

STA 11+75 (SAMPLE AND END WTR)
 1- 6" x 2 1/2" MJ TAPPED PLUG
 1- 2 1/2" TEMPORARY BLOWOFF ASSEMBLY
 (SEE DETAIL FOR INCLUDED ITEMS)
 REPLACE TEMPORARY BLOWOFF WITH
 6" PLUG ON TEE AFTER ACCEPTABLE
 BACTERIA SAMPLES ARE APPROVED.)
 1- 6" MJ SLEEVE W/ RESTRS
 1- 6" MJ SLEEVE W/ RESTRS
 TIE IN TO EX. 6" STUBOUT

STA 11+05 TO 11+45 (WTR)
 DIRECTIONAL BORE 40-LF 6" (6.625" IPS O.D.)
 SDR17 HDPE UNDER 24" RCP INCLUDE
 TRANSITION ADAPTERS EACH END
 1- 6" MJ SLEEVE W/ RESTRS
 3- 6" BELL RESTRAINTS (TWO JOINTS FROM
 EACH END OF HOPE)

STA 5+65 TO 6+05 (WTR)
 1- 6" MJ 45° BEND W/ RESTRS
 DIRECTIONAL BORE 40-LF 6" (6.625" IPS O.D.)
 SDR17 HDPE UNDER 24" RCP INCLUDE
 TRANSITION ADAPTERS EACH END
 1- 6" MJ SLEEVE W/ RESTRS
 4- 6" BELL RESTRAINTS (TWO JOINTS FROM
 EACH END OF HOPE)

STA 5+40 (END SWR)
 1- 2" MJ MUELLER R.W. GATE VALVE
 (W/ EVERDURE STEM, BOX, COLLAR & RESTRS)
 INSTALL EX. 2" PUMPER CONNECTION
 ASSEMBLY RELOCATED FROM STA 0+00
 (PER STD #S-14)
 2- 2" BELL RESTRAINTS
 1- VALVE MARKER

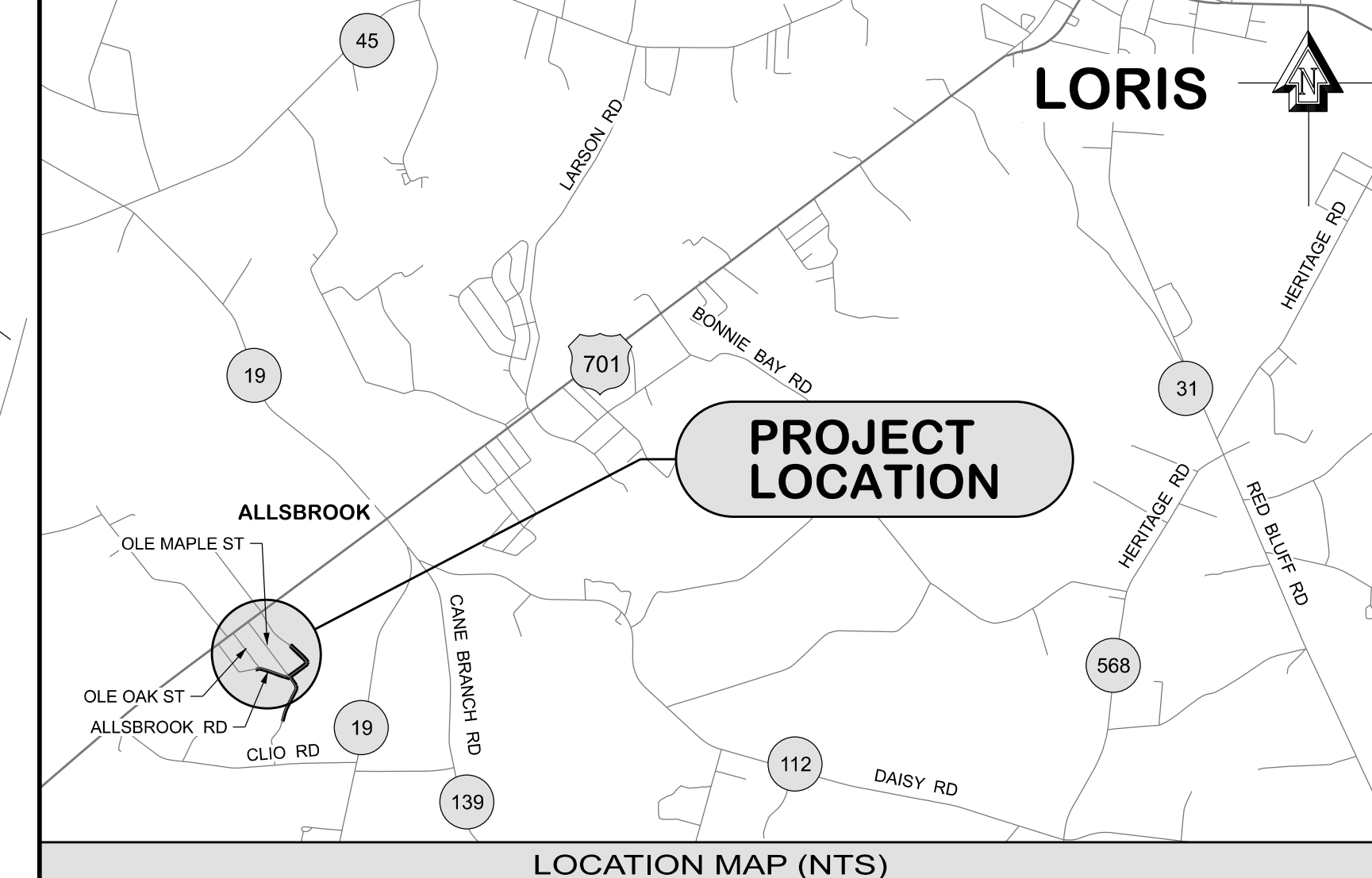
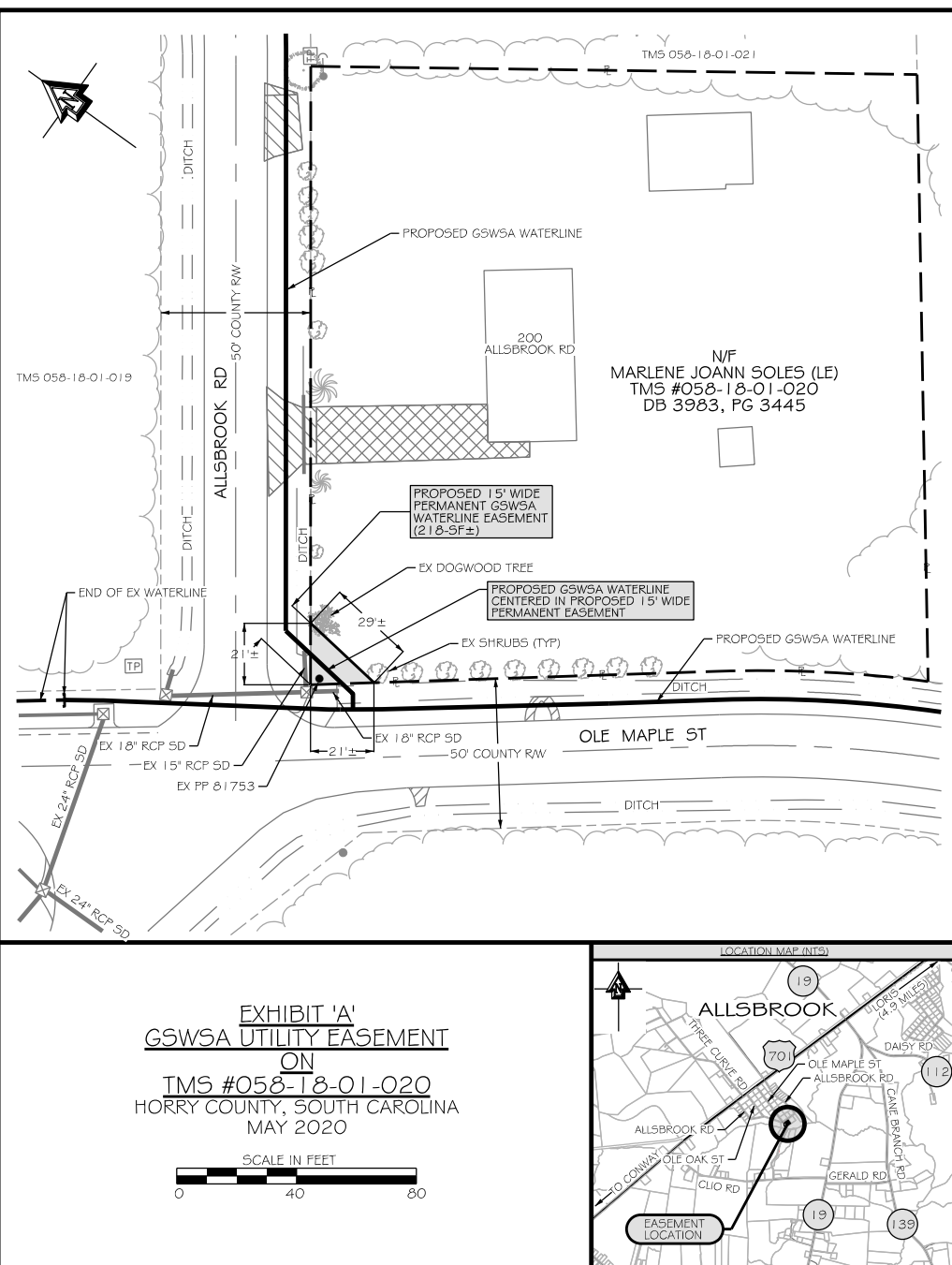
STA 5+60 (SWR)
 1- 2" x 2" A.R.V. ASSEMBLY (PER DETAIL)
 1- VALVE MARKER

STA 5+70 (END SWR)
 1- 2" MJ MUELLER R.W. GATE VALVE
 (W/ EVERDURE STEM, BOX, COLLAR & RESTRS)
 1- 2" PUMPER CONNECTION ASSEMBLY
 (PER STD #S-14)
 2- 2" BELL RESTRAINTS
 1- VALVE MARKER

APPROXIMATE LOCATION
 OF PROPOSED HOUSE
 ERIC & HEATHER KARNEY
 210 ALLSBROOK RD / TR 2
 ACCT # 0256446-00
 WO # 254791 & #254792

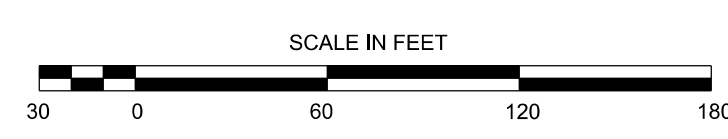
FINAL LOCATION OF WATER AND SEWER
 SERVICES TO BE DETERMINED BASED
 UPON LOCATION OF PROPOSED HOUSE

NEW 6" C900 DR25 PVC (BLUE)
 WATERLINE



- WORK WITHIN PUBLIC RIGHT-OF-WAYS OR PRIVATE EASEMENTS SHALL BE ACCOMPLISHED BY THE CONTRACTOR ACCORDING TO THE REQUIREMENTS OR CONDITIONS OF THE ENCROACHMENT PERMIT OR OTHER LEGAL DOCUMENTS AS THOUGH DOCUMENTS WERE ISSUED IN THE CONTRACTOR'S NAME. THE CONTRACTOR SHALL MAINTAIN COPIES OF THESE DOCUMENTS ON THE SITE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF PUBLIC RIGHT-OF-WAY DURING CONSTRUCTION AND UNTIL THE CONTRACTOR OBTAINS AND DELIVERS TO THE OWNER A WRITTEN SIGN-OFF FROM HORRY COUNTY AND/OR THE S.C.D.T. THAT THE PUBLIC AGENCY HAS ACCEPTED THE RIGHT-OF-WAY BACK FOR MAINTENANCE. FINAL PAYMENT AND RELEASE OF RETAINAGE WILL NOT BE MADE TO THE CONTRACTOR UNTIL WRITTEN SIGN-OFF HAS BEEN OBTAINED FROM THE APPROPRIATE PUBLIC AGENCY AND PROVIDED TO THE OWNER.
- PROVISIONS SHALL BE MADE TO PREVENT EROSION AND SILTATION CAUSED BY CONSTRUCTION. TEMPORARY GRASSING, HAY BALES, SILT FENCES OR OTHER METHODS, AS CALLED FOR ON THE PLAN OR THAT MAY BE REQUIRED, SHALL BE USED.
- DISTANCES SHOWN ON THE PLAN FOR THE DESIGNATED LOCATION OF THE PROPOSED LINE WHICH MAY BE FROM THE EDGE OF PAVEMENT OR OTHERWISE SHOWN INTENDED ONLY AS A DESIRED LOCATION FOR THIS INSTALLATION. HOWEVER, SHOULD A CONFLICT OCCUR AND/OR DUE TO UNFORESEEN OR OTHER UTILITIES DISCOVERED THAT ARE IN CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FOR ANY AND ALL INSTALLATIONS AND DEVIATIONS OF ALIGNMENT NECESSARY TO ACHIEVE A CHANGED AND SATISFACTORY LOCATION FOR THIS INSTALLATION. THE INSTALLATION COSTS THAT MAY OCCUR DUE TO ALIGNMENT CHANGES ARE CONSIDERED TO BE A PART OF THE PRICE SUBMITTED FOR PIPE INSTALLATION AND NO ADDITIONAL COMPENSATION IS ALLOWED. THE FINAL LOCATION SELECTED FOR INSTALLATION BY THE CONTRACTOR OTHER THAN WHAT IS SHOWN ON THE PLAN SHALL BE FIRST APPROVED BY THE AUTHORITY PRIOR TO PROCEEDING WITH THE WORK AND ACTUAL INSTALLATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND EXISTENCE OF ALL UNDERGROUND UTILITIES BOTH PRIOR TO THE BID SUBMITTAL AND DURING CONSTRUCTION. LOCATION OF UTILITIES AS TENTATIVELY SHOWN ON THE PLANS, WHETHER FULLY AND CORRECTLY LOCATED OR PARTIALLY AND/OR INCORRECTLY LOCATED OR OMITTED WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OR LIABILITY FOR PROVIDING FOR ANY DAMAGE TO OTHER UTILITIES. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING LOCAL UTILITIES FOR ASSISTANCE IN LOCATING UTILITIES PRIOR TO BID PROPOSALS AND DURING INSTALLATIONS. THE CONTRACTOR MUST FULLY COMPLY WITH THE SOUTH CAROLINA UNDERGROUND UTILITIES DAMAGE PREVENTION ACT, GENERAL STATUTES 58-35, SECTIONS 20 THROUGH 120 AND ALL APPLICABLE STATUTES AND STATE APPROVED REQUIREMENTS.
- WHEN THE CONTRACTOR IS UNABLE TO COMPLETE HIS WORK AS SHOWN ON THE PLANS BECAUSE OF AN EXISTING UTILITY, CONTRACTOR SHALL STAKE THE LOCATION OF THE UTILITY PRIOR TO PROCEEDING AND CONTACT THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AGENCIES, THE OWNER, THE ENGINEER AND ALL OTHER CONCERNED PARTIES WHEN CONSTRUCTION IS TO COMMENCE SO THAT INSPECTIONS AND OTHER SITE VISITS MAY BE SCHEDULED.
- DATA REQUIRED FOR PREPARATION OF AS-BUILT DRAWINGS SHALL BE OBTAINED BY THE CONTRACTOR AT THE TIME OF INSTALLATION. THIS DATA SHALL BE ACCUMULATED BY THE CONTRACTOR AND COORDINATED WITH THE PROJECT INSPECTOR ON A DAILY BASIS DURING THE CONSTRUCTION PERIOD AND BE SUBMITTED TO THE PROJECT INSPECTOR IN A NEAT AND LEGIBLE MANNER AFTER COMPLETION OF THE PROJECT.
- SPECIAL NOTE: PRIOR TO ANY EXCAVATION THE CONTRACTOR IS REQUIRED TO CONTACT HORRY TELEPHONE COOPERATIVE FOR CABLE LOCATIONS AT 365-2151. THIS PROJECT HAS SEVERAL CABLES OFF EDGE OF PAVEMENT THAT THE CONTRACTOR WILL BE REQUIRED TO LOCATE AND EXPOSE PRIOR TO THE INSTALLATION OF ANY MATERIALS.
- REPLACE IN KIND ALL AREAS PROPERTY OWNER HAS DEVELOPED SPECIAL GRASS, TURF, OR LANDSCAPING. ALL DISTURBED AREAS ARE TO BE PAVED AND SEEDS.
- FINAL LOCATION AND SIZE OF E-CONE GRINDER PUMP STATIONS AND WATER SERVICES SHALL BE DETERMINED BY GSWSA. LOCATION OF PUMP STATIONS AND WATER SERVICES SHOWN ON PLANS ARE TENTATIVE AND SUBJECT TO CHANGE. GSWSA SHALL DETERMINE AND STAKE OUT ALL LOCATIONS PRIOR TO CONTRACTOR INSTALLATION.

