PROJECT LOCATION

CONSTRUCTION NOTES

1. CONTRACTOR WILL BE WORKING IN TEMPORARY CONSTRUCTION EASEMENTS, PERMANENT EASEMENTS, AND COUNTY RIGHT-OF-WAYS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OF EASEMENTS AND REMOVAL OF ALL DEBRIS INCLUDING STUMPS, BLAST ROCK, ETC. NO BURIAL OF CLEARED MATERIALS WILL BE

2. CONTRACTOR SHALL REMOVE ALL DEBRIS AND HAVE SOIL EROSION CONTROL MEASURES IN PLACE BEFORE CONSTRUCTIONS REGINS

3. CONTRACTOR TO NOTIFY UTILITY PROTECTION AGENCY 72 HOURS PRIOR TO START OF WORK. PHONE 811. ALL UTILITY COMPANIES WHICH HAVE FACILITIES IN THE CONSTRUCTION AREA (TELEPHONE, ELECTRIC, ETC.) SHALL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DISRUPTIONS OF UTILITY SERVICE. ANY UTILITIES DAMAGED MUST BE REPAIRED THE SAME DAY, UNLESS WRITTEN PERMISSION FROM UTILITY OWNER IS

5. EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATION SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO THEIR ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE CLIENT AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY. SHOULD THE DAMAGED UTILITY LINE REQUIRE REPAIR BY THE RESPECTIVE UTILITY COMPANY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL COSTS ASSOCIATED WITH THE REPAIR INCLUING FINES AND ASSESSMENTS IMPOSED BY UTILITY COMPANY. CONTRACTOR SHALL NOTIFY ELECTRIC POWER PROVIDER 5 BUSINESS DAYS IN ADVANCE OF WORK ADJACENT TO POWER POLES. COORDINATE WITH UTILITY PROVIDER TO REMOVE OR RELOCATE UTILITY MAINS AND POLES AND PAY ALL ASSOCIATED

6. WHEN CONSTRUCTION INVOLVES THE REMOVAL OF FENCE, POLES, MAILBOXES, SIGNS, SIDEWALKS, DRIVEWAYS, DRIVEWAY CULVERTS, TEMPORARY OR FIXED STRUCTURES, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FOR TEMPORARY ACCESS SERVICE OR CONTAINMENT TO THE AFFECTED PROPERTY. HE SHALL REPLACE SUCH ITEMS WITH SIMILAR OR BETTER MATERIALS AS SOON AS PRACTICAL, OR AS DIRECTED BY THE ENGINEER AND ALL SIGNAGE, ALL UTILITY COMPANIES WHICH HAVE FACILITIES IN THE CONSTRUCTION AREA (TELEPHONE, ELECTRIC, ETC.) SHALL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

7. PEDESTRIAN AND LOCAL VEHICULAR TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. SAFETY DEVICES AND FLAGMEN SHALL BE PROVIDED BY THE CONTRACTOR, AT HIS EXPENSE. IF IT SHOULD BE NECESSARY, WRITTEN PERMISSION TO CLOSE THE CONSTRUCTION AREA TO TRAFFIC MUST BE OBTAINED FROM THE APPROPRIATE GOVERNMENT AGENCY PRIOR TO ANY STREET CLOSING. ALL CONSTRUCTION SIGNAGE, LIGHTED BARRIERS, ETC. SHALL BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION.

8. ALL CONSTRUCTION STAKING SHALL BE BY THE CONTRACTOR, AT HIS EXPENSE. STAKING OF EASEMENT AND CLEARING LIMITS AND NEW CONSTRUCTION SHALL BE PERFORMED BY PROFESSIONAL SURVEYOR LICENSED IN GEORGIA.

9. ALL PROPERTY LINES ARE BASED ON DATA PROVIDED BY FIELD SURVEY DATA.

10. CONTRACTOR SHALL MAINTAIN FIELD "AS-BUILT" DRAWINGS AND SHALL MEASURE AND SHOW LOCATION OF ALL MANHOLES, GRAVITY MAINS, RIM/INVERT ELEVATIONS, ETC.

11. CONTRACTOR SHALL MATCH EXISTING LAWN AND GRASS TYPES WHEN REPAIRING DISTURBED AREAS.

12. ALL CROSS DRAINS AND DRIVEWAY CULVERTS MUST REMAIN OPEN AT ALL TIMES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO DRAINS AND CULVERTS.

13. CONTRACTOR SHALL PERFORM CONSTRUCTION IN A MANNER THAT WILL ALLOW VEHICULAR ACCESS TO EACH HOME OR BUSINESS DURING CONSTRUCTION.

14. ALL EROSION AND SEDIMENTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

15. A MINIMUM OF 10' OF HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER & SEWER MAINS. A MINIMUM OF 18" VERTICAL SEPARATION SHALL BE MAINTAINED AT ALL CROSSINGS OF WATER & SEWER MAINS.

16. THE CONTRACTOR SHALL FURNISH MATERIALS AND MAKE THE CONNECTION TO ALL EXISTING PIPE LINES.

17. THE CONTRACTOR SHALL BEAR ALL COST OF WATER USED FOR FLUSHING AND TESTING REQUIRED BY THE SPECIFICATIONS. PROVISIONS TO PURCHASE SAID WATER FROM A SUPPLIER APPROVED OF BY THE ENGINEER.

18. ALL REQUIRED FITTINGS ARE NOT NECESSARILY SHOWN ON THESE DRAWINGS. CONTRACTOR SHALL FURNISH AND SUPPLY ALL FITTINGS NECESSARY TO CONSTRUCT GRAVITY SEWER MAIN.

19. BEFORE CONSTRUCTION BEGINS, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER THE CONTACT INFORMATION OF A PERSON WHO WILL BE AVAILABLE 24 HOURS A DAY TO CONTACT IN CASE OF EMERGENCY.

20. CONTRACTOR TO SAW-CUT EXISTING ASPHALT TO PROVIDE NEAT EDGE FOR PATCHING ON ALL STREETS (SEE DETAIL CLASS 'A' UTILITY PATCH DETAIL)

21. ALL CONSTRUCTION MATERIALS, METHODS AND INSTALLATION SHALL BE IN ACCORDANCE WITH MACON WATER AUTHORITY STANDARDS AND SPECIFICATIONS.

22. CONTRACTOR SHALL NOTIFY MWA CHIEF INSPECTOR, JOEL HERNDON, 478-464-5639, A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.

23. MEANS AND METHODS FOR CONSTRUCTION ARE UP TO THE BIDDING CONTRACTOR AND HE/SHE WILL BE FULLY RESPONSIBLE FOR ALL MATERIALS, EQUIPMENT, LABOR, TEMPORARY POWER, TIE-INS WHERE BYPASS PIPING AND BYPASS PUMPING (INCLUDING FUEL COSTS) IS REQUIRED TO MAINTAIN OPERATION OF THE SANITARY SEWER SYSTEM. BYPASS PUMPING SHALL INCLUDE NOISE ATTENUATION AS SUCH TO AVOID EXCESS SOUND DURING OPERATION AS WELL AS AN AUTO-DIALER TO ALERT THE CONTRACTOR AND MWA IN THE EVENT OF BYPASS PUMP FAILURE.

PROJECT QUANTITIES

BENCHMARK INFORMATION

18" SDR 26 PVC SANITARY SEWER

3040 L.F.

N/A

JOE TAMPLIN INDUSTRIAL BOULEVARD 18" SANITARY SEWER REPLACEMENT FOR THE MACON WATER AUTHORITY



Macon Water Authority

537 HEMLOCK STREET

Macon, GA 31202-0108

(478) 464-5635 * Fax (478) 738-3864

OCTOBER 31, 2024

NOTIFICATION CONTACTS

ner and Joel Herndon, Chief Inspector
Hour Macon Water Authority

537 Hemlock Street
Macon, GA 31202
Phone: 478-464-5639
Email: jherndon@maconwater.org

Engineer

Don L. Carter, P.E.
Carter Engineering Group.
6310 Peake Road, Suite 200
Macon, GA 31210
Office: 478-219-2600
Email: dcarter@carterenggrp.com

UTILITY CONTACTS

Cheryl Treadway, Account Executive, New Business

Development AGL Resources (Local Office) 5472 New Forsyth Rd, Macon, GA 31210 Local Office: (478) 476-2230

Cell: 404-391-3142
Email: Cheryl.treadway@aglresources.com

960 Key Street
Macon, GA 31204
Office: 888-655-588

Telephone/Cable OSP-Planning & Design

Engineering
AT&T
1630 Eisenhower Par

1630 Eisenhower Parkway-Room 26 Macon, GA 31206 Phone: 478-788-1040 Email: <u>mr8876@att.com</u>

Water and Sew

Macon Water Authority
537 Hemlock Street
Macon, GA 31202
Phone: 478-464-5639
Email: jherndon@maconwater.org

Joel Herndon, Chief Inspector

PROJECT NARRATIVE

THIS PROJECT CONSISTS OF FURNISHING AND INSTALLING APPROXIMATELY 3,040 L.F. OF 18" SANITARY SEWER ON JOE TAMPLIN BOULEVARD.

INDEX TO DRAWINGS

SHEET

DESCRIPTION	EXISTING	NEW
PROPERTY LINE		
CONTOUR LINE	- — -45 <i>Ø</i> - — -	450
POWER POLE	Ø	
LIGHT POLE	ф-	*
OVERHEAD POWER	OHP	
HIGH VOLTAGE LINE	HVL	
UNDERGROUND ELECTRICAL	——E——	
UNDERGROUND TELEPHONE	T	
UNDERGROUND FIBER OPTIC	——FOC——	
GAS LINE		——G-——-
WATER LINE	W	$-\!\!-\!\!\!-\!$
FIRE PROTECTION MAIN		—·—FM—·—
DOMESTIC WATER		$-\cdot - \square \square \square - \cdot -$
IRRIGATION MAIN		-·-IRR-·-
FIRE HYDRANT	Ø	₩
WATER VALVE	\triangleright	>
SAN. SEWER W/ MANHOLE	—SAN—O——	
CLEANOUT	0	•
DRAIN INLET		
CATCH BASIN D.O.T. STD. 1033D		
STORM DRAIN	======	
SILT FENCE & TYPE		—x—(Sd1-C)—x—
SPOT ELEVATION	+	•
CONCRETE PAVING		
CONCRETE SIDEWALKS		
PVC IRRIGATION SLEEVE		=====
SOIL BOUNDARY LINE		
SOIL TYPE		HyB
FENCE	—_x—_x—_x—	xxx
FENCE W/ 3 STRANDS OF BARBED WIRE		— <i>///</i> _x— <i>///</i> _x—
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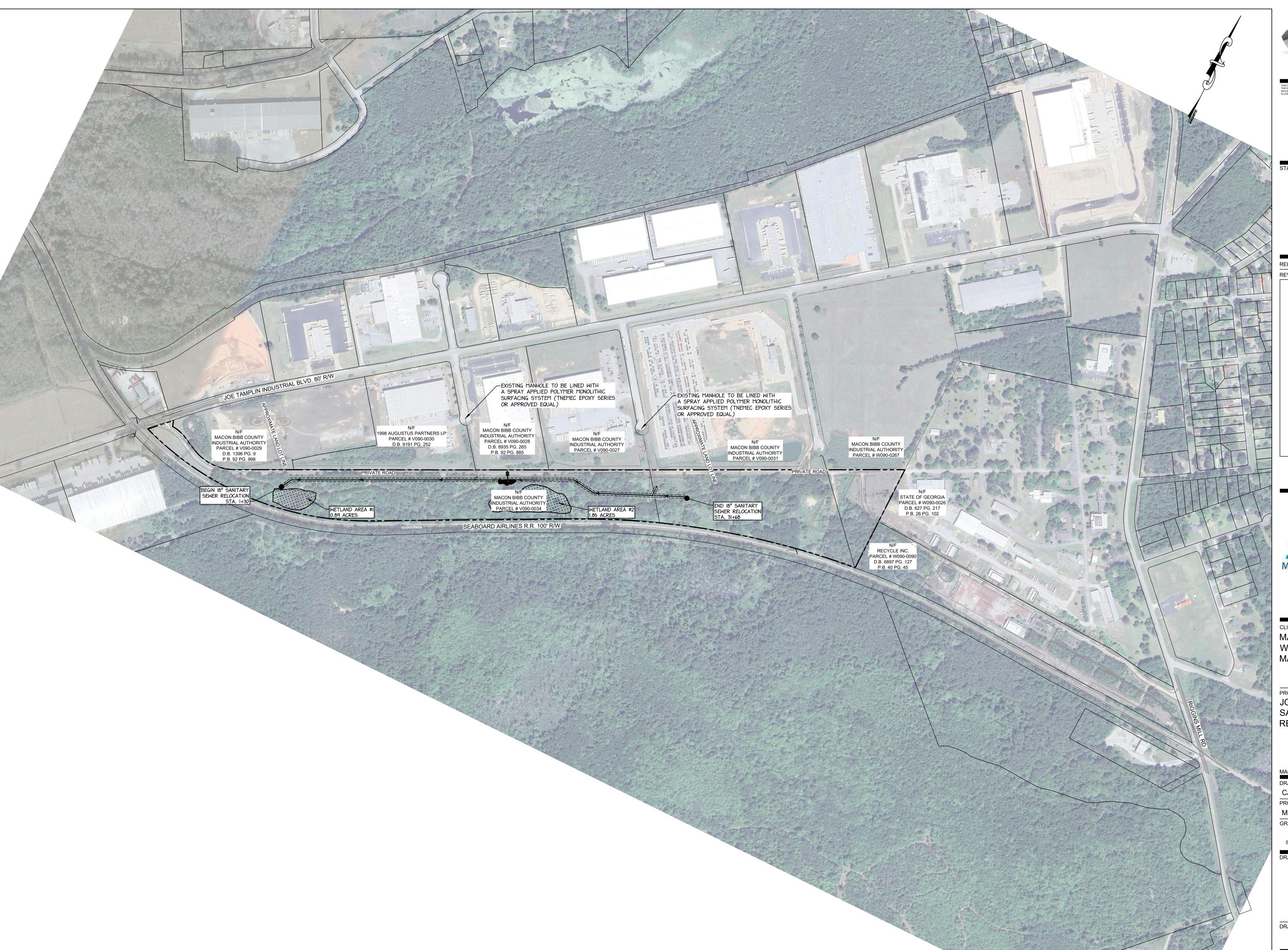
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LEGEND

NO.	TITLE
-	COVER SHEET
C1	OVERALL PLAN
C2-C5	SANITARY SEWER PLAN AND PROFILE
C6	SANITARY SEWER EROSION AND SEDIMENT CONTROL PLAN
C7	SANITARY SEWER EROSION AND SEDIMENT CONTROL PLAN
C8	SANITARY SEWER EROSION AND SEDIMENT CONTROL PLAN
C9	NPDES COMPREHENSIVE MONITORING PROGRAM NOTES
C10	STORMWATER POLLUTION PREVENTION NOTES
C11	STORMWATER POLLUTION PREVENTION DETAILS
C12	SANITARY SEWER DETAILS





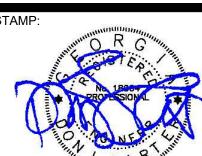


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6310 Peake Road, Suite 200 Macon, GA 31210 (478) 219-2600

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MACON

WATER AUTHORITY MACON, GA

PROJECT:

JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT

MACON, GA 31216

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CADD DLC

CADD DLC

PROJECT NUMBER: DATE:

