

GENERAL NOTES

- OWNER/ DEVELOPER:
TOWN OF VIENNA
DEPARTMENT OF PUBLIC WORKS
127 CENTER STREET, SOUTH
VIENNA, VA 22180
1. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, THEY SHOULD IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE UTILITY AND ASSURE THE CONTINUANCE OF SERVICE. THE ENGINEER DOES NOT CERTIFY TO THE LOCATION OR EXISTENCE OF ANY UNDERGROUND UTILITY SHOWN ON THIS PLAN. THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 811 PRIOR TO COMMENCEMENT OF ANY EXCAVATION.
2. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON THE FIELD RUN SURVEY PERFORMED BY URBAN, LTD IN AUGUST, 2021. HORIZONTAL DATUM IS NAD1983 AND VERTICAL DATUM IS NAVD1988.
3. SUBSURFACE UTILITIES SHOWN PER MISS UTILITY MARK OUT FIELD LOCATION.
4. NO TITLE REPORT FURNISHED.
5. CLEARING AND GRADING SHALL BE IN ACCORDANCE WITH THE GRADING AND EROSION CONTROL PLANS AND STANDARDS SET FORTH BY THE VIRGINIA EROSION AND SEDIMENTATION CONTROL HANDBOOK. ALL LAND ON OR OFF-SITE WHICH IS DISTURBED BY THIS IMPROVEMENT AND WHICH IS NOT BEING BUILT UPON OR SURFACED SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION.
6. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING THE TOWN STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN STREETS, ALLAY DUST AND TO TAKE WHATEVER MEASURES NECESSARY TO INSURE THAT THE ROAD IS MAINTAINED IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES. SEE SILTATION AND EROSION CONTROL PLANS/NARRATIVE FOR ADDITIONAL INFORMATION.
7. THE CONTRACTOR SHALL PROTECT AND ADJUST, AS REQUIRED, ALL EXISTING MANHOLES AND VALVES WITHIN THE LIMITS OF DISTURBANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE THAT MAY OCCUR BY HIS FAILURE TO PROPERLY PROTECT THE EXISTING MANHOLES AND VALVES.
8. IF APPLICABLE, ANY UTILITIES AND UTILITY POLES TO BE BRACED DUE TO THIS IMPROVEMENT SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR PURSUANT TO THE TOWN'S PAY ITEM SCHEDULE. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL UTILITY WORK REQUIRED. THE TOWN WILL COORDINATE WITH DOMINION VIRGINIA POWER IN REGARDS TO RELOCATING ANY POLES DUE TO THIS IMPROVEMENT.
9. ALL STORM SEWER STRUCTURES AND PIPING WITHIN THE AREA OF CONSTRUCTION SHALL BE CLEANED OUT FOLLOWING THE COMPLETION OF CONSTRUCTION.
10. ANY DAMAGE TO EXISTING STREETS, PUBLIC UTILITIES OR PRIVATE UTILITIES, INCLUDING BUT NOT LIMITED TO, VALVE BOXES, WATER METER UDS, FRAMES OR CROCKS AND WATER LATERALS, DUE TO THIS IMPROVEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
11. ALL CONSTRUCTION DUE TO THIS IMPROVEMENT IS TO BE PERFORMED IN ACCORDANCE WITH THE STANDARDS SET FORTH BY THE STATE OF VIRGINIA AND THE TOWN OF VIENNA.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE TOWN AND THE ENGINEER/SURVEYOR OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM TOWN OF VIENNA, OR ANY OTHER AUTHORITY ISSUING PERMITS.
13. A SMOOTH GRADE SHALL BE MAINTAINED FROM CENTERLINE TO THE CURB AND GUTTER TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR PONDING OF WATER ON ANY ROAD OR PARKING AREA.
14. PLANS MAY NOT INCLUDE MINOR SITE FEATURES SUCH AS MAILBOXES, PRIVATE LIGHTING FIXTURES, SIGNS, ETC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM A PRE-CONSTRUCTION SURVEY OF THE PROPOSED STREETS TO LOCATE THESE PRIVATE FEATURES AND RELOCATE THEM AS NECESSARY.
15. THE CONTRACTOR SHALL INSPECT ALL EXISTING UTILITIES FOR NECESSARY REPAIRS PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES. IF ANY SUCH UTILITY REPAIRS ARE REQUIRED, THE CONTRACTOR WILL COORDINATE THESE REPAIRS WITH THE TOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING OR PROPOSED UTILITIES THAT OCCURS DURING CONSTRUCTION ACTIVITIES. DAMAGED UTILITIES SHALL BE REPAIRED IN A TIMELY FASHION TO LIMIT THE INTERRUPTION OF SERVICE TO THE AFFECTED RESIDENTS.
16. THE CONTRACTOR SHALL NOTIFY THE TOWN AND ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING FIELD CONDITIONS AND THOSE SHOWN ON THE CONTRACT DOCUMENTS THAT IMPACT PROPOSED CONSTRUCTION ACTIVITIES.
17. ALL CONCRETE AND PAVEMENT DEMOLITION/REMOVAL SHALL EMPLOY SAW CUT JOINTS.
18. ROOT PRUNING SHALL BE TO THE DEPTH OF EXCAVATION, OR 24 INCHES, WHICHEVER IS LESS. A TRENCHER OR VIBRATORY PLOW SHALL BE USED TO PRUNE ALL ROOTS. ROOTS OVER ONE AND ONE-HALF INCHES (1.5") IN DIAMETER SHALL BE CLEANLY CUT BY HAND.
19. A ROOT BIOSTIMULANT SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO ALL TREES THAT ARE ROOT PRUNED.
20. CONCRETE PIPE TO BE CLASS III UNLESS OTHERWISE SPECIFIED.
21. SIGHT DISTANCE TO BE MAINTAINED BY CONTRACTOR DURING CONSTRUCTION.
22. THE CONTRACTOR SHALL PROVIDE A SMOOTH GRADE FROM THE LIMITS OF DISTURBANCE TO THE BACK OF SIDEWALK.
23. VDOT STD. IS-1, INLET SHAPING, TO BE UTILIZED ON ALL PROPOSED OR MODIFIED EXISTING STORM STRUCTURES.
24. AIR QUALITY PERMIT NOT REQUIRED PER STATE AIR POLLUTION CONTROL BOARD REGULATION ACOR VII, SECTION 2.706 (G)(2)(1).
25. ALL FINISHED GRADING, SEEDING, SODDING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER ON THE SITE.
26. THE CONTRACTOR SHALL INSURE THAT ALL CONSTRUCTION CONFORMS WITH CURRENT FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS, INCLUDING FEDERAL REGULATIONS CONTAINED WITHIN "THE AMERICANS WITH DISABILITIES ACT," ENACTED ON JULY 26, 1990 (AKA "ADA").
27. ALL EARTHWORK OPERATIONS SHALL CONFORM TO THE GEOTECHNICAL NOTES AND DETAILS IF PROVIDED.
28. PRIOR TO ANY LAND DISTURBANCE ACTIVITY WITHIN THE AREA OF WASHINGTON GAS, AND F.C.W.A. MAJOR TRANSMISSION LINES, THE CONTRACTOR MUST NOTIFY THESE UTILITY COMPANIES IN ADVANCE TO ASSURE THEY CAN INSPECT AND APPROVE THE CONSTRUCTION ACTIVITY.

29. NO VISIBLE EVIDENCE OF ANY PLACE OF BURIAL OR HISTORIC SITE WAS ENCOUNTERED ON THE PROPERTY BY THIS FIRM. IF ANY GRAVE YARD OR HISTORIC SITE IS ENCOUNTERED DURING CONSTRUCTION THE CONTRACTOR SHALL CEASE WORK IN THE AREA IMMEDIATELY AND NOTIFY THE OWNER AND ENGINEER.
30. ALL CONSTRUCTION INVOLVING PROBLEM SOIL MUST BE PERFORMED UNDER THE FULL-TIME INSPECTION OF THE GEOTECHNICAL ENGINEER.
31. THE GEOTECHNICAL ENGINEER SHALL FURNISH A WRITTEN OPINION TO THE TOWN AS TO WHETHER OR NOT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS PRIOR TO THE ISSUANCE OF ANY OCCUPANCY OR USE PERMIT.
32. ALL CLEARING, GRADING AND ACTUAL CONSTRUCTION ACTIVITY SHALL BE LIMITED TO BETWEEN THE HOURS OF 7:00 A.M. AND 6:00 P.M., MONDAY THROUGH FRIDAY, AND BETWEEN 8:00 A.M. AND 6:00 P.M. SATURDAY. CONSTRUCTION ACTIVITY ON SUNDAY SHALL BE PROHIBITED. CONTRACTOR SHALL CONFIRM HOURS WITH TOWN OF VIENNA PRIOR TO CONSTRUCTION AND ADJUSTMENTS MAY BE MADE DUE TO CLOSE PROXIMITY OF A NEARBY SCHOOL.

