MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address: Various Meeting Date: 11/12/2025

Beechbank Rd and Capitol View Avenue, Silver Spring

Resource: Non-Contributing, Contributing, and Outstanding Resources

Capitol View Park Historic District Report Date: 11/5/2025

Applicant: WSSC, c/o Walid Halboni **Public Notice:** 10/29/2025

(Amanda Gould, Agent)

Review: HAWP Tax Credit: No

Case Number: 1136655 Staff: Laura DiPasquale

Proposal: Tree removal and associated grading

STAFF RECOMMENDATION

Staff recommends that the HPC <u>approve</u> the HAWP application.

PROPERTY DESCRIPTION

The proposed project overlaps 10 parcels in two areas within the Capitol View Historic District.

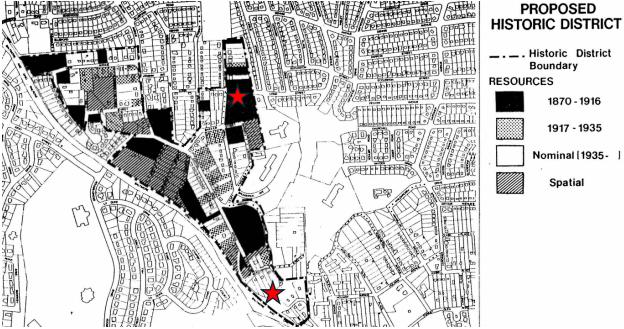


Figure 1: The Capitol View Historic District Boundary, 1982. Red stars highlights the areas of the current proposal within the historic district.

PROPOSAL

The applicant proposes removal of 34 trees and the rehabilitation of sanitary sewer pipes and stream restoration with associated grading across 10 parcels. Temporary access paths are also shown on the proposed plans. In accordance with M-NCPPC Parks and Recreation Construction Park Permit requirements, approximately 75 trees will be planted in the historic district as mitigation for the tree removal.



Figure 2: Map of the WSSC Capitol View – ESA Sanitary Sewer Rehabilitation project sheet index overlaid with all but the northwestern portion of the Capitol View Historic District boundary (in red). The proposed work on sheets 5 and 8 within the district are shown in the figures below.

TREE ID	Common Name	Scientific Name	DBH
270	Black cherry	Prunus serotina	31.2
861	Tulip poplar	Liriodendron tulipifera	21
865	Tulip poplar	Liriodendron tulipifera	6.5
866	Black locust	Robinia pseudoacacia	12.5
867	Norway spruce	Picea abies	11
872	Boxelder	Acer negundo	7
882	Norway spruce	Picea abies	7
885	Tulip poplar	Liriodendron tulipifera	12.5
886	Tulip poplar	Liriodendron tulipifera	6
887	Tulip poplar	Liriodendron tulipifera	18
888	American holly	Ilex opaca	8
893	American holly	Ilex opaca	7
999	Black walnut	Juglans nigra	6
1068	Red maple	Acer rubrum	6
1080	American sycamore	Platanus occidentalis	30
1081	Elm sp.	Ulmus sp.	12
1082	Elm sp.	Ulmus sp.	7
1083	Tulip poplar	Liriodendron tulipifera	23
1084	Elm sp.	Ulmus sp.	11
1086	Tulip poplar	Liriodendron tulipifera	12
1103	American sycamore	Platanus occidentalis	13
1105	Elm sp.	Ulmus sp.	6
1106	American sycamore	Platanus occidentalis	13
1107	Elm sp.	Ulmus sp.	14
1118	Red maple	Acer rubrum	8
1122	Elm sp.	Ulmus sp.	8
1139	Sugar maple	Acer saccharum	16
1140	Red maple	Acer rubrum	20
1141	Boxelder	Acer negundo	11
1142	Elm sp.	Ulmus sp.	15
1143	Boxelder	Acer negundo	10
1144	Black walnut	Juglans nigra	17
1145	Boxelder	Acer negundo	6
1146	Boxelder	Acer negundo	10

Figure 3: Tree survey ID key. The survey is keyed to the aerial views of the project.



Figure 4: Aerial view of the work on Sheet 5 showing the proposed tree removal near Loma Street and Leafy Avenue within the Capitol View Historic District (shaded in purple). The LOD begins behind the new construction at 10201 Menlo Avenue and extends west and south along the property line between the Outstanding resources at 2801 and 2905 Barker Street.

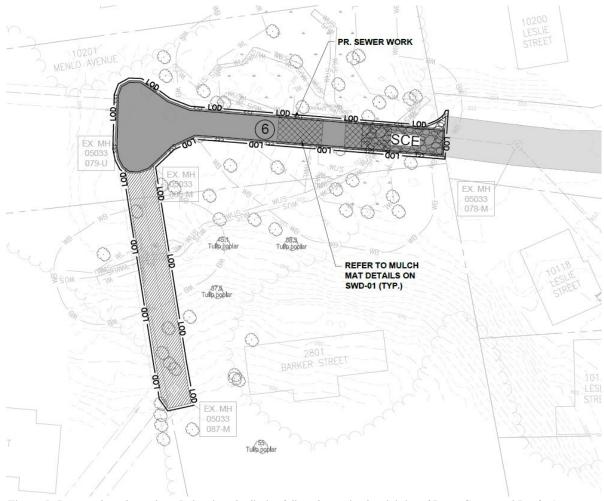


Figure 5: Proposed work on sheet 5 showing the limit of disturbance in the vicinity of Loma Street and Leafy Avenue.



Figure 6: View northwest from Barker Street at the driveway entrance to 2801 Barker Street towards the LOD. The trees in the foreground are not proposed for removal (October 2025, Historic Preservation Office).

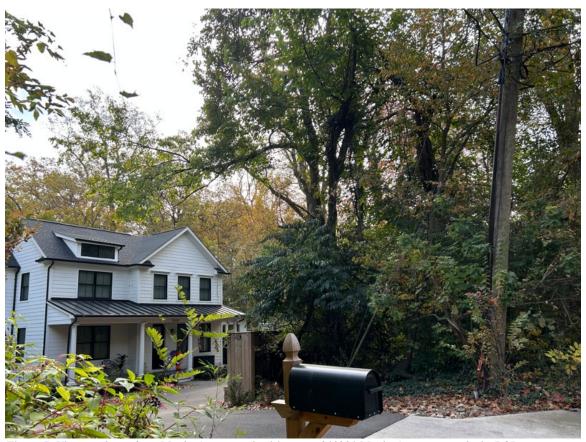


Figure 7: View southeast from Menlo Avenue at the driveway of 10201 Menlo Avenue towards the LOD.



Figure 8: Aerial view of the work on sheet 8 showing the proposed tree removal near Capitol View Avenue and Beechbank Road within the Capitol View Historic District (shaded in purple).

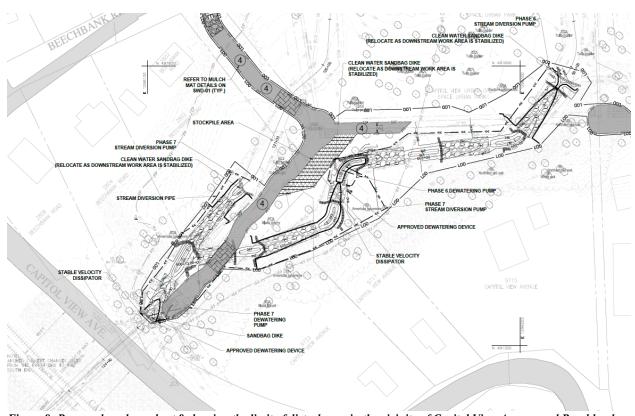


Figure 9: Proposed work on sheet 8 showing the limit of disturbance in the vicinity of Capitol View Avenue and Beechbank Road.

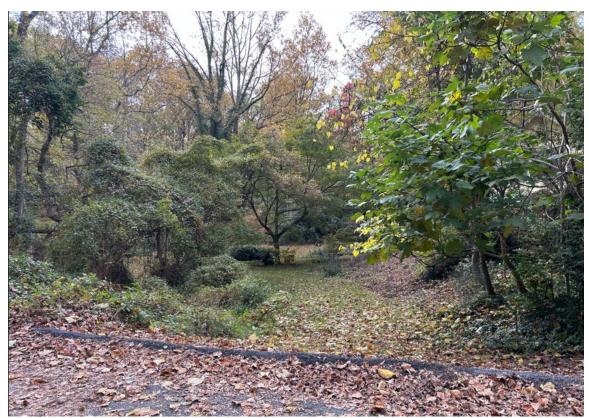


Figure 10: View southeast from Beechbank Road at the location of the proposed temporary access road.



Figure 11: Looking southeast from the rear yard of 2802 Beechbank Road (October 2025, Historic Preservation Office).



Figure 12: Photographs of the project area near Loma Street.



Figure 13: Photographs of the project area near Capitol View Avenue.

APPLICABLE GUIDELINES

When reviewing alterations and new construction within the Capitol View Park Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents include the historic preservation review guidelines in the approved and adopted amendment for the Approved & Adopted Sector Plan for Capitol View & Vicinity (Sector Plan/Guidelines), Montgomery County Code Chapter 24A (Chapter 24A), and the Secretary of the Interior's Standards for Rehabilitation (Standards). The pertinent information in these documents is outlined below.

Approved & Adopted Sector Plan for Capitol View & Vicinity (Sector Plan/Guidelines)

The significance of Capitol View Park to the County's heritage is as an example of a railroad community which developed gradually over the past 100 years. The community's origin is representative of a number of railroad suburbs which developed following the opening of the Metropolitan Branch of the B&O. After its genesis, Capitol View Park developed so as to exhibit most building styles "typical" in the development of suburban Montgomery County. Most Capitol View Park structures possess little distinction as architectural entities. When grouped, however, these resources meet the criteria for district designation as a visual example of suburban development styles. This emphasis on the contiguous visual architectural contribution of the district is the basis for the boundary... The geographic contiguity and architectural cohesiveness of the resources as provided by the... boundary presents a sound basis for the regulation and preservation of properties significant to the district's contribution to the County.

Within the district, the resources can be grouped into four categories, each of which contributes to the district:

- 1. [Primary/Outstanding] 1870-1916: Characterized by large lots and variety of setbacks, and architecturally encompassing the "Victorian" residential and revival styles and the early bungalow style popular during this period, these twenty-two houses are of a higher degree of architectural and historical significance than the other structures within the district.
- 2. [Contributing] 1917-1935: Characterized by small lots, regularity of set backs, and predominantly of the bungalow style, these twenty-three houses are of a lesser architectural significance, but taken as a whole do contribute to the character of the district.
- 3. Nominal (1936-1981): These houses of themselves are of no architectural or historical significance, but through their contiguity to the significant resources have some interest to the historic district.
- 4. Spatial: Spatial resources are unimproved parcels of land which visually and aesthetically contribute to the setting of the historic district, and which can be regarded as extensions of the environmental settings of the significant historic resources.

Montgomery County Code; Chapter 24A-8

- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to ensure conformity with the purposes and requirements of this chapter, if it finds that:
 - (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
 - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter.
 - (3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic

- district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located: or
- (4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or
- (5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship; or
- (6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.
- (c) It is not the intent of this chapter to limit new construction, alteration or repairs to any 1 period or architectural style.
- (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district.

Secretary of the Interior's Standards for Rehabilitation:

#2: The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

STAFF DISCUSSION

Staff supports the proposed tree removal and associated grading for sewer system repairs and stream restoration and recommends approval. Staff finds that the proposal is intended to both protect sewer assets and minimize increases to floodplain water surface elevations that could damage adjacent homes. Staff finds that, while the proposed removal of 34 trees within two small areas of the historic district may have a short-term visual impact within the district, the areas remain heavily wooded and the applicants' proposed 1:1 replanting for every inch removed will offset the removal and act as succession planting in the district to preserve the open and wooded character of the district long-term, per Chapter 24A-8(b)(1), Chapter 24A-8(d), and *Standard* 2. Staff also finds that the proposal will reduce the risk of flooding of the historic resources within the district, aiding in their protection, per Chapter 24A-8(b)(3), and that proper sanitation is a public necessity and that in balancing the interests of the public in preserving the historic resources within a historic district, the interests of the public from the use and benefit of the current proposal, the general public welfare is better served by granting the permit, per Chapter 24A-8(b)(6).

STAFF RECOMMENDATION

Staff recommends that the HPC <u>approve</u> the HAWP application under the Criteria for Issuance in Chapter 24A-8(b)(1), (3), and (6) and Chapter 24A-8(d), having found that the proposal will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the Secretary of the Interior's Standards for Rehabilitation #2;

and with the general condition that the applicant shall present an electronic set of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to

submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301-495-2167 or laura.dipasquale@montgomeryplanning.org to schedule a follow-up site visit.



APPLICATION FOR HISTORIC AREA WORK PERMIT HISTORIC PRESERVATION COMMISSION 301.563.3400

HAWP#__ DATE ASSIGNED____

FOR STAFF ONLY:

APPLICANT:

Name:			E-ma	ail:	
Address:			City:		Zip:
Daytime Ph	one:		Tax A	Account	No.:
AGENT/COI	NTACT (if applicabl	e):			
Name:			E-ma	ail:	
Address:			City:		Zip:
Daytime Ph	one:		Cont	ractor R	egistration No.:
LOCATION (OF BUILDING/PRE	MISE: MIHP # of I	Historic Prop	erty	
map of the of Are other PI (Conditional supplement Building Nui	easement, and docu anning and/or Heari Use, Variance, Reco al information. (See mber:	mentation from t ing Examiner App ord Plat, etc.?) If Y Attachment 1 for Street:	he Easemer rovals /Revi 'ES, include r ePlan reco	nt Holde iews Red informa rds for th	nt on the Property? If YES, include a r supporting this application. quired as part of this Application? Ition on these reviews as his project).
Lot:	Block:	Subdiv	ision:	Parce	÷l:
for propos be accepte New Addit Demo Gradi	ed work are submited for review. Check Construction Construction Colition Colition Check Excavation Country that I have the aute and that the construction Check C	itted with this apoint and that apply: Deck/Porch Fence Hardscape/ Roof authority to make	Landscape the foregoingly with plan	Incomp	fy that all supporting items plete Applications will not Shed/Garage/Accessory Structure Solar Tree removal/planting Window/Door Other: cation, that the application is corrected and approved by all necessary for the issuance of this permit.

HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFING [Owner, Owner's Agent, Adjacent and Confronting Property Owners]								
Owner's mailing address Owner's Agent's mailing address								
Adjacent and conf	ronting Property Owners mailing addresses							
·								

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:
Description of Work Proposed: Please give an overview of the work to be undertaken:

Work Item 1:					
Description of Current Condition:	Proposed Work:				
Work Item 2:					
Description of Current Condition:	Proposed Work:				
Work Item 3:					
Description of Current Condition:	Proposed Work:				

HISTORIC AREA WORK PERMIT CHECKLIST OF APPLICATION REQUIREMENTS

	Required Attachments						
Proposed Work	I. Written Description	2. Site Plan	3. Plans/ Elevations	4. Material Specifications	5. Photographs	6. Tree Survey	7. Property Owner Addresses
New Construction	*	*	*	*	*	*	*
Additions/ Alterations	*	*	*	*	*	*	*
Demolition	*	*	*		*		*
Deck/Porch	*	*	*	*	*	*	*
Fence/Wall	*	*	*	*	*	*	*
Driveway/ Parking Area	*	*		*	*	*	*
Grading/Exc avation/Land scaing	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/ Door Changes	*	*	*	*	*		*
Masonry Repair/ Repoint	*	*	*	*	*		*
Signs	*	*	*	*	*		*

Attachment 1.

Are other Planning and/or Hearing Examiner Approvals /Reviews Required as part of this Application? (Conditional Use, Variance, Record Plat, etc.?)

- Project 2024-025 (WSSC Water Capitol View Sewer Rehabilitation)
- Project MR2025025 (Capitol View Sewer Rehab Project)

Attachment 2. Adjacent and confronting Property Owners

2804 Beechbank Rd
Silver Spring, MD, 20910
9723 Capitol View Ave
Silver Spring, MD, 20910
2802 Beechbank Rd
Silver Spring, MD, 20910
9715 Capitol View Ave
Silver Spring, MD, 20910
9717 Capitol View Ave
Silver Spring, MD, 20910
2905 Barker Street
Silver Spring, MD, 20910
10201 Menlo Ave
Silver Spring, MD, 20910
2801 Barker Street
Silver Spring, MD, 20910
CSX Transportation, Inc.
Tax account: 952561
Montgomery County
Tax account: 3629626

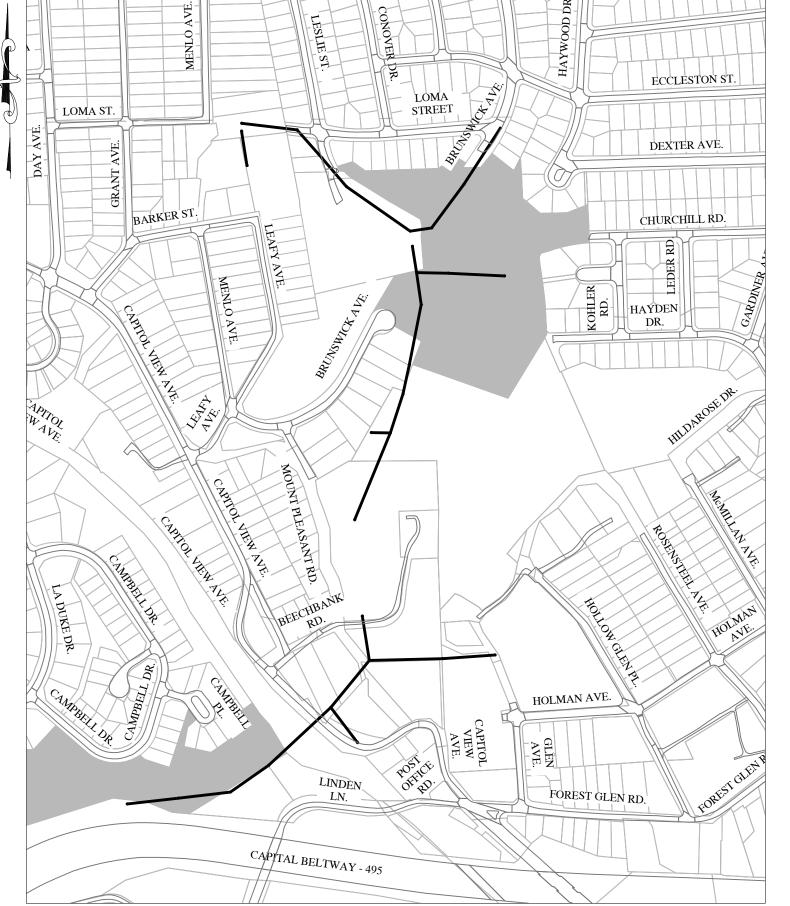
TREE ID	Common Name	Scientific Name	DBH
270	Black cherry	Prunus serotina	31.2
861	Tulip poplar	Liriodendron tulipifera	21
865	Tulip poplar	Liriodendron tulipifera	6.5
866	Black locust	Robinia pseudoacacia	12.5
867	Norway spruce	Picea abies	11
872	Boxelder	Acer negundo	7
882	Norway spruce	Picea abies	7
885	Tulip poplar	Liriodendron tulipifera	12.5
886	Tulip poplar	Liriodendron tulipifera	6
887	Tulip poplar	Liriodendron tulipifera	18
888	American holly	llex opaca	8
893	American holly	llex opaca	7
999	Black walnut	Juglans nigra	6
1068	Red maple	Acer rubrum	6
1080	American sycamore	Platanus occidentalis	30
1081	Elm sp.	Ulmus sp.	12
1082	Elm sp.	Ulmus sp.	7
1083	Tulip poplar	Liriodendron tulipifera	23
1084	Elm sp.	Ulmus sp.	11
1086	Tulip poplar	Liriodendron tulipifera	12
1103	American sycamore	Platanus occidentalis	13
1105	Elm sp.	Ulmus sp.	6
1106	American sycamore	Platanus occidentalis	13
1107	Elm sp.	Ulmus sp.	14
1118	Red maple	Acer rubrum	8
1122	Elm sp.	Ulmus sp.	8
1139	Sugar maple	Acer saccharum	16
1140	Red maple	Acer rubrum	20
1141	Boxelder	Acer negundo	11
1142	Elm sp.	Ulmus sp.	15
1143	Boxelder	Acer negundo	10
1144	Black walnut	Juglans nigra	17
1145	Boxelder	Acer negundo	6
1146	Boxelder	Acer negundo	10

- UNDERGROUND OR OVERHEAD UTILITIES (ELECTRIC, WATER, GAS, CABLE, SPRINKLER SYSTEMS, ETC.) MAY OR MAY NOT EXIST ON PRIVATE PROPERTY OR OUTSIDE WSSC WATER'S R.O.W. THE LOCATION OF THESE UTILITIES IS TYPICALLY UNKNOWN. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGING ANY UTILITIES. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY AT THE
- RELATED WORK OR CONDITIONS THAT MAY IMPACT THEIR ACTIVITIES INCLUDING BY-PASS/FLOW CONTROL, SITE ACCESS AND WORK AREA PRIOR TO INITIATING THEIR WORK. THE CONTRACTOR SHOULD ALSO REVIEW AND MAKE THEMSELVES FAMILIAR WITH PROJECT WORK AREAS AND THE ALIGNMENT, GRADES AND/OR CROSS-SLOPES OF ANY PROPOSED SITE ACCESS AND WORK AREAS. THE CONTRACTOR SHALL ONLY UTILIZE PROPER EQUIPMENT AND CONSTRUCTION TECHNIQUES THAT THEY DEEM APPROPRIATE TO PERFORM THE REQUIRED WORK WITHOUT DAMAGING EXISTING FACILITIES. UTILITIES OR ENVIRONMENTAL FEATURES.
- THE WORK WERE DEVELOPED USING A COMBINATION OF GIS DATA, AS-BUILT DRAWINGS, FIELD COLLECTED SURVEY DATA AND VISUAL OBSERVATIONS, THIS DATA WAS ALSO UTILIZED TO DEVELOP PROJECT LODS SHOWN ON THE DRAWINGS, THE LODS ARE SHOWN FOR EROSION AND SEDIMENT CONTROL, PERMITTING, SITE ACCESS AND WORK AREAS AND TEMPORARY BY-PASS ROUTING REQUIREMENTS. THE CONTRACTOR SHALL UTILIZE THE LODS SHOWN AND AS DIRECTED IN THE FIELD FOR COMPLETION OF THE REQUIRED WORK. MODIFICATIONS OF THE LODS MAY BE REQUIRED BASED ON UPDATED SITE CONDITIONS OR TO BETTER PROTECT WORK AREA AND ENVIRONMENTAL FEATURES. MODIFICATIONS MUST BE APPROVED BY WSSC WATER
- SEWER BYPASS PUMPING IS SHOWN ON THESE DRAWINGS FOR DIAGRAMMATICAL PURPOSES ONLY. CONTRACTOR SHALL PROVIDE TEMPORARY SEWER BYPASS PUMPING SERVICES DURINGONSTRUCTION FOR SEWER AND MANHOLE WORK ON ACTIVE PIPELINES IN ACCORDANCE WITH SPECIFICATION SECTION 02960.
- SEWER BYPASS PIPING THAT IS RUN THROUGH A BRIDGE OR OTHER EXISTING CULVERT SHALL BE ADEQUATELY SUPPORTED AT THE HIGHEST ELEVATION POSSIBLE, ANY PHYSICAL MODIFICATIONS TO BRIDGES, CUI VERTS OR OTHER STRUCTURES SHALL BE MADE PER THE
- 9. IT IS THE INTENT OF THE CONTRACT TO UTILIZE EXISTING SEWER STRUCTURES FOR BY-PASS AND INSTALLATION OF THE CURED-IN-PLACE PIPE (CIPP) LINING. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY INTERNAL CONFIGURATIONS AND CONDITIONS OF EACH STRUCTURE AND PROVIDE APPROPRIATE MATERIALS. FLOW CONTROL. INSTALLATION REQUIREMENTS AND EQUIPMENT TO COMPLETE THE
- PIPELINE DESIGN DIVISION (PDD), PIPELINE CONSTRUCTION DIVISION (PCD) CONTRACT MANAGER, AND REPRESENTATIVE OF THE PROPERTY OWNER TO FINALIZE ACCESS ROAD ALIGNMENTS AND TYPES. CONTRACTOR SHALL ENSURE THAT ADEQUATE SUBGRADE CONDITIONS EXIST. CONTRACTOR, PDD, PCD AND REPRESENTATIVE OF THE PROPERTY OWNER SHALL COORDINATE ALL NECESSARY MODIFICATIONS TO THE ACCESS ROAD DESIGN IN THE FIELD. TREE REMOVAL WILL ALSO BE CONFIRMED AT THE-PRE-CONSTRUCTION
- 11. CALL MNCPPC REPRESENTATIVE AT 301-873-7702 SEVENTY- TWO (72) HOURS IN ADVANCE OF USING ANY PART OF THE TRAIL FOR SEWER TEMPORARY CLOSURE OF THE TRAIL THE CONTRACTOR MUST PROVIDE WARNING SIGNS, SAFETY BARRIERS AND PROTECTIVE MATTING FOR EXISTING PAVEMENT AS DIRECTED BY MNCPPC. DO NOT PROCEED WITHOUT PRE-CONSTRUCTION MEETING WITH MNCPPC. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ALL PAVING DAMAGED AS A RESULT OF TRAIL USAGE AT NO COST TO THE OWNER. EXISTING DAMAGED PAVEMENT SHOULD BE DOCUMENTED PRIOR TO START OF WORK.
- 12. CONTRACTOR SHALL NOTIFY MISS UTILITY 1-800-257-7777 AT LEAST 72 HOURS IN ADVANCE OF ANY WORK OR LOG ON TO WWW.CALL811.COM OR WWW.MISSUTILITY SO APPROPRIATE MARKINGS CAN BE MADE IN THE VICINITY OF ALL CONSTRUCTION ACTIVITY.
- 13. AREAS DESIGNATED AS TEMPORARY FOOTPATH WILL NOT BE USED FOR TRAVEL OF MECHANIZED EQUIPMENT. NO TREE CLEARING OR GROUND DISTURBANCES ARE ALLOWED IN AREAS DESIGNATED AS TEMPORARY FOOTPATHS.
- 14. PARK TRAILS ARE SHOWN BASED ON AVAILABLE INFORMATION. CONTRACTOR SHOULD FAMILIARIZE HIMSELF WITH ALL TRAIL LOCATION. WIDTHS CONDITION MATERIALS FTC PRIOR TO INITIATING WORK
- 15. PAVEMENT PROTECTION (ACCESS ROAD TYPES 1, 2 OR 3) SHALL BE USED OVER EXISTING PAVED TRAILS TO PROTECT THE TRAILS AND SUSTAIN CONTRACTOR EQUIPMENT LOADING IN ACCORDANCE WITH THE GENERAL NOTES 10 AND 11 ON THIS SHEET.
- 16. DESPITE ANY CHANGE IN FIELD CONDITIONS, THE CONTRACTOR AT ALL TIMES SHALL ONLY WORK ON PROPERTIES WHICH HAVE GRANTED THE CONTRACTOR ACCESS THROUGH RIGHT OF ENTRY (ROE) AGREEMENTS. THESE AGREEMENTS ARE PROVIDED AS PART OF THE
- CONTRACT DOCUMENTS. 17. ROE AGREEMENTS PROVIDED MAY HAVE SPECIAL CONDITIONS INCLUDED WITH THEM. IN SOME INSTANCES, THE ENGINEER HAS INCLUDED
- NOTES ON THE DESIGN DRAWINGS FOR INCORPORATION INTO THE CONTRACT. CONTRACTOR SHALL REVIEW THE ROE DOCUMENTS TO ENSURE ALL CONDITIONS FOR ENTRY ARE ADDRESSED. 18. TRAFFIC CONTROL PERMITS ARE PROVIDED WITH CONTRACT DOCUMENTS. A PERMIT HAS BEEN OBTAINED AND TRAFFIC CONTROL MUST BE
- PROVIDED EACH TIME THE CONTRACTOR BEGINS NEW WORK AT A PARTICULAR ACCESS PATH WITH ENTRY FROM A LOCAL, COUNTY OR STATE HIGHWAY.(IE., CCTV, MANHOLE REHABILITATION, SEWER PIPE LINING)
- 19. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING STAGING AREAS. MOBILIZATION OF EQUIPMENT AND MATERIALS TO AND FROM WORK AREAS SHALL BE AT NO ADDITIONAL COST TO THE COMMISSION. ALL AREAS SHALL BE STABILIZED AND RESTORED TO EXISTING CONDITIONS. 20. CONTRACTOR SHALL PROVIDE TREE TRUNK PROTECTION FOR ALL TREES WITHIN 15 FEET OF ANY WORK. SEE TREE PROTECTION FENCE DETAIL
- ON SANITARY SEWER REHABILITATION DETAIL SHEET. CONTRACTOR SHALL NOT STOCKPILE MATERIALS OR EQUIPMENT WITHIN THE DRIPLINE
- 21. CONTRACTOR SHALL PERFORM CAMERA AND TV RECORD INSPECTIONS OF MANHOLES AND PIPES WITHIN LIMITS OF WORK FOR PRE AND POST CONSTRUCTION CONDITIONS.
- 22. A COPY OF USACE AND MDE PERMITS MUST BE AVAILABLE AT THE WORK SITE AT ALL TIMES.
- 23. POST-CONSTRUCTION GRADES AND ELEVATIONS SHALL BE THE SAME AS ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED WETLAND AREAS TO ENSURE THAT THERE IS NO PERMANENT LOSS IN WETLAND HYDROLOGY. IN UNDEVELOPED AREAS, CONTRACTOR SHALL INSTALL ALL NEW MANHOLES AND ADJUST EXISTING MANHOLES WITH PROPOSED REHABILITATION OF THE CONE AND/OR FRAME AND COVER SUCH THAT THE FINAL RIM ELEVATION IS A MINIMUM OF 12-INCHES AND A MAXIMUM OF 18-INCHES ABOVE ADJACENT GROUND ELEVATION.
- 24. ACCESS ROADS ARE CONSTRUCTED WITHIN LOD AS SHOWN ON THE PLANS & IN ACCORDANCE WITH ACCESS ROAD DETAILS.
- 25. REDUNDANT SILT AND/OR SUPER-SILT FENCE IS NOT REQUIRED WHERE SHOWN WHEN PROVIDED AS PART OF ACCESS ROAD CONSTRUCTION (TYPES 3 AND 4). FOR ACCESS ROAD TYPES 1 AND 2, SILT FENCE MAY BE PROVIDED IN LIEU OF WOVEN WIRE CHICKEN FENCE IN AREAS WHERE SILT FENCE IS SHOWN ON THE PLANS.
- 26. CONTRACTOR SHALL NOT CUT PAVEMENT ON ANY ROADS INCLUDED ON THE "MORATORIUM LIST" PROVIDED IN THE CONSTRUCTION TASK ORDER WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ROAD OWNER. THE CONTRACTOR SHOULD GET AN UPDATED MORATORIUM ROADS LIST FROM MONTGOMERY COUNTY AT THE TIME OF CONSTRUCTION.
- 27. MAXIMUM BYPASS PUMP FLOWRATES PROVIDED ON THE DRAWINGS ARE ESTIMATED BASED ON HYDRAULIC MODELING RESULTS, THEORETICAL FULL PIPE FLOW OF CONNECTED PIPES, OR APPROXIMATE NUMBER OF SEWER HOUSE LATERAL CONNECTIONS. CONTRACTOR SHALL CONFIRM BYPASS PUMP RATE REQUIREMENTS FOR EACH SET-UP AND SELECT APPROPRIATE BYPASS EQUIPMENT.

CONTRACT NO. CI7063A21 **CAPITOL VIEW - ESA SANITARY** SEWER REHABILITATION MONTGOMERY COUNTY, MD.

TASK ORDER NO. 05-17 - JOB NO. CICKCNCRMH7360A22

- 28. CONTRACTOR SHALL NOT STOCKPILE EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS. WATERWAYS. THE 100-YEAR FLOODPLAIN. OR WITHIN THE DRIPLINE OF ANY TREE
- 29. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING ROADS, DRIVEWAYS, CULVERTS, DRAINAGE FACILITIES, UTILITIES, PIPING, STRUCTURES, EQUIPMENT, OR IMPROVED AREAS THAT OCCURS AS A RESULT OF PROJECT CONSTRUCTION AND SHALL REPAIR TO CURRENT CONDITIONS OR REPLACE IN-KIND ANY FEATURES DAMAGED AS A RESULT OF THEIR WORK IMMEDIATELY
- 30. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ROADWAYS OF DUST AND DEBRIS AND TAKE WHATEVER MEASURES NECESSARY TO ENSURE THAT ROADS AND MAINTAINED AREAS ARE KEPT IN A DEBRIS AND DUST FREE CONDITION AT ALL TIMES. THE CONTRACTOR SHALL IMMEDIATELY CLEAN-UP ALL DEBRIS THAT IS TRACKED ONTO ROADS AS A RESULT OF THEIR WORK
- 31. IF EXCAVATION IS NECESSARY TO COMPLETE CERTAIN ASPECTS OF THE WORK, ANY EXCAVATED MATERIALS SHALL BE IMMEDIATELY HAULED AWAY TO AN APPROVED OFF-SITE LOCATION. WHICH HAS AN APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR ACCEPTING EXCAVATED MATERIAL, UNLESS OTHERWISE AUTHORIZED BY WSSC WATER. EXCAVATIONS WHICH ARE LEFT OPEN SHALL BE PROTECTED OR ENCLOSED AND EFFECTIVELY MARKED SO TO PRESENT NO DANGER TO THE PUBLIC. EXCAVATIONS OCCURRING IN ROADWAYS SHALL HAVE STEEL PLATES PLACED OVER THE EXCAVATIONS WHEN THE CONTRACTOR IS NOT PRESENT. SILT FENCING SHALL BE PLACED ON THE DOWNHILL SIDE OF ANY AREAS WORKED BY THE CONTRACTOR'S AS MAY BE REQUIRED.
- 32. ALL CIPP LINING WORK SHOULD BE COMPLETED DURING DRY-WEATHER. NO CIPP LINING SHALL BE PERFORMED DURING WET-WEATHER CONDITIONS.
- 33. THE CONTRACTOR MAY BE REQUIRED TO ADJUST THEIR CONSTRUCTION SCHEDULE AND WORK OPERATIONS TO ACCOMMODATE PROPERTY OWNER CONSIDERATIONS OR OTHER WORK IMPACTING THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE THEIR WORK SUFFICIENTLY IN ADVANCE TO HELP ELIMINATE PROJECT DELAYS IN COMPLETING THE REQUIREMENTS OF
- FOR CIPP LINING, REFER TO WSSC STANDARD SPECIFICATIONS SECTION 02955.
- 35. HYDRANT USE FOR WATER NEEDED TO COMPLETE THE WORK WILL REQUIRE A METER FROM WSSC. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE NECESSARY WATER AND APPURTENANCES TO EACH WORK LOCATION AS NEEDED TO COMPLETE
- 36. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROLLING SIDELINE AND SERVICE CONNECTION FLOWS AND MAINTAIN SERVICE AT ALL TIMES. SEWER SERVICE MUST BE MAINTAINED AT ALL TIMES. CONTROLLING SIDELINE AND SERVICE CONNECTION FLOWS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 37. THE CONTRACTOR SHALL OBSERVE ANY POSTED BRIDGE LOADING REQUIREMENTS. IF BRIDGE USE INFORMATION IS NOT POSTED, THE CONTRACTOR SHOULD CONSULT WITH THE PROPERTY OWNER OR AGENCY TO DEFINE USE REQUIREMENTS.
- 38. UNOBSTRUCTED ACCESS TO PROPERTY OWNER FACILITIES SHALL BE MAINTAINED AT ALL TIMES AND THE CONTRACTOR SHALL OBSERVE ALL TIME-OF-DAY WORK REQUIREMENTS AND RESTRICTIONS OR NO WORK REQUIREMENTS DUE TO FACILITY ACTIVITIES (FUNERALS, ETC.).
- 39. ACCESS TO THE WORK AREAS SHALL ONLY BE THROUGH DESIGNATED SITE ACCESS POINTS AS SHOWN ON THE DRAWINGS.
- 40. WHERE ACCESS IS SHOWN ON THE PLANS, TEMPORARY UNIMPROVED ACCESS AND WORK AREAS SHALL BE PROTECTED BY EITHER MULCH AND TIMBER MATTING OR RUBBER/FIBERGLASS PROTECTION MATTING. ALL ACCESS AND WORK AREAS ON M-NCPPC PROPERTY SHALL UTILIZE MULCH AND TIMBER PROTECTION MATTING.
- 41. PROTECTION MATTING SHOULD ALSO BE USED TO REDUCE IMPACTS/DISTURBANCE WHENEVER CONSTRUCTION TRAFFIC IS NOT KEPI ON PAVED ROADWAYS (ROADWAY BENDS WHERE TRUCKS CANNOT KEEP WHEELS ON PAVED ROADWAYS WHILE MAKING TURN, ETC.). CONSTRUCTION CONDITION OR BETTER AS SOON AS POSSIBLE.
- 42. IF NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS, ANY AREAS DISTURBED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHOULD BE RESTORED TO PRE-CONSTRUCTION CONDITIONS OR BETTER. COORDINATE RESTORATION REQUIREMENTS WITH IMPACTED PROPERTY OWNERS.
- 43. APPROVAL BY SEDIMENT CONTROL INSPECTOR IS REQUIRED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS BEFORE PROCEEDING WITH ANY OTHER LAND DISTURBANCE, GRADING, OR CONSTRUCTION.
- 44. FOR DETAILS OF SEDIMENT CONTROL DEVICES TO BE INSTALLED BY CONTRACTOR, SEE DWG S.C. 1
- 45. REPLACEMENT SEWER SHALL BE RELAYED IN THE SAME LOCATION AT THE SAME LINE AND GRADE AS THE EXISTING SEWER, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 46. WSSC'S INSPECTOR SHALL BE PRESENT FOR THE OPERATION OF ANY WSSC VALVES.
- 47. CONTRACTOR TO PROVIDE TEMPORARY WATER AND/OR SEWER SERVICE DURING CONSTRUCTION.
- 48. THE CONTRACTOR SHALL TEST PIT AND DETERMINE THE LOCATION, ELEVATION, SIZE, MATERIAL, PIPE DIAMETER, AND OUT OF ROUNDNESS OF THE EXISTING PIPE WHERE THE NEW PIPING WILL CONNECT. PRIOR TO ORDERING ANY NEW MATERIAL. UPON DELIVERY OF REQUIRED MATERIALS AND PRIOR TO THE REMOVAL OF EXISTING PIPING, THE CONTRACTOR SHALL CONFIRM THAT ALL MATERIALS
- 49. EXISTING PAVEMENT TO BE SWEPT AT THE END OF EACH BUSINESS DAY.
- 50. UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL PREPARE AS-BUILT PLANS AND SUBMIT TO PIPELINE CONSTRUCTION DIVISION CONTRACT MANAGER.
- 51. WSSC TAKES NO RESPONSIBILITY FOR DESIGN ERRORS AND/OR OMISSIONS. WSSC'S APPROVAL/PERMIT ACCEPTANCE DOES NOT CONSTITUTE A WARRANTY NOR DOES IT RELEASE THE CONTRACTOR FROM RESPONSIBILITY FOR ANY DEFICIENCY WHICH MAY SUBSEQUENTLY BE FOUND.
- 52. ALL NEW REPLACEMENT SEWERS SHALL MATCH THE EXISTING INVERT ELEVATION, UNLESS OTHERWISE MARKED ON PROFILE OR PLANNING VIEW.
- 53. CONTRACTOR SHALL NOT INSTALL LATERAL CONNECTIONS TO NEW MANHOLE UNLESS THERE IS NO ALTERNATIVE. CONTRACTOR SHALL USE RUBBER BOOT IF THE LATERAL CONNECTION IS TO BE MADE TO NEW MANHOLE.
- 54. WORK SHALL COMPLY WITH THE CURRENT COUNTY SPECIFICATIONS FOR UTILITY CONSTRUCTION PERMIT AND/OR MDSHA UTILITY PERMIT. COMPLETE REPAIR (RESTORATION OF RIGHT OF WAY) SHALL BE MADE OF ANY AND ALL DAMAGES DONE TO THE EXISTING IMPROVEMENTS IN THE PUBLIC RIGHT OF WAY CAUSED BY CONSTRUCTION OPERATIONS ON THE SITE. ALL LANE CLOSURES/TRAFFIC CONTROLS ON COUNTY ROAD(S) SHALL COMPLY WITH APPROVED TRAFFIC CONTROL PLANS, WORK ZONE TEMPORARY TRAFFIC CONTROL STANDARDS AND DIRECTIONS OF THE PERMITTING AUTHORITY INSPECTOR.
- 55. USE DIP, RCP, OR AWWA C900/905 PVC PIPE WHEN CONNECTING TO AN EXISTING BRICK MANHOLE. SEE STANDARD DETAIL S/3.0.



TASK ORDER 05-17 LOCATION MAP

<u>Montgomery Co.</u> PAGE: <u>M5286</u> GRID: <u>A08, B08</u> GRAPHIC SCALE 0 200 400 SCALE: 1'' = 400'

MAY, 2025

WSSC Erosion and Sediment Control Approval Note This plan has been approved per requirements in the: Standard Procedures of the WSSC Regulations for Utility Erosion and Sediment Control, Section V, Paragraph A. Plan No. CICKCNCRMH7360A22

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.

PROFESSIONAL CERTIFICATION

NAME: EVAN R. ANDREWS, P.E. ICENSE NO.: 29609

CAPITOL VIEW - ESA

GEN-01 - COVER SHEET

EXPIRATION DATE: 11/19/2025 IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17

SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

SEWER INFRASTRUCTURE SECTION **SECTION MANAGER**

FOR LOCATION OF UTILITIES CALL 8-1-1 OR 1-800-257-77

OR LOG ON TO www.call811.com or www.missutility.net HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY

PERMIT REQUIREMENTS

*TO BE ACQUIRED BY APPLICANT

TOWN NOTIFICATION

AS BUILT DATA

DRAWING INDEX

PIPELINE DESIGN DIVISION

Plans, Notes & Details

Sediment Control Details

DIVISION MANAGER

Description

WETLANDS / WATERWAYS

M.N.C.P.&P.C.

STATE HGWY. ADM.

STATE BD. HEALTH

MONTGOMERY CO

SED. CONTROL

P.G.CO.D.P.W.&T.

M.D. D.O.E. - WMA

CONTRACT MANAGER

CONTRACTOR

DATE STARTED

DATE COMPLETED

TYPE PIPE W.

TYPE MANHOLES

DATE FINALED

1 thru 44

FINALED BY

Drawing No.

INSPECTOR

L&G

REQ'D

REQ'D

REQ'D

REQ'D

REQ'D

REQ'D

NOT REQ'D

NOT REQ'D

NOT REQ'D

REVISIONS

DRAWN ADEQUATE SURVEY ON PROP. R/W REQ'D CHECK OFF PROP. R/W REQ'D OTHER UTILITIES

JOB NUMBER: CICKCNCRMH7360A22

00'S 212NW03 & 213NW03

STRAUGHANENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com

MICHAEL BAKER INTERNATIONAL, LLC. 306 Concourse Drive, Suite 500



THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

INTERNATIONAL Phone: (410) 689-3400

NO 1

- PRE-CONSTRUCTION MEETING
- EROSION AND SEDIMENT CONTROL MEETING (MINIMUM 7 WORKING DAYS PRIOR TO COMMENCING EARTH DISTURBING ACTIVITIES)
- FOLLOWING INSTALLATION OF INITIAL SEDIMENT CONTROL MEASURES
- DURING INSTALLATION OF MAJOR SEDIMENT CONTROL BASINS/TRAPS
- PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S)
- PRIOR TO REMOVAL OF ALL SEDIMENT CONTROL DEVICES
- PRIOR TO FINAL ACCEPTANCE BY WSSC

2. STANDARDS AND SPECIFICATIONS

THIS PLAN IS DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I & II AND THE MARYLAND DEPARTMENT OF ENVIRONMENT EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT REGULATIONS, AND ALL REVISIONS THERE OF, AND AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL KEEP A COPY OF THE 2011 "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL ON THE SITE AT ALL TIMES.

3. INGRESS / EGRESS CONTROLS

THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ON PUBLIC ROADS. ALL MATERIALS DEPOSITED ON PUBLIC ROADS SHALL BE MECHANICALLY REMOVED IMMEDIATELY. THE FLUSHING OF ROAD SURFACES IS PROHIBITED.

TYPICALLY, ALL INGRESS AND EGRESS POINTS SHALL BE CONTROLLED THROUGH THE USE OF A "STABILIZED CONSTRUCTION ENTRANCE SEE DETAIL SC 7 0 '

4. INSPECTION

THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES.

