INDEX OF STRUCTURE PLANS

For Index of Drawings, see Sheet B-3.

Manatee County FLORIDA

CONTRACT PLANS

COUNTY PROJECT NUMBER 6086960

MANATEE COUNTY

44th AVENUE EAST – BRADEN RIVER SEGMENT
(45th STREET EAST TO 44th AVENUE PLAZA EAST)

STRUCTURE PLANS

STRUCTURE SHOP DRAWINGS
TO BE SUBMITTED TO:

DAREN CARRIERE, P.E.
AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Waterford Plaza, Suite 700
Tampa, Florida 33607-1462
(813) 286-1711

PLANS PREPARED BY:

AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Waterford Plaza, Suite 700
Tampa, Florida 33607-1462
(813) 286-1711

CERTIFICATE OF AUTHORIZATION NO. 8115

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

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

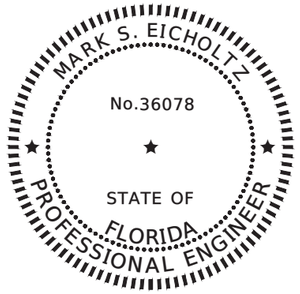
STRUCTURE PLANS
ENGINEER OF RECORD: MARK S. EICHOLTZ, P.E.

DATE: 2/2018
P.E. NO.: 36078

FISCAL YEAR	SHEET NO.
18	B-1

MANATEE COUNTY PROJECT MANAGER: Eric Shroyer, P.E.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



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Signed and Sealed by:

Mark S Eicholtz
2018.02.16 16:25:23 -05'00'

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AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607
Certificate of Authorization: 8115
Mark S. Eicholtz, P.E.

The above named Professional Engineer shall be responsible for the following sheets in accordance with Rule 61G15-23.004, F.A.C.

SHEET NO.	SHEET DESCRIPTION
B-1	Cover Sheet
B-2	Signature Sheet
B-3	Index of Drawings
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B-5	General Notes (1 of 2)
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B-7	Plan & Elevation (1 of 5)
B-8	Plan & Elevation (2 of 5)
B-9	Plan & Elevation (3 of 5)
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B-30	End Bent 16 (1 of 2)
B-31	End Bent 16 (2 of 2)
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B-34	End Bent Details (3 of 5)
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B-54	Finish Grade Elevations (2 of 11)
B-55	Finish Grade Elevations (3 of 11)
B-56	Finish Grade Elevations (4 of 11)
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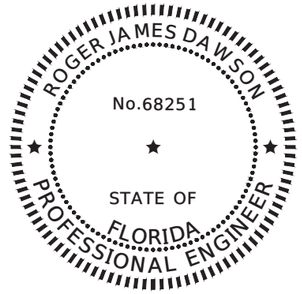
B-92	Load Rating Summary Sheet



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Roger J Dawson
2018.02.16 16:01:57 -05'00'

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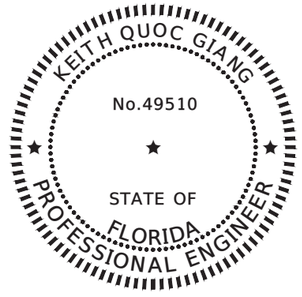
AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607
Certificate of Authorization: 8115
Roger James Dawson, P.E.

The above named Professional Engineer shall be responsible for the following sheets in accordance with Rule 61G15-23.004, F.A.C.

SHEET NO.	SHEET DESCRIPTION
B-2	Signature Sheet
B-13	Bridge Hydraulic Recommendation Sheet



This item has been digitally
Signed and Sealed by:

Giang, Keith
Giang, Keith
2018.02.16
15:37:47 -05'00'

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AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607
Certificate of Authorization: 8115
Keith Quoc Giang, P.E.

The above named Professional Engineer shall be responsible for the following sheets in accordance with Rule 61G15-23.004, F.A.C.

SHEET NO.	SHEET DESCRIPTION
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B-15	Report of SPT Borings (2 of 7)
B-16	Report of SPT Borings (3 of 7)
B-17	Report of SPT Borings (4 of 7)
B-18	Report of SPT Borings (5 of 7)
B-19	Report of SPT Borings (6 of 7)
B-20	Report of SPT Borings (7 of 7)

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MSE

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SIGNATURE SHEET

SHEET NO.: B-2

Compton, Kathy
2/15/2018 4:11:56 PM
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B-92	Load Rating Summary Sheet

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MSE

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

INDEX OF DRAWINGS

SHEET NO.: B-3

Compton, Kathy
2/15/2018 2:08:20 PM
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SUMMARY OF STRUCTURE QUANTITIES – BRIDGE 134130

SECTION	PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
					P	F	P	F		
LUMP SUM ITEMS	0103 1	TEMPORARY WORK STRUCTURE		LS	1				TEMPORARY WORK STRUCTURE	
	0108 2	PROTECTION OF EXISTING STRUCTURES		LS	1					
FOUNDATIONS	0455 34 5	PRESTRESSED CONCRETE PILING, 24" SQ	END & INTER. BENTS	LF	13278.9					
	0455 143 5	TEST PILES – PRESTRESSED CONCRETE, 24" SQ	END & INTER. BENTS	LF	1217.0					
	0459 71	PILES, POLYETHYLENE SHEETING	END BENTS	SY	59.4					
SUBSTRUCTURE	0400 4 5	CONCRETE CLASS IV, SUBSTRUCTURE	END & INTER. BENTS	CY	920.5					
	0415 1 5	REINFORCING STEEL – SUBSTRUCTURE	END & INTER. BENTS	LB	220858.0					
	0530 1	RIPRAP – SAND CEMENT	BEGIN & END BRIDGE	CY	55.0					
	0530 3 3	RIPRAP– RUBBLE, BANK AND SHORE	BEGIN & END BRIDGE	TN	1558.0					
	0530 74	BEDDING STONE	BEGIN & END BRIDGE	TN	555.0					
APPROACH SLABS	0400 2 10	CONCRETE CLASS II, APPROACH SLABS	APP SLAB 1 & 2	CY	248.6					
	0415 1 9	REINFORCING STEEL – APPROACH SLABS	APP SLAB 1 & 2	LB	47262.0					
SUPERSTRUCTURE	0400 2 4	CONCRETE CLASS II, BRIDGE SUPERSTRUCTURE	DECK UNITS 1 TO 5	CY	4851.2					
	0400 9	BRIDGE DECK GROOVING & PLANING, DECK 8.5" OR >	DECK UNITS 1 TO 5	SY	13368.9					
	0400 147	COMPOSITE NEOPRENE PADS	BEARING PADS	CF	142.4					
	0415 1 4	REINFORCING STEEL – SUPERSTRUCTURE	DECK UNITS 1 TO 5	LB	1268424.0					
	0450 2 45	PREST BEAMS: FLORIDA-I BEAM 45"	SPANS 1 TO 15	LF	14937.9					
	0458 1 11	BRIDGE DECK EXP. JT., NEW CONST., F&I (POURED)	EXPANSION JOINTS	LF	689.0					
RAILING & BARRIERS	0515 4 2	PEDESTRIAN/BICYCLE RAILING, ALUMINUM, DOUBLE BULLET RAIL	BRIDGE & APP SLABS	LF	3124.8				POST D	
	0521 5 1	CONCRETE TRAFFIC RAILING, BRIDGE 32" F – SHAPE	BRIDGE & APP SLABS	LF	6249.7					
	0521 6 11	CONCRETE PARAPET, PEDESTRIAN/BICYCLE, 27" HEIGHT	BRIDGE & APP SLABS	LF	3124.8					

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SUMMARY OF STRUCTURES QUANTITIES

SHEET NO.: B-4

Compton, Kathy
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DESIGN SPECIFICATIONS:
1. FDOT Structures Manual dated January 2016.
2. American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor (LRFD) Bridge Design Specifications, 7th Edition.
3. FDOT Plan Preparation Manual dated January 2016.

CONSTRUCTION SPECIFICATIONS:
FDOT Standard Specifications for Road and Bridge Construction, July 2017 Edition and as amended by contract documents.

VERTICAL DATUM:
NAVD 88

ENVIRONMENT:
Substructure: Extremely Aggressive
Superstructure: Slightly Aggressive

DESIGN METHODOLOGY:
Load and Resistance Factor Design (LRFD) method using strength, service, extreme event and fatigue limit states.

DESIGN LOADINGS:
1. Live Loads:
   HL-93 with Dynamic Load Allowance
   0.075 KSF Pedestrian Load – Sidewalk
2. Dead Loads:
   Traffic Railing----------420 PLF
   Pedestrian Railing----------235 PLF
   Stay-in-Place Forms----------20 PSF
   Reinforced Concrete----------150 PCF
   Future Wearing Surface--------Not Included
   Florida I-45 Beam----------906 PLF
   The 8½ inch deck thickness includes a ½ inch sacrificial thickness included in the dead load of the deck but omitted from the section properties used for design.
3. Thermal Loads:
   1. Normal Mean Temperature----70°F
   2. Thermal Coefficient----------0.0000060°F
   3. Temperature Range for Sizing Bearings and Joints
      Rise----------35°F
      Fall----------35°F
4. Vessel Collision Load: No allowance for vessel collision load has been included in the design.
5. Utilities: 36" Ø Water Main Total Weight – 702 PLF & 8" Ø Dry Force Main Total Weight – 47 PLF. No allowance for any other utility loads has been included in the design.
6. Seismic: Exempted Bridge (all support on elastomeric bearings) meet minimum support length per LRFD Specifications.

CONSTRUCTION LOADS:
1. Finishing Machine Load: 16 kips.
2. Finishing Machine Wheel Location beyond the edge of deck overhang: 6 inches.
3. Construction Live Load: 20 psf extended over the entire bridge width and 50-feet in longitudinal length centered on the finishing machine.
4. Removable Deck Cantilever Timber Forms with Overhang Brackets: 15 psf.
5. Live load at or near the outside edge of deck during deck placement: 75 plf applied as a moving load over a length of 20-feet.
6. Construction Inactive Basic Wind Speed including Exposure Period Reduction Factor (RE): 78 MPH.
7. Velocity Pressure Exposure Coefficient (k_z): 1.14
8. Construction Active Basic Wind Speed: 20 MPH.

MATERIALS:
1. Concrete:

CONCRETE CLASS	MINIMUM 28-DAY COMPRESSIVE STRENGTH (PSI)	LOCATION
II (Bridge Deck)	F'c = 4,500	Approach Slabs & C.I.P. Superstructure
II	F'c = 3,400	Traffic Railing Barrier
IV	F'c = 5,500	C.I.P. Substructure
V (Special)	F'c = 6,000	Pre-Stressed Piles
VI	F'c = 8,500	Pre-Stressed Beams

2. Concrete Cover:

SUPERSTRUCTURE		SUBSTRUCTURE	
COVER	LOCATION	COVER	LOCATION
2"	Pre-Stressed Beams	4½"	External Surfaces against Earth and in Water
¾"	Pre-stressed Beams – Top of Top Flange	4"	External Surface Formed
2½"	Top Deck Surface	2"	Top of Beam Pedestals
2"	All other Surfaces	3"	Pre-Stressed Piling

Concrete cover dimensions shown in the plans do not include placement and fabrication tolerances unless shown as "minimum cover". See Specification 415 for allowable tolerances. All dimensions pertaining to the location of reinforcing steel are to centerline of bar except where clear dimension is noted to face of concrete.

3. Reinforcing Steel: Carbon Steel per Specifications Section 931.

APPLIED FINISH COATING:
1. Anti-Graffiti coating is not required on this project.
2. Class 5 coating of concrete surface is not required. Smooth uncoated surfaces are required for all concrete surfaces.

PLAN DIMENSIONS:
All dimensions in these plans are measured in feet either horizontally or vertically unless otherwise noted.

UTILITIES:
For plan locations of existing utilities, see Plan and Elevation sheets. Locations of utilities shown in the plans are approximate. Contractor shall field verify utility locations before commencing with construction. For disposition of utilities, see Roadway Plans.

BRIDGE NAME:
Place the following bridge name & number on the traffic railing in accordance with the Traffic Railing Design Standards:
44th Ave. East over Braden River
134130

SCREEDING DECK SLABS:
Screed the riding surface of the bridge deck and approach slabs to achieve the finish grade elevations shown in the plans. Account for the theoretical deflections due to self weight, deck casting sequence, deck forming systems, constructions loads, overlays, and temporary shoring, etc as required.

STAY-IN-PLACE DECK FORMS:
Design includes allowance for 20 PSF over the projected plan area of the metal forms for the unit weight of the metal forms and the concrete required to fill the form flutes. Stay-in-Place forms are not allowed at deck cantilevers.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MSE

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

GENERAL NOTES (1 OF 2)

SHEET NO.: B-5

Compton, Kathy 2/16/2018 9:19:32 AM
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BEARING REPLACEMENT:
Future bearing replacement and jacking requirements have not been included in the design.

JOINTS IN CONCRETE:
Construction joints will be permitted only at the locations indicated in the plans. Additional constructions joints or alterations to those shown shall require approval of the engineer.

TRAFFIC CONTROL PLANS/PHASING OF WORK:
Work phasing and progression of the work shall conform to the traffic control plans located in the roadway plans.

CONSTRUCTION:
1. *For construction limitations see Roadway Plans – General Notes.*
2. *The contractor will be required to maintain water traffic in a manner satisfactory to both the County and the U.S. Coast Guard and in conformance with the conditions of the bridge permit issued by the U.S. Coast Guard.*
3. *Manatees and other listed species shall be protected during all phases of construction in accordance with the environmental permit conditions.*
4. *Piling for temporary work structures shall not be installed within 10 feet of a permanent bridge pile location. Jetting is not allowed for the installation or removal of temporary piling.*
5. *Temporary work structures will be required for the bridge construction due to wetlands and sea grasses. The contractor is responsible for the size, location, design and erection details of the temporary work structures. Payment for temporary work structures shall be included in Pay Item No. 103–1. Shop drawings that fully detail their layout and composition shall be submitted with the design calculations, signed and sealed by a qualified professional engineer registered in the State of Florida, for review and approval.*

CERTIFICATE OF NON-CONTAMINATION:
The Contractor shall provide a certificate affirming that no materials containing asbestos were used in construction of the project. A copy of these certifications are to be provided to:

Project Manager: Eric Shroyer, P.E.
Project Management Division
1022 26th Avenue East
Bradenton, Florida 34208–3926

PAY ITEM NOTES:

1. *For summary of Bridge Pay Items, see "Roadway Plans".*
2. *Payment for incidental items not specifically covered in the individual bid items shall be included in the contract unit price of the bid item.*
3. *Class II (Bridge Deck) shall be paid under Pay Item No. 400–2–4, Concrete Class II, Superstructure.*
4. *Supplemental reinforcement to stabilize and support the required reinforcement shown in these plans is the responsibility of the contractor and is not included in these plans or quantities.*
5. *Bridge Pay items do not include cost of 36 inch Φ Water Main and 8 inch Ø Dry Force Main along with their attachments, supports, expansion joints, fittings and anchors. For these pay items, see Utility Work Plans.*
6. *Pay Item No 400–9 includes grooving of the Bridge Deck from gutter to gutter of westbound and eastbound roadway width. Grooving of sidewalks and median below the utility pipes is not required. Grooving of the Approach Slab under the asphalt layer is not required and not included in this pay item.*
7. *Pay items 400–2–10 and 415–1–9 for approach slabs include the concrete and steel for 5 ft. long portion between Westbound and Eastbound approach slabs at the end bents 1 & 16. For remaining gap between WB & EB approach slabs, see Utility Work Plans.*
8. *Asphalt on the approach slabs is included in the Roadway Quantities.*
9. *The cost of furnishing and installing Conduit, Pull Cords and Wires, EJB, Expansion and Expansion/Deflection Fittings and all associated hardware required to complete the installation is to be included in the cost of the Traffic Railing or Pedestrian Railing (Parapet) that the Conduit is installed in.*
10. *Soil Preloading/Surcharging and settlement monitoring is required before construction of end bents 1 and 16 can begin. For any cost associated with overloading/surcharging and monitoring, refer to Roadway plans.*
11. *For additional Pay Item Notes see Plans.*
12. *The cost of predrilling for installation of prestressed concrete piles shall be included in the unit cost of the piles, Pay Item 455–34–5.*

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MSE

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

GENERAL NOTES (2 OF 2)

SHEET NO.: B–6

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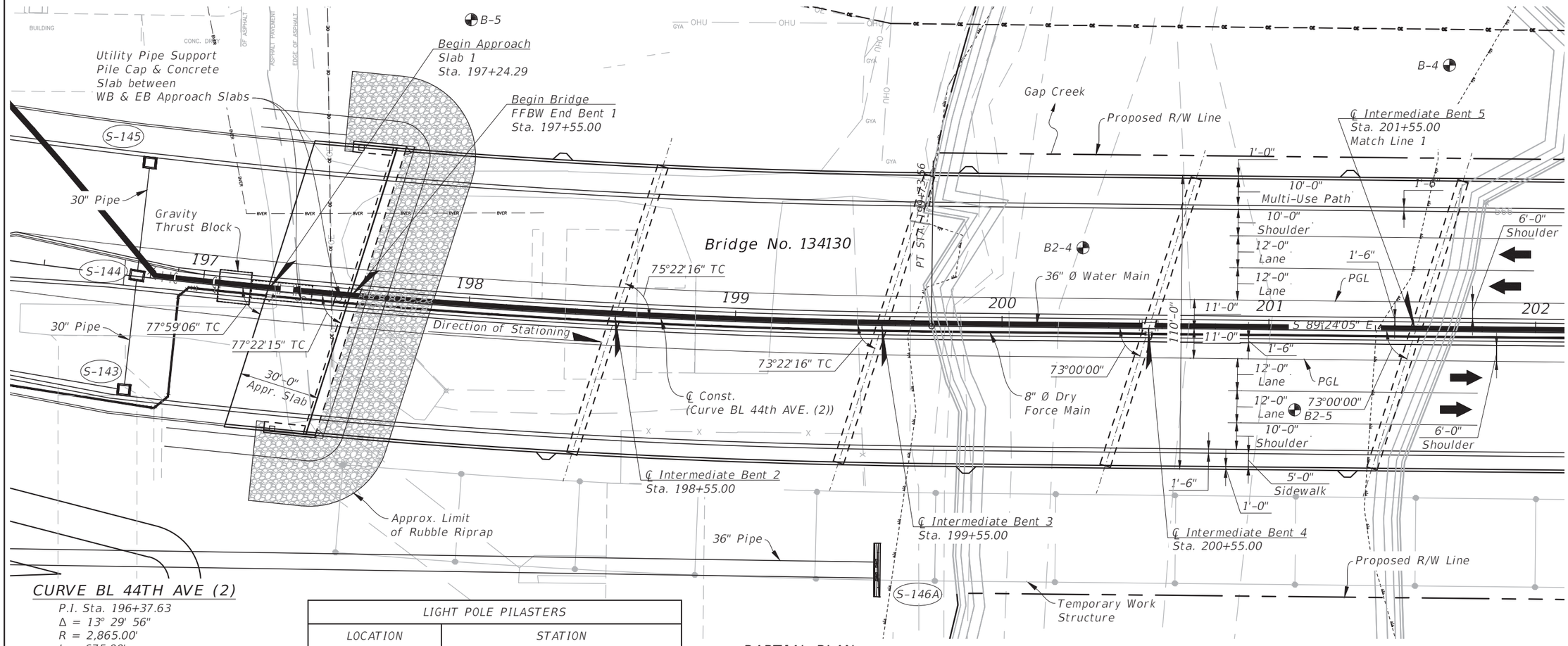


CURVE BL 44TH AVE (2)

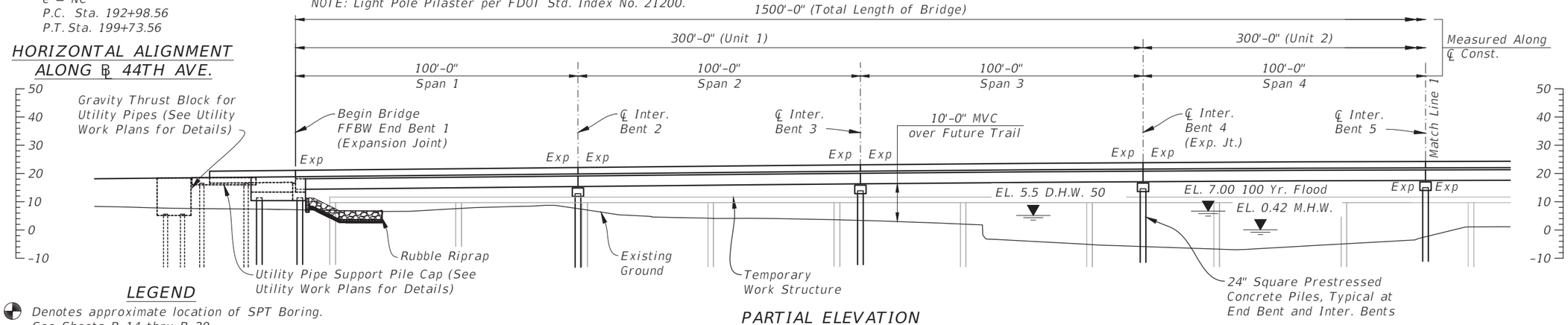
P.I. Sta. 196+37.63
Δ = 13° 29' 56"
R = 2,865.00'
L = 675.00'
T = 339.07'
e = NC
P.C. Sta. 192+98.56
P.T. Sta. 199+73.56

LIGHT POLE PILASTERS			
LOCATION	STATION		
Right & Left Coping	198+32.00	199+87.00	201+30.00

NOTE: Light Pole Pilaster per FDOT Std. Index No. 21200.

PARTIAL PLAN

HORIZONTAL ALIGNMENT ALONG ℄ 44TH AVE.



PARTIAL ELEVATION

(Pedestrian Barrier Rails not Shown)

NOTE: End Bents & Intermediate Bents are parallel.

LEGEND

Denotes approximate location of SPT Boring.
See Sheets B-14 thru B-20.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

PLAN AND ELEVATION (1 OF 5)

SHEET NO.: B-7

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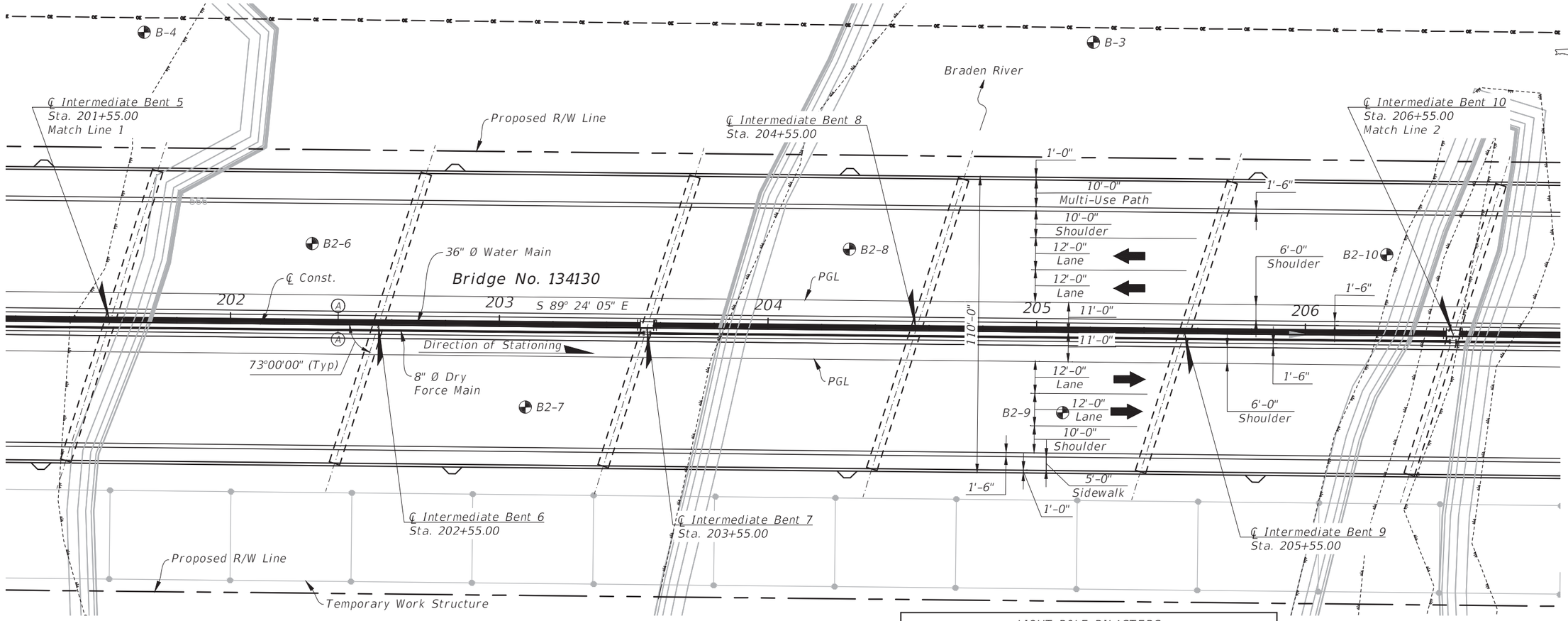
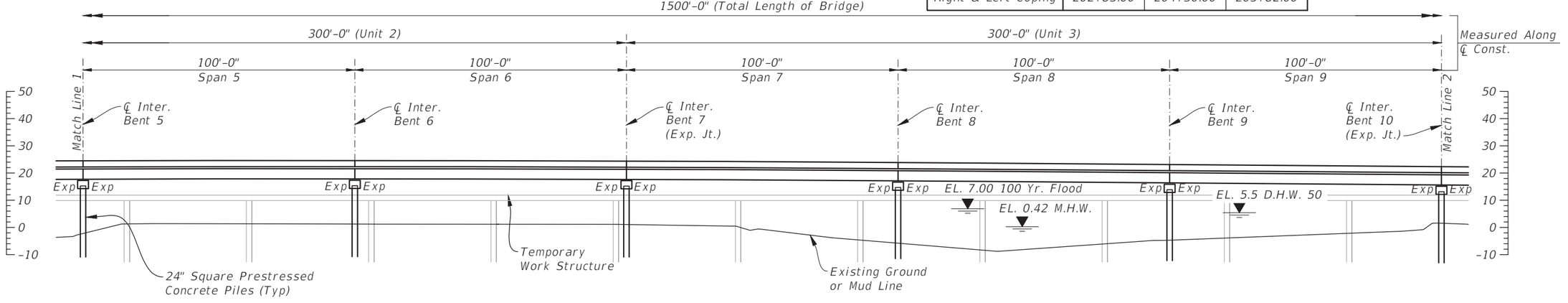


PARTIAL PLAN

LIGHT POLE PILASTERS			
LOCATION	STATION		
Right & Left Coping	202+83.00	204+30.00	205+82.00

NOTE: Light Pole Pilaster per FDOT Std. Index No. 21200.



PARTIAL ELEVATION

(Pedestrian Barrier Rails not Shown)

NOTE: Intermediate Bents are parallel.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

PLAN AND ELEVATION (2 OF 5)

SHEET NO.: B-8

Compton, Kathy
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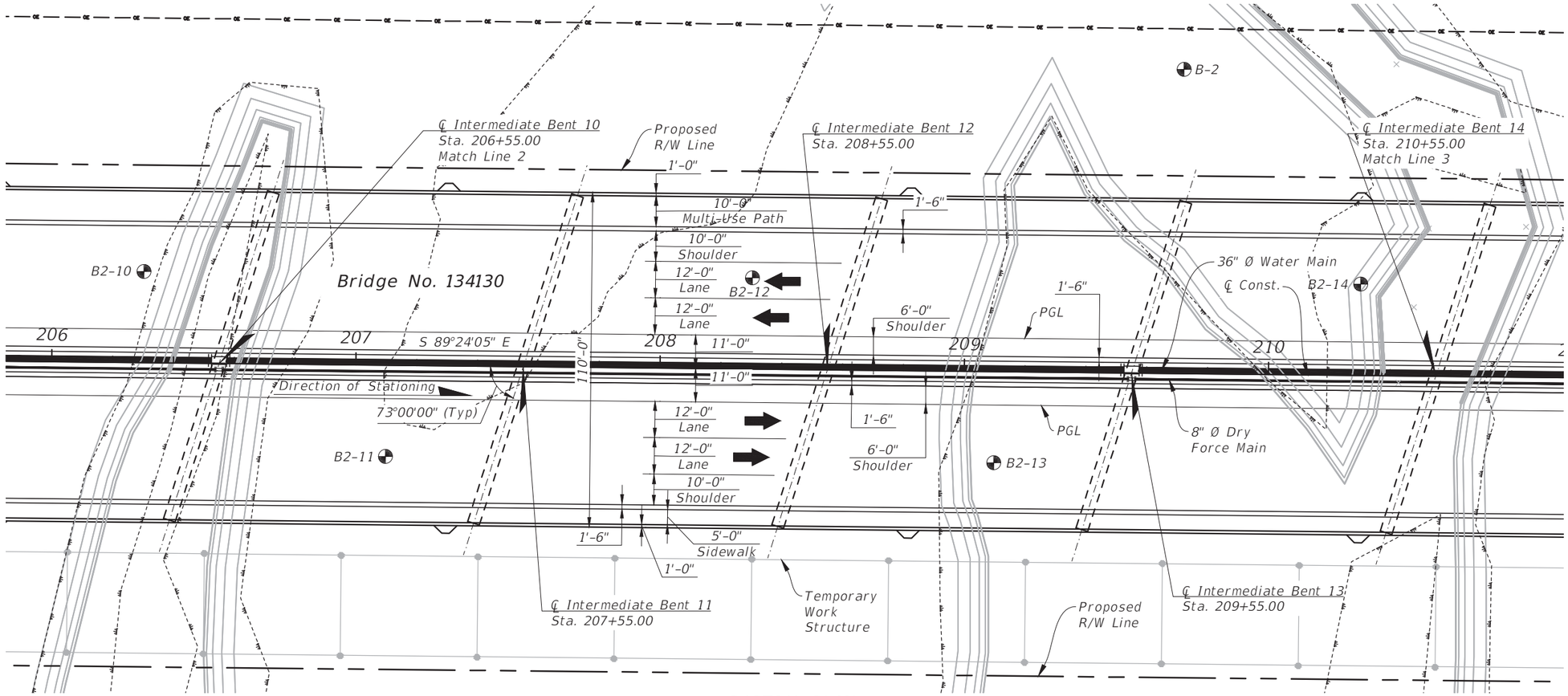
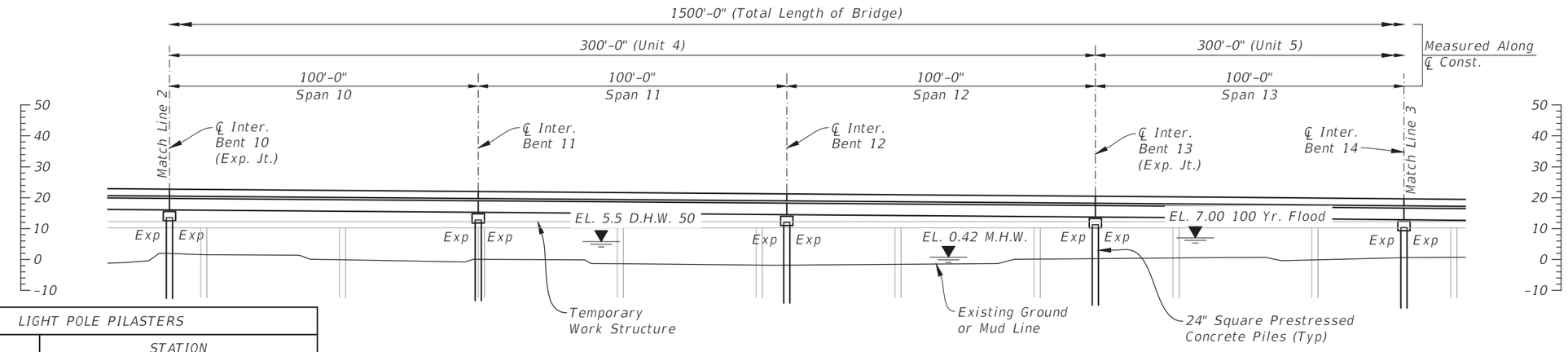


PARTIAL PLAN



PARTIAL ELEVATION
(Pedestrian Barrier Rails not Shown)

LIGHT POLE PILASTERS			
LOCATION	STATION		
Right & Left Coping	207+30.00	208+82.00	210+30.00

NOTE: Light Pole Pilaster per FDOT Std. Index No. 21200.

NOTE: Intermediate Bents are parallel.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

PLAN AND ELEVATION (3 OF 5)

SHEET NO.: B-9

Compton, Kathy
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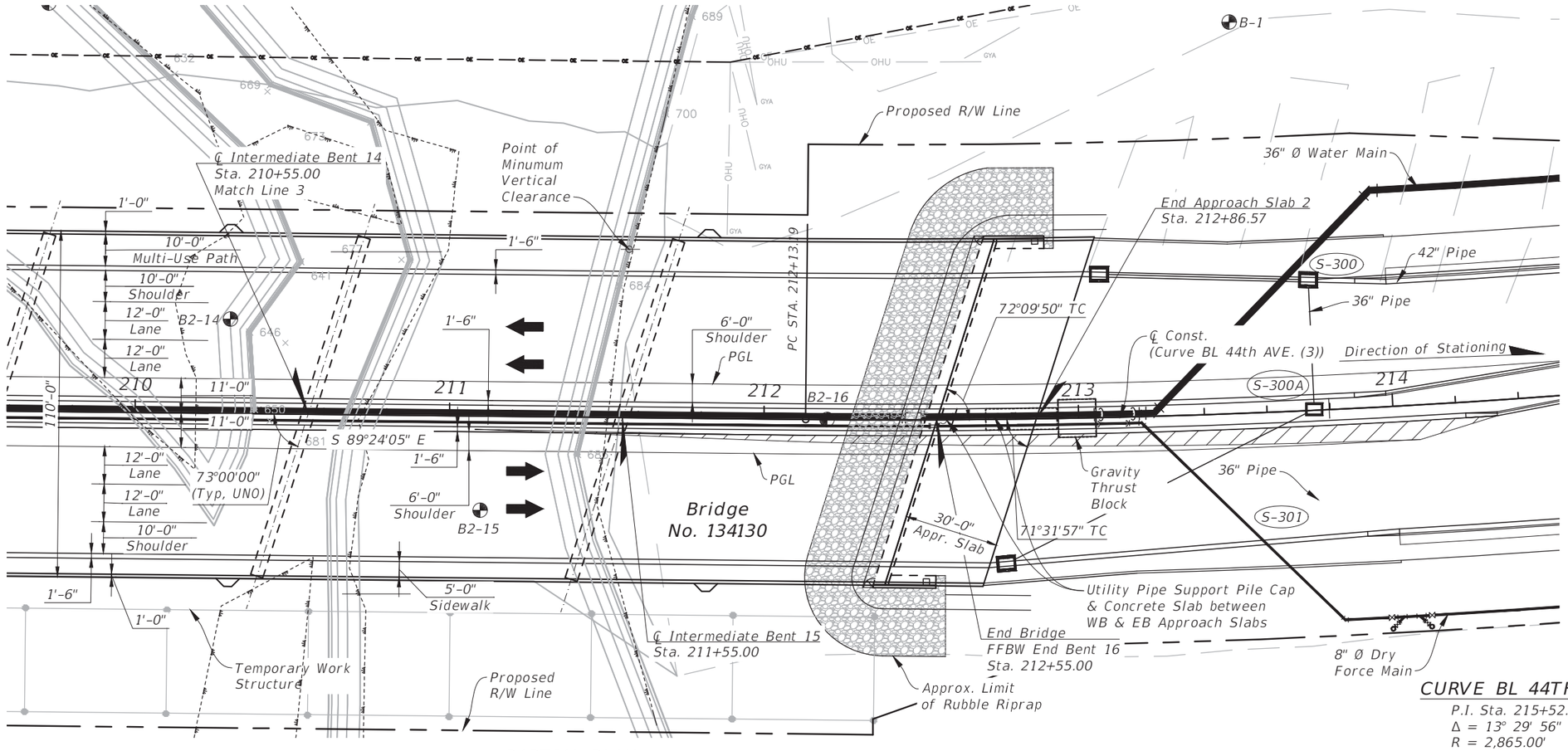
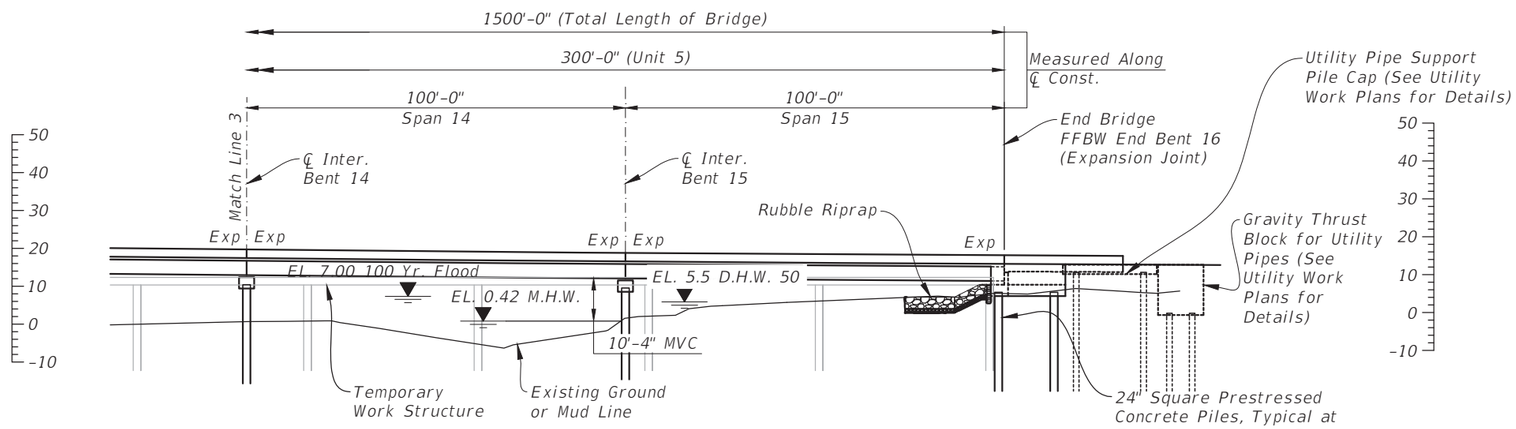


PARTIAL PLAN

CURVE BL 44TH AVE (3)

P.I. Sta. 215+52.26
Δ = 13° 29' 56"
R = 2,865.00'
L = 675.00'
T = 339.07'
e = NC
P.C. Sta. 212+13.19
P.T. Sta. 218+88.19

HORIZONTAL ALIGNMENT ALONG ℄ 44TH AVE.



PARTIAL ELEVATION

(Pedestrian Barrier Rails not Shown)

LIGHT POLE PILASTERS		
LOCATION	STATION	
Right & Left Coping	210+30.00	211+82.00

NOTE: Light Pole Pilaster per FDOT Std. Index No 21200.

NOTE: End Bents and Intermediate Bents are parallel.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

PLAN AND ELEVATION (4 OF 5)

SHEET NO.: B-10

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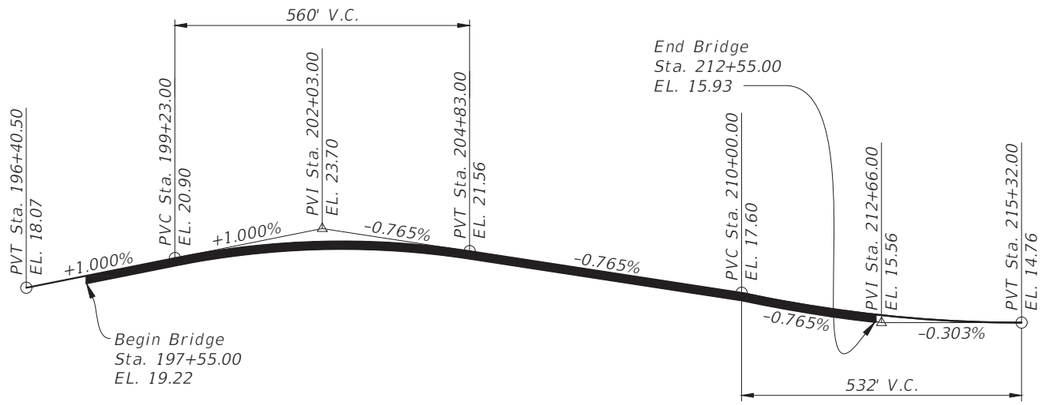

VERTICAL ALIGNMENT AT PGL

TRAFFIC DATA				
ROADWAY	AADT YEAR 2020	AADT YEAR 2040	DESIGN SPEED	% TRUCKS
44th Avenue East	16,900	35,800	45 mph	4

Bridge No. 134130

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No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

PLAN AND ELEVATION (5 OF 5)

SHEET NO.: B-11

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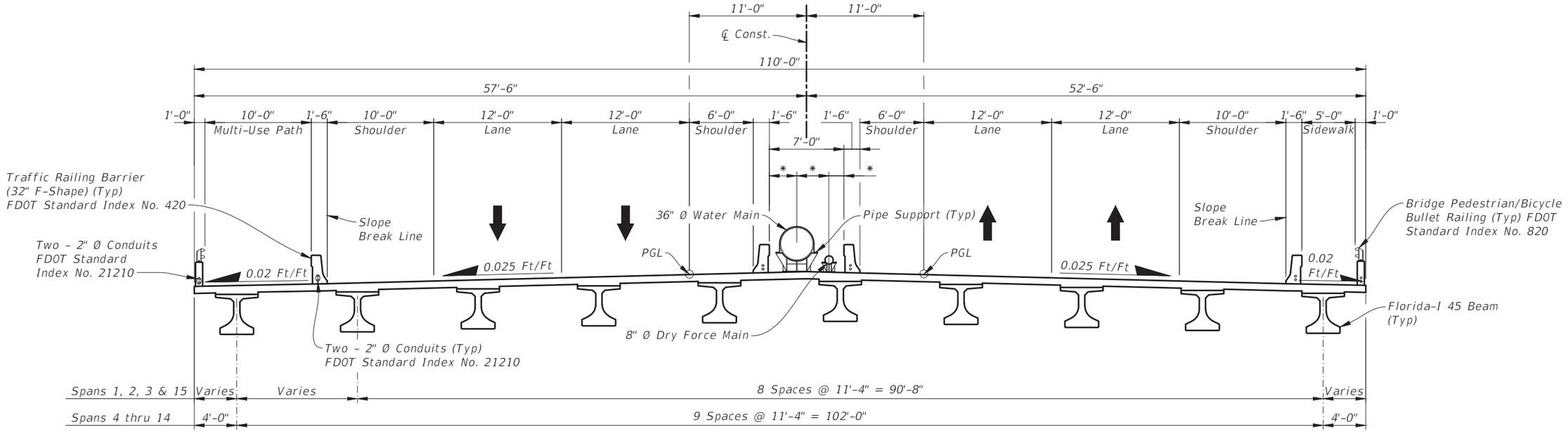

TYPICAL SECTION

* Coordinate location of 36" Ø Water Main & 8" Ø Dry Force Main with Potable, Sanitary and Reclaimed Water Utility Work Plans.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

TYPICAL SECTION

SHEET NO.: B-12

Compton, Kathy
2/15/2018 4:19:07 PM
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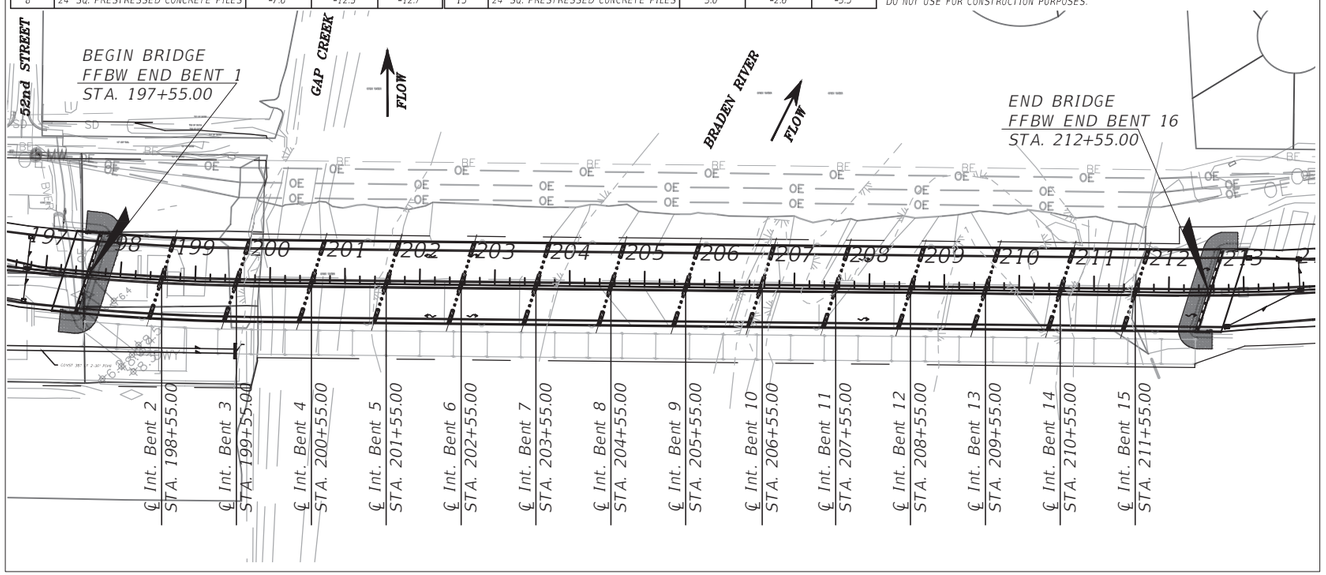
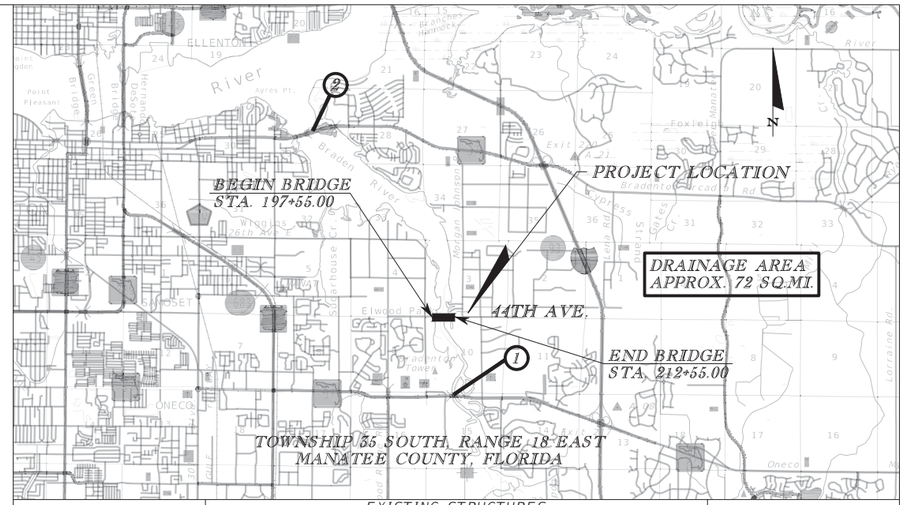
SCOUR PREDICTIONS				
INT. BENT NUMBER	SIZE AND TYPE	LONG TERM SCOUR ELEV. (NAVD) (FT)	100-YEAR SCOUR ELEV. WORSE CASE < 100 YR. (NAVD) (FT)	500-YEAR SCOUR ELEV. WORSE CASE < 500 YR. (NAVD) (FT)
2	24" SQ. PRESTRESSED CONCRETE PILES	6.0	6.0	4.0
3	24" SQ. PRESTRESSED CONCRETE PILES	3.5	-5.0	-6.0
4	24" SQ. PRESTRESSED CONCRETE PILES	-5.9	-15.4	-16.4
5	24" SQ. PRESTRESSED CONCRETE PILES	-3.1	-9.7	-10.6
6	24" SQ. PRESTRESSED CONCRETE PILES	1.6	-5.0	-5.9
7	24" SQ. PRESTRESSED CONCRETE PILES	1.2	-5.4	-6.3
8	24" SQ. PRESTRESSED CONCRETE PILES	-7.6	-12.3	-12.7

SCOUR PREDICTIONS				
INT. BENT NUMBER	SIZE AND TYPE	LONG TERM SCOUR ELEV. (NAVD) (FT)	100-YEAR SCOUR ELEV. WORSE CASE < 100 YR. (NAVD) (FT)	500-YEAR SCOUR ELEV. WORSE CASE < 500 YR. (NAVD) (FT)
9	24" SQ. PRESTRESSED CONCRETE PILES	-6.2	-10.9	-11.3
10	24" SQ. PRESTRESSED CONCRETE PILES	1.1	-4.4	-5.8
11	24" SQ. PRESTRESSED CONCRETE PILES	-1.6	-7.1	-8.5
12	24" SQ. PRESTRESSED CONCRETE PILES	-2.0	-7.5	-8.9
13	24" SQ. PRESTRESSED CONCRETE PILES	0.1	-5.4	-6.8
14	24" SQ. PRESTRESSED CONCRETE PILES	0.4	-7.6	-9.0
15	24" SQ. PRESTRESSED CONCRETE PILES	3.0	-2.6	-3.5

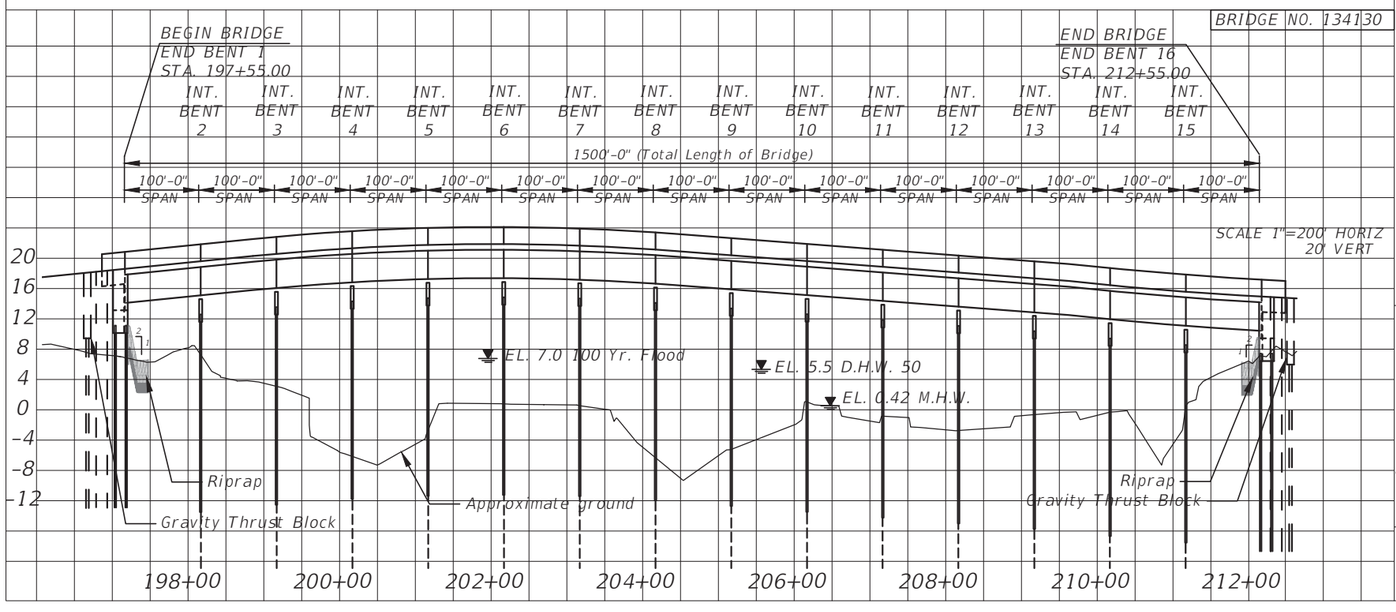
0 40 200
Feet

THIS SHEET HAS BEEN INCLUDED IN THE PLANS FOR DOCUMENTATION. DO NOT USE FOR CONSTRUCTION PURPOSES.





BRIDGE NO. 134130



	EXISTING STRUCTURES				PROPOSED STRUCTURE
(REFERENCE)	S.R. 70 (1)	S.R. 64 (2)	(3)	(4)	
FOUNDATION	CONC. PILES	CONC. PILES			CONC. PILES
OVERALL LENGTH	288'	642'			1,500'
SPAN LENGTH	9 @ 32'	13 @ 49.385'			15 @ 100'
TYPE CONSTRUCTION	CONCRETE	CONCRETE			CONCRETE
AREA OF OPENING @ D.F.	3,260 SF	5,866 SF			7,390 SF
BRIDGE WIDTH	38'	116.75'			110'
ELEV. LOW MEMBER	8.5'	10.5'			10.8'

HYDRAULIC DESIGN DATA

NOTE:
The hydraulic data is shown for informational purposes only to indicate the flood discharges and water surface elevations which may be anticipated in any given year. This data was generated using highly variable factors determined by a study of the watershed. Many judgements and assumptions are required to establish these factors. The resultant hydraulic data is sensitive to changes, particularly antecedent conditions, urbanization, channelization and land use. Users of this data are cautioned against the assumption of precision which cannot be obtained.

TERMS:
Design Flood: Utilized to assure a desired level of hydraulic performance.
Base Flood: Has a 1% chance of being exceeded in any given year (100 year frequency)
Overtopping Flood: Causes flow over the highway, over a watershed divide, or thru emergency relief structures.
Greatest Flood: The most severe that can be predicted where overtopping is not practicable.

WATER SURFACE ELEVATIONS: N.H.W. (Non-Tidal) —; M.H.W. (Tidal) 0.42'; CONTROL (Non-Tidal) —; M.L.W. (Tidal) -1.48'

FLOOD DATA: (1)	MAX. EVENT OF RECORD	DESIGN FLOOD	BASE FLOOD	☐ OVERTOPPING or ☒ GREATEST FLOOD
STAGE ELEV. NAVD (ft)	UNKNOWN	5.5	7	8.9
DISCHARGE (cfs)	—	12,300	15,500	25,000
AVERAGE VELOCITY (f/s)	—	3.2	3.6	4.8
EXCEEDANCE PROB. (%)	—	2	1	0.2
FREQUENCY (yr.)	—	50	100	500

SCOUR PREDICTIONS FOR PROPOSED STRUCTURE DESCRIBED ABOVE:

PIER INFORMATION		TOTAL SCOUR ELEVATION		
NUMBERS	SIZE AND TYPE	LONG TERM SCOUR ELEV.	WORST CASE <_ 100 yr. FREQ. (yr.)	WORST CASE <_ 500 yr. FREQ. (yr.)
SEE SCOUR PREDICTION TABLE ABOVE PLAN VIEW				

HYDRAULIC RECOMMENDATIONS

1. BEGIN BRIDGE STATION 197+55 END BRIDGE STATION 212+55 SKEW ANGLE 17°
2. CLEARANCE PROVIDED: NAV: HORIZ. 98' VERT. 10.38' ABOVE EL. 0.42' DRIFT: HORIZ. N/A VERT. 5.3' ABOVE EL. 5.5'
3. MINIMUM CLEARANCE: NAV: HORIZ. 10' VERT. 10.2' ABOVE EL. 0.42' DRIFT: HORIZ. N/A VERT. 2.0' ABOVE EL. 5.5'
4. ABUTMENTS:

	BEGIN BRIDGE 197+55	END BRIDGE 212+55
RUBBLE GRADE:	BANK AND SHORE	BANK AND SHORE
SLOPE:	1V:2H	1V:2H
BURIED OR NON-BURIED HORIZ. TOE EMBANKMENT TO TOE HORIZ. DISTANCE:	BURIED 15'	BURIED 15'
LIMIT OF PROTECTION:	25' LT. AND RT.	25' LT. AND RT.

5. DECK DRAINAGE: SPREAD IS CONTAINED IN SHOULDER. RUNOFF CAPTURED BY INLETS AT EACH END OF THE BRIDGE.

REMARKS: (1) Simulated riverine velocities and flows are reported. Design stages are taken from FEMA flood profiles which account for downstream tidal surge influence.