| FLUSHING CALCULATIONS | |
|--------------------------------|----------------------------------------------|
| PROJECT #634-60 | 6" WL (1,260-LF) |
| Flushing flow = 220 gpm (min.) | Flushing volume = 4,626 gal. (2.5 turnovers) |
| Flushing duration = 21 minutes | |
| PROJECT #634-61 | 6" WL (1,175-LF) |
| Flushing flow = 220 gpm (min.) | Flushing volume = 4,314 gal. (2.5 turnovers) |
| Flushing duration = 20 minutes | |



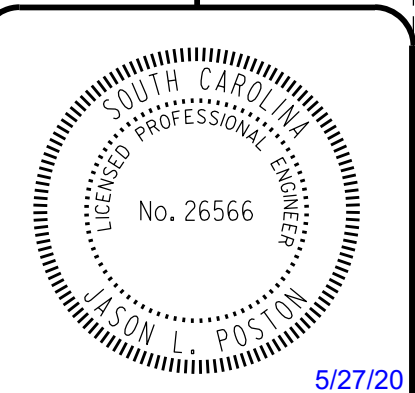
| LEGEND (APPLIES TYPICALLY THROUGHOUT PLAN SHEETS) | |
|---------------------------------------------------|------------------------------------------------|
| DIRT/GRASS DRIVEWAY | WATER OR SEWER AIR RELEASE VALVE |
| COQUINA/GRAVEL DRIVEWAY | SEWER FM PUMPER CONNECTION ASSEMBLY |
| CONCRETE DRIVEWAY | SEWER FM PLUG VALVE |
| ASPHALT DRIVEWAY | SEWER MANHOLE |
| REINFORCED CONCRETE PIPE (RCP) | SEWER LIFT STATION |
| TELEPHONE PEDESTAL | SEWER S.T.E.P. TANK |
| T.V. CABLE PEDESTAL | SEWER GRINDER PUMP STATION |
| ELECTRIC POWER POLE | WATER FIRE HYDRANT |
| U.G. ELECTRIC TRANSFORMER | WATER POST HYDRANT |
| GAS MAIN | WATER BLOW-OFF ASSY |
| TELEPHONE/TV CABLE | WATER GATE VALVE |
| FIBER OPTIC CABLE | WATER/SEWER REDUCER |
| CATCH BASIN | WATER SERVICE METER |
| WATER WELL HOUSE | CUSTOMER TO RECEIVE WATER AND/OR SEWER SERVICE |

| PROJECT | ITEM CALLOUT |
|--------------------------|--------------|
| OLE MAPLE ST EXT 1 WATER | "CALLOUT" |
| ALLSBROOK RD EXT 1 W&S | "CALLOUT" |

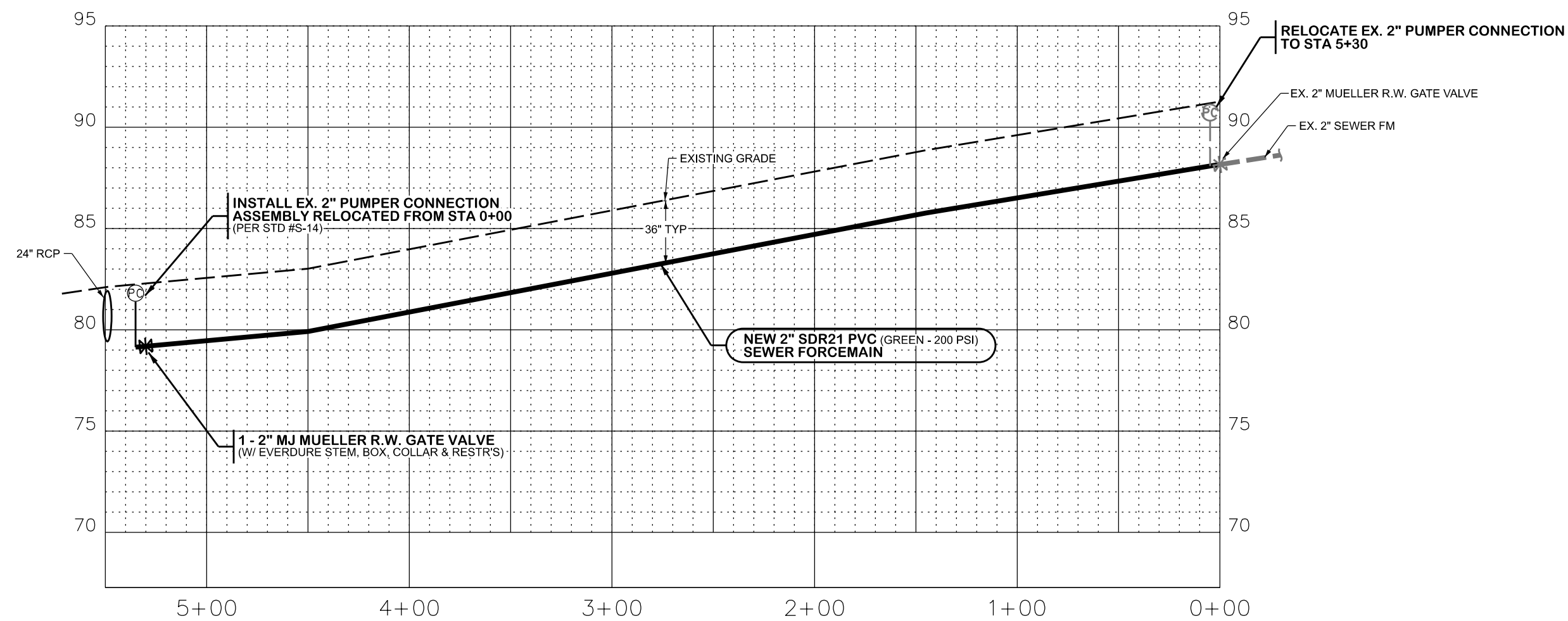
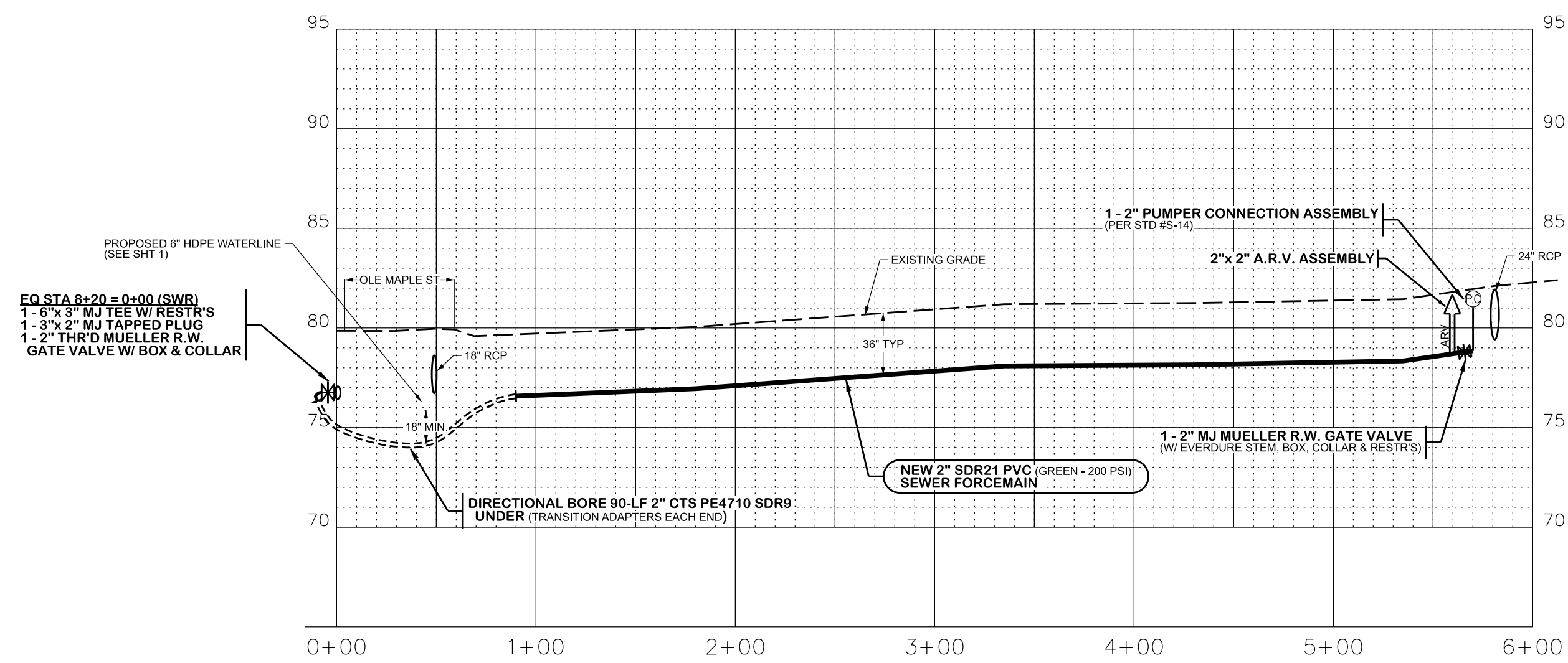
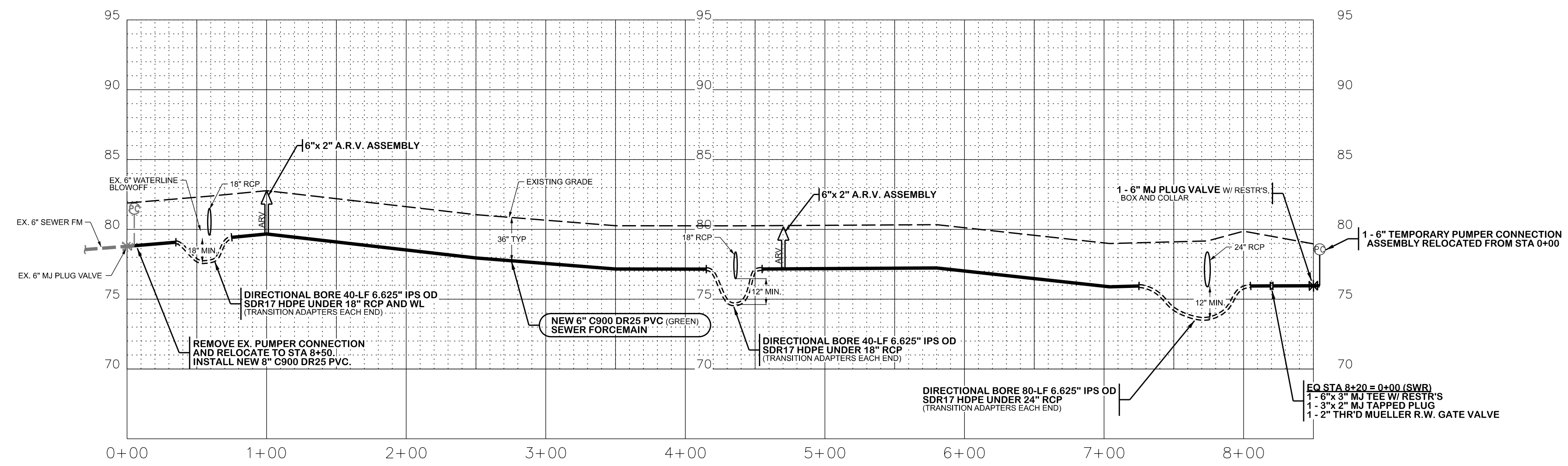
| REVISION | DATE | BY |
|----------|------------|-----|
| 1 | 2020-03-12 | DRT |
| 2 | 2020-03-19 | DRT |

GRAND STRAND WATER & SEWER AUTHORITY
 166 JACKSON BLUFF RD.
 CONWAY, SC 29526-2968
 (803) 343-9800 FAX: 4641
 E-MAIL: GSWSA@GSA.COM

OLE MAPLE ST - Ext. 1 Rural Water Project #634-60 / #W101-20 -
ALLSBROOK RD - Ext. 1 Rural Water Project #634-61 / #W108-20 -
 - Ext. 1 Rural Sewer Project #8900-59 / #S110-20 -
 (off US Hwy 701 North near Allsbrook)



DATE: May 2020 A.D.
 SCALE: as shown
 FILENAME: design - Allsbrook Rd Ext 1 RW108-20 & Ext 1 RS110-20
 #05 Ole Maple St Ext 1 RW101-20.dgn
 DESIGNED BY: Ray Thompkins
 CHECKED BY: Jason L. Poston
 APPROVED BY:



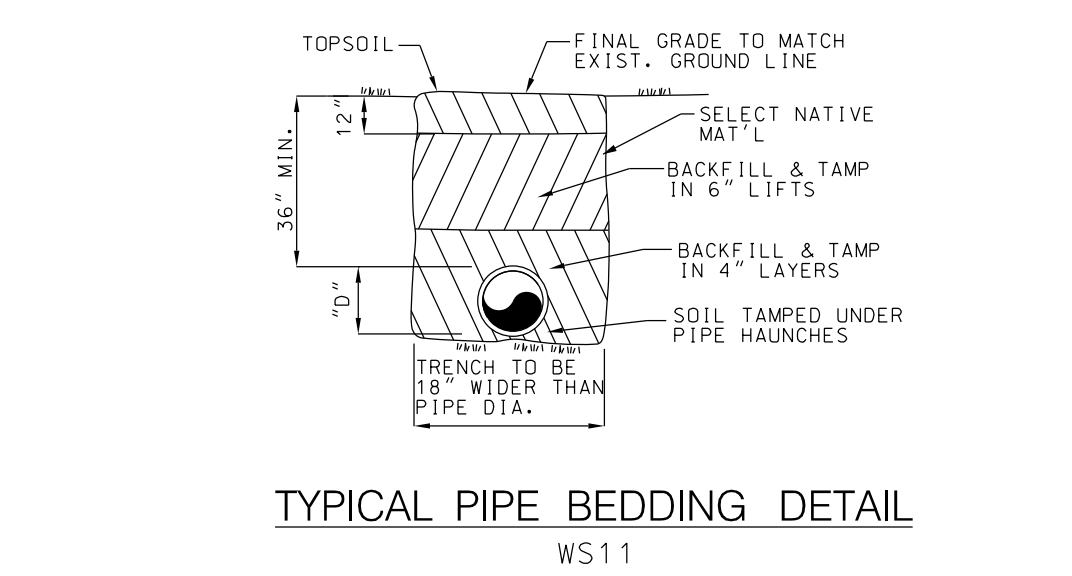
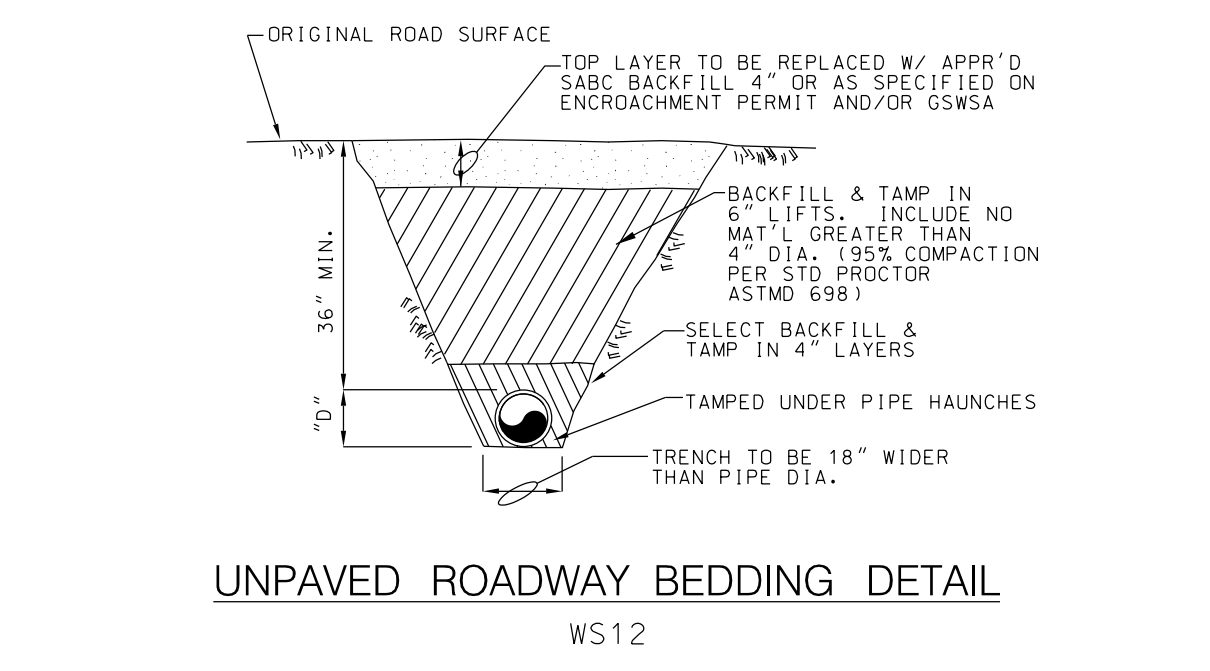
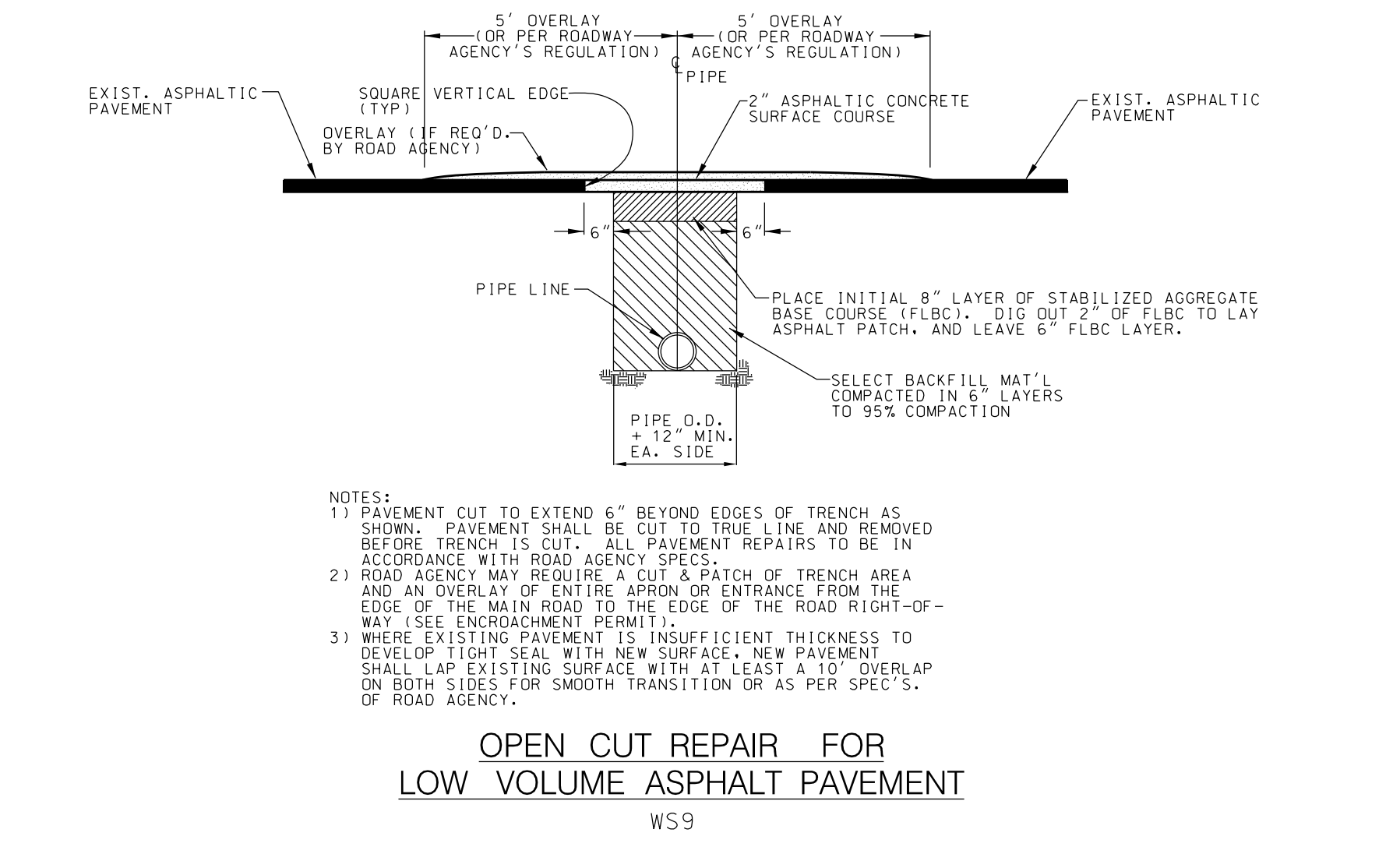
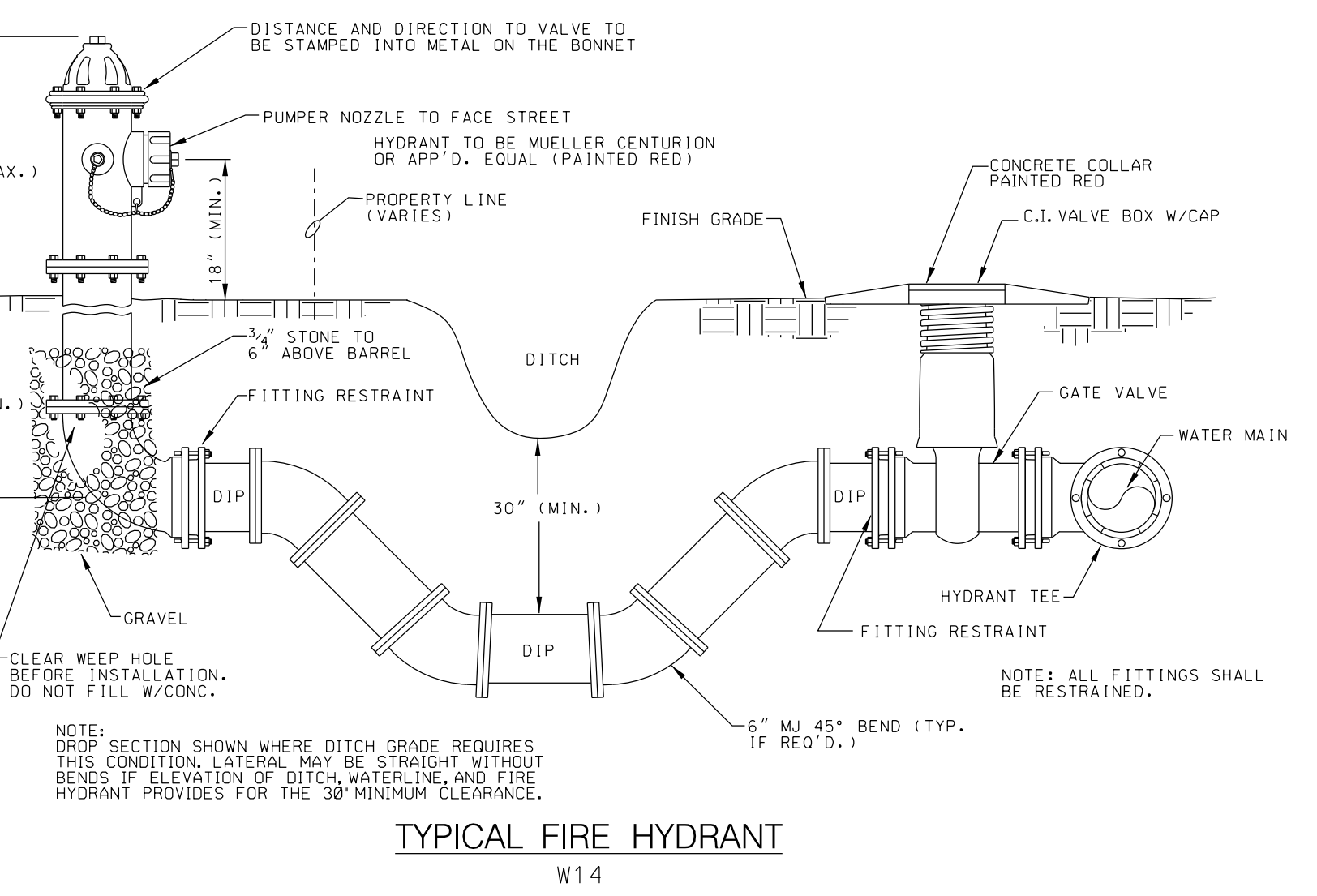
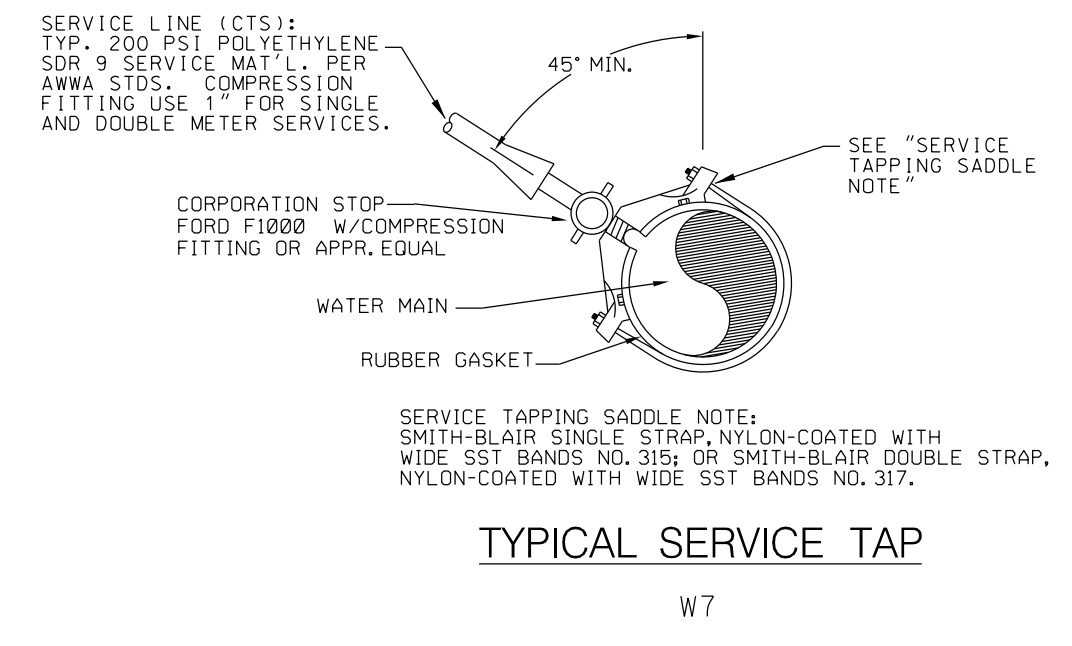
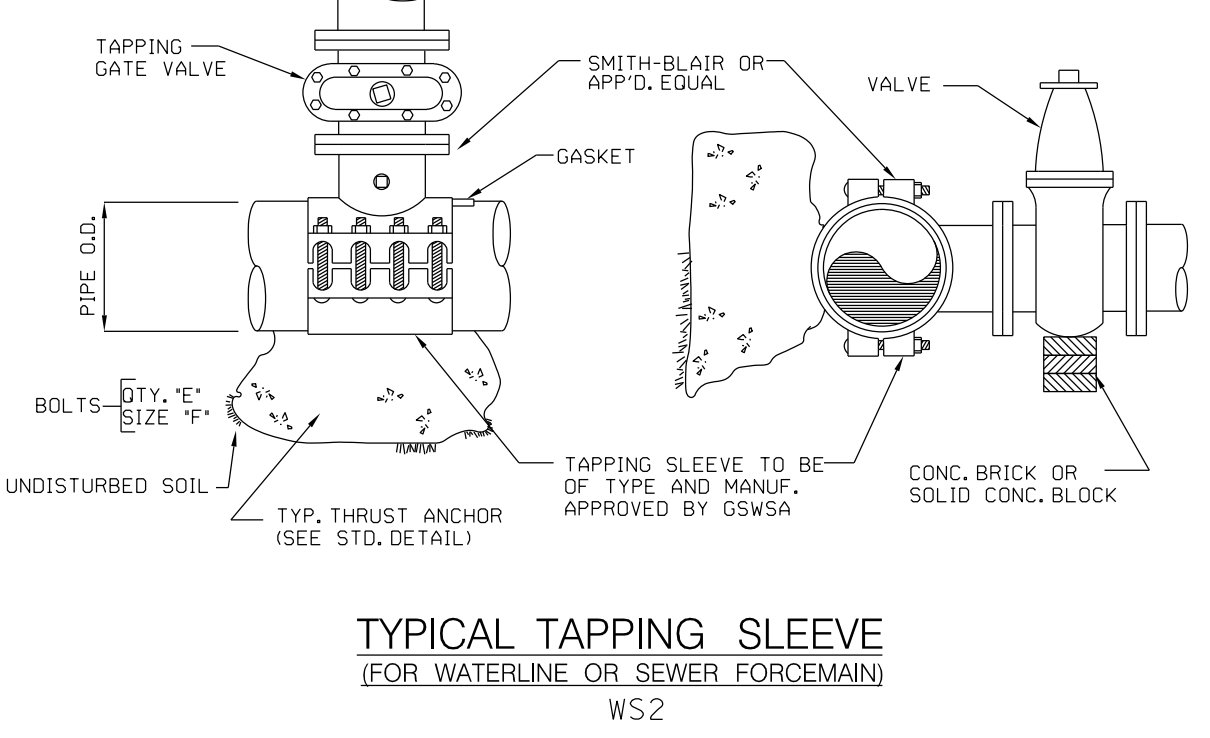
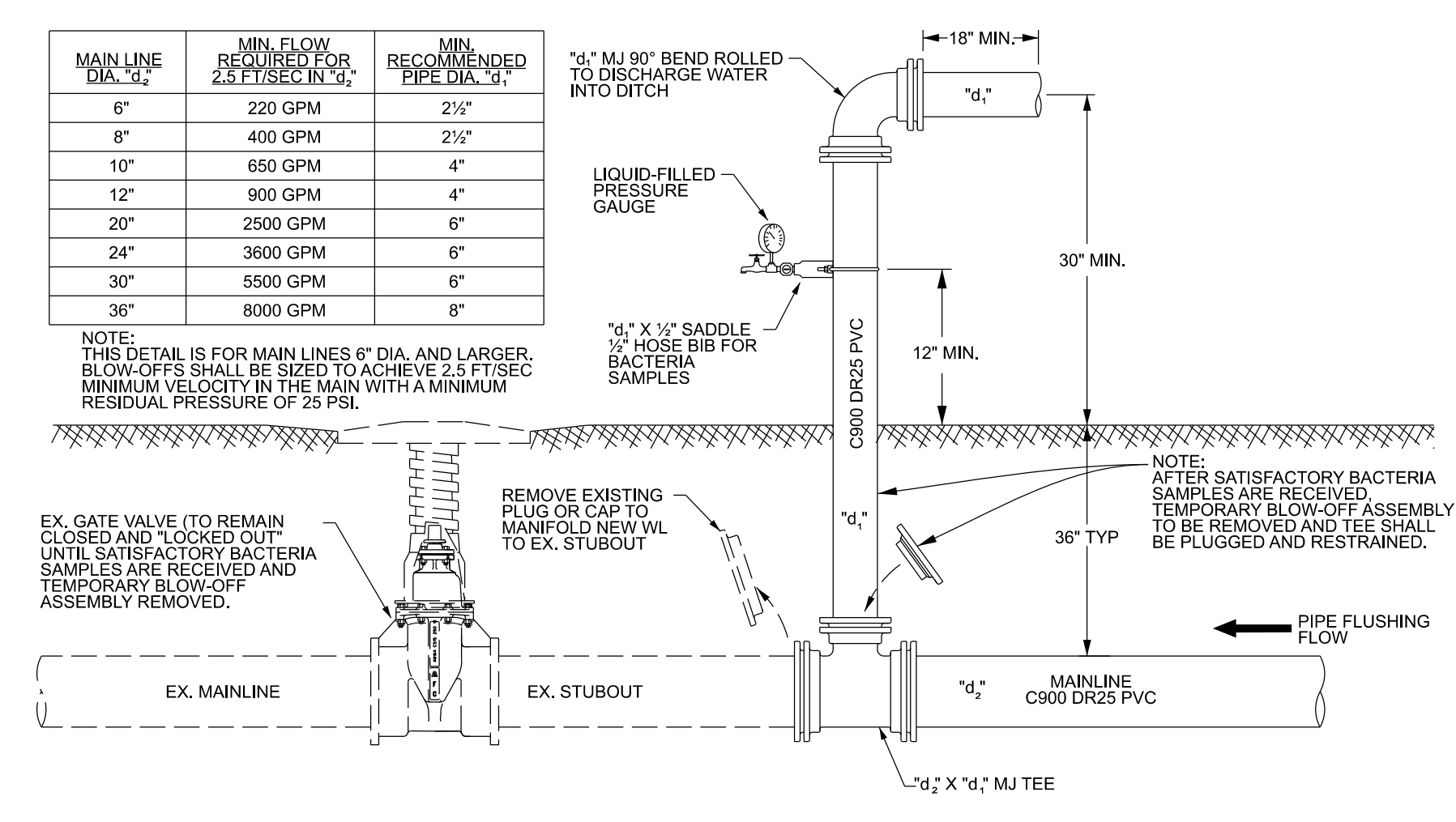
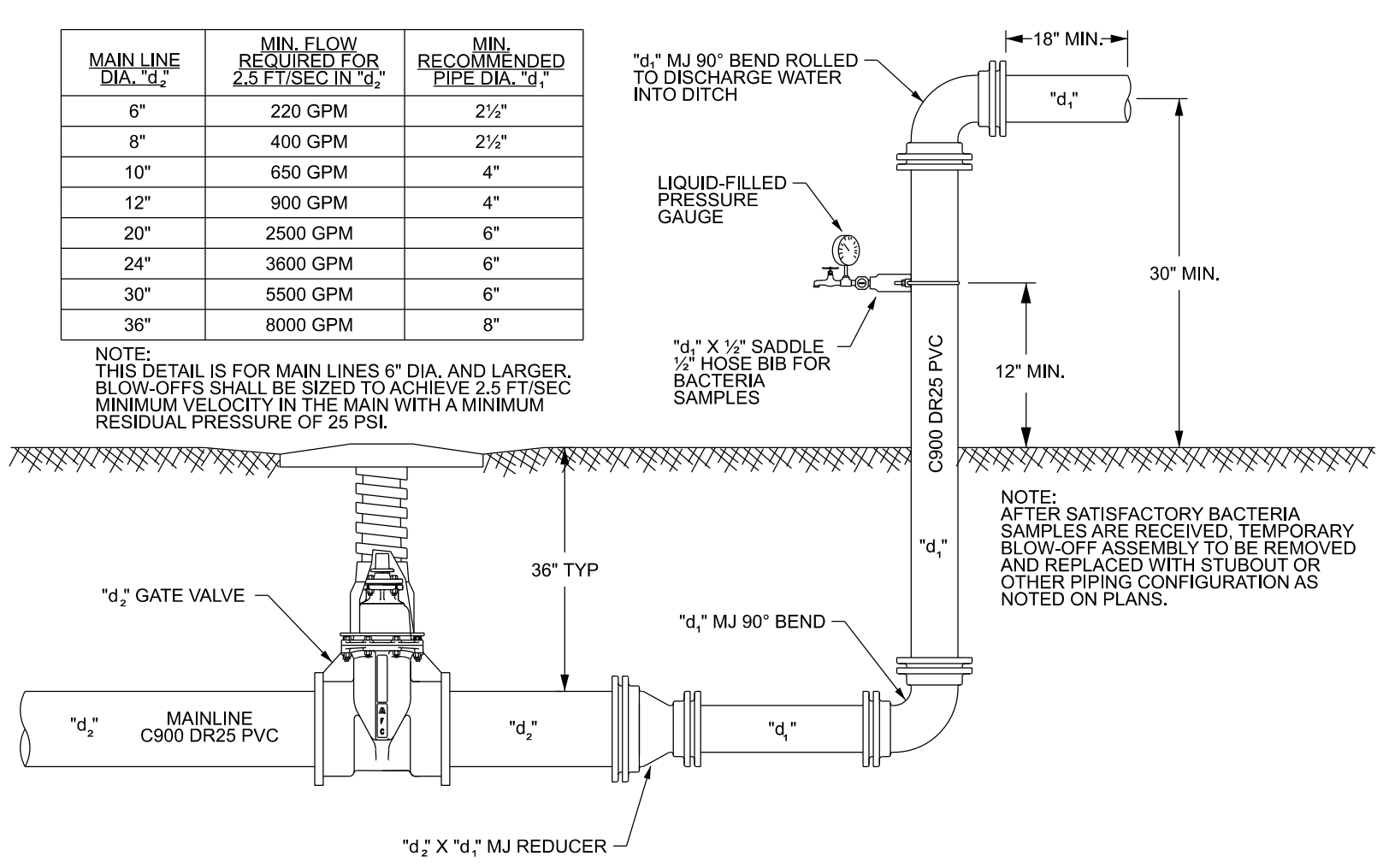
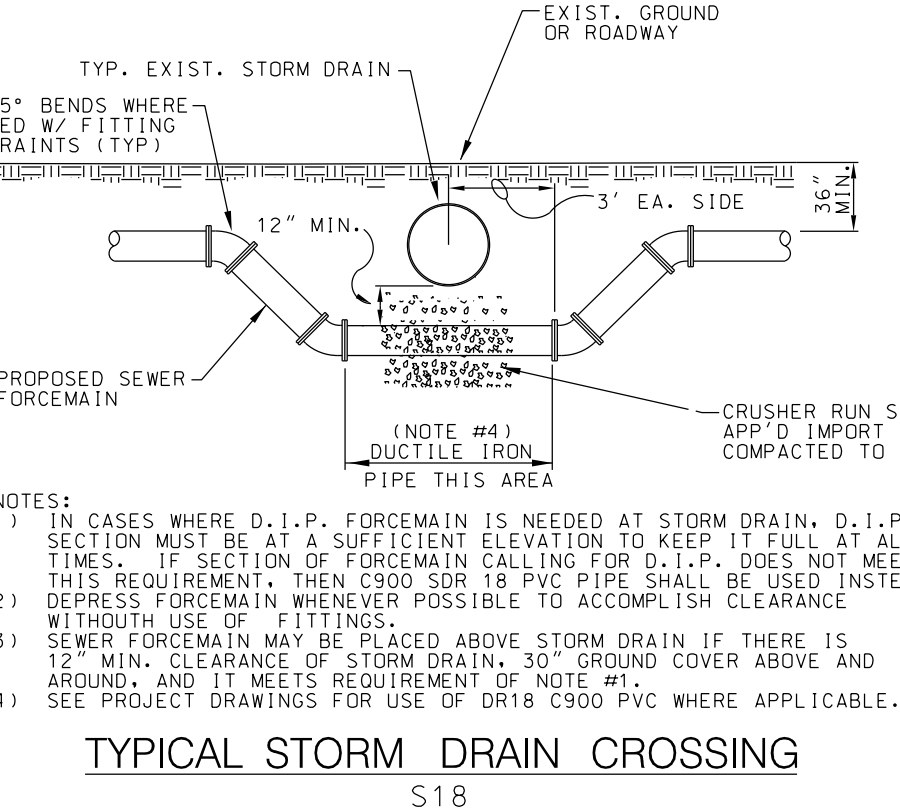