5. SHUTDOWNS AND OR PENALTIES

TOTAL COMPLIANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS EXPECTED AT ALL TIMES. IN CASES WHERE THE CONTRACTOR IS FOUND TO BE IN NON-COMPLIANCE WSSC MAY TAKE STEPS TO IMPOSE SELECTED OR TOTAL SHUTDOWNS AND IMPOSE PER DAY PENALTIES FOR NON-COMPLIANCE.

THE DISTRICT ENGINEER CAN IMPOSE A TOTAL OR PARTIAL SHUTDOWN IF THE PROJECT MAY ADVERSELY IMPACT THE WATERS OF THE STATE.

6. RECORD KEEPING

THE PROJECTS APPROVAL LETTER, APPROVED EROSION AND SEDIMENT CONTROL PLANS, APPROVED CHANGE REQUESTS, DAILY LOG BOOKS AND TEST REPORTS WILL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MDE.

7. EROSION AND SEDIMENT **CONTROL EXCAVATION**

SILT REMOVED FROM CONTROL DEVICES SHALL BE PLACED IN AN APPROVED WASTE SITE EITHER ON OR OFF THE PROJECT. MATERIAL STORED ON SITE MAY BE REUSED ONCE IT IS DRIED AND IF IT MEETS WSSC REQUIREMENTS FOR EMBANKMENT OR ANY UNSPECIFIED NEED.

8. OFF-SITE UTILITY WORK

PRIOR TO ANY EARTHWORK

CALL MISS UTILITY: 1-800-257-7777

SEDIMENT CONTROL FOR UTILITY CONSTRUCTION IN AREAS OUTSIDE OF DESIGNED CONTROLS SHALL FOLLOW THESE ADDITIONAL BEST MANAGEMENT PRACTICES:

- (a) CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK (b) EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.
- (c) TRENCHES FOR UTILITY INSTALLATIONS SHALL BE BACKFILLED. COMPACTED AND STABILIZED
- AT THE END OF EACH WORKING DAY. WHEN THIS IS NOT POSSIBLE, THE AREA SHALL CONFORM TO (d) TEMPORARY SILT FENCES SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED FOR MORE THAN ONE DAY.

9. SENSITIVE AREAS

NO CONSTRUCTION ACTIVITIES SHALL BE UNDERTAKEN WITHIN SPECIFIED SENSITIVE AREAS OF THE PROJECT WITHOUT PRIOR NOTIFICATION OF THE ENGINEER. ALL WORK IN THESE AREAS SHALL BE MONITORED BY A RESPONSIBLE PARTY DESIGNATED BY THE CONTRACTOR TO ASSURE THAT REASONABLE CARE IS TAKEN IN OR ADJACENT TO THESE AREAS. AREAS CONSIDERED SENSITIVE ARE DEFINED AS: FLOODPLAINS, WETLANDS (TIDAL, NONTIDAL AND ASSOCIATED BUFFERS) CRITICAL AREAS, FORESTED AREAS, ARCHEOLOGICAL SITES HISTORIC SITES, PARKLAND AND OPEN WATER.

10. STANDARD STABILIZATION NOTE

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 DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
- (b) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

11. SITE INFORMATION (NOT FOR BIDDING PURPOSES)

SITE AREA: **5.94 ACRES**

DISTURBED AREA: 2.19 ACRES

TEMPORARY IMPACT AREA:

TOTAL CUT: 319 CUBIC YARDS

TOTAL FILL: 6,122 CUBIC YARDS

12. INCREMENTAL STABILIZATION

2.46 ACRES

REFER TO THE CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE INCREMENTAL STABILIZATION OF CUT AND FILLS.

13. DEWATERING PRACTICES

THE CONTRACTOR IS ALERTED THAT MDE CONSIDERS DEWATERING PRACTICES TO BE ELECTIVE IN NATURE. DEWATERING PRACTICES ARE TO BE LOCATED AND OPERATED IN A MANNER THAT DOES NOT DISCHARGE SEDIMENT INTO ANY WATERWAY. NO VISIBLE CHANGES TO STREAM CLARITY ARE PERMITTED.

14. MODIFICATIONS

THE CONTRACTOR SHALL SUBMIT MODIFICATIONS TO THE EROSION AND SEDIMENT CONTROLS TO WSSC FOR APPROVAL PRIOR TO SUBMISSION TO MDE. NO MODIFICATIONS SHALL BE IMPLEMENTED UNTIL ALL APPROVALS FROM WSSC AND MDE ARE OBTAINED.

ADDITIONAL SILT FENCE OR SUPER SILT FENCE PROTECTION NOT SHOWN ON PLAN MAY BE REQUIRED AT THE DISCRETION OF THE WSSC EROSION AND SEDIMENT CONTROL INSPECTOR AND ENFORCEMENT STAFF.

15. BEST MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS WETLAND BUFFERS, WATERWAYS, AND **100-YEAR FLOODPLAIN**

- 1) NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100 - YEAR FLOODPLAIN.
- 2) PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS. WATERWAYS, OR THE 100 - YEAR FLOODPLAIN.
- 3) DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS. UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS. TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
- 4) PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100 - YEAR FLOODPLAIN.
- REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100 - YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED
- RECTIFY ANY NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, OR 100 YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION
- 7) ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (UNIOLA SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON - PERSISTENT VEGETATION MAY BE ACCEPTABLE . BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- 8) AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
- 9) TO PROTECT AQUATIC SPECIES, IN STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM:
 - USE I WATERS: IN STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.
 - USE III WATERS: IN STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD OCTOBER 1 THROUGH APRIL 30, INCLUSIVE, DURING ANY YEAR
 - USE IV WATERS: IN STREAM WORK SHALL NOT BE CONDUCTED DURING

THE PERIOD MARCH 1 THROUGH MAY 31, INCLUSIVE, DURING ANY YEAR.

WASHING OF DEBRIS INTO THE WATERWAY.

- 10) STORMWATER RUNOFF FROM IMPERVIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE
- 11) CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER.

16. ACCESS PATH SEQUENCE OF CONSTRUCTION

- NO LATER THAN 15 DAYS PRIOR TO THE START OF EACH INDIVIDUAL INDEPENDENT UTILITY SEWERSHED REHABILITATION PROJECT CONSTRUCTION, THE PERMITTEE MUST NOTIFY THE BALTIMORE DISTRICT AND MARYLAND DEPARTMENT OF THE ENVIRONMENT, AND SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CONTRACTORS AND INSPECTORS RESPONSIBLE FOR MONITORING THE PROJECT SITE AND COMPLIANCE WITH WORK IN WATERS OF THE U.S., INCLUDING JURISDICTIONAL WETLANDS.
- INSTALL APPROVED TRAFFIC CONTROL DEVICES AS NEEDED
- CLEAR AND CHIP, DO NOT GRUB. DISTURB ONLY THOSE AREAS NECESSARY TO CONSTRUCT THE EROSION AND SEDIMENT CONTROL DEVICES.
- INSTALL SILT FENCING ON DOWN SLOPE SIDE OF ACCESS PATHS. ALL WORK IN WETLANDS AND WETLANDS BUFFER REQUIRE THE USE OF SUPER SILT FENCE INSTEAD OF SILT FENCE. FIBER LOGS MAYBE SUBSTITUTED FOR SILT FENCE SEE DETAIL SHEET 10.
- 5) INSTALL WETLANDS MATTING FOR ALL WETLANDS CROSSINGS.
- WHERE TREES ARE TO BE CLEARED, DO NOT GRUB. CUT TREES FLUSH WITH GROUND AND USE TREE CHIPS FOR ACCESS
- 7) DO NOT DISTURB EARTH. USE TREE CHIPS WHERE NECESSARY
- FOR IMPACTS WITHIN MNCPPC PARKLAND BOUNDARIES INSTALL MULCH MAT AND TREE AREA PROTECTION AS PER DETAIL SHEET 10. SPECIFIC MULCH DETAIL SHALL BE VERIFIED BY MNCPPC
- 9) PROTECT STOCKPILE AREAS WITH SEDIMENT CONTROL MEASURES.
- 10) ACCESS ROAD SHALL BE CONSTRUCTED WITHIN 16' WIDE PATHS SHOWN ON PLANS IN ACCORDANCE WITH DETAILS ON
- 11) UTILIZING THE ACCESS ROAD. CONTRACTOR SHALL GAIN ACCESS TO THE WORK AREAS MINIMIZING IMPACTS TO TREES
- 12) AFTER REMOVAL OF ALL ACCESS ROADS, PATHS SHALL BE REPLACED WITH NATIVE VEGETATION AS SHOWN IN DETAIL ON

17. CLEAN FILL DISPOSAL

BEFORE DISPOSING OF SOIL MATERIAL OR RECEIVING BORROW MATERIAL FOR THE SITE, THE CONTRACTOR MUST ASSURE THAT EACH SPOIL OR BORROW AREA HAS AN EROSION AND SEDIMENT CONTROL PLAN APPROVED (BY THE LOCAL CONSERVATION DISTRICT OFFICE OR OTHER OFFICE DESIGNATED TO REGULATE SUCH ACTIVITIES) AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO ALL APPLICABLE STATE AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ALSO NOTIFY THE LOCAL CONSERVATION DISTRICT IN WRITING OF ALL RECEIVING SPOIL AND BORROW AREAS WHEN

18. UTILITY EROSION AND SEDIMENT CONTROL

- CONTRACTOR IS REQUIRED TO HAVE COPY OF WSSC EROSION AND SEDIMENT CONTROL PERMIT FOR UTILITY CONSTRUCTION ON-SITE AND RESPONSIBLE SUPERVISORY FIELD PERSONNEL MUST HAVE CERTIFICATE OF ATTENDANCE (GREEN CARD) AT A MDE APPROVED TRAINING PROGRAM FOR UTILITY EROSION AND SEDIMENT CONTROL.
- CONTRACTOR MUST AVOID AND/OR MINIMIZE IMPACTS TO ENVIRONMENTAL RESOURCES SUCH AS WETLANDS, TREES, STREAMS, ETC. PATH ALIGNMENT SHOULD BE REVIEWED PRIOR TO CONSTRUCTION DURING THE PRE-CONSTRUCTION SITE VISIT(S) SCHEDULED WITH THE ENVIRONMENTAL CLEARING HOUSE, WSSC, MNCPPC AND LANDOWNERS.
- CONTACT THE WSSC ENVIRONMENTAL GROUP AT 301-206-8077 48HRS IN ADVANCE OF ANY PRE-CONSTRUCTION MEETINGS. REQUIRED SEDIMENT CONTROL MEASURES TO BE INSTALLED WILL BE DISCUSSED AT THE PRE-CONSTRUCTION MEETING. SILT FENCE AND/OR SUPER SILT FENCE IN NON-TIDAL WETLANDS AND BUFFERS SHALL BE INSTALLED AT DIRECTION OF ENVIRONMENTAL INSPECTION PERSONNEL FOR ACCESS ROADS AND WORK AREAS ASSOCIATED WITH STREAM CHANNEL IMPROVEMENTS AND/ OR MANHOLE REPAIR ACTIVITIES.
- CONTACT THE WSSC ENVIRONMENTAL GROUP 48 HRS IN ADVANCE IF CONSTRUCTION ACTIVITIES INVOLVE EARTH DISTURBANCES SUCH AS GRADING AND/OR TRENCHING.
- CONTRACTOR SHALL PERFORM WORK IN A MANNER THAT PROVIDES APPROPRIATE DAILY PROTECTION FOR ALL SOIL AREAS THAT HAVE BEEN DISTURBED AND ALL EXCAVATED SOIL MATERIAL. SO THAT EROSION AND OFF-SITE SEDIMENTATION ARE PREVENTED.
- ALL STREAM CROSSINGS AND CHANNEL IMPROVEMENTS SHALL BE OF A PERMEABLE NATURE AND CONSTRUCTED IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S GUIDELINES TO WATERWAY CONSTRUCTION. THE USE OF TEMPORARY BRIDGES AND/OR TEMPORARY CULVERT CROSSINGS FOR ACCESS IS REQUIRED.
- ANY GROUND OR SURFACE WATER THAT IS PUMPED DURING THIS PROJECT SHALL BE DISCHARGED THROUGH AN APPROVED DEWATERING DEVICE. ANY SURFACE DRAINAGE FLOWING THROUGH DISTURBED AREAS MUST BE SAFELY CHANNELED UTILIZING DIVERSION DEVICES TO PREVENT OFF-SITE SEDIMENTATION.
- 8) IF DEEMED NECESSARY BY CONTINUAL USAGE OF ACCESS ROADS BY HEAVY EQUIPMENT, SILT FENCE SHOULD BE INSTALLED ON DOWNSLOPE SIDE OF ACCESS ROADS (PATHS) AND SUPER SILT FENCE SHOULD BE USED WITHIN WETLANDS BOUNDARY AND WETLANDS BUFFER TO PREVENT OFF-SITE SEDIMENTATION DUE TO ACCESS ROAD DETERIORATION. INSTALL WETLANDS MATTING FOR ALL WETLANDS AND WETLANDS BUFFER CROSSINGS.
- ALL DISTURBED NON PAVED AREAS SHOULD BE VEGETATIVELY RESTORED ACCORDING TO APPROVED PLAN. SEE "BEST MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS AND BUFFERS" FOR STABILIZATION REQUIREMENTS FOR NON-TIDAL WETLANDS AREAS.
- 10) NO TEMPORARY BYPASS SEWER PIPE IS TO BE PLACED DIRECTLY IN ANY STREAM CHANNEL. BYPASS PIPE SHOULD BE ELEVATED TO ALLOW FOR PROTECTION FROM NORMAL STREAM FLOW AND HEAVY STREAM FLOW CONDITIONS ASSOCIATED WITH RAIN EVENTS.
- 11) ADDITIONAL SILT FENCE PROTECTION NOT SHOWN ON PLANS MAYBE REQUIRED AT THE DIRECTION OF WSSC SEDIMENT CONTROL INSPECTION STAFF.
- 12) SEDIMENT CONTROLS SHOWN ON PLANS FOR VEHICLE ACCESS ROADS ARE FOR LINING, GROUTING, AND MANHOLE FRAME WORK PURPOSES ONLY. ANY PROPOSED EXCAVATION AND INSTALLATION OF PIPELINE WILL REQUIRE ADDITIONAL SEDIMENT CONTROL TO BE APPROVED BY WSSC SEDIMENT CONTROL INSPECTION STAFF PRIOR TO ANY EXCAVATION.

SPECIAL CONSTRUCTION REQUIREMENTS FOR WORK PERFORMED IN THE VICINITY OF **EXISTING WATER UTILITIES**

- 1) CONSTRUCTION VEHICLES GENERATING A LOAD GREATER THAN AN AASHTO H20 AND VIBRATORY COMPACTION EQUIPMENT ARE NOT PERMITTED WITHIN 10 FEET CLEAR OF THE EXISTING WATER OR SEWER MAIN(S).
- 2) THE CONTRACTOR SHALL SUBMIT CONSTRUCTION VEHICLE SPECIFICATIONS FOR ALL VEHICLES TO BE USED CLOSER THAN 10 FEET CLEAR OF EXISTING WATER MAIN(S) TO THE WSSC RELOCATIONS UNIT FOR WSSC APPROVAL PRIOR TO COMMENCING WORK OVER THE MAIN(S).
- 3) STOCKPILING OF SOIL OR OTHER MATERIAL IS NOT PERMITTED WITHIN 10 FEET CLEAR OF THE MAIN(S).
- 4) THE CONTRACTOR SHALL LOCATE AND STAKE OUT THE EXISTING WATER MAIN(S) AND MAINTAIN THE MARKERS DURING CONSTRUCTION. UNLESS OTHERWISE APPROVED BY WSSC RELOCATIONS UNIT, CONSTRUCTION VEHICLES ARE NOT PERMITTED WITHIN 10 FEET CLEAR OF THE WATER MAINS AT ANY TIME WHEN LESS THAN 3'-0" OF COVER EXISTS OVER THE MAINS DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AREAS WHERE LESS THAN 3'-0" OF SOIL COVER WILL EXIST OVER THE MAIN(S) DURING HIS CONSTRUCTION OPERATIONS.
- ALL BACKFILL AND COMPACTION OVER THE WATER MAIN(S) WITH LESS THAN 3'-0" OF SOIL COVER MUST BE PERFORMED MANUALLY AND/OR WITH VEHICLES POSITIONED A MINIMUM
- OF 10 FEET CLEAR OF THE MAIN(S) UNTIL 3'-0" OF COVER IS ACHIEVED. IF NECESSARY TEMPORARY FILL SHALL BE PLACED OVER THE EXISTING MAINS TO ALLOW WSSC APPROVED VEHICLE TRAFFIC TO CROSS OVER THE PIPELINE.
- 6) ALL EXPOSED ROCKS, BROKEN PAVEMENT, CURBING AND OTHER UNYIELDING DEBRIS HAVING ANY DIMENSION GREATER THAN THREE INCHES SHALL BE REMOVED FROM ABOVE THE MAIN(S) PRIOR TO PLACING AND COMPACTING FILL. SUBGRADE MATERIALS OR PAVING OVER THE MAIN(S)
- THE CONTRACTOR SHALL NOTIFY THE WSSC CONSTRUCTION INSPECTOR IDENTIFIED AT THE PRE-CONSTRUCTION CONFERENCE AT LEAST 5 DAYS IN ADVANCE OF ANY GRADING OR PAVING IN THE VICINITY OF THE EXISTING WATER MAIN(S). ALL GRADING AND PAVING OVER THE MAIN(S) SHALL BE COORDINATED AND PERFORMED UNDER THE SUPERVISION OF THE WSSC CONSTRUCTION INSPECTOR.
- THE CONTRACTOR SHALL USE SPECIAL CARE WHILE PERFORMING WORK IN THE VICINITY OF THE EXISTING WATER MAIN(S) WHERE LESS THAN 3'-0" OF SOIL COVER EXISTS AND STRICTLY ADHERE TO THESE SPECIAL CONSTRUCTION REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE AND/OR REPLACEMENT REQUIRED AS RESULT OF HIS WORK OVER THE MAIN(S).

TREE CLEARING RESTRICTION

TREE CLEARING IS PROHIBITED BETWEEN APRIL 1 AND SEPTEMBER 30.

WSSC PIPELINE DESIGN DIVISION

REVISIONS

PROFESSIONAL CERTIFICATION 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.

NAME: EVAN R. ANDREWS, P.E. LICENSE NO.: 29609 EXPIRATION DATE: 11/19/2025

SEWER INFRASTRUCTURE SECTION

DATE

PDD PROJECT MANAGER JOB NUMBER : CICKCNCRMH7360A22

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 CAPITOL VIEW - ESA

SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

NO 2 200'S 212NW03 & 213NW03

5/12/2025 12:11 PM - PLOT DATE

WASHINGTON SUBURBAN SANITARY COMMISSION



THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT **PRIOR WSSC APPROVAL**

MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 INTERNATIONAL Phone: (410) 689-3400

MAY, 2025

OF 44

GEN-02 - SEWER FACILITIES REHABILITATION NOTES

CONTRACTOR SHALL CONDUCT ON-SITE PROJECT INITIATION MEETING WITH THE PROJECT ENGINEER.

CONTRACTOR SHALL TAKE EXTRA PRECAUTION WHEN TRANSPORTING MATERIALS TO THE

- SITE, CONTRACTOR SHALL MINIMIZE IMPACT ON THE EXISTING TREES, WETLANDS, WATERS OF THE US, EXISTING UTILITIES, AND OTHER EXISTING FEATURES.
- NO TREES SHALL BE REMOVED WITHIN THE LIMIT OF DISTURBANCE WITHOUT APPROVAL FROM THE PROJECT ENGINEER OR INSPECTOR
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A PUMP AROUND DURING ANY IN-STREAM CONSTRUCTION ACTIVITIES. SEDIMENT-LADEN WATER FROM THE WORK AREA IS TO BE PUMPED INTO AN APPROVED SEDIMENT FILTERING DEVICE. CLEAN WATER ONLY IS TO BE DISCHARGED DOWNSTREAM.
- UPON COMPLETION OF DAILY WORK, A STABLE OUTFALL/CONNECTION SHALL BE ESTABLISHED AND THE PUMP AROUND REMOVED. A STABLE OUTFALL IS DEFINED AS A COMPLETED STREAM RESTORATION STRUCTURE DOWNSTREAM OF WORK AREA.
- 8. FOLLOWING COMPLETION OF DAILY WORK, ALL DISTURBED AREA SHALL BE STABILIZED. DAILY WORK SHALL NOT EXCEED WHAT CAN BE STABILIZED AT THE END OF WORKDAY.
- . ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY IS TO BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 10. CONTRACTOR TO NOTIFY WSSC PROJECT ENGINEER OF BEDROCK CONFLICTS FOR GUIDANCE.

SEQUENCE OF CONSTRUCTION

EROSION AND SEDIMENT CONTROL SETUP

- NO IN-STREAM CONSTRUCTION SHALL BE ALLOWED MARCH 1ST TO JUNE 15TH.
- STAKE OUT THE LIMITS OF DISTURBANCE AND STRUCTURE LOCATIONS, PER THE APPROVED PLANS.
- FLAG ALL TREES WITHIN THE LIMIT OF DISTURBANCE WHICH WILL BE REMOVED FOR ACCESS AND GRADING.
- FOLLOWING LOD STAKEOUT AND TREE FLAGGING, CONDUCT A PRE-CONSTRUCTION MEETING ONSITE WITH THE PROJECT ENGINEER, CONSTRUCTION SUPERVISOR AND APPROPRIATE AGENCY PERSONNEL TO REVIEW THE EROSION AND SEDIMENT CONTROL REQUIREMENTS, SEQUENCE OF CONSTRUCTION, LIMITS OF DISTURBANCE, PROJECT LAYOUT, AND TREE IMPACTS BEFORE WORK BEGINS.
- 5. INSTALL THE STABILIZED CONSTRUCTION ENTRANCES AS INDICATED ON THE PLANS.

THE PLANS OR AS DIRECTED BY THE ENGINEER OR INSPECTOR.

- 6. CLEAR AND GRUB AS NECESSARY TO INSTALL SEDIMENT AND EROSION PERIMETER CONTROLS AND
 43. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS STAGING AREAS.
- INSTALL THE ACCESS ROUTES AND STREAM CROSSINGS PER DIRECTION FROM THE INSPECTOR PRIOR TO ACCESSING THE SITE WITH EQUIPMENT.
- INSTALL TEMPORARY ORANGE CONSTRUCTION FENCE AND TREE PROTECTION AREAS AS SHOWN ON

PHASE 1: STREAM STRUCTURE INSTALLATION AND PLANTING (1 WEEK + 2 WEEKS PLANTING)

- . BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND
- 10. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM
- 11. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.
- 12. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.
- 13. GRADE THE CHANNEL AND INSTALL STRUCTURES. AS SHOWN ON THE PLANS. WORKING FROM UPSTREAM TO DOWNSTREAM.
- COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED.
- 15. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING. PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

PHASE 2: STREAM STRUCTURE INSTALLATION AND PLANTING (1 WEEK + 1 WEEK PLANTING)

- 16. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND APPROVED.
- 18. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.
- 20. GRADE THE CHANNEL AND INSTALL STRUCTURES, AS SHOWN ON THE PLANS, WORKING FROM UPSTREAM TO DOWNSTREAM.

INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.

- 21. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED.
- 22. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING. PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.
- PHASE 3: STREAM STRUCTURE INSTALLATION AND PLANTING (2 WEEKS + 4 WEEKS PLANTING)
- 23. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND APPROVED.

- 24. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM
- 25. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.
- 26. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.
- 27. GRADE THE CHANNEL AND INSTALL STRUCTURES, AS SHOWN ON THE PLANS, WORKING FROM UPSTREAM TO DOWNSTREAM. WORK AREAS THAT ARE WITHIN ACCESS PATHS SHALL BE COORDINATED BY THE CONTRACTOR SUCH THAT NECESSARY ACCESS IS PROVIDED FOR CONSTRUCTION RESTORATION.
- 28. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED
- 29. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING. PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

PHASE 4: STREAM STRUCTURE INSTALLATION AND PLANTING (2.5 WEEKS + 2 WEEKS PLANTING)

- 30. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND APPROVED.
- 31. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM
- 32. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA
- 33. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.
- 34. GRADE THE CHANNEL AND INSTALL STRUCTURES, AS SHOWN ON THE PLANS, WORKING FROM UPSTREAM TO DOWNSTREAM.
- 35. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED
- 36. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING. PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

PHASE 5: STREAM STRUCTURE INSTALLATION AND PLANTING (1.25 WEEKS + 2 WEEKS PLANTING)

- 37. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND APPROVED.
- 38. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM
- 39. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.
- 40. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.
- 41. GRADE THE CHANNEL AND INSTALL STRUCTURES, AS SHOWN ON THE PLANS, WORKING FROM UPSTREAM TO DOWNSTREAM.
- 42. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED.
- ROAD. TREE PROTECTION, AND ORANGE FENCING, PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

PHASE 6: STREAM STRUCTURE INSTALLATION AND PLANTING (3.5 WEEKS + 6 WEEKS PLANTING)

- 44. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND
- 45. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM
- 46. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.
- 47. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.
- 48. GRADE THE CHANNEL AND INSTALL STRUCTURES, AS SHOWN ON THE PLANS, WORKING FROM UPSTREAM TO DOWNSTREAM.
- 49. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED.
- 50. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING. PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

PHASE 7: STREAM STRUCTURE INSTALLATION AND PLANTING (3.25 WEEKS + 6 WEEKS PLANTING)

- 51. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND APPROVED.
- 52. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM
- 53. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.
- 17. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM 54. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.
 - 55. GRADE THE CHANNEL AND INSTALL STRUCTURES, AS SHOWN ON THE PLANS, WORKING FROM UPSTREAM TO DOWNSTREAM. WORK AREAS THAT ARE WITHIN ACCESS PATHS SHALL BE COORDINATED BY THE CONTRACTOR SUCH THAT NECESSARY ACCESS IS PROVIDED FOR CONSTRUCTION AND RESTORATION.
 - 56. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED.
 - 57. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING. PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

PHASE 8: STREAM STRUCTURE INSTALLATION AND PLANTING (3.25 WEEKS + 6 WEEKS PLANTING)

- 58. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND APPROVED.
- 59. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM

60. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.

- 61. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.
- 62. GRADE THE CHANNEL AND INSTALL STRUCTURES, AS SHOWN ON THE PLANS, WORKING FROM UPSTREAM TO DOWNSTREAM.
- 63. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED.
- 64. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING, PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

PHASE 9: STREAM STRUCTURE INSTALLATION AND PLANTING (2.5 WEEKS + 2 WEEKS PLANTING)

- 65. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND APPROVED.
- 66. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM
- 67. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.
- 68. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION
- 69. GRADE THE CHANNEL AND INSTALL STRUCTURES. AS SHOWN ON THE PLANS. WORKING FROM UPSTREAM TO DOWNSTREAM.
- 70. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED.
- 71. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING. PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

PHASE 10: STREAM STRUCTURE INSTALLATION AND PLANTING (1.25 WEEKS + 2 WEEKS PLANTING)

- 72. BEGIN WORK AFTER ALL EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND APPROVED.
- 73. ALL PIPE REHABILITATION WORK IN-STREAM MUST BE COMPLETED PRIOR TO BEGINNING IN-STREAM WORK.
- 74. INSTALL THE CLEAN-WATER DIVERSION PRACTICE TO BYPASS WATER AROUND THE WORK AREA.
- 75. INSTALL THE PUMP AROUND TO DE-WATER THE WORK AREA DURING CONSTRUCTION.
- 76. GRADE THE CHANNEL AND INSTALL STRUCTURES, AS SHOWN ON THE PLANS, WORKING FROM UPSTREAM TO DOWNSTREAM.
- 77. COMPLETE LANDSCAPING, PLANTING, AND PERMANENT SEEDING AS PROPOSED.
- 78. WITH APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, STAGING AREAS, ACCESS ROAD, TREE PROTECTION, AND ORANGE FENCING. PROVIDE STABILIZATION MEASURES FOR AREAS IMPACTED BY REMOVAL OF DEVICES OR ROAD.

GENERAL NOTES FOR STREAM RESTORATION WORK ON PARKLAND

- CONSTRUCTION OF IN-STREAM REVETMENTS, INCLUDING GRADE CONTROL AND BANK STABILIZATION, SHALL BE INSPECTED AND APPROVED BY A STREAM RESTORATION PROFESSIONAL. CONTRACTOR SHALL RECEIVE CONFIRMATION OF APPROVAL BY M-NCPPC AND WSSC PRIOR TO SITE
- 2. THE CONTRACTOR SHALL HAVE SURVEY EQUIPMENT AVAILABLE ON-SITE TO LOCATE CRITICAL DESIGN POINTS (STATION AND ELEVATION) ALONG THE STREAM CHANNEL.
- 3. THE CONTRACTOR SHALL STAKE OUT EACH REVETMENT AND PROVIDE M-NCPPC WITH THE OPPORTUNITY TO INSPECT AND ADJUST LOCATIONS PRIOR TO CONSTRUCTION.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING A SMOOTH TRANSITION UPSTREAM AND DOWNSTREAM OF WORK AREAS WITHIN THE ACTIVE CHANNEL AND ON THE STREAM BANKS. UPON CONCLUSION OF IN-STREAM WORK IN AN AREA, THE THALWEG SHALL BE ESTABLISHED AT THE DIRECTION OF THE STREAM RESTORATION PROFESSIONAL
- LARGE VOIDS SHOULD NOT BE LEFT IN ANY COMPLETED ROCK STRUCTURE. BOULDER STRUCTURES SHALL BE CHINKED BY HAND WITH SMALLER STONE WHERE APPLICABLE.
- 6. GRADE CONTROL STRUCTURES (UNLESS OTHERWISE APPROVED BY PARKS), SHALL BE INSTALLED AND ADJUSTED TO ENSURE FISH PASSAGE ACROSS REVETMENTS.
- 7. CONTRACTOR SHALL REMOVE SSF FOR STREAM ACCESS AS NEEDED, RESETTING BEFORE THE END OF EACH WORK DAY.

LIMIT OF WORK

LIMIT OF WORK (LOW) IS DELINEATED FOR AREAS THAT MAY BE CLEARED OF DEBRIS FOR INSTALLATION OF SANDBAGS OR TREE PROTECTION FENCE, BUT NO EARTH DISTURBANCE SHALL BE ALLOWED.

GENERAL NOTES FOR WORK ON M-NCPPC PROPERTY

- 1. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO START OF WORK WITH 72-HOURS PRIOR NOTICE. THE M-NCPPC PARK MANAGER, INSPECTOR, AND ARBORIST SHALL BE REPRESENTED AT THE MEETING.
- 2. M-NCPPC RESERVES THE RIGHT TO ADJUST AND MODIFY THE LIMITS OF DISTURBANCE IN THE FIELD TO MINIMIZE IMPACTS OF WORK, WITH THE APPROVAL OF WSSC ENVIRONMENTAL GROUP (301-206-8077).
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE FACULTY ACCESS THROUGHOUT CONSTRUCTION AND PROVIDE ANY APPROPRIATE DETOURS, TEMPORARY FACILITIES, AND SIGNAGE AS REQUESTED BY THE PARK MANAGER.
- 4. M-NCPPC MAY INSPECT CONDITION OF TREES THROUGHOUT CONSTRUCTION AND REQUIRE REPAIR, REMOVAL, AND/OR REPLACEMENT OF ANY DAMAGED TREES AT NO COST TO M-NCPPC. THE CONTRACTOR SHALL NOTIFY WSSC OF REQUIRED REPAIR, REMOVAL, AND/OR REPLACEMENT OF DAMAGED TREES FOR APPROVAL BY WSSC PRIOR TO COMPLETION OF WORK
- 5. SITE RESTORATION AND REPAIR/REPLACEMENT OF DAMAGED INFRASTRUCTURE SHALL BE IN ACCORDANCE WITH M-NCPPC DETAILS, STANDARDS, AND SPECIFICATIONS AT THE DIRECTION OF THE M-NCPPC INSPECTOR AT NO COST TO M-NCPPC. DAMAGED M-NCPPC INFRASTRUCTURE NOT INDICATED ON THE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO SEPARATE PAYMENT SHALL BE MADE BY WSSC.
- 6. TREE PROTECTION FENCING SHALL BE PER TREE PROTECTION FENCE DETAIL SHOWN ON PLANS. TREE SAVE AREA SIGNAGE SHOULD BE POSTED EVERY 30 TO 50 FEET ALONG FENCING TREE PROTECTION FENCE SHOULD BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY M-NCPPC ARBORIST PRIOR TO START OF CONSTRUCTION
- 7. THE ENTIRE L.O.D. SHALL BE FENCED AS DIRECTED BY THE PARK INSPECTOR. WHERE SILT FENCE. SUPER SILT FENCE. OR TREE PROTECTION FENCE IS NOT REQUIRED. ORANGE BLAZE SAFETY FENCE SHALL BE USED.
- 8. ALL PLANTING SUBSTITUTIONS MUST BE APPROVED BY M-NCPPC HORTICULTURIST. PLANT MATERIALS AND LOCATIONS SHALL BE INSPECTED BY M-NCPPC HORTICULTURIST PRIOR TO
- 9. PROVIDE DEER PROTECTION FENCING PER M-NCPPC'S SPECIFICATIONS FOR ALL LANDSCAPE AND REFORESTATION TREES AND SHRUBS TO PREVENT DAMAGE FROM DEER.
- 10. STAGING AREAS AND ACCESS ROUTES SHALL BE DETERMINED IN FIELD AND APPROVED BY THE M-NCPPC CONSTRUCTION MANAGER, TO MINIMIZE IMPACTS.
- 11. CONSTRUCTION MANAGER MAY AUTHORIZE SPECIAL TREE AND TREE ROOT PROTECTIONS MEASURES OTHER THAN SHOWN ON THESE PLANS DURING CONSTRUCTION. THESE MAY INCLUDE, BUT NOT LIMITED TO 12-INCH THICK MULCH LAYER ACCESS BEDDING, MATTING, ADDITIONAL TREE PROTECTION FENCING, AND ADDITIONAL SEDIMENT CONTROLS.
- 12. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR IDENTIFYING THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION RELATED WORK AND SHALL COORDINATE THE WORK WITH M-NCPPC CONSTRUCTION MANAGER. THE CONTRACTOR SHALL MAINTAIN PROPER CLEARANCES BETWEEN ALL EXISTING AND PROPOSED UTILITIES AT ALL TIMES AS REQUIRED BY THE UTILITY COMPANIES.
- 13. PRIOR TO VEGETATIVE STABILIZATION, ALL DISTURBED AREAS MUST BE TOPSOILED PER THE MONTGOMERY COUNTY "STANDARDS AND SPECIFICATIONS FOR TOPSOIL". IF ON-SITE MATERIALS DO NOT MEET REQUIREMENTS OF TOPSOIL, COORDINATE WITH M-NCPPC REGARDING TILLING-IN OF CERTIFIED COMPOST TO ON-SITE SOILS IN ORDER TO MEET SPECIFICATIONS.

WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION

REVISIONS

MAY, 2025

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 CAPITOL VIEW - ESA SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

PROFESSIONAL CERTIFICATION

HEREBY CERTIFY THAT THESE

DOCUMENTS WERE PREPARED OR

APPROVED BY ME, AND THAT I AM A

DULY LICENSED PROFESSIONAL

ENGINEER UNDER THE LAWS OF

NAME: EVAN R. ANDREWS, P.E.

EXPIRATION DATE: 11/19/2025

THE STATE OF MARYLAND.

LICENSE NO.: 29609

JOB NUMBER : CICKCNCRMH7360A22

DATE

NO 3 00'S 212NW03 & 213NW03 OF 44

PDD PROJECT MANAGER

WASHINGTON SUBURBAN SANITARY COMMISSION

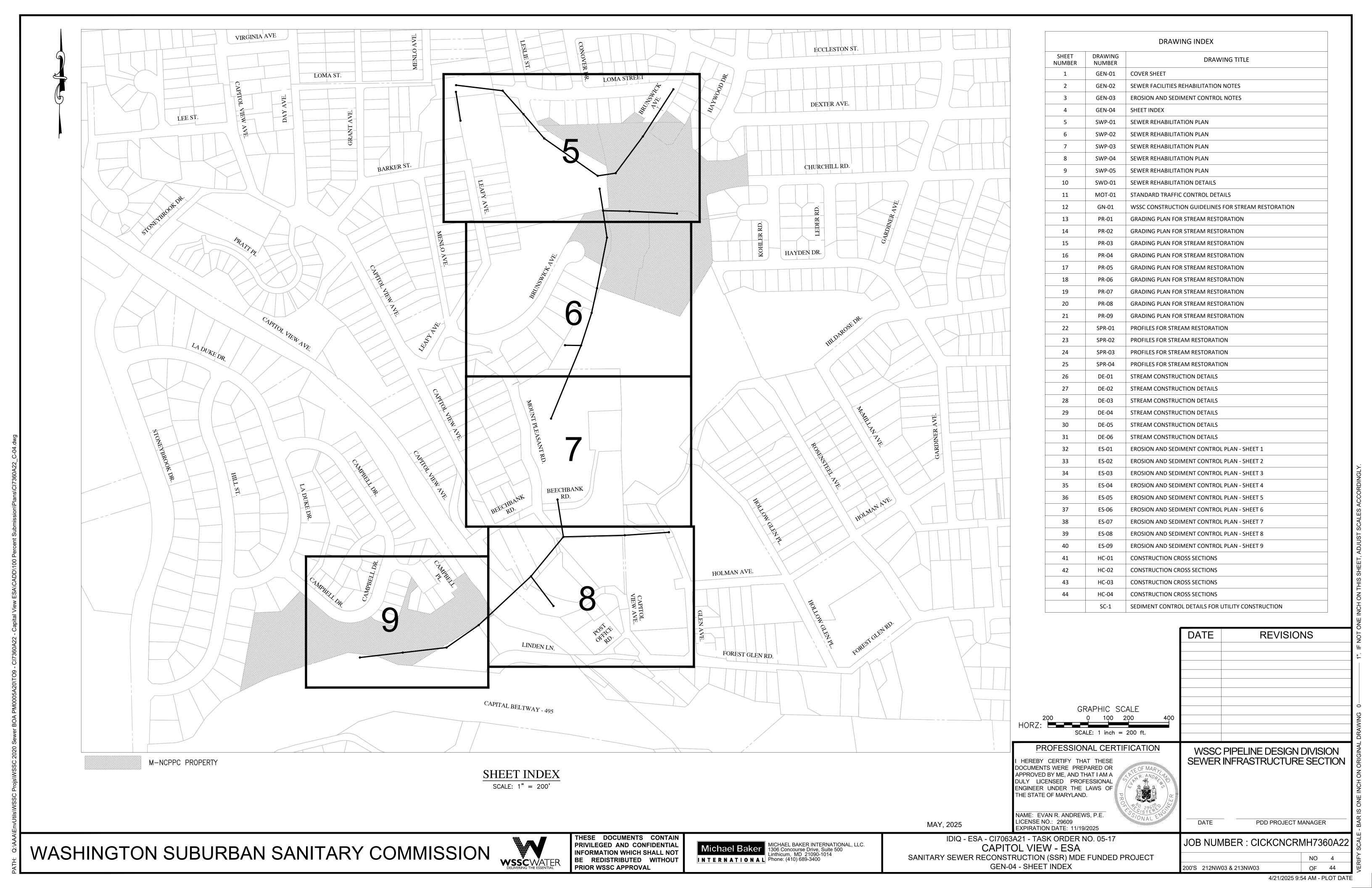
PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT **PRIOR WSSC APPROVAL**

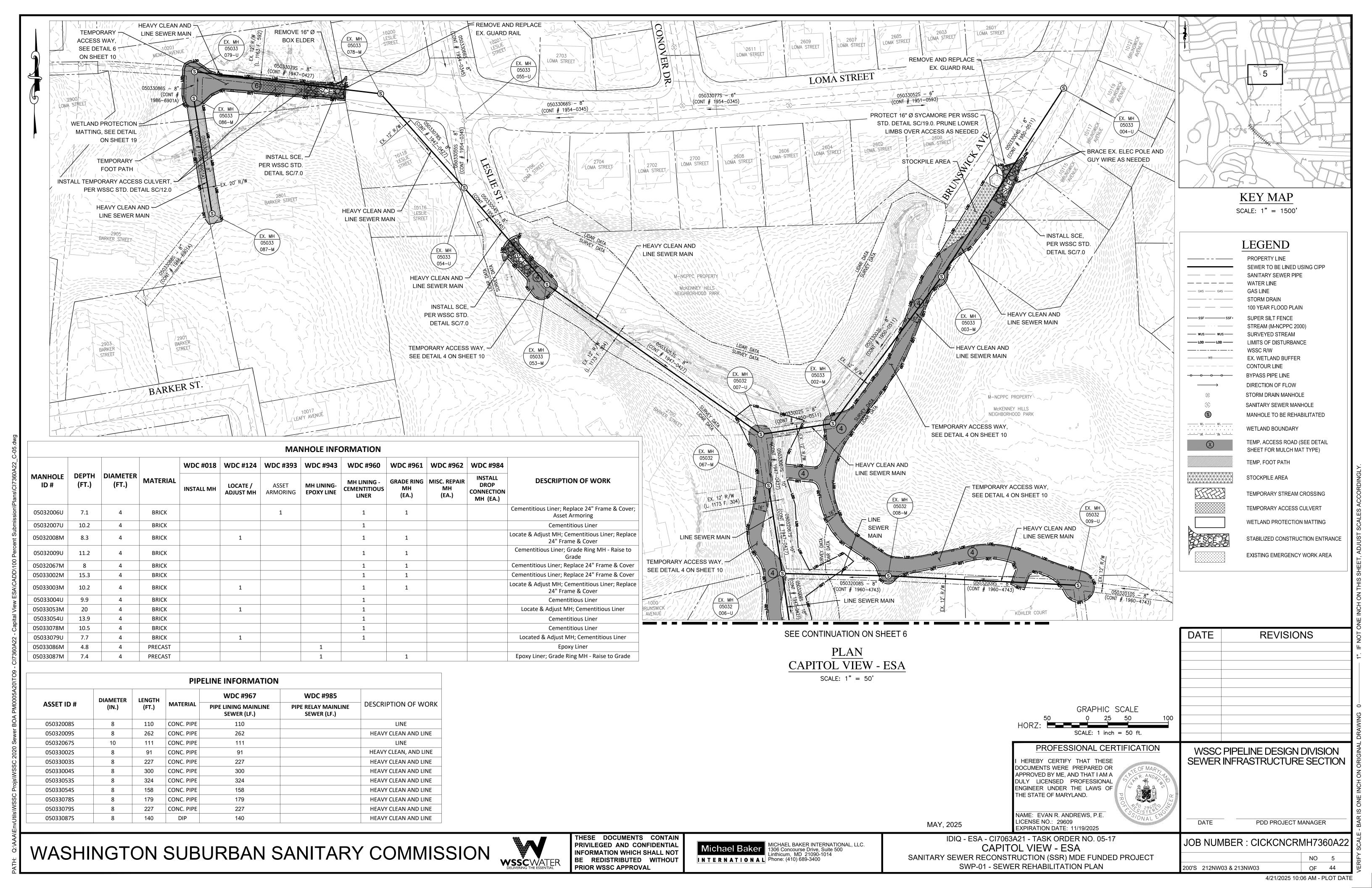
THESE DOCUMENTS CONTAIN

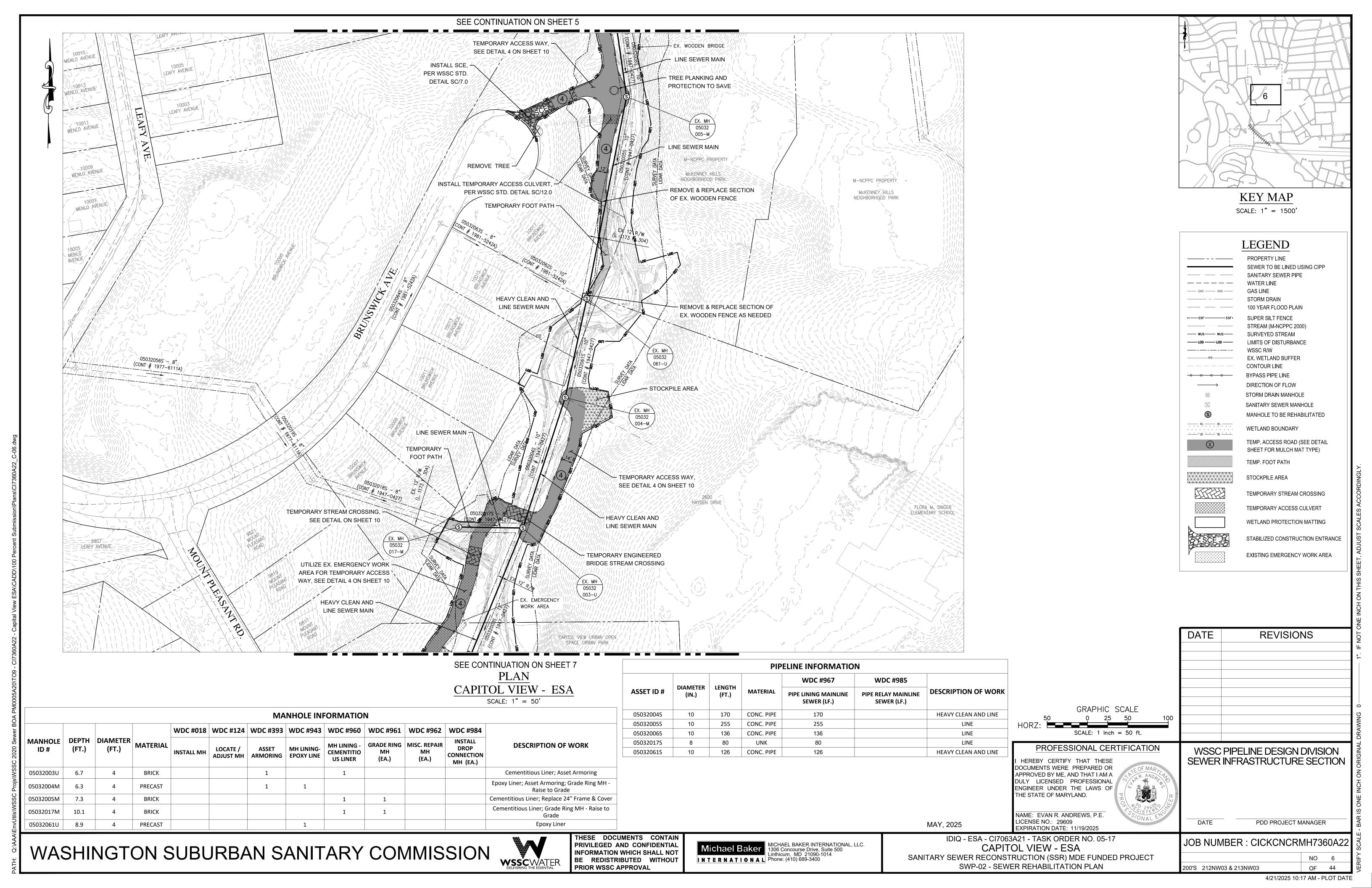
MICHAEL BAKER INTERNATIONAL, LLC. Michael Baker 1306 Concourse Drive, Suite 500 INTERNATIONAL Phone: (410) 689-3400

