COLLETON COUNTY
SOUTH CAROLINA

NORTHWEST WALTERBORO SEWER IMPROVEMENTS PHASE I - GRAVITY SEWER

FOR

COLLETON COUNTY

PREPARED FOR:

COLLETON COUNTY
109 BENSON STREET
WALTERBORO, SC 29488

TM# MULTIPLE

DECEMBER 2024

J-29851.0000

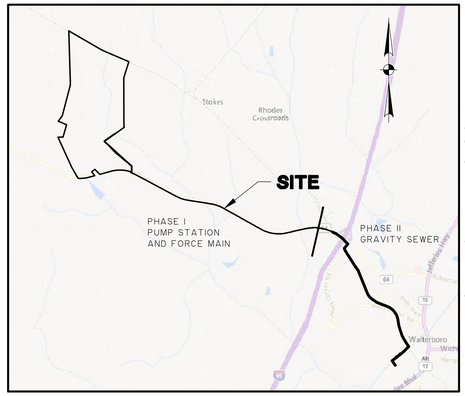
PREPARED BY:

THOMAS & HUTTON

12/23/24

SCIIP
South Carolina Infrastructure Investment Program

SCIIP GRANT #A23-E203



VICINITY MAP
SCALE: 1" = 6000'

J-29851.0000
01/02/2024
NORTHWEST WALTERBORO SEWER IMPROVEMENTS

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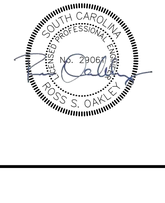
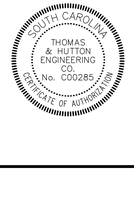
REVISION HISTORY

REV. NO.	REVISION	BY	DATE

SUBMITTAL HISTORY

SUBMITTED TO	DATE





811
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ABBREVIATIONS

DBL	DOUBLE		FM	FORCE MAIN (SANITARY SEWER)		PC	POINT OF CURVE		TC	TOP OF CURB
BOT	BOTTOM		FP	FINISH PAD		PH	POST HYDRANT		TH	THROAT ELEVATION
CB	CATCH BASIN		FR	FRAME		PT	POINT OF TANGENT		TG	TOP OF GUTTER
CI	CURB INLET		GI	GRATE INLET		PVC	POLYVINYL CHLORIDE		TP	TOP OF PAVEMENT
CO	CLEAN OUT		GV	GATE VALVE		RCP	REINFORCED CONCRETE PIPE		TW	TOP OF WALK
CPP	CORRUGATED PLASTIC PIPE		HDPE	HIGH DENSITY POLYETHYLENE		RC	ROLL CURB INLET		TYP	TYPICAL
DBL	DOUBLE		HI	HOODED INLET		RCP	REINFORCED CONCRETE PIPE		VI	VALLEY INLET
DI	DITCH INLET		INV	INVERT ELEVATION		RI	ROOF INLET		W	WATER
DIP	DUCTILE IRON PIPE		JB	JUNCTION BOX		RJP	RESTRAINED JOINT PIPE		W/	WITH
EL	ELEVATION		LF	LINEAR FEET		R/W	RIGHT-OF-WAY		WV	WATER VALVE
ES	END SECTION		MAX	MAXIMUM		SD	STORM DRAINAGE		YI	YARD INLET
FES	FLARED END SECTION		MIN	MINIMUM		SDMH	STORM DRAINAGE MANHOLE		YI	YARD INLET
FG	FINISH GRADE		MH	MANHOLE		SF	SQUARE FEET			
FH	FIRE HYDRANT		OC	ON CENTER		SS	SANITARY SEWER			

DRAINAGE LEGEND

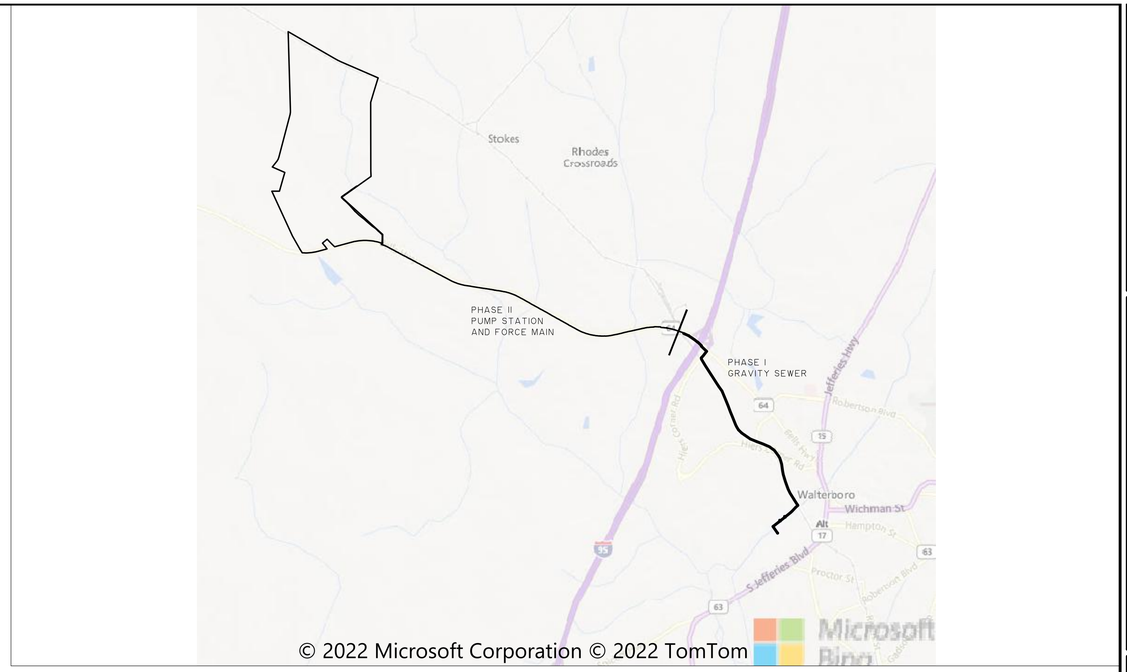
DESCRIPTION	EXISTING	PROPOSED
PIPE		
DITCH		
CURB INLET (CI) CATCH BASIN (CB)		
CURB INLET - RIGHT (CI) OR CATCH BASIN - RIGHT (CB)	OR	OR
CURB INLET - LEFT (CI) OR CATCH BASIN - LEFT (CB)	OR	OR
CURB INLET - BOTH (CI) OR CATCH BASIN - LEFT (CB)	OR	OR
CONTROL STRUCTURE (CS)		
DITCH INLET (DI)		
GRATE INLET (GI)		
HOODED INLET (HI)	OR	OR
JUNCTION BOX (JB)		
MANHOLE (SDMH)		
ROLL CURB INLET (RC)		
ROOF INLET (RI)		
YARD INLET (YI)		
FLARED END SECTION (FES)		

WATER LEGEND

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN	10"W	10"W
SINGLE SERVICE LATERAL		
DOUBLE SERVICE LATERAL		
VALVE AND BOX		
FIRE HYDRANT W/VALVE & BOX		
POST HYDRANT		
REDUCER		
BACKFLOW PREVENTOR		
CROSS		
TEE		
90° BEND - HORIZONTAL		
45° BEND - HORIZONTAL		
22-½° BEND - HORIZONTAL		
11-¼° BEND - HORIZONTAL		
BEND - VERTICAL		
CAP		

SEWER LEGEND

DESCRIPTION	EXISTING	PROPOSED
GRAVITY PIPE	SS	
SINGLE SERVICE LATERAL		
DOUBLE SERVICE LATERAL		
MANHOLE		
CLEANOUT		
FORCEMAIN	10"FM 10"FM	10"FM 10"FM
VALVE AND BOX		
FLUSH HYDRANT		
REDUCER		
BACKFLOW PREVENTOR		
CROSS		
TEE		
90° BEND - HORIZONTAL		
45° BEND - HORIZONTAL		
22-½° BEND - HORIZONTAL		
11-¼° BEND - HORIZONTAL		
BEND - VERTICAL		
PLUG \ CAP		



OTHER UTILITIES LEGEND

DESCRIPTION	EXISTING
NATURAL GAS	UGG UGG
TELEPHONE	OHT OHT
UNDERGROUND TELEPHONE	UTL UTL
ELECTRICITY	OHP OHP
UNDERGROUND ELECTRICITY	UGP UGP

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SCALE: 1" = 4000'

GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE TIE-IN OF NEW SEWER FACILITIES TO CITY OF WALTERBORO.
2. CONTRACTOR SHALL MAINTAIN MINIMUM COVER OVER THE WATER MAIN PIPE BARREL OF 4'-0" UNLESS OTHERWISE INDICATED. TOP OF PIPE ELEVATIONS ARE SHOWN FOR CASES WHERE FUTURE STORM SEWERS ARE TO BE INSTALLED. IN NO CASE SHALL THE WATER MAIN BE INSTALLED AT A LOWER ELEVATION THAN THAT SHOWN.
3. SHOULD PIPE, FITTINGS, AND OTHER MATERIALS BE NEEDED IN ADDITION TO THAT SHOWN ON THE DRAWINGS BECAUSE PIPELINE WAS NOT INSTALLED TO THE ALIGNMENT AND PROFILE SHOWN, THEN THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THOSE NECESSARY MATERIALS AND PROVIDING THE EQUIPMENT AND LABOR TO INSTALL THEM TO MEET THE DESIGN INTENT OF THE WATERMAIN AT NO ADDITIONAL COST TO THE OWNER.
4. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER 48 HOURS IN ADVANCE OF ALL REQUIRED TESTS AND INSPECTIONS.
5. THE CONTRACTOR WILL NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO BEGINNING ANY REMOVAL OPERATION.
6. ALL FORCE MAINS SHALL BE POLYVINYL CHLORIDE (PVC C900 OR I8) UNLESS OTHERWISE INDICATED.
7. ALL GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE (PVC SDR 26) UNLESS OTHERWISE INDICATED.
8. SURVEYING AND BOUNDARY INFORMATION BY THOMAS AND HUTTON
9. ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.
10. TOPOGRAPHIC SURVEY BY THOMAS AND HUTTON.
11. CONTRACTOR IS TO VERIFY ACCURACY OF ANY TEMPORARY BENCHMARKS SHOWN PRIOR TO UTILIZING THEM FOR CONSTRUCTION.
12. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES OTHER THAN THOSE SHOWN ARE ENCOUNTERED DURING CONSTRUCTION , THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND TAKE STEPS TO PROTECT THE LINE(S) AND ENSURE CONTINUED SERVICE. DAMAGE CAUSED TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR. ADDITIONALLY, THE CONTRACTOR SHALL CONFIRM THE CONNECTION POINTS OF NEW UTILITIES TO EXISTING UTILITIES PRIOR TO BEGINNING NEW CONSTRUCTION.
13. IF WORK IS SUSPENDED OR DELAYED FOR 14 DAYS, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE DISTURBED AREA AT NO ADDITIONAL COST TO THE OWNER.
14. THE CONTRACTOR SHALL INSTALL ANY BARRICADES PRIOR TO BEGINNING CONSTRUCTION
15. ANY DAMAGE TO EXISTING PAVEMENT MUST BE REPAIRED AT CONTRACTORS EXPENSE AND TO THE SATISFACTION OF THE COUNTY ENGINEER AND THE PROJECT ENGINEER.
16. ALL RIGHT-OF-WAY AND DRAINAGE EASEMENT CONSTRUCTION SHALL MEET SCDOT STANDARD SPECIFICATIONS UNLESS SPECIFIED ELSEWHERE AND APPROVED IN WRITING BY THE COUNTY ENGINEER.
17. WHERE FIELD INSPECTIONS ARE REQUIRED BY THE COUNTY, THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION A MINIMUM OF 48 HOURS IN ADVANCE TO SCHEDULE SUCH INSPECTIONS.
18. A COMPLETE SET OF APPROVED DRAWINGS AND SPECIFICATIONS MUST BE MAINTAINED ON SITE AT ALL TIMES THAT THE CONTRACTOR IS PERFORMING WORK. THESE DRAWINGS SHALL BE MADE AVAILABLE UPON REQUEST.
19. ANY REVISIONS DURING CONSTRUCTION WHICH ALTER THE ROAD LAYOUT, CONSTRUCTION METHODS, RIGHT-OF-WAY LOCATION OR DRAINAGE MUST BE SUBMITTED AND APPROVED IN WRITING BY THE COUNTY ENGINEER.
20. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS NECESSARY FROM OTHER RESPONSIBLE AGENCIES.
21. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL AND PREVENTION STRUCTURES SHOWN ON THE PLANS. BOTH MUST BE APPROVED BY COLLETON COUNTY PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES.
22. CONTRACTOR WILL BE REQUIRED TO ADJUST MANHOLE FRAMES TO MATCH FINAL GRADE AT NO ADDITIONAL COST.
23. THE FOLLOWING NOTES ARE SPECIFIED BY THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL - OFFICE OF OCEAN AND COASTAL RESOURCES MANAGEMENT (SCDHEC-OCRM) AND ARE TO BE EXECUTED BY THE CONTRACTOR:
    a. ALL SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD. ALL SEDIMENT CONTROL FEATURES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION HAS BEEN OBTAINED.
    b. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED, UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 14 DAYS.
25. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED SIMULTANEOUSLY WITH THE DISTURBANCE OF THE LAND AND SHALL REMAIN FUNCTIONAL UNTIL THE CONTRIBUTING DISTURBED AREAS ARE STABILIZED. SILT BARRIERS WILL BE INSTALLED AS NECESSARY TO PREVENT EXCESSIVE SEDIMENTATION OF DOWNSTREAM AREAS. DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL OF "EROSION AND SEDIMENT CONTROL PRACTICES FOR DEVELOPING AREAS" BY THE S.C. LAND RESOURCES CONSERVATION COMMISSION.
26. CONTRACTOR SHALL GRADE AREAS TO DRAIN FOR POSITIVE FLOW PRIOR TO FINAL APPROVAL.
27. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND "SOUTH CAROLINA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BOTH CURRENT EDITIONS.
28. ALL AREAS DISTURBED WILL BE GRASSED IMMEDIATELY AFTER THE INSTALLATION. GRASSING SHALL BE IN ACCORDANCE WITH SECTION 810 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION CURRENT EDITION. PAYMENT SHALL BE AS SHOWN IN THE BID FORM AND SHALL BE COMPENSATION FOR ALL NECESSARY WORK AND MATERIALS TO COMPLETE THE SEEDING IN ACCORDANCE WITH THESE SPECIFICATIONS. (SEE SPECIFICATIONS BELOW)
29. ALL DRAINAGE WILL BE MADE FUNCTIONAL DAILY AS WORK PROGRESSES.
30. EACH EXISTING ROAD WILL BE CLEANED UP AND RESTORED DAILY.
31. NEW PAVEMENT TO BE FLUSH WITH EDGE OF EXISTING PAVEMENT.
32. ALL STORM DRAIN PIPE INVERTS IN AND OUT ARE THE SAME AS THE BOX INVERT UNLESS OTHERWISE NOTED ON THE PLAN SHEETS AND/OR PROFILES.
33. ALL SEWER INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTION 30.30.00 OF THE THOMAS AND HUTTON STANDARDS AND SPECIFICATIONS.
34. IF ARCHEOLOGICAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION WORK SHALL IMMEDIATELY CEASE. THE PROCEDURES CODIFIED AT 36 CFR 800.13(B) WILL APPLY AND EDA, THE SOUTH CAROLINA STATE HISTORIC PRESERVATION OFFICE, AND THE CATAWBA INDIAN NATION SHALL BE CONTACTED IMMEDIATELY. ARCHEOLOGICAL MATERIALS CONSIST OF ANY ITEMS, FIFTY YEARS OR OLDER WHICH WERE MADE OR USED BY MAN. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO, STONE PROJECTILE POINTS (ARROWHEADS), CERAMIC SHERDS, BRICKS, WORKED WOOD, BONE AND STONE, METAL AND GLASS OBJECTS, AND HUMAN SKELETAL REMAINS.

GENERAL INFORMATION

COUNTY	COLLETON
TOWN	WALTERBORO
ZONING	INDUSTRIAL

OWNER:
CITY OF WALTERBORO
242 HAMPTON STREET
(843) 782-1015

ENGINEER:
THOMAS & HUTTON
1501 MAIN STREET, SUITE 400
COLUMBIA, SC 29201
(803) 451-6789

SURVEYOR: THOMAS & HUTTON
50 PARK OF COMMERCE WAY
SAVANNAH, GA 31405
(912) 234-5300

UTILITY: CITY OF WALTERBORO
242 HAMPTON STREET
(843)782-1015

PREPARED FOR:
COLLETON COUNTY
109 BENSON STREET
WALTERBORO, SC 29488
843-549-5221

NORTH CAROLINA — REGISTERED LANDSCAPE ARCHITECT — THOMAS & HUTTON ENGINEERING CO. — No. C00285 — CERTIFICATE OF AUTHORIZATION — 12/23/24

SOUTH CAROLINA — REGISTERED LANDSCAPE ARCHITECT — No. 1301 — 12/23/24

NO.	REVISIONS	BY	DATE

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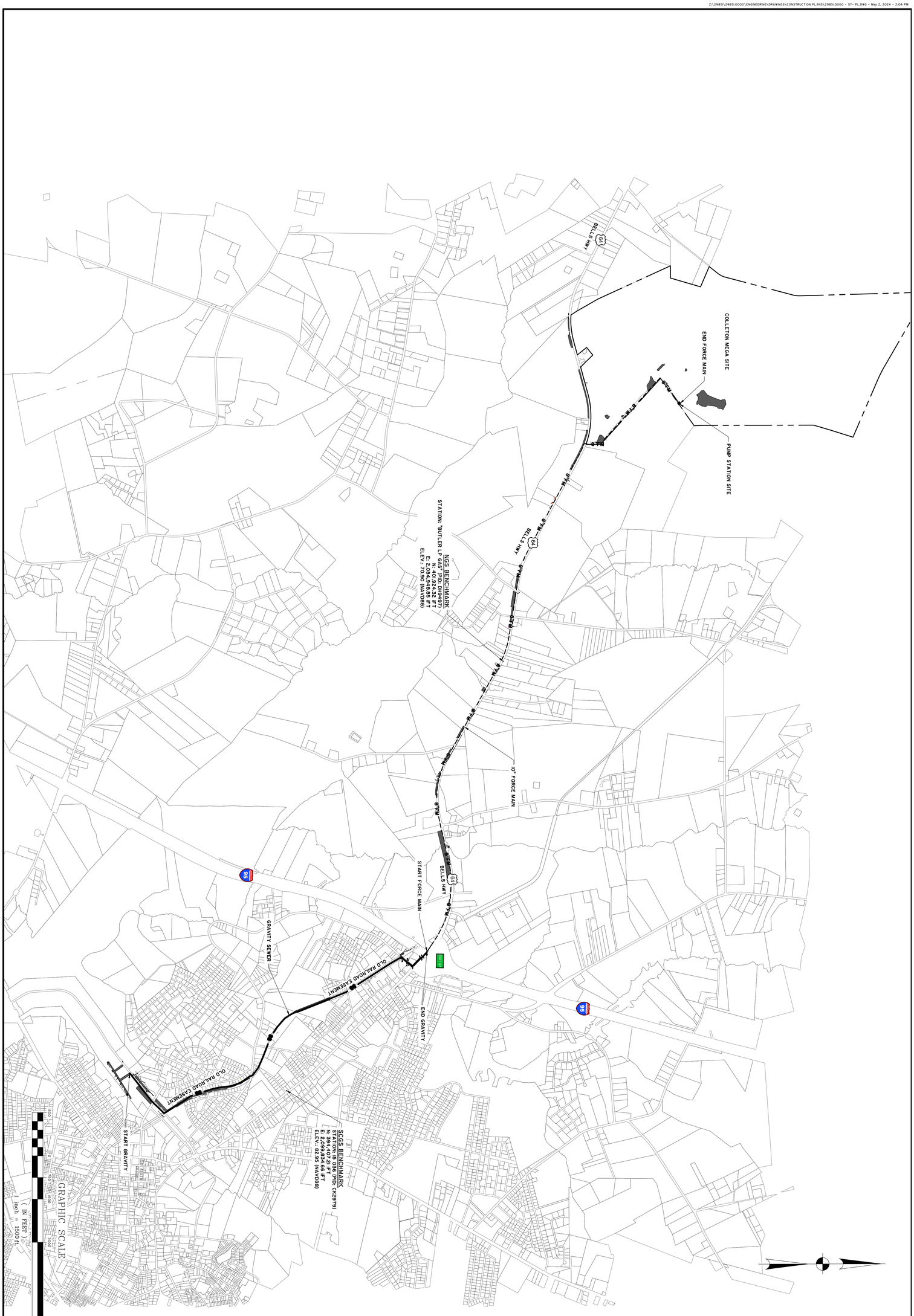
NORTHWEST WALTERBORO SEWER IMPROVEMENTS
GENERAL NOTES & INDEX

JOB NO:	J-21851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	N/A

GN.01



C1.0

COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

OVERALL SITE PLAN

PROJECT NO: 2985.0000
DATE: 01/29/2024
DRAWN: JTB
DESIGNED: MAL
REVIEWED: RSO
APPROVED: RSO
SCALE: 1" = 1500'

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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29067 RUSS S. OAKLEY

