code. The front cover of each set of drawings, of each copy of the engineer's report, and of each copy of the specifications submitted for review shall bear the signed imprint of the seal of the above licensed professional who prepared or supervised the preparation, and shall be signed with an original signature and date.
- E. The engineer shall be responsible for obtaining the review and necessary approvals of all drawings and specifications by applicable Town, County, State, and Federal agencies having jurisdiction. Copies of such approvals

shall be submitted to the Director of Public Works and Director of Community Development at the time of final approval.

2. Stormwater Report

- A. All drainage calculations shall be incorporated into a stormwater report, which shall present the following information as applicable. If the necessary calculations are minimal, they can be included on the plan sheets.
 1. A description of the computer software used and references to charts and tables used. Computer spreadsheets or programs created “in-house,” used in lieu of standard forms or standard manual calculations, shall be substantiated, at least initially, with manual calculations showing equivalent results. Acceptance of “in-house” spreadsheets and programs will be the decision of the Town Engineer and the Director of Public Works.
 2. The following computations shall be shown for both pre-developed and post-developed conditions:
 - a. Grading plan with the boundaries, acreages, and C-factors or CN values for all drainage areas contributing storm water to the site.
 - b. Flow paths and calculations of times of concentration.
 - c. Runoff computations.

3. Stormwater Design

A. General

1. An evaluation using verifiable engineering calculations shall be performed for all proposed drainage systems including, but not limited to, channels, inlets, and conduits. At a minimum, this evaluation shall show adequate hydraulic capacity for conveyance of the ten (10) year storm event.
2. Due consideration must be given to less frequent storms, up to and including the 100-year storm event. The design of drainage systems shall generally provide for overland relief of the 100-year storm event without flooding or damaging buildings and structures.
3. The drainage system shall be designed to closely maintain existing drainage divides and must not create adverse impacts on upstream or downstream properties.
4. Drainage designs must account for any off-site drainage that will be collected by the drainage system or that will flow through any part of the site. Ultimate developed condition of currently undeveloped areas within

a watershed shall be based upon the current or anticipated zoning of those areas.

5. All systems shall be designed to convey runoff to the flow line of a natural watercourse or to an adequate conveyance system.
6. The owner or developer may continue to discharge stormwater as sheet flow (non-concentrated) onto an adjoining property if, at the same location:
 - a. The post-development peak runoff rate based on documentation and calculations does not exceed the pre-development peak rates, and
 - b. The duration of the flow does not increase under post-development conditions.
7. The owner or developer may not create a new discharge of concentrated storm water from a pipe, culvert, channel, or other drainage structure onto or through lands of others without first obtaining a permanent storm drainage easement and ensuring that adequate conveyance exists downstream between the point of discharge and the nearest natural or man-made waterway.
8. If off-site downstream construction and easements are required to construct an adequate channel outfall, no plans shall be approved until such storm drainage easement, extending to the nearest natural or man-made watercourse, has been obtained and recorded. It will be the responsibility of the developer to obtain all off-site easements.

B. Storm Sewer Systems

1. All publicly owned storm inlets and manholes shall include inlet/invert shaping per VDOT standard IS-1.
2. No concentrated flow greater than one cubic foot per second, based on the ten (10) year storm, shall cross a sidewalk or curb.
3. Culverts and storm sewers shall be of adequate size to transport runoff from the ten (10) year storm for the ultimate developed condition of the subject property. Contributions of off-site flow from permanently developed properties shall be based upon existing conditions. Contributions of off-site flow from undeveloped properties shall be calculated based upon the two-year fully developed flow (undetained) from such properties. Plans shall account for overland relief resulting from less frequent events.

4. The hydraulic grade line of storm sewers for the post-developed ten (10) year storm shall be lower than the gutter line or grate inlet top elevation at all points.
5. All publicly-owned storm sewer pipes within street rights-of-way shall be reinforced concrete pipe with a minimum diameter of five (5) inches or equivalent elliptical size, unless otherwise approved by the Town's Engineer and the Director of Public Works. Publicly-owned storm sewer pipe in non-traffic bearing areas may be either reinforced concrete pipe or corrugated HDPE pipe, with a minimum diameter of fifteen (15) inches.
6. All pipes shall terminate with flared end sections or concrete headwalls. Box culverts shall include concrete headwalls and end walls, which shall be located a minimum of 25 feet from the edge of pavement if the culvert is subject to vehicular traffic.
7. The outfall conditions of pipes and culverts shall be designed to withstand the velocities produced during the two (2) year storm event without erosion.
8. Pipe shall not deflect between storm structures. Pipe on slopes greater than 20% shall be anchored.
9. Minimum cover for storm sewer pipe within the right-of-way shall be according to the *Town of Berryville Standard Details*. Outside the right-of-way, the minimum cover, from finished grade to the outside crown of pipe, shall be the greater of twelve (12) inches or half the pipe diameter.
10. In parallel installations, under normal conditions, storm sewer pipes shall be laid at least ten (10) feet horizontally from water lines and sanitary sewer lines. The distance shall be measured from outside edge to outside edge.
11. In general crossing situations, storm sewer pipes shall maintain a minimum vertical distance of eighteen (18) inches from water mains and twelve (12) inches from sanitary sewer lines. In cases where this separation is impossible to achieve, the water or sanitary sewer line shall be protected in accordance with the appropriate Town of Berryville utility standard. In cases where the water or sanitary sewer line is not owned by the Town of Berryville, the crossing shall be governed by the regulations of the authority which owns the utility in question.
12. Test pits will be required and shall be shown on the plans for all crossings which involve gas lines, water mains twelve (12) inches in diameter and larger, sanitary sewer crossings that have minimum clearance, and all fiber

optic telephone service lines. Test pits shall be dug and clearances verified prior to installing any portion of the storm sewer system.

C. Easements

1. An “easement” shall mean any area to which the Town has unlimited access for maintaining adequate drainage.
2. Permanent easements shall be a minimum width of 20 feet. Wider easements may be required where more than one facility may occupy an easement or in consideration of structure size, depth, or access requirements. The extent of drainage easements shall be dependent on upstream and downstream conditions and the scope of maintenance needed to maintain adequate drainage.
3. Easements shall be recorded and the Deed Book and Page Numbers of the recordation provided to the Community Development Department before approval of the as-built plans and release of the construction bonds.
 - a. No building or other structure, including but not limited to fences and decks, shall be erected over permanent easements.
 - b. Small and medium shrubs, groundcovers, or grasses may be planted within an easement. Their suitability shall be determined by their likelihood to create or entrap debris or to obstruct natural flow.
 - c. Any plantings installed within an easement may be damaged or destroyed during the course of servicing. The Town is not liable for damage to any improvements or plantings within an easement. The Town will re-seed as necessary any bare or disturbed soil for erosion control purposes.

D. Storm Inlet Design

1. Drop inlets shall be sized and spaced such that a minimum of one half of the travel way in each direction shall be free from flooding at the inlet design flow.
2. To properly drain sag vertical curves, it is required on roads classified as minor arterial or higher to place three (3) inlets on each side of the road; one (1) inlet at the low point and one (1) flanking inlet on each side of the low point. The flanking inlets shall be placed so that they will limit the spread in the low gradient (flatter) approaches to the sag point and will act in relief of the sag inlet should it become clogged.
3. Drainage flowing in street gutters shall be intercepted 100%, at design flow, prior to entering an intersection with another public street.

4. Inlets which have bypass flows shall be clearly marked on the plans and bypass flow must be included in the total gutter flow contributing to the next downstream inlet.
5. Downstream flow for drop inlets in streets and parking areas shall be computed using the rational method and applying a rainfall intensity of four (4) inches per hour. Design flow for grate inlets located near structures that could be damaged by flooding shall be computed using the 100-year storm and assuming 50% blockage of the grate. Design flow for all other grate inlets shall be the same as street inlets but must assume 50% blockage.

E. Stormwater Conveyance Channels

1. Channel adequacy, hydraulic capacity, maximum velocities, channel linings, and other related design variables shall be determined by the procedures outlined in the *Virginia Stormwater Management Handbook*, or by approved computer software.
2. All open channels shall be designed to contain the ten (10) year storm with six (6) inches of freeboard below the banks of the channel. Contributions of off-site flow from permanently developed properties shall be calculated based upon the two (2) year fully developed flow (undetained) from such properties. Plans shall account for overland relief resulting from less frequent events.
3. Unless otherwise approved, the need, type, and dimensions of lining for erosion control shall be based on the velocity and depth of flow associated with the ten (10) year event.
4. Maximum side slope for grass lined conveyance channels shall be three-to-one (3:1) (H:V) with a minimum longitudinal slope of 2%.

F. Stormwater Quantity

1. To protect downstream properties and receiving waterways from flooding, the ten (10) year post-development peak rate and velocity of runoff from the land development shall not exceed the two (2) year pre-development peak rate of runoff.
2. To protect downstream properties and receiving waterways from channel erosion, the two (2) year post-development peak rate and velocity of runoff from the land development shall not exceed the two (2) year pre-development peak rate and velocity of runoff.

3. If the land development is in a watershed for which a hydrologic and/or hydraulic study has been conducted or a stormwater model developed, the Town Engineer and Director of Public Works may modify the requirements of items one (1) and two (2) above so that runoff from the land development is controlled in accordance with the findings in the study or model or to prevent adverse watershed storm flow timing, channel degradation, and/or localized flooding problems.
4. The Town Engineer and Director of Public Works may also require that the plan include additional measures to address damaging conditions to downstream properties and receiving waterways caused by the land development.
5. Pre-development and post-development runoff rates shall be verified by calculations that are consistent with accepted engineering practices as determined by the Town Engineer.

G. Stormwater Quality

1. Best management practices shall be designed and sited to capture runoff from the entire land development project area and, in particular, areas of impervious cover within the land development, to the maximum extent practicable.
2. Best management practices as identified in *the Virginia Storm Water Management Handbook* shall be designed to remove the difference between post-development and pre-development total phosphorus loads in cases where post-develop loads exceed pre-development loads.

4. Materials

A. Concrete Pipe

1. Circular reinforced concrete culvert and storm sewer pipe shall be in accordance with ASTM C76 and be Class III minimum.
2. Elliptical reinforced concrete culvert and storm sewer pipe shall be in accordance with ASTM C507.
3. Gasketed joints shall be bell and spigot with rubber gasket seal in accordance with ASTM C443. Tongue and groove joints shall be sealed with mortar or pre-formed flexible sealant per ASTM C990, or other suitable sealant.

B. Corrugated Plastic Pipe

1. Pipe shall be in accordance with AASHTO M294 or ASTM 2306.
2. Pipe shall be joined using a bell and spigot joint meeting AASHTO M252, AASHTO M294, or ASTM F2306. The joint shall be soil-tight and gaskets, when applicable, shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable wrap to ensure the gasket is free from debris. A joint lubricant supplied by the manufacturer shall be used on the gasket and bell during assembly.
3. Fittings shall conform to AASHTO M252, AASHTO M294 or ASTM F2306. Bell and spigot connections shall utilize a spun-on or welded bell and valley or saddle gasket meeting the soil-tight joint performance requirements of AASHTO M252, AASHTO M294, or ASTM F2306.
4. All installation of corrugated plastic pipe shall be per manufacturer's specifications.

C. Drop Inlets

1. Standard drop inlets shall be per VDOT specifications.
2. For drop inlets in shallow conditions, structures shall be consistent with *Standard Details* or shall be a precast or cast-in-place concrete box with a top consistent with *Standard Details*.
3. For drop inlets requiring a manhole frame and cover for access, the manhole frame and cover shall be as manufactured by Neenah Foundry per *Standard Details*. Frames and covers shall be manufactured in the United States.

D. Manholes

1. Storm manholes shall be per VDOT specifications.
2. Frames and covers shall be as manufactured by Neenah Foundry per *Standard Details* or approved equivalent.

5. Inspection and Testing

A. Concrete Pipe

1. Concrete pipe shall be inspected visually during installation by the Director of Public Works or designee.

3. After installation and backfill, all sand, dirt, and debris from the lines shall be flushed prior to inspection.
4. All lines and manholes shall be visually inspected by the Town of Berryville from every manhole by use of video cameras. The cost shall be the responsibility of the Contractor and invoiced as identified on the *Town of Berryville Planning and Zoning Fee Schedule*.
5. The lines shall exhibit a fully circular pattern when viewed from one manhole to the next.
6. Lines which do not exhibit a true and correct line and grade or have obstruction or structural defects shall be corrected to meet these specifications and the barrel left clean for its entire length.

B. Corrugated Plastic Pipe

1. Corrugated plastic pipe shall be inspected visually during installation by the Director of Public Works or designee.
2. Following installation, the contractor shall perform cleaning and video inspection of the installed plastic pipe. The processes listed below shall be followed:
 - a. The video camera inspection must be completed per this manual and by an impartial, qualified and reputable inspector in the presence of a Town inspector. The Town reserves the right to reject an inspector.
 - b. The Contractor shall provide 48 hours' notice to the Town prior to televising any pipe to allow an inspector to be on site.
 - c. A written inspection report accompanied by visual recording shall be provided to the Town. Visual recording shall be digital mp4 format. The written report shall be in both list form and plan view.
 - d. It will be the Contractor's responsibility to demonstrate acceptable joint spacing.
 - e. Deflection visible on the video will be assumed to be greater than 5%. The Contractor has the right to challenge this decision by direct measurement or by the use of a GO-NO-GO Mandrel. The pipe will be rechecked for damage after use of the Mandrel.
 - f. The Contractor must repair all defects found during inspection. A follow-up video camera inspection shall be performed by the Contractor to assure the repairs have been completed satisfactorily.

IV. Water & Sewer

- A. General. A Preliminary Design Report shall be submitted to the Town which shall describe the additions to the water distribution and sewerage collection systems, and at a minimum shall include:

1. Number of units, with the estimates for water usage and wastewater production, and
2. Hydraulic calculations for the proposed water system and existing water system to insure that adequate pressure and volume can be sustained to the new development without reducing pressure or volume in other areas of the existing system, and
3. Hydraulic calculations for the proposed sewerage collection system and all existing lines or pump stations that may be impacted.

B. Design Practices

1. Scope
 - a. This section is included for the clarification, information, and benefit of the engineering design community to act as a guide to the practices of the Town. This section is a compilation of a variety of typical practices to be followed in the layout and design of water distribution and wastewater collection systems of the Town. The information contained in this section must be applied in conjunction with the regulations of the Commonwealth of Virginia Department of Environmental Quality, *Virginia Department of Health Waterworks Regulations* and the other sections of this manual.
 - b. Many criteria listed are minimums. Additional separations and clearances are to be furnished as practical to optimize each design. Attention shall be given to locating utilities so as to facilitate their re-excavation. The Town will consider factors such as depth and magnitude of facility in determining the adequacy of each design, and may relax or increase dimensional requirements accordingly. In general, a design is to be sought which minimizes length of piping and number of appurtenances while providing a system which minimizes maintenance costs.
 - c. Because of the wide variety of situations that arise, it is impossible to address all scenarios. The Town reserves the right to exercise engineering judgement and will have the final decision on the acceptability of design.
2. Water Distribution Design Flows
 - a. Whenever practicable, distribution systems shall be designed to avoid main dead ends. When dead ends are unavoidable, the main size serving that area may be evaluated to determine if the main diameter may be reduced and still meet fire flow and domestic needs. However, at no time may the main be smaller than six (6) inches in diameter.
 - b. Fire Flows. The water distribution system piping and any extensions thereof shall have adequate capacity to supply the normal (average) and peak hour demands of all customers – domestic, public, commercial and industrial – while maintaining a pressure of not less than 30 pounds per square inch (psi) at all points of delivery. In addition, the piping system shall be capable of delivering on the day of maximum customer demand, flows required for fire protection to at least one (1) point within 300 feet

of each building being served or proposed to be served by such system and extension, while maintaining a residual pressure of not less than 20 psi at the point of service. Flows required for fire protection shall be a minimum of 750 gallons-per-minute (gpm) for Single Family Detached Dwelling developments, 1,500 gpm for Attached Residential or Apartment of three stories or less, and 2,000 gpm for Commercial and Industrial developments.

- c. Daily Demands. The following criteria will be used in estimating demands for water and accomplishing hydraulic design of the system.

- i. Average day, maximum day, and peak hour demands to be used in system hydraulic design will be estimated using the following parameters:
- ii. Residential Population
= N = number of dwelling units $\times 2.75$
- iii. Average daily water demand of residential population in gallons per day (g.p.d.)
= $R = N \times 100$
- iv. Average daily commercial and industrial water demand in g.p.d.
= C = number of commercial and industrial employees $\times 100^*$
*NOTE: Appropriate additional water demand allowance shall be made for commercial and/or industrial establishments of types having water demands in excess of 100 g.p.d. per employee.
- v. Average daily school water demand in g.p.d.
= S = number of staff employees and students $\times 20$
- vi. Average daily water demand in g.p.d.
= $A = R + C + S$
- vii. Maximum daily water demand in g.p.d.
= $M = A \times 2$
- viii. Peak hour demand in g.p.m. is calculated using the formula provided in the Waterworks Regulations 12 VAC 5-590-690
= $Q = 11.4 \times N^{0.544}$

- d. Distribution piping design will be based upon providing flows and service pressures in accordance with these standards from the supply design gradient (HGL) furnished by the Town. Hydraulic design of distribution piping will be based on pipe carrying capacities consistent with head losses determined in accordance with the following:

<u>Pipe Diameter</u>	<u>Hazen-Williams Coefficient "C"</u>
6"	100
8"	110
10"	115
12" or greater	120

3. Wastewater Collection Design Flows

a. Tributary Population

- i. Sewer systems, which provide for a complete watershed, shall be designed and sized assuming the entire watershed to be completely developed according to present or planned land use designation, whichever requires the greater capacity.
- ii. Sewer systems initially developed for only a part of a complete watershed shall be sized to provide for the entire watershed. Otherwise, if acceptable to the Town, physical provision shall be made for future increased capacity. Proper modification to allow for the characteristics (i.e. domestic, commercial and industrial wastes, and ground water infiltration) of the area under consideration shall be made.

b. Capacities

- i. In determining the required capacities of sanitary sewers, the following factors shall be considered:
 - (1) Maximum hourly quantity of domestic sewage.
 - (2) Additional maximum sewage or waste from industrial plants and commercial areas.
- ii. New sewer systems shall be designed on the basis of an average per capita flow of sewage from the equivalent population served of not less than 100 gallons per capita per day. Lateral and submain sewers shall be designed for a minimum of 400% of the average flow, main and trunk sewers shall be designed for a minimum of 250% of the average flow, and interceptors shall be designed for a minimum of 200% of the average flow.
- iii. Computations shall use a roughness coefficient (n) in the *Mannings Formula* of 0.014. However, other values may be used for situations where sufficient engineering justification can be demonstrated.
- iv. The 100 gallons per capita per day figure is assumed to cover normal infiltration, but an additional allowance shall be made where conditions are especially unfavorable.
- v. The minimum allowance for flow from single-family detached residences shall be based on 3.5 people per home. For single-family attached residences or dwelling units in multifamily structures, a basis of three (3) people per unit may be used.
- vi. Unless evidence is presented to prove a different flow from industry at ultimate development, the minimum allowance for industrial flow shall be determined by providing an equivalent population of 40 persons per acre or one (1) equivalent population per employee, whichever is the greater, in the industrial area. "Area" shall include the entire area zoned for industry, except public road, street, and highway rights-of-way, flood plains on which construction is prohibited, and "green

zones” separating industrial from residential areas, on which construction is prohibited.

- vii. The minimum allowance for flows from commercial areas shall be determined by providing an equivalent population of 30 persons per acre, or one-half (1/2) equivalent population per employee, whichever is the greater, in the commercial area. “Area” shall include entire area zoned for commercial development, including off-street parking and landscaped areas, but excluding the rights-of-way of public roads, streets and highways, flood plains of streams on which construction is prohibited and “green zones” on which construction is prohibited.

- viii. Sewer size shall not be less than eight (8) inches in diameter, except under the following condition: Laterals serving six (6) connections or fewer on cul-de-sacs or as sidewalk collector lines may be six (6) inches in diameter.

- ix. Minimum Gravity Sewer Slopes
Sewer Size Minimum Slope in Feet per 100 Feet

<u>Nonsettled Sewage</u>	
3 inch	Not Allowed
4 inch	Not Allowed
6 inch	0.49
8 inch	0.40
10 inch	0.28
12 inch	0.22
14 inch	0.17
15 inch	0.15
16 inch	0.14
18 inch	0.12
21 inch	0.10
24 inch	0.08
27 inch	0.067
30 inch	0.058
36 inch	0.046

All sewer shall be nonsettled unless pre-approved by the Town

- x. Minimum flow velocities of 1.3 fps and 2 fps are required for settled and non-settled sewage, respectively.
- xi. Special provisions must be made to protect against internal erosion when flow velocities exceed 15 fps.
- xii. Sewer shall be buried 24” to protect against freezing.
- xiii. In cases where the above criteria are not applicable, an alternate design procedure may be submitted to the Town Engineer and Director of Public Works for approval. A description of the procedure used and justification for the modifications for sewer design proposed shall be included with the Design Analyses and plans submitted for approval.

V. Easements

Where the Town of Berryville permits the construction of water, sewer, or storm water improvements (Town utilities) outside of the public right-of-way, the following shall apply:

- A. Easement must be conveyed to the Town of Berryville. Such easement shall include language and conditions as required by the Town and will be approved by the Town prior to recordation.
- B. Easements shall be located so as to provide access to all parts of the utility without interference from abutting buildings, fences, and other private improvements.
- C. Easements shall not be centered on property lines but shall run parallel to boundary lines to the greatest degree practical. Easements may straddle boundaries, provided that the associated channel or pipeline is offset from the boundary.
- D. Easements must remain clear of buildings, trees, fences, and other improvements, and underground structures other than the designated utility. Fence sections may be erected across an easement section so long as the section contained within the easement is a gate through which personnel and equipment may enter the property.
- E. Landscaping and/or improvements erected within a utility easement that are damaged or destroyed in the course of utility inspection, maintenance, or reconstruction will not be replaced or paid for by the Town of Berryville. The impacted area will be returned to grade and reseeded by the Town.
- F. Easements shall be a minimum of 20 feet in width, however, the Town reserves the right to require wider easements as deemed necessary.
- G. Town utility easements are exclusive. Other utilities may only cross the town's easement, and such crossings must be at or near a 90-degree angle.

VI. Submission of Calculation Data in Digital Format

- A. Engineering calculations used in the design of public improvements shall be submitted to the Town in digital format for review.
- B. Submissions for water system design shall be on a master development plan that includes the locations of the water mains. The plan(s) shall be paper drawings or provided in an AutoCad compatible format. In addition, the plans shall be scale accurate drawings referenced to the North American Datum of 1983.
- C. Submissions for sanitary sewer system design should be provided in Microsoft Excel format or Heastead input/output files.

- D. Submissions for storm drain system and storm water management design should be provided in Microsoft Excel format, or Heastead input/output files, or Soil Conservation Service TRT -20 or 55 format.

VII. Transferring of Pump Station Ownership

- A. Transfer of ownership of a pump station to the Town of Berryville will occur only after final acceptance in writing of a completed project. A project is considered complete for the purpose of transferal when 95% of the structures in the project area have a Certificate to Occupy. See *Section 14 of the Town of Berryville Construction Standards and Specifications* for additional information on transferal/acceptance requirements.
- B. The developer will be responsible for any maintenance as a result of construction defects of said facilities for one year from the date of final acceptance. A maintenance bond may be required.

VIII. Streets and Related Improvements in the Public Right-of-Way

- A. All activity performed in the public right-of-way requires an approved permit from VDOT and the Town of Berryville. VDOT maintains public primary roadways (Business Route 7 and US Route 340). The Town of Berryville maintains public secondary roadways.
- B. All work performed under a permit issued by the Town of Berryville must be performed in accordance with the following as applicable:
 - 1. *Berryville Town Ordinances*
 - 2. *Berryville Construction Standards and Specifications*
 - 3. *VDOT Road and Bridge Standards*, current edition
 - 4. *VDOT Road and Bridge Specifications*, current edition
 - 5. *Manual on Uniform Traffic Control Devices (MUTCD)*, including the *VDOT supplement*, current edition
 - 6. *VDOT Manual on Planting and Irrigation in the Right-of-Way*, current edition
 - 7. *VDOT Land Use Permit Manual*, current edition
 - 8. *Virginia Stormwater Management Handbook*, current edition
- C. Right-of-way dedication and acceptance of public streets not maintained by VDOT shall be evidenced by authorized signatures on the deed of dedication or other instrument deemed acceptable by the Town of Berryville.
- D. In order to obtain guarantee of performance to assure timely completion and competent construction of physical improvements, the applicant is required to post a bond or other acceptable surety as identified in Article VII. *Performance*

Surety, of the Town of Berryville Subdivision Ordinance and Article III. Section 314.8 Construction and Bonding of the Town of Berryville Zoning Ordinance.

- E. Performance bonds shall be submitted to the Town of Berryville for review and approval for those streets in the Town's system (secondaries).
- F. Dedication and acceptance of public streets shall be in compliance with VDOT *Guide to Highway System Changes, 2023*, current edition.
- G. The following chart identifies requirements for right-of-way widths:

ROW WIDTH	ADT	Design Speed	Road Width (Parking 2 sides)	Curb & Gutter	Buffer Strip	Sidewalk Width
55'	Up to 2,000	25 mph	30'	CG-6	5'	5'
65'	2,001 to 4,000	25 mph	36'	CG-6	7'	5'

H. Street Lighting

All outdoor lighting fixtures shall be shielded to prevent glare on adjacent properties or rights-of-way. No lighting fixtures shall exceed twenty-five (25) feet above the ground in height.

- 1. The placement of Residential street lights shall follow the guidelines below:
 - a. At intersections:
 - i. In order to provide lighting within the intersection area of two local streets, a light ball shall be installed on one corner of any intersection or opposite the intersection in the case of a T-intersection.
 - b. Within cul-de-sac bulbs:
 - i. A light pole will be installed within the cul-de-sac bulb when the cul-de-sac street is longer than 200 feet measured from the intersection of the intersection local streets to the center of the cul-de-sac bulb.
 - c. Mid-block streetlights:
 - i. A minimum number of mid-block streetlights shall be installed in order to achieve a desired pole spacing of approximately 250 feet. The maximum spacing between lights should not exceed 300 feet and the minimum spacing between lights should not be less than 200 feet unless otherwise approved by the Town Engineer and the Director of Public Works. Lights should desirably be located on or near property lines and not in front of structures when possible.
- 2. Street lights on collector streets with rights-of-way of 60 feet or more with average daily traffic of 2,001 vehicles or more shall maintain separation based on

the guidelines established above. Cobra head fixtures may be installed on these roadways.

3. Commercial street lighting will be reviewed as part of the site plan review and based on guidelines established above.

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Section 3

Water Mains and Appurtenances

I. General

- A. This section includes construction of distribution system mains, service laterals, and other associated appurtenances as well as testing and disinfection requirements. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.
- B. All mains shall be cement mortar lined ductile iron with a minimum diameter of six (6) inches. The pipe shall have rubber gasket push-on joints and all fittings shall be mechanical joint except as approved by the Town. Where special fabrication of ductile iron pipe is required to fit water mains within vaults, structures, and buildings, the Contractor shall submit fully dimensioned drawings showing the piping in full detail with exact locations, dimensions, and schedules of all pipe, fittings, hangers, supports, and appurtenances before starting fabrication of the pipe and/or fittings. Where special fittings are required, they shall be shown in detail with all necessary dimensions. The design of such installations shall provide adequate space within the housing and around the fittings to allow easy disassembly of pipe sections or other appurtenances.
- C. Water mains shall be located a minimum of three (3) feet from the gutter of the streets with curb and gutter, or three (3) feet within the pavement edge of streets without curb and gutter. Whenever practical, sewer mains shall be located in the center of the street.
- D. A minimum ten (10) foot horizontal separation (outside to outside), or six (6) feet horizontal separation with at least eighteen (18) inches' vertical separation from bottom of water to top of sewer, shall be provided between all water lines and sanitary sewer lines. Should conditions require the water and sewer lines to be installed in the same trench, the water line must rest on a shelf of undisturbed earth to one side of the sewer with at least eighteen (18) inches of vertical separation between the top of the sewer line and bottom of the water line. Approval from the Town Engineer and Director of Public Works must be acquired before same trench installation is permitted.
- E. Typical minimum cover of four (4) feet is to be provided for water mains. For short distances, reduced cover of as little as three (3) feet may be approved so as to preclude locating water below a crossing utility.

II. Mains

A. Ductile Iron Pipe

1. Ductile iron pipe shall be manufactured in accordance with ANSI A21.51/ AWWA C151. All pipe shall have a minimum Class 52 thickness.
2. End designs shall conform to the ANSI/AWWA C 111/ A21.11 – “Rubber Gasket Joints Ductile Iron and Gray Iron Pressure Pipe and Fittings”. Push-on joints shall be “Tyton,” “Super Bell Tite” or “Fast-Tite” joint, or approved equal.
3. The inside of the pipe shall be cement lined in accordance with ANSI/AWWA C 104/ A21.
4. Flanged connections shall only be permitted where indicated on construction plans and pre-approved by the Town, and shall conform to ANSI/AWWA C115/A21.15.

B. Backfill and Bedding

1. Select Backfill

- a. There shall be 24 inches of select backfill above the stone aggregate which shall be compacted in eight-inch lifts. The maximum particle size of the material shall be no greater than one (1) inch and shall be compacted to 95% of maximum density.
- b. Above the select backfill, material shall be deposited in lifts not to exceed two (2) feet, and have a compaction to 95% of maximum density.
- c. A six (6) inch wide magnetized locating ribbon labeled “WATER LINE BURIED BELOW” shall be placed above the select fill.
- d. No rock shall be used in the select backfill. Any rock used *above* the select backfill shall be no larger than six (6) inches in diameter.
- e. A #12-gauge wire shall be placed next to the PVC (C909) line during installation of the main. This wire must maintain positive continuity at all times.

2. Stone Bedding

1. For excavation in dirt or clay, there must be six (6) inches of stone under and over the pipe.
2. For excavation through rock, there shall be twelve (12) inches of stone under and over pipe in rock trenches.

C. Fittings

1. All fittings shall be cast of ductile iron, and shall conform to ANSI/AWWA C153/A21.53. Fittings shall be made with mechanical joint ends in accordance with ANSI/AWWA C 111/A21.11.
2. A sufficient number of bolts, nuts, glands, and gaskets shall be provided for each fitting. These accessories shall be of the proper dimensions for the size pipe. The bolts shall be made of high strength low alloy steel in accordance with ANSI/AWWA C 111/ A21.11.
3. The cement lining shall conform to ANSI/AWWA C 104/A21.4.

II. *Handling Ductile Iron Pipe and Fittings*

- A. It shall be the responsibility of the pipe manufacturer to thoroughly inspect each length of pipe according to the applicable ANSI and AWWA standards and other requirements as set forth in these specifications.
- B. Ductile iron pipe, fittings, valves, and accessories shall be handled in strict accordance with the provisions of ANSI/AWWA C 600, so as to ensure that these items are sound, undamaged, and entirely suitable in all aspects to the specified requirements of each particular fitting, pipe, and accessory. Particular care shall be taken not to injure either the coating, the pipe, or threads. Equipment, tools, and methods used in loading, reloading, unloading, hauling, and laying pipe and fittings shall be such that no damage is done to the pipe, fittings, or coatings. Where hooks are used for lifting, they shall have broad, well-padded contact surfaces. Repair of defective or damaged coatings or linings shall be made under the direct supervision of a representative of the pipe manufacturer. No field repair work may be done on any damaged pipe coating or lining without the prior approval of the Director of Public Works and Town Engineer. Any bituminous pipe coating that is damaged by shipment or by the Contractor shall be repaired prior to installation or placing of any backfill or hanging within hangers. Repairs shall be made by removing all damaged coating, then wire brushing to expose the metal and applying two coats of coal tar coating material of a type and quality equal to that used originally for the bituminous coating of the pipe.
- C. The cutting of pipe for closure pieces or for other reasons shall be done in a neat and workmanlike manner by a method that will not damage the pipe or its lining. Sections shall be thoroughly swabbed or cleaned of all foreign matter before being installed into the system and shall be kept clean during and after installation. Before installation of any pipe or fitting, each piece shall be inspected for defects. All defective, damaged, or unsound pipe or fittings shall be rejected.

III. Installation

- A. Pipe laying shall be conducted in strict accordance with the provisions of ANSI/AWWA C 600. The lay shall proceed with the bell end of the pipe pointing in the direction of the next pipe joint to be laid. Each pipe shall be laid true to line and grade and in such manner as to form a close concentric joint with the adjoining pipe and to prevent sudden offsets of the flow line. Proper precautions shall be taken to keep the interior of the pipe free of all dirt and superfluous materials of every description as the work progresses.
- B. Trenches shall be kept free from water until the pipe jointing is complete. At all times when work is not in progress, open ends of pipe and fittings shall be securely closed to the satisfaction of the Town so that no trench water, earth, or other substance will enter the pipe or fittings. Adequate backfill shall be deposited on the pipe to prevent floating. Any pipe which has floated shall be removed from the trench and be re-laid.
- C. All tees, bends, and dead ends shall be restrained by means of concrete blocking and be installed with Megalug™ retainer gland or approved equal.
- D. ScotchMark Electronic Marker System (EMS 1257) or approved equal shall be included with the installation of all water mains. The markers shall respond to a frequency of 145.7 kHz, with placement as follows:
 - 1. 50-foot intervals on mains, and
 - 2. Each bend, and
 - 3. The end on each joint that is deflected and each “T”, and
 - 4. Any additional location directed by the Town of Berryville.
- E. A six (6) inch wide magnetized location ribbon labeled ”WATER LINE BURIED BELOW” shall be installed above the select backfill.
- F. A #12 gauge wire shall be placed next to all main lines and service laterals. The wire shall maintain continuity at all times.

V. Separation of Water Lines and Sewers

- A. General – The following factors shall be considered in providing adequate separation:
 - 1. Materials and types of joints for water and sewer pipes.
 - 2. Service branch connections into the water line and sewer lines.

3. Space for repairs and alterations of water and sewer pipes.
 4. Avoiding offset of pipes around manholes.
- B. A minimum ten (10) foot horizontal separation (outside to outside), or six (6) feet horizontal separation with at least eighteen (18) inches' vertical separation from bottom of water to top of sewer, shall be provided between all water lines and sanitary sewer lines. Should conditions require the water and sewer lines to be installed in the same trench, the water line must rest on a shelf of undisturbed earth to one side of the sewer with at least eighteen (18) inches of vertical separation between the top of the sewer line and bottom of the water line. Approval from the Town Engineer and Director of Public Works must be acquired before same trench installation is permitted.
- C. Parallel Installation
1. Normal Conditions – Water lines shall be laid at least ten (10) feet horizontally from a sewer or sewer manhole wherever possible. The distance shall be measured edge-to-edge.
 2. Unusual Conditions – When local conditions prevent a horizontal separation of ten (10) feet, the water line may be laid closer to a sewer or sewer manhole provided that:
 - a. The bottom (invert) of the water main shall be at least eighteen (18) inches above the top (crown) of the sewer. Should conditions require the water and sewer lines to be installed in the same trench, the water line must rest on a shelf of undisturbed earth to one side of the sewer with at least eighteen (18) inches of vertical separation between the top of the sewer line and bottom of the water line. Approval from the Town Engineer and Director of Public Works must be acquired before same trench installation is permitted.
 - b. The sewer manhole shall be of watertight construction and tested in place.
 - c. Where vertical separation of at least eighteen (18) inches cannot be maintained between the bottom of the waterline and the top of the sewer, the sewer line shall be constructed of water pipe conforming to AWWA C 900 and shall be pressure tested in place, as specified in AWWA standard C 600, with a minimum test pressure of 30 pounds per square inch (psi). Leakage is not permitted during the AWWA C600 pressure testing.
 - d. When sanitary sewers cross over water lines, the sewer joints must also be centered at the point of crossing so that joints are equidistant and as far as possible from the water line.
 - e. Sewer Manholes and Drainage Structures —A minimum of ten (10) feet of separation shall be provided between water pipes and sanitary sewer manholes. Where this distance cannot be maintained, the manhole shall be of watertight construction and tested in place. A minimum of six (6)

feet of separation shall be maintained between sewer manholes and drainage structures.

D. Crossings

1. Normal Conditions – Water lines crossing sanitary and storm sewers shall be laid to provide a separation of at least eighteen (18) inches between the bottom of the water line and the top of the sewer.
2. Unusual Conditions – When local conditions prevent a vertical separation as described, or where waterline must cross below sanitary sewers, the sewer line shall be constructed of water pipe conforming to AWWA C 900 and shall be pressure tested in place, as specified in AWWA standard C 600, with a minimum test pressure of 30 psi. Water lines passing under sewers shall, in addition, be protected by providing:
 - a. A vertical separation of at least 24 inches between the bottom of the sanitary sewer and the top of the water line.
 - b. Adequate structural support for the sewer to prevent excessive deflection of the joints and the settling on and breaking of the water line.
 - c. The length of the water line be centered at the point of the crossing so that joints shall be equidistant and as far as possible from the sewer.
 - d. When conditions do not allow for water lines to pass over storm sewers, a minimum of eighteen (18) inches clearance shall be maintained from top of water line to bottom of storm sewer.
 - e. If conditions do not allow for separation during installation around existing structures, bridging or other methods of protecting water quality and pipe integrity may be submitted and considered for approval by the Town Engineer and Director of Public Works. New construction must maintain required separations.
3. Stream crossing and highway crossings shall be installed as shown in the *Standard Details* unless otherwise specified. The crossing shall be made in such a manner to minimize erosion and blockage of the stream flow. Backfill under rip-rap shall be compacted to 90% density.

VI. Testing and Disinfection of Water Lines

A. General

The Contractor will supply the water used for flushing, disinfection, and testing. Town water may be available on a case-by-case basis with prior approval from

the Director of Utilities and Director of Public Works. If Town water is used, the water shall be metered and the contractor shall pay the Town for its cost. Filling of water lines may not be performed until permission has been obtained from the Director of Public Works and Director of Utilities. The contractor is not permitted to operate valves on any existing water line.

B. Testing

1. All new water mains and hydrant connections shall be subject to a hydrostatic pressure test after thrust restraints have been installed, the line has been backfilled, all water house connections have been installed (lateral from main to meter box), and at least three (3) days after the last concrete reaction anchor has been poured. Testing shall be in accordance with AWWA C-600. Water mains shall be filled with clean water at a velocity of approximately one (1) foot per second (fps) while necessary measures are taken to eliminate all air. A hydrostatic pressure of not less than 150 psi or 150% of normal operating pressure, whichever is greater, shall be maintained for two (2) hours. Lines of different sizes shall be tested separately. Hydrants shall be in the closed position. All high points in the portion of the system under test shall be vented and air shall be expelled from the system prior to beginning the test.
2. At the conclusion of the pressure test, the volume of the makeup water required to refill the pipeline shall be determined by measurement with a displacement meter or by pumping from a vessel of known volume.
3. All visible leakage must be eliminated by the contractor, regardless of the amount. Should test results show displacement, damage, or leakage in excess of the allowable amount (see table below for representative values), the contractor shall repair the displacement and damage to eliminate the leakage. The contractor shall retest until the specified conditions are met to the satisfaction of the Director of Public Works and Town Engineer.

Allowable Leakage per 1,000 feet of Pipeline – gph
Nominal Pipe Diameter – in

Psi	4	6	8	10	12	16
250	0.47	0.71	0.95	1.19	1.42	1.90
225	0.45	0.68	0.90	1.13	1.35	1.80
200	0.43	0.64	0.85	1.06	1.28	1.70
175	0.40	0.59	0.80	0.99	1.19	1.59
150	0.37	0.55	0.74	0.92	1.10	1.47

The above table is presented for convenience only. Please refer to AWWA C600 for complete up-to-date table.

C. Disinfection

1. After leakage testing, and before final inspection of the completed systems, water mains shall be flushed and then disinfected in accordance with ANSI/AWWA C-651 standards. All disinfection procedures and final testing shall be carried out under the observation of a utility inspector approved by the Town. Either the tablet method or continuous feed method shall be used.
 - a) The tablet method can only be used if the pipes and appurtenances are kept clean and dry during construction. The mains should be filled at the rate of one (1) fps or less. Water must remain in the main for a minimum of 24 hours when the water temperature is 41° Fahrenheit (5° Celsius) or more. If the water temperature drops below this then the water must remain a minimum of 48 hours. A detectable chlorine residual should be found at each sampling point after the prescribed contact time.
 - b) If the continuous feed method is to be used, pre-flushing shall be accomplished at a flow velocity of not less than 2.5 fps. All valves, hydrants, and water house connection shall be operated during this procedure. Clean water shall be flushed throughout the system until there is no trace of cuttings, oil, dirt, or other foreign matter flowing out of the pipe. The water shall be chlorinated so that after the 24 hour contact time, a free chlorine residual of not less than ten (10) parts-per-million (ppm) is maintained.
2. Final flushing will occur as soon as practically possible after the required contact time to prevent damage to the pipe lining or to prevent damage. When the chlorine residual has been reduced to within the range of 0.2 and 2.0 ppm, bacteriological samples can be collected.
3. Water samples for bacteriological analysis shall be taken by the contractor at regular intervals not exceeding 2,000 feet, as approved by the Town Engineer and Director of Public Works, witnessed by the utility inspector, and analyzed by a certified laboratory. Two satisfactory bacteriological samples, collected 24 hours apart, must be obtained prior to placing the lines in service. Satisfactory samples are those that indicate no presence of coliform bacteria. If contamination is found in one or both sets of samples, the entire disinfection and bacteriological sampling procedure must be repeated.
4. Water flushed from the mains will have to be dechlorinated with a neutralizing chemical to prevent environmental damage. The recommended neutralizing chemicals and procedural guidelines for dechlorination are explained in ANSI/AWWA C-651 standards. The contractor shall be responsible for the proper application of the neutralizing chemicals to reduce the chlorine residual to a non-detectable level. The contractor shall assume full responsibility for the discharge of all water used during any flushing, and

shall be responsible for any damage to public or private property or environmental damage including, but not limited to, vegetation, trees, streams, ponds, and lakes.

VII. Service Laterals

A. General

1. All material used shall meet or exceed ANSI/AWWA C800 standards.
2. All taps made on ductile iron mains shall be made direct, without a saddle, unless otherwise specified or approved by the Town Engineer and Director of Public Works.
3. Where applicable, and when tapping PVC mains, a Ford Style FS202 or approved equal shall be used.
4. All water services shall be installed as shown in Specification Detail section.
5. Service lines shall be type 200 psi HDPE copper tubing sized piping conforming to ANSI/ASTM standard specifications. The line shall be one continuous piece from corporation stop to meter setter and the line will be equal to the size of the corporation stop. Line must be accompanied by a twelve-gauge copper tracer wire.
6. Meter boxes will be set on the street side at the property line, unless otherwise approved by the Town Director of Public Works.

B. ¾-Inch Water Service

1. Corporation stop shall be ¾ inch ball style and conforming to the requirements of the AWWA Standards. Connection at the corporation stop shall be compression type.
2. The meter box shall be eighteen (18) inches in diameter, and 30 inches in depth, with an eighteen (18) inch diameter frame and eleven and a half (11½) inch diameter lid. The frame and lid shall be made of cast iron and lid shall include the FP cast iron plug where applicable.
3. The meter setter shall consist of a copper setter, inlet angle valve, and outlet angle ASSE approved top loading dual check valve.

C. One (1) Inch Water Service

1. Corporation stop shall be one (1) inch ball style and conform to the requirements of ANSI/AWWA Standards. Connection at the corporation stop shall be compression type.

2. The meter box shall be eighteen (18) inches in diameter and 30 inches in depth, with an eighteen (18) inch diameter frame and eleven and a half (11½) inch diameter lid. The frame and lid shall be made of cast iron and lid shall include the FP cast iron plug where applicable.
3. The meter setter shall consist of a copper setter, inlet angle valve, and outlet angle ASSE approved top loading dual check valves

D. 1½ and Two (2) Inch Water Services

1. Service shall be taken off the main by means of a wet tap or an anchoring tee, with a six (6) inch branch and a six (6) inch branch valve. A tapped mechanical joint plug shall be used in the downstream side of this valve, with a male IPT to compression adapter. Connection at the corporation stop shall be compression type.
2. The meter shall be set in a custom box with a custom meter setter consisting of a flanged angle valve on the inlet and an ASSE approved dual check valve on the outlet. The setter shall include a bypass with ball valve and locking cap.
3. Meter vault shall conform to the dimensions shown in the Standard Details, or as approved by the Town Director of Public Works.

VIII. Backflow Prevention Assemblies

- A. Each metered service connection must have an ASSE approved backflow prevention device installed for service line protection. The Town Director of Public Works and Director of Utilities must approve the type of device submitted based on the degree of hazard of the planned use.
 1. Metered service lines with a low degree of hazard must be provided with a double-check valve backflow prevention assembly that is tagged, stamped, or embossed to indicate it meets ASSE Standard No. 1015.
 2. Metered service lines with a high degree of hazard must be provided with a reduced pressure zone device that is tagged, stamped, or embossed to indicate it does meet ASSE Standard No. 1013.
 3. Backflow prevention devices that require yearly inspection must be installed above grade and/or in a location not subject to flooding. The location of a backflow prevention device is to be approved by the Town's Director of Utilities.
- B. Each fire line service connection must have an ASSE approved backflow prevention device with leak detector installed for fire service line protection. The

Town Director of Public Works and Director of Utilities must approve the type of device submitted based on degree of hazard of the planned fire service.

1. Fire lines with a low degree of hazard (no additives or antifreeze) must be provided with a detector double check backflow prevention assembly with ASSE Standard No. 1048 identification made part of the device.
 2. Fire lines with a high degree of hazard (additives or antifreeze) must be provided with a reduced pressure assembly with ASSE Standard No. 1047 identification made part of the device.
- C. All detector (metered) assemblies are required to have a meter that is compatible with the Town's meter reading device.
- D. All backflow prevention devices must be inspected annually by the owner and a report submitted to the Town's Director of Utilities for review. Residential premises without secondary uses, exclusive of multifamily that present a low degree of hazard (no additives or anti-freeze), are not required to submit annual reports.

IX. Acceptance of Improvements

- A. A written request to the Director of Public Works is required for necessary inspections for acceptance of improvements. The request shall include as-built drawings, easements, and other pertinent information as deemed necessary by the Department of Public Works and the Town's Engineer. A response from the Department of Public Works and Community Development Director after review will be forwarded to the applicant outlining deficiencies or for approval of the project.

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Section 4

Valves and Hydrants

I. General

- A. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.
- B. Valve or hydrant manufacturer shall be regularly engaged in the design, manufacture, and maintenance of valves or hydrants of the type specified, and shall have furnished valves or hydrants of the same general design, type, and comparable size specified herein, which have been used and proved satisfactory under similar test, service, and operating conditions for at least five years. The manufacturer shall furnish satisfactory evidence of adequate facilities for furnishing parts for repairs and for maintenance of the hydrants or valves furnished. Unless otherwise indicated, valves shall be designed to provide tight shut-off at the following pressure differential: 250 pounds per square inch (psi) upstream and zero psi downstream in either direction. Design flows shall be a minimum fifteen (15) feet per second (fps) for opening and closing.
- B. All valves furnished through twelve (12) inches shall be resilient wedge-valves with non-rising stems. Valves larger than twelve (12) inches shall be butterfly type unless otherwise required by the Town Engineer and Director of Public Works.
- C. A valve box shall be provided for each buried valve. Boxes shall be screw type. Telescoping type are prohibited. Extension stems shall be provided for valves where the operating nut is greater than four feet (4'-0") below grade. The stem shall extend to a minimum of two feet (2'-0") below finished grade.
- D. Unless otherwise specified herein, four (4) inch and larger valves and all hydrants shall have mechanical joint ends.

II. Gate Valves

A. General

- 1. Gate Valves shall be manufactured to meet or exceed all the requirements of ANSI/AWWA C509-01 or ANSI/AWWA C515 Standard for resilient wedge ductile iron gate valves.
- 2. The manufacturer must provide a ten (10) year warranty against defective material and workmanship.

III. Specifications

A. Valves shall meet the following minimum design criteria:

1. Valve body shall be manufactured of ductile iron and have a working pressure of 250 psi.
2. All ferrous components shall be ductile iron: body, wrench nut, stuffing box, and valve wedge.
3. The marking "DI" or "ductile iron" shall be cast into the valve body along with "250W" or "250 psi".
4. The valve wedge shall be ductile iron encapsulated with nitrile rubber. The wedge shall be symmetrical and seal equally well with flow in either direction.
5. Valves shall have a fusion-bonded epoxy coating complying with ANSI/AWWA C550 Standard applied electrostatically prior to assembly, inside and out, for maximum corrosion resistance.
6. The valve shall have a smooth full diameter waterway with no recesses to trap debris or obstruct flow.
7. Valve stem shall be high strength corrosion resistant bronze. Stem shall be sealed by three O-rings. The top two O-rings shall be replaceable with valve fully open and while subject to full rated working pressure. O-rings set in a cartridge shall not be allowed.
8. Sealing gaskets shall be pressure energized O-rings.
9. Torque minimizing thrust washers must be installed with one (1) above and one (1) below the thrust collar to assure trouble free operation of the valve.
10. Valves shall conform to UL Solutions and Factory Mutual Research Corporation standards.
11. Bolting materials shall develop the physical strength requirements of ASTM A307 Standard, and may have either regular square or hexagonal heads with dimensions conforming to ANSI B18.2.1 Standard. Metric size socket head cap screws are not allowed. Bolts and nuts securing valve bonnets, stems, and operating nuts shall be stainless steel.
12. Operating nut shall have four flats at stem connection to assure even input torque to the stem.

13. Flanged valves shall be OS&Y 125-pound flanges. The manufacturer shall be able to furnish 250-pound flanges upon request.

B. Installation

1. Valves shall be carefully erected in their respective positions and free from all distortion and strain with stems vertical. The valve box shall be set over the operating nut and shall have its top flush with the final surface. The valve box top section shall overlap the lower section by at least six (6) inches.
2. Restraint of valves shall be performed by the Contractor in accordance with the Standard Details or as specified by the Director of Public Works and the Town Engineer.
3. Where valves occur on the end of the pipeline, a mechanical joint plug shall be placed and secured in the exposed bell before backfilling the trench.
4. The contractor shall backfill and compact under and around valve boxes to ensure no vertical loads are transmitted to the valve operators.
5. All valves shall be installed with Megalug™ retainer gland or approved equal.

IV. Tapping Sleeves

A. Mechanical joint tapping sleeves meet the following design criteria:

1. Sleeves shall be the split type mechanical joint with side and end gaskets, manufactured of ductile iron.
2. Sleeves shall conform to all applicable requirements of ANSI/AWWA C110 A21.10, ANSI/AWWA C111 A21.11, and ANSI B16.11 Class 125 flange.
3. When sleeves are to be installed on pipe that is larger than twelve (12) inches, field verification by the contractor of the existing pipes outside diameter shall be required before ordering said sleeve.
4. Stainless steel tapping sleeves will be considered where the existing main is PVC pipe or cast iron of irregular outside diameter.

V. Fire Hydrants

A. General

1. Fire hydrants shall be the dry-barrel type manufactured to meet or exceed all the requirements of ANSI/AWWA C502 Standard.
2. Drainage capability must be provided for fire hydrant weep holes. If areas of high water table are encountered, the contractor shall contact the Director of Public Works or the Town Engineer to relocate the hydrant to prevent possible cross contamination.
3. Fire hydrants shall be painted in accordance with *Standard Details*.
4. The manufacturer must provide a ten (10) year warranty against defective material and workmanship.
5. Fire hydrants shall be located as follows:
 - a. At street intersections and at intermediate locations where deemed necessary by the Town Engineer and the Director of Public Works and/or the State Fire Marshall's Office after consultation with the Fire Chief.
 - b. At the end of all cul-de-sacs in a location determined by the Town. If a hydrant is determined to be unnecessary by the Director of Public Works and the Town Engineer, a "blow-off" shall be installed.
 - c. No closer than 50 feet and no further away than 100 feet of any standpipe or sprinkler system fire department connections.
 - d. As required by the following schedule according to use group. The distance shall be measured along an unobstructed path around the structure to the most remote part of the structure that the hydrant will serve.

Industrial Buildings	250 feet
School Buildings	300 feet
Commercial, Church and Office Buildings	350 feet
Apartments, Multifamily, and Town Houses	250 feet
Single-Family Detached and Two-Family Attached Dwellings	400 feet
 - e. All hydrants shall be a minimum of 50 feet away from any buildings other than single-family detached and two-family attached dwellings unless deemed appropriate by the Town Superintendent.
 - f. In no case shall the distance between fire hydrants, measured along the centerline of accessible streets, be greater than 600 feet.
6. No landscaping shall be permitted within five (5) feet of a fire hydrant, with the "no landscape" area indicated on the plat.