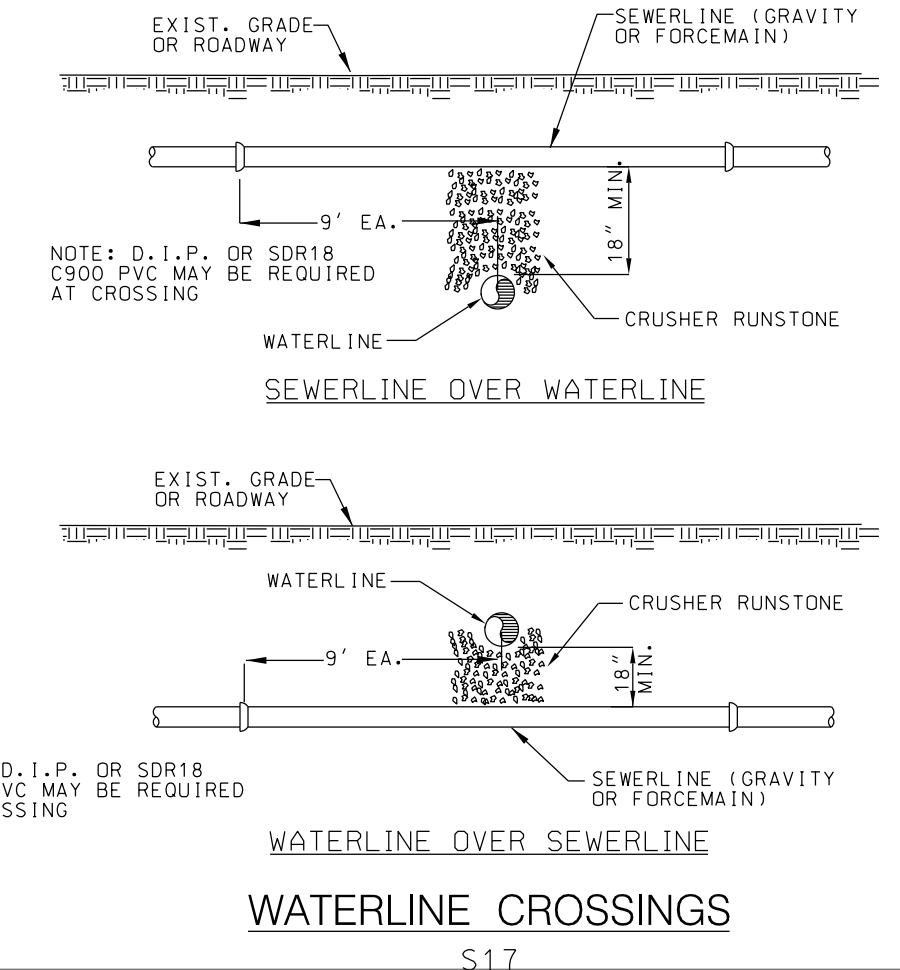
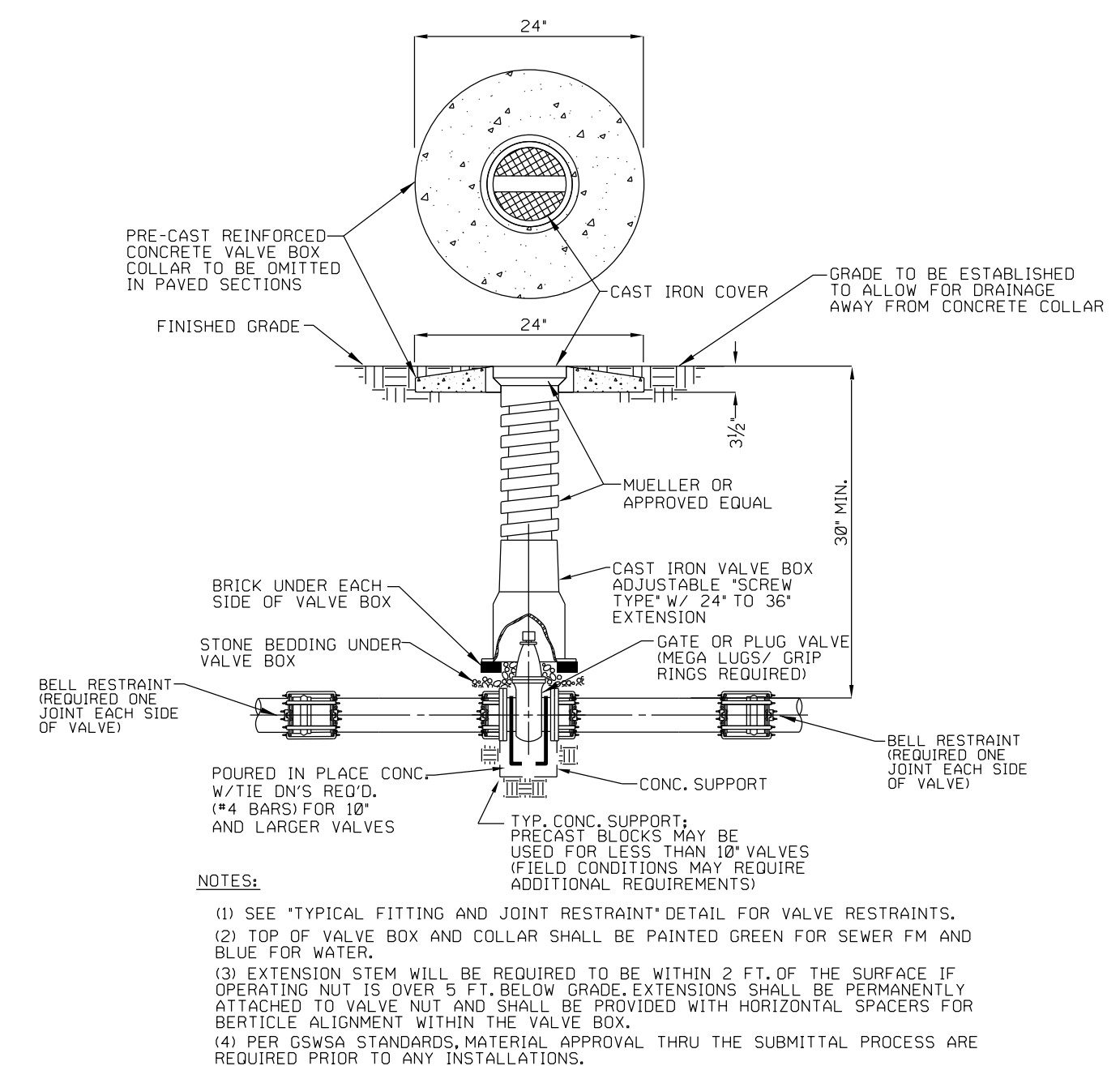
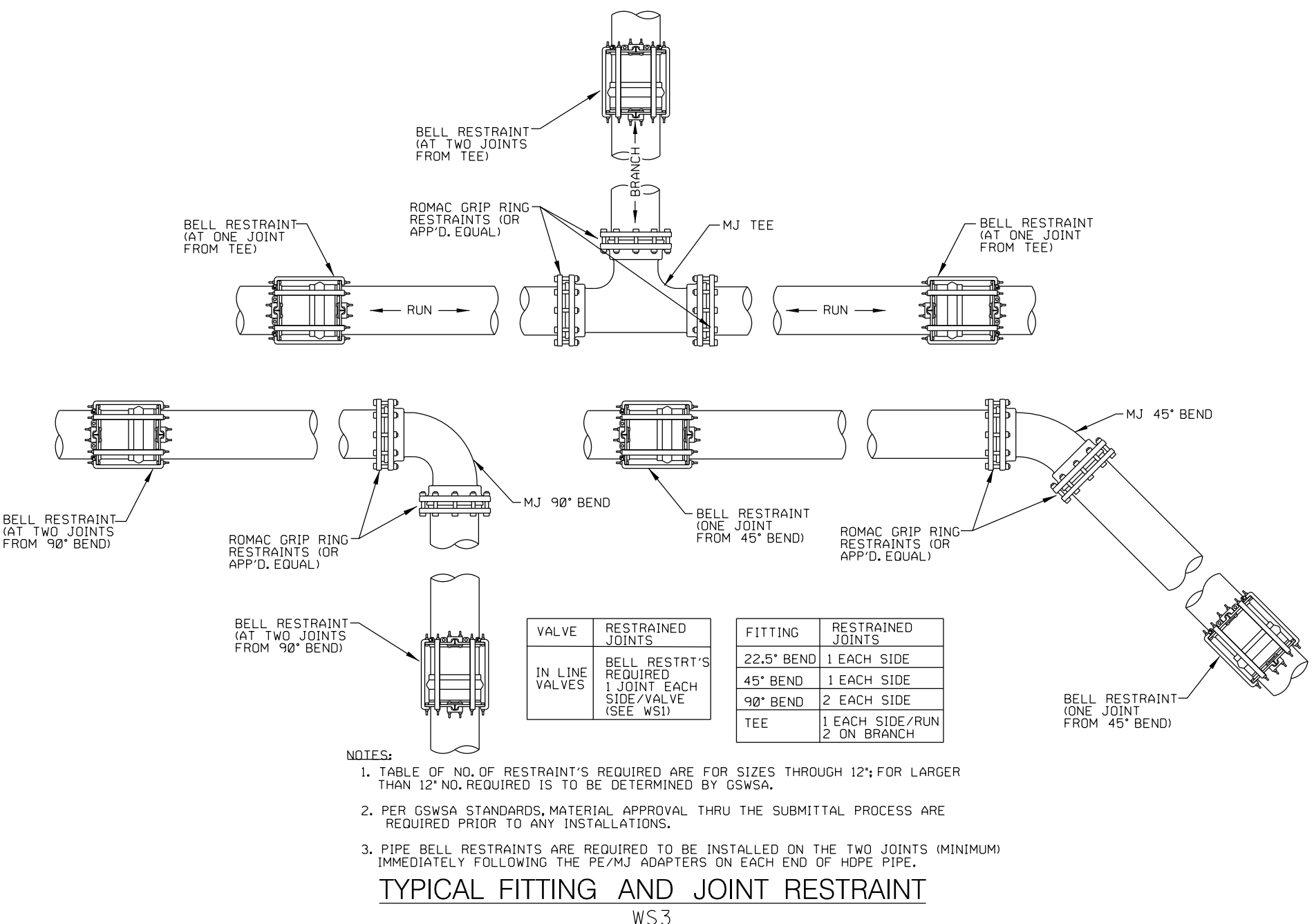
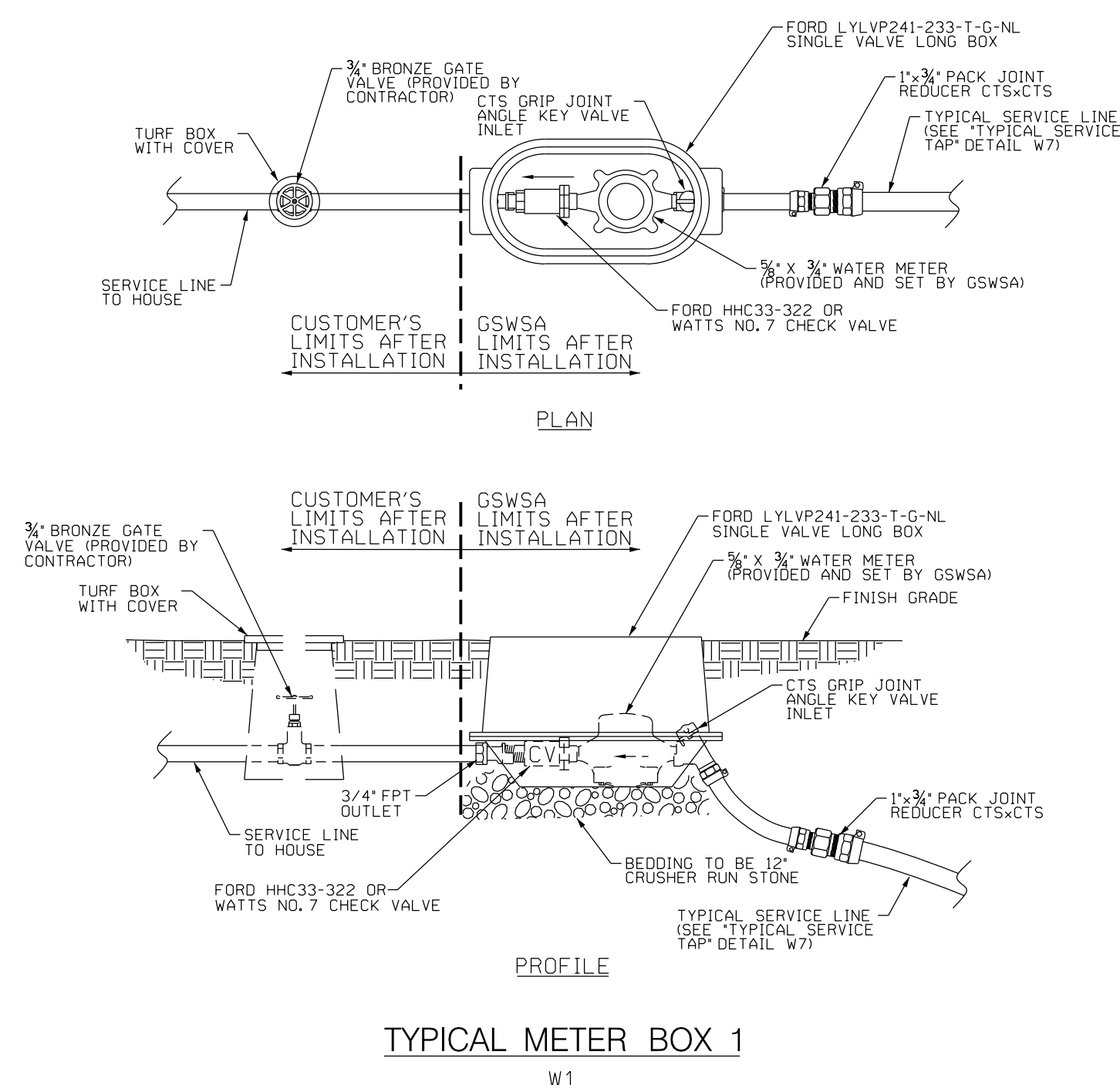
| REVISION | BY | DATE |
|----------|--------------------|----------------|
| 1 | ADDED NEW CUSTOMER | DRT 2/20/20-12 |
| 2 | ADDED NEW CUSTOMER | DRT 2/20/20-19 |

