STANDARD RESPONSIBILITY NOTES:

- CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE
- IF APPLICABLE, THE APPROPRIATE ENCLOSURE WILL BE CONSTRUCTED AND MAINTAINED ON SEDIMENT
- BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE
- FOR INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT AND/OR TEMPORARY STABILIZATION PER THE AASCD VEGETATIVE ESTABLISHMENT SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALI CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- THE GRADING AND SEDIMENT CONTROL APPROVAL ON THIS PLAN EXTENDS ONLY TO THOSE AREAS WITHIN THE LIMITS
- THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT
- THE DEVELOPER MUST REQUEST THAT THE SEDIMENT AND EROSION CONTROL INSPECTOR APPROVE WORK COMPLETED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, THE GRADING OR BUILDING PERMIT.
- AND PERMITS MAY ALSO REQUIRE THAT AN INSPECTION AND CERTIFICATION OF THE INSTALLATION OF SEDIMENT ONTROL ALSO BE PERFORMED BY A DESIGN PROFESSIONAL PRIOR TO CONSTRUCTION COMMENCING
- EXISTING TOPOGRAPHY MUST BE FIELD VERIFIED BY RESPONSIBLE PERSONNEL TO THE SATISFACTION OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO COMMENCING WORK.

SIGNATURE	OF DEVELOPER/OWNER	DATE
PRINT NAME:		
TITLE:		
ADDRESS:	ANNE ARUNDEL COUNTY DEPARTMEN	T OF PUBLIC WORKS
	2662 RIVA ROAD	
	ANNAPOLIS, MARYLAND 21401	

TELEPHONE NUMBER: EMAIL ADDRESS:

CONSULTANT'S CERTIFICATION

SEDIMENT CONTROL, I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

MD P.E. LICEN	ISE #
MD LAND SUR	VEYOR LICENSE #
MD LANDSCAF	PE ARCHITECT#
NAME	JESSE M. LINDSAY , P.E.
FIRM NAME	WHITNEY BAILEY COX & MAGNANI, LLC
ADDRESS	300 E. JOPPA ROAD, SUITE 200
CITY TOWS	ON STATE MD ZIP CODE 21286

NOTE: THE CONSULTANT'S CERTIFICATION MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER IF THE SITE LIES WITHIN THE SEVERN RIVER WATERSHED.

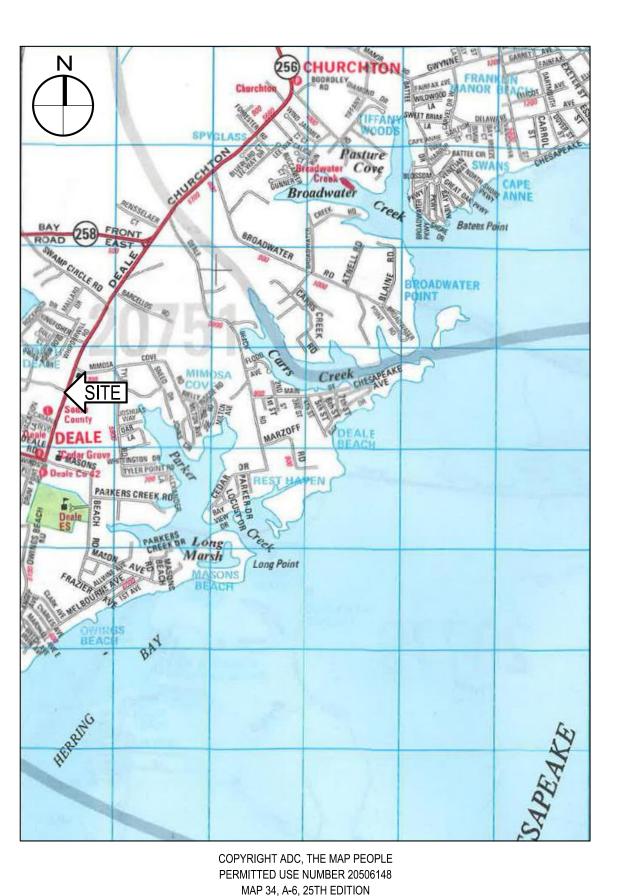
GENERAL CONSTRUCTION NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ANNE ARUNDEL COUNTY STANDARD SPECIFICATIONS AND/OR DETAILS FOR CONSTRUCTION AND THE STATE HIGHWAY ADMINISTRATION'S HIGHWAY DRAINAGE MANUAL STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION UNLESS OTHERWISE NOTED.
- THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS SATISFACTION PRIOR TO CONSTRUCTION, NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS AND ANY DAMAGE TO THEM SHALL BE REPAIRED IMMEDIATELY AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 1-800-257-7777 A MINIMUM OF 96 HOURS IN ADVANCE OF ANY EXCAVATION, BORING. PILE DRIVING AND/OR DIGGING FOR THE LOCATION OF GAS, ELECTRIC, TELEPHONE, WATER AND SEWER LINES.
- MECHANICAL EXCAVATION SHALL NOT BE CONDUCTED WITHIN 3 FEET HORIZONTALLY OR WITHIN 2 FEET VERTICALLY OF KNOWN UTILITY LOCATIONS. HAND OR SOFT DIGGING SHALL BE DONE WITHIN THESE LIMITS. UNDERGROUND UTILITIES, ONCE UNCOVERED, SHALL BE PROTECTED FROM BEING STRUCK BY EQUIPMENT.
- IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NATURALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO COMPLETE SUCH
- ALL EXCESS SOIL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION.
- DISTURBANCES THAT DO NOT DRAIN TO A SEDIMENT CONTROL DEVICE SHALL BE STABILIZED BY THE END OF THE WORKDAY. NO MORE AREA SHALL BE DISTURBED THAN CAN BE STABILIZED BY THE END OF THE WORKDAY. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS THE RUNOFF IS DIRECTED TO AN APPROVED SEDIMENT CONTROL DEVICE. SLOPES SHALL BE STABILIZED IMMEDIATELY WITH TOPSOIL, SEED AND EROSION CONTROL MATTING (IF REQUIRED). SEE NOTE #16.
- ALL FILL AREAS SHALL BE CLEANED OF ALL VEGETATION AND DEBRIS PRIOR TO THE PLACEMENT OF FILL. FILL MATERIAL SHALL BE PLACED IN CONTROLLED LIFTS WITH A MAXIMUM THICKNESS OF 8" PRIOR TO COMPACTION THAT IS CONTINUOUS OVER THE ENTIRE AREA OF FILL EACH LAYER OF FILL SHALL BE COMPACTED WITH THE MINIMUM NUMBER OF PASSES NECESSARY TO PRODUCE A FULL
- ALL STONE USED FOR THE PROTECTIONS WORK SHALL BE DURABLE QUARRIED STONE. THE STONE SHALL BE HARD AND ANGULAR, FREE FROM EITHER LAMINATIONS, WEAK CLEAVAGES, OR UNDESIRABLE WEATHERING, AND OF SUCH CHARACTER THAT IT WILL NOT DISINTEGRATE FROM THE ACTION OF AIR, SALT, WATER, OR HANDLING. SEDIMENTARY STONE WILL GENERALLY BE UNACCEPTABLE. INDIVIDUAL STONES WILL BE FREE FROM THIN, SLABBY PIECES HAVING A MAXIMUM DIMENSION OF MORE THAN THREE AND ONE-HALF TIMES THE LEAST DIMENSION.
- ANY EXCAVATION THAT MEETS SAND FILL REQUIREMENTS MAY BE REUSED. OTHERWISE, UNSUITABLE MATERIAL IS TO BE DISPOSED
- THE WORK INSTALLED AS A PART OF THE PROJECT WILL CONTAIN NO FAULTY MATERIALS, OR ANY CARELESS, OR UNSKILLED
- THE CONTRACTOR SHALL CORRECT, REPAIR, OR REMOVE AND REPLACE WITH PROPER WORK AT NO COST TO THE COUNTY, OR ANY WORK FOUND NOT TO BE AS PER THE GUARANTEE. THE CONTRACTOR SHALL ALSO MAKE GOOD ALL DAMAGES CAUSED TO OTHER WORK OR MATERIALS IN THE PROCESS OF FULFILLING THE GUARANTEE.
- 13. CONTRACTOR MAY UTILIZE STOCKPILE AREAS AS DELINEATED ON PLANS.

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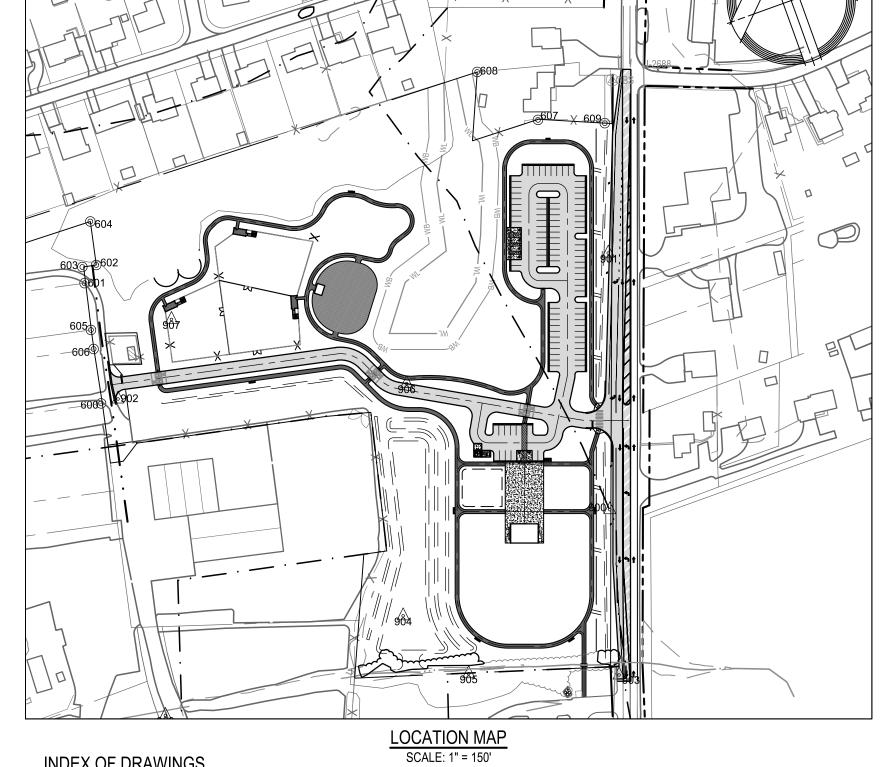
ANNE ARUNDEL COUNTY MARYLAND DEPARTMENT OF PUBLIC WORKS DEALE COMMUNITY PARK

BID SET SUBMISSION - NOVEMBER 7, 2023 DEALE CHURCHTON ROAD, DEALE, MARYLAND 20751 PROJECT NO. P582000, CONTRACT NO. P582001



- ALL DISTURBED AREAS SHALL HAVE PERMANENT OR TEMPORARY STABILIZATION COMPLETED WITHIN: THREE CALENDAR DAYS ON SLOPES GREATER THAN 3:1 AND TO THE SURFACE OF ALL PERIMETER SEDIMENT CONTROLS. SEVEN CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS.
- ALL TREES WITH A DIAMETER GREATER THAN 12 INCHES WITHIN THE LIMIT OF DISTURBANCE SHALL NOT BE REMOVED UNLESS PRIOR APPROVAL IS OBTAINED OR EXPLICITLY SHOWN ON THE PLANS TO BE REMOVED. ALL TREES WITHIN THE LIMIT OF DISTURBANCE, THAT ARE NOT TO BE REMOVED SHALL BE PROTECTED WITH TREE PROTECTION FENCING OR TREE REINFORCED PLANKING.
- 16. ALL DISTURBED AREAS WITH SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH TEMPORARY SOIL STABILIZATION MATING THAT HAS A SUFFICIENT DESIGN SHEAR STRESS FOR THE APPLICATION OR AS SHOWN ON THE APPROVED SEDIMENT AND EROSION
- ALL ROADS SHALL BE CLEANED AND CLEARED BY THE END OF EACH WORK DAY. ANY MUD OR ROCKS TRACKED ON THE ROADWAYS SHALL BE SWEPT BEFORE THE END OF EACH WORK DAY.
- 18. ALL STAKING, RE-STAKING, AND CUT SHEETS SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR OR PROFESSIONAL ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL CONSTRUCTION TO BE PERFORMED IN ACCORDANCE WITH STATE OF MARYLAND OCCUPATIONAL SAFETY LAWS.
- 21. CONTRACTOR SHALL RESTORE ALL AREAS IMPACTED BY CONSTRUCTION ACTIVITY. THIS SHALL INCLUDE BUT NOT LIMITED TO GRASS

CONTRACTOR MUST ENSURE THAT COPIES OF FEDERAL, STATE, AND COUNTY PERMITS ARE POSTED ON SITE PRIOR TO THE START



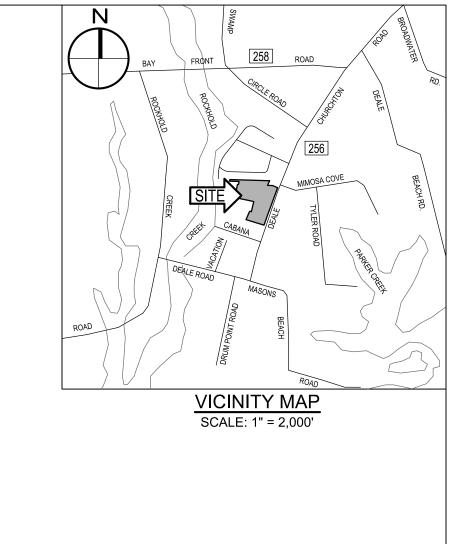
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<u>CIVIL</u>			
SHEET NO.	SHEET TITLE		
1.	COVER SHEET	29.	EROSION AND SEDIMENT CONTROL-PHASE #1
2.	OVERALL EXISTING CONDITIONS PLAN	30.	EROSION AND SEDIMENT CONTROL-PHASE #2
3.	DEMOLITIONS PLAN	31.	EROSION AND SEDIMENT CONTROL NOTES
4.	DEMOLITIONS PLAN	32.	EROSION AND SEDIMENT CONTROL DETAILS
5.	OVERALL SITE LAYOUT PLAN	33.	EROSION AND SEDIMENT CONTROL DETAILS
6.	SITE LAYOUT PLAN	34.	FOREST STAND DELINEATION
7.	SITE LAYOUT PLAN	35.	FOREST CONSERVATION PLAN
8.	SITE DETAILS	36.	FOREST CONSERVATION PLAN NOTES AND DETAILS
9.	SITE DETAILS	ROADWAY IMPI	ROVEMENTS
10.	SITE DETAILS	SHEET NO.	SHEET TITLE
11.	SITE DETAILS		
12.	SITE DETAILS	37.	ROADWAY IMPROVEMENTS PLAN AND DETAILS
13.	OVERALL GRADING PLAN	38.	SIGNING AND PAVEMENT MARKING PLAN
14.	GRADING PLAN	39.	MAINTENANCE OF TRAFFIC PLAN
15.	GRADING PLAN	40.	LANDSCAPE PLAN
16.	PROFILES	41.	ROADWAY SECTIONS
17.	STORMWATER MANAGEMENT OVERALL PLAN	42.	ROADWAY SECTIONS
18.	STORMWATER MANAGEMENT PART PLAN	STRUCTURAL	
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21.	STORMWATER MANAGEMENT NOTES	43.	GENERAL NOTES
22.	CRITICAL AREA PLAN	44.	PAVILION FOUNDATION PLAN
23.	EXISTING DRAINAGE AREA MAP	ELECTRICAL	
24.	PROPOSED DRAINAGE AREA MAP	SHEET NO.	SHEET TITLE
25.	WATER QUALITY MAP	SHEET NO.	SHEET HILE
26.	LANDSCAPE PLAN	45.	ELECTRICAL LEGEND
07			

OVERALL SITE PLAN ELECTRICAL

DETAILS & RISER DIAGRAMS

LANDSCAPE PLAN

LANDSCAPE NOTES AND DETAILS



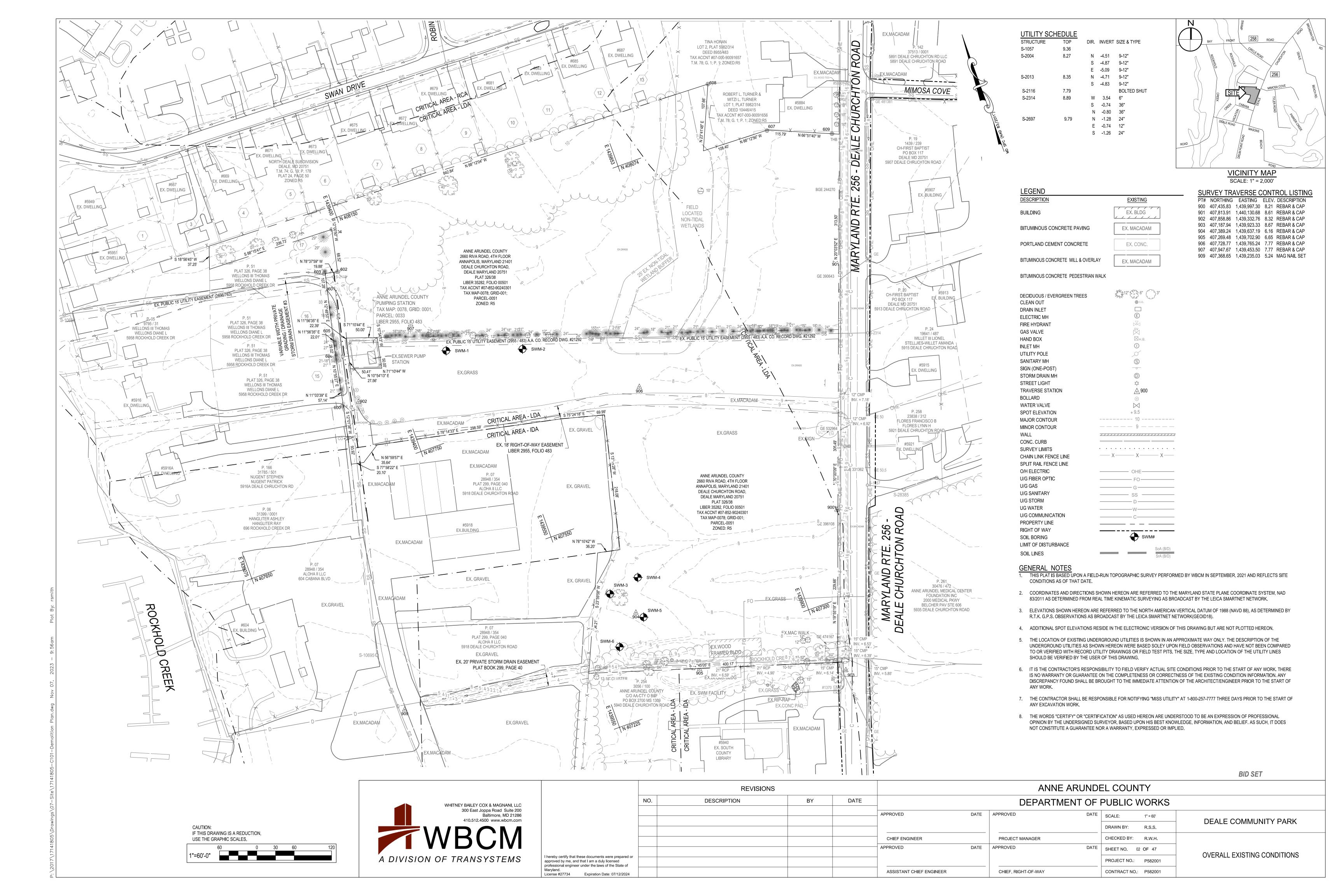
LEGEND **DESCRIPTION DEMOLISH / REMOVE** BUILDING EX. BLDG BITUMINOUS CONCRETE PAVING EX. MACADAM PORTLAND CEMENT CONCRETE EX. CONC. BITUMINOUS CONCRETE MILL & OVERLAY EX. MACADAM BITUMINOUS CONCRETE PEDESTRIAN WALK ****** 12"***** 6" **(X) CLEAN OUT** DRAIN INLET ELECTRIC MH FIRE HYDRAN **GAS VALVE** HAND BOX INLET MH UTILITY POLE STORM DRAIN MH STREET LIGHT TRAVERSE STATION BOLLARD WATER VALVE SPOT ELEVATION MAJOR CONTOUR MINOR CONTOUR _____ CONC. CURB SURVEY LIMITS — X—— X—— X— — X—— X—— X— CHAIN LINK FENCE LINE SPLIT RAIL FENCE LINE O/H ELECTRIC ----- OHE-----U/G FIBER OPTIC U/G GAS U/G SANITARY U/G STORM UG WATER U/G COMMUNICATION PROPERTY LINE RIGHT OF WAY SOIL BORING LIMIT OF DISTURBANCE SOIL LINES

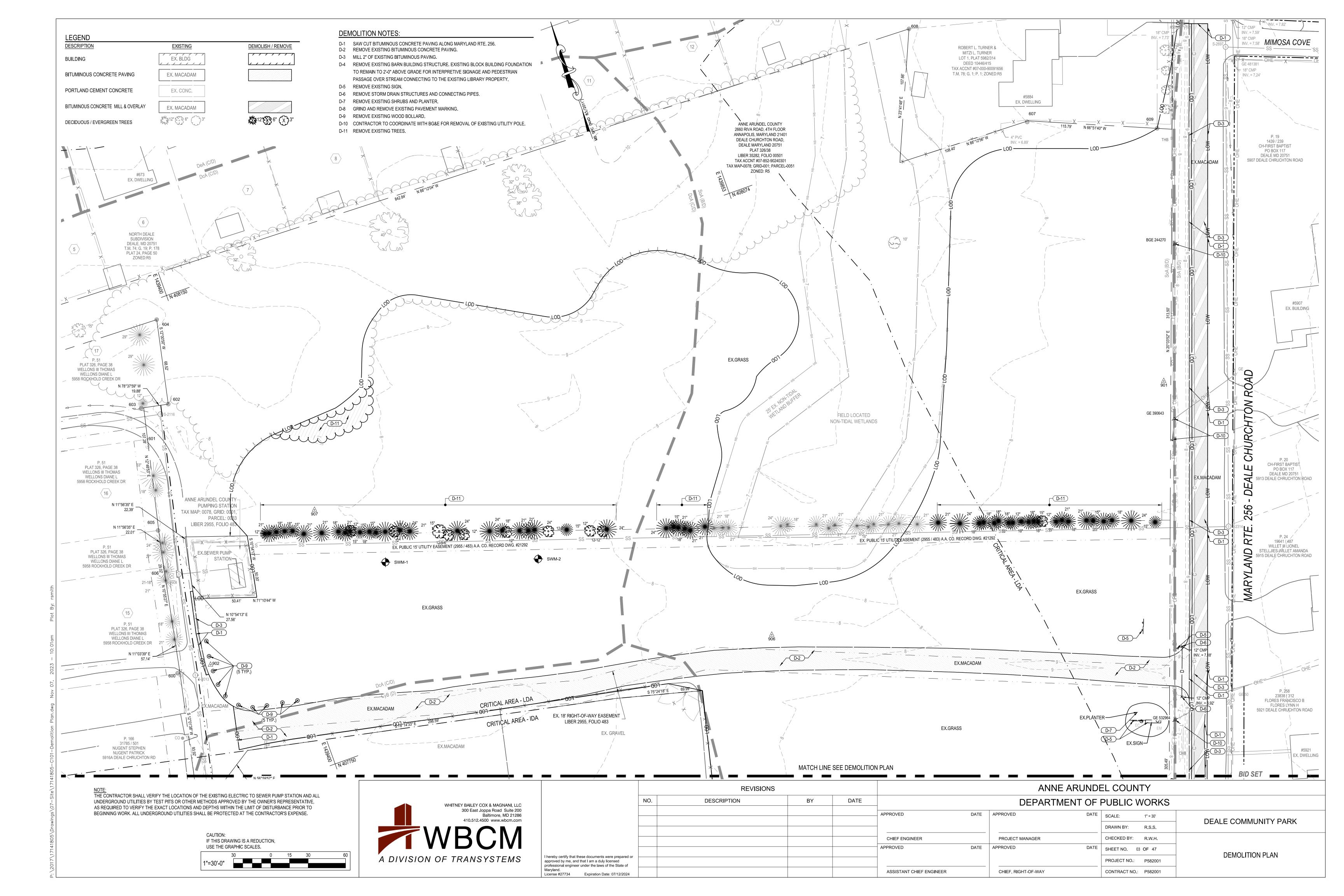


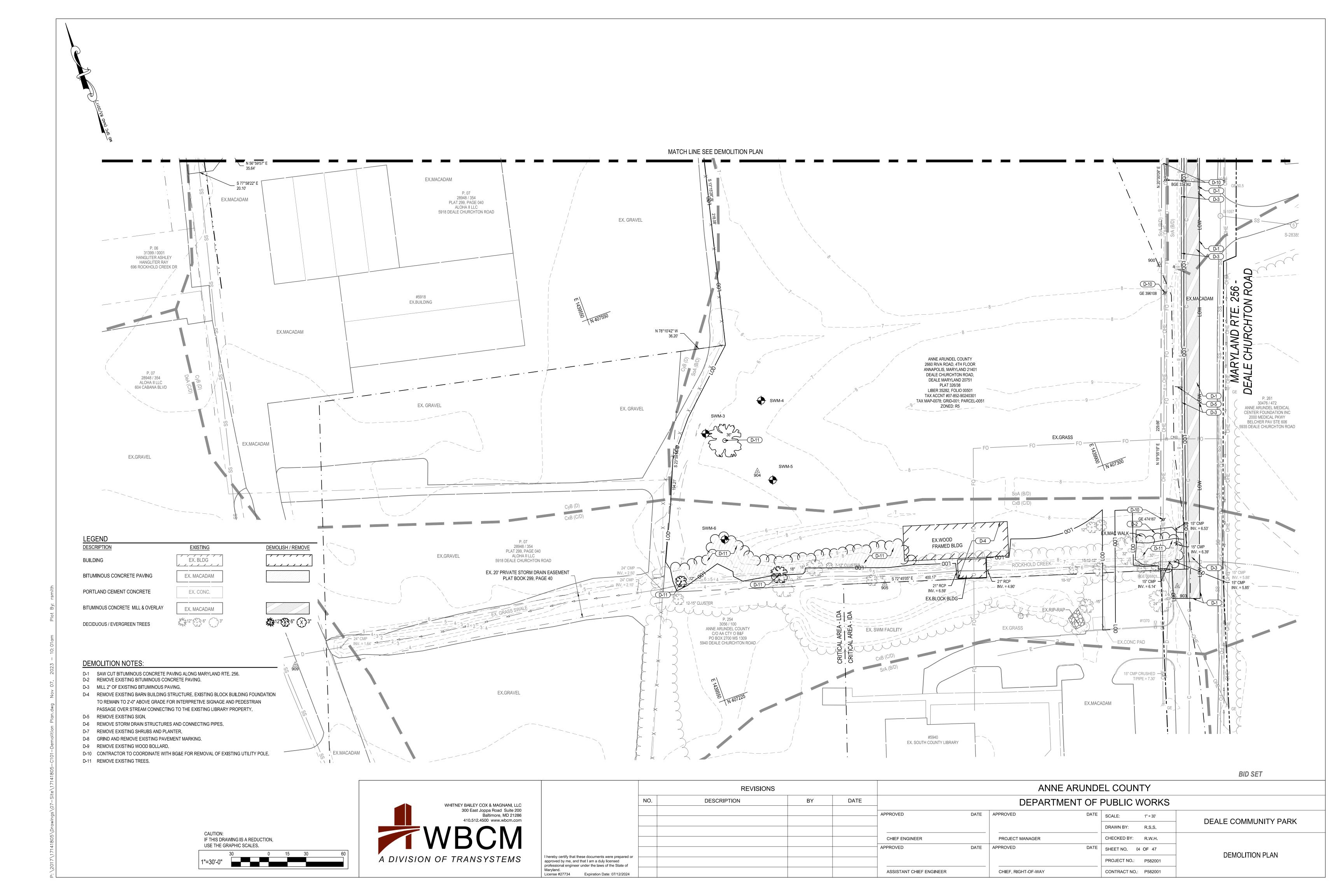
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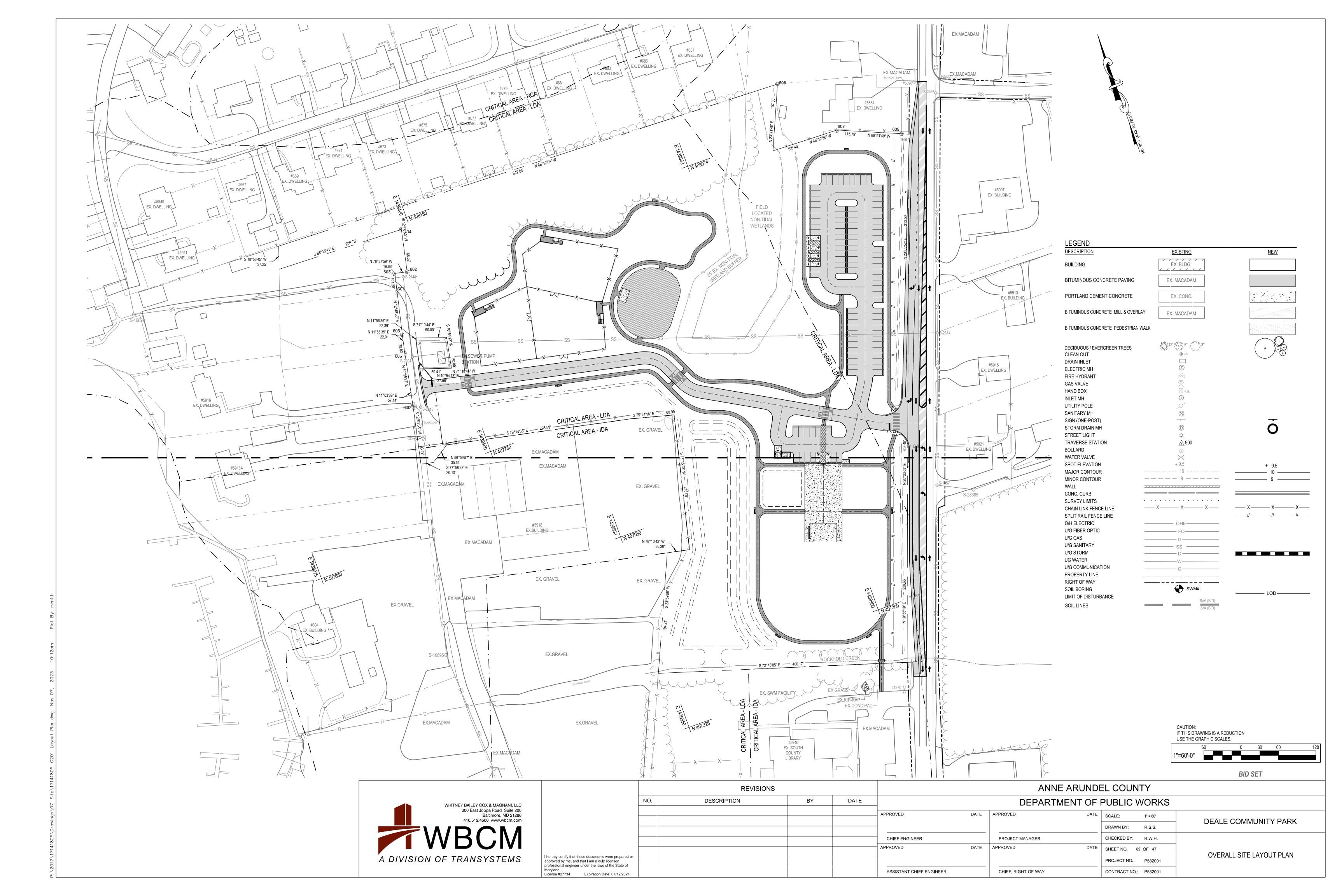
WHITNEY BAILEY COX & MAGNANI, LLC Baltimore, MD 21286 A DIVISION OF TRANSYSTEMS

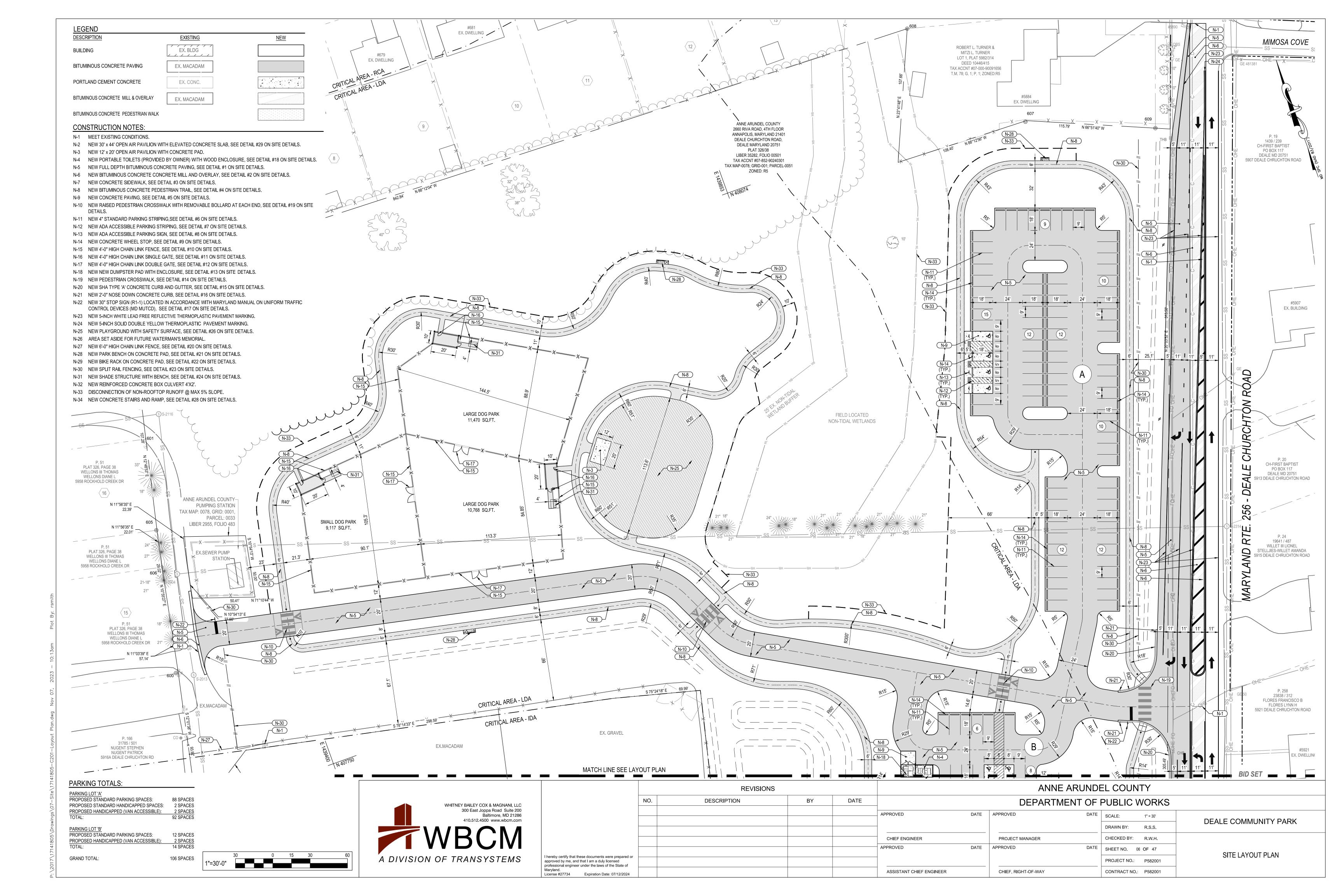
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									DRAWN BY:	R.S.S.	DEALE COMMUNITY PARK
					CHIEF ENGINEER		PROJECT MANAGER		CHECKED BY:	R.W.H.	
					APPROVED	DATE	APPROVED	DATE	SHEET NO. 0	1 OF 47	COVED CHEET
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of					_				PROJECT NO.:	P582001	COVER SHEET
Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY		CONTRACT NO.:	P582001	