TOWN OF VIENNA NOTES

1. NOTIFY THE TOWN OF VIENNA DEPARTMENT OF PUBLIC WORKS AT 703-255-6380 WHEN WORK IS TO BE STARTED.
2. ALL CONTRACTOR GENERATED DEBRIS MUST BE HAULED AWAY BY THE CONTRACTOR OR OWNER.
3. ALL RUNOFF MUST SHEET FLOW ACROSS PROPERTY LINES UNLESS APPROVED OTHERWISE BY THE DIRECTOR OF PUBLIC WORKS.
4. ALL PRIVATE STORM DRAINS (I.E. ROOF DRAINS, SUMP PUMP ETC.) MUST DAYLIGHT AT A MINIMUM OF 10 FEET FROM A PROPERTY LINE.
5. PRIOR TO THE REMOVAL OF ANY TREES, THE APPLICANT OR THEIR REPRESENTATIVE SHALL CONTACT THE TOWN OF VIENNA ARBORIST AT 703-255-6360 TO COORDINATE HAVING THE TOWN ARBORIST ONSITE DURING ALL TREE REMOVAL.
6. TREE PROTECTION FOR ANY TREE, AS SHOWN ON PLAN, MUST BE INSTALLED PRIOR TO ANY SITE WORK.

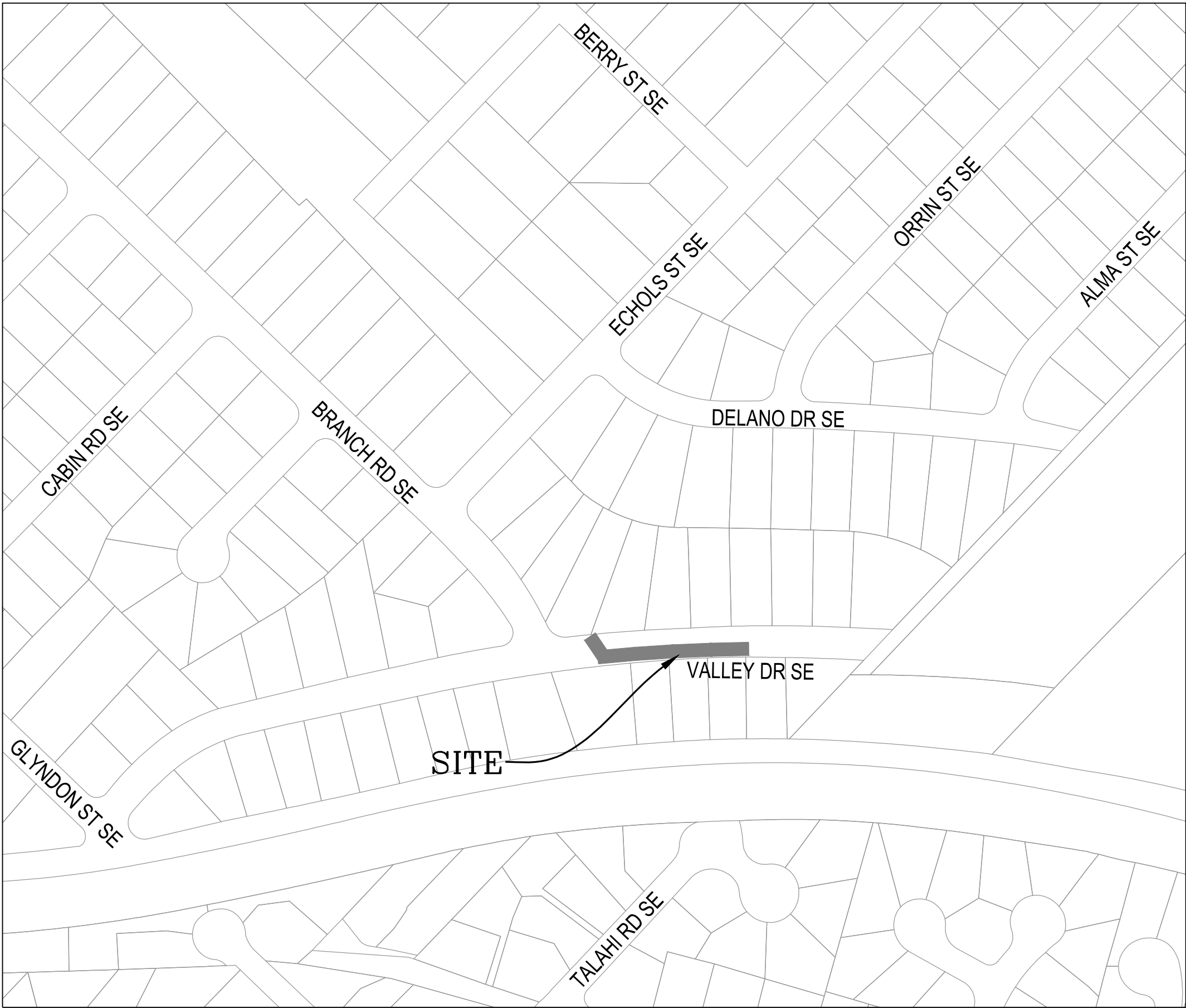
ROAD CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO CURRENT TOWN OF VIENNA AND VDOT STANDARDS AND SPECIFICATIONS.
2. THE LOCATIONS OF EXISTING UTILITIES ON THESE DRAWINGS ARE GENERALLY APPROXIMATE. IT IS THE CONTRACTOR WHO IS RESPONSIBLE TO ENSURE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES IN THE AREA OF CONSTRUCTION PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER AND URBAN ENGINEERING & ASSOC. OF ANY POTENTIAL CONFLICTS PRIOR TO COMMENCING CONSTRUCTION.
3. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND MAKE ALL INSPECTIONS NECESSARY IN ORDER TO DETERMINE THE FULL EXTENT OF WORK REQUIRED TO MAKE THE COMPLETED WORK CONFORM TO THE DRAWINGS AND SPECIFICATIONS.
4. WHERE CONFLICTS REQUIRE RELOCATION OF EXISTING UTILITIES (E.G. AT&T, MCI, C&P, VEPSCO, MEDIA GENERAL) UTILITY COMPANIES SHALL BE NOTIFIED.
5. ALL EXISTING SIGNS, FENCES, ETC. DISTURBED BY THIS CONSTRUCTION SHALL BE RELOCATED BY THE CONTRACTOR AS NECESSARY PER TOWN OF VIENNA REQUIREMENTS.
6. ALL EXISTING TOWN OF VIENNA TRAFFIC CONTROL EQUIPMENT WILL BE RELOCATED BY THE CONTRACTOR AS NECESSARY PER VDOT REQUIREMENTS.
7. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS AND UTILITIES WHICH OCCUR AS A RESULT OF PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO THE SITE.
8. ANY EXISTING C&G AND PAVEMENT TO REMAIN THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/REPAIRED TO TOWN OF VIENNA SATISFACTION. C&G TO BE SAW CUT, OTHERWISE REMOVE TO THE NEAREST JOINT.
9. THE CONTRACTOR SHALL CONTACT MISS UTILITY COMPANY REPRESENTATIVE, REVIEW TEST PIT DATA AND ANY OTHER OPERATIONS AVAILABLE TO ENSURE ALL EXISTING UTILITIES IN THE AREA OF CONSTRUCTION ARE SHOWN ON THE PLANS PRIOR TO CONSTRUCTION.
10. WHERE MANHOLES ARE TO BE PLACED IN THE ROAD R/W, THE TOPS SHALL BE OFFSET TO ASSURE THAT THEY AREA POSITIONED TO MINIMIZE IMPACT TO VEHICULAR WHEEL PATHS.
11. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE OWNER OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
12. ALL FILL MATERIAL REQUIRED TO RAISE GRADES AND UNDER SLABS, WHICH MAY CONSIST OF APPROVED ONSITE SOILS AND/OR OFFSITE BORROW MATERIAL, SHALL BE FREE OF ALL DEBRIS, ORGANIC MATERIAL, AND CLUMPS AND SHALL BE ADJUSTED TO THE PROPER MOISTURE CONTENT BEFORE BEING COMPACTED IN 8" MAXIMUM LAYERS. EACH LAYER TO BE COMPACTED TO 95% DENSITY MODIFIED PROCTOR PER ASTM D1557. BASE AND SUBBASE MATERIAL SHALL BE COMPACTED TO THE REQUIREMENTS OF SECTIONS 308.03, 309.04, AND 309.05 OF VDOT SPECIFICATIONS. SUBGRADE COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 305.03.

