

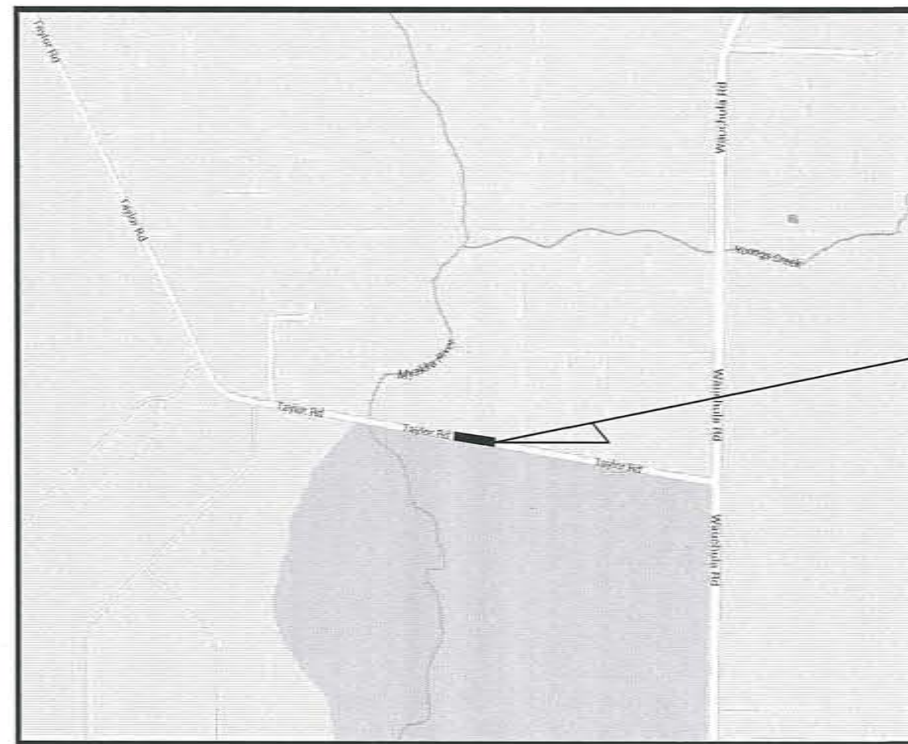


CONTRACT DRAWINGS
TAYLOR ROAD BRIDGE
OVER MYAKKA BYPASS CANAL (BR No. 134122)
EMERGENCY REPLACEMENT
FOR
MANATEE COUNTY, FLORIDA
COUNTY PROJECT NUMBER: 0019903

RELATED STANDARDS AND SPECIFICATIONS

DESCRIPTION

- A. MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION, (FLORIDA GREEN BOOK), (2011).
- B. FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, 2014 EDITION AND SUPPLEMENTS THERETO.
- C. FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD), (2009).
- D. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2014 EDITION AND SUPPLEMENTS THERETO.
- E. STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL (JUNE 2007).



COMPONENTS OF CONTRACT PLANS SET

- ROADWAY PLANS
- STRUCTURE PLANS

INDEX OF ROADWAY PLANS

SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
2	TYPICAL SECTIONS
3	GENERAL NOTES
4	PLAN AND PROFILE
5-8	CROSS SECTIONS
9	SOIL BORING LOG
10	EROSION CONTROL PLAN
11	EROSION AND TREE PROTECTION
12	EXISTING CONDITIONS SURVEY & CONTROL POINTS
13	PROJECT AND IMPACT AREAS

INDEX OF BRIDGE PLANS

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B1	GENERAL NOTES
B2	PLAN AND ELEVATION
B3	FOUNDATION LAYOUT
B4	PILE DATA TABLE
B5	SOIL BORING LOG
B6	ENDBENTS
B7	INTERMEDIATE BENT 2
B8	ENDBENT DETAILS
B9	TYPICAL SECTION
B10	PRESTRESSED SLAB UNITS (1 OF 2)
B11	PRESTRESSED SLAB UNITS (2 OF 2)
B12	DECK ELEVATIONS
B13	SLOPE PROTECTION (SHEET 1 OF 2)
B14	SLOPE PROTECTION (SHEET 2 OF 2)
B15	REBAR LIST
B16	LOAD RATING

UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.

SUMMARY OF REVISIONS

DATE	DESCRIPTION

LENGTH OF PROJECT

	TOTAL	
	LIN. FT.	MILES
ROADWAY	430	0.081
BRIDGE	100	0.019
NET LENGTH OF PROJECT	530	0.100
EXCEPTIONS	0	0.000
GROSS LENGTH OF PROJECT	530	0.100

ROAD CLASSIFICATION: TAYLOR ROAD - RURAL LOCAL
 DESIGN SPEED: 30 MPH



PLANS PREPARED BY:

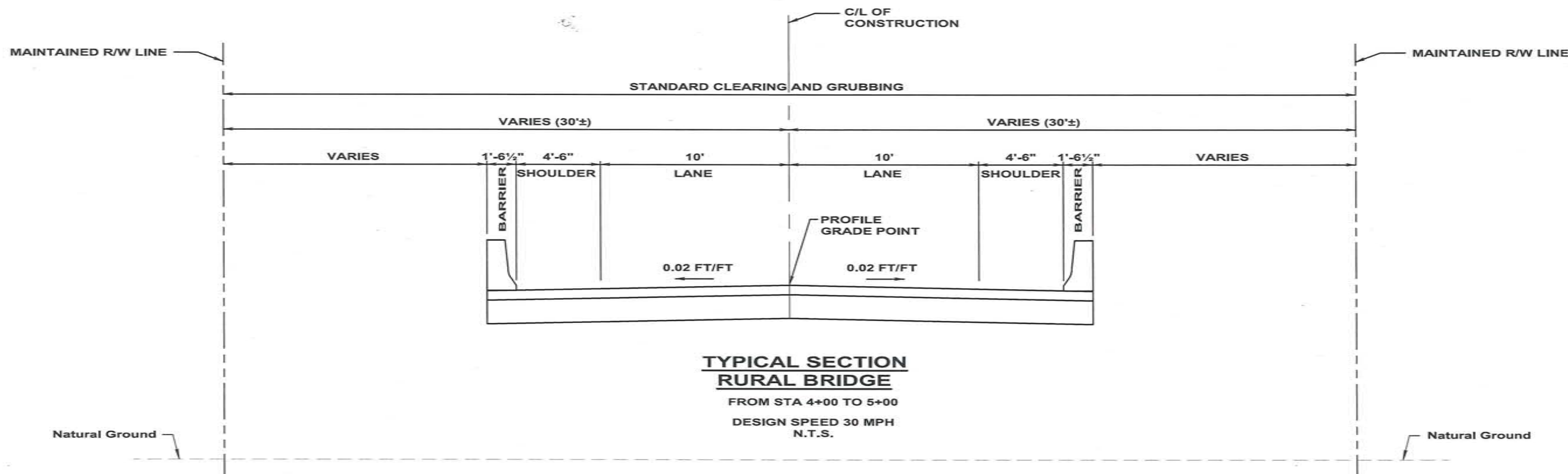
JAMES R. BERNARD
 LICENSE No. 55499
Cardno TBE
 380 Pine Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotebe.com - 727.531.3505
 Certificate of Authorization No. 3943

STATE OF FLORIDA
 PROFESSIONAL ENGINEER
JAMES R. BERNARD, P.E.
 DATE: 3/3/2014

STATE OF FLORIDA
 PROFESSIONAL ENGINEER
MIGUEL A. VILLEGAS
 LICENSE No. 68768
 DATE: 3-3-14

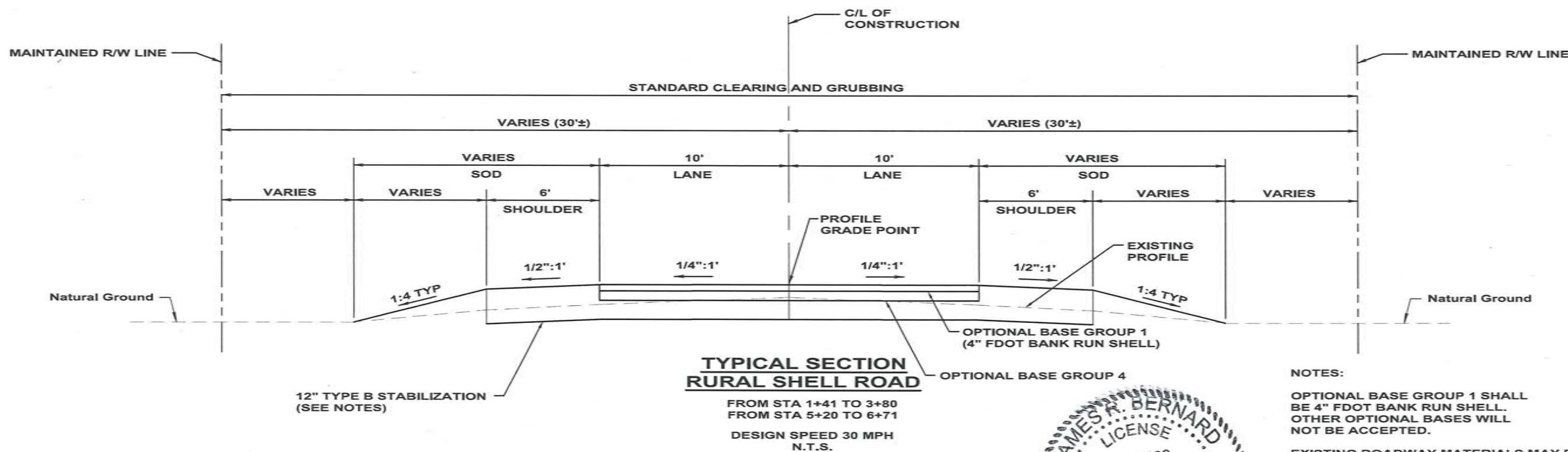
FINAL PLANS SUBMITTAL
 MARCH 3, 2014

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.



**TYPICAL SECTION
RURAL BRIDGE**

FROM STA 4+00 TO 5+00
DESIGN SPEED 30 MPH
N.T.S.



**TYPICAL SECTION
RURAL SHELL ROAD**

FROM STA 1+41 TO 3+80
FROM STA 5+20 TO 6+71
DESIGN SPEED 30 MPH
N.T.S.

NOTES:

OPTIONAL BASE GROUP 1 SHALL BE 4" FDOT BANK RUN SHELL. OTHER OPTIONAL BASES WILL NOT BE ACCEPTED.

EXISTING ROADWAY MATERIALS MAY BE UTILIZED FOR STABILIZATION AND BASE. (SEE GENERAL NOTES)



NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

TAYLOR ROAD BRIDGE



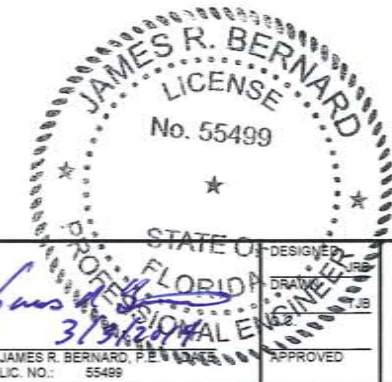
DESIGNED: JRB
DRAWN: TJB
Q.C.:
APPROVED:

TYPICAL SECTIONS

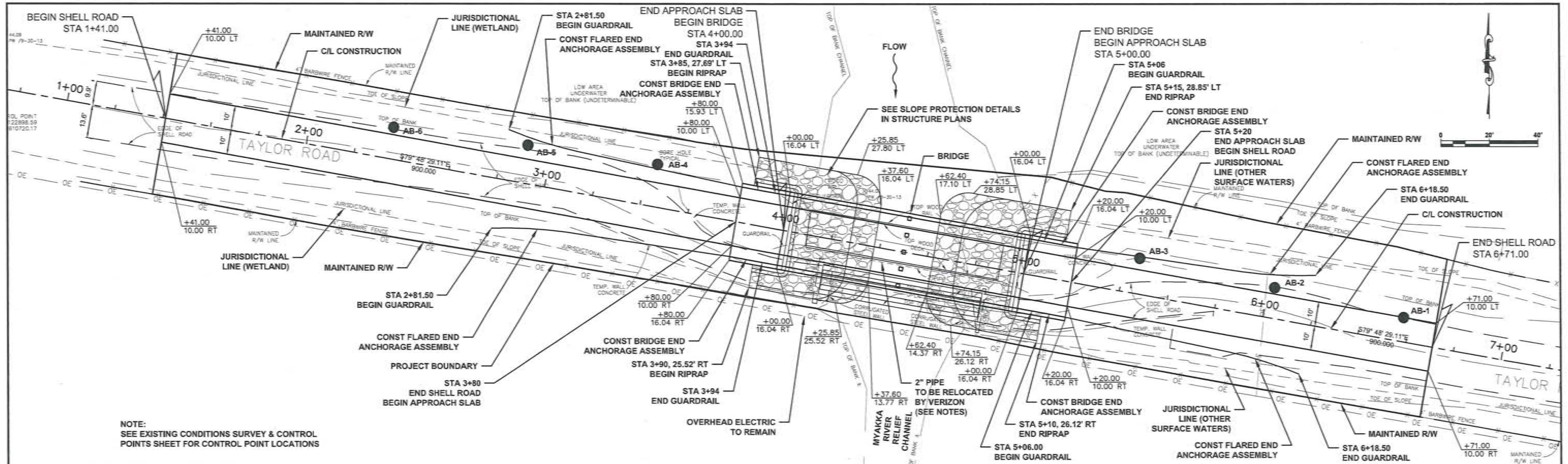
PROJECT NO:
00193008.26
DATE:
3-3-2014
SHEET NO:
2

GENERAL NOTES

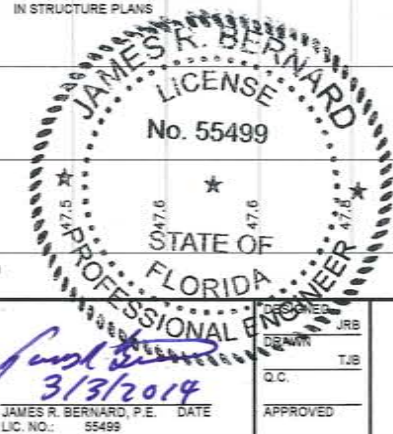
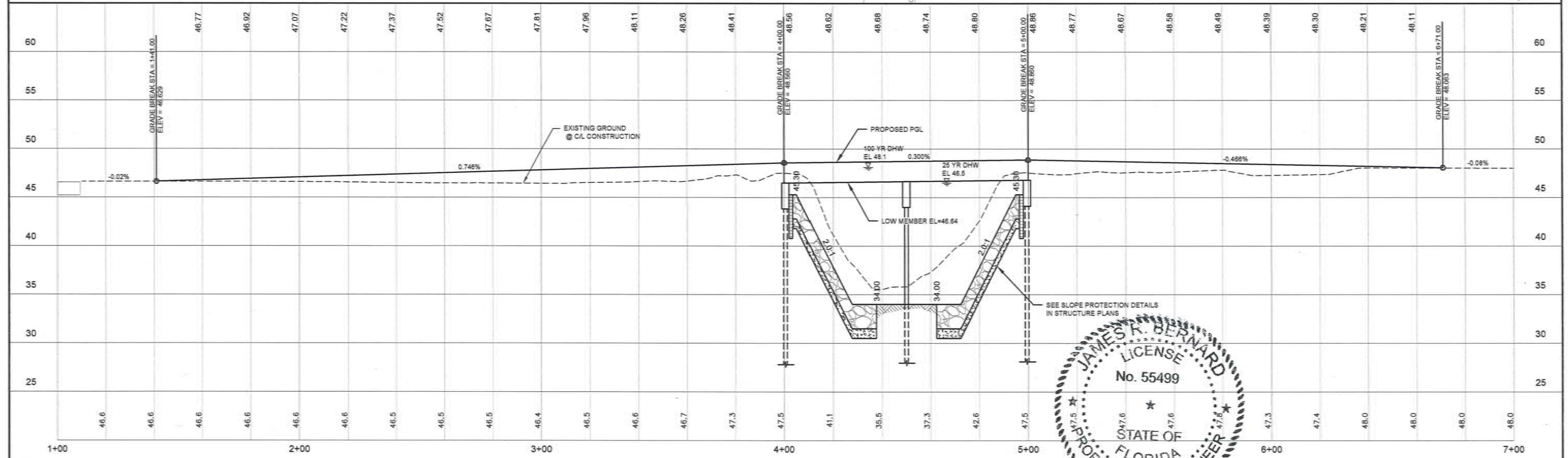
1. ALL STATIONS AND OFFSETS REFER TO C/L OF CONSTRUCTION, UNLESS OTHERWISE NOTED. HORIZONTAL CONTROL IS NAD 1983 (1990 ADJUSTMENT) STATE PLANE COORDINATES. VERTICAL CONTROL IS NGVD 1929.
2. THE CONTRACTOR SHALL FIELD VERIFY ANY AND ALL EXISTING CONDITIONS PRIOR TO COMMENCING CONSTRUCTION, AND SHALL NOTIFY THE COUNTY REPRESENTATIVE PROMPTLY OF ANY DISCREPANCIES.
3. THE CONSTRUCTION LENGTHS INDICATED IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE COUNTY REPRESENTATIVE.
4. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE TOPOGRAPHIC SURVEY PROVIDED BY ZNS ENGINEERING, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT SIZE, LOCATION, DEPTH, HEIGHT, ELEVATION, DIMENSION, AND EXTENT OF ALL UNDERGROUND AND OVERHEAD FACILITIES AND OTHER FEATURES AFFECTING HIS WORK PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY THAT MAY AFFECT SUCH FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS.
5. THE CONTRACTOR SHALL HAVE A FOREMAN, OR RESPONSIBLE PARTY, ON SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. ALL WORKERS ON THE JOB SITE WILL BE COURTEOUS TO THE PUBLIC AT ALL TIMES, AND SHALL REFER ANY QUESTIONS OR CONCERNS TO THE CONTRACTOR'S FOREMAN OR THE COUNTY INSPECTOR. THE FOREMAN SHALL SPEAK AND UNDERSTAND ENGLISH AND SHALL BE AVAILABLE AT ALL TIMES FOR TIMELY RESOLUTION OF PROJECT-RELATED ISSUES.
6. EXCEPT WHERE THE PLANS AND SPECIFICATIONS PROVIDE THAT SUCH WORK SHALL BE PERFORMED UNDER THE CONTRACT FOR THIS PROJECT, ALL UTILITIES INTERFERING WITH CONSTRUCTION SHALL BE REMOVED, RELOCATED OR ADJUSTED BY THEIR OWNERS, AT THEIR EXPENSE. THE CONTRACTOR SHALL ARRANGE HIS SCHEDULE TO ALLOW UTILITY OWNERS TIME FOR THE NECESSARY RELOCATION AND ADJUSTMENT OF UTILITIES AND RELATED STRUCTURES.
7. ABOVE GROUND AND/OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL (1-800-432-4770) AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES, UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY. ALL UTILITY OWNERS MAY NOT BE A MEMBER, REQUIRING DIRECT CONTACT. THE CONTRACTOR SHALL FURTHER COORDINATE WITH UTILITY OWNERS TO RESOLVE CONFLICTS THAT MAY ARISE IN THE FIELD DURING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S FAILURE TO CALL "SUNSHINE STATE ONE CALL" AND THE UTILITY OWNERS.
8. ALL EXISTING WATER MAINS, SANITARY SEWER, AND OTHER UTILITIES SHALL REMAIN IN SERVICE UNTIL THE RELOCATED UTILITIES ARE PLACED IN SERVICE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL AND SEDIMENT CONTROL, IN ACCORDANCE WITH FDOT EROSION AND SEDIMENT CONTROL MANUAL, THROUGHOUT THE DURATION OF THE PROJECT AND ALL ASPECTS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE RESTORATION EFFORTS THAT MAY BE REQUIRED AS A RESULT OF CONSTRUCTION. THE CONTRACTOR SHALL USE WHATEVER METHODS, CONFORMING TO APPLICABLE STANDARDS, NECESSARY TO PREVENT EROSION AND SILTATION AS MAY BE REQUIRED FOR THE PROJECT.
10. ALL EROSION CONTROL FENCES, BARRIERS, AND SILTATION DEVICES SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, SHALL BE MAINTAINED IN GOOD WORKING ORDER DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING. BUILT-UP SEDIMENT WILL BE REMOVED FROM SILT FENCES AND STAKED TURBIDITY BARRIERS WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE/BARRIER. STOCKPILE AREAS SHALL BE LOCATED IN UPLAND AREAS AND INCLUDE SILT FENCE AROUND THE PERIMETER.
11. THE CONTRACTOR SHALL PROVIDE FOR ADEQUATE CROSS DRAINAGE THROUGH THE PROJECT LIMITS AT ALL TIMES. ESTIMATED FLOWS THROUGH THE BRIDGE MAY EXCEED 2,500 CUBIC FEET PER SECOND DURING EXTREME STORM EVENTS. THE CONTRACTOR SHALL ANTICIPATE THE OCCURRENCE OF SUCH EVENTS AND HAVE A PLAN AND APPROPRIATE MEASURES IN PLACE TO PROTECT FROM DAMAGE, FLOODING OR WATER QUALITY IMPACT. ADDITIONALLY, AREAS ALONG THE ROADWAY TOE-OF-SLOPE MAY BE FREQUENTLY FLOODED DURING THE WET SEASON OR FLOODED BY LARGER RAINSTORMS.
12. DURING DEWATERING OPERATIONS, THE CONTRACTOR SHALL NOT DISCHARGE DIRECTLY TO RECEIVING WATERS, EXISTING CONVEYANCES TO RECEIVING WATERS, OR WETLAND SYSTEMS. TEMPORARY SEDIMENT BASINS, TRAPS, OR SILTATION REDUCTION DEVICES SHALL BE UTILIZED TO COLLECT THE DISCHARGE FROM DEWATERING ACTIVITIES TO ELIMINATE THE POTENTIAL FOR OFFSITE SEDIMENT TRANSPORT AND TO ENSURE THAT DIRECT DISCHARGE DOES NOT OCCUR.
13. CONTRACTOR SHALL CHECK ALL EROSION AND SILTATION CONTROL DEVICES WEEKLY, AND AFTER EACH RAINFALL, AND REPAIR AND REPLACE THEM AS REQUIRED.
14. BANKS SHALL BE PROTECTED FROM EROSION OR COLLAPSE DURING CONSTRUCTION. BANK PROTECTION MATERIAL SHALL BE CAREFULLY PLACED FROM THE BANK AND NOT DUMPED FROM ABOVE IN AN UNCONTROLLED MANNER. EROSION CONTROL FABRIC SHALL BE USED FOR EROSION PROTECTION WHERE SOD WILL NOT HOLD OR BECOME ESTABLISHED IN TIME TO PROTECT THE BANKS. UNLESS OTHERWISE SPECIFIED IN THE PLANS, UPON COMPLETION OF CONSTRUCTION, ALL BANKS AND WATERWAYS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONFIGURATION AND PROTECTED FROM EROSION.
15. ALL STUMPS, ROOTS, AND OTHER DEBRIS PROJECTING THROUGH OR APPEARING ON THE SURFACE OF THE GROUND SHALL BE REMOVED TO A DEPTH OF 1-FOOT BELOW THE COMPLETED SURFACE.
16. THE CONTRACTOR SHALL REMOVE ALL DRIVEWAYS, SIDEWALKS, CURBS, AND ALL ABANDONED UTILITY LINES, PIPES, STRUCTURES, FLUMES AND OTHER SUBTERRANEAN OBJECTS TO A MINIMUM DEPTH OF FOUR (4) FEET BELOW GRADE, OR AS OTHERWISE DIRECTED BY THE COUNTY REPRESENTATIVE.
17. ALL MATERIALS NOT CLAIMED BY THE COUNTY SHALL BECOME PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN AREAS PROVIDED BY THE CONTRACTOR.
18. ALL SUB-BASES SHALL BE OF GOOD, CLEAN, ACCEPTABLE MATERIAL COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99, IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
19. ALL AREAS OF EXPOSED EARTH RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE SODDED AS DIRECTED BY THE COUNTY REPRESENTATIVE. SEEDING AND MULCHING SHALL BE APPLIED ONLY WHERE SPECIFICALLY CALLED FOR IN THE PLANS AND SPECIFICATIONS, OR WHERE SPECIFICALLY DIRECTED BY THE COUNTY REPRESENTATIVE.
20. THE CONTRACTOR WILL BACKFILL AREAS TO BE SODDED WITH CLEAN FILL TO MAINTAIN PROPER GRADE OF THE PLANTING AREA, AND THE SOD SHALL BE PROPERLY CUT-IN AND TAMPED.
21. SOD STABILIZATION SHALL OCCUR WITHIN 72 HOURS OF ACHIEVING FINAL GRADE. ALL SLOPES STEEPER THAN 3:1 SHALL INCLUDE SOD STAPLING OR STAKING.
22. THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING, AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES OR TO MINIMIZE TRENCH WIDTH. WHERE A SEPARATE PAY ITEM IS NOT PROVIDED, THE COST OF ALL SHEETING, SHORING, AND BRACING REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEM OF WORK FOR WHICH SHEETING, SHORING, AND BRACING IS REQUIRED.
23. UNSUITABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF SITE, AT A SUITABLE SITE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PERMITS AND PERMITTING FEES REQUIRED FOR THE TRANSPORT AND DISPOSAL OF UNSUITABLE MATERIAL.
24. BORROW MATERIAL REQUIRED FOR CONSTRUCTION OF THE PROJECT SHALL BE PROVIDED BY THE CONTRACTOR, FROM BORROW AREAS PROVIDED BY THE CONTRACTOR.
25. THE CONTRACTOR SHALL ENDEAVOR TO PROTECT PRIVATE PROPERTY. ANY PRIVATELY OWNED FEATURES LOCATED ON PRIVATE PROPERTY AND OUTSIDE THE DESIGNATED AREA OF CONSTRUCTION WHICH ARE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED IN A TIMELY MANNER AT THE EXPENSE OF THE CONTRACTOR. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
26. SUITABLE EXISTING ROADWAY MATERIALS, SUCH AS BANK RUN SHELL, MAY BE UTILIZED FOR THE CONSTRUCTION OF STABILIZATION AND BASE. ALL EXISTING AND NEW ROADWAY MATERIALS UTILIZED AND PLACED FOR CONSTRUCTION SHALL MEET THE APPLICABLE DENSITY REQUIREMENTS OF THE FDOT STANDARD SPECIFICATIONS FOR THE MATERIAL TYPE (STABILIZATION OR BASE). NO ADDITIONAL MIXING AND COMPACTION OTHER THAN THAT REQUIRED TO ACHIEVE THE APPLICABLE DENSITY IS NECESSARY.
27. THE CONTRACTOR SHALL DISTURB NO MORE GROUND THAN WHAT IS NECESSARY FOR CONSTRUCTION. NO OPEN EXCAVATED TRENCH, OR OTHER UNSAFE CONDITION, WILL BE LEFT OVERNIGHT. ALL WORK SITES WILL BE COMPLETELY RESTORED WITHIN SEVEN (7) CALENDAR DAYS OF THE CONCRETE POUR FOR SIDEWALK. THE INTENT OF THIS PROVISION IS TO "SAFE-UP" THE PROJECT SITE AS WORK PROGRESSES, AND SHALL INCLUDE REMOVING FORMS, FILLING HOLES, GRADING, AND REMOVAL OF DEBRIS.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE COORDINATION OF CONSTRUCTION SCHEDULING BETWEEN THE CONTRACTOR AND ALL UTILITY AGENCIES.
NOTE: THIS INCLUDES MEETING WITH UTILITY AGENCIES PRIOR TO THE PRE-CONSTRUCTION CONFERENCE TO ADJUST THEIR SCHEDULES TO COINCIDE WITH THE CONTRACTORS CONSTRUCTION SCHEDULE.
29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE STAKE-OUT OF THE PROJECT, I.E., LINE, GRADE, SLOPE, UTILITY RELOCATIONS OR ANY OTHER STAKE-OUT THAT MAY BE REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ANY AND ALL EXPENSES INCURRED FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK.
30. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
31. DRIVEWAY LOCATION AND WIDTH MAY BE FIELD ADJUSTED DURING CONSTRUCTION BY THE COUNTY REPRESENTATIVE IN COORDINATION WITH REQUESTS FROM PROPERTY OWNERS. ASPHALT DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL INCLUDED IN THESE PLANS.
32. COUNTY REPRESENTATIVE REFERS TO THE COUNTY'S DESIGNATED PROJECT MANAGER OR INSPECTOR OR OTHER REPRESENTATIVE AUTHORIZED BY THE COUNTY PROJECT MANAGER.
33. THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE ADJACENT PROPERTY OWNERS REGARDING REMOVAL AND RELOCATION OF EXISTING FENCES, MAILBOXES, ETC.
34. FIELD ADJUSTMENTS MAY BE REQUIRED AS DIRECTED BY COUNTY REPRESENTATIVE.
35. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION SAFETY. SPECIAL PRECAUTIONS MAY BE REQUIRED IN THE VICINITY OF POWER LINES AND OTHER UTILITIES.
36. ALL WORKMANSHIP AND MATERIALS USED IN THE CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, UNLESS OTHERWISE INDICATED.
37. THE CONTRACTOR IS RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND IS RESPONSIBLE FOR THE CLEARING AND GRUBBING, DEMOLITION, REMOVAL OR ADJUSTMENT OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS, THE CONTRACTOR SHALL CONTACT THE COUNTY REPRESENTATIVE AND REQUEST A CLARIFICATION BEFORE CONSTRUCTION TAKES PLACE.
38. CONTRACTOR SHALL SUBMIT FOR COUNTY REVIEW AND APPROVAL A SPOIL UTILIZATION/ DISPOSAL PLAN. THE PLAN SHALL DETAIL THE METHOD FOR UTILIZATION AND/OR DISPOSAL OF SPOIL MATERIALS REMOVED DURING RECONTOURING OF THE CANAL. IN ACCORDANCE WITH THE REQUIREMENTS OF 62-330.447 (1)(b) F.A.C.; ALL SPOIL MATERIALS SHALL BE USED ON AN UPLAND PORTION OF THE PROJECT OR DEPOSITED IN A SELF-CONTAINED, UPLAND SPOIL SITE. ESCAPE OF SPOIL MATERIAL OR WATER FROM THE SPOIL DEPOSITION AREA INTO WETLANDS OR OTHER SURFACE WATERS IS PROHIBITED.
39. ON THE SOUTH SIDE OF THE EXISTING TIMBER BRIDGE THERE IS A 2" GALVANIZED PIPE WITH CONDUIT THAT WILL BE RELOCATED BY VERIZON. CONTRACTOR SHALL COORDINATE TEMPORARY RELOCATION OF THIS FACILITY AS REQUIRED.
40. FOR BRIDGE AND ROADWAY PHASING, SEE CONSTRUCTION SEQUENCE NOTES IN GENERAL NOTES IN STRUCTURE PLANS.
41. THE CONTRACTOR SHOULD BE AWARE THAT SOME OF THE PAY ITEMS (PRICE SCHEDULE) MAY INCLUDE CONTINGENCY QUANTITIES. PAYMENT SHALL BE MADE ONLY FOR FINAL IN-PLACE QUANTITIES.



