

WEST MAIN STREET SIDEWALK IMPROVEMENTS PULASKI, VIRGINIA

VDOT PROJ#: EN20-125-133/EN20-125-134

UPC #: 117993/117996

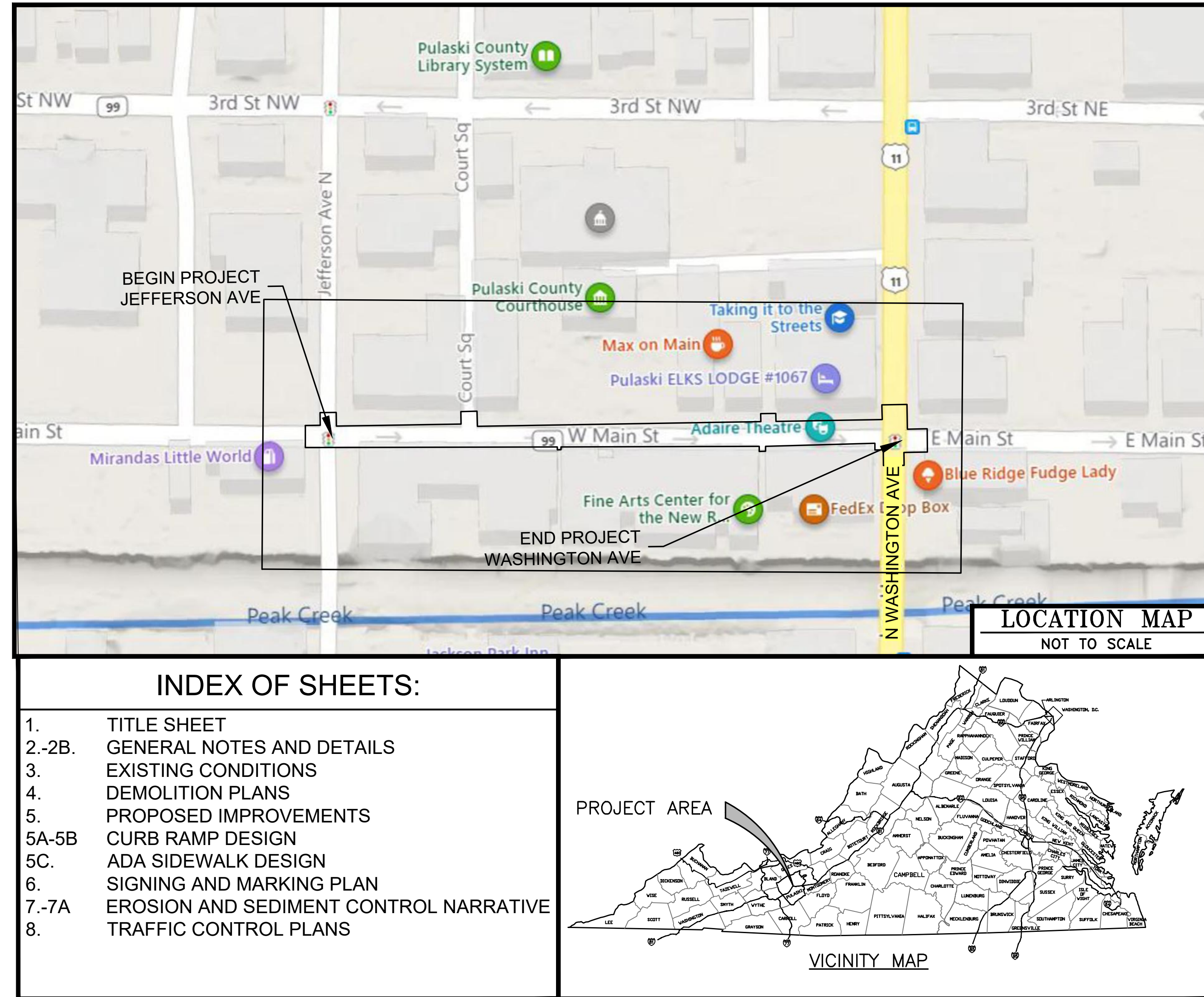
FED #: TAP-5125(129) / TAP-5125(128)

UPC#	FED PROJECT NUMBER	VDOT PROJECT NUMBER
117993	TAP-5125(129)	EN20-125-133
117996	TAP-5125(128)	EN20-125-134

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA				
	WEST MAIN STREET Minor Arterial	NORTH WASHINGTON AVENUE Other Principal Arterial		JEFFERSON AVENUE Unclassified Local Road
	Fr: Jefferson Ave To: Washington Ave	Fr: Main St To: 5th St	Fr: 6th St To: Main St	Fr: 1st St To: 3rd St
ADT	900	3200	3400	n/a
DHV	81	352	340	n/a
D (%) (design hour)	91%	64%	62%	n/a
T (%) (design hour)	%1.3	1.4%	1.3%	n/a
V (MPH)	25 MPH	25 MPH	25 MPH	25 MPH

PROJECT MANAGER
 SURVEYED BY, DATE H&B SURVEYING & MAPPING, LLC., 05-15-2022
 DESIGN BY J. MICHAEL JOHNSON, PE
 SUBSURFACE UTILITY BY, DATE H&B SURVEYING & MAPPING, LLC., 05-15-2022

LEGEND		
EXISTING	ITEM	PROPOSED
---	WATER LINE	N/A
---	SANITARY SEWER	N/A
====	STORM DRAIN	N/A
---	GAS LINE	N/A
---ugt---	U/G TELEPHONE	N/A
---uge---	U/G ELECTRIC	N/A
---ohp---	O/H POWER	N/A
---	RIGHT-OF-WAY LINE	---
---	PROPERTY LINE	N/A
---	CONTOUR LINE - INDEX	N/A
---	CONTOUR LINE - INTERMEDIATE	N/A
76.9 X	SPOT ELEVATION	+ 83.5
△	HORIZONTAL CONTROL	△
●wm	WATER METER VALVE	N/A
○	FIRE HYDRANT	N/A
⊙	SANITARY SEWER MANHOLE	N/A
⊙	STORM MANHOLE	N/A
□	DROP INLET	N/A
□	HANDICAP SPACE	□
N/A	HANDICAP RAMP	□
⊕	ELECTRIC BOX	N/A
⊕	ELECTRIC MANHOLE	N/A
⊕	TELEPHONE MANHOLE	N/A
⊕	POWER POLE	N/A
---	GUY WIRE	N/A
---	SIGN	---
---	LIGHT POLE	---
---	FENCE POST	N/A
○	DECIDUOUS SHRUB	○
○	DECIDUOUS TREE	○
○	EVERGREEN SHRUB	○
○	EVERGREEN TREE	○
---	PROPERTY CORNER	N/A
---	GRAVEL ROAD	N/A
---	ASPHALT PAVEMENT	---
N/A	CONCRETE	---
N/A	VDOT STD TRUNCATED DOMES	---
N/A		---
N/A		---
N/A		---



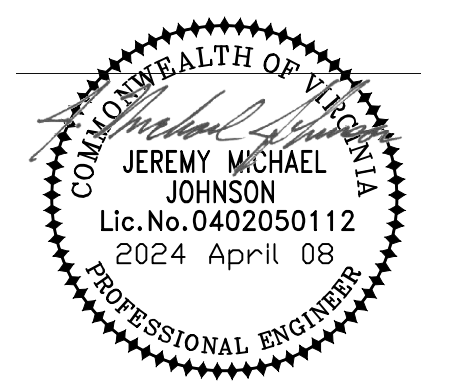
TIER 1 PROJECT	
LOCALLY ADMINISTERED PROJECTS	
TOWN OF PULASKI	
RECOMMENDED FOR APPROVAL FOR CONSTRUCTION	
DATE	TITLE OF POSITION

CONTACT THE TOWN ENVIRONMENTAL REVIEWER, THE TOWN CONSTRUCTION COORDINATOR, AND MISS UTILITY 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES.

Town Certification:
By signature of a person of responsible charge from the locality, the locality shall certify on the title sheets that the plans are complete, constructible, and biddable and accounted for, and all permits necessary for construction have been obtained.

Signature _____ Date _____

Title _____



THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE GENERAL NOTES.

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL (REV 2.1), AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, IS FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES IS ILLEGAL AND ENFORCED TO THE FULL EXTEND OF THE LAW.

Abbreviations:

Bl: Base Line	P.B.: Plat Book
Bnt: Bent	Pg.: Page
C&P: Chesapeake & Potomac Telephone	Pks: PK Traverse Nail Set
Cl: Center Line	PP: Power Pole
Cmp: Corrugated Metal Pipe	P.T.: Pressure Treated
CY: Cubic Yards	Pvc: Polyvinylchloride Pipe
D.B.: Deed Book	Rcp: Reinforced Concrete Pipe
Dip: Ductile Iron Pipe	Ssmh: Sanitary Sewer Manhole
D.N.D Do Not Disturb	Stmh: Storm Manhole
Fh: Fire Hydrant	Std: Storm Drop Inlet
Fnd: Found	Stgr: Storm Grate
GTD: Grade to Drain	S.W.: Sidewalk
Lp: Light Pole	Trs: Traverse Nail Set
MB: Mail Box	Trs: Traverse Rod Set
Ngas: Natural Gas	Wm: Water Meter
O.C.: On Center	Wv: Water Valve

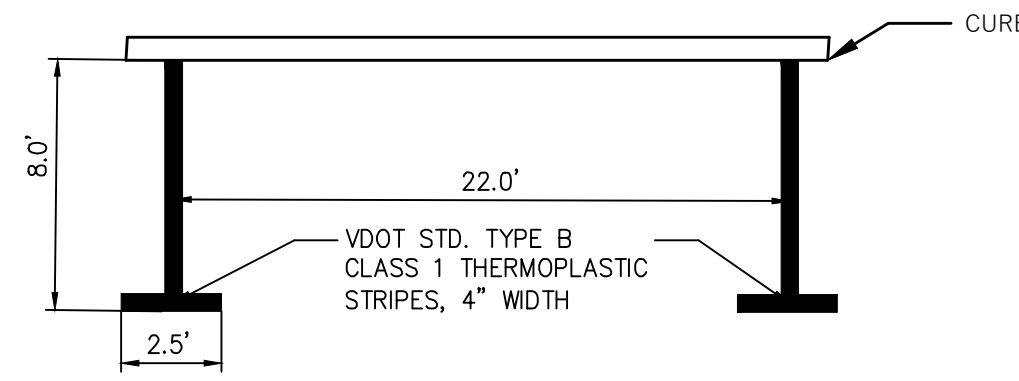
GENERAL NOTES

- The following outside sources, under contract with the Town of Pulaski, have provided information on this project.
Roadway Design - Hurt & Proffitt, Inc.
Survey - H&B Surveying and Mapping, LLC
- The Official Electronic PDF Version of the plans will override the paper copies or prints of specific layers. Portions of this plan assembly have been CADD generated. To assist in the preparation of the bid and construction of the project, AutoCAD format (.dwg) files will be made available to the prime contractor during bids and after award of the contract.
- All electronic plan assemblies will include the construction plans in two formats:
PDF files and AutoCAD format (.dwg) files. Only the PDF files will be considered as part of the official plan assembly. The AutoCAD format (.dwg) files are furnished only as information for the contractor. These plans are developed in layers (levels) to aid in readability. However, the construction items may or may not be in the proper layering scheme as described in the VDOT CADD Manual. The AutoCAD files will only match the scanned files if all required levels are turned on. An AutoCAD Software license is required to be able to read these files.
- The grade line denotes top of finished grade unless shown otherwise on typical sections or plans.
- The cost of removal of all existing items located in the area to be graded/disturbed shall be included in the Unit Price for other items of Work. The Contractor Shall identify the disposal site for all planned demolition items at the pre-construction conference.
- All existing underground utility locations as shown on these plans are approximate and do not represent all underground utilities or service lines. Prior to excavation, the contractor shall contact the pertinent utility companies and/or utility locating services to have all underground utilities located and marked.
- All water meters, water valves, manholes, cleanouts, gate valves, etc. affected by grading procedures shall be adjusted to match finished grade. Curb inlets shall be installed to match linear grade of existing or proposed back of curb.
- Existing concrete or pavement structures to be removed shall be saw cut to provide a clean, straight edge. Existing concrete shall be saw cut at existing control joints.
- Items disturbed or damaged during construction that are not specifically noted to be replaced shall be restored to pre-construction conditions at the contractor's expense. All property corners and R/W monuments that are disturbed shall be reset by Contractors surveyor. All signs removed during construction are to be replaced as shown on plans and in accordance with VDOT and MUTCD Standards.
- Smooth surface transitions are required.
- All sidewalk cross slopes shall not exceed 2%.
- Storm sewer grades and lengths shown are based on horizontal distance between center line of structures.
- Contractor shall maintain pedestrian access to all homes and businesses during construction. See Temporary Traffic Control Plan.
- The contractor shall continuously keep up to date with property restoration, seeding, and compaction testing.
- Contractor shall be responsible for safety on the site. Contractor shall install any barriers, temporary fencing, flashers, lighting or any other means necessary to protect unauthorized personnel from hazardous areas.
- The Contractor shall be responsible for Maintenance of Traffic and Traffic Control in accordance with the latest editions of the Manual of Uniform Traffic Control Devices and the Virginia Work Area Protection Manual. Contractor shall submit Maintenance of Traffic Plan to be reviewed and approved by the Engineer before start of construction.
- Proposed spot elevations on curbing reference the back/top of curb elevation. Unless otherwise noted.
- Curb radii are measured to the face of curb.
- Storm structures shall be modified as necessary to accommodate inverts of existing and proposed storm lines. New structure top elevations shall match the back/top of curb elevation and linear grade. All curbing, sidewalk & pavement not to be demolished that is damaged during construction shall be replaced at the Contractor's expense.
- Contractor shall be responsible for providing positive drainage to existing and proposed storm systems during all phases of the project. Contractor shall provide positive drainage in all aspects of the project. All areas of ponding shall be adjusted by the contractor at no additional cost to the Owner
- Contractor shall relocate or adjust existing utilities and appurtenances or coordinate their relocation as necessary to accommodate the proposed construction. Some utilities to be relocated or adjusted may not be shown on the plans.
- If, during construction, the stormwater invert elevations, existing pipe sizes or pipe types shown on the plans are found to differ significantly from the elevations and pipe sizes/types encountered in the field the Contractor will confer with the Engineer before installing the proposed stormwater facilities.
- When 6" curb & gutter is specified on a radius (such as at an intersection), the Town may approve a decrease in the cross slope of the gutter to facilitate proper drainage. Radial curb/gutter is considered the same item as standard curb/gutter & gutter.
- All excess excavated material will be disposed of legally off site and at contractor's expense. Contractor to obtain site, and E&S permit. All excavation is unclassified and no additional payment will be made for rock or unsuitable material encountered.
- The contractor shall verify all existing and proposed inverts prior to beginning construction.
- Color of truncated domes shall be determined by Owner. Surface mounted or formed truncated domes shall not be used.
- All pavement removed during construction shall be replaced in accordance with the standard details on this sheet.
- No paved areas are to be disturbed during construction unless directed by the Town or called for on the plans.
- Construction stakeout and surveying for all construction on this project shall be performed by the contractor.
- The contractor shall restore all pavement, sidewalks, curbing, gutter, benches, trash cans, fences, poles, retaining walls, culverts, utilities or other such property, landscaping and surface structures removed or disturbed as a part of the work to a condition equal to that before the work began.
- Permits, fees, and licenses shall be secured and paid for by the contractor, including disposal charges as required.
- Contractor shall saw-cut all joints where existing curbing, pavement, and sidewalk is to be demolished and new construction joins the existing.
- Property lines and right of way lines shown on the plans are from tax map records and shall be considered approximate for the purpose of securing general easement agreements.
- Contractor shall comply with 559.1-406, ET Sec. of the Code of Virginia (Overhead High Voltage Lines Safety Act).
- Contractor shall maintain emergency service and delivery vehicle access to the surrounding area.
- Any discrepancies found between the drawings and site conditions or any inconsistencies of ambiguities in the drawings shall be immediately reported to the Engineer.
- Contractor shall comply with the most recent OSHA standards.
- Contractor shall contact Town of Pulaski Traffic Engineering Section at least 72 hours prior to beginning any work within 1,000' of a signalized intersection.
- Utilities shown hereon are per above ground evidence corresponding with miss utility designation. Contractor shall verify utilities before excavation.
- Contractor shall install erosion and sediment control measures prior to commencing land disturbing activities.
- Where improvements are installed near existing pavement, the existing pavement shall be saw cut 4' from existing edge and primed with VDOT approved primer prior to placement of improvements. Pavement patch shall be installed where applicable.
- Disturbed areas not to be paved shall be topsoiled, seeded, and mulched according to the VESCH standards.
- Testing shall be the responsibility of the Contractor, shall be performed by an approved independent testing laboratory qualified to perform such tests, and shall be considered incidental to other items of Work.
- Blasting and burning will not be allowed.
- Nothing shall be installed within four (4) feet of any water lines, vaults, meters and/or fire line taps which would prevent the installation of any required RP's and/or RPDA's for backflow going forward or impact any which are already in place.
- Service connections shall not be utilized for demolition, grading, construction/renovation, and/or landscaping purposes, until the appropriate RP's (or RPDA's) for backflow have been installed. This includes temporary as well as permanent connections.
- If any backflow prevention assemblies are found during demolition or while other work is being performed for this project, they shall not be removed, relocated, or replaced without advance authorization from the Dept. of Water Resources.
- If during demolition or construction, any discrepancies are noted with regard to any public water service connection, the Dept. of Water Resources shall be notified. This includes, but is not limited to; connections which need to be added, abandoned, changed, or relocated.
- The Dept. of Water Resources shall be contacted no less than 2 business days in advance if any water or sewer relocation is needed. In addition, as built shall be provided for said relocations at the end of the project.

THE FOLLOWING FROM THE 2016 ROAD AND BRIDGE STANDARDS ARE MADE PART OF THESE PLANS BY REFERENCE:

- CG-2 - Curb
- CG-9 - Entrances
- CG-6 - Curb & Gutter
- CG-12 - Detectable Warning Strips
- ECl-1 - Electrical Conduit
- JB-S1 - Junction Box
- LF-1 - Light Pole Foundation
- PB-1 - Pipe Bedding and Backfill
- PM-2 - Pavement Markings
- PM-3 - Pavement Markings
- PM-5 - Pavement Markings
- STP-1 - Sign Post
- STP-2 - Sign Post

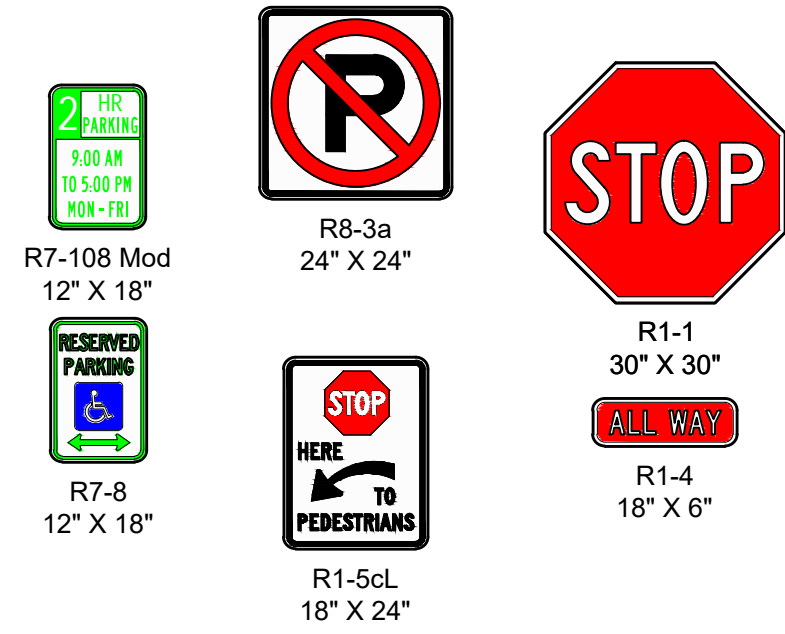
SIGNAGE DETAIL



NOTE:
TYPE B MARKING MATERIAL SHALL BE THERMOPLASTIC

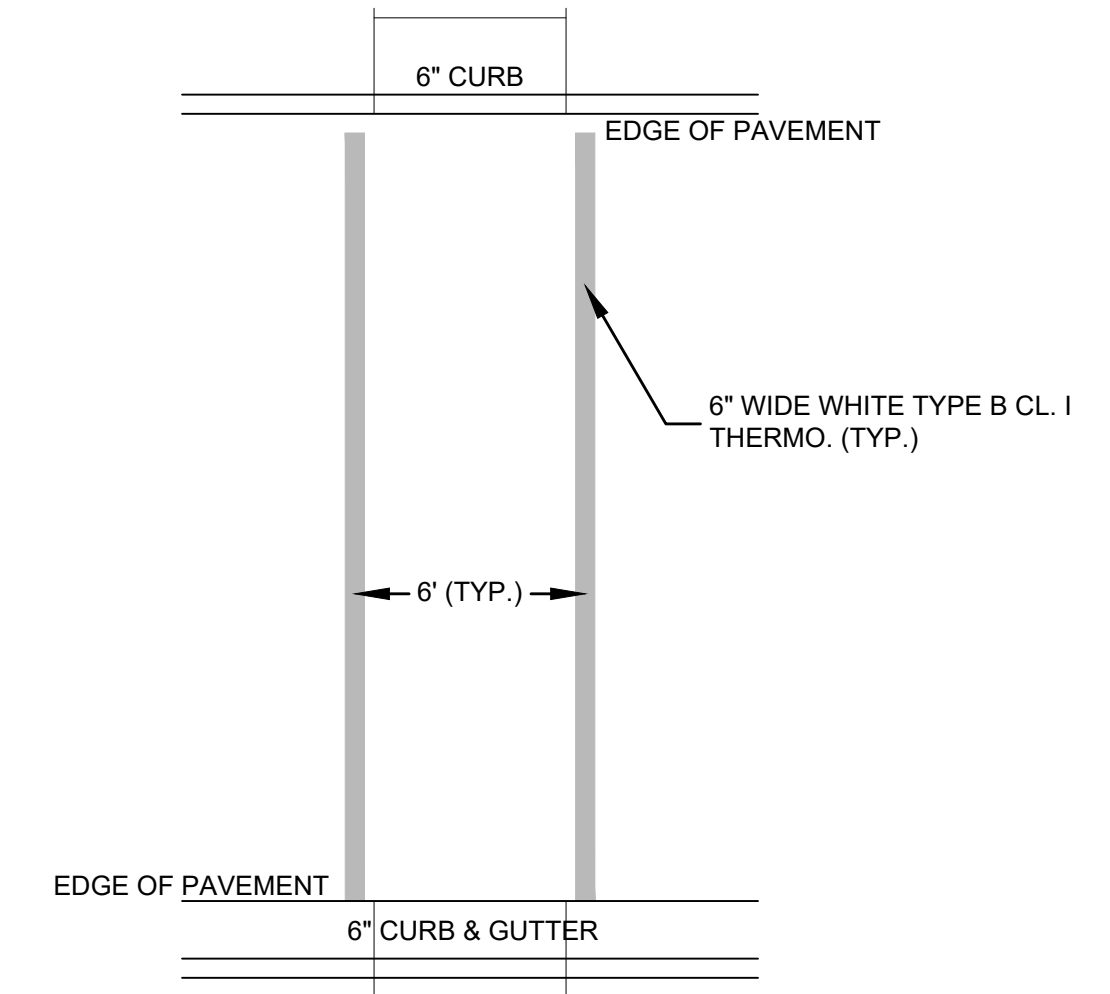
ALL PAVEMENT MARKINGS INSTALLATIONS MUST MEET VDOT ROAD & BRIDGE SPECIFICATIONS

PARKING SPACE DETAIL
NOT TO SCALE



- NOTES:
- ALL SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST ED., THE VIRGINIA SUPPLEMENT TO THE 2009 MUTCD, LATEST ED., THE STANDARD HIGHWAY SIGNS BOOK, LATEST ED., AND 2016 VDOT ROAD AND BRIDGE STANDARDS.
 - SIGNS SHALL BE MANUFACTURED TO PROVIDE A SMOOTH, SINGLE UNIT SURFACE.
 - SIGN PLACEMENT SHALL CONFORM TO SECTION 2 OF THE MUTCD
 - POST MATERIAL, TREATMENTS, AND INSTALLATION SHALL BE PER VDOT SPECIFICATIONS.
 - ALL EX. SIGNS WHICH ARE IN CONFLICT W/ THE WORK SHALL BE REMOVED AND REINSTALLED IN THE SAME CONDITION UNLESS OTHERWISE NOTED IN THE PLANS