13. STANDARD UD-2, UD-3, & UD-4 TO BE UTILIZED IN CONSTRUCTION WITH STANDARD PIPE UNDER DRAIN. UD-2, UD-3, & UD-4 TO BE INSTALLED IN ACCORDANCE WITH VDOT SECTION 108.02, 108.03, AND 108.05.
14. STANDARD GUARDRAILS AND/OR HANDRAILS SHALL BE INSTALLED AT HAZARDOUS LOCATIONS AS DESIGNATED DURING FIELD REVIEW BY THE TOWN OF VIENNA INSPECTOR.
15. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL. IF REQUIRED, THE DEVELOPER SHALL SUBMIT A SIGNING, STRIPING AND/OR SIGNALIZATION PLAN TO THE VDOT LAND DEVELOPMENT SECTION A MINIMUM OF 30 DAYS PRIOR TO PERMIT APPLICATION. THE DEVELOPER SHALL NOT COMMENCE CONSTRUCTION OF ANY PAVEMENT COURSE WITHOUT AN APPROVED STRIPING PLAN.
16. A 4" (MIN.) LAYER OF STONE IS REQUIRED BENEATH CURB AND GUTTER.
17. ADDITIONAL DITCH LININGS OR SILTATION AND EROSION CONTROL MEASURES SHALL BE PROVIDED, AS DETERMINED NECESSARY BY THE TOWN DURING FIELD REVIEW. ALL COSTS SHALL BE ASSUMED BY THE CONTRACTOR.
18. OVERLAY OF EXISTING PAVEMENT SHALL BE MINIMUM OF 1.25" DEPTH, ANY COSTS ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE CONTRACTOR.

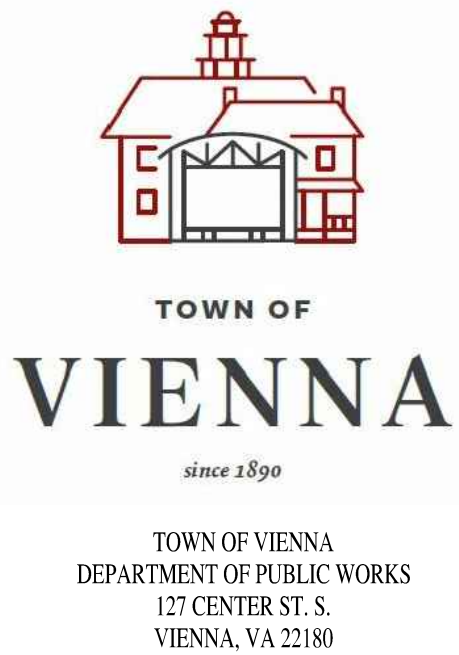
TOWN OF VIENNA
DEPARTMENT OF PUBLIC WORKS
FAIRFAX COUNTY, VIRGINIA

VALLEY DRIVE SE
DRAINAGE IMPROVEMENT PLAN
100% DESIGN CONSTRUCTION DRAWINGS



VICINITY MAP
SCALE : 1"= 200'

OWNER/DEVELOPER:



SURVEY NOTES

- TOPOGRAPHICAL SURVEY PERFORMED BY FIELD RUN SURVEY BY URBAN, LTD. PERFORMED IN OCTOBER, 2021.
- VERTICAL
NOTE: ELEVATIONS SHOWN HEREON ARE BASED ON STATIC GPS OBSERVATIONS AS PROCESSED BY THE NATIONAL GEODETIC SURVEY, ONLINE POSITIONING USER SERVICE (OPUS), AND ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM (NAV) OF 1988.
- HORIZONTAL
NOTE: BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON STATIC GPS OBSERVATIONS AS PROCESSED BY THE NATIONAL GEODETIC SURVEY, ONLINE POSITIONING USER SERVICE (OPUS), AND ARE REFERENCED TO VIRGINIA STATE GRID NORTH ZONE NAD 83 - US SURVEY FOOT.
- UTILITIES
UNDERGROUND UTILITIES WERE PAINTED BY UTILITIES SEARCH, INC. AND MAPPED INTO THE BASE BY URBAN, LTD.

SHEET INDEX

- COVER SHEET
- NOTES AND DETAILS
- EXISTING CONDITIONS AND DEMOLITION PLAN
- SITE PLAN
- STORM DIVIDES
- STORM PROFILES & COMPUTATIONS
- PAVEMENT IMPROVEMENT PLAN
- EROSION AND SEDIMENT CONTROL PLAN PH I & PH II
- EROSION AND SEDIMENT CONTROL NARRATIVE AND DETAILS

NOTICE REQUIRED

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION.

CONTACT "MISS UTILITY" AT
1-800-552-7001
FOR THESE UTILITIES

VIRGINIA ELECTRIC & POWER CO.
A.T. & T. CO.
COLUMBIA GAS TRANSMISSION CO.
FAIRFAX CO. SAN. SEWER DIV.
TRANSCO GAS PIPELINE CO.
COLUMBIA GAS OF VIRGINIA
CONTINENTAL TELEPHONE OF VIRGINIA




COLONIAL PIPELINE CO.
FAIRFAX CO. WATER AUTHORITY
WASHINGTON GAS LIGHT CO.
PRINCE WILLIAM ELEC. CO-OP.
PLANTATION PIPELINE CO.
C & P TELEPHONE CO.

CONTACT THESE UTILITIES

TRI-COUNTY ELEC. CO-OP 1-777-2151
FALLS CHURCH WATER SER. 1-241-5078

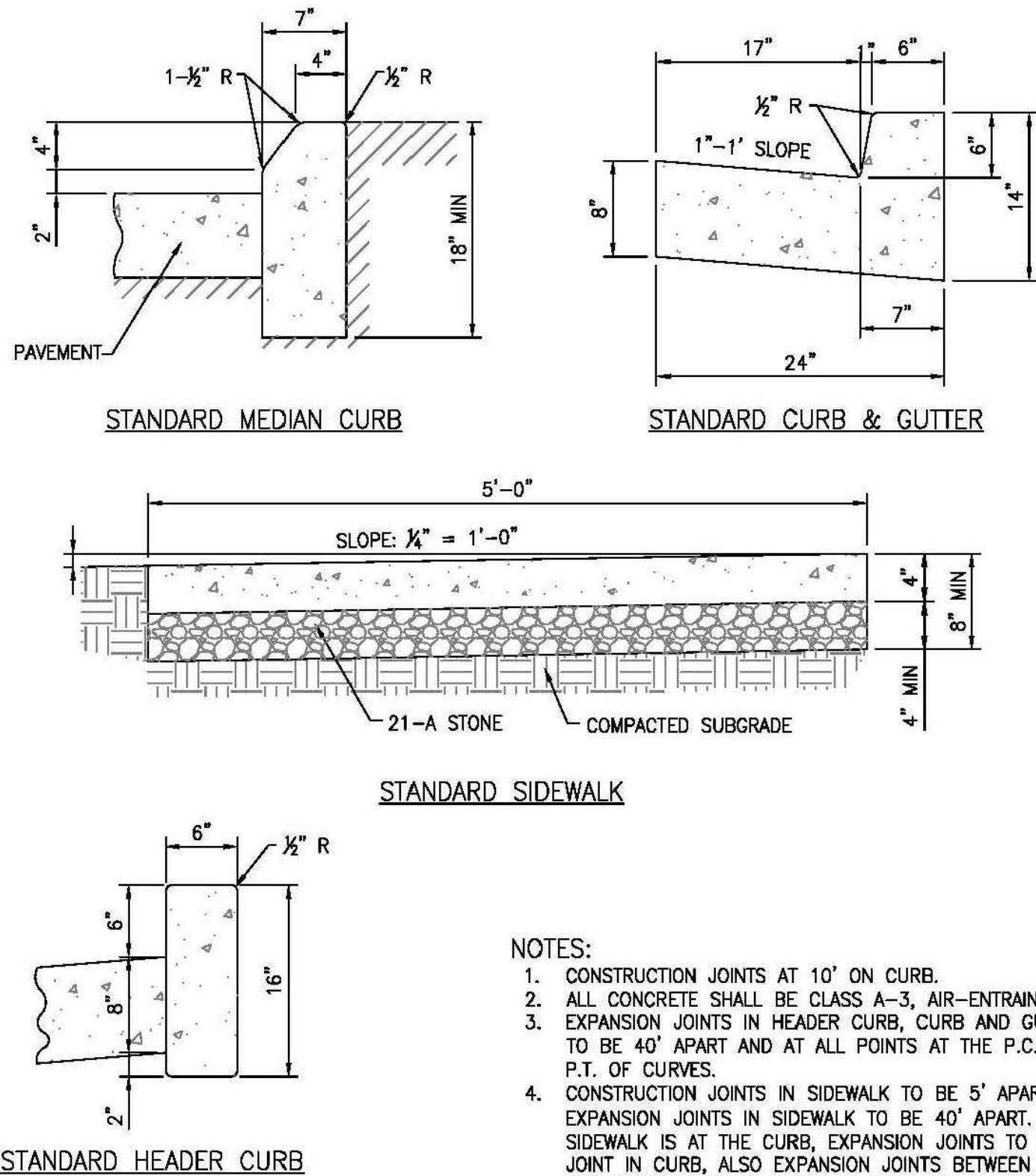
LOUDOUN WATER 571-291-7880
FAIRFAX CITY WATER SER. 385-7916