No.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: ERG
DRAWN BY: CIF
CHECKED BY: RJD

ROGER J. DAWSON, P.E.
P.E. NO. 68251
AECOM TECHNICAL SERVICES, INC.
7650 WEST COURTNEY CAMPBELL CAUSEWAY
TAMPA, FL 33607-1462
(813) 286-1711
CERTIFICATE OF AUTHORIZATION: 8115

DATE: FEBRUARY 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: ROGER J. DAWSON, P.E.
FL. LICENSE NO.: 68251

BRIDGE HYDRAULIC RECOMMENDATION SHEET

SHEET NO.: B-13

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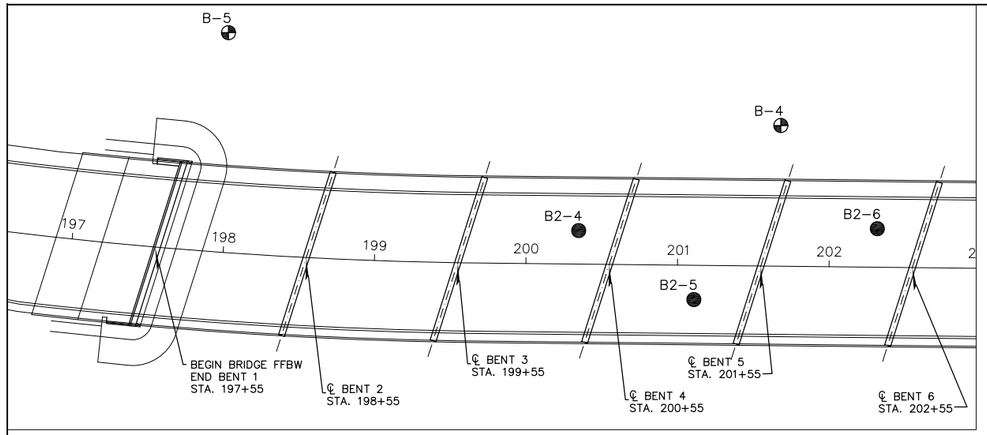
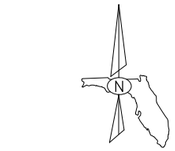




GRAPHIC SCALE IN FEET

50 0 50 100

SCALE 1" = 50'

NOTES:

1. PLAN VIEW IS FOR SHOWING APPROXIMATE BORING LOCATIONS ONLY AND MAY NOT BE INDICATIVE OF FINAL PLANS.
2. LABORATORY TEST RESULTS HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.
3. THE FOLLOWING APPLY TO ALL BORINGS:

DRILLER:	UNIVERSAL
HAMMER:	SAFETY
RIG:	CME 45

LEGEND

- SAND
- SILT
- CLAY
- SAND WITH SOME SILT
- CLAY WITH SOME SAND
- CLAYEY SAND
- SAND WITH SOME CLAY
- SANDY SILT
- SANDY CLAY
- SILTY SAND
- SILTY CLAY
- HARD LIMESTONE
- CEMENTED SILT

GRANULAR MATERIALS–RELATIVE DENSITY	SPT N–VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	**SPT N–VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2
SOFT	2 to 4
FIRM	4 to 8
STIFF	8 to 15
VERY STIFF	16 to 30
HARD	GREATER THAN 30

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND/OR LABORATORY TESTING.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
WH	FELL UNDER WEIGHT OF ROD AND HAMMER
WR	FELL UNDER WEIGHT OF ROD
–200	PERCENT PASSING #200 SIEVE
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
WC	WATER CONTENT (%)
NGVD 88	NATIONAL GEODETIC VERTICAL DATUM OF 1988

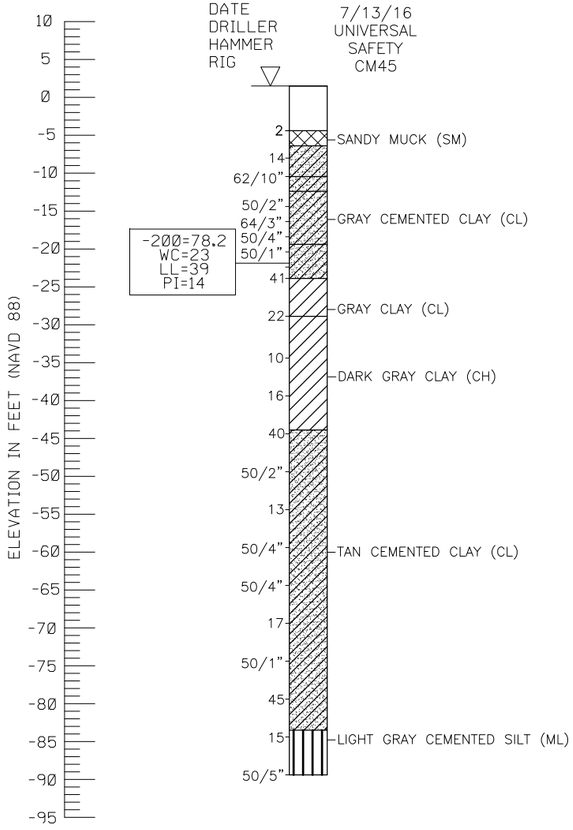
APPROXIMATE SPT BORING LOCATION

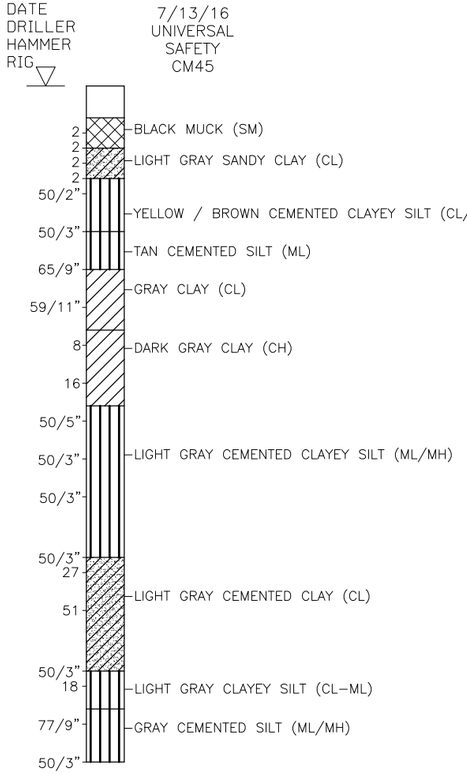
GROUNDWATER TABLE

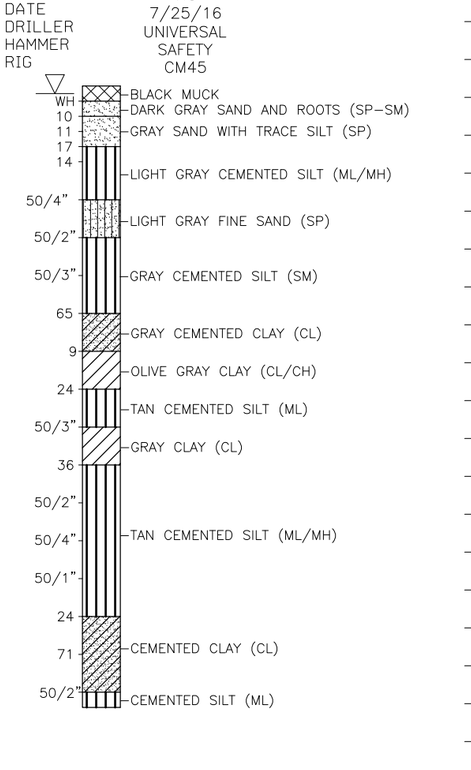
NR NO RECOVERY

CASING

B/L BASELINE







ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE (pH<5.0)
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE
(WATER SAMPLE FROM BRADEN RIVER)

CHLORIDE	48.7 - 50.2 PPM
SULFATE	45.3 - 56.0 PPM
RESISTIVITY	2500 OHM-CM
pH	7.4 - 7.6

LAND

CHLORIDE	11.8 - 3.64 PPM
SULFATE	1717 - 3.49 PPM
RESISTIVITY	20,800 - 750 OHM-CM
pH	8.31 - 4.72

BRIDGE FOUNDATION BORINGS

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: KEITH GIANG
DRAWN BY: IRA ZICHLIN
CHECKED BY: KEITH GIANG

AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607–1462
C.A. No. 8115

DATE: FEBRUARY 2018
PROJECT NO.: 6086960

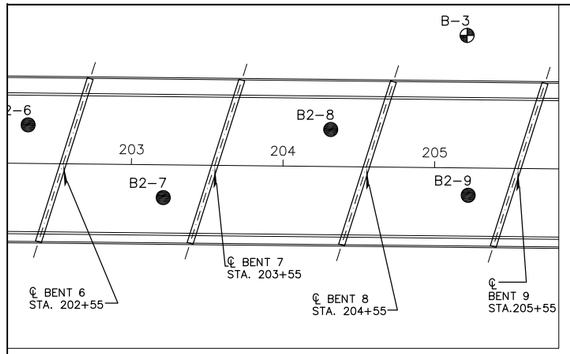
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

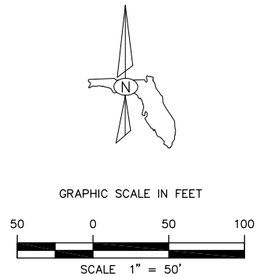
DESIGN ENGINEER: KEITH Q. GIANG, PE
FL. LICENSE NO.: 49510

SHEET TITLE: REPORT OF SPT BORINGS (1 OF 7)
PROJECT NAME: 44th AVENUE BRIDGE OVER BRADEN RIVER

SHEET NO.: B–14

FILE NAME: S:\Projects_GeoGovDocs\Manatee County\44th Ave Over Braden River\9 – PROJECT DRAWINGS_44TH AVENUE BRIDGE BORINGS 14–18.dwg LAYOUT NAME: 14 PLOTTED: Friday, February 16, 2018 – 2:58pm USER: ira.zichlin





NOTES:

1. PLAN VIEW IS FOR SHOWING APPROXIMATE BORING LOCATIONS ONLY AND MAY NOT BE INDICATIVE OF FINAL PLANS.
2. LABORATORY TEST RESULTS HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.
3. THE FOLLOWING APPLY TO ALL BORINGS:

DRILLER:	UNIVERSAL
HAMMER:	SAFETY
RIG:	CME 45

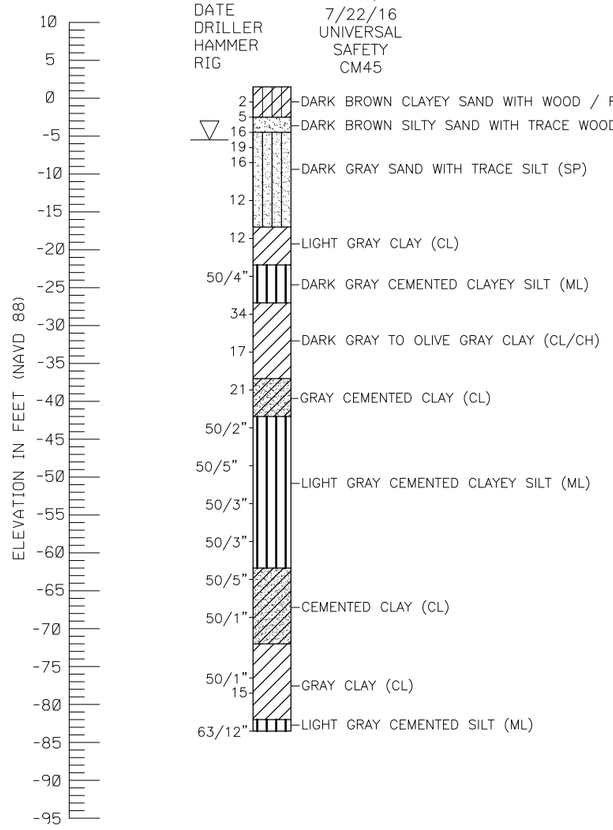
LEGEND

- SAND
- SILT
- CLAY
- SAND WITH SOME SILT
- CLAY WITH SOME SAND
- CLAYEY SAND
- SAND WITH SOME CLAY
- SANDY SILT
- SANDY CLAY
- SILTY SAND
- SILTY CLAY
- HARD LIMESTONE
- CEMENTED SILT

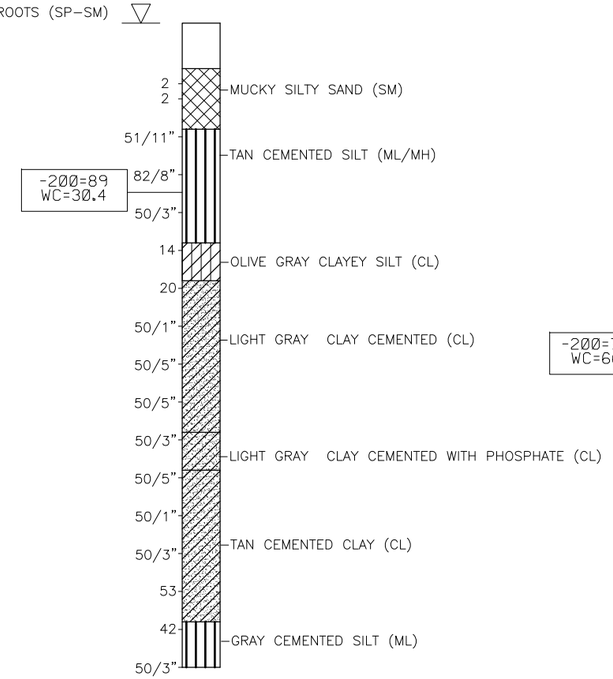
GRANULAR MATERIALS–RELATIVE DENSITY	SPT N–VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	**SPT N–VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2
SOFT	2 to 4
FIRM	4 to 8
STIFF	8 to 15
VERY STIFF	16 to 30
HARD	GREATER THAN 30

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND/OR LABORATORY TESTING.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
WH	FELL UNDER WEIGHT OF ROD AND HAMMER
WR	FELL UNDER WEIGHT OF ROD
–200	PERCENT PASSING #200 SIEVE
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
WC	WATER CONTENT (%)
NGVD 88	NATIONAL GEODETIC VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER TABLE
NR	NO RECOVERY
	CASING
B/L	BASELINE

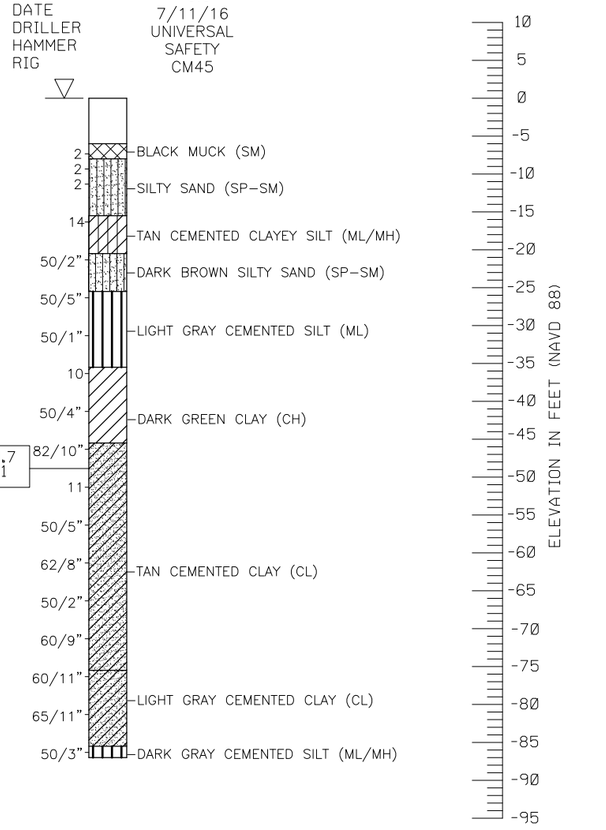
BOR # B2-7
STATION 203+10 ℄ 44TH AVE
OFFSET 30.0'RT
ELEV. +1.5
DATE 7/22/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45



BOR # B2-8
STATION 204+30 ℄ 44TH AVE
OFFSET 30.0'LT
ELEV. -5.0
DATE 7/12/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45



BOR # B2-9
STATION 205+10 ℄ 44TH AVE
OFFSET 30.0'RT
ELEV. -6.0
DATE 7/11/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45



ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE (pH<5.0)
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE
(WATER SAMPLE FROM BRADEN RIVER)

CHLORIDE	48.7 - 50.2 PPM
SULFATE	45.3 - 56.0 PPM
RESISTIVITY	2500 OHM-CM
pH	7.4 - 7.6

LAND

CHLORIDE	11.8 - 3.64 PPM
SULFATE	1717 - 3.49 PPM
RESISTIVITY	20,800 - 750 OHM-CM
pH	8.31 - 4.72

BRIDGE FOUNDATION BORINGS

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: KEITH GIANG
DRAWN BY: IRA ZICHLIN
CHECKED BY: KEITH GIANG

AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607–1462
C.A. No. 8115

DATE: FEBRUARY 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

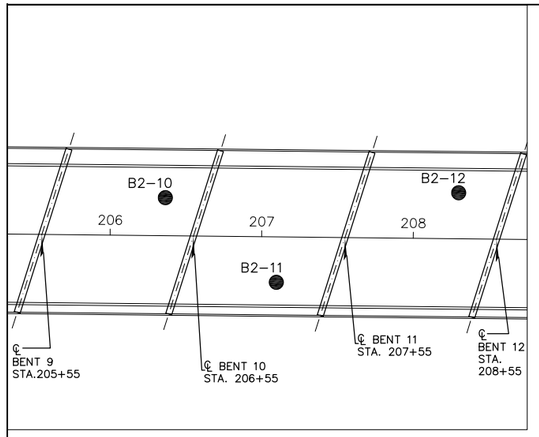
DESIGN ENGINEER: KEITH Q. GIANG, PE
FL. LICENSE NO.: 49510

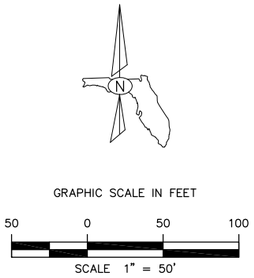
SHEET TITLE: REPORT OF SPT BORINGS (2 OF 7)
PROJECT NAME: 44th AVENUE BRIDGE OVER BRADEN RIVER

SHEET NO.: B–15

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15–23.004, F.A.C

FILE NAME: S:\Projects_GeoGovDocs\Manatee County\44th Ave Over Braden River\9 – PROJECT DRAWINGS_44TH AVENUE BRIDGE BORINGS 14–18.dwg LAYOUT NAME: 15 PLOTTED: Friday, February 16, 2018 – 2:58pm USER: ira.zichlin





NOTES:

1. PLAN VIEW IS FOR SHOWING APPROXIMATE BORING LOCATIONS ONLY AND MAY NOT BE INDICATIVE OF FINAL PLANS.
2. LABORATORY TEST RESULTS HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.
3. THE FOLLOWING APPLY TO ALL BORINGS:

   DRILLER: UNIVERSAL
   HAMMER: SAFETY
   RIG: CME 45

LEGEND

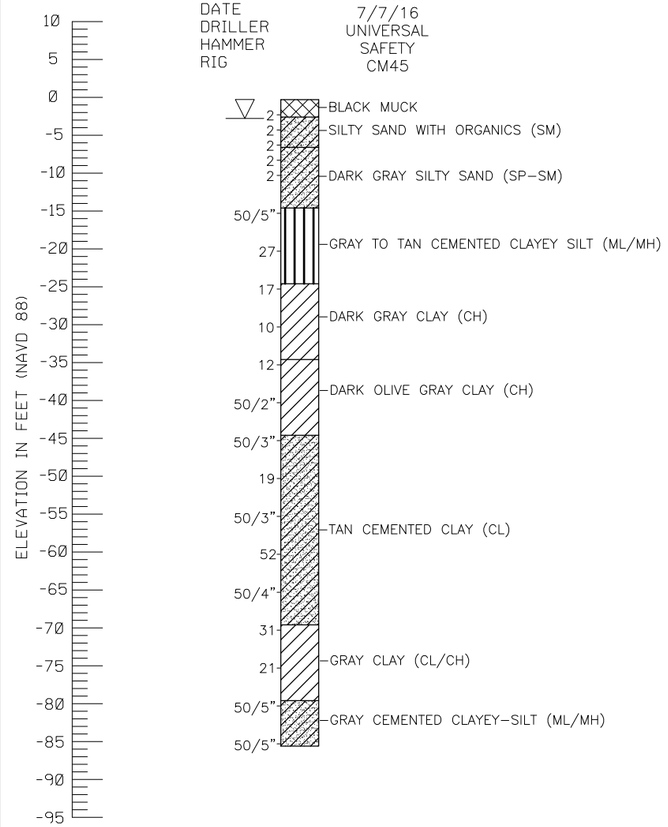
- SAND
- SILT
- CLAY
- SAND WITH SOME SILT
- CLAY WITH SOME SAND
- CLAYEY SAND
- SAND WITH SOME CLAY
- SANDY SILT
- SANDY CLAY
- SILTY SAND
- SILTY CLAY
- HARD LIMESTONE
- CEMENTED SILT

GRANULAR MATERIALS– RELATIVE DENSITY	SPT N–VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	**SPT N–VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2
SOFT	2 to 4
FIRM	4 to 8
STIFF	8 to 15
VERY STIFF	16 to 30
HARD	GREATER THAN 30

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND/OR LABORATORY TESTING.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
WH	FELL UNDER WEIGHT OF ROD AND HAMMER
WR	FELL UNDER WEIGHT OF ROD
–200	PERCENT PASSING #200 SIEVE
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
WC	WATER CONTENT (%)
NGVD 88	NATIONAL GEODETIC VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER TABLE
NR	NO RECOVERY
	CASING
B/L	BASELINE

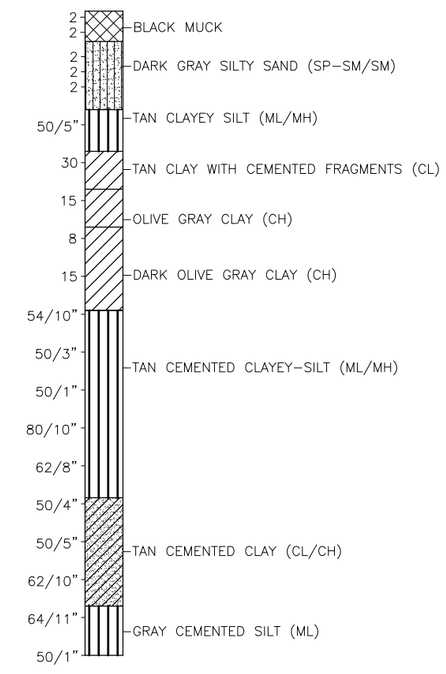
B2–10

BOR # B2–10
STATION 206+30 ℄ 44TH AVE
OFFSET 30.0'LT
ELEV. –0.3
DATE 7/7/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45



B2–11

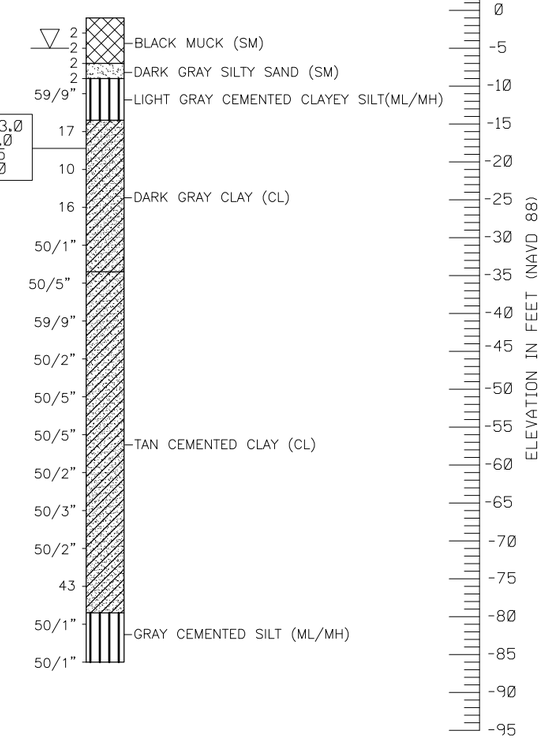
BOR # B2–11
STATION 207+10 ℄ 44TH AVE
OFFSET 30.0'RT
ELEV. –0.5
DATE 7/6/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45



NOTE:
WATER LEVEL WAS NOT RECORDED FOR THIS BORING

B2–12

BOR # B2–12
STATION 208+30 ℄ 44TH AVE
OFFSET 30.0'LT
ELEV. –1.0
DATE 7/5/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45



-200=63.0
WC=71.0
LL=35
PI=9.0

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE (pH<5.0)
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE
(WATER SAMPLE FROM BRADEN RIVER)

CHLORIDE	48.7 - 50.2 PPM
SULFATE	45.3 - 56.0 PPM
RESISTIVITY	2500 OHM-CM
pH	7.4 - 7.6

LAND

CHLORIDE	11.8 - 3.64 PPM
SULFATE	1717 - 3.49 PPM
RESISTIVITY	20,800 - 750 OHM-CM
pH	8.31 - 4.72

BRIDGE FOUNDATION BORINGS

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: KEITH GIANG
DRAWN BY: IRA ZICHLIN
CHECKED BY: KEITH GIANG

AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607–1462
C.A. No. 8115

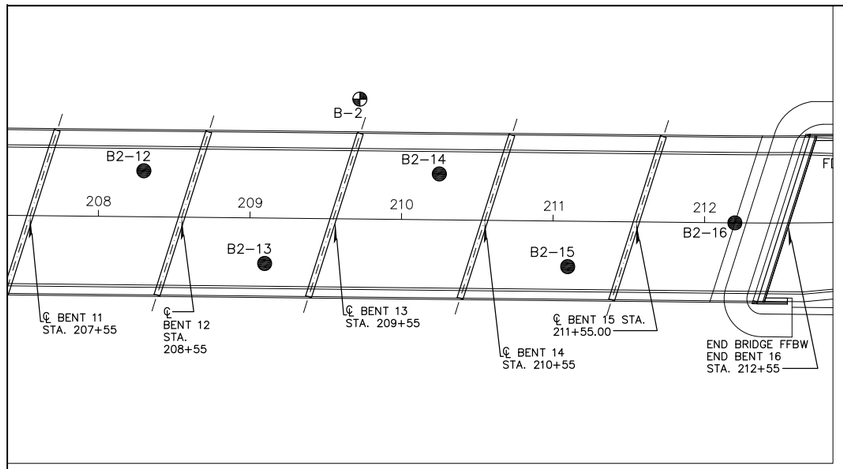
DATE: FEBRUARY 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: KEITH Q. GIANG, PE
FL. LICENSE NO.: 49510

SHEET TITLE: REPORT OF SPT BORINGS (3 OF 7)
PROJECT NAME: 44th AVENUE BRIDGE OVER BRADEN RIVER

SHEET NO.: B–16



GRAPHIC SCALE IN FEET

50 0 50 100

SCALE 1" = 50'

NOTES:

1. PLAN VIEW IS FOR SHOWING APPROXIMATE BORING LOCATIONS ONLY AND MAY NOT BE INDICATIVE OF FINAL PLANS.
2. LABORATORY TEST RESULTS HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.
3. THE FOLLOWING APPLY TO ALL BORINGS:

   DRILLER: UNIVERSAL
   HAMMER: SAFETY
   RIG: CME 45

LEGEND

- SAND
- SILT
- CLAY
- SAND WITH SOME SILT
- CLAY WITH SOME SAND
- CLAYEY SAND
- SAND WITH SOME CLAY
- SANDY SILT
- SANDY CLAY
- SILTY SAND
- SILTY CLAY
- HARD LIMESTONE
- CEMENTED SILT

GRANULAR MATERIALS–RELATIVE DENSITY	SPT N–VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	**SPT N–VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2
SOFT	2 to 4
FIRM	4 to 8
STIFF	8 to 15
VERY STIFF	16 to 30
HARD	GREATER THAN 30

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND/OR LABORATORY TESTING.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
WH	FELL UNDER WEIGHT OF ROD AND HAMMER
WR	FELL UNDER WEIGHT OF ROD
–200	PERCENT PASSING #200 SIEVE
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
WC	WATER CONTENT (%)
NGVD 88	NATIONAL GEODETIC VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER TABLE
NR	NO RECOVERY
	CASING
B/L	BASELINE
100% ▶	LOSS OF DRILLING FLUID (%)

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE (pH<5.0)
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE
(WATER SAMPLE FROM BRADEN RIVER)

CHLORIDE	48.7 - 50.2 PPM
SULFATE	45.3 - 56.0 PPM
RESISTIVITY	2500 OHM-CM
pH	7.4 - 7.6

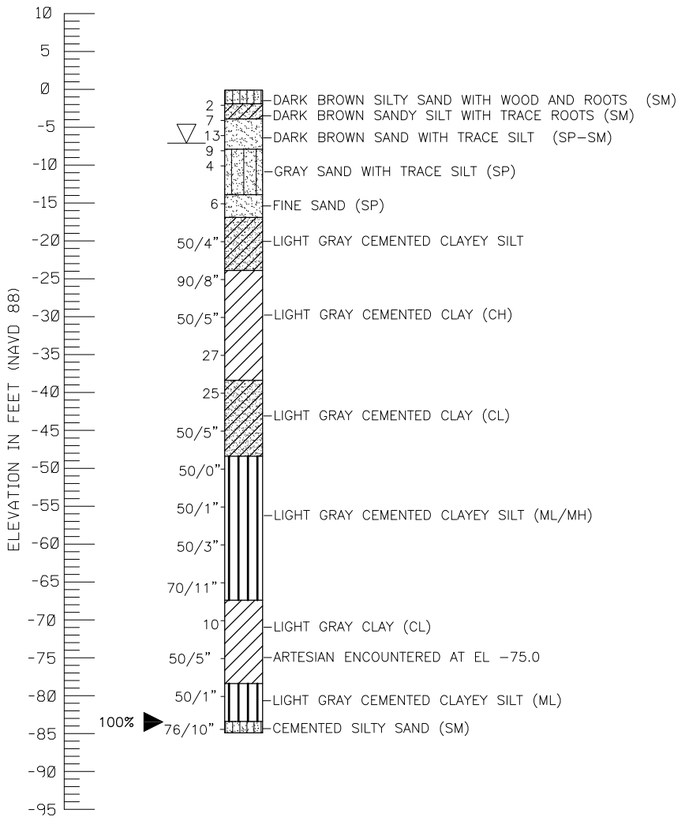
LAND

CHLORIDE	11.8 - 3.64 PPM
SULFATE	1717 - 3.49 PPM
RESISTIVITY	20,800 - 750 OHM-CM
pH	8.31 - 4.72

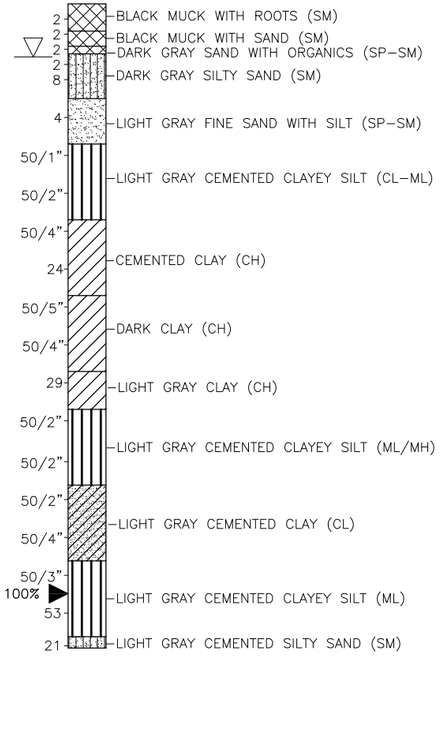
BRIDGE FOUNDATION BORINGS

Bridge No. 134130

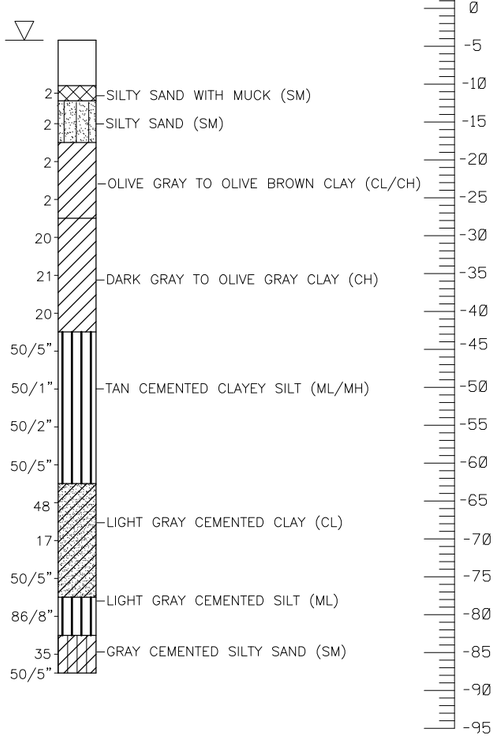
BOR # B2–13
STATION 209+10 ℄ 44TH AVE
OFFSET 30.0'RT
ELEV. 0.1
DATE 7/22/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45

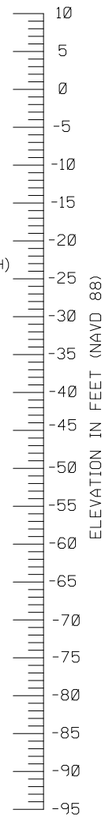


BOR # B2–14
STATION 210+30 ℄ 44TH AVE
OFFSET 30.0'LT
ELEV. 0.2
DATE 7/19/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45



BOR # B2–15
STATION 211+10 ℄ 44TH AVE
OFFSET 30.0'RT
ELEV. -4.2
DATE 7/8/16
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CM45





No.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: KEITH GIANG
DRAWN BY: IRA ZICHLIN
CHECKED BY: KEITH GIANG

AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607–1462
C.A. No. 8115

DATE: FEBRUARY 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

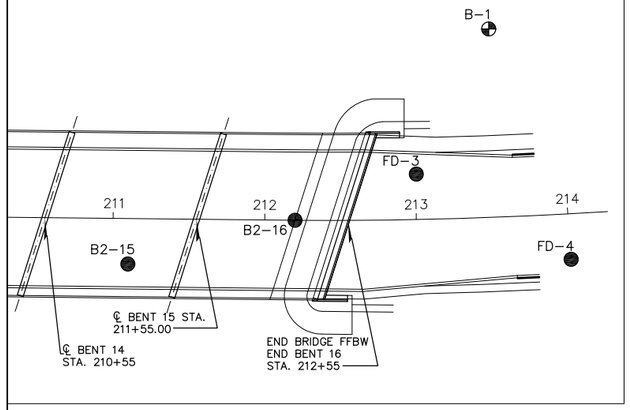
DESIGN ENGINEER: KEITH Q. GIANG, PE
FL. LICENSE NO.: 49510

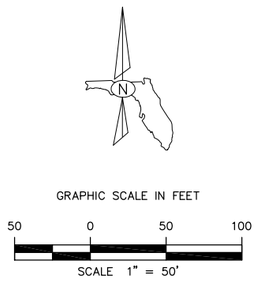
SHEET TITLE: REPORT OF SPT BORINGS (4 OF 7)
PROJECT NAME: 44th AVENUE BRIDGE OVER BRADEN RIVER

SHEET NO.: B–17

FILE NAME: S:\Projects_GeoGovDocs\Manatee County\44th Ave Over Braden River\9 – PROJECT DRAWINGS_44TH AVENUE BRIDGE BORINGS 14–18.dwg LAYOUT NAME: 17 PLOTTED: Friday, February 16, 2018 – 2:59pm USER: ira.zichlin

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15–23.004,F.A.C





NOTES:

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2. LABORATORY TEST RESULTS HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.
3. THE FOLLOWING APPLY TO ALL BORINGS:

DRILLER:	UNIVERSAL
HAMMER:	SAFETY
RIG:	CME 45

LEGEND

- SAND
- SILT
- CLAY
- SAND WITH SOME SILT
- CLAY WITH SOME SAND
- CLAYEY SAND
- SAND WITH SOME CLAY
- SANDY SILT
- SANDY CLAY
- SILTY SAND
- SILTY CLAY
- HARD LIMESTONE
- CEMENTED SILT

GRANULAR MATERIALS– RELATIVE DENSITY	SPT N–VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	**SPT N–VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2
SOFT	2 to 4
FIRM	4 to 8
STIFF	8 to 15
VERY STIFF	16 to 30
HARD	GREATER THAN 30

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND/OR LABORATORY TESTING.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
WH	FELL UNDER WEIGHT OF ROD AND HAMMER
WR	FELL UNDER WEIGHT OF ROD
–200	PERCENT PASSING #200 SIEVE
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
WC	WATER CONTENT (%)
NGVD 88	NATIONAL GEODETIC VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER TABLE
NR	NO RECOVERY
	CASING
B/L	BASELINE

ENVIRONMENTAL CLASSIFICATION

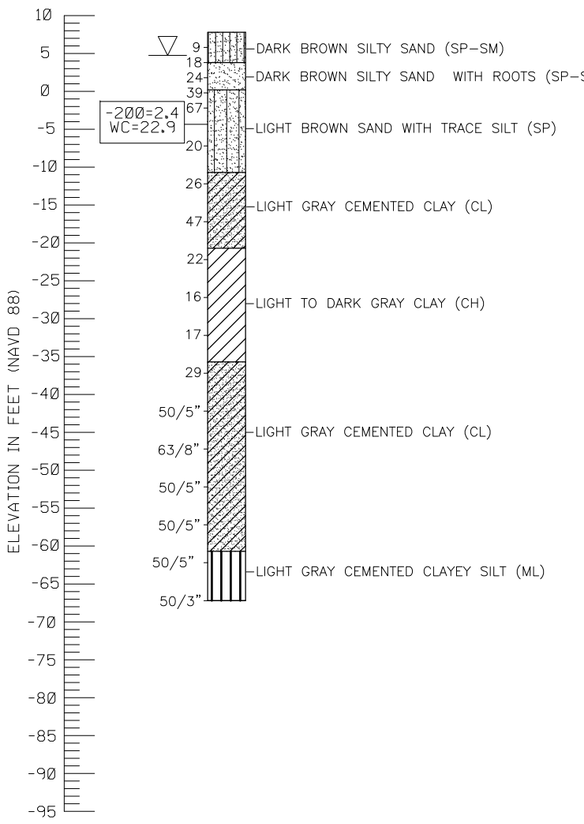
SUBSTRUCTURE: EXTREMELY AGGRESSIVE (pH<5.0)
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE
(WATER SAMPLE FROM BRADEN RIVER)

CHLORIDE	48.7 - 50.2 PPM
SULFATE	45.3 - 56.0 PPM
RESISTIVITY	2500 OHM-CM
pH	7.4 - 7.6

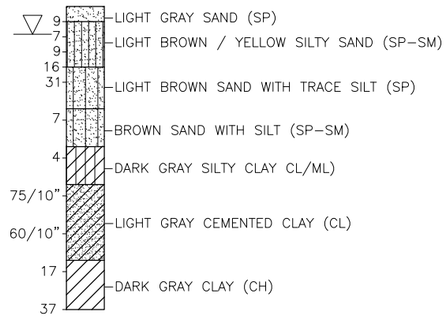
LAND

CHLORIDE	11.8 - 3.64 PPM
SULFATE	1717 - 3.49 PPM
RESISTIVITY	20,800 - 750 OHM-CM
pH	8.31 - 4.72

BOR #	B2–16
STATION	212+20 ℄ 44TH AVE
OFFSET	BL
ELEV.	7.8
DATE	7/6/16
DRILLER	UNIVERSAL
HAMMER	SAFETY
RIG	CM45



BOR #	FD–3
STATION	213+00 ℄ 44TH AVE
OFFSET	30.0'LT
ELEV.	10.0
DATE	7/11/16
DRILLER	UNIVERSAL
HAMMER	SAFETY
RIG	CM45



BOR #	FD–4
STATION	214+00 ℄ 44TH AVE
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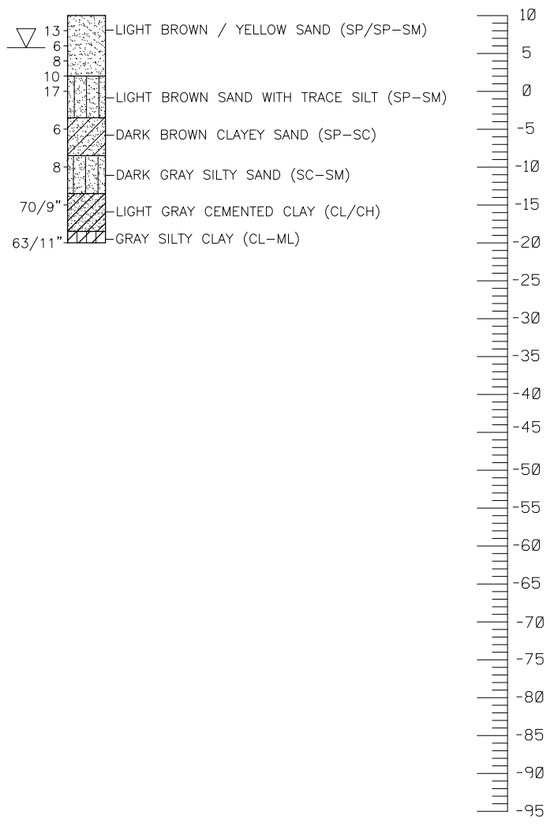
ELEV.	10.0
DATE	7/11/16
DRILLER	UNIVERSAL
HAMMER	SAFETY
RIG	CM45



BRIDGE FOUNDATION BORINGS

Bridge No. 134130

				SCALE: AS NOTED	AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607–1462 C.A. No. 8115	DATE: FEBRUARY 2018	DESIGN ENGINEER: KEITH Q. GIANG, PE
				DESIGNED BY: KEITH GIANG		PROJECT NO.: 6086960	FL. LICENSE NO.: 49510
				DRAWN BY: IRA ZICHLIN			
				CHECKED BY: KEITH GIANG			
No.	REVISIONS	DATE	BY				

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

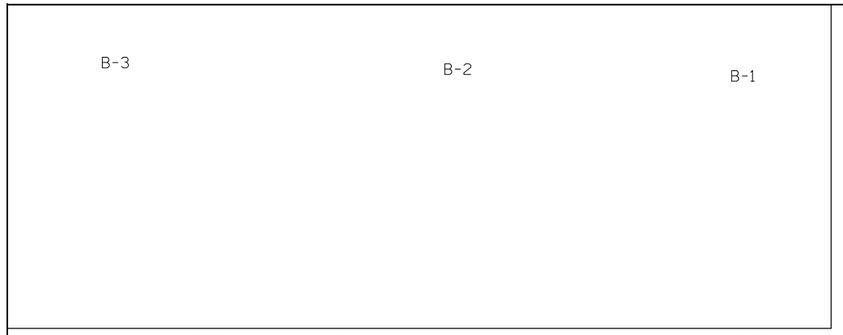
SHEET TITLE: REPORT OF SPT BORINGS (5 OF 7)

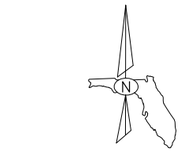
SHEET NO.: B–18

PROJECT NAME: 44th AVENUE BRIDGE OVER BRADEN RIVER

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15–23.004, F.A.C

FILE NAME: S:\Projects_GeoGovDocs\Manatee County\44th Ave Over Braden River\9 – PROJECT DRAWINGS_44TH AVENUE BRIDGE BORINGS 14–18.dwg LAYOUT NAME: 18 PLOTTED: Friday, February 16, 2018 – 2:59pm USER: ira.zichlin





GRAPHIC SCALE IN FEET

100' 0 100' 200'

SCALE 1" = 100'

NOTES:

1. PLAN VIEW IS FOR SHOWING APPROXIMATE BORING LOCATIONS ONLY AND MAY NOT BE INDICATIVE OF FINAL PLANS.
2. LABORATORY TEST RESULTS HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.
3. THE FOLLOWING APPLY TO ALL BORINGS:

DRILLER:	UNIVERSAL
HAMMER:	SAFETY
RIG:	CME 45

LEGEND

- SAND
- SILT
- CLAY
- SAND WITH SOME SILT
- CLAY WITH SOME SAND
- CLAYEY SAND
- SAND WITH SOME CLAY
- SANDY SILT
- SANDY CLAY
- SILTY SAND
- SILTY CLAY
- HARD LIMESTONE
- CEMENTED SILT

GRANULAR MATERIALS—RELATIVE DENSITY	SPT N—VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	**SPT N—VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2
SOFT	2 to 4
FIRM	4 to 8
STIFF	8 to 15
VERY STIFF	16 to 30
HARD	GREATER THAN 30

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND/OR LABORATORY TESTING.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
WH	FELL UNDER WEIGHT OF ROD AND HAMMER
WR	FELL UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
WC	WATER CONTENT (%)
NGVD 88	NATIONAL GEODETIC VERTICAL DATUM OF 1988

APPROXIMATE SPT BORING LOCATION

GROUNDWATER TABLE

NR NO RECOVERY

CASING

B/L BASELINE

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE (pH<5.0)

SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE

(WATER SAMPLE FROM BRADEN RIVER)

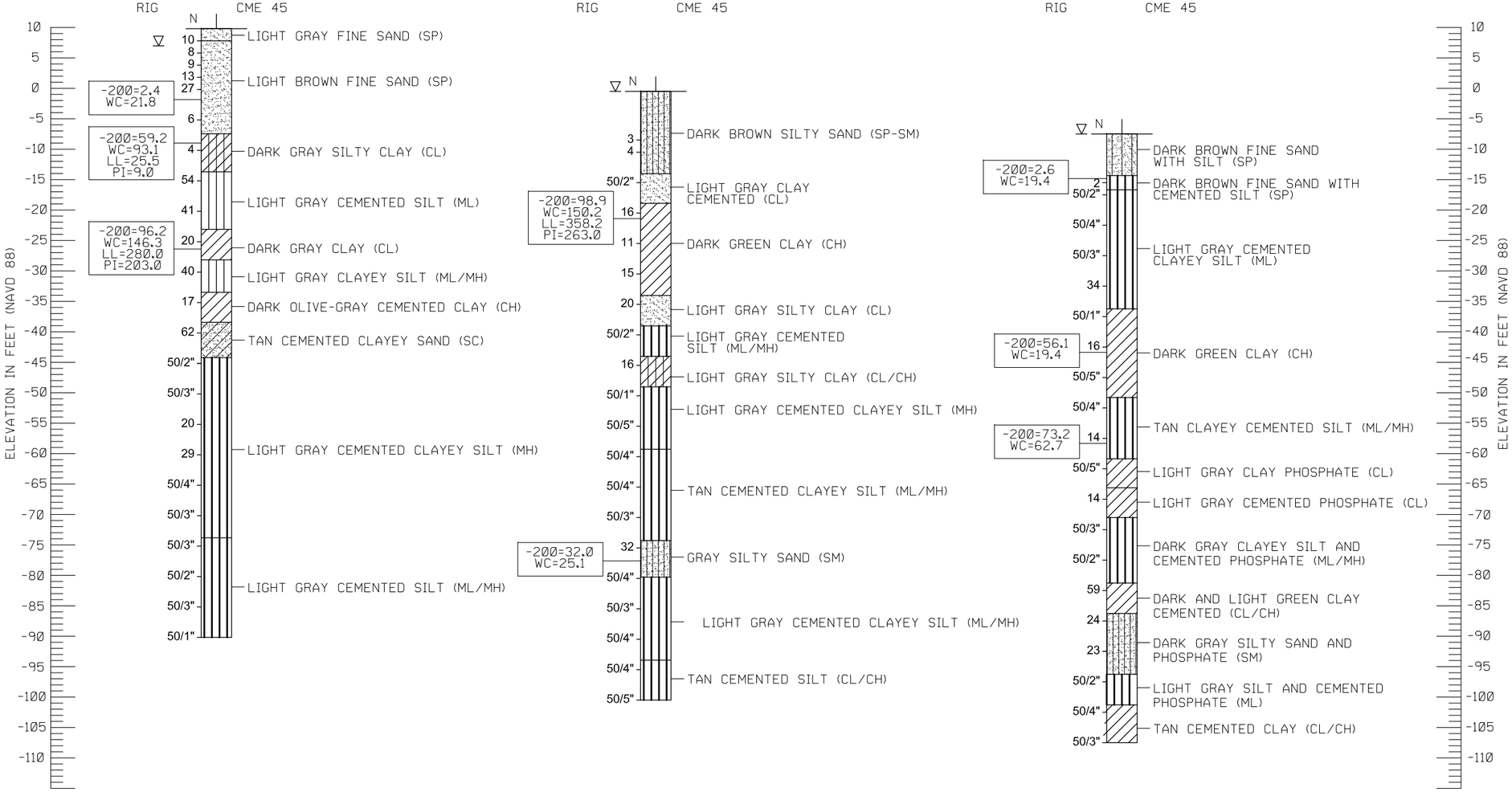
CHLORIDE	48.7 - 50.2 PPM
SULFATE	45.3 - 56.0 PPM
RESISTIVITY	2500 OHM-CM
pH	7.4 - 7.6

LAND

CHLORIDE	11.8 - 3.64 PPM
SULFATE	1717 - 3.49 PPM
RESISTIVITY	20,800 - 750 OHM-CM
pH	8.31 - 4.72

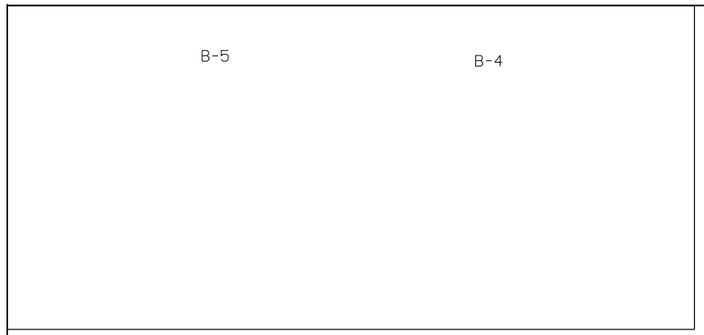
BRIDGE FOUNDATION BORINGS

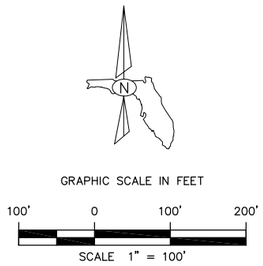
Bridge No. 134130



No.	REVISIONS	DATE	BY	SCALE: AS NOTED DESIGNED BY: KEITH GIANG DRAWN BY: IRA ZICHLIN CHECKED BY: KEITH GIANG	AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115	DATE: FEBRUARY 2018 PROJECT NO.: 6086960	PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER: KEITH Q. GIANG, PE FL. LICENSE NO.: 49510	SHEET TITLE: REPORT OF SPT BORINGS (6 OF 7) PROJECT NAME: 44th AVENUE BRIDGE OVER BRADEN RIVER	SHEET NO.: B-19

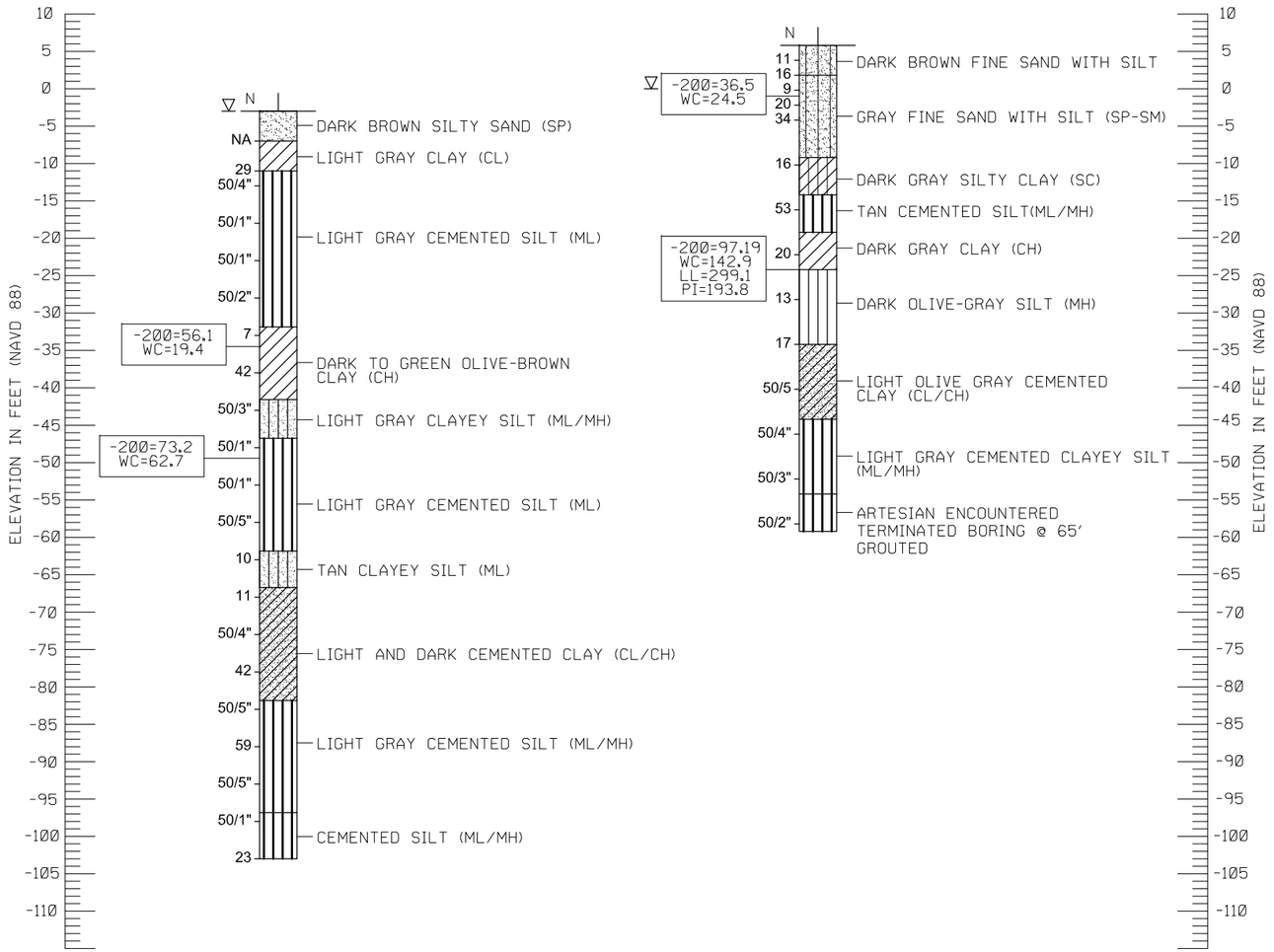
FILE NAME: S:\Projects_GeoGovDocs\Manatee County\44th Ave Over Braden River\9 - PROJECT DRAWINGS_44TH AVENUE BRIDGE BORINGS 19-20.dwg LAYOUT NAME: 19 PLOTTED: Friday, February 16, 2018 - 3:02pm USER: ira.zichlin





BOR # B-4
NORTHING 1137303.24
EASTING 495715.89
ELEV. -3.0
DATE 8/30/2015
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CME 45

BOR # B-5
NORTHING 1137314.51
EASTING 495351.48
ELEV. 5.8
DATE 9/1/2015
DRILLER UNIVERSAL
HAMMER SAFETY
RIG CME 45



NOTES:

1. PLAN VIEW IS FOR SHOWING APPROXIMATE BORING LOCATIONS ONLY AND MAY NOT BE INDICATIVE OF FINAL PLANS.
2. LABORATORY TEST RESULTS HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.
3. THE FOLLOWING APPLY TO ALL BORINGS:

   DRILLER: UNIVERSAL
   HAMMER: SAFETY
   RIG: CME 45

LEGEND

- SAND
- SILT
- CLAY
- SAND WITH SOME SILT
- CLAY WITH SOME SAND
- CLAYEY SAND
- SAND WITH SOME CLAY
- SANDY SILT
- SANDY CLAY
- SILTY SAND
- SILTY CLAY
- HARD LIMESTONE
- CEMENTED SILT

GRANULAR MATERIALS–RELATIVE DENSITY	SPT N–VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	**SPT N–VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2
SOFT	2 to 4
FIRM	4 to 8
STIFF	8 to 15
VERY STIFF	16 to 30
HARD	GREATER THAN 30

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND/OR LABORATORY TESTING.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
WH	FELL UNDER WEIGHT OF ROD AND HAMMER
WR	FELL UNDER WEIGHT OF ROD
–200	PERCENT PASSING #200 SIEVE
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
WC	WATER CONTENT (%)
NGVD 88	NATIONAL GEODETIC VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER TABLE
NR	NO RECOVERY
	CASING
B/L	BASELINE

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE (pH<5.0)
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE
(WATER SAMPLE FROM BRADEN RIVER)

CHLORIDE	48.7 - 50.2 PPM
SULFATE	45.3 - 56.0 PPM
RESISTIVITY	2500 OHM-CM
pH	7.4 - 7.6

LAND

CHLORIDE	11.8 - 3.64 PPM
SULFATE	1717 - 3.49 PPM
RESISTIVITY	20,800 - 750 OHM-CM
pH	8.31 - 4.72

BRIDGE FOUNDATION BORINGS

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: KEITH GIANG
DRAWN BY: IRA ZICHLIN
CHECKED BY: KEITH GIANG

AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607–1462
C.A. No. 8115

DATE: FEBRUARY 2018
PROJECT NO.: 6086960

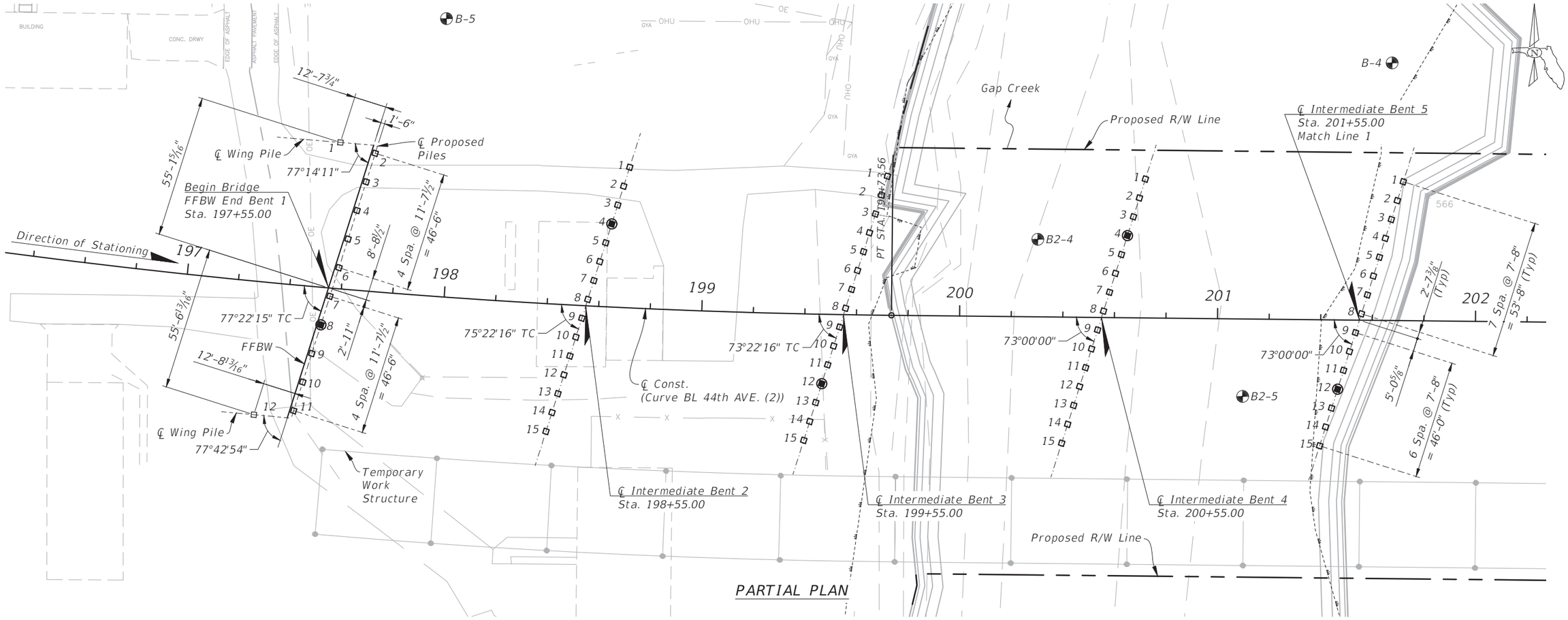
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: KEITH Q. GIANG, PE
FL. LICENSE NO.: 49510