GRAND STRAND WATER & SEWER AUTHORITY
 166 JACKSON BLUFF RD.
 CONWAY, SC 29526-2368
 (843) 341-3400 FAX: (843) 341-4641
 E-MAIL: GSWSA@GMAIL.COM

- Ext. 1 Rural Water Project #634-60 / #W101-20) - **OLE MAPLE ST**
- Ext. 1 Rural Water Project #634-61 / #W108-20) - **ALLSBROOK RD**
- Ext. 1 Rural Sewer Project #890-59 / #S110-20) - (off US Hwy 701 North near Allsbrook)



DATE: May 2020 A.D.
 SCALE: as shown
 FILENAME: design - Allsbrook Rd Ext 1 RW108-20 & Ext 1 RS110-20 and Ole Maple St Ext 1 RW101-20.dgn
 DESIGNED BY: Ray Thompkins
 CHECKED BY: Jason L. Poston
 APPROVED BY: Jason L. Poston, PE #26566



DATE: _____

BY: _____

REVISION: _____

GRAND STRAND WATER & SEWER AUTHORITY

166 JACKSON BLUFF RD.
CONWAY, SC 29526-2368
(803) 343-6800 FAX: 464-4641
E-MAIL: GSWSA@GMAIL.COM

OLE MAPLE ST
- Ext. 1 Rural Water Project #634-60 / #W101-20 -

ALLSBROOK RD
- Ext. 1 Rural Water Project #634-61 / #W108-20 -
- Ext. 1 Rural Sewer Project #990-59 / #S110-20 -
(off US Hwy 701 North near Allsbrook)

5/27/20

DATE: May 2020 A.D.

SCALE: as shown

FILENAME: design - Allsbrook Rd Ext 1 RW108-20 & Ext 1 RS110-20
#45 Ole Maple St Ext 1 RW101-20.dgn