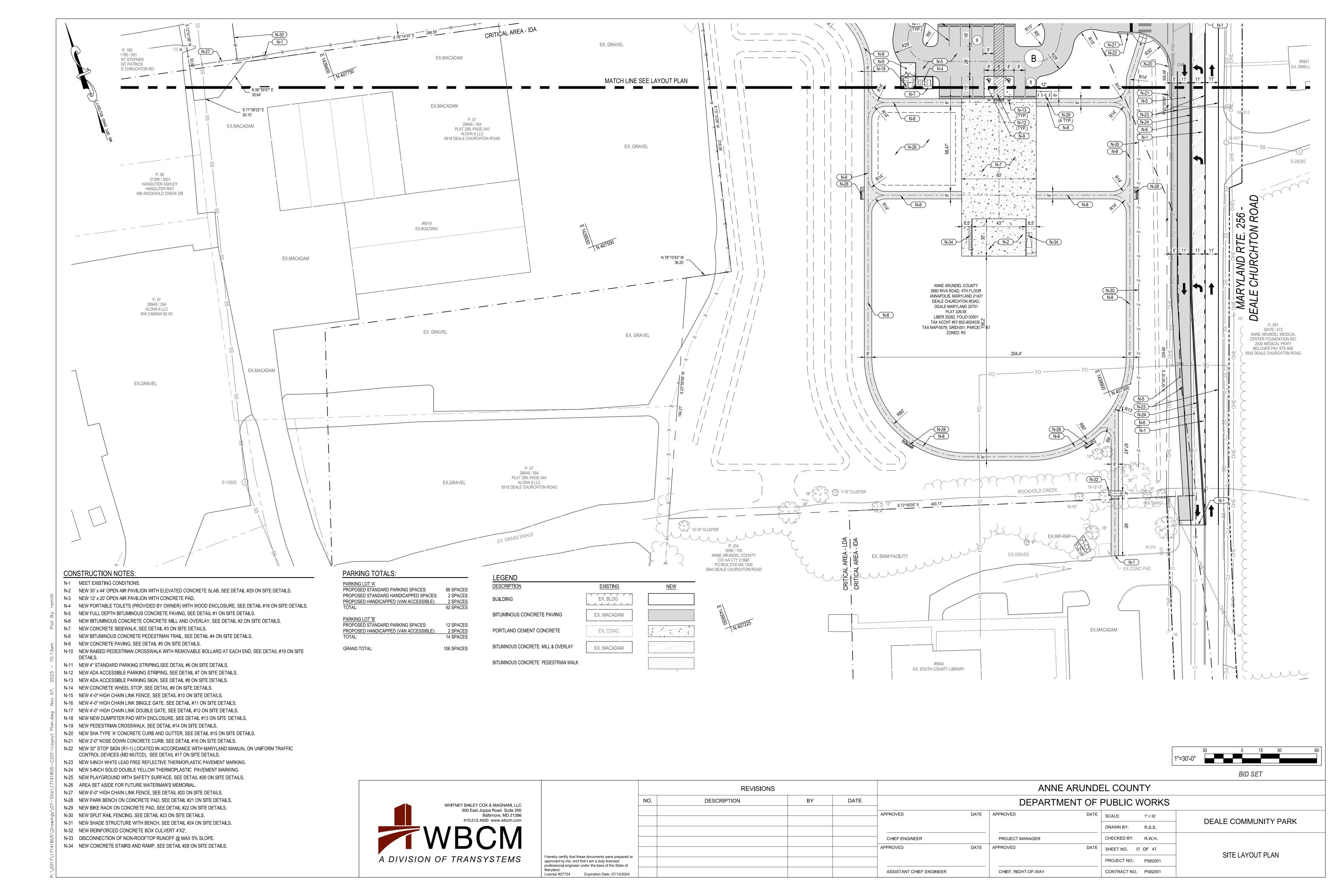


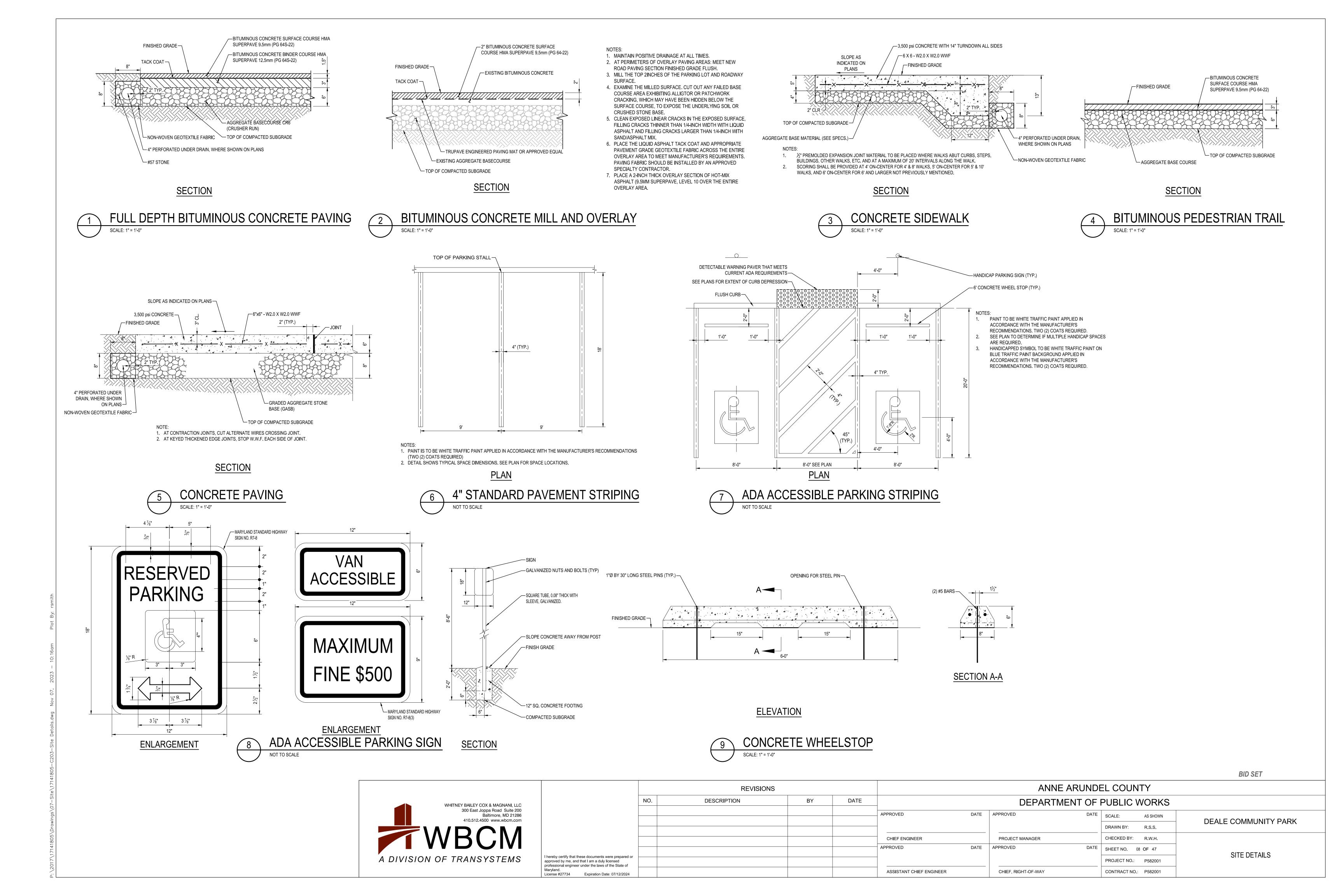


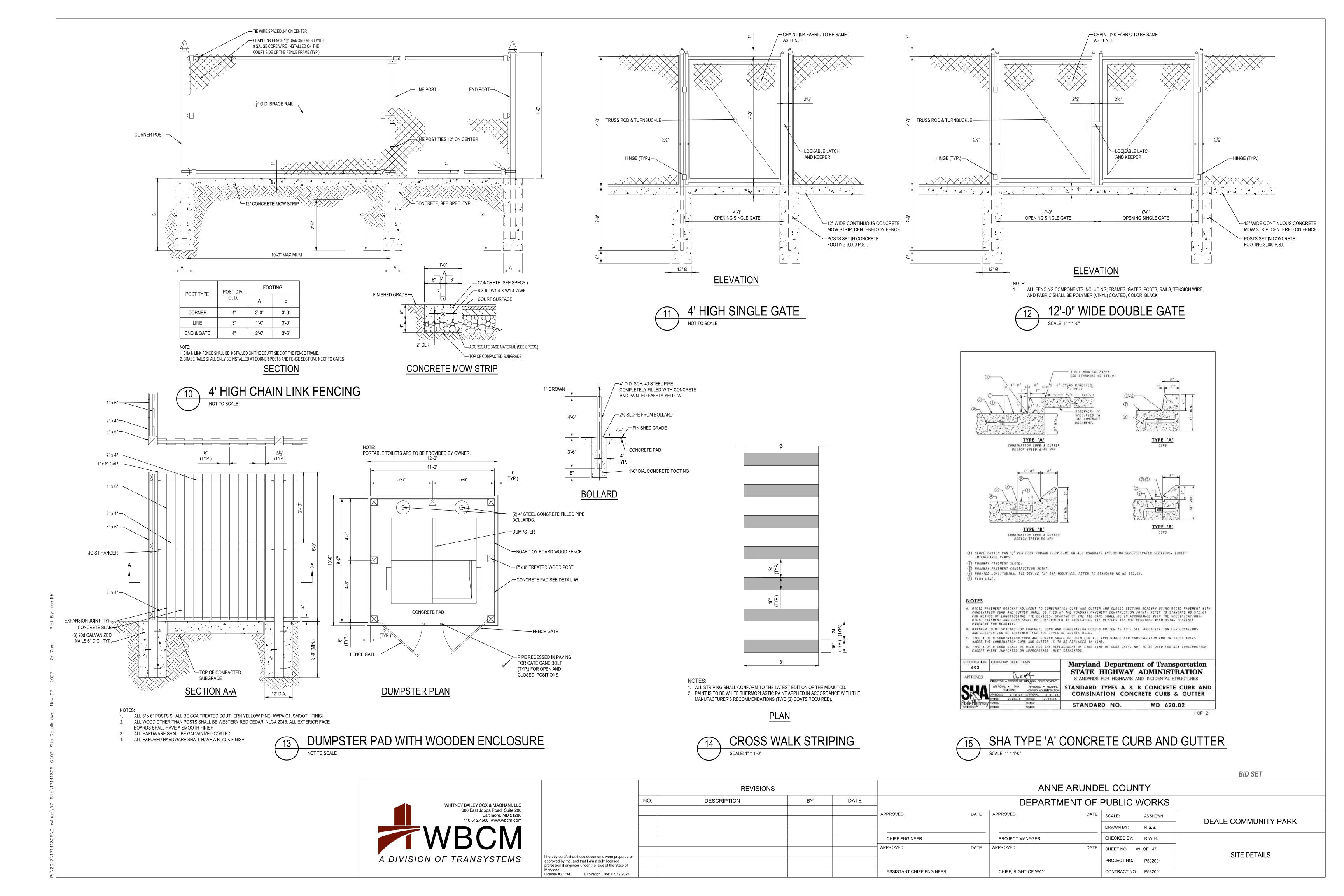


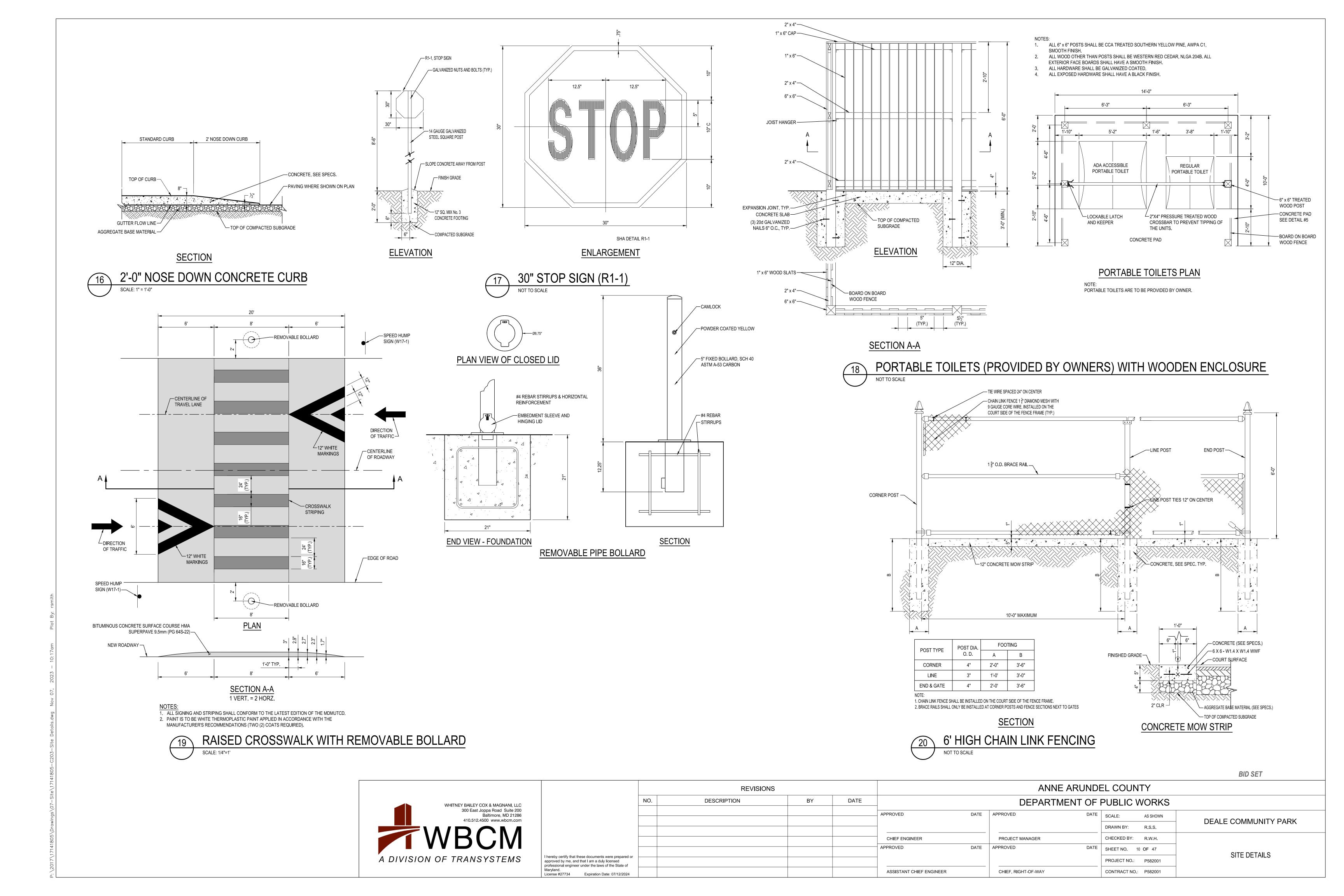


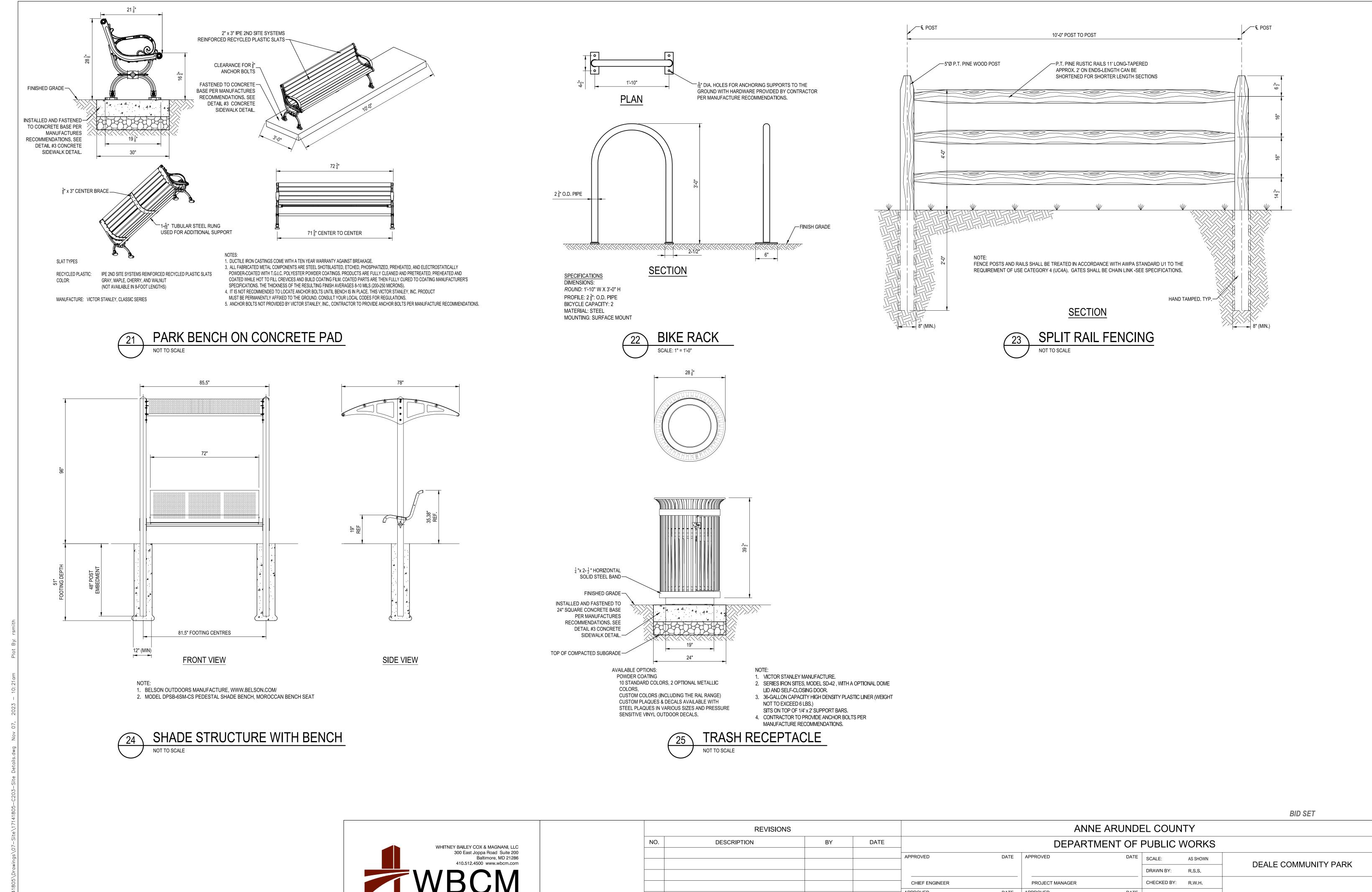




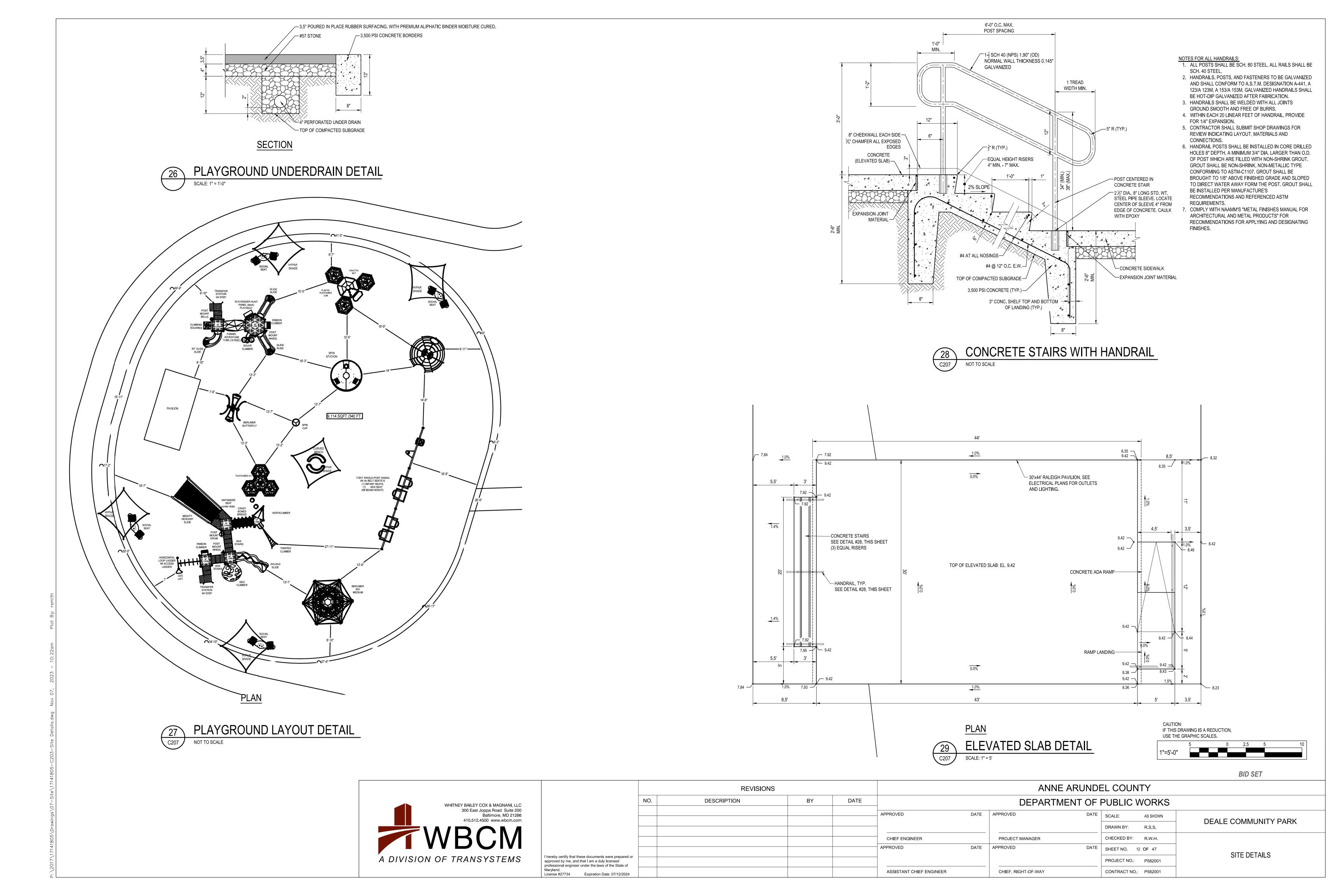


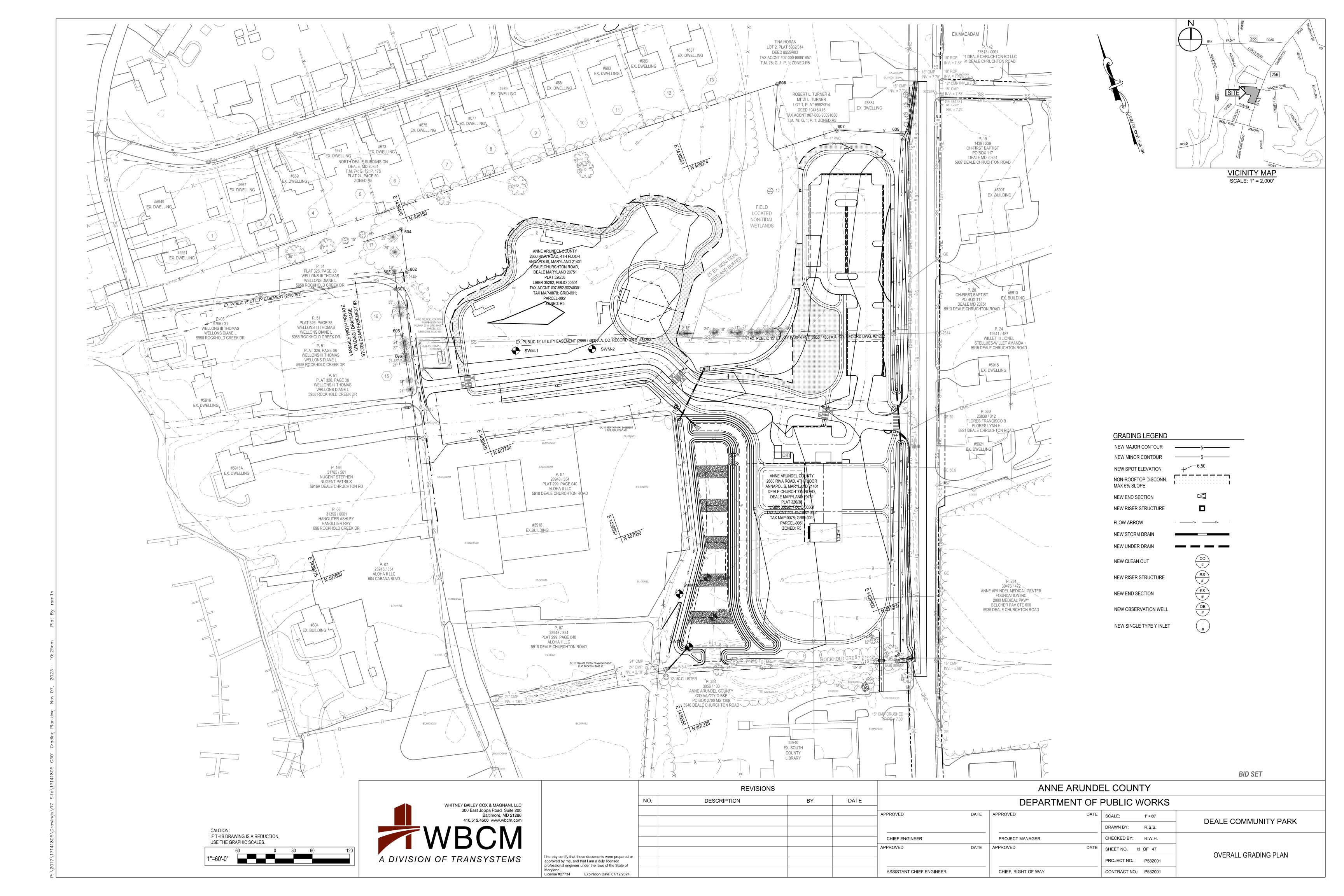


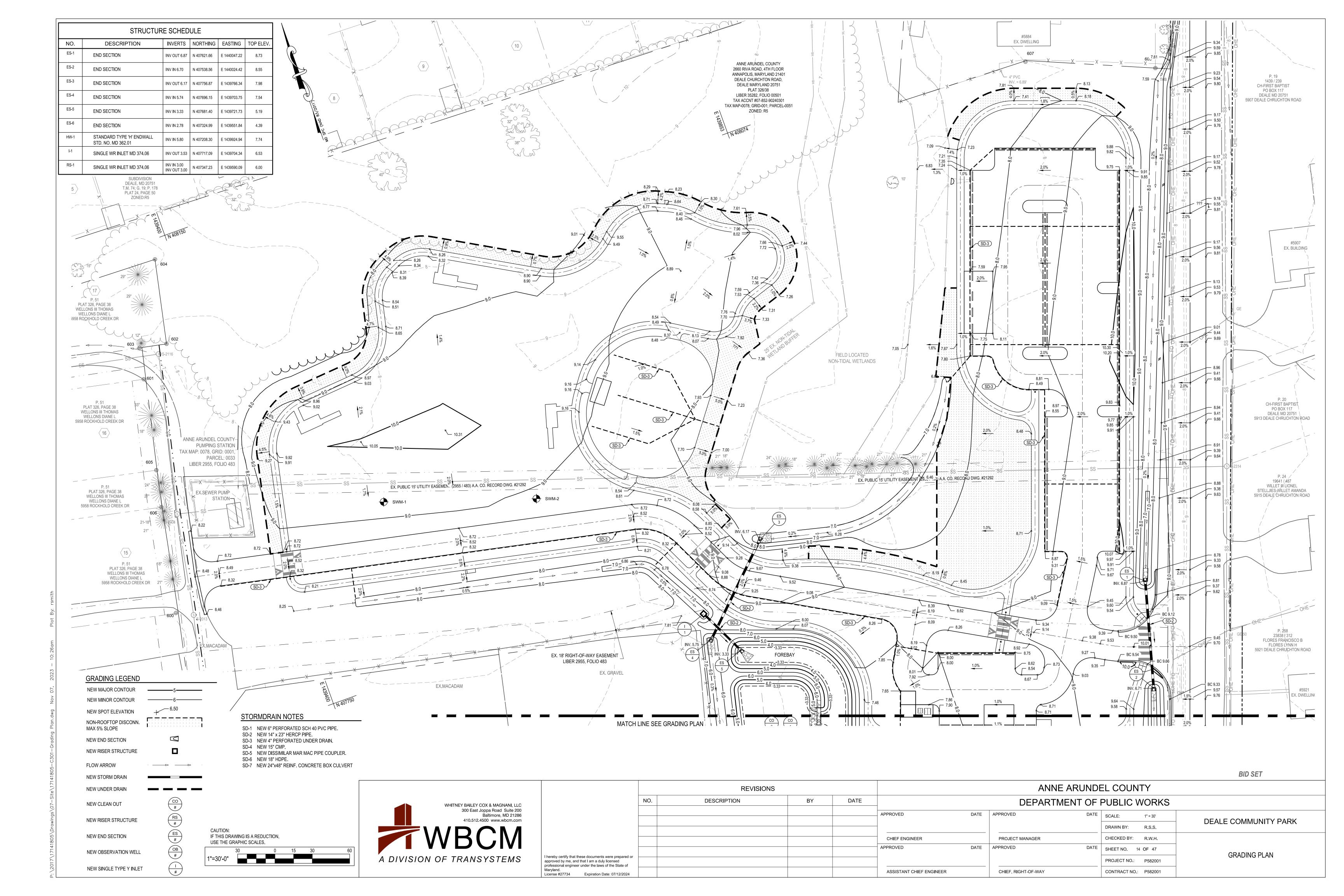


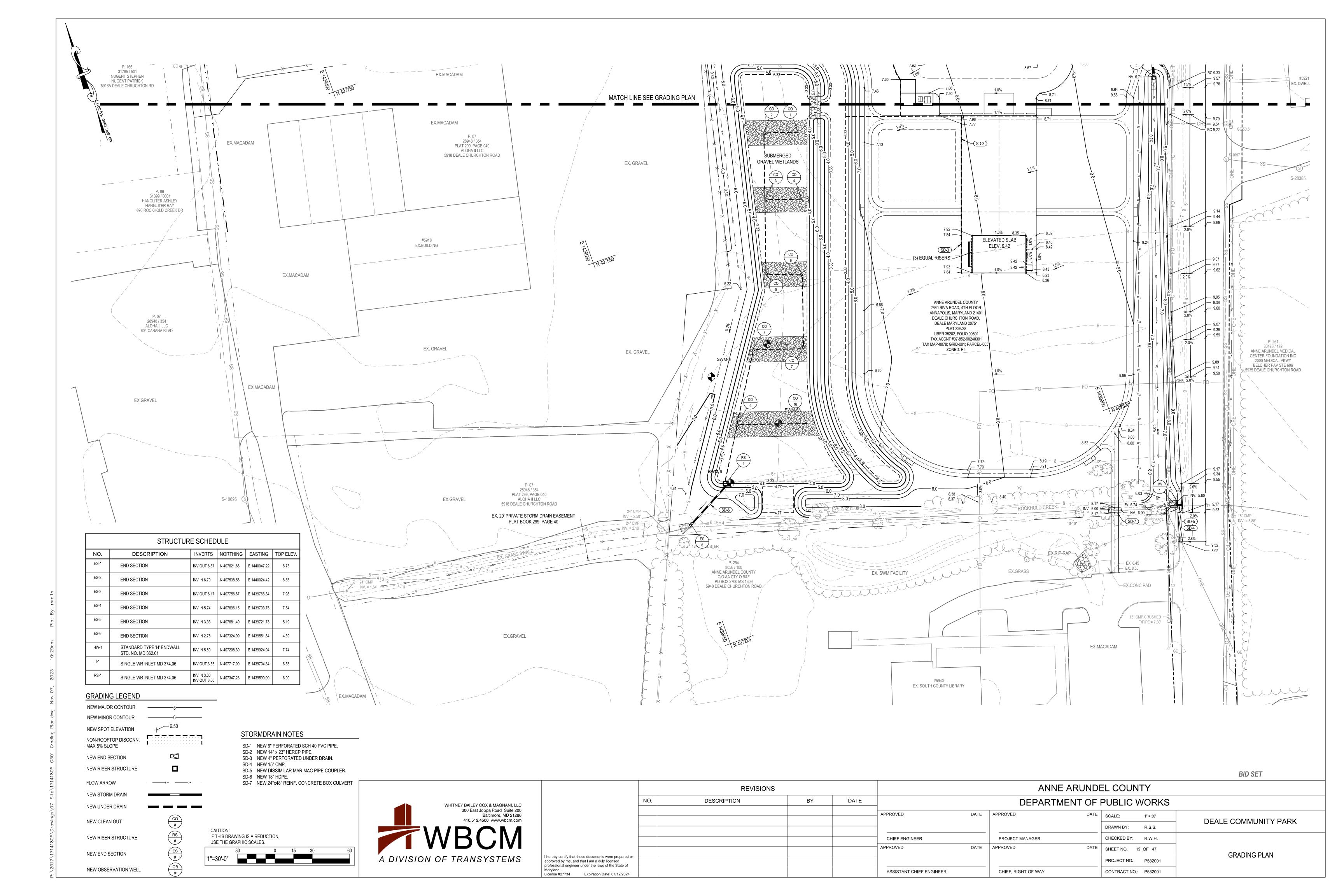


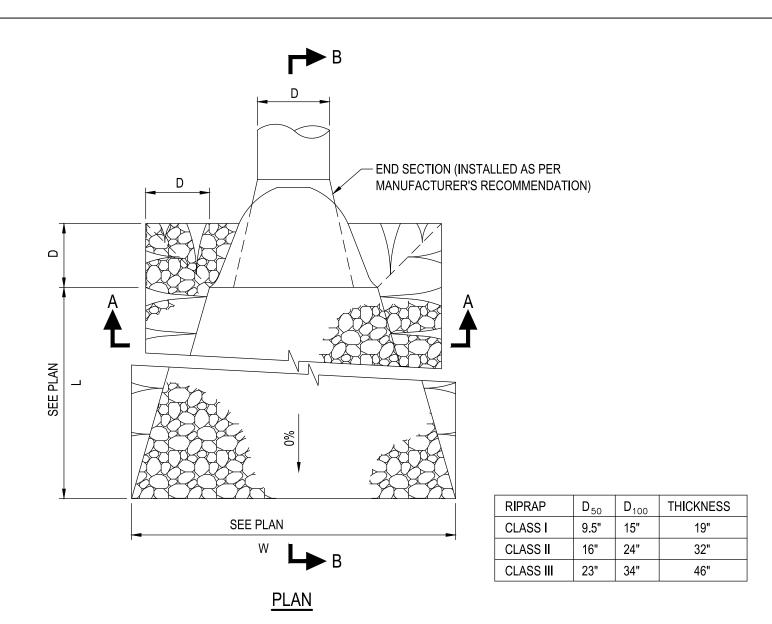
APPROVED DATE APPROVED DATE | SHEET NO. 11 OF 47 SITE DETAILS A DIVISION OF TRANSYSTEMS hereby certify that these documents were prepared or PROJECT NO.: P582001 approved by me, and that I am a duly licensed professional engineer under the laws of the State of ASSISTANT CHIEF ENGINEER CHIEF, RIGHT-OF-WAY CONTRACT NO.: P582001 Expiration Date: 07/12/2024

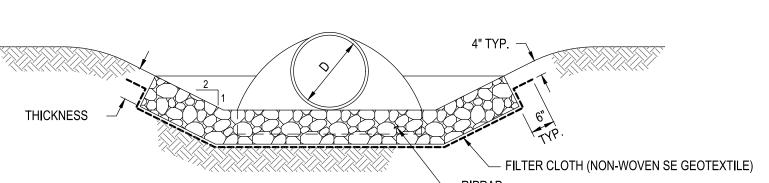


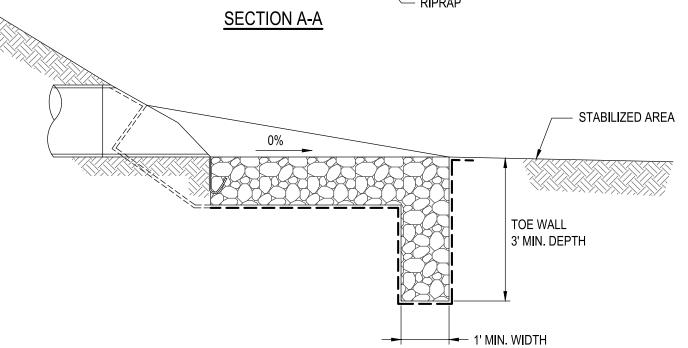








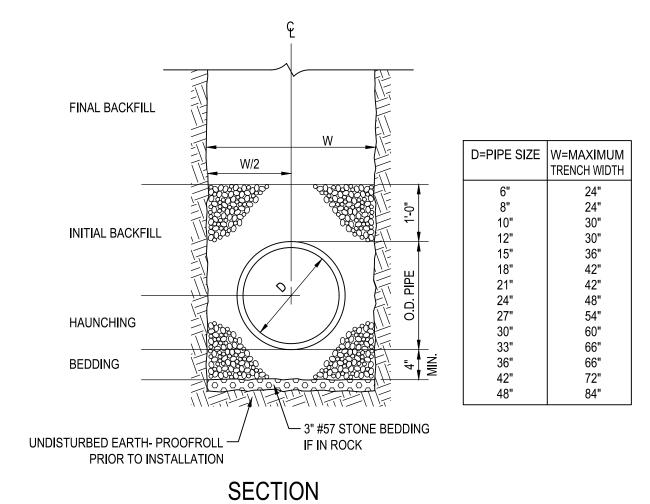




SECTION B-B CONSTRUCTION SPECIFICATIONS

- 1. THE SUBGRADE FOR THE FILTER, RIPRAP OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- 2. FILTER CLOTH SHALL BE PROTECTED FROM PUNCHING, CUTTING OR TEARING. ANY DAMAGE OTHER THEN AN OCCASIONAL SMALL HOLE SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF CLOTH OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE CLOTH. ALL OVERLAPS WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF CLOTH SHALL BE A MINIMUM OF ONE FOOT.
- 3. STONE FOR THE RIPRAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. BOTH SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIPRAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. RIPRAP SHALL BE PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR FILTER CLOTH. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.

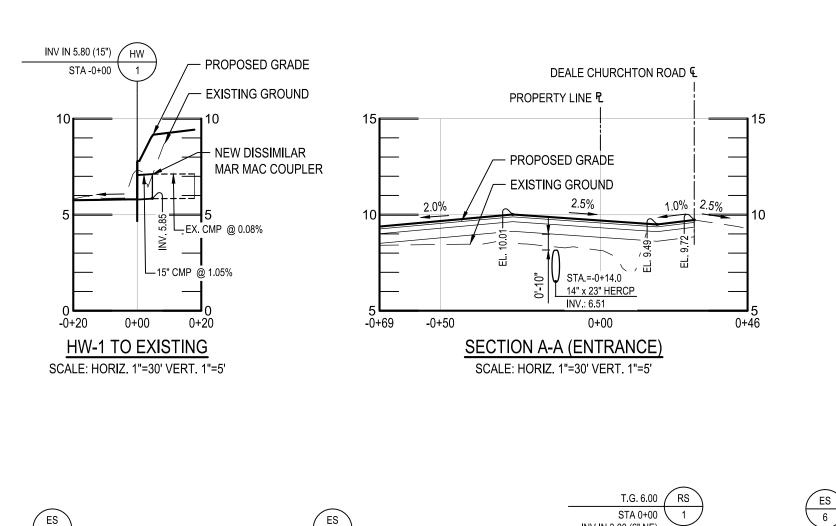


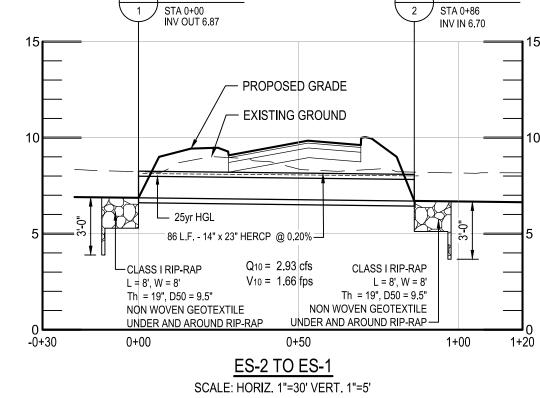


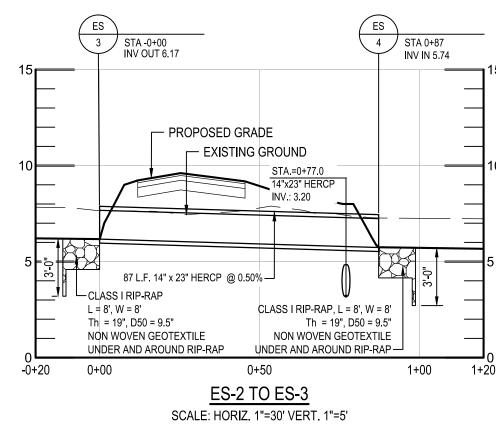
MATERIAL NOTES (UNLESS OTHERWISE SPECIFIED):

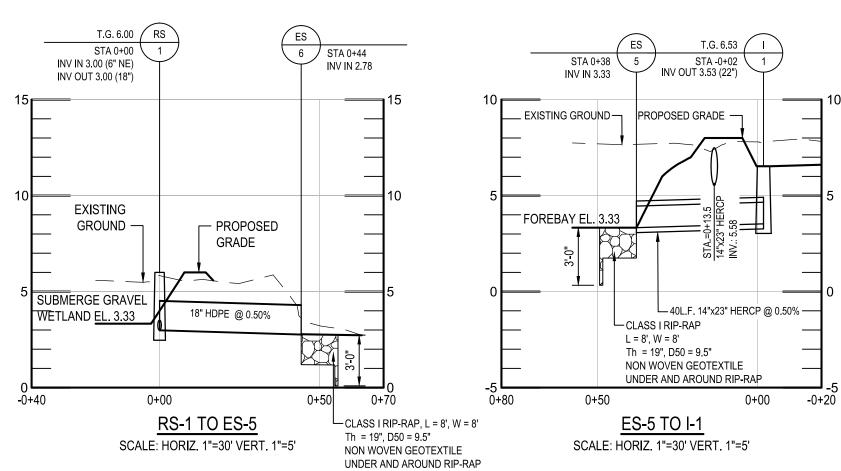
- 1. <u>BEDDING:</u> NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940/D 2940M; EXCEPT WITH 100 PERCENT PASSING A 1-INCH (25-MM) SIEVE AND NOT MORE THAN 8 PERCENT PASSING A NO. 200 (0.075-MM) SIEVE. COMPACT TO 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 1557.
- 2. <u>HAUNCHING:</u> NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940/D 2940M; EXCEPT WITH 100 PERCENT PASSING A 1-INCH (25-MM) SIEVE AND NOT MORE THAN 8 PERCENT PASSING A NO. 200 (0.075-MM) SIEVE. COMPACT TO 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 1557.
- 3. INITIAL BACKFILL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940/D 2940M; WITH AT LEAST 90 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 (0.075-MM) SIEVE. CAREFULLY COMPACT INITIAL BACKFILL UNDER PIPE HAUNCHES AND COMPACT EVENLY UP ON BOTH SIDES AND ALONG THE FULL LENGTH OF PIPING OR CONDUIT TO AVOID DAMAGE OR DISPLACEMENT OF PIPING OR CONDUIT. COORDINATE BACKFILLING WITH UTILITIES TESTING.
- 4. <u>FINAL BACKFILL:</u> EXCAVATED SOILS MEETING THE PROJECT SPECIFIC REQUIREMENTS FOR SATISFACTORY SOILS PLACED IN 6" LIFTS AND COMPACTED.
- 5. COMPACT EACH LAYER OF INITIAL AND FINAL BACKFILL SOIL MATERIAL AT 90 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 1557.