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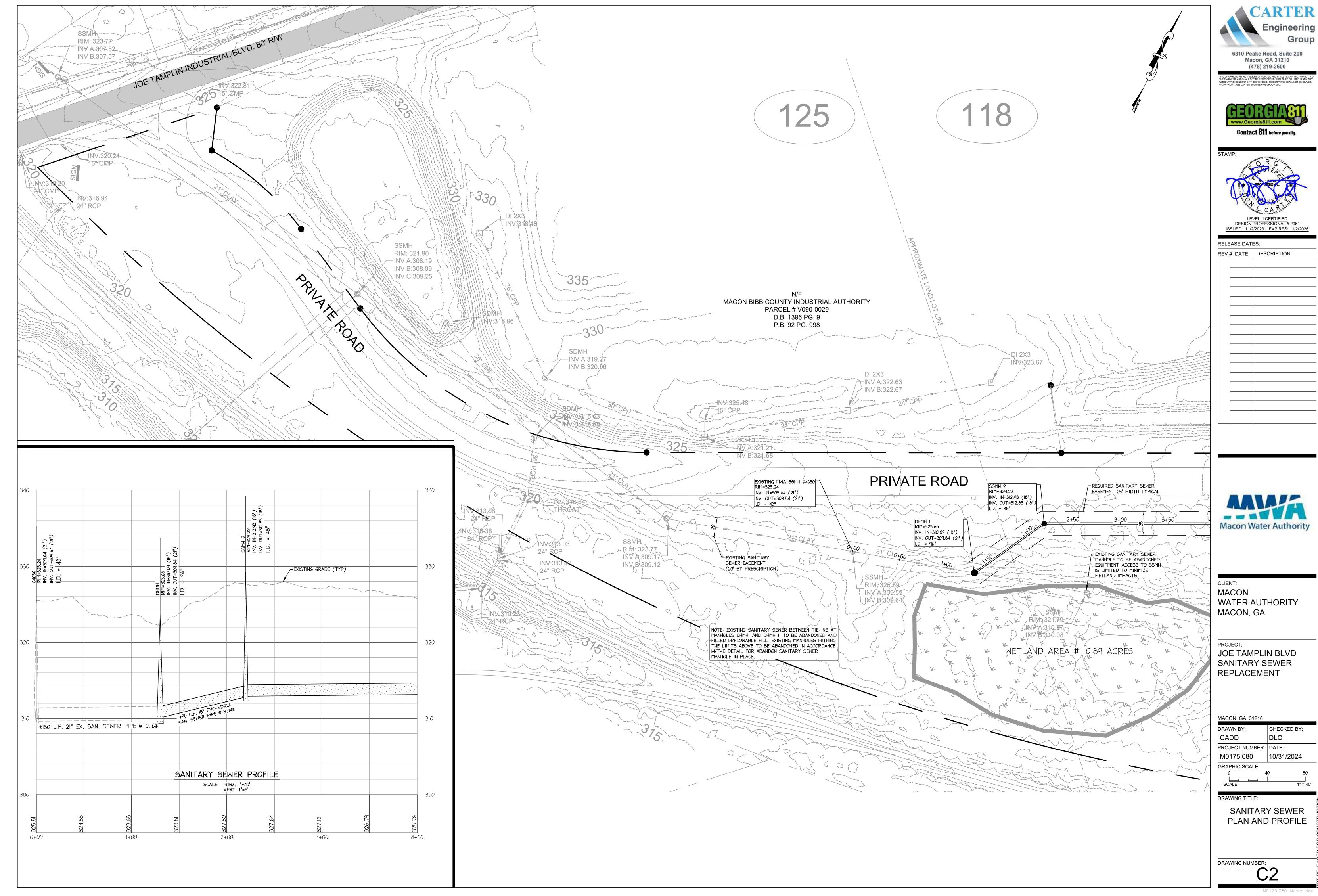
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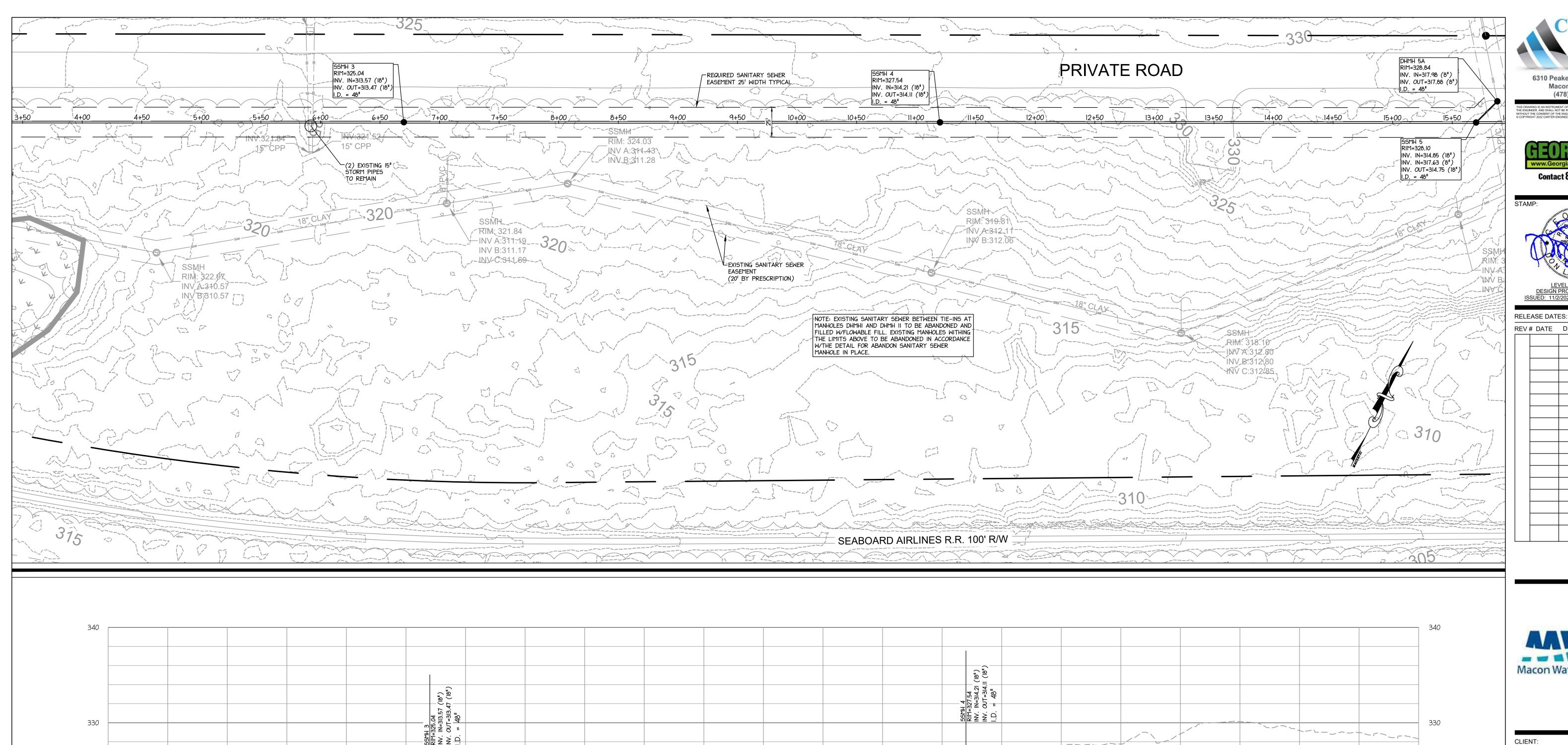
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MACON
WATER AUTHORITY

MACON, GA

PROJECT:
JOE TAMPLIN BLVD
SANITARY SEWER
REPLACEMENT

ACON, GA 31216	
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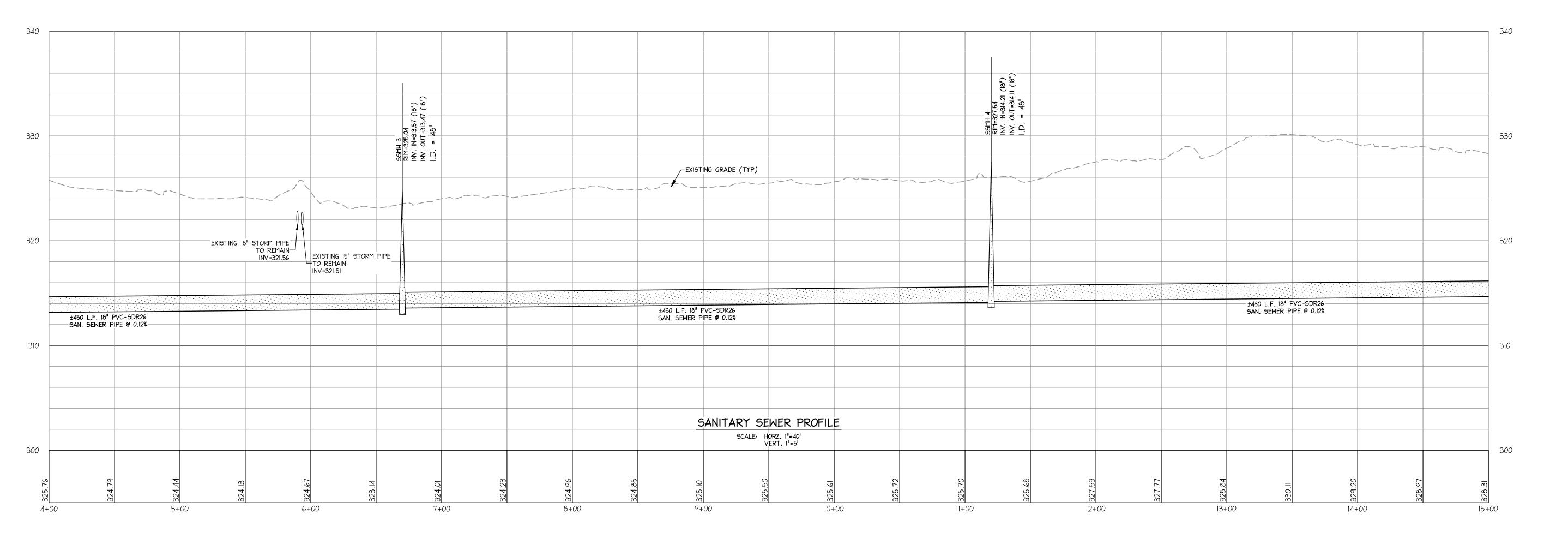
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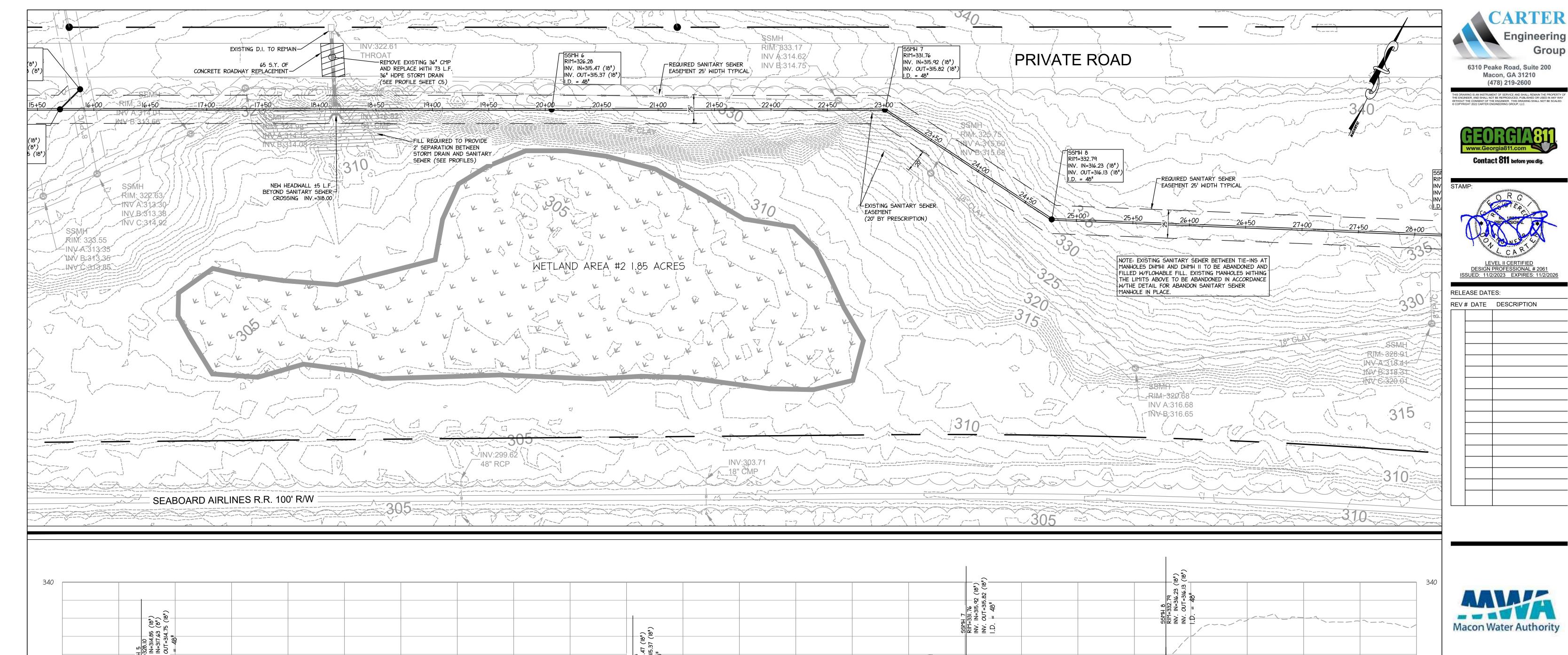
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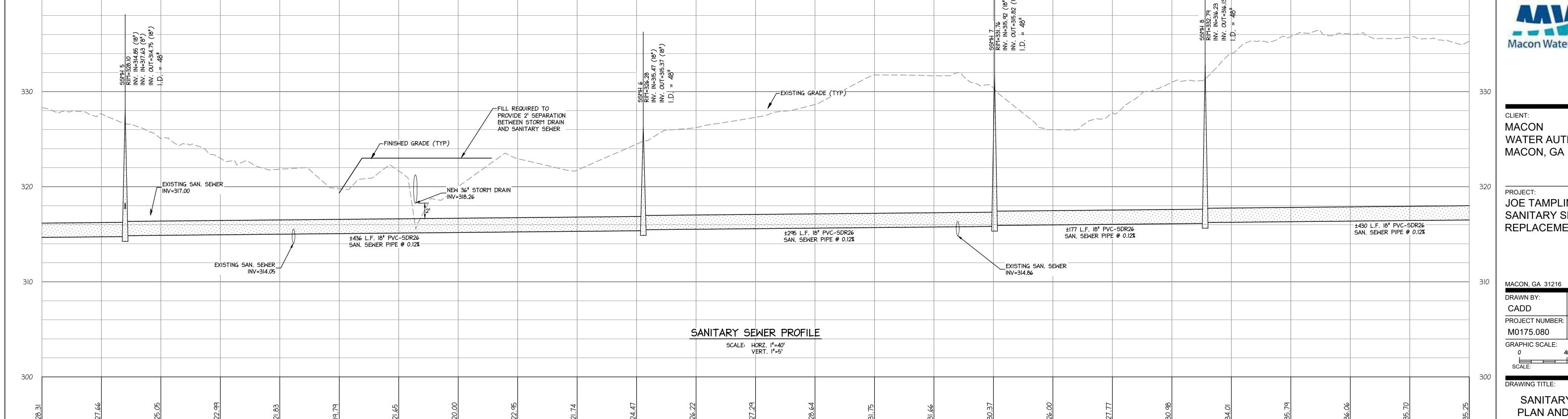
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SANITARY SEWER PLAN AND PROFILE







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JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT