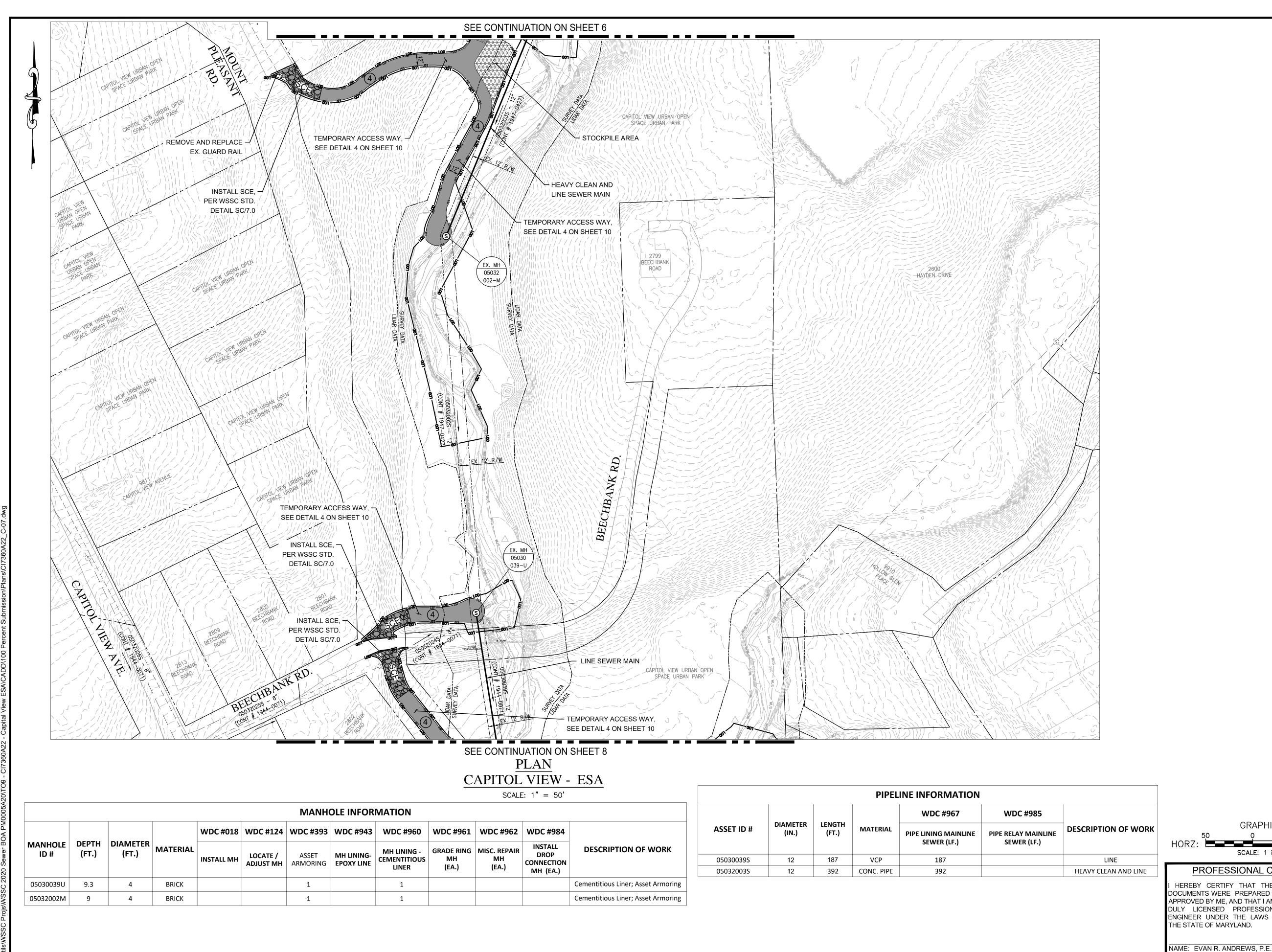
GEN-03 - EROSION AND SEDIMENT CONTROL NOTES

5/16/2025 8:24 AM - PLOT DATE









KEY MAP SCALE: 1" = 1500'

LEGEND

SEWER TO BE LINED USING CIPP SANITARY SEWER PIPE

SURVEYED STREAM LIMITS OF DISTURBANCE EX. WETLAND BUFFER

> BYPASS PIPE LINE DIRECTION OF FLOW STORM DRAIN MANHOLE

CONTOUR LINE

SANITARY SEWER MANHOLE MANHOLE TO BE REHABILITATED

WETLAND BOUNDARY

TEMP. FOOT PATH

···· WL ···· WL TEMP. ACCESS ROAD (SEE DETAIL SHEET FOR MULCH MAT TYPE)

STOCKPILE AREA

TEMPORARY STREAM CROSSING

TEMPORARY ACCESS CULVERT

WETLAND PROTECTION MATTING

STABILIZED CONSTRUCTION ENTRANCE

EXISTING EMERGENCY WORK AREA

REVISIONS

DATE

SCALE: 1 inch = 50 ft.PROFESSIONAL CERTIFICATION

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.

WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION

PDD PROJECT MANAGER

MAY, 2025

EXPIRATION DATE: 11/19/2025 IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

SWP-03 - SEWER REHABILITATION PLAN

LICENSE NO.: 29609

JOB NUMBER : CICKCNCRMH7360A22

NO 7 OF 44

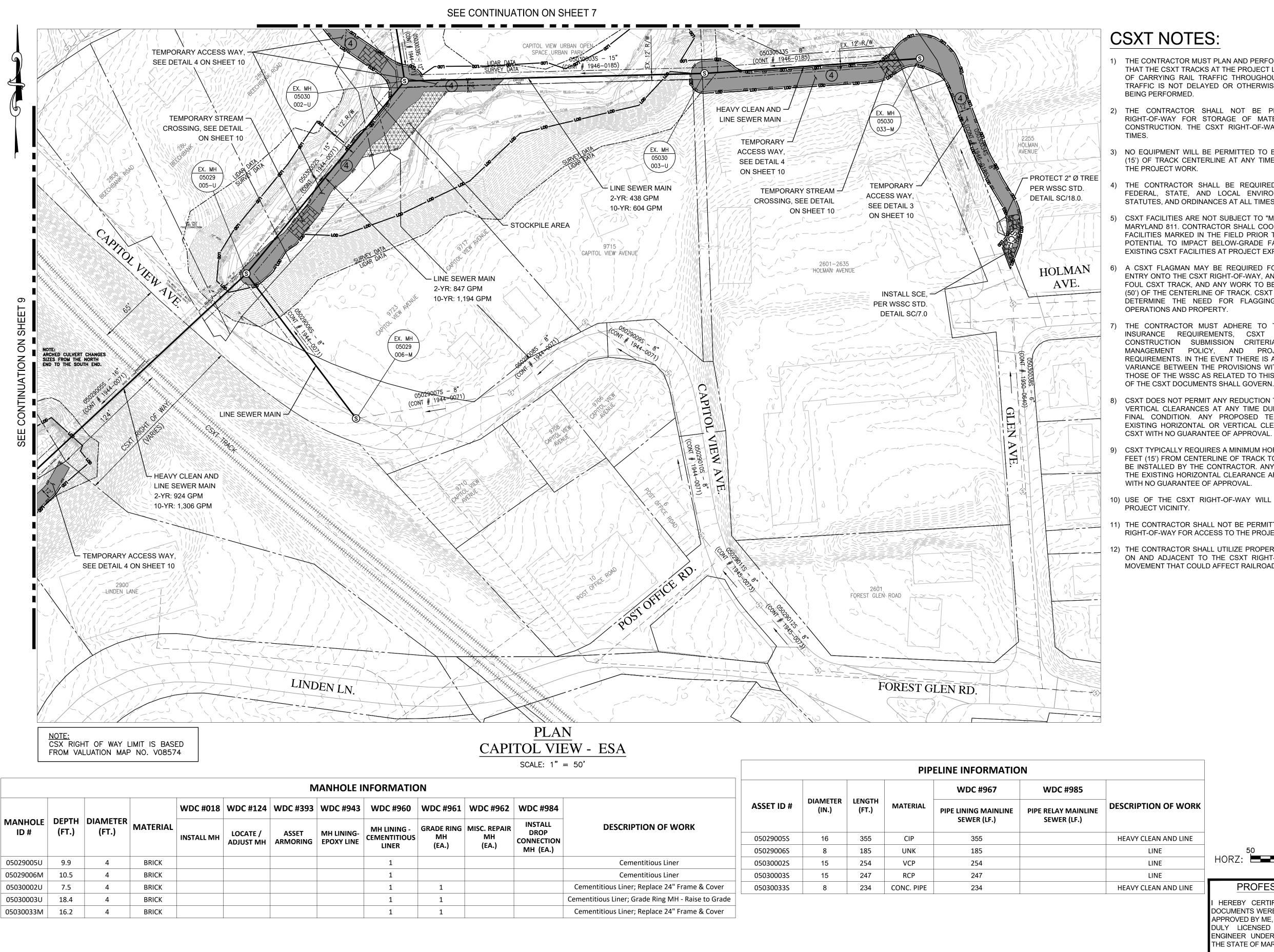
WASHINGTON SUBURBAN SANITARY COMMISSION



THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 Linthicum, MD 21090-1014 Phone: (410) 689-3400

200'S 212NW03 & 213NW03 4/21/2025 10:25 AM - PLOT DATE



- 1) THE CONTRACTOR MUST PLAN AND PERFORM THE WORK IN A MANNER SUCH THAT THE CSXT TRACKS AT THE PROJECT LOCATION REMAIN FULLY CAPABLE OF CARRYING RAIL TRAFFIC THROUGHOUT THE WORK PERIOD AND RAIL TRAFFIC IS NOT DELAYED OR OTHERWISE IMPACTED DUE TO THE WORK
- 2) THE CONTRACTOR SHALL NOT BE PERMITTED TO USE THE CSXT RIGHT-OF-WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION. THE CSXT RIGHT-OF-WAY MUST REMAIN CLEAR AT ALL
- 3) NO EQUIPMENT WILL BE PERMITTED TO BE STAGED WITHIN FIFTEEN FEET (15') OF TRACK CENTERLINE AT ANY TIME DURING THE PERFORMANCE OF
- 4) THE CONTRACTOR SHALL BE REQUIRED TO FULLY COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS, REGULATIONS, STATUTES, AND ORDINANCES AT ALL TIMES.
- 5) CSXT FACILITIES ARE NOT SUBJECT TO "MISS UTILITY" PROGRAMS SUCH AS MARYLAND 811. CONTRACTOR SHALL COORDINATE WITH CSXT TO HAVE ITS FACILITIES MARKED IN THE FIELD PRIOR TO PERFORMING WORK WITH THE POTENTIAL TO IMPACT BELOW-GRADE FACILITIES. CSXT WILL MARK OUT EXISTING CSXT FACILITIES AT PROJECT EXPENSE.
- A CSXT FLAGMAN MAY BE REQUIRED FOR ANY WORK WHICH REQUIRES ENTRY ONTO THE CSXT RIGHT-OF-WAY. ANY WORK THAT HAS POTENTIAL TO FOUL CSXT TRACK, AND ANY WORK TO BE PERFORMED WITHIN FIFTY FEET (50') OF THE CENTERLINE OF TRACK. CSXT SHALL HAVE SOLE AUTHORITY TO DETERMINE THE NEED FOR FLAGGING REQUIRED TO PROTECT ITS OPERATIONS AND PROPERTY.
- 7) THE CONTRACTOR MUST ADHERE TO THE PROVISIONS OF THE CSXT INSURANCE REQUIREMENTS, CSXT SPECIAL PROVISIONS, CSXT CONSTRUCTION SUBMISSION CRITERIA, CSXT SOIL AND WATER MANAGEMENT POLICY, AND PROJECT-SPECIFIC CONSTRUCTION REQUIREMENTS. IN THE EVENT THERE IS ANY DISCREPANCY OR PERCEIVED VARIANCE BETWEEN THE PROVISIONS WITHIN THE CSXT DOCUMENTS AND THOSE OF THE WSSC AS RELATED TO THIS PROJECT, THEN THE PROVISIONS
- CSXT DOES NOT PERMIT ANY REDUCTION TO THE EXISTING HORIZONTAL OR VERTICAL CLEARANCES AT ANY TIME DURING CONSTRUCTION, OR IN THE FINAL CONDITION. ANY PROPOSED TEMPORARY REDUCTION OF THE EXISTING HORIZONTAL OR VERTICAL CLEARANCE MUST BE REVIEWED BY CSXT WITH NO GUARANTEE OF APPROVAL.
- 9) CSXT TYPICALLY REQUIRES A MINIMUM HORIZONTAL CLEARANCE OF FIFTEEN FEET (15') FROM CENTERLINE OF TRACK TO ANY TEMPORARY MEASURES TO BE INSTALLED BY THE CONTRACTOR. ANY TEMPORARY REDUCTIONS FROM THE EXISTING HORIZONTAL CLEARANCE ARE SUBJECT TO REVIEW BY CSXT, WITH NO GUARANTEE OF APPROVAL.
- 10) USE OF THE CSXT RIGHT-OF-WAY WILL BE LIMITED TO THE IMMEDIATE
- 11) THE CONTRACTOR SHALL NOT BE PERMITTED TO TRAVEL ALONG THE CSXT RIGHT-OF-WAY FOR ACCESS TO THE PROJECT LOCATION.
- 12) THE CONTRACTOR SHALL UTILIZE PROPER EROSION CONTROL TECHNIQUES ON AND ADJACENT TO THE CSXT RIGHT-OF-WAY TO PREVENT SEDIMENT MOVEMENT THAT COULD AFFECT RAILROAD ACTIVITIES AND/OR PROPERTY

3 /	
8	
73	

KEY MAP

SCALE: 1" = 1500'

LEGEND PROPERTY LINE SEWER TO BE LINED USING CIPP SANITARY SEWER PIPE WATER LINE

STORM DRAIN 100 YEAR FLOOD PLAIN SUPER SILT FENCE

GAS LINE

STREAM (M-NCPPC 2000) SURVEYED STREAM LIMITS OF DISTURBANCE WSSC R/W EX. WETLAND BUFFER

CONTOUR LINE BYPASS PIPE LINE DIRECTION OF FLOW

STORM DRAIN MANHOLE SANITARY SEWER MANHOLE

MANHOLE TO BE REHABILITATED

WETLAND BOUNDARY ···· w ···· TEMP. ACCESS ROAD (SEE DETAIL SHEET FOR MULCH MAT TYPE)

TEMP. FOOT PATH

STOCKPILE AREA

TEMPORARY STREAM CROSSING

TEMPORARY ACCESS CULVERT

WETLAND PROTECTION MATTING

STABILIZED CONSTRUCTION ENTRANCE

EXISTING EMERGENCY WORK AREA

REVISIONS

GRAPHIC SCALE

DATE

PROFESSIONAL CERTIFICATION

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

SCALE: 1 inch = 50 ft.

WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION

PDD PROJECT MANAGER

JULY, 2025

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

NAME: EVAN R. ANDREWS, P.E.

EXPIRATION DATE: 11/19/2025

ICENSE NO.: 29609

JOB NUMBER : CICKCNCRMH7360A22

OF 44

WASHINGTON SUBURBAN SANITARY COMMISSION



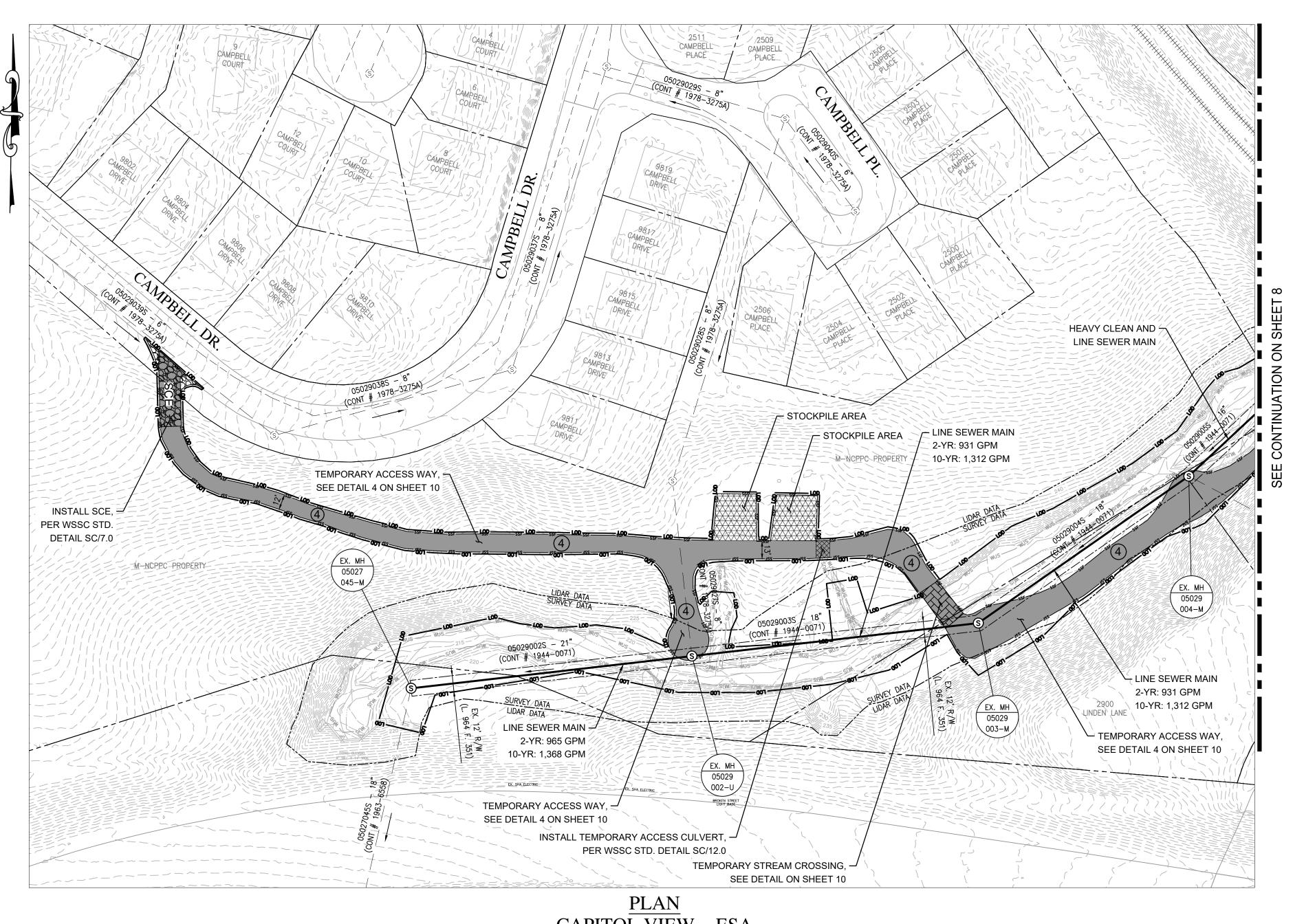
THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. INTERNATIONAL Phone: (410) 689-3400

SWP-04 - SEWER REHABILITATION PLAN 200'S 212NW03 & 213NW03

7/25/2025 9:48 AM - PLOT DATE

NO 8



CAPITOL VIEW - ESA

SCALE: 1" = 50'

	MANHOLE INFORMATION													
						WDC #018	WDC #124	WDC #393	WDC #943	WDC #960	WDC #961	WDC #962	WDC #984	
MANHOLE ID#	DEPTH (FT.)	DIAMETER (FT.)	MATERIAL	INSTALL MH	LOCATE / ADJUST MH	ASSET ARMORING	MH LINING- EPOXY LINE	MH LINING - CEMENTITIOUS LINER		MISC. REPAIR MH (EA.)	INSTALL DROP CONNECTION MH (EA.)	COMMENTS		
05027045M	5.8	4	BRICK					1				Cementitious Liner		
05029002U	7.5	4	BRICK			1						Asset Armoring		
05029003M	6.8	4	BRICK						1			Grade Ring MH - Raise to Grade		
05029004M	6.9	4	BRICK			1						Asset Armoring		

PIPELINE INFORMATION								
		_		WDC #967	WDC #985			
ASSET ID #	DIAMETER (IN.)	LENGTH (FT.)	NANTEDIAL		MATERIAL	PIPE LINING MAINLINE PIPE RELAY MAINLINE		COMMENTS
05029002S	21	214	VCP	214		LINE		
05029003S	18	218	VCP	218		LINE		
05029004S	18	196	VCP	196		LINE		

DATE **REVISIONS**

KEY MAP

SCALE: 1" = 1500'

LEGEND

SEWER TO BE LINED USING CIPP

SANITARY SEWER PIPE

100 YEAR FLOOD PLAIN

STREAM (M-NCPPC 2000)

LIMITS OF DISTURBANCE

SUPER SILT FENCE

SURVEYED STREAM

EX. WETLAND BUFFER

DIRECTION OF FLOW STORM DRAIN MANHOLE SANITARY SEWER MANHOLE

WETLAND BOUNDARY

TEMP. FOOT PATH

STOCKPILE AREA

···· WL ···· WL

MANHOLE TO BE REHABILITATED

TEMP. ACCESS ROAD (SEE DETAIL

TEMPORARY STREAM CROSSING

TEMPORARY ACCESS CULVERT

WETLAND PROTECTION MATTING

STABILIZED CONSTRUCTION ENTRANCE

EXISTING EMERGENCY WORK AREA

SHEET FOR MULCH MAT TYPE)

WSSC R/W

CONTOUR LINE

BYPASS PIPE LINE

GRAPHIC SCALE SCALE: 1 inch = 50 ft.

PROFESSIONAL CERTIFICATION 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. NAME: EVAN R. ANDREWS, P.E.

WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION

PDD PROJECT MANAGER

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL

MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 Linthicum, MD 21090-1014 Phone: (410) 689-3400

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT SWP-05 - SEWER REHABILITATION PLAN

MAY, 2025

LICENSE NO.: 29609

EXPIRATION DATE: 11/19/2025

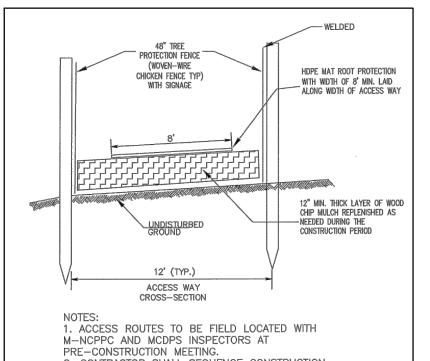
JOB NUMBER : CICKCNCRMH7360A22

NO 9 200'S 212NW03 & 213NW03

WASHINGTON SUBURBAN SANITARY COMMISSION

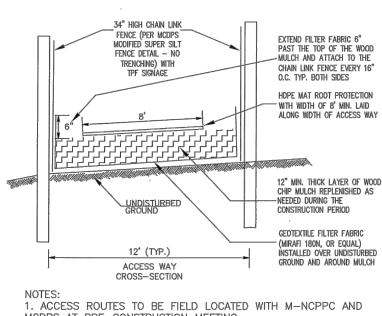
INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

4/21/2025 10:48 AM - PLOT DATE



. CONTRACTOR SHALL SEQUENCE CONSTRUCTION SUCH THAT NO EQUIPMENT WILL IMPACT AREAS TO BE PROTECTED PRIOR TO MULCH PLACEMENT . CONTRACTOR SHALL MAINTAIN MULCH MAT THROUGHOUT CONSTRUCTION PERIOD. 4. CONTRACTOR SHALL LAY ALTURNAMATS OR APPROVED EQUAL OVER MULCH MAT TO PROVIDE GROUND COVER PROTECTION ALONG THE WIDTH OF THE ACCESS WAY USING A MINIMUM 8-FT WIDE SEMI-RIGID MAT FOR IMPACT PROTECTION AND MINOR WEIGHT DISTRIBUTION. 5. MULCH SHALL BE DISPOSED OF OFF-SITE UNLESS OTHERWISE APPROVED BY M-NCPPC, WHERE MULCH IS TO REMAIN, FILTER FABRIC SHALL BE AN APPROVED BIODEGRADABLE TYPE.

MODIFIED LIGHT DUTY MULCH MAT DETAIL **(2)** NOT TO SCALE

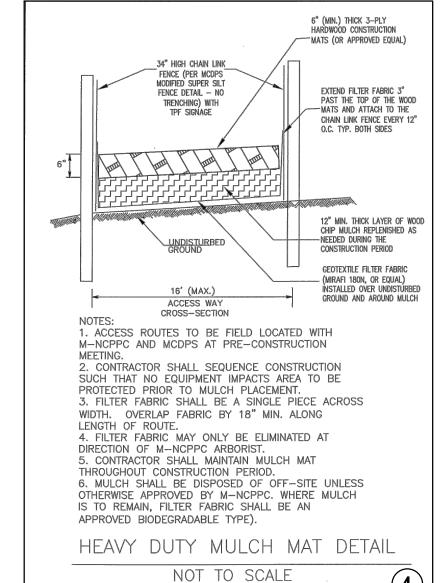


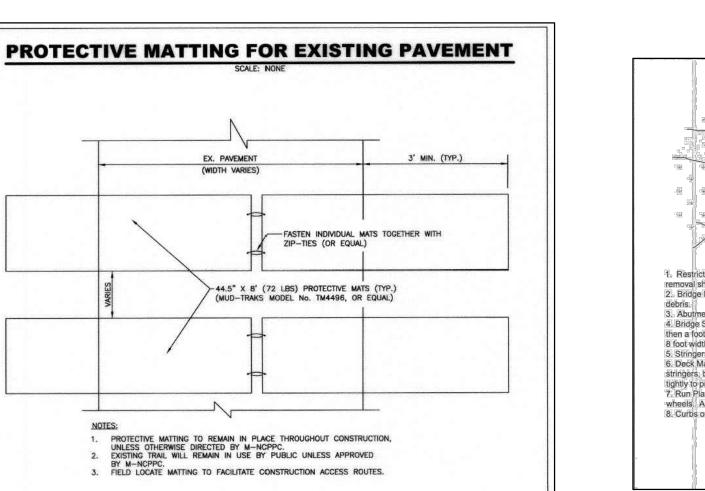
MCDPS AT PRE-CONSTRUCTION MEETING. 2. CONTRACTOR SHALL SEQUENCE CONSTRUCTION SUCH THAT NO EQUIPMENT IMPACTS AREA TO BE PROTECTED PRIOR TO MULCH PLACEMENT. 3. FILTER FABRIC SHALL BE A SINGLE PIECE ACROSS WIDTH. OVERLAP FABRIC BY 18" MIN. ALONG LENGTH OF ROUTE. 4. FILTER FABRIC MAY ONLY BE ELIMINATED AT DIRECTION OF M-NCPPC ARBORIST. 5. CONTRACTOR SHALL MAINTAIN MULCH MAT THROUGHOUT

CONSTRUCTION PERIOD. 6. CONTRACTOR SHALL LAY ALTURNAMATS OR APPROVED EQUAL OVER MULCH MAT TO PROVIDE GROUND COVER PROTECTION ALONG THE WIDTH OF THE ACCESS WAY USING A MINIMUM 8-FT WIDE SEMI-RIGID MAT FOR IMPACT PROTECTION AND MINOR WEIGHT DISTRIBUTION. 7. MULCH SHALL BE DISPOSED OF OFF-SITE UNLESS OTHERWISE APPROVED BY M-NCPPC. WHERE MULCH IS TO REMAIN, FILTER FABRIC SHALL BE AN APPROVED BIODEGRADABLE TYPE).

HIGH USE MULCH MAT DETAIL

NOT TO SCALE

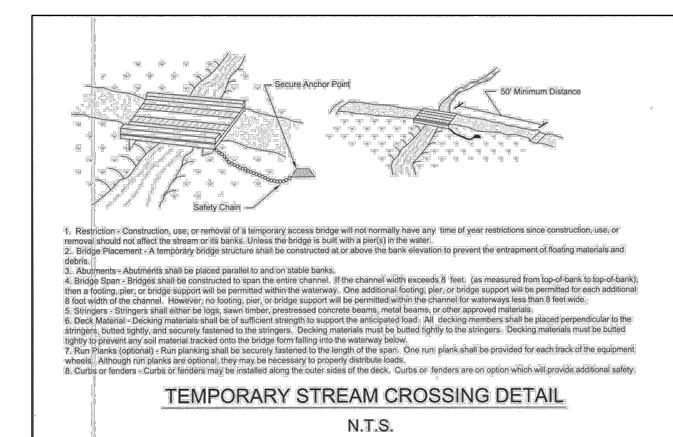


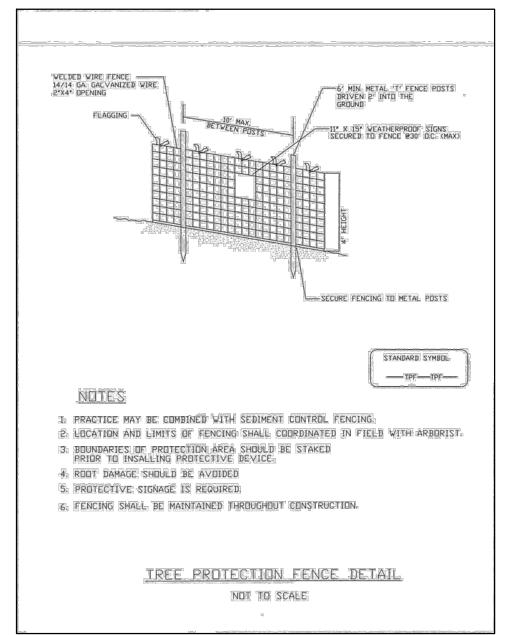


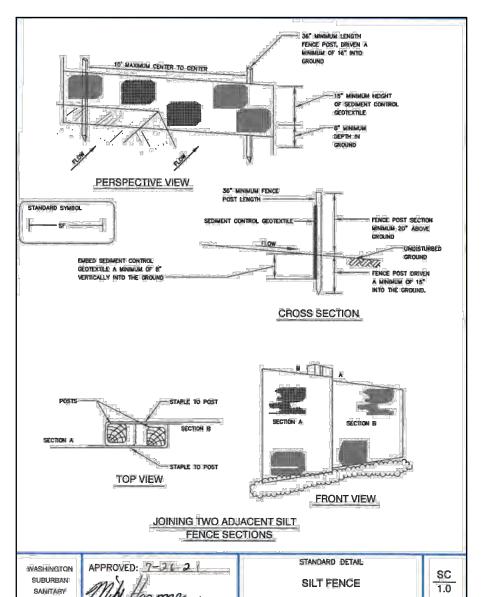
-FASTEN INDIVIDUAL MATS TOGETHER WITH

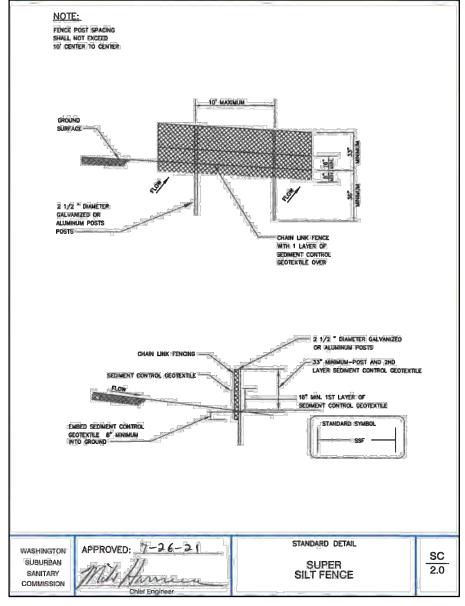
-44.5" X 8' (72 LBS) PROTECTIVE MATS (TYP.) (MUD-TRAKS MODEL No. TM4496, OR EQUAL)

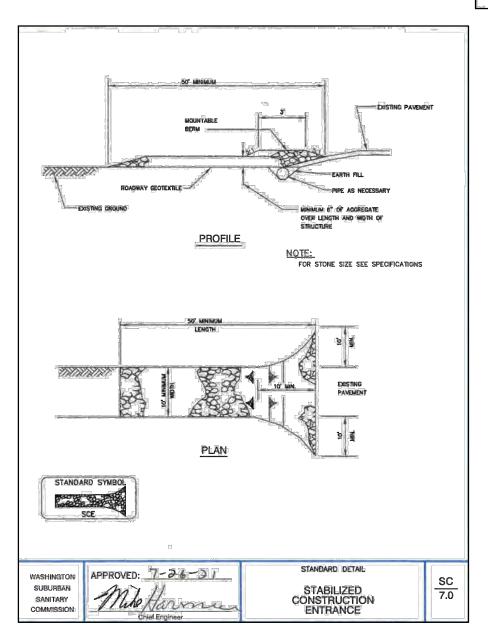
PROTECTIVE MATTING TO REMAIN IN PLACE THROUGHOUT CONSTRUCTION, UNLESS OTHERWISE DIRECTED BY M-NCPPC.
 EXISTING TRAIL WILL REMAIN IN USE BY PUBLIC UNLESS APPROVED BY M-NCPPC.
 FIELD LOCATE MATTING TO FACILITATE CONSTRUCTION ACCESS ROUTES.

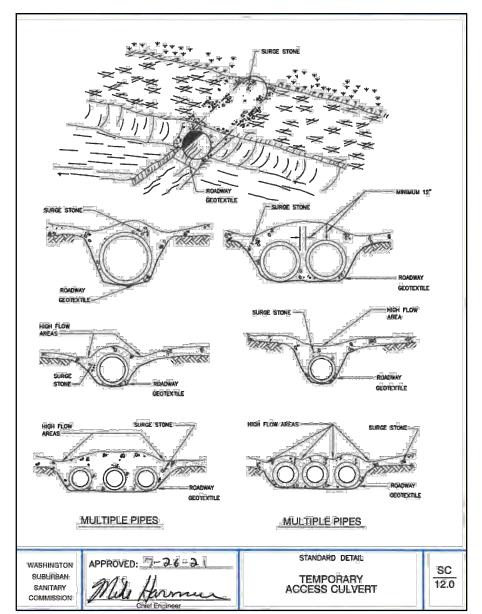












M-NCPPC STANDARDS FOR SUPER-LIGHT-DUTY ACCESS FOR CONSTRUCTION

THESE STANDARDS SHOULD APPLY TO ACCESS ROUTES TO INFRASTRUCTURE LOCATED IN NATURAL AREAS WHERE THE PROPOSED CONSTRUCTION ACTIVITY IS LIMITED AND EQUIPMENT REQUIRED TO PERFORM WORK IS SMALLER THAN TYPICAL LOW-IMPACT CONSTRUCTION EQUIPMENT. THE PURPOSE OF THESE STANDARDS ARE TO REDUCE REQUIREMENTS FOR TEMPORARY TREE AND ROOT PROTECTION MEASURES.

- * ACCESS ROUTE SHALL BE FLAGGED IN FIELD BY EUGENE ROSE (OR M-NCPPC URBAN FORESTER OR
- OTHER APPROVED PARTY), TAKING INTO ACCOUNT LOCATION OF TREES, UNDERSTORY PLANTS, WETLANDS, HISTORICAL AND CULTURAL SITES, AND OTHER ENVIRONMENTAL FACTORS. THERE WILL BE NO ACCESS ALLOWED ACROSS VERNAL POOLS OR OTHER STANDING WATERS.

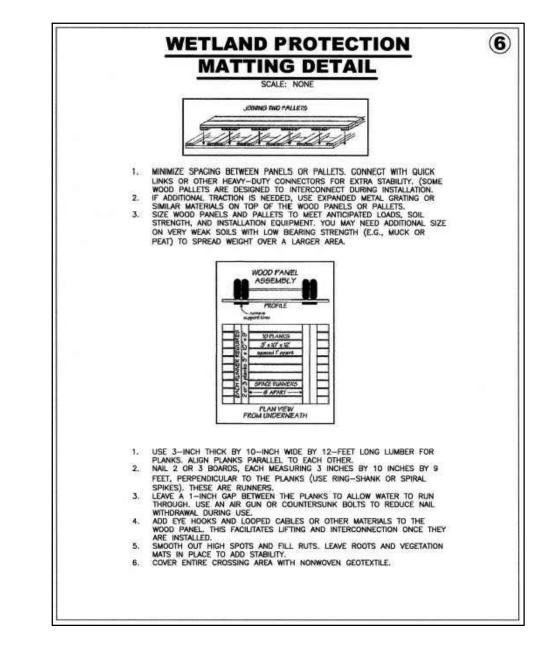
 ACCESS ROUTES WILL BE LIMITED TO 6—FEET IN WIDTH AND NUMBER OF EQUIPMENT PASSES SHALL BE
- * NO TREES SHALL BE REMOVED FOR CONSTRUCTION WORK OR ACCESS, UNLESS SPECIFICALLY DIRECTED BY
- EUGENE ROSE (OR M-NCPPC URBAN FORESTER OR OTHER APPROVED PARTY).

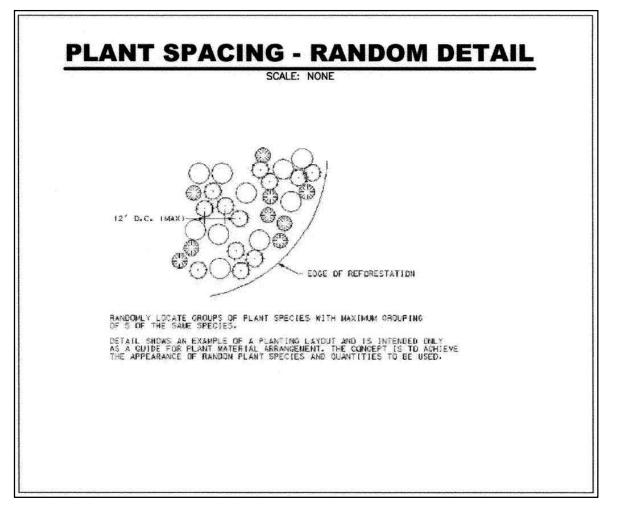
 AN ON-SITE PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR IS REQUIRED TO REVIEW PROPOSED WORK, ACCESS ROUTES, AND AVOIDANCE AREAS PRIOR TO STARTING WORK.

 APPROVED EQUIPMENT USED TO ACCESS WORK AREAS SHALL BE WALK-BEHIND, RUBBER TRACKED EQUIPMENT WITH A LOADED GROUND PRESSURE RATING OF LESS THAN 5 POUNDS PER SQUARE INCH.
- SUCH EQUIPMENT SHALL BE DESIGNED TO CARRY SHALL LOADS (<1,000 LBS.) WHILE LIMITING GROUND PRESSURE AND DISTURBANCE. * DAILY INSPECTIONS WILL BE RQUIRED THROUGHOUT CONSTRUCTION PERIODS ON ALL SITES TO ENSURE
- COMPLIANCE.

 * M-NCPPC RESERVES THE RIGHT TO REQUIRED ADDITIONAL TREE PROTECTION MEASURES UNDER CERTAIN
- ENVIRONMENTAL CONDITIONS SUCH AS WET SOILS, EXPOSED TREE ROOTS, OR OTHER UNIQUE * FOLLOWING CONSTRUCTION THE ACCESS ROUTE AND WORK AREAS SHALL BE INSPECTED BY EUGENE ROSE

(OR M-NCPPC URBAN FORESTER OR OTHER APPROVED PARTY) AND APPROPRIATE RESTORATION MEASURES





DATE	REVISIONS
	PIPELINE DESIGN DIVISION
SEVVER	INFRASTRUCTURE SECTION

MAY, 2025

EXPIRATION DATE: 11/19/2025 IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

SWD-01 - SEWER REHABILITATION DETAILS

ICENSE NO.: 29609

PROFESSIONAL CERTIFICATION

HEREBY CERTIFY THAT THESE

DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A

DULY LICENSED PROFESSIONAL

ENGINEER UNDER THE LAWS OF

NAME: EVAN R. ANDREWS, P.E.

THE STATE OF MARYLAND.