DESIGNED BY: Ray Thompkins

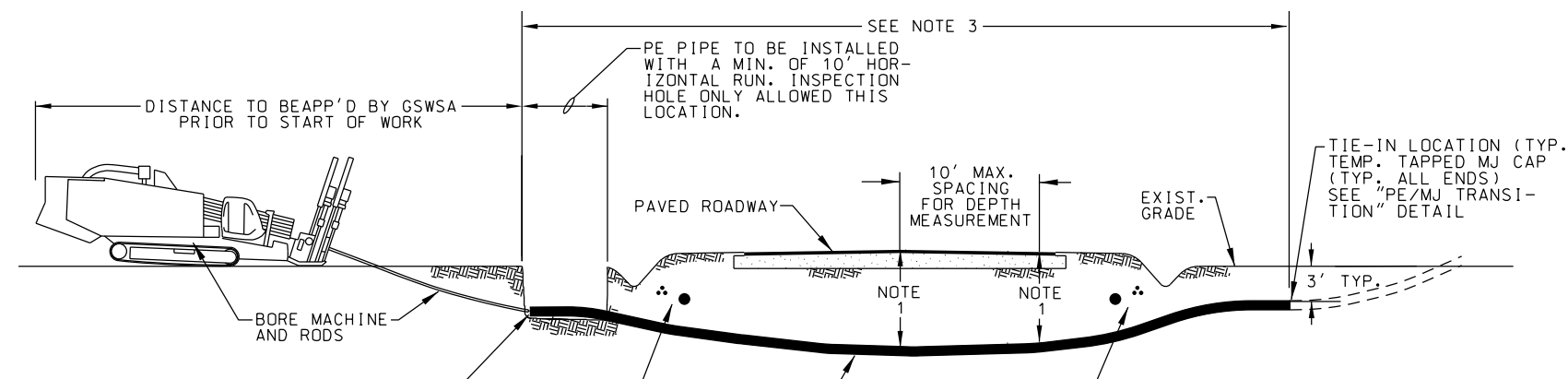
CHECKED BY: Jason L. Poston

APPROVED BY: _____

JASON L. POSTON, PE #26566

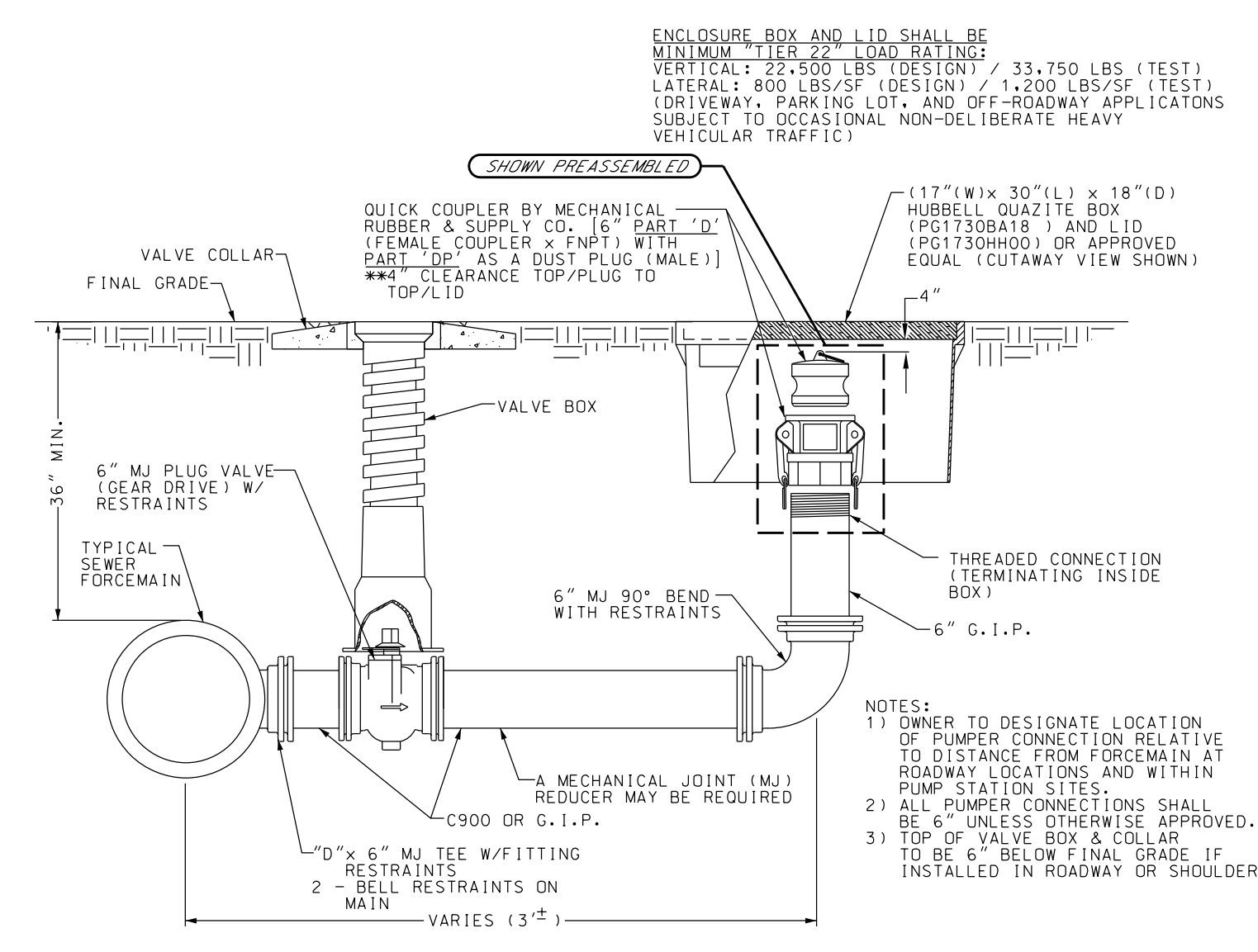
SHEET **3** OF 5

CONSTRUCTION DETAILS

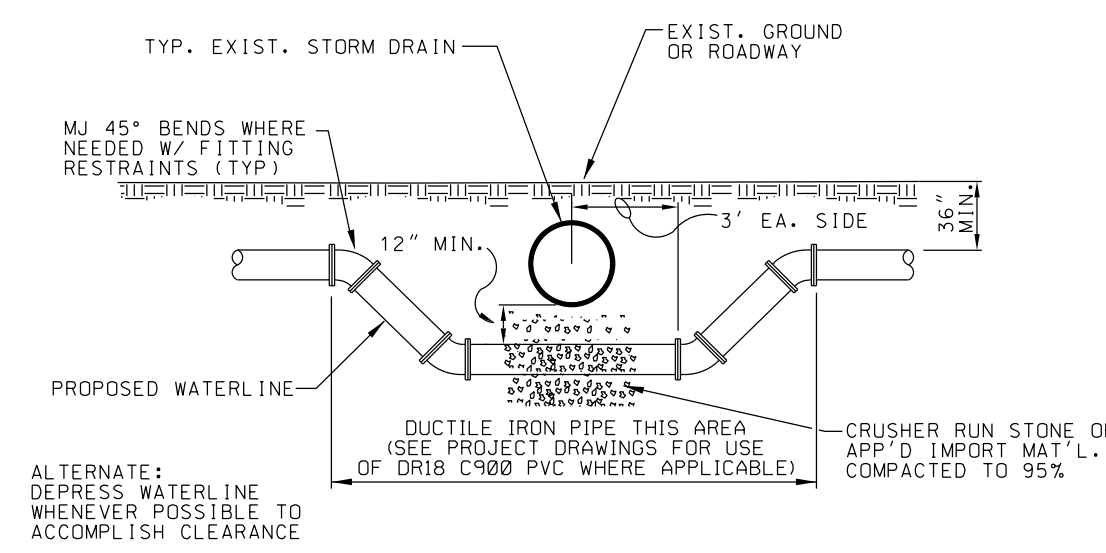


- SELF-RESTRAINED PE/MJ ADAPTERS, NOT APPROVED FOR POTABLE WATER WITH S.S. SLEEVE INSERTS AS MANUF. BY JCM OR APP'D EQUAL. ADAPTER BY CENTRAL DESIGN, ETC. OR APP'D EQUAL ADAPTERS TO BE FOR IT (TIE-IN BOTH ENDS). SEE PE/MJ TRANSITION DETAIL.
1. AN ELECTRONICALLY-DEVELOPED PROFILE AND PLAN SHALL BE PROVIDED FROM ENTRY TO EXIT FOR EACH DIRECTIONAL BORE SECTION BY THE DIRECTIONAL BORE CONTRACTOR. THIS SHALL INCLUDE ACCURATE HORIZONTAL AND VERTICAL DIMENSIONS.
 2. ALL BORE SECTIONS SHALL BE HYDROSTATICALLY TESTED PER GSWA STANDARDS BOTH UPON COMPLETION OF THE ABOVE-GROUND FUSION OPERATION AND AGAIN AFTER INSTALLATION, WHICH IS PRIOR TO CONNECTION TO THE MAIN PROJECT WATER/SEWER LINE. A FINAL TEST WILL BE A PART OF THE TOTAL MAIN LINE SYSTEM TEST.
 3. LENGTH OF CROSSING, LOCATION OF INSPECTION/OBSERVATION EXCAVATION, NUMBER OF P.E. PIPE JOINTS, LOCATION OF BORE MACHINE, AUGER ENTRANCE LOCATION AND TIE-IN POINTS ARE TO BE APPROVED BY GSWA PRIOR TO ANY START OF WORK OR ORDERING OF MATERIALS.
 4. THIS DETAIL IS ALSO APPLICABLE TO STREAMS, WETLANDS, LARGE STORM DRAINS AND SIMILAR APPLICATIONS FOR DIRECTIONAL BORE WITH POLYETHYLENE PIPE.
 5. THE BORE DEVELOPED FOR THE LEAD END OF THE PIPE SHALL BE KEPT AT A MINIMUM DIAMETER FOR THE PIPE INSTALLATION. THE AUGER HEAD SIZE SHALL BE APPROVED BY THE AUTHORITY PRIOR TO THE START OF WORK. THE LEADING END SHALL BE FULLED THROUGH WITHOUT THE D.I. M.J. RING FLANGE ATTACHED FOR LARGER THAN 6" PIPE INSTALLATIONS. THE D.I. M.J. RING FLANGE FOR SAID LEADING END SHALL BE INSTALLED AFTER THE PIPE INSTALLATION WITH THE USE OF A SPLIT D.I. M.J. FLANGE PER THE DETAIL DRAWING.
 6. THE MANUFACTURER AND TYPE OF DRILLERS MUD SELECTED FOR USE SHALL BE APPROVED BY THE AUTHORITY PRIOR TO THE START OF WORK.
 7. PIPE BELL RESTRAINTS ARE REQUIRED TO BE INSTALLED ON THE TWO JOINTS (MINIMUM) IMMEDIATELY FOLLOWING THE PE/MJ ADAPTERS ON EACH END OF HDPE PIPE.
 8. HDPE MJ TRANSITION ADAPTERS TO BE SIZE-ON-SIZE. ANY REQUIRED CHANGE IN PIPE DIAMETER SHALL BE MADE USING DUCTILE IRON (D.I.) MJ FITTING WITH RESTRAINTS. HDPE REDUCERS ARE NOT ALLOWED.
 9. HDPE MJ TRANSITION ADAPTER "OR" TO MATCH "OR" OF HDPE BORE PIPE BEING INSTALLED.

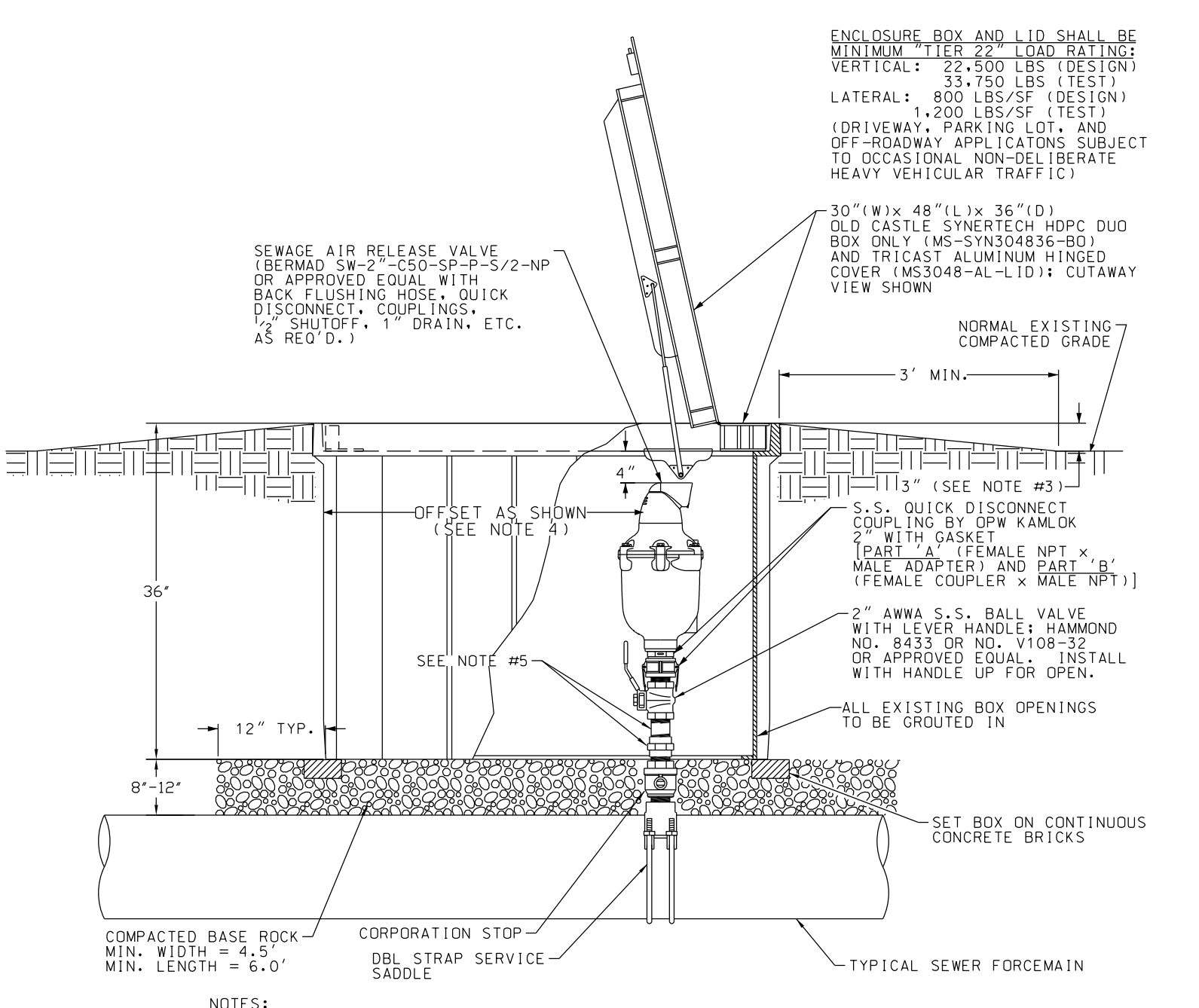
TYPICAL HDPE DIRECTIONAL BORE
WS4



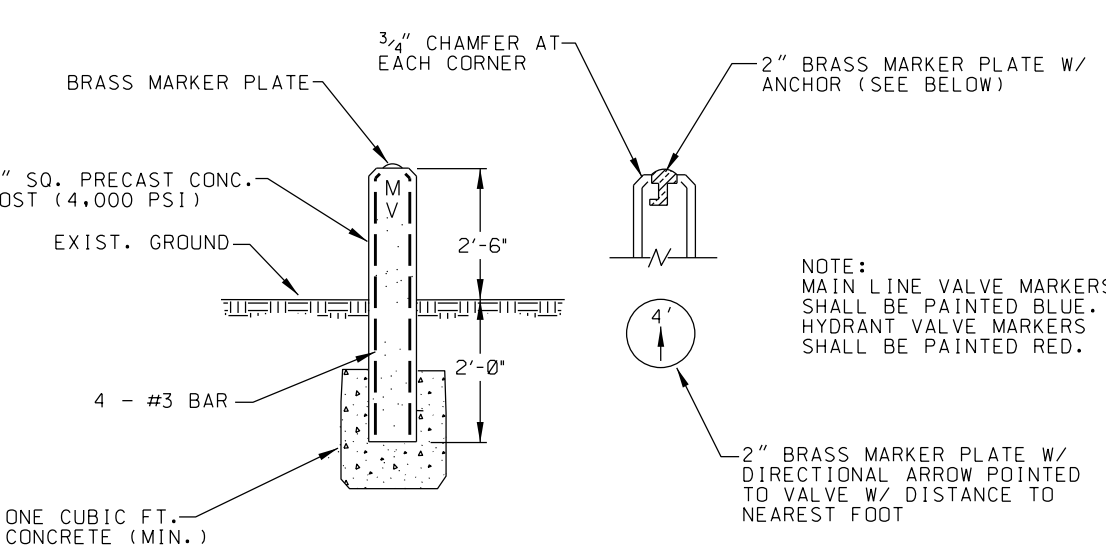
TYPICAL PUMPER CONNECTION FOR FOREMAIN FLUSHING
S14



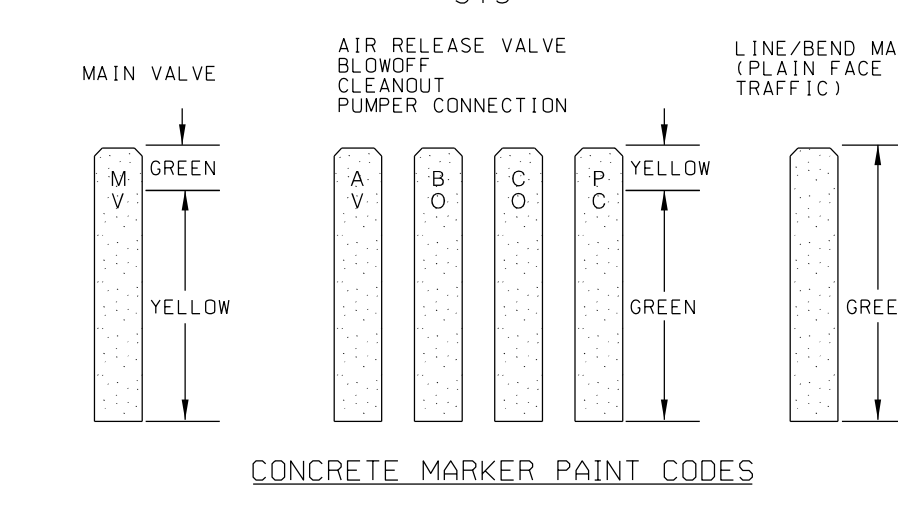
TYPICAL STORM DRAIN CROSSING
W8



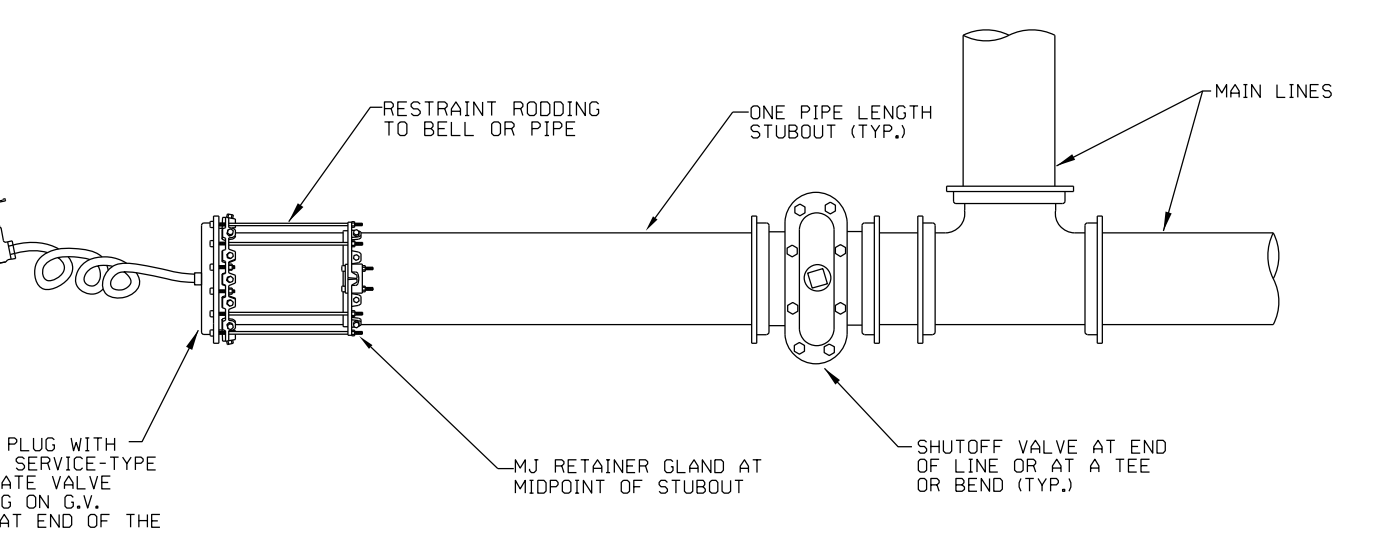
TYPICAL SEWER FOREMAIN AIR RELEASE VALVE ASSEMBLY
S15



