PURCHASING AND MATERIALS MANAGEMENT

<u>City of Myrtle Beach</u> SOUTH CAROLINA (843) 918-2170 FAX: (843) 918-2182 www.cityofmyrtlebeach.com

Addendum #02 December 5, 2023 IFB 24-B0019 Parallel LDM Water Transmission Main Phase 1

The purpose of this Addendum #02 to IFB 24-B0019 for Parallel LDM Water Transmission Main Phase 1, dated December 5, 2023, and previously amended on November 22, 2023, is to provide a revised Schedule of Bid Items, additional drawings, the approved SCDOT Encroachment Permit, the Horry County Encroachment Permit, and answers to the following submitted questions:

1. The bid form shows that the steel pipe is the base bid- with the alternate as the DIP. However, on page 004113-9 for the bid totals it states that the DIP is base and steel is alternate. Can you confirm which is which to eliminate any confusion?

This project is a steel pipe project, and the base bid is Steel Pipe. The revised Schedule of Bid Items has been attached to and hereby made a part of this addendum. The project will be awarded to the responsive low bid based on unit prices. Any bids submitted that exclude the base bid will be just cause for the bid to be considered non-responsive and rejected. Bidders are not required to submit a bid for Alternate #1, but are required to submit the base bid.

2. Bid item 5 and item 24 are the same footage, is there additional 36" pipe on the project other than the connection at the end point?

Bidders are advised to refer to the attached revised Schedule of Bid Items.

3. Bid item 15 and 20 are the same footage, is there an additional bore on the project?

Bidders are advised to refer to the attached revised Schedule of Bid Items.

4. On the 48" DIP bid schedule, it states that all fittings are included in the pipe price, but there are bid items for the fittings – please confirm how this is to be bid.

Bidders are advised to refer to the attached revised Schedule of Bid Items. The fittings on the 48" DIP are to be included in the alternate line items.

5. Item 1.8 of the bid form, page 004113-10, states that we are to be a license contractor for the City of Myrtle Beach. We have contacted the city finance dept., they state there is a fairly lengthy process to obtain one, most likely due to Thanksgiving this would not happen before the bid date. Please confirm if this is a requirement or can be accomplished by the low bidder after the bid?

City of Myrtle Beach business licenses are not required to submit a bid, however the license must be issued before any work may begin within the City's jurisdiction.

6. Same question as #5, regarding Horry County, and the timing of the license.

Horry County business licenses are not required to submit a bid, however the license must be issued before any work may begin within the county's jurisdiction.

7. Section 330524 1.05 Corrosion Protection – the specification states that we are to provide a design by a NACE certified engineer for the pipeline cathodic. This is atypical, and most likely not possible prior to the bid. Can this be added as an allowance? For bid equality between the bidders this would be the fairest option.

Bidders are to include this task under the pipe unit price of their bid as outlined in the bid documents.

8. Is a geotech report available?

There is no geotech report on this project. Bidders are to assume that all the soils on the route are clay and select fill is required for all back filling operations around the pipeline and full depth on pavement cuts. The Contractor is to haul off any unsuitable excavation material that isn't deemed suitable for backfill material. The cost of this task shall be included in the pipe unit price.

9. Station 51+78- shows a 48" MJ tee with a 48"x36" MJ reducer. For the steel pipe base bid, this would be a welded fitting. To transition to 36" DIP, this would typically be a flanged connection to include a dielectric gasket. Please confirm this is the plan for the steel pipe option.

Yes, the 48" x 36" reducer shall be a steel fitting. Bidders are advised to transition to DIP after the 36" butterfly valve.

10. For the blow-off valves – same question – is a dielectric gasket needed on the transition at the flange between steel and 16" DIP?

Yes, the pipe will transition after the 16" gate valve. The 48" steel pipe will have a 16" outlet to DIP. The detail has been attached to and hereby made a part of this addendum.

11. The ARV detail shows a tapping saddle – fro steel or DIP this would typically be a welded outlet (or fitting). Is there a separate detail available to ensure the correct materials are quoted at bid time?

For the ARV detail, bidders are to use a 2" half coupling on the steel pipe segment. The detail has been attached to and hereby made a part of this addendum.

12. At station 0+00, is the intent to provide a 48" DIP tee that would connect by flange to the steel pipe, or a steel tee with flanges to connect to the 48" DIP?

The Contractor is to cut in a 48" x 48" MJ DIP tee with a DIP sleeve with 48" MJ butterfly valve. The Contractor will transition to steel pipe after the valve.

13. At station 52+XX, the end of the 48", for steel pipe an MJ cap would not be typical. Please let us know what should be included here such as a blind flange or other?

The Contractor shall use a blind flange with a tapped plug to bleed the air out of the pipe segment in lieu of a MJ cap. Bidders are to refer to the revised Schedule of Bid Items.

14. What is the expected duration of the shutdowns to connect the 48" and 36" pipes at the two ends of the project?

The existing 48" DIP water line can be shut down for the duration of the tie-in. The existing 36" DIP must always remain active at all times. To cut-in the proposed 36" x 36" tee, the existing 36" water line will require a line stop with a bypass line to feed water to the north end of the distribution system.

15. There does not seem to be a conflict with the existing 36" pipe that the 54" bore crosses, can the necessity of the 24" HDPE line be provided? Or can it be eliminated through contractor means and methods?

The 24" HDPE is a temporary water bypass for the line stops for the 36" x 36" MJ tee cut-in.

16. What is the thickness of the Steel Casing for the Bore & Jack under Hwy. 17 (Sheet C3.09)?

The 54" steel under Highway 17 will be ³/₄" in thickness.

17. It appears the labels for the DIP pipe and fittings are labeled 48" but should be 36" for the 54" carrier pipe exit on Sheet C3.09.

The 90-degree bends shown on the profile should be 36" and not 48" as listed. Bidders are advised to change the 90-degree bends to 36".

18. Which roads are SCDOT, so we know which roads have the 8" Concrete repair (Sheet C5.02)?

Highway 17 Bypass right-of-way is the only SCDOT roadway on this project.

19. Can we move the fence along Church Street from Sta. 43+25 – 47+25 (Right) to the R/W and clear trees so we can utilize the full Church Street R/W for construction (Sheet C3.08)?

Yes, the fence can be removed and placed back if it is in the way of constructing the pipeline. The fence will need to be reinstalled as removed.

20. How long can the existing 48" WL be valved off so we can install the 48" MJ Tee on Sheet C.301?

The existing 48" DIP may be shut down for the duration of the tie-in in the off season.

21. Bid items #15 and #20 are the same. Should Item #20 be 36" RJ DIP in Casing?"

Item #15 is the installation of the 54" steel bore casing. Bidders are advised to disregard item #20 and refer to the revised Schedule of Bid Items.

22. Should the bid totals in Section 004113-9 read, "Base Bid Steel Pipe Total" and "Alternate #1 DIP?"

Bid totals in Section 004113 – 9 should read "Base Bid Steel Pipe." Bidders are advised to refer to the revised Schedule of Bid Items.

23. Can any of this work be done during the summer months or are there some work restrictions for certain areas?

Work may be done on the back streets during the summer months. The work in the Highway 17 Bypass right-of-way and the tie-ins on each side of the project are excluded during the summer months: May through September.

24. Are there any Encroachment Permits available for our use?

The Encroachment Permits have been attached to and hereby made a part of this addendum.

25. Is there a soil report available or should we consider the existing soils suitable for backfill in the areas outside of the pavement? If unsuitable soils are encountered, would we be paid separately for the import/export if required?

There is no soils report on this project, select fill is required for backfill on the full-length of the pipeline. The Contractor will be required to haul off the unsuitable excavated material and import select material to be included in the pipe unit price per foot cost.

26. The project is required to meet AIS, correct?

This project does **not** have to meet the AIS requirement.

27. Looks like the power poles may be in conflict or closer than the power company will allow us to encroach, have you considered an allowance for supporting the poles?

Bidders are to include any work or cost associated with any supporting of the poles in the overall pipe unit price per foot cost.

28. Will O-ring steel pipe be allowed?

O-ring steel pipe will not be allowed.

29. Can we submit only a steel price/no alternate?

Yes, bidders are not required to submit an alternate, if they choose not to.

30. Unsuitable material was discussed at the pre-bid, how will this paid, I don't see a bid item. And are we to assume all material from the ditch must be hauled off and replaced with suitable?

Bidders are to assume that all the soils on the route are clay and select fill is required for all back filling operations around the pipeline and full depth on pavement cuts. The Contractor is to haul off any unsuitable excavation material that isn't deemed suitable for backfill material. The cost of this task shall be included in the pipe unit price.

31. Will there be local vendor preference apply to this project since there is federal funding?

Yes, Local Vendor Preference will apply to this project.

32. Will select fill be required if ductile iron pipe is used?

Select fill will be required only in the roadway and driveway areas if DIP pipe is used.

Bidders are advised to disregard **Bid Item #21** and refer to the revised Schedule of Bid Items. Bid Item #21 is a duplicate of Bid Item #16. All DIP pipes are to be poly wrapped and fully restrained form the 36" MJ butterfly valve to the 36" MJ tee that is being cut-in.

Specification Revision: Under specification section 330524 – Steel Pipe, Page 330524 – 4 underneath Part 2 – Products, Section 2.01 Materials; A. Pipe, Paragraph 2 – Bidders are advised to disregard 250 psi and write 100 psi.

This section should read: "Pipe shall be designed for 150 psi working pressure with an additional 100 psi allowance for transient. Pipe design shall be in accordance with AWWA M11. Design stress shall be limited to 50% of the minimum yield strength at working pressure and 75% at the great of working pressure plus transient allowance, or test pressure.

All bids must be received by the Procurement Office at 3231 Mr. Joe White Avenue, Myrtle Beach, SC 29577 **prior** to 2:00p.m. (local time) on Tuesday, December 12, 2023.

Thank you,

City of Myrtle Beach Brandon Hancock Purchasing Office/Buyer Email: <u>bhancock@cityofmyrtlebeach.com</u>

DOCUMENT 004113 - BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT)

1.1 BID INFORMATION

- A. Bidder: _____
- B. Project Name: City of Myrtle Beach Parallel LDM Water Transmission Main SCIIP Project #A-23-C139
- C. Project Location: Old Bryan Drive between 29th Avenue North and 33rd Avenue within the City of Myrtle Beach.
- D. Owner: CITY OF MYRTLE BEACH, SOUTH CAROLINA.
- E. Owner Project Number: Bid #24-B0019

1.2 CERTIFICATIONS AND BASE BID

- A. Base Bid, Single-Prime (All Trades) Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by the City of Myrtle Beach, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated Lump sum of:
 - 1. _____ Dollars
 - (\$_____).

1.3 BID GUARANTEE

- A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10 days after a written Notice of Award, if offered within 60 days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:
 - 1. _____ Dollars _____
- B. In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.4 THE FOLLOWING SUBCONTRACTORS ARE LISTED:

The following companies shall execute subcontracts for the portions of the Work indicated:

Name, Address, Phone and Email Address
Name, Address, Phone and Email Address

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

1.5 UNIT/INCREMENTAL PRICING: (The City is requesting unit pricing for information purposes only in the event a Change Order/Directive is necessary due to unforeseen circumstances. The Owner reserves the right to negotiate any of the unit prices listed with the lowest responsive and responsible Bidder. These unit or incremental prices shall be the installed price including all costs to the City such as, by way of illustration and not limitation, materials, labor, equipment, fees, taxes, insurance, bonding, overhead, profit or other such items.)

SCHEDULE OF BID ITEMS

The Contractor shall furnish all labor, equipment, materials, and transportation and perform all work necessary to complete the construction and installation of water utilities and appurtenances as shown on the drawings prepared by Bolton & Menk and per all specifications herein.

NOTE: This project will be bid with alternates for certain items of work as it relates to this project. "The OWNER reserves the right to award a CONTRACT on the basis of the BASE BID ITEMS and ADD, DEDUCT, AND ALTERNATE BID ITEM(s) deemed by the OWNER to be in their best interest. Final award shall be made to the lowest responsive BIDDER as selected by the OWNER."

The Alternate is for City of Myrtle Beach to review and determine the best means to construct the project. The Owner may elect to substitute the alternate or not with the contractor after the project is bid and before the award to stay within their budgets.

Bids shall include sales tax and all other applicable taxes and fees. Any work required as shown on the plans or called for in the specifications not specifically listed below shall be included in the most closely related work item listed. It is the responsibility of the Contractor to verify all quantity takeoffs, and to bid the work appropriately.

Bid prices shall also include all traffic control, silt fencing, erosion control, grading, cuts, fills and site restoration for the project as shown on the construction plans. The pavement prices will include all stripping with pavement markings that are required to complete the project unless otherwise listed as a pay item. All fittings are to be restrained with megalugs or an approved equal and are to be included in the fitting price. All fittings shall have restrained joints on either side of the fitting to the length recommended by the manufacturer and shall be included in the price of the pipe. All sleeves needed to make any tie-ins are to be included in the tie-in price and/or pipe price. The contractor must verify the size and type of line being tapped and must supply the appropriate tapping sleeves to complete the work for this project.

PARALLEL WATER TRANSMISSION MAIN PHASE 1

Unit Price Amount Engr's Unit Bid Description Est. Item \$ \$ 1. 1 LS Mobilization \$ \$ LS 2. Clearing and Grubbing 1 \$ \$ 3. 1 LS Sediment and Erosion Control Complete 0.20 Thickness Steel Waterline. 48" \$ \$ *4. Includes all Bends and Fittings in Pipe 5,280 LF Price 36" Class Zinc Coated 150 Waterline \$ \$ 5. LF Restrained DIP w/Polywrap full length 245 \$ \$ 6. 48" MJ Butterfly Valve w/Box Restrained 6 EA 1 \$ \$ 7. 36" MJ Butterfly Valve Restrained EA \$ 8 ¢ 4 EA 48" x 30" MJ Reducer \$ \$ 9. 1 EA 48" Dish Head w/Tap Plug & Valve \$ \$ 10. LF 72 15" Reinforced Concrete Pipe Culvert

48-Inch Steel Water Transmission Line Base Bid. All bends and fittings are included in the pipe price.

PARALLEL LDM WATER TRANSMISSION MAIN PHASE 1 ENGINEER PROJECT NUMBER 21067E

Bid Item	Description	Engr's Est.	Unit	Unit Price	Amount
11.	18" Reinforced Concrete Pipe Culvert	258	LF	\$	\$
12.	24" Reinforced Concrete Pipe Culvert	46	LF	\$	\$
13.	Catch Basin	2	EA	\$	\$
14.	16" Blow Assembly Complete (16" Gate Valve, Piping, Bends, Check Valve and Pipes Complete)	1	EA	\$	\$
15.	54" Steel Bore Casing Complete ¾" Thickness	155	LF	\$	\$
16.	Restrain Existing 36" DIP Waterline on Each Side of Line Stop	1	LS	\$	\$
17.	Cut and Plug Ex. Abandoned 30" DIP FM	4	EA	\$	\$
18.	36" MJ 90° Bend Restrained	2	EA	\$	\$
19.	Air Release Valve with Manhole Complete	9	EA	\$	\$
20.	54" Steel Bore Casing DIP Waterline Fully			\$	\$
	Restrained Throughout Casing Length	155	LF	φ	Ψ
21.	Restrain existing 36" DIP water line	i	LS	\$	\$
22.	Cut-in 36" x 36" MJ Tee with 3-36" MJ Butterfly Valves Complete	1	EA	\$	\$
23.	Cut-in 48" x 48" MJ Tee with 2-48" MJ Butterfly Valves Complete	1	EA	\$	\$
24.	36" Class 150 Waterline DIP w/Polywrap	245	LF-	3	\$
25.	36" Line Stop Complete with Valves and 24" HDPE Bypass Piping Complete	1	LS	\$	\$
26.	Curb and Gutter Repair	75	LF	\$	\$
27.	Repair Existing Concrete Drive	350	SF	\$	\$
28.	Asphalt Driveway Repair	180	LF	\$	\$
29.	Asphalt County Roadway Repair	1,000	LF	\$	\$
30.	Patch Existing Asphalt SCDOT Road	100	LF	\$	\$
31.	2" Milling of Roadway	4,375	SY	\$	\$
32.	Asphalt Overlay (Driveway)	650	SY	\$	\$
33.	Asphalt Overlay (County Road)	3,640	SY	\$	\$
34.	Asphalt Overlay (SCDOT Road)	735	SY	\$	\$
35.	Flowable Fill Existing 30" DIP Force Main under 33 rd Avenue North	90	LF	\$	\$
36.	Regrade Existing Ditch	1,060	LF	\$	\$
37.	Reconstruct Driveway Features	1	LS	\$	\$
38.	Concrete Marker (Main Valve, Bends, Line Locations, etc.)	1	LS	\$	\$
39.	Project Traffic Control	1	LS	\$	\$
40.	Remove Existing 12" RCP/CMP Culvert	68	LF	\$	\$

PARALLEL LDM WATER TRANSMISSION MAIN PHASE 1 ENGINEER PROJECT NUMBER 21067E

Bid Item	Description	Engr's Est.	Unit	Unit Price	Amount
41.	Remove Existing Catch Basin	2	EA	\$	\$
42.	Remove Existing 15" RCP/CPP Culvert	206	LF	\$	\$
43.	Remove Existing 24" CMP Culvert	32	LF	\$	\$
44.	Concrete Cap on Top of Waterline at Canal	1	LS	\$	\$
45.	Site Restoration	1	LS	\$	\$
46.	Roadway Stripping and Thermoplastic Lines	1	LS	\$	\$
47.	Concrete Sidewalk Repair	1	LS	\$	\$
TOTAL	BASE BID AMOUNT: \$		•		

BID ITEM

MANUFACTURER

*4. 48-Inch Steel Pipe Waterline

5. 36-Inch Ductile Iron Pipe Waterline

<u>Alternate #1 Bid Item Ductile Iron Pipe</u> - The City of Myrtle Beach may elect to select an alternate. (Optional, not required to bid)