EMERGENCY DIAL 911
POLICE - FIRE - RESCUE
777-1021 777-2222

FILE No. PP-2553	SHEET 1 OF 9	COVER SHEET	VIENNA DRAINAGE IMPROVEMENTS VALLEY DRIVE SE TOWN OF VIENNA FAIRFAX COUNTY, VIRGINIA	SCALE: AS NOTED	C.I. N/A	DATE: APRIL, 2022									Urban, Ltd. 7712 Little River Turnpike Amandale, Virginia 22003 Tel. 703.642.8080 www.urban-llc.com www.urban-llc.com		PLAN DATE							
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SOIL TYPE WITHIN LIMITS

SOIL ID NUMBERS	SOIL SERIES NAME	FOUNDATION SUPPORT	SOIL DRAINAGE	EROSION POTENTIAL	PROBLEM CLASS
108B	WHEATON-SUMERDUCK COMPLEX	MARGINAL	POOR	MEDIUM	IVB



STANDARD CURB,GUTTER & SIDEWALK
TOWN OF VIENNA
DEPARTMENT OF PUBLIC WORKS

PREPARED: 11-10-2010
REVISED: 5-18-2011

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	INDEX CONTOUR	
	INTERMEDIATE CONTOUR	
	EDGE OF PAVEMENT	
	CURB AND GUTTER	
	TRANSITION FROM SPILL TO CATCH CURB	
	HEADER CURB	
	PROPERTY LINE	
	DEPARTING PROPERTY LINE	
	LOT LINE	
	RIGHT-OF-WAY	
	CENTERLINE	
	FLOOD PLAIN	
	LIMIT OF DISTURBANCE	
	TREE LINE	
	FLOW LINE OF SWALE	
	STREAM	
	OVERLAND RELIEF PATHWAY	
	FENCE LINE	
	EASEMENT	
	WATER LINE	
	REUSE WATER MAIN	
	WATER VALVE	
	SANITARY SEWER	
	STORM SEWER	
	ELECTRIC SERVICE	
	TELEPHONE SERVICE	
	GAS LINE	
	IRRIGATION LINE	
	FIBER OPTIC LINE	
	UNKNOWN LINE	
	SPOT ELEVATION	
	UTILITY POLE	
	GUY WIRE	
	MAILBOX SIGN	
	SANITARY SEWER IDENTIFIER	
	STORM DRAIN IDENTIFIER	
	EASEMENT IDENTIFIER	
	WATER METER	
	WATER VALVE	
	FIRE HYDRANT	
	COMMUNICATION VAULT (MANHOLE)	
	COMMUNICATION PEDESTAL	
	PARKING INDICATOR	
	STREET LIGHT	
	VEHICLES PER DAY (TRAFFIC COUNT)	
	TEST PIT REQUIRED	
	CRITICAL SLOPE	
	HANDICAP RAMP	
	DECIDUOUS TREE	
	BENCHMARK	
	NEW ASPHALT	
	ASPHALT TRAIL	
	CONCRETE SIDEWALK	
	END WALLS	
	END SECTIONS	
	STOP SIGN	
	STREET SIGN	
	GEOTHERMAL LINE	

PLAN DATE

04-14-2022
05-19-2022
08-19-2022

REVISIONS

Urban Ltd
7712 Little River Turnpike
Arlington, Virginia 22003
Tel. 703.642.8080
Fax. 703.642.8251
www.urban-llc.com

urban

Planners • Engineers • Landscape Architects • Land Surveyors

COMMONWEALTH OF VIRGINIA
C. RYAN CONNOR
Lic. No. 039631
08/19/2022
PROFESSIONAL ENGINEER

NOTES AND DETAILS

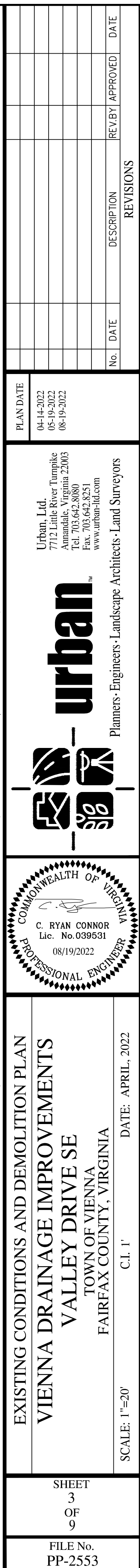
VIENNA DRAINAGE IMPROVEMENTS
VALLEY DRIVE SE
TOWN OF VIENNA
FAIRFAX COUNTY, VIRGINIA