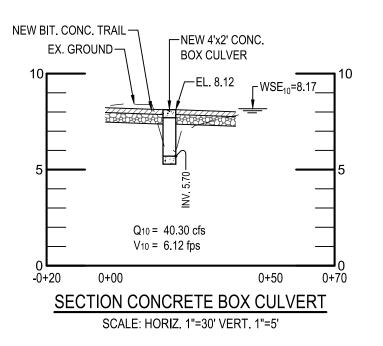




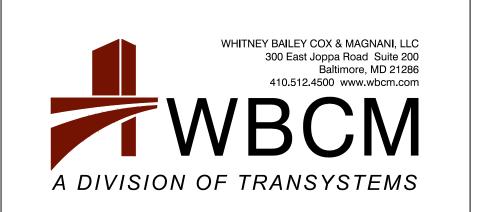








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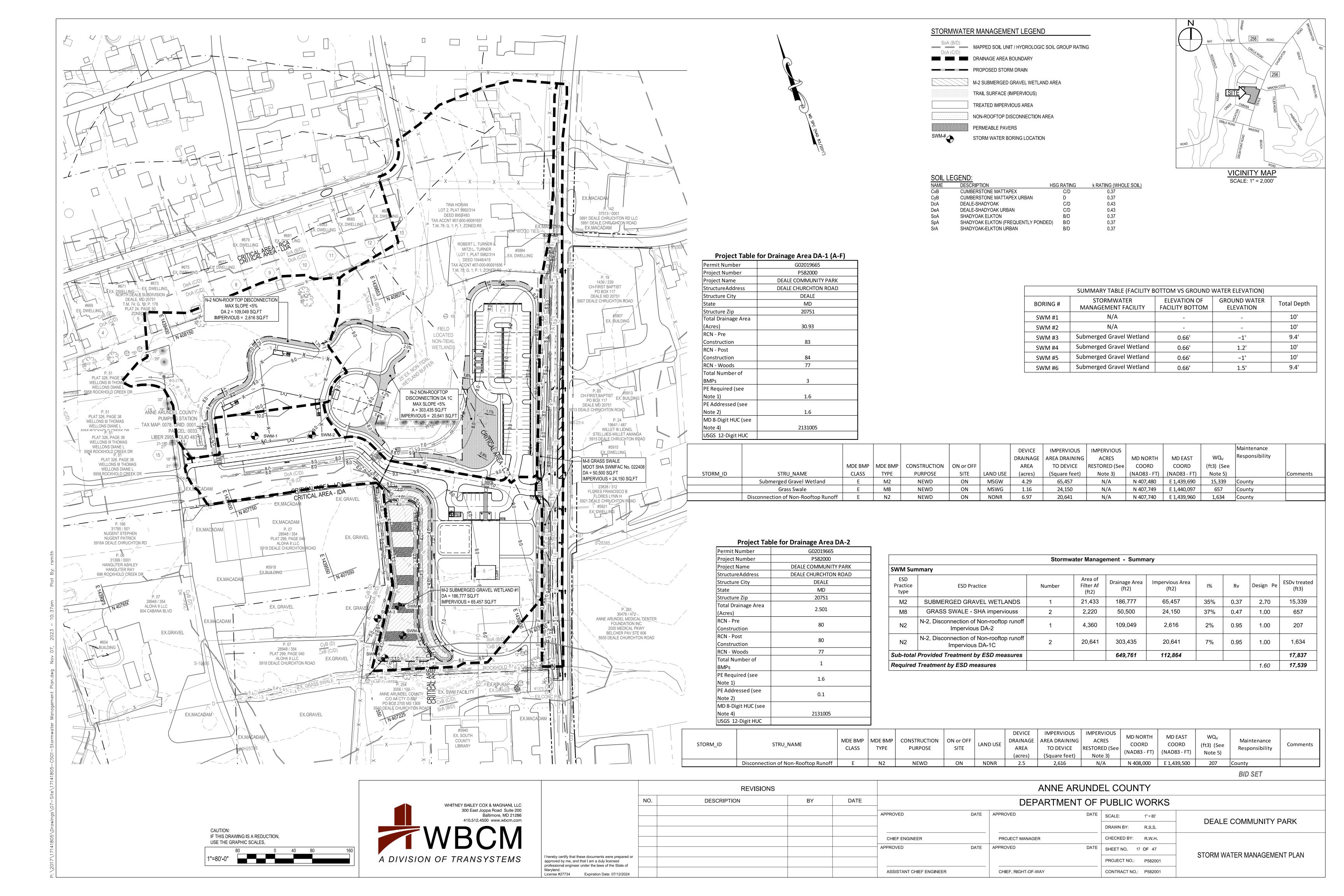


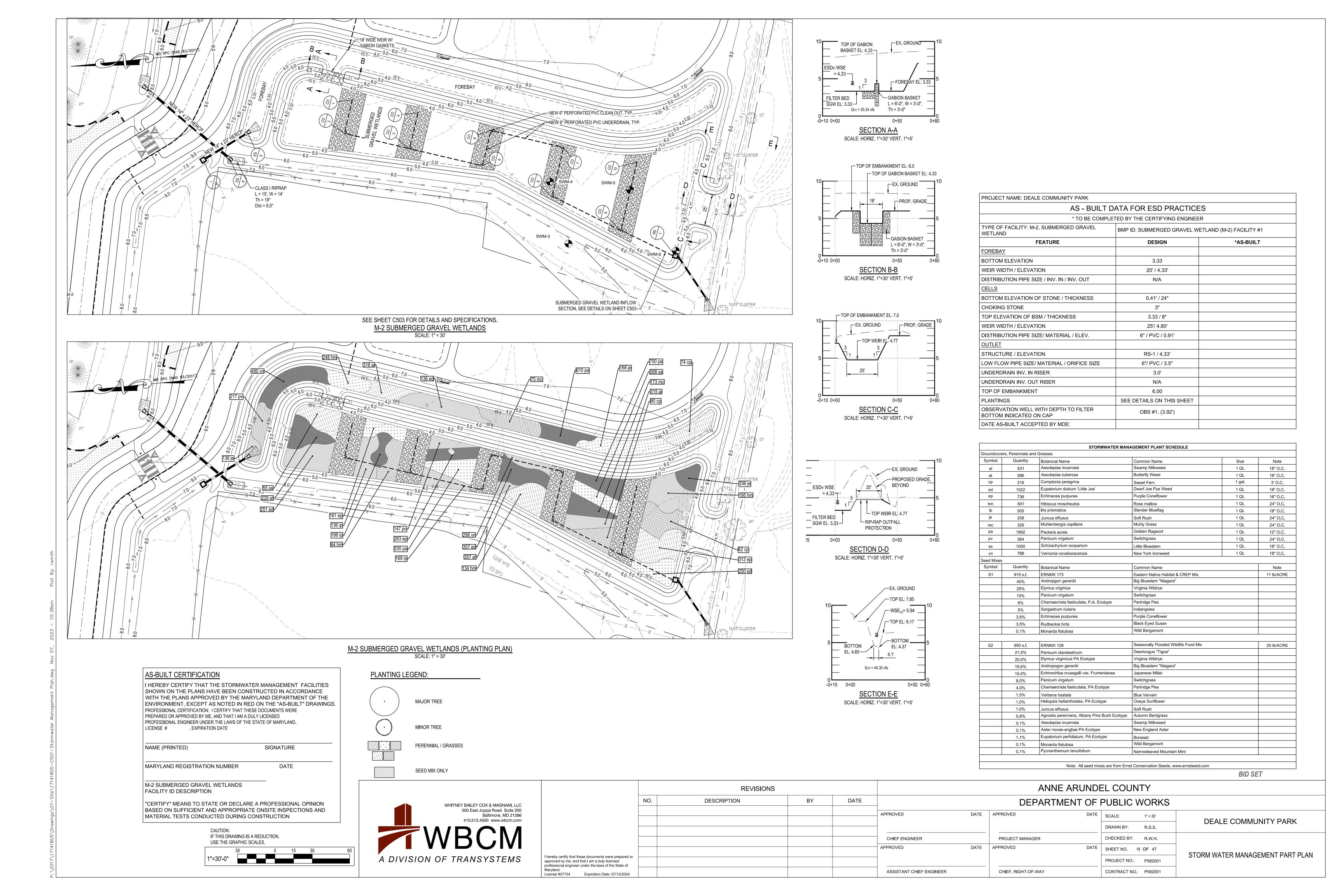
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					APPROVED	DATE	APPROVED	DATE	SCALE:	1" = 30'	DEALE COMMUNITY PARK
									DRAWN BY:	R.S.S.	DEALE COMMUNITY FARK
					CHIEF ENGINEER		PROJECT MANAGER		CHECKED BY:	R.W.H.	
					APPROVED	DATE	APPROVED	DATE	SHEET NO.	16 OF 47	DDOE!! FO
hereby certify that these documents were prepared or pproved by me, and that I am a duly licensed rofessional engineer under the laws of the State of									PROJECT NO.:	P582001	PROFILES
flaryland. icense #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY		CONTRACT NO	D.: P582001	

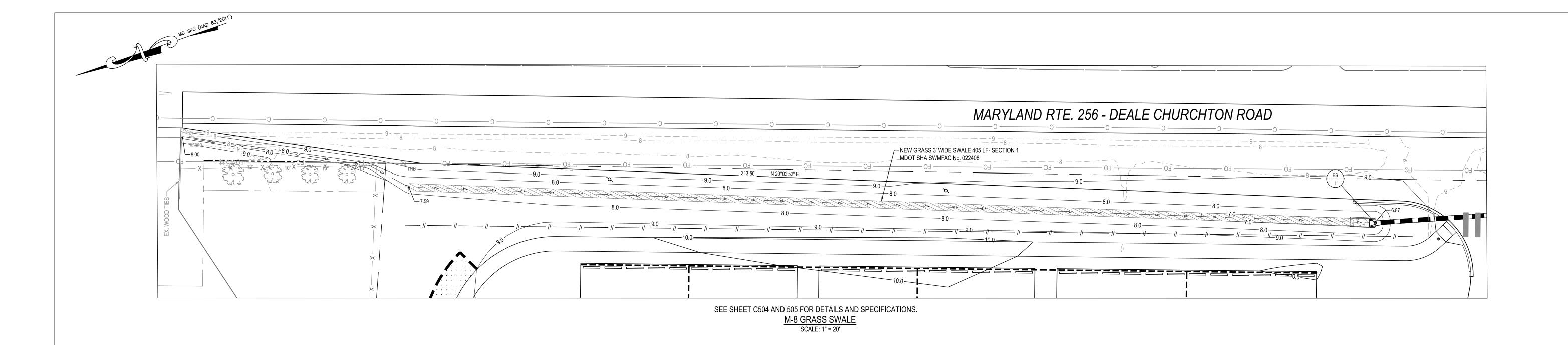
CAUTION:
IF THIS DRAWING IS A REDUCTION,
USE THE GRAPHIC SCALES.

30 0 15 30

1"=30'-0"







SEE SHEET C504 AND 505 FOR DETAILS AND SPECIFICATIONS.

DESIGN / AS - BUILT DATA FOR GRASS SWALE

* TO BE COMPLETED BY THE CERTIFYING ENGINEER

DESIGN *AS-BUILT

BOTTOM WIDTH 3 ft

TOTAL LENGTH 740 ft

WQ VOLUME 856 cf

NUMBER OF CHECK DAMS / WEIRS N/A

10 YEAR FREEBOARD 0.31 ft

DATE AS-BUILT APPROVED:

PROJECT NAME: Deale Community Park

NOTE: GRASS SWALE TO BE LINED ON BOTTOM AND SIDES WITH 4" OF TOPSOIL AND SOD INSTALLED AT COMPLETION.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT FACILITIES SHOWN ON THE PLANS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS APPROVED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, EXCEPT AS NOTED IN RED ON THE "AS-BUILT" DRAWINGS. PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE # , EXPIRATION DATE

NAME (PRINTED)

SIGNATURE

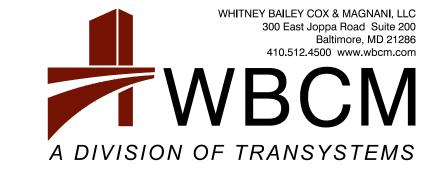
DATE

MARYLAND REGISTRATION NUMBER

GRASS SWALE FACILITY ID DESCRIPTION

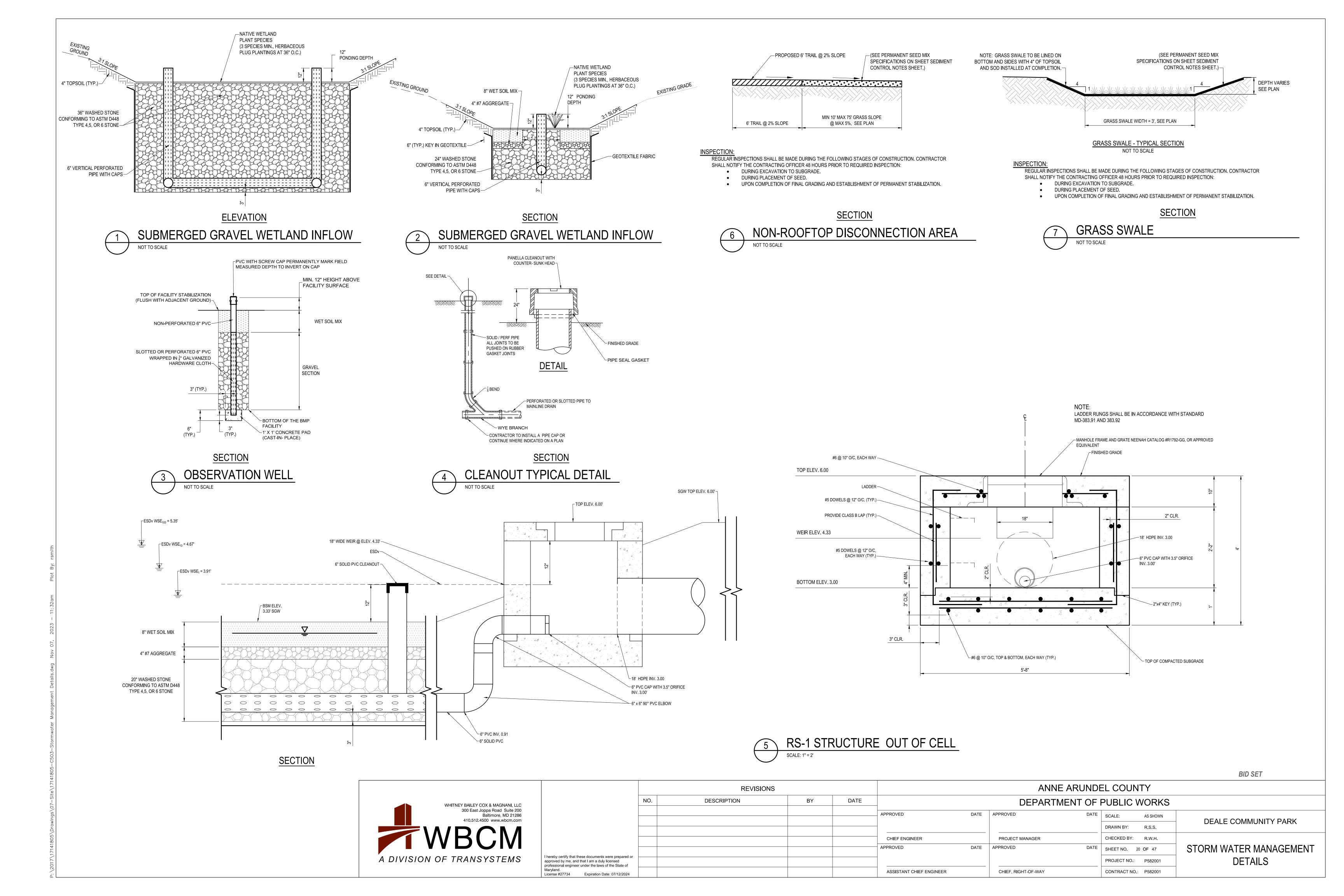
"CERTIFY" MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED ON SUFFICIENT AND APPROPRIATE ONSITE INSPECTIONS AND MATERIAL TESTS CONDUCTED DURING CONSTRUCTION

CAUTION: IF THIS DRAWING IS A REDUCTION, USE THE GRAPHIC SCALES.



		REVISIONS					ANNE A	RUNDE	EL COUN	NTY	
	NO.	DESCRIPTION	BY	DATE			DEPARTME	NT OF F	PUBLIC	WORKS	
					APPROVED	DATE	APPROVED	DATE	SCALE:	1" = 30'	
					_				DRAWN BY:	R.S.S.	DEALE COMMUNITY PARK
					CHIEF ENGINEER		PROJECT MANAGER		CHECKED BY:	R.W.H.	
					APPROVED	DATE	APPROVED	DATE	SHEET NO.	19 OF 47	
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.									PROJECT NO.:	P582001	STORM WATER MANAGEMENT PART PLAN
Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY		CONTRACT NO	.: P582001	

BID SET



SEQUENCE OF CONSTRUCTION FOR SUBMERGED GRAVEL WETLANDS (M-2) SWM FACILITY

- 1. THE CONTRACTOR SHALL CALL ANNE ARUNDLE COUNTY DPW, DIVISION OF ENGINEERING AND CONSTRUCTION (410) 222-7800 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO SCHEDULE A MEETING AND AN INSPECTION.
- 2. EXCAVATE FOREBAY, INSTALL GABION WEIR AND OVERFLOW. 3. STABILIZE FOREBAY.
- 4. INSTALL FOREBAY PLANTINGS AS INDICATED ON PLANS.
- 5. DEWATER SEDIMENT BASIN AND EXCAVATE FACILITY.
- 6. PLACE LINER MATERIAL AS INDICATED ON THE PLANS.
- 7. PLACE STONE IN THE FACILITY AS INDICATED ON THE PLANS. CLEANOUTS MUST BE EXTEND A MINIMUM TWO FEET ABOVE FINISHED GRADE AND BE FURNISHED WITH CAPS THAT CAN BE REMOVED WHEN AND AS NEEDED FOR INSPECTIONS, MAINTENANCE, AND TO CHECK ON WATER LEVELS. STONE IS TO BE WASHED AND SHALL NOT INCLUDE FINE MATERIAL.
- 8. PLACE WETLAND SOIL AS INDICATED ON THE PLANS.
- 9. INSTALL PLANTINGS AS INDICATED ON THE PLANS.

SUBMERGED GRAVEL WETLANDS (M-2) INSPECTION, & MAINTENANCE NOTES

INSPECTION:

REGULAR INSPECTIONS SHALL BE MADE DURING THE FOLLOWING STAGES OF CONSTRUCTION:

- DURING EXCAVATION TO SUBGRADE.
- DURING PLACEMENT OF BACKFILL OF PERFORATED INLET PIPE AND OBSERVATION WELLS.
- DURING PLACEMENT OF GEOTEXTILES AND ALL FILTER MEDIA.
- DURING CONSTRUCTION OF ANY APPURTENANT CONVEYANCE SYSTEMS SUCH AS DIVERSION STRUCTURES, INLETS, OUTLETS, AND FLOW DISTRIBUTION STRUCTURES.
- UPON COMPLETION OF FINAL GRADING AND ESTABLISHMENT OF PERMANENT STABILIZATION, AND BEFORE ALLOWING RUNOFF TO ENTER THE WETLAND.

MAINTENANCE CRITERIA:

THE FOLLOWING ITEMS SHOULD BE ADDRESSED TO ENSURE PROPER MAINTENANCE AND LONG-TERM PERFORMANCE OF SUBMERGED GRAVEL WETLANDS:

- PRIVATELY OWNED PRACTICES SHALL HAVE A MAINTENANCE PLAN AND BE PROTECTED BY EASEMENT, DEED RESTORATION, ORDINANCE OR OTHER LEGAL MEASURES PREVENTING ITS NEGLECT, ADVERSE ALTERATION, AND REMOVAL.
- DURING THE FIRST YEAR OF OPERATION, INSPECTIONS SHOULD BE CONDUCTED AFTER EVERY MAJOR STORM AND POORLY ESTABLISHED AREAS REVEGETATED.
- SEDIMENT ACCUMULATION IN THE PRETREATMENT AREAS SHOULD BE REMOVED AS NECESSARY.
- SIGNS OF UNEVEN LOW DISTRIBUTION WITHIN THE WETLAND MAY MEAN THAT THE GRAVEL OF UNDERDRAIN IS CLOGGED. THE GRAVEL AND/OR UNDERDRAIN MAY NEED TO BE REMOVED, CLEANED, AND REPLACED.
- A DENSE STAND OF WETLAND VEGETATION SHOULD BE MAINTAINED THROUGH THE LIFE OF THE FACILITY WITH PLANTINGS REPLACED AS NEEDED.
- INLETS AND OUTLETS TO EACH SUBMERGED GRAVEL WETLAND CELL SHOULD BE FREE FROM DEBRIS TO PREVENT CLOGGING.
- EROSION AT INFLOW POINTS SHOULD BE REPAIRED. FLOW SPLITTERS SHOULD BE FUNCTIONAL TO PREVENT BYPASSING OF THE FACILITY.

CONSTRUCTION CRITERIA:

THE FOLLOWING ITEMS SHOULD BE ADDRESSED DURING THE CONSTRUCTION OF PROJECTS WITH SUBMERGED GRAVEL WETLANDS.

SITE DISTURBANCE

ALL ONSITE DISTURBED AREAS SHOULD BE STABILIZED PRIOR TO ALLOWING RUNOFF TO ENTER THE NEWLY CONSTRUCTED WETLAND. EROSION AND SEDIMENT CONTROL:

THE PROPOSED LOCATION OF A SUBMERGED GRAVEL WETLAND SHALL BE PROTECTED DURING CONSTRUCTION. SURFACE RUNOFF SHALL BE DIVERTED AWAY FROM THE PRACTICE DURING GRADING OPERATIONS. FLOW SPLITTERS AND OTHER CONVEYANCE INFRASTRUCTURE SHALL BE BLOCKED.

GRAVEL MEDIA

THE AGGREGATE SHALL BE COMPOSED OF AN 18 TO 48 INCH LAYER OF CLEAN WASHED, UNIFORMLY GRADED MATERIAL WITH POROSITY OF 40%. (ASTM D488 #57 / AASHTO M-43 STONE OR EQUAL).

	STORMWATER MAINTENA	NCE SCHEDULE
	GRASS SWAI	LE
	MONTHLY INSPEC	CTION
Inspection Item	Inspection Requirements	Remedial Action
Debris and Trash	Check for trash and/or debris.	Dispose of trash and debris in an acceptable manner.
Grass Cover	Grass in swale must be maintained at a height of 4 to 6 inches. Check for channelizing and bare spots.	Mow during the growing season to maintain the required height. Clippings must be removed. Re-plant with topsoil, seed, and matting.
	SEASONAL INSPECTION AND AFT	ER A MAJOR STORM
Inspection Item	Inspection Requirements	Remedial Action
Sediment Accumulation	Check for accumulated sediment.	When sediment accumulates to 2 inches in depth, remove sediment and dispose of in an acceptable location.
Erosion	Check inflow, channel, outfall, and side slopes for evidence of erosion, rills, gullies, and runoff channelization.	Re-plant with topsoil, seed, and matting. Re-grading may be required when concentrated runoff causes rills or gullying to the facility. Grade, vegetate, and/or armor to provide stable conveyance in accordance with approved plans.
	ANNUAL INSPEC	ΓΙΟΝ
Inspection Item	Inspection Requirements	Remedial Action
Maintenance Access	Check for accessibility to facility.	Prevent excessive vegetative growth, erosion, and obstructions on access way.
Overall Function of Facility	Check that flow conveyance is operating as designed	Repair to good condition according to specifications on the approved plans.

SPECIFICATIONS:

- 2. THE CONTRACTOR SHALL SUBMIT SOIL TEST RESULTS (1 PER 30 CY TOPSOIL) TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. PERFORM SOIL TESTS REQUIRED FOR BOTH IMPORTED SOIL AND RE-USED / AMENDED TOP SOIL. SOIL TEST AND RESULTS SHALL INCLUDE AT A MINIMUM; PHOSPHORUS, ORGANIC MATTER, SOLUBLE SALTS, NUTRIENTS, AND TEXTURAL ANALYSIS.
- 3. PLANT MATERIAL SHALL BE REPRESENTATIVE OF SPECIES AND CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1-2004. MATERIALS SPECIFICATIONS FOR SUBMERGED GRAVEL WETLANDS

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE PLAN SHEET	N/A	PLANTINGS ARE SITE SPECIFIC
BSM	SHA BIORETENTION SOIL MIX (BSM) SECTION 920.01.05 ORGANIC CONTENT MIN. 5% BY DRY WEIGHT (ASTM D 2974)	N/A	MARYLAND STATE HIGHWAY ADMINISTRATION STANDARDS SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS DATED MAY 2017 INCLUDING AND ADDENDA THERETO. COPY TO BE KEPT ON-SITE
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
LINER MATERIAL		N/A	NONWOVEN SE GEOTEXTILE TABLE H.1 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
GRAVEL	AASHTO M-43	NO.57, 6, OR 67 (3/8" TO 3/4")	
UNDERDRAIN PIPING	F 758, TYPE PS 28 AASHTO M-278 AASHTO M-252	4" TO 6"	SLOTTED OR PERFORATED PIPE; SLOTTED PIPE SHALL HAVE A MINIMUM OPEN AREA OF 1.5 SQ.IN. / LINEAR FOOT WITH A MAXIMUM SLOT LENGTH OF 2" AND MAXIMUM SLOT WIDTH OF 1/8 INCH. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4 INCH GALVANIZED HARDWARE CLOTH.
STABILIZATION MATTING	PERMANENT STABILIZATION MATTING NORTH AMERICAN GREEN ERONET CN125 OR APPROVED EQUAL		AS NOTED ON PLAN / SECTION / DETAILS

MAINTENANCE SCHEDULE:

AFTER CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE WORK, INSPECTION AND MAINTENANCE SHALL BE THE RESPONSIBILITY OF ANNE ARUNDEL COUNTY.

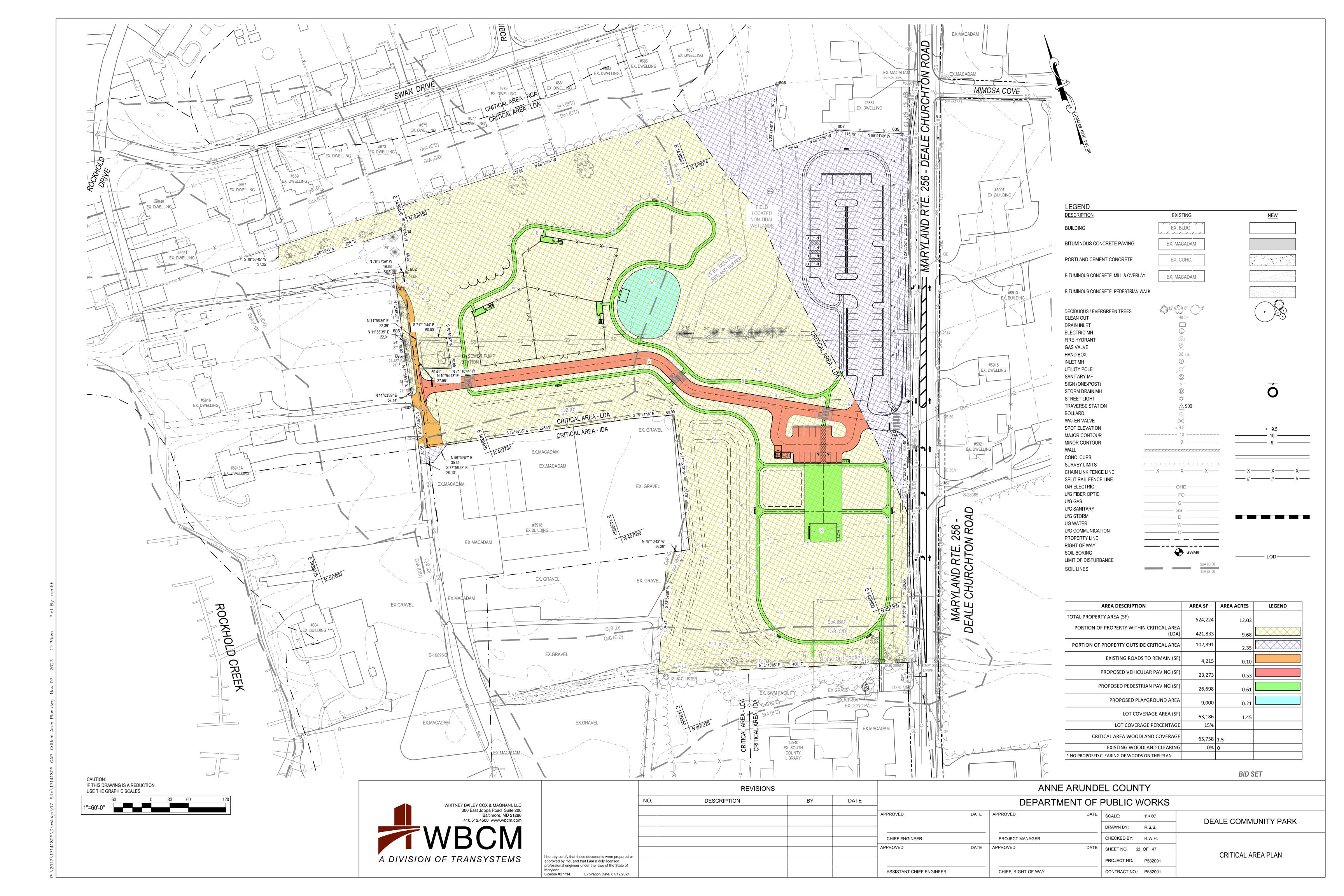
STORMWATER MAINTENANCE SCHEDULE SUBMERGED GRAVEL WETLANDS

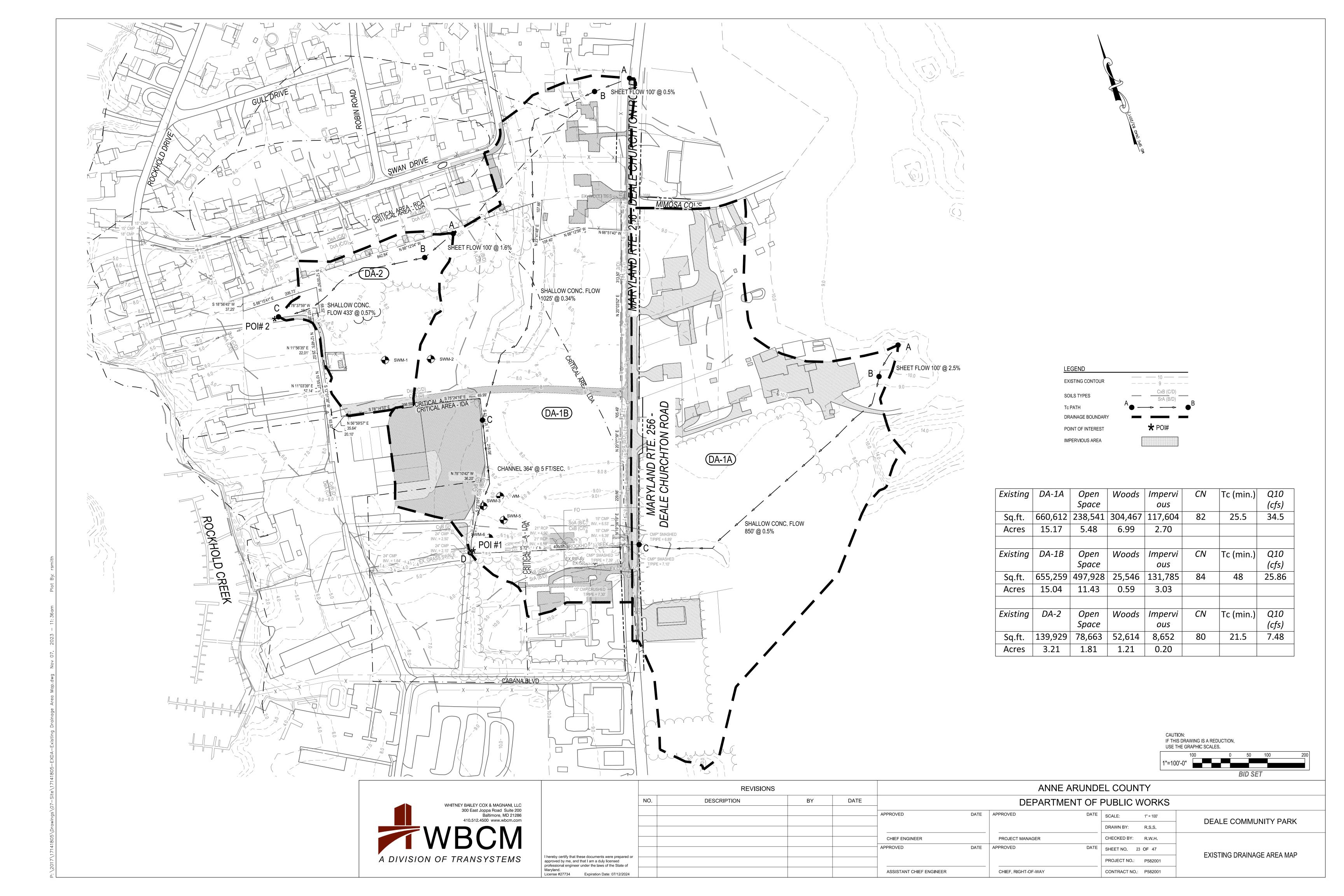
INSPECTION ITEM	FREQUENCY OF INSPECTION	INSPECTION REQUIREMENTS	REMEDIAL ACTION
GRAVEL WETLAND CELLS	SEASONALLY AND AFTER A MAJOR STORM		
VEGETATION	SEASONALLY AND AFTER A MAJOR STORM	FACILITY MUST DEWATER WITHIN 48 HOURS OF RAINFALL. NOTICEABLE ODORS, STAINED WATER ON THE FILTER SURFACE OR AT THE OUTLET, OR THE PRESENCE OF ALGAE OR AQUATIC VEGETATION ARE INDICATORS OF ANAEROBIC CONDITIONS, AND INADEQUATE DEWATERING OF THE FACILITY.	THE TOP THREE INCHES OF SOIL SHOULD BE REMOVED AND REPLACED WITH SOIL MATERIAL AS PER PLAN SPECIFICATIONS. FOLLOW UP INSPECTIONS MUST CONFIRM ADEQUATE DEWATERING. IF THE FACILITY DOES NOT FUNCTION AS INTENDED AFTER THE ABOVE ACTION, THE ENTIRE FILTER AND UNDERDRAIN SYSTEM MAY NEED MAINTENANCE. MDE APPROVAL MAY BE NECESSARY.
MULCH LAYER	SEASONALLY AND AFTER A MAJOR STORM	CHECK MULCH FOR ADEQUATE COVER, SEDIMENT ACCUMULATION, OR DISCOLORATION.	REPLACE AND REMOVE OLD MULCH AND EXCESS SEDIMENTS. PROVIDE ADEQUATE MULCH COVER ACCORDING TO APPROVED DESIGN.
VEGETATIVE SURFACES	MONTHLY		
PLANT COMPOSITION AND HEALTH	MONTHLY	COMPARE PLANT COMPOSITION WITH APPROVED PLANS. CHECK FOR INVASIVE SPECIES OR WEEDS. CHECK FOR DEAD OR DYING VEGETATION.	REMOVE AND REPLACE PLANTS IN ACCORDANCE WITH PLAN SPECIFICATIONS.
VEGETATIVE COVER AND EROSION	MONTHLY	CHECK FOR EVIDENCE OF EROSION, RUNOFF CHANNELIZING, OR BARE SPOTS.	RE-SEED OR RE-PLANT IN ACCORDANCE WITH APPROVED LANDSCAPING PLANS. RE-GRADING MAY BE REQUIRED WHEN CONCENTRATED FLOW CAUSES RILLS OR GULLYING THROUGH THE FACILITY.
DEBRIS AND TRASH CLEANOUT	MONTHLY	CHECK THAT THE FACILITY IS CLEAN OF TRASH AND DEBRIS. INLETS, OUTLETS, AND CONTRIBUTING AREAS AROUND THE FACILITY MUST BE CHECKED.	TRASH AND DEBRIS MUST BE DISPOSED OF IN AN ACCEPTABLE MANNER ACCORDING TO CURRENT REGULATIONS.
STRUCTURAL COMPONENTS	ANNUALLY	CHECK FOR EVIDENCE OF STRUCTURAL DETERIORATION, SPALLING, OR CRACKING. INLET AND OUTLET STRUCTURES MUST BE IN GOOD CONDITION.	REPAIR TO GOOD CONDITION ACCORDING TO SPECIFICATIONS ON THE APPROVED PLANS.
OUTLETS		CHECK FOR EVIDENCE OF EROSION, RILLS, OR GULLYING.	STABILIZE ALL ERODED AREAS AND GRADE TO PROVIDE STABLE CONVEYANCE.
	SEASONALLY AND AFTER A MAJOR STORM	RIPRAP OUTLET MUST BE MAINTAINED IN GOOD FUNCTIONAL CONDITION.	REPAIR ACCORDING TO APPROVED PLAN.
PRETREATMENT			
SEDIMENT ACCUMULATION	SEASONALLY AND AFTER A MAJOR STORM	CHECK FOR SEDIMENT ACCUMULATION.	WHEN SEDIMENT ACCUMULATIONS TO A DEPTH OF ONE HALF THE DESIGN PONDING DEPTH OR COVERS MORE THAN, SEDIMENT MUST BE REMOVED AND THE FACILITY RESTORED ACCORDING TO THE APPROVED DESIGN.
GRASS CHANNEL CONVEYANCE SYSTEMS		CHECK FOR EROSION, FLOW BLOCKAGES, AND STABLE CONVEYANCE.	STABILIZE AND GRADE ACCORDING TO APPROVED PLAN.
OVERALL FUNCTION OF THE FACILITY	ANNUALLY	CHECK THAT FLOW SPLITTERS ARE FUNCTIONING AS DESIGNED AND THAT BYPASS IS OPERATING AS DESIGNED.	CONSTRUCTION MUST BE IN ACCORDANCE WITH APPROVED PLANS.

