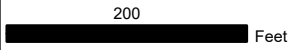


**POD2022-00480**

**Sam's Xpress  
at 7411 West  
Broad Street**

Tuckahoe District



MS Nov 2023

Ref: 765-749-9512  
766-748-0483 (pt)



**POD2022-00480**

**Sam's Xpress  
at 7411 West  
Broad Street**

Tuckahoe District



MS Nov 2023

Ref: 765-749-9512  
766-748-0483 (pt)

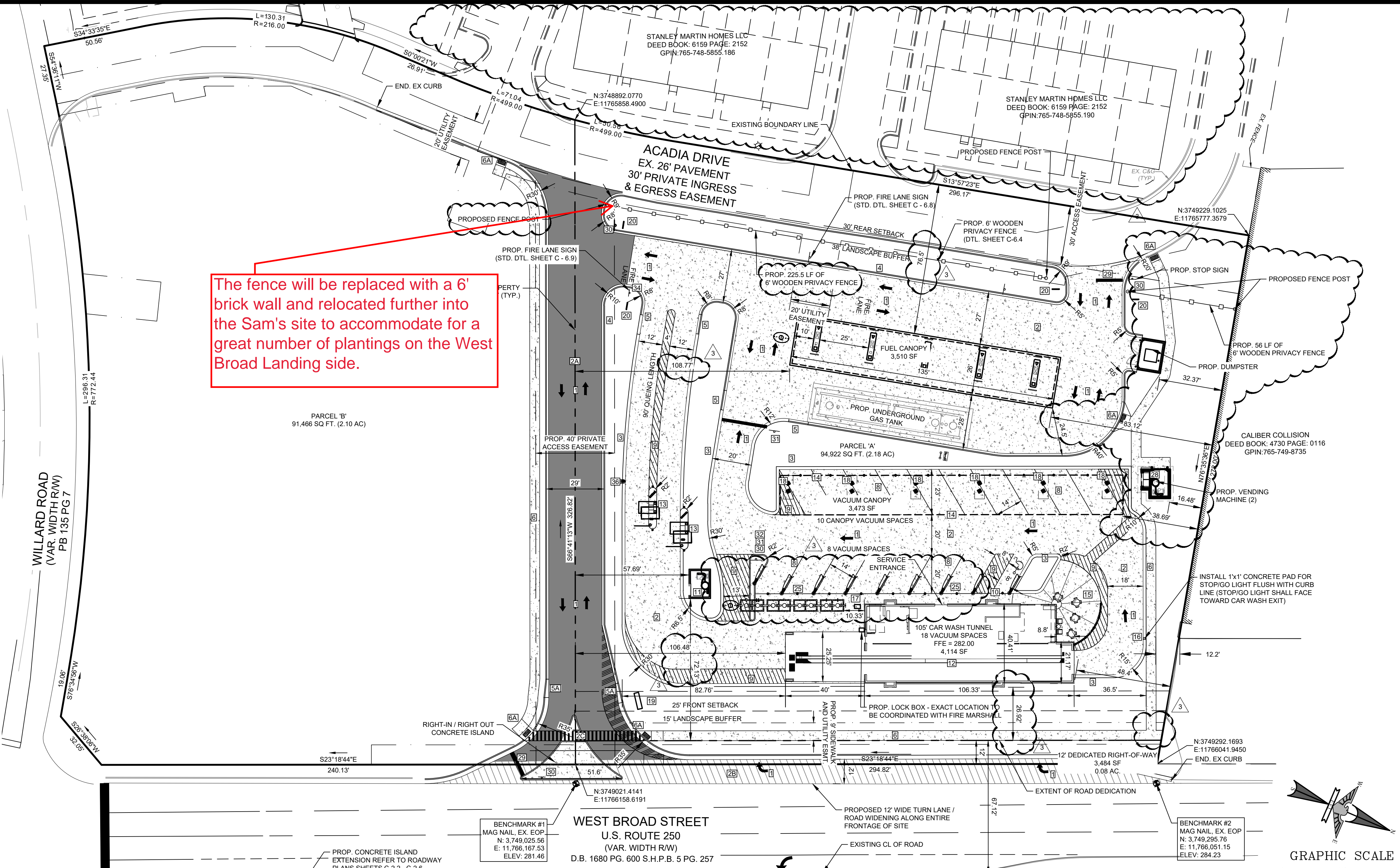
**SITE AND DEVELOPMENT DATA**

JURISDICTION	Project Number: PRJ2021-02133
GPIN(S)	Master case #: POD2022-00480
SITE ADDRESS	Planning ID: POD2022-00480
ZONING	Case Number: POD2022-00480
USE CLASSIFI	
TOTAL AREA	
PARCEL A	
PARCEL B	
DISTURBED AR	
PROPOSED IMPERVIOUS AREA	52,452 SQ. FT. OR 1.204 AC.
MINIMUM FRONT SETBACK	25 FEET
MINIMUM CORNER/SIDE SETBACK	0/0 FEET
MINIMUM REAR SETBACK	30 FEET

**SITE KEY NOTES:**

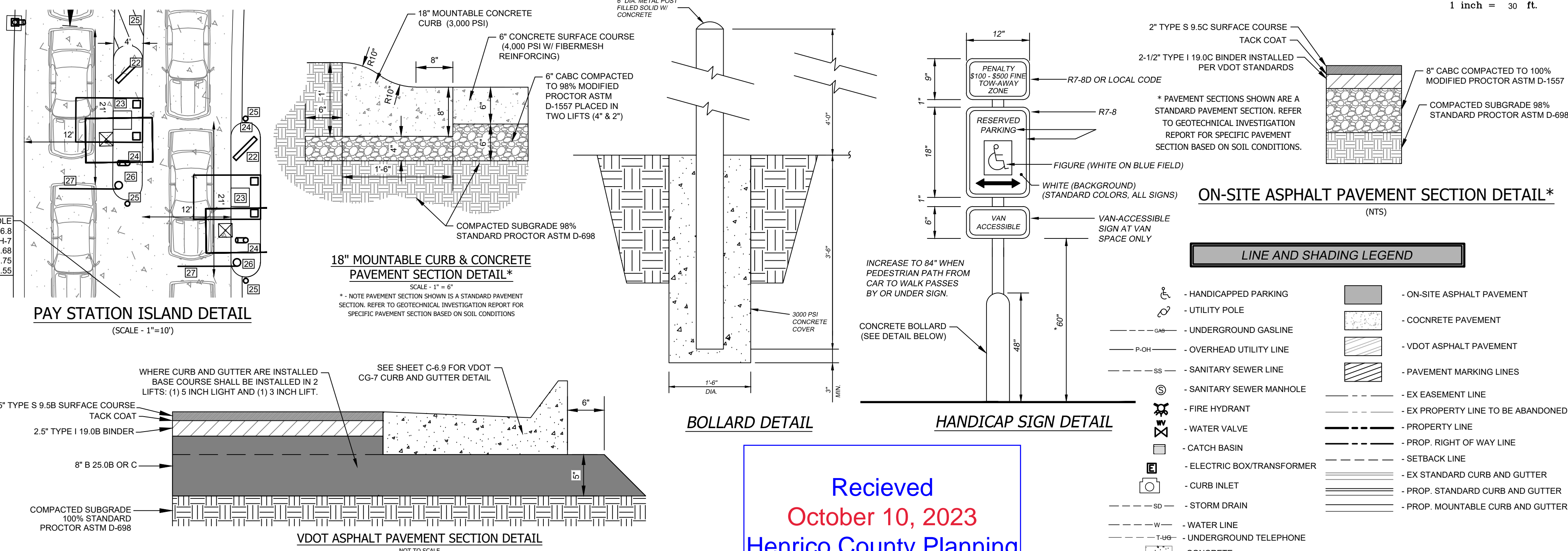
- 1 - PAINT WHITE TRAFFIC ARROWS PER MUTCD STANDARDS
- 2 - CONSTRUCT CONCRETE PAVEMENT (SEE DETAIL ON THIS SHEET) (SAW CUTS AT 10'X10' MAX. & CONTROL JOINTS AT 50' X 50' MAX. SPACING)
- 2A - CONSTRUCT ON SITE ASPHALT PAVEMENT (SEE DETAIL ON THIS SHEET)
- 2B - CONSTRUCT VDOT ASPHALT PAVEMENT (SEE DETAIL ON THIS SHEET)
- 3 - **Planning:**
- 4 - **- Proposed internal drive will not connect to Acadia Drive at the proposed location. Once the adjacent lot is developed, an entrance aligning with St. Elias Drive will be constructed.**
- 5 - **- See standard and additional comments.**
- 6 - **All other Review Agencies:**
- 7 - **- See standard and additional comments.**
- 22 - PROPOSED PAY HERE CANOPY (EXACT LOCATION TO BE COORDINATED WITH CONSTRUCTION MANAGER, SIGNAGE TO BE PERMITTED BY OTHERS)
- 23 - PROPOSED CAMERA POLES (EXACT LOCATION TO BE COORDINATED WITH CONSTRUCTION MANAGER, SIGNAGE TO BE PERMITTED BY OTHERS)
- 24 - PROPOSED 6" CONCRETE BOLLARD (SHALL NOT BLOCK VIEW OF MENU BOARD)
- 25 - PROPOSED 4" CONCRETE BOLLARD (TYP.) (SEE DETAIL ON THIS SHEET)
- 26 - PROPOSED TRAFFIC GATE
- 27 - SEE I.C.S. DRAWINGS FOR NUMBER AND LOCATION OF PROPOSED DETECTOR LOOPS
- 28 - CONSTRUCT VACUUM EQUIPMENT AND VENDING MACHINE ENCLOSURE - 2 MACHINE MAXIMUM (SEE ARCHITECTURAL PLANS FOR DETAILS & DIMENSIONS)
- 29 - PROPOSED 24" STOP BAR
- 30 - CONSTRUCT R1-1 STOP SIGN
- 31 - CONSTRUCT DO NOT ENTER SIGN (PER MUTCD STANDARDS)
- 32 - CONSTRUCT NO RIGHT TURN SIGN (PER MUTCD STANDARDS)
- 33 - CONSTRUCT PAY STATION CANOPY HEIGHT WARNING SIGN (13'-0" HEIGHT)
- 34 - CONSTRUCT FIRE LANE SIGN (SEE NOTES AND DETAILS ON SHEET C-6.10)
- 35 - CONSTRUCT R6-1R ONE-WAY SIGN
- 36 - CONSTRUCT 2x2" CONCRETE PADS FOR LPR CAMERAS (CENTER OF PADS TO BE 24" BACK FROM THE CENTER OF PAY STATION)
- 37 - PROPOSED 4" CONCRETE BOLLARD (TYP.) (SEE DETAIL ON THIS SHEET)

The fence will be replaced with a 6' brick wall and relocated further into the Sam's site to accommodate for a great number of plantings on the West Broad Landing side.



**SITE NOTES:**

- THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COSTS HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR(S) SHALL CONTACT VIRGINIA MISS UTILITY AT 1-800-552-3120 FOR ASSISTANCE IN LOCATING EXISTING UTILITIES. CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
- THE LOCATIONS OF ALL UTILITIES SHOWN ON THESE PLANS ARE BASED ON THE AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UTILITIES WITH THE UTILITY OWNERS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES. FAILURE OF THE CONTRACTOR TO FOLLOW THIS PROCEDURE SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATION OF THE WORK MANDATED BY ANY REGULATORY AUTHORITY. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY AND LOCAL CODES.
- THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHT-OF-WAYS, PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS. ACCESS SHALL BE LIMITED UNTIL PERMISSION IS GRANTED.
- CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE CONTRACT LIMITS DUE TO CONSTRUCTION OPERATIONS.
- ALL SITE DIMENSIONS ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED.
- THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES AND REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
- BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL REVIEW ALL PLANS AND SPECIFICATIONS AND THE JOB SITE. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER WHO PREPARED THE PLANS OF ANY DISCREPANCIES THAT MAY REQUIRE MODIFICATIONS TO THESE PLANS OR OF ANY FIELD CONFLICTS.
- ALL PERMITS RELATIVE TO THE PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY AND LOCAL CODES.
- ALL WORK IN RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH "THE CURRENT EDITION OF THE STATE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS".
- CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD THE OWNER AND DESIGN PROFESSIONAL HARMLESS OF ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, ACCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL.
- SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE "X" AS DEFINED BY NFIP F.I.R.M. MAP NUMBER 51087C1910C, EFFECTIVE DATE: DECEMBER 18, 2007.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL STOP SIGNS, DIRECTIONAL SIGNS, AND STRIPING SHOWN ON THE PLANS.
- PROPOSED FUEL PUMPS SHALL MEET SECTION 24-4324B USE STANDARDS.
- THE HOURS OF OPERATION FOR THE CAR WASH AND FUEL STATION ARE 7:30 AM - 9:00 PM, SUNDAY TO SATURDAY.
- VACUUMS CANNOT PRODUCE MORE THAN 55 dBA ABOVE AMBIENT SOUNDS AT ANY LOT BOUNDARY LINE AT THE PERIPHERY OF THE SITE.



Recieved  
October 10, 2023  
Henrico County Planning

EAGLE ENGINEERING

COMMONWEALTH OF VIRGINIA

MATTHEW C KIRCH  
Lic. No. 05846

NOVEMBER 15, 2023

FIRM LICENSE # C-0873

NOVEMBER 15, 2023

SAM'S XPRESS CAR WASH  
7411 W. BROAD ST  
HENRICO COUNTY, VA

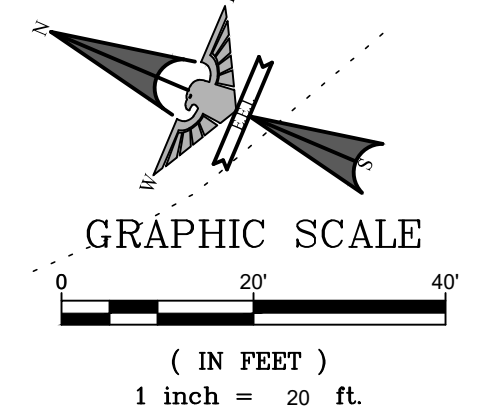
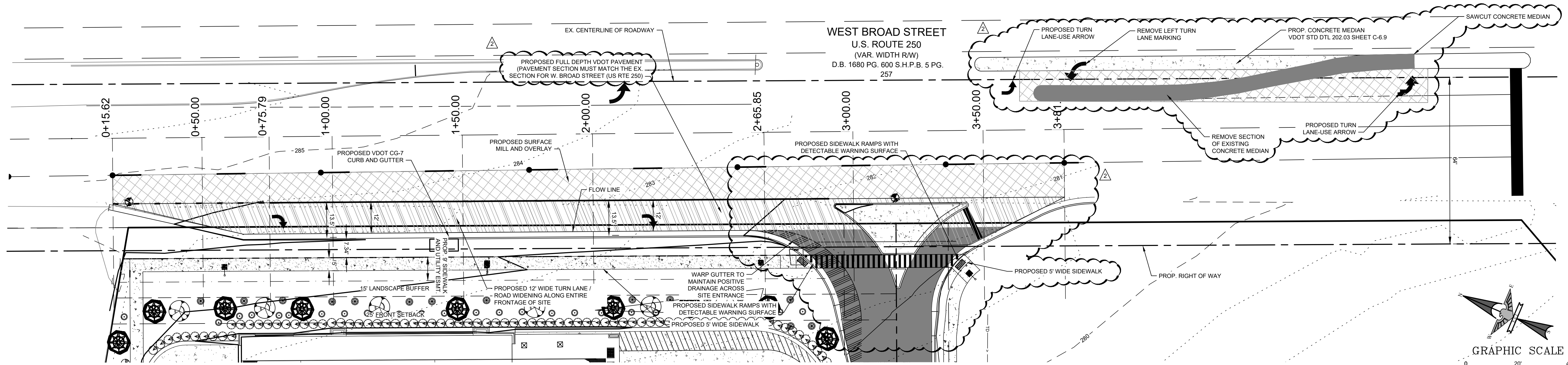
NOVEMBER 15, 2023

SAM'S XPRESS CAR WASH

SITE PLAN

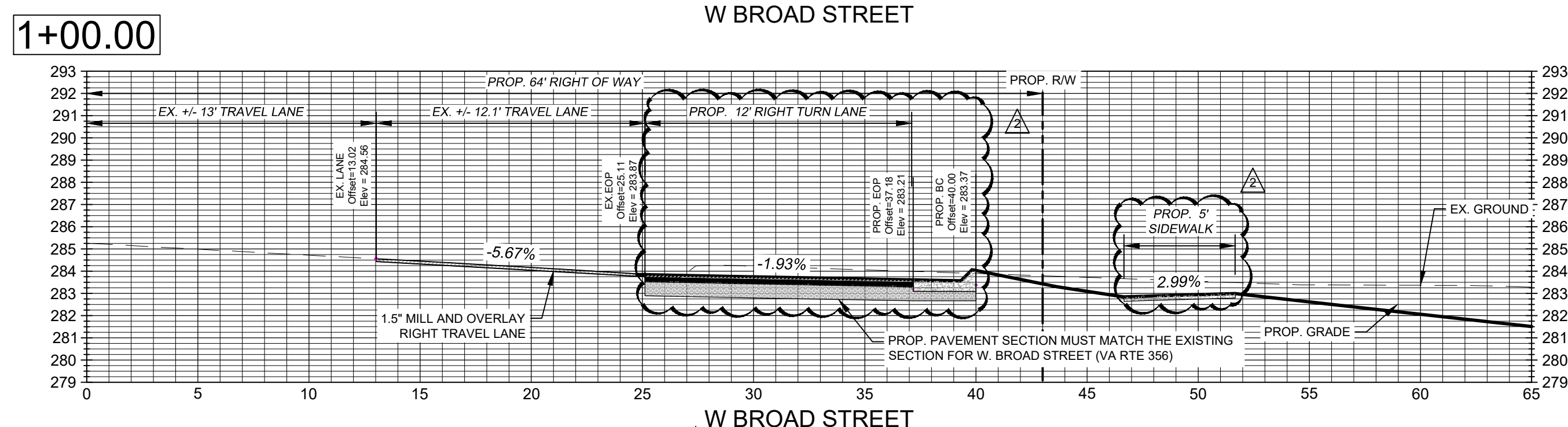
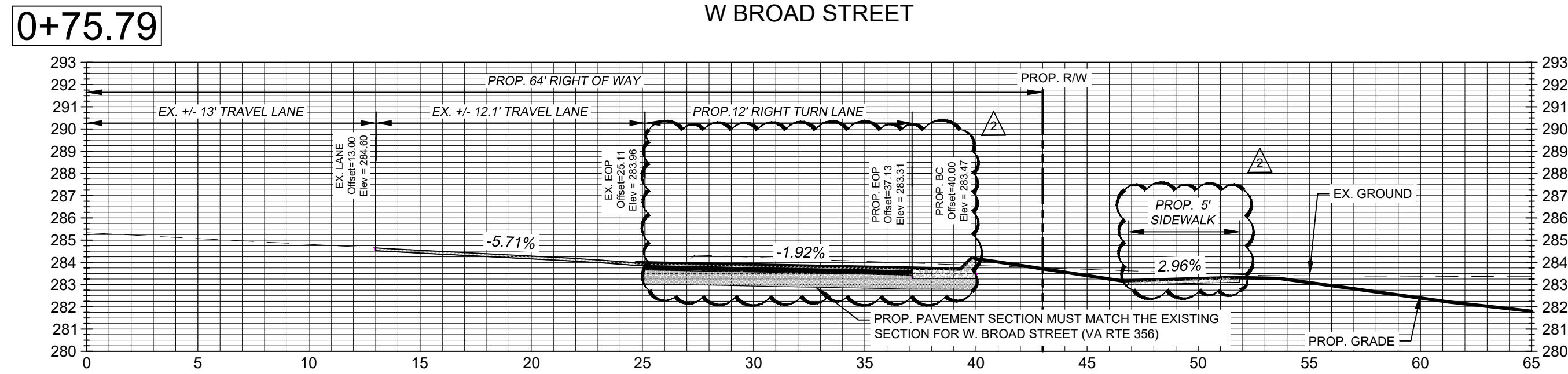
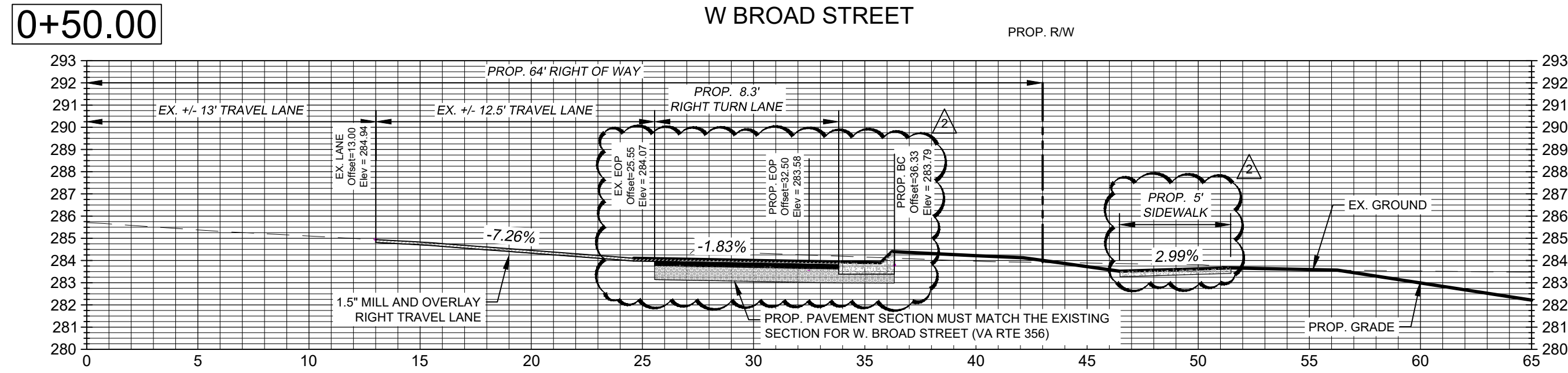
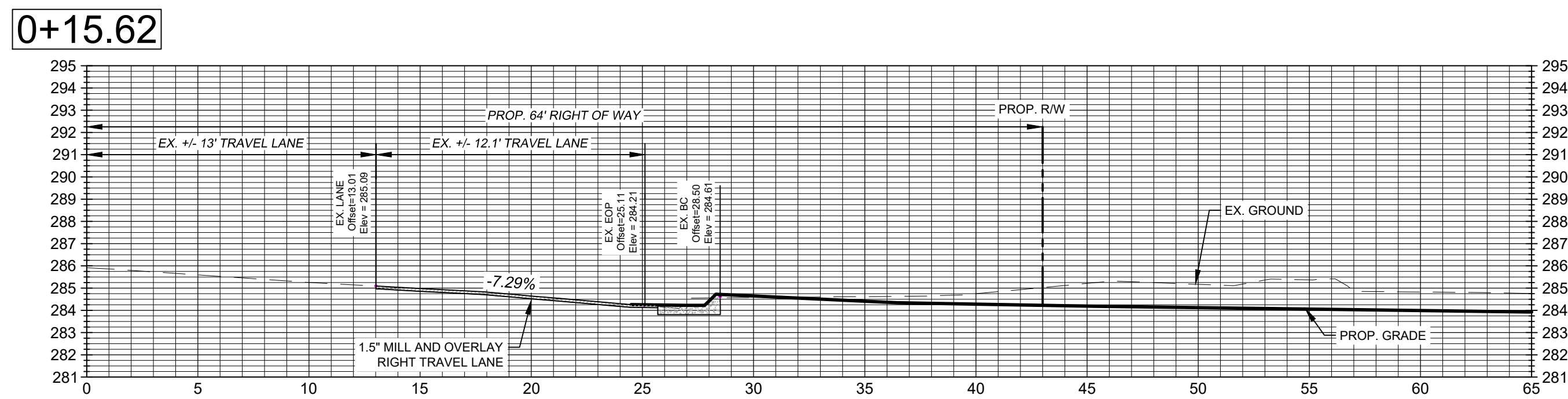
Sheet  
C-2