JOB NUMBER : CICKCNCRMH7360A22 NO 10

200'S 212NW03 & 213NW03

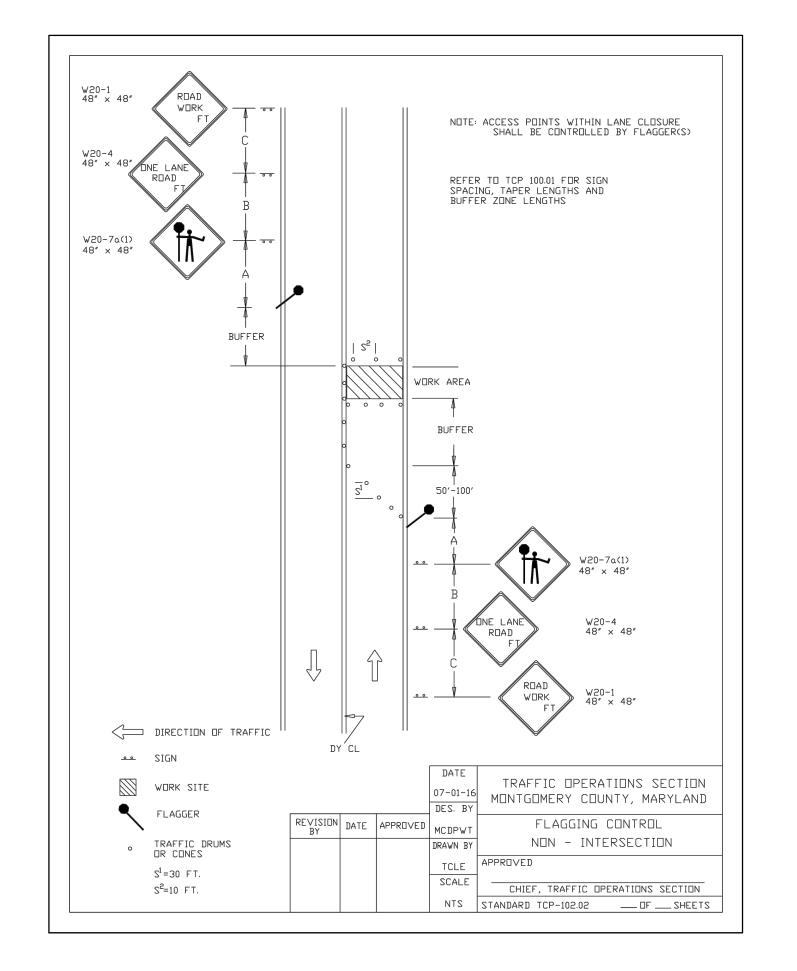
WASHINGTON SUBURBAN SANITARY COMMISSION

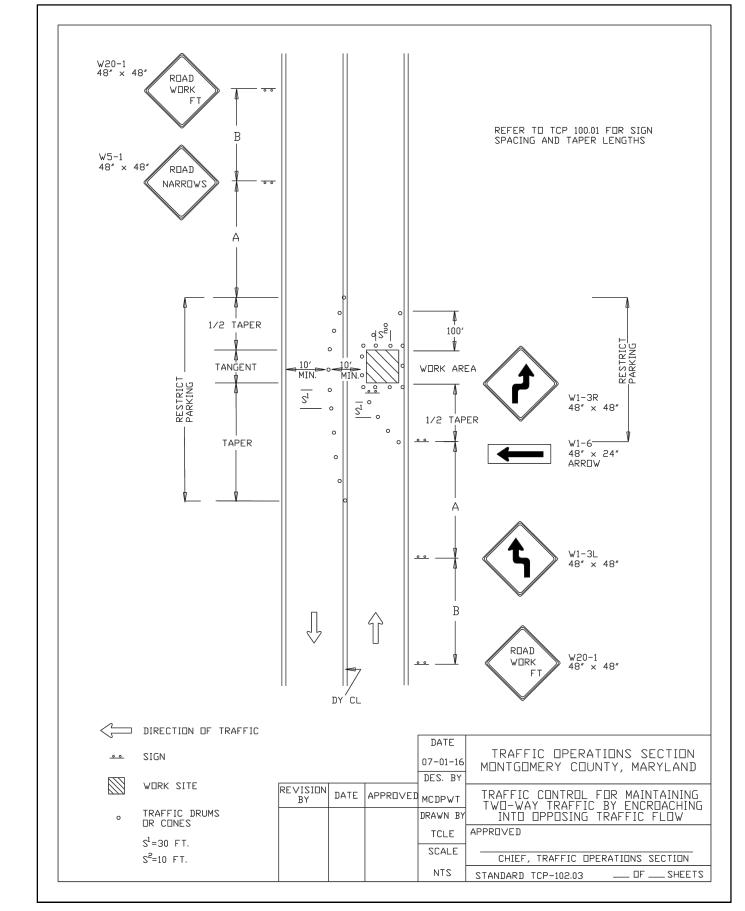


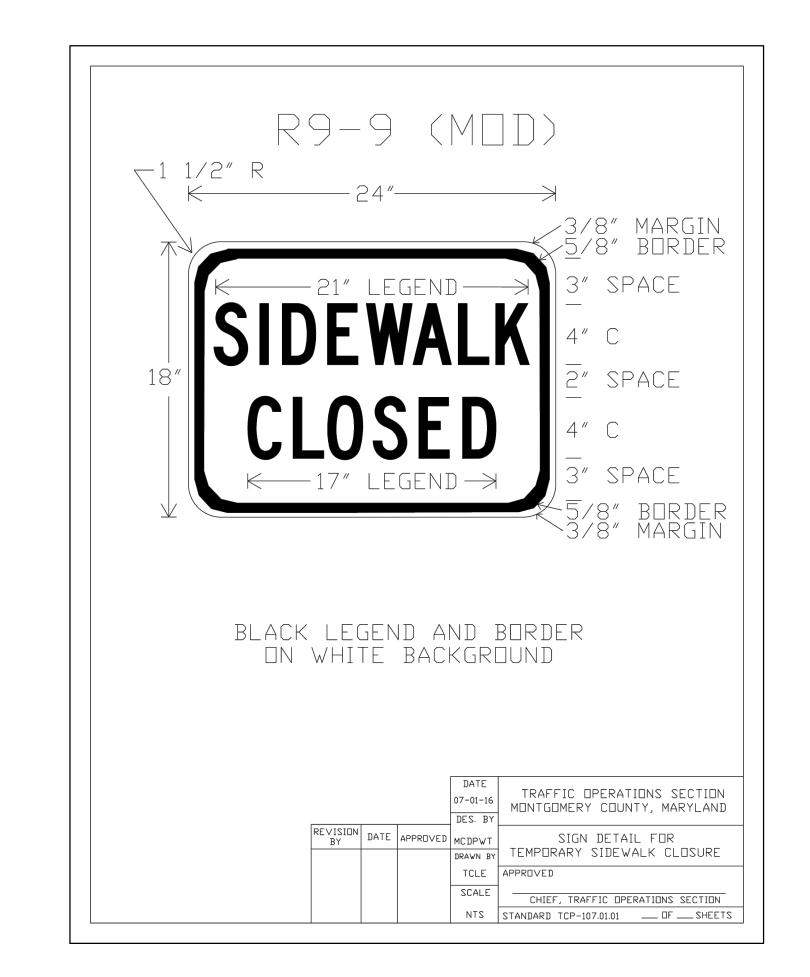
THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

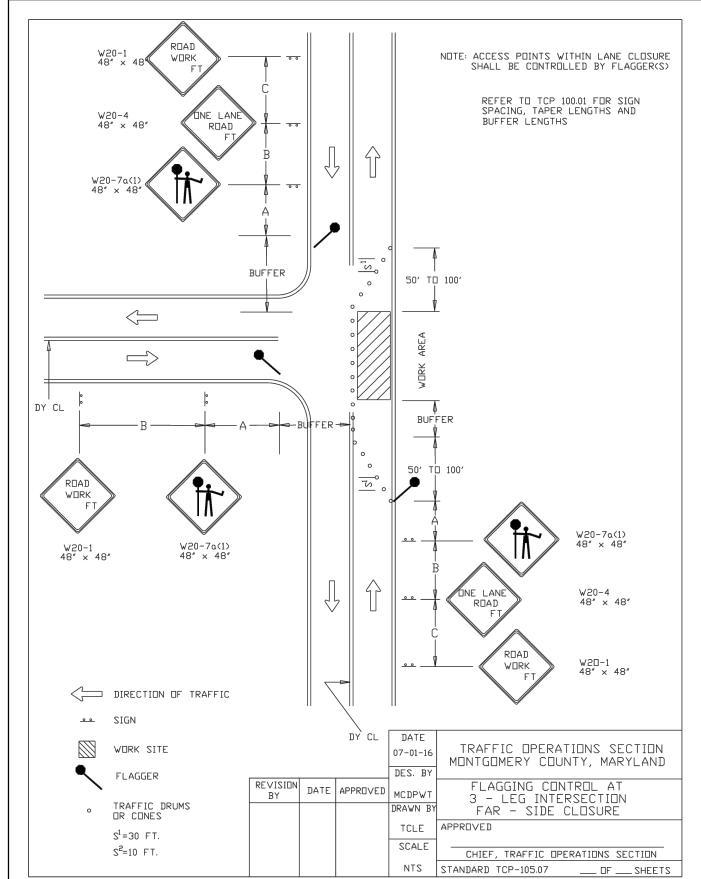
MICHAEL BAKER INTERNATIONAL, LLC. Michael Baker INTERNATIONAL Phone: (410) 689-3400

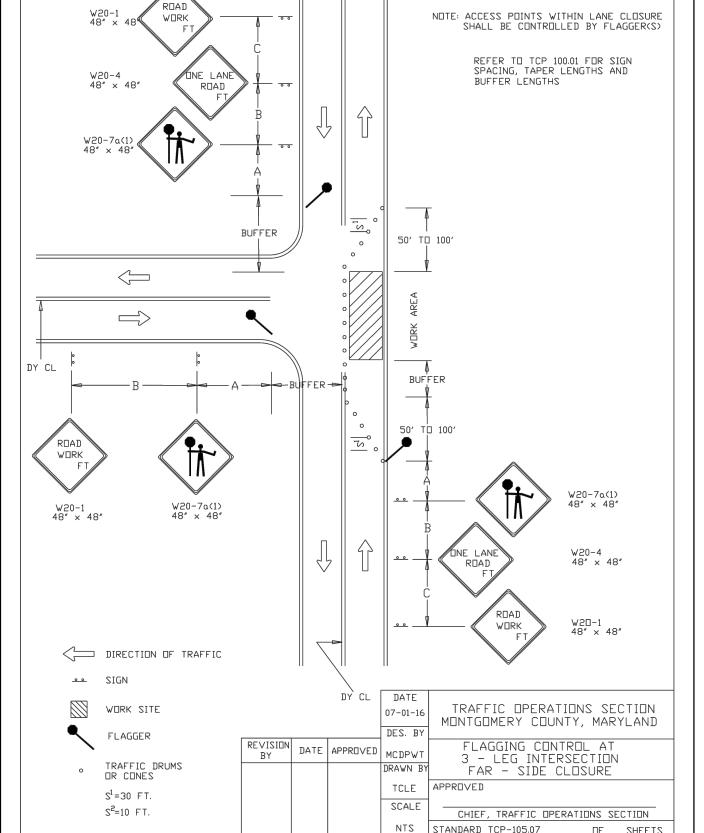
PDD PROJECT MANAGER

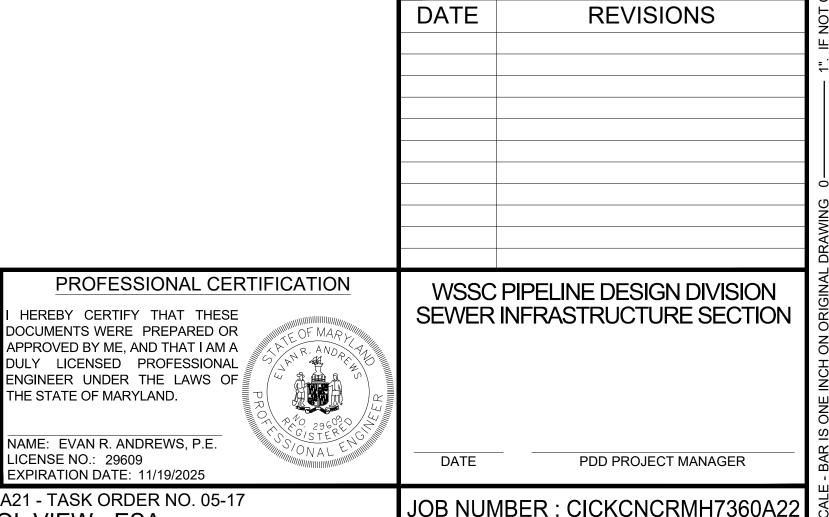












WSSCWATER DELIVERING THE ESSENTIAL

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATION 1306 Concourse Drive, Suite 500 Linthicum, MD 21090-1014 MICHAEL BAKER INTERNATIONAL, LLC. INTERNATIONAL Phone: (410) 689-3400

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT MOT-01 - STANDARD TRAFFIC CONTROL DETAILS

MAY, 2025

JOB NUMBER : CICKCNCRMH7360A22 NO 11

OF 44

2. CONTRACTOR SHALL IMPLEMENT MDE WATERWAY CONSTRUCTION GUIDELINES AND MDE BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAIN THROUGHOUT CONSTRUCTION. ALL IN-CHANNEL CONSTRUCTION SHALL OCCUR "IN THE DRY" WITH CORRECTLY INSTALLED AND MAINTAINED STREAM DIVERSION PRACTICES TO MINIMIZE DOWNSTREAM SEDIMENT. CONTRACTOR IS RESPONSIBLE FOR CONTROL OF WATER THROUGHOUT CONSTRUCTION, INCLUDING STREAM FLOWS AND RUNOFF THROUGH DISTURBED AREAS. CONTRACTOR SHALL ALSO BE FAMILIAR WITH ALL DESIGN DETAILS AND THESE STREAM RESTORATION GUIDELINES.

3. IN-STREAM AREAS WHERE PUMP-AROUND/STREAM DIVERSION IS REMOVED AT THE END OF THE WORKDAY MUST BE COMPLETED AND STABILIZED DAILY. DISTURBED AREAS ABOVE BASEFLOW SHALL RECEIVE NATIVE RIPARIAN SEED AND WEED-FREE STRAW MULCH AT THE END OF EACH WORKDAY. ONCE STREAM FLOW IS RE-ESTABLISHED AT THE END OF THE WORKDAY, THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME TO INSPECT THE NEW FLOW PATTERN AND MAKE APPROPRIATE ADJUSTMENTS TO ENSURE NON-EROSIVE CONDITIONS BEFORE VACATING THE SITE.

4. THE SRP, AN INDIVIDUAL FAMILIAR WITH STREAM RESTORATION REVETMENT DESIGN FEATURES AND WATERWAY CONSTRUCTION TECHNIQUES, WILL OVERSEE AND COORDINATE CONSTRUCTION ACTIVITIES ON BEHALF OF WSSC TO ENSURE A STABLE STREAM CONDITION IS ESTABLISHED WITH THE PROTECTION OF NATURAL RESOURCES. THE SRP SHALL BE SEPARATE FROM THE ON-SITE CONSTRUCTION CREW. THE SRP SHALL BE EMPOWERED BY WSSC (AND WORK IN CONJUNCTION WITH WSSC) TO DIRECT THE CONTRACTOR'S WORK AS NEEDED TO ENSURE DESIGN INTENT IS ACHIEVED. THE SRP SHALL COORDINATE ADJUSTMENTS AND ACCEPTANCE OF STRUCTURES WITH WSSC CONSTRUCTION MANAGER AND THE LANDOWNER AS CONSTRUCTION PROGRESSES

5. CONTRACTOR SHALL TAKE CARE TO PROTECT TREES (INCLUDING TRUNKS/ROOTS) DESIGNATED TO REMAIN THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL COORDINATE ALL TREE PROTECTION MEASURES AND TREE REMOVALS WITH CONSTRUCTION MANAGER AND LANDOWNER PRIOR TO CONSTRUCTION. PROTECTION MEASURES. SUCH AS HARDWOOD MATS. TREE PLANKING. ROOT AERATION MATTING. EQUIPMENT RESTRICTIONS. MULCH ROADS. TREE PROTECTION FENCING, ROOT PRUNING, ETC. MUST BE INSTALLED BEFORE EQUIPMENT ENTERS WORK AREAS. ADDITIONAL TREE PROTECTION MEASURES NOT INDICATED ON THE PLAN SET MAY BE REQUIRED AT THE DIRECTION OF THE LANDOWNER.

6. ACCESS ROUTES, LOD, TPF LOCATIONS, AND STAGING AREAS SHALL BE FIELD ADJUSTED WITH CONSTRUCTION MANAGER AND SRP TO MINIMIZE IMPACTS TO NATURAL RESOURCES. EQUIPMENT RESTRICTIONS (E.G., <8 PSI LOADED GROUND PRESSURE) MAY BE REQUIRED IN SENSITIVE AREAS. ACCESS ROUTES WILL BE LIMITED TO 12' WIDTH, UNLESS OTHERWISE APPROVED.

7. CONTRACTOR SHALL COORDINATE WITH SEDIMENT CONTROL INSPECTOR, SRP, CONSTRUCTION MANAGER, AND LANDOWNER TO UTILIZE TRENCHLESS SEDIMENT CONTROLS (I.E. COMPOST SOCKS, TRENCHLESS SILT FENCES, ETC.) AND/OR DAILY STABILIZATION WHERE APPROPRIATE TO AVOID CUTTING THROUGH MATURE TREE ROOT SYSTEMS. WHERE TRENCHING IS REQUIRED, CONTRACTOR SHALL ROOT PRUNE PRIOR TO EXCAVATION AT THE DIRECTION OF CONSTRUCTION MANAGER.

8. CONTRACTOR IS RESPONSIBLE FOR PROCURING AND INSTALLING FISH NETS AND FENCING AND COMPLETING FISH RESCUES ASSOCIATED WITH ALL PUMP-AROUNDS/STREAM DIVERSIONS. FISH RESCUE TEAMS SHOULD CONSIST OF PROPERLY TRAINED PERSONNEL, BASED ON MARYLAND BIOLOGICAL STREAM SURVEY (MBSS) STANDARDS, USING ELECTROFISHING EQUIPMENT. A LIST OF PERSONNEL CERTIFIED IN MBSS PROTOCOLS CAN BE FOUND AT HTTP://DNR.MARYLAND.GOV/STREAMS/PAGES/MBSSSFSCERTIFIED.ASPX FISH RESCUES REQUIRE THREE (3) WORKING DAYS ADVANCE NOTIFICATION TO LANDOWNER. FISH NETS AND FENCES MUST BE MAINTAINED IN GOOD WORKING CONDITION THROUGHOUT THE DURATION OF THE PUMP-AROUND/STREAM DIVERSION. CONTRACTOR SHALL COORDINATE WITH SRP AND CONSTRUCTION MANAGER IF A LARGE STORM IS FORECAST TO DETERMINE IF FISH NETS SHOULD BE TEMPORARILY REMOVED AND ALSO IF RE-FISHING IS NEEDED FOLLOWING STORM EVENT.

9. CONTRACTOR SHALL SURVEY EXISTING RIFFLES UPSTREAM/DOWNSTREAM OF THE PROJECT AREA AND LOCATE CRITICAL DESIGN POINTS (CENTERLINE STATION, OFFSETS, ELEVATIONS, STRUCTURES, ETC.) ALONG THE STREAM CHANNEL. ALL DIMENSIONS AND ELEVATIONS OF STRUCTURES SHALL BE FIELD ADJUSTED PRIOR TO INSTALLATION IN COORDINATION WITH THE SRP AND CONSTRUCTION MANAGER TO ENSURE ASSET COVERAGE AS WELL AS PROPER ORIENTATION, STABILITY, FISH PASSAGE, AND SMOOTH TIE-IN TO ADJACENT FEATURES. ADJUSTMENT SHALL ALSO BE MADE TO MINIMIZE DISTURBANCE TO TREES/TREE ROOTS AND ENSURE FUNCTIONALITY OF COMPLETED CONSTRUCTION. CONTRACTOR SHALL MAINTAIN PROPER EQUIPMENT ONSITE TO CHECK GRADES AS CONSTRUCTION PROGRESSES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING STAKEOUT DURING CONSTRUCTION UNTIL FINAL ACCEPTANCE BY CONSTRUCTION MANAGER AND LANDOWNER.

10. CONSTRUCTION OF IN-STREAM REVETMENTS, INCLUDING GRADE CONTROL, BANK STABILIZATION AND HABITAT STRUCTURES, SHALL BE INSPECTED BY SRP, CONSTRUCTION MANAGER, AND LANDOWNER UNDER BASEFLOW (NOT PUMP-AROUND/DIVERSION) CONDITIONS TO DETERMINE ANY MODIFICATIONS REQUIRED PRIOR TO ACCEPTANCE. SUBSEQUENT INSPECTIONS FOLLOWING STORM EVENTS MAY RESULT IN ADDITIONAL MODIFICATIONS. CONTRACTOR IS ENCOURAGED TO UTILIZE CONSTRUCTION EQUIPMENT FOR COMPACTION OF COMPLETED STRUCTURES TO ENSURE STABILITY, AS WELL AS SMALL PUMPS TO WASH IN MATERIAL AFTER THE COMPLETION OF SINGLE STRUCTURES.

11. COMPLETED GRADE CONTROL STRUCTURES WILL HAVE FLOW OVER THE APEX DURING BASEFLOW CONDITIONS WITH CONSISTENT ARM SLOPES UP FROM THE APEX TO A STABLE SILL TIE-IN AT BANKFULL INTO EXISTING GROUND. RIFFLES SHALL HAVE SURFACE FLOW ALONG THE THALWEG THROUGHOUT THE ENTIRE RIFFLE LENGTH AND TIE-IN TO BANKFULL ON BOTH BANKS. CONTRACTOR IS RESPONSIBLE FOR ENSURING SMOOTH TRANSITIONS AT UPSTREAM AND DOWNSTREAM ENDS OF WORK AREAS AND BETWEEN THE STREAMBED AND ITS BANKS.

12. ALL EXPOSED STONE (INCLUDING STONE TOE, IMBRICATED ROCK WALLS, ROCK PACKS, ETC.) ABOVE BANKFULL DEPTH SHALL BE BACKFILLED WITH TOPSOIL/COMPOST TO WITHIN 2-INCHES OF ROCK SURFACE AND VEGETATED WITH NATIVE RIPARIAN SEED AND WEED-FREE STRAW MULCHED.

13. VOIDS SHOULD NOT BE LEFT IN ANY COMPLETED IN-STREAM STRUCTURES. STRUCTURES SHOULD BE BACKFILLED WITH BED STABILITY MIX AND/OR STREAM BED MIX TO FILL ALL VOIDS, INCLUDING HAND PLACEMENT OF STONE.

14. COMPLETED STREAMBED PROFILE SHALL NOT HAVE REVETMENT DROPS GREATER THAN 0.5' AND CONSTRUCTED RIFFLES SHALL NOT BE STEEPER THAN 3% TO ENSURE FISH PASSAGE, UNLESS OTHERWISE INDICATED ON THE PLANS OR APPROVED BY CONSTRUCTION MANAGER. CONTRACTOR WILL BE REQUIRED TO MODIFY/AUGMENT CONSTRUCTED REVETMENTS THAT CREATE FISH PASSAGE RESTRICTIONS AT BASEFLOW. AS DIRECTED BY SRP. CONSTRUCTION MANAGER, AND LANDOWNER.

15. ANY DISTURBED BANKS AND RIPARIAN AREAS SHALL BE SEEDED WITH NATIVE RIPARIAN SEED AND STABILIZED WITH WEED-FREE STRAW MULCH. EROSION CONTROL MATTING (DETAIL 617) SHALL BE INSTALLED TO STABILIZE UP TO TOP OF BANK.

16. STONE OF SERPENTINE ORIGIN, MATTING CONTAINING MONOFILAMENT/PLASTICS, AND METAL SOD STAPLES ARE NOT PERMITTED ON M-NCPPC PARKLAND.

17. CONTRACTOR MUST SUBMIT REDLINE AS-BUILTS TO WSSC AND LANDOWNER FOR REVIEW AND APPROVAL (PLAN AND PROFILE) THAT SHOW IN-STREAM STRUCTURES, CHANNEL DIMENSIONS, AND FEATURES WITH FIELD SURVEYED ELEVATIONS.

18. APPROVED SEED MIXES SHALL BE UTILIZED. ANY MODIFICATIONS TO THESE MIXES MUST BE APPROVED BY CONSTRUCTION MANAGER AND LANDOWNER.

GENERAL NOTES FOR STREAM RESTORATION WORK ON PARKLAND M-NCPPC PARKS DEVELOPMENT DIVISION (TO SUPPLEMENT M-NCPPC GENERAL CONSTRUCTION NOTES)

1. A PRE-CONSTRUCTION MEETING WITH THE M-NCPPPC (PARKS) CONSTRUCTION INSPECTOR, URBAN FORESTER, PARK MANAGER, ENGINEER, AND APPLICANT'S STREAM RESTORATION DESIGNER (SRD) SHALL OCCUR TO ENSURE FULL UNDERSTANDING OF THE PROJECT GOALS, DESIGN INTENT, AND FIELD CONDITIONS AT THE TIME OF CONSTRUCTION. (THE APPLICANT IS RESPONSIBLE FOR COORDINATION WITH MDE AND OTHER REGULATORY AGENCIES AS REQUIRED BY PERMITS.) CONTACT PARKS REPRESENTATIVE 72 HOURS PRIOR TO CONSTRUCTION.

2. CONTRACTOR SHALL BE FAMILIAR WITH MDE WATERWAY CONSTRUCTION GUIDELINES AND MDE BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS, AND IMPLEMENT THEM THROUGHOUT THE PROJECT, INCLUDING DURING IN-CHANNEL REVETMENT INSTALLATION AND PUMP-AROUND

3. THE APPLICANT SHALL ENGAGE AN SRD (AN INDIVIDUAL FAMILIAR WITH STREAM RESTORATION REVETMENT DESIGN AND WATERWAY CONSTRUCTION TECHNIQUES) THAT WILL OVERSEE CONSTRUCTION ACTIVITIES TO ENSURE A STABLE STREAM CONDITION IS ESTABLISHED WITH THE PROTECTION OF NATURAL RESOURCES. THIS PERSON SHALL COORDINATE ALL ADJUSTMENTS AND ACCEPTANCE OF STRUCTURES WITH M-NCPPC AS CONSTRUCTION PROGRESSES.

4. M-NCPPC, IN COORDINATION WITH THE SRD AND WSSC SYSTEMS INSPECTION GROUP (SIG), MAY ADJUST THE LIMITS OF THE IN-STREAM STRUCTURES, STREAM BANK STABLIZATION, AND GRADING TO MINIMIZE DISTURBANCE TO TREES/TREE ROOTS AND TO ENSURE FUNCTIONALITY OF DESIGN INTENT IS ACHIEVED. IN ADDITION, CARE SHALL BE TAKEN TO PROTECT TREE ROOTS DURING CONSTRUCTION.

5. CONTRACTOR SHALL SURVEY AND LOCATE CRITICAL DESIGN POINTS (CENTERLINE STATIONS, OFFSETS, ELEVATIONS, STRUCTURES, ETC.) ALONG THE STREAM CHANNEL IN ACCORDANCE WITH APPROVED MDE/COE PLANS. PRIOR TO CONSTRUCTION SRD MAY ADJUST/CONFIRM CONSTRUCTION STAKEOUT TO ENSURE STABILITY AND PROTECT RESOURCES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING STAKEOUT DURING CONSTRUCTION UNTIL FINAL ACCEPTANCE BY M-NCPPC.

6. CONSTRUCTION OF IN-STREAM REVETMENTS, INCLUDING GRADE CONTROLS AND BANK STABILIZATION, SHALL BE INSPECTED AND ACCEPTED BY SIG. PARKS AND SRD SHALL COORDINATE WITH SIG FOR ACCEPTANCE.

7. ACCESS ROUTES (16' WIDE, TYP.) AND STAGING AREAS SHALL BE FIELD ADJUSTED IN COORDINATION WITH PARKS TO MINIMIZE IMPACTS TO NATURAL RESOURCES. EQUIPMENT SIZE RESTRICTIONS (E.G., <8 PSI LOADED GROUND PRESSURE) MAY BE REQUIRED BY M-NCPPC IN SENSITIVE AREAS.

8. CONTRACTOR SHALL COORDINATE TREE PROTECTION MEASURES AND TREE REMOVALS WITH SIG. SRD. AND M-NCPPC. THESE MEASURES (WHICH MAY INCLUDE HARDWOOD MATS. TREE PLANKING, ROOT AERATION MATTING, EQUIPMENT RESTRICTIONS, MULCH ROADS, TREE PROTECTION FENCE, ETC.) MUST BE INSTALLED BEFORE EQUIPMENT ACCESS OVER ROOTS.

9. THE CONTRACTOR SHALL COORDINATE WITH THE WSSC SEDIMENT CONTROL INSPECTOR AND M-NCPPC ON THE USE OF COMPOST SOCKS, TRENCHLESS SILT FENCES AND/OR DAILY STABILIZATION TO AVOID CUTTING THROUGH MATURE TREE ROOT SYSTEMS. WHERE TRENCHING IS REQUIRED, PRUNE ROOTS PRIOR TO TRENCH EXCAVATION AT THE DIRECTION OF

10. TREE ROOT SYSTEMS ARE NOT TO BE DISTURBED DURING PLACEMENT OF RIP RAP, VEGETATED ROCK PACKS, AND OTHER SIMILAR STRUCTURES, UNLESS OTHERWISE NOTED ON PLANS OR INSTRUCTED BY M-NCPPC. EXACT EXTENTS OF STONE PLACEMENT SHALL BE DETERMINED IN THE FIELD. WORK SHALL BE COMPLETED IN A MANNER THAT MINIMIZES IMPACTS TO NATURAL RESOURCES. INCLUDING TREES. AQUATIC HABITAT. AND TERRESTRIAL HABITAT.

11. THE CONTRACTOR IS RESPONSIBLE FOR CONTROL OF WATER THROUGHOUT THE CONSTRUCTION SITE, INCLUDING RUNOFF THROUGH DISTURBED AREAS.

12. IN-STREAM AREAS WHERE PUMP-AROUNDS ARE REMOVED AT THE END OF EACH WORK DAY MUST BE COMPLETED AND STABILIZED DAILY. DISTURBED AREAS ABOVE THE WATERLINE SHALL BE STABILIZED AT THE END OF EACH WORKDAY. ONCE STREAM FLOW IS RE-ESTABLISHED AT THE END OF THE WORKDAY, THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME TO INSPECT THE NEW FLOW PATTERN AND MAKE ADJUSTMENTS AS NECESSARY TO ENSURE NON-EROSIVE CONDITION BEFORE VACATING THE SITE.

13. CONTRACTOR IS RESPONSIBLE FOR ENSURING SMOOTH TRANSITIONS AT UPSTREAM AND DOWNSTREAM ENDS OF WORK AREAS AND BETWEEN THE STREAMBED AND ITS BANKS.

14. THALWEG IS TO BE INSTALLED PER PLAN AND/OR AS DIRECTED BY THE SRD IN COORDINATION WITH M-NCPPC.

15. UPON THE COMPLETION OF STONE STRUCTURES (INCLUDING STONE TOE, ROCK PACK, AND RIP RAP, ETC.), COMPOST MIX SHOULD BE INTEGRATED INTO THE UPPER PORTIONS OF THE COMPLETED STRUCTURE (ABOVE THE BASEFLOW WATER

SURFACE) TO ENCOURAGE VEGETATION ESTABLISHMENT.

17. VOIDS SHOULD NOT BE LEFT IN ANY COMPLETED IN-STREAM STRUCTURES. STRUCTURES SHOULD BE FILLED IN WITH STONE AND STREAM BED MIX TO FILL VOIDS.

18. CONSTRUCTED RIFFLES AND OTHER STREAMBED REVETMENTS WILL NOT BE ACCEPTED UNTIL SURFACE FLOW IS ESTABLISHED.

19. IN AREAS WHERE A FISH POOL HABITAT IS SPECIFIED FOR CONSTRUCTION OR PRESERVATION, THE FOLLOWING CONDITIONS ARE DESIRABLE:

ROOT-WATER INTERACTION

MAINTAINING VOID SPACE BETWEEN ROOTS AND UNDER BANKS

• RESTORING FLOW PATTERNS AFTER CONSTRUCTION TO PROVIDE ADEQUATE SCOUR WHICH WILL NATURALLY WASH OUT POOLS AND MAINTAIN ADEQUATE HABITAT DEPTH

19. COMPLETED STREAMBED PROFILE WILL NOT HAVE DROPS GREATER THAN SIX INCHES IN ANY ONE LOCATION TO ENSURE FISH PASSAGE. AREAS WHERE THE FINAL GRADE DROP EXCEEDS A SIX-INCH CHANGE IN ELEVATION AT ANY ONE LOCATION SHALL BE ADJUSTED TO ALLOW FISH PASSAGE PRIOR TO FINAL ACCEPTANCE BY M-NCPPC.

BEST MANAGEMENT PRACTICES FOR WORK IN NONTIDAL WETLANDS

1. PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO THE NONTIDAL WETLANDS.

2. USE PREVIOUS EXCAVATED MATERIAL AS BACKFILL UNLESS IT CONTAINS WASTE METAL PRODUCTS. UNSIGHTLY DEBRIS. TOXIC MATERIAL OR ANY OTHER DELETERIOUS SUBSTANCE. USE CLEAN BORROW MATERIAL WHEN EXCAVATED MATERIAL IS NOT SUITABLE FOR USE AS BACKFILL

3. ALL EXCESS FILL. SPOIL MATERIAL. DEBRIS. AND CONSTRUCTION MATERIAL SHALL BE DISPOSED OF OUTSIDE THE NONTIDAL WETLAND. TWENTY-FIVE (25) FOOT BUFFER AREA, AND THE ONE HUNDRED (100) YEAR FLOODPLAIN, AND IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF THE NONTIDAL WETLANDS.

4. TEMPORARY CONSTRUCTION TRAILERS OR STRUCTURE, STAGING AREAS, AND STOCKPILES SHALL NOT BE LOCATED WITHIN THE NONTIDAL WETLANDS, BUFFER AREAS OR THE ONE HUNDRED (100) YEAR FLOODPLAIN UNLESS SPECIFICALLY APPROVED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, NONTIDAL WETLANDS, AND WATERWAYS DIVISION.

5. ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (UNIOLA SP.)AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.

6. RECTIFY ANY TEMPORARILY IMPACTED AREAS BY RESTORING TO EXISTING GRADES AND ELEVATIONS, AND BY PERFORMING APPROPRIATE VEGETATIVE STABILZATION. WETLANDS AND ADJOINING BUFFER AREAS SHALL NOT BE MOWED OR OTHERWISE MANAGED TO PREVENT THE RE-ESTABLISHMENT OF WOODY VEGETATION.

7. TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED BY THE CLASSIFICATION OF THE STREAM. ADHERE TO TIME-OF-YEAR RESTRICTIONS AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.08.02.

14/000	
	PIPELINE DESIGN DIVISION
	PIPELINE DESIGN DIVISION INFRASTRUCTURE SECTION

REVISIONS

STRAUGHANENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com

MAY, 2025

EXPIRATION DATE: XX/XX/XXXX IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 CAPITOL VIEW - ESA

HE STATE OF MARYLAND.

NAME: XXXXXXXXXXX

LICENSE NO.: XXXXX

SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

GN-01 - WSSC CONSTRUCTION GUIDELINES FOR STREAM RESTORATION

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF

PROFESSIONAL CERTIFICATION

JOB NUMBER : CICKCNCRMH7360A22

DATE

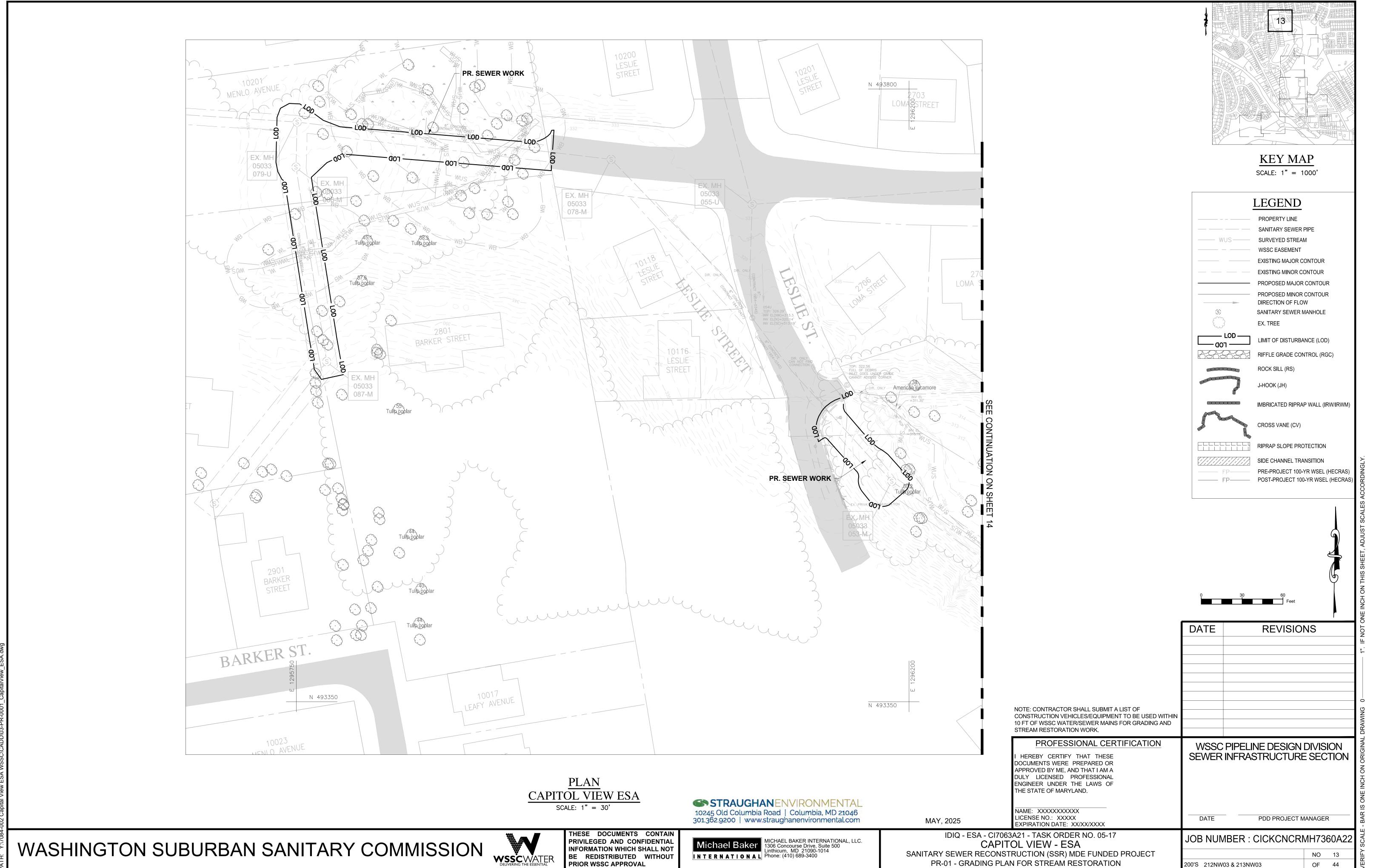
NO 12 200'S 212NW03 & 213NW03

PDD PROJECT MANAGER

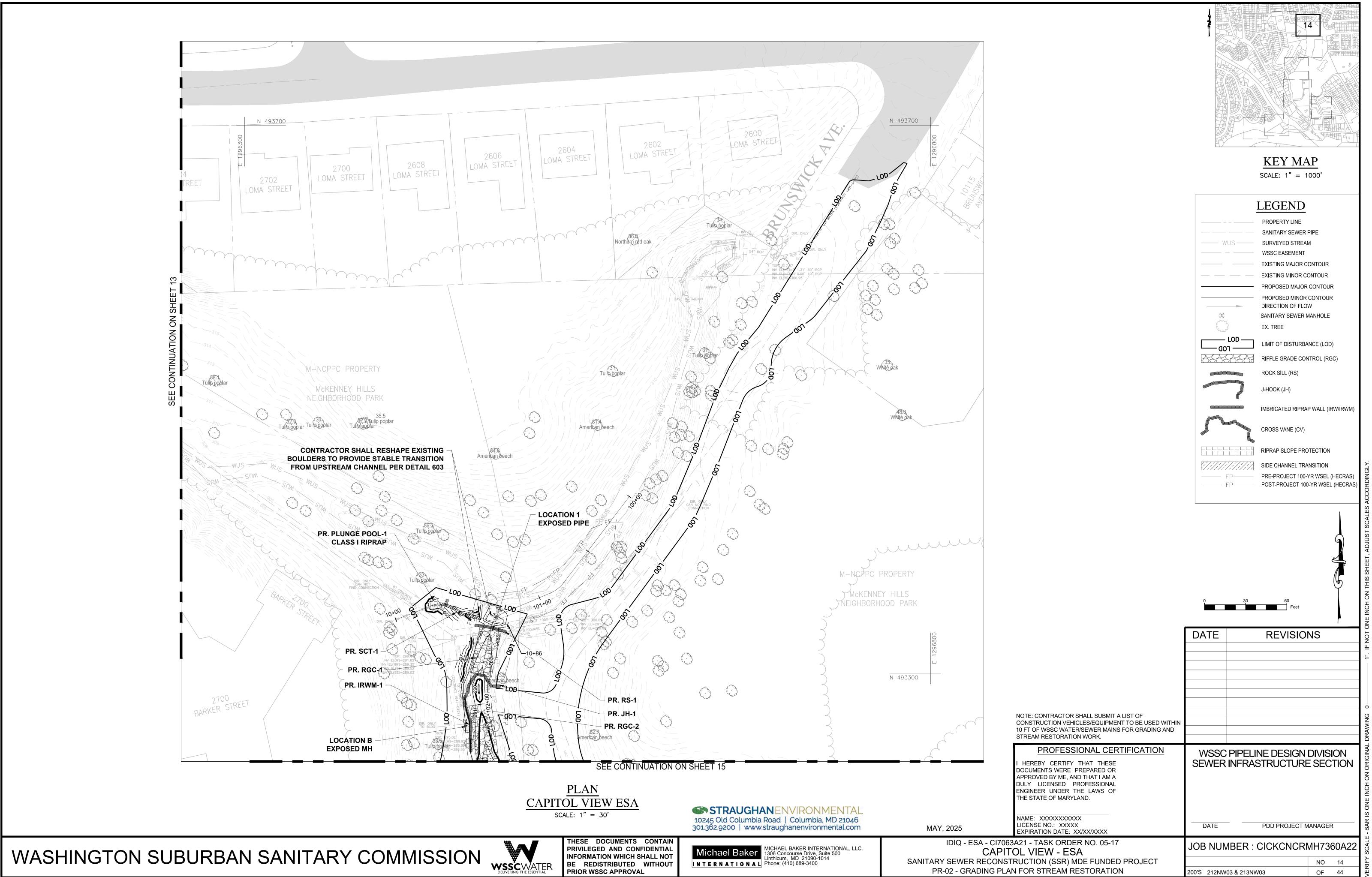
WSSCWATER

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT **PRIOR WSSC APPROVAL**

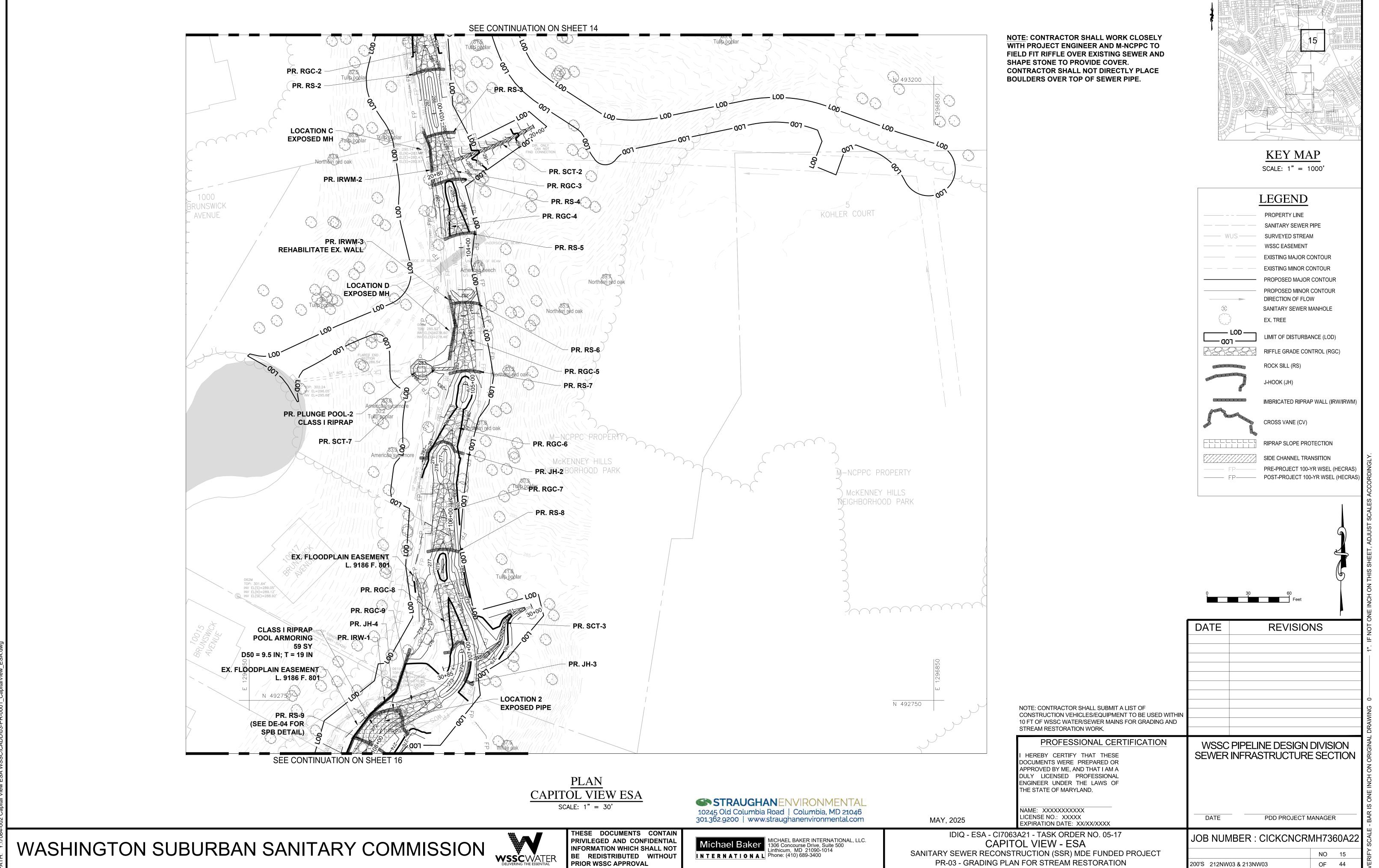
MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 INTERNATIONAL Phone: (410) 689-3400