SOUTH CAROLINA THOMAS & HUTTON ENGINEERING CO. No. COA0285 CERTIFICATE OF AUTHORIZATION

12/23/24

SOUTH CAROLINA
THOMAS & HUTTON ENGINEERING
No. C00285
CERTIFICATE OF AUTHORIZATION
12/23/24

SOUTH CAROLINA
PROFESSIONAL ENGINEER
RYAN S. OSBORNE
12/23/24

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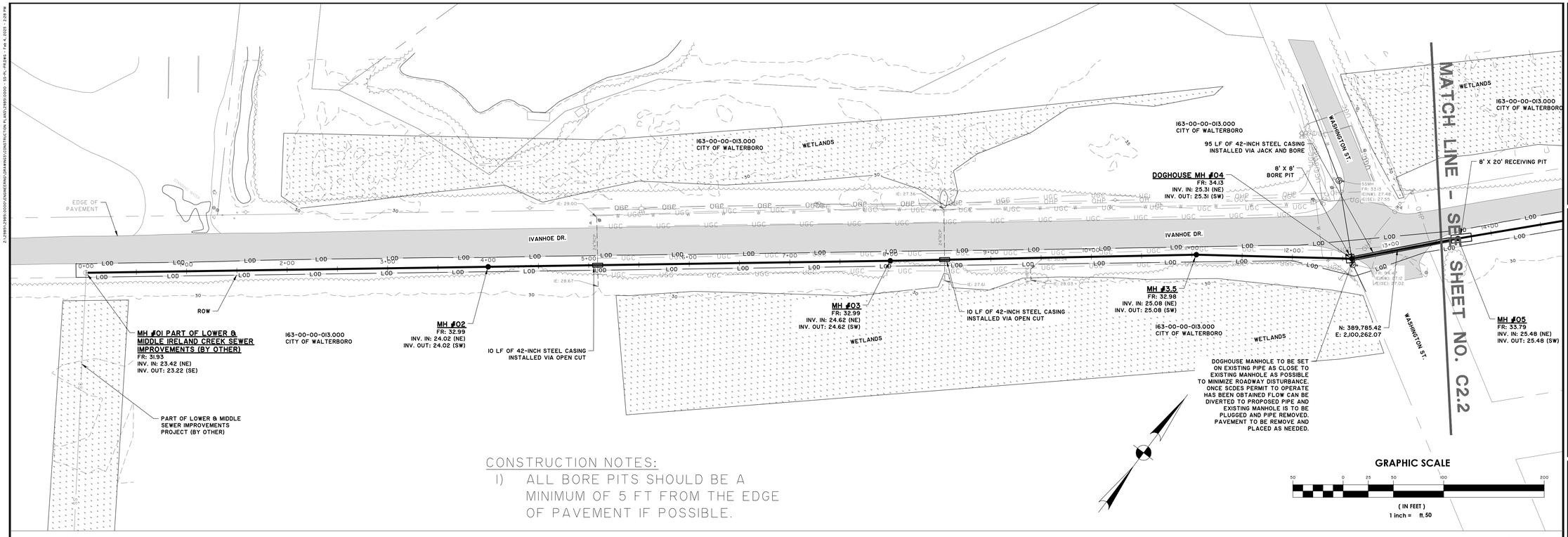
NORTHWEST WALTERBORO SEWER IMPROVEMENTS

GRAVITY SEWER SHEET KEY

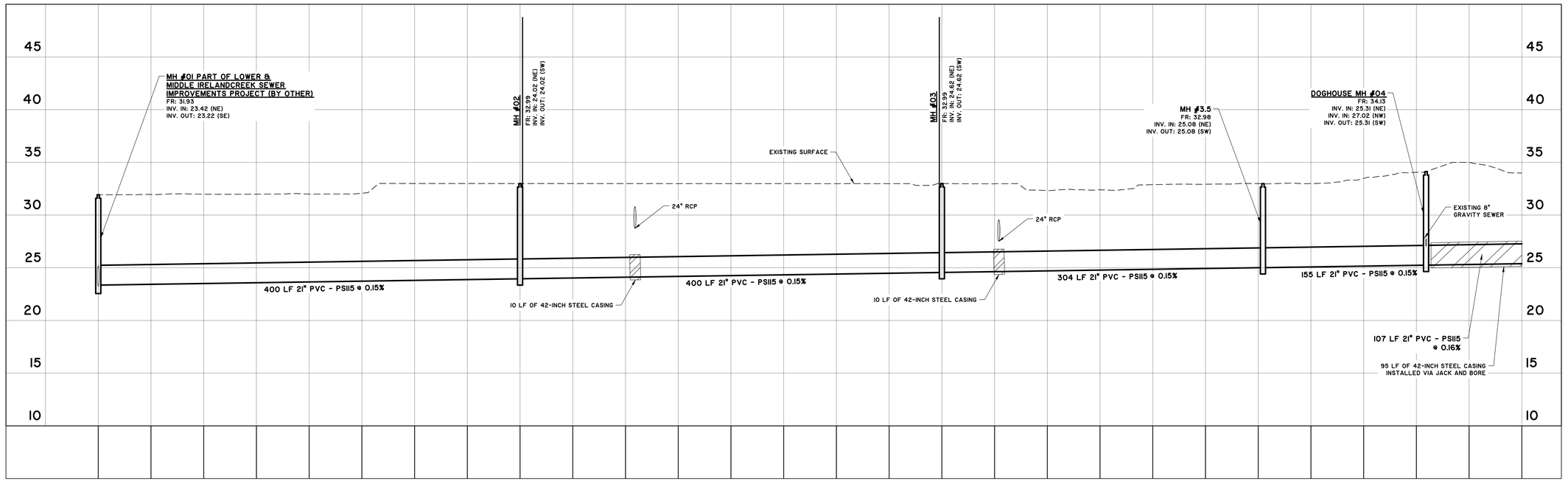
JOB NO:	J-29851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	1" = 500'

C2.0



CONSTRUCTION NOTES:

1) ALL BORE PITS SHOULD BE A MINIMUM OF 5 FT FROM THE EDGE OF PAVEMENT IF POSSIBLE.



GRAVITY SEWER
STATIONS: -0+50 - 13+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

SOUTH CAROLINA PROFESSIONAL ENGINEER — THOMAS HUTTON ENGINEERING CO. No. C00285 — CERTIFICATE OF AUTHORIZATION — 12/23/24

SOUTH CAROLINA PROFESSIONAL ENGINEER — MICHAEL A. LEWIS — No. 31911

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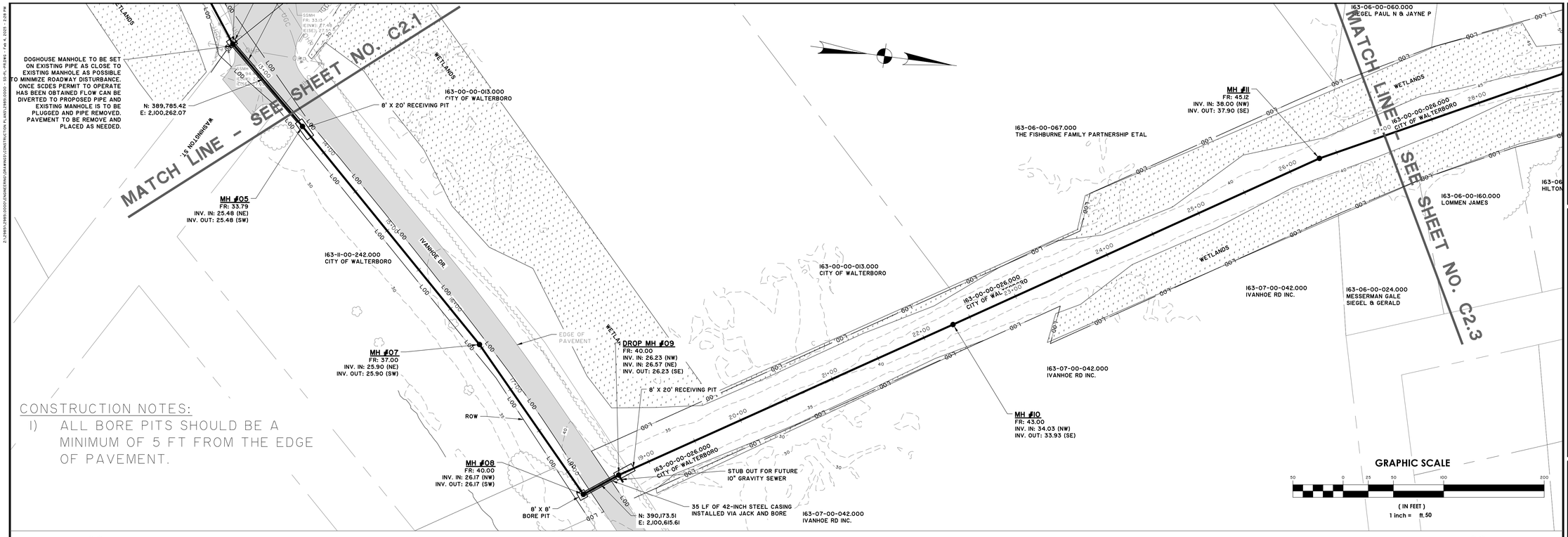
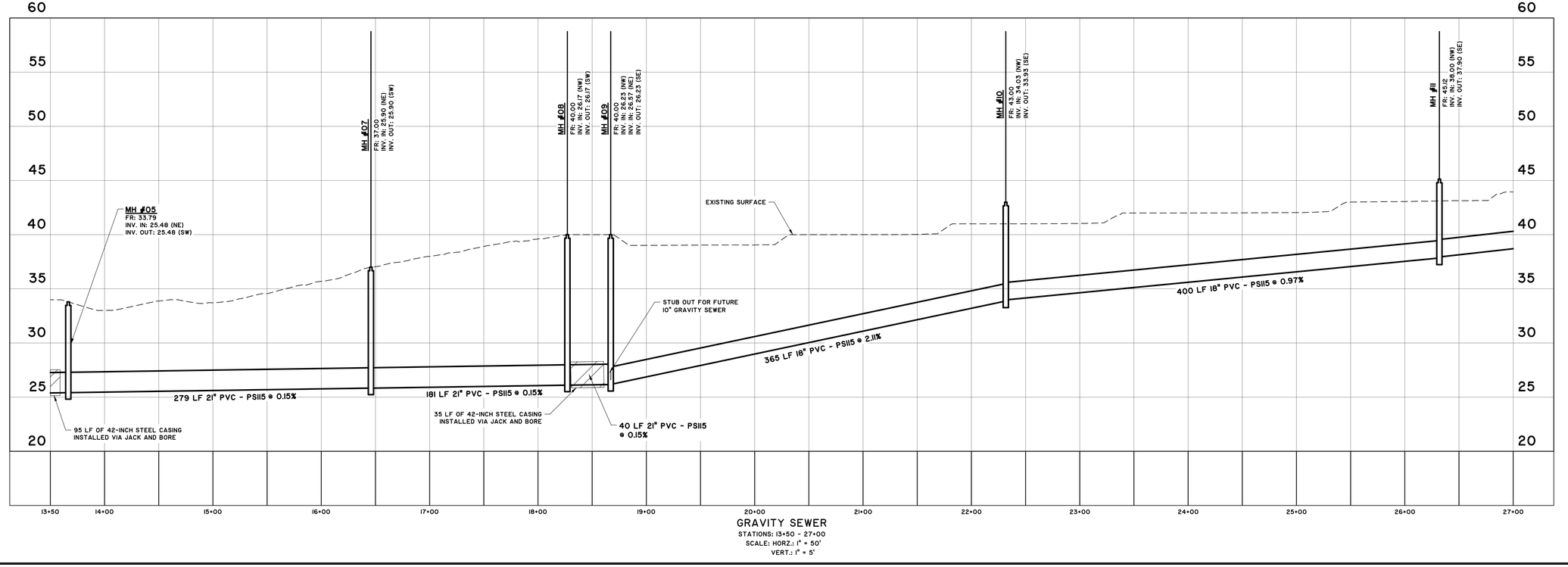
NORTHWEST WALTERBORO SEWER IMPROVEMENTS
GRAVITY SEWER PLAN & PROFILE

JOB NO:	J-29851.0000
DATE:	12/01/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	AS NOTED

C2.1





GRAVITY SEWER
STATIONS: 13+50 - 27+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

CONSTRUCTION NOTES:

1) ALL BORE PITS SHOULD BE A MINIMUM OF 5 FT FROM THE EDGE OF PAVEMENT.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032761 — THOMAS & HUTTON ENGINEERING CO. No. C00285 — 12/23/24

NORTH CAROLINA PROFESSIONAL LANDSCAPE ARCHITECT SEAL 2187 — THOMAS & HUTTON ENGINEERING CO. No. C00285

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NORTHWEST WALTERBORO SEWER IMPROVEMENTS

GRAVITY SEWER PLAN & PROFILE

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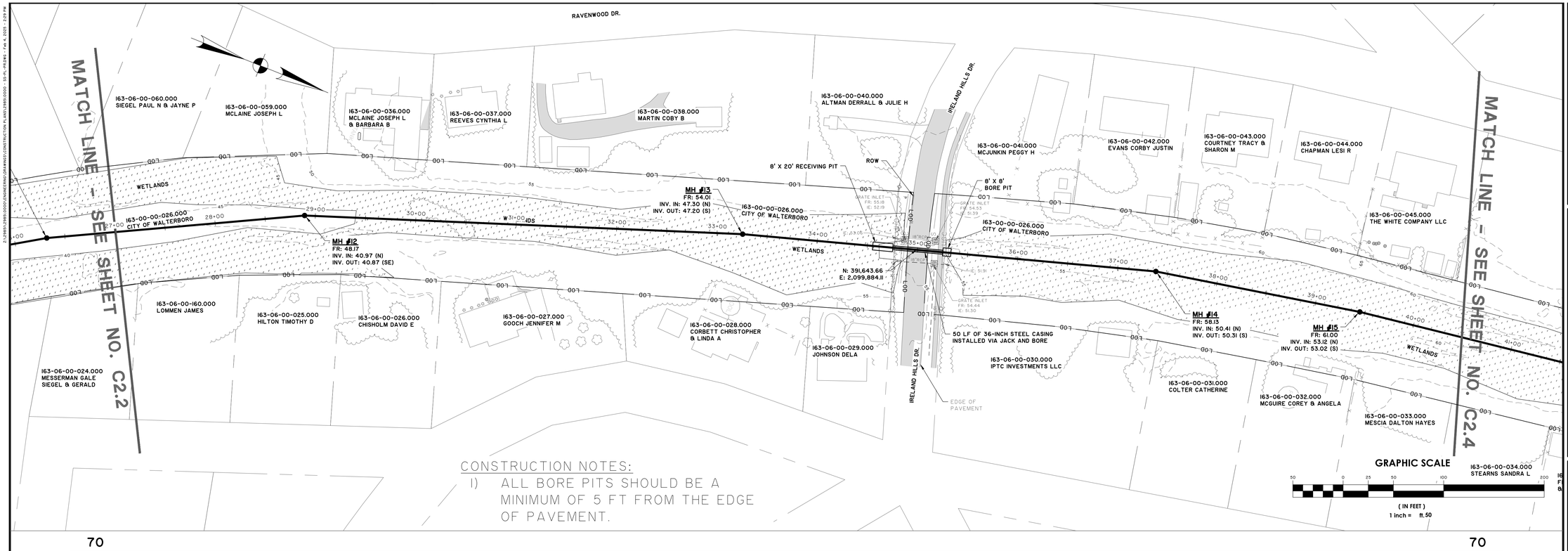
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	AS NOTED

C2.2



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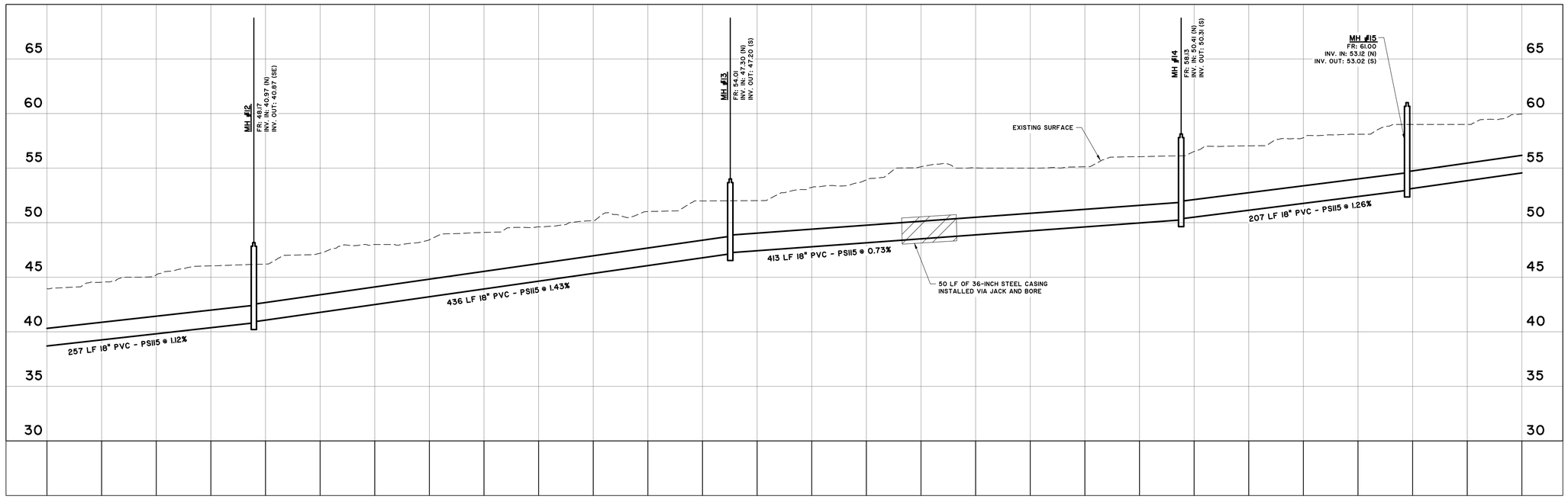

GRAVITY SEWER
STATIONS: 27+00 - 40+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

SOUTH CAROLINA PROFESSIONAL ENGINEER — No. 122289 — THOMAS & HUTTON ENGINEERING No. C00285 — CERTIFICATE OF AUTHORIZATION — 12/23/24

SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR — No. 29291 — CERTIFICATE OF AUTHORIZATION

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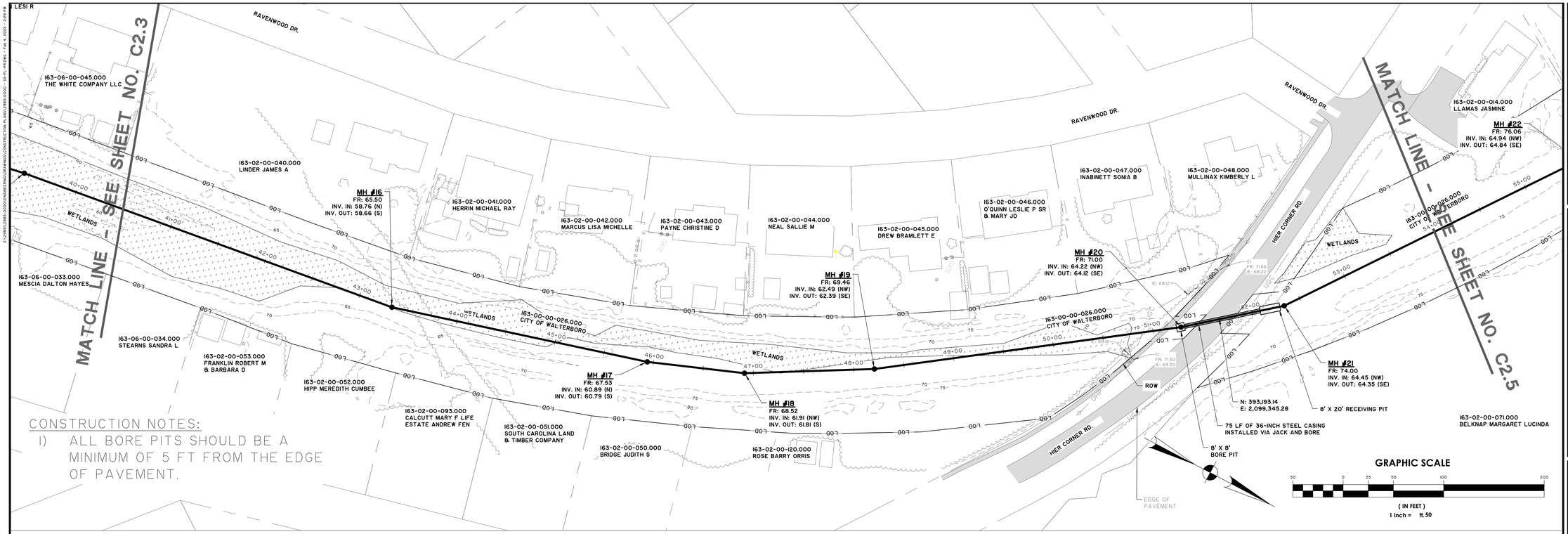
NORTHWEST WALTERBORO SEWER IMPROVEMENTS

GRAVITY SEWER PLAN & PROFILE

JOB NO:	J-29851.0000
DATE:	12/01/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	AS NOTED

C2.3



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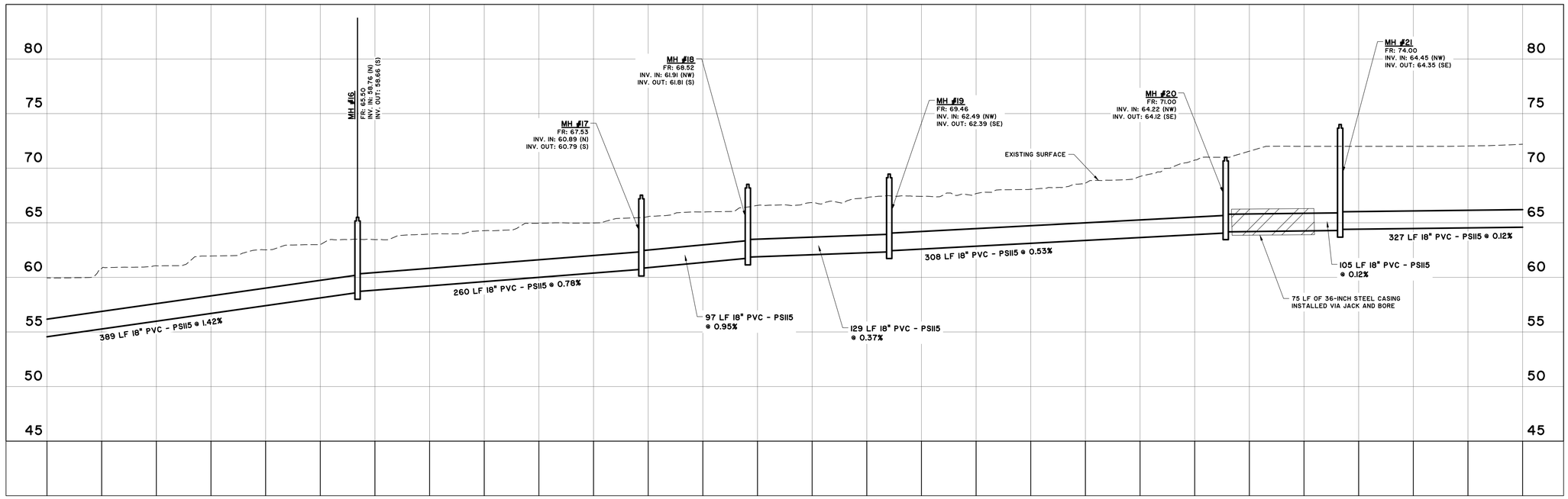

