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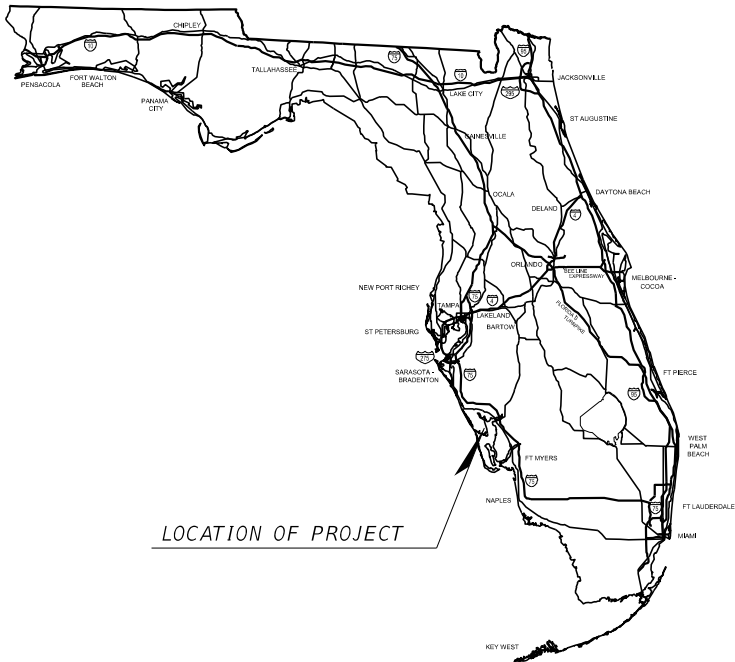
CHARLOTTE COUNTY, FLORIDA

CONTRACT PLANS

Charlotte County Public Works

SOUTH GULF COVE MSBU BRIDGE REPAIR PROJECT
INGRAHAM BLVD. OVER
SANTA CRUZ WATERWAY (BRIDGE NO. 014072)

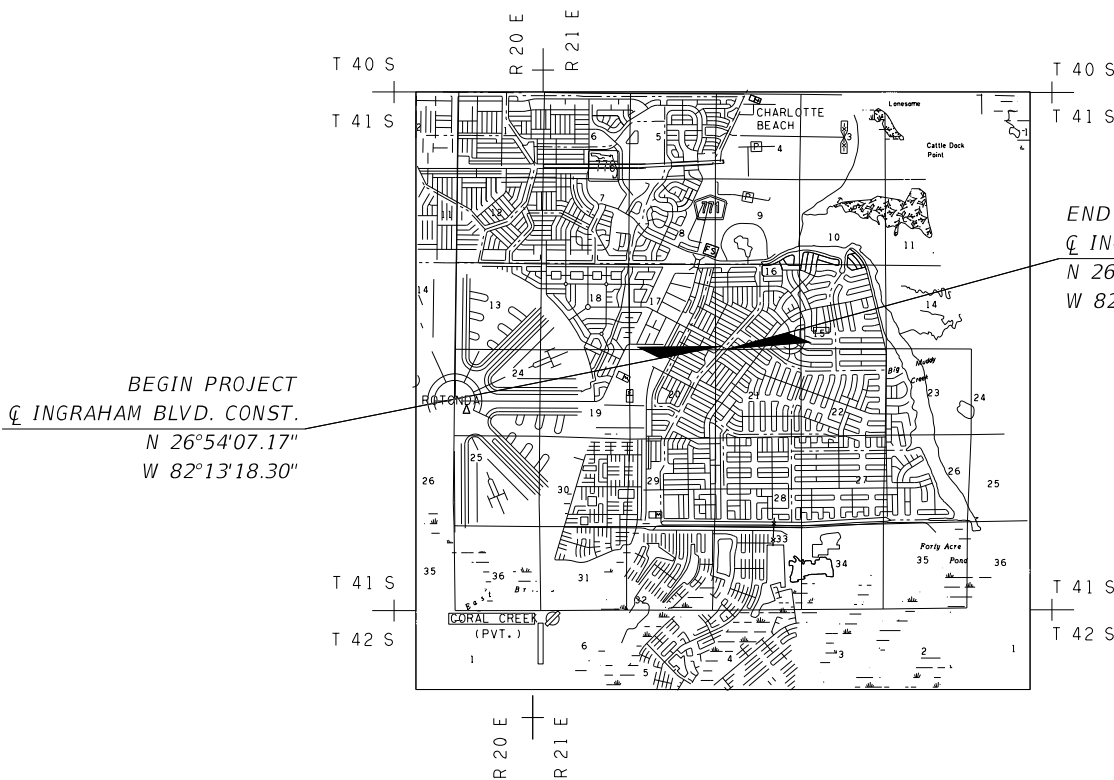
CONTRACT NO. 24-200 W.O. 299



LOCATION OF PROJECT

GOVERNING STANDARDS & SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS DATED FY 2024-25,
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION DATED FY 2024-25,
AS AMENDED BY CONTRACT DOCUMENTS.

FOR DESIGN STANDARDS CLICK ON "STANDARD PLANS FOR
ROAD AND BRIDGE CONSTRUCTION" AT THE FOLLOWING WEB
SITE: [HTTPS://WWW.FDOT.GOV/DESIGN/STANDARDPLANS/](https://www.fdot.gov/design/standardplans/)



LOCATION MAP
SECTION 16 TOWNSHIP 41S, RANGE 21E

SHOP DRAWINGS
TO BE SUBMITTED TO:

LEO E. RODRIGUEZ, P.E.
DRMP, INC.
15310 AMBERLY DRIVE
SUITE 310
TAMPA, FL 33647

PLANS PREPARED BY:

DRMP, INC.
15310 AMBERLY DRIVE
SUITE 310
TAMPA, FL 33647
PHONE: (813) 265-9800
LEO E. RODRIGUEZ, P.E. 78493

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

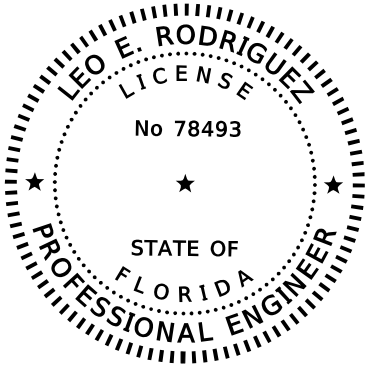
GOOGLE EARTH LINK PROVIDED FOR BRIDGE LOCATION.
<https://maps.app.goo.gl/Pq85QwLaF8fPqZ3GA>

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

ENGINEER OF RECORD: LEO E. RODRIGUEZ, P.E.
P.E. NO.: 78493

COUNTY PROJECT MANAGER: KELLY SLAUGHTER

FISCAL YEAR	SHEET NO.
25	B1-01

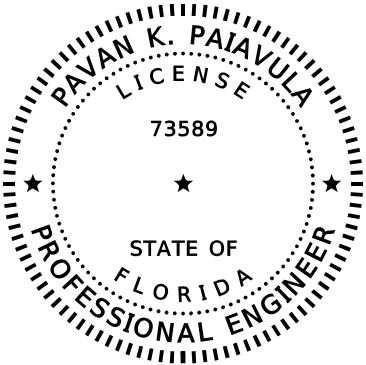


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DRMP, INC.
LEO E. RODRIGUEZ, P.E.
P.E. LICENSE NUMBER 78493
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647



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DRMP, INC.
PAVAN K. PAIYAVULA, P.E.
P.E. LICENSE NUMBER 73589
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

STRUCTURE PLANS	
SHEET NO.	SHEET DESCRIPTION
B1-01	KEYSHEET
B1-02	SIGNATURE SHEET
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B1-05	SUMMARY OF QUANTITIES
B1-06	GENERAL PLAN & ELEVATION
B1-07	MISCELLANEOUS REPAIR DETAILS (1 OF 2)
B1-08	MISCELLANEOUS REPAIR DETAILS (2 OF 2)
B1-09	GENERAL CONCRETE SPALL REPAIR DETAILS

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
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STRUCTURE PLANS	
SHEET NO.	SHEET DESCRIPTION
B1-02	SIGNATURE SHEET
B1-10	CONCEPTUAL TEMPORARY TRAFFIC CONTROL PLAN - GENERAL NOTES
B1-11	CONCEPTUAL TEMPORARY TRAFFIC CONTROL PLAN - DETOUR PLAN

BRIDGE NO. 014072

REVISIONS						DRAWN BY: RP 09-24 CHECKED BY: DRJ 09-24 DESIGNED BY: RP 09-24 CHECKED BY: DRJ 09-24	CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE: SIGNATURE SHEET	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						LEO E. RODRIGUEZ, P.E. P.E. NO.: 78493 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	N/A	CHARLOTTE	24-200	INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY	B1-02

GENERAL NOTES

DESIGN SPECIFICATIONS:

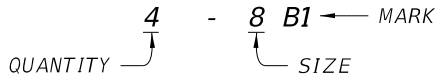
- 1. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE DESIGN SPECIFICATION (9TH EDITION, 2022) AND APPROVED INTERIMS AS SPECIFIED IN THE STRUCTURES DESIGN GUIDELINES.
- 2. FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STRUCTURES DESIGN GUIDELINES (JANUARY 2024).

DRAWINGS AND DIMENSIONS:

- 1. DO NOT SCALE DRAWINGS.
- 2. VERIFY RELEVANT EXISTING FIELD CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING REPAIRS OR ORDERING ANY MATERIALS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND.
- 3. ALL DIMENSIONS ARE IN FEET AND INCHES.

