

STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	1

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TOTAL		23

# CITY OF BEAUFORT



## MOSSY OAKS DRAINAGE IMPROVEMENT PLANS - BASIN 1

Hydraulic Design Reference for these plans is the:

**2009**

Edition of SCDOT's "Requirements for Hydraulic Design Studies"

Design Reference for these plans is the:

**3R**

These Plans Were Designed Using "3R" Principles From the 2017 Roadway Design Manual

### ENVIRONMENTAL PERMIT INFORMATION

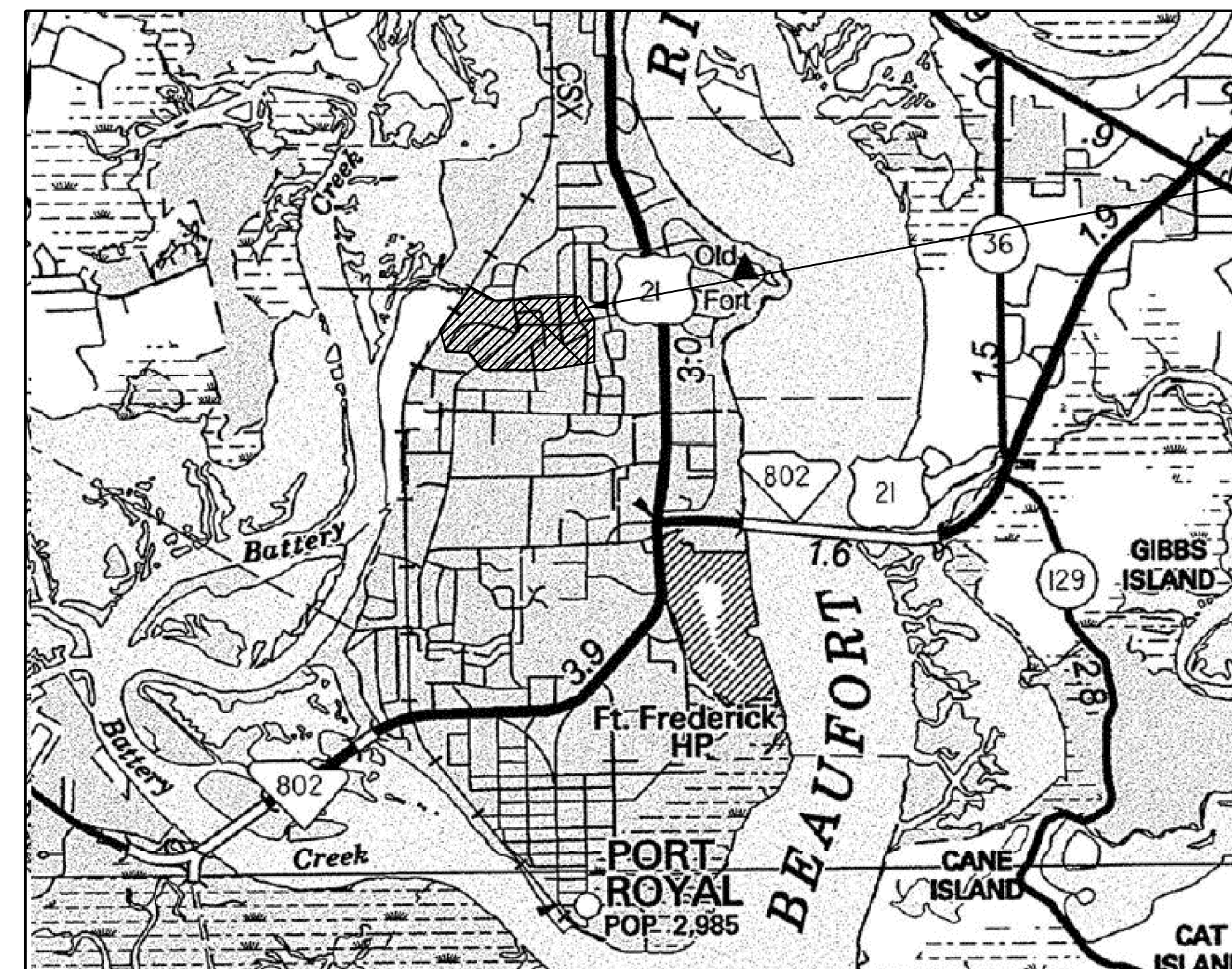
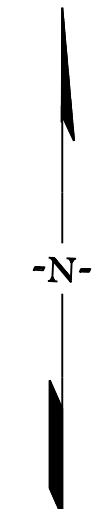
USACE PERMIT	___YES___	___NO___		
NEPA DOCUMENT	___YES___	___NO___		
401 CERTIFICATION	___YES___	___NO___		
OCRM CAP	___YES___	___NO___		
NAVIGABLE WATERS	___SC___	___USCG___	___USACE___	___N/A___

3 DAYS BEFORE DIGGING IN SOUTH CAROLINA

**CALL 811**

SOUTH CAROLINA 811 (SC811)  
WWW.SC811.COM  
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

RAILROAD INVOLVEMENT?  
YES  NO



PROJECT AREA

LAYOUT  
N.T.S.

	BATTERY CREEK ROAD	TOTAL (MILES)
NET LENGTH OF ROADWAY	0.09	0.09
NET LENGTH OF BRIDGES	-	-
NET LENGTH OF PROJECT	0.09	0.09
LENGTH OF EXCEPTIONS	-	-
GROSS LENGTH OF PROJECT	0.09	0.09

EQUALITIES IN STATIONING:  
NONE

NOTE: EXCEPT AS MAY OTHERWISE BE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL TO CONFORM WITH SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION) AND STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.

### NPDES PERMIT INFORMATION

Disturbed Area = 3.3 Acre(s)

Project Area = 4.5 Acre(s)

Approximate Location of Roadway is

Begin

Latitude 32°24'19" N

Longitude 80°41'41" W

End

Latitude 32°24'23" N

Longitude 80°41'42" W

Hydraulic and NPDES Design provided by:

\_\_\_\_\_  
I.C.E.

Designs may be obtained from the SCDOT Regional Production Group

THE CITY OF BEAUFORT DOES NOT WARRANT THE ACCURACY OF RECORDS OF THE RESPONSIBILITY TO DESIGN THIS PROJECT IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

For Right Of Way Acquisition:

\_\_\_\_\_  
Consultant Engineer of Record

\_\_\_\_\_  
Date

CONSULTING ENGINEERING FIRM

**JE** INFRASTRUCTURE  
CONSULTING & ENGINEERING

ENGINEER OF RECORD

**ISSUED FOR BID**

FOR CONSTRUCTION : \_\_\_\_\_ DATE \_\_\_\_\_

## SUMMARY OF ESTIMATED QUANTITIES

PAY ITEM	DESCRIPTION	QUANTITY	UNIT
1031000	MOBILIZATION	1	LS
1032010	BONDS AND INSURANCE	1	LS
1050800	CONSTRUCTION STAKES, LINES & GRADES	1	EA
1071000	TRAFFIC CONTROL	1	LS
1090200	AS-BUILT CONSTRUCTION PLANS	1	LS
2012000	CLEARING & GRUBBING WITHIN ROADWAY	1	LS
2023000	REMOVAL & DISPOSAL OF EXISTING PAVEMENT	28.3	SY
2027000	REMOVAL & DISPOSAL OF EXISTING CONCRETE	15.7	CY
2031200	SITE EXCAVATION	1	LS
3100310	HOT MIX ASPHALT BASE COURSE - TYPE B	16	TON
4013990	MILLING EXISTING ASPHALT PAVEMENT (VARIABLE)	319.1	SY
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	147	TON
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE C	114	TON
6020005	PERMANENT CONSTRUCTION SIGNS (GROUND MOUNTED)	76	SF
7065010	TIMBER BOARDWALK (10' WIDE)	30	LF
7143618	18" SMOOTH WALL PIPE	88	LF
7143624	24" SMOOTH WALL PIPE	58	LF
7143654	54" SMOOTH WALL PIPE	104	LF
7204100	CONCRETE SIDEWALK (4" UNIFORM)	162	SY
7204900	DETECTABLE WARNING MATERIAL	41	SF
8041020	RIP-RAP (CLASS B)	44	TON
8048200	GEOTEXTILE FOR EROSION CONTROL UNDER RIPRAP(CLASS 2)TYPE A	40	SY
8100100	PERMANENT COVER	0.25	ACRE
8100200	TEMPORARY COVER	0.12	ACRE
8104005	FERTILIZER (NITROGEN)	25	LB
8104010	FERTILIZER (PHOSPHORIC ACID)	25	LB
8104015	FERTILIZER (POTASH)	25	LB
8105005	AGRICULTURAL GRANULAR LIME	491	LB
8109901	MOWING	1	ACRE
8153000	SILT FENCE	753	LF
8153090	REPLACE/REPAIR SILT FENCE	75	LF
8154050	REMOVAL OF SILT RETAINED BY SILT FENCE	188	LF

**JE INFRASTRUCTURE**  
CONSULTING & ENGINEERING

**ISSUED  
FOR BID**

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	RNT	DATE 08/22/2019	
DRAWN BY:	RNT	DATE 08/22/2019	
CHECKED BY:	JCH	DATE 08/22/2019	

BEAUFORT COUNTY  
CITY OF BEAUFORT

BATTERY CREEK ROAD (S-7-159)  
BASIN 1  
SUMMARY OF ESTIMATED QUANTITIES



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	3

# GENERAL NOTES

## GENERAL CONSTRUCTION NOTES:

SEE INDIVIDUAL CURVES ON REFERENCE DATA SHEET FOR SUPERELEVATION RATE AND DESIGN SPEED, AS APPLICABLE.

THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM AVAILABLE INFORMATION AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE UTILITIES INFORMATION SHOWN ON THE DRAWINGS. IT IS THEREFORE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THAT THE PROPER COORDINATION WITH THE VARIOUS UTILITY OWNERS HAS BEEN PERFORMED.

THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY OWNERS DURING RELOCATION OPERATIONS. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY WHETHER SHOWN ON THE DRAWINGS OR LOCATED BY THE UTILITY COMPANY. COST OF DAMAGES TO ANY UTILITIES AS A RESULT OF CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ALL WORKMANSHIP AND MATERIALS USED ON THIS PROJECT SHALL CONFORM TO THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION), SCDOT 2007 SUPPLEMENTAL SPECIFICATIONS, SCDOT SUPPLEMENTAL TECHNICAL SPECIFICATIONS IN EFFECT AT THE TIME OF LETTING, AND SCDOT 2009 STANDARD DRAWINGS EXCEPT WHERE OTHERWISE NOTED IN THE PLANS.

ALL EXISTING ROAD SIGNS AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE RETAINED, RELOCATED, OR REMOVED AS DIRECTED BY ENGINEER. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM COST FOR CLEARING AND GRUBBING.

ALL NEW SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SCDOT STANDARD DRAWINGS, NEW 2P & 3P SIGN SUPPORTS REQUIRED FOR RELOCATED SIGNS WILL BE PAID PER LINEAR FOOT INSTALLED AND ACCEPTED.

THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN ALL NECESSARY PROVISIONS FOR TRAFFIC CONTROL FOR THE DURATION OF THE PROJECT. THESE PROVISIONS, AS IN EACH CASE IS APPLICABLE, WILL CONFORM TO THE REQUIREMENTS CONTAINED IN THE SCDOT STANDARD SPECIFICATIONS, STANDARD DRAWINGS, SUPPLEMENTAL SPECIFICATIONS, SPECIAL PROVISIONS, THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL SUBMIT THE TRAFFIC CONTROL PLAN TO THE COUNTY FOR APPROVAL BEFORE BEGINNING CONSTRUCTION.

THE LUMP SUM COST FOR TRAFFIC CONTROL SHALL INCLUDE ALL WORK AS DIRECTED ABOVE. THIS LUMP SUM COST SHALL INCLUDE TEMPORARY CONSTRUCTION SIGNS, BARRICADES, DRUMS, CONES, LIGHTS, AND OTHER ITEMS AS REQUIRED TO COMPLETE THIS WORK.

CONTRACTOR SHALL REFER TO SCDOT STD. DWG. 605-010-02 FOR PLACEMENT OF PERMANENT CONSTRUCTION SIGNS. THIS PROJECT REQUIRES ONE (1) SCHEME C. SIGNS SHALL BE PAID FOR PER SQUARE FOOT INSTALLED AND ACCEPTED UNDER THE BID ITEM FOR PERMANENT CONSTRUCTION SIGNS.

## EROSION CONTROL NOTES:

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

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.

- A) WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICAL.
- B) 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.

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 INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.

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 BACK INTO ANY WATERS OF THE STATE.

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.

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

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 ET SEQ. AND SCR100000.

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.

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 CANNOT 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.

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.

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.

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.

MINIMIZE SOIL COMPACTION AND UNLESS INFEASIBLE, PRESERVE TOPSOIL.

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 EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.

- THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
- WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
  - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
  - FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
  - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTION 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.

## EROSION CONTROL NOTES (CONT):

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

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 AS APPROVED OTHERWISE.

THE CONTRACTOR IS REQUIRED TO IDENTIFY AND MAINTAIN AN ON-SITE CONCRETE WASHDOWN AREA THAT MEETS ALL REQUIREMENTS /BMPs OF SCDHEC. APPROVED WASHOUT AREAS MAY INCLUDE SECTIONS OF SIDEWALK THAT HAVE BEEN FORMED AND THAT ARE LOCATED AHEAD OF THE CURRENT CONCRETE POUR. THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF CONCRETE REMNANTS AND PREPARING THE SUBGRADE IN THESE AREAS PRIOR TO PLACEMENT OF THE NEXT DAYS CONCRETE POUR.

## SEQUENCE OF CONSTRUCTION

1. OBTAIN NPDES COVERAGE FROM DHEC .
2. NOTIFY SC DHEC REGIONAL OFFICE AND THE CITY OF BEAUFORT DEPARTMENT OF PUBLIC WORKS 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. INSTALL TREE PROTECTION AND DELINEATE CLEARING LIMITS.
4. CLEARING & GRUBBING ONLY AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS (E.G. SILT FENCE).
5. INSTALL PERIMETER CONTROLS (E.G. SILT FENCE).
6. CLEARING AND GRUBBING OF SITE (SEDIMENT & EROSION CONTROL MEASURES FOR THESE AREAS MUST ALREADY BE INSTALLED.
7. WORK ON SPANISH MOSS TRAIL (IE TEMPORARY COFFER DAM, SHEET PILE WALL, REPLACE CULVERTS, HEADWALL, FLAP GATES, RECONSTRUCT PATHWAY)
8. CLEAN DITCHES
9. INSTALL UPSTREAM STORM DRAINAGE.
10. INSTALL COFFER DAM FOR BATTERY CREEK ROAD.
11. DETOUR WORK FOR BATTERY CREEK ROAD STORM DRAINAGE CROSSING
12. FINE GRADING ON BATTERY CREEK ROAD.
13. ASPHALT PAVING.
14. CONSTRUCT SIDEWALK.
15. FINISH GRADING AND FINAL GRASSING.
16. MAINTAIN ALL SEDIMENT AND EROSION CONTROL DEVICES FOR THE EXTENT OF THE PROJECT
17. REMOVAL OF SEDIMENT CONTROLS AFTER SITE HAS BEEN STABILIZED.
18. CONTACT THE CITY OF BEAUFORT DEPARTMENT OF PUBLIC WORKS FOR FINAL PROJECT INSPECTION.
19. FILE NOTICE OF TERMINATION.