CROSSWALK DETAIL



TYPICAL CROSSWALK DETAIL
Not To Scale

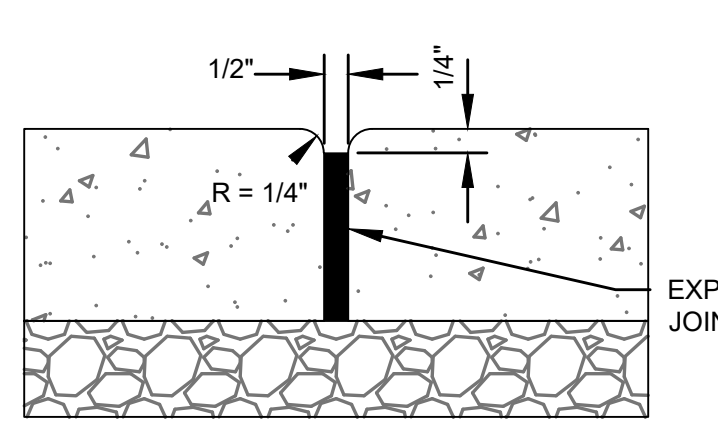
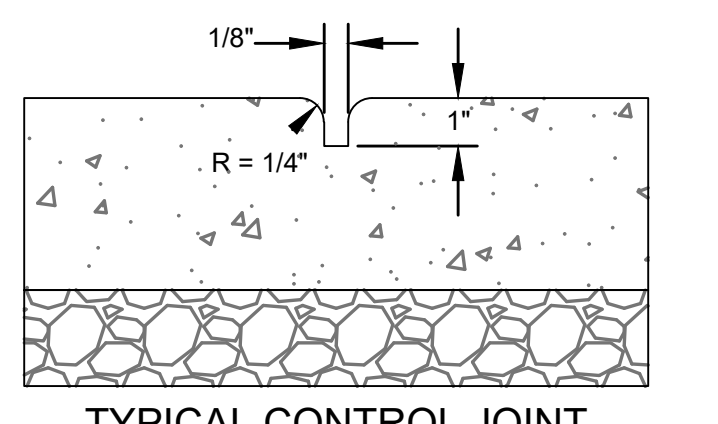
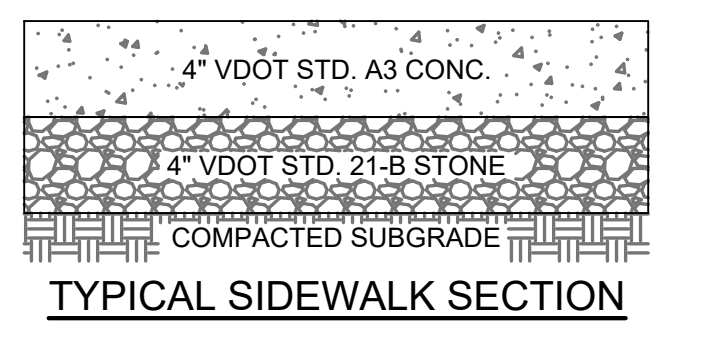
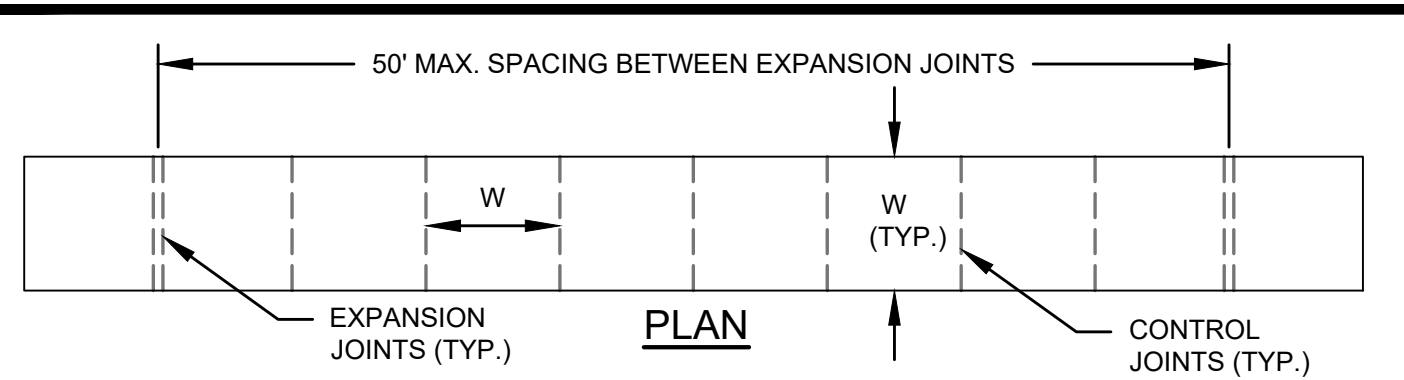
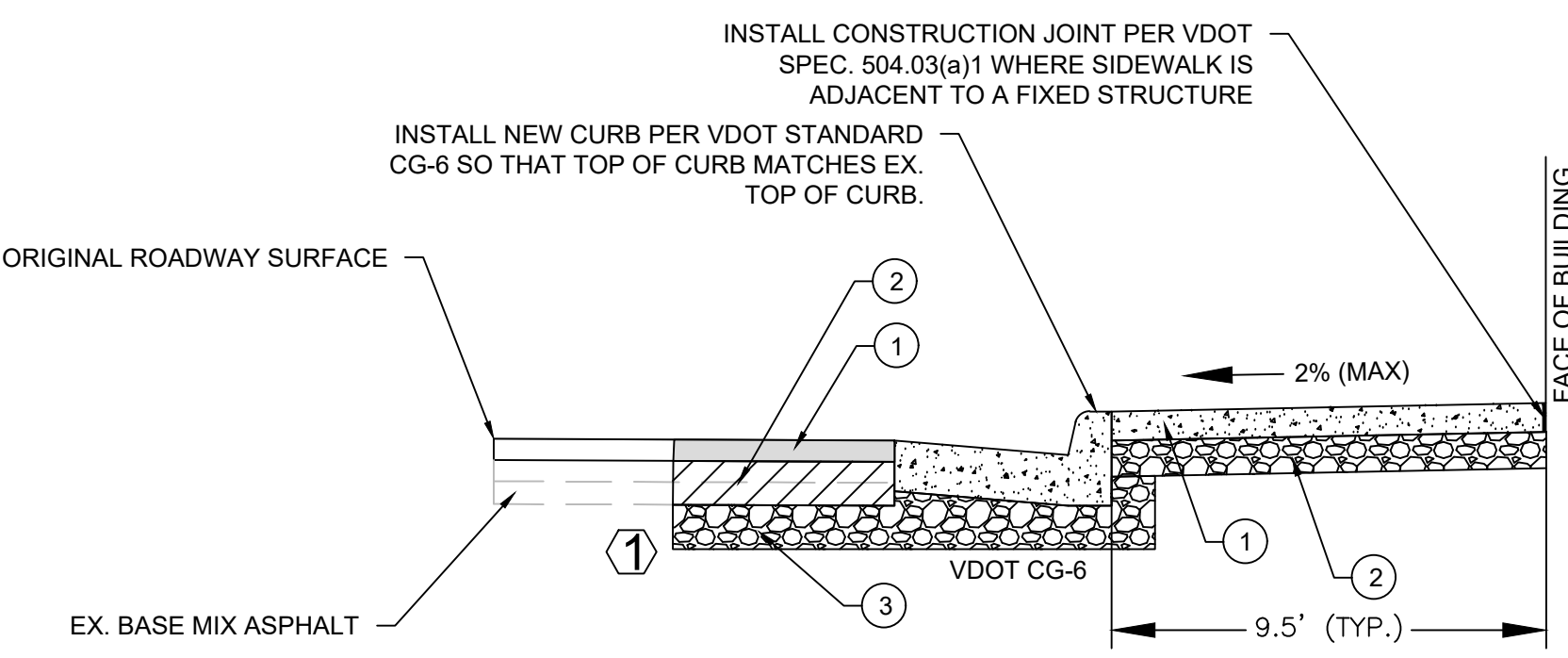
- NOTES:
- ALL PAVEMENT MARKINGS SHALL BE VDOT STD. TYPE B THERMOPLASTIC.
 - ALL CROSSWALKS SHALL INCLUDE 2" WIDE MILL AND OVERLAY (2" DEPTH). THIS OVERLAY SHALL INCLUDE PROPOSED STOP BARS AND CROSSWALK MARKINGS

TYPICAL PAVEMENT PATCH

- Saw cut exist. pavement 4' (typ.) wherever new construction ties into exist. pavement. Provided tack coat (CRS-1) along edges of existing asphalt pavement and new Curb prior to new asphalt paving. Saw cut edges shall be straight and even.

- SIDEWALK CONSTRUCTION:
- Surface: 4" A3 Concrete Sidewalk.
 - Subbase: 4" VDOT Aggregate Base Material Type 1, 21B Compacted to 95% Standard Proctor.
- MIN. PAVEMENT PATCH FOR CG-6 CONSTRUCTION:
- Surface: 2" Asphalt Concrete, Type SM-9.5A @ 117 lbs/SY PER INCH
 - Base: 4" Asphalt Concrete, Type BM-25.0
 - Subbase: 6" Graded Aggregate, Type 1, 21B.

- NOTE:
- Pavement patch or widening less than 1 foot shall be incidental to other items of work.



- NOTES:
- ALL CONCRETE SHALL BE VDOT STD. CLASS A3 WITH A 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
 - ALL CONCRETE SHALL BE INSTALLED PER VDOT STANDARDS AND SPECIFICATION 504.
 - SIDEWALK SHALL BE 5-TYP-WIDTH-44-IN-WITH ADA PASSING ZONES EVERY 25'
 - ALL SIDEWALK SHALL PROVIDE 2" SHOULDER (6:1 MAX. SLOPE) CONTROL JOINTS SHALL BE SPACED AT INTERVALS TO MATCH TYPICAL SIDEWALK WIDTH.
 - CONTRACTOR SHALL BACKFILL AND SEED BEHIND SIDEWALK TO PROVIDE POSITIVE DRAINAGE.
 - 4" CONCRETE SIDEWALK SHALL NOT BE USED FOR ENTRANCES. SEE VDOT STD. CG-9 AND VDOT STD. CG-11 FOR 7" REINFORCED CONCRETE ENTRANCES.



4" CONCRETE SIDEWALK

VA SW-4

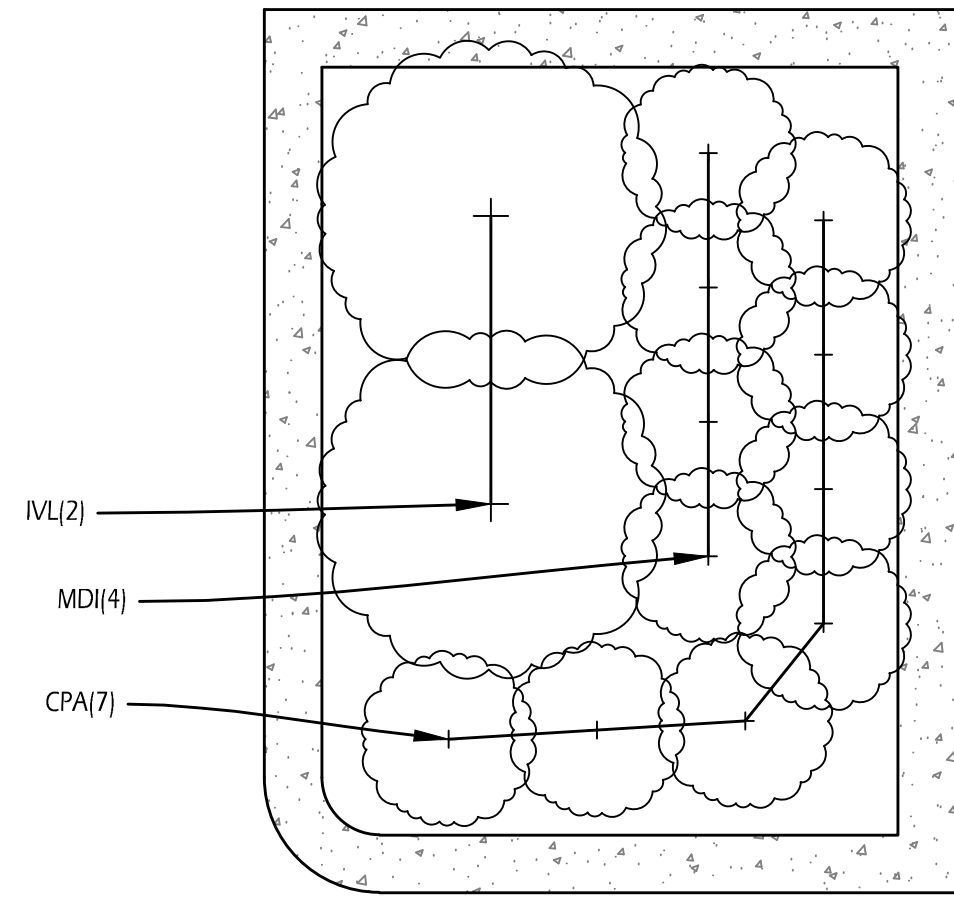
HURT & PROFFITT
1861 PRATT DRIVE, SUITE 1100
BLACKSBURG, VIRGINIA 24060
800.763.5596 TOLL FREE
540.552.5592 MAIN
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**WEST MAIN STREET
SIDEWALK IMPROVEMENTS
GENERAL NOTES**
PULASKI, VIRGINIA

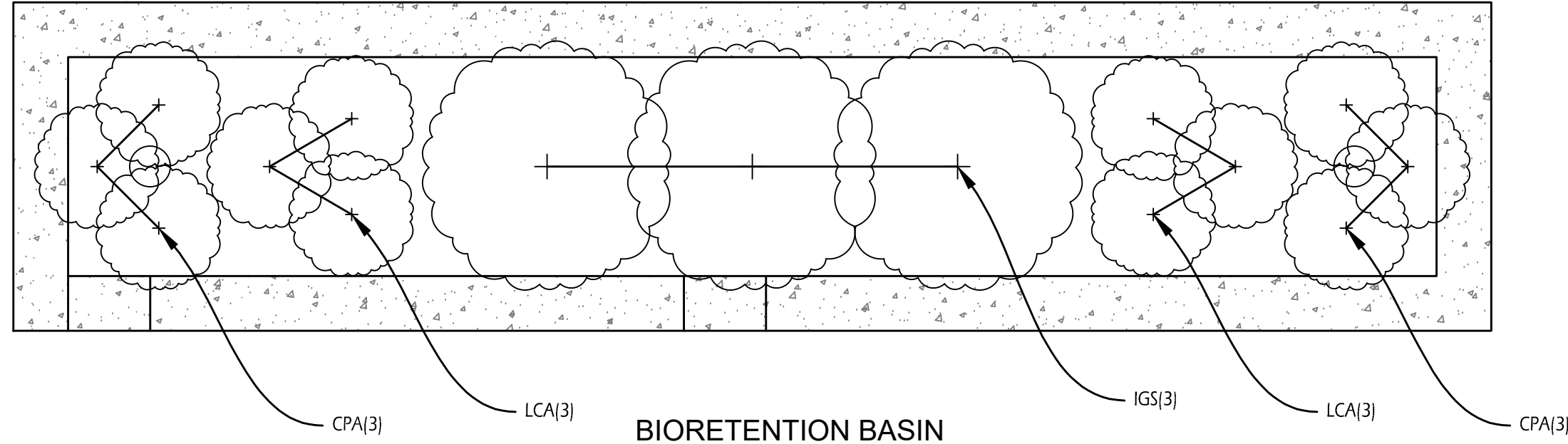
PROJECT NO. 20212161
LAT. 37° 25' 1.85" N
LONG. 80° 46' 52.44" W
DATE: 2024 April 08
DRAWN BY: AWM, TWH
CHECKED BY: JMJ



SHEET NO.
2



MIDBLOCK CROSSING
PLANTING LAYOUT (TYP.)
Not To Scale



BIORETENTION BASIN
PLANTING LAYOUT (TYP.)
Not To Scale

PLANT SCHEDULE

Key	Scientific Name	Common Name	Min. Size	Spacing	Count
CPA	<i>Caltha palustris</i>	marsh marigold	1 gal.	18 in.	52
IGS	<i>Ilex glabra 'SMNIGABI 7'</i>	Gem Box inkberry	3 gal.	30 in.	12
IVL	<i>Itea virginica 'Little Henry'</i>	Virginia Sweetspire	3 gal.	30 in.	8
LCA	<i>Lobelia cardinalis</i>	cardinal flower	1 gal.	18 in.	24
MDI	<i>Morinda citrifolia</i>	bee balm	1 gal.	18 in.	16
	<i>Oxydendrum Arborescens</i>	Sourwood	N/A		4

GENERAL LANDSCAPE NOTES:

- Contractor shall contact Miss Utility and verify the locations of underground utilities before excavating.
- See Plant Schedule for identification key. Plant Schedule count is provided for convenience only.
- Verify dimensions in the field and report discrepancies to the Engineer before setting plant materials.
- Contractor may vary the locations of plant materials slightly based on site conditions to achieve the design intent, and avoid conflicts with lighting and roadway signs.
- Contractor Shall store tree grates on site and notify Owner to select which grates shall be reinstalled prior to salvage.

SPECIFICATIONS: TREES, PLANTS & GROUNDCOVERS

PART 1 - GENERAL

1.01 WORK INCLUDED: Furnish and install all plant materials, seed, fertilizers, lime, mulch and fine grading, in strict accordance with this section and as shown on the drawings.

1.02 PROJECT DATA: Contractor shall furnish labels or other appropriate product data for landscape materials, including but not limited to: labels showing lime and fertilizer analysis; and labels from geotextile fabrics and similar materials. Grower's labels or tags shall remain on or with live plant materials until final project completion.

1.03 PROJECT CONDITIONS: Contractor shall contact Miss Utility and verify the locations of utilities before excavating.

1.04 TOPSOIL PREPARATION: If requested by the landscape architect, contractor shall have the topsoil analyzed by a qualified laboratory or county extension service for pH and nutrient levels, using a minimum of three samples per acre.

1.05 WARRANTY: Contractor shall maintain plantings until final project completion. Plant materials shall be warranted for a period of one year from final project completion.

PART 2 - PRODUCTS

2.01 PLANT MATERIALS: Plants shall be sound, healthy, vigorous plants with a fully developed form typical of the species/variety and shall be free from diseases, insects and defects. Plant materials shall conform to the "American Standard For Nursery Stock" of the American Nursery & Landscape Association, ANSI Z60.1-2004 and to VDOT Road & Bridge Specifications Section 244.

2.02 SOIL AMENDMENTS: Soil amendments shall be commercially prepared with a consistent texture, uniform in composition, dry, free-flowing, and granular. Peat moss shall be Sphagnum.

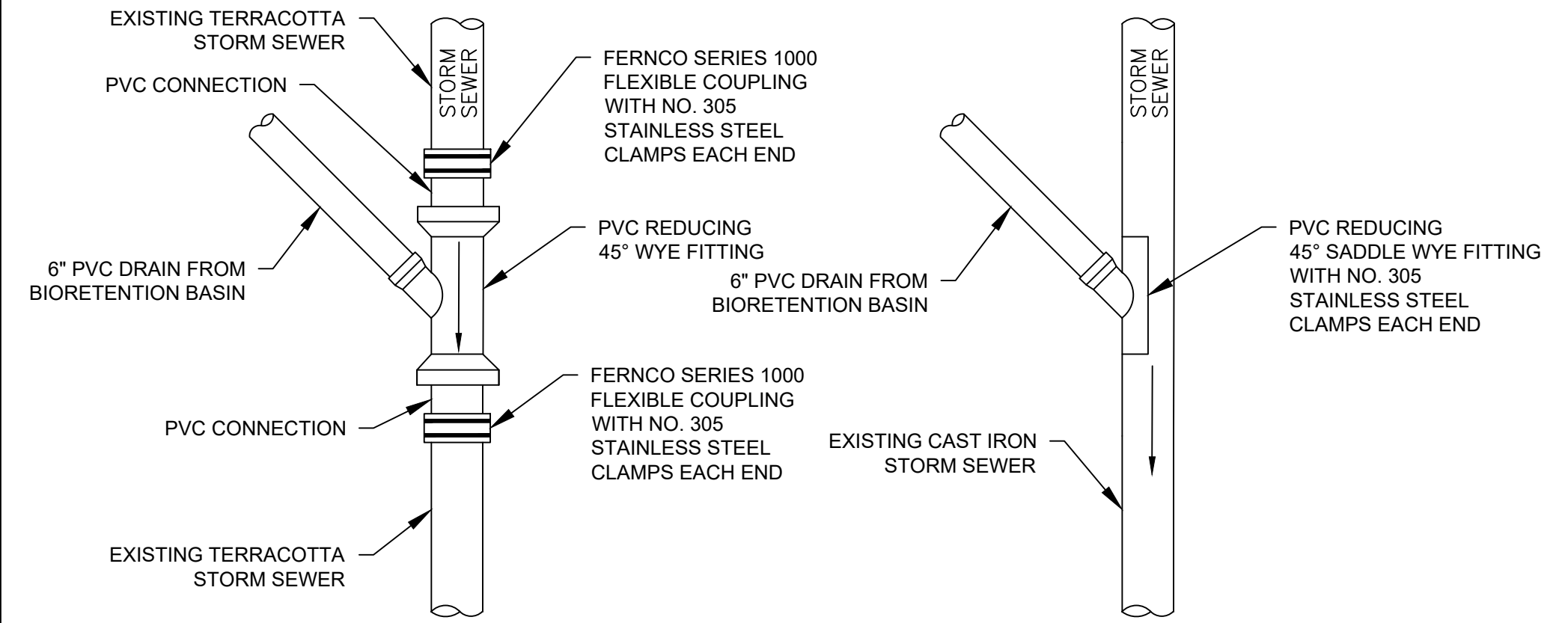
2.03 MULCH: Aged shredded bark mulch.

PART 3 - EXECUTION

3.01 PREPARATION: Prepare site before installing plant materials. In graded and denuded areas, place minimum 6 inches of topsoil to finished grade over scarified, uncompacted subgrade. Wherever necessary, remove or thoroughly kill existing vegetation before planting or mulching.

3.02 PLANT MATERIALS: Plant or install materials during normal planting seasons for each type of landscape work required. Installation of plant materials shall conform to VDOT "Road & Bridge Specifications" Section 244 unless otherwise noted.

3.03 MULCH: Mulch the planting beds and trees to a depth of 4 inches.



TYPICAL URBAN BIORETENTION BASIN STORM SEWER CONNECTIONS
Not To Scale

URBAN BIORETENTION BASIN NOTES:

1. ALL MATERIALS AND METHODS OF CONSTRUCTION FOR THE URBAN BIORETENTION FILTER SHALL CONFORM TO VA DEQ STORMWATER DESIGN SPECIFICATION NO. 9, LEVEL 1 DESIGN.

2. URBAN BIORETENTION FILTER SHALL BE CONSTRUCTED AFTER THE SITE WORK IS COMPLETE AND ALL UPSLOPE AREAS DRAINING TO THE FILTER HAVE BEEN STABILIZED. EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS SILT FENCE AROUND THE FILTER AND INLET PROTECTION AT THE OVERFLOW STRUCTURE, SHALL BE INSTALLED AND MAINTAINED IN ORDER TO PROTECT THE FILTER FROM PREMATURE CLOGGING AND FAILURE.