MACON, GA 31216 CHECKED BY: DLC

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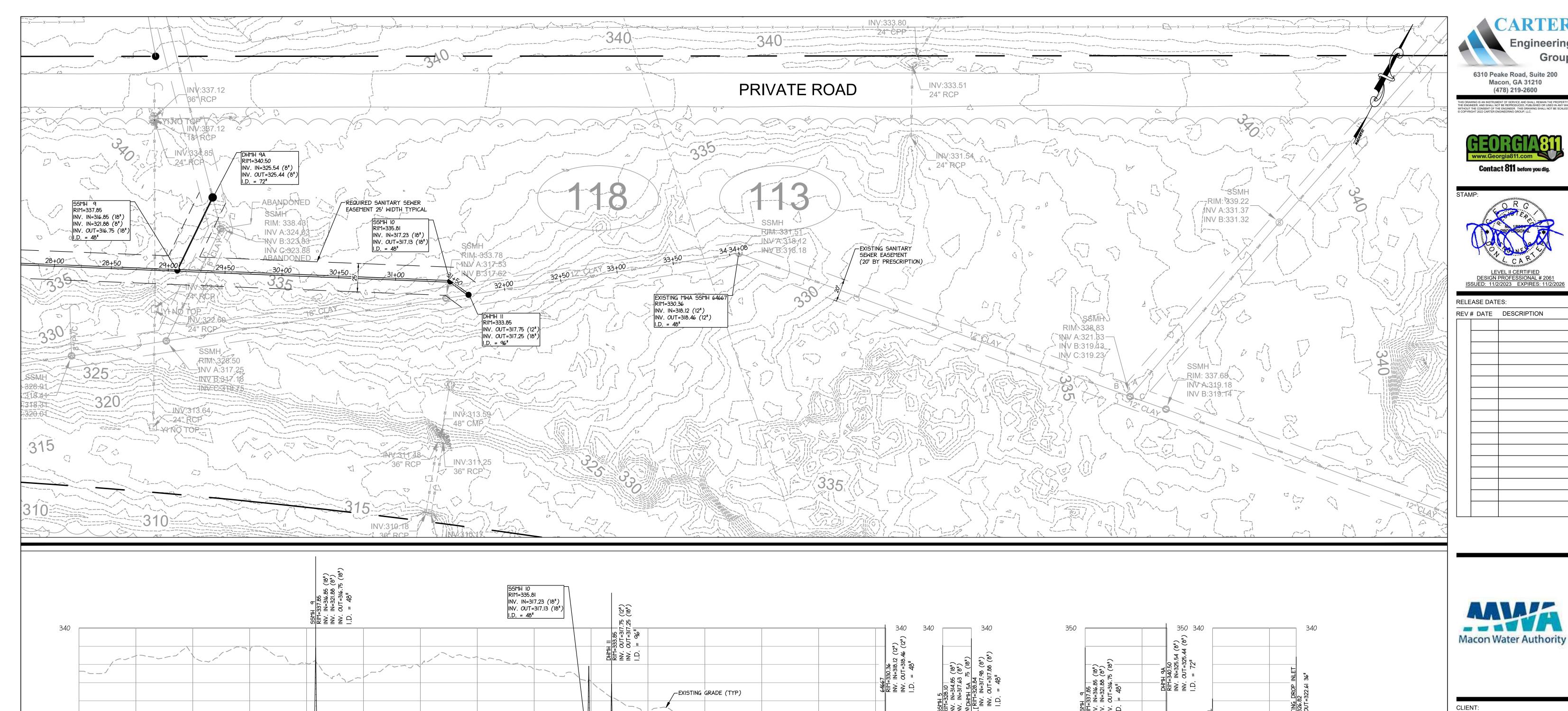
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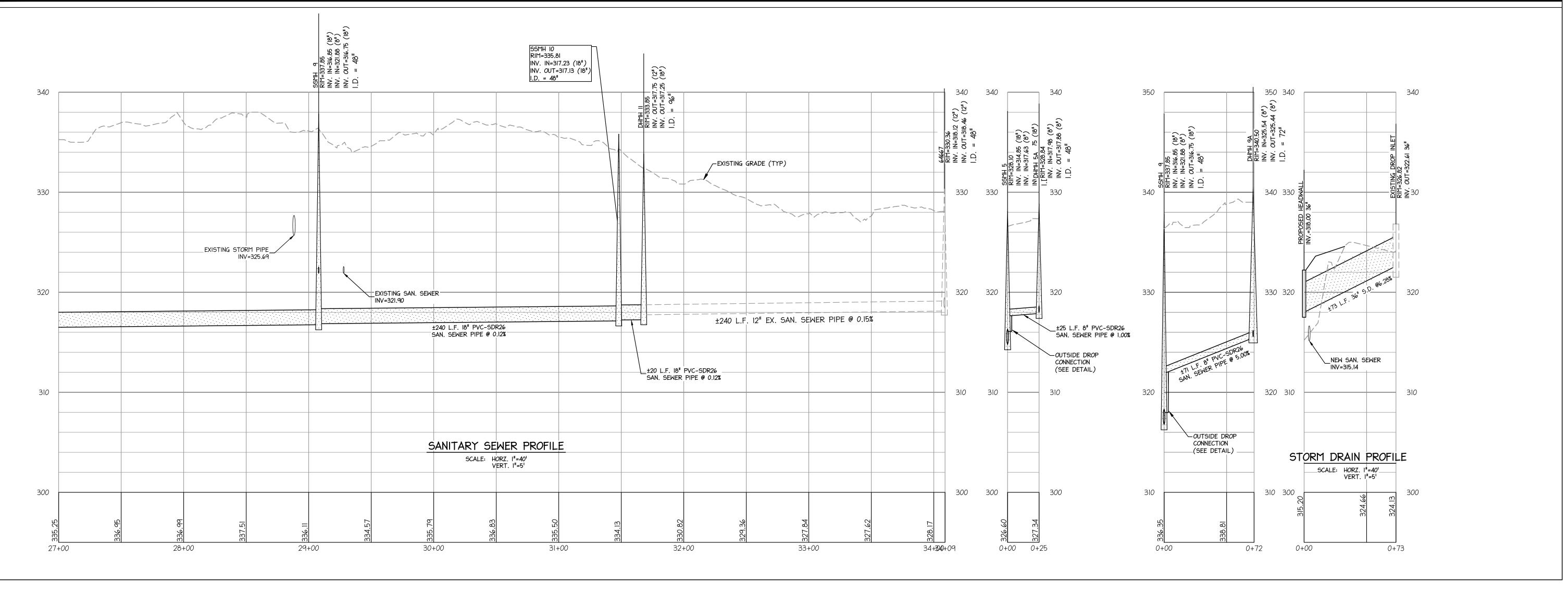
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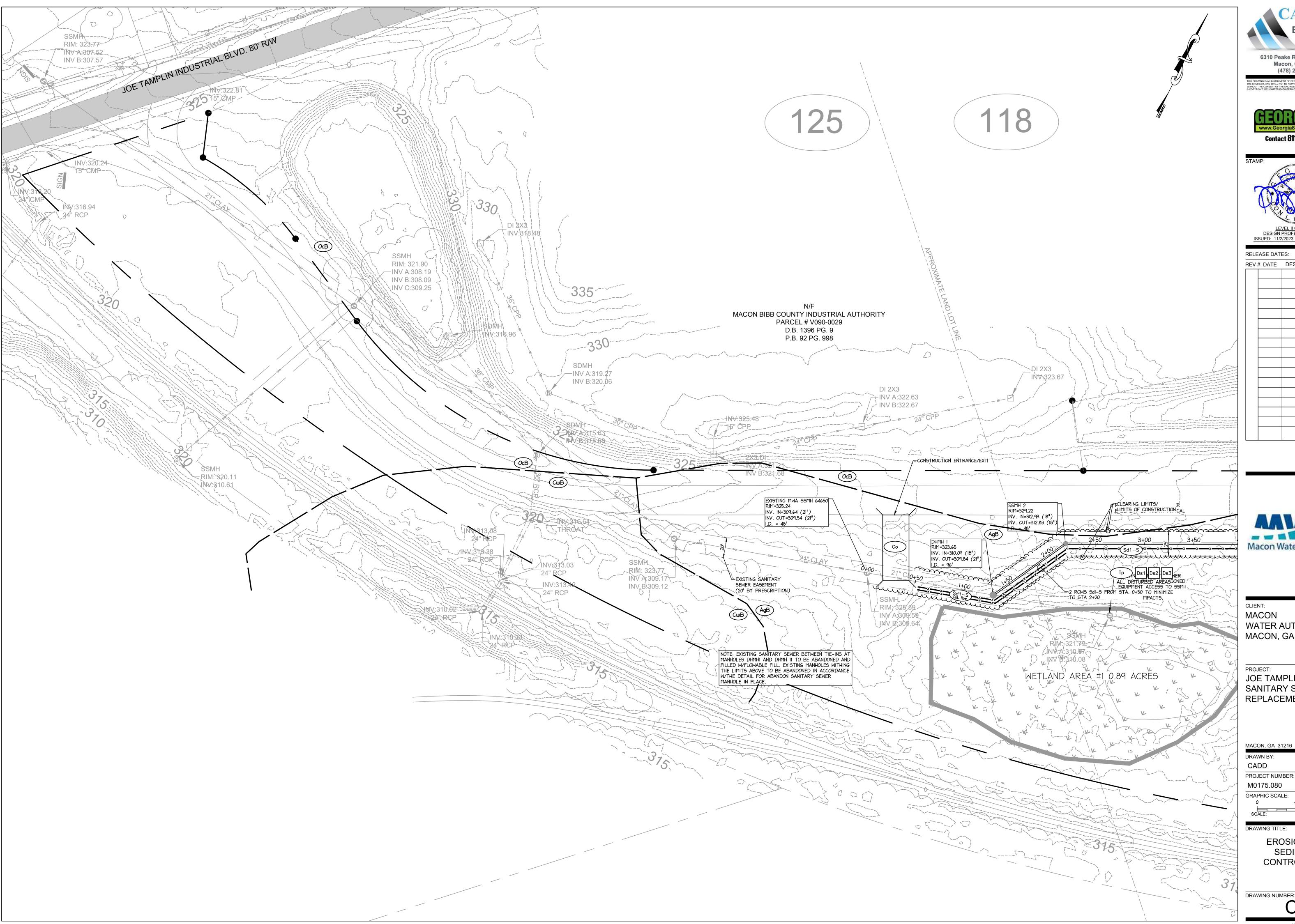
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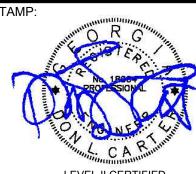






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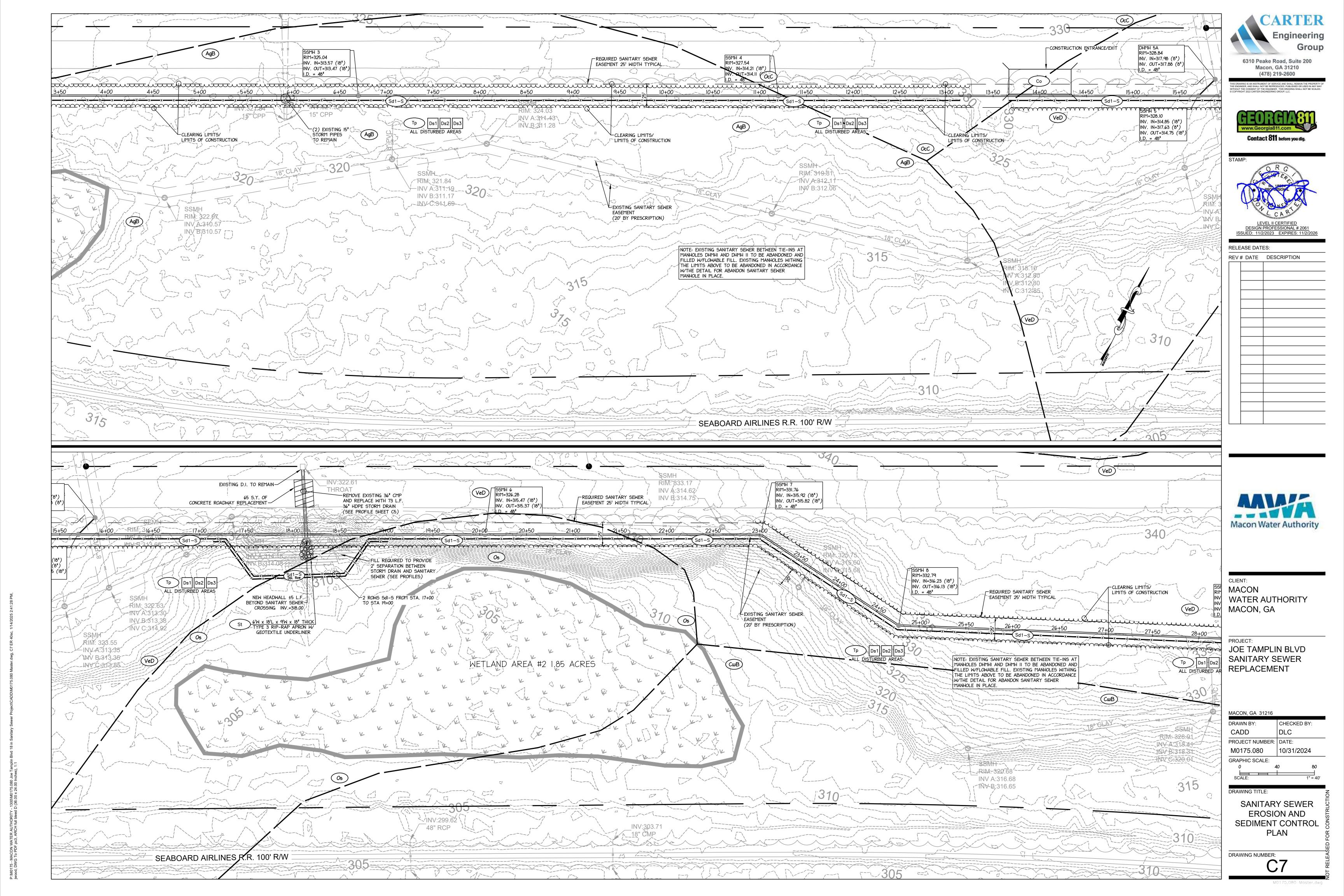
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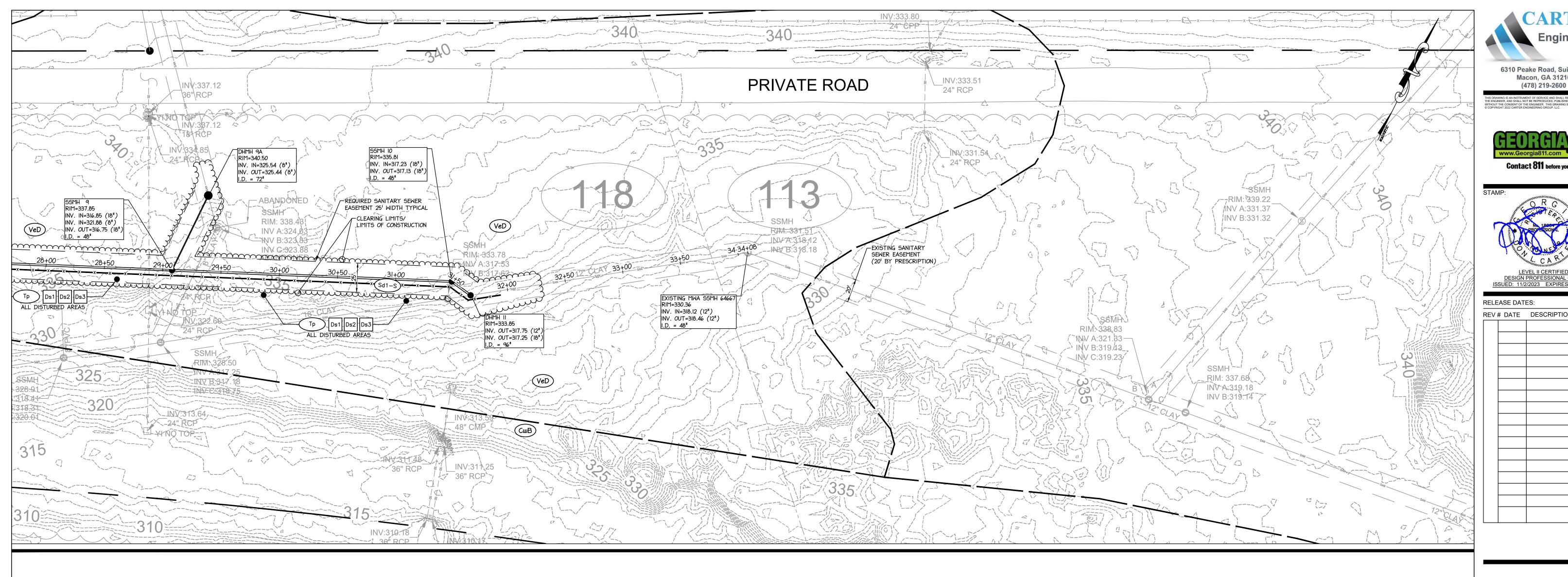
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> **EROSION AND** SEDIMENT CONTROL PLAN







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MACON WATER AUTHORITY MACON, GA

PROJECT:

JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT

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SANITARY SEWER **EROSION AND** SEDIMENT CONTROL PLAN

DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL PROTECTION DIVISION NPDES STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES GENERAL PERMIT No. GAR100002

THE CONTRACTOR SHALL BE THE PRIMARY PERMITTEE. AS SUCH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NPDES TESTING AND MONITORING REQUIREMENTS STATED ON THE CONSTRUCTION DOCUMENTS AND WITHIN STATE OF GEORGIA GENERAL PERMIT NO. 100002. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETION AND FILING OF NOTICE OF INTENT, NOTICE OF TERMINATION AND ALL OTHER REPORTING DOCUMENTS. ALL COSTS FOR TESTING, MONITORING, REPORTING, FEES AND FILING SHALL BE PAID BY THE CONTRACTOR.