SHEET TITLE: REPORT OF SPT BORINGS (7 OF 7)
PROJECT NAME: 44th AVENUE BRIDGE OVER BRADEN RIVER

SHEET NO.: B–20

FILE NAME: S:\Projects_GeoGovDocs\Manatee County\44th Ave Over Braden River\9 – PROJECT DRAWINGS_44TH AVENUE BRIDGE BORINGS 19–20.dwg LAYOUT NAME: 20 PLOTTED: Friday, February 16, 2018 – 3:02pm USER: ira.zichlin



PARTIAL PLAN

NOTES

1. For Pile Data Table, see Sheet B-25. For Pile Cut-Off Elevations, see Sheet B-27.
2. For Horizontal Curve Data Along ℄ Construction, See Sheets B-7 and B-10.
3. All piles are to be 24" square prestressed concrete in accordance with Design Standard Index Nos. 20600, 20601, 20602 and 20624. Piles shall be driven to the nominal bearing resistance (as shown in the Pile Data Table, Sheet B-25) in accordance with Section 455 of the Specifications.
4. Pile spacings are measured horizontally along FFBW at bottom of end bent caps and along ℄ Pile Bents at bottom of cap.
5. Drive test piles in the position of a permanent pile as shown or as directed by the Engineer. A dynamic load test shall be performed on all test piles with the Pile Driving Analyzer (PDA) or approved equal as per Section 455-5.13 of the Specifications.
6. During driving of production piles the County may periodically perform dynamic load tests to evaluate the Contractor's hammer driving system. Hammer driving system evaluation will consist of approximately 30 blows to a recently driven pile using a warmed up hammer. No additional payment will be made for dynamic test made to evaluate the Contractor's driving equipment per Section 455 of the Specifications.
7. End Bent piles shall be driven prior to the placement of Riprap at End Bents.
8. The Pile Data Table presented on Sheet B-25 has been extracted from the "Final Geotechnical Report", dated December 2016, prepared by AECOM Technical Services and signed and sealed by Project Geotechnical Engineer Keith Giang, P.E. (Florida Professional Engineer Number 49510).
9. LEGEND:
   - Denotes approximate location of SPT Boring. See Sheets B-14 thru B-20.
   - Denotes 24" Square Plumb Concrete Pile.
   - Denotes 24" Square Plumb Concrete Test Pile.
10. On north side of Intermediate Bents 3 and 15, power line guy wires are anchored in ground. The Contractor shall verify their locations before starting pile installation. In case of any conflict with piles, contact the Engineer for further course of action.
11. Utility Pipe Support Piles at Ends of Bridge not shown. For details and quantities, see Utility Work Plans.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

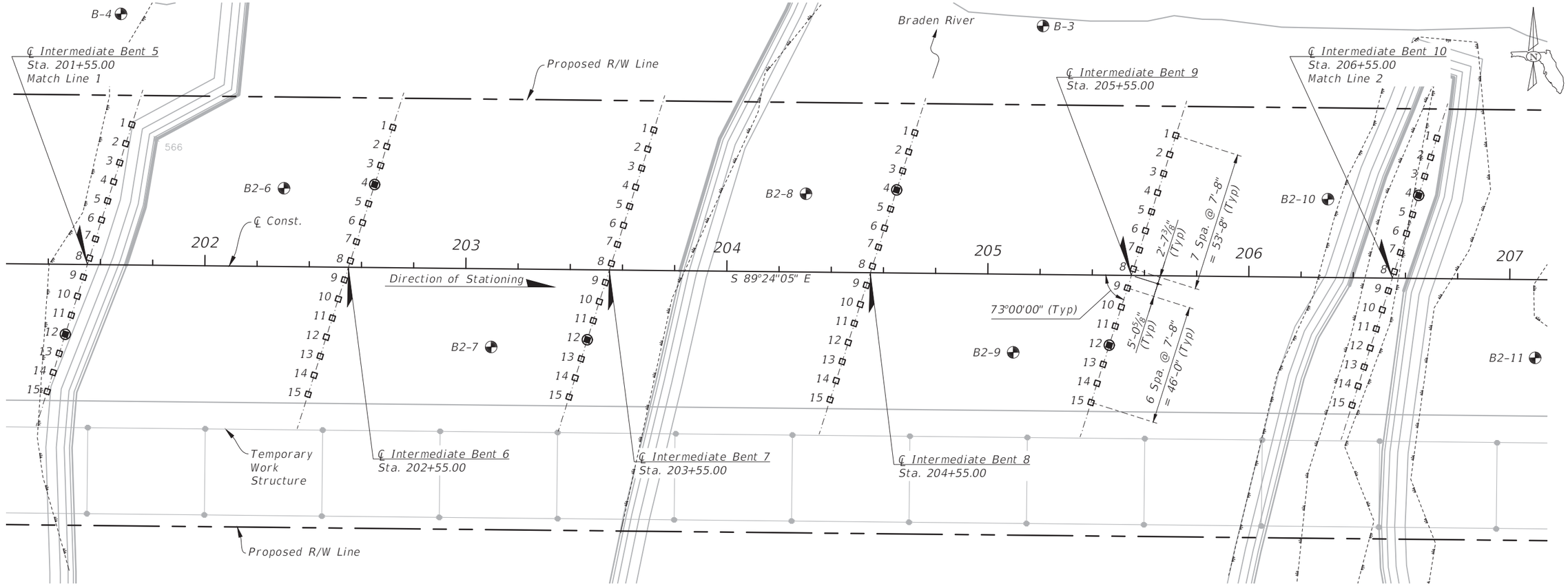
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FOUNDATION LAYOUT (1 OF 4)

SHEET NO.: B-21

Compton, Kathy 2/15/2018 2:11:06 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FoundLay01.dwg



PARTIAL PLAN

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FOUNDATION LAYOUT (2 OF 4)

SHEET NO.: B-22

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2/15/2018 2:13:30 PM
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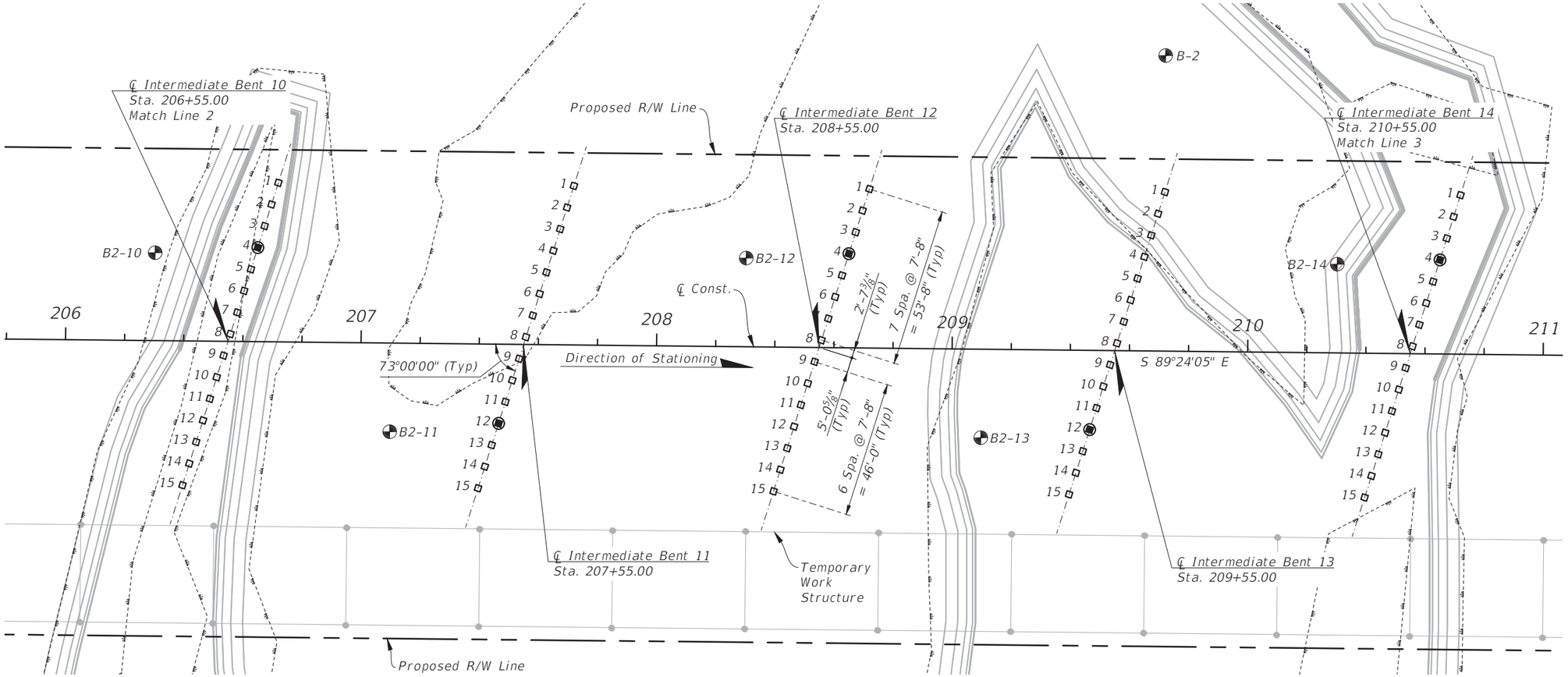


PARTIAL PLAN

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

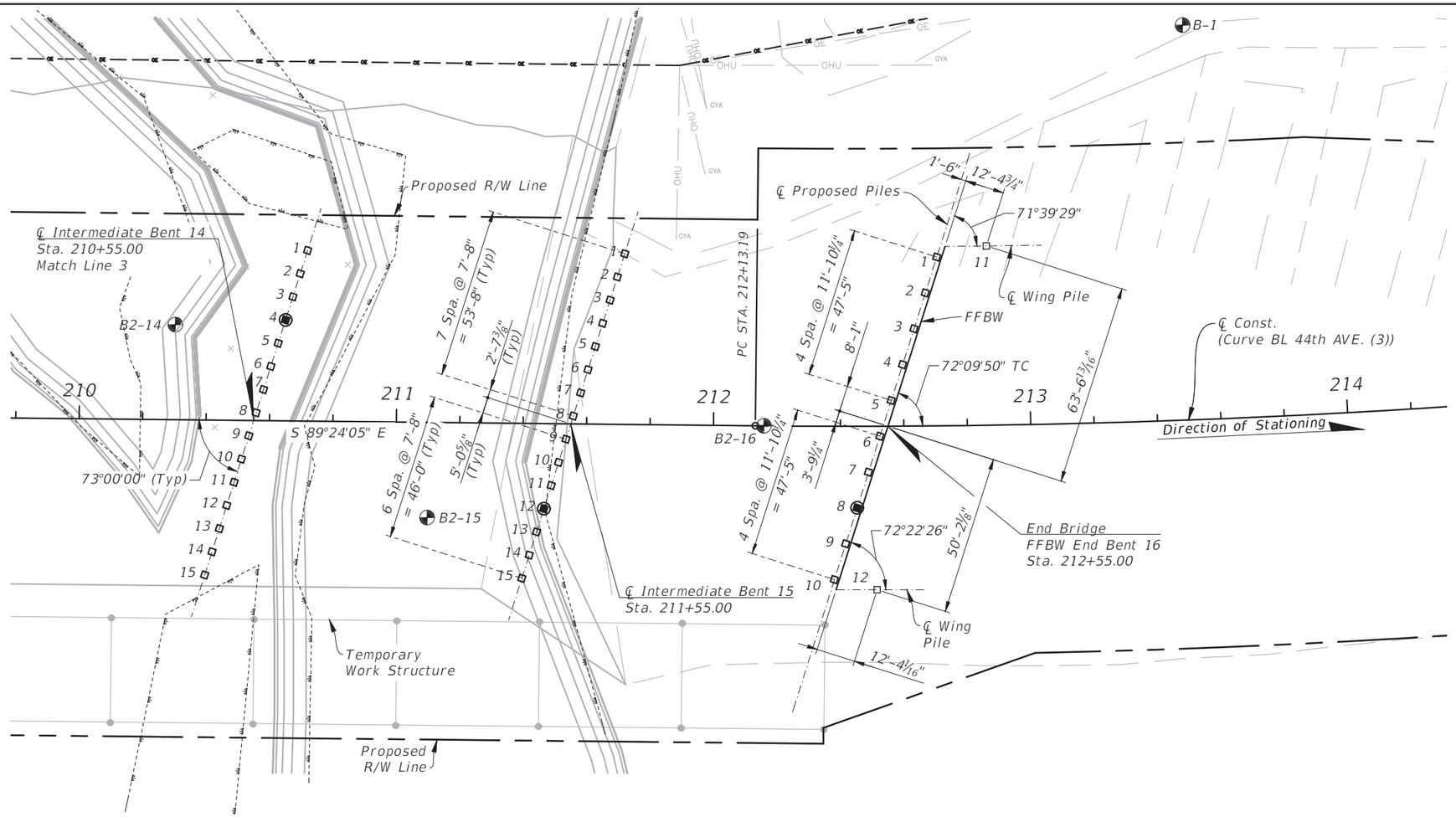
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FOUNDATION LAYOUT (3 OF 4)

SHEET NO.: B-23

Compton, Kathy 2/15/2018 2:33:41 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1FoundLay03.dwg



PARTIAL PLAN

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FOUNDATION LAYOUT (4 OF 4)

SHEET NO.: B-24

Compton, Kathy 2/15/2018 2:36:44 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1FoundLay04.dwg

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PILE DATA TABLE

INSTALLATION CRITERIA									DESIGN CRITERIA							
LOCATION	PILE 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 RESIST (TONS)	NET SCOUR RESIST. (TONS)	100 YEAR SCOUR ELEVATION (FT)	Ø COMPRESSION	Ø UPLIFT
END BENT 1	1 & 12	24	330	0	-36	N/A	N/A	-10	180	0	35	N/A	N/A	9.0	0.65	N/A
	2 THRU 11	24	400	0	-36	68	N/A	-10	225	0	35	N/A	N/A	9.0	0.65	N/A
INTER. BENT 2	1 THRU 15	24	330	0	-37	64	N/A	N/A	215	0	N/A	N/A	N/A	6.0	0.65	N/A
INTER. BENT 3	1 THRU 15	24	330	0	-36	78	N/A	N/A	215	0	N/A	0	0	-5.0	0.65	N/A
INTER. BENT 4	1 THRU 15	24	330	0	-45	84	N/A	-26	215	0	N/A	63.6	0	-15.4	0.65	N/A
INTER. BENT 5	1 THRU 15	24	330	0	-45	88	N/A	-30	215	0	N/A	0	0	-9.7	0.65	N/A
INTER. BENT 6	1 THRU 15	24	330	0	-44	83	N/A	-28	215	0	N/A	7.0	0	-5.0	0.65	N/A
INTER. BENT 7	1 THRU 15	24	330	0	-45	80	N/A	-28	215	0	N/A	9.6	0	-5.4	0.65	N/A
INTER. BENT 8	1 THRU 15	24	330	0	-45	79	N/A	-29	215	0	N/A	2.1	0	-12.3	0.65	N/A
INTER. BENT 9	1 THRU 15	24	330	0	-51	86	N/A	-35	215	0	N/A	0	0	-10.9	0.65	N/A
INTER. BENT 10	1 THRU 15	24	330	0	-37	74	N/A	N/A	215	0	N/A	0	0	-4.4	0.65	N/A
INTER. BENT 11	1 THRU 15	24	330	0	-42	71	N/A	N/A	215	0	N/A	0	0	-7.1	0.65	N/A
INTER. BENT 12	1 THRU 15	24	330	0	-38	65	N/A	N/A	215	0	N/A	0	0	-7.5	0.65	N/A
INTER. BENT 13	1 THRU 15	24	330	0	-44	79	N/A	-30	215	0	N/A	8.1	0	-5.4	0.65	N/A
INTER. BENT 14	1 THRU 15	24	330	0	-45	78	N/A	-30	215	0	N/A	0	0	-7.6	0.65	N/A
INTER. BENT 15	1 THRU 15	24	330	0	-45	72	N/A	N/A	215	0	N/A	0	0	-2.6	0.65	N/A
END BENT 16	1 THRU 10	24	400	0	-40	68	N/A	-10	225	0	35	N/A	N/A	6.8	0.65	N/A
	11 & 12	24	330	0	-40	N/A	N/A	-10	180	0	35	N/A	N/A	6.8	0.65	N/A

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

UPLIFT 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 uplift 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.

NOTE: For Pile Installation Notes see Sheet B-26.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

PILE INSTALLATION TABLE

SHEET NO.: B-25

Compton, Kathy 2/15/2018 2:36:58 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1PileData01.dwg

PILE INSTALLATION NOTES

1. Contractor to verify location of all utilities prior to any pile installation activities.

2. Minimum Tip Elevation is required for lateral stability for Intermediate Bents. Minimum Tip Elevation is set below the compressible soil layers at End Bents.

3. 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.

4. 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.

5. The pile hammer may be required to operate at reduced strokes or energy lower than normal in order to reduce the vibration level at the existing structures in the vicinity. The Contractor shall perform vibration monitoring of the existing structures as per Section 108 of the FDOT Standard Specifications and as directed by the County. The Contractor shall notify the County at least two weeks prior to commencing pile driving. Costs associated with any decrease in production rate for installing piles to meet the vibration limit requirement in accordance with Section 108 of the FDOT Standard Specifications shall be included in the bid price for Protection of Existing Structures, Pay Item No. 108-2.

6. The Contractor shall anticipate the use of specialized equipment and/or methods including, but not limited to, core barrels, rock augers, punches, drill bits, etc. to complete predrilling and/or preforming. If drilling equipment with a taper end is used to construct the preformed pile holes or predrilled pile holes, the maximum diameter of the drilling equipment shall not exceed the maximum size allowed for the 24-inch prestressed concrete pile indicated in the FDOT Specification Section 455.

7. The Contractor shall anticipate encountering variable soil conditions during the pile driving which will require pile splices at some of the pile locations.

8. Preloading/Surcharging and Settlement monitoring is required at both end bents 1 and 16. For details, see Roadway Plans.

9. It is preferred that End Bent 1 & 16 piles are installed after soil preloading/surcharging and settlement monitoring is complete.

10. If the End Bent piles are installed after soil preloading/surcharaging and settlement monitoring is complete, the piles shall be installed with predrilled holes through the completed embankment. No downdrag loss will be added to the pile driving resistance. In this case, Nominal Bearing Resistance of piles at these end bents will be reduced but shall not be less than 346 Tons. Nominal Bearing Resistance of piles at end bent wing walls shall not be less than 280 Tons. Minimum Tip Elevations shall be as shown in the Pile Data Table.

11. If piles are installed prior to preloading/surcharging, the exposed portion of the piles shall be wrapped in two layers of polyethylene sheeting in accordance with FDOT Specifications section 459 prior to fill placement.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

PILE INSTALLATION NOTES

SHEET NO.: B-26

Compton, Kathy 2/15/2018 2:36:59 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1PileData01.dwg

PILE CUTOFF ELEVATIONS

PILE NUMBER	END BENT 1	INTER. BENT 2	INTER. BENT 3	INTER. BENT 4	INTER. BENT 5	INTER. BENT 6	INTER. BENT 7	INTER. BENT 8	INTER. BENT 9	INTER. BENT 10	INTER. BENT 11	INTER. BENT 12	INTER. BENT 13	INTER. BENT 14	INTER. BENT 15	END BENT 16
1	10.9	11.9	13.0	13.7	14.1	14.1	13.9	13.2	12.5	11.7	10.9	10.2	9.4	8.7	8.0	7.4
2		12.1	13.1	13.8	14.2	14.3	14.0	13.4	12.7	11.9	11.1	10.4	9.6	8.8	8.2	
3		12.2	13.2	14.0	14.4	14.4	14.2	13.6	12.8	12.1	11.3	10.5	9.8	9.0	8.3	
4		12.4	13.4	14.1	14.5	14.6	14.3	13.8	13.0	12.2	11.5	10.7	9.9	9.2	8.5	
5		12.5	13.5	14.3	14.7	14.7	14.5	13.9	13.2	12.4	11.6	10.9	10.1	9.3	8.7	
6		12.6	13.6	14.4	14.8	14.9	14.7	14.1	13.3	12.6	11.8	11.0	10.3	9.5	8.8	
7		12.8	13.8	14.5	15.0	15.1	14.8	14.3	13.5	12.7	12.0	11.2	10.4	9.7	9.0	
8		12.9	13.9	14.7	15.1	15.2	15.0	14.4	13.7	12.9	12.1	11.4	10.6	9.9	9.2	
9		12.9	13.9	14.6	15.1	15.2	15.0	14.4	13.6	12.9	12.1	11.3	10.6	9.8	9.1	
10		12.7	13.7	14.4	14.9	15.0	14.8	14.3	13.5	12.7	12.0	11.2	10.4	9.7	9.0	
11		12.5	13.5	14.3	14.7	14.8	14.6	14.1	13.4	12.6	11.8	11.1	10.3	9.5	8.8	
12		12.3	13.3	14.1	14.5	14.7	14.5	14.0	13.2	12.4	11.7	10.9	10.1	9.4	8.7	
13	N/A	12.1	13.1	13.9	14.4	14.5	14.3	13.8	13.1	12.3	11.5	10.8	10.0	9.2	8.6	N/A
14	N/A	11.9	12.9	13.7	14.2	14.4	14.2	13.7	12.9	12.2	11.4	10.6	9.9	9.1	8.4	N/A
15	N/A	11.7	12.7	13.5	14.0	14.2	14.0	13.5	12.8	12.0	11.3	10.5	9.7	9.0	8.3	N/A

NOTES:

1. For Foundation Layout, see Sheets B-21 thru B-24.

2. For Pile Installation Table and Notes, see Sheets B-25 & B-26.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

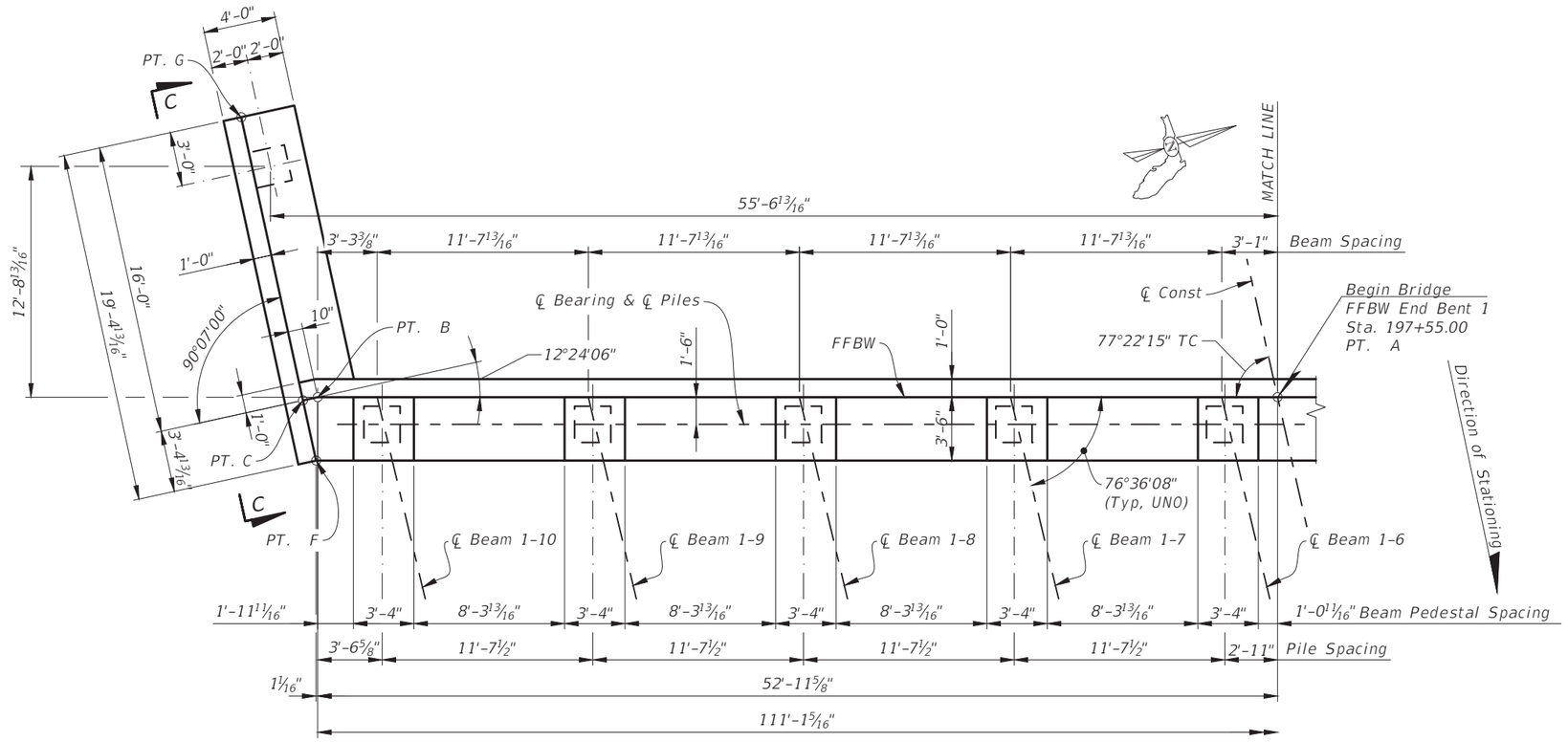
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

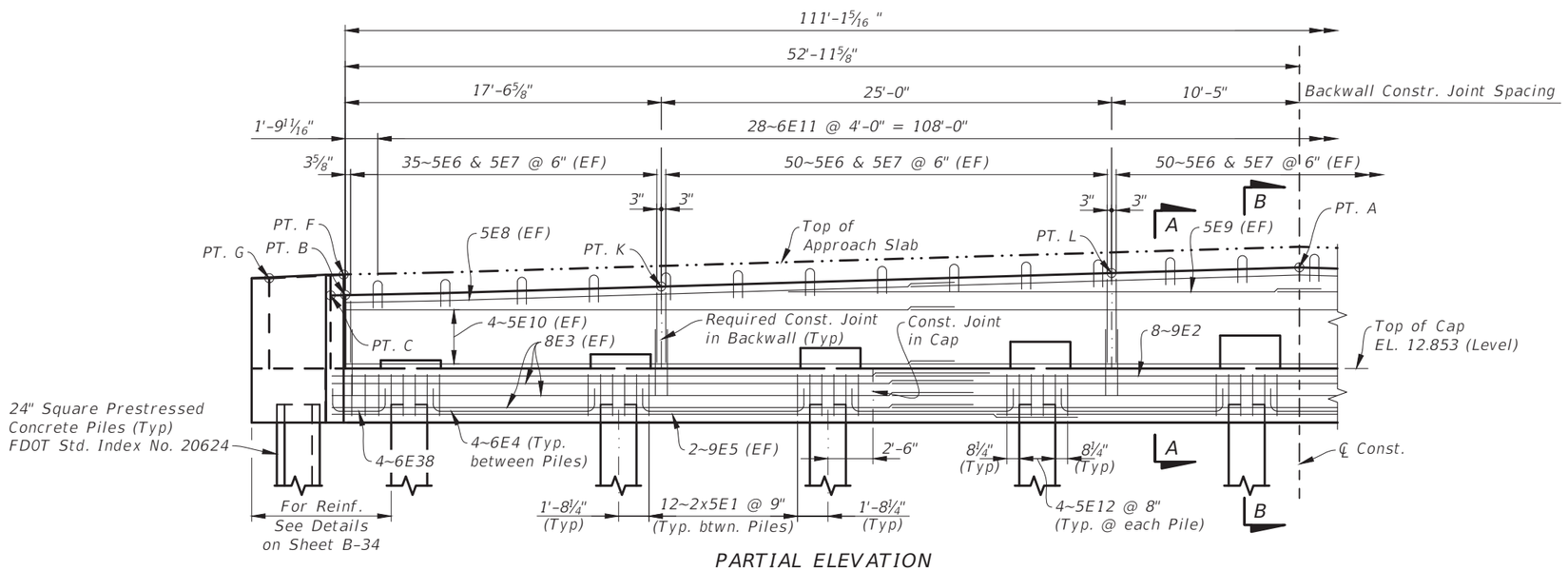
PILE CUT-OFF ELEVATIONS

SHEET NO.: B-27

Compton, Kathy 2/15/2018 2:37:05 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1PileData02.dwg



PARTIAL PLAN



PARTIAL ELEVATION

TABLE OF ELEVATIONS	
POINT	ELEVATION
A	18.348
B	16.942
C	16.922
F	18.097
G	17.906
K	17.408
L	18.072

NOTES

1. For Sections A-A & B-B, see Sheet B-32.
2. For View C-C, see Sheet B-34.
3. For Pedestal Details, see Sheet B-33.
4. Minimum Laps on Reinforcing shall be as follows:
   Bars 9E2: 6'-4"
   Bars 8E3 & 9E5: 4'-6"
   Bars 5E8 & 5E9: 2'-2"
   Bars 5E10: 2'-5"

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/8" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

END BENT 1 (1 OF 2)

SHEET NO.: B-28

Compton, Kathy 2/15/2018 2:37:38 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1EndBent01a.dwg

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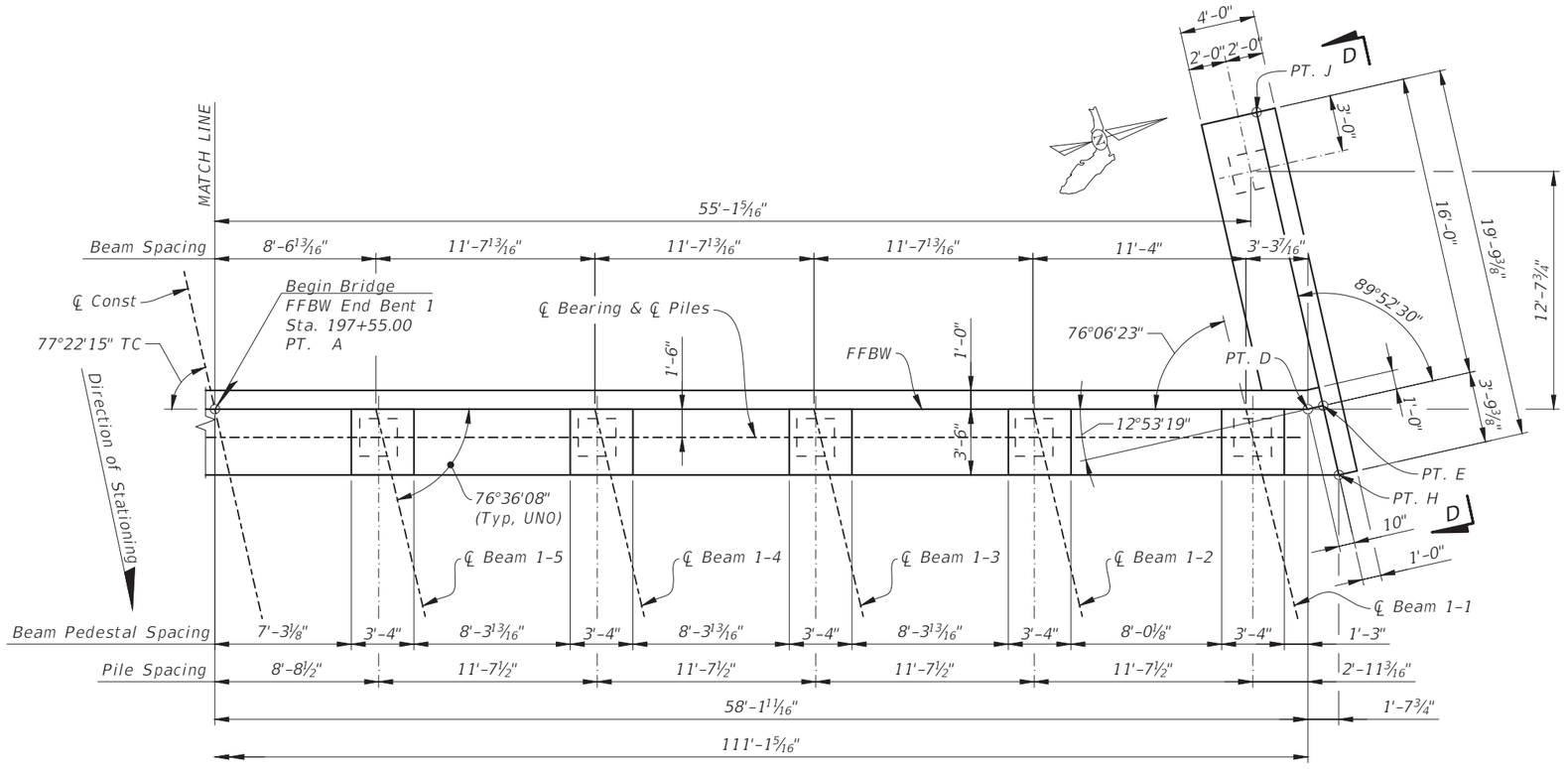
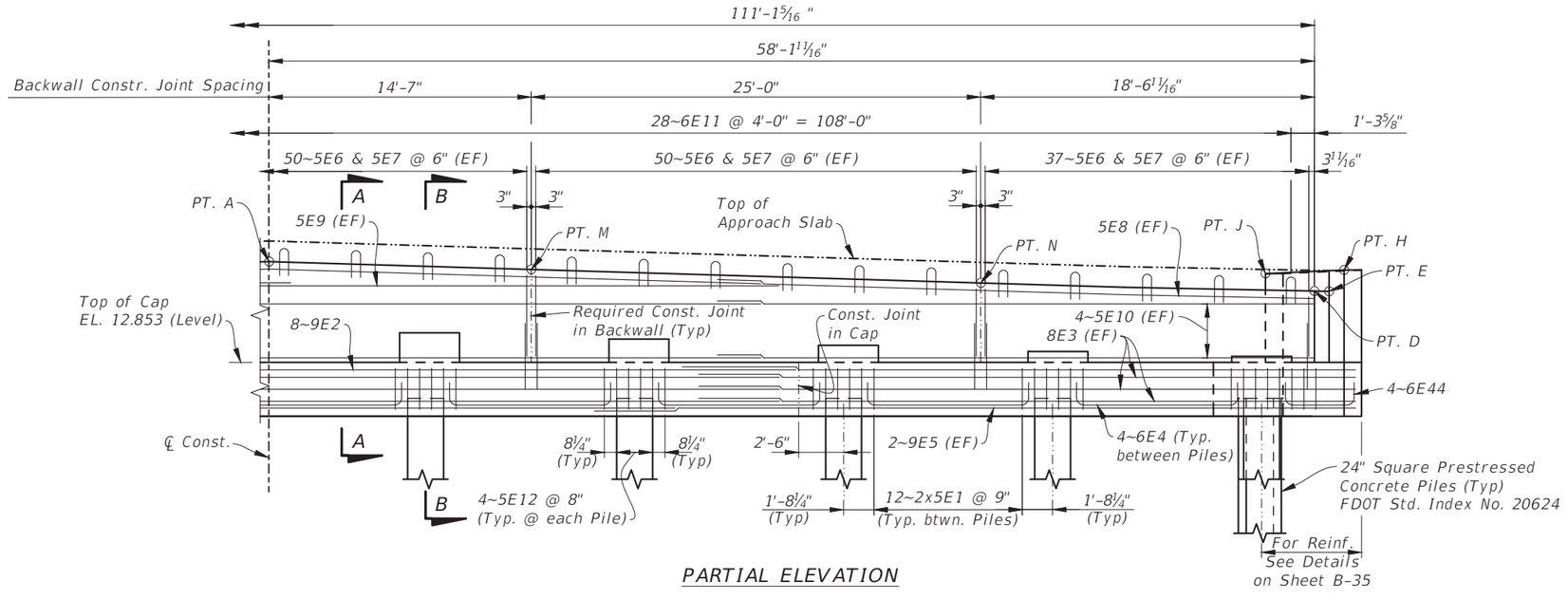


PARTIAL PLAN



PARTIAL ELEVATION

TABLE OF ELEVATIONS	
POINT	ELEVATION
A	18.348
D	17.059
E	17.039
H	18.246
J	18.044
M	18.025
N	17.470

NOTES

1. For Sections A-A & B-B, see Sheet B-32.
2. For View D-D, see Sheet B-35.
3. For Pedestal Details, see Sheet B-33.
4. Minimum Laps on Reinforcing shall be as follows:
   Bars 9E2: 6'-4"
   Bars 8E3 & 9E5: 4'-6"
   Bars 5E8 & 5E9: 2'-2"
   Bars 5E10: 2'-5"

Bridge No. 134130

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No.	REVISIONS	DATE	BY

SCALE: 1/8" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

END BENT 1 (2 OF 2)

SHEET NO.: B-29

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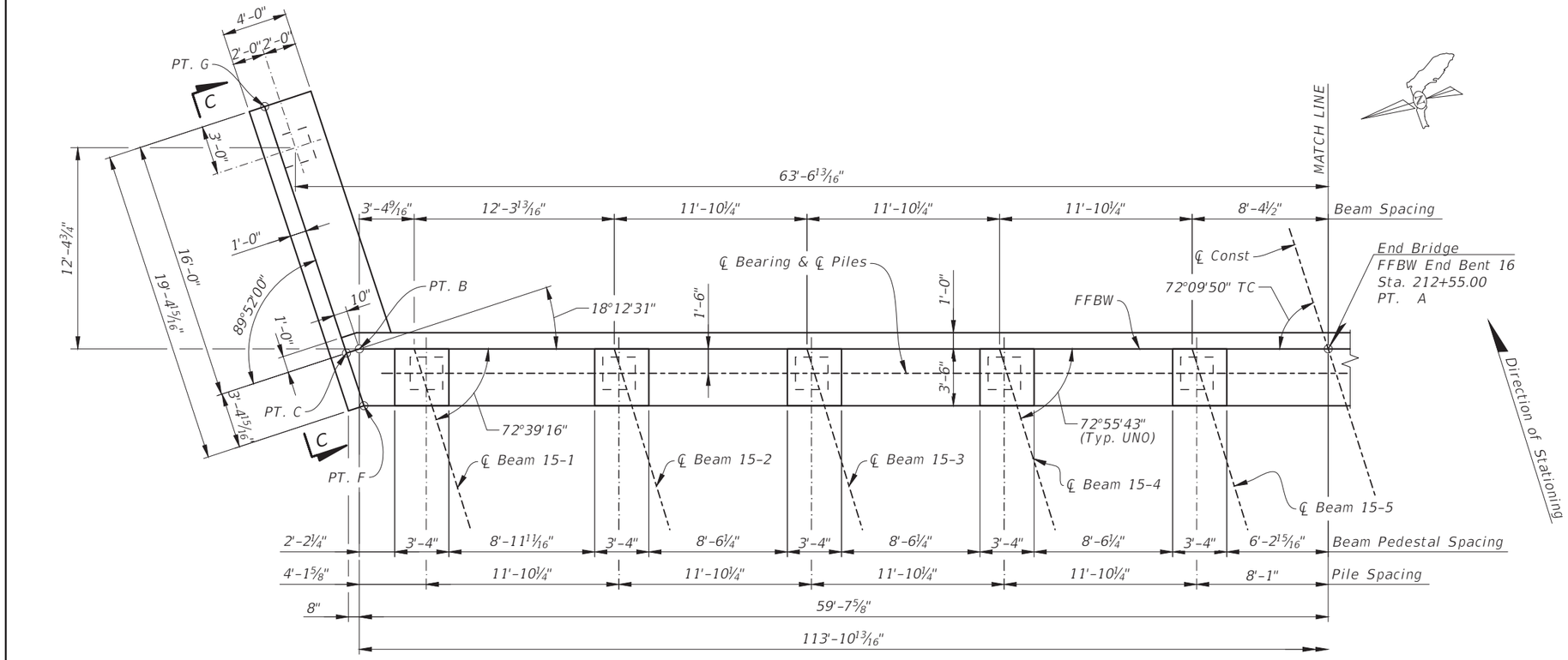
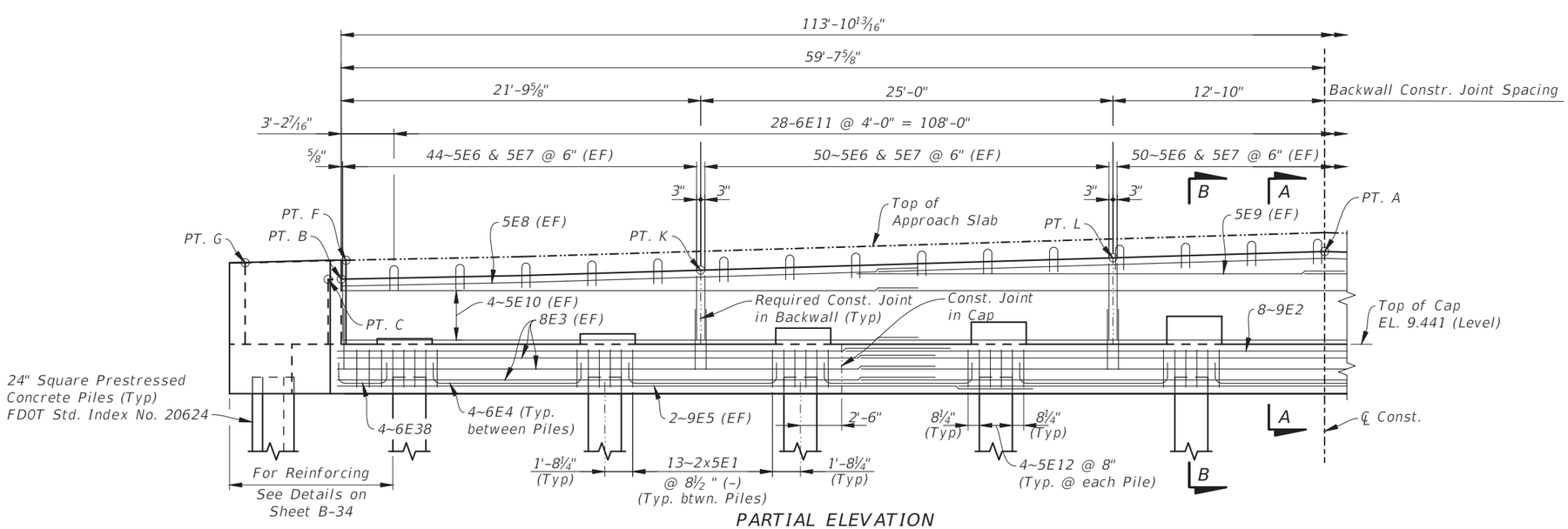


PARTIAL PLAN



PARTIAL ELEVATION

TABLE OF ELEVATIONS	
POINT	ELEVATION
A	15.059
B	13.542
C	13.522
F	14.710
G	14.603
K	14.097
L	14.733

NOTES

1. For Sections A-A & B-B, see Sheet B-32.
2. For View C-C, see Sheet B-34.
3. For Pedestal Details, see Sheet B-33.
4. Minimum Laps on Reinforcing shall be as follows:
   Bars 9E2: 6'-4"
   Bars 8E3 & 9E5: 4'-6"
   Bars 5E8 & 5E9: 2'-2"
   Bars 5E10: 2'-5"

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/8" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

END BENT 16 (1 OF 2)

SHEET NO.: B-30

Compton, Kathy
2/15/2018 2:37:52 PM
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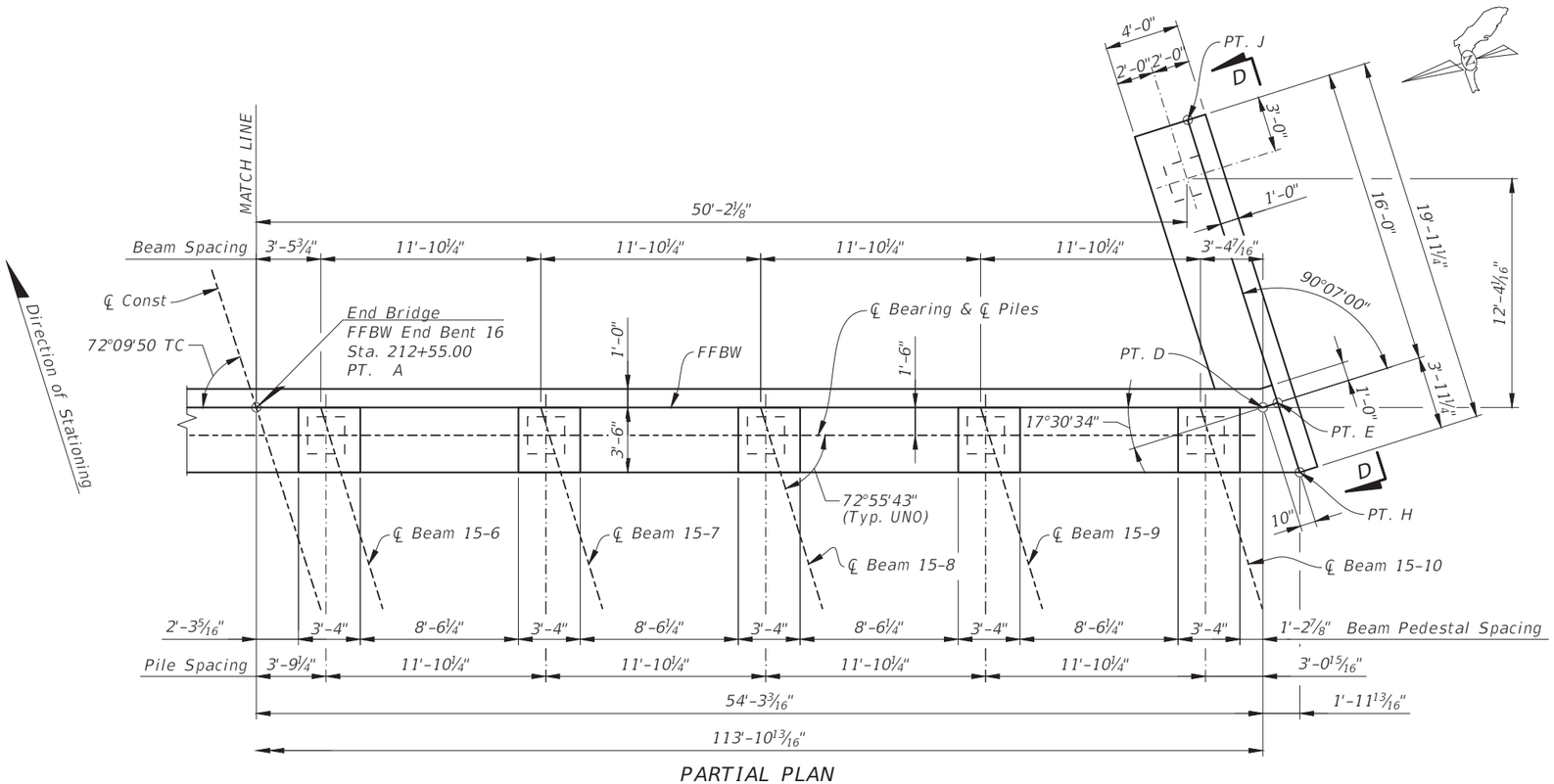
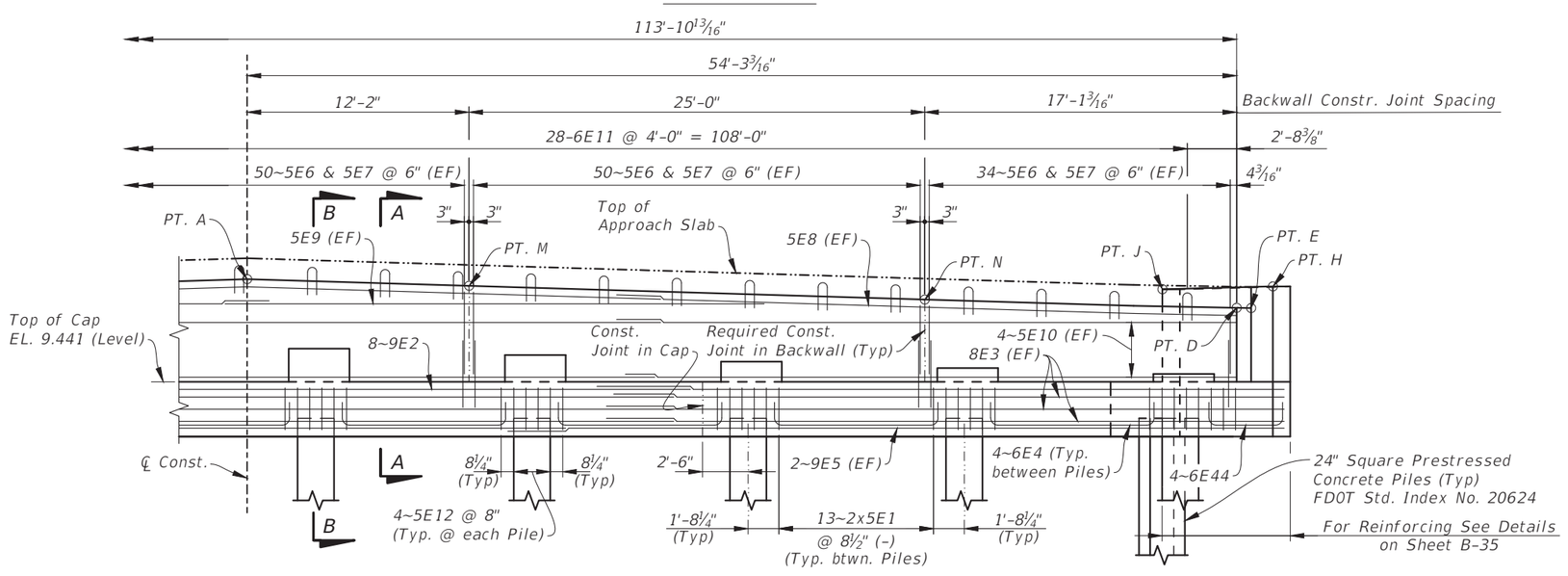


PARTIAL PLAN



PARTIAL ELEVATION

TABLE OF ELEVATIONS	
POINT	ELEVATION
A	15.059
D	13.856
E	13.836
H	14.997
J	14.892
M	14.789
N	14.235

NOTES

1. For Sections A-A & B-B, see Sheet B-32.
2. For View D-D, see Sheet B-35.
3. For Pedestal Details, see Sheet B-33.
4. Minimum Laps on Reinforcing shall be as follows:
   Bars 9E2: 6'-4"
   Bars 8E3 & 9E5: 4'-6"
   Bars 5E8 & 5E9: 2'-2"
   Bars 5E10: 2'-5"

Bridge No. 134130

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No.	REVISIONS	DATE	BY

SCALE: 1/8" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

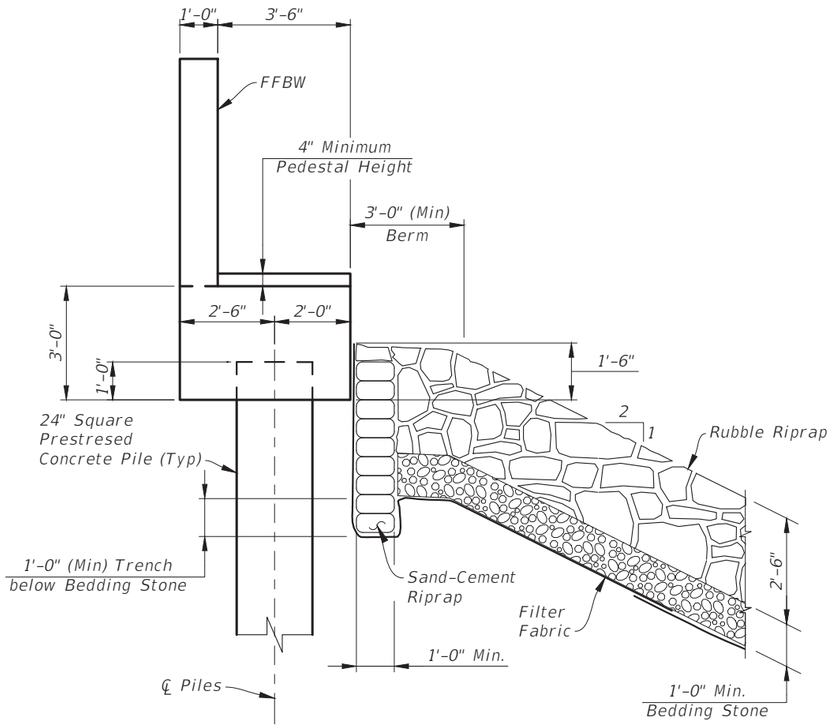
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

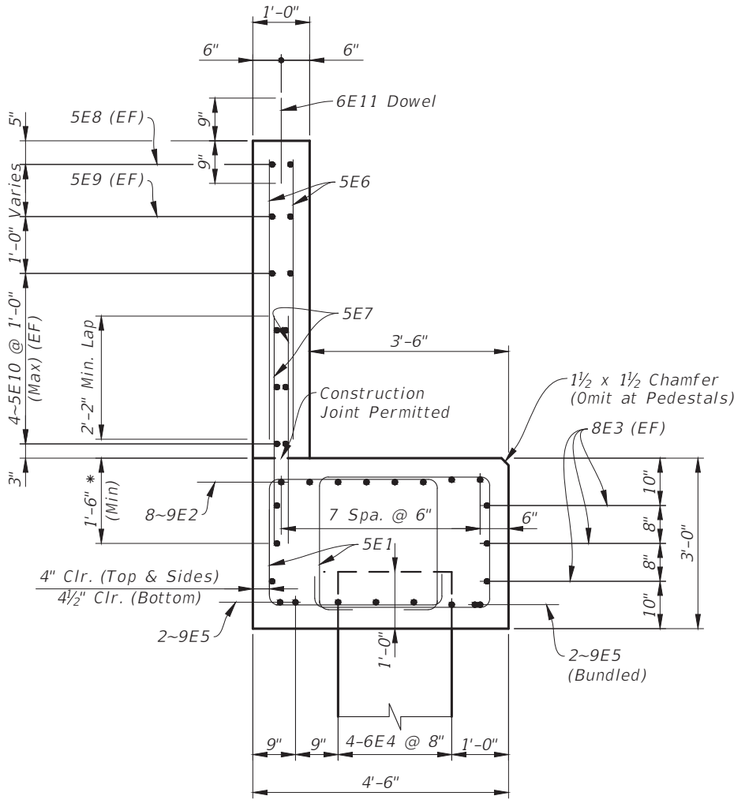
END BENT 16 (2 OF 2)

SHEET NO.: B-31

Compton, Kathy 2/15/2018 2:37:59 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1EndBent02b.dwg



SECTION THRU END BENTS
(Scale: ¼" = 1'-0")



SECTION A-A
(Pedestal Not Shown)
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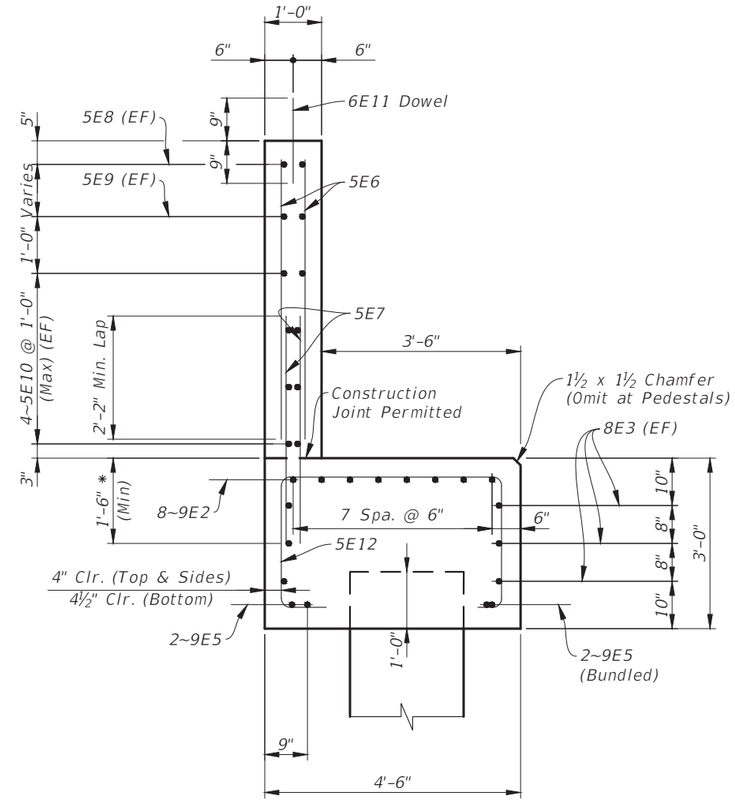
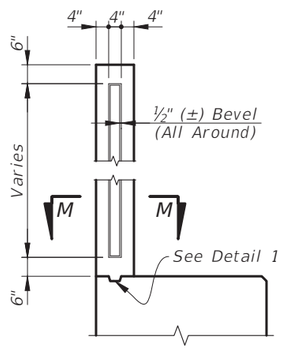
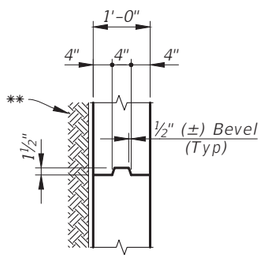


SECTION B-B
(Pedestal Not Shown)
(Scale: ⅜" = 1'-0")

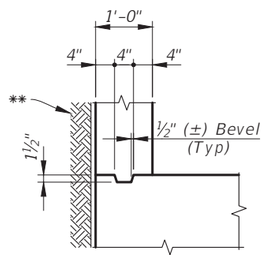
* Adjust embedment along wall length to cover full height of backwall with lapped 5E6 & 5E7 bars.



