FRIPP ISLAND PUBLIC SERVICE DISTRICT

Tuesday, March 12, 2019
Fripp Island Fire Station
9:30 a.m.

AGENDA

1. Call to Order

2. Pledge of Allegiance

3. Commission Meeting Minutes

   - Special Commission Meeting of February 5, 2019
   - Commission Meeting of February 12, 2019
   - Special Commission Meeting of February 28, 2019

4. Reports

   - Manager's Report for February, 2019
     December 31, 2018 Unaudited Financial Statements
   - Fire Department Report for February, 2019
   - Other

5. Old Business

6. New Business

   - General Legal Representation – Pope Flynn Group
   - Proposed Revisions to FIPSD Bylaws
   - US Hwy. 21 Waterline Project Engineering Cost Overrun
   - Review & Approval of Fripp Inlet Bridge Repair Plans & Bid Documents
   - Purchase of Fleet Vehicle for Water & Sewer Operations

7. Questions and Comments from Visitors

   - FIPOA Representative

8. Executive Session

   - Legal & Contractual Matters Pertaining to Financing of the Fripp Inlet Bridge Rehab/Repair Project

9. Upon returning to public session, the Commission may take such action(s) as it deems appropriate on the items discussed in executive session.

10. Adjourn

FRIPP ISLAND PUBLIC SERVICE DISTRICT

Minutes: Commission Meeting on March 12, 2019

Present: Dan H. McCormick, John W. Derrick, Richard S. Combes, Rick E. Keup, Warren S. McKay, and Michael J. Wilt

Absent: None

Staff: Angie Hughes, District Manager; Joshua Horton, Fire Chief; Yvonne Fireall, Office Manager

Guests: John Marsh (FIPOA), Mark Draves (FIPOA), Gary Pope – via Conference Call (Pope Flynn Group), Lon Carlson, Rita Riley, Gary Nizzi, Ed Wetzel, Stuart Mitchell, Bill Lyman, Walter Dany

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1. Chairman McCormick called the meeting to order at 9:30 a.m.

2. Chairman McCormick led the Commission in the Pledge of Allegiance.

3. The Commission approved the minutes of the February 5, 2019 special meeting, the February 12, 2019 regular meeting and the February 28, 2019 special meeting, as amended, upon a motion by Mr. Combes.

4. Reports

(a) The Commission reviewed the Manager's Report for February, 2019 and the December 31, 2018 unaudited financial statements (*Att A*).

5. The Commission agreed to proceed out of order with the first Meeting Agenda item under New Business. The Commission approved the engagement of Pope Flynn Group as outlined in the engagement letter dated March 6, 2019, upon a motion by Mr. Derrick *(Att B)*. The Commission then returned to the order of business as stated on the Meeting Agenda.

6. Reports

(a) The Commission reviewed the Fire Department Report for February, 2019 (*Att C*).

7. Old Business

8. New Business

(a) The Commission approved the first reading of proposed revisions to the FIPSD Bylaws (*Att D*), contingent upon legal review and approval, upon a motion by Mr. Derrick.

(b) The Commission reviewed a letter from JMT dated March 8, 2019 regarding additional engineering and management services during construction of the U.S. Hwy. 21 waterline replacement (*Att E*). The Commission agreed that the District is not liable for additional expenses due to changes

made in the field by the contractor and/or the engineer and directed the Manager to discuss this with the engineer and contractor.

(c) The Commission reviewed and approved the draft Fripp Inlet Bridge repair plans & bid documents, subject to final revision of dates *(Att F)*, upon a motion by Mr. McKay.

(d) The Commission agreed to add an agenda item to New Business for review of a quote for the purchase of a new truck for field operations from Butler Chrysler Dodge Jeep LLC *(Att G)* and approved the purchase, as quoted, upon a motion by Mr. Wilt.

9. The Commission entertained questions and comments from Mr. Dany and Mr. Lyman regarding the construction of bulkheads on the properties in River Club that front the Fripp Inlet Revetment.

10. The Commission entered executive session at 11:33 a.m. to discuss legal and contractual matters pertaining to financing of the Fripp Inlet Bridge Rehab/Repair Project, upon a motion by Mr. Combes. The Commission resumed open session at 12:00 p.m., upon a motion by Mr. Combes.

11. There being no further business, the meeting adjourned at 12:05 p.m.., upon a motion by Mr. McKay.

Dan H, McCormick
Chairman

Angel L. Hughes
Secretary

Att A

FRIPP ISLAND PUBLIC SERVICE DISTRICT
MANAGER'S REPORT FOR FEBRUARY 2019

I. Tap-Ins

	FY 2019		FY 2018		FY 2017	
Category	Feb	YTD	Feb	YTD	Feb	YTD
1. Water customers	1	3	1	4	1	2
2. Sewer customers						
a. Gravity	1	2	1	3	1	2
b. Vacuum	-	1	-	2	-	-

Total vacuum sewer customers: 560 of 725

II. Routine Operations

1. Butcher's Island and Hunting Island Booster Pumps Average Daily Run Time for February

	2019	Diff	2018	Diff	2017	Diff	2016
Butcher's Isl Pumps Hrs/Day	0.3	0.3	0.0	0.0	0.0	(0.1)	0.1
Hunting Isl Pumps Hrs/Day	0.7	0.7	0.0	0.0	0.0	(0.2)	0.2
Total Hrs/Day	1.0	1.0	0.0	0.0	0.0	(0.3)	0.3

2. Fripp Island Master Metered Water Use for February, Average Gallons per Day

	2019	% Change	2018	% Change	2017	% Change	2016
BJW&SA	319,179	20.0	265,893	0.7	264,143	2.5	257,607
Harbor Island	36,918	(3.8)	38,375	(2.7)	39,454	(5.1)	41,589
Hunt Island	31,664	119.3	14,439	384.7	2,979	(84.2)	18,864
Fripp Island	260,536	16.9	222,893	(4.8)	234,036	13.7	205,821
Accountability,%	103.1	N/A	103.7	N/A	104.7	N/A	103.4
Rainfall, Inches	0.8		1.5		0.9		3.3

3. The water tank levels and water line pressures were normal for February.

4. Wastewater Treatment Plant Flow for February, Gallons per Day

	2019	% Change	2018	% Change	2017	% Change	2016
Average Daily Flow	144,187	(0.5)	144,908	(1.9)	147,750	(7.7)	160,048
Weekly Max Flow	154,000	(0.6)	155,000	(0.6)	156,000	(9.8)	173,000
Peak Daily Flow	169,475	(15.0)	199,399	11.4	178,969	(13.5)	206,808

Peak daily flow of 169,475 occurred on Sat., 2/16/19, without rain. For Feb. 2018, peak daily flow occurred on Sat., 2/17/18, without rain. For Jan. 2017, peak daily flow occurred on Sun., 2/19/17 without rain. For Feb. 2016, peak daily flow occurred on Fri., 2/5/16 with 0.9 inches of rain.

5. The water system and wastewater treatment plant samples were satisfactory.

III. Emergencies, Special Field Work and Activities

1. Erosion Control
   a) During January, McSweeney Engineers was asked to evaluate stations 17+00 – 19+00 of the Fripp Inlet revetment and provide guidance on how to remediate the continued erosion of the road shoulder and slumping rocks. The engineer suggested using some of the excess sand that continues to wash onto the road to build up the base of the revetment and replace the filter fabric and rocks. At a special Commission meeting on February 5th, the Commission voted to sole-source the repair to Roger Wilson Construction Co. in order to move quickly before additional erosion could occur with the next king tide. Upon uncovering the base of the revetment, the contractor was unable to find filter fabric for about 100 feet of the 200-foot section, and he determined that much of the revetment there was comprised of small stone, rather than armor stone. After adding two feet of fill to the base of the revetment, placing filter fabric and replacing the rocks, it was determined that additional armor stone would be needed and, on February 28th, the Commission authorized an additional expense of up to $30,000 in armor stone for the area. At the end of February, the area was still under construction, but it will be completed prior to March 11th, when POA intends to begin the resurfacing of Porpoise Drive.

2. Fripp Inlet Bridge
   a) The Army Corps of Engineers issued a letter dated February 12, 2019 stating that the proposed bridge project is not considering a "regulated activity" and no ACOE permit is required. The project should be advertised for bid during the first half of March. The project is running approximately one month behind the originally anticipated schedule, but this should not affect the financing, and the construction could still begin in May if no other delays occur.

3. Water System
   a) The Harbor River Waterline replacement project is nearing full completion. Final roadway crossing pavement patches and miscellaneous cleanup were completed in February. Final inspections will take place following re-establishment of the road shoulders.
   b) During February, maintenance was done on all three elevated storage tanks. A washout inspection with minor paint touch-up was done on the 200k gallon tank at the front of the island, the 250k gallon tank at Ocean Creek was visually inspected and touched up, and a wet interior renovation was begun on the 75k gallon tank at the center of the island. This work involves sand-blasting and recoating the wet interior surface of the tank and should be completed by the end of the first week in March.

4. Wastewater System
   a) One of the pumps at the Ocean Creek sewer lift station was replaced during February at a cost of about $5,000. The existing pumps were installed sometime in the 90s. A replacement for the remaining old pump will be included in the budget for the next fiscal year.

5. Hargray Cable Installation
   a) District staff continue to locate lines and repair broken lines due to installation of Hargray's fiber optic cable and Hargray's installers are working closely with the District to minimize accidental line breaks. Mass emails are sent each time a water or sewer outage occurs, with a follow-up email when the line has been repaired.

FRIPP ISLAND PUBLIC SERVICE DISTRICT
July 1, 2018 through December 31, 2018
Statement of Revenues & Expenses
Water & Wastewater Operations

	Actual	Budget	Variance Favorable (Unfavorable)	Variance Comments
Operating revenues				
Water operations	513,742	470,175	43,567	Water sales
Water Tank Leases	119,758	117,380	2,378	
Wastewater operations	349,123	347,410	1,713	Sewer sales
Total operating revenues	982,623	934,965	47,658	
Cost of sales	(249,032)	(228,165)	(20,867)	Water sales
Gross profit from operations	733,591	706,800	26,791	
Operating expenses				
General & administrative	286,448	304,830	18,382	Salaries, engineering fees
Water system expenses	33,159	42,885	9,726	Booster pumps, water meter repair
Wastewater expenses	117,040	128,028	10,988	Sewer lines & wastewater treatment
Total operating expenses	436,647	475,743	39,096	
Earnings (loss) from operations	296,944	231,057	65,887	Water & sewer sales, timing
Nonoperating income (expenses)				
Interest earned	37,599	30,500	7,099	
Taxes & assessments collected	422,848	510,020	(87,172)	Timing of collections
Bond interest & expenses	(75,038)	(83,170)	8,132	Timing of payments
Net nonoperating income (expenses)	385,409	457,350	(71,941)	
Earnings (loss) before depreciation	682,353	688,407	(6,054)	
Depreciation/Loss on disposal	283,594	305,045	21,451	Timing of backhoe purchase
Net earnings (loss)	398,759	383,362	15,397	
Cash available on July 1, 2018			5,670,463	
Earnings (loss) before depreciation & debt amortization			682,353	
Changes in assets & liabilities				
(Increase) decrease in accounts receivable			52,434	
(Increase) decrease in inventory			(2,600)	
(Increase) decrease in prepaid expenses			16,476	
(Decrease) increase in accounts payable & transfers			(105,019)	
(Decrease) increase unrealized gains			(7,489)	
Net cash provided (used)			(46,199)	
Cash flow from capital & financing activities				
Asset additions/deletions & construction in progress			(150,211)	
Principal payments on bonds & deferred debt			(477,218)	GO bonds (WWTP) & Rev bond (VS)
Bond proceeds & contributed capital			-	
Net cash provided (used)			(627,429)	
Cash available on September 30, 2018			5,679,187	

Available cash includes following balance sheet accounts:	Beginning	Ending	Change Pos. (Neg.)
Cash (gross revenue, petty cash & contingency fund)	2,246,311	2,284,783	38,472
Due from Beaufort County Treasurer (Vac sewer assessments)	350,417	223,244	(127,173)
Investments & restricted cash (Sewer const fund, DS, invest.)	3,073,735	3,171,161	97,426
Total	5,670,463	5,679,187	8,724

FRIPP ISLAND PUBLIC SERVICE DISTRICT
July 1, 2018 through December 31, 2018
Statement of Revenues & Expenses
Fire Department & Erosion Operations

	Fire Department Fund			Erosion & Bridge Operations Fund			Fire Dept. Donations Fund		
	Actual	Budget	Variance Favorable (Unfavorable)	Actual	Budget	Variance Favorable (Unfavorable)	Actual	Budget	Variance Favorable (Unfavorable)
Revenues									
Taxes & penalties (ds transfers in)	309,122	265,640	43,482	105,833	95,375	10,458	-	-	-
Assessments, donations & FIPOA	-	600	(600)	-	-	-	25	-	25
Interest & miscellaneous	3,114	-	3,114	5,278	-	5,278	-	-	-
Total Revenues	312,236	266,240	45,996	111,111	95,375	15,736	25	-	25
Expenditures									
Employee expenses	218,271	243,565	25,294	-	-	-	-	-	-
General & Administrative	11,313	27,600	16,287	21,895	5,990	(15,905)	-	-	-
Operations	12,372	10,250	(2,122)	7,707	90,350	82,643	-	-	-
Total Operating Expenses	241,956	281,415	39,459	29,602	96,340	66,738	-	-	-
Bond Interest & expenses				28,935	28,935	0			
Capital outlay	34,481	35,000	519	55,525	-	(55,525)	268	-	(268)
Total Expenditures	276,437	316,415	39,978	114,062	125,275	11,213	268	-	(268)
Revenues over (under) expenditures	35,799	(50,175)	85,974	(2,951)	(29,900)	26,949	(243)	-	(243)
Cash available July 1, 2018	433,215	381,283	51,932	1,704,267	1,692,246	12,021	1,044	-	1,044
Revenues over (under) expenditures	35,799	(50,175)	85,974	(2,951)	(29,900)	26,949	(243)	-	(243)
Increase (decrease) payables & transfers	64,094	1,500	62,594	(50,945)	9,200	(60,145)	(22)	-	(22)
Cash available Sept. 30, 2018	533,107	332,608	200,500	1,650,372	1,671,546	(21,175)	780	-	780

Notes:
1. Favorable revenues collected for Fire Dept and Erosion & Bridge Operations were related to the timing of collections
2. Unfavorable G&A expenses for Erosion & Bridge Fund was for legal expenses related to the bridge GO bond, which will be reimbursed from proceeds of the bond
3. Unfavorable capital outlay for Erosion & Bridge Fund was for expenses related to bridge bent retrofits, which could not be budgeted but will be paid from proceeds of GO bond approved in Dec 2018 referendum

FRIPP ISLAND PUBLIC SERVICE DISTRICT
July 1, 2018 through December 31, 2018
Statement of Revenues & Expenses
Debt Service Fund

	Actual	Budget	Variance Favorable (Unfavorable)	Comments
Revenues				
Tax levy WWTP & Revetment	411,115	360,880	50,235	timing
Service assessments	-	-	-	
Interest, penalties & misc	4,188	-	4,188	int & penalties
Total Revenues	415,303	360,880	54,423	
Expenditures				
Interfund Transfer (wwtp & revmt G.O. bond P&I)	250,400	250,410	10	
Bond payment fees	-	-	-	
Total Expenditures	250,400	250,410	10	
Revenues over (under) expenditures	164,902	110,470	54,432	timing & int
Cash available July 1, 2018	296,700	286,920	9,780	
Revenues over (under) expenditures	164,902	110,470	54,432	
Increase (decrease) payables & transfers	-	-	-	
Cash available Sept. 30, 2018	461,602	397,390	64,212	timing *

For 1st quarter budget, assume zero tax revenue. Actual taxes collected during 1st quarter are delinquent taxes for prior fiscal year. Budget assumes 48% collection in 2nd quarter, 48% collection in 3rd quarter, and 4% collection in 4th quarter.

Expenditures include interfund transfers of quarterly SRF (wwtp) debt payments and biannual BB&T (revetment) debt payments.

Available cash on July 1, 2018 needs to be sufficient to cover July 1, 2018 & Oct.1, 2018 wwtp quarterly debt payments of $221,465.80 and Sept. 1, 2018 biannual revetment debt payment of $28,934.70.

*Favorable variance resulted from timing of collections versus due date of first payment for the SRF loan funding the Hwy 21 water line relocation.

FRIPP ISLAND PUBLIC SERVICE DISTRICT
Combined Balance Sheet
All Fund Types and Account Groups
December 31, 2018

	Governmental Fund Types			Proprietary Fund Type	Fiduciary Fund Type	Account Groups		Totals
	Erosion & Bridge	Fire Dept.	Debt Service	Wtr & Sew Dept.	Fire Dept. Donations	Governmental Fixed Assets	Long Term Debt	Sept 30 2017
ASSETS								
Available Cash	276,037	99,053		2,284,783	780			2,660,652
Due from Beaufort County Treasurer	101,918	434,054	461,602	223,244				1,220,817
Accounts receivable water & sewer system				376,018				376,018
Accounts receivable-other				12,380				12,380
Interfund receivable / transfer accounts								-
Inventory				24,550				24,550
Prepaid expenses				8,659				8,659
Restricted cash, debt service funds & investments	1,272,417			3,171,161				4,443,578
Fixed assets (net of accumulated depreciation)				12,177,379		7,277,945		19,455,324
Unamortized debt acquisition costs				146,480				146,480
Pension deferred outflows		146,066		145,249				291,315
Amount provided for retirement of long term debt								-
Total Assets	1,650,372	679,173	461,602	18,569,902	780	7,277,945	-	28,639,773
LIABILITIES								
Vouchers & accounts payable	26,165	7,364		49,678	-			83,207
Accrued employee expenses		6,544		4,802				11,345
Payable from restricted assets (accrued bond int.)								-
Deferred revenue				200				200
General obligation & revenue bonds payable	2,243,000			6,684,545				8,927,545
Pension liability & deferred inflows		837,450		832,769				1,670,219
Interfund payable / transfer accounts	(74,140)	73,858		6,687				6,405
Total liabilities	2,195,025	925,215	-	7,578,681	-	-	-	10,698,921
FUND EQUITY								
Contributed capital & G.O. bond proceeds				2,270,705				2,270,705
Investment in fixed assets						7,277,945		7,277,945
Unrealized gains (losses)	(11,630)			(135,902)				(147,532)
Retained earnings-Reserved for revenue bonds				233,207				233,207
Retained earnings-Unreserved beginning balance				8,224,451				8,224,451
Retained earnings-Year to date increase (decrease)				398,759				398,759
Fund balance-Reserved beg. bal. for debt service			296,700					296,700
Fund balance-Unreserved beginning balance	(530,073)	(281,841)			1,022			(810,891)
Fund balance-Year to date increase (decrease)	(2,950)	35,799	164,902		(243)			197,508
Total fund equity	(544,653)	(246,042)	461,602	10,991,220	780	7,277,945	-	17,940,852
Total liabilities & fund equity	1,650,372	679,173	461,602	18,569,902	780	7,277,945	-	28,639,773

Att B

POPE FLYNN
GROUP

Pope Flynn, LLC
1411 Gervais Street, Suite 300
Post Office Box 11509 (29211)
Columbia, SC 29201

MAIN 803.354.4900
FAX 803.354.4899
www.popeflynn.com

March 6, 2019

(Electronic Distribution Only)

Ms. Angie Hughes, Manager
Fripp Island Public Service District
291 Tarpon Boulevard
Fripp Island, SC 29920-7350

Re: Engagement Letter for Legal Representation of Fripp Island Public Service District, South Carolina - Advice & Counsel
File No. 30.1

Dear Angie:

This letter is to acknowledge and thank you for hiring Pope Flynn, LLC to represent Fripp Island Public Service District (the "District") as counsel in connection with ongoing advice and counsel matters on an as-requested basis. This engagement letter shall supersede and replace any prior engagement agreement for general advice and counsel (Matter 30.1). Accordingly, we and the District agree that the terms and scope of our representation, shall be as follows:

SCOPE OF ENGAGEMENT

We are representing the District in connection with advice and counsel matters, on an as-requested basis. The advice and counsel file serves as the file where we record our work for the District that is not otherwise specifically addressed by a separate engagement letter and does not involve transactional work for a bond issue or other borrowing.

We should advise you that our governmental advice and counsel practice typically does not involve real estate, employment or litigation matters and that we typically either directly engage another law firm as Pope Flynn's contractor or recommend to our clients to engage another law firm for these specific areas. We have found that these areas can be handled by firms focused in these areas on a more cost effective or efficient basis. Before contracting with any outside firm to assist us in representing the District, we will obtain the consent and direction of the District.

Unless specifically agreed otherwise in writing, we are not undertaking by this letter or our representation of the District to represent any other entity that may be involved in matters involving the District.

ATTORNEY-CLIENT RELATIONSHIP

Upon execution of this engagement letter, the District constitutes our client and an attorney-client relationship will exist between us. Our services as counsel are limited to those contracted for in this letter; and the District's execution of this engagement letter will constitute an acknowledgement of those limitations.

CONFLICTS

As you are aware, we represent many political subdivisions and companies. It is possible that during the time that we are representing the District, one or more of our present or future clients will have transactions with the District. We do not believe such representation, if it occurs, will adversely affect our ability to represent you as provided in this engagement letter, either because such matters will be sufficiently different from this matter so as to make such representations not adverse to our representation of you, or because the potential for such adversity is remote or minor and outweighed by the consideration that it is unlikely that advice given to the other client will be relevant to any aspect of this matter. Execution of this engagement letter will signify the District's consent to our representation of others consistent with the circumstances described in this paragraph.

FEES AND PAYMENT

For advice and counsel matters, our fees are based on hourly billing rates for all time spent working on various advice and counsel matters and we bill on a monthly basis. Each invoice will be itemized detailing each task performed, the professionals involved, and the time involved.

The invoice will also detail out-of-pocket expenses incurred to date, including fees and expenses of outside attorneys Pope Flynn contracts with for focused advice and services as set forth in the Scope of Engagement section above, along with instructions for payment. If you prefer a different format, please let me know. Certain of these expenses are more fully explained on the Schedule of Primary Charges, attached to this letter.

Listed below are the hourly billing rates of the professionals in our firm who may assist me from time-to-time in providing assistance with advice and counsel matters. It is anticipated that C.D. Rhodes and I will perform the bulk of any services, with Margaret Pope participating as warranted. We typically adjust our billing rates annually each January 1 and I will advise you if and when our rates are adjusted.

	Billing Rate
William M. Musser, Esquire	$450
Marc L. Oberdorff, Esquire	450
Josiah C. T. Lucas, Esquire	400
Matthew J. Davis, Esquire	400
Margaret C. Pope, Esquire	375
Lawrence E. Flynn III, Esquire	350
Gary T. Pope, Jr., Esquire	300

	Billing Rate
Lawrence E. Flynn, Jr.	300
CD Rhodes III, Esquire	250
Drew Hunsicker, Managing Paralegal	175
Angie Gould, Paralegal	150
Hannah Collier, Paralegal	150
Law Clerk	150

If the foregoing terms are acceptable to you, please so indicate by returning a copy of this engagement letter dated and signed by an authorized officer, retaining a copy for your files.