3. A RECORD SURVEY AND PHOTOGRAPHIC RECORD OF EACH FILTER LAYER IS REQUIRED AT THE TIME OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE ENGINEER AND THE TOWN OF PULASKI FOR INSPECTION DURING FILTER CONSTRUCTION. SEE SEQUENCE OF CONSTRUCTION BELOW.

4. BIORETENTION TURF GROUND COVER VEGETATION SHALL BE SOD GRASS AS ALLOWED BY VA DEQ STORMWATER DESIGN SPECIFICATION NO. 9.

5. BIORETENTION FILTER SHALL BE CONSTRUCTED ACCORDING TO THE FOLLOWING SEQUENCE. CONTRACTOR TO PROVIDE RECORD SURVEY OF THE INDICATED LAYERS PRIOR TO INSTALLATION OF THE NEXT LAYER. CONTRACTOR MAY BE REQUIRED TO REMOVE AN ALREADY INSTALLED LAYER IF SUCH LAYER IS INSTALLED PRIOR TO THE INSPECTION AND RECORD SURVEY OF THE PREVIOUS LAYER.

A. STABILIZE THE ENTIRE UPSTREAM CONTRIBUTING DRAINAGE AREA.
B. HOLD PRE-CONSTRUCTION MEETING WITH ENGINEER, CONTRACTOR, AND THE TOWN OF PULASKI.
C. INSTALL TEMPORARY SILT FENCE.
D. EXCAVATE MAIN BIORETENTION AREA TO DESIGN DEPTH AND DIMENSIONS. EXCAVATION EQUIPMENT SHALL NOT SIT IN BIORETENTION FOOTPRINT. **PERFORM RECORD SURVEY.**

E. INSTALL LINER WITH 6" OVERLAP ON SIDES, ANCHORED INTO GROUND ABOVE TOP ELEVATION OF OVERFLOW STRUCTURE.
F. PLACE 11" STONE/PEA GRAVEL LAYER, UNDERDRAIN, AND OVERFLOW STRUCTURE. **PERFORM RECORD SURVEY.**

G. PLACE APPROVED SOIL MEDIA IN 12" LIFTS. WAIT 3 DAYS AND CHECK FOR SETTLEMENT. ADD ADDITIONAL MEDIA AS NEEDED TO ACHIEVE DESIGN ELEVATION. **PERFORM RECORD SURVEY.**

H. INSTALL GROUND COVER AND MULCH. WATER FOR FIRST 2 MONTHS, IF NO RAIN.

1. CONDUCT FINAL CONSTRUCTION INSPECTION WITH ENGINEER, CONTRACTOR, AND THE TOWN OF PULASKI.

6. AFTER CONSTRUCTION IS COMPLETE, CONTRACTOR SHALL PROVIDE ENGINEER AND THE TOWN OF PULASKI WITH A BMP AS-BUILT CERTIFICATION BASED ON THE RECORD SURVEYS AND INSTALLATION OBSERVATIONS FOR EACH STORMWATER MANAGEMENT FACILITY, SIGNED BY A LICENSED PROFESSIONAL IN VIRGINIA. CONTRACTOR SHALL COORDINATE WITH LICENSED PROFESSIONAL THROUGHOUT BMP CONSTRUCTION, INCLUDING PRE-CONSTRUCTION MEETING AND RECORD SURVEYS.

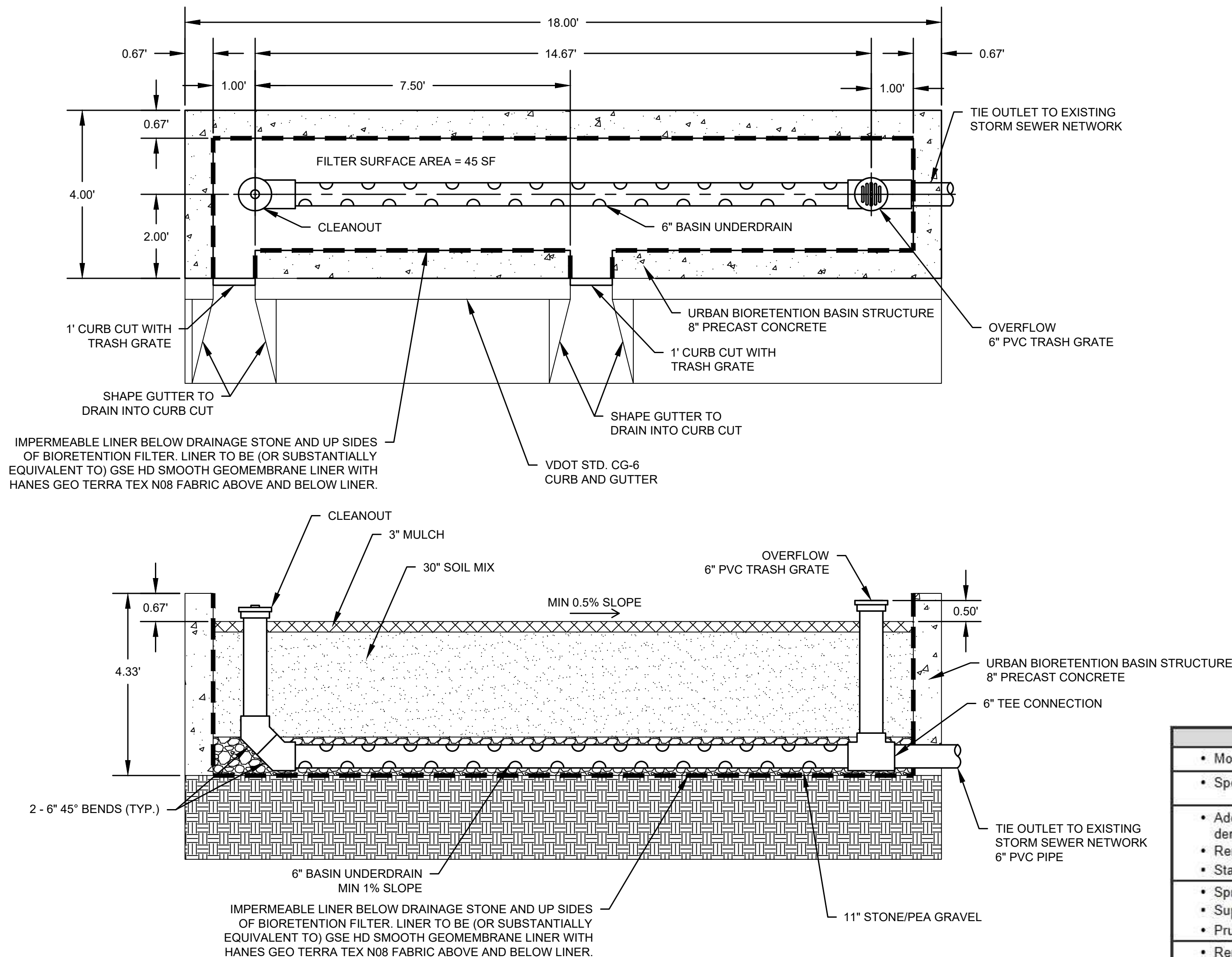
7. POST-CONSTRUCTION MAINTENANCE FOR URBAN BIORETENTION FILTERS SHALL BE IN ACCORDANCE WITH SECTION 9 OF THE VA DEQ STORMWATER DESIGN SPECIFICATION NO. 9. SEE TABLE 9.7 INCLUDED ON THIS SHEET. PULASKI COUNT SHALL BE RESPONSIBLE FOR POST-CONSTRUCTION MAINTENANCE.

Table 9.7. Suggested Annual Maintenance Activities for Bioretention

Maintenance Tasks	Frequency
Mowing of grass filter strips and bioretention turf cover	At least 4 times a year
Spot weeding, erosion repair, trash removal, and mulch raking	Twice during growing season
Add reinforcement planting to maintain desired the vegetation density	As needed
Remove invasive plants using recommended control methods	
Stabilize the contributing drainage area to prevent erosion	
Spring inspection and cleanup	Annually
Supplement mulch to maintain a 3 inch layer	
Prune trees and shrubs	
Remove sediment in pre-treatment cells and inflow points	Once every 2 to 3 years
Replace the mulch layer	Every 3 years

TYPICAL URBAN BIORETENTION BASIN DETAIL

Not To Scale



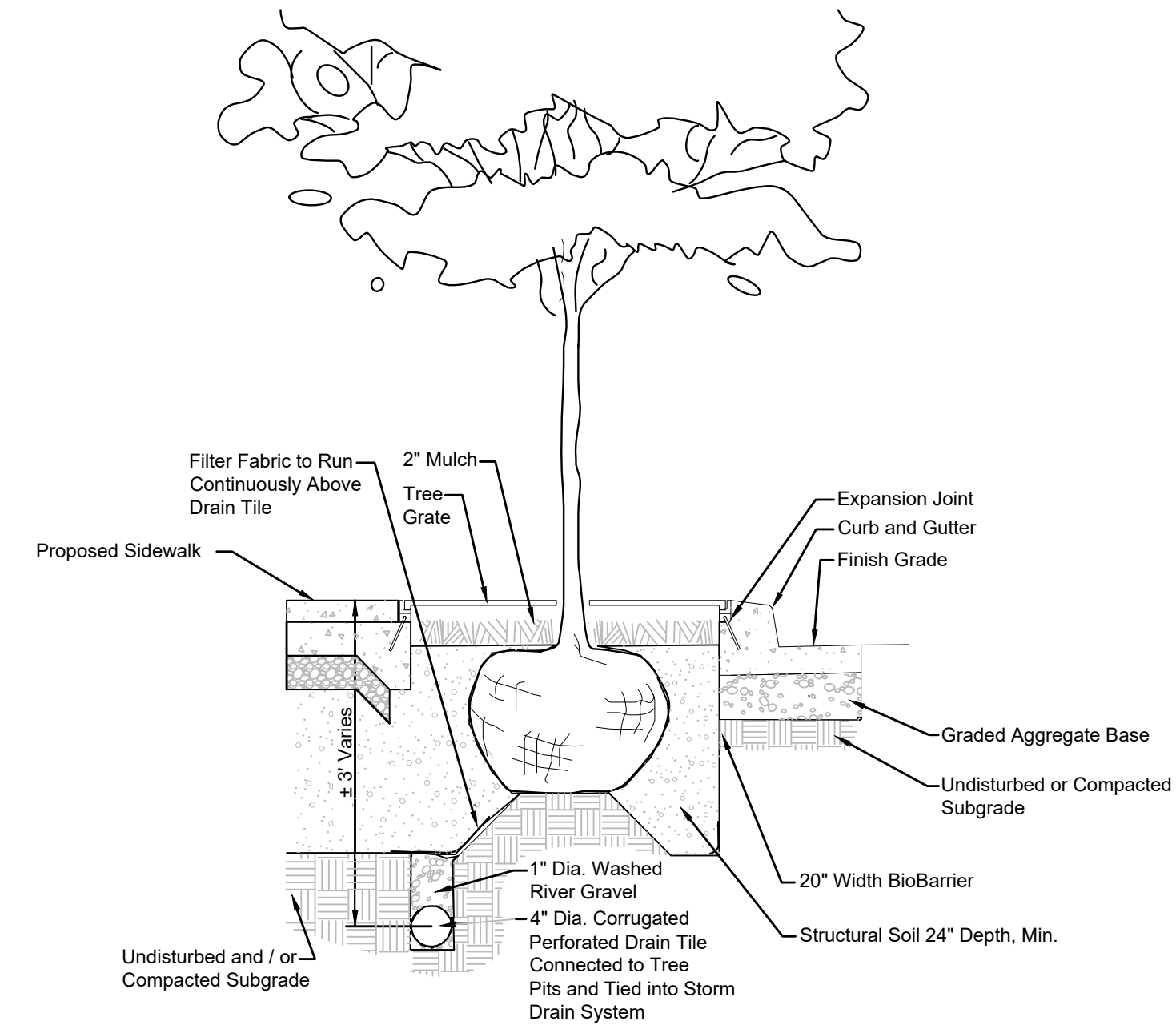
LANDSCAPE PLAN BY
HALCYON
Planning & Design
Salem, Virginia
540.589.1625
HalcyonPlanning.com
WAYNE T. WILCOX, PLA

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**WEST MAIN STREET
SIDEWALK IMPROVEMENTS
GENERAL NOTES**
PULASKI, VIRGINIA

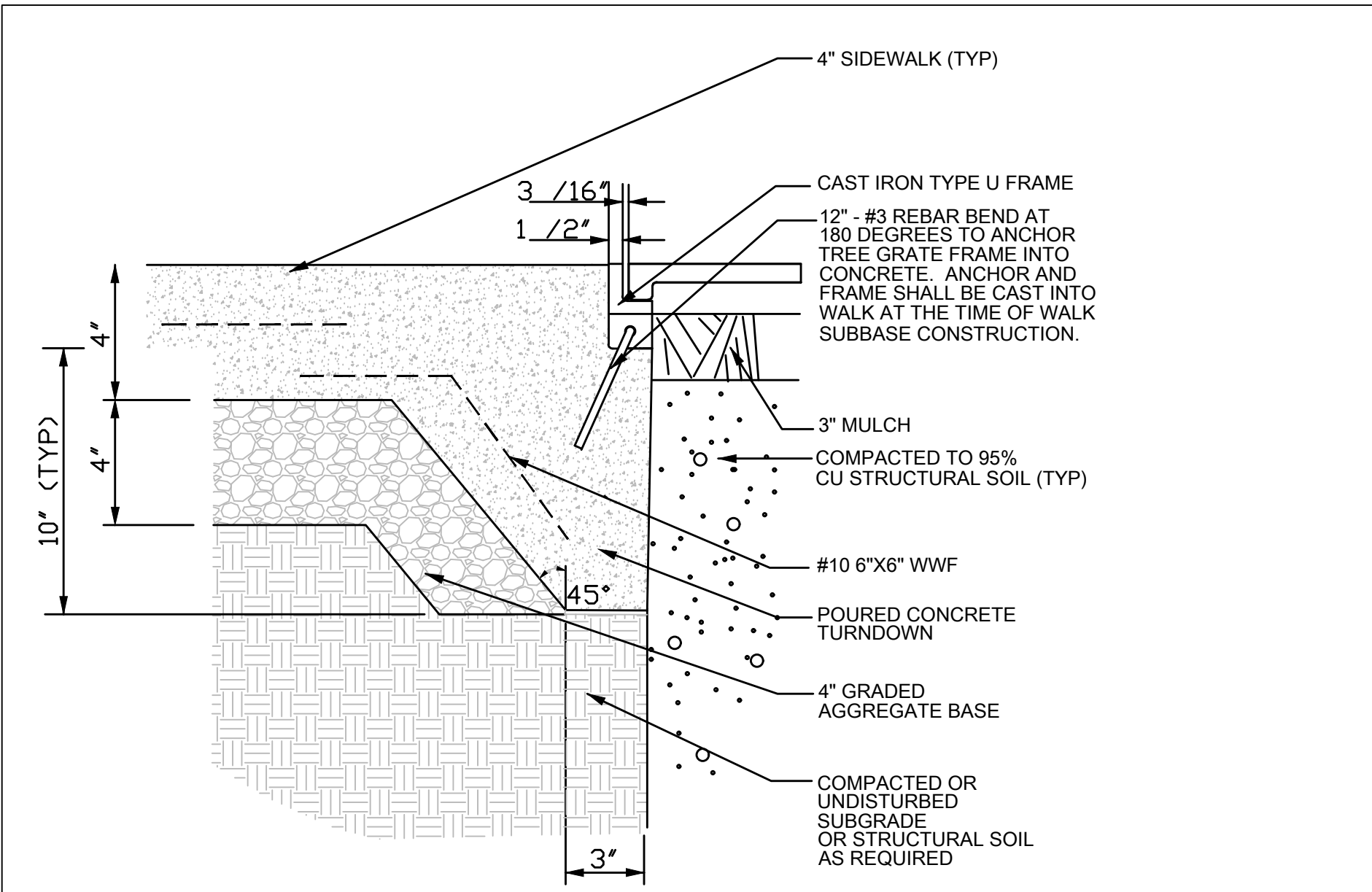
PROJECT NO.	20212161
LAT.	37° 2' 51.85" N
LONG.	80° 46' 52.44" W
DATE:	2024 April 08
DRAWN BY:	AWM, TWH
CHECKED BY:	JMJ

COMMONWEALTH OF VIRGINIA
JEREMY MICHAEL JOHNSON
Lic. No. 0402050112
2024 April 08
PROFESSIONAL ENGINEER



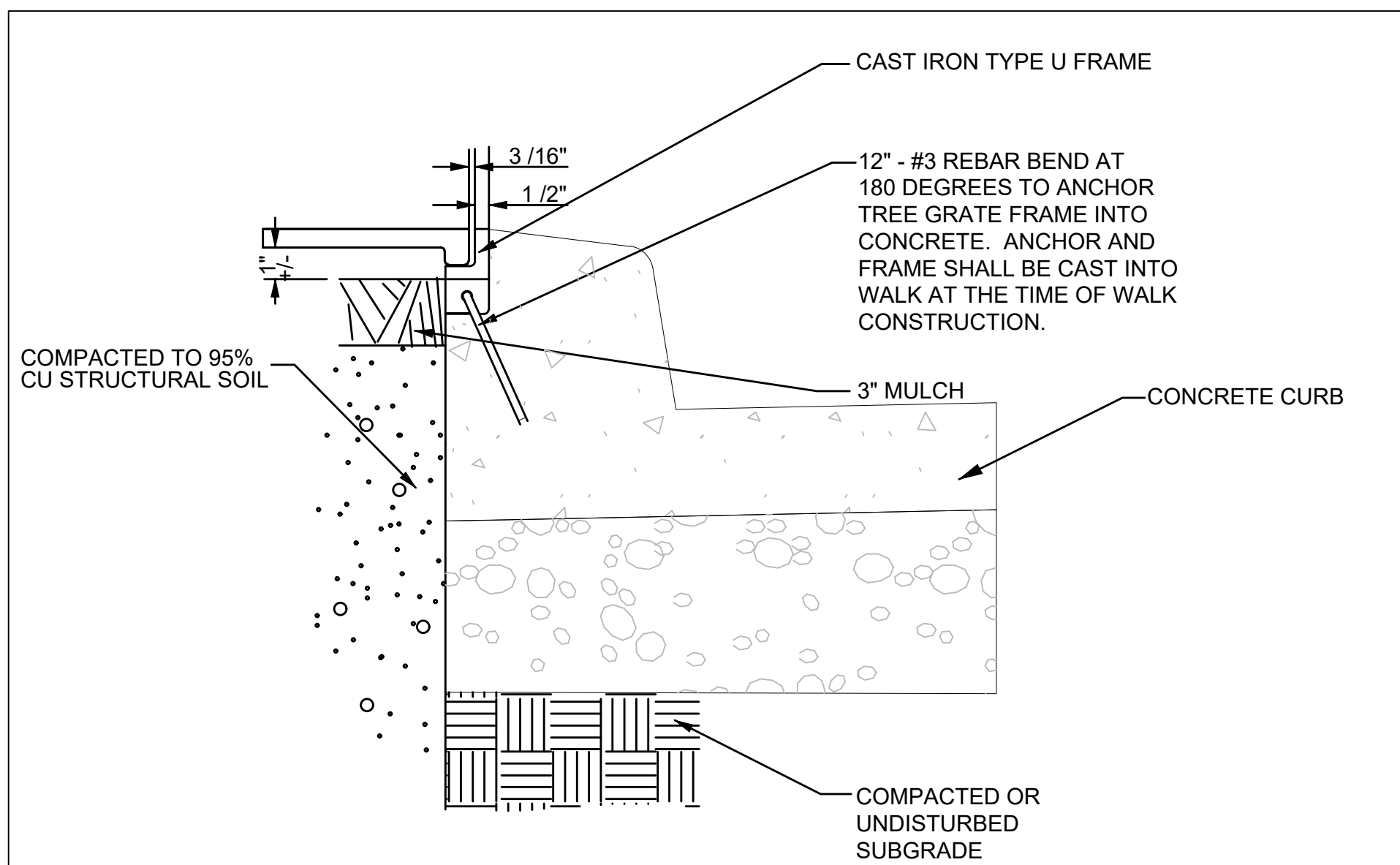
Tree Grate between Concrete Sidewalk and Curb

NOT TO SCALE



Tree Grate Against Concrete Sidewalk

NOT TO SCALE



Tree Grate Against Curb

NOT TO SCALE

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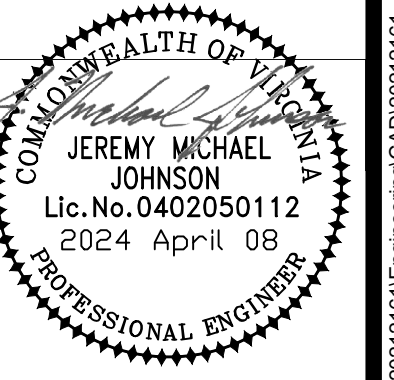


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**WEST MAIN STREET
SIDEWALK IMPROVEMENTS
GENERAL NOTES**

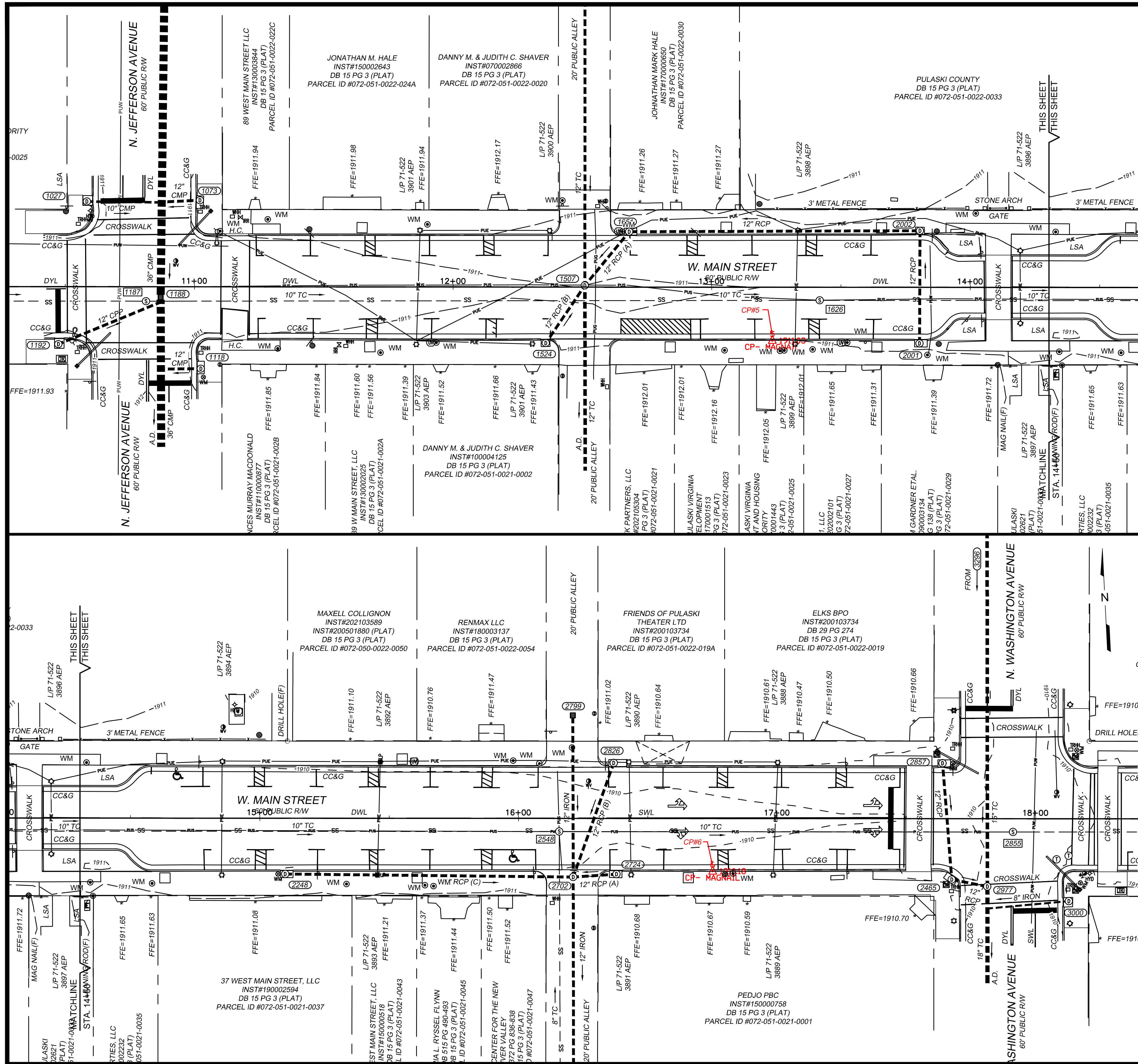
PULASKI, VIRGINIA

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CHECKED BY:	JMJ



SHEET NO.
2B

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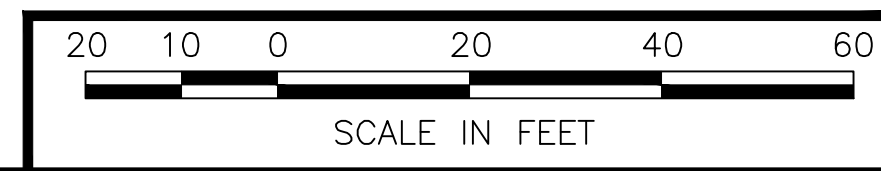
SANITARY SEWER STRUCTURES