Staff Plan



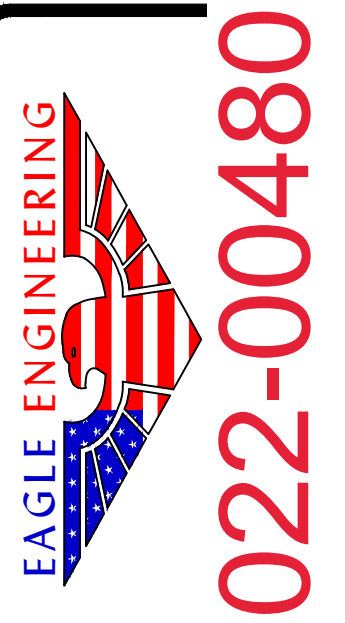
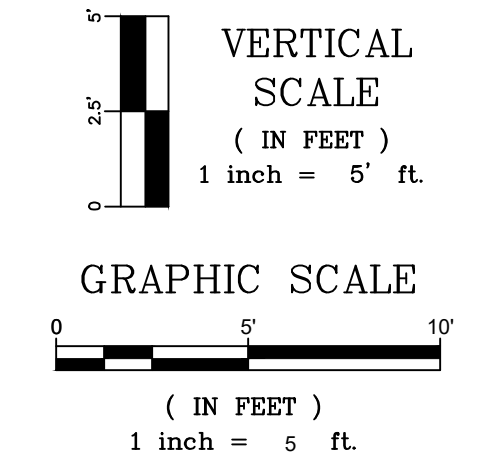
**PAVEMENT LEGEND**

ON-SITE ASPHALT PAVEMENT	
CONCRETE SIDEWALK	
VDOT ASPHALT PAVEMENT	
MILL AND SURFACE OVERLAY	



**PAVEMENT SECTIONS**

1.5" TYPE S 9.5B SURFACE COURSE	
2.5" TYPE I 19.0B BINDER	
8" B 25.0B OR C BASE COURSE	



COMMONWEALTH OF VIRGINIA  
 MATTHEW C.K.  
 Lic. No. 05  
 Matthew C.K.  
 PROFESSIONAL ENGINEER

ADDRESS: HENRICO COUNTY COMMENTS

NO.	DATE	BY	ISSUE
2	09/29/2023	THH	ADDRESS HENRICO COUNTY COMMENTS



SAM'S X-PRESS CAR WASH  
 7411 W. BROAD ST  
 HENRICO COUNTY, VA

ROAD IMPROVEMENT  
 PLAN  
 Staff Plan

Sheet

POD2022-00480

November 15, 2023

**SEEDING SCHEDULE**  
FOR SHOULDERS, SIDE DITCHES & SLOPES (MAX 2:1)

DATE	TYPE	PLANTING RATE
AUG 15-NOV 1	TALL FESCUE	300 #/AC
NOV 1-MAR 1	TALL FESCUE AND ABRUZZI RYE	300 #/AC 25 #/AC
MAR 1-APR 15	TALL FESCUE	300 #/AC
APR 15-JUN 30	HULLED COMMON BERMUDA GRASS	25 #/AC 25 #/AC
JUL 15-AUG 15	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS	120 #/AC 35 #/AC 30 #/AC

FOR SLOPES (3:1 TO 2:1)

MAR 1-JUN 1	TALL FESCUE	50 #/AC
(MAR 1-JUNE 30)	OR ADD WEEPING LOVEGRASS	10 #/AC
(MAR 1-JUNE 30)	OR ADD HULLED COMMON BERMUDA GRASS	25 #/AC
JUN 1-SEPT 1	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS	120 #/AC 35 #/AC 30 #/AC
SEPT 1-MAR 1 (NOV 1-MAR 1)	TALL FESCUE ADD ABRUZZI RYE	120 #/AC 25 #/AC

**QUANTITIES**  
QUANTITIES SHOWN IN LIST ARE FOR THE CONVENIENCE OF CONTRACTORS AND BELIEVED TO BE SUBSTANTIALLY CORRECT, BUT THE ACCURACY OF QUANTITIES IN LIST ARE NOT GUARANTEED.

**Call Before You Dig!!!**  
Virginia One Call  
1-800-522-7001  
IT'S THE LAW  
http://va811.com

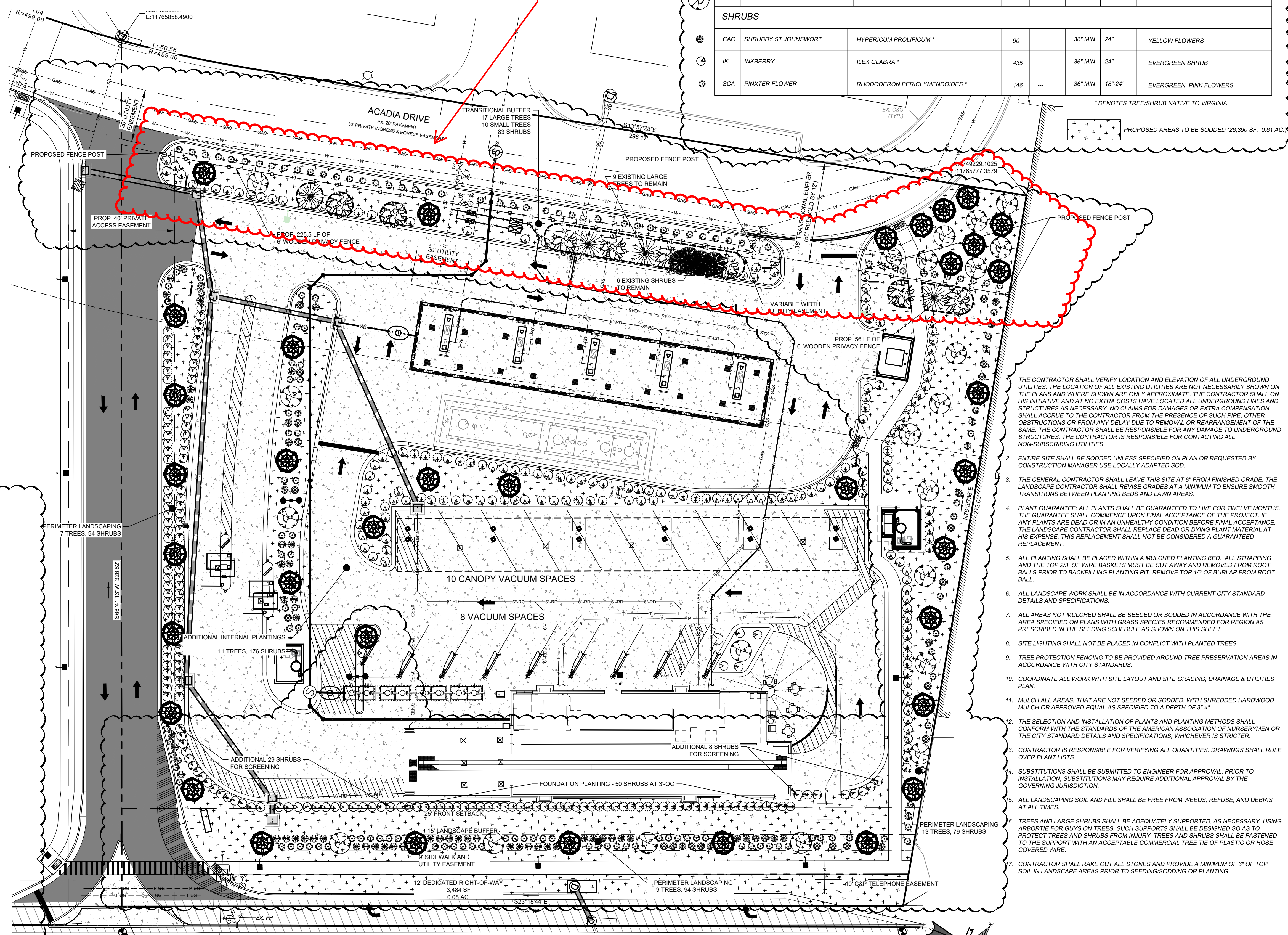
The fence will be replaced with a 6' brick wall and relocated further into the Sam's site to accommodate for a great number of plantings on the West Broad Landing side.

**PLANT SCHEDULE**

CODE	COMMON NAME	BOTANICAL NAME	QTY.	CALIPER	HEIGHT	SPREAD	COMMENTS
<b>TREES</b>							
FT	FRINGE TREE	CHIONANTHUS VIRGINICUS *	36	2.5"	10'-15'	15'	SMALL MATURING
QP	WILLOW OAK	QUERCUS PHELLOS *	22	2.5"	60' MAX	50' MAX	LARGE MATURING
<b>SHRUBS</b>							
CAC	SHRUBBY ST. JOHNSWORT	HYPERICUM PROLIFICUM *	90	---	36" MIN	24"	YELLOW FLOWERS
IK	INKBERRY	ILEX GLABRA *	435	---	36" MIN	24"	EVERGREEN SHRUB
SCA	PINKER FLOWER	RHODODERON PERICLYMENDOIDES *	146	---	36" MIN	18"-24"	EVERGREEN, PINK FLOWERS

\* DENOTES TREE/SHRUB NATIVE TO VIRGINIA

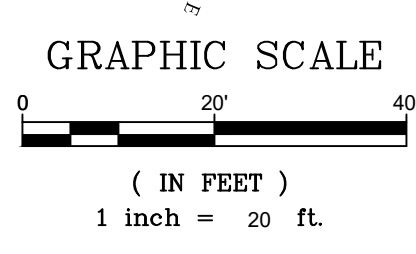
**Planning:**  
- Transitional Buffer planting will get finalized at time of landscape plan submittal due to the fence needing to account for site distance triangles and the change in access to Acadia Drive.



**PLANTING SUMMARY CALCULATIONS**

<b>FOUNDATIONAL PLANTINGS:</b>	3 SHRUBS / 10'
REQUIRED (150 LF):	45 SHRUBS
PROVIDED:	50 SHRUBS
<b>PERIMETER LANDSCAPING (WEST BROAD ST):</b>	280 LF
REQUIRED WIDTH:	MIN 10'
REQUIRED TREES:	3/100' = 9 TREES
PROVIDED LARGE TREES:	9 TREES
REQUIRED SHRUBS:	3.5' ON CENTER = 80 SHRUBS
PROVIDED SHRUBS:	94 SHRUBS
<b>PERIMETER LANDSCAPING (N PROP LINE):</b>	272 LF
REQUIRED TREES:	2/100' = 6 TREES
PROVIDED TREES:	13 TREES
REQUIRED SHRUBS:	3.5' OC = 78 SHRUBS
PROVIDED SHRUBS:	79 SHRUBS
<b>PERIMETER LANDSCAPING (INTERNAL RD):</b>	326 LF
REQUIRED TREES:	2/100' = 7 TREES
PROVIDED TREES:	7 TREES
REQUIRED SHRUBS:	3.5' OC = 94 SHRUBS
PROVIDED SHRUBS:	94 SHRUBS
<b>TRANSITIONAL BUFFER (TB50):</b>	296.17 LF (281.5 LF OF FENCE)
REQUIRED WIDTH:	50'
ADJUSTED WIDTH (FENCE):	38'
REQUIRED SMALL TREES:	4/100' PLUS 3/100' = 10 TREES
PROVIDED SMALL TREES:	10 TREES*
REQUIRED LARGE TREES:	7/100' PLUS 5/100' = 17 TREES
PROVIDED LARGE TREES:	9 EX + 8 NEW = 17 TREES*
REQUIRED SHRUBS:	24/100' PLUS 17/100' = 55 SHRUBS
PROVIDED SHRUBS:	5 EX + 78 NEW = 83 SHRUBS
<b>ADDITIONAL INTERNAL PLANTINGS</b>	
PROVIDED TREES	11 TREES
PROVIDED SHRUBS	176 SHRUBS
<b>TOTAL LANDSCAPE PLANTINGS</b>	
PROVIDED TREES	58 NEW + 9 EXISTING = 67 TREES
PROVIDED SHRUBS	671 NEW + 5 EXISTING = 676 SHRUBS
	729 NEW + 14 = 743 PLANTS
<b>NATIVE PLANTS:</b>	
REQUIRED (35% OF 743):	261 TREES/SHRUBS
PROVIDED:	729 TREES/SHRUBS

- THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COSTS HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES.
- ENTIRE SITE SHALL BE SODDED UNLESS SPECIFIED ON PLAN OR REQUESTED BY CONSTRUCTION MANAGER USE LOCALLY ADAPTED SOD.
- THE GENERAL CONTRACTOR SHALL LEAVE THIS SITE AT 6" FROM FINISHED GRADE. THE LANDSCAPE CONTRACTOR SHALL REVISE GRADES AT A MINIMUM TO ENSURE SMOOTH TRANSITIONS BETWEEN PLANTING BEDS AND LAWN AREAS.
- PLANT GUARANTEE: ALL PLANTS SHALL BE GUARANTEED TO LIVE FOR TWELVE MONTHS. THE GUARANTEE SHALL COMMENCE UPON FINAL ACCEPTANCE OF THE PROJECT. IF ANY PLANTS ARE DEAD OR IN AN UNHEALTHY CONDITION BEFORE FINAL ACCEPTANCE, THE LANDSCAPE CONTRACTOR SHALL REPLACE DEAD OR DYING PLANT MATERIAL AT HIS EXPENSE. THIS REPLACEMENT SHALL NOT BE CONSIDERED A GUARANTEED REPLACEMENT.
- ALL PLANTINGS SHALL BE PLACED WITHIN A MULCHED PLANTING BED. ALL STRAPPING AND THE TOP 2/3 OF WIRE BASKETS MUST BE CUT AWAY AND REMOVED FROM ROOT BALLS PRIOR TO BACKFILLING PLANTING PIT. REMOVE TOP 1/3 OF BURLAP FROM ROOT BALL.
- ALL LANDSCAPE WORK SHALL BE IN ACCORDANCE WITH CURRENT CITY STANDARD DETAILS AND SPECIFICATIONS.
- ALL AREAS NOT MULCHED SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE AREA SPECIFIED ON PLANS WITH GRASS SPECIES RECOMMENDED FOR REGION AS PRESCRIBED IN THE SEEDING SCHEDULE AS SHOWN ON THIS SHEET.
- SITE LIGHTING SHALL NOT BE PLACED IN CONFLICT WITH PLANTED TREES.
- TREE PROTECTION FENCING TO BE PROVIDED AROUND TREE PRESERVATION AREAS IN ACCORDANCE WITH CITY STANDARDS.
- COORDINATE ALL WORK WITH SITE LAYOUT AND SITE GRADING, DRAINAGE & UTILITIES PLAN.
- MULCH ALL AREAS, THAT ARE NOT SEEDDED OR SODDED, WITH SHREDDED HARDWOOD MULCH OR APPROVED EQUAL AS SPECIFIED TO A DEPTH OF 3"-4".
- THE SELECTION AND INSTALLATION OF PLANTS AND PLANTING METHODS SHALL CONFORM WITH THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN OR THE CITY STANDARD DETAILS AND SPECIFICATIONS, WHICHEVER IS STRICTER.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES. DRAWINGS SHALL RULE OVER PLANT LISTS.
- SUBSTITUTIONS SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL, PRIOR TO INSTALLATION. SUBSTITUTIONS MAY REQUIRE ADDITIONAL APPROVAL BY THE GOVERNING JURISDICTION.
- ALL LANDSCAPING SOIL AND FILL SHALL BE FREE FROM WEEDS, REFUSE, AND DEBRIS AT ALL TIMES.
- TREES AND LARGE SHRUBS SHALL BE ADEQUATELY SUPPORTED, AS NECESSARY, USING ARBORTIE FOR GUYS ON TREES. SUCH SUPPORTS SHALL BE DESIGNED SO AS TO PROTECT TREES AND SHRUBS FROM INJURY. TREES AND SHRUBS SHALL BE FASTENED TO THE SUPPORT WITH AN ACCEPTABLE COMMERCIAL TREE TIE OF PLASTIC OR HOSE COVERED WIRE.
- CONTRACTOR SHALL RAKE OUT ALL STONES AND PROVIDE A MINIMUM OF 6" OF TOP SOIL IN LANDSCAPE AREAS PRIOR TO SEEDING/SODDING OR PLANTING.