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FOR BID**

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION	
DESIGNED BY:	BJL	DATE	08/22/2019	
DRAWN BY:	BJL	DATE	08/22/2019	
CHECKED BY:	JCH	DATE	08/22/2019	

BEAUFORT COUNTY  
CITY OF BEAUFORT

BATTERY CREEK ROAD (S-7-159)  
BASIN 1  
GENERAL CONSTRUCTION NOTES

SHEET 3

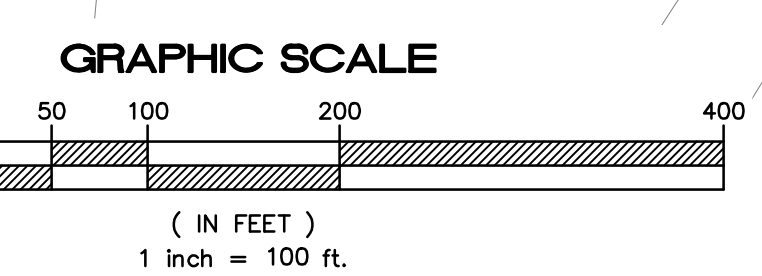
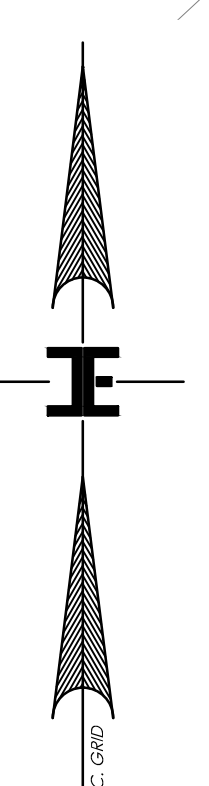
SCALE: NTS

STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				4

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PROPERTY OWNER DATA TABLE			
NO.	TAX MAP NO.	OWNER	MAILING ADDRESS
1	R120 006 000 0281	CARLEY JO & GEORGE M MYERS III	2832 W ROYAL OAKS DR, BEAUFORT, SC 29902
2	R120 006 000 0282	BRENT A HALLINAN, SHAWN EVAN HALLINAN	2834 W ROYAL OAKS DR, BEAUFORT, SC 29902
3	R120 006 000 0299	DOUGLAS D CIFRANICK	2831 W ROYAL OAKS DR, BEAUFORT, SC 29902
4	R120 006 000 0298	TMSRE LLC	85 JAMES F BYRNES ST, BEAUFORT, SC 29907
5	R120 006 000 0295	MARY JO & JERRY W LEWIS	806 COATES LN, BEAUFORT, SC 29902
6	R120 006 000 0296	JOANNE MANSKER, BRENDA CHAPMAN	804 COATES LN, BEAUFORT, SC 29902
7	R120 006 000 0560	JESSIE P GOETHIE	811 COATES LN, BEAUFORT, SC 29902
8	R120 006 000 0315	MARLENE P & JAMES T HANDRINOS	2605 BOYER ST, BEAUFORT, SC 29902
9	R120 006 000 0303	OLIVA C & BENJAMIN HASSEL	2801 W ROYAL OAKS DR, BEAUFORT, SC 29902
10	R120 006 000 0304	DONNA M & WILLIAM R MCCOY JR	812 BATTERY CREEK RD, BEAUFORT, SC 29902
11	R120 006 000 0305	JOSE N HERNANDEZ	810 BATTERY CREEK RD, BEAUFORT, SC 29902
12	R120 006 000 0306	JOHN L HELES	808 BATTERY CREEK RD, BEAUFORT, SC 29902
13	R120 006 000 0307	LORRI K & RALPH STANLEY JR	806 BATTERY CREEK RD, BEAUFORT, SC 29902
14	R120 006 000 0238	VIKKI M & LARRY W MORRIS SR	815 BATTERY CREEK RD, BEAUFORT, SC 29902
15	R120 006 000 0237	ALLISON & THOMAS CONRAD	813 BATTERY CREEK RD, BEAUFORT, SC 29902
16	R120 006 000 0242	VIVIAN Q & SENANDO LORENZO	2612 N ROYAL OAKS DR, BEAUFORT, SC 29902
17	R120 006 000 0243	ERIN MICHELLE & TIMOTHY JOHN GURLEY	2617 N ROYAL OAKS DR, BEAUFORT, SC 29902
18	R120 006 000 0208	KAY M & STEPHEN M KEELER	2608 N ROYAL OAKS DR, BEAUFORT, SC 29902
19	R120 006 000 324A	SANDRA G & RONALD L VOEGELI	702 BATTERY CREEK RD, BEAUFORT, SC 29902
20	R120 006 000 0254	HEIDI M & ROBERT G HARVEY	703 BATTERY CREEK RD, BEAUFORT, SC 29902
21	R120 006 000 0291	JANET C & HAL G HORTON JR	2850 W ROYAL OAKS DR, BEAUFORT, SC 29902
22	R120 006 000 290A	BIWSA	6 SNAKE RD, OKATIE, SC 29909
23	R120 006 000 0229	SHIRLEY L KUMPF	2610 FIRST BLVD, BEAUFORT, SC 29902
24	R120 006 000 0324	CITY OF BEAUFORT	1911 BOUNDARY ST, BEAUFORT, SC 29902
25	R120 006 000 0228	RENEE T MULVHILL	PO BOX 4381, IRMO, SC 29063
26	R120 006 000 324B	ROBERT CAMPBELL	719 JANE WAY, BEAUFORT, SC 29902
27	R120 006 000 0226	MARY M & PETE L GODBEY	2600 FIRST BLVD, BEAUFORT, SC 29902
28	R120 006 000 0253	RICHARD S CHIAVELLO, BRENNA COLLINS-MEAD JTROS	2501 N ROYAL OAKS DR, BEAUFORT, SC 29902
29	R120 006 000 0220	LILLIAN H DENNIS	2504 N ROYAL OAKS DR, BEAUFORT, SC 29902
30	R120 006 000 0323	VALERIE M LONG	718 JANE WAY, BEAUFORT, SC 29902
31	R120 007 000 0512	DAVID W MORRIS	712 CENTER DR W, BEAUFORT, SC 29902
32	R120 006 000 0225	JONNIE K & CHARLES E HALDT	800 JANE WAY, BEAUFORT, SC 29902
33	R120 007 000 0528	EVE T & DANIEL S HEATON	800 CENTER DR W, BEAUFORT, SC 29902
34	R120 006 000 0224	HAZEL W & HERBERT WAYNE LANIER	802 JANE WAY, BEAUFORT, SC 29902
35	R120 007 000 0529	JOANNE B HARDYMAN	802 CENTER DR W, BEAUFORT, SC 29902
36	R120 006 000 0223	SUSAN MILLS TUCKER	804 JANE WAY, BEAUFORT, SC 29902
37	R120 007 000 0530	RIO ELLIS COX III	804 CENTER DR W, BEAUFORT, SC 29902
38	R120 006 000 0222	KAREN H STODDARD	804 PINCKNEY ST, BEAUFORT, SC 29902
39	R120 007 000 0531	KAREN L & JAMES H SMITH	41 DULANO BLUFF RD, SAINT HELENA ISLAND, SC 29920
40	R120 006 000 0221	BRIAN G PIRTLE	808 JANE WAY, BEAUFORT, SC 29902
41	R120 007 000 0532	MATTHEW C FORRESTER, RACHEL SCHWIDT	808 CENTER DR W, BEAUFORT, SC 29902
42	R120 007 000 0079	BEAUFORT COUNTY SCHOOL BOARD	PO BOX 309, BEAUFORT, SC 29901



**IE INFRASTRUCTURE CONSULTING & ENGINEERING**

ISSUED FOR BID

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	M. HAMMOND	DATE 07/11/2019	
DRAWN BY:	L. WILEN	DATE 04/10/2020	
CHECKED BY:	A. KLOSTERMAN	DATE 04/10/2020	

BEAUFORT COUNTY  
CITY OF BEAUFORT

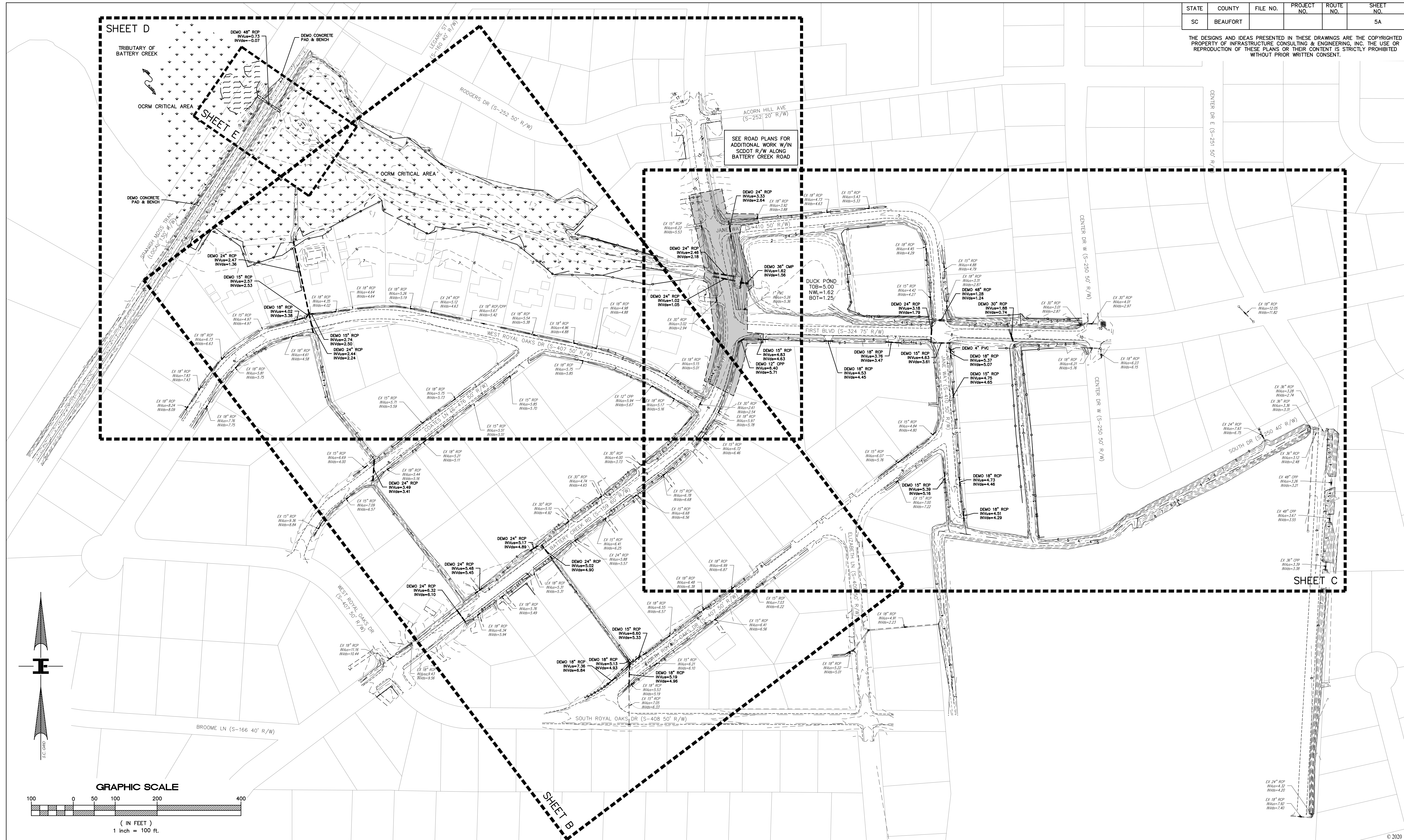
MOSSY OAKS BASIN 1 – WEST ROYAL OAKS  
DRAINAGE ALIGNMENT &  
PROPERTY OWNER SHEET

SHEET 4 SCALE: 1"=100'



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				5A

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SHEET D

SHEET E

SHEET C

SHEET B

**IE** INFRASTRUCTURE  
CONSULTING & ENGINEERING

ISSUED FOR BID

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	M. HAMMOND	DATE 07/11/2019	
DRAWN BY:	L. WILEN	DATE 04/10/2020	
CHECKED BY:	A. KLOSTERMAN	DATE 04/10/2020	

BEAUFORT COUNTY  
CITY OF BEAUFORT

MOSSY OAKS BASIN 1 – WEST ROYAL OAKS  
DRAINAGE IMPROVEMENT PLAN

SHEET 5A SCALE: 1"=100'



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				58

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**SEC LEGEND**

- TEMPORARY & PERMANENT SEEDING LIMITS
- RIP-RAP CHECK DAM
- RIP-RAP OUTLET PROTECTION
- SEDIMENT TUBE
- TYPE A INLET PROTECTION
- TURBIDITY CURTAIN

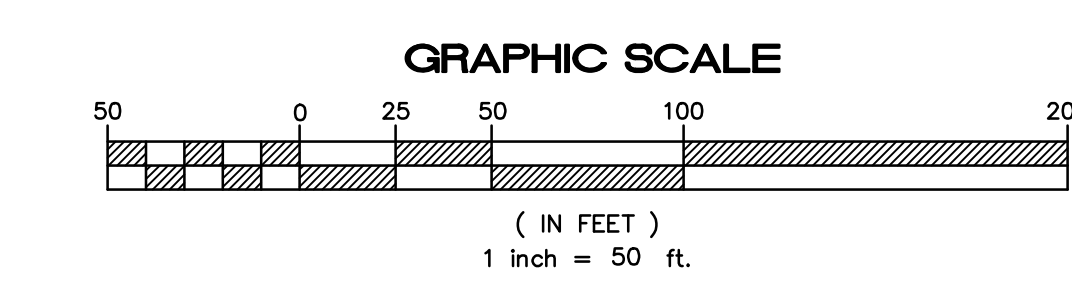
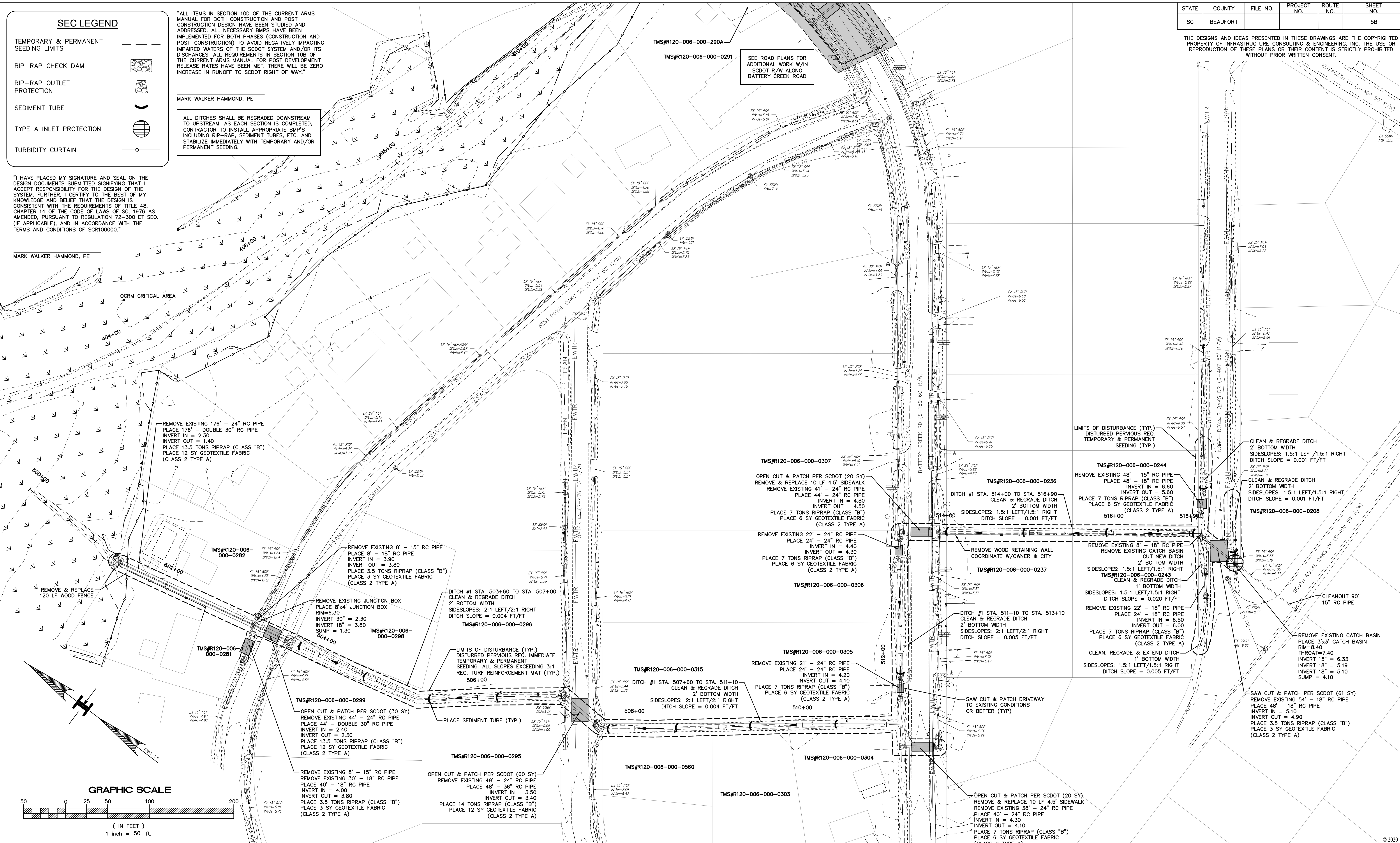
"ALL ITEMS IN SECTION 10D OF THE CURRENT ARMS MANUAL FOR BOTH CONSTRUCTION AND POST CONSTRUCTION DESIGN HAVE BEEN STUDIED AND ADDRESSED. ALL NECESSARY BMP'S HAVE BEEN IMPLEMENTED FOR BOTH PHASES (CONSTRUCTION AND POST-CONSTRUCTION) TO AVOID NEGATIVELY IMPACTING IMPAIRED WATERS OF THE SCDOT SYSTEM AND/OR ITS DISCHARGES. ALL REQUIREMENTS IN SECTION 10B OF THE CURRENT ARMS MANUAL FOR POST DEVELOPMENT RELEASE RATES HAVE BEEN MET. THERE WILL BE ZERO INCREASE IN RUNOFF TO SCDOT RIGHT OF WAY."