7. Fiberglass hydrant marker flags shall be installed by the developer and approved by the Director of Public Works.

B. Specifications

Hydrants shall meet the following minimum design criteria:

1. Hydrant shall have a rated working pressure of 200 psi with a test pressure of 400 psi.
2. The main valve closure shall be of the compression type, opening against the pressure and closing with the pressure.
3. Traffic feature to be designed so that the nozzle section of the hydrant can be rotated (by degree) to a full 360° circle during field installations, if necessary.
4. The main valve opening shall not be less than 5 ¼" and be designed so that seat, drain valve mechanism, internal rod, and all working parts can be removed through the top of the hydrant without disturbing the ground line joint or the nozzle section of the hydrant.
5. The bronze seat shall be threaded into mating threads of bronze for easy field removal.
6. The draining system of the hydrant shall be bronze and activated by the main stem without the use of auxiliary rods, toggles, pins, etc. The drain mechanism shall be completely closed after no more than three turns of the operating nut, allowing throttling of the hydrant as needed. A minimum of two inside ports and four drain port outlets must be provided to ensure positive drainage when closed. Drain shut-offs shall be by direct compression closure.
7. The operating nut, main stem, coupling, and main valve assembly shall be capable of withstanding input torque of 200 ft/lbs in opening or closing directions.
8. There shall be an internal top housing with triple O-rings to seal operating threads from the waterway and accommodate an antifriction washer.
9. Nozzle sections of the hydrant shall be designed to permit field replacement of damaged threads without special tools, excavation, or disturbing the ground line joint. Bronze nozzles are to be locked into the hydrant barrel with locking lugs and be sealed by heavy duty O-rings. The operating nut size, as well as hose and pumper threads, shall conform to National Standard Specifications.
10. Hydrants shall conform to UL Solutions UL 246 standards and Factory Mutual Research Corporation standards.

11. The maximum friction loss through the hydrant shall not exceed 2.8 psi at 1000 gallons per minutes (gpm) through the pumper nozzle. The flow test and certification of this feature shall be conducted by an independent testing laboratory, and be in accordance with ANSI/AWWA C502-94 standard. The records of all tests performed shall be made available to the Town upon request.
12. The standard depth of bury shall be a minimum of four (4) feet to a maximum of seven (7) feet without the use of extensions. When the water main is deeper than the standard depth, the use of quarter and eighth bends between the tee at the main and the fire hydrant will be required to bring it to the proper grade.

C. Installation

1. Fire hydrants shall be installed in accordance with the Standard Details, where indicated on the plans, set plumb, and with bury line at finished grade. The pumper outlet shall face the street.
2. Bollards shall be installed as shown on plans or as directed by the Town.
3. Every effort shall be made to avoid the use of barrel extensions, and such extensions shall only be used when approved on a case-by-case basis by the Director of Public Works and the Town Engineer.
4. A six (6) inch valve shall be provided in the lead of each hydrant. This valve shall be restrained to the main by an anchoring tee or anchoring coupling. Where a hydrant is used to terminate the main, restraint of this valve shall be by means of a dead-end anchor cast around the main.
5. All privately owned hydrants shall have stenciled on the hydrant the word "PRIVATE" to identify the unit as a privately owned hydrant. The stenciling shall be sized and placed to be easily seen from the direction of hydrant access.
6. Hydrants shall be located no more than ten (10) feet from the face of curb and at least ten (10) feet from any entrance or driveway.
7. Prior to acceptance, hydrants shall be flow tested under Town supervision to assure compliance with the *Town of Berryville Construction Standards Manual*. The flow report shall be submitted to the Town Engineer and the Director of Public Works for review and approval.

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Section 5

Sanitary Sewer

I. General

- A. This section includes requirements for construction and testing of all sanitary sewer piping. The installation of sanitary sewers will be in accordance with this section of the specifications and applicable standard details. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.
- B. Whenever practical, sewer mains shall be located in the center of the street. Water mains shall be located a minimum of three (3) feet from the gutter of the streets with curb and gutter; or three (3) feet within the pavement edge of streets without curb and gutter. A minimum ten (10) foot horizontal separation (outside to outside), or six (6) feet horizontal separation with at least eighteen (18) inches' vertical separation from bottom of water to top of sewer shall be provided between all water lines and sanitary sewer lines. The water line must rest on a shelf of undisturbed earth to one side of the sewer.

Manholes shall be placed at the intersection of all mains, at all changes in horizontal or vertical alignment, at a maximum of 300 foot intervals, where pipe size changes occur, and at any other locations as directed by the Town Engineer and the Director of Public Works. Where a temporary or permanent termination of the main is proposed, a manhole shall be provided.
- C. A minimum separation of 50 feet must be maintained between sanitary sewer and any well producing potable water.
- D. A minimum separation of fifteen (15) feet must be maintained between sanitary sewer and all existing or proposed buildings.
- E. Sewers shall be extended to beyond the limits of all proposed improvements prior to final grading and/or street construction.
- F. If a manhole is constructed, a channel may be required to provide for future growth.

II. Materials

- A. All pipe shall be of the same material and shall be furnished by the same manufacturer. Each pipe length and all fittings shall be clearly marked at intervals of five (5) feet or less with the manufacturer's name or trademark and pipe type.

B. PVC Sewer Pipe

1. The pipe and fittings shall be manufactured in accordance with ANSI/AWWA C900/C905 for Polyvinyl Chloride (PVC) pressure pipe and fittings, utilizing a rubber gasketed joint to provide for expansion and contraction. The pipe shall have a minimum DR ratio of 25 with cast-iron-pipe-equivalent Outside Diameters (ODs).
2. The pipe shall be joined with an integral bell-and-spigot type rubber gasketed joint. Each integral bell joint shall consist of a formed bell complete with a single rubber gasket. Gaskets shall conform to ASTM F-477. All fittings shall utilize gasketed joints.
3. Pipe and fittings shall be homogeneous throughout and free from cracks, holes, foreign inclusions, or other injurious defects. The pipe shall be as uniform as commercially practicable in color, opacity, density, and other physical properties.
4. Manhole connections shall be accomplished by means of an elastomeric gasket to provide flexibility and adequate joint tightness.
5. Manholes shall be placed at the intersection of all mains, at all changes in horizontal direction, at a maximum of three-hundred (300) foot intervals on straight sections, where pipe size changes occur, and at any other location as so determined by the Director of Public Works and the Town Engineer.

III. Installation

- A. Only proper and suitable tools and appliances for the safe and convenient handling and laying of pipes and fittings shall be used. Pipes and fittings shall be carefully handled and lowered into the trench. Under no circumstances shall any pipe or fitting be dumped or rolled into the trench or be allowed to drop against the pipe or fitting already in the trench. Before being lowered and while suspended, the pipe shall be inspected for defects. Defective, damaged, or unsound pipe will be rejected.
- B. The interior of the pipe shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved methods. The pipe shall not be laid in water or when the trench or weather conditions are unsuitable for such work. When work is not in progress, open ends of pipe and fittings shall be closed securely so that no trench water, earth, or other substances will enter the pipe or fittings.

- C. All pipe being installed shall have no less than six (6) inches of bedding under and over the pipe as per *Standard Details*. The stone to be used for bedding shall be VDOT #68 type. The full length of each section of underground pipe shall rest solidly upon the pipe bedding and any defects due to settlement shall be made good by the contractor at their own expense. The ends of pipe shall abut each other in such a manner that there shall be no shoulder or unevenness on the inside of the main. Bell holes shall be dug sufficiently large to ensure installation of proper joints. Special precautions shall be exercised to prevent any pipe from resting on rock.
- D. Any pipe that has the grade or joint disturbed after laying shall be taken up and re-laid. Any pipe, pipe fittings, or appurtenance found defective after installation shall be replaced.
- E. Except where otherwise necessary in making connections or closures, or as authorized by the Director of Public Works and the Town Engineer, bell-and-spigot pipe shall be laid with bells facing in the direction of laying.
- F. Where pipe cutting is necessary, it shall be done in a neat and workmanlike manner without damage to the pipe. Unless otherwise authorized, cutting shall be done by means of an approved type of mechanical cutter that will leave a smooth end at right angles to the axis of the pipe and not otherwise damage the pipe.
- G. Joints on PVC pipe and fittings shall be made in accordance with the recommendations of the joint manufacturer and as approved by the Town Engineer and the Director of Public Works.
- H. All transition joints in sewers between similar or dissimilar materials of equal or unequal size shall be made water and gas tight by means of an approved connector or adapter of the compression or mechanical seal type. Please see *Materials Specifications* section of this document for approved materials. Couplings of the mechanical seal type shall have tightening clamps or devices made of 304 stainless steel. The compression joint connector or adapter and flexible coupling shall be installed as recommended and specified by the manufacturer and each connector shall bear the manufacturer's name clearly visible when installed.
- I. Pipe excavation shall be kept free from water and no joint shall be made under water. The Contractor shall be careful during backfilling to prevent damage to or disturbing of joints and to protect the watertight integrity of the pipes at all times. There shall be no walking on or working over pipe until backfill is over the pipe. Backfilling shall be in accordance with the standard details and *Section 8* of the *Construction Standards*. The maximum depth of burial shall be no greater than 20 feet unless approved in writing by the Town of Berryville.

- J. Sheeting, shoring, and bracing shall be in accordance with safety standards and regulations established by the Occupational Health and Safety Administration (OSHA) and construction methods established in the Associated General Contractors of America Safety Code. The Contractor shall follow applicable regulation and best practices in determining whether or not sheeting and shoring is required, as well as for installation, maintenance, and removal of same.
- K. Stream crossings and highway crossings shall be installed as in *the Standard Details* unless otherwise specified. The crossing shall be made in such a manner to minimize erosion and blockage of the stream flow. Backfill under the rip-rap shall be compacted to 90% density. Sanitary sewer entering or crossing a stream must be constructed of watertight pipe and exhibit 0% infiltration when tested in place.
- L. Slope anchors as described in *Construction Specifications* shall be provided on sewers with slopes exceeding 20%. Minimum anchorage shall be as follows:
 - 1. Not over 36 feet center-to-center on grades 20% and up to 35%.
 - 2. Not over 24 feet center-to-center on grades 35% and up to 50%.
 - 3. Not over 16 feet center-to-center on grades 50% and over.
- M. ScotchMark Electronic Marker System EMS 1258 or approved equal shall be included with the installation of all sewer force mains. The markers shall respond to a frequency of 122.5 kHz, with placement as follows:
 - 1. 50-foot intervals on force mains, and
 - 2. All laterals (pegs placed where lateral leaves right-of-way or easement and enters private property), and
 - 3. Any additional location directed by the Town of Berryville.
- N. A six (6) inch wide magnetized locating ribbon labeled "SEWER LINE BURIED BELOW" shall be installed above the select backfill.
- O. A #12 gauge wire shall be placed next to all sewer mains, force mains and laterals. This wire must maintain positive continuity at all times.

IV. Final Inspection and Testing

- A. All sewer construction shall be subject to testing and final inspection, including internal video camera inspection prior to acceptance.

- B. The Contractor shall furnish weirs, stand pipes, pipe plugs, pressure gauges, stop watches, air compressors, hose, and such materials and assistance as required to perform these tests. All acceptance tests shall be conducted by the Contractor in the presence of a utility inspector approved by the Town. The Contractor shall schedule all acceptance tests with an approved utility inspector and provide the Town Director of Public Works at least 48 hours notice of the test.
- C. Prior to the final inspection by the Town, the Contractor shall locate and adjust all manholes, valve boxes, etc. to final grade and clean all gravity lines and manholes.
- D. All gravity sewer lines, to include building sewers, shall be tested after backfill using a low-pressure air test in accordance with applicable ASTM specifications. The air test shall be conducted as follows: provide test plugs at each manhole and securely brace. Provide suitable means of determining depth of groundwater level above the inverts immediately before testing. The testing pressure will be increased accordingly but the total pressure including the increased amount of groundwater backpressure at the spring line of the pipe shall not exceed 5.5 pounds per square inch (psi). Add air slowly to the test section until the internal air pressure, as indicated on the gauge, stabilizes at four (4) psi or at the increased pressure determined for the correction of the groundwater backpressure. Do not allow personnel in manholes while the test is being performed or when test section is under air pressure. If leakage is indicated at the test plugs, relieve pressure before taking steps to eliminate the leak. When the air pressure is stabilized, disconnect the hose and compressor and allow the pressure to decrease to 3.5 psi, plus correction for groundwater backpressure. Record the time period for the pressure to drop 1/2 psi. Pipes failing to maintain minimum holding times set forth in the table below will not be accepted.

AIR TEST TABLE
Pipe Size – Diameter

Length	6"	8"	10"	12"	15"	18"	21"	24"	27"
25'	2:50	3:47	4:43	5:40	7:05	8:30	9:55	11:24	14:25
50'	2:50	3:47	4:43	5:40	7:05	8:30	9:55	11:24	14:25
75'	2:50	3:47	4:43	5:40	7:05	8:30	9:55	11:24	14:25
100'	2:50	3:47	4:43	5:40	7:05	8:30	9:55	11:24	14:25
125'	2:50	3:47	4:43	5:40	7:05	8:30	10:54	14:15	18:02
150'	2:50	3:47	4:43	5:40	7:47	11:13	15:16	19:56	25:14
200'	2:50	3:47	4:43	5:42	8:54	12:49	17:27	22:48	28:51
225'	2:50	3:47	4:43	6:25	10:01	14:25	19:38	25:38	32:37
250'	2:50	3:47	4:57	7:08	11:08	16:01	21:49	28:30	36:04
275'	2:50	3:47	5:26	7:50	12:15	17:37	24:00	31:20	39:40
300'	2:50	3:48	5:56	8:33	13:21	19:41	26:11	34:11	43:16
325'	2:50	4:07	6:26	9:15	14:28	20:50	28:21	37:02	46:52
350'	2:50	4:26	6:55	9:58	15:35	22:26	30:32	39:53	50:30
375'	2:50	4:45	7:25	10:41	16:42	24:02	32:43	42:44	54:05
400'	2:50	5:04	7:54	11:24	17:48	25:38	34:54	45:35	57:42

Minimum holding time in minutes and seconds by size and length of pipe.
Pressure drop from 4.0 psi to 3.5 psi (test pressure shall be increased by amount of groundwater backpressure at springline of pipe, but shall not exceed 5.5 psi).

- E. Should the test show displacement, damage, or leakage in excess of the allowable amount, the Contractor shall repair the displacement and damage and eliminate the leakage. Contractor shall retest until the specified conditions are met to the satisfaction of the Town Engineer and Director of Public Works.
- F. All gravity sewer lines (not including building sewer) shall be internally inspected by video camera prior to acceptance, and all deficiencies noted during the inspection shall be corrected. Such inspection shall be made after sewer trench has been fully backfilled and associated roadway sub-grade construction is completed. The cost of this inspection will be borne by the project's owner. Requests for such inspection shall only be made after the system is fully cleaned. Inspections will be scheduled within ten (10) business days of receipt of a valid request. Should the Town Director of Public Works or Town Engineer be unable to perform the inspection within this period, then an approved third party may be contracted by the project's owner to conduct the work. A follow-up inspection will be made eleven (11) months following the initial inspection. Any required repairs shall be made at project developer's expense and prior to release of any maintenance bond. An additional twelve (12) month maintenance bond may be required at the discretion of the Director of Public Works, the Town Engineer, and the Director of Community Development.

- G. Building sewers shall provide a standard cleanout within five (5) feet of building exit to allow for internal camera inspection prior to being given a *Certificate of Occupancy*. Any required repair shall be performed by project owner prior to being granted a *Certificate of Occupancy*. 48 hours' notice is required for the inspection. Line must be cleaned by project owner prior to inspection. The cost of the inspection and any reinspection, if required, will be due from the project owner.
- H. All manholes shall be tested for water tightness by vacuum testing after the manhole rim has been installed to final grade and prior to final acceptance.
- I. Vacuum tests shall be conducted in accordance with ASTM C1244. Stubouts, manhole boots, and pipe plugs shall be secured to prevent movement while the vacuum is drawn. Vacuum equipment shall be approved by the Town prior to its use. A measured vacuum of ten (10) inches of mercury shall be established in the manhole. The time for the vacuum to drop to nine (9) inches of mercury shall be recorded. The following are the minimum allowable test times for manhole acceptance at the specified vacuum drop:

Depth of Manhole (feet)	Time (seconds)								
	Manhole Diameter (inches)								
	30	33	36	42	48	54	60	66	72
8	11	12	14	17	20	23	25	29	33
10	14	15	18	21	25	29	33	36	41
12	17	18	21	25	30	35	39	43	49
14	20	21	25	30	35	41	48	51	57
16	22	24	29	34	40	45	52	58	67
18	25	27	32	38	45	52	59	65	73
20	28	30	35	42	50	53	65	72	81
22*	31	33	39	48	55	64	72	79	89
24*	33	38	42	51	59	64	78	87	97
26*	36	39	46	55	64	75	85	94	105
28*	39	42	49	59	69	81	91	101	113
30*	42	45	53	63	74	87	98	108	121

*requires written approval by the Town of Berryville

- J. If a manhole joint mastic is completely pulled out during the vacuum test, the manhole shall be disassembled and the mastic repaired.
- K. Manholes that fail the vacuum test shall be repaired and the test and repairs shall be repeated until the manhole passes the test.

V. *Gravity Sewer Laterals*

- A. In new construction, wyes shall be used to connect to lateral main.
- B. When connecting to existing lines, an approved saddle and stainless bands shall be used.
- C. Connections to existing manholes must be made by core drilling. The connection between pipe and manhole will be with an approved watertight boot.
- D. In addition to requirements for sewer laterals as required by applicable Plumbing Code, a cleanout shall be installed within a foot of the Right of Way (ROW) on the interior side of, and immediately adjacent to, the property line. Installation shall be in accordance with *Standard Details* and the slab shall abut the sidewalk where applicable.
- E. Pipe shall be DR25 as listed on the materials listing sheet.
- F. Refer to *Standard Detail #1* for bedding requirements.
- G. Location markers must be installed at the end of each lateral.
- H. Connection at main must be inspected prior to back-filling.
- I. Lateral connections greater than half the diameter of the main will require approval from the Director of Public Works or the Town Engineer. Installation of a manhole may be required for laterals larger than half the main line diameter.
- J. No gravity connection will be made to a force main.

Section 6

Sanitary Sewer Manholes

I. General

- A. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.
- B. All manholes shall be precast concrete unless otherwise noted on the plans and approved by the Town. Any manhole being installed within ,1000 feet of the discharge from a pressure sewer main or existing manhole having a pressure sewer main installed from a pump station designed for more than one hundred 100 gallons per minute (gpm) shall be lined with a high density Poly Ethylene (HDPE) sheets to protect the concrete from sewer gasses. Where pressure sewer is being connected to existing gravity collection system, manholes within 1,000 feet of the connection shall be protected by lining with a high alumina cement mortar (Strong Seal™ or approved equal).
- C. Applicable Standards
 - 1. American Society for Testing Materials ASTM) C478, D1752
 - 2. ASTM A48/A48 M for Grey Iron Castings
 - 3. Corps of Engineers CRD-588

II. Precast Base

- A. Precast base sections shall be installed on a firm stabilized foundation prepared similarly to that required for the proper installation of the adjacent pipeline. Precast base sections may be supplied by the manufacturer with precast inverts or the Contractor may cast the inverts in the field. Inverts shall be smooth and accurately shaped to a semicircular bottom conforming to the inside of the adjacent sewer sections. Changes in direction of the sewer and entering branches shall have a circular curve of as large a radius as the manhole will permit, as shown in the Standard Details. The invert channel's depth is to be at least seven tenths (0.7) times the diameter of the pipe. Manhole base shall be integrally cast with walls.

III. Precast Sections

- A. Precast manhole sections shall be manufactured in accordance with current ASTM Standard C478. Joints of the manhole sections shall be formed entirely of concrete, employing a round rubber gasket, and when assembled, shall be self-centering and make uniform watertight joints. Except for those surfaces within the gasket groove, all inside surfaces of the bell or outside surfaces of the spigot, or both, on which the rubber gasket may bear during the closure of the joint and at

any degree of partial closure shall be parallel within one (1) degree and have an angle of not more than two (2) degrees with the longitudinal axis of the pipe. In joints formed entirely of concrete, the distance from either side of the gasket to the end of the bell or spigot shall be not less than three-quarters (3/4) inch. The gasket spaces between the bell and spigot shall be so shaped as to provide either grooves or shoulders that will prevent the gasket from disengaging from its compression surface or being blown out by hydrostatic pressures. The gasket shall be the sole element utilized in sealing the joint from either internal or external hydrostatic pressure.

IV. Invert Channels

- A. Invert channels shall be smooth and semicircular in shape, conforming to the inside of the adjacent sewer section. Changes in direction of flow shall be made with a smooth curve of as large a radius as the size of the manhole will permit.
- B. Changes in size, direction, and grade of the channels shall be made gradually and evenly. The invert channels may be precast, or may be built up with Portland cement grout and mortar (1 part cement to 2 parts sand), or may be formed with sewer pipe laid through the manhole and breaking out the top half after the surrounding concrete has hardened. The bench of the manhole outside the channels shall be smooth and shall slope toward the channels at 1 inch per foot minimum. The invert channel is to be at least seven tenths (0.7) times the diameter of the pipe depth.

V. Drop Connections

- A. Designs shall minimize the use of drop connections, favoring increased slope and covers on main where practical. Drop connections may be approved where influent main is to be at least four (4) feet above effluent main. Outside drop connections are typically employed. Inside drop connections may be approved by Director of Public Works and Town Engineer on a case-by-case basis. Where inside drop connections are approved, particular care must be taken to ensure adequate foundation for influent line.

VI. Gradient Across Manholes

- A. At a manhole, design shall provide two tenths (0.2) foot, to a maximum of one half (0.5) foot, of difference between invert elevations of influent and effluent mains of like diameters. A minimum difference of one tenth (0.1) foot will be permitted where two tenths (0.2) foot cannot be practically attained. Where a service or smaller main flows into a manhole, its crown shall be no lower than that of the effluent main.

VII. Watertight Work Required

- A. Manholes shall be completely watertight. All leaks shall be repaired immediately with a non-shrink material or the entire work shall be removed and rebuilt. Groundwater must be kept below all parts of the masonry or concrete foundations and walls until the mortar and concrete has obtained an adequate set.

VIII. Frames, Covers, and Steps

- A. Manhole frames and covers shall be manufactured true to pattern. Component parts shall fit together in a satisfactory manner. Castings shall be smooth and well cleaned by shotblasting. They shall be free from cracks, holes, and cold shuts and conform to ASTM-A-48 Class 35B gray iron. For consistency, the Town has adopted standard dimensions, which are shown in the *Standard Details*.
- B. Covers shall have the words "SANITARY SEWER" cast in them.
- C. Watertight manhole covers shall be required when the manhole top is below the elevation of the 100-year flood.
- D. All manholes, except those outfitted with watertight covers, shall be fitted with plastic inserts to eliminate the entrance of surface water.
- E. Manhole steps shall be made of plastic- or rubber-covered steel and shall conform to the requirements of ASTM C478.

X. Connecting to Existing Manholes

- A. When sewer line construction starts at an existing manhole, the sewer line shall be securely plugged watertight in a manner satisfactory to the inspector as soon as the pipeline stub has been installed in the manhole. The sewer shall be plugged in such a manner that the plug can be removed for pressure testing of the sewer. When the pressure tests have been completed, the plug shall be replaced and maintained as set forth above until the new sewer line is placed in service. This plug shall be maintained in a watertight condition throughout the construction of the new sewer system until the system has been completed and the Contractor has been instructed by the Town to place the system in operation.

XI. Appurtenances

- A. Flexible gaskets for pipe connection to manholes shall be PSX™ or Press-Boot™ by Press-Seal Gasket Corporation, or KOR-N-SEAL by Trelleborg Seals and Profiles or approved equal.

- B. Jointing mastic shall be an elastic, water-resistant formulation of plastic bituminous materials and inert fillers so combined that, when applied to a vertical metal surface and heated to 120 degrees Fahrenheit, the jointing mastic will neither slump nor lose plasticity. When applied directly from the container without further fixing, the jointing mastic shall provide even, adherent coating within the temperature range of 20 degrees to 100 degrees Fahrenheit.
- C. Asphalt-based waterproof coating for exteriors of manholes shall be mineral-filled, solvent type meeting all applicable standards and best practices.
- D. Quick-setting, non-shrink grout shall conform to all requirements of Corps of Engineers CRD-588 (Octocrete, Speed Crete, or equal).
- E. Sanitary sewer vents shall be provided where continuous watertight sections are greater than 1,000 feet in length.

XII. Protective Ring of Asphalt

- A. If the final coat of asphalt is not to be applied at the time base pavement is laid on a street, a ring of asphalt must be placed around each sanitary sewer manhole to avoid damaging vehicles and snowplows. This protective ring of asphalt must be ramped around the manhole to permit a snowplow to travel over it without removing the manhole frame and cover from the structure. In the event that settlement occurs in any base pavement around manholes, remedial measures shall be taken to restore the pavement prior to final acceptance of the sanitary sewer and the street.

Section 7

Erosion and Sedimentation Control

I. General

- A. The work in this section shall include, but is not limited to, construction and maintenance of berms and dikes, temporary diversion barriers, sediment traps, siltation ponds, temporary vegetation covers, and other measures to prevent and control erosion and sedimentation. All regulations, standards, and established best practices as determined by Town Engineer, Director of Public Works, and Community Development Director must be applied.
- B. All work performed in the Berryville Area shall conform with the provisions of the Town of Berryville *Erosion and Sedimentation Control Ordinance*, the current version of the Commonwealth of Virginia *Stormwater Management Handbook*, and approved plans.

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Excavation and Backfill

I. General

All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.

II. Excavation

A. The trench excavation shall be of sufficient size to permit the work to be properly performed in the manner specified. All work shall meet Occupational Safety and Health Administration (OSHA) regulations. The width of trenches shall be such as to provide adequate space for workers to place and join the pipe properly and in accordance with these specifications, but shall be kept to a minimum. Unless otherwise approved by the Town Engineer and the Director of Public Works, the clear width of the trench at the level of the top of the pipe shall be related to the inside diameter (I.D.) of the pipe barrel as follows:

Pipe Size Inches	Trench Width Inches
less than 4"	24
4"- 12"	I.D. + 18"
Larger than 12"	I.D. + 24"

B. Earth Trench Excavation

1. The term "earth" as used herein shall include all material not requiring blasting, barring, or wedging for its removal from its original beds and specifically excludes all ledge or bedrock, boulders, or masonry larger than one (1) cubic yard in volume.
2. Material in the bottom of the trench deemed unsuitable by the Town Engineer or the Director of Public Works shall be removed and replaced with material as hereinafter specified. Depth and width of removal shall be as directed by the Director of Public Works or the Town Engineer. Excavation shall be performed in the vicinity of adjacent and contiguous facilities by means that will not damage the facilities. Damage caused to existing facilities by the Contractor's operations shall be repaired by Contractor at Contractor's expense.
3. The bottom of all pipe trenches shall be carefully graded and aligned so that the barrel of the pipe will have bearing for its full length. Where the nature of the soil is such that this cannot be readily accomplished, granular material shall be placed in the bottom of the trench and shaped to provide a continuous, firm bearing for the pipe barrel.

4. Trench excavation shall proceed no more than 75 feet in advance of the placing of backfill unless otherwise authorized by the Director of Public Works and the Town Engineer. The Director of Public Works and the Town Engineer may require backfilling and subsequent re-excavation on trenches left open an unreasonable amount of time in advance of laying of pipe, at no expense to the Town. Trenches left open overnight, or during periods when the Contractor's forces are not present, shall be so protected or enclosed and marked as to cause no danger to the public or others.
5. Sides of trenches in improved public right-of-ways and adjacent to other structures shall be practically plumb. Where permitted by the Town, sides of trenches in other areas may be sloped from a point one (1) foot above the top of the pipe to grade. Slopes shall be such as will not allow displacement of material or danger to personnel.
6. Work performed on highways and streets shall be in accordance with *Section 10* of these *Specifications*, as shown or specified herein, and as directed by VDOT or designee.

C. Rock Excavation

1. The term “rock” as used herein shall include all material requiring blasting, barring, or wedging for its removal from its original bed.
2. Rock shall be excavated within the boundary lines and grades shown on the plans, or given by the project Engineer, and shall be removed and disposed of in accordance with the plan and with the approval of the Town Engineer and Director of Public Works.
3. For excavations in which pipe will be laid, the rock shall be excavated to a depth of twelve (12) inches below the lower outside surface of the pipe barrel or bell and filled in to the proper grade with selected fill material properly graded and compacted to provide uniform support for the barrel of the pipe.
4. For structures, the rock shall be excavated only to the bottom of the structure.
5. For pre-cast structures, a minimum of twelve (12) inch bedding is required.
6. Best practices and other applicable requirements of this section shall be followed.

D. Blasting

1. Blasting shall be performed by qualified personnel holding the required license issued by the Commonwealth of Virginia Fire Marshal’s Office.

2. A pre-blast survey shall be made available at no cost to all property owners whose structures are within 300 feet of the blast zone.
3. Additional buffer distance may be required for blasting due to site conditions and type of pipe in ground. Inspection by the Public Works Director and Director of Public Utilities is required to determine blasting setbacks
4. Blasting shall not be permitted within 25 feet of pipes or structures where sewers, gas, water, steam, or other utility ducts or lines, basin connections, or other structures have been exposed during excavation. Any such structure shall be adequately protected from damage before proceeding with the blasting.
5. Any structure, pipeline, or conduit damaged by blasting shall be promptly repaired at Contractor's expense.
6. All notice is the responsibility of Contractor. 48 hours' notice shall be provided to the Director of Community Development, the Director of Public Works, the Director of Utilities, and all property owners whose structures are within 300 feet of the blasting zone.
7. Equipment used for drilling or holes shall have a positive means of dust control, subject to the Director of Public Work's approval.
8. Blasting shall be discontinued whenever the Town Engineer, Director of Public Works, Director of Utilities, or Community Development Director determines the further blasting may injure or damage adjacent rock, masonry, or other structures. In such case, the remaining rock shall be excavated by boring, wedging, or other approved method.
9. Explosives
 - a. Explosives shall be stored, handled, and used in conformity with all state and local laws, ordinances, and regulations governing the storage and use of explosives. A permit and bond may be required.
 - b. In the event of loss or misplacement of blasting materials, the Contractor shall immediately notify the local authorities having jurisdiction in such matters.

E. Unsuitable Material

1. In case the materials encountered at the elevations specified are not suitable, or in case it is found desirable or necessary to go to an additional depth, the excavation shall be carried to such additional depth as the Director of Public Works and the Town Engineer may direct in writing. The Contractor shall refill such excavated space with either Class B concrete or sand, gravel, or other selected fill material.

F. Unauthorized Excavation

1. Wherever the excavation is carried beyond or below the lines and grades given by the Engineer, except as specified herein, all such excavated space shall be refilled with such material and in such manner as may be directed by the Director of Public Works and the Town Engineer in order to ensure the stability of the various structures.

G. Disposal of Material

1. Topsoil suitable for final grading shall be stored in accordance with applicable site plan, erosion and sediment control measures, and separately from other excavated material. Excavated material in excess of that required for backfilling around structures and in trenches and for constructing fills and embankments as shown on the plans shall be removed by the Contractor.

H. Shoring, Sheeting, and Bracing

1. Sheeting, shoring, and bracing shall be in accordance with safety standards and regulations established by OSHA and construction methods established in the Associated General Contractors of America Safety Code (ASC). The Contractor shall follow applicable regulation and best practices in determining whether or not sheeting and shoring is required, as well as for installation, maintenance, and removal of same.
2. Sheeting, shoring, and bracing shall be placed so as not to interfere with the construction work and shall be entirely independent of all footings and structures. If at any point the Engineer or Director of Public Works is of the opinion that the sheeting or supports furnished are inadequate or unsuited for the purpose, they may order additional sheeting and supports to be installed.
3. In general, sheeting, shoring, and bracing shall be removed as the excavation is refilled in such a manner as to avoid the caving-in of the bank or disturbance to adjacent areas or structures.
4. Contractor bears responsibility for injury to structures, property, or persons due to inadequate, inappropriate, or premature removal of shoring, sheeting, and bracing.
5. The method of making excavation below groundwater level shall be submitted, in detail, to the Director of Public Works, Director of Community Development, and the Town Engineer, and must be accepted/approved before the work is started.

I. Sheeting Left in Place

1. The Engineer may recommend and the Director of Public Works may approve, in writing, any or all sheeting or bracing to be left in place for the purpose of preventing injury to structures, property, or persons, whether such sheeting or bracing was shown on the plans. If left in place, such sheeting shall be cut off at the elevation ordered, but in general, such cutoffs shall be at least eighteen (18) inches below the final ground surface. Bracing remaining in place shall be "snug tight".

J. Removal of Water

1. All excavated areas shall be kept dry. No water shall be allowed to rise over or to come in contact with masonry placed during construction until the concrete and mortar has attained a set satisfactory to the Director of Public Works and the Town Engineer or inspector and, in any event, no sooner than twelve (12) hours after placing the masonry. Water pumped, drained, or otherwise removed from the work hereunder shall be disposed of in a suitable manner without damage to adjacent properties, to other work under construction, or to the street pavement. Water shall not be discharged onto streets without adequate protection of the surface at the point of discharge. No water shall be discharged into sanitary sewers and no water containing settleable solids shall be discharged into storm sewers.
2. Any and all damage caused by dewatering the work shall be promptly repaired by the Contractor at their expense.

II. Backfilling

A. General

1. All excavations shall be backfilled to the original surface of the ground or to such other grades as may be shown or directed. Before depositing fills, the Contractor shall remove all vegetative matter, mud, muck, and unsuitable soils from the surfaces upon which fill materials are to be placed and fill irregularities and cavities.
2. Backfilling and tamping specifications shall assure, at a minimum, that:
 - a. Trenches are carefully backfilled with excavated materials approved for backfilling, which are free from large clods of earth or stones larger than one (1) inch in diameter, deposited in six (6) inch layers, and thoroughly and carefully tamped until the pipe has a cover of not less than twelve (12) inches.
 - b. The remainder of the backfill is placed in the trench in layers not exceeding one (1) foot and thoroughly tamped. No stone or rock larger than five (5) inches in its greatest dimension shall be used in backfilling.

- c. Trenches in public roadways shall be excavated, backfilled, and compacted in accordance with the requirements of the current version of Virginia Department of Highways and Transportation's *Road and Bridge Specifications* or other criteria approved by VDOT.

B. Backfilling Around Structures, Pipes, and Conduits

1. Backfilling around structures, pipes, and conduits shall be carefully done by hand and tamped, with suitable tools of approved weight, to the top of such structures and conduits. This material shall be approximately six (6) inches thick, tamped and compacted in place.
2. After the backfill has been made around the structures, conduits, and pipes as specified above, the remainder of the trench may be backfilled by machine, but the work shall be done in such a way as to prevent dropping of material directly on top of the structure, conduit, or pipe. Material shall be deposited in horizontal layers.
3. The methods used in backfilling and bedding ductile iron pipe shall be in strict conformance to applicable regulation, the details shown in the *Standard Details*, and plans. The selection of the backfilling method shall be predicated upon the actual trench conditions encountered and shall be determined by the Town Engineer or Director of Public Works.
4. Where structures such as pipelines, sidewalks, railroad tracks, and roadways are to be constructed or replaced later on backfilled areas, the Director of Public Works and the Town Engineer may order the entire backfill in such areas placed in layers, rolled, rammed, or otherwise thoroughly compacted to a minimum of 95% density compaction to prevent after-settlement.

C. Selected Fill Material

1. Selected fill material shall consist of bank-run sand and gravel or similar material that is approved by the Director of Public Works and the Town Engineer as suitable for the purpose intended. Selected fill shall be placed in the manner specified under "Backfilling" or as ordered by the Director of Public Works and the Town Engineer.
2. In a rock trench, at least six (6) inches of selected fill material shall be placed for pipe bedding.
3. All excavation done in roadways and along shoulders shall be backfilled with 21B stone and compacted in accordance with the current version of Virginia Department of Highways and Transportation's *Road and Bridge Specifications*.

Section 9

Topsoiling and Seeding

I. General

- A. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied. Topsoiling and seeding shall be performed in accordance with the Virginia Department of Transportation (VDOT) requirements and *Virginia Stormwater Management Handbook*, Sections C-ENV-15 and C-SSM-02 through C-SSM-10.
- B. The work covered by this section consists of furnishing all labor, material, and equipment and the performing of all operations necessary or required to place topsoil, final grade, fertilize, lime, seed, and mulch all graded and cleared areas, including those areas disturbed in the course of construction, in accordance with the specifications.

II. Products

A. Topsoil

- 1. Shall be furnished from the on-site stockpile or from other approved source.
- 2. Shall be natural, friable, agricultural soil, possessing characteristics representative of soils in the vicinity that will sustain vigorous plant growth, free from stones larger than two (2) inches in diameter, roots, toxic substances, and other foreign matter which might be detrimental to plant growth.

B. Lime

- 1. Shall conform to the standards of the Association of Official Analytical Chemists.
- 2. Ground agricultural limestone shall contain not less than 55% of total carbonates and shall be ground to such a fineness that at least 90% will pass a No. 10 mesh screen and at least 50% will pass a No. 100 mesh screen. Coarser material will be accepted provided that the specified rates of application are increased proportionately on the basis of quantities passing the No. 100 mesh screen.

C. Fertilizer

1. Shall be a commercial type 10-10-10 (nitrogen-phosphorous-potassium), fully labeled, uniform in composition, and conforming to all applicable regulations.

D. Seed

1. Shall be labeled or marked per accepted horticulture practice, comply with all current State and Federal regulations, and furnished in sealed standard containers. Seed which has become wet, moldy, or otherwise damaged in transit or storage will not be acceptable.
2. Seed and mixes shall be furnished with a certification from the seed company stating type of seed and percentages of mixture purity, germination, and weed seed.

E. Mulch

1. Straw and hay shall be free from noxious weeds, grain seeds, mold or other objectionable material and shall be in an air-dry condition and suitable for placing with mulch blower equipment.
2. Binders shall conform to C-SSM-11.
3. Wood cellulose shall be natural wood mulch, without toxic substances and foreign matter, packaged in air-dry containers capable of application with power spray equipment, and shall have a maximum pH of 9.0 in distilled water.
4. All other mulch material and installation shall meet requirements of the current edition of the *Virginia Stormwater Management Handbook*, approved plan, or as directed by Town Engineer, Director of Public Works, and Director of Community Development.

III. Execution

A. Preparation

1. The ground surface shall be cleared of stones, roots, cable, wire, grade stakes and any other material that might hinder proper grading and tillage, be harmful to plant growth, or hinder subsequent mowing and other maintenance operations. Sub-grades shall be loosened by dicing to a depth of not less than three (3) inches so that the loosened surface will readily bond with the topsoil.
2. Areas to be planted shall be graded as shown on the drawings and all surfaces shall be left in an even and properly compacted condition to prevent the formation of depressions where water will stand.

B. Application

1. Topsoil, Lime, and Fertilizer

- a. Topsoil shall be spread to a compacted depth of four (4) inches for areas to be seeded, raked to a smooth uniform surface, and compacted with a lawn roller weighting not less than 90 pounds per foot of roller width. Any bumps or depressions which develop shall be leveled or filled, as required, and rolled until a satisfactory grade is obtained.
- b. Lime and fertilizer shall be as specified, applied at the rate of 50 pounds per 1,000 square feet of lime, and 20 pounds per 1,000 square feet for fertilizer. Not more than two (2) days afterward, the area shall be raked or harrowed in such a manner as to well work well the lime and fertilizer into the top two (2) inches of soil, and then be thoroughly wetted.

2. Seeding and Mulching

- a. All seeding shall be accomplished by Hydroseeding methods. Hydroseeding shall be done by a three-step method using the application rates previously specified. The three steps shall be as follows:
Step 1 – Apply lime and fertilizer.
Step 2 – Apply seed mixture.
Step 3 – Apply hydro mulch.
- b. All mulching shall be accomplished by means of hydromulching except where slopes are steep and require tied down mulch. However, under no circumstances shall straw or hay mulch be applied to the berms forming the detention ponds or the aeration lagoons. After slopes have stabilized, the contractor shall gather and removed from the site all straw and/or hay mulch.
- c. Straw or hay mulching shall be spread uniformly over seeded areas at the rate of 115 pounds per 1,000 square feet. It shall be anchored by the specified asphalt binder as follows:
 - i. Binder applied as separate operation at 8 gallons per 1,000 square feet on slopes flatter than 3 to 1; 16 gallons per 1,000 square feet on slopes 3 to 1 and steeper.
 - ii. Binder applied simultaneously with straw or hay at 1.5 gallons per square yard as directed.
- d. The Contractor shall take all necessary precautions to prevent asphalt binder from marking or defecting structures, pavements, utilities, or plant growth. Any disfigurement shall be repaired at the Contractor's expense.
- e. Wood cellulose mulch, as specified, shall be applied evenly at the rate of 50 pounds per 1,000 square feet.
- f. Matting in place of or as part of mulching shall adhere to standards of the current edition of the *Virginia Stormwater Management Handbook*.

C. Seeding and Sodding

1. Seeding and sodding, whether temporary or permanent, shall be in accordance with the current edition of the *Virginia Stormwater Management Handbook*.

D. Seed Establishment Period

1. The Contractor shall protect and maintain the seeded areas for at least 90 days after seeding is complete.
2. The Contractor shall repair any damage to seeded areas without additional compensation and shall provide a uniform acceptable stand of grass.
3. The Contractor shall seed as soon as a unit or portion of the project is satisfactorily completed.
4. Maintenance shall consist of repair and replacement of eroded areas, watering, re-fertilizing, re-liming, re-seeding, and re-mulching as necessary to provide an even fixed growth of grass.
5. The Contractor will provide protection against traffic and shall erect the necessary barricades and warning signs immediately after planting is completed.
6. All such signage, barricades, etc. shall be removed once site is stable and grass is uniform and mature according to the standards of the current edition of the *Virginia Stormwater Management Handbook*, or at the direction of the Director of Public Works and Community Development Director.

Section 9

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I. General

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- B. The work covered by this section consists of furnishing all labor, material, and equipment and the performing of all operations necessary or required to placed topsoil, final grade, fertilize, lime, seed, and mulch all graded and cleared areas, including those areas disturbed in the course of construction, in accordance with the specifications.

II. Products

A. Topsoil

- 1. Shall be furnished from the on-site stockpile or from other approved source.
- 2. Shall be natural, friable, agricultural soil, possessing characteristics representative of soils in the vicinity that will sustain vigorous plant growth, free from stones larger than two (2) inches in diameter, roots, toxic substances, and other foreign matter which might be detrimental to plant growth.

B. Lime

- 1. Shall conform to the standards of the Association of Official Analytical Chemists.
- 2. Ground agricultural limestone shall contain not less than 55% of total carbonates and shall be ground to such a fineness that at least 90% will pass a No. 10 mesh screen and at least 50% will pass a No. 100 mesh screen. Coarser material will be accepted provided that the specified rates of application are increased proportionately on the basis of quantities passing the No. 100 mesh screen.

C. Fertilizer

1. Shall be a commercial type 10-10-10 (nitrogen-phosphorous-potassium), fully labeled, uniform in composition, and conforming to all applicable regulations.

D. Seed

1. Shall be labeled or marked per accepted horticulture practice, comply with all current State and Federal regulations, and furnished in sealed standard containers. Seed which has become wet, moldy, or otherwise damaged in transit or storage will not be acceptable.
2. Seed and mixes shall be furnished with a certification from the seed company stating type of seed and percentages of mixture purity, germination, and weed seed.

E. Mulch

1. Straw and hay shall be free from noxious weeds, grain seeds, mold or other objectionable material and shall be in an air-dry condition and suitable for placing with mulch blower equipment.
2. Binders shall conform to C-SSM-11.
3. Wood cellulose shall be natural wood mulch, without toxic substances and foreign matter, packaged in air-dry containers capable of application with power spray equipment, and shall have a maximum pH of 9.0 in distilled water.
4. All other mulch material and installation shall meet requirements of the current edition of the *Virginia Stormwater Management Handbook*, approved plan, or as directed by Town Engineer, Director of Public Works, and Director of Community Development.

III. Execution

A. Preparation

1. The ground surface shall be cleared of stones, roots, cable, wire, grade stakes and any other material that might hinder proper grading and tillage, be harmful to plant growth, or hinder subsequent mowing and other maintenance operations. Sub-grades shall be loosened by dicing to a depth of not less than three (3) inches so that the loosened surface will readily bond with the topsoil.
2. Areas to be planted shall be graded as shown on the drawings and all surfaces shall be left in an even and properly compacted condition to prevent the formation of depressions where water will stand.

B. Application

1. Topsoil, Lime, and Fertilizer

- a. Topsoil shall be spread to a compacted depth of four (4) inches for areas to be seeded, raked to a smooth uniform surface, and compacted with a lawn roller weighting not less than 90 pounds per foot of roller width. Any bumps or depressions which develop shall be leveled or filled, as required, and rolled until a satisfactory grade is obtained.
- b. Lime and fertilizer shall be as specified, applied at the rate of 50 pounds per 1,000 square feet of lime, and 20 pounds per 1,000 square feet for fertilizer. Not more than two (2) days afterward, the area shall be raked or harrowed in such a manner as to well work well the lime and fertilizer into the top two (2) inches of soil, and then be thoroughly wetted.

2. Seeding and Mulching

- a. All seeding shall be accomplished by Hydroseeding methods. Hydroseeding shall be done by a three-step method using the application rates previously specified. The three steps shall be as follows:
Step 1 – Apply lime and fertilizer.
Step 2 – Apply seed mixture.
Step 3 – Apply hydro mulch.
- b. All mulching shall be accomplished by means of hydromulching except where slopes are steep and require tied down mulch. However, under no circumstances shall straw or hay mulch be applied to the berms forming the detention ponds or the aeration lagoons. After slopes have stabilized, the contractor shall gather and removed from the site all straw and/or hay mulch.
- c. Straw or hay mulching shall be spread uniformly over seeded areas at the rate of 115 pounds per 1,000 square feet. It shall be anchored by the specified asphalt binder as follows:
 - i. Binder applied as separate operation at 8 gallons per 1,000 square feet on slopes flatter than 3 to 1; 16 gallons per 1,000 square feet on slopes 3 to 1 and steeper.
 - ii. Binder applied simultaneously with straw or hay at 1.5 gallons per square yard as directed.
- d. The Contractor shall take all necessary precautions to prevent asphalt binder from marking or defecting structures, pavements, utilities, or plant growth. Any disfigurement shall be repaired at the Contractor's expense.
- e. Wood cellulose mulch, as specified, shall be applied evenly at the rate of 50 pounds per 1,000 square feet.
- f. Matting in place of or as part of mulching shall adhere to standards of the current edition of the *Virginia Stormwater Management Handbook*.

C. Seeding and Sodding

1. Seeding and sodding, whether temporary or permanent, shall be in accordance with the current edition of the *Virginia Stormwater Management Handbook*.

D. Seed Establishment Period

1. The Contractor shall protect and maintain the seeded areas for at least 90 days after seeding is complete.
2. The Contractor shall repair any damage to seeded areas without additional compensation and shall provide a uniform acceptable stand of grass.
3. The Contractor shall seed as soon as a unit or portion of the project is satisfactorily completed.
4. Maintenance shall consist of repair and replacement of eroded areas, watering, re-fertilizing, re-liming, re-seeding, and re-mulching as necessary to provide an even fixed growth of grass.
5. The Contractor will provide protection against traffic and shall erect the necessary barricades and warning signs immediately after planting is completed.
6. All such signage, barricades, etc. shall be removed once site is stable and grass is uniform and mature according to the standards of the current edition of the *Virginia Stormwater Management Handbook*, or at the direction of the Director of Public Works and Community Development Director.

Section 10

Work on Highways and Streets

I. General

- A. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.
- B. The Virginia Department of Transportation (VDOT) maintains primary roadways (Business Route 7 and US Route 340) within the Town of Berryville Corporate Limits.
- C. The Contractor shall assume all responsibility for fulfilling any and all requirements specified herein and under the permit(s) obtained from the VDOT for work to be performed on state highways. A copy of the VDOT permit(s) must be provided to the Town.
- D. All applicable provisions as established in the current version of VDOT's *Land Use Permit Regulations* apply to this work, including provisions for revocation of permit.
- E. All work done within the road right-of-way shall, in all respects including location, alignment, elevation and grade, manner of performing the work, highway crossings, restoration and conditions, etc., shall be done to the satisfaction of the Town of Berryville and VDOT.

Work on Town Maintained Roadways

II. General

- A. The Town of Berryville maintains public secondary streets within the Corporate Limits. Proposed secondary streets located within approved annexation areas will also comply with regulations established by these standards and specifications once development occurs.
- B. The Contractor shall assume all responsibility for fulfilling any and all requirements specified herein and under the permit(s) obtained from the Town of Berryville for work to be performed on Town streets.
- C. All applicable provisions as established by the current version of VDOT's *Land Use Permit Regulations* shall apply to this work unless otherwise herein provided, including provisions for revocation of permit.

- D. All work done under this permit within the street right-of-way shall, in all respects including location, alignment, elevation, grade, manner of performing the work, highway crossings, restoration, installation of street name signs, etc., be subject to Town of Berryville Department of Public Works direction and shall be done to the satisfaction of the Department.
- E. "Test pits", excavated to allow visual inspection of utility crossings, may be eligible for relaxation from VDOT's *Land Use Permit Regulations* on a case-by-case basis at the discretion of the Director of Public Works with the approval of the Town Manager. All such test pit restoration shall meet the *Standard Details*, and the following:
1. No relaxation of asphalt restoration standards may be made on the following streets:
 - a. Church Street between Liberty and South Buckmarsh Streets
 - b. Fairfax Street
 - c. First Street between Fairfax and Main Streets
 - d. Hermitage Boulevard
 - e. Jack Enders Boulevard
 - f. Jackson Drive
 - g. Liberty Street
 - h. Mosby Boulevard
 2. No relaxation of asphalt restoration standards will be granted on streets that have been paved less than 60 months prior to the request.
 3. The relaxed test pit restoration standard may be applied if:
 - a. The street in question is not included in *Sec. 10 Work on Highways and Streets, II- General, E, 1* or *Sec. 10 Work on Highways and Streets, II- General, E, 2*, and
 - b. Application for "Test Pit Restoration" is approved in writing by the Director of Public Works (Director) prior to test pit excavation, and
 - c. The Director determines that the test pit is not in the typical wheel path on the street and will not be detrimental to the Town's interest, and
 - d. The applicant provides a 60 month warranty on workmanship and materials. The Director may require a bond be provided to the Town to provide surety for the 60 month warranty.

III. Street Name Sign Specifications

A. General

1. All signage, mounting, colors, fonts, and accessories shall comply with this *Manual* and guidelines established by the current edition of the *Manual of Uniform Traffic Control Devices* (MUTCD) and associated manuals or papers referenced within the MUTCD. These documents will be reviewed on a routine basis to ensure this standard and specifications are aligned.

B. Panel / Plaque Standards

1. The standard street name sign shall be the MUTCD D3-1 series with a green background, rounded corners, white border, and white lettering. The shade of green for the background shall be reflective 3M green or an approved equivalent. The private street name sign shall be the MUTCD D3-1 series with a brown background, rounded corners, a white border, and white lettering. The shade of brown for the background shall be reflective 3M 3430EGP3430 brown or an approved equivalent.
2. All signs will be constructed from flat aluminum sheet material with a thickness of eight tenths of an inch (0.8") and will comply with retroreflective standards established in the MUTCD (sec. 2A.07).
3. The standard post mounted street name sign shall measure 6" vertically. Street name signs mounted overhead shall measure 24" vertically.
4. The reflectivity requirements for these signs shall be ASTM D4956 Type XI in accordance with section 701 of the Virginia Department of Transportation *2020 Road and Bridge Supplemental Specifications*, as amended.

C. Lettering

1. Signs shall be lettering utilizing Series D 2000 as illustrated in the *Standard Alphabets for Traffic Control Devices* as published by the Federal Highway Administration (FHWA).
2. For the standard post mounted sign, uppercase letters will be four (4) inches in height with lower case letters being three (3) inches in height. Overhead mounted signs will utilize uppercase letters twelve (12) inches in height and lowercase letters nine (9) inches in height.
3. Street name lettering will begin with an uppercase letter followed by lower case.

4. All directional prefixes will be a single uppercase letter with no punctuation. As an example, E Main St would represent East Main Street.
5. All roadway suffix designations will be standard abbreviations with the first letter capitalized followed by lower case letters with no punctuation.
6. Letter spacing requirements will follow the *Series D 2000 Standard Alphabets Spacing Chart*.

D. Mounting

1. Post mounted signs, other than stop, enforcement, and warning signs, shall utilize a two (2) inch square gray sign post made of fourteen (14) gauge aluminum with a FHWA approved breakaway support system conforming to American Association of State Highway and Transportation Officials (ASSHTO) standards and specifications for highway signs.
2. Overhead mounted signs shall comply with standards established by ASSHTO in *Specifications for Structural Supports of Highway Signs, Luminaires, and Traffic Signals*.
3. For signs located in areas where pedestrian movements are likely to occur or where on-street parking is permitted, the height of the lowest portion of the sign panel to the finished surface shall have a minimum clearance of seven (7) feet and maximum clearance of eight (8) feet. The Town Engineer and the Director of Public Works may approve a modification to the maximum clearance height.
4. Unless otherwise approved by the Director of Public Works and the Town Engineer, the lateral clearance to the sign shall be a minimum of two (2) inches from the face of curb or four (4) feet from face of barrier, if present.
5. Post mounted signs will be attached to the top of the post using a 5.6 inch sign slot bracket, 5.6 inch sign T slot bracket, and set screws. Additional information concerning the hardware specifications can be found in the *Materials Specifications* section of this document.

IV. Other Street Signage Specifications

- A. All other required highway signs will follow the standards and requirements established within the MUTCD.
- B. The Director of Public Works may require DEAD END or NO OUTLET signs.
- C. Mounting

1. Mounting materials shall be the same as defined in MUTCD Sec. 10.III.C, with the following exceptions:
 - a. Enforcement and warning signs will utilize a post yellow in color.
 - b. Stop signs will utilize the yellow post and additional red retroreflective tape attached to the post in accordance with the MUTCD.
2. No post will extend vertically over the posted sign or plaque greater than six (6) inches. All square posts will be capped with a pyramid style rain cap in a color matching the post.