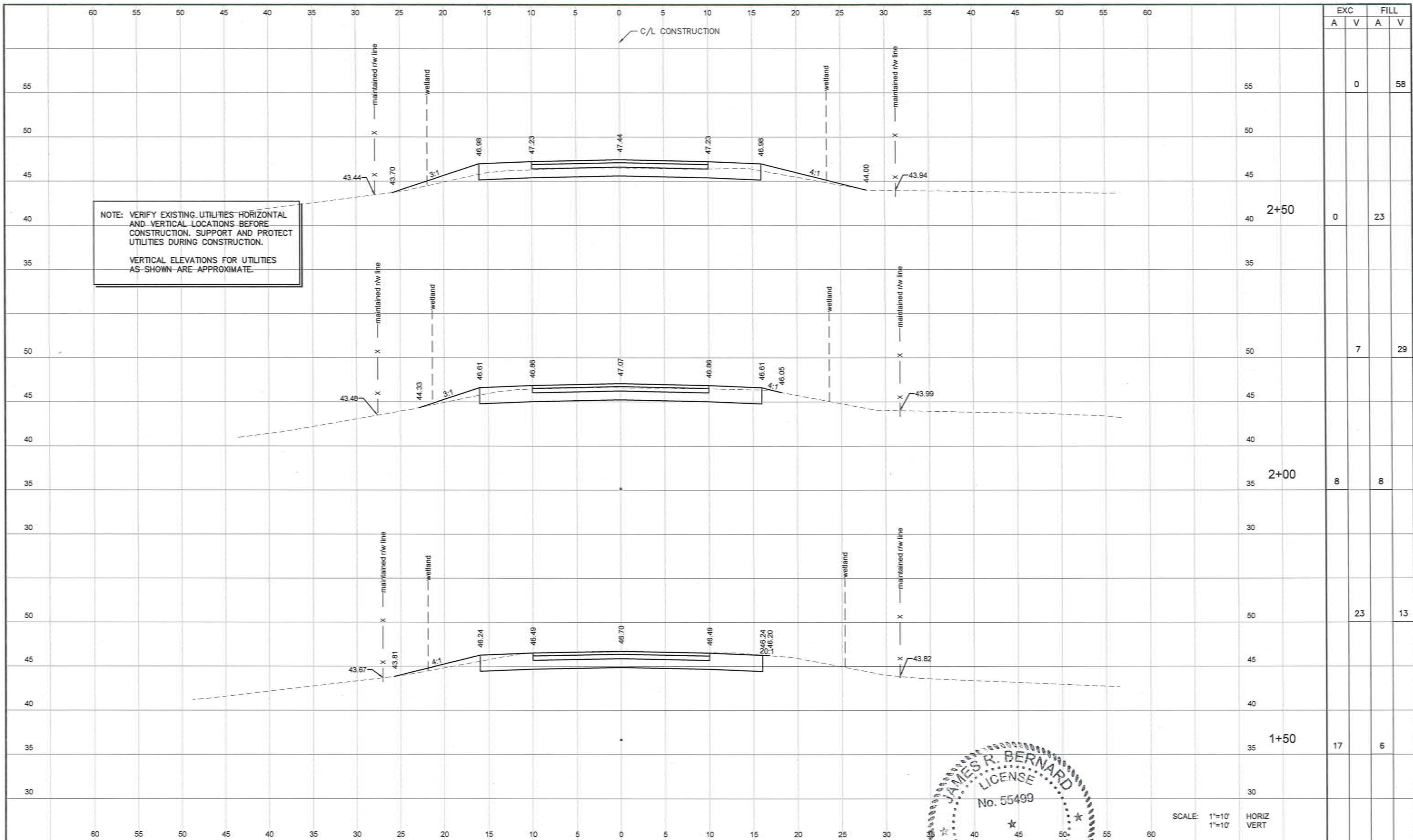
	MANATEE COUNTY	TAYLOR ROAD BRIDGE	 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843	GENERAL NOTES	PROJECT NO: 00193008.26 DATE: 3-3-2014 SHEET NO: 3
NO.	DESCRIPTION	BY	DATE		



NOTE:
SEE EXISTING CONDITIONS SURVEY & CONTROL
POINTS SHEET FOR CONTROL POINT LOCATIONS



MANATEE COUNTY		TAYLOR ROAD BRIDGE		 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		PROJECT NO: 00193008.26 DATE: 3-3-2014 SHEET NO: 4	
NO.	DESCRIPTION	BY	DATE	APPROVED	DATE	JRB	TJB



SCALE: 1"=10' HORIZ
1"=10' VERT

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

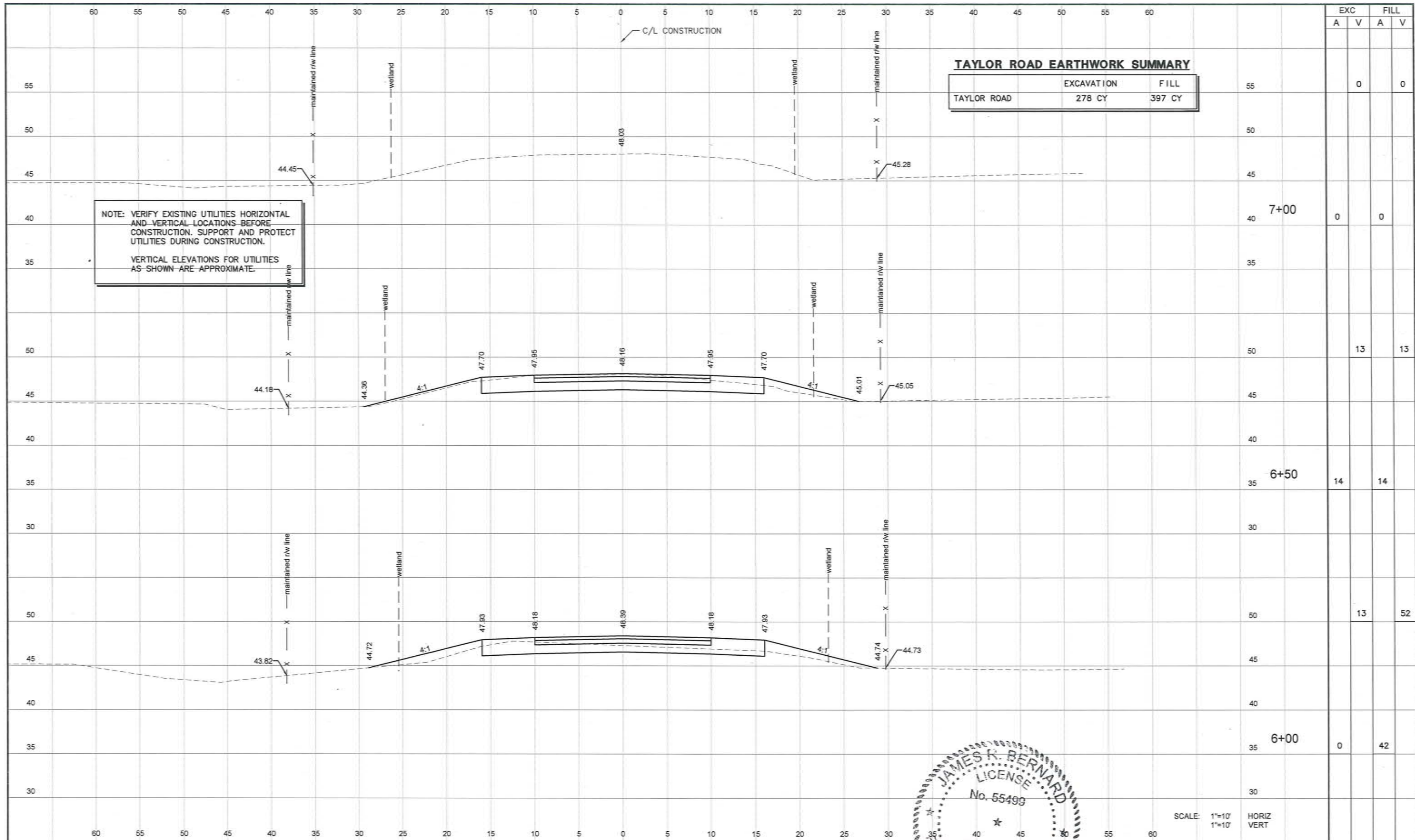
TAYLOR ROAD BRIDGE



DESIGNED BY: JRB
CHECKED BY: TJB
APPROVED: _____
JAMES R. BERNARD, P.E.
LIC. NO.: 55499

CROSS SECTIONS

PROJECT NO: 00193008.26
DATE: 3-3-2014
SHEET NO: 5

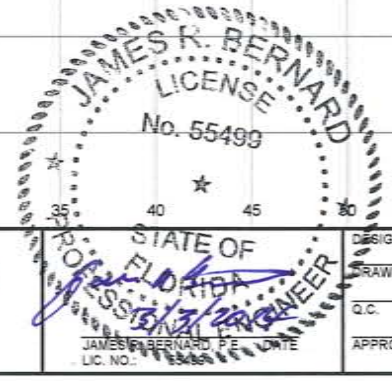


TAYLOR ROAD EARTHWORK SUMMARY

TAYLOR ROAD	EXCAVATION	FILL
	278 CY	397 CY

STATION	EXC		FILL	
	A	V	A	V
7+00	0	0	0	0
6+50	14	14	13	52
6+00	0	42	0	0

SCALE: 1"=10' HORIZ
1"=10' VERT



NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

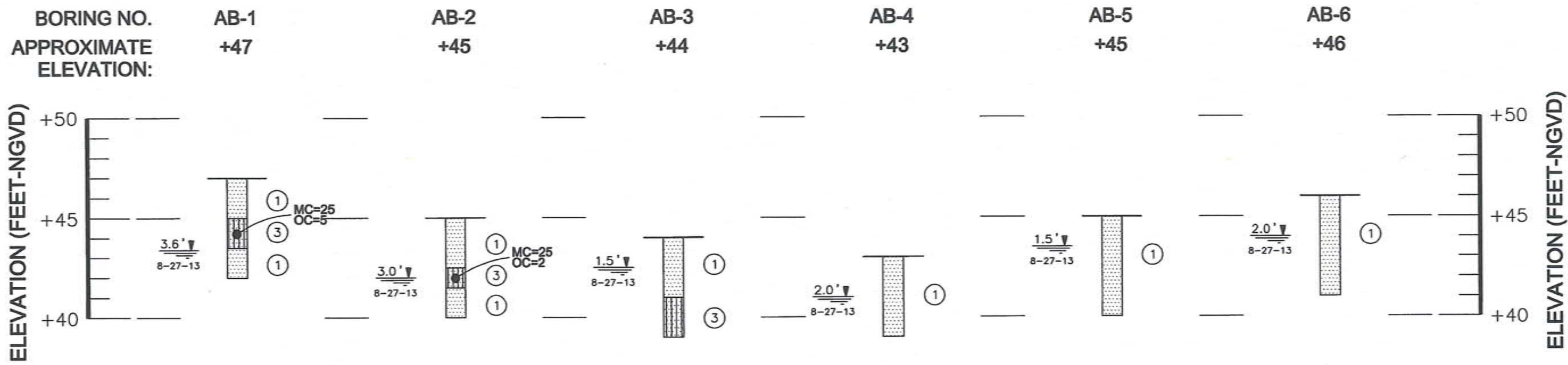
TAYLOR ROAD BRIDGE

22 Sarasota Center Blvd, Sarasota, Florida, 34240
www.cardnotbe.com - 941.377.9084
Certificate of Authorization No. 3843

DESIGNED: JRB
DRAWN: TJB
Q.C.:
APPROVED: _____
DATE: _____
LIC. NO.: _____

CROSS SECTIONS

PROJECT NO: 00193008.26
DATE: 3-3-2014
SHEET NO: 8



LEGEND

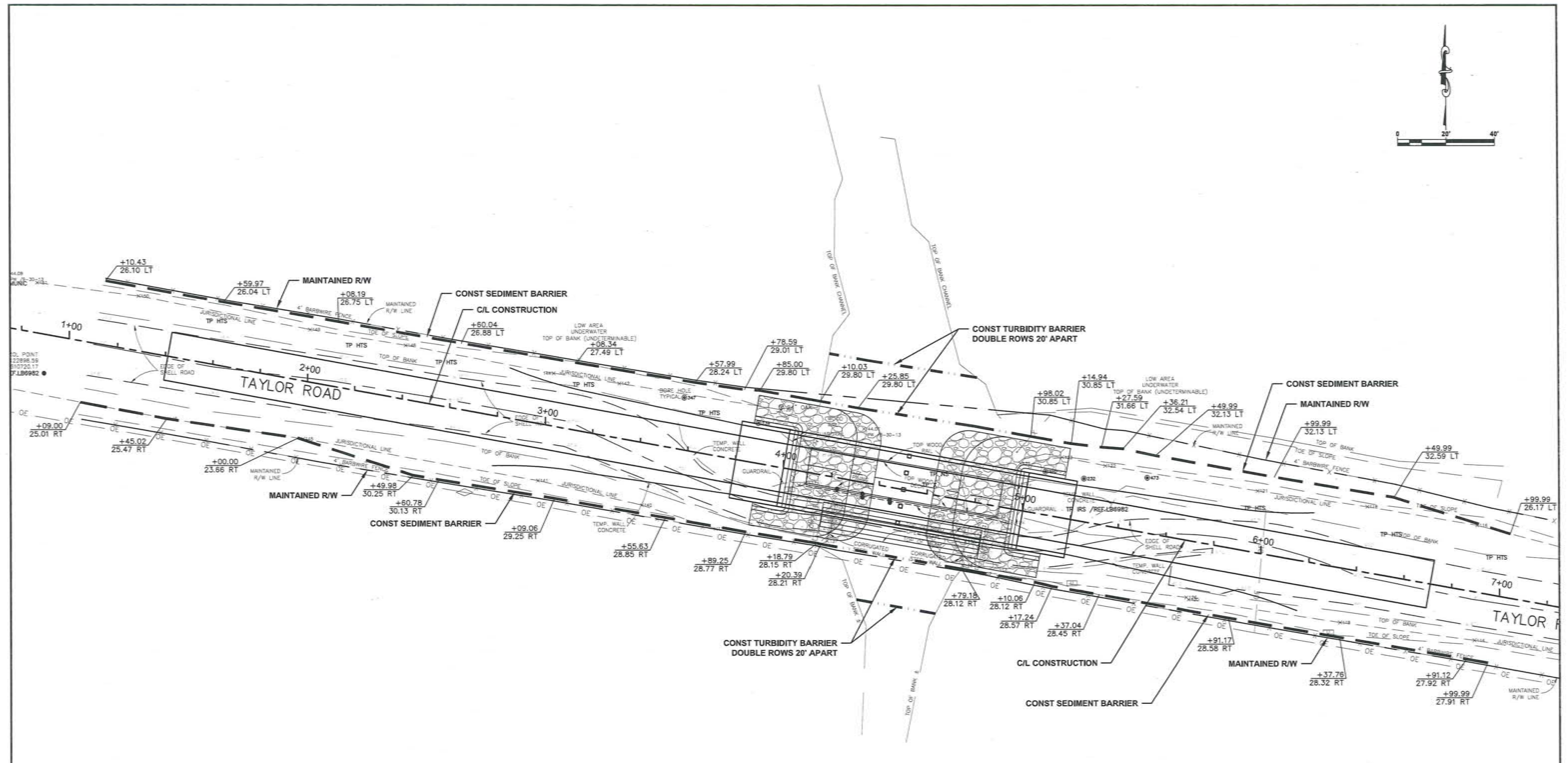
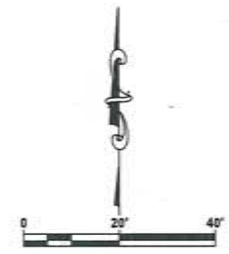
- (B) Sand-Shell BASE
- (1) Gray to brown fine SAND with trace silt to slightly silty (SP, SP-SM)
- (2) Gray to brown clayey fine SAND (SC)
- (3) Gray silty fine SAND (SM)
- (4) Gray SILT with some cementation (ML)
- (5) Blue-gray to gray CLAY (CL)

- SP - Unified Soil Classification System Group Symbol (ASTM D 2487)
- AB-1 - Auger boring and number
- MC - Moisture Content (%)
- OC - Organic Content (%)
- 200 - Amount Finer Than The U.S. Standard No. 200 Sieve (%)
- 3.6' 8-27-13 - Depth of groundwater (feet) & date measured

NOTES

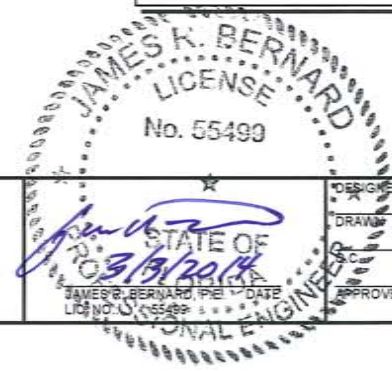
- (1) Borings were drilled on August 27, 2013 using hand turned augering equipment.
- (2) Strata boundaries are approximate and represent soil strata at each test hole location only. Soil transitions may be more gradual than implied.
- (3) Groundwater depths shown on the subsurface profiles represent groundwater surfaces on the dates and times shown. Groundwater level fluctuations should be anticipated throughout the day due to tide changes and throughout the year.
- (4) Boring elevations were estimated based on the Topographic & Jurisdictional Survey, Sheet 2 by ZNS Engineering dated September 5, 2013.