CONTRACTOR SHALL OBTAIN PERMIT COVERAGE ELECTRONICALLY THROUGH GEOS (GEORGIA EPD ONLINE SYSTEM) BY SETTING UP A RESPONSIBLE OFFICIAL (RO) ACCOUNT. ONCE THE ACCOUNT HAS BEEN ESTABLISHED, THE CONTRACTOR MUST ASSOCIATE (LINK) THIS FACILITY WITH THE ACCOUNT THEY MAY THEN DESIGNATE THE ENGINEER (CARTER ENGINEERING GROUP, LLC) AS THE PLAN PREPARER IF THEY SO WISH TO ASSIST WITH COMPLETION OF THE ONLINE NOTICE OF INTENT (NOI). ONCE THE NOI HAS BEEN COMPLETED, FINAL SUBMISSION ON THE GEOS WEBSITE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL UTILIZE THE GEOS SYSTEM AND SUBMIT ALL TESTING, MONITORING, AND REPORTS AS REQUIRED BY GAR100001. CONTRACTOR SHALL ALSO PAY ALL FEES ASSOCIATED WITH PERMIT, BOTH TO THE GEORGIA EPD, AND TO THE LOCAL ISSUING AUTHORITY (LIA), IF APPLICABLE.

FEE SCHEDULE

<u>EPD PORTION:</u> DISTURBED AREA x \$40/ACRE = 1.8 AC x \$40 = \$72.00

LOCAL ISSUING AUTHORITY PORTION: DISTURBED AREA x \$40/ACRE = 1.8 AC x \$40 = \$72.00

SITE / OWNER / OPERATOR INFORMATION

JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT PROJECT NAME:

END PROJECT

PROJECT ADDRESS:

GPS LOCATION OF BEGIN PROJECT: BEGINNING & END OF PROJECT:

LAT: 32.7993° LON: -83.5569° LAT: 32.8027° LON: -83.5481°

OWNER/DEVELOPER:

MR. MICHEL WANNA MACON WATER AUTHORITY 537 HEMLOCK STREET MACON. GA 31202 OFFICE: (478) 464-5636 EMAIL: <u>mwanna@maconwater.org</u>

24 HOUR FACILITY CONTACT:

Joel Herndon, Chief Inspector Macon Water Authority 537 Hemlock Street Macon, GA 31202 Phone: 478-464-5639 Email: jherndon@maconwater.org

THE MONITORING REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT No. GAR 100001.

STATEMENT

THE PERMITTEE'S COMPREHENSIVE MONITORING PROGRAM PROVIDES FOR THE MONITORING OF THE RECEIVING WATER(S) OR THE MONITORING OF THE STORMWATER OUTFALLS AND IS EXPECTED TO MEET

DON L. CARTER, P.E. LEVEL II CERTIFIED DESIGN PROFESSIONAL

LICENSE No.

DATE

CERTIFICATION NUMBER: 0000002061 ISSUED: 11/02/2023 EXPIRES: 11/02/2026

THE FOLLOWING COMPREHENSIVE MONITORING PROGRAM HAS BEEN PREPARED BY A PROFESSIONAL LICENSED BY THE STATE OF GEORGIA IN THE FIELD OF ENGINEERING, ARCHITECTURE, LANDSCAPE ARCHITECTURE, FORESTRY, GEOLOGY, OR LAND SURVEYING.

III. TOPOGRAPHIC INFORMATION FOR THIS PROJECT IS INCLUDED ON THE PLAN SHEETS. IV. NARRATIVE DESCRIPTION OF ALL RECEIVING WATERS, WITH LOCATIONS OF ALL SAMPLING LOCATIONS AND

TWO MONITORING POINTS WILL BE SAMPLED FOR THIS PROJECT. THE MONITORING POINTS ARE LOCATED MONITORING POINT No. 1: LOCATED AT THE DISCHARGE OF THE 15" STORM DRAINS UNDER THE PRIVATE

ROAD (APPROXIMATE SEWER STATION 6+00). MONITORING POINT No. 2: LOCATED AT THE DISCHARGE OF THE 36" STORM DRAIN UNDER THE NEW

PRIVATE ROAD (APPROXIMATE SEWER STATION 18+00). THE APPROXIMATE LOCATION OF THE MONITORING POINTS ARE SHOWN ON THE PLANS.

SAMPLE ANALYSIS METHOD

APPENDIX B NTU VALUE: 75

SAMPLE ANALYSIS SHALL BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136, THE GUIDANCE DOCUMENT TITLED "NPDES STORMWATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND OR ANY OTHER GUIDANCE DOCUMENTS THAT MAY BE

 ${\sf VI}$. The NTU SELECTION IS MADE USING THE TABLES IN APPENDIX B OF THE GENERAL PERMIT AND THE INFORMATION USED IN THE NOI FOR THE SIZE AND THE SURFACE WATER DRAINAGE AREA.

SURFACE WATER DRAINAGE AREA: 0.2 SQUARE MILES SITE DISTURBED AREA: 1.8 ACRES

WARM WATER (SUPPORTING WARM WATER FISHERIES) SURFACE WATER DRAINAGE AREA, SQUARE MILES									
	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+	
1.00-10	75	150	200	400	750	750	750	750	
10.01-25	50	100	100	200	300	500	750	750	
25.01-50	50	50	100	100	200	300	750	750	
50.01-100	50	50	50	100	100	150	300	600	
100.01+	50	50	50	50	50	100	200	100	

RAINFALL DATA

RAINFALL INFORMATION SHALL BE LOGGED DAILY BY THE OPERATOR. THE RAINFALL DATA SHALL BE LOGGED AT THE SITE, NOT ANOTHER LOCATION.

ALL SAMPLES TAKEN SHALL BE GRAB SAMPLES. FOR THIS PROJECT, SAMPLES SHALL BE COLLECTED USING A MANUAL METHOD. SAMPLE CONTAINERS SHALL BE LABELED PRIOR TO COLLECTING THE SAMPLES. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER. SAMPLES SHOULD BE TAKEN IN A LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JAR. THE JAR SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.

MANUAL SAMPLING SHALL BE UTILIZED. SAMPLES REQUIRED BY THE PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. SAMPLES ARE NOT REQUIRED TO BE COOLED. ALL SAMPLES TAKEN SHOULD BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATERS AND/OR THE STORMWATER OUTFALLS.

X. <u>SAMPLING POINTS: SEE PARAGRAPH IV, ABOVE</u>

XI. SAMPLING REQUIREMENTS

THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THIS PARAGRAPH SHALL NOT APPLY TO ANY LAND DISTURBANCE ASSOCIATED WITH THE CONSTRUCTION OF SINGLE-FAMILY HOMES WHICH ARE NOT PART OF A SUBDIVISION OR PLANNED COMMON DEVELOPMENT UNLESS FIVE (5) ACRES OR MORE WILL BE DISTURBED. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

A. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:

A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE SITE OR THE STAND ALONE CONSTRUCTION; (A) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION. INTO WHICH THE STORM WATER IS DISCHARGED AND (B) THE RECEIVING WATER AND/OR OUTFALL SAMPLING LOCATIONS. WHEN THE PERMITTEE HAS CHOSEN TO USE A USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS NOT SHOWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION OF THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP FROM WHERE THE STORM WATER(S) ENTERS THE RECEIVING WATER(S) TO THE POINT WHERE THE RECEIVING WATER(S) COMBINES WITH THE FIRST BLUE LINE STREAM SHOWN ON THE USGS TOPOGRAPHIC MAP;

- 2. A WRITTEN NARRATIVE OF SITE SPECIFIC ANALYTICAL METHODS USED TO COLLECT, HANDLE AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING LOCATION;
- 3. WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE MONITORED, A RATIONALE MUST BE INCLUDED FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX B. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES); AND
- 4. ANY ADDITIONAL INFORMATION EPD DETERMINES NECESSARY TO BE PART OF THE PLAN. EPD WILL PROVIDE WRITTEN NOTICE TO THE PERMITTEE OF THE INFORMATION NECESSARY AND THE TIME LINE FOR SUBMITTAL
- B. SAMPLE TYPE. ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.
- 1. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES
- 2. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
- 3. LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
- 4. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
- 5. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

XI. SAMPLING REQUIREMENTS (continued)

C. SAMPLING POINTS.

- 1. FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:
- a. THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
- b. THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
- c. IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNEL(S).
- d. CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL
- e. THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
- f. THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
- . PERMITTEES DO NOT HAVE TO SAMPLE SHEET FLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION. STABILIZED SHALL MEAN. FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER. OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPE AREAS, OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING TARGET CROP OF PERENNIALS APPROPRIATE FOR THE REGION.
- GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4.., WHICHEVER IS APPLICABLE.

SAMPLING FREQUENCY.

1. THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER AND OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

2. HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT). OR ARE BEYOND THE PERMITTEE'S CONTROL. THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.

- 3. SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING EVENTS:
- a. FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS* AS DEFINED IN THIS PERMIT. AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;
- b. IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS. AS DEFINED IN THIS PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED BUT PRIOR TO SUBMITTAL OF A N O T. IN. THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER
- AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE. IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED
- d. WHEN SAMPLING PURSUANT TO (a), (b) OR (c) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.a.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (a), (b) OR (c) ABOVE,
- e. EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT. THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.

*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AT ANY TIME OF THE DAY OR WEEK.

XII. <u>INSPECTIONS</u>

A. SITE INSPECTIONS BY LICENSED PROFESSIONAL (SITE DESIGN ENGINEER)

1. FOR STAND ALONE PROJECTS THAT BEGIN CONSTRUCTION ACTIVITY AFTER THE EFFECTIVE DATE OF THIS PERMIT. THE PRIMARY PERMITTEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION. SEDIMENTATION AND POLLUTION CONTROL PLAN. EXCEPT WHEN THE PRIMARY PERMITTEE HAS REQUESTED IN WRITING AND EPD HAS AGREED TO AN ALTERNATE DESIGN PROFESSIONAL, TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WHICH THE DESIGN PROFESSIONAL DESIGNED WITHIN SEVEN (7) DAYS AFTER INSTALLATION. THE DESIGN PROFESSIONAL SHALL DETERMINE IF THESE BMPS HAVE BEEN INSTALLED AND ARE BEING MAINTAINED AS DESIGNED. THE DESIGN PROFESSIONAL SHALL REPORT THE RESULTS OF THE INSPECTION TO THE PRIMARY PERMITTEE WITHIN SEVEN (7) DAYS AND THE PERMITTEE MUST CORRECT ALL DEFICIENCIES WITHIN TWO (2) BUSINESS DAYS OF RECEIPT OF THE INSPECTION REPORT FROM THE DESIGN PROFESSIONAL UNLESS WEATHER RELATED SITE CONDITIONS ARE SUCH THAT ADDITIONAL TIME IS REQUIRED.

2. THE PRIMARY PERMITTEE SHALL CORRECT ANY DEFICIENCIES IDENTIFIED BY THE LICENSED PROFESSIONAL WITHIN TWO BUSINESS DAYS OF INSPECTION AND AS NOTED IN WRITTEN INSPECTION

3. THE PRIMARY PERMITTEE SHALL CORRECT ANY DEFICIENCIES IDENTIFIED BY THE LICENSED PROFESSIONAL WITHIN TWO BUSINESS DAYS OF INSPECTION AND AS NOTED IN WRITTEN INSPECTION

B. PRIMARY PERMITTEE/OWNER/PRIMARY CONTRACTOR REQUIREMENTS

- 1. EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS
- 2. MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY. NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.
- 3. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING A LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY. NON-WORKING SUNDAY ORANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST):(A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE. THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OF ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- 4. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
- 5. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING
- 6. A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

1. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD, REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT UPON WRITTEN. NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORMWATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

- 2. ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION: a. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS; b. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND
 - MEASUREMENTS:
 - THE DATE(S) ANALYSES WERE PERFORMED; d. THE TIME(S) ANALYSES WERE INITIATED; e. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES:
 - REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED:
 - g. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES. ETC., USED TO DETERMINE THESE RESULTS:
 - h. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND i. CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.
- 3. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

XIV. RETENTION OF RECORDS

- 1. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH
- a. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
- b. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS
- c. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT
- d. A COPY OF ALL MONITORING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
- e. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS f. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN
- ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND g. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(1)(C) OF THIS PERMIT.
- COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, REPORTS, PLANS, SAMPLING REPORTS, (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

XV. REPORT SUBMITTAL

ALL NOTICE OF INTENTS; NOTICE OF TERMINATIONS; CERTIFICATIONS; EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS; COMPREHENSIVE MONITORING PROGRAMS; REPORTS AND ANY OTHER INFORMATION SHALL BE SUBMITTED TO THE GEORGIA EPD ONLINE SYSTEM (GEOS) FOR PERMITTING, COMPLIANCE AND FACILITY INFORMATION.

1. EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST

Provide the name, address, email address, and phone number of Primary Permittee.

Note total and disturbed acreages of the project or phase under construction.

Descriptions of the nature of construction activity and existing site conditions.

NOTE: SUCCESSFUL BIDDER (CONTRACTOR) SHALL BECOME PRIMARY PERMITTEE.

PROJECT NAME: JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT

etc. which may be affected.

IV.D.6.c.(3). page 37 of the permit as applicable. *

must be certified by the design professional." *

and practices prior to land disturbing activities."

the construction site is prohibited. *

C1-C11 Y 37 Graphic scale and North arrow.

Proposed Contours

C11 Y 47 Soil series for the project site and their delineation.

C1-C8 Y 48 The limits of disturbance for each phase of construction.

and Sediment Control in Georgia.

checklist items would be N/A.

25 Provide BMPs for the remediation of all petroleum spills and leaks.

C9 Y 30 Provide complete requirements of Inspections and record keeping by the Primary Permittee.

