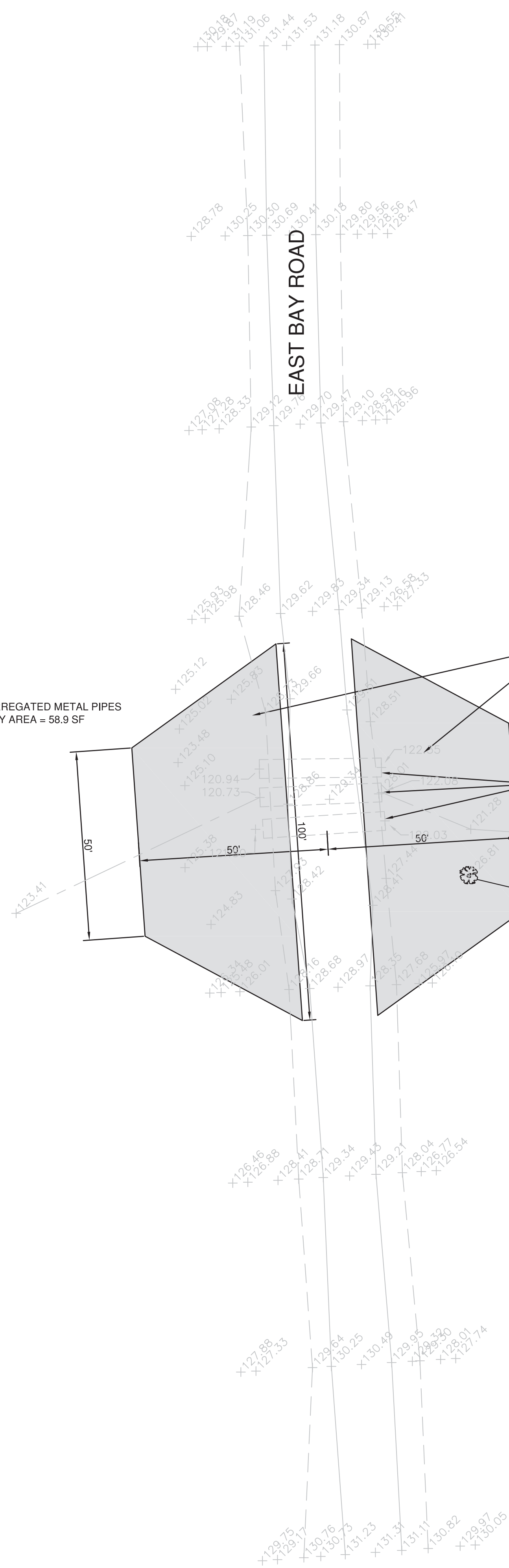


EXISTING  
(3) 60" CORRUGATED METAL PIPES  
WATERWAY AREA = 58.9 SF



CONTRACTOR SHALL CLEAR ALL TREES, BRUSH AND DEBRIS IN THIS AREA. REGRADE TO PROVIDE UNOBSTRUCTED ENTRANCE AND EXIT TO NEW BOX CULVERT. ADJUST LIMITS DOWNSTREAM BASED ON FILED CONDITIONS TO CONNECT TO EXISTING CHANNEL.