BACKWALL KEYED CONSTRUCTION JOINT
(Scale: ¼" = 1'-0")

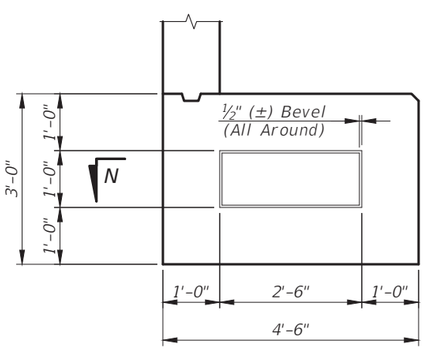


SECTION M-M
(Scale: ⅜" = 1'-0")

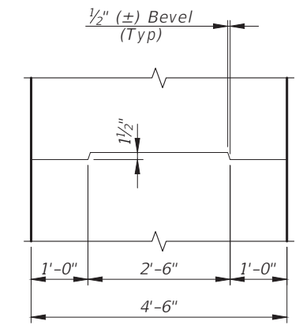


DETAIL 1
(Scale: ⅜" = 1'-0")

** Attach Type D-5 (Specifications Section 985) Geotextile Fabric. 1'-0" wide & full height/length of construction joint.



END BENT CAP - KEYED CONSTRUCTION JOINT
(Scale: ⅜" = 1'-0")



SECTION N-N
(Scale: ⅜" = 1'-0")

Bridge No. 134130

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No.	REVISIONS	DATE	BY

SCALE: Varies
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

END BENT DETAILS (1 OF 5)

SHEET NO.: B-32

Compton, Kathy
2/15/2018 2:38:41 PM
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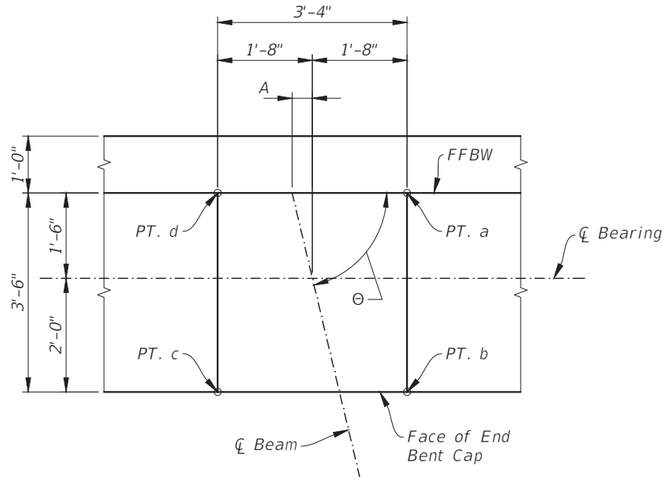
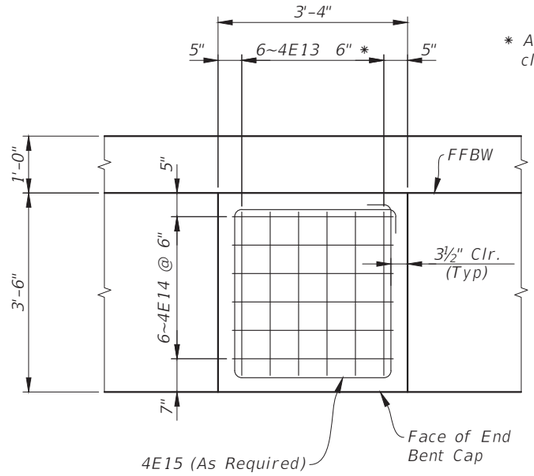
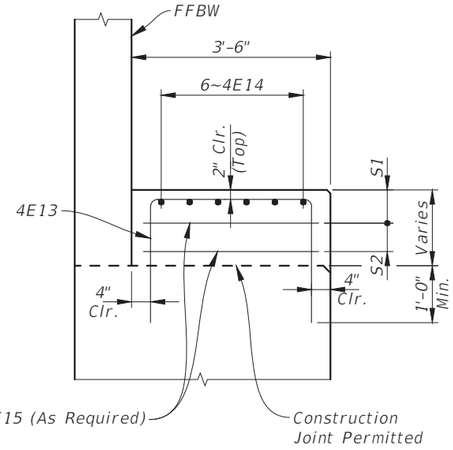


PLAN - PEDESTAL GEOMETRY



* Adjust spacing as required to clear 5E1 & 5E12.

PLAN - PEDESTAL REINFORCING



SECTION - PEDESTAL REINFORCING

END BENT PEDESTAL ELEVATIONS & DIMENSIONS

END BENT	BEAM NUMBER	PEDESTAL ELEVATIONS				A	Θ
		PT. a	PT. b	PT. c	PT. d		
1	1-1	13.365	13.400	13.391	13.357	4 7/16"	76°06'23"
	1-2	13.597	13.632	13.624	13.589	4 5/16"	76°36'08"
	1-3	13.855	13.890	13.882	13.847	4 5/16"	76°36'08"
	1-4	14.113	14.148	14.140	14.105	4 5/16"	76°36'08"
	1-5	14.372	14.406	14.398	14.364	4 5/16"	76°36'08"
	1-6	14.502	14.536	14.528	14.494	4 5/16"	76°36'08"
	1-7	14.192	14.226	14.218	14.185	4 5/16"	76°36'08"
	1-8	13.883	13.916	13.909	13.875	4 5/16"	76°36'08"
	1-9	13.574	13.607	13.599	13.566	4 5/16"	76°36'08"
	1-10	13.259	13.292	13.285	13.251	4 5/16"	76°36'08"
16	15-1	9.852	9.872	9.866	9.847	5 5/8"	72°39'16"
	15-2	10.148	10.167	10.162	10.143	5 1/2"	72°55'43"
	15-3	10.450	10.470	10.464	10.445	5 1/2"	72°55'43"
	15-4	10.752	10.772	10.766	10.747	5 1/2"	72°55'43"
	15-5	11.054	11.074	11.068	11.049	5 1/2"	72°55'43"
	15-6	11.198	11.218	11.212	11.193	5 1/2"	72°55'43"
	15-7	10.935	10.955	10.949	10.929	5 1/2"	72°55'43"
	15-8	10.671	10.691	10.685	10.665	5 1/2"	72°55'43"
	15-9	10.408	10.428	10.422	10.402	5 1/2"	72°55'43"
	15-10	10.141	10.161	10.155	10.135	5 1/2"	72°55'43"

END BENT PEDESTAL REINFORCING

END BENT	BEAM NUMBER	S1 (Inches)	S2 (Inches)	No. of 4E15 Bars
1	1-1	N/A	N/A	N/A
	1-2	N/A	N/A	N/A
	1-3	5	5	2
	1-4	6	6	2
	1-5	6	8	2
	1-6	6	8	2
	1-7	6	8	2
	1-8	5	5	2
	1-9	5	N/A	1
	1-10	N/A	N/A	N/A
16	15-1	N/A	N/A	N/A
	15-2	5	N/A	1
	15-3	5	5	2
	15-4	6	6	2
	15-5	6	8	2
	15-6	6	7	3
	15-7	6	8	2
	15-8	5	5	2
	15-9	5	5	2
	15-10	5	N/A	1

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 3/8" = 1'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

END BENT DETAILS (2 OF 5)

SHEET NO.: B-33

Compton, Kathy 2/15/2018 2:38:47 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1EndBentDet05.dwg

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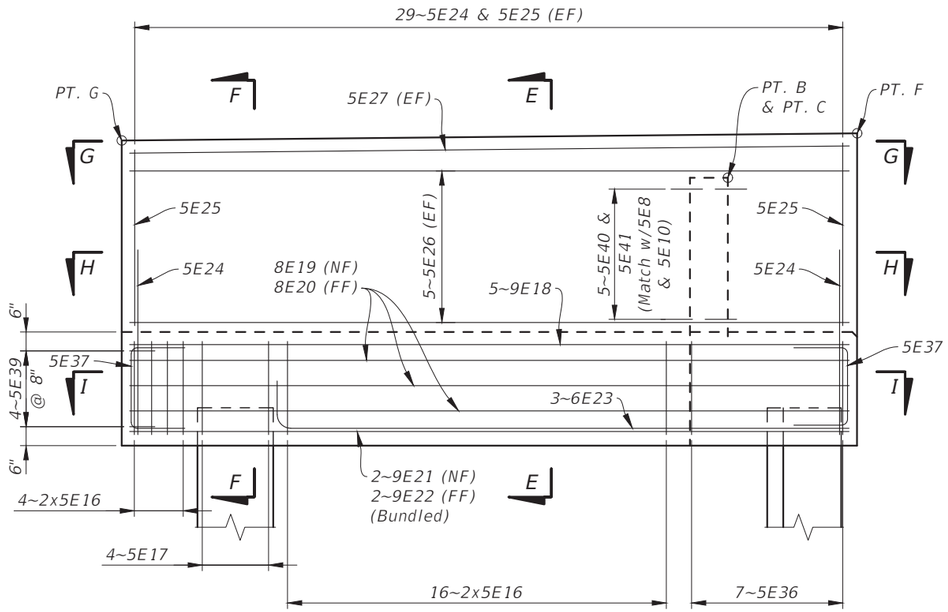
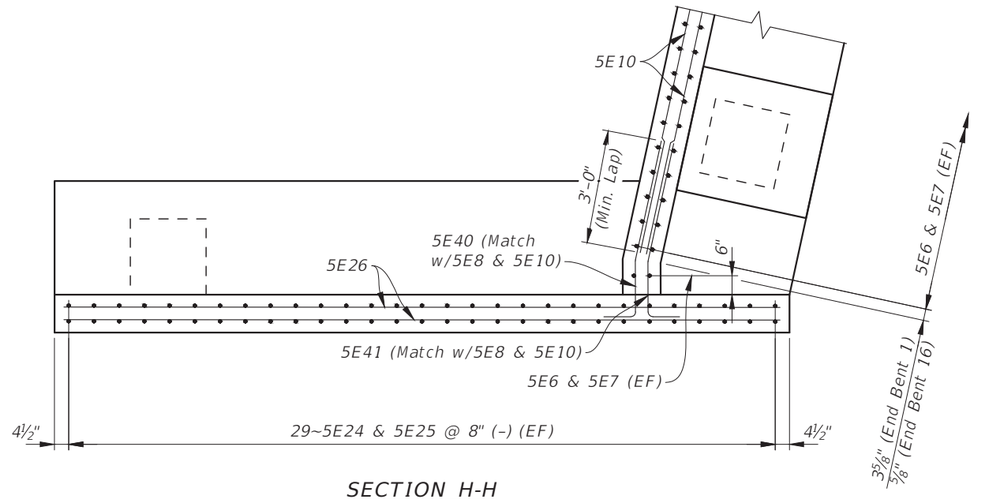
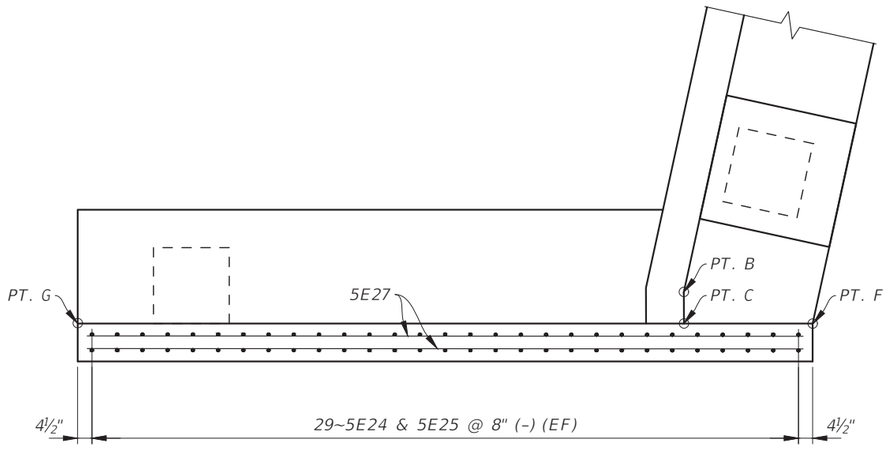


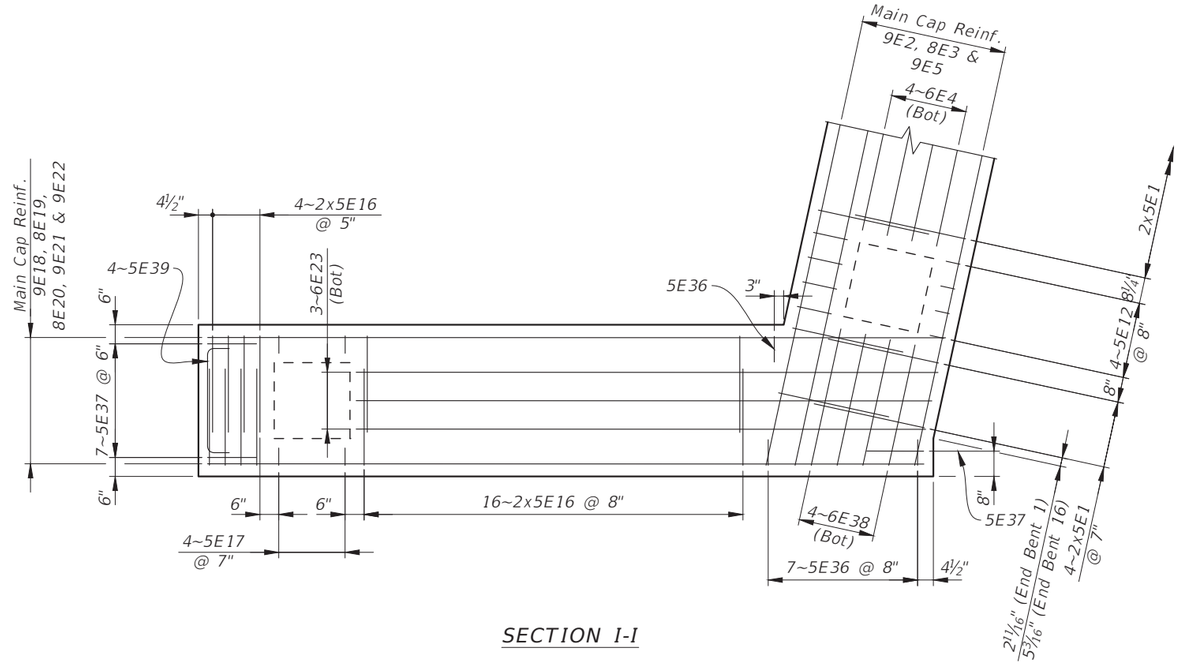
ELEVATION C-C



SECTION H-H



SECTION G-G



SECTION I-I

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/4" = 1'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

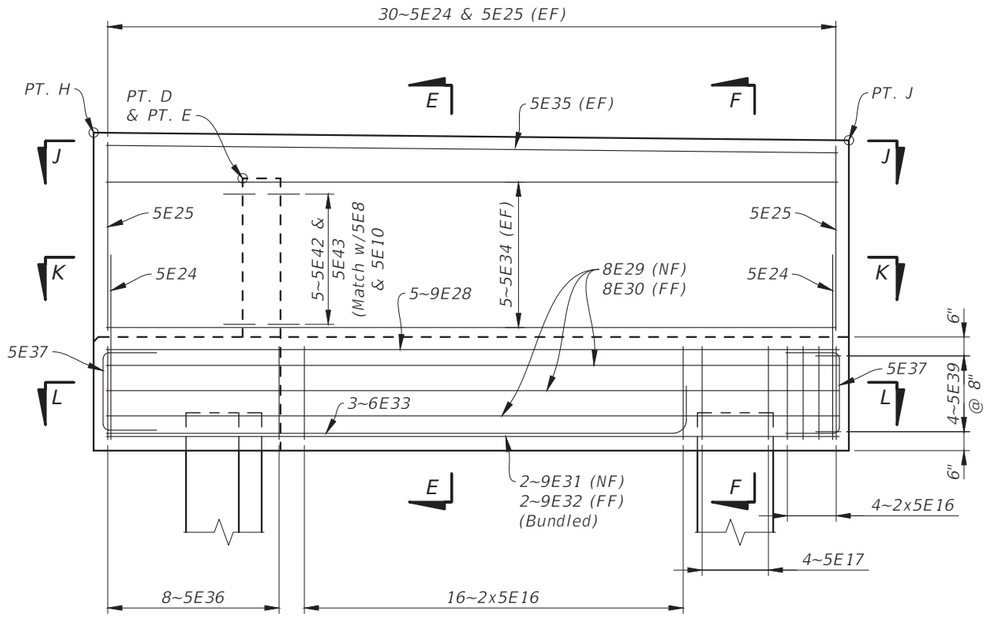
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

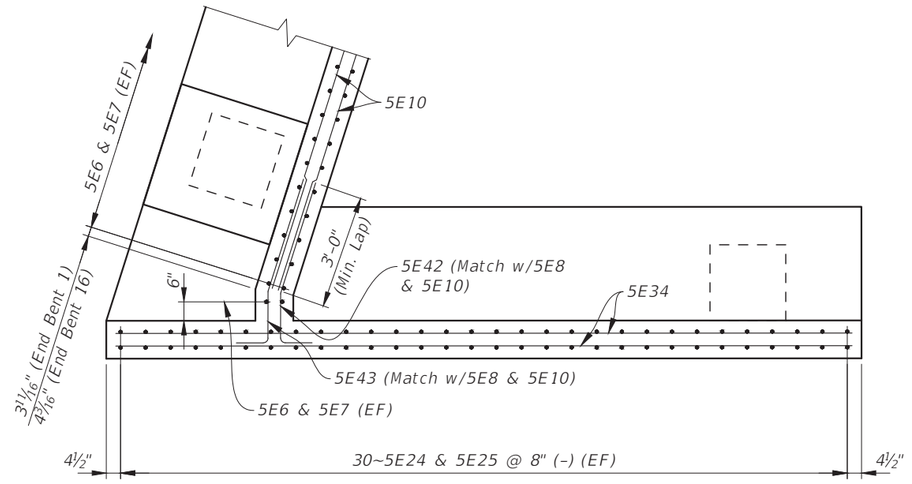
END BENT DETAILS (3 OF 5)

SHEET NO.: B-34

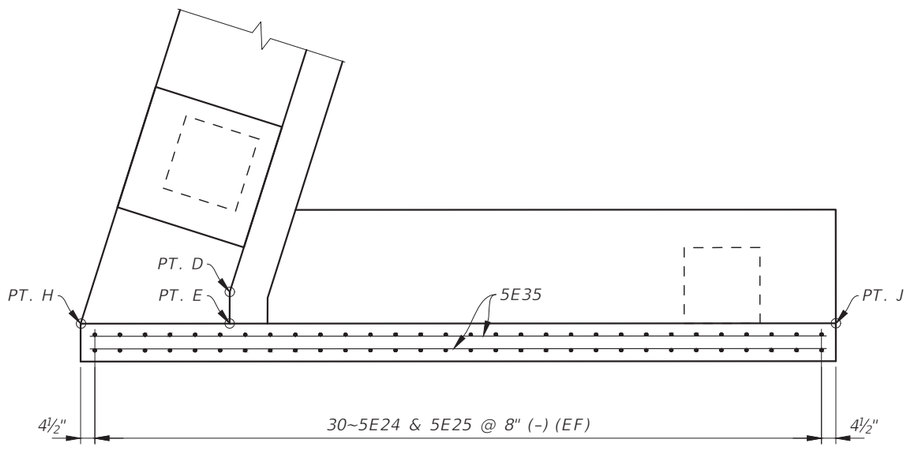
Compton, Kathy 2/15/2018 2:38:54 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1EndBentDet02.dwg



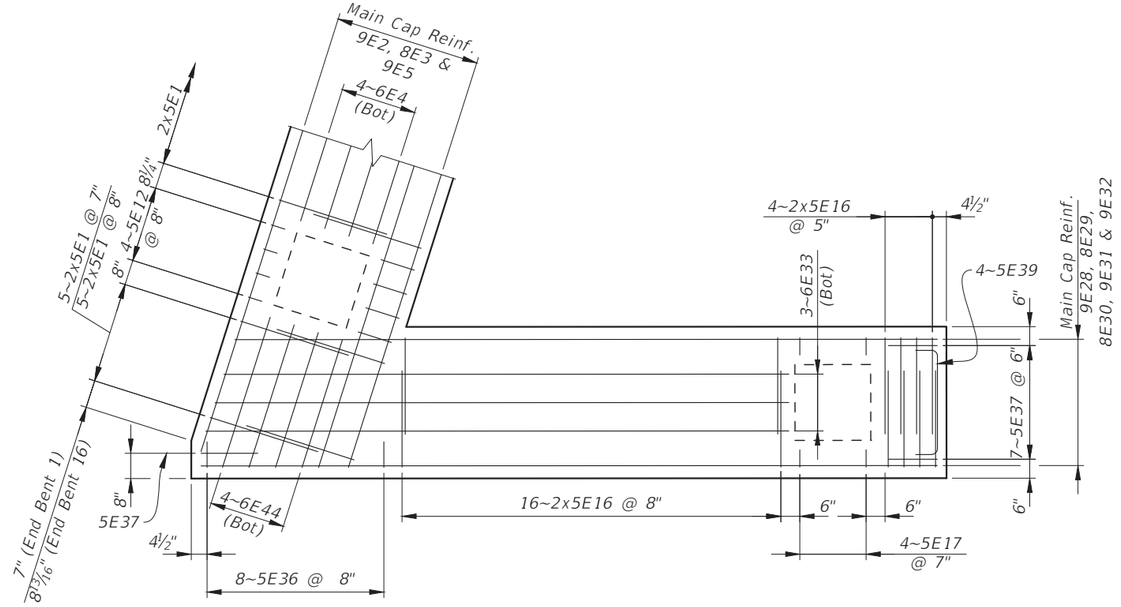
ELEVATION D-D



SECTION K-K



SECTION J-J



SECTION L-L

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/4" = 1'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

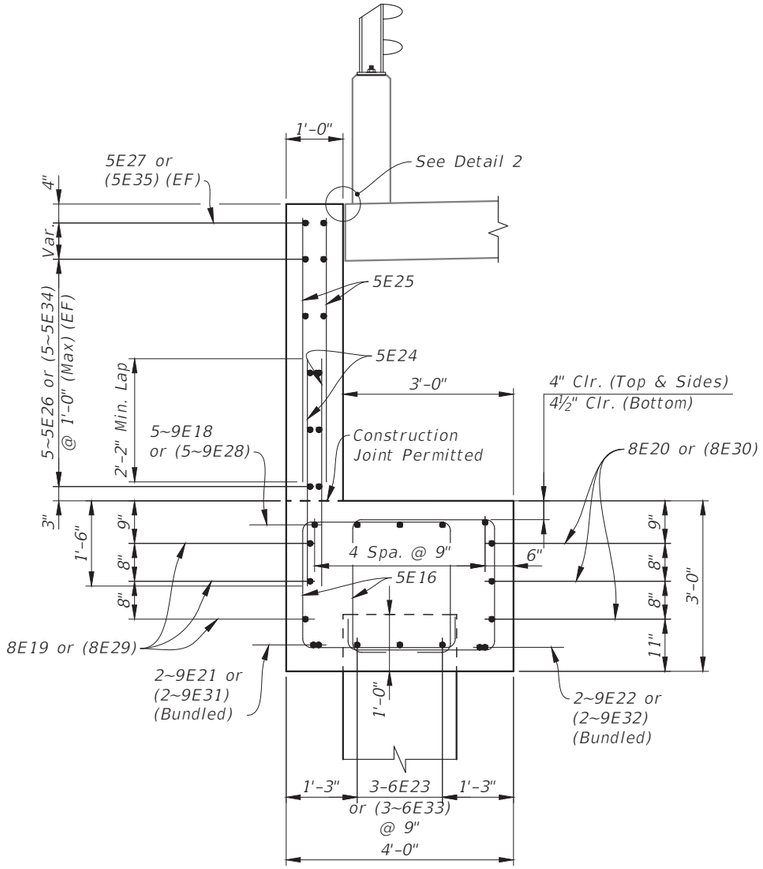
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

END BENT DETAILS (4 OF 5)

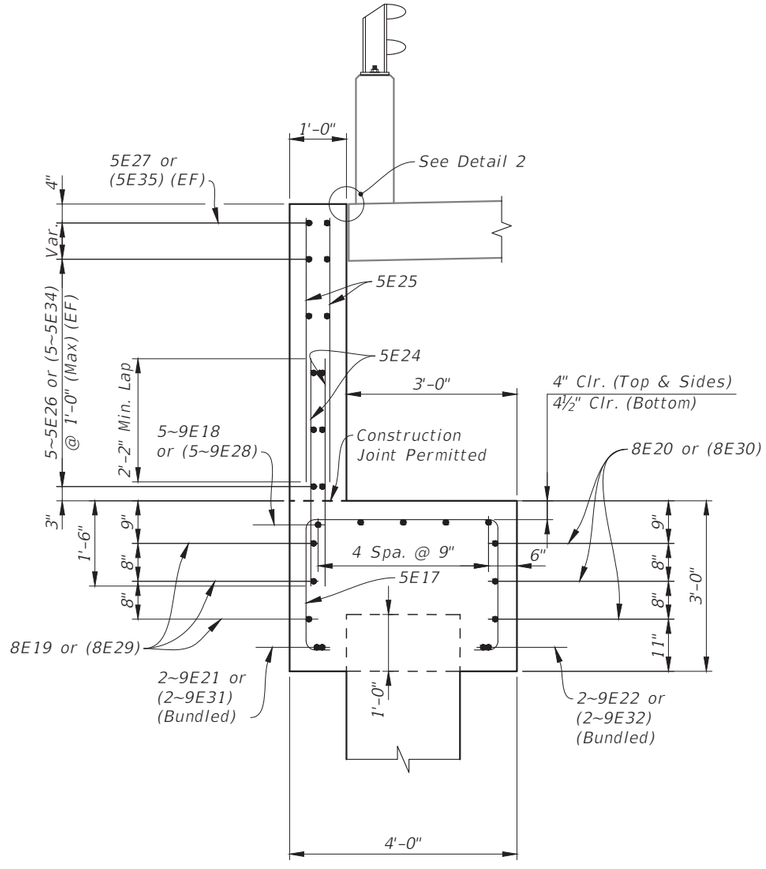
SHEET NO.: B-35

Compton, Kathy 2/15/2018 2:39:00 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1EndBentDet03.dwg



SECTION E-E

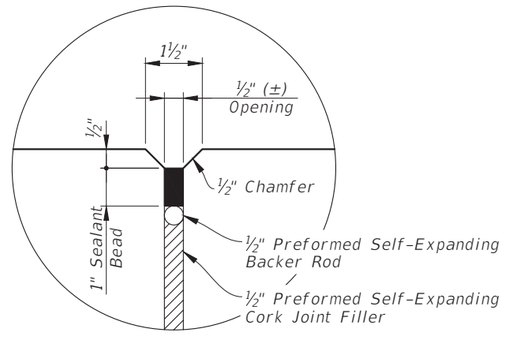
Scale: ⅜" = 1'-0"



SECTION F-F

Scale: ⅜" = 1'-0"

NOTE: Bar Marks, in ( ), are associated with Sections Cut in Elevation D-D.



DETAIL 2

Scale: 3" = 1'-0"

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: Varies
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

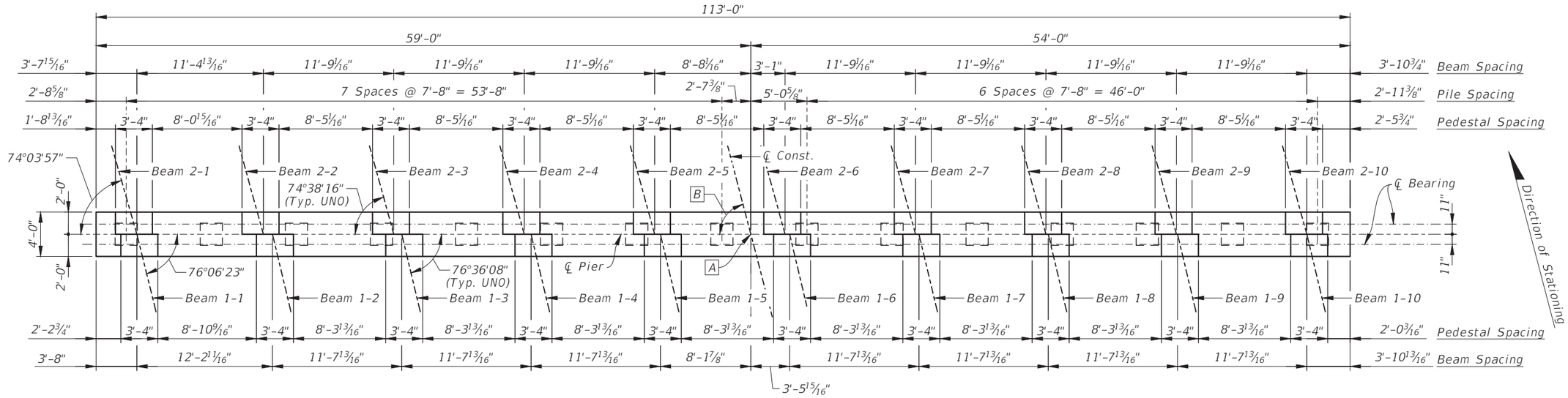
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

END BENT DETAILS (5 OF 5)

SHEET NO.: B-36

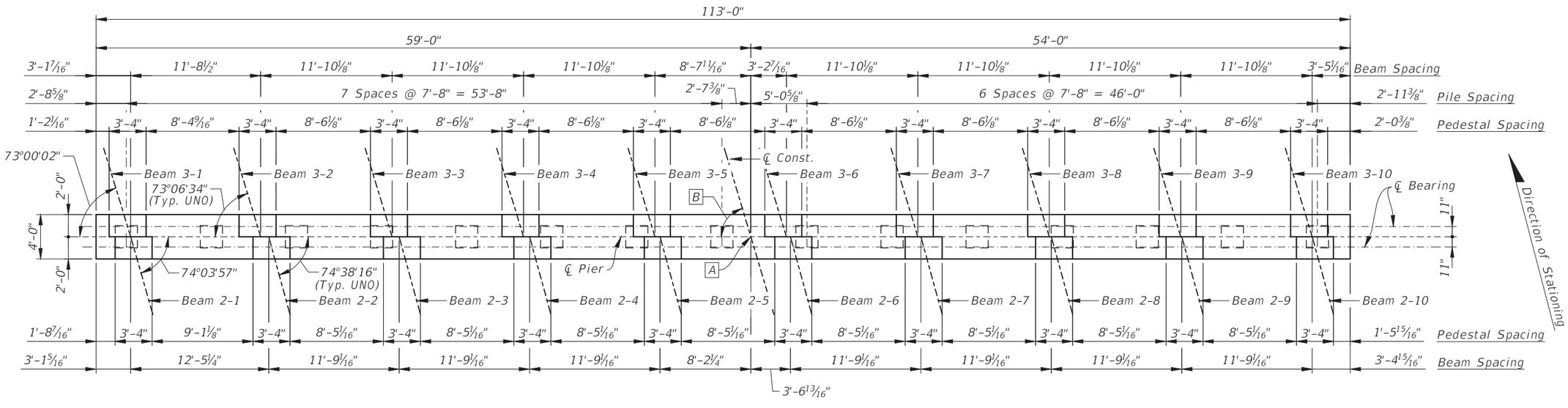
Compton, Kathy 2/15/2018 2:39:07 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1EndBentDet04.dwg



CAP PLAN - INTERMEDIATE BENT 2

A ℄ Intermediate Bent 2 – Sta. 198+55.00
℄ Intermediate Bent 3 – Sta. 199+55.00

B 75°22'16" TC – Intermediate Bent 2
73°22'16" TC – Intermediate Bent 3



CAP PLAN - INTERMEDIATE BENT 3

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

INTERMEDIATE BENT DETAILS (1 OF 9)

SHEET NO.: B-37

Compton, Kathy
2/15/2018 2:39:14 PM
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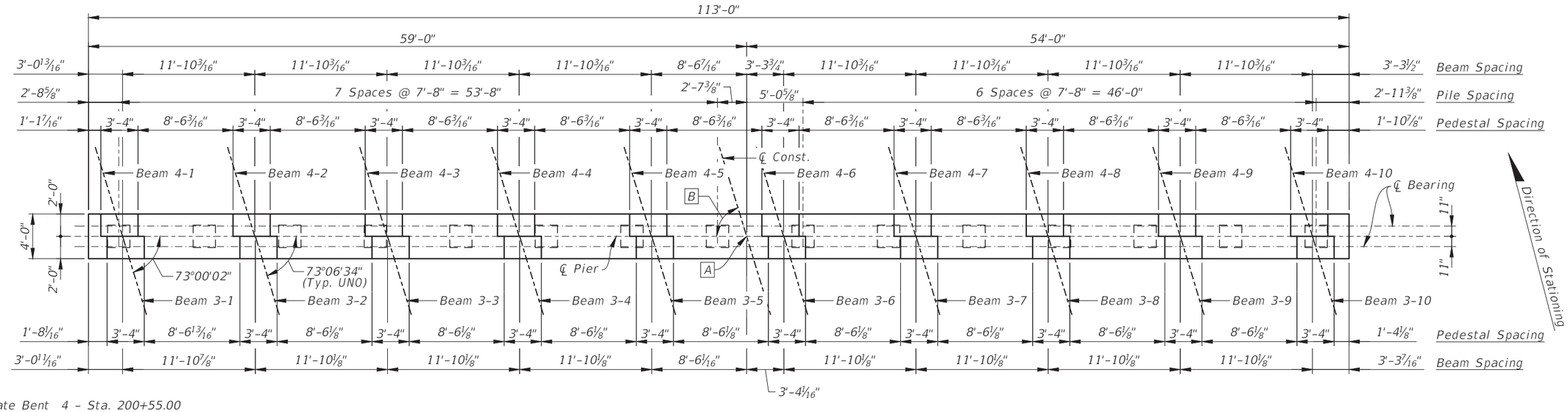
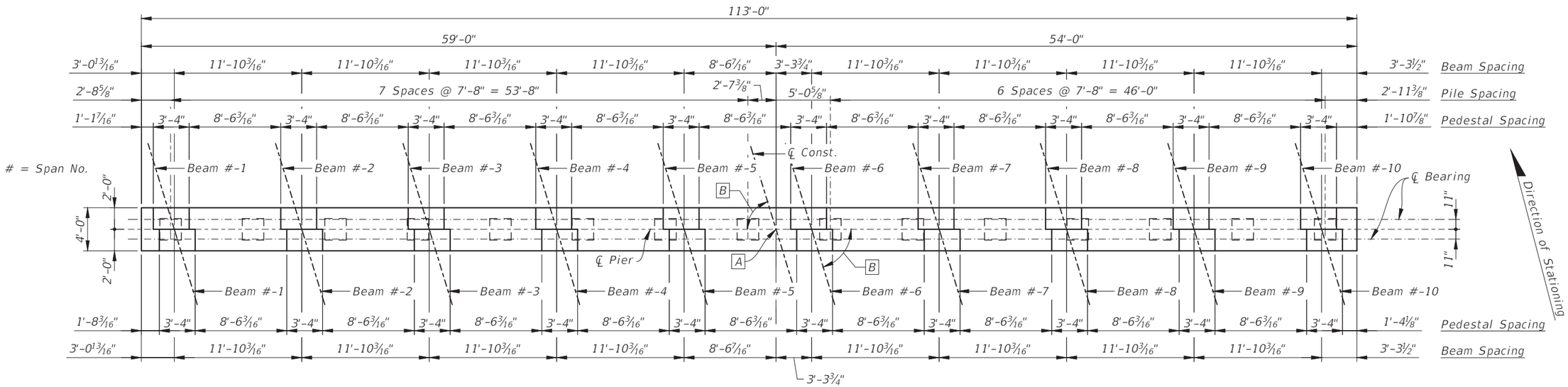


A ℄ Intermediate Bent 4 – Sta. 200+55.00
℄ Intermediate Bent 5 – Sta. 201+55.00
℄ Intermediate Bent 6 – Sta. 202+55.00
℄ Intermediate Bent 7 – Sta. 203+55.00
℄ Intermediate Bent 8 – Sta. 204+55.00
℄ Intermediate Bent 9 – Sta. 205+55.00
℄ Intermediate Bent 10 – Sta. 206+55.00
℄ Intermediate Bent 11 – Sta. 207+55.00
℄ Intermediate Bent 12 – Sta. 208+55.00
℄ Intermediate Bent 13 – Sta. 209+55.00
℄ Intermediate Bent 14 – Sta. 210+55.00

B 73°00'00" (Typ. UNO) – Intermediate Bents 4 thru 14

CAP PLAN - INTERMEDIATE BENT 4



CAP PLAN - INTERMEDIATE BENTS 5 THRU 14

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

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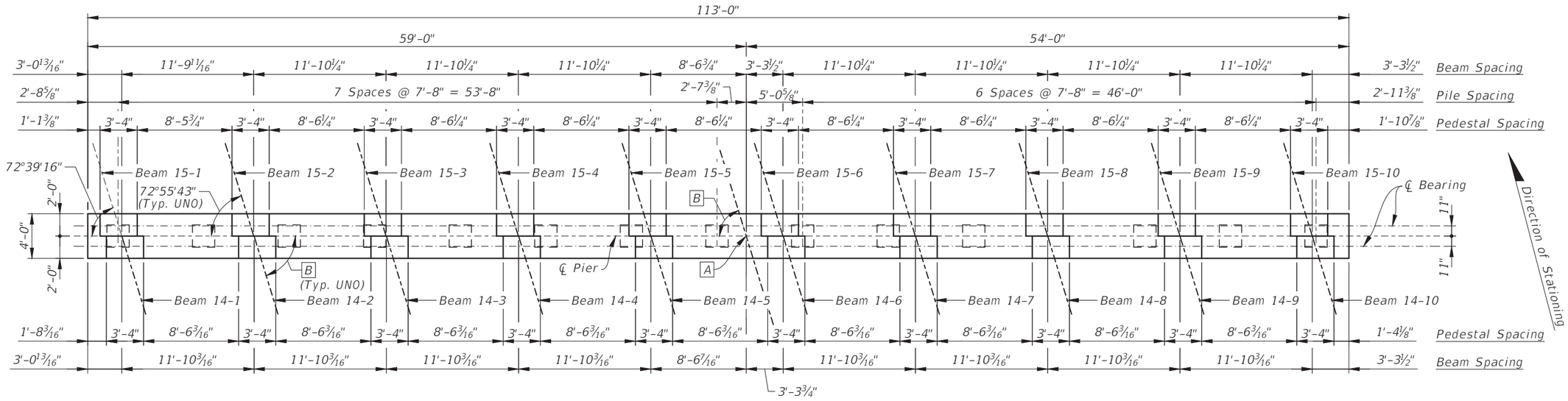
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

INTERMEDIATE BENT DETAILS (2 OF 9)

SHEET NO.: B-38

Compton, Kathy 2/15/2018 2:39:21 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1IntBent02.dwg



CAP PLAN - INTERMEDIATE BENT 15

A ℄ Intermediate Bent 15 – Sta. 211+55.00

B 73°00'00" – Intermediate Bent 15

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

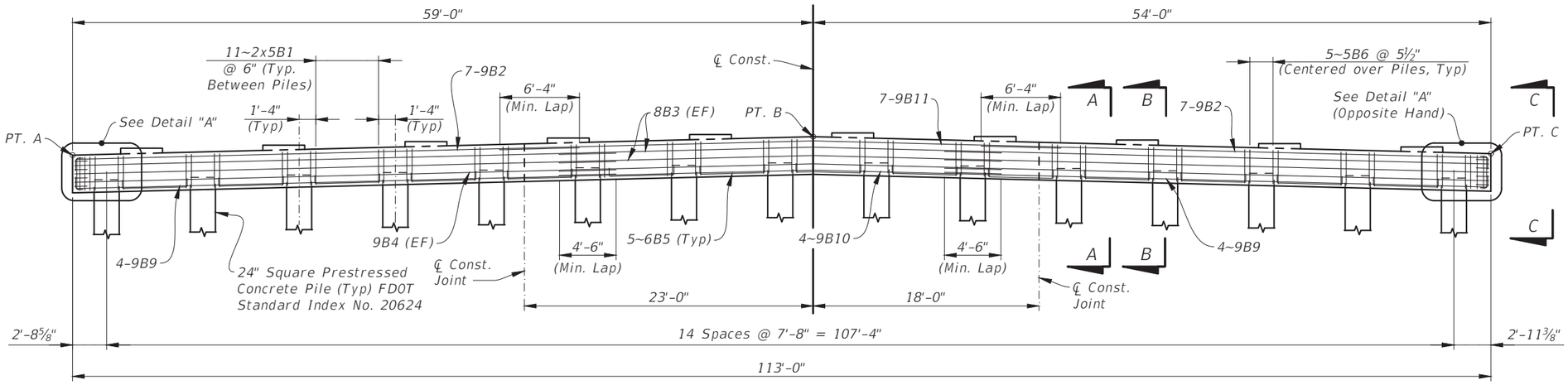
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

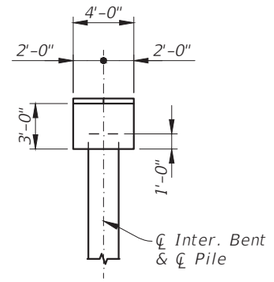
INTERMEDIATE BENT DETAILS (3 0F 9)

SHEET NO.: B-39

Compton, Kathy 2/15/2018 2:39:27 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1IntBent03.dwg



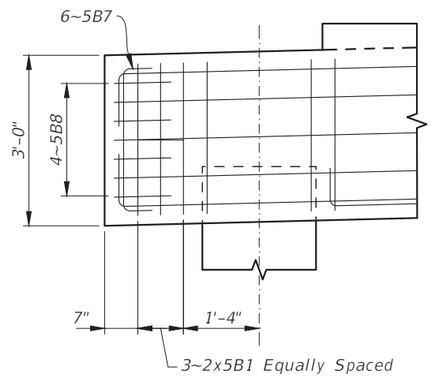
ELEVATION



END VIEW

NOTES

1. For Sections and additional Details, see Sheet B-41.
2. For Pedestal Elevations see Sheet B-42 thru B-45.



DETAIL "A"

INTERMEDIATE BENT CAP ELEVATIONS			
LOCATION	POINT A	POINT B	POINT C
Inter. Bent 2	13.870	14.954	13.699
Inter. Bent 3	14.887	15.952	14.692
Inter. Bent 4	15.607	16.723	15.504
Inter. Bent 5	15.981	17.144	15.985
Inter. Bent 6	16.038	17.249	16.151
Inter. Bent 7	15.776	17.034	15.995
Inter. Bent 8	15.162	16.471	15.500
Inter. Bent 9	14.397	15.710	14.750
Inter. Bent 10	13.632	14.945	13.984
Inter. Bent 11	12.867	14.180	13.219
Inter. Bent 12	12.102	13.414	12.454
Inter. Bent 13	11.327	12.642	11.685
Inter. Bent 14	10.584	11.888	10.920
Inter. Bent 15	9.920	11.209	10.237

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

INTERMEDIATE BENT DETAILS (4 OF 9)

SHEET NO.: B-40

Compton, Kathy
2/15/2018 2:39:33 PM
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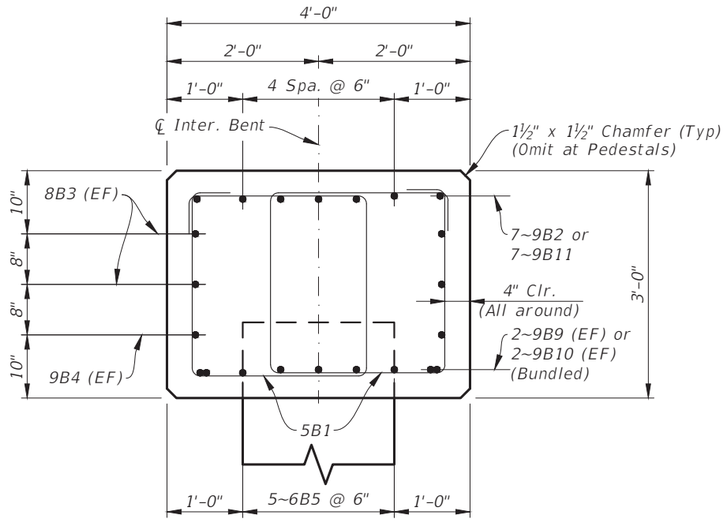
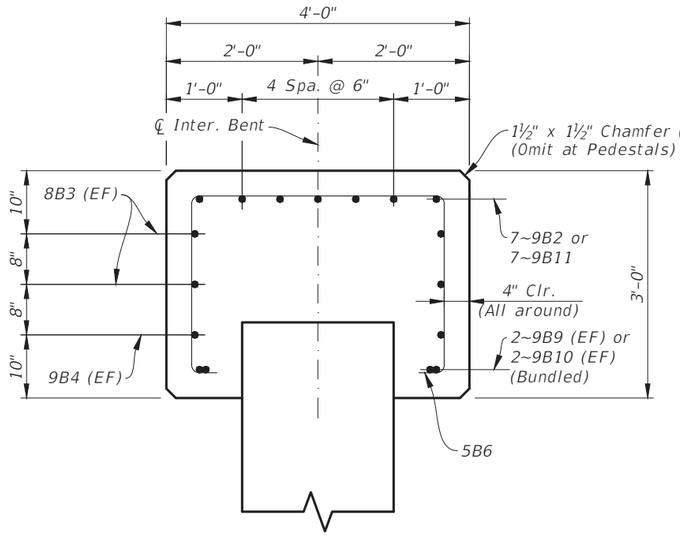
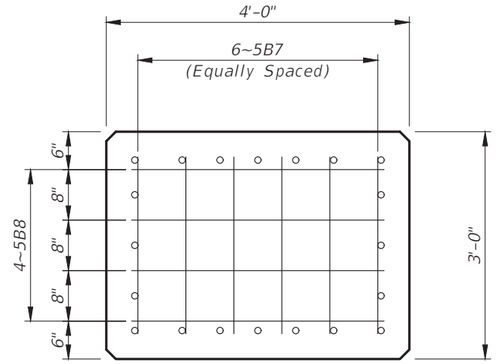


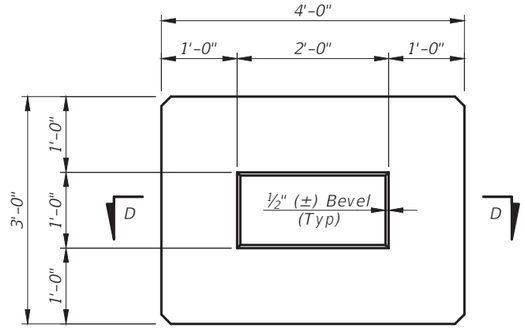
SECTION A–A
(Pedestals not shown)



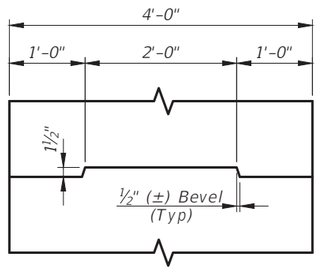
SECTION B–B
(Pedestals not shown)



SECTION C–C
(Pedestals not shown)



KEYED CONSTRUCTION JOINT



SECTION D–D

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

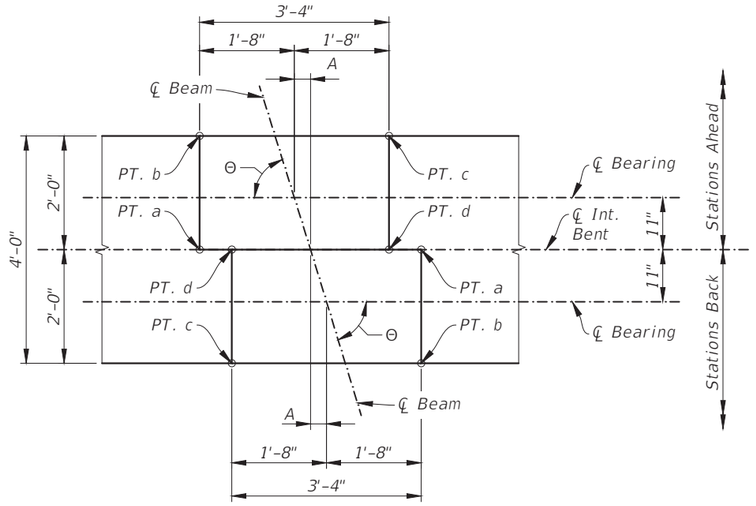
DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

INTERMEDIATE BENT DETAILS (5 OF 9)

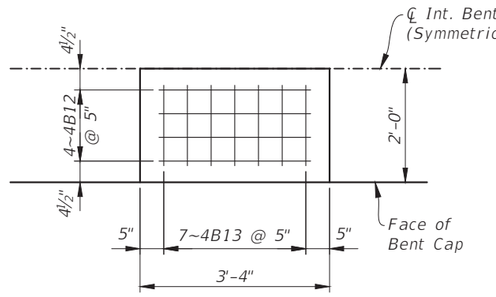
SHEET NO.: B-41

Compton, Kathy 2/15/2018 2:40:05 PM

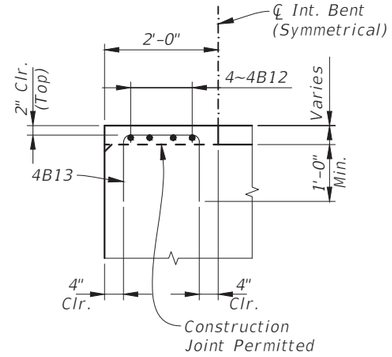
S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1IntBent05.dwg



PLAN - PEDESTAL GEOMETRY



PLAN - PEDESTAL REINFORCING



SECTION - PEDESTAL REINFORCING

INTERMEDIATE BENT PEDESTAL ELEVATIONS & DIMENSIONS

INT. BENT	LOCATION	BEAM NUMBER	PEDESTAL ELEVATIONS				A	θ
			Pt. a	Pt. b	Pt. c	Pt. d		
2	Back	1-1	14.375	14.356	14.364	14.384	2¾"	76° 06' 23"
		1-2	14.621	14.601	14.609	14.629	2⅝"	76° 36' 08"
		1-3	14.872	14.852	14.860	14.880	2⅝"	76° 36' 08"
		1-4	15.124	15.104	15.112	15.132	2⅝"	76° 36' 08"
		1-5	15.376	15.356	15.364	15.384	2⅝"	76° 36' 08"
		1-6	15.481	15.462	15.469	15.489	2⅝"	76° 36' 08"
		1-7	15.170	15.151	15.158	15.178	2⅝"	76° 36' 08"
		1-8	14.859	14.840	14.847	14.866	2⅝"	76° 36' 08"
		1-9	14.548	14.529	14.536	14.556	2⅝"	76° 36' 08"
		1-10	14.232	14.213	14.220	14.240	2⅝"	76° 36' 08"
	Ahead	2-1	14.406	14.425	14.416	14.397	3⅛"	74° 03' 57"
		2-2	14.631	14.651	14.642	14.622	3"	74° 38' 16"
		2-3	14.883	14.902	14.893	14.874	3"	74° 38' 16"
		2-4	15.134	15.154	15.145	15.125	3"	74° 38' 16"
		2-5	15.387	15.406	15.397	15.378	3"	74° 38' 16"
		2-6	15.512	15.531	15.522	15.503	3"	74° 38' 16"
		2-7	15.197	15.215	15.207	15.188	3"	74° 38' 16"
		2-8	14.881	14.900	14.892	14.873	3"	74° 38' 16"
		2-9	14.567	14.586	14.577	14.558	3"	74° 38' 16"
		2-10	14.246	14.265	14.256	14.237	3"	74° 38' 16"

INTERMEDIATE BENT PEDESTAL ELEVATIONS & DIMENSIONS

INT. BENT	LOCATION	BEAM NUMBER	PEDESTAL ELEVATIONS				A	θ
			Pt. a	Pt. b	Pt. c	Pt. d		
3	Back	2-1	15.380	15.361	15.370	15.389	3⅛"	74° 03' 57"
		2-2	15.626	15.606	15.615	15.635	3"	74° 38' 16"
		2-3	15.875	15.855	15.864	15.884	3"	74° 38' 16"
		2-4	16.124	16.105	16.114	16.133	3"	74° 38' 16"
		2-5	16.374	16.354	16.363	16.382	3"	74° 38' 16"
		2-6	16.474	16.455	16.464	16.483	3"	74° 38' 16"
		2-7	16.160	16.142	16.150	16.169	3"	74° 38' 16"
		2-8	15.847	15.828	15.837	15.855	3"	74° 38' 16"
		2-9	15.533	15.514	15.523	15.542	3"	74° 38' 16"
		2-10	15.213	15.195	15.203	15.222	3"	74° 38' 16"
	Ahead	3-1	15.418	15.431	15.425	15.411	3⅜"	73° 00' 02"
		3-2	15.655	15.668	15.661	15.648	3⅝"	73° 06' 34"
		3-3	15.908	15.922	15.915	15.901	3⅝"	73° 06' 34"
		3-4	16.161	16.175	16.168	16.154	3⅝"	73° 06' 34"
		3-5	16.414	16.428	16.421	16.407	3⅝"	73° 06' 34"
		3-6	16.515	16.529	16.522	16.508	3⅝"	73° 06' 34"
		3-7	16.201	16.215	16.208	16.193	3⅝"	73° 06' 34"
		3-8	15.886	15.900	15.893	15.878	3⅝"	73° 06' 34"
		3-9	15.571	15.586	15.578	15.563	3⅝"	73° 06' 34"
		3-10	15.244	15.259	15.252	15.237	3⅝"	73° 06' 34"

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 3/8" = 1'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

INTERMEDIATE BENT DETAILS (6 OF 9)

SHEET NO.: B-42

Compton, Kathy
2/15/2018 2:40:12 PM
S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1IntBent06.dwg

INTERMEDIATE BENT PEDESTAL ELEVATIONS & DIMENSIONS

INT. BENT	LOCATION	BEAM NUMBER	PEDESTAL ELEVATIONS Pt. a	Pt. b	Pt. c	Pt. d	A	θ
4	Back	3-1	16.100	16.087	16.094	16.107	3 3/8"	73° 00' 02"
		3-2	16.352	16.339	16.346	16.359	3 5/16"	73° 06' 34"
		3-3	16.616	16.603	16.610	16.623	3 5/16"	73° 06' 34"
		3-4	16.880	16.866	16.873	16.887	3 5/16"	73° 06' 34"
		3-5	17.143	17.129	17.136	17.150	3 5/16"	73° 06' 34"
		3-6	17.247	17.233	17.240	17.254	3 5/16"	73° 06' 34"
		3-7	16.943	16.929	16.936	16.951	3 5/16"	73° 06' 34"
		3-8	16.639	16.624	16.632	16.646	3 5/16"	73° 06' 34"
		3-9	16.334	16.320	16.327	16.342	3 5/16"	73° 06' 34"
		3-10	16.018	16.003	16.010	16.025	3 5/16"	73° 06' 34"
	Ahead	4-1	16.108				3 3/8"	73° 00' 00"
		4-2	16.358				3 3/8"	73° 00' 00"
		4-3	16.623				3 3/8"	73° 00' 00"
		4-4	16.887				3 3/8"	73° 00' 00"
		4-5	17.151				3 3/8"	73° 00' 00"
		4-6	17.256				3 3/8"	73° 00' 00"
		4-7	16.952				3 3/8"	73° 00' 00"
		4-8	16.648				3 3/8"	73° 00' 00"
		4-9	16.343				3 3/8"	73° 00' 00"
		4-10	16.027				3 3/8"	73° 00' 00"
5	Back	4-1	16.475				3 3/8"	73° 00' 00"
		4-2	16.737				3 3/8"	73° 00' 00"
		4-3	17.012				3 3/8"	73° 00' 00"
		4-4	17.286				3 3/8"	73° 00' 00"
		4-5	17.561				3 3/8"	73° 00' 00"
		4-6	17.676				3 3/8"	73° 00' 00"
		4-7	17.383				3 3/8"	73° 00' 00"
		4-8	17.090				3 3/8"	73° 00' 00"
		4-9	16.796				3 3/8"	73° 00' 00"
		4-10	16.491				3 3/8"	73° 00' 00"
	Ahead	5-1	16.479				3 3/8"	73° 00' 00"
		5-2	16.741				3 3/8"	73° 00' 00"
		5-3	17.016				3 3/8"	73° 00' 00"
		5-4	17.291				3 3/8"	73° 00' 00"
		5-5	17.566				3 3/8"	73° 00' 00"
		5-6	17.682				3 3/8"	73° 00' 00"
		5-7	17.389				3 3/8"	73° 00' 00"
		5-8	17.096				3 3/8"	73° 00' 00"
		5-9	16.802				3 3/8"	73° 00' 00"
		5-10	16.497				3 3/8"	73° 00' 00"

INTERMEDIATE BENT PEDESTAL ELEVATIONS & DIMENSIONS

INT. BENT	LOCATION	BEAM NUMBER	PEDESTAL ELEVATIONS Pt. a	Pt. b	Pt. c	Pt. d	A	θ
6	Back	5-1	16.538				3 3/8"	73° 00' 00"
		5-2	16.810				3 3/8"	73° 00' 00"
		5-3	17.096				3 3/8"	73° 00' 00"
		5-4	17.382				3 3/8"	73° 00' 00"
		5-5	17.667				3 3/8"	73° 00' 00"
		5-6	17.794				3 3/8"	73° 00' 00"
		5-7	17.511				3 3/8"	73° 00' 00"
		5-8	17.229				3 3/8"	73° 00' 00"
		5-9	16.946				3 3/8"	73° 00' 00"
		5-10	16.652				3 3/8"	73° 00' 00"
	Ahead	6-1	16.536				3 3/8"	73° 00' 00"
		6-2	16.808				3 3/8"	73° 00' 00"
		6-3	17.094				3 3/8"	73° 00' 00"
		6-4	17.380				3 3/8"	73° 00' 00"
		6-5	17.666				3 3/8"	73° 00' 00"
		6-6	17.793				3 3/8"	73° 00' 00"
		6-7	17.511				3 3/8"	73° 00' 00"
		6-8	17.228				3 3/8"	73° 00' 00"
		6-9	16.946				3 3/8"	73° 00' 00"
		6-10	16.652				3 3/8"	73° 00' 00"
7	Back	6-1	16.285				3 3/8"	73° 00' 00"
		6-2	16.568				3 3/8"	73° 00' 00"
		6-3	16.865				3 3/8"	73° 00' 00"
		6-4	17.162				3 3/8"	73° 00' 00"
		6-5	17.458				3 3/8"	73° 00' 00"
		6-6	17.595				3 3/8"	73° 00' 00"
		6-7	17.324				3 3/8"	73° 00' 00"
		6-8	17.053				3 3/8"	73° 00' 00"
		6-9	16.781				3 3/8"	73° 00' 00"
		6-10	16.497				3 3/8"	73° 00' 00"
	Ahead	7-1	16.279	16.268	16.274	16.285	3 3/8"	73° 00' 00"
		7-2	16.563	16.552	16.557	16.568	3 3/8"	73° 00' 00"
		7-3	16.860	16.849	16.854	16.865	3 3/8"	73° 00' 00"
		7-4	17.156	17.146	17.151	17.162	3 3/8"	73° 00' 00"
		7-5	17.453	17.443	17.448	17.458	3 3/8"	73° 00' 00"
		7-6	17.590	17.581	17.586	17.596	3 3/8"	73° 00' 00"
		7-7	17.319	17.310	17.315	17.324	3 3/8"	73° 00' 00"
		7-8	17.046				3 3/8"	73° 00' 00"
		7-9	16.774				3 3/8"	73° 00' 00"
		7-10	16.491				3 3/8"	73° 00' 00"