Section 11

As-Built Drawings

I. General

- A. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.
- B. A complete set of as-built drawings and corrected key sheets shall be submitted by the developer or owner responsible for the construction upon completion of construction and at least one week prior to the anticipated occupancy of any building within the project. As-built drawings must be determined by actual field survey and sealed and certified by a professional engineer registered in the Commonwealth of Virginia. The following statement, signed by the responsible surveyor or engineer, shall be on each sheet: "I hereby state, to the best of my knowledge and personal belief, that the work shown on these plans was constructed to the direction and grades shown and are either installed within the Public right-of-way or properly recorded easements dedicated to the Town of Berryville". The as-built drawings shall show all revisions, substitutions, variations, omissions, and discrepancies made or discovered during construction concerning location and depth of utilities, piping, manholes, pumps, and other facilities. Revisions shall be made and shown on all drawing views with actual dimensions established to permanent points. The contractor shall keep daily as-built work plans at the construction site and shall furnish them to the design engineer for as-built drawing. In addition to the set of paper drawings, the developer or owner responsible for the construction must also submit a digital file of the as-built drawings that are in an AutoCad format.
- C. When the as-built drawing information differs from the approved construction plans, a design analysis for the existing conditions may be required. After the record drawings are approved in writing by the Department of Public Works and the Town Engineer, a set of three drawings and an electronic copy of all drawings in pdf format shall be submitted. Projects which include water and/or sewer facilities which are located within a Virginia Department of Transportation (VDOT) right-of-way will require four (4) additional sets of drawings for the remain-in-place permit.

II. Elements of As-Built Drawings

A. Water Line Construction

- 1. Scale accurate location plans of the line and all installed valves and fittings, such as elbows, tees, crosses, reducers, cradle encasements, or special construction, and

2. Exact measurements to show positive locations shall be taken from at least two reasonably adjacent and available permanently fixed objects, such as fire hydrants, centers of sanitary or storm sewer manhole casting covers, or corners, and
3. Type and sizes of all pipes.

B. Sewer Line Construction

1. Scale accurate location of manhole inverts and top casting elevations and numerical notations of the exact elevations of same as determined by field survey after construction. Elevations shall be in North American Datum of 1983, and
2. Scale accurate indication of lengths and grades and direction of lines between manholes and numerical notations of the exact length and grades, as determined after construction, and
3. Scale accurate location of concrete cradles, encasements, or special construction, and
4. Location of house services by measurement from the manhole immediately downgrade, and
5. Type and sizes of all pipes.

C. Wastewater treatment facilities and pumping stations, water pumping stations, all other comparable construction and building structures

1. As-built plans and specifications shall accurately indicate all approved deviations from or changes in locations or type of equipment installed and material used, and
2. Accurate listings of the name of the manufacturer of all operating equipment installed, together with model or style numbers, ratings, capacities, and other pertinent information, and
3. Physical and digital complete copies of operation and maintenance manuals for all operating equipment and all certificates of inspections, warranties and guarantees of equipment, materials and the installation thereof.

D. Storm Sewer Construction

1. Scale accurate location of structures, providing all invert elevations, distances between structures, elevation of structure tops, and diameter of pipes.

E. Stormwater Management Facilities

1. Acceptable as-built drawings for stormwater management facilities utilizing an embankment shall contain:
 - a. A profile of the top of the dam, and
 - b. A cross-section of the emergency spillway at the control section, and
 - c. A profile along the centerline of the emergency spillway, and
 - d. A profile along the centerline of the principal spillway, extending at least 100 feet downstream of the fill, and
 - e. The elevation of the principal spillway crest, and
 - f. The elevation of the principal spillway conduit invert (inlet and outlet), and
 - g. The diameter, length, and type of material for the riser, and
 - h. The diameter, length, and type of material for the conduit, and
 - i. The size and type of anti-vortex and trash rack devices and their elevations in relation to the principal spillway crest, and
 - j. The number, size, and location of the anti-seep collars, and
 - k. The diameter and size of any low-stage orifices or drain pipes, and
 - l. The length, width, depth or contours of the pool area so that design volume can be verified, and
 - m. A certification statement and seal by a Professional Engineer licensed in the Commonwealth of Virginia, that the as-built is accurate and complete and that the stormwater facility, as constructed, meets applicable regulations, standards, and established best practices.

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STANDARD SPECIFICATION
SECTION 12
CONSTRUCTION RECORD

Project Name and Location: _____

	<u>Water</u>	<u>Sewer</u>
<u>Developer</u>		
Provide 5 physical copies and one digital copy of preliminary plans to the Community Development Department	_____	_____
Pay appropriate fees	_____	_____
<u>Community Development Department</u>		
Circulate preliminary plans to:		
Town Engineer	_____	_____
Director of Public Works	_____	_____
Director of Public Utilities	_____	_____
Other _____	_____	_____
<u>Public Works Department</u>		
Review Plans	_____	_____
Forward review comments to Community Development Department	_____	_____
<u>Town Engineer</u>		
Review Plans	_____	_____
Forward review comments to Community Development Department	_____	_____
<u>Community Development Department</u>		
Forward comments to Developer	_____	_____
<u>Developer</u>		
Submit revised plans	_____	_____
Submit executed agreement	_____	_____
<u>Community Development Department</u>		
Submit revised plans to:		
Town Engineer	_____	_____
Public Works Department	_____	_____
Director of Public Utilities	_____	_____
Approving authority	_____	_____

Submit plan to following as necessary:

Virginia Department of Health

Department of Environmental Quality

Community Development Department

Upon submission of plans that meet all applicable requirements and address comments received from reviewing authorities:

Submit plans to approving body

APPROVE FINAL PLANS

Developer

Post off-site performance surety

Post on-site performance surety

Provide agreement recordation fees

Submit construction permit request

Schedule preconstruction conference

Submit off-site easement deeds

Record deeds of easement

Public Works and Community Development Departments

Conduct preconstruction conference

ISSUE CONSTRUCTION PERMIT

Record agreement

Developer

Record off-site easement deeds

Bring roads and ditches to final grade

Disinfect completed system, flush, and
submit bacteriological samples

Submit capital cost data and

request tentative acceptance in writing

Public Works

Review inspections for tentative acceptance

Require or conduct additional inspections
(charged to Developer)

Developer

Correct operational deficiencies

Public Works

GRANT TENTATIVE ACCEPTANCE

Developer

Camera inspection of sewer lines; submit copy to Town
Correct deficiencies

_____	_____
_____	_____

Public Works/Community Development Department

Reduce performance bond

_____	_____
-------	-------

Developer

Pave roads, adjust valves and manholes
Correct remaining deficiencies
Submit construction completion certificate to VDH
Provide paper and digital record drawings
and paper shop drawings
Request final acceptance in writing
Submit letter stating system is paid for in full
Post 10% defect bond + cost of final camera inspection
Pay any inspection fees

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Public Works/Community Development Department

GRANT FINAL ACCEPTANCE

_____	_____
-------	-------

Release performance bond
Inspect for defects (9 months)

_____	_____
_____	_____

Developer

Correct defects

_____	_____
-------	-------

Public Works

Release performance bond and close record
Inspect for defects by camera (9 months)
Release defect bond and close record

_____	_____
_____	_____
_____	_____

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Section 13

Utility Inspectors

All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.

The Director of Public Works shall maintain a listing of approved utility inspectors. Inspectors may be contractors or Town of Berryville employees.

The Town Engineer and the Director of Public Works shall approve the utility inspector for each project.

Only inspectors approved by the Director of Public Works may inspect work in the Town of Berryville or its growth areas.

Approved utility inspectors shall perform inspections and submit reports as required by the *Construction Standards and Specifications Manual* and/or the Town Engineer and the Director of Public Works.

All costs incurred by the Town for utility inspection shall be billed to and paid by the landowner, developer, or Contractor. Occupancy of any building within the project will be delayed until the required payments of these costs have been made.

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Section 14

Minimum Standards for Wastewater Pumping Stations

I. *Design Criteria*

A. General

1. The purpose of this document is to establish minimum technical and design standards for developers and engineers for the design and acceptance of wastewater pumping stations within the service area of the Town of Berryville. The standards are intended to ensure uniformity and quality of construction for wastewater pumping stations throughout the Town. Any deviation from the standards contained herein shall be subject to the approval of the Town Engineer and the directors of Public Works and Utilities. Plans and specifications shall be prepared and certified by a professional engineer registered in the Commonwealth of Virginia. All such designs must conform to the requirements of this document and regulations promulgated by the agencies of the Commonwealth of Virginia. All regulations, standards, and established best practices as determined by Town Engineer and Director of Public Works must be applied.
2. Certain equipment manufacturers have been noted herein for the purposes of establishing standards for the level of quality for materials and workmanship, reliability, ease of maintenance, and minimization of spare parts inventory. Other equipment may be used, but must be pre-approved by the Town Engineer and the directors of Public Works and Utilities. The pumping station and all appurtenant equipment and materials shall be new and unused.
3. If the property to be served by a pump station is located within the same drainage area as other undeveloped or underdeveloped land situated within the limits of the Berryville Area, the Town may require an increase or modification in sizing or design of the building, wet well, pumps, mains, and/or other associated improvements.
4. After the construction plans and specifications for pumping stations have been completed by the design engineer and have received approval by the Town, the design engineer shall submit the plans to the Virginia Department of Environmental Quality (DEQ), Valley Regional Office along with a stamped and signed application for a *Certificate to Construct* certifying that the pump station design is in accordance with the *Sewage Collection and Treatment Regulations* and complies with the reliability requirements as calculated by the DEQ *Reliability Classification Worksheet*. A copy of DEQ's approval and issuance of the *Certificate to Construct* must be provided to the Town prior to final approval by the Town of Berryville.

5. The Town of Berryville shall have access to the site and any building upon connection of the first structure to the sanitary sewer served by the respective pump station. Maintenance of the pump station shall be provided by the contractor following the maintenance guidelines of the equipment manufacturers. A log of maintenance activities shall be maintained on site and be available for review by Town staff. Should maintenance not be in accordance with equipment manufacturer's recommendations, the Town of Berryville shall have the right to maintain the facility and use bond funds to cover such maintenance.
6. Upon completion of the construction of the pumping station, the design engineer shall inspect the station, review reports by the equipment manufacturer's field representatives, and request written documentation from the Town that the station is acceptable. The design engineer shall then submit to DEQ a stamped and signed application for a *Certificate to Operate* (CTO). A CTO for each pump station must be issued by DEQ and delivered to the Town of Berryville with record drawings prior to its acceptance by the Town of Berryville.

B. Design Data

1. The pump station design shall comply with all Virginia Department of Environmental Quality regulations and this *Manual*.
2. Pumps shall be capable of handling the maximum peak hourly flow with one unit out of service. A minimum peak factor of 2.5 is required.

C. Site Requirements

1. If all equipment is not completely enclosed within a building, or if the emergency generator is located outside of the main station structure in its own sound attenuating enclosure, the site shall be protected by a six (6) foot high chain link fence.
2. One three (3) foot walk-through gate and one ten (10) foot drive-through gate shall be provided. The grounds within the fenced area shall be covered with a weed barrier, four (4) inches of compacted stone (21B), and shall contain no slopes exceeding fifteen 15%.
3. Access to the station shall be via a dedicated asphalt or concrete paved twelve (12) foot wide access road terminating at the drive-through gate or at the building entrance. Curbs and gutters may be required by the Town Engineer, Director of Public Works, and Community Development Director. In no case shall the profile grade exceed 15%.

4. All grounds outside the containment fence are to be landscaped or seeded with grass. Slopes requiring mowing shall not exceed 15%.
5. For pump stations without an enclosed building, a storage shed of at least 40 square feet (8' x 5' x 8' high or larger) with a lockable double door shall be provided. The shed shall be plastic *Lifetime* or approved equivalent; see Materials Specifications for details. This shed shall be no closer than five (5) feet from any property line and ten (10) feet from any station improvement. It shall be located on a four (4) inch thick concrete slab which extends at least one (1) foot beyond shed on all sides. Shed shall be affixed to slab as required by Director of Public Works.
6. No pump station component may be inundated during a 100-year storm event. The pumping station shall be designed to remain fully operational and accessible during a 100-year flood event.
7. Sufficient lighting shall be provided both inside and outside structures. All-hours security lighting shall have separate controls from lighting intended to illuminate work areas. Work area lighting shall provide a minimum of four (4) watts of illumination per square foot of work area and staging area.
8. A 110 Volt outlet shall be provided inside pumping station building or, if no pumping station building exists, the outlet shall be installed on an electrical backboard.
9. The pumping station shall be located within a dedicated easement or fee-simple lot dedicated to the Town of Berryville. Easement limits or property boundaries shall be a minimum of twenty (20) feet from all site improvements. Dedications and/or easements shall be reviewed by the Town Manager. No such dedication or easement will be accepted by the Town until it is approved by the Town Manager and Town Attorney, as applicable.
10. All pump station lots shall be fully screened with a Town-approved evergreen species of trees and/or tall shrubs along the property lines and other areas as determined by the Community Development Director and Director of Public Works.
11. The street address must be posted on the property and visible from the right-of-way.
12. Signage indicating "AUTHORIZED PERSONNEL ONLY" shall be posted on the fence at the entrance gate.

D. Pumping Station Building

1. The building shall be precast concrete with a finish provided by the developer and approved by the Town of Berryville, have a minimum eight (8) foot clear ceiling height, twelve (12) foot overall width and 20-foot overall length. The size may be increased at the discretion of the Town Engineer or Director of Utilities to provide adequate clearance for equipment operation and maintenance. The building shall have one 6'-0" x 6'-8" fiberglass or aluminum insulated double door with key lock and stainless-steel hardware. The building shall have no windows. The interior walls and ceiling must be primed and painted with an alkali resistant primer and white 100% acrylic industrial enamel finish coat (Primer: PPG 6-603, Finish PPG 90-374 or approved equal). The roof shall be shingled with thirty-year asphalt shingles and have a minimum 5/12 pitch. The roof pitch shall conform to other structures in the area.
2. Key locksets to the Town of Berryville's existing master-key system. Deliver four (4) master keys to the Town only.
3. A minimum three (3) feet of unobstructed floor space shall be provided in all directions around the pumping equipment or as otherwise accepted by the Town Engineer and the Director of Public Works.
4. A ventilator shall be provided using forced air as opposed to exhaust. Ventilation requirements are twelve (12) air changes per hour for continuous duty or 30 air changes per hour for intermittent duty. A ventilation louver shall be provided on the wall opposite to the ventilation fan.
5. No manholes or wet well entrances shall be located inside the pumping station building.
6. A metered water service shall be provided with a Town-approved ¾-inch x ⅝-inch meter, setter, and cock. Appurtenances shall include one ¾-inch hose bib and sink located inside the building and one exterior frost-free hose bib located on the building adjacent to the wet well and opposite the concrete slab required per E.11. of this section. This service must have a reduced pressure zone device as its backflow protection.
7. Sufficient electric heat shall be provided so as to prevent freezing inside the building at negative 10°Fahrenheit (negative 23°C) ambient temperature. A redundant heater shall be installed on a separate circuit with a separate thermostat.
8. Interior lighting shall be comprised of LED fixtures that are controlled by a switch located inside of the building near the entrance. This lighting shall

provide a minimum of four (4) watts of illumination per square foot of interior space.

9. A minimum of two 110-volt receptacles shall be provided with ground fault protection and waterproof covers. Outlets should be a minimum of ten (10) feet apart and three (3) feet off the floor. Outlets shall be located in the natural walking areas and not obstructed by equipment or piping.
10. The building type and architecture should match and compliment adjacent buildings and properties and meet all applicable building codes.
11. Exterior lighting shall be comprised of at least two downcast LED wall packs with a minimum output of 5,000 lumens each. One light shall be located outside of the entrance door and a second light shall be located over the wet well. Exterior lights shall be controlled by switches located inside the building near the entrance.

E. Wet Well

1. All wet wells must be below grade and penetrations through the slab to the wet well shall be sealed to prevent sewer gas leakage.
2. An aluminum door shall be provided for access to the wet well sized to provide a minimum 30"x30" clear opening. The door shall have a 300 pounds per square foot load rating with automatic hold open arm.
3. The bottom of the wet well shall be sloped 1:1 toward the pump suction inlet to minimize solids settling. Slope shall begin below pump off elevation.
4. The wet well shall have a ductile iron four (4) inch vent pipe with a 180° turn-down outside of the building. The vent pipe must be screened with stainless steel screen.
5. A ladder or manhole rungs of corrosion-resistant materials shall be provided to provide access to the bottom of the wet well.
6. For three (3) inch self-priming pumps or submersibles passing 2.5-inch solids, a strainer basket to remove rags shall be required. The strainer basket bars shall be two (2) inches on center with the basket mounted on guide tracks, removable without entering the wet-well. The basket and guide tracks shall be constructed of welded aluminum and anchored with stainless steel nuts and bolts.
7. Unless otherwise directed by the Town Engineer and Director of Public Works, provide a portable hoist and winch assembly suitable for lifting the pumps. Hoist socket shall be permanently installed on station slab

8. The wet-well volume shall be of sufficient capacity to accommodate average and peak flow rates while ensuring that the time between pump run cycles is within the requirements of the electric motor manufacturer. For duplex pumping stations with alternating pumps, the wet-well cycle time between pump on and pump off levels shall be a minimum of ten (10) minutes for motor sizes less than fifteen (15) horsepower or fifteen (15) minutes for motor sizes greater than fifteen (15) horsepower when the inflow to the wet well is one-half of the pump rated capacity.
9. Provide adequate distance between the pump off level and the pump suction intake pipe to prevent vortexing.
10. To prevent concrete deterioration from sewer gases, the wet well shall be coated with Sherwin Williams Cor-Cote FRE Sewer-Cote or an approved equivalent.
11. A wire reinforced concrete slab with minimum dimensions of six (6) feet wide, six (6) feet length, and six (6) inches thick shall be placed immediately adjacent to the wet well/building with vehicular accessibility via an asphalt driveway. The top of the slab should be about two inches above the final grade.

F. Pumps & Associated Controls

1. Unless performance conditions prohibit their use, all pumps shall be suction lift type with pumps, motors, valves, and controls located above grade inside a weatherproof enclosure as described in Section D herein. Suction lift pumps shall be Super T-Series (or T-Series) as manufactured by the Gorman Rupp Company of Mansfield, Ohio, or a Town of Berryville approved equivalent. Discharge piping and controls shall be furnished by Gorman-Rupp or a Town of Berryville approved equivalent. Each pump shall have:
 - a. Cover plate opening large enough to allow for unclogging and removal of the impeller.
 - b. Spring-assisted discharge check valve.
 - c. Discharge plug valve.
 - d. Automatic, spring assisted air release valve.
 - e. Glycerin-filled 3-1/2" diameter suction and discharge gauges.
 - f. Drain valve with quick connect piping.
 - g. High pump temperature thermostat.
 - h. Pump controls, manufactured by Gorman-Rupp, which employ an electronic pressure switch air bubbler wet well level controller with digital readout of wet well level. The pump controller shall be equipped with high wet-well level alarm capability.
 - i. All pumps shall be equipped with fixed speed ODP enclosure motors equipped with OSHA-compliant V-belt drive for setting the design pump rpm. Pumps shall be of non-clog design capable of passing a minimum 2.

- 5-inch sphere for three (3) inch pumps and a minimum three (3) inch sphere for larger pumps through all openings within the pump.
- j. For any design flow, a minimum of (2) two fixed speed pumps shall be provided- each capable of pumping in excess of the peak hourly flow.
 - k. Pumps, motors, valves, piping, and controls shall be tested as a unit at the pump manufacturer's facility prior to shipment. Provide Town Engineer with a copy of the certified test data. Suction lift pumps must include certified reprime performance tests.
 - l. All valves shall have ports designed to pass three (3) inch spherical solids.
 - m. Pumps shall be designed to create a low-pressure area within the pump housing to initiate priming. No vacuum-assisted priming systems will be acceptable.
 - n. The station shall be equipped with an emergency bypass connection with both suction and discharge connections. Connections shall be a minimum four (4) inch aluminum cam and groove connector with a cover plate and required valving to isolate pumps and connectors. The bypass connection shall terminate outside the station enclosure.
 - o. The pump station controls must provide pump alternation and protection from short circuits, overloads, and low voltages on all phases.
 - p. Provide the following spare parts for each pump:
 - i. Mechanical seal
 - ii. Cover Plate O-ring
 - iii. Shaft sleeve
 - iv. Suction flap valve
 - v. Sufficient volume of seal lubricant to perform one lubricant change in all pumps with a minimum volume of two (2) quarts.
 - vi. Impeller
 - vii. Wear plate
2. Town Engineer and Director of Public Works may determine that a duplex grinder pump may be required when it is determined by the design engineer, Town Engineer, and Director of Public Works that a suction lift pump will not operate effectively and efficiently, or the sewerage flow from the drainage areas that will be served by the pump station, which includes currently proposed development and future development within the drainage area and approved growth area, will not exceed an average daily flow of 10,000 gallons per day. Where suction lift pumps cannot be used, pumps shall be submersible with all valves and controls located above ground in a weatherproof enclosure. All station design must be approved by the Virginia Department of Environmental Quality. Unless waived in writing by the Director of Public Works, basic details of submersible pumps shall meet all applicable requirements of suction lift pumps and include:
- 1) The pumps shall be specifically designed for submersible duty in a sewage environment, and shall be as manufactured by Liberty Pumps or pre-approved equal. All valves, gauges, and controls shall be supplied by the pump manufacturer and shall be located above ground in a weatherproof

fiberglass enclosure. Enclosure shall be heated in accordance with manufacturer's recommendations and be positively sealed from wet well. Each pump shall be equipped with the following:

- i. Discharge check valve
 - ii. Discharge plug valve
 - iii. High motor winding temperature thermostat
 - iv. Motor housing moisture detector
 - v. Discharge gauge kit, glycerin-filled, 3½ inch diameter
- 2) A spare grinder pump must be provided to the Town within 30 days of the issuance of the *Certificate to Operate* and prior to any release of construction bond.
- 3) Pump controls shall be manufactured by the pump manufacturer and employ an electronic pressure switch air bubbler wet well level controller with digital readout of wet well level. The pump controller shall be equipped with high wet well level alarm capability.
- 4) All pumps shall be equipped with a fixed-speed motor with water-proof enclosure.
- 5) Motors shall conform to NEMA standards, and shall be capable of operating in liquids with a maximum temperature of 40 °Celsius. Motors and power cables shall be supplied as an assembly, and all components shall be water-tight such that the assembly is capable of operating at a continuous submergence of 65 feet without loss of water-tight integrity.
- 6) For any design flow, a minimum of two fixed speed pumps shall be provided- each capable of pumping in excess of the peak hourly flow.
- 7) Pumps, valves, motors, piping and controls shall be tested as a unit at the pump manufacturer's facility prior to shipment. Provide Town Engineer with a copy of the certified test data.
- 8) All valves shall have ports designed to pass three (3) inch spherical solids.
- 9) Provide stainless steel guide rails, sized in accordance with the pump manufacturer's recommendations, for each pump. If desired by the Town Engineer, provide a portable hoist and winch assembly suitable for lifting the pumps. Hoist socket shall be permanently installed on station slab.
- 10) A separately metered water service and a frost-free hydrant shall be provided, at least ten (10) feet away from the wet well.
- 11) A sufficiently sized generator shall be installed in a sound attenuating enclosure

G. Electrical

1. Electrical service shall be three phase, 60 HZ, 460 volt.
2. The electrical breaker panel shall be provided with two (2) spare 110-volt 20-amp and one (1) spare three phase 480-volt 30-amp breakers.
3. A 110-volt, 20-amp circuit shall be provided and installed on the outside of the building in a weather resistant enclosure and shall be located near the center of the concrete slab beside the wet well.

4. Phase conversion equipment to convert single phase power to three phase power shall not be acceptable.
5. Control voltage shall be 110 volt.
6. Electrical components shall be as manufactured by Rockwell Automation's Allen-Bradley, General Electric, or Furnas. Circuit breakers shall have through the door operating mechanisms to prevent the door from opening when the breakers are in the "on" position. Motor starters, relays and selector switches shall be NEMA rated. Enclosure shall be stainless steel.
7. The pump control panel shall be manufactured by the pump manufacturer. Each panel shall be built by a UL Solutions panel builder and the assembly shall bear a serialized UL Solutions label for *Enclosed Industrial Control Panels*. All wiring, workmanship, and schematic wiring diagrams shall be in compliance with the National Electric Code (NEC).
8. Pump stations shall be equipped with the necessary equipment to interface with the Town *Supervisory Control and Data Acquisition* (SCADA) system as determined by the Director of Utilities. Provide the following minimum alarm conditions: high water alarm, pump fail to start, high pump temperature, power failure, engine overcrank, battery failure, and high engine temperature. A separate float switch shall be wired directly to the SCADA to serve as an independent high-water alarm.
9. All equipment shall be wired for automatic restart capability after restoration of power.
10. Elapsed time meters shall be provided for each pump on the motor control panel.
11. The pump station controls must provide pump alternation and protection from short circuits, overloads, and low voltages on all phases.
12. Pump stations shall be equipped with an emergency generator and automatic load transfer switch. If the generator is installed outside the main station building, it shall be located inside a sound attenuating enclosure with fencing and screening provided in this section.
 - a. Units shall be powered by natural gas or Liquefied Petroleum (propane) gas. Fuel storage tank is to be sized to allow for five (5) days of continuous operation. Provide a 115-volt battery charger to maintain the charge on the 12-volt DC battery supplied with the engine.
 - b. LP Fuel tanks shall be installed underground according to ASME standards, NFPA 58 standards, and all applicable building codes. If underground storage is not possible and a waiver is granted by the Town's Director of Utilities or the Town Engineer, above ground installation following the NFPA 58 standards is permissible. Screening shall be provided by contractor as required in this section.

H. Force Main

1. Force main and fittings of diameters four (4) inches and larger shall be Polyvinyl Chloride (PVC) manufactured in accordance with ANSI/AWWA C900.
2. All PVC SDR Series pipe shall be manufactured from a Type I, Grade I Polyvinyl Chloride (PVC) compound with a Cell Classification of 12454 per ASTM D1784. The pipe shall be manufactured in strict compliance to ASTM D2241, consistently meeting and/or exceeding the Quality Assurance test requirements of this standard with regard to pressure rating, material, workmanship, burst pressure, flattening, impact resistance, and extrusion quality.
3. All force mains shall be pressure tested in accordance with procedures in ANSI/AWWA C 600.
4. Depth of cover shall be a minimum of four (4) feet.
5. A by-pass connection with a quick connect coupling and shut-off plug valve shall be installed inside the pump station building on the discharge header to allow for bypass pumping into the force main.
6. Force main shall be designed to operate at velocities between two (2) and five (5) feet per second.
7. Minimum force main pipe diameter is four (4) inch, unless otherwise approved by the Town Engineer, and unless a grinder pump is to be utilized. Force main sizing must be coordinated with pump design for optimum performance.

I. Start-Up

1. Start-up and equipment check operations shall be performed by an authorized service technician from the original equipment manufacturer.
2. The Town Engineer and Director of Public Works shall be notified 48 hours prior to start-up and a Town representative shall be present during the period of start-up.
3. A copy of the technician's start up report showing all field data control, set points, and equipment condition shall be furnished to the Town Engineer.
4. Sufficient water for start-up and equipment check shall be the responsibility of the developer.

J. Submittals

1. Prior to beginning work on the station the following data shall be submitted to the Town Engineer for approval:
 - a. A completed application form.
 - b. All calculations and assumptions for the system head curve, total dynamic head, flow quantification, wet-well volume, pump duty cycle at average and peak daily flow, force main line velocity, and any other design calculations.
 - c. Site plan showing subject pumping station relative to area under development and the existing sewer system.
 - d. Building blueprints for the pumping station.
 - e. All pump curves.

2. Prior to acceptance of the pumping station, the following shall be submitted to the Town Engineer:
 - a. Three copies, including a digital copy, of the equipment submittal drawings.
 - b. Three copies, including a digital copy, of the manufacturer's O/M manuals for all mechanical and electrical equipment.
 - c. Recommended spare parts list from the equipment manufacturer.
 - d. One physical and one digital copy of manufacturer's certified test data including reprime performance tests.

II *Summary of Design Criteria*

DESIGN PARAMETER	DESIGN VALUE
1. FLOW DEVELOPMENT	
a. Single family dwellings, GPD/capita	100
b. Others	per accepted text or manuals
2. RATIO OF PEAK HOURLY FLOW/DESIGN AVERAGE FLOW	2.5
3. SITE	
a. Fence	chain link (6')
b. Roadway	asphalt or concrete, single lane, less than 15% grade
c. Maximum landscaped slope, %	15
d. Flood protection, flood event	100 Yr.
4. BUILDING (unless alternate is approved)	
a. Minimum clear ceiling height, ft.	8
b. Unobstructed floor space around pumps, ft.	3
c. Ventilation requirements, air changes/hr	12 continuous, 30 intermittent
d. Potable water service line, in	3/4

Town of Berryville Construction Standards and Specifications - December 2025
Section 14 * Minimum Standards for Wastewater Pumping Stations

- | | |
|---|--|
| e. Interior lighting, 2 bulb, 40W fixtures | 2 watts/SF minimum |
| f. Interior electrical receptacles, 110 volt | 2 |
| 5. WET-WELL | |
| a. Minimum wet-well bottom slope | 1:1 |
| b. Detention time between pump run cycles, min. | 15 |
| 6. PUMPS | |
| a. Maximum pumping rate | 2x designed peak
pump station influent |
| b. Minimum number of pumps | 2 |
| c. Pump type | suction lift, constant speed
unless conditions prohibit |
| 7. ELECTRICAL | |
| a. Incoming service, volt/phase | 460, 3 phase |
| b. Control voltage, volts | 110 |
| 8. FORCE MAIN | |
| a. Pipe material of construction | C 900 PVC |
| b. Depth of cover, ft. | 4 |
| c. Line velocities, fps | 2.0-5.0 |

APPLICATION FORM FOR WASTEWATER PUMPING STATION

All construction plans and specifications for pumping stations must be submitted to the Virginia Department of Environmental Quality, Valley Regional Office, for review and approval. A copy of the DEQ's approval must be provided to the Town, prior to final approval by the Town of Berryville.

A. General Information

1. Name of project served _____
2. Total area served, acres _____
3. Estimated start of construction _____
4. Estimated completion date _____

B. Applicant

I, the undersigned, am fully aware that the statements made in this application for approval of a wastewater pumping station are true, correct and complete to the best of my knowledge.

Mailing Address

Signature of Applicant

Telephone No.

Name and Title

Date

Representing

C. Engineer

This is to certify that this application has been prepared under my direction and the plans and specifications for this wastewater pumping station have been designed by me and are in conformance with sound engineering practices.

Mailing Address

Signature of Engineer

Company Name

Name

Telephone Number

Registration No.

Date

APPLICATION FORM FOR WASTEWATER PUMPING STATION PAGE 2

D. Critical Elevations

1. 100 year flood _____
2. Top of pumping station structure _____
3. Influent line in wet-well _____
4. Bottom of wet-well _____
5. Pump on _____
6. Pump off _____

E. Quantification of Design Flow

	UNITS	@	GAL/UNIT	GPD
1. Single Family Dwellings	_____	@	_____	_____
2. Condominiums, Apartments	_____	@	_____	_____
3. Swimming Pools	_____	@	_____	_____
4. Motels	_____	@	_____	_____
5. School	_____	@	_____	_____
6. Commercial	_____	@	_____	_____
7. Industrial	_____	@	_____	_____
8. Other	_____	@	_____	_____

Average Daily Flow	_____	GPD
Minimum Daily Flow	_____	GPD
Peak Hourly Flow	_____	GPD
Peaking Factor	_____	

F. Design Information

1. Head
 - a. Static head, ft _____
 - b. Total dynamic head, ft _____
2. Wet-Well
 - a. Volume, CF _____
 - b. Detention time at peak hourly flow, min. _____
 - c. Time between pump starts _____
 - d. Ventilation present _____
 - e. Strainer basket present _____
3. Pumps
 - a. Pump manufacturer/Model No. _____
 - b. Number of pumps _____
 - c. Type of pumps _____

APPLICATION FORM FOR WASTEWATER PUMPING STATION PAGE 3

d. Pump capacity

No. 1 _____ GPM @ _____ TDH; _____ HP

No. 2 _____ GPM @ _____ TDH; _____ HP

e. Pump controller

Manufacturer/Model No. _____

4. Force Main

a. Pipe material of construction _____

b. Pipe diameter, inches _____

c. Line velocity _____

d. Depth of cover, ft. _____

5. Electrical

a. Electrical service manufacturer _____

b. Voltage, Phase _____

c. Automatic restart capability _____

d. Alarm manufacturer/Model No. _____

e. Emergency generator, standby engine
or portable engine driven pump _____

6. Building

a. Interior 3/4" hose bib present _____

b. Minimum unobstructed distance around
equipment, ft. _____

c. Overhead support beam present _____

d. Ventilator present _____

e. Number of 110 volt electrical receptacles _____

f. Area of building, SF _____

7. Submittals attached with this application

a. Calculations _____

b. Site plan _____

c. Building blueprints _____

d. Pump curves _____

TOWN OF BERRYVILLE MATERIALS SPECIFICATIONS MANUAL

WATER DISTRIBUTION SYSTEM * December 2025 (Listed in order of preference)

Items for Water Distribution	Manufacturer	Model #	ANSI/AWWA spec.* or other Requirement
Water lines	Griffin		C151/A121.5
	Atlantic States		AWWA C151
	JM Eagle		C0909
Fire Hydrants	American Flow Control Mueller Centurion	Super Centurion 200 B62B 4' D.O.B.	AWWA C502
Gate Valves R.S. Ductile Iron	American Flow Control Mueller	A2361 AFC 2500	AWWA C502
Swing Check Valves	American Flow Control Mueller	A 2600-6 AFC 2100	AWWA C508
Combination Air Release & Air Vacuum Valves	Valmatic Apco	VM 201 C & VM 202 C 143C & 145C	ASTM A126 Class B
Valves Boxes	Tyler Union Pipe Bingham and Taylor	564S BT 22	AWWA C110 ASTM A438-62
Valve Box Adapter	Adapter, Inc.	Valve Box Adapter II (VBAll)	N/A
Bolts and Gasket Kits	Stewart Carson	S-FBK-FF-1/8 C-FBK-FF-1/8	
Mechanical Joint Fittings	Tyler Union Pipe Star	Compact	AWWA C153
Mech. Joint Restraints Mega Lug Glands	EBAA Iron Mega Lugs Ford Meter Box Co.	1100 Series 1400 Series	ASTM A536-80
Wall pipe/Sleeve/Flg Spools – Ductile Iron Pipe and Flanges	Higgins Eng. Davis K Clow		AWWA C115
Service Line Fittings	Ford Meter Box Co. Mueller	C44 Series 110 Series	compression AWWA C800
Service Tubing	Mueller Howell	HDPE	CTS 200 PSI
Threaded Fittings	Trenton Lee Brass	Red Brass Red Brass	ANSI B16.15

(Continued)

*Must meet the requirements of the ANSI/AWWA and/or ASTM standards as described.

TOWN OF BERRYVILLE MATERIALS SPECIFICATIONS MANUAL

WATER DISTRIBUTION SYSTEM * December 2025 (Listed in order of preference)

Items for Water Distribution	Manufacturer	Model #	ANSI/AWWA spec.* or other Requirement
Service Saddles	Ford Meter Box Co. FS 202 Mueller	Double Strap H10500	Stainless Steel Bands
Ball Corporation Stops	Ford Meter Box Co. Mueller	FB 1000 Series 300 Series	AWWA C800
Coppersettters			
Single Service 1 $\frac{1}{2}$ "	Ford Meter Box Co.	VBHH76-15C11-66NL	AWWA C800
Single Service $\frac{5}{8}$ "	Ford Meter Box Co.	VBHC172-12WW443NL	W/ dual bypass check valve
Single Service 1"	Ford Meter Box Co.	VBHC174-15W444NL	
Double Service $\frac{5}{8}$ "	Ford Meter Box Co.	VBHC172-12W1433NL	
Single Service 2"	Ford Meter Box Co.	VBHH77-15BHC 11-77NL	
Dual Cartridge Style Check	Ford Meter Box Co.	HHC Series	AWWA C800
Meter Box			
Single Service $\frac{5}{8}$ "	Bingham & Taylor	18" x 30"	High density plastic
Single Service 1"	Bingham & Taylor	24" x 30"	High density plastic
Meter Box Frame and Cover $\frac{5}{8}$ " to 2"	Ford Meter Box Co.	Style M32C PW REC MC36 or M36	Cast Iron
Single service $\frac{5}{8}$ "	AY McDonald	Style 74M32CRG	Cast Iron
Single service $\frac{5}{8}$ "	Bingham & Taylor	Style #180-18-C	Cast Iron
Meter Box Cover	Ford Meter Box Co.	NO#1	Extensions
Extension Rings	MBC	NO 18-24	Cast Iron
Cold Water Meters	Neptune	T-10	AWWA C700
Blow-off Hydrants	Kupferle Foundary	#77	
Sampling Stations	Kupferle Foundary	NO88-WC (Eclipse)	
Mechanical Joint Connections	Infact Corporation	Foster Adaptor	
Backflow Assemblies Low Hazard	Ames Watts	3000 SS 709 DCA	ASSE 1048
Backflow Assemblies High Hazard	Ames Watts	5000 SS 909 RPDA	ASSE 1047

*Must meet the requirements of the ANSI/AWWA and/or ASTM standards as described

TOWN OF BERRYVILLE MATERIALS SPECIFICATIONS MANUAL

SEWER COLLECTION SYSTEM * December 2025 (Listed in order of preference)

Items for Sewer Collection	Manufacturer	Model #	ANSI/AWWA spec.* or other Requirement
Gravity Sewer Mains PVC	J.M. Eagle	C909/905	AWWA C909 ASTM F1483
Gravity Sewer laterals 4" through 6"	National NAPCO	DR25 PVC	ASTM D3139
Force Main (PVC) 6" through 12"	J.M. Eagle	C909	AWWA C909
Force Main PVC Pressure Pipe 1½" through 4"	J.M. Eagle	C900	AWWA C900
Sewer Main Fittings Gravity	HARCO	C900 Fittings	PVC ASTM D 1784
Mechanical Joint Fittings 3" through 12"	Tyler Union Pipe Star	Compact	AWWA C153
Ball Curb Stops 2"	Ford Meter Box, Inc. Mueller	B11 Series	AWWA C800
Manhole Frames And Cover 24" diameter	Neenah	Watertight R1916-F Standard R1642	ASTM-A-48 Class 35B Gray Iron

(Continued)

*Must meet the requirements of the ANSI/AWWA and/or ASTM standards as described.

TOWN OF BERRYVILLE MATERIALS SPECIFICATIONS MANUAL

SEWER COLLECTION SYSTEM * December 2025 (Listed in order of preference)

Items for Sewer Collection	Manufacturer	Model #	ANSI/AWWA spec.* or other
Hour Meters	Cramer		
Flow Meters	Polysonics		
Suction Lift Pumps	Gorman-Rupp		
Submersible Grinder Pumps	Liberty		
Ball Valve	Geneco	EST ST-3.0	ASTM A-36
Extension Stems	Trumble		84A
Gate Valves R5	AFC 2500	250 PSI R. S.	AWWA C515
Ductile Iron	Mueller A 2361	Ductile Iron	
Air Release and Air Vacuum Valve	Valmatic APCO	801 BW, 802 BW	ASTM A126 Class B
Valve Boxes	Tyler Union Bingham & Taylor	24" x 36" 36" x 48"	Cast Iron
Gate Valve	Geneco	EST ST-3.0	ASTM A-36-84A
Extension Stems	Trumble		
Clean Out Adapters and Plug	Jones Manufacturing	C.I. Clean Out Adapter	Cast Iron
Clean Out Wye Fabricated	HARCO	SDR 21 Long Sweed T-Wye	ASTMD-1784
Clean Out Frame and Cover	Capital Foundaries	Lamp Pole Frame and Cover	Cast Iron
Manhole Internal And External Chimney Seals	N.P.C., Inc. Cretex Wrapid		

*Must meet the requirements of the ANSI/AWWA and/or ASTM standards as described.

TOWN OF BERRYVILLE MATERIALS SPECIFICATIONS MANUAL

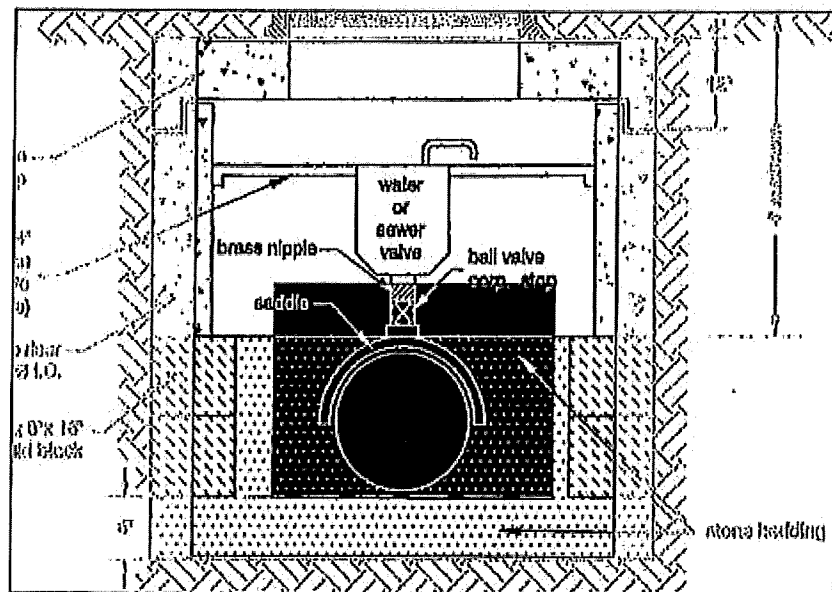
STREET SIGNAGE * December 2025

Items for Street Signage	Manufacturer	Model #	Specifications
Standard public street name sign	N/A	N/A	MUTCD D3-1 3M Green background, white letters white rounded corners
Standard private street name sign	N/A	N/A	MUTCD D3-1 3M3430EGP3430 brown background, white letters white rounded corners
Perforated traffic post	Trinity Highway	SQR-LOC	2" square 14 gauge Aluminum, FHWA approved breakaway support
Enforcement and warning sign posts	N/A	N/A	2" square 14 gauge galvanized yellow post
Sign slot hardware	N/A	N/A	Standard sign 5.6" sign slot 5.6" t slot
Sign T slot hardware	N/A	N/A	

OTHER * December 2025

Items	Manufacturer	Model #	Specifications
Storage Shed	Lifetime		8' x 5' HDPE Double Doors with padlock loop

Town of Berryville



Catalogue of Figures

Figure 1.....	Trench and Bedding
Figure 2.....	Concrete Thrust Blocking
Figure 3.....	Highway Crossing
Figure 4.....	Stream Crossing
Figure 5.....	5/8" to 1" Meter Installation
Figure 6.....	1 1/2" and 2" Meter Installation
Figure 7.....	3" to 8" Meter Installation
Figure 8.....	Gate Valve
Figure 9.....	Fire Hydrant Assembly
Figure 10.....	Fire Hydrant Painting
Figure 11.....	Combination Air Release and Air Vacuum Valve
Figure 12.....	Standard Manhole
Figure 13.....	Manhole Cover and Frame
Figure 14.....	Outside Drop Manhole
Figure 15.....	Manhole Inside Drop Bowl
Figure 16.....	New Manhole on Existing Line
Figure 17.....	Gravity Sewer Service Lateral
Figure 18.....	Sewer Cleanout
Figure 19.....	Deep Hydrant
Figure 20.....	Dead End Hydrant Assembly
Figure 21.....	Dead End Anchor
Figure 22.....	Temporary Blow Off
Figure 23.....	Slope Anchor
Figure 24.....	Concrete Storm Drain Bedding Within Traffic Areas
Figure 25.....	Concrete Storm Drain Bedding Outside Traffic Areas
Figure 26.....	Concrete Storm Drain Bedding Within Easement or Nontraffic Areas
Figure 27A.....	DI-3A, 3B, 3C (Shallow)
Figure 27B.....	DI-3A, 3B, 3C (Shallow)
Figure 27C.....	DI-3A, 3B, 3C (Shallow)

Figure 28.....Modified DI-1 (Shallow)

Figure 29A.....28” Manhole Frame

Figure 29B.....21 ¾” Special Lettered Cover

Figure 30.....24 ¼” Manhole Frame

Figure 31.....23 ¼” Manhole Frame

Figure 32.....1125A Storm Manhole Cover, 4” & 8” Frames

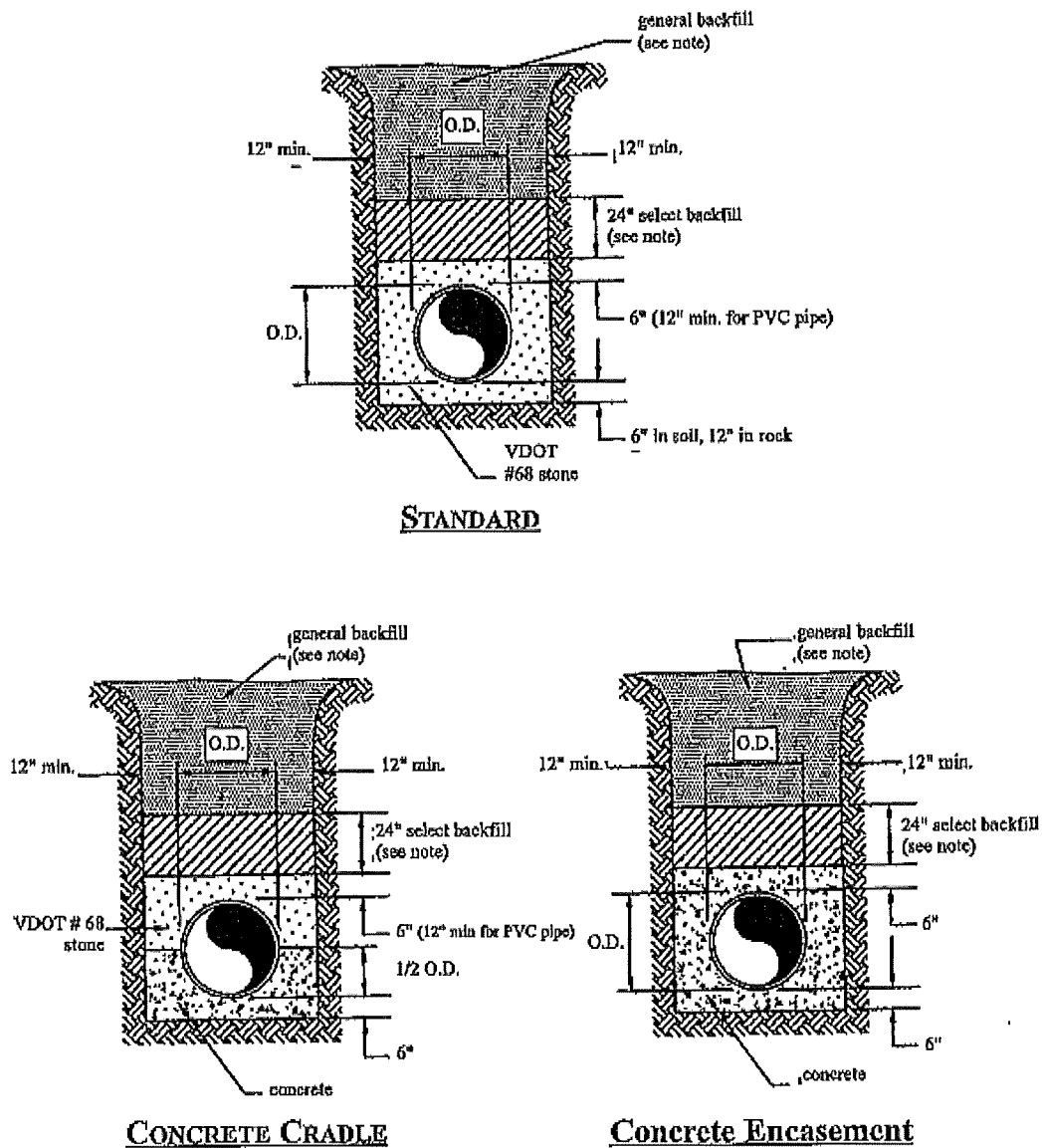
Figure 33A..... 20” Molded Meter Box

Figure 33B.....18” Molded Meter Box

Figure 34.....Lid Touch Read Water Meter Frame and Cover

Figure 35.....Meter Box Frame and Cover

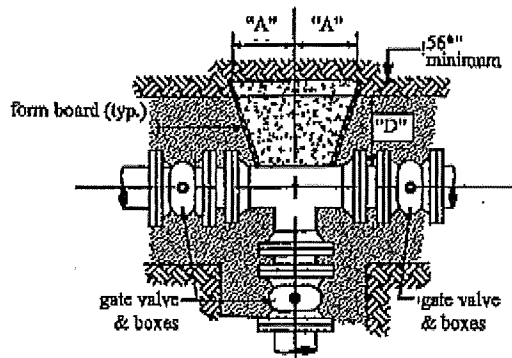
Figure 36.....Test Pit Restoration



TRENCH & BEDDING

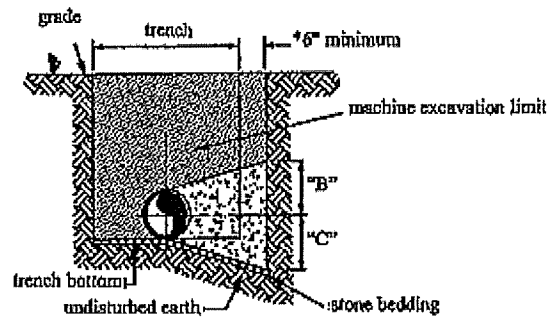
Figure 1

Town of Berryville
Standard Details 2025 Update



TEE, WYE, OR PLUG

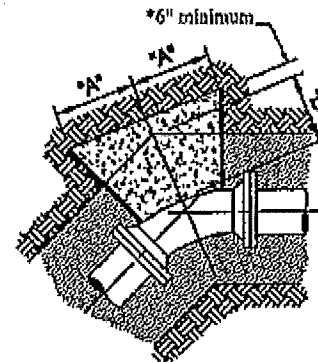
In lieu of wood forming, the fitting may be wrapped with polyethylene and the concrete poured to completely surround the fitting against undisturbed soil. The bearing dimensions against undisturbed soil shall remain as shown.



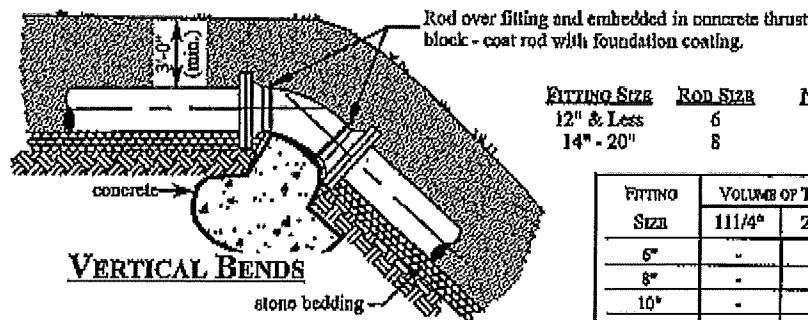
TYPICAL SECTION

* denotes hand excavation
 "D" = 12" min. for 10" and smaller pipe
 "D" = 18" min. for 12" thru 20" pipe
 see chart below for A, B, C dimensions

CONCRETE DIMENSIONS FOR HORIZONTAL THRUST BLOCKS									
PIPE DIA.	PLUGS, WYES & TEES			11 1/4° AND 22 1/2° BENDS			45° AND 90° BENDS		
	A	B	C	A	B	C	A	B	C
6"	1'-0"	0'-9"	1'-0"	0'-9"	0'-9"	0'-9"	1'-3"	0'-9"	1'-9"
8"	1'-3"	0'-9"	1'-3"	0'-9"	0'-9"	0'-9"	1'-6"	0'-9"	2'-3"
10"	1'-6"	0'-9"	1'-3"	1'-0"	0'-9"	1'-3"	1'-9"	0'-9"	2'-6"
12"	1'-9"	1'-0"	2'-6"	1'-3"	1'-0"	1'-6"	2'-0"	1'-0"	3'-0"
14"	2'-0"	1'-0"	3'-0"	1'-3"	1'-0"	1'-6"	2'-6"	1'-0"	4'-0"
16"	2'-3"	1'-0"	3'-6"	1'-6"	1'-0"	2'-0"	2'-9"	1'-0"	4'-6"
18"	2'-6"	1'-3"	3'-9"	1'-6"	1'-3"	2'-0"	3'-0"	1'-3"	4'-9"
20"	2'-9"	1'-6"	4'-0"	1'-9"	1'-6"	2'-0"	3'-3"	1'-6"	5'-0"



11 1/4° THRU 90° BENDS



VERTICAL BENDS

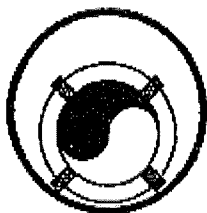
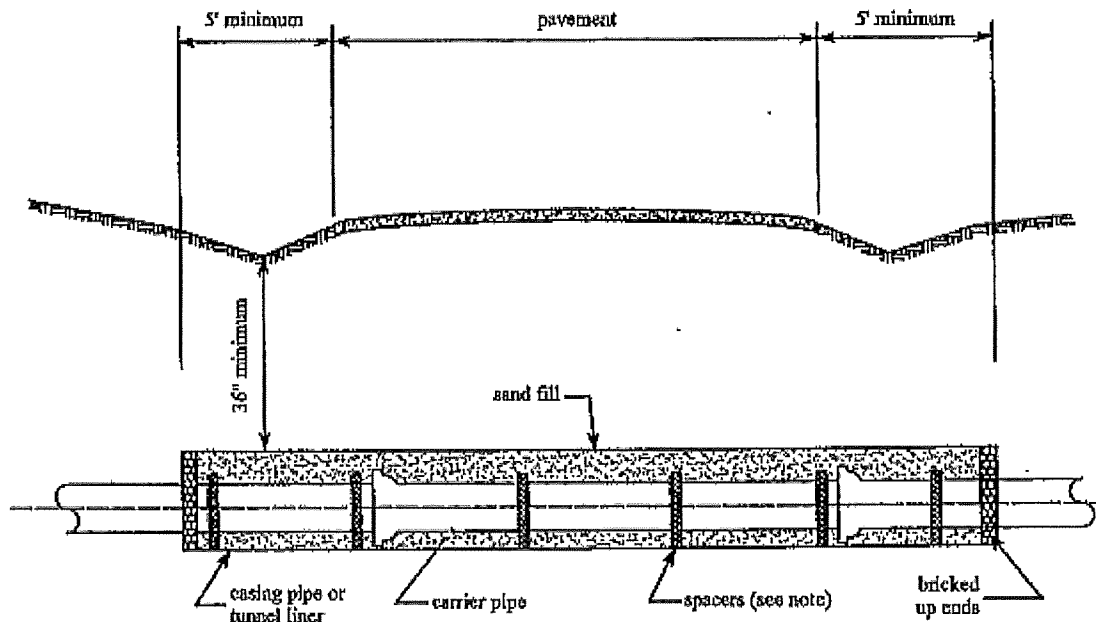
THRUST BLOCKS FOR VERTICAL UP BENDS SHALL BE THE SAME AS FOR HORIZONTAL BENDS.