REMOVE (3) EXISTING 60" PIPES

BENCHMARK

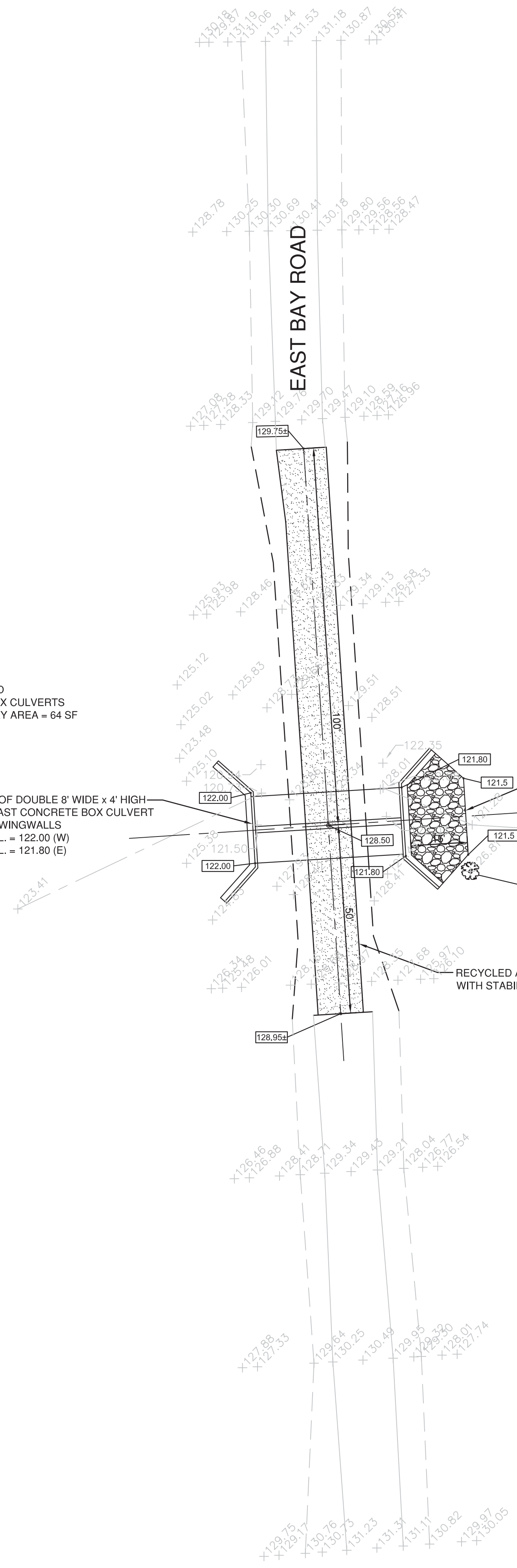
SET NAIL IN 20" PINE TREE ELEV. 126.81

CONTRACTOR TO RESET BENCHMARK OUT OF THE WORK AREA AS NEEDED.

EXISTING CONDITIONS AND DEMOLITION PLAN

PROPOSED  
(2) 8'x4' BOX CULVERTS  
WATERWAY AREA = 64 SF

40 LF OF DOUBLE 8' WIDE x 4' HIGH PRECAST CONCRETE BOX CULVERT WITH WINGWALLS  
INV. EL. = 122.00 (W)  
INV. EL. = 121.80 (E)



ABI #001, W-BEAM GUIDE RAILING

BENCHMARK  
SET NAIL IN 20" PINE TREE ELEV. 126.81

NOTES:

- CONTRACTOR SHALL STAKE FRONT WALL LOCATIONS ON BOTH ENDS OF CULVERT AFTER REMOVAL OF OLD CULVERTS AND CLEARING OF DEBRIS UPSTREAM AND DOWNSTREAM. CONTRACTOR SHALL REVIEW LOCATION WITH ENGINEER AND BASE CONSTRUCTION PROJECTS ADMINISTRATOR FOR ALIGNMENT AND ELEVATION PRIOR TO ANY NEW CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE SEPARATE PRICE TO FURNISH AND INSTALL W-BEAM GUIDE RAILING AT EACH CULVERT LOCATION IN ACCORDANCE WITH FDOT STANDARD PLANS AND SPECIFICATIONS. GUIDE RAILING SHALL BE PLACED ON BOTH SIDES OF THE ROAD AT THE SLOPE BREAK USING STEEL DEEP POSTS OR BOLTED TO THE TOP OF THE BOX CULVERT AS NECESSARY. GUARD RAIL SHALL INCLUDE 25 FOOT FLARES, OFFSET 4 FEET AND INCLUDE A FLARED END UNIT AT EACH END AS THE END CAP. TOTAL LENGTH OF GUIDE RAIL AND FLARES PER SIDE AT THIS LOCATION IS 75 FEET.
- BOX CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT FDOT STANDARD INDICES 289, AND 291 AS APPLICABLE.
- THESE PLANS ARE REUSE FOR CULVERT REPLACEMENT FROM ROUND PIPE TO BOX CULVERTS PER DOT INDEX NOT TO INCREASE TOTAL SQUARE FOOTAGE OF DRAINAGE.