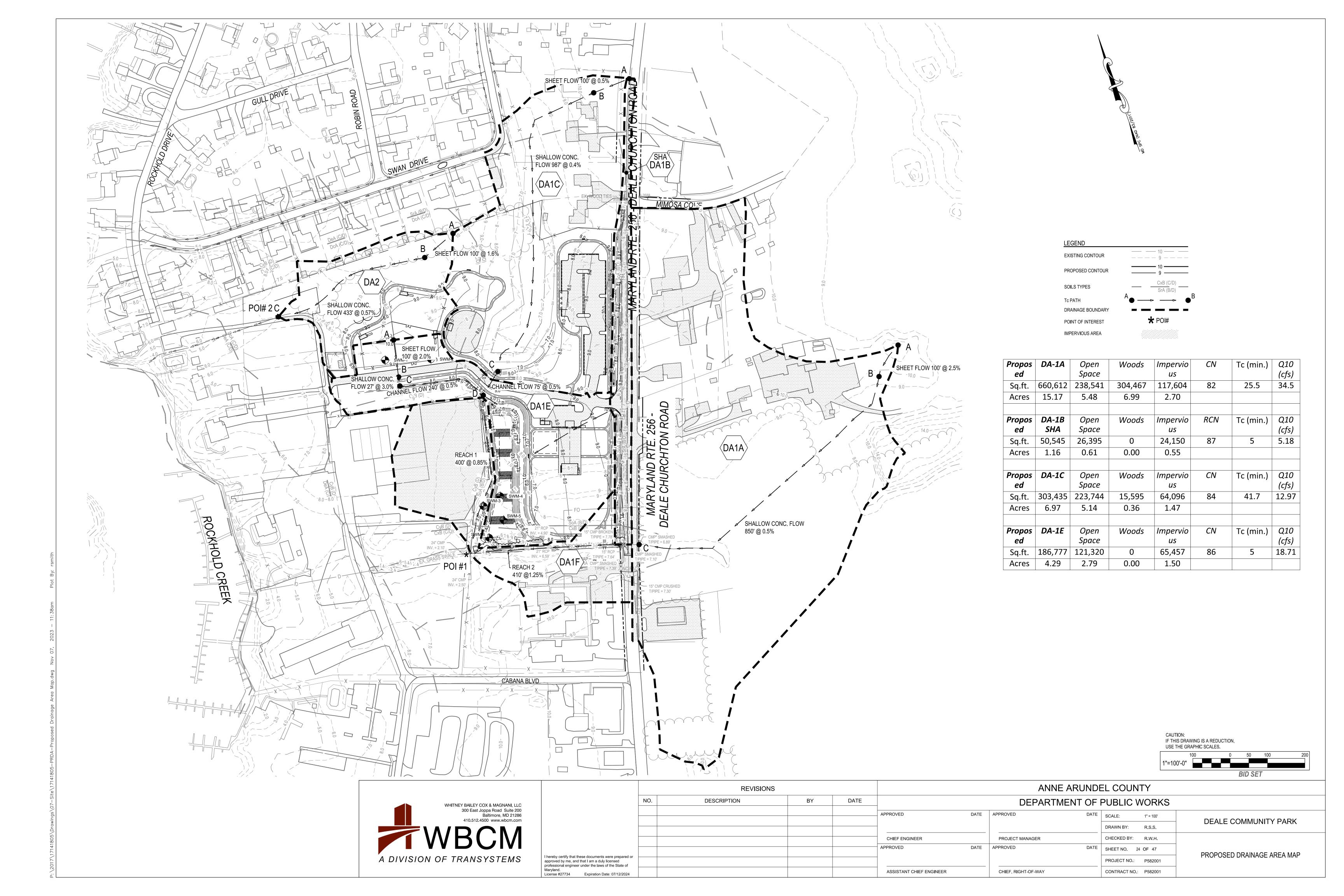
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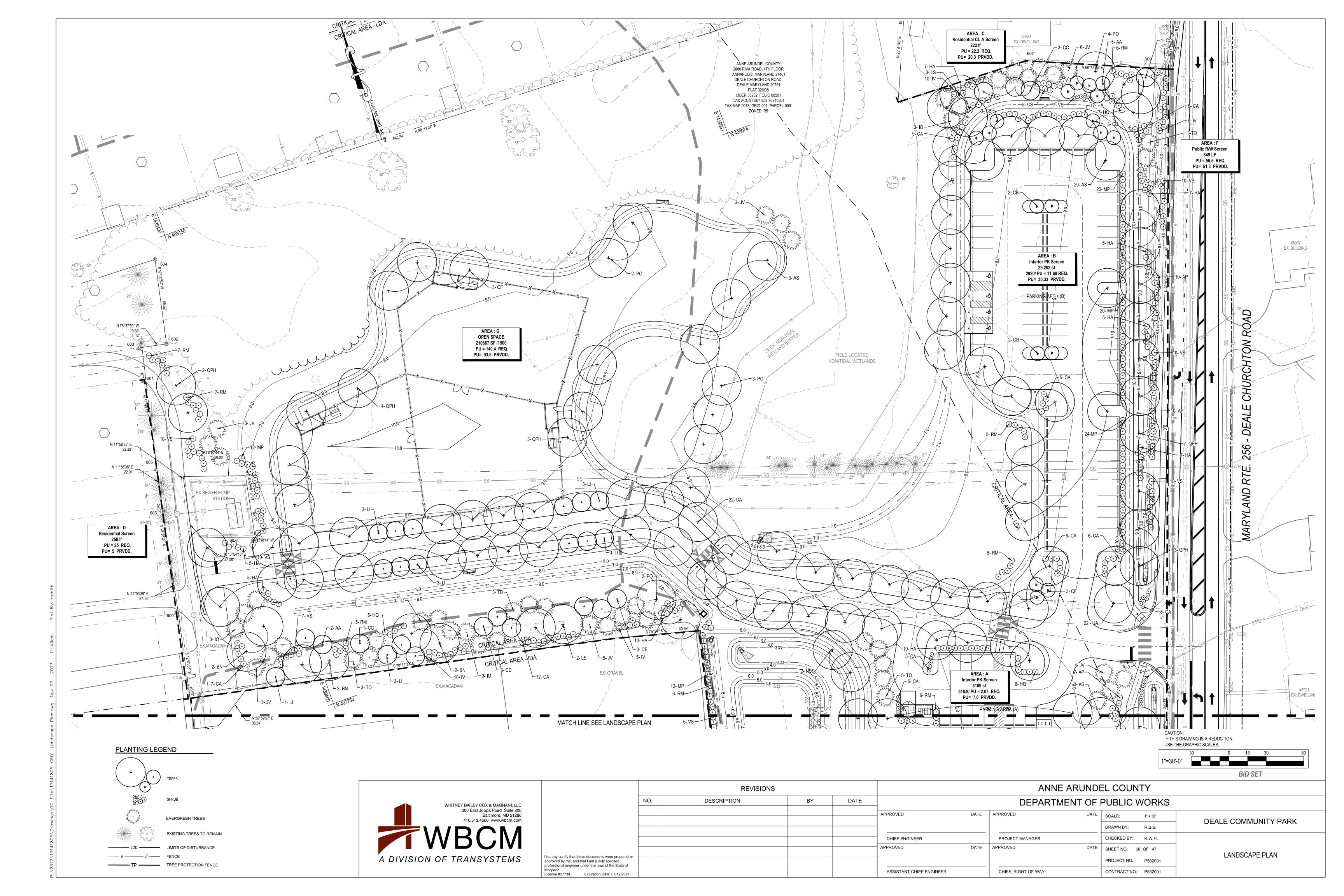
	REVISIONS						ANNE	ARUND	EL COU	NTY	
	NO.	NO. DESCRIPTION BY DATE			DEPARTMENT OF PUBLIC WORKS						
					APPROVED	DATE	APPROVED	DATE	SCALE:	AS SHOWN	DEALE COMMUNITY PARK
									DRAWN BY:	R.S.S.	DEALE COMMUNITY PARK
					CHIEF ENGINEER		PROJECT MANAGER		CHECKED BY	: R.W.H.	
					APPROVED	DATE	APPROVED	DATE	SHEET NO.	21 OF 47	STORM WATER MANAGEMENT
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of									PROJECT NO	.: P582001	DETAILS
Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY		CONTRACT N	O.: P582001	

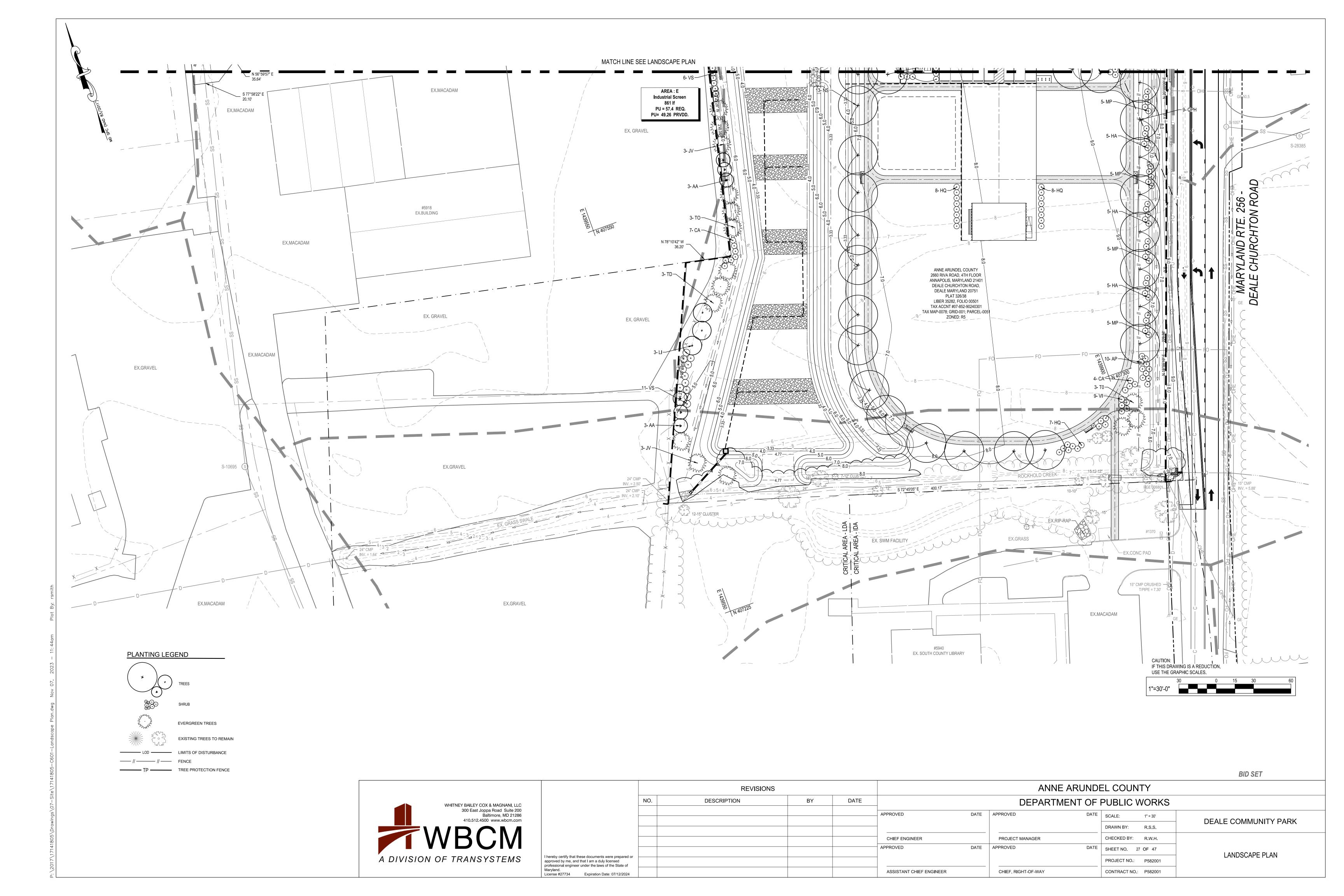


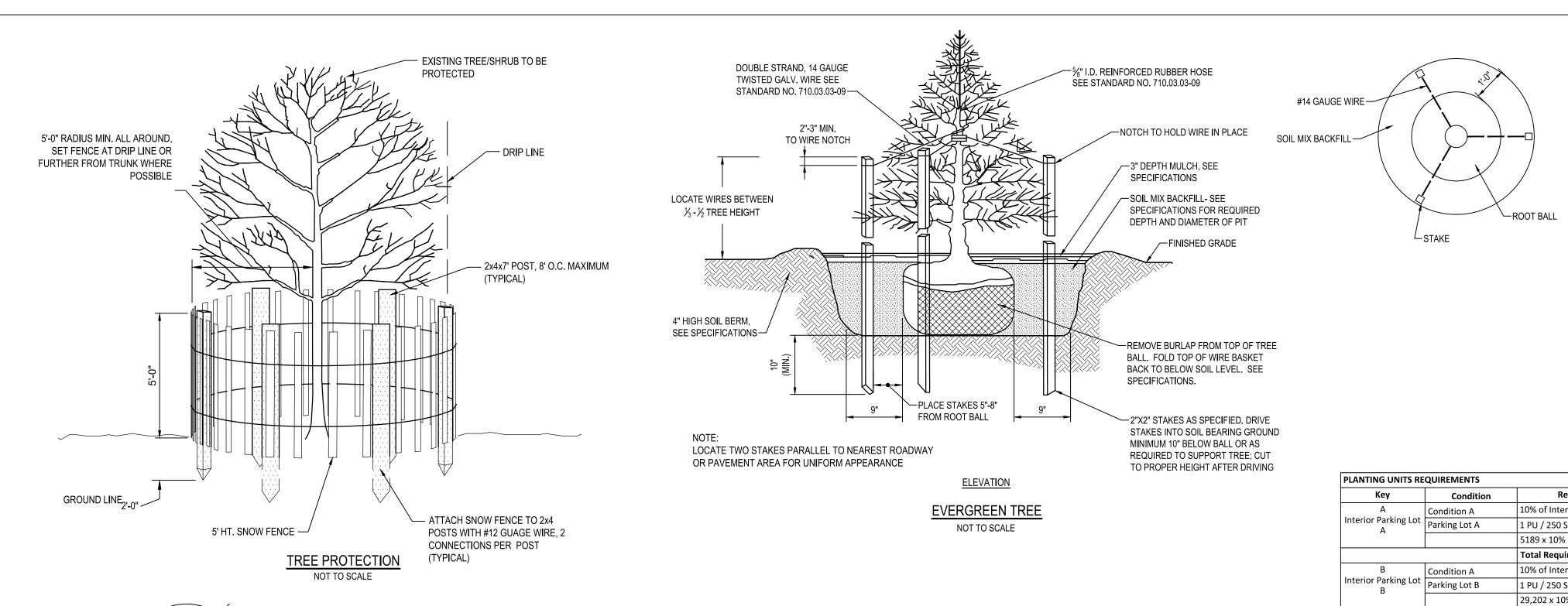


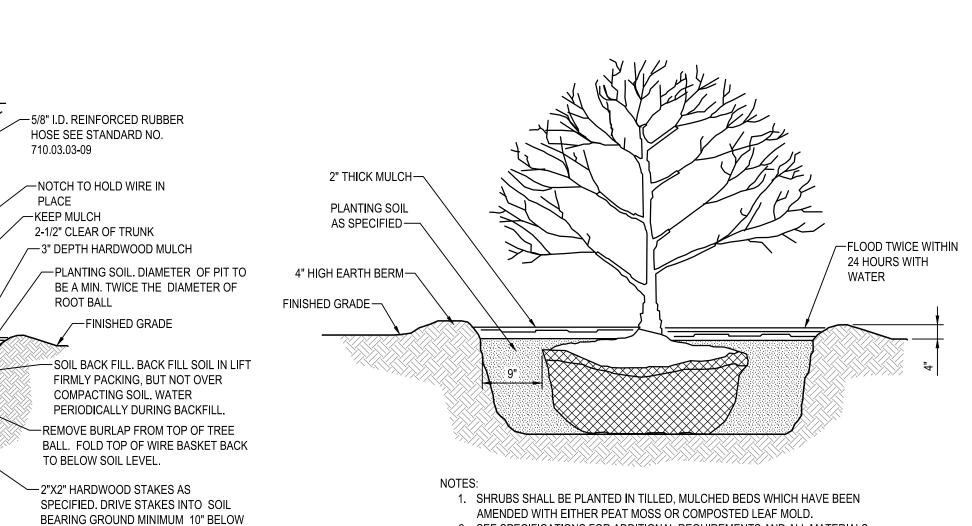












AMENDED WITH EITHER PEAT MOSS OR COMPOSTED LEAF MOLD. 2. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND ALL MATERIALS.

ELEVATION

NOT TO SCALE

Key	Condition	Required Planting Units	Proposed Planting Units
Α	Condition A	10% of Interior to be landscaped	(1 Major Tree 3 Shrubs) = 5.0 P
Interior Parking Lot A	Parking Lot A	1 PU / 250 SF	(3 LG shrubs) = 2.0 PU
7		5189 x 10% = 518.9 SF parking	
	•	Total Required = 2.07 PU	Total Provided = 7.0 PU
В	Condition A	10% of Interior to be landscaped	(1 Major Tree 3 Shrubs) = 12Pl
Interior Parking Lot B	Parking Lot B	1 PU / 250 SF	(2 Minor Trees 5 Shrubs)= 10/=!
D		29,202 x 10% = 2,920.2 SF to be landscaped	(3 LG shrubs) =40/ 13.3PU
	•	Total Required = 11.68 PU	Total Provided = 30.33 PU
С	Condition A	1 Per 10 LF	(1 Major Tree 3 Shrubs) = 7 PU
Residental Screening	NORTH PL Residence		(2 Minor Trees 5 Shrubs)= 4.5 P (3 Evergreens) = 3.0 PU
Sercennig		222 LF/ 10 = 22.2	(3 LG shrubs) = 7.5/2.5 PU
		Total Required = 22.2 PU	Total Provided = 17.0 PU
D	Condition A	1 Per 10 LF	(1 Major Tree 3 Shrubs) = 6 PU
Residental Screening	WEST PL Residence		(3 Evergreens) = 2.0 PU (3 LG shrubs) = 15.0 PU
Screening		258 LF/ 10 = 25.8	(5 LG SIII (DS) = 15.0 PO
	•	Total Required = 25.8 PU	Total Provided = 23.0 PU
E	Condition A	1 Per 15 LF	(1 Major Tree 3 Shrubs) = 8 PU
Industry Screening	WEST PL @ Marina		(2 Minor Trees 5 Shrubs)= 11.0 (3 Evergreens) = 10.6 PU
		861 LF/ 15 = 57.4	(3 LG shrubs) = 5.3PU
	•	Total Required = 57.3 PU	Total Provided = 34.9 PU
F	Condition A	1 Per 15 LF	(1 Major Tree 3 Shrubs) = 20 P
ROAD R/W	EAST PL @ ROAD		(3 Evergreens) = 2.0 PU (3 LG shrubs) = 29.3PU
		849 LF/ 15 = 56.6	(3 LG SIII (DS) = 29.3F0
		Total Required = 56.6 PU	Total Provided = 51.3 PU
G	Condition A	1 Per 1500 SF	(1 Major Tree 3 Shrubs) = 74 Pl
OPEN SPACE INTERIOR AREAS	INTERIOR PLANTINGS		(2 Minor Trees 5 Shrubs)= 7.5 P (3 Evergreens) = 1.0PU
INTERIOR AREAS		210667 SF/ 1500 = 140.4 PU	(3 LG shrubs) = 11.0 PU
	l .	Total Required = 140.4 PU	Total Provided = 95.1 PU
Н	Condition A	1 Per 15 LF	(1 Major Tree 3 Shrubs) = 1 PU
Dumpster Screening	Parking Lot B		(3 Evergreens) = 1.6 PU
Screening		32 LF/ 15 = 2.13	(3 LG shrubs) = 2.60 PU
		Total Required = 2.13	Total Provided = 5.2
		Total Required = 318.18 PU	Total Provided = 263.83

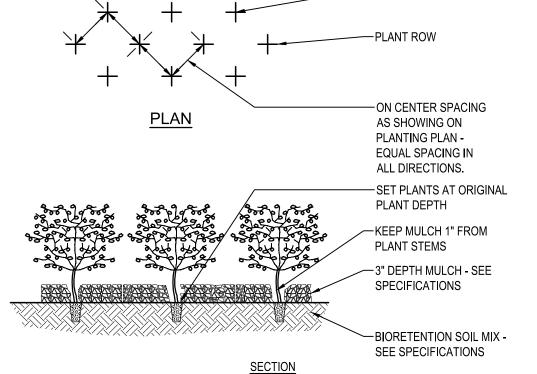
Qty.	SYM.	Botanical Name	Common Name	Size (Min.)	Root	Remarks
Major Decid				, , , , , ,		11011141110
26	AS	Acer saccharum 'Legacy'	Sugar Maple Legacy	2.5" Cal.	B&B	As Shown
6	BN	Betula nigra	River Birch	2.5" Cal.	B&B	As Shown
5	LS	Liquidambar styraciflua	Sweet Gum	2.5" Cal.	B&B	As Shown
16	NS	Nyssa sylvatica 'Wildfire'	Black Tupelo	2.5" Cal.	B&B	As Shown
11	РО	Platanus occidentalis	American Sycamore	2.5" Cal.	B&B	As Shown
30	QPH	Quercus phellos	Willow Oak	2.5" Cal.	B&B	As Shown
44	UA	Ulmus americana 'Delaware'	Delaware Americana Elm	2.5" Cal.	B&B	As Shown
138		Total				
Minor Decid	uous Trees					
33	AA	Amelanchier arborea	Downy Serviceberry	1-1/2" Cal.	B&B	As Shown
10	СВ	Carpinus betulus 'Fastigiata'	European Hornbeam	1-1/2" Cal.	B&B	As Shown Limbed up to 6'
8	СС	Cercis canadensis	Eastern Redbud	1-1/2" Cal.	B&B	Multistem
6	CF	Cornus florida	Flowering Dogwood	1-1/2" Cal.	B&B	As Shown
19	LI	Lagerstroemia indica x fauriei 'Muskogee'	Muskogee Crape Myrtle	1-1/2" Cal.	B&B	As Shown
76		Total		<u> </u>		•
Evergreen 1	rees					
9	IO	llex opaca 'Jersey Princess'	American Holly	8-10' Hgt.	B&B	As Shown
24	JV	Juniperus virginiana 'Canaertil'	Eastern Red Cedar	10-12' Hgt.	B&B	As Shown
17	TD	Taxodium distichum	Bald cypress	8-10' Hgt.	B&B	As Shown
12	ТО	Thuja occidentalis	Eastern Arborvitae	8-10' Hgt.	B&B	As Shown
62		Total				
Shrubs						
37	AP	Asculus parviflora	Bottlebrush Buckeye	#7	Cont.	3' O.C.
73	CA	Clethra alnifolia 'Hummingbird'	Summersweet	#3	Cont.	3' O.C.
19	CS	Cornus sericea 'Baileyi'	RedTwig Dogwood	#5	Cont.	6' O.C.
93	НА	Hydrangea aborscens 'Annabelle'	Smooth Hydrangea	#5	Cont.	di
41	HQ	Hydrangea quercifolia 'Ruby Slippers'	Oakleaf Hydrangea	#5	Cont.	di
43	IV	llex verticillatta	Winterberry Holly	#5	Cont.	6' O.C.
9	IV	llex verticillatta 'Southern Gentleman'	Winterberry Holly	#5	Cont.	6' O.C. 1 male per 7
60	VS	Itea virginica 'Henry's Garnet'	Virginia Sweetspire	#3	Cont.	3' O.C.
115	MP	Myrica pensylvanica	Northern Bayberry	#5	Cont.	5' O.C.
40	RM	Rhododendron maximum	Rosebay Rhododendron	3-4' Hgt.	Cont.	5' O.C.

GENERAL NOTES:

- 1. ALL PLANT MATERIAL SHALL CONFORM TO THE SIZES GIVEN IN THE PLANT LIST AND SHALL BE NURSERY GROWN IN ACCORDANCE WITH THE "AMERICAN STANDARDS FOR NURSERY STOCK, ANSI Z60,1-2004" LATEST EDITION PREPARED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, 230 SOUTHERN BUILDING. WASHINGTON, DC, 20005.
- 2. CONTRACTOR MUST VERIFY THE CORRECT LOCATION OF ANY EXISTING UTILITIES WHICH ARE UNDERGROUND, PRIOR TO PLANT INSTALLATION. THE CONTRACTOR SHALL CALL MISS UTILITY (1-800-257-7777) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND REQUIREMENTS FOR CONSTRUCTION.
- 3. ALL PLANT BEDS SHALL BE MULCHED WITH A MINIMUM OF 2" AND A MAXIMUM OF 3" LAYER OF MULCH WITHIN TWO DAYS AFTER PLANTING.THIS SHALL BE SHREDDED HARDWOOD BARK, AND SHALL COVER ENTIRELY THE PLANTING BED.
- 4. ALL PLANTS SHALL BE GUARANTEED TO REMAIN ALIVE AND HEALTHY FOR A PERIOD OF TWO FULL YEARS AFTER INITIAL ACCEPTANCE. ANY REPLACEMENT PLANTS, REQUIREMENTS, ETC. AND METHOD OF PLACING SHALL COMPLY WITH THE REQUIREMENTS SPECIFIED HEREIN AND ON THE DRAWINGS.
- 5. EXISTING SOIL IN BED AREAS SHALL BE AMENDED TO A DEPTH OF 12". SOIL MIX IN ALL BEDS SHALL BE 2/3 EXISTING SOIL, AND 1/3 ORGANIC MATERIAL SUCH AS LEAFGRO.
- 6. PLANT MATERIAL AVAILABILITY MAY VARY AT THE TIME OF CONSTRUCTION. ANY SUBSTITUTIONS ARE TO BE OF EQUIVALENT TYPE AND SIZE (OR LARGER), AND MUST BE APPROVED BY LANDSCAPE ARCHITECT BEFORE
- 7. WHERE THE CONDITION EXISTS THAT BALLED AND BURLAPPED TREES ARE DELIVERED IN WIRE BASKETS, THE WIRE BASKETS SHALL BE CUT DOWN THE SIDE OF EACH MESH AND PEELED AWAY FROM THE ROOTBALL OR REMOVED IN ENTIRETY. NO PORTION OF THE WIRE BASKET SHALL REMAIN INTACT AROUND THE SIDES OF THE ROOTBALL OR EXTEND ABOVE FINISHED GRADE.
- 8. ANY DAMAGE TO THE EXISTING UTILITIES, BUILDINGS, PAVING, CURB, WALLS, AND VEGETATION (NOT SO DESIGNATED FOR REMOVAL ON THESE PLANS) SHALL BE REPAIRED TO PREVIOUS CONDITION OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE SEEDED UNLESS NOTED OTHERWISE.
- 9. ADJUST TREE LOCATIONS IN THE FIELD IF LOCATIONS SHOWN CONFLICT WITH EXISTING VEGETATION NOT
- PICKED UP IN SURVEY.

10. SEED DISTURBED AREAS.

BID SET



GROUND COVER NOT TO SCALE

#14 GAUGE WIRE-

STAKE-SOIL MIX BACKFILL

DOUBLE STRAND, 14 GAUGE

TWISTED GALV. WIRE SEE STANDARD NO. 710.03.03-09-

2½" CAL. TRESS - STAKES 5-6' TRUNK FLARE—

3"-3 ½" CAL. TRESS - STAKES 4" HIGH SOIL

6'-7' ABOVE GRADE BERM, SEE

ABOVE GRADE

SET HOLE DEPTH SO

TRUCK FLARE IS PARTIALLY

VISIBLE AFTER PLANTING

LOCATE TWO STAKES PARALLEL TO

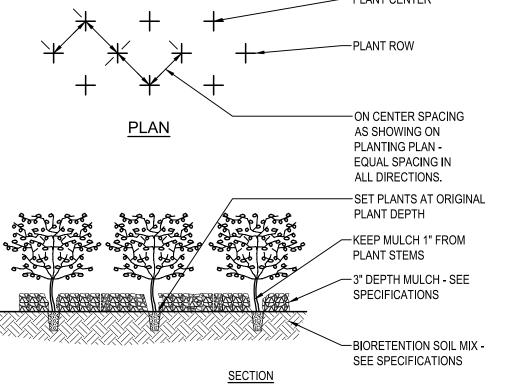
FOR UNIFORM APPEARANCE

NEAREST ROADWAY OR PAVEMENT AREA

2"-3" MIN.

TO WIRE NOTCH

SPECIFICATIONS_



−PLACE STAKES | 9"

ROOT BALL

ELEVATION

<u>DECIDUOUS T</u>REE

NOT TO SCALE

5"-8" FROM

BALL OR AS REQUIRED TO SUPPORT

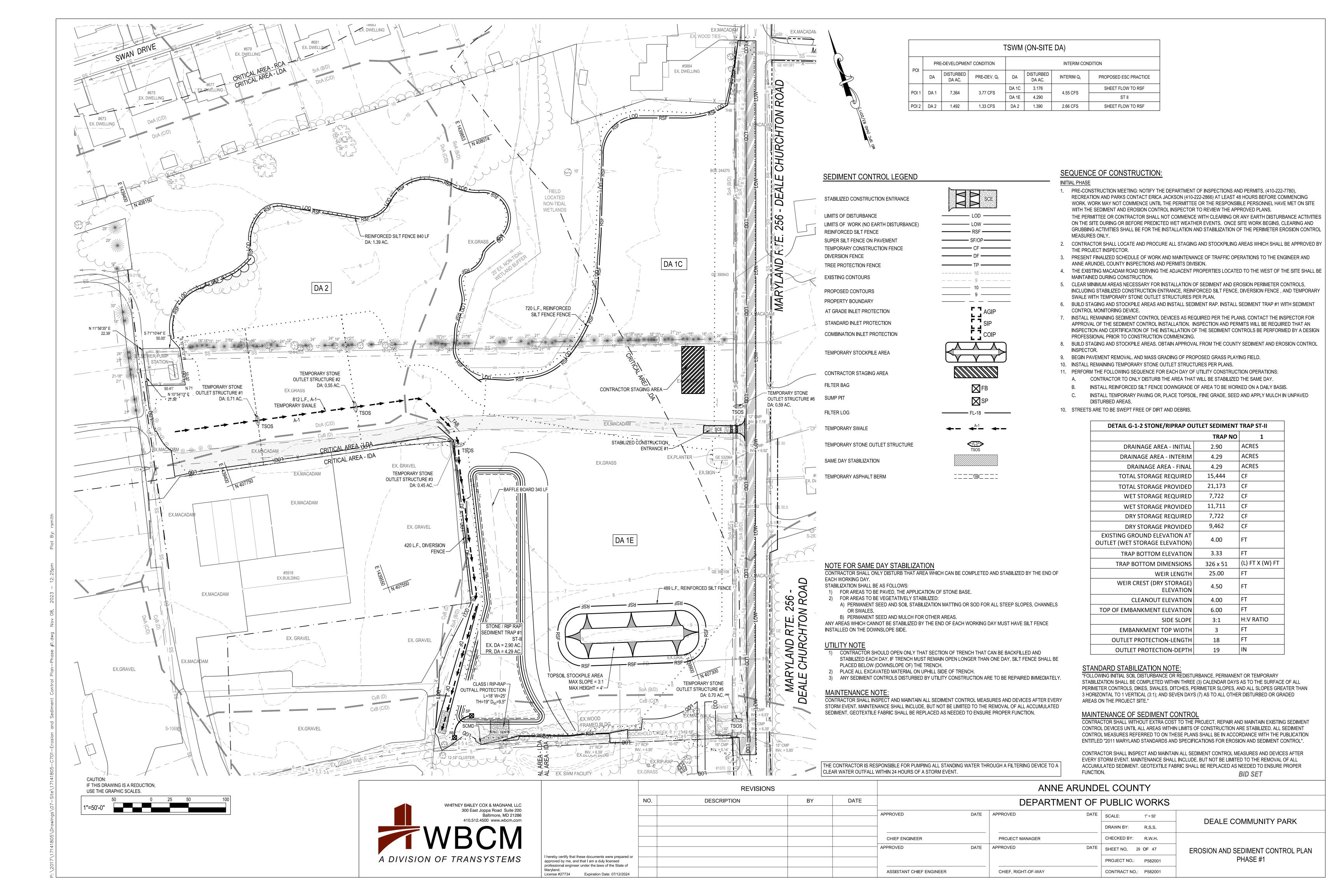
TREE; CUT TO PROPER HEIGHT AFTER

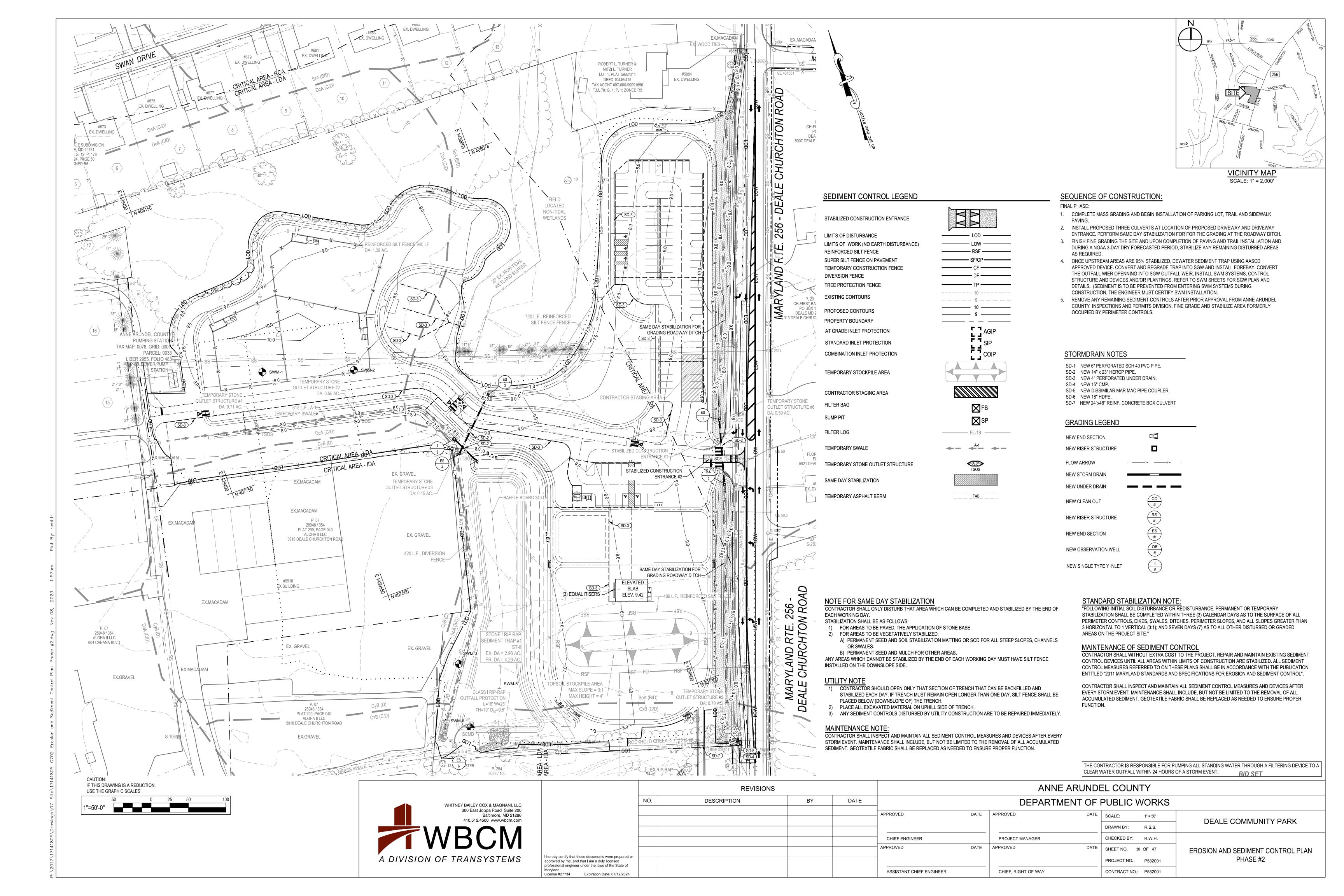
MINIMUM LANDSCAPE MAINTENANCE REQUIREMENTS:

- 1. LAWN AREAS SHALL BE MOWED TO A HEIGHT OF 2 TO 3 INCHES AND NOT ALLOWED TO REACH A HEIGHT OF 4
- INCHES BEFORE MOWING. 2. ALL CURBS AND WALKS SHALL BE EDGED AS NEEDED.
- 3. ALL LAWN AREAS ADJACENT TO BUILDING FACES OR STRUCTURES SHALL BE TRIMMED. 4. A SLOW RELEASE NITROGEN BALANCED FERTILIZER WITH A 2-1-1 RATIO SHALL BE APPLIED AT A RATE OF 2 POUNDS OF NITROGEN PER 1000 SQUARE FEET IN SEPTEMBER, OCTOBER, AND FEBRUARY.
- 5. LIME SHALL BE APPLIED AT THE RATE DETERMINED BY A SOILS REPORT. 6. IT IS RECOMMENDED THAT LAWN AREAS BE TREATED IN MID-MARCH TO EARLY APRIL WITH PER-EMERGENT
- HERBICIDE (BETASAN) OR EQUAL APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE. 7. A POST-EMERGENT HERBICIDE (TRIMEC) OR EQUAL IS RECOMMENDED TO BE SPRAYED ON LAWN AREAS IN
- THE LATE SPRING OR THE EARLY FALL. FOLLOW MANUFACTURER'S RATES AND RECOMMENDATIONS. 8. INSECTICIDES AND FUNGICIDES ARE RECOMMENDED FOR INSECT AND DISEASE CONTROL.
- 9. RESEED BARE AREAS OF LAWN AS NECESSARY. YEARLY AERATION IS RECOMMENDED. 10. ALL TRASH, LITTER, AND DEBRIS SHALL BE REMOVED FROM LAWN AREAS, PARKING LOTS, AND SHRUB BEDS
- 11. MULCH ALL SHRUB AND GROUNDCOVER BEDS YEARLY WITH 3 INCHES OF HARD WOOD BARK. 12. PERMIT SHRUBS AND TREES TO GROW AND ENLARGE TO THEIR DESIGN SIZE. CONSULT PROJECT LANDSCAPE
- ARCHITECT FOR DETAILS.
- 13. PRUNE TREES IN ACCORDANCE WITH LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METRO-POLITAN AREAS.