\*MAJORITY OF BUFFER LIES WITHIN UTILITY EASEMENT NOT ALLOWING THE PLANTING OF PROPOSED TREES

**EAGLE ENGINEERING**  
COMMONWEALTH OF VIRGINIA  
MATTHEW L. NICHOLS  
Lic. N. 11765777.3579

NO. 1 DATE: 07/28/2023 BY: TMH ADDRESS: HENRICO COUNTY COMMENTS: 1  
NO. 2 DATE: 10/27/2023 BY: TMH ADDRESS: HENRICO COUNTY COMMENTS: 3

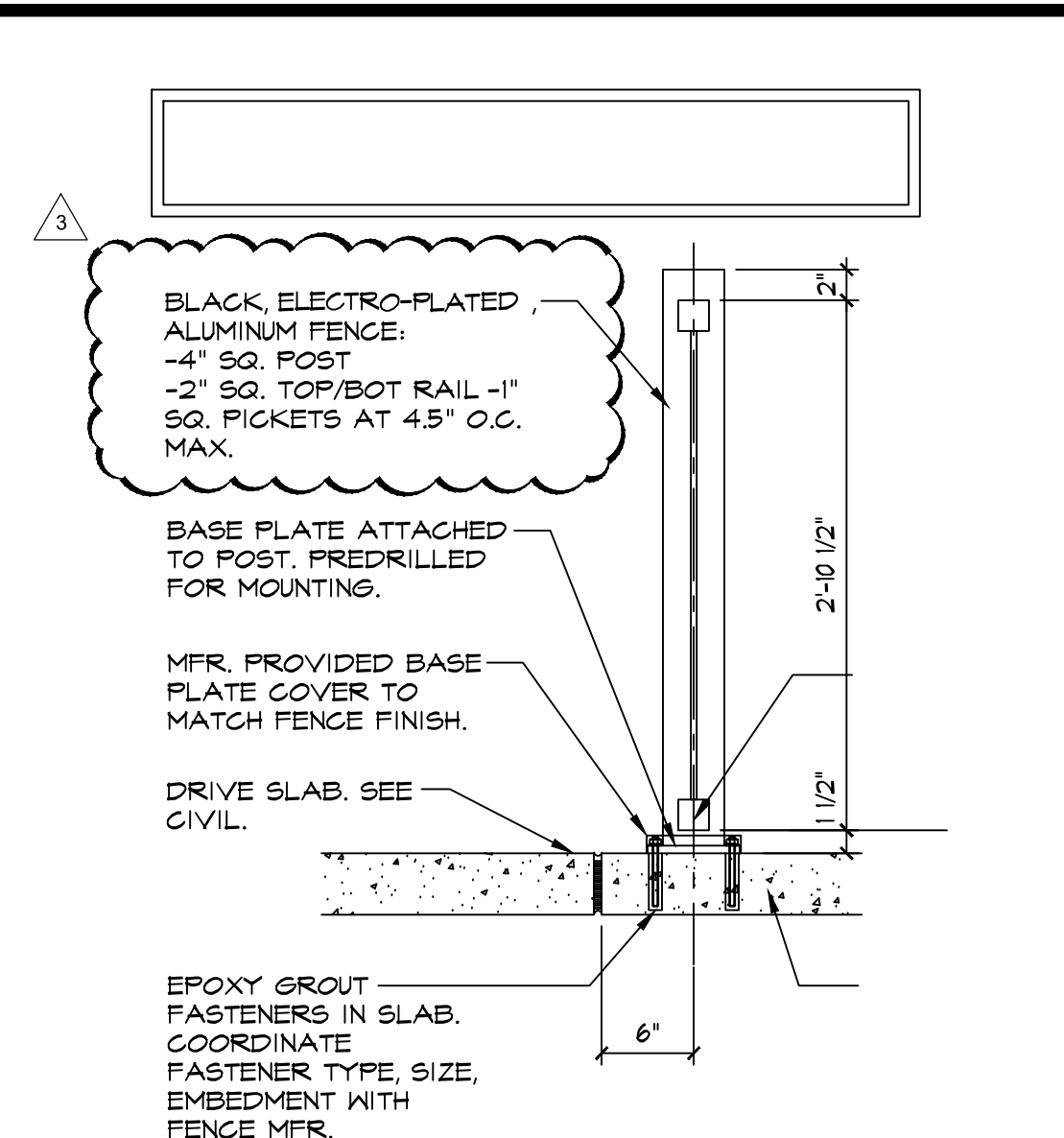
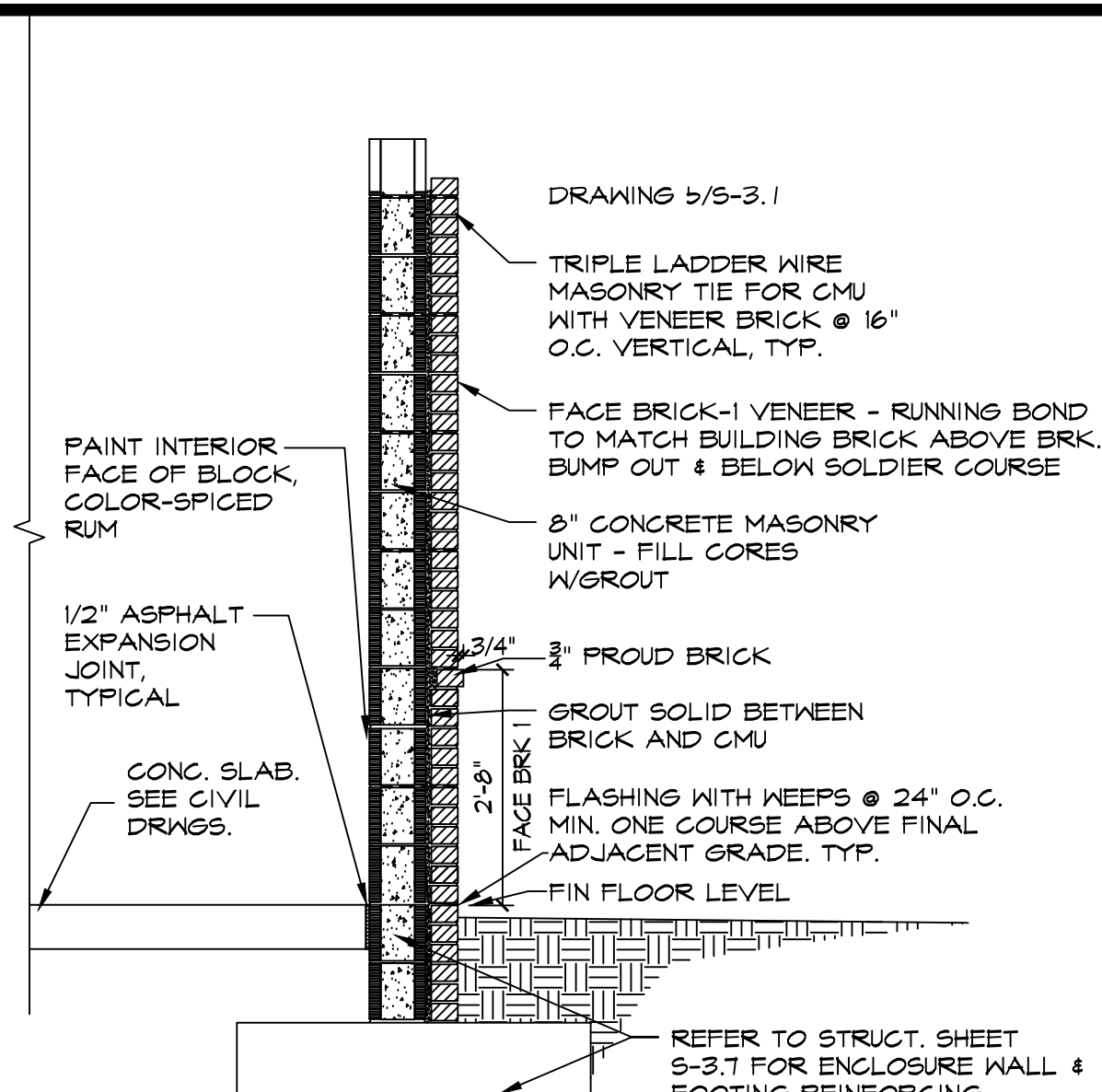
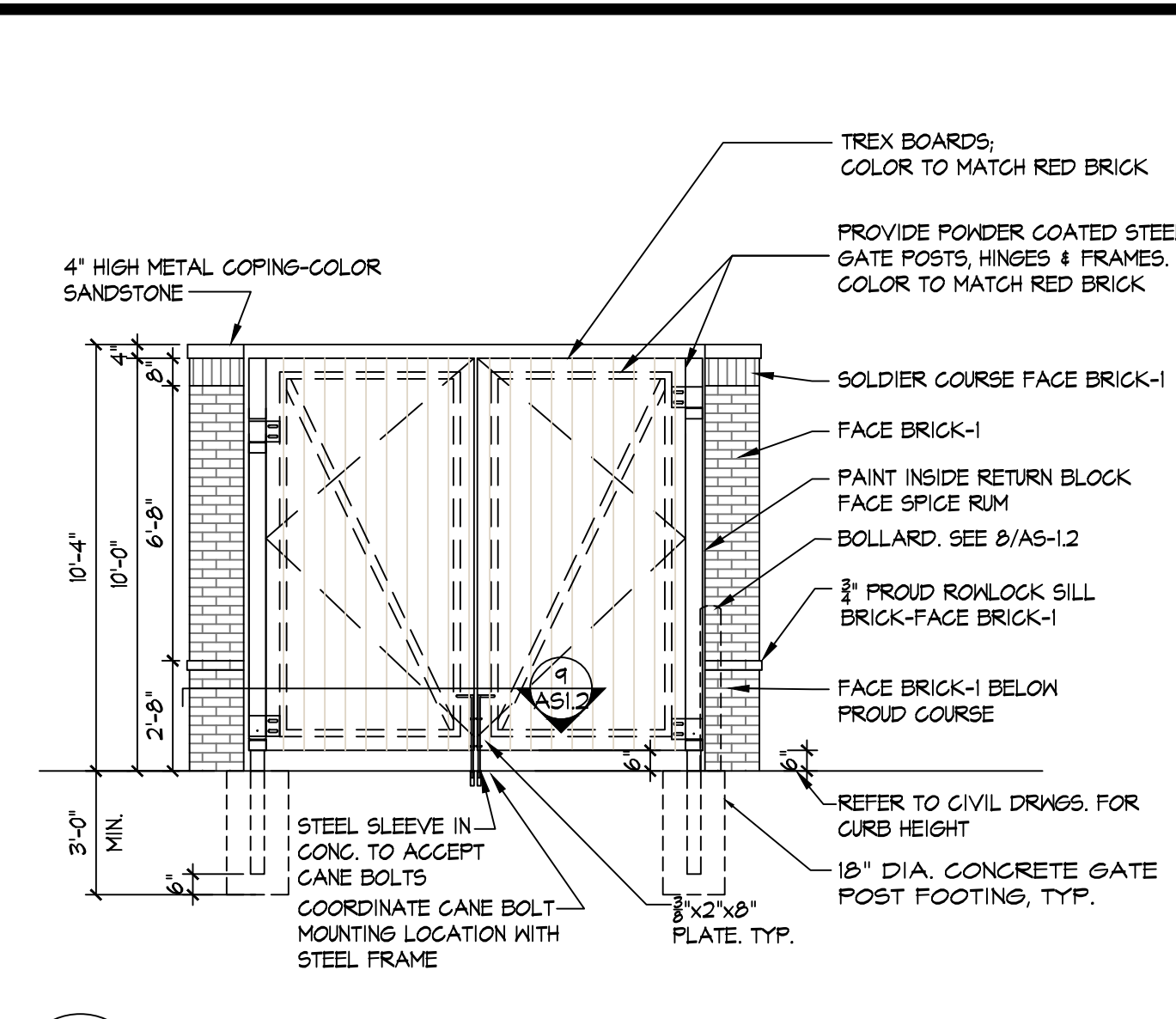
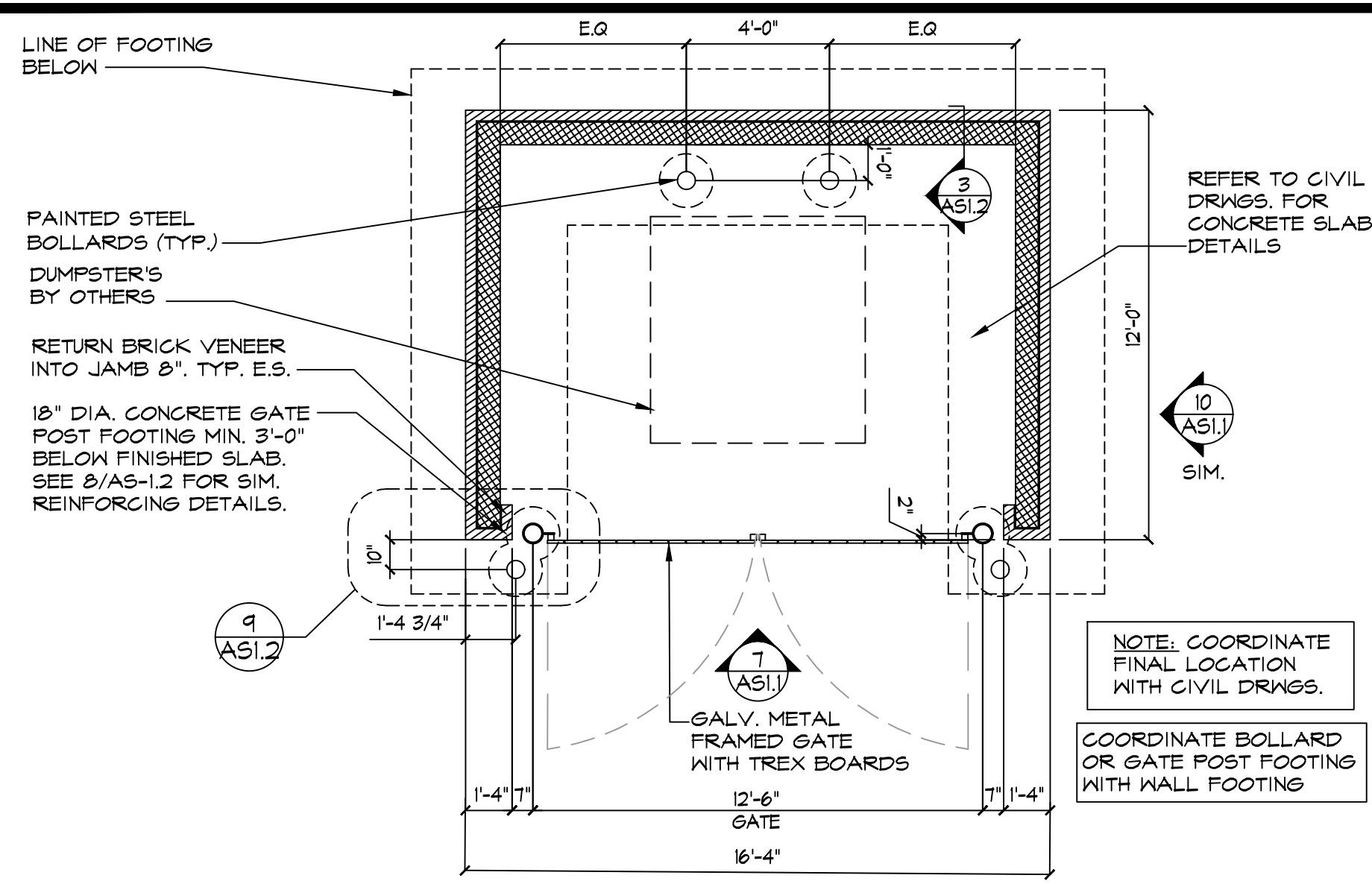
**W. BROAD STREET  
7411 W. BROAD ST**

**November 15, 2023**

**CONCEPTUAL  
Staff Plan**

Sheet

**POD2022-00480**

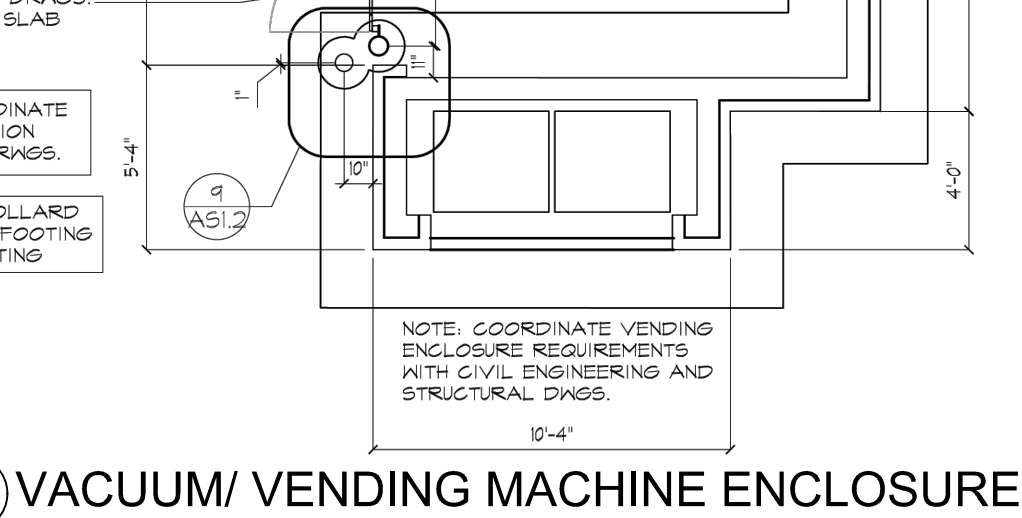
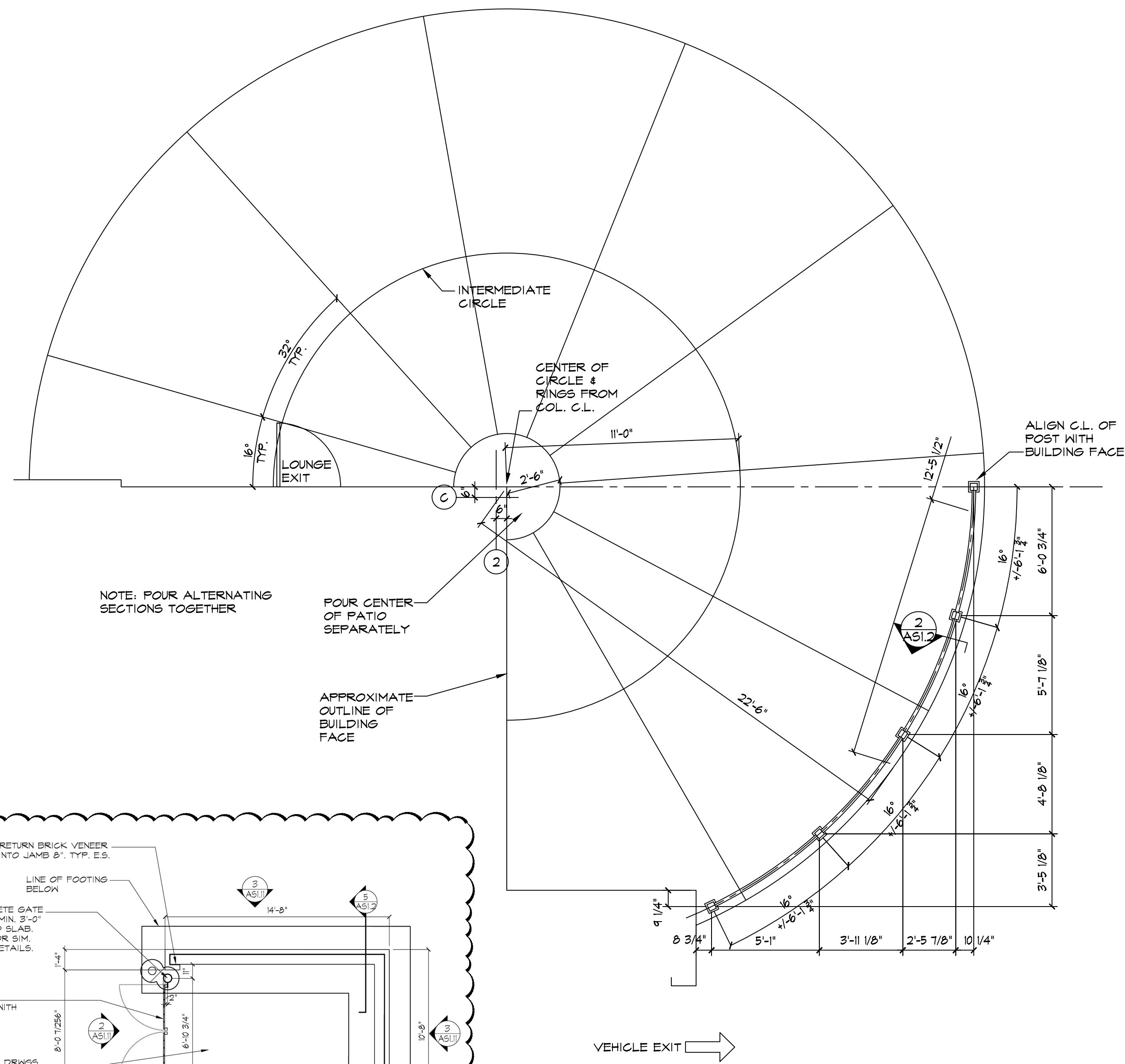