GRAVITY SEWER
STATIONS: 40+50 - 54+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030285 THOMAS & HUTTON ENGINEERING No. C00285 CERTIFICATE OF AUTHORIZATION 12/23/24

NORTH CAROLINA PROFESSIONAL LANDSCAPE ARCHITECT SEAL 2327 R. SCOTT OSTERMAN 12/23/24

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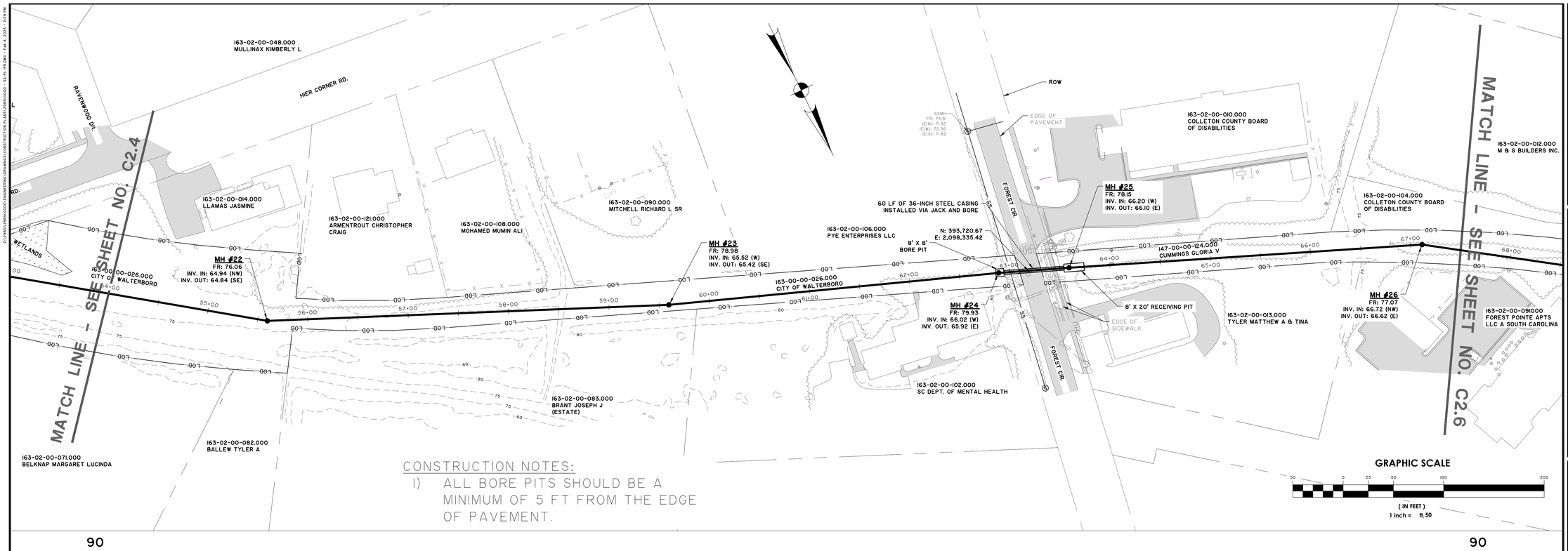
COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

GRAVITY SEWER PLAN & PROFILE

JOB NO:	J-29851.0000
DATE:	12/01/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	AS NOTED

C2.4



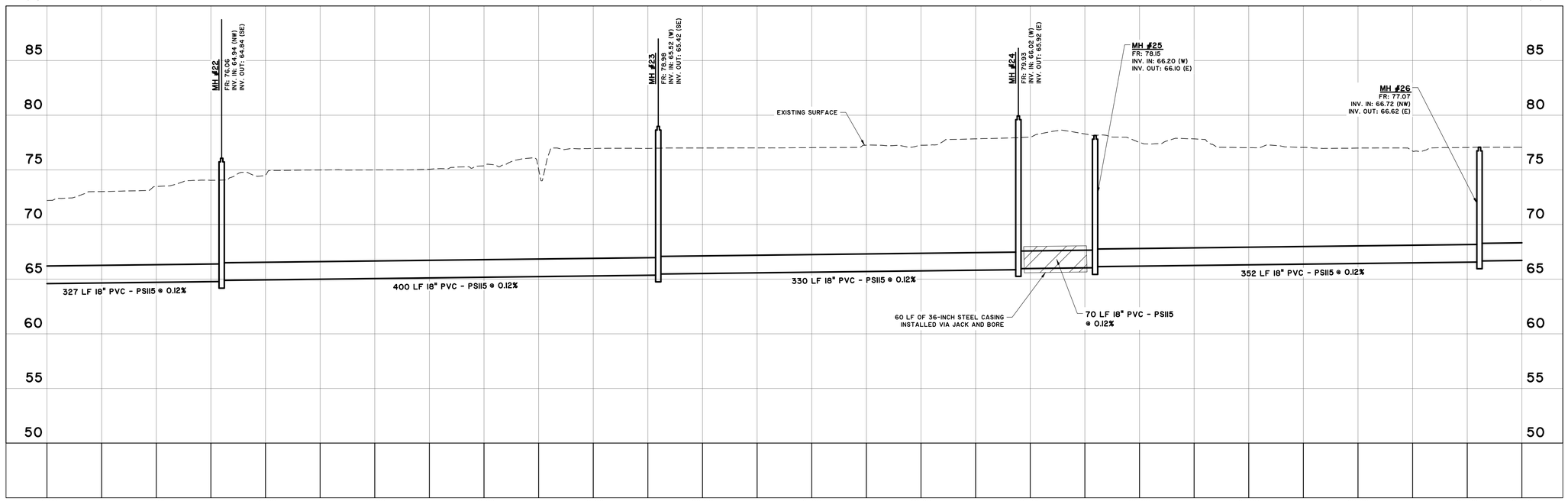
CONSTRUCTION NOTES:

I) ALL BORE PITS SHOULD BE A MINIMUM OF 5 FT FROM THE EDGE OF PAVEMENT.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = ft.50



GRAVITY SEWER
STATIONS: 54+00 - 67+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

NO.	REVISIONS	BY	DATE

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COLLETON COUNTY
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GRAVITY SEWER PLAN & PROFILE

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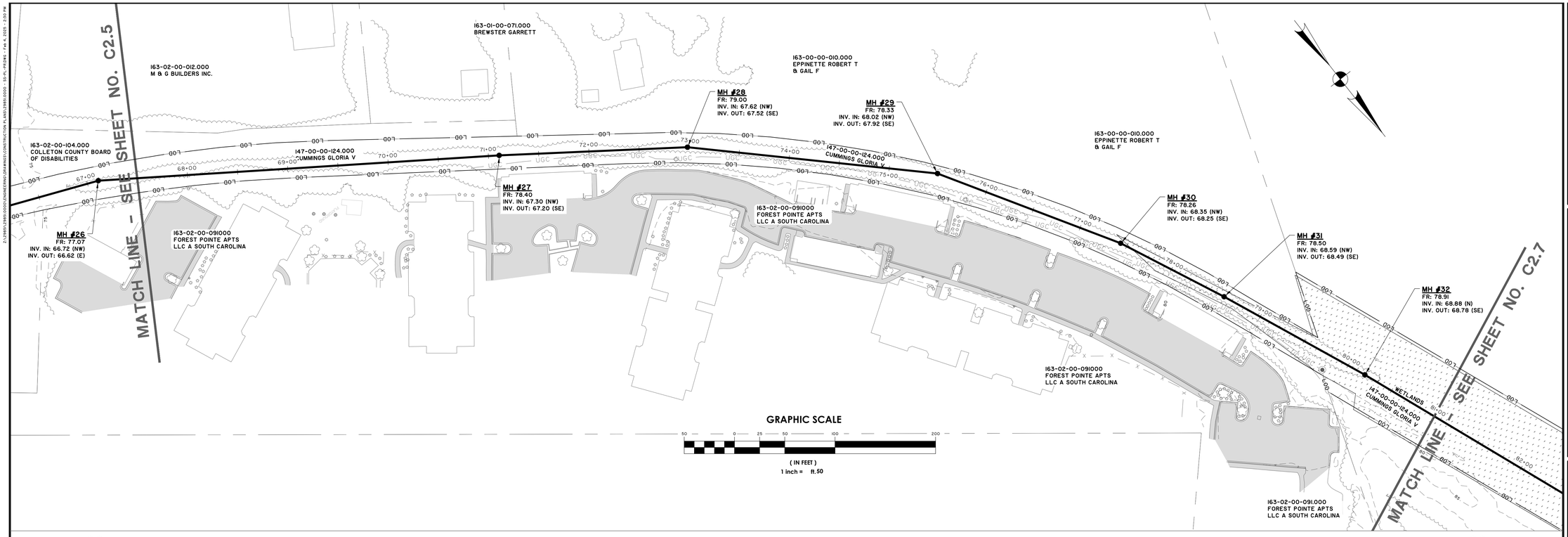
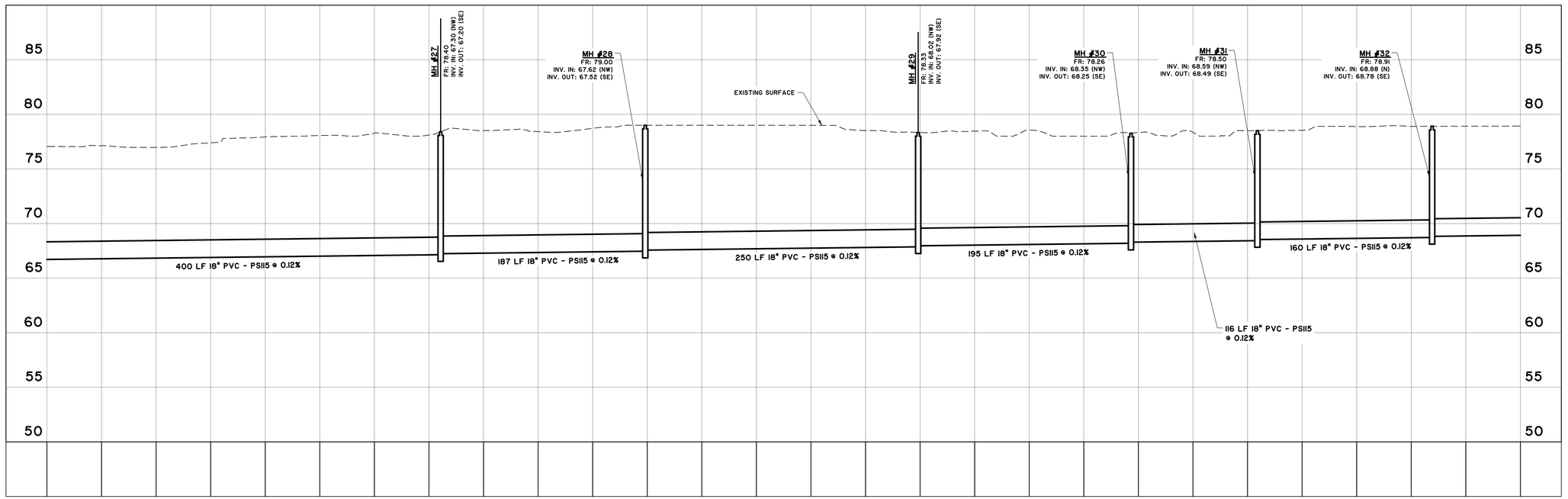
C2.5





GRAVITY SEWER
STATIONS: 67+50 - 81+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

SOUTH CAROLINA
THOMAS & HUTTON ENGINEERING CO.
No. C00285
CERTIFICATE OF AUTHORIZATION
12/23/24

SOUTH CAROLINA
PROFESSIONAL ENGINEER
MICHAEL A. LISTON
No. 32127
12/23/24

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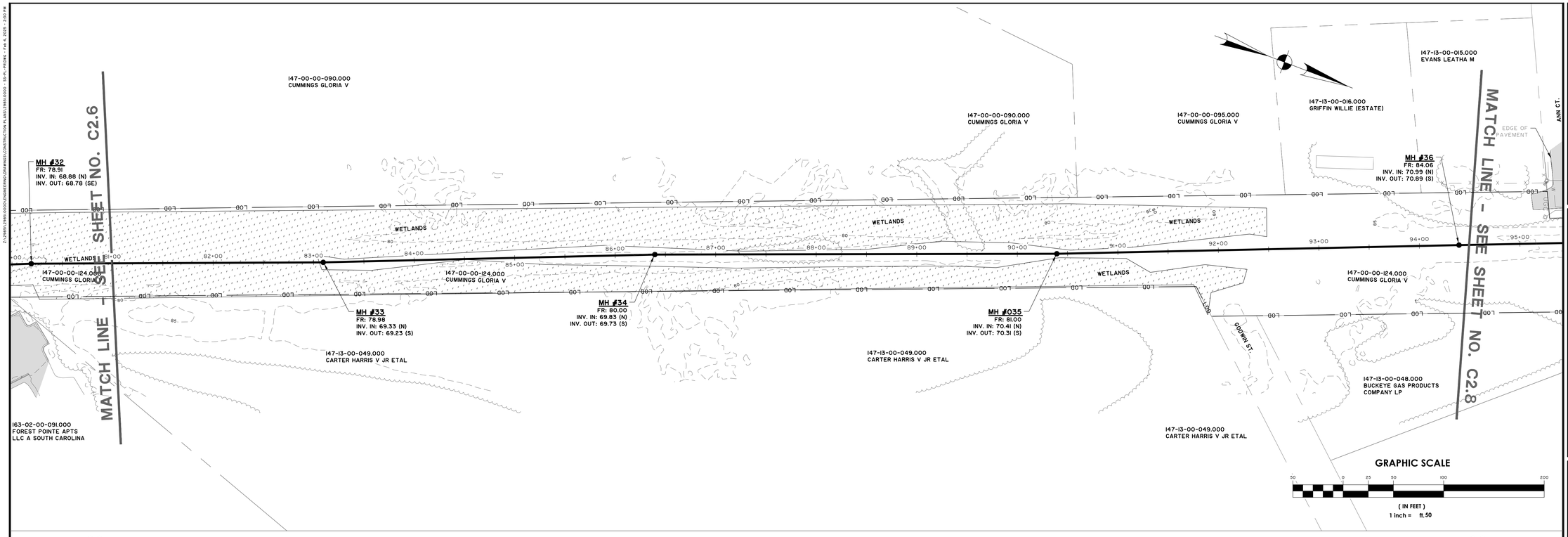
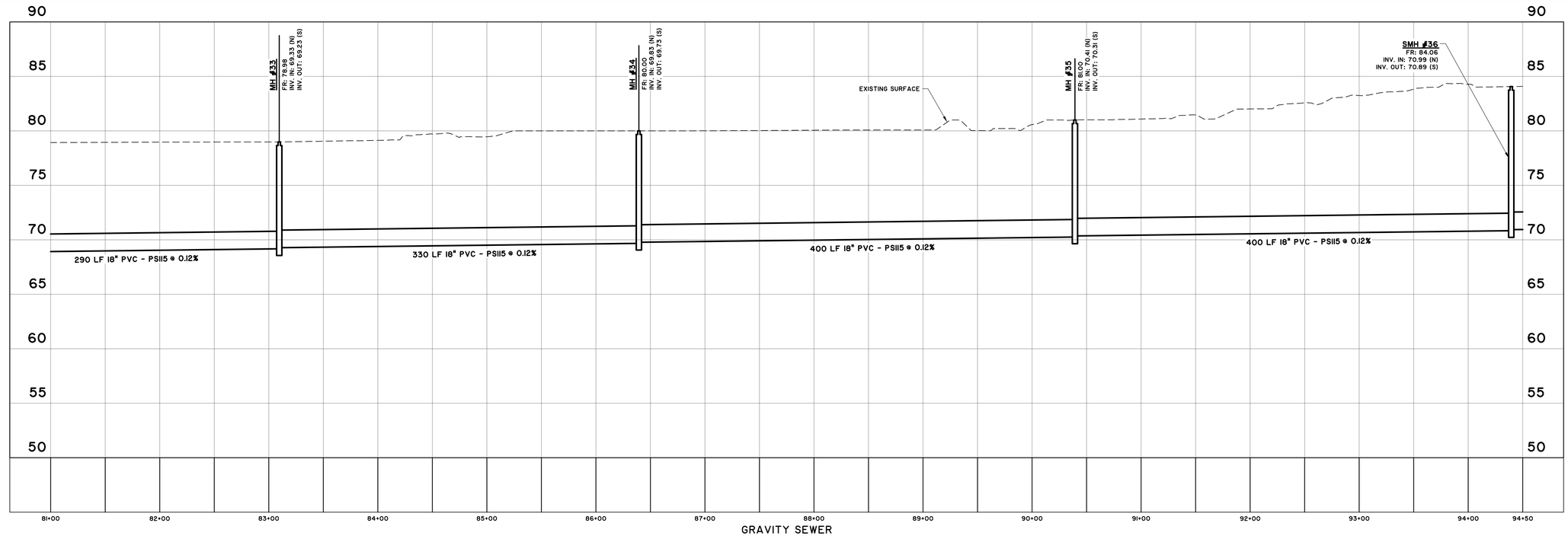
C2.6

Z:\29851.0000\ENGINEERING\04 PERMITS\CONSTRUCTION PLANS\29851.0000 - 3SPL PRSWS - FOR 4_2023 - 2:57 PM





GRAVITY SEWER
STATIONS: 81+00 - 94+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

SOUTH CAROLINA
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PROFESSIONAL ENGINEER
THOMAS & HUTTON ENGINEERING Co.
No. C00285
CERTIFICATE OF AUTHORIZATION
12/23/24

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COLLETON COUNTY
COLLETON COUNTY
NORTHWEST WALTERBORO SEWER IMPROVEMENTS
GRAVITY SEWER PLAN & PROFILE

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APPROVED:	RSO
SCALE:	AS NOTED

C2.7

Z:\29851.0000\ENGINEERING\SEWER\CONSTRUCTION PLANS\29851.0000 - SSPL PRSWS - Fri 4, 2025 - 2:39 PM

147-13-00-001.000
SAND HILL BAPTIST
CHURCH HARVELL BREL

147-13-00-015.000
EVANS LEATHA M

147-09-00-031.000
GELZER JOYCE C

147-09-00-033.000
CROSBY FANNIE G LIFE
ESTATE WANDA CR

147-09-00-032.000
PINCKNEY NADINE LIFE
ESTATE STACY PINCKNEY
& CYNTHIA JONES REM

147-13-00-006.000
STEPHENS THLMA

147-13-00-003.000
RIVERS TRESSIE YOUNG

147-13-00-056.000
ACKERMAN THELMA R

147-09-00-030.000
JAMISON MICHEL (ESTATE)
& CHARLOTTE JAMISON
(ESTATE)

147-00-00-155.000
CITY OF WALTERBORO

147-00-00-124.000
CUMMINGS GLORIA V

147-13-00-047.000
HUDSON MARY LEE

147-09-00-147.000
WALKER ROY C

147-09-00-060.000
MEADOW CREEK A
LIMITED PARTNERSHIP

147-09-00-051.000
COLLETON TILE &
CONCRETE INC.

147-09-00-053.000
COLLETON TILE &
CONCRETE INC.

ANN CT.

JOSEPH DR.

KIMBRELL ST.

RAILROAD ST.