WH	ITNEY BAILEY COX & MAGNANI, LLC 300 East Joppa Road Suite 200 Baltimore, MD 21286 410.512.4500 www.wbcm.com
W	BCM
A DIVISION OF	TRANSYSTEMS

		REVISIONS				ANNE ARUNC	EL COUNTY			
	NO. DESCRIPTION BY DATE				DEPARTMENT OF PUBLIC WORKS					
					APPROVED DATE	APPROVED DATE	SCALE: AS SHOWN	DEALE COMMUNITY PARK		
							DRAWN BY: R.S.S.	DEALE COMMUNITY PARK		
					CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: R.W.H.			
					APPROVED DATE	APPROVED DATE	SHEET NO. 28 OF 47	LANDSCADE NOTES AND DETAILS		
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of							PROJECT NO.: P582001	LANDSCAPE NOTES AND DETAILS		
Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P582001			





2018 VEGETATIVE ESTABLISHMENT

FOLLOWING INITIAL SOIL DISTURBANCES OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

1. PERMANENT SEEDING:

- A. SOIL TESTS: LIME AND FERTILIZER WILL BE APPLIED PER SOIL TESTS RESULTS FOR SITES GREATER THAN 5 ACRES. SOIL TESTS WILL BE DONE AT COMPLETION OF INITIAL ROUGH GRADING OR AS RECOMMENDED BY THE SEDIMENT CONTROL INSPECTOR. RATES AND ANALYSES WILL BE PROVIDED TO THE GRADING INSPECTOR AS WELL AS THE CONTRACTOR. OCCURRENCE OF ACID SULFATE SOILS (GRAYISH BLACK COLOR) WILL REQUIRE COVERING WITH A MINIMUM OF 12 INCHES OF CLEAN SOIL WITH 6 INCHES MINIMUM CAPPING OF TOP SOIL. NO STOCKPILING OF MATERIAL IS ALLOWED. IF NEEDED, SOIL TESTS SHOULD BE DONE BEFORE AND AFTER A 6-WEEK INCUBATION PERIOD TO ALLOW OXIDATION OF SULFATES. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
- a. SOIL PH SHALL BE BETWEEN 6.0 AND 7.0.
- b. SOLUBLE SALTS SHALL BE LESS THAN 500 PARTS PER MILLION (PPM).
- c. THE SOIL SHALL CONTAIN LESS THAN 40% CLAY BUT ENOUGH FINE GRAINED MATERIAL (> 30% SILT PLUS clay) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION IS IF LOVEGRASS OR SERECIA LESPEDEZA IS TO BE PLANTED, THEN A SANDY SOIL (< 30% SILT PLUS CLAY) WOULD BE ACCEPTABLE.
- d. SOIL SHALL CONTAIN 1.5% MINIMUM ORGANIC MATTER BY WEIGHT.

THE SOIL TO A DEPTH OF AT LEAST 3-5 INCHES ON SLOPES FLATTER THAN 3:1.

- e. SOIL MUST CONTAIN SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
- f. IF THESE CONDITIONS CANNOT BE MET BY SOILS ON SITE, ADDING TOPSOIL IS REQUIRED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS FROM THE 2011 MARYLAND STANDARDS AND
- SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR AMENDMENTS MADE AS RECOMMENDED BY A CERTIFIED AGRONOMIST. B. SEEDBED PREPARATION: AREA TO BE SEEDED SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3-5 INCHES. THE TOP LAYER SHALL BE LOOSENED BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING OCCURS. FOR SITES LESS THAN 5 ACRES, APPLY 100 POUNDS DOLOMITIC LIMESTONE AND 21 POUNDS OF 10-10-10 FERTILIZER PER 1,000 SQUARE FEET. HARROW OR DISK LIME AND FERTILIZER INTO
- C. SEEDING: APPLY 5-6 POUNDS PER 1.000 SQUARE FEET OF TALL FESCUE BETWEEN FEBRUARY 1 AND APRIL 30 OR BETWEEN AUGUST 15 AND OCTOBER 31. APPLY SEED UNIFORMLY ON A MOIST FIRM SEEDBED WITH A CYCLONE SEEDER, CULTIPACKER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEEDS AND FERTILIZER, RECOMMENDED ON STEEP SLOPES ONLY). MAXIMUM SEED DEPTH SHOULD BE 1/4 INCH IN CLAYEY SOILS AND ½ INCH IN SANDY SOILS WHEN USING OTHER THAN THE HYDROSEEDER METHOD. IRRIGATE WHERE NECESSARY TO SUPPORT ADEQUATE GROWTH UNTIL VEGETATION IS FIRMLY ESTABLISHED. IF OTHER SEED MIXES ARE TO BE USED, SELECT FROM TABLE B3 AND B5 OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- D. MULCHING: MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. DURING THE TIME PERIODS WHEN SEEDING IS NOT PERMITTED, MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING. MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 POUNDS PER 1,000 SQUARE FEET (2 BALES). APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. IF A MULCH-ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES.
- . SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE MOVEMENT BY WIND OR WATER. THE FOLLOWING METHODS ARE PERMITTED:
- i. USE A MULCH-ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING MULCH, HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY.
- ii. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
- iii. LIQUID BINDERS MAY BE USED. APPLY AT HIGHER RATES AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. BINDERS LISTED IN THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR APPROVED EQUAL SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURERS.
- iv. LIGHTWEIGHT PLASTIC NETTING MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO THE GROUND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

2. TEMPORARY SEEDING:

LIME: 100 POUNDS OF DOLOMITIC LIMESTONE PER 1,000 SQUARE FEET.

FERTILIZER: 15 POUNDS OF 10-10-10 PER 1.000 SQUARE FEET.

SEED: PERENNIAL RYE - 0.92 POUNDS PER 1,000 SQUARE FEET (FEBRUARY 1 THROUGH APRIL 30 OR AUGUST 15 THROUGH OCTOBER 31). MILLET - 0.92 POUNDS PER 1,000 SQUARE FEET (MAY 1 THROUGH AUGUST 15).

MULCH: SAME AS 1 D AND E ABOVE.

3. NO FILLS MAY BE PLACED ON FROZEN GROUND. ALL FILL IS TO BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS, EACH LAYER HAVING A LOOSE THICKNESS OF NOT MORE THAN 8 INCHES. ALL COMPACTION REQUIREMENTS ARE IN ACCORDANCE TO ANNE ARUNDEL COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AS WELL AS THE AA COUNTY DESIGN MANUAL AND STANDARD DETAILS. FILLS FOR POND EMBANKMENTS SHALL BE COMPACTED AS PER MD-378 CONSTRUCTION SPECIFICATIONS. ALL OTHER FILLS SHALL BE COMPACTED SUFFICIENTLY SO AS TO BE STABLE AND PREVENT EROSION AND SLIPPAGE.

4. PERMANENT SOD:

INSTALLATION OF SOD SHOULD FOLLOW PERMANENT SEEDING DATES. SEEDBED PREPARATION FOR SOD SHALL BE AS NOTED IN SECTION (B) ABOVE. PERMANENT SOD IS TO BE TALL FESCUE, STATE APPROVED SOD; LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOD. SOD IS TO BE LAID ON THE CONTOUR WITH ALL ENDS TIGHTLY ABUTTING, JOINTS ARE TO BE STAGGERED BETWEEN ROWS. WATER AND ROLL OR TAMP SOD TO INSURE POSITIVE ROOT CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1. AS SHOWN, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH AN APPROVED EROSION CONTROL NETTING, ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOD IS NOT TO BE INSTALLED ON FROZEN GROUND. SOD SHALL NOT BE TRANSPLANTED WHEN MOISTURE CONTENT (DRY OR WET) AND/OR EXTREME TEMPERATURE MAY ADVERSELY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE PERFORMED TO ENSURE ESTABLISHMENT OF SOD.

. MINING OPERATIONS:

SEDIMENT CONTROL PLANS FOR MINING OPERATIONS MUST INCLUDE THE FOLLOWING SEEDING DATES AND MIXTURES: FOR SEEDING DATES OF FEBRUARY 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH OCTOBER 31, USE SEED MIXTURE OF TALL FESCUE AT THE RATE OF 2 POUNDS PER 1,000 SQUARE FEET AND SERICEA LESPEDEZA AT THE MINIMUM RATE OF 0.5 POUNDS PER 1,000 SQUARE FEET.

TOPSOIL SHALL BE APPLIED AS PER THE STANDARD AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS FROM

THE REQUIREMENTS SET FORTH IN THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. USE OF THESE VEGETATIVE ESTABLISHMENT SPECIFICATIONS DOES NOT PRECLUDE THE PERMITTEE OR CONTRACTOR FROM MEETING ALL OF

PERMANENT SOD:

INSTALLATION OF SOD SHOULD FOLLOW PERMANENT SEEDING DATES. PERMANENT SOD IS TO BE TALL FESCUE, MARYLAND APPROVED SOD; LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOD. SOD IS TO BE LAID ON THE CONTOUR WITH ALL ENDS TIGHTLY ABUTTING. JOINTS ARE TO BE STAGGERED BETWEEN ROWS. WATER AND ROLL OR TAMP SOD TO INSURE POSITIVE ROOF CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH AN APPROVED EROSION CONTROL NETTING. ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOD IS NOT TO BE APPLIED ON FROZEN GROUND. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (DRY OR WET) AND/OR EXTREME TEMPERATURE MAY ADVERSELY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE PERFORMED TO INSURE ESTABLISHED SOD.

2. MINING OPERATIONS:

- SEDIMENT CONTROL PLANS FOR MINING OPERATIONS MUST INCLUDE THE FOLLOWING SEEDING DATES AND MIXTURES:
- FOR SEEDING DATES OF FEBRUARY 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH OCTOBER 31 USE SEED MIXTURE OF TALL FESCUE AT THE RATE OF 2 POUNDS PER 1,000 SQUARE FEET AND SERICEA LESPEDEZA AT THE RATE OF 0.5 POUNDS+ PER 1,000 SQUARE FEET.
- FOR SEEDING DATES OF MAY 1 THROUGH AUGUST 14 USE SEED MIXTURE OF TALL FESCUE AT THE RATE OF 2 POUNDS PER 1,000 SQUARE FEET AND WEEPING LOVEGRASS AT THE RATE OF 0.1 POUND PER 1,000 SQUARE FEET.
- TOPSOIL SHALL BE APPLIED AS PER THE STANDARD AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS FROM THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- NOTE: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."

SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

A. SOIL PREPARATION

- A. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
- INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. 2. PERMANENT STABILIZATION
- A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED
- FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE: I. SOIL PH BETWEEN 6.0 AND 7.0.
- II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
- III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
- IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
- V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
- APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED
- OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
- APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY

DISTURBED AREAS.

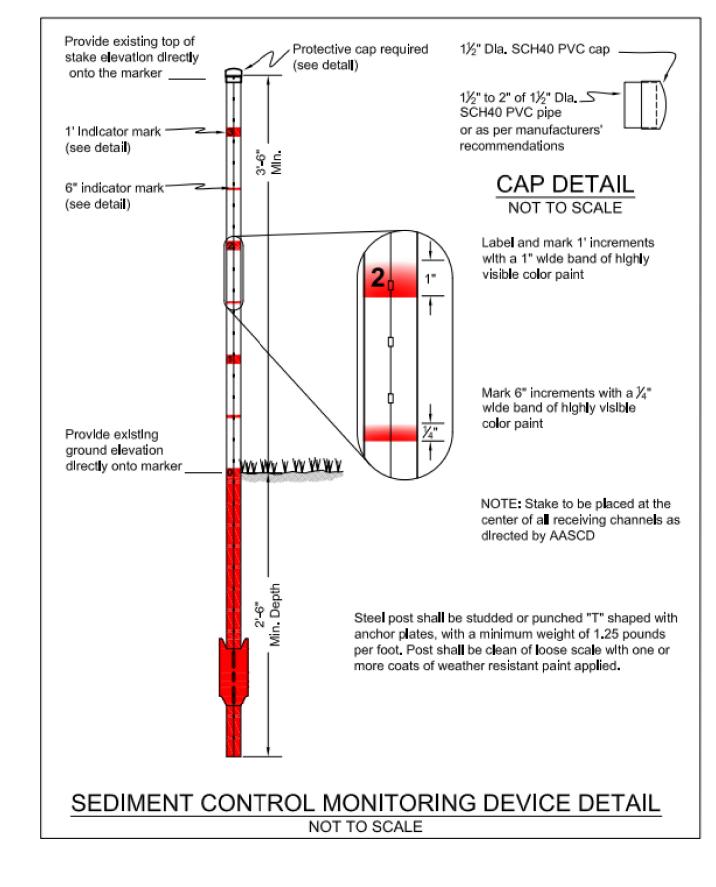
- 1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS. LOW PH. MATERIALS TOXIC TO PLANTS. AND/OR UNACCEPTABLE SOIL GRADATION
- 2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
- 3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
- THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
- THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- 4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.
- 5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA: A. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER
- MATERIALS LARGER THAN 1½ INCHES IN DIAMETER. B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS,
- NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED. C. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

6. TOPSOIL APPLICATION EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.

- UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- C. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

- 1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES. 2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST
- BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER. 3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS
- THROUGH A #20 MESH SIEVE. 4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- 5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE(200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.



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	SITE ANALYSIS	
1.	TOTAL AREA OF PARCEL:	12.03 ACRES
2.	TOTAL DISTURBED AREA:	8.856 ACRES
3.	TOTAL AREA TO BE STABILIZED:	8.856 ACRES
	a. TOTAL IMPERVIOUS AREA:	4.28 ACRES
	b. TOTAL TO BE VEGETATIVELY STABILIZED:	4.576 ACRES
4.	PROPOSED NEW IMPERVIOUS AREA:	4.02 ACRES
5.	ESTIMATED CUT:	7,755 CU.YDS.
6.	ESTIMATED FILL:	6,969 CU.YDS.

NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUNOFF IS DIRECTED TO A MDE APPROVED SEDIMENT CONTROL DEVICE

NOTE TO CONTRACTOR: SEDIMENT AND EROSION CONTROL SHALL BE STRICTLY ENFORCED.

THE EARTHWORK QUANTITIES SHOWN HEREON ARE FOR INFORMATION PURPOSES ONLY. WBCM MAKES NO GUARANTEES OF ACCURACY OF QUANTITIES OR BALANCE OF SITE. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY OF ACTUAL EARTHWORK QUANTITIES ENCOUNTERED

DURING CONSTRUCTION.

STANDARD STABILIZATION NOTE

1. EROSION CONTROL MATTING SHALL BE INSTALLED ON ALL SLOPE AREAS 3:1 OR GREATER.

- 2. FILL SOILS MAY BE AVAILABLE FROM ON-SITE SOIL BORROW AREA PROVIDED THE SOILS MEET THE PROJECT SPECIFICATIONS.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SOILS (TOP SOIL AND FILL SOIL) MEETING THE PROJECT SPECIFICATIONS FROM ON-SITE AND OFF-SITE SOURCES.

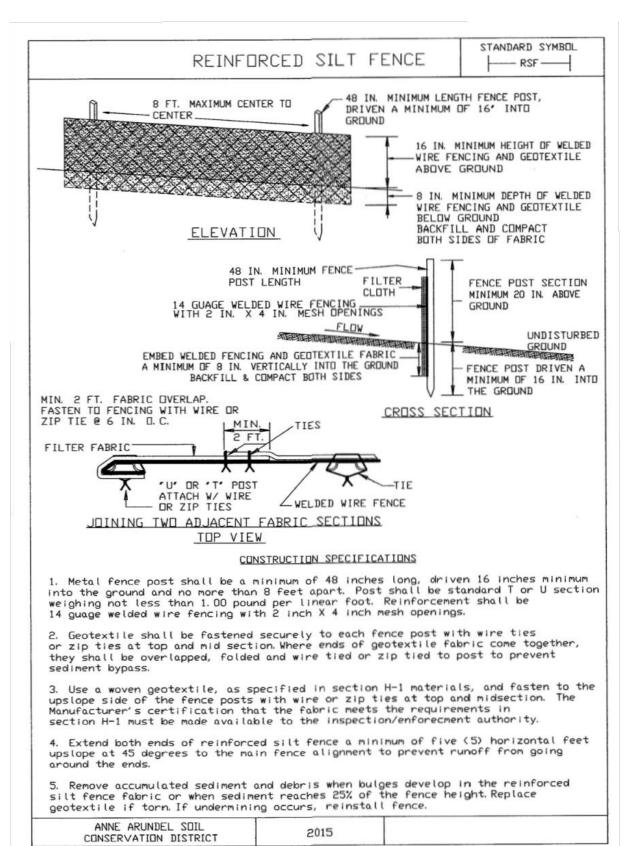
FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE. PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

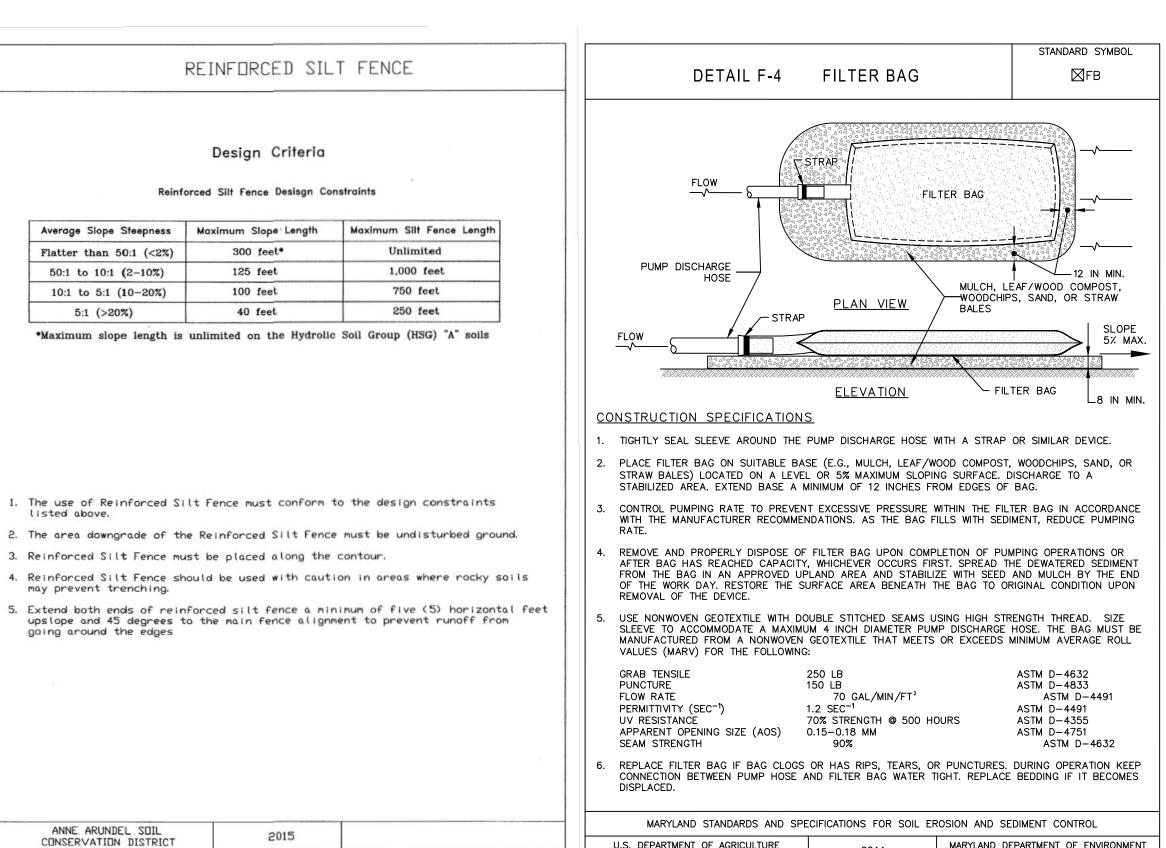
- a.) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1), AND
- .) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

BID SET



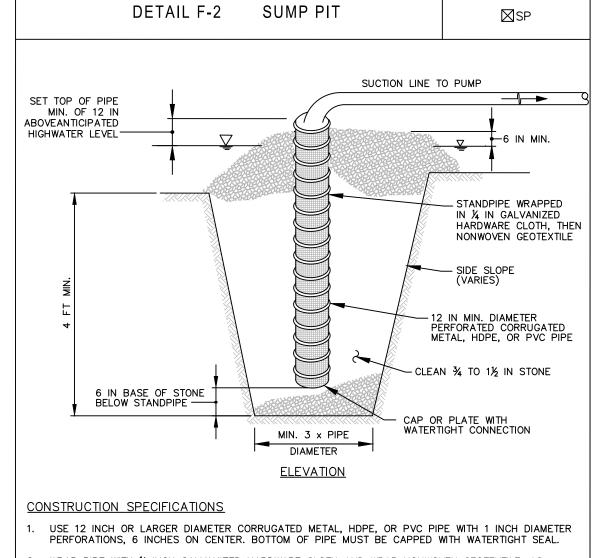
		REVISIONS			ANNE ARUNDEL COUNTY						
	NO. DESCRIPTION BY DATE				DEPARTMENT OF PUBLIC WORKS						
					APPROVED	DATE	APPROVED D	SCALE: AS SHOWN			
								DRAWN BY: R.S.S.	DEALE COMMUNITY PARK		
					CHIEF ENGINEER		PROJECT MANAGER	CHECKED BY: R.W.H.			
					APPROVED	DATE	APPROVED D	ATE SHEET NO. 31 OF 47	EROSION AND SEDIMENT CONTROL NOTES		
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of								PROJECT NO.: P582001	EROSION AND SEDIMENT CONTROL NOTES		
Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P582001			





DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

MOUNTABLE BERM



STANDARD SYMBOL

WRAP PIPE WITH $\frac{1}{4}$ INCH GALVANIZED HARDWARE CLOTH AND WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH. 3. EXCAVATE PIT TO THREE TIMES THE PIPE DIAMETER AND FOUR FEET IN DEPTH. PLACE ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.

4. SET TOP OF PIPE MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION. BACKFILL PIT AROUND THE PIPE WITH 3/4 TO 1/5 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE

6. DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.

A SUMP PIT REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, REMOVE PERFORATED PIPE AND REPLACE GEOTEXTILE AND STONE. KEEP POINT OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT

TABLE H.1: GEOTEXTILE FABRICS NONWOVEN SILT FILM MONOFILAMENT GEOTEXTILE GEOTEXTILE GEOTEXTILE MINIMUM AVERAGE ROLL VALUE PROPERTY TEST METHOD CD | MD | CD | MD | CE GRAB TENSILE STRENGTH 200 LB | 200 LB | 370 LB | 250 LB | 200 LB | 200 LB GRAB TENSILE ELONGATION 15% 10% 15% 15% 50% 50% TRAPEZOIDAL TEAR STRENGTH PUNCTURE STRENGTH 450 LB ASTM D-6241 450 LB 900 LB U.S. SIEVE 30 U.S. SIEVE 70 U.S. SIEVE 70 APPARENT OPENING SIZE² ASTM D-4751 (0.59 MM) (0.21 MM) (0.21 MM) FRMITTIVITY 0.05 SEC 1 0.28 SEC 1 1.1 SEC 70% STRENGTH 70% STRENGTH 70% STRENGTH ULTRAVIOLET RESISTANCE ASTM D-4355 RETAINED AT 500 HOURS

H-1 STANDARDS AND SPECIFICATIONS FOR MATERIALS

¹ ALL NUMERIC VALUES EXCEPT APPARENT SIZE (AOS) REPRESENT MINIMUM AVERAGE ROLL VALUES (MARV). MARV IS CALCULATED AS THE TYPICAL MINUS TWO STANDARD DEVIATIONS. MD IS MACHINE DIRECTION; CD IS CROSS DIRECTION.

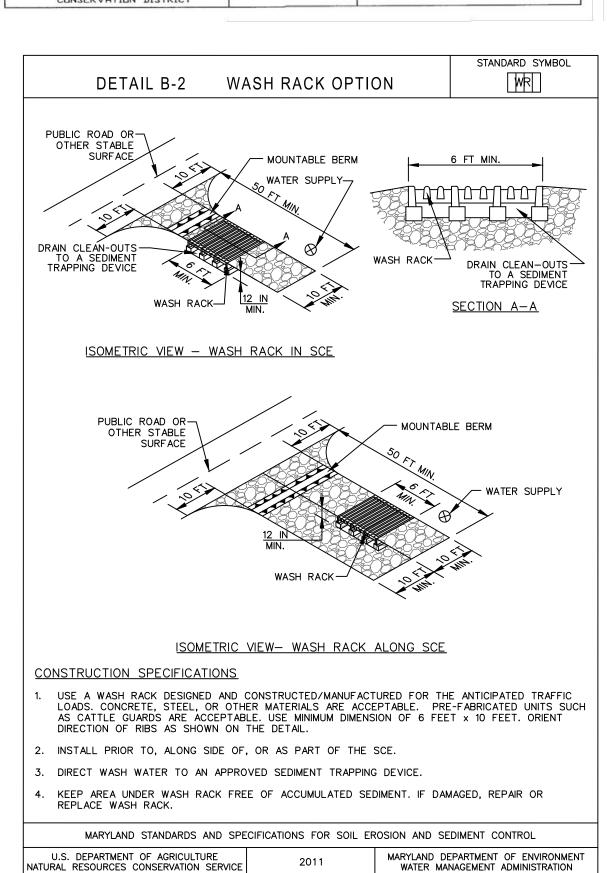
VALUES FOR AOS REPRESENT THE AVERAGE MAXIMUM OPENING.

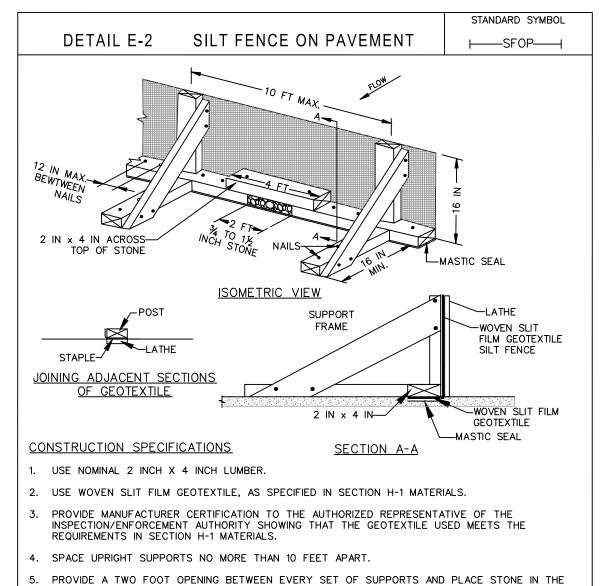
GEOTEXTILES MUST BE EVALUATED BY THE NATIONAL TRANSPORTATION PRODUCT EVALUATION PROGRAM (NTPEP) AND CONFORM TO THE VALUES IN TABLE H.1.

THE GEOTEXTILE MUST BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS AND MUST BE ROT AND MILDEW RESISTANT. THE GEOTEXTILE MUST BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS AND COMPOSED OF A MINIMUM OF 95 PERCENT BY WEIGHT OF POLYOLEFINS OR POLYESTERS, AND FORMED INTO A STABLE NETWORK SO THE FILAMENTS OR YARNS RETAIN THEIR DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, INCLUDING SELVAGES.

WHEN MORE THAN ONE SECTION OF GEOTEXTILE IS NECESSARY, OVERLAP THE SECTIONS BY AT LEAST ONE FOOT. THE GEOTEXTILE MUST BE PULLED TAUT OVER THE APPLIED SURFACE. EQUIPMENT MUST NOT RUN OVER EXPOSED FABRIC. WHEN PLACING RIPRAP ON GEOTEXTILE, DO NOT EXCEED A ONE FOOT DROP HEIGHT.

RID SFT





KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS.

WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN

10. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT

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PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT

SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.

SECURE BOARDS TO PAVEMENT WITH 40D 5 INCH MINIMUM LENGTH NAILS.

2015

Average Slope Steepness

125 feet

100 feet

40 feet

Flatter than 50:1 (<2%)

50:1 to 10:1 (2-10%)

10:1 to 5:1 (10-20%)

5:1 (>20%)

listed above.

may prevent trenching.

going around the edges

ANNE ARUNDEL SOIL

CONSERVATION DISTRICT

EXTEND GEOTEXTILE UNDER 2x4.

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ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.

SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

CONSTRUCTION SPECIFICATIONS PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE

<u>PLAN VIEW</u>

AND WIDTH OF ENTRANCE <u>PROFILE</u>

50 FT MIN.

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—EARTH FILL

- EXISTING PAVEMENT

EXISTINGPAVEMENT

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AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT . PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.

I. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND

SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR

ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER

TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

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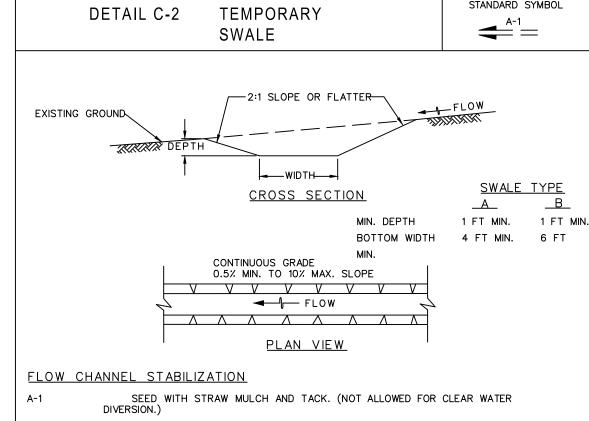
NATURAL RESOURCES CONSERVATION SERVICE

STANDARD SYMBOL DETAIL E-7 TEMPORARY STONE **₹** OUTLET STRUCTURE MAXIMUM DRAINAGE AREA = 1/2 ACRI ISOMETRIC VIEW L = 6 FT MIN.6 IN MIN.— EARTH DIKE 76 IN MIN.⇒ <u>←</u>18 IN MIN. └─ GROUND LINE PERFORATIONS FOR DEWATERING, 1/2 N MIN. 3 ROWS 1 IN DIAMETER HOLES 2 IN x 10 IN x 1: ∠2 IN x 10 IN x 12 FT BAFFLE BOARD SECTION A-A 2:1 OR FLATTER-BOARD EXCAVATE AS NECESS. 2 TO 3 IN STONE-- WOVEN MONOFILAMENT 4 IN EMBEDMENT GEOTEXTILE NONWOVEN GEOTEXTILE -POST 2 IN x 2 IN x 18 IN MIN. SECTION B-B MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

	DETAIL E-7		RARY STONE T STRUCTURE		STANDARD SYMBOL
<u>co</u>	NSTRUCTION S	PECIFICATION	<u>IS</u>		
1.	PROVIDE STORAGE	VOLUME AS SPE	CIFIED ON APPROVED	PLANS.	
2.	USE NONWOVEN GE	OTEXTILE ON IN	TERFACE BETWEEN GRO	DUND AND STONE	Ξ.
		OF 4 INCHES I			S INCHES ON CENTER, BOARD MINIMUM OF 12
		OTEXTILE ON UP	R EQUIVALENT RECYCL STREAM FACE AND COV		PLACE WOVEN NIMUM OF 6 INCHES OF
	USE NONWOVEN AN MATERIALS.	ID WOVEN MONOFI	LAMENT GEOTEXTILES	AS SPECIFIED	IN SECTION H-1
	SET WEIR CREST LENGTH OF 6 FEE		HES LOWER THAN THE ST.	TOP OF EARTH	DIKE. USE MINIMUM
		STONE FACING W			WEIR CREST, REPLACE
		STABILIZE DIS	STRUCTURE, GRADE AF TURBED AREA WITH TO		
					2 OF 2
	MARYLAND ST	ANDARDS AND SPE	CIFICATIONS FOR SOIL E	EROSION AND SE	DIMENT CONTROL

WHITNEY BAILEY COX & MAGNANI, LLC 300 East Joppa Road Suite 200 Baltimore, MD 21286 410.512.4500 www.wbcm.com A DIVISION OF TRANSYSTEMS

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		REVISIONS					ANNE ARUN	DEL COUNTY		
	NO.	DESCRIPTION	BY	DATE	DEPARTMENT OF PUBLIC WORKS					
					APPROVED	DATE	APPROVED DA	SCALE: AS SHOWN		
								DRAWN BY: R.S.S.	DEALE COMMUNITY PARK	
					CHIEF ENGINEER		PROJECT MANAGER	CHECKED BY: R.W.H.		
					APPROVED	DATE	APPROVED DA	SHEET NO. 32 OF 47	EROSION AND SEDIMENT CONTROL DETAIL	
I hereby certify that these documents were prepared o approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License #27734 Expiration Date: 07/12/2024								PROJECT NO.: P582001	EROSION AND SEDIMENT CONTROL DETAIL	
					ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P582001		



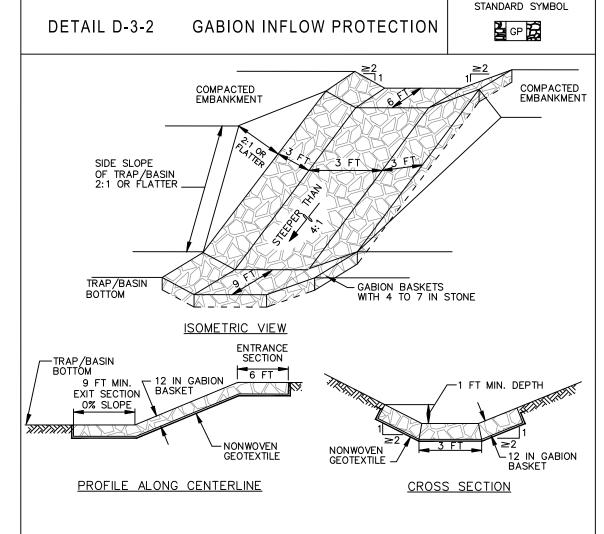
SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.