DRAWN	JJ	TAYLOR ROAD BRIDGE		
CHECKED	JJ	SUBSURFACE PROFILES		
APPROVED		MANATEE COUNTY, FLORIDA		
		DUNKELBERGER engineering & testing, inc. A Terracon COMPANY		
DATE	9-19-13	PROJ. NO.	HC135579	SHEET A-4



LEGEND

	CONST SEDIMENT BARRIER
	CONST TURBIDITY BARRIER
	CONST INLET PROTECTION SYSTEM



NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

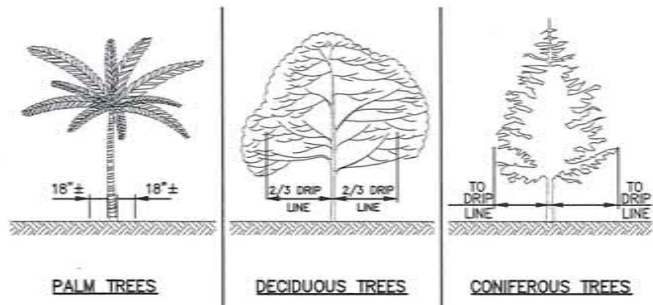
TAYLOR ROAD BRIDGE

22 Sarasota Center Blvd, Sarasota, Florida, 34240
www.cardnotbe.com - 941.377.9084
Certificate of Authorization No. 3843

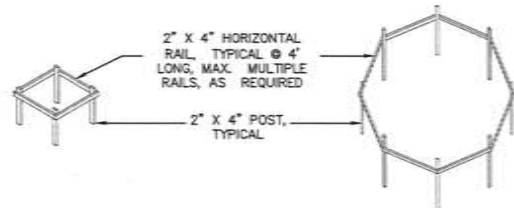
DESIGNED	JRB
DRAWN	TJB
CHECKED	
APPROVED	

EROSION CONTROL PLAN

PROJECT NO:	00193008.26
DATE:	3-3-2014
SHEET NO:	10



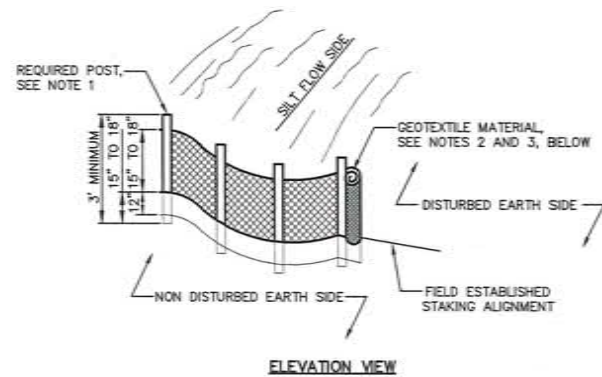
PALM TREES DECIDUOUS TREES CONIFEROUS TREES



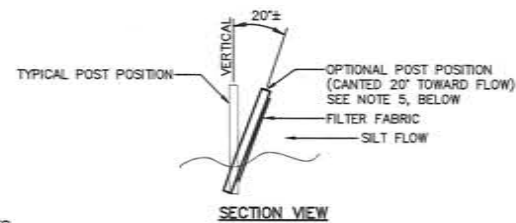
PALMS AND SMALL TREES LARGE TREES AND BUSHES

- NOTES:**
- NO TRUCKS OR HEAVY EQUIPMENT ALLOWED WITHIN BARRIERS, ONLY HAND LABOR ALLOWED.
 - NO CONSTRUCTION MATERIALS, SOILS DEPOSITS, OR SOLVENTS SHALL BE ALLOWED WITHIN BARRIERS.
 - BARRIERS ARE TO IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN TREE AREA.
 - BARRIERS ARE TO STAY IN PLACE UNTIL ALL PAVING, CONSTRUCTION, AND HEAVY EQUIPMENT IS REMOVED FROM THE AREA.

TREE PROTECTION BARRIERS DETAIL
NTS



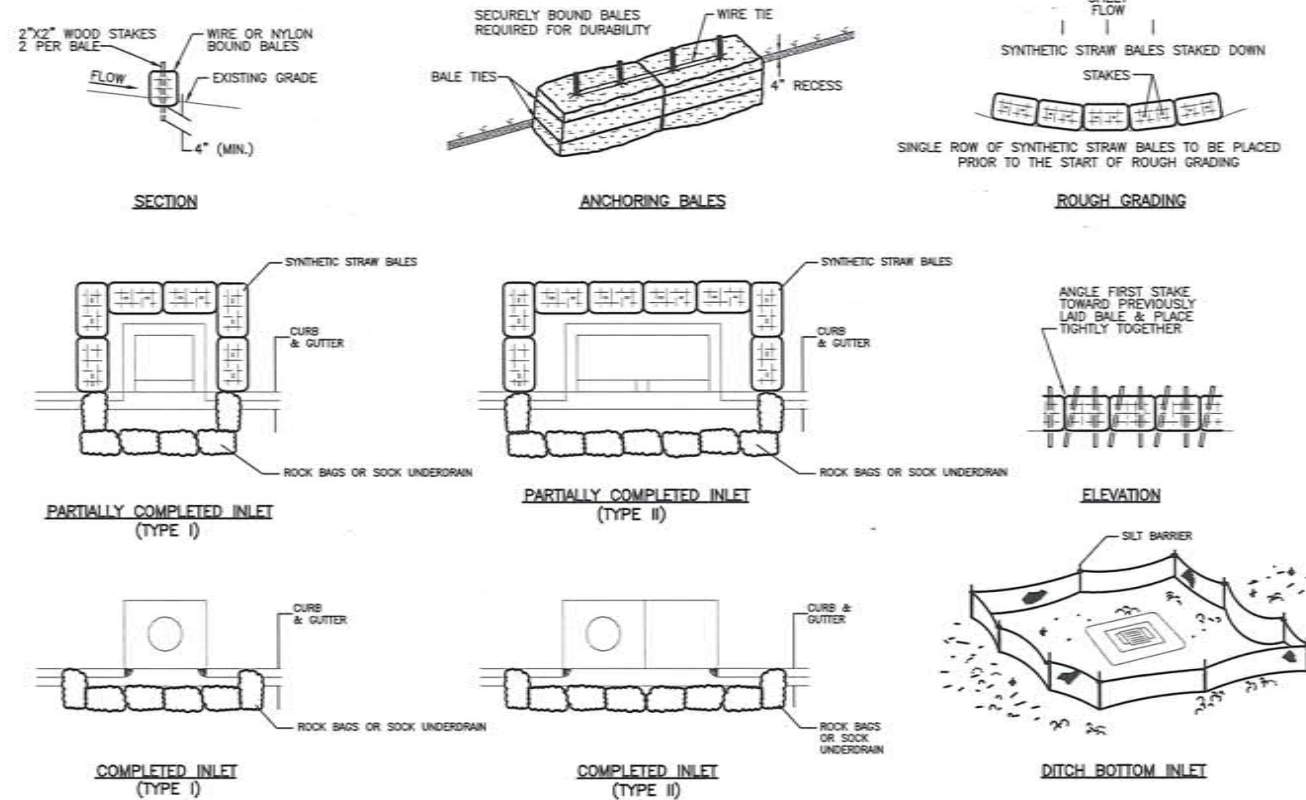
ELEVATION VIEW



SECTION VIEW

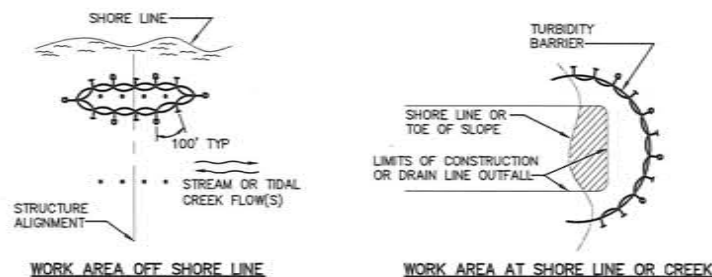
- NOTES:**
- POST: 2" X 2" WOOD, P.T. OR 2-1/2" Ø STEEL AT 6'-0" CENTERS MAXIMUM.
 - GEOTEXTILE: GRAB TENSILE AT 90 LBS, TRAPEZOIDAL TEAR AT 35 LBS., MULLEN BURST AT 180 PSI.
 - GEOTEXTILE MATERIAL SHALL BE BURIED IN THE GROUND A MINIMUM OF 12" AND BACK FILLED.
 - ALSO SEE FDOT INDEX 199, "GEOTEXTILE CRITERIA", EROSION CLASS.
 - OPTIONAL POST POSITION REQUIRED WHEN SLOPE IS GREATER THAN 1:2.

STAKED SILT BARRIER DETAIL
NTS



NOTE:
CONTRACTOR MAY USE OTHER ACCEPTABLE EROSION CONTROL DEVICES AROUND INLETS AS APPROVED BY THE ENGINEER.

ROCK BAGS, SYNTHETIC STRAW OR SILT BARRIERS
NTS



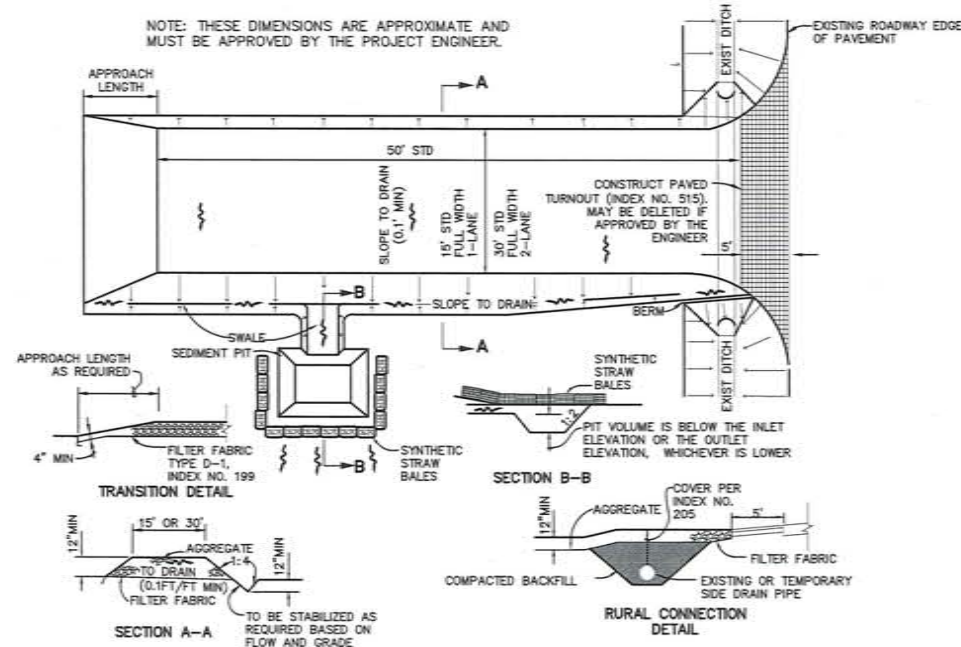
WORK AREA OFF SHORE LINE WORK AREA AT SHORE LINE OR CREEK

LEGEND

- ▨ DREDGE OR FILL AREA
- b MOORING BUOY W/ ANCHOR
- > BARRIER MOVEMENT DUE TO CURRENT ACTION
- PILE LOCATIONS
- ~ WAVE ACTION

- NOTES:**
- CURTAIN TO REACH THE BOTTOM UP TO DEPTHS OF 10', 2 PANELS ARE TO BE USED FOR DEPTHS GREATER THAN 10' UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY ARE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
 - COMPONENTS OF TYPES I AND TYPES II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND/OR TYPE II SHALL BE AS APPROVED BY THE ENGINEER.
 - TURBIDITY BARRIERS SHALL BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
 - NUMBER AND SPACING OF ANCHORS DEPENDENT ON CURRENT VELOCITIES.
 - DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
 - NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION ACTIVITIES.
 - FOR ADDITIONAL INFORMATION, SEE SECTION 104 OF THE STANDARD FDOT SPECIFICATIONS.

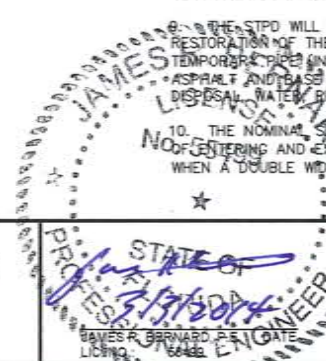
FLOATING TURBIDITY BARRIER DETAIL
NTS



SOIL TRACKING PREVENTION DEVICE TYPE A
NTS

SOIL TRACKING PREVENTION DEVICE NOTES

- IF DEEMED NECESSARY A SOIL TRACKING PREVENTION DEVICE (STPD) WILL BE CONSTRUCTED AT LOCATIONS DESIGNATED FOR POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFF SITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE CONSTRUCTION PROJECT SHOULD BE DIRECTED THROUGH A STPD. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHOULD BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STPD.
- THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFF SITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ITS USE.
- ALL MATERIALS SPILLED, DROPPED OR TRACKED ONTO PUBLIC ROADS (INCLUDING THE STPD AGGREGATE AND CONSTRUCTION MUD) SHOULD BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER.
- AGGREGATE SHALL BE DESCRIBED IN SECTION 901 EXCLUDING 901-2.3. AGGREGATES SHALL BE FDOT SIZE #1. IF THIS SIZE IS NOT AVAILABLE, THE NEXT AVAILABLE SMALLER SIZE AGGREGATE MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. SIZES CONTAINING EXCESSIVE SMALL AGGREGATE WILL TRACK OFF THE PROJECT AND ARE NOT SUITABLE.
- THE SEDIMENT PIT SHOULD PROVIDE A RETENTION VOLUME OF 3600 CUBIC FEET/ACRE OF SURFACE AREA DRAINING TO THE PIT. WHEN THE STPD IS ISOLATED FROM OTHER DRAINAGE AREAS, THE FOLLOWING PIT VOLUMES WILL SATISFY THIS REQUIREMENT: 15'X50'=100 FT.³, 30'X50'=200 FT.³ AS AN OPTION TO THE SEDIMENT PIT, THE WIDTH OF THE SWALE BOTTOM CAN BE INCREASED TO OBTAIN THE VOLUME. WHEN THE SEDIMENT PIT OR SWALE VOLUME HAS BEEN REDUCED TO ONE HALF, IT SHALL BE CLEANED. WHEN A SWALE IS USED, HAY BALES OR SILT FENCE SHALL BE PLACED ALONG THE ENTIRE LENGTH.
- THE SWALE DITCH DRAINING THE STPD SHALL HAVE A 0.2% MINIMUM AND A 1.0% MAXIMUM GRADE ALONG THE STPD AND TO THE SEDIMENT PIT.
- MITERED END SECTIONS ARE NOT REQUIRED WHEN THE SIDE DRAIN PIPE SATISFIES THE CLEAR ZONE REQUIREMENTS.
- THE STPD SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION. TO PREVENT OFFSET TRACKING, THE STPD SHALL BE RINSED (DAILY WHEN IN USE) TO MOVE ACCUMULATED MUD DOWNWARD THROUGH THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STPD MAY BE REQUIRED TO LIMIT MUD TRACKED.
- THE STPD WILL INCLUDE CONSTRUCTION, MAINTENANCE, REPLACEMENT OF MATERIALS, REMOVAL, AND RESTORATION OF THE AREA UTILIZED FOR THE STPD: INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, TEMPORARY PAVEMENT (INCLUDING M.E.S. WHEN REQUIRED), FILTER FABRIC, AGGREGATE, PAVED TURNOUT (INCLUDING ASPHALT AND BASE CONSTRUCTION), DITCH STABILIZATION, APPROACH ROUTE STABILIZATION, SEDIMENT REMOVAL AND DISPOSAL, WATER BARRIERS, AND CLEANING OF THE STPD AND CLEANING OF PUBLIC ROADS, GRASSING AND SOD.
- THE NOMINAL SIZE OF A STANDARD STPD IS 15'X50' UNLESS OTHERWISE SHOWN IN THE PLANS. IF THE VOLUME OF ENTERING AND EXITING VEHICLES WARRANT, A 30' WIDTH STPD MAY BE USED IF APPROVED BY THE ENGINEER. WHEN A DOUBLE WIDTH (30') STPD IS USED, THE PAY QUANTITY SHALL BE 2 FOR EACH LOCATION.



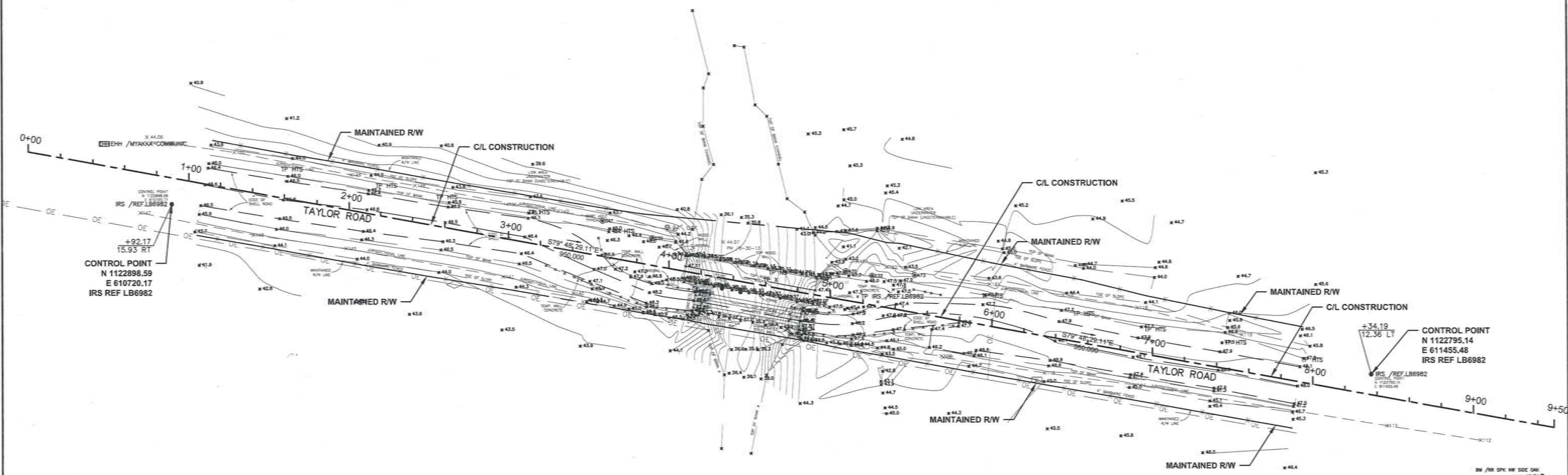
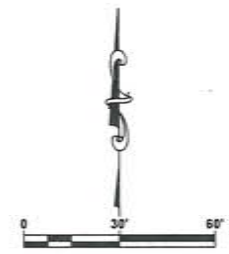
DESIGNED	JRB	PROJECT NO:	00193008.26
DRAWN	TJB	DATE:	3-3-2014
C.C.		SHEET NO:	11
APPROVED			

MANATEE COUNTY

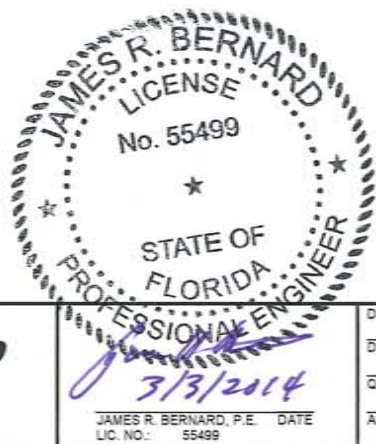
TAYLOR ROAD BRIDGE

Cardno TBE
22 Sarasota Center Blvd, Sarasota, Florida, 34240
www.cardnotbe.com - 941.377.9084
Certificate of Authorization No. 3843

EROSION CONTROL AND TREE PROTECTION



NOTE:
 SURVEY INFORMATION DEPICTED BY THIS SHEET HAS BEEN ALTERED FOR THE PURPOSES OF THIS SHEET, WHICH INCLUDE LOCATION OF CONSTRUCTION CENTERLINE AND CONTROL POINTS CREATED BY ENGINEER. CONTRACTOR SHALL USE ACTUAL TOPOGRAPHIC & JURISDICTIONAL SURVEY OF TAYLOR ROAD BRIDGE PREPARED BY ZNS ENGINEERING OF 201 5TH AVENUE DRIVE EAST, BRADENTON, FL 34208, (941) 748-8080, ZNS@ZNSENG.COM FOR CONSTRUCTION.