^48-Inch DIP Water Transmission Line Alternate Bid

Bid Item	Description	Engr's Est.	Unit	Unit Price	Amount
*4.	48" Class Zinc Coated 150 Ductile Iron Waterline	5,280	LF	\$	\$
4a.	48" MJ 90° Bend / Restrained	4	EA	\$	\$
4b.	48" MJ 45 Bend / Restrained	22	EA	\$	\$
4c.	48" 11 1/4° Bend Restrained	5	EA	\$	\$
4d.	48" 22 1/2° Bend Restrained	5	EA	\$	\$
4e.	48" x 48" MJ Tee Restrained	1	EA	\$	\$
4f.	48" x 36" MJ Reducer Restrained	1	EA	\$	\$
4g.	48" Cap Restrained	1	EA	\$	\$
^48-INC	H DIP ALTERNATE SUBTOTAL: \$				

BID ITEM

MANUFACTURER

48-Inch DIP Waterline

BASE BID TOTAL (Page 8):

\$_____

-\$

^MINUS 48-Inch Steel Pipe and Fitting Subtotal (Item #4:)

PARALLEL LDM WATER TRANSMISSION MAIN PHASE 1 ENGINEER PROJECT NUMBER 21067E

PROJECT WITHOUT PIPE AN	D BENDS SUBTOTAL:	\$	
*ADD 48-Inch DIP Pipe Alternate Subtotal (Page 8)		+\$	
ALTERNATE #1 BID TOTAL:		\$	
BID TOTALS			
Base Bid Steel Pipe Total:	\$		_
(In Words)			_
Alternate #1 DIP Pipe Total:	\$		

- A. TIME OF COMPLETION: If notified of the acceptance of the Bid or any Alternate Bids within thirty (30) days after the date fixed for opening of the Bids, the undersigned agrees to execute and deliver the specified contract and contractor's bonds within ten (10) days. The undersigned agrees, if awarded the contract within thirty (30) days from the date fixed for opening of bids, will commence the work required by the CONTRACT DOCUMENTS within TEN (10) calendar days after the date of the NOTICE TO PROCEED and will complete faithfully and properly the work no later than two hundred and seventy (270) calendar days from the date of commencement (NTP, Notice to Proceed), or unless the period of completion is extended otherwise by the CONTRACT DOCUMENTS; all work consistent with the best interest of the Owner, the safety of the public and in accordance with first-class workmanship.
- B. LIQUIDATED DAMAGES: Should the Contractor fail to substantially complete the work under this contract within the stipulated time as he has set forth in "Time of Completion" paragraph above, plus any additional days that may result from extension of time granted by the Architect/Engineer, he agrees that the Owner may retain the sum of \$500.00 per day for each succeeding calendar day that the Owner is deprived of full use of any or all phases of the project. This amount is agreed upon as a reasonable and proper measure of Liquidated Damages which the Owner sustains per day by failure of the contractor to complete the work within the time stipulated; it being recognized by the Owner, the Contractor, and the Architect that the injury to the Owner which could result from failure by the contractor to complete on schedule is uncertain and insusceptible to certain computation, and this sum is not to be construed in any sense as a penalty.

1.6 ACKNOWLEDGEMENT OF ADDENDA

A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

Addendum No. 1, dated ______.

Addendum No. 2, dated ______.

1.7 BID SUPPLEMENTS

A. The following supplements are a part of this Bid Form and are attached hereto.

(In Words)

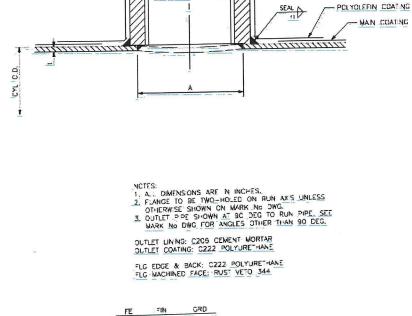
Bid Form Supplement - Allowances. Bid Form Supplement - Bid Bond Form (AIA Document A310). Bid Form Supplement - Bid Bond OR a certified check for the amount required. Bid Form Supplement - Bidder's Representation. Bid Form Supplement - Non-collusion Affidavit of Prime Bidder. Bid Form Supplement - Statement of Experience of the Bidder. Bid Form Supplement - Project Superintendence.

1.8 CONTRACTOR'S LICENSE

The undersigned further states that it is a duly licensed contractor for the type of work proposed, Α. in Myrtle Beach, South Carolina, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.9 SUBMISSION OF BID

Α.	Respectfully submitted this	_ day of	, 20 .
В.	Submitted By		(Name of bidding firm or corporation).
C.	Authorized Signature:		(Handwritten signature).
D.	Signed By:		(Type or print name).
E.	Title:		(Owner/Partner/President/Vice President).
F.	Witness By:		(Handwritten signature).
G.	Attest:		(Handwritten signature).
Н.	Ву:		(Type or print name).
L.	Title:		(Corporate Secretary or Assistant Secretary).
J.	Street Address:		
K.	City, State, Zip		
L.	Phone:		
M.	License No.:		
N.			(Affix Corporate Seal Here).
END	OF DOCUMENT 004113		



- STEEL PLUG. SEE NOTE 2

PRMER



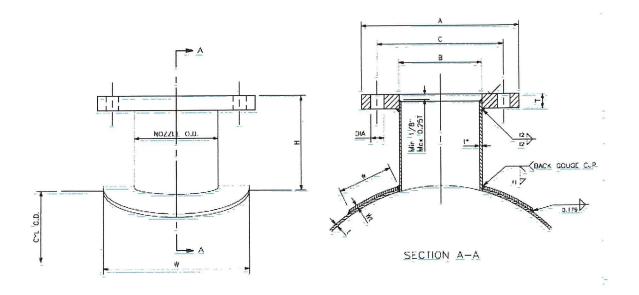
0.0 0.0

SCALE: N.T.S.

FE

INCERIOR ENTERICR FIN

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- NOTES: 1. ALL DIMENSIONS ARE IN INCHES. 2. FLANGE TO BE TWO-HOLED ON RUN AXIS UNLESS OTHERWISE SHOWN ON MARK NG DWG. 3. OUTLET P.PE SHOWN AT 90 DEG TO RUN PIPE: SEE MARK NG DWG FOR ANGLES OTHER THAN 90 DEG.

OUTLET LINING: C205 CEMENT WORTAR OUTLET COATING: C222 POLYURETHANE

FLG EDGE & BACK: C222 POLYURETHANE FLG MACHINED FACE: RUST VETO 344

FE FIN GRD INTERIOR ENTERIOR 0.0 0.0

TYPICAL WELDED STEEL OUTLET DETAIL

SCALE: N.T.S.

<u>Application for Encroachment Permit</u>

S.C. Department of Transportation Form 637 (Rev 09/2015)

Contact Information

City of Myrtle Beach		
P.O. Drawer 2468		
Myrtle Beach		
SC ×	Zip Code: 29578	
(843)918-2023	Fax:	
camiller@cityofmyr	tlebeach.com	
Chris Miller		
<u>Projec</u>	t Location	
	P.O. Drawer 2468 Myrtle Beach SC (843)918-2023 camiller@cityofmyrt Chris Miller	

Primary County: Horry

County	Road Name
Horry	N Hwy 17 Byp (US 17)

V

1. Type of WATER

Encroachment:

Installation of a City of Myrtle Beach Parallel Water Transmisson Main.

2. Description of Location:

Boring under N Hwy 17 bypass at the intersection of 33rd Ave N and N Hwy 17 Bypass and connecting to the existing 36" water line.

(Attach sketch indicating roadway features such as: pavement width, shoulder width, sidewalk and curb and gutter location, significant drainage structure, north arrow, right of way width, and location of the proposed encroachment with respect to the roadway centerline and the nearest intersecting road on the State system.)

Customer Agreement

3. The undersigned applicant hereby requests the SCDOT to permit encroachment on the SCDOT right of way as described herein. It is expressly understood that the encroachment, if and when constructed, shall be installed in accordance with the sketch attached hereto and made a part hereof. The applicant agrees to comply with and be bound by the SCDOT's "A Policy for Accommodating Utilities on Highways Rights of way", "Standard Specifications for Highway Construction", the "General Provisions" and "Special Provisions", attached hereto or made a part hereof by reference, during the installation, operation and maintenance of said encroachment within the SCDOT's Right of Way. DISCHARGES OF STORM WATER AND NON-STORM WATER: Work within State Highway right-of-way shall be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit(s) issued to the Department of Transportation (Department), to govern the discharge of storm water and non-storm water from its properties. Work shall also be in compliance with all other applicable Federal, State and Local laws and regulations, and with the Department's Encroachment Permits Manual and encroachment permit. The encroachment permit will not be issued until the applicant has received an NPDES construction permit from SC Department of Health and Environmental Control.

The applicant agrees to comply with all current SCDOT Standards Specifications for Highway Construction including all Supplemental Technical Specifications. The applicant hereby further agrees, and binds his/her/its heirs, personal representatives, successors, assigns, to assume any and all liability for accidents or injuries to persons, or damage to property, including the highway, that may be caused by the construction, maintenance, use, moving or removing of the physical appurtenances contemplated herein.

Applicant's Name:	Chris Miller	Date: 05/23/2023
Applicant's Sig:	(Please print or type)	Title: Infrastructure Project Manage

For Office Use Only

For Office Use Only

In accordance with your request and subject to all the provisions, terms, conditions, and restrictions stated in the application and the general and special provisions attached hereto, the SCDOT hereby approves your application for an encroachment permit. This permit shall become null and void unless the work contemplated herein shall have been completed prior to:

See Attached Special Provision and/or Permit Requirements

	NPDES Permit	
	Nbr:	
	APPROVED By Angela W. Hicks at 9:21 am, Jul 27, 2023	
gr.)	(SCDOT Approval)	(Date)

(Date received by res. Maint. Engr.)

<u>Application for Encroachment Permit</u> <u>General Provisions</u>

- 1. DEFINITIONS: The word "Permittee" used herein shall mean the name of the person, firm, or corporation to whom this permit is addressed, his, her, its, heirs, personal representatives, successors and assigns. The word "DEPARTMENT" shall mean the South Carolina Department of Transportation.
- 2. NOTICE PRIOR TO STARTING WORK: Before starting the work contemplated herein within the limits of the highway right of way, the Department's Resident Maintenance Engineer in the county in which the proposed work is located shall be notified 24 hours in advance so that he may be present while the work is under way.
- 3. PERMIT SUBJECT TO INSPECTION: This permit shall be kept at the site of the work at all times while said work is under way and must be shown to any representative of the Department or law enforcement officer on demand.
- 4. PROTECTION OF HIGHWAY TRAFFIC: The applicant shall be responsible for the protection of the highway traffic at all times during the construction, maintenance, removing or moving of the encroachment permitted herein. Detours, barricades, warning signs and flagmen, as necessary, shall be provided by and at the expense of the Permittee and shall be in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD). The work shall be planned and carried out so that there will be the least possible inconvenience to the motoring public. The Permittee agrees to observe all rules and regulations of the Department while carrying on the work contemplated herein and take all other precautions that circumstances warrant.
- 5. STANDARDS OF CONSTRUCTION: All work shall conform to the Department's standards of construction and shall be performed in a workman-like manner. The applicant shall make adequate provisions for maintaining the proper drainage of the highway as it may be affected by the encroachment permitted herein. All work shall be subject to the supervision and satisfaction of the Department.
- 6. FUTURE MOVING OF PHYSICAL APPURTENANCES: If, in the opinion of the State Highway Engineer, it should ever become necessary to move or remove the

physical appurtenances, or any part thereof contemplated herein, on account of change in location of the highway, widening of the highway, or for any other sufficient reason, such moving shall be done on demand of the Department at the expense of the Permittee, unless the Permittee has prior rights.

- 7. RESTORATION OF HIGHWAY FACILITIES UPON MOVING OR REMOVING OF PHYSICAL APPURTENANCES: If, and when, the physical appurtenances contemplated herein shall be moved or removed, either on the demand of the Department or at the option of the Permittee, the highway and facilities shall immediately be restored to their original condition at the expense of the Permittee, unless the Permittee has prior rights, if any.
- 8. COSTS: All work in connection with the construction, maintenance, moving or removing of the physical appurtenances contemplated herein shall be done by and at the expense of the Permittee.
- 9. ADDITIONAL PERMISSIONS:

(a) It is distinctly understood that this permit does not in any way grant or release any rights lawfully possessed by the abutting property owners. The Permittee shall secure any such rights, as necessary, from said abutting property owners.

(b) The Permittee shall be responsible for obtaining all other approvals or permits necessary for installation of the encroachment from other government entities.

(c) There shall be no excavation of soil nearer than two feet to any public utility line or appurtenant facility except with the consent of the owner thereof, or except upon special permission of this Department after an opportunity to be heard is given the owner of such line or appurtenant facility.

10. ADDITIONAL WORK PERFORMANCE:

(a) All crossings over the highway shall be constructed in accordance with "Specifications for Overhead Crossings of Light and Power Transmission Lines and Telegraph Lines over each other and over Highway Rights of Way in South Carolina," as approved by the Public Service Commission of South Carolina and effective as of date of this permit.

(b) All tunneling, boring, or jacking shall be done in such a way as not to disturb the highway surfacing.

(c) No pavement shall be cut unless specifically authorized herein.

(d) No excavation shall be nearer than three feet to the edge of pavement unless specifically authorized herein.

(e) Underground facilities will be located at minimum depths as defined in the "Utility Accommodations Manual" for the transmittant, generally as follows: 4 feet minimum for hazardous or dangerous transmittant, 3 feet minimum for other lines. The Department may approve shallower depths if adequate protection is provided. Such approval must be obtained in writing.

(f) Service and other small diameter pipes shall be jacked, driven, or otherwise forced underneath the pavements on any surfaced road without disturbing the pavement. The section under the highway pavement and within a distance of three (3) feet on either side shall be continuous without joints.

11. ACCESS:

(a) Permittee is responsible for maintaining reasonable access to private driveways during construction.

(b) It is expressly provided that, with respect to any limited access highway, the Permittee shall not have or gain access from the main traveled way of the highway, or the on or off ramps to such facility, except upon approval by the Department.

12. DRIVEWAYS:

(a) The existing crown of the highway shall be continued to the outside shoulder line of the highway.

(b) If the driveway or approach is concrete pavement, the pavement shall be constructed at least 6 inches thick and with a minimum of class 2500 concrete. There shall be a bituminous expansion joint, not less than 3/4 inches in thickness, placed between the highway paving and the paving of the approach for the full width of the approach.

13. **BEAUTIFICATION:**

(a) All trees, plants, flowers, etc. shall be placed in accordance with the provisions specifically stipulated herein.

(b) All trees, plants, flowers, etc. shall be maintained by, and at the expense of, the Permittee and the provisions of this permit shall become null and void, if and when said Permittee ceases to maintain aid trees, plants, flowers, etc.

14. AS-BUILT PLANS:

(a) The applicant shall provide the Department with survey-quality as-built plans in accordance with the requirements set forth in the Department's "A Policy for Accommodating Utilities on Highway Rights of Way".

15. COMPLETE STREETS:

Reference Departmental Directive 28, "Complete Streets". For encroachment permit types that require a Traffic Impact Study (TIS), the applicant shall consider the inclusion of walking, bicycling, and transit accommodations within the scope of the encroachment. The applicant shall review walking, bicycling, and transit plans from Metropolitan Planning Organizations (MPOs), Councils of Government (COGs), and regional transit providers to determine the scope of accommodations for complete streets. Coordination with the District Permit Engineer is required to determine if the inclusion of walking, bicycling, and transit accommodations are conducive for implementation based on the scope of the encroachment.

Horry County Government

Engineering Department encroachment@horrycounty.org



Horry County Public Works Complex 4401 Privetts Road Conway, South Carolina 29526 Phone 843.915.5160 || Fax 843.365.2170

<u>Encroachment Permit</u> (submit your application to the email address or mailing address above)

Applicant Information

Applicant Name: City of Myrtle Beach - Chris Miller
Applicant Mailing Address: P.O Drawer 2468
Applicant Email Address:
Applicant Telephone #: (<u>843</u>) <u>918</u> _ <u>2023</u>
Encroachment Details/Information
Road Name &/or Address where the Encroachment Permit is needed:
Old Bryan Drive, Elizabeth Road, Church Street, & 33rd Avenue North
*** Chaucer Ln is replacing Elizabeth Rd.
Property TMS &/or PIN #: Roadway R/W's
Description of Work:
Installation of a 48" water transmission main in the roadway R/W's to handle future projected water demands for the City of Myrtle
Beach & the City of North Myrtle Beach.
The undersigned applicant hereby applies to the County of Horry for permission for encroachment on County right-of-way or easement
and agrees to comply with all conditions noted herein and all applicable Local, State and Federal laws. This permit for installation shall
expire six months from the date of approval or as noted on the permit.
Applicant Name (Print):
Applicant Signature:Date: 5/23/23
Complete/Sign the following pages for the General Provisions, Special Provisions, Plan Details, and Location Map
complete sign and constrained pages for the General Frontisions, Special Frontisions, Faul Details, and Education hasp

Engineering Department Use Only				
Permit Number: <u>170749</u>	Permit Expiration Date: 04/01/2024			
Road Segment #: 4477.1, 547, 560, 555, 501	Approved By: <u>Alience Johnn</u>			

GENERAL PROVISIONS

- 1. Notice shall be given at least 72 hours prior to starting work covered by this permit.
- 2. Upon completion of the work all County road right-of-way and easement areas disturbed shall be restored to at least as good a condition as existed prior to the start of work.
- 3. Work covered by this permit is subject to inspection for compliance with the terms of the permit. This permit may be revoked if the terms and conditions are not adhered to. A copy of this permit shall be kept on-site while work is underway.
- 4. Traffic control within the construction area shall be the responsibility of the Permittee and shall comply with State and local law and shall be as indicated in the current edition of the SCDOT Manual on Uniform Traffic Control Devices for Streets and Highways Through traffic to be maintained at all times with no trenches or excavations left open overnight. Traffic may be reduced to one lane during daylight hours if flagmen are utilized, however at the end of each workday traffic shall be returned to two lanes.
- 5. All materials and construction methods are to be in accordance with the current edition of the SCDOT Standard Specifications for Highway Construction.
- 6. Future moving of the encroachment: If in the opinion of Horry County, it becomes necessary to move, remove or relocate the encroachment permitted herein, all such work including restoration of the roadway, shall be done on demand of the County at the sole expense of the Permittee.
- 7. There shall be no excavation nearer than two feet of any other utility line or facility without the express permission of the owner of said line or facility.
- 8. All construction shall be subject to final inspection by the Horry County Engineer or his approved representative. The Permittee shall be subject to a warranty period of one (1) year from the date of final acceptance. Deficiencies such as settling of the roadbed, erosion, failure of grass to establish, etc. caused by the work permitted herein shall be repaired by the Permittee within 30days of notification by the County or sooner if a hazardous situation develops.
- 9. The Permittee agrees to hold Horry County, its officers and employees harmless from any liability for any accident, loss or damage as a result of any claim arising as a result of the work covered by this permit and that said liability is hereby assumed by the applicant.