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE 1:1
DESIGNED BY AR
DRAWN BY KAC
CHECKED BY BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE February 2018
PROJECT NO. 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER Mark S. Eicholtz, P.E.
FL. LICENSE NO. 36078

INTERMEDIATE BENT DETAILS (7 OF 9)

SHEET NO. B-43

Compton, Kathy 2/15/2018 2:40:13 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1IntBent06.dwg

INTERMEDIATE BENT PEDESTAL ELEVATIONS & DIMENSIONS

INT. BENT	LOCATION	BEAM NUMBER	PEDESTAL ELEVATIONS				A	θ
			Pt. a	Pt. b	Pt. c	Pt. d		
8	Back	7–1	15.715	15.726	15.720	15.709	3 3/8"	73° 00' 00"
		7–2	16.009	16.020	16.014	16.003	3 3/8"	73° 00' 00"
		7–3	16.317	16.327	16.322	16.311	3 3/8"	73° 00' 00"
		7–4	16.624	16.635	16.629	16.619	3 3/8"	73° 00' 00"
		7–5	16.932	16.942	16.936	16.926	3 3/8"	73° 00' 00"
		7–6	17.080	17.090	17.085	17.075	3 3/8"	73° 00' 00"
		7–7	16.820	16.829	16.825	16.815	3 3/8"	73° 00' 00"
		7–8	16.561				3 3/8"	73° 00' 00"
		7–9	16.300				3 3/8"	73° 00' 00"
		7–10	16.028				3 3/8"	73° 00' 00"
	Ahead	8–1	15.669	15.654	15.662	15.676	3 3/8"	73° 00' 00"
		8–2	15.964	15.949	15.957	15.971	3 3/8"	73° 00' 00"
		8–3	16.273	16.258	16.266	16.280	3 3/8"	73° 00' 00"
		8–4	16.582	16.567	16.575	16.589	3 3/8"	73° 00' 00"
		8–5	16.890	16.876	16.883	16.898	3 3/8"	73° 00' 00"
		8–6	17.040	17.026	17.033	17.048	3 3/8"	73° 00' 00"
		8–7	16.782	16.768	16.775	16.789	3 3/8"	73° 00' 00"
		8–8	16.523	16.509	16.516	16.530	3 3/8"	73° 00' 00"
		8–9	16.264	16.250	16.257	16.272	3 3/8"	73° 00' 00"
		8–10	15.995	15.980	15.988	16.002	3 3/8"	73° 00' 00"
9	Back	8–1	14.914	14.929	14.921	14.907	3 3/8"	73° 00' 00"
		8–2	15.211	15.225	15.218	15.203	3 3/8"	73° 00' 00"
		8–3	15.521	15.536	15.528	15.514	3 3/8"	73° 00' 00"
		8–4	15.832	15.847	15.839	15.825	3 3/8"	73° 00' 00"
		8–5	16.143	16.158	16.150	16.136	3 3/8"	73° 00' 00"
		8–6	16.296	16.311	16.303	16.289	3 3/8"	73° 00' 00"
		8–7	16.041	16.055	16.048	16.034	3 3/8"	73° 00' 00"
		8–8	15.786	15.800	15.793	15.779	3 3/8"	73° 00' 00"
		8–9	15.531	15.545	15.538	15.524	3 3/8"	73° 00' 00"
		8–10	15.266	15.280	15.273	15.259	3 3/8"	73° 00' 00"
	Ahead	9–1	14.905	14.890	14.897	14.912	3 3/8"	73° 00' 00"
		9–2	15.200	15.186	15.193	15.208	3 3/8"	73° 00' 00"
		9–3	15.510	15.495	15.503	15.518	3 3/8"	73° 00' 00"
		9–4	15.820	15.805	15.813	15.827	3 3/8"	73° 00' 00"
		9–5	16.130	16.115	16.123	16.137	3 3/8"	73° 00' 00"
		9–6	16.281	16.267	16.274	16.289	3 3/8"	73° 00' 00"
		9–7	16.024	16.010	16.017	16.032	3 3/8"	73° 00' 00"
		9–8	15.768	15.753	15.760	15.775	3 3/8"	73° 00' 00"
		9–9	15.511	15.496	15.504	15.518	3 3/8"	73° 00' 00"
		9–10	15.243	15.229	15.236	15.251	3 3/8"	73° 00' 00"

INTERMEDIATE BENT PEDESTAL ELEVATIONS & DIMENSIONS

INT. BENT	LOCATION	BEAM NUMBER	PEDESTAL ELEVATIONS				A	θ
			Pt. a	Pt. b	Pt. c	Pt. d		
10	Back	9–1	14.148	14.163	14.155	14.141	3 3/8"	73° 00' 00"
		9–2	14.444	14.458	14.451	14.436	3 3/8"	73° 00' 00"
		9–3	14.754	14.768	14.761	14.746	3 3/8"	73° 00' 00"
		9–4	15.063	15.078	15.071	15.056	3 3/8"	73° 00' 00"
		9–5	15.373	15.388	15.380	15.366	3 3/8"	73° 00' 00"
		9–6	15.525	15.539	15.532	15.517	3 3/8"	73° 00' 00"
		9–7	15.268	15.283	15.275	15.260	3 3/8"	73° 00' 00"
		9–8	15.011	15.026	15.018	15.004	3 3/8"	73° 00' 00"
		9–9	14.754	14.769	14.761	14.747	3 3/8"	73° 00' 00"
		9–10	14.487	14.501	14.494	14.479	3 3/8"	73° 00' 00"
	Ahead	10–1	14.139	14.125	14.132	14.147	3 3/8"	73° 00' 00"
		10–2	14.435	14.420	14.428	14.442	3 3/8"	73° 00' 00"
		10–3	14.745	14.730	14.738	14.752	3 3/8"	73° 00' 00"
		10–4	15.055	15.040	15.048	15.062	3 3/8"	73° 00' 00"
		10–5	15.364	15.350	15.357	15.372	3 3/8"	73° 00' 00"
		10–6	15.516	15.501	15.509	15.523	3 3/8"	73° 00' 00"
		10–7	15.259	15.245	15.252	15.267	3 3/8"	73° 00' 00"
		10–8	15.002	14.988	14.995	15.010	3 3/8"	73° 00' 00"
		10–9	14.746	14.731	14.738	14.753	3 3/8"	73° 00' 00"
		10–10	14.478	14.463	14.471	14.485	3 3/8"	73° 00' 00"
11	Back	10–1	13.383	13.397	13.390	13.375	3 3/8"	73° 00' 00"
		10–2	13.678	13.693	13.686	13.671	3 3/8"	73° 00' 00"
		10–3	13.988	14.003	13.995	13.981	3 3/8"	73° 00' 00"
		10–4	14.298	14.313	14.305	14.291	3 3/8"	73° 00' 00"
		10–5	14.608	14.623	14.615	14.601	3 3/8"	73° 00' 00"
		10–6	14.760	14.774	14.767	14.752	3 3/8"	73° 00' 00"
		10–7	14.503	14.517	14.510	14.495	3 3/8"	73° 00' 00"
		10–8	14.246	14.261	14.253	14.238	3 3/8"	73° 00' 00"
		10–9	13.989	14.004	13.996	13.982	3 3/8"	73° 00' 00"
		10–10	13.721	13.736	13.729	13.714	3 3/8"	73° 00' 00"
	Ahead	11–1	13.374	13.359	13.367	13.381	3 3/8"	73° 00' 00"
		11–2	13.670	13.655	13.663	13.677	3 3/8"	73° 00' 00"
		11–3	13.980	13.965	13.972	13.987	3 3/8"	73° 00' 00"
		11–4	14.289	14.275	14.282	14.297	3 3/8"	73° 00' 00"
		11–5	14.599	14.585	14.592	14.607	3 3/8"	73° 00' 00"
		11–6	14.751	14.736	14.744	14.758	3 3/8"	73° 00' 00"
		11–7	14.494	14.479	14.487	14.501	3 3/8"	73° 00' 00"
		11–8	14.237	14.223	14.230	14.245	3 3/8"	73° 00' 00"
		11–9	13.980	13.966	13.973	13.988	3 3/8"	73° 00' 00"
		11–10	13.713	13.698	13.705	13.720	3 3/8"	73° 00' 00"

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

INTERMEDIATE BENT DETAILS (8 OF 9)

SHEET NO.: B-44

Compton, Kathy
2/15/2018 2:40:14 PM
S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1IntBent06.dwg

INTERMEDIATE BENT PEDESTAL ELEVATIONS & DIMENSIONS

INT. BENT	LOCATION	BEAM NUMBER	PEDESTAL ELEVATIONS				A	θ
			Pt. a	Pt. b	Pt. c	Pt. d		
12	Back	11–1	12.617	12.632	12.625	12.610	3 3/8"	73° 00' 00"
		11–2	12.913	12.928	12.920	12.906	3 3/8"	73° 00' 00"
		11–3	13.223	13.238	13.230	13.216	3 3/8"	73° 00' 00"
		11–4	13.533	13.548	13.540	13.525	3 3/8"	73° 00' 00"
		11–5	13.843	13.857	13.850	13.835	3 3/8"	73° 00' 00"
		11–6	13.994	14.009	14.001	13.987	3 3/8"	73° 00' 00"
		11–7	13.737	13.752	13.745	13.730	3 3/8"	73° 00' 00"
		11–8	13.481	13.495	13.488	13.473	3 3/8"	73° 00' 00"
		11–9	13.224	13.238	13.231	13.216	3 3/8"	73° 00' 00"
		11–10	12.956	12.971	12.963	12.949	3 3/8"	73° 00' 00"
	Ahead	12–1	12.609	12.594	12.602	12.616	3 3/8"	73° 00' 00"
		12–2	12.904	12.890	12.897	12.912	3 3/8"	73° 00' 00"
		12–3	13.214	13.200	13.207	13.222	3 3/8"	73° 00' 00"
		12–4	13.524	13.510	13.517	13.532	3 3/8"	73° 00' 00"
		12–5	13.834	13.819	13.827	13.841	3 3/8"	73° 00' 00"
		12–6	13.986	13.971	13.978	13.993	3 3/8"	73° 00' 00"
		12–7	13.729	13.714	13.721	13.736	3 3/8"	73° 00' 00"
		12–8	13.472	13.457	13.465	13.479	3 3/8"	73° 00' 00"
		12–9	13.215	13.200	13.208	13.222	3 3/8"	73° 00' 00"
		12–10	12.947	12.933	12.940	12.955	3 3/8"	73° 00' 00"
13	Back	12–1	11.852	11.867	11.859	11.845	3 3/8"	73° 00' 00"
		12–2	12.148	12.163	12.155	12.140	3 3/8"	73° 00' 00"
		12–3	12.458	12.472	12.465	12.450	3 3/8"	73° 00' 00"
		12–4	12.768	12.782	12.775	12.760	3 3/8"	73° 00' 00"
		12–5	13.077	13.092	13.085	13.070	3 3/8"	73° 00' 00"
		12–6	13.229	13.244	13.236	13.222	3 3/8"	73° 00' 00"
		12–7	12.972	12.987	12.979	12.965	3 3/8"	73° 00' 00"
		12–8	12.715	12.730	12.723	12.708	3 3/8"	73° 00' 00"
		12–9	12.458	12.473	12.466	12.451	3 3/8"	73° 00' 00"
		12–10	12.191	12.206	12.198	12.183	3 3/8"	73° 00' 00"
	Ahead	13–1	11.835	11.820	11.828	11.842	3 3/8"	73° 00' 00"
		13–2	12.131	12.117	12.124	12.138	3 3/8"	73° 00' 00"
		13–3	12.441	12.427	12.434	12.448	3 3/8"	73° 00' 00"
		13–4	12.752	12.737	12.745	12.759	3 3/8"	73° 00' 00"
		13–5	13.062	13.048	13.055	13.069	3 3/8"	73° 00' 00"
		13–6	13.214	13.200	13.207	13.221	3 3/8"	73° 00' 00"
		13–7	12.958	12.944	12.951	12.965	3 3/8"	73° 00' 00"
		13–8	12.702	12.687	12.695	12.709	3 3/8"	73° 00' 00"
		13–9	12.446	12.431	12.439	12.453	3 3/8"	73° 00' 00"
		13–10	12.179	12.164	12.172	12.186	3 3/8"	73° 00' 00"

INTERMEDIATE BENT PEDESTAL ELEVATIONS & DIMENSIONS

INT. BENT	LOCATION	BEAM NUMBER	PEDESTAL ELEVATIONS				A	θ
			Pt. a	Pt. b	Pt. c	Pt. d		
14	Back	13–1	11.100	11.114	11.107	11.093	3 3/8"	73° 00' 00"
		13–2	11.394	11.408	11.401	11.387	3 3/8"	73° 00' 00"
		13–3	11.702	11.716	11.709	11.695	3 3/8"	73° 00' 00"
		13–4	12.011	12.025	12.018	12.003	3 3/8"	73° 00' 00"
		13–5	12.319	12.334	12.326	12.312	3 3/8"	73° 00' 00"
		13–6	12.470	12.484	12.477	12.463	3 3/8"	73° 00' 00"
		13–7	12.212	12.227	12.219	12.205	3 3/8"	73° 00' 00"
		13–8	11.955	11.969	11.962	11.947	3 3/8"	73° 00' 00"
		13–9	11.697	11.712	11.704	11.690	3 3/8"	73° 00' 00"
		13–10	11.429	11.443	11.436	11.422	3 3/8"	73° 00' 00"
	Ahead	14–1	11.090	11.077	11.084	11.096	3 3/8"	73° 00' 00"
		14–2	11.384	11.371	11.377	11.390	3 3/8"	73° 00' 00"
		14–3	11.691	11.679	11.685	11.698	3 3/8"	73° 00' 00"
		14–4	11.999	11.987	11.993	12.006	3 3/8"	73° 00' 00"
		14–5	12.307	12.295	12.301	12.314	3 3/8"	73° 00' 00"
		14–6	12.457	12.444	12.451	12.464	3 3/8"	73° 00' 00"
		14–7	12.199	12.186	12.193	12.205	3 3/8"	73° 00' 00"
		14–8	11.941	11.928	11.934	11.947	3 3/8"	73° 00' 00"
		14–9	11.682	11.669	11.676	11.689	3 3/8"	73° 00' 00"
		14–10	11.413	11.400	11.407	11.420	3 3/8"	73° 00' 00"
15	Back	14–1	10.438	10.450	10.444	10.431	3 3/8"	73° 00' 00"
		14–2	10.728	10.741	10.735	10.722	3 3/8"	73° 00' 00"
		14–3	11.033	11.046	11.040	11.027	3 3/8"	73° 00' 00"
		14–4	11.338	11.351	11.345	11.332	3 3/8"	73° 00' 00"
		14–5	11.643	11.656	11.650	11.637	3 3/8"	73° 00' 00"
		14–6	11.790	11.803	11.796	11.784	3 3/8"	73° 00' 00"
		14–7	11.529	11.542	11.535	11.522	3 3/8"	73° 00' 00"
		14–8	11.267	11.281	11.274	11.261	3 3/8"	73° 00' 00"
		14–9	11.006	11.019	11.013	11.000	3 3/8"	73° 00' 00"
		14–10	10.734	10.748	10.741	10.728	3 3/8"	73° 00' 00"
	Ahead	15–1	10.425	10.414	10.420	10.431	3 7/16"	72° 39' 16"
		15–2	10.712	10.701	10.707	10.718	3 3/8"	72° 55' 43"
		15–3	11.017	11.006	11.012	11.023	3 3/8"	72° 55' 43"
		15–4	11.323	11.312	11.317	11.328	3 3/8"	72° 55' 43"
		15–5	11.628	11.617	11.623	11.634	3 3/8"	72° 55' 43"
		15–6	11.783	11.771	11.777	11.788	3 3/8"	72° 55' 43"
		15–7	11.520	11.509	11.515	11.526	3 3/8"	72° 55' 43"
		15–8	11.258	11.247	11.252	11.264	3 3/8"	72° 55' 43"
		15–9	10.996	10.985	10.990	11.002	3 3/8"	72° 55' 43"
		15–10	10.731	10.719	10.725	10.737	3 3/8"	72° 55' 43"

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

INTERMEDIATE BENT DETAILS (9 OF 9)

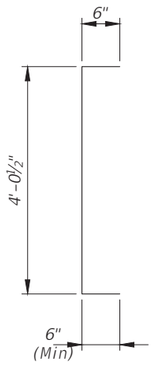
SHEET NO.: B-45

Compton, Kathy 2/15/2018 2:40:15 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1IntBent06.dwg

FLORIDA-I BEAM – TABLE OF BEAM VARIABLES

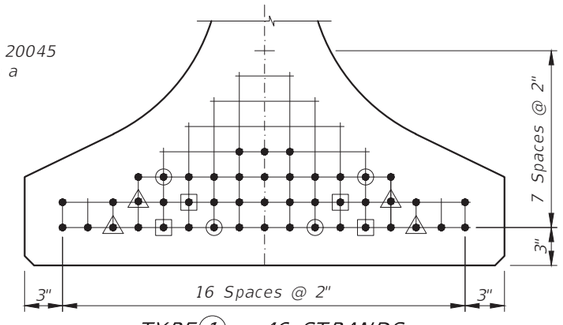
Table Date 01-01-16

LOCATION		BEAM TYPE	CONCRETE PROPERTIES			STND. PTRN. TYPE	END ELEV. COND	PLAN VIEW CASE		BRG. PLATE MARK ***		END OF BEAM & BEARING DIMENSIONS **						BEAM DIMENSIONS *	
				STRENGTHS (psi)								ANGLE θ		DIM P	DIM J	DIM K1	DIM K2		
SPAN NO.	BEAM NO.		CLASS	28 Day	Release			END 1	END 2	END 1	END 2	END 1	END 2					DIM L	DIM R
1	1-1	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	1'-6½"	11⅜"	99'-2⅛"	⅝"
1	1-2 thru 1-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	1'-6½"	11¼"	98'-11¾"	⅝"
2	2-1	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-9⅝"	⅝"
2	2-2 thru 2-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11⅜"	11⅜"	99'-6¼"	⅝"
3	3-1	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7⅞"	⅝"
3	3-2 thru 3-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7¼"	⅝"
4	4-1 thru 4-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7⅝"	⅝"
5	5-1 thru 5-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7⅝"	⅝"
6	6-1 thru 6-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7⅝"	⅝"
7	7-1 thru 7-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7⅝"	⅝"
8	8-1 thru 8-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7¾"	⅝"
9	9-1 thru 9-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7¾"	⅝"
10	10-1 thru 10-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7¾"	⅝"
11	11-1 thru 11-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7¾"	⅝"
12	12-1 thru 12-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7¾"	⅝"
13	13-1 thru 13-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7¾"	⅝"
14	14-1 thru 14-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	11½"	99'-7¾"	⅝"
15	15-1	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	1'-6⅞"	99'-1⅜"	⅝"
15	15-2 thru 15-10	45	VI	8500	6000	1	1	1	1	S1	S1	90°	90°	n/a	9"	11½"	1'-6⅞"	98'-11⅝"	⅝"



BARS 5K

(Bars 5K on FDOT Standard Index No. 20045 shall be revised as shown above within a distance of 15'-0" from beam ends.)



TYPE (1) 46 STRANDS

STRAND DESCRIPTION: Use 0.60" Diameter, Grade 270 Low-Relaxation Carbon Steel Strands stressed at 43.9 kips each. Area per strand equals 0.217 sq. in.

STRAND PATTERNS

STRAND DEBONDING LEGEND

- ● – fully bonded strands.
- △ – strands debonded 8'-0" from end of beam.
- ◉ – strands debonded 16'-0" from end of beam.
- ▣ – strands debonded 20'-0" from end of beam.

NOTE: On beams with skewed ends, the debonded length shall be measured along the shielded strand.

NOTE: Work this sheet with Design Standards Index Nos. 20010 and 20045.

DIMENSION NOTES

* All longitudinal beam dimensions shown on this sheet with a single asterisk (*) are measured along the centerline of beam. Dimension "R" is calculated at mid-height of the beam.

** End beam bearing dimensions "J" and "K" are measured perpendicular to ℄ Bearing along the bottom of the beam.

BEARING PLATES

*** See the Bearing Plate Data Table, Sheet B-75, B-76 & B-77 for details.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FLORIDA-I 45 BEAM
TABLE OF BEAM VARIABLES (1 OF 2)

SHEET NO.: B-46

Compton, Kathy 2/15/2018 2:40:22 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1DataTableBeam01.dwg

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FLORIDA-I BEAM – TABLE OF BEAM VARIABLES CONTINUED

Table Date 01-01-16

LOCATION		REINFORCING STEEL															
SPAN NO.	BEAM NO.	3C1	3C2	3D1		3D2		3D3	4M1	4M2	4M3	5K	NO. OF SPACES BARS 5K				SP. BARS 5K *
		C	C	A	B	A	B	NO.	D	D	NO.	NO.	S1	S2	S3	S4	V1
1	1-1	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
1	1-2 thru 1-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	116	3'-8"	3'-8"	88	182	44	16	10	0	6"
2	2-1	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
2	2-2 thru 2-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
3	3-1	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
3	3-2 thru 3-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
4	4-1 thru 4-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
5	5-1 thru 5-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
6	6-1 thru 6-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
7	7-1 thru 7-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
8	8-1 thru 8-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
9	9-1 thru 9-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
10	10-1 thru 10-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
11	11-1 thru 11-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
12	12-1 thru 12-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
13	13-1 thru 13-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
14	14-1 thru 14-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
15	15-1	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	118	3'-8"	3'-8"	88	182	44	16	10	0	6"
15	15-2 thru 15-10	1'-5½"	1'-5½"	8½"	1'-3"	8½"	1'-3"	116	3'-8"	3'-8"	88	182	44	16	10	0	6"

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

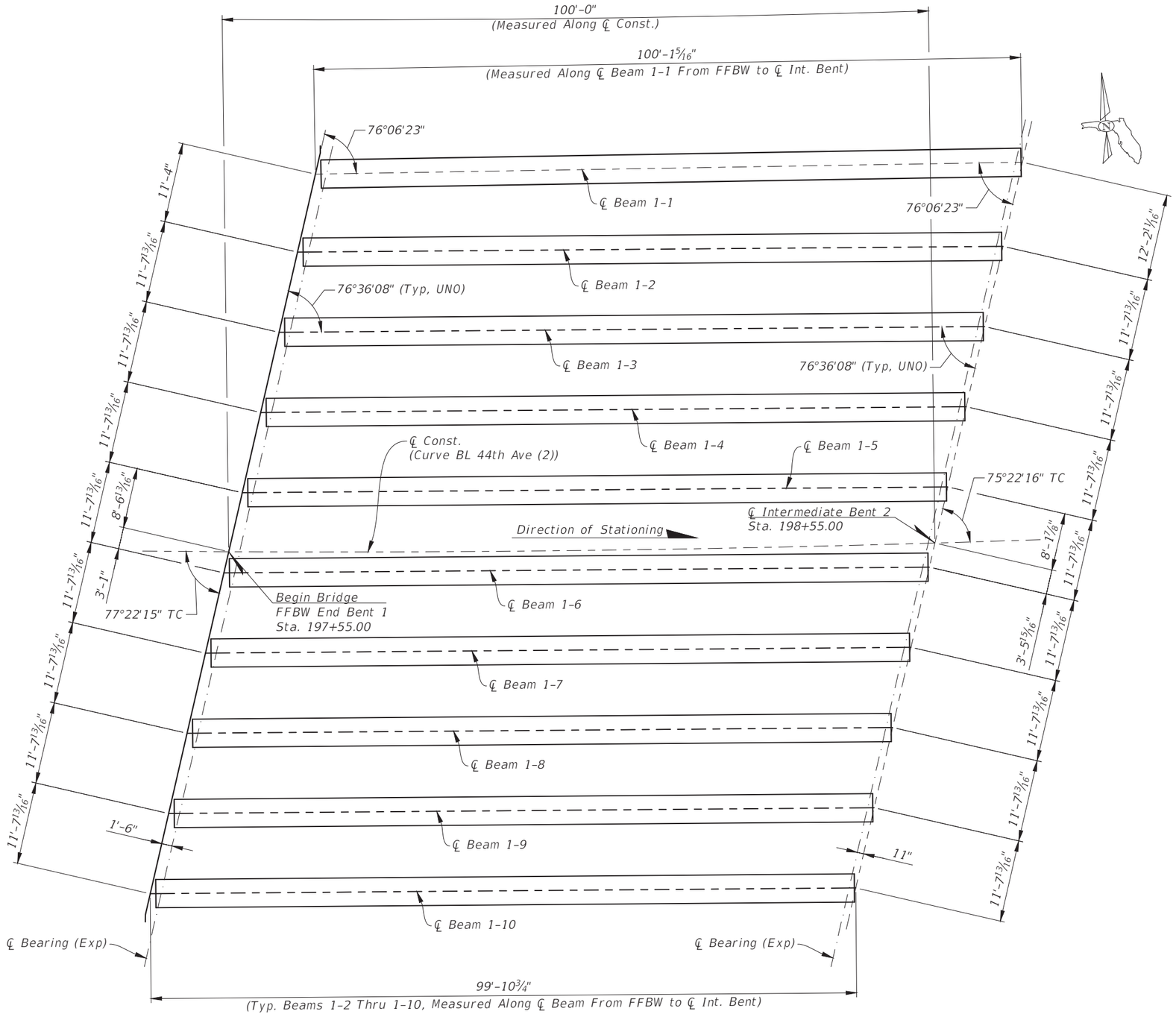
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FLORIDA-I 45 BEAM
TABLE OF BEAM VARIABLES (2 OF 2)

SHEET NO.: B-47

Compton, Kathy 2/15/2018 2:40:23 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1DataTableBeam01.dwg



FRAMING PLAN - SPAN 1

NOTES

1. All beams are Florida-I 45, FDOT Standard Index No. 20045.
2. Temporary bracing locations are not shown. For locations of temporary bracing, see Sheet B-78.
3. For horizontal alignment along ℄ Construction, see Sheet B-7.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/16" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

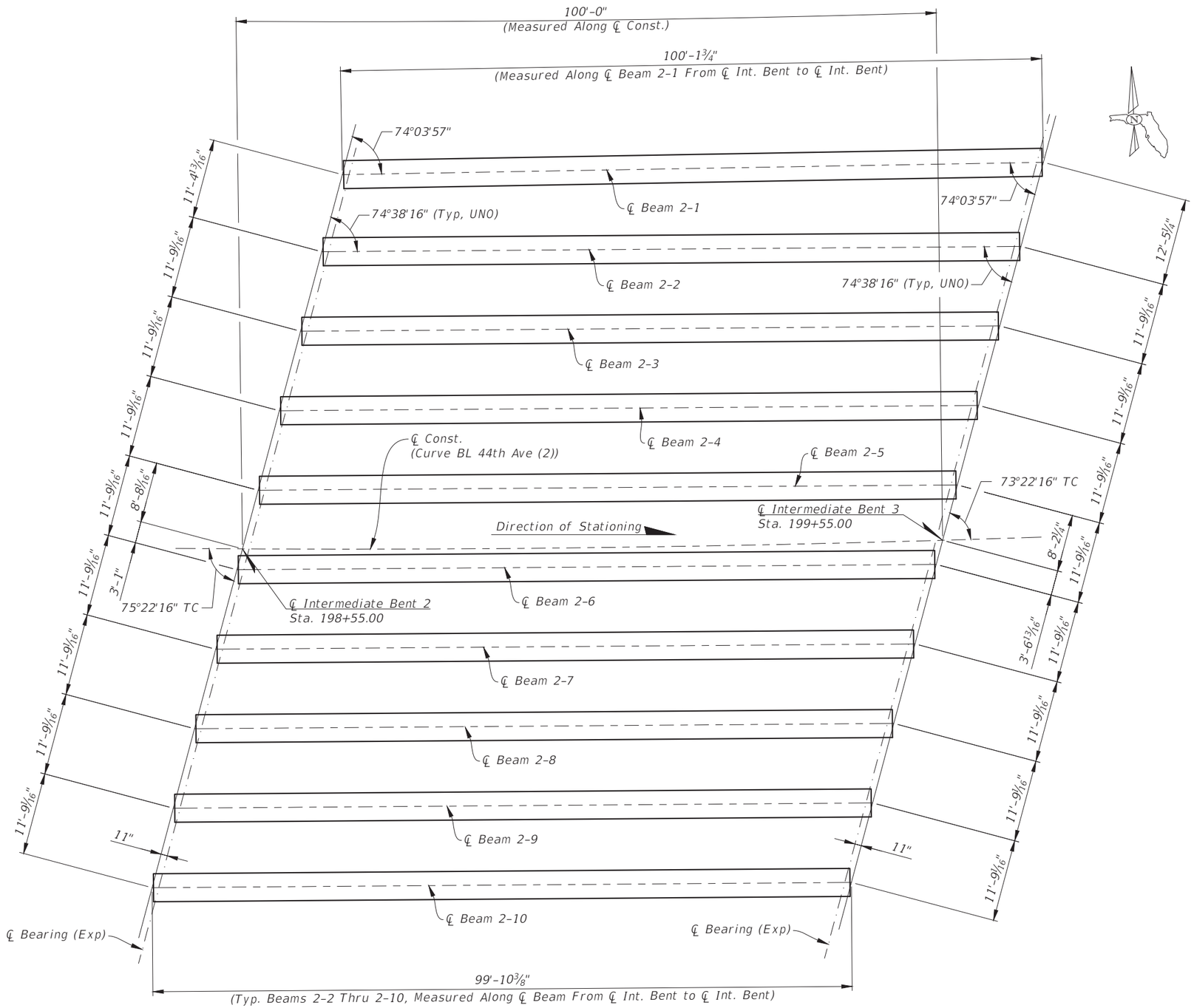
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FRAMING PLAN – SPAN 1

SHEET NO.: B-48

Compton, Kathy 2/15/2018 2:40:29 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FramingPlan_Span1.dwg



FRAMING PLAN - SPAN 2

NOTES

1. All beams are Florida-I 45, FDOT Standard Index No. 20045.
2. Temporary bracing locations are not shown. For locations of temporary bracing, see Sheet B-78.
3. For horizontal alignment along ℄ Construction, see Sheet B-7.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/16" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

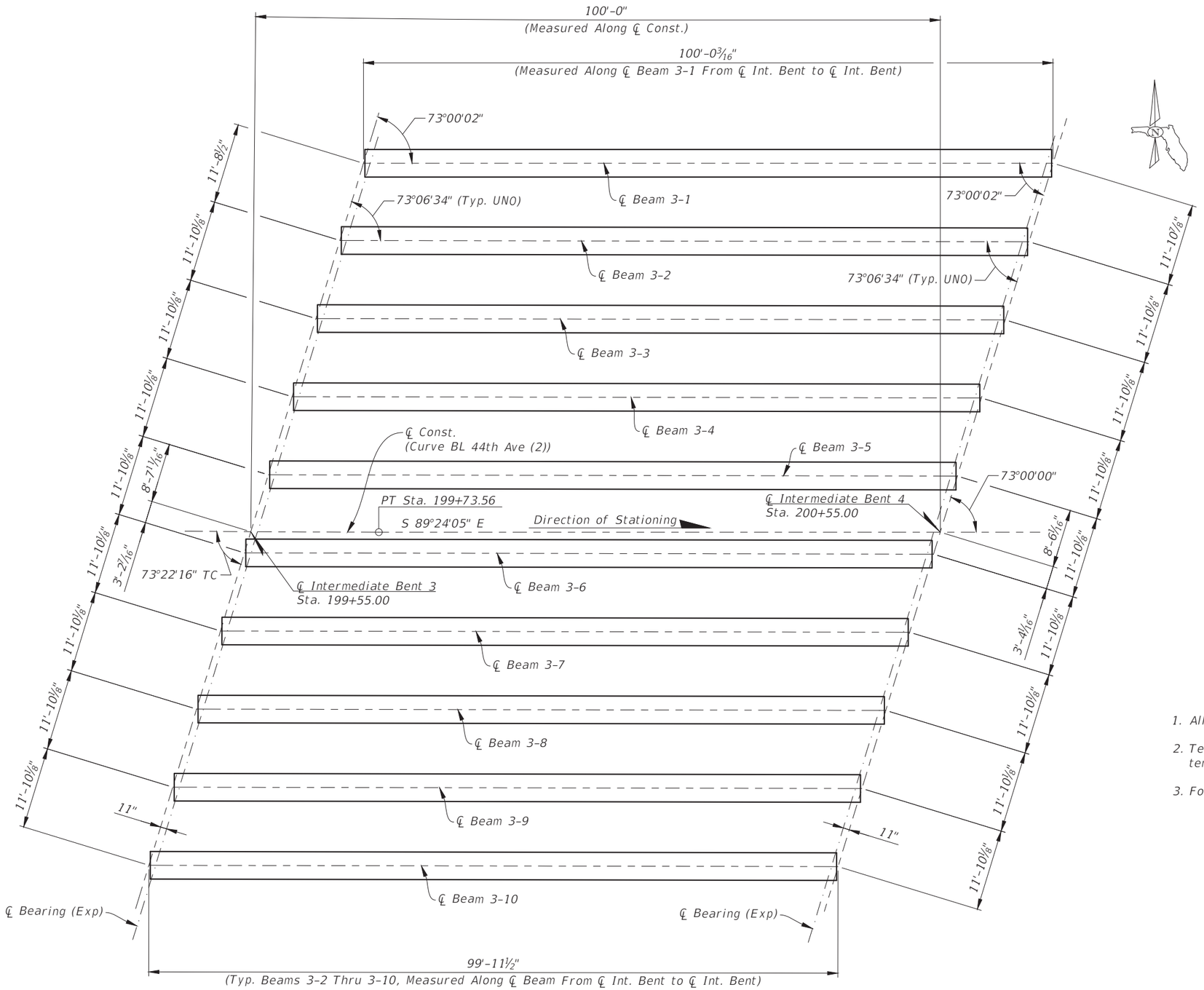
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FRAMING PLAN – SPAN 2

SHEET NO.: B-49

Compton, Kathy 2/15/2018 2:40:35 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FramingPlan_Span2.dwg



FRAMING PLAN - SPAN 3

NOTES

1. All beams are Florida-I 45, FDOT Standard Index No. 20045.
2. Temporary bracing locations are not shown. For locations of temporary bracing, see Sheet B-78.
3. For horizontal alignment along ℄ Construction, see Sheet B-7.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/16" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

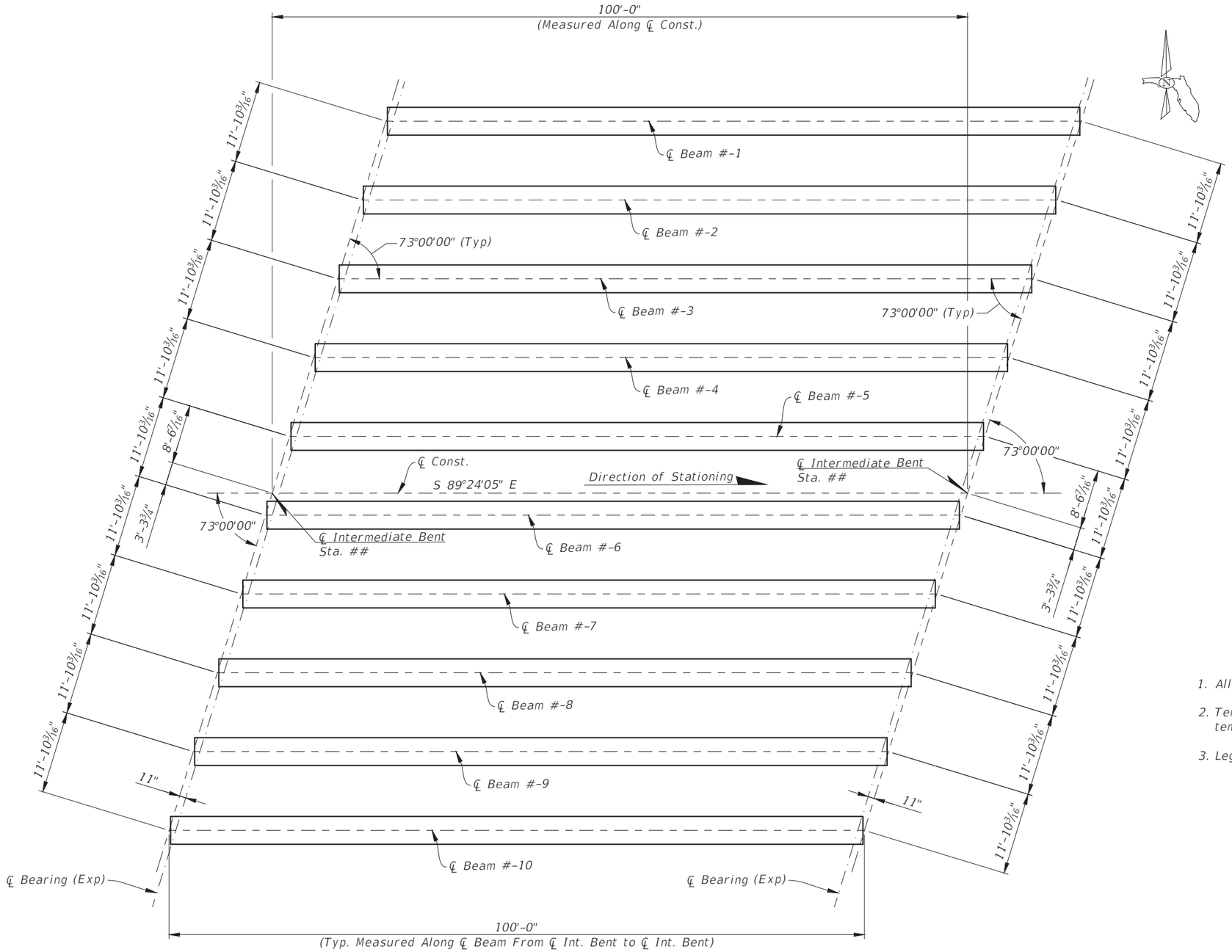
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FRAMING PLAN – SPAN 3

SHEET NO.: B-50

Compton, Kathy 2/15/2018 2:40:41 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1FramingPlan_Span3.dwg



FRAMING PLAN - SPANS 4 THRU 14

TABLE OF VARIABLES		
SPAN NUMBER (#)	INTERMEDIATE BENT	
	NUMBER	STATION (##)
4	4	200+55.00
5	5	201+55.00
6	6	202+55.00
7	7	203+55.00
8	8	204+55.00
9	9	205+55.00
10	10	206+55.00
11	11	207+55.00
12	12	208+55.00
13	13	209+55.00
14	14	210+55.00
	15	211+55.00

NOTES

1. All beams are Florida-I 45, FDOT Standard Index No. 20045.
2. Temporary bracing locations are not shown. For locations of temporary bracing, see Sheet B-78.
3. Legend:
   # = Span Number
   ## = Intermediate Bent Station

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/16" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

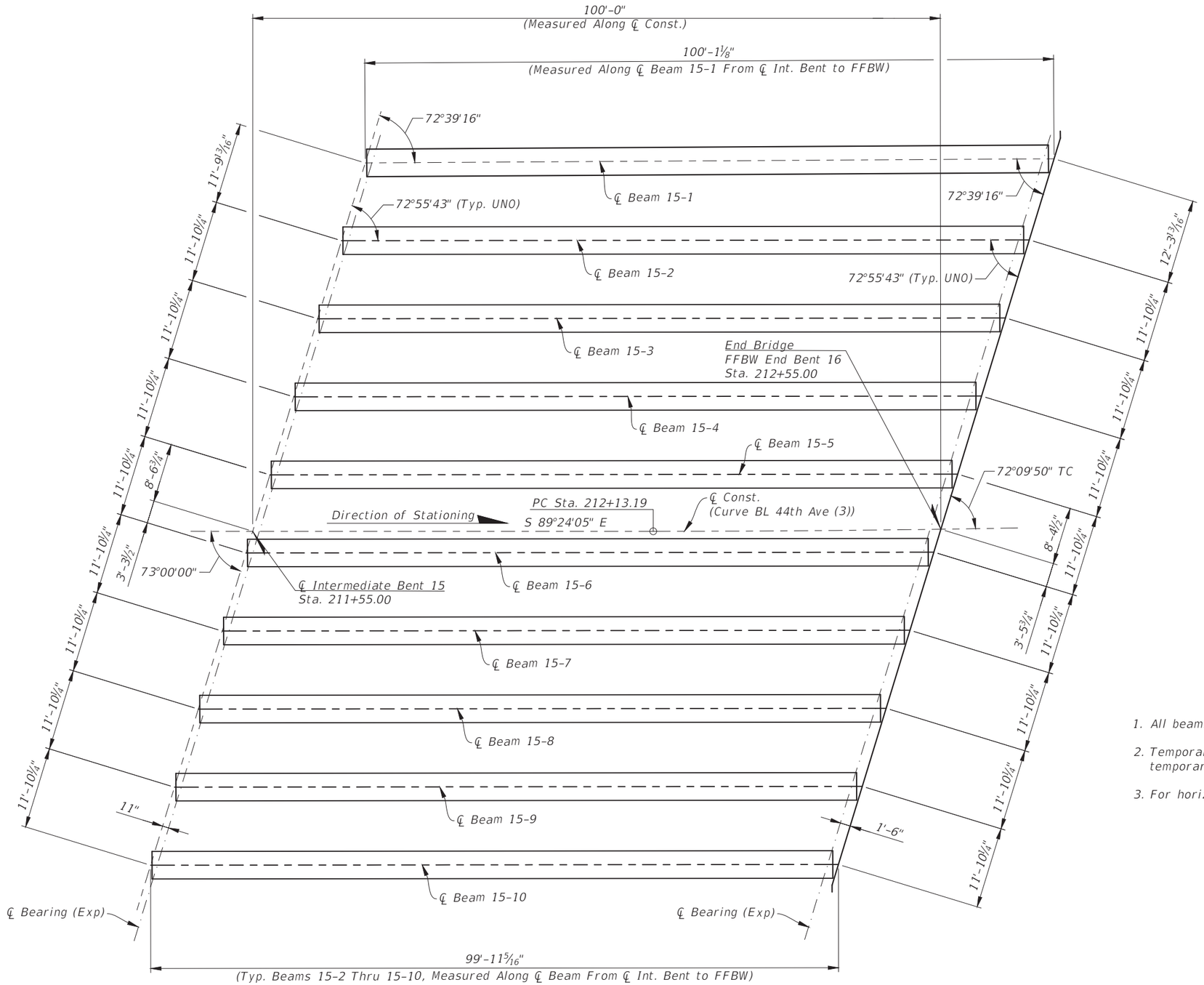
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FRAMING PLAN – SPANS 4 THRU 14

SHEET NO.: B-51

Compton, Kathy 2/15/2018 2:40:47 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FramingPlan_Span4-14.dwg



FRAMING PLAN - SPAN 15

NOTES

1. All beams are Florida-I 45, FDOT Standard Index No. 20045.
2. Temporary bracing locations are not shown. For locations of temporary bracing, see Sheet B-78.
3. For horizontal alignment along ℄ Construction, see Sheet B-10.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/16" = 1'-0"
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

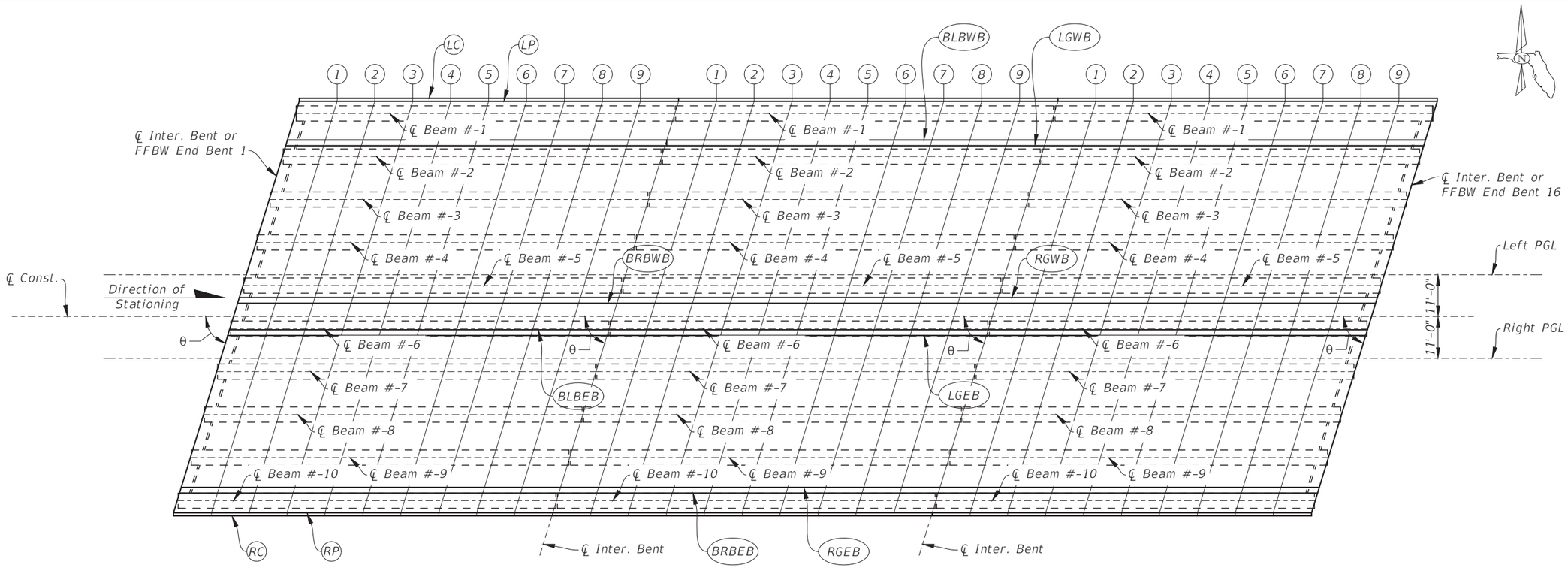
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FRAMING PLAN – SPAN 15

SHEET NO.: B-52

Compton, Kathy 2/15/2018 2:40:53 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FramingPlan_Span15.dwg



PLAN

(Units 2, 3 & 4 Shown, Units 1 & 5 Similar)

TABLE OF VARIABLES

LOCATION	FFBW END BENT 1	℄ INTER. BENT 2	℄ INTER. BENT 3	℄ INTER. BENT 4	℄ INTER. BENT 5	℄ INTER. BENT 6	℄ INTER. BENT 7	℄ INTER. BENT 8	℄ INTER. BENT 9	℄ INTER. BENT 10	℄ INTER. BENT 11	℄ INTER. BENT 12	℄ INTER. BENT 13	℄ INTER. BENT 14	℄ INTER. BENT 15	FFBW END BENT 16
STATION	197+55.00	198+55.00	199+55.00	200+55.00	201+55.00	202+55.00	203+55.00	204+55.00	205+55.00	206+55.00	207+55.00	208+55.00	209+55.00	210+55.00	211+55.00	212+55.00
θ	77°22'15" TC	75°22'16" TC	73°22'16" TC	73°00'00"	73°00'00"	73°00'00"	73°00'00"	73°00'00"	73°00'00"	73°00'00"	73°00'00"	73°00'00"	73°00'00"	73°00'00"	73°00'00"	72°09'50" TC
UNIT	1			2			3			4			5			

NOTES

1. Legend:
   - BAS – Denotes Begin Approach Slab
   - BB – Denotes Begin Bridge
   - LC – Denotes Left Coping
   - LP – Denotes Left Parapet
   - BLBWB – Denotes Back of Left Barrier – Westbound
   - LGWB – Denotes Left Gutter & Slope Break – Westbound
   - PGL – Denotes Profile Grade Line
   - RGWB – Denotes Right Gutter – Westbound
   - BRBWB – Denotes Back of Right Barrier – Westbound
   - BLBEB – Denotes Back of Left Barrier – Eastbound
   - RCWB – Denotes Approach Slab Right Coping – Westbound
   - LCEB – Denotes Approach Slab Left Coping – Eastbound
   - LGEB – Denotes Left Gutter – Eastbound
   - RGEB – Denotes Right Gutter & Slope Break – Eastbound
   - BRBEB – Denotes Back of Right Barrier – Eastbound
   - RP – Denotes Right Parapet
   - RC – Denotes Right Coping
   - EB – Denotes End Bridge
   - EAS – Denotes End Approach Slab
   - # – Denotes Span Number
2. Elevations for Bridge: Elevations given are Top of Slab Elevations along Coping Lines, Gutter Lines, Sidewalk Lines and over Beam Centerlines.
3. Elevations for Approach Slab: Elevations given are top of riding surface elevations, along Coping Lines, Sidewalk Lines and Gutter Lines.
4. For Table of Elevations, see Sheets B-56 thru B-63.
5. All T-Lines are parallel to ℄ of Intermediate Bents and Front Faces of Back Walls at End Bent 1 and 16.
6. T-Lines are equally spaced along ℄ Const. in each Span and on Approach Slabs.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 30'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FINISH GRADE ELEVATIONS (1 OF 11)

SHEET NO.: B-53

Compton, Kathy
2/15/2018 2:41:00 PM
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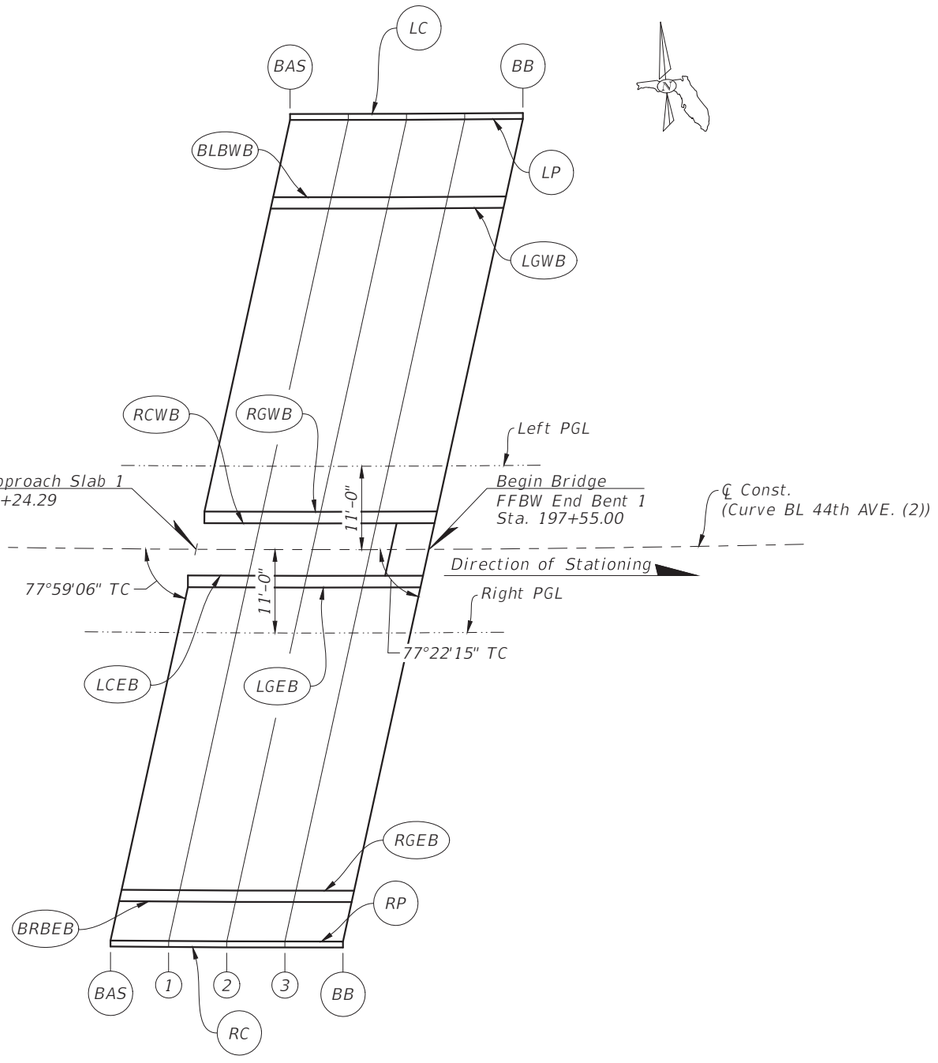
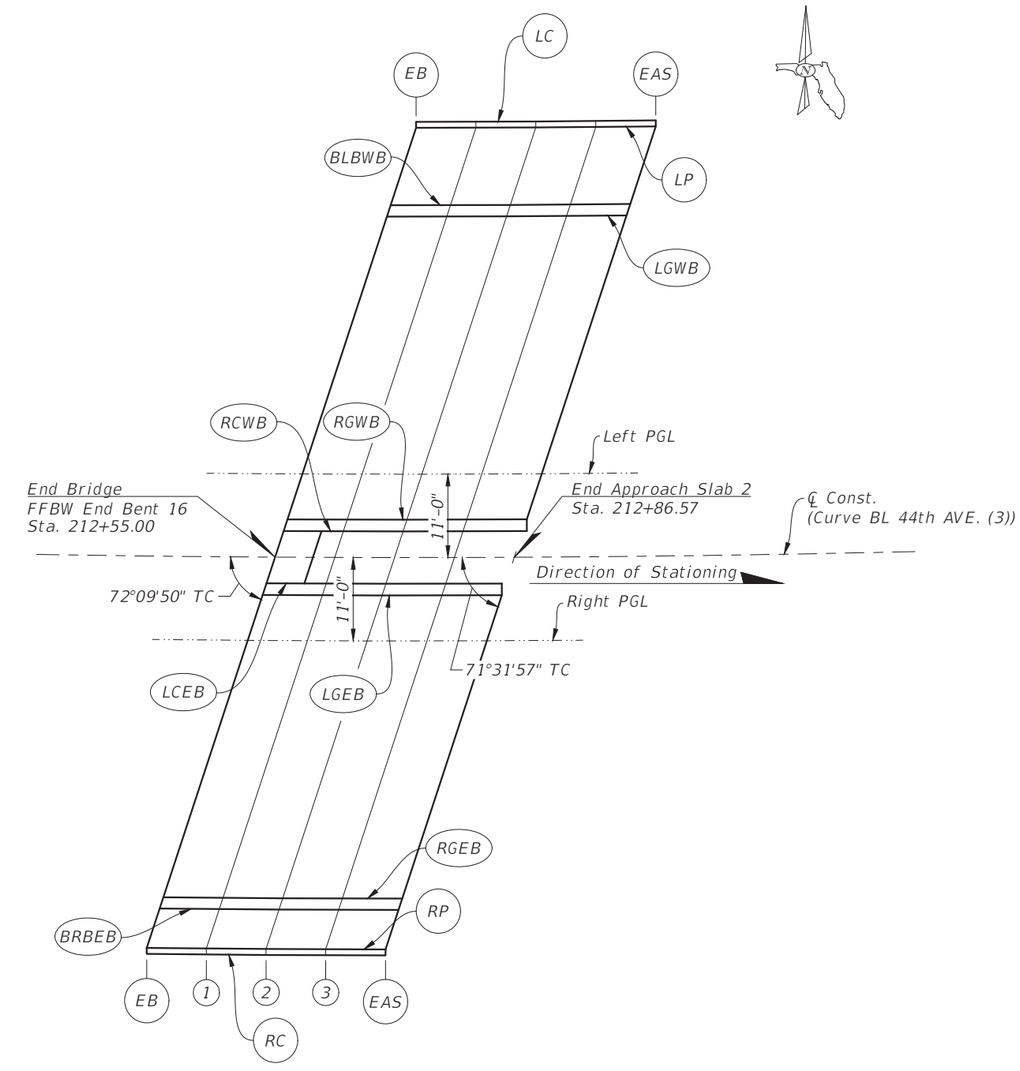


APPROACH SLAB 1



APPROACH SLAB 2

NOTES

1. For Notes & Legend, see Sheet B-53.
2. For Table of Elevations, see Sheet B-63.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 20'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

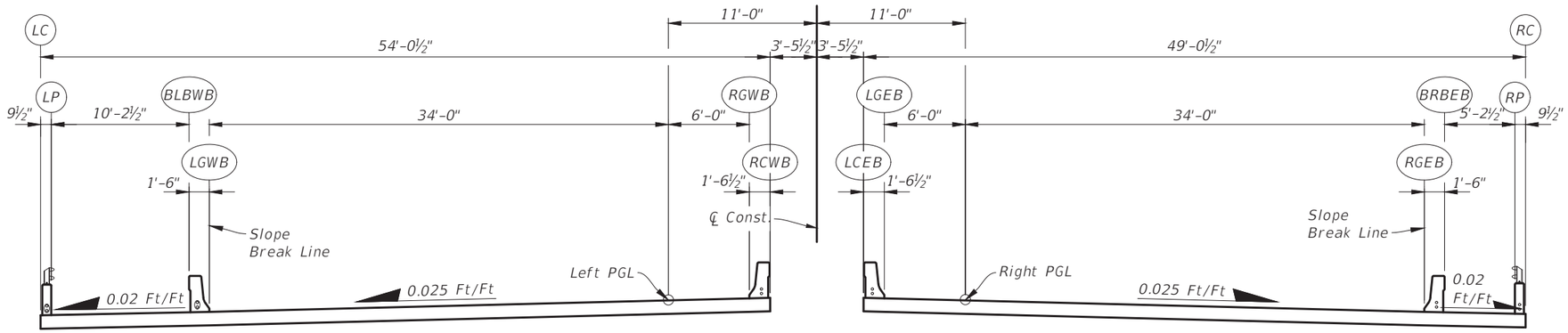
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