NO.	DESCRIPTION	BY	DATE

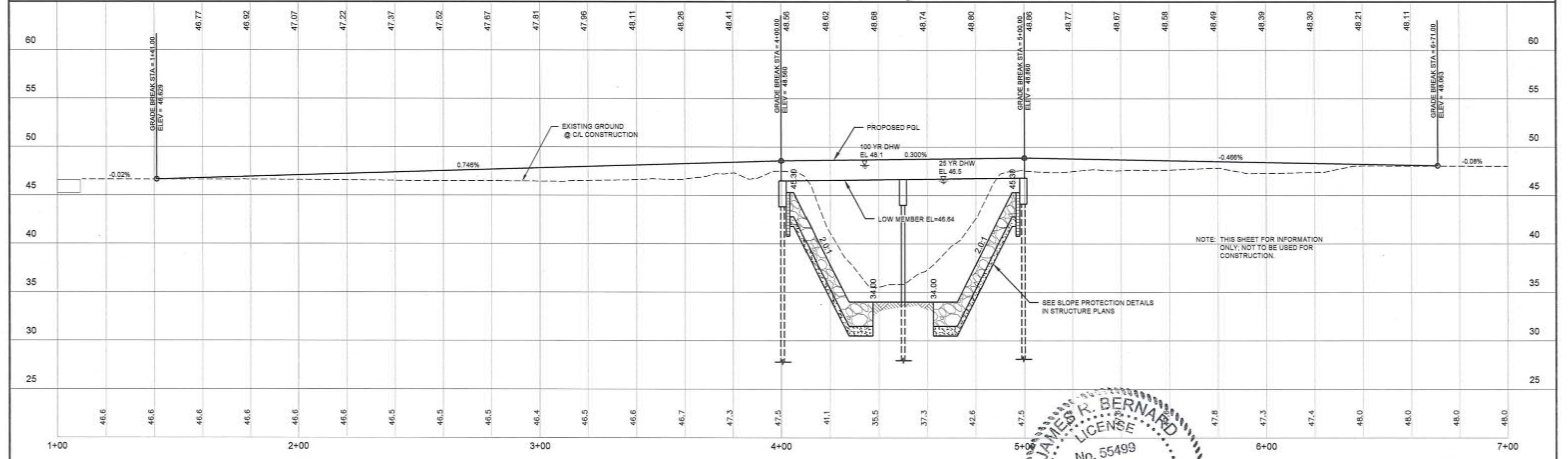
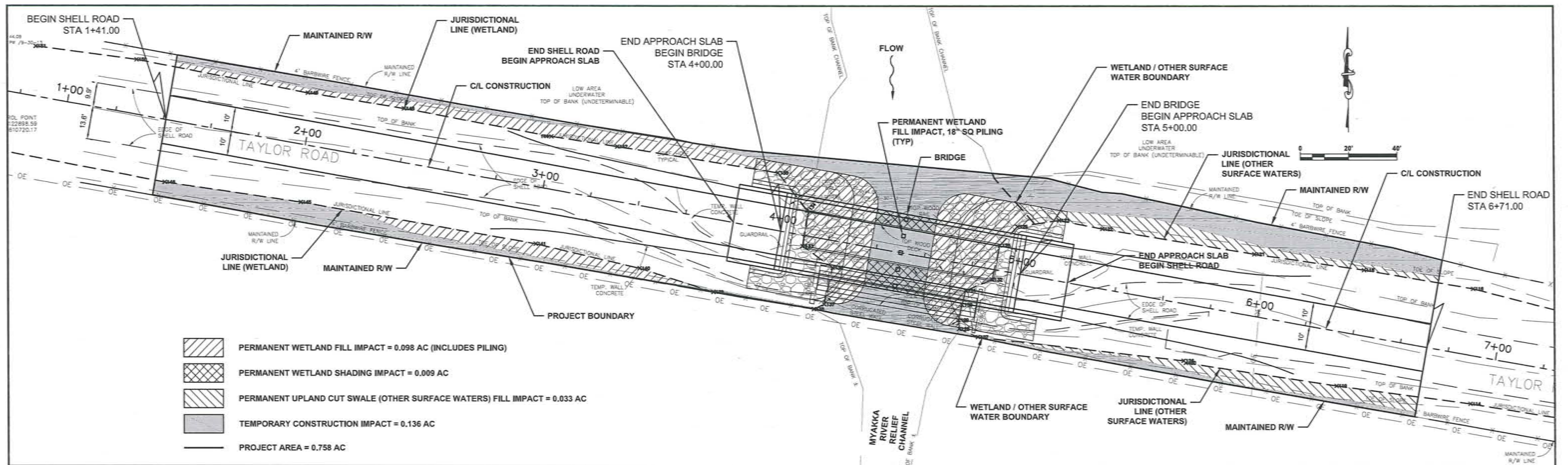
MANATEE COUNTY

TAYLOR ROAD BRIDGE

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 22 Sarasota Center Blvd, Sarasota, Florida, 34240
 www.cardnotbe.com - 941.377.9084
 Certificate of Authorization No. 3843

DESIGNED: JRB
 DRAWN: TJB
 Q.C.:
 APPROVED:
 JAMES R. BERNARD, P.E. DATE: 3/3/2014
 LIC. NO.: 55499

EXISTING CONDITIONS SURVEY & CONTROL POINTS	PROJECT NO: 00193008.26
	DATE: 3-3-2014
	SHEET NO: 12



	MANATEE COUNTY	TAYLOR ROAD BRIDGE	 Cardno TBE 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		PROJECT AND WETLAND IMPACT AREAS	PROJECT NO: 00193008.26 DATE: 3-3-2014 SHEET NO: 13
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CONSTRUCTION SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2014 EDITION) WITH SUPPLEMENTS THERETO.

DESIGN SPECIFICATIONS:

FDOT STRUCTURES DESIGN GUIDELINES FOR LOAD AND RESISTANCE FACTOR DESIGN (2014 EDITION). FDOT STRUCTURES MANUAL 2014.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), LRFD BRIDGE DESIGN SPECIFICATIONS SIXTH EDITION/2012 WITH 2013 INTERIM REVISIONS.

DESIGN METHOD:

LOAD AND RESISTANCE FACTOR DESIGN METHOD (LRFD) FOR ALL ELEMENTS UNLESS OTHERWISE NOTED.

DESIGN LOADING:

DEAD LOADS:	
UNIT WEIGHT OF REINFORCED CONCRETE (INCLUDING REINFORCEMENT)	150 pcf
FUTURE WEARING SURFACE ALLOWANCE (APPLIED OVER PROJECTED PLAN AREA OF THE EXPOSED BRIDGE DECK)	15 psf
TRAFFIC RAILING BARRIER	420 plf

LIVE LOADS:

HL-93 LOADING.

WIND LOADS:

WIND LOADS ARE IN ACCORDANCE WITH AASHTO, SECTION 3.8.

EARTHQUAKE LOADS:

THE MINIMUM BEARING SUPPORT LENGTH IS DETERMINED IN ACCORDANCE WITH AASHTO, SECTION 4.7.4.4. NO SEISMIC FORCES ARE APPLIED IN ACCORDANCE WITH THE "STRUCTURES DESIGN GUIDELINES", SECTION 2.3.1.

TEMPERATURE EFFECTS:

STRUCTURE MATERIAL: CONCRETE

MEAN	RISE FROM MEAN	FALL FROM MEAN	RANGE
70°	+35°	-35°	70°

COEFFICIENT OF THERMAL EXPANSION: 0.000006 PER °F.

DISTRIBUTION VALUES (LANES):

	<u>SHEAR</u>	<u>MOMENT</u>
INTERIOR SLAB UNITS	0.600	0.350
EXTERIOR SLAB UNITS	0.500	0.380

ENVIRONMENT:

SUPERSTRUCTURE - SLIGHTLY AGGRESSIVE
SUBSTRUCTURE - SLIGHTLY AGGRESSIVE

CONCRETE:

CLASS	MINIMUM 28-DAY COMPRESSIVE STRENGTH (psi)	LOCATION OF CONCRETE IN STRUCTURE
II	f'c = 3,400	BARRIERS
II (BRIDGE DECK)	f'c = 4,500	C.I.P. CONCRETE TOPPING, APPROACH SLABS
V	f'c = 8,000	PRESTRESSED SLAB UNITS
IV	f'c = 5,500	C.I.P. SUBSTRUCTURE
V (SPECIAL)	f'c = 6,000	PRESTRESSED PILES

CONCRETE COVER:

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

CHAMFERS:

PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES, EXCEPT AS NOTED OTHERWISE.

SCREEDING DECK SLABS:

THE RIDING SURFACE OF THE BRIDGE DECK SHALL BE SCREEDED TO FINISHED GRADE WITH NO ALLOWANCE FOR PERMANENT CAMBER.

BRIDGE FLOOR GROOVING:

BRIDGE FLOOR SURFACE SHALL BE GROOVED IN ACCORDANCE WITH SECTION 400-15.2.5.6 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

CONCRETE FINISH:

A CLASS 5 APPLIED FINISH COATING SHALL BE APPLIED TO ALL EXPOSED SURFACES AS SEEN IN ELEVATION VIEW (SEE "DETAIL A"). COST OF COATING SURFACES SHALL BE INCIDENTAL TO THE ITEM COATED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. ALL WELDED WIRE FABRIC REINFORCING SHALL BE ASTM A497. ALL DIMENSIONS PERTAINING TO LOCATIONS OF REINFORCING ARE TO CENTERLINE OF BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO FACE OF CONCRETE.

PRESTRESSING STRANDS:

STRANDS FOR PRESTRESSED PILES SHALL MEET THE REQUIREMENTS DETAILED IN FDOT STANDARD DRAWINGS, INDEX NO. 20600. STRANDS FOR PRESTRESSED SLAB UNITS SHALL BE AS DETAILED IN THESE PLANS.

PILE REQUIREMENTS:

SEE "FOUNDATION LAYOUT SHEET" FOR PILE SIZES.

UTILITIES:

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO UNCOVER AND VERIFY THE LOCATION OF THE EXISTING UTILITIES IN THE VICINITY OF PILE DRIVING OPERATION. UNLESS DIRECTED OTHERWISE BY THE ENGINEER, EXISTING UTILITIES MUST BE PROTECTED DURING CONSTRUCTION BY THE CONTRACTOR.

TURBIDITY CONTROL:

PROVIDE AND MAINTAIN FLOATING TURBIDITY BARRIERS AS REQUIRED TO CONTROL TURBIDITY CAUSED BY CONSTRUCTION OPERATIONS IN ACCORDANCE WITH PERMIT REQUIREMENTS.

JOINTS IN CONCRETE:

CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT LOCATIONS INDICATED IN THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE APPROVAL OF THE ENGINEER. ALL CONTACTING SURFACES SHALL BE COATED WITH AN APPROVED EPOXY BONDING COMPOUND IN ACCORDANCE WITH THE SPECIFICATIONS IMMEDIATELY PRIOR TO CASTING THE NEW CONCRETE ADJACENT TO EXISTING CONCRETE. THE EPOXY BONDING COMPOUND SHALL BE APPLIED IN A MANNER THAT MINIMIZES THE ELAPSED TIME BETWEEN APPLICATION AND THE CASTING OF THE NEW CONCRETE. THE USE OF OTHER METHODS NOT UTILIZING EPOXY BONDING COMPOUND WILL REQUIRE THE PRIOR APPROVAL OF THE ENGINEER.

EXPANSION JOINTS:

ALL EXPANSION JOINTS TO BE INSTALLED AFTER THE SUPERSTRUCTURE C.I.P. CONCRETE TOPPING IS POURED.

MAINTENANCE OF CANAL:

SEE ROADWAY PLANS.

SCOUR:

SCOUR ANALYSIS WAS CONSIDERED TO DETERMINE PILE FOUNDATION DESIGN.

DESIGNATIONS:

PCF = POUNDS PER CUBIC FOOT
PLF = POUNDS PER LINEAL FOOT
BOTT. = BOTTOM
EF = EACH FACE
ES = EACH SIDE
BTWN = BETWEEN

EXISTING TIMBER BRIDGE REMOVAL AND DISPOSAL:

ALL MATERIAL IN THE EXISTING BRIDGE SHALL BE REMOVED. OBTAIN ALL PERMITS (LOCAL, STATE, AND FEDERAL) NECESSARY FOR AND RELATED TO DISPOSAL OF EXISTING MATERIAL. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

BASED ON THE ENVIRONMENTAL SAMPLING AND TESTING REPORT OF THE EXISTING TIMBER BRIDGE, THE TIMBERS OF THE BRIDGE ARE NOT CONSIDERED HAZARDOUS WASTE. HOWEVER, SPECIAL HANDLING/DISPOSAL CONSIDERATIONS NEED TO BE ADDRESSED. A SPECIAL DEMOLITION CREW WITH EXPERIENCED WITH HANDLING AND DISPOSITION OF CREOSOTE TIMBERS SHOULD BE SUB-CONTRACTED TO DEMOLISH AND REMOVE THE CREOSOTE TIMBER PORTIONS OF THE BRIDGE. THE CREOSOTE TIMBERS SHOULD BE DISPOSED OF IN A COUNTY OWNED LANDFILL (SUCH AS LENA ROAD LANDFILL) INSTEAD OF A CONSTRUCTION AND DEBRIS LANDFILL.

MAINTENANCE OF TRAFFIC:

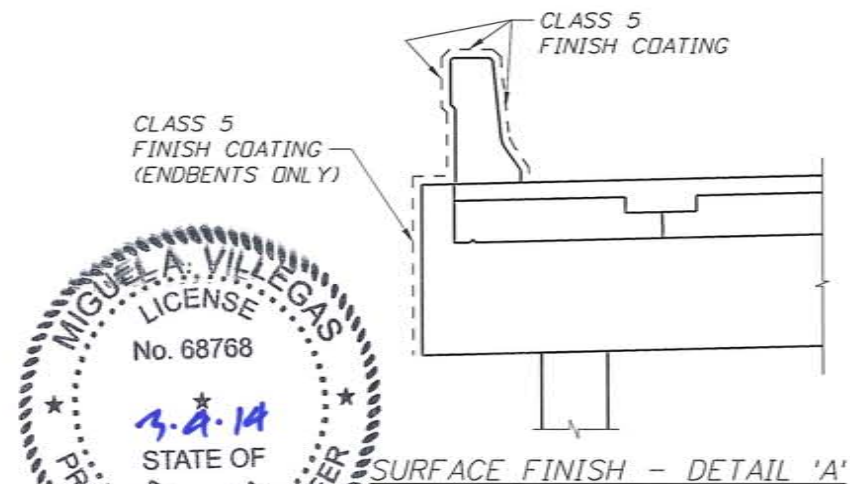
CONTRACTOR TO PROVIDE A MAINTENANCE OF TRAFFIC (MOT) PLAN USING FDOT DESIGN STANDARDS, OR SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER (WITH ADVANCED FDOT MOT CERTIFICATION) FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION OF THE MOT PLAN. THE EXISTING BRIDGE IS CLOSED FOR THE DURATION OF THE PROJECT. A TEMPORARY BRIDGE HAS BEEN PLACED TO SUPPORT TEMPORARY CONDITIONS.

CONSTRUCTION SEQUENCE NOTES:

1. REMOVE EXISTING TIMBER BRIDGE
2. CONSTRUCT BRIDGE AND ROADWAY - PHASE I CONSTRUCTION.
3. SHIFT TRAFFIC FROM TEMPORARY BRIDGE ON TO NEW BRIDGE.
4. REMOVE TEMPORARY BRIDGE (BY COUNTY STAFF).
5. CONSTRUCT BRIDGE AND ROADWAY PHASE II CONSTRUCTION.

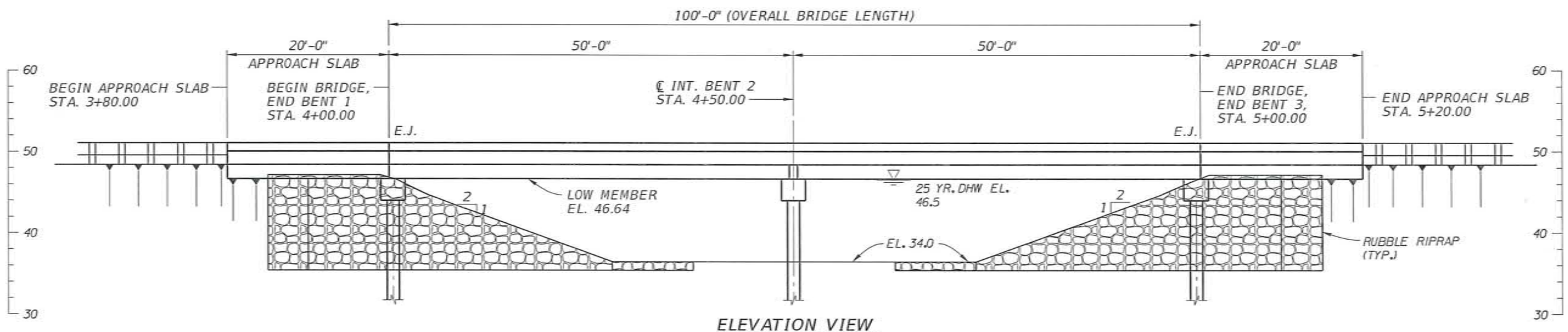
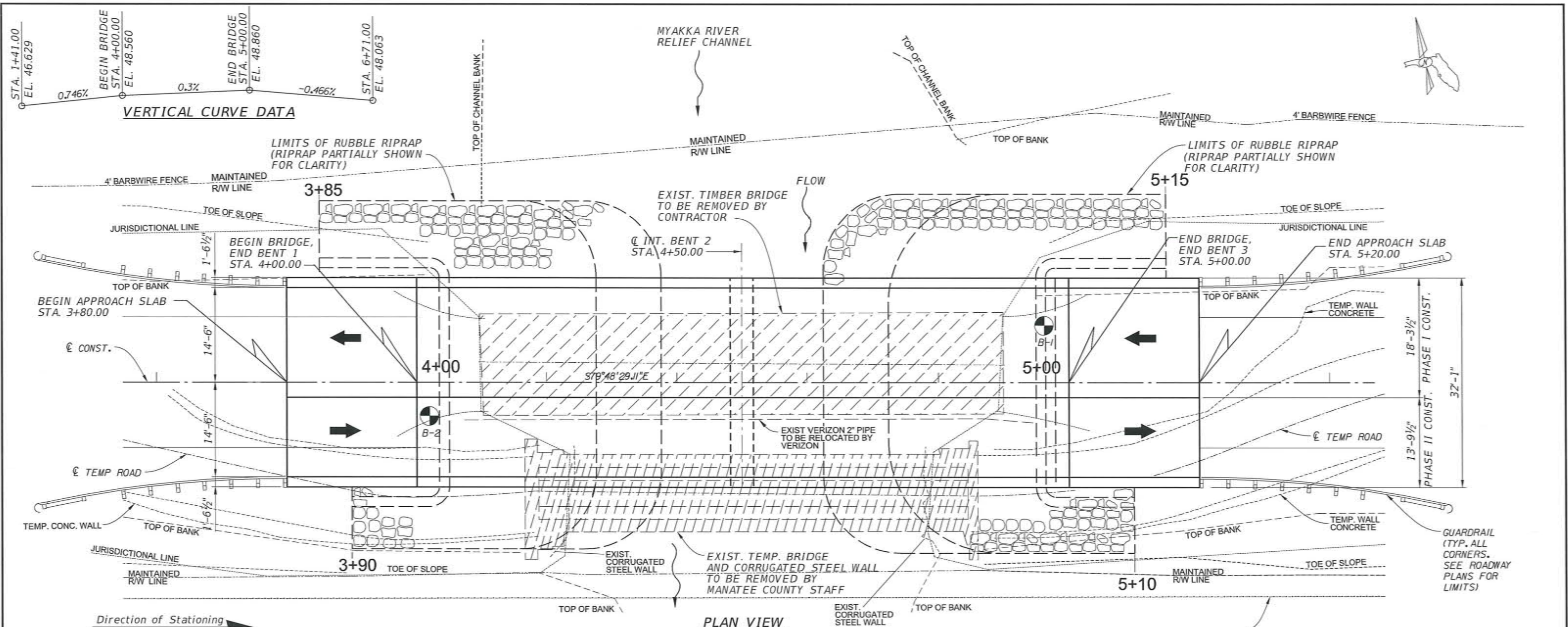
BID ITEMS NOTES:

1. PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL PAY ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE BID ITEMS.
2. THE ESTIMATED PLAN AREA OF EXISTING TIMBER BRIDGE TO BE REMOVED UNDER PAY ITEM 110-3, REMOVAL OF EXISTING STRUCTURE, IS APPROXIMATELY 1208 SF.
3. NO SEPARATE PAYMENT WILL BE MADE FOR EXCAVATIONS FOR CONSTRUCTION OF STRUCTURES. ALL COSTS FOR EXCAVATION SHALL BE INCIDENTAL TO THE ELEMENT REQUIRING SUCH WORK.
4. THE CONTRACTOR SHOULD BE AWARE THAT SOME OF THE PAY ITEMS (PRICE SCHEDULE) MAY HAVE CONTINGENCY QUANTITIES. PAYMENT SHALL BE MADE ONLY FOR FINAL IN-PLACE QUANTITIES.



BRIDGE NO. 134122

MANATEE COUNTY		TAYLOR ROAD BRIDGE		 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		DESIGNED: MAV DRAWN: MAV Q.C.: RAH APPROVED: RAH		PROJECT NO: 00193008.26 DATE: 3-4-14 SHEET NO: B1	
GENERAL NOTES									

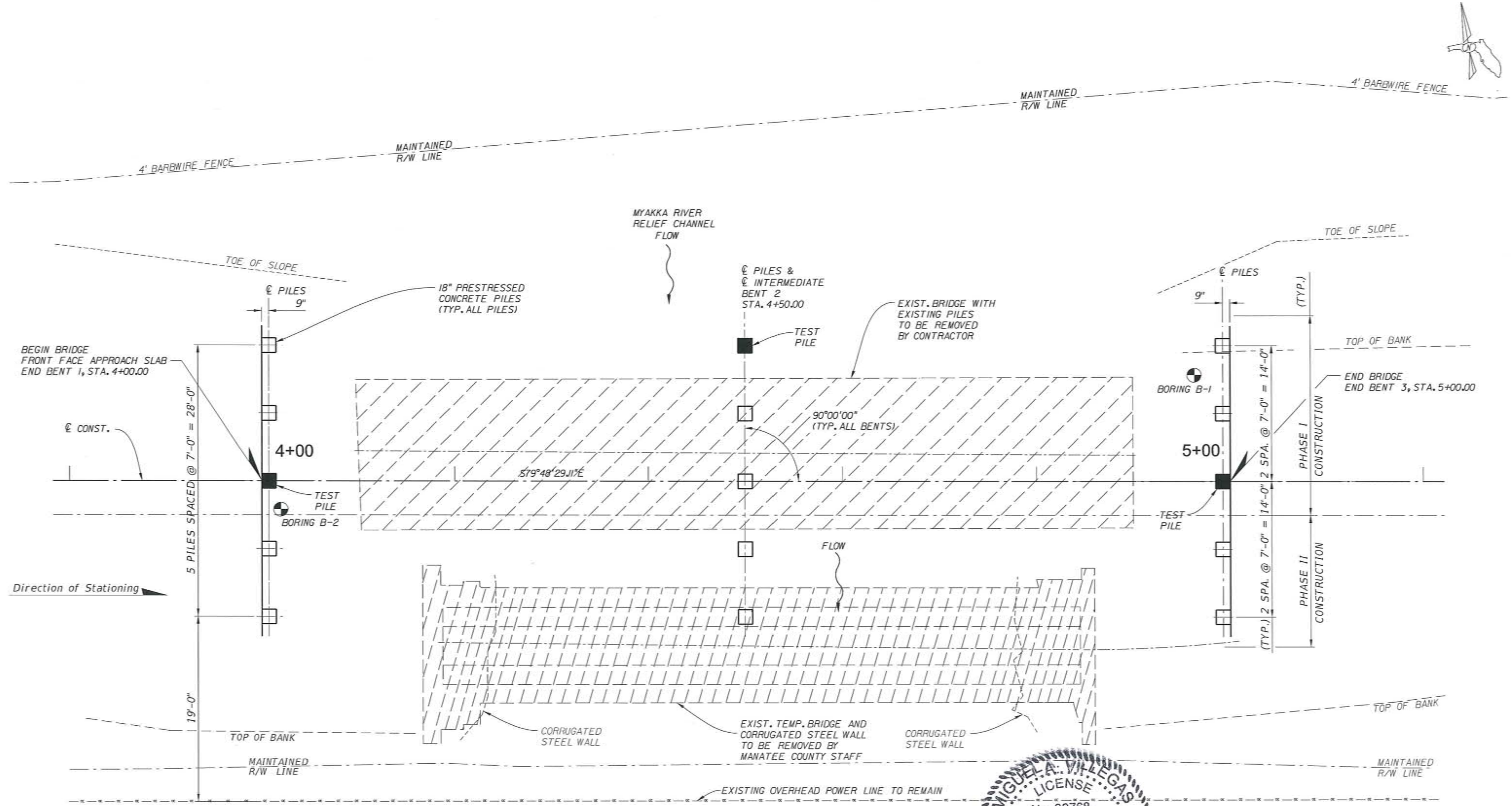


E.J. = EXPANSION JOINT

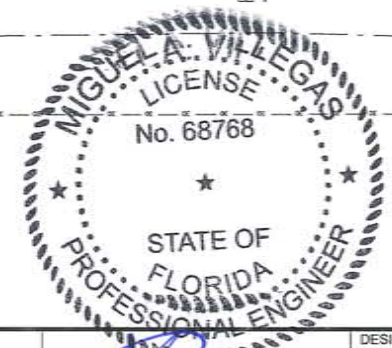


BRIDGE NO. 134122

MANATEE COUNTY		TAYLOR ROAD BRIDGE		 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		 MIGUEL A. VILLEGAS, P.E. DATE 3-4-14 LIC. NO.: 68768		DESIGNED: MAV DRAWN: MAV Q.C.: MAV APPROVED: RAH RAH		PLAN AND ELEVATION		PROJECT NO: 00193008.26 DATE: 3-4-14 SHEET NO: B2	
NO.	DESCRIPTION	BY	DATE										



PLAN VIEW



BRIDGE NO. 134122

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

TAYLOR ROAD BRIDGE

Cardno TBE
 22 Sarasota Center Blvd, Sarasota, Florida, 34240
 www.cardnotbe.com - 941.377.9084
 Certificate of Authorization No. 3843

MIGUEL A. VILLEGAS, P.E. DATE 3-4-14
 LIC. NO.: 68768

DESIGNED MAV
 DRAWN MAV
 Q.C. MAV
 APPROVED RAH

FOUNDATION LAYOUT

PROJECT NO: 00193008.26
 DATE: 3-4-14
 SHEET NO: B3

PILE DATA TABLE																	Table Date 01/01/12					
INSTALLATION CRITERIA								DESIGN CRITERIA								PILE CUT-OFF ELEVATIONS						
PIER or BENT NUMBER	PILE SIZE (in.)	NOMINAL BEARING RESISTANCE (tons)	NOMINAL UPLIFT RESISTANCE (tons)	MINIMUM TIP ELEVATION (ft.)	TEST PILE LENGTH (ft.)	REQUIRED JET ELEVATION (ft.)	REQUIRED PREFORM ELEVATION (ft.)	FACTORED DESIGN LOAD (tons)	FACTORED DESIGN UPLIFT LOAD (tons)	DOWN DRAG (tons)	TOTAL SCOUR RESISTANCE (tons)	NET SCOUR RESISTANCE (tons)	100-YEAR SCOUR ELEVATION (ft.)	LONG TERM SCOUR ELEVATION (ft.)	Ø COMPRESSION	Ø UPLIFT	PILE 1	PILE 2	PILE 3	PILE 4	PILE 5	
ENDBENT 1	18	105	N.A.	-13.0	76	N.A.	N.A.	80	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.75	0.6						44.8
BENT 2	18	144	N.A.	-23.0	83	N.A.	N.A.	108	N.A.	N.A.	N.A.	N.A.	26.8	N.A.	0.75	0.6						45.0
ENDBENT 3	18	105	N.A.	-13.0	76	N.A.	N.A.	80	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.75	0.6						45.1

$$\frac{\text{Factored Design Load} + \text{Net Scour Resistance} + \text{Down Drag}}{\phi} \leq \text{Nominal Bearing Resistance}$$

TENSION RESISTANCE - The ultimate side friction capacity that must be obtained below the 100 year scour elevation to resist pullout of the pile (Specify only when design requires tension capacity).