MARK WALKER HAMMOND, PE

ALL DITCHES SHALL BE REGRADED DOWNSTREAM TO UPSTREAM. AS EACH SECTION IS COMPLETED, CONTRACTOR TO INSTALL APPROPRIATE BMP'S INCLUDING RIP-RAP, SEDIMENT TUBES, ETC., AND STABILIZE IMMEDIATELY WITH TEMPORARY AND/OR PERMANENT SEEDING.

"I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000."

MARK WALKER HAMMOND, PE



**INFRASTRUCTURE CONSULTING & ENGINEERING**

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
	DESIGNED BY: M. HAMMOND	DATE 07/11/2019	
	DRAWN BY: L. WILEN	DATE 04/10/2020	
	CHECKED BY: A. KLOSTERMAN	DATE 04/10/2020	

BEAUFORT COUNTY  
CITY OF BEAUFORT

MOSSY OAKS BASIN 1 – WEST ROYAL OAKS DRAINAGE IMPROVEMENT PLAN

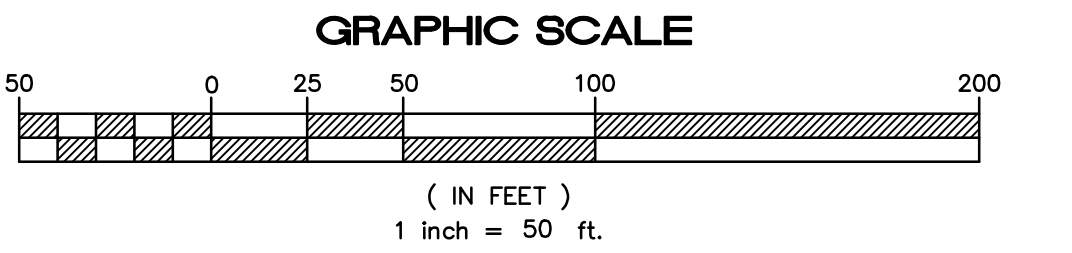
SHEET 5B

SCALE: 1"=50'



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				5C

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MARK WALKER HAMMOND, PE

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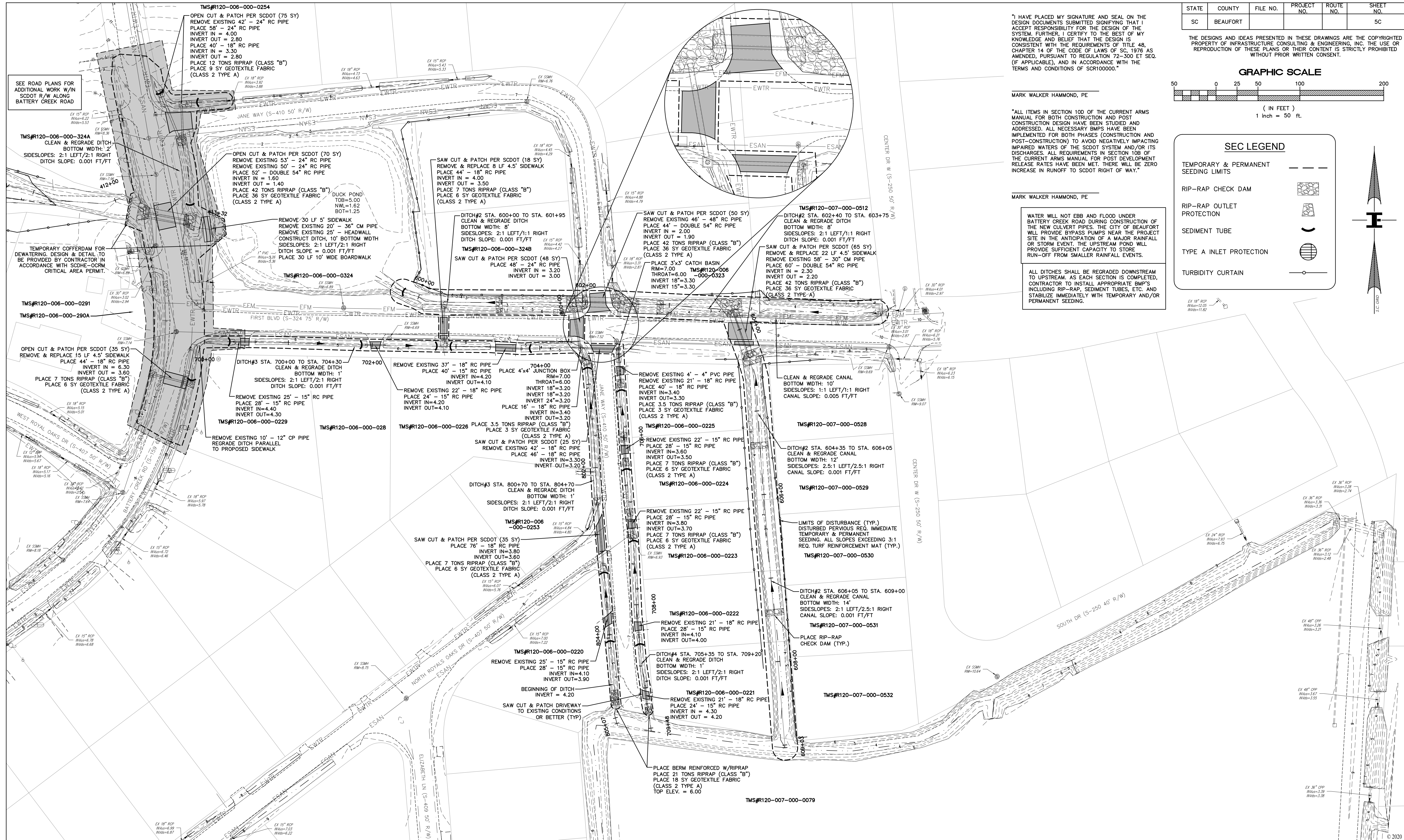
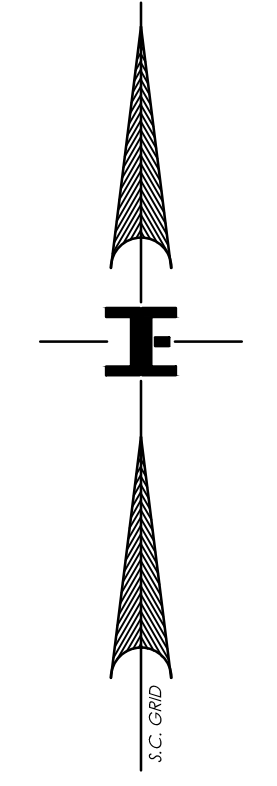
MARK WALKER HAMMOND, PE

WATER WILL NOT EBB AND FLOOD UNDER BATTERY CREEK ROAD DURING CONSTRUCTION OF THE NEW CULVERT PIPES. THE CITY OF BEAUFORT WILL PROVIDE BYPASS PUMPS NEAR THE PROJECT SITE IN THE ANTICIPATION OF A MAJOR RAINFALL OR STORM EVENT. THE UPSTREAM POND WILL PROVIDE SUFFICIENT CAPACITY TO STORE RUN-OFF FROM SMALLER RAINFALL EVENTS.

ALL DITCHES SHALL BE REGRADED DOWNSTREAM TO UPSTREAM. AS EACH SECTION IS COMPLETED, CONTRACTOR TO INSTALL APPROPRIATE BMP'S INCLUDING RIP-RAP, SEDIMENT TUBES, ETC. AND STABILIZE IMMEDIATELY WITH TEMPORARY AND/OR PERMANENT SEEDING.

**SEC LEGEND**

- TEMPORARY & PERMANENT SEEDING LIMITS
- RIP-RAP CHECK DAM
- RIP-RAP OUTLET PROTECTION
- SEDIMENT TUBE
- TYPE A INLET PROTECTION
- TURBIDITY CURTAIN



**IE INFRASTRUCTURE CONSULTING & ENGINEERING**

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BEAUFORT COUNTY  
CITY OF BEAUFORT

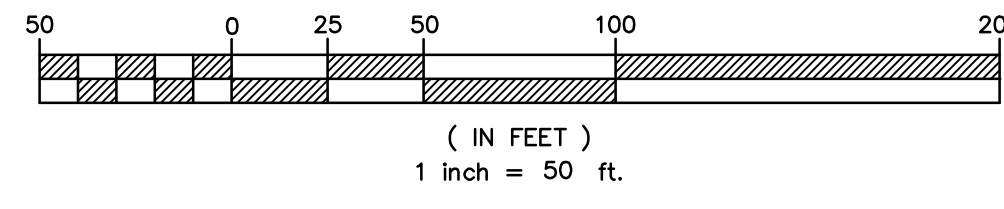
MOSSY OAKS BASIN 1 – WEST ROYAL OAKS DRAINAGE IMPROVEMENT PLAN

SHEET 5C

SCALE: 1"=50'



**GRAPHIC SCALE**



ALL DITCHES SHALL BE REGRADED DOWNSTREAM TO UPSTREAM, AS EACH SECTION IS COMPLETED, CONTRACTOR TO INSTALL APPROPRIATE BMP'S INCLUDING RIP-RAP, SEDIMENT TUBES, ETC. AND STABILIZE IMMEDIATELY WITH TEMPORARY AND/OR PERMANENT SEEDING.

"I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000."

STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				50

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**SEC LEGEND**

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MARK WALKER HAMMOND, PE  
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MARK WALKER HAMMOND, PE

WATER WILL NOT EBB AND FLOOD UNDER THE SPANISH MOSS TRAIL AND BATTERY CREEK ROAD DURING CONSTRUCTION OF THE NEW CULVERT PIPES. THE CITY OF BEAUFORT WILL PROVIDE BYPASS PUMPS NEAR THE PROJECT SITE IN THE ANTICIPATION OF A MAJOR RAINFALL OR STORM EVENT. THE UPSTREAM MARSH & POND WILL PROVIDE SUFFICIENT CAPACITY TO STORE RUN-OFF FROM SMALLER RAINFALL EVENTS.

**TMS#R120-006-000-0254**  
 OPEN CUT & PATCH PER SCOTD (75 SY)  
 REMOVE EXISTING 42" - 24" RC PIPE  
 PLACE 58" - 24" RC PIPE  
 INVERT IN = 4.00  
 INVERT OUT = 2.80  
 PLACE 40' - 18" RC PIPE  
 INVERT IN = 3.30  
 INVERT OUT = 2.80  
 PLACE 12 TONS RIPRAP (CLASS "B")  
 PLACE 9 SY GEOTEXTILE FABRIC (CLASS 2 TYPE A)

SEE ROAD PLANS FOR ADDITIONAL WORK W/IN SCOTD R/W ALONG BATTERY CREEK ROAD

**TMS#R120-006-000-324A**  
 CLEAN & REGRADE DITCH  
 BOTTOM WIDTH: 2'  
 SIDESLOPES: 2:1 LEFT/2:1 RIGHT  
 DITCH SLOPE: 0.001 FT/FT

REMOVE 30 LF 5" SIDEWALK  
 REMOVE EXISTING 20' - 36" CM PIPE  
 REMOVE EXISTING 25' - HEADWALL  
 CONSTRUCT DITCH, 10' BOTTOM WIDTH  
 SIDESLOPES: 2:1 LEFT/2:1 RIGHT  
 DITCH SLOPE = 0.001 FT/FT  
 PLACE 30 LF 10' WIDE BOARDWALK

OPEN CUT & PATCH PER SCOTD (70 SY)  
 REMOVE EXISTING 53" - 24" RC PIPE  
 PLACE 52" - DOUBLE 54" RC PIPE  
 INVERT IN = 1.60  
 INVERT OUT = 1.40  
 PLACE 42 TONS RIPRAP (CLASS "B")  
 PLACE 36 SY GEOTEXTILE FABRIC (CLASS 2 TYPE A)

TEMPORARY COFFERDAM FOR DEWATERING. DESIGN & DETAIL TO BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH SCDEH-OCRM CRITICAL AREA PERMIT.

**TMS#R120-006-000-0291**  
**TMS#R120-006-000-290A**

OPEN CUT & PATCH PER SCOTD (35 SY)  
 REMOVE & REPLACE 15 LF 4.5" SIDEWALK  
 PLACE 44" - 18" RC PIPE  
 INVERT IN = 6.30  
 INVERT OUT = 3.60  
 PLACE 7 TONS RIPRAP (CLASS "B")  
 PLACE 6 SY GEOTEXTILE FABRIC (CLASS 2 TYPE A)

**TMS#R120-006-000-0229**  
 REMOVE EXISTING 10" - 12" CP PIPE  
 REGRADE DITCH PARALLEL TO PROPOSED SIDEWALK

OCRM CRITICAL AREA  
 OPEN CUT & PATCH CONCRETE (113 SY)  
 MATCH EXISTING CROSS-SECTION  
 REMOVE EXISTING 64" - 48" RC PIPE  
 PLACE 68" - DOUBLE 60" RC PIPE  
 INVERT IN = -0.50  
 INVERT OUT = -1.00  
 CONSTRUCT TIDAL FLAP GATE ON OUTLET END OF EACH PIPE  
 PLACE 25'x20' RIPRAP BED (CLASS "B") ON GEOTEXTILE FABRIC (CLASS 2 TYPE A) (SEE SHEET 6)

CONSTRUCT 1,220 LF SHEET PILE WALL 3' OFFSET FROM TRAIL TOP OF WALL ELEVATION 12' (SEE SHEET 6)

REMOVE EXISTING 176" - 24" RC PIPE  
 PLACE 176" - DOUBLE 30" RC PIPE  
 INVERT IN = 2.30  
 INVERT OUT = 1.40  
 PLACE 13.5 TONS RIPRAP (CLASS "B")  
 PLACE 12 SY GEOTEXTILE FABRIC (CLASS 2 TYPE A)

REMOVE EXISTING 8" - 15" RC PIPE  
 REMOVE EXISTING 30" - 18" RC PIPE  
 PLACE 40" - 18" RC PIPE  
 INVERT IN = 4.00  
 INVERT OUT = 3.80  
 PLACE 3.5 TONS RIPRAP (CLASS "B")  
 PLACE 3 SY GEOTEXTILE FABRIC (CLASS 2 TYPE A)

REMOVE EXISTING 8" - 15" RC PIPE  
 PLACE 8" - 18" RC PIPE  
 INVERT IN = 3.90  
 INVERT OUT = 3.80  
 PLACE 3.5 TONS RIPRAP (CLASS "B")  
 PLACE 3 SY GEOTEXTILE FABRIC (CLASS 2 TYPE A)

REMOVE EXISTING JUNCTION BOX  
 PLACE 8'x4' JUNCTION BOX  
 RIM=6.30  
 INVERT 30" = 2.30  
 INVERT 18" = 3.80  
 SUMP = 1.30

PLACE SEDIMENT TUBE (TYP.)