FITTING SIZE	ROD SIZE	NO. RODS	EMBEDMENT
12" & Less	6	2	30"
14" - 20"	8	2	36"

FITTING SIZE	VOLUME OF THRUST BLOCK PER CUBIC YARD			
	11 1/4°	22 1/2°	45°	90°
6"	-	-	-	1.3
8"	-	-	1.1	2.3
10"	-	-	1.8	3.7
12"	-	1.2	2.8	5.5
14"	0.5	1.7	3.9	7.6
16"	0.9	2.3	5.1	-
18"	1.4	3.2	6.3	-
20"	2.2	4.5	7.8	-

CONCRETE THRUST BLOCKING

Figure 2



SECTION

NOTE:

1. Separation of carrier pipe shall be by manufactured casing spacers with plastic runners.
2. Spacers shall be placed on spigot end within 6 inches of connection to bell; then 2 spacers evenly placed on length of pipe.

SIZES REQUIRED

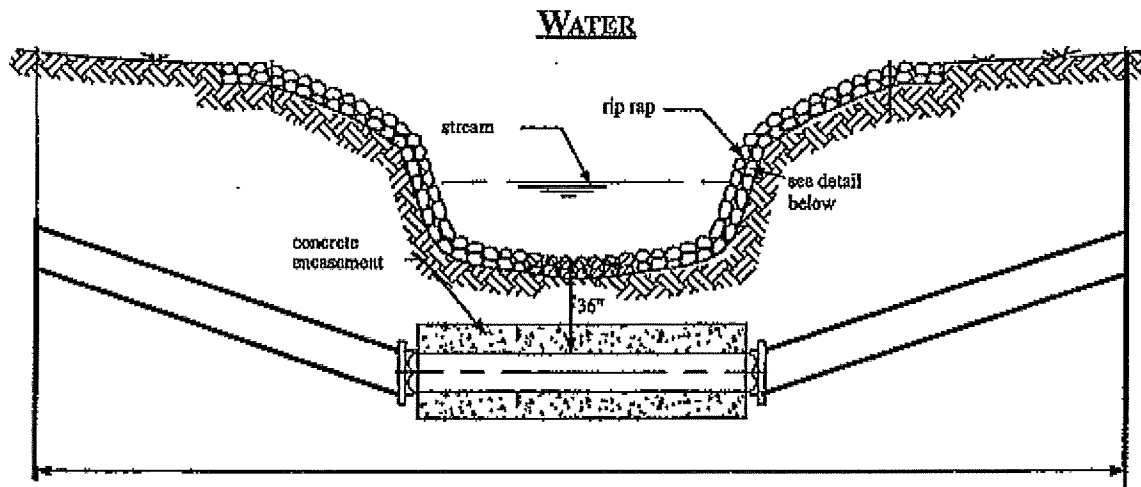
Carrier Pipe Dia. (")	Casing Pipe Dia. (")	Wall Thickness (")
4 or less	12	.250
6	16	.250
8	18	.375
10	20	.375
12	24	.375
14	24	.375
15	24	.375
16	30	.500
18	30	.500
20	36	.500
21	36	.500
24	36	.500
(for larger pipe use tunnel liner)		

Water Service Laterals

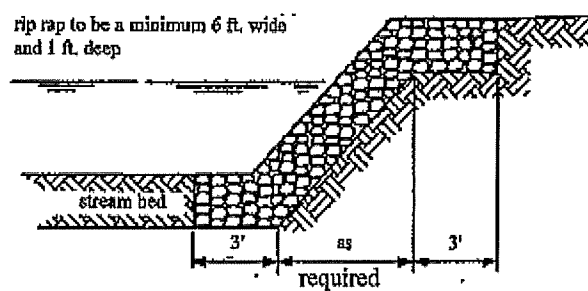
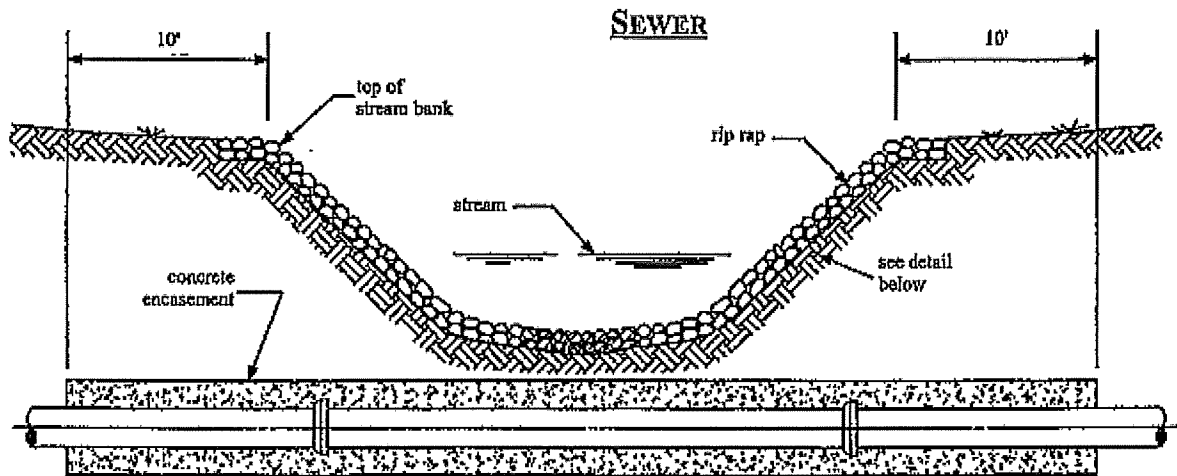
- a) Casing pipe shall be SCH 40 PVC or SDR 21
- b) 3" diameter pipe for 1" service lines
- c) 6" diameter pipe for 2" service lines
- d) No spacers or sand fill to be installed

HIGHWAY CROSSING

Figure 3



M.J. FITTINGS AND D.I. PIPE RESTRAINED BY MEGALUG RESTRAINING GLANDS.

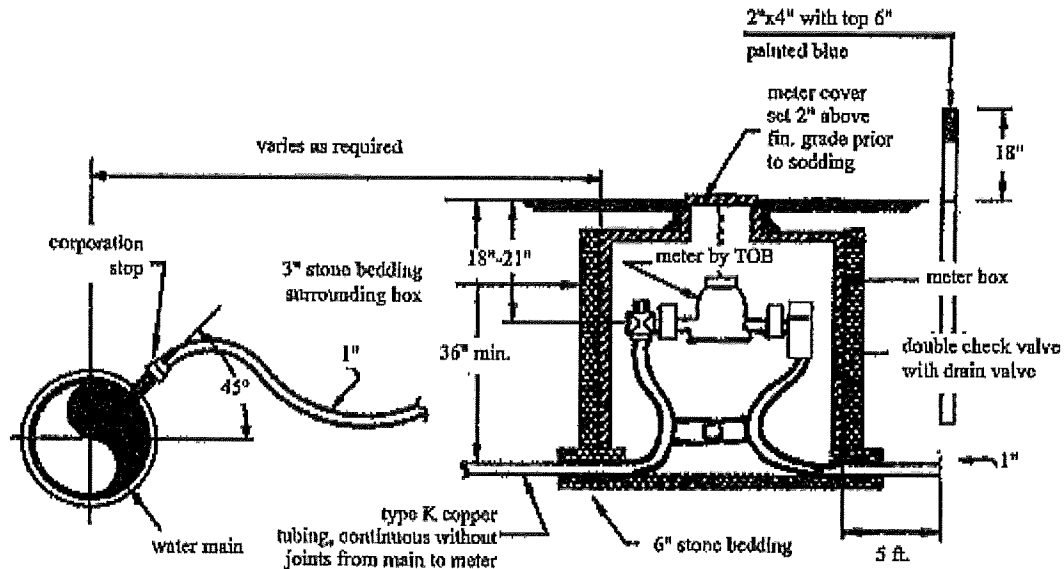


STREAM CROSSING

Figure 4

METER BOX & COVER

Meter Size	Meter Box		Meter Box Cover
5/8"x3/4" or 3/4"	18 in Dia.	Non-Traffic	M32C-PW + FP cast iron plug
		Traffic	A32HH-T
1"	24 in Dia.	Non-Traffic	MC-24 (Frame) WITH RML-1-T (Top Lid)
		Traffic	MC-24 (Frame) WITH RML-12-T (Top Lid)



METER SETTING PARTS		
SERVICE PIPING DIA.	METER SIZE	FORD METER SETTER
3/4"	5/8"x3/4" (20 gpm)	VBHC 72 12W 4433
1"	5/8"x3/4" (20 gpm)	VBHC 72 15W 44-44B4
1"	3/4" (30 gpm)	VBHC 72 15W 44-44B4
1"	1" (50 gpm)	VBHC 74 15W 4444

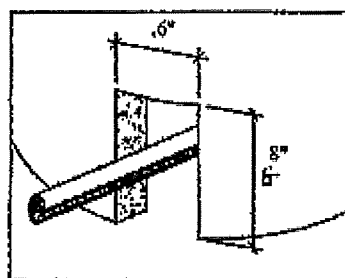
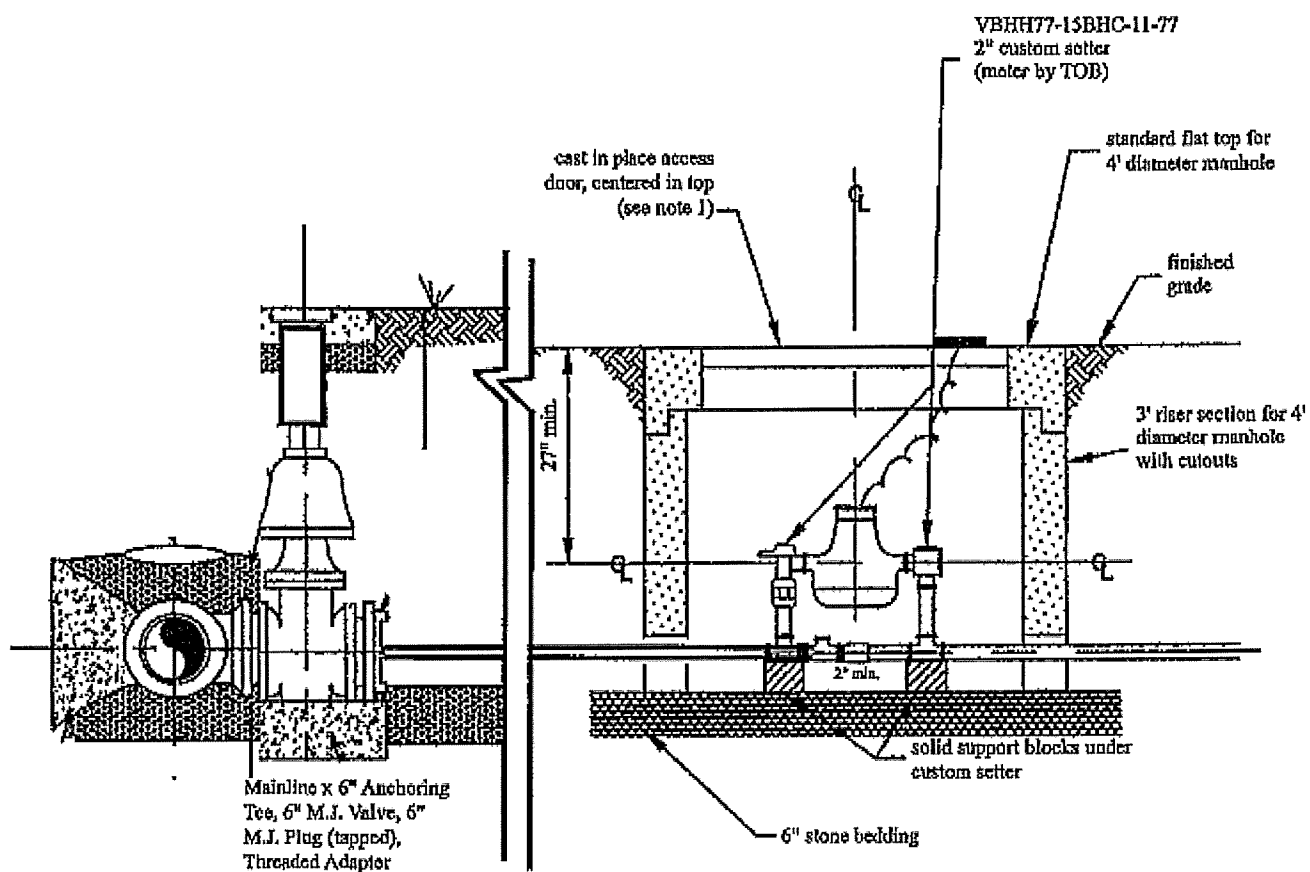
NOTE: Equivalent meter setters by other manufacturers may be installed with prior approval of the Director of Public Works.

INSTALLATION NOTES:

1. Exact location of meter box assembly to be approved prior to installation.

5/8" x 3/4", 3/4", & 1" METER INSTALLATION

Figure 5



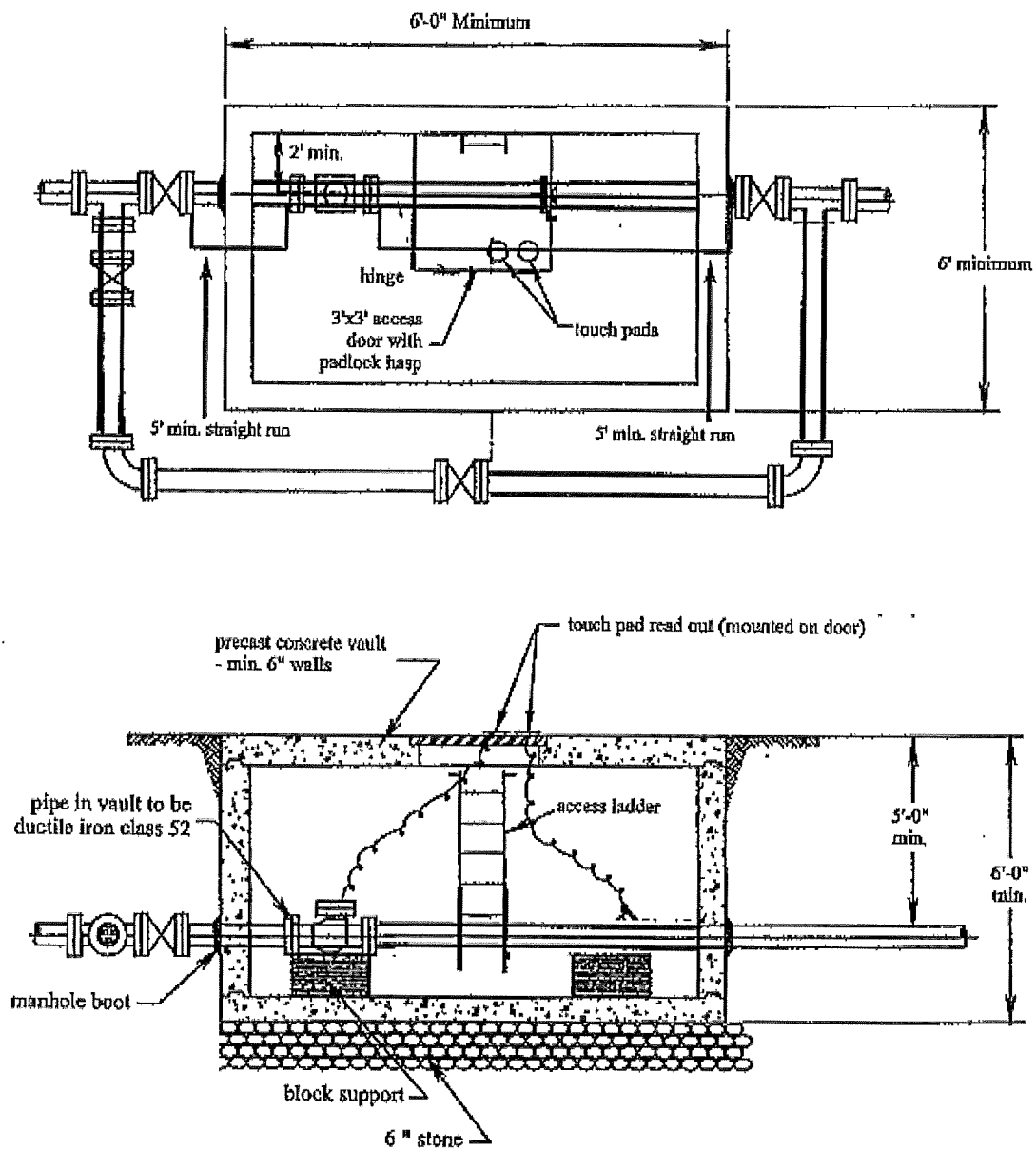
CUTOUT DETAIL
(typical)

NOTES:

1. Access door shall be by Halliday Products or our approved equal:
 - a) in non-traffic area - model no. S1R3030
 - b) in traffic area - model no. H1R2424
2. Water service crossing street shall be encased in 6" diameter SCH40 PVC or SDR21 piping. The piping shall run from one foot beyond sidewalk, across the street, to one foot beyond sidewalk.

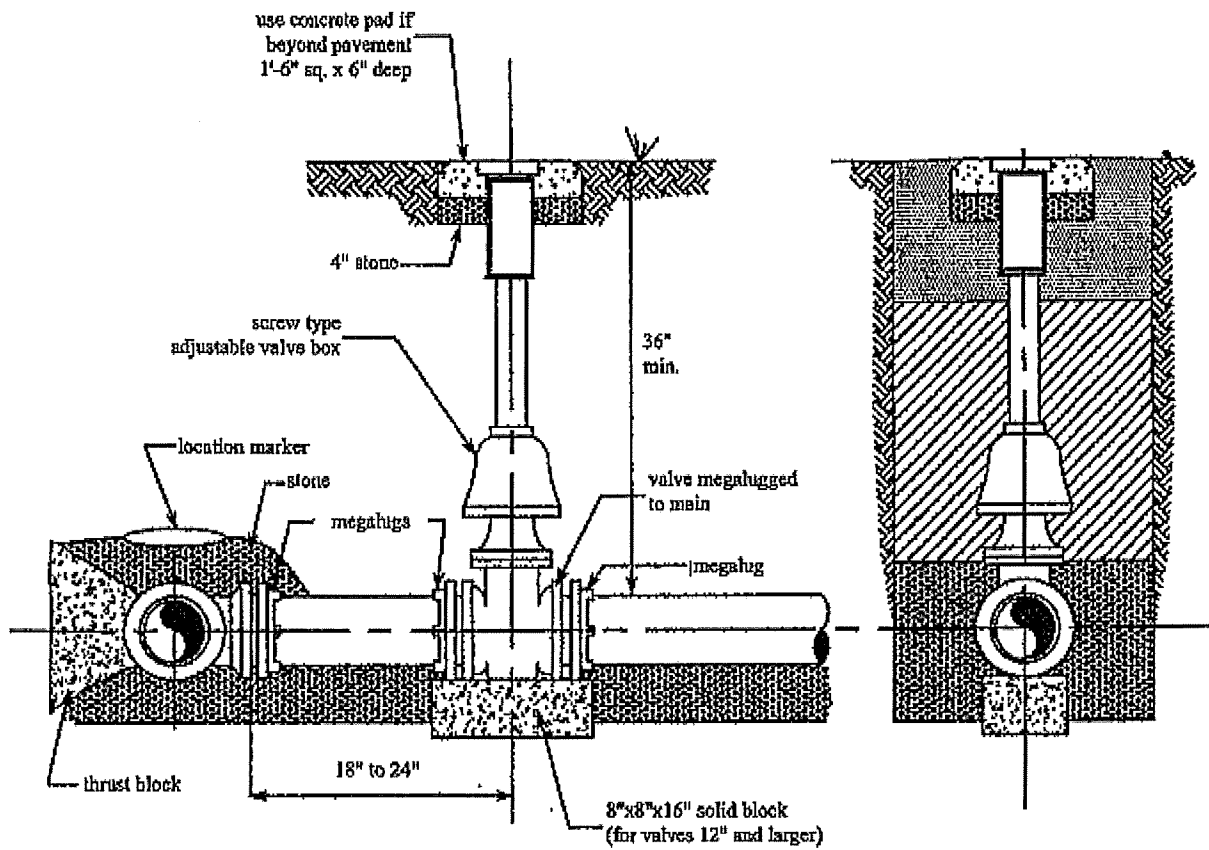
1 1/2" AND 2" METER INSTALLATION

Figure 6



3" to 8" METER INSTALLATION

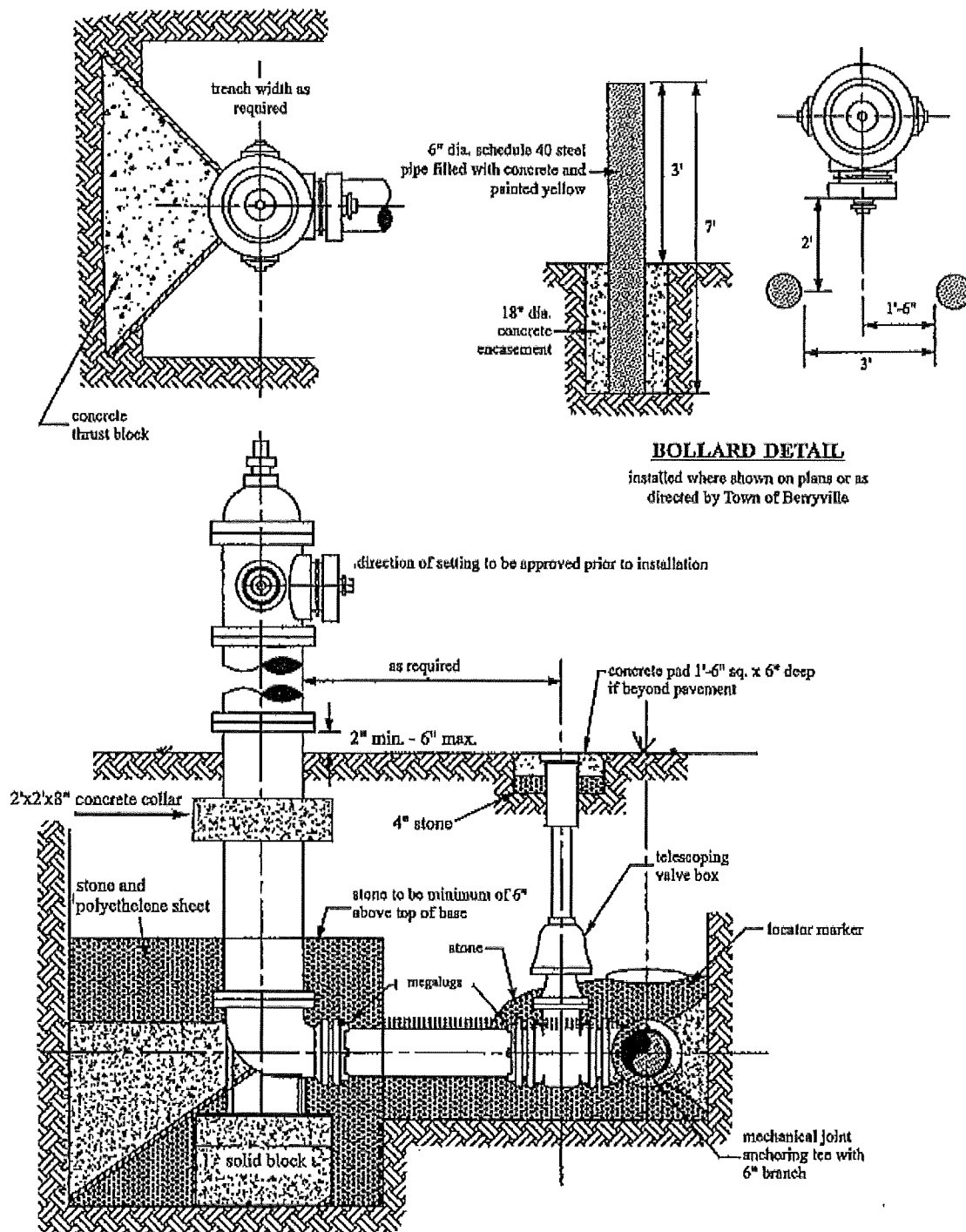
Figure 7



NOTE: this detail is also used for butterfly valves

GATE VALVE

Figure 8



BOLLARD DETAIL

installed where shown on plans or as directed by Town of Berryville

FIRE HYDRANT ASSEMBLY

Figure 9

HYDRANT FLOW COLOR CODES

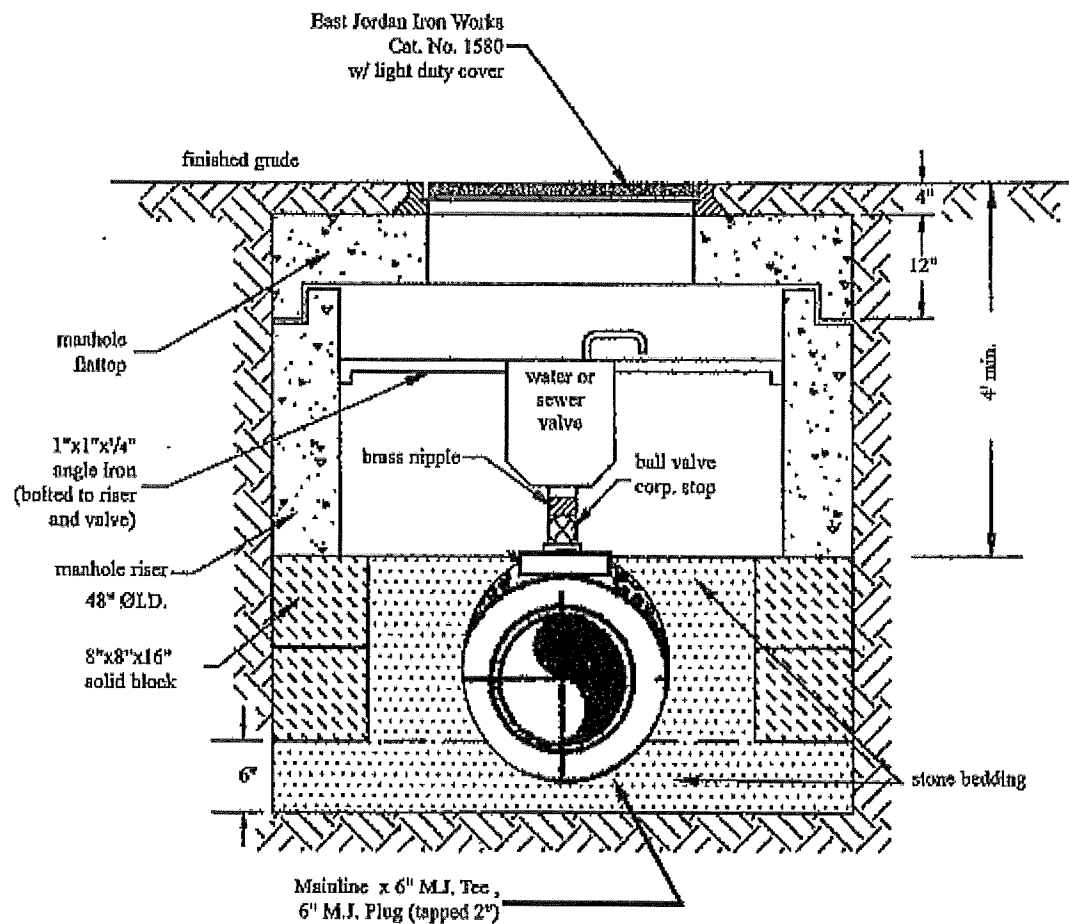
Hydrant Class	Color	Flow
 Class AA	Light Blue	1,600 gpm (5 680 L/min) or greater
 Class A	Green	1,000-1,499 gpm (3 785 L/min to 5 675 L/min)
 Class B	Orange	500-999 gpm (1 900 L/min to 3 780 L/min)
 Class C	Red	Less than 500 gpm (1 900 L/min)

Public Hydrant Barrels shall be silver

Private Hydrants shall be red and marked “PRIVATE”

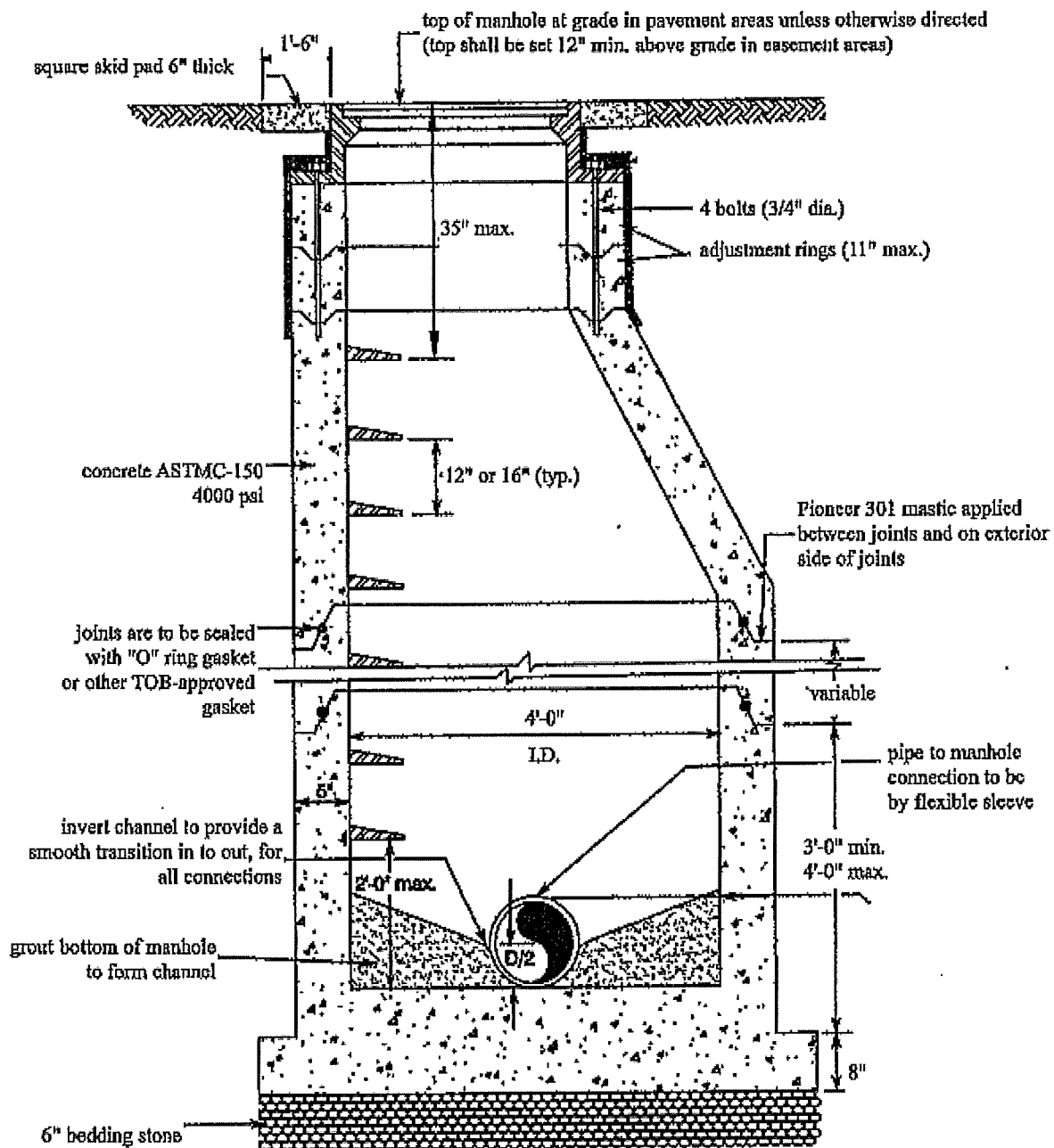
FIRE HYDRANT COLORS

Figure 10



COMBINATION AIR RELEASE AND AIR VACUUM VALVE

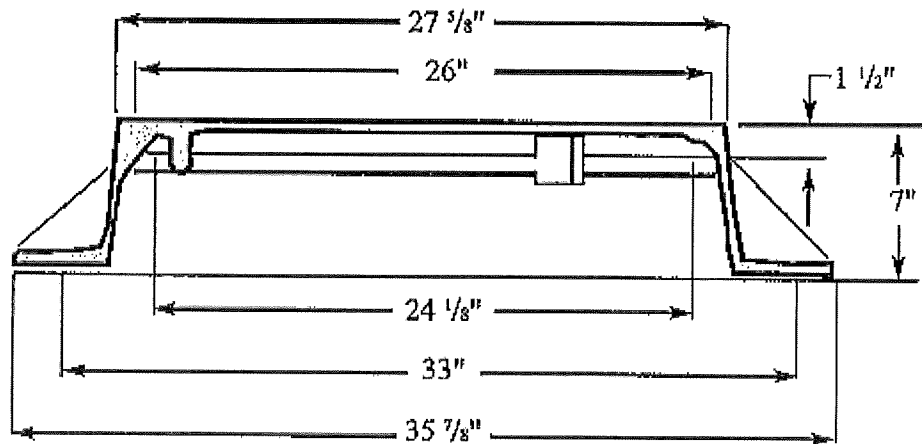
Figure 11



- NOTES:
1. Manhole sections shall have an external coating of approved bitumastic water proofing prior to installation.
 2. If adjustment elevation exceeds two inches use concrete adjustment rings with a exterior coating of bitumastic water proofing.
 3. Final slope adjustment of manhole frame may be by shims and non-shrink grout.
 4. Skid pad to be placed around manholes located in shoulders of roads.
 5. Flat top casting shall be used on shallow manhole (6 ft. or less) installations.
 6. Slope bench at 1":1" toward channel.

STANDARD MANHOLE

Figure 12

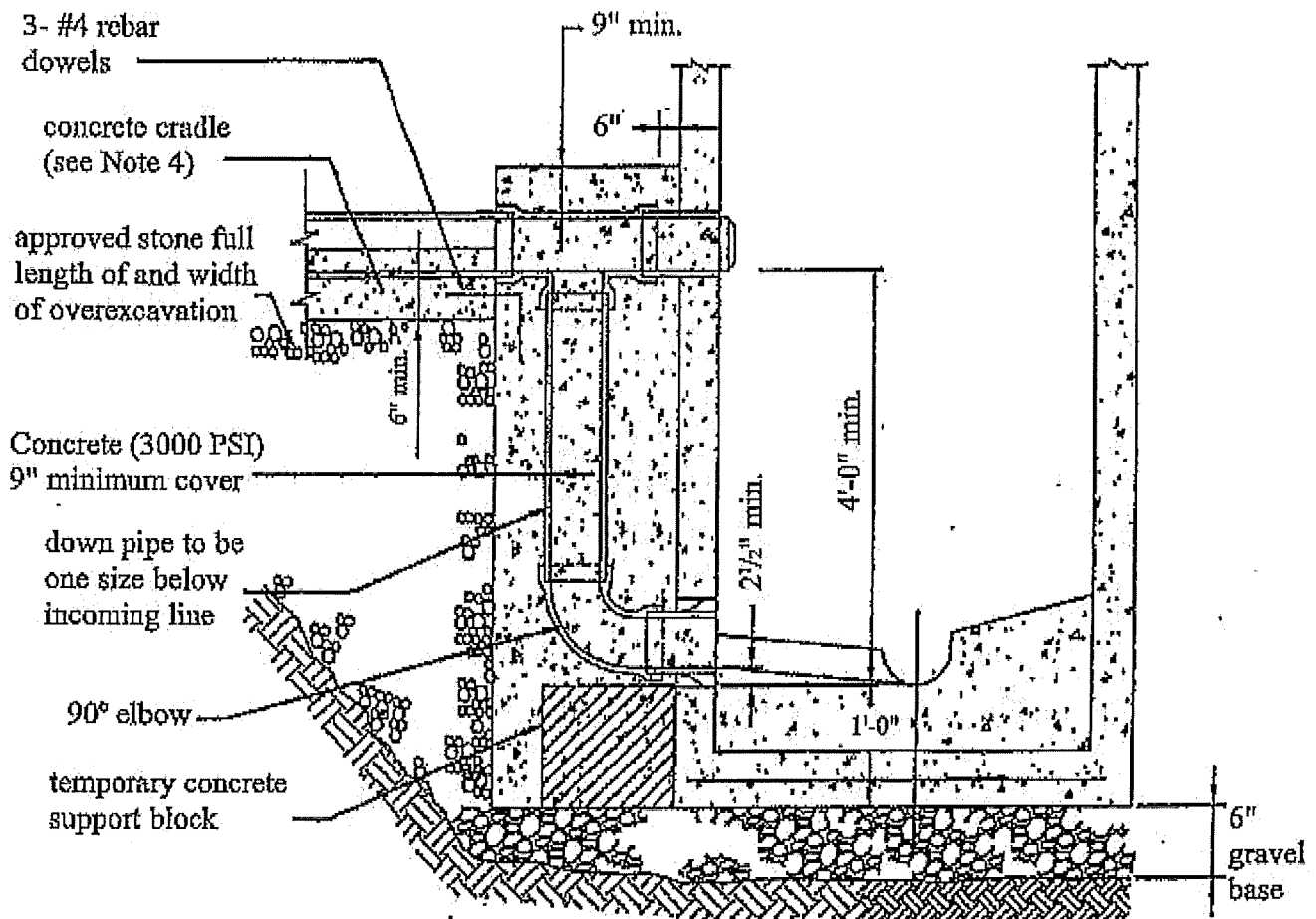


NOTE:

1. Castings shall be manufactured true to pattern. Component parts shall fit together in a satisfactory manner. Castings shall be smooth and well cleaned by shotblasting.
2. Metal shall be ASTM-A-48 Class 35B gray iron minimum, or ASTM-A-536 Grade 80-55-06 for ductile iron.
3. Castings shall have a minimum tensile strength of 35,000 P.S.I., H2O loading.
4. Watertight castings shall be furnished with a bolt down lid and gasket.
5. Standard castings shall be furnished with a compression sealing gasket.

MANHOLE COVER & FRAME

Figure 13

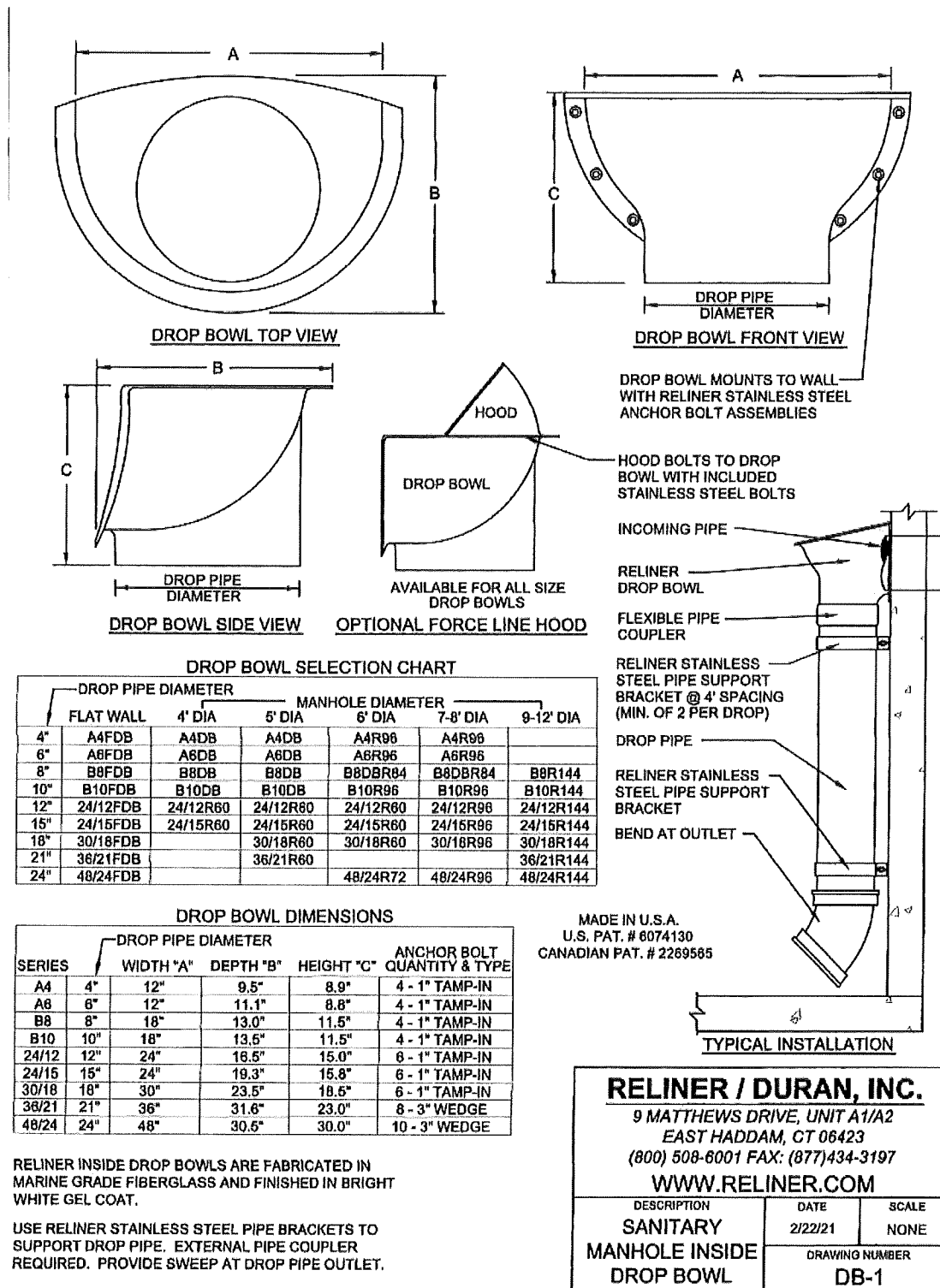


Notes:

1. Incoming line to have 2.0% slope maximum
2. Manhole penetrations to be with core and watertight connector. Core is to be at least 1'-0" clear of horizontal manhole joint
3. Extend concrete cradle onto undisturbed trench bottom to a minimum of 4 feet
4. The elbow at the bottom of the stack may be either a 45- or 90-degree angle turned in the direction of flow. Channel must conform to the manhole bench.

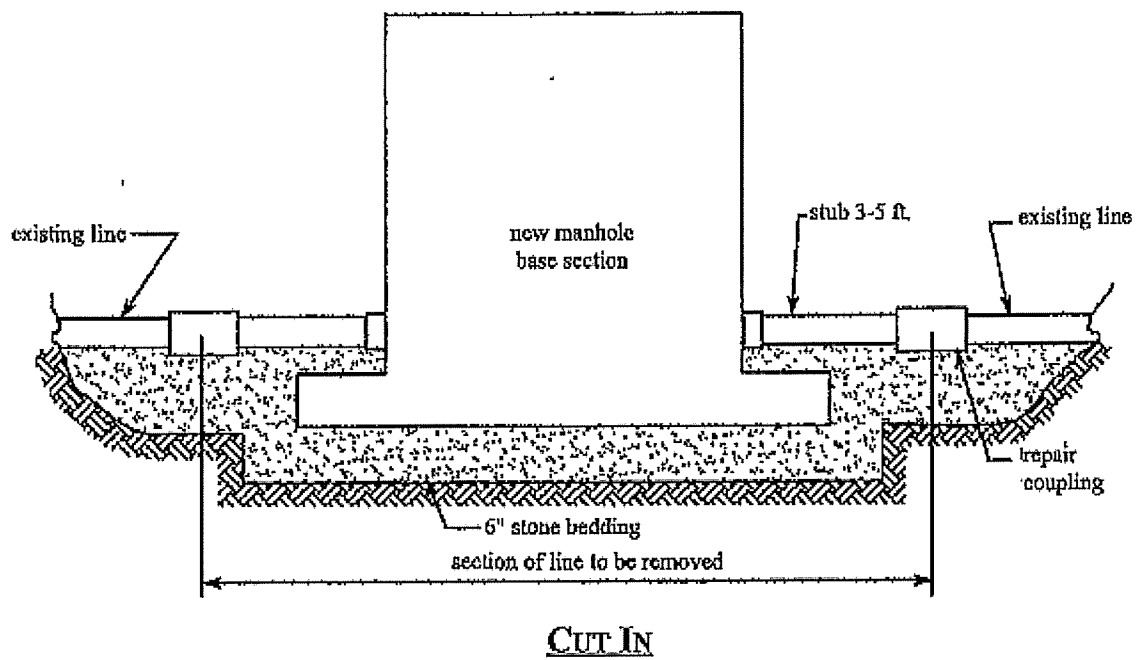
OUTSIDE DROP MANHOLE

Figure 14



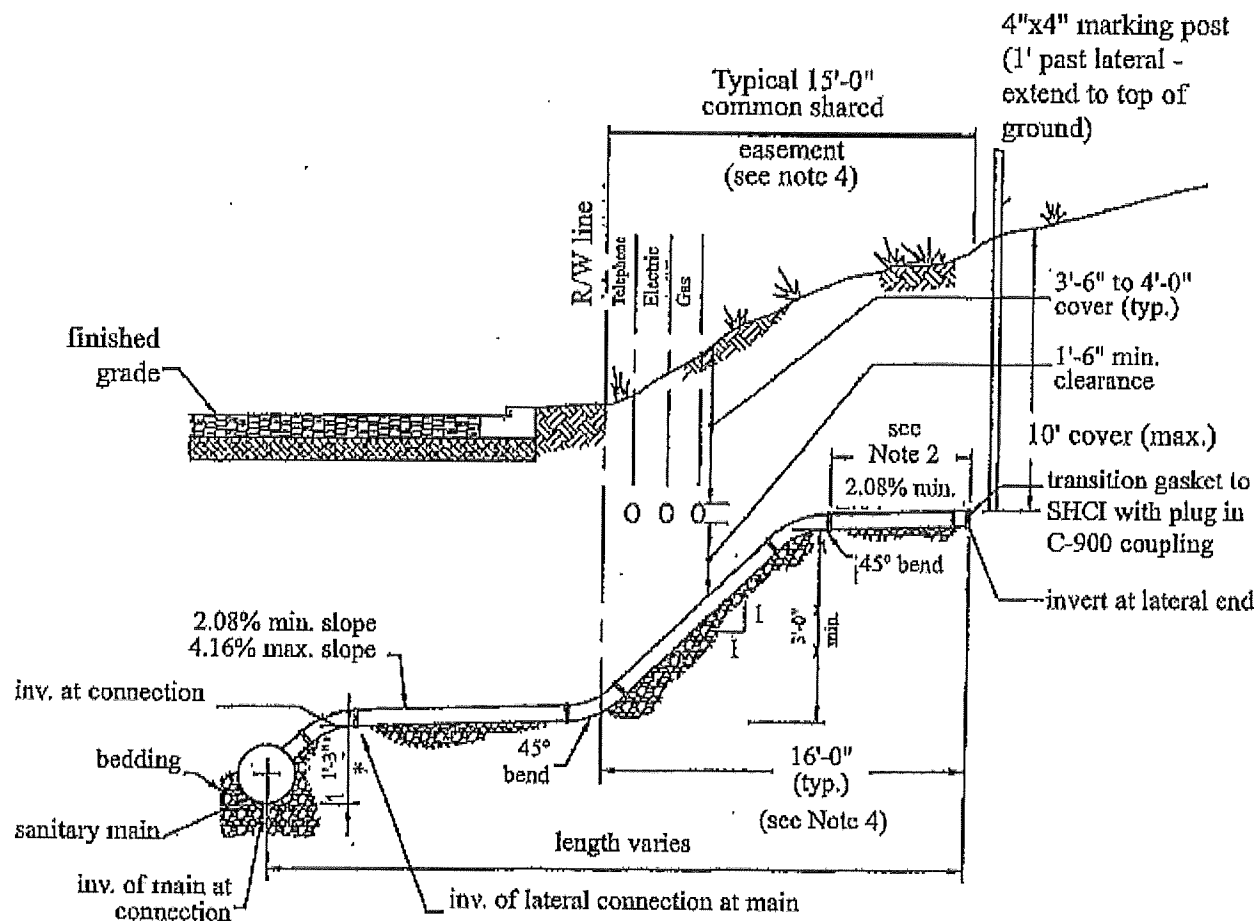
INSIDE DROP MANHOLE

Figure 15



NEW MANHOLE ON EXISTING LINE

Figure 16

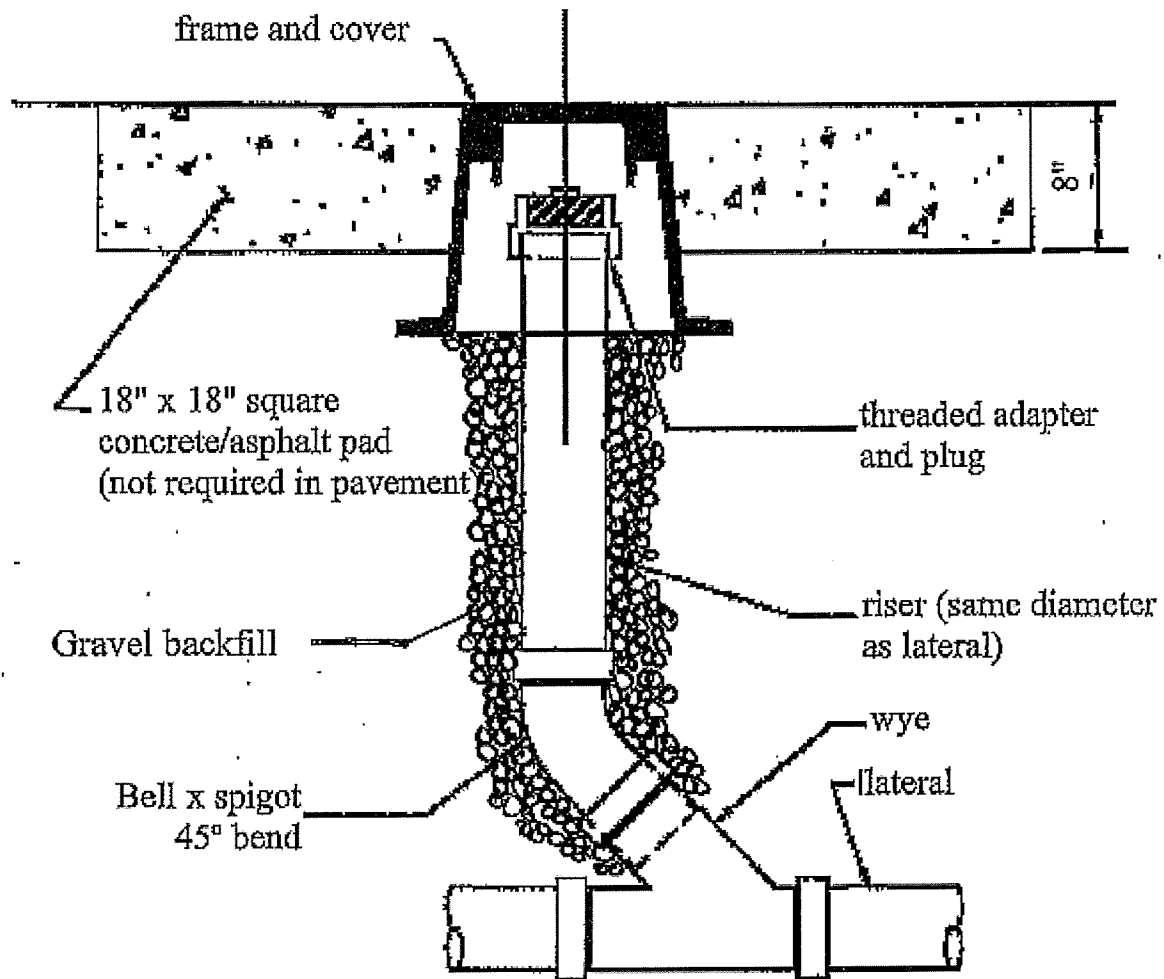


NOTES:

1. *Dimension based on 8" diameter sanitary sewer pipe.
2. Coupling/transition gasket to be minimum of 5' from last pipe joint.
3. Dimensions apply in public rights-of-ways.
4. Refer to approved products list for additional requirements.