REINFORCING STEEL:

- 1. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. PER SPECIFICATION SECTION 415.
- 2. ALL DIMENSIONS PERTAINING TO LOCATION OF REINFORCEMENT ARE TO CENTERLINE OF BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO FACE OF CONCRETE.
- 3. REINFORCEMENT DETAIL DIMENSIONS ARE OUT-TO-OUT OF BARS.
- 4. TYPICAL REINFORCING BARS ARE DESIGNATED THUS:



ENVIRONMENT:

LOCATION - COASTAL (SALT-WATER)
SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (ASSUMED)
SUBSTRUCTURE: EXTREMELY AGGRESSIVE (ASSUMED)

PLAN DIMENSIONS:

ALL DIMENSIONS IN THESE PLANS ARE GIVEN EITHER HORIZONTALLY OR VERTICALLY. UNLESS OTHERWISE NOTED DECK JOINT OPENINGS ARE GIVEN FOR A MEAN TEMPERATURE OF 70°F.

EXISTING PLANS:

STRUCTURE BUILT IN 1981. NO EXISTING PLANS AVAILABLE.

DIMENSION VERIFICATION:

THE DIMENSIONS, ELEVATIONS, AND INTERSECTION ANGLES SHOWN ARE BASED ON LIMITED INFORMATION FROM EXISTING DOCUMENTS AND FIELD MEASUREMENTS. VERIFY THE DATA BEFORE CONSTRUCTION OR ORDERING MATERIALS.

VERTICAL DATUM:

PLAN ELEVATIONS ARE IN FEET AND REFER TO NAVD88 DATUM. VERIFY THE RELEVANT ELEVATIONS IN THE FIELD.

UTILITIES:

LOCATE RELEVANT UTILITIES (INCLUDING SUBAQUEOUS CHANNEL CROSSINGS) BEFORE COMMENCING CONSTRUCTION. CONTACT SUNSHINE 811 AND ANY OTHER LOCAL UTILITIES TO VERIFY THE UTILITIES EXISTING AT THE CONSTRUCTION SITE. IF ANY UTILITIES CONFLICT WITH PROPOSED CONSTRUCTION METHODS, MATERIALS, OR EQUIPMENT, NOTIFY THE ENGINEER.

UTILITIES: (CONTINUED)

CHARLOTTE COUNTY UTILITIES - SW (941) 764-4309
CENTURYLINK (850) 599-1444
COMCAST (239) 253-7642
FLORIDA POWER & LIGHT - CHARLOTTE (386) 586-6403

INCIDENTAL ITEMS:

PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL PAY ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR BID ITEMS CONTAINED IN THIS CONTRACT.

CONCRETE:

ALL CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 346 OF THE FDOT SPECIFICATIONS.
f'c CLASS NS = 2500 psi

JOINTS IN CONCRETE:

CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT LOCATIONS INDICATED ON THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE APPROVAL OF THE ENGINEER.

PHASING OF WORK:

WORK PHASING AND PROGRESSION OF THE WORK SHALL CONFORM WITH THE TRAFFIC CONTROL NOTES AND THE NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS AND APPLICABLE STANDARDS.

CONCRETE RESTORATION:

FOR REQUIREMENTS ON SURFACE PREPARATION MIXING, PLACING, FINISHING, MATERIAL, AND OTHER RELATED ITEMS, REFER TO THE FDOT SPECIFICATIONS.

SITE CONDITIONS:

- 1. BE AWARE OF THE SITE CONDITIONS REGARDING WATER DEPTH AND DO NOT DISTURB THE HABITAT.
- 2. BULKHEAD WALL CRACK REPAIRS MAY BE LOCATED UNDERWATER AND REQUIRE UNDERWATER REPAIR TECHNIQUES. PROVIDE TEMPORARY FORMWORK INSTALLATION DETAILS TO ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF WORK.

CONCRETE COVER:

CONCRETE COVER SHOWN IN THE PLANS DOES NOT INCLUDE PLACEMENT OR FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER". SEE FDOT SPECIFICATIONS FOR ALLOWABLE TOLERANCES.

MATERIAL PRODUCTS:

MATERIAL MEETING THE REQUIREMENTS OF THE FDOT APPROVED PRODUCTS LIST (APL) AND PLANS AND SPECIFICATIONS SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED MANUFACTURER'S RECOMMENDATIONS.

MAINTENANCE OF NAVIGATION CHANNEL:

NOTIFY LT. CLARK SANFORD AT THE USCG SECTOR ST. PETERSBURG AT 813-228-2191 EXT. 8105 PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, IN ADVANCE OF ACTIONS DURING BRIDGE CONSTRUCTION OR DEMOLITION WHICH POTENTIALLY AFFECT WATERWAY USERS AND PRIOR TO THE PLACEMENT OF ANY FLOATING CONSTRUCTION EQUIPMENT IN THE WATERWAY. NOTIFY NO LESS THAN 60 DAYS IN ADVANCE OF ACTIONS WHICH COULD POTENTIALLY AFFECT THE WATERWAY.

MARINE TRAFFIC:

KEEP THE CHANNEL OPEN TO TRAFFIC AT ALL TIMES.

PROTECTION OF WATER RESOURCES:

- 1. CONDUCT ACTIVITIES IN A MANNER TO AVOID POLLUTION OF SURFACE AND GROUND WATER AND WETLANDS. THE CONSTRUCTION METHODS SHALL PROTECT WETLAND AND SURFACE WATER AREAS FROM DAMAGE DUE TO MECHANICAL GRADING, EROSION, SEDIMENTATION, VEHICULAR TRAFFIC, AND TURBID DISCHARGES. NO STORAGE OR STOCKPILING OF EQUIPMENTS IS ALLOWED WITHIN ANY WETLAND AREA UNLESS SPECIFICALLY AUTHORIZED UNDER PERMIT. WATER DIRECTLY DERIVED FROM CONSTRUCTION ACTIVITIES SHALL BE COLLECTED IN RETENTION AREAS TO ALLOW SETTTLING OF SUSPENDED MATERIALS. ALL MONITORING OF ANY WATER AREAS THAT ARE AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 2. IMMEDIATELY REMOVE DEBRIS THAT FALLS IN THE WATER AT THE CONTRACTOR'S OWN EXPENSE.

OIL, FUEL AND HAZARDOUS SUBSTANCE SPILL PREVENTION:

PREPARE A SPILL CONTINGENCY PLAN IN ACCORDANCE WITH 40CFR, PART 109. THE PLAN IS REQUIRED TO PREVENT OIL, FUEL OR OTHER HAZARDOUS SUBSTANCES FROM ENTERING THE AIR, GROUND, DRAINAGE, AND LOCAL BODIES OR WETLANDS. IN THE EVENT THAT A SPILL OCCURS, DESPITE DESIGN AND PROCEDURAL CONTROLS, TAKE IMMEDIATE ACTION TO CONTAIN AND CLEANUP THE SPILL AND REPORT THE SPILL IMMEDIATELY TO THE COUNTY'S REPRESENTATIVE. SUBMIT A WRITTEN REPORT PROVIDING CERTIFICATION OF COMMITMENT OF MANPOWER, EQUIPMENT AND MATERIALS NECESSARY TO PREVENT THE SPREAD AND EFFECT EXPEDITIOUS CLEANUP AND DISPOSAL.

FISH AND WILDLIFE RESOURCES PROTECTION:

- 1. CONTROL AND MINIMIZE INTERFERENCE WITH, DISTURBANCE TO, AND DAMAGE TO FISH AND WILDLIFE RESOURCES WHERE APPROPRIATE. THE ENVIRONMENTAL PROTECTION PLAN SHOULD LIST ANY THREATENED AND ENDANGERED SPECIES THAT NEED SPECIFIC PROTECTION MEASURES. THE PERSON RESPONSIBLE FOR THE ENVIRONMENTAL PROTECTION PLAN MUST IDENTIFY THE THREATENED AND ENDANGERED SPECIES LISTED. IF THE CONTRACTOR OBSERVES ANY ACTIVITY THAT MIGHT ADVERSELY IMPACT THREATENED OR ENDANGERED SPECIES, IMMEDIATELY NOTIFY THE COUNTY AND THE COUNTY'S REPRESENTATIVE. THE COUNTY'S REPRESENTATIVE HOLDS THE SOLE AUTHORITY TO STOP WORK, CREATE A BUFFER AREA, OR RESTART CONSTRUCTION ACTIVITIES.
- 2. IN THE EVENT THAT THE COUNTY'S REPRESENTATIVE DETERMINES THE ADVERSE IMPACT TO THREATENED OR ENDANGERED SPECIES MAY OCCUR AS A RESULT OF THE CONSTRUCTION ACTIVITIES, THE COUNTY SHALL NOTIFY THE CORPS OF ENGINEERS AND THE FISH AND WILDLIFE SERVICE. ADVERSE IMPACT IS DEFINED AS TO HARASS, HARM, PURSUE, HUNT, SHOOT, WOUND, KILL, TRAP, CAPTURE, COLLECT, OR TO ATTEMPT TO ENGAGE IN ANY SUCH CONDUCT.