Applicant Name (Print): City of Myrtle Beach - Chr	is Miller
Applicant Signature:	Date: 5/23/23
Engineering Department Use Only	
Permit Number:	Permit Expiration Date:
Road Segment #:	Approved By:

SPECIAL PROVISIONS

- 1. Shoulders and ditches which are disturbed shall be replanted in accordance with section 810 of the SCDOT Standard Specifications noted above and a satisfactory stand of grass is required.
- 2. No obstructions or earth to be placed on pavement without permission.
- 3. Any areas disturbed beneath pavement or across driveways or within any portion of the traveled roadway shall be stabilized with an acceptable base material immediately after backfilling operations. Suitable material shall be defined as coquina (shell aggregate) or a suitable grade of crusher run stone (stabilized aggregate).
- 4. Any excess spoil material resulting from construction shall be removed immediately following backfilling operations. Horry County shall reserve the authority to halt all construction activities if spoil material prohibits proper road or ditch drainage, or creates any hazardous conditions that might endanger pedestrian or automobile traffic.
- 5. Roadbeds and drainage ditches shall be rebuilt to provide proper service after every 500 feet of construction, at the end of each day's work, or after County inspection of a major situation.
- 6. When County drain pipes or other facilities are damaged, the County should be notified immediately and the repairs or replacement made under County supervision.

DRIVEWAYS

- 1. Horry County is not responsible for maintenance or repair of driveways located within the road right of way. The driveway area within the rightof-way shall be maintained in a safe condition by the property owner or the County may require that it be removed.
- 2. The existing road crown slope shall be continued to the outside edge of the shoulder except in curb and gutter situations.
- 3. Concrete driveways shall be a minimum of 4 inches thick for single family residential use and a minimum of 6 inches thick for all other uses. Expansion joints shall be provided over drainage tiles to facilitate replacement or repair of the tile. These joints shall be located 12 inches on either side of the pipe.

UTILITY LINES

- 1. Pavement cuts are not allowed unless specifically permitted herein. Any pavement cuts which are permitted shall be saw cut and repaired as indicated in the approved plans or as ordered by Horry County.
- 2. No excavation shall closer than 3 feet from the edge of the pavement.
- 3. All underground lines shall be placed a minimum of 36 inches deep.

ENVIRONMENTAL REQUIREMENTS

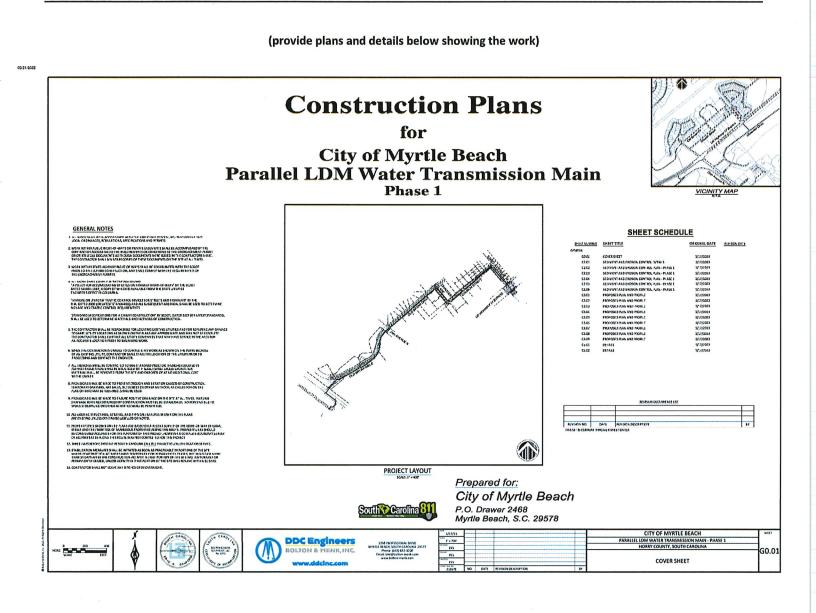
The following is a general guideline for Stormwater, Erosion and Sediment Control:

- 1. The size of the disturbed area shall be kept to a minimum. Erosion and sediment control, and revegetation must be in accordance with The South Carolina Department of Transportation (SCDOT) specifications and Horry County ordinances. Adequate measures shall be taken to prevent erosion and to restore vegetation along the length of the construction area. Unsatisfactory restoration work shall be promptly corrected by the applicant. If necessary, unsatisfactory restoration work will be accomplished by the Division and billed to the permittee. Issuance of an Encroachment Permit does not relieve the Permittee from complying with other applicable Federal, State or Local laws, rules or regulations.
- 2. When land disturbance will be adjacent to wetlands or any waterbody silt fence shall be installed to protect the waterbody or wetland from any run off. Silt fence shall meet the requirements of SCDHEC's Best Management Practices.
- 3. All drainage inlets immediately downstream from the land disturbance shall be protected as per the requirements of SCDHEC's Best Management Practices Manual
- 4. Where sediment from the project site can enter into a drainage ditch the ditch shall be protected with an adequate check dam immediately downstream from the disturbed area and removed upon completion of final soil stabilization.
- 5. Stockpiles and spoil piles shall be kept off the pavement and protected with silt fence to contain any sediment runoff.

Applicant Name (Print): _	City of Myrtle Beach -	Chris Miller		
Applicant Signature:	Chel	L		
	1			
Engineering Departmen	t Use Only			
Permit Number:		Permit E	Expiration Date:	
Road Segment #:		Approve	ed By: (llisher Golphin	~

PLAN

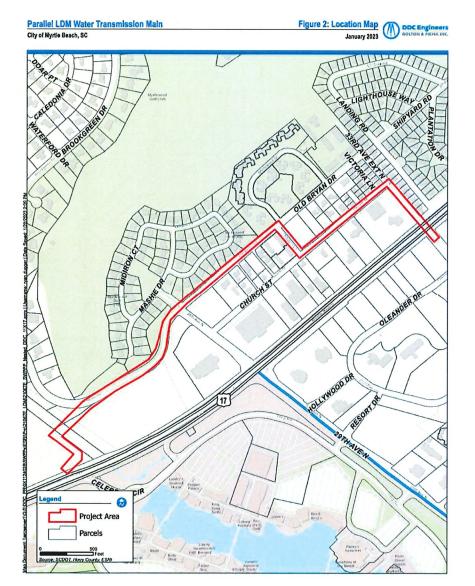
Road Name / Location Details: Within the public R/W of Old Bryan Drive, Elizabeth Road, Church Street, & 33rd Avenue North



			ncroachment on County right-of-way as show	<u>n on the plan above.</u>
Applicant Name (Print):	City of Myrtle Beach	n - Chris Mille	ər	
	Cyl	Ŀ	5/23/23	
	N State			
Engineering Departme	nt Use Only			
Permit Number:		Permi	t Expiration Date:	
Road Segment #:		Appro	oved By:	

Location Map

Road Name / Location Details: Within the public R/W of Old Bryan Drive, Elizabeth Road, Church Street, & 33rd Avenue North



(provide a sketch or map of the location below)

The undersigned applicant hereby applies to the County of Horry for encroachment on County right-of-way at the location shown on the map above.

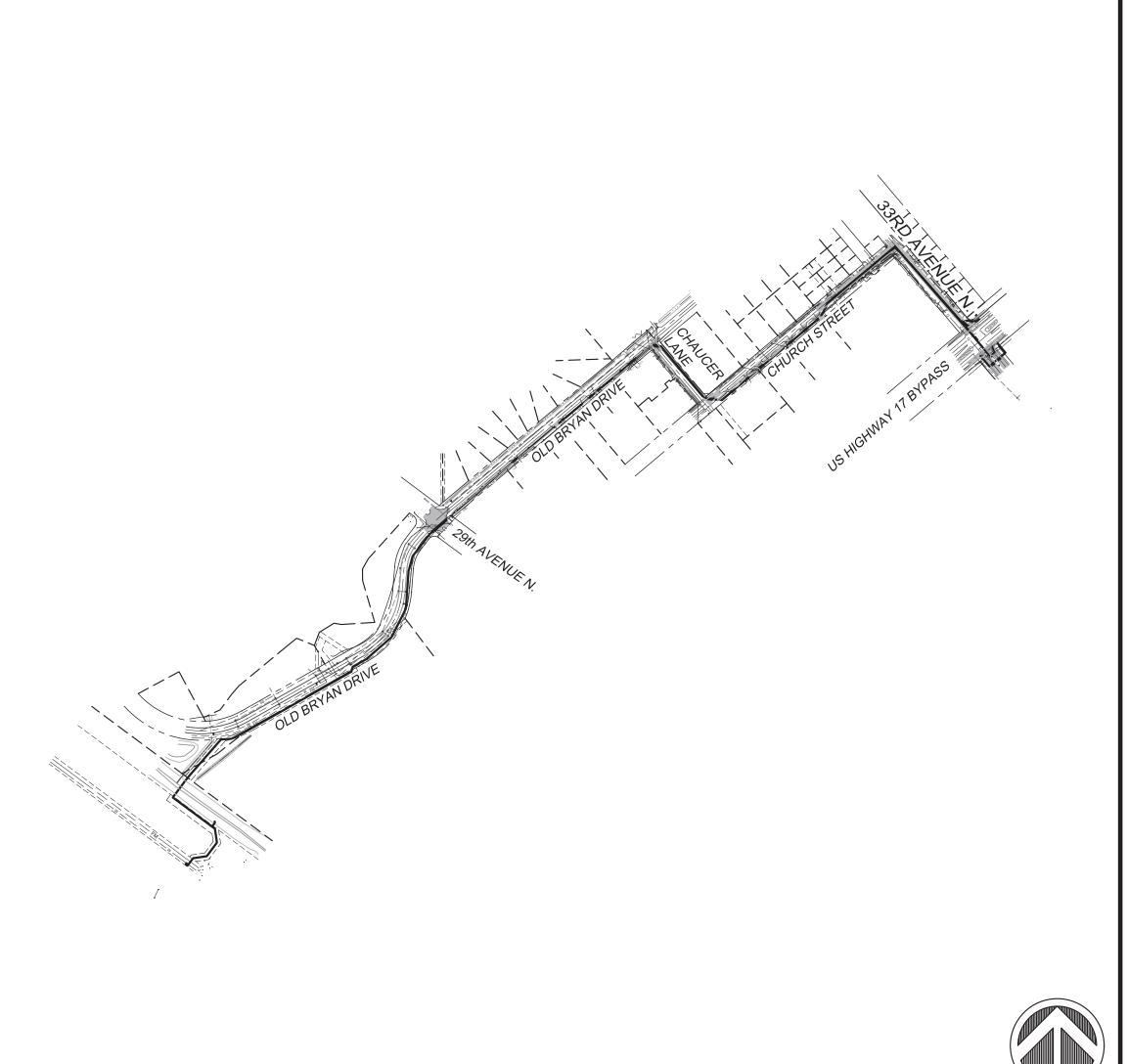
Applicant Name (Print): City of Myrtle Beach - Chris	
Applicant Signature: dtpl =	5/23/23
Engineering Department Use Only	
Permit Number:	Permit Expiration Date:
Road Segment #:	Approved By:

		Para P
GENERAL NOTES		
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE FEDER LOCAL ORDINANCES, REGULATIONS, SPECIFICATIONS AND PERMITS		
2. WORK WITHIN PUBLIC RIGHT-OF-WAYS OR PRIVATE EASEMENTS SH CONTRACTOR ACCORDING TO THE REQUIREMENTS OR CONDITIONS OR OTHER LEGAL DOCUMENTS AS THOUGH DOCUMENTS WERE ISS	OF THE ENCROACHMENT PERMIT JED IN THE CONTRACTORS NAME.	
THE CONTRACTOR SHALL MAINTAIN COPIES OF THESE DOCUMENTS 3. WORK WITHIN STATE HIGHWAY RIGHT-OF-WAYS SHALL BE COORDI PRIOR TO AND DURING CONSTRUCTION, AND SHALL COMPLY WITH	IATED WITH THE SCDOT	
THE ENCROACHMENT PERMITS. 4. ALL WORK SHALL COMPLY WITH THE FOLLOWING: "A POLICY FOR ACCOMODATING UTILITIES ON HIGHWAY RIGHT-OF- DATED MARCH 1987, A COPY OF WHICH IS AVAILABLE FROM THE ST ENGINEER'S OFFICE IN COLUMBIA.		
"MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS A FHA, DATED 2000 (OR LATEST STANDARDS) AND ALL SUBSEQUENT A SIGNAGE AND TRAFFIC CONTROL REQUIREMENTS.		E
"STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" BY SC SHALL BE USED TO DETERMINE MATERIALS AND METHODS OF CONS	,	DS),
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING TO SAME. UTILITY LOCATIONS AS SHOWN ON THE PLANS ARE APPR THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES THAT M AN ACCURATE LOCATION PRIOR TO BEGINNING WORK.	XIMATE AND MAY NOT BE COMPLETE.	/IAGE
5. WHEN THE CONTRACTOR IS UNABLE TO COMPLETE HIS WORK AS SI OF AN EXISTING UTILITY, CONTRACTOR SHALL STAKE THE LOCATION PROCEEDING AND CONTACT THE ENGINEER.		
7. ALL TRENCHES SHALL BE COMPACTED TO 98% STANDARD PROCTOF ASPHALT PAVED AREAS SHALL BE BACKFILLED WITH SELECT SAND. E MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF A TO THE OWNER.	CESS EXCAVATION	
8. PROVISIONS SHALL BE MADE TO PREVENT EROSION AND SILTATION TEMPORARY GRASSING, HAY BALES, SILT FENCES OR OTHER METHC PLAN OR THAT MAY BE REQUIRED; SHALL BE USED.		
9. PROVISIONS SHALL BE MADE TO ENSURE POSITIVE DRAINAGE ON T DRAINAGE FEATURES DISTURBED BY CONSTRUCTION MUST BE RE-E SPOILS STOCKPILING OR OTHER ACTIVITIES SHALL BE PERMITTED.		
D. ALL EXISTING STRUCTURES, UTILITIES, AND PHYSICAL FEATURES SHO ARE EXISTING UNLESS OTHERWISE LABELLED OR NOTED.	WN ON THE PLANS	
1. PROPERTY LINES SHOWN ON THE PLANS ARE BASED ON A RECENT S STREET AND THE FRONTAGE OF NUMEROUS PROPERTIES ALONG TH BE CONSIDERED ACCURATE FOR THE PURPOSES OF THIS PROJECT, H OF ALL PROPERTIES ALONG THIS ROUTE WAS NOT COMPLETED FOR	IS ROUTE. PROPERTY LINES SHOULD OWEVER A COMPLETE BOUNDARY SURV THIS PROJECT.	
 THREE DAYS BEFORE DIGGING IN SOUTH CAROLINA <u>CALL 811</u> PALM STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTI WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMA THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTI PERMANENTLY CEASED, UNLESS ACTIVITY IN THAT PORTION OF THI 	CABLE IN PORTIONS OF THE SITE NENTLY CEASED, BUT IN NO CASE MORE ON OF THE SITE HAS TEMPORARILY OR	<u>.</u>
4. CONTRACTOR SHALL NOT LEAVE ANY DITCHES OPEN OVERNIGHT.		