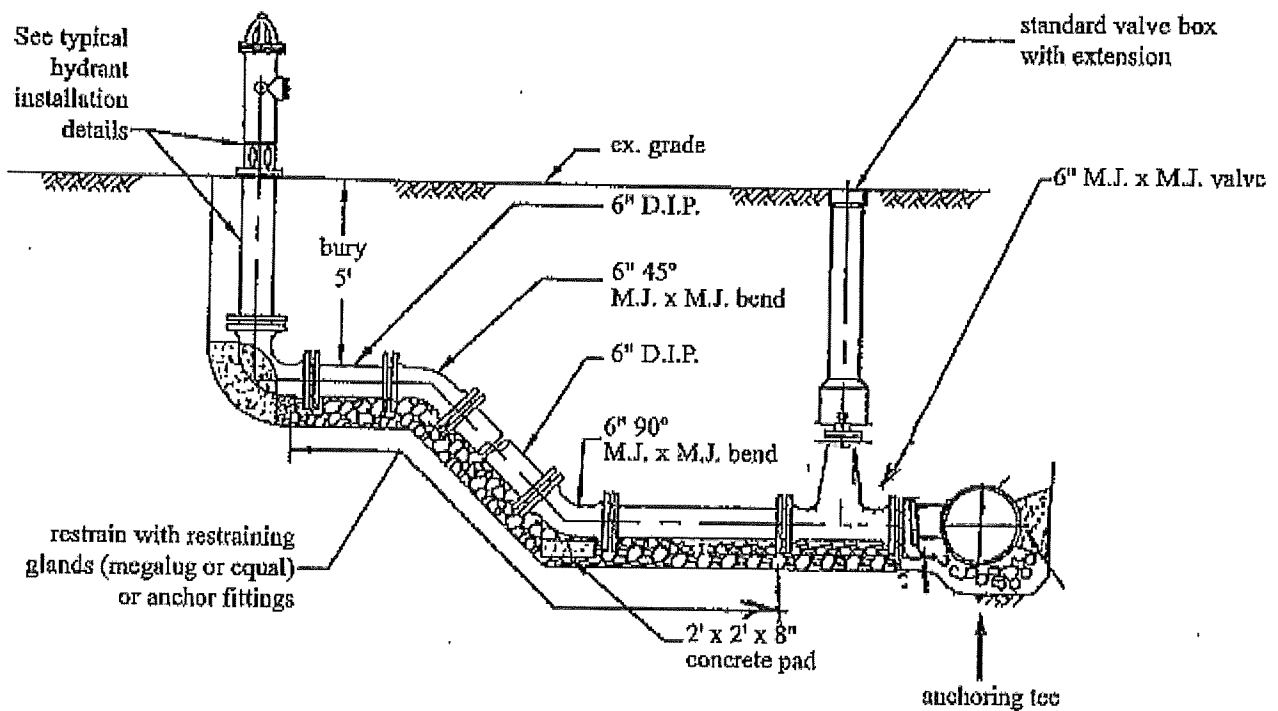
GRAVITY SEWER SERVICE LATERAL

Figure 17



SEWER CLEANOUT

Figure 18

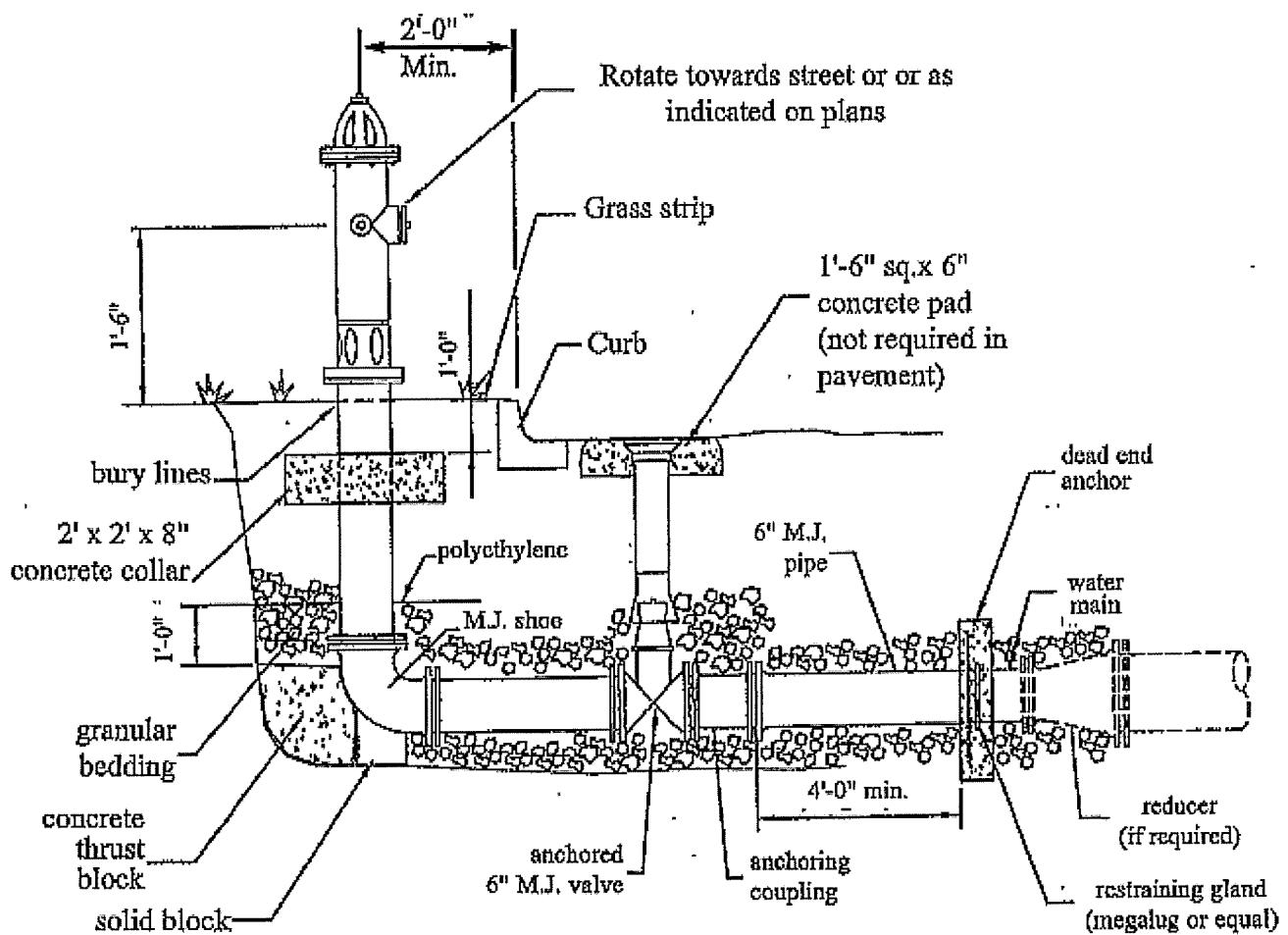


NOTES:

1. Restrain piping from dead end anchor to hydrant barrel.
2. Refer to approved products list for additional requirements.
3. Offset bends to be used where applicable.

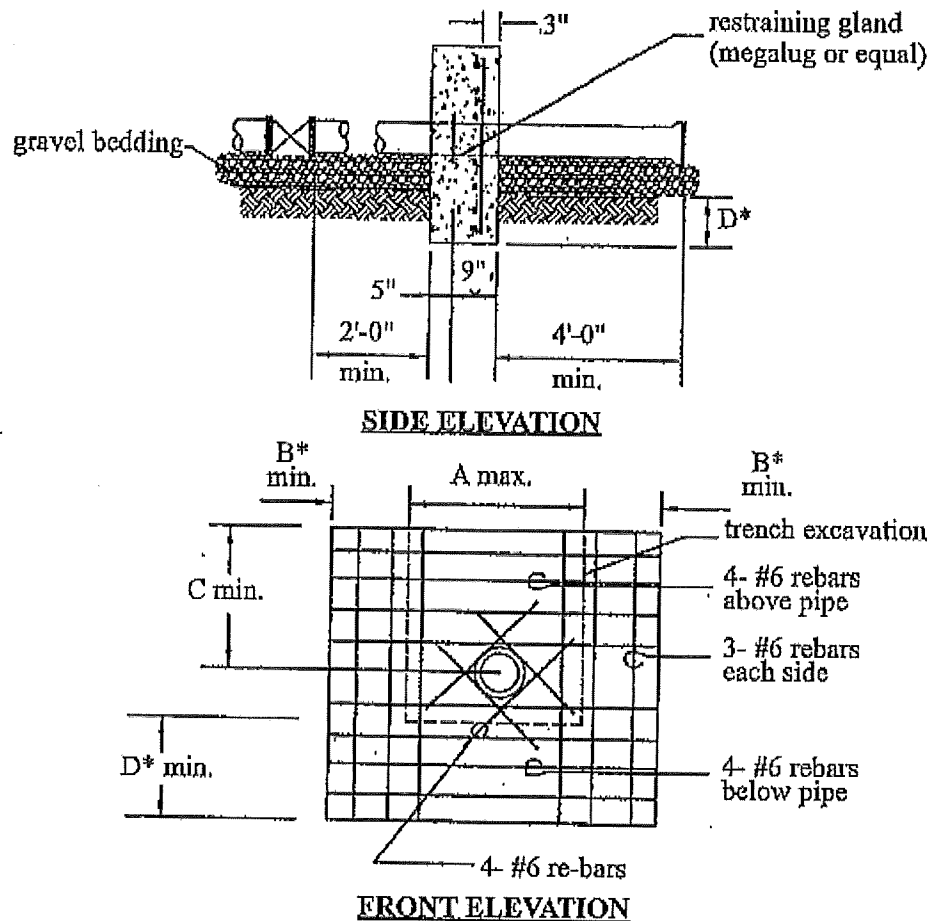
DEEP HYDRANT Perpendicular to Main

Figure 19



DEAD END HYDRANT ASSEMBLY

Figure 20



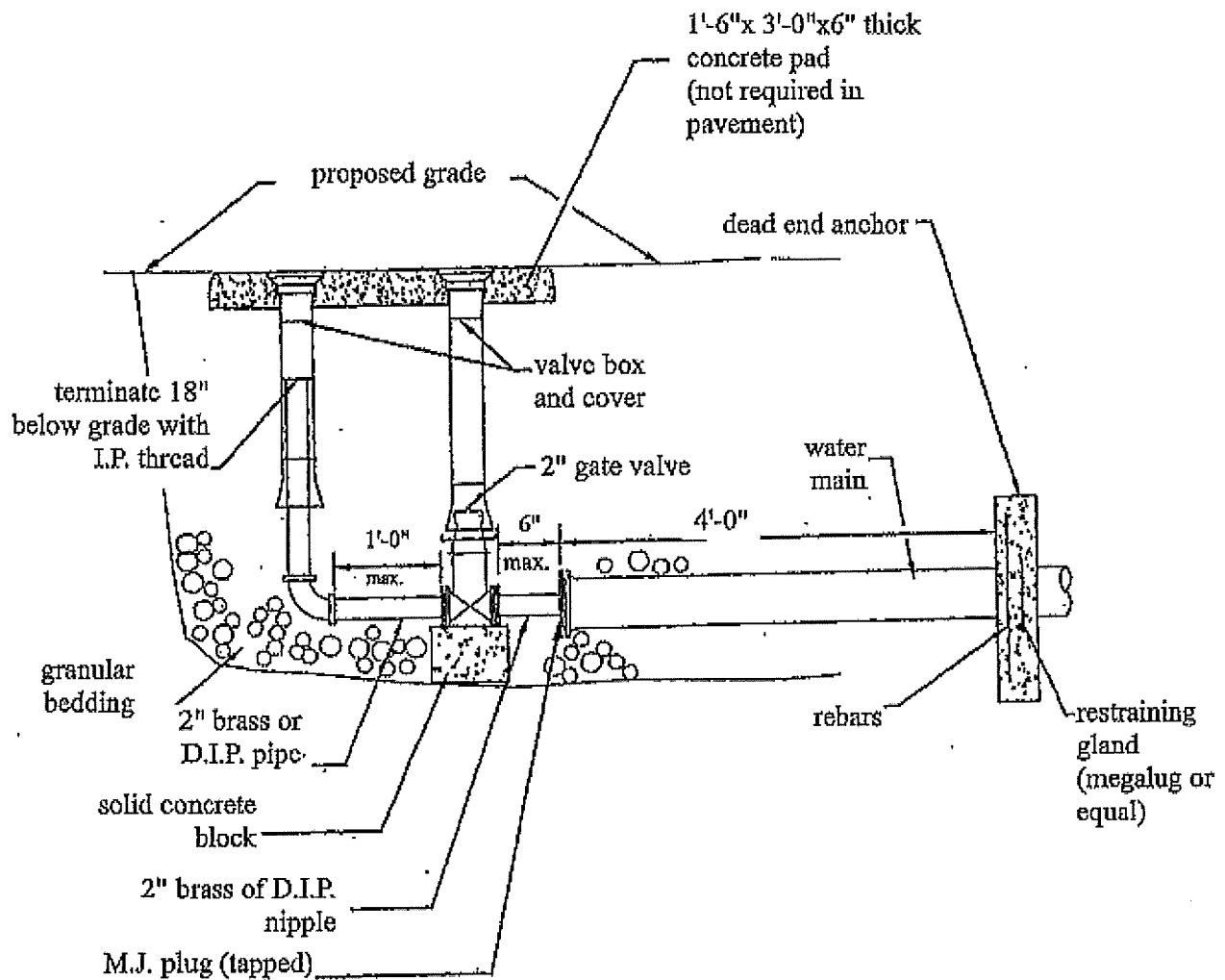
NOTES:

1. Bearing area is based on 200 PSI test pressure and a soil bearing pressure of 2000 pounds per square foot. Increase block dimensions as required for higher test pressures and in soils with lower bearing values.
2. *Dimensions "B" and "D" are minimum values for bearing in undisturbed earth.
3. Refer to approved products list for additional requirements.
4. Concrete strength shall be 3000 PSI.

DEAD END ANCHOR SCHEDULE				
LINE SIZE	A	B*	C	D*
6"	2'-0"	1'-0"	1'-6"	1'-0"
8"	2'-0"	1'-3"	1'-8"	1'-0"
10"	2'-3"	1'-6"	1'-8"	1'-6"
12"	2'-6"	2'-0"	1'-6"	1'-8"

DEAD END ANCHOR

Figure 21



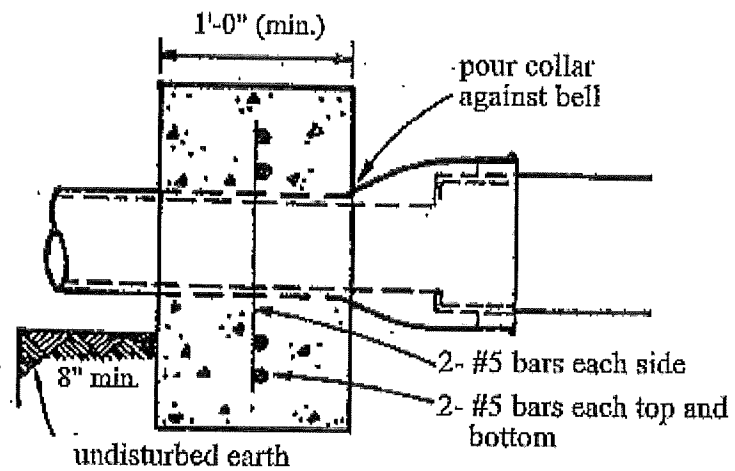
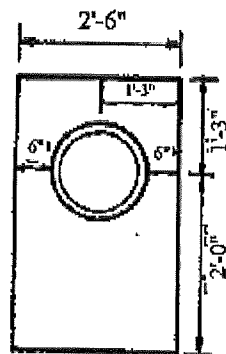
NOTES:

1. All 2" pipe to join with I.P. thread

TEMPORARY BLOW OFF

Figure 22

anchor collar

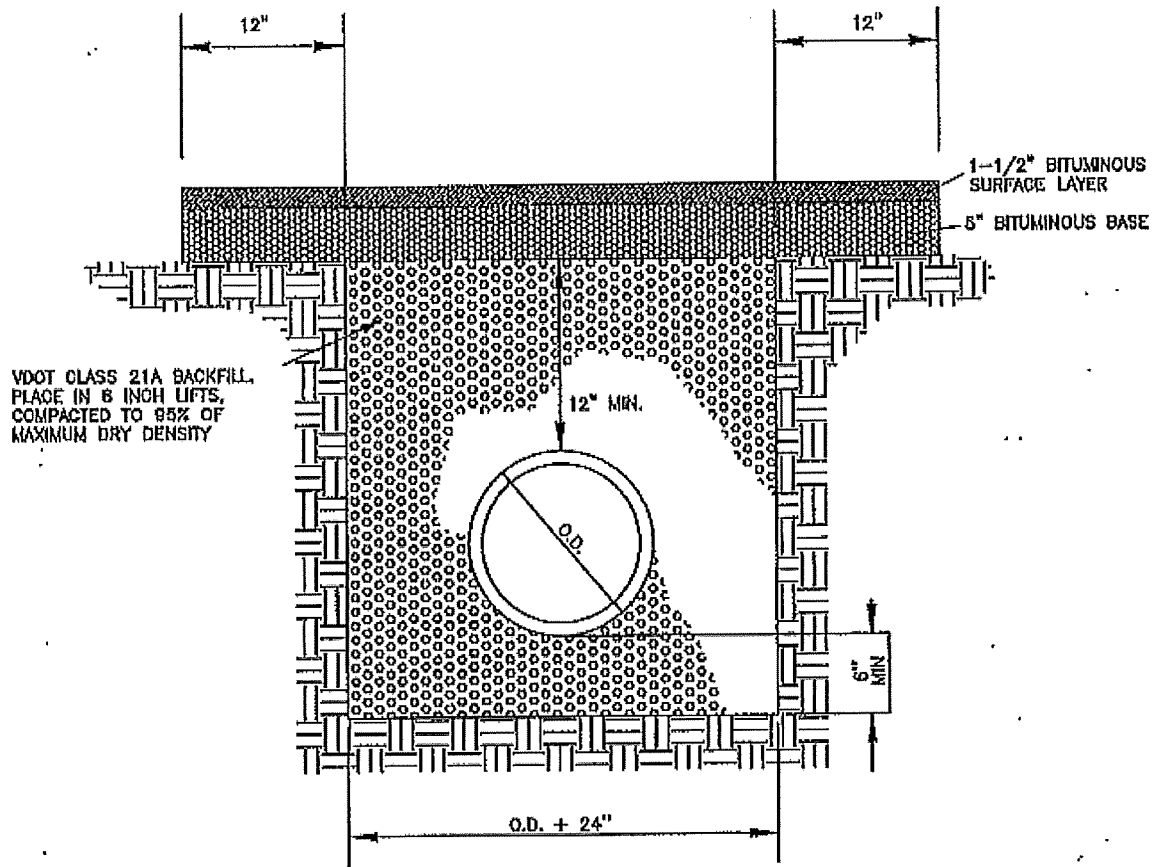


Concrete

$F_c=3000$ PSI at 28 days

SLOPE ANCHOR

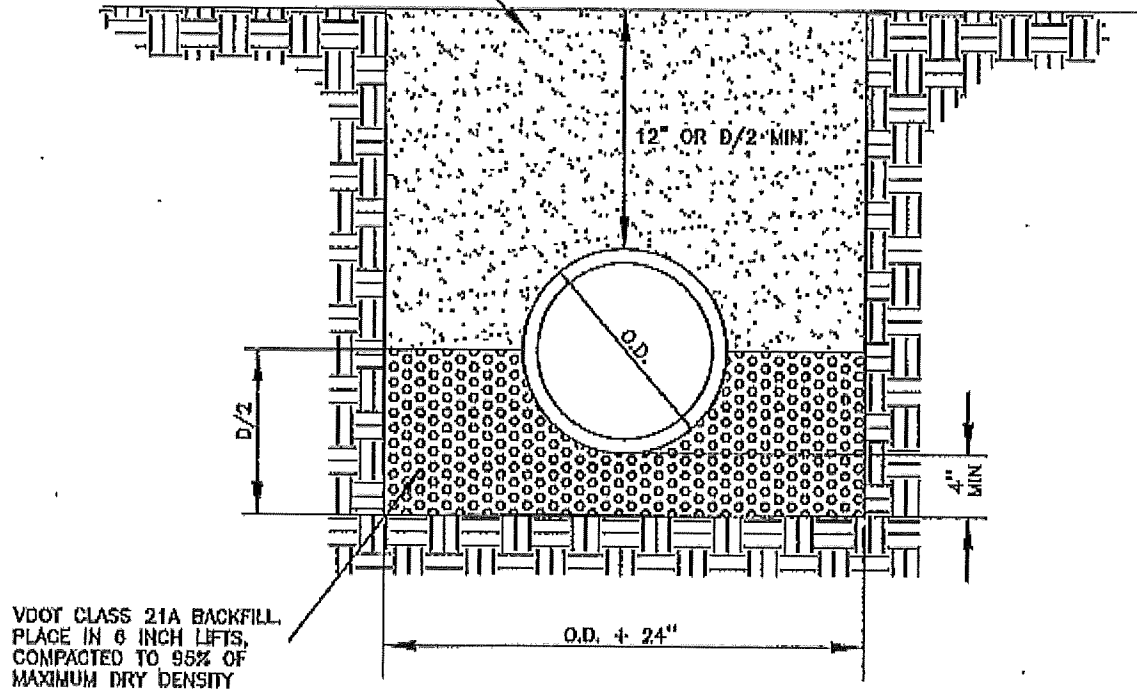
Figure 23



CONCRETE STORM DRAIN BEDDING WITHIN TRAFFIC AREAS

Figure 24

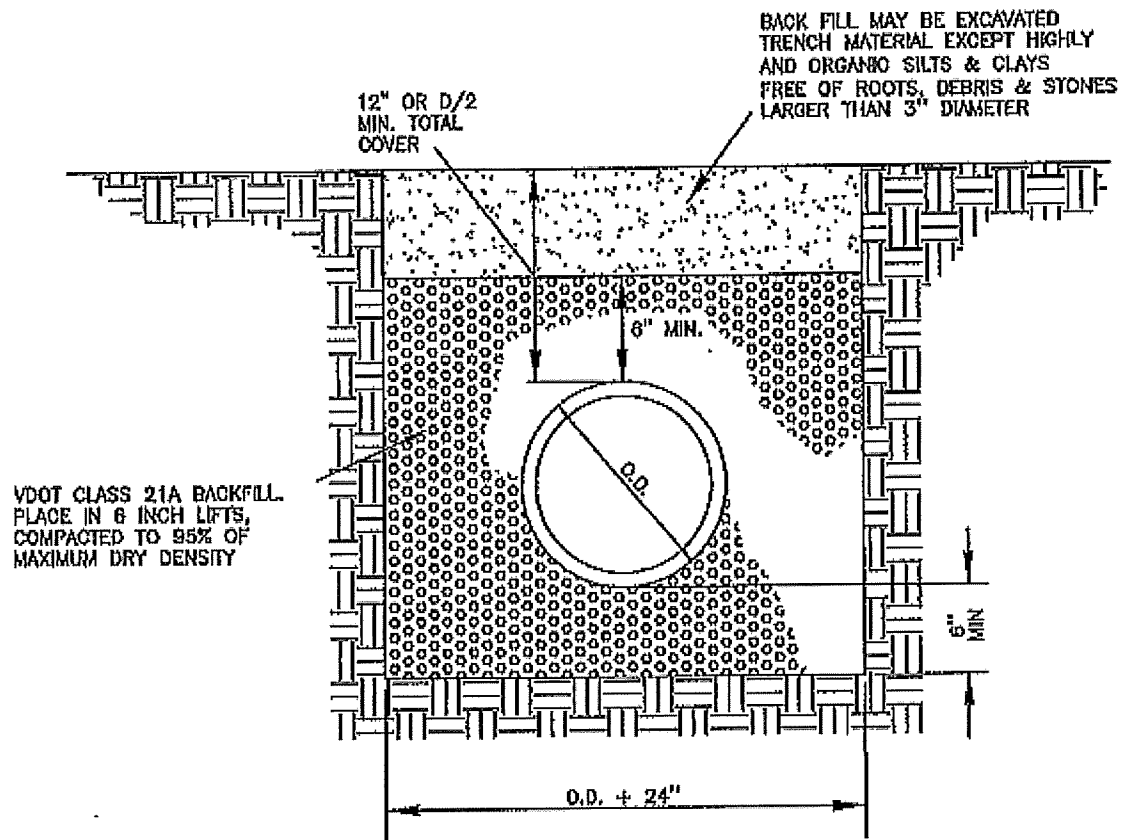
BACK FILL MAY BE EXCAVATED
TRENCH MATERIAL EXCEPT HIGHLY
AND ORGANIC SILTS & CLAYS
FREE OF ROOTS, DEBRIS & STONES
LARGER THAN 3" DIAMETER



CONCRETE STORM DRAIN BEDDING OUTSIDE TRAFFIC AREAS

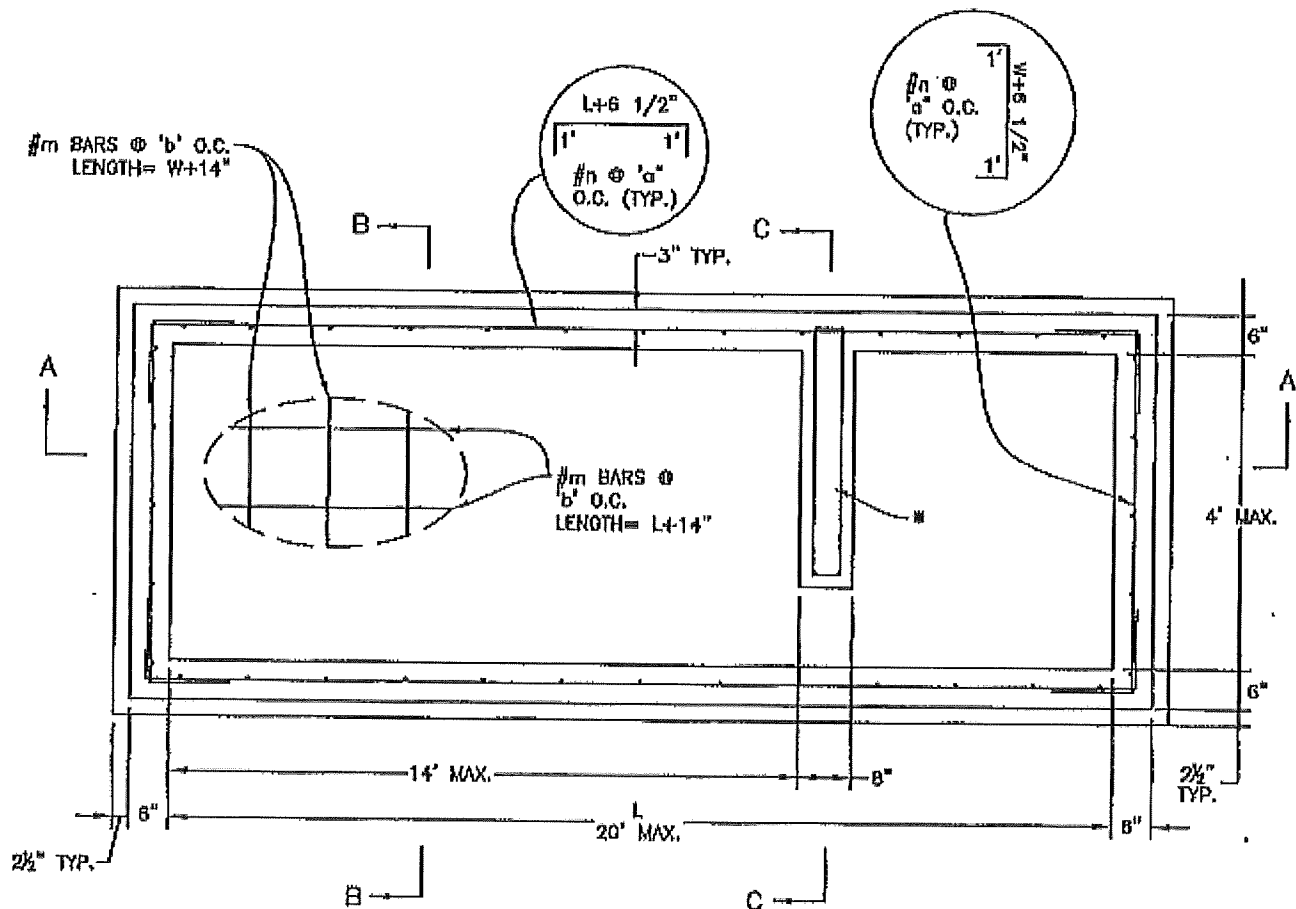
Figure 25

Town of Berryville
Standard Details 2025 Update



CONCRETE STORM DRAIN BEDDING WITHIN EASEMENT OR NONTRAFFIC AREAS

Figure 26



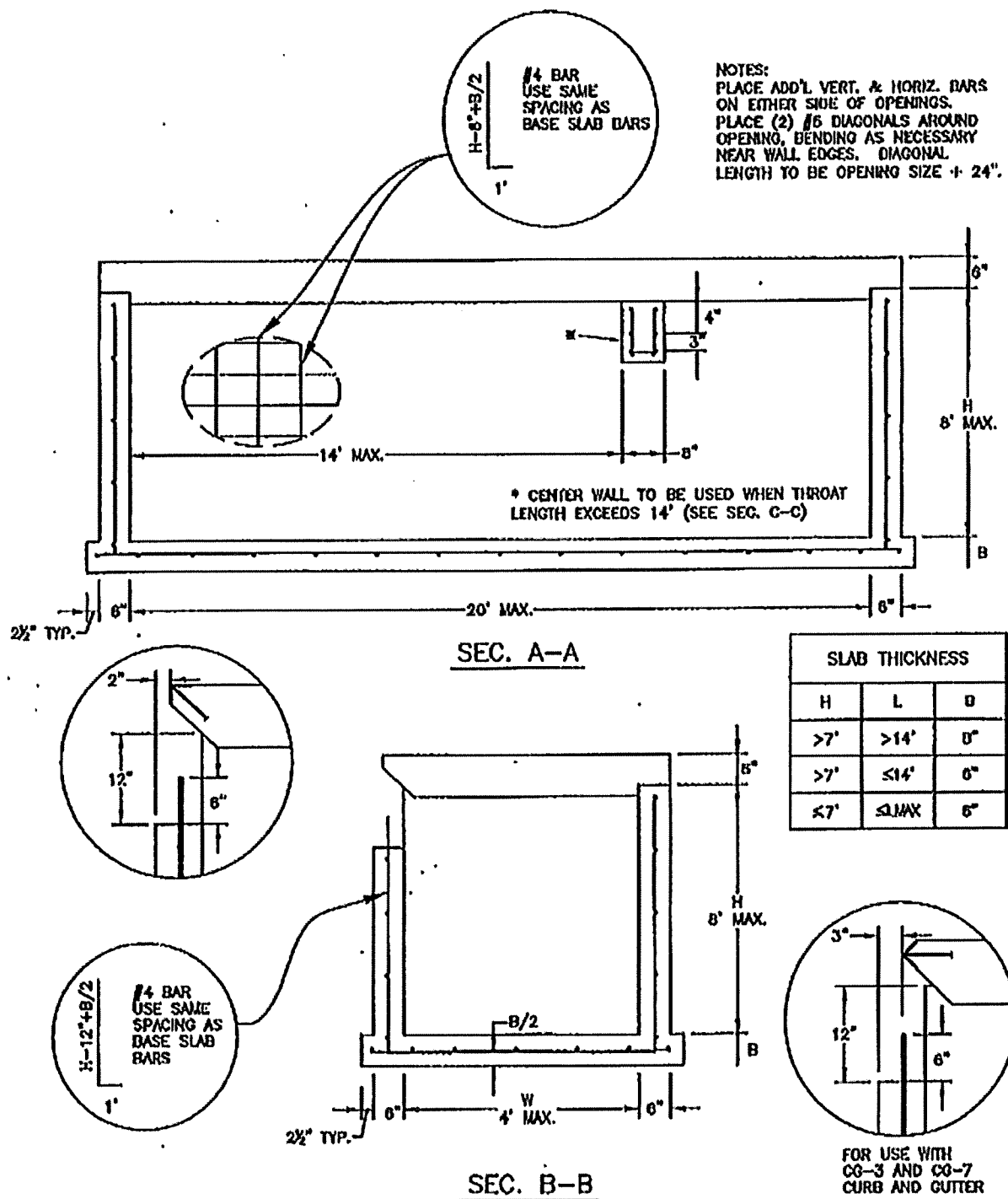
PLAN VIEW
TOP SLAB REMOVED

- NOTES:
1. CONCRETE TO BE 4,000 PSI MIN.
 2. STEEL TO BE GRADE 60
 3. DOWEL HOLES PROVIDED TO PREVENT SETTLEMENT OF ADJACENT CONCRETE
 4. WEEP HOLES PROVIDED
 5. STEPS PROVIDED WHEN HEIGHT IS 4' OR GREATER
 6. GUTTER PAN/THROAT FACE TO BE POURED IN FIELD

BAR SPACING				
L	HORIZ.		BASE	
	n	a	m	b
>18'	5	6"	4	12"
>12'	5	6"	4	12"
>8'	4	9"	4	16"
≤8'	4	14"	4	16"

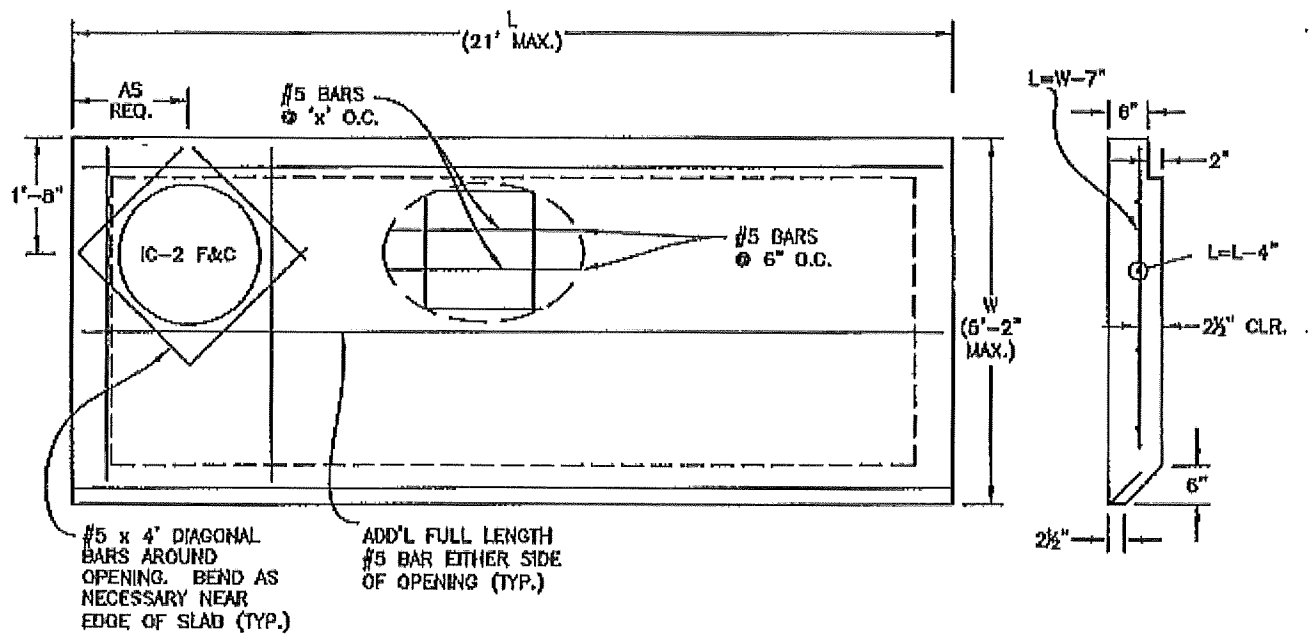
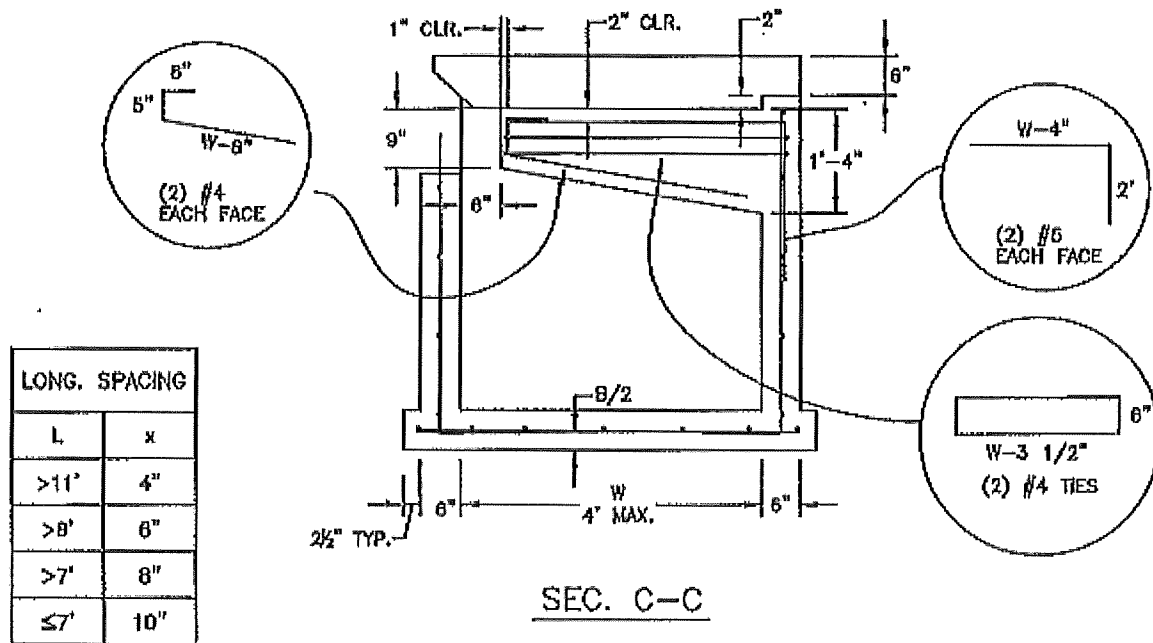
DI-3A, 3B, 3C (SHALLOW)

Figure 27A



DI-3A, 3B, 3C (SHALLOW)

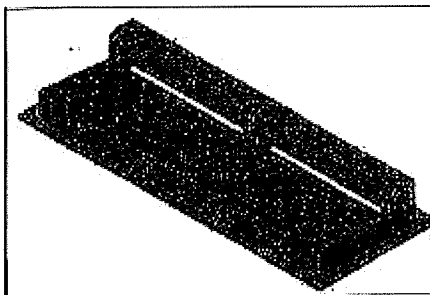
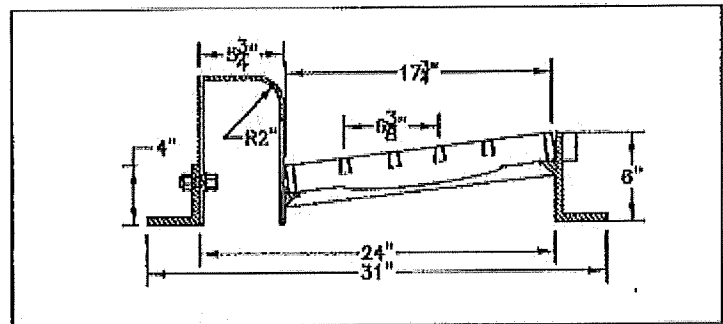
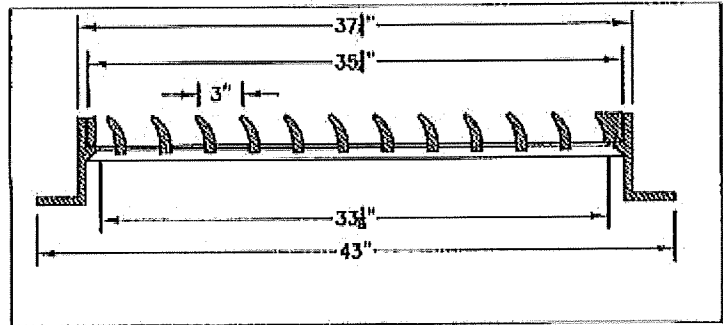
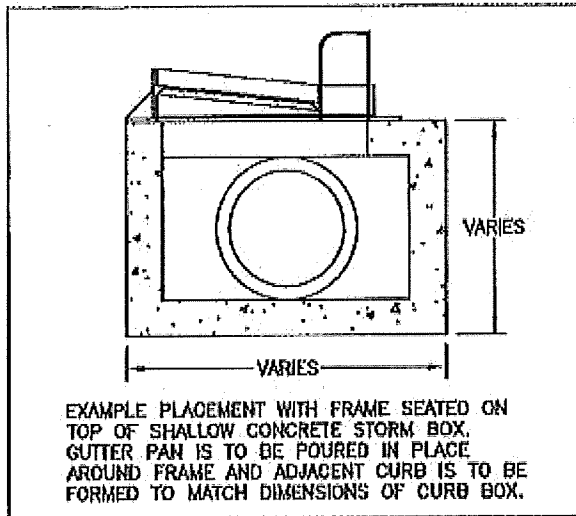
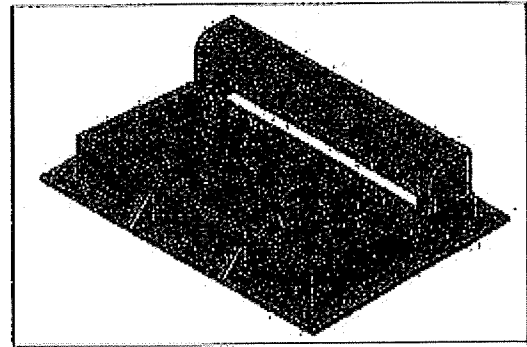
Figure 27B



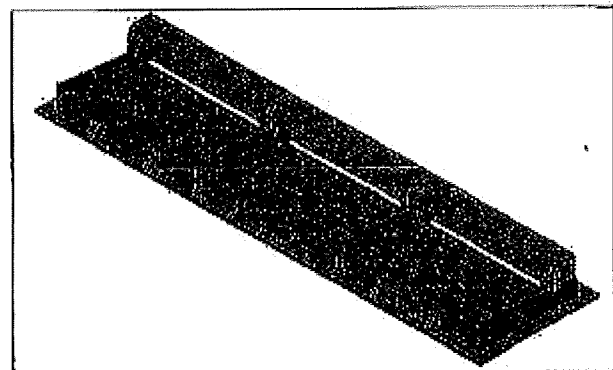
DI-3A, 3B, 3C (SHALLOW)

Figure 27C

COMBINATION INLET FRAME, GRATE, AND CURB BOX MFG. BY NEENAH FOUNDRY
MODEL NUMBER R-3295
TYPE "L" GRATES



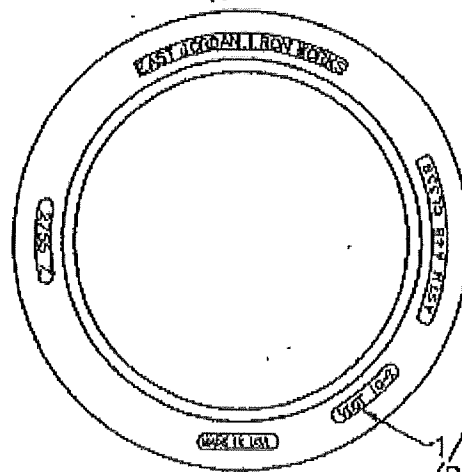
MODEL NUMBER R-3295-2
FOR DUAL INLET SITUATIONS



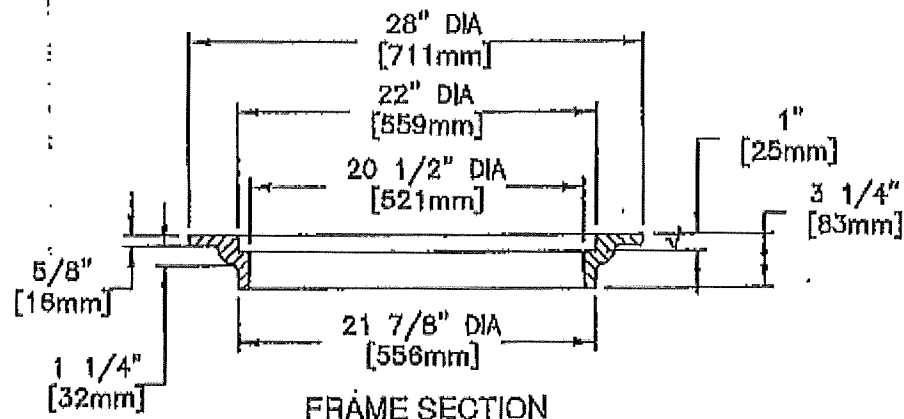
MODEL NUMBER R-3295-3 FOR THREE INLET SITUATIONS. ADD'L MIDDLE UNITS CAN BE ADDED FOR INCREASED LENGTH

MODIFIED DI-1 (SHALLOW)

Figure 28

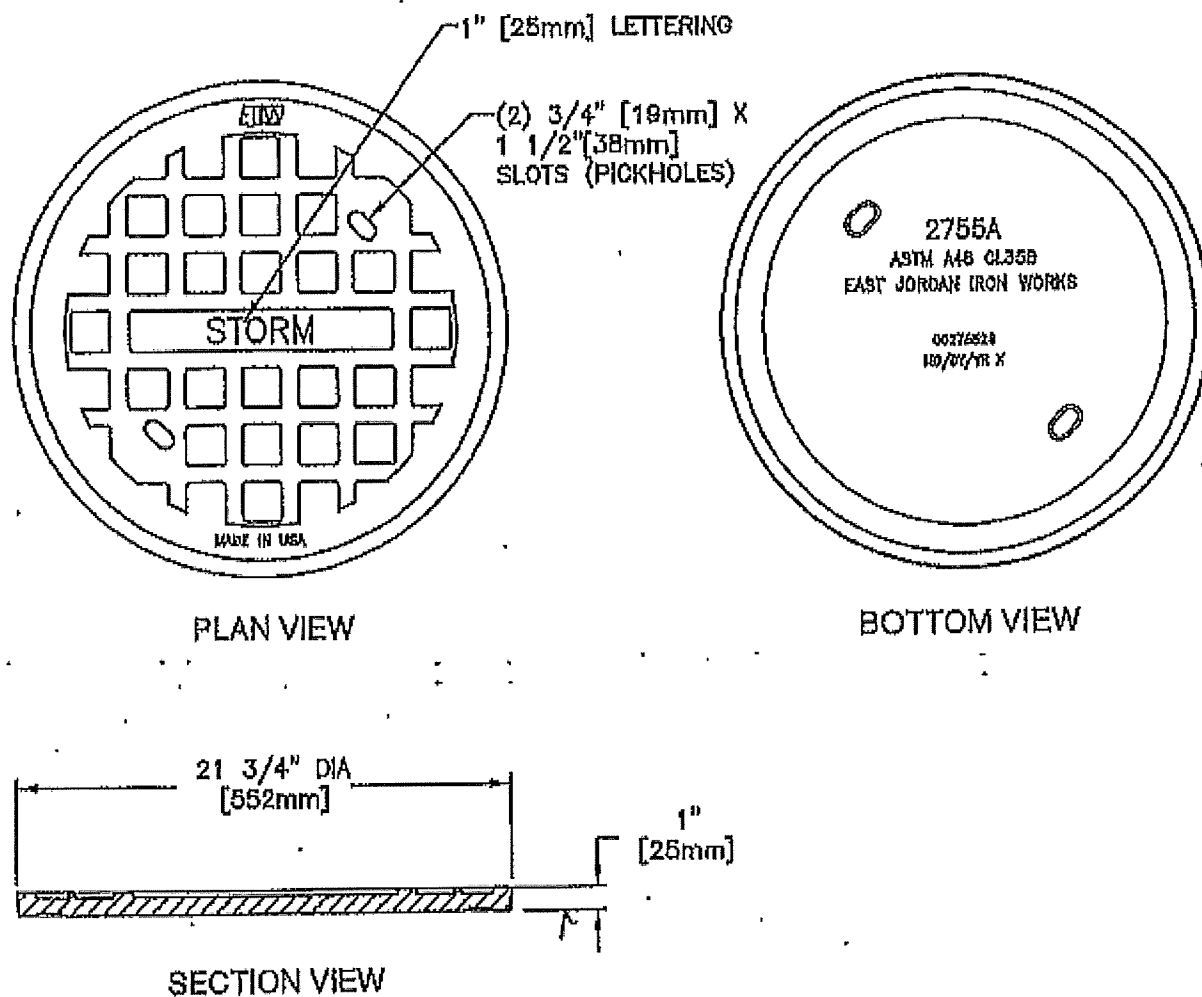


PLAN VIEW



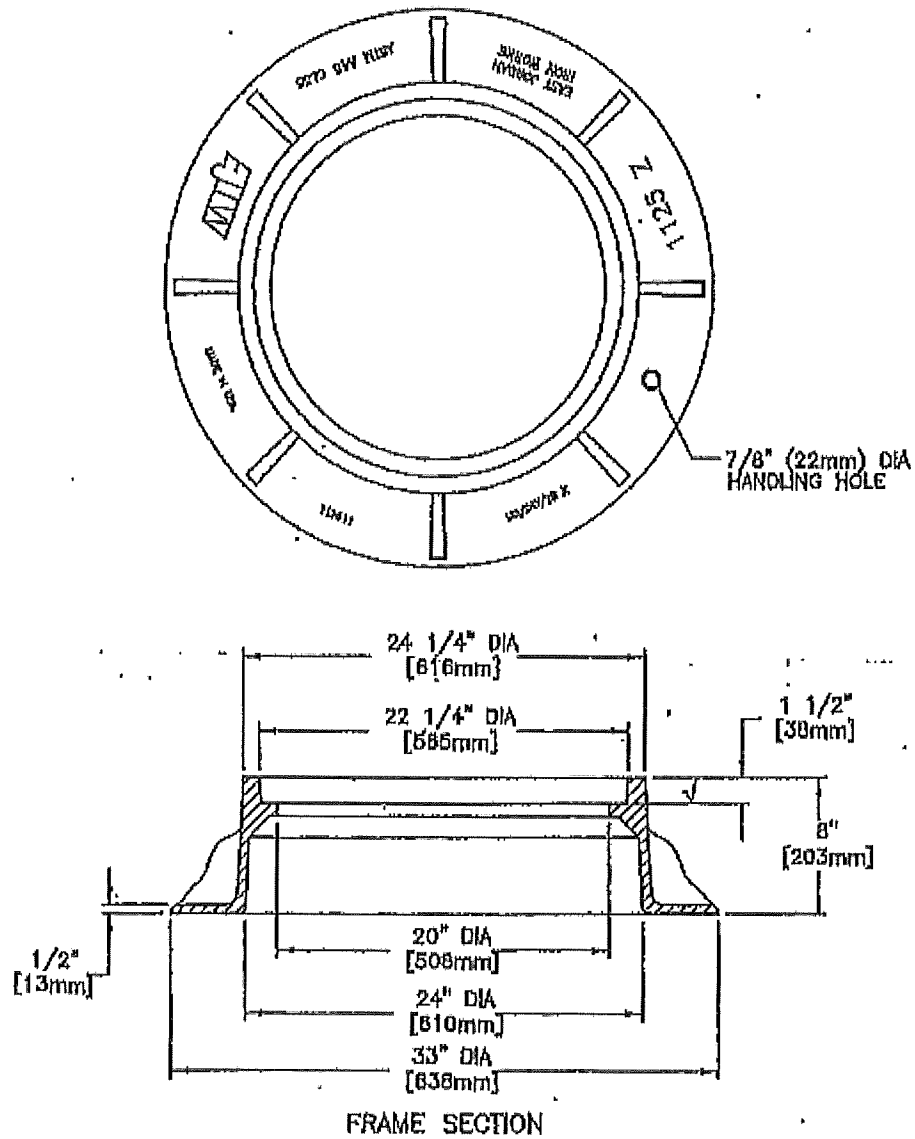
28" MANHOLE FRAME HEAVY DUTY RATING

Figure 29A



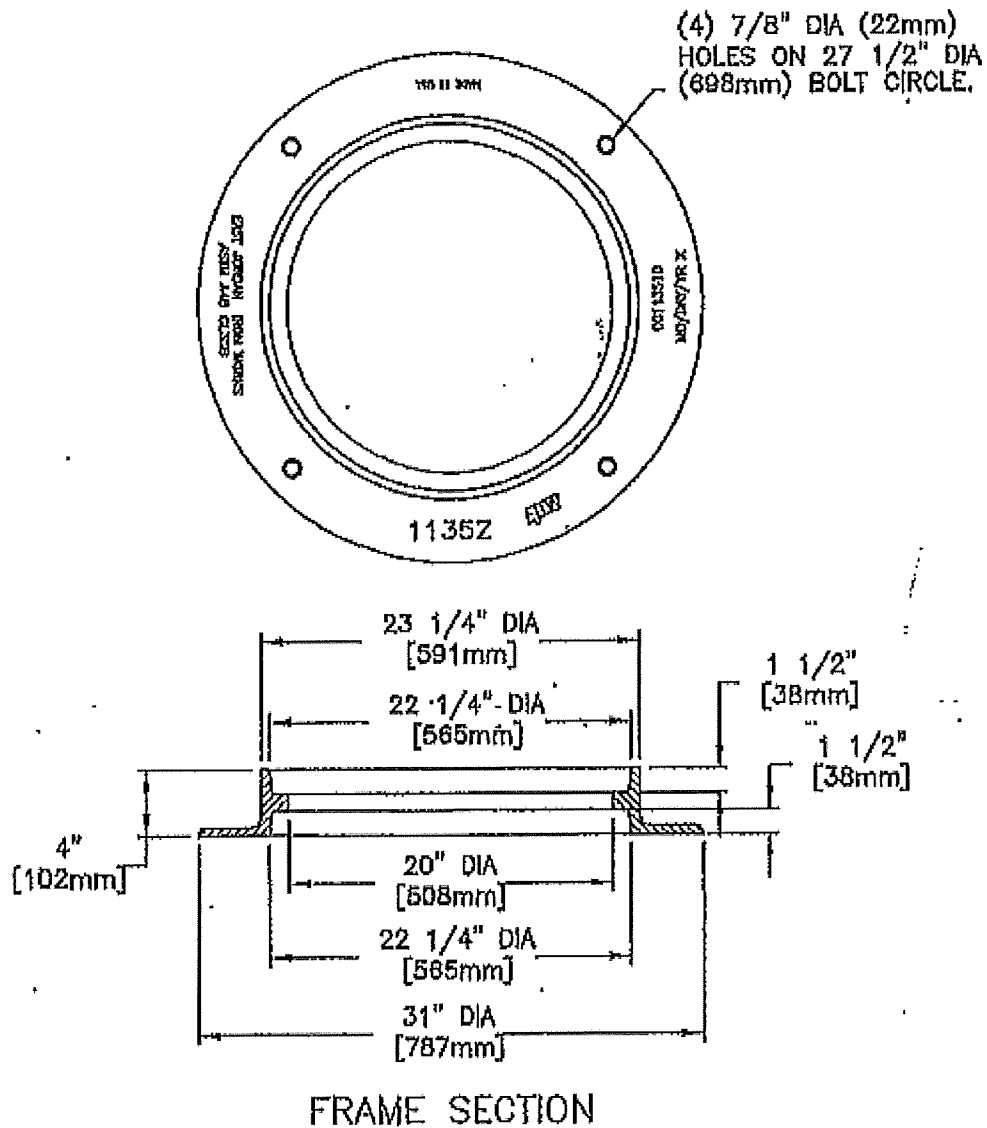
21 3/4" SPECIAL LETTERED COVER HEAVY DUTY RATING