OPEN CUT & PATCH PER SCOTD (30 SY)  
 REMOVE EXISTING 44" - 24" RC PIPE  
 PLACE 44" - DOUBLE 30" RC PIPE  
 INVERT IN = 2.40  
 INVERT OUT = 2.30  
 PLACE 13.5 TONS RIPRAP (CLASS "B")  
 PLACE 12 SY GEOTEXTILE FABRIC (CLASS 2 TYPE A)

DITCH #1 STA. 503+60 TO STA. 507+00  
 CLEAN & REGRADE DITCH  
 2' BOTTOM WIDTH  
 SIDESLOPES: 2:1 LEFT/2:1 RIGHT  
 DITCH SLOPE = 0.004 FT/FT

LIMITS OF DISTURBANCE (TYP.)  
 DISTURBED PERVIOUS REQ. IMMEDIATE TEMPORARY & PERMANENT SEEDING. ALL SLOPES EXCEEDING 3:1 REQ. TURF REINFORCEMENT MAT (TYP.)



ISSUED FOR BID

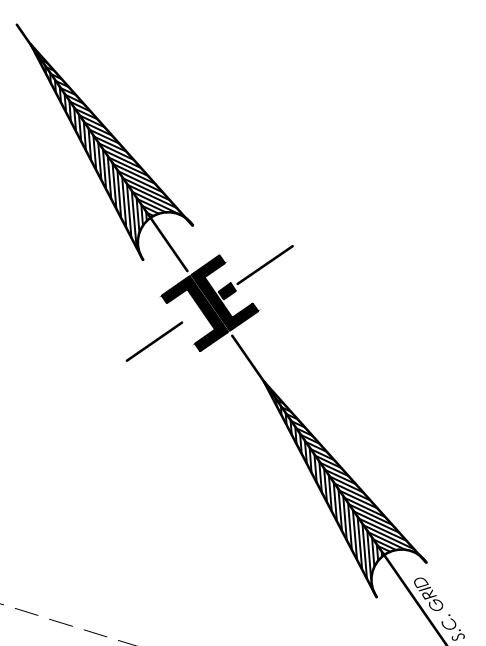
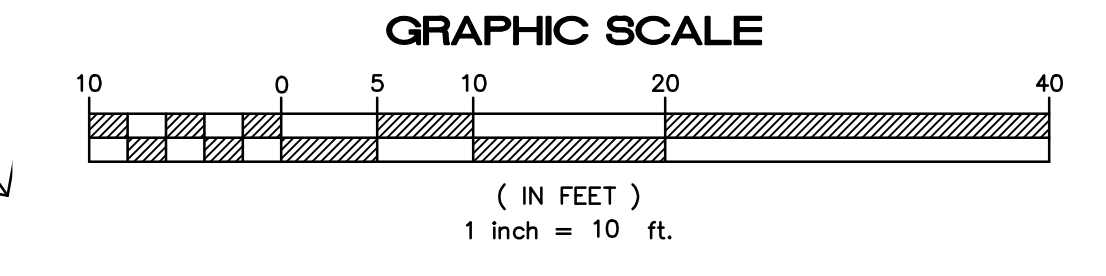
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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	M. HAMMOND	DATE	07/11/2019
DRAWN BY:	L. WILEN	DATE	04/10/2020
CHECKED BY:	A. KLOSTERMAN	DATE	04/10/2020

BEAUFORT COUNTY  
 CITY OF BEAUFORT  
 MOSSY OAKS BASIN 1 - WEST ROYAL OAKS DRAINAGE IMPROVEMENT PLAN  
 SHEET 5D  
 SCALE: 1"=50'



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				5E

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- SEC LEGEND**
- TEMPORARY & PERMANENT SEEDING LIMITS
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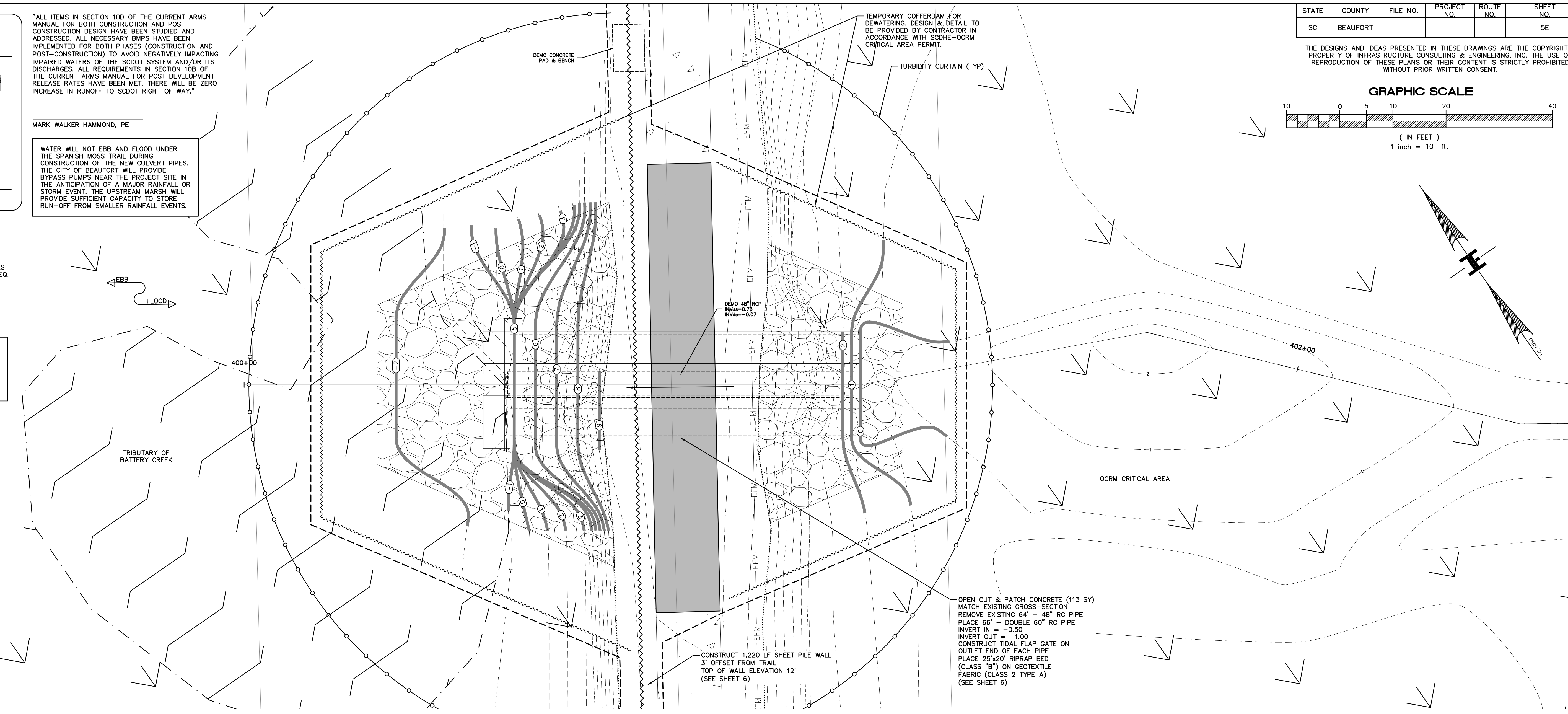
MARK WALKER HAMMOND, PE

WATER WILL NOT EBB AND FLOOD UNDER THE SPANISH MOSS TRAIL DURING CONSTRUCTION OF THE NEW CULVERT PIPES. THE CITY OF BEAUFORT WILL PROVIDE BYPASS PUMPS NEAR THE PROJECT SITE IN THE ANTICIPATION OF A MAJOR RAINFALL OR STORM EVENT. THE UPSTREAM MARSH WILL PROVIDE SUFFICIENT CAPACITY TO STORE RUN-OFF FROM SMALLER RAINFALL EVENTS.

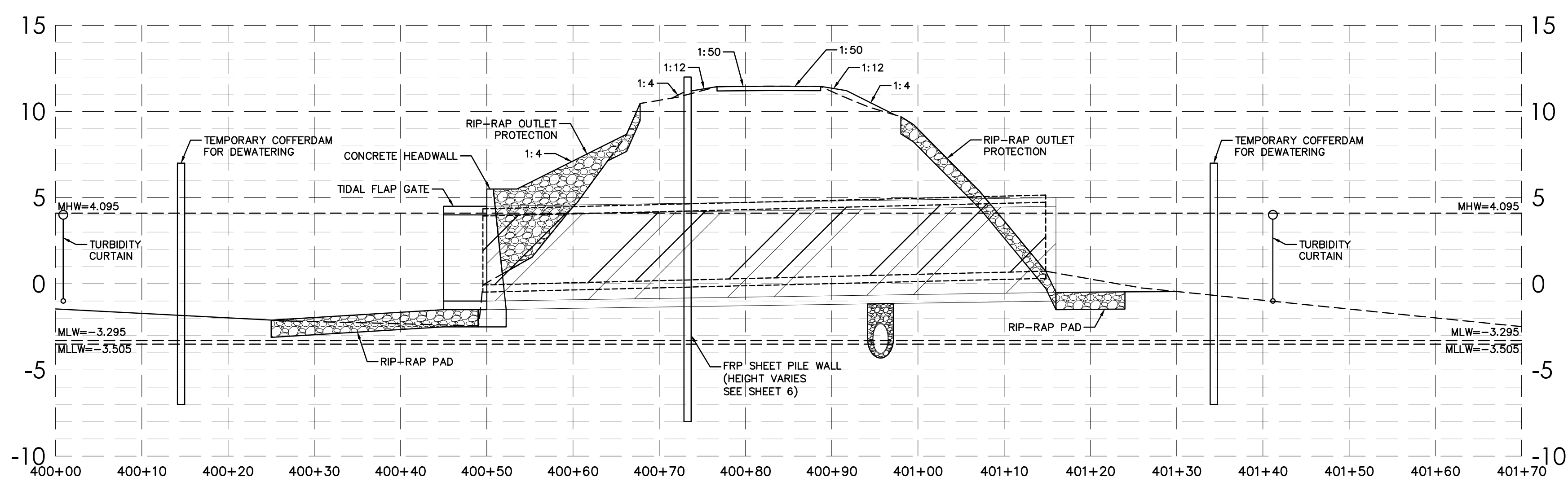
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MARK WALKER HAMMOND, PE

ANY DEWATERING OF SEDIMENT LADEN WATER TO BE IN ACCORDANCE WITH SCDHEC-OCRM STANDARDS USING APPROPRIATE BMPs. SEE DETAIL SHEET FOR TYPICAL DEWATERING SETUP, DETAILS, AND SPECIFICATIONS. CONTRACTOR TO COORDINATE DEWATERING PLAN AND LOCATION OF BMPs WITH ENGINEER PRIOR TO CONSTRUCTION.



- SPANISH MOSS TRAIL CONSTRUCTION SEQUENCE:**
1. INSTALL SHEET PILE WALL (3 WEEKS)
  2. INSTALL COFFERDAM & TURBIDITY CURTAINS (1 WEEK)
  3. REMOVE EXISTING PIPE (1 WEEK)
  4. INSTALL NEW PIPES (2 WEEKS)
  5. INSTALL HEADWALL (2 WEEKS)
  6. INSTALL FLAP GATES (1 WEEK)
  7. INSTALL REMAINING SHEET PILE WALL (1 WEEK)
  8. REMOVE COFFERDAM (1 WEEK)
  9. REPLACE CONCRETE PATHWAY (1 WEEK)
  10. FINAL GRADING & FINAL GRASSING (1 WEEK)
  11. REMOVE ALL EROSION CONTROL DEVICES (1 WEEK)



SECTION A-A  
SCALE: VERT 1"=5' HORZ 1"=10'



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BEAUFORT COUNTY  
CITY OF BEAUFORT

MOSSY OAKS BASIN 1 – WEST ROYAL OAKS DRAINAGE IMPROVEMENT PLAN

SHEET 5E SCALE: 1"=10'

STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				6

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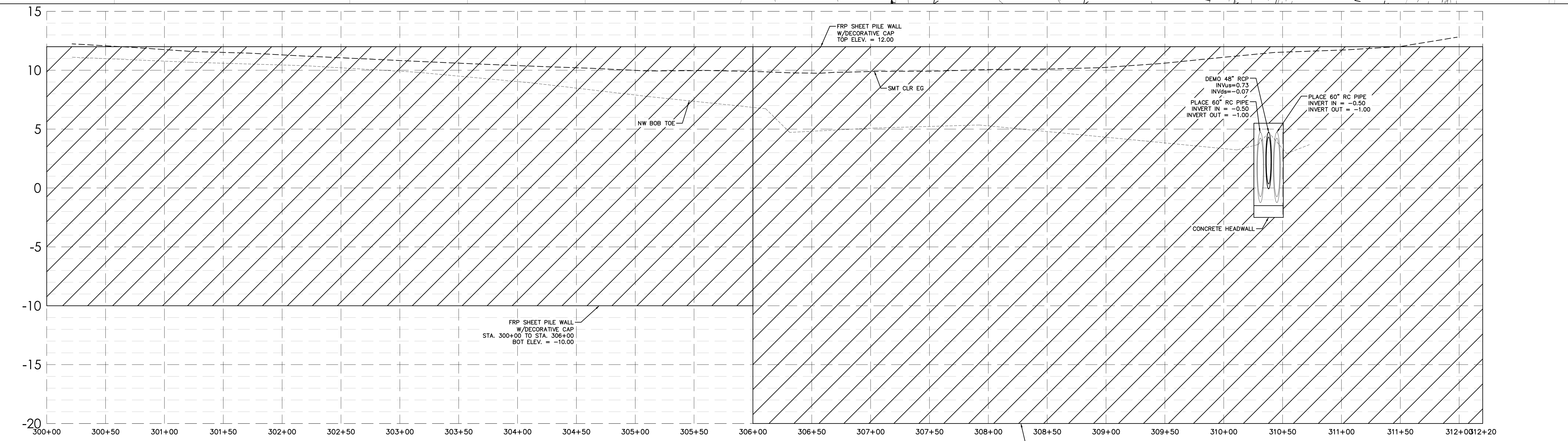
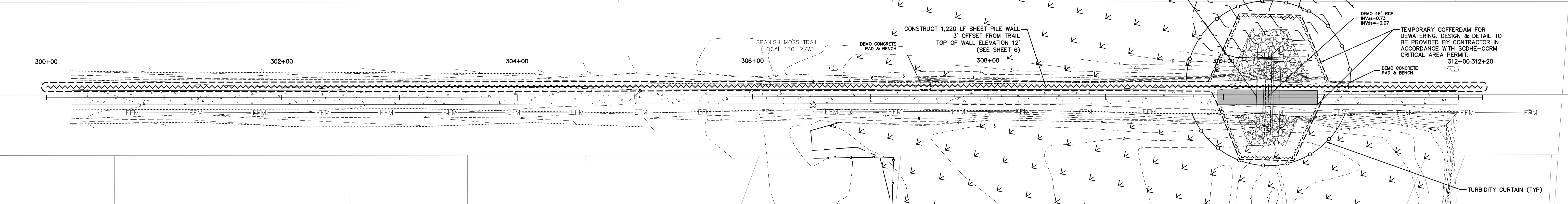
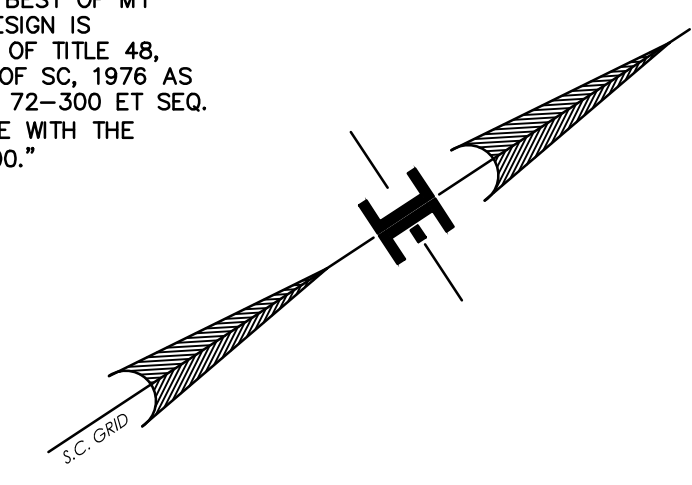
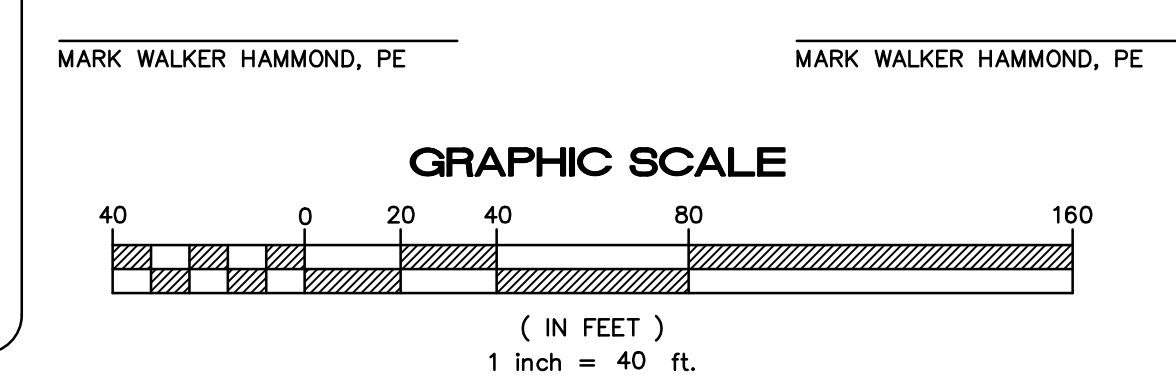
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  - RIP-RAP CHECK DAM
  - RIP-RAP OUTLET PROTECTION
  - SEDIMENT TUBE
  - TYPE A INLET PROTECTION
  - TURBIDITY CURTAIN