I look forward to working with you and the District.

With regards, I remain,

Gary T. Pope, Jr.

WE AGREE TO THE TERMS OF THIS ENGAGEMENT LETTER FOR LEGAL REPRESENTATION AS STATED ABOVE.

RE: LEGAL REPRESENTATION OF FRIPP ISLAND PUBLIC SERVICE DISTRICT, SOUTH CAROLINA - ADVICE & COUNSEL
FILE NO. 30.1

FRIPP ISLAND PUBLIC SERVICE DISTRICT, SOUTH CAROLINA

BY:_____

ITS: _____

DATE: _____

SCHEDULE OF PRIMARY CHARGES

Photocopies	10¢ per page.
Travel mileage	At IRS allowable rate – 58¢ per mile, effective 01/01/2019.
Other travel (airfare, hotels, lodging, meals, ground transportation)	At cost.
Postage	At cost.
Express courier services *(i.e., FedEx)*	At cost.
Out-of-Office messenger costs	$5 plus mileage charges indicated above.
Electronic legal research	WestLaw electronic legal research: You will be billed $15.00 per use, unless additional charges are incurred, which will be applied at their actual cost to your file.
Newspaper Publication	At cost – billed at the time of receipt of invoice from newspaper.

Att C

Fripp Island Fire Department
Monthly Report Summary
February 2019

Response Activities:

Total emergency responses for February, 16

	Feb 2019	Feb 2018	YTD CY19	YTD CY18
• Structure Fires	01	00	01	00
• Vehicle Fire	00	00	00	00
• Medical Emergencies	08	05	15	20
• Brush Fires	00	00	00	00
• Misc. Fire	02	02	04	04
• Service Calls	05	04	11	06
• Mutual Aid	00	00	00	00
• Auto Accident	00	00	01	00
	16	11	32	30

Average emergency response time:

4 minutes 54 seconds.

Inspections:

Feb 2019	Feb 2018	YTD CY19	YTD CY18
0	0	0	0

Training Activities:

No training for February.

Roster:

Total personnel active for February, 22

Vol.-04
Paid-18

Att D

FRIPP ISLAND PUBLIC SERVICE DISTRICT

BYLAWS

ARTICLE I – COMMISSION

The Public Service District shall be operated, managed and governed by a Commission known as The Fripp Island Public Service District Commission, which shall have and possess all the power and capacity now conferred or which may be hereafter conferred by the laws governing such public corporations in South Carolina as well as all of the broad powers specifically given to said Commission by its Enabling Legislation, incorporated as part of these bylaws by reference, including but not limited to water supply, fire protection, wastewater treatment and collection, and erosion control.

ARTICLE II – ELECTION OF COMMISSIONERS

Section 1. Qualifications

It is the intent of the District that those six (6) individuals elected to the Commission in accordance with the laws of the State of South Carolina and the policies and procedures as set forth in the provisions of these bylaws which follow be representatives of the customers of the District who reside and vote within the District and that they be persons who bring particular experience and interest beneficial to conducting the affairs of the District and Commission.

Section 2. Elections

The Beaufort County Election Commission has the responsibility and authority for conducting non-partisan elections for electing members to the Commission.

Section 3. Elections for Four Years

Candidates for the Commission must file a statement of intention of candidacy with the Beaufort County Election Commission. All commissioners will be elected on an at-large basis for terms of four years with terms staggered so that a simple majority of the commissioners are elected in a general election in an even-numbered year, and the remaining commissioners are elected at the next preceding and following general election in an even-numbered year. The terms of office of commissioners whose seats are subject to contest in a general election shall expire fourteen days following the general election.

Section 4. Elections to fill Vacancies

(a) Definition: Vacancy on the Commission shall exist in the case of any of the following events: the death, resignation, primary residency outside the District, or felony conviction of a Commissioner prior to the completion of the term of office for which elected.

(b) Declaration of Vacancy: Whenever a vacancy occurs on the Commission, the Commission shall notify the Beaufort County Election Commission, and the vacancy shall be filled by a special election to complete the term of office. Except, if the vacancy occurs no more than ninety days prior to the general election or the expiration of the vacant term, then the election shall be held on the same day as the general election. **(Note: Section 7-13-190 requires a primary for partisan elections on the 13th Tuesday after the vacancy & a special election on the 18th Tuesday unless the 18th Tuesday is no more than 60 days prior to the general election. For non-partisan elections; i.e., the PSD, a special election to fill the vacancy is required on the 13th Tuesday after the vacancy. Assuming the vacancy occurred on a Tuesday, the 13th Tuesday after the vacancy; i.e., the special election, would occur 91 days after the vacancy. Therefore, if the vacancy occurred within 90 days of the general election, it could result in a special election being held after the general election or after the term of office for the vacancy had expired.)**

(c) Special Elections to fill Vacancies: The Beaufort County Election Commission shall conduct non-partisan elections to fill vacancies on the Commission in the manner provided in Section 7-13-190 of the South Carolina Code of Laws.

ARTICLE III – OFFICERS

Section 1. Election

The Commission shall at the Annual Meeting (Article IV, Section 2[a]) elect by a majority vote a Chairman and a Vice-Chairman from its own members. It may also elect a Secretary-Treasurer of the Commission, together with such additional officers as in its opinion may be desirable for conducting the activities of the Commission. The Secretary-Treasurer need not be a member of the Commission. Only those Commissioners for the ensuing year shall vote in the election of officers for that year. If there is more than one nominee for the position being voted upon, a ballot shall be used.

Section 2. Term

Officers so elected shall serve for one (1) year or until their successors are elected and their terms of office shall begin immediately after the elections.

Section 3. Duties of the Chairman

The Chairman shall be the principal officer of the Commission and, subject to the control of the Commission, shall in general, supervise and control affairs of the

Commission. When present, the Chairman shall preside at all meetings of the Commission and may sign, with the Secretary-Treasurer or any other proper person of the Commission thereunto authorized by the Commission, instruments which the Commission has authorized to be executed, except in cases where the signing and execution thereof shall be expressly delegated by the Commission or these bylaws to some other officer of agent of the Commission, or shall be required by law to be otherwise signed or executed. The Chairman, in general, shall perform all duties incident to the office of Chairman and such other duties as may be prescribed by the Commission from time to time.

Section 4. Duties of the Vice-Chairman

In absence of the Chairman, the Vice-Chairman shall perform all the duties of the office of Chairman.

Section 5. Duties of the Secretary-Treasurer

The Secretary-Treasurer shall:

(a) keep the minutes of the proceedings of the Commission in one or more books provided for that purpose;

(b) see that all notices are duly given in accordance with the provisions of these bylaws or as required by law;

(c) be custodian of the records and of the seal of the Commission and see that the seal of the Commission is affixed to all documents, the execution of which on behalf of the Commission under its seal, is duly authorized;

(d) have charge and custody of and be responsible for all funds of the Commission;

(e) receive and give credit for monies due and payable to the Commission from any source whatsoever, and deposit all such monies in the name of the Commission in such banks, trust companies or other depositories keeping money invested in compliance with State law, bond issue resolutions, and other instructions from the Commission; and

(f) in general, perform all of the duties incident to the office of Secretary-Treasurer and such other duties as from time to time may be assigned to him by the Commission.

Section 6. Vacancy, Declaration of Vacancy, & Filling Vacancy by Commission

(a) Vacancy: Vacancy in the position of an officer of the Commission shall exist in the case of any of the following events: the death, resignation, or removal of the officer.

(b) Declaration of Vacancy: Any officer of the District may be removed, without or with cause, by a vote of a majority of all of the members of the Commission.

(c) Filling Vacancy by Commission: A vacancy of an officer may be filled until the next Annual meeting by the vote of the majority of the remaining members of the Commission.

ARTICLE IV – MEETINGS OF THE COMMISSION

Section 1. Place

Meetings of the Commission of the Public Service District shall be held at such place either within or without the State of South Carolina as may from time to time be designated by the Commission pursuant to authority hereinafter granted, or by the written consent of all persons entitled to vote thereof, given either before or after the meeting and filed with the Chairman of the Commission.

Section 2. Commission Meetings

(a) Monthly meetings: A monthly meeting of the members of the Commission shall be held on the second Tuesday of each month (or if that be a legal holiday, then on the next business day), or on such other date as may be previously agreed upon, at ~~the office of the Fripp Island Public Service District~~ such place that may be determined, from time to time, by the Commission on Fripp Island, South Carolina, for the consideration of the reports on the affairs of the District and for the transaction of such other business as may be brought before the meeting.

(b) Provision for and attendance at electronic meetings: In accordance with the provisions of the South Carolina Code of Laws, Commissioners may attend any regular or special meeting of the Commission by telephone or other electronic means if the meeting has been properly noticed, and all participants can hear the proceedings and be heard. Any number of Commissioners, including all, may attend electronically. Commissioners in attendance by phone shall have all rights, including, but not limited to, the right to make motions, second motions, discuss and vote upon any issue that may come before the Commission. If the Commission should move into executive session, those in attendance electronically, shall be permitted to participate, without restriction, in the executive session. The minutes of the proceedings shall reflect which

Commissioners were in attendance in person and which Commissioners were in attendance electronically.

~~(b)~~(c) Annual Meeting: The regular meeting on the second Tuesday in December shall be known as the Annual Meeting and shall be for the purpose of electing officers. In addition to all other regular business of all other regular monthly meetings, the outgoing Chairman shall chair the meeting for approval of the minutes of the prior meeting's minutes and conduct of old business. If the Chairman's term has expired prior to the annual meeting, then the Vice-Chairman shall chair the meeting for approval of the minutes of the prior meeting's minutes and conduction of old business. If the Vice-Chairman's term has expired prior to the annual meeting, then the Secretary shall chair the meeting for approval of the minutes of the prior meeting's minutes and conduction of old business. The Secretary shall then chair the meeting for the election of the other officers and such other business, which may come to the attention of the Commission.

Section 3. Notices

(a) Public Notice of Meeting: All notices of meetings shall comply with the provisions of the South Carolina Freedom of Information Act as set forth in Section 30-4-80 of the South Carolina Code of Laws.

(b) Notice of Special Meeting: Notice of all meetings of the Commission other than the regularly scheduled monthly meetings shall be given with not less than 24 hours notice to members of the Commission entitled to vote by the Chairman, the Vice-Chairman or such other person charged with that duty, or by any two (2) members of the Commission.

(c) Method of Notice: A notice may be given by the Commission to any member of the Commission and District Manger, either personally, by telephone or by mail or other means of written communication, charges prepaid, addressed to the member at his address appearing on the books of the Commission or given by him to the Commission for purpose of notice.

(d) Time and Contents of Notice: Notice of any meeting of the Commission shall specify the place, the day, and the hour of the meeting and, in the case of special meetings, the general nature of the business to be transacted. Any meeting may also be held pursuant to a written waiver of notice signed by the members of the Commission.

(e) Notice of Adjourned Meeting: When a Commission meeting is adjourned, notice of the time and place of the rescheduled meeting shall be announced at the meeting at which the adjournment is taken and shall comply with the notification provisions of the South Carolina Freedom of

Information Act as set forth in Section 30-4-80 of the South Carolina Code of Laws.

Section 4. Quorum

A majority of the members of the Commission entitled to vote thereof, present in person, shall constitute a quorum for the transaction of business at all meetings of the Commission except as may otherwise be provided by law. But, if there be less than a quorum, the members of the Commission so present may adjourn the meeting from time to time.

Section 5. Voting

At all meetings of the Commission, every member of the Commission is entitled to vote. Votes shall not be by ballot unless a member of the Commission requests a vote by ballot before the voting begins.

Section 6. Action

Only those acts or decisions done or made by a majority of the members of the Commission present at any meeting duly held at which a quorum is present and voting are the acts of the Commission.

Section 7. Chairman of Meeting

The Chairman of the Commission or, in his absence, the Vice-Chairman shall preside at all meetings of the Commission. In absence of both the Chairman and the Vice-Chairman, with the other four (4) Commissioners present (constituting a quorum), they shall elect by acclamation or by lot an Acting Chairman for that meeting. Should the Secretary also be absent, the Acting Chairman shall appoint an Acting Secretary for that meeting.

Section 8. Secretary of Meeting

The Chairman of the Commission shall appoint any person to act as Secretary of all meetings of the Commission. The District Manager may be appointed as the Secretary. The Secretary of the meeting shall record the minutes of the meeting of the Commission with the time and place of holding, whether regular or special, and if special, how authorized, the notice thereof given, the names of those present at the meeting, and the proceedings thereof.

Section 9. Validation of Meeting

Any action taken at any meeting of the Commission, no matter how called or wherever held, shall be deemed binding, if a quorum was present and a majority of the

Commissioners voted in favor of the action(s). Approval of the minutes recording the action(s) taken by a majority of the Commission, serves as validation of the meeting.

Section 10. Action Without Meeting

Any action which, may be properly brought before a meeting of the Commission, may be approved and implemented without necessity of a meeting if authorized either in writing by a majority of the members of the Commission or by telephone call and verbal approval by a majority of the members of the Commission. In the event of written approval, the document so evidencing the written approval shall be filed in the minutes of the District. In the event of verbal telephonic approval, a memorandum of the approval shall be filed with the minutes of the District. It is the Chairman's responsibility to ensure that any action of the Commission taken under this section will not be done to circumvent the spirit of the requirements of the Freedom of Information Act or any other State legislation that protects the public's right to know.

ARTICLE V – EXECUTION OF INSTRUMENTS & DEPOSITS OF FUNDS

Section 1. Authority for Execution of Contract and Instruments

The Commission, except as otherwise provided in these bylaws, may authorize any member of the Commission or the District Manager to enter into any contract or execute and deliver any instrument in the name of and on behalf of the Commission, and such authority may be general or confined to specific instances; and, unless so authorized, no member of the Commission, acting alone, shall have any power or authority to bind the Commission by any contract or engagement or to pledge its credit or to render it liable pecuniarily for any purpose or in any amount.

Section 2. Instruments Containing Corporate Seal

Unless otherwise specifically determined by the Commission or otherwise required by law, formal contracts of the Commission, promissory notes, deeds of trust, mortgages, security agreements, and other evidence of indebtedness of the Commission, and other corporate instruments or documents requiring the corporate seal, and certificates of shares of stock owned by the Commission, shall be executed, signed, or endorsed by the Chairman.

Section 3. Financial Transactions

(a) Bank Accounts and Deposits: All funds of the Commission shall be deposited from time to time to the credit of the Commission with such banks, bankers, trust companies, or other depositories as the Commission may select.

(b) Endorsement: Deposits to the credit of the Commission in any of its duly authorized depositories may be made by endorsement of the Chairman or

any member of the Commission or by hand-stamped impression in the name of the Commission.

(c) Signing of Checks, Drafts, etc.: All checks, drafts, or other order for payment of money, notes or other evidences of indebtedness, issued in the name of or payable to the Commission, shall be signed or endorsed by such person or persons and in such manner as shall be determined from time to time by resolution of the Commission.

ARTICLE VI – COMMISSION RECORDS, REPORTS AND SEAL

Section 1. Minutes of Commission Meetings

The Commission shall keep at its principal office, or such other place as the Commission may order, a book of minutes of all meetings of its members, with the time and place of holding, whether regular or special, and if special, how authorized, the notice thereof given, the names of those present at the Commission's meeting and the proceedings thereof.

Section 2. Books of Account

The Commission shall keep and maintain adequate and correct accounts of its properties and business transactions, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital and surplus. The financial affairs of the Commission shall be subject to detailed audit by a firm of independent certified public accountants with such audits to be made annually and the Commission-approved reports thereof being promptly provided to the appropriate agencies and institutions as prescribed by law and the District's bond covenants. In addition, any taxpayers of the District may obtain a copy of the reports upon payment of the reasonable costs of reproducing a copy of such audits.

ARTICLE VII – OFFICES

The Public Service District shall maintain a principal office in the State of South Carolina, as required by law, which shall be located within the County of Beaufort. The Public Service District may have such other offices, either within or without the County of Beaufort as the business of the Public Service District may from time to time require.

ARTICLE VIII – DISTRICT MANAGER

Section 1. Management

The District may, but shall not be required to, employ an individual to manage the daily affairs of the District.

Section 2. Delegation

The Commission may delegate to such manager such responsibilities and duties as the Commissioners deem appropriate.

ARTICLE IX – FISCAL YEAR

The fiscal year of the Commission shall commence on July 1 and end on June 30 of the next year.

ARTICLE X – MEMBER AND OFFICER INDEMNIFICATION

The District shall indemnify any and all of its Officers, Commissioners, and Employees, or former Officers, Commissioners, Employees, or any person who may have served at its request or by its election as a member or officer of the District, against expenses actually and necessarily incurred by them in connection with the defense or settlement of any action, suit or proceeding in which they, or any of them, are made parties, or a party, by reason of being or having been acting on behalf of the Commission, except in relation to matters as to which any such member, Commissioner or employee or former Commissioner or officer or person shall be adjudged in such action, suit or proceeding to be liable for willful misconduct in the performance of duty and to such matters as shall be settled by agreement predicated on the existence of such liability. The indemnification provided hereby shall not be deemed exclusive of any other right to which anyone seeking indemnification hereunder may be entitled under any bylaw, agreement, or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office. The District shall purchase and maintain insurance on the behalf of any Commissioner, officer, agent, employee or former member of officer or other person, against any liability asserted against them and incurred by him to the extent that the District would have the power to indemnify him against such liability under the provision of this Article and the law of South Carolina.

ARTICLE XI – CERTIFICATION, INSPECTION & AMENDMENT OF BYLAWS

Section 1. Certification & Inspection of Bylaws

The Commission shall keep in its principal office for the transaction of its business, the original or a copy of the bylaws as amended or otherwise altered to date, certified by the Secretary of the Commission, which shall be open to inspection at all reasonable times during office hours.

Section 2. Adoption, Amendment, Repeal of Bylaws of the Commission

Bylaws may be adopted, amended or repealed at any regular meeting of the Commission by a two-thirds vote of all Commissioners provided that the amendment has been submitted in writing at the previous regular meeting and further that such bylaws as adopted or amended are not in conflict with the enabling legislation here before referred to and/or other South Carolina laws.

ARTICLE XII – PARLIAMENTARY AUTHORITY

The rules contained in the current edition of Robert's Rules of Order, Newly Revised, shall govern the District in all cases to which they are applicable and in which they are not inconsistent with these bylaws and any special rules of order the District may adopt.

The Fripp Island Public Service District Commission at its regular meeting on July 8, 2003, hereby duly approves and adopts these Bylaws, which supersede the Bylaws revised on October 10, 1989.

Attest: _____
Secretary

_____
Chairman

_____
Commissioner

SEAL

_____
Commissioner

_____
Commissioner

_____
Commissioner

_____
Commissioner

ATE

March 8, 2019

Angel L. Hughes, Manager
Fripp Island Public Service District
291 Tarpon Boulevard, Fripp Island, SC 29920

Ref: 10" waterline replacement project, Harbor River Bridge

Re: Additional engineering and management services during construction

Dear Ms. Hughes,

Following up on our recent conversation regarding close-out documentation for the waterline replacement project, the subsequent items are presented for your review and eventual back-charge expenses under your contract with Quality Engineering USA, Inc.

During construction, JMT provided additional accommodations to Quality Enterprises to ensure the project maintained a forward progress despite their rollercoaster construction approach and schedule. These additional items ranged from excessive hours spent to review submittals, providing CM oversite beyond the intended scope, and modifying the original USACE wetlands permit to adapt to the change in HDD equipment setup.

JMT's main approach was established early in the project, our charge was to always provide expedited engineering and construction management oversite during the project to facilitate meeting the deadline of abandoning the existing waterline and support Quality Enterprises with reaching substantial completion. Fripp Island Public Service District's commitment to relocate this waterline within the timeline established by your Memorandum of Agreement with SCDOT was our prime directive and guiding influence.

The following items highlight most of the accommodations and represent elements for consideration of additional compensation.

1. Submittal documents with excessive review time
    a. Horizontal Direction Drilling qualifications
    b. Contractor Insurance Policies
        i. Incomplete Builder's Risk Policy
        ii. Evidentiary confirmation of additionally insured for FIPSD
2. Non-conformances for open-cut pipeline work
    a. Compaction testing by third party
    b. Wire line tracing installation
3. Excessive field oversite by construction management team
4. Modification to existing USACE wetlands permit
5. Inadvertent release of drilling fluids
6. Review and evaluation of actual HDD installation profile
7. Testing plan and procedures for new waterline

Our approach for resolving these additional accommodations provided to Quality Enterprises USA focused on only three specific items for consideration for compensation from Fripp Island Public Service District, with the remaining items offered without recompense to facilitate goodwill between our organizations.

I. Inadvertent release of drilling fluids. JMT provided evaluation of the incident to maintain compliance with the requirements of the USACE wetlands permit and DHEC's Critical Area Permit from Ocean and Coastal Resource Management. This release required specific site survey documentation, evaluation and monitoring of remediation conditions to ensure best management practices were implemented and release of fluid were fully contained. Our manpower accounting for this event totaled 28.5 manhours with a total labor value equal to $3498.30.

II. Modification of USACE Wetlands Permit. JMT provided evaluation and revision drawings for the relocation of entry and exit pits to compliment the actual construction methods for the Horizontal Directional Drilling operation. Informal approach attempts to simply switch pit locations were initially received by the USACE but eventually deemed un-acceptable by USACE and necessitated a formal revision request requiring a complete corrective narrative and revised project drawing re-submission. Our team hand walked this revision through the process to maintain the permit authorization and eventual re-authorization of the permit. Our manpower accounting for this task totaled 63.0 manhours with a total labor and expenses value equal to $8,603.30.

III. Excess work hours to facilitate contractor's schedule. JMT provided onsite construction management oversite hours beyond those work hours allotted within the contract documents. Work hours were specifically detailed in the Special Conditions section 1.10 which limited construction to 8-hour workdays for Monday through Friday. With the continuous work schedule enacted by site crews, working 10 to12-hour work shifts for seven to ten days continuously exceeded our original estimate for field staff. Our manpower accounting for this support totaled 248.0 manhours with a total labor value equal to $21,914.40.

The total for these three accommodations equals $34,016.00 for which we attribute the full amount, and the sole responsibility, to the execution of the construction work by Quality Enterprises USA, Inc.

JMT is proud of the work that was accomplished by the project's team and appreciates the diligence and professionalism demonstrated by Quality Enterprises USA. This waterline project is a success for all parties involved and we appreciate the opportunity to provide our services to your District. We look forward to discussing these accommodations with you and helping to resolve these items with Quality Enterprises USA, Inc.

Sincerely,
JOHNSON, MIRMIRAN & THOMPSON, INC.