DRAWING ISSUE

NO.	DATE	DESCRIPTION
1	3/2/20	BID ISSUE

CONSTRUCTION PLANS

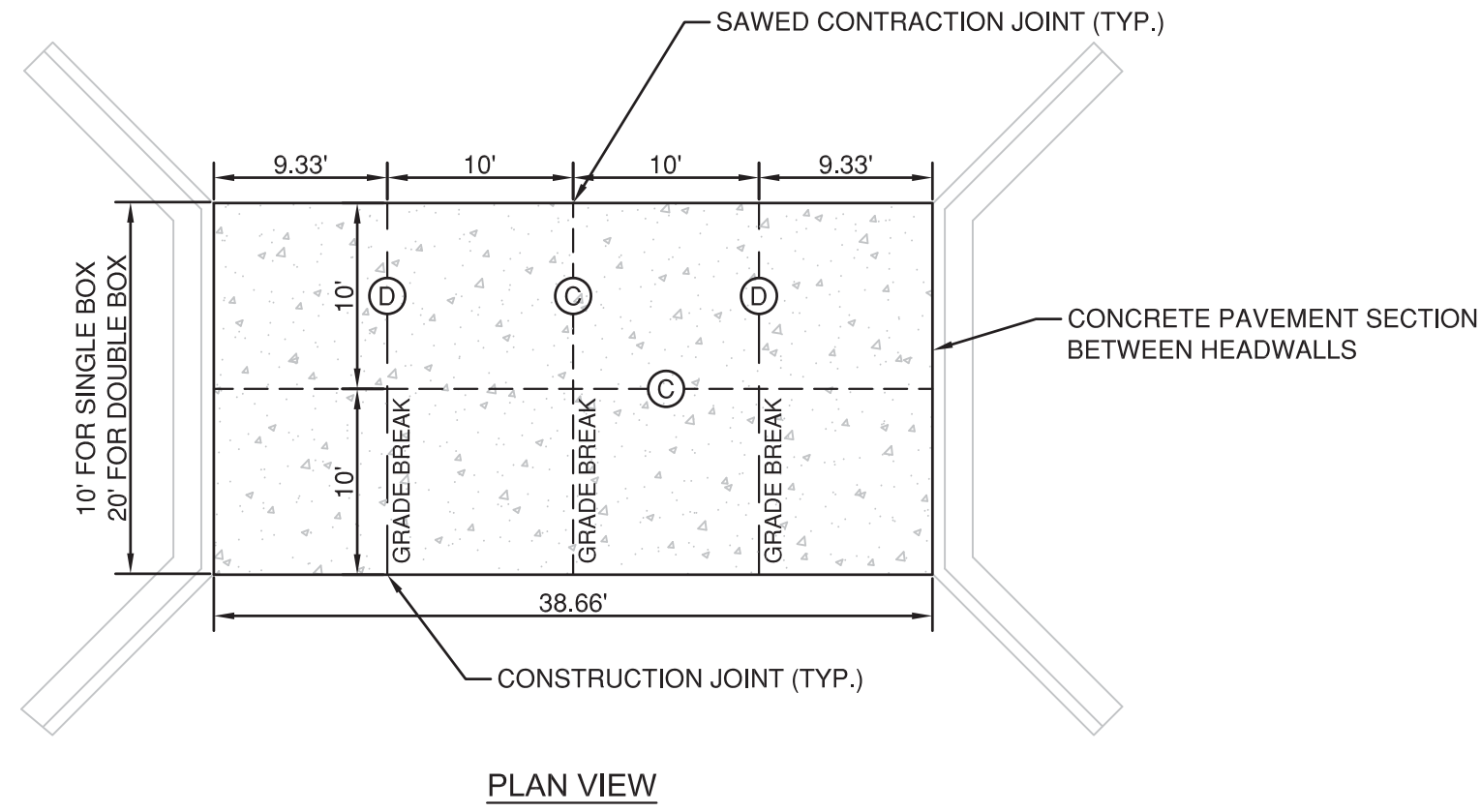
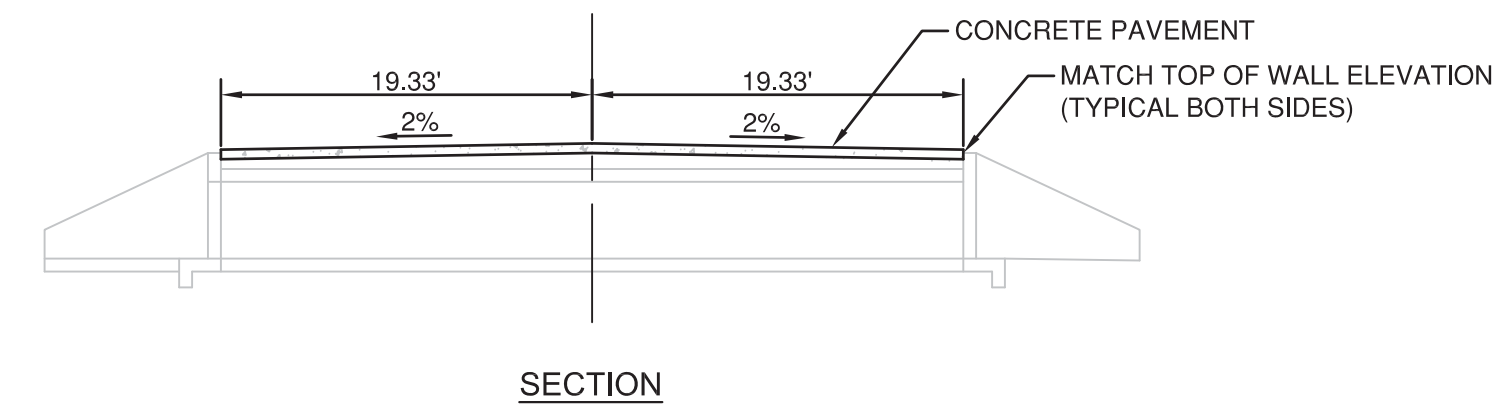
CULVERT REPAIR - EAST BAY ROAD  
CAMP BLANDING, STARKE, FLROIDA