TOTAL SCOUR RESISTANCE - An estimate of the ultimate static side friction resistance provided by the scourable soil.

NET SCOUR RESISTANCE - An estimate of the ultimate static side friction resistance provided by the soil from the required preformed or jetting elevation to the scour elevation.

100-YEAR SCOUR ELEVATION - Estimated elevation of scour due to the 100 year storm event.

LONG TERM SCOUR ELEVATION - Estimated elevation of scour used in design for extreme event loading.

PILE INSTALLATION NOTES:

Contractor to verify location of all utilities prior to any pile driving.

Minimum Tip Elevation is required for lateral stability.

When a required jetting elevation is shown, the jet shall be lowered to the elevation and continue to operate at this elevation until the pile driving is completed. If jetting or preforming elevations differ from those shown on the table, the Engineer shall be responsible for determination of the required driving resistance.

No jetting will be allowed without the approval of the Engineer.

The Contractor should not anticipate being allowed to jet piles below the 100-year scour elevation or required jet elevation, whichever is deeper.

At each Bent, pile driving is to commence at the center of the Bent and proceed outward.



DESIGNED: MAV
 DRAWN: MAV
 Q.C.: RAH
 APPROVED: RAH
 DATE: 3-4-14
 LIC. NO.: 68768

BRIDGE NO. 134122

NO.	DESCRIPTION	BY	DATE

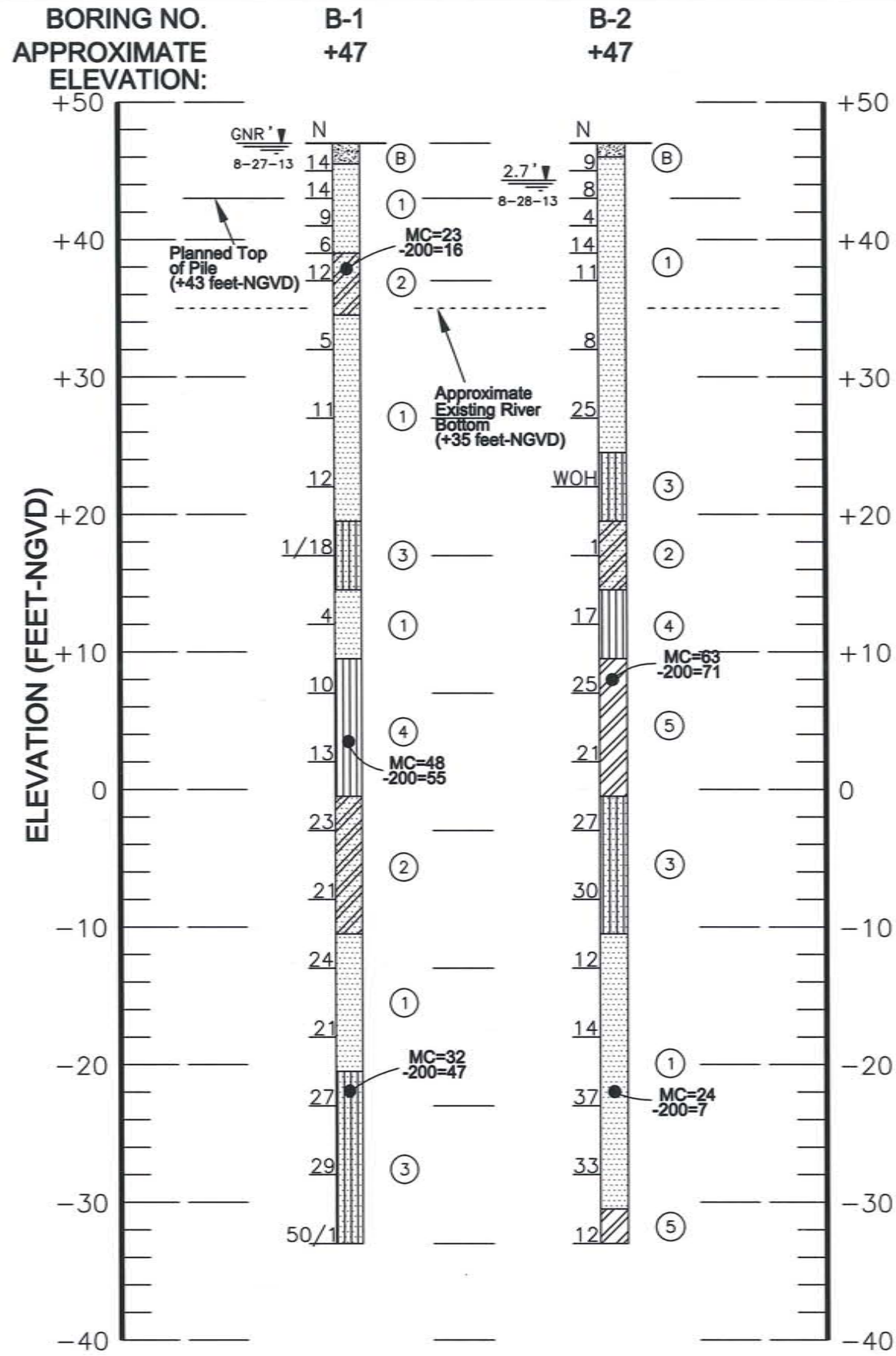
MANATEE COUNTY

TAYLOR ROAD BRIDGE



PILE DATA TABLE

PROJECT NO: 00193008.26
 DATE: 3-4-14
 SHEET NO: B4



LEGEND

- (B) Sand-Shell BASE
- (1) Gray to brown fine SAND with trace silt to slightly silty (SP, SP-SM)
- (2) Gray to brown clayey fine SAND (SC)
- (3) Gray silty fine SAND (SM)
- (4) Gray SILT with some cementation (ML)
- (5) Blue-gray to gray CLAY (CL)

- SP - Unified Soil Classification System Group Symbol (ASTM D 2487)
- N - Indicates the number of blows of a 140 pound hammer, freely falling a distance of 30 inches, required to drive a 2-inch diameter sampler 12 inches (ASTM D 1586)
- B-1 - Standard Penetration Test (SPT) boring and number
- 1/18 - Indicates that one hammer blow advanced the sampler 18 inches
- MC - Moisture Content (%)

- 200 - Amount Finer Than The U.S. Standard No. 200 Sieve (%)
- 2.7' - Depth of groundwater (feet) & date measured
- GNR' - Groundwater not recorded
- WOH - Indicates sampler advanced due to weight of hammer
- 50/1 - Indicates fifty SPT hammer blows were required to drive the sampler 1 inch

CORROSION TEST RESULTS				
Sample Location	RESISTIVITY ohm-cm	CHLORIDES ppm	SULFATES ppm	pH
B-1 (28.5 - 30' bls)	3,690	25.0	23.0	6.5
B-2 (13.5 - 15' bls)	10,800	30.0	66.9	6.4
Substructure Environment Classification:		Steel	Concrete	
		Moderately Aggressive	Slightly Aggressive	

ENGINEERING CLASSIFICATION (AUTOMATIC HAMMER)

GRANULAR MATERIALS	
Relative Density	SPT BLOW-COUNTS
Very Loose	Less than 3
Loose	3 - 8
Medium Dense	8 - 24
Dense	24 - 40
Very Dense	Greater than 40

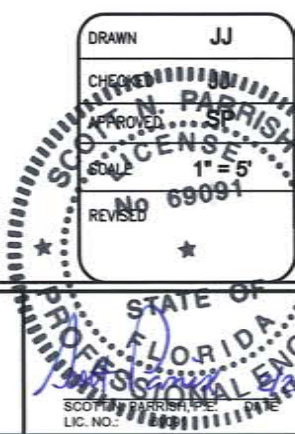
SILTS AND CLAYS	
Consistency	SPT BLOW-COUNTS
Very Soft	Less than 1
Soft	1 - 3
Firm	3 - 6
Stiff	6 - 12
Very Stiff	12 - 24
Hard	Greater than 24

STANDARD PENETRATION TEST DATA

SPOON INSIDE DIA.	1.375 inch
SPOON OUTSIDE DIA.	2.00 inches
AVG. HAMMER DROP	30 inches
HAMMER WEIGHT	140 pounds

NOTES

- (1) Borings were drilled on August 27 and 28, 2011 using a Central Mine Equipment Model 45 (CME 45) drilling rig.
- (2) Strata boundaries are approximate and represent soil strata at each test hole location only. Soil transitions may be more gradual than implied.
- (3) Groundwater depths shown on the subsurface profiles represent groundwater surfaces on the dates and times shown. Groundwater level fluctuations should be anticipated throughout the day due to tide changes and throughout the year.
- (4) Boring elevations were estimated based on the Topographic & Jurisdictional Survey, Sheet 2 by ZNS Engineering dated September 5, 2013.



TAYLOR ROAD BRIDGE
SUBSURFACE PROFILES
MANATEE COUNTY, FLORIDA
DUNKELBERGER
engineering & testing, inc.
A Terracon COMPANY

9-19-13 PROJ. NO. HC135579 SHEET A-3

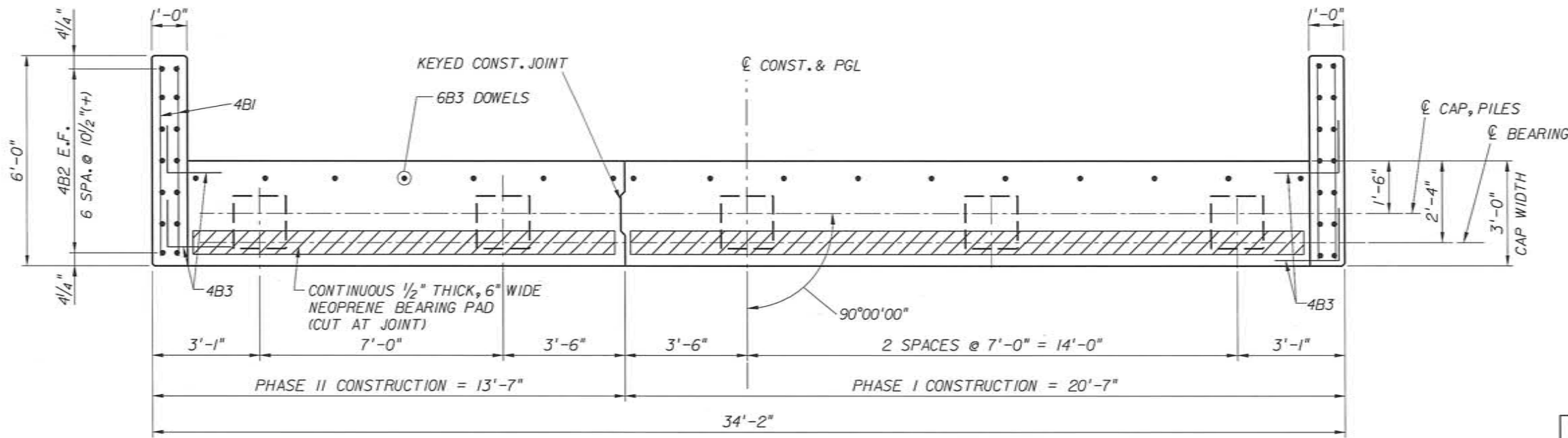
NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

TAYLOR ROAD BRIDGE

SOIL BORING LOG

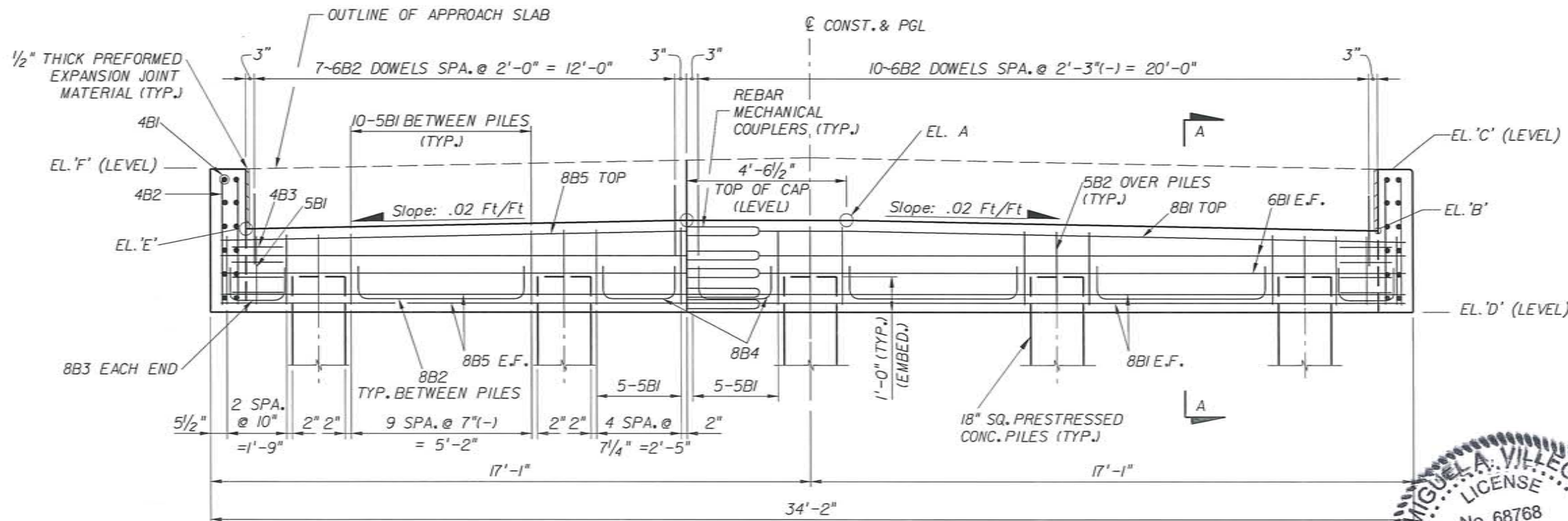
PROJECT NO:	00193008.26
DATE:	3-3-2014
SHEET NO:	B5



PLAN
(ENDBENT 1 SHOWN,
ENDBENT 3 SIMILAR & OPPOSITE HAND)

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
CLASS IV CONCRETE (SUBSTRUCTURE)	C.Y.	25.2
REINFORCING STEEL (SUBSTRUCTURE)	LB.	4408
18" SQ. PRESTRESSED CONC. PILES	L.F.	**

** SEE SUMMARY OF PAY ITEMS



ELEVATION
(ENDBENT 1 SHOWN,
ENDBENT 3 SIMILAR & OPPOSITE HAND)

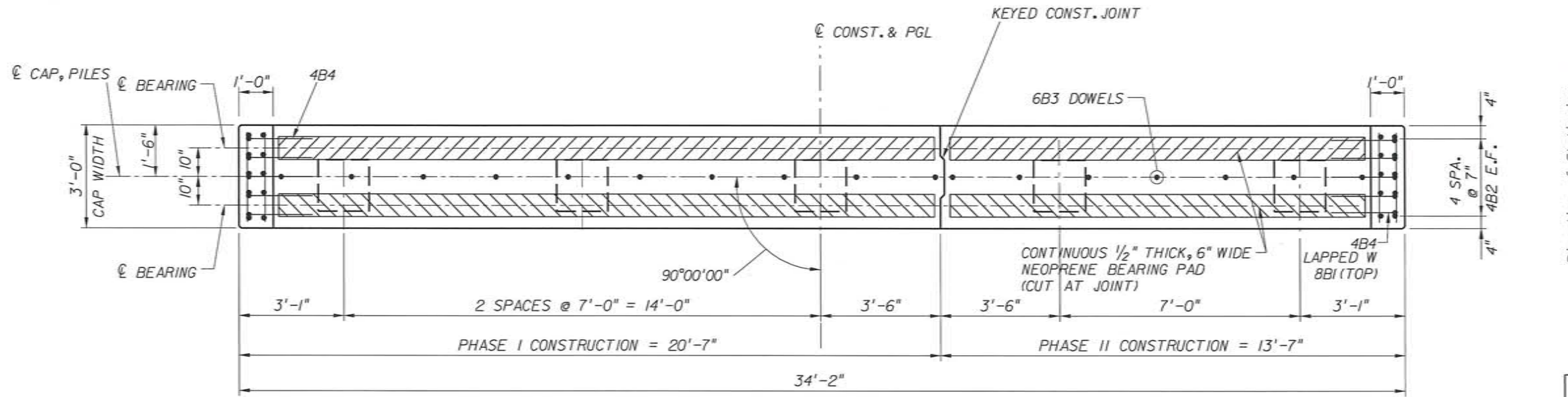
TABLE OF ELEVATIONS		
	ENDBENT 1	ENDBENT 3
EL. A	46.768	47.068
EL. B	46.467	46.767
EL. C	48.259	48.559
EL. D	43.800	44.100
EL. E	46.517	46.817
EL. F	48.259	48.559
PILE CUTOFF ELEVATION END BENT 1 = 44.8		
PILE CUTOFF ELEVATION END BENT 3 = 45.1		

NOTES:

1. WORK THIS SHEET WITH SHEET B8.
2. FOR SECTIONS A-A AND B-B SEE SHEET B8.
3. FOR REINFORCING BAR LIST SEE SHEET B15.



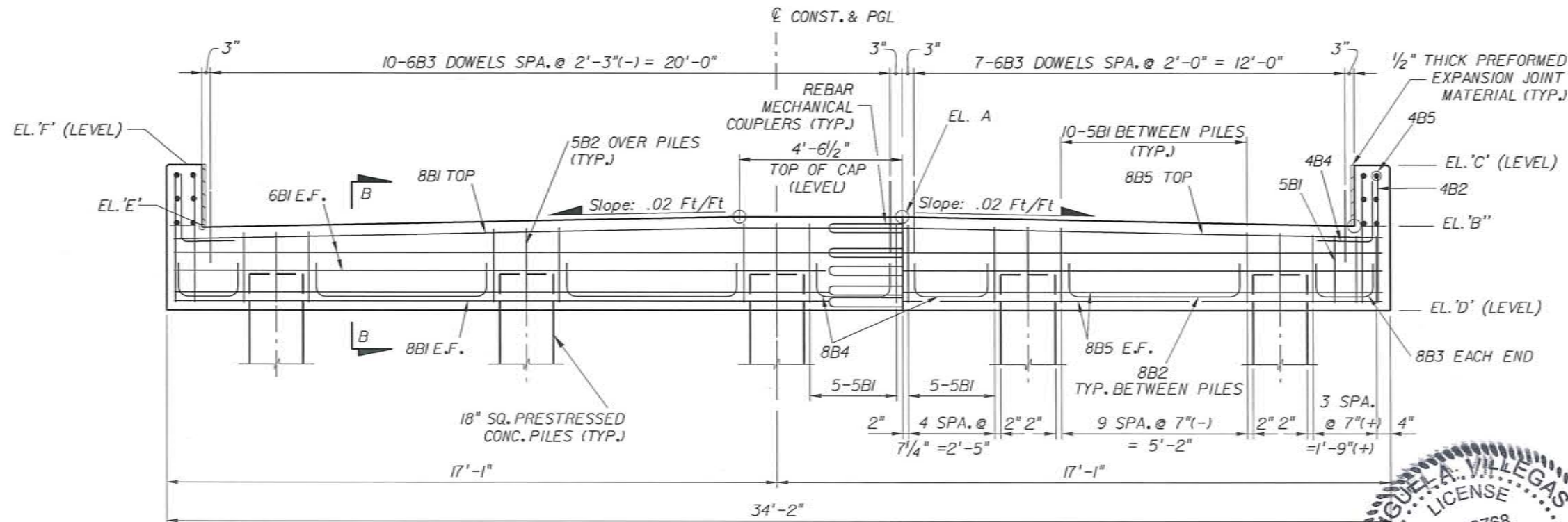
MANATEE COUNTY		TAYLOR ROAD BRIDGE		 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		DESIGNED MAV DRAWN MAV Q.C. MAV APPROVED RAH RAH		BRIDGE NO. 134122 ENDBENTS		PROJECT NO. 00193008.26 DATE 3-4-14 SHEET NO. B6	
NO.	DESCRIPTION	BY	DATE								



PLAN

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
CLASS IV CONCRETE (SUBSTRUCTURE)	C.Y.	11.6
REINFORCING STEEL (SUBSTRUCTURE)	LB.	2204
18" SQ. PRESTRESSED CONC. PILES	L.F.	**

** SEE SUMMARY OF PAY ITEMS

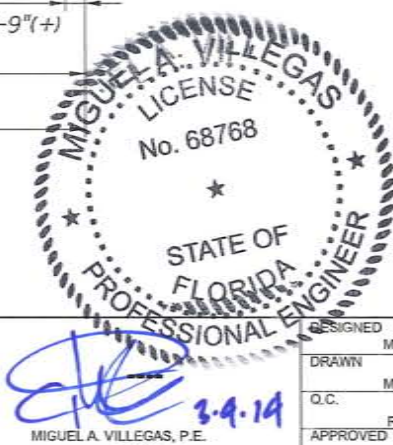


ELEVATION

TABLE OF ELEVATIONS	
INTERMEDIATE BENT 2	
EL. A	46.918
EL. B	46.617
EL. C	48.409
EL. D	43.950
EL. E	46.667
EL. F	48.409
PILE CUTOFF ELEVATION END BENT 1 = 44.950	

NOTES:

1. WORK THIS SHEET WITH SHEET B8.
2. FOR SECTIONS A-A AND B-B SEE SHEET B8.
3. FOR REINFORCING BAR LIST SEE SHEET B15.



BRIDGE NO. 134122

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

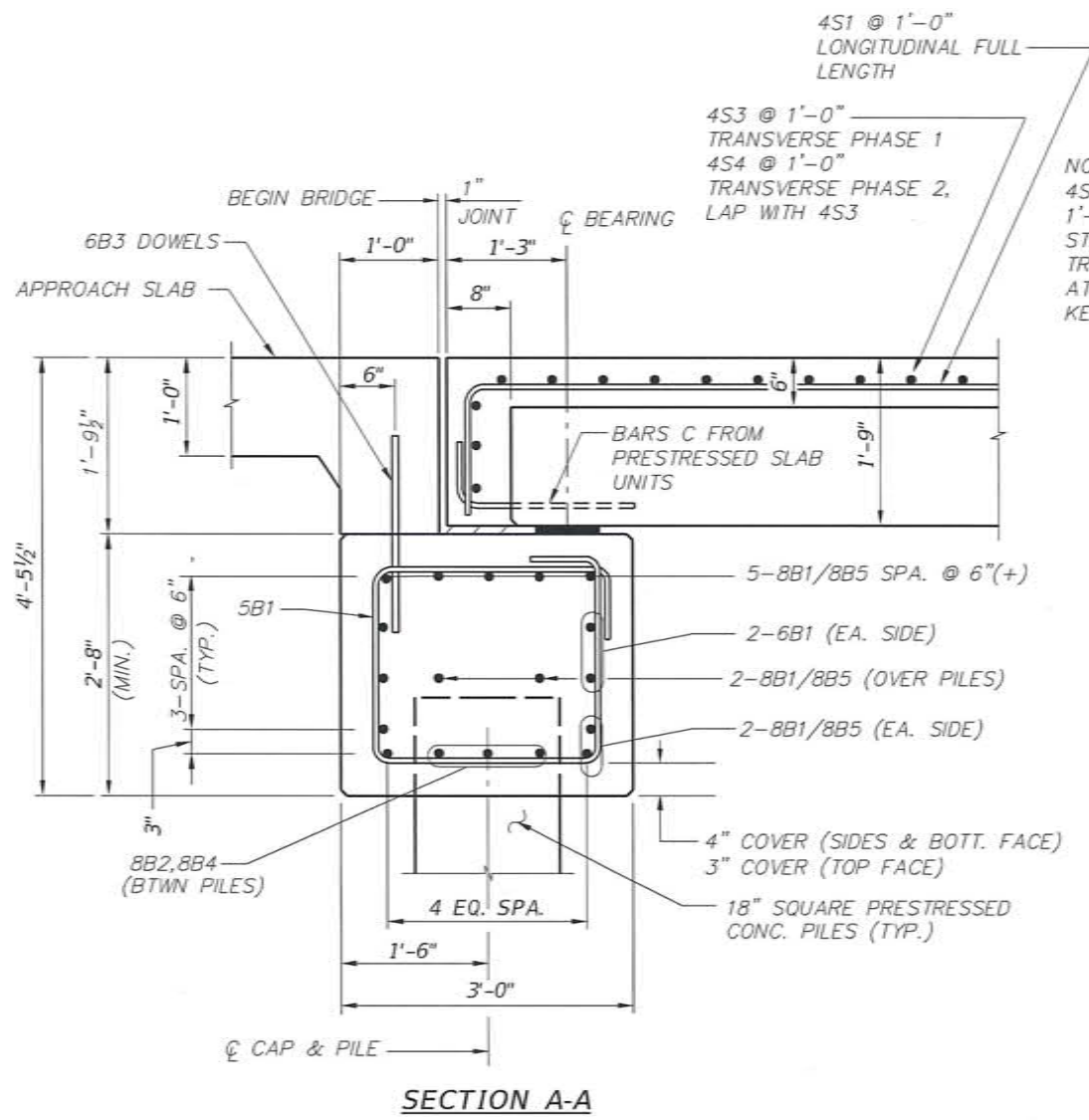
TAYLOR ROAD BRIDGE



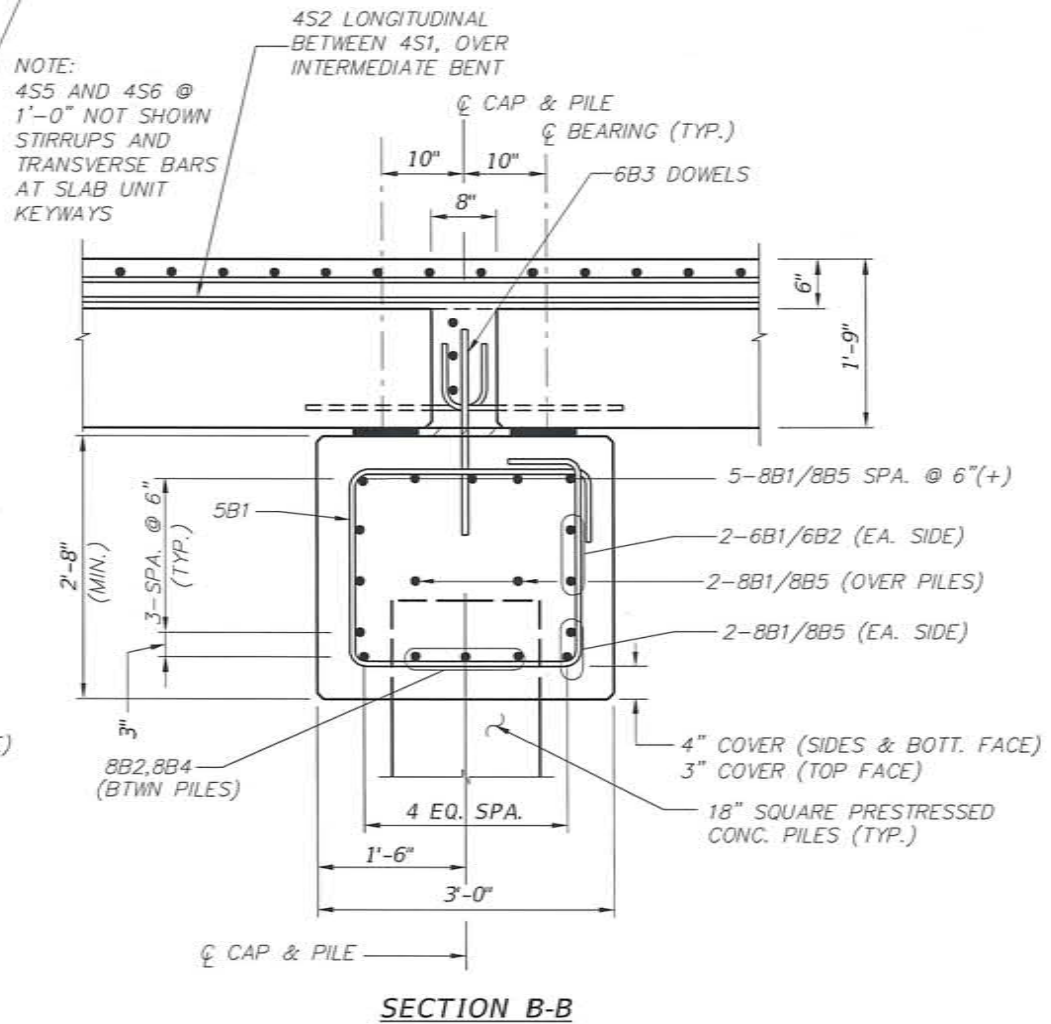
DESIGNED: MAV
DRAWN: MAV
O.C.: MAV
APPROVED: RAH
MIGUELA VILLEGAS, P.E.
68768
3-9-14

INTERMEDIATE BENT 2

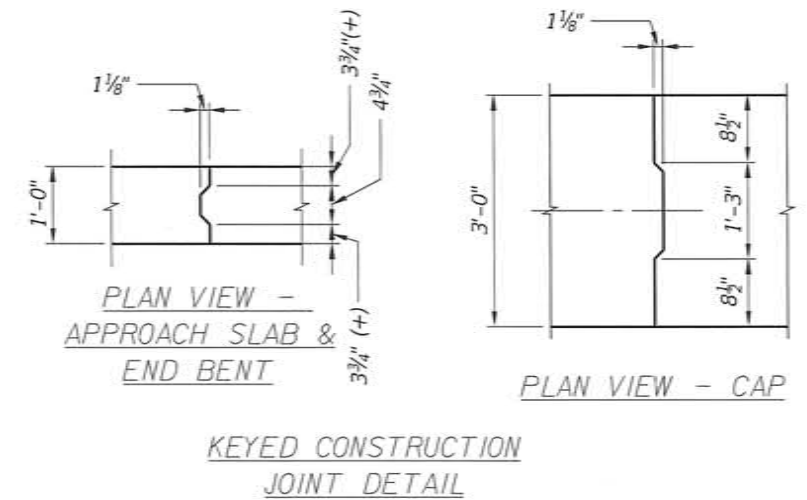
PROJECT NO. 00193008.26
DATE 3-4-14
SHEET NO. B7



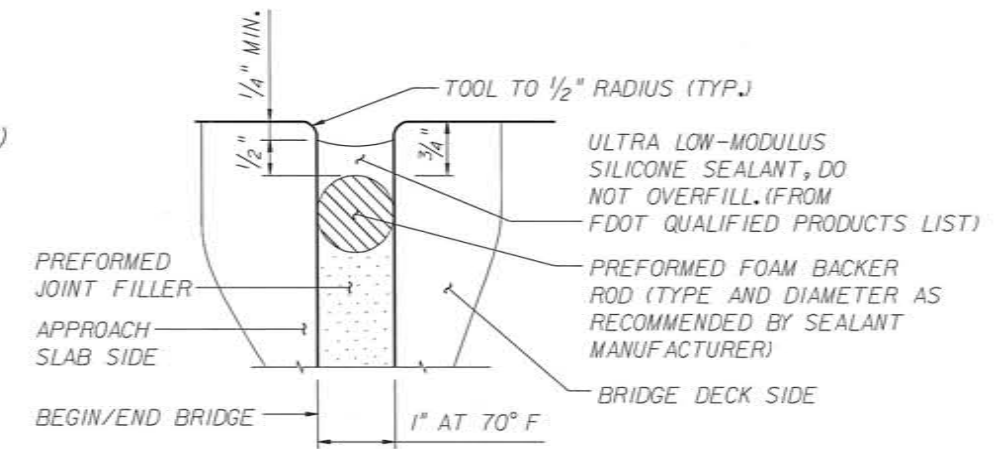
SECTION A-A



SECTION B-B



KEYED CONSTRUCTION JOINT DETAIL



EXPANSION JOINT DETAIL (BEGIN/END BRIDGE)

TABLE OF DIMENSIONS AND ESTIMATED QUANTITIES
APPROACH SLAB INDEX NO. 20900

LOCATION	DIMENSIONS		REINFORCING STEEL (LBS)	CLASS II CONCRETE (CY)
	L 1	L 2		
APPROACH SLAB 1	20'-0"	20'-0"	4821	24.65
APPROACH SLAB 2	20'-0"	20'-0"	4821	24.65

APPROACH SLAB NOTES:

1. DIMENSIONS L 1 AND L 2 ARE MEASURED ALONG THE GUTTER LINE.
2. QUANTITIES SHOWN ARE FOR ONE APPROACH SLAB.
3. QUANTITIES DO NOT INCLUDE THE TRAFFIC RAILING BARRIER.
4. FOR TRAFFIC RAILING BARRIER QUANTITIES, SEE BID ITEM LIST.
5. PROVIDE 1'-8" BAR LAPS FOR TRANSVERSE B1 AND B2 BARS BETWEEN PHASE 1 AND PHASE 2 CONSTRUCTION.
6. APPROACH SLAB DETAILS AND DIMENSIONS BASED ON FDOT 2014 DESIGN STANDARDS INDEX 20900, CASE 1.

EXPANSION JOINT NOTES:

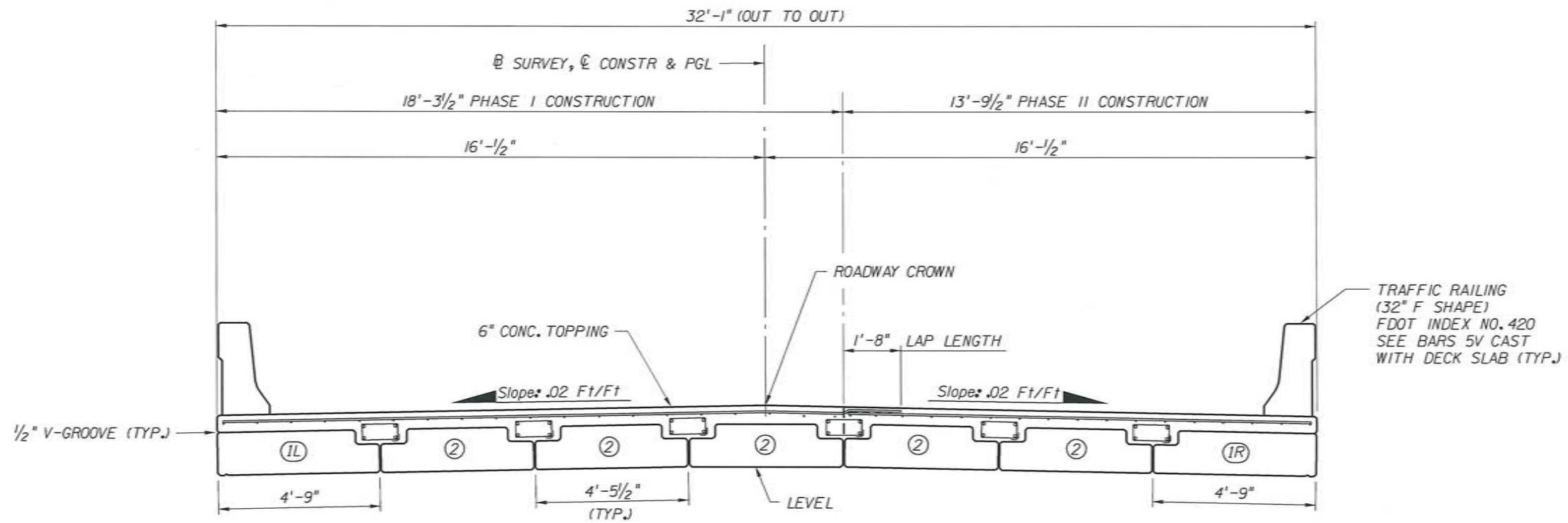
1. THE CONTRACTOR SHALL SUBMIT THE EXPANSION JOINT SYSTEM INCLUDING JOINT SEALANT AND INSTALLATION PROCEDURES TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION OF THE JOINT. SEALANT SHALL BE DOW CORING 902 RCS OR APPROVED EQUAL.
2. THE COST OF ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED FOR THE CONSTRUCTION OF THE EXPANSION JOINTS BETWEEN THE BRIDGE DECK AND THE APPROACH SLAB AS DETAILED ON THIS SHEET SHALL BE PAID FOR UNDER CONCRETE CLASS II (SUPERSTRUCTURE) PAY ITEM.
3. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BEARING PAD NOTES:

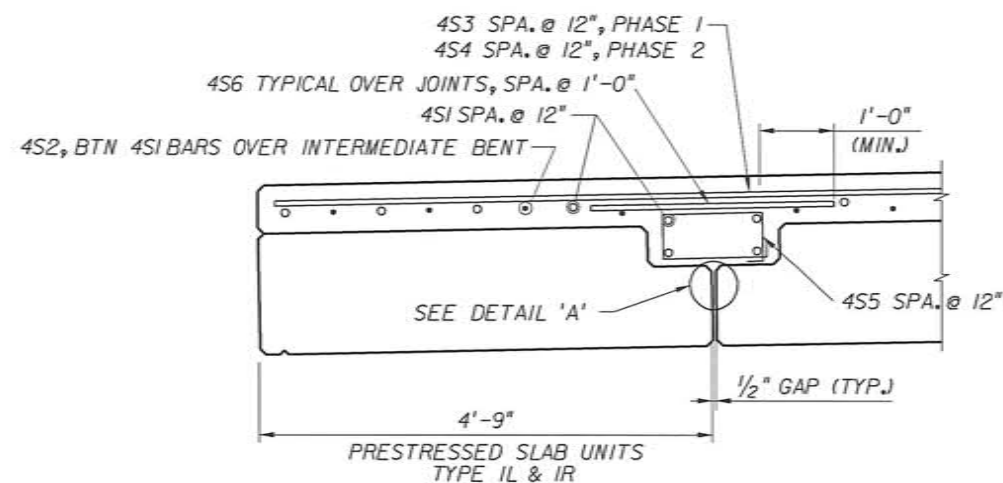
1. PLAIN BEARING PADS SHALL HAVE A GRADE 50 DUROMETER HARDNESS.
2. COST OF NEOPRENE BEARING PADS SHALL BE INCLUDED IN THE PRESTRESS SLAB UNIT PAY ITEM.



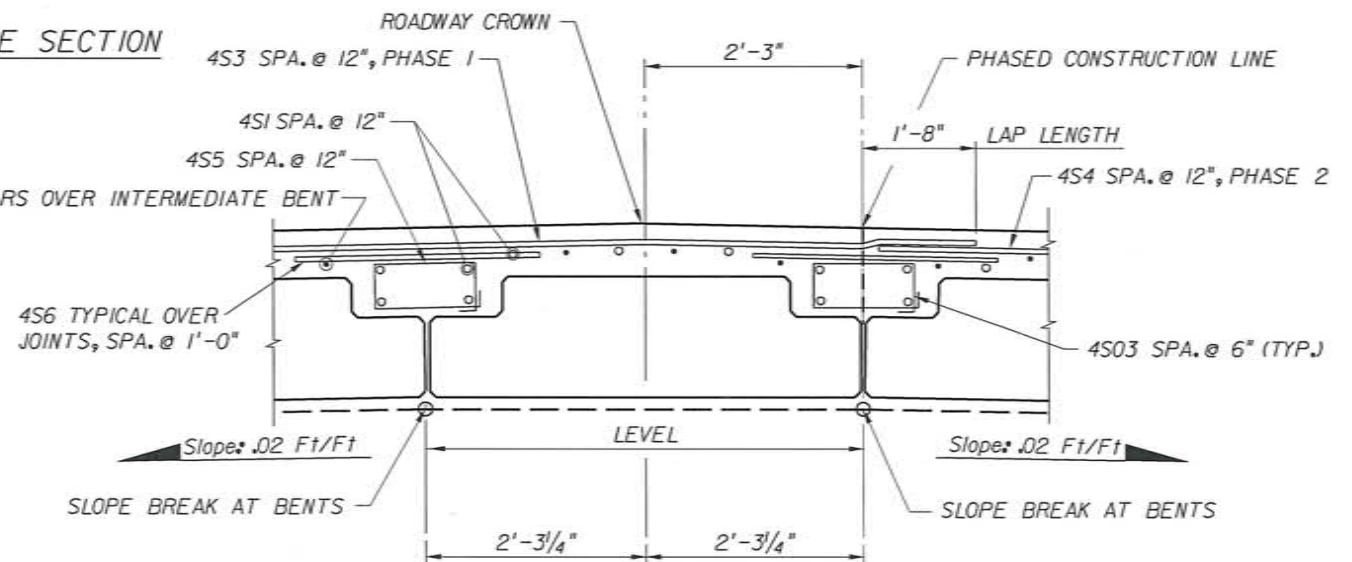
MANATEE COUNTY		TAYLOR ROAD BRIDGE		 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		 3.4.14 MIGUEL A. VILLEGAS, P.E. DATE LIC. NO.: 68768		DESIGNED MAV DRAWN MAV Q.C. MAV APPROVED RAH RAH		ENDBENT DETAILS PROJECT NO: 00193008.26 DATE: 3-4-14 SHEET NO: B8	
NO.	DESCRIPTION	BY	DATE								



SUPERSTRUCTURE SECTION



DETAIL 'A'



SUPERSTRUCTURE DETAILS

NOTES:

1. TOP SURFACES OF PRECAST SLABS SHALL BE THOROUGHLY SATURATED WITH WATER 30 MINUTES PRIOR TO PLACEMENT OF C.I.P. CONCRETE SLAB.
2. APPLY AN APPROVED EPOXY BONDING AGENT TO THE BOTTOM AND SIDES OF SLAB KEYWAY PRIOR TO PLACEMENT OF C.I.P. CONCRETE SLAB.
3. CONTRACTOR MAY SUBSTITUTE WELDED WIRE FABRIC SIZE 6x6-D10xD10 FOR BARS 4S01 THROUGH 4S03.

BREAKDOWN OF ESTIMATED CONCRETE QUANTITIES		
ITEM	UNIT	QUANTITY
CONCRETE TOPPING	CY	76.9

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
PRESTRESSED SLAB UNIT (57" WIDE) (15" DEEP)	LF	195.7
PRESTRESSED SLAB UNITS (53 1/2" WIDE) (15" DEEP)	LF	489.2
CLASS II CONCRETE (SUPERSTRUCTURE) *	CY	76.9
REINFORCING STEEL (SUPERSTRUCTURE) *	LBS	8327
BRIDGE TRAFFIC RAILING **	LF	240.0

* QUANTITY INCLUDES BRIDGE TOPPING AND APPROACH SLABS.
 ** WORK THIS SHEET WITH BRIDGE RAILING SHEETS.



BRIDGE NO. 134122

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

TAYLOR ROAD BRIDGE

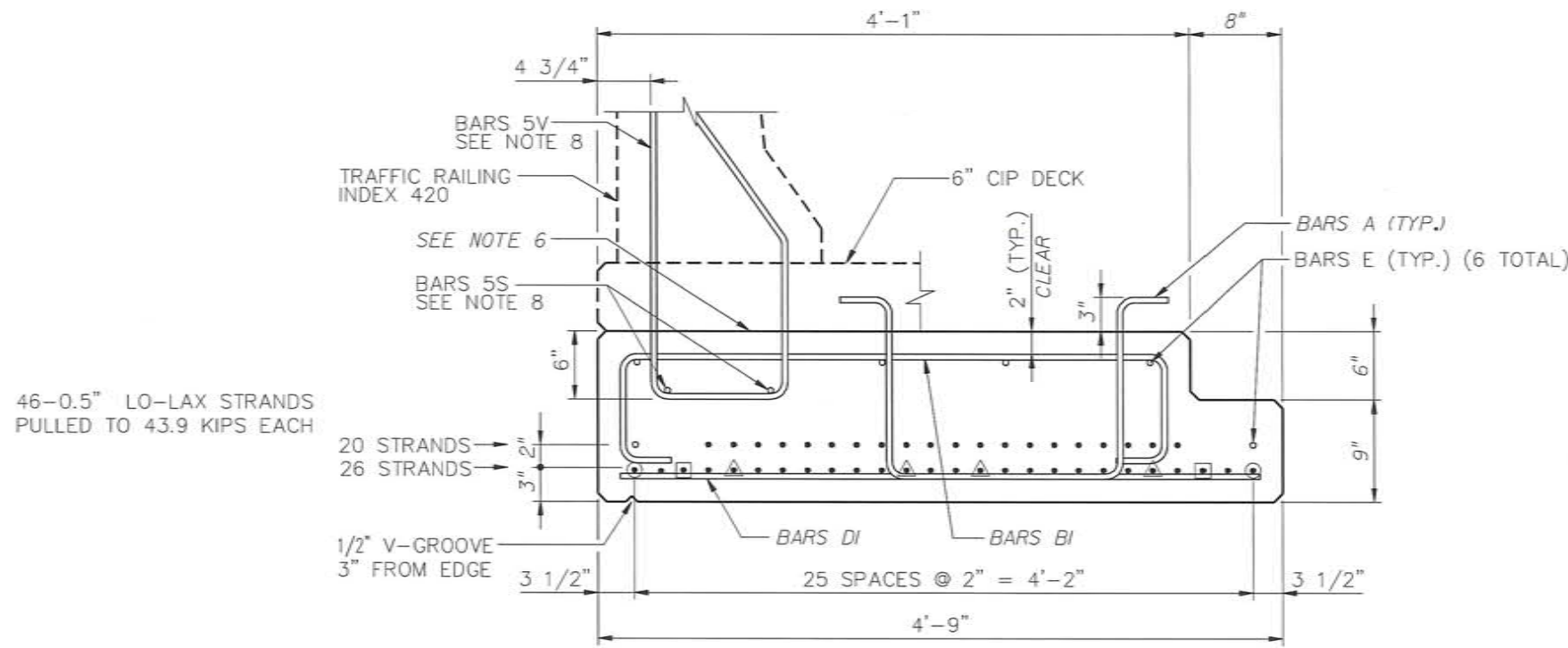


TYPICAL SECTION

PROJECT NO:	00193008.26
DATE:	3-4-14
SHEET NO:	B9

NOTES:

1. ALL BAR DIMENSIONS ARE OUT-TO-OUT.
2. REFER TO INDEX 21300 FOR PIN DIAMETER FOR BENDING STIRRUPS.
3. SEE GENERAL NOTES FOR CONCRETE STRENGTH AT RELEASE AND 28 DAYS.
4. BARS C MAY BE BENT AFTER REMOVAL FROM FORM.
5. STRANDS SHALL HAVE A MINIMUM AREA OF 0.217 in². REQUIRED G.U.T.S. SHALL BE 58.6 KIPS.
6. ROUGHEN TOP OF SLAB UNITS TO 1/4" AMPLITUDE.
7. WELD OR PROVIDE POSITIVE ATTACHMENT AT EACH TRANSVERSE BAR LOCATION.
8. FOR LOCATION OF PRESTRESSED SLAB UNITS FOR TRAFFIC RAILING, REFER TO THE PRESTRESSED SLAB UNITS SHEET (2 OF 2).