4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND. A-3/B-3 CONSTRUCTION SPECIFICATIONS

- REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF TEMPORARY SWALE.
- 2. EXCAVATE OR SHAPE TEMPORARY SWALE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
- 3. STABILIZE TEMPORARY SWALE WITHIN THREE DAYS OF INSTALLATION. STABILIZE SWALES USED FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
- CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
- MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP TEMPORARY SWALE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
- UPON REMOVAL OF TEMPORARY SWALE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

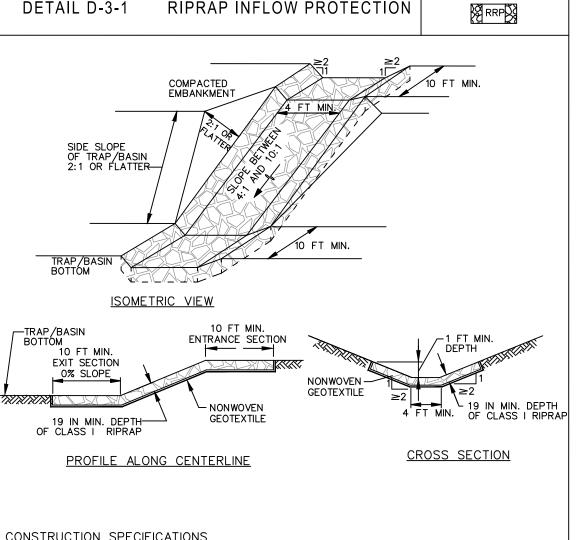
STANDARD SYMBOL



CONSTRUCTION SPECIFICATIONS

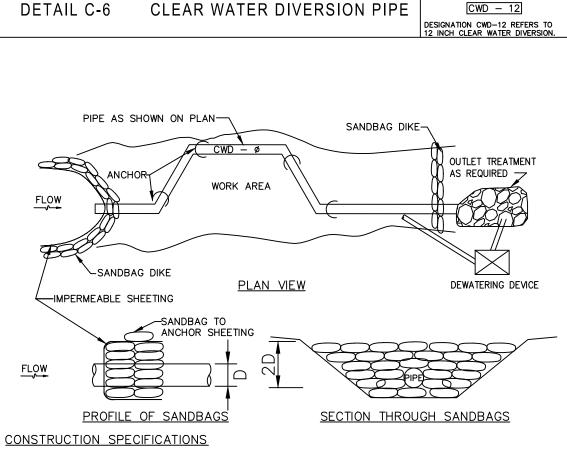
- PROVIDE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND ALONG SIDES OF ALL GABION BASKETS.
- USE BASKETS MADE OF MINIMUM 11 GAUGE WIRE.
- 3. CONSTRUCT GABION INFLOW PROTECTION BY ARRANGING 9 X 3 X 1 FOOT GABION BASKETS TO FORM A TRAPEZOIDAL SECTION WITH A 3 FOOT BOTTOM WIDTH, 1 FOOT MINIMUM DEPTH, 3 FOOT SIDE WALLS, AND 2:1 OR FLATTER SIDE SLOPES. FILL GABION BASKETS WITH 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE WITHOUT REBAR OR WEIR MESH.
- INSTALL ENTRANCE AND EXIT SECTIONS AS SHOWN ON THE PROFILE
- INSTALL GABIONS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
- BLEND GABIONS INTO EXISTING GROUND.
- MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. KEEP POINTS OF INFLOW AND OUTFLOW FREE OF EROSION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



- PROVIDE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND ALONG SIDES OF ALL RIPRAP.
- CONSTRUCT INFLOW CHANNEL WITH CLASS I RIPRAP OR EQUIVALENT RECYCLED CONCRETE LINING TO A MINIMUM DEPTH OF 19 INCHES (2 x D_{50}) AND A 1 FOOT DEEP FLOW CHANNEL. INFLOW RIPRAP PROTECTION CHANNEL MUST HAVE A TRAPEZOIDAL CROSS SECTION WITH 2:1 OR FLATTER SIDE SLOPES AND A 4 FOOT MINIMUM BOTTOM WIDTH.
- INSTALL ENTRANCE AND EXIT SECTIONS AS SHOWN ON THE PROFILE.
- 4. BLEND RIPRAP INTO EXISTING GROUND.
- MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. KEEP POINTS OF INFLOW AND OUTFLOW FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION



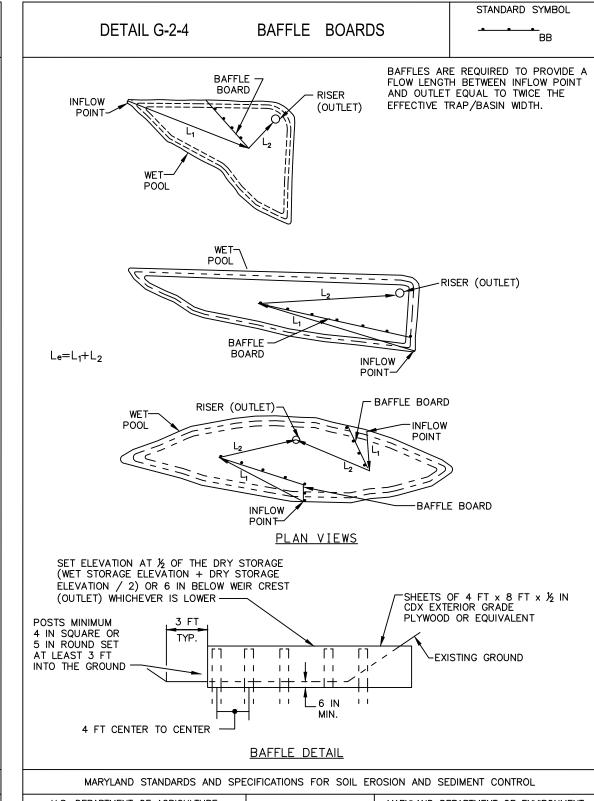
STANDARD SYMBOL

STANDARD SYMBOL

FLEXIBLE PIPE IS PREFERRED. HOWEVER, CORRUGATED METAL PIPE OR EQUIVALENT PVC PIPE CAN BE USED, MAKE ALL JOINTS WATERTIGHT

- FOR SANDBAGS USE MATERIALS THAT ARE RESISTANT TO ULTRA-VIOLENT RADIATION, TEARING, AND PUNCTURE AND WOVEN TIGHTLY ENOUGH TO PREVENT LEAKAGE OF FILL MATERIAL.
- 3. USE 10 MIL OR THICKER, UV RESISTANT, IMPERMEABLE SHEETING OR OTHER APPROVED MATERIAL
- THAT IS IMPERMEABLE AND RESISTANT TO PUNTURING AND TEARING. 4. PLACE IMPERMEABLE SHEETING SUCH THAT UPGRADE PORTION OVERLAPS DOWNGRADE PORTION BY
- SET HEIGHT OF SANDBAG DIKE AT TWICE THE PIPE DIAMETER. MAINTAIN HEIGHT ALONG LENGTH OF SANDBAG DIKE. PLACE DOUBLE ROW OF SANDBAGS.
- 6. AT A MINIMUM, SECURELY ANCHOR DIVERSION PIPE AT EACH DOWNGRADE JOINT.
- 7. SET OUTLET END OF DIVERSION PIPE LOWER THAN INLET END.
- 8. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
- 9. DEWATER WORK AREA USING AN APPROVED EROSION AND SEDIMENT CONTROL PRACTICE AS SPECIFIED ON APPROVED PLAN.
- . KEEP POINT OF DISCHARGE FREE OF EROSION. MAINTAIN WATER TIGHT CONNECTIONS AND POSITIVE DRAINAGE. REPLACE SANDBAGS AND IMPERMEABLE SHEETING IF TORN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION NATURAL RESOURCES CONSERVATION SERVICE

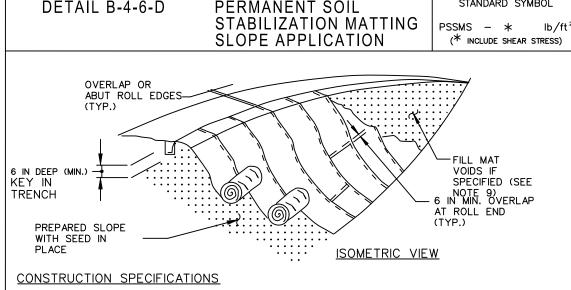


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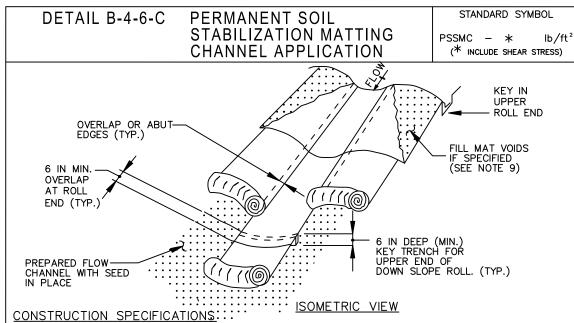
WATER MANAGEMENT ADMINISTRATION

BID SET



- USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
- . USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN, IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT
- . SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE BOTTOM.
- PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS, PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING S, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND
- UNROLL MATTING DOWN SLOPE. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
- . OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE DOWNSLOPE
- KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL,
- AND TAMPING TO SECURE THE MAT END IN THE KEY. 8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
- 9. IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED, ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT
- 10. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

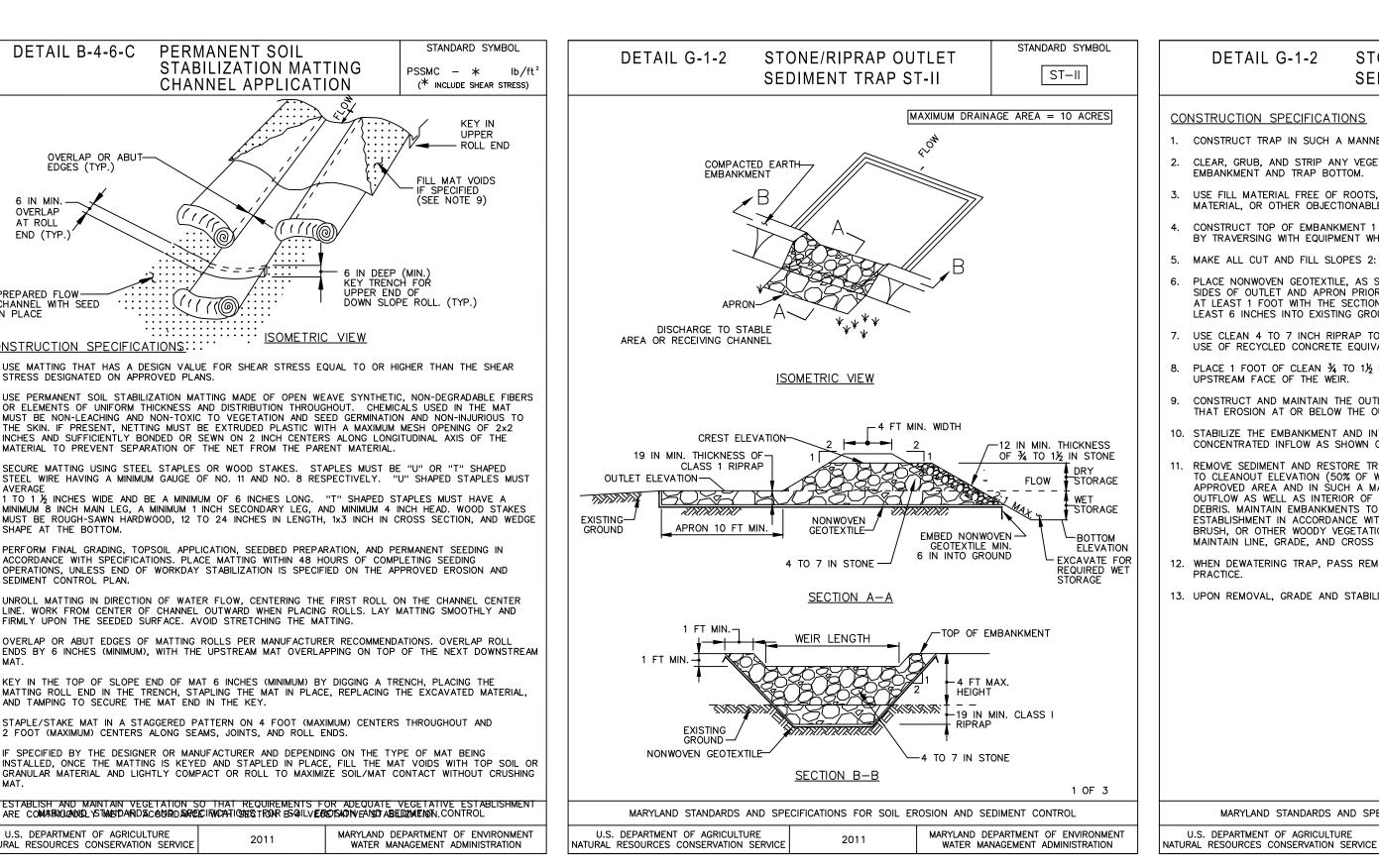
MARYLAND STANDARDS AND SPE	ECIFICATIONS FOR SOIL I	EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

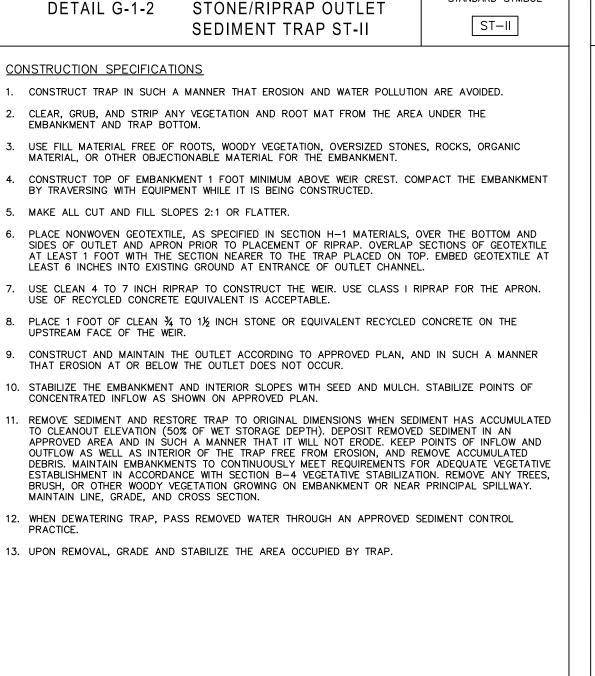


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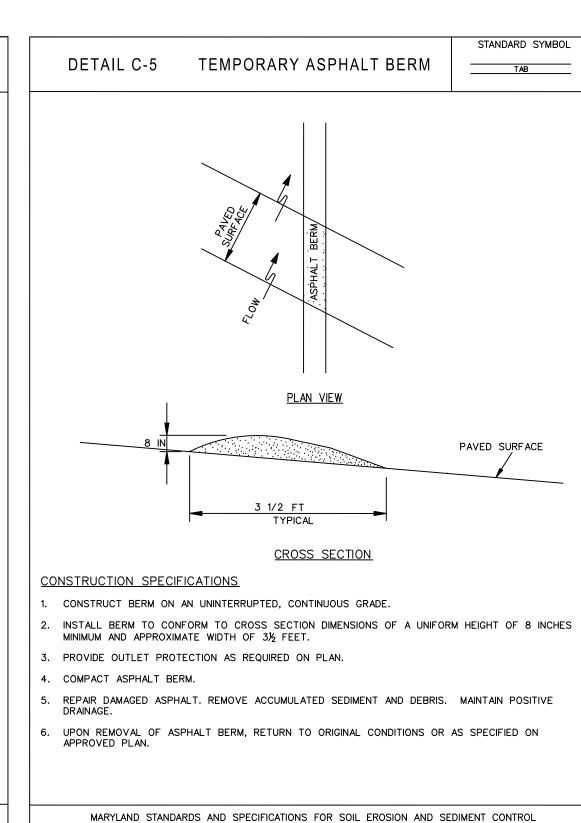
- USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO HE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL. SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST
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- UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING. . OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLI
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- IO. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE COMARNILANDS STANDARD SCONDO SARDE FROM TIGHTS FROM BSQILVEROS AND ABEDDIMENTA. CONTROL

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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL



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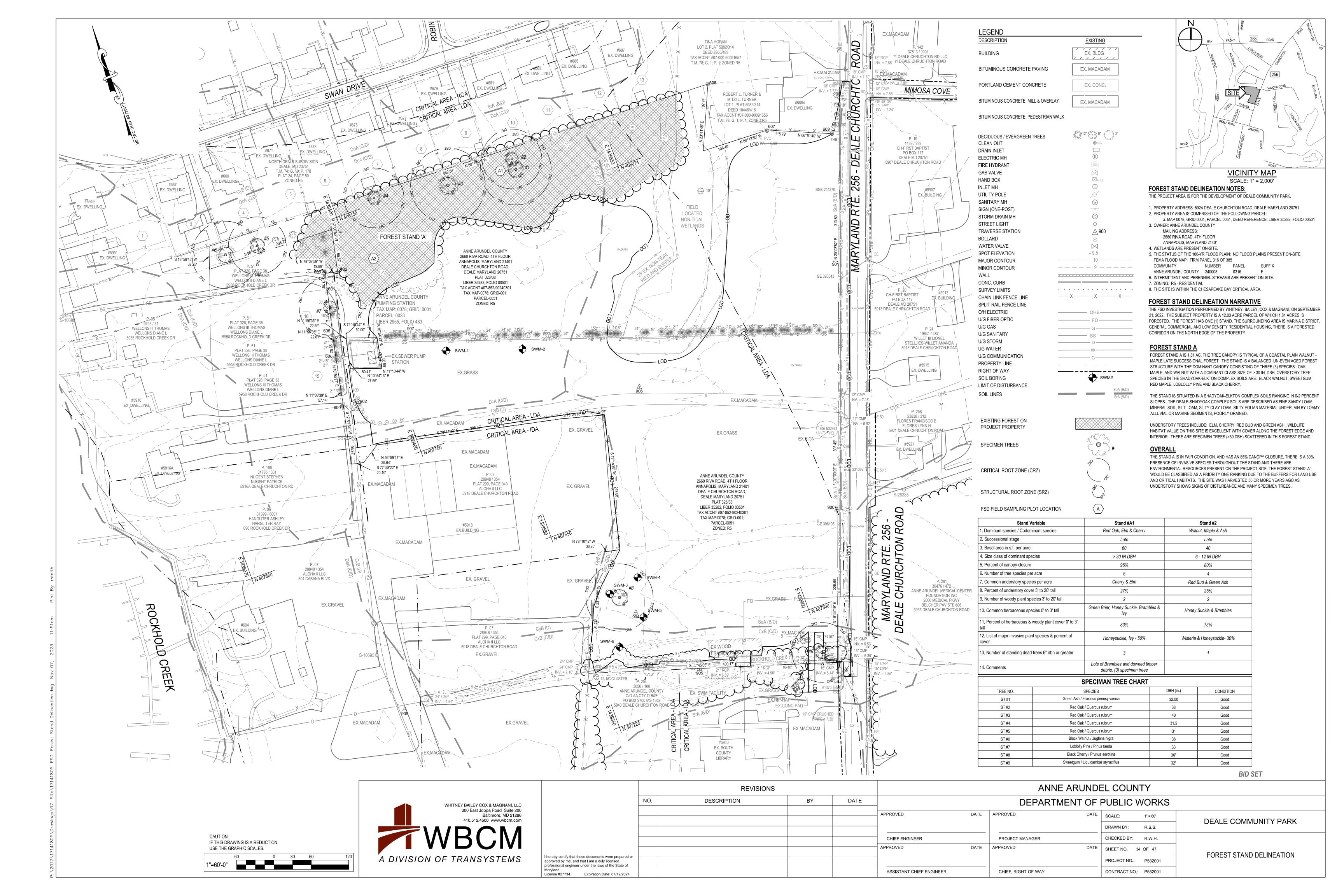
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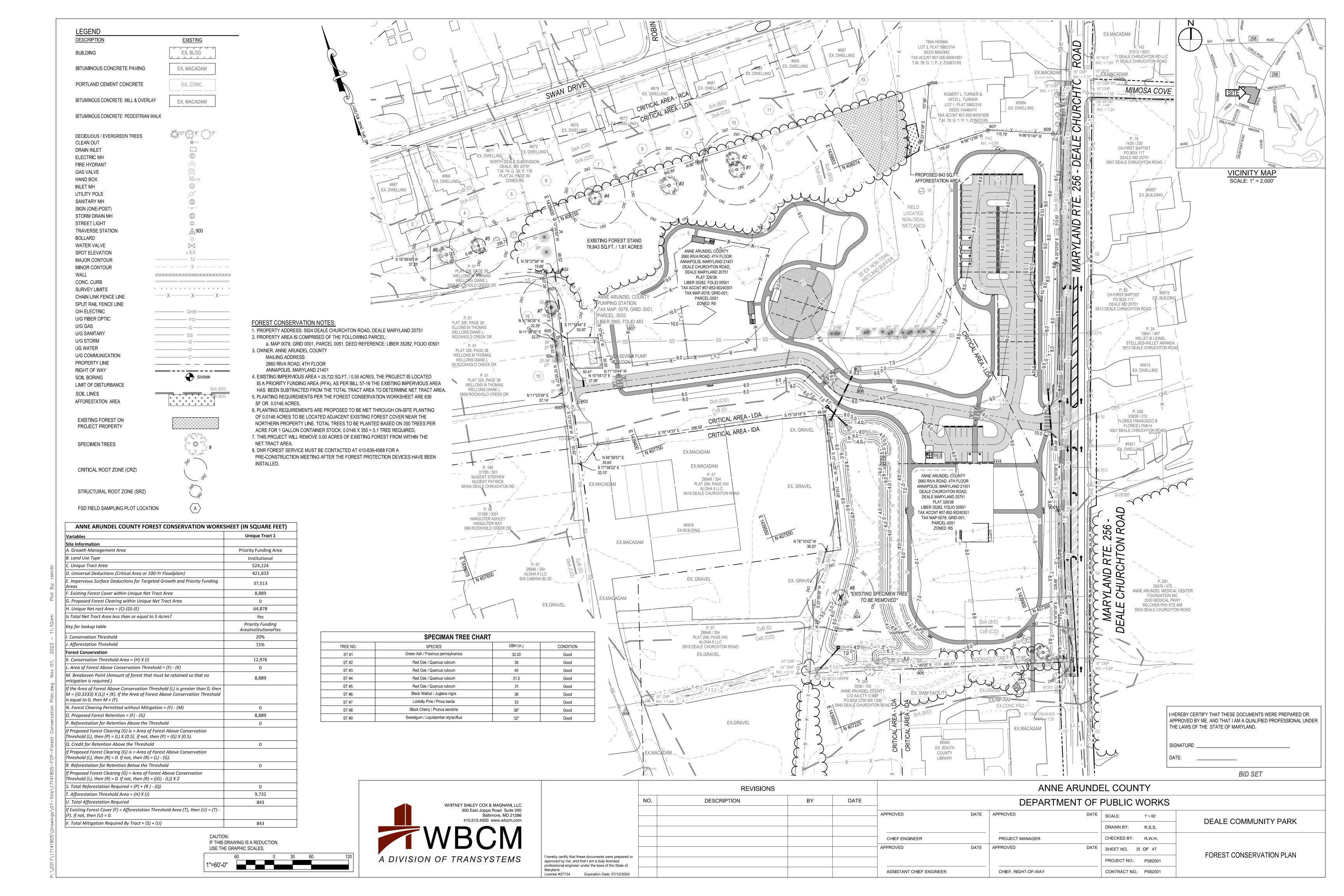
REVISIONS						ANNE ARUND	EL COUNTY	
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							DRAWN BY: R.S.S.	DEALE COMMUNITY PARK
					CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: R.W.H.	
					APPROVED DATE	APPROVED DATE	SHEET NO. 33 OF 47	EROSION AND SEDIMENT CONTROL DETAIL
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of							PROJECT NO.: P582001	EROOIOIVAND OEDIMENT GOIVINGE DETAIL
Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P582001	

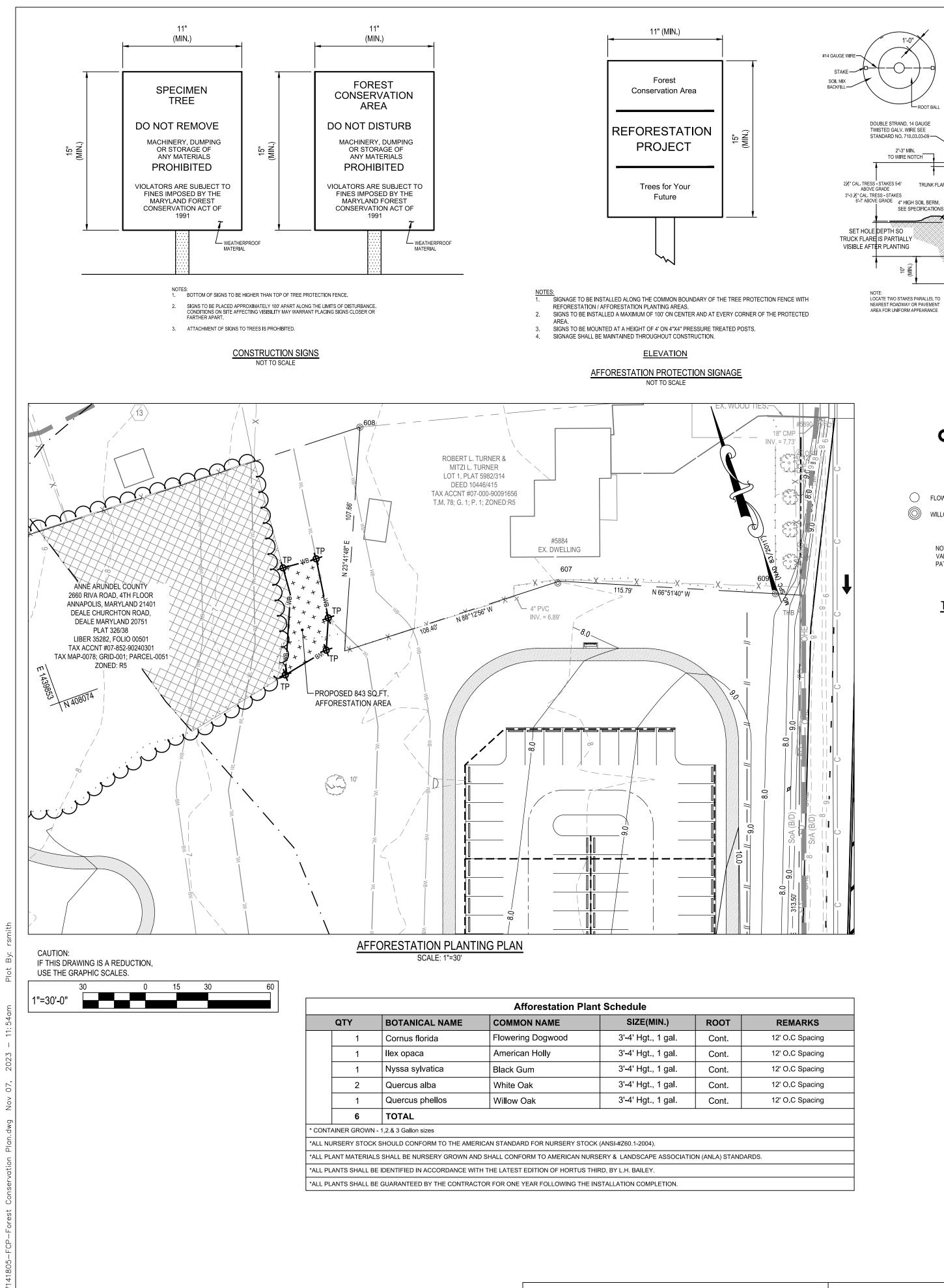
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

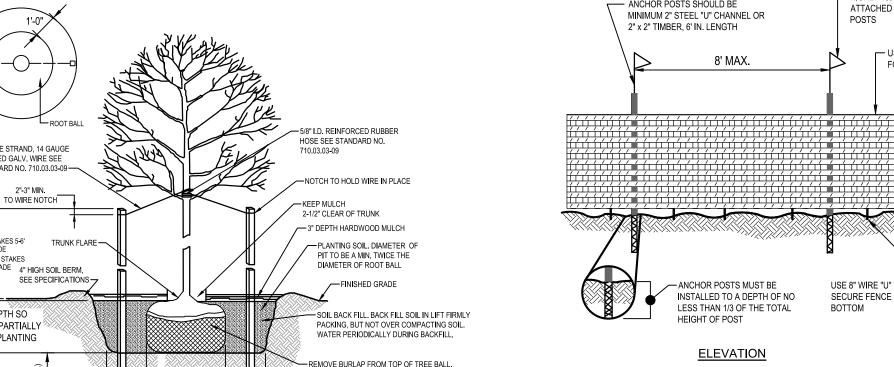
2 OF 3

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE









FOLD TOP OF WIRE BASKET BACK TO BELOW

"X2" HARDWOOD STAKES AS SPECIFIED

DRIVE STAKES INTO SOIL BEARING GROUND

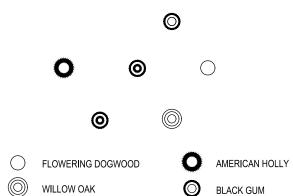
MINIMUM 10" BELOW BALL OR AS REQUIRED TO

ELEVATION DECIDUOUS TREE DETAI

NOT TO SCALE

5"-8" FROM

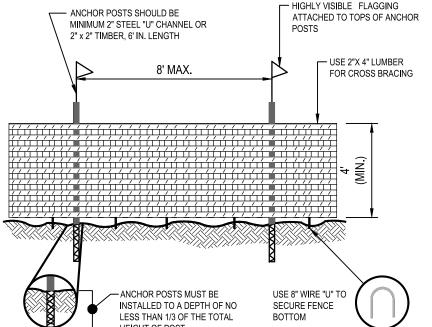
ROOT BALL



WHITE OAK VARY PLANTING OF SPECIES TO ACHIEVE RANDOM

5 PLANT LAYOUT

TYPICAL PLANTING LAYOUT



BLAZE ORANGE OR BLUE PLASTIC MESH FENCE FOR FOREST PROTECTION DEVICE ONLY. BOUNDARIES OF RETENTION AREA WILL BE ESTABLISHED AS PART OF THE FOREST CONSERVATION PLAN

BOUNDARIES OF RETENTION AREA SHALL BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.

AVOID DAMAGE TO CRITICAL ROOT ZONE. DO NOT DAMAGE OR SEVER LARGE ROOTS WHEN INSTALLING PROTECTION SIGNS ARE REQUIRED

6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

NOT TO SCALE

AFFORESTATION OR REFORESTATION MAINTENANCE AND REPLACEMENT REQUIREMENTS

A TWO YEAR MAINTENANCE AND REPLACEMENT WARRANTY PERIOD IS REQUIRED FOR ALL NEWLY PLANTED MATERIALS. THE MAINTENANCE AND REPLACEMENT WARRANTY E PRO PERIOD SHALL COMMENCE UPON THE DATE OF THE WRITTEN ACCEPTANCE BY THE OWNER OF THE PLANTED AREAS. A WRITTEN WARRANTY WILL BE DELIVERED TO THE OWNER UPON ACCEPTANCE OF THE PLANTED AREAS. THE CONTRACTOR RESPONSIBLE FOR THE INITIAL PLANTING OPERATIONS AND RELATED WORK SHALL PROVIDE MAINTENANCE AND REPLACEMENT. ALL LANDSCAPE PLANT MATERIAL INCLUDED AS FOREST CONSERVATION CREDITS SHALL BE COVERED UNDER THE MAINTENANCE AND REPLACEMENT WARRANTY PERIOD.

THE CONTRACTOR SHALL FIELD CHECK THE NEWLY PLANTED AREA(S) AND SHALL PROVIDE THE FOLLOWING MAINTENANCE ITEMS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE WHICH SHALL BEGIN AFTER THE COMPLETION AND ACCEPTANCE OF THE INITIAL AFFORESTATION OR REFORESTATION PLANTING.

- 1. WATERING: WATERING OF ALL NEWLY PLANTED MATERIALS ONCE PER WEEK AS WEATHER PERMITS DURING THE ENTIRE INITIAL GROWING SEASON. FOLLOWING THE INITIAL GROWING SEASON, WATERING SHALL BE DONE ON AN "AS NEEDED" BASIS DEPENDING ON THE FREQUENCY OF NATURAL RAINFALL. DURING THE MONTHS OF JULY AND AUGUST AND PERIODS OF SEVERE DROUGHT, ALL NEWLY PLANTED MATERIALS SHALL BE WATERED THOROUGHLY ONCE EVERY WEEK. WATERING SHALL BE DONE DEEPLY AND SLOWLY USING AN OPEN END HOSE OR WATERING PROBE, AT LOW PRESSURE ALLOWING THE WATER TO BE ABSORBED INTO THE SOIL UNTIL THOROUGHLY SATURATED. THE WATERED AREA SHALL INCLUDE THE WHOLE ROOT ZONE AS THE TREE BECOMES MORE ESTABLISHED. 2. FERTILIZING: FERTILIZING SHALL BE APPLIED ONLY AFTER THE SOIL HAS BEEN TESTED TO DETERMINE ITS NEEDS. ORGANIC FERTILIZER SHOULD BE APPLIED IN ACCORDANCE WITH THE AMOUNTS RECOMMENDED IN THE SOIL ANALYSIS REPORT. NO FERTILIZING OF NEW PLANTED TREES SHALL BE DONE WITHIN THE FIRST GROWING SEASON AFTER INITIAL PLANTING. FOLLOWING THE FIRST GROWING SEASON, APPLY FERTILIZER AS RECOMMENDED EITHER IN LATE FALL OR EARLY SPRING
- 3. SUPPLEMENTAL MULCH: TO CONTROL UNDESIRABLE VEGETATION ADJACENT TO THE NEWLY PLANTED MATERIALS AND TO PREVENT TREE ROOTS FROM DRYING OUT, ADDITIONAL MULCH SHALL BE PLACED OVER THE EXISTING MULCH FIELD WHERE REQUIRED. CAREFULLY REMOVE ANY INVASIVE PLANTS, INCLUDING THE ROOT SYSTEM WITHIN THE MULCH FIELDS. DO NOT DAMAGE TREES IN ANY WAY DURING REMOVAL OF INVASIVE PLANTS OR MULCHING OPERATIONS.
- 4. PRUNING: REMOVE DEAD, DISEASED, DYING, AND BROKEN BRANCHES FROM ALL PLANT MATERIALS. PRUNING SHALL BE DONE CLEANLY, LEAVING NO RAGGED EDGES.

REPLACEMENT OF DEAD OR DYING MATERIALS

- 1. SURVIVAL REQUIREMENT: AREAS AT THE END OF THE SECOND GROWING SEASON SHALL MEET THE FOLLOWING MINIMUM PERCENTAGES OF TOTAL PLANTS SPECIFIED BY THE APPROVED PLAN. A. BARE ROOT SEEDLINGS OR WHIPS- 55%
 - B. CONTAINER-GROWN SEEDLING TUBES OR WHIPS WITH TREE SHELTERS- 65%
 - C. CONTAINER-GROWN 1-,2-, AND 3- GALLON- 75% D. CONTAINER-GROWN 5- AND 7- GALLON OF 1" CAL) B&B- 85%
 - E. 2" CAL. B&B- 100%.
- 2. INSPECTION: CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE AFFORESTATION OR REFORESTATION AREA(S) BY A QUALIFIED REPRESENTATIVE OF THE DPZ AND BY THE QUALIFIED PROFESSIONAL WHO PREPARED THE PLAN, AT THE BEGINNING AND AT THE END OF THE GROWING SEASON TO OBSERVE ANY PROBLEMS, MONITOR SURVIVAL RATE AND SPECIFY NECESSARY REMEDIAL ACTIONS NEEDED TO CORRECT EXISTING PROBLEMS. THE INSPECTION SHOULD FOCUS ON THE
- FOLLOWING ITEMS WHEN DETERMINING SURVIVAL POTENTIAL: A. VIGOR AND THREAT OF COMPETING VEGETATION
- B. PLANT STRUCTURE
- C. GROWTH RATE
- D. CROWN DEVELOPMENT E. TRUNK CONDITIONS AND HEALTH.
- 3. PLANT CONDITION-CHECK SHEETS: THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS ON APPROPRIATE FIELD DATA CHECK SHEETS WHICH SHALL INCLUDE ALL CONDITIONS OBSERVED RELATIVE TO THE HEALTH AND POTENTIAL SURVIVAL OF THE PLANT MATERIALS. SUCH CHECK SHEETS SHALL BE COMPLETED DURING EACH SCHEDULED MAINTENANCE SESSION DURING THE 24-MONTH MANAGEMENT AND MAINTENANCE PROGRAM. ONE COPY OF THE CHECK SHEETS SHALL BE SENT TO THE CLIENT, ONE COPY TO WBCM, AND ONE COPY SHALL BE SENT TO THE ANNE ARUNDEL COUNTY DEPARTMENT OF PLANNING AND ZONING.
- 4. REPLACEMENT: ANY PLANT MATERIALS WHICH ARE 25% DEAD OR MORE SHALL BE REPLACED DURING THE APPROPRIATE SPRING OR FALL PLANTING SEASONS IN ACCORDANCE WITH THE METHODS INDICATED IN THE PLANTING DETAILS. A TREE SHALL BE CONSIDERED DEAD WHEN THE MAIN LEADER HAS DIED BACK. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME GENUS, SPECIES, AND SIZE AS SPECIFIED ON THE PLANT LIST.
- 5. INSPECTION/CERTIFICATION SCHEDULE: THE CONTRACTOR SHALL SUBMIT WITH HIS BID A SCHEDULE FOR THE WORK WHICH SHALL INCLUDE INSPECTIONS BY WBCM AT THE CONCLUSION OF INSTALLATION AND AT THE START AND CONCLUSION OF EACH GROWING SEASON DURING THE TWO-YEAR WARRANTY
- 6. PENALTY FOR VIOLATION: A SITE INSPECTION BY THE CONTRACTOR, AND A REPRESENTATIVE OF WBCM SHALL TAKE PLACE AT THE END OF THE 24-MONTH MANAGEMENT AND MAINTENANCE AGREEMENT PERIOD. THE CONTRACTOR SHALL CONTACT WBCM AT LEAST ONE (1) MONTH IN ADVANCE OF SUCH INSPECTION FOR COORDINATION. IF THE SURVIVAL RATE OF THE AFFORESTATION OR REFORESTATION AREA(S) FALLS BELOW THE ESTABLISHED SURVIVAL REQUIREMENTS BY THE END OF THE 24-MONTH MANAGEMENT AND MAINTENANCE AGREEMENT, THE REMAINING AMOUNT OF THE CASH BOND OR OTHER SURETY MAY BE SUBJECT TO FORFEITURE, OR OTHER PENALTIES MAY BE **IMPOSED**

SEQUENCE OF OPERATIONS

PRE-CONSTRUCTION SITE PREPARATION

ALL CONSTRUCTION ACTIVITIES, PRACTICES, TECHNIQUES, ETC., SHALL BE IN CONFORMANCE WITH THE MARYLAND FOREST CONSERVATION PROGRAM, AS SPECIFIED IN THE STATE FOREST CONSERVATION TECHNICAL MANUAL. (THIS MANUAL SUPERCEDES ANY DISCREPANCIES BETWEEN IT AND THESE PLANS)

- INSTALL TREE PROTECTION FENCE AND IMPLEMENT TREE PROTECTION METHODS AS SHOWN.
- 2. MOW OR BRUSHHOG THE SITE WITHIN THE LIMITS OF THE PROPOSED REFORESTATION/AFFORESTATION AREA. DO NOT REMOVE OR DAMAGE ANY EXISTING TREES OR SAPLINGS UNLESS OTHERWISE INDICATED.
- 3. REMOVE OR TREAT WITH AN ACCEPTABLE METHOD. NOXIOUS PLANT MATERIAL SUCH AS MULTIFLORA ROSE, TEARTHUMB, AND JOHNSON GRASS BEFORE INSTALLING REFORESTATION/AFFORESTATION
- 4. INSTALL TREE PROTECTION SIGNAGE.
- 5. STABILIZE ANY DISTURBED AREAS USING THE SPECIFIED STABILIZATION MIXTURE THAT ALLOWS FOR NATURAL REVEGETATION OF FOREST COMMUNITIES.

FOREST RETENTION SEQUENCE OF OPERATIONS

ALL CONSTRUCTION ACTIVITIES, PRACTICES, TECHNIQUES, ETC., SHALL BE IN CONFORMANCE WITH THE MARYLAND FOREST CONSERVATION PROGRAM, AS SPECIFIED IN THE STATE FOREST CONSERVATION TECHNICAL MANUAL. (THIS MANUAL SUPERCEDES ANY DISCREPANCIES BETWEEN IT AND THESE PLANS).