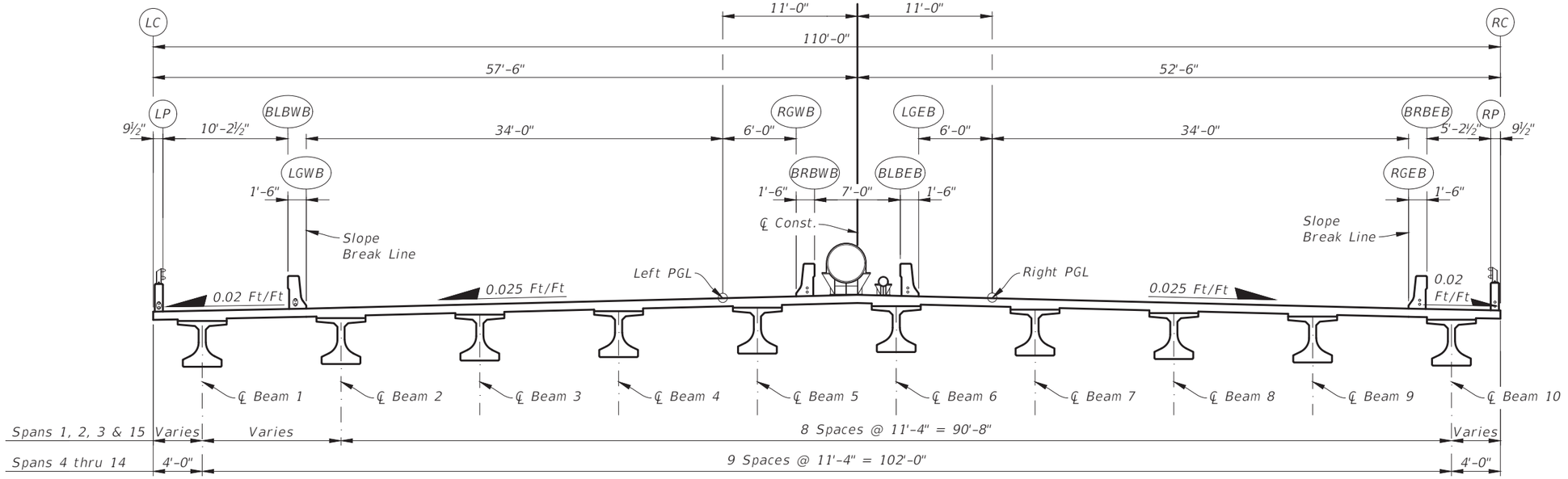
FINISH GRADE ELEVATIONS (2 OF 11)

SHEET NO.: B-54

Compton, Kathy 2/15/2018 2:41:06 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FinishGrEL02.dwg



SECTION THRU APPROACH SLABS



TYPICAL SECTION

NOTES

1. For Notes & Legend, see Sheet B-53.
2. For Table of Elevations, see Sheets B-56 thru B-63.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FINISH GRADE ELEVATIONS (3 OF 11)

SHEET NO.: B-55

Compton, Kathy 2/15/2018 2:41:12 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FinishGrEL03.dwg

FINISH GRADE ELEVATIONS - SPAN 1

T-Lines & Bents / Location	FFBW End Bent 1	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 2
Left Coping	18.249	18.351	18.453	18.555	18.657	18.759	18.861	18.963	19.066	19.168	19.270
Left Parapet	18.265	18.367	18.469	18.571	18.673	18.775	18.877	18.979	19.081	19.184	19.286
℄ Beam 1-1	18.321	18.420	18.519	18.620	18.721	18.822	18.925	19.028	19.131	19.236	19.341
Back of Left Barrier - Westbound	18.445	18.547	18.648	18.750	18.852	18.954	19.055	19.157	19.259	19.360	19.462
Left Gutter & Slope Break - Westbound	18.471	18.573	18.675	18.776	18.878	18.980	19.081	19.183	19.285	19.386	19.488
℄ Beam 1-2	18.529	18.629	18.729	18.830	18.932	19.035	19.138	19.243	19.349	19.455	19.562
℄ Beam 1-3	18.787	18.886	18.985	19.086	19.187	19.289	19.392	19.496	19.601	19.707	19.813
℄ Beam 1-4	19.045	19.143	19.242	19.342	19.443	19.544	19.647	19.750	19.854	19.959	20.065
Left PGL	19.244	19.344	19.445	19.545	19.645	19.746	19.846	19.946	20.047	20.147	20.248
℄ Beam 1-5	19.304	19.401	19.499	19.599	19.699	19.800	19.901	20.004	20.108	20.212	20.317
Right Gutter - Westbound	19.380	19.480	19.581	19.681	19.781	19.881	19.981	20.081	20.182	20.282	20.382
Back of Right Barrier - Westbound	19.414	19.514	19.615	19.715	19.815	19.915	20.015	20.115	20.215	20.315	20.415
℄ Const.	19.494	19.594	19.694	19.794	19.894	19.994	20.094	20.194	20.294	20.394	20.494
℄ Beam 1-6	19.412	19.515	19.617	19.718	19.818	19.917	20.016	20.113	20.210	20.306	20.400
Back of Left Barrier - Eastbound	19.399	19.498	19.598	19.698	19.798	19.898	19.998	20.098	20.197	20.297	20.397
Left Gutter - Eastbound	19.358	19.458	19.557	19.657	19.757	19.857	19.957	20.056	20.156	20.256	20.356
Right PGL	19.194	19.294	19.394	19.493	19.593	19.692	19.792	19.891	19.991	20.091	20.190
℄ Beam 1-7	19.103	19.205	19.307	19.408	19.508	19.607	19.705	19.802	19.899	19.995	20.089
℄ Beam 1-8	18.793	18.896	18.997	19.098	19.198	19.297	19.395	19.492	19.588	19.684	19.778
℄ Beam 1-9	18.484	18.586	18.687	18.788	18.888	18.986	19.084	19.181	19.278	19.373	19.467
Right Gutter & Slope Break - Eastbound	18.270	18.368	18.466	18.565	18.663	18.762	18.860	18.958	19.057	19.155	19.253
Back of Right Barrier - Eastbound	18.237	18.335	18.433	18.531	18.630	18.728	18.826	18.925	19.023	19.121	19.219
℄ Beam 1-10	18.192	18.294	18.394	18.494	18.593	18.692	18.790	18.887	18.983	19.079	19.174
Right Parapet	18.121	18.219	18.317	18.416	18.514	18.612	18.710	18.808	18.906	19.004	19.102
Right Coping	18.105	18.203	18.301	18.400	18.498	18.596	18.694	18.792	18.890	18.988	19.086

FINISH GRADE ELEVATIONS - SPAN 2

T-Lines & Bents / Location	℄ Inter. Bent 2	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 3
Left Coping	19.270	19.372	19.474	19.576	19.678	19.781	19.882	19.979	20.074	20.165	20.253
Left Parapet	19.286	19.388	19.490	19.592	19.694	19.796	19.897	19.995	20.090	20.181	20.269
℄ Beam 2-1	19.341	19.440	19.539	19.640	19.741	19.842	19.944	20.043	20.139	20.233	20.325
Back of Left Barrier - Westbound	19.462	19.564	19.666	19.767	19.869	19.971	20.072	20.171	20.266	20.358	20.446
Left Gutter & Slope Break - Westbound	19.488	19.590	19.691	19.793	19.895	19.997	20.098	20.196	20.292	20.384	20.472
℄ Beam 2-2	19.544	19.644	19.744	19.846	19.948	20.051	20.155	20.257	20.356	20.453	20.548
℄ Beam 2-3	19.798	19.897	19.997	20.097	20.199	20.301	20.404	20.507	20.607	20.704	20.800
℄ Beam 2-4	20.052	20.150	20.249	20.349	20.450	20.552	20.654	20.757	20.857	20.955	21.051
Left PGL	20.248	20.348	20.448	20.549	20.649	20.750	20.850	20.950	21.047	21.141	21.232
℄ Beam 2-5	20.306	20.404	20.502	20.601	20.702	20.803	20.905	21.007	21.108	21.206	21.302
Right Gutter - Westbound	20.382	20.482	20.582	20.682	20.782	20.883	20.983	21.083	21.180	21.275	21.366
Back of Right Barrier - Westbound	20.415	20.516	20.616	20.716	20.816	20.916	21.016	21.116	21.214	21.308	21.399
℄ Const.	20.494	20.594	20.694	20.794	20.894	20.994	21.094	21.194	21.291	21.386	21.477
℄ Beam 2-6	20.411	20.514	20.616	20.716	20.816	20.916	21.014	21.111	21.206	21.296	21.383
Back of Left Barrier - Eastbound	20.397	20.497	20.597	20.697	20.797	20.896	20.996	21.096	21.194	21.289	21.381
Left Gutter - Eastbound	20.356	20.456	20.555	20.655	20.755	20.855	20.954	21.054	21.152	21.247	21.339
Right PGL	20.190	20.290	20.389	20.489	20.588	20.688	20.788	20.887	20.985	21.081	21.173
℄ Beam 2-7	20.098	20.200	20.301	20.402	20.502	20.601	20.699	20.796	20.892	20.983	21.071
℄ Beam 2-8	19.784	19.886	19.988	20.088	20.188	20.287	20.385	20.482	20.578	20.670	20.759
℄ Beam 2-9	19.470	19.572	19.674	19.774	19.874	19.973	20.070	20.167	20.264	20.357	20.446
Right Gutter & Slope Break - Eastbound	19.253	19.352	19.450	19.548	19.647	19.745	19.843	19.941	20.040	20.137	20.231
Back of Right Barrier - Eastbound	19.219	19.318	19.416	19.514	19.613	19.711	19.809	19.907	20.006	20.103	20.197
℄ Beam 2-10	19.174	19.276	19.376	19.476	19.575	19.674	19.772	19.869	19.965	20.060	20.151
Right Parapet	19.102	19.200	19.298	19.396	19.494	19.593	19.691	19.789	19.887	19.984	20.078
Right Coping	19.086	19.184	19.282	19.381	19.479	19.577	19.675	19.773	19.871	19.968	20.062

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE 1:1
DESIGNED BY AR
DRAWN BY KAC
CHECKED BY BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE February 2018
PROJECT NO. 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER Mark S. Eicholtz, P.E.
FL. LICENSE NO. 36078

FINISH GRADE ELEVATIONS (4 OF 11)

SHEET NO. B-56

Compton, Kathy 2/15/2018 2:41:19 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FinishGrEL04.dwg

FINISH GRADE ELEVATIONS - SPAN 3

T-Lines & Bents / Location	℄ Inter. Bent 3	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 4
Left Coping	20.253	20.336	20.416	20.493	20.566	20.636	20.703	20.767	20.828	20.886	20.940
Left Parapet	20.269	20.352	20.432	20.508	20.582	20.652	20.719	20.783	20.844	20.902	20.956
℄ Beam 3-1	20.325	20.408	20.488	20.565	20.639	20.709	20.777	20.841	20.902	20.960	21.015
Back of Left Barrier - Westbound	20.446	20.531	20.612	20.689	20.763	20.835	20.903	20.968	21.029	21.088	21.144
Left Gutter & Slope Break - Westbound	20.472	20.557	20.638	20.716	20.790	20.861	20.930	20.995	21.057	21.115	21.171
℄ Beam 3-2	20.533	20.618	20.699	20.778	20.853	20.925	20.994	21.060	21.123	21.182	21.238
℄ Beam 3-3	20.786	20.872	20.955	21.034	21.111	21.184	21.254	21.321	21.385	21.445	21.503
℄ Beam 3-4	21.039	21.126	21.210	21.291	21.368	21.442	21.513	21.581	21.646	21.708	21.766
Left PGL	21.232	21.319	21.404	21.485	21.563	21.637	21.709	21.777	21.842	21.904	21.963
℄ Beam 3-5	21.293	21.380	21.465	21.546	21.625	21.700	21.772	21.841	21.907	21.970	22.030
Right Gutter - Westbound	21.366	21.454	21.539	21.620	21.699	21.774	21.846	21.915	21.980	22.043	22.103
Back of Right Barrier - Westbound	21.399	21.487	21.572	21.654	21.732	21.808	21.880	21.949	22.015	22.078	22.137
℄ Const.	21.477	21.566	21.651	21.733	21.812	21.887	21.960	22.029	22.096	22.159	22.219
℄ Beam 3-6	21.392	21.482	21.567	21.649	21.727	21.803	21.875	21.944	22.010	22.073	22.133
Back of Left Barrier - Eastbound	21.381	21.469	21.554	21.637	21.716	21.792	21.865	21.935	22.001	22.065	22.125
Left Gutter - Eastbound	21.339	21.428	21.513	21.596	21.675	21.751	21.824	21.894	21.961	22.024	22.085
Right PGL	21.173	21.262	21.348	21.431	21.511	21.587	21.661	21.731	21.799	21.863	21.924
℄ Beam 3-7	21.078	21.168	21.255	21.337	21.417	21.494	21.567	21.637	21.705	21.769	21.829
℄ Beam 3-8	20.763	20.855	20.942	21.026	21.107	21.184	21.259	21.330	21.398	21.463	21.525
℄ Beam 3-9	20.449	20.541	20.629	20.714	20.796	20.874	20.950	21.022	21.092	21.158	21.221
Right Gutter & Slope Break - Eastbound	20.231	20.322	20.410	20.495	20.577	20.657	20.734	20.808	20.879	20.946	21.010
Back of Right Barrier - Eastbound	20.197	20.288	20.376	20.461	20.544	20.624	20.701	20.775	20.845	20.913	20.977
℄ Beam 3-10	20.151	20.244	20.333	20.419	20.501	20.581	20.658	20.732	20.802	20.869	20.934
Right Parapet	20.078	20.170	20.258	20.343	20.426	20.507	20.585	20.659	20.730	20.798	20.863
Right Coping	20.062	20.154	20.242	20.327	20.411	20.491	20.569	20.643	20.714	20.783	20.847

FINISH GRADE ELEVATIONS - SPAN 4

T-Lines & Bents / Location	℄ Inter. Bent 4	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 5
Left Coping	20.940	20.991	21.040	21.085	21.127	21.165	21.201	21.233	21.263	21.289	21.312
Left Parapet	20.956	21.007	21.056	21.101	21.142	21.181	21.217	21.249	21.278	21.305	21.327
℄ Beam 4-1	21.015	21.067	21.115	21.160	21.203	21.242	21.278	21.310	21.340	21.366	21.390
Back of Left Barrier - Westbound	21.144	21.196	21.245	21.291	21.334	21.374	21.410	21.444	21.474	21.501	21.525
Left Gutter & Slope Break - Westbound	21.171	21.223	21.273	21.319	21.362	21.402	21.438	21.472	21.502	21.530	21.554
℄ Beam 4-2	21.237	21.290	21.339	21.386	21.429	21.469	21.506	21.540	21.571	21.598	21.623
℄ Beam 4-3	21.502	21.555	21.606	21.654	21.698	21.739	21.777	21.812	21.844	21.872	21.898
℄ Beam 4-4	21.765	21.820	21.872	21.921	21.966	22.008	22.048	22.084	22.117	22.146	22.173
Left PGL	21.963	22.019	22.071	22.121	22.167	22.210	22.250	22.287	22.321	22.351	22.379
℄ Beam 4-5	22.029	22.085	22.138	22.188	22.234	22.278	22.318	22.355	22.389	22.420	22.447
Right Gutter - Westbound	22.103	22.159	22.212	22.262	22.309	22.353	22.393	22.431	22.465	22.496	22.524
Back of Right Barrier - Westbound	22.137	22.194	22.247	22.297	22.344	22.388	22.429	22.466	22.501	22.532	22.560
℄ Const.	22.219	22.275	22.329	22.380	22.427	22.471	22.512	22.550	22.585	22.616	22.645
℄ Beam 4-6	22.134	22.191	22.245	22.296	22.343	22.388	22.429	22.467	22.502	22.534	22.563
Back of Left Barrier - Eastbound	22.125	22.182	22.236	22.287	22.335	22.379	22.420	22.459	22.494	22.526	22.554
Left Gutter - Eastbound	22.085	22.142	22.196	22.247	22.295	22.340	22.381	22.419	22.455	22.487	22.516
Right PGL	21.924	21.982	22.036	22.088	22.136	22.182	22.224	22.263	22.298	22.331	22.361
℄ Beam 4-7	21.830	21.888	21.943	21.995	22.044	22.089	22.132	22.171	22.207	22.240	22.270
℄ Beam 4-8	21.526	21.585	21.641	21.694	21.744	21.791	21.834	21.875	21.912	21.946	21.977
℄ Beam 4-9	21.221	21.282	21.339	21.393	21.444	21.492	21.536	21.578	21.616	21.651	21.683
Right Gutter & Slope Break - Eastbound	21.010	21.072	21.129	21.184	21.236	21.285	21.330	21.372	21.411	21.447	21.480
Back of Right Barrier - Eastbound	20.977	21.039	21.097	21.152	21.204	21.252	21.298	21.340	21.379	21.416	21.448
℄ Beam 4-10	20.934	20.995	21.053	21.109	21.161	21.209	21.255	21.298	21.337	21.373	21.407
Right Parapet	20.863	20.925	20.984	21.039	21.091	21.141	21.187	21.230	21.269	21.306	21.339
Right Coping	20.847	20.909	20.968	21.023	21.076	21.125	21.171	21.214	21.253	21.290	21.323

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE 1:1 | DESIGNED BY AR | DRAWN BY KAC | CHECKED BY BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018

PROJECT NO.: 6086960

Manatee County FLORIDA

PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.

FL. LICENSE NO.: 36078

FINISH GRADE ELEVATIONS (5 OF 11)

SHEET NO.: B-57

Compton, Kathy 2/15/2018 2:41:20 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FinishGrEL04.dwg

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FINISH GRADE ELEVATIONS - SPAN 5

T-Lines & Bents / Location	℄ Inter. Bent 5	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 6
Left Coping	21.312	21.331	21.348	21.362	21.372	21.379	21.383	21.384	21.382	21.376	21.368
Left Parapet	21.327	21.347	21.364	21.377	21.388	21.395	21.399	21.400	21.398	21.392	21.384
℄ Beam 5-1	21.390	21.410	21.427	21.440	21.451	21.459	21.463	21.464	21.462	21.457	21.449
Back of Left Barrier - Westbound	21.525	21.546	21.563	21.578	21.589	21.597	21.602	21.604	21.603	21.599	21.591
Left Gutter & Slope Break - Westbound	21.554	21.575	21.593	21.607	21.619	21.627	21.632	21.634	21.633	21.629	21.621
℄ Beam 5-2	21.623	21.644	21.662	21.677	21.689	21.697	21.703	21.705	21.704	21.700	21.693
℄ Beam 5-3	21.898	21.920	21.939	21.955	21.968	21.978	21.984	21.988	21.988	21.985	21.979
℄ Beam 5-4	22.173	22.196	22.216	22.234	22.247	22.258	22.266	22.270	22.272	22.270	22.265
Left PGL	22.379	22.403	22.424	22.442	22.457	22.468	22.477	22.482	22.484	22.483	22.479
℄ Beam 5-5	22.447	22.472	22.493	22.511	22.526	22.538	22.547	22.553	22.555	22.554	22.550
Right Gutter - Westbound	22.524	22.549	22.570	22.589	22.604	22.616	22.625	22.631	22.634	22.634	22.630
Back of Right Barrier - Westbound	22.560	22.585	22.607	22.626	22.641	22.653	22.663	22.669	22.671	22.671	22.668
℄ Const.	22.645	22.670	22.692	22.711	22.727	22.740	22.749	22.756	22.759	22.759	22.756
℄ Beam 5-6	22.563	22.589	22.611	22.630	22.646	22.659	22.669	22.676	22.679	22.680	22.677
Back of Left Barrier - Eastbound	22.554	22.580	22.602	22.622	22.638	22.651	22.661	22.668	22.671	22.671	22.669
Left Gutter - Eastbound	22.516	22.541	22.564	22.583	22.600	22.613	22.623	22.630	22.633	22.634	22.631
Right PGL	22.361	22.387	22.410	22.430	22.447	22.461	22.471	22.479	22.483	22.484	22.482
℄ Beam 5-7	22.270	22.297	22.320	22.341	22.358	22.372	22.383	22.391	22.395	22.397	22.395
℄ Beam 5-8	21.977	22.005	22.029	22.051	22.069	22.084	22.096	22.105	22.111	22.113	22.113
℄ Beam 5-9	21.683	21.712	21.738	21.760	21.780	21.796	21.809	21.819	21.826	21.829	21.830
Right Gutter & Slope Break - Eastbound	21.480	21.509	21.536	21.559	21.579	21.596	21.610	21.621	21.629	21.633	21.634
Back of Right Barrier - Eastbound	21.448	21.478	21.505	21.528	21.549	21.566	21.580	21.591	21.598	21.603	21.604
℄ Beam 5-10	21.407	21.436	21.463	21.487	21.507	21.525	21.539	21.550	21.558	21.563	21.564
Right Parapet	21.339	21.370	21.397	21.421	21.441	21.459	21.474	21.485	21.493	21.498	21.500
Right Coping	21.323	21.354	21.381	21.405	21.426	21.443	21.458	21.469	21.477	21.482	21.484

FINISH GRADE ELEVATIONS - SPAN 6

T-Lines & Bents / Location	℄ Inter. Bent 6	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 7
Left Coping	21.368	21.356	21.341	21.323	21.302	21.278	21.250	21.220	21.186	21.149	21.109
Left Parapet	21.384	21.372	21.357	21.339	21.318	21.294	21.266	21.236	21.202	21.165	21.125
℄ Beam 6-1	21.449	21.438	21.423	21.405	21.384	21.360	21.333	21.303	21.269	21.233	21.193
Back of Left Barrier - Westbound	21.591	21.580	21.566	21.549	21.529	21.506	21.479	21.450	21.417	21.381	21.342
Left Gutter & Slope Break - Westbound	21.621	21.611	21.597	21.580	21.560	21.537	21.511	21.481	21.448	21.413	21.374
℄ Beam 6-2	21.693	21.683	21.669	21.653	21.633	21.610	21.584	21.555	21.522	21.487	21.448
℄ Beam 6-3	21.979	21.970	21.958	21.942	21.923	21.902	21.877	21.848	21.817	21.783	21.745
℄ Beam 6-4	22.265	22.257	22.246	22.231	22.214	22.193	22.169	22.142	22.112	22.078	22.042
Left PGL	22.479	22.472	22.461	22.448	22.431	22.411	22.388	22.362	22.332	22.300	22.264
℄ Beam 6-5	22.550	22.543	22.533	22.520	22.503	22.484	22.461	22.435	22.406	22.374	22.338
Right Gutter - Westbound	22.630	22.623	22.613	22.600	22.584	22.565	22.542	22.517	22.488	22.456	22.421
Back of Right Barrier - Westbound	22.668	22.661	22.651	22.639	22.623	22.603	22.581	22.556	22.527	22.495	22.460
℄ Const.	22.756	22.750	22.740	22.728	22.712	22.693	22.671	22.646	22.618	22.586	22.552
℄ Beam 6-6	22.677	22.671	22.662	22.650	22.634	22.616	22.594	22.569	22.541	22.510	22.476
Back of Left Barrier - Eastbound	22.669	22.663	22.654	22.642	22.626	22.608	22.586	22.561	22.533	22.502	22.468
Left Gutter - Eastbound	22.631	22.626	22.617	22.605	22.589	22.571	22.550	22.525	22.497	22.466	22.432
Right PGL	22.482	22.477	22.469	22.457	22.443	22.425	22.404	22.380	22.352	22.322	22.289
℄ Beam 6-7	22.395	22.390	22.382	22.371	22.357	22.339	22.319	22.295	22.268	22.238	22.205
℄ Beam 6-8	22.113	22.109	22.102	22.092	22.079	22.062	22.043	22.020	21.994	21.965	21.933
℄ Beam 6-9	21.830	21.827	21.821	21.812	21.800	21.785	21.767	21.745	21.720	21.692	21.661
Right Gutter & Slope Break - Eastbound	21.634	21.632	21.627	21.619	21.608	21.593	21.575	21.555	21.531	21.504	21.473
Back of Right Barrier - Eastbound	21.604	21.602	21.598	21.589	21.578	21.564	21.546	21.526	21.502	21.475	21.445
℄ Beam 6-10	21.564	21.563	21.558	21.550	21.539	21.525	21.508	21.487	21.463	21.437	21.407
Right Parapet	21.500	21.499	21.494	21.487	21.476	21.462	21.445	21.425	21.402	21.375	21.346
Right Coping	21.484	21.483	21.479	21.471	21.460	21.446	21.429	21.409	21.386	21.359	21.330

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE 1:1 | DESIGNED BY AR | DRAWN BY KAC | CHECKED BY BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018

PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.

FL. LICENSE NO.: 36078

FINISH GRADE ELEVATIONS (6 OF 11)

SHEET NO.: B-58

Compton, Kathy 2/15/2018 2:41:21 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FinishGrEL04.dwg

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FINISH GRADE ELEVATIONS - SPAN 7

T-Lines & Bents / Location	℄ Inter. Bent 7	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 8
Left Coping	21.109	21.066	21.019	20.970	20.917	20.861	20.802	20.740	20.675	20.607	20.535
Left Parapet	21.125	21.082	21.035	20.986	20.933	20.877	20.818	20.756	20.691	20.622	20.551
℄ Beam 7-1	21.193	21.150	21.104	21.055	21.003	20.947	20.888	20.827	20.762	20.693	20.622
Back of Left Barrier - Westbound	21.342	21.300	21.254	21.206	21.154	21.099	21.041	20.980	20.916	20.848	20.778
Left Gutter & Slope Break - Westbound	21.374	21.332	21.286	21.238	21.186	21.132	21.074	21.013	20.949	20.881	20.811
℄ Beam 7-2	21.448	21.406	21.361	21.313	21.262	21.207	21.150	21.089	21.025	20.958	20.888
℄ Beam 7-3	21.745	21.704	21.661	21.614	21.563	21.510	21.454	21.394	21.331	21.265	21.196
℄ Beam 7-4	22.042	22.002	21.959	21.914	21.864	21.812	21.757	21.698	21.637	21.572	21.504
Left PGL	22.264	22.225	22.183	22.138	22.090	22.039	21.984	21.926	21.865	21.801	21.734
℄ Beam 7-5	22.338	22.300	22.258	22.213	22.165	22.114	22.060	22.002	21.942	21.878	21.811
Right Gutter - Westbound	22.421	22.383	22.341	22.297	22.249	22.198	22.144	22.087	22.027	21.963	21.897
Back of Right Barrier - Westbound	22.460	22.422	22.381	22.336	22.289	22.238	22.184	22.127	22.067	22.004	21.937
℄ Const.	22.552	22.514	22.473	22.429	22.382	22.331	22.278	22.221	22.161	22.098	22.032
℄ Beam 7-6	22.476	22.438	22.398	22.354	22.307	22.257	22.204	22.147	22.088	22.025	21.959
Back of Left Barrier - Eastbound	22.468	22.430	22.390	22.346	22.299	22.249	22.196	22.140	22.080	22.018	21.952
Left Gutter - Eastbound	22.432	22.395	22.354	22.311	22.264	22.214	22.161	22.105	22.046	21.983	21.917
Right PGL	22.289	22.252	22.212	22.169	22.123	22.073	22.021	21.965	21.907	21.845	21.780
℄ Beam 7-7	22.205	22.168	22.129	22.086	22.040	21.991	21.939	21.884	21.826	21.764	21.699
℄ Beam 7-8	21.933	21.898	21.860	21.818	21.773	21.725	21.674	21.620	21.563	21.502	21.439
℄ Beam 7-9	21.661	21.627	21.590	21.549	21.506	21.459	21.409	21.356	21.300	21.240	21.178
Right Gutter & Slope Break - Eastbound	21.473	21.440	21.403	21.364	21.321	21.275	21.226	21.173	21.118	21.059	20.997
Back of Right Barrier - Eastbound	21.445	21.412	21.375	21.336	21.293	21.247	21.198	21.146	21.090	21.032	20.970
℄ Beam 7-10	21.407	21.374	21.337	21.298	21.255	21.210	21.161	21.109	21.054	20.995	20.934
Right Parapet	21.346	21.313	21.277	21.238	21.196	21.150	21.102	21.050	20.995	20.937	20.876
Right Coping	21.330	21.297	21.261	21.222	21.180	21.134	21.086	21.034	20.979	20.921	20.860

FINISH GRADE ELEVATIONS - SPAN 8

T-Lines & Bents / Location	℄ Inter. Bent 8	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 9
Left Coping	20.535	20.460	20.384	20.307	20.231	20.154	20.078	20.001	19.925	19.848	19.772
Left Parapet	20.551	20.476	20.400	20.323	20.247	20.170	20.093	20.017	19.940	19.864	19.787
℄ Beam 8-1	20.622	20.548	20.471	20.395	20.318	20.242	20.165	20.089	20.012	19.936	19.859
Back of Left Barrier - Westbound	20.778	20.704	20.628	20.551	20.475	20.398	20.322	20.245	20.168	20.092	20.015
Left Gutter & Slope Break - Westbound	20.811	20.737	20.661	20.585	20.508	20.432	20.355	20.278	20.202	20.125	20.049
℄ Beam 8-2	20.888	20.815	20.739	20.662	20.586	20.509	20.433	20.356	20.279	20.203	20.126
℄ Beam 8-3	21.196	21.124	21.048	20.972	20.895	20.819	20.742	20.666	20.589	20.513	20.436
℄ Beam 8-4	21.504	21.433	21.358	21.282	21.205	21.129	21.052	20.976	20.899	20.823	20.746
Left PGL	21.734	21.664	21.590	21.514	21.438	21.361	21.285	21.208	21.132	21.055	20.979
℄ Beam 8-5	21.811	21.741	21.668	21.592	21.515	21.439	21.362	21.286	21.209	21.132	21.056
Right Gutter - Westbound	21.897	21.827	21.754	21.678	21.602	21.525	21.449	21.372	21.296	21.219	21.143
Back of Right Barrier - Westbound	21.937	21.868	21.795	21.719	21.643	21.566	21.490	21.413	21.337	21.260	21.184
℄ Const.	22.032	21.963	21.890	21.815	21.738	21.662	21.585	21.509	21.432	21.356	21.279
℄ Beam 8-6	21.959	21.891	21.818	21.743	21.667	21.590	21.514	21.437	21.361	21.284	21.207
Back of Left Barrier - Eastbound	21.952	21.883	21.811	21.736	21.659	21.583	21.506	21.429	21.353	21.276	21.200
Left Gutter - Eastbound	21.917	21.849	21.777	21.702	21.625	21.549	21.472	21.396	21.319	21.242	21.166
Right PGL	21.780	21.711	21.640	21.566	21.489	21.413	21.336	21.260	21.183	21.106	21.030
℄ Beam 8-7	21.699	21.631	21.560	21.486	21.410	21.333	21.257	21.180	21.104	21.027	20.951
℄ Beam 8-8	21.439	21.372	21.302	21.229	21.153	21.076	21.000	20.923	20.847	20.770	20.694
℄ Beam 8-9	21.178	21.112	21.043	20.971	20.896	20.820	20.743	20.667	20.590	20.514	20.437
Right Gutter & Slope Break - Eastbound	20.997	20.932	20.864	20.793	20.719	20.642	20.566	20.489	20.413	20.336	20.260
Back of Right Barrier - Eastbound	20.970	20.905	20.837	20.766	20.692	20.616	20.539	20.463	20.386	20.310	20.233
℄ Beam 8-10	20.934	20.869	20.802	20.731	20.657	20.580	20.504	20.427	20.351	20.274	20.198
Right Parapet	20.876	20.812	20.744	20.674	20.600	20.524	20.447	20.371	20.294	20.218	20.141
Right Coping	20.860	20.796	20.728	20.658	20.584	20.508	20.431	20.355	20.278	20.202	20.125

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FINISH GRADE ELEVATIONS (7 OF 11)

SHEET NO.: B-59

Compton, Kathy
2/15/2018 2:41:22 PM
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FINISH GRADE ELEVATIONS - SPAN 9

T-Lines & Bents / Location	℄ Inter. Bent 9	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 10
Left Coping	19.772	19.695	19.618	19.542	19.465	19.389	19.312	19.236	19.159	19.083	19.006
Left Parapet	19.787	19.711	19.634	19.558	19.481	19.405	19.328	19.252	19.175	19.099	19.022
℄ Beam 9-1	19.859	19.782	19.706	19.629	19.553	19.476	19.400	19.323	19.247	19.170	19.094
Back of Left Barrier - Westbound	20.015	19.939	19.862	19.786	19.709	19.633	19.556	19.480	19.403	19.327	19.250
Left Gutter & Slope Break - Westbound	20.049	19.972	19.896	19.819	19.743	19.666	19.590	19.513	19.437	19.360	19.284
℄ Beam 9-2	20.126	20.050	19.973	19.897	19.820	19.744	19.667	19.591	19.514	19.438	19.361
℄ Beam 9-3	20.436	20.360	20.283	20.207	20.130	20.054	19.977	19.901	19.824	19.747	19.671
℄ Beam 9-4	20.746	20.670	20.593	20.517	20.440	20.363	20.287	20.210	20.134	20.057	19.981
Left PGL	20.979	20.902	20.825	20.749	20.672	20.596	20.519	20.443	20.366	20.290	20.213
℄ Beam 9-5	21.056	20.979	20.903	20.826	20.750	20.673	20.597	20.520	20.444	20.367	20.291
Right Gutter - Westbound	21.143	21.066	20.989	20.913	20.836	20.760	20.683	20.607	20.530	20.454	20.377
Back of Right Barrier - Westbound	21.184	21.107	21.030	20.954	20.877	20.801	20.724	20.648	20.571	20.495	20.418
℄ Const.	21.279	21.203	21.126	21.050	20.973	20.897	20.820	20.744	20.667	20.590	20.514
℄ Beam 9-6	21.207	21.131	21.054	20.978	20.901	20.825	20.748	20.672	20.595	20.519	20.442
Back of Left Barrier - Eastbound	21.200	21.123	21.047	20.970	20.894	20.817	20.741	20.664	20.588	20.511	20.435
Left Gutter - Eastbound	21.166	21.089	21.013	20.936	20.860	20.783	20.707	20.630	20.554	20.477	20.401
Right PGL	21.030	20.953	20.877	20.800	20.724	20.647	20.571	20.494	20.418	20.341	20.265
℄ Beam 9-7	20.951	20.874	20.798	20.721	20.645	20.568	20.491	20.415	20.338	20.262	20.185
℄ Beam 9-8	20.694	20.617	20.541	20.464	20.388	20.311	20.235	20.158	20.082	20.005	19.929
℄ Beam 9-9	20.437	20.360	20.284	20.207	20.131	20.054	19.978	19.901	19.825	19.748	19.672
Right Gutter & Slope Break - Eastbound	20.260	20.183	20.106	20.030	19.953	19.877	19.800	19.724	19.647	19.571	19.494
Back of Right Barrier - Eastbound	20.233	20.157	20.080	20.003	19.927	19.850	19.774	19.697	19.621	19.544	19.468
℄ Beam 9-10	20.198	20.121	20.045	19.968	19.892	19.815	19.739	19.662	19.585	19.509	19.432
Right Parapet	20.141	20.065	19.988	19.911	19.835	19.758	19.682	19.605	19.529	19.452	19.376
Right Coping	20.125	20.049	19.972	19.896	19.819	19.743	19.666	19.590	19.513	19.436	19.360

FINISH GRADE ELEVATIONS - SPAN 10

T-Lines & Bents / Location	℄ Inter. Bent 10	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 11
Left Coping	19.006	18.930	18.853	18.777	18.700	18.624	18.547	18.471	18.394	18.318	18.241
Left Parapet	19.022	18.946	18.869	18.793	18.716	18.639	18.563	18.486	18.410	18.333	18.257
℄ Beam 10-1	19.094	19.017	18.941	18.864	18.788	18.711	18.635	18.558	18.482	18.405	18.328
Back of Left Barrier - Westbound	19.250	19.174	19.097	19.021	18.944	18.868	18.791	18.714	18.638	18.561	18.485
Left Gutter & Slope Break - Westbound	19.284	19.207	19.131	19.054	18.978	18.901	18.824	18.748	18.671	18.595	18.518
℄ Beam 10-2	19.361	19.285	19.208	19.132	19.055	18.979	18.902	18.825	18.749	18.672	18.596
℄ Beam 10-3	19.671	19.594	19.518	19.441	19.365	19.288	19.212	19.135	19.059	18.982	18.906
℄ Beam 10-4	19.981	19.904	19.828	19.751	19.675	19.598	19.522	19.445	19.369	19.292	19.216
Left PGL	20.213	20.137	20.060	19.984	19.907	19.831	19.754	19.678	19.601	19.525	19.448
℄ Beam 10-5	20.291	20.214	20.138	20.061	19.985	19.908	19.832	19.755	19.678	19.602	19.525
Right Gutter - Westbound	20.377	20.301	20.224	20.148	20.071	19.995	19.918	19.842	19.765	19.689	19.612
Back of Right Barrier - Westbound	20.418	20.342	20.265	20.189	20.112	20.036	19.959	19.883	19.806	19.730	19.653
℄ Const.	20.514	20.437	20.361	20.284	20.208	20.131	20.055	19.978	19.902	19.825	19.749
℄ Beam 10-6	20.442	20.366	20.289	20.213	20.136	20.060	19.983	19.907	19.830	19.753	19.677
Back of Left Barrier - Eastbound	20.435	20.358	20.282	20.205	20.129	20.052	19.975	19.899	19.822	19.746	19.669
Left Gutter - Eastbound	20.401	20.324	20.248	20.171	20.095	20.018	19.942	19.865	19.788	19.712	19.635
Right PGL	20.265	20.188	20.112	20.035	19.959	19.882	19.806	19.729	19.652	19.576	19.499
℄ Beam 10-7	20.185	20.109	20.032	19.956	19.879	19.803	19.726	19.650	19.573	19.497	19.420
℄ Beam 10-8	19.929	19.852	19.776	19.699	19.622	19.546	19.469	19.393	19.316	19.240	19.163
℄ Beam 10-9	19.672	19.595	19.519	19.442	19.366	19.289	19.213	19.136	19.060	18.983	18.906
Right Gutter & Slope Break - Eastbound	19.494	19.418	19.341	19.265	19.188	19.112	19.035	18.959	18.882	18.806	18.729
Back of Right Barrier - Eastbound	19.468	19.391	19.315	19.238	19.162	19.085	19.009	18.932	18.856	18.779	18.703
℄ Beam 10-10	19.432	19.356	19.279	19.203	19.126	19.050	18.973	18.897	18.820	18.744	18.667
Right Parapet	19.376	19.299	19.223	19.146	19.070	18.993	18.917	18.840	18.764	18.687	18.611
Right Coping	19.360	19.283	19.207	19.130	19.054	18.977	18.901	18.824	18.748	18.671	18.595

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE 1:1
DESIGNED BY AR
DRAWN BY KAC
CHECKED BY BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE February 2018
PROJECT NO. 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER Mark S. Eicholtz, P.E.
FL. LICENSE NO. 36078

FINISH GRADE ELEVATIONS (8 OF 11)

SHEET NO. B-60

Compton, Kathy 2/15/2018 2:41:23 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1FinishGrEL04.dwg

FINISH GRADE ELEVATIONS - SPAN 11

T-Lines & Bents / Location	℄ Inter. Bent 11	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 12
Left Coping	18.241	18.164	18.088	18.011	17.935	17.858	17.782	17.705	17.629	17.552	17.476
Left Parapet	18.257	18.180	18.104	18.027	17.951	17.874	17.798	17.721	17.645	17.568	17.492
℄ Beam 11-1	18.328	18.252	18.175	18.099	18.022	17.946	17.869	17.793	17.716	17.640	17.563
Back of Left Barrier - Westbound	18.485	18.408	18.332	18.255	18.179	18.102	18.026	17.949	17.873	17.796	17.720
Left Gutter & Slope Break - Westbound	18.518	18.442	18.365	18.289	18.212	18.136	18.059	17.983	17.906	17.830	17.753
℄ Beam 11-2	18.596	18.519	18.443	18.366	18.290	18.213	18.137	18.060	17.984	17.907	17.831
℄ Beam 11-3	18.906	18.829	18.753	18.676	18.600	18.523	18.447	18.370	18.293	18.217	18.140
℄ Beam 11-4	19.216	19.139	19.063	18.986	18.909	18.833	18.756	18.680	18.603	18.527	18.450
Left PGL	19.448	19.371	19.295	19.218	19.142	19.065	18.989	18.912	18.836	18.759	18.683
℄ Beam 11-5	19.525	19.449	19.372	19.296	19.219	19.143	19.066	18.990	18.913	18.837	18.760
Right Gutter - Westbound	19.612	19.535	19.459	19.382	19.306	19.229	19.153	19.076	19.000	18.923	18.847
Back of Right Barrier - Westbound	19.653	19.576	19.500	19.423	19.347	19.270	19.194	19.117	19.041	18.964	18.888
℄ Const.	19.749	19.672	19.596	19.519	19.443	19.366	19.290	19.213	19.136	19.060	18.983
℄ Beam 11-6	19.677	19.600	19.524	19.447	19.371	19.294	19.218	19.141	19.065	18.988	18.912
Back of Left Barrier - Eastbound	19.669	19.593	19.516	19.440	19.363	19.287	19.210	19.134	19.057	18.981	18.904
Left Gutter - Eastbound	19.635	19.559	19.482	19.406	19.329	19.253	19.176	19.100	19.023	18.947	18.870
Right PGL	19.499	19.423	19.346	19.270	19.193	19.117	19.040	18.964	18.887	18.811	18.734
℄ Beam 11-7	19.420	19.344	19.267	19.191	19.114	19.037	18.961	18.884	18.808	18.731	18.655
℄ Beam 11-8	19.163	19.087	19.010	18.934	18.857	18.781	18.704	18.628	18.551	18.475	18.398
℄ Beam 11-9	18.906	18.830	18.753	18.677	18.600	18.524	18.447	18.371	18.294	18.218	18.141
Right Gutter & Slope Break - Eastbound	18.729	18.652	18.576	18.499	18.423	18.346	18.270	18.193	18.117	18.040	17.964
Back of Right Barrier - Eastbound	18.703	18.626	18.549	18.473	18.396	18.320	18.243	18.167	18.090	18.014	17.937
℄ Beam 11-10	18.667	18.591	18.514	18.438	18.361	18.285	18.208	18.131	18.055	17.978	17.902
Right Parapet	18.611	18.534	18.457	18.381	18.304	18.228	18.151	18.075	17.998	17.922	17.845
Right Coping	18.595	18.518	18.442	18.365	18.289	18.212	18.136	18.059	17.982	17.906	17.829

FINISH GRADE ELEVATIONS - SPAN 12

T-Lines & Bents / Location	℄ Inter. Bent 12	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 13
Left Coping	17.476	17.399	17.323	17.246	17.170	17.093	17.017	16.940	16.864	16.787	16.710
Left Parapet	17.492	17.415	17.339	17.262	17.185	17.109	17.032	16.956	16.879	16.803	16.726
℄ Beam 12-1	17.563	17.487	17.410	17.334	17.257	17.181	17.104	17.028	16.951	16.874	16.798
Back of Left Barrier - Westbound	17.720	17.643	17.567	17.490	17.414	17.337	17.260	17.184	17.107	17.031	16.954
Left Gutter & Slope Break - Westbound	17.753	17.677	17.600	17.524	17.447	17.370	17.294	17.217	17.141	17.064	16.988
℄ Beam 12-2	17.831	17.754	17.678	17.601	17.525	17.448	17.371	17.295	17.218	17.142	17.065
℄ Beam 12-3	18.140	18.064	17.987	17.911	17.834	17.758	17.681	17.605	17.528	17.452	17.375
℄ Beam 12-4	18.450	18.374	18.297	18.221	18.144	18.068	17.991	17.915	17.838	17.762	17.685
Left PGL	18.683	18.606	18.530	18.453	18.377	18.300	18.224	18.147	18.071	17.994	17.917
℄ Beam 12-5	18.760	18.684	18.607	18.531	18.454	18.378	18.301	18.224	18.148	18.071	17.995
Right Gutter - Westbound	18.847	18.770	18.694	18.617	18.541	18.464	18.388	18.311	18.235	18.158	18.081
Back of Right Barrier - Westbound	18.888	18.811	18.735	18.658	18.582	18.505	18.429	18.352	18.276	18.199	18.122
℄ Const.	18.983	18.907	18.830	18.754	18.677	18.601	18.524	18.448	18.371	18.295	18.218
℄ Beam 12-6	18.912	18.835	18.759	18.682	18.606	18.529	18.453	18.376	18.299	18.223	18.146
Back of Left Barrier - Eastbound	18.904	18.828	18.751	18.675	18.598	18.521	18.445	18.368	18.292	18.215	18.139
Left Gutter - Eastbound	18.870	18.794	18.717	18.641	18.564	18.488	18.411	18.334	18.258	18.181	18.105
Right PGL	18.734	18.658	18.581	18.505	18.428	18.352	18.275	18.198	18.122	18.045	17.969
℄ Beam 12-7	18.655	18.578	18.502	18.425	18.349	18.272	18.196	18.119	18.043	17.966	17.890
℄ Beam 12-8	18.398	18.322	18.245	18.168	18.092	18.015	17.939	17.862	17.786	17.709	17.633
℄ Beam 12-9	18.141	18.065	17.988	17.912	17.835	17.759	17.682	17.606	17.529	17.452	17.376
Right Gutter & Slope Break - Eastbound	17.964	17.887	17.811	17.734	17.658	17.581	17.505	17.428	17.352	17.275	17.198
Back of Right Barrier - Eastbound	17.937	17.861	17.784	17.708	17.631	17.555	17.478	17.402	17.325	17.249	17.172
℄ Beam 12-10	17.902	17.825	17.749	17.672	17.596	17.519	17.443	17.366	17.290	17.213	17.137
Right Parapet	17.845	17.769	17.692	17.616	17.539	17.463	17.386	17.310	17.233	17.157	17.080
Right Coping	17.829	17.753	17.676	17.600	17.523	17.447	17.370	17.294	17.217	17.141	17.064

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE 1:1 | DESIGNED BY AR | DRAWN BY KAC | CHECKED BY BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018

PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.

FL. LICENSE NO.: 36078

FINISH GRADE ELEVATIONS (9 OF 11)

SHEET NO.: B-61

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FINISH GRADE ELEVATIONS - SPAN 13

Location \ T-Lines & Bents	℄ Inter. Bent 13	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 14
Left Coping	16.710	16.634	16.557	16.481	16.405	16.330	16.256	16.183	16.110	16.039	15.968
Left Parapet	16.726	16.650	16.573	16.497	16.421	16.346	16.272	16.198	16.126	16.054	15.984
℄ Beam 13–1	16.798	16.721	16.645	16.568	16.492	16.417	16.343	16.270	16.197	16.126	16.055
Back of Left Barrier – Westbound	16.954	16.878	16.801	16.725	16.649	16.573	16.499	16.425	16.353	16.281	16.210
Left Gutter & Slope Break – Westbound	16.988	16.911	16.835	16.758	16.682	16.607	16.532	16.459	16.386	16.314	16.243
℄ Beam 13–2	17.065	16.989	16.912	16.836	16.760	16.684	16.610	16.536	16.463	16.391	16.320
℄ Beam 13–3	17.375	17.299	17.222	17.146	17.069	16.993	16.919	16.845	16.772	16.699	16.628
℄ Beam 13–4	17.685	17.609	17.532	17.455	17.379	17.303	17.228	17.154	17.080	17.008	16.936
Left PGL	17.917	17.841	17.764	17.688	17.611	17.535	17.460	17.385	17.312	17.239	17.167
℄ Beam 13–5	17.995	17.918	17.842	17.765	17.689	17.612	17.537	17.462	17.389	17.316	17.244
Right Gutter – Westbound	18.081	18.005	17.928	17.852	17.775	17.699	17.623	17.549	17.475	17.402	17.330
Back of Right Barrier – Westbound	18.122	18.046	17.969	17.893	17.816	17.740	17.664	17.590	17.516	17.443	17.371
℄ Const.	18.218	18.142	18.065	17.989	17.912	17.836	17.760	17.685	17.611	17.538	17.466
℄ Beam 13–6	18.146	18.070	17.993	17.917	17.840	17.764	17.688	17.613	17.539	17.466	17.394
Back of Left Barrier – Eastbound	18.139	18.062	17.986	17.909	17.833	17.756	17.681	17.606	17.532	17.459	17.386
Left Gutter – Eastbound	18.105	18.028	17.952	17.875	17.799	17.722	17.647	17.572	17.498	17.424	17.352
Right PGL	17.969	17.892	17.816	17.739	17.663	17.586	17.510	17.435	17.361	17.288	17.215
℄ Beam 13–7	17.890	17.813	17.737	17.660	17.583	17.507	17.431	17.356	17.281	17.208	17.135
℄ Beam 13–8	17.633	17.556	17.480	17.403	17.327	17.250	17.174	17.098	17.024	16.950	16.877
℄ Beam 13–9	17.376	17.299	17.223	17.146	17.070	16.993	16.917	16.841	16.766	16.692	16.619
Right Gutter & Slope Break – Eastbound	17.198	17.122	17.045	16.969	16.892	16.816	16.739	16.663	16.588	16.514	16.441
Back of Right Barrier – Eastbound	17.172	17.095	17.019	16.942	16.866	16.789	16.713	16.637	16.562	16.487	16.414
℄ Beam 13–10	17.137	17.060	16.984	16.907	16.831	16.754	16.677	16.601	16.526	16.452	16.378
Right Parapet	17.080	17.003	16.927	16.850	16.774	16.697	16.621	16.545	16.469	16.395	16.321
Right Coping	17.064	16.988	16.911	16.835	16.758	16.682	16.605	16.529	16.454	16.379	16.306

FINISH GRADE ELEVATIONS - SPAN 14

Location \ T-Lines & Bents	℄ Inter. Bent 14	1	2	3	4	5	6	7	8	9	℄ Inter. Bent 15
Left Coping	15.968	15.898	15.829	15.761	15.694	15.628	15.562	15.498	15.434	15.371	15.309
Left Parapet	15.984	15.914	15.845	15.777	15.710	15.643	15.578	15.513	15.450	15.387	15.325
℄ Beam 14–1	16.055	15.985	15.916	15.848	15.780	15.714	15.649	15.584	15.520	15.457	15.395
Back of Left Barrier – Westbound	16.210	16.140	16.071	16.002	15.935	15.868	15.802	15.738	15.674	15.610	15.548
Left Gutter & Slope Break – Westbound	16.243	16.173	16.104	16.035	15.968	15.901	15.835	15.771	15.707	15.643	15.581
℄ Beam 14–2	16.320	16.250	16.181	16.112	16.045	15.978	15.912	15.847	15.783	15.720	15.657
℄ Beam 14–3	16.628	16.557	16.488	16.419	16.351	16.284	16.218	16.153	16.088	16.025	15.962
℄ Beam 14–4	16.936	16.865	16.795	16.726	16.658	16.591	16.524	16.459	16.394	16.330	16.267
Left PGL	17.167	17.096	17.026	16.957	16.888	16.821	16.754	16.688	16.623	16.559	16.496
℄ Beam 14–5	17.244	17.173	17.103	17.033	16.965	16.897	16.830	16.765	16.700	16.635	16.572
Right Gutter – Westbound	17.330	17.259	17.189	17.119	17.051	16.983	16.916	16.850	16.785	16.721	16.657
Back of Right Barrier – Westbound	17.371	17.300	17.229	17.160	17.091	17.023	16.957	16.891	16.825	16.761	16.698
℄ Const.	17.466	17.395	17.324	17.255	17.186	17.118	17.051	16.985	16.920	16.856	16.792
℄ Beam 14–6	17.394	17.322	17.252	17.182	17.113	17.046	16.978	16.912	16.847	16.783	16.719
Back of Left Barrier – Eastbound	17.386	17.315	17.244	17.175	17.106	17.038	16.971	16.905	16.839	16.775	16.711
Left Gutter – Eastbound	17.352	17.281	17.210	17.140	17.071	17.003	16.936	16.870	16.805	16.740	16.677
Right PGL	17.215	17.144	17.073	17.003	16.934	16.866	16.799	16.732	16.667	16.602	16.538
℄ Beam 14–7	17.135	17.064	16.993	16.923	16.854	16.786	16.718	16.652	16.586	16.521	16.458
℄ Beam 14–8	16.877	16.805	16.734	16.664	16.594	16.526	16.458	16.391	16.326	16.260	16.196
℄ Beam 14–9	16.619	16.547	16.475	16.405	16.335	16.266	16.198	16.131	16.065	16.000	15.935
Right Gutter & Slope Break – Eastbound	16.441	16.368	16.296	16.226	16.156	16.087	16.019	15.951	15.885	15.819	15.755
Back of Right Barrier – Eastbound	16.414	16.341	16.270	16.199	16.129	16.060	15.992	15.924	15.858	15.792	15.728
℄ Beam 14–10	16.378	16.306	16.234	16.163	16.093	16.024	15.956	15.888	15.822	15.756	15.691
Right Parapet	16.321	16.249	16.177	16.106	16.036	15.967	15.898	15.831	15.764	15.699	15.634
Right Coping	16.306	16.233	16.161	16.090	16.020	15.951	15.882	15.815	15.748	15.683	15.618

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1:1
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

FINISH GRADE ELEVATIONS (10 OF 11)

SHEET NO.: B-62

Compton, Kathy
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FINISH GRADE ELEVATIONS - SPAN 15

T-Lines & Bents / Location	℄ Inter. Bent 15	1	2	3	4	5	6	7	8	9	FFBW End Bent 16
Left Coping	15.309	15.248	15.188	15.128	15.070	15.011	14.953	14.896	14.840	14.784	14.730
Left Parapet	15.325	15.264	15.203	15.144	15.086	15.027	14.969	14.912	14.856	14.800	14.746
℄ Beam 15-1	15.395	15.333	15.271	15.210	15.150	15.091	15.033	14.976	14.921	14.868	14.816
Back of Left Barrier - Westbound	15.548	15.487	15.426	15.367	15.308	15.249	15.191	15.134	15.078	15.023	14.968
Left Gutter & Slope Break - Westbound	15.581	15.520	15.459	15.399	15.341	15.282	15.224	15.167	15.111	15.055	15.001
℄ Beam 15-2	15.656	15.595	15.534	15.474	15.414	15.356	15.298	15.243	15.189	15.137	15.087
℄ Beam 15-3	15.961	15.899	15.838	15.778	15.718	15.660	15.602	15.546	15.491	15.439	15.388
℄ Beam 15-4	16.266	16.204	16.142	16.082	16.022	15.963	15.905	15.849	15.794	15.741	15.690
Left PGL	16.496	16.434	16.372	16.312	16.252	16.193	16.135	16.077	16.021	15.965	15.911
℄ Beam 15-5	16.572	16.509	16.447	16.386	16.326	16.267	16.209	16.152	16.097	16.043	15.992
Right Gutter - Westbound	16.657	16.595	16.533	16.473	16.413	16.354	16.295	16.238	16.182	16.126	16.071
Back of Right Barrier - Westbound	16.698	16.635	16.574	16.513	16.453	16.394	16.336	16.278	16.222	16.166	16.111
℄ Const.	16.792	16.729	16.668	16.607	16.547	16.488	16.429	16.372	16.315	16.260	16.205
℄ Beam 15-6	16.719	16.657	16.595	16.535	16.475	16.416	16.358	16.301	16.243	16.185	16.128
Back of Left Barrier - Eastbound	16.711	16.649	16.587	16.526	16.466	16.406	16.348	16.291	16.234	16.178	16.123
Left Gutter - Eastbound	16.677	16.614	16.552	16.491	16.431	16.372	16.313	16.256	16.199	16.143	16.089
Right PGL	16.538	16.475	16.413	16.352	16.292	16.232	16.174	16.116	16.060	16.004	15.949
℄ Beam 15-7	16.458	16.395	16.333	16.273	16.212	16.153	16.095	16.037	15.980	15.923	15.865
℄ Beam 15-8	16.196	16.133	16.071	16.010	15.950	15.890	15.832	15.774	15.717	15.660	15.603
℄ Beam 15-9	15.935	15.872	15.809	15.748	15.687	15.628	15.569	15.511	15.454	15.397	15.340
Right Gutter & Slope Break - Eastbound	15.755	15.691	15.628	15.566	15.505	15.444	15.385	15.326	15.269	15.213	15.158
Back of Right Barrier - Eastbound	15.728	15.664	15.601	15.539	15.477	15.417	15.357	15.299	15.242	15.186	15.131
℄ Beam 15-10	15.691	15.628	15.565	15.503	15.442	15.382	15.323	15.264	15.207	15.151	15.094
Right Parapet	15.634	15.570	15.507	15.444	15.383	15.322	15.263	15.204	15.147	15.091	15.036
Right Coping	15.618	15.554	15.491	15.428	15.367	15.307	15.247	15.188	15.131	15.075	15.020

FINISH GRADE ELEVATIONS - APPROACH SLAB 1

T-Lines & Bents / Location	Begin App. Slab 1	1	2	3	FFBW END BENT 1
Left Coping	17.935	18.014	18.092	18.170	18.249
Left Parapet	17.951	18.029	18.108	18.186	18.265
Back of Left Barrier - Westbound	18.133	18.211	18.289	18.367	18.445
Left Gutter & Slope Break - Westbound	18.159	18.237	18.315	18.393	18.471
Left PGL	18.935	19.013	19.090	19.167	19.244
Right Gutter - Westbound	19.073	19.150	19.226	19.303	19.380
Right Coping - Westbound	19.107	19.184	19.261	19.338	19.414
℄ Const.	19.187	19.264	19.341	19.417	19.494
Left Coping - Eastbound	19.092	19.169	19.245	19.322	19.399
Left Gutter - Eastbound	19.051	19.128	19.205	19.281	19.358
Right PGL	18.889	18.965	19.042	19.118	19.194
Right Gutter & Slope Break - Eastbound	17.968	18.043	18.119	18.194	18.270
Back of Right Barrier - Eastbound	17.935	18.010	18.086	18.161	18.237
Right Parapet	17.820	17.895	17.971	18.046	18.121
Right Coping	17.804	17.879	17.955	18.030	18.105

FINISH GRADE ELEVATIONS - APPROACH SLAB 2

T-Lines & Bents / Location	FFBW End Bent 16	1	2	3	End App. Slab 2
Left Coping	14.730	14.688	14.646	14.605	14.564
Left Parapet	14.746	14.704	14.662	14.621	14.580
Back of Left Barrier - Westbound	14.968	14.926	14.884	14.843	14.802
Left Gutter & Slope Break - Westbound	15.001	14.958	14.917	14.875	14.835
Left PGL	15.911	15.868	15.826	15.785	15.744
Right Gutter - Westbound	16.071	16.029	15.986	15.945	15.904
Right Coping - Westbound	16.111	16.069	16.027	15.985	15.944
℄ Const.	16.205	16.162	16.120	16.079	16.038
Left Coping - Eastbound	16.123	16.081	16.039	15.997	15.956
Left Gutter - Eastbound	16.089	16.046	16.004	15.962	15.921
Right PGL	15.949	15.906	15.864	15.823	15.782
Right Gutter & Slope Break - Eastbound	15.158	15.115	15.073	15.031	14.990
Back of Right Barrier - Eastbound	15.131	15.088	15.046	15.004	14.962
Right Parapet	15.036	14.993	14.950	14.908	14.867
Right Coping	15.020	14.977	14.935	14.893	14.851

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE 1:1 | DESIGNED BY AR | DRAWN BY KAC | CHECKED BY BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018

PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.