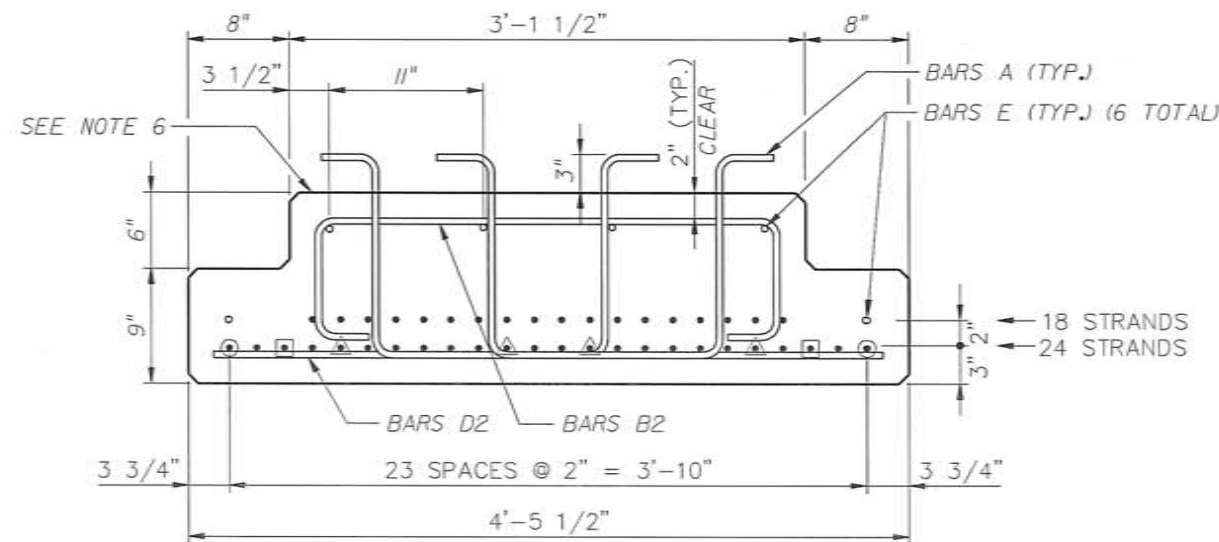
46-0.5" LO-LAX STRANDS
PULLED TO 43.9 KIPS EACH

20 STRANDS
26 STRANDS

SECTION A-A
UNIT 1L, 1R

STRAND DEBONDING LEGEND

- - FULLY BONDED STRANDS.
- ▲ - STRANDS DEBONDED 3'-0" FROM END OF BEAM.
- ◻ - STRANDS DEBONDED 4'-0" FROM END OF BEAM.
- ⊙ - STRANDS DEBONDED 5'-0" FROM END OF BEAM.



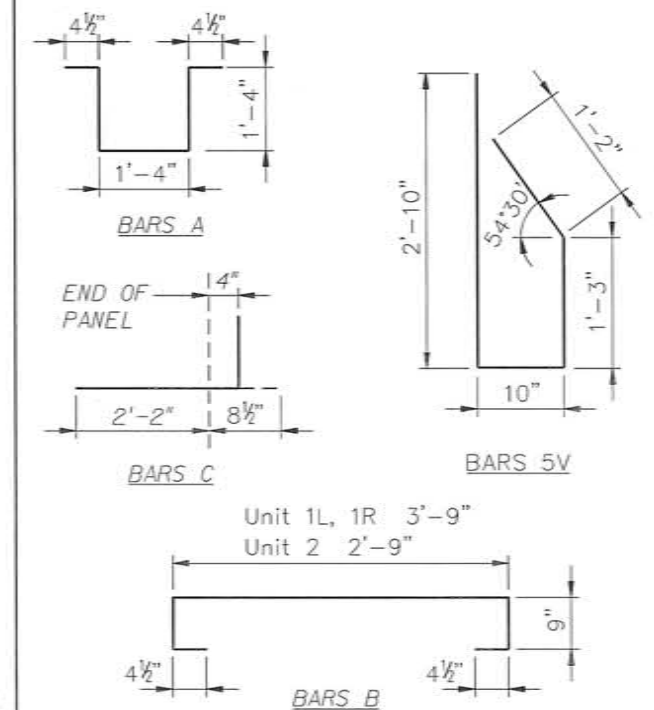
42-0.5" LO-LAX STRANDS
PULLED TO 43.9 KIPS EACH

SECTION B-B
UNIT 2

BILL OF REINFORCING STEEL

MARK	SIZE	NO. REQ'D.		LENGTH
		1L, 1R	2	
A	4	101	202	4'-9"
B1	4	101	-	5'-6"
B2	4	-	101	4'-6"
C	4	12	12	2'-10 1/2"
D1	4	101	-	3'-9"
D2	4	-	101	2'-9"
E	4	6	6	48'-7"
5V	5	101	-	6'-1"
5S	5	2	-	48'-7"

BENDING DIAGRAMS



NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

TAYLOR ROAD BRIDGE

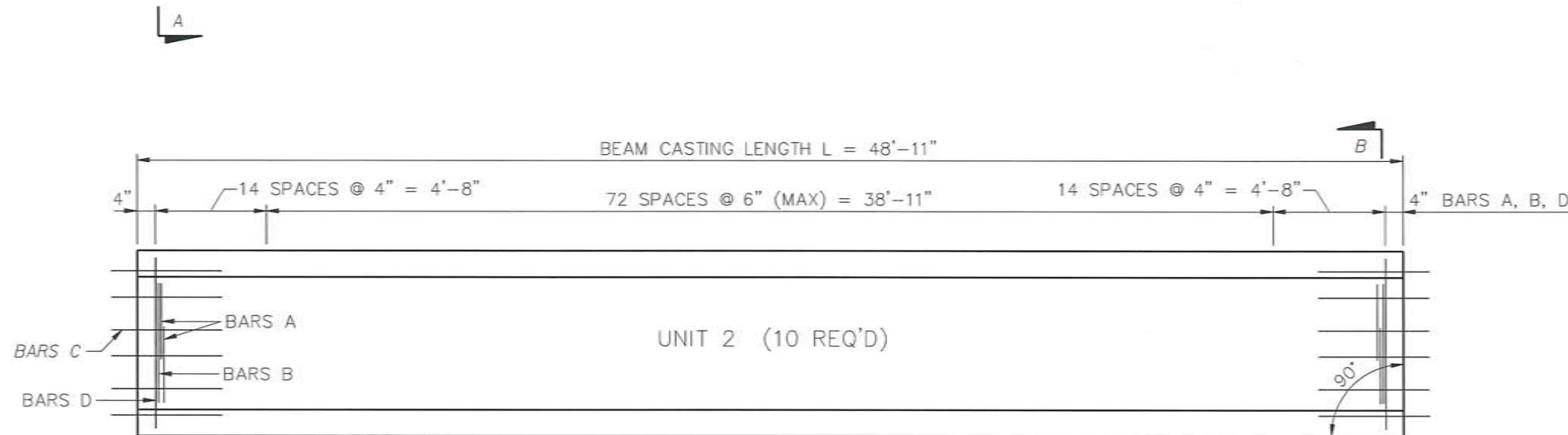
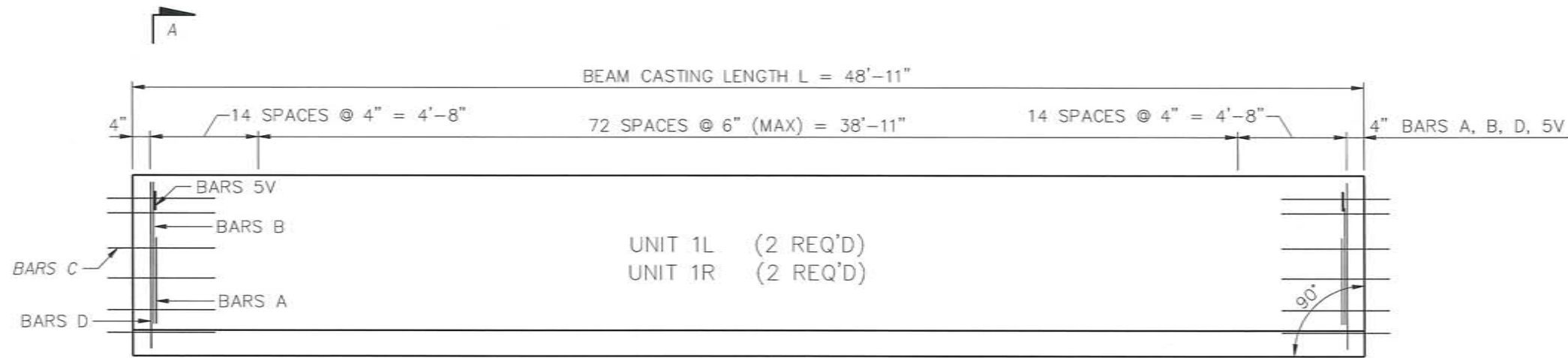


DESIGNED: FXH
DRAWN: FXH
Q.C.:
APPROVED: MAJ
RAH

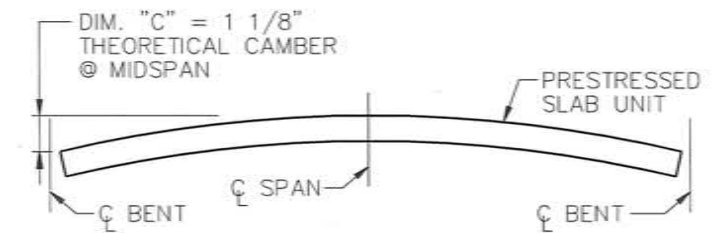
MIGUEL A. VILLEGAS, P.E. DATE: 3-4-14
LIC. NO.: 68768

PRESTRESSED SLAB UNITS
(1 OF 2)

PROJECT NO: 00193008.26
DATE: 3-4-14
SHEET NO: **B10**

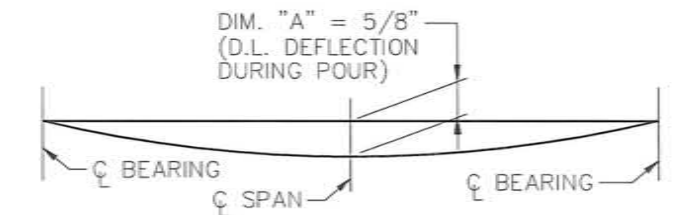


PRESTRESSED SLAB UNITS



CAMBER AT MIDSPAN OF PRESTRESSED SLAB UNITS

CAMBER NOTE:
 THE CAMBER VALUES SHOWN ARE BASED ON THE THEORETICAL FINAL CAMBERS OF THE PRESTRESSED SLAB UNITS 120 DAYS AFTER RELEASE OF THE STRANDS. THE CONTRACTOR SHALL MONITOR CAMBERS FOR THE PURPOSE OF PREDICTING CAMBER VALUES AT THE TIME OF CASING THE CONCRETE TOPPING. THE PREDICTED CAMBERS BASED ON FIELD MEASUREMENTS SHOULD BE USED TO ESTIMATE THE RESULTING TOPPING THICKNESS TO MATCH THE TOPPING THICKNESS SHOWN ON THESE PLANS. IF THE PREDICTED CAMBERS DIFFER MORE THAN +/- 1/2" FROM THE THEORETICAL "NET CAMBER @ 120 DAYS" SHOWN ON THE TABLE, NOTIFY THE ENGINEER A MINIMUM OF 21 DAYS PRIOR TO CASTING THE TOPPING.



DEAD LOAD DEFLECTION DIAGRAM
 (ALONG CL PRESTRESSED SLAB UNIT)

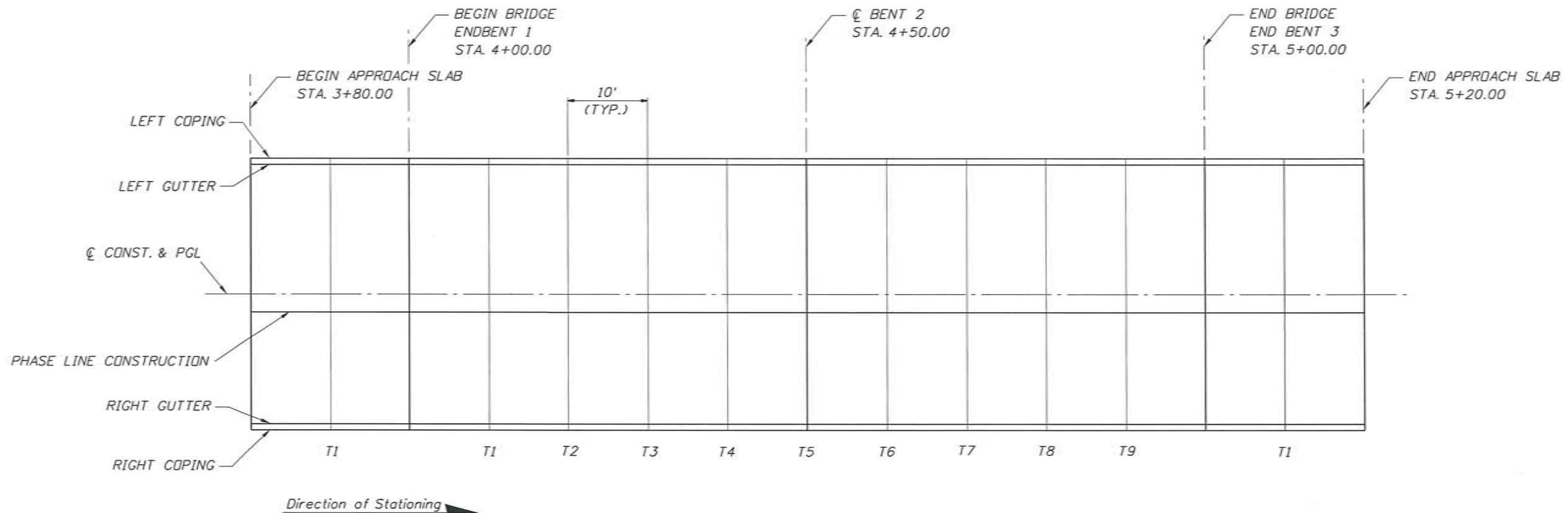
- PRESTRESSED SLAB UNIT NOTES:
1. THE CASTING LENGTH (L) INCLUDES THE EXPECTED ELASTIC SHORTENING (R) OF THE PRESTRESSED SLAB UNITS.
 2. CONTINUOUSLY WET TOP OF PRECAST SLAB UNITS FOR 4 HOURS AND REMOVE EXCESS WATER PRIOR TO POURING CONCRETE TOPPING.
 3. CONCRETE FOR THE PRESTRESSED SLAB UNITS SHALL BE CLASS V, WITH A 28-DAY COMPRESSIVE STRENGTH OF 8,000 PSI.
 4. THE MINIMUM CONCRETE STRENGTH AT RELEASE OF STRANDS SHALL BE 6,000 PSI.



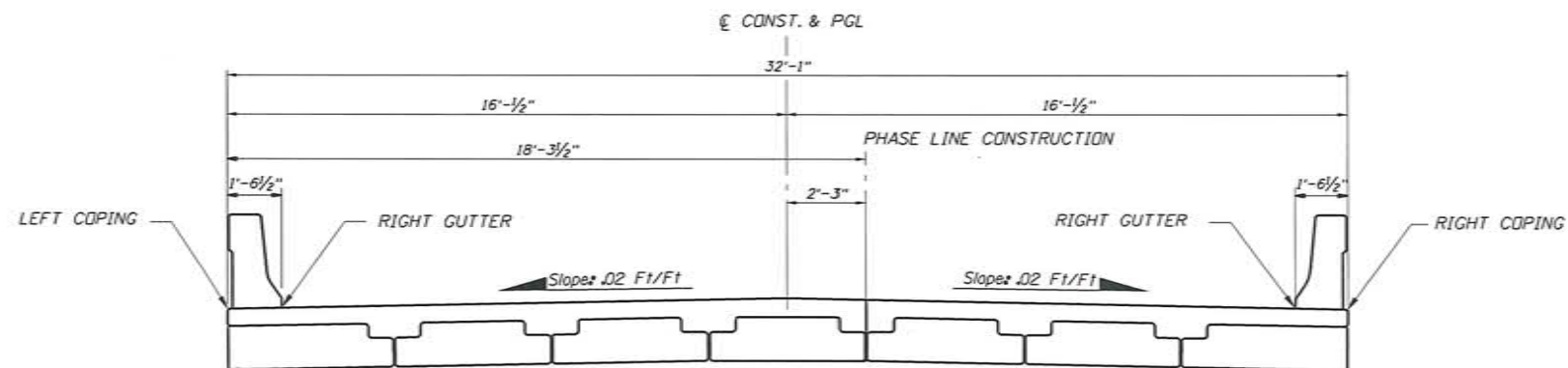
LOCATION		STRAND PATTERN TYPE	DIM. "L" BEAM CASTING LENGTH	DIM. "R" ELASTIC & TIME DEPENDENT SHORTENING EFFECTS	DIM. "A" DEAD LOAD DEFLECT.	DIM. "C" THEORETICAL CAMBER @ MIDSPAN	REINFORCING STEEL		
SPAN NO.	SLAB UNIT NO.						NO. OF SPACES BARS A, B, & D	5S NO. REQ'D.	5V NO. REQ'D.
1 THRU 2	UNIT 1-1 THRU 2-7	1	48'-11"	1/4"	5/8"	1 1/8"	100	2	101

NOTE: 5S AND 5V BARS ONLY REQUIRED FOR EXTERIOR SLAB UNITS. REFER TO INDEX 420 FOR MORE INFORMATION.

MANATEE COUNTY		TAYLOR ROAD BRIDGE		 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		 MIGUEL A. VILLEGAS, P.E. DATE 3-4-14 LIC. NO.: 68768		DESIGNED: FXH DRAWN: FXH Q.C.: RAH APPROVED: RAH		BRIDGE NO. 134122 PRESTRESSED SLAB UNITS (2 OF 2)		PROJECT NO: 00193008.26 DATE: 3-4-14 SHEET NO: B11	
----------------	--	--------------------	--	--	--	---	--	---	--	--	--	--	--



PLAN VIEW



SUPERSTRUCTURE SECTION

	BEGIN APPROACH SLAB		SPAN NO. 1						SPAN NO. 2					END APPROACH SLAB	
TRANSVERSAL T-LINES & BENTS	BEGIN APPROACH SLAB	T1	BEGIN BRIDGE/ ENDBENT 1	T1	T2	T3	T4	☉ BENT 2/ T5	T6	T7	T8	T9	END BRIDGE/ ENDBENT 3	T1	END APPROACH SLAB
LEFT COPING	48.090	48.165	48.239	48.269	48.299	48.329	48.359	48.389	48.419	48.449	48.479	48.509	48.539	48.493	48.446
LEFT GUTTER	48.121	48.195	48.270	48.300	48.330	48.360	48.390	48.420	48.450	48.480	48.510	48.540	48.570	48.523	48.477
☉ CONST. & PGL	48.411	48.485	48.560	48.590	48.620	48.650	48.680	48.710	48.740	48.770	48.800	48.830	48.860	48.813	48.767
PHASE CONSTRUCTION LINE	48.366	48.440	48.515	48.545	48.575	48.605	48.635	48.665	48.695	48.725	48.755	48.785	48.815	48.768	48.722
RIGHT GUTTER	48.121	48.195	48.270	48.300	48.330	48.360	48.390	48.420	48.450	48.480	48.510	48.540	48.570	48.523	48.477
RIGHT COPING	48.090	48.165	48.239	48.269	48.299	48.329	48.359	48.389	48.419	48.449	48.479	48.509	48.539	48.493	48.446