- 1. PRIOR TO BEGINNING ANY GRADING OPERATIONS ON THIS SITE OR ON A RESPECTIVE LOT, THERE SHALL BE A PRECONSTRUCTION MEETING HELD AT THE SITE, WHICH IS TO INCLUDE THE CONTRACTOR AND REPRESENTATIVES FROM WHITNEY, BAILEY, COX & MAGNANI, LLC (WBCM). THE ANNE ARUNDEL COUNTY DEPARTMENT OF PLANNING AND ZONING (DPZ) AND THE OWNER WILL BE NOTIFIED BY THE CONTRACTOR AS TO THE TIME AND PLACE OF THE FIELD MEETING, SHOULD THEY WISH TO SEND A REPRESENTATIVE. THE PURPOSE OF THIS MEETING WILL BE TO REVIEW THE APPROVED FCP AND TO FIELD VERIFY THE CORRECT LIMITS OF DISTURBANCE (LOD).
- 2. THE LIMITS OF DISTURBANCE (LOD) PERTINENT TO THE PRESERVATION OF WOODED AREAS SHALL BE STAKED IN THE FIELD WITH FINAL ADJUSTMENTS BEING MADE AS NECESSARY TO ENSURE ADEQUATE PROTECTION OF THE CRITICAL ROOT ZONE OF TREES DESIGNATED FOR RETENTION. STAKES TO BE USED SHALL BE THOSE SPECIFIED FOR THE "TREE PROTECTION DEVICES" TO WHICH APPROVED PROTECTIVE MATERIAL WILL BE ATTACHED. ALTERNATE MEANS OF DEFINING THE LOD MAY BE USED IF APPROVED BY THE DPZ.
- 3. ALL FOREST RETENTION AREAS SHALL BE PROTECTED BY HIGHLY VISIBLE, WELL-ANCHORED, TEMPORARY PROTECTION DEVICES (SEE DETAIL), WHICH SHALL BE SECURELY IN PLACE PRIOR TO ANY
- CLEARING OR GRADING OPERATIONS. 4. GRADING OPERATIONS OR OTHER CONSTRUCTION OPERATIONS THAT COULD DISLODGE OR OTHERWISE DAMAGE THE PROTECTIVE DEVICES SHALL BE AVOIDED ALONG THE EDGES OF THE LOD LINES IF POSSIBLE. THE CONTRACTOR SHALL PROPERLY REPAIR ANY PROTECTIVE DEVICES, WHICH ARE DAMAGED DURING SITE CONSTRUCTION OPERATIONS, IMMEDIATELY
- AFTER SITE GRADING AND CONSTRUCTION HAVE BEEN COMPLETED, ALL EXISTING TREES ADJACENT TO THE LOD LINE SHALL BE INSPECTED FOR INDICATIONS OF CROWN DIE-BACK (SUMMER INDICATOR), DAMAGE WITHIN RESPECTIVE CRITICAL ROOT ZONES, ANY DEAD WOOD OR OTHER CONDITIONS WHICH MIGHT BE HAZARDOUS SUCH AS TO PEDESTRIANS, BUILDINGS, UTILITY LINES, VEHICULAR ACCESS WAYS, OR PARKED VEHICLES.
 - A. SHOULD THERE BE EVIDENCE OF ANY DAMAGE TO TREE TRUNKS, BRANCHES, OR OTHER CRITICAL ROOT ZONE OF TREES WITHIN THE PROTECTED AREAS, OR TO ISOLATED SPECIMEN TREES TO BE PRESERVED, THE DAMAGE SHALL BE EXAMINED WITHIN A PERIOD OF TWO (2) DAYS FROM THE DATE OF OBSERVANCE BY A LICENSED TREE CARE PROFESSIONAL. EXPOSED ROOTS SHOULD BE COVERED IMMEDIATELY TO A DEPTH OF 6-8 INCHES WITH SOIL, PREFERABLY MIXED WITH 50% PEAT MOSS OR LEAF MOLD.
 - B. THE CONTRACTOR SHALL REMOVE DAMAGED, DEAD, OR DYING TREES OR LIMBS ONLY IF THE TREES OR LIMBS POSE AN IMMEDIATE SAFETY HAZARD TO BUILDINGS, UTILITY LINES, VEHICLES, OR ACCESS AND EGRESS DRIVES OR PEDESTRIAN AREAS. TREES DESIGNATED FOR PRUNING OR REMOVAL SHALL BE PRUNED OR REMOVED USING EQUIPMENT AND METHODS WHICH WILL NOT DAMAGE OR DESTROY ADJACENT LARGE TREES OR UNDERSTORY TREES OR SHRUBS DESIGNATED FOR RETENTION.
- 6. ALL TEMPORARY FOREST PROTECTION DEVICES WILL BE CAREFULLY REMOVED AFTER ALL GENERAL CONSTRUCTION, NECESSARY TREE SURGERY, REMOVAL OF DEBRIS, REGRADING AND RESEEDING OF SEDIMENT AND EROSION CONTROL DISTURBANCE HAVE BEEN COMPLETED AND ACCEPTANCE AND APPROVAL OF THE WORK AND SITE CONDITIONS HAVE BEEN GIVEN BY THE DPZ.

AFFORESTATION/REFORESTATION PLANTING SEQUENCE OF OPERATIONS

ALL CONSTRUCTION ACTIVITIES, PRACTICES, TECHNIQUES, ETC., SHALL BE IN CONFORMANCE WITH THE MARYLAND FOREST CONSERVATION PROGRAM, AS SPECIFIED IN THE STATE FOREST CONSERVATION TECHNICAL MANUAL. (THIS MANUAL SUPERCEDES ANY DISCREPANCIES BETWEEN IT AND THESE PLANS.)

- 1. THE CONTRACTOR(S) SHALL INFORM THE ANNE ARUNDEL COUNTY DEPARTMENT OF PLANNING AND
- ZONING (DPZ) WHEN PLANTING OPERATIONS ARE TO BEGIN.
- 2. DETERMINE STORAGE AREAS FOR MATERIALS AND EQUIPMENT. OBTAIN APPROVAL OF LOCATION FROM OWNER AND THE DPZ.
- 3. PRIOR TO BEGINNING ANY PLANTING, THE SOILS WITHIN THE AREA(S) DESIGNATED FOR AFFORESTATION OR REFORESTATION SHALL BE ANALYZED REGARDING THE FOLLOWING FEATURES: NUTRIENT CONTENT, ORGANIC MATTER, STRUCTURE, PH AND CAUTION EXCHANGE CAPACITY. SOILS THAT HAVE BEEN ACTIVELY FORMED MAY REQUIRE EVALUATION FOR PESTICIDE OR HERBICIDE CONTAMINATION. THE LOCAL SOIL CONSERVATION SERVICE OR AGRICULTURAL EXTENSION SERVICE MAY PERFORM SUCH ANALYSIS. A MINIMUM OF THREE RANDOM SAMPLES SHOULD BE COLLECTED FOR THE ANALYSIS. AN ASSESSMENT OF SOIL MOISTURE SHOULD ALSO BE MADE AT THIS TIME. CORRECTIVE MEASURES SHALL BE MADE IN ACCORDANCE WITH ANALYSIS RESULTS AND
- RECOMMENDATIONS. 4. THE CONTRACTOR, ASSISTED BY A REPRESENTATIVE OF WHITNEY, BAILEY, COX & MAGNANI, LLC (WBCM) SHALL STAKE (OR WIRE-FLAG) PLANTING AREA LIMITS AND PLANT LOCATIONS IN ACCORDANCE WITH THE PLAN AND DETAILS.
- 5. PROVIDE AND PLANT ALL TREES OF THE SPECIES AND SIZES SPECIFIED AND IN ACCORDANCE WITH THE DETAIL(S) SHOWN ON THE FOREST CONSERVATION PLANS, UNLESS OTHERWISE DIRECTED BY THE ANNE ARUNDEL COUNTY DPZ. ANY SPECIES SUBSTITUTIONS SHALL BE APPROVED BY WBCM OR THE ANNE ARUNDEL COUNTY DPZ. THE CONTRACTOR IS URGED TO SEEK SUCH APPROVAL PRIOR TO ORDERING OR PLANTING.
- 6. AT THE COMPLETION OF PLANTING, REMOVE ALL EXCESS MATERIALS AND MISCELLANEOUS DEBRIS FROM THE RESPECTIVE AREA(S) OF WORK.
- 7. PROTECTION DEVICES: TO PREVENT DAMAGE WITHIN PLANTED AREAS, ALL REFORESTATION AND/OR AFFORESTATION SITES MUST BE POSTED WITH APPROPRIATE SIGNS AND THE AREA(S) DELINEATED WITH APPROPRIATE PROTECTIVE FENCING. NEITHER CONSTRUCTION EQUIPMENT NOR STORAGE OF MATERIALS SHALL BE PERMITTED WITHIN THE PLANTED AREAS. DETAILS ARE SHOWN ON THE FOREST CONSERVATION PLANS REGARDING TYPICAL SIGN SIZE AND WORDING. NO PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THE PROTECTED AREAS.
- 8. ATTACHMENT OF SIGNS OR ANY OTHER OBJECTS TO TREES WITHIN THE PROTECTED AREAS IS PROHIBITED.

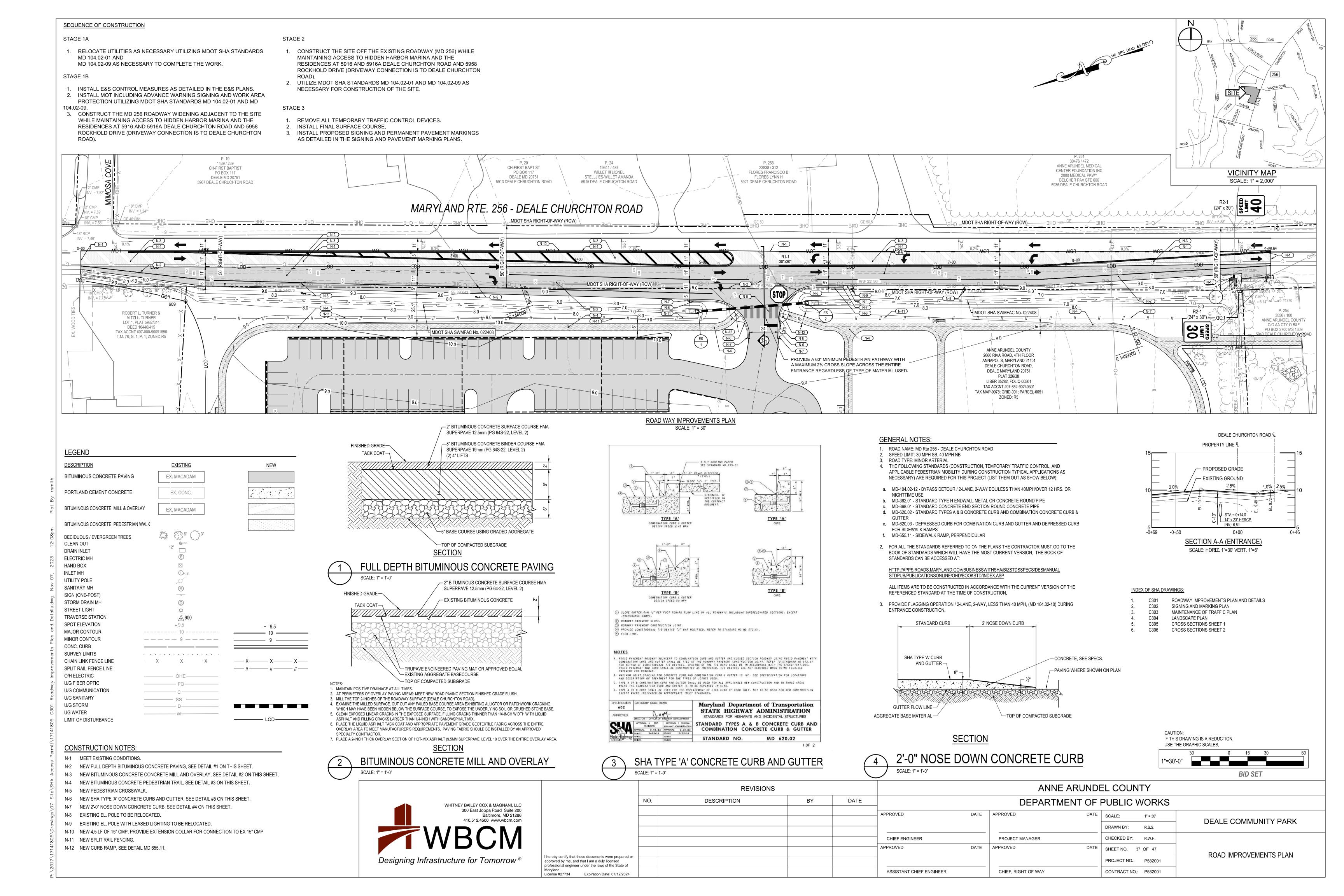
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL UNDER THE LAWS OF THE STATE OF MARYLAND.
SIGNATURE:

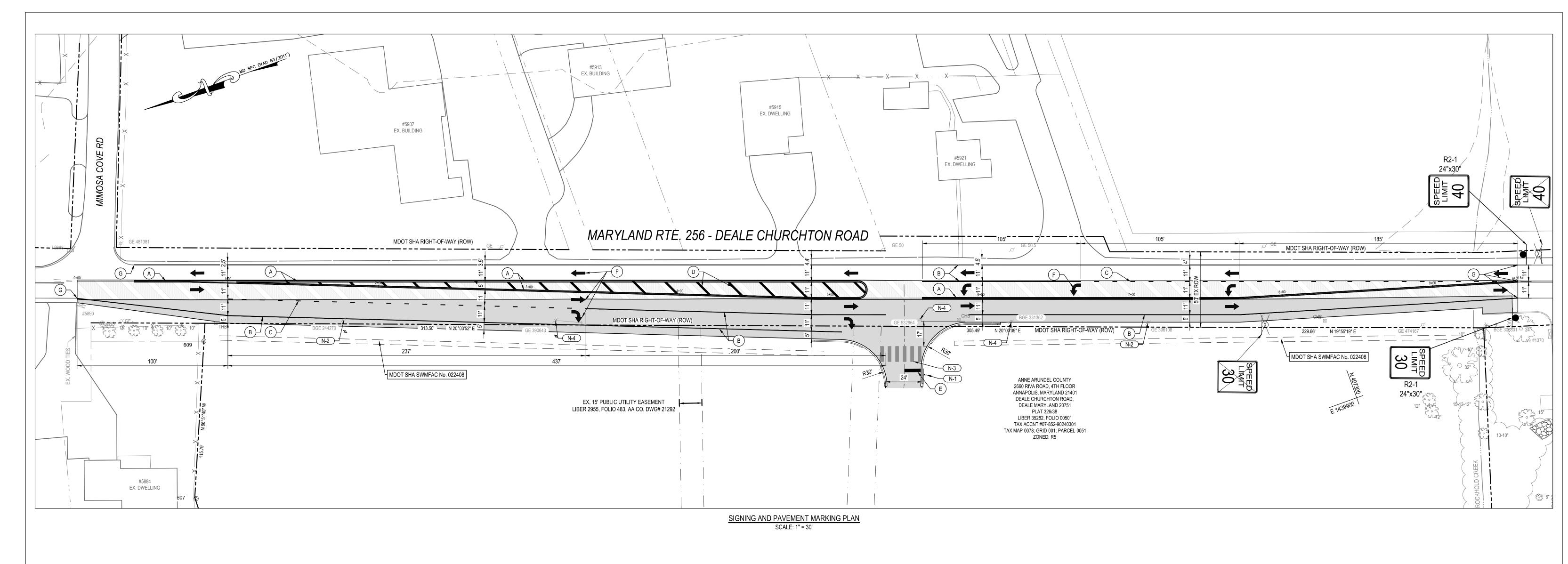
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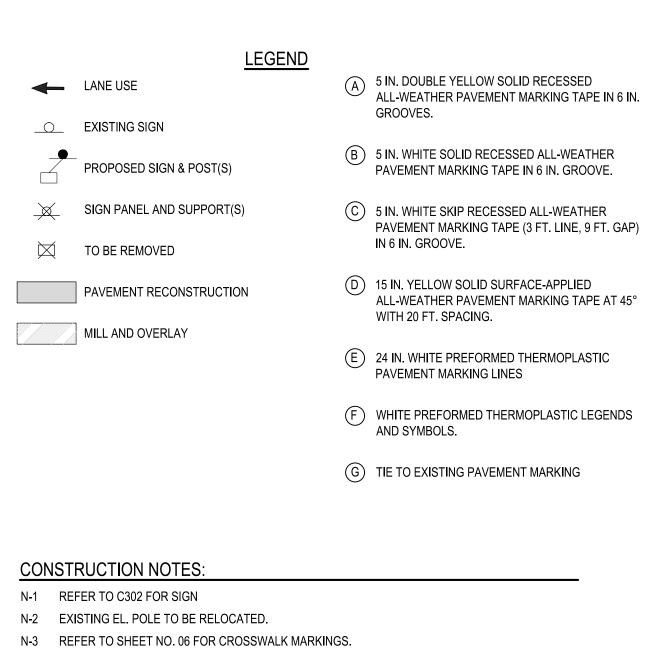


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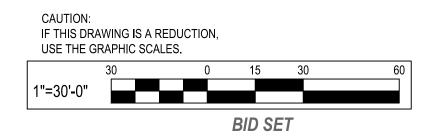
ANNE ARUNDEL COUNTY **REVISIONS** NO. DESCRIPTION DATE BY DEPARTMENT OF PUBLIC WORKS DATE APPROVED APPROVED DATE | SCALE: 1" = 60' DEALE COMMUNITY PARK R.S.S. DRAWN BY: CHIEF ENGINEER PROJECT MANAGER CHECKED BY: APPROVED APPROVED SHEET NO. 36 OF 47 FOREST CONSERVATION PLAN hereby certify that these documents were prepared o NOTES AND DETAILS PROJECT NO.: P582001 approved by me, and that I am a duly licensed professional engineer under the laws of the State of ASSISTANT CHIEF ENGINEER CHIEF, RIGHT-OF-WAY CONTRACT NO.: P582001 Expiration Date: 07/12/2024





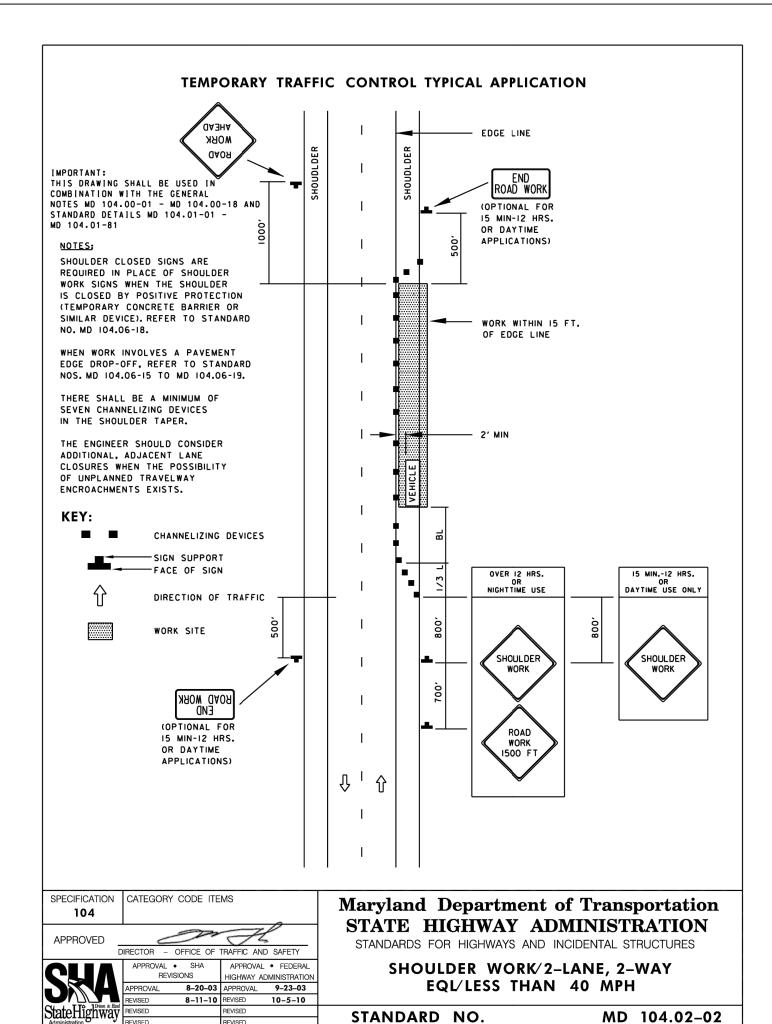


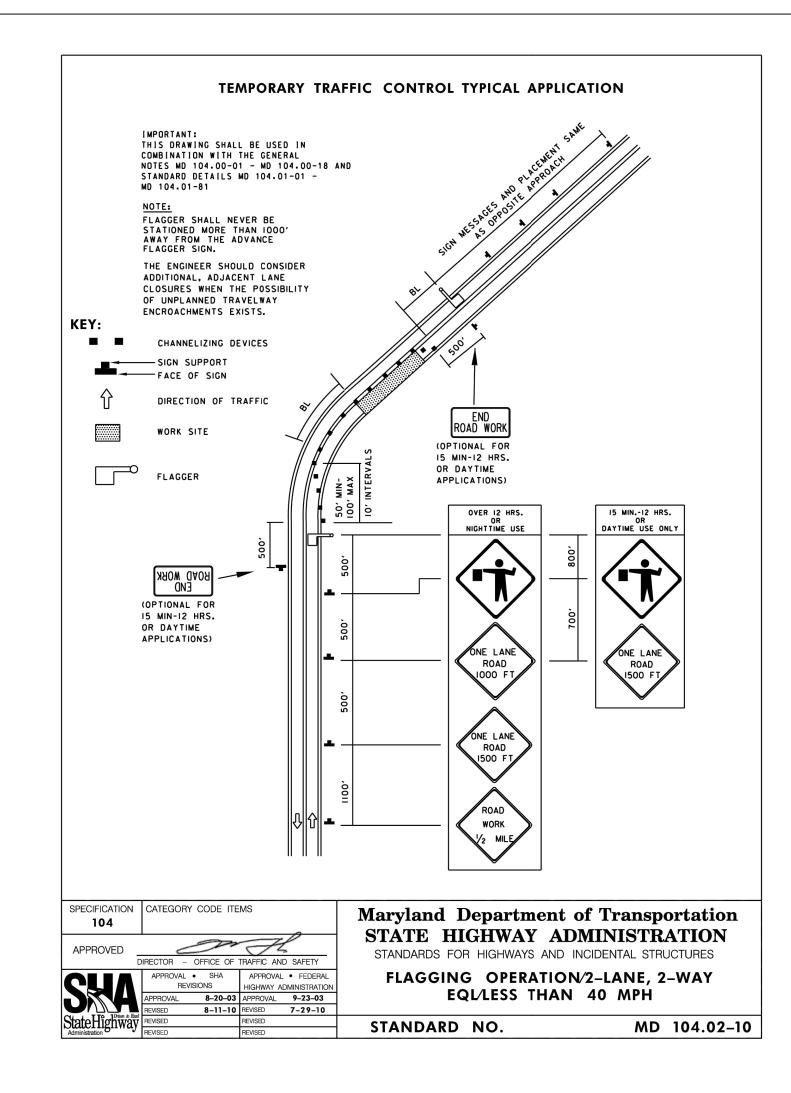
N-4 EXISTING EL. POLE WITH LEASED LIGHTING TO BE RELOCATED.





		REVISIONS			ANNE ARUNDEL COUNTY				
	NO. DESCRIPTION BY DATE				DEPARTMENT OF PUBLIC WORKS				
					APPROVED DATE	APPROVED DATE	SCALE: 1" = 30'	DEALE COMMUNITY PARK	
						_	DRAWN BY: IJM	DEALE COMMONITY FAIR	
					CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: JRS		
					APPROVED DATE	APPROVED DATE	SHEET NO. 38 OF 47	CICNING AND DAYEMENT MADIZING DI ANI	
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of							PROJECT NO.: P582001	SIGNING AND PAVEMENT MARKING PLAN	
approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P582001		



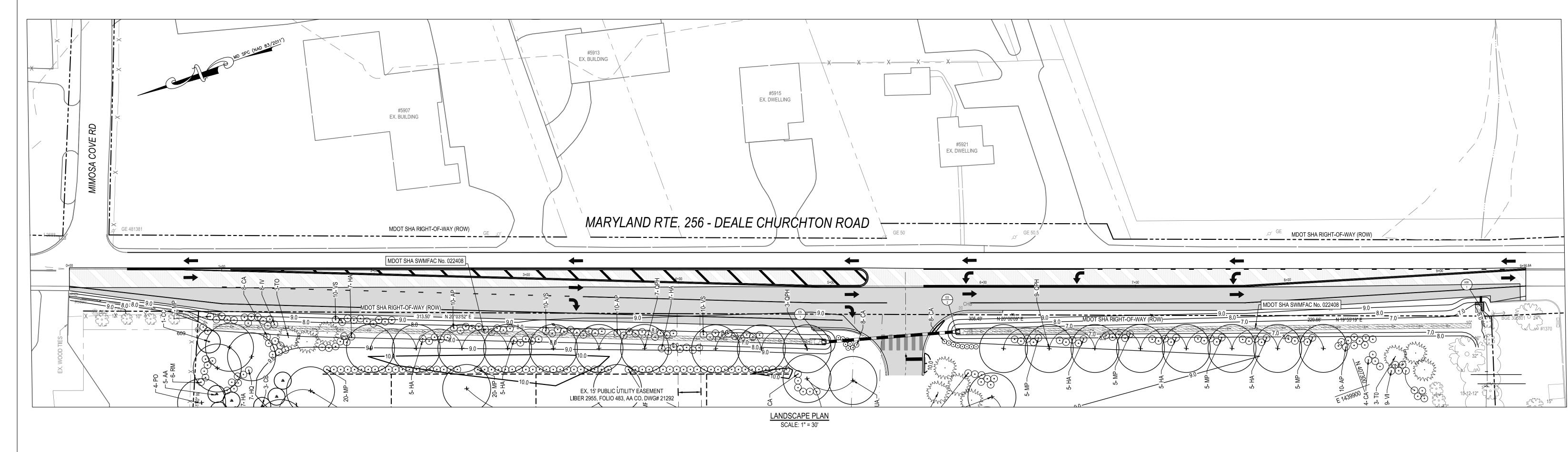


TRAFFIC CONTROL GENERAL NOTES

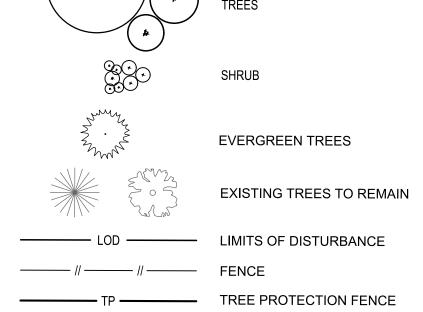
- 1. ALL STANDARD REGULATORY, WARNING AND CONSTRUCTION SIGNS USED FOR MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE MARYLAND EDITION OF STANDARD HIGHWAY
- 2. TEMPORARY TRAFFIC SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION (MDOT SHA) STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES, SECTION 104.00-06 & 07, MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND AS APPROVED BY THE ENGINEER.
- 3. CONTRACTOR SHALL FIELD LOCATE ALL TEMPORARY SIGNS TO BE INSTALLED ON WOOD SUPPORTS A MINIMUM OF 7 CALENDAR DAYS PRIOR TO INITIATING WORK. CONTRACTOR MUST RECEIVE WRITTEN APPROVAL OF THE SIGN LOCATIONS AND MOUNTINGS FROM THE ENGINEER PRIOR TO INSTALLATION.
- 4. ALL TEMPORARY TRAFFIC SIGN LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- 5. ALL TEMPORARY TRAFFIC SIGNS SHALL BE PLACED SO THAT THEY DO NOT OBSTRUCT EXISTING TRAFFIC CONTROL DEVICES OR CREATE SIGHT DISTANCE OBSTRUCTIONS FROM CROSS STREETS OR DRIVEWAYS.
- 6. BUSINESS AND RESIDENCE ACCESS MUST BE MAINTAINED DURING CONSTRUCTION OPERATIONS.
- 7. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES.
- 8. ALL SIGNS SHALL CONFORM TO CURRENT MDOT SHA MATERIAL AND REFLECTIVITY REQUIREMENTS.
- 9. ALL CONFLICTING EXISTING SIGNING SHALL BE COVERED/MODIFIED.
- 10. TRUCK CROSSING SIGNS (W11-10(1)) SHALL BE INSTALLED IN ADVANCE OF CONSTRUCTION ACCESS POINTS PER MDOT SHA STANDARDS MD 104.00-08 AND MD 104.00-13.
- 11. THE SHOULDER CLOSURE FOR WORK ADJACENT TO THE ROADWAY SHALL BE IN CONFORMANCE WITH MDOT SHA STANDARD MD 104.02-01 UNLESS OTHERWISE NOTED.
- 12. REFER TO EROSION AND SEDIMENT CONTROL PLANS FOR FURTHER DETAILS REGARDING THE SEQUENCE OF CONSTRUCTION.
- 13. THE LUMP SUM PAY ITEM FOR MAINTENANCE OF TRAFFIC PROVIDES COMPENSATION FOR ALL MATERIALS, TOOLS, LABOR, AND INCIDENTALS NECESSARY TO MAINTAIN TRAFFIC THROUGH THE WORK ZONE WHICH ARE NOT INCLUDED IN OTHER CONTRACT PAY ITEMS.

WHITNEY BAILEY COX & MAGNANI, LLC 300 East Joppa Road Suite 200 Baltimore, MD 21286 410.512.4500 www.wbcm.com A DIVISION OF TRANSYSTEMS

								BID SET	
	REVISIONS				ANNE ARUNDEL COUNTY				
	NO.	DESCRIPTION	BY	DATE		DEPARTMENT OF	PUBLIC WORKS		
					APPROVED DATE	APPROVED DATE	SCALE: N.T.S.	DEALE COMMUNITY PARK	
					CHIEF ENGINEER	PROJECT MANAGER	DRAWN BY: I.J.M. CHECKED BY: J.R.S.		
I hereby certify that these documents were prepared or					APPROVED DATE	APPROVED DATE	SHEET NO. 39 OF 47	MAINTENANCE OF TRAFFIC PLAN	
approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT-OF-WAY	PROJECT NO.: P582001 CONTRACT NO.: P582001		







CAUTION:
IF THIS DRAWING IS A REDUCTION,
USE THE GRAPHIC SCALES.

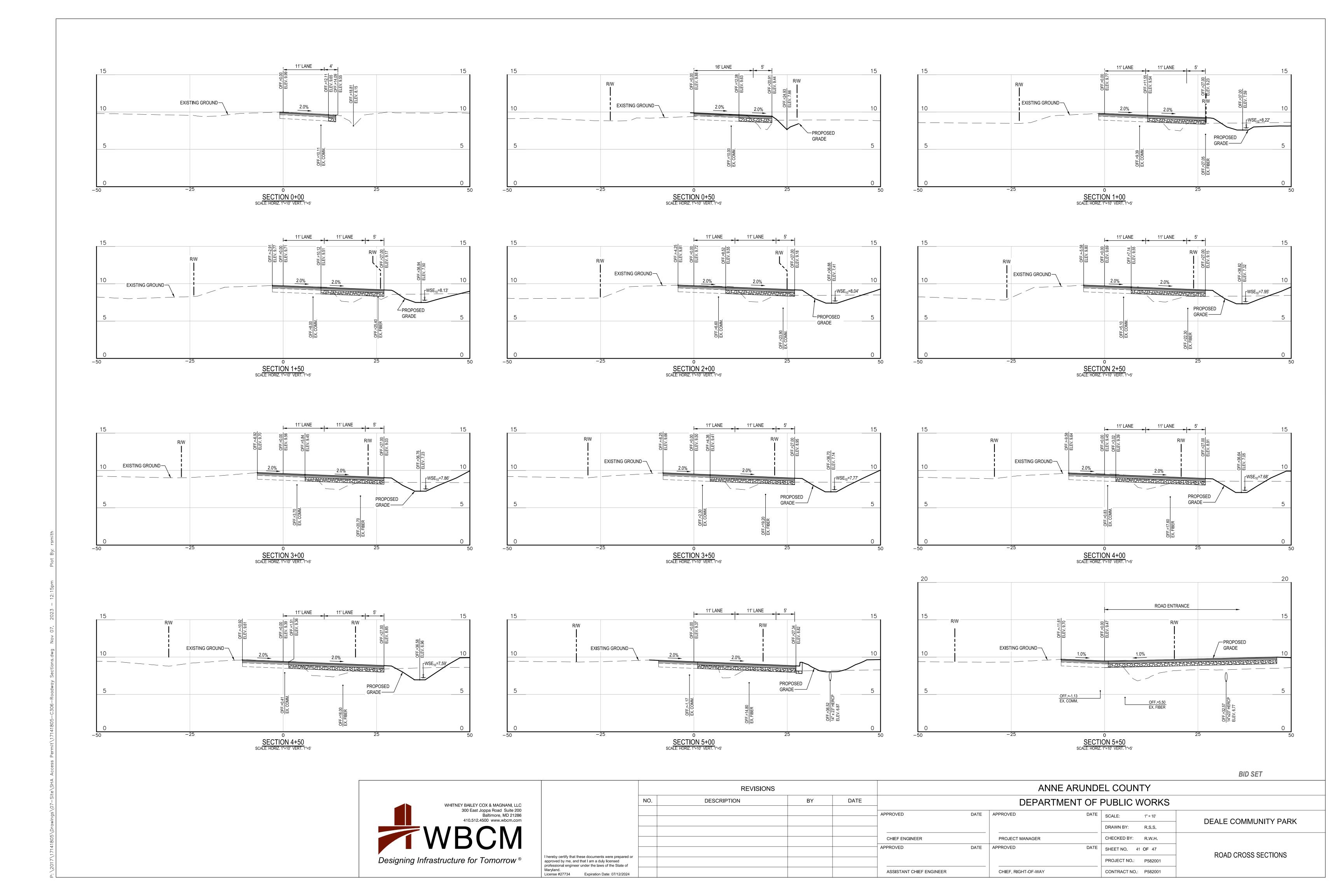
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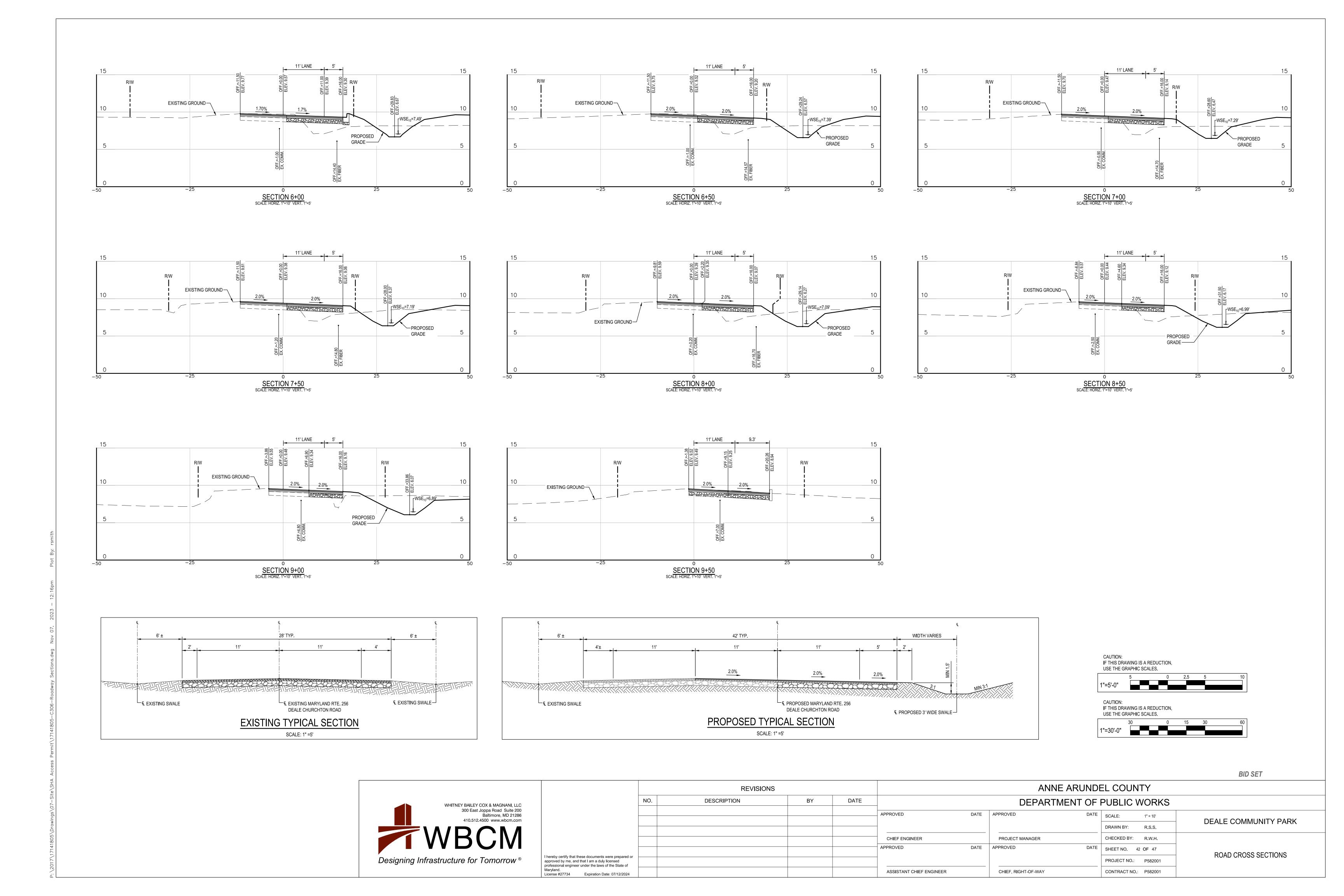
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	REVISIONS				ANNE ARUNDEL COUNTY				
	NO. DESCRIPTION BY DATE			DEPARTMENT OF PUBLIC WORKS					
					APPROVED DATE	APPROVED DATE	SCALE: 1" = 30'	DEALE COMMUNITY PARK	
							DRAWN BY: IJM	DEALE COMMUNITY PARK	
					CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: JRS		
					APPROVED DATE	APPROVED DATE	SHEET NO. 40 OF 47	LANDSCADE DLAN	
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of							PROJECT NO.: P582001	LANDSCAPE PLAN	
professional engineer under the laws of the State of Maryland. License #27734 Expiration Date: 07/12/2024					ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P582001		





GENERAL NOTES

- I. CODE
 A. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL BUILDING CODE, AND ANNE ARUNDEL COUNTY LOCAL AMENDMENTS.
- II. DESIGN LOADING

 A THE DESIGN DEAD LOAD FOR THE ROOF FRAMING IS:

A. THE DESIGN DEAD LOAD FOR THE ROOF FRAMING IS:

12 PSF TOTAL

12 PSF DEAD LOAD USED IN LOAD COMBINATIONS
WHICH INCLUDE WIND.

TOTAL DEAD LOAD = 10 PSF

B. THE FOLLOWING LIVE LOADS WERE USED IN DESIGN:
IBC 1603.1.2 - ROOF LIVE LOAD = 30 PSF

IBC 1603.1.3 - ROOF SNOW LOAD

GROUND SNOW LOAD (P_G) = 20 PSF FLAT SNOW LOAD (P_F) = 17 PSF SNOW EXPOSURE FACTOR (C_T) = 1.0 SNOW LOAD IMPORTANCE FACTOR (I) = 1.0 THERMAL FACTOR (C_T) = 1.2 SLOPE FACTOR (C_T) = 1.0 SLOPED SNOW LOAD (C_T) = 17 PSF IBC 1603.1.4 - WIND LOAD

IBC 1603.1.4 - WIND LOAD

ULTIMATE DESIGN WIND SPEED (V_{ULT}) = 115 MPH

NOMINAL DESIGN WIND SPEED (V_{ASD}) = 89 MPH

RISK CATEGORY = II

WIND EXPOSURE = C

INTERNAL PRESSURE COEFFICIENT = ±0.18

IBC 1603.1.5 - EARTHQUAKE DESIGN DATA

RISK CATEGORY = II

SEISMIC IMPORTANCE FACTOR (I_E) = 1.0

MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS:

S_S = 0.123 G S₁ = 0.042 G

SITE CLASS = D DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS;

S_{DS} = 0.131 G S_{D1} = 0.067 G

SEISMIC DESIGN CATEGORY = A

- C. ALL STRUCTURAL COMPONENTS HAVE BEEN DESIGNED FOR THE DEAD LOADS SHOWN ON THE PLANS AND THE LIVE LOADS SHOWN ABOVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF THOSE ITEMS NECESSARY TO FACILITATE CONSTRUCTION INCLUDING BUT NOT LIMITED TO FALSEWORK, FORMWORK, STAGING, BRACING, SHEETING AND SHORING, ETC.
- D. THE STABILITY OF THE STRUCTURE IS DEPENDENT UPON THE DIAPHRAGM ACTION OF THE ROOFS. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR THE METHODS OF CONSTRUCTIONS AND SHALL PROVIDE ALL GUYS, BRACING AND SHORING REQUIRED TO ACCOMMODATE ALL INTERIM LOADING CONDITIONS THROUGHOUT THE CONSTRUCTION PHASE.
- III. GENERAL

A. THE CONTRACTOR SHALL FIELD CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING WORK PRIOR TO FABRICATION OF ANY NEW MATERIALS.