EDGE OF PAVEMENT

ROW

MH #36
FR: 84.06
INV. IN: 70.99 (N)
INV. OUT: 70.89 (S)

MH #37
FR: 87.51
INV. IN: 71.57 (NW)
INV. OUT: 71.47 (S)

MH #38
FR: 89.84
INV. IN: 71.75 (NW)
INV. OUT: 71.65 (SE)

MH #39
FR: 89.86
INV. IN: 72.20 (NW)
INV. OUT: 72.10 (SE)

MH #40
FR: 89.05
INV. IN: 72.58 (NW)
INV. OUT: 72.48 (SE)

MH #41
FR: 87.47
INV. IN: 73.16 (NW)
INV. OUT: 73.06 (SE)

N: 396,516.24
E: 2,096,404.76

8' X 20' RECEIVING PIT

8' X 8'
BORE PIT

50 LF OF 36-INCH STEEL CASING
INSTALLED VIA JACK AND BORE

MATCH LINE - SEE SHEET NO. C2.7

MATCH LINE - SEE SHEET NO. C2.9

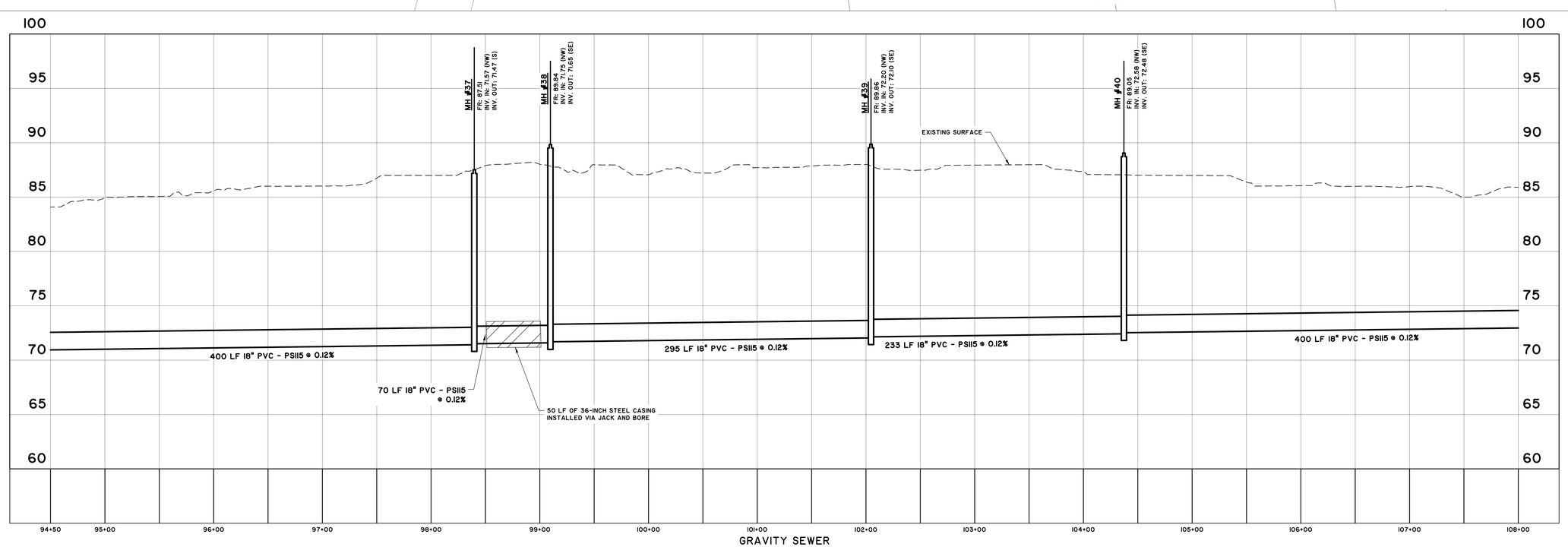
CONSTRUCTION NOTES:

1) ALL BORE PITS SHOULD BE A MINIMUM OF 5 FT FROM THE EDGE OF PAVEMENT.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = ft. 50



GRAVITY SEWER
STATIONS: 94+50 - 108+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL
030289
THOMAS & HUTTON ENGINEERING CO.
No. C00285
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NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL
030289
RYAN S. OSBORNE
12/23/24

NO.	REVISIONS	BY	DATE

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COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

GRAVITY SEWER PLAN & PROFILE

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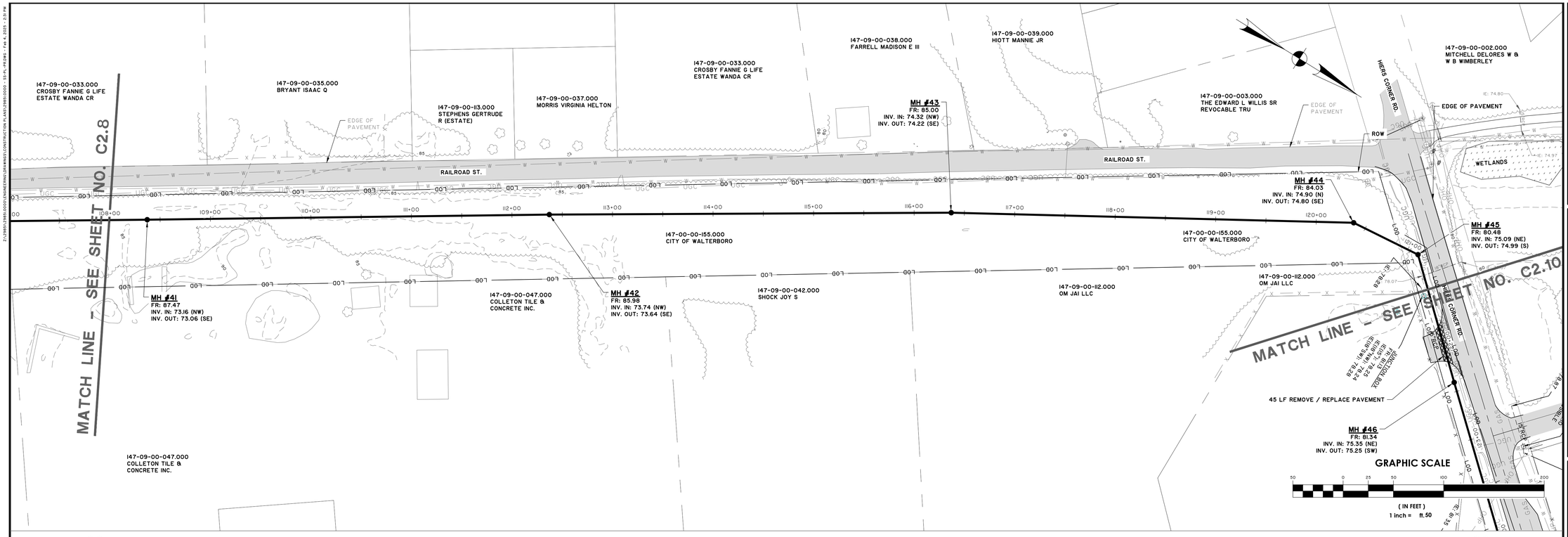
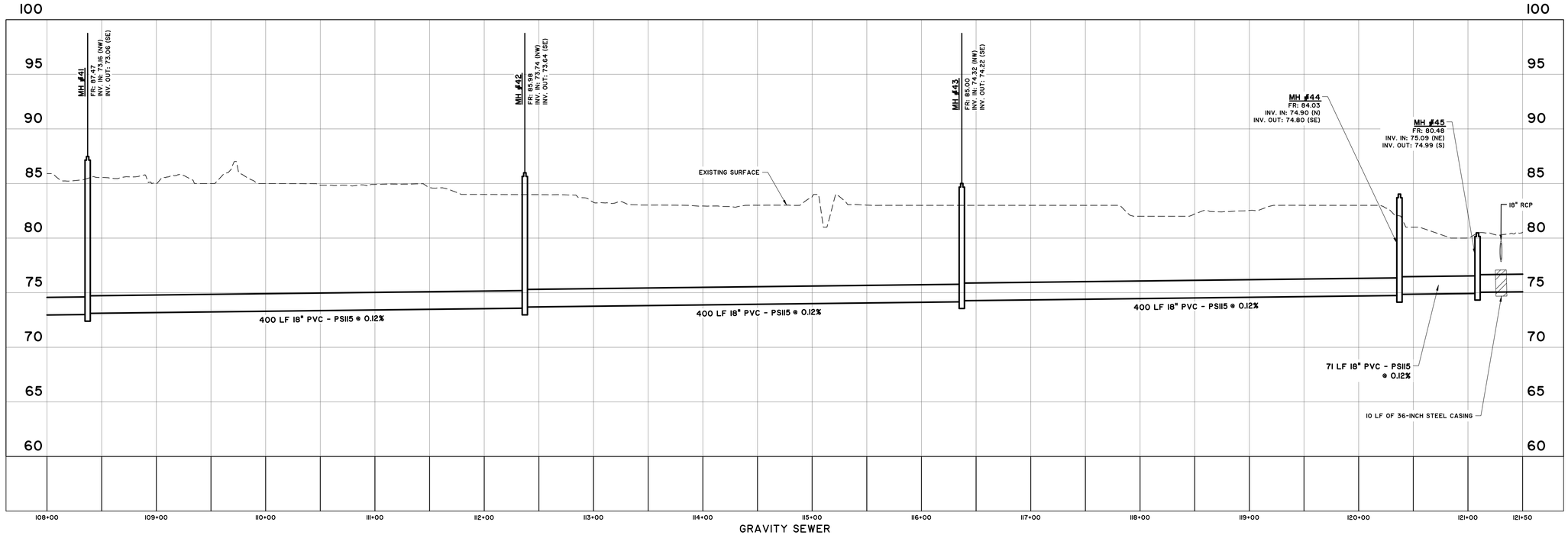
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	AS NOTED

C2.8

Z:\29851.0000\ENGINEERING\04 PANELS CONSTRUCTION PLANS\29851.0000 - 05 PL PRIME - TUE 4, 2023 - 2:53 PM





GRAVITY SEWER
STATIONS: 108+00 - 121+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

NORTH CAROLINA
REGISTERED
PROFESSIONAL
ENGINEER
SEAL
032285
THOMAS
& HUTTON
ENGINEERING
No. C00285
CERTIFICATE OF AUTHORIZATION
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COLLETON COUNTY
COLLETON COUNTY
NORTHWEST WALTERBORO SEWER IMPROVEMENTS
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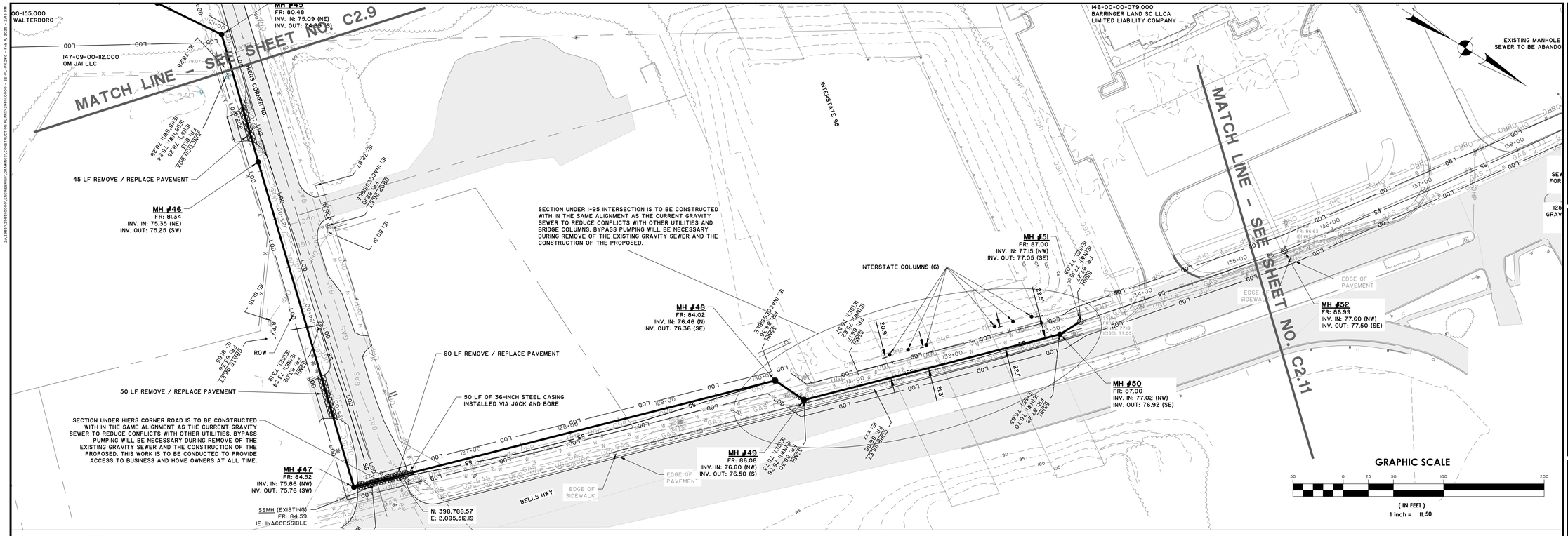
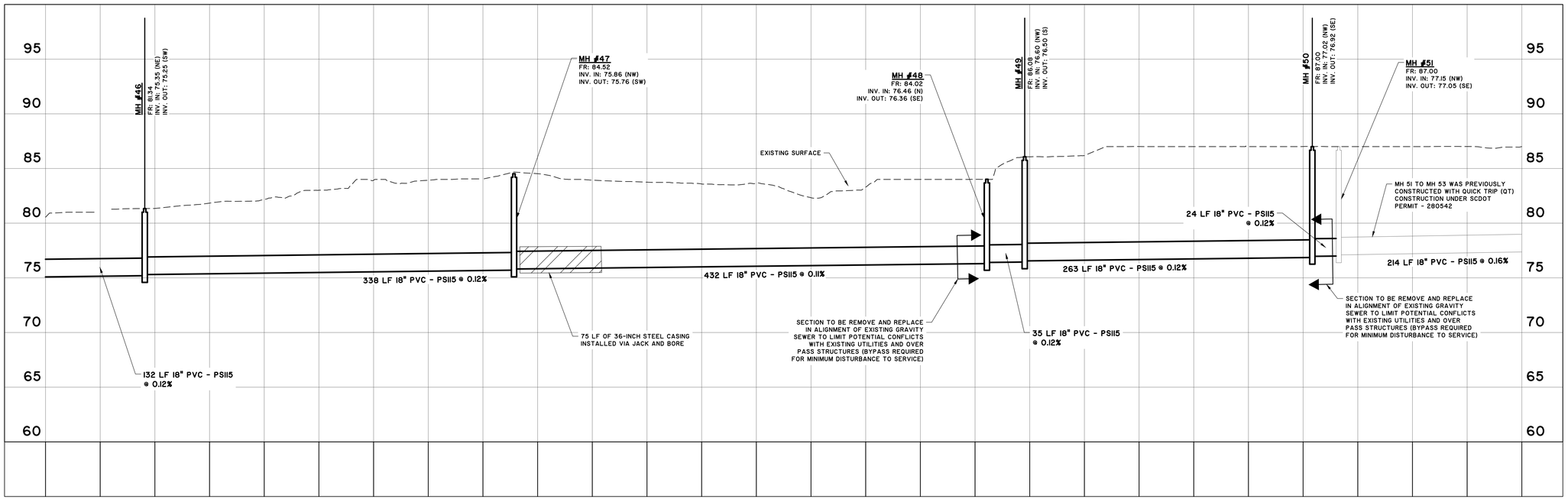
SCALE:	AS NOTED

C2.9





GRAVITY SEWER
STATIONS: 121+50 - 135+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

NO.	REVISIONS	BY	DATE

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COLLETON COUNTY
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NORTHWEST WALTERBORO SEWER IMPROVEMENTS
GRAVITY SEWER PLAN & PROFILE

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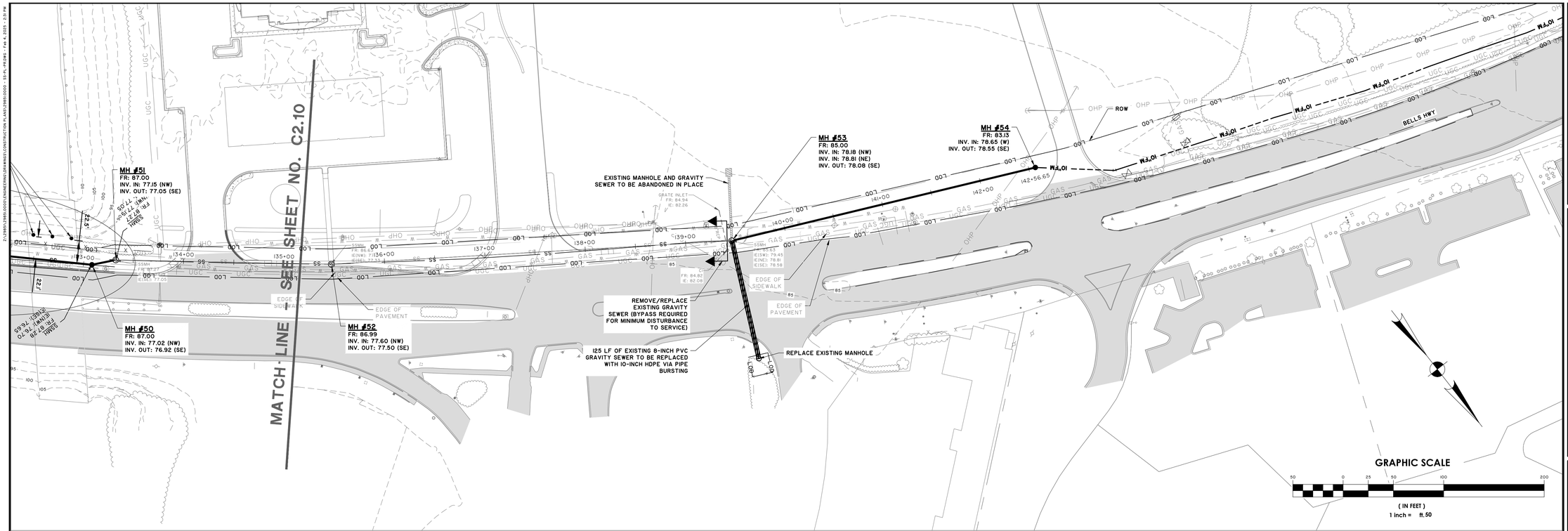
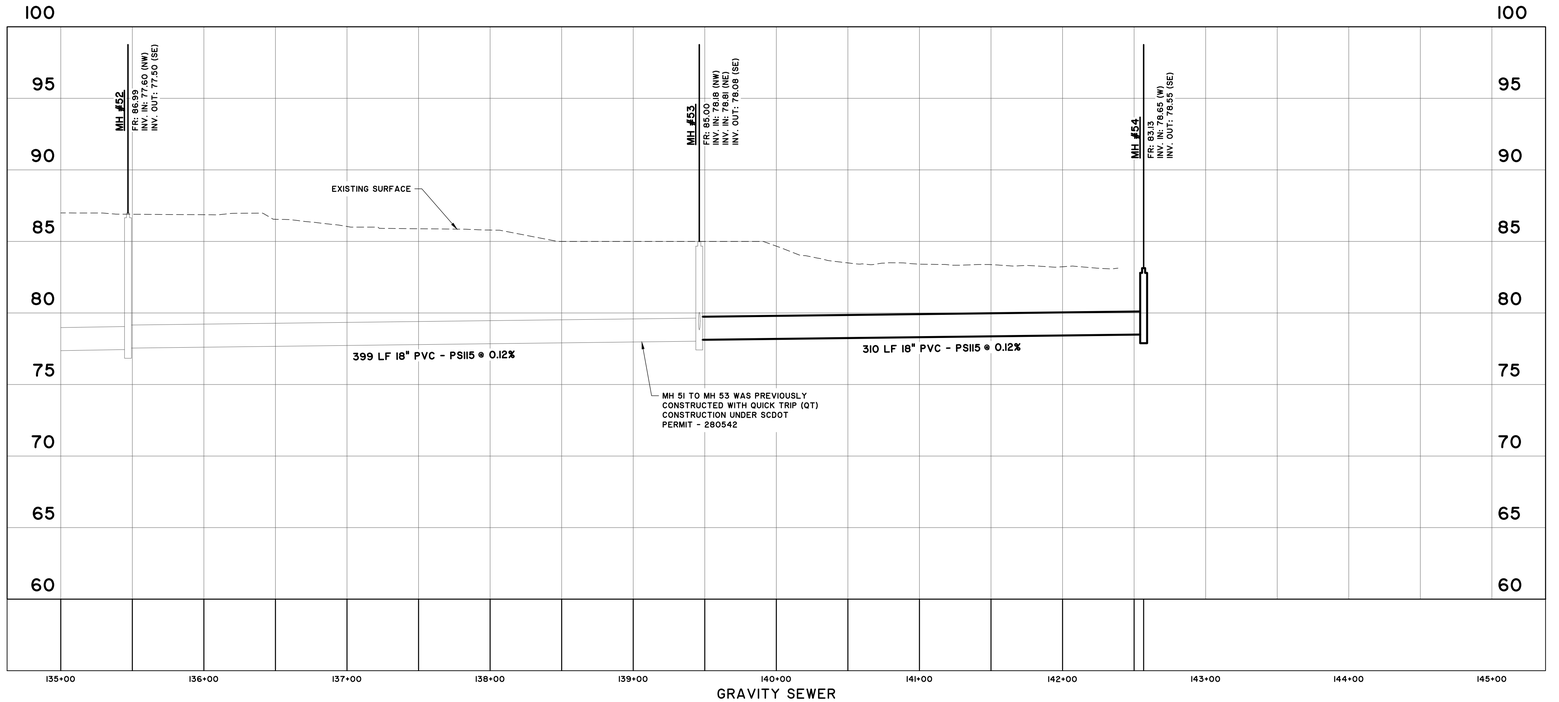
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	AS NOTED

C2.10





GRAVITY SEWER
STATIONS: 135+00 - 145+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

SOUTH CAROLINA
REGISTERED
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ENGINEER
THOMAS
& HUTTON
ENGINEERING
No. C002851
CERTIFICATE OF AUTHORIZATION
12/23/24

SOUTH CAROLINA
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PROFESSIONAL
ENGINEER
No. 32127
CERTIFICATE OF AUTHORIZATION
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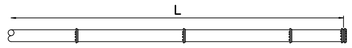
C2.11



DUCTILE IRON LINE

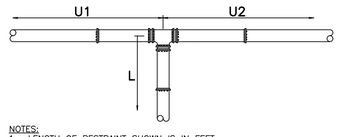
PIPE DIA.	L
4	28
6	40
8	52
10	62
12	73
16	94
20	114
24	132

PVC LINE

PIPE DIA.	L
4	52
6	74
8	96
10	115
12	136

NOTES:
1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LINES CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.

DEAD END RESTRAINT



NOTES:
1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LINES CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.
3. U1 AND U2 = UNINTERRUPTED STRAIGHT RUNS OF PIPE IN EACH DIRECTION.
4. Ur = THE SMALLER OF U1 OR U2.
5. L = MINIMUM RESTRAINED LENGTH ALONG THE BRANCH.
6. WHERE Ur IS LESS THAN 5', RESTRAIN TEE AS A 90°. HORIZONTAL BEND.

DUCTILE IRON LINE

TEE / Ur	5'–10'	11'–20'	21'–35'	36'–50'	50'–75'	75'–100'
4X4	23	15	2	*	*	*
6X4	21	9	*	*	*	*
6X6	35	27	14	*	*	*
8X4	18	3	*	*	*	*
8X6	33	23	5	*	*	*
8X8	47	39	26	6	*	*
10X4	16	*	*	*	*	*
10X6	31	18	*	*	*	*
10X8	46	36	19	*	*	*
10X10	57	49	36	17	*	*
12X4	13	*	*	*	*	*
12X6	30	14	*	*	*	*
12X8	44	32	13	*	*	*
12X10	56	47	31	7	*	*
12X12	68	60	47	28	*	*
16X6	26	4	*	*	*	*
16X8	41	25	*	*	*	*

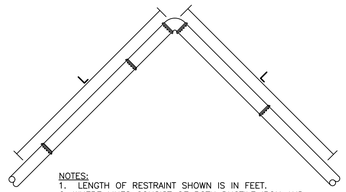
DUCTILE IRON LINE

TEE / Ur	5'–10'	11'–20'	21'–35'	36'–50'	50'–75'	75'–100'
16X10	54	41	20	*	*	*
16X12	66	56	38	*	*	*
16X16	89	81	38	*	*	*
20X6	22	*	*	*	*	*
20X8	38	18	*	*	*	*
20X10	51	35	8	*	*	*
20X12	64	51	28	*	*	*
20X16	87	77	60	35	10	*
20X20	108	100	87	67	48	*
24X6	18	*	*	*	*	*
24X8	35	10	*	*	*	*
24X10	49	29	*	*	*	*
24X12	62	45	17	*	*	*
24X16	86	73	53	22	*	*
24X20	107	97	81	57	33	*
24X24	127	119	106	86	66	33

MINIMUM RESTRAINED LENGTH (L)

*RESTRAIN AT TEE ONLY.

TEE RESTRAINT (DUCTILE IRON LINE)



NOTES:
1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LINES CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.