Mike Luning, P.E.
Vice President

Att F

CONTRACT DOCUMENTS AND SPECIFICATIONS

PROJECT:

FRIPP INLET BRIDGE REPAIRS

FOR:

FRIPP ISLAND
Public Service District

291 TARPON BOULEVARD
FRIPP ISLAND, SOUTH CAROLINA 29920
ATTN: Ms. Angie Hughes
PHONE: (843) 838-2400

PREPARED BY:

JMT®

952 Houston Northcutt Boulevard, SUITE 100
MOUNT PLEASANT, SOUTH CAROLINA 29464
ATTN: MR. THAI TRINH, PE
PHONE: (843) 556-2624
EMAIL: ttrinh@jmt.com

Bid Opening Date: March 29, 2012, 2:00 PM at the JMT Office

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Division 2 Specifications
All work shall be completed in accordance with the SCDOT 2007 Standard Specifications for Highway Construction.

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Fripp Island Public Service District
Invitation for Construction Bids

PROJECT NAME: Fripp Inlet Bridge Repairs

BID SECURITY REQUIRED?	YES
PERFORMANCE BOND REQUIRED?	YES
PAYMENT BOND REQUIRED?	YES

DESCRIPTION OF PROJECT: The bridge repair work includes installation of twelve (12) new retrofit bents (each consisting of six 20" SQ piles located outside of the existing bent and pouring a new retrofit cap to encapsulate the new and existing piles); prestressed concrete beam spall repairs, reinforced concrete member spall repairs, embankment erosion repair, and replacement of three (3) timber dolphins.

The work shall be generally performed in accordance with the 2007 Standard Specifications for Highway Construction of the South Carolina Department of Transportation, as modified by these Contract Documents. Only Contractors that have been prequalified for bidding by the South Carolina Department of Transportation to perform bridge work are invited to submit bids.

ENGINEER NAME: JMT ENGINEER CONTACT: Thai Trinh, PE

ADDRESS: 952 Houston Northcutt Blvd., Suite 100 PHONE: (843) 556-2624 FAX: (843) 556-4329

CITY: Mount Pleasant STATE: SC ZIP: 29464 E-MAIL: ttrinh@jmt.com

PLANS ON FILE AT: JMT Office: 952 Houston Northcutt Blvd., Suite 100, Mt. Pleasant, SC 29464
FIPSD Office: 291 Tarpon Blvd., Fripp Island, SC 29920

PLANS MAY BE DOWNLOADED FROM:
South Carolina Business Opportunities: https://scbo.sc.gov/online-edition

PRE-BID CONFERENCE? NO MANDATORY ATTENDANCE? N/A

BID OPENING DATE: March 29, 201 TIME: 2:00 PM LOCATION: JMT Office

BID DELIVERY ADDRESS: JMT Office, 952 Houston Northcutt Blvd., Suite 100, Mt. Pleasant, SC 29464

PROJECT MANAGER:	Thai Trinh, PE (JMT)	PHONE: 843-556-2624	FAX: 843-556-4329
PROJECT OWNER:	Angie Hughes (FIPSD)	PHONE: 843-838-2400	FAX: 843-838-4900

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Fripp Island Public Service District
Instructions to Bidders

1. RECEIPT AND OPENING OF BIDS

Johnson, Mirmiran & Thompson, Inc. (JMT) (the "Engineer") on the behalf of Fripp Island Public Service District (FIPSD) (the "Owner"), will receive bids for the above project until (14:00) local time, where they shall be publicly opened and read aloud. The Owner may consider non-responsive any bid not prepared and submitted in accordance with these instructions and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time or authorized postponement. Any bid received after the time and date specified shall not be considered. No Bidder may withdraw a bid within 60 days after the date of the bid opening.

2. PREPARATION OF BID

Bids must be submitted in writing on the attached FIPSD Bid Form in whole dollar amounts. All blank spaces for bid prices must be filled in, in ink or typewritten, and the form must be fully completed and executed when submitted. Failure to provide all requested information as part of the submitted bid may be justification to deem the bid non-responsive, resulting in the rejection of the bid. Each bid must be submitted in a sealed envelope bearing on the outside the name and address of the Bidder and the name of the project for which the bid is submitted and the Contractor's license number. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to the Johnson, Mirmiran & Thompson, Inc. at 952 Houston Northcutt Boulevard, Suite 100, Charleston, SC 29464.

3. PRE-BID CONFERENCE (if scheduled)

N/A

4. SUBCONTRACTS

The Bidder is specifically advised that any person, firm or other party to whom it proposes to award a subcontract under this contract must be acceptable to the Owner. The Bidder must perform a minimum of 30% of the work with its own forces.

5. QUALIFICATIONS OF BIDDER

The Owner may make such investigations as it deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the Owner in a timely manner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner of the Bidder's qualifications to complete the project. The Contractor shall provide a copy of the bridge construction license and/or other proof of adequate experience.

6. BID SECURITY (if required)

Each bid must be accompanied by Bid Security in the amount of not less than 5% of the Base Bid in the form of a certified cashiers check or a Bid Bond, made payable to the Owner and issued by

a surety licensed to do business in South Carolina. The Bid Bond must be accompanied by a certified and current Power of Attorney by the Attorney-in-Fact. The Owner shall have the right to retain the Bid Security of any or all Bidders until such time as one of the three conditions listed below have been met:

1. The Construction Contract has been executed and both Performance and Payment Bonds have been furnished, if required.
2. The specified time has elapsed so that bids may be withdrawn.
3. The Owner has rejected all bids.

7. FAILURE TO ENTER INTO CONTRACT

Failure of the Bidder to execute and deliver the contract within ten (10) days after bid opening or failure to provide Performance and Payment Bonds and Certificate of Insurance within ten (10) days of receipt of a Notice of Award from the Owner, shall entitle the Owner to consider the Bidder non-responsive and to declare the Bid Security forfeited.

8. DATE OF COMMENCEMENT, COMPLETION AND LIQUIDATED DAMAGES

Bidder must agree to commence work as specified in a Notice to Proceed from the Owner and to fully complete the Base Bid and any awarded Bid Alternates within (30) calendar days after the Date of Commencement.

All work on the Project must be Completed in 270 Calendar Days from Notice to Proceed.

Bidder must agree also to pay as liquidated damages the sum of $ 200 for each calendar day thereafter that the project fails to reach Substantial Completion within the time allowed.

9. ADDENDA AND INTERPRETATIONS

No oral interpretation of the meaning of the plans, specifications or other pre-bid documents will be made. Requests for clarification should be made in writing to the Engineer identified in the Invitation for Construction Bids and to be given consideration must be received at least five (5) working days prior to the date fixed for the opening of bids. Any interpretations, corrections or changes will be issued in the form of written addenda and will be transmitted to all who are known to have received a complete set of biding documents by telephone, fax or other appropriate means with immediate follow-up with written addenda. Should the original Bid Date be postponed, the new Bid Date shall be no earlier than the fifth (5^{th}) calendar day after the date of issuance of the addendum postponing the original Bid Date. Failure of any Bidder to receive any such addendum or interpretation shall not relieve such Bidder from any obligation under its bid as submitted. All addenda so issued shall become part of the contract documents.

10. LAWS AND REGULATIONS

All applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

11. INTENT TO AWARD/EVALUATION OF BID ALTERNATES

It is the intent of the Owner to award a Contract to the lowest responsive and responsible Bidder. When bidding documents include Bid Alternates, the Owner shall have the right to award the contract to the apparent low bidder based on ANY COMBINATION of the BASE BID plus Bid

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Alternates or with no Bid Alternates, unless otherwise specifically provided in the Bid Documents. The Owner reserves the right to apply these Alternate prices in any combination or order for the overall benefit of the project as defined by the Owner. All requested Alternates must be bid.

12. OBLIGATION OF BIDDER

At the time of the opening of bids, each Bidder will be presumed to have inspected the site and the conditions relating to construction of the project, and to have read and become thoroughly familiar with the plans and contract documents, including all addenda. The failure or omission of any Bidder to visit the site or to examine any form, instrument or document shall in no way relieve any Bidder from any obligation with respect to his bid.

13. LICENSES

The successful Bidder shall obtain the appropriate Business Licenses prior to beginning the work of this contract. Bidder must also be licensed under the laws of the State of South Carolina for the specific category of work to be performed.

END OF INSTRUCTIONS TO BIDDERS

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Fripp Island Public Service District
Bid Form

BID SUBMITTED BY: Name:

Address:

FOR PROJECT: Fripp Inlet Bridge Repairs
(Name)

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OFFER

1. In response to the *Invitation for Construction Bids*, and in compliance with the *Instructions to Bidders* for the above-named Project, the undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into a Contract with the Fripp Island Public Service District (FIPSD) ("Owner") in the form included in the Bidding Documents, and to perform all Work as specified or indicated in the Bidding Documents, for the prices and within the time frames indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

2. BIDDER has submitted Bid Security as follows in the amount and form requested by the Bidding Documents:

   ☐ Bid Bond with Power of Attorney ☒ Cashier's Check
   (BIDDER check one)

3. BIDDER, by submitting this Bid, affirms that it has carefully examined the Bidding Documents and the other related data identified in the Bidding Documents, has visited the actual location of the Work, has satisfied itself as to all conditions and understands that, in signing this Bid Form it waives all rights to plead any misunderstanding regarding same and agrees to be bound by the provisions of said Bidding Documents and all statements made therein.

4. BIDDER acknowledges the receipt of the following Addenda to the Bidding Documents and has incorporated the effects of said Addenda into its Bid:
   ADDENDUM No.(s) _____

5. BIDDER accepts all terms and conditions of the *Invitation for Construction Bids*, including, without limitation, those dealing with the dispositions of Bid Security. BIDDER agrees that this Bid, including all Alternative Bid Items, if any, may not be revoked or withdrawn after the opening of bids, and shall remain open for acceptance for a period of 60 days following the Bid Date, or for such longer period of time that BIDDER may agree to in writing upon request of the OWNER. BIDDER understands that Bid Alternates that are not accepted in an initial award shall remain open for acceptance for the entire period set above and for such longer period as requested by OWNER and agreed to by BIDDER.

6. BIDDER herewith submits its offer to provide all labor, materials, equipment, tools of trades and labor, accessories, appliances, warranties and guarantees, and to pay all royalties, fees, permits, licenses and applicable taxes necessary to complete the construction work in accordance with the Bidding Documents:

6.1 UNIT PRICE WORK

For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated below:

NO.	ITEM*	ESTIMATED QUANTITY	UNIT PRICE	UNIT OF MEASURE	Extended Price
1	Mobilization	1		LS	
2	Repair Type 1: Beam Repair	2.7		CF	
3	Repair Type 2: Concrete Repair	2.6		CF	
4	Repair Type 3: Embankment Repair	920		CF	
---	Repair Type 4: Bent Retrofit	---	---	---	---
5	Reinf. Steel for Structures (Bridges)	168,718		LB	
6	Conc. For Structures-Class 4000	867.6		CY	
7	Prestr. Conc. Piling (20" SQ)	6,396		LF	
8	Prestr. Conc. Index Piling (20" SQ)	396		LF	
9	Prestr. Pile Point HP10x57	990		LF	
10	Dynamic Pile Analyzer Test Set-up	4		EA	
11	Pile Driving Set-up	72		EA	
				Sub Total	
12	Repair Type 5: Install Timber Dolphin (Alternative Bid Item)	3		EA	
				Grand Total	

The estimated quantities are not guaranteed, and determinations of actual quantities are to be made by the Engineer based on field conditions.

* The bid item includes all direct and indirect costs or expenses required to complete the work.

1. For the Beam and Concrete Repairs, the unit price bid for the pay item includes all material, equipment, and labor costs of the cleaning, removal of unsound concrete to a depth required to reach sound concrete, reinforcing, concrete, and any other work required to correctly repair the structural component as per the Contract Documents.
2. For the Embankment Repair, the unit price bid for the pay item includes all material, equipment, and labor costs of the placement of the fill, geotextile fabric, and sod, and any other work and any necessary traffic control required to correctly repair the embankment as per the Contract Documents.
3. For Bent Retrofit items, the unit price bid for the pay item includes all material, equipment, labor, necessary testing, and all other costs for the proper installation in accordance with the SCDOT 2007 Standard Specifications for Highway Construction.
4. Repair Type 5: Install Timber Dolphin is an alternative bid item. Contractors are required to provide a price for this bid item. However, the Owner may choose to include or exclude this repair at their sole discretion.

DRAFT

AGREEMENTS

By submitting this Bid, BIDDER hereby agrees to the following terms and conditions:

1. An incomplete Bid, or information not requested that is written on or attached to this Bid Form that could be considered a qualification of the Bid, may be cause for rejection of the Bid.
2. Unless otherwise provided in the Bidding Documents, BIDDER will provide Performance and Payment Bonds, each in the amount equal to 100% of the Contract Award, as a condition of execution of the Contract. Failure to supply such bonds as required by the Contract Documents shall result in forfeiture of the Bid Bond.
3. BIDDER agrees to provide all information requested by the OWNER to support the OWNER'S evaluation and determination of the BIDDER'S responsibility. Failure by BIDDER to supply requested information with respect to responsibility may be grounds for a determination of non-responsibility.
4. The BIDDER certifies that it will provide a "Drug-Free Workplace" as that term is defined in Section 44-107-30 of the SC Code of Laws, and shall comply with the requirements set forth in Title 44, Chapter 107.

5. At any time prior to the issuance of the Notice to Proceed for this Project, this Contract may be cancelled for the convenience of the Owner.
6. Neither the Owner nor any of its employees or agents shall be responsible for any bid preparation costs, or any costs or charges of any type, should all bids be rejected, or the Project cancelled for any reason prior to the issuance of the Notice to Proceed.

DRAFT

BIDDER'S TAXPAYER IDENTIFICATION

FEDERAL EMPLOYER'S IDENTIFICATION NUMBER: _____
OR
SOCIAL SECURITY NUMBER: _____

CONTRACTOR'S CLASSIFICATIONS AND SUBCLASSIFICATIONS WITH LIMITATIONS

_____ _____ _____
(Classification) *(Subclassification)* *(Limitations)*

_____
(SC Contractor's License Number)

SIGNATURE

_____
(Legal Name of Person, Firm or Corporation Submitting Bid)

_____ _____
BY (Signature) (Date)

_____ _____
(Title) (Phone)

At the Bidder's option, this form may be substituted with a Bid Bond and Power of Attorney form from the Bidder's Surety Company. The Bidder is cautioned that all pertinent information included on this form shall be incorporated in the bid security form executed and submitted.

BID BOND

DRAFT

KNOW ALL MEN BY THESE PRESENTS THAT

_____ , as Principal,
(insert full name and legal title of Bidder)

and _____ , as Surety, are
(insert full name of Surety)

held and firmly bound unto the Fripp Island Public Service District, as Owner, in the penal sum of

_____ dollars ($_____)

for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed, this _____ day of _____ , 20__.

The condition of this obligation is such that whereas the Principal has submitted to the Owner a certain Bid, attached hereto and hereby made a part hereof, to enter into a contract in writing, hereinafter referred to as the "AGREEMENT" for

_____ Fripp Island, South Carolina
(Project Name)

NOW THEREFORE,

(a) If said BID shall be rejected, or in the alternative,

(b) If said BID shall be accepted and the Principal shall duly execute and deliver the form of AGREEMENT attached hereto (properly completed in accordance with said bid) and shall furnish the specified bonds for the faithful performance of the Contract and for the payment for labor and materials furnished for the performance of the AGREEMENT, then this obligation shall be void, otherwise it shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder in no event shall exceed the amount of this obligation as herein stated.

The Surety, for value received, hereby agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extensions of the time within which the Owner may accept such BID; and said Surety does hereby waive notice of any such extensions.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

(SEAL)

_____
(Name of Principal)

By: _____

(SEAL)

_____
(Name of Surety)

By: _____

Sealed and delivered in the presence of:

_____

_____

DRAFT

At the Contractor's option, this form may be substituted with a Power of Attorney form from the Contractor's Surety Company. The Contractor is cautioned that all pertinent information included on this form shall be incorporated in the executed and submitted security form.

CERTIFICATE OF GRANTEE / BORROWER'S ATTORNEY

I, the undersigned, _____,
the duly authorized and acting legal representative of _____
_____, do hereby certify as follows:

I have examined the attached contract(s) and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties' names thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

_____ _____
(Signature) (Date)

DRAFT

At the Contractor's option, this form may be substituted with a Performance Bond and Power of Attorney form from the Contractor's Surety Company. The Contractor is cautioned that all pertinent information included on this form shall be incorporated in the executed and submitted security form.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that _____
(Name of Contractor)

at _____
(Address of Contractor)

a _____, hereinafter called "Principal",
(Corporation, Partnership or Individual)

and _____
(Name of Surety)

at _____, hereinafter called "Surety", are held
(Address of Surety)

and firmly bound unto the Fripp Island Public Service District, 291 Tarpon Boulevard, Fripp Island, SC, 29920, hereinafter called "Owner", in the penal sum of :

_____ Dollars($_____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated the _____day of _____, 20__, a copy of which is hereto attached and made a part hereof for the construction of:

_____
(Project Name)

NOW, THEREFORE, is the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, then this obligation shall be void; otherwise it shall remain in full force and effect.

PROVIDED FURTHER, that the said Surety, for value hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alterations or addition to the terms of the contract or to the work or to the specification.

PROVIDED FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the ___ day of _____, 20__ .

ATTEST:

_____
(Principal) Secretary

_____
(Principal)
By: _____

(SEAL)

_____
(Witness as to Principal)

_____
(Address)

_____

_____
(Surety)

ATTEST:

_____
(Surety) Secretary

(SEAL)

_____

By: _____
(Attorney -in-fact)

_____
(Address)

_____

_____
(Address)

_____

NOTE: Date of bond must not be prior to date of Contract.
If Contractor is Partnership, all partners should execute bond.

Important: Surety companies executing bonds must appear on the Treasury Department most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

DRAFT

At the Contractor's option, this form may be substituted with a Payment Bond and Power of Attorney form from the Contractor's Surety Company. The Contractor is cautioned that all pertinent information included on this form shall be incorporated in the executed and submitted security form.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

that _____ at _____
(Name of Contractor) (Address of Contractor)

a _____, hereinafter called "Principal", and
(Corporation, Partnership or Individual)

_____ at _____,
(Name of Surety) (Address of Surety)

herinafter called "Surety", are held and firmly bound unto the Fripp Island Public Service District, 291 Tarpon Boulevard, Fripp Island, SC, 29920, hereinafter called "Owner", in the penal sum of

_____ Dollars ($_____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated the _____ day of _____, 2002, a copy of which is hereto attached and made a part hereof for the construction of:

_____
(Project Name)

NOW, THEREFORE, is the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alterations or addition to the terms of the contract or to the work or to the specification.

PROVIDED FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

DRAFT

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the ___ day of _____, 20____.

ATTEST:

_____
(Principal) Secretary

(SEAL)

_____
(Witness as to Principal)

_____

ATTEST:

_____
(Surety) Secretary

(SEAL)

_____

_____
(Address)

_____

_____
(Principal)
By: _____

_____
(Address)

_____
(Surety)

By: _____
(Attorney-in-Fact)

_____
(Address)

_____

NOTE: Date of bond must not be prior to date of Contract.
If Contractor is Partnership, all partners should execute bond.

Important: Surety companies executing bonds must appear on the Treasury Department most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

DRAFT

CONTRACTOR'S REQUEST FOR CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT: _____
(name)

This is Part One of a two-part form. It is to be completed by the Contractor and delivered to the Engineer. Part Two, Certificate of Substantial Completion, is to be completed by the Engineer and submitted to the Owner for approval.

CERTIFICATION

I hereby certify that Substantial Completion has been accomplished in conformance with the requirements of the Contract. This certification declares that:

A. The remaining work is not disruptive to the function of the facility and is limited to items minor in scope and nature.
B. The required Contractor's Punch List is attached. (*Failure to include incomplete work does not relieve the Contractor of the responsibility to complete or correct the Work.*)
C. All other requirements of the Contract have been accomplished, including delivery of all operational and maintenance manuals, record drawings, maintenance training, warrantee certificates and start-up activities.

SPECIAL CONDITIONS OR STIPULATIONS CONCERNING THE COMPLETION OF PUNCH LIST ITEMS OR EXPLANATIONS OF PARTIAL SUBSTANTIAL COMPLETION:

_____
_____
_____

CONTRACTOR: _____ _____ _____
(Signature of Contractor Representative) *(Print or Type Name of Contractor Rep)* *Date*

INSTRUCTIONS TO THE CONTRACTOR:
Forward this completed form with all required attachments to the Engineer for approval, with copy to the Owner. **ATTACHMENTS:**
1. Contractor's Punch List.
2. Acceptance letters by other agencies/entities having approval authority (water supply, waste water treatment, fire and licensing etc.)
3. Other attachments per Contract Documents

ENGINEER: I ___ concur ___ do not concur that the Work is ready for inspection and testing.

_____ _____ _____
(Signature of Engineer Representative) *(Print or type Name of Engineer Rep)* *(Date)*

INSTRUCTIONS TO THE ENGINEER:
1. If concur, return this completed form to the Contractor, with a copy to the Owner, and schedule a date for inspection mutually agreeable to Contractor, Engineer and Owner.
2. If not concur, state reason(s) below. Attach additional sheets if needed. Return completed form to the Contractor with copy to the Owner.

_____
_____
_____
_____

DRAFT

CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT: _____
(name)

This is Part Two of a two-part form. The Contractor's Request for Certificate of Substantial Completion is to be completed by the Contractor and delivered to the Engineer. The Certificate of Substantial Completion is to be completed by the Engineer and submitted to the Owner for approval.

CERTIFICATION

I hereby certify that Substantial Completion has been accomplished in conformance with the requirements of the Contract. This certification declares that:

A. The remaining work is not disruptive to the function of the facility occupants and is limited to items minor in nature and scope. *(Examples are minor repairs to finishes, electrical device cover plates, and hardware and window adjustments.)*
B. The Contractor's Request for Certificate of Substantial Completion and all attachments thereto have been reviewed and any exceptions are noted.
C. The composite Engineer's Punch List is attached, with the status of each item noted.
D. All other requirements of the Contract related to Substantial Completion have been accomplished, including delivery of all operational and maintenance manuals, record drawings, maintenance training, warrantee certificates and start up activities.

DATE FOR SUBSTANTIAL COMPLETION: _____
(This is also the date for the commencement of warranties required by the Contract.) *(DATE)*

SPECIAL CONDITIONS OR STIPULATIONS CONCERNING THE COMPLETION OF PUNCH LIST ITEMS OR EXPLANATIONS OF PARTIAL SUBSTANTIAL COMPLETION.

ENGINEER's CERTIFICATE BY:

_____ _____
(Signature of Engineer Representative) *(Print or Type Name of Engineer Rep)*

ITS: _____ _____
(Date)

INSTRUCTIONS TO THE ENGINEER:
Forward both the Contractors Request and this form with attachments to the Owner for review and approval.