DATE: APRIL, 2022

SCALE: N/A

SHEET
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OF
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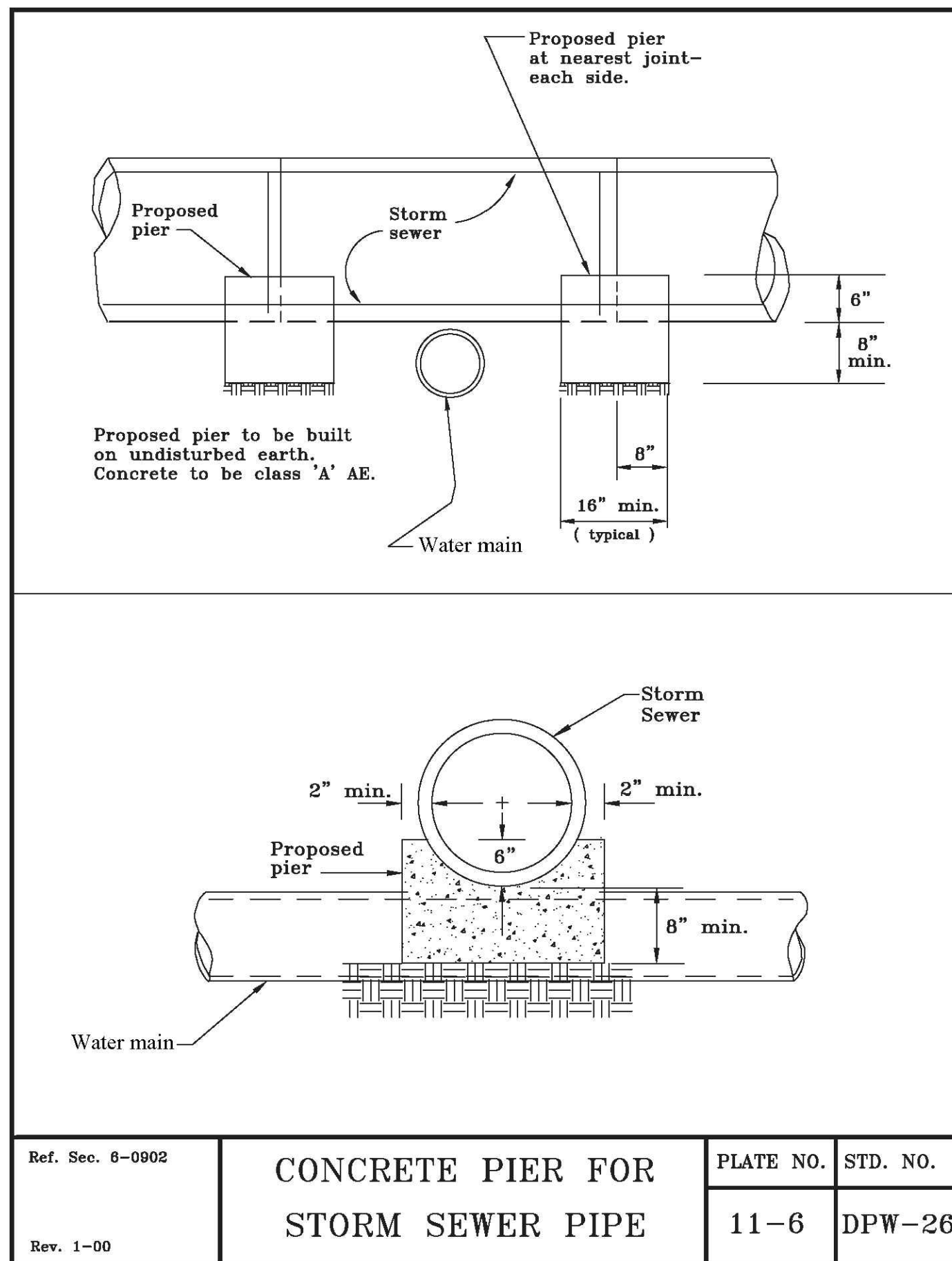
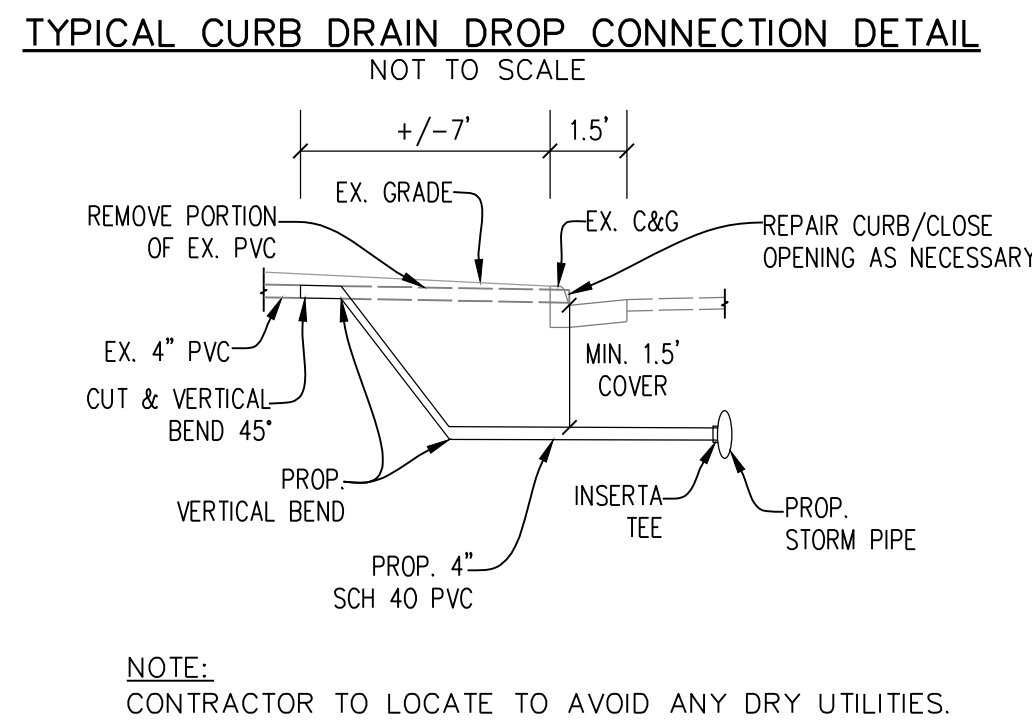
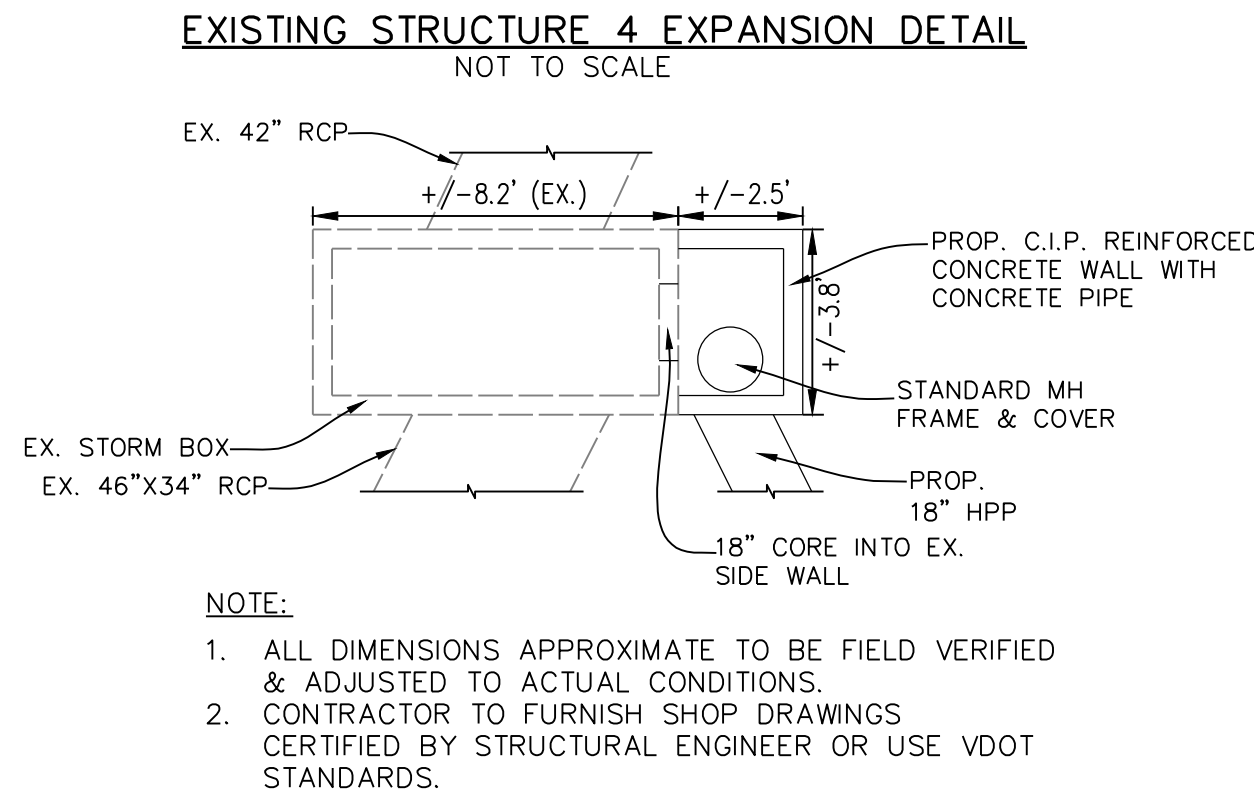
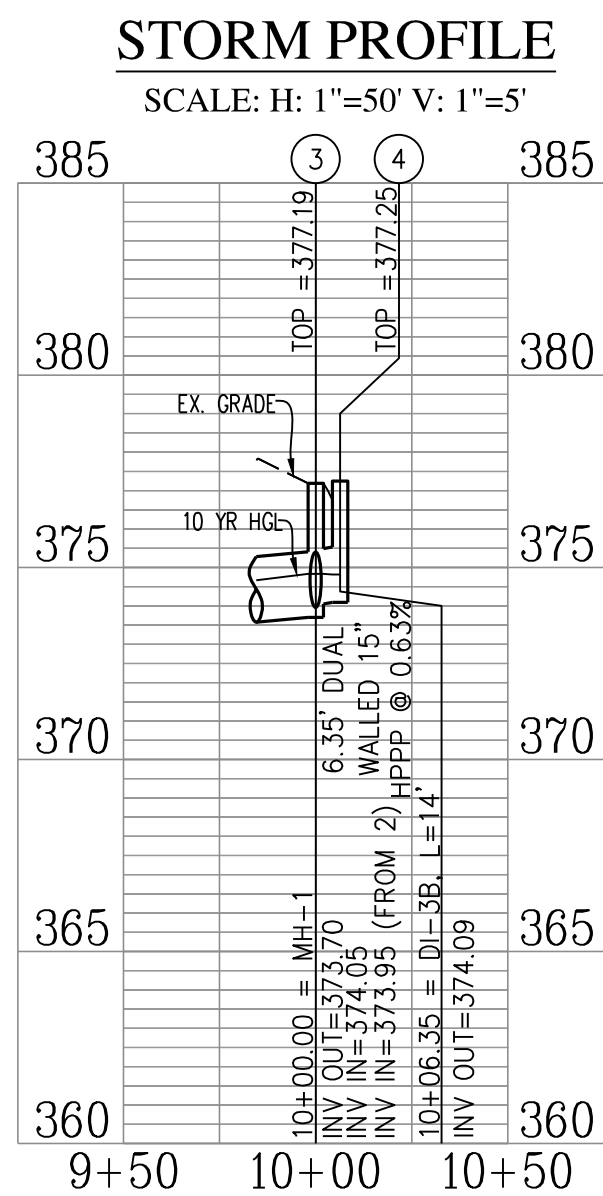
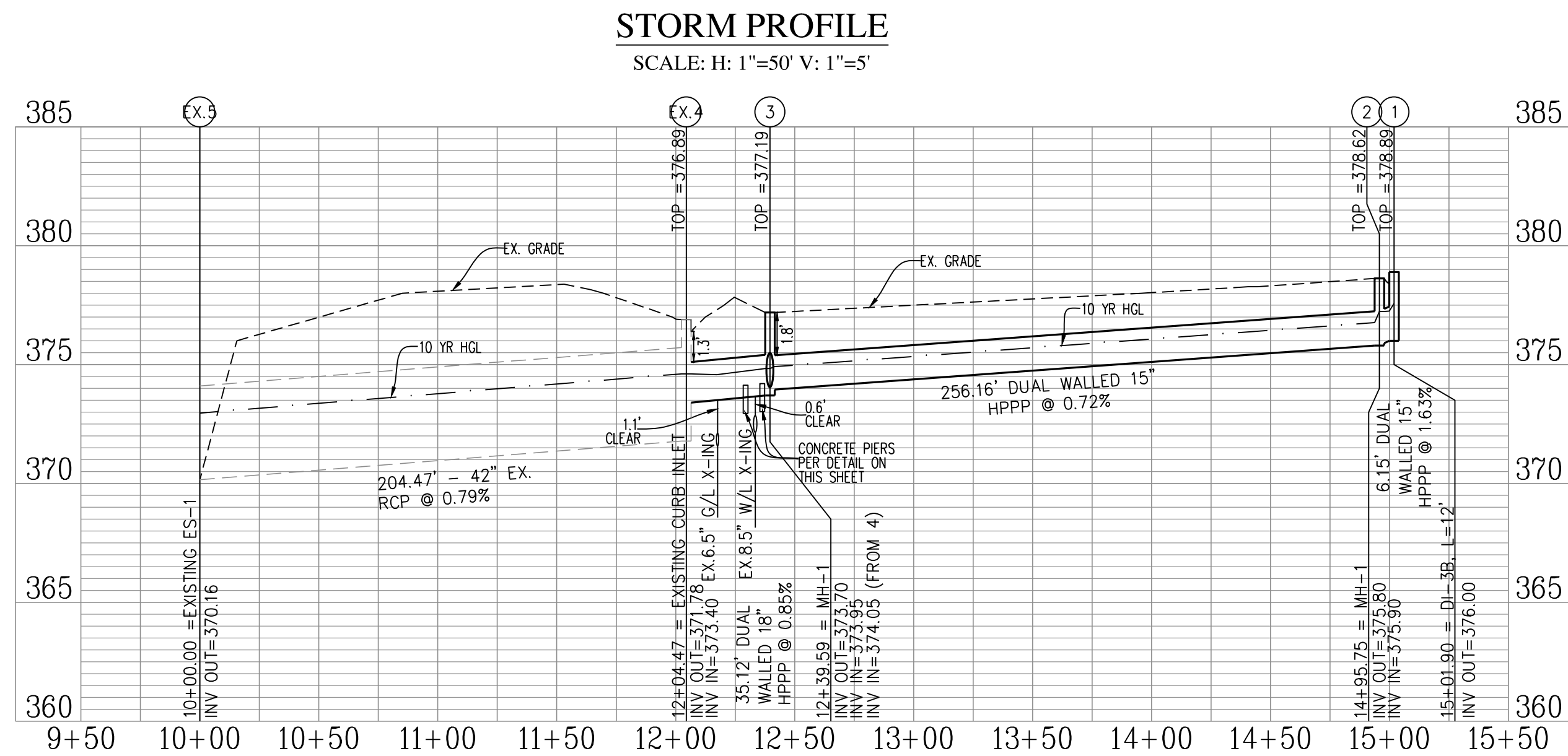
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Inlet ID	Inlet Type	Length	DrainageArea	C	CA	I	Q Incr.	QCarryover	QCaptured	QBypass	GutterSlope	CrossSlope, Sx	T (Grade) Spread	T (Sump) Spread	W	Sw	d	E	h	Grate Area	10yr WSEL
		(ft)	(ac)	(C)		(in/hr)	(cfs)	(cfs)	(cfs)	(cfs)	(ft/ft)	(ft/ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft)	(%)	(in)	(sqft)	
EX.4	Curb	12	1.05	0.63	0.66	5.9	74.3	0	74.3	0	Sag	0.02	150.47	1.5	0.083	3.23	100	5.5
3	MH-1	0	0	0		0	0
2	MH-1	0	0	0		0	0
1	DI-3B	12	2.74	0.36	0.99	5.67	5.59	0	4.56	1.03	0.01	0.02	12.48	1.5	0.083	0.47	82	5.5
4	DI-3B	14	1.37	0.42	0.58	5.67	3.26	1.03	4.12	0.17	0.01	0.02	11.20	1.5	0.083	0.44	96	5.5