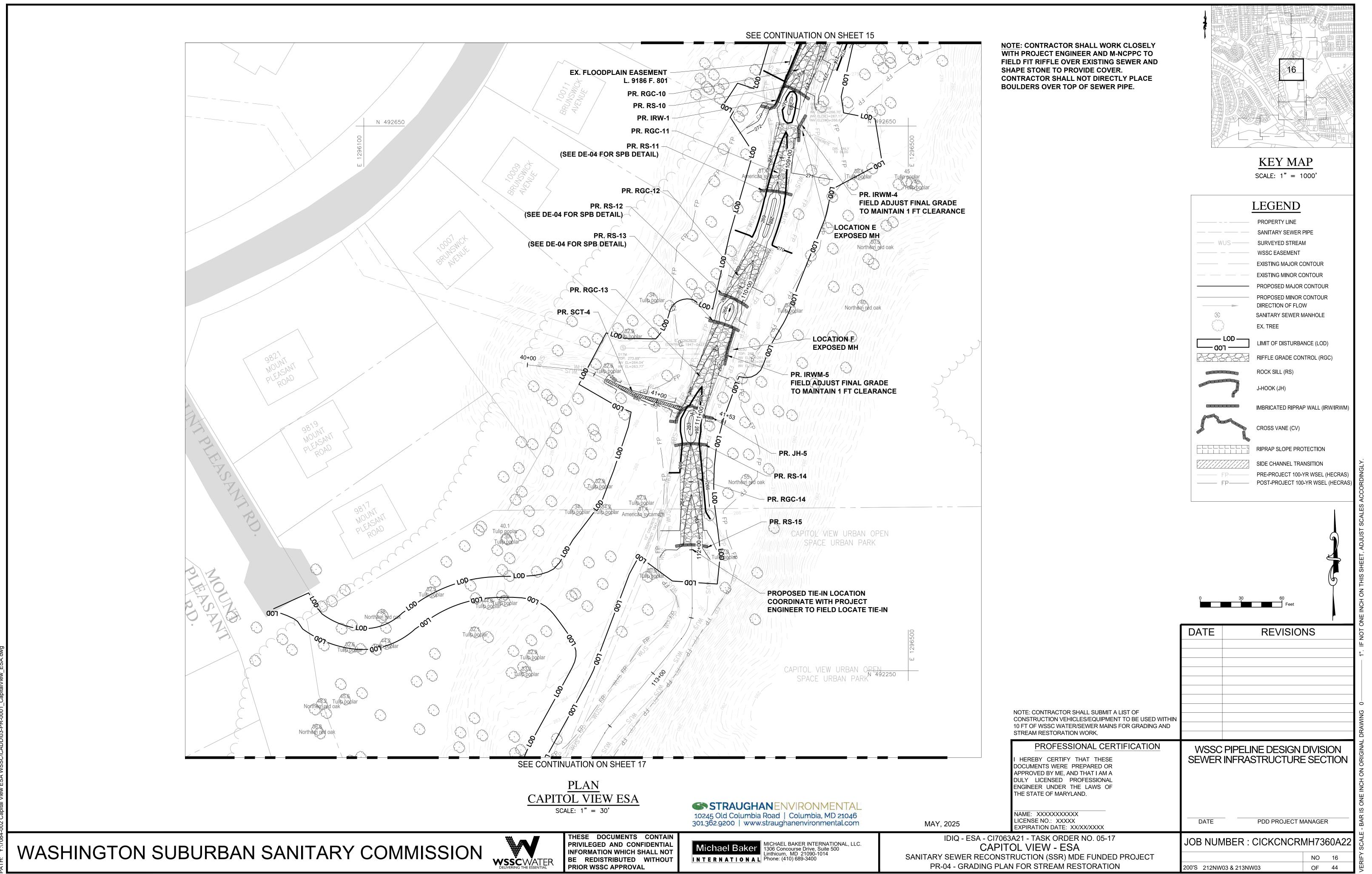
8/5/2025 12:25 PM - PLOT DATE



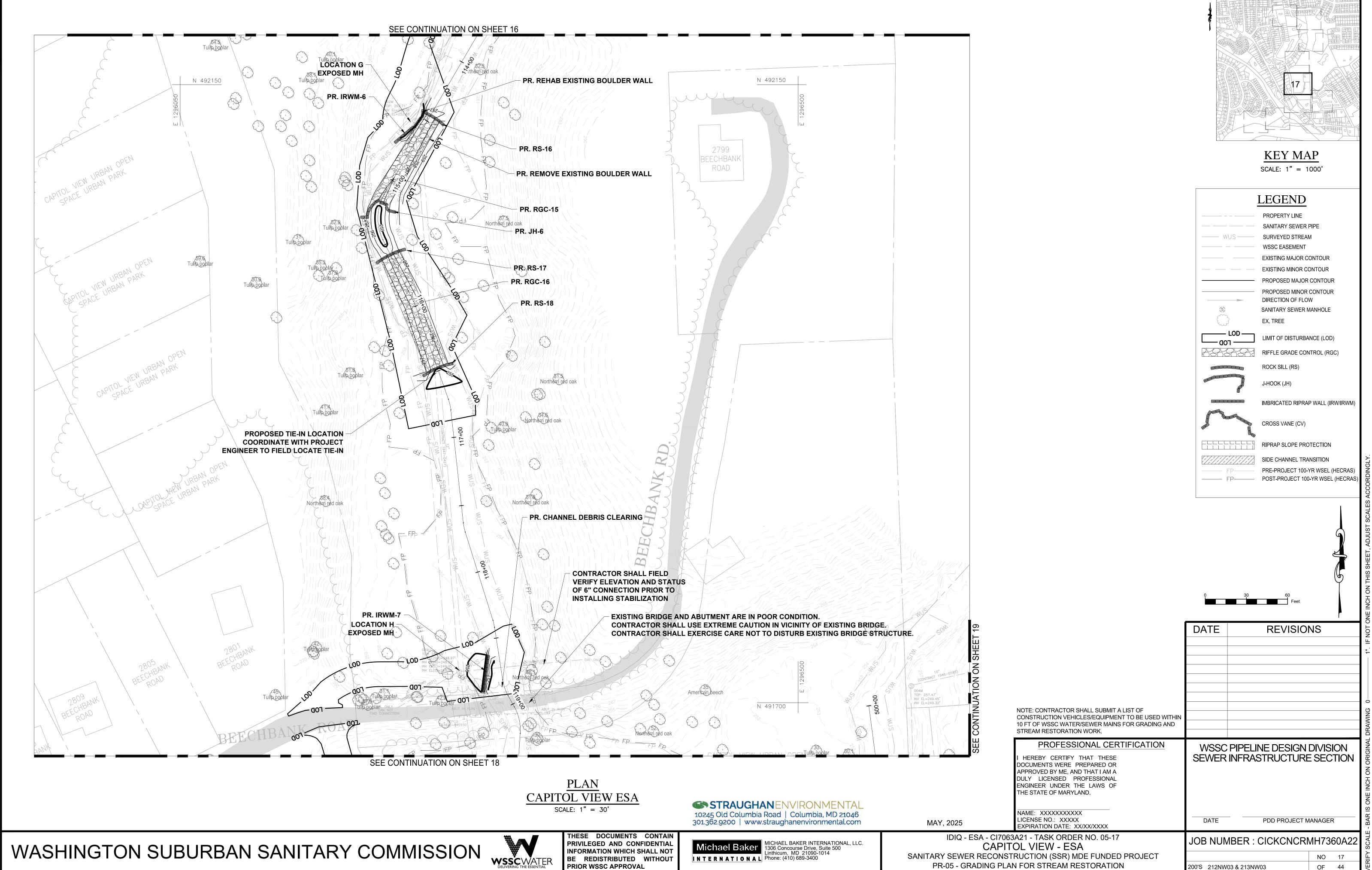
8/5/2025 12:26 PM - PLOT DATE



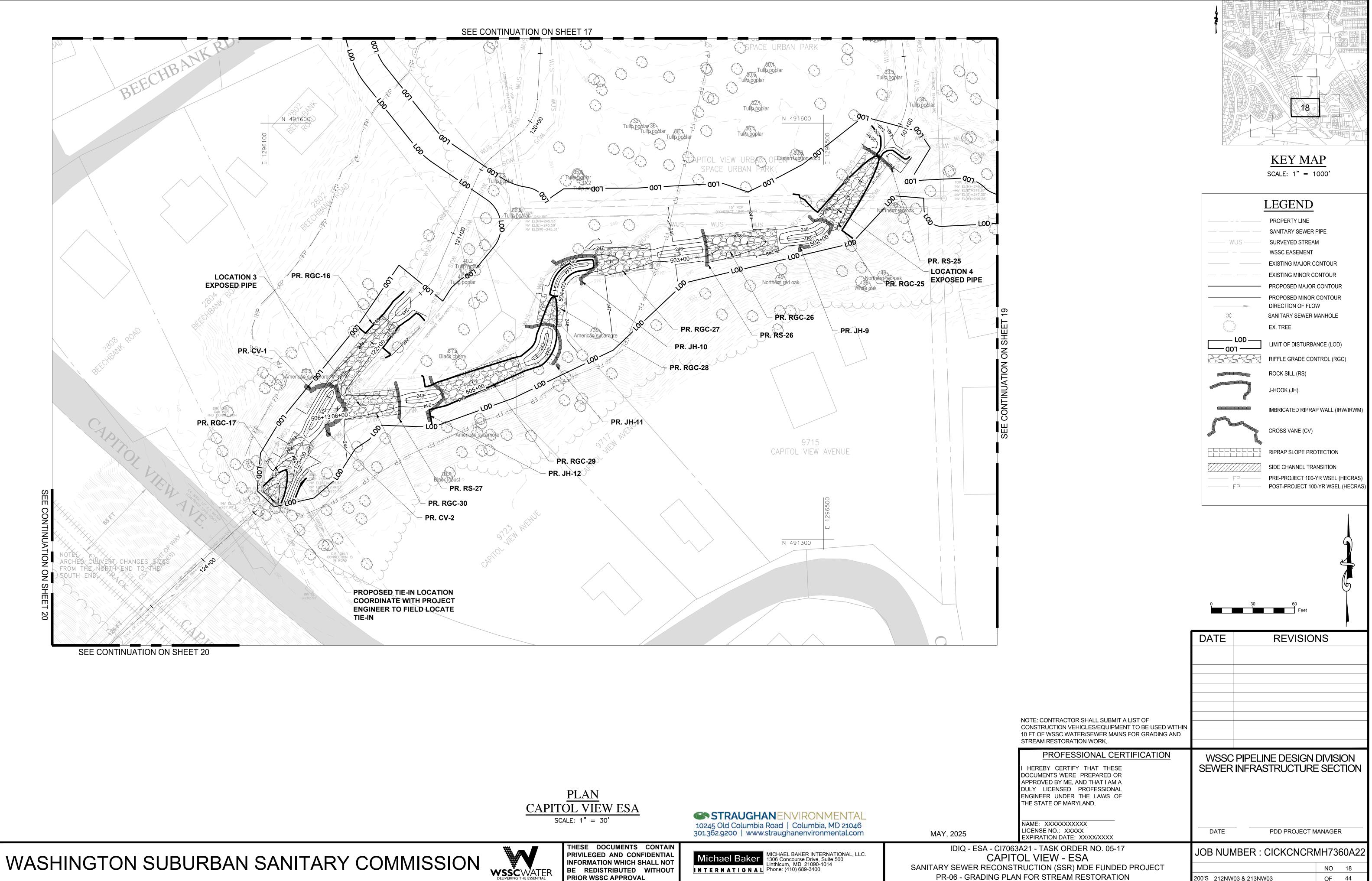
8/5/2025 12:28 PM - PLOT DATE



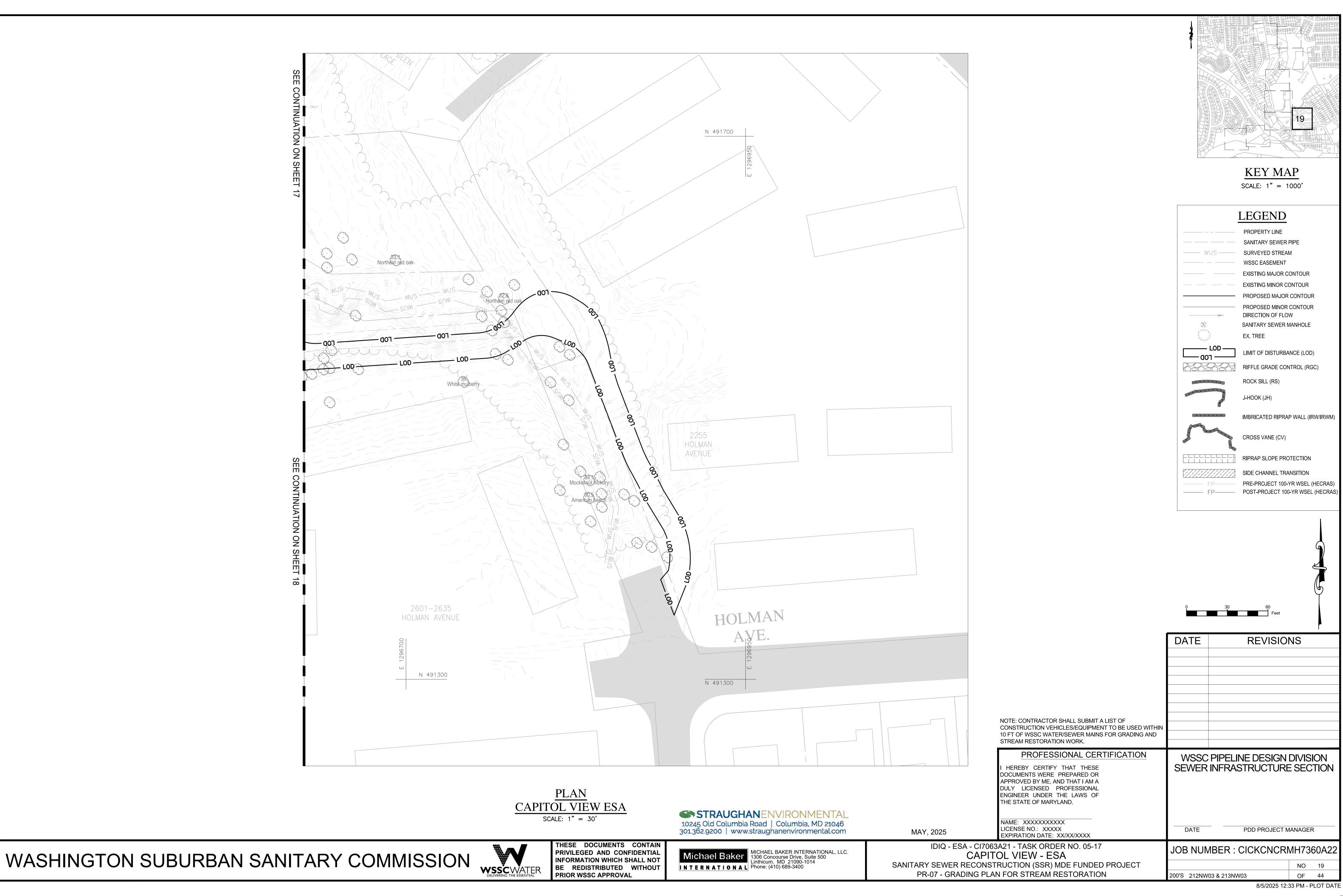
8/5/2025 12:29 PM - PLOT DATE



OF 44 8/5/2025 12:30 PM - PLOT DATE

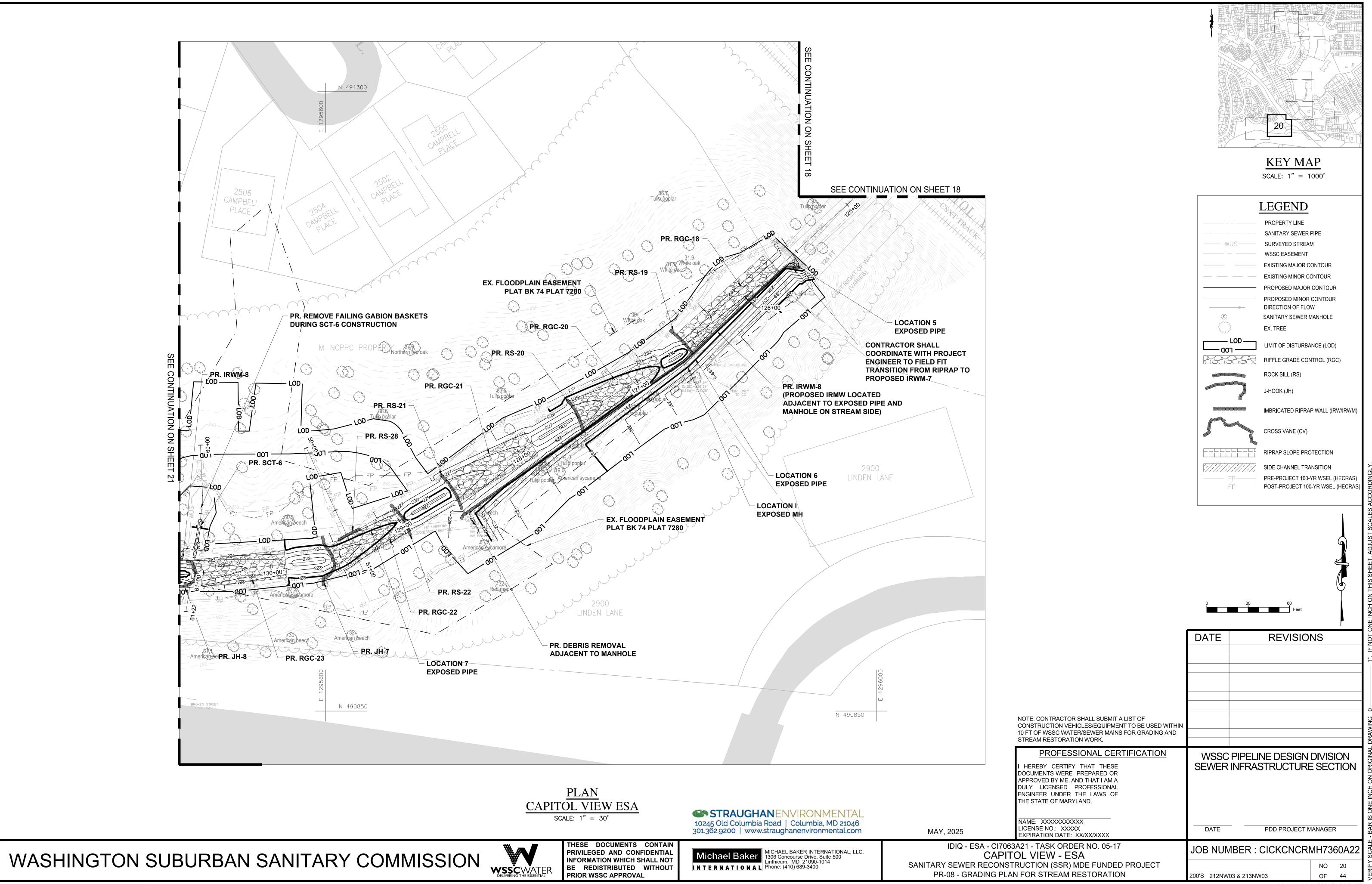


OF 44 8/5/2025 12:32 PM - PLOT DATE

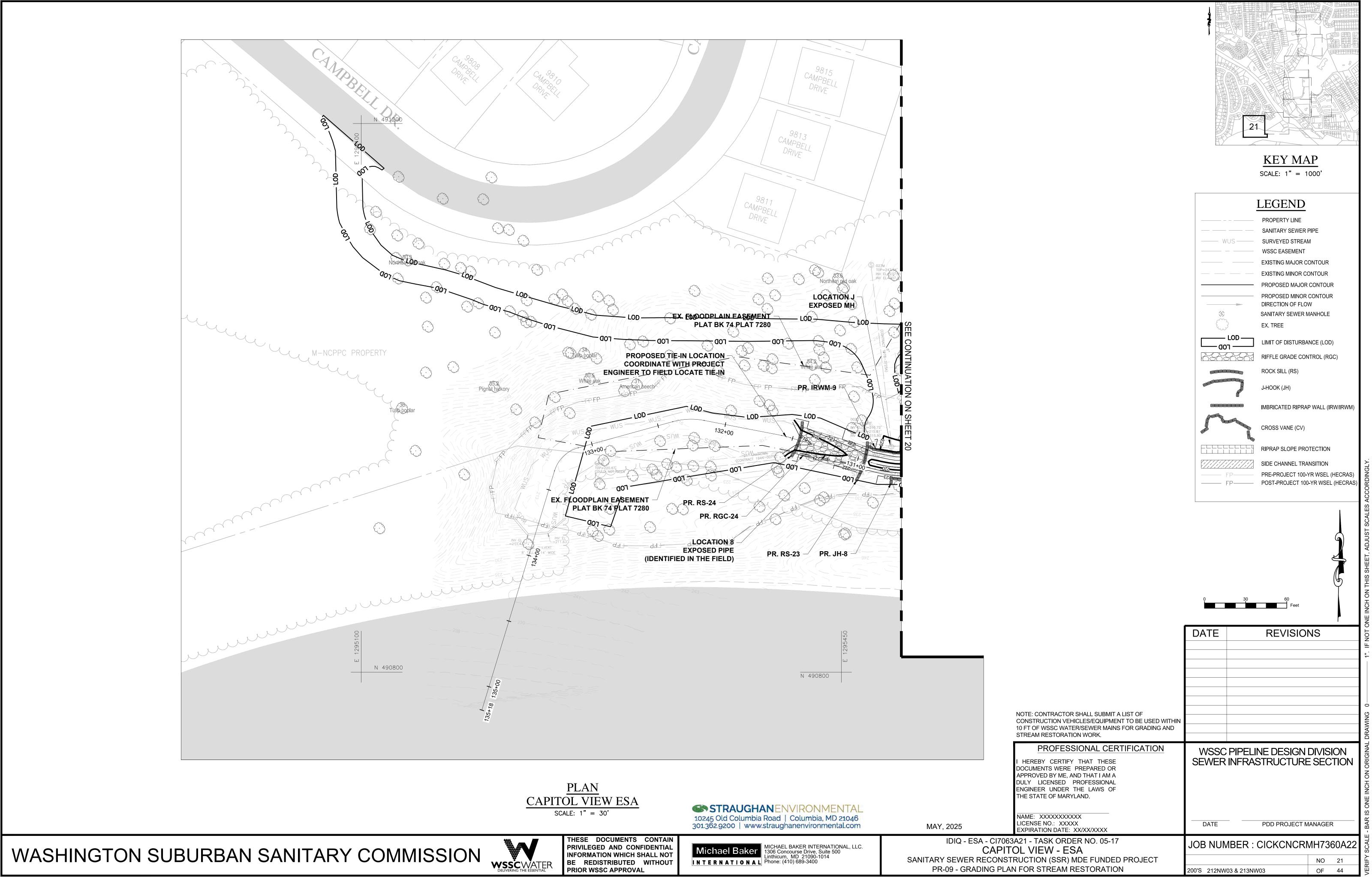


OF 44 8/5/2025 12:33 PM - PLOT DATE

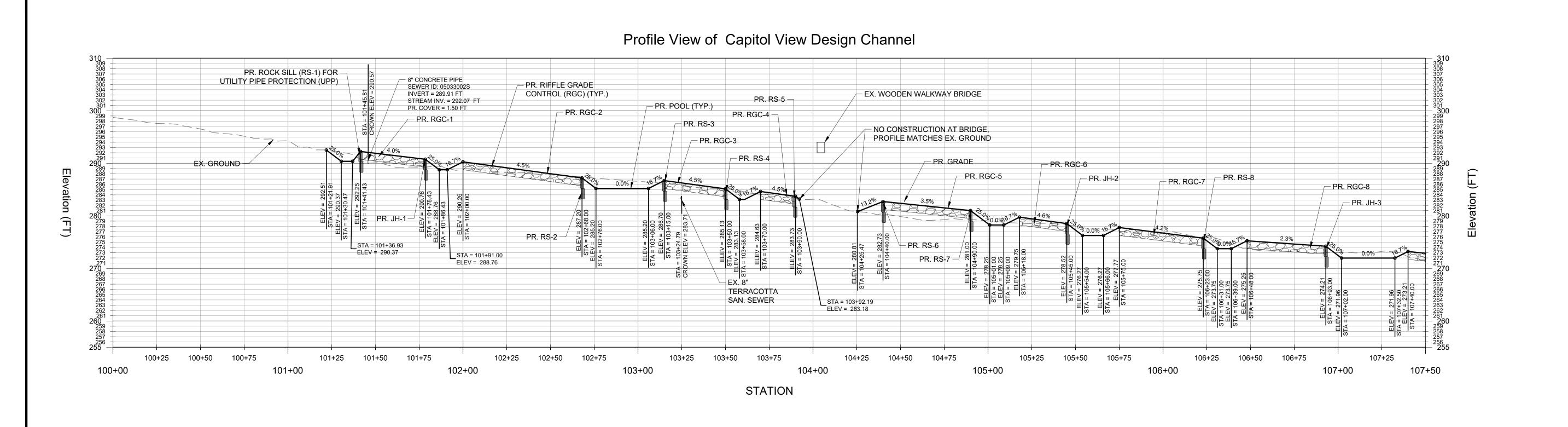
NO 19

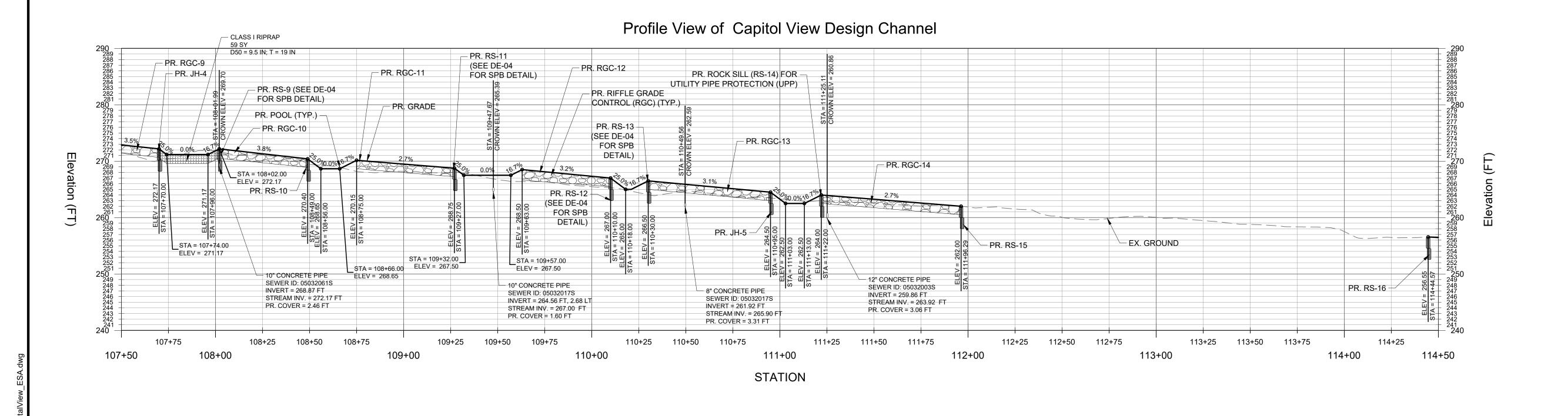


8/5/2025 12:34 PM - PLOT DATE



8/5/2025 12:36 PM - PLOT DATE





WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION

REVISIONS

STRAUGHANENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com

MAY, 2025

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT SPR-01 - PROFILES FOR STREAM RESTORATION

PROFESSIONAL CERTIFICATION

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.

EXPIRATION DATE: XX/XX/XXXX

NAME: XXXXXXXXXXX LICENSE NO.: XXXXX

JOB NUMBER: CICKCNCRMH7360A22

DATE

NO 22 200'S 212NW03 & 213NW03

PDD PROJECT MANAGER

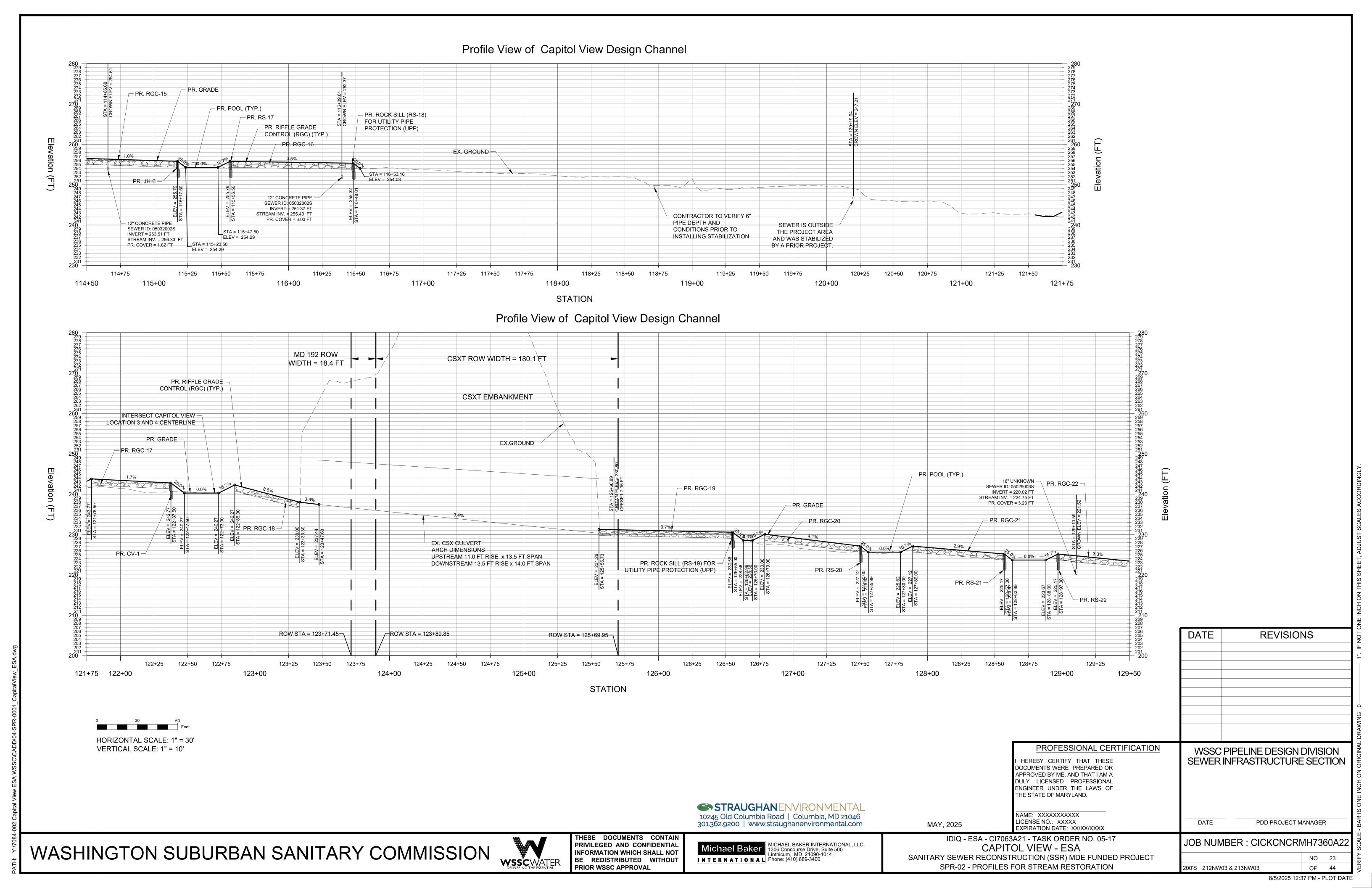
WASHINGTON SUBURBAN SANITARY COMMISSION

HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 1" = 10'

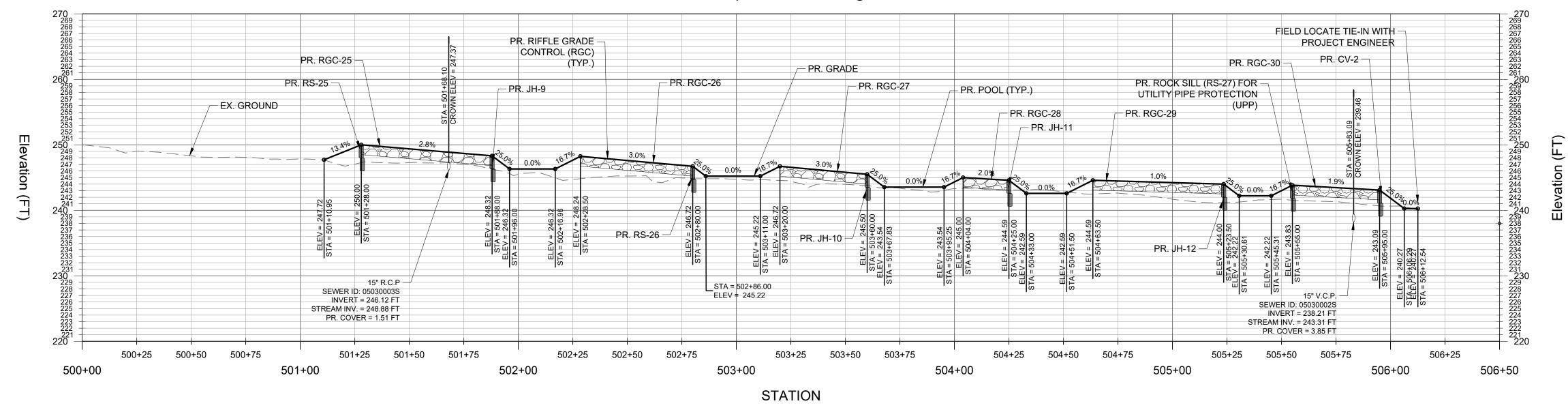
THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 Linthicum, MD 21090-1014 INTERNATIONAL Phone: (410) 689-3400

> OF 44 8/5/2025 12:37 PM - PLOT DATE







HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 1" = 10'

> **STRAUGHAN**ENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com

MAY, 2025

PROFESSIONAL CERTIFICATION WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A ENGINEER UNDER THE LAWS OF

DATE

EXPIRATION DATE: XX/XX/XXXX IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

HEREBY CERTIFY THAT THESE

DULY LICENSED PROFESSIONAL

THE STATE OF MARYLAND.

NAME: XXXXXXXXXXX LICENSE NO.: XXXXX

SPR-03 - PROFILES FOR STREAM RESTORATION

JOB NUMBER : CICKCNCRMH7360A22 NO 24

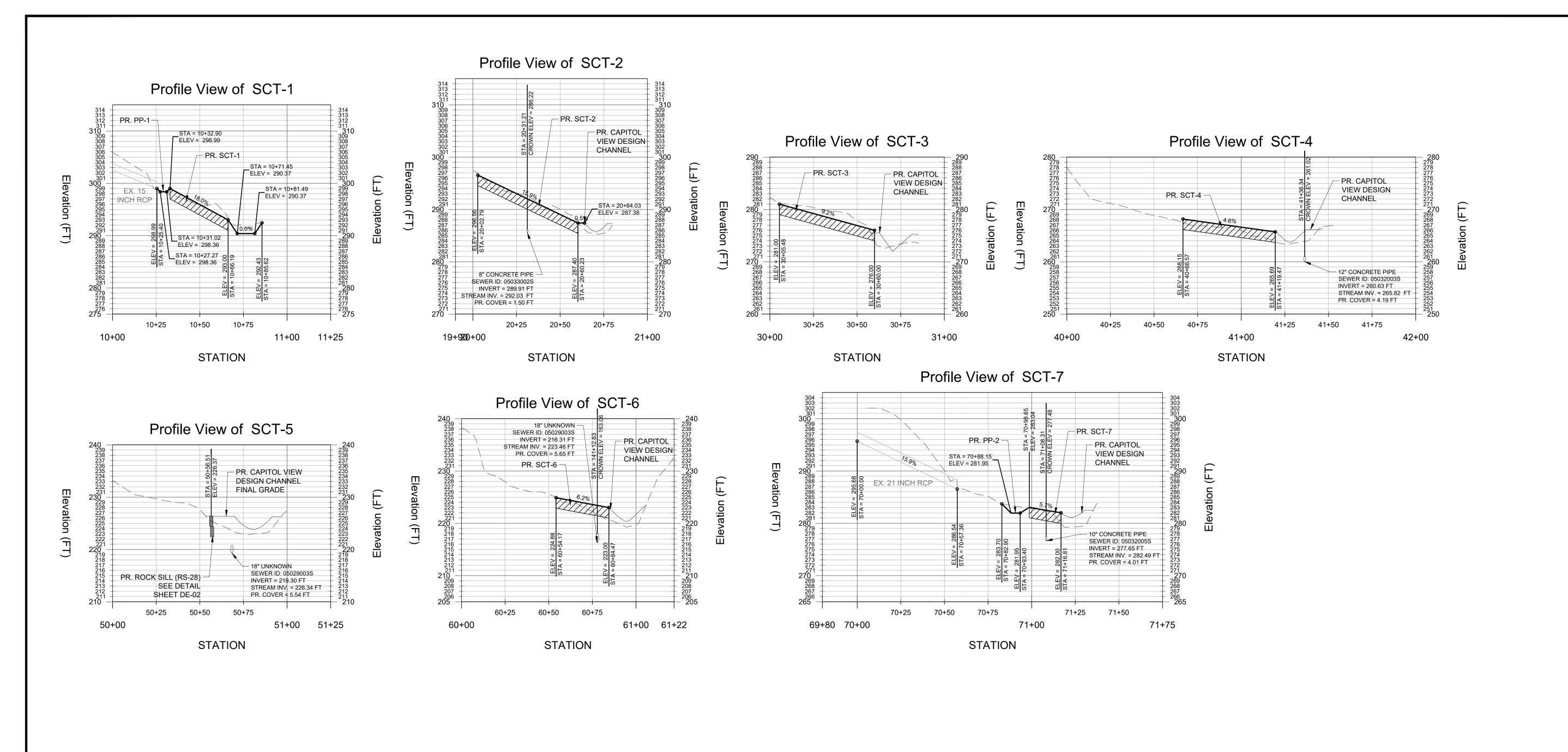
WSSCWATER DELIVERING THE ESSENTIAL

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 Linthicum, MD 21090-1014 Phone: (410) 689-3400

PDD PROJECT MANAGER

REVISIONS



HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 1" = 10'

> **STRAUGHAN**ENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com

MAY, 2025

PROFESSIONAL CERTIFICATION WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION 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. NAME: XXXXXXXXXXX LICENSE NO.: XXXXX PDD PROJECT MANAGER EXPIRATION DATE: XX/XX/XXXX

DATE

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA**

JOB NUMBER : CICKCNCRMH7360A22

SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT NO 25 SPR-04 - PROFILES FOR STREAM RESTORATION 200'S 212NW03 & 213NW03 OF 44

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 Linthicum, MD 21090-1014 Phone: (410) 689-3400

REVISIONS

RIFFLE GRADE CONTROL (RGC) DETAIL (TYPICAL PROFILE)

PAGE 1 OF 3 (NTS)

<u> 604</u>

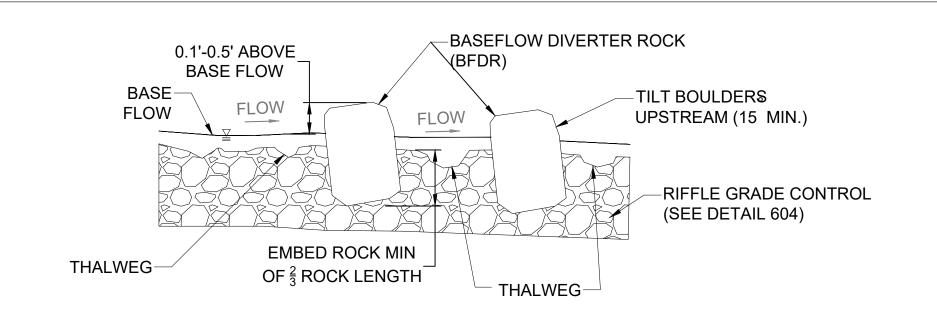
PAGE 2 OF 3 (NTS)

FILL BANK CONDITION (SEE PLANS/CROSS SECTIONS)	TRANSITION TO MATCH EXISTING UPSTREAM AND DOWNSTREAM CHANNEL SHAPE	CUT BANK CONDITION (SEE PLANS/CROSS SECTIONS)
	B=BANKFULL WIDTH	
SOIL LIFT (SEE DETAIL 617)	D=\frac{1}{3} B BASEFLOW CHANNEL	FIELD ADJUST TIE-IN TO MINIMIZE NATURAL RESOURCE IMPACTS
	BASEFLOW DIVERTER ROCK (SEE DETAIL 609) BANKFULL DEPTH	EXISTING GRADE
	E	ECM
		SET CENTER THIRD OF RGC ALMOST FLAT TO CREATE CHANNEL SHAPE.
EXTEND ECM DOWN 1.0' (MIN) AND SECURE WITH BSM BSM		EXTEND ECM DOWN 12" (MIN.) AND SECURE WITH BSM
FIELD ADJUST TO ENSURE TIGHT FIT WITH EXISTING BANK BED STABILITY (BSM) THICKNESS (1.5' MIN)	1' EXCAVATION — THALWEG (LOCATION VARIES ALONG RIFFLE)	EXCAVATE EXISTING STREAMBED MATERIAL 1.0' (MIN) AND SALVAGE FOR REUSE IN SURFACE OF RGC (SEE RGC NOTES) ROUGHEN SUBGRADE PRIOR TO BSM PLACEMENT.