B. THE CONTRACTOR IS ADVISED THAT ALL PLANS, DIMENSIONS, AND DETAILS DEPICT FIELD CONDITION AS SHOWN. MINOR VARIATIONS ARE TO BE EXPECTED AND ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE APPROVED BY THE ARCHITECT IN WRITING PRIOR TO PROCEEDING.

C. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE LOCATION OF ANY UTILITIES IN THE IMMEDIATE VICINITY OF CONSTRUCTION SO AS TO PREVENT DAMAGE TO THEM. SHOULD ANY DAMAGE TO SUCH UTILITIES OCCUR THE CONTRACTOR SHALL BE REQUIRED TO REPAIR SUCH DAMAGE AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER.

D. CONSULT THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATION AND DIMENSION OF CHASES, INSERTS, OPENINGS, SLEEVES, WASHERS, DRIPS, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS.

E. ALL WORK SPECIFIED HEREIN SHALL BE INSPECTED IN ACCORDANCE WITH THE BUILDING CODE AND ALL LOCAL ORDINANCES. THE OWNER OR CONTRACTOR (SEE SPECIFICATIONS) SHALL HIRE AN EXPERIENCED, QUALIFIED INSPECTOR TO PERFORM ALL THE REQUIRED INSPECTION WORK. THE ENGINEER WILL NOT PERFORM THE REQUIRED INSPECTION AS A PART OF THEIR DESIGN SERVICES. THE ENGINEER MAY VISIT THE SITE TO ASCERTAIN GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS. SUCH SITE VISITS ARE NOT TO BE CONSTRUED AS MEETING ANY INSPECTION REQUIREMENTS UNLESS THE ENGINEER SPECIFICALLY SO STATES IN WRITING.

F. ANY REVIEW OF STRUCTURAL ITEM SHOP DRAWINGS BY (THE STRUCTURAL ENGINEER) IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AS PRESENTED BY THE CONTRACT DOCUMENTS. NO DETAILED CHECK OF QUANTITIES OR DIMENSIONS WILL BE MADE.

G. AT THE TIME OF SHOP DRAWING SUBMISSION, THE GENERAL CONTRACTOR SHALL STATE IN WRITING ANY DEVIATION OR OMISSIONS FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS BEFORE SUBMISSION AND MAKE ALL CORRECTIONS AS HE DEEMS NECESSARY.

H. SUBMIT SHOP DRAWINGS FOR SPECIFIC AREAS IN THEIR ENTIRETY. THAT IS, IN A GIVEN AREA OF THE BUILDING INCLUDE ALL COLUMNS, BASE PLATES, BEAMS AND CONNECTION DETAILS. SHOP DRAWINGS FOR SIMILAR FLOORS SHALL BE SUBMITTED IN THE SAME PACKAGE.

I. THE STRUCTURAL CONTRACT DOCUMENTS ARE NOT TO BE REPRODUCED FOR USE AS SHOP DRAWINGS.

J. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE GENERAL CONTRACTOR. IF A CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE ENGINEER WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION OR FOR THE DESIGN OF THE PROJECT.

V. FOUNDATIONS

A. SPREAD FOOTING FOUNDATIONS

1. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-6" BELOW FINISH GRADE OR 1'-0" BELOW EXISTING GRADE, WHICHEVER IS GREATER, UNLESS NOTED OTHERWISE ON THE DRAWINGS. SEE SITE PLANS FOR EXISTING AND FINISHED GRADES.

2. ALL FOOTINGS HAVE BEEN DESIGNED FOR AN ASSUMED NET SOIL BEARING PRESSURE OF 2000 PSF PER THE GEOTECHNICAL REPORT BY SCHNABEL ENGINEERING DATED OCTOBER 19, 2022. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE SERVICES OF A GEOTECHNICAL ENGINEER FOR FIELD VERIFICATION OF THE SOIL BEARING PRESSURES. SHOULD THE SOIL BEARING PRESSURE BE FOUND TO BE LESS THAN THIS VALUE THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. IN THIS CASE, THE FOOTINGS WILL EITHER HAVE TO BE LOWERED OR RE-DESIGNED. CONTRACTOR SHALL RECEIVE THE APPROVAL OF THE TESTING AGENCY PRIOR TO POURING ALL FOUNDATIONS.

3. ALL FILL UNDER FOOTINGS AND SLABS SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1577, MODIFIED PROCTOR.

4. ALL EXCAVATION, BACKFILLING, AND FILLING OPERATIONS BENEATH THE BUILDING SLAB AND FOUNDATIONS, AND ALL COMPACTION TESTS AND INSPECTION, SHALL BE DONE UNDER THE DIRECTION AND SUPERVISION OF A REGISTERED PROFESSIONAL SOILS ENGINEER RETAINED BY THE OWNER. ALL SOIL, EQUIPMENT AND PROCEDURES SHALL BE APPROVED BY THE SOILS ENGINEER PRIOR TO ALL EARTHWORK OPERATIONS.

V. CAST-IN-PLACE CONCRETE

A. GENERAL CONSTRUCTION

1. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST APPROVED (BY LOCAL GOVERNMENT) EDITIONS OF THE FOLLOWING A.C.I. AND A.S.T.M. DOCUMENTS:

ACI-302,1R FLOOR AND SLAB CONSTRUCTION

ACI-318 BUILDING CODE REQUIREMENTS FOR REINFORCED

CONCRETE

COMPRESSION TESTS

ACI-214 COMPRESSION TESTS
ACI-306 COLD WEATHER

ACI-315 DETAILING

ACI-347 FORMWORK

ACI-305 HOT WEATHER

ACI-211 PROPORTIONS OF CO

ACI-211 PROPORTIONS OF CONCRETE
ACI-304 PLACING CONCRETE

ACI-304 PLACING CONCRETE
ASTM C94 READY-MIX CONCRETE

2. ALL FIELD AND LAB TESTING OF CONCRETE SHALL CONFORM TO THE LATEST APPROVED (BY LOCAL GOVERNMENT) EDITIONS OF ASTM:

ASTM C31 FIELD CYLINDER SPECIMENS

ASTM C143 SLUMP TEST
ASTM C231 AIR CONTENT (WHEN REQUIRED)

ASTM C231 AIR CONTENT (WHEN REQUIRED)
ASTM C39 LAB TESTING CYLINDERS

ASTM C172 SAMPLING FRESH CONCRETE
ASTM C42 HARDENED CORES (WHEN REQUIRED)

3. THE CONTRACTOR IS CAUTIONED THAT THE SCHEDULED CONSTRUCTION SEQUENCE FOR THE CONCRETE WORK MAY REQUIRE HIGHER CONCRETE STRENGTHS FOR SUPPORT OF CONSTRUCTION LOADINGS.

CONCRETE MEMBERS CANNOT CARRY THEIR DESIGN LOADING UNTIL THE SPECIFIED 28-DAY COMPRESSIVE STRENGTHS ARE OBTAINED. CONTRACTOR SHALL INCREASE CONCRETE STRENGTHS AS REQUIRED.

4. ALL CONCRETE SHALL BE STONE AGGREGATE CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 5%±1%. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED. MAXIMUM AGGREGATE SIZE FOR CONCRETE SHALL BE 1", AND MAXIMUM SLUMP SHALL BE 4", AND 3" FOR SLABS ON GRADE. ALL CONCRETE, EXCEPT FOOTINGS, SHALL CONTAIN A WATER REDUCING ADMIXTURE.

5. ALL CONCRETE MIX DESIGNS AND ADMIXTURES SHALL BE APPROVED BY THE ENGINEER 30 DAYS PRIOR TO INITIATION OF FIRST POUR.

6. ALL REINFORCING BARS SHALL CONFORM TO ASTM A-615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.

7. ALL CONCRETE SHALL BE SAMPLED AND TESTED BY AN AGENCY RETAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE TESTING AGENCY 48 HOURS PRIOR TO THE POURING OF ANY CONCRETE.

8. TESTING FREQUENCY: OBTAIN ONE CONCRETE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE EXCEEDING 5 CU. YD. BUT LESS THAN 25 CU. YD. PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF.

a. CAST AND LABORATORY CURE TWO SETS OF TWO STANDARD CYLINDER

b. CAST AND FIELD CURE TWO SETS OF TWO STANDARD CYLINDER

9. COMPRESSIVE STRENGTH TESTS: ASTM C39/C 39M; TEST ONE SET OF TWO LABORATORY CURED SPECIMENS AT 7 DAYS AND ONE SET OF TWO SPECIMENS AT 28 DAYS.

a. TEST ONE SET OF TWO FIELD-CURED SPECIMENS AT 7 DAYS AND ONE SET OF TWO SPECIMENS AT 28 DAYS.

b. A COMPRESSIVE-STRENGTH TEST SHALL BE THE AVERAGE COMPRESSIVE STRENGTH FROM A SET OF TWO SPECIMENS OBTAINED FROM SAME COMPOSITE SAMPLE AND TESTED AT AGE INDICATED.

10. CONCRETE EXPOSED TO PUBLIC VIEW SHALL MEET THE REQUIREMENTS FOR ARCHITECTURAL CONCRETE OF ACI 301.

VI. PRE-ENGINEER TIMBER PAVILION

A. THE TIMBER PAVILION BUILDING SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE "TIMBER CONSTRUCTION MANUAL" AS PUBLISHED BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.

B. SHOP DRAWINGS AND CALCULATIONS FOR ALL TIMBER PAVILION

BAY FRONT 258 ROAD

BAY FRONT 258 ROAD

BEACH ROAD

ORGER

CARGANA

ORGER

ROAD

ROAD

ROAD

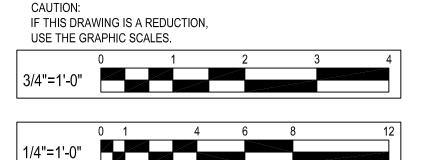
ROAD

ROAD

ROAD

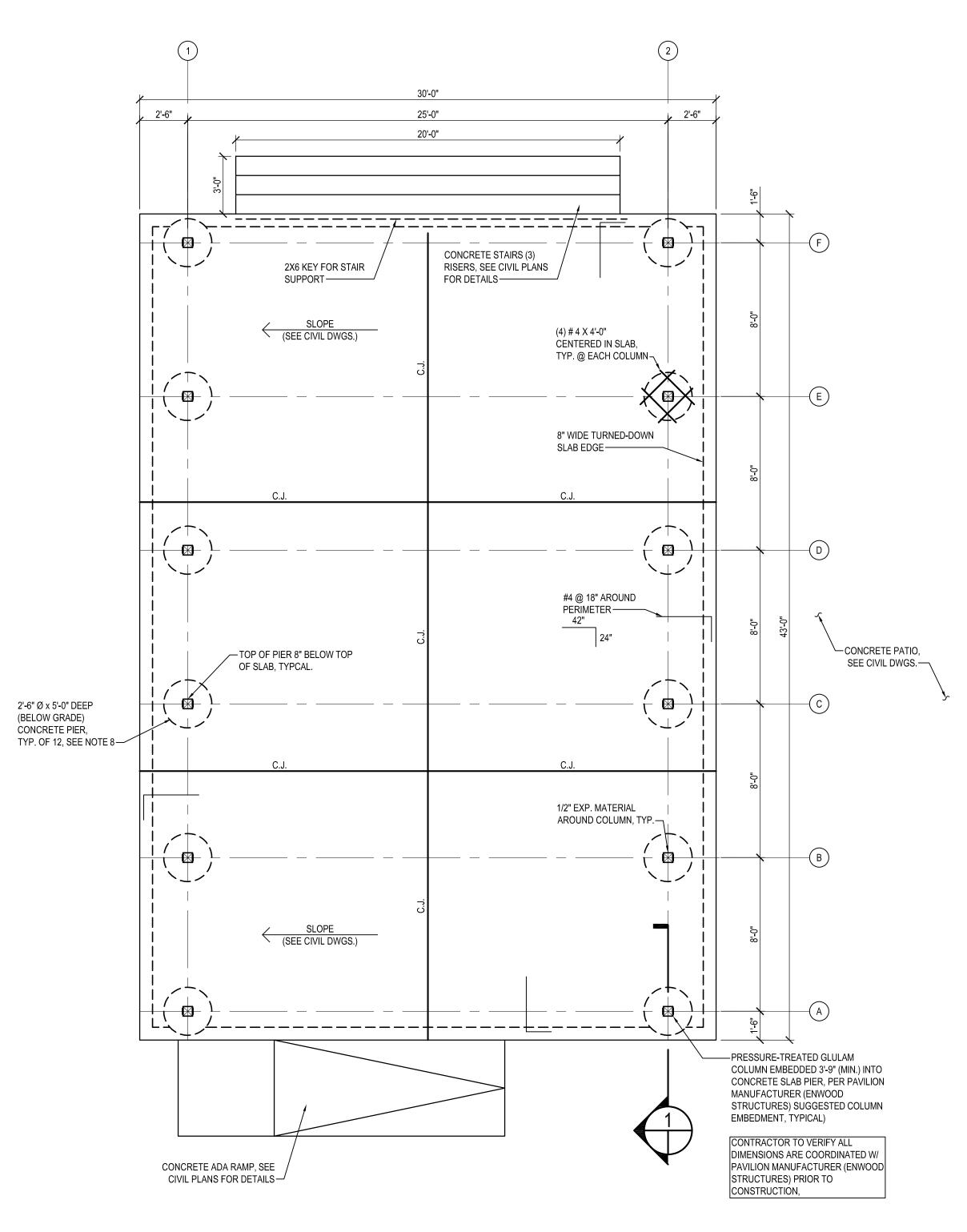
VICINITY MA SCALE: 1" = 2,000

BID SET





	REVISIONS	ANNE ARUNDEL COUNTY										
	NO. DESCRIPTION BY DATE				DEPARTMENT OF PUBLIC WORKS							
					APPROVED	DATE	APPROVED	DATE	SCALE: AS SHOWN			
									DRAWN BY: R.S.S.	DEALE COMMUNITY PARK		
					CHIEF ENGINEER		PROJECT MANAGER		CHECKED BY: M.W.S.			
					APPROVED	DATE	APPROVED	DATE	SHEET NO. 43 OF 47	CENEDAL NOTES		
by certify that these documents were prepared or ved by me, and that I am a duly licensed sional engineer under the laws of the State of									PROJECT NO.: P582001	GENERAL NOTES		
and. ee #200461 Expiration Date: 09/02/2024					ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY		CONTRACT NO.: P582001			

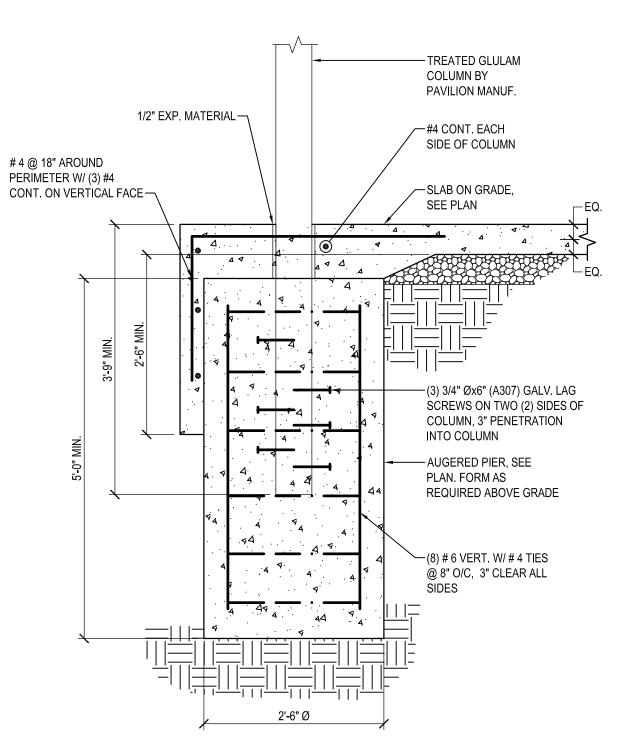


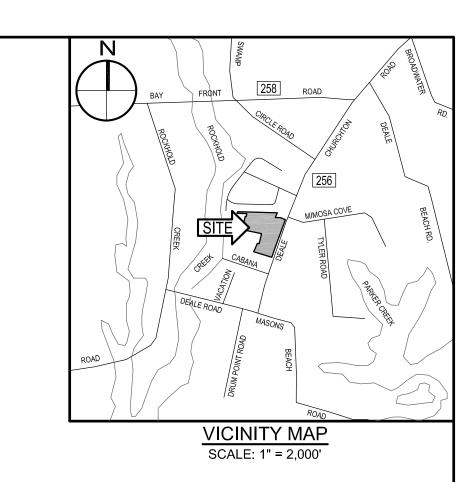


LARGE PAVILION (30' X 44') RALEIGH BY ENWOOD STRUCTURES FOUNDATION PLAN

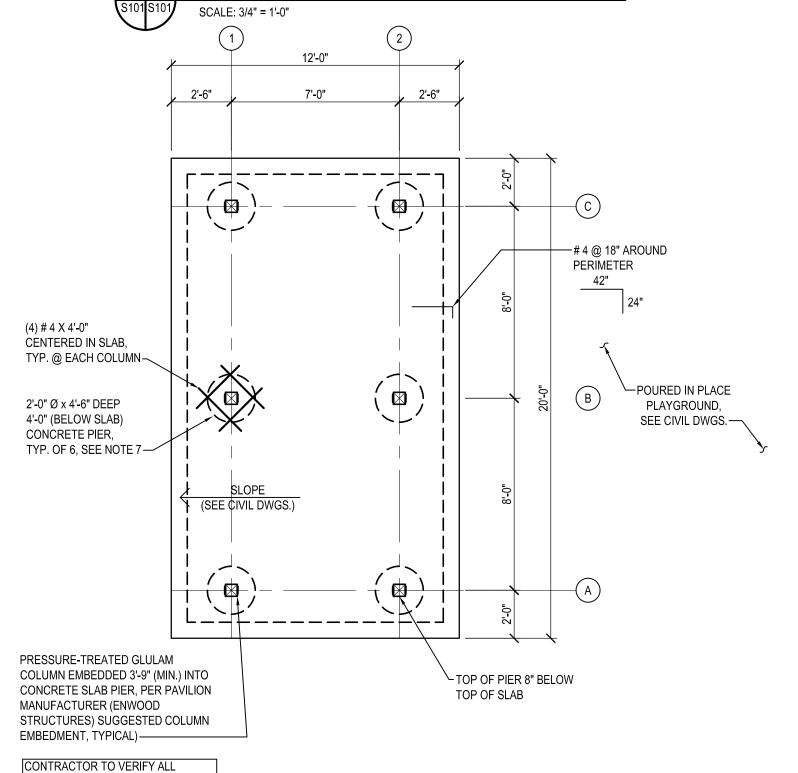
- 1. FOOTINGS HAVE BEEN DESIGNED FOR A SOIL BEARING PRESSURE OF 2,000 PSF. CONTRACTOR VERIFY SOIL CONDITIONS, SEE GENERAL NOTES.
- 2. BOTTOM OF TURNED-DOWN SLAB EDGE, SHALL BE 30" MINIMUM BELOW GRADE. CONTRACTOR COORDINATE WITH FINAL GRADES. 3. CONCRETE SLAB ON GRADE SHALL BE 5" THICK REINFORCED WITH 6"x6" - W2.9xW2.9 (AND ADDITIONAL BARS WHERE NOTED) PLACE SLAB ON 4" GRAVEL SUB-BASE.
- 4. "CJ" INDICATES SLAB CONTROL JOINTS. SEE DETAIL.
- 5. SEE CIVIL DWGS. FOR FINISHED FLOOR ELEVATIONS AND EXTENT OF DEPRESSIONS AND FLOOR SLOPES IN CONCRETE SLABS. 6. FOUNDATIONS DESIGNED TO SUPPORT PRE-ENGINEERED / PRE-FABRICATED TIMBER-FRAMED PAVILION. FOUNDATIONS SHALL BE VERIFIED BY ENGINEER OF RECORD FOLLOWING RECEIPT OF MANUFACTURER
- 7. SLAB SHALL BE CURED WITH AN APPROVED SEALING COMPOUND AND FINISHED WITH AN APPROVED NON-METALLIC HARDENER. CURING COMPOUNDS AND HARDENERS SHALL BE APPROVED PRIOR TO THEIR USE,
- AND SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. 8. CONCRETE PIERS SHALL BE REINFORCED W/ (8) # 6 VERT. & # 4 TIES @ 8" O.C.







LARGE PAVILION PIER DETAIL





DIMENSIONS ARE COORDINATED W/

STRUCTURES) PRIOR TO

CONSTRUCTION,

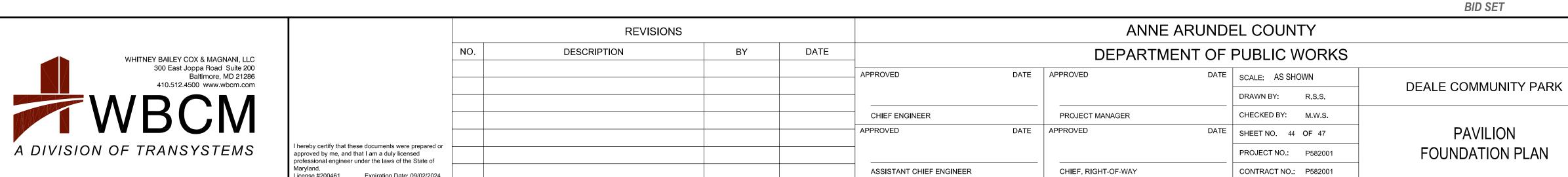
PAVILION MANUFACTURER (ENWOOD

SMALL PAVILION (12' X 20')

RALEIGH BY ENWOOD STRUCTURES FOUNDATION PLAN

- 1. FOOTINGS HAVE BEEN DESIGNED FOR A SOIL BEARING PRESSURE OF 2,000 PSF. CONTRACTOR VERIFY SOIL CONDITIONS, SEE GENERAL NOTES.
- 2. BOTTOM OF TURNED-DOWN SLAB EDGE, SHALL BE 30" MINIMUM BELOW GRADE. CONTRACTOR COORDINATE WITH FINAL GRADES.
- 3. CONCRETE SLAB ON GRADE SHALL BE 5" THICK REINFORCED WITH 6"x6" W2.9xW2.9 (AND ADDITIONAL BARS WHERE NOTED) PLACE SLAB ON 4" GRAVEL SUB-BASE. 4. SEE CIVIL DWGS. FOR FINISHED FLOOR ELEVATIONS AND EXTENT OF DEPRESSIONS AND FLOOR SLOPES IN CONCRETE SLABS.
- 5. FOUNDATIONS DESIGNED TO SUPPORT PRE-ENGINEERED / PRE-FABRICATED TIMBER-FRAMED PAVILION. FOUNDATIONS SHALL BE VERIFIED BY ENGINEER OF RECORD FOLLOWING RECEIPT OF MANUFACTURER SHOP DRAWINGS AND BASE REACTIONS.
- 6. SLAB SHALL BE CURED WITH AN APPROVED SEALING COMPOUND AND FINISHED WITH AN APPROVED NON-METALLIC HARDENER. CURING COMPOUNDS AND HARDENERS SHALL BE APPROVED PRIOR TO THEIR USE, AND SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 7. SLAB SHALL BE CURED WITH AN APPROVED SEALING COMPOUND AND FINISHED WITH AN APPROVED NON-METALLIC HARDENER. CURING COMPOUNDS AND HARDENERS SHALL BE APPROVED PRIOR TO THEIR USE,

AND SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



IF THIS DRAWING IS A REDUCTION,

USE THE GRAPHIC SCALES.

HANDHOLE

C#

POLE MOUNTED SITE LIGHTING FIXTURE, TYPE AS NOTED

SWITCHES

WATERPROOF DIMMER SWITCH WITH 2 HOUR TIMER. MOUNT AT 4'-0" AFF TO TOP.

EXTERIOR PHOTOCELL - WALL MOUNTED 11'-0" AFF

CONTACTOR IN NEMA 3R ENCLOSURE UON. MOUNT 5'-6" AFF TO TOP, UON.

OUTLETS

SURFACE MOUNTED DUPLEX RECEPTACLE; 2P, 3W, 20A, 125V, NEMA 5-20R; GROUND FAULT INTERRUPTING; WEATHERPROOF, WHILE IN USE. MOUNT 24" AFG, UON.

POWER

PANELBOARD - SURFACE, RECESSED MOUNTED, M.H. 6'-6" AFF TO TOP OF PANEL

TRANSFORMER

JUNCTION BOX - WALL MOUNTED

MISCELLANEOUS

DENOTES REFERENCE TO DRAWING NOTE

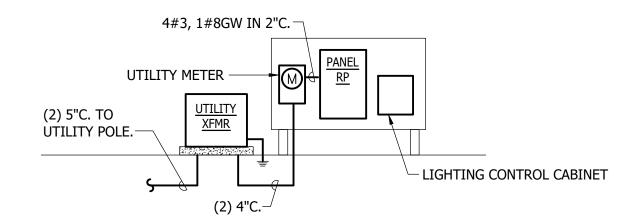
DETAIL REFERENCE: DETAIL NUMBER/DRAWING NUMBER

CONDUIT

HOMERUN TO PANELBOARD; NUMBER OF ARROWHEADS INDICATE NUMBER OF CIRCUITS; REFER TO PANEL SCHEDULES FOR MINIMUM WIRE AND CONDUIT

CONDUIT OR WIRE CONCEALED IN CEILING SPACE, WALL OR SURFACE MOUNTED WHERE NO CEILING EXISTS

CONDUIT OR WIRE ROUTED BELOW GRADE.



SCHEMATIC POWER RISER DIAGRAM

1. LIGHTING CONTROL CABINET SHALL BE IN LOCKABLE NEMA 3R ENCLOSURE.

REFER TO DETAIL 4/E7.1 FOR LIGHTING CONTROLS FOR PLAZA LIGHTS AND PAVILION LIGHTS. 3. PROVIDE DIMMING SWITCH FOR PAVILION LIGHTS.

1. ALL LIGHTING FIXTURES SHALL BE DESIGN LIGHTS CONSORTIUM (DLC) QUALIFIED PRODUCTS LISTED (QPL) OR ENERGY STAR. 2. REFER TO SPECIFICATIONS FOR ADDITIONAL LED AND DRIVER INFORMATION. PROVIDE DRIVERS FOR VOLTAGE AS INDICATED.

ABBREVIATIONS

AMPERE, AMPERES ABOVE FINISHED GRADE AUTHORITY HAVING JURISDICTION ALUMINUM ATS AUTOMATIC TRANSFER SWITCH AMERICAN WIRE GAUGE BALLAST FACTOR BALTIMORE GAS & ELECTRIC CONDUIT CIRCUIT BREAKER DIA DIAMETER

EMERGENCY ENCLOSED CIRCUIT BREAKER ECB EPO EMERGENCY POWER OFF ETR EXISTING TO REMAIN **EXISTING** EX FLA FULL LOAD AMPERES GROUND FAULT INTERRUPTING GFI

DRAWING

GROUND **GROUND WIRE** HORSEPOWER ISOLATED GROUND IMC INTERMEDIATE METAL CONDUIT KCMIL THOUSAND CIRCULAR MILS KILOVOLT-AMPERES

KVA KW KILOWATT MCA MINIMUM CIRCUIT AMPERES MCB MAIN CIRCUIT BREAKER

MLO MAIN LUGS ONLY MOCP MAXIMUM OVERCURRENT PROTECTION MTD MOUNTED MOUNTING HEIGHT/MANHOLE NATIONAL ELECTRICAL CODE

NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION NONFUSED SAFETY SWITCH NIC NOT IN CONTRACT

NO NUMBER ON CENTERS POLE, POLES PHASE PANEL

POLYVINYL CHLORIDE RIGID GALVANIZED STEEL REMOVE EXISTING SURGE PROTECTION DEVICE TAMPER RESISTANT

UNLESS OTHERWISE NOTED

TELEPHONE TERMINATION BOARD TYPICAL UNDERGROUND VOLT, VOLTS WEATHERPROOF WATTS, WIRE, WIRES TRANSFORMER

UON

GENERAL NOTES:

- 1. THE ELECTRICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE DRAWINGS OF ALL OTHER TRADES ON THE PROJECT. ELECTRICAL OR SYSTEMS CONNECTIONS INDICATED ON ARCHITECTURAL, MECHANICAL, CIVIL, STRUCTURAL, KITCHEN AND ALL OTHER DRAWINGS WHICH ARE PART OF THIS PROJECT, SHALL BE CONSIDERED A PART OF THIS CONTRACT AND SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AT NO EXTRA COST TO THE
- 2. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE AND AS SUCH SHALL NOT BE SCALED. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF DEVICES AND EQUIPMENT AND DIMENSIONAL INFORMATION PRIOR TO ROUGH-IN. COORDINATE LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN OF SERVICE EQUIPMENT AND WIRING.
- 3. COORDINATE MOUNTING HEIGHTS OF ALL DEVICES WITH ARCHITECTURAL PLANS, SECTIONS, ELEVATIONS AND CASEWORK DRAWINGS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT ROUTING OF WIRING AND CONDUITS AND SHALL BE RESPONSIBLE FOR SIZING ALL BRANCH CIRCUIT WIRING TO LIMIT VOLTAGE DROP TO 3%%%. CONTRACTOR SHALL SIZE CONDUIT TO ACCOMMODATE WIRING PER NEC. 20 AMPERE CIRCUITS SHALL BE SIZED AS FOLLOWS:

	20 /						
120 VOL	.Т	277 VOL	277 VOLT				
WIRING LENGTH	WIRE SIZE	WIRING LENGTH	WIRE SIZE	CONDUIT SIZE			
0' - 60'	#12	0' - 130'	#12	3/4"			
60' - 100'	#10	130' - 210'	#10	3/4"			
100' - 150'	#8	210' - 340'	#8	3/4"			
150' - 240'	#6	340' - 540'	#6	3/4"			
OVER 240'	#4	OVER 540'	#4	1"			

DIMMED LIGHTING CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS. WIRING AND CONDUIT SIZES INDICATED IN PANEL SCHEDULES ARE MINIMUM ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR

DETERMINING EXACT WIRING AND CONDUIT SIZES. CONTRACTOR SHALL PROVIDE SPLICE BLOCKS AND REDUCING PINS AS REQUIRED

BRANCH CIRCUITS IN PANELBOARDS WITH 200% RATED NEUTRAL BUS, ECM MOTORS AND ALL

TO TERMINATE WIRING AND MAKE FINAL CONNECTIONS.

5. ALL WIRING IS TO BE ALUMINUM WIRING; ALL BOXES SHALL BE BURIED; THE INSPECTION PLATE SHOULD BE WELDED; 10-YEAR WARRANTY

	LIGHTING FIXTURE SCHEDULE											
TYPE	DESCRIPTION	MANUFACTURER	CATALOG NO.	VOLTS	INPUT WATTS	LAMP	MOUNTING	REMARKS				
Р3	LED AREA LUMINAIRE WITH DIE CAST ALUMINUM HOUSING, INTEGRAL MOTION SENSOR, IP66, TYPE III DISTRIBUTION, WET LOCATION LISTED	RAB	ALED-L-3T-N/480/WS2	240,1PH	80	LED 4000K, 10458 LUMENS	POLE MOUNTED	HI/LOW DIMMABLE				
P4	P4PL - PLAZA LIGHTING FIXTURES NOT REQUIRED TO HAVE SENSO	RAB R	ALED-L-4T-N/480/WS2	240, 1PH	80	LED 4000K, 10616 LUMENS	POLE MOUNTED	HI/LOW DIMMABLE				
P5	20-FT SQUARE STRAIGHT ALUMINUM POLE FINISH TO MATCH SAME AS TYPE P5, EXCEPT TYPE V DISTRIBUTION.	RAB	ALED-L-5T-N/480/WS2	240, 1PH	80	LED 4000K, 11760 LUMENS	POLE MOUNTED	HI/LOW DIMMABLE				
A	20-FT SQUARE STRAIGHT ALUMINUM POLE FINISH TO MATCH 8' LED ENCLOSED AND GASKETED INDUSTRIAL FIXTURE WITH FIBERGLASS HOUSING, NEMA 4X GASKET, POLYMERIC LATCHES,	LITHONIA	FEM-L96-9000LM-LPPFL-MD-MVOLT-GZ10-40K-80CRI-WLF	120	53.4	LED 4000K, 8080 LUMENS	TIGHT TO STRUCTURE	PROVID DIMMING				
	POLYCARBONATE LENS, STAINLESS STEEL MOUNTING BRACKETS AND HARDWARE, ELECTRONIC DIMMABLE DRIVER; COLD WEATHER DRIVER							SWITCH MOUNTED AT PAVILLION AREA ONLY TO FUNCTION AT DUSK				
	NOTES:											

4. FIXTURE SHALL BE PROVIDED WITH INTEGRAL PHOTOCELL AND MOTION SENSOR RATED FOR MINIMUM 40 FOOT MOUNTING HEIGHT. MOTION SENSOR SHALL BE PIR TYPE WITH HIGH/LOW/OFF. WATTSTOPPER FSP-2X SERIES OR EQUAL. SEQUENCE OF OPERATION: FIXTURE SHALL ONLY OPERATE FROM DUSK TO DAWN. WHEN MOTION IS DETECTED WITHIN THE SENSOR'S COVERAGE AREA, FIXTURE SHALL BE IN "HIGH MODE" LEVEL. WHEN NO MOTION IS DETECTED FOR THE DURATION OF THE TIME DELAY SETTING (FACTORY PRESET AT 5 MINUTES), THE LIGHTS WILL GO TO THE SELECTABLE LOW MODE (30% OUTPUT). LIGHTS SHALL TURN OFF AFTER 1 HOUR OF NO MOTION. PROVIDE OWNER WITH FSIR-100 HANDHELD REMOTE TOOL FOR SETTING UP THE FSP-2X1. PROVIDE TRAINING TO FOR CHANGING

60 AMI	PERE	BUS		60 A MCB 100%						100% RAT	RATED NEUTRAL BUS				25,000 A.I.C.		
CONN			BR	EAKER	CIRCUIT WIRING						BREAKER		CIRCL		JIT WIRING		CONN
KVA	СКТ	DESCRIPTION	Р	AMPS	NO	SIZE	GND	С	СКТ	DESCRIPTION	Р	AMPS	NO	SIZE	GND	С	KVA
0.4	1	PAVILLION LTG	1	20	2	8	10	2	2	PARKING LOT DRIVE	2	20	3	6	10	2	0.4
0.8	3	PAVILLION REC	1	20	2	8	10	2	4								0.4
0.2	5	CONTROLS	1	20	2	12	12	1	6	PARKING LOT SOUTH	2	20	3	6	10	2	0.4
	7	SPARE	1	20					8								0.4
	9	SPARE	1	20					10	PARKING LOT NORTH	2	20	3	6	10	2	0.6
	11	SPARE	1	20					12	-							0.6
	13	SPACE	1						14	SPACE	1						
	15	SPACE	1						16	SPACE	1						
	17	SPACE	1						18	SPACE	1						
	19	SPACE	1						20	SPACE	1						

BID DOCUMENTS11/08/2023

VICINITY MAP

SCALE: 1" = 2,000'



ARE PROPRIETARY TO GIPE ASSOCIATES, INC. AND SHALL NOT BE ALTERED OR

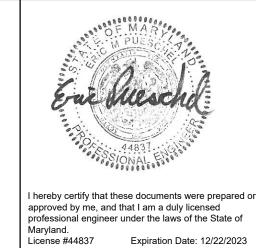
REUSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION

OF GIPE ASSOCIATES, INC. Copyright © 2022"

ADJUSTABLE SETTINGS.



3. FIRST NAMED PRODUCT IS BASIS OF DESIGN. PROVIDE PRODUCTS WHICH INCLUDE ALL FEATURES AND ACCESSORIES AS INDICATED IN THE DESCRIPTION AND MODEL NUMBER OF THE BASIS OF DESIGN PRODUCT.



					•								
		REVISIONS			ANNE ARUNDEL COUNTY								
	NO.	DESCRIPTION	ВҮ	DATE			DEPARTMENT OF	PUBLIC WORKS					
					APPROVED	DATE	APPROVED DATE	SCALE: NONE	DEALE COMMUNITY DADY				
					1			DRAWN BY: J.L.P.	DEALE COMMUNITY PARK				
					CHIEF ENGINEER	_	PROJECT MANAGER	CHECKED BY: E.M.P.					
					APPROVED	DATE	APPROVED DATE	SHEET NO. 45 OF 47	ELECTRICAL LEGEND				
or								PROJECT NO.: P582001	ELECTRICAL LEGEND				
;					ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P582001					