TR C

Construction Plans for

City of Myrtle Beach I LDM Water Transmission Main se 1 - SCIIP PROJECT # A-23-C139



PROJECT LAYOUT SCALE: 1" = 400'



Prepared for: City of Myrtle Beach *P.O. Drawer* 2468 Myrtle Beach, S.C. 29578

DC Engineers

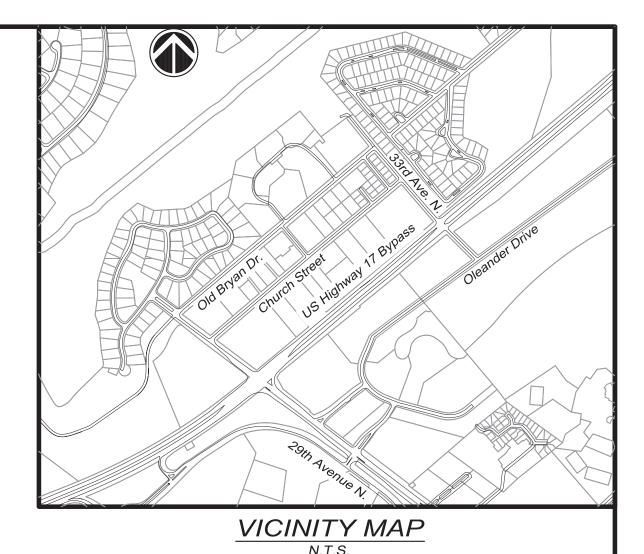
OLTON & MENK, INC.

www.ddcinc.com

1298 PROFESSIONAL DRIVE MYRTLE BEACH, SOUTH CAROLINA 29577 Phone: (843) 692-3200 Email: bmi@bolton-menk.com www.bolton-menk.com

DATE 1/17/23			
SCALE 1' = 200'			
DESIGNED			
EKS			
DRAWN			
PES			
CHECKED	2	7/19/23	REVISED PER HORRY COUNTY COMMENTS.
EKS	1	6/26/23	REVISED PER SCDOT COMMENTS.
CLIENT PROJ. NO. 21067E	NO.	DATE	REVISION DESCRIPTION





SHEET SCHEDULE

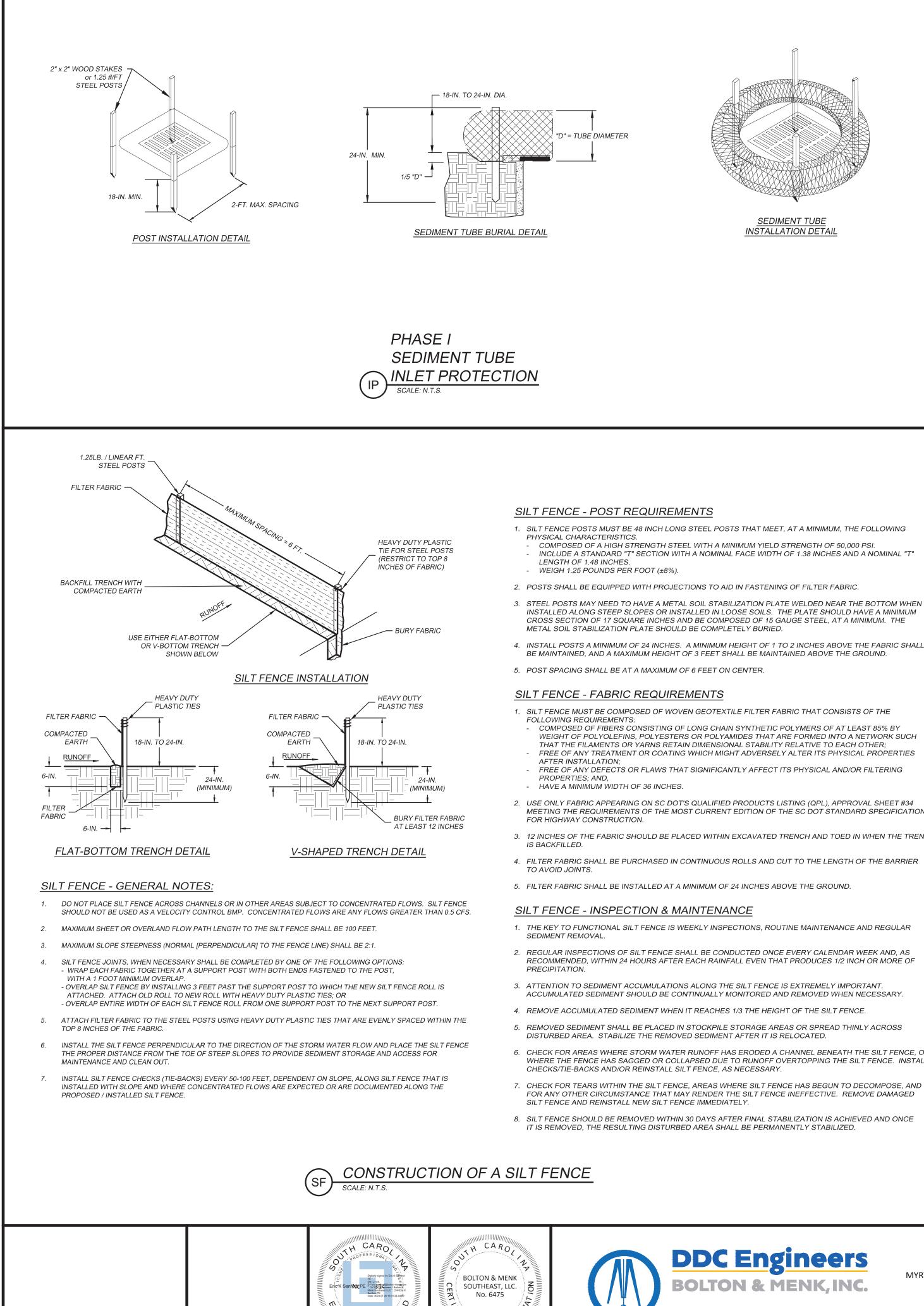
SHEET NUMBER	SHEET TITLE	ORIGINAL DATE	REVISION DATE
GENERAL			
G0.01	COVER SHEET	1/17/2023	7/19/2023
C2.01	SEDIMENT AND EROSION CONTROL DETAILS	1/17/2023	7/19/2023
C2.02	SEDIMENT AND EROSION CONTROL PLAN - PHASE 1	1/17/2023	7/19/2023
C2.03	SEDIMENT AND EROSION CONTROL PLAN - PHASE 1	1/17/2023	7/19/2023
C2.04	SEDIMENT AND EROSION CONTROL PLAN - PHASE 1	1/17/2023	7/19/2023
C2.05	SEDIMENT AND EROSION CONTROL PLAN - PHASE 1	1/17/2023	7/19/2023
C2.06	SEDIMENT AND EROSION CONTROL PLAN - PHASE 1	1/17/2023	7/19/2023
C3.01	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.02	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.03	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.04	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.05	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.06	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.07	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.08	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.09	PROPOSED PLAN AND PROFILE	1/17/2023	7/19/2023
C3.10	PROPOSED PRV #18 AND DETAILS	7/19/2023	7/19/2023
C5.01	DETAILS	1/17/2023	7/19/2023
C5.02	DETAILS	1/17/2023	7/19/2023
C503	DETAILS	7/19/2023	7/19/2023
T1	TRAFFIC CONTROL PLAN	1/17/2023	7/19/2023
T2	DETOUR PLAN	1/17/2023	7/19/2023

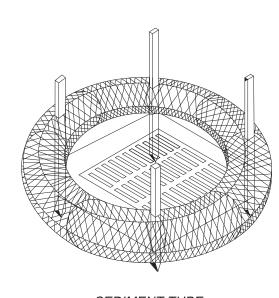
REVISION OCCURRENCE LIST

2	7/19/2023	REVISED PER HORRY COUNTY COMMENTS.	PES
1	6/26/2023	REVISED PER SCDOT COMMENTS.	PES
REVISION NO.	DATE	REVISION DESCRIPTION	BY

THIS SET IS CURRENT THROUGH SHEET DATED:

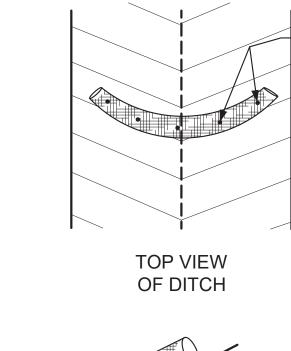
SCIIP PROJECT # A-23-C139 CITY OF MYRTLE BEACH SHEET PARALLEL LDM WATER TRANSMISSION MAIN - PHASE 1 HORRY COUNTY, SOUTH CAROLINA G0.01 COVER SHEET PES PES BY





SEDIMENT TUB INSTALLATION DETAIL

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



STAKES

PLACED AT

SPACING

?' MINIMUM

1. SILT FENCE POSTS MUST BE 48 INCH LONG STEEL POSTS THAT MEET, AT A MINIMUM, THE FOLLOWING COMPOSED OF A HIGH STRENGTH STEEL WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.

INCLUDE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38 INCHES AND A NOMINAL "T"

2. POSTS SHALL BE EQUIPPED WITH PROJECTIONS TO AID IN FASTENING OF FILTER FABRIC.

3. STEEL POSTS MAY NEED TO HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM WHEN INSTALLED ALONG STEEP SLOPES OR INSTALLED IN LOOSE SOILS. THE PLATE SHOULD HAVE A MINIMUM CROSS SECTION OF 17 SQUARE INCHES AND BE COMPOSED OF 15 GAUGE STEEL, AT A MINIMUM. THE

4. INSTALL POSTS A MINIMUM OF 24 INCHES. A MINIMUM HEIGHT OF 1 TO 2 INCHES ABOVE THE FABRIC SHALL BE MAINTAINED, AND A MAXIMUM HEIGHT OF 3 FEET SHALL BE MAINTAINED ABOVE THE GROUND.

1. SILT FENCE MUST BE COMPOSED OF WOVEN GEOTEXTILE FILTER FABRIC THAT CONSISTS OF THE - COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, POLYESTERS OR POLYAMIDES THAT ARE 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

FREE OF ANY DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING

2. USE ONLY FABRIC APPEARING ON SC DOT'S QUALIFIED PRODUCTS LISTING (QPL), APPROVAL SHEET #34 MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SC DOT STANDARD SPECIFICATIONS

3. 12 INCHES OF THE FABRIC SHOULD BE PLACED WITHIN EXCAVATED TRENCH AND TOED IN WHEN THE TRENCH

1. THE KEY TO FUNCTIONAL SILT FENCE IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE AND REGULAR

2. REGULAR INSPECTIONS OF SILT FENCE SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24 HOURS AFTER EACH RAINFALL EVEN THAT PRODUCES 1/2 INCH OR MORE OF

3. ATTENTION TO SEDIMENT ACCUMULATIONS ALONG THE SILT FENCE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY.

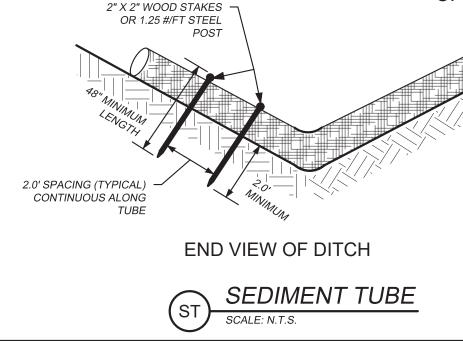
4. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SILT FENCE.

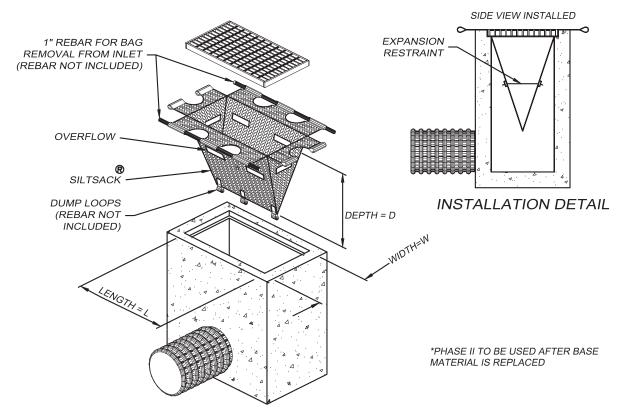
DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.

6. CHECK FOR AREAS WHERE STORM WATER RUNOFF HAS ERODED A CHANNEL BENEATH THE SILT FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED DUE TO RUNOFF OVERTOPPING THE SILT FENCE. INSTALL

7. CHECK FOR TEARS WITHIN THE SILT FENCE, AREAS WHERE SILT FENCE HAS BEGUN TO DECOMPOSE, AND FOR ANY OTHER CIRCUMSTANCE THAT MAY RENDER THE SILT FENCE INEFFECTIVE. REMOVE DAMAGED

8. SILT FENCE SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED AND ONCE





SILTSACK

PHASE II

INLET PROTECTION	
SCALE: N.T.S.	
	1

DDC Engineers

BOLTON & MENK, INC

www.ddcinc.com

OF A

1298 PROFESSIONAL DRIVE MYRTLE BEACH, SOUTH CAROLINA 29577 Phone: (843) 692-3200 Email: bmi@bolton-menk.com www.bolton-menk.com

DATE 1/17/23			
SCALE NO SCALE			
designed EKS			
DRAWN PES			
CHECKED EKS		- /10/00	
CLIENT PROJ. NO. 21067E	2 NO.	7/19/23 DATE	REVISED PER HORRY COUNTY COMMENTS. REVISION DESCRIPTION

3. 4.	DISTURBED AREA THIS PHASE: 3.10 ± ACRES 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
4.	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:
	- WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED 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.
	ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED 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 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 OFF SITE 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 ROADWAYS 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 SCR 100000.
	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.
15.	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.
	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.).
18.	 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, 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.
20.	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 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.
21.	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.
22.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SILT BARRIERS AND SEDIMENT CONTROL INSTALLATIONS DURING CONSTRUCTION UNTIL THE COMPLETION OF THE SITE DEVELOPMENT.
	EROSION CONTROL DEVICES MUST BE INSTALLED IMMEDIATELY AFTER LAND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE CONTROL DEVICES MAY BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS, IF DRAINAGE PATTERNS DURING CONSTRUCTION VARY FROM THE FINAL DRAINAGE PATTERNS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE SOIL EROSION CONTROL FOR ALL DRAINAGE PATTERNS DURING ALL STAGES OF CONSTRUCTION. ALL INADEQUACIES IN SOIL EROSION CONTROL DURING ANY PHASE OF CONSTRUCTION MUST BE REPORTED IMMEDIATELY TO THE ENGINEER.
	THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE PROPER FUNCTIONING OF ALL DEVICES.
	FAILURE TO INSTALL, OPERATE AND MAINTAIN ALL EROSION CONTROL MEASURES, AS SHOWN ON THE APPROVED PLANS OR AS DIRECTED BY THE ENGINEER AND/OR OCRM WILL RESULT IN ALL WORK ON THE CONSTRUCTION SITE BEING STOPPED UNTIL PROPER CORRECTIVE MEASURES HAVE BEEN MET, AS REQUIRED AND/OR DIRECTED.
	ALL LAND DISTURBING ACTIVITIES REQUIRES COMPLIANCE UNDER THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM THE CONSTRUCTION ACTIVITIES (PERMIT NO. SCR100000). ANY NONCOMPLIANCE WITH THESE REGULATIONS IS A VIOLATION OF THE FEDERAL CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT ACTION BY HORRY COUNTY OR SCDHEC.
	CONTRACTOR SHALL PROVIDE A WATER TIGHT ENCLOSURE FOR STORAGE OF THE OCRM CERTIFIED PLANS AND INSPECTION REPORTS. ENCLOSURE SHALL BE LOCATED IN AN AREA ACCESSIBLE TO REGULATORY PERSONNEL. ALL STOCKPILE TO BE PROTECTED WITH SILT FENCE.
	ALL STOCKFILE TO BE PROTECTED WITH SILT FENCE. ALL CONCRETE TO BE WASHED OUT IN AN APPROVED AREA.

EDIMENT AND EROSION CONTROL
DETAILS

PARALLEL LDM WATER TRANSMISSION MAIN - PHASE 1

HORRY COUNTY, SOUTH CAROLINA

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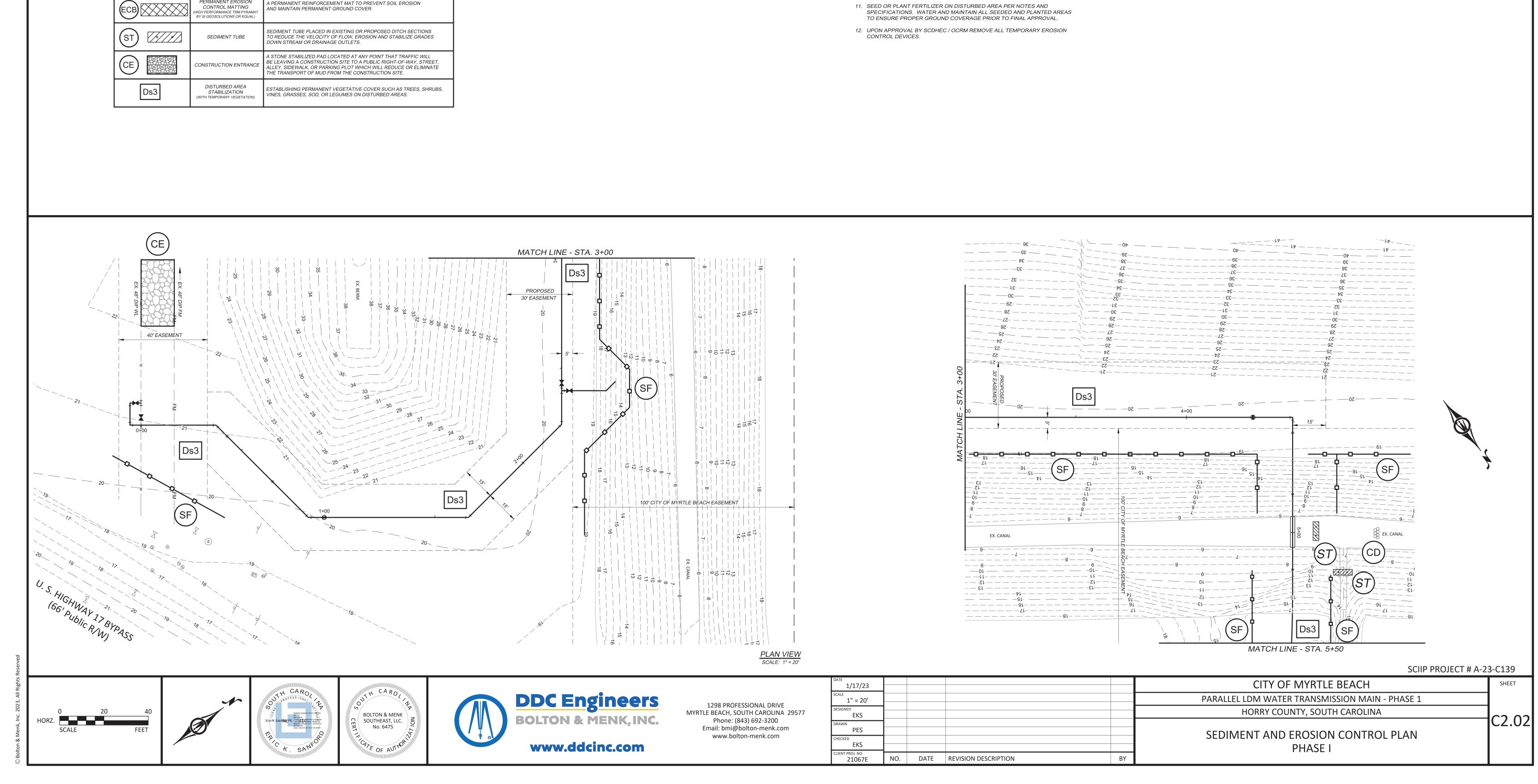
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SYMBOL PRACTICE		DESCRIPTION
	INLET PROTECTION	A TEMPORARY SEDIMENT BARRIER LAID AROUND A STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM.
OP 💖	OUTLET PROTECTION	RIP RAP CHANNEL / BANK PLACED BELOW DRAINAGE OUTLETS TO REDUCE THE VELOCITY OF FLOW, EROSION, AND STABILIZE GRADES DOWNSTREAM OF OUTLET STRUCTURES.
	TEMPORARY CHECK DAM	RIP RAP BANK PLACED BELOW DRAINAGE OUTLETS TO REDUCE THE VELOCITY OF FLOW, EROSION AND STABILIZE GRADES DOWN STREAM OF DRAINAGE OUTLETS.
		A TEMPORARY STRUCTURE USED TO SLOW THE VELOCITY OF RUN-OFF, CAUSE SEDIMENT DEPOSITION AT THE STRUCTURE, AND FILTER SEDIMENT FROM RUN-OFF.
(CL) — —	CONSTRUCTION LIMITS	A DEFINED AREA THAT ALL LAND DISTURBANCE WILL OCCUR DURING CONSTRUCTION.
		A PERMANENT REINFORCEMENT MAT TO PREVENT SOIL EROSION AND MAINTAIN PERMANENT GROUND COVER.
ST ////	SEDIMENT TUBE	SEDIMENT TUBE PLACED IN EXISTING OR PROPOSED DITCH SECTIONS TO REDUCE THE VELOCITY OF FLOW, EROSION AND STABILIZE GRADES DOWN STREAM OR DRAINAGE OUTLETS.
		A STONE STABILIZED PAD LOCATED AT ANY POINT THAT TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE TO A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING PLOT WHICH WILL REDUCE OR ELIMINATE THE TRANSPORT OF MUD FROM THE CONSTRUCTION SITE.
		ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREAS.