	RIFFLE GRADE CONTROL (RGC) GEOMETRY TABLE										
STR.#	CREST STA.	CREST ELEVATION	TAIL STATION	A (FT)	SLOPE	B (BANKFULL WIDTH) (FT)	D (FT)	E (BANKFULL DEPTH) (FT)	X (MSL)	Z (MSL)	BED STABILITY MIX TYPE
RGC-1	101+41.43	292.25	101+78.43	37.00	0.040	16.0	5.33	1.50	292.25	290.76	E
RGC-2	102+00.00	290.26	102+68.00	68.00	0.045	16.0	5.33	1.50	290.26	287.20	E
RGC-3	103+15.00	286.70	103+50.00	35.00	0.045	16.0	5.33	1.50	286.70	285.13	E
RGC-4	103+70.00	284.63	103+90.00	20.00	0.045	16.0	5.33	1.50	284.63	283.73	E
RGC-5	104+40.00	282.73	104+90.00	50.00	0.035	16.0	5.33	1.50	282.73	281.00	E
RGC-6	105+18.00	279.75	105+45.00	27.00	0.046	16.0	5.33	1.50	279.75	278.52	E
RGC-7	105+75.00	277.77	106+23.00	48.00	0.042	16.0	5.33	1.50	277.77	275.75	E
RGC-8	106+48.00	275.25	106+93.00	45.00	0.023	16.0	5.33	1.50	275.25	274.21	E
RGC-9	107+40.00	273.21	107+70.00	30.00	0.035	16.0	5.33	1.50	273.21	272.17	E
RGC-10	108+02.00	272.17	108+49.00	47.00	0.038	16.0	5.33	1.50	272.17	270.40	E
RGC-11	108+75.00	270.15	109+27.00	52.00	0.027	16.0	5.33	1.50	270.15	268.75	E
RGC-12	109+66.00	268.50	110+10.00	44.00	0.034	16.0	5.33	1.50	268.50	267.00	Е
RGC-13	110+30.00	266.50	110+95.00	65.00	0.031	16.0	5.33	1.50	266.50	264.50	E
RGC-14	111+22.00	264.00	111+96.29	74.29	0.027	16.0	5.33	1.50	264.00	262.00	E
RGC-15	114+44.57	256.55	115+17.50	72.93	0.010	16.0	5.33	1.50	256.55	255.79	E
RGC-16	115+56.50	255.79	116+48.01	91.51	0.005	16.0	5.33	1.50	255.79	255.32	E
RGC-17	121+78.50	243.77	122+37.50	59.00	0.017	20.0	6.67	1.50	243.77	242.77	F
RGC-18	122+85.00	242.27	123+33.30	48.30	0.088	20.0	6.67	2.25	242.27	238.00	F
RGC-19	125+55.73	231.26	126+55.72	99.99	0.007	20.0	6.67	2.25	231.26	230.56	F
RGC-20	126+79.72	230.06	127+50.72	71.00	0.041	20.0	6.67	2.25	230.06	227.12	F
RGC-21	127+89.72	227.12	128+55.72	66.00	0.030	20.0	6.67	2.25	227.12	225.17	F
RGC-22	128+97.72	225.17	129+56.72	59.00	0.033	20.0	6.67	2.25	225.17	223.22	F
RGC-23	129+90.72	222.72	130+56.72	66.00	0.026	20.0	6.67	2.25	222.72	221.00	F
RGC-24	130+95.72	220.50	131+47.23	51.51	0.037	20.0	6.67	2.25	220.50	218.59	F
RGC-25	501+28.00	250.00	501+88.00	60.00	0.028	18.0	6.00	1.00	250.00	248.32	E
RGC-26	502+28.50	248.24	502+80.00	51.50	0.030	18.0	6.00	1.00	248.24	246.72	E
RGC-27	503+20.00	246.72	503+60.00	40.00	0.031	18.0	6.00	1.00	246.72	245.50	E
RGC-28	504+04.00	245.00	504+25.00	21.00	0.020	18.0	6.00	1.00	245.00	244.59	E
RGC-29	504+63.50	244.59	505+23.50	60.00	0.010	18.0	6.00	1.00	244.59	244.00	E
RGC-30	505+55.00	243.83	505+95.00	40.00	0.019	18.0	6.00	1.00	243.83	243.09	E

- 1. CONTRACTOR SHALL LAY OUT CRITICAL POINTS OF STRUCTURE TO REVIEW WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD ADJUSTED IN COORDINATION WITH THE CONSTRUCTION MANAGER TO ENSURE PROPER ORIENTATION, STABLE INSTALLATION, FISH PASSAGE, AND SMOOTH TIE-IN TO ADJACENT FEATURES.
- 2. WHERE EXISTING CHANNEL GRADES ARE BELOW THICKNESS OF RGC, BACKFILL WITH COMMON BORROW AND COMPACT UP TO 30" BELOW FINISHED GRADE. USE BSM AND/OR APPROVED SALVAGED MATERIAL FOR THE TOP 30" OF RGC.
- 3. SATISFACTORY SOIL TYPES FOR COMPACTED FILL INCLUDE ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP AND SM OR A COMBINATION OF THESE SOIL GROUPS. SOIL SHALL BE FREE DEBRIS, WASTE, FROZEN MATERIALS, AND OTHER DELETERIOUS MATTER.
- 4. INSTALL AND COMPACT BSM IN LIFTS NOT TO EXCEED 1.5'. 5. SET LARGEST (CLASS II/III, AS APPLICABLE) MATERIAL CONCENTRATED NEAR THE RIFFLE CREST AND TAIL TO HOLD GRADE.
- SUCCESSFUL INSTALLATION ENTAILS:
- a. SET LARGEST MATERIAL FIRST IN A CHECKERBOARD PATTERN. FINAL TOP ELEVATIONS OF LARGE BOULDERS SHALL BE 0.5' +/- FROM FINISHED THALWEG IN ORDER TO PROVIDE FLOW VARIETY THROUGHOUT THE RIFFLE. BOULDERS TO BE AT LEAST 2/3 BURIED - REFER TO BASEFLOW DIVERTER ROCK DETAIL 609 AS APPLICABLE (FOR BANKFULL WIDTHS >12' ONLY).
- b. USE NEXT SIZE CLASS (CLASS I) STONE TO BACKFILL VOIDS BETWEEN LARGEST STONES c. WASH STREAMBED MATERIAL AND/OR BANK-RUN GRAVEL INTO EACH LIFT TO FILL ROCK VOIDS AND ENSURE SURFACE FLOW. RESERVE SALVAGED NATIVE STREAMBED MATERIAL TO BE USED IN UPPERMOST-LIFT.
- 7. ENSURE MATERIAL LOCKS TOGETHER AND CREATES STABLE TRANSITIONS INTO SURROUNDING FEATURES.
- 8. SHAPE CHANNEL BED TO FORM A BASEFLOW CHANNEL (APPROXIMATELY 1/3 BANKFULL WIDTH) AND THALWEG. USE BSM TO SLOPE SIDES UP TO MEET ADJACENT BANKS AT BANKFULL.
- 9. COMPLETED STRUCTURE WILL HAVE SURFACE FLOW DURING BASEFLOW CONDITIONS WITH STABLE SILL TIE-INS AT BANKFULL AND TO UPSTREAM AND DOWNSTREAM CHANNEL.
- 10. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED

RIFFLE GRADE CONTROL (RGC) DETAIL (STRUCTURE TABLE AND NOTES) PAGE 3 OF 3 (NTS)

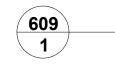


BRDR NOTES:

- 1. BFDR SHALL BE SELECT CLASS II-III BOULDERS.
- 2. BFDR SHALL BE PLACED ON SLIGHT ANGLE IN THE UPSTREAM DIRECTION FOR STABILITY.
- 3. PLACE CLUSTERS COMPRISED OF 3 TO 5 BFDR ARRANGED IN TRIANGULAR CONFIGURATION WITHIN RIFFLE AS DIRECTED BY CONSTRUCTION MANAGER.
- 4. SPACE MULTIPLE BFDR CLUSTERS A MINIMUM OF 1/9 BANKFULL WIDTH "B" APART TO AVOID FLOW OBSTRUCTIONS.
- 5. BFDR SHALL NOT TAKE UP MORE THAN 20% OF BANKFULL WIDTH.
- 6. BASE FLOW SHALL PASS ON ALL SIDES OF BFDR AND SHALL NOT BE WITHIN 1/9 BANKFULL WIDTH "B" OF TOE OF BANK. 7. BFDR SHALL BE PLACED AS TO NOT ENCOURAGE FLANKING OR BANK EROSION.
- 8. BFDR SHALL NOT BE USED IN RIFFLES WITH A BANKFULL WIDTH OF <12'.
- 9. BFDR LOCATIONS TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF CONSTRUCTION MANAGER.
- 10.BFDR CAN BE SET TO PROVIDE STEPPING STONES ACROSS STREAM AS NOTED ON PLAN OR DIRECTED BY CONSTRUCTION
- 11. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED.

609 BASEFLOW DIVERTER ROCK (BFDR) DETAIL (PROFILE AND NOTES) PAGE 2 OF 2 (NTS)

STRAUGHANENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com



(BSM) RIFFLE GRADE

CONTROL (DETAIL 604)

BASEFLOW DIVERTER ROCK (BFDR) DETAIL (PLAN VIEW)

MIN 1/9 B

MONTGOMERY PARKS BED STABILITY MIX (BSM)

PAGE 1 OF 2 (NTS)

PURPOSE: BED STABILITY MIX (BSM) IS A MIXTURE OF SANDS, GRAVELS, COBBLES, AND ROCKS THAT ARE INSTALLED WITHIN STREAM CHANNELS TO STABILIZE AREAS OF HIGH STRESS, PROVIDE CHANNEL SHAPING, AND CREATE LONG-TERM STABILITY, SURFICIAL FLOW, AQUATIC HABITAT, AND FISH PASSAGE.

BSM TYPE: SELECTION OF BSM TYPE FOR A PARTICULAR PROJECT SHOULD BE MADE BASED ON CHANNEL SIZE, STREAM GRADIENT, ANTICIPATED WATER POWER, ETC.

TYPE E (BFw<24') MODERATE STRESSES

MATERIAL SIZE	PERCENTAGE OF BSM
BRG/NATIVE SBM	20%
CLASS 0	10%
CLASS I	30%
CLASS II	40%
TOTAL	100%

TYPE F (BFw<30') MODERATE STRESSES						
MATERIAL SIZE	PERCENTAGE OF BSM					
BRG/NATIVE SBM	20%					
CLASS I	30%					
CLASS II	30%					
CLASS III	20%					
TOTAL	100%					

RIFFLE TAIL

- Baseflow —

B = BANKFULL WIDTH

12' (MIN.)

NATIVE STREAM BED MATERIAL (SBM) SHOULD BE HARVESTED PRIOR TO CHANNEL GRADING FOR REUSE, ESPECIALLY IN UPPER 12" OF BSM. 2. BSM MATERIALS SHALL CONSIST OF CLEAN NATURAL MATERIALS (I.E. NO CONCRETE, ASPHALT, STONE DUST, ETC.)

CREST

- MATERIALS SHOULD BE WELL MIXED PRIOR TO IN-STREAM PLACEMENT. INSTALLED IN 18" (MAX.) LIFTS, AND WASHED IN TO PROMOTE SURFACE
- WASH BANK RUN GRAVEL (BRG)/SBM INTO EACH LIFT TO LOCK-IN MATERIAL AND ESTABLISH SURFACE FLOW AT BASEFLOW CONDITION.
- PLACED BSM LIFTS SHOULD BE PRESSED/TRACKED INTO STREAM CHANNEL TO ENSURE STABILITY AND SMOOTH TRANSITIONS.
- PARKS MAY PERMIT COMMON BORROW TO BE INCORPORATED INTO LOWER LIFTS OF BSM AND SILICA SAND IN UPPER LAYERS IF WASHED-IN BRG DOES NOT SEAL BSM.
- 7. INSTALLED BSM SHOULD BE CHECKED AND AUGMENTED AS NEEDED ONCE
- BASEFLOW CONDITIONS ARE OBSERVED AND FOLLOWING STORM EVENTS. 8. ALTERNATIVE BSM TYPES MAY BE SUBMITTED BY DESIGN TEAM FOR SITE
- SPECIFIC APPROVAL BY PARKS. 9. PERCENTAGES LISTED ARE BY VOLUME. ACTUAL CONTENT OF EACH

COMPONENT MAY VARY 5% UP OR DOWN.

DATE	REVISIONS	
		!

PROFESSIONAL CERTIFICATION WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION 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. NAME: XXXXXXXXXXX LICENSE NO.: XXXXX PDD PROJECT MANAGER EXPIRATION DATE: XX/XX/XXXX

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 CAPITOL VIEW - ESA

JOB NUMBER : CICKCNCRMH7360A22 NO 26 200'S 212NW03 & 213NW03

SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT DE-01 - STREAM CONSTRUCTION DETAILS

MAY, 2025

RIFFLE GRADE CONTROL (RGC) DETAIL (TYPICAL CROSS-SECTION)

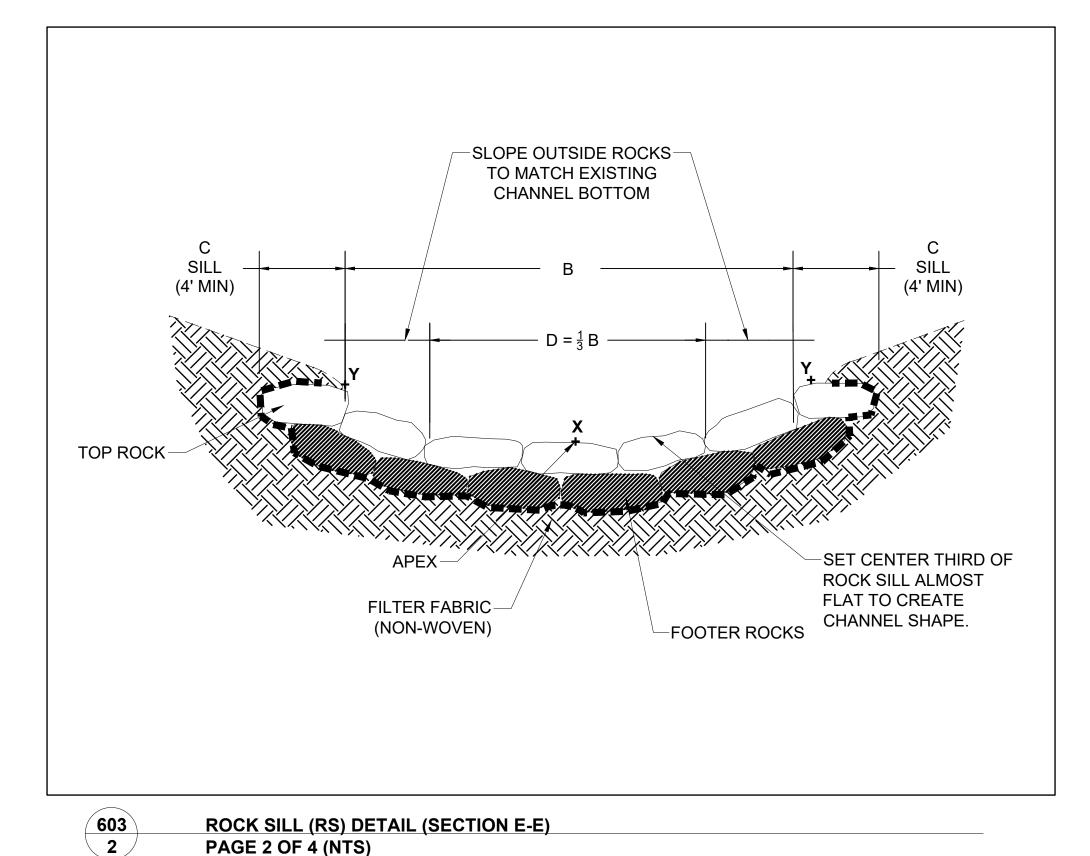


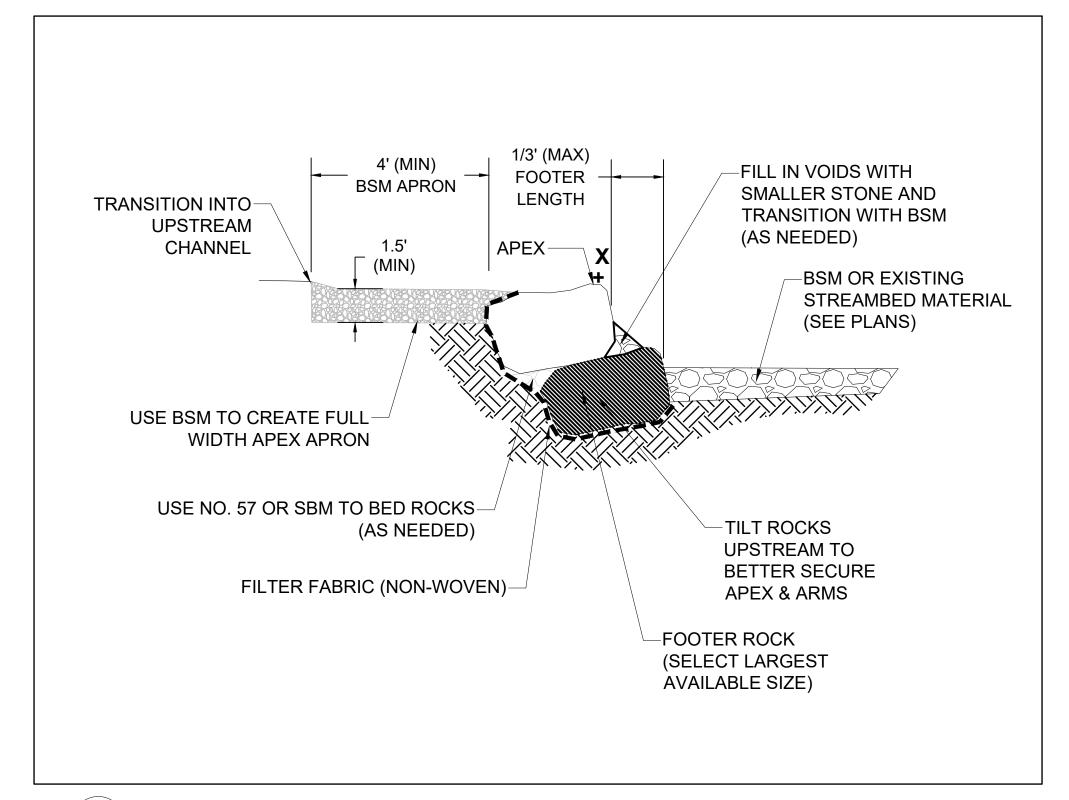
THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. Michael Baker 1306 Concourse Drive, Suite 500 INTERNATIONAL Phone: (410) 689-3400

> OF 44 8/5/2025 12:37 PM - PLOT DATE







603 **ROCK SILL (RS) DETAIL (SECTION F-F)** PAGE 3 OF 4 (NTS)

TIE IN SILLS SHALL EXTEND 4' MINIMUM INTO STABLE CHANNEL BANK.

- 1. CONTRACTOR SHALL LAY OUT CRITICAL POINTS OF STRUCTURE TO REVIEW WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD ADJUSTED IN COORDINATION WITH THE CONSTRUCTION MANAGER TO ENSURE PROPER ORIENTATION, STABLE INSTALLATION, FISH PASSAGE, AND SMOOTH TIE-IN TO ADJACENT FEATURES.
- 2. IMPORTED ROCKS SHALL BE IMBRICATED WITH RECTANGULAR BLOCK SHAPE. APPROPRIATELY SIZED SALVAGED ROCK CAN BE UTILIZED WITH APPROVAL FROM CONSTRUCTION MANAGER.
- 3. ELEVATION "Y" SHALL BE APPROXIMATELY BANKFULL DEPTH ABOVE ELEVATION "X". IN ALL CASES, ELEVATION "Y" SHALL BE AT LEAST 0.5' ABOVE
- ELEVATION "X" (SEE STRUCTURE TABLE FOR ACTUAL ELEVATION DIFFERENCE).
- 4. STATION REFERENCE POINT "X" IS LOCATED AT CHANNEL CENTERLINE UNLESS OTHERWISE SPECIFIED ON PLANS. 5. FOOTER ROCKS NOT SHOWN IN PLAN VIEW FOR CLARITY. FOOTER ROCKS SHALL UTILIZE LARGEST MATERIAL AVAILABLE. FOOTER ROCKS SHALL BE PLACED SO TOP SURFACE ANGLES TO THE UPSTREAM/OUTSIDE EDGE OF STRUCTURE IN ORDER TO BETTER ALLOW FOR SECURE PLACEMENT
- 6. STONE PLACEMENT SHALL BE FIELD ADJUSTED TO CREATE ARCHED SHAPE WITH ABUNDANT SURFCE CONTACT BETWEEN ALL STONES TO ENSURE STONE WILL REMAIN IN PLACE OVER FULL RANGE OF FLOW CONDITIONS.
- 8. PLACE FILTER FABRIC (NON-WOVEN) ON UPSTREAM SIDE OF SILL. FABRIC SHALL COVER THE UPSTREAM FACE OF THE ENTIRE SILL.ENSURE FILTER FABRIC (NON-WOVEN) IS SECURED BY SETTING IT UNDERNEATH THE FOOTER ROCKS, WRAPPING IT ALL THE WAY UP AROUND THE TOP ROCKS,
- 9. ROCKS SHALL BE TIGHT FITTING WITH NO VOIDS/GAPS ALONG APEX AND VANE ARMS. PLACE SMALLER ANGULAR STONE IN ANY REMAINING SPACES TO ESTABLISH SURFACE FLOW AND INTERCONNECTION OF ROCKS.
- 10. STREAMBED MATERIAL TO BE SALVAGED FROM EXISTING CHANNEL, AND ONLY FURNISHED AS NECESSARY. IF SITE DOES NOT PROVIDE ENOUGH
- SALVAGED MATERIAL, FURNISHED STREAMBED MATERIAL SHALL BE BURIED WITH SALVAGED MATERIAL RESERVED FOR SURFACE LAYER. 11. NUMBER OF VANE ROCKS SHOWN FOR GRAPHICAL PURPOSES ONLY. ACTUAL NUMBER OF ROCKS FOR THE STRUCTURE SHALL DEPEND ON ROCK
- 13. NO SINGLE DROP FROM STRUCTURE APEX TO THE NEXT STRUCTURE APEX AND/OR RIFFLE CREST SHALL EXCEED 0.5'. ANY EXCEPTIONS MUST BE APPROVED BY CONSTRUCTION MANAGER.
- 14. COMPLETED STRUCTURE WILL HAVE FLOW OVER THE APEX DURING BASEFLOW CONDITIONS WITH CONSISTENT ARM SLOPES UP FROM THE APEX
- TO A STABLE SILL TIE-IN AT BANKFULL INTO EXISTING GROUND. 15. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED

12. BACKFILL UPSTREAM SIDES OF APEX AND VANE ARMS WITH BSM.

ROCK SILL (RS) DETAIL (STRUCTURE TABLE AND NOTES) PAGE 4 OF 4 (NTS)

> **STRAUGHAN**ENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046

MONTGOMERY PARKS IMBRICATED RIP RAP (IRR) TABLES

PURPOSE: IMBRICATED RIP RAP (IRR) ARE INDIVIDUAL ROCK WITH ANGULAR FACES THAT ARE USED TO CONSTRUCT IN-STREAM REVETMENTS (I.E. CROSS VANES, J-HOOKS, ROCK SILLS, STONE TOES, WALLS, ETC.) TO SHAPE THE CHANNEL, CONTROL CHANNEL ELEVATIONS, DIVERT FLOW PATHS, PROTECT INFRASTRUCTURE, AND SECURE BANKS WHILE MAINTAINING LONG-TERM STABILITY. SURFICIAL FLOW, AQUATIC HABITAT, AND FISH PASSAGE.

IRR TYPES: SELECTION OF IRR TYPE FOR A PARTICULAR PROJECTS SHOULD BE MADE BAESD ON CHANNEL SIZE, STREAM GRADIENT, ANTICIPATED WATER POWER, ETC. NOTE THAT INDIVIDUAL ROCK SIZES AND SHAPES VARY SIGNIFICANTLY, AND THESE TABLES REPRESENT TARGET WEIGHTS AND SIZES. STABLE INSTALLATION OF IN-STREAM REVETMENTS REQUIRES APPROPRIATE SELECTIONS OF INDIVIDUAL ROCKS AND SECURE PLACEMENT AGAINST OTHER ROCKS TO FORM INTENDED SHAPES AND SLOPES TO ENSURE OVERALL

- 1. IRR MATERIALS SHALL CONSIST OF NATURAL HARD BLUESTONE (I.E. NO CONCRETE, WHITE ROCK, ASBESTOS FIBERS, ETC.).
- 2. MANY STREAM CONTAIN EXISTING ROCKS THAT CAN BE HARVESTED AND REUSED FOR IN-STREAM REVETMENTS. 3. INDIVIDUAL ROCKS SHOULD BE SELECTED AND PLACED BASED ON ANTICIPATED STRESS AND FIT AGAINST ADJOINING ROCKS.
- 4. INSTALL FILTER FABRIC IN CONJUNCTION WITH STONE PLACEMENT TO MEET INTENT OF DESIGN DETAILS.
- 5. USE OF LARGER ROCKS MAY REDUCE NEED FOR FOOTER ROCKS. 6. USE OF OVERSIZED ROCKS MAY BE DETRIMENTAL TO DESIGN INTENT, AND PARKS MAY REQUIRE REMOVAL OF OVERSIZED OR MISFIT
- 7. WHEN OVERSIZED ROCKS ARE ACCEPTABLE, BUT EXCEED THE DESIGN REQUIREMENTS, PARKS RESERVES THE RIGHT TO MODIFY PAY

TYPE 3: MID-LARGE CHANNELS (BFw<30')						
WITH MODER	ATE STRESSES					
ITEM AVE. MEASUREMENT						
LENGTH, FT	3					
WIDTH, FT	2					
THICKNESS, FT	1.5					
WEIGHT, LBS	1500					

ROCK SILL (RS) GEOMETRY									
STR.#	STA.	POINT "X" C/L	A (ARCH	B (BANKFULL	D (FT)	X (MSL)	Y (MSL)		
STR. #	SIA.	OFFSET (FT)	HEIGHT) (FT)	WIDTH) (FT)	D (F1)	A (IVIOL)	I (IVIOL)		
RS-1	101+41.43	0.00	2.67	16.0	5.33	292.25	294.92		
RS-2	102+68.00	0.00	2.67	16.0	5.33	287.20	289.87		
RS-3	103+15.00	0.00	2.67	16.0	5.33	286.70	289.37		
RS-4	103+50.00	0.00	2.67	16.0	5.33	285.13	287.80		
RS-5	103+90.00	0.00	2.67	16.0	5.33	283.73	286.40		
RS-6	104+40.00	0.00	2.67	16.0	5.33	282.73	285.40		
RS-7	104+90.00	0.00	2.67	16.0	5.33	281.00	283.67		
RS-8	108+02.00	0.00	2.67	16.0	5.33	272.17	274.84		
RS-9	108+49.00	0.00	2.67	16.0	5.33	270.40	273.07		
RS-10	108+75.00	0.00	2.67	16.0	5.33	270.15	272.82		
RS-11	109+27.00	0.00	2.67	16.0	5.33	268.75	271.42		
RS-12	110+10.00	0.00	2.67	16.0	5.33	267.00	269.67		
R\$-13	110+30.00	0.00	2.67	16.0	5.33	266.50	269.17		
RS-14	111+22.00	0.00	2.67	16.0	5.33	264.00	266.67		
R\$-15	111+96.29	0.00	2.67	16.0	5.33	262.00	264.67		
RS-16	114+44.57	0.00	2.67	16.0	5.33	256.55	259.22		
RS-17	115+56.50	0.00	2.67	16.0	5.33	255.79	258.46		
R\$-18	116+48.01	0.00	2.67	16.0	5.33	255.32	257.99		
RS-19	126+55.72	0.00	2.67	16.0	5.33	230.56	233.23		
RS-20	127+50.72	0.00	3.33	20.0	6.67	227.12	230.45		
R\$-21	128+55.72	0.00	3.33	20.0	6.67	225.17	228.50		
RS-22	128+97.72	0.00	3.33	20.0	6.67	225.17	228.50		
RS-23	130+95.72	0.00	3.33	20.0	6.67	220.50	223.83		
RS-24	131+47.23	0.00	3.33	20.0	6.67	218.59	221.92		
RS-25	501+28.00	0.00	3.00	18.0	6.00	250.00	253.00		
RS-26	502+80.00	0.00	3.00	18.0	6.00	246.72	249.72		
RS-27	505+55.00	0.00	3.00	18.0	6.00	243.83	246.83		
RS-28	50+56.51	0.00	0.33	2.0	0.67	226.37	226.70		

	DATE	REVISIONS
PROFESSIONAL CERTIFICATION EREBY CERTIFY THAT THESE CUMENTS WERE PREPARED OR PROVED BY ME, AND THAT I AM A LY LICENSED PROFESSIONAL GINEER UNDER THE LAWS OF E STATE OF MARYLAND.		PIPELINE DESIGN DIVISION INFRASTRUCTURE SECTION
ME: XXXXXXXXXX ENSE NO.: XXXXX PIRATION DATE: XX/XX/XXXX	DATE	PDD PROJECT MANAGER
- TASK ORDER NO. 05-17 VIEW - ESA	JOB NUN	MBER : CICKCNCRMH7360A22

301.362.9200 | www.straughanenvironmental.com

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

1306 Concourse Drive, Suite 500

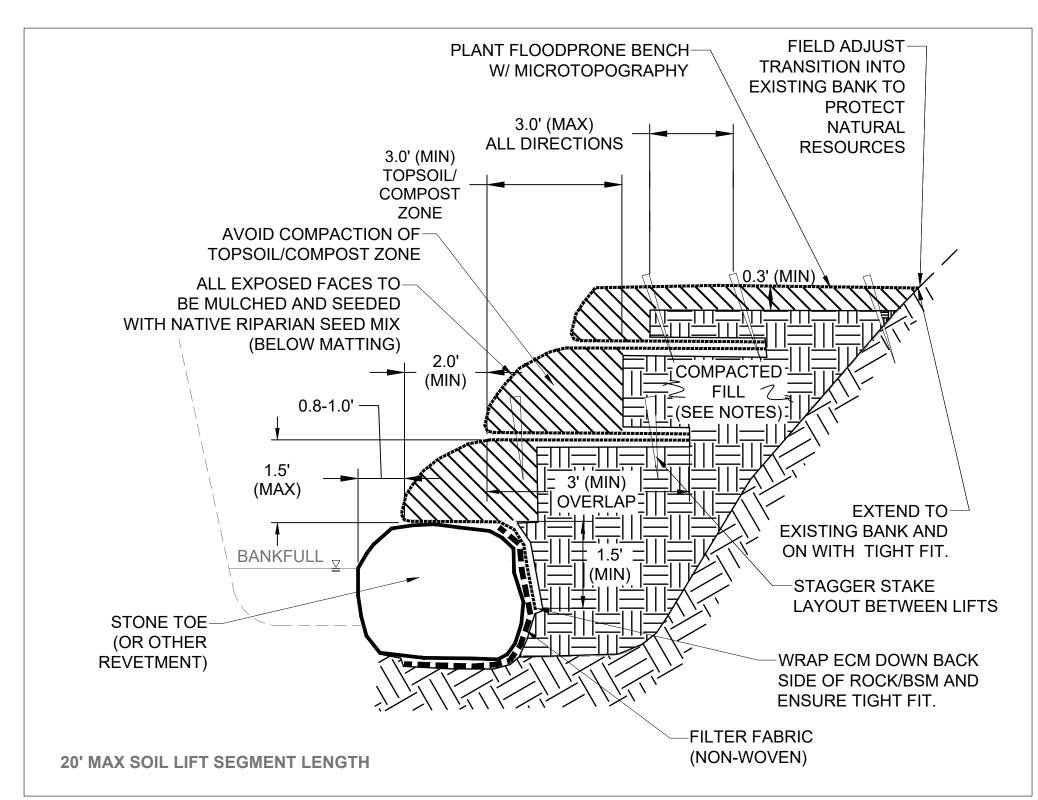
IDIQ - ESA - CI7063A21 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT DE-02 - STREAM CONSTRUCTION DETAILS

MAY, 2025

NO 27 200'S 212NW03 & 213NW03 OF 44

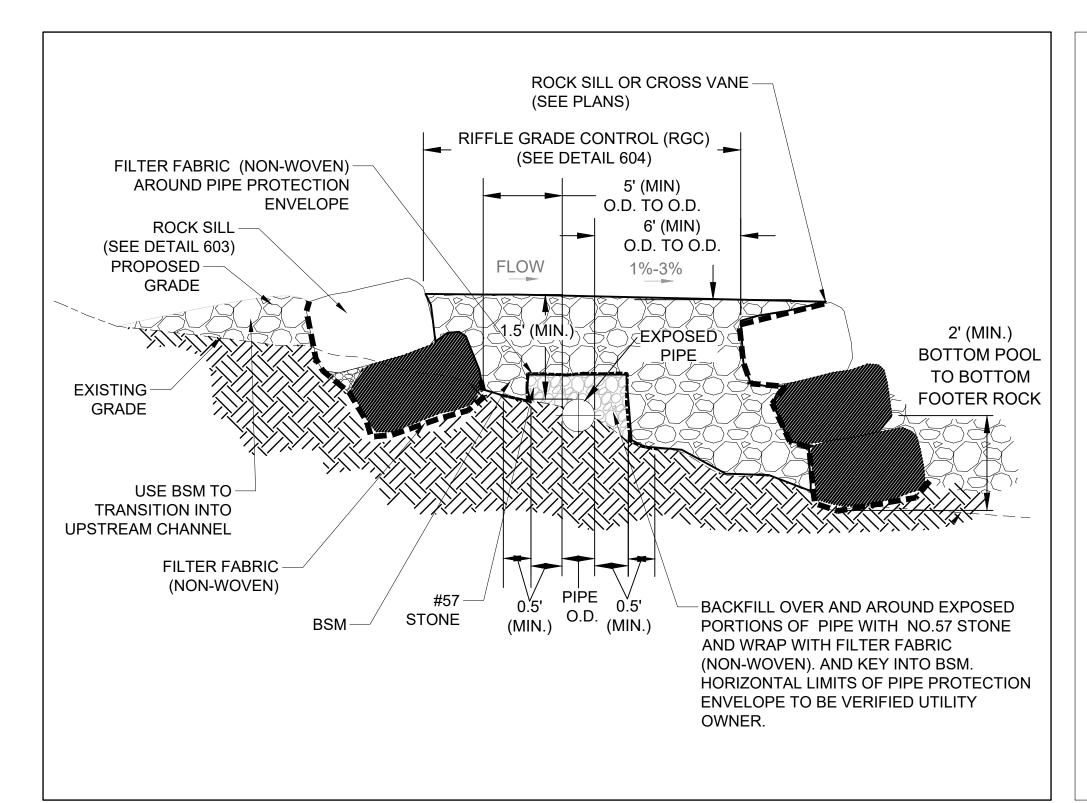
WASHINGTON SUBURBAN SANITARY COMMISSION

INTERNATIONAL Phone: (410) 689-3400



SINGLE LAYER SOIL LIFT (SLSL) DETAIL (TYPICAL CROSS SECTION) PAGE 1 OF 2 (NTS)

617A



607 **UTILITY PIPE PROTECTION (UPP) DETAIL (SECTION K-K)** PAGE 2 OF 3 (NTS)

UPP NOTES:

- REMOVE ANY LOOSE OR UNSTABLE BED MATERIAL FROM AROUND THE EXPOSED PIPE. DO NOT DISTURB ANY COMPACTED BED MATERIAL ENCASEMENT, OR BEDROCK THAT IS SUPPORTING THE PIPE. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE PIPE. THE LIMITS OF EXPOSED AREA WILL VARY IN ACCORDANCE WITH THE UTILITY OWNERS' DIRECTIVE. THE EXPOSED PIPE TO BE SUPPORTED AT ALL
- THE EXPOSED PIPE, AND A 0.5' (MIN) BUFFER IN EACH DIRECTION SHALL BE BACKFILLED WITH NO. 57 STONE. THE NO. 57 STONE SHALL EXTEND 0.5' (MIN) ABOVE THE CROWN OF THE EXPOSED PIPE AND FILL ALL VOIDS AND SUPPORT THE PIPE
 - IRRESPECTIVE OF PIPE ORIENTATION. THE INVERTS OF THE FOOTER ROCKS SHALL BE AT OR BELOW THE INVERT OF THE EXPOSED PIPE TO PREVENT FURTHER EXPOSURE. THE TOP ELEVATION OF THE RGC AT PIPE SHALL BE AT 1.5' (MIN) (AT THALWEG) ABOVE THE PIPE
- THE SPACE BETWEEN ROCK SILLS/VANES AND THE NO. 57 STONE PIPE PROTECTION SHALL BE BACKFILLED WITH COMPACTED BED
- STREAMBED MATERIAL TO BE SALVAGED FROM EXISTING CHANNEL, AND ONLY FURNISHED AS NECESSARY. IF SITE DOES NOT PROVIDE ENOUGH SALVAGED MATERIAL, FURNISHED STREAMBED MATERIAL SHALL BE BURIED WITH SALVAGED MATERIAL RESERVED FOR
- SURFACE LAYER. 6. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED.

UTILITY PIPE PROTECTION (UPP) DETAIL (TABLE AND NOTES) PAGE 3 OF 3

3

- 1. SOIL LIFTS SHALL CONSIST OF SOIL WRAPPED IN EROSION CONTROL MATTING (ECM). THE INNER LAYER (DETAIL 617A) SHALL BE B01-D70. THE OUTER LAYER (DETAIL617B) IS TO CONSIST OF BIO-D90 (OR EQUAL). MATTING CONTAINING MONOFILAMENT AND/OR PLASTICS OF ANY KIND ARE NOT PERMITTED
- 2. SATISFACTORY SOIL TYPES FOR COMPACTED FILL INCLUDE ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP AND SM OR A COMBINATION OF THESE SOIL GROUPS. SOIL SHALL BE FREE OF ROCK OR GRAVEL (LARGER THAN 2 INCHES IN ANY DIMENSION), DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION AND OTHER DELETERIOUS MATTER.
- TOPSOIL/COMPOST MIX SURFACE ZONE TO BE FREE OF STICKS, DEBRIS, AND ROCKS. ALL FACES TO BE SEEDED WITH NATIVE RIPARIAN SEED MIX (WITH ANNUAL RYE) AND STRAW MULCHED (WEED-FREE). IF SEED MIX IS UNSUCCESSFUL IN TAKING FROM INITIAL APPLICATION, SEED MIX TO BE REAPPLIED ON TOP OF ECM UNTIL SUCCESSFUL GERMINITATION TAKES PLACE.
- 5. FINAL INSTALLATION SHALL MAINTAIN DIRECT CONTACT OF ECM WITH SOIL, BE TIGHT AND WRINKE-FREE, BUT NOT
- 6. OVERLAP EDGES OF ADJACENT ROLLS 0.5' (MIN) AND STAKE AT 1.0' O.C. WITH THE STREAM ROLL SHINGLED OVER **DDOWNSTREAM**
- 7. PLAIN WOODEN STAKES SHALL CONSIST OF ROUGH SAWN HARDWOOD, TRIANGULAR IN SHAPE, 1-INCH BY 3-INCHES IN CROSS SECTION AND 18-INCHES (MIN) IN LENGTH (INSTALL PER PARKS ECM DETAIL 623). METAL SOD STAKES ARE NOT
- 8. SOIL LIFTS SHALL NOT BE DRIVEN OVER WITH HEAVY EQUIPMENT
- 9. ACTUAL NUMBER OF SOIL LIFTS TO BE INSTALLED WILL VARY PER BANK CONDITION AND DIRECTION BY CONSTRUCTION

SOIL LIFT AND ECM PLANTING DETAIL (NOTES) PAGE 2 OF 2 (NTS)

> **STRAUGHAN**ENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com



ENDWALL

CULVER⁻

ENDWALL-

FILTER FABRIC

(NON-WOVEN)

CULVERT

PLUNGE POOL IS A MODIFIED MDE D-4-2 PLUNGE POOL SUITED FOR IN-STREAM SCOUR PROTECTION. DIMENSIONS AND ELEVATIONS SHALL BE FIELD ADJUSTED IN COORDINATION WITH THE CONSTRUCTION MANAGER TO ENSURE PROPER

(1' THICK)

SECTION N-N

PLAN VIEW

(NTS)

-ROCKSILL #1

- POOL CREST

LINE POOL WITH BSM

ROCKSILL #2

BSM POOL OUTLET APRON

(3% MAX FOR FISH PASSAGE)

-2:1 SIDE SLOPE

-ROCK SILL #2

(DETAIL 603)

FIELD ADJUST APRON LIMITS

ENSURE STABLE TIE-IN WITH

TRANSITION INTO

DOWNSTREAM

EXISTING

CHANNEL

AND ADJUST SHAPE TO

EXISTING CHANNEL

- ORIENTATION, STABLE INSTALLATION, FISH PASSAGE, AND SMOOTH TIE-IN TO ADJACENT FEATURES
- APPROVAL FROM CONSTRUCTION MANAGER. FOOTER ROCKS NOT SHOWN IN PLAN VIEW FOR CLARITY. FOOTER ROCKS SHALL UTILIZE LARGEST MATERIAL AVAILABLE. FOOTER ROCKS SHALL BE PLACED SO TOP SURFACE ANGLES TO THE UPSTREAM/OUTSIDE EDGE OF STRUCTURE IN ORDER TO BETTER ALLOW FOR SECURE PLACEMENT
- STONE PLACEMENT SHALL BE FIELD ADJUSTED TO CREATE ARCHED SHAPE WITH ABUNDANT SURFCE CONTACT BETWEEN ALL STONES TO ENSURE
- STONE WILL REMAIN IN PLACE OVER FULL RANGE OF FLOW CONDITIONS. TIE IN SILLS SHALL EXTEND 4' MINIMUM INTO STABLE CHANNEL BANK. (DETAIL 603)
- PLACE FILTER FABRIC (NON-WOVEN) ON UPSTREAM SIDE OF SILLS. FABRIC SHALL UNDERLIE THE ENTIRE STRUCTURE. ENSURE FILTER FABRIC (NON-WOVEN) IS SECURED BY SETTING IT UNDERNEATH THE FOOTER ROCKS, WRAPPING IT ALL THE WAY UP AROUND THE TOP ROCKS, AND SECURING IT USING BSM ON THE FACE TO HOLD IT IN PLACE.
- ROCKS SHALL BE TIGHT FITTING WITH NO VOIDS/GAPS ALONG SILLS. PLACE SMALLER ANGULAR STONE IN ANY REMAINING SPACES TO ESTABLISH
- STREAMBED MATERIAL TO BE SALVAGED FROM EXISTING CHANNEL, AND ONLY FURNISHED AS NECESSARY. IF SITE DOES NOT PROVIDE ENOUGH SALVAGED MATERIAL, FURNISHED STREAMBED MATERIAL SHALL BE BURIED AND SALVAGED MATERIAL RESERVED FOR SURFACE LAYER. 10. NUMBER OF ROCKS SHOWN FOR GRAPHICAL PURPOSES ONLY. ACTUAL NUMBER OF ROCKS FOR THE STRUCTURE SHALL DEPEND ON ROCK SIZE
- 11. COMPLETED STRUCTURE WILL HAVE FLOW OVER THE SILLS DURING BASEFLOW CONDITIONS WITH CONSISTENT A STABLE SILL TIE-IN INTO
- 12. TOP OF ROCK SILL #2 SHOULD NOT EXTEND ABOVE MORE THAN 2/3 CULVERT HEIGHT
- ALL STONE ABOVE BACKFILL ELEVATION SHALL BE BACKFILLED WITH TOPSOIL AND VEGETATED. BACKWATER DEPTH VARIES DEPENDING ON CULVERT SIZE, SLOPE, AND UPSTREAM CONDITIONS.
- 15. MULTIPLE PLUNGE POOLS MAY BE USED IN SERIES AS CONDITIONS PERMIT.
- 16. EXTEND ENDWALL HEIGHT TO REDUCE PIPE LENGTH TO EXTENT PRACTICAL
- 17. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED.

PLUNGE POOL (PP) DETAIL (TABLE AND NOTES) 2 PAGE 2 OF 2

PLUNG	SE POOL (PP) STRUCTUR	RE TABL	E
SIZE VARIABLE:	DESCRIPTION:	PP-1	PP-2
d	FT	1.25	1.75
А	POOL TOP LENGTH (FT)	7.50	10.50
В	POOL TOP WIDTH (FT)	6.25	8.75
L	POOL BOTTOM LENGTH (FT)	3.75	5.25
W	POOL BOTTOM WIDTH (FT)	2.50	3.50
D	POOL DEPTH (FT)	0.625	0.875
	BACKWATER (ABOVE		
Н	CULVERT INVERT)	0.00	0.00
	ROCKSILL #2 HEIGHT ABOVE		
R	INVERT (FT)	0.00	0.00
	SIDE SLOPE Y	3.0	3.0

DE-03 - STREAM CONSTRUCTION DETAILS

IKULTUR	KETABL	
10N:	PP-1	PP-2
	1.25	1.75
IGTH (FT)	7.50	10.50
DTH (FT)	6.25	8.75
ENGTH (FT)	3.75	5.25
NIDTH (FT)	2.50	3.50
H (FT)	0.625	0.875
(ABOVE		
VERT)	0.00	0.00
GHT ABOVE		
FT)	0.00	0.00
E Y	3.0	3.0

PROFESSIONAL CERTIFICATION	WSSC PIPELINE DESIGN DIVISION
HEREBY CERTIFY THAT THESE OCUMENTS WERE PREPARED OR PPROVED BY ME, AND THAT I AM A ULY LICENSED PROFESSIONAL NGINEER UNDER THE LAWS OF HE STATE OF MARYLAND.	SEWER INFRASTRUCTURE SECTION
ICENSE NO.: XXXXX XPIRATION DATE: XX/XX/XXXX	DATE PDD PROJECT MANAGER

MAY, 2025 IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

JOB NUMBER : CICKCNCRMH7360A22 NO 28 200'S 212NW03 & 213NW03

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT **PRIOR WSSC APPROVAL**

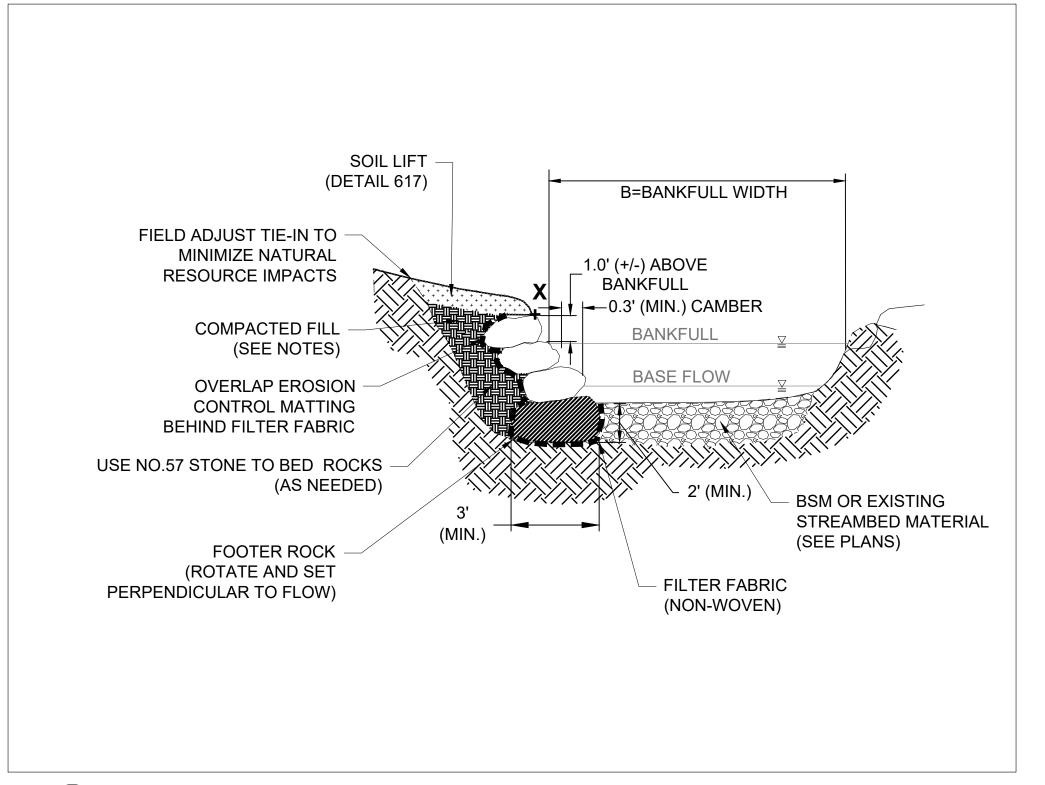
1306 Concourse Drive, Suite 500 INTERNATIONAL Phone: (410) 689-3400

MICHAEL BAKER INTERNATIONAL, LLC.