OWNER ACCEPTANCE:

_____ _____
(Signature of Owner Representative) *(Print or Type Name of Owner Rep)*

ITS: _____ _____
(Date)

DRAFT

CERTIFICATE OF FINAL COMPLETION

PROJECT: _____
(name)

CONTRACTOR'S NOTIFICATION AND CERTIFICATION

I hereby notify the Engineer and the Owner that the Work for the above Project is or will be fully completed on the date stated below. All items on the punch-list and all items required by the Construction Documents have been completed and all Work is in conformance with the Contract Documents. The Facility is or will be ready for FINAL INSPECTION and TESTING on _____.
(Date)

CONTRACTOR:

BY: _____ _____
(Signature of Contractor Representative) *(Print or Type Name of Contractor Representative)*

ITS: _____

ENGINEER'S CERTIFICATE AND OWNER ACCEPTANCE OF FINAL COMPLETION

The Engineer and Owner agree that the Project is complete and the Final Inspection of the Project was acceptable. Final Completion of the Project is hereby declared to be effective on the date stated below.

SPECIAL CONDITIONS OR STIPULATIONS CONCERNING FINAL COMPLETION

_____
_____
_____

ENGINEER CERTIFICATION:

BY: _____ _____
(Signature of Engineer Representative) *(Print or Type Name of Engineer Representative)*

ITS: _____ _____
Date of Final Completion

OWNER ACCEPTANCE:

BY: _____ _____
(Signature of Owner Representative) *(Print or Type Name of Owner Representative)*

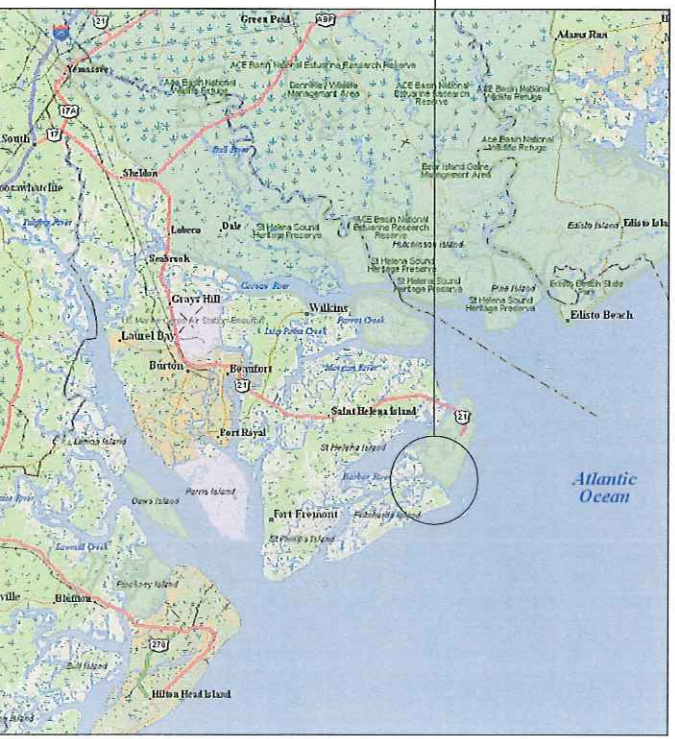
ITS: _____ _____
Date of Acceptance

DRAFT

FRIPP INLET BRIDGE REPAIRS
FRIPP ISLAND, SOUTH CAROLINA
MARCH 2019

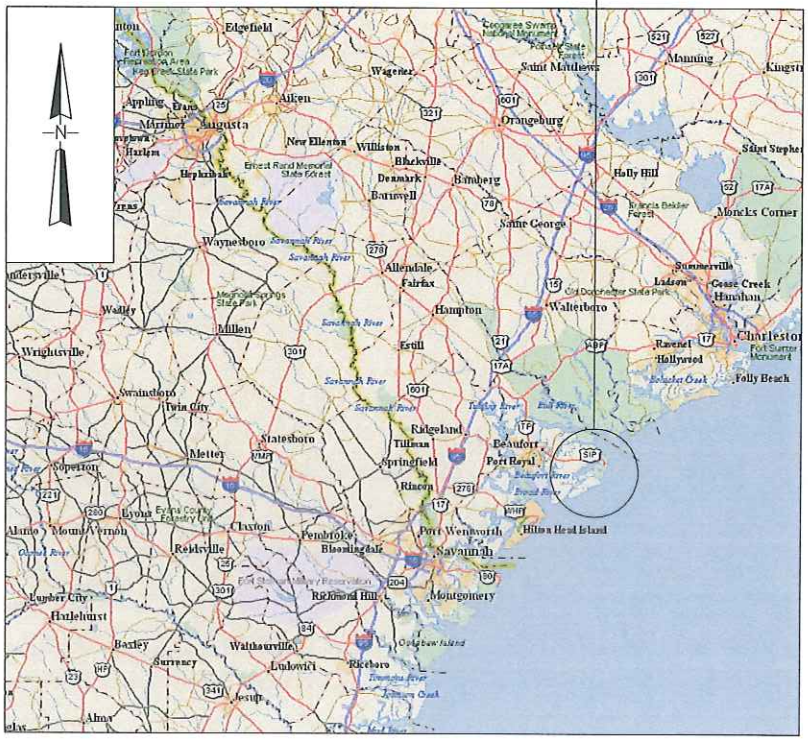
TS 4, 18, 35-37, 39-41, & 43-44)
TS 4, 18, 35-37, 39-41, & 43-44)
42)
42)

BRIDGE LOCATION



LOCATION

BRIDGE LOCATION



VICINITY

APPROXIMATE LOCATION OF BRIDGE:
LONGITUDE 32° 20' 15"N
LATITUDE 80° 27' 54"W

JMT
952 HOUSTON NORTHCUTT BLVD, SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

FRIPP ISLAND Public Service District

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 24002 THAI G. TRINH

REV.			
REV.			
REVIEWED	TGT		
QUAN.	–	–	–
DR.	LMB	TGT	03-19
DES.	LMB	TGT	03-19
	BY	CHK.	DATE

FRIPP INLET BRIDGE REPAIRS

COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE

ACE SPECIFICATIONS. SEE
DITION TO GENERAL NOTES.
TANDARD SPECIFICATIONS

SIONS AND EXISTING
IFY THE OWNER IN WRITING
SHALL NOT BEGIN
EA UNTIL THE DISCREPANCY

EGULATIONS ARE TO BE
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ONTRACT PLANS ARE BASED
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TOR. ALL EXISTING
AWINGS DATED 1961, 1980,
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EMENTS OF THE CONTRACT

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OF THE OWNER.

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SIBILITY OF THE

THESE CONTRACT
DESIGN DOCUMENTS DATED
REMENTS AND ARE SUBJECT

R, EQUIPMENT, AND
N OF THE PROJECT.

ON FROM THE CONTRACT
FROM THE OWNER.

R OF ANY DISCREPANCIES
EXISTING CONDITIONS FOR
HE WORK.

ERHEAD LINES AND
PLANS ARE OF REFERENCE
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VERIFYING AND LOCATING
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MEANS HE MAY PREFER,
TING UNDERGROUND LINES
OPERATIONS. THE
OR THE WORKMANLIKE
TIES DURING WORK UNDER
AMILIARIZE HIMSELF WITH
D TO ADEQUATELY CARE
NER FROM DAMAGE.

WATER ELEVATIONS

THE WATER ELEVATIONS SHOWN IN THE PLANS ARE FOR INFORMATION ONLY AND THE ACTUAL WATER ELEVATION DURING CONSTRUCTION MAY VARY DEPENDING ON WEATHER CONDITIONS AND SEASONAL FLUCTUATIONS.

REINFORCING STEEL

FABRICATE REINFORCING BARS IN ACCORDANCE WITH THE CURRENT C.R.S.I. MANUAL OF STANDARD PRACTICE EXCEPT FOR TIES AND STIRRUPS. PROVIDE ALL TIES AND STIRRUPS WITH 135° HOOKS THAT HAVE EXTENSIONS NO LESS THAN THE LARGER OF TEN BAR DIAMETERS OR SIX INCHES.

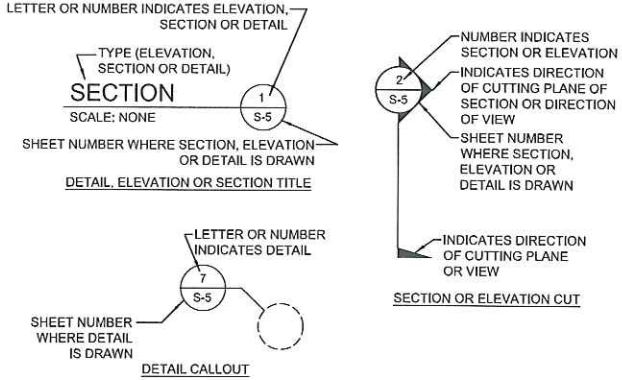
CHANNEL BOTTOM NOTES

CHANNEL BOTTOM ELEVATIONS WERE OBTAINED FROM FASCIA SOUNDINGS COMPLETED ON JANUARY 24, 2019.

SUMMARY OF ESTIMATED QUANTITIES

REPAIR ITEM	UNIT	QUANTITY
MOBILIZATION	LS	NEC.
REPAIR TYPE 1: BEAM REPAIR	CF	2.7
REPAIR TYPE 2: CONCRETE REPAIR	CF	2.6
REPAIR TYPE 3: EMBANKMENT REPAIR	CF	920
REPAIR TYPE 4: BENT RETROFIT (		
REINF. STEEL FOR STRUCTURES (BRIDGES)	LB	168,718
CONCRETE FOR STRUCTURES - CLASS 4000	CY	867.6
PRESSTRESSED CONCRETE PILING (20" SQUARE)	LF	6,396
PRESTRESSED CONCRETE INDEX PILING (20" SQUARE)	LF	396
PRESTRESSED PILE POINT HP 10X57	LF	990
DYNAMIC PILE ANALYZER TEST SET-UP	EA	4
PILE DRIVING SET-UP	EA	
REPAIR TYPE 5: INSTALL TIMBER DOLHPIN (ALTERNATIVE BID ITEM)	EA	3

SYMBOLS LEGEND



SHEET NO. S2

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 24002 THAI G. TRINH

REV.				
REV.				
REVIEWED	TGT			
QUAN.	CSS	LMB	03-19	
DR.	LMB	TGT	03-19	
DES.	LMB	TGT	03-19	
	BY	CHK.	DATE	

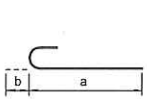
JMT
952 HOUSTON NORTHCUTT BLVD. SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

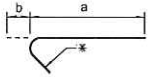
FRIPP ISLAND Public Service District

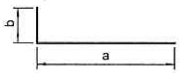
GENERAL NOTES

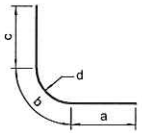
COUNTY: BEAUFORT

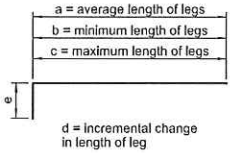
ROUTE: FRIPP INLET BRIDGE


BARS B

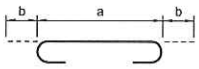

BARS BA


BARS C


BARS CA



BARS CV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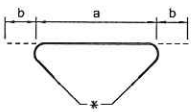
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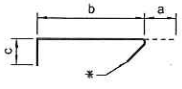
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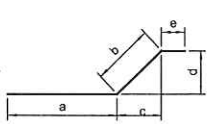
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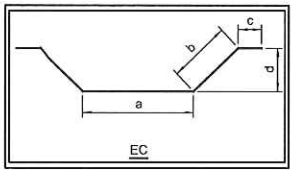
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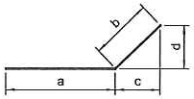
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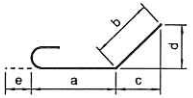
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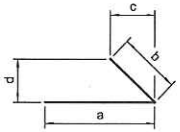
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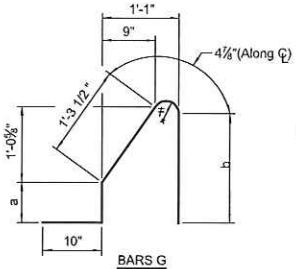

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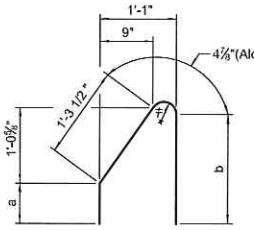

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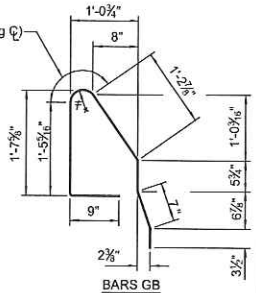

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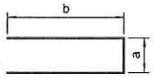
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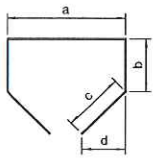
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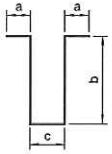
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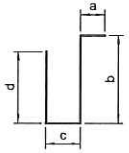
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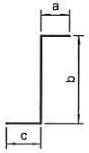
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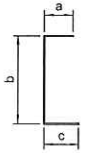
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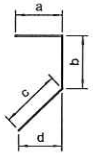
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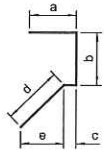
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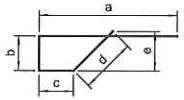
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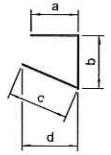
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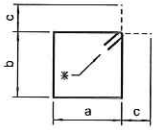
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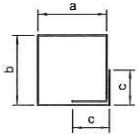
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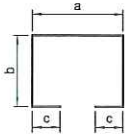
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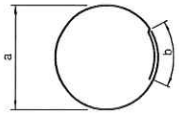
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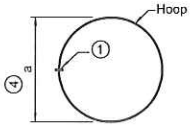

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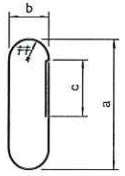
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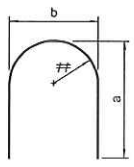
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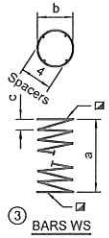
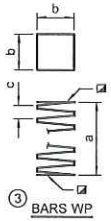
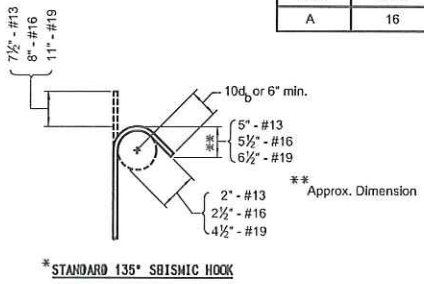


③ BARS WS


③ BARS WP

REINFORCING STEEL CODE

TYPE	SIZE	SERIES	COUPLER
A	16	01	②



*STANDARD 135° SEISMIC HOOK

NOTES:

DIMENSIONS SHOWN ARE OUT-TO-OUT AND STANDARD C.R.S.I. BENDING DETAILS SHALL APPLY, EXCEPT AS NOTED.

ǂ - 1⅝" INSIDE RADIUS

ǂǂ - OUTSIDE RADIUS = B/2

◪ - 1½ TURNS @ A CLOSED PITCH SECURED BY AN ULTIMATE WELDED LAP SPLICE.

① ULTIMATE BUTT-WELDED SPLICE - USE COMPLETE JOINT PENETRATION BUTT WELD CONFORMING TO THE REQUIREMENTS OF AWS D1.4/D1.4M STRUCTURAL WELDING CODE - REINFORCING STEEL (LATEST EDITION) AND THE STANDARD SPECIFICATIONS.

② IF A MECHANICAL COUPLER IS REQUIRED, THE REINFORCING STEEL CODE INCLUDES A DESIGNATION OF "S" FOR A STANDARD COUPLER AND A DESIGNATION OF "U" FOR AN ULTIMATE COUPLER. UNLESS NOTED OTHERWISE, BAR LENGTHS SHOWN IN THE REINFORCING STEEL SCHEDULES ARE TO THE CENTER OF THE COUPLER. IF NECESSARY, ADJUST THE LENGTH OF THE BARS TO MAINTAIN THE REQUIRED CONCRETE COVER.

③ SPLICE WS AND WP BARS WITH EITHER ULTIMATE WELDED LAP SPLICES OR ULTIMATE MECHANICAL COUPLERS. USE OVER AND UNDER LAP SPLICES, NOT SIDE BY SIDE, TO MAINTAIN BAR CLEARANCES.

④ THE FABRICATION TOLERANCE FOR WELDED HOOP DIAMETER IS ± ½ INCH.

JMT
952 HOUSTON NORTHCUTT BLVD. SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

FRIPP ISLAND Public Service District

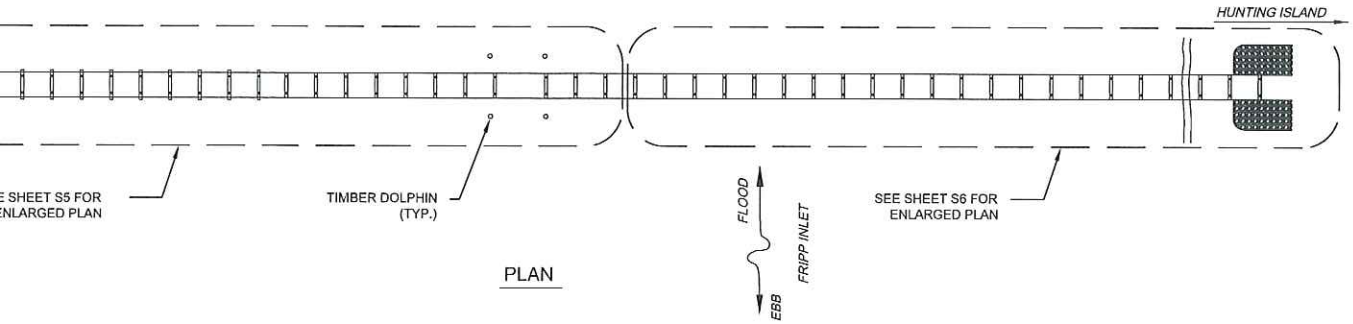
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 24002 THAI G. TRINH

REV.			
REV.			
REVIEWED	TGT		
QUAN.	–	–	–
DR.	LMB	TGT	03-19
DES.	LMB	TGT	03-19
	BY	CHK.	DATE

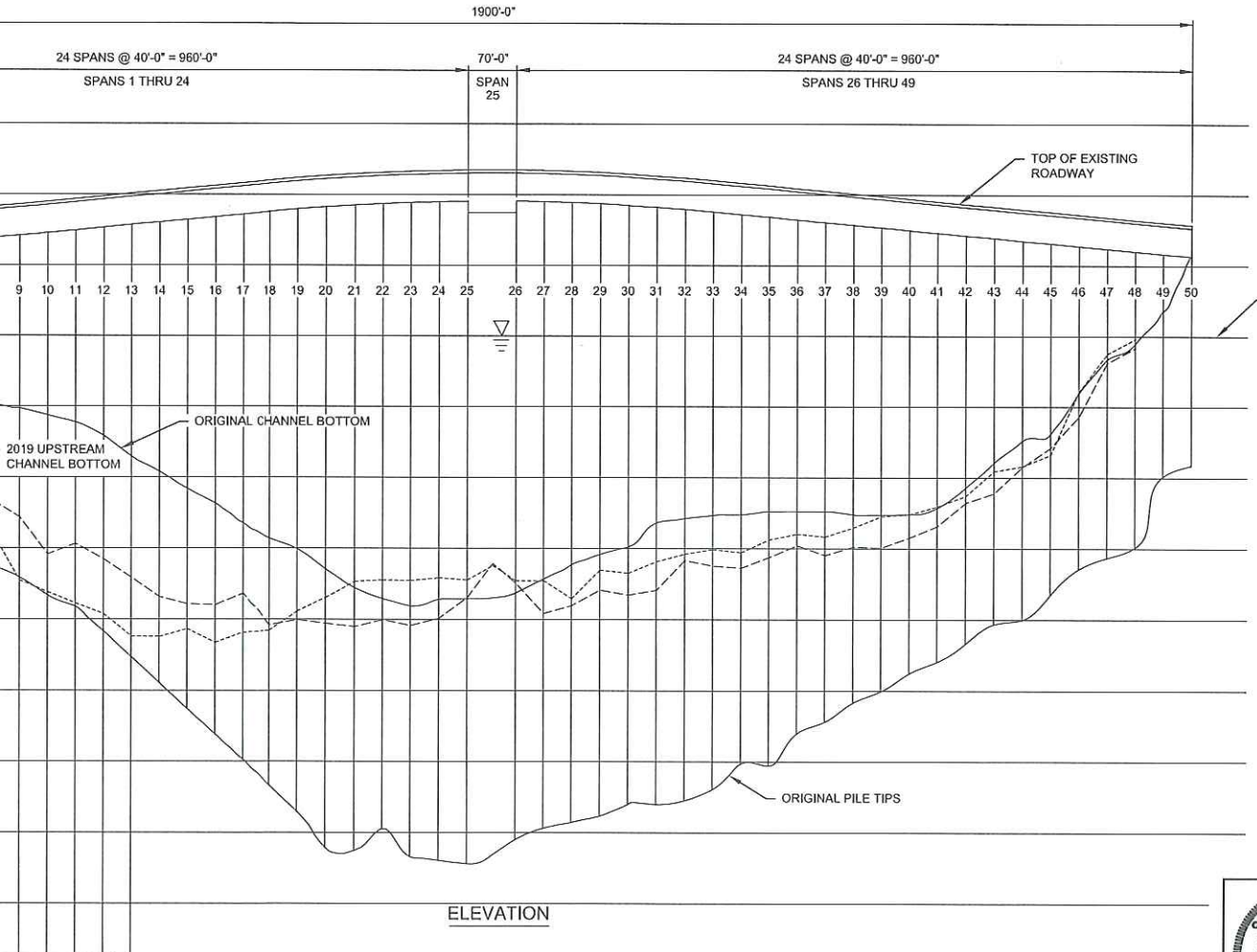
REINFORCING BENDING DETAILS

COUNTY BEAUFORT

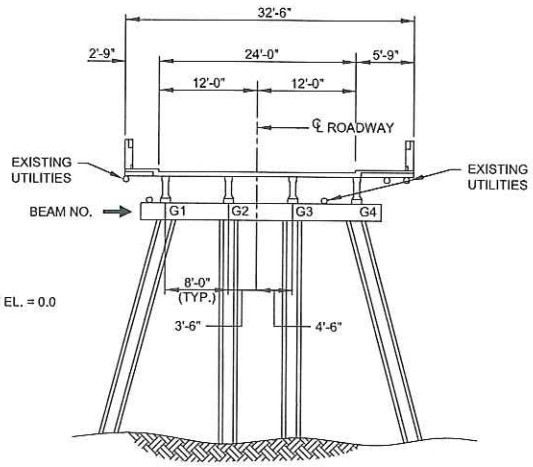
ROUTE FRIPP INLET BRIDGE



PLAN



ELEVATION



(LOOKING NORTH)