Figure 29B



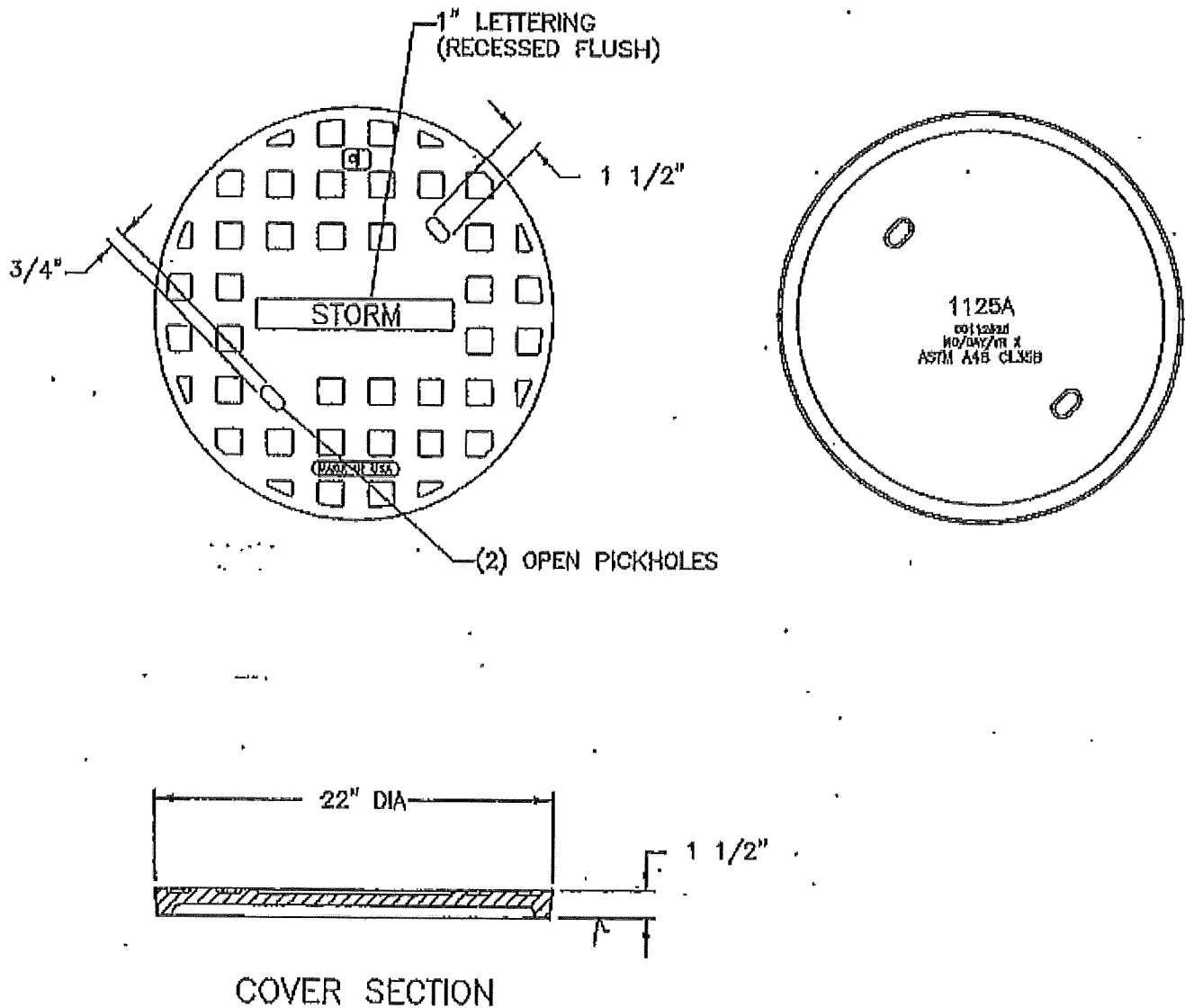
24 1/4" MANHOLE FRAME HEAVY DUTY RATING

Figure 30



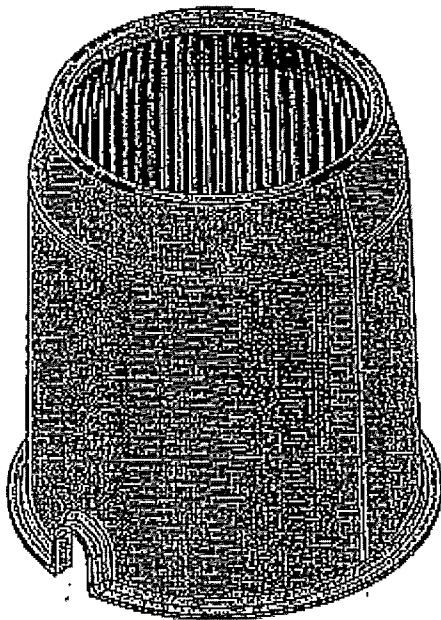
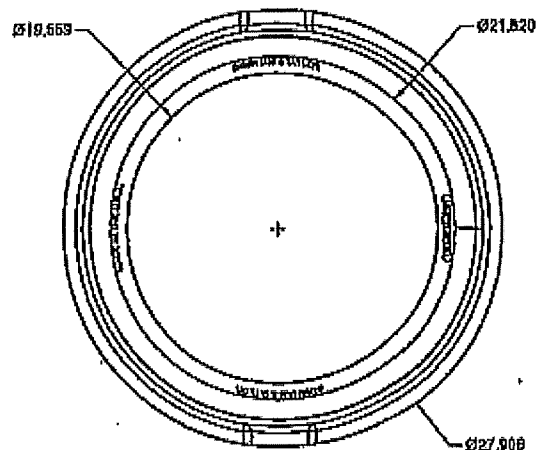
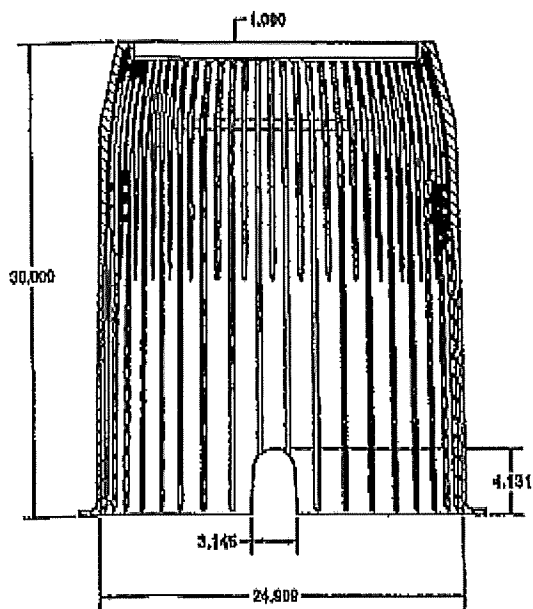
23 1/4" MANHOLE FRAME HEAVY DUTY RATING

Figure 31



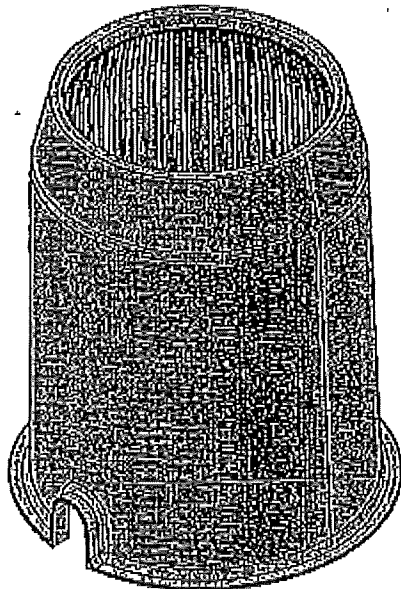
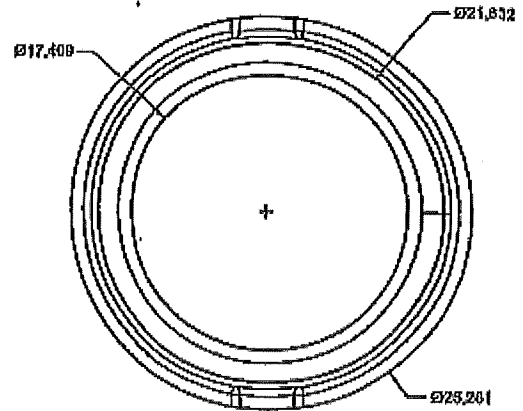
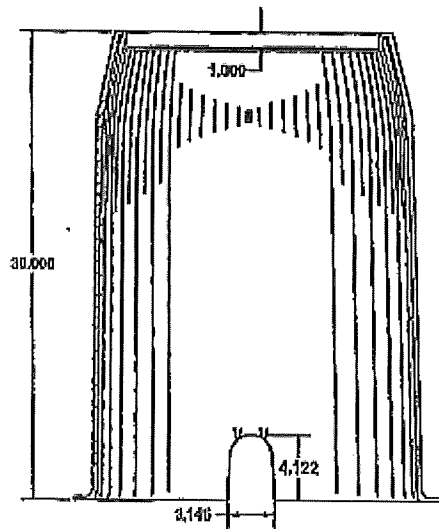
**1125A STORM MANHOLE COVER
FITS
4" & 8" FRAMES
HEAVY DUTY RATING**

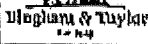
Figure 32



NOTES-ALL EDGES HAVE A 1/16 RADIUS TOLERANCE $\pm .0025$		
REV.	DATE	COMMENT
A		RELEASED
 Bingham & Taylor 1888-2017		BINGHAM & TAYLOR
		MMP202430
Molded Meter Box 20x24x30		DESIGNED BY J. Kopp
		DATE 02/18/16
		WEIGHT 20.0 lbs
		DATE 11/27/17

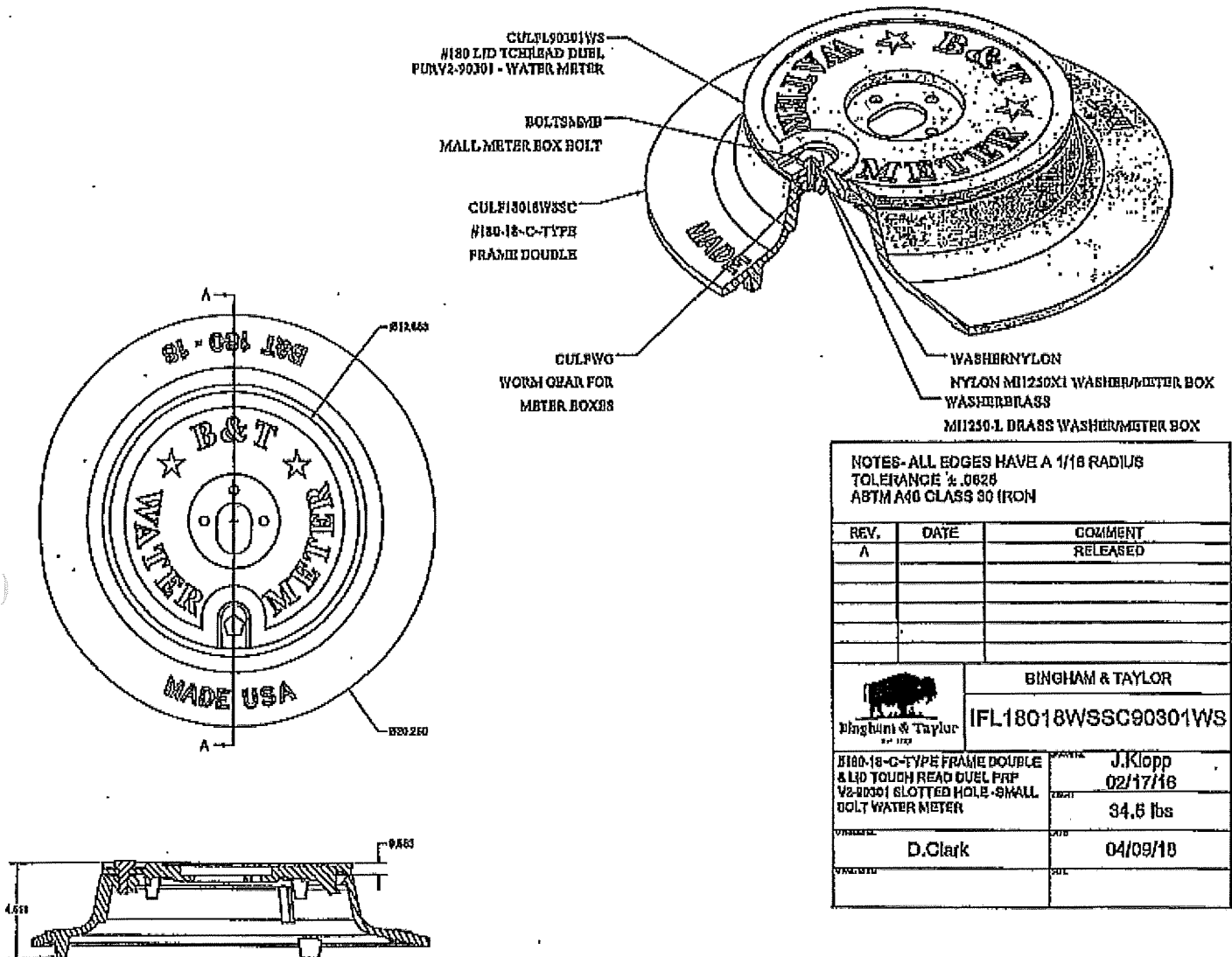
20x24x30 MOLDED METER BOX
Figure 33A



NOTES-ALL EDGES HAVE A 1/16 RADIUS TOLERANCE ±.0025		
REV.	DATE	COMMENT
A		RELEASED
		BINGHAM & TAYLOR
		MMP182230
Molded Meter P11 18x22x30		J.Klopp 02/18/16
		0 lbs

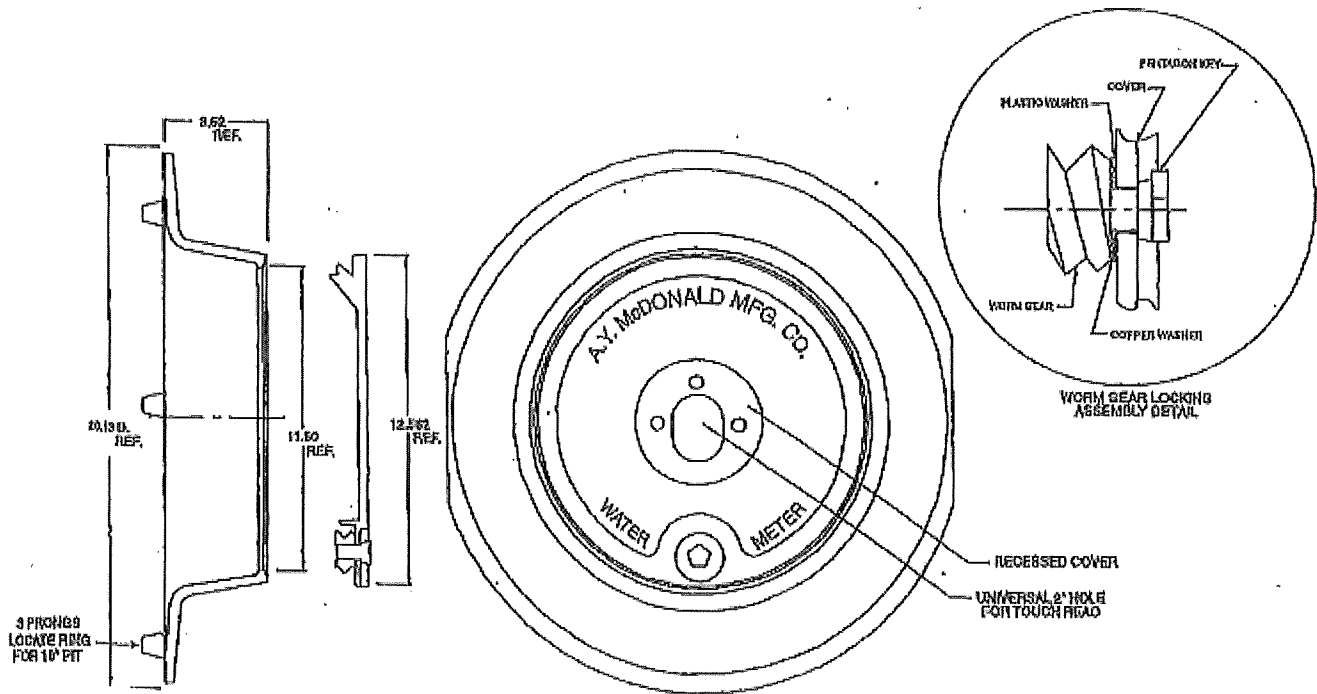
18x22x30 MOLDED METER BOX

Figure 33B



#180-18-C-TYPE FRAME DOUBLE AND LID TOUCH READ CAST IRON METER COVER

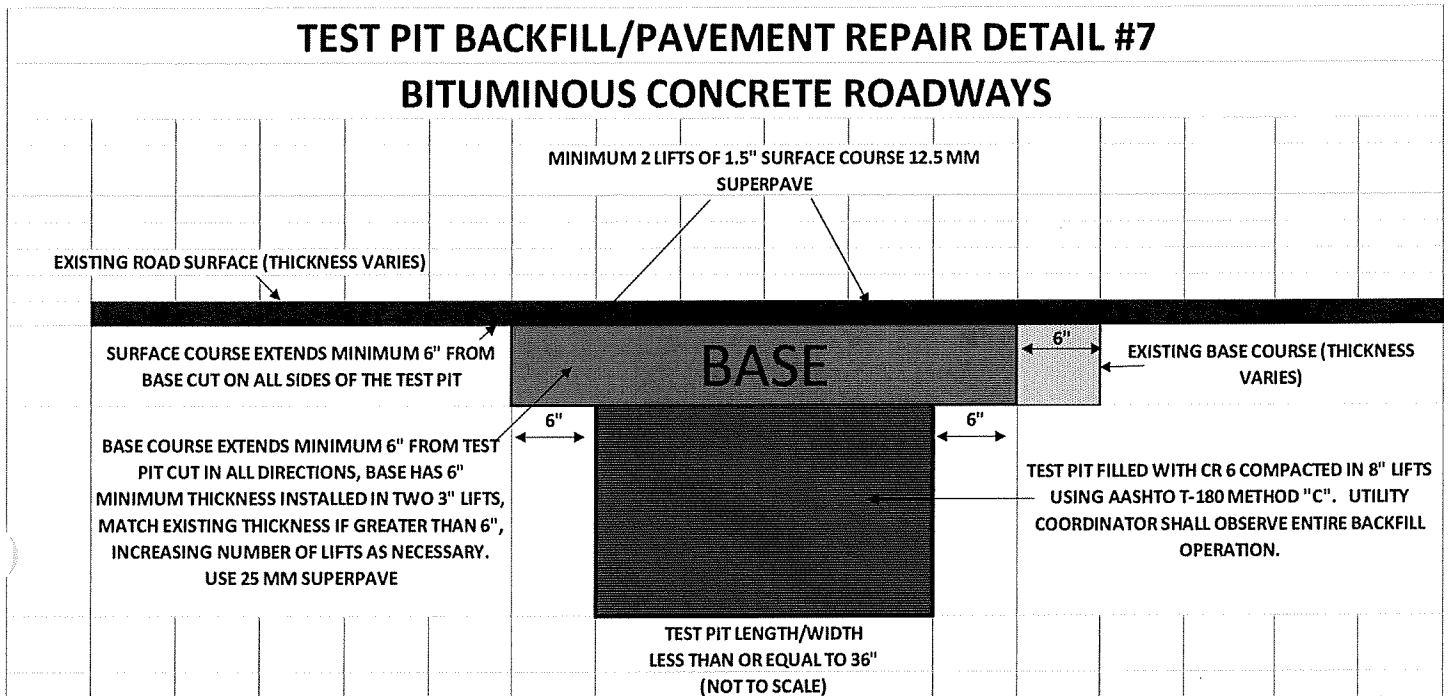
Figure 34



CAST IRON METER BOX FRAME AND COVER

Figure 35

TEST PIT BACKFILL/PAVEMENT REPAIR DETAIL #7 BITUMINOUS CONCRETE ROADWAYS



TEST PIT ASPHALT RESTORATION STANDARD Figure 36

Town of Berryville
Standard Details 2025 Update

Lease for 36 Smithy Lane

History

The Town of Berryville has owned the property now known as Rose Hill Park since 1964. When acquired, the property in question contained several buildings, including a dwelling known as the Smithy Cottage (Cottage).

Prior to the adaptive reuse of the two adjacent dairy barns (use of this portion of the property is subject to a lease agreement that will expire in 2057), the Town rented the Cottage for use as a dwelling.

In 2012, the Town entered into a lease agreement with the Barns of Rose Hill (BRH). The Cottage was to be used by the BRH as an office and/or for use by an artist in residence. At the time of this lease, the Town recognized that the rent payment represented a discounted rate. At that time, it was determined that the monthly rent of \$500 was discounted from an expected market rate of \$800 per month.

Upon the expiration of the 2012 lease in 2018, the Town and the BRH entered into another lease. The 2018 lease agreement will expire in February 2026.

Overview of the current proposal

Town staff utilized the lease approved for 23 East Main Street in 2022 as the template for the proposed lease agreement.

The revised lease includes changes to the following elements of the agreement:

- Rent escalation during the term of the agreement is a fixed dollar amount as opposed to a percentage.
- The initial lease term will be three years and one-year extensions may be granted.
- Cost to lessor for repairs is increased and the agreement requires that the Town approve any work for which it is to contribute.
- The Town formally acknowledges that it will mow the grass on the leased property.
- BRH formally acknowledges that it will contract with a firm to provide pest control services at their cost.

The proposed lease agreement contains an initial monthly rent of \$590 (\$7,080 annually).

From the perspective of Town staff, the relationship between the Town and the BRH over the past thirteen years has been very positive. The property has been well-maintained and has not been the subject of any complaints by neighboring property owners. Further, the Cottage provides building space that is essential to the BRH's operations. Lastly, given the nature of the operations at the BRH's main facility and that

facility's proximity to the Cottage, rental of the Cottage to another party as a dwelling would likely lead to conflicts/complaints.

The Town utilizes the Cottage rent payments to maintain the structure. While the cost to maintain the structure is not typically onerous, it is expected that the Town will invest approximately \$150,000 in the structure in the next year. The repairs in question will include extensive repair to the front and rear porches as well as stripping and painting the building exterior.

Recommendation

Determine whether the Council is willing to grant a lease agreement and if so, what terms are to be included in the lease agreement.

Sample Motion

I move that the Council of the Town of Berryville, approve the **proposed lease agreement / or / the amended lease agreement** between the Town and the Barns of Rose Hill, Inc. for use of the property described as the Smithy Cottage, which is located at 36 Smithy Lane. I further move that the town manager is authorized to execute said lease on behalf of the Town.

Proposed Lease for 36 Smithy Lane

DRAFT 11/12/25
MEETING

THIS LEASE, dated the _____ day of _____, _____,
by and between the TOWN OF BERRYVILLE, VIRGINIA, hereinafter called
the Lessor, and BARNS OF ROSE HILL, INC., a Virginia nonstock
corporation, hereinafter called the Lessee.

WITNESSETH:

The Lessor agrees to lease to the Lessee, and the Lessee agrees to lease
from the Lessor, the following described property under the following terms
and conditions:

1. DESCRIPTION:

A. The premises herein leased the building and adjacent
yard located at 36 SMITHY LANE as shown on attached EXHIBIT A ("the
property" or "the premises").

2. TERM:

The term of this lease shall be for three (3) years, beginning
on the 1st day of March, 2026, and ending on the 28th day of February, 2029.

3. RENT:

A. As rental for the property, the Lessee shall pay the
Lessor the sum of \$590.00 per month for the first year of the lease, with the

monthly rent increasing by \$20.00 on each March 1 during the term of the lease.

B. Rent shall be payable in advance on the first day of each month, beginning March 1, 2026.

C. If any rental payment is paid after the fifth (5th) day of the month but by the tenth (10th) day of the month, a penalty equal to five percent (5%) of the rental amount shall be due and payable to Lessor in addition to the rental payment. If any rental payment is not made by the tenth (10th) day of the month, a penalty equal to ten percent (10%) of the rental amount shall be due and payable to Lessor in addition to the rental payment. If any rental payment is not paid within thirty (30) days of the due date, the rental amount and penalty amount shall carry interest at ten percent (10%) per annum from the tenth (10th) day of the month in which the rental payment was due, and, in addition, the Lessor shall have the remedies set forth in Paragraph 16 of this Lease.

4. SECURITY DEPOSIT:

Lessor agrees not to require Lessee to pay a security deposit.

5. ASSIGNMENT:

The Lessee shall not assign this lease or sublet the leased premises or any part thereof without the written consent of the Lessor.

6. USE:

It is expressly agreed that this lease is executed in order that the Lessee may use the premises for offices and for an "Artest in residence," and the property shall not be put to any other use without the written consent of the Lessor. In any event no dogs, cats or other animals may be in or about the leased property by Lessee, or Lessee's, employees, subtenants, or guests.

7. UTILITIES:

Lessee shall be responsible for all utility services to the premises including, but not limited to, electric, phone, cable, and water and sewer.

8. REPAIRS AND MAINTENANCE BY LESSOR:

A. The Lessor agrees that during the term of this lease and any renewal thereof, Lessor shall do the following:

- (1) Keep the outer walls in proper and substantial repair;
- (2) Keep the roof in proper and substantial repair;
- (3) Make necessary major repairs (repairs in excess of \$700.00 each) to the heating and air conditioning systems.
- (4) Maintain the exterior appearance of the building, except as herein provided.

B. It is agreed by the parties that Lessor is not an insurer and that Lessor's responsibility and liability for each of the items of maintenance and repair set forth above shall be to make the proper repairs within a reasonable time after the necessity, nature, and location thereof has been called to Lessor's attention by Lessee.

C. Lessor agrees to mow the grass on the grounds of the leased space and maintain the grassed area in accordance with §13-32 of the Berryville Code.

9. OPERATION/REPAIR/MAINTENANCE BY LESSEE:

In regard to the use and occupancy of the premises, Lessee shall (i) maintain the premises in good condition; (ii) except such repairs as are the responsibility of the Lessor as set forth above, make all necessary repairs to the premises, including, without limitation, plumbing repairs and minor repairs (repairs up to \$700.00 each) to the heating and air conditioning systems; provided, however, the cost of necessary repairs paid by Lessee in excess of \$1,400.00 per lease year shall be reimbursed by Lessor if prior written approval for the repairs was given by Lessor; (iii) be responsible for prompt snow and ice removal from parking areas, walks, and building entrances; (iv) keep the inside and outside of all glass in the doors and windows of the premises clean; (v) keep all exterior store front surfaces of the premises clean;

(vi) replace promptly, at Lessee's expense, any cracked or broken plate or window glass of the premises with glass of like kind and quality; (vii) maintain the premises in a clean, orderly and sanitary condition and free of insects, rodents, vermin and other pests (shall include at a minimum, contracting with a licensed pest control provider to treat the property no less frequently than once per quarter); (viii) keep any garbage, trash, rubbish or refuse in closed containers; (ix) repair promptly at its expense any damage to the premises caused by bringing into the premises any property for Lessee's use, or by the installation or removal of such property, or caused by any act or omission of Lessee, their agents, employees, contractors or invitees; (x) keep all mechanical apparatus free of vibration and noise which may be transmitted beyond the premises; (xi) comply with all laws, ordinances, rules and regulations of governmental authorities and all recommendations of the Fire Underwriters Rating Bureau now or hereafter in effect; and (xii) conduct Lessee's business in all respects in a dignified manner.

10. EXTERIOR DESIGN AND SIGNS:

The Lessor shall have control of the exterior design of the premises and Lessee shall not paint or decorate any part of the exterior of the premises without first obtaining the written approval of Lessor. The Lessee shall have the right to erect and maintain on the exterior of the premises, at

Lessee's own expense, signs, advertising matter, or a logo, including lettering or other advertising matter on the glass of the premises, necessary or appropriate to the conduct of the business of Lessee; provided, however, that no such signs or other matters shall be erected without the prior approval of Lessor as to design, size, color, and location, and without any necessary approval from the appropriate agency of the Town of Berryville.

11. ALTERATIONS AND IMPROVEMENTS BY LESSEE:

A. Lessee, prior to making any improvements or alterations to the premises, shall submit to the Lessor plans and specifications for such work (the "Construction Documents"), including, but not limited to, all electrical, plumbing, mechanical, and architectural plans and specifications. Lessor shall review the Construction Documents submitted by the Lessee, and, if same are approved by Lessor, Lessee shall submit such Construction Documents to the appropriate governmental agencies together with an application for all permits and licenses necessary to commence such construction work. Lessor shall not be liable for any delay in obtaining such permits or licenses. The cost of any such permits or licenses shall be the responsibility of Lessee. Lessee shall be entitled to commence work in the premises upon receipt of all necessary permits and licenses.

B. In the event the Construction Documents submitted

by Lessee are not acceptable to the Lessor or the appropriate governmental agencies for any reason, Lessor and Lessee shall cooperate in revising such Construction Documents to a point where they will be acceptable to Lessor and the appropriate governmental agency.

C. All improvements made by Lessee shall be considered a part of the real estate and as such the property of Lessor, except for items of tangible personal property not affixed to the demised premises.

12. PROCEDURES FOR LESSEE'S ALTERATION AND IMPROVEMENT WORK:

A. Prior to the commencement of any improvement work in the premises, Lessee shall:

- (1) Obtain Lessor's written approval of the Construction Documents as set forth above;
- (2) Have in its possession the permits and licenses necessary for the improvement work;

B. Lessee shall conduct the improvement work in the premises in accordance with reasonable rules and regulations promulgated by Lessor or its agent, including, but not limited to, the following:

- (1) All work by Lessee shall conform to the Construction Documents as approved by Lessor and shall conform to all local,

state, and national codes, laws, rules and regulations;

(2) Lessee shall not permit its construction activities to interfere with the quiet enjoyment of the building in which the demised premises are located, or of the adjoining buildings.

(3) Lessee shall, at Lessee's expense, remove from the premises and adjoining areas all trash and debris as same accumulates;

(4) Lessee shall not use or permit the use of any areas outside the premises for any construction activities unless expressly consented to in writing by Lessor; and

(5) Lessee shall, at all times, enforce strict discipline and good order among their contractors, subcontractors, and employees.

C. In the event Lessee shall fail to perform the improvement work in accordance with the rules and regulations of Lessor, Lessor shall have the right to either (a) perform the obligation which Lessee have failed to perform, or (b) repair any damage caused by Lessee's failure to comply, including, without limitation, the correction of any deviation from the Construction Documents and the correction of any defects, and Lessee shall pay to Lessor on demand, all of Lessor's costs associated therewith. Lessee shall be responsible and liable for any and all damage to the premises caused

either directly or indirectly by Lessee's construction activities.

13. DEFAULT:

A. If any rent shall be due or unpaid for a period of thirty (30) days, or if default shall be made in any of the conditions or covenants herein contained, or if the said premises or any part thereof shall be vacated by the Lessee during the term granted by this lease, the Lessor may recover and resume possession of said property, either by force or otherwise, without being liable to prosecution therefor, remove all persons and property therefrom, relet the said premises as agent for the Lessee, receive and collect the rents thereof, applying the same first to the payment of such expenses as the Lessor may have incurred in recovering the possession of the said property and reletting the same, secondly to the payment of any costs or expenses that the Lessor may have incurred, either for repairs or by reason of any condition or covenant being unfulfilled on the part of the Lessee, and then to the payment of any rent due or to become due under the terms of this lease, with interest, and the Lessee agrees to pay any deficiency which may arise.

B. Any and all remedies provided to Lessor for the enforcement of the provisions of this Lease are cumulative and not exclusive, and Lessor shall be entitled to pursue either the rights enumerated in this Lease or remedies authorized by law, or both. Lessee shall be liable for any breach of

this Lease and for any costs or expenses, including attorney's fees, incurred by Lessor in enforcing the terms of this Lease, or in pursuing any legal action for the enforcement of Lessor's rights.

14. LIABILITY:

The Lessor shall not be liable for any injuries to any person or for any damages to any property on or about the demised premises. The foregoing shall apply to injuries or damages to any property of Lessee, except such injuries or damages as directly result from Lessor's failure to comply with the provisions of Paragraph 8 of this lease.

15. INDEMNITY:

Lessee shall indemnify Lessor against all expenses, liabilities, and claims of every kind, including reasonable counsel fees, by or on behalf of any person or entity arising out of either (1) a failure by Lessee to perform any of the terms or conditions of this lease, (2) any injury or damage happening on or about the demised premises, (3) failure to comply with any law of any governmental authority, or (4) any mechanic's lien or security interest filed against the demised premises or equipment, materials, or alterations of buildings or improvements thereon, for property owned by or work done by Lessee.

16. DAMAGE OR DESTRUCTION:

If the demised premises shall, without fault of Lessee, be destroyed or be so damaged as to become wholly or partially untenable by fire or by providential means, then, if the Lessor shall elect to rebuilt or repair, this Lease shall remain in force and Lessor shall rebuild or repair the premises within a reasonable time after such election, putting premises in as good condition as they were at time of destruction or damage, and for that purpose they may enter said premises, and rent shall abate during time the premises are untenable; but if Lessor does not elect as aforesaid to rebuild or repair, then Lessor shall have possession of the premises hereby let, and Lessee shall deliver and surrender to Lessor such possession, and this Lease shall become void and the term hereby created end; and on such delivery and surrender being made or on the recovery of said premises by Lessor the Lessee shall receive a prorated refund of prepaid rent, or the obligation to pay rent shall cease, as applicable.

17. INSPECTION AND ACCESS:

A. The Lessor and its agents shall have the right during the term of this Lease to visit, inspect, and make necessary repairs to the leased premises at any reasonable hour.

B. The Lessor shall have the right during the term of the Lease to access the site in order to enter portions of the building not subject to the lease. Lessee agrees that such access must occur through leased space and agrees to provide access at any reasonable hour. The Lessee agrees to park only in identified spaces and not to block access to the rear of the building.

18. INSURANCE:

A. Minimum Insurance Coverage Requirements: Lessee shall, at its own expense, keep in full force and effect during the term of this lease, and during the term of any extension of this lease, insurance coverage in the following amounts:

Commercial General Liability:

\$1,000,000 each occurrence (Bodily Injury and Property Damage)

\$2,000,000 General Aggregate

\$2,000,000 Products/Completed Operations Aggregate

\$1,000,000 per person or organization (Personal and Advertising Injury)

\$1,000,000 each (CGL/AL/EL) occurrence/\$2,000,000 Annual Policy
Aggregate

Workers Compensation as required by Code of Virginia.

B. The Town shall be named as an additional insured on any policy obtained by Lessee pursuant to this paragraph. Lessee shall annually furnish the Town with a Certificate of Insurance documenting that the aforesaid insurance coverage has been obtained.

19. ENTIRE AGREEMENT:

This Lease constitutes the entire agreement among the parties and may not be amended except by written instruments executed by each of the parties.

20. CONSTRUCTION OF THE LEASE:

This Lease shall be construed and interpreted according to the laws of the Commonwealth of Virginia.

21. COMPUTATION OF TIME:

If the time period or date by which any right, option, or election provided under this Lease must be exercised, or by which any act required hereunder must be performed, expires or occurs on a Saturday, Sunday, or legal, bank, or Clarke County Circuit Court Clerk's Office holiday, then such time period or date shall be automatically extended through the close of business on the next regularly scheduled business day.

22. BINDING:

The Lease shall inure to the benefit of, and be binding upon, the successors and assigns of the parties.

23. RIGHT TO RE-LEASE:

If the demised premises is to be available for lease by Lessor at the expiration of the three (3) year term of this Lease, or at the

expiration of any subsequent one-year term, the Lessor shall give the Lessee the first right to re-lease the premises for a term of one (1) year, upon the same conditions, except the amount of rent, as contained in this Lease. If Lessee should desire to re-lease the premises at the expiration of the three (3) year term or any subsequent one-year term, Lessee shall so notify the Lessor in writing at least ninety (90) days prior to the expiration of term, and upon being so notified the Lessor shall inform the Lessee in writing at least sixty (60) days prior to the expiration of said term of the amount of rent for the new term. The Lessee shall then notify the Lessor in writing at least thirty (30) days prior to the expiration of said term as to whether or not the Lessee will elect to re-lease the premises.

24. NOTICES:

All notices, demands, or other communications that may be necessary or proper hereunder shall be deemed duly given if personally delivered, sent via certified mail, return receipt requested, or sent overnight courier service, such as Federal Express, UPS, or Airborne, addressed respectively as follows:

If to Lessor:

Town of Berryville, Virginia
ATTN: Mayor
101 Chalmers Court, Suite A
Berryville, VA 22611

AND

Town of Berryville, Virginia
ATTN: Town Manager
101 Chalmers Court, Suite A
Berryville, VA 22611

If to Lessee:

^

The Barns of Rose Hill, Inc.
ATTN: President
PO Box 738
Berryville, VA 22611

AND

The Barns of Rose Hill, Inc.
ATTN: Executive Director
PO Box 738
Berryville, VA 22611

TOWN OF BERRYVILLE, VIRGINIA, Lessor

BY: _____(SEAL)
Keith R. Dalton, Town Manager

BARNS OF ROSE HILL, INC, Lessee

BY: _____(SEAL)

(Printed Name) (Position)

Current Lease for 36 Smithy Lane

THIS LEASE, dated the 15th day of FEBRUARY, 2018, by and between the TOWN OF BERRYVILLE, VIRGINIA, hereinafter called the Lessor, and THE BARNS OF ROSE HILL, INC., a Virginia nonstock corporation, hereinafter called the Lessee.

WITNESSETH:

The Lessor agrees to lease to the Lessee, and the Lessee agrees to lease from the Lessor, the following described property under the following terms and conditions:

1. DESCRIPTION:

The premises herein leased is the building with an address of 36 Smithy Lane in the Town of Berryville, Virginia, together with an area surrounding the building as more particularly described on attached Exhibit A, and also together with non-exclusive access from Smithy Lane as generally shown on attached Exhibit A.

2. TERM:

The term of this lease shall be for five (5) years, beginning on the 1st day of March, 2018, and ending on the 28th day of February, 2023.

3. RENT:

A. As rental for the property, the Lessee shall pay the Lessor the sum of \$ 500.00 per month for the first year of the lease, with the monthly rent increasing by two percent (2%) on each March 1 during the term of the lease.

B. Rent shall be payable in advance on the first day of each month, beginning March 1, 2018.

C. If any monthly rental payment is made after the fifth (5th) day of the month but by the tenth (10th) day of the month, a penalty equal to five percent (5%) of the rental amount shall be due and payable to Lessor in addition to the rental payment. If any monthly rental payment is not made by the tenth (10th) day of the month, a penalty equal to ten percent (10%) of the rental amount shall be due and payable to Lessor in addition to the rental payment. If any monthly rental payment is not paid within thirty (30) days of the due date, the rental amount and penalty amount shall carry interest at ten percent (10%) per annum from the tenth (10th) day of the month in which the rental payment was due, and, in addition, the Lessor shall have the remedies set forth in Paragraph 14 of this Lease.

4. SECURITY DEPOSIT:

No security deposit shall be required under this lease.

5. ASSIGNMENT:

The Lessee shall not assign this lease or sublet the leased premises or any part thereof without the written consent of the Lessor.

6. USE:

It is expressly agreed that this lease is executed in order that the Lessee may use the premises for offices and/or a residence for an "artist in residence", and the property shall not be put to any other use without the written consent of the Lessor. In any event, no dogs, cats, or other animals shall be kept in or about the leased property by Lessee or Lessee's subtenants or guests.

7. UTILITIES:

The Lessee shall be responsible for the payment of all utility services to the premises including, but not limited to electric, phone, cable, and water and sewer.

8. REPAIRS BY LESSOR:

A. The Lessor agrees that during the term of this lease and any renewal thereof, Lessor shall be responsible for the following:

(1) Keep the outer walls in proper and substantial repair;

(2) Keep the roof in proper and substantial repair;

(3) Make necessary major repairs (repairs in excess of \$500.00 each) to the heating and air conditioning systems.

(4) Maintain the exterior appearance of the building, except as herein provided.

B. It is agreed by the parties that Lessor is not an insurer and that Lessor's responsibility and liability for each of the items of maintenance and repair set forth above shall be to make the proper repairs within a reasonable time after the necessity, nature, and location thereof has been called to Lessor's attention by Lessee.

9. OPERATION/REPAIR/MAINTENANCE BY LESSEE:

In regard to the use and occupancy of the premises, Lessee shall (i) maintain the premises in good condition; (ii) except such repairs as is the responsibility of the Lessor as set forth above, make all necessary repairs and replacements to the premises, including, without limitation, plumbing repairs and minor repairs (repairs up to \$500.00 each) to the heating and air conditioning systems, and prompt replacement of any cracked or broken plate or window glass

of the premises with glass of like kind and quality; provided, however, the cost of necessary repairs and replacements paid by Lessee in excess of \$1,000.00 per lease year shall be reimbursed by Lessor if prior written approval for the repairs or replacements was given by Lessor and the need for the repair and/or replacement was not the result of the negligent or improper act of the Lessee, its employees, agents, or invitees; (iii) maintain the premises in a clean, orderly and sanitary condition and free of insects, rodents, vermin and other pests; (iv) keep any garbage, trash, rubbish or refuse in closed containers; (v) repair promptly at its expense any damage to the premises caused by bringing into the premises any property for Lessee's use, or by the installation or removal of such property, or caused by any act or omission of Lessee, their agents, employees, contractors or invitees; and (vi) comply with all laws, ordinances, rules and regulations of governmental authorities and all recommendations of the Fire Underwriters Rating Bureau now or hereafter in effect.

10. EXTERIOR DESIGN AND SIGNS:

The Lessor shall have control of the exterior design of the premises and Lessee shall not paint or decorate any part of the exterior of the premises without first obtaining the written approval of Lessor. The Lessee shall have the right to erect and maintain on the exterior of the premises, at Lessee's own

expense, signs, advertising matter, or a logo, including lettering or other advertising matter on the glass of the premises, necessary or appropriate to the conduct of the business of Lessee; provided, however, that no such signs or other matters shall be erected without the prior approval of Lessor as to design, size, color, and location, and without any necessary approval from the appropriate agency of the Town of Berryville.

11. ALTERATIONS AND IMPROVEMENTS:

A. Lessee, prior to making any initial improvements or subsequent alterations to the premises, shall submit to Landlord plans and specifications for such work (the "Construction Documents"), including, but not limited to, all electrical, plumbing, mechanical, and architectural plans and specifications. Lessor shall review the Construction Documents submitted by Lessee, and, if same are approved by Lessor, Lessee shall submit such Construction Documents to the appropriate governmental agencies together with an application for all permits and licenses necessary to commence such construction work. Lessor shall not be liable for any delay in obtaining such permits or licenses. The cost of any such permits or licenses shall be the responsibility of Lessee. Lessee shall be entitled to commence work in the premises upon receipt of all necessary permits and licenses.

B. In the event the Construction Documents submitted by Lessee are unacceptable to Lessor or to the appropriate governmental agencies for any reason, Lessor and Lessee shall cooperate in revising such Construction Documents to a point where they will be acceptable to Lessor and to the appropriate governmental agency.

C. All improvements made by Lessee shall be considered a part of the real estate and as such the property of Lessor, except for items of tangible personal property not affixed to the demised premises.

12. PROCEDURES FOR LESSEE'S ALTERATION AND IMPROVEMENT WORK:

A. Prior to the commencement of any improvement work in the premises, Lessee shall:

(1) Obtain Lessor's written approval of the Construction Documents as set forth above;

(2) Have in its possession the permits and licenses necessary for the improvement work.

B. Lessee shall conduct the improvement work in the premises in accordance with reasonable rules and regulations promulgated by Lessor or its agent, including, but not limited to, the following:

(1) All work by Lessee shall conform to the Construction Documents as approved by Lessor and shall conform to all local, state, and national codes, laws, rules and regulations;

(2) Lessee shall not permit its construction activities to interfere with the quiet enjoyment of the building in which the demised premises are located, or of the adjoining buildings.

(3) Lessee shall, at Lessee's expense, remove from the premises and adjoining areas all trash and debris as same accumulates;

(4) Lessee shall not use or permit the use of any areas outside the premises for any construction activities unless expressly consented to in writing by Lessor; and

(5) Lessee shall, at all times, enforce strict discipline and good order among their contractors, subcontractors, and employees.

C. In the event Lessee shall fail to perform the improvement work in accordance with the rules and regulations of Lessor, Lessor shall have the right to either (a) perform the obligation which Lessee have failed to perform, or (b) repair any damage caused by Lessee's failure to comply, including, without limitation, the correction of any deviation from the Construction Documents and the correction of any defects, and Lessee shall pay

to Lessor on demand, all of Lessor's costs associated therewith. Lessee shall be responsible and liable for any and all damage to the premises caused either directly or indirectly by Lessee's construction activities.

13. DEFAULT:

A. If any rent shall be due or unpaid for a period of thirty (30) days, or if default by Lessee shall be made in any of the conditions or covenants herein contained, or if the said premises or any part thereof shall be vacated by the Lessee, the Lessor may recover and resume possession of said property, either by force or otherwise, without being liable to prosecution therefor, remove all persons and property therefrom, and, for any renewal term, relet the said premises as agent for the Lessee, receive and collect the rents thereof, applying the same first to the payment of such expenses as the Lessor may have incurred in recovering the possession of the said property and reletting the same, secondly to the payment of any costs or expenses that the Lessor may have incurred, either for repairs or by reason of any condition or covenant being unfulfilled on the part of the Lessee, and then to the payment of any rent due or to become due under the terms of this lease, with interest, and the Lessee agrees to pay any deficiency which may arise.

B. Any and all remedies provided to Lessor for the enforcement

of the provisions of this Lease are cumulative and not exclusive, and Lessor shall be entitled to pursue either the rights enumerated in this Lease or remedies authorized by law, or both. Lessee shall be liable for any breach of this Lease and for any costs or expenses, including attorney's fees, incurred by Lessor in enforcing the terms of this Lease, or in pursuing any legal action for the enforcement of Lessor's rights.

14. LIABILITY:

The Lessor shall not be liable for any injuries to any person or for any damages to any property on or about the demised premises. The foregoing shall apply to injuries or damages to any property of Lessee, except such injuries or damages as directly result from Lessor's failure to comply with the provisions of Paragraph 8 of this lease.

15. INDEMNITY:

Lessee shall indemnify Lessor against all expenses, liabilities, and claims of every kind, including reasonable counsel fees, by or on behalf of any person or entity arising out of either (1) a failure by Lessee to perform any of the terms or conditions of this lease, (2) any injury or damage happening on or about the demised premises not caused by Lessor or Lessor's breach of this lease, (3) failure to comply with any law of any governmental authority, or (4) any

mechanic's lien or security interest filed against the demised premises or equipment, materials, or alterations of buildings or improvements thereon for property owned by or work done by Lessee.

16. DAMAGE OR DESTRUCTION:

If the demised premises shall, without fault of Lessee, be destroyed or be so damaged as to become wholly or partially untenable by fire or by providential means, then, if the Lessor shall elect to rebuilt or repair, this Lease shall remain in force and Lessor shall rebuild or repair the premises within a reasonable time after such election, putting premises in as good condition as they were at time of destruction or damage, and for that purpose they may enter said premises, and rent shall abate during time the premises are untenable; but if Lessor does not elect as aforesaid to rebuild or repair, then Lessor shall have possession of the premises hereby let, and Lessee shall deliver and surrender to Lessor such possession, and this Lease shall become void and the term hereby created end; and on such delivery and surrender being made or on the recovery of said premises by Lessor the Lessee shall receive a pro rata refund of prepaid rent, or the obligation to pay rent shall cease, as applicable.

17. INSPECTION AND ACCESS:

A. The Lessor and its agents shall have the right during the term of this Lease to visit, inspect, and make necessary repairs to the property at any reasonable hour.

18. INSURANCE:

A. Minimum Insurance Coverage Requirements: Lessee shall, at its own expense, keep in full force and effect during the term of this lease, and during the term of any extension of this lease, insurance coverage's in the following amounts:

Commercial General Liability:

- \$1,000,000 each occurrence (Bodily Injury and Property Damage)
- \$2,000,000 General Aggregate
- \$2,000,000 Products/Completed Operations Aggregate
- \$1,000,000 per person or organization (Personal and Advertising Injury)
- \$1,000,000 each (CGL/AL/EL) occurrence/\$2,000,000 Annual Policy Aggregate

Workers Compensation as required by the Code of Virginia.

B. The Town shall be named as an additional insured on any policy obtained by Lessee pursuant to this paragraph. Lessee shall annually furnish the Town with a Certificate of Insurance documenting that the aforesaid insurance coverage has been obtained.

19. ENTIRE AGREEMENT:

This Lease constitutes the entire agreement among the parties and may not be amended except by written instruments executed by each of the parties.

20. CONSTRUCTION OF THE LEASE:

This Lease shall be construed and interpreted according to the laws of the Commonwealth of Virginia.

21. COMPUTATION OF TIME:

If the time period or date by which any right, option, or election provided under this Lease must be exercised, or by which any act required hereunder must be performed, expires or occurs on a Saturday, Sunday, or legal, bank, or Clarke County Circuit Court Clerk's Office holiday, then such time period or date shall be automatically extended through the close of business on the next regularly scheduled business day.

22. BINDING:

The Lease shall inure to the benefit of, and be binding upon, the successors and assigns of the parties.

23. RIGHT TO RE-LEASE:

If the demised premises is to be available for lease by Lessor at the expiration of the five (5) year term of this Lease, or at the expiration of any subsequent one-year term, the Lessor shall give the Lessee the first right to re-lease the premises for a term of one (1) year, upon the same conditions, except the amount of rent, as contained in this Lease. If Lessee should desire to re-lease the premises at the expiration of the five (5) year term or any subsequent one-year term, Lessee shall so notify the Lessor in writing at least ninety (90) days prior to the expiration of the term, and upon being so notified the Lessor shall inform the Lessee in writing at least sixty (60) days prior to the expiration of said term of the amount of rent for the new term. The Lessee shall then notify the Lessor in writing at least thirty (30) days prior to the expiration of said term as to whether or not the Lessee will elect to re-lease the premises. Notwithstanding the foregoing, the Lessee's right to re-lease the premises shall be limited to three (3) one-year renewal terms.