EROSION CONTROL LEGEND

SEEDING NOTES:

- 5 FEET IN HEIGHT.



1. INCLUDES RURAL AREAS ADJACENT TO WELL-DEVELOPED LAWNS. 2. NOT REQUIRED ON SHOULDERS, MEDIANS, ETC.., AND SLOPES UNDER

GRASS, AND SHALL FOLLOW THE APPLICATION PROCEDURES AS SPECIFIED HEREIN.

3. GIANT BERMUDA SEED, INCLUDING NK-37, SHALL NOT BE USED.

4. RESEEDING CRIMSON CLOVER SHALL BE INOCULATED IN ACCORDANCE WITH SUBSECTION 810.05. DO NOT PLANT CLOVER IN MEDIANS OR IN RURAL AREAS ADJACENT TO WELL-DEVELOPED LAWNS. 5. PENSACOLA BAHIA SHALL BE ALLOWED ONLY AS SHOWN IN SEEDING SCHEDULES 3 AND 4 AT THE

RATE OF 50 POUNDS PER ACRE ONLY WHEN SEEDING PIT AREAS THAT ARE GOVERNED BY THE SOUTH CAROLINA MINING ACT. OTHERWISE, DO NOT INCLUDE BAHIA SEED IN THE MIX.

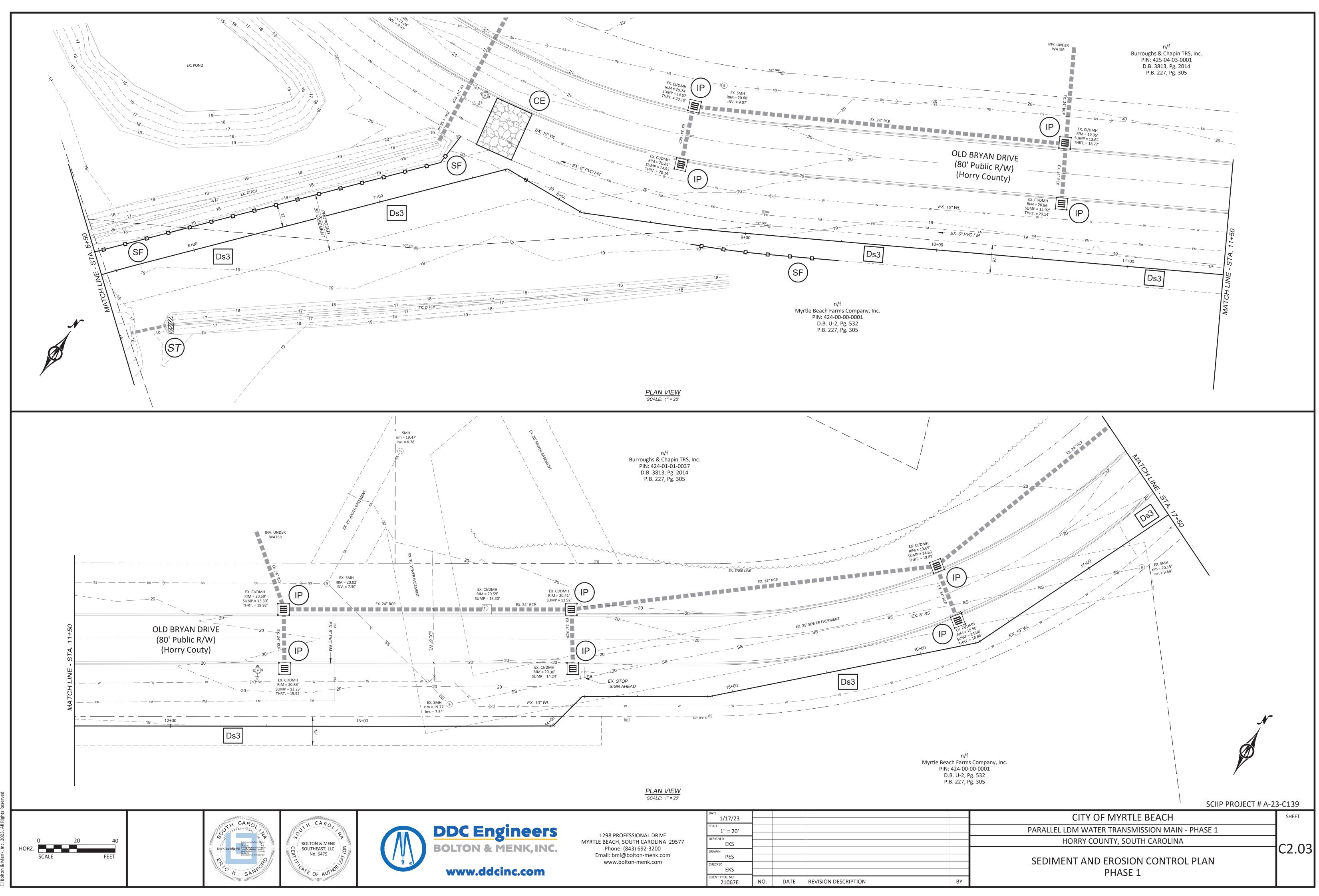
6. THE CONTRACTOR SHALL OBTAIN A SATISFACTORY STAND OF PERENNIAL VEGETATION WHOSE ROOT SYSTEM SHALL BE DEVELOPED SUFFICIENTLY TO SURVIVE DRY PERIODS AND WINTER WEATHER, AND BE CAPABLE OF RE-ESTABLISHMENT IN THE SPRING. THE PERENNIAL VEGETATIVE COVER SHALL HAVE A MINIMUM COVERAGE DENSITY OF 70% FOR THE SEEDED AREAS. CONTRACTOR SHALL DETERMINE ALL RATES OF APPLICATION NECESSARY TO PRODUCE THE REQUIRED STAND OF

CONSTRUCTION SEQUENCE NOTES

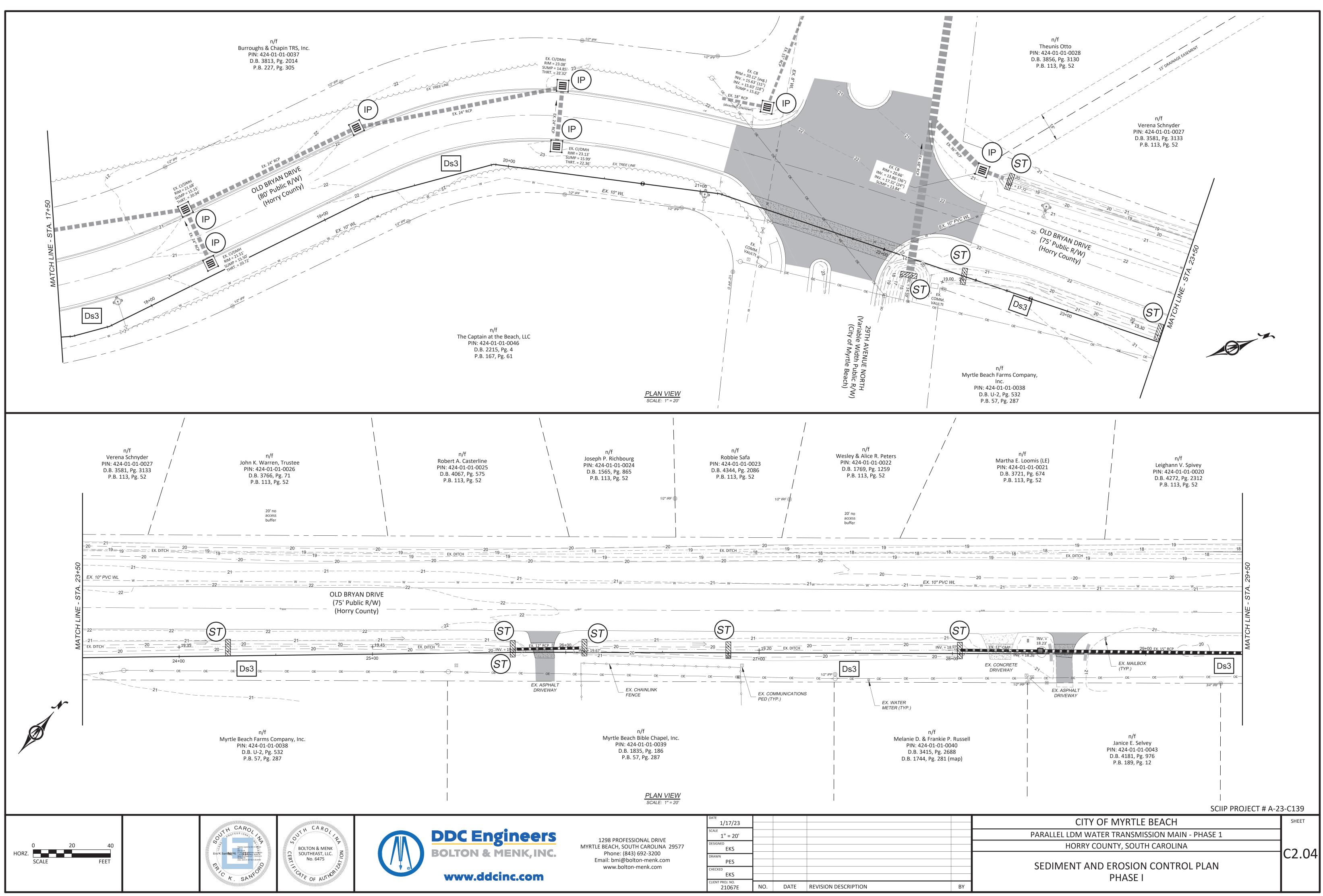
- 1. OBTAIN ALL NECESSARY PERMITS.
- 2. ON SITE PRE-CON MEETING WITH THE CONTRACTOR, ENGINEER, OWNER AND CONSTRUCTION MANAGER.
- 3. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WITHIN AND IMMEDIATELY ADJACENT TO THE PROJECT AREA.
- 4. INSTALL SILT FENCE, TREE PROTECTION AND INLET PROTECTION.
- 5. SCHEDULE SILT FENCE AND TREE PROTECTION INSPECTION WITH ENGINEER AND CONSTRUCTION MANAGER. NO LAND DISTURBANCE MAY START UNTIL SILT FENCE AND TREE PROTECTION HAVE BEEN APPROVED.
- 6. UPON INSTALLING ALL PERIMETER EROSION CONTROL, CLEAR AND GRUB SITE.
- 7. CONSTRUCT WATER LINE.
- 8. GRADE AND SEED SITE, PLACE AND COMPACT G.A.B.C. IN PAVED AREAS.
- 9. COMPLETE ALL REMAINING SITE IMPROVEMENTS AND PAVEMENT.
- 10. STABILIZE SITE, INSTALL LANDSCAPING AS SOON AS PRACTICAL AFTER CONSTRUCTION IS COMPLETE.

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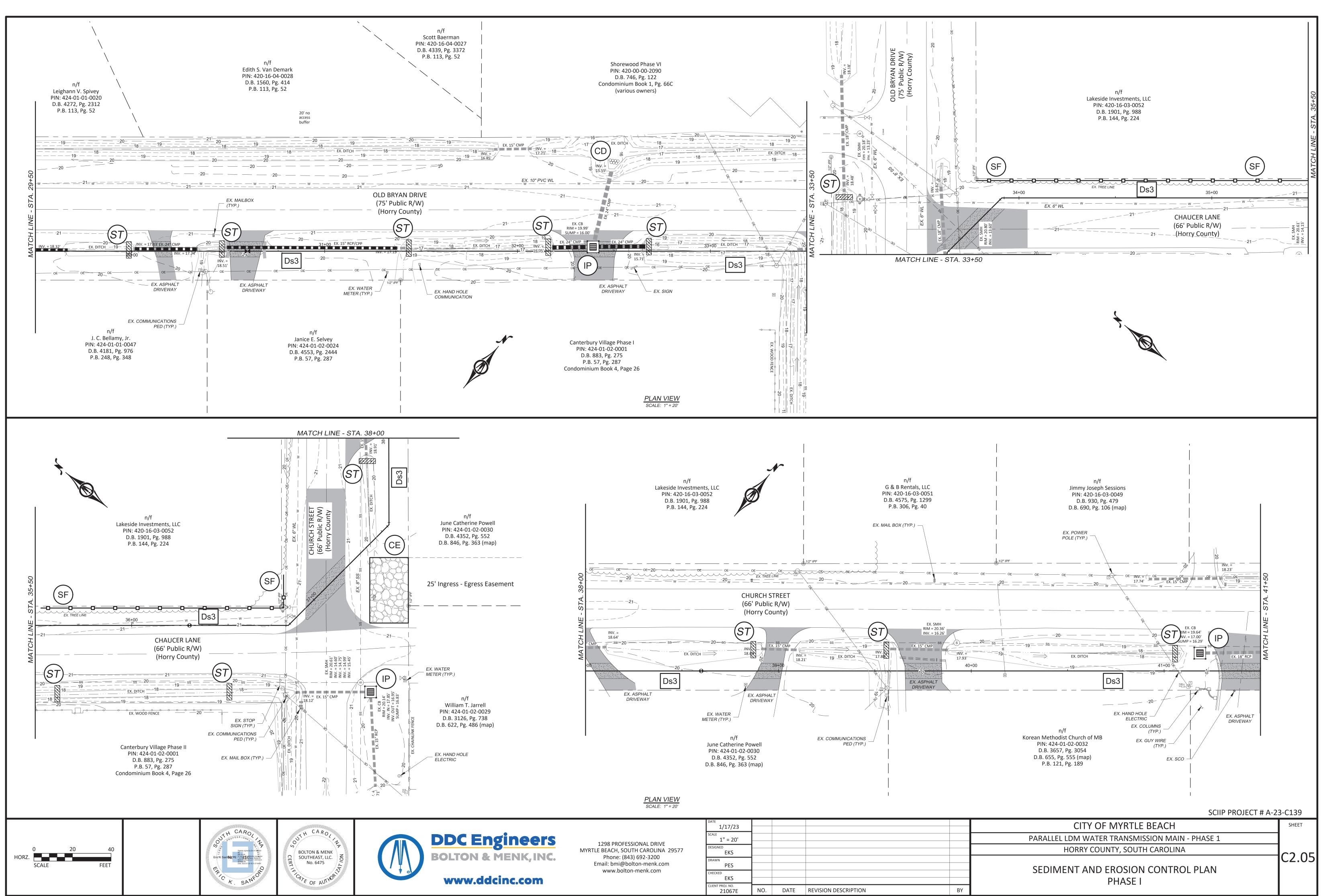




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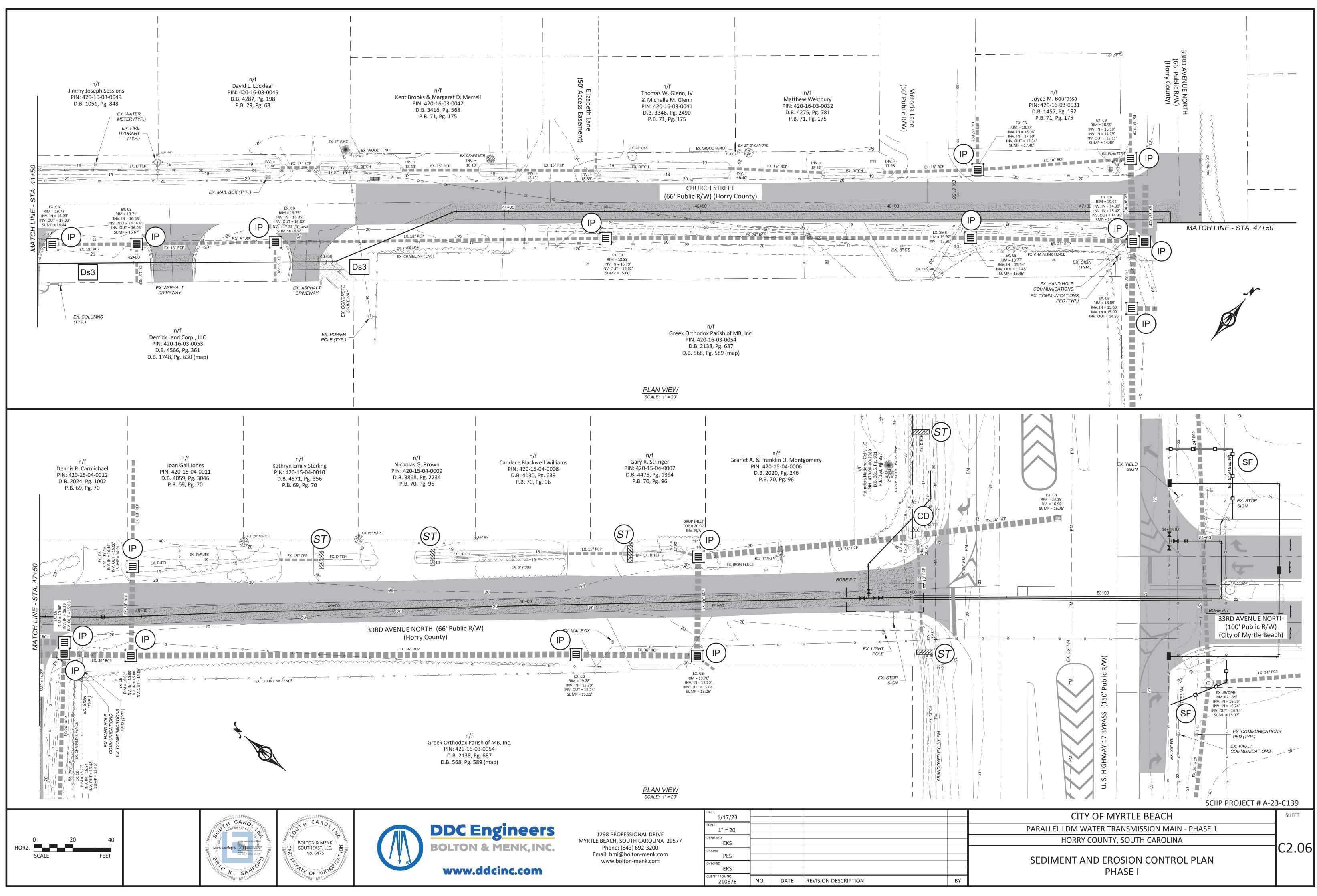