JOHN R. BARNARD & ASSOCIATES, INC.  
CONSULTING ENGINEERS, FL. CERT. #7643  
4453 SHIRLEY AVENUE  
JACKSONVILLE, FLORIDA 32210  
(904) 387-2025

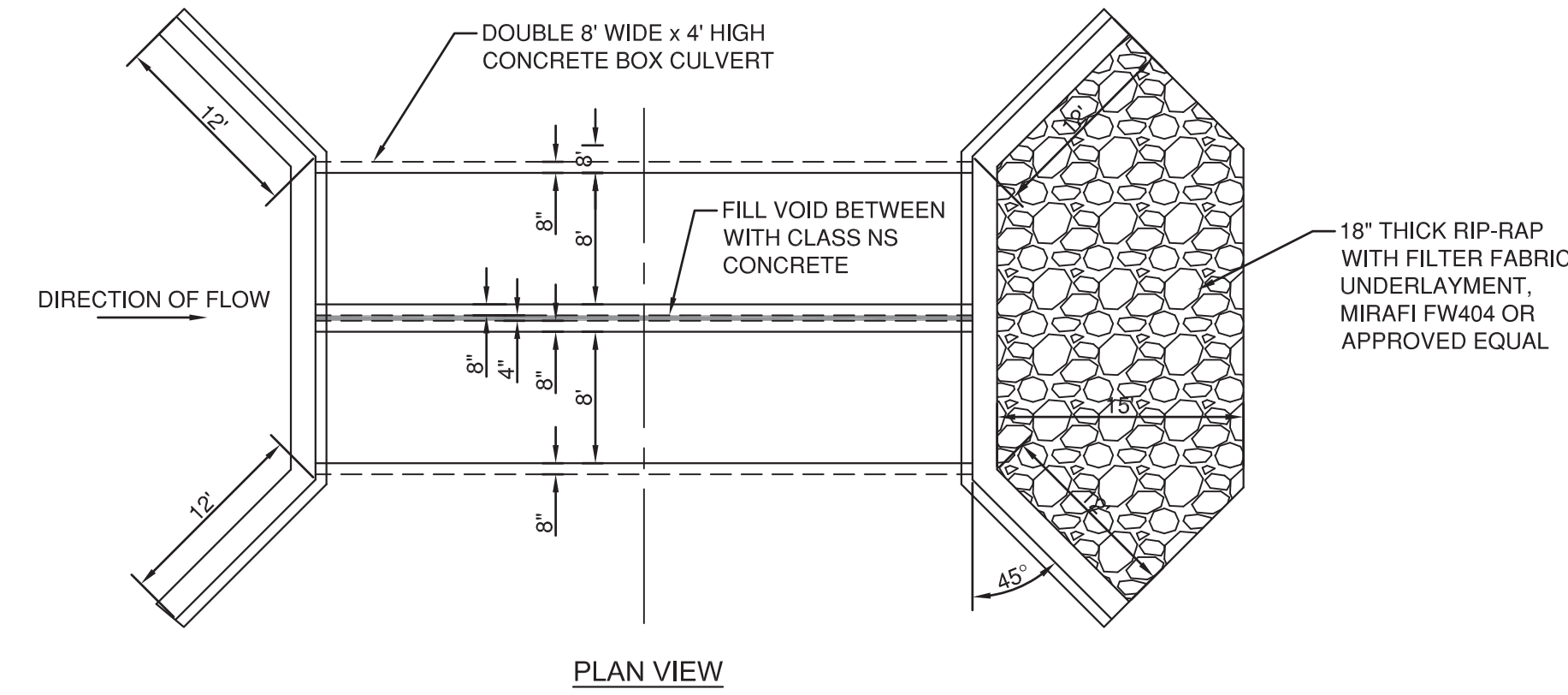
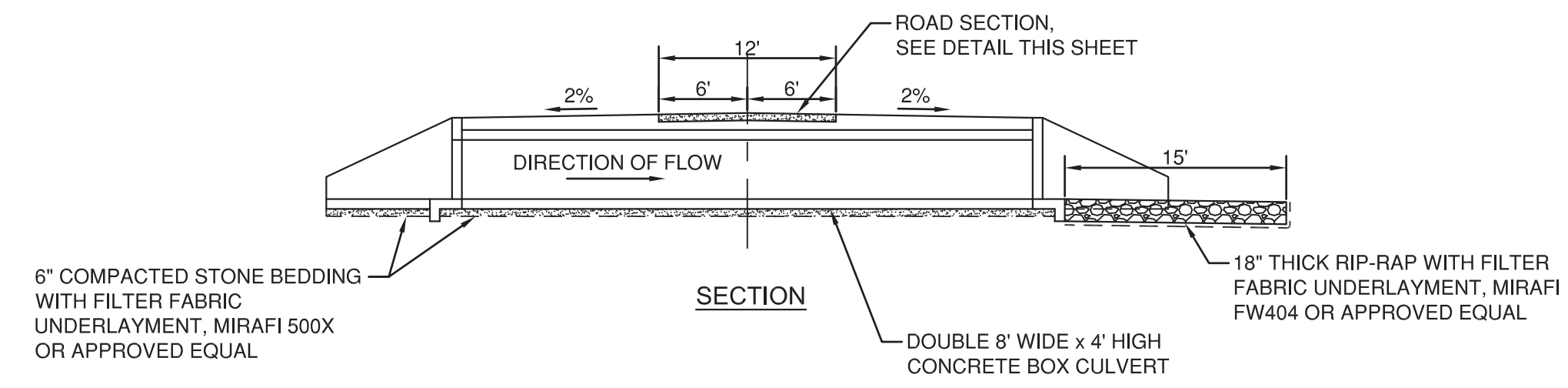
DESIGN	P.E. #	DATE	SCALE	JOB NO.	SHEET NO.
JOHN BARNARD	40868	3/2/20	1"=20'	217091	5