LineID	DrainageArea	RunoffCoeff	IncrCxA	TotalCxA	Inlet Time	Tc	Rainfall Intensity	KnownQ	Runoff Q	InvertUp	InvertDn	Length	Slope	Diameter	Capacity	Actual Flow Velocity	Full Flow Vel
	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(%)	(in)	(cfs)	(ft/s)	(ft/s)
EX.4 - EX.5	1.05	0.63	0.66	2.22	8	10	5.43	70.4	82.48	371.78	370.16	204.47	0.79	42	89.55	9.94	9.31
3-EX.4	0	0	0	1.56	0	10	5.46	0	8.53	373.7	373.94	35.12	0.85	18	10.51	5.77	5.95
2-3	0	0	0	0.99	0	9	5.66	0	5.58	375.8	375.95	256.16	0.72	15	5.94	5.51	4.84
1-2	2.74	0.36	0.99	0.99	9	9	5.67	0	5.59	376	375.9	6.15	1.63	15	8.92	4.55	7.27
4-3	1.37	0.42	0.58	0.58	9	9	5.67	0	3.26	374.09	374.05	6.346	0.63	15	5.55	4.23	4.52

InletID	Outlet WSE	Do	Qo	Lo	Sfo	Vo	Qi	Vi	Hi	Angle	MinorLoss	Final H	HGLJunct	Inlet WSE	Rim Elev
	(ft)	(in)	(cfs)	(ft)	(%)	(ft)	(cfs)	(ft/s)	(ft)	(Deg)	(ft)	(ft)	(ft)	(ft)	(ft)
EX 4	372.96	42.00	82.48	204.47	0.00	1.52	74.30	9.89	1.52	108.34	1.83	2.83	374.61	374.61	376.89
3	374.61	18.00	8.53	35.12	0.00	0.55	0.00	5.97	0.55	-49.64	n/a	1.13	374.83	374.83	377.19
2	374.91	15.00	5.58	256.16	0.72	0.47	0.00	5.51	0.47	-61.89	0.47	1.43	377.23	376.76	376.62
1	377.23	15.00	5.59	6.15	0.64	0.32	5.59	4.55	0.32	92.33	0.32	1.57	377.57	377.25	378.89
4	374.83	15.00	3.26	6.35	0.00	0.30	3.26	4.40	0.30	25.76	0.30	0.73	374.82	374.82	377.25






Description	Part No.	Invert Depth	mm	Weight lbs.
2x2 Catch Basin - Polyester polymer concrete	05719	25.63	651	192.0
Grey iron frame & slot grate	05720			243.5

Part I - General	Part II - Product	Part III - Installation
<p>1. Related Work - Work specified in other sections includes but is not limited to:</p> <ul style="list-style-type: none"> Excavation and backfill, cast-in-place concrete, and mechanical equipment. <p>2. System Description - 2 x 2 Catch basin manufactured from polyester polymer concrete, complete with grey iron slotted grate.</p> <p>3. Submittals - Manufacturer will submit, among other, shop drawings showing schematic plan of total drainage system including all parts being provided with exact center line dimensions suitable for installation. Copies of the manufacturer's recommended method of installation shall be submitted for review.</p> <p>4. Project History - Manufacturer shall submit a list of previous projects, if required.</p> <p>5. Warranty - ACO provides a limited product warranty of one year based on installation according to manufacturer's installation instruction data.</p>	<p>1. Products - Manufacturer shall be ACO Polymer Products, Inc.</p> <p>2. Physical & Mechanical Characteristics</p> <ul style="list-style-type: none"> Overall width - 27.83 inches (708mm) Overall length - 27.87 inches (708mm) Overall depth - 26.77 inches (680mm) Invert depth - 25.63 inches (651mm) Compressive strength - 14,000 psi Tensile strength - 4,000 psi Water absorption rate - <0.1% by weight <p>3. Duct Profile - Pre-cast units shall be manufactured with drilled/slot for channel and pipe connections and have a wall thickness of at least 0.75" (19mm).</p> <p>4. Grades - Grades are slootted grey iron. After removal of grades there shall be uninterrupted access to the catch basin to aid maintenance.</p>	<p>1. Excavation - Identify area for install. Full structural identification is required, excavate area large enough to fit the catch basin plus a minimum of 6" of concrete on all four sides and base. Engineering advice should be sought as ground conditions may require additional concrete support.</p> <p>2. Outlet Connections - Each box has several drill-holes, which when removed, allow pipe to be connected to catch basin. Drill-holes are guided & openings that can be positioned where required.</p> <p>3. Connection of channels: Catch basin can be used within a channel run. Remove side-sill to suit channel profile.</p> <p>4. Back Fill - Haunch around catch basin & backfill with concrete of 4,000 psi minimum strength. Finish concrete to 1/8" above required grade level.</p> <p>5. Install in strict accordance with manufacturer's recommendations & drawings. Details available at www.ACOAcrux.com.</p>