LEGEND

- ORIGINAL PILE TIPS
- 2019 UPSTREAM CHANNEL BOTTOM
- 2019 DOWNSTREAM CHANNEL BOTTOM

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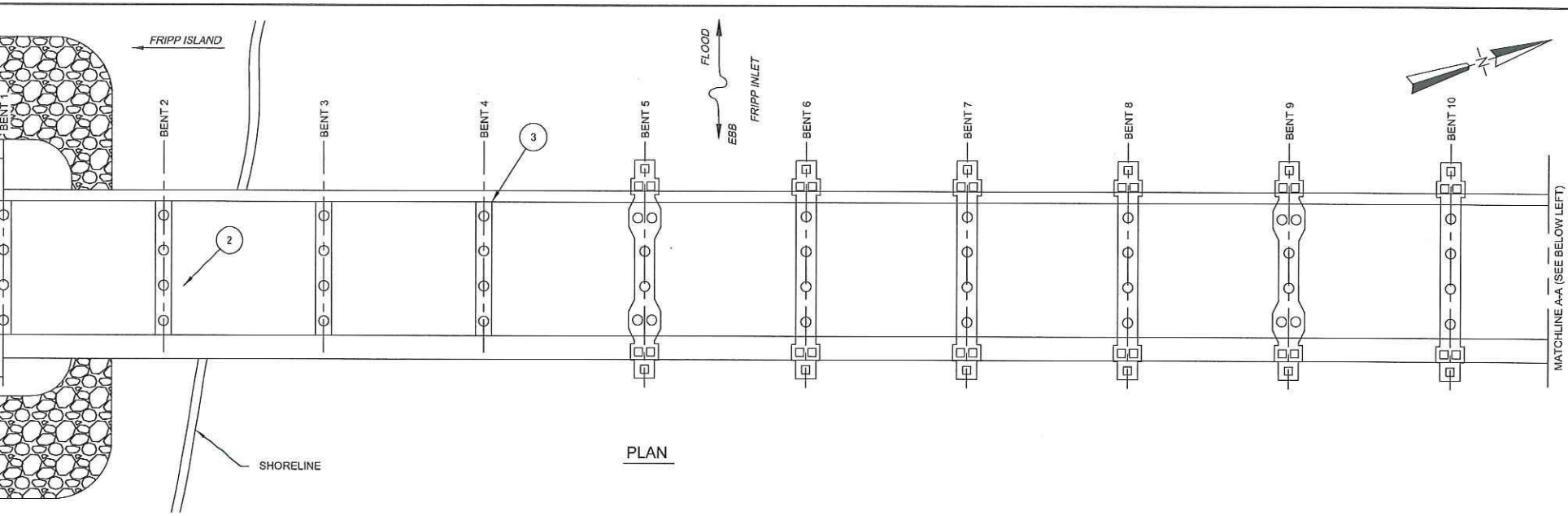
DES.	LMB	TGT	03-19
	BY	CHK.	DATE

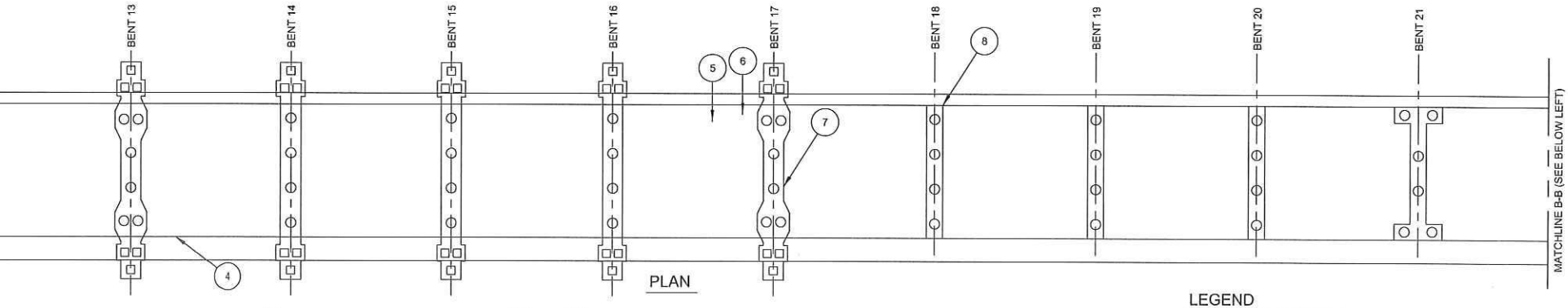
PLAN AND PROFILE

COUNTY: BEAUFORT

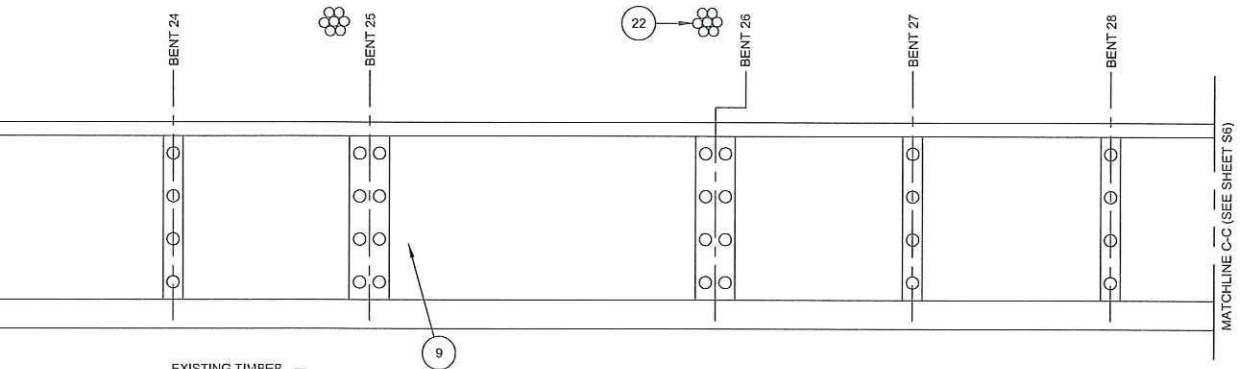
ROUTE: FRIPP INLET BRIDGE



PLAN



PLAN



PLAN

...NS OF THE BENT
...EWS OF THE BENT
...RESPONDING REPAIR
...ES AND NOTES.

LEGEND

RIP-RAP

1 → REPAIR ITEM LOCATION

JMT
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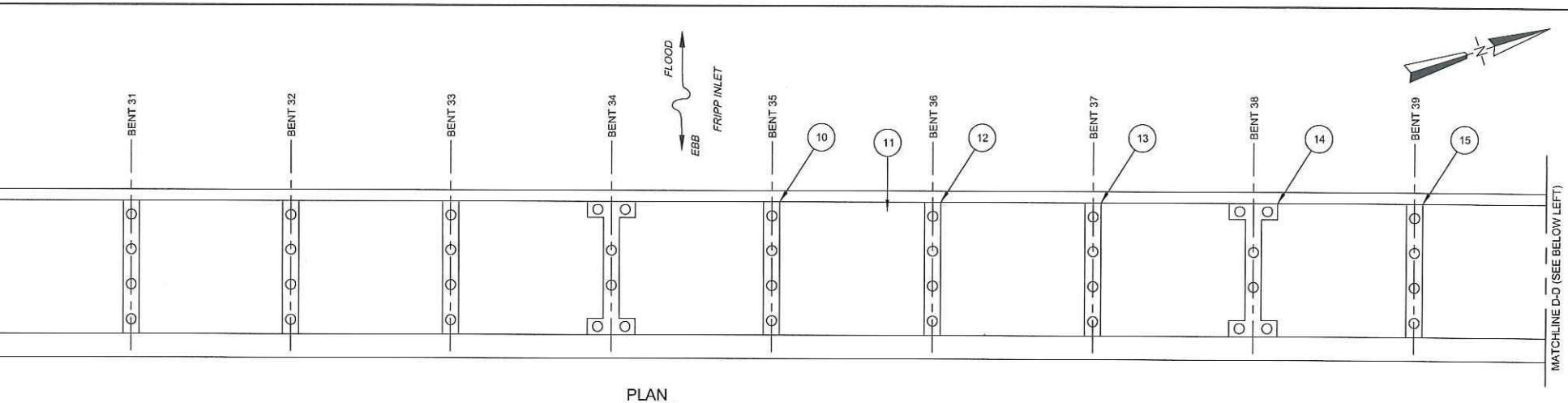
REV.			
REV.			
REVIEWED	TGT		
QUAN.	–	–	–
DR.	LMB	TGT	03-19
DES.	LMB	TGT	03-19
	BY	CHK.	DATE

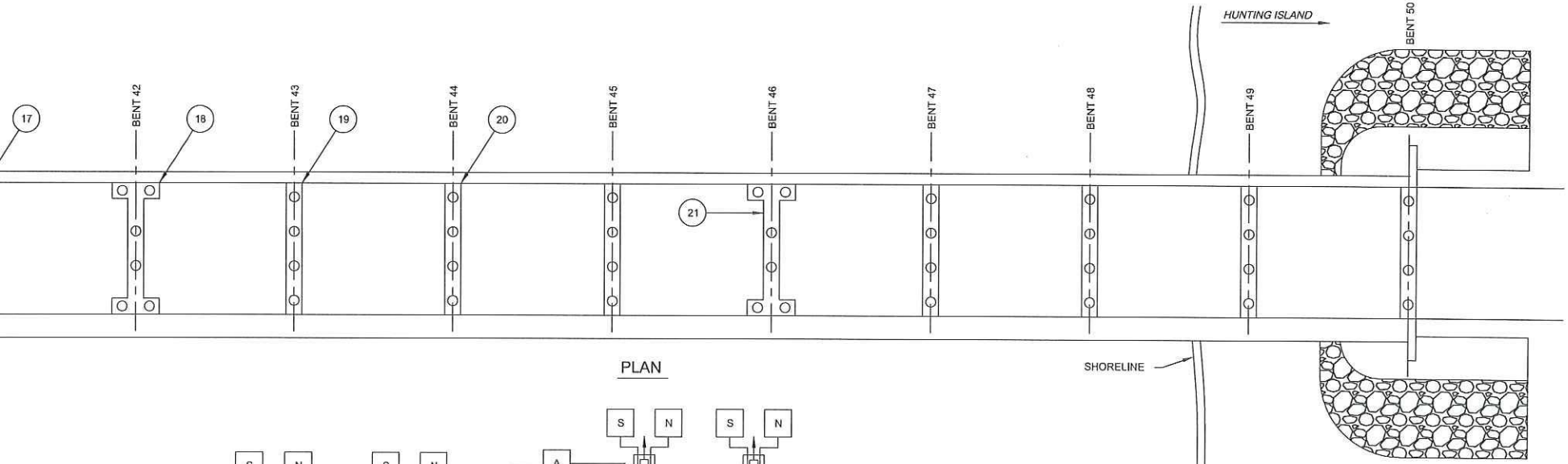
REPAIR ITEM LOCATION PLAN I

COUNTY: BEAUFORT

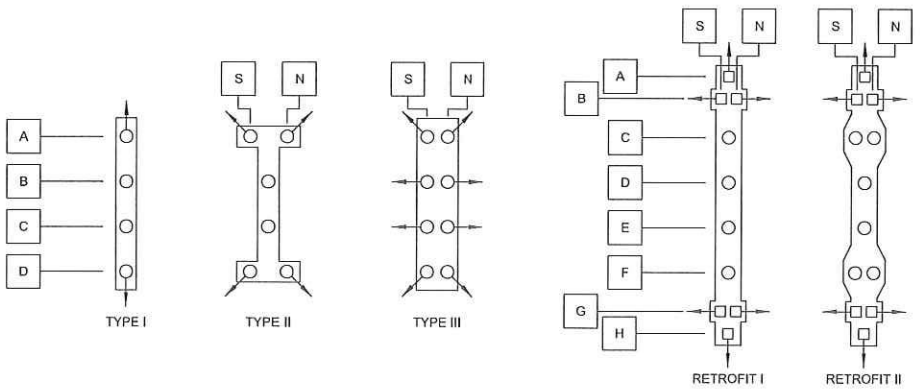
ROUTE: FRIPP INLET BRIDGE



PLAN



PLAN



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FRIPP ISLAND
Public Service District

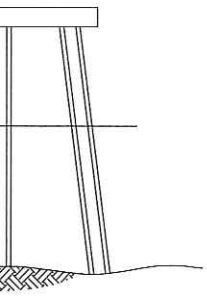
SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 24002
THAI G. TRINH

REV.			
REV.			
REVIEWED	TGT		
QUAN.	–	–	–
DR.	LMB	TGT	03-19
DES.	LMB	TGT	03-19
	BY	CHK.	DATE

REPAIR ITEM LOCATION PLAN II

COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE

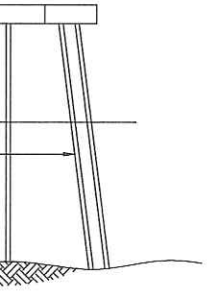
ORIGINAL PILE CAP



VATION

, 22-24, 27-29,
5, 47-50)

ORIGINAL PILE CAP

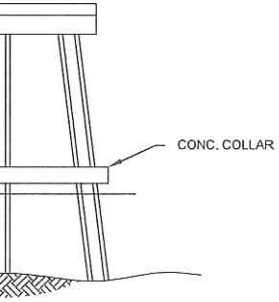


VATION

34, 38, 42, 46)

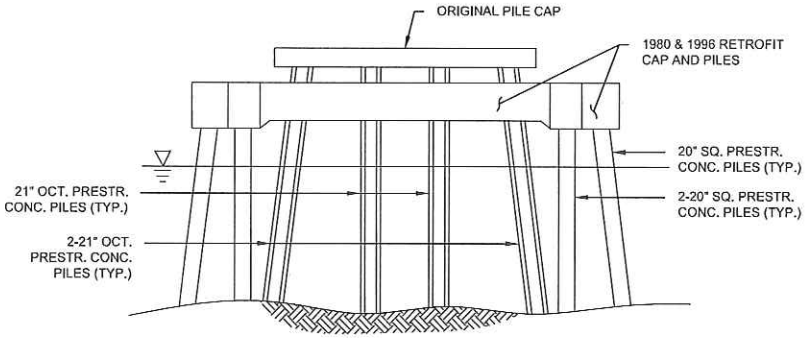
ORIGINAL PILE CAP

CONC. COLLAR



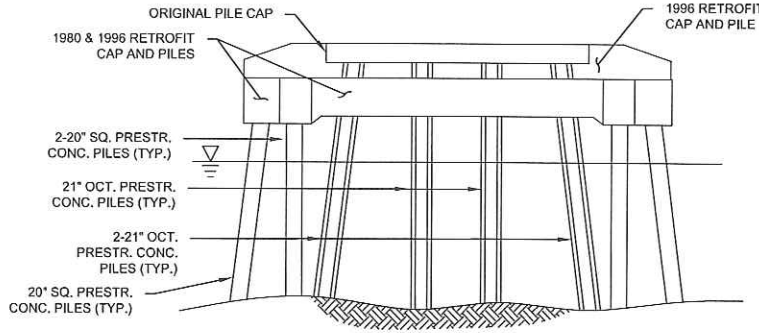
VATION

AND 26)



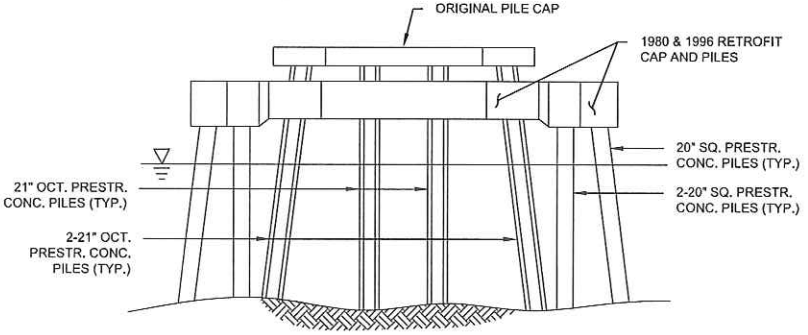
RETROFIT I BENT ELEVATION 1

(TYPICAL OF BENTS 14, 15, AND 16)



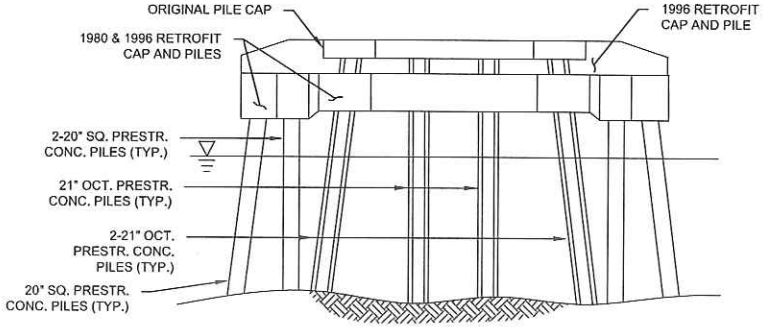
RETROFIT I BENT ELEVATION 2

(TYPICAL OF BENTS 6-8, 10-12)



RETROFIT II BENT ELEVATION 1

(TYPICAL OF BENTS 5 AND 17)



RETROFIT II BENT ELEVATION 2

(TYPICAL OF BENTS 9 AND 13)

LEGEND

WATERLINE

JMT
952 HOUSTON NORTHCUTT BLVD.
SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

FRIPP ISLAND
Public Service District

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 24002 THAI G. TRINH

REV.				
REV.				
REVIEWED	TGT			
QUAN.	–	–	–	
DR.	LMB	TGT	03-19	
DES.	LMB	TGT	03-19	
	BY	CHK.	DATE	

EXISTING BENT ELEVATIONS

COUNTY: BEAUFORT

ROUTE: FRIPP INLET BRIDGE

REPAIR ITEM LIST

LOCATION	REPAIR TYPE	ESTIMATED QUANTITY OF REPAIR	DETERIORATION NOTES
H EMBANKMENT	3	920 CF	10' BY 20' BY 4' VERTICAL EROSION OF EMBANKMENT MATERIAL AT OUTFLOW DRAINAGE FLUME.
AN 2 BEAM 3	1	1.2 CF CONCRETE	SOUTH END OF BEAM ON BOTTOM FLANGE. SPALL 33" LONG BY 8" WIDE BY 4" PENETRATION AND 2 EXPOSED REINFORCING BARS/STRANDS.
BENT 4	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
I 13 EAST RAIL	2	0.3 CF CONCRETE	SECOND POST NORTH OF BENT 13. SPALL 6" DIAMETER BY 3/4" PENETRATION AND 1 EXPOSED REINFORCEMENT.
AN 16 BEAM 1	1A	1 EA.	NORTH END OF BEAM ON BOTTOM. SPALL 2'-6" LONG BY 3" WIDE BY 1" PENETRATION AND 1 EXPOSED REINFORCEMENT.
16 WEST RAIL	2	0.3 CF CONCRETE	EIGHT FEET SOUTH OF BENT 17 UNDERSIDE. SPALL 18" LONG BY 8" WIDE BY 1" PENETRATION.
AN 17 BEAM 3	1	0.6 CF CONCRETE	SPALL FULL WIDTH OF BOTTOM FLANGE BY 1' LONG BY 1" PENETRATION AND 1 EXPOSED STRAND.
BENT 18	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
AN 25 BEAM 3	1	0.5 CF CONCRETE	SEVEN FEET FROM BENT 25 BEARING LINE. PATCHES FAILING ON BOTTOM FLANGE. THREE LOCATIONS OF MAJOR SPALLING UP TO 1' LONG BY 9" WIDE BY 3/4" PENETRATION AND 5 EXPOSED STRANDS.
BENT 35	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
AN 35 BEAM 1	1A	1 EA.	EAST FACE OF BOTTOM FLANGE. CORNER SPALL 15" LONG BY 3" WIDE BY 1/2" PENETRATION AND 1 EXPOSED REINFORCEMENT.
BENT 36	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
BENT 37	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
BENT 38	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
BENT 39	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
BENT 40	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
BENT 41	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
BENT 42	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
BENT 43	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
BENT 44	4	SEE SHEET S16	INSTALL SIX NEW PILES AND BUILD RETROFIT PILE CAP.
T 46 SPAN 45	2	2 CF CONCRETE	2 SHEAR KEYS AT BENT 46 BEAMS 1 AND 2. MAJOR SPALLING UP TO FULL WIDTH BY 1' VERTICAL BY 3" PENETRATION AND UP TO 4 EXPOSED ANCHOR RODS AND REINFORCING STEEL.
NTS 25 & 26	5	3 EA.	INSTALL THREE NEW TIMBER PILE DOLPHINS.

NOTES:

1. SEE SHEET S5 AND S6 FOR ITEM NUMBER LOCATIONS.
2. REFER TO SHEET S9 FOR REPAIR TYPE 1, S10 FOR REPAIR TYPE 2, S11 FOR REPAIR TYPE 3, S12-S17 FOR REPAIR TYPE 4, AND S18 FOR REPAIR TYPE 5.
3. THE DETERIORATION NOTES ARE BASED ON FIELD OBSERVATIONS IN DECEMBER 2017 AND ARE CONSIDERED APPROXIMATE. THE DIMENSIONS OF DAMAGE ARE NOT MEANT TO REPRESENT THE AMOUNT OF UNSOUND CONCRETE TO BE REMOVED OR THE REPAIR EXTENTS. DURING DEMOLITION THE ACTUAL EXTENTS WILL VARY FROM THE VISIBLE DIMENSIONS OF DAMAGE.
4. THE ESTIMATED QUANTITY OF REPAIR ARE AN ESTIMATED AMOUNT FOR BID PURPOSES. THE ACTUAL QUANTITIES WILL VARY.