24. NOTICES:

All notices, demands, or other communications that may be necessary or proper hereunder shall be deemed duly given if personally delivered, sent via certified mail, return receipt requested, or sent overnight courier service,

such as Federal Express, UPS, or Airborne, addressed respectively as follows:

If to Lessor:

Town of Berryville, Virginia
ATTN: Town Manager
101 Chalmers Court, Suite A
Berryville, VA 22611

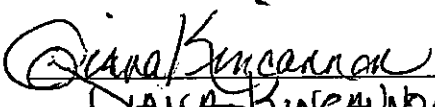
If to Lessee:

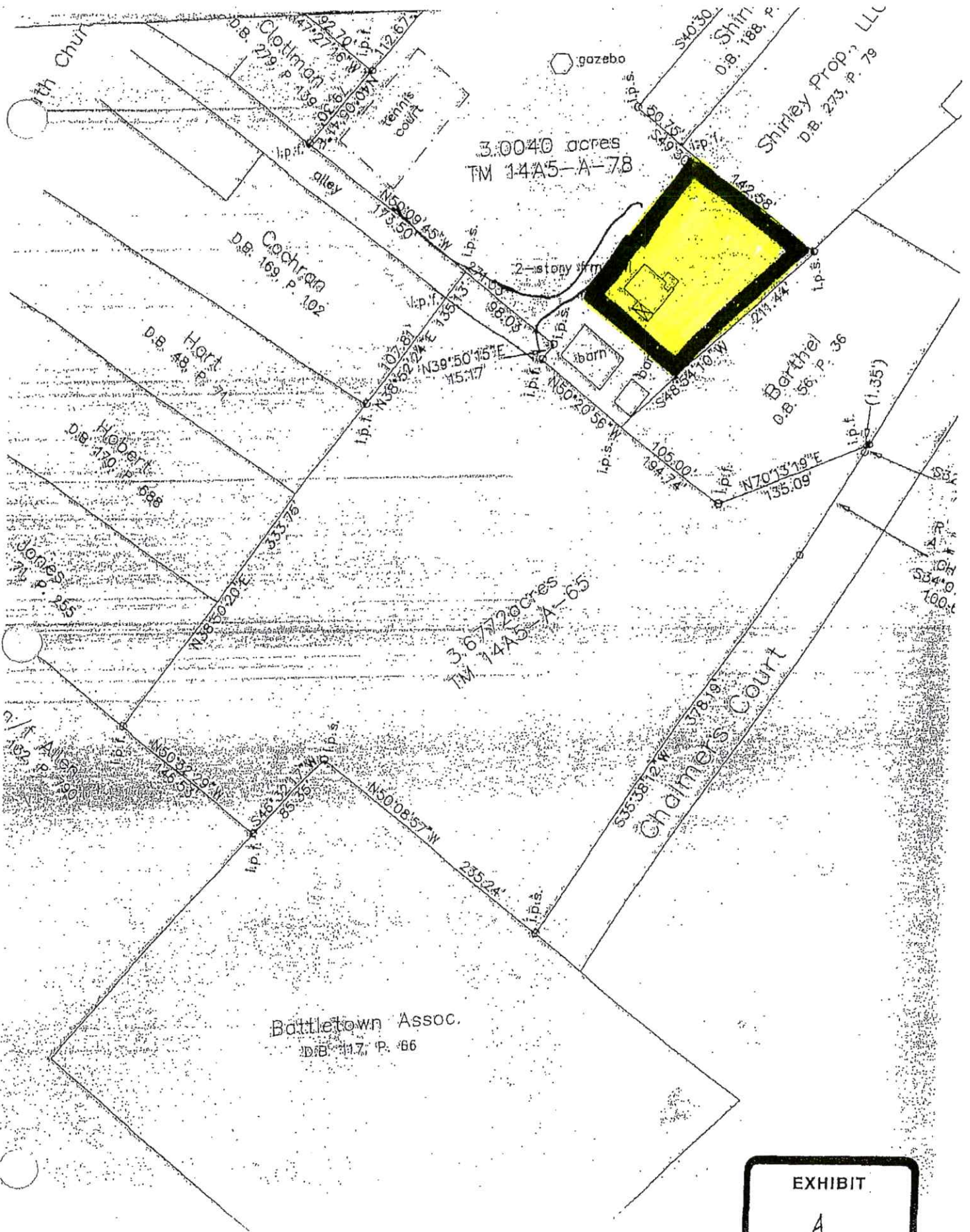
The Barns of Rose Hill, Inc.
ATTN: CHAIRMAN
95 Chalmers Court
Berryville, VA 22611

TOWN OF BERRYVILLE, VIRGINIA, Lessor

BY:  (SEAL)
Keith R. Dalton, Town Manager

THE BARNs OF ROSE HILL, INC, Lessee

BY:  (SEAL)
DIANA KINCANNON, CHAIR
(Printed Name) (Position)



Current Lease for 23 East Main Street



THIS LEASE, dated the 28th day of January, 2022, by and between the TOWN OF BERRYVILLE, VIRGINIA, hereinafter called the Lessor, and DOWNTOWN BERRYVILLE, INC., a Virginia nonstock corporation, dba Berryville Main Street, hereinafter called the Lessee.

W I T N E S S E T H:

The Lessor agrees to lease to the Lessee, and the Lessee agrees to lease from the Lessor, the following described property under the following terms and conditions:

1. DESCRIPTION:

A. The premises herein leased is a portion of the first and second floor of the building located at 23 E. Main Street as shown on attached Exhibit A (“the property” or “the premises”).

B. In addition, the Town Manager may extend written revocable permission to Lessee to use the 70' by 25.33' parking area as generally shown on attached Exhibit B and all or a portion of a building (livery stable) not subject to this Lease for access to the leased premises and/or for storage use.

2. TERM:

The term of this lease shall be for three (3) years, beginning on the 1st day of March, 2022, and ending on the 28th day of February, 2025.

3. RENT:

A. As rental for the property, the Lessee shall pay the Lessor the sum of \$550.00 per month for the first year of the lease, with the monthly rent increasing by \$20.00 on each March 1 during the term of the lease.

B. Rent shall be payable in advance on the first day of each month, beginning March 1, 2022.

C. If any rental payment is paid after the fifth (5th) day of the month but by the tenth (10th) day of the month, a penalty equal to five percent (5%) of the rental amount shall be due and payable to Lessor in addition to the rental payment. If any rental payment is not made by the tenth (10th) day of the month, a penalty equal to ten percent (10%) of the rental amount shall be due and payable to Lessor in addition to the rental payment. If any rental payment is not paid within thirty (30) days of the due date, the rental amount and penalty amount shall carry interest at ten percent (10%) per annum from the tenth (10th) day of the month in which the rental payment was

due, and, in addition, the Lessor shall have the remedies set forth in Paragraph 16 of this Lease.

4. SECURITY DEPOSIT:

Lessor agrees not to require Lessee to pay a security deposit.

5. ASSIGNMENT:

A. No sublease agreement permitted under this paragraph 5 shall have a term that extends beyond the term of this lease.

B. The Lessee may, without prior written consent of the Lessor, sublet first floor space to retail businesses. Sublet of the first-floor space for any use other than retail business requires prior written consent of the Lessor.

C. Lessee agrees that it will utilize the rear office of the second floor of the premises for its offices and may, without prior consent of Lessor, sublet the front office of the second floor of the premises for business incubation and development.

D. All sublease agreements shall include the following:

(1) Indemnification of the Town of Berryville by sublessee;
and

(2) Naming of the Town of Berryville as an additional insured on sublessee's Commercial General Liability policy.

6. USE:

It is expressly agreed that this lease is executed in order that the Lessee may use the premises for Berryville Main Street offices and other activities to promote Berryville's downtown and the economic development of the Town of Berryville and Clarke County, and the property shall not be put to any other use without the written consent of the Lessor.

7. UTILITIES:

Lessee shall be responsible for all utility services to the premises including, but not limited to, electric, phone, cable, and water and sewer. Lessee shall also pay all charges for heating oil. Notwithstanding any provisions contained herein, Lessee shall be responsible for all costs associated with repairs required by damage caused by the failure of Lessee to keep heating oil supplied to the premises.

8. REPAIRS BY LESSOR:

A. The Lessor agrees that during the term of this lease and any renewal thereof, Lessor shall do the following:

- (1) Keep the outer walls in proper and substantial repair;
- (2) Keep the roof in proper and substantial repair;
- (3) Make necessary major repairs (repairs in excess of \$700.00 each) to the heating and air conditioning systems.
- (4) Maintain the exterior appearance of the building, except as herein provided.

B. It is agreed by the parties that Lessor is not an insurer and that Lessor's responsibility and liability for each of the items of maintenance and repair set forth above shall be to make the proper repairs within a reasonable time after the necessity, nature, and location thereof has been called to Lessor's attention by Lessee.

9. OPERATION/REPAIR/MAINTENANCE BY LESSEE:

In regard to the use and occupancy of the premises, Lessee shall (i) maintain the premises in good condition; (ii) except such repairs as are the responsibility of the Lessor as set forth above, make all necessary repairs to the premises, including, without limitation, plumbing repairs and minor repairs (repairs up to \$700.00 each) to the heating and air conditioning systems; provided, however, the cost of necessary repairs paid by Lessee in excess of

\$1,400.00 per lease year shall be reimbursed by Lessor if prior written approval for the repairs was given by Lessor; (iii) be responsible for prompt snow and ice removal from the sidewalk in front of the premises; (iv) keep the inside and outside of all glass in the doors and windows of the premises clean; (v) keep all exterior store front surfaces of the premises clean; (vi) replace promptly, at Lessee's expense, any cracked or broken plate or window glass of the premises with glass of like kind and quality; (vii) maintain the premises in a clean, orderly and sanitary condition and free of insects, rodents, vermin and other pests; (viii) keep any garbage, trash, rubbish or refuse in closed containers; (ix) repair promptly at its expense any damage to the premises caused by bringing into the premises any property for Lessee's use, or by the installation or removal of such property, or caused by any act or omission of Lessee, their agents, employees, contractors or invitees; (x) keep all mechanical apparatus free of vibration and noise which may be transmitted beyond the premises; (xi) comply with all laws, ordinances, rules and regulations of governmental authorities and all recommendations of the Fire Underwriters Rating Bureau now or hereafter in effect; and (xii) conduct Lessee's business in all respects in a dignified manner.

10. EXTERIOR DESIGN AND SIGNS:

The Lessor shall have control of the exterior design of the premises and Lessee shall not paint or decorate any part of the exterior of the premises without first obtaining the written approval of Lessor. The Lessee shall have the right to erect and maintain on the exterior of the premises, at Lessee's own expense, signs, advertising matter, or a logo, including lettering or other advertising matter on the glass of the premises, necessary or appropriate to the conduct of the business of Lessee; provided, however, that no such signs or other matters shall be erected without the prior approval of Lessor as to design, size, color, and location, and without any necessary approval from the appropriate agency of the Town of Berryville.

11. ALTERATIONS AND IMPROVEMENTS BY LESSEE:

A. Lessee, prior to making any improvements or alterations to the premises, shall submit to the Lessor plans and specifications for such work (the "Construction Documents"), including, but not limited to, all electrical, plumbing, mechanical, and architectural plans and specifications. Lessor shall review the Construction Documents submitted by the Lessee, and, if same are approved by Lessor, Lessee shall submit such Construction Documents to the appropriate governmental agencies together with an

application for all permits and licenses necessary to commence such construction work. Lessor shall not be liable for any delay in obtaining such permits or licenses. The cost of any such permits or licenses shall be the responsibility of Lessee. Lessee shall be entitled to commence work in the premises upon receipt of all necessary permits and licenses.

B. In the event the Construction Documents submitted by Lessee are not acceptable to the Lessor or the appropriate governmental agencies for any reason, Lessor and Lessee shall cooperate in revising such Construction Documents to a point where they will be acceptable to Lessor and the appropriate governmental agency.

C. All improvements made by Lessee shall be considered a part of the real estate and as such the property of Lessor, except for items of tangible personal property not affixed to the demised premises.

12. PROCEDURES FOR LESSEE'S ALTERATION AND IMPROVEMENT WORK:

A. Prior to the commencement of any improvement work in the premises, Lessee shall:

(1) Obtain Lessor's written approval of the Construction Documents as set forth above;

(2) Have in its possession the permits and licenses necessary for the improvement work;

B. Lessee shall conduct the improvement work in the premises in accordance with reasonable rules and regulations promulgated by Lessor or its agent, including, but not limited to, the following:

(1) All work by Lessee shall conform to the Construction Documents as approved by Lessor and shall conform to all local, state, and national codes, laws, rules and regulations;

(2) Lessee shall not permit its construction activities to interfere with the quiet enjoyment of the building in which the demised premises are located, or of the adjoining buildings.

(3) Lessee shall, at Lessee's expense, remove from the premises and adjoining areas all trash and debris as same accumulates;

(4) Lessee shall not use or permit the use of any areas outside the premises for any construction activities unless expressly consented to in writing by Lessor; and

(5) Lessee shall, at all times, enforce strict discipline and good order among their contractors, subcontractors, and employees.

C. In the event Lessee shall fail to perform the improvement work in accordance with the rules and regulations of Lessor, Lessor shall have the right to either (a) perform the obligation which Lessee have failed to perform, or (b) repair any damage caused by Lessee's failure to comply, including, without limitation, the correction of any deviation from the Construction Documents and the correction of any defects, and Lessee shall pay to Lessor on demand, all of Lessor's costs associated therewith. Lessee shall be responsible and liable for any and all damage to the premises caused either directly or indirectly by Lessee's construction activities.

13. ANTICIPATED WORK BY LESSOR

A. Lessor anticipates completing two projects on or adjacent to the premises within the next ten (10) years and hereby notifies Lessee of these projects. Lessor anticipates completing projects to:

- (1) Stabilize and improve the livery stable; and
- (2) Construct a vestibule outside of the second-floor bathroom of the premises.

B. Lessor agrees to provide Lessee thirty (30) days written notice of the commencement of the work on the livery stable.

C. Lessee agrees to the vestibule project by Lessor, and

Lessor agrees to provide thirty (30) days written notice to Lessee of the commencement of work on the project.

14. DEFAULT:

A. If any rent shall be due or unpaid for a period of thirty (30) days, or if default shall be made in any of the conditions or covenants herein contained, or if the said premises or any part thereof shall be vacated by the Lessee during the term granted by this lease, the Lessor may recover and resume possession of said property, either by force or otherwise, without being liable to prosecution therefor, remove all persons and property therefrom, relet the said premises as agent for the Lessee, receive and collect the rents thereof, applying the same first to the payment of such expenses as the Lessor may have incurred in recovering the possession of the said property and reletting the same, secondly to the payment of any costs or expenses that the Lessor may have incurred, either for repairs or by reason of any condition or covenant being unfulfilled on the part of the Lessee, and then to the payment of any rent due or to become due under the terms of this lease, with interest, and the Lessee agrees to pay any deficiency which may arise.

B. Any and all remedies provided to Lessor for the enforcement of the provisions of this Lease are cumulative and not exclusive,

and Lessor shall be entitled to pursue either the rights enumerated in this Lease or remedies authorized by law, or both. Lessee shall be liable for any breach of this Lease and for any costs or expenses, including attorneys fees, incurred by Lessor in enforcing the terms of this Lease, or in pursuing any legal action for the enforcement of Lessor's rights.

15. LIABILITY:

The Lessor shall not be liable for any injuries to any person or for any damages to any property on or about the demised premises. The foregoing shall apply to injuries or damages to any property of Lessee, except such injuries or damages as directly result from Lessor's failure to comply with the provisions of Paragraph 8 of this lease.

16. INDEMNITY:

Lessee shall indemnify Lessor against all expenses, liabilities, and claims of every kind, including reasonable counsel fees, by or on behalf of any person or entity arising out of either (1) a failure by Lessee to perform any of the terms or conditions of this lease, (2) any injury or damage happening on or about the demised premises, (3) failure to comply with any law of any governmental authority, or (4) any mechanic's lien or security interest filed against the demised premises or equipment, materials, or

alterations of buildings or improvements thereon, for property owned by or work done by Lessee.

17. DAMAGE OR DESTRUCTION:

If the demised premises shall, without fault of Lessee, be destroyed or be so damaged as to become wholly or partially untenable by fire or by providential means, then, if the Lessor shall elect to rebuilt or repair, this Lease shall remain in force and Lessor shall rebuild or repair the premises within a reasonable time after such election, putting premises in as good condition as they were at time of destruction or damage, and for that purpose they may enter said premises, and rent shall abate during time the premises are untenable; but if Lessor does not elect as aforesaid to rebuild or repair, then Lessor shall have possession of the premises hereby let, and Lessee shall deliver and surrender to Lessor such possession, and this Lease shall become void and the term hereby created end; and on such delivery and surrender being made or on the recovery of said premises by Lessor the Lessee shall receive a prorated refund of prepaid rent, or the obligation to pay rent shall cease, as applicable.

18. INSPECTION AND ACCESS:

A. The Lessor and its agents shall have the right during

the term of this Lease to visit, inspect, and make necessary repairs to the leased premises at any reasonable hour.

B. The Lessor shall have the right during the term of the Lease to access the site in order to enter portions of the building not subject to the lease. Lessee agrees that such access must occur through leased space and agrees to provide access at any reasonable hour. The Lessee agrees to park only in identified spaces and not to block access to the rear of the building.

19. INSURANCE:

A. Minimum Insurance Coverage Requirements: Lessee shall, at its own expense, keep in full force and effect during the term of this lease, and during the term of any extension of this lease, insurance coverage in the following amounts:

Commercial General Liability:

- \$1,000,000 each occurrence (Bodily Injury and Property Damage)
- \$2,000,000 General Aggregate
- \$2,000,000 Products/Completed Operations Aggregate
- \$1,000,000 per person or organization (Personal and Advertising Injury)
- \$1,000,000 each (CGL/AL/EL) occurrence/\$2,000,000 Annual Policy Aggregate

Workers Compensation as required by Code of Virginia.

B. Lessee shall have the aforesaid insurance coverage apply to Lessee's use of non-leased premises pursuant to paragraph 1.B.

C. The Town shall be named as an additional insured on any policy obtained by Lessee pursuant to this paragraph. Lessee shall annually furnish the Town with a Certificate of Insurance documenting that the aforesaid insurance coverage has been obtained.

20. ENTIRE AGREEMENT:

This Lease constitutes the entire agreement among the parties and may not be amended except by written instruments executed by each of the parties.

21. CONSTRUCTION OF THE LEASE:

This Lease shall be construed and interpreted according to the laws of the Commonwealth of Virginia.

22. COMPUTATION OF TIME:

If the time period or date by which any right, option, or election provided under this Lease must be exercised, or by which any act required hereunder must be performed, expires or occurs on a Saturday, Sunday, or legal, bank, or Clarke County Circuit Court Clerk's Office holiday, then such time period or date shall be automatically extended through the close of business on the next regularly scheduled business day.

23. BINDING:

The Lease shall inure to the benefit of, and be binding upon, the successors and assigns of the parties.

24. RIGHT TO RE-LEASE:

If the demised premises is to be available for lease by Lessor at the expiration of the three-year term of this Lease, or at the expiration of any subsequent one-year term, the Lessor shall give the Lessee the first right to re-lease the premises for a term of one (1) year, upon the same conditions, except the amount of rent, as contained in this Lease. If Lessee should desire to re-lease the premises at the expiration of the three-year term or any subsequent one-year term, Lessee shall so notify the Lessor in writing at least ninety (90) days prior to the expiration of term, and upon being so notified the Lessor shall inform the Lessee in writing at least sixty (60) days prior to the expiration of said term of the amount of rent for the new term. The Lessee shall then notify the Lessor in writing at least thirty (30) days prior to the expiration of said term as to whether or not the Lessee will elect to re-lease the premises.

25. NOTICES:

All notices, demands, or other communications that may be

necessary or proper hereunder shall be deemed duly given if personally delivered, sent via certified mail, return receipt requested, or sent overnight courier service, such as Federal Express, UPS, or Airborne, addressed respectively as follows:

If to Lessor:

Town of Berryville, Virginia
ATTN: Town Manager
101 Chalmers Court, Suite A
Berryville, VA 22611

If to Lessee:

DBI / Berryville Main Street
ATTN: President
23 East Main Street
Berryville, VA 22611

TOWN OF BERRYVILLE, VIRGINIA, Lessor

BY:  (SEAL)
Keith R. Dalton, Town Manager

DOWNTOWN BERRYVILLE, INC, Lessee

BY:  (SEAL)

Michele K. Marino, President
(Printed Name) (Position)

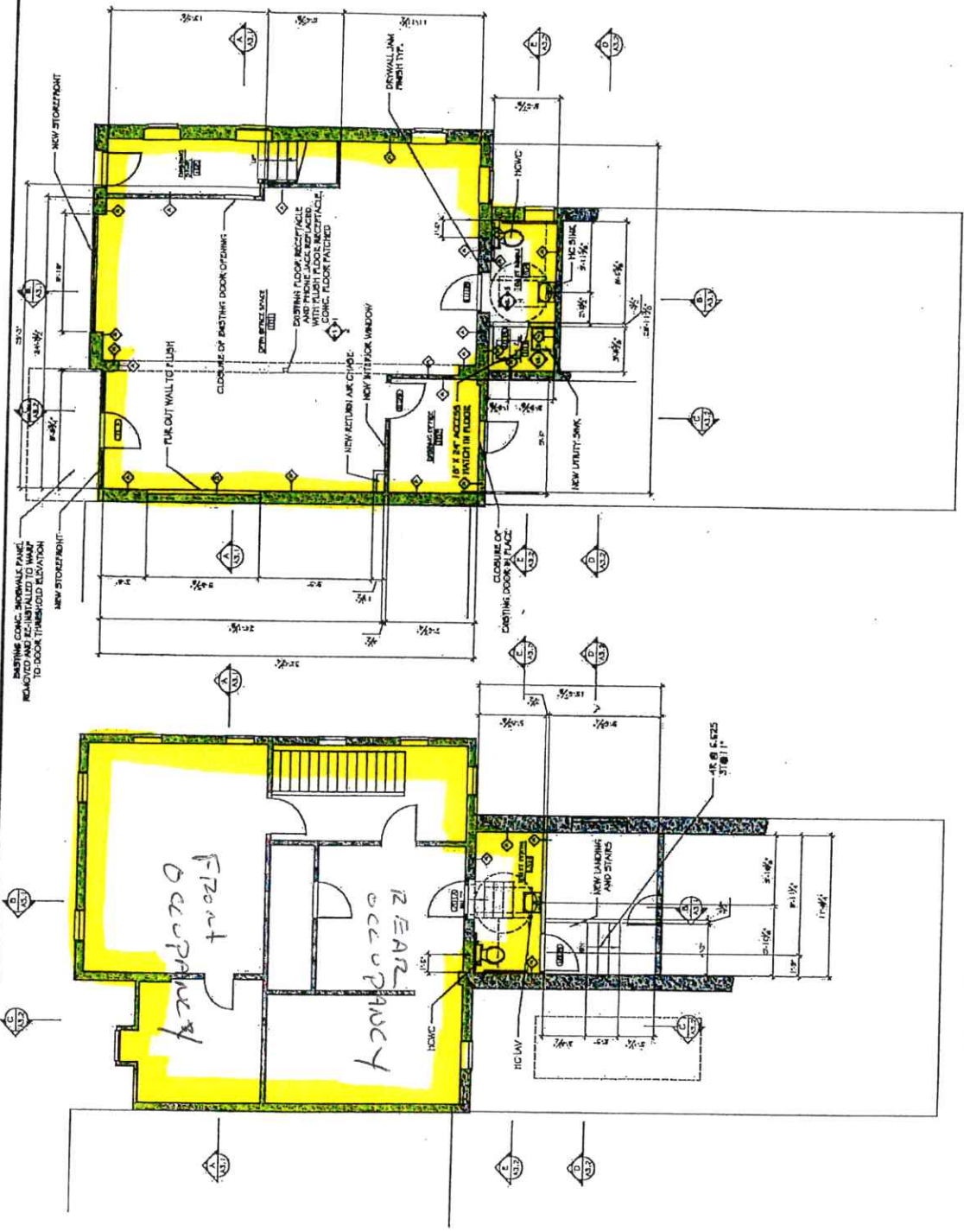
EXHIBIT A

Berryville Main Street Office & The Fire House Gallery
23 E. Main Street- Berryville, Virginia

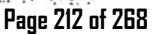
MSA
MAIN STREET ARCHITECTURE, P.C.
1000 E. MAIN STREET, SUITE 100
BERRYVILLE, VA 22134
TEL: 540-338-1111
WWW.MSAVA.COM

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SCHEMATIC NOT FOR CONSTRUCTION



PARKING
LOT



MINUTES

BERRYVILLE TOWN COUNCIL

Regular Meeting

October 14, 2025

7:00 p.m.

A meeting of the Berryville Town Council was held on Tuesday, October 14, 2025, at 7:00 p.m. at the Berryville-Clarke County Government Center in Berryville.

Town Council

Present: Harry Lee Arnold, Jr., Mayor; Erecka L. Gibson, Vice Mayor; William Steinmetz; Grant Mazzarino; Ryan Tibbens.

Absent:

Staff

Present: Keith Dalton, Town Manager; Jean Petti, Deputy Town Manager; Brandel Kelsey, Town Clerk; Terry Russell, Community Development Director; Chief Tim Bristol, Berryville Police Department

Press Mickey Powell, Winchester Star

1. Call to Order

Mayor Arnold called the meeting to order at 7:00 p.m.

2. Pledge of Allegiance

Mayor Arnold invited all those assembled to stand for the Pledge of Allegiance.

3. Approval of Agenda

Ms. Gibson moved to approve the agenda as **amended**. The motion passed by voice vote.

4. Presentations, Awards, and Recognitions

None

5. Public Hearings

None

6. Discussion of Public Hearing Items

None

7. Citizens' Forum

Mayor Arnold called on citizens who have signed up to speak during the forum.

Mr. Rick Figert from 417 Jones Ct shared his concerns with the storm water pond behind his home. He had previously spoken with Town staff, reps from DEQ and DR Horton about the issue and feels it is not being resolved. Mayor asked staff if there is any update. Mrs. Petti stated that it has been looked at and she will get an update emailed to Mr. Figert first thing tomorrow. Mr. Figert also asked about the concrete issue that has been on going. Mr. Figert additionally asked about the dip in the road at the intersection of Hermitage Blvd and Alexander Dr, he said it feels like it will damage cars. Mrs. Petti said that the grade of the road is necessary to avoid the ponding of water in the area. Mr. Figert would like the specs for the dip in the road.

8. Consent Agenda

Mr. Steinmetz moved to approve the consent agenda as presented. The motion passed by voice vote.

9. Unfinished Business

Discussion- Appointment of a Ward 2 Councilmember

The Mayor stated the names of both candidates had been interviewed for Town Council Ward 2 position. They are Paul Perez and Patrick Irish.

Mr. Tibbens moved that the Council of the Town of Berryville appoint Paul Perez to the unexpired term of Diane Harrison, Ward 2 Councilmember, with such term to commence on October 15, 2025 and end on December 31, 2026. Motion passed by voice vote.

Discussion- Town legal services

Mr. Dalton discussed the town is looking to fill the Town Attorney position and there was an interview that took place last Council meeting.

Ms. Gibson moved that the Council of the Town of Berryville, in accordance with §5.1 of the Town of Berryville Charter, authorize the town manager to finalize an agreement with Martin R. Crim, Sands Anderson PC, to provide legal representation for the Town. The motion passed by voice vote.

Discussion- Proposed amendment of the Town's Construction Standards and Specifications to address restoration of pavement for utility test pits

Mrs. Petti gave a quick recap of the Berryville standard, Berryville requires a 25ft on center and Glo Fiber is asking for a 4ftx4ft patch. Glo Fiber states it will be cost prohibitive if they go forward with VDOT's standards and could not reach 700 of the residents originally projected. Mrs. Petti presented a Power Point about potential manual revision of restoration of pavement.

Mrs. Petti introduced Bryan Byrd from Glo Fiber to speak about the pavement restoration standards and answer any questions the Council may have.

Mr. Tibbens asked if the patches on Mosby Blvd are up to Berryville standards and Mr. Dalton said all the patches that were made so far are up to the Berryville/VDOT standard. Mr. Byrd said the patches that were placed so far were approved by Rick Boor.

Mr. Tibbens asked Mr. Byrd if a plan can be in place by the November meeting, Mr. Byrd said yes. Ms. Gibson asked how many streets have been paved in the last five years. Mr. Dalton stated six streets this year and approximately 30 in the last five years.

Mayor Arnold said he has noticed a lip on the patches and is concerned with the snow plows this winter to see if the patches start to deteriorate.

Mr. Tibbens moved that the Council of the Town of Berryville set a public hearing on November 12, 2025 at 7:00 p.m., or as soon thereafter as the matter may be heard, to consider a proposal to amend the *Town of Berryville Construction Standards Manual and Specifications* to establish standards for asphalt pavement restoration for open cut utility cuts made when test pits are excavated in streets. The motion passed by voice vote.

10. New Business

None

11. Council Member Reports

Mayor Arnold stated that the second Tuesday of November is Veterans Day. Accordingly, the Council's regular meeting in November will be held on Wednesday, November 12th. There will be a Veteran's Day celebration on November 11th at 11:00 a.m. The service will be held in the Veterans Memorial at the BCCGC.

Keith Dalton said there will be a [notice on the website](#) about the change in date for the November Council meeting. He also announced there will be a reception for Diane Harrison, former Councilmember, at the November meeting at 6:00 p.m. This will also be a welcome reception for newly appointed Councilmember, Paul Perez.

12. Staff Reports

Chief of Police

Chief Bristol said the Police Department had one resignation and there are interviews for two candidates for the January Academy.

Deputy Town Manager

Mrs. Petti explained that D.R. Horton has addressed the bulk of remediation and has committed to fully resolving remaining areas identified by the Town, consisting of several short sections of sidewalk, driveway aprons, and curb/gutter.

Mr. Tibbens moved that the Council of the Town of Berryville authorize the following related to bonds held for the Fellowship Square and Shenandoah Crossing developments:

- **Full release of erosion and sedimentation bonds and**
- **Release of all but \$83,500 in public improvement bonds, which will be held as surety to ensure the repair of identified deficiencies and to serve as a maintenance bond for any repair/replacement needs that become evident before November 12, 2026.**

The motion passed by voice vote.

13. Committee Updates

Mayor Arnold recognized the chairs of each standing committee of the Town Council to introduce action items, provide updates, and impart additional information that they think may be helpful to the Council.

Budget and Finance Committee

Discussion- Proposed FY27 Budget Calendar

Ms. Gibson asked if there were any concerns about the Proposed FY27 Budget Calendar. There were none. She then stated that according to the budget calendar, committee priorities are due by December 1, 2025.

Discussion- Review of VML/VACo Investment Pool

Ms. Gibson let the Council know that she would like the Budget and Finance Committee to review whether the Town should avail itself of the VML/VACo Investment Pool. She stated the Town staff has met with representatives of VML/VACo Finance and that she would like to have the Committee review this matter, meet with VML/VACo Finance, and report back to the full Council on the matter. Mr. Dalton stated Committee and staff will go through the reserve specifics to develop recommendations for investments.

Community Development Committee & Streets and Utilities Committee

Chair Tibbens said there will be no meeting in October, the next meeting will be on November 25, 2025 at 3:30 p.m., project updates will be discussed.

Personnel, Appointments, and Policy

Discussion- Hours of work section of the Town of Berryville Employee Handbook

Town staff requests that the Personnel, Appointments, and Policy Committee review the hours of work section of the employee handbook to ensure that it best meets the needs of the Town and complies with federal law.

Mr. Dalton also asked the Personnel Committee to discuss the vacancies on other committees and boards at their next scheduled meeting.

Public Safety

Chair Mazzarino informed the Council that he is working closely with the town manager to fulfill a portion of the Town Council's consultation role in the hiring of a Chief of Police as required by §2-66 of the Berryville Code. He informed the Council that the town manager plans to meet with the entire Council in closed session on November 12, 2025, to brief them on his findings and to seek counsel on the applicant who will be offered the position.

14. Closed Session

None

15. Adjourn

The Council adjourned at 7:59 p.m. on a motion by Ms. Gibson.

Erecka L. Gibson, Vice Mayor

Brandel Kelsey, Town Clerk

MINUTES

BERRYVILLE TOWN COUNCIL Budget and Finance Committee Meeting October 27, 2025 3:30 p.m.

A meeting of the Berryville Town Council Budget and Finance Committee was held on Monday, October 27, 2025, at 3:30 p.m. at the Berryville-Clarke County Government Center in Berryville.

Town Council

Present: Erecka L. Gibson, Vice Mayor; Grant Mazzarino.

Absent:

Staff

Present: Keith Dalton, Town Manager; Brandel Kelsey, Town Clerk; Cindy Poulin, Treasurer.

1. Call to Order

Ms. Gibson called the meeting to order at 3:40 p.m.

2. Approval of Agenda

Agenda was approve as **amended** by consensus on a motion by Mr. Mazzarino.

3. New Business

VACo/VML Investments- Steve Mulroy

Mr. Mulroy explained details of the VACo/VML Virginia Investment Pool as outlined in the **attached** document. Mr. Dalton asked who normally handles the moving of funds between the different pools. Mr. Mulroy said it is usually the Town Manager. Mr. Mazzarino asked if participants have withdrawn in the past. Mr. Mulroy said participants may move around in the pools, but seldom withdraw fully. Mr. Dalton recommended that the committee ask Mr. Mulroy to come back in January to speak with the full Council. Ms. Gibson asked if participants normally participate in all 3 pools and Mr. Mulroy said no, but it is recommended.

The Committee directed staff to propose investment recommendations for the committee's review.

4. Unfinished Business

Bank Account Review

Ms. Gibson explained that every 2 years there needs to be a review of the Town's bank accounts. Mrs. Poulin reviewed the accounts with the Committee.

Administration and Finance Monthly Packet to Town Council

Ms. Gibson spoke about what comes in the monthly finance packet and what may or may not be needed on a monthly basis. The committee directed staff to amend the report and gauge Town Council's support of the change.

Budget Updates

The Committee discussed how income from interest is apportioned to the General Fund, Water Fund, and Sewer Fund. The Committee directed the Treasurer to review the matter in accordance with their accordance and affect a fair distribution.

14. Closed Session

None

15. Adjourn

The Council adjourned at 5:03 p.m. on a motion by Mr. Mazzarino.

Erecka L. Gibson, Vice Mayor

Brandel Kelsey, Town Clerk



VACo/VML Virginia Investment Pool

VIP Briefing for:

**Budget & Finance Cmte.
Town of Berryville, Virginia**

Steve Mulroy, Managing Director

October 27, 2025



About VML/VACo Finance

- Non-profit corporation established in 2003 by the Virginia Municipal League (VML) and Virginia Association of Counties (VACo).
- Governed by Board of Directors comprised of local government officials appointed by VML and VACo.
- Municipal Advisor registered with the Municipal Securities Rulemaking Board & SEC.
- Services include:
 - ✓ Financing & Municipal Advisory: *\$1.2B in projects financed to date*
 - ✓ Pooled OPEB Trust & Virginia Investment Pool (VIP): *\$6.0B in assets*
 - ✓ Accounting Services



VML/VACo Virginia Investment Pool (VIP)

- Created in 2013 by local Treasurers and investment officers to provide a professionally managed investment program for local governments and political subdivisions of the Commonwealth.
- Legislation specifically recognizing jointly-administered investment pools was unanimously approved by the General Assembly in 2017.
- Organized as a governmental trust (IRC Section 115). *Not a “product.”* VIP is owned and controlled by local governments and authorities.
- As of June 30, 2025, VIP portfolios had a combined:

\$3.9 billion in assets

191 participating political subdivisions



VIP is Local Governments Investing Jointly

- Benefits of our approach:
 - ✓ Accountability to Treasurers and Investment Officers – **VIP's owners**
 - ✓ Consistent record of competitive returns
 - ✓ Highly-rated portfolios with continuous oversight
 - ✓ Customer-focused and user-friendly
- Funds managed by PTMA Financial Solutions, an SEC-registered investment advisor:
 - ✓ A best-in-class fund manager with **\$154 billion** in assets under management
 - ✓ Focused on management of short-term, fixed income investments for state and local governments



VIP Board of Trustees – FY 2026

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VIP's investment options

Portfolio Characteristics	Stable NAV Liquidity Pool	<i>end of the year</i> COMING SOON VIP Fixed Term Portfolios	1-3 Year High Quality Bond Fund
Key Attributes	- Daily liquidity - Stable Net Asset Value	- Specific maturity dates - Fixed rate of return if held to maturity	- Longer term yields - Net Asset Value experiences low volatility
How Used	- Short-term cash needs - Link to bank account	- Cash needs with a specific term - Seasonal cash flow management	Longer-term fund balances over one year
Liquidity	Daily	3, 6, 9, or 12 months; Subject to penalty for early withdrawal	Semi-Monthly; Intended for investments over one year
Underlying Securities (partial listing)	Negotiable CDs, Commcl Paper, Repos	US Treasuries & Agencies, Commcl Paper, Repos, Negot. CDs	US Treasuries & Agencies, High Quality Corporate Bonds
Rating	AAAAm (S&P)	AAAf (Fitch)	AA+f/S1 (S&P)



Virginia Investment Pool
A Service of VML/VACO Finance

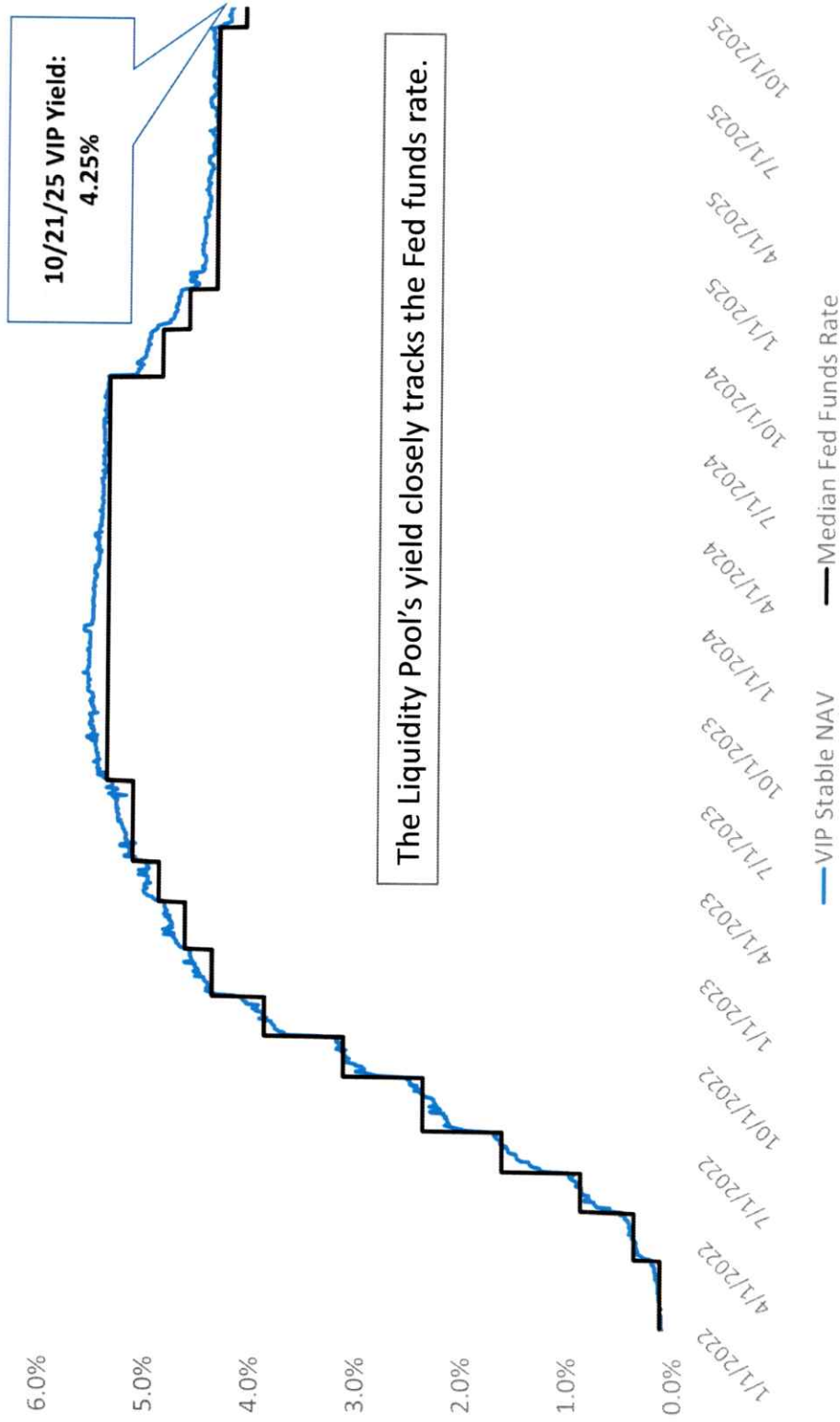


VIP Stable NAV Liquidity Pool

- Features:
 - ✓ Safety – Stable net asset value and S&P rating of AAAm
 - ✓ Daily liquidity – **2 PM** cutoff for same day funds
 - ✓ Highly competitive rates – current net yield is **4.25%***
 - ✓ No minimum balance or account maintenance fee
 - ✓ Establish separate accounts to track project funds at no additional cost
- Appropriate for bond proceeds
 - ✓ Complete arbitrage monitoring & rebate reports at no additional cost
- Yields posted daily at **virginiainvestmentpool.org**.

**Yield as of October 21, 2025. Past performance is not necessarily indicative of future results.*

VIP Stable NAV Liquidity Fund



The Liquidity Pool's yield closely tracks the Fed funds rate.

Past performance is not necessarily indicative of future results.



VIP 1-3 Year High Quality Bond Fund

- A portfolio invested in **high-quality, short-term fixed income** securities.
 - Portfolio benchmark: ICE BofA Merrill Lynch 1-3 Year Corp. & Gov't Index
- **Access funds twice a month**, generally with 5 days' notice
- The portfolio is marked-to-market twice per month
- Rated **"AA+f/S1"** by Standard & Poor's. "S1" indicates the lowest level of volatility on S&P's rating scale
- Gross market yield as of 9/30/2025: 3.67%* (*Rate applicable to new investors*)
- Total Return for 12 months ending 9/30/2025: 4.38%* (*Includes price appreciation and income, before fees*)
- Outperformed its key benchmark on a total-return basis for 9 of the past 10 years

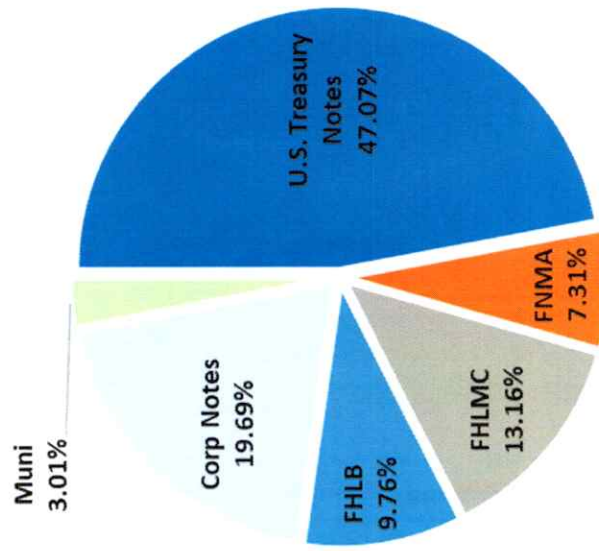
*Fees range from 0.08% to 0.17% based on amount invested. Past performance is not necessarily indicative of future results.



VIP 1-3 Year High Quality Bond Fund

Portfolio is actively managed to adjust to changing market conditions.

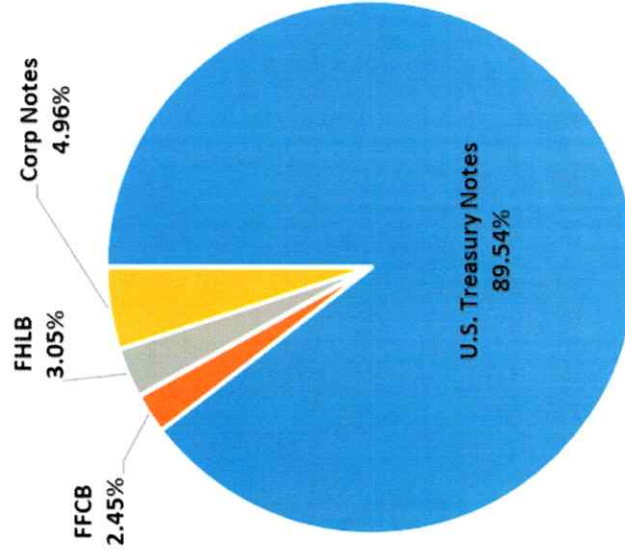
Portfolio Security Distribution



June 2018

Source: PTMA Financial Solutions

Portfolio Security Distribution

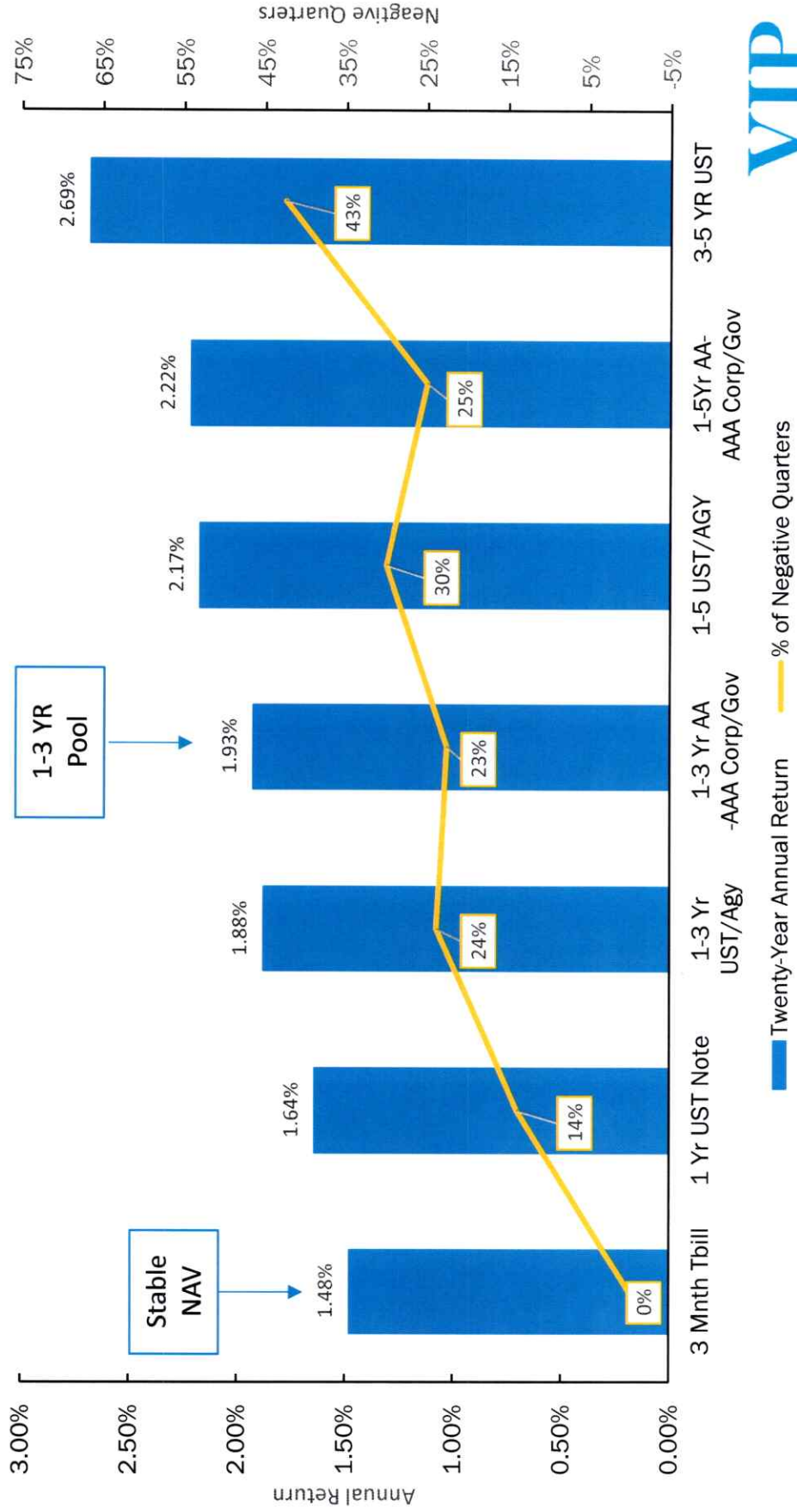


June 2025



Performance: Historical Returns and Volatility

Annual Return Index Comparison
Twenty-Year Period as of December 31, 2024



Source: PTMA Financial Solutions; Bloomberg - ICE BofA Fixed Income Indices. Past performance is not necessarily indicative of future results.

Volatility: 1-3 Year Corp/Gov Historical Total Returns

	Q1	Q2	Q3	Q4	Annual
2004	1.05	-1.14	1.07	0.06	1.03
2005	-0.26	1.20	0.09	0.67	1.72
2006	0.47	0.65	2.01	0.99	4.18
2007	1.42	0.73	2.50	2.26	7.08
2008	2.85	-0.70	1.12	2.96	6.33
2009	0.20	0.46	0.96	0.15	1.77
2010	0.77	1.07	0.73	-0.12	2.47
2011	0.10	0.85	0.40	0.15	1.51
2012	0.12	0.21	0.33	0.10	0.76
2013	0.14	-0.13	0.32	0.09	0.42
2014	0.14	-0.13	0.32	0.09	0.67
2015	0.16	0.29	0.03	0.18	0.59
2016	0.53	0.14	0.33	-0.41	0.93
2017	0.91	0.54	-0.08	-0.44	0.55
2018	0.30	0.22	0.27	-0.23	1.64
2019	-0.13	0.24	0.24	1.28	3.64
2020	2.62	0.29	0.12	0.07	3.12
2021	-0.04	-0.02	0.06	-0.53	-0.53
2022	-2.34	-0.52	-1.57	0.75	-3.66
2023	1.56	-0.55	0.74	2.52	4.31
2024	0.32	0.95	2.87	-0.05	4.13
2025	1.60	1.19	1.13		

2021 - 2022

Low Yields + Increasing Rates = Negative Total Return

2023 - 2024

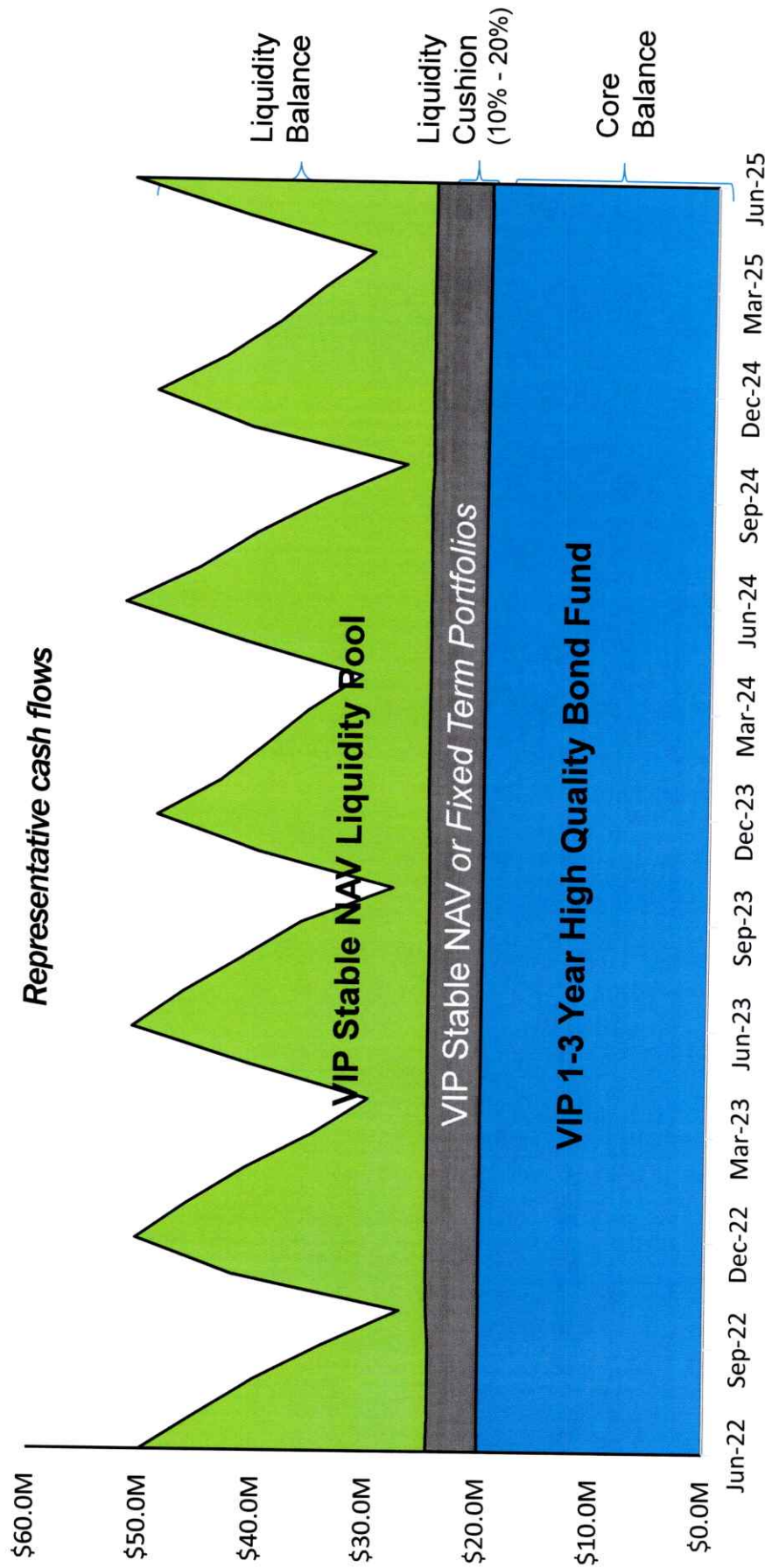
Higher Yields + Stable/Declining Rates = Positive Total Return



VIP Fixed Term Portfolios – Coming Soon

- Bridges the gap between VIP Stable NAV Liquidity Pool and VIP 1-3 Year High Quality Bond Fund
- Offers Participants the ability to lock-in a fixed rate of return over a fixed time horizon
 - Participants can select portfolios with a time horizon of 3, 6, 9, or 12 months
- Avoids interest rate volatility
 - Declining rates have a negative impact on the Liquidity Pool yields
 - Increasing rates negatively impact the total return of the 1-3 Year High Quality Bond Fund
- Professionally managed, safe (AAAF rated by Fitch), and approved for Virginia local governments

Three complementary services for managing funds



This chart is for informational purposes only. It is not meant to provide advice for your locality's particular situation. For assistance with analyzing your situation, please consult with PTMA Financial Solutions, VIP's registered investment manager.