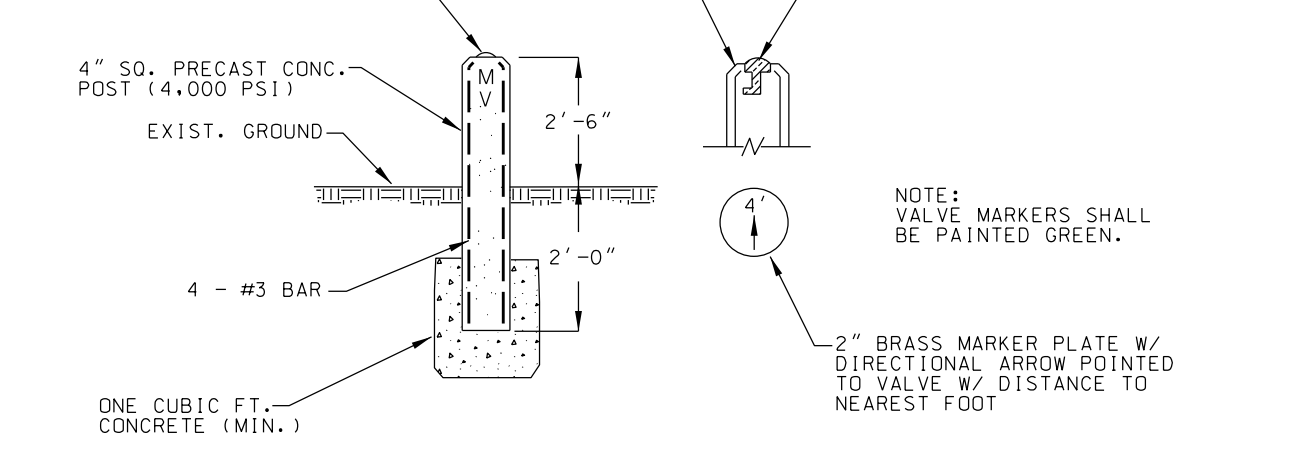
TYPICAL CONCRETE VALVE MARKER
W17



CONCRETE MARKER PAINT CODES



TYPICAL FUTURE WATERLINE OR FOREMAIN STUBOUT
WS14



TYPICAL CONCRETE MARKERS (VALVE, ARV, BLOWOFF, CLEANOUT, PUMPER CONNECTION, LINE/BEND)
S16

| | |
|----------|--|
| DATE | |
| REVISION | |

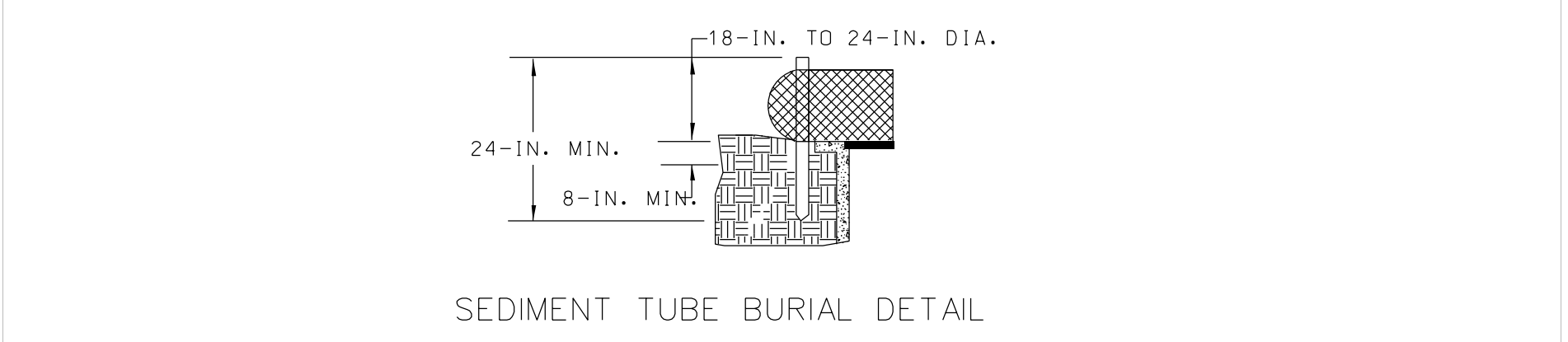
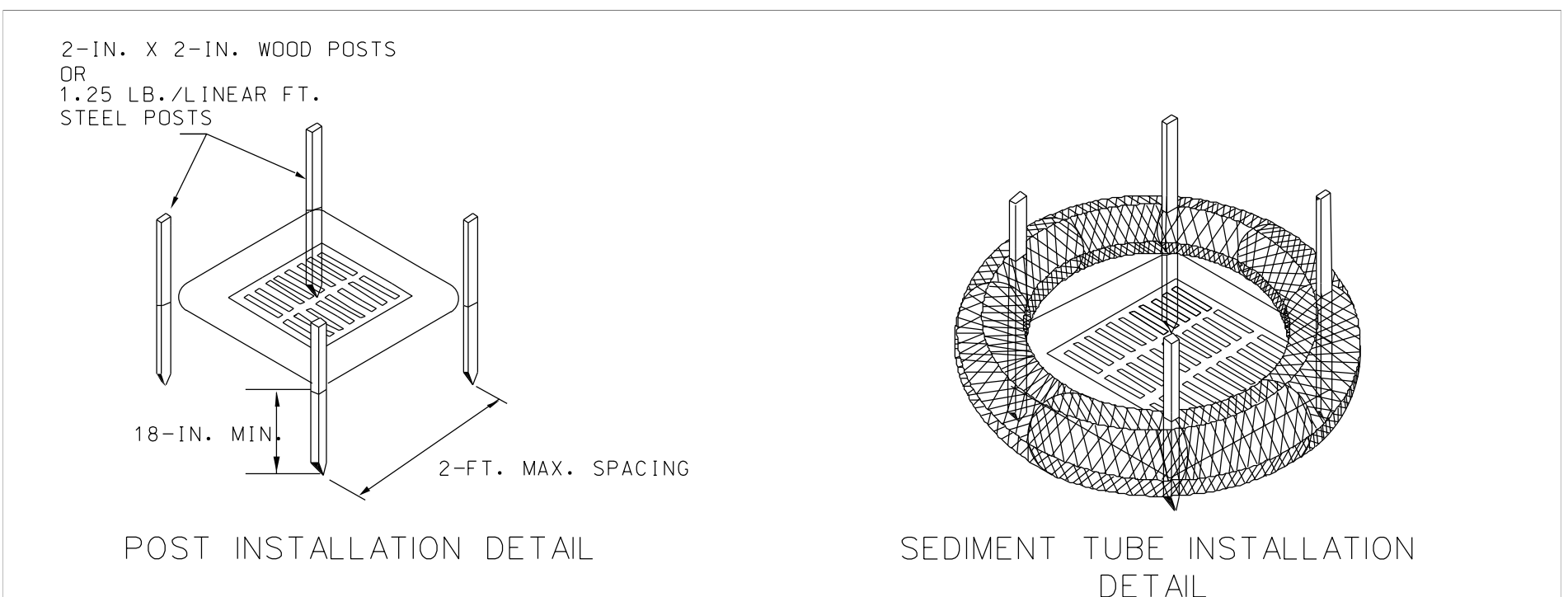
GRAND STRAND WATER & SEWER AUTHORITY
166 JACKSON BLUFF RD.
CONWAY, SC 29526-2368
(843) 341-9800 FAX: 843-341-4641
E-MAIL: GSWA@GSWA.COM

OLE MAPLE ST
- Ext. 1 Rural Water Project #634-60 / #W101-20 -
ALLSBROOK RD
- Ext. 1 Rural Water Project #634-61 / #W108-20 -
- Ext. 1 Rural Sewer Project #890-59 / #S110-20 -
(off US Hwy 701 North near Allsbrook)

Professional Engineer Seal for Jason L. Poston, License No. 26566, State of South Carolina.

DATE: May 2020 A.D.
SCALE: as shown
FILENAME: design - Allsbrook Rd Ext 1 RW108-20 & Ext 1 RS110-20
890 Ole Maple St Ext 1 RW101-20.dgn

| | |
|-------------|-----------------|
| DESIGNED BY | Ray Thompkins |
| CHECKED BY | Jason L. Poston |
| APPROVED BY | |



SEDIMENT TUBE INLET PROTECTION

Materials
Sediment tubes for Type A Inlet Structure Filters exhibit the following properties:
Produced by a Manufacturer experienced in sediment tube manufacturing.
Composed of compacted geotextiles, curled excelsior wood, natural coconut fibers, hardwood mulch or a mix of these materials enclosed by a flexible netting material.
Straw, straw fiber, straw bales, pine needles, and leaf mulch are not allowed under this specification.
Utilizes outer netting that consists of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable materials.
Diameter ranging from 18-inches to 24-inches.
Curled excelsior wood, or natural coconut rolled erosion control products (RECPs) that are rolled up to create a sediment tube are not allowed under this specification.
Select applicable Sediment Tubes from the SCDOT approved products list.

Use 48-inch long wood posts that meet the following requirements:
2-inch by 2-inch size.
Heavy-duty wire staples at least 1 3/4-inch long, spaced a maximum of 6-inches apart to attach the filter fabric to wooden stakes.

Use 48-inch long steel posts that meet the following minimum physical requirements:
Be composed of high strength steel with minimum yield strength of 50,000 psi.
Have a standard "T" section with a nominal face width of 1.38-inches and nominal "T" length of 1.48-inches.
Weigh 1.25 pounds per foot (± 8 %).
Be painted with a water based baked enamel paint.

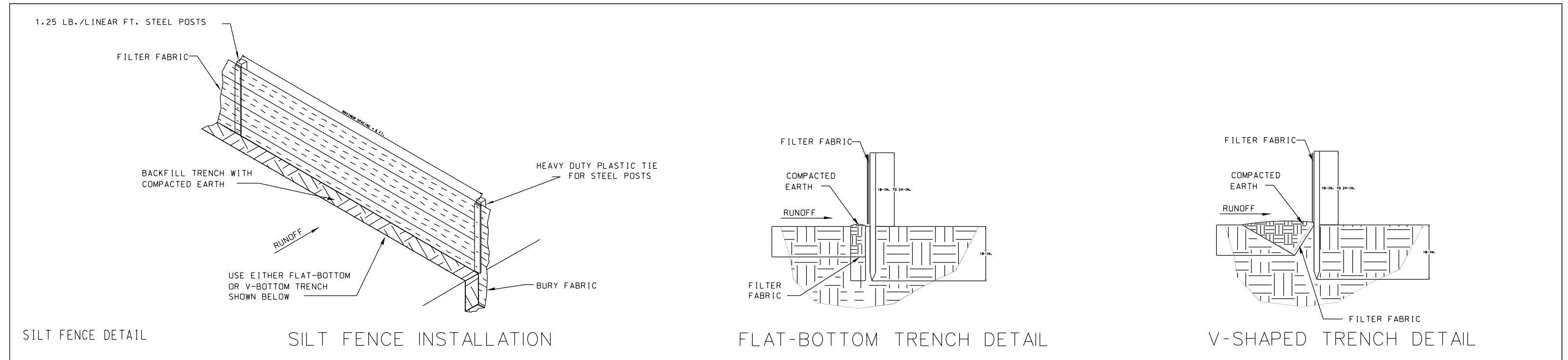
Installation:
Remove all rocks, clods, vegetation or other obstructions so installed sediment tubes have direct contact with the underlying soil or surface.
Install sediment tubes by laying them flat on the ground. Construct a small trench to a depth that is 20% of the sediment tube diameter. Lay the sediment tube in the trench and compact the upstream sediment tube soil interface. Do not completely bury sediment tubes during installation. Lap the ends of adjacent sediment tubes a minimum of 6-inches to prevent flow and sediment from passing through the field joint. Never stack sediment tubes on top of one another. Install sediment tubes using wooden stakes (2-inch x 2-inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) a minimum of 48-inches in length placed on 2-foot centers. Intertwine the stakes with the outer mesh on the downstream side.
Drive the stakes in the ground to a minimum depth of 24-inches leaving less than 12-inches of stake above the exposed sediment tube.

South Carolina Department of Health and Environmental Control

TYPE A - SEDIMENT TUBE INLET PROTECTION

STANDARD DRAWING NO. SC-07

APPROVED BY: _____ SOURCE: _____ DATE: AUGUST, 2005



When and Where to Use It:
Silt fence is applicable in areas:
Where the maximum sheet or overland flow path length to the fence is 100-feet.
Where the maximum slope steepness (normal [perpendicular] to fence line) is 2H:1V.
That do not receive concentrated flows greater than 0.5 cfs.

Do not place silt fence across channels or use it as a velocity control BMP.

Materials
Steel Posts
Use 48-inch long steel posts that meet the following minimum physical requirements:
Composed of high strength steel with minimum yield strength of 50,000 psi.
Have a standard "T" section with a nominal face width of 1.38-inches and nominal "T" length of 1.48-inches.
Weigh 1.25 pounds per foot (± 8%).
Have a soil stabilization plate with a minimum cross section area of 17-square inches attached to the steel posts.
Painted with a water based baked enamel paint.

Use steel posts with a minimum length of 4-feet, weighing 1.25 pounds per linear foot (± 8%) with projections to aid in fastening the fabric. Except when heavy clay soils are present on site, steel posts will have a metal soil stabilization plate welded near the bottom such that when the post is driven to the proper depth, the plate will be below the ground level for added stability.
The soil plates should have the following characteristics:
Be composed of minimum 15 gauge steel.
Have a minimum cross section area of 17-square inches.

Geotextile Filter Fabric
Filter fabric is:
Composed of fibers consisting of long chain synthetic polymers composed of at least 85% by weight of polyolefins, polyesters, or polyamides. Formed into a network such that the filaments or yarns retain dimensional stability relative to each other. Free of any treatment or coating which might adversely affect its physical properties after installation. Free of defects or flaws that significantly affect its physical and/or filtering properties. Cut to a minimum width of 36 inches.

Use only fabric appearing on SCDOT Approval Sheet #34 meeting the requirements of the most current edition of the SCDOT Standard Specifications for Highway Construction.

Installation
Excavate a trench approximately 6-inches wide and 6-inches deep when placing fabric by hand. Place 12-inches of geotextile fabric into the 6-inch deep trench, extending the remaining 6-inches towards the upslope side of the trench. Backfill the trench with soil or gravel and compact. Bury 12-inches of fabric into the ground when pneumatically installing silt fence with a slicing method. Purchase fabric in continuous rolls and cut to the length of the barrier to avoid joints. When joints are necessary, wrap the fabric together at a support post with both ends fastened to the post, with a 6-inch minimum overlap. Install posts to a minimum depth of 24-inches. Install posts a minimum of 1- to 2- inches above the fabric, with no more than 3-feet of the post above the ground. Space posts to maximum 6-foot centers. Attach fabric to wood posts using staples made of heavy-duty wire at least 1 3/4-inch long, spaced a maximum of 6-inches apart. Staple a 2-inch wide lath over the filter fabric to securely fasten it to the upslope side of wooden posts. Attach fabric to the steel posts using heavy-duty plastic ties that are evenly spaced and placed in a manner to prevent sagging or tearing of the fabric. In coil cases, ties should be affixed in no less than 4 places. Install the fabric a minimum of 24-inches above the ground. When necessary, the height of the fence above ground may be greater than 24-inches. In tidal areas, extra silt fence height may be required. The post height will be twice the exposed post height. Post spacing will remain the same and extra height fabric will be 4-, 5-, or 6-foot tall. Locate silt fence checks every 100 feet maximum and at low points. Install the fence perpendicular to the direction of flow and place the fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.