- SPANISH MOSS TRAIL CONSTRUCTION SEQUENCE:**
1. INSTALL SHEET PILE WALL (3 WEEKS)
  2. INSTALL COFFERDAM & TURBIDITY CURTAINS (1 WEEK)
  3. REMOVE EXISTING PIPE (1 WEEK)
  4. INSTALL NEW PIPES (2 WEEKS)
  5. INSTALL HEADWALL (2 WEEKS)
  6. INSTALL FLAP GATES (1 WEEK)
  7. INSTALL REMAINING SHEET PILE WALL (1 WEEK)
  8. REMOVE COFFERDAM (1 WEEK)
  9. REPLACE CONCRETE PATHWAY (1 WEEK)
  10. FINAL GRADING & FINAL GRASSING (1 WEEK)
  11. REMOVE ALL EROSION CONTROL DEVICES (1 WEEK)

"ALL ITEMS IN SECTION 10D OF THE CURRENT ARMS MANUAL FOR BOTH CONSTRUCTION AND POST CONSTRUCTION DESIGN HAVE BEEN STUDIED AND ADDRESSED. ALL NECESSARY BMPs HAVE BEEN IMPLEMENTED FOR BOTH PHASES (CONSTRUCTION AND POST-CONSTRUCTION) TO AVOID NEGATIVELY IMPACTING IMPAIRED WATERS OF THE SCDOT SYSTEM AND/OR ITS DISCHARGES. ALL REQUIREMENTS IN SECTION 10B OF THE CURRENT ARMS MANUAL FOR POST DEVELOPMENT RELEASE RATES HAVE BEEN MET. THERE WILL BE ZERO INCREASE IN RUNOFF TO SCDOT RIGHT OF WAY."

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**SMT - CLR PROFILE**

SCALE: VERT 1"=4' HORZ 1"=40'



ISSUED FOR BID

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BEAUFORT COUNTY  
CITY OF BEAUFORT

MOSSY OAKS BASIN 1 – WEST ROYAL OAKS  
FRP WALL PLAN & PROFILE

SHEET 6

SCALE: 1"=40'

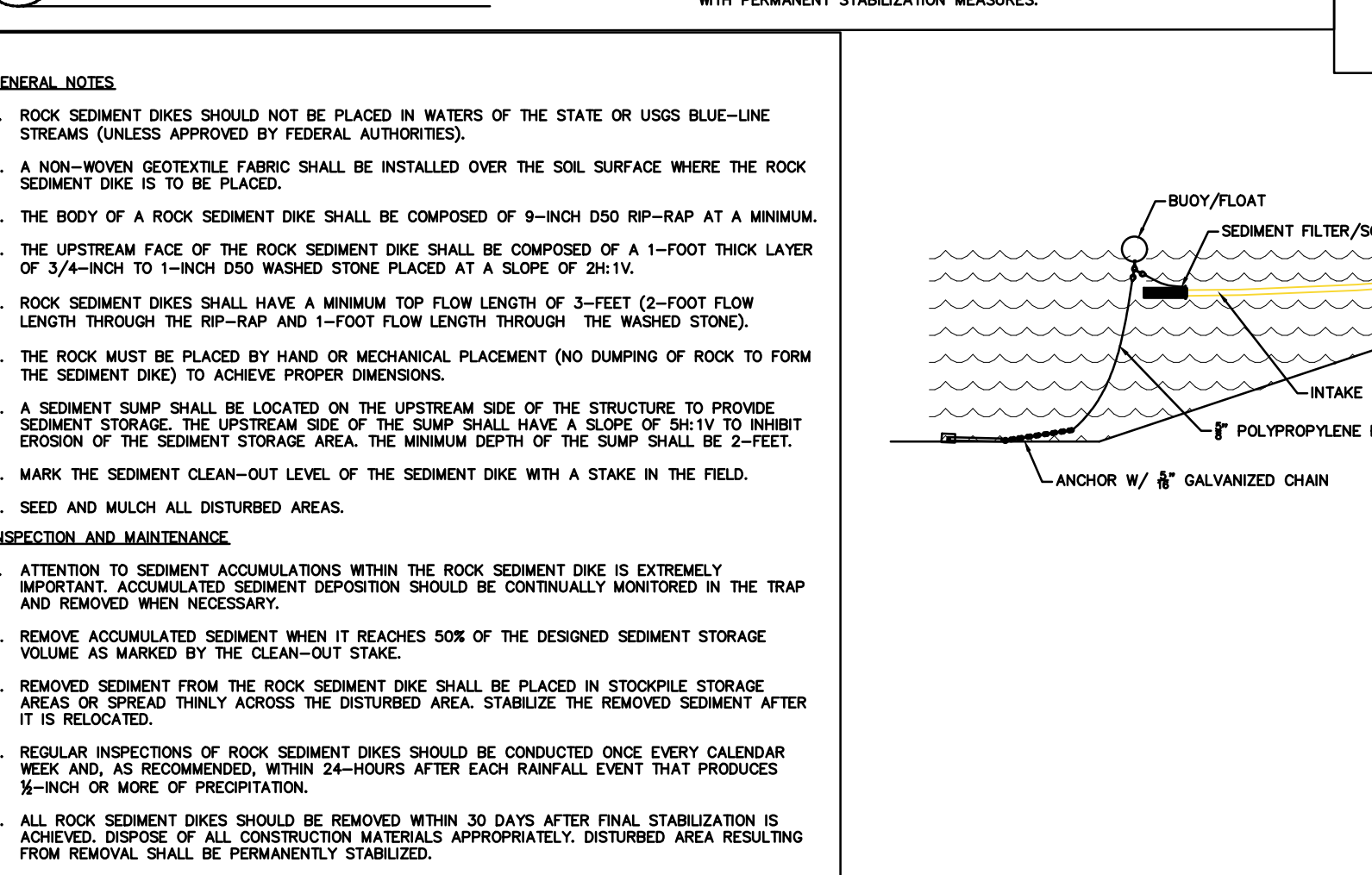
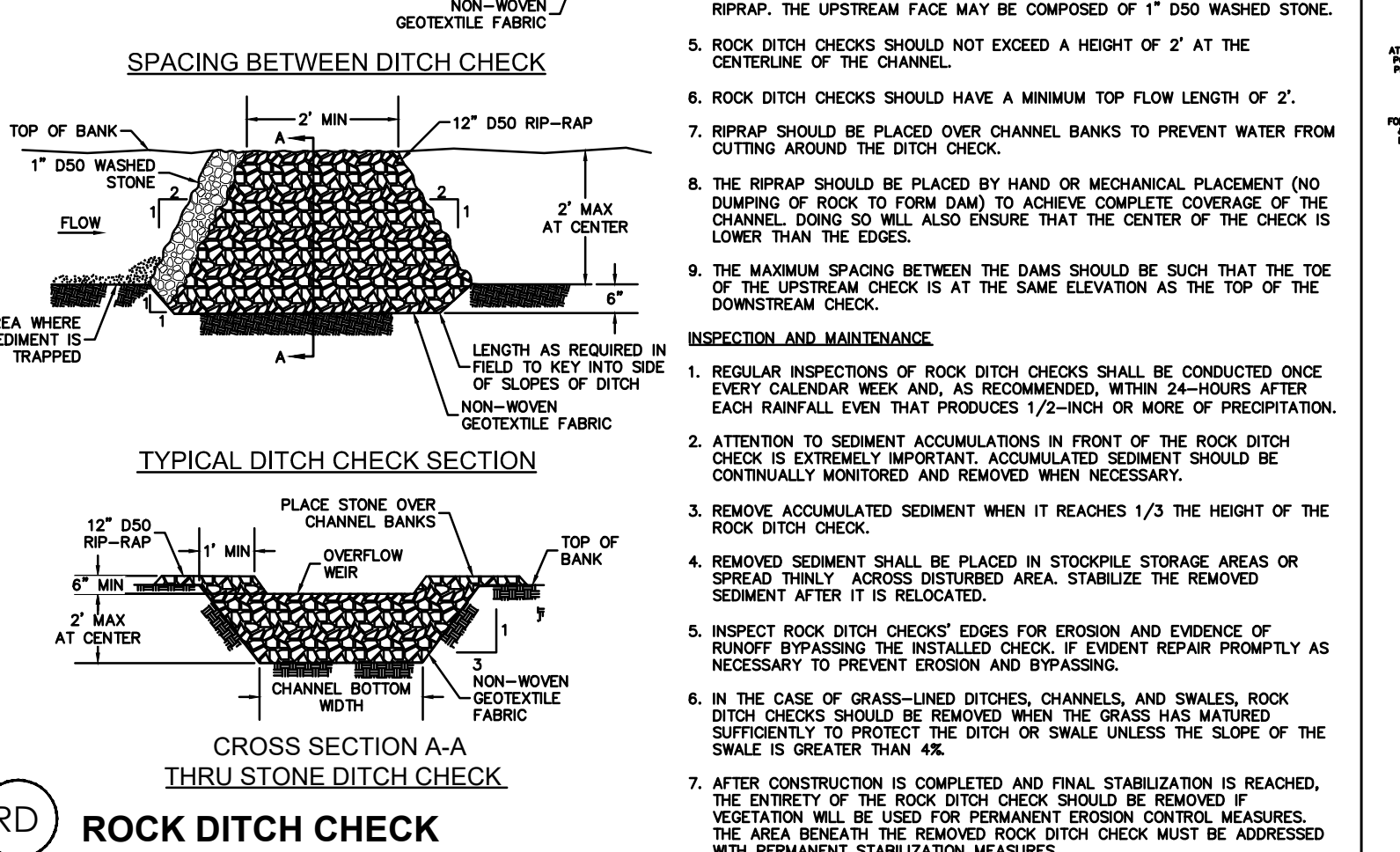
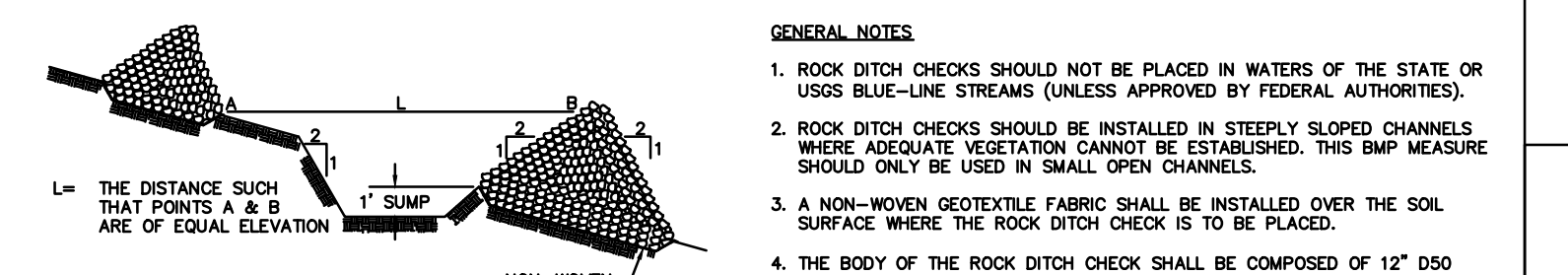
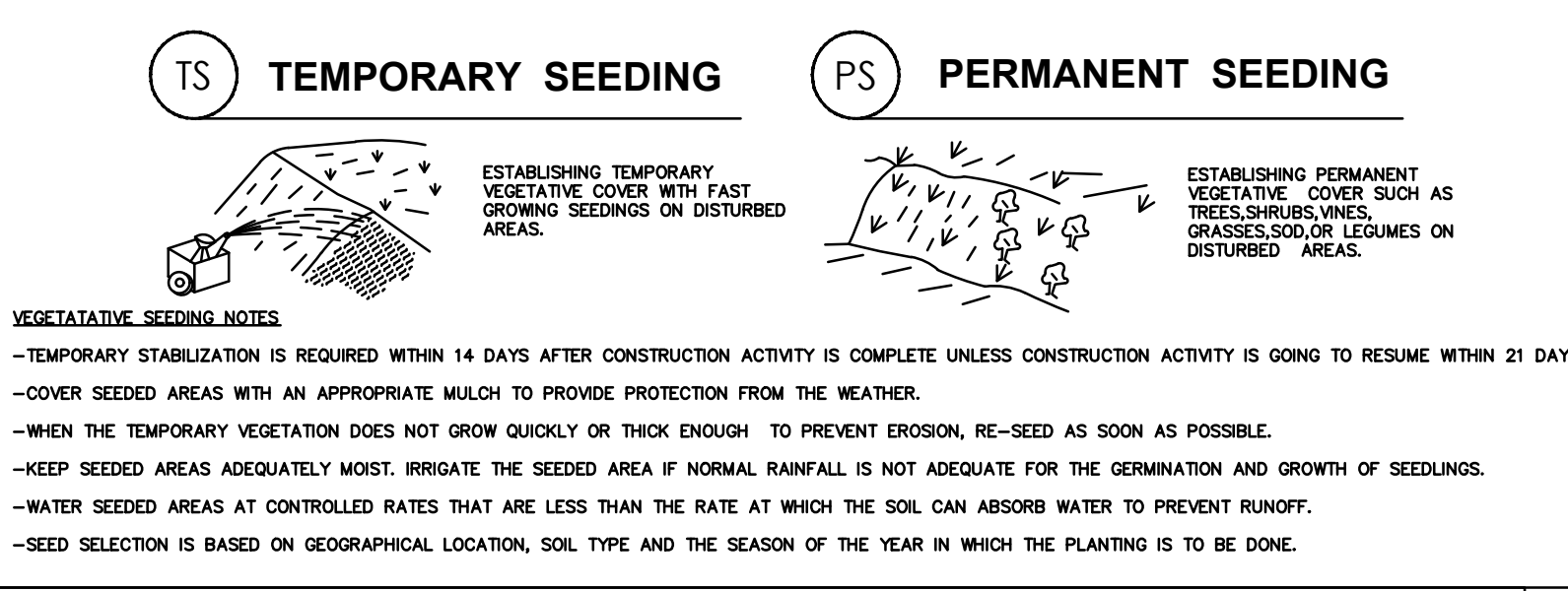
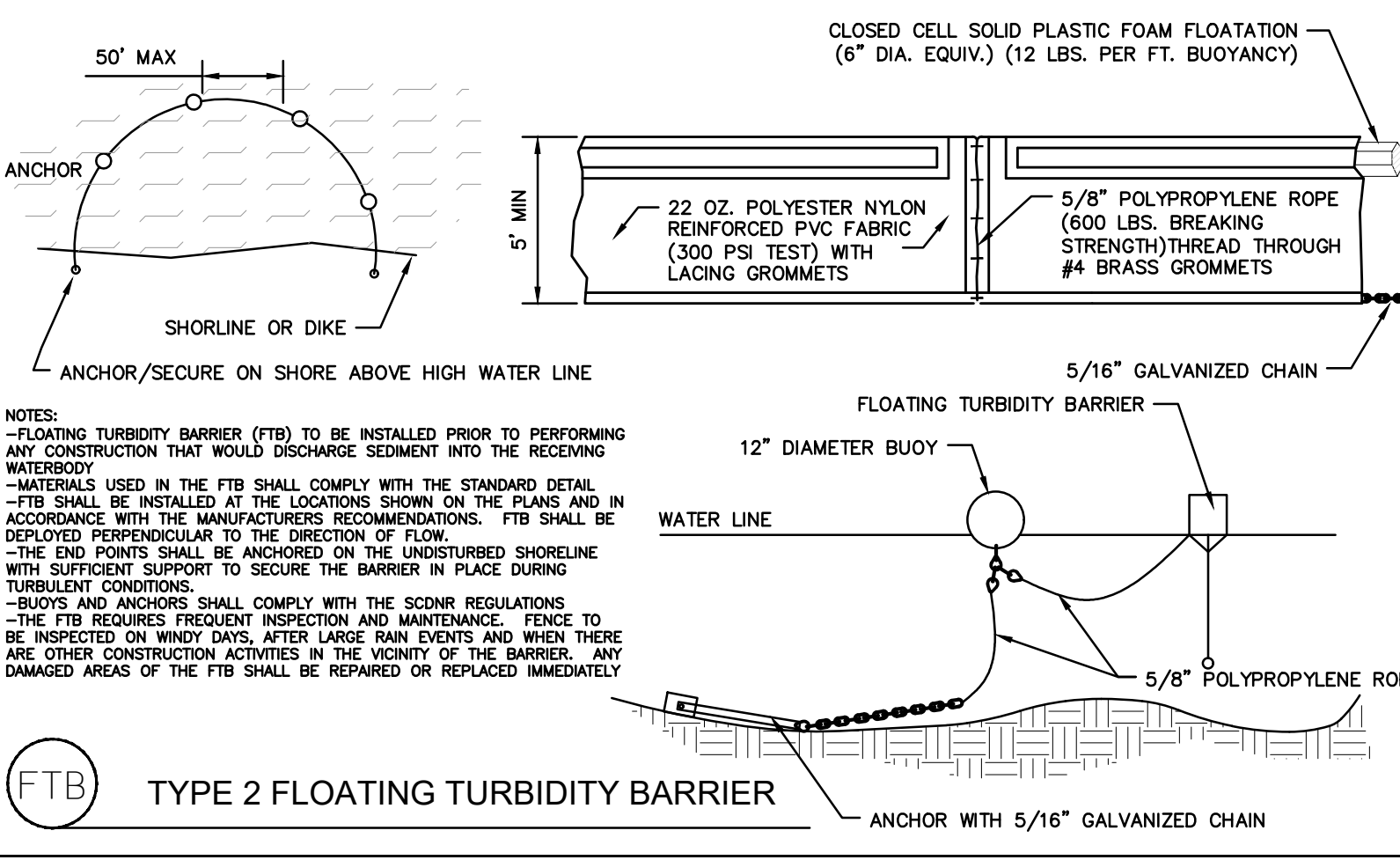