Steps to Join VIP Trust

- Town Council passes an ordinance which includes authorization for Town Manager/Finance Director to open a VIP account
- Town Manager/Finance Director executes VIP Trust Agreement Joinder Agreement
- Town completes VIP Account Registration form and submits, along with Joinder Agreement, to VML/VACo Finance



VML/VACo Finance's Mission

- Provide high-quality financial services to all political subdivisions in Virginia.
- Deliver solutions that meet the needs of clients and exceed expectations.
- Treat clients fairly and with integrity.
- Employ staff with subject matter expertise and highest professional standards.



Thank you.

valocalfinance.org

804.648.0635

Steve Mulroy

Managing Director

smulroy@valocalfinance.org



Report of the Department of Public Works November 2025

Paving

The asphalt contractor continues with striping and re-establishing the shoulders of the recently paved roadways.

Water

We will be helping the Water Treatment Plant with the breakdown of the Monroe Vertical clarifier. Additionally, we will be assisting the WTP with the installation of a pressure relief blowoff. The river intake vault will be cleaned as part of routine maintenance.

Sewer

We experienced one pump station failure last month. The failure occurred at the Boom Road Pump Station. This failure was due to debris entering the pump. The pump was cleaned and put back into service. These pumps occasionally need to be cleared manually.

Training

The department is going to send two employees to a training on Wednesday, November 12th in Fairfax, VA. This training will cover Operations and Safety Systems, Proper Maintenance, Trouble shooting, and Service repairs on our VDOT plowing trucks.

Parks

We inspect the park each weekday to keep the park clean and in good repair. Additionally, all lights have been repaired in the park and at the Gazebo.

Public Utilities Department Report

12th November 2025

Item Title: Department Update

Prepared By: Frank Kelsey

Water Treatment Plant Activity

All water quality results are available at <https://vadwv.gecsws.com/>

A pilot test of a Monroe Vertical Clarifier is underway. Thanks to members of Public Works for assistance in site preparation and assembly.

The Water Treatment Plant is running well and in accordance with state regulations. The Town is on schedule and in compliance with VDH consent order's Corrective Action Plan.

Town staff and Engineers are working to finalize the Water Treatment Plant upgrade design.

Wastewater Treatment Plant Activity

Inboden continues to operate the facility with care and consideration, completing monthly preventative maintenance on equipment to ensure pumps and motors are operating efficiently.



BERRYVILLE POLICE DEPARTMENT

101 Chalmers Ct., Suite A, Berryville VA 22611

(T) 540.955.3863 (F) 540.955.0207

policeadmin@berryvilleva.gov

Timothy J. Bristol – Interim Chief of Police

MEMO

DATE: 10/29/2025

TO: Town Council

FROM: Interim Chief T. J. Bristol

CC:

RE Police Department Monthly Report – 10/29/2025

Monthly Activity Report

The activity report for the month of October 2025 is attached to this report.

Public Safety Committee

The Public Safety Committee did not meet in October 2025.



BERRYVILLE POLICE DEPARTMENT

101 Chalmers Ct., Suite A, Berryville VA 22611
(T) 540.955.3863 (F) 540.955.0207
policeadmin@berryvilleva.gov
Timothy J. Bristol – Interim Chief of Police

Police and Security Report (Continued)

	Year To Date	October	September
	2025	2025	2025
<u>Criminal Papers Served</u>			
Abduction:	0	0	0
Arson:	0	0	0
Assault and Battery:	6	0	0
Assault and Battery on Police Officer:	0	0	0
Auto Larceny:	0	0	0
Breaking and Entering:	1	0	0
Capias:	11	2	2
Disorderly Conduct:	0	0	0
Driving Under the Influence:	10	0	0
Drunk In Public:	13	1	3
Fail to Obey Police Officer:	0	0	0
Fail to Pay Parking Ticket:	0	0	0
Forgery:	0	0	0
Fraud:	1	1	0
Homicide:	0	0	0
Illegal Drugs/Paraphernalia:	8	0	1
Larceny:	6	1	1
Possess Alcohol Underage:	0	0	0
Protective Order Violations:	3	0	0
Rape:	0	0	0
Resisting Arrest:	1	0	1
Robbery:	0	0	0
Shoplifting:	6	0	6
Trespassing:	0	0	0
Vandalism:	3	1	0
Weapons Violation:	1	0	0
Miscellaneous Criminal Arrests:	36	3	2
Juvenile Detention Order Totals:	7	2	0
Total Criminal Arrests:	113	11	16

Town Council Agenda Item Report Summary

November 12, 2025

Item Title

Community Development Update

Prepared By

Terry Russell

Planning Commission

The Planning Commission met on Tuesday, October 28, 2025. It set a work session on the request to rezone approximately 43 acres of the Friant property from BP, DR-1, DR-2 and OSR to DR-4 for Thursday, November 20, 2025 at 6:00 pm.

Berryville Area Development Authority

The BADA has not met since the last Town Council meeting. The BADA is scheduled to meet on November 19, 2025.

Architectural Review Board

The ARB has not met since the last Town Council meeting.

Tree Board

The Tree Board has not met since the last Town Council meeting. Its next meeting is scheduled for December 3, 2025

Board of Zoning Appeals

The BZA has not met since the last Council meeting.

Wayfinding

The Wayfinding signs plan continues under review by VDOT staff.

Town Council Agenda Item Report Summary

November 12, 2025

Item Title

East Fairfax Street and Mosby Boulevard Sidewalk Improvement Projects

Prepared By

Terry Russell

The Transportation Alternatives Program (TAP) is a federal reimbursement transportation grant funding program administered by the Virginia Department of Transportation (VDOT). It provides 80 percent match funding for transportation projects such as pedestrian and bicycle facilities, safe routes to schools, conversion of abandoned railway corridors to trails, and historic transportation facility preservation. Berryville has received funding through this program for sidewalk projects on the southside of East Fairfax Street west of Page Street, and the northside of Mosby Boulevard from McNeill Drive to Hancock Court.

On July 31, 2025 the Town of Berryville executed an advertisement for bids for the construction of approximately 2,000 linear feet of 5-foot wide sidewalk. Bids were received until 3:00 pm August 28, 2025.

The low bidder Imperio Construction was awarded a contract amount of \$136,218.50 for the Mosby Boulevard project and \$39,083.50 for the East Fairfax Street project for a total of \$175,502.00.

The East Fairfax Street and Mosby Boulevard Sidewalk Improvement Projects are about to enter the construction phase. On October 6, 2025 a Notice of Award was presented to Imperio Construction. The contract was executed and became effective on October 21, 2025. A pre-construction meeting was held on November 6, 2025.

The contractor plans to begin work in December shortly after Thanksgiving. It is their plan to construct the Mosby Boulevard project first. Once Mosby Boulevard is substantially complete the contractor intends to move the construction crew to East Fairfax Street and construct that project. Weather permitting the contractor hopes to complete both projects by February, 2026.

Item Title

Wayfinding Project Update

Prepared By

Jean Petti

General Information

Launched in summer 2022 with an award to Frazier for \$41,950.00, Town Council reserved \$50,000.00 in addition to ARPA funding of \$140,000.00. Current expenditures are \$47,000.00. Design phase is completed and project may go out for bid.

Current Developments

Virginia Department of Transportation has reviewed the revision to the “Welcome to Berryville” signs (formerly referred to as Monument Signs). These have been redesigned with break-away bases, allowing for installation in the right-of-way. On October 31, staff and VDOT had an on-site review of locations, bringing plans to 90%, which is the threshold for bid issuance.

Attachments

1. Minutes of Berryville Town Council February 2025

**MINUTES
BERRYVILLE TOWN COUNCIL
Regular Meeting
February 11, 2025
7:00 p.m.**

A meeting of the Berryville Town Council was held on Tuesday, February 11, 2025 at 7:00 p.m. at the Berryville-Clarke County Government Center in Berryville.

Town Council

Present: Harry Lee Arnold, Jr., Mayor; Erecka L. Gibson, Vice Mayor; Diane Harrison; Grant Mazzarino; Ryan Tibbens.

Absent: William Steinmetz

Staff

Present: Keith Dalton, Town Manager; Brandel Kelsey, Town Clerk; Chief Neal White, Berryville Police Department.

Press None

1. Call to Order

Mayor Arnold called the meeting to order at 7:03 p.m.

2. Pledge of Allegiance

Mayor Arnold invited all those assembled to stand for the Pledge of Allegiance.

3. Approval of Agenda

Vice Mayor Gibson moved to approve the agenda as presented.

The motion passed by voice vote.

4. Presentations, Awards, and Recognitions

Gerold Dodson presented an idea about a Peace Pole in Rose Hill Park, the Rotary Club would put in place and cover the cost.

Presentation of FY24 Financial Report

Mayor Arnold recognized Mr. Josh Roller from Robinson, Farmer, Cox Associates, who participated via phone call.

Mr. Roller presented an overview of the Fiscal year 2024 financial report. There were no questions from Council or Staff. Mayor Arnold thanked Mr. Roller for his participation.

5. Public Hearings

none

6. Discussion of Public Hearing Items

none

7. Citizens' Forum

Mayor Arnold called on citizens who have signed up to speak during the forum. There were none.

8. Consent Agenda

Mr. Tibbens moved to approve the consent agenda as presented.

The motion passed by voice vote.

9. Unfinished Business

Water and Sewer Billing Adjustment Policy Review.

Mayor Arnold recognized the town manager, Mr. Dalton, who explained the changes that were made to the policy. Council discussed what they liked and disliked about the changes. Mr. Dalton will revise the policy again and bring it back to Council in March to finalize.

Consideration of Virginia Department of Health funding for the Water Treatment Plant Upgrade

Mr. Dalton explained updates on the **Bipartisan Infrastructure Laws** initial offers that will provide loan funds for the Water Treatment Plant Upgrade Project. Mr. Dalton said the revised Preliminary Engineering Report should be ready by the end of February. Mr. Dalton stated that in accordance with the revised schedule, the project should be done by the end of 2027. Ms. Harrison asked if the BIL is canceled, what would we do from there? Mr. Dalton explained the different avenues they could go.

Ms. Harrison moved that the Council of the Town of Berryville authorize the Mayor to sign the attached draft letter to the Virginia Department of Health evidencing the Town's continued interest in securing a FY2024 Bipartisan Infrastructure Law loan for the completion of the project to upgrade the Town's Water Treatment Plant and related facilities. The motion passed by voice vote.

10. New Business

Proposed IFB #2025-01

Mayor Arnold recognized the town manager to provide an overview of the wayfinding signage plan. Mr. Dalton explained the wayfinding signage plan. Ms. Harrison explained the process as well. Ms. Gibson mentioned the ARPA money would need to be spent first because the funds have an expiration date of 2026. Mr. Dalton stated the project is expected to be finished by the end of 2025. Mr. Dalton said 2 of the signs will need to have easements established before contract award and he will speak with the property owners now.

Ms. Harrison moved that the Council of the Town of Berryville authorize the town manager to issue IFB #2025-01. She further moved that the Council hereby authorized the town manager to:

- make necessary edits to the IFB prior to issuance and
- to approve the bid and execute required contract documents in this matter, if the lowest responsible bidder's bid is less than or equal to the funds allocated for the project.

The motion passed by voice vote.

11. Council Member Reports

Ms. Harrison spoke about the BADA Comprehensive Plans and Southeast Collector. Ms. Harrison stated that Mr. Russell and Mrs. Poulin are preparing a report on the Berryville Plan update. A work session is set for March 3 to discuss the FY26 Budget and Berryville Area Plan Review.

Mr. Mazzarino spoke about the concrete problems on the sidewalks and driveways in Hermitage V. The company is aware of the problems and appears to be working with the property owners to schedule necessary repairs.

12. Staff Reports

none

13. Committee Updates

Mayor Arnold recognized the chairs of each standing committee of the Town Council to introduce action items, provide updates, and impart additional information that they think may be helpful to the Council.

Budget and Finance Committee

none

Community Development Committee & Streets and Utilities Committee

Mr. Tibbens discussed the possibility of fostering a program to connect volunteers willing to clear snow from sidewalks with residents who are unable to do so themselves. Mr. Tibbens discussed having groups like the cub scouts or highschoolers who need volunteer hours to do the work. Mayor Arnold suggested the Rotary club or other clubs take on the facilitating of the project. Mayor Arnold does not want to increase the workload for town Staff, particularly, Public Works.

Ms. Harrison discussed the Proposed Town Code and Zoning Ordinance amendments that will require dumpsters sited within the Town to be screened within a prescribed time period. Mayor Arnold asked that Council discuss it at a later date after the budget is approved. Mr. Dalton said discussions for the Amendments to the Code and Zoning Ordinance must be done at the same time.

Personnel, Appointments, and Policy

none

Public Safety

none

15. Closed Session

The Council of the Town of Berryville will enter closed session in accordance with §2.2-3711-A-3- Discussion or consideration of the acquisition of real property for a public purpose, or the disposition of publicly held real property, where discussion in an open meeting would adversely affect the bargaining position or negotiating strategy of the public body.

Motion to Enter Closed Session

Ms. Harrison moved that the Council of the Town of Berryville enter closed session in accordance with §2.2-3711-A-3- Discussion or consideration of the acquisition of real property for a public purpose, or the disposition of publicly held real property, where discussion in an open meeting would adversely affect the bargaining position or negotiating strategy of the public body.

The Council returned to open session at 9:24 pm.

Certification Motion and Resolution

Mr. Tibbens moved that the Council of the Town of Berryville adopt the following resolution certifying it has convened a closed meeting on this date pursuant to an affirmative recorded vote and in accordance with the provisions of The Virginia Freedom of Information Act:

WHEREAS, Section 2.2-3712.D of the Code of Virginia requires a certification by this Council that such closed meeting was conducted in conformity with Virginia law.

NOW, THEREFORE, BE IT RESOLVED that the Council hereby certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the closed meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed or considered by the Council. Motion passed by roll call vote.

16. Adjourn

The Council adjourned at 9:25 p.m. on a motion by Vice Mayor Gibson.

Erecka L. Gibson, Vice Mayor

Brandel Kelsey, Town Clerk

Administration and Finance Report

November 12, 2025

Item Title:

Report of the Administration and Finance Department

Prepared by:

Cynthia Poulin, Treasurer

Attachments:

1. ARPA Report
2. October Cash Balance

ARPA MASTER LIST

10/31/2025

	PROJECT NAME	BUDGET	SPENT TO DATE	BALANCE	%COMPLETE
1	Computers:Utility Clerk,PWs	\$ 2,437.90	\$ 2,437.90	\$ -	100% Admin
2	Police Radio Replacements	\$ 75,000.00	\$ 75,000.00	\$ -	100%
3	PW Compressor	\$ 23,629.85	\$ 23,629.85	\$ -	100% infra
4	Water Dist Sys Flushing Equip	\$ 7,500.00	\$ 9,844.38	\$ -	100% infra
5	Water Meter Reading Equip	\$ 12,458.03	\$ 12,458.03	\$ -	100% infrastr
6	Grants for Improper Con to Sewer Sys	\$ 4,500.00	\$ 4,500.00	\$ -	100% grant
7	W/s Admin Fees	\$ 175,260.82	\$ 175,260.82	\$ -	100%
8	Premium Pay for Employees	\$ 172,000.00	\$ 174,323.86	\$ -	100% premium pay
9	Grant John H Enders/Rescue Squad *	\$ 80,000.00	\$ 80,000.00	\$ -	100% grant
10	Grant to Barns of Rose Hill *	\$ 40,000.00	\$ 40,000.00	\$ -	100% grant
11	Grant for Façade Improvement	\$ 196,185.08	\$ 196,185.08	\$ -	100% grant
12	Website	\$ 5,845.29	\$ 5,845.29	\$ -	100% Admin
13	Leak Study	\$ 8,662.50	\$ 8,662.50	\$ -	100% infra
14	SSES Study	\$ 117,868.73	\$ 117,868.73	\$ -	100% infra
15	River Pumping Station Upgrade	\$ 25,000.00	\$ 28,538.55	\$ -	100% infra
16	Water Meter & Setter Replacements *	\$ 350,000.00	\$ 350,000.00	\$ -	95% infra
17	Hermitage Pump Station	\$ 26,000.00	\$ 26,000.00	\$ -	100% infra
18	Booster Building Upgrade	\$ 20,000.00	\$ 22,985.85	\$ -	100% infra
19	WWTP Headworks Lighting Upgrade	\$ 4,764.00	\$ 4,764.00	\$ -	100% infra
20	Ridge Road Water Main	\$ 25,939.04	\$ 25,939.04	\$ -	100% infra
21	Water, Sewer and Drainage Projects	\$ 2,228,476.76	\$ 2,228,476.76	\$ -	100% infra
22	Rockcroft Water Main Abandonment	\$ 10,000.00	\$ 10,550.96	\$ -	100% infra
23	Security Upgrades	\$ 125,000.00	\$ 100,995.91	\$ -	100% infra/admin70
24	Drainage Dorsey, Walnut, Treadwell	\$ 1,500.00	\$ 1,500.00	\$ -	100% infra
25	Bel Voi and Battletown Water Main Repl	\$ -	\$ 11,612.50	\$ -	100% infra
26	Wayfinding Signs	\$ 140,000.00	\$ 43,700.00	\$ 96,300.00	40%
27	Raw Water Intake Land-Easement Acquisition	\$ 13,672.50	\$ 13,672.50	\$ -	100% infra
28	Grant Housing (3 years)	\$ 40,000.00	\$ 40,000.00	\$ -	100%
29	Capital Projects	\$ 543,285.50	\$ 273,855.94	\$ 269,429.56	0%
	Administrative /Legal Fees	\$ 60,000.00	\$ 45,055.39	\$ 15,592.60	75% Admin
	Total Encumbered	\$ 4,534,986.00	\$ 4,153,663.84	\$ 381,322.16	
	Total ARPA	\$ 4,534,986.00			
*	Project For (2) two years				

Oct-25

Signage

Estimated cost of these actions						
- Signage	\$ 140,000.00	\$ -	\$ 43,280.00	\$ 96,300.00	31%	\$ 140,000.00
- Total			\$ 43,280.00			\$ 140,000.00
Fund balance from first payment						\$ 31,135.34
Fund balance from second payment						\$ 65,584.66

Complete necessary water and sewer infrastructure projects

Capital Projects

Estimated cost of these actions						
- Cost of the projects	\$ 3,495,500.79	\$ 62,436.38	\$ 1,601,974.10	\$ -	85.00%	\$ 3,485,953.17
Total			\$ 1,624,097.13	\$ 269,429.56		\$ 3,485,953.17
Fund balance from first payment			\$ 3,226,071.23			\$ -
Fund balance from second payment						\$ 269,429.56

Pay for administrative costs

Estimated cost of these actions						
- Administrative costs per FY (5.5)	\$ 60,000.00	\$ -	\$ 44,407.40	\$ 15,592.60	74%	\$ 60,000.00
- Total			\$ 44,407.40			\$ 60,000.00
Fund balance from first payment						\$ 15,592.60

NOTES:

INFRASTRUCTURE COSTS:

Frazier Assoc.(Wayfinding)		1st Tranche	\$ 2,267,493.00
Core & Main	\$ -	Used to date	\$ 2,221,185.06
VA RIGGERS	\$ -	Balance	\$ 46,307.94
Pete McLean	\$ -	2nd Tranche	\$ 2,267,493.00
Norfolk Southern	\$ -	Used to date	\$ 1,932,478.78
FUOG Interbuild	\$ 62,436.38	Balance	\$ 335,014.22
Pennoni (Water Projects Bel Voi & Battletown)	\$ -		
Webster Nursery(Concrete walls)	\$ -		
Total	\$ 62,436.38		

Project Status Report

Date: 11/12/2025

Project Name:
Water Meter and Setter Replacements

Project Budget: \$350,000.00
Expected Completion Date: June 2023

Executive Summary:
Upgrade ¼ of the Town’s water Meters and setters.

- Project Goals:
- 1. Improve capture of water use.
 - 2. Improve back flow protection.
 - 3. Reduce meter reading costs.

Project Status:

Status Item	Status	Summary
Budget \$350,000.00	Completed	Total Spend: \$350,000.00
Schedule/Timeline	On Track	% Complete: 95

Project Milestones:

Description	% Complete	Status
1. Order meters, setters, valves, plus other supplies	100%	Completed
2. Install meters / setters	90%	On Track

- Project Issues or Concerns:
- 1. Multiyear project

Project Status Report

Date: 11/12/2025

Project Name:
Wayfinding Signs

Project Budget: \$190,000.00
From ARPA: \$140,000.00
From Town: \$50,000.00
Expected Completion Date: December 2023

Executive Summary:
Design, construct, and install entrance and wayfinding signs.

Project Goals:
1. To improve business environment in downtown business district.

Project Status:

Status Item	Status	Summary
Budget 190,000.00	On Track	Total Spend: \$43,700.00
Schedule/Timeline	On Track	Complete: 40%

Project Milestones:

Description	% Complete	Status
1. Design	50%	On Track
2. Determine Sign locations	50%	On Track
3. Secure VDOT approvals	95%	On Track
4. Develop offering for design and construction/award/have signs fabricated	0%	On Track
5. Secure contractor to install signs	0%	Not Started
6. Have signs installed	0%	Not Started
RFP ISSUED ON 6/30/2022 & COUNCIL AUTHORIZED THE TOWN MANAGER TO AWARD BID.		

Project Issues or Concerns:

Project Status Report

Date: 11/12/2025

Project Name: Capital Projects

Project Budget: \$543,285.50

Expected Completion Date:

Project List Under Consideration:

Bel Voi Water Main Replacement

Bar Screen at STP

North Crow Street Drainage

Rose Hill Park Bridge

Project Goals:

Project Status:

Status Item	Status	Summary
Budget \$543,285.50	On Track	Total Spend: \$273,855.94
Schedule/Timeline	On Track	% Complete: 50

Project Milestones:

Description	% Complete	Status
1. Construction plans	100%	Completed
2. Develop IFB	100%	Completed
3. Secure Easements	0%	Not Started
4. Issue offering/ review offering	100%	Completed
5. Select Contractor	100%	Completed
6. Complete project	0%	Not Started

Project Issues or Concerns:

Cash Balance Report

Period Ending 10/31/2025

Town of Berryville

11/3/2025 9:41 AM

Page 1/1

	Bank Information	Balance
1	Bank of Clarke Operating Acct#- 1138499	-\$719,029.31
2	Bank of Clarke NOW Acct#- 1138502	\$7,605,273.80
3	Bank of Clarke Payroll Acct#- 1138510	-\$82,834.18
4	Bank of Clarke CIP Acct#- 1138405	\$18,501,781.20
5	Bank of Clarke SW Acct#- 1138413	\$491,773.17
6	Bank of Clarke PDAF Acct#- 1138421	\$25,518.96
7	Bank of Clarke DSR Acct#- 1138456	\$113,087.40
9	Bank of Clarke RAU Acct#- 1138472	\$951.93
10	Bank of Clarke VRA Reserve Acct#- 6041647	\$470,000.00
11	Bank of Clarke Proffer Reserve Acct#- 1897098	\$90,432.24
12	Bank of Clarke Performance Bonds Acct#- 1910841	\$11,327.09
13	TRUIST Acct#- 5137523525	\$568,668.35
14	Bank of Clarke PD Contributions Acct#- 5759859	\$10,035.72

Total Cash Balance:	\$27,086,986.37
---------------------	-----------------

Check Listing

Date From: 10/1/2025 Date To: 10/31/2025
Vendor Range: 1-800 FLOWERS - Zuleger, David E. & Joanne C.

Town of Berryville
11/03/2025 09:25 AM

Page: 1 of 13

Check Number	Bank	Vendor	Date	Amount
10115	1	COMBS WASTEWATER MANAGEMENT LLC	10/01/2025	<u>\$75.00</u>
Invoice: M3464		Inv Date 09/29/2025	Due Date 10/01/2025	Amt: \$75.00
100-4071310-3160		8/19-9/15 Rental Period		\$75.00
Total Distributed:				\$75.00
10116	1	Gall's LLC	10/01/2025	<u>\$187.40</u>
Invoice: 032502861		Inv Date 09/29/2025	Due Date 10/01/2025	Amt: \$187.40
100-4031100-6011		B736-H BADGE - RETIREMENT NEAL		\$187.40
Total Distributed:				\$187.40
10117	1	GEORGE HAMLIN	10/01/2025	<u>\$200.00</u>
Invoice: 251		Inv Date 09/26/2025	Due Date 10/01/2025	Amt: \$200.00
100-4012530-6001		4 - PHOTOS FOR TOWN WEBSITE		\$200.00
Total Distributed:				\$200.00
10118	1	HUDSON, JOHN E	10/01/2025	<u>\$40.00</u>
Invoice: 9.24.2025		Inv Date 09/26/2025	Due Date 10/01/2025	Amt: \$40.00
100-4081700-1111		BADA MEETING ON SEPT 24TH		\$40.00
Total Distributed:				\$40.00
10119	1	Kitselman, H. Allen	10/01/2025	<u>\$75.00</u>
Invoice: 9.24.2025		Inv Date 09/26/2025	Due Date 10/01/2025	Amt: \$75.00
100-4081700-1111		BADA CHAIRMAN		\$75.00
Total Distributed:				\$75.00
10120	1	Michelle M. Jones	10/01/2025	<u>\$760.00</u>
Invoice: 8.2025.ADMIN		Inv Date 09/24/2025	Due Date 10/01/2025	Amt: \$760.00
100-4012210-3150		ADMIN		\$760.00
Total Distributed:				\$760.00
10121	1	MONROE ENVIRONMENTAL CORPORATION	10/01/2025	<u>\$3,000.00</u>
Invoice: 98522R		Inv Date 09/19/2025	Due Date 10/01/2025	Amt: \$3,000.00
501-4012222-3310		1 DAY ON-SITE SUPERVISION		\$3,000.00
Total Distributed:				\$3,000.00
10122	1	PENNONI ASSOCIATES INC	10/01/2025	<u>\$5,060.00</u>
Invoice: 1291087		Inv Date 09/15/2025	Due Date 10/01/2025	Amt: \$5,060.00
100-4094200-9005		W FAIFAX ST SIDEWALK EXT - ROAD CONSTRUCTION PLANS		\$5,060.00
Total Distributed:				\$5,060.00

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10123	1	Waterloo Electric Service, LLC	10/01/2025	<u>\$240.00</u>
Invoice: 5059		Inv Date 09/17/2025	Due Date 10/01/2025	Amt: \$240.00
100-4041340-6007		REPAIR TO PARKING LOT LIGHT		\$240.00
Total Distributed:				\$240.00
10124	1	Arnold, Jay	10/08/2025	<u>\$40.00</u>
Invoice: 9.24.25		Inv Date 09/30/2025	Due Date 10/08/2025	Amt: \$40.00
100-4081700-1111		BADA MEETING ON SEPT 24TH		\$40.00
Total Distributed:				\$40.00
10125	1	Barns of Rose Hill	10/08/2025	<u>\$2,000.00</u>
Invoice: VCACCPG.2025		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$2,000.00
100-4081500-5693		TOWN MATCH OF VCA GRANT		\$2,000.00
Total Distributed:				\$2,000.00
10126	1	CORE & MAIN LP	10/08/2025	<u>\$335.34</u>
Invoice: X635610		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$335.34
501-4012224-6007		PW MAINT SUPPLIES		\$335.34
Total Distributed:				\$335.34
10127	1	Griffith Energy Services, Inc.	10/08/2025	<u>\$3,115.05</u>
Invoice: 48785		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$730.66
100-4041200-6008		8/19 - 208.2 GALLONS		\$730.66
Total Distributed:				\$730.66
Invoice: 6054156		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$14.76
100-4041200-6008		LATE FEE		\$14.76
Total Distributed:				\$14.76
Invoice: 57717		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$609.66
100-4041200-6008		9/2 - 174 GALLONS		\$609.66
Total Distributed:				\$609.66
Invoice: 69075		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$581.61
100-4041200-6008		9/16 - 165 GALLONS		\$581.61
Total Distributed:				\$581.61
Invoice: 70541		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$813.58
100-4041200-6008		9/17 - 230 GALLONS		\$813.58
Total Distributed:				\$813.58
Invoice: 75953		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$364.78
100-4041200-6008		9/23 - 102.8 GALLONS		\$364.78
Total Distributed:				\$364.78

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10128	1	Hall Company, The	10/08/2025	<u>\$1,795.30</u>
Invoice: 34436		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$1,795.30
501-4012220-5210		POSTAGE - 9/23/25		\$575.25
501-4012220-6001		PDF COPY		\$37.50
501-4012220-6001		SEPT UTILITY BILLING 1,925		\$284.90
502-4012220-5210		POSTAGE - 9/23/25		\$575.25
502-4012220-6001		PDF COPY		\$37.50
502-4012220-6001		SEPT UTILITY BILLING 1,925		\$284.90
Total Distributed:				<u>\$1,795.30</u>
10129	1	HARRISON, DIANE M	10/08/2025	<u>\$40.00</u>
Invoice: 8.27.2025		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$40.00
100-4081700-1111		BADA MEETING ON 27TH		\$40.00
Total Distributed:				<u>\$40.00</u>
10130	1	HUDSON, JOHN E	10/08/2025	<u>\$40.00</u>
Invoice: 8.27.2025		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$40.00
100-4081700-1111		BADA MEETING ON AUG 27TH		\$40.00
Total Distributed:				<u>\$40.00</u>
10131	1	Kitselman, H. Allen	10/08/2025	<u>\$75.00</u>
Invoice: 8.27.2025		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$75.00
100-4081700-1111		BADA CHAIRMAN		\$75.00
Total Distributed:				<u>\$75.00</u>
10132	1	LANGUAGE LINE SERVICES INC	10/08/2025	<u>\$0.11</u>
Invoice: 11703560		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$0.11
100-4031100-3190		91 + (15.25), 61-90 5.76, CURRENT 9.60		\$0.11
Total Distributed:				<u>\$0.11</u>
10133	1	MAIN STREET CHAMBER ORCHESTRA INC	10/08/2025	<u>\$1,500.00</u>
Invoice: VCACCPG.2025		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$1,500.00
100-4081500-5693		TOWN MATCH OF VCA GRANT		\$1,500.00
Total Distributed:				<u>\$1,500.00</u>
10134	1	NORTHERN SHENANDOAH VALLEY QUILT SHOW	10/08/2025	<u>\$500.00</u>
Invoice: VCACCPG.2025		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$500.00
100-4081500-5693		TOWN MATCH OF VCA GRANT		\$500.00
Total Distributed:				<u>\$500.00</u>

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10135	1	PENNONI ASSOCIATES INC	10/08/2025	<u>\$975.00</u>
Invoice: 1293031		Inv Date 09/24/2025	Due Date 10/08/2025	Amt: \$975.00
100-4093000-3000		CONSTRUCTION ADMINISTRATION SVCS THRU 8/31/25		\$975.00
Total Distributed:				\$975.00
10136	1	POLICE AND SHERIFFS PRESS, THE	10/08/2025	<u>\$20.00</u>
Invoice: 124697		Inv Date 09/22/2025	Due Date 10/08/2025	Amt: \$20.00
100-4031100-6010		ID CARDS: AUMULLER		\$20.00
Total Distributed:				\$20.00
10137	1	THOMSON REUTERS	10/08/2025	<u>\$244.56</u>
Invoice: 852636884		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$114.66
100-4012530-3320		MONTHLY SUBSCRIPTION		\$114.66
Total Distributed:				\$114.66
Invoice: 852639680		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$129.90
100-4031100-3320		MONTHLY SUBSCRIPTION		\$129.90
Total Distributed:				\$129.90
10138	1	Tiny Toes Dance, LLC	10/08/2025	<u>\$500.00</u>
Invoice: VCACCPG.2025		Inv Date 10/08/2025	Due Date 10/08/2025	Amt: \$500.00
100-4081500-5693		TOWN MATCH OF VCA GRANT		\$500.00
Total Distributed:				\$500.00
10139	1	Valley Automation	10/08/2025	<u>\$5,566.68</u>
Invoice: 14156		Inv Date 09/22/2025	Due Date 10/08/2025	Amt: \$5,037.48
502-4012222-3310		WWTP - 9/16		\$5,037.48
Total Distributed:				\$5,037.48
Invoice: 14175		Inv Date 09/29/2025	Due Date 10/08/2025	Amt: \$529.20
502-4012222-3310		#4 SOFT START OVERHEATING		\$529.20
Total Distributed:				\$529.20
10140	1	ANDERSON LAWN CARE, INC.	10/15/2025	<u>\$1,052.57</u>
Invoice: 6733		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$925.00
100-4043200-3310		9/23 - ROUND ABOUT		\$25.00
100-4043200-3325		9/9, 9/24 - HERMITAGE RETENTION POND		\$600.00
502-4012222-3310		9/22 - SEWER LAGOONS & DOG RUN		\$300.00

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Total Distributed:				\$925.00
Invoice: 132224		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$127.57
100-4043200-3325		CAMINO RESTAURANT		\$127.57
Total Distributed:				\$127.57
10141	1	BLOSSMAN GAS INC	10/15/2025	\$10.00
Invoice: 32993048		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$10.00
100-4041200-6007		TAK RENTAL CONTRACT RENEWAL: 10/1/25-10/1/26		\$10.00
Total Distributed:				\$10.00
10142	1	Broy & Son Pump Service, Inc	10/15/2025	\$4,226.86
Invoice: 30609		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$1,662.30
501-4012222-3310		RAN WIRES FROM BLDG TO PAD/HOOK UP		\$1,662.30
Total Distributed:				\$1,662.30
Invoice: 30625		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$2,564.56
501-4012222-3310		MONROE PROJECT WIRING AND SETUP		\$2,564.56
Total Distributed:				\$2,564.56
10143	1	Carmeuse Lime, Inc	10/15/2025	\$7,831.64
Invoice: 95430720		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$7,831.64
502-4012222-6025		24.89 TON HICAL QL 1/3" X 1/8"		\$7,831.64
Total Distributed:				\$7,831.64
10144	1	CRYSTAL SPRINGS	10/15/2025	\$28.62
Invoice: 0518730066400		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$28.62
502-4012222-6004		9/4 DELIVERY 8603710537		\$28.62
Total Distributed:				\$28.62
10145	1	Dalton, Keith	10/15/2025	\$75.00
Invoice: 10.2025		Inv Date 10/09/2025	Due Date 10/15/2025	Amt: \$75.00
100-4012110-5230		OCTOBER		\$75.00
Total Distributed:				\$75.00
10146	1	Denali Water Solutions LLC	10/15/2025	\$21,295.80
Invoice: INV1147009		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$21,295.80
501-4012222-3210		9/22 SLUDGE REMOVAL		\$21,295.80
Total Distributed:				\$21,295.80
10147	1	Fuog/Interbuild, Inc.	10/15/2025	\$62,436.38

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Invoice: 25-153-3		Inv Date 10/15/2025	Due Date 10/15/2025	Amt: \$62,436.38
100-4093000-3000		WORK FROM 8/1/25-8/31-25		\$62,436.38
Total Distributed:				\$62,436.38
10148	1	Hach Company	10/15/2025	\$17,607.20
Invoice: 14651621		Inv Date 10/09/2025	Due Date 10/15/2025	Amt: \$17,607.20
502-4012222-3310		RENEWAL OF LAB EQUIP/REPAIR WARRANTY 9/2/25-9/1/26		\$17,607.20
Total Distributed:				\$17,607.20
10149	1	INBODEN ENVIRONMENTAL SVCS	10/15/2025	\$27,148.33
Invoice: 85942		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$4,404.75
501-4012222-3145		PER DEVELOPMENT/CONSULTING		\$4,404.75
Total Distributed:				\$4,404.75
Invoice: 85946		Inv Date 10/14/2025	Due Date 10/15/2025	Amt: \$22,743.58
502-4012222-1147		LABOR WASTEWATER TESTING		\$20,527.98
502-4012222-2850		LAB TESTING		\$2,215.60
Total Distributed:				\$22,743.58
10150	1	James River Equipment	10/15/2025	\$998.20
Invoice: R16073		Inv Date 10/15/2025	Due Date 10/15/2025	Amt: \$998.20
100-4041200-6007		FLAT BUCKET RENTAL 9/2-9/29		\$998.20
Total Distributed:				\$998.20
10151	1	MALVERN PANALYTICAL INC	10/15/2025	\$46,143.32
Invoice: 1132063		Inv Date 10/15/2025	Due Date 10/15/2025	Amt: \$46,143.32
501-4094200-9007		REF #2US1024205 - ZETASIZER ANALYZER		\$46,143.32
Total Distributed:				\$46,143.32
10152	1	Michelle M. Jones	10/15/2025	\$1,580.00
Invoice: 19020		Inv Date 10/09/2025	Due Date 10/15/2025	Amt: \$1,580.00
100-4012210-3150		ADMIN		\$660.00
100-4012210-3150		PD		\$920.00
Total Distributed:				\$1,580.00
10153	1	PAMELA J OLINGER	10/15/2025	\$67.70
Invoice: UB4881251010100201217		Inv Date 10/10/2025	Due Date 10/15/2025	Amt: \$67.70
502-2500000-0000		Deposit Refund for SEWER		\$67.70

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Total Distributed:				\$67.70
10154	1	Petti, Jean	10/15/2025	\$75.00
Invoice: 10.2025		Inv Date 10/09/2025	Due Date 10/15/2025	Amt: \$75.00
100-4012110-5230		OCTOBER		\$75.00
Total Distributed:				\$75.00
10155	1	SOUTHERN AIR INC	10/15/2025	\$2,694.50
Invoice: 966981		Inv Date 10/15/2025	Due Date 10/15/2025	Amt: \$497.50
502-4012222-3310		FOUND VALVE LEAKING UNIT CU-1		\$497.50
Total Distributed:				\$497.50
Invoice: C223553		Inv Date 10/15/2025	Due Date 10/15/2025	Amt: \$2,197.00
502-4012222-3310		CONTRACT #C46987 EXP 4/30/26		\$2,197.00
Total Distributed:				\$2,197.00
10156	1	Treasurer of Virginia - DEQ	10/15/2025	\$3,523.00
Invoice: 721846		Inv Date 10/15/2025	Due Date 10/15/2025	Amt: \$3,523.00
502-4012222-5690		VPDES RENEWAL - LOC #214543		\$3,523.00
Total Distributed:				\$3,523.00
10157	1	TYLER MURPHY	10/15/2025	\$93.60
Invoice: UB6247251010100201220		Inv Date 10/10/2025	Due Date 10/15/2025	Amt: \$93.60
502-2500000-0000		Deposit Refund for SEWER		\$93.60
Total Distributed:				\$93.60
10158	1	Tyler Technologies	10/15/2025	\$3,246.88
Invoice: 130159764		Inv Date 09/23/2025	Due Date 10/15/2025	Amt: \$3,246.88
100-4031100-3320		CMS ANNUAL MAINTENANCE 11/1/25 - 10/31/26		\$3,246.88
Total Distributed:				\$3,246.88
10159	1	UTILITY SERVICE CO., INC.	10/15/2025	\$2,249.00
Invoice: 633481		Inv Date 10/15/2025	Due Date 10/15/2025	Amt: \$2,249.00
501-4012222-3145		PROJECT #155516 NW TANK INSPECTION		\$2,249.00
Total Distributed:				\$2,249.00
10160	1	Valley Automation	10/15/2025	\$3,345.92
Invoice: 14181		Inv Date 10/08/2025	Due Date 10/15/2025	Amt: \$3,345.92
502-4012222-3310		REPLACE PANEL SURGE PROTECTOR - WWTP		\$3,345.92
Total Distributed:				\$3,345.92

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10161	1	VALLEY ICE LLC	10/15/2025	\$316.90
Invoice: 57500167 Inv Date 10/15/2025 Due Date 10/15/2025 Amt: \$316.90				
100-4041200-6007		9/19 ICE DELIVERY		\$316.90
Total Distributed:				\$316.90
10162	1	VIRASEC IT Support Services, Inc.	10/15/2025	\$3,989.29
Invoice: 21118 Inv Date 10/10/2025 Due Date 10/15/2025 Amt: \$3,989.29				
100-4012530-3320		ADMIN		\$3,531.79
100-4031100-3320		PD		\$457.50
Total Distributed:				\$3,989.29
10163	1	CHELSEA BECKER	10/22/2025	\$220.39
Invoice: UB6416251020100917930 Inv Date 10/20/2025 Due Date 10/22/2025 Amt: \$220.39				
501-2500000-0000		Deposit Refund for WATER		\$47.22
502-2500000-0000		Deposit Refund for SEWER		\$173.17
Total Distributed:				\$220.39
10164	1	CORE & MAIN LP	10/22/2025	\$11.83
Invoice: X489099 Inv Date 10/16/2025 Due Date 10/22/2025 Amt: \$11.83				
100-4041200-6007		8341-313 4" GASKET TRU-FLO MAINCASE NEPTUNE		\$11.83
Total Distributed:				\$11.83
10165	1	EASTERN SUPPLY, INC.	10/22/2025	\$1,529.90
Invoice: 2134194 Inv Date 10/16/2025 Due Date 10/22/2025 Amt: \$1,529.90				
100-4064200-7115		30" GRATE RING EXTENSIONS		\$1,529.90
Total Distributed:				\$1,529.90
10166	1	Gun Shop, The	10/22/2025	\$2,784.62
Invoice: 52764 Inv Date 10/08/2025 Due Date 10/22/2025 Amt: \$2,784.62				
100-4031100-5540		AMMO - 9 MM		\$2,784.62
Total Distributed:				\$2,784.62
10167	1	INBODEN ENVIRONMENTAL SVCS	10/22/2025	\$27,443.73
Invoice: 86272 Inv Date 10/14/2025 Due Date 10/22/2025 Amt: \$23,397.58				
502-4012222-1147		LABOR WASTEWATER TESTING		\$20,527.98
502-4012222-2850		LAB TESTING		\$2,869.60
Total Distributed:				\$23,397.58
Invoice: 86273 Inv Date 10/14/2025 Due Date 10/22/2025 Amt: \$4,046.15				
501-4012222-3145		SEPT PER DEVELOPMENT		\$4,046.15

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			Total Distributed:	\$4,046.15
10168	1	Jno. S. Solenberger & Co., Inc	10/22/2025	\$252.31
Invoice: 359437		Inv Date 10/16/2025	Due Date 10/22/2025	Amt: \$252.31
501-4012222-3310		FILTER LINE FOR WTP		\$252.31
			Total Distributed:	\$252.31
10169	1	Minnesota Life Insurance Co.	10/22/2025	\$723.84
Invoice: 10.2025		Inv Date 10/17/2025	Due Date 10/22/2025	Amt: \$723.84
100-2113000-0000		ADMIN		\$716.95
501-2113000-0000		PW		\$4.60
502-2115000-0000		WTP		\$2.29
			Total Distributed:	\$723.84
10170	1	Quadient Inc	10/22/2025	\$16.95
Invoice: 062283614		Inv Date 10/20/2025	Due Date 10/22/2025	Amt: \$16.95
100-4012530-3320		DS40I FOLDER MAINT 11/1-1/31		\$16.95
			Total Distributed:	\$16.95
10171	1	RISEDEN, DOUGLAS	10/22/2025	\$1,487.51
Invoice: 9.18.25		Inv Date 10/17/2025	Due Date 10/22/2025	Amt: \$61.39
100-4041100-5540		REIMBURSE - PERSONAL CC USED		\$61.39
			Total Distributed:	\$61.39
Invoice: 9.19.25		Inv Date 10/17/2025	Due Date 10/22/2025	Amt: \$106.47
100-4041100-5540		REIMBURSE - PERSONAL CC USED		\$106.47
			Total Distributed:	\$106.47
Invoice: 10.1.25		Inv Date 10/17/2025	Due Date 10/22/2025	Amt: \$1,214.65
100-4041250-3310		REPAIR INTL TRUCK #10 - REIMBURSE PERSONAL CC USED		\$1,214.65
			Total Distributed:	\$1,214.65
Invoice: 9.25.25		Inv Date 10/17/2025	Due Date 10/22/2025	Amt: \$105.00
502-4012222-3310		BOONE RD PUMP STATION REPAIR - PERSONAL CC USED		\$105.00
			Total Distributed:	\$105.00
10172	1	Sunbelt Rentals	10/22/2025	\$322.05
Invoice: 1741672830001		Inv Date 10/16/2025	Due Date 10/22/2025	Amt: \$322.05
100-4041200-3311		STUMP GRINDER RENTAL 9/12		\$322.05

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Total Distributed:				\$322.05
10173	1	Treasurer of Clarke County	10/22/2025	\$655.69
Invoice: 1563		Inv Date 10/17/2025	Due Date 10/22/2025	Amt: \$655.69
100-4031100-5230		AT&T SEPT DATA		\$655.69
Total Distributed:				\$655.69
10174	1	Treasurer of Frederick County	10/22/2025	\$4,991.76
Invoice: 9302025		Inv Date 10/09/2025	Due Date 10/22/2025	Amt: \$3,518.20
100-4042400-3800		9/5 - 9/30 LANDFILL		\$3,518.20
Total Distributed:				\$3,518.20
Invoice: 93025SLUDG		Inv Date 10/09/2025	Due Date 10/22/2025	Amt: \$1,473.56
502-4012222-3210		LANDFILL - SOLIDS DISPOSAL 9/9-9/26		\$1,473.56
Total Distributed:				\$1,473.56
10175	1	VIRGINIA STATE POLICE	10/22/2025	\$900.00
Invoice: 107998		Inv Date 10/16/2025	Due Date 10/22/2025	Amt: \$900.00
100-4031100-4081		STATE SURPLUS - 3 COLT RIFLES		\$900.00
Total Distributed:				\$900.00
10176	1	VUPS	10/22/2025	\$117.60
Invoice: 09202500480		Inv Date 10/15/2025	Due Date 10/22/2025	Amt: \$117.60
501-4012220-3170		98 TICKETS		\$117.60
Total Distributed:				\$117.60
10177	1	Winchester Star, The	10/22/2025	\$1,043.37
Invoice: 106960		Inv Date 10/09/2025	Due Date 10/22/2025	Amt: \$1,043.37
100-4012530-3600		PH FY26 BUDGET AMENDMENT NOTICE 9/5		\$1,043.37
Total Distributed:				\$1,043.37
10178	1	BAYLISS, KEVIN	10/29/2025	\$121.90
Invoice: 8.3.25		Inv Date 10/21/2025	Due Date 10/29/2025	Amt: \$121.90
100-1133000-0000		NATIONAL NIGHT OUT REIMBURSEMENT		\$121.90
Total Distributed:				\$121.90
10179	1	COMBS WASTEWATER MANAGEMENT LLC	10/29/2025	\$75.00
Invoice: M4025		Inv Date 10/27/2025	Due Date 10/29/2025	Amt: \$75.00
100-4071310-3160		9/16-10/13 Rental Period		\$75.00
Total Distributed:				\$75.00

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10180	1	Commercial Press Inc	10/29/2025	\$984.50
Invoice: 145583		Inv Date 10/21/2025	Due Date 10/29/2025	Amt: \$192.50
100-4012530-6001		1,000 - 6" X 9" CATALOG ENVELOPES FOR BUSINESS LIC		\$192.50
Total Distributed:				\$192.50
Invoice: 145584		Inv Date 10/23/2025	Due Date 10/29/2025	Amt: \$792.00
100-4012530-6001		2,000 - #10 REGULAR ENVELOPES		\$507.00
100-4012530-6001		2,000 - COSMIC ORANGE PAYMENT OPTIONS		\$285.00
Total Distributed:				\$792.00
10181	1	CRYSTAL SPRINGS	10/29/2025	\$20.00
Invoice: 05J8730066400		Inv Date 10/20/2025	Due Date 10/29/2025	Amt: \$20.00
502-4012222-6004		LATE FEE 8616063726		\$20.00
Total Distributed:				\$20.00
10182	1	DISPLAY SALES CO	10/29/2025	\$738.00
Invoice: INV8423		Inv Date 10/27/2025	Due Date 10/29/2025	Amt: \$738.00
100-4071310-6017		30 - 18" RED VELOUR BOWS		\$738.00
Total Distributed:				\$738.00
10183	1	H2O Pipe Cleaning LLC	10/29/2025	\$7,275.00
Invoice: 10715		Inv Date 10/17/2025	Due Date 10/29/2025	Amt: \$7,275.00
502-4012222-3145		9/23, 9/24 HYDRO EXCAVATION AT WWTP		\$7,275.00
Total Distributed:				\$7,275.00
10184	1	Treasurer of Clarke County	10/29/2025	\$56,978.02
Invoice: 1549		Inv Date 10/27/2025	Due Date 10/29/2025	Amt: \$56,978.02
100-4064200-3200		CONTRACTURAL SERVICES (CLEANING)		\$8,111.51
100-4064200-5110		ELECTRICITY		\$14,272.92
100-4064200-5120		NATURAL GAS/HEAT		\$3,932.31
100-4064200-5130		WATER/SEWER		\$355.15
100-4064200-5230		TELECOMMUNICATIONS		\$1,196.34
100-4064200-5304		LIABILITY INSURANCE		\$891.94
100-4064200-7115		FY 25 1ST HALF		\$12,160.72
100-4064200-7115		SHARED MAINTENANCE		\$12,516.84
100-4064200-8411		CAPITAL ASSET RESERVE		\$3,540.29

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Total Distributed:				\$56,978.02
10185	1	Treasurer of Virginia - Div Unclaimed Property	10/29/2025	\$1,992.71
Invoice: 10.2025		Inv Date 10/24/2025	Due Date 10/29/2025	Amt: \$1,992.71
100-2370000-0000		TAX OVERPYMT REFUND		\$1,287.54
501-3160112-0000		WATER SEC DEPOSIT REFUND		\$180.00
502-3160112-0000		SEWER SEC DEPOSIT REFUND		\$525.17
Total Distributed:				\$1,992.71
10186	1	U.S. BANK NATIONAL ASSOCIATION	10/29/2025	\$1,637.36
Invoice: 566805271		Inv Date 10/27/2025	Due Date 10/29/2025	Amt: \$1,637.36
100-4012530-3320		CONTRACT 500-0735131-000		\$610.88
100-4031100-3320		POLICE		\$410.58
100-4041100-6001		PW		\$205.30
501-4012222-6001		WTP		\$205.30
502-4012222-6001		STP		\$205.30
Total Distributed:				\$1,637.36
10187	1	Stuart M. Perry, Inc	10/31/2025	\$250,854.00
Invoice: 9.8.25		Inv Date 10/30/2025	Due Date 10/31/2025	Amt: \$30,037.50
100-4094200-9009		STATION RD PAVING		\$30,037.50
Total Distributed:				\$30,037.50
Invoice: 9.22.25		Inv Date 10/30/2025	Due Date 10/31/2025	Amt: \$54,522.50
100-4041250-6050		BRECKINRIDGE COURT		\$16,635.50
100-4041250-6050		DELANEY COURT		\$5,500.00
100-4041250-6050		FREMONT COURT		\$19,285.50
100-4041250-6050		PICKETT COURT		\$10,601.50
100-4041250-6050		ROCKCROFT DRIVE		\$2,500.00
Total Distributed:				\$54,522.50
Invoice: 10.2.25		Inv Date 10/30/2025	Due Date 10/31/2025	Amt: \$13,864.00
100-4041250-6050		ACADEMY ST BETWEEN BUCKMARSH & CHURCH		\$13,864.00
Total Distributed:				\$13,864.00
Invoice: 10.9.25		Inv Date 10/30/2025	Due Date 10/31/2025	Amt: \$23,881.00
100-4041250-6050		CHURCH ST		\$5,500.00
100-4041250-6050		CROW ST		\$18,381.00
Total Distributed:				\$23,881.00

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Invoice: 10.10.25		Inv Date 10/30/2025	Due Date 10/31/2025	Amt: \$37,971.00
100-4041250-6050		CAMERON ST		\$37,971.00
Total Distributed:				\$37,971.00
Invoice: 10.14.25		Inv Date 10/30/2025	Due Date 10/31/2025	Amt: \$49,476.00
100-4041250-6050		SPRINGSBURY RD FROM JACK ENDERS BLVD TO END OF TOW		\$49,476.00
Total Distributed:				\$49,476.00
Invoice: 10.15.25		Inv Date 10/30/2025	Due Date 10/31/2025	Amt: \$41,102.00
100-4041250-6050		BATTLETOWN DR		\$14,490.00
100-4041250-6050		BEL VOI DR		\$26,612.00
Total Distributed:				\$41,102.00
73	Checks Totaling -			\$599,598.19

Totals By Fund

	Checks	Voids	Total
100	\$414,315.13		\$414,315.13
501	\$87,405.90		\$87,405.90
502	\$97,877.16		\$97,877.16
Totals:	\$599,598.19		\$599,598.19