6 DUMPSTER ENCLOSURE PLAN  
SCALE: 1/4" = 1'-0"

7 DUMPSTER ELEVATION

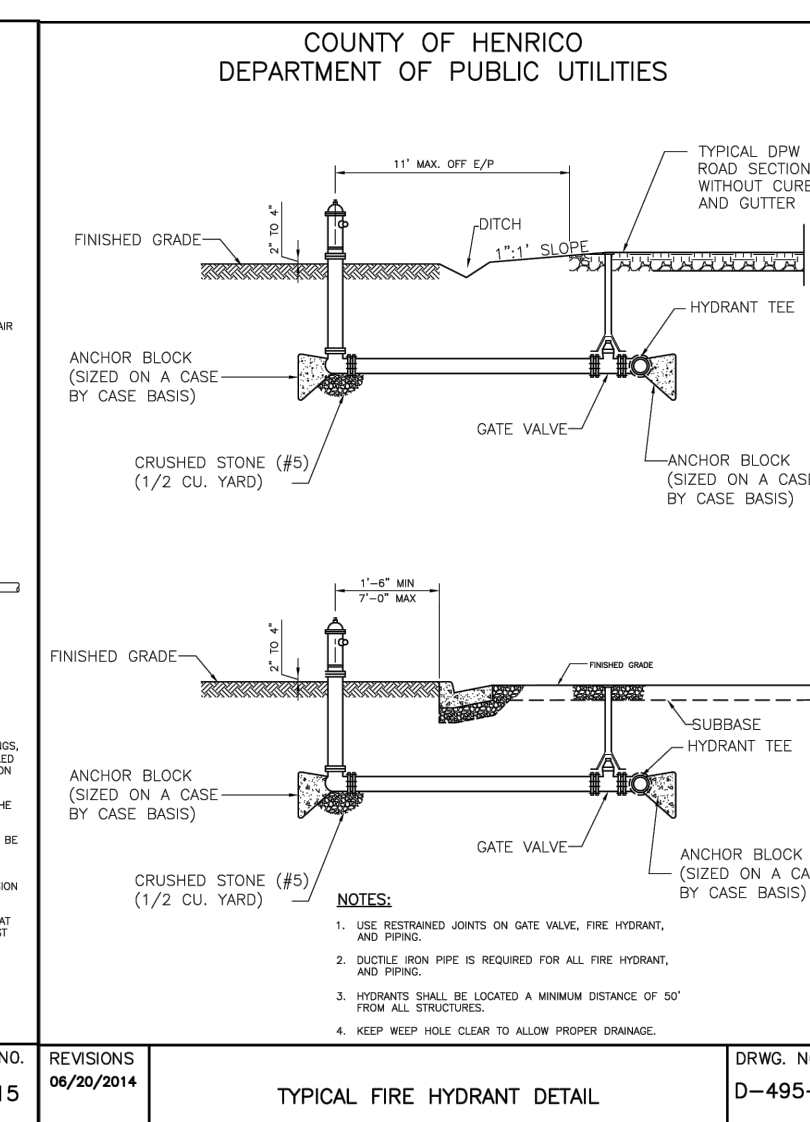
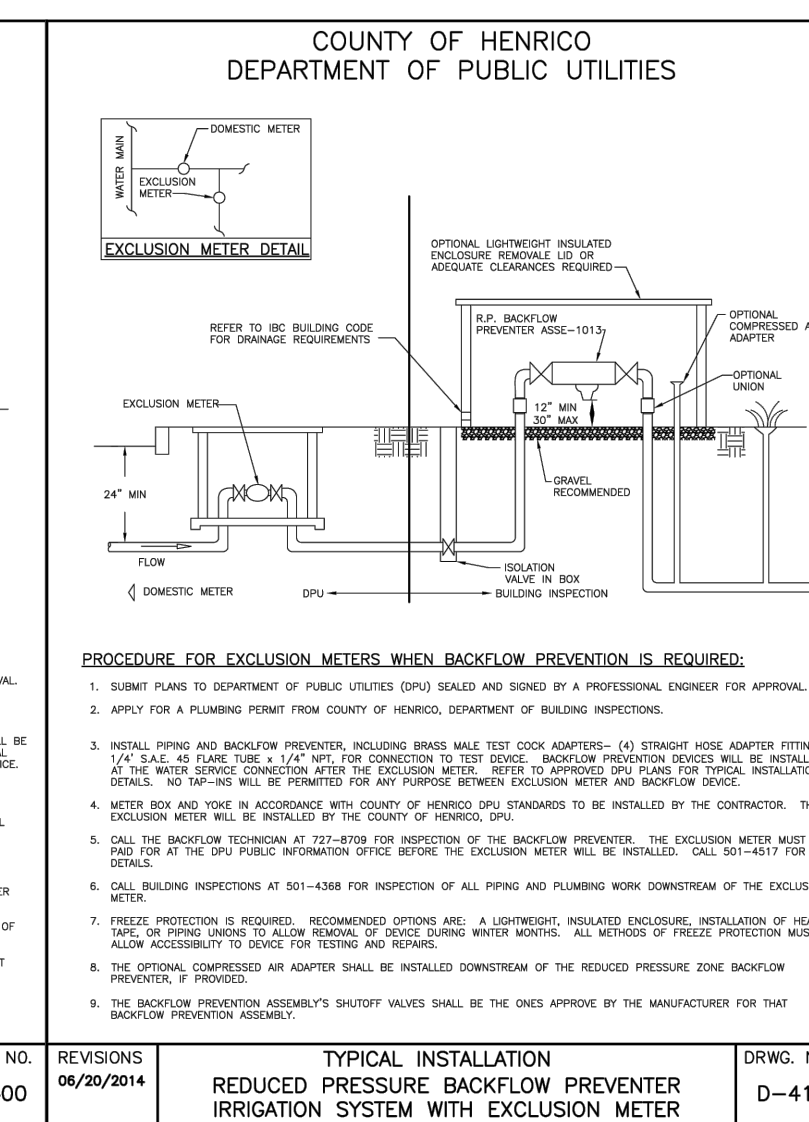
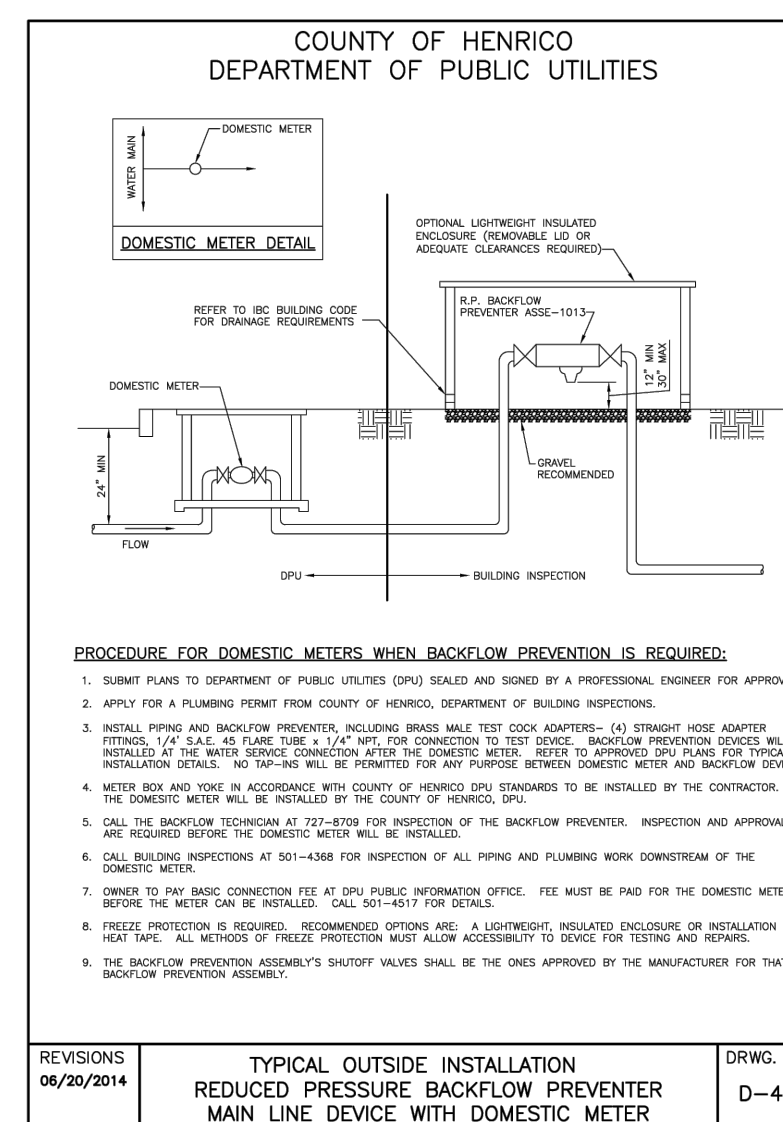
3 DUMPSTER ENCLOSURE WALL SECTION  
SCALE: 1/2" = 1'-0"

2 PATIO FENCE D  
SCALE: 1" = 1'-0"



1 PATIO PLAN  
1/4" = 1'-0"

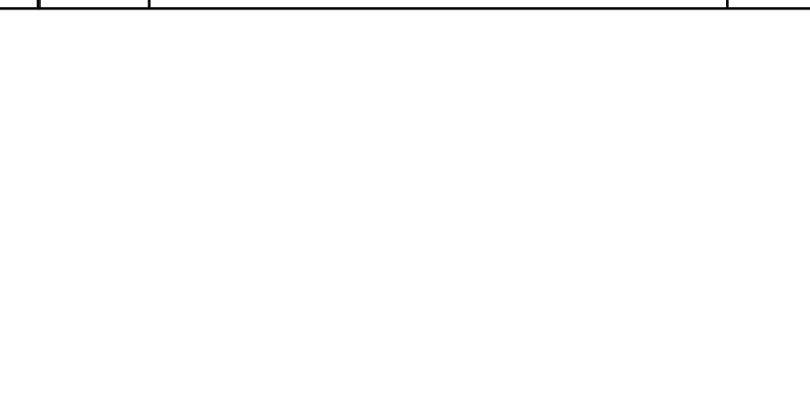
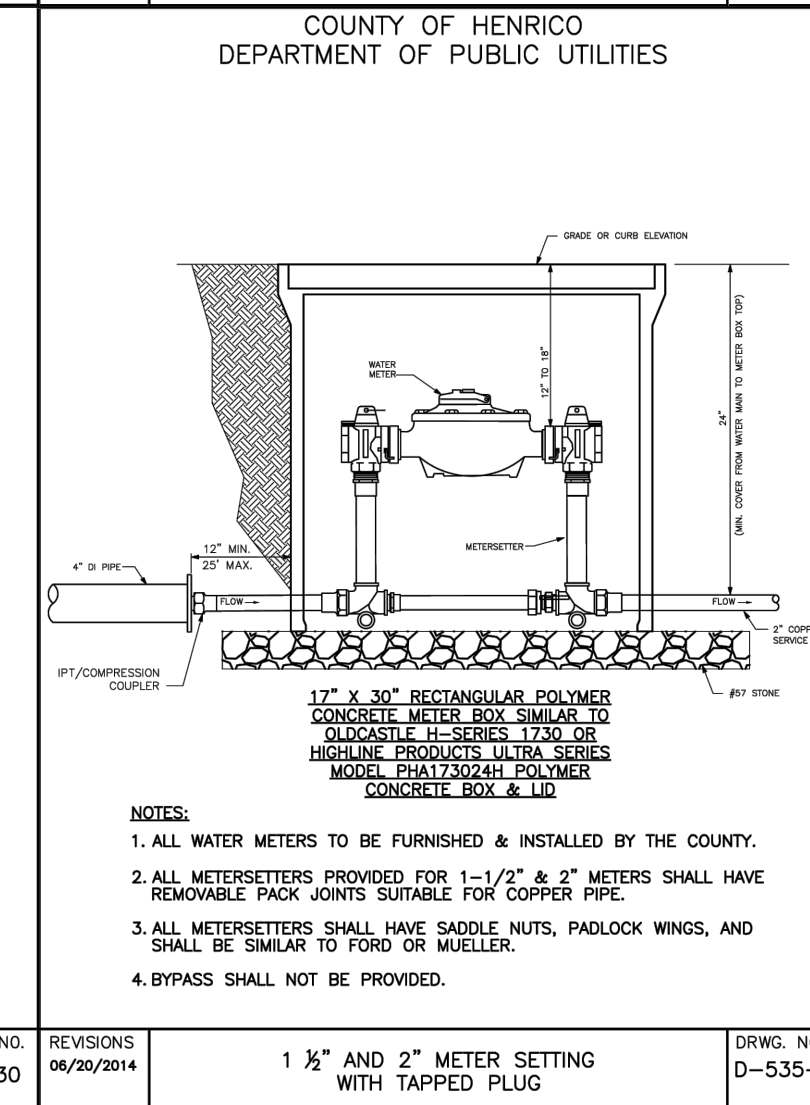
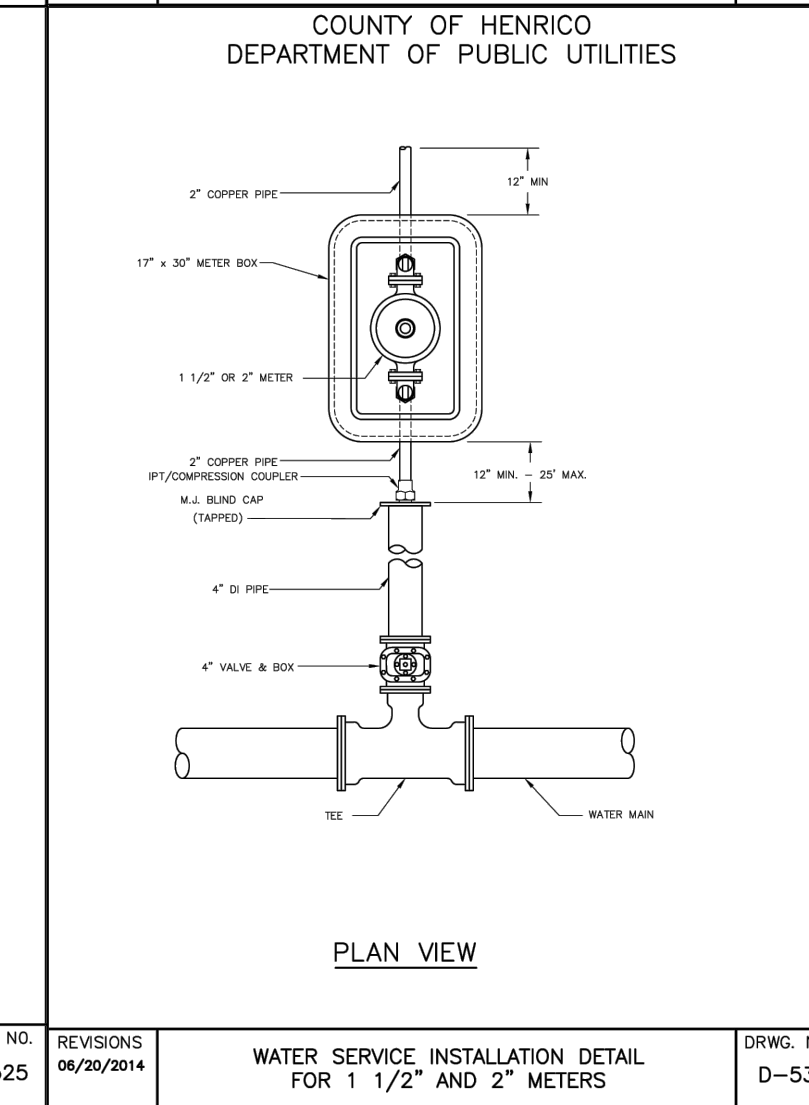
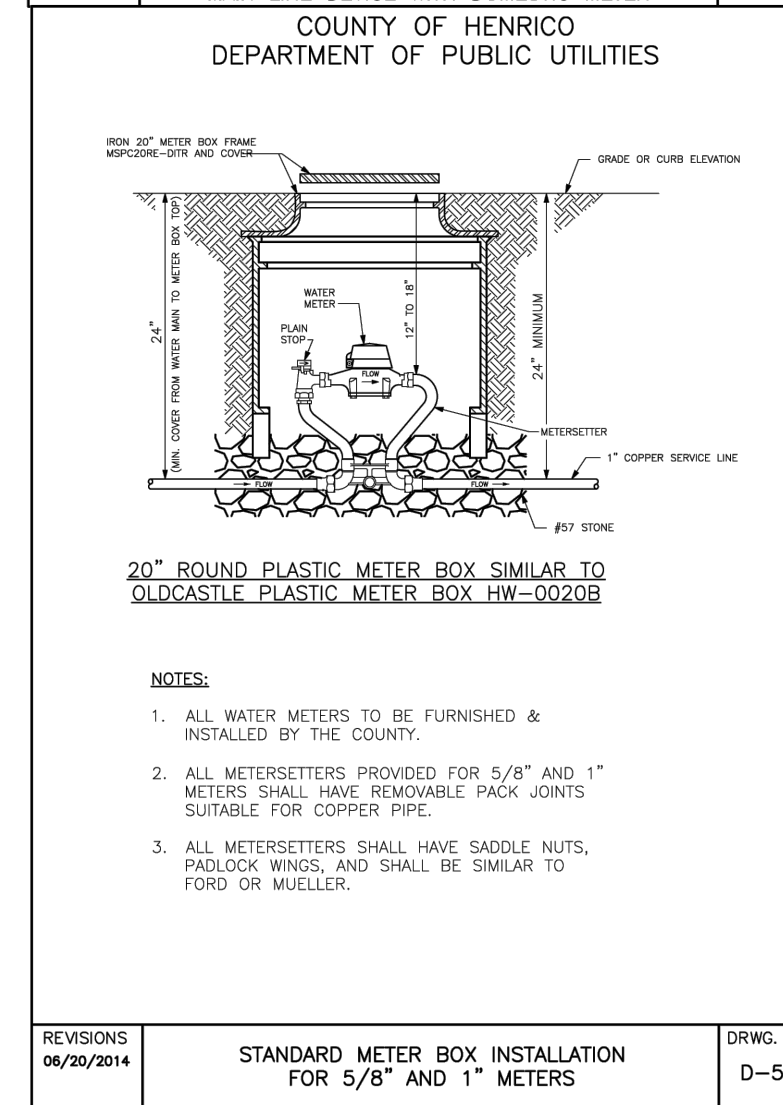
8 VACUUM/ VENDING MACHINE ENCLOSURE  
SCALE: 1/4" = 1'-0"



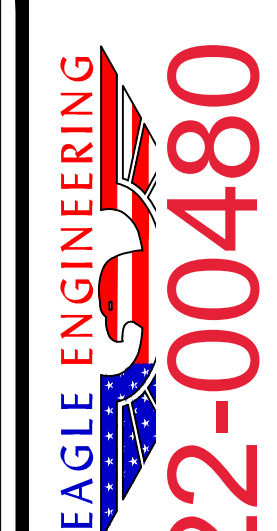
COUNTY OF HENRICO DEPARTMENT OF PUBLIC UTILITIES

BEARING AREA OF THRUST BLOCKS IN SQ. FT.