PVC LINE

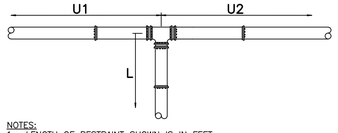
PIPE DIA.	BEND ANGLE 11 1/4°	22 1/2°	45°	90°
4	3	6	12	29
6	4	8	17	41
8	5	11	22	53
10	6	13	26	64
12	7	15	31	75

DUCTILE IRON LINE

PIPE DIA.	BEND ANGLE 11 1/4°	22 1/2°	45°	90°
4	2	4	8	20
6	3	6	12	28
8	4	7	15	36
10	4	9	18	43
12	5	10	21	51
16	6	13	27	65
20	8	16	33	79
24	9	18	38	92

MINIMUM RESTRAINED LENGTH (L)

HORIZONTAL BEND RESTRAINT



NOTES:
1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LINES CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.
3. U1 AND U2 = UNINTERRUPTED STRAIGHT RUNS OF PIPE IN EACH DIRECTION.
4. Ur = THE SMALLER OF U1 OR U2.
5. L = MINIMUM RESTRAINED LENGTH ALONG THE BRANCH.
6. WHERE Ur IS LESS THAN 5', RESTRAIN TEE AS A 90°. HORIZONTAL BEND.

PVC LINE

TEE / Ur	5'–10'	11'–20'	21'–35'	> 35'
4X4	43	28	4	*
6X4	38	17	*	*
6X6	64	49	25	*
8X4	34	6	*	*
8X6	61	42	10	*
8X8	87	72	48	12
10X4	29	*	*	*
10X6	58	34	*	*
10X8	84	66	35	*
10X10	106	91	67	31
12X4	24	*	*	*
12X6	54	26	*	*
12X8	82	60	23	*
12X10	104	86	57	13
12X12	126	112	87	51

MINIMUM RESTRAINED LENGTH (L)

*RESTRAIN AT TEE ONLY.

TEE RESTRAINT (PVC LINE)

DUCTILE IRON LINE

REDUCER	U	L
6X4	30	21
8X4	72	38
8X6	29	22
10X4	123	51
10X6	63	38
10X8	26	21
12X4	186	64
12X6	106	53
12X8	59	39
12X10	26	21
16X6	214	79
16X8	141	68
16X10	91	56
16X12	54	40
20X10	174	84
20X12	123	71
20X16	51	40
24X12	207	97
24X16	113	72
24X20	48	39

PVC LINE

REDUCER	U	L
6X4	56	38
8X4	134	69
8X6	53	40
10X4	227	94
10X6	117	71
10X8	49	39
12X4	343	118
12X6	196	99
12X8	109	72
12X10	48	40

U = MINIMUM UNINTERRUPTED STRAIGHT RUN OF PIPE ON SMALL SIDE OF REDUCER.

L = MINIMUM RESTRAINED LENGTH.

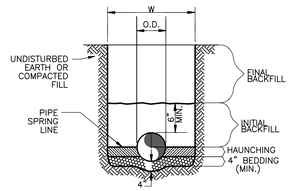
* WHERE MINIMUM "U" IS NOT MET, PIPE ON LARGE SIDE OF REDUCER SHALL BE RESTRAINED FOR A MINIMUM OF "L" FEET.

NOTES:
1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LINES CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.

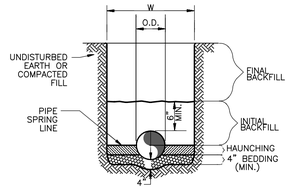
REDUCER RESTRAINT

RESTRAINED JOINTS DETAILS

NOT TO SCALE



WATER LINE
NOT TO SCALE



SANITARY SEWER
NOT TO SCALE

PIPE DIA.	W
≤12"	O.D. OF PIPE + (12" TO 18")
>12"	> O.D. OF PIPE + 18"

GENERAL NOTES

1. BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.
2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A OR CLASS I-B OR CLASS II COMPACTED TO 85% PROCTOR.
3. INITIAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
4. INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
5. FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3 AND 4.
6. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV-A COMPACTED TO 95% STANDARD PROCTOR.
7. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-89.
8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

UTILITY TRENCH AND BEDDING

NOT TO SCALE

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
1501 Main Street • Suite 400
Columbia, SC 29201 • 803.451.4789
www.thomasandhutton.com

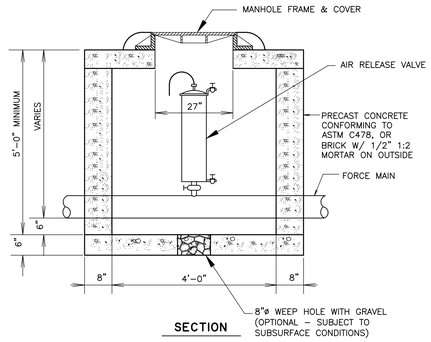
COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

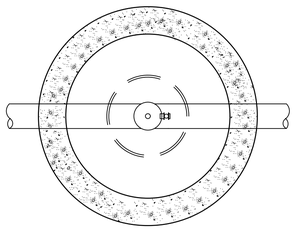
UTILITY DETAILS

JOB NO:	J-2985.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	N/A

C5.0



SECTION

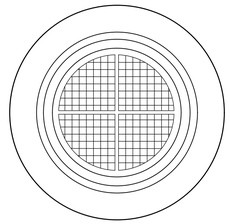


PLAN

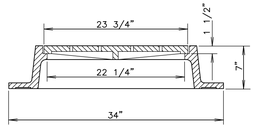
AIR RELEASE VALVE AND MANHOLE

NOT TO SCALE

TYPE "C" LID TO HAVE MACHINED BEARING SURFACES. LID TO BE LETTERED "STORM", "SANITARY" OR "WATER" AS APPROPRIATE. (NONE VENTED)



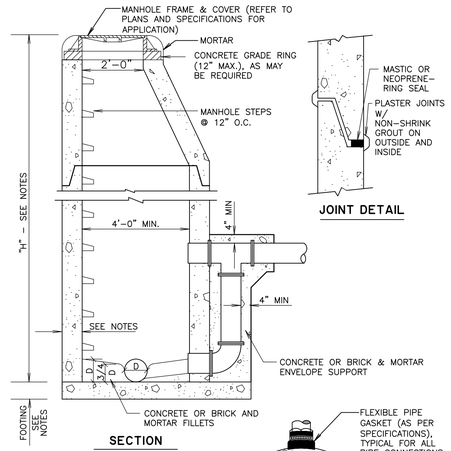
PLAN



SECTION

MANHOLE FRAME AND COVER DETAIL

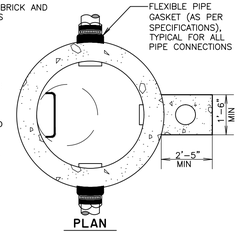
NOT TO SCALE



SECTION

JOINT DETAIL

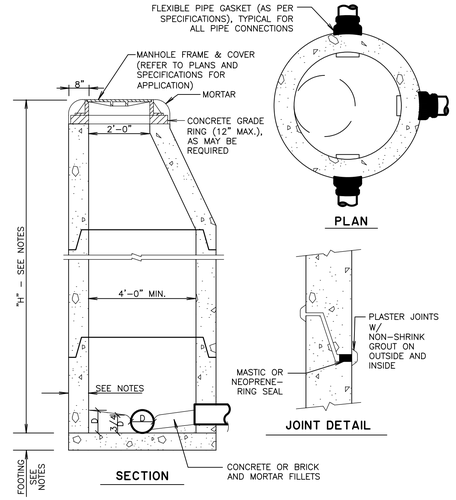
NOTES:
1. IN PAVED AREAS MANHOLE FRAMES WILL BE FLUSH WITH FINISHED PAVEMENT GRADE. IN NON-PAVED AREAS MANHOLE FRAMES WILL BE SET 2" ABOVE FINISHED GRADE.
2. PRECAST REINFORCED CONCRETE MANHOLE TOPS, RISERS, AND BASES SHALL CONFORM TO ASTM C478.
3. BRICK MANHOLES - WHEN "H" IS LESS THAN 12 FT., FOOTING AND BRICK WALLS SHALL BE 8" THICK. WHEN "H" IS GREATER THAN 12 FT., FOOTING AND BRICK WALLS BELOW 12 FT. SHALL BE 12" THICK. PLASTER WITH 1/2" 1:2 MORTAR ON OUTSIDE.



PLAN

DROP-TYPE MANHOLE

NOT TO SCALE



SECTION

PLAN

JOINT DETAIL

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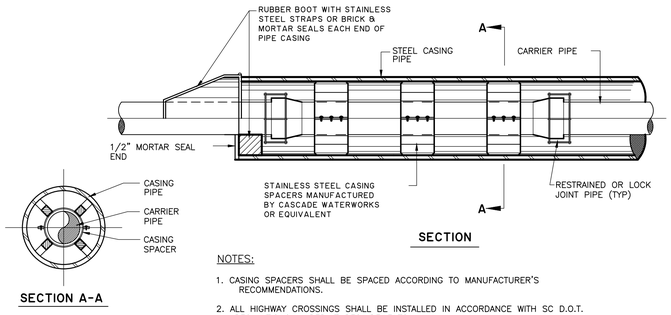
STANDARD MANHOLE

NOT TO SCALE



SECTION A-A

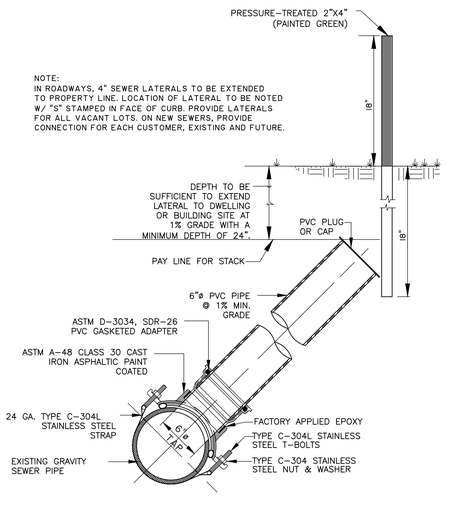
SECTION

NOTES:

1. CASING SPACERS SHALL BE SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
2. ALL HIGHWAY CROSSINGS SHALL BE INSTALLED IN ACCORDANCE WITH SC D.O.T. REGULATIONS & PERMIT REQUIREMENTS.
3. ALL RAILROAD CROSSINGS SHALL BE INSTALLED IN ACCORDANCE TO AMERICAN RAILWAY ENGINEERING ASSOCIATION REGULATIONS, UNDER PART 5, PIPELINES (LATEST EDITION) AND PERMIT REGULATIONS.

CASING PIPE DETAIL

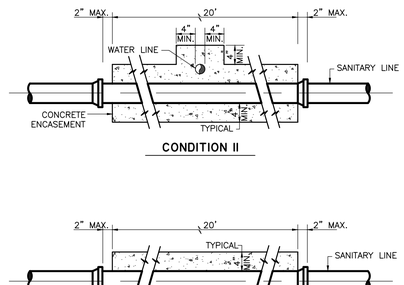
NOT TO SCALE



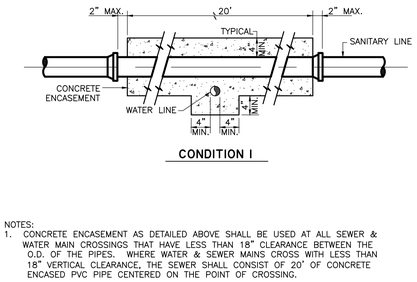
CONNECTION TO NEW SANITARY PIPE

SANITARY SERVICE CONNECTION DETAIL

NOT TO SCALE



CONDITION II



CONDITION I

NOTES:
1. CONCRETE ENCASEMENT AS DETAILED ABOVE SHALL BE USED AT ALL SEWER & WATER MAIN CROSSINGS THAT HAVE LESS THAN 18" CLEARANCE BETWEEN THE O.D. OF THE PIPES. WHERE WATER & SEWER MAINS CROSS WITH LESS THAN 18" VERTICAL CLEARANCE, THE SEWER SHALL CONSIST OF 20' OF CONCRETE ENCASED PVC PIPE CENTERED ON THE POINT OF CROSSING.
2. WHERE WATER LINE CROSSES BELOW SEWER, ENCASEMENT IS MANDATORY, REGARDLESS OF VERTICAL SEPARATION.

WATER & SEWER CROSSING DETAIL

NOT TO SCALE

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NO.	REVISIONS	BY	DATE

COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

UTILITY DETAILS

JOB NO:	J-29851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	N/A

C5.1

STORMWATER POLLUTION PREVENTION PLAN

I. SITE DESCRIPTION

A. PROJECT DESCRIPTION

A.1.	PROJECT AREA	32.3 ACRES
A.2.	AREA DISTURBED	32.3 ACRES
A.3.	PERCENT IMPERVIOUS AREA BEFORE CONSTRUCTION	21.72 %
A.4.	RUNOFF COEFFICIENT BEFORE CONSTRUCTION	70.5 CN
A.5.	PERCENT IMPERVIOUS AREA AFTER CONSTRUCTION	21.78 %
A.6.	RUNOFF COEFFICIENT AFTER CONSTRUCTION	73.0 CN

B. DESCRIPTION OF CONSTRUCTION ACTIVITY

WORK CONSISTS OF OPEN CUT OF APPROXIMATELY 14,000 LF OF 21-INCH GRAVITY MAIN WITH MANHOLES AND APPROXIMATELY 23,000 LF OF 10-INCH FORCE MAIN.

C. RUNOFF DATA

C.1.	SOIL CLASSIFICATIONS:	(HSG) A, A/D, B, B/D, C
C.2.	LAND USE(S):	RESIDENTIAL, WOODED, ROAD RIGHT OF WAY

D. RECEIVING WATERS

D.1.	CLOSEST RECEIVING WATERS:	JONES SWAMP CREEK AND DOCTORS CREEK
D.2.	ULTIMATE RECEIVING WATERS:	ASHEPOO RIVER

E. FLOOD

E.1.	FEMA FLOOD ZONE(S):	A & X
E.2.	FEMA FLOOD INSURANCE MAP(S):	45029C0300G, 45029C0305G, 45029C0315G, 45029C0316G, and 45029C0318G

II. CONTROL MEASURES

1. EROSION and SEDIMENT CONTROLS

PRIOR TO START OF CONSTRUCTION, ALL EXTERIOR SILT FENCE WILL BE INSTALLED AS SHOWN ON THE PLANS.

1.1. CLEARING

1.1.1. AS CLEARING IS COMPLETED, ADDITIONAL SILT FENCE WILL BE INSTALLED WHERE NECESSARY, SUCH AS POINTS WHERE FLOWS BECOME CHANNELIZED, AND OTHER POINTS WHERE EXCESSIVE RUNOFF VELOCITIES MAY OCCUR.

1.1.2. INSTALL CONSTRUCTION ENTRANCES / EXITS BEFORE BEGINNING CLEARING

1.1.3. CONSTRUCTION DELAYS IN ANY ONE AREA GREATER THAN 14 DAYS PRIOR TO START OF ROUGH GRADING WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.1.4. MAINTAIN EXISTING VEGETATION WHENEVER POSSIBLE AND MINIMIZE THE AREA OF DISTURBANCE. RETAIN AND PROTECT TREES TO ENHANCE FUTURE LANDSCAPING EFFORTS AND REDUCE RAINDROP IMPACT.

1.1.5. INSTALL ALL SEDIMENT CONTROL PRACTICES PRIOR TO ANY UP-SLOPE SOIL DISTURBING ACTIVITIES.

1.1.6. PHASE CONSTRUCTION ACTIVITIES TO MINIMIZE THE AREAS DISTURBED AT ONE TIME. THIS WILL ALSO ALLOW COMPLETED AREAS TO BE STABILIZED AND RE-VEGETATED BEFORE DISTURBING ADJACENT SITES. THE NEED FOR TEMPORARY EROSION CONTROL MEASURES MAY BE AVOIDED BY COMPLETING A PHASE AND INSTALLING PERMANENT EROSION CONTROL MEASURES WHEN THE FINAL GRADE IS ATTAINED.

1.1.7. MAINTAIN AND PROTECT ALL NATURAL WATERWAYS. RETAIN AT LEAST A 35-FOOT UNDISTURBED BUFFER OF NATURAL VEGETATION ALONG ALL WATERWAYS TO FILTER OUT SEDIMENT AND OTHER POLLUTANTS. MAINTAIN A 45-FOOT UNDISTURBED BUFFER AROUND SENSITIVE WATERS.

1.1.8. INSTALL SILT FENCE (OR BIO ROLLS/ROCK SOCK PRODUCTS) ON THE DOWN-SLOPE PERIMETER OF ALL DISTURBED AREAS PRIOR TO ANY SOIL DISTURBING ACTIVITIES (INCLUDING CLEARING AND GRUBBING). SILT FENCE CAN TREAT A MAXIMUM OF 100 SQUARE FEET PER LINEAL FOOT OF FENCE. INSTALL SILT FENCE IN SHORTER REACHES ON THE CONTOUR WITH EACH END TURNED UP-SLOPE. SWALES AND SHORELAND AREAS SHOULD ALSO BE PROTECTED WITH SILT FENCE, BIO ROLLS, OR ROCK SOCKS.

1.1.9. IN AREAS OF CONCENTRATED FLOW INSTALL STRAW BALE CHECKS, ROCK CHECK DAMS, TRIANGULAR DIKES, BIO ROLL BLANKETS, OR ROCK SOCKS TO SLOW RUNOFF AND TRAP SEDIMENT.

1.1.10. USE TEMPORARY SLOPE DRAINS OR ROCK CHUTES TO MOVE WATER DOWN STEEP SLOPES.

1.1.11. CONSTRUCT SEDIMENT BASINS FOR DRAINAGE AREAS GREATER THAN 10 ACRES

1.2. ROUGH GRADING

1.2.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING ROUGH GRADING, DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.2.2. ALL AREAS NOT SUBJECT TO FURTHER CONSTRUCTION (DRAINAGE, SANITARY SEWER, ROADS, WATER DISTRIBUTION SYSTEMS, OR STORM WATER FACILITIES) SHALL BE GRASSED WITH A PERMANENT COVER.

1.2.3. COVER ANY STOCK PILED TOPSOIL WITH PLASTIC (OR OTHER IMPERVIOUS COVERING) OR USE A TEMPORARY SEED MIX. USE STOCKPILED TOPSOIL AS EARTHEN BERMS TO SERVE AS TEMPORARY SEDIMENT BASINS.

1.3. DRAINAGE

1.3.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING DRAINAGE INSTALLATION.

1.3.2. CONSTRUCTION DRAINAGE WILL BE ROUTED THROUGH LAKES, WHICH WILL ACT AS SEDIMENT BASINS OR OTHER ACCEPTABLE SEDIMENT BASINS/TRAPS.

1.3.3. STORM DRAIN INLET PROTECTION AS SHOWN ON DETAIL SHEET SHALL BE INSTALLED ON ALL CURB INLETS, STORM DRAIN MANHOLES, JUNCTION BOXES, AND GRATE INLETS.

1.3.4. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF THE NEXT CONSTRUCTION SEQUENCE WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.3.5. ALL STORM LINES NOT IN STREETS OR OTHER PAVED AREAS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL.

1.4. WASTE DISTRIBUTION SYSTEM INSTALLATION

1.4.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING INSTALLATION OF THE WATER DISTRIBUTION SYSTEM.

1.4.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.5. WASTEWATER COLLECTION SYSTEM INSTALLATION

1.5.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING INSTALLATION OF THE WASTEWATER SYSTEM.

1.5.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.6. CONSTRUCTION OF ROADS

1.6.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING ROAD CONSTRUCTION.

1.6.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.7. GRASSING

1.7.1. ALL EXISTING CONTROLS WILL BE MAINTAINED UNTIL GRASSING IS ESTABLISHED

1.7.2. ANY AREAS THAT ERODE OR WHERE GRASS DOES NOT ESTABLISH ITSELF SHALL BE RE-GRADED AND RE-GRASSED.

2. STORM WATER MANAGEMENT

RUNOFF FROM THIS PROJECT WILL DISCHARGE INTO A STORM WATER MANAGEMENT SYSTEM. TREATMENT WILL OCCUR IN STORM WATER DETENTION PONDS.

3. OTHER CONTROLS

3.1. WASTE DISPOSAL

3.1.1. NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED TO ANY RECEIVING WATERS.

3.1.2. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED.

3.1.3. THIS PLAN SHALL COMPLY WITH STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS.

3.1.4. DUST CONTROL ON DISTURBED AREAS - CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE AND HAUL ROUTES. THE PURPOSE OF THE MEASURE IS TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES, WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE OR SAFETY, OR TO ANIMALS OR PLANT LIFE.

III. MAINTENANCE

1. MAINTENANCE PROGRAM

1.1. THE SITE SUPERINTENDENT, OR HIS/HER REPRESENTATIVE, SHALL MAKE VISUAL INSPECTIONS OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (I.E. SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS; ESPECIALLY AFTER HEAVY RAINFALL EVENT TO INSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDING AND MULCHING OR RE-SODDING IF NECESSARY.

1.2. 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 SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE. ALL DRAINAGE SWALES, POCKETS, DEPRESSION, LOW LINES, AND OUTLET DITCHES SHALL DRAIN EFFECTIVELY AT ALL TIMES. SETTLEMENT OR WASHING THAT MAY OCCUR SHALL BE REPAIRED BY THE CONTRACTOR. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN AN EFFECTIVE BARRIER. MAINTAIN THE CONSTRUCTION EXIT IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TACKED ONTO PUBLIC ROADWAYS. RESEED AND MULCH AREA WHERE SEEDING EMERGENCE IS POOR, OR WHERE EROSION OCCURS. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE. INSPECT ALL MULCHES PERIODICALLY, AND AFTER RAINSTORMS TO CHECK FOR EROSION, DISLOCATION OR FAILURE. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED AND REINSTALL MULCH. FOLLOW THE CONSTRUCTION SEQUENCE THROUGHOUT THE PROJECT DEVELOPMENT. WHEN CHANGES IN CONSTRUCTION ACTIVITIES ARE NEEDED, AMEND THE SEQUENCE SCHEDULE IN ADVANCE TO MAINTAIN MANAGEMENT CONTROL. IF MAJOR CHANGES ARE NECESSARY, SEND A COPY OF THE MODIFIED SCHEDULE TO THE ENGINEER, SEDIMENT AND EROSION CONTROL MEASURES WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE DISTURBED AREAS ARE STABILIZED.