**SEDIMENT AND EROSION CONTROL NOTES**

- IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS. IN ADDITION TO MATS, IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE BRIMS DURING CONSTRUCTION. TEMPORARY BRIMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. 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, SHALL BE STABILIZED BY THE 14TH DAY IS PRECEDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
  - 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.
  - WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED ON ANY EXPOSED STEEP SLOPE (ONE-1/2 OR GREATER) AND/OR ANY DITCHES/CHANNELS, AND WILL NOT RESUME FOR A PERIOD OF SEVEN (7) CALENDAR DAYS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN ONE (1) CALENDAR DAY AFTER WORK HAS CEASED.
- 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 INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- 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 SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATER OF THE SITE.
- 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 OFF-SITE SEDIMENTATION. ALL 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. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 30-FOOT BUFFER CANNOT 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.
- LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKS 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.
- A COPY OF THE SWPPP, INSPECTION RECORDS, AND MAINTENANCE 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.
- MINIMIZE SOIL COMPACTION AND UNLESS NECESSARY, PREVENT TOPSOIL.
- 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 EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
- 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.).
- THE FOLLOWING DISCHARGES ARE PROHIBITED:
  - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL.
  - WASTEWATER FROM WASHOUT AND CLEANUP OF PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS.
  - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
  - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- 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.
- EXISTING BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT. IMPROVEMENTS PRACTICES 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.
- A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH PROJECT SITE 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.



**ROCK SEDIMENT DIKE (SD)**

W	L	Bo	MAX. DRAINAGE (ACRES)	TOTAL STORAGE VOL. (CU. FT.)	SEDIMENT STORAGE VOLUME (CU. FT.)
15'	17.5'	3.5'	0.5	1259	283
20'	20.0'	6.0'	1.0	1948	529
25'	22.5'	8.5'	1.5	2700	855
30'	25.0'	11.0'	2.0	3790	1257

MAXIMUM 2-ACRE DRAINAGE AREA TO DIKE

**Temporary Seeding - Coastal**

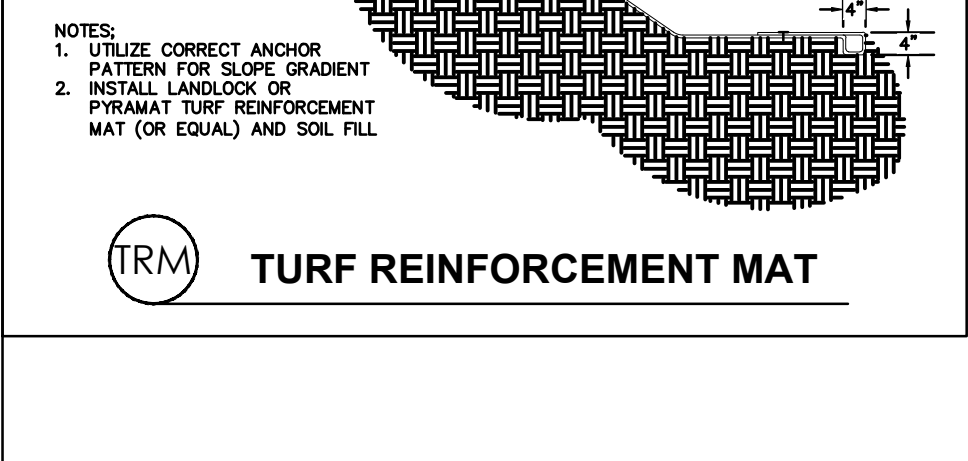
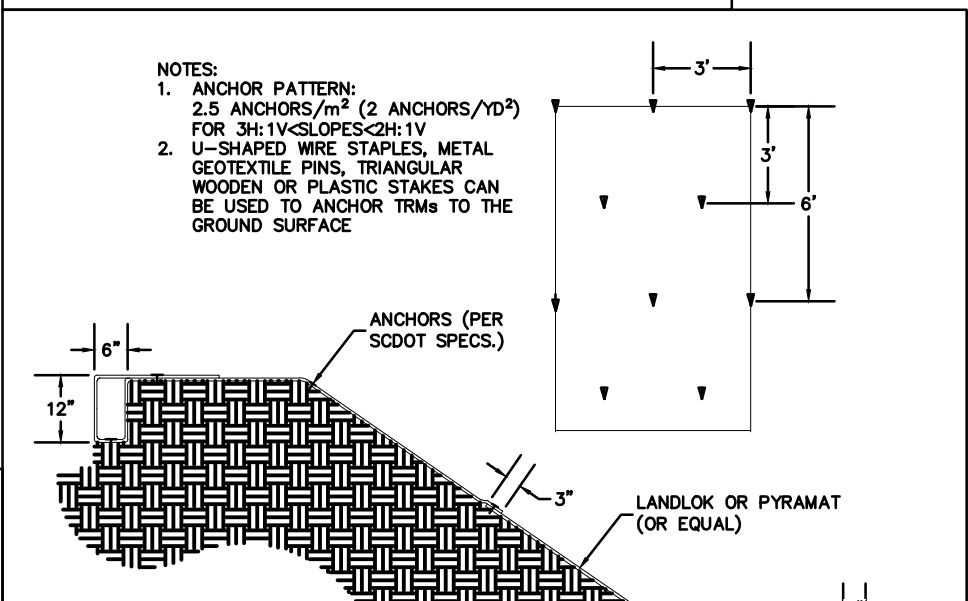
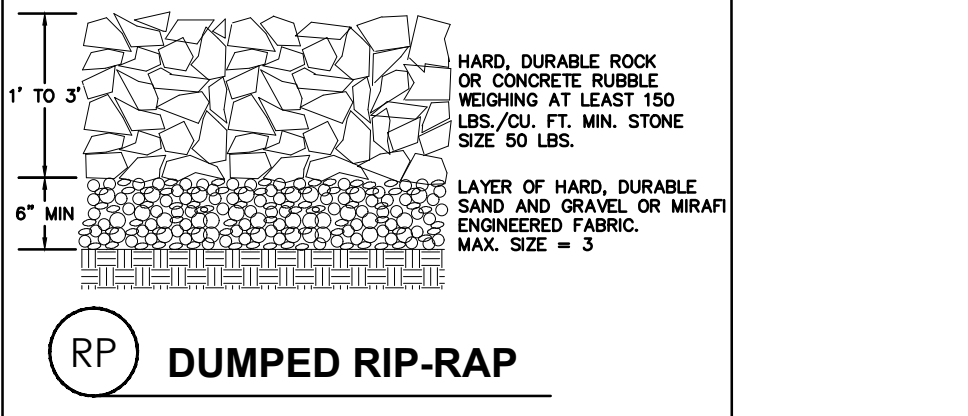
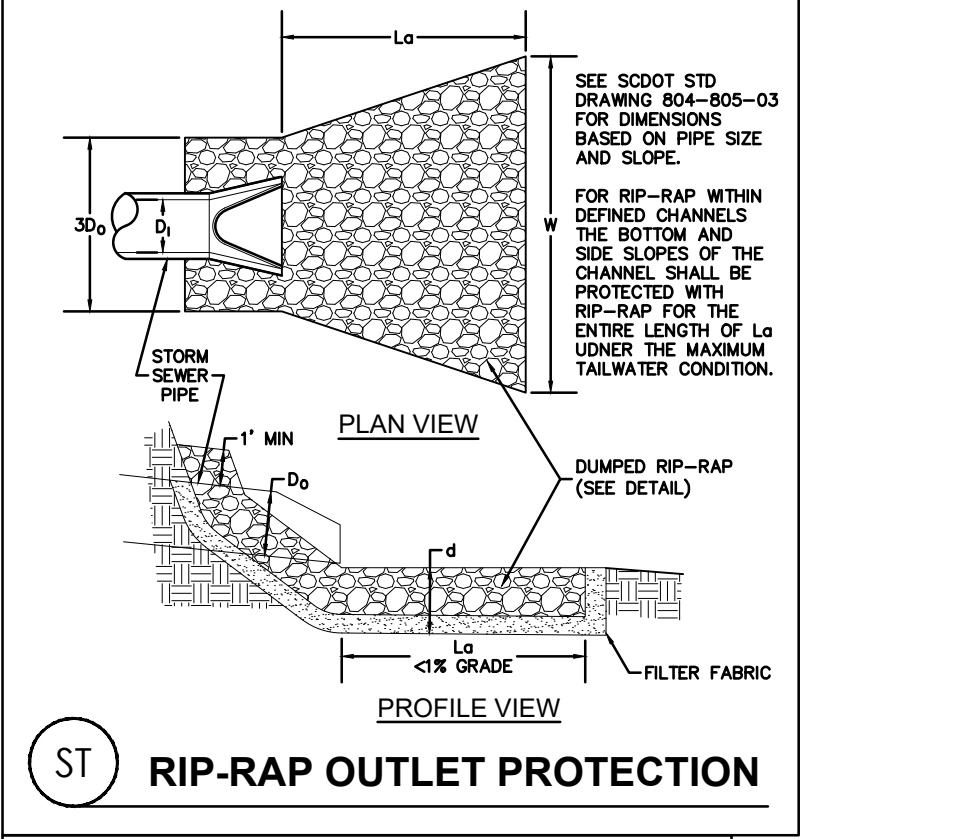
Species	Lbs/Ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sandy, Droughty Sites													
Browntop Millet	40 lbs./ac.												
Rye, Grain	56 lbs./ac.												
Ryegrass	50 lbs./ac.												
Well drained, clayey/loamy Sites													
Browntop Millet or Japanese Millet	40 lbs./ac.												
Rye, Grain or Oats	56 lbs./ac.												
Ryegrass	50 lbs./ac.												

**Permanent Seeding - Coastal**

Species	Lbs/Ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sandy, Droughty Sites													
Browntop Millet	10 lbs./ac.												
Bahagras	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahagras	30 lbs./ac.												
Sericea Lepedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Atlantic Coastal Panicgrass	15 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Limbe Bluestem (Annual)	8 lbs./ac.												
Limbe Bluestem (Perennial)	12 lbs./ac.												
Limbe Bluestem (Annual)	10 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahagras	20 lbs./ac.												
Bermuda, Common	6 lbs./ac.												
Sericea Lepedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Limbe Bluestem	8 lbs./ac.												
Limbe Bluestem	12 lbs./ac.												
Indiangrass	3 lbs./ac.												
Well drained, clayey/loamy Sites													
Browntop Millet	10 lbs./ac.												
Bahagras	40 lbs./ac.												
Rye, Grain	10 lbs./ac.												
Bahagras	10 lbs./ac.												
Clower, Crimson	5 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahagras	10 lbs./ac.												
Sericea Lepedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahagras	10 lbs./ac.												
Bermuda, Common	12 lbs./ac.												
Kobe Lepedeza (Annual)	10 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahagras	20 lbs./ac.												
Bermuda, Common	6 lbs./ac.												
Sericea Lepedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Limbe Bluestem	8 lbs./ac.												
Limbe Bluestem	12 lbs./ac.												
Indiangrass	3 lbs./ac.												

**Well drained, clayey/loamy Sites**

Species	Lbs/Ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Browntop Millet	10 lbs./ac.												
Bahagras	40 lbs./ac.												
Rye, Grain	10 lbs./ac.												
Bahagras	10 lbs./ac.												
Clower, Crimson	5 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahagras	10 lbs./ac.												
Sericea Lepedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahagras	10 lbs./ac.												
Bermuda, Common	12 lbs./ac.												
Kobe Lepedeza (Annual)	10 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahagras	20 lbs./ac.												
Bermuda, Common	6 lbs./ac.												
Sericea Lepedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Limbe Bluestem	8 lbs./ac.												
Limbe Bluestem	12 lbs./ac.												
Indiangrass	3 lbs./ac.												



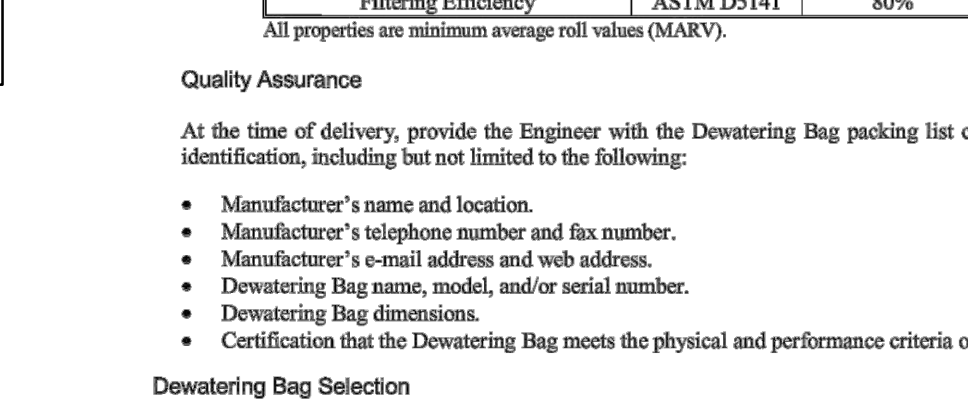
**SEDIMENT BAG SPECIFICATIONS**

Materials

Use Dewatering Bags composed of a UV resistant, non-woven geotextile sewn into a completely enclosed bag. Use Dewatering Bags sewn with high strength double stitched seams. Use Dewatering Bags that have a sewn-in sleeve to receive the pump discharge hose.