PIPE SIZE	1/2" W/ 1/2" PLUG OR CAP	3/4" W/ 3/4" PLUGGED CROSS	1" W/ 1" WYE	1 1/2" W/ 1 1/2" PLUGGED CROSS	2" W/ 2" WYE	3" W/ 3" PLUGGED CROSS	4" W/ 4" WYE	6" W/ 6" PLUGGED CROSS	8" W/ 8" WYE	10" W/ 10" PLUGGED CROSS
6	2.1	3.0	3.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0
8	3.6	5.0	5.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0
10	5.8	8.4	11.8	8.4	8.4	8.4	8.4	8.4	8.4	8.4
12	8.6	12.0	17.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14	11.2	15.5	23.0	15.5	15.5	15.5	15.5	15.5	15.5	15.5
16	13.8	19.0	29.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
18	16.4	22.5	34.0	22.5	22.5	22.5	22.5	22.5	22.5	22.5
20	19.0	27.0	40.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0
24	25.2	35.0	52.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
30	32.4	45.0	68.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0



MASTER CASE: POD 2020-00031



NO. 1  
DATE: 07/28/2023  
BY: TMMH  
ISSUE: ADDRESS HENRICO COUNTY COMMENTS

NO. 2  
DATE: 10/27/2023  
BY: TMMH  
ISSUE: ADDRESS HENRICO COUNTY COMMENTS

W. BROAD STREET  
7411 W. BROAD ST

REVISIONS  
06/20/2014  
TYPICAL OUTSIDE INSTALLATION REDUCED PRESSURE BACKFLOW PREVENTER MAIN LINE DEVICE WITH DOMESTIC METER  
DRWG. NO. D-400

REVISIONS  
06/20/2014  
TYPICAL INSTALLATION REDUCED PRESSURE BACKFLOW PREVENTER IRRIGATION SYSTEM WITH EXCLUSION METER  
DRWG. NO. D-415

REVISIONS  
06/20/2014  
TYPICAL FIRE HYDRANT DETAIL  
DRWG. NO. D-495-1

REVISIONS  
06/20/2014  
THRUST BLOCKING DETAILS  
DRWG. NO. D-700

REVISIONS  
06/20/2014  
STANDARD METER BOX INSTALLATION FOR 5/8\"/>

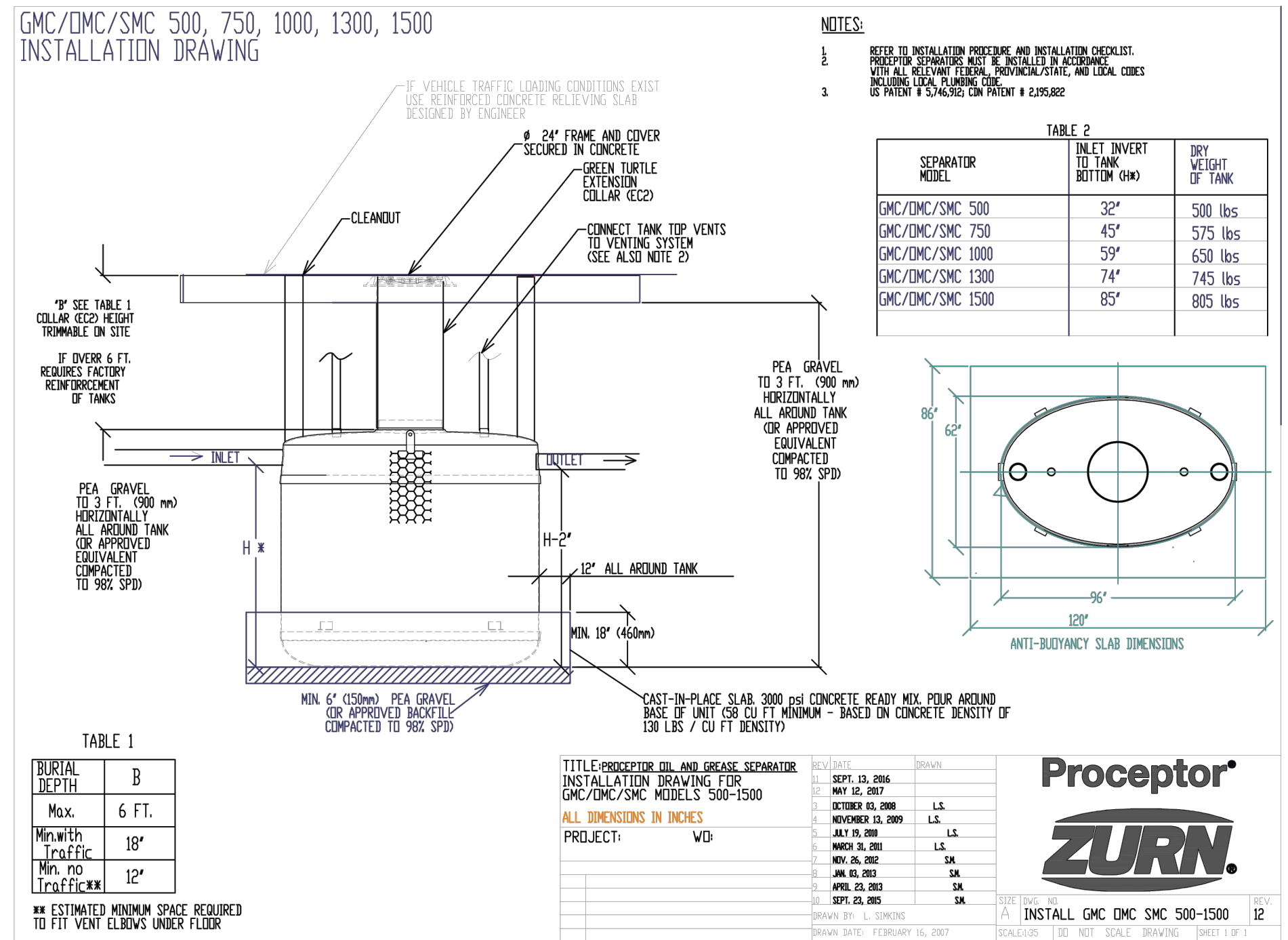
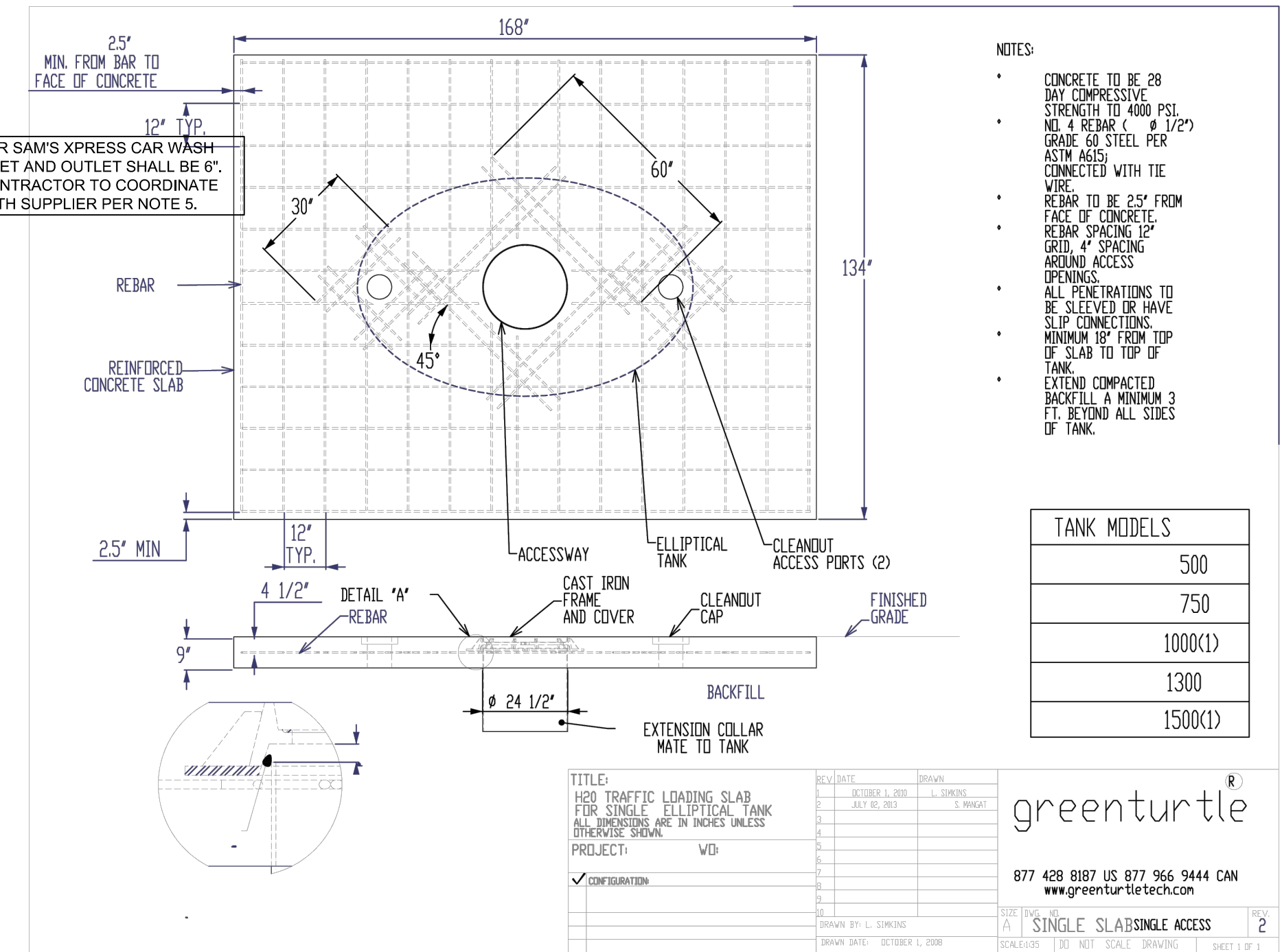
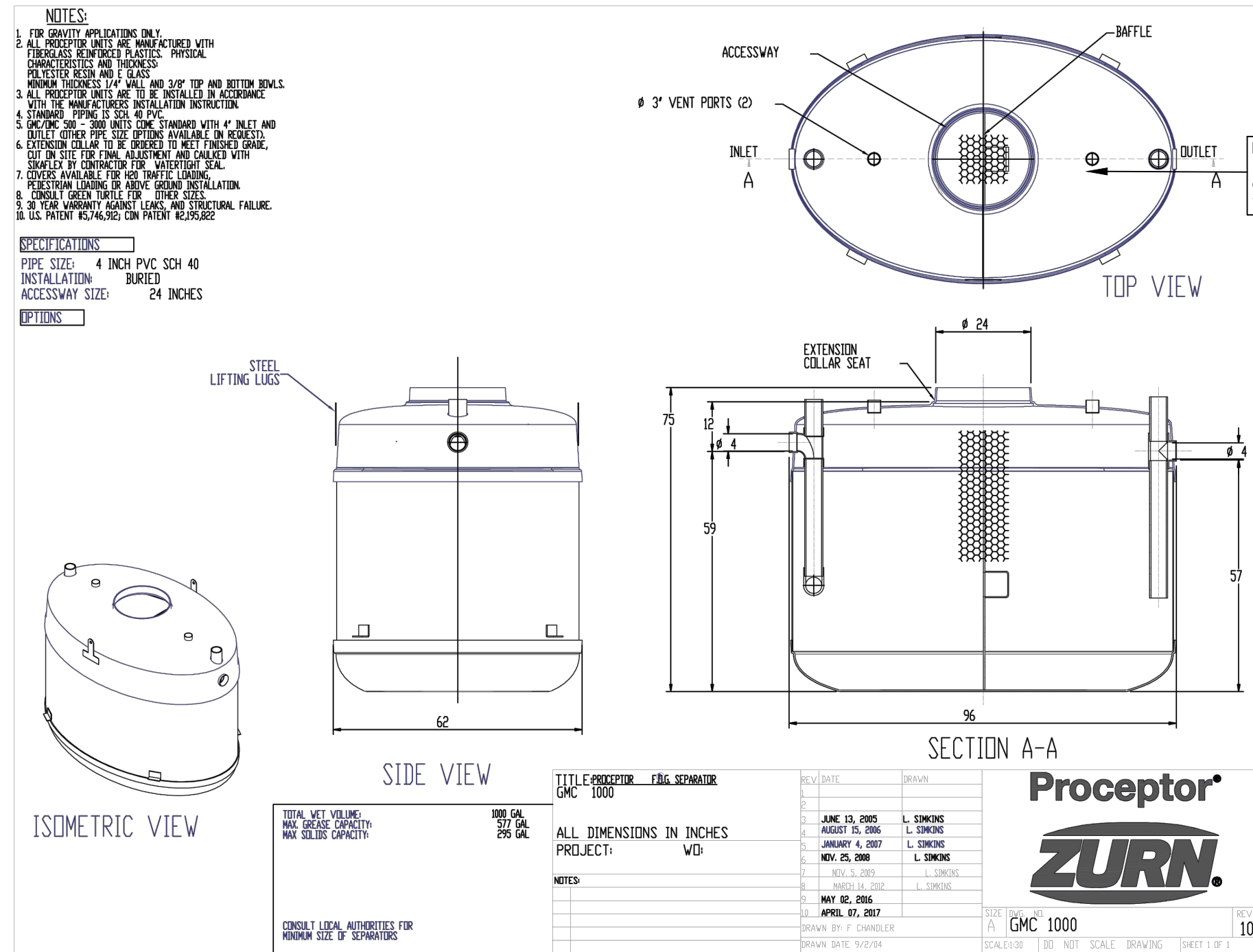
REVISIONS  
06/20/2014  
WATER SERVICE INSTALLATION DETAIL FOR 1 1/2\"/>

REVISIONS  
06/20/2014  
1 1/2\"/>

POD2022-00480

November 15, 2023

Staff Plan



MASTER CASE: POD 2020-00031



NO.	DATE	BY	ISSUE
1	08/29/2023	TKH	ADDRESS HENRICO COUNTY COMMENTS
2	10/27/2023	TKH	ADDRESS HENRICO COUNTY COMMENTS
3			



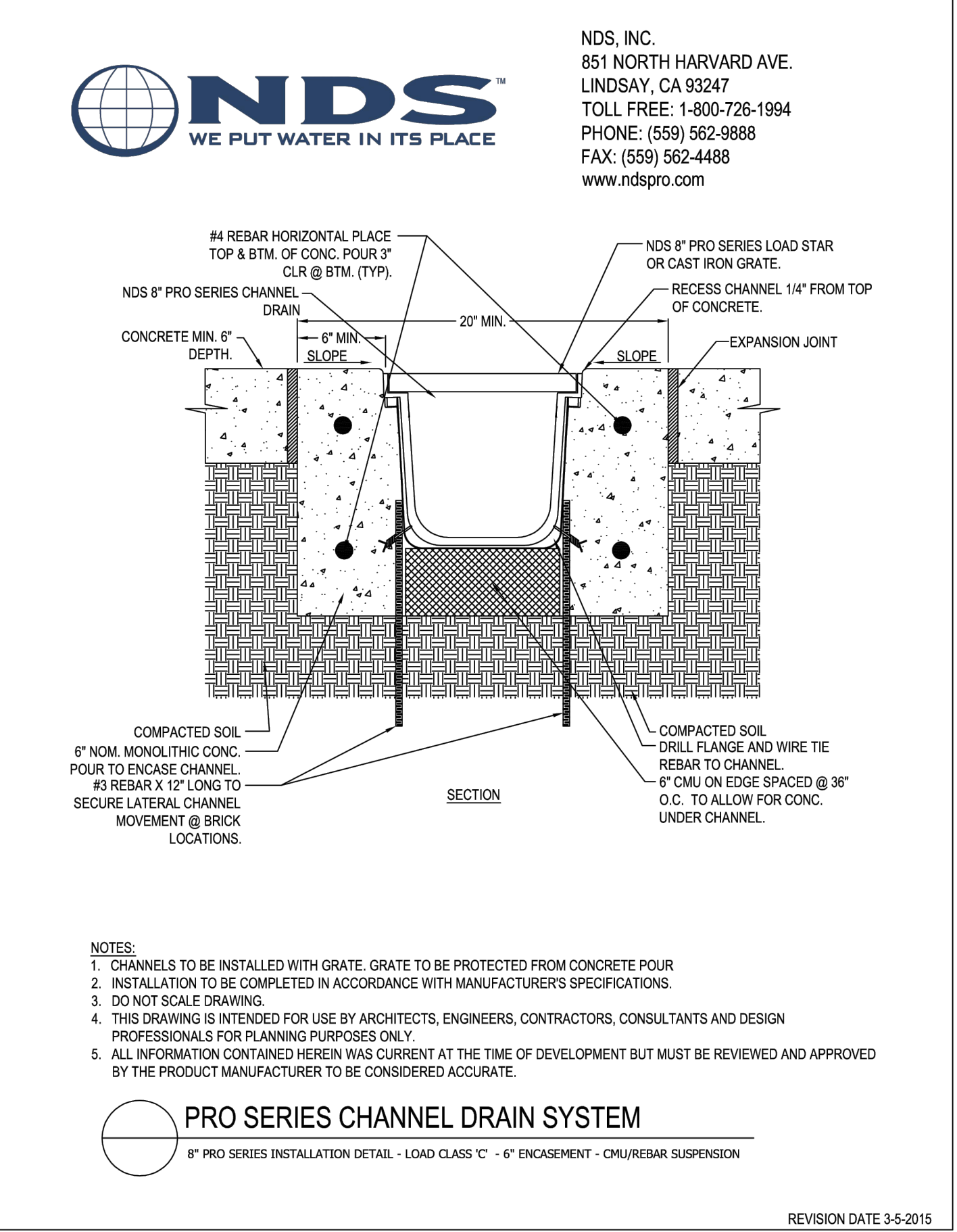
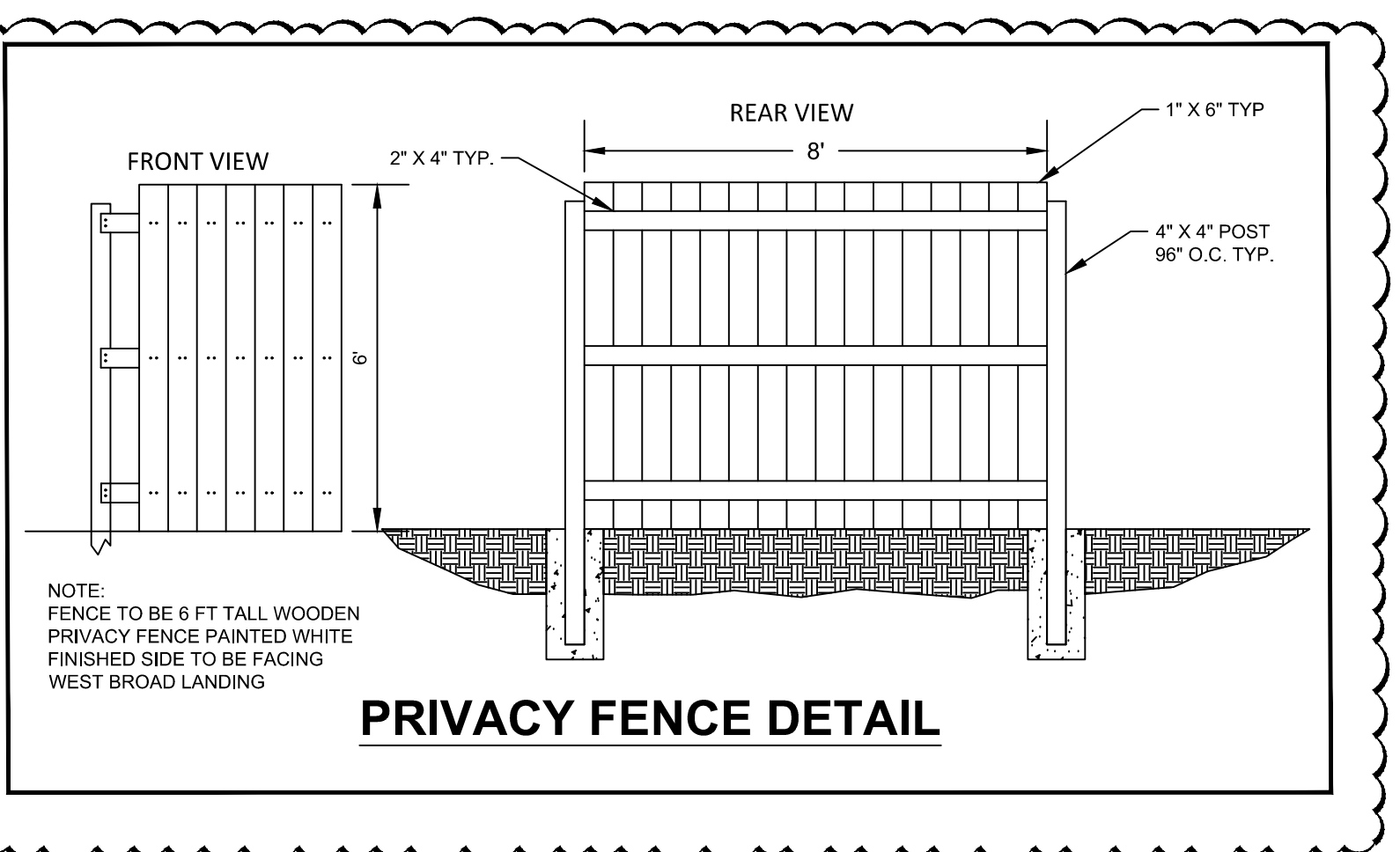
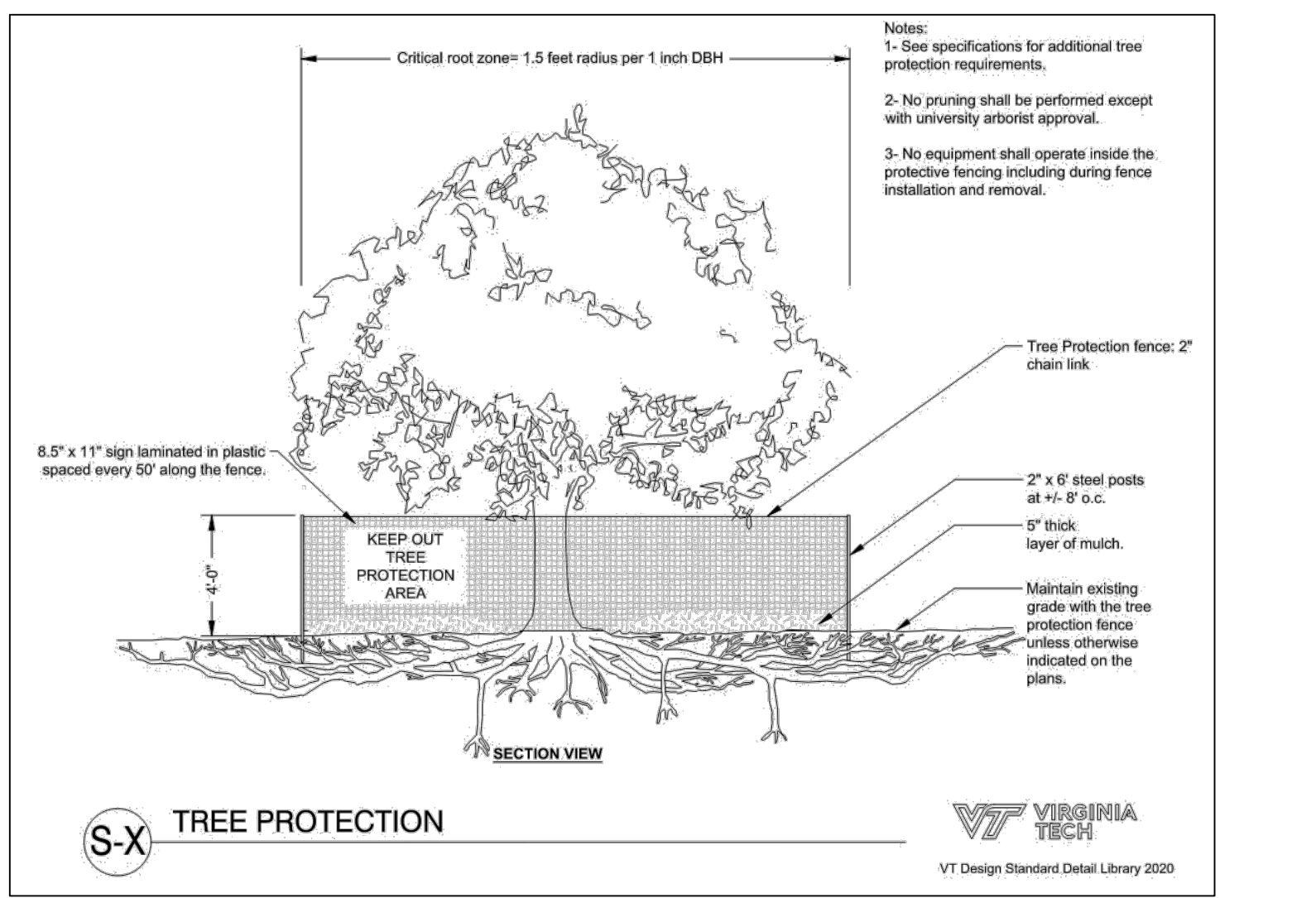
**W. BROAD STREET  
 7411 W. BROAD ST  
 HENRICO COUNTY, VA**