WASHINGTON SUBURBAN SANITARY COMMISSION

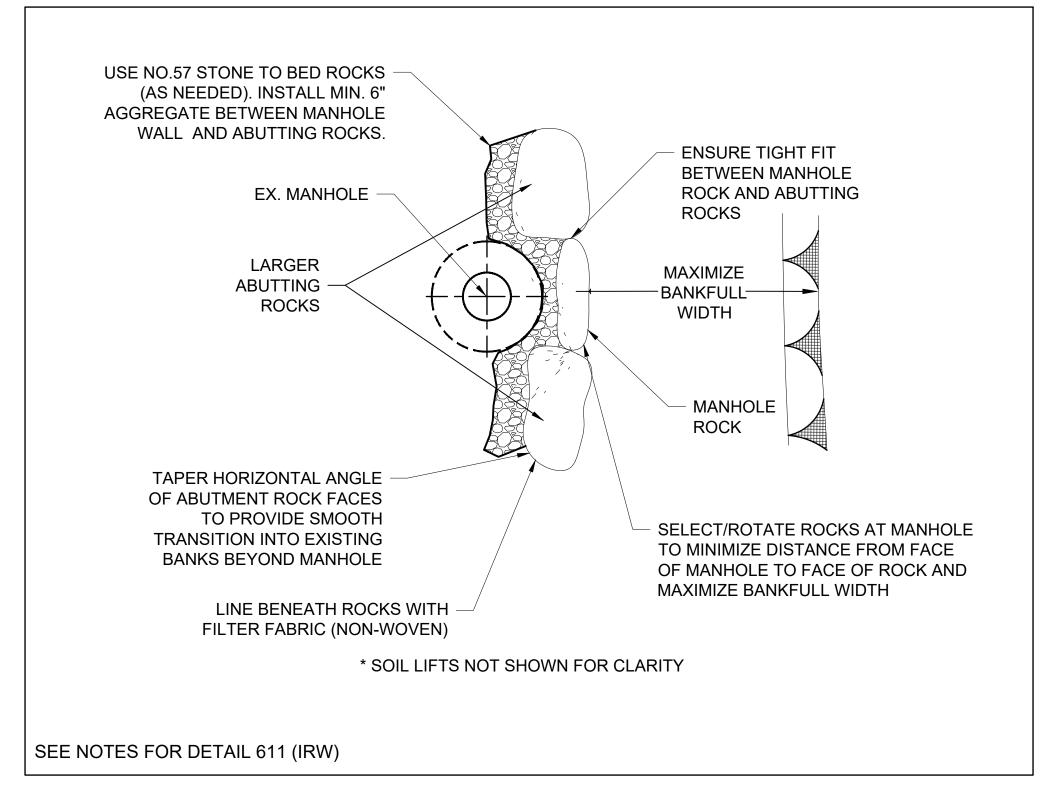
OF 44 8/5/2025 12:37 PM - PLOT DATE IMBRICATED RIPRAP WALL AT MANHOLE (IRWM) DETAIL (TYPICAL SECTION) PAGE 1 OF 2 (NTS)

611A



IMBRICATED RIPRAP WALL (IRW) DETAIL (TYPICAL SECTION) <u> 611`</u> PAGE 1 OF 2 (NTS)

	IMBRICATED RIPRAP WALL (IRW) GEOMETRY										
STR.#	POINT "X" C/L OFFSET (FT)	B BANKFULL (FT)	U/S STA.	U/S TOP OF ROCK ELEV. (X) (MSL)	POINT "X" C/L D/S OFFSET (FT)	D/S STA.	D/S TOP OF ROCK ELEV (X) (MSL)				
IRW-1	33.17	16.00	106+83.05	278.00	17.95	108+94.49	271.24				



611A IMBRICATED RIPRAP WALL AT MANHOLE (IRWM) DETAIL (NOTES) PAGE 2 OF 2 (NTS)

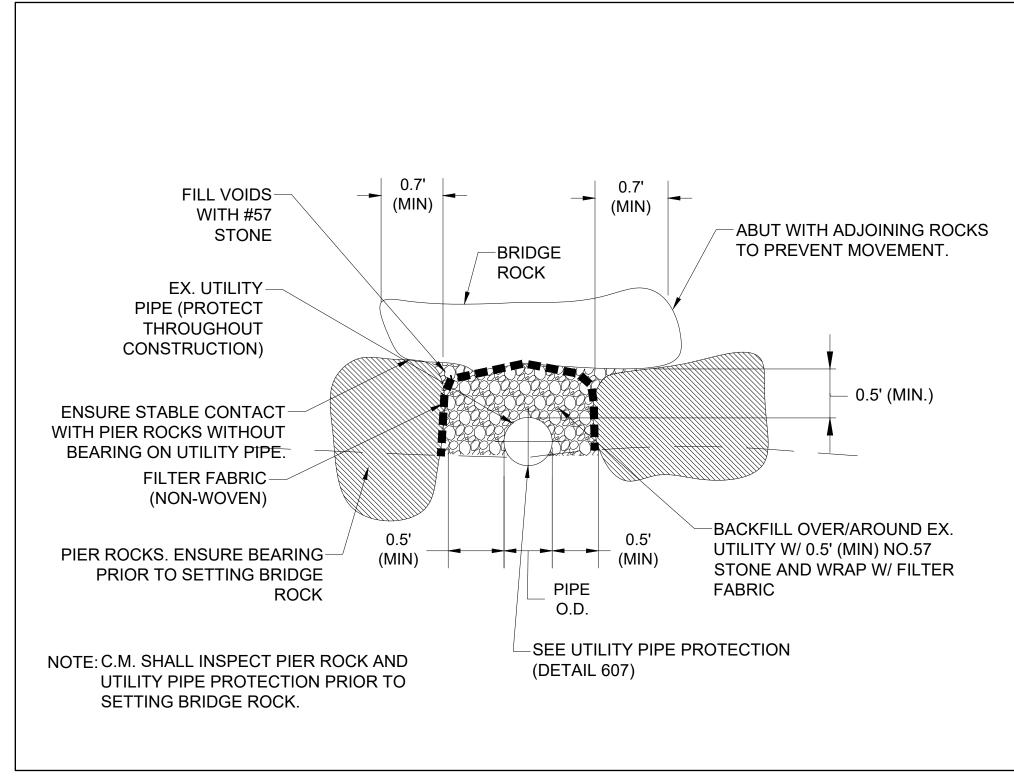
	- In	MBRICATED R	PRAP WALL	AT MANHOLE (RWM) GEOMET	TRY	
STR.#	POINT "X" C/L OFFSET (FT)	B BANKFULL (FT)	U/S STA.	U/S TOP OF ROCK ELEV. (X) (MSL)	POINT "X" C/L D/S OFFSET (FT)	D/S STA.	D/S TOP OF ROCK ELEV (X) (MSL)
IRWM-1	11.35	16.00	101+94.71	294.00	11.38	102+33.43	292.14
IRWM-2	10.26	16.00	103+10.67	289.31	11.31	103+49.80	288.16
IRWM-3	9.88	16.00	104+34.63	284.55	11.24	104+81.75	283.09
IRWM-4	-12.54	16.00	108+66.00	271.50	-10.19	108+85.00	271.00
IRWM-5	-8.00	16.00	110+30.00	267.50	-10.06	110+57.00	267.00
IRWM-6	7.01	16.00	114+44.18	260.73	15.53	114+75.55	260.00
IRWM-7	7.64	16.00	118+61.51	255.00	14.63	118+83.83	255.00
IRWM-8	-3.22	20.00	125+65.86	232.00	-19.76	128+56.54	229.15
IRWM-9	10.84	20.00	130+65.08	225.00	10.60	130+95.25	223.17

- 1. CONTRACTOR SHALL LAY OUT CRITICAL POINTS OF STRUCTURE TO REVIEW WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD ADJUSTED IN COORDINATION WITH THE CONSTRUCTION MANAGER TO ENSURE PROPER
- ORIENTATION, STABLE INSTALLATION, AND SMOOTH TIE-IN TO ADJACENT FEATURES. 2. IMPORTED ROCKS SHALL BE IMBRICATED WITH RECTANGULAR BLOCK SHAPE. APPROPRIATELY SIZED SALVAGED ROCK CAN BE UTILIZED WITH APPROVAL FROM CONSTRUCTION MANAGER.
- 3. FOOTER STONES TO BE ROTATED SLIGHTLY INTO BANK (SUCH THAT SURFACE FOR TOP ROCK TO REST ON TILTS TOWARD OUTSIDE OF CHANNEL) TO MINIMIZE POTENTIAL MOVEMENT.
- 4. NUMBER OF ROCKS SHOWN FOR GRAPHICAL PURPOSES ONLY. ACTUAL NUMBER OF ROCKS FOR THE STRUCTURE SHALL DEPEND ON ROCK SIZE AND BANKFULL DEPTH.
- 5. SATISFACTORY SOIL TYPES FOR COMPACTED FILL INCLUDE ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP AND SM OR A COMBINATION OF THESE SOIL GROUPS. SOIL SHALL BE FREE DEBRIS, WASTE, FROZEN MATERIALS, AND OTHER DELETERIOUS MATTER.
- 6. SELECT SMALLER/THINNER ROCKS WHERE TOE CROSSES TREES, MANHOLES, OR OTHER IMPEDIMENTS TO MINIMIZE CROSS SECTION
- 7. AT UTILITY CROSSINGS, FIELD ADJUST FOOTER SPACING AND INSTALL BRIDGING ROCKS TO PROTECT PIPE. (DETAIL 616) 8. ECM (DETAIL 623) OR SOIL LIFT (DETAIL 617) TO BE INSTALLED ABOVE TOP ROCK TO TRANSITION INTO EXISTING/ADJACENT BANK.
- 9. FILTER FABRIC (NON-WOVEN) SHALL BE PLACED UNDER FOOTER STONES AND WRAPPED AROUND BACK OF STRUCTURE. ECM (FOR BANK
- TREATMENT ABOVE STONE TOE) SHALL BE LAYERED BEHIND FILTER FABRIC WHERE THEY OVERLAP. 10. INSTALL ECM OVER TOPSOIL AND NATIVE RIPARIAN SEED MIX (WITH ANNUAL RYE). IF SEED MIX IS UNSUCCESSFUL IN TAKING FROM INITIAL
- APPLICATION, SEED MIX TO BE REAPPLIED ON TOP OF ECM UNTIL SUCCESSFUL GERMINITATION TAKES PLACE.
- 11. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED.

IMBRICATED RIPRAP WALL (IRW) DETAIL (TABLE AND NOTES) 611 PAGE 2 OF 2 (NTS)

10245 Old Columbia Road | Columbia, MD 21046

STRAUGHANENVIRONMENTAL 301.362.9200 | www.straughanenvironmental.com MAY, 2025



STONE PIPE BRIDGE (SPB) DETAIL

PAGE 1 OF 1 (NTS)

616

DATE **REVISIONS** PROFESSIONAL CERTIFICATION WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION 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. NAME: XXXXXXXXXXX LICENSE NO.: XXXXX PDD PROJECT MANAGER EXPIRATION DATE: XX/XX/XXXX

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. Michael Baker 1306 Concourse Drive, Suite 500 INTERNATIONAL Phone: (410) 689-3400

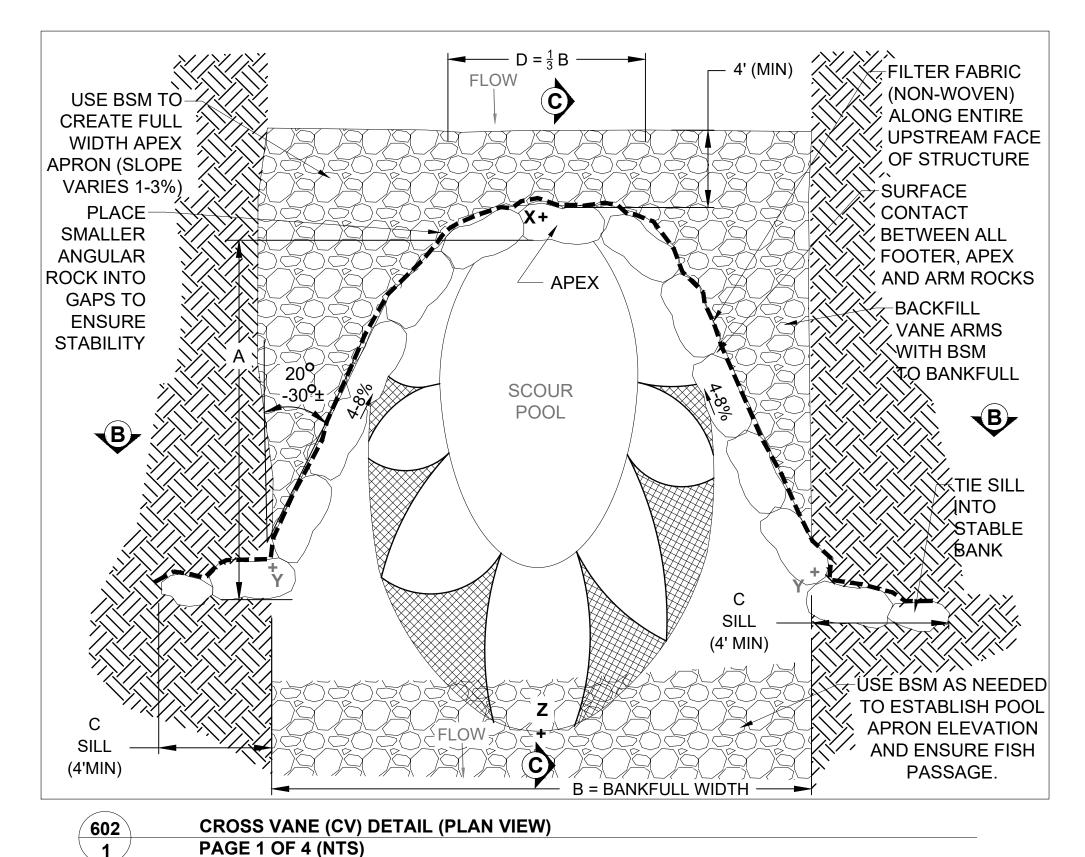
IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT DE-04 - STREAM CONSTRUCTION DETAILS

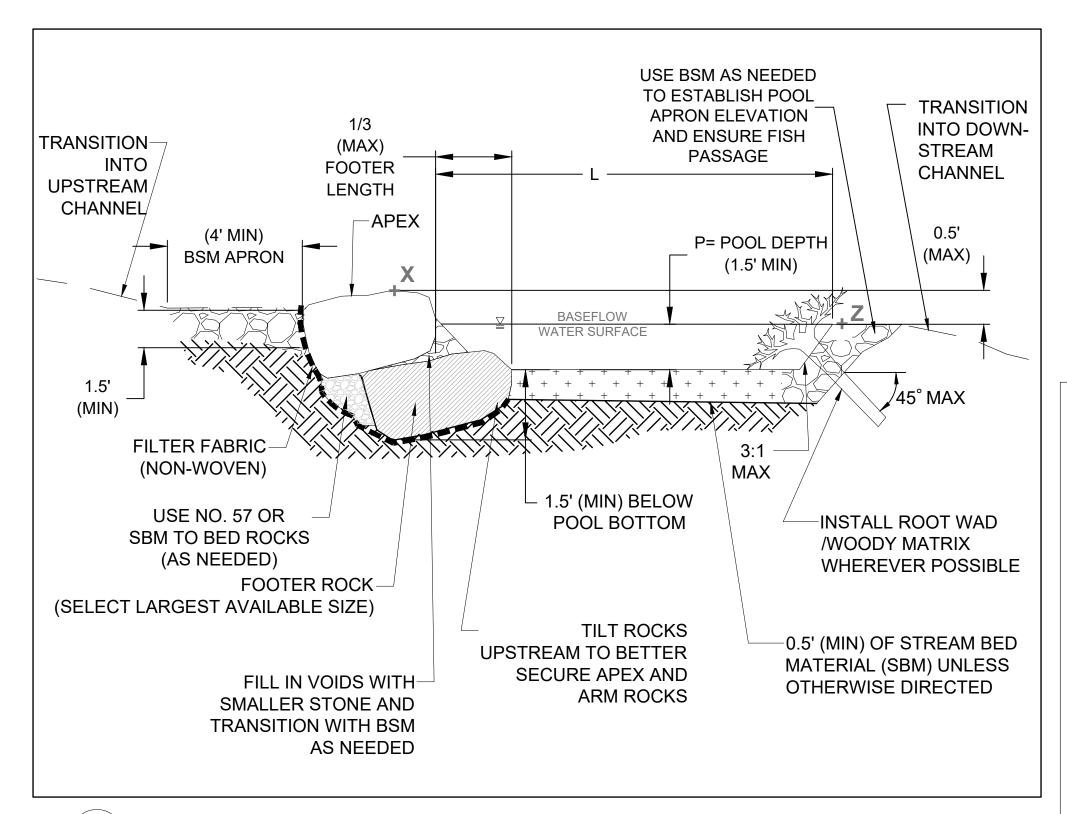
JOB NUMBER : CICKCNCRMH7360A22 NO 29 200'S 212NW03 & 213NW03 OF 44

WASHINGTON SUBURBAN SANITARY COMMISSION

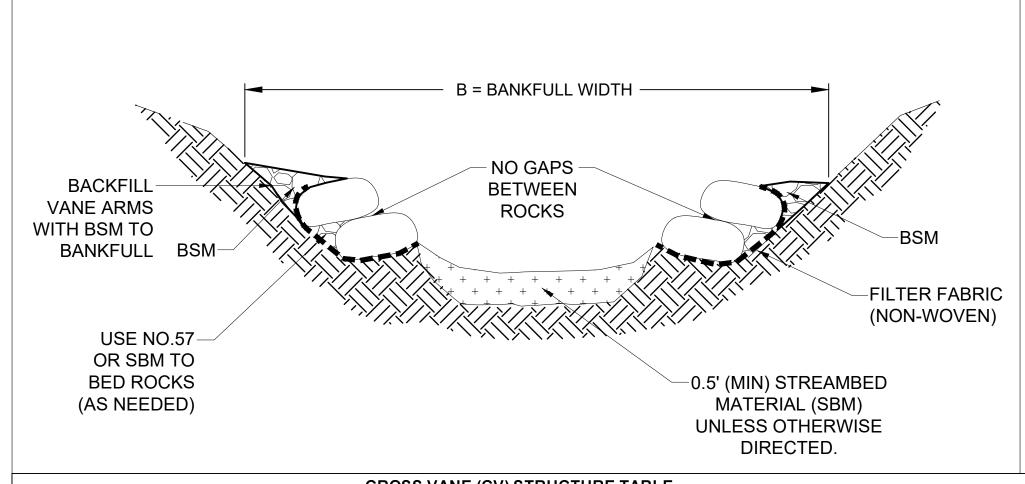
8/5/2025 12:37 PM - PLOT DATE

<u>601</u> J-HOOK (JH) VANE DETAIL (PLAN VIEW) PAGE 1 OF 3 (NTS)





J-HOOK (JH) VANE DETAIL SECTION A-A (PROFILE VIEW) <u>601</u> PAGE 2 OF 3 (NTS)



	CROSS VANE (CV) STRUCTURE TABLE										
STR.#	APEX STA.	POINT "X" C/L OFFSET (FT)	A (FT)	B BANKFULL (FT)	C (FT) (4' MIN)	D (FT)	L (FT)	F (FT)	X (MSL)	Y (MSL)	Z (MSL)
CV-1	122+37.50	0+00.00	11.93	16.0	4.00	5.33	30.00	2.67	242.77	243.01	242.27
CV-2	505+95.00	0+00.00	13.42	18.0	4.00	6.00	30.00	3.00	243.09	243.36	242.27

CROSS VANE (CV) DETAIL SECTION B-B <u>602</u> PAGE 2 OF 4 (NTS)

10245 Old Columbia Road | Columbia, MD 21046

				J-HO	OK (JH) V	ANE GEO	OMETRY	,					
STR.#	APEX STA.	POINT "X" C/L OFFSET (FT)	A (FT)	B BANKFULL (FT)	C (FT) (4' MIN)	D (FT)	L (FT)	F (FT)	P (FT)	X (MSL)	Y (MSL)	V (MSL)	Z (MSL)
JH-1	101+78.43	0.00	12.00	16.00	4.00	5.33	44.0	2.67	1.5	290.76	292.26	292.26	290.26
JH-2	105+45.00	0.00	12.00	16.00	4.00	5.33	36.0	2.67	1.5	278.52	280.02	280.02	277.77
JH-3	106+93.00	0.00	12.00	16.00	4.00	5.33	35.5	2.67	1.5	274.21	275.71	275.71	273.21
JH-4	107+70.00	0.00	12.00	16.00	4.00	5.33	57.7	2.67	1.5	272.17	273.67	273.67	272.17
JH-5	110+95.00	0.00	12.00	16.00	4.00	5.33	34.0	2.67	1.5	264.50	266.00	266.00	264.00
JH-6	115+17.50	0.00	12.00	16.00	4.00	5.33	42.0	2.67	1.5	255.79	257.29	257.29	255.79
JH-7	129+56.72	0.00	12.00	16.00	4.00	5.33	43.0	2.67	1.5	223.22	225.47	225.47	222.72
JH-8	130+56.72	0.00	15.00	20.00	4.00	6.67	52.0	3.33	1.5	221.00	223.25	223.25	220.50
JH-9	501+88.00	0.00	15.00	20.00	4.00	6.67	47.0	3.33	1.5	248.32	250.57	250.57	248.24
JH-10	503+60.00	0.00	13.00	18.00	4.00	6.00	50.0	3.00	1.5	245.50	246.50	246.50	245.00
JH-11	504+25.00	0.00	13.00	18.00	4.00	6.00	56.0	3.00	1.5	244.59	245.59	245.59	244.59
JH-12	505+23.50	0.00	13.00	18.00	4.00	6.00	44.0	3.00	1.5	244.00	245.00	245.00	243.83
	•												

√3 /

MAY, 2025

- 1. CONTRACTOR SHALL LAY OUT CRITICAL POINTS OF STRUCTURE TO REVIEW WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD ADJUSTED IN COORDINATION WITH THE CONSTRUCTION MANAGER TO ENSURE PROPER ORIENTATION, STABLE INSTALLATION, FISH PASSAGE, AND SMOOTH TIE-IN TO ADJACENT FEATURES.
- 2. IMPORTED ROCKS SHALL BE IMBRICATED WITH RECTANGULAR BLOCK SHAPE. APPROPRIATELY SIZED SALVAGED ROCK CAN BE UTILIZED
- 3. ELEVATION "Y" SHALL BE APPROXIMATELY BANKFULL DEPTH ABOVE ELEVATION "X". IN ALL CASES, ELEVATION "Y" SHALL BE AT LEAST 0.5' ABOVE ELEVATION "X" (SEE STRUCTURE TABLE FOR ACTUAL ELEVATION DIFFERENCE).
- 4. STATION REFERENCE POINT "X" IS LOCATED AT CHANNEL CENTERLINE UNLESS OTHERWISE SPECIFIED ON PLANS
- FOOTER ROCKS NOT SHOWN IN PLAN VIEW FOR CLARITY. FOOTER ROCKS SHALL UTILIZE LARGEST MATERIAL AVAILABLE. FOOTER ROCKS SHALL BE PLACED SO TOP SURFACE ANGLES TO THE UPSTREAM/OUTSIDE EDGE OF STRUCTURE IN ORDER TO BETTER ALLOW FOR SECURE PLACEMENT OF TOP ROCKS.
- 6. STONE PLACEMENT SHALL BE FIELD ADJUSTED TO CREATE ARCHED SHAPE WITH ABUNDANT SURFCE CONTACT BETWEEN ALL STONES TO
- ENSURE STONE WILL REMAIN IN PLACE OVER FULL RANGE OF FLOW CONDITIONS. TIE IN SILLS SHALL EXTEND 4' MINIMUM INTO STABLE CHANNEL BANK
- PLACE FILTER FABRIC (NON-WOVEN) ON UPSTREAM SIDE OF VANE. FABRIC SHALL COVER THE UPSTREAM FACE OF THE ENTIRE STRUCTURE. ENSURE FILTER FABRIC (NON-WOVEN) IS SECURED BY SETTING IT UNDERNEATH THE FOOTER ROCKS, WRAPPING IT ALL THE WAY UP AROUND THE TOP ROCKS, AND SECURING IT USING BSM ON THE UPSTREAM FACE TO HOLD IT IN PLACE
- ROCKS SHALL BE TIGHT FITTING WITH NO VOIDS/GAPS ALONG APEX AND VANE ARMS. PLACE SMALLER ANGULAR STONE IN ANY REMAINING SPACES TO ESTABLISH SURFACE FLOW AND INTERCONNECTION OF ROCKS.
- 10. STREAMBED MATERIAL TO BE SALVAGED FROM EXISTING CHANNEL, AND ONLY FURNISHED AS NECESSARY. IF SITE DOES NOT PROVIDE ENOUGH SALVAGED MATERIAL, FURNISHED STREAMBED MATERIAL SHALL BE BURIED WITH SALVAGED MATERIAL RESERVED FOR SURFACE
- 11. NUMBER OF VANE ROCKS SHOWN FOR GRAPHICAL PURPOSES ONLY. ACTUAL NUMBER OF ROCKS FOR THE STRUCTURE SHALL DEPEND ON
- ROCK SIZE AND STREAM WIDTH. 12. BACKFILL UPSTREAM SIDES OF APEX AND VANE ARMS WITH BSM.
- 13. NO SINGLE DROP FROM STRUCTURE APEX TO THE NEXT STRUCTURE APEX AND/OR RIFFLE CREST SHALL EXCEED 0.5'. ANY EXCEPTIONS MUST BE APPROVED BY CONSTRUCTION MANAGER.
- 14. COMPLETED STRUCTURE WILL HAVE FLOW OVER THE APEX DURING BASEFLOW CONDITIONS WITH CONSISTENT ARM SLOPES UP FROM THE APEX TO A STABLE SILL TIE-IN AT BANKFULL INTO EXISTING GROUND.
- 15. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED.

<u>601</u> J-HOOK (JH) VANE DETAIL (STRUCTURE TABLE AND NOTES) PAGE 3 of 3

> PROFESSIONAL CERTIFICATION WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION 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. NAME: XXXXXXXXXXX ICENSE NO.: XXXXX PDD PROJECT MANAGER

DATE

STRAUGHANENVIRONMENTAL 301.362.9200 | www.straughanenvironmental.com

WSSCWATER DELIVERING THE ESSENTIAL

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

ENGINEER: MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 INTERNATIONAL Phone: (410) 689-3400

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT DE-05 - STREAM CONSTRUCTION DETAILS

EXPIRATION DATE: XX/XX/XXXX

JOB NUMBER : CICKCNCRMH7360A22 NO 30 200'S 212NW03 & 213NW03 OF 44

REVISIONS

WASHINGTON SUBURBAN SANITARY COMMISSION

LENGTH (L) ECM APRON-(SEE DETAIL 617) **EXISTING** ERODED ARCHED ROCK SIDE CHANNEL/ SILL/STONE PIPE OUTFALL TOE CHANNEL STREAM BED FIELD ADJUST TO-PROVIDE SMOOTH TRANSITION INTO ADJACENT SLOPES IMBRICATED ROCK (WHERE SINGLE--SLOPE MAINSTEM BANK **ROCKS DO NOT SPAN CHANNEL ROCKS ON BOTH SIDES OF** WIDTH STAGGER JOINTS 9" MIN) SIDE CHANNEL SO 'Z' IS 0.5'-1.0' LOWER THAN MAINSTEM BANK.

DS STA.

10+66.19

20+64.03

30+60.00

41+19.47

60+84.47

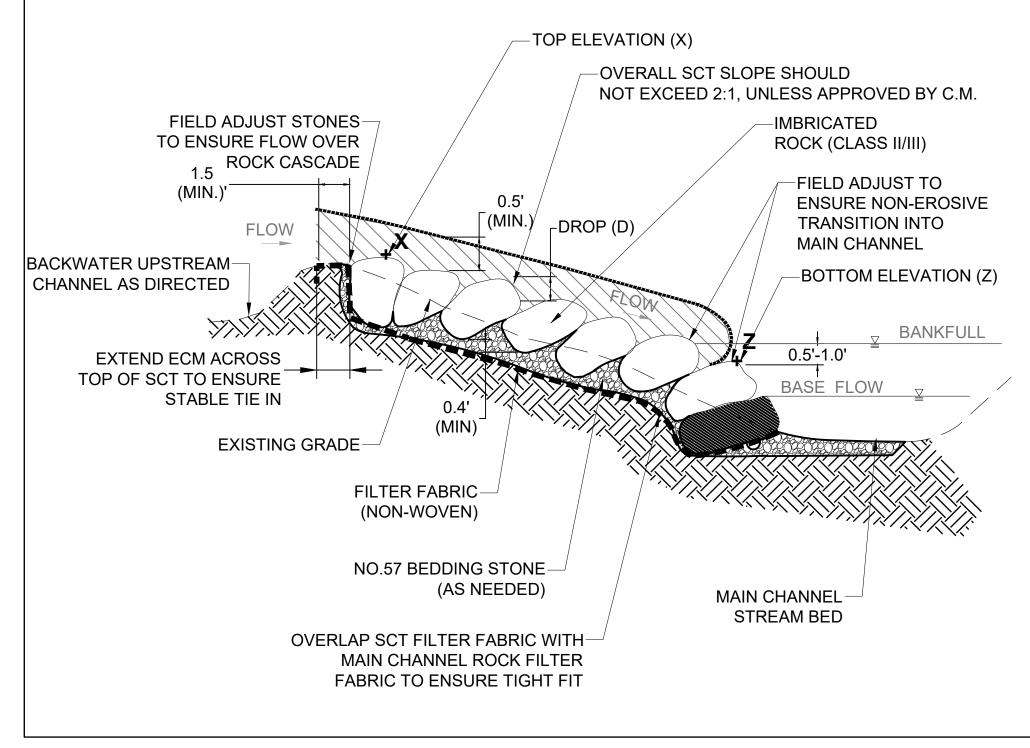
71+16.81

CROSS VANE (CV) DETAIL (SECTION C-C) PAGE 3 OF 4 (NTS)

CV NOTES:

- CONTRACTOR SHALL LAY OUT CRITICAL POINTS OF STRUCTURE TO REVIEW WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD ADJUSTED IN COORDINATION WITH THE CONSTRUCTION MANAGER TO ENSURE PROPER ORIENTATION, STABLE INSTALLATION, FISH PASSAGE, AND SMOOTH TIE-IN TO ADJACENT FEATURES
- IMPORTED ROCKS SHALL BE IMBRICATED WITH RECTANGULAR BLOCK SHAPE. APPROPRIATELY SIZED SALVAGED ROCK CAN BE UTILIZED WITH APPROVAL FROM CONSTRUCTION MANAGER. ELEVATION "Y" SHALL BE APPROXIMATELY BANKFULL DEPTH ABOVE ELEVATION "X". IN ALL CASES, ELEVATION "Y" SHALL BE AT LEAST 0.5' ABOVE
- ELEVATION "X" (SEE STRUCTURE TABLE FOR ACTUAL ELEVATION DIFFERENCE).
- STATION REFERENCE POINT "X" IS LOCATED AT CHANNEL CENTERLINE UNLESS OTHERWISE SPECIFIED ON PLANS. FOOTER ROCKS NOT SHOWN IN PLAN VIEW FOR CLARITY. FOOTER ROCKS SHALL UTILIZE LARGEST MATERIAL AVAILABLE. FOOTER ROCKS SHALL BE PLACED SO TOP SURFACE ANGLES TO THE UPSTREAM/OUTSIDE EDGE OF STRUCTURE IN ORDER TO BETTER ALLOW FOR SECURE PLACEMENT OF TOP
- STONE PLACEMENT SHALL BE FIELD ADJUSTED TO CREATE ARCHED SHAPE WITH ABUNDANT SURFCE CONTACT BETWEEN ALL STONES TO ENSURE STONE WILL REMAIN IN PLACE OVER FULL RANGE OF FLOW CONDITIONS.
- TIE IN SILLS SHALL EXTEND 4' MINIMUM INTO STABLE CHANNEL BANK. PLACE FILTER FABRIC (NON-WOVEN) ON UPSTREAM SIDE OF VANE, FABRIC SHALL COVER THE UPSTREAM FACE OF THE ENTIRE STRUCTURE. ENSURE FILTER FABRIC (NON-WOVEN) IS SECURED BY SETTING IT UNDERNEATH THE FOOTER ROCKS, WRAPPING IT ALL THE WAY UP AROUND THE TOP ROCKS, AND SECURING IT USING BSM ON THE UPSTREAM FACE TO HOLD IT IN PLACE.
- ROCKS SHALL BE TIGHT FITTING WITH NO VOIDS/GAPS ALONG APEX AND VANE ARMS. PLACE SMALLER ANGULAR STONE IN ANY REMAINING SPACES TO ESTABLISH SURFACE FLOW AND INTERCONNECTION OF ROCKS.
- STREAMBED MATERIAL TO BE SALVAGED FROM EXISTING CHANNEL. AND ONLY FURNISHED AS NECESSARY. IF SITE DOES NOT PROVIDE ENOUGH SALVAGED MATERIAL, FURNISHED STREAMBED MATERIAL SHALL BE BURIED AND SALVAGED MATERIAL RESERVED FOR SURFACE LAYER.
- NUMBER OF VANE ROCKS SHOWN FOR GRAPHICAL PURPOSES ONLY. ACTUAL NUMBER OF ROCKS FOR THE STRUCTURE SHALL DEPEND ON ROCK SIZE
- 12. BACKFILL UPSTREAM SIDES OF APEX AND VANE ARMS WITH BSM.
- 13. NO SINGLE DROP FROM STRUCTURE APEX TO THE NEXT STRUCTURE APEX AND/OR RIFFLE CREST SHALL EXCEED 0.5'. ANY EXCEPTIONS MUST BE APPROVED BY CONSTRUCTION MANAGER.
- 14. COMPLETED STRUCTURE WILL HAVE FLOW OVER THE APEX DURING BASEFLOW CONDITIONS WITH CONSISTENT ARM SLOPES UP FROM THE APEX TO
- A STABLE SILL TIE-IN AT BANKFULL INTO EXISTING GROUND. 15. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED

612 SIDE CHANNEL TRANSITION (SCT) DETAIL (PLAN VIEW) PAGE 1 OF 4 (NTS)



SIDE CHANNEL TRANSITION (SCT) DETAIL (CROSS SECTION O-O) PAGE 2 OF 4 (NTS)

CROSS VANE (CV) DETAIL (NOTES) PAGE 4 OF 4 (NTS)

STRAUGHANENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com

MICHAEL BAKER INTERNATIONAL, LLC. Michael Baker 1306 Concourse Drive, Suite 500

STR.#

SCT-1

SCT-2

SCT-3

SCT-4

SCT-6

SCT-7

FILTER FABRIC

(NON-WOVEN)

STA.

10+32.90

20+00.00

30+05.48

40+66.57

60+54.17

70+98.65

PAGE 3 OF 4 (NTS)

NO.57 BEDDING STONE-

(AS NEEDED)

D (FT)

0.35

0.29

0.18

0.09

0.12

0.10

CONTRACTOR SHALL LAY OUT CRITICAL POINTS OF STRUCTURE TO REVIEW WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD ADJUSTED IN COORDINATION WITH THE CONSTRUCTION MANAGER TO ENSURE PROPER ORIENTATION, STABLE INSTALLATION, AND SMOOTH TIE-IN TO ADJACENT FEATURES.

SOIL LIFT

(SEE DETAIL 617)

ARRADAMENT.

BACKFILL

SIDE CHANNEL TRANSITION (SCT) TABLE

L (FT)

33.29

64.03

54.52

52.90

30.30

18.16

W (FT)

2.00

2.00

2.00

2.00

2.00

2.00

(AS NEEDED)

-EXISTING

FIELD ADJUST TIE IN

RESOURCE IMPACTS

Z (MSL)

293.00

287.39

276.00

265.69

223.00

282.00

TO MINIMIZE NATURAL

GRADE

OVERLAP ECM

BEHIND FILTER

FABRIC (TYP)

-IMBRICATED ROCK

X (MSL)

298.99

281.00

268.15

224.88

283.04

2. IMPORTED ROCKS SHALL BE IMBRICATED WITH RECTANGULAR BLOCK SHAPE. APPROPRIATELY SIZED SALVAGED ROCK CAN BE UTILIZED

SIDE CHANNEL TRANSITION (SCT) DETAIL (SECTION N-N AND TABLE)

- WITH APPROVAL FROM CONSTRUCTION MANAGER. 3. STONES TO BE ROTATED SLIGHTLY UPSTREAM (SUCH THAT SURFACE TILTS UPSTREAM) TO MINIMIZE POTENTIAL MOVEMENT.
- 4. NUMBER OF ROCKS SHOWN FOR GRAPHICAL PURPOSES ONLY. ACTUAL NUMBER OF ROCKS FOR THE STRUCTURE SHALL DEPEND ON ROCK
- SIZE, STREAM WIDTH, AND BANKFULL DEPTH. SATISFACTORY SOIL TYPES FOR COMPACTED FILL INCLUDE ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP AND SM OR A
- COMBINATION OF THESE SOIL GROUPS. SOIL SHALL BE FREE DEBRIS, WASTE, FROZEN MATERIALS, AND OTHER DELETERIOUS MATTER. SOIL/COMPOST MIX SHALL BE FREE OF STICKS, DEBRIS, WEEDS AND ROCKS.
- ENCROACHMENT.
- 7. AT UTILITY CROSSINGS, FIELD ADJUST FOOTER SPACING AND INSTALL BRIDGING ROCKS TO PROTECT UTILITY CROSSINGS. (DETAIL 616)
- 8. SOIL LIFTS SHALL CONSIST OF EROSION CONTROL MATTING (ECM) IN TWO LAYERS. SEE DETAIL 617. MATTING CONTAINING MONOFILAMENT AND/OR PLASTICS OF ANY KIND ARE NOT PERMITTED.
- 9. PLAIN WOODEN STAKES SHALL CONSIST OF ROUGH SAWN HARDWOOD, TRIANGULAR IN SHAPE, 1-INCH BY 3-INCHES AND 18-INCHES (MIN) IN LENGTH. METAL SOD STAKES ARE NOT PERMITTED.
- 10. MULTIPLE SOIL LIFTS MAY BE REQUIRED PER BANK CONDITIONS AND ELEVATIONS.
- 11. FINAL INSTALLATION SHALL MAINTAIN DIRECT CONTACT OF ECM WITH SOIL, BE TIGHT AND WRINKE-FREE, BUT NOT STRETCHED.
- 12. OVERLAP EDGES OF ADJACENT ROLLS 0.5' (MIN) AND STAKE AT 1.0' O.C. WITH THE STREAM ROLL SHINGLED OVER DOWNSTREAM.
- 13. SOIL LIFTS SHALL NOT BE DRIVEN OVER WITH HEAVY EQUIPMENT. 14. ALL FACES TO BE SEEDED WITH NATIVE RIPARIAN SEED MIX (WITH ANNUAL RYE) UNDER ECM AND STRAW MULCHED (WEED-FREE). IF SEED
- MIX IS UNSUCCESSFUL IN TAKING FROM INITIAL APPLICATION, SEED MIX TO BE REAPPLIED ON TOP OF ECM UNTIL SUCCESSFUL GERMINITATION TAKES PLACE.
- 15. STONE OF SERPENTINE ORIGIN IS NOT PERMITTED.