27 Description of practices to provide cover for building materials and building products on site. *

31 Provide complete requirements of Sampling Frequency and Reporting of sampling results.

Description of analytical methods to be used to collect and analyze the samples from each location.

and final BMPs are the same, the Plan may combine all BMPs into a single phase plan. *

32 Provide complete details for Retention of Records as per Part IV.F. of the permit. *

34 Appendix B rationale for NTU values at all outfall sampling points where applicable. *

C1-C11 Y 38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

1": 400' Centerline Profile

Existing Contours USGS 1": 2000' Topographical Sheets

Issuing Authority. Clearly note and delineate all areas of impact.

Delineation and acreage of contributing drainage basins on the project site.

Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.

Georgia. Use uniform coding symbols from the Manual Chapter 6, with legend.

C1-C8 Y 42 Delineation of all State Waters and wetlands located on or within 200 feet of the project site.

Document found at www.gaswcc.georgia.gov.

28 Description of the practices that will be used to reduce the pollutants in storm water discharges. '

C10 Y 29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial

construction operations have been completed. *

without first acquiring the necessary variances and permits."

C10 Y 16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.

NAME AND EMAIL OF PERSON FILLING OUT CHECKLIST: JOE WOOD jwood@carterenggrp.com

the land-disturbing activity was permitted.

LOCAL ISSUING AUTHORITY: MACON WATER AUTHORITY

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST INFRASTRUCTURE CONSTRUCTION PROJECTS GAR 100002

TO BE SHOWN ON THE ES&PC PLAN

Level II certification number issued by the Commission, signature and seal of the certified design professional

3 The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.

The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed. Permit IV.D.1. pg 28

SWCD: OCMULGEE

The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which

Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed. The Level II certification

must be issued to the Design Professional, after completion of a GSWCC approved course, and whose signature and seal are on the Plan.

Provide the GPS locations of the beginning and end of the infrastructure project. Give the Latitudes and Longitudes in decimal degrees.

Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands,

Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV

Design professional certification statement and signature that the Permittee's ES&PC Plan provides for representative sampling as stated on Part

Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect and certify the installation of the initial

Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured

from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line

Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component

18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *

19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures

20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide

21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."

N/A 22 Any construction activity which discharges storm water into a Biota Impaired Stream Segment, or within 1 linear mile upstream of and within the

N/A 23 If a TMDL Implementation Plan for sediment has been finalized for the Biota Impaired Stream Segment (identified in Item 22 above) at least six

for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."

same watershed as any portion of a Biota Impaired Stream Segment, must comply with Part III.C. of the permit. Include the completed Appendix 1

of this checklist with at least 4 of the chosen BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. *

months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation

perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, grading, infrastructure, temporary and

35 Delineate all sampling locations on all phases of the Plan, and perennial and intermittent streams and other water bodies into which storm water is

requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will

be no mass grading and the initial sediment storage requirements and initial perimeter control BMPs, intermediate grading and drainage BMPs,

Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Refer to the Alternative BMP Guidance

46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate at all storm

49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or

50 Location of Best Management Practices that are consistent with, and no less stringent than, the Manual for Erosion and Sediment Control in

** If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the *

excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land

disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls

when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided.

structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When

A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for

discharging from sediment basins and impoundments, Permittees are required to utilize outlet structures that withdraw water from the surface,

unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be

Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion

Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and

mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic

36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage

N/A 39 Use of Alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design

N/A Use of Alternative BMP for application to the Equivalent BMP List. Refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia

C1-C8 N/A 41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State Waters and any additional buffers as required by the Local

45 Estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.

24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Include statement that washout of the drum at

Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after

12 Design professional's certification statement and signature that the Permittee's ES&PC Plan provides for an appropriate and comprehensive

Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.

Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.

system of BMPs and sampling to meet permit requirements as stated on Part IV page 21 of the permit. *

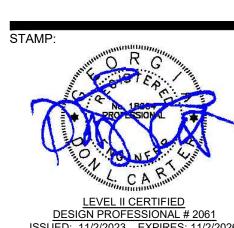
sediment storage requirements and perimeter control BMPs within 7 days after installation." *

ADDRESS: JOE TAMPLIN BLVD

DATE ON PLANS: OCTOBER 31, 2024

6310 Peake Road, Suite 200 Macon, GA 31210 (478) 219-2600





RELEASE DATES: REV # DATE DESCRIPTION



CLIENT:

MACON WATER AUTHORITY MACON, GA

JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT

MACON, GA 31216 DRAWN BY: CHECKED BY: CADD PROJECT NUMBER: | DATE M0175.080 10/31/2024 GRAPHIC SCALE:

SCALE:

DRAWING TITLE:

NPDES COMPREHENSIVE MONITORING PROGRAM NOTES

DRAWING NUMBER:

AS SHOWN

TIME N.P.D.E.S. NOTICE OF INTENT IS FILED.)

CERTIFICATION STATEMENTS:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION.'

"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA," (MANUAL) PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100001." "I UNDERSTAND THAT AS THE PLAN PREPARER, RETAINED BY THE PRIMARY PERMITTEE, I MUST VISIT THE SITE WITHIN 7 DAYS AFTER INSTALLATION ONCE THE CONSTRUCTION ACTIVITIES COMMENCE, TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S." "THE OWNER/DEVELOPER AND ENGINEER HAVE REVIEWED THE APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS REGARDING DEVELOPMENT ACTIVITIES ADJACENT TO FLOODPLAINS, STATE WATERS AND WETLANDS AND HAVE DETERMINED THAT THIS DEVELOPMENT PLAN SATISFIES THE STANDARDS PRESENTED IN ALL APPLICABLE REGULATIONS."

"I CERTIFY THAT GEORGIA'S 2018 305(b)/303(d) LIST DOCUMENTS HAVE BEEN CONSULTED TO DETERMINE IF SITE DISCHARGES TO AN IMPAIRED STREAM SEGMENT OR WITHIN 1 MILE UPSTREAM OF A BIOTA IMPAIRED STREAM SEGMENT."



MAINTENANCE STATEMENT:

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

14 DAY DISTURBANCE NOTE:

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

EROSION CONTROL NOTE:

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.

FLOODPLAIN NOTE:

NO PORTION OF THE PROPOSED PROJECT IS LOCATED IN A 100-YEAR FLOOD PLAIN IN ACCORDANCE WITH FIRM MAP 13021C0170G, EFFECTIVE DATE JUNE 7, 2017 FOR MACON- BIBB COUNTY, GA.

WETLANDS NOTE:

JURISDICTIONAL WETLANDS ARE SHOWN ON THE PLANS. THE PROJECT WILL NOT ENCROACH ON JURISDICTIONAL WETLANDS

STATE WATERS NOTE:

ALL STATE WATERS AND STATE WATERS BUFFERS LOCATED ON OR WITHIN 200 FEET OF THE PROJECT AREA HAVE BEEN DELINEATED AND SHOWN ON THE CONSTRUCTION PLANS.

STATE WATERS BUFFER REQUIREMENTS:

-ALL STATE WATERS BUFFERS AND UNDISTURBED BUFFERS SHALL BE FIELD LOCATED. STAKED AND FLAGGED OR MARKED WITH "TENZAL" OR SIMILAR TYPE FENCING AND SHALL BE SUBMITTED TO THE COUNTY FOR

APPROVAL PRIOR TO GRADING. -EXISTING VEGETATION SHALL BE PRESERVED WITHIN ALL BUFFER AREAS.

-ANY CONTEMPLATED DISTURBANCES SHALL FIRST BE BROUGHT TO THE ATTENTION OF THE MACON WATER AUTHORITY INSPECTOR AND FORMAL APPROVAL SECURED PRIOR TO INITIATING ACTIVITY WITHIN THE REQUIRED BUFFER AREAS.

-NO BUFFER ENCROACHMENTS OR BUFFER VARIANCES ARE NECESSARY FOR THIS PROJECT. -NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST

ACQUIRING THE NECESSARY VARIANCES AND PERMITS. PROJECT RECEIVING WATERS:

STORMWATER FLOWS FROM THIS SITE TO AN UNNAMED TRIBUTARY OF STONE CREEK.

ADJACENT PROPERTIES:

THE SEWER ROUTE IS ALONG COUNTY OWNED AND PRIVATE PROPERTY. EASEMENTS SHALL BE SECURED. FOR PORTIONS TO BE LOCATED ON PRIVATE PROPERTY.

EXISTING LAND USE: UNDEVELOPED COMMERCIAL PROPERTY, RESIDENTIAL, AND AGRICULTURAL.

PROPOSED PROJECT: THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF APPROXIMATELY 3,308 L.F. OF 18 INCH SANITARY SEWER.

OWNER/DEVELOPER: MR. MICHEL WANNA

MACON WATER AUTHORITY 537 HEMLOCK STREET MACON. GA 31202 OFFICE: (478) 464-5636 EMAIL: <u>mwanna@maconwater.org</u>

Joel Herndon, Chief Inspector Macon Water Authority 537 Hemlock Street Macon, GA 31202 Phone: 478-464-5639 Email: jherndon@maconwater.org

PROJECT ACREAGE: 1.8 ACRES

CRITICAL AREAS ONSITE: POTENTIAL ONSITE EROSION AND SEDIMENT PROBLEMS INCLUDE FILL SLOPES AND STORMWATER DISCHARGE FROM STORM SEWERS. SEDIMENT BARRIER SILT FENCING WILL BE PLACED ALONG THE PERIMETER OF THE SITE AT CRITICAL LOCATIONS. BERMS, SWALES AND DIVERSION DITCHES WILL BE EMPLOYED TO PREVENT RUNOFF FROM WASHING OVER SLOPES. RIP RAP STONE WILL BE USED AT STORM DRAIN OUTLETS. CONSTRUCTION ACTIVITIES AT THIS SITE SHOULD HAVE NO ADVERSE EFFECTS TO DOWNSTREAM PROPERTIES.

AMENDMENTS / REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP's WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT

DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION:

DATE OF INSPECTION _____

I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLAN ON THE DATE OF INSPECTION.

0000002061 DON L. CARTER, P.E. CERTIFICATION # GSWCC LEVEL II DESIGN PROFESSIONAL

INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN:

THESE DISCREPANCIES MUST BE ADDRESSED IMMEDIATELY AND A RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED. THE DESIGN PROFESSIONAL WHO PREPARED THE ES & PC PLAN IS TO INSPECT THE

INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER

INITIAL PHASE EROSION CONTROL NOTES:

CONTROL BMP's WITHIN 7 DAYS AFTER INSTALLATION.

THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND AREA STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN MANAGEABLE QUANTITIES.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.

MMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.

TYPE "S" SILT FENCE SHOULD BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA AS SHOWN ON THE PLAN. THE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE MANUAL FOR EROSION CONTROL IN GEORGIA, TABLE 6-20.2. THE SILT FENCE SHOULD BE KEPT ERECT AT ALL TIMES AND REPAIRED WHEN REQUESTED BY THE SITE INSPECTOR OR THE PROJECT DESIGN PROFESSIONAL OF RECORD. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES ½ HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED

AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITY SHALL OCCUR UNTIL THE PROJECT DESIGN PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.

AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT PONDS AND DIVERSION DIKES AS SHOWN ON THE PLAN TO CONTROL EROSION AND STORMWATER RUNOFF.

THE CONTRACTOR CAN UTILIZE MULCHED CLEARED TREES AS BARRIER BRUSH SEDIMENT CONTROL IN AREAS SHOWN ON PLAN WHERE INITIAL GRADING ACTIVITIES WILL NOT OCCUR.

NO BURN PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND THE GOVERNING AUTHORITIES. IF BURNING IS NOT PERMITTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING FROM THE SITE ALL WASTE MATERIALS AND MATERIALS FROM CLEARING AND GRUBBING OPERATIONS.

NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE CONSTRUCTED AS SHOWN ON THE INITIAL PHASE EROSION CONTROL PLAN.

NO BURY PITS SHALL BE PERMITTED ON SITE.

INTERMEDIATE PHASE EROSION CONTROL NOTES:

EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE

EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID ENCROACHMENT INTO THE BUFFER AREAS.

AFTER PRELIMINARY GRADING ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASINS AND DIVERSION DIKES AS SHOWN ON THE PLAN. THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT POND UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE PONDS WHEN IT REACHES THE 1/3 DEPTH OF BASIN. SEE SEPARATE DETAILS FOR ADDITIONAL

CUT AND FILL SLOPES ARE NOT TO EXCEED "2.5H:IV"

ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFERS. SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING OR BLANKETS. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

TYPE "NS" SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS. SEE SEPARATE

DETAILS FOR ADDITIONAL INFORMATION. INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL STORM STRUCTURES AS THEY ARE CONSTRUCTED. SEE PLAN VIEW FOR SPECIFIC TYPE AND SEPARATE DETAILS FOR ADDITIONAL INFORMATION

ON TYPE OF INLET PROTECTION SPECIFIED. SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED AND STABILIZED SO IT WILL NOT ENTER THE INLETS.

STORM DRAIN OUTLET PROTECTION SHALL BE PLACED AT ALL OUTLET HEADWALLS AS SOON AS THE HEADWALL IS CONSTRUCTED. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

ALL GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.

FINAL PHASE EROSION CONTROL NOTES:

THE CONTRACTOR SHALL MAINTAIN ALL SEDIMENT PONDS AND EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE PONDS WHEN IT REACHES THE HALF WAY POINT ON THE RISER.

AFTER CURBING, GRADED AGGREGATE BASE, AND PAVEMENT HAS BEEN INSTALLED, ALL INLET SEDIMENT TRAPS ON CATCH BASINS AND CURB INLETS SHALL BE REMOVED AND REPLACED WITH CURB FILTER INLET PROTECTION. SEE SEPARATE DETAIL FOR ADDITIONAL INFORMATION.

ALL ROADWAY SHOULDERS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS

UPON COMPLETION OF THE PROJECT AND RECEIPT OF CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES (SILT FENCING, MULCH BARRIERS, TEMPORARY PIPING AND STRUCTURES, CONSTRUCTION EXIT PADS, TEMPORARY SEDIMENT TRAPS, ETC.) AND DISPOSE OF THEM UNLESS OTHERWISE NOTED ON PLANS.