**DETAILS**

**Staff Plan**

POD2022-00480

November 15, 2023



**HENRICO COUNTY DPU  
 DOMESTIC METER SIZING FORM**

Project Name: SAM'S XPRESS CAR WASH - W. BROAD STREET  
 Address: 7411 W. BROAD STREET, RICHMOND VA, 23294  
 Parcel No. 816-711-8151  
 Subdivision:  
 Type of Occupancy: COMMERCIAL (AUTOMATED CAR WASH)

Fixture	Fixture Value (60 psi)	No. of Fixtures	Fixture Value
Bathtub	8	x	=
Bedpan Washers	10	x	=
Bidet	2	x	=
Dental Unit	2	x	=
Drinking Fountain- Public	2	x	= 4
Kitchen Sink	2.2	x	=
Lavatory	1.5	x	=
Shower Head (Shower Only)	2.5	x	=
Service Sink	4	x	=
Toilet - Flush Valve	35	x	= 70
- Tank Type	4	x	=
Urinal - Pedestal Flush Valve	35	x	=
- Wall Flush Valve	16	x	= 32
Wash Sink (Each Set of Faucets)	4	x	= 8
Dishwasher	2	x	=
Washing Machine - 1/2" Connection	5	x	= 5
- 3/4" Connection	12	x	=
- 1" Connection	25	x	=
Hose Connection (50 Ft Wash Down) - 1/2"	5	x	=
- 5/8"	9	x	=
- 3/4"	12	x	= 60

**Combined Fixture Value Total** = 179 = 58 GPM PEAK  
**Maximum Demand** = 16.96 + 58 = 74.96 GPM  
 \*\*\* 5,290 GPD / 13 HRS = 407 GPH x 2.5 PEAK = 1,018 GPH / 60 = 16.96 GPM  
**Meter Size** = 2"

I certify that the above is true and correct.  
 Signature: Matthew Kirchner 4/13 Form F-8

\*\*\* ALTHOUGH THE FIXTURE VALUE DOES NOT DICTATE A 2" METER, THE VALUES DO NOT ACCOUNT FOR THE REQUIRED CAR WASH WATER TO BE USED. A 2" METER IS MORE APPROPRIATE BASED ON THE AVERAGE GPD. THE FIXTURE VALUE REQUIRES A 1-1/2" METER, BUT A 2" METER IS BEING REQUESTED TO ACCOUNT FOR THE ADDITIONAL FLOW.  
 \*\*\* FOR BREAKDOWN OF CAR WASH WATER DEMAND PROVIDED BY THE MANUFACTURER, PLEASE REFER TO SHEET C-6.5

**HENRICO COUNTY DPU  
 FIRE FLOW ESTIMATE FORM**

ISO (Insurance Service Office) Method of Calculating NFF (Needed Fire Flow)

ENGINEER: MATTHEW C. KIRCHNER DATE: 1-30-2020  
 PROJECT NAME: SAM'S XPRESS CAR WASH - W. BROAD STREET CALC. BY:

**TYPE OF CONSTRUCTION:** V-B (CLASS 1)  
 Class of Construction Coef. = F = 1.5  
**GROUND FLOOR AREA** = 4,114 # of Stories = 1  
 Total Floor Area = A<sub>f</sub> (effective area) = 4,114

**FIRE AREA CONSIDERED**  
 Construction Factor C<sub>i</sub> = J8(P)(A<sub>f</sub>)<sup>0.5</sup> C<sub>i</sub> = 1731.8 (1750)  
 (ROUNDED TO NEAREST 250 cfm)

**TYPE OF OCCUPANCY:** LIMITED COMBUSTIBILITY  
 (Worst Case) Occupancy Factor = O<sub>i</sub> = 0.85

**EXPOSURE (X) AND COMMUNICATION (P):**  
 X<sub>1</sub> + P<sub>1</sub> = 0 X<sub>2</sub> + P<sub>2</sub> =  
 X<sub>3</sub> + P<sub>3</sub> = X<sub>4</sub> + P<sub>4</sub> =  
 X<sub>5</sub> + P<sub>5</sub> = X<sub>6</sub> + P<sub>6</sub> =

**NEEDED FIRE FLOW**  
 NFF = (C<sub>i</sub>)(O<sub>i</sub>)(X+P) NFF = 1487.5  
 Automatic Sprinklers (YES NO X) Reduction Factor % x NFF =  
**TOTAL:** 1487.5  
 Required Fire Flow - Rounded (if < 2500 nearest 250 if > 2500 nearest 500) = 1500 gpm  
 \* Fire Hydrants Required: 2

I CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT.  
 SIGNATURE: Matthew Kirchner P.E.  
 \* COMMERCIAL AREA REQUIRES 350 FT. MAXIMUM HOSE LAY.  
 References: NFF CALCULATION PROCEDURE DESCRIBED IN A.W.W.A. M-31, I.S.O.'S 1980 COMMERCIAL FIRE RATING SCHEDULE AND I.S.O.'S 1980 FIRE SUPPRESSION RATING SCHEDULE.  
 9/94 Form F-9



VICINITY MAP  
NOT TO SCALE



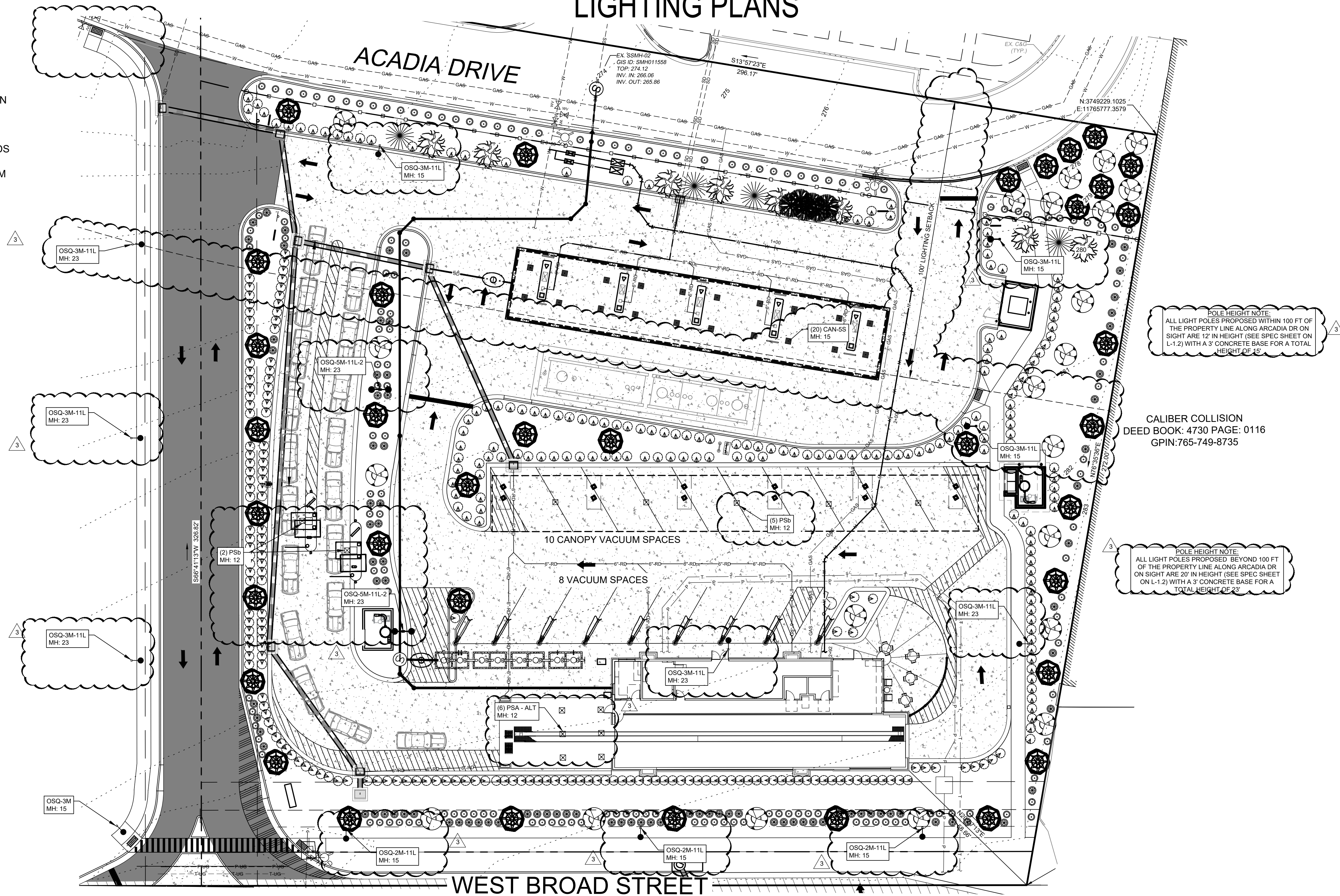
# SAM'S XPRESS

7411 W. BROAD STREET, HENRICO  
TUCKAHOE DISTRICT - HENRICO COUNTY, VIRGINIA

## LIGHTING PLANS

**GENERAL LIGHTING NOTES:**

1. LIGHTING MUST BE EXTINGUISHED BY 11 PM OR WITHIN ONE HOUR OF CLOSING (SECTION 24-5503C.1)
2. PROPOSED LIGHTINGS ARE FULL CUT OFF FIXTURES (SECTION 24-5503.D)
3. LIGHTING MEETS THE ENERGY EFFICIENCY STANDARDS (SECTION 24-5503.F)
4. WITHIN 100' OF THE R-6 PROPERTY LINE, THE MAXIMUM HEIGHT OF EXTERIOR LIGHTING FIXTURES CANNOT EXCEED 15' (SECTION 24-5503.E)
5. CANOPY LIGHTS ARE NOT SAG LENS TYPE
6. VACUUM CANOPY LIGHTS ARE TO BE INSTALLED PARALLEL WITH THE GROUND.



POLE HEIGHT NOTE:  
ALL LIGHT POLES PROPOSED WITHIN 100 FT OF THE PROPERTY LINE ALONG ACADIA DR ON SIGHT ARE 12' IN HEIGHT (SEE SPEC SHEET ON L-1.2) WITH A 3' CONCRETE BASE FOR A TOTAL HEIGHT OF 15'

CALIBER COLLISION  
DEED BOOK: 4730 PAGE: 0116  
GPIN:765-749-8735

POLE HEIGHT NOTE:  
ALL LIGHT POLES PROPOSED BEYOND 100 FT OF THE PROPERTY LINE ALONG ACADIA DR ON SIGHT ARE 20' IN HEIGHT (SEE SPEC SHEET ON L-1.2) WITH A 3' CONCRETE BASE FOR A TOTAL HEIGHT OF 23'



Symbol	Qty	Label	Arrangement	LMF	Lum. Lumens	Lum. Watts	Part Number	BUG Rating
□	20	CAN-5S	SINGLE	1.000	5308	46	CAN-304-5S-RS-04-E-UL-WH-350	B2-U0-G1
○	3	OSQ-2M-11L	SINGLE	0.920	10450	68	OSQM-C-11L-57K7-3M-UL-NM-SV w/OSQ-ML-C-AA-SV	B2-U0-G2
○	7	OSQ-3M-11L	SINGLE	0.920	10450	68	OSQM-C-11L-57K7-3M-UL-NM-SV w/OSQ-ML-C-AA-SV	B2-U0-G2
○	2	OSQ-5M-11L	SINGLE	0.920	11000	68	OSQM-C-11L-57K7-5M-UL-NM-SV w/OSQ-ML-C-AA-SV	B3-U0-G2
○	2	OSQ-5M-11L-2	2 @ 180°	0.920	11000	68	OSQM-C-11L-57K7-5M-UL-NM-SV w/OSQ-ML-C-AA-SV	B3-U0-G2
⊗	7	PSb	SINGLE	0.950	5419	46	PKG-304-PS-DM-04-E-UL-WH-350	B2-U0-G0
⊗	6	PSa-alt	SINGLE	1.000	4690	46	SFT-304-5M-RM-04-E-12-WH-350	B3-U0-G1

Calculation Summary (Footcandles calculated using predicted lumen values @ 50K hrs of operation)						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
All Calc Points	Fc	1.41	15.1	0.0	N.A.	N.A.
Entry Canopy	Fc	9.05	12	4	2.26	3.00
Gas Canopy	Fc	12.97	15	8	1.62	1.88
Side Walk	Fc	2.99	10	1	2.99	10.00
Vacuum Canopy	Fc	6.63	13	2	3.32	6.50
Paved Parking	Fc	2.98	15.1	1.0	2.98	15.10

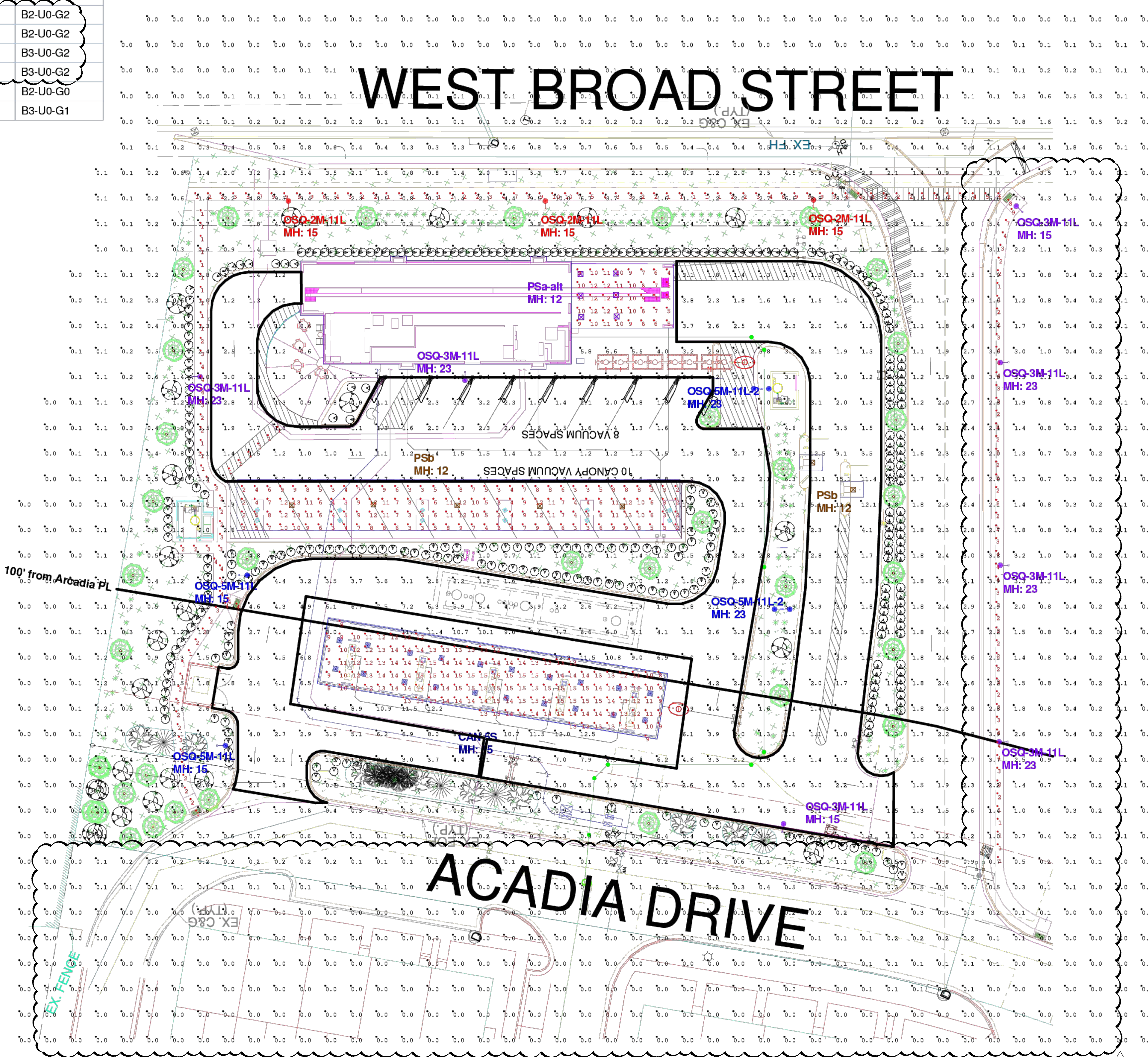
Fixture Mounting Height: 23' AFG (20' Pole + 3.0' Base)  
15' AFG (12' Pole + 3.0' Base)

- Pole Schedule**
- (7) SSS-4-11-12-CW-BS-OT-N-SV (12' X 4" X 11ga STEEL SQUARE POLE)
  - (7) SSS-4-11-20-CW-BS-OT-N-SV (20' X 4" X 11ga STEEL SQUARE POLE)
  - (7) PB-1A4SV SINGLE TENON
  - (7) PB-2A4SV TWIN TENON
  - (21) OSQ-ML-C-AA-SV - (Adjustable Arm Mount)

Proposed poles meet 120 MPH sustained winds.