FL. LICENSE NO.: 36078

FINISH GRADE ELEVATIONS (11 OF 11)

SHEET NO.: B-63

Compton, Kathy 2/15/2018 2:41:27 PM

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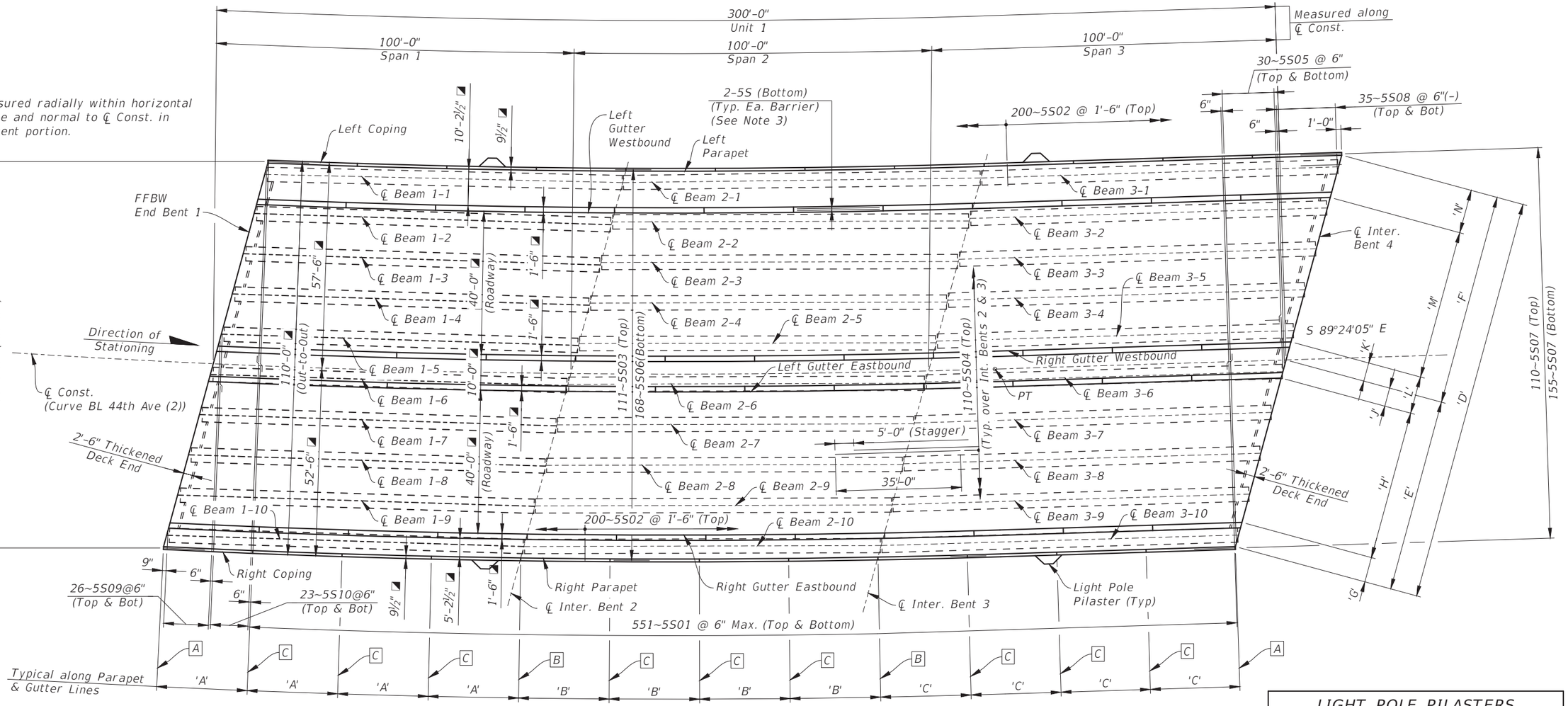
◪ Measured radially within horizontal curve and normal to ℄ Const. in tangent portion.



DECK PLAN
(Unit 1)

LIGHT POLE PILASTERS		
LOCATION	STATION	
Right & Left Coping	198+32.00	199+87.00

NOTE: Light Pole Pilaster per FDOT Std. Index No. 21200.

TABLE OF DIMENSIONS			
LOCATION	'A'	'B'	'C'
Left Parapet	25'-0 3/8"	25'-0 1/2"	25'-0 1/16"
Left Gutter Westbound	25'-0 5/16"	25'-0 3/8"	25'-0 1/16"
Right Gutter Westbound	25'-0"	25'-0 1/16"	25'-0"
Left Gutter Eastbound	25'-0"	24'-11 15/16"	25'-0"
Right Gutter Eastbound	24'-11 3/4"	24'-11 5/8"	24"-11 7/8"
Right Parapet	24'-11 11/16"	24'-11 5/8"	24'-11 7/8"

TABLE OF DIMENSIONS										
LOCATION	'D'	'E'	'F'	'G'	'H'	'J'	'K'	'L'	'M'	'N'
FFBW End Bent 1	111'-1 5/16"	52'-11 5/8"	58'-1 3/4"	6'-10 7/16"	40'-11 11/16"	5'-1 1/2"	5'-1 1/2"	10'-3"	41'-0 1/8"	12'-0 1/8"
℄ Inter. Bent 2	112'-0 11/16"	53'-4 7/8"	58'-7 13/16"	6'-11 1/16"	41'-3 13/16"	5'-2"	5'-2"	10'-4"	41'-4 3/8"	12'-1 1/16"
℄ Inter. Bent 3	113'-1 15/16"	53'-11 1/16"	59'-2 7/8"	6'-11 7/8"	41'-8 9/16"	5'-2 5/8"	5'-2 5/8"	10'-5 1/4"	41'-9 3/8"	12'-2 7/8"
℄ Inter. Bent 4	113'-4 7/16"	54'-0 7/8"	59'-3 9/16"	7'-0 3/16"	41'-9 15/16"	5'-2 3/4"	5'-2 3/4"	10'-5 1/2"	41'-9 15/16"	12'-2 7/8"

NOTE: For Notes, see Sheet B-67.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

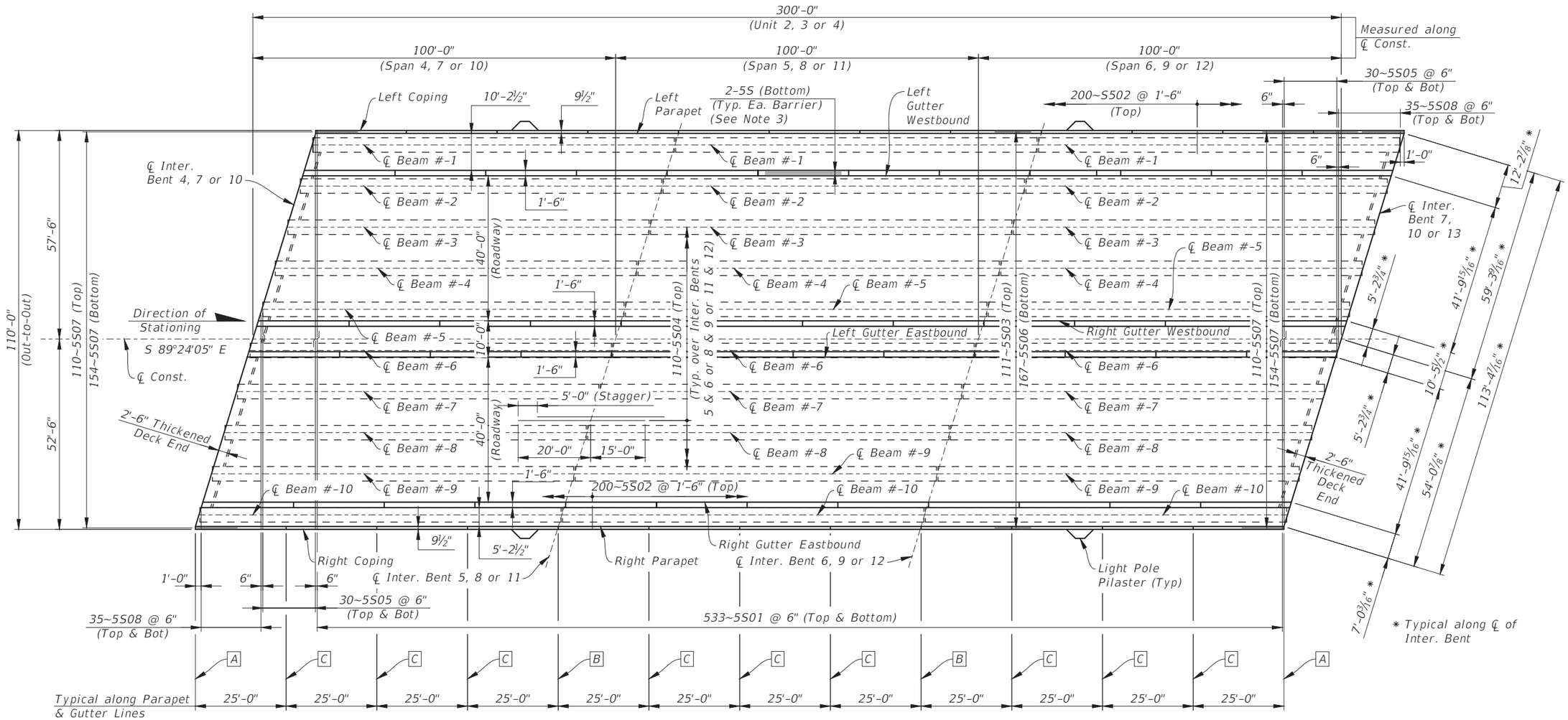
DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SUPERSTRUCTURE PLAN – SPANS 1, 2 & 3

SHEET NO.: B-64

Compton, Kathy 2/15/2018 2:41:34 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1Superst01.dwg

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



DECK PLAN
(Unit 2, 3 or 4)

POURED EXPANSION JOINT DATA TABLE INDEX NO. 21110			Table Date 1-01-09
LOCATION	DIM. "A" @ 70°F	TOTAL DESIGN MOVEMENT	DIM. "A" ADJUSTMENT PER 10°F
End Bent 1 & End Bent 16	1½"	1"	⅛"
Inter. Bents 4, 7, 10 & 13	1½"	2⅛"	¼"
NOTE: Dim. "A" adjustment per 10°F shown is measured perpendicular to ℄ Expansion Joint. Work this table with Design Standards Index No. 21110.			

LIGHT POLE PILASTERS						
LOCATION	STATION					
Right & Left Coping	201+30.00	202+83.00	204+30.00	205+82.00	207+30.00	208+82.00

NOTE: Light Pole Pilaster per FDOT Standard Index No. 21200.

NOTE: For Notes, see Sheet B-67.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
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Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SUPERSTRUCTURE PLAN – SPANS 4 THRU 12

SHEET NO.: B-65

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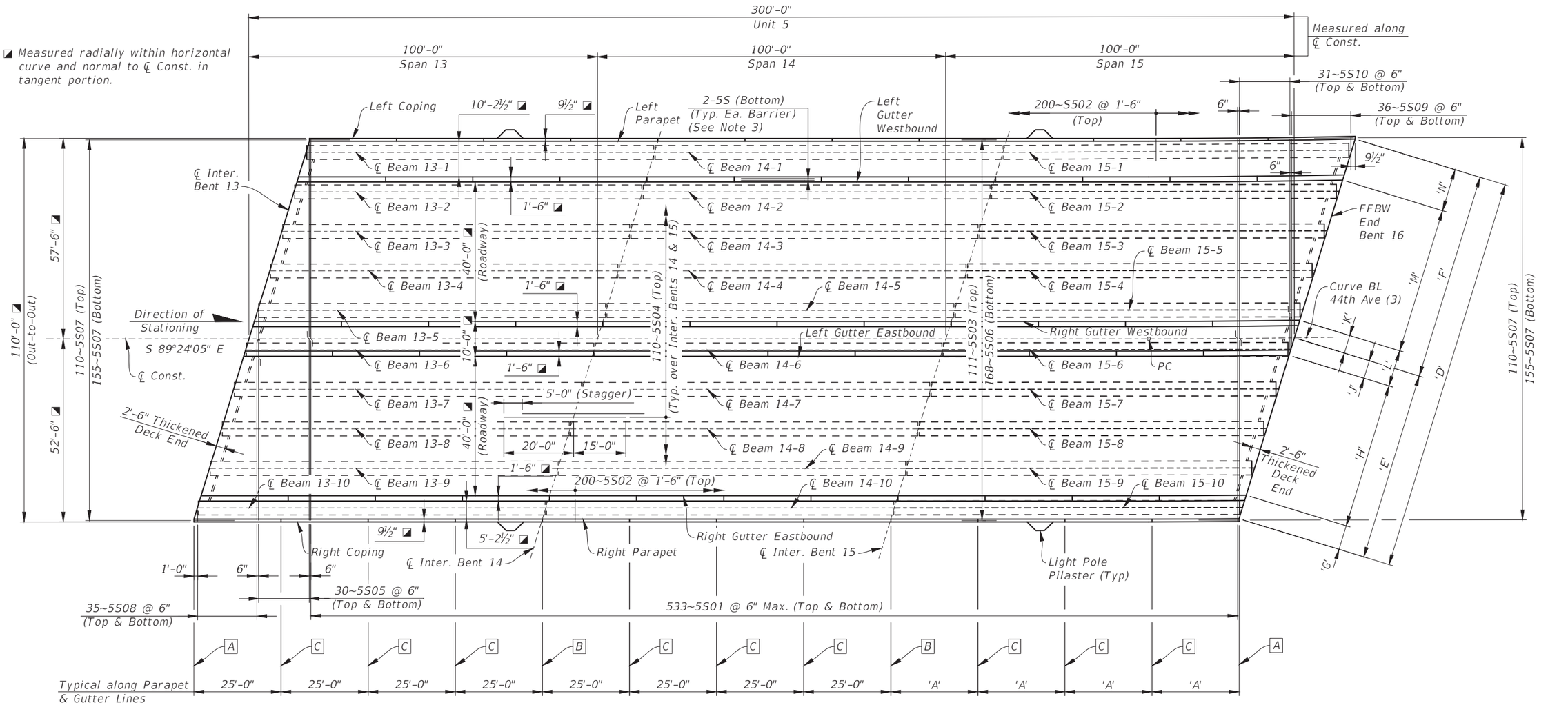

DECK PLAN
(Unit 5)

TABLE OF DIMENSIONS	
LOCATION	'A'
Left Parapet	25'-0 5/16"
Left Gutter Westbound	25'-0 5/16"
Right Gutter Westbound	25'-0"
Left Gutter Eastbound	25'-0"
Right Gutter Eastbound	24'-11 7/8"
Right Parapet	24'-11 13/16"

TABLE OF DIMENSIONS										
LOCATION	'D'	'E'	'F'	'G'	'H'	'J'	'K'	'L'	'M'	'N'
℄ Inter. Bents 13, 14 & 15	113'-4 7/16"	54'-0 7/8"	59'-3 3/16"	7'-0 3/16"	41'-9 15/16"	5'-2 3/4"	5'-2 3/4"	10'-5 1/2"	41'-9 15/16"	12'-2 7/8"
FFBW End Bent 16	113'-10 13/16"	54'-3 1/4"	59'-7 9/16"	7'-0 7/16"	41'-11 3/16"	5'-3"	5'-3 1/16"	10'-6 1/16"	42'-0 1/16"	12'-3 13/16"

LIGHT POLE PILASTERS		
LOCATION	STATION	
Right & Left Coping	210+30.00	211+82.00

NOTE: Light Pole Pilaster per FDOT Standard Index No. 21200.

NOTE: For Notes, see Sheet B-67.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 40'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SUPERSTRUCTURE PLAN – SPANS 13, 14 & 15

SHEET NO.: B-66

Compton, Kathy
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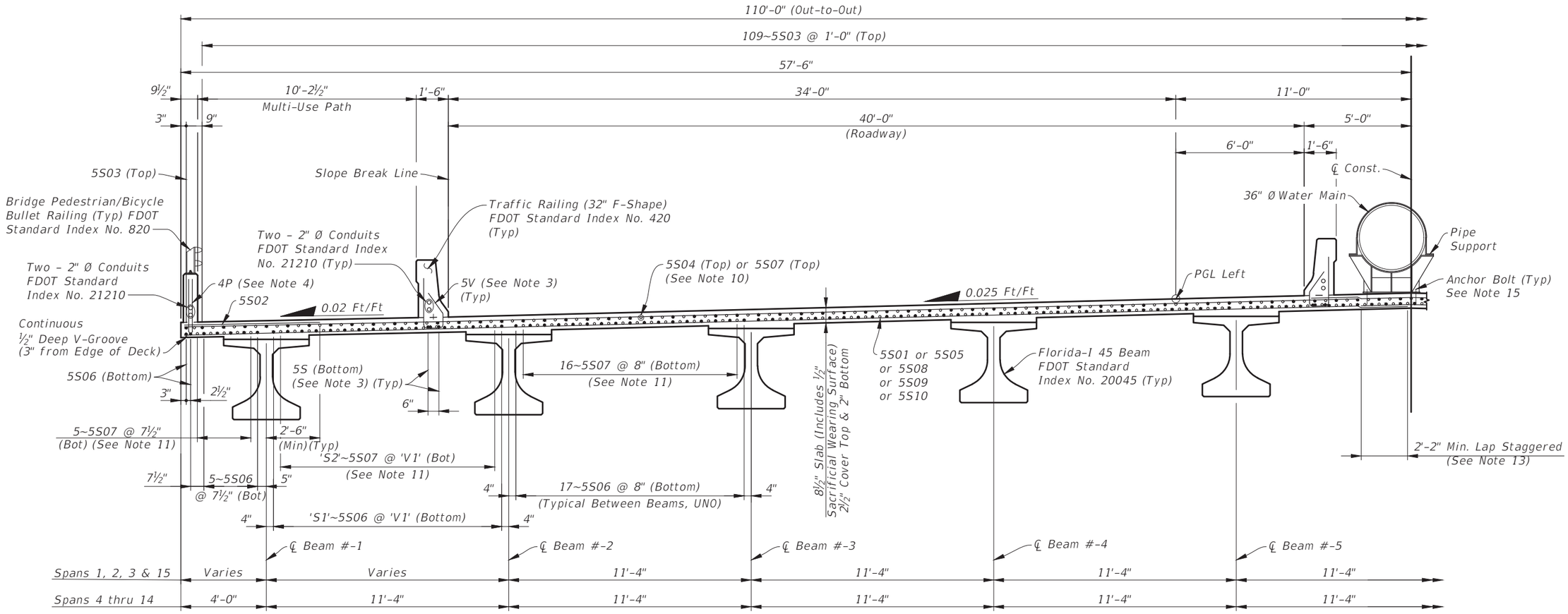

PARTIAL SECTION THRU DECK

(All horizontal dimensions are measured normal to ℄ Const.)

NOTES

1. Legend:
   - A Open Joint in Deck, Traffic Railing and Concrete Parapet per FDOT Standard Index 21110. See table, Sheet B-65.
   - B ℄ ¾" Open Joint in Traffic Railing and Concrete Parapet per FDOT Standard Index's 420 and 820.
   - C ℄ ½" V-Groove in both faces and tip of Traffic Railing and Concrete Parapet per FDOT Standard Index's 420 and 820.
   - # = Span Number
   - ● = Continuous Bar
   - ○ = Bar at Supports only
2. All reinforcing steel shall have 2" clear cover, unless noted otherwise.
3. Bars 5S and 5V shall be per Index 420 and are included in the cost of the Traffic Railing Barrier.
4. Bars 4P shall be per Index 820 and are included in the cost of the Concrete Parapet.
5. Expansion fittings for 2" Ø Conduits in Traffic Railings and Concrete Parapet shall be per FDOT Standard Index 21210, (Detail A).
6. For additional Details, see Sheets B-68, B-69, B-70, B-71 & B-72.
7. At the Contractor's option, Bars 5V may be substituted with Bars 5V1, 5V2 and 5V3 as shown in the 5V Alternate Stirrup Details (Sheet B-68), to facilitate screeding the entire width of Bridge Deck.
8. Light Pole Pilasters shall be per FDOT Standard Index No. 21200.
9. Pull Box for 2" Ø Conduits in Traffic Railings and Concrete Parapet shall be Type "B" per FDOT Standard Index 21210. For locations of Pull Boxes, see "Lighting Plans".
10. 110~5S04 (Top) equally spaced between each 5S03 top bar at interior Intermediate Bents of each Unit.
    110~5S07 (Top) equally spaced between each 5S03 top bar at Ends of each Unit.
11. 5S07 (Bottom) equally spaced between 5S06 bottom bars at Ends of each Unit. Omit at ℄ of Beams.
12. Place 5S01 Bars radially in the horizontally curve region with maximum spacing of 6".
13. Stagger laps for 5S01, 5S05 & 5S09 Top & Bottom Bars.
14. Place 5S06 Bars with 2'-2" extending into adjacent Continuous Span on one side.
15. For Anchor Bolt Layout, see Sheet U-64. Maximum embedment of 4¼" (Typ).

TABLE OF VARIABLES

SPAN	'S1'	'V1'	'S2'
1	18	8" (-)	17
2	18	8" (-)	17
3	18	8" (-)	17
4 thru 12	17	8"	16
13 & 14	18	8" (-)	17
15	18	8" (-)	17

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 5'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
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PUBLIC WORKS DEPARTMENT
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1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SUPERSTRUCTURE DETAILS (1 OF 3)

SHEET NO.: B-67

Compton, Kathy
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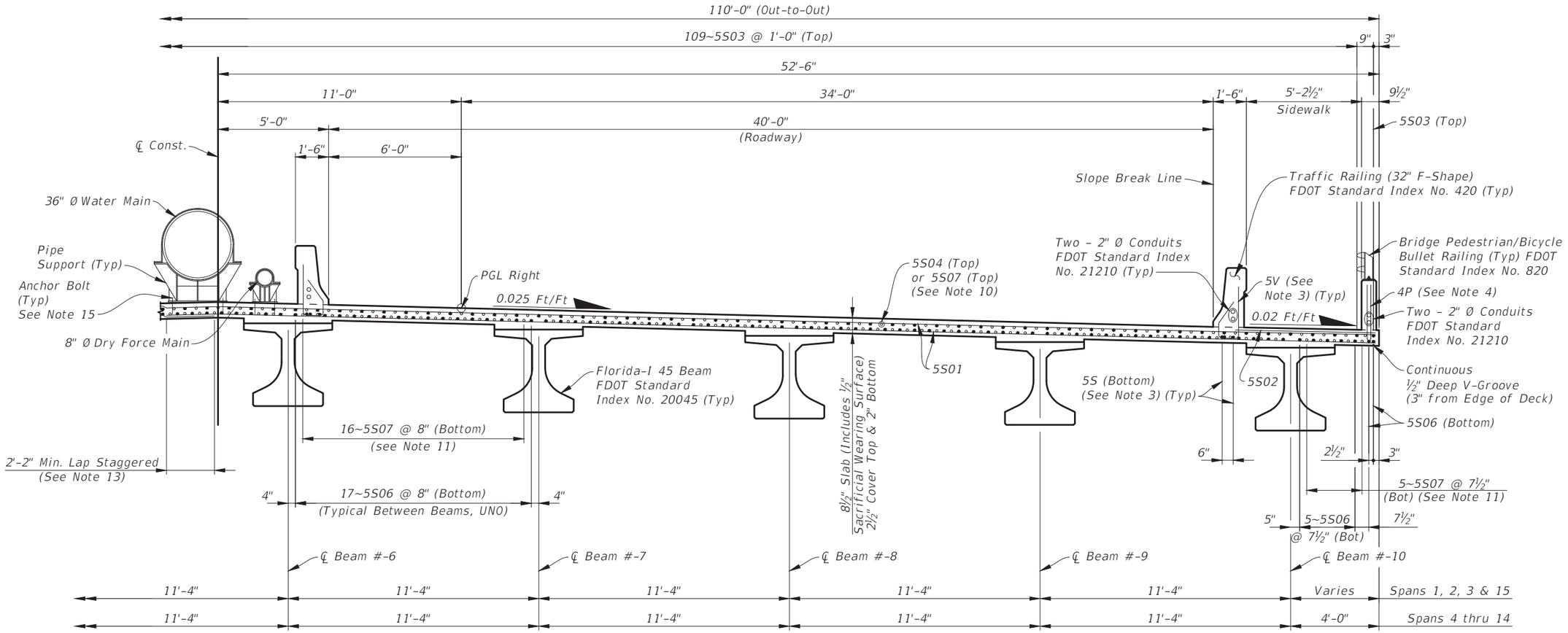
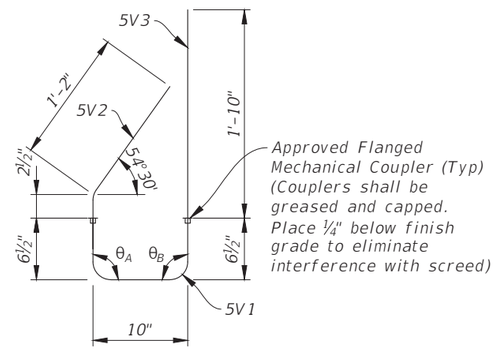


PARTIAL SECTION THRU DECK

(All horizontal dimensions are measured normal to ℄ Const.)



5V ALTERNATE STIRRUP DETAIL

(Applies to Traffic Railing at Sidewalk and Multi-Use Path only)
(For θ_A & θ_B See Table of Alternate Stirrup Angles))

TABLE OF ALTERNATE STIRRUP ANGLES				
ROADWAY CROSS-SLOPE	LOW GUTTER		HIGH GUTTER	
	θ_A	θ_B	θ_A	θ_B
2% to 6%	93°	87°	87°	93°

NOTE: For Notes, see Sheet B-67.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 5'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

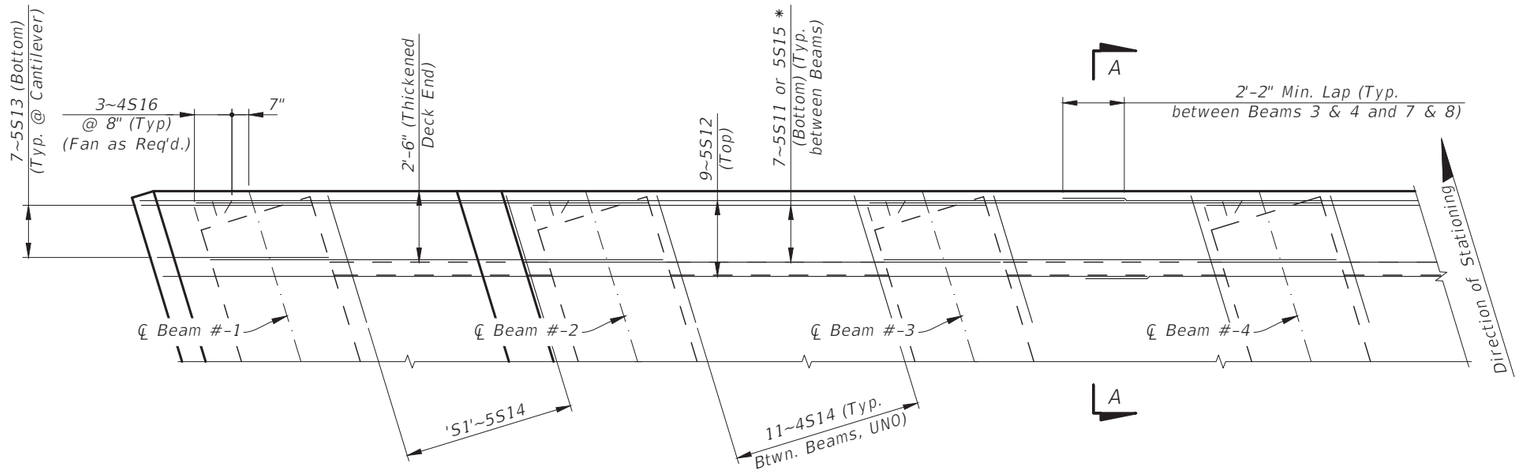
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SUPERSTRUCTURE DETAILS (2 OF 3)

SHEET NO.: B-68

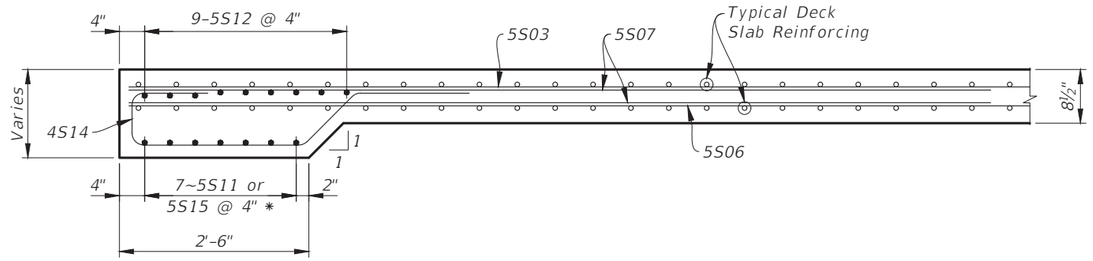
Compton, Kathy 2/15/2018 2:41:55 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1SuperstDet01.dwg



PARTIAL PLAN – THICKENED DECK END

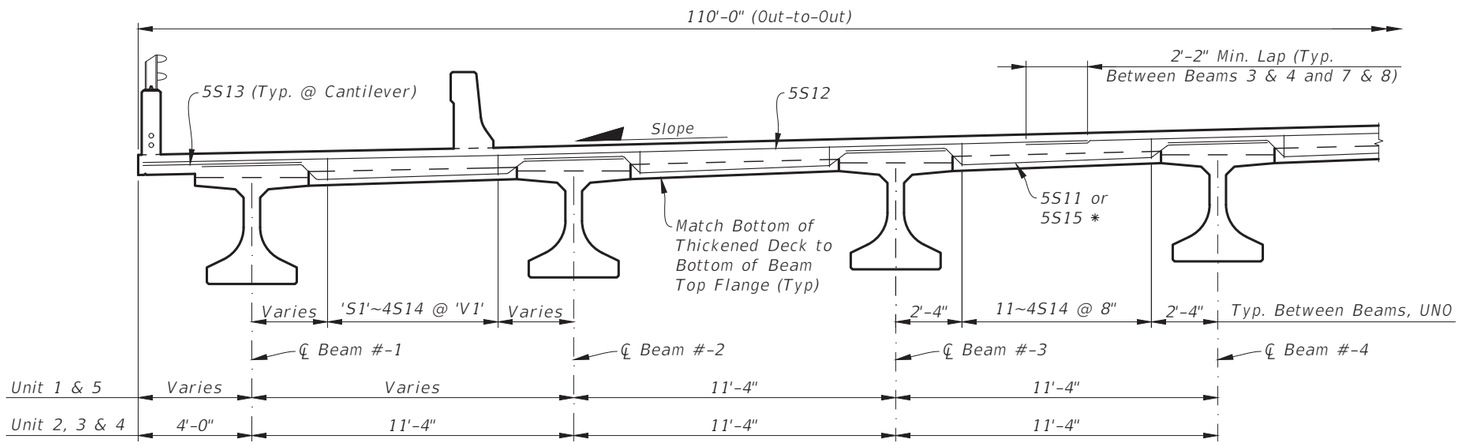
(End of Unit Shown, Begin of Unit Similar)
(Main Deck Reinforcement not shown for clarity)
(Scale: 3/16" = 1'-0")

* Use 5S11 Begin of Unit.
Use 5S15 End of Unit.



SECTION A-A

(Scale: ½" = 1'-0")



PARTIAL SECTION THRU THICKENED DECK END

(All horizontal dimensions are measured normal to ℄ Const.)
(Main Deck Reinforcement not shown for clarity)
(Scale: 3/16" = 1'-0")

TABLE OF VARIABLES

UNIT	'S1'	'V1'	
		Begin of Unit	End of Unit
1	12	8" (-)	8" (-)
2, 3 & 4	11	8"	8"
5	12	8" (-)	8" (-)

= Span Number

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: Varies
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SUPERSTRUCTURE DETAILS (3 OF 3)

SHEET NO.: B-69

Compton, Kathy
2/15/2018 2:42:01 PM
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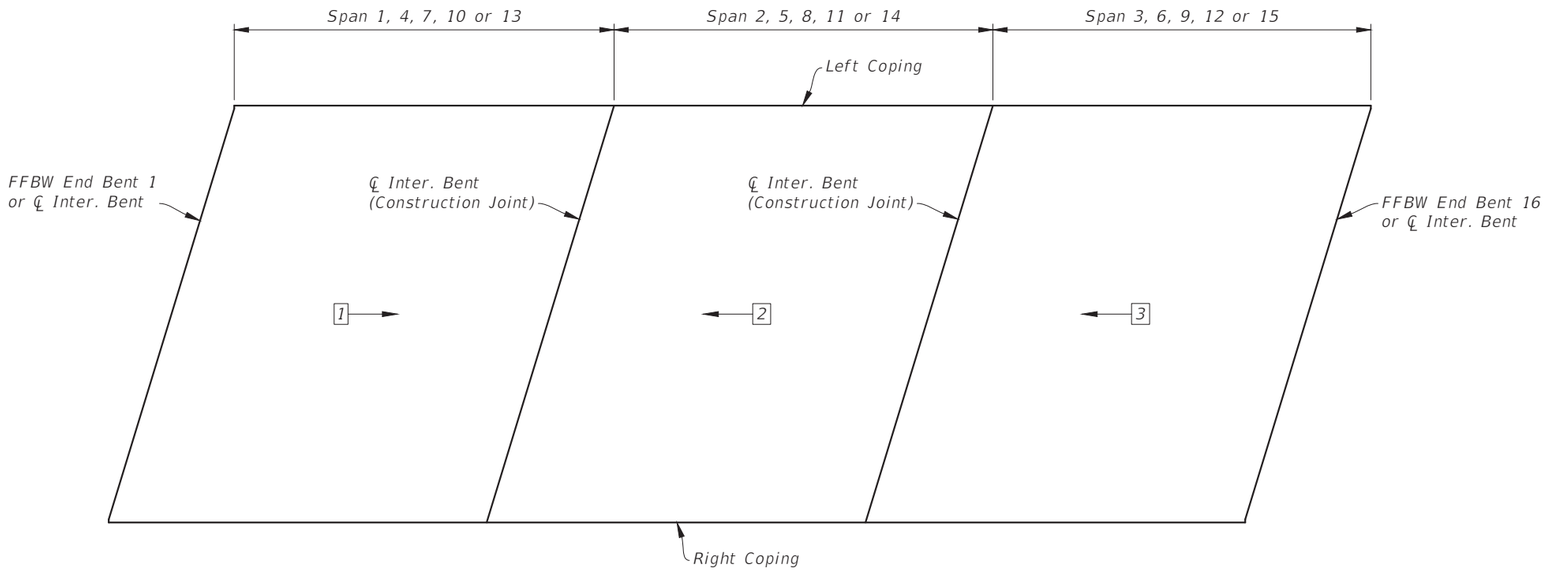


PLAN - DECK PLACEMENT SEQUENCE

DECK PLACEMENT NOTES

1. Legend:

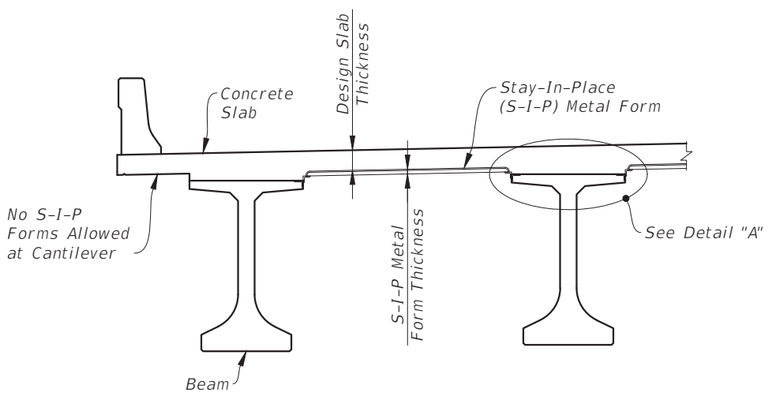
   1 → Denotes placement sequence and direction.

2. Place no unit adjacent to a previously placed unit which is not a minimum of 72 hours old.

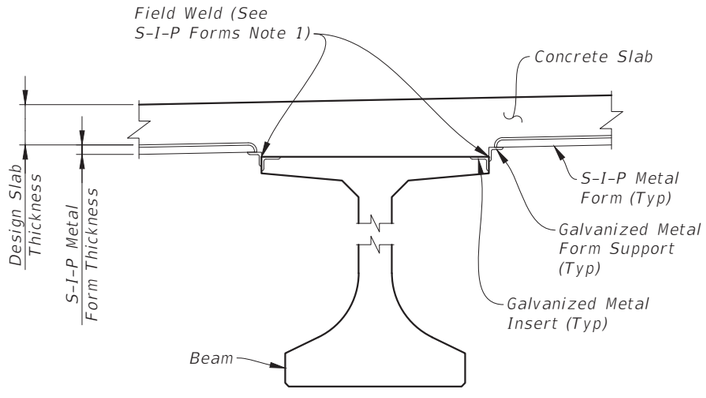
3. After placement of the first unit, begin succeeding placements at the end away from and proceed toward the previously placed unit.

4. Each placement section shall be continuous with no termination until the entire section is placed.

5. Any change to Deck Placement sequence shall be submitted to Engineer of Record for approval.



PARTIAL SECTION THRU SUPERSTRUCTURE
(Showing Typical Details and Notes for S-I-P Metal Forms)



DETAIL "A"

STAY-IN-PLACE FORM NOTES

1. See Section 400 of the Specifications for installation requirements of stay-in-place forms and support components. Electrical grounding to reinforcing steel is prohibited.

2. The Superstructure Concrete Quantities shown in the plans do not include the concrete required to fill the stay-in-place metal form flutes.

3. The cost of the stay-in-place metal forms, the concrete required to fill the flutes, the metal form attachments and accessories and all miscellaneous items required to install the forms shall be included in the Contract Unit Price for the Superstructure Concrete.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

MISCELLANEOUS SUPERSTRUCTURE DETAILS (1 OF 3)

SHEET NO.: B-70

Compton, Kathy
2/15/2018 2:42:07 PM
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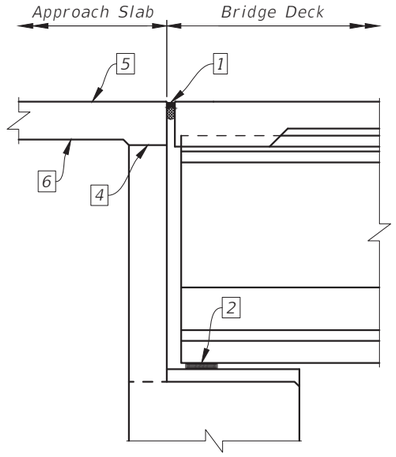
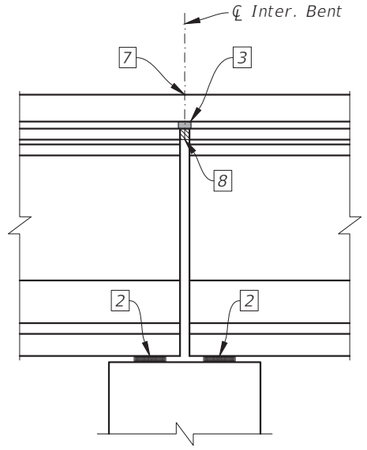
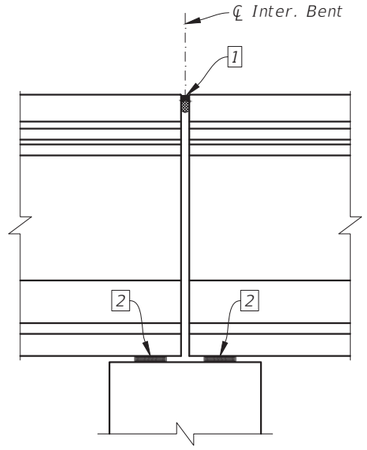


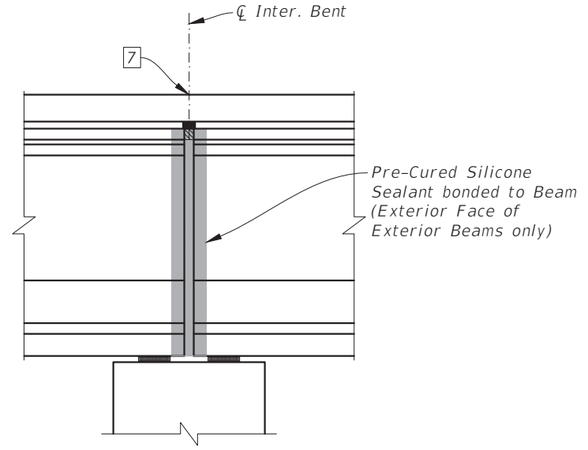
SECTION AT END BENTS



SECTION AT INTERMEDIATE BENTS (CONTINUOUS DECK)



SECTION AT INTERMEDIATE BENTS (EXPANSION JOINT)

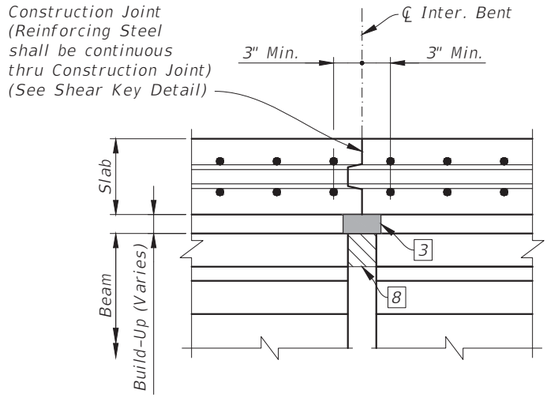


ELEVATION - EXTERIOR BEAMS AT INTERMEDIATE BENTS

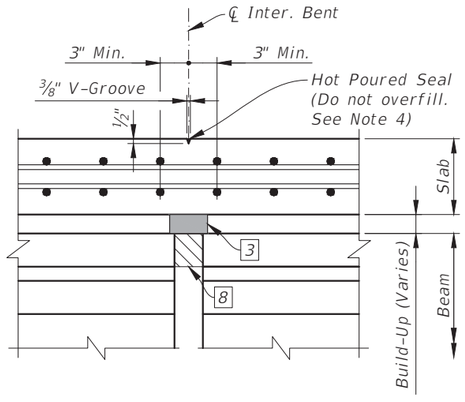
(Continuous Deck shown, Expansion Joint similar)

DECK CONSTRUCTION JOINT NOTES

1. Use Detail "B" where a pour terminates at an Intermediate Support.
2. Use Detail "C" where deck pours are continuous over Intermediate Supports.
3. Cost of Constructing Detail "C" shall be included in the Deck Concrete. Construct either a tooled groove or V-Groove placed prior to the concrete obtaining initial set.
4. Low Modulus Silicone (Type D) Sealant may be used in lieu of Hot-Poured Seal in groove. Ensure groove is lean and free of grease and debris before filling the groove.
5. For Deck Placement Sequence, See Sheet B-70.

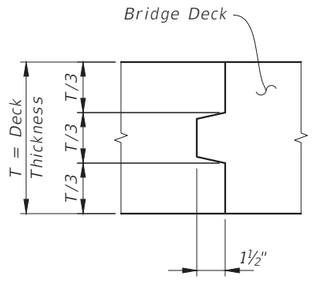


DETAIL "B"



DETAIL "C"

DECK CONSTRUCTION JOINT DETAIL AT INTERMEDIATE SUPPORTS



SHEAR KEY DETAIL

LIST OF STANDARD NOTATIONS

1 Poured Expansion Joint, FDOT Standard Index No. 21110.

2 Composite Neoprene Bearing Pad.

3 Expanded Polystyrene (EPS).

4 Two layers of 30 pound smooth roofing paper.

5 See "Surface Treatment Note" on Approach Slab Drawings.

6 Approach Slab.

7 See Deck Construction Joint Details at Intermediate Supports.

8 Temporary Support for EPS between Beam Ends.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

MISCELLANEOUS SUPERSTRUCTURE DETAILS (2 OF 3)

SHEET NO.: B-71

Compton, Kathy
2/15/2018 2:42:13 PM
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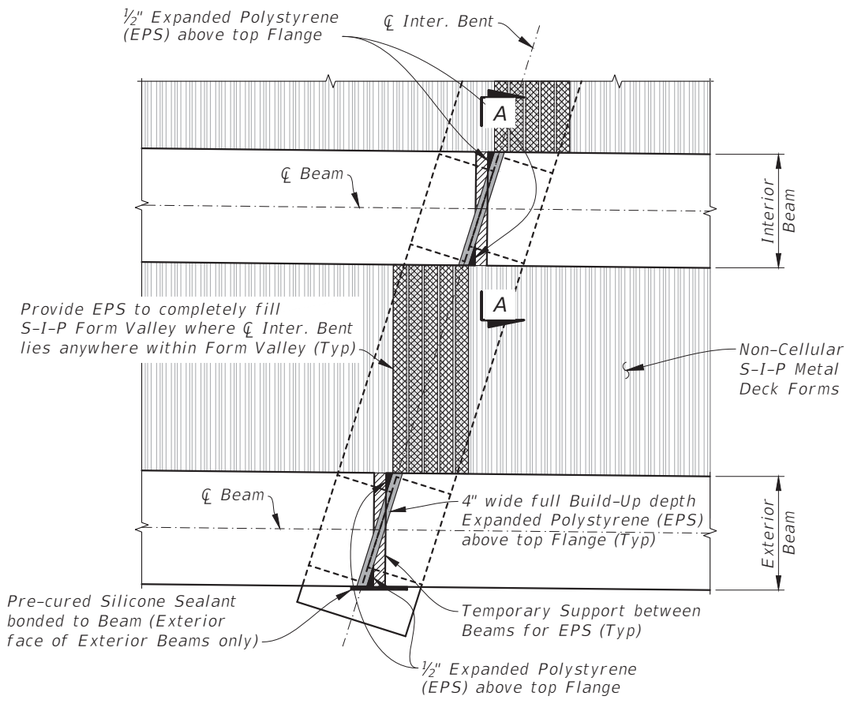
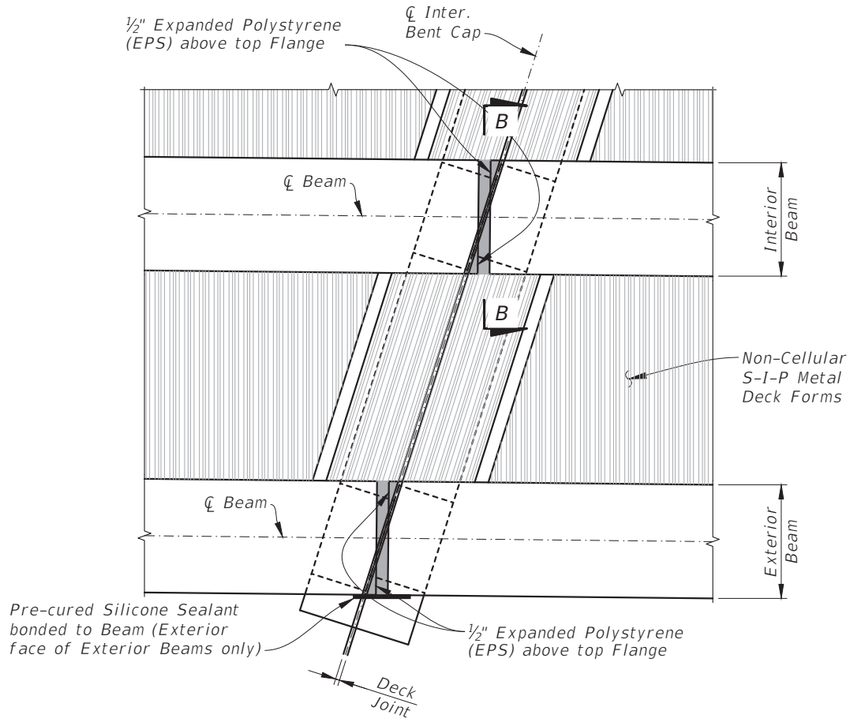


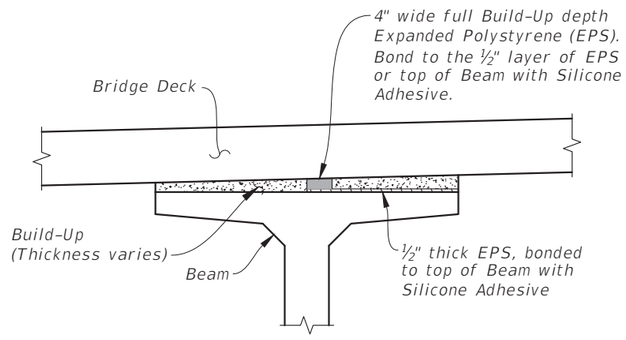
PLAN AT INTERMEDIATE BENTS (CONTINUOUS DECK)

SCALE: 3/16" = 1'-0"



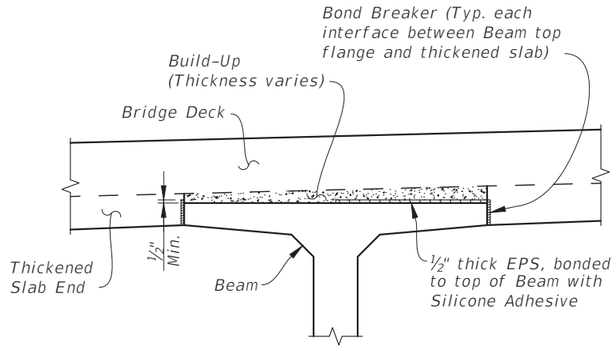
PLAN AT INTERMEDIATE BENTS (NON-CONTINUOUS DECK)

SCALE: 3/16" = 1'-0"



SECTION A-A

(Typical at Continuous Deck)
(Scale: ½" = 1'-0")



SECTION B-B

(Typical at Expansion Joint)
(Scale: ½" = 1'-0")

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: Varies
DESIGNED BY: AR
DRAWN BY: JLS
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

MISCELLANEOUS SUPERSTRUCTURE DETAILS (3 OF 3)

SHEET NO.: B-72

Compton, Kathy 2/15/2018 2:42:20 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1SuperstDet05.dwg

BUILD-UP & DEFLECTION DATA TABLE FOR PRESTRESSED I-BEAMS

Table Date 07/01/13

SPAN NO.	BEAM NO.	REQUIRED THEORETICAL BUILD-UP OVER ℄ BEAM: AT BEGIN SPAN DIM B	AT ℄ SPAN DIM C	AT END SPAN DIM D	NET BEAM CAMBER (PRESTRESS – DEAD LOAD OF BEAM) @ 120 DAYS	DEAD LOAD DEFLECTION DURING DECK POUR @ 120 DAYS DIM A	BUILD-UP CASE NO.
1	1-1	3½"	1"	3½"	4½"	-2⅛"	2
	1-2	3⅛"	1⅛"	3⅛"	4½"	-2⅝"	2
	1-3	3⅛"	1⅛"	3⅛"	4½"	-2⅝"	2
	1-4	3⅛"	1⅛"	3⅛"	4½"	-2⅝"	2
	1-5	3⅛"	1⅛"	3⅛"	4½"	-2⅝"	2
	1-6	2⅞"	1⅛"	2⅞"	4½"	-2⅝"	3
	1-7	2⅞"	1⅛"	2⅞"	4½"	-2⅝"	3
	1-8	2⅞"	1⅛"	2⅞"	4½"	-2⅝"	3
	1-9	2⅞"	1⅛"	2⅞"	4½"	-2⅝"	3
	1-10	3¼"	1"	3¼"	4½"	-2¼"	3
2	2-1	3¼"	1"	3¼"	4⅝"	-2¼"	3
	2-2	3"	1⅛"	3"	4⅝"	-2⅝"	3
	2-3	3"	1⅛"	3"	4⅝"	-2⅝"	3
	2-4	3"	1⅛"	3"	4⅝"	-2⅝"	1
	2-5	3"	1⅛"	3"	4⅝"	-2⅝"	2
	2-6	2¾"	1⅛"	2¾"	4⅝"	-2⅝"	3
	2-7	2⅞"	1⅛"	2⅞"	4⅝"	-2⅝"	3
	2-8	2⅞"	1⅛"	2⅞"	4⅝"	-2⅝"	3
	2-9	2⅞"	1⅛"	2⅞"	4⅝"	-2⅝"	3
	2-10	3⅛"	1"	3⅛"	4⅝"	-2¼"	3
3	3-1	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
	3-2	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	3-3	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	3-4	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	3-5	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	3-6	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	3-7	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	3-8	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	3-9	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	3-10	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
4	4-1	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
	4-2	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	4-3	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	4-4	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	4-5	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	4-6	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	4-7	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	4-8	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	4-9	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	4-10	2⅛"	1"	2⅞"	4⅝"	-2¼"	3

BUILD-UP & DEFLECTION DATA TABLE FOR PRESTRESSED I-BEAMS

Table Date 07/01/13

SPAN NO.	BEAM NO.	REQUIRED THEORETICAL BUILD-UP OVER ℄ BEAM: AT BEGIN SPAN DIM B	AT ℄ SPAN DIM C	AT END SPAN DIM D	NET BEAM CAMBER (PRESTRESS – DEAD LOAD OF BEAM) @ 120 DAYS	DEAD LOAD DEFLECTION DURING DECK POUR @ 120 DAYS DIM A	BUILD-UP CASE NO.
5	5-1	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
	5-2	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	5-3	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	5-4	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	5-5	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	5-6	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	5-7	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	5-8	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	5-9	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	5-10	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
6	6-1	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
	6-2	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	6-3	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	6-4	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	6-5	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	6-6	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	6-7	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	6-8	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	6-9	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	6-10	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
7	7-1	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
	7-2	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	7-3	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	7-4	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	7-5	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	7-6	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	7-7	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	7-8	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	7-9	2½"	1⅛"	2½"	4⅝"	-2⅝"	3
	7-10	2⅞"	1"	2⅞"	4⅝"	-2¼"	3
8	8-1	3⅜"	1"	3⅜"	4⅝"	-2¼"	3
	8-2	3"	1⅛"	3"	4⅝"	-2⅝"	3
	8-3	3"	1⅛"	3"	4⅝"	-2⅝"	3
	8-4	3"	1⅛"	3"	4⅝"	-2⅝"	3
	8-5	3"	1⅛"	3"	4⅝"	-2⅝"	3
	8-6	2⅞"	1⅛"	2⅞"	4⅝"	-2⅝"	3
	8-7	2⅞"	1⅛"	2⅞"	4⅝"	-2⅝"	3
	8-8	2⅞"	1⅛"	2⅞"	4⅝"	-2⅝"	3
	8-9	2⅞"	1⅛"	2⅞"	4⅝"	-2⅝"	3
	8-10	3⅛"	1"	3⅛"	4⅝"	-2¼"	3

NOTE: Work this sheet with FDOT Standard Index No. 20199.