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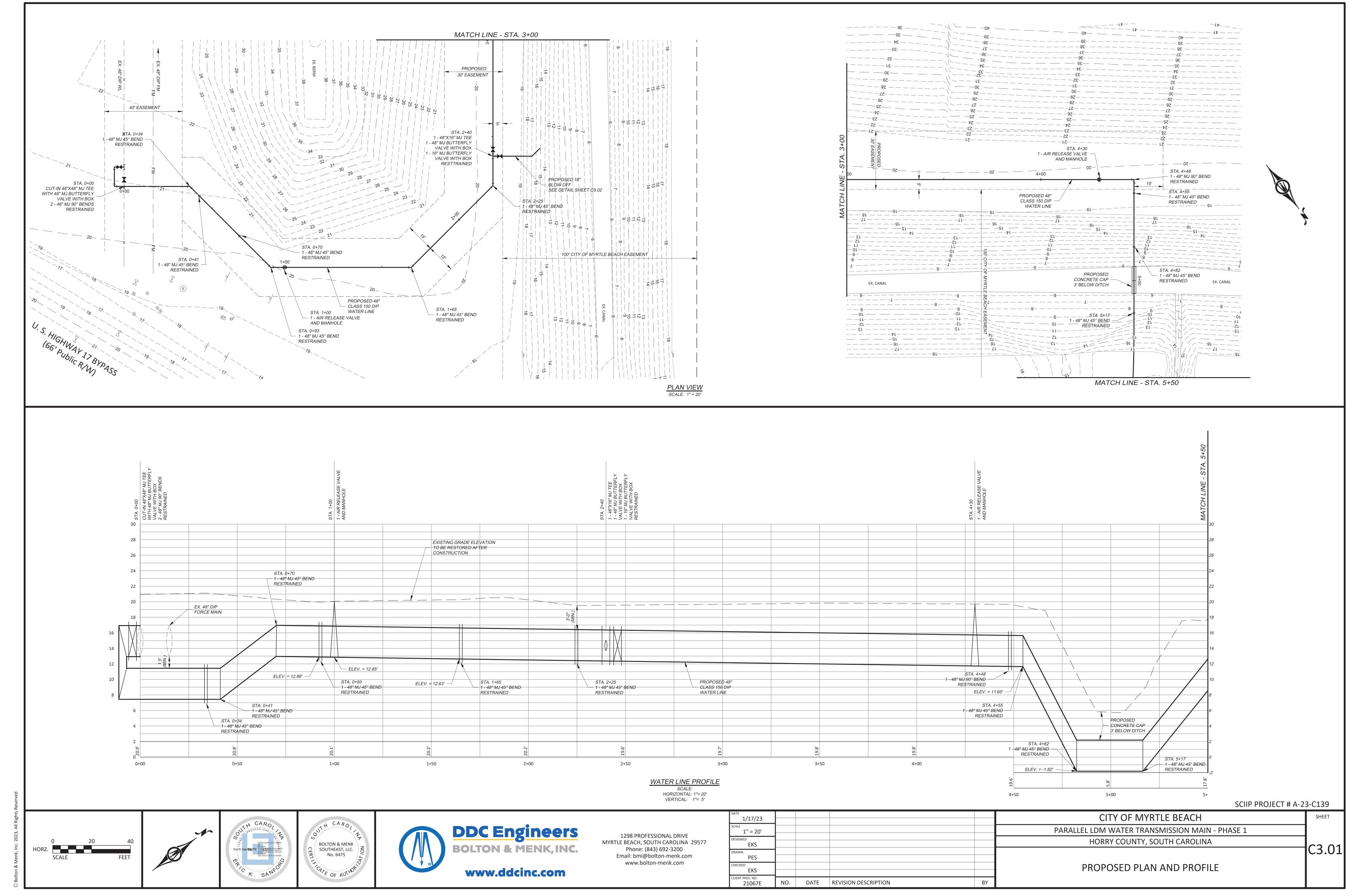


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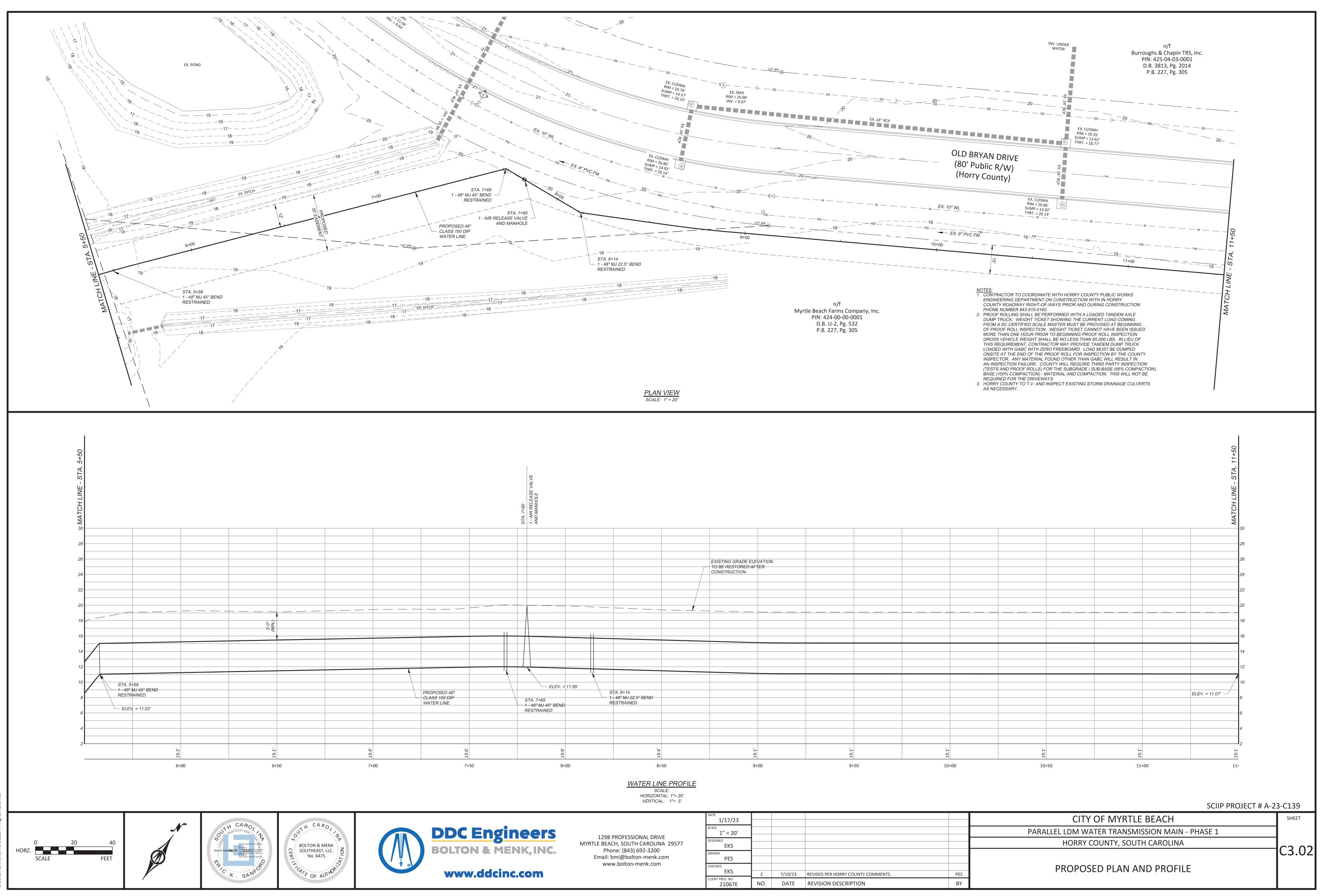


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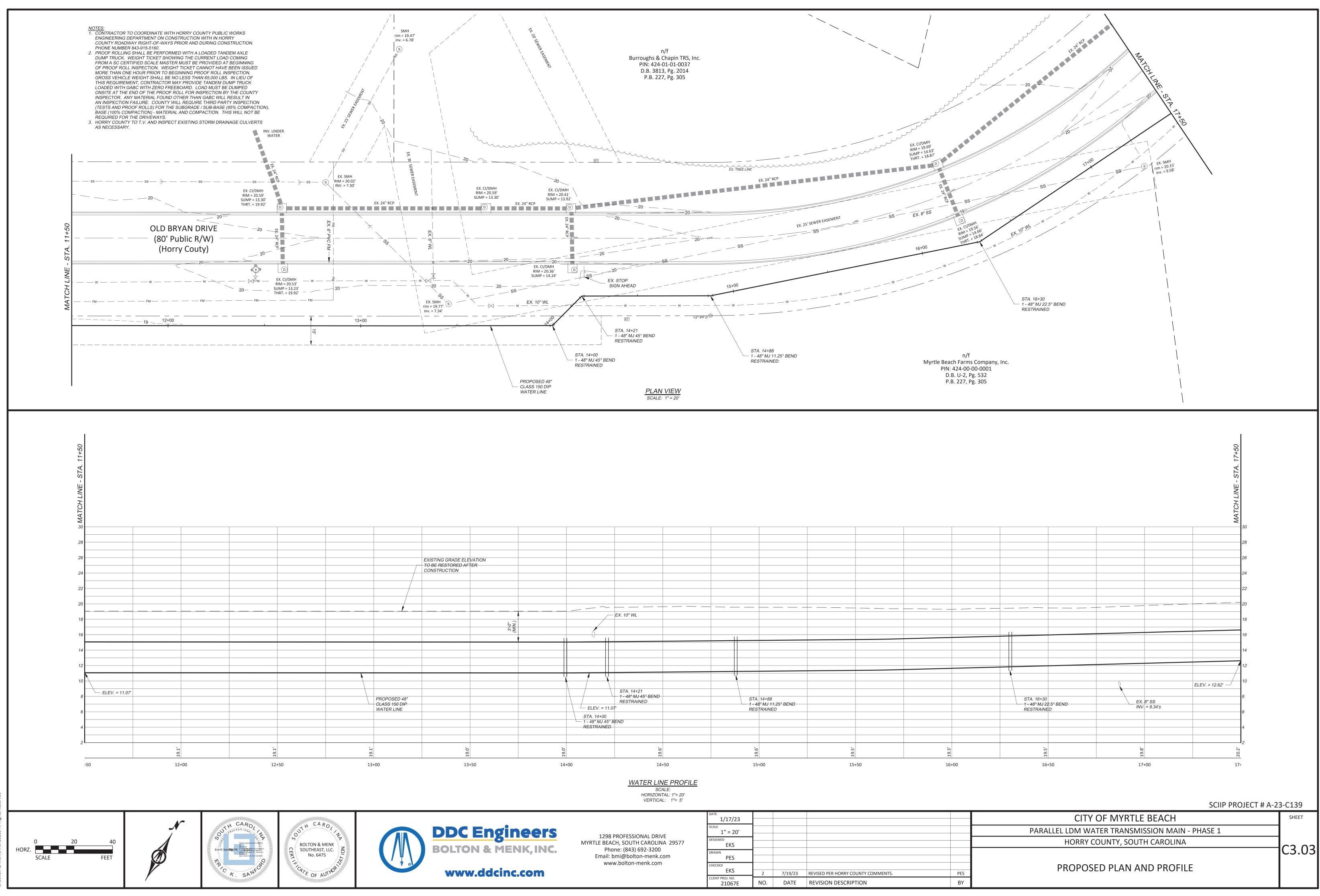
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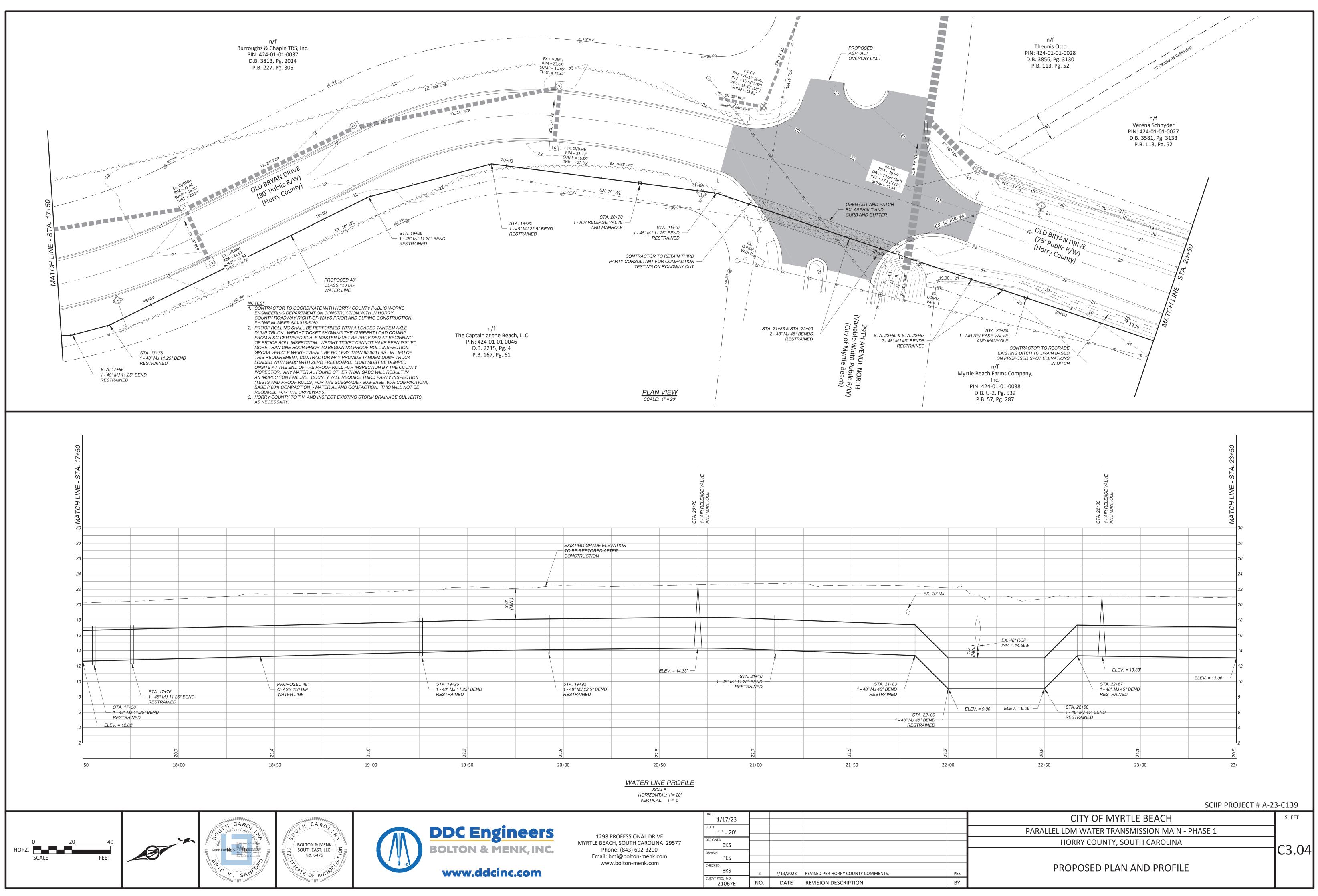