BRIDGE NO. 014072

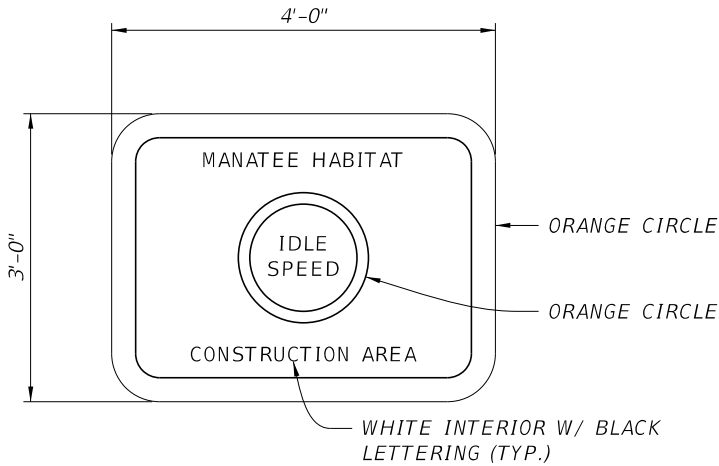
REVISIONS						LEO E. RODRIGUEZ, P.E. P.E. NO.: 78493 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	DRAWN BY: RP 09-24			CHARLOTTE COUNTY PUBLIC WORKS	SHEET TITLE:		REF. DWG. NO.	
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		CHECKED BY: DRJ 09-24				GENERAL NOTES (1 OF 2)			
							DESIGNED BY: RP 09-24			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY	SHEET NO. B1-03
							CHECKED BY: DRJ 09-24			N/A	CHARLOTTE	24-200		

GENERAL NOTES

SPECIAL MANATEE PROTECTION CONDITIONS:

MANATEES MAY BE PRESENT IN THE AREA. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION'S STANDARD MANATEE PROTECTION CONSTRUCTION CONDITIONS FOR IN-WATER WORK.

1. ALL PERSONNEL ASSOCIATED WITH THE PROJECT SHALL BE INSTRUCTED ABOUT THE PRESENCE OF MANATEES AND MANATEE SPEED ZONES, AND THE NEED TO AVOID COLLISIONS WITH AND INJURY TO MANATEES. ALL CONSTRUCTION PERSONNEL IS ADVISED THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING MANATEES WHICH ARE PROTECTED UNDER THE MARINE MAMMAL PROTECTION ACT, THE ENDANGERED SPECIES ACT, AND THE FLORIDA MANATEE SANCTUARY ACT.
2. ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "IDLE SPEED/NO WAKE" AT ALL TIMES WHILE IN THE IMMEDIATE AREA AND WHILE IN WATER WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN A FOUR-FEET CLEARANCE FROM THE BOTTOM, ALL VESSELS WILL FOLLOW ROUTES OF DEEP WATER WHENEVER POSSIBLE.
3. SILTATION OR TURBIDITY BARRIERS SHALL BE MADE OF MATERIAL IN WHICH MANATEES CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND ENTRAPMENT. BARRIERS MUST NOT IMPEDE MANATEE MOVEMENT.
4. ALL ONSITE PROJECT PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES FOR THE PRESENCE OF MANATEE(S) COMES WITHIN 50 FEET OF THE OPERATION. ACTIVITIES WILL NOT RESUME UNTIL THE MANATEE(S) HAS MOVED BEYOND THE 50-FOOT RADIUS OF THE PROJECT OPERATION, OR UNTIL 30 MINUTES ELAPSES IF THE MANATEE(S) HAS NOT REAPPEARED WITHIN 50 FEET OF THE OPERATION, ANIMALS MUST NOT BE HERDED AWAY OR HARASSED INTO LEAVING.
5. ANY COLLISIONS WITH OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE FWC HOTLINE AT 1-888-404-FWCC. COLLISION AND/OR INJURY SHOULD ALSO BE REPORTED TO THE U.S. FISH AND WILDLIFE SERVICE IN JACKSONVILLE (1-904-232-2580) FOR NORTH FLORIDA OR VERO BEACH (1-561-562-3909) FOR SOUTH FLORIDA.
6. TEMPORARY SIGNS CONCERNING MANATEES SHALL BE POSTED PRIOR TO AND DURING ALL IN-WATER PROJECT ACTIVITIES. ALL SIGNS ARE TO BE REMOVED BY THE PERMITTEE UPON COMPLETION OF THE PROJECT. AWARENESS SIGNS THAT HAVE ALREADY BEEN APPROVED FOR THIS USE BY THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) MUST BE USED. ONE SIGN MEASURING AT LEAST 3 FT. BY 4 FT. WHICH READS CAUTION: MANATEE AREA MUST BE POSTED.



7. A SECOND SIGN MEASURING AT LEAST 8½" x 11" EXPLAINING THE REQUIREMENTS FOR "IDLE SPEED/NO WAKE" AND THE SHUT DOWN OF IN-WATER OPERATIONS MUST BE POSTED IN A LOCATION PROMINENTLY VISIBLE TO ALL PERSONNEL ENGAGED IN WATER-RELATED ACTIVITIES.

SPECIAL MANATEE PROTECTION CONDITIONS: (CONTINUED)

CAUTION: MANATEE HABITAT

All Project Vessels
IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must
SHUT DOWN

Report any collision or injury to:
1-888-404-FWCC (1-888-404-3922)

Florida Fish and Wildlife Conservation Commission

ALL SIGNS ARE TO BE REMOVED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT.

BRIDGE NO. 014072

REVISIONS						LEO E. RODRIGUEZ, P.E. P.E. NO.: 78493 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	DRAWN BY: RP 09-24			CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE:		REF. DWG. NO.	
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		CHECKED BY: DRJ 09-24						GENERAL NOTES (2 OF 2)			
							DESIGNED BY: RP 09-24			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:		SHEET NO.	
							CHECKED BY: DRJ 09-24			N/A	CHARLOTTE	24-200	INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY		B1-04	

BID ITEMS FOR BRIDGE NO. 014072 INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
101-1**	MOBILIZATION	LS	1
102-1**	MAINTENANCE OF TRAFFIC	LS	1
110-1-1**	CLEARING & GRUBBING	LS	1
121-70	FLOWABLE FILL	CY	1.0
327-70-5**	MILLING EXISTING ASPHALT PAVEMENT, 2" AVG. DEPTH	SY	126
327-70-20**	MILLING EXISTING ASPHALT PAVEMENT, 3 3/4" AVG. DEPTH	SY	442
331-2B**	ASPHALTIC CONCRETE TYPE S-III	TN	103.7
400-150**	CLEANING AND SEALING CONCRETE SURFACE	SF	1687
401-70-1	RESTORE SPALLED AREAS, EPOXY	CF	5.0
401-999**	WATERPROOFING MEMBRANE	SY	380
411-1	EPOXY MATERIAL FOR CRACK INJECTION - STRUCTURES REHAB	GA	5
411-2	CRACKS INJECT & SEAL - STRUCTURES REHAB	LF	261
458-1-21	BRIDGE DECK EXPANSION JOINT, REHABILITATION, POURED JOINT WITH BACKER ROD	LF	220
458-2	POLYMER NOSING FOR BRIDGE DECK EXPANSION JOINT	CF	84.8
530-3-3	RIPRAP, RUBBLE, BANK AND SHORE	TN	13.7
530-74	BEDDING STONE	TN	5.2
E536-15	MISCELLANEOUS GUARDRAIL MAINTENANCE	LS	1
705-10-3	OBJECT MARKER, TYPE 3	EA	4
710-A**	PAINTED PAVEMENT MARKINGS, DURABLE, WHITE, SOLID 6"	LF	482
710-B**	PAINTED PAVEMENT MARKINGS, DURABLE, YELLOW, SOLID 6"	LF	482

- NOTES:
- ALL WORK DESCRIBED IN REPAIR NOTE 7 ON THE "GENERAL PLAN AND ELEVATION" SHEET IS COVERED UNDER PAY ITEM E536-15, "MISCELLANEOUS GUARDRAIL MAINTENANCE."
 - ALL WORK DESCRIBED IN REPAIR NOTE 9 ON THE "GENERAL PLAN AND ELEVATION" SHEET IS COVERED UNDER PAY ITEM 110-1-1, "CLEARING & GRUBBING."
 - ALL WORK DESCRIBED IN REPAIR NOTE 10 ON THE "GENERAL PLAN AND ELEVATION" SHEET IS CONSIDERED INCIDENTAL TO PAY ITEM 411-2, "INJECT AND SEAL CRACK".
 - ALL WORK DESCRIBED IN REPAIR NOTE 11 ON THE "GENERAL PLAN AND ELEVATION" SHEET IS COVERED UNDER PAY ITEM 400-150, "CLEANING AND SEALING CONCRETE SURFACE".