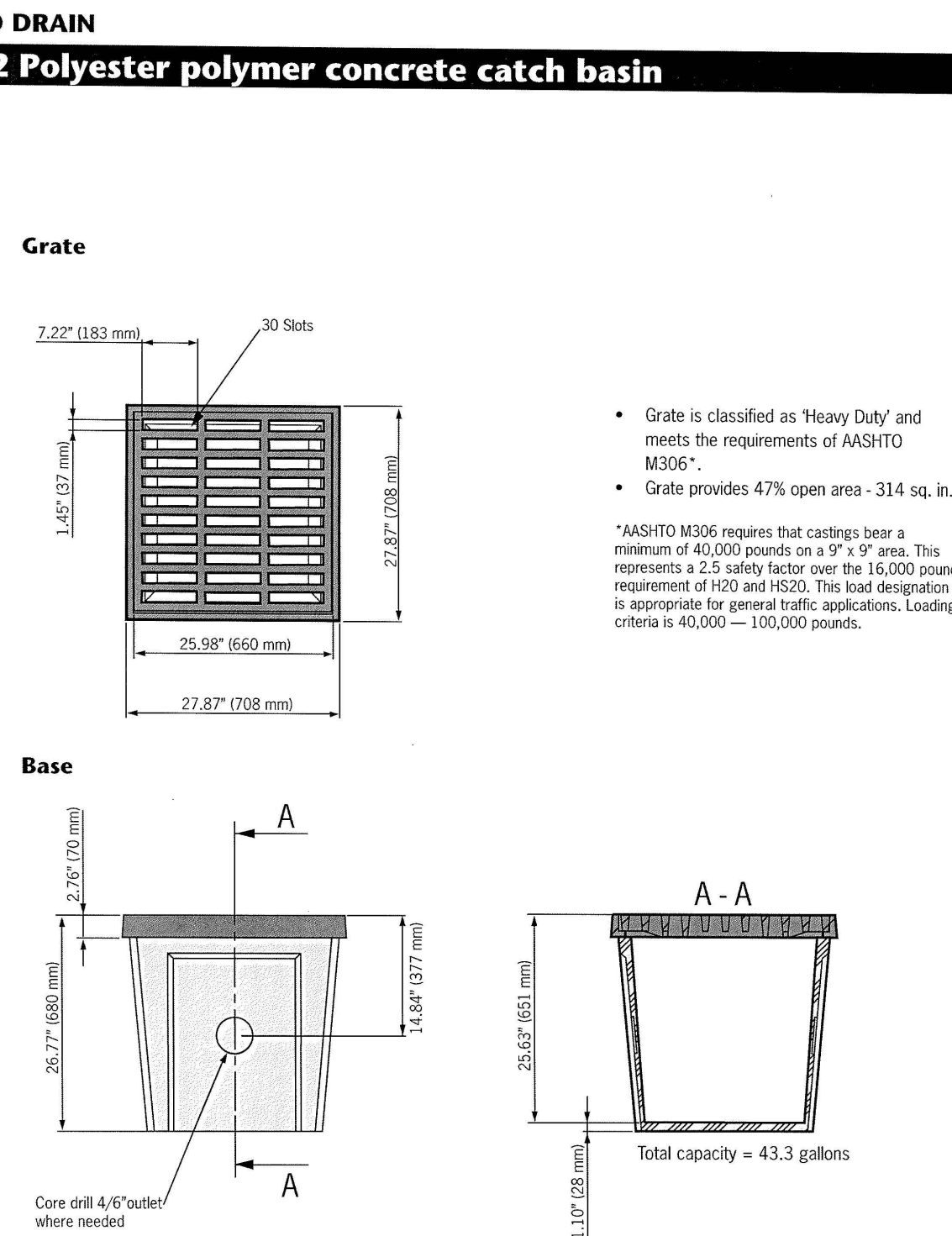
ACO Polymer Products, Inc.
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Southeast Sales Office
 421 Fleet Road
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 Toll free: (888) 543-6154
 Fax: (888) 802-1063

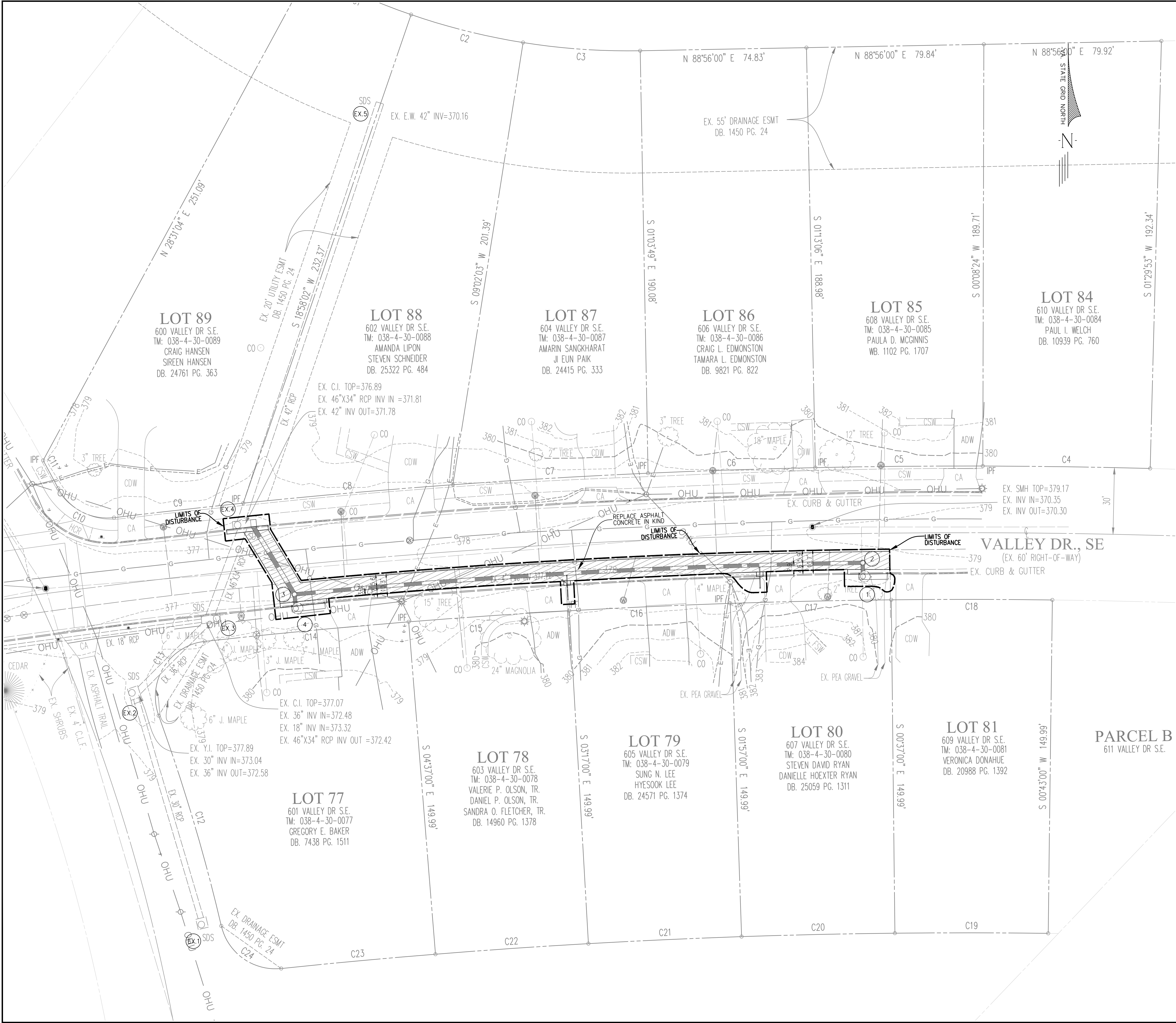
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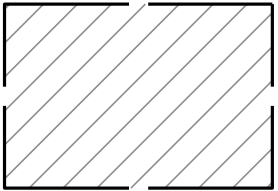


ACO Specification Information

FILE No. PP-2553	SHEET 6 OF 9	STORM PROFILES & COMPUTATIONS	VIENNA DRAINAGE IMPROVEMENTS V VALLEY DRIVE SE TOWN OF VIENNA FAIRFAX COUNTY, VIRGINIA	SCALE: AS SHOWN	C.I. N/A	DATE: APRIL, 2022		 urban sm Planners · Engineers · Landscape Architects · Land Surveyors Urban, Ltd. 7712 Little River Turnpike Amandale, Virginia 22003 Tel. 703.642.8080 Fax. 703.642.8081 www.urban-ltd.com	PLAN DATE									
									04-14-2022									
									05-19-2022									
									08-19-2022									
										No.	DATE	DESCRIPTION	REV BY	APPROVED	DATE			
										REVISIONS								