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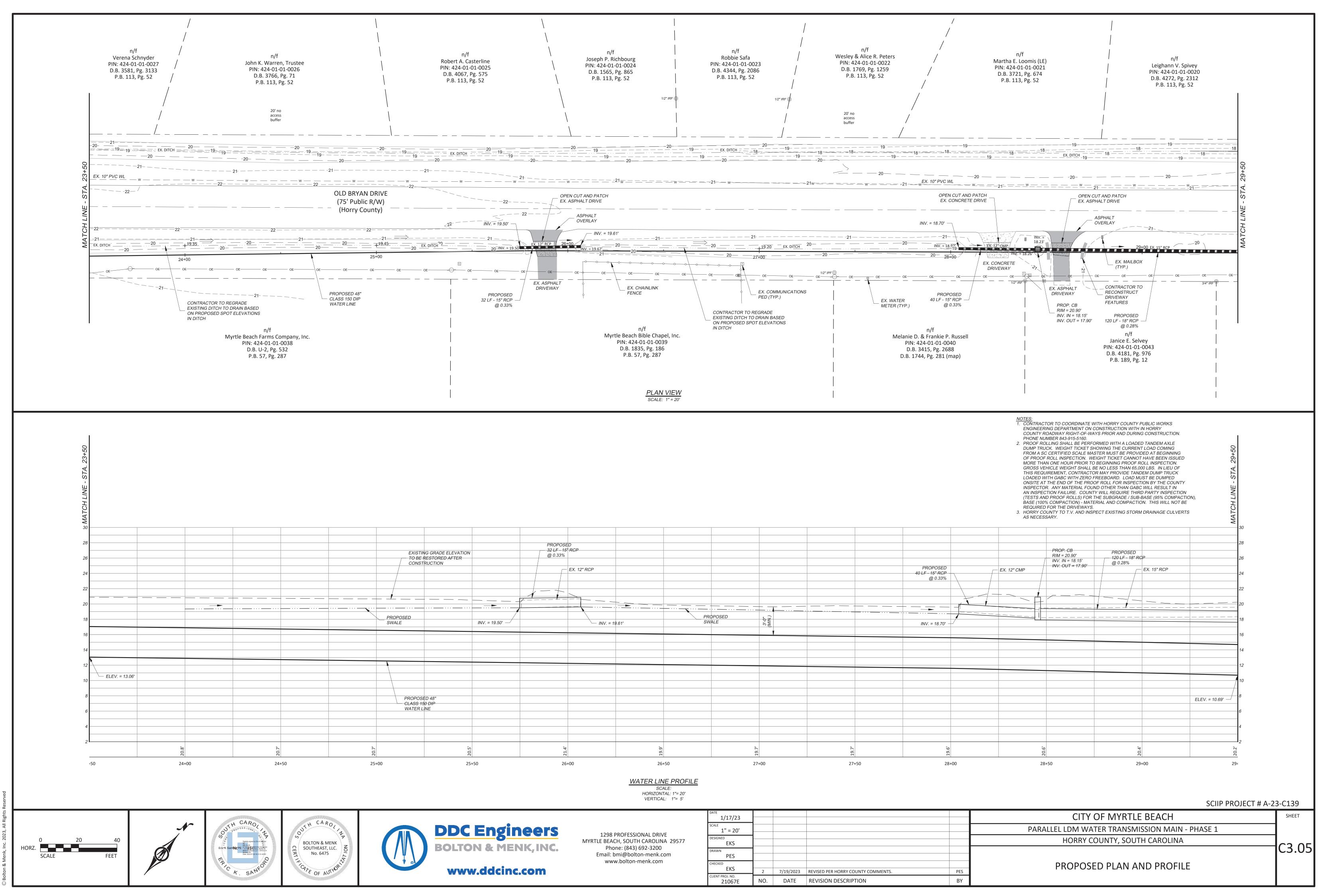
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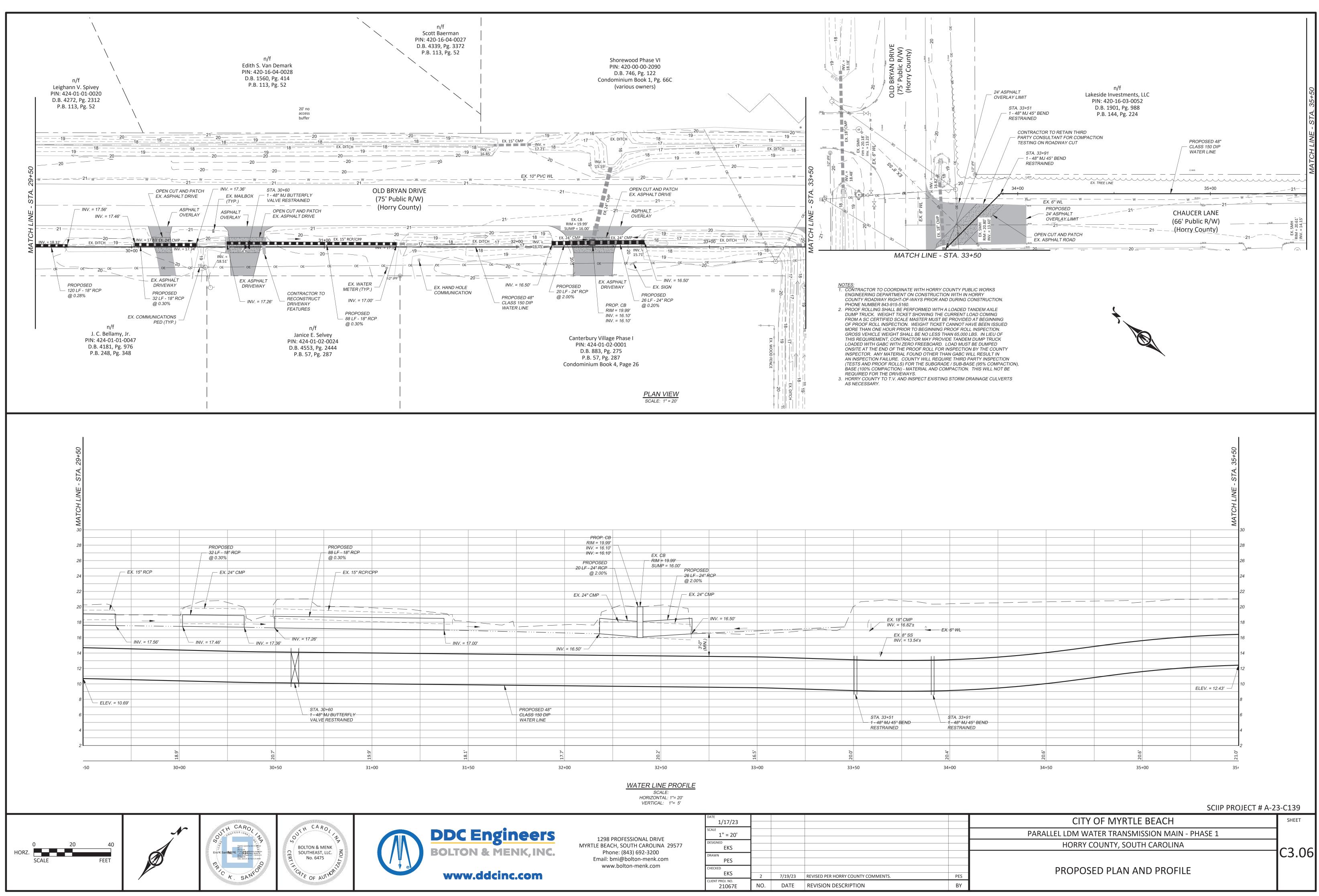
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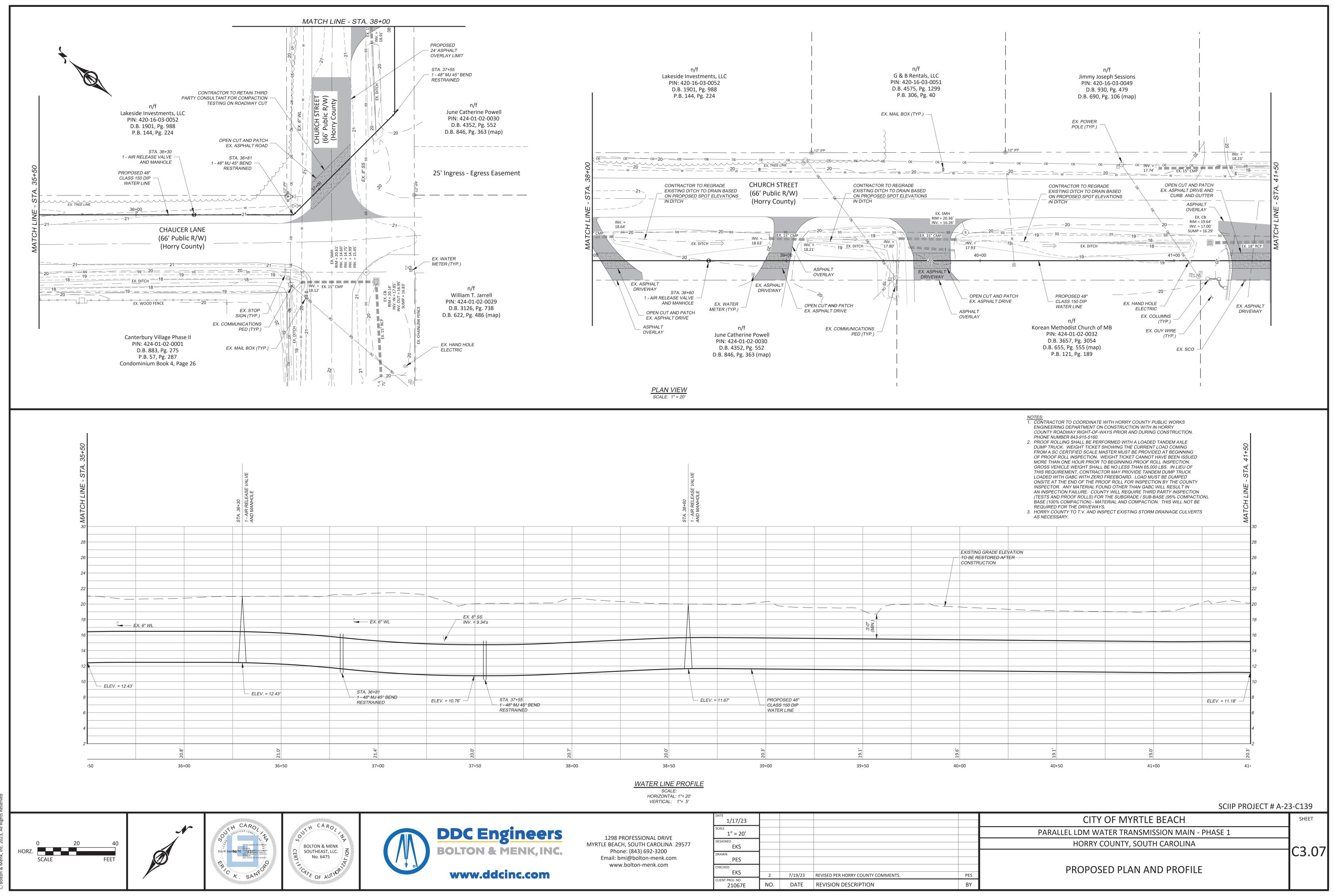
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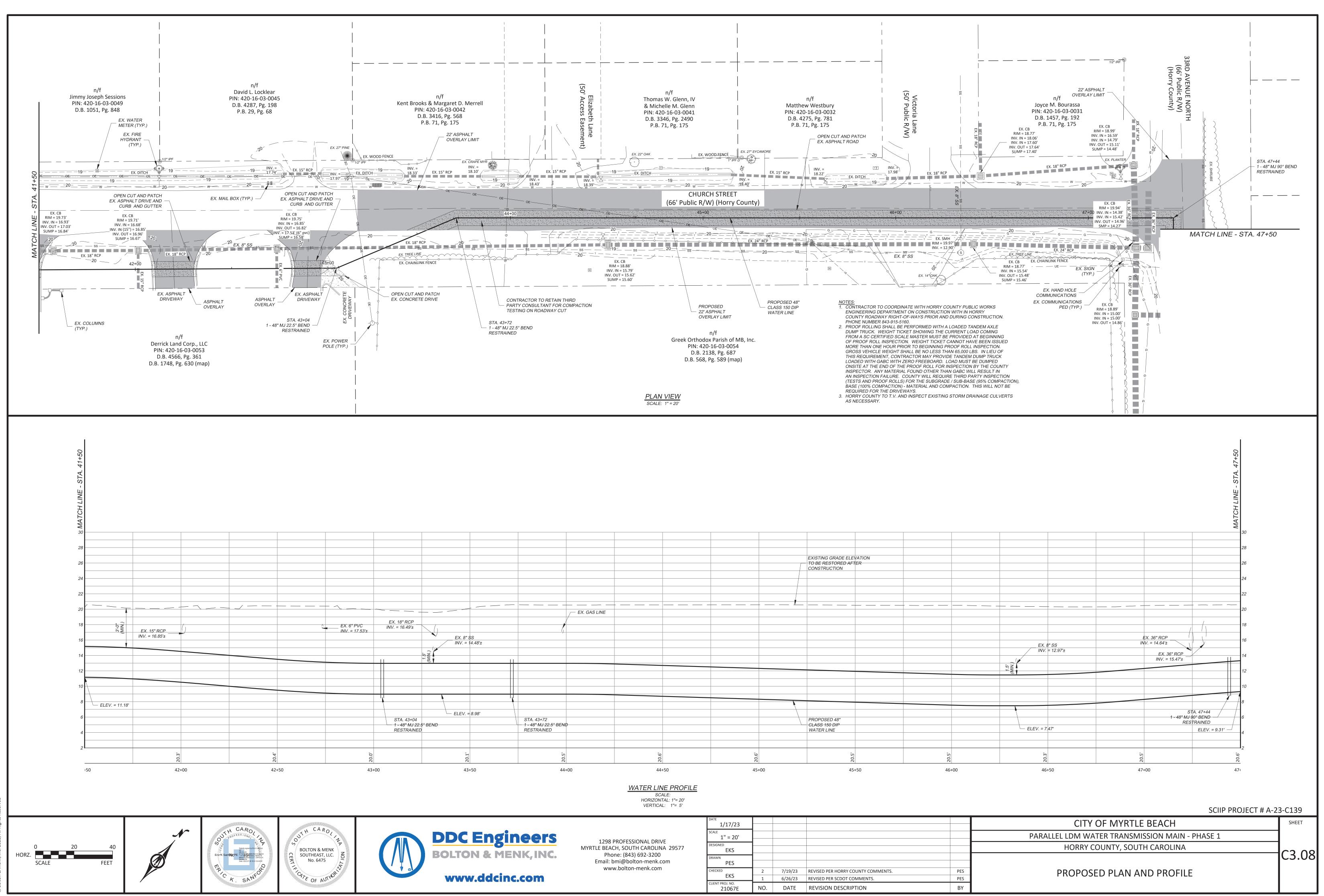


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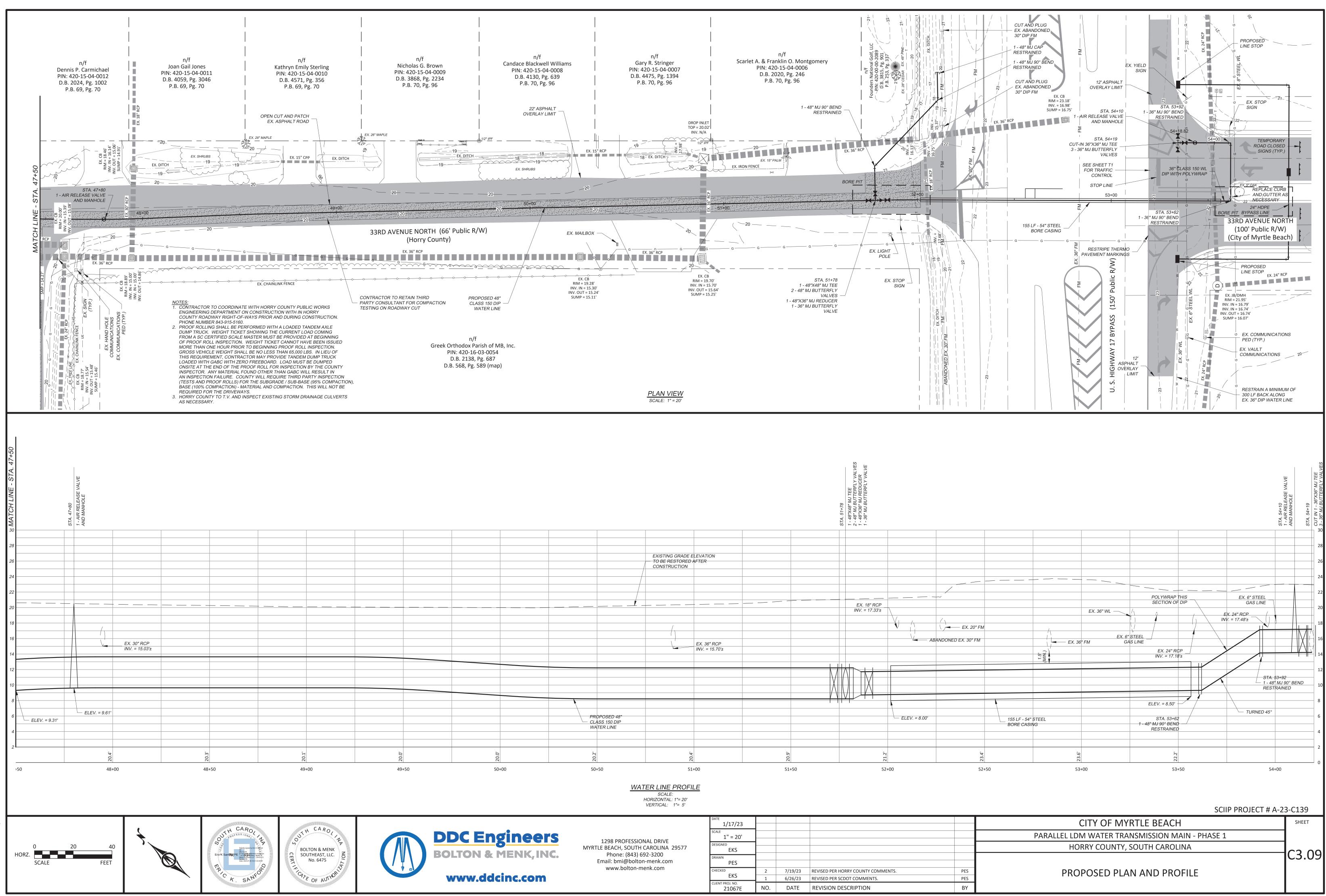


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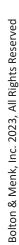