** NOTE - TECHNICAL SPECIAL PROVISION PROVIDED.

CRACK REPAIR TABLE						
LOCATION	DESCRIPTION	DIMENSIONS PER INSPECTION				TOTAL LENGTH
		LENGTH	WIDTH	DEPTH	NO.	
		(FT.)	(IN.)	(IN.)		(FT.)
WEST END BENT SLOPE PROTECTION	RANDOM CRACKS THROUGHOUT	5	0.0625	4	11	65
EAST END BENT SLOPE PROTECTION	RANDOM CRACKS THROUGHOUT	5	0.0625	4	10	65
EAST BULKHEAD WALL	LONGITUDINAL CRACKS	2	0.0625	4	7	34
TOP OF BRIDGE DECK	REFLECTIVE LONGITUDINAL CRACKS	24	0.0625	5	3	97

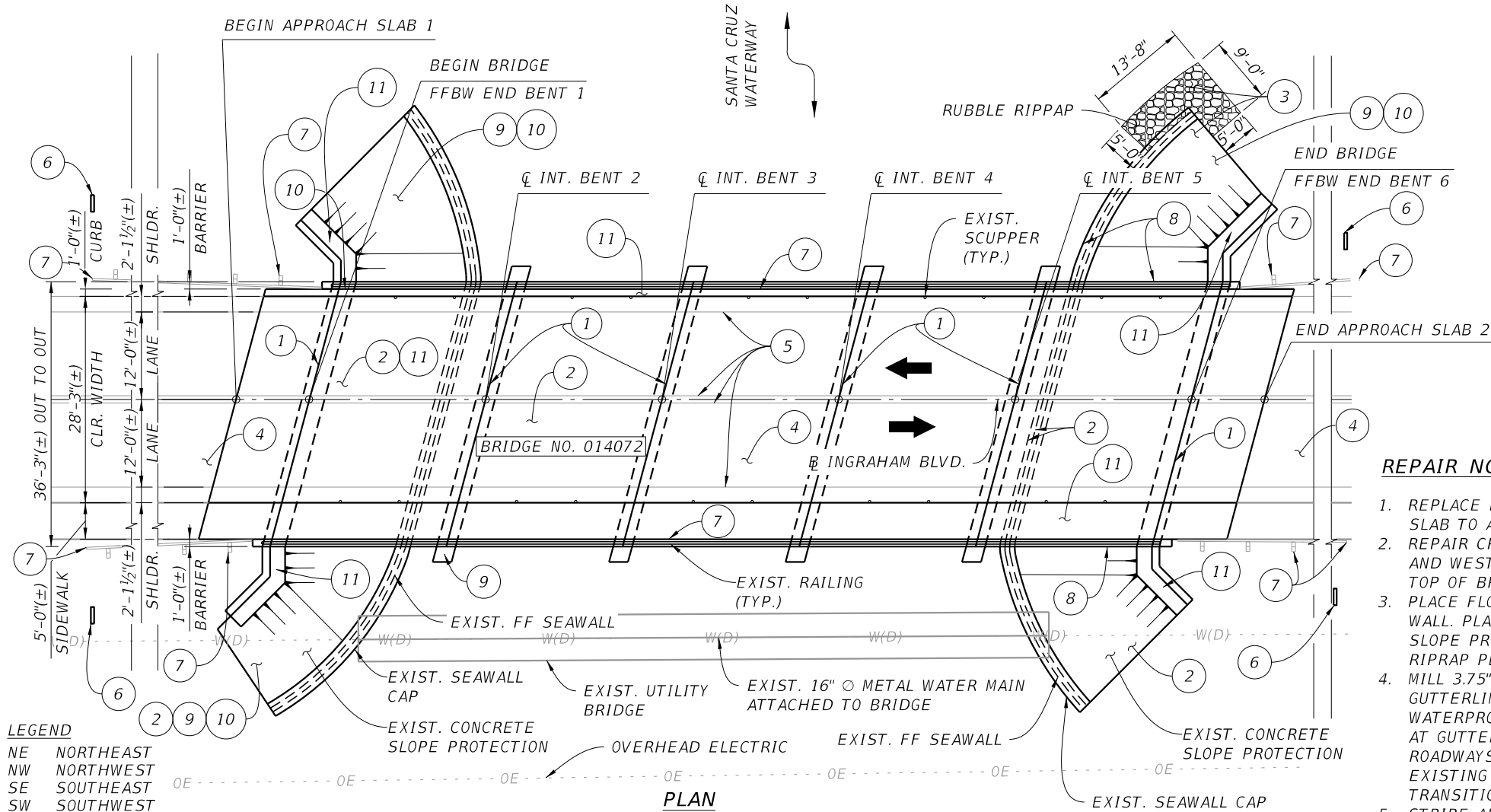
- NOTES:
- REPAIR DEPTH ASSUMED FOR QUANTITY PURPOSES.
 - TOTAL REPAIR QUANTITY ASSUMES 25 LF ADDITIONAL CRACKS IN SLOPE PROTECTION TO ACCOUNT FOR UNKNOWN DEFICIENCY EXTENTS.
 - TOTAL REPAIR QUANTITY ASSUMES 20 LF ADDITIONAL CRACKS IN BULKHEAD WALL CAP TO ACCOUNT FOR UNKNOWN DEFICIENCY EXTENTS.
 - TOTAL REPAIR QUANTITY ASSUMES 25 LF ADDITIONAL CRACKS IN TOP OF BRIDGE DECK TO ACCOUNT FOR UNKNOWN DEFICIENCY EXTENTS.

SPALL/DELAMINATION REPAIR TABLE							
LOCATION	DESCRIPTION	NO.	DIMENSIONS PER INSPECTION			MIN. REMOVAL DEPTH	VOLUME
			LENGTH	WIDTH	DEPTH		
			(IN.)	(IN.)	(IN.)	(IN.)	(CF)
EAST BULKHEAD WALL	DELAMINATION	1	24	17	-	3	1.1
EAST BULKHEAD WALL	DELAMINATION	1	6	15	-	3	0.2
POST-TENSIONED DUCT PATCHES	DELAMINATION / SPALL	20	8	2	2	2	0.4

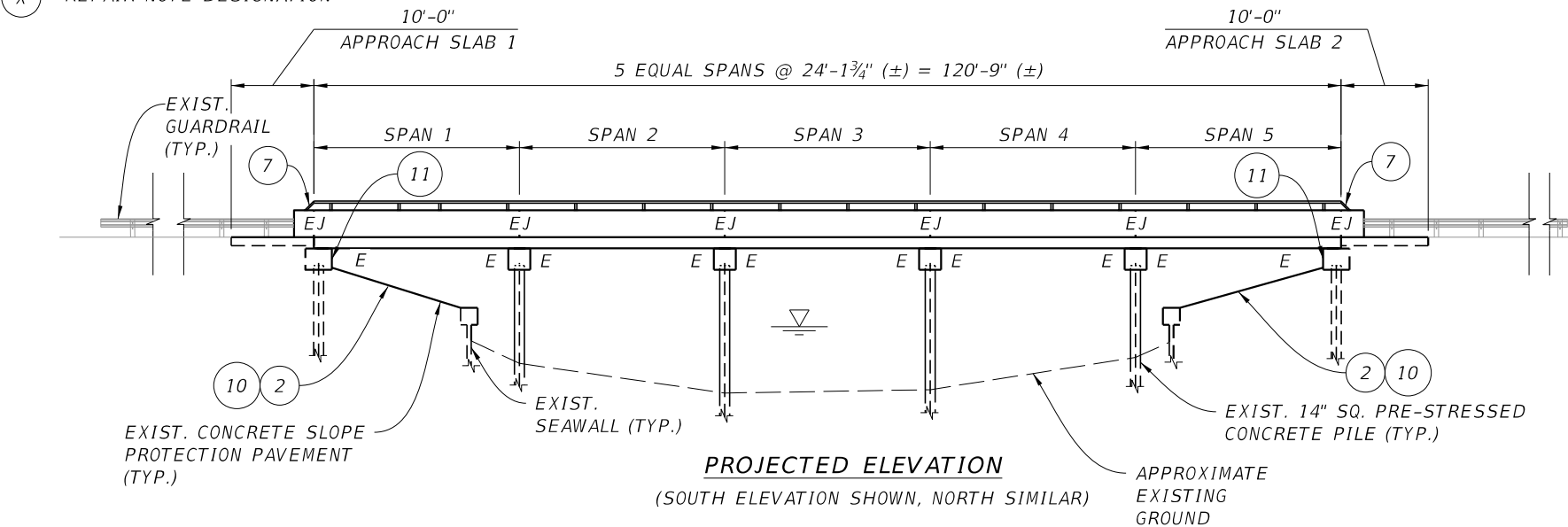
- NOTES:
- MINIMAL REMOVAL DEPTH IS ESTIMATED FOR QUANTITY PURPOSES.
 - TOTAL REPAIR QUANTITY FOR BULKHEAD WALL REPAIRS ASSUME 50% ADDITIONAL MATERIAL TO ACCOUNT FOR UNKNOWN DEFICIENCY EXTENTS.

BRIDGE NO. 014072

REVISIONS						DRAWN BY: RP 09-24 CHECKED BY: DRJ 09-24 DESIGNED BY: 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE: SUMMARY OF QUANTITIES		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY		SHEET NO. B1-05
							N/A	CHARLOTTE	24-200			



- LEGEND
- NE NORTHEAST
 - NW NORTHWEST
 - SE SOUTHEAST
 - SW SOUTHWEST
 - EJ EXPANSION JOINT
 - E EXPANSION BEARING
 - F FIXED BEARING
 - (X) REPAIR NOTE DESIGNATION



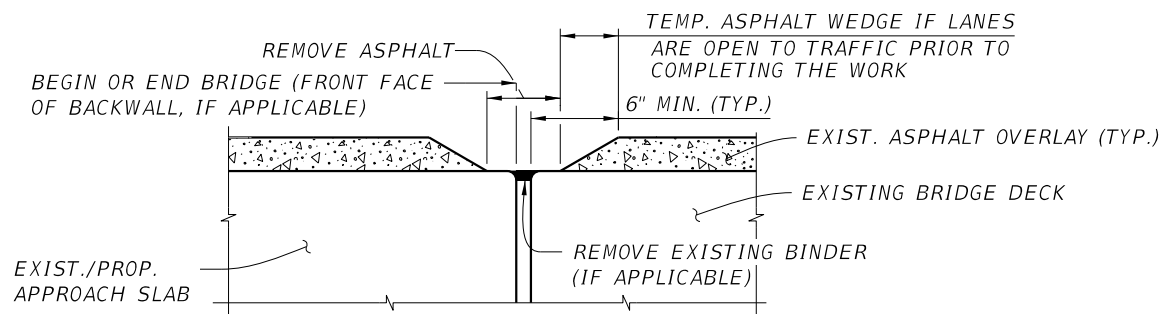
REPAIR LOCATION DATA TABLE		
REPAIR NOTE	ASSOCIATIVE REPAIR MATERIAL	
	SHT. NO.	SHEET TITLE
1	B1-07	MISCELLANEOUS REPAIR DETAILS (1 OF 2)
2	B1-05 & B1-08	SUMMARY OF QUANTITIES & MISCELLANEOUS REPAIR DETAILS (2 OF 2)
3	B1-08	MISCELLANEOUS REPAIR DETAILS (2 OF 2)
4	B1-07	MISCELLANEOUS REPAIR DETAILS (1 OF 2)
5	N/A	N/A
6	N/A	N/A
7	N/A	N/A
8	B1-05 & B1-09	SUMMARY OF QUANTITIES & GENERAL CONCRETE SPALL REPAIR DETAILS
9	N/A	N/A
10	N/A	N/A
11	N/A	N/A