- #1187
SANITARY MANHOLE
RIM=1911.54'
INV. IN=1904.94' (10" TC FROM #3298)
INV. OUT=1904.85' (10" TC TO #1626)
- #1626
SANITARY MANHOLE
RIM=1910.86'
INV. IN=1903.91' (10" TC FROM #1187)
INV. OUT=1903.86' (10" TC TO #2548)
- #2548
SANITARY MANHOLE
RIM=1910.43'
INV. IN=1903.23' (10" TC FROM #1626)
INV. IN=1903.36' (8" TC FROM #3294)
INV. OUT=1903.10' (10" TC TO #2855)
- #2855
SANITARY MANHOLE
RIM=1910.38'
INV. IN=1902.71' (10" TC FROM #2548)
INV. OUT=1902.53' (10" TC TO #3295)
- #3294
SANITARY MANHOLE
RIM=1910.29'
INV. IN=TOO RECESSED (8" TC FROM A.D. ONLY)
INV. OUT=TOO RECESSED (8" TC TO #2548)
C/L OF STRUCTURE=1904.17'
- #3295
SANITARY MANHOLE
RIM=1908.40'
INV. IN=1901.50' (10" TC FROM #2855)
INV. OUT=1901.45' (10" TC TO A.D. ONLY)
- #3298
SANITARY MANHOLE
RIM=1912.67'
MULTIPLE INVERTS COMING IN BUT ALL WERE TOO RECESSED TO OBTAIN
INV. OUT=1905.97' (10" TC TO #1187)
C/L OF STRUCTURE=1906.07'
- #1651
STORM MANHOLE
RIM=1910.73'
INV. IN=1905.53' (12" RCP FROM #2002)
INV. OUT=1905.34' (12" RCP TO #1507)
- #2001
STORM MANHOLE
RIM=1910.91'
STRUCTURE FULL OF DEBRIS, UNABLE TO OBTAIN INVERT
- #2002
STORM MANHOLE
RIM=1910.81'
INV. IN=1906.44' (12" RCP FROM #2001)
INV. OUT=1906.44' (12" RCP TO #1651)
- #2248
STORM MANHOLE
RIM=1910.84'
STRUCTURE FULL OF DEBRIS, UNABLE TO OBTAIN INVERT
(POSSIBLE CONNECTION TO #2702)
- #2465
STORM MANHOLE
RIM=1909.85'
INV. IN=1905.16' (12" RCP FROM #2857)
INV. OUT=1905.19' (12" RCP TO #2977)
- #2724
STORM MANHOLE
RIM=1910.11'
INV. OUT=1906.64' (12" RCP TO #2702)
- #2702
STORM MANHOLE
RIM=1910.13'
INV. IN (A)=1906.28' (12" RCP FROM #2724)
INV. IN (B)=1905.08' (12" RCP FROM #2826)
INV. IN (C)=1905.60' (12" RCP POSSIBLY FROM #2248)
INV. IN=1904.59' (12" IRON FROM #2799)
INV. OUT=1904.53' (12" IRON TO #3293)
- #3296
STORM MANHOLE
RIM=1909.52'
INV. IN=TOO RECESSED (15" TC FROM A.D. ONLY)
INV. OUT=TOO RECESSED (15" TC TO #2977)
C/L OF STRUCTURE=1905.83'
- #3299
GRATE INLET
TOP=1912.54'
INV. IN=TOO RECESSED (36" CMP FROM A.D. ONLY)
INV. OUT=TOO RECESSED (36" CMP TO #1188)
C/L OF STRUCTURE=1903.54'

STORM DRAINAGE STRUCTURES

- #1187
STORM MANHOLE
RIM=1911.10'
INV. OUT=1907.66' (10" CMP BLIND CONNECTION BETWEEN #3299 AND #1188)
- #1073
STORM MANHOLE
RIM=1911.29'
INV. OUT=1908.71' (12" CMP BLIND CONNECTION BETWEEN #3299 AND #1188)
- #1118
STORM MANHOLE
RIM=1911.24'
INV. OUT=1908.04' (12" CMP BLIND CONNECTION BETWEEN #1188 AND OUTFALL)
- #1188
GRATE INLET
TOP=1911.55'
INV. IN=TOO RECESSED (12" CPP FROM #1192)
INV. IN=TOO RECESSED (36" CMP FROM #3299)
INV. OUT=TOO RECESSED (36" CMP A.D. TO OUTFALL AT RIVER, UNDER BRIDGE)
C/L OF STRUCTURE=1902.99'
- #1192
STORM MANHOLE
RIM=1911.40'
INV. OUT=1908.30' (12" CPP TO #1188)
- #1524
STORM MANHOLE
RIM=1911.05'
INV. OUT=1907.55' (12" RCP TO #1507)
- #1507
STORM MANHOLE
RIM=1911.02'
INV. IN (A)=1905.07' (12" RCP FROM #1651)
INV. IN (B)=1907.62' (12" RCP FROM #1524)
INV. IN=1904.63' (12" TC FROM #3291)
INV. OUT=1904.59' (15" TC A.D. TO OUTFALL AT RIVER)
- #2799
GRATE INLET
TOP=1910.46'
INV. IN=1904.66' (12" IRON FROM A.D. ONLY)
INV. OUT=1904.57' (12" IRON TO #2702)
- #2826
STORM MANHOLE
RIM=1910.19'
INV. OUT=1906.67' (12" RCP TO #2702)
- #2857
STORM MANHOLE
RIM=1909.73'
INV. OUT=1906.10' (12" RCP TO #2465)
- #2977
STORM MANHOLE
RIM=1910.25'
INV. IN=1905.03' (12" RCP FROM #2465)
INV. IN=1904.80' (15" TC FROM #3296)
INV. OUT=1904.8' (18" TC TO A.D. OUTFALL AT RIVER, UNDER BRIDGE)
- #3000
STORM MANHOLE
RIM=1910.35'
INV. OUT=1907.56' (8" IRON BLIND CONNECTION BETWEEN #2977 AND OUTFALL AT RIVER, UNDER BRIDGE)
- #3291
GRATE INLET
TOP=1910.48'
INV. IN=1905.28' (12" TC FROM A.D. ONLY)
INV. OUT=1905.23' (12" TC TO #1507)
- #3293
GRATE INLET
TOP=1910.17'
INV. IN=TOO RECESSED (12" IRON FROM #2702)
INV. OUT=TOO RECESSED (12" IRON TO A.D. ONLY)
C/L OF STRUCTURE=1903.82'

CONTROL POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	3549030.25	10816124.89	1917.47	T-BAR SET
2	3549061.10	10816776.92	1911.80	MAG NAIL SET
3	3548947.67	10817848.27	1909.13	MAG NAIL SET
4	3548976.57	10818474.57	1908.44	T-BAR SET
5	3548988.29	10817142.20	1911.03	MAG NAIL SET
6	3548970.63	10817493.41	1910.18	MAG NAIL SET

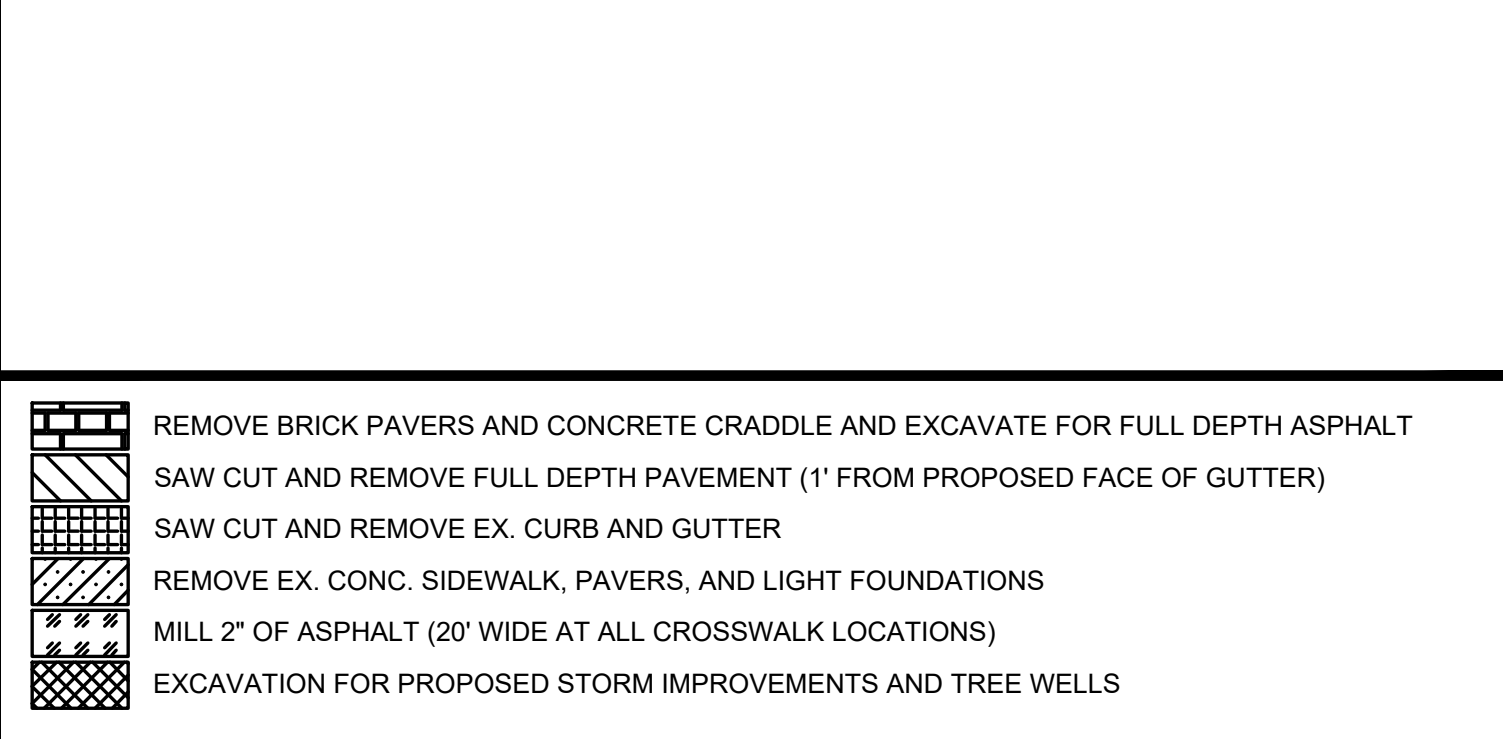
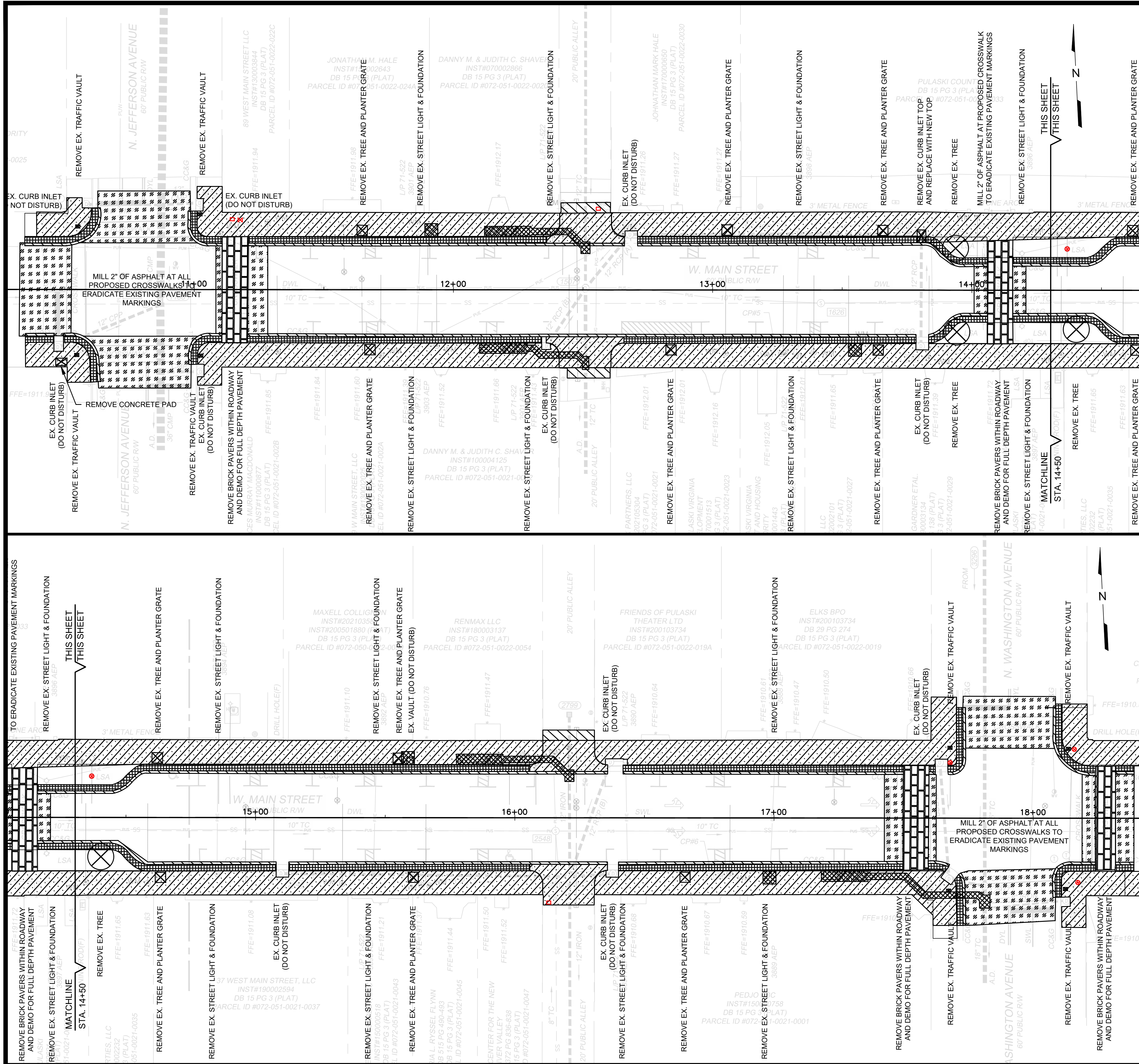


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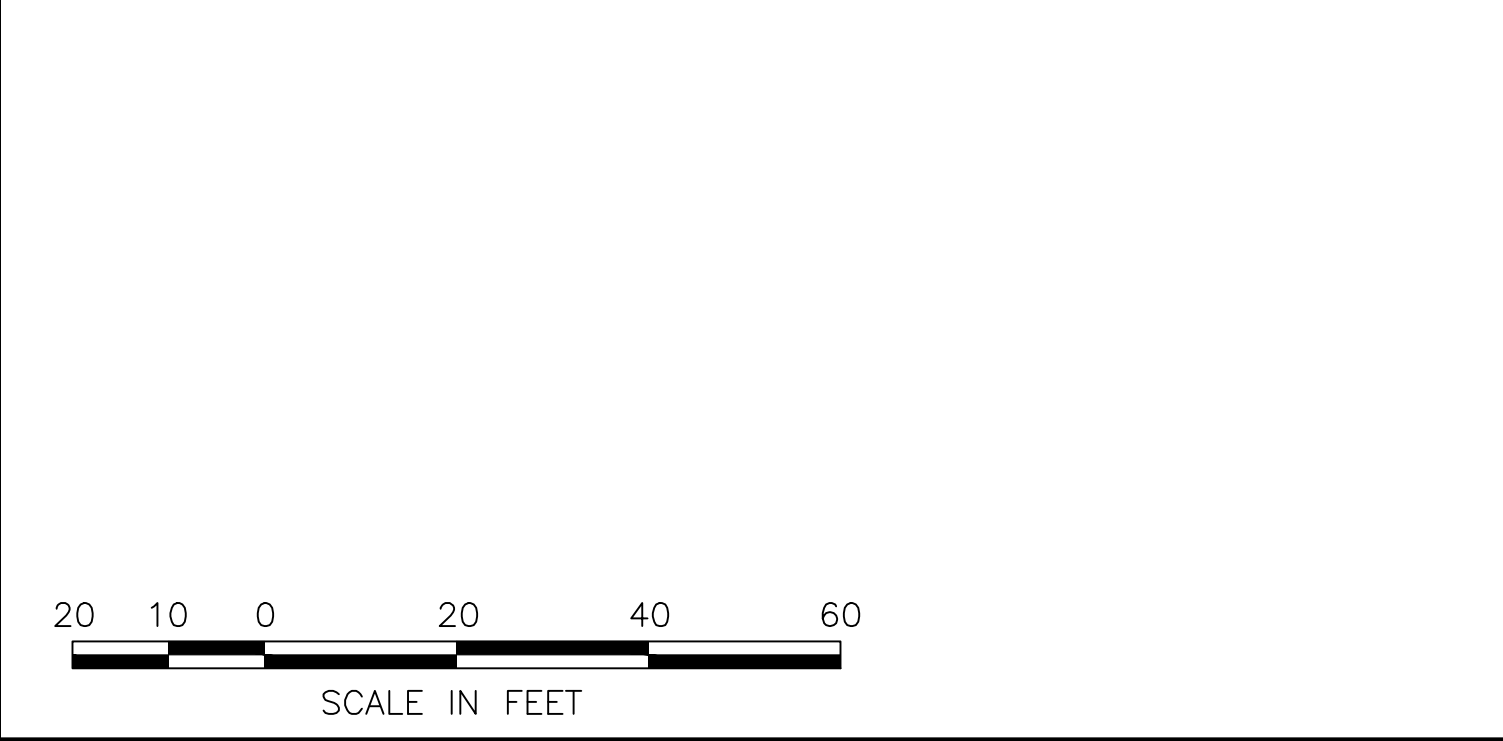
**WEST MAIN STREET
 SIDEWALK IMPROVEMENTS
 EXISTING CONDITIONS**
 PULASKI, VIRGINIA

PROJECT NO. 20212161
 LAT. 37° 25' 1.85" N
 LONG. 80° 46' 52.44" W
 DATE: 2024 April 08
 DRAWN BY: AWM, TWH
 CHECKED BY: JMJ





- REMOVE 10 STREET LIGHTS AND FOUNDATIONS ON NORTH WASHINGTON AVENUE.**
- REMOVE BRICK PAVERS AND CONCRETE CRADLE AND EXCAVATE FOR FULL DEPTH ASPHALT
 - SAW CUT AND REMOVE FULL DEPTH PAVEMENT (1' FROM PROPOSED FACE OF GUTTER)
 - SAW CUT AND REMOVE EX. CURB AND GUTTER
 - REMOVE EX. CONC. SIDEWALK, PAVERS, AND LIGHT FOUNDATIONS
 - MILL 2" OF ASPHALT (20' WIDE AT ALL CROSSWALK LOCATIONS)
 - EXCAVATION FOR PROPOSED STORM IMPROVEMENTS AND TREE WELLS
- ITEMS SHOWN IN RED ARE INCLUDED AS "ADJUST" IN THE BID FORM**
- DEMOLITION NOTES:**
- PROPER DISPOSAL OF ALL ITEMS LISTED AS "REMOVE" OR "DEMO" SHALL BE INCIDENTAL TO OTHER ITEMS OF WORK.
 - THE OWNER SHALL SELECT FOUR EXISTING TREE GRATES TO BE REUSED IN THE PROJECT.
 - STREET LIGHT AND SIGNAL CONDUIT MAY BE ABANDONED IN PLACE. THE CONTRACTOR SHALL REMOVE ALL CONDUCTORS, AND JUNCTION BOXES PRIOR TO ABANDONMENT.
 - PAYMENT FOR 2" MILL SHALL ONLY INCLUDE AREAS OUTSIDE OTHER DEMOLITION PAY ITEMS.