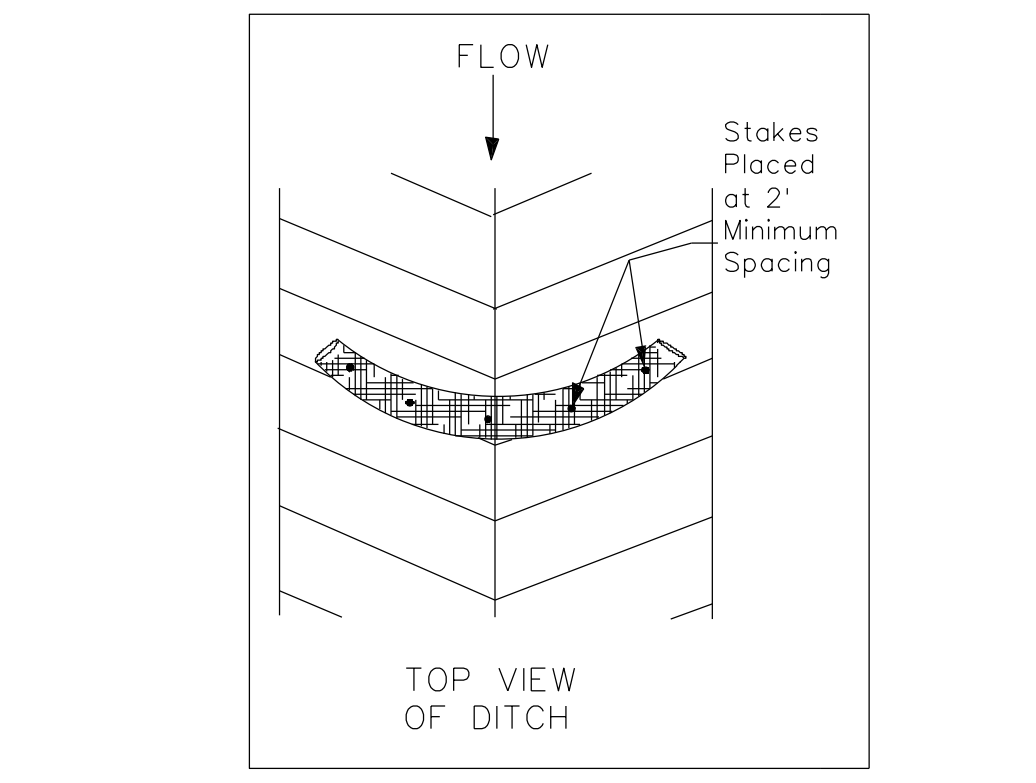
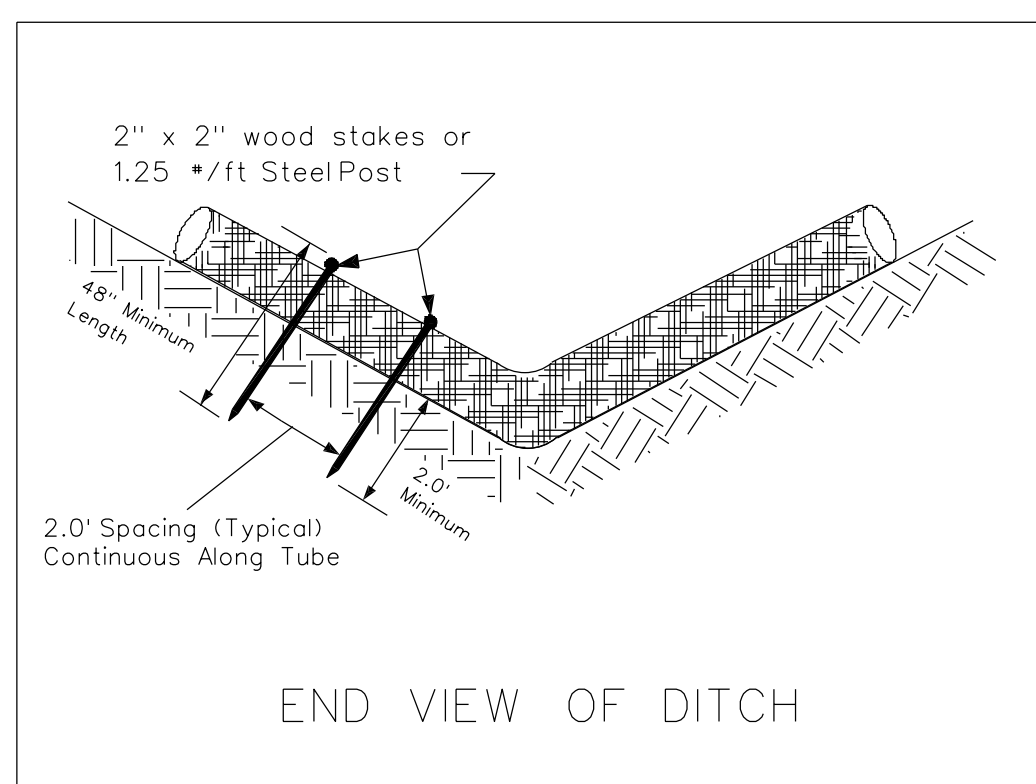
Inspection and Maintenance
Inspect every seven calendar days and within 24-hours after each rainfall event that produces 3/4-inches or more of precipitation. Check for sediment buildup and fence integrity. Check where runoff has eroded a channel beneath the fence, or where the fence has sagged or collapsed by fence overlapping.
If the fence fabric tears, begins to decompose, or in any way becomes ineffective, replace the section of fence immediately.
Remove sediment accumulated along the fence when it reaches 1/3 the height of the fence, especially if heavy rains are expected.
Remove trapped sediment from the site or stabilize it on site.
Remove silt fence within 30 days after final stabilization is achieved or after temporary best management practices (BMPs) are no longer needed.
Permanently stabilize disturbed areas resulting from fence removal.

South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03

APPROVED BY: _____ SOURCE: _____ DATE: AUGUST, 2005



SEDIMENT TUBE

Description
Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber or hardwood mulch. Straw, pine needle and leaf mulch-filled sediment tubes are not permitted under this specification.

When and Where to Use It
Install sediment tubes along contours, in drainage conveyance swales, and around inlets to help reduce the effects of soil erosion by energy dissipation and retain sediment.

Materials
Sediment tubes for ditch checks and Type A Inlet Structure Filters exhibit the following properties:
Produced by a Manufacturer experienced in sediment tube manufacturing.
Composed of compacted geotextiles, curled excelsior wood, natural coconut fibers, hardwood mulch or a mix of these materials enclosed by a flexible netting material.
Straw, straw fiber, straw bales, pine needles and leaf mulch are not allowed under this specification.
Utilizes outer netting that consists of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable materials. Diameter ranging from 18-inches to 24-inches.

Installation:
Install over bare soil, mulched areas or erosion control blankets.
Be composed of geotextiles, curled excelsior wood, natural coconut fiber or hardwood mulch enclosed by a flexible netting material. Straw, straw fiber, straw bales, pine needles and leaf mulch are not allowed.

The minimum diameter should be 18 inches.
Sediment tubes should be staked using wooden stakes (2-inch x 2-inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) a minimum of 48-inches in length placed on 2-foot centers.

Stakes should be intertwined with the outer mesh on the downstream side and driven in the ground to a minimum depth of 1.5 feet leaving less than 1 foot of stake exposed above the sediment tube. Always refer to the Manufacturer's recommendations for the staking detail.
Install all sediment tubes insuring that no gaps exist between the soil and the bottom of the sediment tube. The ends of adjacent sediment tubes should be lapped 6-inch to prevent flow and sediment from passing through the field joint. In no situations should sediment tubes be stacked on top of one another.

Construct a trench that is 20% of the tube diameter to install the tube in. Avoid damage to sediment tubes while installing them. If the sediment tube becomes damaged during installation, a stake should be placed on both sides of the damaged area terminating the tube segment and a new tube segment should be installed. Should be installed in swales or drainage ditches perpendicular to the flow of water. Sediment tubes should continue up the side slopes a minimum of 1 foot above the design flow depth. Sediment tubes should be spaced according to the following table.

| SEDIMENT TUBE SPACING | |
|-----------------------|-------------------------------|
| SLOPE | MAXIMUM SEDIMENT TUBE SPACING |
| LESS THAN 2% | 150-FEET |
| 2% | 100-FEET |
| 3% | 75-FEET |
| 4% | 50-FEET |
| 5% | 40-FEET |
| 6% | 30-FEET |
| GREATER THAN 6% | 25-FEET |

SEDIMENT TUBE

Sediment tube length selected should minimize the number of sediment tubes needed to span the width of the drainage conveyance. If the ditch check length (perpendicular to the water flow) is 15 feet, then one 15 foot sediment tube is preferred compared to two overlapping 10 foot sediment tubes.

Sediment tubes for ditch checks should remain in place until fully established vegetation and root systems have completely developed and can survive on their own.

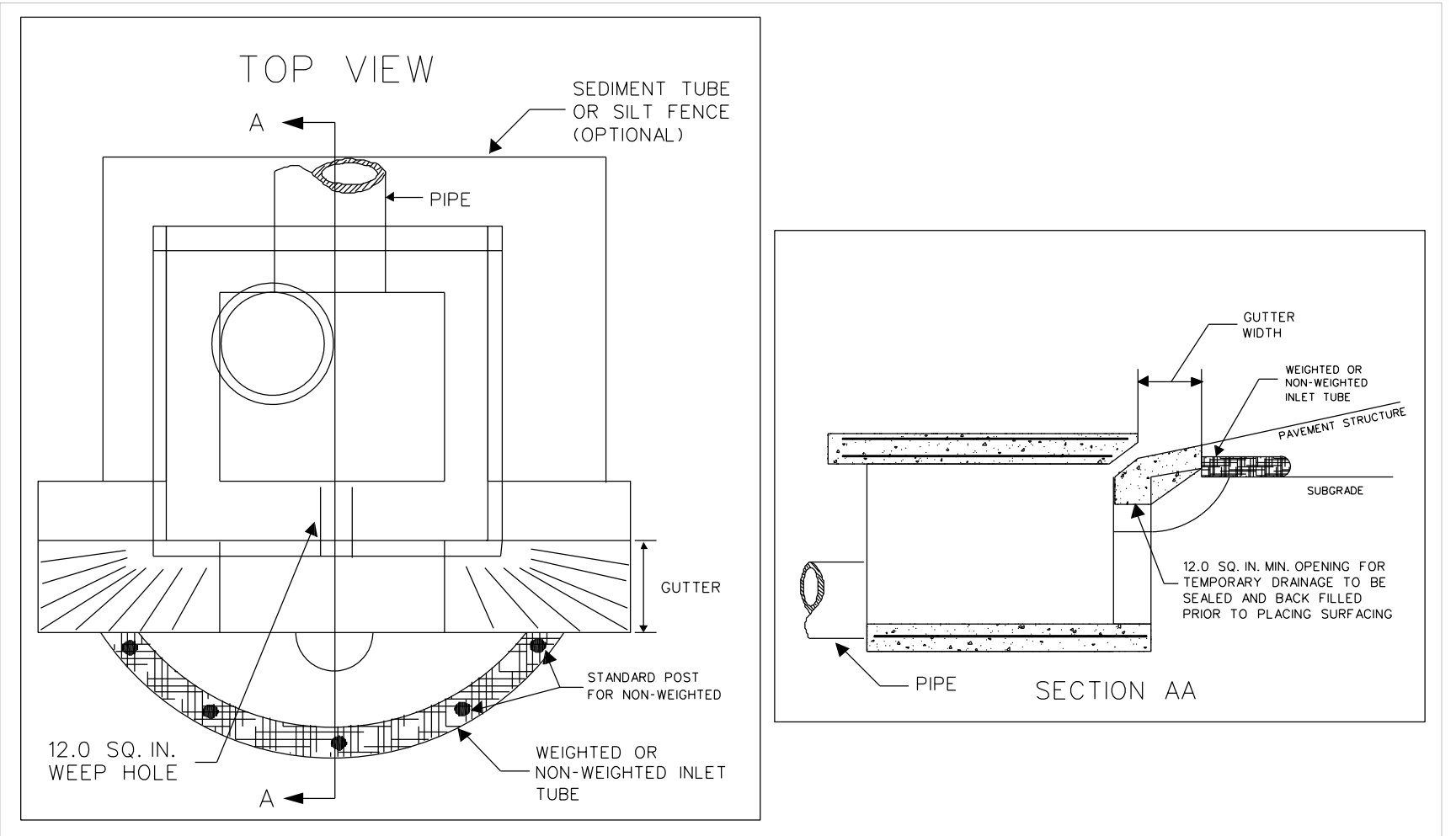
Inspection and Maintenance:
Check dams should be inspected every 7 calendar days and within 24-hours after each storm that produces 3/4-inches or more of rain to ensure continued effectiveness.
Large debris, trash, and leaves should be removed.
If erosion causes the edges to fall to a height equal to or below the height of the center, repairs should be made immediately.
Remove accumulated sediment from the upstream side of the sediment tube when the sediment has reached a height of approximately one-third of the exposed height of the tube (measured at the center).
Accumulated sediment should be removed prior to removing sediment tubes.
Sediment Tube removal should be completed only after the contributing drainage area has been completely stabilized. Permanent vegetation should replace areas from which gravel, stone, sediment tubes, or other materials have been removed.

South Carolina Department of Health and Environmental Control

SEDIMENT TUBE

STANDARD DRAWING NO. SC-05

APPROVED BY: _____ SOURCE: _____ DATE: AUGUST, 2005



Type F Inlet Tubes

Materials
Use inlet tubes that exhibit the following properties:
Produced by a Manufacturer experienced in sediment tube manufacturing.
Composed of compacted geotextiles, curled excelsior wood, natural coconut fibers or hardwood mulch or a mix of these materials enclosed by a flexible netting material.
Do not use straw, straw fiber, straw bales, pine needles or leaf mulch under this specification.
Utilize an outer netting that consists of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable materials. Curled wood excelsior fiber, or natural coconut fiber rolled erosion control products (RECP) rolled up to create an inlet tube device are not allowed under this specification.

Weighted Inlet Tubes
Weighted inlet tubes are sediment tubes capable of staying in place without external stabilization measures and may have a weighted inner core or other weighted mechanism to keep them in place.

Materials
Applicable Type F weighted inlet tubes may be selected from the SCDOT approved products list.

Installation
Install weighted inlet tubes lying flat on the ground, with no gaps between the underlying surface and the inlet tube. Never stack weighted inlet tubes on top of one another.

Do not completely block inlets with weighted inlet tubes.

Install weighted inlet tubes in such a manner that all overflow or overtopping water has the ability to enter the inlet unobstructed.

To avoid possible flooding, two or three concrete cinder blocks may be placed between the weighted inlet tubes and the inlet.

South Carolina Department of Health and Environmental Control

TYPE F INLET TUBES

STANDARD DRAWING NO. SC-11 Page 1 of 1

APPROVED BY: _____ SOURCE: _____ DATE: AUGUST, 2005

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| REVISION | BY | DATE |
| | | |

GRAND STRAND WATER & SEWER AUTHORITY

166 JACKSON BLUFF RD.
P.O. BOX 2368
CONWAY, SC 29526-2368

(803) 343-3400 FAX: (803) 343-4641
E-MAIL: GSWSA@GSA.COM

OLE MAPLE ST
- Ext. 1 Rural Water Project #634-60 / #W101-20 -

ALLSBROOK RD
- Ext. 1 Rural Water Project #634-61 / #W108-20 -
- Ext. 1 Rural Sewer Project #690-59 / #S110-20 -
(off US Hwy 701 North near Allsbrook)

Professional Engineer Seal: JASON L. POSTON, No. 26566, LICENSED PROFESSIONAL ENGINEER, STATE OF SOUTH CAROLINA

DATE: May 2020 A.D.
SCALE: NTS
FILENAME: design - Allsbrook Rd Ext 1 RW108-20.dwg
4 Ext 1 RS110-20 and Ole Maple St Ext 1 RW101-20.dwg

DESIGNED BY: Ray Thompkins
CHECKED BY: Jason L. Poston
APPROVED BY: _____

JASON L. POSTON, PE #26566

SHEET **5** OF 5