	NEL TRANSITION (OCT) BETAIL (NOTEO)		1 (2) (3) (3)
	NEL TRANSITION (SCT) DETAIL (NOTES)		
PAGE 4 OF	4 (NTS)		
-			
Γ	PROFESSIONAL CERTIFICATION	WSSC	PIPELINE DESIGN DIVISION
			PIPELINE DESIGN DIVISION
	HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR		PIPELINE DESIGN DIVISION INFRASTRUCTURE SECTION
A	HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A		
A D	HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL		
A C E	HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A		
A C E	HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF		
# F	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.		
A C E T	HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF	SEWER	INFRASTRUCTURE SECTION
# E T - N L	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.		
# E T N L	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. NAME: XXXXXXXXXXX LICENSE NO.: XXXXX	SEWER	INFRASTRUCTURE SECTION

DATE

IDIQ - ESA CAPITOL VIEW - ESA SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT DE-06 - STREAM CONSTRUCTION DETAILS

MAY, 2025

NO 31 200'S 212NW03 & 213NW03 OF 44

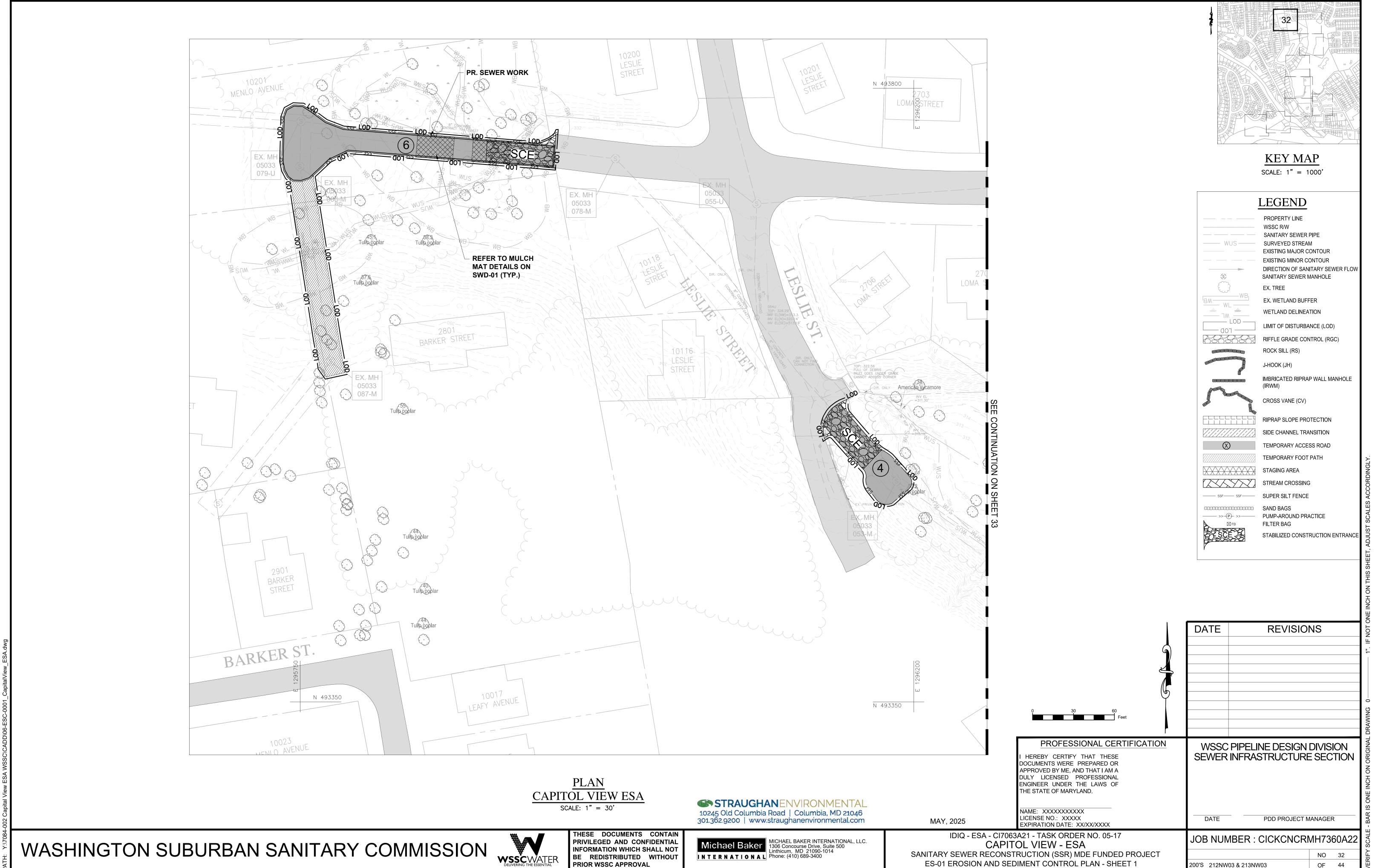
REVISIONS

8/5/2025 12:38 PM - PLOT DATE

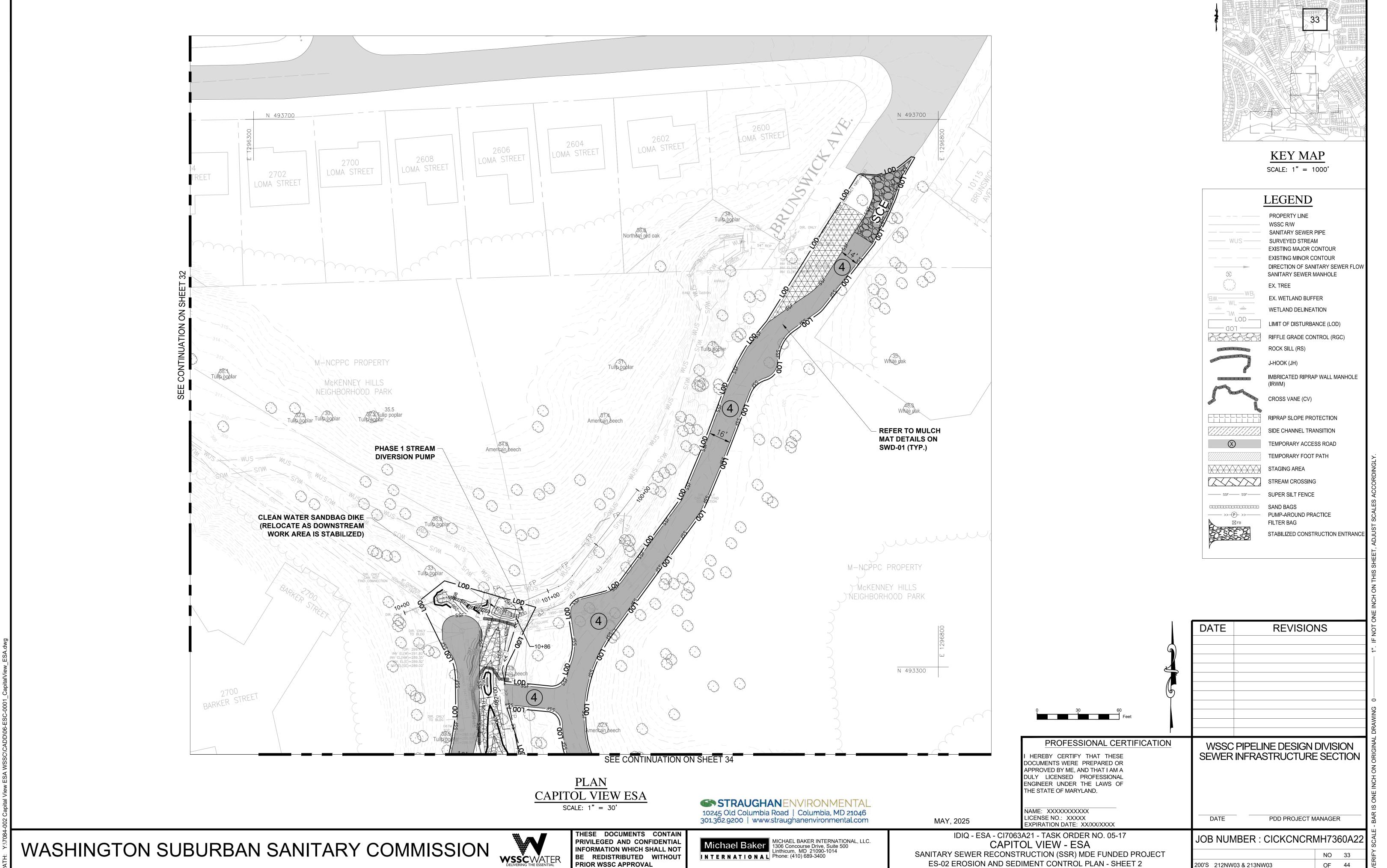
WASHINGTON SUBURBAN SANITARY COMMISSION

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL **INFORMATION WHICH SHALL NOT** BE REDISTRIBUTED WITHOUT **PRIOR WSSC APPROVAL**

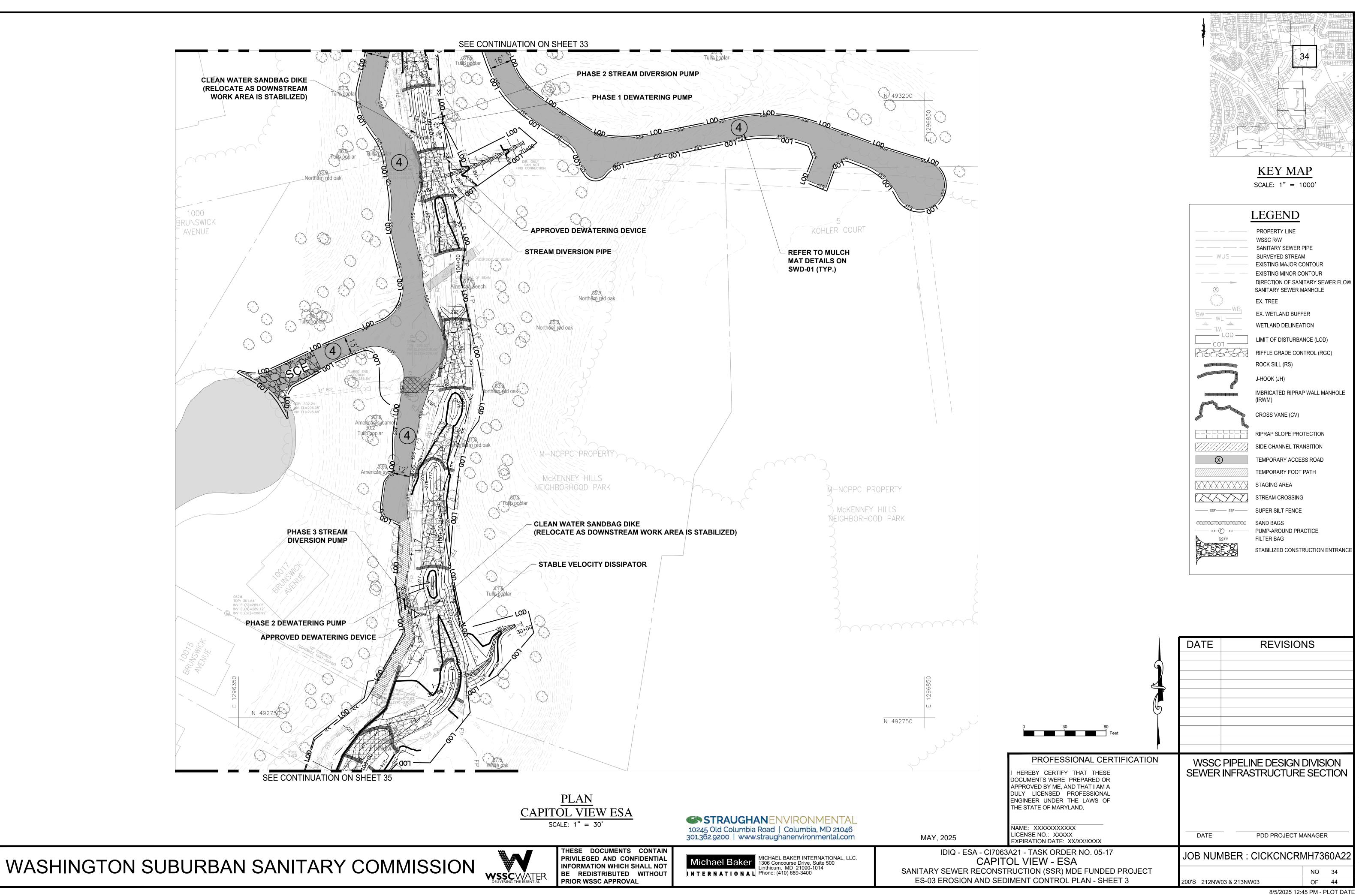
INTERNATIONAL Phone: (410) 689-3400



8/5/2025 12:41 PM - PLOT DATE

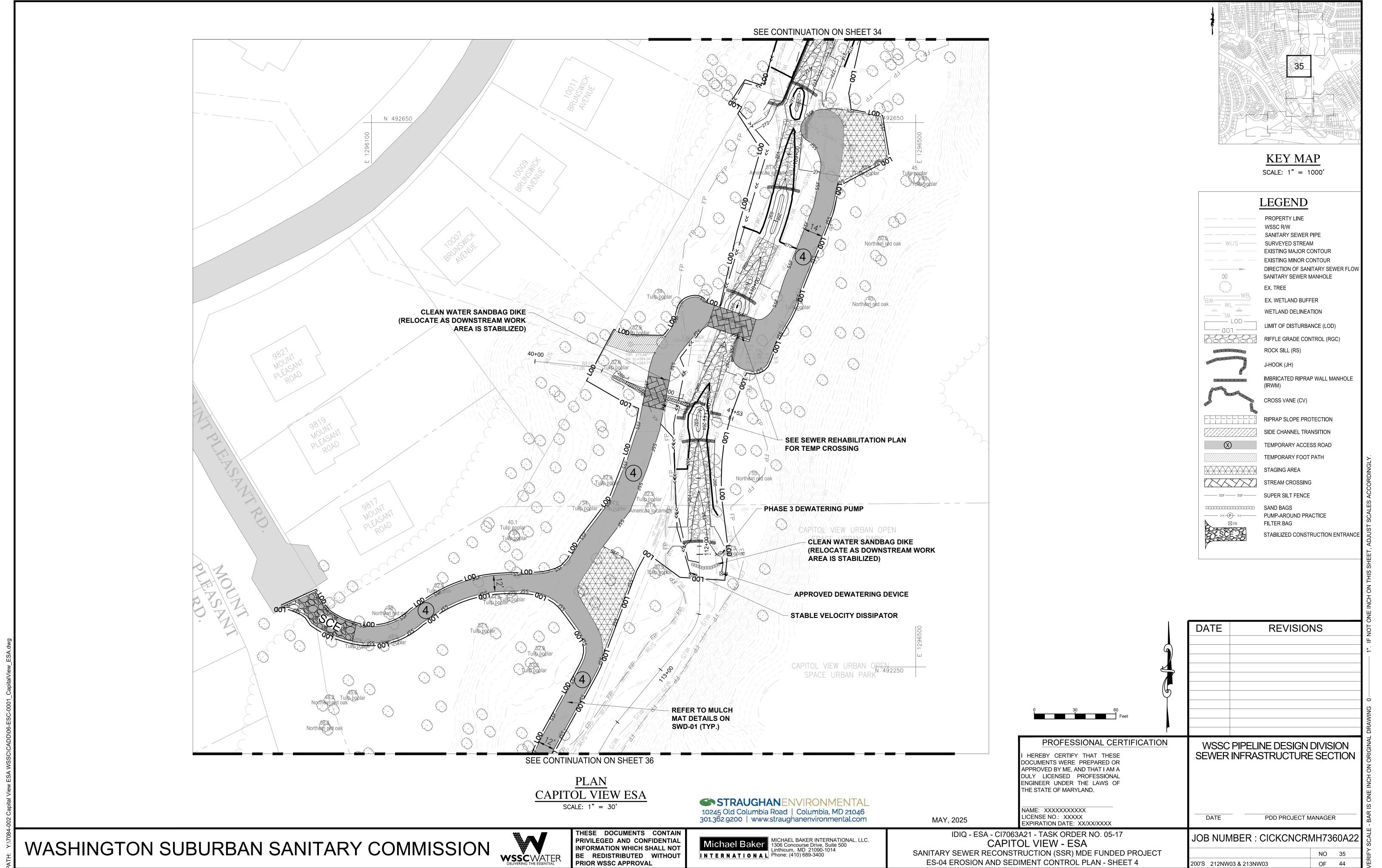


8/5/2025 12:43 PM - PLOT DATE

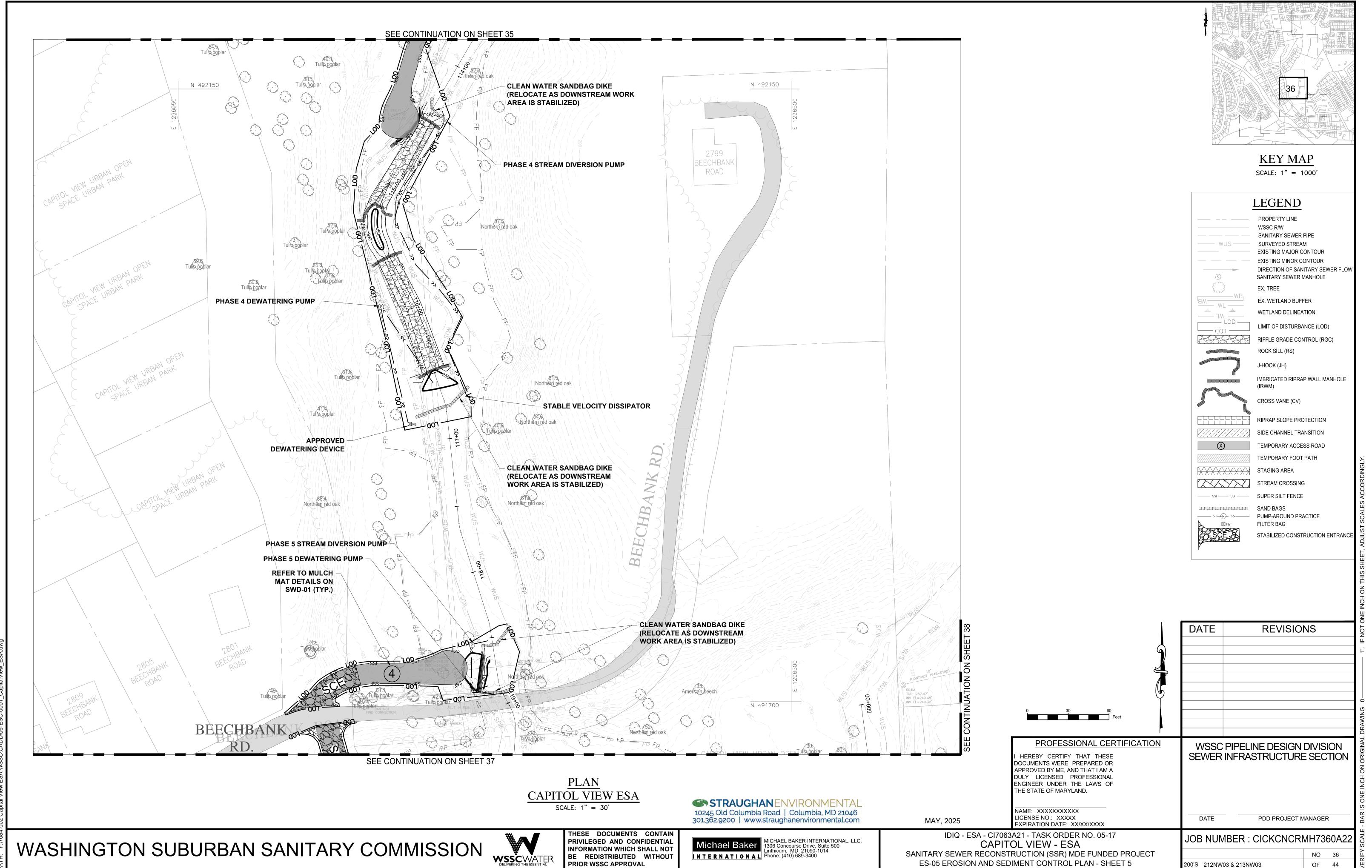


8/5/2025 12:45 PM - PLOT DATE

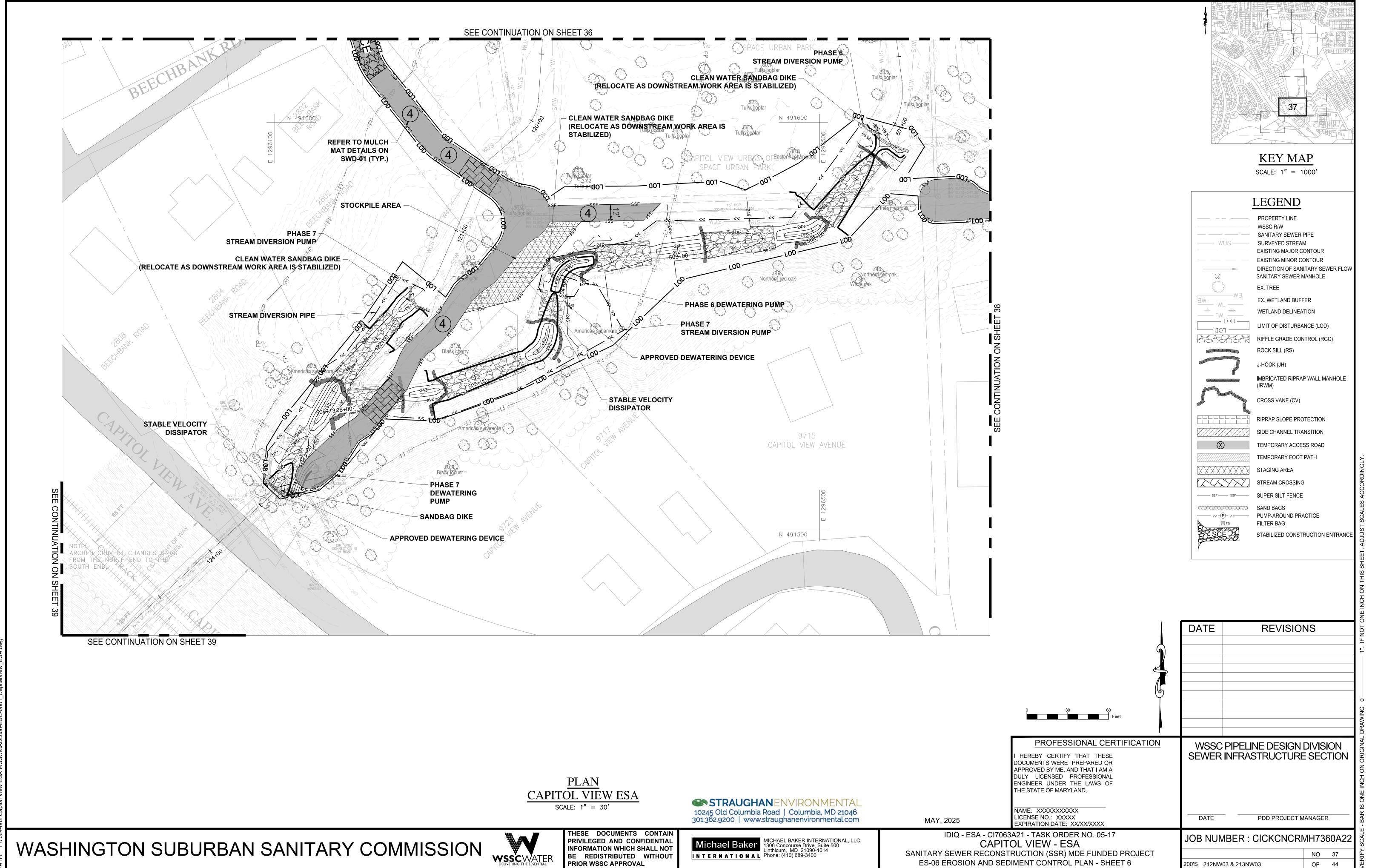
NO 34



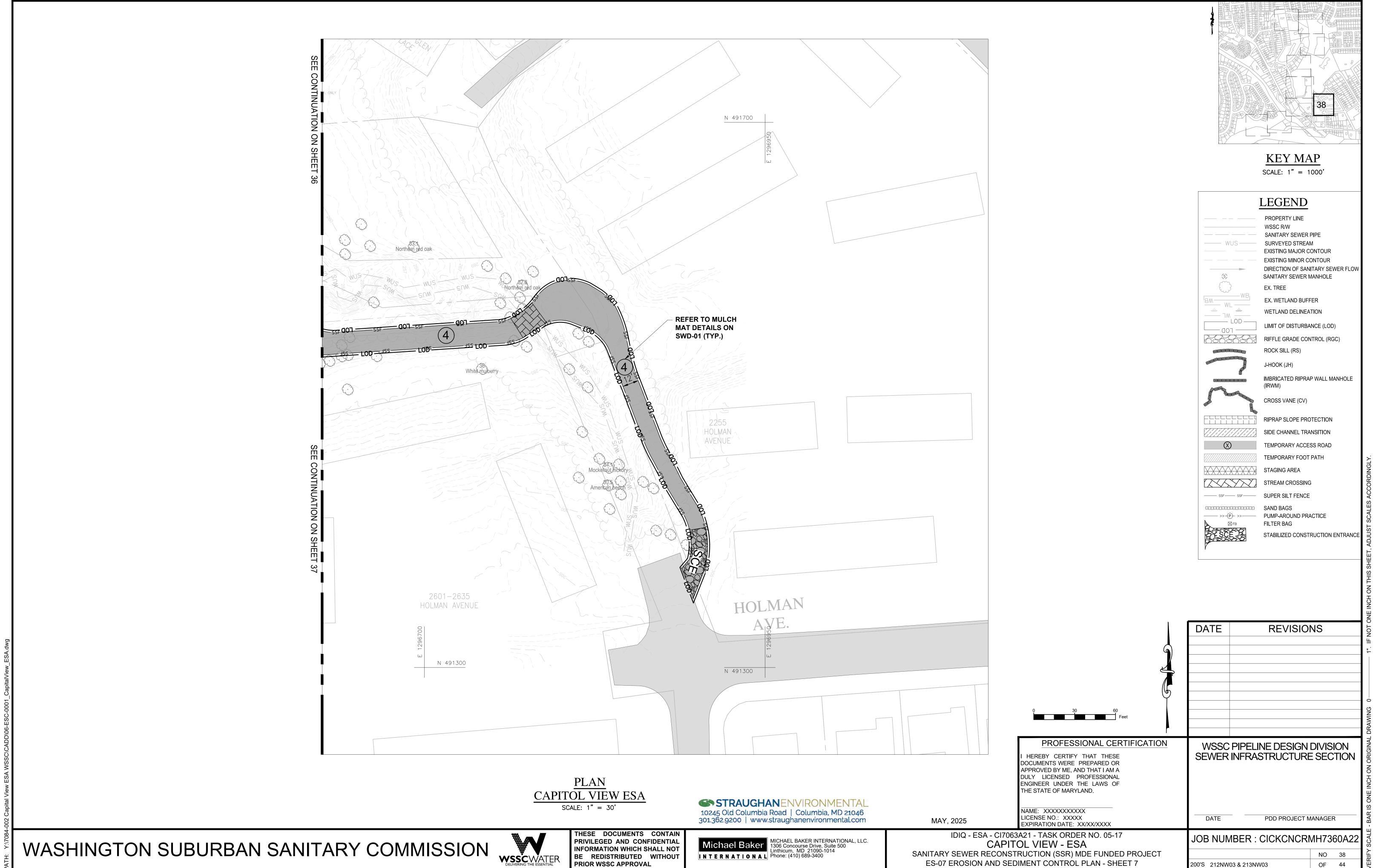
8/5/2025 12:46 PM - PLOT DATE



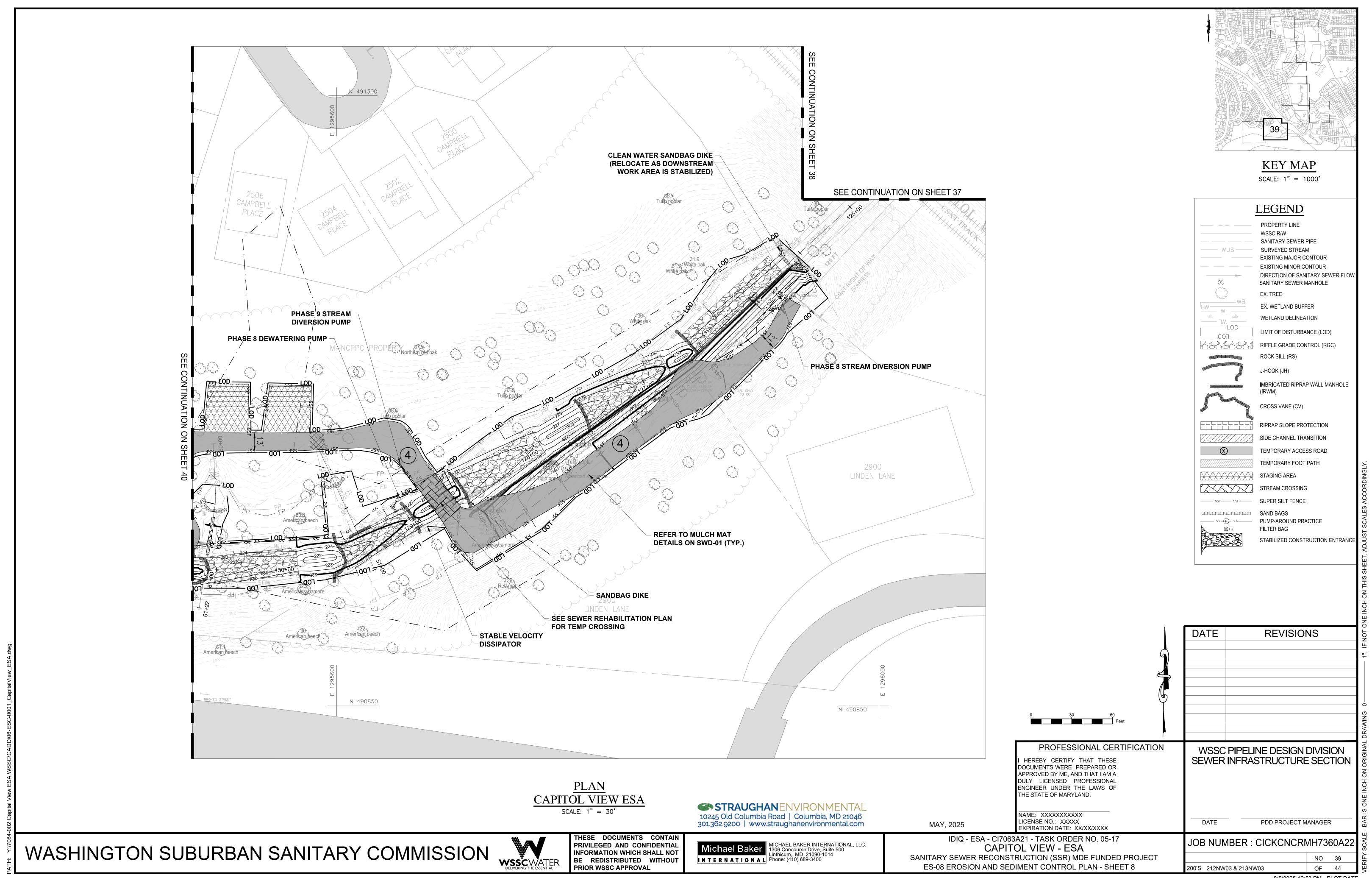
8/5/2025 12:48 PM - PLOT DATE



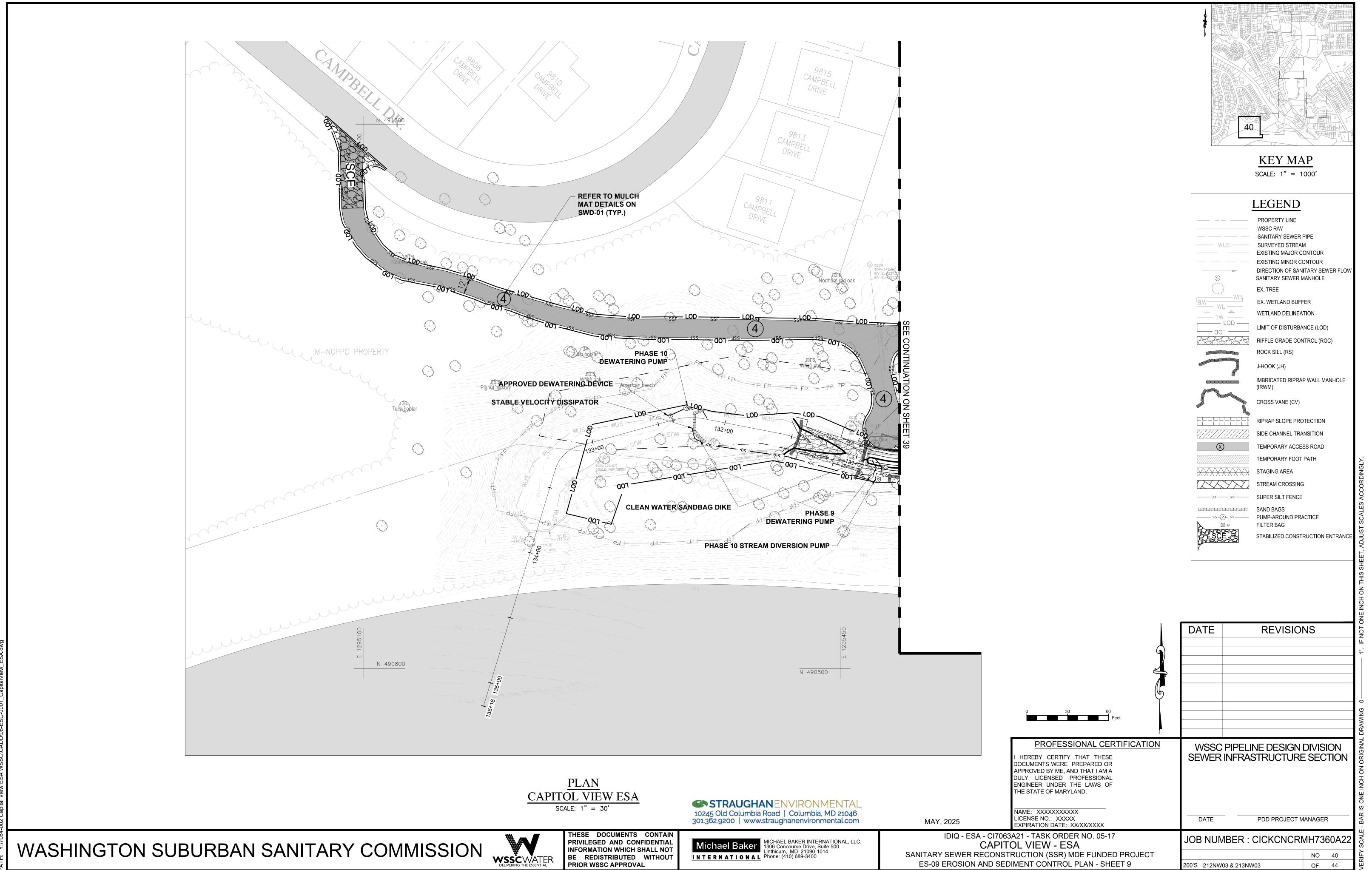
8/5/2025 12:50 PM - PLOT DATE



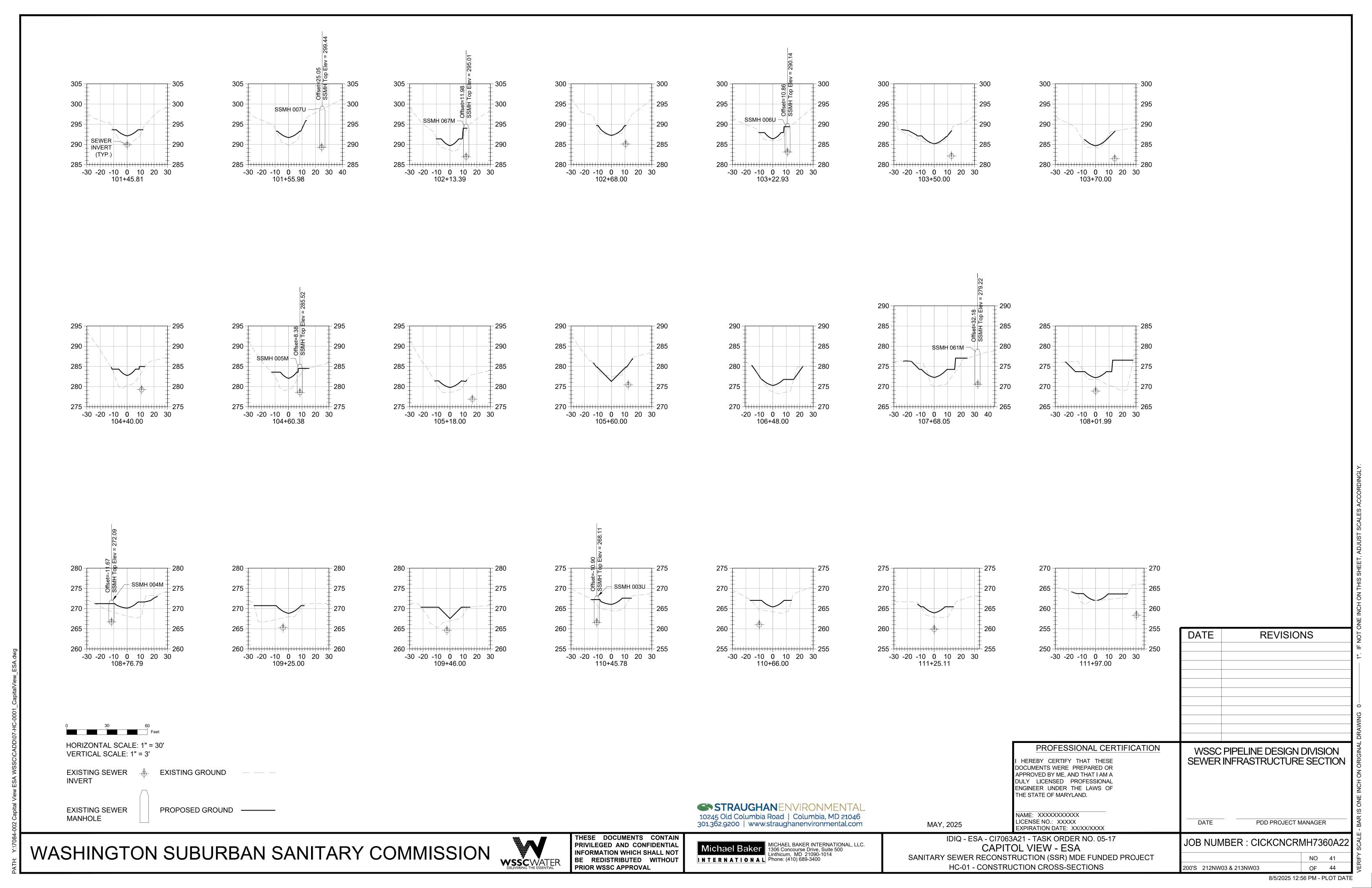
8/5/2025 12:51 PM - PLOT DATE



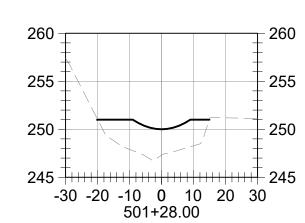
8/5/2025 12:53 PM - PLOT DATE

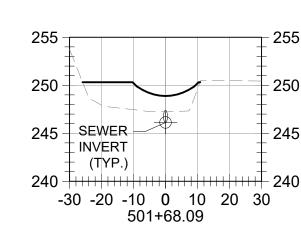


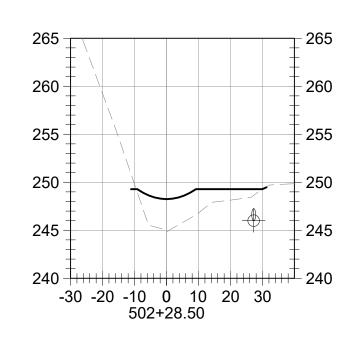
8/5/2025 12:55 PM - PLOT DATE

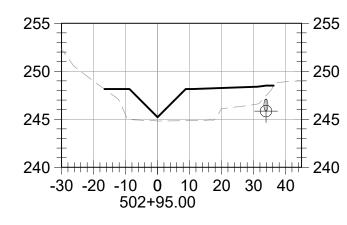


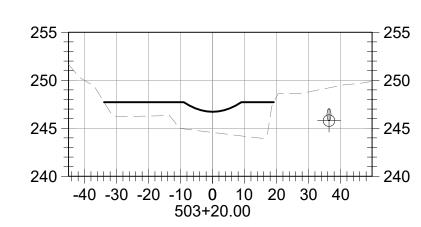


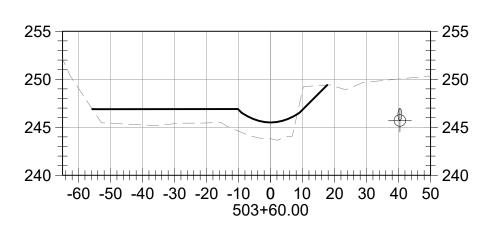


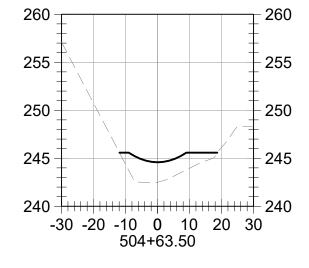


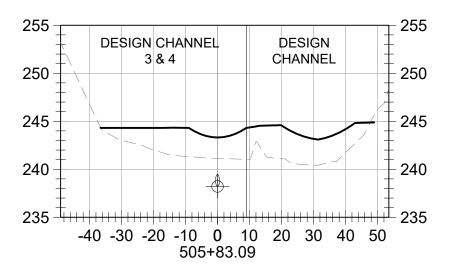


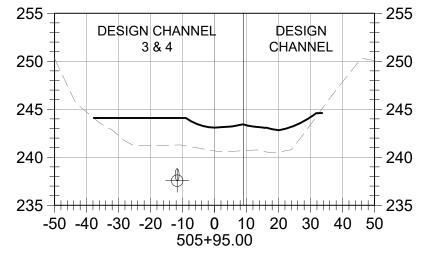












HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 1" = 3' EXISTING SEWER EXISTING GROUND INVERT **EXISTING SEWER** PROPOSED GROUND ———— MANHOLE

STRAUGHANENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com

LICENSE NO.: XXXXX MAY, 2025 EXPIRATION DATE: XX/XX/XXXX IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT HC-03 - CONSTRUCTION CROSS-SECTIONS

PROFESSIONAL CERTIFICATION

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.

NAME: XXXXXXXXXXX

PDD PROJECT MANAGER JOB NUMBER : CICKCNCRMH7360A22

DATE

NO 43 200'S 212NW03 & 213NW03 OF 44

REVISIONS

WSSC PIPELINE DESIGN DIVISION

SEWER INFRASTRUCTURE SECTION

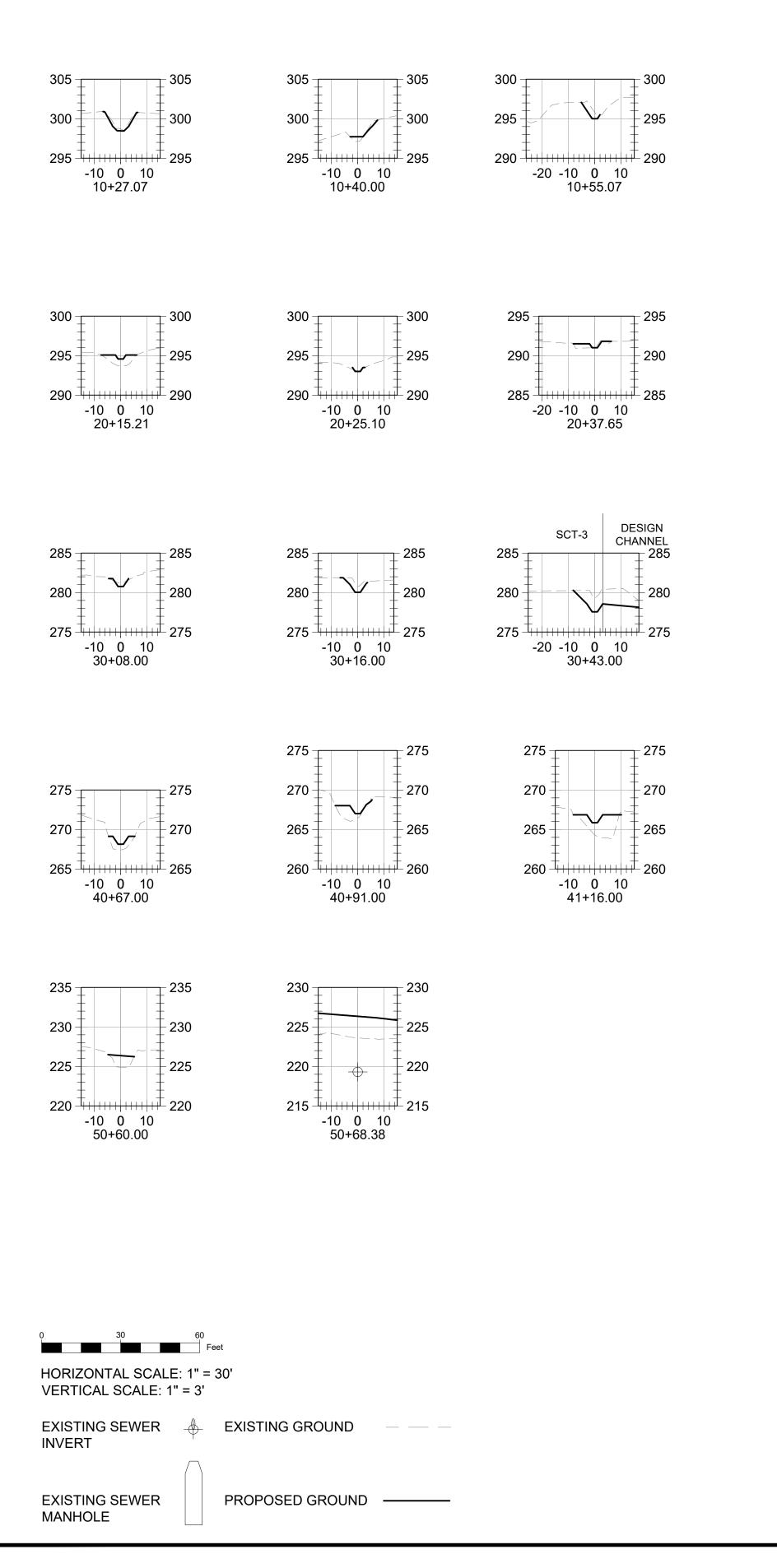
WASHINGTON SUBURBAN SANITARY COMMISSION



THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 Linthicum, MD 21090-1014 Phone: (410) 689-3400

8/5/2025 12:56 PM - PLOT DATE



225 SEWER INVERT (TYP) -10 0 10 60+60.00 -10 0 10 60+70.00 -10 0 10 20 30 60+77.04 DESIGN CHANNEL 285 285 280 -10 0 10 70+90.00 -10 0 10 -10 0 10 70+98.65 71+08.31

> **STRAUGHAN**ENVIRONMENTAL 10245 Old Columbia Road | Columbia, MD 21046 301.362.9200 | www.straughanenvironmental.com

MAY, 2025

PROFESSIONAL CERTIFICATION WSSC PIPELINE DESIGN DIVISION SEWER INFRASTRUCTURE SECTION 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. NAME: XXXXXXXXXXX LICENSE NO.: XXXXX PDD PROJECT MANAGER EXPIRATION DATE: XX/XX/XXXX JOB NUMBER : CICKCNCRMH7360A22

DATE

IDIQ - ESA - CI7063A21 - TASK ORDER NO. 05-17 **CAPITOL VIEW - ESA** SANITARY SEWER RECONSTRUCTION (SSR) MDE FUNDED PROJECT

HC-04 - CONSTRUCTION CROSS-SECTIONS

NO 44 200'S 212NW03 & 213NW03

OF 44

WASHINGTON SUBURBAN SANITARY COMMISSION



THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

MICHAEL BAKER INTERNATIONAL, LLC. 1306 Concourse Drive, Suite 500 Linthicum, MD 21090-1014 Phone: (410) 689-3400

REVISIONS