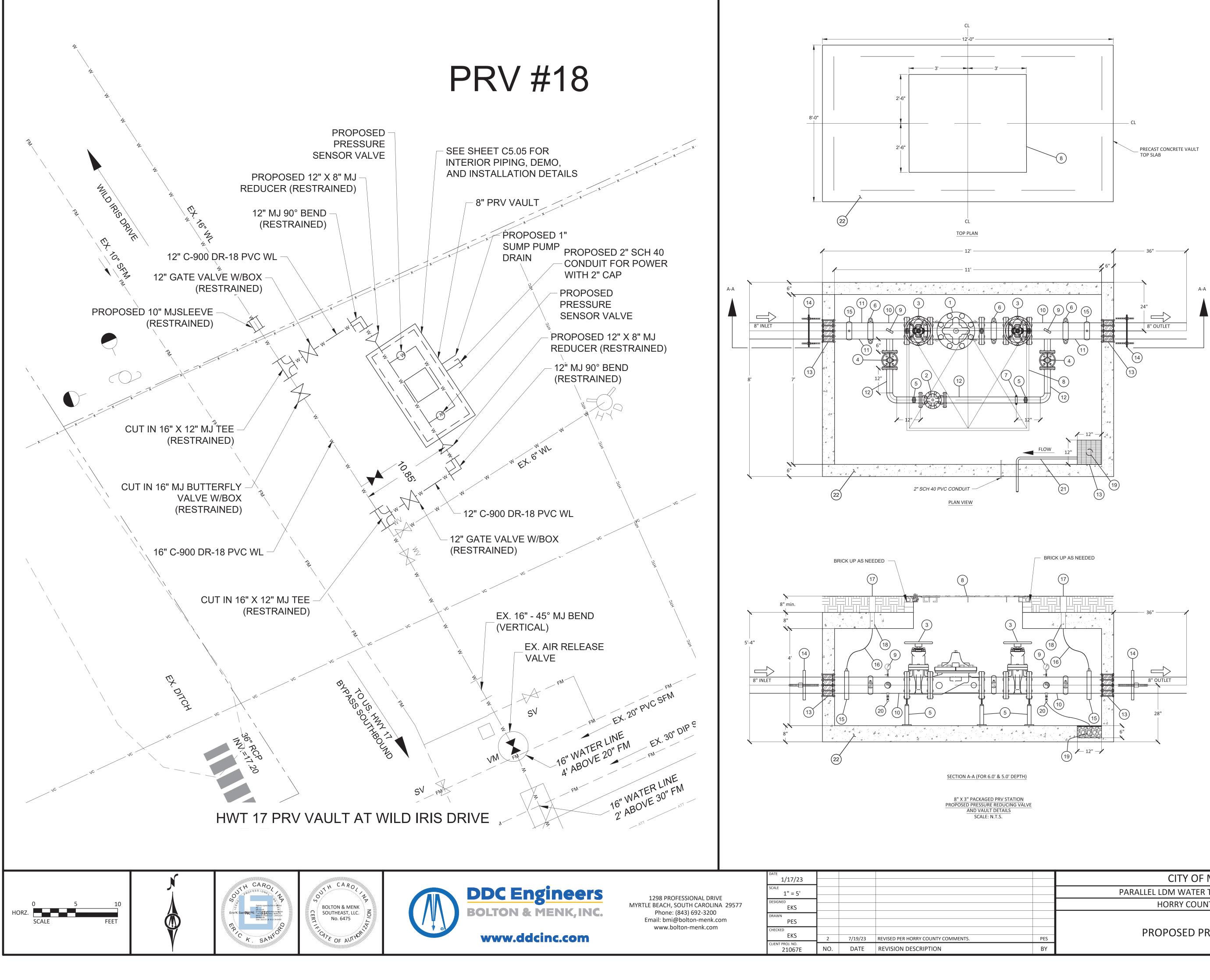


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		ID DUNES / 82ND AVE N PRV VAULT " MATERIALS DESCRIPTION:
ITEM #	QTY.	DESCRIPTION
1	1	8" FLANGED BERMAL PRESSURE REDUCING VALVE (AIS COMPLIANT)
2	1	3" FLANGED BERMAL PRESSURE REDUCING VALVE (AIS COMPLIANT)
3	2	8" R/S FL X FL GATE VALVE W/ HAND WHEEL
4	2	3" R/S FL X FL GATE VALVE W/ HAND WHEEL
5	5	STANDON ADJUSTABLE PIPE SUPPORTS
6	3	8" GROOVE COUPLING
7	1	3" GROOVE COUPLING
8	1	60" X 72" EJCO H6072991CHS (H20) HATCH WITH LIFT ASSIST AND SAFE GRATE SYSTEM
9	2	2 1/2 - 0 - 200 PSI PRESSURE GAUGE GLYCERIN FILLED WITH 1/4 SS ISOLATION VALVE
10	2	8" X 3" FL X PE 304 STAINLESS STEEL TEE
(11)	2	8" - 304 STAINLESS STEEL PIPING
(12)	1	3" - 304 STAINLESS STEEL PIPING
(13)	2	8" LINK SEAL ASSEMBLY
(14)	2	ROMAC 600 SERIES SPLIT PIPE RESTRAINT
(15)	2	12" X 2" TAPPING SADDLE WITH 2" CORPORATION STOP
(16)	2	RAFA SYSTEM REMOTE PRESSURE MONITORING SYSTEM
(17)	2	EJCO VALVE BOX
(18)	2	2" HOLE IN TOP OF VAULT AND SEAL WATER TIGHT AFTER PRESSURE SENSOR INSTALLED
(19)	1	LIBERTY SJ10 WATER POWERED SUMP PUMP WITH 1" BACKFLOW
20	2	STAINLESS STEEL BALL VALVE FOR WATER SUPPLY TO LIBERTY SJ10 SUMP PUMP
(21)	1	1" PVC DISCHARGE LINE
22	1	H2O RATED PRV VAULT WHITE INTERIOR W/ BLACK EXTERIOR SEALANT

NOTES:

1. ALL PIPING AND EQUIPMENT SUPPLIED BY PRESTIGE WORLDWIDE TECHNOLOGIES. ALL PIPING IS SCHEDULE 40 304 SST.

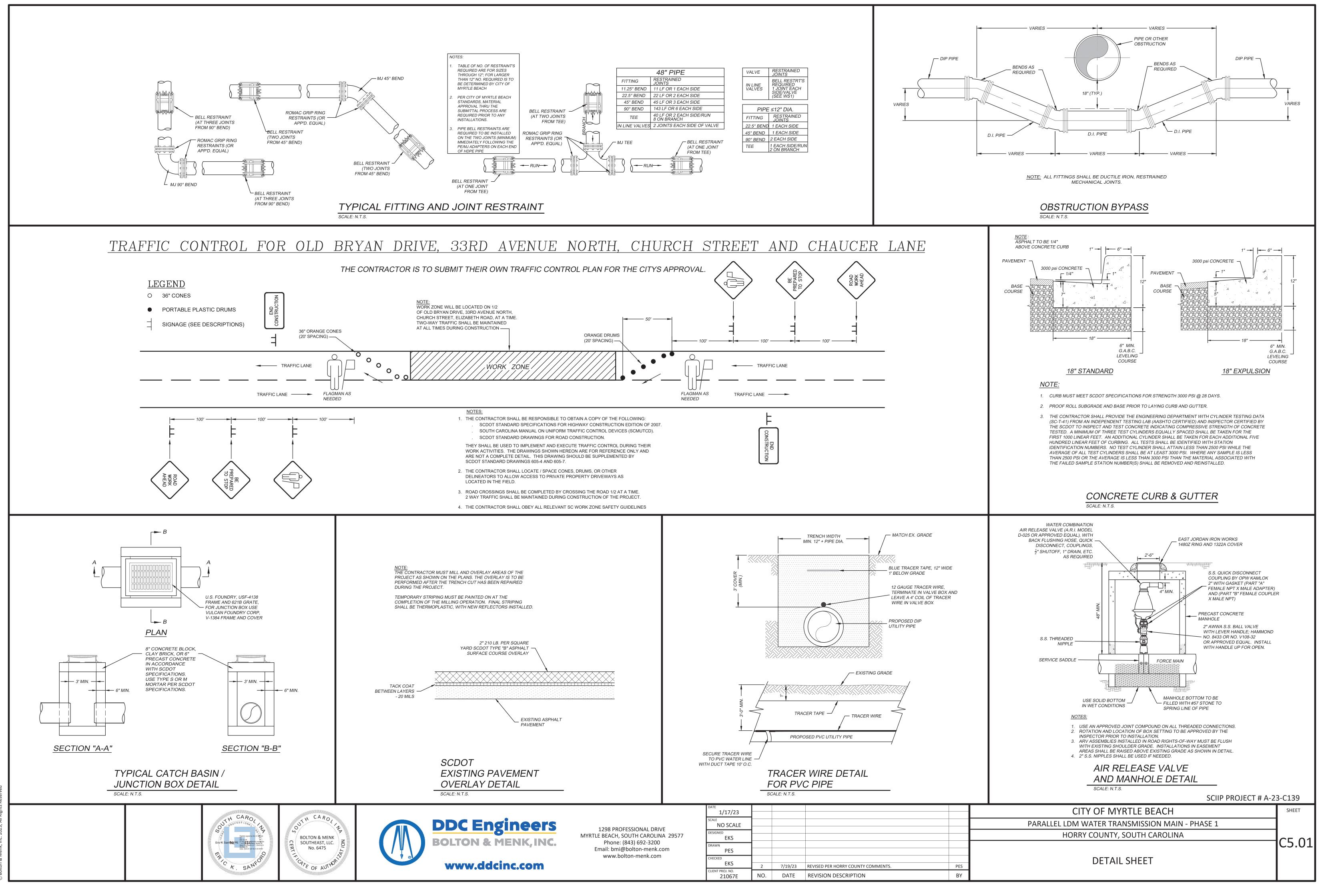
2. VAULT SUPPLIER WILL SUPPLY AN INDIVIDUAL WITH AT LEAST 10 YRS. EXP.

- WITH CONTROL VALVE EQUIPMENT START UP AND TROUBLESHOOTING.
- VAULT SUPPLIER TO PROVIDE 3 COPIES OF O&M MANUALS.
 VAULT SHOWN INCLUDES ALL EQUIPMENT REQUIRED FOR A FULLY

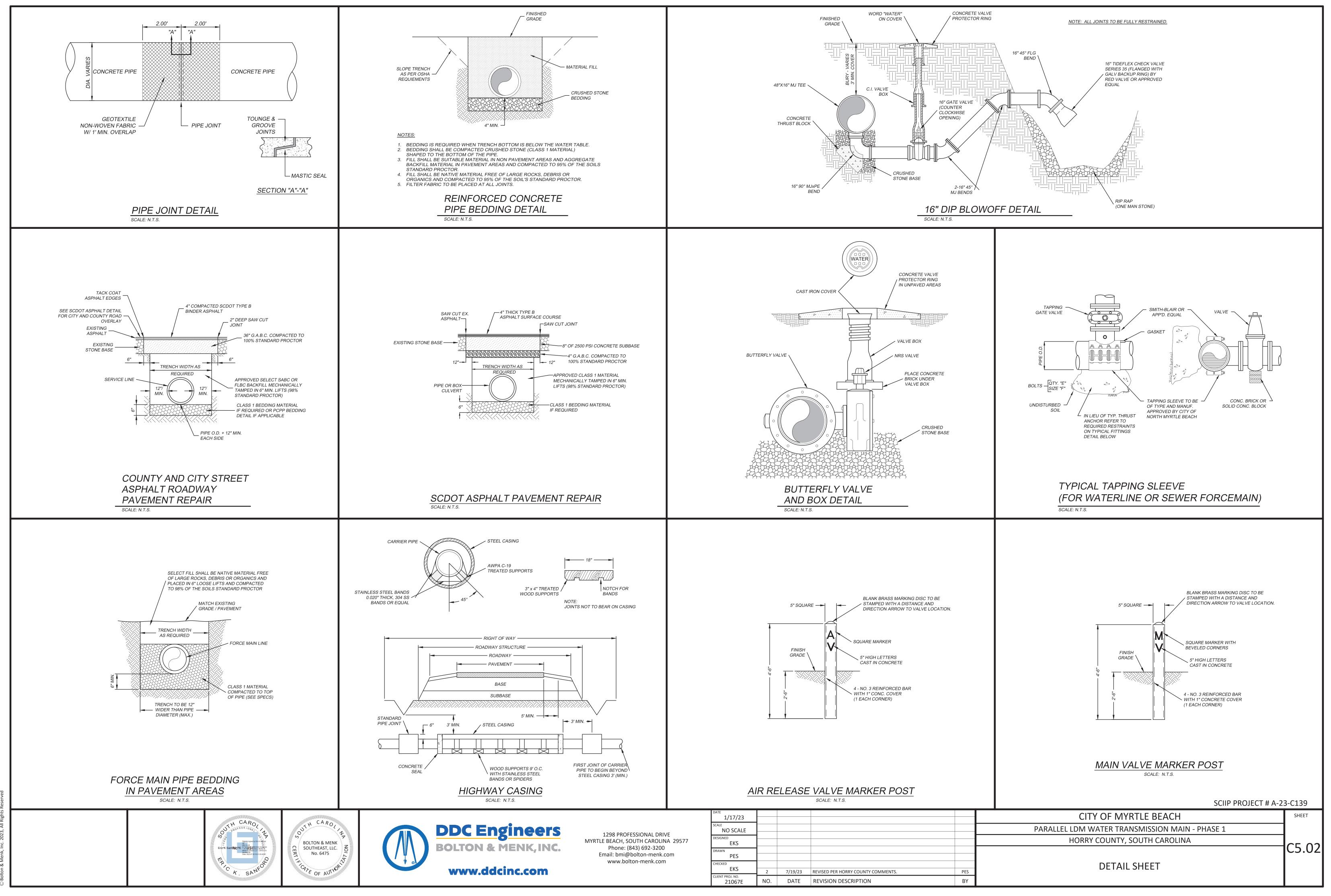
FUNCTIONING PRV STATION. THIS INCLUDES DELIVERY TO SITE. DELIVERY. 5. INSTALLER TO OFF-LOAD VAULT AND COORDINATE WITH SUPPLIER DELIVERY.

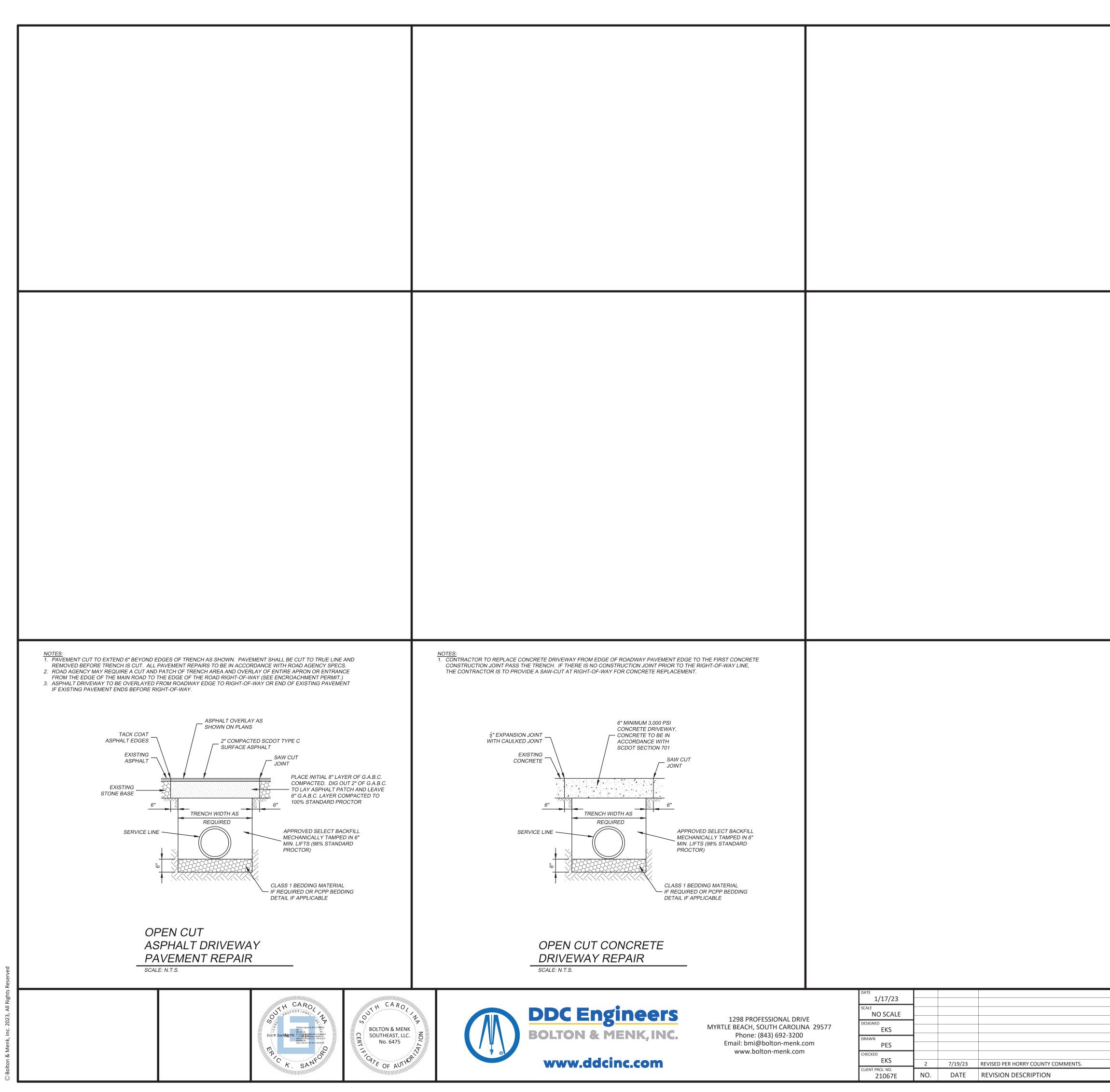
- INSTALLER MUST PROVIDE ALL EXCAVATION AND FINAL CONNECTIONS. 6. DISINFECTIONS, FINAL GRADE AND CONNECTIONS OUTSIDE OF THE VAULT ARE
- THE INSTALLERS RESPONSIBILITY. 7. PACKAGED PRV IS A.I.S. COMPLIANT.

	SCIIP PROJECT # A-2	.3-C139
	CITY OF MYRTLE BEACH	SHEET
	PARALLEL LDM WATER TRANSMISSION MAIN - PHASE 1	
	HORRY COUNTY, SOUTH CAROLINA	
PES BY	PROPOSED PRV #18 AND DETAILS	C3.10



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I		SCIIP PROJECT # A-2	
	1	CITY OF MYRTLE BEACH	SHEET
	}	PARALLEL LDM WATER TRANSMISSION MAIN - PHASE 1	4
	-	HORRY COUNTY, SOUTH CAROLINA	C5.03
	-	DETAIL SHEET	
PES	-		
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