SOIL DATA											
NAME	SYMBOL	DEPTH	USDA TEXTURE	PERMEABILITY (in./hr.)	REACTION pH	EROSION FACTOR (K/T)					
AILEY	AGB	0-30 30-50 50-65	LOAMY SAND SANDY LOAM, SANDY CLAY SANDY LOAM SANDY CLAY LOAM	6.0-20 0.6-2.0 0.06-0.2	4.5-6.5 4.5-5.5 4.5-5.5	0.20 4 0.24 0.17					
COWARTS	CwB	0-8 8-19 19-65	SANDY LOAM SANDY CLAY LOAM SANDY LOAM SANDY CLAY LOAM	2.0-6.0 0.6-2.0 0.06-0.2	4.5-5.5 4.5-5.5 4.5-5.5	0.24 3 0.28 0.24					
ORANGEBURG	OcB OcC	0-8 8-60	SANDY LOAM SANDY CLAY LOAM	2.0-6.0 0.6-2.0	4.5-6.0 4.5-5.5	0.24 5 0.24					
OSIER	Os	0-4 4-20 20-60	LOAMY SAND SAND, LOAMY SAND,LOAMY FINE SAND SOURSE SAND, SAND, FINE SAND	6.0-20 6.0-20 >20	4.5-6.0 4.5-6.0 4.5-6.0	 					
VAUCLUSE	VeD	0-8 8-23 23-60	LOAMY SAND SANDY CLAY LOAM SANDY LOAM	6.0-20 0.6-6.0 0.06-0.2	4.5-5.5 4.5-5.5 4.0-5.5	0.17 3 0.20 0.17					

EROSION & SEDIMENTATION, & POLLUTION CONTROL NOTES:

- SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND LOCAL AND STATE REQUIREMENTS AND SPECIFICATIONS MUST MEET, AT A MINIMUM, GUIDELINES SET FORTH IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA." FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES CAN RESULT IN CONSTRUCTION BEING HALTED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AS DIRECTED BY THE ON SITE INSPECTOR OR THE CIVIL ENGINEER.
- EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE, CERTIFIED PERSONNEL SHALL INSPECT (A) ALL AREAS WHERE PETROLEUM PRODUCTS ARE STORED, USED OR HANDLED AND (B) ALL
- A SITE INSPECTION SHALL BE CONDUCTED WITHIN 24 HOURS OF THE END OF ANY RAINFALL EVENT THAT IS GREATER THAN OR EQUAL TO 0.5-IN., AND AT LEAST, EVERY SEVEN (7) DAYS. EACH DEVICE IS TO BE MAINTAINED OF REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ON HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

- ANY DEFICIENCIES IDENTIFIED DURING THE INSPECTION OF BMP's SHALL BE CORRECTED WITHIN SEVEN
- (7) DAYS OF THE INSPECTION.
- EACH DAY THERE IS A FAILURE TO PROPERLY INSTALL AND MAINTAIN ES&PC BMP's CONSTITUTES A VIOLATION OF THE NPDES PERMIT. A VIOLATION OF THE TURBIDITY LIMITS FOR RECEIVING STREAMS DEFINED BY THE NPDES PERMIT SHALL CONSTITUTE A SECOND VIOLATION OF THE PERMIT.
- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
- IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES AND EXITS, ALL PERIMETER EROSION CONTROL DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION. THE LOCATION OF CERTAIN EROSION CONTROL DEVICES MAY REQUIRE ALTERING FROM THE LOCATIONS SHOWN ON THE DRAWING IF DRAINAGE PATTERNS DURING CONSTRUCTION DIFFER FROM THE FINAL GRADING PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. AT ALL TIMES, 67 CUBIC YARDS OF SEDIMENT STORAGE MUST BE AVAILABLE FOR EACH ACRE OF DISTURBED LAND.
- -- ALL B.M.P. DEVICES, PRACTICES, AND MATERIALS SHALL BE DESIGNED AND INSTALLED TO WITHSTAND EFFECTS OF A MINIMUM 25-YEAR STORM EVENT.
- DIVERSION DITCHES, BERMS AND TEMPORARY DOWN DRAINS SHALL BE USED DURING GRADING OPERATIONS TO PROVIDE SEDIMENT CONTROL FOR DISTURBED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF THESE MEASURES DURING THE VARIOUS PHASES OF GRADING. THESE MEASURES MAY OR MAY NOT BE INDICATED ON THE DRAWINGS. - SILT MATERIALS SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE HALF THE
- HEIGHT OF SILT BARRIER. NO STAGING AREAS, MATERIAL STORAGE, CONCRETE WASH OUT AREAS, OR DEBRIS BURN AND BURIAL
- HOLES SHALL BE LOCATED WITHIN 300 FEET OF DESIGNATED TREE PROTECTION AREAS. . SEDIMENT BARRIERS SHALL MEET D.O.T. STANDARDS AND SPECIFICATIONS AND SHALL BE INSTALLED AS DETAILED ON THE DRAWINGS.
- CONSTRUCT CONSTRUCTION EXITS AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. EXIT SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE FOLLOWING:

REGATE SIZE: WILL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION ASTM D448 SIZE #1 (1.5 TO 3.5 INCH STONE). STONE SHALL BE UNDERLAYED WITH GEOTEXTILE

PAD THICKNESS: 6-INCH MINIMUM.

PAD WIDTH: AT AT MINIMUM, SHOULD EQUAL FULL WIDTH OF ALL POINTS OF VEHICULAR EGRESS, BUT NOT LESS THAN 20 FEET WIDE AND 50 FEET LONG.

WASHING: WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WASHING SHALL BE PERFORMED ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT FRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1.5-3.5 INCH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

- ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE INSTALLED BY CONTRACTOR IF DEEMED NECESSARY BY ON-SITE INSPECTION.
- ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATION FOR THIS PROJECT SHALL CONSIST OF HE FOLLOWING: THE GROUND PREPARATION, SEEDING, MULCHING AND HYDROSEEDING OF ALL DISTURBED AREAS IN THE PROJECT AREA IN ACCORDANCE WITH THE FOLLOWING SCHEDULE. GROUND PREPARATION SEEDING, MULCHING AND HYDROSEEDING METHODS SHALL CONFORM TO THE SPECIFICATIONS.
- MULCH, TEMPORARY VEGETATION, OR PERMANENT (PERENNIAL) VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE
- CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. SEE MULCHING TABLE. TEMPORARY SEEDING: SHALL BE USED ON AREAS THAT WILL BE UNDISTURBED FOR LESS THAN SIX MONTHS. SEE GRASSING TABLE.
- THAT WILL BE UNDISTURBED FOR MORE THAN SIX MONTHS. SEE GRASSING TABLE AND MULCHING SCHEDULE. EROSION CONTROL BLANKETS OR SODDING SHALL BE USED ON (1) ALL SLOPES STEEPER THAN 2 1/2:1

PERMANENT VEGETATION: SHALL BE USED ON AREAS THAT ARE AT FINAL GRADE OR ON AREAS

- AND GREATER THAN OR EQUAL TO 10 FEET IN HEIGHT, (2) ALL CONCENTRATED FLOW AREAS, AND (3) CUTS AND FILLS ADJACENT TO STATE WATERS. REFER TO DRAWINGS FOR AREAS REQUIRING THESE . CONTRACTOR SHALL MAINTAIN ON PROJECT SITE DIRECTIONS FOR NECESSARY ACTIONS SHOULD
- ANY FUEL OR HAZARDOUS CHEMICAL SPILL OCCUR AT THE PROJECT SITE OR DURING TRANSPORTATION OPERATIONS TO OR FROM THE PROJECT SITE. 6. CONTRACTOR SHALL EMPLOY APPROPRIATE MEASURES TO CONTROL DUST WITH THE UNDERSTANDING
- WATER USE RESTRICTIONS COULD BE IMPOSED DURING SOME OR ALL PHASES OF CONSTRUCTION.
- PREPARATION OF ES&PC PLAN AND ACTIVITIES OF CONTRACTOR SHALL BE IN COMPLIANCE WITH WASTE DISPOSAL. SANITARY SEWER. OR SEPTIC TANK REGULATIONS. 8 TEMPORARY MEASURES SUCH AS SILT FENCING SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR ONCE THE AREA DRAINING TO THE BMP HAS REACHED FINAL STABILIZATION. FINAL STABILIZATION MEANS THAT ALL LAND-DISTURBING ACTIVITIES HAVE BEEN COMPLETED AND THAT FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES. THE SOIL SURFACE IS

UNIFORMLY COVERED IN PERMANENT VEGETATION OR THAT EQUIVALENT PERMANENT STABILIZATION

- MEASURES (SUCH AS RIP RAP, GABIONS, PERMANENT MULCHES, OR GEOTEXTILES) HAVE BEEN 9. PERMANENT CONTROL STRUCTURES SHALL BE MAINTAINED BY THE CONTRACTOR FOR A PERIOD OF 1 YEAR FOLLOWING ACCEPTANCE OF THE PROJECT.
- 20. A COPY OF THE LDA PERMIT, APPROVED ES&PC PLAN, AND ALL REQUIRED NPDES DOCUMENTATION SHALL BE PRESENT ON THE SITE UNTIL A NOTICE OF TERMINATION IS FILED.

CONSTRUCTION SCHEDULE APPROX. STARTING DATE: MARCH 1, 2025 APPROX. COMPLETION DATE: JUNE 30, 2025 MTHS OF CONST ITEM DESCRIPTION SILT BARRIER INSTALLATION CLEARING AND GRUBBING INSTALL SANITARY SEWER MAIN STORM DRAINAGE TEMPORARY GRASSING FINAL GRASSING & REMOVAL OF TEMPORARY STRUCTURES MAINTENANCE OF EROSION CONTROL MEASURES NOTE: STARTING & COMPLETION DATES ARE APPROXIMATE AND NOT INTENDED TO BE CONTRACTUAL. THE INSTALLATION SOIL EROSION CONTROL MEASURES &

PRACTICES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH

LAND-DISTURBING ACTIVITIES.

REMEDIATION OF PETROLEUM SPILLS AND LEAKS

RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.

SOIL CLEANUP AND CONTROL PRACTICES

AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.

MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.

SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.

· ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS

REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL

· FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.

FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS. · FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAI 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED

WASTE DISPOSAL, SANITARY SEWER, AND/OR SEPTIC TANK REGULATIONS

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOB SITE SUPERINTENDENT, WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED, WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL SAFETY DATA SHEETS (MSDS'S) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS AN MSDS WILL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED AND ANOTHER COPY OF EACH MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.

THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THIS ESPCP AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTES WILL BE ALLOWED TO COME IN CONTACT WITH STORM WATER DISCHARGES. IF SUCH OCCURS, THE STORM WATER DISCHARGE WILL BE CONTAINED ONSITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORM WATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

SANITARY WASTES

A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED FOR EVERY TEN (10) WORKERS ON THE SITE. ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.

ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORM WATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMP'S MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORM WATER DISCHARGES. THE LOCATION OF SANITARY WASTE UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE, BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED.

SANITARY SEWER WILL BE PROVIDED BY MUNICIPAL AUTHORITY/SEPTIC SYSTEM AT THE COMPLETION OF

PRACTICES TO REDUCE POLLUTANTS IN STORM WATER DISCHARGE PRODUCT SPECIFIC PRACTICES

PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS SHALL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ONSITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS SHALL BE LOCATED AWAY FROM STATE WATER. NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS SHALL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS. PAINTS/FINISHES/SOLVENTS - ALL PRODUCTS SHALL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS

WHEN NOT IN USE. EXCESS PRODUCT SHALL NOT BE DISCHARGED TO THE STORM WATER COLLECTION

BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS SHALL

CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS SHALL BE ALLOWED TO WASH OUT OR DISCHARGE URPLUS CONCRETE OR DRUM WASH WATER ONSITE. CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES. HOPPERS AND THE REAR OF VEHICLES SHALL BE CONTAINED IN A PIT OR TRENCH WITH NO MATERIAL LEAVING THE SITE OR IMPACTING VEGETATED OR NON-DISTURBED AREAS. CONTRACTOR SHALL DISPOSE OF MATERIAL BY BREAKING OF MATERIAL INTO SMALL AMOUNTS AND DISPOSING OF MATERIAL

OFF-SITE INTO A LANDFILL APPROVED TO ACCEPT SUCH WASTE. <u>ERTILIZER/HERBICIDES</u> - THESE PRODUCTS SHALL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OF IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.

1. BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS SHALL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES. SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL NOT BE DISCHARGED TO WATERS OF THE STATE OR BURIED ON SITE.

3. WASTE DISPOSAL CONTAINERS WILL BE PROVIDED BY CONTRACT HAULER FOR WASTE MATERIALS GENERATED DURING CONSTRUCTION. 4. THE COMPLETED FACILITY WILL HAVE WASTE DUMPSTERS THAT WILL BE SERVICED BY A CONTRACT HAULER COVER FOR BUILDING MATERIALS & PRODUCTS - FOR BUILDING MATERIALS, BUILDING PRODUCTS,

CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS PRESENT ON THE SITE, PROVIDE COVER (E.G. PLASTIC SHEETING, TEMPORARY ROOFS) TO MINIMIZE THE EXPOSURE OF THESE PRODUCTS TO PRECIPITATION AND TO STORMWATER, OR A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THESE AREAS. MINIMIZATION OF EXPOSURE IS NOT REQUIRED IN CASES WHERE EXPOSURE TO PRECIPITATION AND TO STORMWATER WILL NOT RESULT IN A DISCHARGE OF POLLUTANTS, OR WHERE EXPOSURE OF A SPECIFIC MATERIAL OR PRODUCT POSES LITTLE RISK TO STORMWATER CONTAMINATION (SUCH AS FINAL PRODUCTS AND MATERIALS INTENDED FOR OUTDOOR USE).

MEASURES TO BE INSTALLED DURING CONSTRUCTION TO CONTROL POLLUTANTS IN STORMWATER AFTER CONSTRUCTION

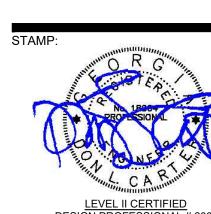
FOR THIS PROJECT, MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORMWATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED -PERMANENT VEGETATION WILL BE SUFFICIENT TO CONTROL STORMWATER POLLUTANTS AFTER CONSTRUCTION

OPERATIONS HAVE BEEN COMPLETED. NOTE: THE PERMITTEE IS ONLY RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF STORMWATER MANAGEMENT DEVICES PRIOR TO FINAL STABILIZATION OF THE SITE AND NOT THE OPERATION AND MAINTENANCE OF SUCH STRUCTURES AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. (PERMIT IV.D.3.B PG 29)

6310 Peake Road, Suite 200 Macon, GA 31210

(478) 219-2600





RELEASE DATES: REV # DATE DESCRIPTION



MACON WATER AUTHORITY MACON, GA

JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT

MACON, GA 31216 CHECKED BY: CADD PROJECT NUMBER: DATE M0175.080 10/31/2024

GRAPHIC SCALE: SCALE:

STORMWATER

PREVENTION NOTES

AS SHOWN

TEMPORARY VEGETATION/ MULCHING - DS2

LIME: APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE

FERTILIZER: APPLY 10-10-10 FERTILIZER AT A RATE OF 500 LBS PER ACRE

MULCHING RATES: FOR TEMPORARY VEGETATION

1 - DRY STRAW: 2 TONS PER ACRE 2 - DRY HAY: 2.5 TONS PER ACRE

3 - WOOD CELLULOSE MULCH OR WOOD PULP FIBER: 500 LBS PER ACRE

PERMANENT VEGETATION/ MULCHING - DS3

LIME: APPLY AGRICULTURAL LIME AT A RATE OF ONE TO TWO TONS PER ACRE AS RECOMMENDED BY SOIL TESTS.

FERTILIZER: APPLY 6-12-12 FERTILIZER AT A RATE OF 1500 LBS PER ACRE

MULCHING RATES: FOR PERMANENT VEGETATION

1 - DRY STRAW: 2 TONS PER ACRE 2 - DRY HAY: 2.5 TONS PER ACRE

3 - WOOD CELLULOSE MULCH OR WOOD PULP FIBER: 500 LBS PER ACRE NOTE: PERMANENT VEGETATION INDICATED ABOVE IS REQUIRED FOR ALL DISTURBED AREAS OF THE SITE EXCEPT:

 1 - AREAS TO BE SODDED 2 - SPORTS FIELDS WHICH ARE TO BE PERMANENTLY SEEDED WITH PRINCESS-77 BERMUDA 80 LBS./ACRE (SEE SPECS.)

POLYACRYLAMIDE - PM

CONTRACTOR SHALL INCORPORATE USE OF POLYACRYLAMIDE WITH ALL TEMPORARY AND PERMANENT GRASSING FOR AREAS THAT HAVE NOT BEEN STABILIZED WITH TEMPORARY OR PERMANENT COVER WITHIN 7 DAYS OF INITIAL DISTURBANCE.

ANIONIC PAM APPLICATION SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, RULES, OR REGULATIONS GOVERNING ANIONIC PAM. THE OPERATOR IS RESPONSIBLE FOR SECURING REQUIRED PERMITS.

USERS OF ANIONIC PAM SHALL OBTAIN AND FOLLOW ALL MATERIAL SAFETY DATA SHEET REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS.