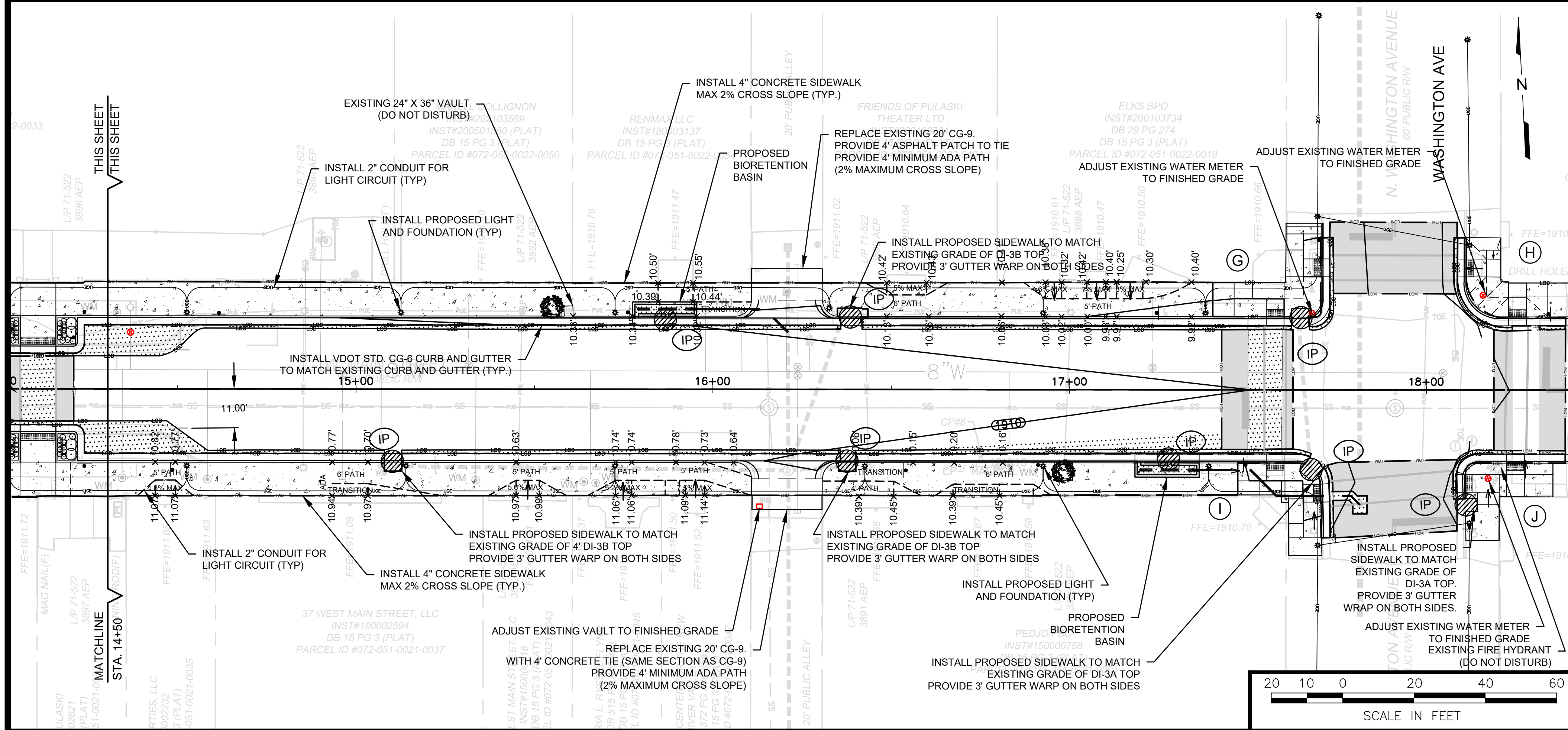
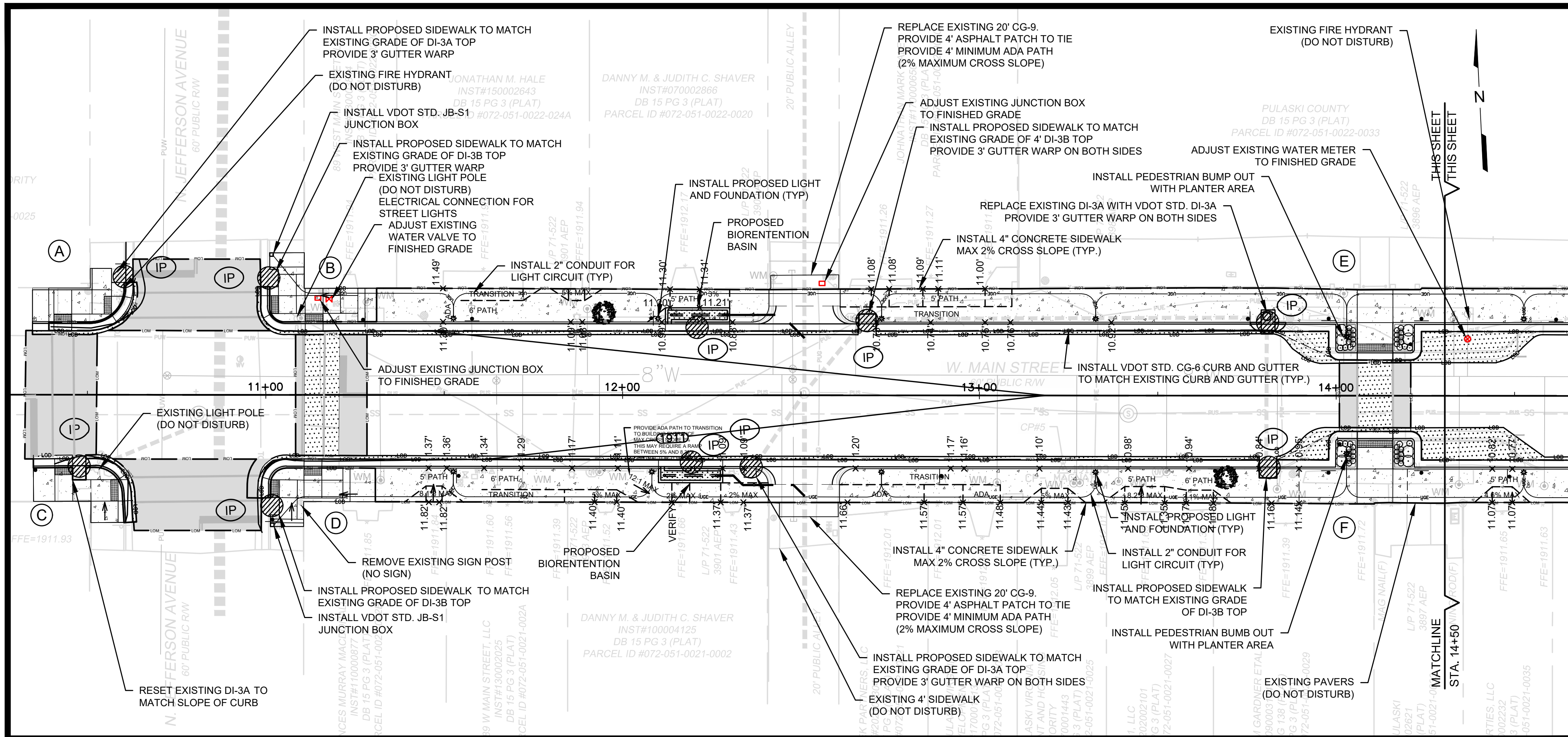


**WEST MAIN STREET
 SIDEWALK IMPROVEMENTS
 DEMOLITION PLAN**
 PULASKI, VIRGINIA

PROJECT NO. 20212161
 LAT. 37° 25' 1.85" N
 LONG. 80° 46' 52.44" W
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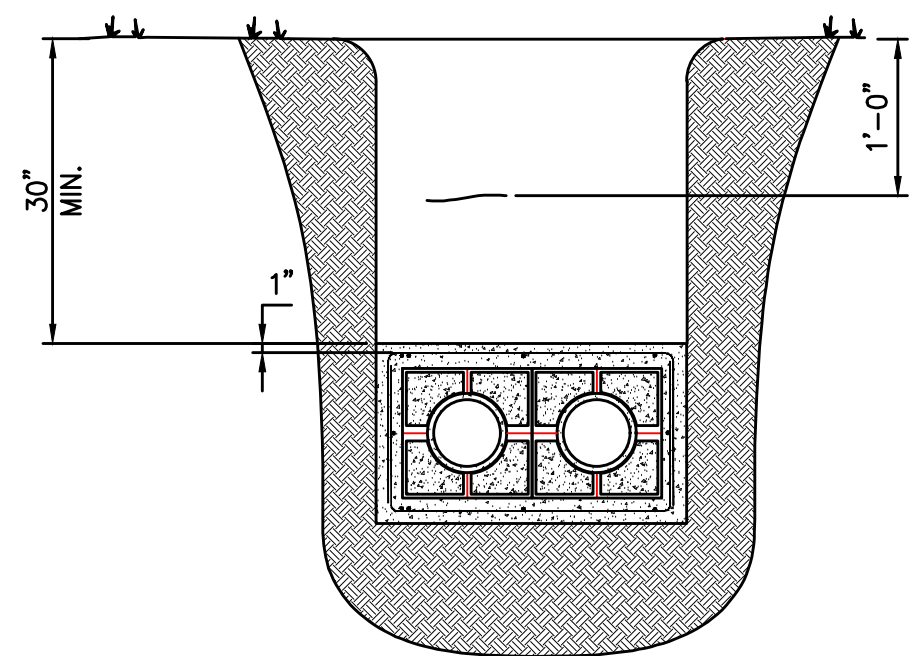


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THE NATURE OF THIS PROJECT IS MAINTENANCE ACTIVITIES TO RECONSTRUCT EX. CURB RAMPS TO MEET CURRENT ADA STANDARDS. THE PROPOSED ACTIVITIES DO NOT ALTER THE DRAINAGE AREAS OR CHANGE THE DRAINAGE CHARACTERISTICS OF THE PROJECT AREA FROM THEIR ORIGINAL LINE AND GRADE EXCEPT WHERE IMPERVIOUS AREAS HAVE BEEN INCREASED FOR THE ALTERATIONS OF THE MID-BLOCK CROSSING.

OWNER SHALL INSTALL PROPOSED STREET LIGHTS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION OF CONCRETE FOUNDATIONS AND INSTALLATION OF CONDUIT WITH PULL CORDS.



DUCT NOTES

1. PROVIDE BASE SPACERS AND INTERMEDIATE SPACERS AT 5'-0" ON CENTER.
2. PROVIDE 2" CONDUIT WITH PULL CORD.
3. MINIMUM 48" RADIUS FOR CONDUIT BENDS.
4. PROVIDE 6" WIDE CONDUCTIVE MARKING TAPE ABOVE THE ENTIRE LENGTH OF THE DUCTBANK.
5. UNDER PAVED AREAS ENCASE CONDUITS WITH 3" COVER, ALL SIDES 4000 PSI CONCRETE. THE SLOPE OF DUCTBANK SHALL BE LIMITED TO 5% MAXIMUM. SAND ENVELOPE MAY BE USE IN LIEU OF CONCRETE UNDER NON-PAVED AREAS.
6. REPLACE EXISTING SURFACE CONDITIONS IN KIND TO INCLUDE, BUT NOT LIMITED TO: CONCRETE, CRUSHED STONE, SELECT GRAVEL, ASPHALT, TOPSOIL, GRASS, ETC. REPLACE SELECT BACKFILL IN 6" LIFTS. COMPACT EACH PLACEMENT.
7. CONTRACTOR SHALL PROVIDE GROUND RODS AND GROUNDING PER VDOT ROAD AND BRIDGE SPECIFICATION 700.

- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED CG-12 DETECTABLE WARNING STRIP
- PROPOSED FULL DEPTH PAVEMENT PATCH
- 2" OVERLAY ON PREVIOUSLY MILLED AREAS

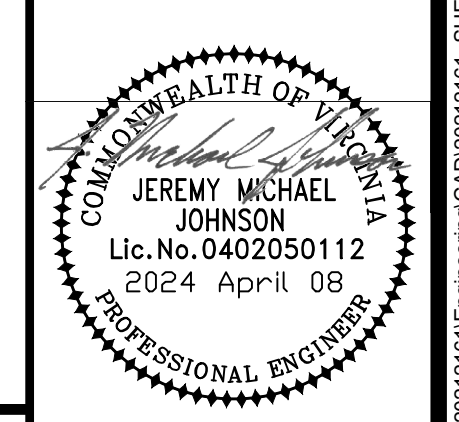
ESC LEGEND

- (IP) INLET PROTECTION
- (X) CURB RAMP DETAIL LABEL
- LIMITS OF DISTURBANCE
- LIMITS OF MAINTENANCE

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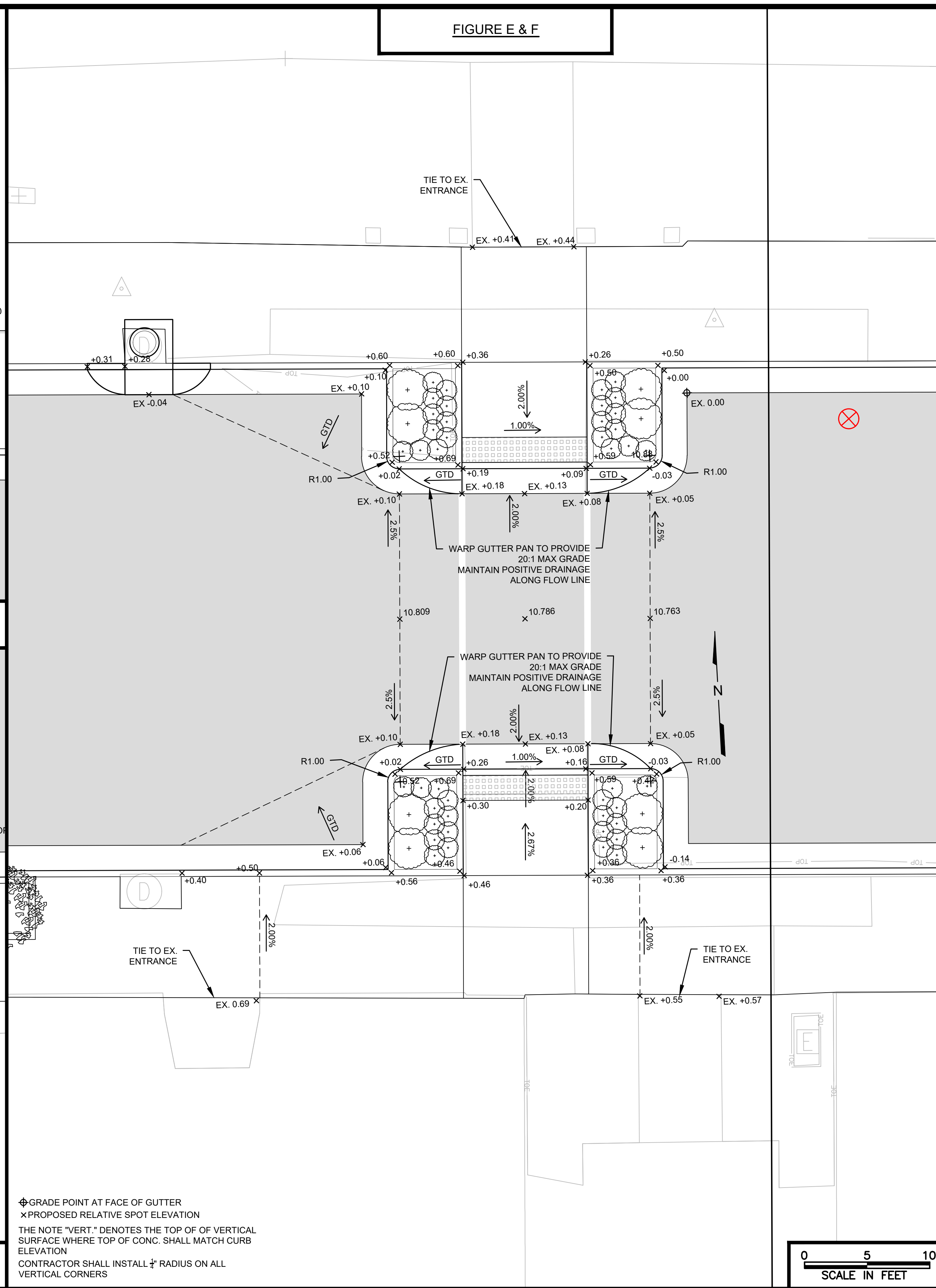
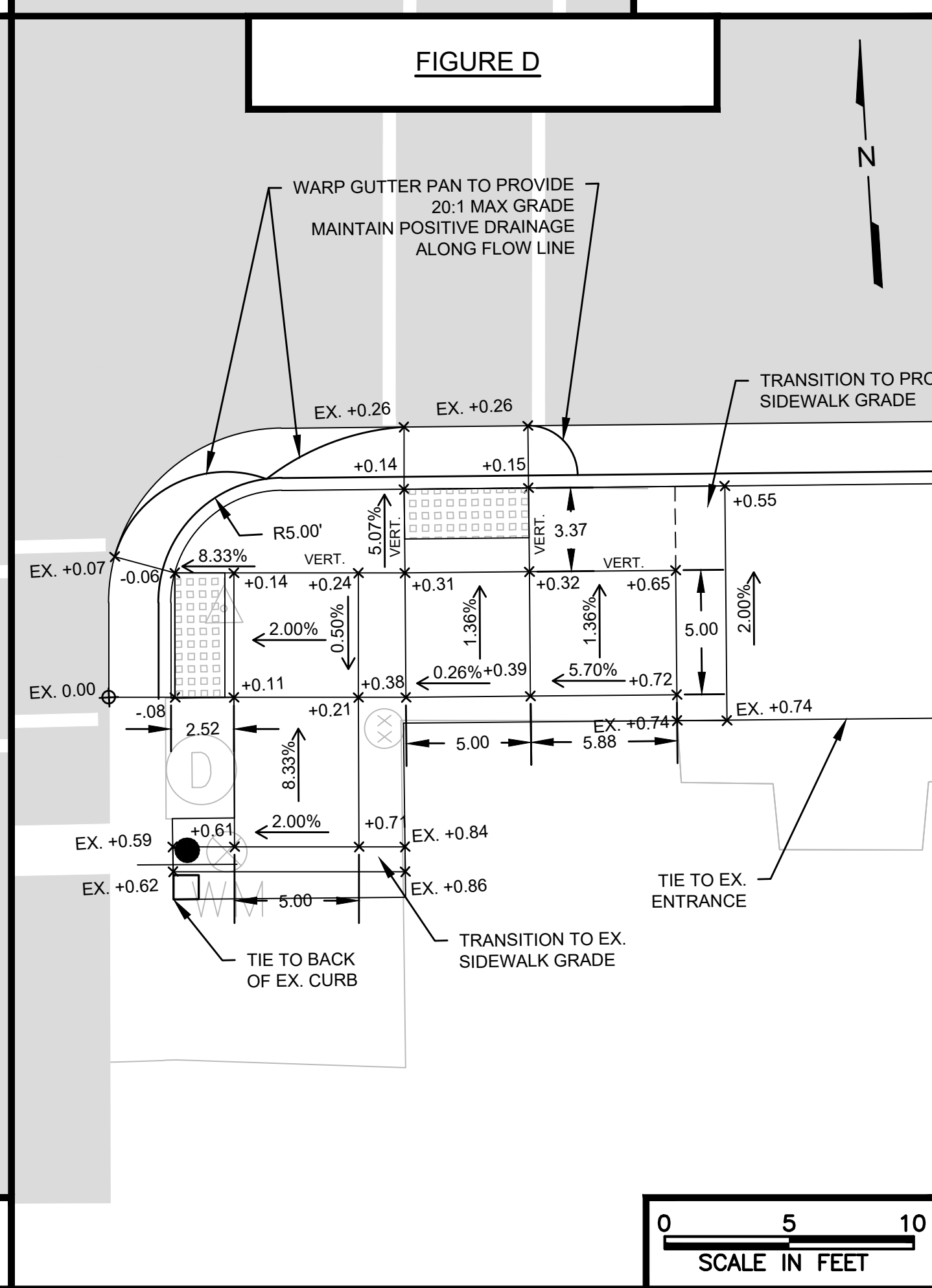
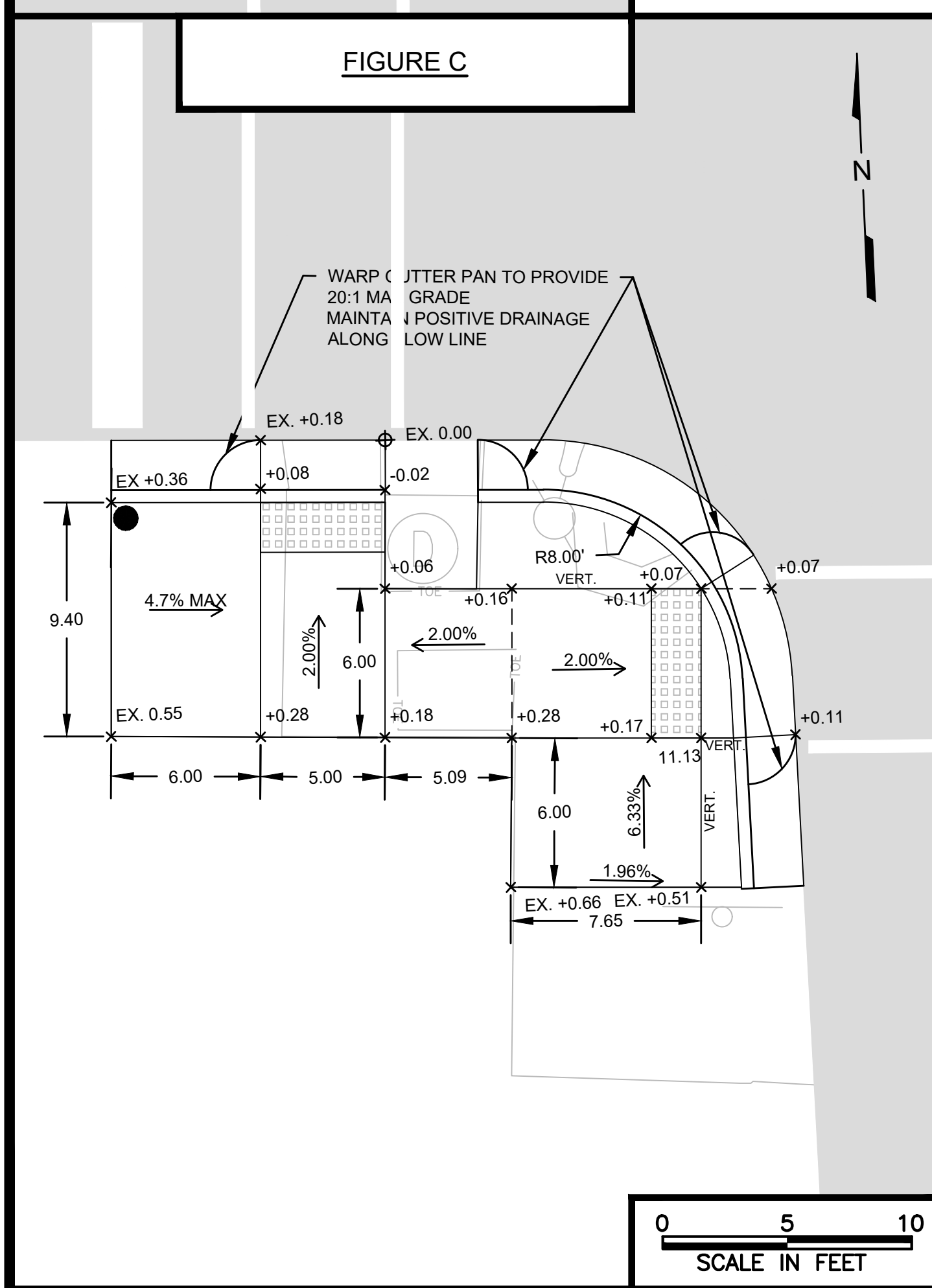
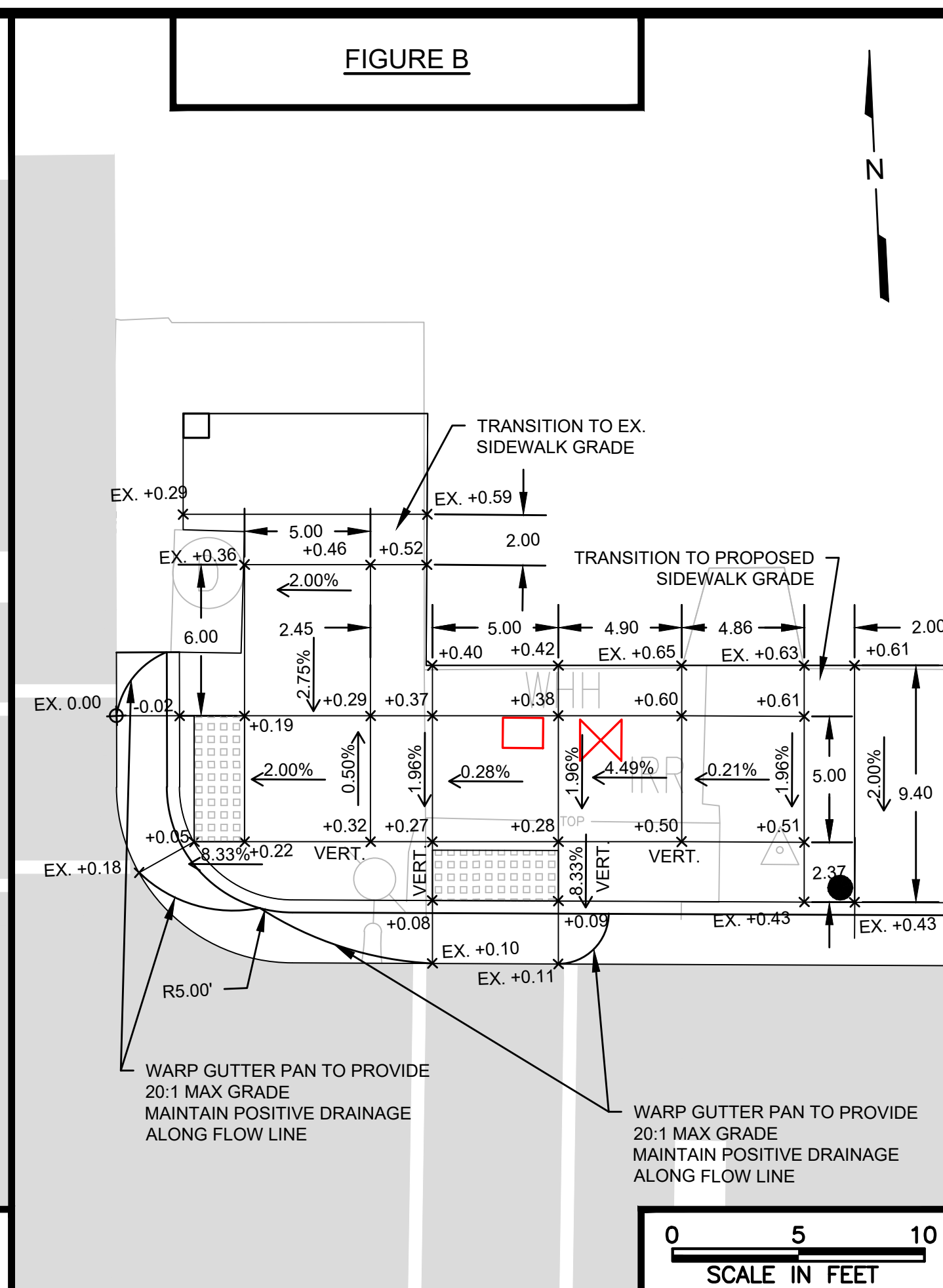
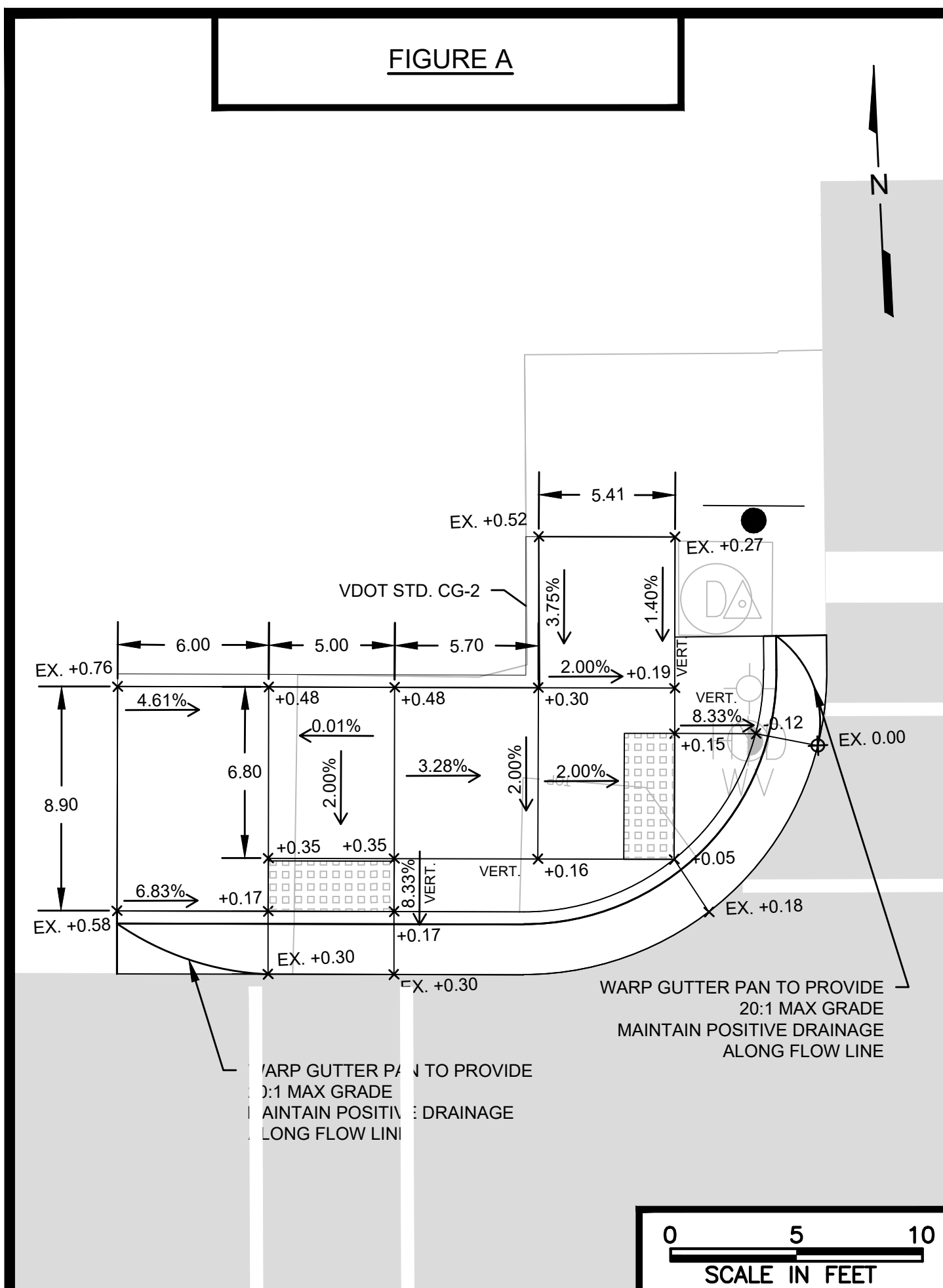
**WEST MAIN STREET
 SIDEWALK IMPROVEMENTS
 PROPOSED IMPROVEMENTS**
 PULASKI, VIRGINIA