REPAIR NOTES

- REPLACE EXPANSION JOINTS AT ALL BENTS. PROVIDE 1" DEEP SAW CUT AT APPROACH SLAB TO APPROACH ROADWAY TRANSITIONS AFTER INSTALLING ASPHALT OVERLAY.
- REPAIR CRACKS ALONG FACE OF EAST BULKHEAD WALL AND CAP. REPAIR CRACKS IN EAST AND WEST CONCRETE SLOPE PROTECTION. REPAIR LONGITUDINAL REFLECTIVE CRACKS IN TOP OF BRIDGE DECK PRIOR TO INSTALLATION OF WATERPROOF MEMBRANE.
- PLACE FLOWABLE FILL BENEATH NE SLOPE PROTECTION AT THE END OF THE EAST BULKHEAD WALL. PLACE 2'-6" THICK RUBBLE RIPRAP (BANK AND SHORE) ADJACENT TO THE NE EDGE OF SLOPE PROTECTION. PLACE 1'-0" THICK BEDDING STONE AND FILTER FABRIC BELOW RUBBLE RIPRAP PER FDOT SPECIFICATIONS SECTION 530.
- MILL 3.75" AVERAGE ASPHALT OVERLAY ON BRIDGE AND APPROACH SLABS BETWEEN GUTTERLINES. MILL 2" ASPHALT FOR 20 FT. OF APPROACH ROADWAY, EACH SIDE. INSTALL WATERPROOF MEMBRANE ON BRIDGE PRIOR TO PLACING NEW ASPHALT. INSTALL 2" (MIN. AT GUTTERLINES) ASPHALT OVERLAY OVER BRIDGE, APPROACH SLABS, AND APPROACH ROADWAYS. MATCH EXISTING CROSS SLOPE. TAPER ASPHALT THICKNESS TO TIE INTO EXISTING APPROACH ROADWAY ELEVATION. TAKE CARE TO PROVIDE A SMOOTH ROADWAY TRANSITION. DO NOT BLOCK SCUPPERS.
- STRIPE APPROACH SLABS AND BRIDGE DECK. RE-STRIPE APPROACH ROADWAYS 50FT. BEYOND LIMITS OF APPROACH SLAB.
- RE-SET OBJECT MARKERS.
- TIGHTEN ALL LOOSE CUSHION BLOCKS AND ORIENT TO VERTICAL POSITION. REPLACE ALL WORN AND WEATHERED CUSHION BLOCKS. REPLACE REFLECTIVE TAPE AT APPROACH GUARDRAIL END TERMINALS. REPLACE MISSING BARRIER REFLECTORS ON BOTH SIDES OF BRIDGE. REMOVE GRAFFITI FROM NW GUARDRAIL END TERMINAL. EXTEND ALL ENDS OF THE BULLET PEDESTRIAN RAILING WITH A TURN DOWN AT A 45 DEGREE ANGLE.
- REPAIR DELAMS / SPALLS AT POST-TENSIONED DUCT PATCHES IN ALL SPANS AND BOTH FASCIAS. REPAIR SPALL / DELAMS ON EAST BULKHEAD WALL.
- TRIM OVERHANGING VEGETATION AT NE, NW, AND SW BRIDGE CORNERS OVER SLOPE PROTECTION. EXTEND CLEARING VEGETATION BY 5 FT. BEYOND SLOPE PROTECTION/WINGWALLS. REMOVE VEGETATION IN CONCRETE SLOPE PROTECTION JOINTS. REMOVE VEGETATION AT SOUTH OVERHANG OF BENT 2 CAP.
- SEAL OPEN JOINTS BETWEEN SIDEWALK AND BARRIER AT NW BRIDGE CORNER. SEAL OPEN JOINTS IN NE, NW, AND SW CONCRETE SLOPE PROTECTION.
- POWER WASH SIDEWALK AND CURBS. POWER WASH AND PAINT INSIDE FACE AND TOP TOP OF CONCRETE BARRIERS, END BENT WINGWALLS, AND VERTICAL FACE OF END BENT CAPS. REMOVE GRAFFITI AND APPLY ANTI-GRAFFITI COATING ON WEST END SLOPE PROTECTION. USE TEX-COTE GRAFFITI GARD IV LOW LUSTER OR EQUIVALENT. USE COLOR ANTIQUE IVORY T-108.

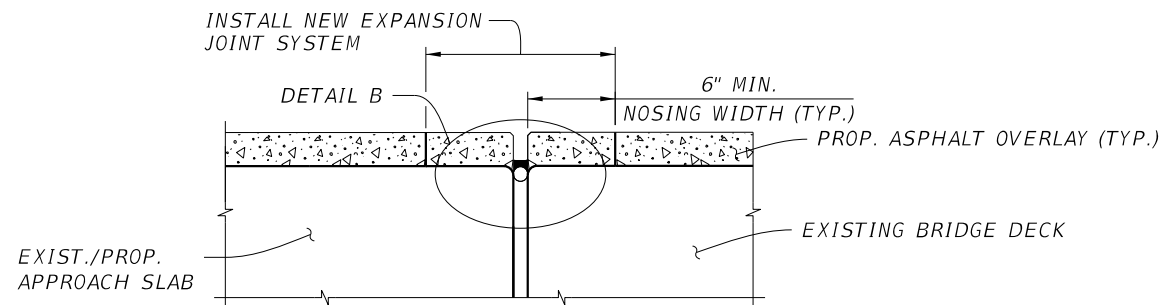
BRIDGE NO. 014072

REVISIONS						LEO E. RODRIGUEZ, P.E. P.E. NO.: 78493 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	DRAWN BY: RP 09-24 CHECKED BY: DRJ 09-24 DESIGNED BY: RP 09-24 CHECKED BY: DRJ 09-24	CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE: GENERAL PLAN AND ELEVATION		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY	SHEET NO. B1-06	



STEP 1

- REMOVE ASPHALT OVER THE JOINTS. REMOVE THE MINIMUM WIDTH SHOWN OR AS REQUIRED TO MEET THE MANUFACTURER'S RECOMMENDATIONS.
- REMOVE EXISTING BINDER (IF APPLICABLE).

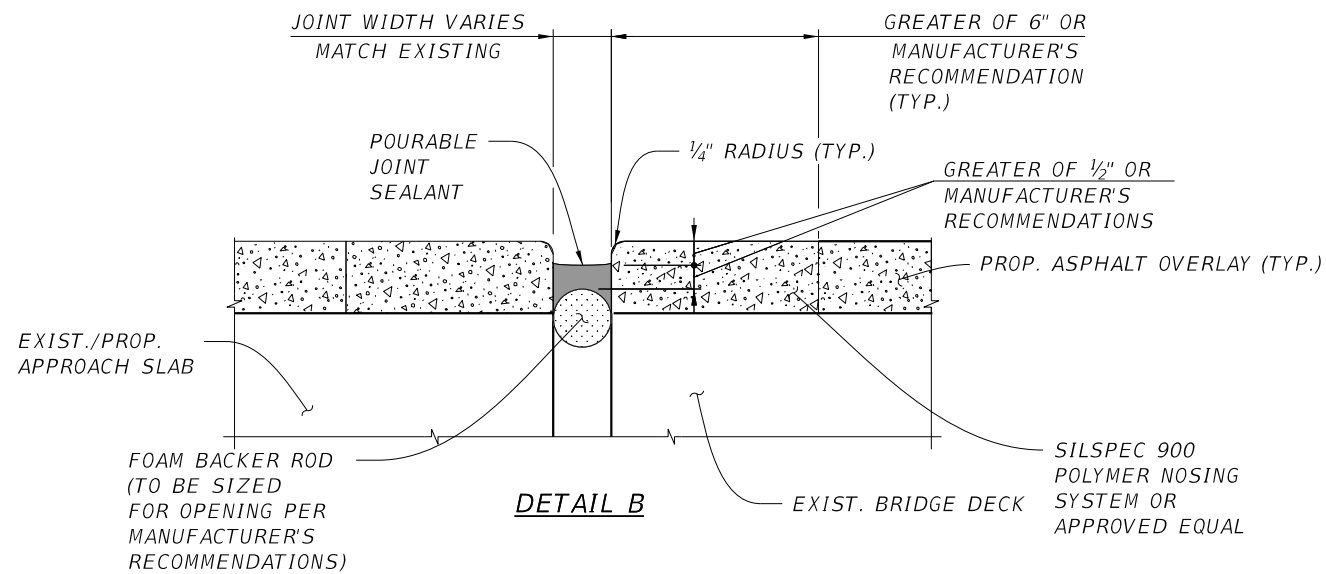


STEP 2

- THOROUGHLY PREPARE DECK SURFACE TO RECEIVE NOSING MATERIAL BY SAND BLASTING TO CLEAN GRAY CONCRETE AND THEN SCARIFYING TO A MINIMUM 1/4" AMPLITUDE. PLACE NEW NOSING AND EXPANSION JOINT SEALS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. DO NOT SAND BLAST THE REST OF THE BRIDGE DECK.