Property	Test Method	Type II Value
Weight (oz/yd <sup>2</sup> ) (typical)	ASTM D5261	10 oz
Grab Tensile Strength (MD)	ASTM D4632	250 lbs
Mullen Burst	ASTM D7786	350 psi
UV Resistance	ASTM D4355	70% @ 500 hrs
Flow Rate (Gal/Min/Ft <sup>2</sup> )	ASTM D4491	70
Filtering Efficiency	ASTM D5141	80%

All properties are minimum average roll values (MARV).



- DEWATERING DETAIL**  
N.T.S.
- At the time of delivery, provide the Engineer with the Dewatering Bag packing list containing complete identification, including but not limited to the following:
- Manufacturer's name and location.
  - Manufacturer's telephone number and fax number.
  - Manufacturer's e-mail address and web address.
  - Dewatering Bag name, model, and/or serial number.
  - Dewatering Bag dimensions.
  - Certification that the Dewatering Bag meets the physical and performance criteria of this specification.
- Dewatering Bag Selection
- Use the following steps to select an appropriately sized Dewatering Bag. Consult with the Engineer to select Dewatering Bag size if insufficient information is known about the site conditions.
- Determine the peak flow rate generated from the dewatering pump in gallons per minute.
  - Determine the peak flow rate through the Dewatering Bag in gallons per minute based on the Dewatering Bag peak flow rate and the total surface area provided by the manufacturer.
  - Select a Dewatering Bag that passes a minimum of two times the peak flow rate generated from the dewatering pump as determined in Step 1 to account for a 50% clogging factor.

STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				8

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ALL WORK WITHIN THE SCODT R/W SHALL CONFORM TO THE MOST CURRENT EDITION OF SCODT STANDARD DRAWINGS. THIS INCLUDES, BUT IS NOT LIMITED TO, TEMPORARY CONSTRUCTION ENTRANCES, PAVEMENT MARKINGS, SIGNS AND DRAINAGE STRUCTURES. IF DETAILS VARY FROM SCODT STANDARD DRAWINGS, SCODT STANDARD DRAWINGS SHALL BE ADHERED TO.

THE FOLLOWING SCODT STANDARD DRAWING NUMBERS ARE PROVIDED FOR REFERENCE:

- 625-305-00: STANDARD MARKINGS FOR INTERSECTIONS
- 719-305-00: RECTANGULAR PRECAST SOLID WALL BOX
- 719-315-00: RECTANGULAR PRECAST RISER
- 719-330-00: RECTANGULAR JUNCTION BOX TOPS
- 719-605-00: END TREATMENT (STRAIGHT HEADWALL FOR CIRCULAR PIPE)
- 719-610-00: END TREATMENT (RCP BEVELED END)
- 720-150-01: CURB & GUTTER (CONCRETE)
- 720-150-02: CURB & GUTTER (CONCRETE)
- 720-150-03: CURB & GUTTER (CONCRETE)
- 815-001-00: TYPE A INLET STRUCTURE FILTERS
- 815-105-00: DITCH CHECK
- 815-205-00: SEDIMENT TUBE DITCH APPLICATION
- 815-605-00: TEMPORARY SILT FENCE
- 815-805-00: FLOATING TURBIDITY CURTAIN

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ISSUED FOR BID

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

DESIGNED BY: M. HAMMOND DATE 07/11/2019  
 DRAWN BY: L. WILEN DATE 04/10/2020  
 CHECKED BY: A. KLOSTERMAN DATE 04/10/2020

BEAUFORT COUNTY  
CITY OF BEAUFORT

MOSSY OAKS BASIN 1 - WEST ROYAL OAKS  
CONSTRUCTION DETAILS

SHEET 8 SCALE: NOT TO SCALE



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT				9

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DESIGNED BY:	M. HAMMOND	DATE	07/11/2019
DRAWN BY:	L. WILEN	DATE	04/10/2020
CHECKED BY:	A. KLOSTERMAN	DATE	04/10/2020

BEAUFORT COUNTY  
CITY OF BEAUFORT

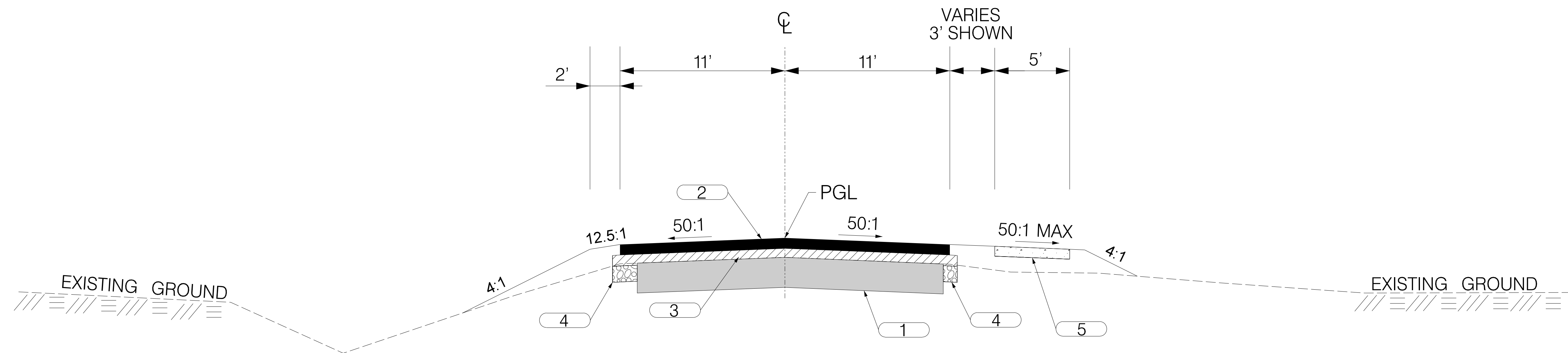
MOSSY OAKS BASIN 1 – WEST ROYAL OAKS  
PROJECT LIMITS SHEET

SHEET 9

SCALE: 1"=100'

STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	9

# TYPICAL SECTION



USE THIS SECTION ON  
 BATTERY CREEK ROAD (S-5-179)  
 STA. 12+00.00 TO STA. 16+50.00

1		EXISTING PAVEMENT - RETAIN
2		HOT MIX ASPHALT SURFACE COURSE TYPE C (150 PSY)
3		HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B (200 PSY)
4		HOT MIX ASPHALT BASE COURSE TYPE B (400 PSY)
5		CONCRETE SIDEWALK (4" UNIFORM)

RTE. S-7-159		DESIGN SPEED
MPH	FROM STA.	TO STA.
30	12+00.00	16+50.00
EXCEPTIONS TO DESIGN SPEED		
FUNCTIONAL CLASSIFICATION		
URBAN COLLECTOR		

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	RNT	DATE	08/22/2019
DRAWN BY:	RNT	DATE	08/22/2019
CHECKED BY:	JCH	DATE	08/22/2019

BEAUFORT COUNTY  
 CITY OF BEAUFORT

BATTERY CREEK ROAD (S-7-159)  
 BASIN 1  
 TYPICAL SECTION SHEET





STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	10A



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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
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DRAWN BY:	BJL	DATE 08/22/2019	
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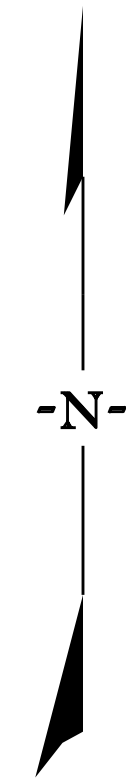
BEAUFORT COUNTY  
CITY OF BEAUFORT

BATTERY CREEK ROAD (S-7-159)  
BASIN 1  
PROPERTY STRIP MAP

SHEET 10A SCALE: 1" = 50'



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	11



$PI = 16+74.46$   
 $\Delta = 2^{\circ}05'25'' (RT)$   
 $D = 4^{\circ}05'33''$   
 $T = 25.54'$   
 $L = 51.08'$   
 $E = 0.23'$   
 $R = 1,400.00'$

$PT = 17+00.00$   
 $PC = 16+48.92$

100

$POT = 100+00.00$   
 $N 11^{\circ}14'67.61'' N$

15

$POT = 200+00.00$   
 $N 84^{\circ}36'53'' E$

200

$PT = 14+14.46$

$N 84^{\circ}36'53'' E$   
 JANE WAY

$PC = 104+39.74$

105

$PT = 105+66.54$

$PI = 105+20.88$   
 $\Delta = 90^{\circ}48'34'' (RT)$   
 $D = 71^{\circ}37'11''$   
 $T = 81.14'$   
 $L = 126.79'$   
 $E = 33.94'$   
 $R = 80.00'$

$POT = 209+06.65$

$S 89^{\circ}02'25'' E$   
 FIRST BOULEVARD

205

FIRST BOULEVARD

10

$PC = 10+00.00$

BATTERY CREEK ROAD (S-7-159)

$PI = 12+28.00$   
 $\Delta = 59^{\circ}22'02'' (LT)$   
 $D = 14^{\circ}19'26''$   
 $T = 228.00'$   
 $L = 414.46'$   
 $E = 60.42'$   
 $R = 400.00'$

$S 4^{\circ}34'32'' E$   
 JANE WAY

110

$POT = 111+83.39$

GENERAL INFORMATION

CONTROL SURVEY SUMMARY

- VERTICAL - NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
- HORIZONTAL - NORTH AMERICAN DATUM 1983 (NAD 83)
- COORDINATES - SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM

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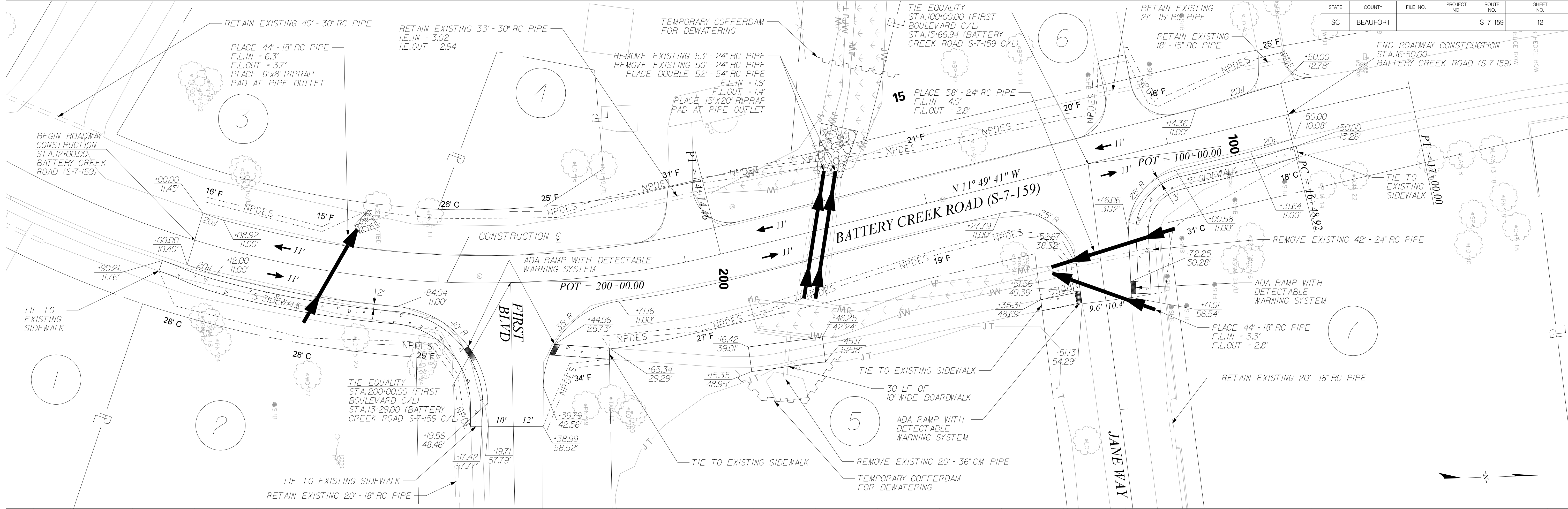
ISSUED  
FOR BID

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	BJL	DATE 08/22/2019	
DRAWN BY:	BJL	DATE 08/22/2019	
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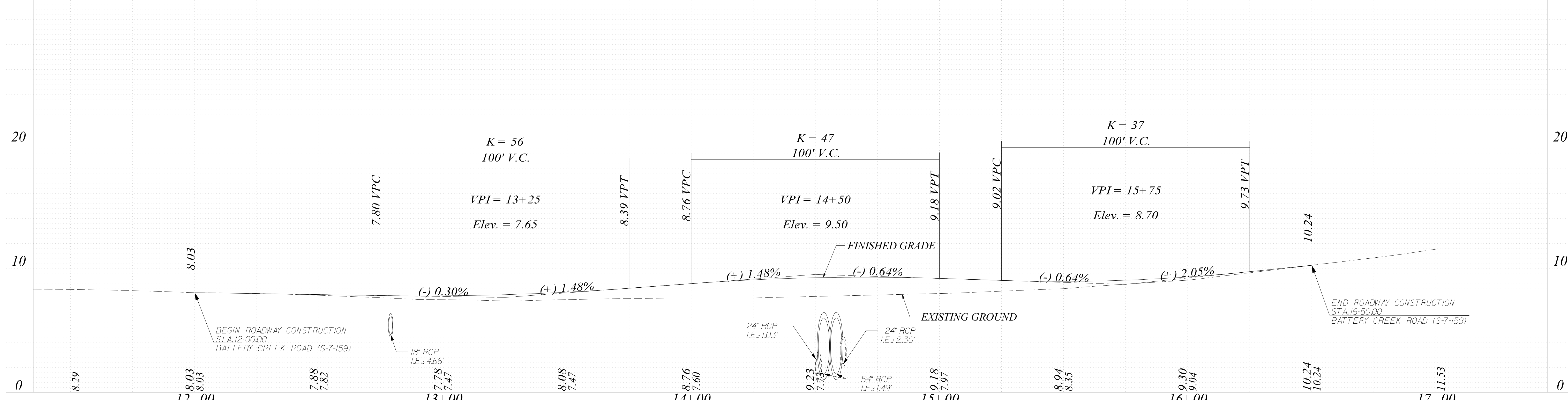
BEAUFORT COUNTY  
CITY OF BEAUFORT

BATTERY CREEK ROAD (S-7-159)  
BASIN 1  
REFERENCE DATA SHEET

STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	12



**BATTERY CREEK ROAD (S-7-159)**



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**ISSUED FOR BID**

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
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DRAWN BY:	RNT	DATE 08/22/2019	
CHECKED BY:	JCH	DATE 08/22/2019	