PROJECT NO. 20212161
 LAT. 37° 2' 51.85" N
 LONG. 80° 46' 52.44" W
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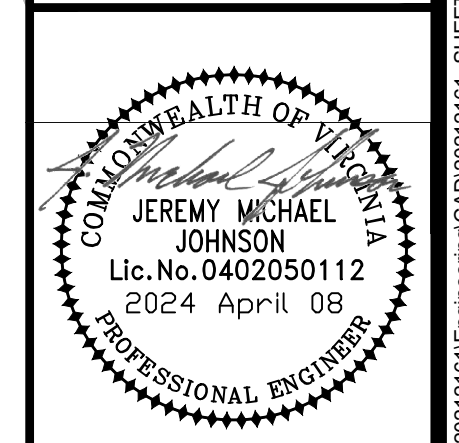


◊ GRADE POINT AT FACE OF GUTTER
 × PROPOSED RELATIVE SPOT ELEVATION
 THE NOTE "VERT." DENOTES THE TOP OF OF VERTICAL SURFACE WHERE TOP OF CONC. SHALL MATCH CURB ELEVATION
 CONTRACTOR SHALL INSTALL 1/4" RADIUS ON ALL VERTICAL CORNERS

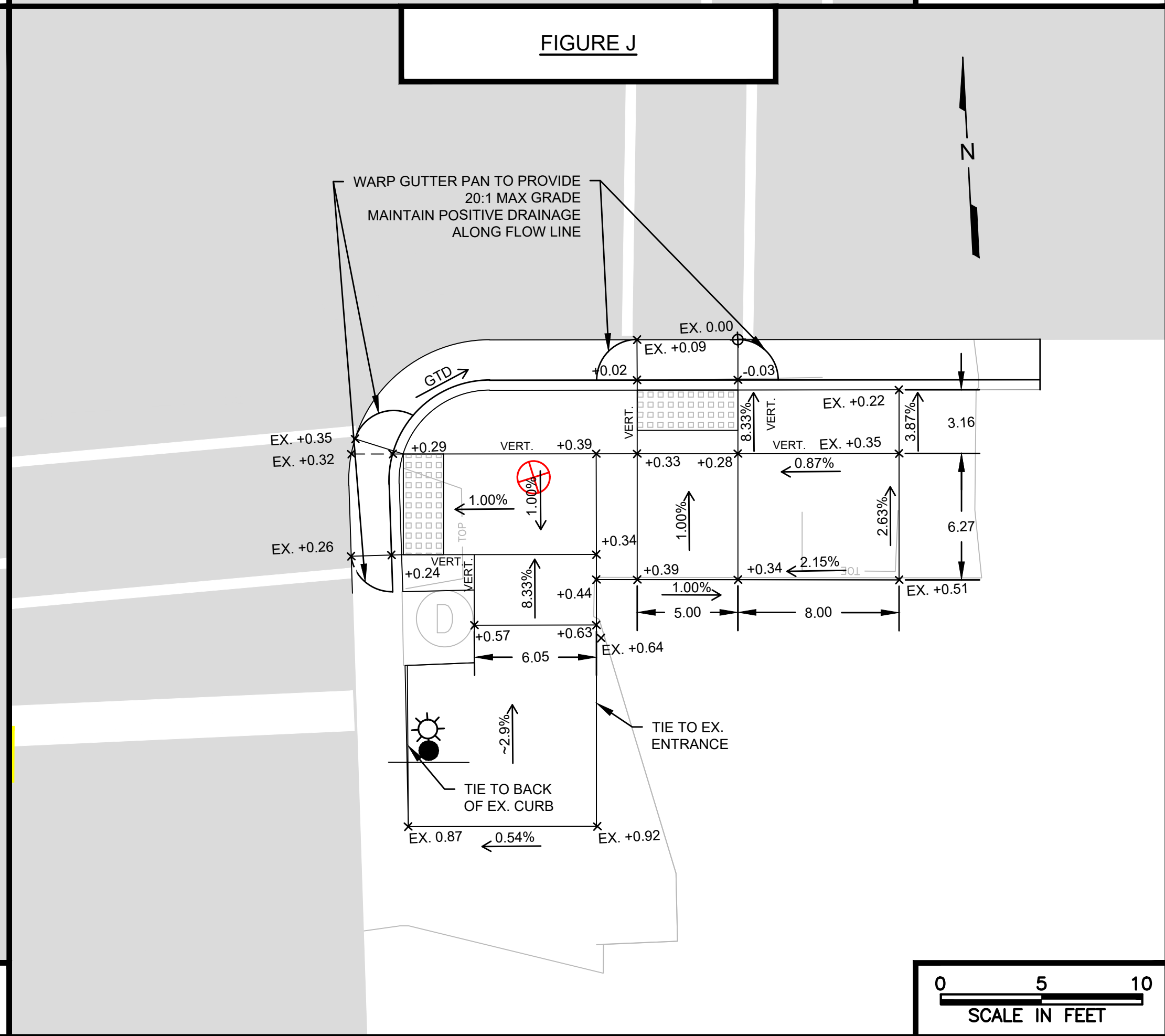
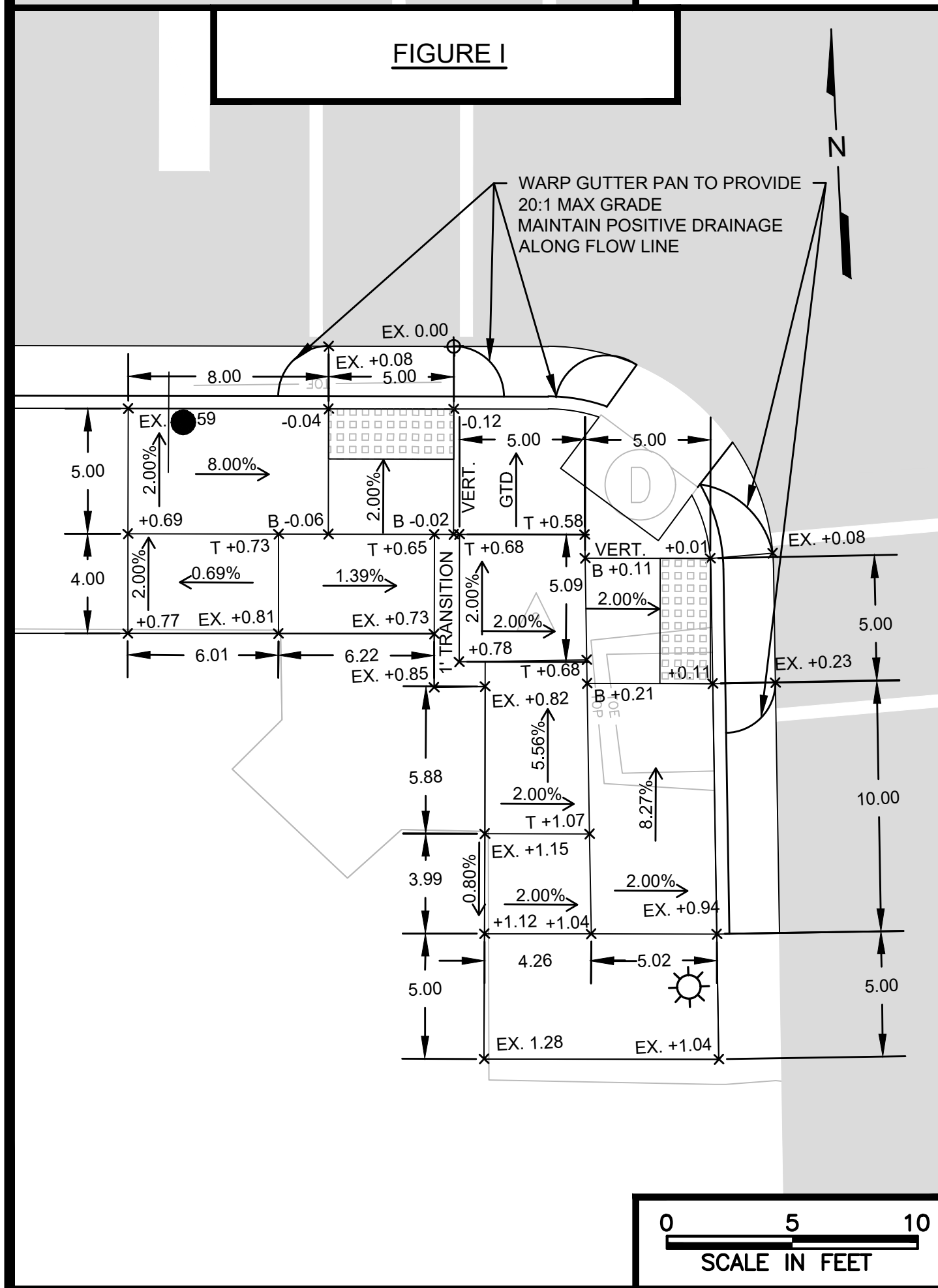
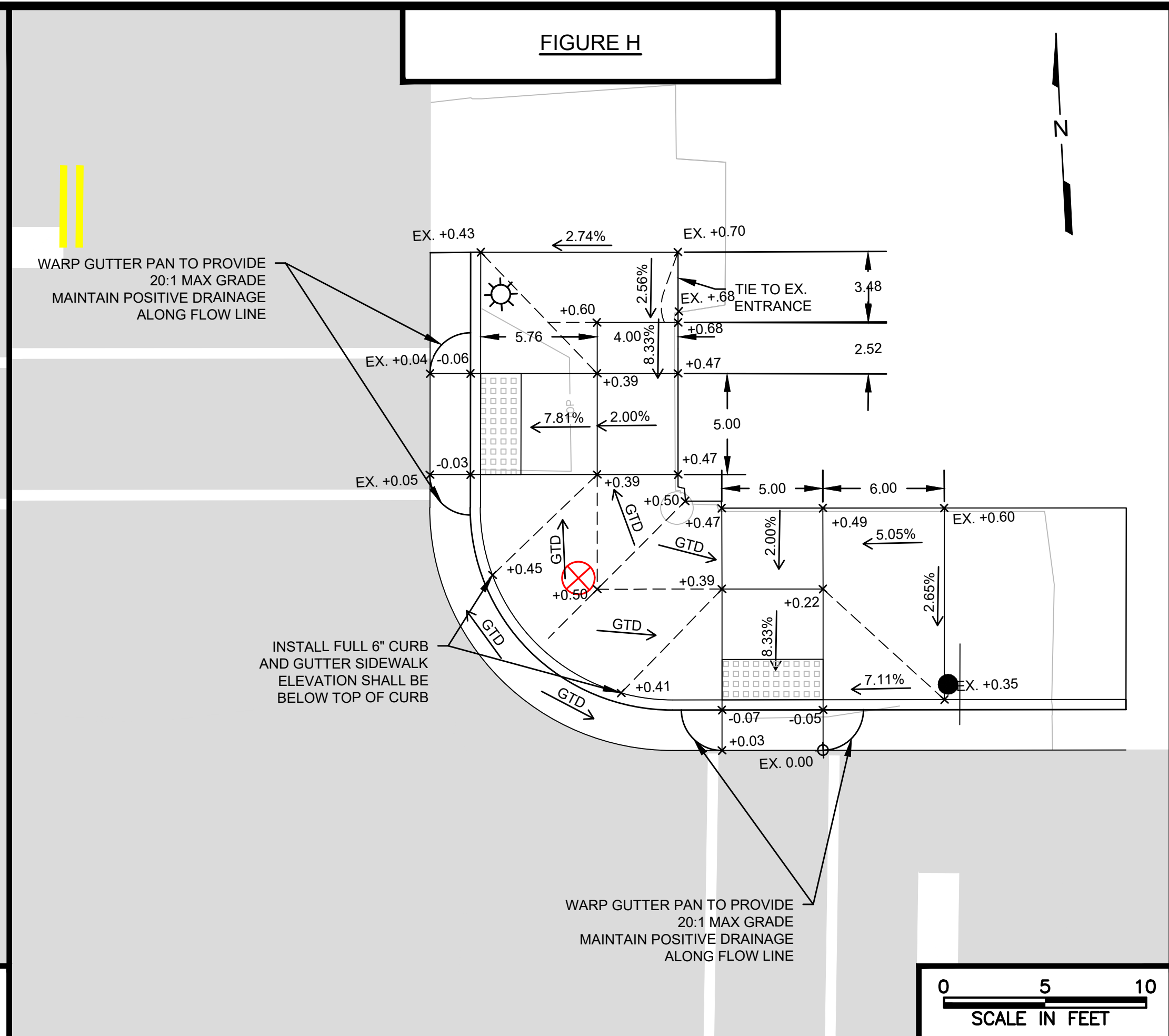
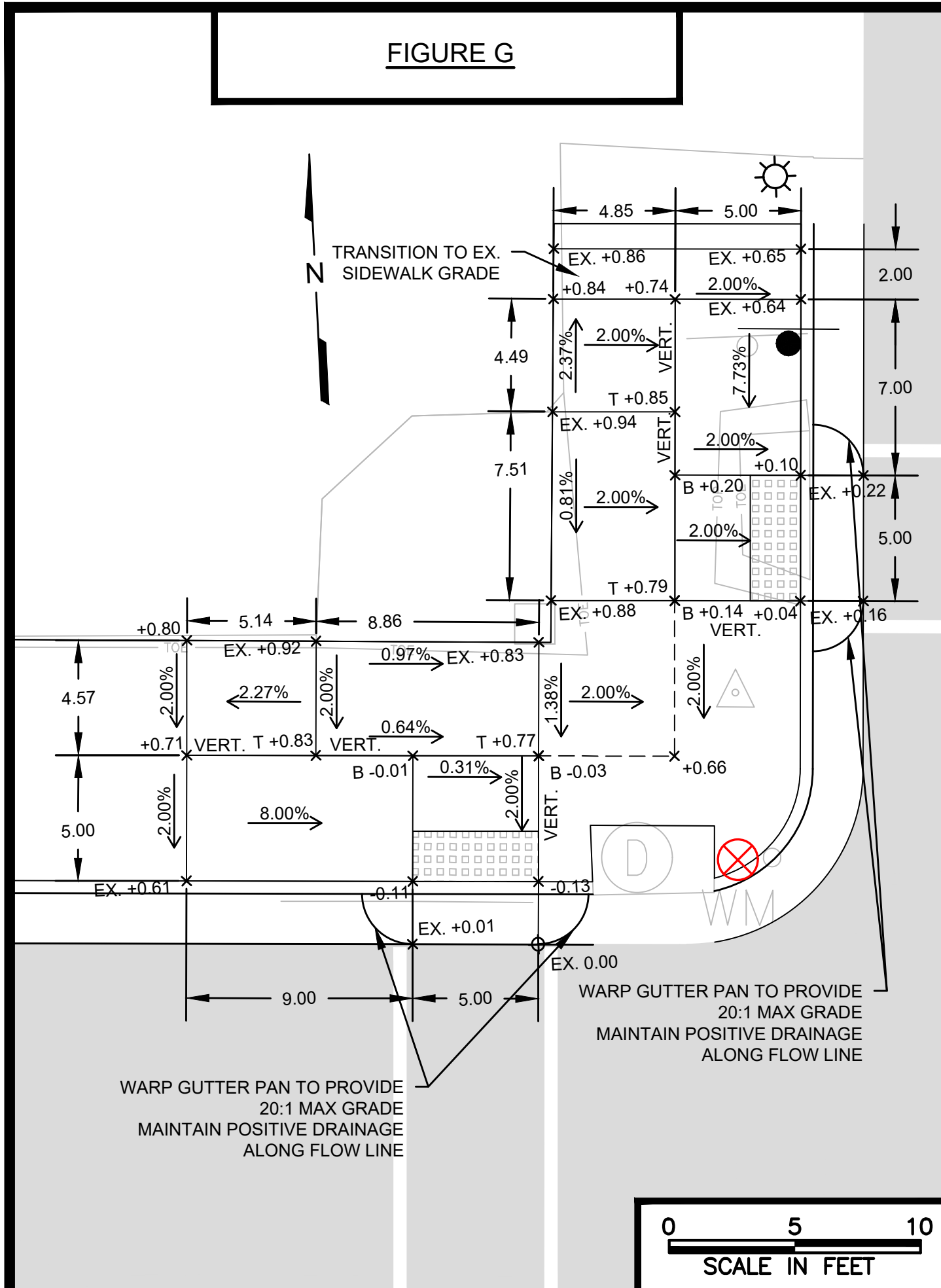
WEST MAIN STREET SIDEWALK IMPROVEMENTS CURB RAMP DESIGN

PULASKI, VIRGINIA

PROJECT NO. 20212161
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⊕ GRADE POINT AT FACE OF GUTTER
 × PROPOSED RELATIVE SPOT ELEVATION

THE NOTE "VERT." DENOTES THE TOP OF OF VERTICAL SURFACE WHERE TOP OF CONC. SHALL MATCH CURB ELEVATION. "GTD" REFERS TO GRADE TO DRAIN IN THE DIRECTION SHOWN.

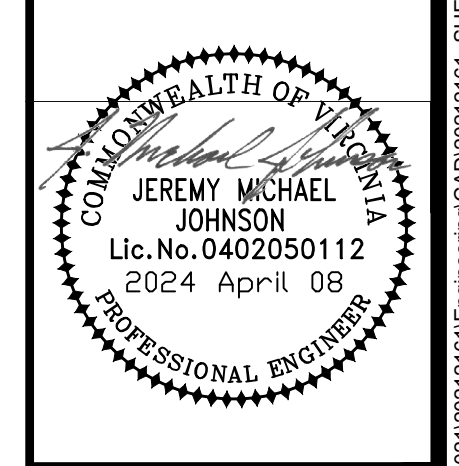
WHERE ELEVATION POINTS ARE ALONG A VERTICAL FACE, "B" DENOTES THE ELEVATION AT THE BOTTOM OF THE FACE AND "T" DENOTES THE ELEVATION AT THE TOP OF THE FACE.