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REV.			
REVIEWED	TGT		
QUAN.	CSS	LMB	02-19
DR.	LMB	TGT	03-19
DES.	LMB	TGT	03-19
	BY	CHK.	DATE

REPAIR ITEM LIST

COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE

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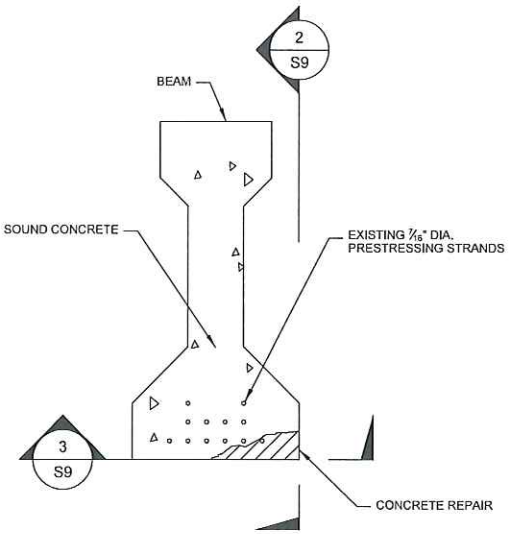
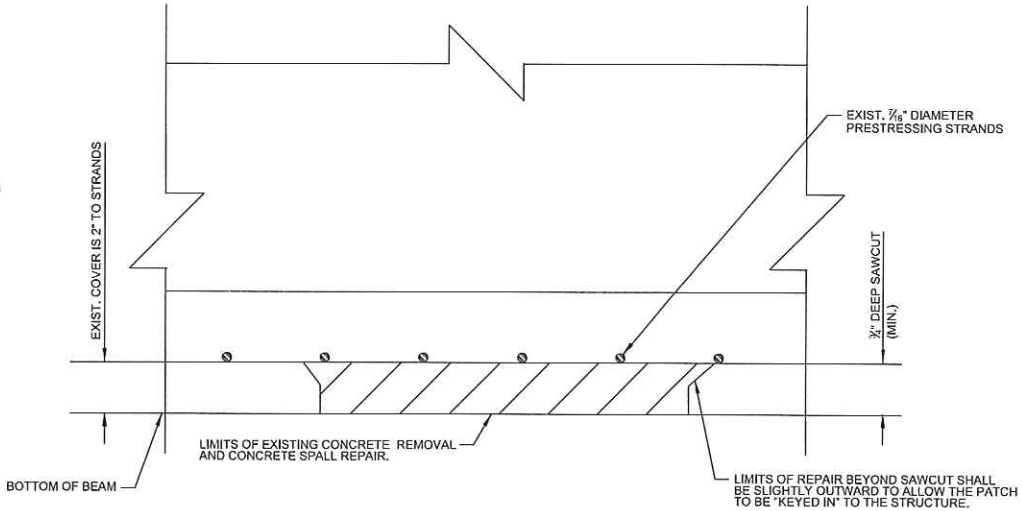
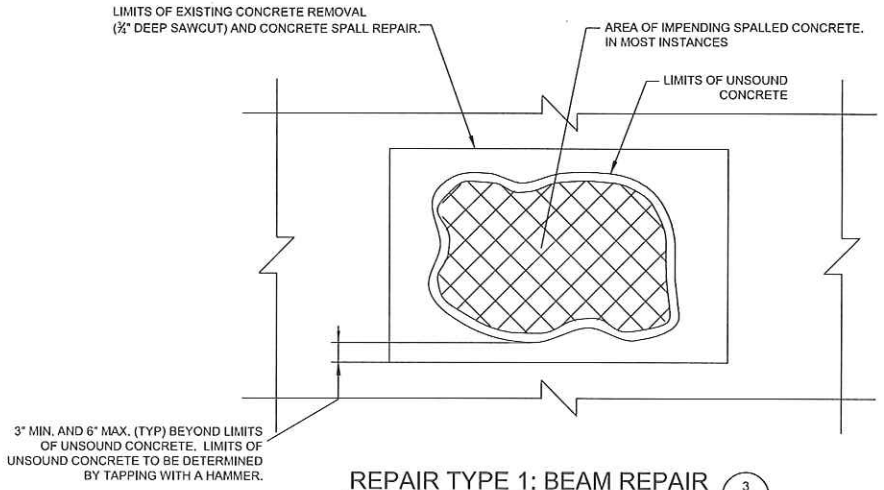


REPAIR TYPE 1: BEAM REPAIR (1 S9)
SCALE: NONE



SECTION AT BEAM REPAIR (2 S9)
SCALE: NONE



REPAIR TYPE 1: BEAM REPAIR (3 S9)
SCALE: NONE

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	BY	CHK.	DATE	

REPAIR TYPE 1 AND 1A: BEAM REPAIR

COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE

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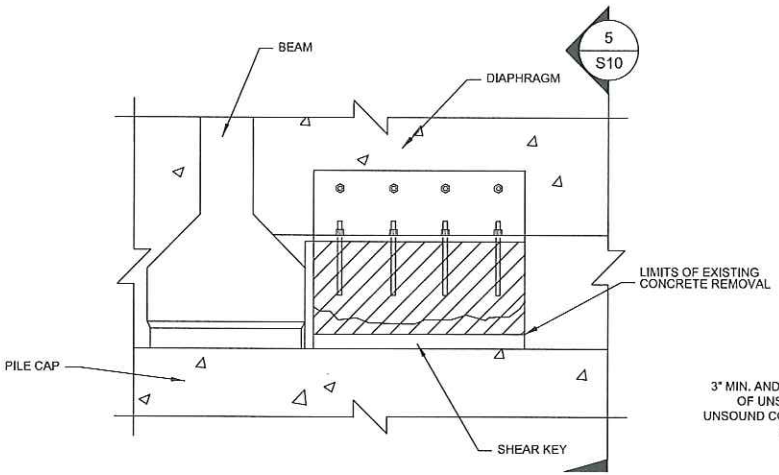
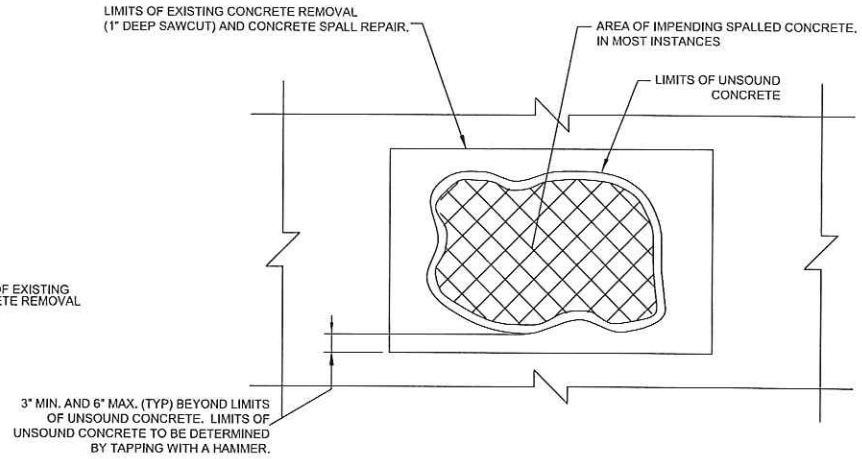
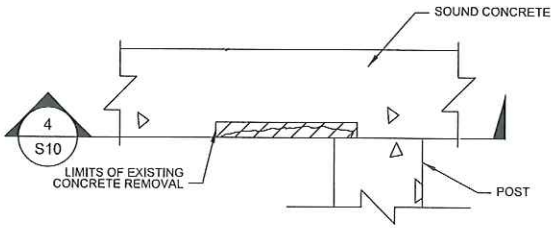


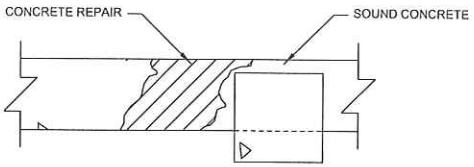
SHEAR KEY REPAIR
SCALE: NONE
1 S10



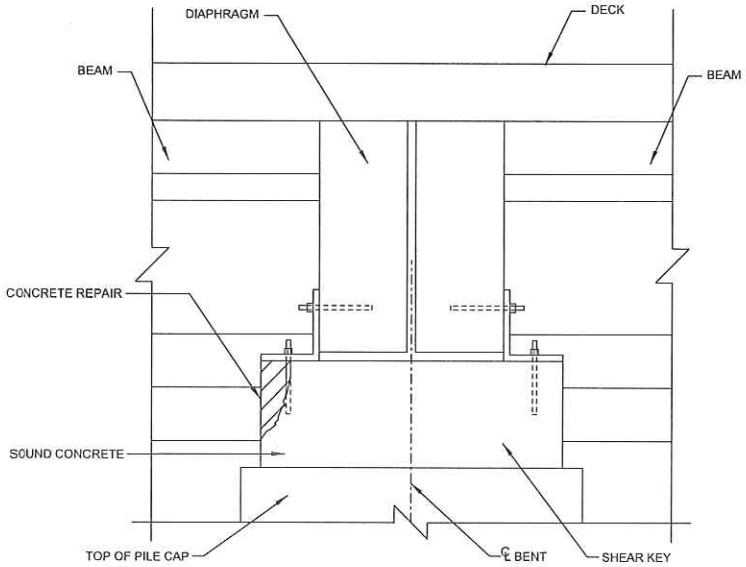
REPAIR TYPE 2: CONCRETE REPAIR
SCALE: NONE
2 S9



RAIL REPAIR
SCALE: NONE
3 S10



SECTION @ RAIL REPAIR
SCALE: NONE
4 S9



SECTION @ SHEAR KEY REPAIR
SCALE: NONE
5 S10

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REPAIR TYPE 2: CONCRETE REPAIR

COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE

AT THE SOUTH END OF

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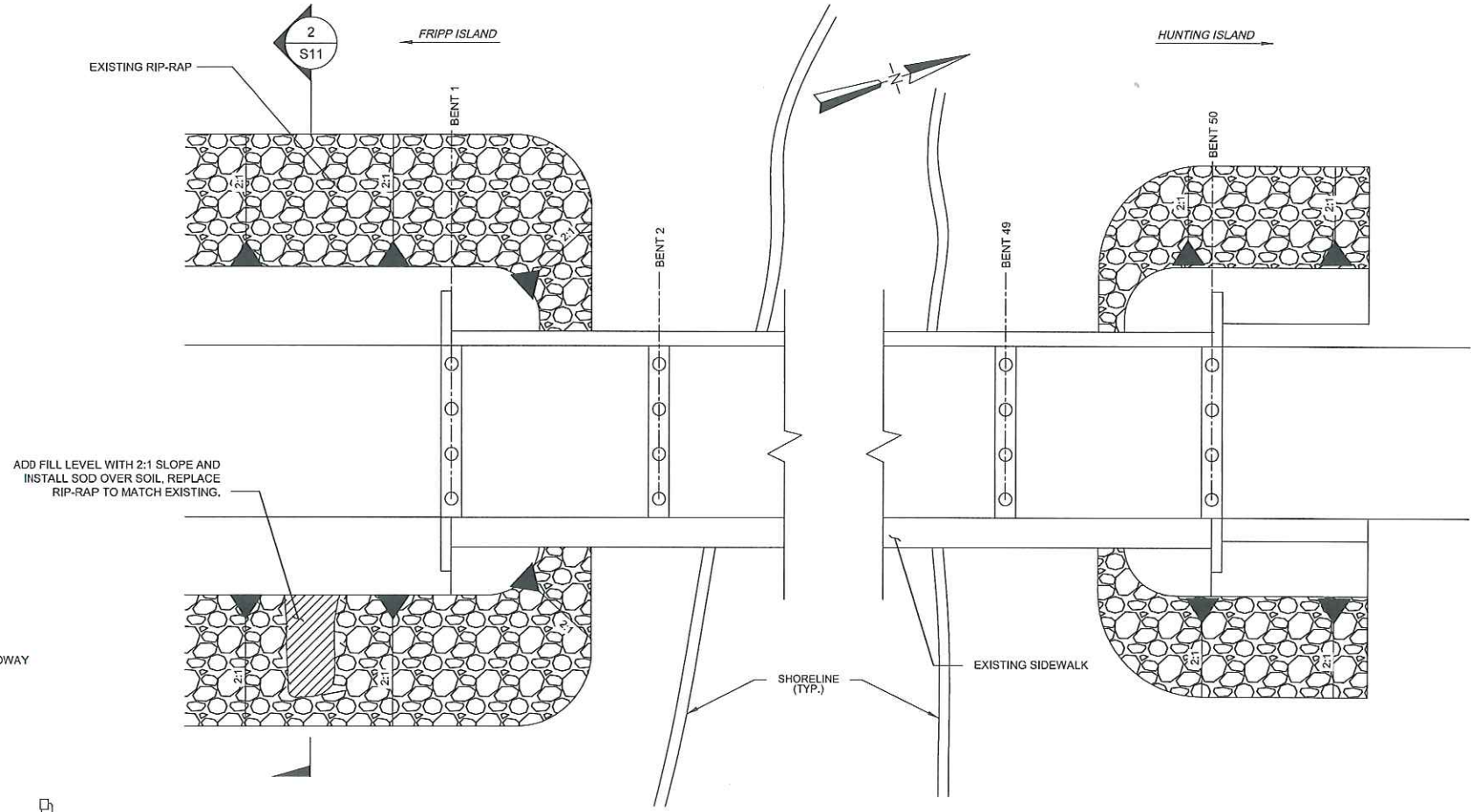

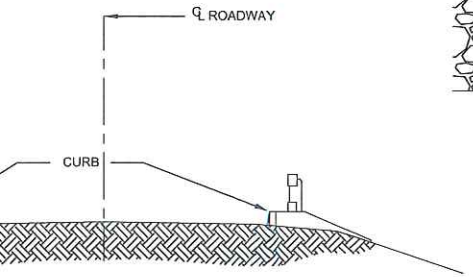

REPAIR TYPE 3: EMBANKMENT REPAIR (1 / S11)
SCALE: NONE

TEXTILE FABRIC,

LOPE AND
EPLACE
G.

OUGH BRIDGE APPROACH (2 / S11)

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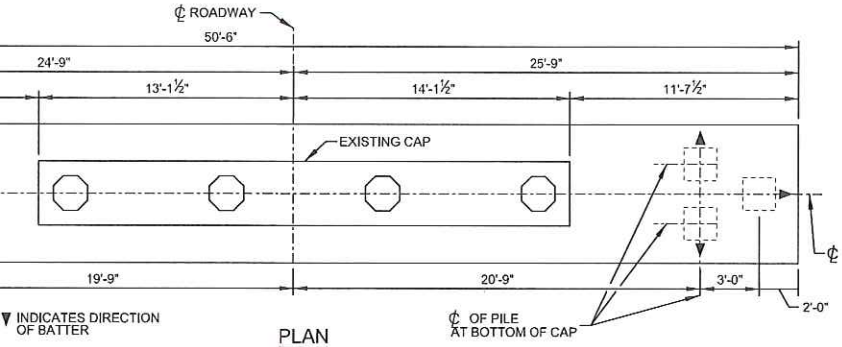
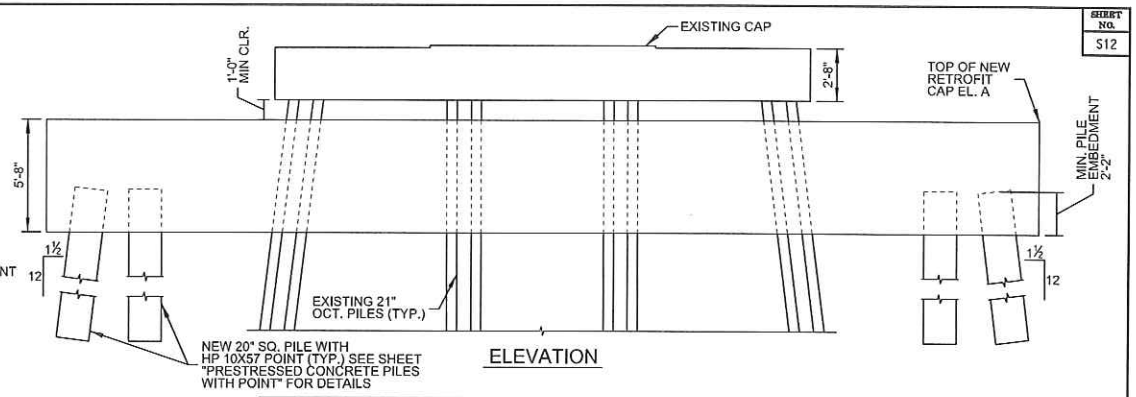
REPAIR TYPE 3: EMBANKMENT REPAIR

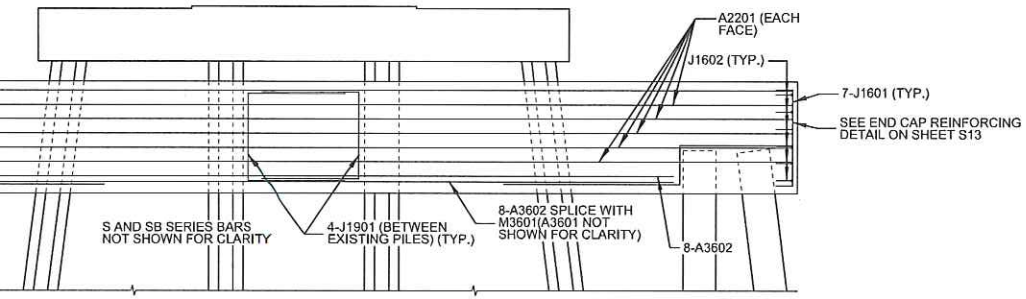
COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE



PLAN



ELEVATION



REINFORCING ELEVATION

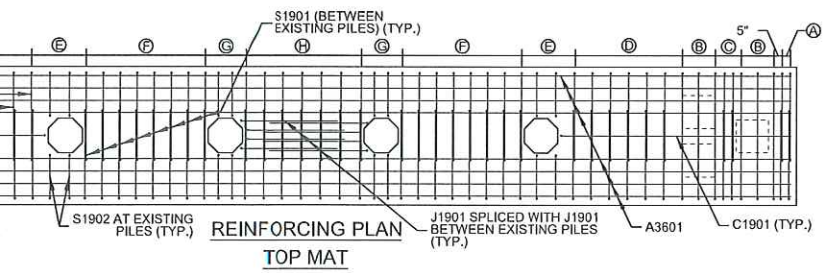
MINIMUM SPLICE LENGTH	
BAR MARKS	SPLICE LENGTH
A3602 WITH M3601	8'-4"
C1901 WITH C1901	2'-7"

TABLE OF ELEVATIONS				
BENT	EL. A	MINIMUM CONC. PILE TIP EL.	ESTIMATED CONC. PILE TIP EL.	ESTIMATED STEEL PILE TIP EL.
4	8.449	-80	-97	-
18	13.769	-80	-97	-
35	13.009	-80	-83	-93
36	12.629	-80	-83	-93
37	12.249	-80	-83	-93
39	11.489	-80	-83	-93
40	11.109	-80	-83	-93
41	10.729	-80	-83	-93
43	9.969	-80	-83	-93
44	9.589	-80	-83	-93

RESISTANCE SHALL BE VERIFIED BY HIGH-STRAIN DYNAMIC TESTING WITH A PILE DRIVING ANALYZER (PDA) AND SIGNAL MATCHING (CAPWAP) ANALYSIS OF TEST PILES.

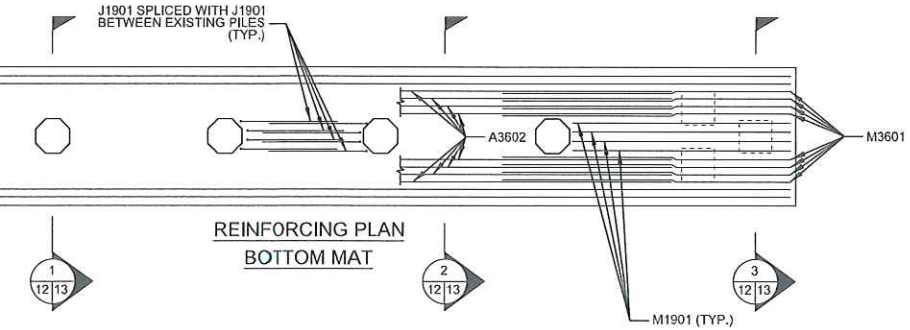
PERFORM AT LEAST FOUR HIGH-STRAIN DYNAMIC TESTS WITH A PILE DRIVING ANALYZER (PDA). A TEST SHOULD BE PERFORMED DURING THE INSTALLATION OF THE FIRST PRODUCTION PILE IN BENTS 4, 18, 36, AND 42. PDA GAGES ARE ATTACHED A MINIMUM OF 1.5D BELOW THE PILE TOP AND CANNOT FUNCTION BELOW GRADE OR IN WATER. THEREFORE, ACCOMMODATIONS FOR THIS MUST BE MADE. WITH RESPECT TO DRIVING RESISTANCE, THE REQUIRED RESISTANCE OF THE PILES AT THIS SITE MAY NOT BE REFLECTED IN THE DYNAMIC MEASUREMENTS DURING INITIAL INSTALLATION, BUT RATHER AT SOME TIME FOLLOWING INSTALLATION AS THE PILE "SETS UP". HOWEVER, EVEN IF THE REQUIRED DRIVING RESISTANCE IS NOT MEASURED DURING INITIAL PILE INSTALLATION, DYNAMIC TESTING WILL BE USED TO MEASURE DRIVING STRESSES. ADDITIONAL DYNAMIC TESTING SHOULD BE PERFORMED DURING A RESTRIKE TEST TO CONFIRM THE REQUIRED DRIVING RESISTANCE IF IT IS NOT MEASURED DURING INITIAL INSTALLATION. IN GENERAL, A LONGER IDLE PERIOD AFTER INSTALLATION WILL RESULT IN A HIGHER DRIVING RESISTANCE AND A MINIMUM OF 7 DAYS MAY BE REQUIRED TO MEASURE THE REQUIRED DRIVING RESISTANCE.

IF PILES ARE NOT INSTALLED IN ONE CONTINUOUS OPERATION, THEY MAY "SET UP" AND REQUIRE ADDITIONAL EFFORT TO CONTINUE INSTALLATION. INCLUDE DETAILS OF ANY ANTICIPATED TEMPORARY DRIVING DISCONTINUANCES INCLUDING ANTICIPATED TIME INTERVALS IN THE PILE INSTALLATION PLAN.