CONSTRUCTION PLAN

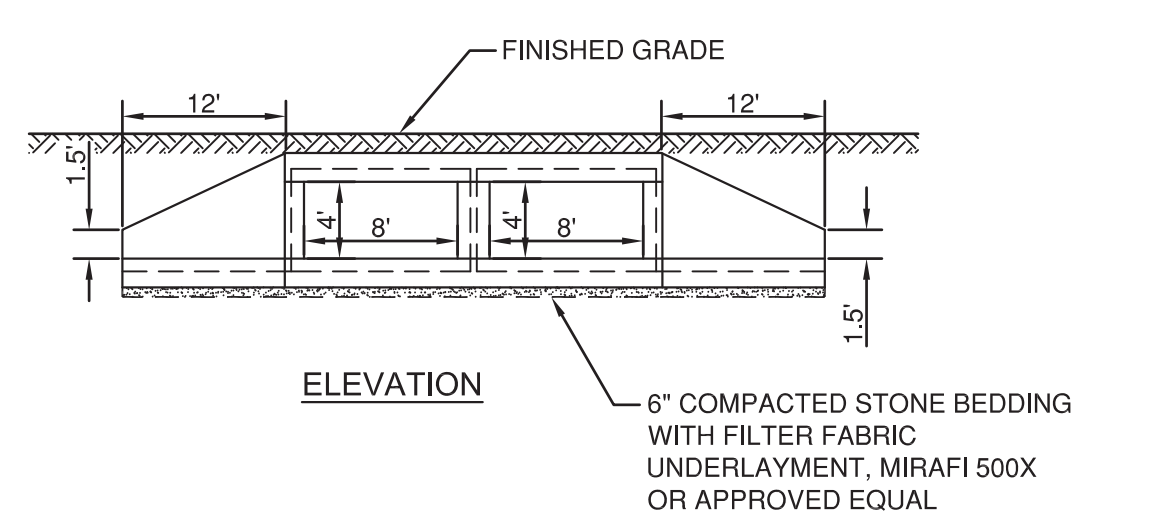
**ABI #002, CONCRETE PAVEMENT AT BOX CULVERT**