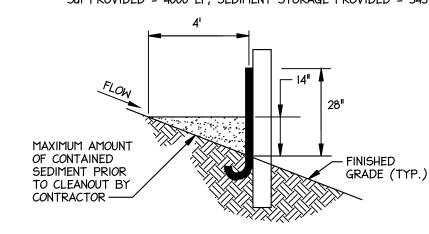
STRUCTURAL PRACTICES WRITTEN JUSTIFICATION REGARDING TEMPORARY SEDIMENT STORAGE DESCRIPTION

> FOR THIS PROJECT. THE USE OF TEMPORARY SEDIMENT BASINS. SEDIMENT BARRIERS OR EQUIVALENT CONTROLS TO PROVIDE 67 CUBIC YARDS OF TEMPORARY SEDIMENT STORAGE PER ACRE DRAINED, IS NOT ATTAINABLE. THIS IS DUE TO THE WORK BEING PERFORMED INSIDE UTILITY EASEMENTS TO AVOID ENCROACHMENT ON TO PRIVATE PROPERTY.

CHECKLIST ITEM 49

THE LONG, NARROW SHAPE OF THE DISTURBED AREA IS A COMMON TRAIT OF LONGITUDINAL INFRASTRUCTURE PROJECTS. THE GEOMETRIC AND TOPOGRAPHIC CONSTRAINTS DO NOT FACILITATE SEDIMENT COLLECTION AREAS SUFFICIENT TO CONTAIN THE REQUIRED SEDIMENT STORAGE VOLUME. SIL-FENCE WILL BE UTILIZED TO PREVENT RUNOFF OF SEDIMENT AND WILL PROVIDE LIMITED TEMPORARY SEDIMENT STORAGE. SEDIMENT WILL BE REMOVED FROM THIS BMP ON A REGULAR BASIS AND IN ACCORDANCE WITH THE DETAILS AND NOTES ON THE DRAWINGS.

> DA = REQUIRED SEDIMENT STORAGE = 114 AC x 67 CY/AC = 7638 C.Y. REQUIRED SdI = 7638 CY / 0.0859 CY/LF = 88,918 L.F.SdI PROVIDED = 4000 LF; SEDIMENT STORAGE PROVIDED = 343 C.Y.



SEDIMENT STORAGE PER L.F. OF SdI CALCULATION: $4^{1}L \times 1.16^{1} H \times 1^{1} W \times 0.5 = 2.32 \text{ C.F.} = 0.0859 \text{ C.Y./L.F.}$

CHECKLIST ITEM 49

SEDIMENT STORAGE BEHIND SILT FENCE

the construction site. It may be sandbags,

gravel, or a silt fence.

(SHOW STRIPING AND STORAGE AREAS) construction activities.

VEGETATIVE PRACTICES

bales of straw or hay, brush, logs and poles,

The practice of stripping off the more fertile

DESCRIPTION

disturbed areas where seedlings may not have

a suitable growing season to produce an

Establishing a temporary vegetative cover

with fast growing seedings on disturbed

Establishing a permanent vegetative cover

such as trees, shrubs, vines, grasses, or

Controlling surface and air movement of

dust on construction site, roadways and

Substance used to anchor straw or hay mulch by causing the organic material to

legumes on disturbed areas.

similar sites.

soil, storing it, then spreading it over the

disturbed area after completion of

Establishing temporary protection for

lerosion retardina cover

. STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. A 4 TO 6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL. 2. IF pH VALUE IS LESS THAN 6.0. LIME SHALL BE APPLIES AND INCORPORATED WITH THE TOPSOIL TO ADJUST THE pH TO 6.5 OR HIGHER. TOPSOILS CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED. 3. THE LOCATION OF TOPSOIL STOCKPILES SHOULD NOT OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.

4. STOCKPILES SHALL BE CONTAINED BY SEDIMENT BARRIERS TO PREVENT SEDIMENTATION ON ADJACENT AREAS. STOCKPILES SHALL

CONSTRUCTION SPECIFICATIONS

. TOPSOILING: WHEN TOPSOILING, MAINTAIN NEEDED EROSION CONTROL PRACTICE SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, LEVEL SPREADERS, WATERWAYS, SEDIMENT BASINS, ETC.

?. GRADING: GRADES ON THE AREAS TO BE TOP SOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED SHALL BE MAINTAINED. 3. LIMING: SOIL TESTS SHOULD BE USED TO DETERMINE THE pH OF THE SOIL. WHERE THE pH OF THE SUBSOIL IS 5.0 OR LESS OR COMPOSED OF HEAVY CLAYS, AGRICULTURAL LIMESTONE SHALL BE SPREAD AT THE RATE OF 100 POUNDS PER 1,000 SQUARE FEET. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE

I. BONDING: USE ONE OF THE FOLLOWING METHODS TO INSURE BONDING OF TOPSOIL:

OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

BE STABILIZED ON ACCORDANCE WITH SPECIFICATIONS FOR DSI, DS2, PM OR TB.

DETAIL

DETAIL

THIS PRACTICE SHALL BE EMPLOYED TO CONTROL SURFACE AND AIR MOVEMENT OF DUST ON SITE.

METHOD SHALL INCLUDE SPRAYING OF DISTURBED AREAS WITH WATER

ON A PERIODIC BASIS WHEN EXPOSED SOIL BECOMES DRY. CONTRACTOR SHALL MONITOR THESE AREAS AND APPLY DUST CONTROL BEFORE SOIL BECOMES EXCESSIVELY DRY.

SEDIMEN1

BARRIER

TOPSOILING

DISTURBED AREA

MULCHING ONLY)

DISTURBED AREA

TEMP SEEDING)

A. TILLING: AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUB GRADE SHALL BE LOOSENED BY DISCING OR SCARIFYING TO A DEPTH OF AT LEAST 3 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL.

B. TRACKING: PASSING A BULLDOZER OVER THE ENTIRE SURFACE AREA OF THE SLOPE TO LEAVE HORIZONTAL DEPRESSIONS. 5. APPLYING TOPSOIL:

A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITH WITHOUT DAMAGING SOIL STRUCTURE. B. A UNIFORM APPLICATION OF 6 INCHES (UNSETTLED) IS RECOMMENDED, BUT MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER OR LANDSCAPE ARCHITECT.

TOPSOILING

SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED: . DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING 2. CUTBACK ASPHALT (SLOW CURLING) SHALL BE APPLIED AT 1200 GALLONS PER ACRE

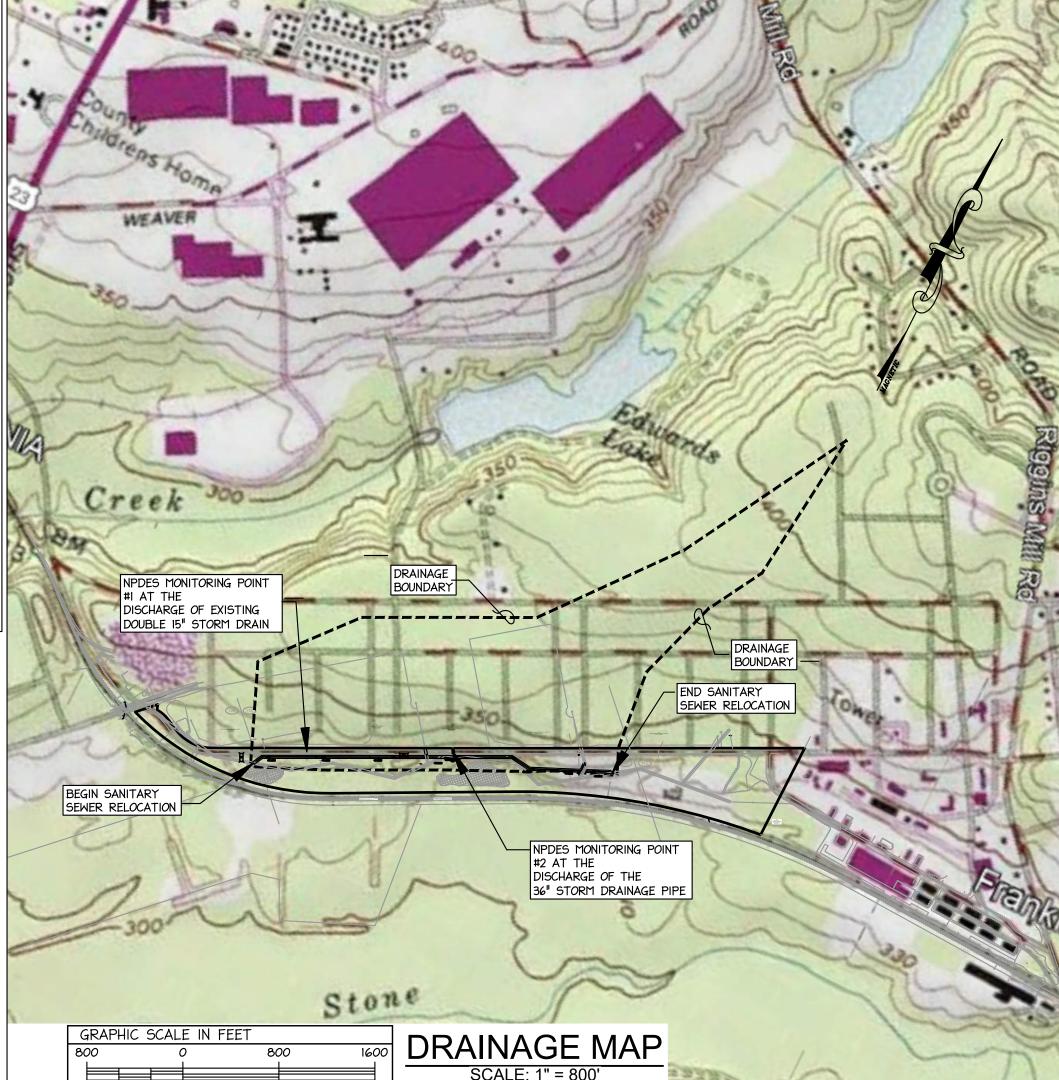
WHEN MULCH IS USED WITH OUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.

1. DRY STRAW OR HAY MULCH SHALL BE APPLIED UNIFORMLY BY HAND OR BY 2. CUTBACK ASPHALT SHALL BE APPLIED UNIFORMLY. CARE SHOULD BE TAKEN IN AREAS

OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF "TRACKING IN" OR DAMAGE TO SHOES,

STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK". DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MULCH IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. 2. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1). THE ASPHALT EMULSION GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH. TACKIFIERS ON BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT.

> DISTURBED AREA STABILIZATION (W/ MULCH ONLY)



<u>PLAN</u>

RIPRAP APRON

PIPE OUTLET TO WELL DEFINED CHANNEL

6310 Peake Road, Suite 200 Macon, GA 31210 (478) 219-2600

RELEASE DATES: REV # DATE DESCRIPTION

Macon Water Authority

JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT

MACON, GA 31216 CHECKED BY: CADD PROJECT NUMBER: DATE: M0175.080 10/31/2024 GRAPHIC SCALE:

SCALE:

DRAWING NUMBER:

PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL

La IS THE LENGTH OF THE RIPRAP

D = 1.5 TIMES THE MAXIMUM STONE

IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO

TOP OF THE BANK (WHICHEVER IS LESS).

DIAMETER BUT NOT LESTHAN 6".

AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE

A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE

RIPRAP AND THE SOIL FOUNDATION.

APRON.

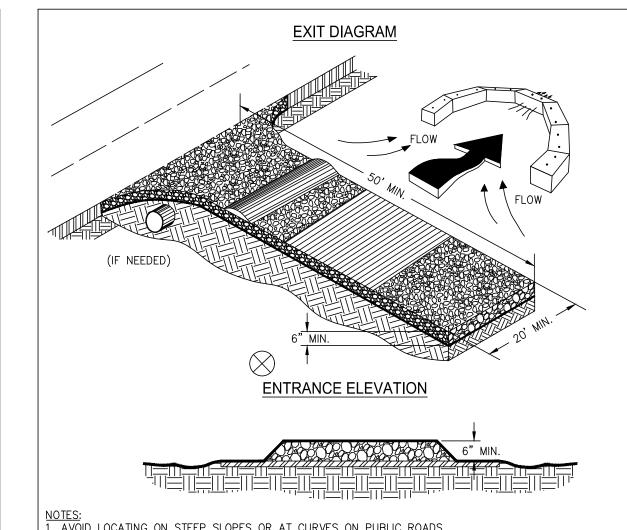
CLIENT: MACON WATER AUTHORITY MACON, GA

DRAWING TITLE:

STORMWATER POLLUTION PREVENTION DETAILS

BLANKET AND MATTING CROSS-SECTIONS <u>UPSTREAM TERMINAL</u> STEP 1: CUT TERMINAL SLOT. STEP 2: SNUG MAT INTO SLOT. STEP 2: WORK UPSTREAM ACROSS CHECK SLOT AND LAP BACK 15". A. STAKE MAT INTO SLOT. STEP 3: TUCK MAT LAP INTO SLOT 3. USE 1" X 3" PRESSURE TREATED AND STAKE. BOARD TO SPACE MAT AGAINST VERTICAL CUT. A. REVERSE MAT ROLL DIRECTION TO . BACKFILL AND PROGRESS UPSTREAM STREAM OVER REFILLED TERMINAL. B. PULL OUT TEMPORARY STAKES WHEN OVERLAY CHECK LOT. B. STAKE MAT TO ANCHOR TERMINAL. STAKE MAT DOWN TO ANCHOR C. PROGRESS UPSTREAM WITH ROLL. SEQUENTIAL ROLL RUN OUT IN PICTORAL VIEW OF TRANSVERSE SLOT START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND
PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE. USE 3" OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE 6. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS. <u>SLOPE STABILIZATION</u>

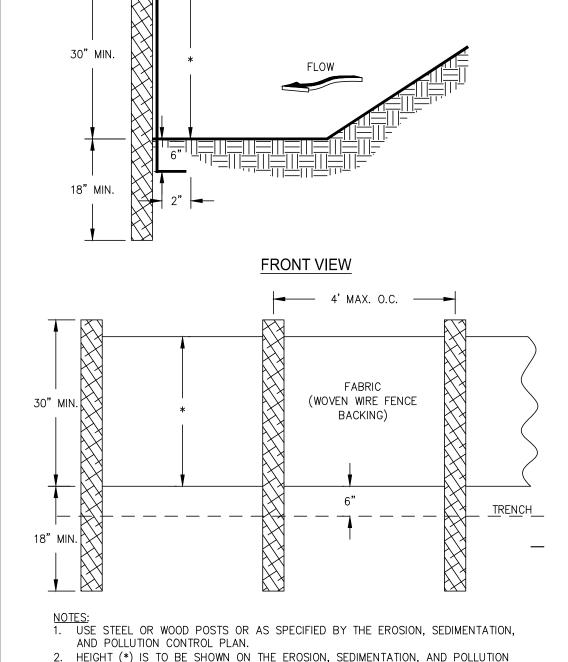
ROLLED EROSION CONTROL PRODUCTS



1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE. . AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE). 4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6". 5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'. 6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.. . INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES. . WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND

DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE). . WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL <u>SUITABLE</u> FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT. O.MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES

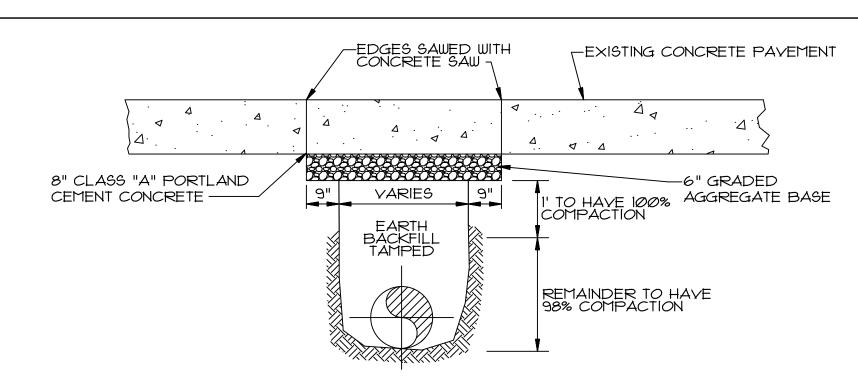
USED TO TRAP SEDIMENT.