2. SILT FENCE

SILT FENCES WILL BE MONITORED DURING CONSTRUCTION. ANY SILT FENCE WHICH IS NOT FUNCTIONING PROPERLY WILL BE PROMPTLY REPAIRED. CLEAN OUT THE SILT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE OR REPLACE WITH FUNCTIONAL SILT FENCE WITHIN 24 HOURS. USE OF HOSES AND WATER TO FLUSH THE SEDIMENT INTO THE STORM INLETS IS UNACCEPTABLE.

3. SEDIMENTATION BASINS

SEDIMENTATION BASINS WHICH ARE AT 50% USED CAPACITY OR APPROACHING SUCH CAPACITY SHALL BE RE-EXCAVATED TO ORIGINAL DIMENSIONS AND THE SILT PROPERLY DISPOSED OF.

4. SEDIMENT LOGS/ROLLS

SEDIMENT LOGS/ROLLS OR OTHER CONTROL MEASURES WHICH BEGIN TO DISINTEGRATE OR FUNCTION INEFFECTIVELY SHALL BE PROMPTLY REPLACED.

5. VEGETATION COVER

ANY VEGETATION COVER SERVING TO STABILIZE DISTURBED SOILS WHICH IS ITSELF DISTURBED SHALL IMMEDIATELY BE REPLACED.

6. CONSTRUCTION ENTRANCE

MAINTAIN ROCK CONSTRUCTION ENTRANCE AND CLEAN ADJACENT ROADS OF ANY MUD TRACKED ONTO THEM.

IV. INSPECTIONS

1. QUALIFIED PERSONNEL WILL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS. WHERE SITES HAVE BEEN FINALLY STABILIZED SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH DURING THE WARRANTY PERIOD.

2. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. 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 WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.

3. A WRITTEN REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES) AND WHETHER ANY DISCHARGES OCCURRED, LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE, LOCATION(S) OF BMP'S THAT NEED MAINTENANCE, LOCATIONS(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, LOCATION(S) WHERE ADDITIONAL BMP'S ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION AND ANY CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO SWPPP NECESSARY AND IMPLEMENTATION DATES.

4. THE REPORT SHALL BE MAINTAINED AT LEAST THREE YEARS FROM THE DATE THE SITE IS FINALLY STABILIZED. THE REPORT MUST BE SIGNED AND SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN AND THE NPDES PERMIT REFERENCED ABOVE. THE CONTRACTOR SHALL MAINTAIN THIS REPORT. THE REPORT SHALL BE SUBMITTED TO THE ENGINEER AND OWNER.

V. LONG TERM MAINTENANCE OF DRAINAGE AND STORM WATER MANAGEMENT SYSTEM

THE ROADS AND DRAINAGE SYSTEM WILL BE OWNED AND MAINTAINED BY THE CITY OF WALTERBORO AFTER CONSTRUCTION IS COMPLETE.

VI. SC DHEC STANDARD NOTES

1. IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO GRASSING / HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.

2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW:

2.1. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.

2.2. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.

3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.

4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED INTO ANY WATERS OF THE STATE.

5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.

6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT AS MAY BE REQUIRED.

7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 AND SCR100000.

8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN NOT BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS

10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.

11. A COPY OF THE SWPPP, INSPECTION RECORDS AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.

12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.

13. MINIMIZE SOIL COMPACTION IN AREAS NOT UNDER PAVEMENTS AND /OR STRUCTURES AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.

14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUAL OR BETTER TREATMENT PRIOR TO DISCHARGE.

15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).

16. THE FOLLOWING DISCHARGES ARE PROHIBITED:

16.1. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;

16.2. WASTEWATER FROM WASHOUT AND CLEANOUT OF OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;

16.3. FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND

16.4. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.

18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF PERMIT SCR100000 AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.

19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE, THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

VII. EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES

1. THE IMPLEMENTATION OF THESE EROSION SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.

2. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.

3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.

4. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

5. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A MAJOR STORM EVENT.

6. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING AND PRIOR TO FINAL INSPECTION. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

7. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

8. BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY, THE EXISTING STORM WATER INLET(S) THAT RECEIVING RUNOFF FROM THE PROPOSED WORK AREA SHALL BE PROTECTED. THE TEMPORARY INLET PROTECTION MUST REMAIN IN PLACE UNTIL THE CONSTRUCTION ACTIVITY IS COMPLETED, THE STREET HAS BEEN SWEPT AND ANY EXPOSED SOILS ARE STABILIZED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REMOVING ANY TEMPORARY INLET PROTECTION INSTALLED; AFTER ALL DISTURBED AREAS ARE STABILIZED. TEMPORARY PROTECTION OF THE INLETS MAY BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING:

8.1. USE OF GRAVEL BAGS TO FILTER THE SEDIMENT FROM ANY RUNOFF. TO MAKE A GRAVEL BAG, USE A BAG MADE OF GEOTEXTILE FABRIC (NOT BURLAP) AND FILL WITH EITHER 3/4 INCH ROCK OR 1/4 INCH PEA GRAVEL.

8.2. USE OF SEDIMENT LOGS TO FILTER THE SEDIMENT FROM ANY RUNOFF (AVAILABLE THROUGH LOCAL EROSION CONTROL SUPPLIERS).

8.3. USE OF ABOVE OR UNDER-GRATE FILTER BAGS OR DEVICES TO FILTER THE SEDIMENT FROM ANY RUNOFF (AVAILABLE THROUGH EROSION CONTROL SUPPLIERS).

9. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION, SEDIMENTATION, OR FLOODING ON THE SITE, ON DOWNSTREAM PROPERTIES, IN THE RECEIVING CHANNELS, OR IN ANY STORM WATER INLET. WHEN SITE DEWATERING, WATER PUMPED FROM THE SITE, INCLUDING TRENCHES, SHALL BE TREATED BY ONE OF THE FOLLOWING:

9.1. TEMPORARY SEDIMENTATION BASINS

9.2. SEDIMENT FILTERING BAGS

10. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING UTILITIES. EXISTING UTILITIES ARE ALL UTILITIES THAT EXIST ON THE PROJECT IN AN ORIGINAL, RELOCATED OR NEWLY INSTALLED POSITION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGED UNDERGROUND OR OVERHEAD FACILITIES, EVEN IF THE UTILITY IS NOT SHOWN ON THE SITE DEVELOPMENT PLANS. THE CONTRACTOR SHALL CONTACT THE LOCAL UTILITIES PROTECTION CENTER TO COORDINATE THE MARKING OF EXISTING UTILITY LINES A MINIMUM OF 96 HOURS PRIOR TO COMMENCEMENT OF ANY WORK.

11. THE CONTRACTOR SHALL FLUSH ALL INLETS AND PIPE AT THE COMPLETION OF CONSTRUCTION TO REMOVE SILT AND DEBRIS. THE CLEANING AND FLUSHING OF INLETS AND PIPE (EXISTING AND PROPOSED) SHALL BE CONSIDERED PART OF THE COST FOR THE PROJECT.

12. EGRESS FROM THE SITE SHALL BE CONTROLLED SUCH THAT VEHICLES LEAVING THE SITE MUST TRAVERSE CONSTRUCTION EXITS TO REMOVE MUD FROM TIRES.

13. SCHEDULE CONSTRUCTION ACTIVITIES TO MINIMIZE THE EXPOSED AREA AND DURATION OF EXPOSURE. IN SCHEDULING, TAKE INTO ACCOUNT THE SEASON AND THE WEATHER FORECAST.

14. EROSION CONTROL MEASURES ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL CONTROL MEASURES AS DICTATED BY ACTUAL FIELD CONDITIONS AT THE TIME OF CONSTRUCTION IN ORDER TO PREVENT EROSION AND CONTROL SEDIMENT. EROSION AND SEDIMENT CONTROL MEASURES WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE ENTIRE PROJECT IS TERMINATED OR SUSPENDED FOR AND INDEFINITE LENGTH OF TIME, ALL DISTURBED AREAS SHALL BE PLANTED WITH PERMANENT VEGETATION.

15. THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, IS BASED UPON FIELD INVESTIGATIONS AND IS BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME IS SHOWN AS INFORMATION ONLY, IS NOT GUARANTEED AND DOES NOT BIND THOMAS & HUTTON, OR THE OWNER IN ANY WAY.

16. CONTRACTOR SHALL MAINTAIN SITE ON A DAILY BASIS TO PROVIDE FOR POSITIVE DRAINAGE. CONTRACTOR, AT HIS COST, SHALL GRADE SITE AND PROVIDE NECESSARY TEMPORARY DRAINAGE SWALES TO INSURE STORM WATER DOES NOT POND ON SITE.

17. SITE DRAINAGE SHALL BE ESTABLISHED TO PREVENT ANY PONDED WATER CONDITIONS WITHIN THE CONSTRUCTION AREA AND TO FACILITATE STORM WATER DISCHARGE.

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

19. LIME RATES AND ANALYSIS:

19.1. AGRICULTURAL LIME SHALL BE APPLIED AT THE RATE SHOWN IN THE

TEMPORARY SEEDING - COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	40												
RYE, GRAIN	56												
RYEGRASS	50												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET	40												
JAPANESE MILLET	40												
RYE, GRAIN	56												
OATS	75												
RYEGRASS	50												

PERMANENT SEEDING - COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	10												
BAHIAGRASS	40												
BROWNTOP MILLET	10												
BAHIAGRASS	30												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
ATLANTIC COASTAL	15												
PANICGRASS	PLS												
BROWNTOP MILLET	10												
SWITCHGRASS	8												
(ALAMO)	PLS												
LITTLE BLUESTEM	4												
SERICEA LESPEDEZA	20												
BROWNTOP MILLET	10												
WEEPING LOVEGRASS	8												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET	10												
BAHIAGRASS	40												
RYE, GRAIN	10												
BAHIAGRASS	40												
CLOVER, CRIMSON (ANNUAL)	5												
BROWNTOP MILLET	10												
BAHIAGRASS	30												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
BERMUDA, COMMON	10												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
BERMUDA, COMMON	12												
KOBE LESPEDEZA (ANNUAL)	10												
BROWNTOP MILLET	10												
BAHIAGRASS	20												
BERMUDA, COMMON	6												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
SWITCHGRASS	8												
LITTLE BLUESTEM	PLS												
INDIANGRASS	3												

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
SILT FENCE	
CLEARING LIMITS	CL
DIVERSION DIKE	DD
DIVERSION BERM	DB
TEMPORARY DIVERSION	TD
PERMANENT DIVERSION	PD
SUBSURFACE DRAIN	SSD
VEGETATED CHANNEL	
RIP RAP LINED CHANNEL	
ECB OR TRM LINED CHANNEL	
PAVED CHANNEL	PC
TREE PROTECTION	
SURFACE ROUGHENING	OR LG
TOP SOILING	
TEMPORARY SEEDING	TS
PERMANENT SEEDING	PS
MULCHING	M

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
EROSION CONTROL BLANKET OR TURF REINFORCEMENT MAT	
FLEXIBLE GROWTH MATRIX	FGM
BONDED FIBER MATRIX	BFM
SODDING	SO
SLOPED SODDING	
STAKED SOD	
STAKED SOD AROUND INLET	OR
RIPRAP	
OUTLET PROTECTION - RIP RAP	
OUTLET PROTECTION - ECB OR TRM	
DUST CONTROL	DC
POLYACRYLAMIDE (PAM)	PAM
SEDIMENT BASIN	
SEDIMENT BASIN WITH SKIMMER	
SEDIMENT TRAP	
ROCK SEDIMENT DIKE	
SEDIMENT TUBE	

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
ROCK CHECK DAM	OR
POROUS BAFFLES	
STABILIZED CONSTRUCTION ENTRANCE	
CONCRETE WASHOUT	
STORM DRAIN INLET PROTECTION - TYPE A FILTER FABRIC	A
STORM DRAIN INLET PROTECTION - TYPE A SEDIMENT TUBE	A
STORM DRAIN INLET PROTECTION - TYPE B HARDWARE FABRIC AND STONE	B
STORM DRAIN INLET PROTECTION - TYPE C BLOCK AND GRAVEL	C
STORM DRAIN INLET PROTECTION - TYPE D RIGID INLET FILTER	D
STORM DRAIN INLET PROTECTION - TYPE E SURFACE COURSE CURB INLET FILTER	E
STORM DRAIN INLET PROTECTION - TYPE F INLET TUBE	F
STORM DRAIN INLET PROTECTION - TYPE G IMPERVIOUS AREA	G
STORM DRAIN INLET PROTECTION - CATCH BASIN INSERT	I
PIPE SLOPE DRAINS	
TEMPORARY STREAM CROSSING	
LEVEL SPREADER	

LIST OF ACRONYMS FOR SEDIMENT AND EROSION CONTROL

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AMD	ACRYLAMIDE POLYMER
BFM	BONDED FIBER MATRIX
BMP(S)	BEST MANAGEMENT PRACTICE(S)
CFS	CUBIC FEET PER SECOND
CMP	CORRUGATED METAL PIPE
DHEC	DEPARTMENT OF HEATH AND ENVIRONMENTAL CONTROL
ECB	EROSION CONTROL BLANKET
EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPSC	EROSION PREVENTION AND SEDIMENTATION CONTROL
FDA	UNITED STATES FOOD AND DRUG ADMINISTRATION
FGM	FLEXIBLE GROWTH MATRIX
HDPE	HIGH DENSITY POLYETHYLENE
MS4	MUNICIPAL SEPARATE STORM SEWER SYSTEM
MSDS	MATERIAL SAFETY DATA SHEETS
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PAM	POLYACRYLAMIDE OR POLYMER
RCP	REINFORCED CONCRETE PIPE
SCS	SOIL CONSERVATION SERVICE
SWPPP	STORMWATER POLLUTION PREVENTION PROGRAM
TRM	TURF REINFORCEMENT MAT
VFS	VEGETATED FILTER STRIP

CONSTRUCTION SEQUENCE

CONSTRUCTION ACTIVITY	SCHEDULE CONSIDERATION
1 OBTAIN COPIES OF ALL PLAN APPROVALS AND OTHER APPLICABLE PERMITS.	CONTRACTOR TO HAVE ONSITE AT ALL TIMES DURING CONSTRUCTION.
2 FLAG THE WORK LIMITS AND WETLANDS.	FLAGGING TO HELP IDENTIFY PROJECT BOUNDARIES AND WETLANDS AREAS TO HELP PROVIDE SURFACE WATER PROTECTION AND MINIMIZE WETLAND IMPACTS
3 HOLD PRE CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.	REVIEW SEDIMENT AND EROSION PROTECTION AREAS AND BMPS WITH OWNER AND CONTRACTOR.
4 INSTALL CONSTRUCTION ACCESS AND LAY DOWN AREAS	STABILIZE BARE AREAS IMMEDIATELY AND INSTALL CONSTRUCTION EXITS / ENTRANCES.
5 CONSTRUCT SEDIMENT TRAPS AND BARRIERS - BASIN TRAPS, SEDIMENT FENCES, AND OUTLET PROTECTION.	INSTALL PRINCIPAL BASINS AFTER CONSTRUCTION SITE IS ACCESSED. INSTALL ADDITIONAL TRAPS AND BARRIERS AS NEEDED.
6 ESTABLISH RUNOFF CONTROL - DIVERSIONS, PERIMETER DIKES, WATER BARS, AND OUTLET PROTECTION.	INSTALL KEY PRACTICES AFTER PRINCIPAL SEDIMENT TRAPS AND BEFORE LAND GRADING. INSTALL ADDITIONAL RUNOFF-CONTROL MEASURES DURING GRADING.
7 LAND CLEARING AND GRADING-SITE PREPARATION CUTTING, FILLING AND GRADING, SEDIMENTATION TRAPS, BARRIERS, DIVERSIONS, DRAINS, SURFACE ROUGHENING.	BEGIN MAJOR CLEARING AND GRADING AFTER PRINCIPAL SEDIMENT AND KEY RUNOFF-CONTROL MEASURES ARE INSTALLED. CLEAR BORROW AND DISPOSAL AREAS ONLY AS NEEDED. INSTALL ADDITIONAL CONTROL MEASURES AS GRADING PROGRESSES. MARK TREES AND BUFFER AREAS FOR PRESERVATION.
8 RUNOFF CONVEYANCE SYSTEM- INSTALL STORM DRAINS, STABILIZE BANKS, CHANNELS, INSTALL INLET AND OUTLET PROTECTION, SLOPE DRAINS.	WHERE NECESSARY, STABILIZE BANKS AS EARLY AS POSSIBLE. INSTALL PRINCIPAL RUNOFF CONVEYANCE SYSTEM WITH RUNOFF- CONTROL MEASURES. INSTALL REMAINDER OF SYSTEM AFTER GRADING.
9 INSTALL WASTEWATER COLLECTION, WATER DISTRIBUTION, AND STORM DRAINAGE SYSTEMS	APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE.. WETLAND AREAS TO BE FILLED WITH NATIVE SOIL WHEN POSSIBLE AND SEEDED WITH NATIVE WETLAND MIX.
10 SURFACE STABILIZATION-TEMPORARY AND PERMANENT SEEDING, MULCHING, SODDING, RIP RAP.	APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE.
11 BUILDING CONSTRUCTION- BUILDINGS UTILITIES, ROADS, ETC.	INSTALL NECESSARY EROSION AND SEDIMENTATION CONTROL PRACTICES AS WORK TAKES PLACE.
12 LANDSCAPING AND FINAL STABILIZATION - TOPSOILING, TREES AND SHRUBS, PERMANENT SEEDING, MULCHING, SODDING, RIP RAP.	LAST CONSTRUCTION PHASE--STABILIZE ALL OPEN AREAS, INCLUDING BORROW AND SPOIL AREAS. REMOVE AND STABILIZE ALL TEMPORARY CONTROL MEASURES.

SOUTH CAROLINA PROFESSIONAL ENGINEER JOHN T. BUYNOVSKI THOMAS & HUTTON ENGINEERING No. 030285 CERTIFICATE OF AUTHORIZATION SOUTH CAROLINA No. C00285 12/23/24

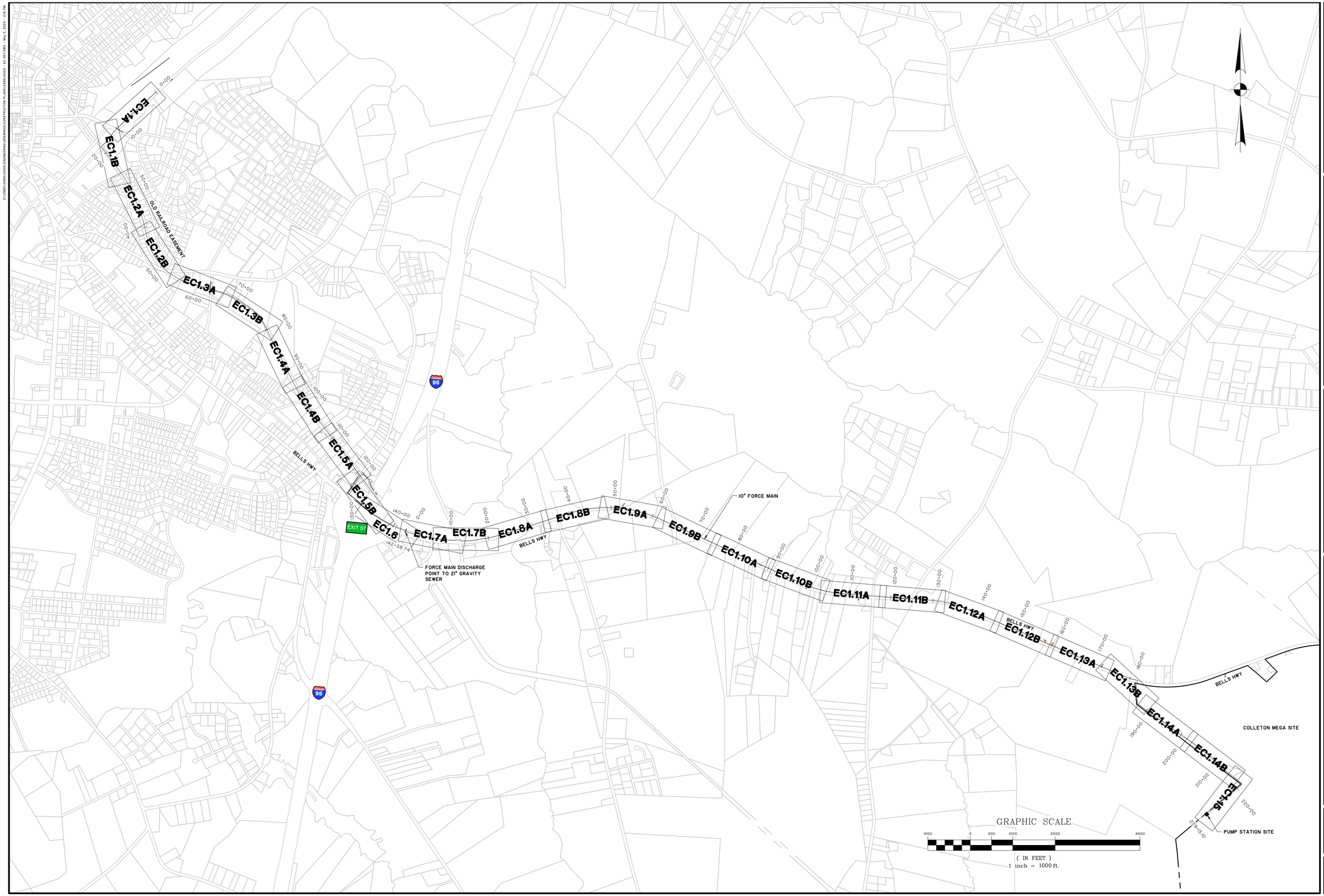
NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
1501 Main Street • Suite 400
Columbia, SC 29201 • 803.451.6789
www.thomasandhutton.com

COLLETON COUNTY
COLLETON COUNTY
NORTHWEST WALTERBORO SEWER IMPROVEMENTS
EROSION CONTROL CHARTS

JOB NO:	J-29851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	N/A

EC0.2



SOUTH CAROLINA
ROY S. HUTTON
THOMAS & HUTTON ENGINEERING CO.
No. C00285
CERTIFICATE OF AUTHORIZATION
12/23/24

SOUTH CAROLINA
MICHAEL A. LEVEILLE
No. 32102
REGISTERED PROFESSIONAL ENGINEER
12/23/24

NO.	REVISIONS	BY	DATE

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COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