**CONCRETE PAVEMENT - ALTERNATE**  
NOT TO SCALE

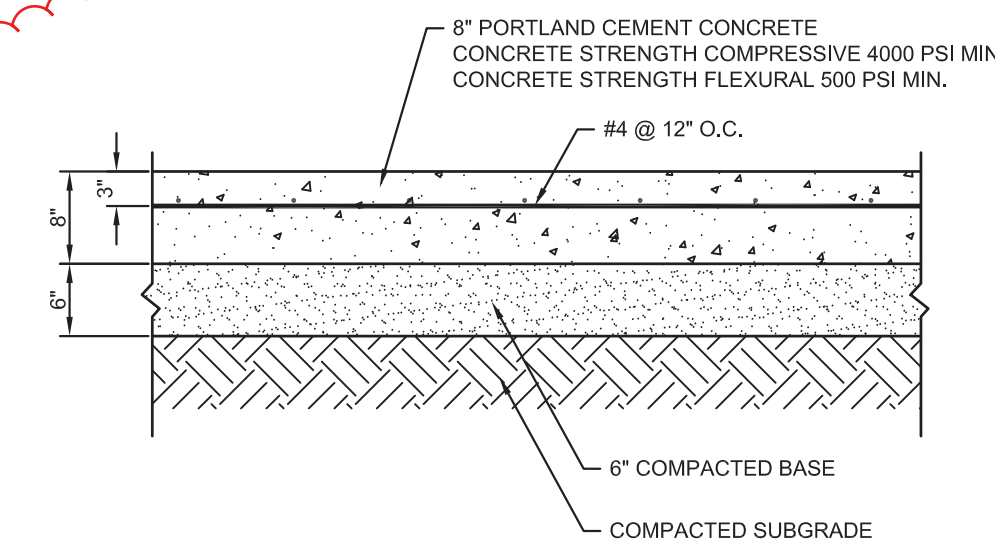


**CONCRETE BOX CULVERT DETAILS**  
NOT TO SCALE

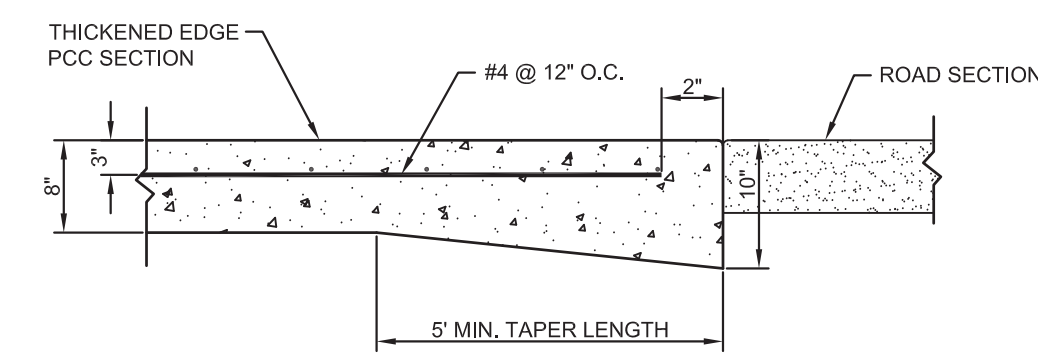


**NOTES:**

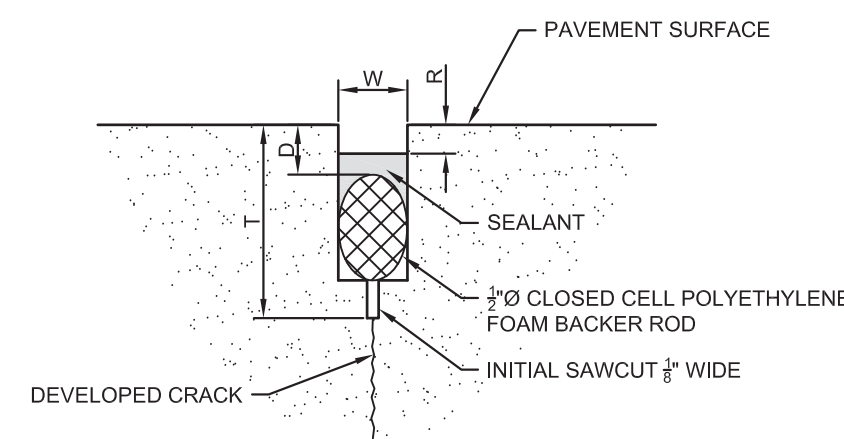
- CONTRACTOR SHALL STAKE FRONT WALLS ON BOTH ENDS OF CULVERT AFTER REMOVAL OF OLD CULVERTS AND CLEARING OF DEBRIS UPSTREAM AND DOWNSTREAM. CONTRACTOR SHALL REVIEW LOCATION WITH ENGINEER AND BASE CONSTRUCTION PROJECTS ADMINISTRATOR FOR ALIGNMENT AND ELEVATION PRIOR TO ANY NEW CONSTRUCTION.
- DESIGN FOR PROPOSED CULVERT IMPROVEMENTS BASED ON DUPLICATING TRAIL ROAD CONDITIONS. GUARD RAILS NOT INCLUDED UNLESS SPECIFICALLY REQUIRED BY CAMP BLANDING PERSONNEL.
- BOX CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT FDOT STANDARD INDICES 289, AND 291 AS APPLICABLE.
- SEE PLAN SHEETS FOR ELEVATIONS.
- ROUND PIPE TO BOX CULVERT CONVERSION SHALL BE PERFORMED PER APPLICABLE FDOT INDEXES. PIPE SQUARE FOOTAGE FOR THE NEW BOX CULVERT MUST BE LESS THAN OR EQUAL TO THE EXISTING ROUND PIPE SQUARE FOOTAGE.