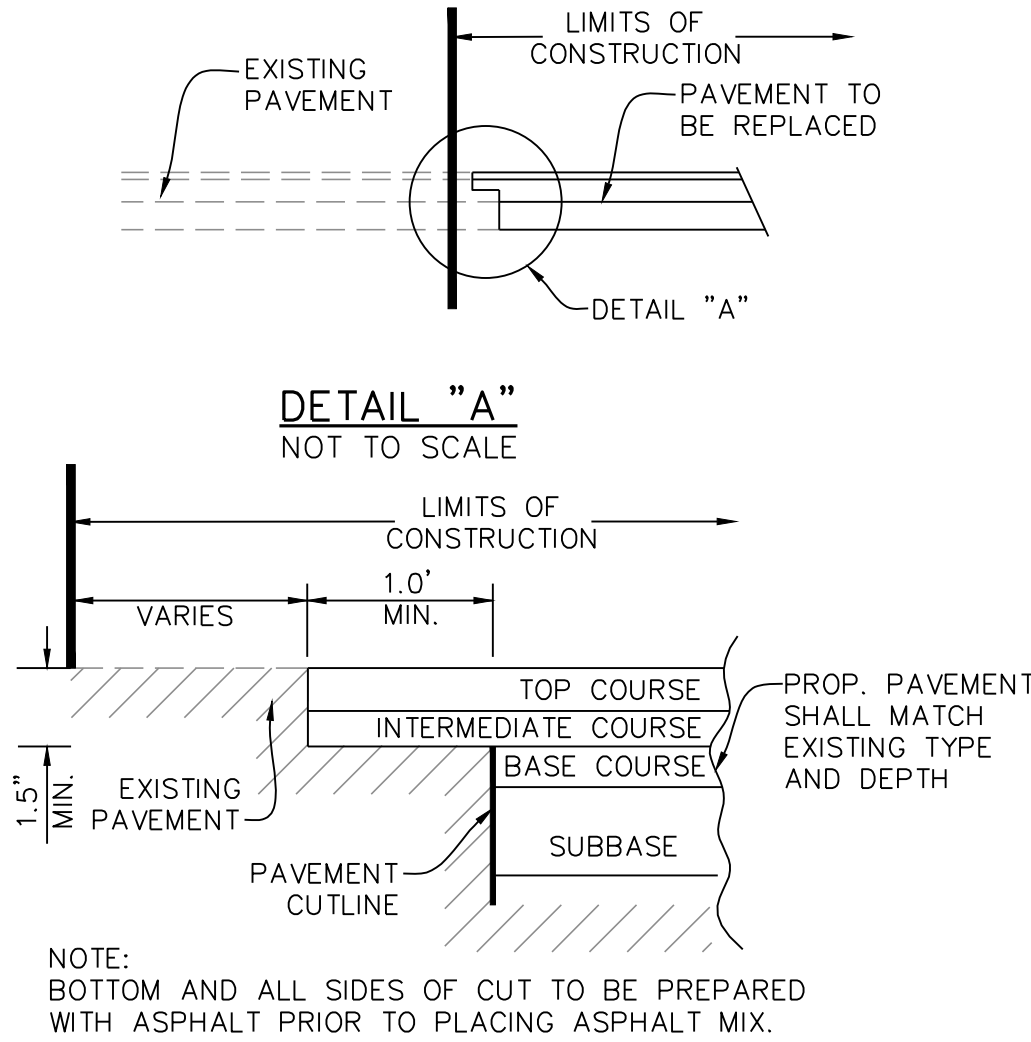
PAVEMENT LEGEND



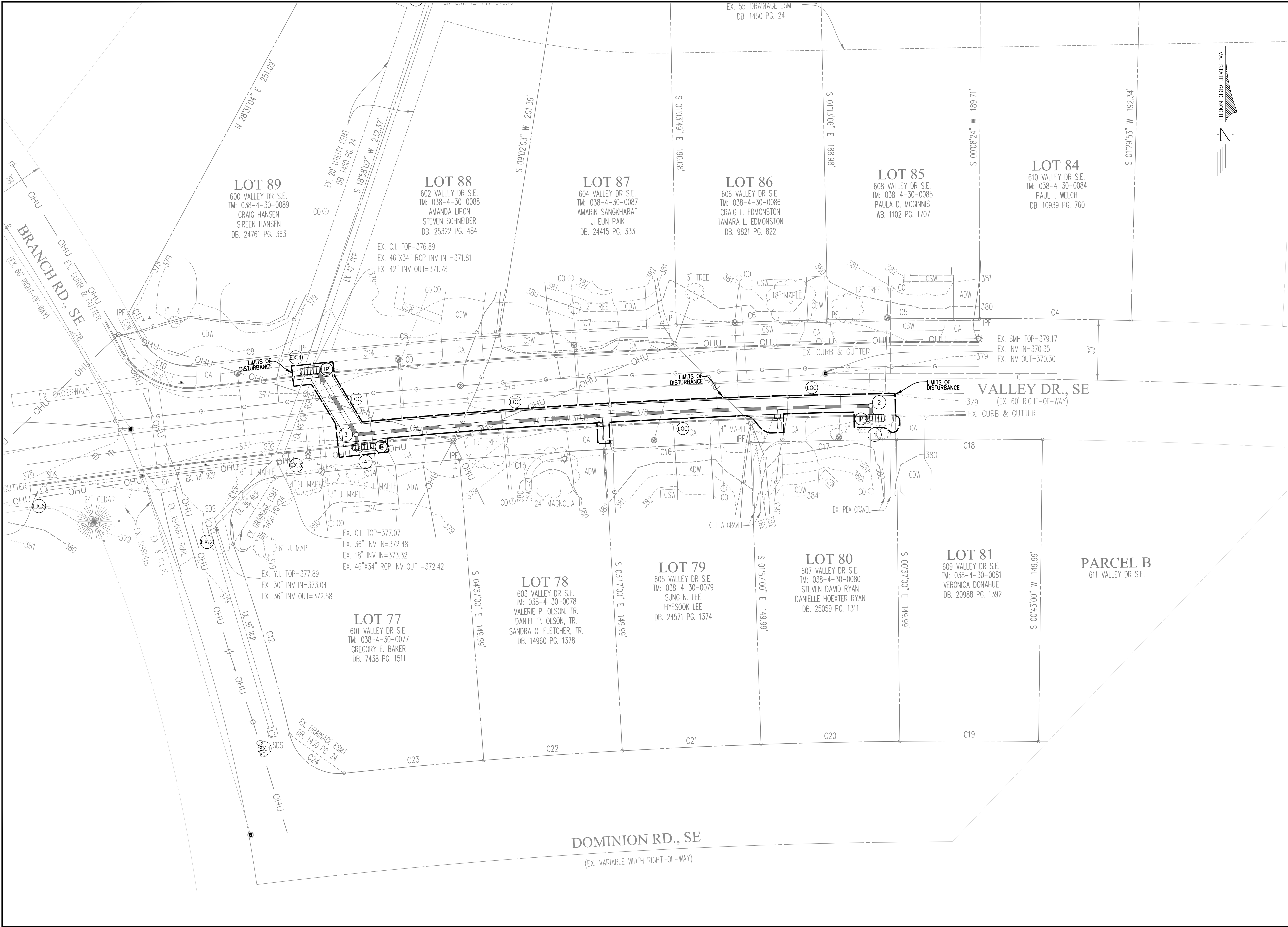
ASPHALT REPAIR AT
EXISTING ELEVATION.

TYPICAL PAVEMENT WEDGING DETAIL

TO BE USED FOR PAVEMENT REPLACEMENT. N.T.S.



PLAN DATE 04-14-2022 05-19-2022 08-19-2022		REVISIONS	
No.		DATE	
DESCRIPTION		REV. BY / APPROVED	
Urban Ltd 7712 Valley Drive Arlington, Virginia 22203 Tel. 703.642.8080 Fax. 703.642.8251 www.urban-ld.com		Planners - Engineers - Landscape Architects - Land Surveyors	
PAVEMENT IMPROVEMENT PLAN VIENNA DRAINAGE IMPROVEMENTS VALLEY DRIVE SE TOWN OF VIENNA FAIRFAX COUNTY, VIRGINIA		DATE: APRIL, 2022 C.I. = 1' = 20'	
SHEET 7 OF 9		FILE No. PP-2553	



PLAN DATE		04-14-2022	
		05-19-2022	
		08-19-2022	
Urban Ltd		7712 Valley View Turnpike	
Amanda, Virginia 23003		Tel. 703.642.8080	
Fax. 703.642.8251		www.urban-ld.com	
urban		Planners-Engineers-Landscape Architects-Land Surveyors	
COMMONWEALTH OF VIRGINIA		C. RYAN CONNOR	
Lic. No. 039531		08/19/2022	
PROFESSIONAL ENGINEER			
EROSION AND SEDIMENT CONTROL PH I & PH II		DATE: APRIL, 2022	
VIENNA DRAINAGE IMPROVEMENTS		C.I. 1"	
VALLEY DRIVE SE		SCALE: 1"=20'	
TOWN OF VIENNA			
FAIRFAX COUNTY, VIRGINIA			
SHEET		8	
OF		9	
FILE No.		PP-2553	