CONTRACTOR SHALL INSTALL 1/4" RADIUS ON ALL VERTICAL CORNERS

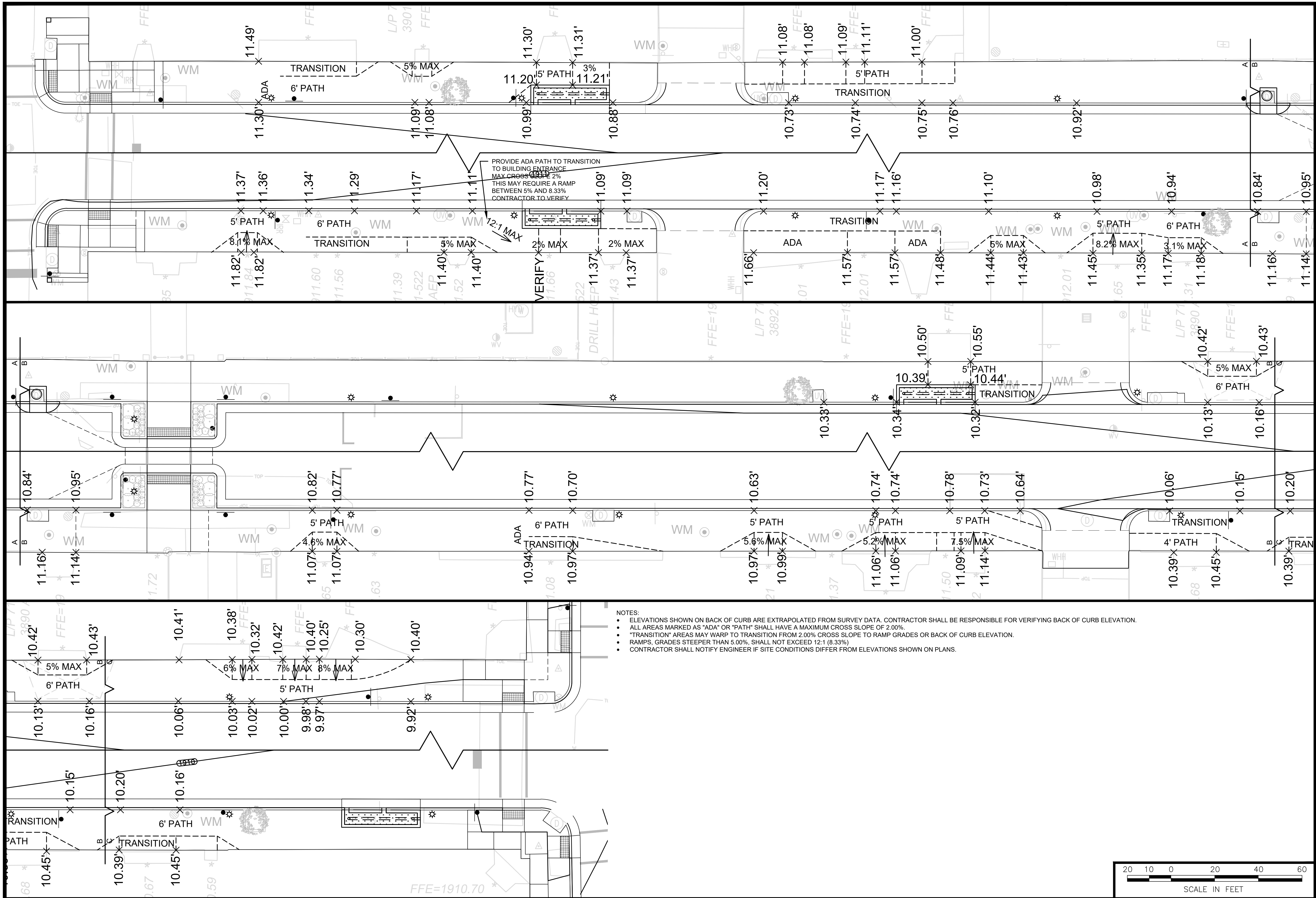
**WEST MAIN STREET
 SIDEWALK IMPROVEMENTS
 CURB RAMP DESIGN**

PULASKI, VIRGINIA

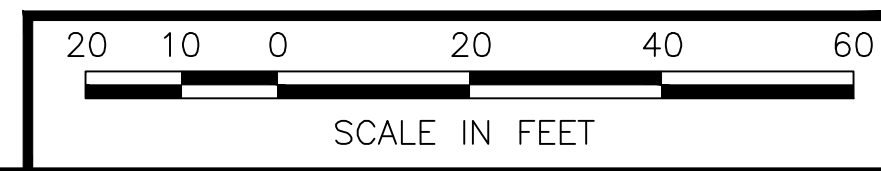
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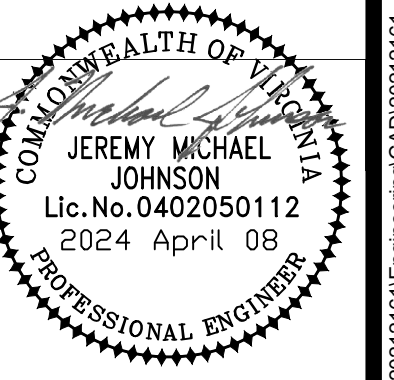


- NOTES:
- ELEVATIONS SHOWN ON BACK OF CURB ARE EXTRAPOLATED FROM SURVEY DATA. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING BACK OF CURB ELEVATION.
 - ALL AREAS MARKED AS "ADA" OR "PATH" SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00%.
 - "TRANSITION" AREAS MAY WARP TO TRANSITION FROM 2.00% CROSS SLOPE TO RAMP GRADES OR BACK OF CURB ELEVATION.
 - RAMPS, GRADES STEEPER THAN 5.00%, SHALL NOT EXCEED 12:1 (8.33%)
 - CONTRACTOR SHALL NOTIFY ENGINEER IF SITE CONDITIONS DIFFER FROM ELEVATIONS SHOWN ON PLANS.



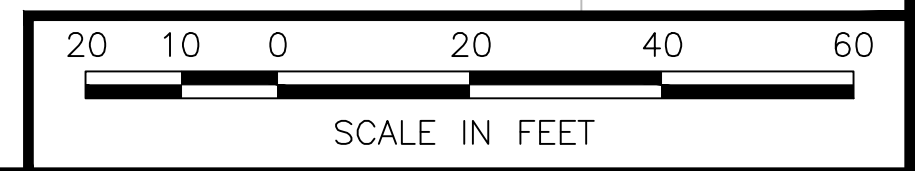
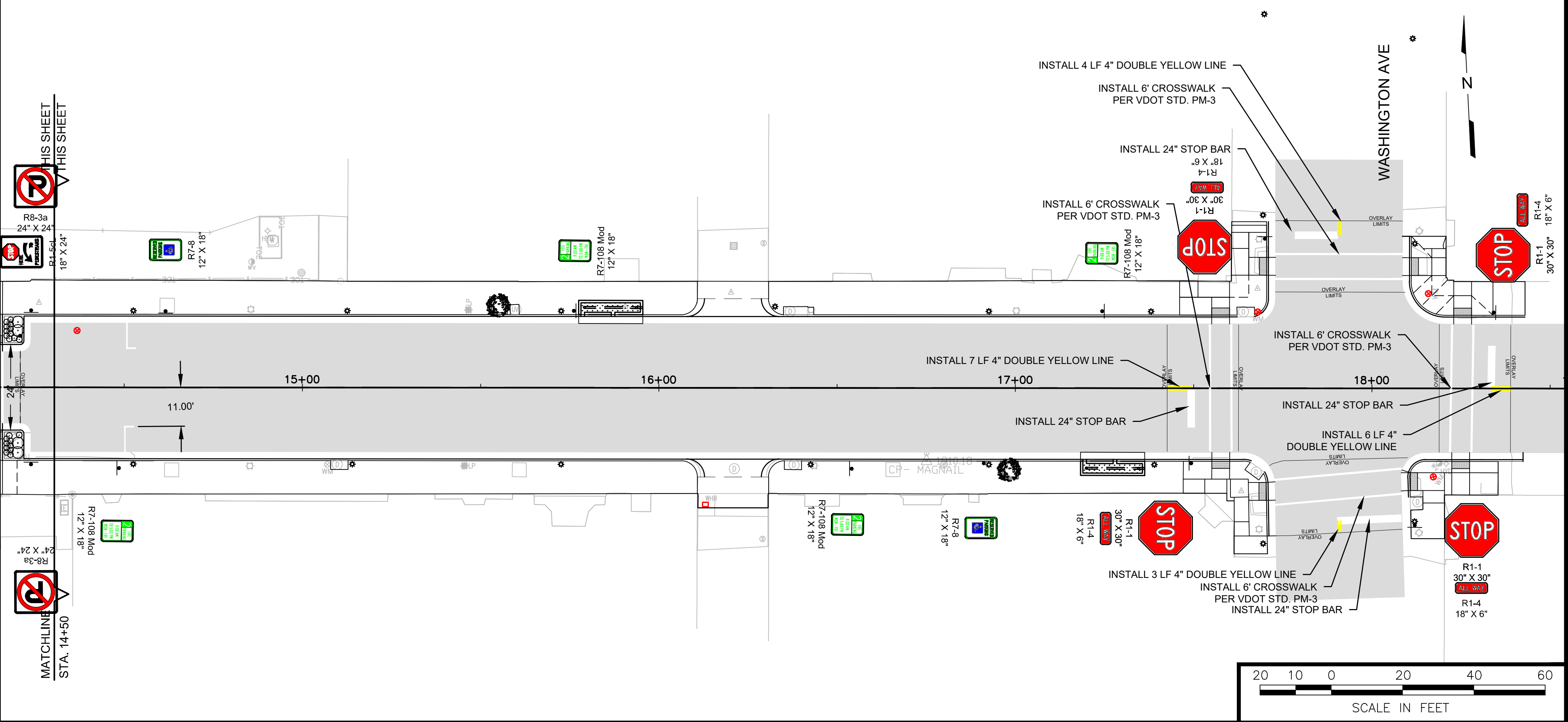
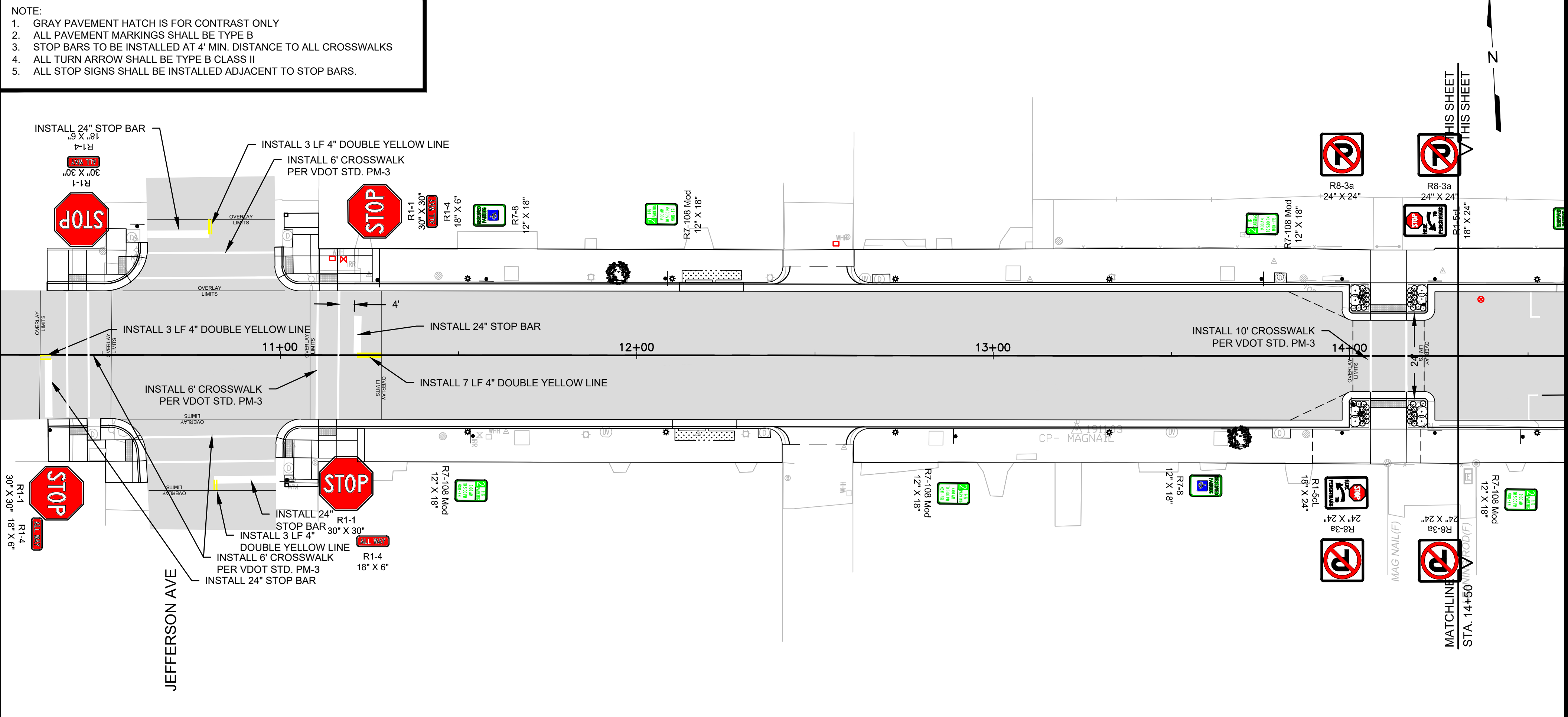
WEST MAIN STREET
 SIDEWALK IMPROVEMENTS
 ADA SIDEWALK DESIGN

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 DRAWN BY: AWM, TWH
 CHECKED BY: JMJ



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- NOTE:
1. GRAY PAVEMENT HATCH IS FOR CONTRAST ONLY
 2. ALL PAVEMENT MARKINGS SHALL BE TYPE B
 3. STOP BARS TO BE INSTALLED AT 4' MIN. DISTANCE TO ALL CROSSWALKS
 4. ALL TURN ARROW SHALL BE TYPE B CLASS II
 5. ALL STOP SIGNS SHALL BE INSTALLED ADJACENT TO STOP BARS.



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**WEST MAIN STREET
 SIDEWALK IMPROVEMENTS
 SIGNING AND MARKING PLAN**
 PULASKI, VIRGINIA

PROJECT NO. 20212161
 LAT. 37° 2' 51.85" N
 LONG. 80° 46' 52.44" W
 DATE: 2024 April 08
 DRAWN BY: AWM, TWH
 CHECKED BY: JMJ



SHEET NO.
6

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EROSION & SEDIMENT CONTROL AND STORMWATER MANAGEMENT NARRATIVE AND STORMWATER POLLUTION PROTECTION PLAN

A. PROJECT DESCRIPTION

General

The purpose of this project is to repair sidewalks and drainage structures on W Main St. The majority of the improvements are on grade, which is proposed to follow the existing roads and sidewalks which are already impervious surfaces. The total disturbed area for this project is 0.22 acres and is contained in the right-of-way of W Main St. Water quantity control is not addressed with permanent measures because land disturbance does not exceed 1 Acre, but the project does include the installation of urban bioretention basins.

Intended Sequence

Major components of the project which disturb soils are anticipated to occur as follows:

- Install erosion control measures.
- Remove topsoil and stockpile in areas as determined in the field based on sequence of construction for any areas that are not currently impervious. Locations shall be approved by the Town of Pulaski.
- Demolish and remove required materials such as pavement, sidewalk and curb and gutter.
- Install new improvements such as bioretention basins, curb and gutter, sidewalks, and planter areas strips.
- Replace topsoil, & provide permanent stabilization for all disturbed areas. A soil test is required, prior to final site stabilization, to determine fertilizer application rates for the establishment of grass on the site. The Virginia Cooperative Extension, or a geotechnical firm with soil testing facilities, shall be contracted to obtain a soil report for nutrient application.

B. EXISTING SITE CONDITIONS

The proposed improvements will be constructed along existing roadways including W Main St, Jefferson Ave, and N Washington Ave. Demolition and reconstructed areas are within the footprint of the existing impervious sidewalk with the exception of two mulch planter beds in the center of the project.

C. ADJACENT AREAS

All improvements are located in the Town of Pulaski. The adjacent structures are commercial, residential, and vacant. It is not anticipated that this project will have any impact on the adjacent areas. All construction activities will be confined to the properties owned by the Town of Pulaski and within easements. Access to the adjacent properties shall be addressed in the site work traffic plan.

D. OFF-SITE AREAS

Surplus material that is not suitable for use as fill material shall be disposed of by the Contractor. The Contractor shall provide an approved erosion and sediment control plan for those locations. Borrow material is not anticipated, but if needed shall be obtained by the Contractor from approved sources.

E. SOILS

The following information is based on the soils map found in the Soil Survey of Pulaski County / Town of Pulaski, Virginia. The site soils on site are designated "Urban Land" and will be considered equivalent to hydraulic soil group D, which are soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.

F. CRITICAL AREAS

Cut & Fill slopes are minimal in length and shall not be steeper than 12:1. Cross drainage is also minimum due to small drainage areas associated with the project. Critical areas shall include erosive soils as outlined by VDEQ. Contractor shall prevent runoff from exposed soils from leaving the site.

G. EROSION AND SEDIMENT CONTROL MEASURES

The construction-phase erosion and sediment controls shall be designed to retain sediment on site to the maximum extent practicable. All control measures must be properly selected, installed, and maintained in accordance with the manufacturers' specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee must replace or modify the control for site situations. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts (e.g. fugitive sediment in street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets). Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, picked up daily).

The following measures will be used to control erosion and sediment-laden runoff on this project. See plan sheets for locations of specific erosion control measures.

- Storm Drain Inlet Protection:** Storm sewer inlets will need to be protected to prevent sediment-laden runoff from clogging the sewer pipe during construction. Inlet protection should be used on each inlet until upland areas are stabilized. (VESCH Standard and Spec. 3.07)
- Topsoiling:** will provide a suitable growth medium for final site stabilization with vegetation. (VESCH Standard and Spec. 3.30)
- Temporary Seeding:** Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within seven days to denuded areas that may not be at final grade but will remain dormant (undisturbed) for longer than 30 days. (VESCH Standard and Spec. 3.31)
- Permanent Seeding:** will be used to establish vegetative cover and to reduce silt runoff for any areas not paved or roofed. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year. (VESCH Standard and Spec. 3.32)
- Dust Control:** shall be provided in accordance with VESCH Standard and Spec. 3.39

Supplementary E&S structures shall be constructed as required by the erosion control inspector, or as necessary to adequately control erosion and sediment deposition. E&S structures may be removed only when they have served their useful purpose but not before the upstream/upslope area has been stabilized.

H. STABILIZATION PRACTICES

- General - No specific schedule other than those guidelines given in the above descriptions of the vegetative practices will be used for temporary and permanent seeding measures.
 - Contractor shall provide a log of all major grading activities, any cessation, temporary or permanent, of construction activity, and when stabilization measures are implemented. This record shall be kept throughout the duration of the project. The permittee shall ensure that these records are updated, maintained, and become a permanent part of this overall plan.
 - Construction shall be sequenced so that grading operations can begin and end as quickly as possible. Stabilization measures shall be implemented on disturbed areas as soon as practicable. Embankment walls, upon reaching final grade, must be immediately seeded and fertilized to ensure proper stabilization. Permanent seeding shall be installed within 7 days of reaching final grade. Denuded areas that are not at final grade but will remain dormant for more than 30 days shall be temporarily seeded. Areas that are not to be disturbed must be clearly marked by flags, signs, etc.
- Permanent Stabilization - After the construction is completed, any portion of the site not stabilized with sidewalk, pavement or landscaping area shall be will be permanently stabilized with permanent seeding in accordance with VESCH Standard and Specification 3.32.

I. STORMWATER MANAGEMENT NARRATIVE (Quantity and Quality)

This project does not require a VPDES General Permit as the land disturbance is under 1 acre.

J. OTHER CONTROLS

- Materials, Garbage, Debris**

No solid materials, including building materials, garbage, and debris shall be discharged to surface waters of the State. The permittee shall ensure that these items are not left in a location where they could be transported by stormwater runoff off the site.
- Compliance with State & Local Waste, Sanitary, and/or Septic Regulations**

No temporary sewer facilities are planned for the site during construction. If temporary facilities are provided, they shall not be placed in the curb and gutter or any location where it would have a direct flow path to surface waters.
- Expected Construction and Waste Materials**

Construction and waste materials that could potentially be stored on site include topsoil, fill dirt, excavated material, fertilizer for seeding operations, fuel, and silt fence material.

Any stockpiles of topsoil, excavated material or fill dirt that are needed shall be surrounded on the downslope side by silt fence. Fertilizer must be kept in watertight containers, preferably in portable storage units and away from exposure to the weather, during storage on site. Care must be taken to minimize spillage of fertilizer if mixing operations are required to prepare the fertilizer for application.

If overnight storage of fuel is required, the fuel storage container must be equipped with a fueling mechanism disable device. To minimize the affect of any potential spills, maintain all on-site fueling operations as far away from surrounding surface waters and drainage facilities as is practical. Daily inspections of the fuel storage container must be implemented to detect the presence of leaks. The fueling operator shall have a safe fill, shutdown, and transfer procedure in place to minimize spillage during fueling activities. The operator must maintain a fully equipped spill kit on site at all times with the stored fuel. The kit must at least include absorbent mats or material to cleanup any spilled fuel. For any fuel spill on site equal to or exceeding 25 gallons, immediately create an appropriately sized berm around the area of spillage to minimize surface movement of the fuel. Contact local HAZMAT authorities, the engineer, and the regional DEG office as quickly as possible to report the spill and seek further assistance with spill cleanup.

Construction materials that could be carried offsite by stormwater (plastics, paper, etc) shall be picked up daily and placed in appropriate waste disposal containers.

State regulation section 9VAC25-880-70 requires all sites must minimize the exposure of waste materials to precipitation by closing or covering waste containers (dumpsters) during precipitation events and at the end of each business day.

K. APPROVED STATE/LOCAL PLANS

The stormwater pollution prevention plan is consistent with and integrated with the Erosion and Sediment Control Narrative prepared for this project, which has been submitted to the appropriate reviewing authorities for approval.

L. MAINTENANCE

All erosion and sediment control structures and systems shall be maintained, inspected, and repaired as needed to ensure continued performance of their intended function. In general, all erosion and sediment control measures shall be checked at least every 5 business days and no later than 24 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 24 hours between business days, the inspection shall be conducted on the next business day. All failing or damaged ESC measures will be repaired or replaced immediately after they are observed. The following items shall be checked in particular:

- The seeded areas shall be checked every 7 days to ensure that a good stand of grass is maintained. Grassed areas should be fertilized and reseeded as needed.
- Storm Drain Inlet Protection shall be inspected after each rainfall. Any required repairs shall be made immediately.

Specific requirements related to inspection and maintenance of each erosion control measure are discussed in the VESCH Standards and Specifications. The contractor shall be responsible for maintenance of all erosion control measures to the satisfaction of local review authorities, as well as the installation of additional measures as needed to ensure that sediment-laden runoff does not leave the site.

M. TOTAL MAXIMUM DAILY LOAD INFORMATION

The downstream receiving water is Peak Creek and then the New River. Pollutants of concern are sediment and bacteria. According to VA DEQ's NPS Nutrient Trading Data Viewer, the Peak Creek to the confluence of the New Rivers is impaired for Escherichia Coli (E. Coli) and PCBs in fish tissue.

N. INSPECTION

Disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site shall be inspected at least once every 4 business days or at least once every 5 calendar days and no later than 24 hours following a measurable storm event that is 0.25 inches or greater. All failing or damaged ESC measures will be repaired or replaced immediately after they are observed.

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. E&S measures shall be checked to see they are operating correctly. At accessible discharge points, inspection shall take place to ensure these control measures are effective at preventing significant impacts to receiving waters. Nearby downstream locations shall be inspected if discharge points are inaccessible. Sites of vehicle entrance or exit shall be inspected for evidence of offsite sediment tracking.

If existing control measures require modification or additional measures, such changes shall be made as soon as possible after the inspection or before the next anticipated storm event, as implementation is practicable.

Include inspection reports of all stormwater and erosion & sediment control measures along with any required actions as a result of inspections, with the stormwater pollution prevention plan. These reports shall include the name and qualifications of the inspector, dates of inspection, major observations and actions taken in response to inspections. Major observations include the location of discharge of sediment or pollutant from the site. These reports shall include incidents of noncompliance. If the report does not include any noncompliance incidents, the report shall contain a certification that the facility is in compliance with the stormwater pollution prevention plan and permit.

O. NON-STORM WATER DISCHARGES

No non-storm water discharges from Construction Activities are anticipated during this project.

P. CERTIFICATION

All contractors and subcontractors involved in the implementation of stormwater and erosion & sediment control measures must agree with and sign the certification statement below.

NO SITE WORK, LOGGING, GRUBBING, OR GRADING IS PERMITTED PRIOR TO ISSUANCE OF A LAND DISTURBING PERMIT.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 9VAC25-840 EROSION AND SEDIMENT CONTROL REGULATIONS.

ES-2: THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.

ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

ES-5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

ES-6: THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

ES-7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

ES-8: DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.

ES-9: THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY. UPON AWARD OF THE CONTRACT, THE CONTRACTOR SHALL HAVE A CERTIFIED RESPONSIBLE LAND DISTURBER FOR THIS PROJECT.

ES-10: THE RESPONSIBLE LAND DISTURBER SHALL BE ADDED TO THE PLAN AT THE PRE-CONSTRUCTION CONFERENCE.

ES-11: THE RESPONSIBLE LAND DISTURBER SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES FOR PROPER INSTALLATION AND DEFICIENCIES IMMEDIATELY AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. AT LEAST DAILY DURING PROLONGED RAINFALL, AND BI-WEEKLY WHEN NO RAINFALL EVENTS OCCUR. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MADE IMMEDIATELY.