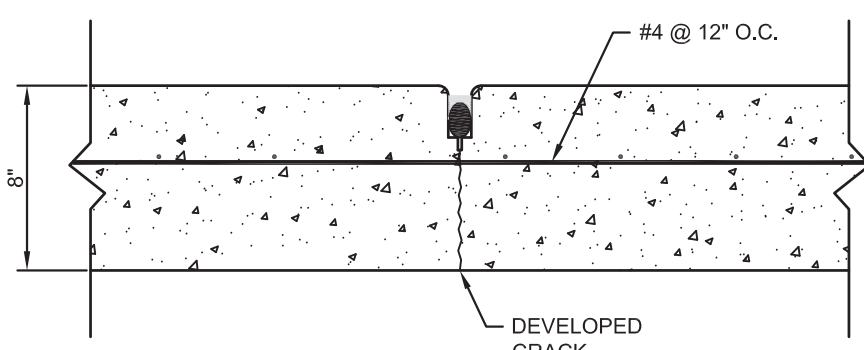
**A PCC PAVEMENT SECTION DETAIL**  
SCALE: NOT TO SCALE



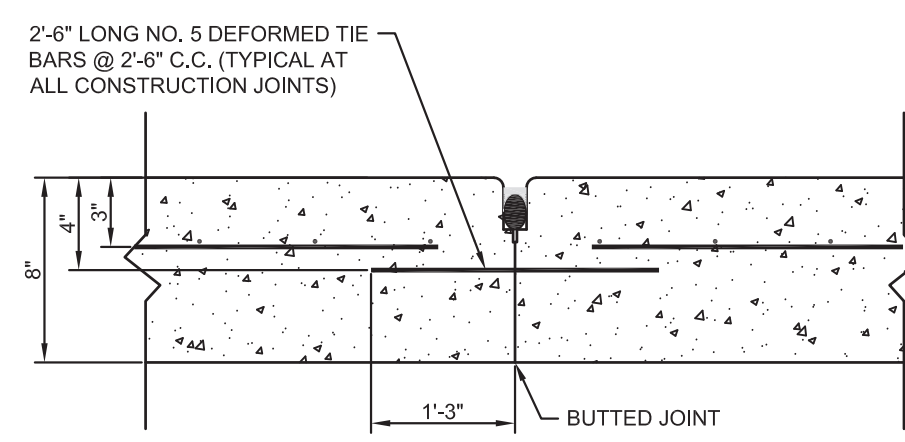
**B NEW PCC EDGE DETAIL**  
SCALE: NOT TO SCALE