EROSION CONTROL OVERALL

JOB NO:	J-29851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	1" = 1000'

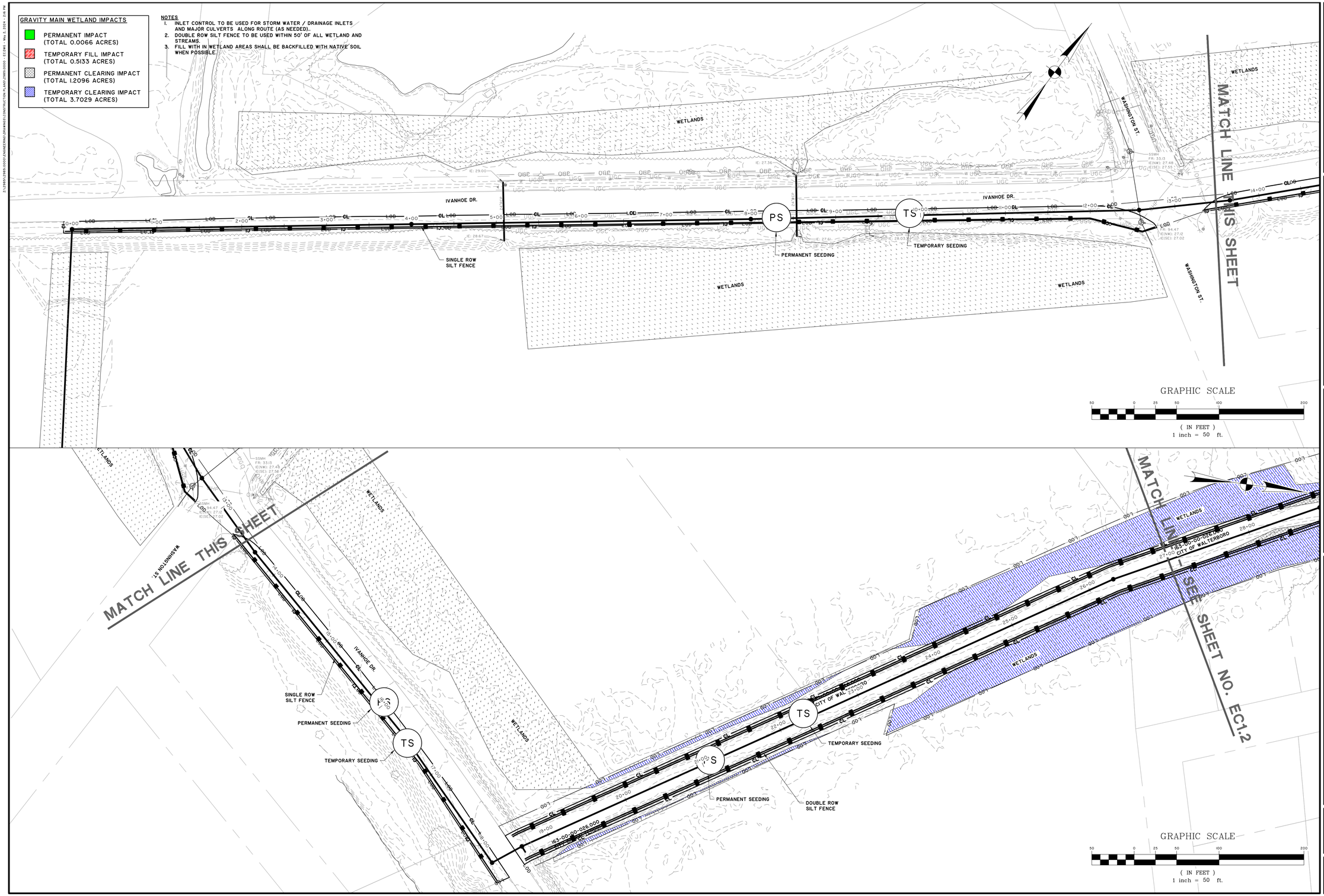
EC1.0

GRAVITY MAIN WETLAND IMPACTS

- PERMANENT IMPACT (TOTAL 0.0066 ACRES)
- TEMPORARY FILL IMPACT (TOTAL 0.5133 ACRES)
- PERMANENT CLEARING IMPACT (TOTAL 1.2096 ACRES)
- TEMPORARY CLEARING IMPACT (TOTAL 3.7029 ACRES)

NOTES

1. INLET CONTROL TO BE USED FOR STORM WATER / DRAINAGE INLETS AND MAJOR CULVERTS ALONG ROUTE (AS NEEDED)..
2. DOUBLE ROW SILT FENCE TO BE USED WITHIN 50' OF ALL WETLAND AND STREAMS.
3. FILL WITH IN WETLAND AREAS SHALL BE BACKFILLED WITH NATIVE SOIL WHEN POSSIBLE.



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

SOUTH CAROLINA PROFESSIONAL ENGINEER — THOMAS & HUTTON ENGINEERING CO. No. C00285 — CERTIFICATE OF AUTHORIZATION — 12/23/24

SOUTH CAROLINA PROFESSIONAL ENGINEER — JOSEPH T. BOYLES — No. 29851 — 12/23/24

NO.	REVISIONS	BY	DATE

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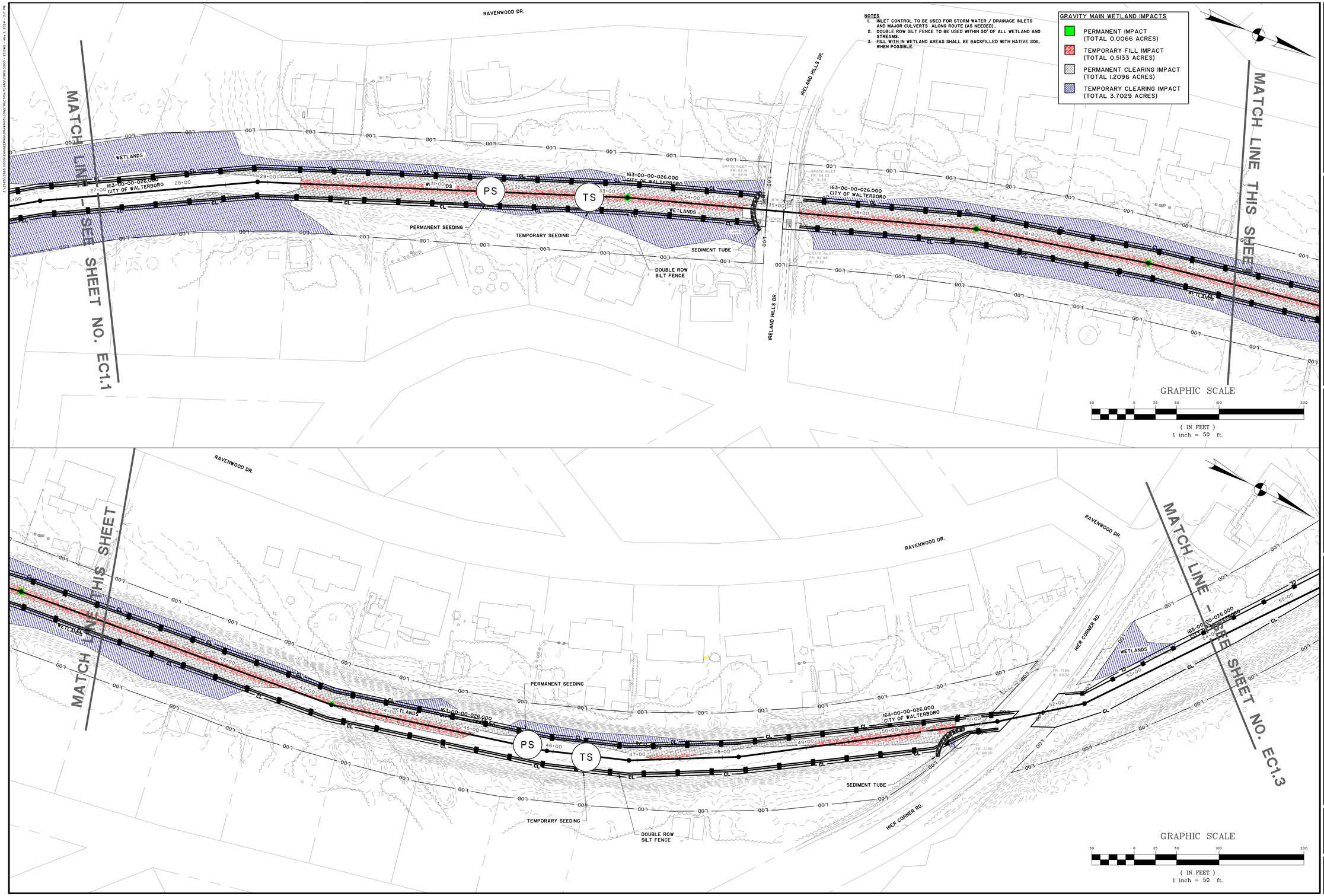
COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

EROSION CONTROL PLAN

JOB NO:	J-29851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	AS NOTED

EC1.1



NOTES

1. INLET CONTROL TO BE USED FOR STORM WATER / DRAINAGE INLETS AND MAJOR CULVERTS ALONG ROUTE (AS NEEDED).
2. DOUBLE ROW SILT FENCE TO BE USED WITHIN 50' OF ALL WETLAND AND STREAMS.
3. FILL WITH IN WETLAND AREAS SHALL BE BACKFILLED WITH NATIVE SOIL WHEN POSSIBLE.

GRAVITY MAIN WETLAND IMPACTS

- PERMANENT IMPACT (TOTAL 0.0066 ACRES)
- TEMPORARY FILL IMPACT (TOTAL 0.5133 ACRES)
- PERMANENT CLEARING IMPACT (TOTAL 1.2096 ACRES)
- TEMPORARY CLEARING IMPACT (TOTAL 3.7029 ACRES)

SOUTH CAROLINA PROFESSIONAL ENGINEER — ROLLYSON D. THOMAS, THOMAS & HUTTON ENGINEERING CO., No. C002851, CERTIFICATE OF AUTHORIZATION — 12/23/24

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COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

EROSION CONTROL PLAN

JOB NO:	J-29851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	AS NOTED

EC1.2

NOTES

1. INLET CONTROL TO BE USED FOR STORM WATER / DRAINAGE INLETS AND MAJOR CULVERTS ALONG ROUTE (AS NEEDED)..
2. DOUBLE ROW SILT FENCE TO BE USED WITHIN 50' OF ALL WETLAND AND STREAMS.
3. FILL WITH IN WETLAND AREAS SHALL BE BACKFILLED WITH NATIVE SOIL WHEN POSSIBLE.

GRAVITY MAIN WETLAND IMPACTS

- PERMANENT IMPACT (TOTAL 0.0066 ACRES)
- TEMPORARY FILL IMPACT (TOTAL 0.5133 ACRES)
- PERMANENT CLEARING IMPACT (TOTAL 1.2096 ACRES)
- TEMPORARY CLEARING IMPACT (TOTAL 3.7029 ACRES)

RAVENWOOD DR.

HIER CORNER RD.

MATCH LINE - SEE SHEET NO. EC1.2

163-00-00-026.000 CITY OF WALTERBORO

SINGLE ROW SILT FENCE

PERMANENT SEEDING

PS

163-00-00-026.000 CITY OF ERBORO

TS

TEMPORARY SEEDING

FOREST CR.

SSMH FR: 75.91 IE(N): 71.92 IE(W): 72.36 IE(S): 71.82

147-00-00-124.000 CUMMINGS GL

MATCH LINE THIS SHEET

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

MATCH LINE THIS SHEET

147-00-00-124.000 CUMMINGS GLORIA V

SINGLE ROW SILT FENCE

PERMANENT SEEDING

PS

TEMPORARY SEEDING

TS

DOUBLE ROW SILT FENCE

WETLANDS

MATCH LINE - SEE SHEET NO. EC1.4

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 042289 THOMAS & HUTTON ENGINEERING CO. No. C00285 REGISTERED 12/23/24

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
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EC1.3

NOTES
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3. FILL WITH IN WETLAND AREAS SHALL BE BACKFILLED WITH NATIVE SOIL WHEN POSSIBLE.

GRAVITY MAIN WETLAND IMPACTS

- PERMANENT IMPACT (TOTAL 0.0066 ACRES)
- TEMPORARY FILL IMPACT (TOTAL 0.5133 ACRES)
- PERMANENT CLEARING IMPACT (TOTAL 1.2096 ACRES)
- TEMPORARY CLEARING IMPACT (TOTAL 3.7029 ACRES)

MATCH LINE - SEE SHEET NO. EC1.3

MATCH LINE THIS SHEET

PERMANENT SEEDING

TEMPORARY SEEDING

DOUBLE ROW SILT FENCE

SINGLE ROW SILT FENCE

WETLANDS

147-00-00-124.000 CUMMINGS GLORIA V

147-00-00-155.000 CITY OF WALTERBORO

PS 87+00

TS 89+00

PS 103+00

ANN CT.

GODWIN ST.

RAILROAD ST.

JOSEPH DR.

KIMBRELL ST.

MATCH LINE THIS SHEET

MATCH LINE - SEE SHEET NO. EC1.5

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

SOUTH CAROLINA PROFESSIONAL ENGINEER — THOMAS & HUTTON ENGINEERING CO. — No. C00285 — CERTIFICATE OF AUTHORIZATION — 12/23/24

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NORTHWEST WALTERBORO SEWER IMPROVEMENTS

EROSION CONTROL PLAN

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DESIGNED:	MAL
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APPROVED:	RSO
SCALE:	AS NOTED

EC1.4

NOTES:
1. INLET CONTROL TO BE USED FOR STORM WATER / DRAINAGE INLETS AND MAJOR CULVERTS ALONG ROUTE (AS NEEDED).
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3. FILL WITH IN WETLAND AREAS SHALL BE BACKFILLED WITH NATIVE SOIL WHEN POSSIBLE.

MATCH LINE – SEE SHEET NO. EC1.4

RAILROAD ST.

PERMANENT SEEDING

TEMPORARY SEEDING

SINGLE ROW SILT FENCE

TS

PS

147-00-00-155.000
CITY OF WALTERBORO

HIERS CORNER RD.

WETLANDS

MATCH LINE THIS SHEET

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

MATCH LINE THIS SHEET

INTERSTATE 95

MATCH LINE – SEE SHEET NO. EC1.6

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

SOUTH CAROLINA
ROY V. ZIMMERMAN JR.
THOMAS & HUTTON ENGINEERING CO.
No. C002851
CERTIFICATE OF AUTHORIZATION
12/23/24

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 29851
12/23/24

NO.	REVISIONS	BY	DATE

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COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

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EC1.5

NOTES
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3. FILL WITH IN WETLAND AREAS SHALL BE BACKFILLED WITH NATIVE SOIL WHEN POSSIBLE.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030285 THOMAS & HUTTON ENGINEERING No. C00285 CERTIFICATE OF AUTHORIZATION 12/23/24

NORTH CAROLINA PROFESSIONAL LANDSCAPE ARCHITECT SEAL 2107 CERTIFICATE OF AUTHORIZATION

NO.	REVISIONS	BY	DATE

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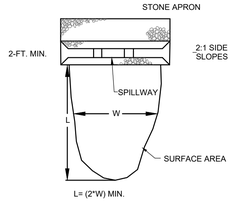
EC1.6

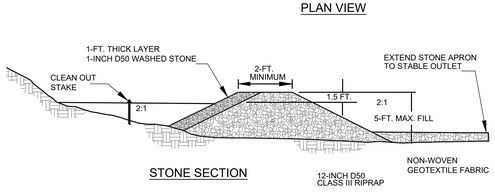
STORMWATER POLLUTION PREVENTION PLAN

SEDIMENT TRAP DIMENSIONS						
SEDIMENT TRAP	BOTTOM LENGTH (ft)	BOTTOM WIDTH (ft)	TOP LENGTH (ft)	TOP WIDTH (ft)	INSIDE SIDE SLOPES (XH:1V)	DEPTH (ft)
ST-I						

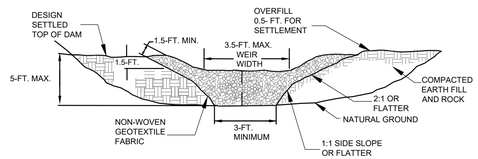
SEDIMENT TRAP ROCK OUTLET						
ROCK OUTLET	HEIGHT (ft)	BOTTOM WIDTH (ft)	INSIDE SIDE SLOPES (XH:1V)	TOP WEIR WIDTH (ft)	BOTTOM RIPRAP FLOW LENGTH (ft)	TOP RIPRAP FLOW LENGTH (ft)
ST-I						



PLAN VIEW



STONE SECTION



EMBANKMENT AND SPILLWAY ELEVATION

WHEN AND WHERE TO USE IT:
SEDIMENT TRAPS SHOULD NOT BE PLACED IN WATERS OF THE STATE OR USGS BLUE-LINE STREAMS.

INSTALLATION:
ROCK OUTLET STRUCTURE REQUIREMENTS:

THE MAXIMUM SEDIMENT TRAP HEIGHT SHALL BE 5-FEET.
THE MAXIMUM STONE HEIGHT OF THE OUTLET WEIR SHALL BE 3.5-FEET.
THE MINIMUM BOTTOM FLOW WIDTH OF THE STRUCTURE SHALL BE 3-FEET.
THE MINIMUM TOP FLOW LENGTH OF THE STRUCTURE SHALL BE 2-FEET.

THE MAIN BODY OF THE OUTLET STRUCTURE SHALL CONSIST OF 12-INCH D50 CLASS III RIPRAP . THE UPSTREAM FACE OF THE OUTLET STRUCTURE SHALL CONSIST OF A 1-FOOT THICK LAYER OF 1-INCH D50 WASHED STONE. THE MAXIMUM SIDE SLOPE OF THE ROCK STRUCTURE SHALL BE 2:1.

INSTALL A NON-WOVEN GEOTEXTILE FILTER FABRIC BEFORE INSTALLING THE STONE FOR THE OUTLET STRUCTURE. ALLOW THE STONE TO EXTEND DOWNSTREAM PAST THE TOE OF THE EMBANKMENT.

ALL INSIDE SEDIMENT TRAP SLOPES SHOULD BE 3:1 OR FLATTER.

MARK THE SEDIMENT CLEANOUT LEVEL OF TRAP WITH A STAKE IN THE FIELD. SEED AND MULCH ALL DISTURBED AREAS.

INSPECTION AND MAINTENANCE:
CONTRACTOR SHALL PROVIDE CONTINUAL MONITORING, REGULAR MAINTENANCE AND REGULAR SEDIMENT REMOVAL.

REMOVE SEDIMENT WHEN IT REACHES 50% OF STORAGE VOLUME OR REACHES THE TOP OF CLEANOUT STAKE.

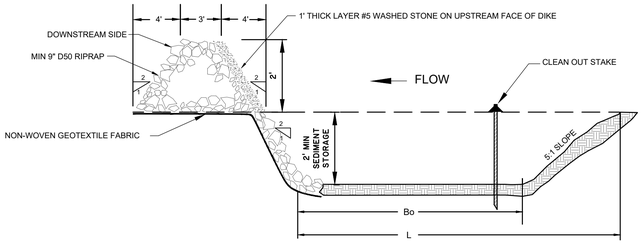
ALL TEMPORARY SEDIMENT TRAPS SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER IT IS NO LONGER NEEDED.

TRAPPED SEDIMENT SHOULD BE REMOVED FROM, OR STABILIZED ON SITE.

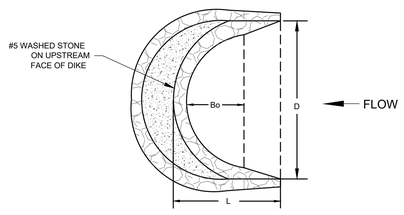
DISTURBED AREAS RESULTING FROM THE REMOVAL OF THE SEDIMENT TRAP SHOULD BE PERMANENTLY STABILIZED.

TEMPORARY SEDIMENT TRAP

NOT TO SCALE



SECTION



D	L	Bo	PEAK FLOW (CFS)	TOTAL STORAGE VOL. (CU. FT.)	SEDIMENT STORAGE VOLUME (CU. FT.)
15'	17.5'	3.5'	24.1	838	250
20'	20.0'	6.0'	32.1	1263	406
25'	22.5'	8.5'	40.1	1766	601
30'	25.0'	11.0'	48.2	2348	836

TYPICAL ROCK DIKE PLAN DIMENSIONS

WHEN AND WHERE TO USE IT:
ROCK SEDIMENT DIKES ARE MOST EFFECTIVE IN AREAS WHERE SEDIMENT CONTROL IS NEEDED WITH MINIMAL DISTURBANCE. THEY CAN BE USED AS SEDIMENT CONTROL STRUCTURES FOR THE OUTFALLS OF DIVERSION SWALES, DIVERSION DIKES, IN LOW AREAS OR OTHER AREAS WHERE CONCENTRATED SEDIMENT LADEN FLOW IS EXPECTED. ROCK SEDIMENT DIKES SHOULD NOT BE PLACED IN WATERS OF THE STATE OR ANY OTHER STREAMS THAT HAVE A BASE FLOW. MAXIMUM 2 - ACRE DRAINAGE AREA TO DIKE.

INSTALLATION:
A NON-WOVEN GEOTEXTILE FABRIC SHALL BE INSTALLED OVER THE SOIL SURFACE WHERE THE ROCK SEDIMENT DIKE IS TO BE PLACED.

THE BODY OF THE ROCK SEDIMENT DIKE SHALL BE COMPOSED OF MINIMUM 9-INCH D50 RIPRAP.

THE UPSTREAM FACE OF THE ROCK SEDIMENT DIKE SHALL BE COMPOSED OF A 1-FOOT THICK LAYER OF 3/4-INCH TO 1-INCH D50 WASHED STONE PLACED AT A SLOPE OF 2H:1V.

ROCK SEDIMENT DIKES SHALL HAVE A MINIMUM TOP FLOW LENGTH OF 3-FEET (2-FOOT FLOW LENGTH THROUGH THE RIPRAP AND 1-FOOT FLOW LENGTH THROUGH THE WASHED STONE).