BEAUFORT COUNTY  
CITY OF BEAUFORT

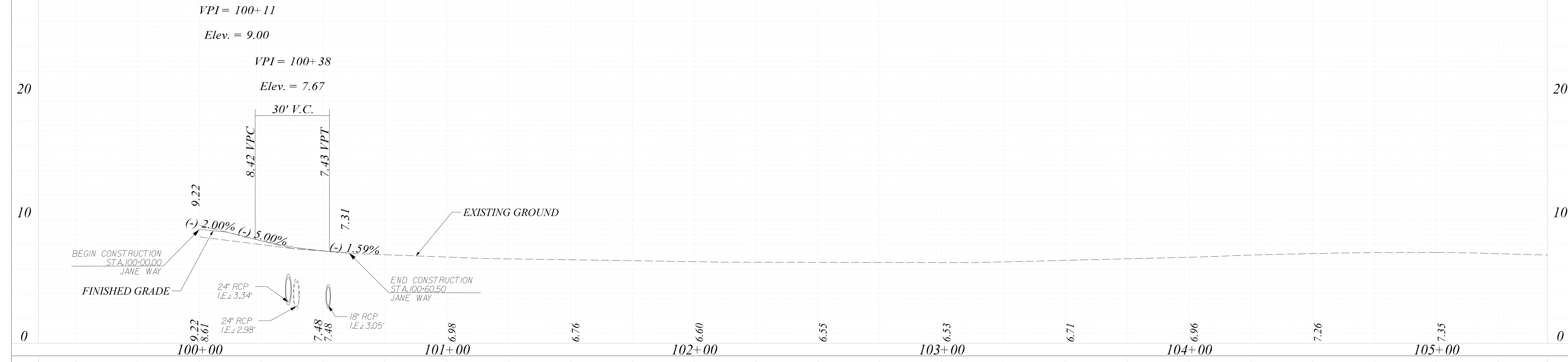
BATTERY CREEK ROAD (S-7-159)  
BASIN 1  
PLAN AND PROFILE SHEET

SHEET 12      SCALE: 1" = 20'

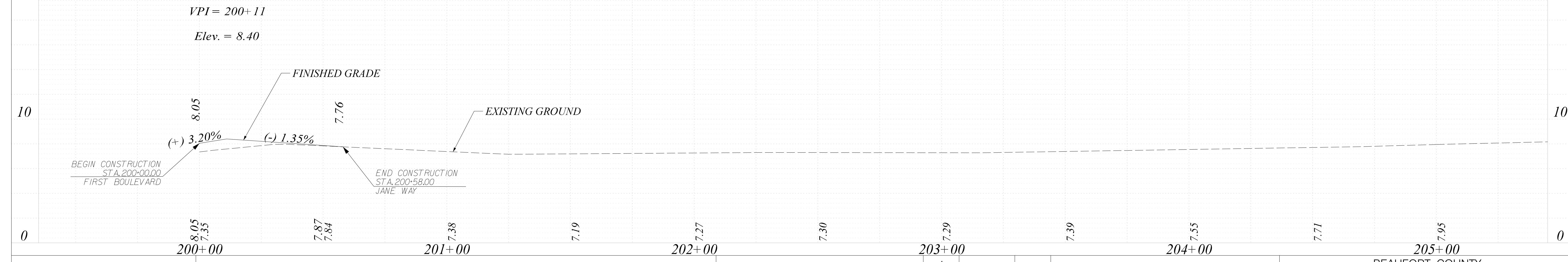


STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	13

# JANE WAY



# FIRST BOULEVARD



**JE INFRASTRUCTURE**  
CONSULTING & ENGINEERING

**ISSUED FOR BID**

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	RNT	DATE 08/22/2019	
DRAWN BY:	RNT	DATE 08/22/2019	
CHECKED BY:	JCH	DATE 08/22/2019	

BEAUFORT COUNTY  
CITY OF BEAUFORT

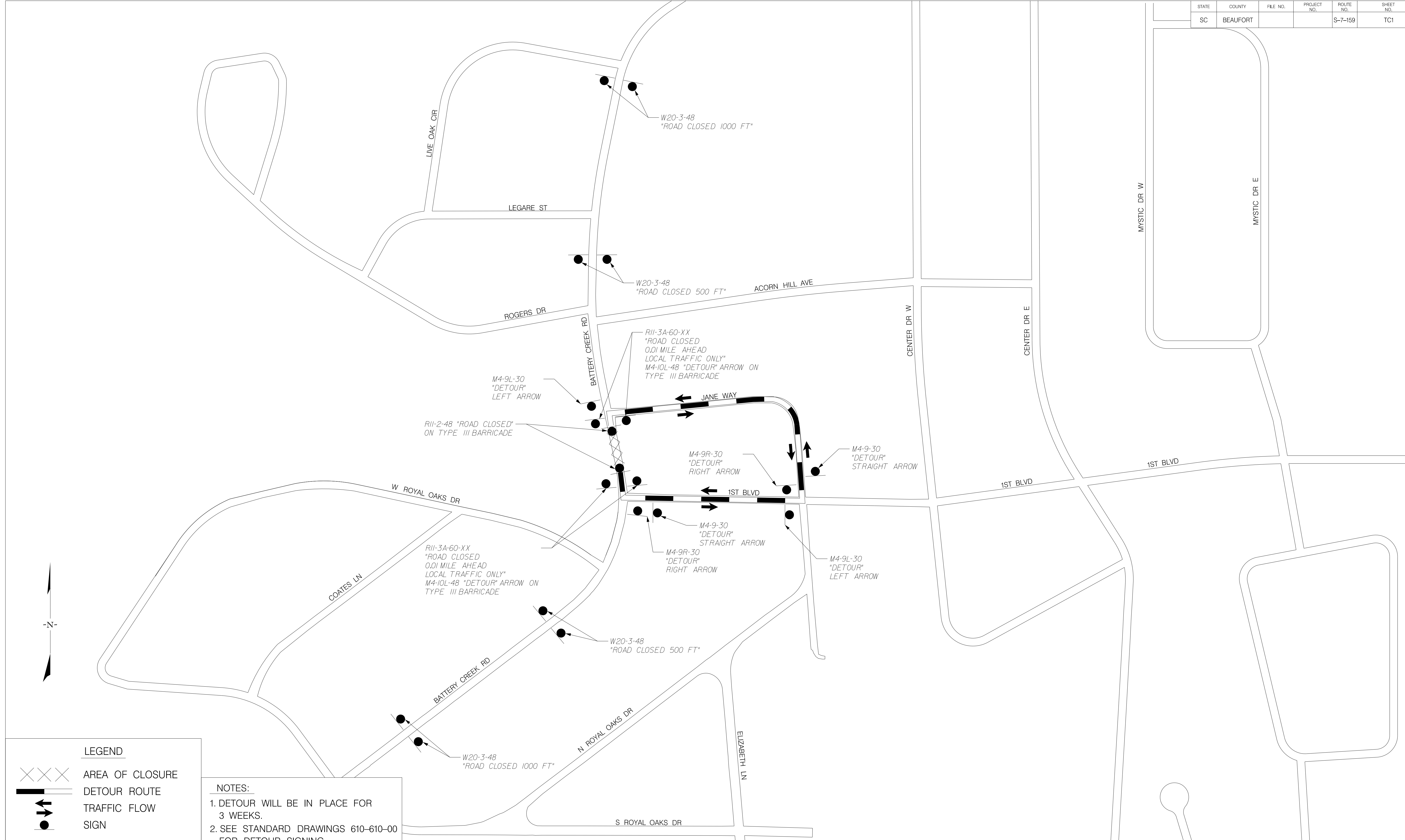
BATTERY CREEK ROAD (S-7-159)  
BASIN 1  
PLAN AND PROFILE SHEET

SHEET 13

SCALE: 1" = 20'



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	TC1



**LEGEND**

XXXX AREA OF CLOSURE

— DETOUR ROUTE

→ TRAFFIC FLOW

● SIGN

**NOTES:**

1. DETOUR WILL BE IN PLACE FOR 3 WEEKS.
2. SEE STANDARD DRAWINGS 610-610-00 FOR DETOUR SIGNING.

**JE INFRASTRUCTURE**  
CONSULTING & ENGINEERING

**ISSUED FOR BID**

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	RNT	DATE 08/22/2019	
DRAWN BY:	RNT	DATE 08/22/2019	
CHECKED BY:	JCH	DATE 08/22/2019	

BEAUFORT COUNTY  
CITY OF BEAUFORT

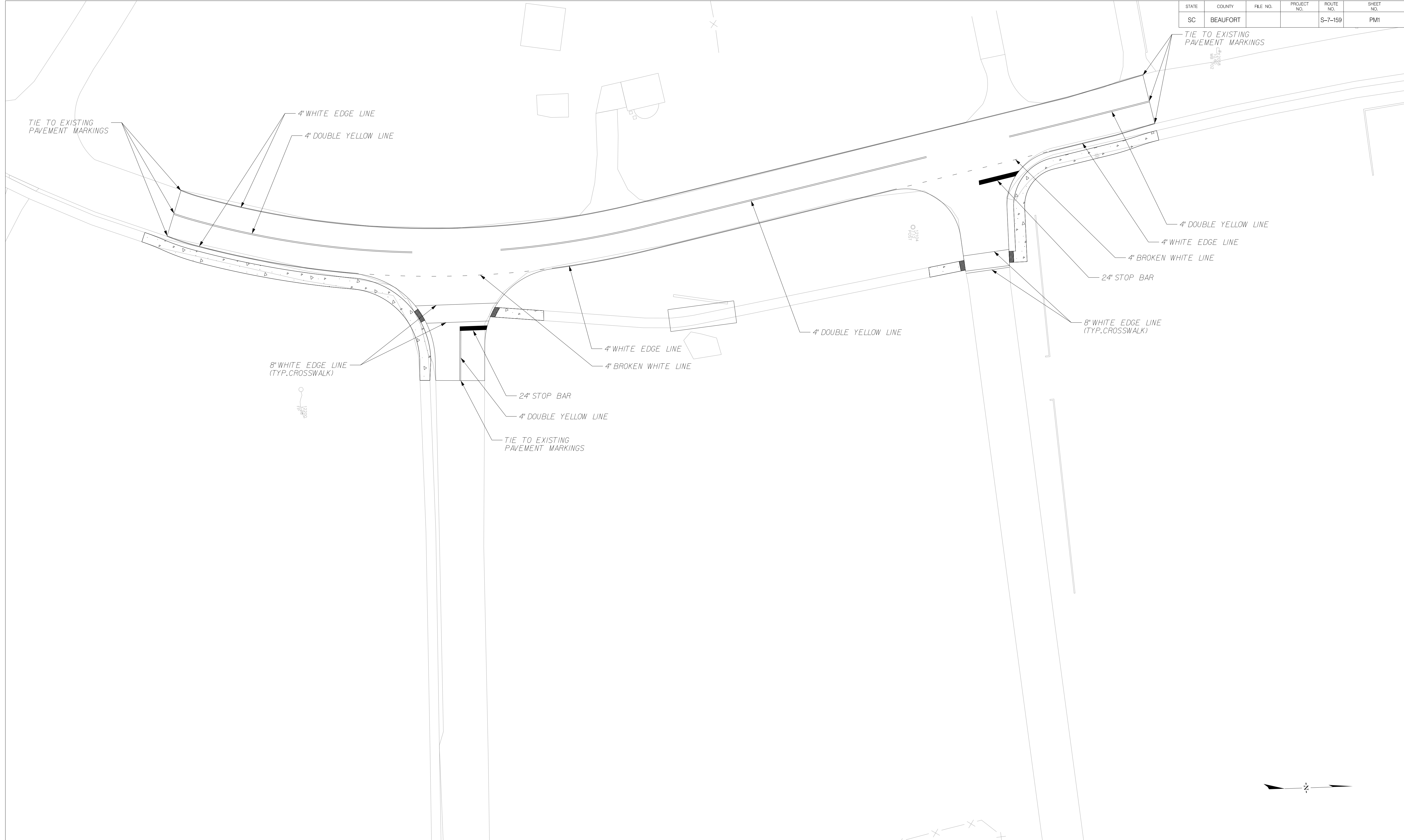
MOSSY OAKS  
BATTERY CREEK ROAD  
DETOUR PLAN SHEET

SHEET TC1

SCALE: 1" = 250'



STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	PM1



**JE INFRASTRUCTURE**  
CONSULTING & ENGINEERING

**ISSUED  
FOR BID**

4			
3			
2			
1			
REV. NO.	BY	DATE	DESCRIPTION OF REVISION
DESIGNED BY:	BJL	DATE 08/22/2019	
DRAWN BY:	BJL	DATE 08/22/2019	
CHECKED BY:	JCH	DATE 08/22/2019	

BEAUFORT COUNTY  
CITY OF BEAUFORT

BATTERY CREEK ROAD (S-7-159)  
BASIN 1  
PAVEMENT MARKING SHEET

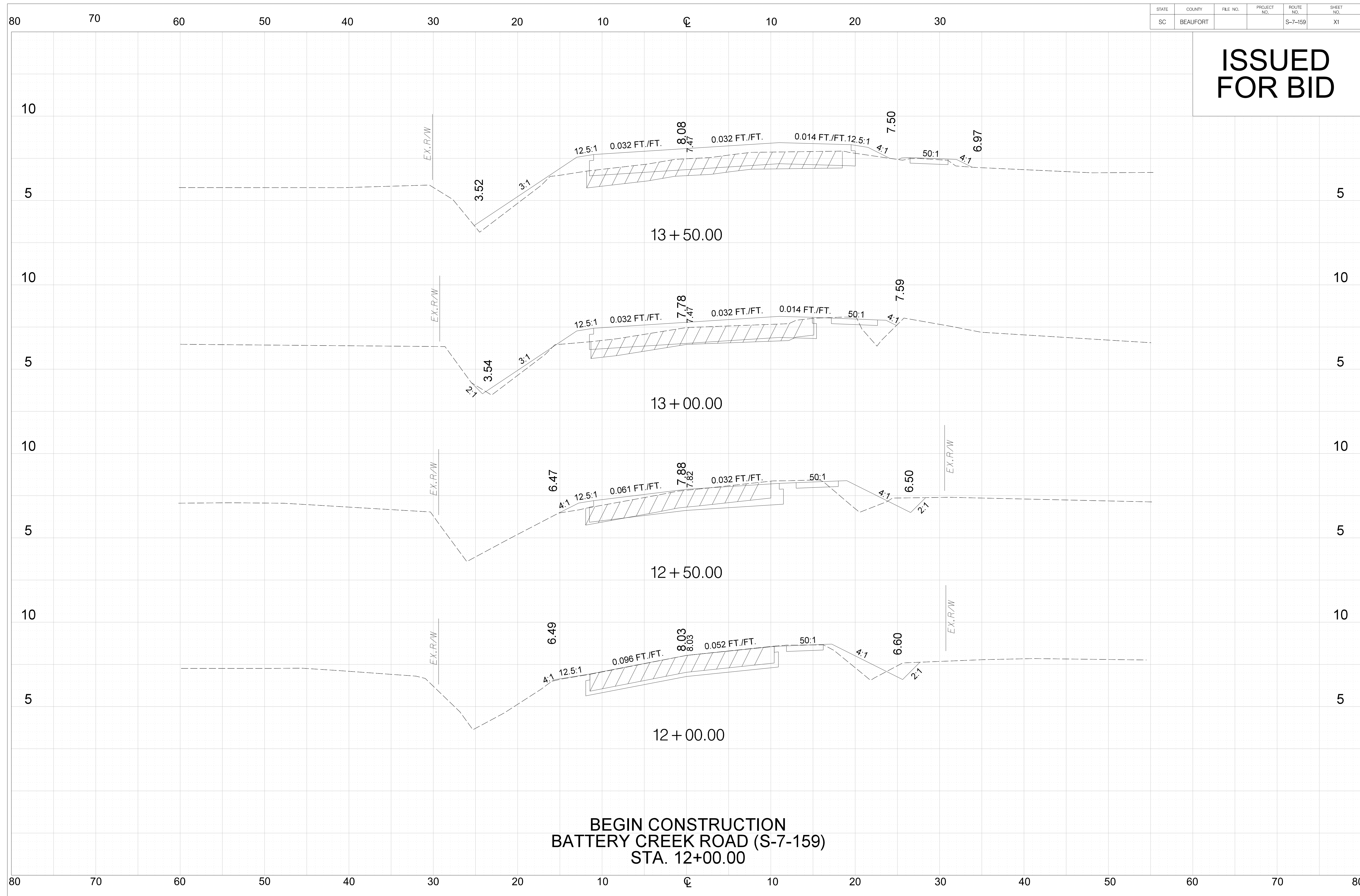
SHEET PM1      SCALE: 1" = 20'





STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	X1

**ISSUED  
FOR BID**



**BEGIN CONSTRUCTION  
BATTERY CREEK ROAD (S-7-159)  
STA. 12+00.00**

STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
SC	BEAUFORT			S-7-159	X2

END CONSTRUCTION  
 BATTERY CREEK ROAD (S-7-159)  
 STA. 16+50.00

ISSUED  
 FOR BID