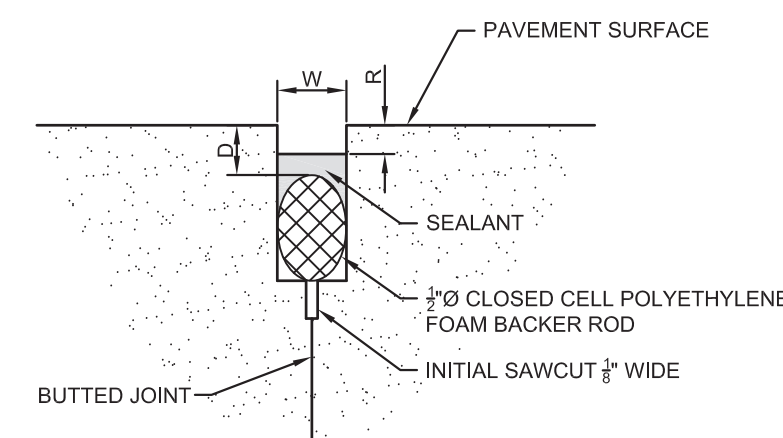
**CONTRACTION JOINT**



**C SAWED CONTRACTION JOINT DETAIL**  
SCALE: NOT TO SCALE

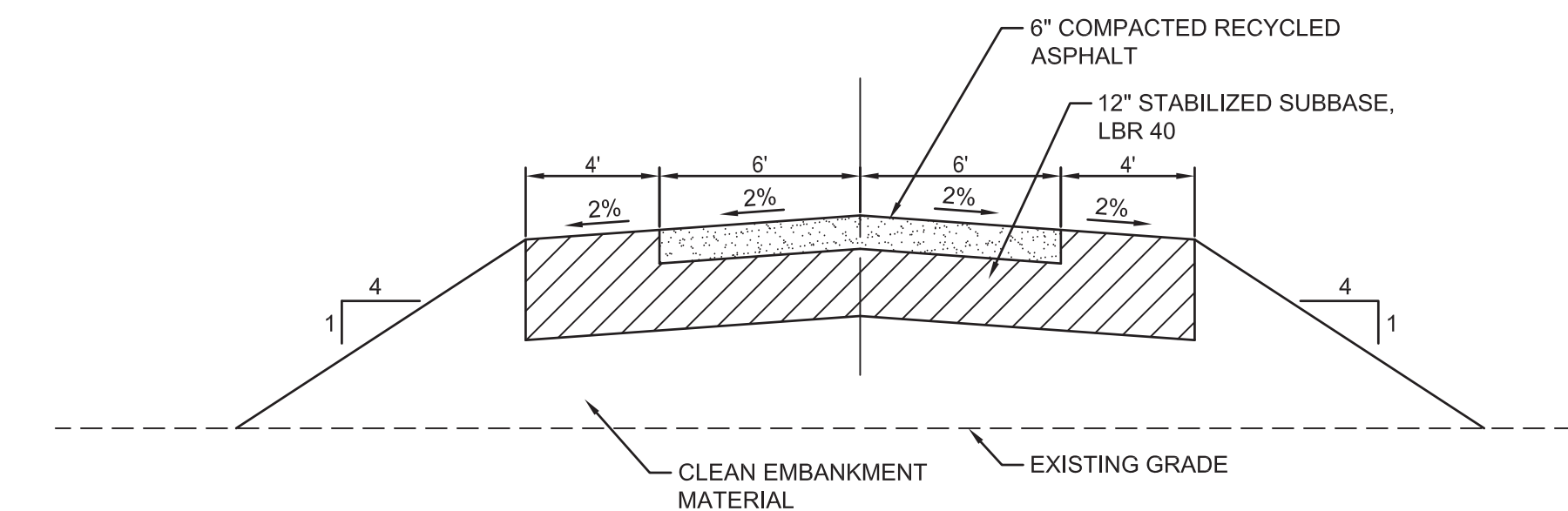


**D CONSTRUCTION JOINT DETAIL**  
SCALE: NOT TO SCALE



**CONTRACTION JOINT**

**DEFINITIONS**  
 W = WIDTH OF SEALANT RESERVOIR  
 D = DEPTH OF SEALANT = 1.0 TO 1.5 x W (OR PER MANUFACTURER'S RECOMMENDATION)  
 T = DEPTH OF INITIAL SAWCUT = 2.25"  
 R = DEPTH OF RECESS = 1/2" MINIMUM TO 1/2" MAXIMUM



**TYPICAL ROAD SECTION**  
NOT TO SCALE

**NOTE:**  
WWR SHALL BE PLACED TO MAINTAIN A MINIMUM COVER OF NOT LESS THAN 3 INCHES TO ALL EXPOSED SURFACES.

**NOTE:**  
WWR SHALL BE PLACED TO MAINTAIN A MINIMUM COVER OF NOT LESS THAN 3 INCHES TO ALL EXPOSED SURFACES.

**NOTES:**

- THESE PLANS ARE FOR REPAIR OF MULTIPLE LOCATIONS OF CULVERT REPAIRS AT CAMP BLANDING. THESE PLANS MAY BE USED AT DIFFERENT LOCATION SUBJECT TO THE APPROVAL OF THE CAMP BLANDING PROJECT ADMINISTRATOR TO DEVELOP SITE SPECIFIC REQUIREMENTS TO ALLOW USE OF THESE PLANS.
- THESE PLANS ARE REUSE FOR CULVERT REPLACEMENT FROM ROUND PIPE TO BOX CULVERTS PER DOT INDEX NOT TO INCREASE TOTAL SQUARE FOOTAGE OF DRAINAGE.

DRAWING ISSUE		
NO.	DATE	DESCRIPTION
1	3/2/20	BID ISSUE

CONSTRUCTION DETAILS					
CULVERT REPAIR - EAST BAY ROAD CAMP BLANDING, STARKE, FLORIDA					
JOHN R. BARNARD & ASSOCIATES, INC. CONSULTING ENGINEERS, FL. CERT. #7643 4453 SHIRLEY AVENUE JACKSONVILLE, FLORIDA 32210 (904) 387-2025					
DESIGN	P.E. #	DATE	SCALE	JOB NO.	SHEET NO.
JOHN BARNARD	40868	3/2/20	NONE	217091	6

**CONCRETE PAVEMENT DETAILS**  
NOT TO SCALE