ES-12: AS THE EROSION AND SEDIMENT CONTROL PLAN APPROVING AUTHORITY, THE TOWN OF PULASKI MAY REVISE THE APPROVED PLAN IF INSPECTION REVEALS THAT THE APPROVED PLAN IS INADEQUATE TO SATISFY APPLICABLE STANDARDS.

ES-13: ALL DISTURBED AREAS NOT OTHERWISE HARDSCAPED AND STABILIZED ARE TO BE SEEDED IN ACCORDANCE WITH THE SEEDING SPECIFICATIONS IN THE VESCH, LATEST EDITION.

ES-14: SEED AND MULCH ALL SOIL STOCKPILES AND MATERIALS LEFT UNDISTURBED IN ACCORDANCE WITH THE VESCH, LATEST EDITION.

ES-15: ALL CULVERT INLET PROTECTION AND STORM DRAIN INLET PROTECTION MUST REMAIN IN PLACE UNTIL FINAL UPSLOPE STABILIZATION IS ACHIEVED.

ES-16: THE FOLLOWING EROSION AND SEDIMENT CONTROL MEASURES REQUIRE CERTIFICATION BY THE DESIGN PROFESSIONAL UPON INSTALLATION AND PRIOR TO COMMENCING GENERAL SITE CONSTRUCTION. IF THESE MATERIALS ARE NOT UTILIZED THEN THE PLAN SHALL STATE THAT FACT.

A. URBAN BIORETENTION BASINS

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**WEST MAIN STREET
SIDEWALK IMPROVEMENTS
EROSION & SEDIMENT CONTROL NARRATIVE**
PULASKI, VIRGINIA

PROJECT NO. 20212161
LAT. 37° 2'51.85"N
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SHEET NO.
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MINIMUM STANDARDS (MS-19)

All applicable Virginia Erosion and Sediment Control Regulations and Minimum Standards shall be adhered to during all phases of construction. If plan details and specifications are more stringent, then they shall supersede the Minimum Standards. The Minimum Standards include, but are not limited to the following:

1. STABILIZATION OF DENUDED AREAS:

Permanent or temporary soil stabilization shall be applied to bare areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within seven days to denuded areas that may not be at final grade, but will remain dormant or undisturbed for longer than 14 days. Permanent stabilization shall be applied at areas that are to be left dormant for more than 1 year.

Applicable: The Contractor shall apply permanent seeding within seven days after reaching final grade. If Contractor elects to rough grade areas or postpone permanent seeding until other sections are complete which will remain dormant or undisturbed for more than 30 days, then temporary seeding shall be applied at the Contractor's expense.

2. STABILIZATION OF SOIL STOCKPILES:

During construction of the project, soil stockpiles shall be stabilized or protected with sediment trapping measures. The applicant is responsible for temporary protection and permanent stabilization of all soil stockpiles on site as well as soil intentionally transported from the project site.

Applicable: Due to limited space and existing easements stockpiling on site will not be allowed. With approved property owner agreements obtained by the contractor, stockpiles will be allowed offsite. The Contractor shall provide the required E&S permits and temporary and permanent stabilization measures for areas offsite.

3. PERMANENT VEGETATIVE COVER

A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that, in the opinion of the local authority (Town of Pulaski), is uniform and mature enough to survive to inhibit erosion.

Applicable: The Contractor must seed and mulch all denuded areas per the project specifications. Over-seeding may be required at the Contractor's expense until an adequate ground cover is achieved as determined by the Town of Pulaski. E&S measures shall not be removed until approved by the local authority. Areas of rutting shall be filled in and reseeded at the Contractor's expense.

4. TIMING & STABILIZATION OF SILT TRAPPING MEASURES:

Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land disturbing activity and shall be made functional before upslope land disturbance takes place.

Applicable: The Contractor shall install inlet protection on existing structures as noted on the plans prior to any land disturbance.

5. STABILIZATION OF EARTHEN STRUCTURES:

Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately after installation.

Not Applicable: No earthen structures are proposed for this project.

6. SEDIMENT TRAPS AND BASINS:

A sediment basin shall control surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to three acres. The sediment basin shall be designed and constructed to accommodate the anticipated sediment loading for the land disturbing activity. The outfall device or system device shall take into account the total drainage area flowing through the disturbed area to be served by the basin.

Not Applicable: No sediment traps or basins are proposed since concentrated drainage crosses the roadway perpendicularly and there is minor land disturbance per outfall.

7. CUT AND FILL SLOPES:

Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Slopes that are found to be eroding excessively within one year of permanent stabilization shall be provided with additional slope stabilizing measures until the problem is corrected.

Applicable: Prior to final acceptance, there shall be no evidence of excessive erosion and the cut/fill slopes shall be stabilized with permanent stabilization acceptable to the Town of Pulaski. In the event that excessive erosion is present within one year after project acceptance, the Contractor shall be responsible for remediation.

8. CONCENTRATED RUN-OFF DOWN CUT OR FILL SLOPES:

Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume, or slope drain structure.

Not Applicable: Concentrated runoff is not designed to flow down cut or fill slopes with existing or newly constructed ditches.

9. WATER SEEPS FROM A SLOPE FACE:

Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.

Not Applicable: Based on site investigation, there are no existing water seeps within the project corridor. In the event water seeps are discovered, the Contractor shall notify the Engineer and the Town of Pulaski and adequate drainage or other protection shall be provided.

10. STORM SEWER INLET PROTECTION:

All storm sewer inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.

Applicable: The Contractor shall protect the existing storm sewer system with inlet protection as shown on the plans. All inlet protection shall be maintained until final completion.

11. STABILIZATION OF OUTLETS:

Before newly constructed stormwater conveyance channels are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel.

Not Applicable: No stormwater conveyance channels are proposed.

12. WORK IN LIVE WATERCOURSES:

When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Non-erodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these structures if armored by non-erodible cover materials.

Not Applicable: No work is permitted within a live watercourse.

13. CROSSING A LIVE WATERCOURSE:

When a live watercourse must be crossed by construction vehicles more than twice in any six month period, a temporary stream crossing constructed of non-erodible materials shall be provided.

Not Applicable: No live watercourses will be crossed.

14. APPLICABLE REGULATIONS:

All applicable federal, state and local regulations pertaining to working in or crossing live watercourses shall be met.

Not Applicable: No live watercourses will be impacted.

15. STABILIZATION OF BED AND BANKS

The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.

Not Applicable: No stream banks will be impacted.

16. UNDERGROUND UTILITIES:

Underground utilities shall be installed in accordance with the following standards in addition to other criteria:

- No more than 500 linear feet of trench may be opened at one time.
- Excavated material shall be placed on the uphill side of trenches
- Effluent for dewatering operations shall be filtered or passed through approved sediment trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or offsite property.
- Material used for backfilling trenches shall be properly compacted in order to minimize erosion and promote stabilization.
- Re-stabilization shall be accomplished in accordance with these regulations.
- Applicable safety regulations shall be complied with.

Applicable: Adjustment of sanitary sewer manhole, gas valve, and water valve rim elevations is to be completed in accordance with these requirements for excavation safety and stabilization.

17. CONSTRUCTION ACCESS ROUTES:

Where construction vehicle access routes intersect paved public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto paved surfaces. Where sediment is transported onto a public road surface, the road shall be cleaned thoroughly at the end of each day. Sediment shall be removed by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual lots as well as to larger land disturbing activities.

Applicable: Sediment tracked onto paved surfaces will be swept up and properly disposed at the end of each work day and as needed. If it is determined by the ESC inspector that a construction entrance is required to prevent tracking of sediment, the Contractor shall install a Construction Entrance before proceeding with land disturbing activities.

18. TEMPORARY E&S CONTROL MEASURE REMOVAL:

All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization or after temporary measures are no longer needed, unless otherwise authorized by the local program authority. Trapped sediment and the disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sediment.

Applicable: After the site is stabilized and approved by the Town of Pulaski, inlet protection and other temporary E&S measures shall be removed within 30 days. The areas of removal shall be smoothly graded, seeded, and mulched. Any remaining buildup of sediment shall be removed from the site by the Contractor.

19. ADEQUACY OF RECEIVING CHANNELS:

Properties and waterways downstream from the development site shall be protected from sediment deposition, erosion, and damage, due to increases in volume, velocity and peak flow rates of stormwater runoff for the stated frequency storm of 24-hour duration in accordance with the following standards and criteria:

- Concentrated stormwater runoff leaving a development site shall be discharged into an adequate natural or man-made receiving channel, pipe, or storm sewer system. For those sites where runoff is discharged into a pipe or pipe system, downstream stability analysis at the outfall of the pipe or pipe system shall be performed.
- Adequacy of all channels and pipes shall be verified in the following manner:

- The applicant shall demonstrate that the total drainage areas to the point of analysis within the channel is one hundred times greater than the contributing drainage area of the project in question; or
- Each of the following:
 - Natural channels shall be analyzed by the use of a two-year storm to verify that stormwater will not overtop channel banks nor cause erosion of channel bed or banks; and
 - All previously constructed man-made channels shall be analyzed by the use of a ten-year storm to verify that stormwater will not overtop its banks and by the use of a two-year storm to demonstrate that stormwater will not cause erosion of channel bed or banks; and
 - Pipes and storm sewer systems shall be analyzed by the use of a ten-year storm to verify that stormwater will be contained within the pipe or system.
 - If natural receiving channels or previously constructed man-made channels or pipes are not adequate, the applicant shall:
- Improve the channel to a condition where a ten-year storm will not overtop the banks and a two-year storm will not cause erosion to the channel bed or banks; or
- Improve the pipe or pipe system to a condition where the ten-year storm is contained within the appurtenances; or
- Develop a site design that will not cause the pre-development peak runoff rate from a two-year storm to increase when runoff outfalls into a natural channel or will not cause the pre-development peak runoff rate from a ten-year storm to increase when runoff outfalls onto a man-made channel; or
- Provide a combination of channel improvement, stormwater detention or other measures which is satisfactory to the plan-approving authority to prevent downstream erosion.
 - The applicant shall provide evidence of permission to make the improvements.
 - All hydraulic analyses shall be based on the existing watershed characteristics and the ultimate development of the subject project.
 - If the applicant chooses an option that includes stormwater detention, applicant shall obtain approval from the locality of a plan for maintenance of the detention facilities. The plan shall set forth the maintenance of the facility and the person responsible for performing the maintenance.
 - Outfall from a detention facility shall be discharged to a receiving channel, and energy dissipaters shall be placed at the outfall of all detention facilities as necessary to provide a stabilized transition from the facility to the receiving channel.
 - All on-site channels must be verified to be adequate.
 - Increased Volumes of sheet flows that may cause erosion or sedimentation on adjacent properties shall be diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.
 - In applying these stormwater runoff criteria, individual lots or parcels in a residential, commercial, or industrial development shall not be considered to be separate development projects. Instead, the development, as a whole, shall be considered to be a single development project. Hydrologic parameters that reflect the ultimate development condition shall be used in all engineering calculations.
 - All measures used to protect properties and waterways shall be employed in a manner which minimizes impacts on the physical, chemical, and biological integrity of rivers, streams, and other waters of the state.
- Applicable:** This project is primarily a maintenance project, restoring existing line and grade for the roadway, sidewalk, and gutters. Two small planter beds will be reduced in size as part of the associated curb ramp redesign and four bioretention basins installed in line with existing gutter. The pre and post development review shows that the drainage coefficient for the corridor remains unchanged and time of concentration lines have not been altered for any of the existing curb inlets

Disturbed Area: 0.22 AC

Pre-Development: C Value = 0.88

- 833.84 SF of mulch with light vegetation C = 0.70
- 8799.60 SF of impervious area (gutters and sidewalks) C = 0.90

Post-Development: C Value = 0.88

- 332.89 SF of landscaping and bioretention basin C = 0.40
- 9300.55 SF of impervious area (gutters and sidewalks) C = 0.90

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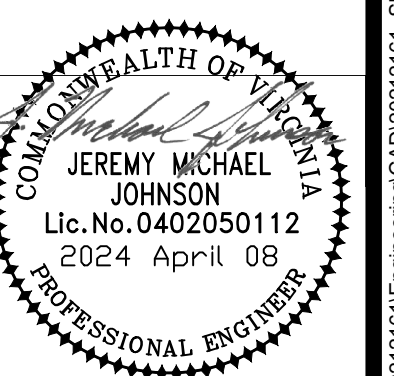
WEST MAIN STREET

SIDEWALK IMPROVEMENTS

EROSION & SEDIMENT CONTROL NARRATIVE

PULASKI, VIRGINIA

PROJECT NO.	20212161
LAT.	37° 2'51.85"N
LONG.	80°46'52.44"W
DATE:	2024 April 08
DRAWN BY:	AWM, TWH
CHECKED BY:	JMJ



SHEET NO.
7A

ROADWAY CLASSIFICATION

- WEST MAIN ST- **MINOR ARTERIAL** - SPEED LIMIT 25 MPH - 900 ADT
- N WASHINGTON AVE - **OTHER PRINCIPAL ARTERIAL** - SPEED LIMIT 25 MPH - 3400 ADT
- JEFFERSON AVE - **UNCLASSIFIED LOCAL ROAD** - SPEED LIMIT 25 MPH

PROJECT NUMBERS

- VDOT PROJECT # EN20-125-133 EN20-125-134
- UPC#: 117993 117996

TEMPORARY TRAFFIC CONTROL REFERENCES

- TTC-4.2: STATIONARY OPERATION ON A SHOULDER
- TTC-5.2: SHOULDER OPERATION WITH MINOR ENCROACHMENT
- TTC-29.2 TURN LANE CLOSURE
- TTC-34.2: STREET CLOSURE OPERATION WITH DETOUR
- TTC-35.1: SIDEWALK CLOSURE AND BYPASS SIDEWALK OPERATION
- TTC-53.0: SIGNING FOR PROJECT LIMITS

LOCAL EMERGENCY RESPONSE AGENCY CONTACT LIST (911)

- 911 DISPATCH (NOTIFICATION FOR ALL ALTERED ACCESS ROUTES) 540-980-7800 (DIAL 0)
- TOWN OF PULASKI POLICE DEPARTMENT 540-994-8667
- TOWN OF PULASKI FIRE DEPARTMENT 540-994-8662
- VDOT TRAFFIC OPERATIONS CENTER (SOUTHWEST REGION) 540-375-0170
- VIRGINIA STATE POLICE (DIV. 4 AREA 24) 540-643-2560

PROPOSED CONSTRUCTION SEQUENCE

EACH STAGE OF CONSTRUCTION WILL INCLUDE THE FOLLOWING GENERAL STEPS:

1. INSTALLATION OF PROJECT LIMITS SIGNAGE.
2. INSTALLATION OF APPROVED TEMPORARY TRAFFIC CONTROL MEASURES.
3. PERFORM DEMOLITION ACTIVITIES.
4. INSTALLATION OF PROPOSED PEDESTRIAN IMPROVEMENTS.
5. RESTORATION OF PROPERTY.
6. REMOVAL OF TEMPORARY TRAFFIC CONTROL MEASURES.
7. REMOVAL OF PROJECT LIMITS SIGNAGE.

AT NO TIME SHALL FLAGGERS CONTROL TRAFFIC AT A SIGNALIZED INTERSECTION UNLESS POWER TO THE TRAFFIC SIGNAL HAS BEEN DISCONNECTED.

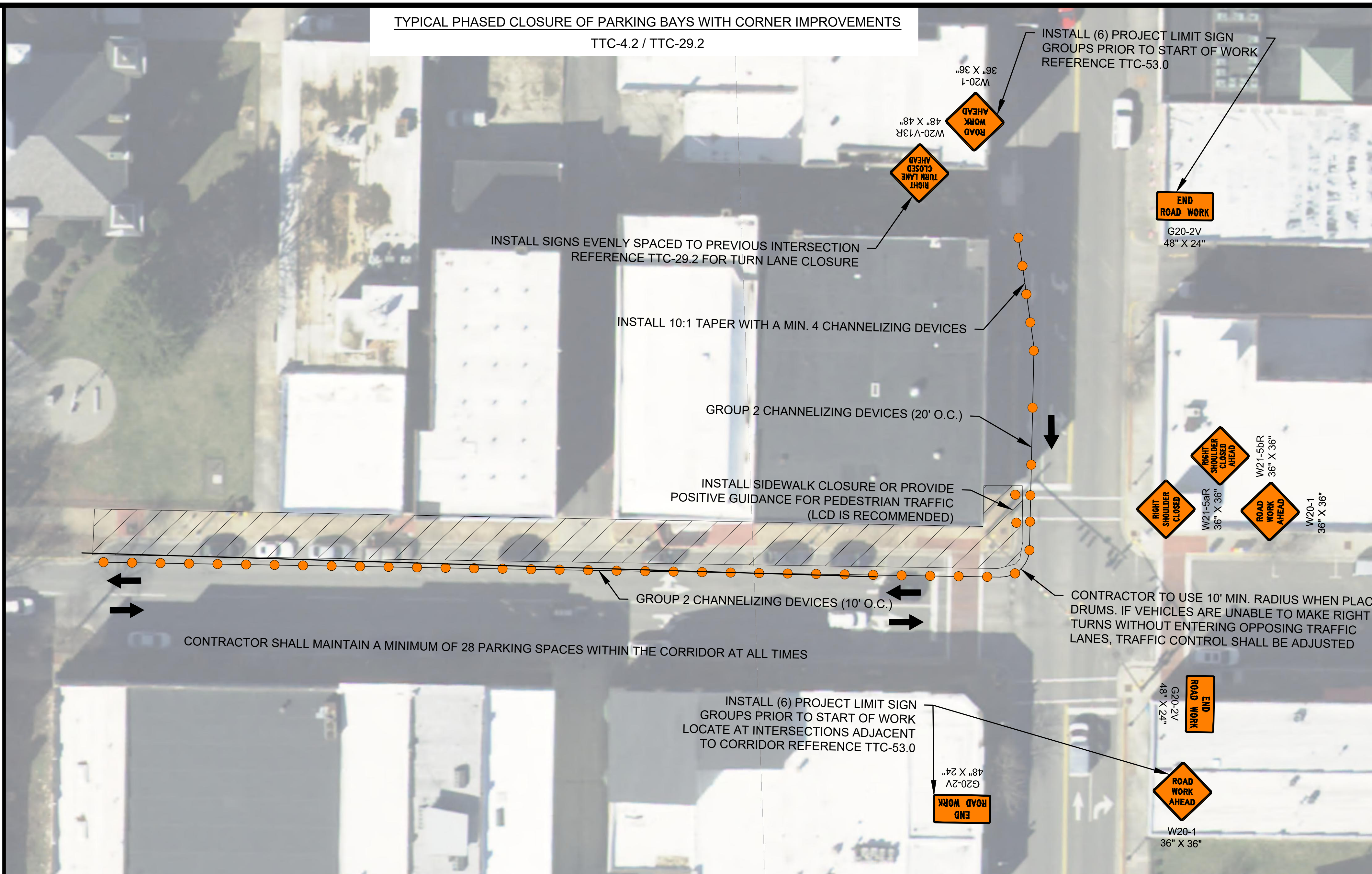
TRAFFIC CONTROL SHALL BE LIMITED TO PARKING AREA CLOSURES NOT TO EXCEED 400 LINEAR FEET AT ANY GIVEN TIME. FLAGGING OPERATIONS SHALL BE PERMITTED FOR WORK AT THE MID-BLOCK CROSSING AND PAVEMENT REPAIRS IN THE CENTER OF MAIN STREET.

NOTES

1. PROJECT CATEGORY: TYPE A, CATEGORY II.
2. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCE PLAN TO GAIN APPROVAL FROM THE TOWN OF PULASKI PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF LANE CLOSURES WITH THE TOWN OF PULASKI.
3. IN THE EVENT OF A STREET OR LANE CLOSURE, THE CONTRACTOR SHALL NOTIFY EMERGENCY DISPATCH CENTER AT LEAST 24 HOURS PRIOR TO CLOSURE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS INCLUDING FEES.
5. LANE WIDTHS SHALL BE A MINIMUM OF 10 FEET. FLAGGING OPERATIONS MAY BE REQUIRED FOR CERTAIN TASKS. THE USE OF FLAGGING OPERATIONS SHALL BE APPROVED BY THE ENGINEER.
6. TRAFFIC CONTROL SHALL PROVIDE POSITIVE GUIDANCE FOR PEDESTRIANS AND CYCLISTS AND SEPARATION FROM VEHICULAR TRAFFIC.
7. PEDESTRIAN ACCESS TO ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.
8. ALL TEMPORARY TRAFFIC CONTROL PLANS AND MEASURES SHALL BE COMPLETED PER THE 2011 VDOT WORK AREA PROTECTION MANUAL (2020, REVISION 2.1)
9. ALL TEMPORARY TRAFFIC CONTROL MEASURES INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICE, PCMS, FLAGGING, AND CONC. BARRIER UTILIZED FOR TEMPORARY TRAFFIC CONTROL SHALL BE PAID FOR ON A LUMP SUM BASIS UNDER BID ITEM 15401 TEMPORARY TRAFFIC CONTROL. CONTRACTOR SHALL ESTIMATE WORK DURATIONS FOR DETOUR AND MAJOR TRAFFIC CONTROL OPERATIONS AND INCORPORATE THE REQUIRED MEASURES INTO THEIR BID.

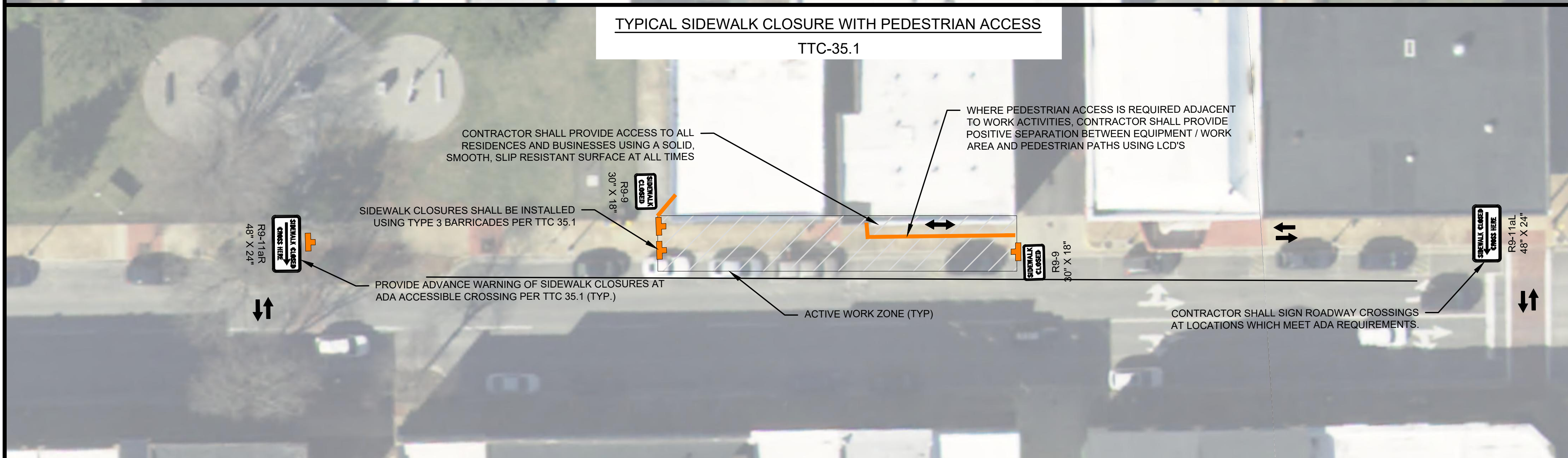
TYPICAL PHASED CLOSURE OF PARKING BAYS WITH CORNER IMPROVEMENTS

TTC-4.2 / TTC-29.2



TYPICAL SIDEWALK CLOSURE WITH PEDESTRIAN ACCESS

TTC-35.1



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COMMONWEALTH OF VIRGINIA
 JEREMY MICHAEL JOHNSON
 Lic. No. 0402050112
 2024 April 08
 PROFESSIONAL ENGINEER

Apr 08, 2024 - 9:22am \\nasd01\projects\2021\20212161\Engineering\CAD\20212161\ SHEETS.dwg