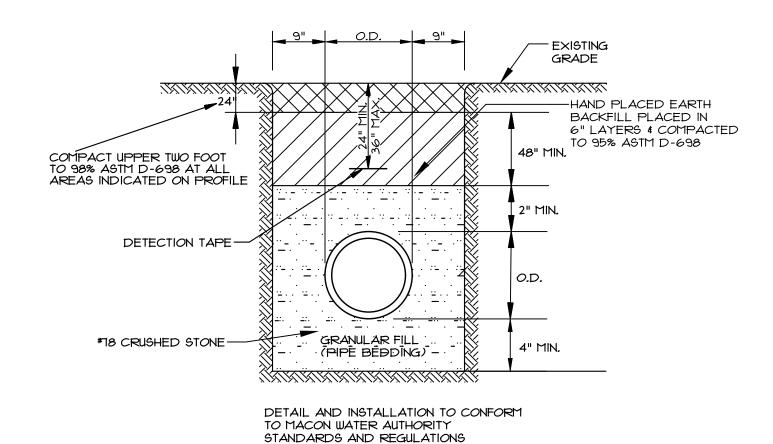
SIDE VIEW

2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION

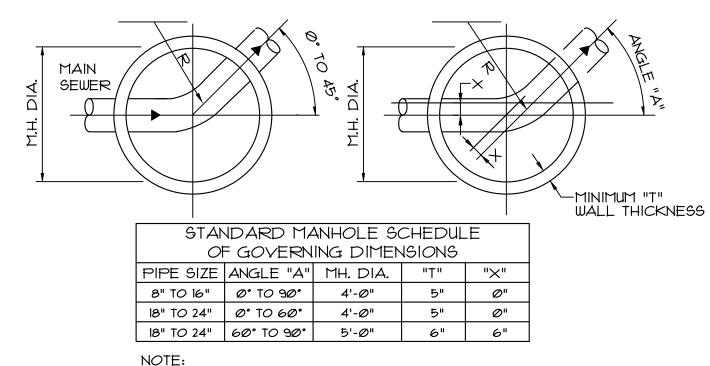
CONSTRUCTION EXIT



DETAIL - CONCRETE ROADWAY REPLACEMENT

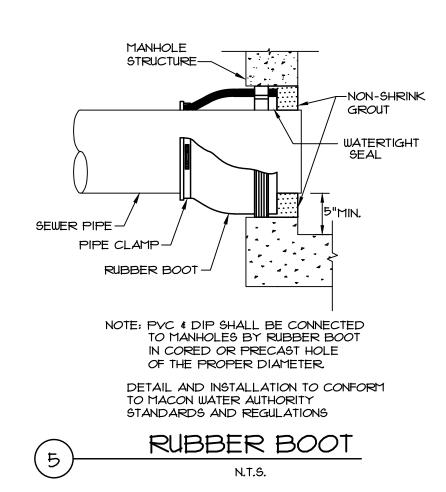


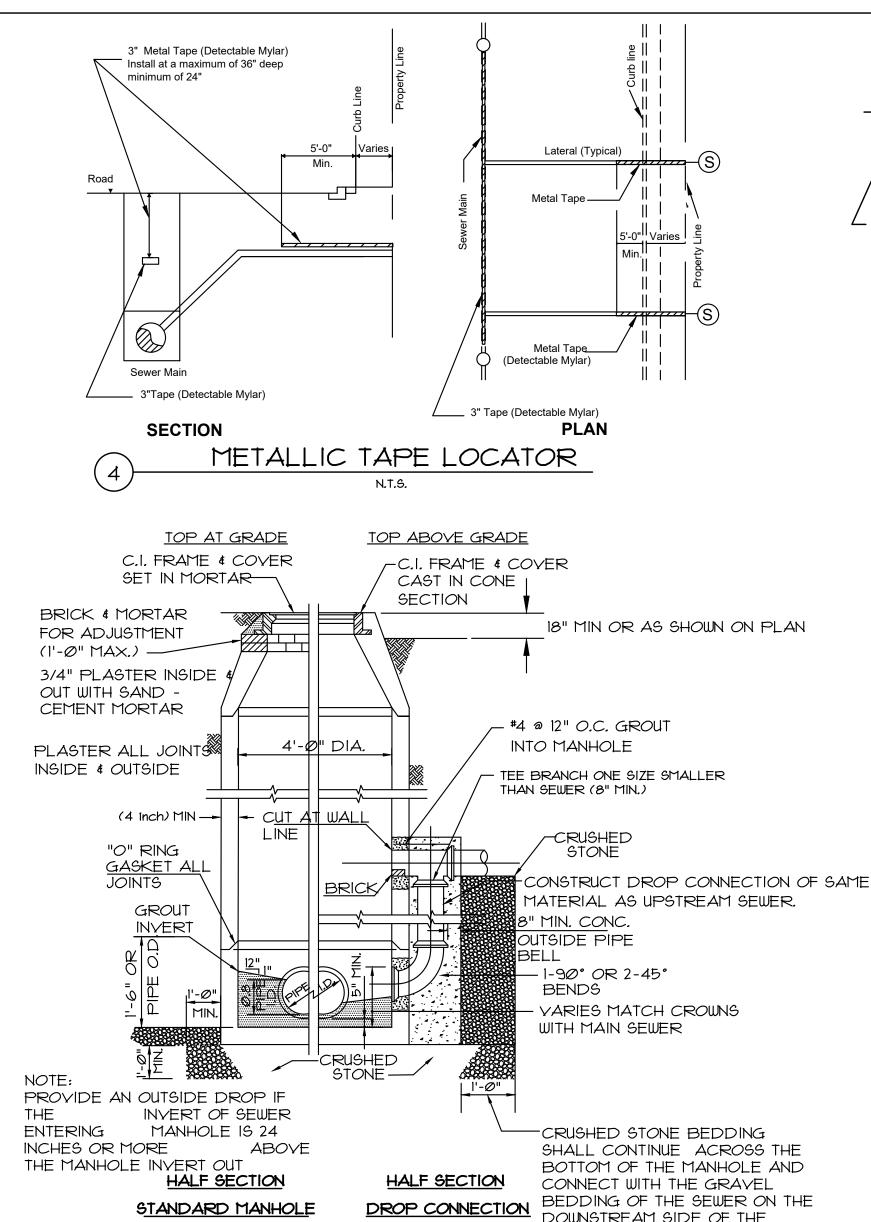
SDR 26PVC SANITARY SEWER BEDDING



<u>NOTE:</u> MINIMUM © RADIUS (R) OF M.H. INVERT = 1.5 x PIPE DIAMETER

TYPICAL PLANS DIRECTION OF FLOW IN A MANHOLE



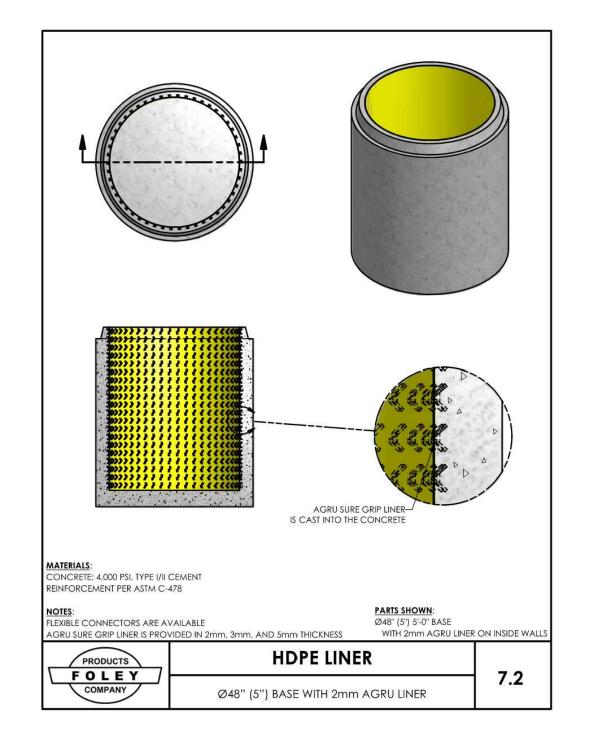


PRECAST CONCRETE MANHOLE DETAIL

DOWNSTREAM SIDE OF THE

MANHOLE

STANDARD MANHOLE



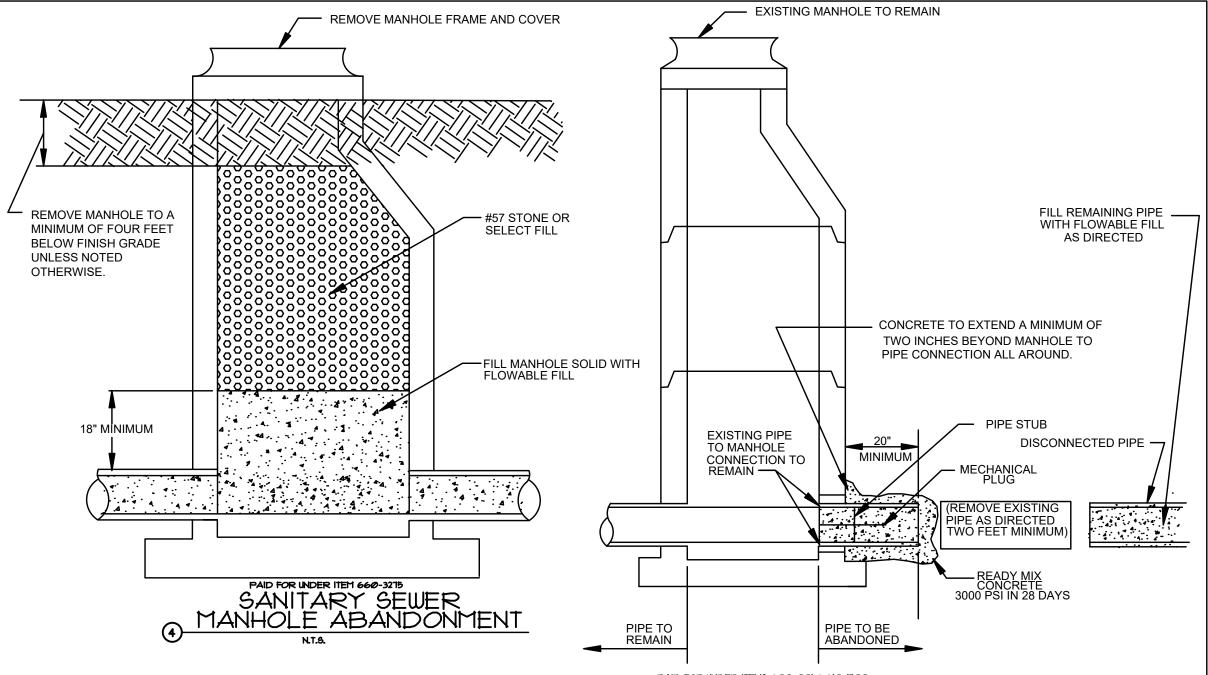
ALL NEW SANITARY SEWER MANHOLES TO BE FULLY LINED (FLOOR, WALLS AND CEILING) WITH 2mm HDPE LINER.

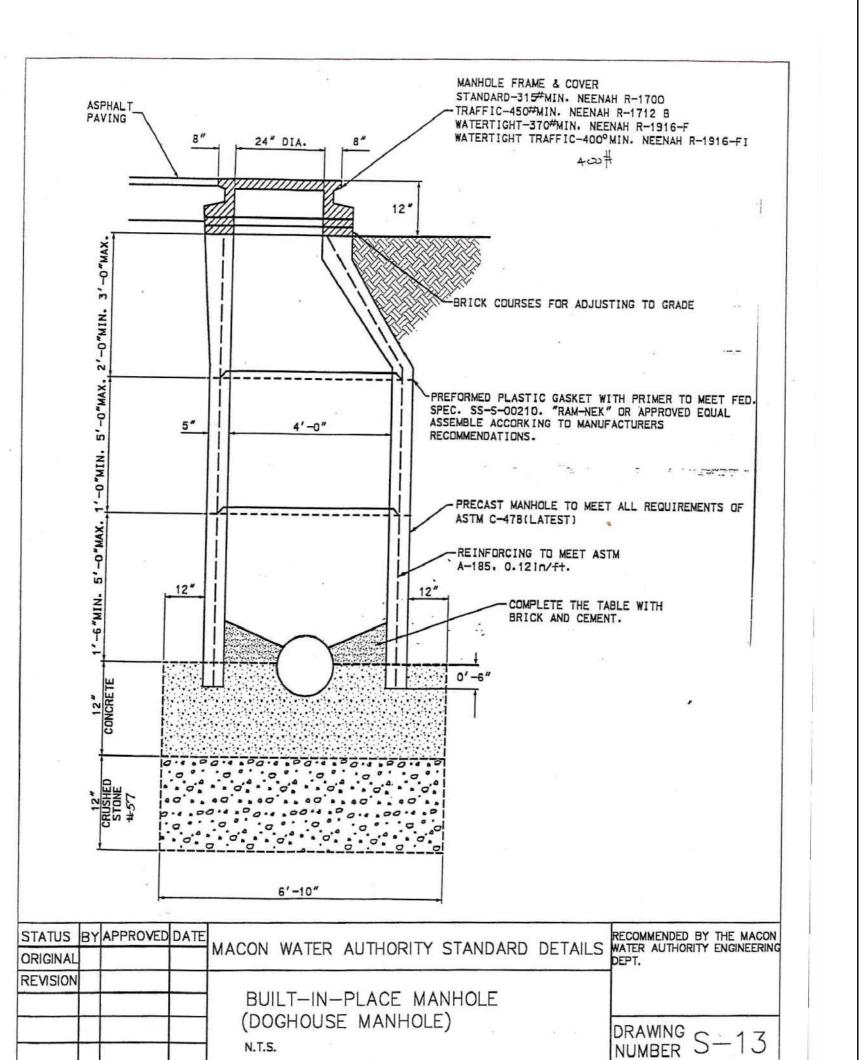
PRICE FOR LINER INCLUDED IN SANITARY SEWER MANHOLE ITEM (FOLEY STRUCTURES OR APPROVED EQUAL)

INVERTS (BUILT IN PLACE OR PREFABRICATED) TO BE INSTALLED ON TOP OF FULLY LINED FLOOR AND COATED WITH AN EPOXY COATING (SERIES 436 PERMASHEILD BY TNEMEC OR APPROVED EQUAL).

A PROTECTIVE COATING SHALL BE APPLIED TO EXISTING MANHOLES IDENTIFIED FOR REPAIR, RECONSTRUCTION, OR ADJUST TO GRADE. COATING SHALL BE SEWPERCOAT OR APPROVED EQUAL.

PROTECTIVE LININGS AND COATINGS WILL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST FOR THE APLLICABLE MANHOLE PAY ITEM.







Macon, GA 31210 (478) 219-2600



RELEASE DATES: REV # DATE DESCRIPTION



CLIENT: MACON WATER AUTHORITY MACON, GA

PROJECT:

JOE TAMPLIN BLVD SANITARY SEWER REPLACEMENT

MACON, GA 31216 DRAWN BY: CHECKED BY: CADD DLC PROJECT NUMBER: DATE: 10/31/2024 M0175.080 GRAPHIC SCALE:

SCALE: DRAWING TITLE:

SANITARY SEWER **DETAILS**