DETAIL A

(END BENTS SHOWN, INTERMEDIATE BENTS ARE SIMILAR)



DETAIL B

TYPICAL SECTIONS THRU EXISTING JOINTS
WITH ASPHALT OVERLAY

(END BENTS SHOWN, INTERMEDIATE BENTS ARE SIMILAR)

EXPANSION JOINT REPAIR NOTES

1. THOROUGHLY CLEAN JOINTS PRIOR TO THE INSTALLATION OF THE JOINT SEAL PER MANUFACTURER'S RECOMMENDATIONS.
2. EXPANSION JOINT SHALL EXTEND CONTINUOUSLY FROM FRONT FACE OF BARRIER TO FRONT FACE OF BARRIER PER INDEX 458-110.
3. SHOP DRAWINGS: SUBMIT DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. THE DRAWINGS SHALL INCLUDE COMPLETE FABRICATION AND INSTALLATION DETAILS FOR EACH JOINT LOCATION.
4. INSTALLATION: THE JOINT SYSTEM INSTALLER SHALL BE LICENSED BY THE MANUFACTURER. SUBMIT A COPY OF THE LICENSING CONTRACT TO THE ENGINEER FOR APPROVAL. INSTALL THE JOINT SYSTEM IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. INSPECT CONCRETE/POLYMER NOSING FOR CRACKS, SPALLS, UNSOUND MATERIAL, ETC., AND PROPERLY REPAIR AS NEEDED ACCORDING TO MANUFACTURER'S RECOMMENDATION PRIOR TO INSTALLING THE EXPANSION JOINT.
5. AVOID DAMAGING REINFORCING STEEL. IF EXISTING REINFORCING STEEL IS EXPOSED, ANY RUST SHALL BE REMOVED PRIOR TO REPLACING THE NOSING.
6. FOR JOINTS WITH NOSING DEFICIENCY, IF UNSOUND MATERIAL IS ENCOUNTERED MORE THAN 3" DEEP, REMOVE THE UNSOUND MATERIAL TO SOUND CONCRETE AND REPAIR WITH POLYMER NOSING MATERIAL. ALL WORK AND MATERIAL IS CONSIDERED INCIDENTAL TO PAY ITEM 458-1-21, "BRIDGE DECK EXPANSION JOINT, REHABILITATION, POURED JOINT WITH BACKER ROD".
7. WARRANTY: PROVIDE THE OWNER WITH A WRITTEN WARRANTY OF THE INSTALLED SYSTEM AGAINST LEAKAGE, ADHESIVE FAILURE, AND JOINT SYSTEM MATERIAL FAILURE FOR A PERIOD OF FIVE (5) YEARS FOLLOWING INSTALLATION. THE WARRANTY SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR PROPER INSTALLATION OF THE JOINT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
8. ACTUAL JOINT OPENING WILL VARY. MATCH EXISTING JOINT WIDTHS.
9. VERIFY EXISTING JOINT OPENINGS BEFORE ORDERING JOINT MATERIAL.
10. THE EXPANSION JOINT SYSTEM, INCLUSIVE OF JOINT AND NOSING REPAIR, SHALL BE THE DOW CORNING/SSI: XJS EXPANSION JOINT SYSTEM OR APPROVED EQUAL.

BRIDGE NO. 014072

REVISIONS						DRAWN BY: RP 09-24 CHECKED BY: DRJ 09-24 DESIGNED BY: RP 09-24 CHECKED BY: DRJ 09-24	CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE: PROJECT NAME: INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY	REF. DWG. NO. SHEET NO. B1-07
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						LEO E. RODRIGUEZ, P.E. P.E. NO.: 78493 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	N/A	CHARLOTTE	24-200		

FLOWABLE FILL REPAIR PROCEDURE

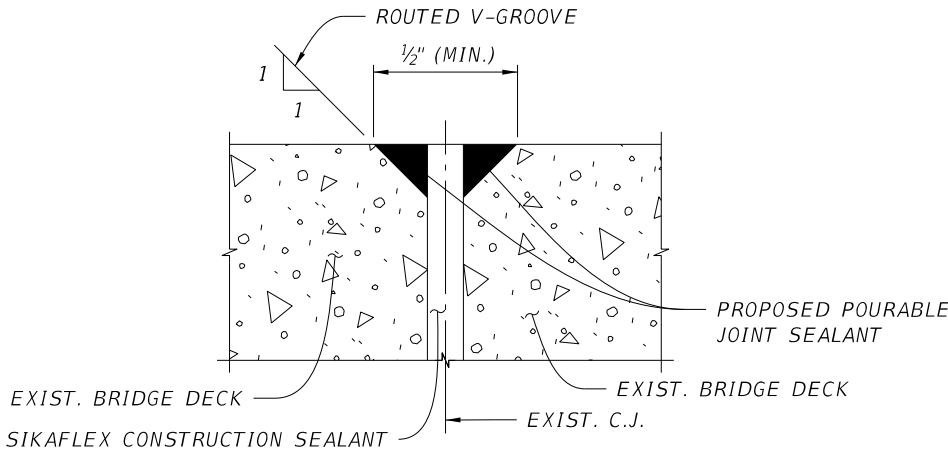
1. PLACE FLOWABLE FILL AT LOCATIONS LISTED IN FLOWABLE FILL REPAIR TABLE AND AS INDICATED WITHIN THE PLAN AND ELEVATION SHEET.
2. PREPARE, APPLY AND CURE APPROVED FLOWABLE FILL MATERIAL IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 121 AND AS GUIDED BY MANUFACTURER RECOMMENDATIONS.
3. REFER TO SECTION 121 OF THE STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION.

FLOWABLE FILL REPAIR TABLE						
LOCATION	DESCRIPTION	NO.	DIMENSIONS PER INSPECTION			VOLUME
			HEIGHT	WIDTH	DEPTH	(CY.)
			(IN.)	(IN.)	(IN.)	
NORTHEAST SLOPE PROTECTION AT END OF BULKHEAD WALL	UNDERMINING OF NORTHEAST SLOPE PROTECTION AND TOE	1	36	8	36	1.0

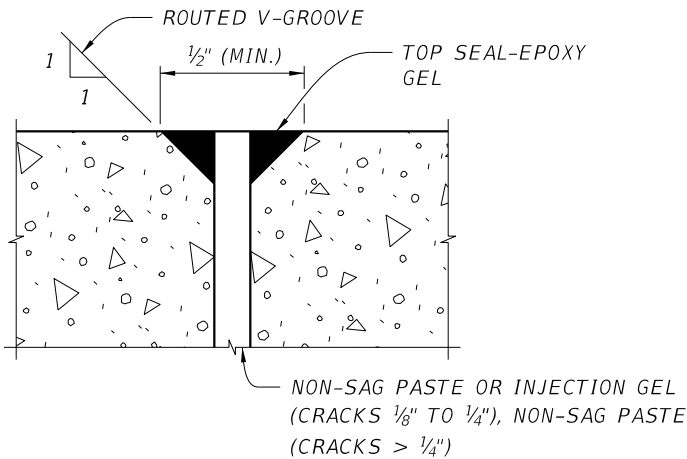
- NOTES:
1. MINIMUM REPAIR DEPTH ESTIMATED FOR QUANTITY PURPOSES.
2. TOTAL REPAIR QUANTITY ASSUMES 50% PERCENT ADDITIONAL MATERIAL TO ACCOUNT FOR UNKNOWN DEFICIENCY EXTENTS.

TOP OF DECK - LONGITUDINAL CONSTRUCTION JOINT REPAIR NOTES

1. REMOVE UNSOUND CONCRETE AND THOROUGHLY CLEAN JOINTS PRIOR TO THE INSTALLATION OF THE JOINT SEAL PER MANUFACTURER'S RECOMMENDATIONS.
2. JOINT SHALL EXTEND CONTINUOUSLY ACROSS EACH SPAN.
3. ROUTE A V-GROOVE NOTCH TO CONCRETE AND APPLY POURABLE JOINT SEAL.
4. USE SIKAFLEX CONSTRUCTION SEALANT OR EQUIVALENT FOR JOINT SYSTEM.
5. INSTALL WATERPROOFING MEMBRANE AFTER POURABLE JOINT SEALANT HAS CURED SUFFICIENTLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.



TYPICAL SECTION THRU
EXISTING TOP OF DECK - LONGITUDINAL CONSTRUCTION JOINT



TYPICAL CRACK
REPAIR DETAIL

TYPICAL CRACK REPAIR NOTES

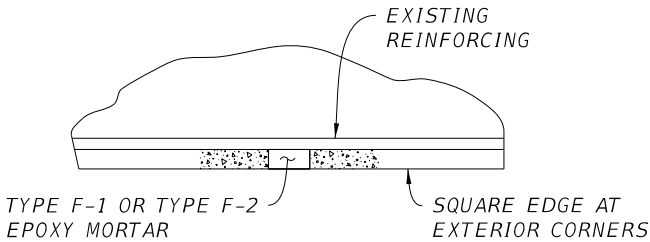
1. REMOVE UNSOUND CONCRETE FROM AREAS TO BE REPAIRED.
2. FOR CRACKS GREATER THAN 1/4", USE NON-SAG GROUT PASTE WITH 28-DAY COMPRESSIVE STRENGTH OF 10,000 PSI.
3. FOR CRACKS LESS OR EQUAL TO 1/4", USE EPOXY INJECTION (AVANTI AV-502 OR EQUAL) OR NON-SAG GROUT PASTE WITH 28-DAY COMPRESSIVE STRENGTH OF 10,000 PSI.
4. DIRECTIONS FOR CRACK INJECTIONS ARE COVERED BY THE MANUFACTURER RECOMMENDATIONS AND FDOT STANDARD SPECIFICATIONS SECTION 411.
5. ROUTE A V-GROOVE NOTCH TO NON-SAG GROUT PASTE AFTER SET AND APPLY TOP SEAL OF EPOXY INJECTION GEL (AVANTI AV-522 OR EQUAL).