BRIDGE NO. 134122

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

TAYLOR ROAD BRIDGE

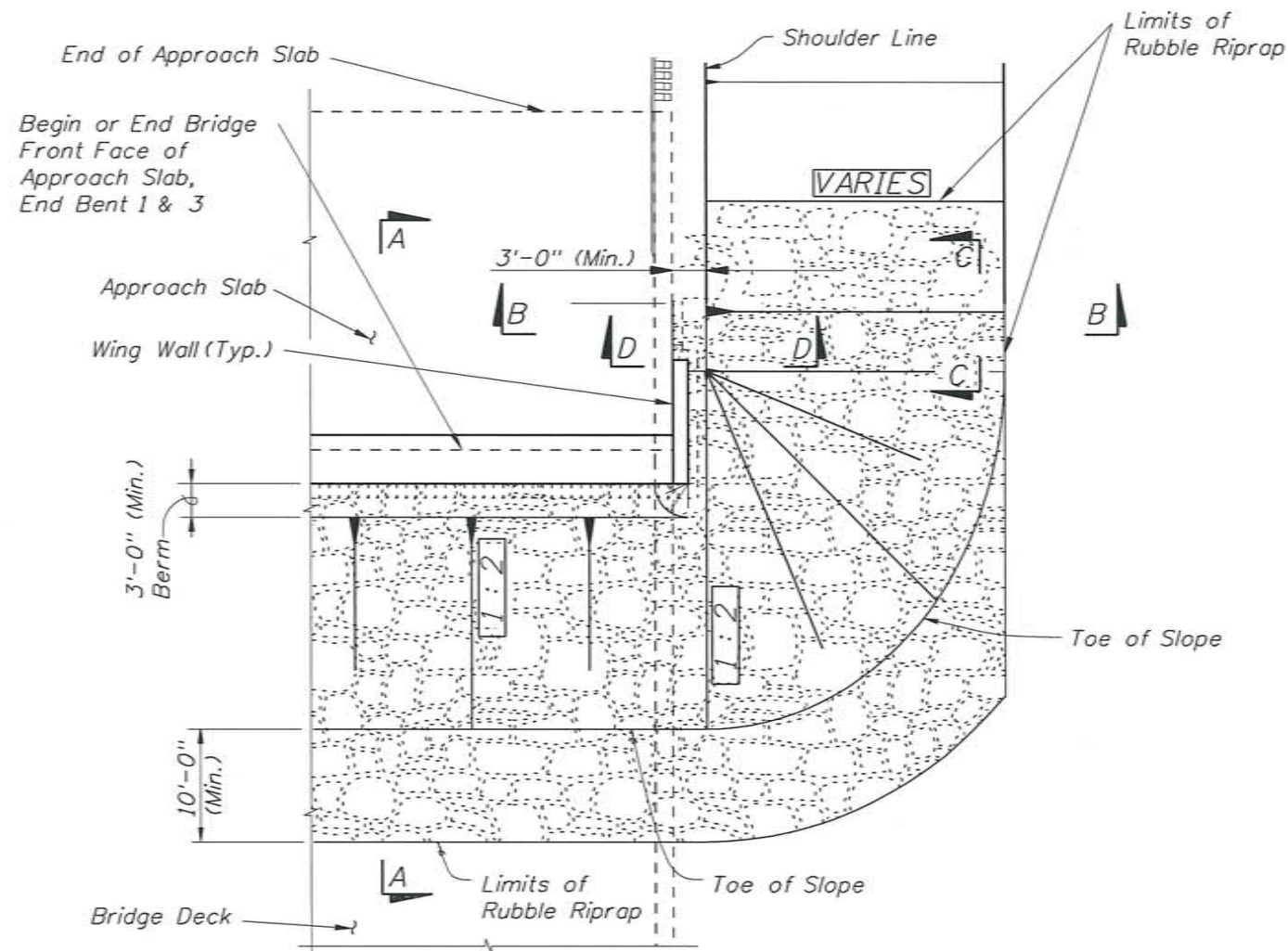


MIGUEL A. VILLEGAS, P.E. DATE 3-4-14
LIC. NO.: 68768

DESIGNED MAV
DRAWN MAV
Q.C. RAH
APPROVED RAH

DECK ELEVATIONS

PROJECT NO: 00193008.26
DATE: 3-4-14
SHEET NO: B12



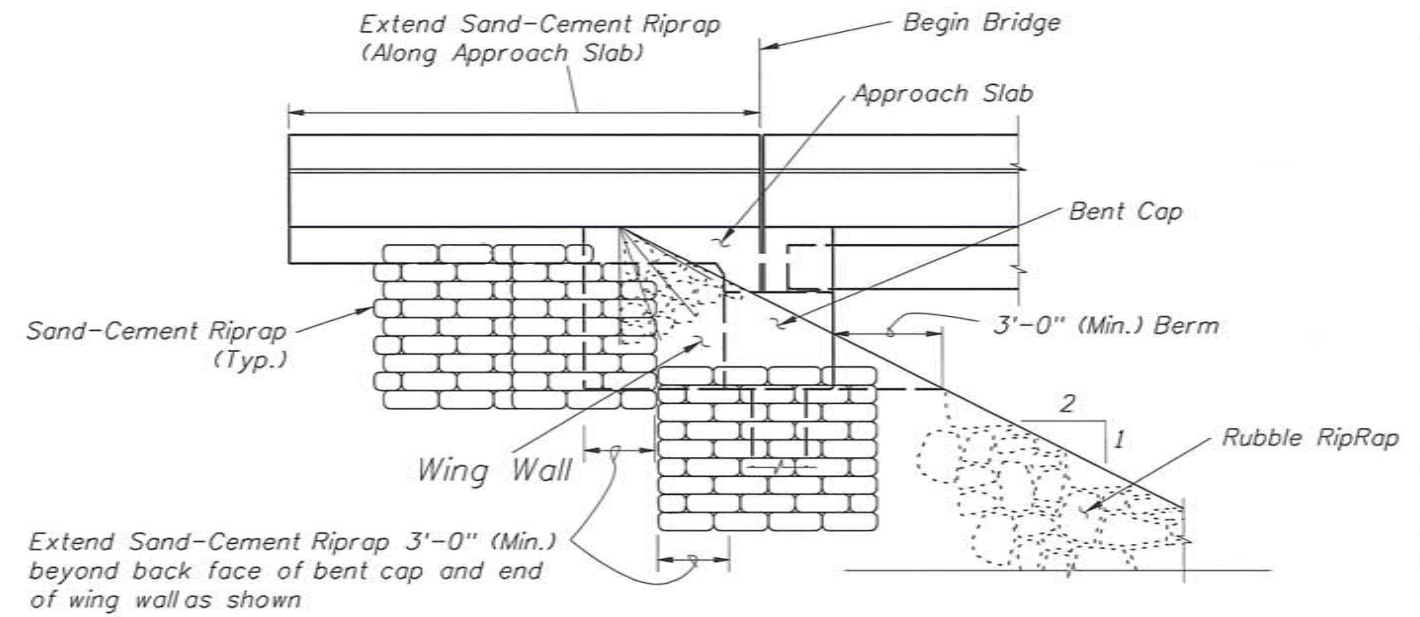
PARTIAL PLAN VIEW

(Bridge Deck and Approach Slab shown Dashed)

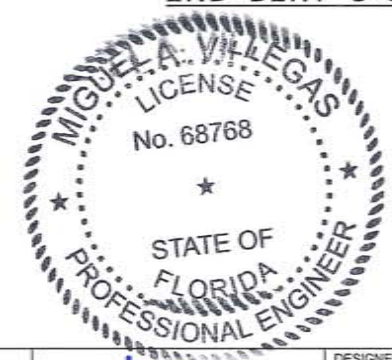
NOTES:

1. The requirements of sections 530-5.2 and 530-5.3 of the fdot standard specifications shall be interpreted for the Taylor Road Bridge project as follows: the full cost of excavation and offsite disposal of excavated materials residing between existing grade and rubble riprap / bedding stone subgrade shall be included in the cost of riprap (rubble).
2. For Sections A-A, B-B, C-C & D-D see Sheet No. B14.
3. See Roadway plans for layout of rubble riprap.

ESTIMATED QUANTITIES			
ITEM	UNIT	QUANTITY	
		END BENT 1	END BENT 3
Riprap (Sand-Cement)	CY	18.4	18.3
Riprap (Rubble)	TN	368.6	368.5
Bedding Stone	TN	106.0	105.9



PARTIAL SIDE ELEVATION
(END BENT 1 SHOWN, END BENT 3 SIMILAR)



BRIDGE NO. 134122

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

TAYLOR ROAD BRIDGE

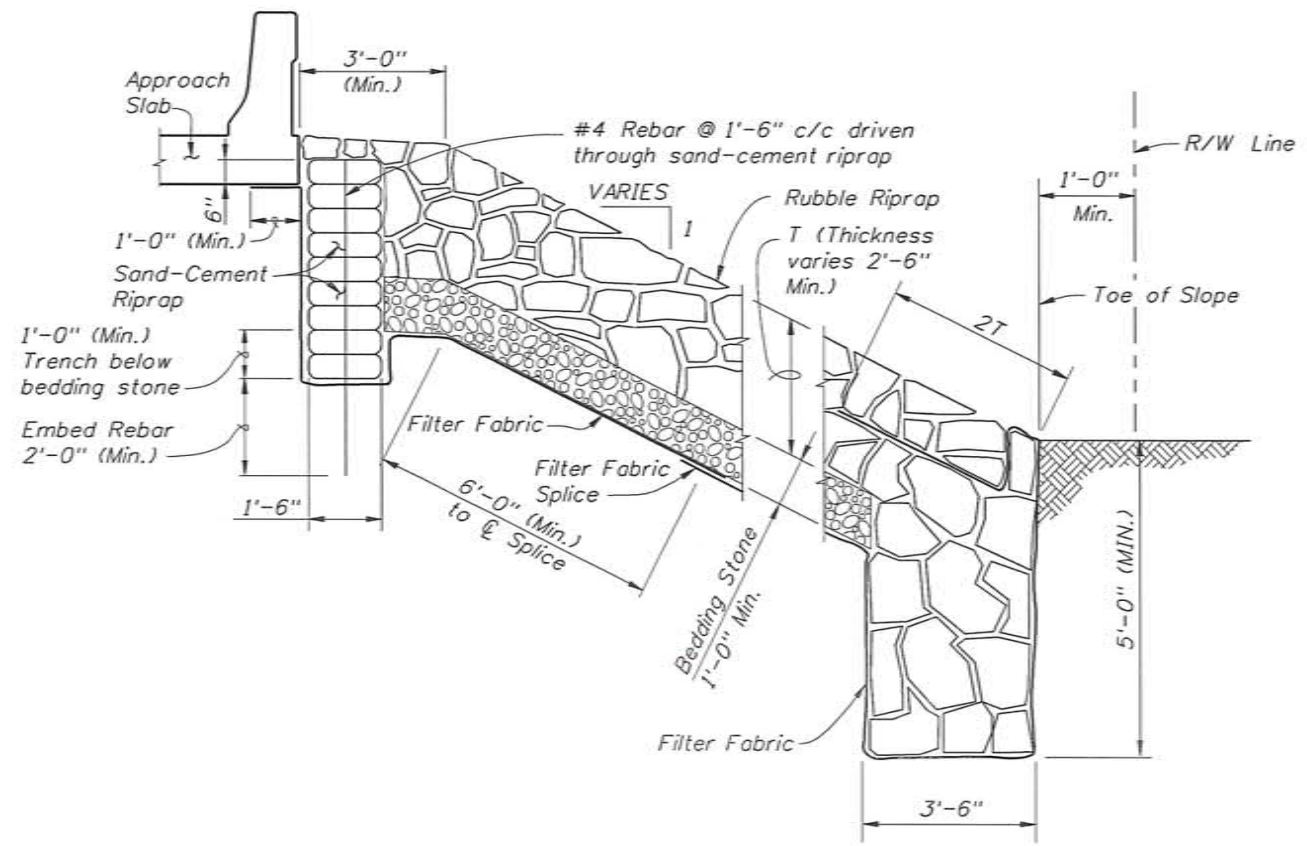
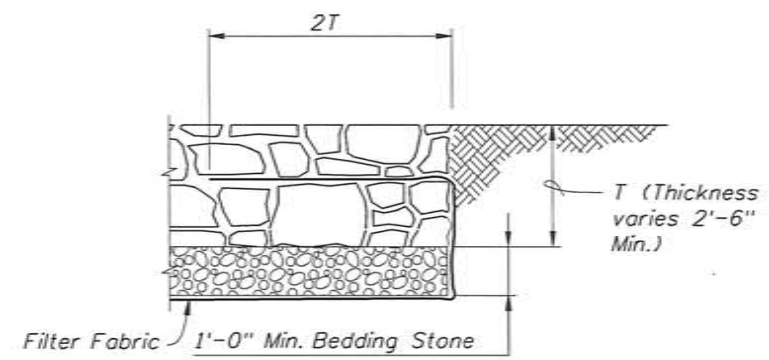
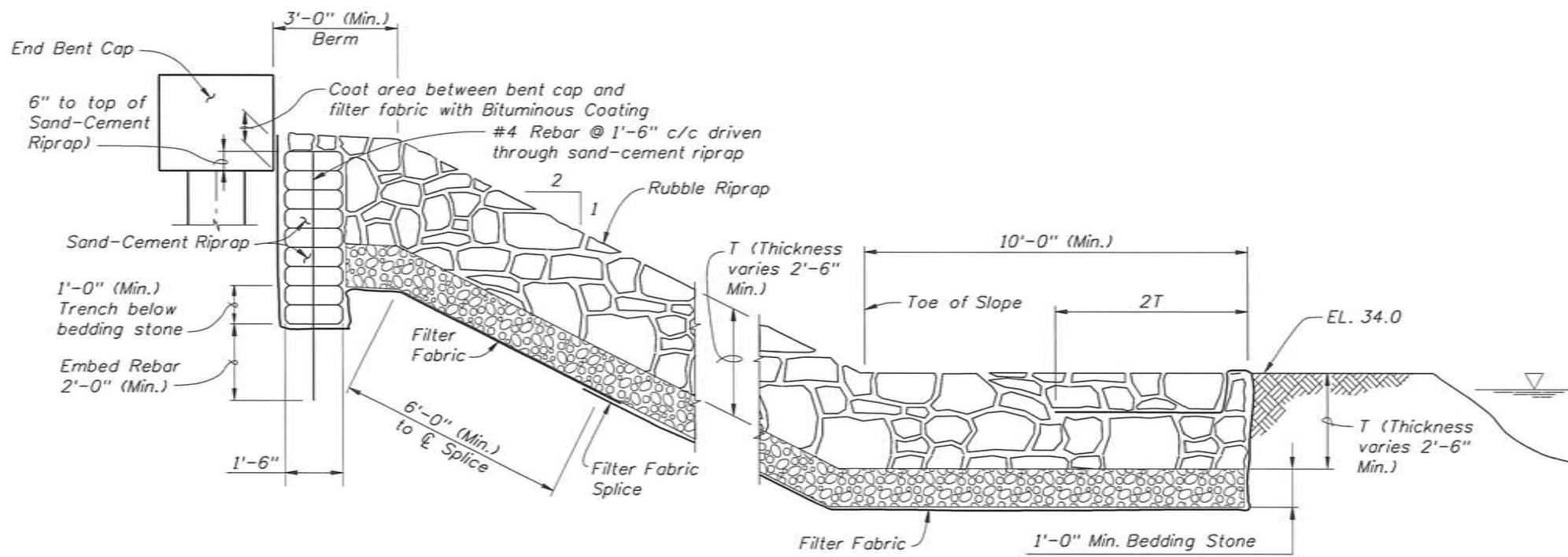


MIGUEL A. VILLEGAS, P.E. DATE 3-9-14
LIC. NO.: 68768

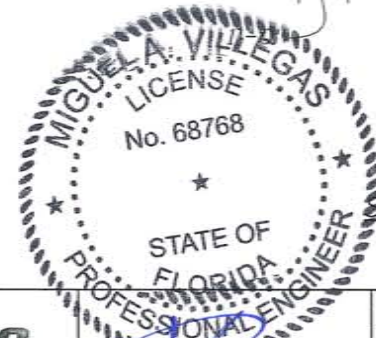
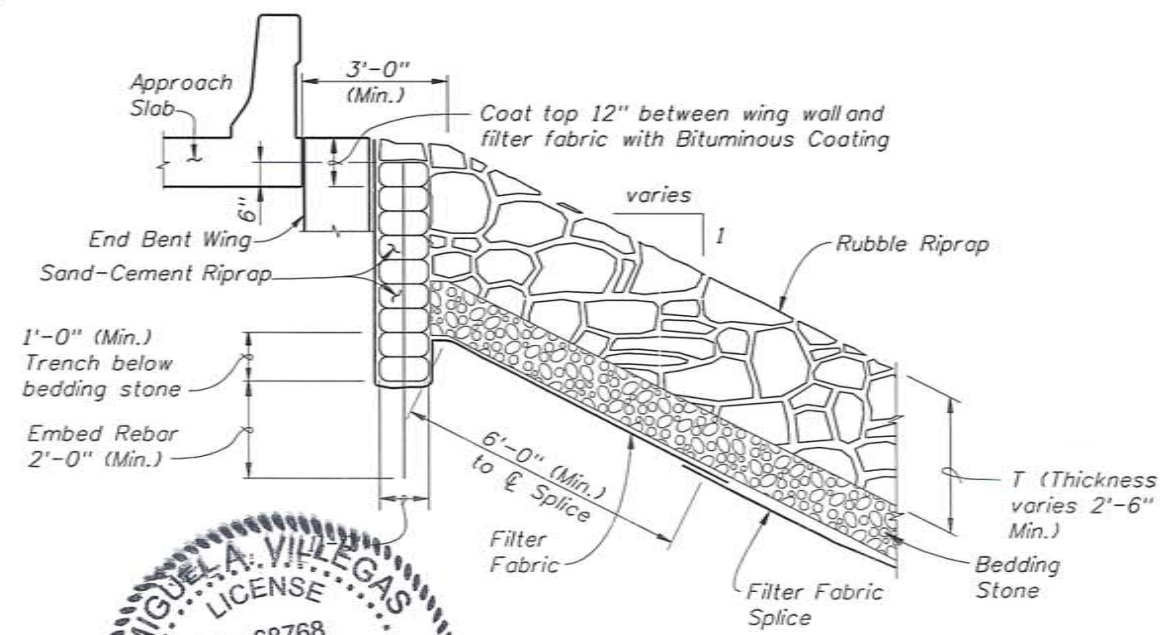
DESIGNED	MAV
DRAWN	MAV
Q.C.	RAH
APPROVED	RAH

SLOPE PROTECTION
(SHEET 1 OF 2)

PROJECT NO:	00193008.26
DATE:	3-4-14
SHEET NO:	B13



NOTE:
 Filter Fabric shall be Type D-2, see Design Standard Index 199. Splice length shall be 6" if bedding stone specified or 2'-0" if no bedding stone specified.
 For location of Sections A-A, B-B, C-C & D-D see Sheet B13.



BRIDGE NO. 134122

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

TAYLOR ROAD BRIDGE

Cardno TBE
 22 Sarasota Center Blvd, Sarasota, Florida, 34240
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 Certificate of Authorization No. 3843

MIGUEL A. VILLEGAS, P.E. DATE 3-4-14
 LIC. NO.: 68768

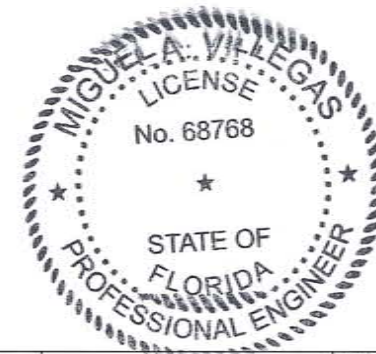
DESIGNED	MAV
DRAWN	MAV
C.C.	MAV
APPROVED	RAH
	RAH

SLOPE PROTECTION
 (SHEET 2 OF 2)

PROJECT NO:	00193008.26
DATE:	3-4-14
SHEET NO:	B14

M	A	R	K	LENGTH	NO	TYP	STY	B	C	D	E	F	H	J	K	N	Ø											
SIZE	DES	FT	IN	BAR	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG	
REINFORCING BAR LIST																												
LOCATION: DECK SLAB																												
NO. REQUIRED = 1																												
4	S1	51	-	5	68	10		50	-	3	1	-	2															
4	S2	35	-	0	32	1		35	-	0																		
4	S3	19	-	9	110	12		15	-	9	4	-	0														2	
4	S4	13	-	6	110	1		13	-	6																		
4	S5	3	-	5	606	4	4	4	0	-	10																	
4	S6	3	-	6	606	1		3	-	6																		
LOCATION: APPROACH SLABS																												
NO. REQUIRED = 2																												
5	A1	19	-	6	34	1		19	-	6																		
8	A2	19	-	6	44	1		19	-	6																		
5	B1	19	-	9	47	12		15	-	9	4	-	0														2	
5	B2	13	-	6	47	1		13	-	6																		
5	C	5	-	0	40	1		5	-	0																		
LOCATION: BENTS 1 THRU 3																												
NO. REQUIRED = 1																												
8	B1	19	-	11	33	1		19	-	11																		
8	B2	8	-	4	27	11		6	-	4	1	-	0	1	-	0												
8	B3	3	-	6	18	11		1	-	6	1	-	0	1	-	0												
8	B4	4	-	0	18	11		2	-	0	1	-	0	1	-	0												
8	B5	12	-	11	33	1		12	-	11																		
6	B1	19	-	11	12	1		19	-	11																		
6	B2	12	-	11	12	1		12	-	11																		
6	B3	2	-	0	51	1		2	-	0																		
5	B1	9	-	10	140	4	4	4	2	-	1	2	-	4														
5	B2	7	-	0	15	5		2	-	1	2	-	4	0	-	3	0	-	3									
4	B1	5	-	4	48	1		5	-	4																		
4	B2	3	-	9	60	1		3	-	9																		
4	B3	3	-	0	32	10		1	-	6	1	-	6															
4	B4	3	-	0	32	10		1	-	6	1	-	6															
4	B5	2	-	4	12	1		2	-	4																		

END OF LIST



BRIDGE NO. 134122

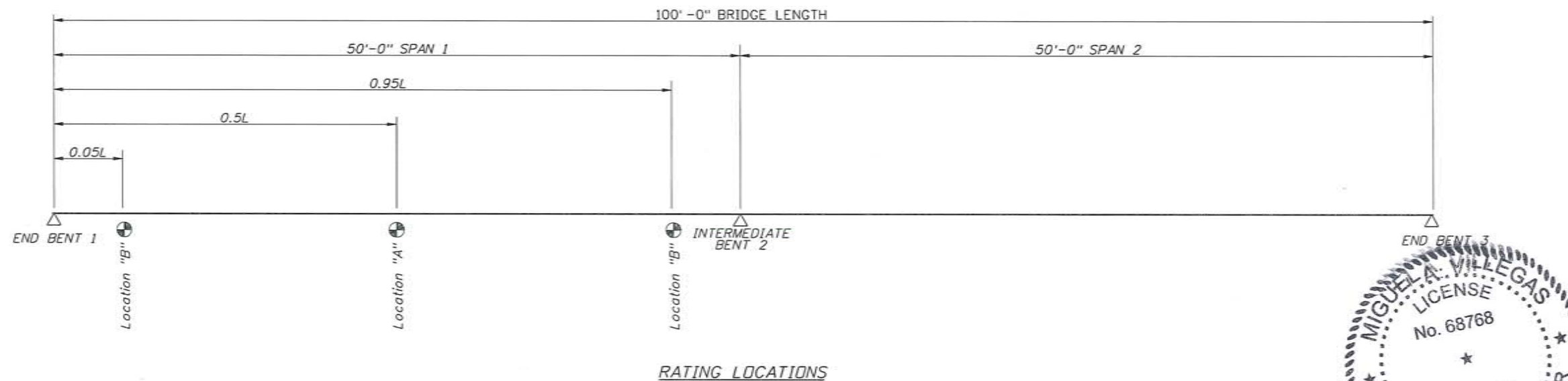
MANATEE COUNTY		TAYLOR ROAD BRIDGE		 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		 MIGUEL A. VILLEGAS, P.E. DATE 3-9-14 LIC. NO.: 68768		DESIGNED MAY DRAWN MAY D.C. APPROVED RAH		REBAR LIST		PROJECT NO: 00193008.26 DATE: 3-4-14 SHEET NO: B15	
NO.	DESCRIPTION	BY	DATE										

Load Rating Summary Details for Prestressed Concrete Bridges (Flat Slab and Deck/Girder)

Table Date 01-01-12

Table 2 - LRFR

Level	Limit State	Vehicle	Weight (tons)	Load Factors			Moment (Strength) or Stress (Service)					Shear (Strength)				Comments:	
				LL	DC	DW	Distribution Factor (DF)	Rating Factor	Tons	Location	Dimension	Distribution Factor (DF)	Rating Factor	Tons	Location		Dimension
Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.39	1.52	N/A	0.5L	25.00	0.45	5.65	N/A	0.05L	2.35	Interior/exterior beam DF method if other than LRFD. Other appropriate comments
	Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.39	1.97	N/A	0.5L	25.00	0.45	7.41	N/A	0.05L	2.35	
	Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.39	1.80	N/A	0.5L	25.00	N/A	N/A	N/A	N/A	N/A	
	Service III (Op)	HL-93	N/A	0.80	1.00	1.00	0.39	2.25	N/A	0.5L	25.00	N/A	N/A	N/A	N/A	N/A	
Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.39	1.46	87.80	0.5L	25.00	0.45	5.23	372.63	0.95L	47.65	
	Service I	FL120	60.0	1.00	1.00	1.00	0.39	4.19	251.20	0.5L	25.00	N/A	N/A	N/A	N/A	N/A	



General Notes:

1. This table is based on the requirements established in the January 2014 FDOT Bridge Load Rating Manual.

Table 2 - LRFR Notes:

1. Permit capacity is determined by using the permit vehicle in all lanes.
2. Service III Design Inventory tensile stress limits = $3v_f'c$ or $6v_f'c$. Service III Design Operating, Legal, and Permit tensile stress limits = $7.5v_f'c$.
3. Has the AASHTO LRFD Specifications Article 5.8.3.5 longitudinal reinforcement been satisfied? Yes No
4. Abbreviations:
Inv - Inventory
Op - Operating



BRIDGE NO. 134122

MANATEE COUNTY		TAYLOR ROAD BRIDGE		 22 Sarasota Center Blvd, Sarasota, Florida, 34240 www.cardnotbe.com - 941.377.9084 Certificate of Authorization No. 3843		DESIGNED: FXH DRAWN: FXH Q.C.: RAH APPROVED: RAH		LOAD RATING		PROJECT NO: 00193008.26 DATE: 3-4-14 SHEET NO: B16	
NO.	DESCRIPTION	BY	DATE								