\*\*\* CUSTOMER TO VERIFY ORDERING INFORMATION AND CATALOGUE NUMBER PRIOR TO PLACING ORDER \*\*\*

NOTES: All Fixtures are Flat Lens and Canopy fixtures all Recessed  
All Fixtures "Full Cut-Off" (U=0; BUG Rating)



**CREE LIGHTING**  
A COMPANY OF IDEAL INDUSTRIES, INC.  
9201 Washington Ave, Racine, WI 53406 <https://creeighting.com> - (800) 236-8800

Illumination results shown on this lighting design are based on project parameters provided to Cree Lighting used in conjunction with luminaire test procedures conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting or energy code.

Project Name: Sam's Xpress Car Wash - 7411 W. Broad St. Henrico, VA - EXT

CASE # 00516192

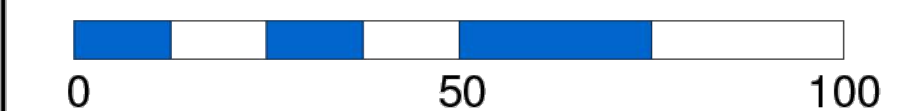
Footcandles calculated at grade

Filename: RJ220921BSHRLJSR4.AGI

Layout By:  
Collin Witherow

Date: 10/30/2023

Scale 1" = 25'



**EAGLE ENGINEERING**  
 1027/2023 TMH ADDRESS HENRICO COUNTY COMMENTS  
 NO. DATE BY ISSUE  
 3 10/27/2023 TMH ADDRESS HENRICO COUNTY COMMENTS  
**November 15, 2023**  
**POD2022-00480**  
**Staff Plan**  
 W. BROAD STREET  
 7411 W. BROAD ST  
 HENRICO COUNTY VA  
 PHOTOMETRIC PLAN  
 Sheet

SSS Series

Crown-Weld® Straight Square Steel Poles. Product Description, Construction Materials, Regulatory & Voluntary Qualifications, Limited Warranty, Ordering Information.

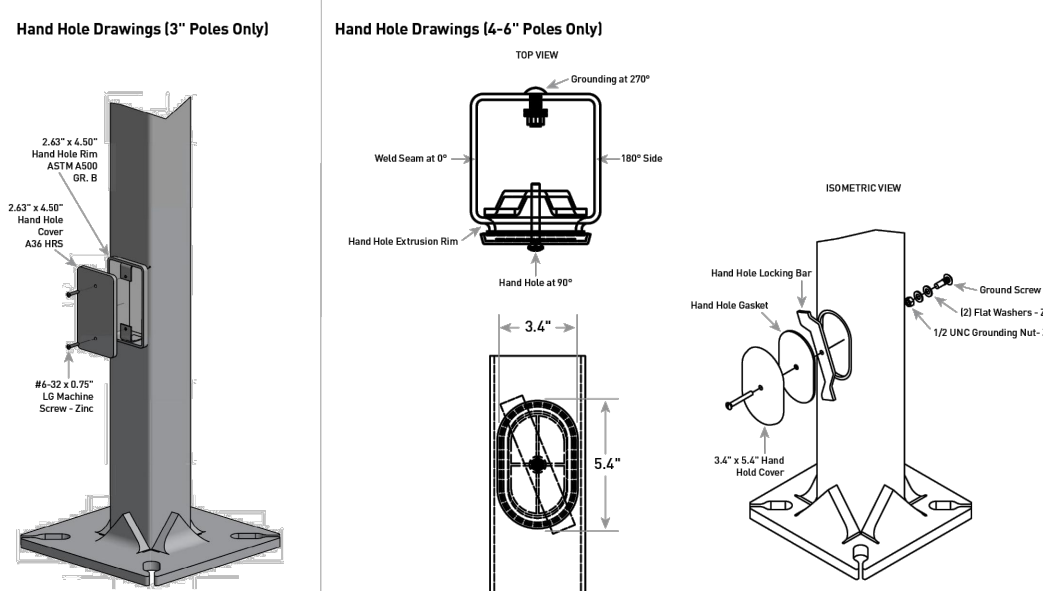
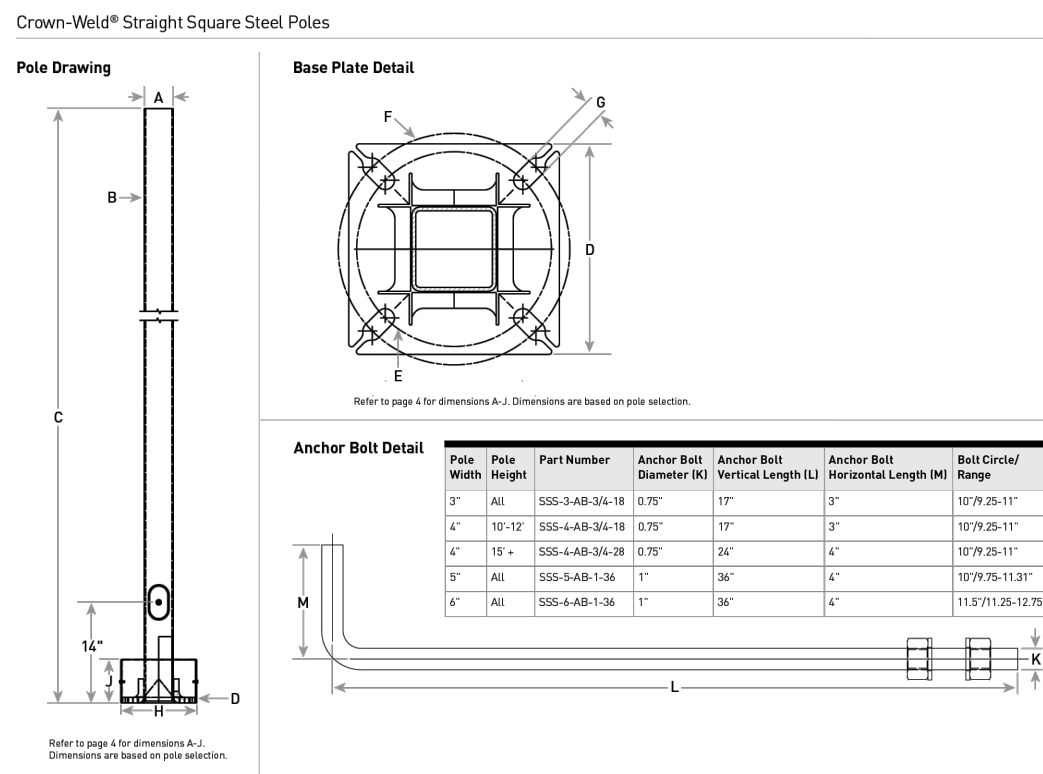
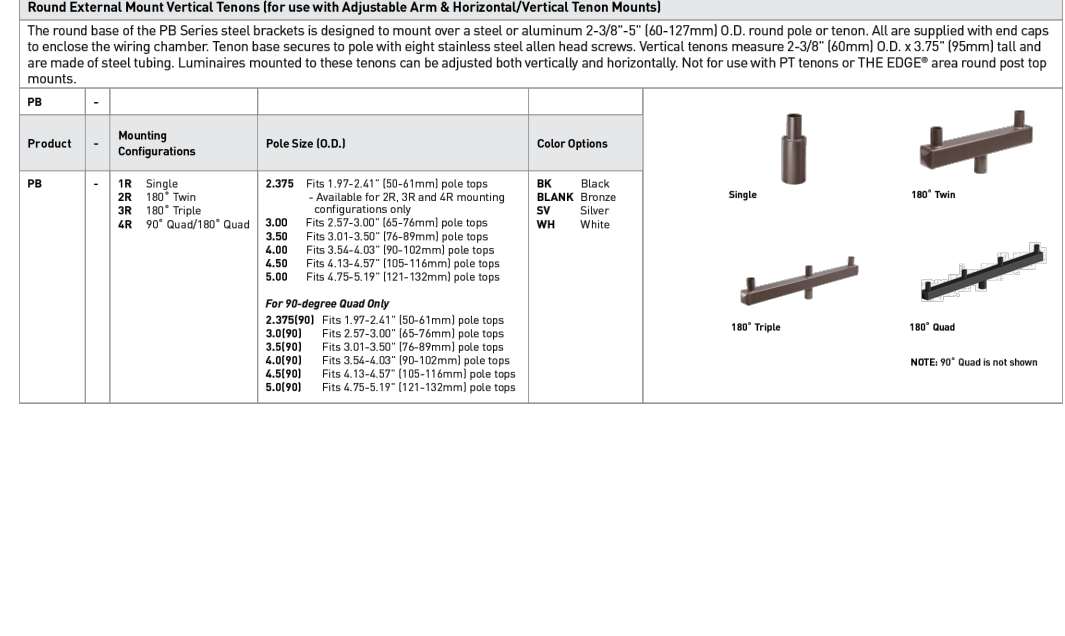


Table with columns for Pole Size, Height, and Material. Lists various pole configurations and their specifications.

CREE LIGHTING logo and contact information for SSS Series.

Brackets and Tenons

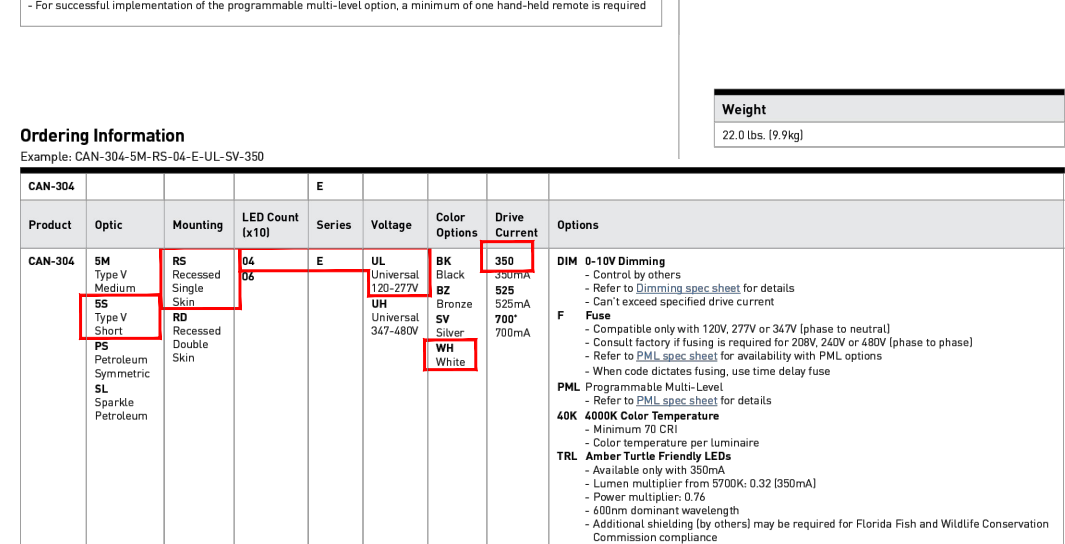
Product Specifications for Brackets and Tenons. Includes Product Description, Performance Summary, and Limited Warranty.



CREE LIGHTING logo and contact information for Brackets and Tenons.

304 Series™

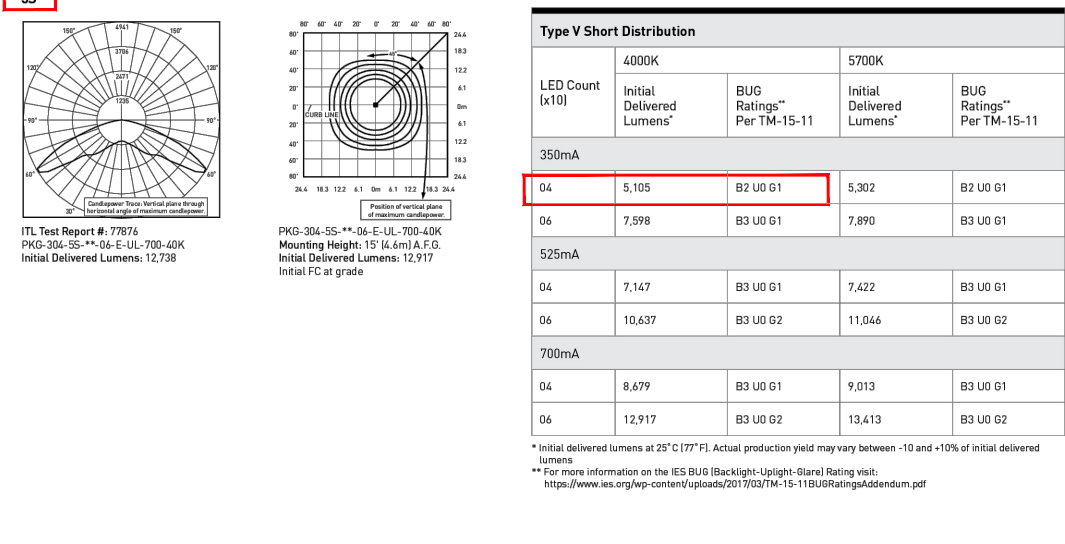
LED Recessed Canopy Luminaire. Product Description, Performance Summary, and Limited Warranty.



CREE LIGHTING logo and contact information for 304 Series luminaire.

304 Series™ LED Parking Structure Luminaire

Photometry and Type Y Medium Distribution data for 304 Series luminaire. Includes beam spread and illuminance tables.



CREE LIGHTING logo and contact information for 304 Series luminaire.

OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology - Version C. Product Description, Performance Summary, and Limited Warranty.

Table with columns for Luminaire Model, Mounting Height, and Weight. Lists various OSQ luminaire models and their specifications.

CREE LIGHTING logo and contact information for OSQ Series luminaire.

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology - Version C

Product Specifications for OSQ Series luminaire. Includes Product Description, Construction & Materials, and Limited Warranty.

Table with columns for Luminaire Model, Mounting Height, and Weight. Lists various OSQ luminaire models and their specifications.

CREE LIGHTING logo and contact information for OSQ Series luminaire.

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology - Version C

Photometry and Type III Mid Distribution data for OSQ Series luminaire. Includes beam spread and illuminance tables.

Table with columns for Luminaire Model, Mounting Height, and Weight. Lists various OSQ luminaire models and their specifications.

CREE LIGHTING logo and contact information for OSQ Series luminaire.

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology - Version C

Photometry and Type IV Mid Distribution data for OSQ Series luminaire. Includes beam spread and illuminance tables.

Table with columns for Luminaire Model, Mounting Height, and Weight. Lists various OSQ luminaire models and their specifications.

CREE LIGHTING logo and contact information for OSQ Series luminaire.

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology - Version C

Photometry and Type V Mid Distribution data for OSQ Series luminaire. Includes beam spread and illuminance tables.

Table with columns for Luminaire Model, Mounting Height, and Weight. Lists various OSQ luminaire models and their specifications.

CREE LIGHTING logo and contact information for OSQ Series luminaire.

Vertical text on the right side of the page: EAGLE ENGINEERING, POD2022-00480, November 15, 2023, W. BROAD STREET 7411 W. BROAD ST HENDRICK COUNTY VA, LIGHTING PLAN Staff Plan, SHEET



## EXTERIOR MATERIAL SCHEDULE

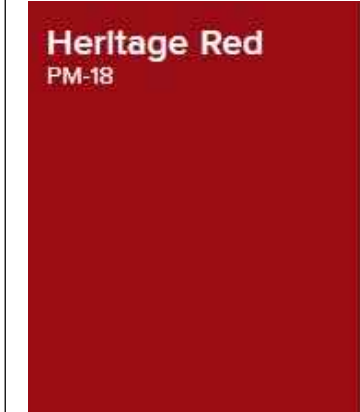
MATERIAL	MANUFACTURER	MODEL	COLOR	NOTES
PARAPET WALL COPING	CARLISLE SYNTEC SYSTEMS	SECUREDGE 300	DOVE GRAY	GALVANIZE, PRE-FINISHED, KYNAR 500, 24 GAUGE METAL
RED TRELLIS	T.B.D.		HERITAGE RED PM-18	PROVIDED BY G.C.
BEIGE EIFS	STO CORP.	StoTherm Ci Essence INSULATED WALL CLADDING SYSTEM	BRUSHED PEWTER FINISH: StoPowerwall FINE (80296)	INSTALL OVER STOGUARD LIQUID APPLIED WRB. COLOR AND TEXTURE TO BE APPROVED BY OWNER.
RED BRICK	TAYLOR CLAY PRODUCTS	322 GRAY	DARK GRAY	RUNNING BOND FACE BRICK. MORTAR COLOR TO BE DETERMINED
CREAM BRICK	TAYLOR CLAY PRODUCTS	320 GRAY	LIGHT GRAY	RUNNING BOND FACE BRICK, SOLDIER & SILL COURSE. MORTAR COLOR TO BE DETERMINED
ROLL UP DOOR	WAYNE DALTON	MODEL 900	CLEAR ANODIZED	
ALUMINUM CURTAIN WALL	TUBLITE	SERIES 200	CLEAR ANODIZED	2" X 5 3/4" FRAMES WITH 1" CLEAR INSULATED GLASS. SEE GLAZING SCHEDULE
ALUMINUM STOREFRONT	KAWNEER	TRIFAB VG45IT SSG	CLEAR ANODIZED	SEE GLAZING SCHEDULE
GRAY METAL GLAZING PANEL	CITADEL	GLAZEGUARD 1000	DOVE GRAY	
RED METAL BAND WITH RED LED LIGHT STRIP	SEE ELECTRICAL DRWS.		HERITAGE RED PM-18	
EMERG. OVERFLOW SPOUT	SEE PLUMBING DRWS.		DOVE GRAY A09	



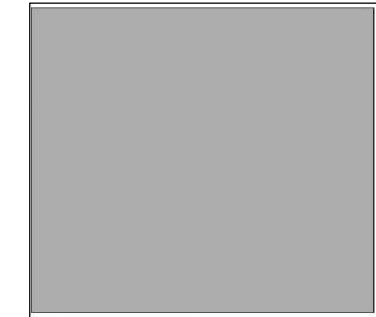
LIGHT FRAY BRICK IMAGE



DARK GRAY BRICK IMAGE

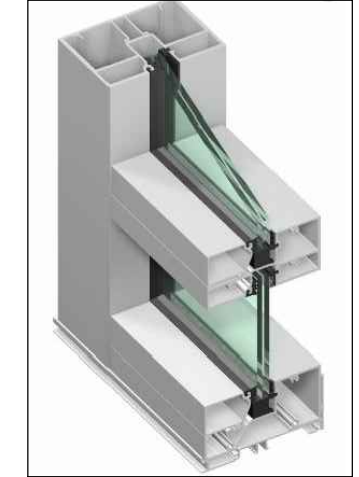


TRELLIS, VACUUM CANOPY

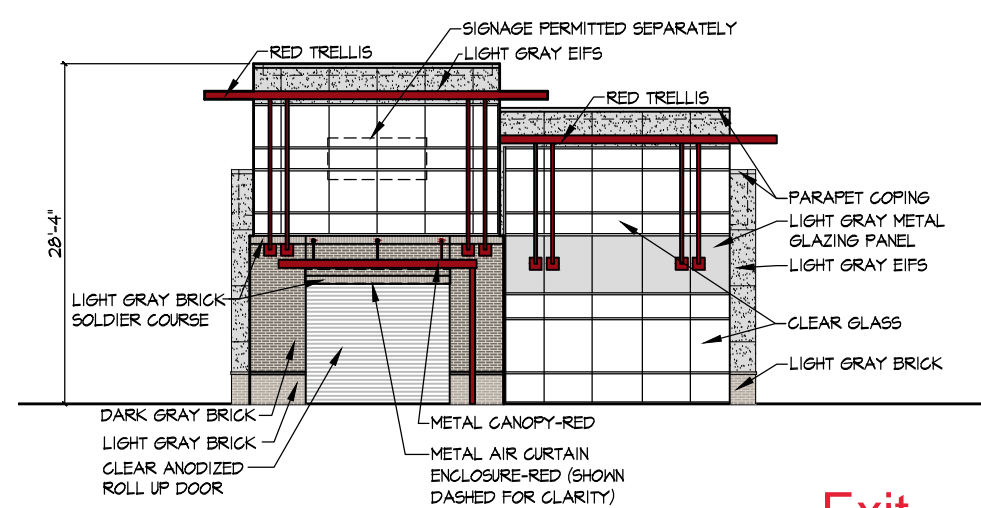


EIFS-11404 "Brushed Pewter" (Sto Fine Finish)