REINFORCING PLAN
TOP MAT

Ⓐ 2-S1901: 1 SPA. @ 4⅝" = 4⅝"
Ⓑ SB1901: 2 SPA. @ 11" = 1'-8"
Ⓒ 2-S1901: 3 EQ. SPA. = 1'-4"
Ⓓ 2-S1901: 6 EQ. SPA. = 5'-5½"
Ⓔ S1902: 3 EQ. SPA. = 2'-8"
Ⓕ 2-S1901: 7 EQ. SPA. = 6'-3"
Ⓖ S1902: 3 EQ. SPA. = 2'-1"
Ⓗ 2-S1901: 6 EQ. SPA. = 5'-11"



REINFORCING PLAN
BOTTOM MAT

NOTES

① SPLICE ALL A AND M BARS VERTICALLY

② FOR SPLICE LENGTHS SEE MINIMUM SPLICE LENGTH TABLE

③ FOR BAR BENDING DETAILS SEE SHEET S3

④ FOR END ELEVATION, SECTIONS, AND DETAILS SEE SHEET S13

⑤ RETROFIT BENT CAP CONCRETE PLACEMENT SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 702.4.2.7 CONCRETE EXPOSED TO TIDAL WATER

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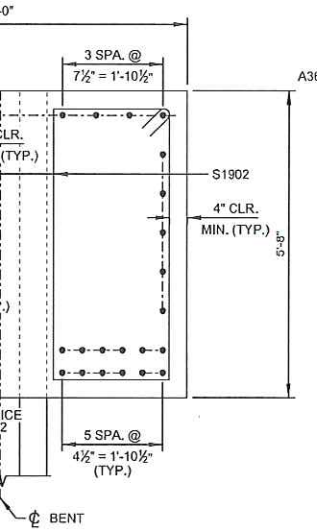
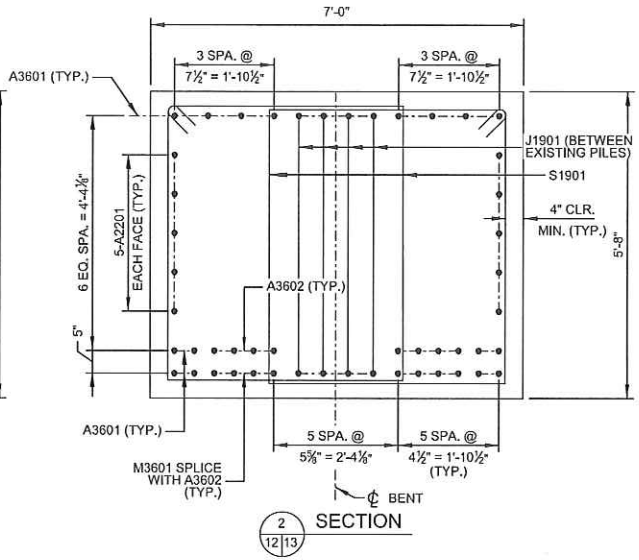
REVIEWED	TGT		
QUAN.	CSS	LMB	03-19
DR.	CSS	PDR	03-19
DES.	CSS	PDR	03-19
	BY	CHK.	DATE

REPAIR TYPE 4: BENT RETROFIT DETAILS I (BENTS 4, 18, 35-37, 39-41, &43-44)

COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE



ECTION



2 / 12 | 13 SECTION

DRIVEABILITY ANALYSIS PARAMETERS			
PARAMETER	BENT 4	BENT 18	BENTS 35-44
SKIN QUAKE (in.)	0.10	0.10	0.10
TOE QUAKE (in.)	0.20	0.20	0.20
SKIN DAMPING (s/ft.)	0.20	0.20	0.20
TOE DAMPING (s/ft.)	0.15	0.15	0.15
% SKIN FRICTION	80%	80%	80%
% END BEARING	20%	20%	20%
DISTRIBUTION SHAPE NO.	VARIABLE[A]	VARIABLE[B]	VARIABLE[B]
BEARING GRAPH	PROPORTIONAL	PROPORTIONAL	PROPORTIONAL
PILE PENETRATION	80%	55%	55%
END BEARING FRACTION (TOE NO. 2)	0.90	0.90	0.90
HAMMER ENERGY RANGE[D]	70 TO 100 ft-klps	70 TO 100 ft-klps	70 TO 100 ft-klps

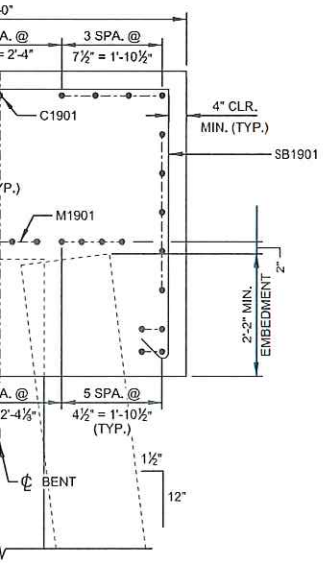
A. LINEARLY INCREASING WITH DEPTH FROM 0 TO 0.4 BETWEEN 21 AND 41 FT. UNIFORM AT 0.4 FROM 41 TO 71 FT, LINEARLY INCREASING FROM 0.9 TO 1.2 FROM 71 TO 86 FT, UNIFORM AT 0.8 FROM 86 TO 91 FT, AND UNIFORM AT 1.7 FROM 91 TO 115 FT.

B. UNIFORM AT 0.5 BETWEEN 52 AND 58 FT, LINEARLY INCREASING FROM 0.3 TO 0.5 FROM 58 TO 68 FT, UNIFORM AT 0.7 FROM 68 TO 77 FT, AND UNIFORM AT 1.7 FROM 77 TO 120 FT.

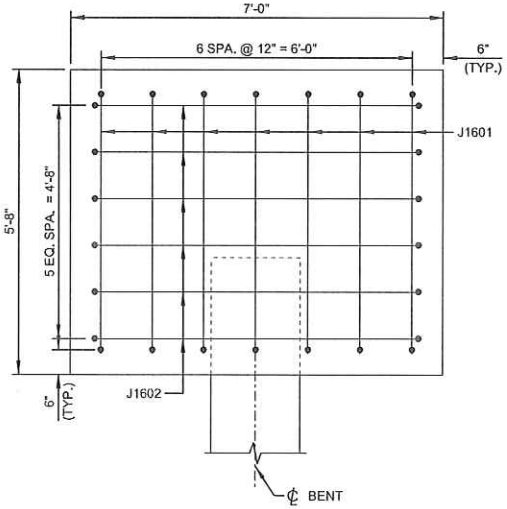
C. LINEARLY INCREASING WITH DEPTH FROM 0 TO 0.5 BETWEEN 47 AND 53 FT. UNIFORM AT 0.6 FROM 53 TO 59 FT, LINEARLY INCREASING FROM 0.5 TO 0.8 FROM 59 TO 65 FT, UNIFORM AT 1.5 FROM 65 TO 83 FT, AND UNIFORM AT 2.2 FROM 83 TO 110 FT.

D. THE HAMMER SELECTION SHALL BE BASED ON A WAVE EQUATION ANALYSIS.

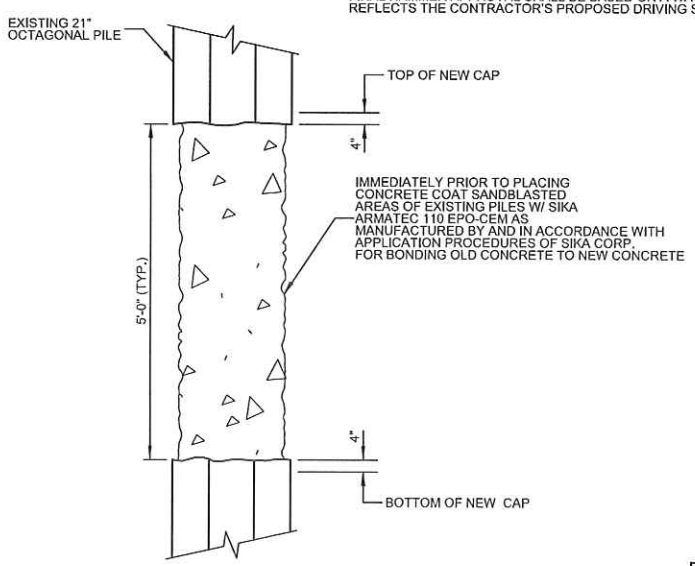
A PROPERLY OPERATING PILE HAMMER HAVING THE MAXIMUM RATED ENERGY BETWEEN 70 FT-KIPS AND 100 FT-KIPS IS CONSIDERED SUITABLE FOR DRIVEN PILE INSTALLATION. HOWEVER, FINAL HAMMER APPROVAL SHALL BE BASED ON A WAVE EQUATION ANALYSIS THAT ACCURATELY REFLECTS THE CONTRACTOR'S PROPOSED DRIVING SYSTEM.



ECTION



END CAP REINFORCING



EXISTING PILE ROUGHENING DETAIL

EXISTING PILE SHOULB BE ROUGHENED TO A MINIMUM APLITUDE OF ⅛" AND MAXIMUM OF ¼". ROUGHENED SURFACE SHALL BE ACHIEVED BY SAND BLASTING, CHIPPING HAMMERS, HYDRODEMOLITION, OR OTHER APPROVED METHOD. CARE SHALL BE TAKEN NOT EXCESSIVELY DAMAGE THE PILE.

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952 HOUSTON NORTHCUTT BLVD, SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

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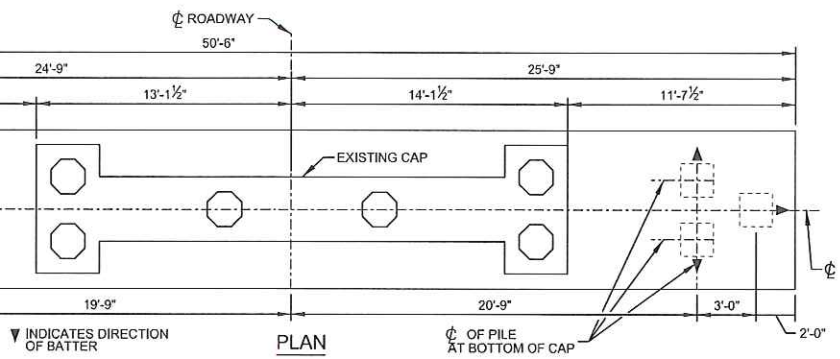
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 24002 THAI G. TRINH

REV.			
REV.			
REVISED	TGT		
QUAN.	CSS	LMB	03-19
DR.	CSS	PDR	03-19
DES.	CSS	PDR	03-19
	BY	CHK.	DATE

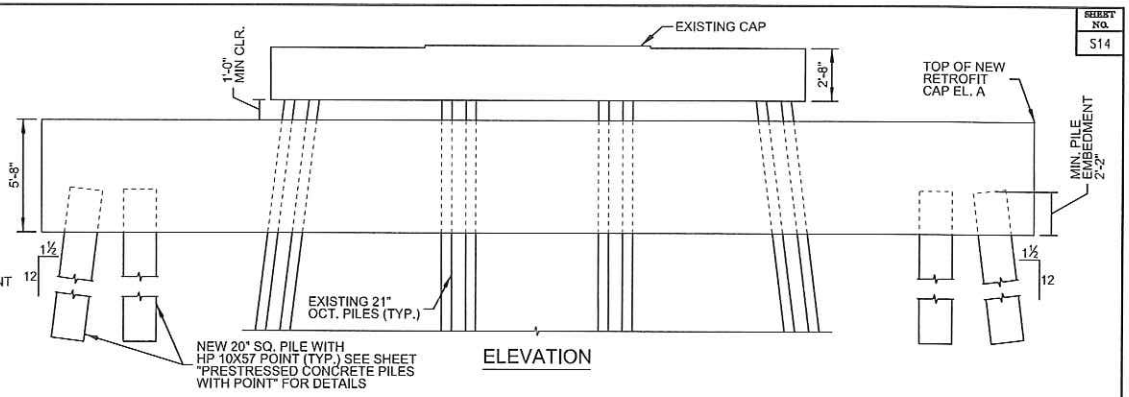
REPAIR TYPE 4: BENT RETROFIT DETAILS II (BENTS 4, 18, 35-37, 39-41, & 43-44)

COUNTY BEAUFORT

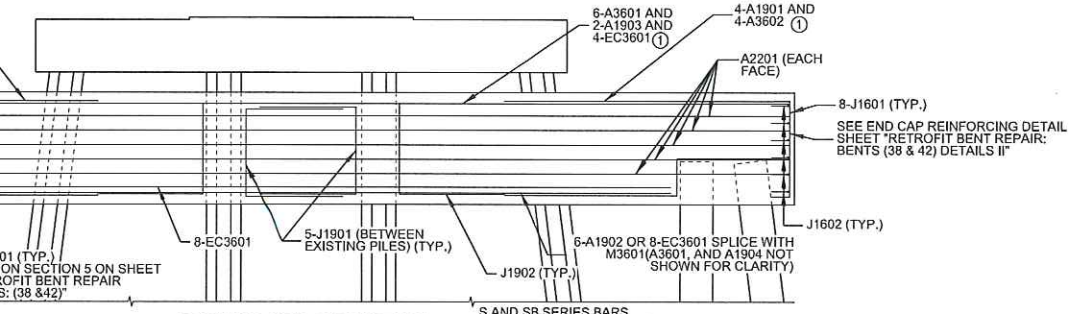
ROUTE FRIPP INLET BRIDGE



PLAN



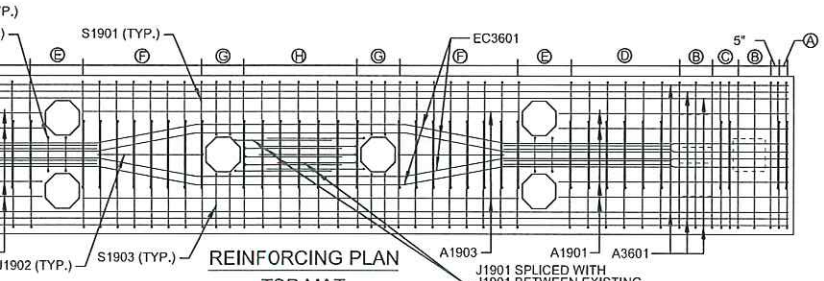
ELEVATION



REINFORCING ELEVATION

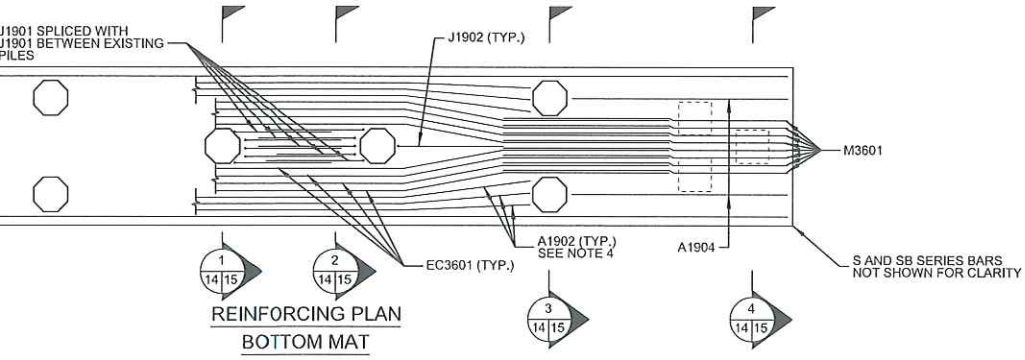
MINIMUM SPLICE LENGTH	
BAR MARKS	SPLICE LENGTH
A3602 WITH EC3601	11'-8"
EC3601 WITH M3601	8'-4"
C1901 WITH C1901	2'-7"

TABLE OF ELEVATIONS				
BENT	EL. A	MINIMUM CONC. PILE TIP EL.	ESTIMATED CONC. PILE TIP EL.	ESTIMATED STEEL PILE TIP EL.
38	11.869	-80	-83	-93
42	10.349	-80	-83	-93



REINFORCING PLAN
TOP MAT

Ⓐ 2-S1901: 1 SPA. @ 4¾" = 4¾"
Ⓑ SB1901: 2 SPA. @ 11" = 1'-8"
Ⓒ 2-S1901: 3 EQ. SPA. = 1'-4"
Ⓓ 2-S1901: 6 EQ. SPA. = 5'-7"
Ⓔ S1902: 3 EQ. SPA. = 2'-8"
Ⓕ 2-S1901: 7 EQ. SPA. = 6'-1½"
Ⓖ S1903: 3 EQ. SPA. = 2'-1"
Ⓗ 2-S1901: 6 EQ. SPA. = 5'-11"



REINFORCING PLAN
BOTTOM MAT

NOTES

① SPLICE A3602 WITH EC3601
② SPLICE ALL A, M, AND EC BARS VERTICALLY
③ FOR SPLICE LENGTH SEE MINIMUM SPLICE LENGTH TABLE
④ FOR BAR BENDING DETAILS SEE SHEET S3
⑤ FIELD BEND A1902 AS NECESSARY
⑥ FOR END ELEVATION, SECTIONS, AND DETAILS SEE SHEET S15
⑦ FOR GEOTECHNICAL AND DRIVEABILTY NOTES SEE SHEETS S12 AND S13
⑧ RETROFIT BENT CAP CONCRETE PLACEMENT SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 702.4.2.7 CONCRETE EXPOSED TO TIDAL WATER

JMT
952 HOUSTON NORTHCUTT BLVD. SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

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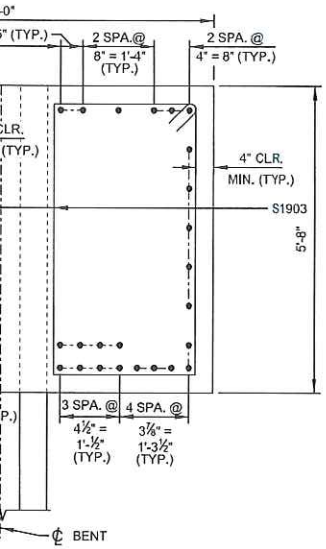
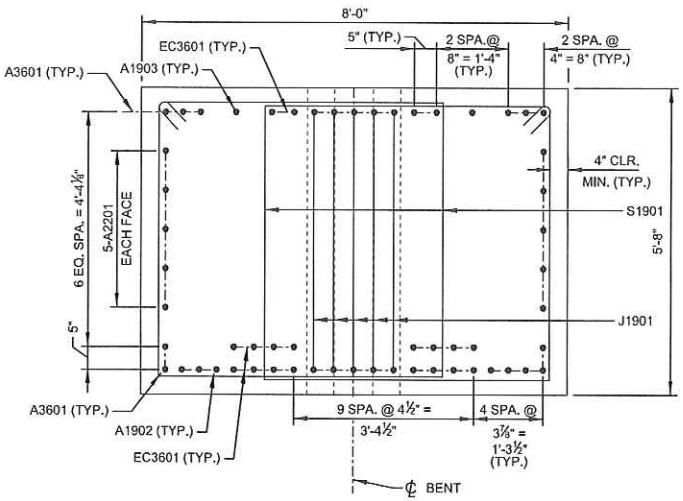
	BY	CHK.	DATE	

REPAIR TYPE 4: BENT RETROFIT DETAILS III (BENTS 38 & 42)

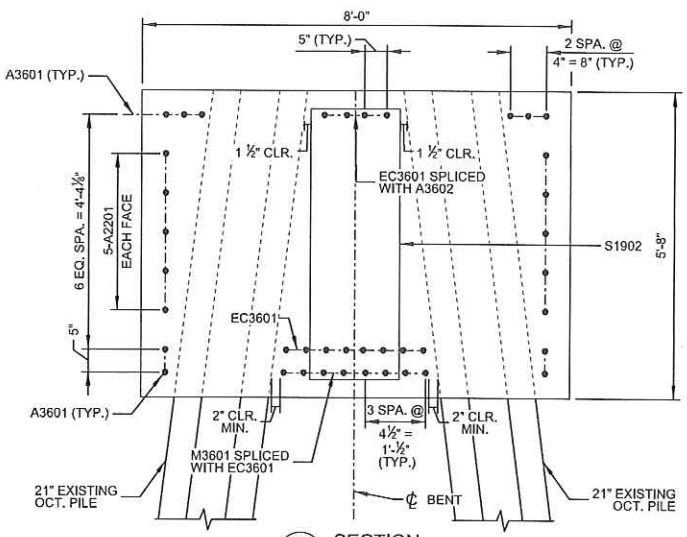
COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE



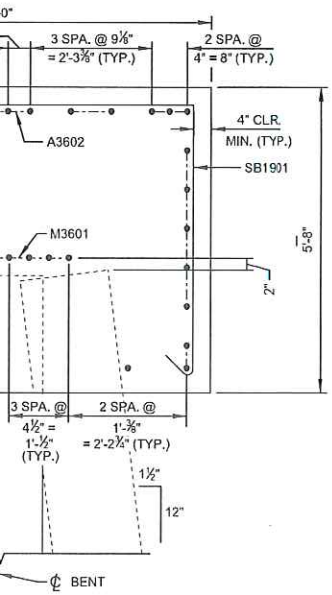
ECTION



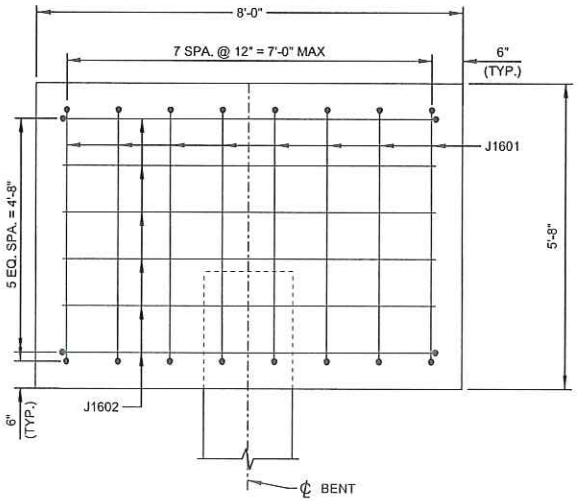
2 | 14 | 15 SECTION



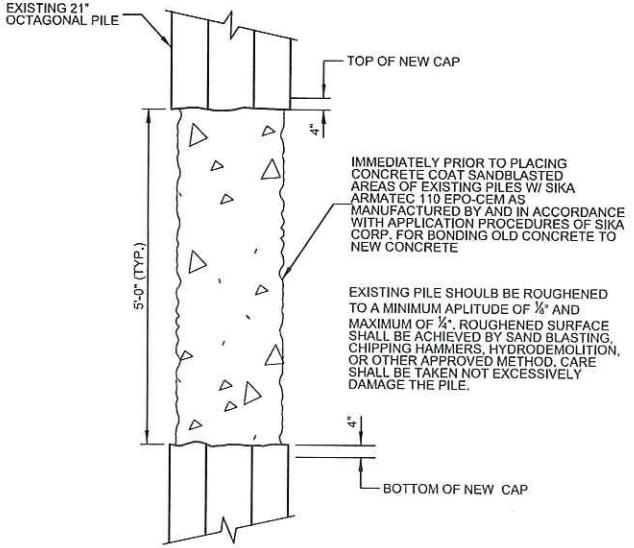
3 | 14 | 15 SECTION



SECTION



END CAP REINFORCING



EXISTING PILE ROUGHENING DETAIL

NOTES

① FOR GEOTECHNICAL AND DRIVEABILTY NOTES SEE SHEETS S12 AND S13

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FRIPP ISLAND Public Service District

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REV.			
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REVIEWED	TGT		
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DES.	CSS	PDR	03-19
	BY	CHK.	DATE

REPAIR TYPE 4: BENT RETROFIT DETAILS IV: (BENT 38 & 42)

COUNTY	ROUTE
BEAUFORT	FRIPP INLET BRIDGE

35-37, 39-41, & 43-44 (QTY PER BENT)

REINF. STEEL SCHEDULE

DIMENSION					LENGTH
A	B	C	D	E	
-10"					49'-10"
-10"					49'-10"
-10"					37'-10"
-8"	1'-0"				12'-8"
1/2"	0'-10"				6'-6 1/2"
1/2"	0'-10"				6'-6 1/2"
3/4"	5'-0"				14'-9 3/4"
-8"	2'-0"	5'-4 1/2"			13'-0 1/2"
-8"	2'-0"	9'-0"			16'-8"
-5"	5'-0"	0'-11"			20'-8"
-2"	5'-0"	0'-11"			16'-2"
-4"	5'-0"	0'-11"			18'-2"

QUANTITIES

ITEM	UNIT	QUANTITY
S - CLASS 4000	CY	70.7
CTURES (BRIDGES)	LB	14,194

TS 38 & 42 (QTY PER BENT)

REINF. STEEL SCHEDULE

DIMENSION					LENGTH
A	B	C	D	E	
-8"					11'-8"
-5"					23'-5"
-4"					22'-4"
-0"					11'-0"
-10"					49'-10"
-10"					49'-10"
-6"					14'-6"
-9"	1'-1 1/2"	8'-6"	0'-11"		30'-0"
1/2"	0'-10"				6'-6 1/2"
1/2"	0'-10"				8'-10 1/2"
3/4"	5'-0"				14'-9 3/4"
3/4"	5'-4 1/2"				15'-6 3/4"
-8"	1'-10 3/4"	8'-10"			16'-4 3/4"
-4"	5'-0"	0'-11"			22'-6"
3/4"	5'-0"	0'-11"			14'-11 1/2"
1/2"	5'-0"	0'-11"			17'-5"
-4"	5'-0"	0'-11"			19'-2"