THE ROCK MUST BE PLACED BY HAND OR MECHANICAL PLACEMENT (NO DUMPING OF ROCK TO FORM THE SEDIMENT DIKE) TO ACHIEVE THE PROPER

DIMENSIONS.
A SEDIMENT SUMP SHALL BE LOCATED ON THE UPSTREAM SIDE OF THE STRUCTURE TO PROVIDE SEDIMENT STORAGE. THE UPSTREAM SIDE OF THE SEDIMENT SUMP SHALL HAVE A SLOPE OF 5H:1V TO INHIBIT EROSION OF THE SEDIMENT STORAGE AREA. THE MINIMUM DEPTH OF THE SEDIMENT SUMP SHALL BE 2-FEET. MARK THE SEDIMENT CLEANOUT LEVEL OF THE SEDIMENT DIKE WITH A STAKE IN THE FIELD.

SEED AND MULCH ALL DISTURBED AREAS.

INSPECTION AND MAINTENANCE:

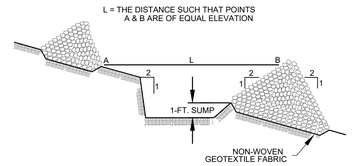
CONTRACTOR SHALL PROVIDE CONTINUAL MONITORING, REGULAR MAINTENANCE AND REGULAR SEDIMENT REMOVAL.

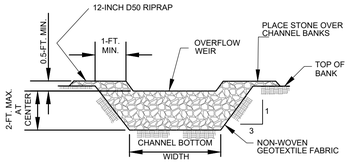
REMOVE SEDIMENT WHEN IT REACHES 50% OF THE SEDIMENT STORAGE VOLUME OR WHEN REACHES THE TOP OF CLEANOUT STAKE. REMOVED SEDIMENT FROM THE SUMP SHOULD BE REMOVED FROM, OR STABILIZED ON SITE.

ALL ROCK SEDIMENT DIKES SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THEY ARE NO LONGER NEEDED. DISTURBED AREAS RESULTING FROM THE REMOVAL OF ROCK SEDIMENT DIKES SHOULD BE PERMANENTLY STABILIZED.

ROCK SEDIMENT DIKES

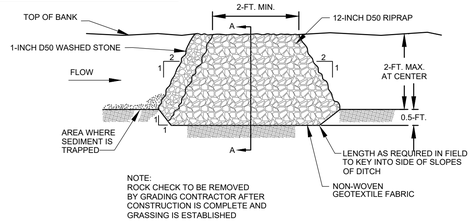
NOT TO SCALE





SPACING BETWEEN DITCH CHECK

CROSS SECTION A-A THRU STONE DITCH CHECK



NOTE:
ROCK CHECK TO BE REMOVED BY GRADING CONTRACTOR AFTER CONSTRUCTION IS COMPLETE AND GRASSING IS ESTABLISHED

TYPICAL DITCH CHECK SECTION

WHEN AND WHERE TO USE IT:
A ROCK DITCH CHECK SHOULD BE INSTALLED IN STEEPLY SLOPED SWALES, OR IN SWALES WHERE ADEQUATE VEGETATION CANNOT BE ESTABLISHED. ROCK DITCH CHECKS SHOULD BE USED ONLY IN SMALL OPEN CHANNELS. ROCK DITCH CHECKS SHOULD NOT BE PLACED IN WATERS OF THE COMMONWEALTH OR USGS BLUE-LINE STREAMS.

INSTALLATION:
A NON-WOVEN GEOTEXTILE FABRIC SHALL BE INSTALLED OVER THE SOIL SURFACE WHERE THE ROCK DITCH CHECK IS TO BE PLACED.

THE BODY OF THE ROCK DITCH CHECK SHALL BE COMPOSED OF 12-INCH D50 RIPRAP.

THE UPSTREAM FACE OF THE ROCK DITCH CHECK MAY BE COMPOSED OF 1-INCH D50 WASHED STONE.

ROCK DITCH CHECKS SHOULD NOT EXCEED A HEIGHT OF 2-FEET AT THE CENTERLINE OF THE CHANNEL.

ROCK DITCH CHECKS SHOULD HAVE A MINIMUM TOP FLOW LENGTH OF 2-FEET.

STONE SHOULD BE PLACED OVER THE CHANNEL BANKS TO PREVENT WATER FROM CUTTING AROUND THE DITCH CHECK.

THE ROCK MUST BE PLACED BY HAND OR MECHANICAL PLACEMENT (NO DUMPING OF ROCK TO FORM DAM) TO ACHIEVE COMPLETE COVERAGE OF THE DITCH OR SWALE AND TO ENSURE THAT THE CENTER OF THE CHECK IS LOWER THAN THE EDGES.

THE MAXIMUM SPACING BETWEEN THE DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM CHECK IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM CHECK.

INSPECTION AND MAINTENANCE:

INSPECT FOR SEDIMENT AND DEBRIS ACCUMULATION. INSPECT DITCH CHECK EDGES FOR EROSION AND REPAIR PROMPTLY AS REQUIRED.

SEDIMENT SHOULD BE REMOVED WHEN IT REACHES 1/3 THE ORIGINAL CHECK HEIGHT.

IN THE CASE OF GRASS-LINED DITCHES AND SWALES, ROCK DITCH CHECKS SHOULD BE REMOVED WHEN THE GRASS HAS MATURED SUFFICIENTLY TO PROTECT THE DITCH OR SWALE UNLESS THE SLOPE OF THE SWALE IS GREATER THAN 4%.

AFTER CONSTRUCTION IS COMPLETE, ALL STONE SHOULD BE REMOVED BY THE GRADING CONTRACTOR IF VEGETATION WILL BE USED FOR PERMANENT EROSION CONTROL MEASURES.

THE AREA BENEATH THE ROCK DITCH CHECKS SHOULD BE SEEDED AND MULCHED IMMEDIATELY AFTER ROCK CHECK DAM REMOVAL.

OR

ROCK DITCH CHECK

NOT TO SCALE

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NORTH CAROLINA — THOMAS & HUTTON ENGINEERING CO. — No. C00285 — CERTIFICATE OF AUTHORIZATION — 12/23/24

SOUTH CAROLINA — THOMAS & HUTTON ENGINEERING CO. — No. 4906 — CERTIFICATE OF AUTHORIZATION — 12/23/24

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COLLETON COUNTY
COLLETON COUNTY

NORTHWEST WALTERBORO SEWER IMPROVEMENTS

EROSION CONTROL DETAILS

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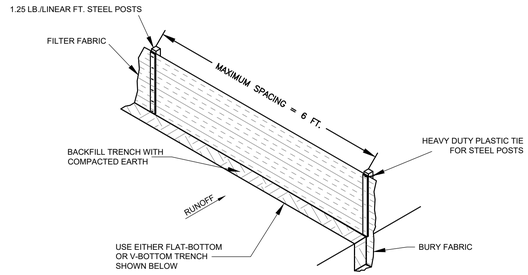
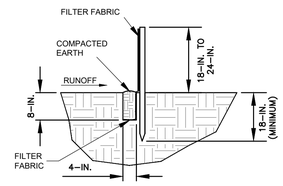
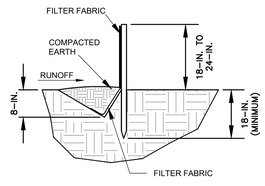
EC2.1



SILT FENCE INSTALLATION



FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL

WHEN AND WHERE TO USE IT:
SILT FENCE IS APPLICABLE IN AREAS:

WHERE THE MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE FENCE IS 100-FEET.
WHERE THE MAXIMUM SLOPE STEEPNESS (NORMAL [PERPENDICULAR] TO FENCE LINE) IS 2H:1V.
THAT DO NOT RECEIVE CONCENTRATED FLOWS GREATER THAN 0.5 CFS.

DO NOT PLACE SILT FENCE ACROSS CHANNELS OR USE IT AS A VELOCITY CONTROL BMP.

MATERIALS:
STEEL POSTS
USE 48-INCH LONG STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS:
COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50,000 PSI.
HAVE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND NOMINAL "T" LENGTH OF 1.48-INCHES.
WEIGH 1.25 POUNDS PER FOOT (± 8%).
HAVE A SOIL STABILIZATION PLATE WITH A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES ATTACHED TO THE STEEL POSTS.
PAINTED WITH A WATER BASED BAKED ENAMEL PAINT.

USE STEEL POSTS WITH A MINIMUM LENGTH OF 4-FEET, WEIGHING 1.25 POUNDS PER LINEAR FOOT (± 8%) WITH PROJECTIONS TO AID IN FASTENING THE FABRIC. EXCEPT WHEN HEAVY CLAY SOILS ARE PRESENT ON SITE, STEEL POSTS WILL HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM SUCH THAT WHEN THE POST IS DRIVEN TO THE PROPER DEPTH, THE PLATE WILL BE BELOW THE GROUND LEVEL FOR ADDED STABILITY.
THE SOIL PLATES SHOULD HAVE THE FOLLOWING CHARACTERISTICS:
BE COMPOSED OF MINIMUM 15 GAUGE STEEL.
HAVE A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES.

GEOTEXTILE FILTER FABRIC:
FILTER FABRIC IS:
COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS COMPOSED OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, POLYESTERS, OR POLYAMIDES.
FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER.
FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION.
FREE OF DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES.
CUT TO A MINIMUM WIDTH OF 36 INCHES.

USE ONLY FABRIC APPEARING ON SCDOT APPROVAL SHEET #34 MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

INSTALLATION:
EXCAVATE A TRENCH APPROXIMATELY 6-INCHES WIDE AND 6-INCHES DEEP WHEN PLACING FABRIC BY HAND. PLACE 12-INCHES OF GEOTEXTILE FABRIC INTO THE 6-INCH DEEP TRENCH, EXTENDING THE REMAINING 6-INCHES TOWARDS THE UPSLOPE SIDE OF THE TRENCH. BACKFILL THE TRENCH WITH SOIL OR GRAVEL AND COMPACT. BURY 12-INCHES OF FABRIC INTO THE GROUND WHEN PNEUMATICALLY INSTALLING SILT FENCE WITH A SLICING METHOD. PURCHASE FABRIC IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, WRAPPED THE FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 6-INCH MINIMUM OVERLAP. INSTALL POSTS TO A MINIMUM DEPTH OF 24-INCHES. INSTALL POSTS A MINIMUM OF 1- TO 2- INCHES ABOVE THE FABRIC, WITH NO MORE THAN 3-FEET OF THE POST ABOVE THE GROUND. SPACE POSTS TO MAXIMUM 6-FEET CENTERS. ATTACH FABRIC TO WOOD POSTS USING STAPLES MADE OF HEAVY-DUTY WIRE AT LEAST 1-1/2-INCH LONG, SPACED A MAXIMUM OF 6-INCHES APART. STAPLE A 2-INCH WIDE LATHE OVER THE FILTER FABRIC TO SECURELY FASTEN IT TO THE UPSLOPE SIDE OF WOODEN POSTS. ATTACH FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN CALL CASES, TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES. INSTALL THE FABRIC A MINIMUM OF 24-INCHES ABOVE THE GROUND. WHEN NECESSARY, THE HEIGHT OF THE FENCE ABOVE GROUND MAY BE GREATER THAN 24-INCHES. IN TIDAL AREAS, EXTRA SILT FENCE HEIGHT MAY BE REQUIRED. THE POST HEIGHT WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING WILL REMAIN THE SAME AND EXTRA HEIGHT FABRIC WILL BE 4-, 5-, OR 6-FEET TALL. LOCATE SILT FENCE CHECKS EVERY 100 FEET MAXIMUM AND AT LOW POINTS. INSTALL THE FENCE PERPENDICULAR TO THE DIRECTION OF FLOW AND PLACE THE FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT.

INSPECTION AND MAINTENANCE:
CHECK FOR SEDIMENT BUILDUP AND FENCE INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED BY FENCE OVERTOPPING. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY. REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR

AFTER TEMPORARY BEST MANAGEMENT PRACTICES (BMPS) ARE NO LONGER NEEDED. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.

SILT FENCE
NOT TO SCALE

SOUTH CAROLINA
THOMAS & HUTTON ENGINEERING CO.
No. C00285
CERTIFICATE OF AUTHORIZATION
12/23/24

SOUTH CAROLINA
PROFESSIONAL ENGINEER
SEAL
No. 29401
STATE OF SOUTH CAROLINA
12/23/24

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
1501 Main Street • Suite 400
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COLLETON COUNTY
COLLETON COUNTY

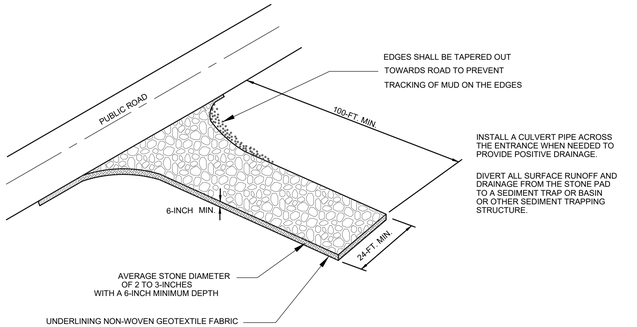
NORTHWEST WALTERBORO SEWER IMPROVEMENTS

EROSION CONTROL DETAILS

JOB NO:	J-29851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	N/A

EC2.2

STORMWATER POLLUTION PREVENTION PLAN



WHEN AND WHERE TO USE IT:
STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD.

IMPORTANT CONSIDERATIONS:
IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFFSITE. WASHDOWN FACILITIES SHALL BE REQUIRED AS DIRECTED BY SCDHEC AS NEEDED. WASHDOWN AREAS IN GENERAL MUST BE ESTABLISHED WITH CRUSHED GRAVEL AND DRAIN INTO A SEDIMENT TRAP OR SEDIMENT BASIN.

CONSTRUCTION ENTRANCES SHOULD BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY VEHICLES.

INSTALLATION:
REMOVE ALL VEGETATION AND ANY OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.

DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM STONES TO A SEDIMENT TRAP OR BASIN.

INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE.

INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.

THE ENTRANCE SHALL CONSIST OF 1-INCH TO 3-INCH D50 STONE PLACED AT A MINIMUM DEPTH OF 6-INCHES.

MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE 24-FEET WIDE BY 100-FEET LONG, AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE SITE CONSTRAINTS.

THE EDGES OF THE ENTRANCE SHALL BE TAPERED OUT TOWARDS THE ROAD TO PREVENT TRACKING OF MUD AT THE EDGE OF THE ENTRANCE.

INSPECTION AND MAINTENANCE:
CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.

WASH OR REPLACE STONES AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF-SITE BY VEHICLES.

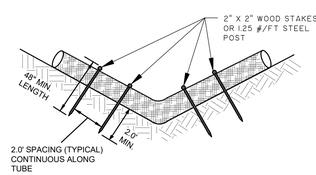
FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE.

IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.

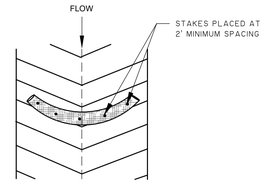
REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



END VIEW OF DITCH



TOP VIEW OF DITCH

DESCRIPTION:
SEDIMENT TUBES ARE ELONGATED TUBES OF COMPACTED GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBER OR HARDWOOD MULCH. STRAW,
PINE NEEDLE AND LEAF MULCH-FILLED SEDIMENT TUBES ARE NOT PERMITTED UNDER THIS SPECIFICATION.

WHEN AND WHERE TO USE IT:
INSTALL SEDIMENT TUBES ALONG CONTOURS, IN DRAINAGE CONVEYANCE SWALES, AND AROUND INLETS TO HELP REDUCE THE EFFECTS OF SOIL EROSION BY ENERGY DISSIPATION AND RETAIN SEDIMENT.

MATERIALS:
SEDIMENT TUBES FOR DITCH CHECKS AND TYPE A INLET STRUCTURE FILTERS EXHIBIT THE FOLLOWING PROPERTIES:
PRODUCED BY A MANUFACTURER EXPERIENCED IN SEDIMENT TUBE MANUFACTURING.
COMPOSED OF COMPACTED GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBERS, HARDWOOD MULCH OR A MIX OF THESE MATERIALS ENCLOSED BY A FLEXIBLE NETTING MATERIAL.
STRAW, STRAW FIBER, STRAW BALES, PINE NEEDLES AND LEAF MULCH ARE NOT ALLOWED UNDER THIS SPECIFICATION.
UTILIZES OUTER NETTING THAT CONSISTS OF SEAMLESS, HIGH-DENSITY POLYETHYLENE PHOTODEGRADABLE MATERIALS TREATED WITH ULTRAVIOLET STABILIZERS OR A SEAMLESS, HIGH-DENSITY POLYETHYLENE NON-DEGRADABLE MATERIALS. DIAMETER RANGING FROM 18-INCHES TO 24-INCHES.
CURLED EXCELSIOR WOOD, OR NATURAL COCONUT ROLLED EROSION CONTROL PRODUCTS (RECPS) THAT ARE ROLLED UP TO CREATE A SEDIMENT TUBE ARE NOT ALLOWED UNDER THIS SPECIFICATION.

INSTALLATION:
INSTALL OVER BARE SOIL, MULCHED AREAS OR EROSION CONTROL BLANKETS.
BE COMPOSED OF GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBER OR HARDWOOD MULCH ENCLOSED BY A FLEXIBLE NETTING MATERIAL.
STRAW, STRAW FIBER, STRAW BALES, PINE NEEDLES AND LEAF MULCH ARE NOT ALLOWED.

THE MINIMUM DIAMETER SHOULD BE 18 INCHES.
SEDIMENT TUBES SHOULD BE STAKED USING WOODEN STAKES (2-INCH X 2-INCH) OR STEEL POSTS (STANDARD "U" OR "T" SECTIONS WITH A MINIMUM WEIGHT OF 1.25 POUNDS PER FOOT) A MINIMUM OF 48-INCHES IN LENGTH PLACED ON 2-FOOT CENTERS.

STAKES SHOULD BE INTERTWINED WITH THE OUTER MESH ON THE DOWNSTREAM SIDE AND DRIVEN IN THE GROUND TO A MINIMUM DEPTH OF 1.5 FEET LEAVING LESS THAN 1 FOOT OF STAKE EXPOSED ABOVE THE SEDIMENT TUBE. ALWAYS REFER TO THE MANUFACTURER'S RECOMMENDATIONS FOR THE STAKING DETAIL. INSTALL ALL SEDIMENT TUBES INSURING THAT NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE SEDIMENT TUBE.
THE ENDS OF ADJACENT SEDIMENT TUBES SHOULD BE LAPPED 6-INCH TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT.
IN NO SITUATIONS SHOULD SEDIMENT TUBES BE STACKED ON TOP OF ONE ANOTHER.

CONSTRUCT A TRENCH THAT IS 20% OF THE TUBE DIAMETER TO INSTALL THE TUBE IN.
AVOID DAMAGE TO SEDIMENT TUBES WHILE INSTALLING THEM. IF THE SEDIMENT TUBE BECOMES DAMAGED DURING INSTALLATION, A STAKE SHOULD BE PLACED ON BOTH SIDES OF THE DAMAGED AREA TERMINATING THE TUBE SEGMENT AND A NEW TUBE SEGMENT SHOULD BE INSTALLED.
SHOULD BE INSTALLED IN SWALES OR DRAINAGE DITCHES PERPENDICULAR TO THE FLOW OF WATER. SEDIMENT TUBES SHOULD CONTINUE UP THE SIDE SLOPES A MINIMUM OF 1 FOOT ABOVE THE DESIGN FLOW DEPTH. SEDIMENT TUBES SHOULD BE SPACED ACCORDING TO THE FOLLOWING TABLE.

SEDIMENT TUBE SPACING

SLOPE	MAXIMUM SEDIMENT TUBE SPACING
LESS THAN 2%	150-FEET
2%	100-FEET
3%	75-FEET
4%	50-FEET
5%	40-FEET
6%	30-FEET
GREATER THAN 6%	25-FEET

SEDIMENT TUBE LENGTH SELECTED SHOULD MINIMIZE THE NUMBER OF SEDIMENT TUBES NEEDED TO SPAN THE WIDTH OF THE DRAINAGE CONVEYANCE.
IF THE DITCH CHECK LENGTH (PERPENDICULAR TO THE WATER FLOW) IS 15 FEET, THEN ONE 15 FOOT SEDIMENT TUBE IS PREFERRED COMPARED TO TWO OVERLAPPING 10 FOOT SEDIMENT TUBES.

SEDIMENT TUBES FOR DITCH CHECKS SHOULD REMAIN IN PLACE UNTIL FULLY ESTABLISHED VEGETATION AND ROOT SYSTEMS HAVE COMPLETELY DEVELOPED AND CAN SURVIVE ON THEIR OWN.

INSPECTION AND MAINTENANCE:
LARGE DEBRIS, TRASH, AND LEAVES SHOULD BE REMOVED.

IF EROSION CAUSES THE EDGES TO FALL TO A HEIGHT EQUAL TO OR BELOW THE HEIGHT OF THE CENTER, REPAIRS SHOULD BE MADE IMMEDIATELY.

REMOVE ACCUMULATED SEDIMENT FROM THE UPSTREAM SIDE OF THE SEDIMENT TUBE WHEN THE SEDIMENT HAS REACHED A HEIGHT OF APPROXIMATELY ONE-THIRD OF THE EXPOSED HEIGHT OF THE TUBE (MEASURED AT THE CENTER).

ACCUMULATED SEDIMENT SHOULD BE REMOVED PRIOR TO REMOVING SEDIMENT TUBES.

SEDIMENT TUBE REMOVAL SHOULD BE COMPLETED ONLY AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETELY STABILIZED. PERMANENT VEGETATION SHOULD REPLACE AREAS FROM WHICH GRAVEL, STONE, SEDIMENT TUBES, OR OTHER MATERIALS HAVE BEEN REMOVED.

SEDIMENT TUBES

NOT TO SCALE

SOUTH CAROLINA
THOMAS & HUTTON ENGINEERING Co.
No. C00285
CERTIFICATE OF AUTHORIZATION
12/23/24

SOUTH CAROLINA
PROFESSIONAL ENGINEER
JAMES T. LAWTON
No. 29805
12/23/24

NO.	REVISIONS	BY	DATE

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COLLETON COUNTY
COLLETON COUNTY
NORTHWEST WALTERBORO SEWER IMPROVEMENTS
EROSION CONTROL DETAILS

JOB NO:	J-29851.0000
DATE:	01/02/2024
DRAWN:	JTB
DESIGNED:	MAL
REVIEWED:	RSO
APPROVED:	RSO
SCALE:	N/A

EC2.3