BRIDGE NO. 014072

REVISIONS						LEO E. RODRIGUEZ, P.E. P.E. NO.: 78493 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	DRAWN BY: <i>RP 09-24</i> CHECKED BY: <i>DRJ 09-24</i> DESIGNED BY: <i>RP 09-24</i> CHECKED BY: <i>DRJ 09-24</i>			CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE: <i>MISCELLANEOUS REPAIR DETAILS (2 OF 2)</i>		REF. DWG. NO.	
DATE	BY	DESCRIPTION			DATE		BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: <i>INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY</i>		SHEET NO.

GENERAL SPALL REPAIR NOTES

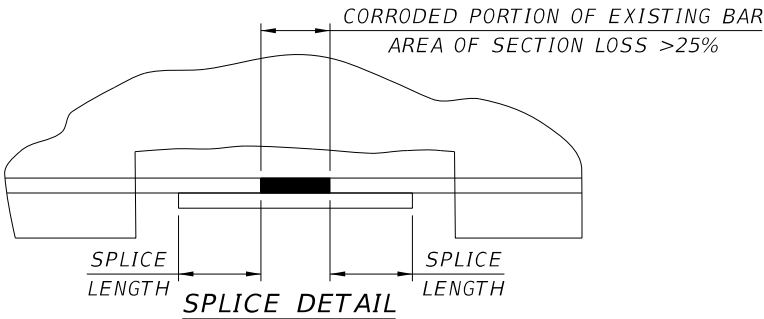
- 1. ABIDE BY SPECIFICATION SECTION 400 AND THE REPAIR NOTES BELOW.
- 2. THE SPALL REPAIR DETAILS SHOWN ON THIS SHEET ARE APPLICABLE TO HORIZONTAL (INCLUDING OVERHEAD) AND VERTICAL SURFACES. SEE SPECIFICATION SECTION 930 FOR ADDITIONAL MATERIAL REQUIREMENTS FOR CONCRETE REPAIR.
- 3. INSPECT, SOUND TEST, AND MARK THE PERIMETER OF THE PROPOSED CONCRETE REPAIR AREAS AS SHOWN ON THESE PLANS. SUBMIT PROPOSED REPAIR AREAS TO THE ENGINEER FOR APPROVAL.



SPALL REPAIR DETAIL 1

SPALL REPAIR DETAIL 1 NOTES

- 1. CHIP TO SOUND CONCRETE.
- 2. USE SPALL REPAIR DETAIL 2 IF MORE THAN HALF OF PERIMETER OF REINFORCING BAR IS EXPOSED OR BOND AROUND BAR IS BROKEN.
- 3. CLEAN REINFORCING STEEL AND CONCRETE SURFACES BY HAND GRIND AND/OR BRUSH CLEAN FOLLOWED BY BLOWING WITH COMPRESSED AIR.
- 4. PRIME THE SURFACE TO BE REPAIRED WITH A TYPE F-1/F-2 EPOXY COMPOUND IN SPECIFICATION SECTION 926.5. WHILE PRIMING MATERIAL IS TACKY, FILL VOIDS WITH RECOMMENDED PRODUCT TO ORIGINAL NEAT LINES. REMOVE AND RE-CLEAN THE CONCRETE SURFACE IF THE REPAIR MATERIAL IS NOT APPLIED WITHIN THE BONDING COMPOUND MANUFACTURER APPLICATION TIME WINDOW.

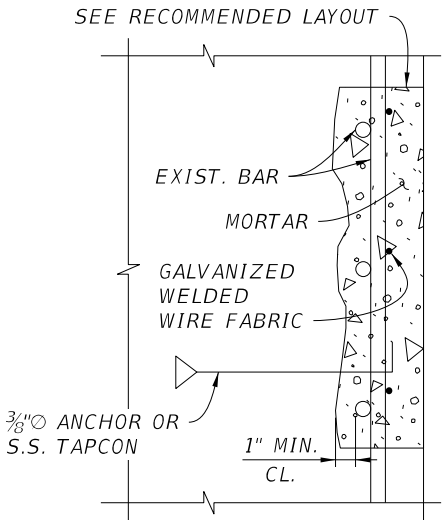


SPLICE NOTES

- 1. STAGGER SPLICES AND REPAIR PER SPALL REPAIR DETAIL 2.

MECHANICAL COUPLER DETAIL NOTES

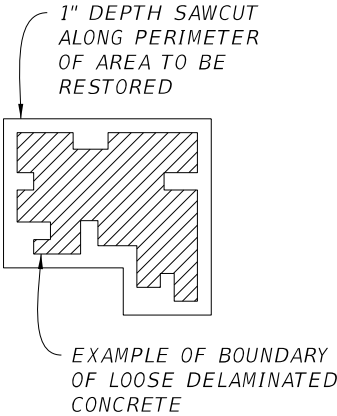
- 1. AS AN ALTERNATIVE TO SPLICING OR DOWELING, THE CONTRACTOR MAY USE MECHANICAL COUPLERS. SUBMIT THE PROPOSED COUPLER TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
- 2. REPAIR PER SPALL REPAIR DETAIL 2 AFTER INSTALLING MECHANICAL COUPLERS.



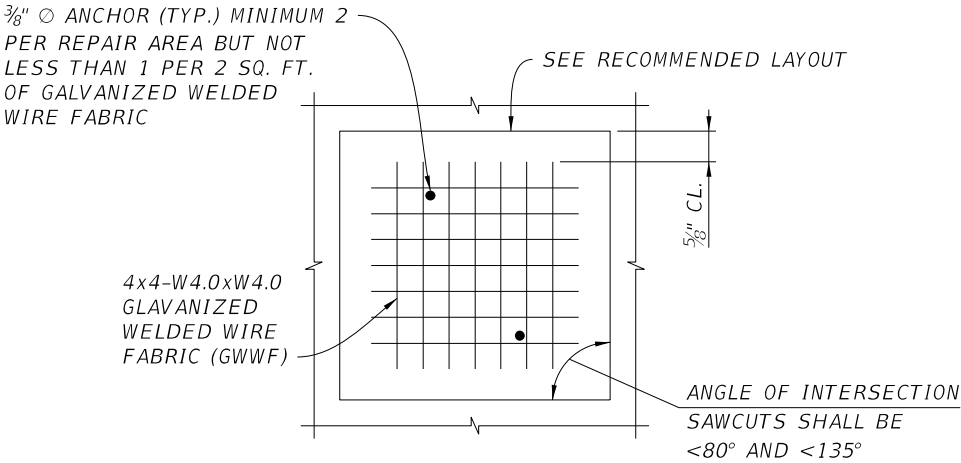
SPALL REPAIR DETAIL 2

SPALL REPAIR DETAIL 2 NOTES

- 1. SAWCUT ALONG THE PERIMETER OF CONCRETE TO BE RESTORED. SEE RECOMMENDED LAYOUT. REMOVE ALL UNSOUND CONCRETE. EXPOSE REINFORCING STEEL WITH ENOUGH CLEARANCE BEHIND THE BAR TO PROVIDE FULL ENCASEMENT AND BOND WITH THE NEW CONCRETE REPAIR MATERIAL. PROVIDE 1" CLEARANCE BETWEEN EXPOSED REINFORCING AND SURROUNDING CONCRETE. SUPPLEMENT ANY EXISTING REINFORCING STEEL FOUND TO HAVE 25% OR MORE LOSS OF AREA BY SPLICING A NEW BAR OF EQUAL SIZE OVER AFFECTED SECTION. SHOP DRAWINGS INDICATING BAR SIZES AND SPLICE LENGTHS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL FOR EXISTING REINFORCING STEEL MEETING THIS CONDITION. FEATHERED EDGES ARE NOT ALLOWED.
- 2. KEEP REPAIR CONFIGURATION AS SIMPLE AS POSSIBLE, PREFERABLY WITH SQUARED CORNERS AS SHOWN IN RECOMMENDED LAYOUT.
- 3. AVOID DAMAGING EXISTING REINFORCING STEEL, EMBEDDED ANCHORAGES OR BREAKING THE BOND BETWEEN THE STEEL AND SOUND CONCRETE.
- 4. WHEN UNSOUND MATERIAL HAS BEEN REMOVED BUT CORROSION ON THE EXISTING REINFORCING STEEL EXTENDS INTO THE SOUND CONCRETE, REMOVE CONCRETE TO 1" BEYOND THE END OF THE AREA OF CORROSION, WHERE THE BAR IS FREE OF CORROSION AND IS WELL BONDED TO SOLID CONCRETE.
- 5. REMOVE CONCRETE TO PROVIDE CLEARANCE AS DETAILED IN NOTE 1 IF NON-CORRODED REINFORCING STEEL IS EXPOSED DURING CONCRETE REMOVAL, AND THE BOND BETWEEN BAR AND CONCRETE IS BROKEN.
- 6. REPAIR ANY EXISTING REINFORCING STEEL DAMAGED WHILE REMOVING UNSOUND CONCRETE OR CLEANING REINFORCING STEEL AT NO EXTRA COST TO THE OWNER.
- 7. CLEAN ALL EXPOSED AND NEW REINFORCING STEEL SSPC-SP-10 (NEAR WHITE) PRIOR TO APPLICATION OF THE PATCH MATERIAL.
- 8. CLEAN THE AREA TO RECEIVE NEW PATCH MATERIAL AND REMOVE LOOSE PARTICLES, DIRT, TAR, OIL AND DUST.
- 9. INSTALL GALVANIZED WELDED WIRE FABRIC AND ANCHORS FOR DEPTH OF CONCRETE EXCEEDING 3".
- 10. REPAIR CONCRETE SPALL REPAIR AREAS USING POLYMER MODIFIED-PORTLAND-CEMENT MORTAR PER APL AND SUBMIT TO THE ENGINEER FOR APPROVAL. MATCH REPAIR MATERIAL COLOR TO SURROUNDING CONCRETE SURFACES.
- 11. STOP WORK IMMEDIATELY AND NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK WHEN:
 - SUBSTRUCTURE REPAIR REQUIRES MORE THAN SIX (6) INCHES OF CONCRETE REMOVAL DEPTH.
 - REPAIR AREA EXTENDS MORE THAN TWELVE (12) INCHES IN ANY DIRECTION BEYOND THE REPAIR AREA INITIALLY IDENTIFIED.