QUANTITIES

ITEM	UNIT	QUANTITY
S - CLASS 4000	CY	80.3
CTURES (BRIDGES)	LB	13,389

PILE QUANTITIES BENT 4		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	1
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	515.0
PRESTR. INDEX PILING (20" SQ.)	LF	103.0
PRESTRESSED PILE POINT HP 10X57	LF	N/A

PILE QUANTITIES BENT 18		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	1
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	545.0
PRESTR. INDEX PILING (20" SQ.)	LF	109.0
PRESTRESSED PILE POINT HP 10X57	LF	N/A

PILE QUANTITIES BENT 35		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	N/A
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	564.0
PRESTR. INDEX PILING (20" SQ.)	LF	N/A
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 36		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	1
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	465.0
PRESTR. INDEX PILING (20" SQ.)	LF	93.0
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 37		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	N/A
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	558.0
PRESTR. INDEX PILING (20" SQ.)	LF	N/A
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 38		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	N/A
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	558.0
PRESTR. INDEX PILING (20" SQ.)	LF	N/A
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 39		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	N/A
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	552.0
PRESTR. INDEX PILING (20" SQ.)	LF	N/A
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 40		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	N/A
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	552.0
PRESTR. INDEX PILING (20" SQ.)	LF	N/A
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 41		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	N/A
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	546.0
PRESTR. INDEX PILING (20" SQ.)	LF	N/A
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 42		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	1
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	455.0
PRESTR. INDEX PILING (20" SQ.)	LF	91.0
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 43		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	N/A
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	546.0
PRESTR. INDEX PILING (20" SQ.)	LF	N/A
PRESTRESSED PILE POINT HP 10X57	LF	99.0

PILE QUANTITIES BENT 44		
DYNAMIC PILE ANALYZER TEST SET-UP	EA	N/A
PILE DRIVING SET-UP	EA	
PREST. CONC. PILING (20" SQ.)	LF	540.0
PRESTR. INDEX PILING (20" SQ.)	LF	N/A
PRESTRESSED PILE POINT HP 10X57	LF	99.0

NOTES

1. HP 10 X 57 SHALL BE GRADE 50

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MT. PLEASANT, SC 29464
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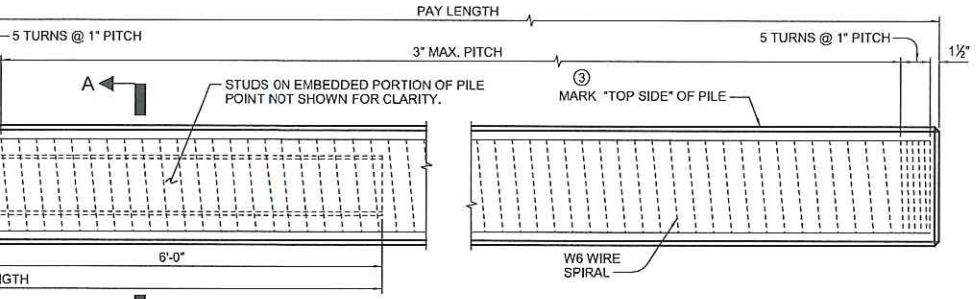
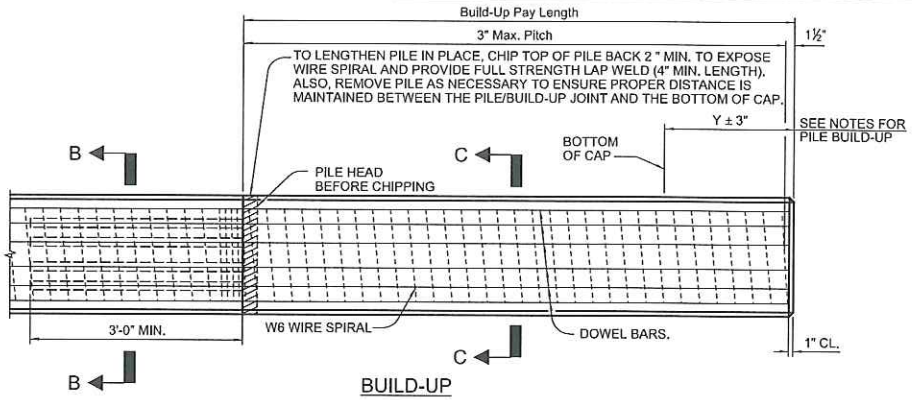
REINFORCING STEEL SCHEDULE & QUANTITIES

COUNTY BEAUFORT

ROUTE FRIPP INLET BRIDGE

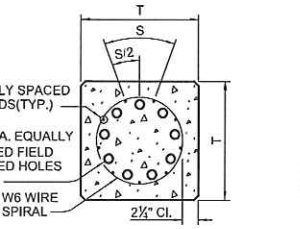


TYPICAL PILE ELEVATION

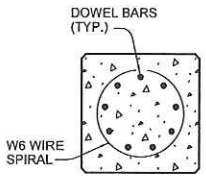


BUILD-UP

PILE POINT LENGTH	
BENT	**
4, 8	N/A
35-44	16'-6"



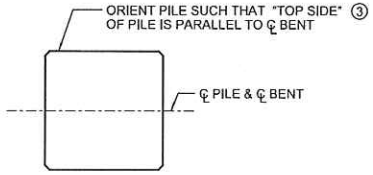
SECTION B-B



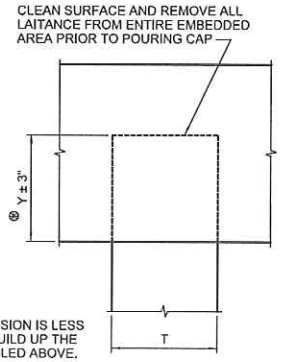
SECTION C-C

* FIELD DRILL DOWEL HOLES. LOCATE DOWEL HOLES TO PROVIDE ½" CL. TO WIRE SPIRAL.

PILE DATA ②					
PILE SIZE "T"	PILE EMBEDMENT "Y"	STRANDS	STRESS (ksi)	DOWEL BARS	PILE POINT SIZE
20"	26"	10 - ½"	0.720	11 # 25	HP10X57



PILE ORIENTATION DETAIL



④ IF THIS DIMENSION IS LESS THAN Y - 3", BUILD UP THE PILE AS DETAILED ABOVE.

PILE ANCHORAGE DETAILS

③ "TOP SIDE" IS THE TOP SURFACE OF THE PILE WHEN IT WAS POURED IN THE CASTING BED.

NOTES FOR BUILD-UP

CHIP BACK TOP OF PILES AND FIELD DRILL HOLES AS SHOWN. GROUT DOWEL BARS IN THE HOLES USING AN APPROVED NON-SHRINK GROUT WITH F'C = 5 KSI. TERMINATE DOWEL BARS 1" CLEAR FROM THE TOP OF PILE. SUBMIT DOWEL BAR LENGTHS TO THE RCE FOR APPROVAL. INCLUDE ALL COSTS ASSOCIATED WITH PREPARATION OF THE PILE FOR BUILD-UP IN THE UNIT PRICE BID FOR PILE BUILD-UP PREPARATION.

BUILD UP ALL PILES THAT HAVE AN EMBEDMENT LENGTH LESS THAN THE MINIMUM SHOWN IN THE PLANS. USE THE BUILD-UP DETAILS SHOWN ON THIS SHEET. THE OPTION IS AVAILABLE TO CAST BUILD-UPS WITH BENT CAPS PROVIDED REBAR AND WIRE SPIRAL ARE CONTINUED A DISTANCE EQUAL TO "Y" INTO THE CAP AND THE CAP IS CAST WITH CLASS 5000 CONCRETE. PAY FOR CAP CONCRETE AS CLASS 4000 CONCRETE REGARDLESS OF THE ACTUAL CLASS USED. INCLUDE AN EMBEDMENT LENGTH OF "Y" IN THE PILE BUILD-UP LENGTH MEASURED FOR PAYMENT. PAY FOR THE PILE BUILD-UP, INCLUDING ALL COSTS FOR DOWEL BARS, WIRE SPIRALS, AND BUILD-UP CONCRETE AS AN ADDITIONAL LENGTH OF PRESTRESSED CONCRETE PILING EQUAL TO THE BUILD-UP PAY LENGTH SHOWN IN THE BUILD-UP DETAIL.

GENERAL NOTES

CHAMFER ALL EXPOSED EDGES ¾" UNLESS NOTED OTHERWISE.

ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERS OF BARS (EXCEPT AS NOTED).

RELEASE ALTERNATE STRANDS SIMULTANEOUSLY AT OPPOSITE ENDS WITHOUT SHOCK.

TIE WIRE SPIRAL TO CABLES AND REINFORCING BARS AS REQUIRED TO MAINTAIN PITCH OF THE SPIRAL. SPLICE WIRE SPIRAL USING FULL STRENGTH LAP WELDS.

ANCHOR THE PILES INTO THE BENT CAPS USING THE DETAILS SHOWN ON THIS SHEET. INCLUDE ALL COSTS FOR THIS WORK IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE PILING.

MATERIALS

PRESTRESSING STRAND	- GRADE 270, LOW RELAXATION	AASHTO M 203
WIRE SPIRAL	-	AASHTO M 32, M 225
REINFORCING STEEL	- GRADE 60	ASTM A 706
CONCRETE	- CLASS 5000	STANDARD SPEC. SECT. 701
W OR HP PILE POINT	- GRADE 50	AASHTO M 270
STUDS	- GRADE 1015, 1018, OR 1020	AASHTO M 169

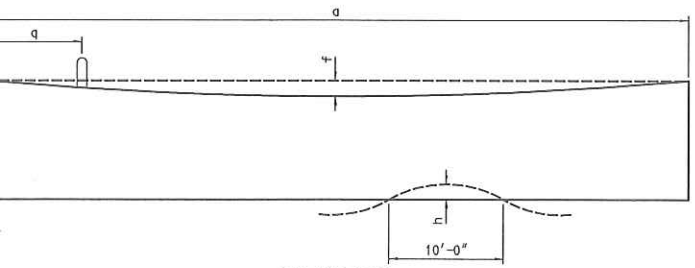
DESIGN DATA

LOW RELAXATION STRANDS

TENSILE STRENGTH (FPU) = 270 KSI
INITIAL PRESTRESS (0.75 FPU) = 202.5 KSI

CLASS 5000 CONCRETE

F'C = 5 KSI
F'CI = 3.5 KSI



ELEVATION

TOLERANCES

a. Length ± 1"
b. Width or Diameter ± 3/8", + ½" (including form draft)
c. Depth ± 3/8"
d. Variation from Specified Plan End Squareness or Skew ± ¼" per 12", ± ½" maximum
e. Variation from Specified Elevation End Squareness or Skew ± ¼" per 12", ± ½" maximum
f. Sweep (Variation from straight line parallel to centerline of member) (considered to be a form tolerance) ± ⅛" per 10' / ¼" in 10'
h. Local Smoothness of Any Surface ± ¼"
j. Projection of steel pile point from end of pile ± 1"
Position of steel pile point ± ½"
Alignment of steel pile point ± ½"
Length of steel pile point - 3", + 6"
k. Location of Strand ± ¼"
q. Location of Handling Device ± 6"
Longitudinal Spacing of Stirrups or Spiral Reinforcement ± ¾"

SOUTH CAROLINA No. 24002 THAI G. TRINH

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JMT
952 HOUSTON NORTHCUTT BLVD. SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

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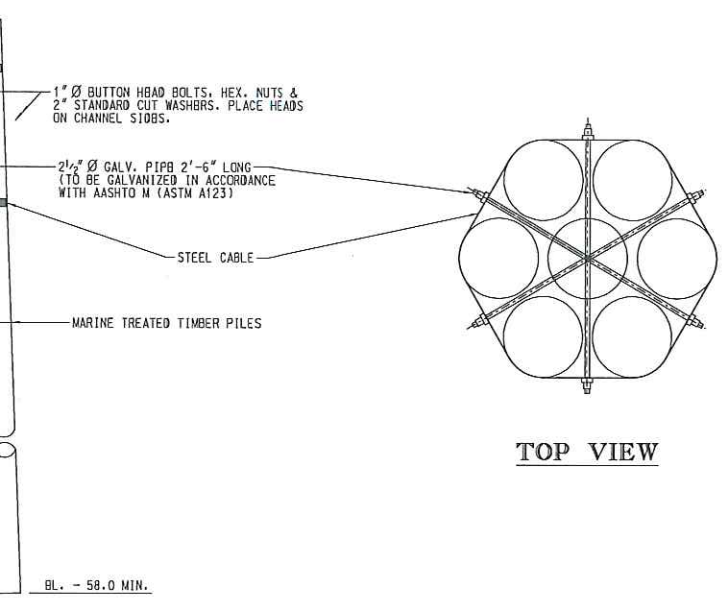
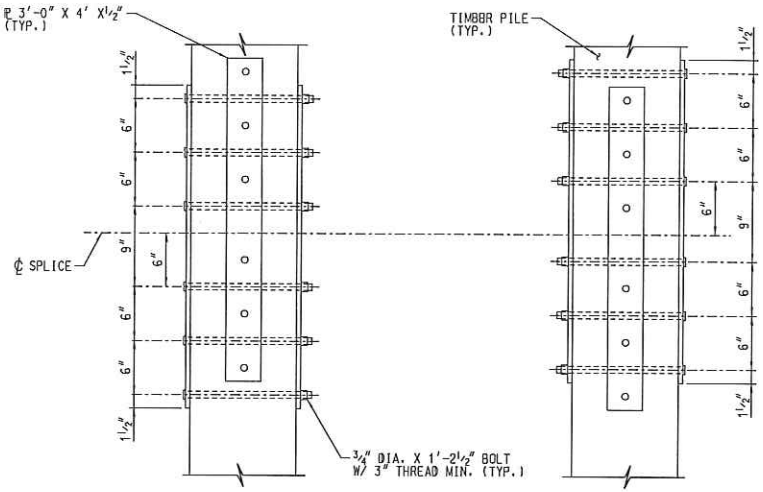
PRESTRESSED CONCRETE PILES WITH POINTS

COUNTY BEAUFORT
ROUTE FRIPP INLET BRIDGE

2.0



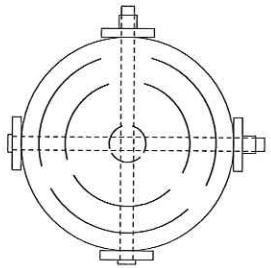
TOP VIEW



ELEVATION

NOTES:

1. PILES TO BE DRIVEN PLUMB AND THEN PULLED TOGETHER AS SHOWN IN DETAIL.
2. 7 PILE CLUSTERS TO BE SEIZED WITH TWO BANDS OF 4 TURNS EACH, 3/4" GALV. PLOW STEEL CABLE PULLED TIGHT TO HOLD PILES SNUG AGAINST EACH OTHER. END OF CABLE TO BE SECURELY FASTENED WITH THREE CABLE CLIPS. SLACK IN CABLE SHALL BE REMOVED BY TIGHTENING THE BUTTON HEAD BOLTS THROUGH THE PIPE.
3. DRIVE ONE STAPLE IN EACH TURN OF CABLE IN EACH PILE. ALL FASTENERS AND THIER COMPONETS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232 (ASTM A 153). PILES SHALL BE TREATED WITH 2.5 PCF CCA FOR MARINE USE.
4. ALL COST ASSOCIATED WITH FASTENERS, CABLE, PIPE, AND STAPLES SHALL BE INCLUDED IN THE PRICE BID FOR TIMBER DOLPHIN REPLACEMENT.
5. BOLT LENGTH FOR 12" DIAMETER PILE. LENGTH SHALL BE ADJUSTED FOR OTHER PILE DIAMETERS.
6. PLATES SHALL CONFORM TO ASTM A36.
7. BOLTS SHALL CONFORM TO ASTM A307.
8. ALL PLATES AND BOLTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123 OR A153 (AS APPLICABLE) AFTER FABRICATION.
9. ALL COST ASSOCIATED WITH THE SPLICING OF TIMBER PILES, INCLUDING HARDWARE, SHALL BE INCLUDED IN THE PRICE BID FOR TIMBER DOLPHIN REPLACEMENT.
10. A MAXIMUM OF ONE TIMBER SPLICE IS PERMISSIBLE PER PILE LOCATION. IF USED, LOCATE THE TOP OF SPLICE AT APPROXIMATE EL. -10.

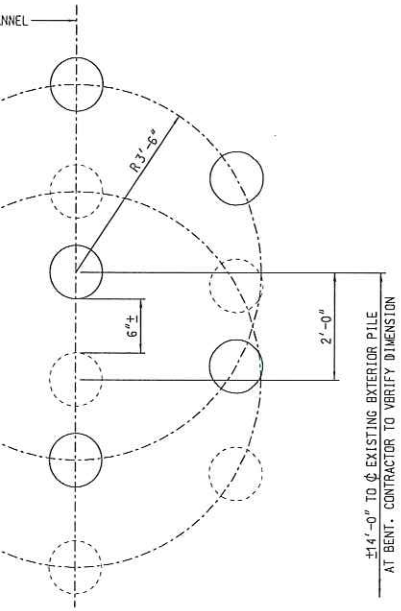


SECTION

TIMBER PILE SPLICE DETAIL
NOT TO SCALE

N

DOLPHIN REPLACEMENT
NOT TO SCALE



AN AT BASE

JMT
952 HOUSTON NORTHCUTT BLVD. SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

FRIPP ISLAND Public Service District

REPAIR TYPE 5:
TIMBER DOLPHIN
REPLACEMENT

COUNTY	ROUTE
BEAUFORT	FRIPP INLET BRIDGE

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 24002 THAI G. TRINH

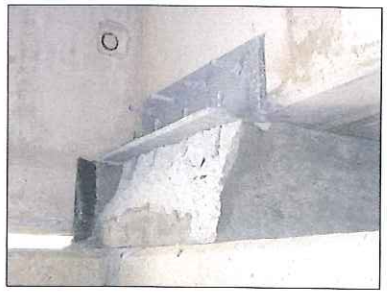
REV.			
REV.			
REVISED	TGT		
QUAN.	CSS	LMB	03-19
DR.	CSS	PDR	03-19
DES.	CSS	PDR	03-19
	BY	CHK.	DATE

3

ITEM NUMBER 4 - REPAIR TYPE 2
SPAN 13 EAST RAIL

ITEM NUMBER 7 - REPAIR TYPE 1
SPAN 17 BEAM 3

ITEM NUMBER 9 - REPAIR TYPE 1
SPAN 25 BEAM 3



ITEM NUMBER 11 - REPAIR TYPE 2
BENT 46 SHEAR KEY NEAR BEAM 1

3

ITEM NUMBER 5 - REPAIR TYPE 1A
SPAN 16 BEAM 1

ITEM NUMBER 9 - REPAIR TYPE 1
SPAN 25 BEAM 3

ITEM NUMBER 9 - REPAIR TYPE 1
SPAN 25 BEAM 3

ITEM NUMBER 11 - REPAIR TYPE 2
BENT 46 SHEAR KEY NEAR BEAM 2

1

ITEM NUMBER 6 - REPAIR TYPE 2
SPAN 16 WEST RAIL

ITEM NUMBER 9 - REPAIR TYPE 1
SPAN 25 BEAM 3

ITEM NUMBER 11 - REPAIR TYPE 1A
SPAN 35 BEAM 1

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 24002 THAI G. TRINH

REV.			
REV.			
REVIEWED	TGT		
QUAN.	–	–	–
DR.	LMB	TGT	03-19
DES.	–	–	–
	BY	CHK.	DATE

JMT
952 HOUSTON NORTHCUTT BLVD.
SUITE 100
MT. PLEASANT, SC 29464
(843) 556-2624

FRIPP ISLAND
Public Service District

INSPECTION PHOTOS

COUNTY: BEAUFORT
ROUTE: FRIPP INLET BRIDGE

Att 6

Butler

CHRYSLER DODGE Jeep RAM

1555 SALEM RD, BEAUFORT S.C. 29902
(843) 522-9696

3/11/2019

Buyer:	Fripp Island Public Service District
	291 Tarpon Blvd
	Fripp Island SC 29920
	Attn: Angie Hughes
Phone:	843-838-2400
Fax:	

Cell:	
Phone:	
Fax:	

Make:	Ram
Model:	1500 Quad Cab 4X2
Year:	2019
Color:	t/b/d
VIN:	t/b/d
Stock #:	t/b/d
Mileage:	10

Make:	
Model:	
Year:	
Color:	
VIN:	
Stock #:	
Mileage:	
ACV:	

MSRP	$35,575.00
Sale Price	**$19,530.00**

Options Included

5.7L V8 HEMI MDS VVT Engine		$ 1,737.00
HD Viny 40/20/40 Split Bench Seat	HD Vinyl Flooring	included in price
Class IV Receiver Hitch w/4&7 pin	Spray in Bedliner	included in price
Power Windows. Locks & Mirrors	Tubular Side Steps	included in price
Tow Package		$ 38.00
Options Total		$1,775.00

Sub Total	**$21,305.00**
DOC	
Tag	
5% IMF Fee (SC)	$500.00
Balance Due	**$21,805.00**

Manager Tina Neill **Customer** _____

Insurance Information

Agency Name and Address:					
				Phone No.:	
Policy No.				Insurance Company:	
Comp.:		Collision:		Effective Dates:	
Contact:			Date:		

DeAna Reed-Sharpe, Procurement Manager
Phone: (803)896-6389
Email: drsharpe@mmo.sc.gov

Materials Management Office
1201 Main Street, Suite 600
Columbia, South Carolina 29201

PU-4: Truck, Pickup, 4x2, 1/2 Ton, Extended Cab, Min. 6ft Bed, Flex Fuel

Contract Number:	**4400019970**	Contractor:	**Performance CDJR**
Initial Contract Term:	12/4/2018 - 10/31/2019	Address:	605 Warsaw Hwy, Clinton, NC 28328
Contract Rollover Dates:	TBD - TBD	Vendor #:	7000241847
Order Cutoff Date:	**TBD**	Contact:	**Amy Hill**
Model:	**Ram 1500 Quad Cab DS1L41**	Email:	ahill@performancecdjr.com
Commodity Code:	07202	Telephone:	**336-687-7964**
Delivery Days ARO:	90-120	Fax:	**N/A**

BASE PRICE **$19,530.00**

*Click on the link above for an itemized listing of items included in the base price.

Optional Additions

4x4 Package - State Standard Spec	$4,197.00
Auxiliary Power Connection-Standard State Spec	$118.00
Auxiliary Power Outlet	Factory Standard
Black or DPS/Bright Silver (to be specified by agency)	$181.00
Bluetooth/Hands Free Calling	$175.00
Privacy Glass- State Standard Spec	Factory Standard
Securable Folding Bedcover (Hard Surface)	$975.00
Spray-In Bedliner	Factory Standard
Tow Package-State Standard Spec	$38.00
V8/Larger Engine (Regular Gas OK)	$1,737.00
Winch-State Standard Spec	$1,800.00

Optional Deductions

Vehicle Delivery Fee	$20.00
Power Locks & Windows to Manual	Factory Standard