EIFS-BRUSHED PEWTER



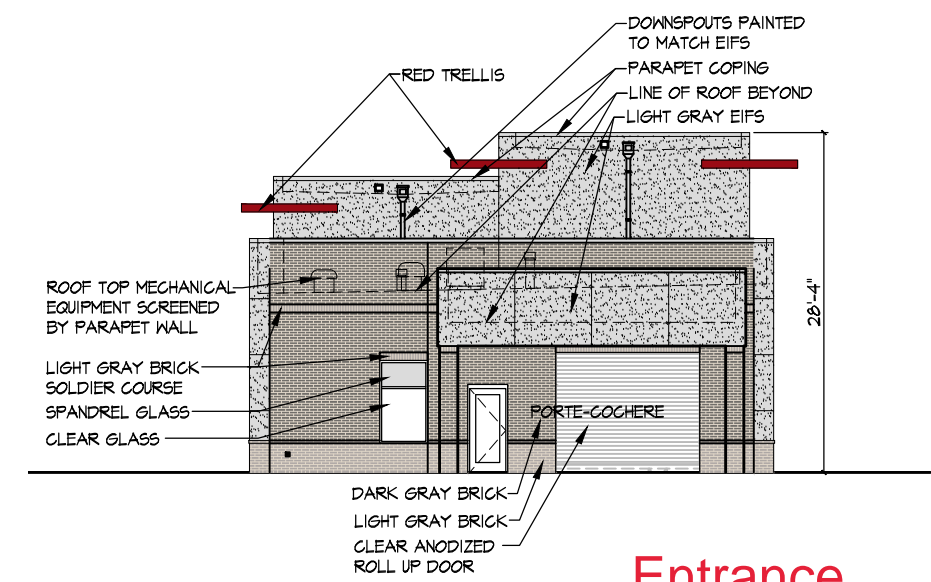
CLEAR ANODIZED ALUMINUM



Exit

2 FRONT ELEVATION  
SCALE: 1/16" = 1'-0"

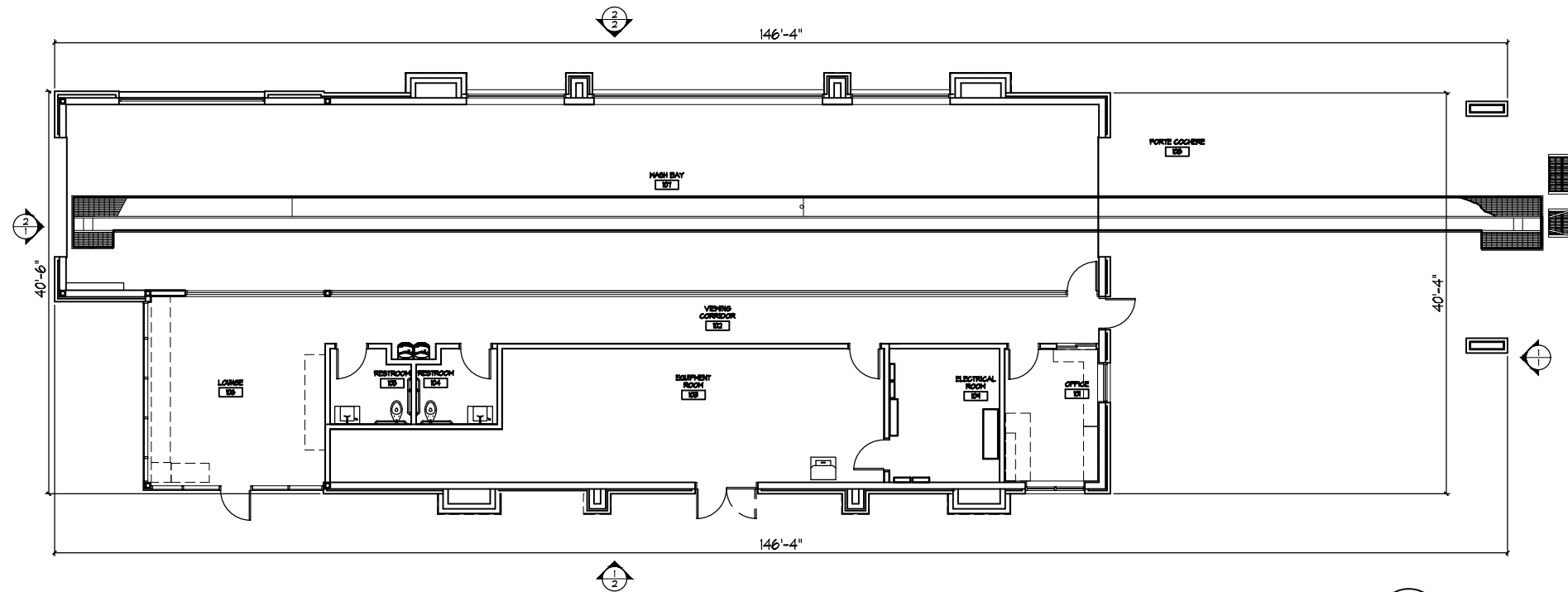
NOTE: BRICK AND EIFS MATERIALS ARE NEUTRAL IN TONE AND UTILIZE A LIGHT AND DARK GRAY COMBINATION WHICH CLOSELY RELATES TO THE WEST BROAD LANDING DEVELOPMENT.



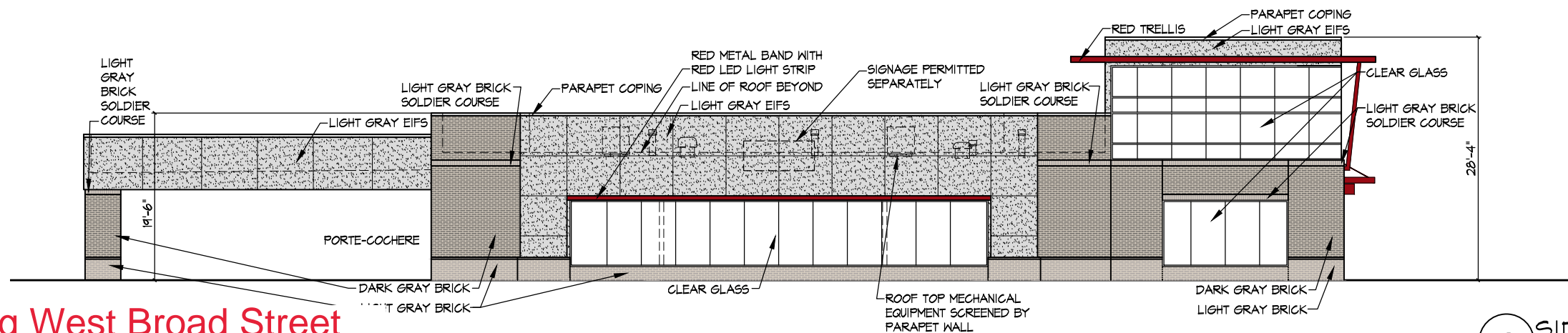
Entrance

1 REAR ELEVATION  
SCALE: 1/16" = 1'-0"

EXTERIOR MATERIALS  
SCHEDULE AND  
IMAGES ON PAGE 1

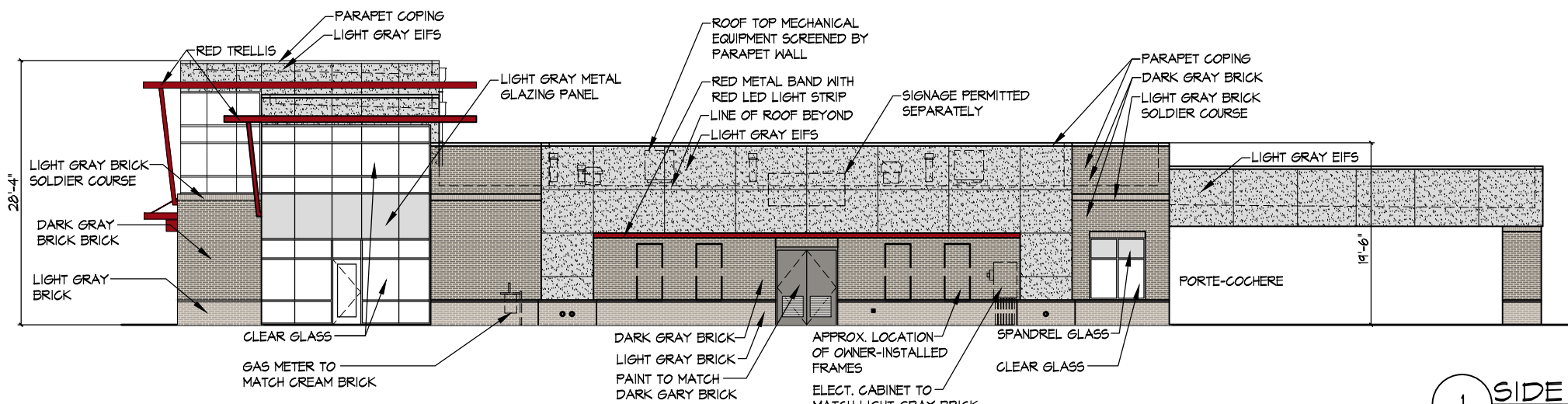


3 FLOOR PLAN  
SCALE: 1/16" = 1'-0"



Facing West Broad Street

2 SIDE ELEVATION  
SCALE: 1/16" = 1'-0"

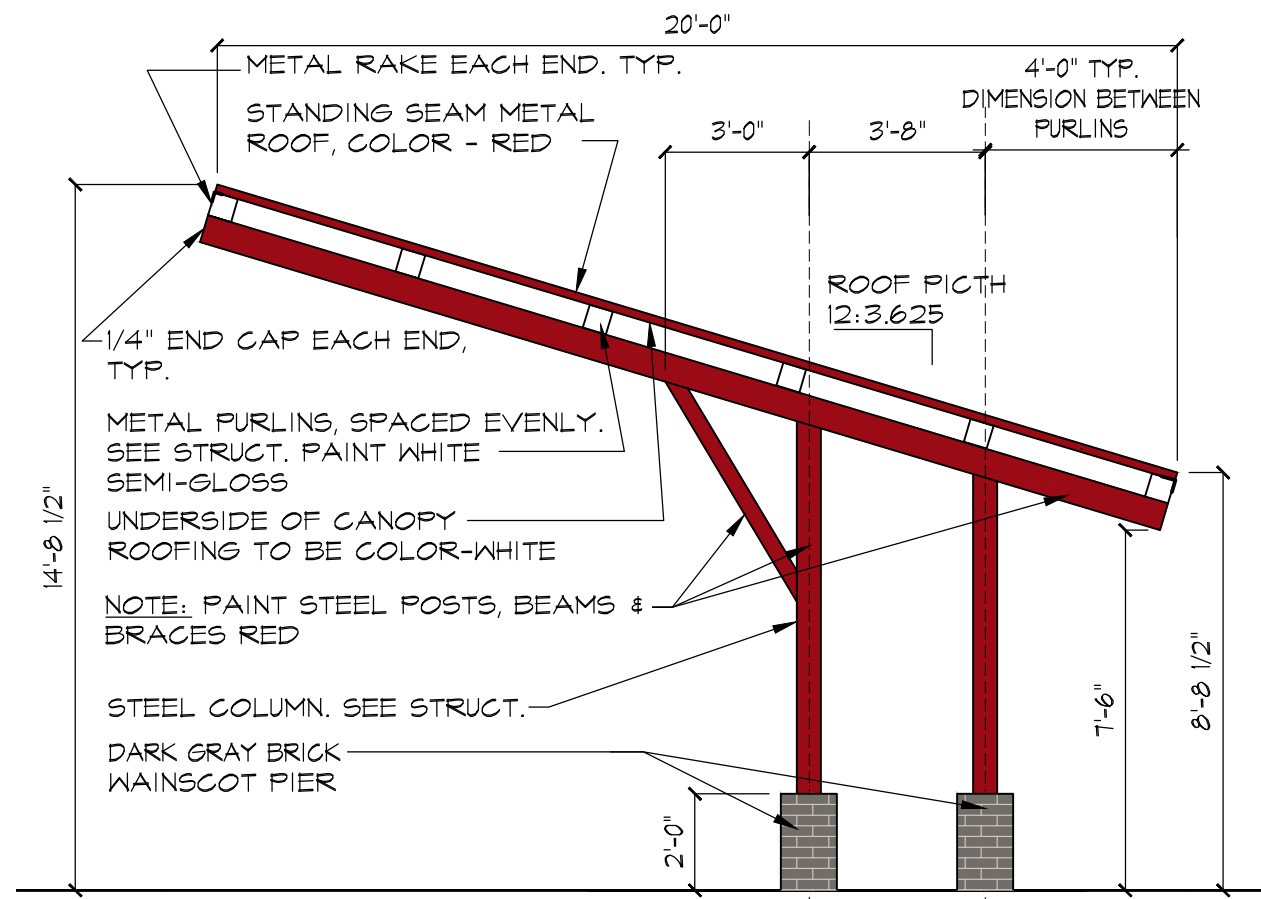


Facing West Broad Landing

1 SIDE ELEVATION  
SCALE: 1/16" = 1'-0"

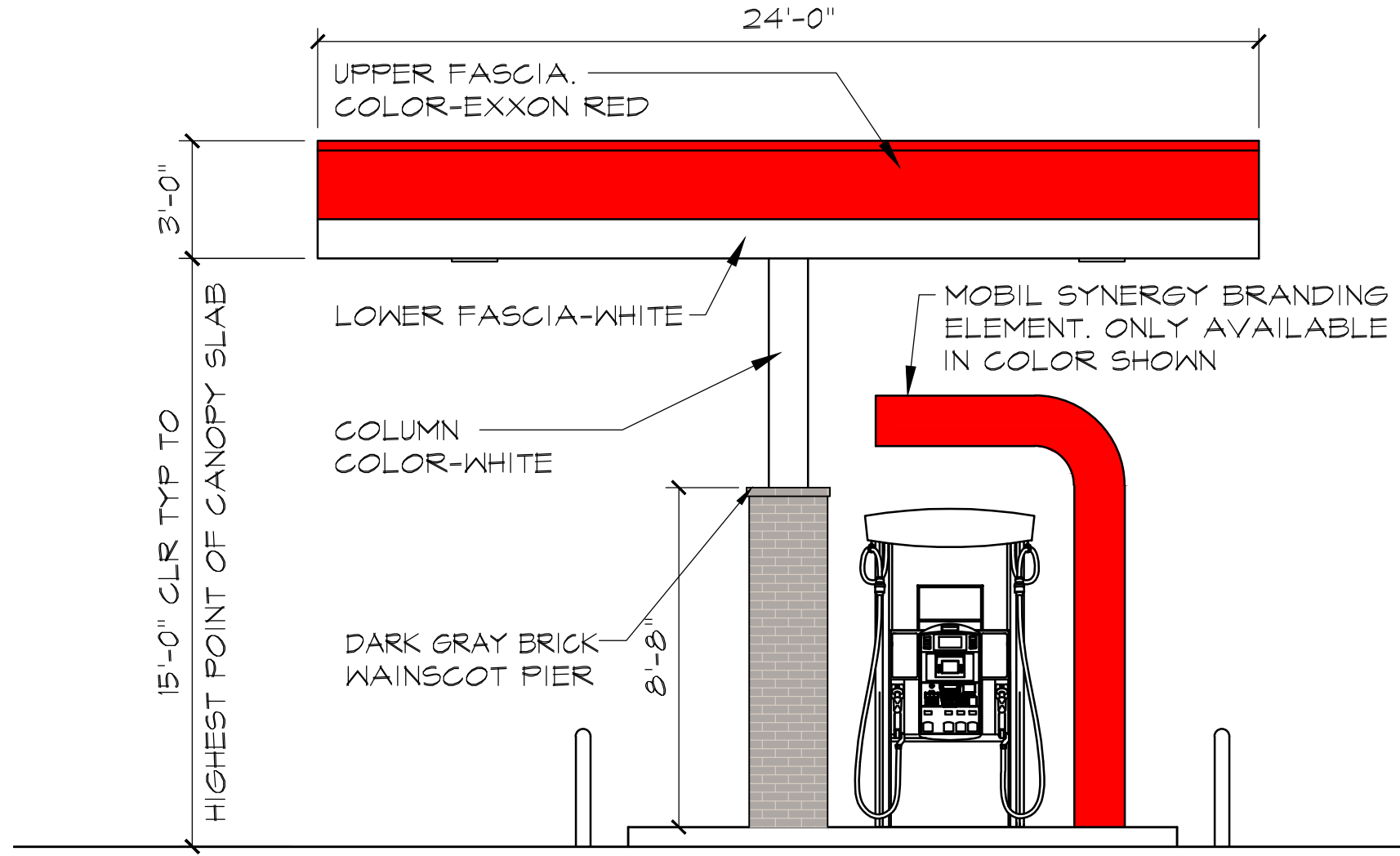


2 VACUUM CANOPY PHOTOS  
SCALE: NOT TO SCALE



1 VACUUM CANOPY SECTION  
SCALE: 1/4" = 1'-0"

3 VACUUM ENCLOSURE ELEVATION



1 FUEL CANOPY  
SCALE: 1/4" = 1'-0"

SAM'S XPRESS CAR WASH

ELEVATION

7411 WEST BROAD STREET

HENRICO VA

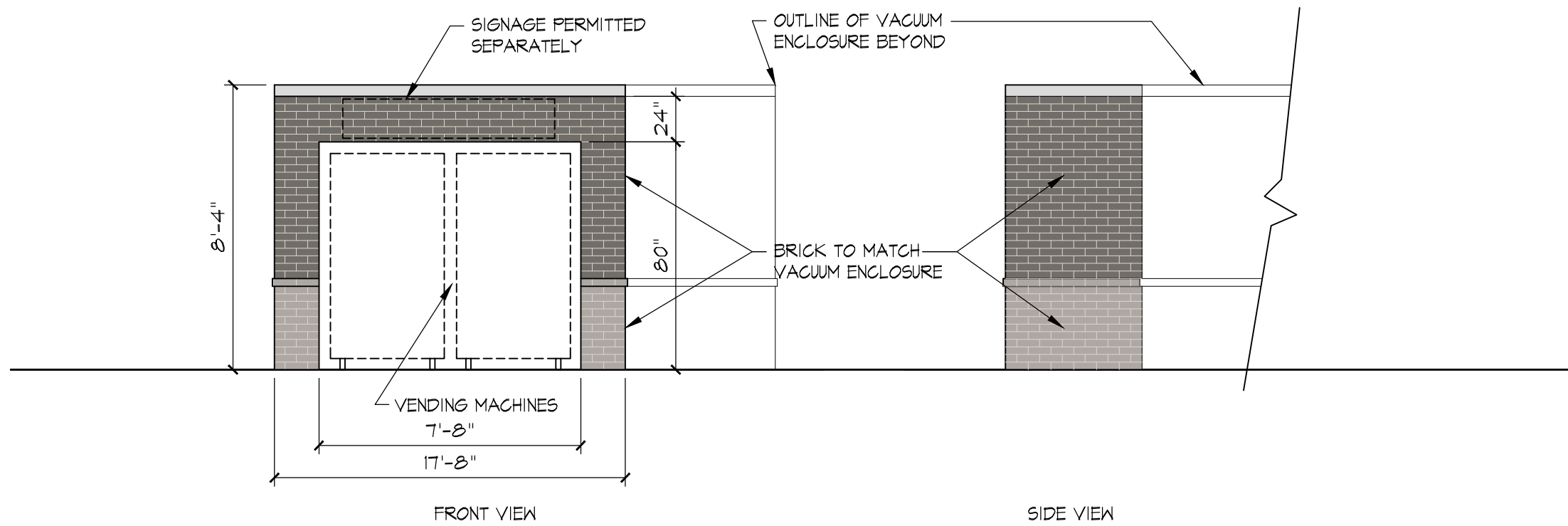
November 15, 2023

DATE: 10-24-23  
PROJECT #: 22-070  
DRAWN BY: VVW  
CADD FILE NAME:

THIS DRAWING AND THE DESIGN SHOWN ARE THE PROPERTY OF OAKLINE STUDIO, LLP. THE REPRODUCTION, OR USE OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED. ANY INFRINGEMENT IS SUBJECT TO LEGAL ACTION.

Sheet

5



1 VENDING ENCLASURE  
SCALE: 1/4" = 1'-0"

SAM'S XPRESS CAR WASH  
ELEVATION  
7411 WEST BROAD STREET  
HENRICO VA  
November 15, 2023

DATE: 10-24-23  
PROJECT #: 22-070  
DRAWN BY: VW  
CADD FILE NAME:

THIS DRAWING AND THE DESIGN SHOWN ARE THE PROPERTY OF OAKLINE STUDIO, LLP. THE REPRODUCTION, OR USE OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED. ANY INFRINGEMENT IS SUBJECT TO LEGAL ACTION.

Sheet  
6

Staff Plan

oaklinestudio  
architecture + design

421 PENMAN STREET, SUITE 200  
CHARLOTTE, NC 28203  
704.373.1900 OAKLINESTUDIO.COM

POD2022-00480