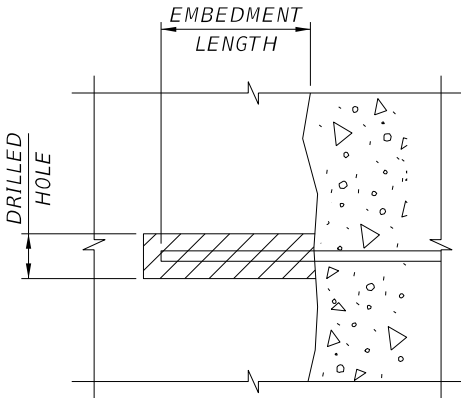
RECOMMENDED LAYOUT



GALVANIZED WELDED WIRE FABRIC (GWFF) DETAIL

SPECIAL NOTES FOR GALVANIZED WELDED WIRE FABRIC

- 1. FIELD BEND GWWF TO CONFORM WITH ANY CHANGES IN THE CONCRETE SURFACE CONFIGURATION.
- 2. TIE EACH EXPANSION ANCHOR BOLT TO THE WELDED WIRE FABRIC WITH GALVANIZED WIRE.
- 3. SUBMIT ANCHOR BOLTS DATA CATALOG AND GWWF INSTALLATION TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF REPAIR MORTAR.



DOWEL OR ANCHOR DETAIL

DOWEL OR ANCHOR NOTES

- 1. USE DOWELS WHERE SPLICING MAY RESULT IN THE REMOVAL OF EXCESS SOUND CONCRETE.
- 2. BEFORE INSTALLATION, LOCATE ALL EXISTING BARS NEXT TO PROPOSED HOLES. PREVENT ANY DAMAGE TO EXISTING REINFORCEMENT.
- 3. PROVIDE EXPANSION ANCHORS OR A HV ADHESIVE ANCHOR SYSTEM PER SPECIFICATION SECTION 937. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS SECTION 416 FOR HOLE DIAMETER AND CLEANING TECHNIQUE. SHOP DRAWINGS INCLUDING BUT NOT LIMITED TO EMBEDMENT LENGTH, TOTAL BAR LENGTH, BAR SIZE, HOLE DIAMETER AND ADHESIVE DATA CATALOG SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IF DOWELS OR ANCHORS ARE REQUIRED.
- 4. SUPPORT DOWELS OR ADHESIVE ANCHORS IN POSITION UNTIL EPOXY IS SET.

BRIDGE NO. 014072

REVISIONS						LEO E. RODRIGUEZ, P.E. P.E. NO.: 78493 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	DRAWN BY: RP 09-24 CHECKED BY: DRJ 09-24 DESIGNED BY: RP 09-24 CHECKED BY: DRJ 09-24	CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE: GENERAL CONCRETE SPALL REPAIR DETAILS		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:		SHEET NO.
								N/A	CHARLOTTE	24-200	INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY		B1-09

GENERAL NOTES

1. THE REGULATORY SPEED LIMIT FOR THE PROJECT ROADWAYS SHALL BE MAINTAINED UNLESS OTHERWISE INDICATED IN THE PLANS:

KEYSTONE BLVD	45 MPH
INGRAHAM BLVD	45 MPH
CALUMET BLVD	40 MPH
GASPARILLA RD	50 MPH

2. THE EXISTING BRIDGE SHALL REMAIN OPEN TO MARINE TRAFFIC AT ALL TIMES DURING REPAIRS. THE BRIDGE MAY BE CLOSED TO VEHICULAR TRAFFIC DURING CONSTRUCTION OPERATIONS.

3. NOTIFY LOCAL EMERGENCY AND RESCUE AGENCIES IN THE PROJECT VICINITY, INCLUDING BUT NOT LIMITED TO THE AGENCIES LISTED BELOW, AS WELL AS THE ENGINEER, 14 DAYS BEFORE ANY COUNTY-APPROVED LANE CLOSURES RESTRICTIONS. NOTIFY AGAIN 24 HOURS BEFORE EACH SERIES OF LANE CLOSURES. REOPEN ALL LANES TO NORMAL TRAFFIC WITHIN 12 HOURS OF AN EVACUATION NOTICE FOR A HURRICANE OR ANY OTHER EMERGENCY EVENT AND KEEP THEM OPEN FOR THE DURATION OF THE EVENT AS DIRECTED BY THE ENGINEER.

CHARLOTTE COUNTY FIRE DEPARTMENT 4	-	(941) 624-2465
CHARLOTTE COUNTY SHERIFF'S OFFICE	-	(941) 475-9005
ENGLEWOOD AREA FIRE CONTROL DISTRICT - STATION 75	-	(941) 474-3311

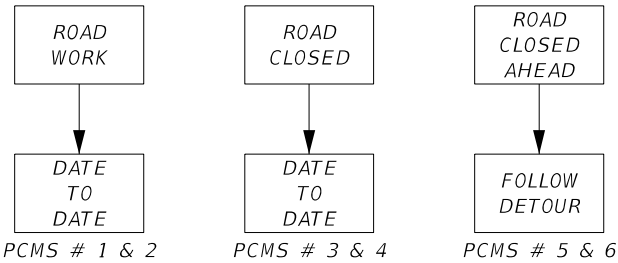
4. NOTIFY ADJACENT PROPERTY OWNERS 7 DAYS IN ADVANCE OF CONSTRUCTION ACTIVITIES WHICH SHALL RESTRICT ACCESS DELIVERY, ETC. TO PRIVATE OR COMMERCIAL PROPERTIES.

5. PERSONNEL WORKING ON THE MAINTENANCE OF TRAFFIC MUST HAVE THE RESPECTIVE APPLICABLE FDOT MOT QUALIFICATION OF ADVANCED, INTERMEDIATE AND FLAGGER BASED ON THEIR TEMPORARY TRAFFIC CONTROL DUTIES.

6. RESTORE ANY PAVEMENT THAT CONSTRUCTION OR MOT OPERATIONS DAMAGE TO ITS ORIGINAL CONDITION (PRIOR TO CONSTRUCTION), AS DETERMINED BY THE ENGINEER. ALL COSTS SHALL BE INCLUDED IN PAY ITEM 102-1 "MAINTENANCE OF TRAFFIC" (LS).

7. FOR TEMPORARY CONSTRUCTION SIGNS LOCATED IN PAVED AREAS, PROVIDE TEMPORARY SIGN SUPPORT WHICH DOES NOT PENETRATE PAVEMENT.

8. PLACE PORTABLE CHANGEABLE MESSAGE SIGNS AS SHOWN BELOW.



NOTES:

PCMS # 1 & 2 - TO BE USED 7 DAYS PRIOR TO CONSTRUCTION

PCMS # 3 & 4 - TO BE USED 7 DAYS PRIOR TO ANY ROAD CLOSURES.

PCMS # 5 & 6 - TO BE USED DURING DETOUR PERIODS.

9. UTILIZE STANDARD PLAN INDEX 102-600, 102-601, 102-603, AND 102-660 AND FOLLOW THE DETOUR SHEETS TO CONST. PROPOSED IMPROVEMENTS.

BRIDGE NO. 014072

REVISIONS						PAVAN K. PAIAVULA, P.E. P.E. NO.: 73589 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	DRAWN BY: JG	CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE: CONCEPTUAL TEMPORARY TRAFFIC CONTROL PLAN - GENERAL NOTES	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		CHECKED BY: PP					
							DESIGNED BY: JG	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY	SHEET NO.
							CHECKED BY: PP	N/A	CHARLOTTE	24-200		B1-10



TYPICAL SIDE STREET SIGNS

INGRAHAM BLVD.

SIDE STREET		OR	
	*PROVIDE SIGN (LT/RT) BASED ON WORK ZONE LOCATION		

LEGEND

- DIRECTION OF TRAFFIC
- WORK ZONE
- WORK ZONE SIGN
- TYPE III BARRICADE

REVISIONS						PAVAN K. PAIAVULA, P.E. P.E. NO.: 73589 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	DRAWN BY: JG CHECKED BY: PP DESIGNED BY: JG CHECKED BY: PP	CHARLOTTE COUNTY PUBLIC WORKS			SHEET TITLE: CONCEPTUAL TEMPORARY TRAFFIC CONTROL PLAN - DETOUR PLAN	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
								N/A	CHARLOTTE	24-200	PROJECT NAME: INGRAHAM BLVD. OVER SANTA CRUZ WATERWAY	SHEET NO. B1-11