Bridge No. 134130

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

BEAM BUILD-UP AND DEFLECTION DATA TABLES (1 OF 2)

SHEET NO.: B-73

Compton, Kathy 2/15/2018 2:42:26 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1DataTableBrgPad01.dwg

BUILD-UP & DEFLECTION DATA TABLE FOR PRESTRESSED I-BEAMS

Table Date 07/01/13

SPAN NO.	BEAM NO.	REQUIRED THEORETICAL BUILD-UP OVER ℄ BEAM: AT BEGIN SPAN DIM B	AT ℄ SPAN DIM C	AT END SPAN DIM D	NET BEAM CAMBER (PRESTRESS – DEAD LOAD OF BEAM) @ 120 DAYS	DEAD LOAD DEFLECTION DURING DECK POUR @ 120 DAYS DIM A	BUILD-UP CASE NO.
9	9-1	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	1
	9-2	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	9-3	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	9-4	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	9-5	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	9-6	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	9-7	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	9-8	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	9-9	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	9-10	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	1
10	10-1	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	1
	10-2	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	10-3	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	10-4	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	10-5	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	10-6	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	10-7	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	10-8	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	10-9	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	10-10	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	1
11	11-1	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	1
	11-2	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	11-3	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	11-4	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	11-5	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	11-6	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	11-7	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	11-8	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	11-9	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	11-10	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	1
12	12-1	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	1
	12-2	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	12-3	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	12-4	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	12-5	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	12-6	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	12-7	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	12-8	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	12-9	3"	1 1/8"	3"	4 5/8"	-2 5/8"	1
	12-10	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	1

BUILD-UP & DEFLECTION DATA TABLE FOR PRESTRESSED I-BEAMS

Table Date 07/01/13

SPAN NO.	BEAM NO.	REQUIRED THEORETICAL BUILD-UP OVER ℄ BEAM: AT BEGIN SPAN DIM B	AT ℄ SPAN DIM C	AT END SPAN DIM D	NET BEAM CAMBER (PRESTRESS – DEAD LOAD OF BEAM) @ 120 DAYS	DEAD LOAD DEFLECTION DURING DECK POUR @ 120 DAYS DIM A	BUILD-UP CASE NO.
13	13-1	3 1/2"	1"	3 1/2"	4 5/8"	-2 1/4"	2
	13-2	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	13-3	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	13-4	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	13-5	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	13-6	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	13-7	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	13-8	3"	1 1/8"	3"	4 5/8"	-2 5/8"	2
	13-9	3"	1 1/8"	3"	4 5/8"	-2 5/8"	2
	13-10	3 3/8"	1"	3 3/8"	4 5/8"	-2 1/4"	2
14	14-1	3 1/2"	1"	3 1/2"	4 5/8"	-2 1/4"	2
	14-2	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	14-3	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	14-4	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	14-5	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	14-6	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	14-7	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	14-8	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	14-9	3 1/8"	1 1/8"	3 1/8"	4 5/8"	-2 5/8"	2
	14-10	3 1/2"	1"	3 1/2"	4 5/8"	-2 1/4"	2
15	15-1	3 1/2"	1"	3 1/2"	4 1/2"	-2 1/8"	2
	15-2	3 1/4"	1 1/8"	3 1/4"	4 1/2"	-2 5/8"	2
	15-3	3 1/4"	1 1/8"	3 1/4"	4 1/2"	-2 5/8"	2
	15-4	3 1/4"	1 1/8"	3 1/4"	4 1/2"	-2 5/8"	2
	15-5	3 1/4"	1 1/8"	3 1/4"	4 1/2"	-2 5/8"	2
	15-6	3 1/8"	1 1/8"	3 1/8"	4 1/2"	-2 5/8"	2
	15-7	3 1/8"	1 1/8"	3 1/8"	4 1/2"	-2 5/8"	2
	15-8	3 1/8"	1 1/8"	3 1/8"	4 1/2"	-2 5/8"	2
	15-9	3 1/8"	1 1/8"	3 1/8"	4 1/2"	-2 5/8"	2
	15-10	3 3/8"	1"	3 3/8"	4 1/2"	-2 1/4"	2

NOTE: Work this sheet with FDOT Standard Index No. 20199.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

BEAM BUILD-UP AND DEFLECTION DATA TABLES (2 OF 2)

SHEET NO.: B-74

Compton, Kathy 2/15/2018 2:42:29 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1DataTableBrgPad01.dwg

BEARING PAD DATA TABLE

Table Date 7-01-13

SPAN NO(s)	BEAM NO(s)	PAD TYPE	BEAM TYPE	BEAM END *
1	1-1 thru 1-10	F	Florida-I 45	END 1 / END 2
2	2-1 thru 2-10	F	Florida-I 45	END 1 / END 2
3	3-1 thru 3-10	F	Florida-I 45	END 1 / END 2
4	4-1 thru 4-10	F	Florida-I 45	END 1 / END 2
5	5-1 thru 5-10	F	Florida-I 45	END 1 / END 2
6	6-1 thru 6-10	F	Florida-I 45	END 1 / END 2
7	7-1 thru 7-10	F	Florida-I 45	END 1 / END 2
8	8-1 thru 8-10	F	Florida-I 45	END 1 / END 2
9	9-1 thru 9-10	F	Florida-I 45	END 1 / END 2
10	10-1 thru 10-10	F	Florida-I 45	END 1 / END 2
11	11-1 thru 11-10	F	Florida-I 45	END 1 / END 2
12	12-1 thru 12-10	F	Florida-I 45	END 1 / END 2
13	13-1 thru 13-10	F	Florida-I 45	END 1 / END 2
14	14-1 thru 14-10	F	Florida-I 45	END 1 / END 2
15	15-1 thru 15-10	F	Florida-I 45	END 1 / END 2

NOTES:
Work this table with Index No. 20510 for Pad Type F
* END 1 = Begin Span End of Beam (Back Station).
End 2 = End Span End of Beam (Ahead Station).

BEARING PLATE DATA TABLE - TYPE 2

Table Date 07-01-13

GENERAL BEARING PLATE DATA							BEVELED PLATE REQUIRED (Yes/No)	BEVELED PLATE DIMENSIONS (PLATE B) (inches)		
BRG. PLATE MARK **	SPAN NO(s).	BEAM NO(s).	PAD TYPE	BEAM END	PLAN VIEW CASE	SLOPE (%) *		C	X	Y
S1	1	1-1	F	1 & 2	1	1.02%	No	N/A	N/A	N/A
S1	1	1-2	F	1 & 2	1	1.03%	No	N/A	N/A	N/A
S1	1	1-3	F	1 & 2	1	1.03%	No	N/A	N/A	N/A
S1	1	1-4	F	1 & 2	1	1.02%	No	N/A	N/A	N/A
S1	1	1-5	F	1 & 2	1	1.01%	No	N/A	N/A	N/A
S1	1	1-6	F	1 & 2	1	0.99%	No	N/A	N/A	N/A
S1	1	1-7	F	1 & 2	1	0.99%	No	N/A	N/A	N/A
S1	1	1-8	F	1 & 2	1	0.99%	No	N/A	N/A	N/A
S1	1	1-9	F	1 & 2	1	0.98%	No	N/A	N/A	N/A
S1	1	1-10	F	1 & 2	1	0.98%	No	N/A	N/A	N/A
S1	2	2-1	F	1 & 2	1	0.98%	No	N/A	N/A	N/A
S1	2	2-2	F	1 & 2	1	1.01%	No	N/A	N/A	N/A
S1	2	2-3	F	1 & 2	1	1.00%	No	N/A	N/A	N/A
S1	2	2-4	F	1 & 2	1	1.00%	No	N/A	N/A	N/A
S1	2	2-5	F	1 & 2	1	1.00%	No	N/A	N/A	N/A
S1	2	2-6	F	1 & 2	1	0.97%	No	N/A	N/A	N/A
S1	2	2-7	F	1 & 2	1	0.98%	No	N/A	N/A	N/A
S1	2	2-8	F	1 & 2	1	0.98%	No	N/A	N/A	N/A
S1	2	2-9	F	1 & 2	1	0.98%	No	N/A	N/A	N/A
S1	2	2-10	F	1 & 2	1	0.98%	No	N/A	N/A	N/A
S1	3	3-1	F	1 & 2	1	0.69%	No	N/A	N/A	N/A
S1	3	3-2	F	1 & 2	1	0.71%	No	N/A	N/A	N/A
S1	3	3-3	F	1 & 2	1	0.72%	No	N/A	N/A	N/A
S1	3	3-4	F	1 & 2	1	0.73%	No	N/A	N/A	N/A
S1	3	3-5	F	1 & 2	1	0.74%	No	N/A	N/A	N/A
S1	3	3-6	F	1 & 2	1	0.74%	No	N/A	N/A	N/A
S1	3	3-7	F	1 & 2	1	0.75%	No	N/A	N/A	N/A
S1	3	3-8	F	1 & 2	1	0.76%	No	N/A	N/A	N/A
S1	3	3-9	F	1 & 2	1	0.77%	No	N/A	N/A	N/A
S1	3	3-10	F	1 & 2	1	0.78%	No	N/A	N/A	N/A
S1	4	4-1	F	1 & 2	1	0.37%	No	N/A	N/A	N/A
S1	4	4-2	F	1 & 2	1	0.39%	No	N/A	N/A	N/A
S1	4	4-3	F	1 & 2	1	0.40%	No	N/A	N/A	N/A
S1	4	4-4	F	1 & 2	1	0.41%	No	N/A	N/A	N/A
S1	4	4-5	F	1 & 2	1	0.42%	No	N/A	N/A	N/A
S1	4	4-6	F	1 & 2	1	0.43%	No	N/A	N/A	N/A
S1	4	4-7	F	1 & 2	1	0.44%	No	N/A	N/A	N/A
S1	4	4-8	F	1 & 2	1	0.45%	No	N/A	N/A	N/A
S1	4	4-9	F	1 & 2	1	0.46%	No	N/A	N/A	N/A
S1	4	4-10	F	1 & 2	1	0.47%	No	N/A	N/A	N/A

NOTES:
See Index No. 20512 for additional Notes and Details.
Embedded Bearing Plate A Dimensions are ½" x 1'-1½" x 3'-0".
* Slope measured along ℄ of Beam at ℄ of Bearing.
** See "TABLE OF BEAMS VARIABLES", Sheets B-46, B-47 and Index No. 20010.

Bridge No. 134130

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No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

BEARING PAD & BEARING PLATE DATA TABLES (1 OF 3)

SHEET NO.: B-75

Compton, Kathy 2/15/2018 2:42:30 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1DataTableBrgPad01.dwg

BEARING PLATE DATA TABLE - TYPE 2

Table Date 07-01-13

GENERAL BEARING PLATE DATA							BEVELED PLATE REQUIRED (Yes/No)	BEVELED PLATE DIMENSIONS (PLATE B) (inches)		
BRG. PLATE MARK **	SPAN NO(s).	BEAM NO(s).	PAD TYPE	BEAM END	PLAN VIEW CASE	SLOPE (%) *		C	X	Y
S1	5	5-1	F	1 & 2	1	0.06%	No	N/A	N/A	N/A
S1	5	5-2	F	1 & 2	1	0.07%	No	N/A	N/A	N/A
S1	5	5-3	F	1 & 2	1	0.08%	No	N/A	N/A	N/A
S1	5	5-4	F	1 & 2	1	0.09%	No	N/A	N/A	N/A
S1	5	5-5	F	1 & 2	1	0.10%	No	N/A	N/A	N/A
S1	5	5-6	F	1 & 2	1	0.11%	No	N/A	N/A	N/A
S1	5	5-7	F	1 & 2	1	0.12%	No	N/A	N/A	N/A
S1	5	5-8	F	1 & 2	1	0.14%	No	N/A	N/A	N/A
S1	5	5-9	F	1 & 2	1	0.15%	No	N/A	N/A	N/A
S1	5	5-10	F	1 & 2	1	0.16%	No	N/A	N/A	N/A
S1	6	6-1	F	1 & 2	1	-0.26%	No	N/A	N/A	N/A
S1	6	6-2	F	1 & 2	1	-0.24%	No	N/A	N/A	N/A
S1	6	6-3	F	1 & 2	1	-0.23%	No	N/A	N/A	N/A
S1	6	6-4	F	1 & 2	1	-0.22%	No	N/A	N/A	N/A
S1	6	6-5	F	1 & 2	1	-0.21%	No	N/A	N/A	N/A
S1	6	6-6	F	1 & 2	1	-0.20%	No	N/A	N/A	N/A
S1	6	6-7	F	1 & 2	1	-0.19%	No	N/A	N/A	N/A
S1	6	6-8	F	1 & 2	1	-0.18%	No	N/A	N/A	N/A
S1	6	6-9	F	1 & 2	1	-0.17%	No	N/A	N/A	N/A
S1	6	6-10	F	1 & 2	1	-0.16%	No	N/A	N/A	N/A
S1	7	7-1	F	1 & 2	1	-0.57%	No	N/A	N/A	N/A
S1	7	7-2	F	1 & 2	1	-0.56%	No	N/A	N/A	N/A
S1	7	7-3	F	1 & 2	1	-0.55%	No	N/A	N/A	N/A
S1	7	7-4	F	1 & 2	1	-0.54%	No	N/A	N/A	N/A
S1	7	7-5	F	1 & 2	1	-0.53%	No	N/A	N/A	N/A
S1	7	7-6	F	1 & 2	1	-0.52%	No	N/A	N/A	N/A
S1	7	7-7	F	1 & 2	1	-0.51%	No	N/A	N/A	N/A
S1	7	7-8	F	1 & 2	1	-0.49%	No	N/A	N/A	N/A
S1	7	7-9	F	1 & 2	1	-0.48%	No	N/A	N/A	N/A
S1	7	7-10	F	1 & 2	1	-0.47%	No	N/A	N/A	N/A
S1	8	8-1	F	1 & 2	1	-0.76%	No	N/A	N/A	N/A
S1	8	8-2	F	1 & 2	1	-0.76%	No	N/A	N/A	N/A
S1	8	8-3	F	1 & 2	1	-0.76%	No	N/A	N/A	N/A
S1	8	8-4	F	1 & 2	1	-0.76%	No	N/A	N/A	N/A
S1	8	8-5	F	1 & 2	1	-0.76%	No	N/A	N/A	N/A
S1	8	8-6	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	8	8-7	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	8	8-8	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	8	8-9	F	1 & 2	1	-0.74%	No	N/A	N/A	N/A
S1	8	8-10	F	1 & 2	1	-0.74%	No	N/A	N/A	N/A

BEARING PLATE DATA TABLE - TYPE 2

Table Date 07-01-13

GENERAL BEARING PLATE DATA							BEVELED PLATE REQUIRED (Yes/No)	BEVELED PLATE DIMENSIONS (PLATE B) (inches)		
BRG. PLATE MARK **	SPAN NO(s).	BEAM NO(s).	PAD TYPE	BEAM END	PLAN VIEW CASE	SLOPE (%) *		C	X	Y
S1	9	9-1	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-2	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-3	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-4	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-5	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-6	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-7	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-8	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-9	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	9	9-10	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-1	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-2	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-3	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-4	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-5	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-6	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-7	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-8	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-9	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	10	10-10	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-1	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-2	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-3	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-4	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-5	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-6	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-7	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-8	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-9	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	11	11-10	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-1	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-2	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-3	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-4	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-5	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-6	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-7	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-8	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-9	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A
S1	12	12-10	F	1 & 2	1	-0.77%	No	N/A	N/A	N/A

NOTES:
See Index No. 20512 for additional Notes and Details.
Embedded Bearing Plate A Dimensions are ½" x 1'-1½" x 3'-0".
* Slope measured along ℄ of Beam at ℄ of Bearing.
** See "TABLE OF BEAMS VARIABLES", Sheets B-46, B-47 and Index No. 20010.

Bridge No. 134130

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

BEARING PAD & BEARING PLATE DATA TABLES (2 OF 3)

SHEET NO.: B-76

Compton, Kathy 2/15/2018 2:42:32 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1DataTableBrgPad01.dwg

BEARING PLATE DATA TABLE - TYPE 2

Table Date 07-01-13

GENERAL BEARING PLATE DATA							BEVELED PLATE REQUIRED (Yes/No)	BEVELED PLATE DIMENSIONS (PLATE B) (inches)		
BRG. PLATE MARK **	SPAN NO(s).	BEAM NO(s).	PAD TYPE	BEAM END	PLAN VIEW CASE	SLOPE (%) *		C	X	Y
S1	13	13-1	F	1 & 2	1	-0.74%	No	N/A	N/A	N/A
S1	13	13-2	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	13	13-3	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	13	13-4	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	13	13-5	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	13	13-6	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	13	13-7	F	1 & 2	1	-0.75%	No	N/A	N/A	N/A
S1	13	13-8	F	1 & 2	1	-0.76%	No	N/A	N/A	N/A
S1	13	13-9	F	1 & 2	1	-0.76%	No	N/A	N/A	N/A
S1	13	13-10	F	1 & 2	1	-0.76%	No	N/A	N/A	N/A
S1	14	14-1	F	1 & 2	1	-0.66%	No	N/A	N/A	N/A
S1	14	14-2	F	1 & 2	1	-0.66%	No	N/A	N/A	N/A
S1	14	14-3	F	1 & 2	1	-0.67%	No	N/A	N/A	N/A
S1	14	14-4	F	1 & 2	1	-0.67%	No	N/A	N/A	N/A
S1	14	14-5	F	1 & 2	1	-0.67%	No	N/A	N/A	N/A
S1	14	14-6	F	1 & 2	1	-0.67%	No	N/A	N/A	N/A
S1	14	14-7	F	1 & 2	1	-0.68%	No	N/A	N/A	N/A
S1	14	14-8	F	1 & 2	1	-0.68%	No	N/A	N/A	N/A
S1	14	14-9	F	1 & 2	1	-0.68%	No	N/A	N/A	N/A
S1	14	14-10	F	1 & 2	1	-0.69%	No	N/A	N/A	N/A
S1	15	15-1	F	1 & 2	1	-0.58%	No	N/A	N/A	N/A
S1	15	15-2	F	1 & 2	1	-0.57%	No	N/A	N/A	N/A
S1	15	15-3	F	1 & 2	1	-0.57%	No	N/A	N/A	N/A
S1	15	15-4	F	1 & 2	1	-0.58%	No	N/A	N/A	N/A
S1	15	15-5	F	1 & 2	1	-0.58%	No	N/A	N/A	N/A
S1	15	15-6	F	1 & 2	1	-0.59%	No	N/A	N/A	N/A
S1	15	15-7	F	1 & 2	1	-0.59%	No	N/A	N/A	N/A
S1	15	15-8	F	1 & 2	1	-0.59%	No	N/A	N/A	N/A
S1	15	15-9	F	1 & 2	1	-0.60%	No	N/A	N/A	N/A
S1	15	15-10	F	1 & 2	1	-0.60%	No	N/A	N/A	N/A

NOTES:
See Index No. 20512 for additional Notes and Details.
Embedded Bearing Plate A Dimensions are ½" x 1'-1½" x 3'-0".
* Slope measured along ℄ of Beam at ℄ of Bearing.
** See "TABLE OF BEAMS VARIABLES", Sheets B-46, B-47 and Index No. 20010.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

BEARING PAD & BEARING PLATE DATA TABLES (3 OF 3)

SHEET NO.: B-77

Compton, Kathy 2/15/2018 2:42:33 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1DataTableBrgPad01.dwg

PRESTRESSED BEAM STABILITY AND TEMPORARY BRACING NOTES:

1. Ensure beam stability and design temporary beam bracing, including connections, in accordance with the Specifications and the FDOT Structure Manual.
2. Construction:
   a. Evaluate the beam stability and bracing requirements against the design assumptions including:
      i. Loadings given in the plans.
      ii. Beam Camber (less than 6 inches) and Beam Sweep (in compliance with Specification 450 requirements).
      iii. Bearings given in the plans.
   b. Securely connect bracing to each beam. Do not allow the bracing to exert any vertical force on the outer edge of the top flange. Preform all bolt holes in beams and fill after use in accordance with the Specifications.

TABLE OF PRESTRESSED I-BEAM TEMPORARY BRACING MINUMUM REQUIREMENTS AND LOADS — Table Date 8-05-15

SPAN NO.	BEAM NO.	STAGE 1	STAGE 2			STAGE 3	
		BRACE ENDS PRIOR TO CRANE RELEASE? [1] (YES/NO)	TOTAL LINES OF BRACING [2,3,7]	MINUMUM NUMBER OF ADJACENT BEAMS ERECTED	HORIZONTAL LOAD AT EACH BRACE [4] (KIP)	TOTAL LINES OF BRACING [3,5,7]	OVERTURNING MOMENT AT EACH BRACE [6] (KIP-FT)
1	1-1 thru 1-10	NO	5	2	5	5	90
2	2-1 thru 2-10	NO	5	2	5	5	90
3	3-1 thru 3-10	NO	5	2	5	5	90
4	4-1 thru 4-10	NO	5	2	5	5	90
5	5-1 thru 5-10	NO	5	2	5	5	90
6	6-1 thru 6-10	NO	5	2	5	5	90
7	7-1 thru 7-10	NO	5	2	5	5	90
8	8-1 thru 8-10	NO	5	2	5	5	90
9	9-1 thru 9-10	NO	5	2	5	5	90
10	10-1 thru 10-10	NO	5	2	5	5	90
11	11-1 thru 11-10	NO	5	2	5	5	90
12	12-1 thru 12-10	NO	5	2	5	5	90
13	13-1 thru 13-10	NO	5	2	5	5	90
14	14-1 thru 14-10	NO	5	2	5	5	90
15	15-1 thru 15-10	NO	5	2	5	5	90

1. Anchor Bracing loads to be determined by the Contractor.
2. Total lines of Stage 2 bracing, including end bracing, are required to be installed within 24 hours after initial beam placement.
3. Equally space bracing along the length of the beams allowing for variations due connection conflicts and skew.
4. LRFD Strength III Loads applied to beam at brace point (see SDG 11.6).
5. Total lines of Stage 3 bracing, including end bracing are required to be installed prior to deck placement.
6. LRFD Strength I overturning moment applied to beam at brace point (see SDG 11.6).
7. Submit shop drawings for temporary bracing plan including locations of preformed beam holes/inserts.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

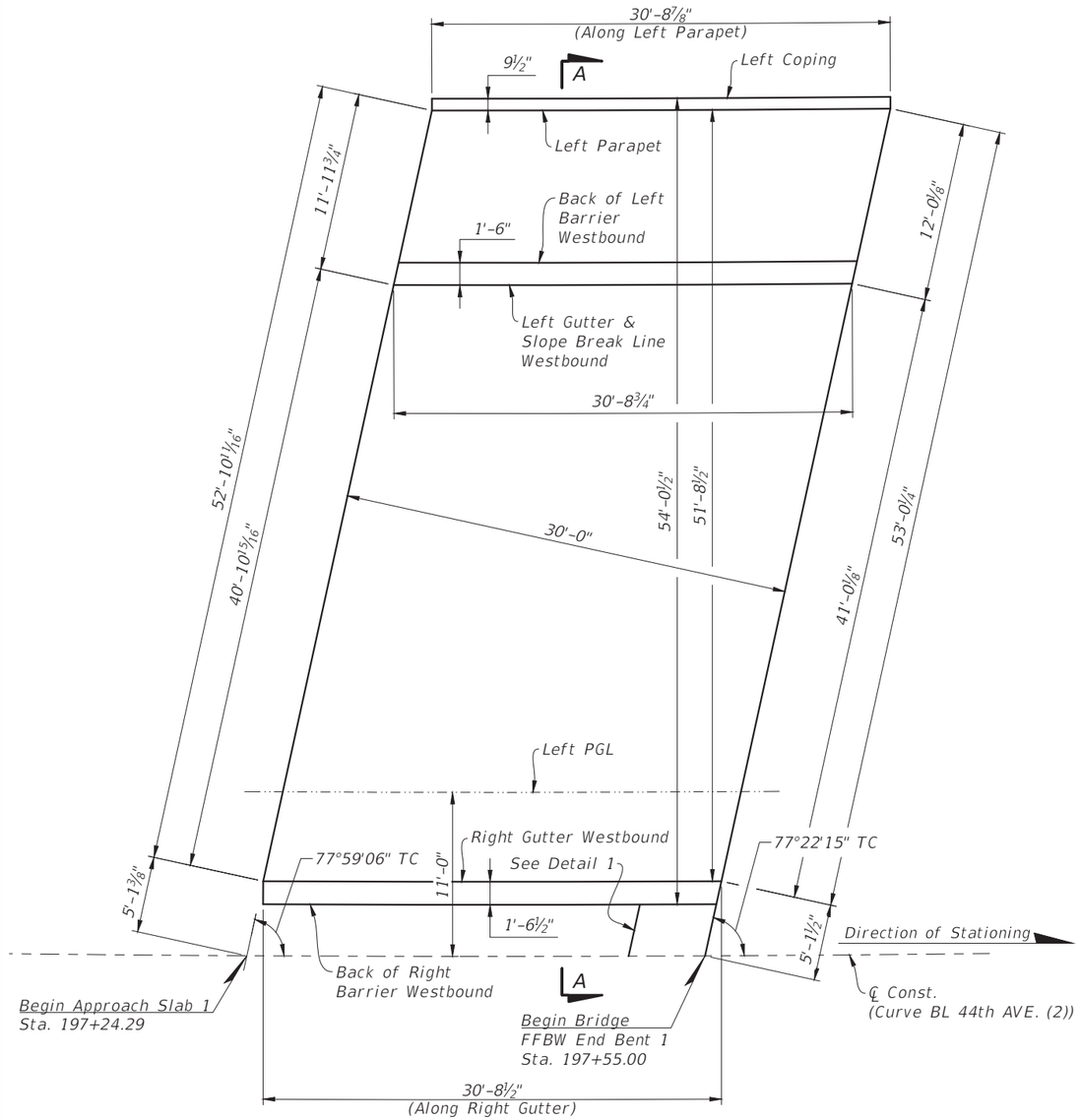
Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

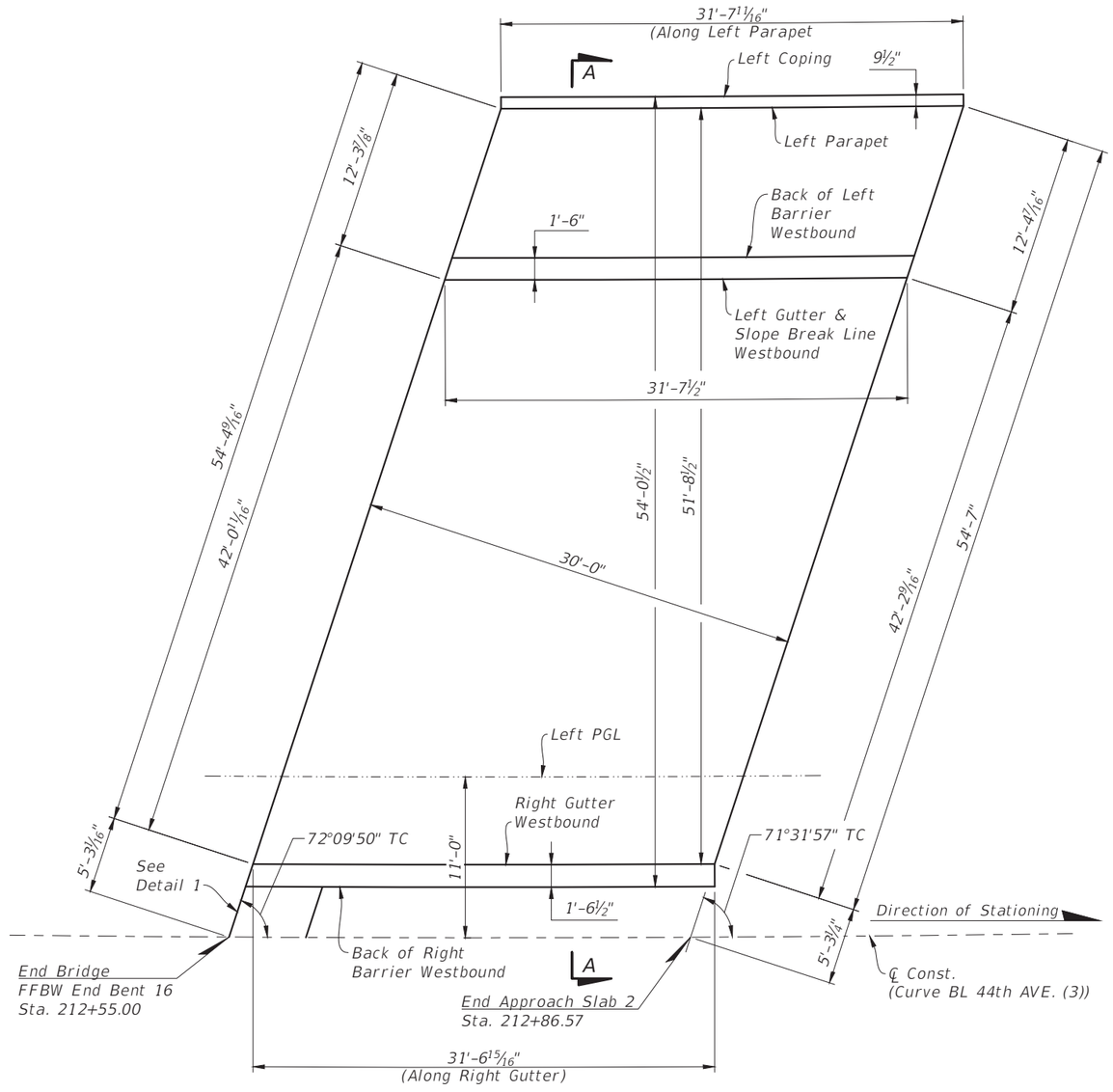
PRESTRESSED BEAM TEMPORARY BRACING DATA TABLES

SHEET NO.: B-78

Compton, Kathy 2/15/2018 2:42:41 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1DataTableTempBracing01.dwg



APPROACH SLAB 1 - WESTBOUND



APPROACH SLAB 2 - WESTBOUND

APPROACH SLAB INDEX NO. 20900 TABLE OF DIMENSIONS

Table Date 07-01-13

LOCATION	DIMENSIONS					ANGLE Ø
	L1	L2	M1	M2	N	
Approach Slab 1 – Westbound	30'-8⅞"	30'-8½"	9½"	1'-6½"	51'-8½"	12°37'45" TC
Approach Slab 2 – Westbound	31'-7¹¹⁄₁₆"	31'-6¹⁵⁄₁₆"	9½"	1'-6½"	51'-8½"	17°50'10" TC

Dimension Notes:
Dimensions L1 & L2 are measured along gutter line, inside face of parapet.
Dimensions L1 & L2 are arc dimensions within curved alignments.

NOTES

1. For Section A-A & Detail 1, see Sheet B-81.
2. Coordinate the construction of Approach Slabs with construction of water main and dry force main thrust blocks with Potable, Sanitary and Reclaimed Water Utility Work Plans.
3. Work this Sheet with FDOT Standard Index No. 20900 and Sheet B-91.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

APPROACH SLAB DETAILS (1 OF 3)

SHEET NO.: B-79

Compton, Kathy
2/15/2018 2:42:48 PM
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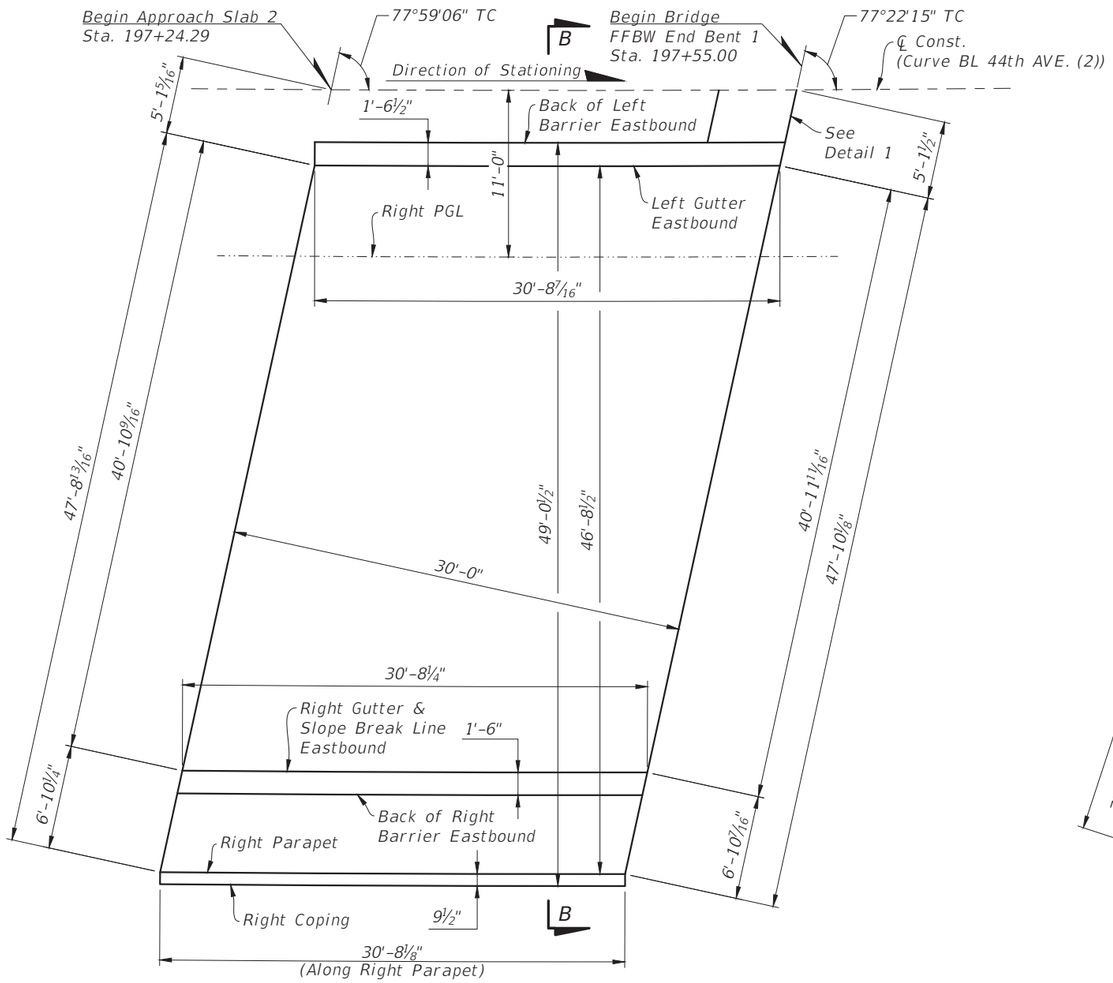
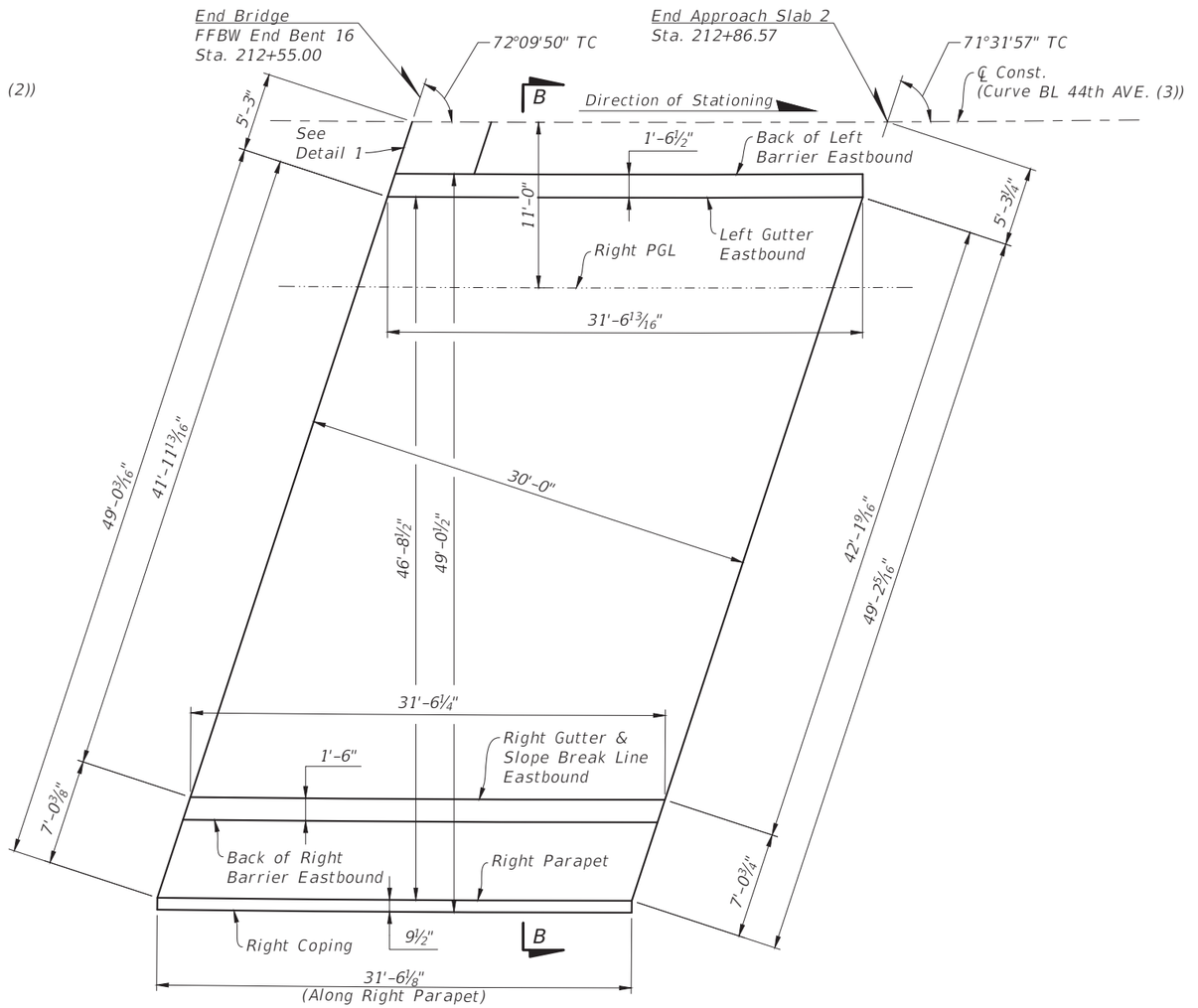


APPROACH SLAB 1 - EASTBOUND



APPROACH SLAB 2 - EASTBOUND

APPROACH SLAB INDEX NO. 20900 TABLE OF DIMENSIONS						Table Date 07-01-13
LOCATION	DIMENSIONS					ANGLE Ø
	L1	L2	M1	M2	N	
Approach Slab 1 – Eastbound	30'-8⁷⁄₁₆"	30'-8⅛"	1'-6½"	9½"	46'-8½"	12°37'45" TC
Approach Slab 2 – Eastbound	31'-6¹³⁄₁₆"	31'-6⅛"	1'-6½"	9½"	46'-8½"	17°50'10" TC

Dimension Notes:
Dimensions L1 & L2 are measured along gutter line, inside face of parapet.
Dimensions L1 & L2 are arc dimensions within curved alignments.

NOTES

1. For Section A-A & Detail 1, see Sheet B-81.
2. Coordinate the construction of Approach Slabs with construction of water main and dry force main thrust blocks with Potable, Sanitary and Reclaimed Water Utility Work Plans.
3. Work this Sheet with FDOT Standard Index No. 20900 and Sheet B-91.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" = 10'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

APPROACH SLAB DETAILS (2 OF 3)

SHEET NO.: B-80

Compton, Kathy
2/15/2018 2:42:54 PM
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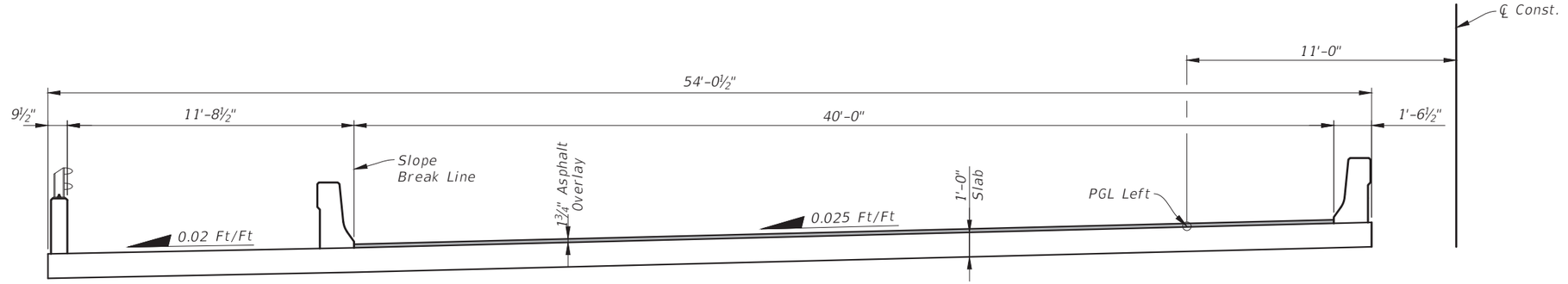
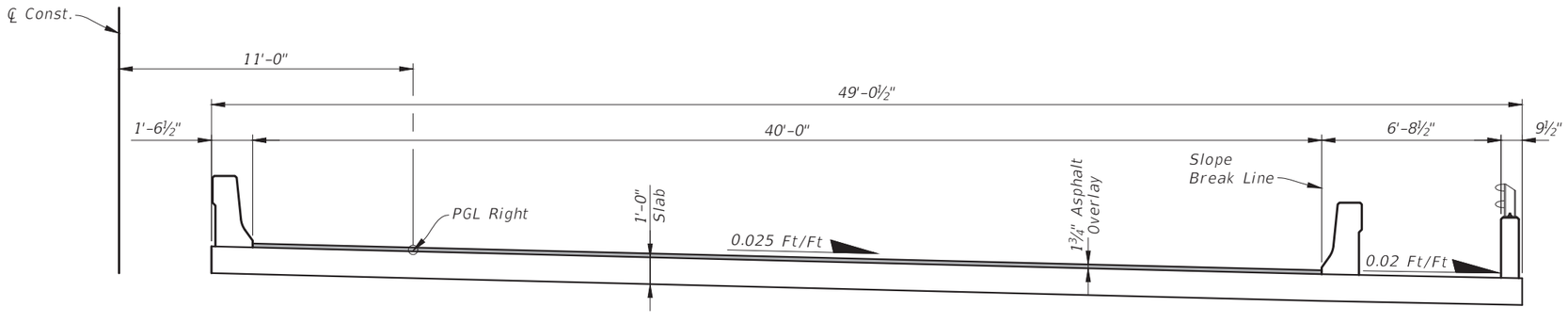
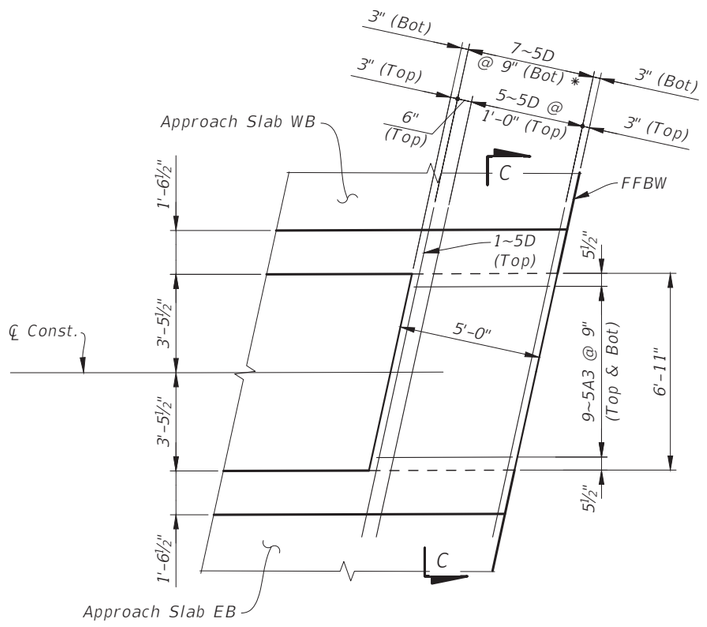


SECTION A-A

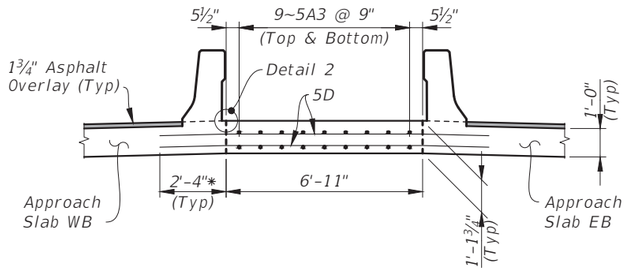


SECTION B-B



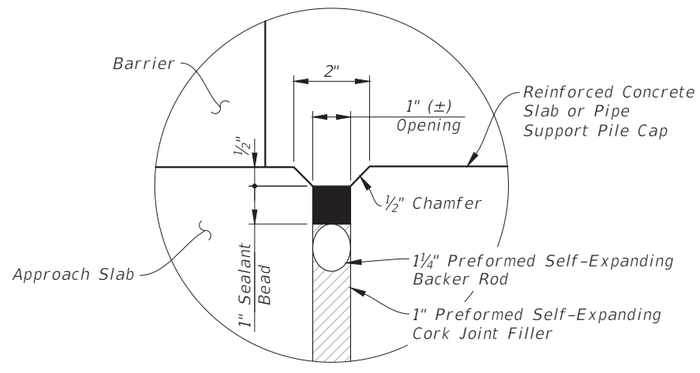
DETAIL 1 (PIPE EXPANSION JOINT SUPPORT)

(Approach Slab 1 Shown, Approach Slab 2 Similar)



SECTION C-C

* 2'-2" Min. Lap w/Approach Slab Bars 5B.



DETAIL 2

Scale: 3" = 1'-0"

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 3/16" = 1'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018

PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.

FL. LICENSE NO.: 36078

APPROACH SLAB DETAILS (3 OF 3)

SHEET NO.: B-81

Compton, Kathy 2/15/2018 2:43:00 PM

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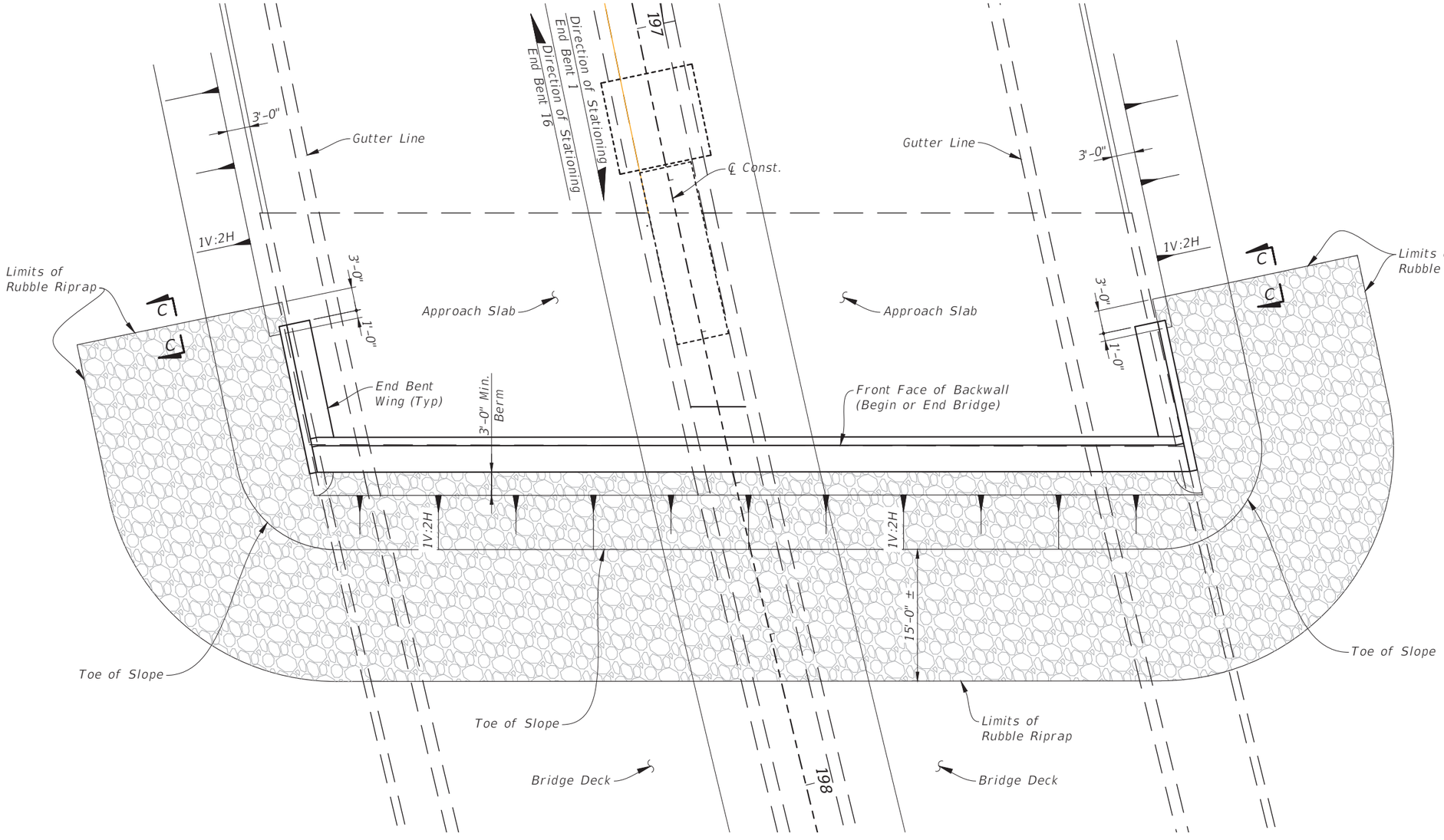

PLAN

(End Bent 1 Shown, End Bent 16 Similar)

NOTES

1. For Section C-C, see Sheet B-83.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1" - 15'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SLOPE PROTECTION DETAILS (1 OF 3)

SHEET NO.: B-82

Compton, Kathy 2/15/2018 2:43:51 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1RiprapRubble01.dwg

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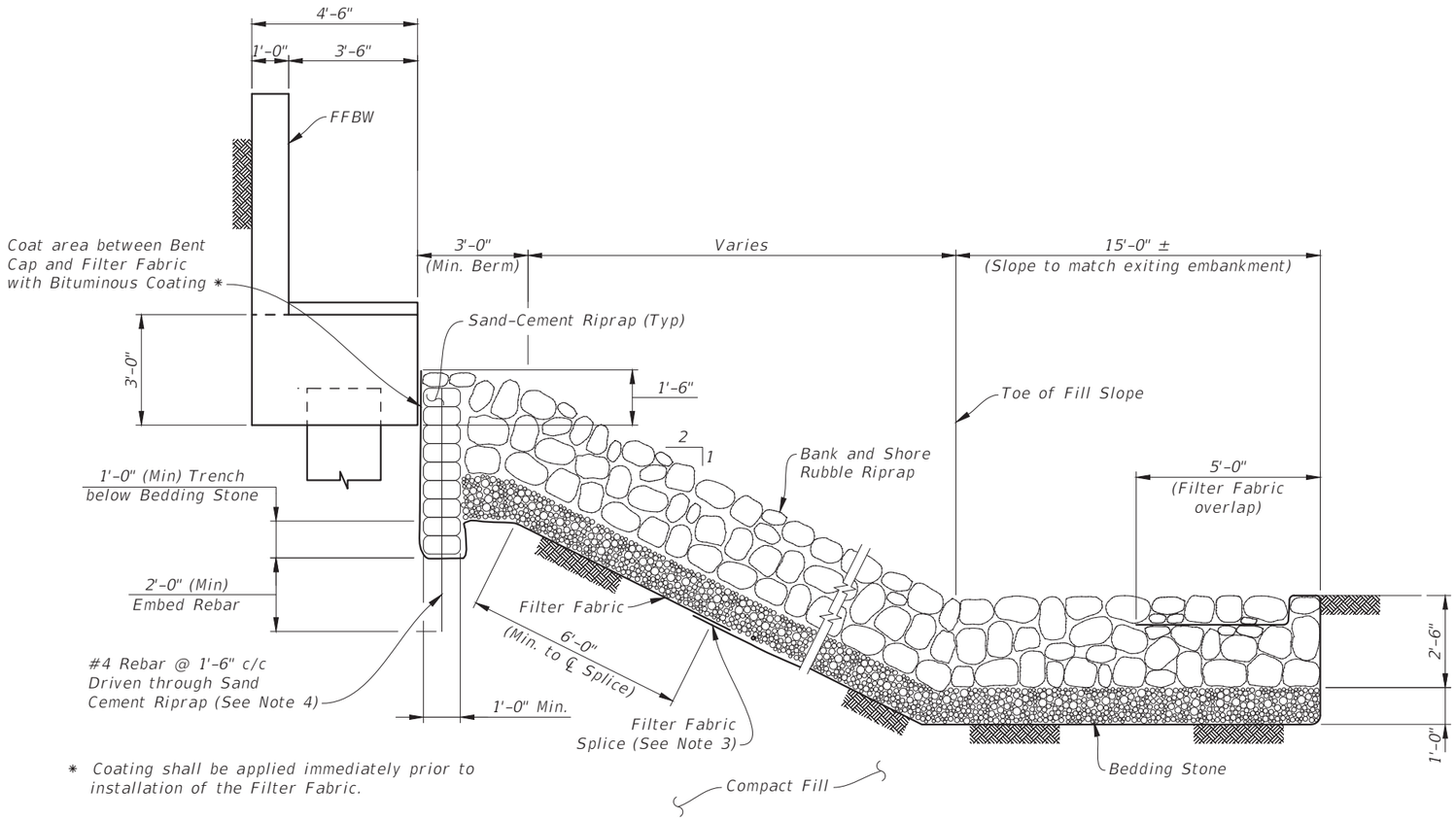
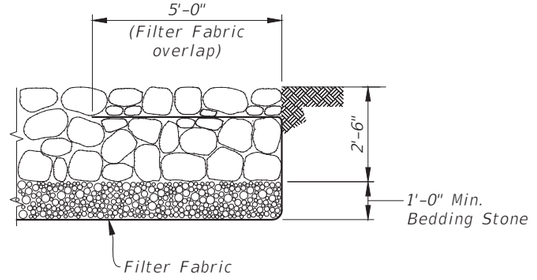


* Coating shall be applied immediately prior to installation of the Filter Fabric.

SECTION UNDER BRIDGE



SECTION C-C

NOTES

1. Cost of Filter Fabric shall be included in the cost of Rubble Riprap.
2. The Filter Fabric shall be Type D-2 in accordance with Specifications 985.
3. Filter Fabric Splice shall be a minimum of 24".
4. Cost of the #4 Rebar shall be included in the cost of Sand-Cement Riprap.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: 1/4" = 1'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SLOPE PROTECTION DETAILS (2 OF 3)

SHEET NO.: B-83

Compton, Kathy
2/15/2018 2:43:58 PM
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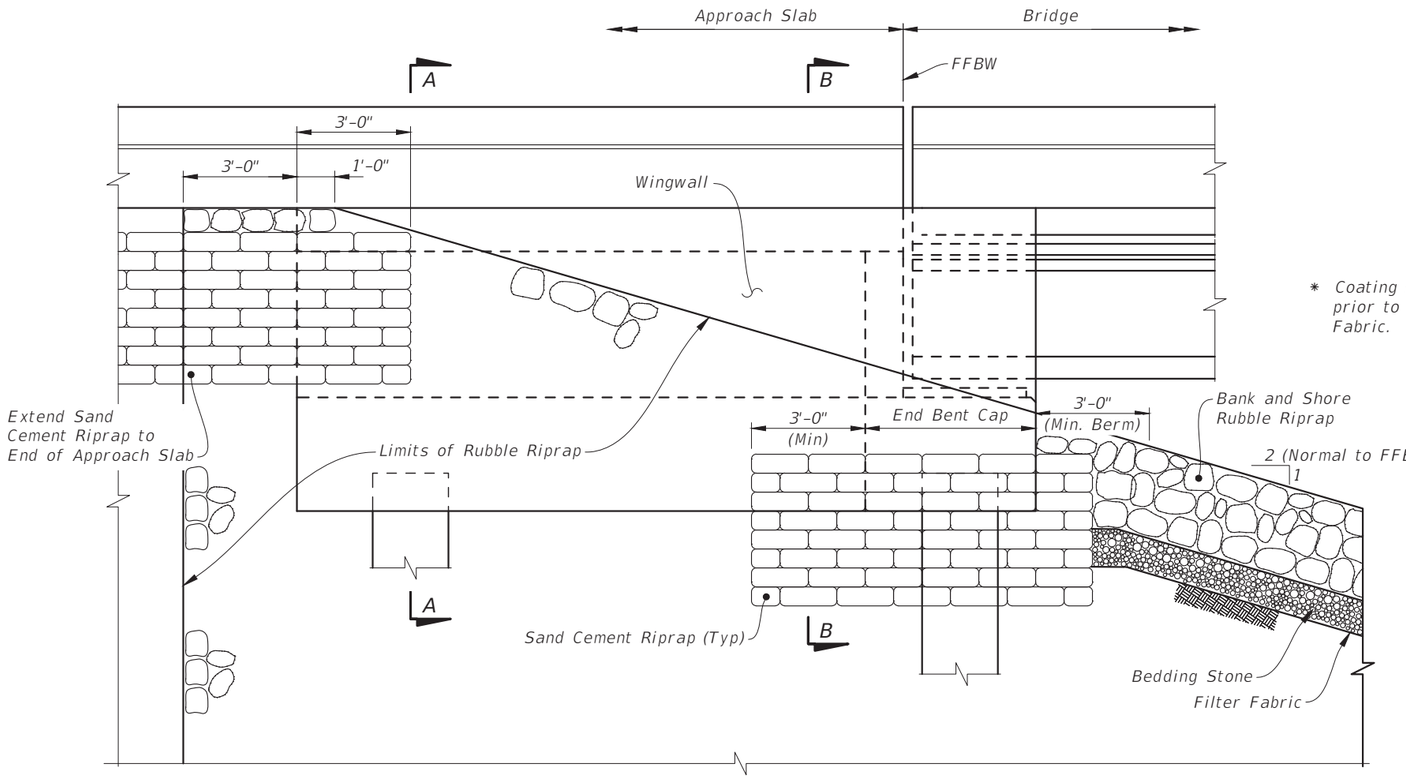
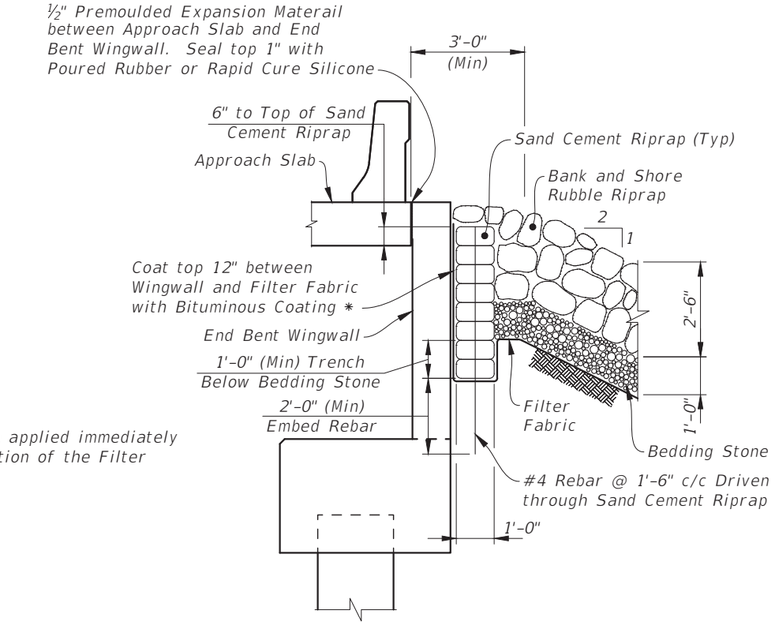
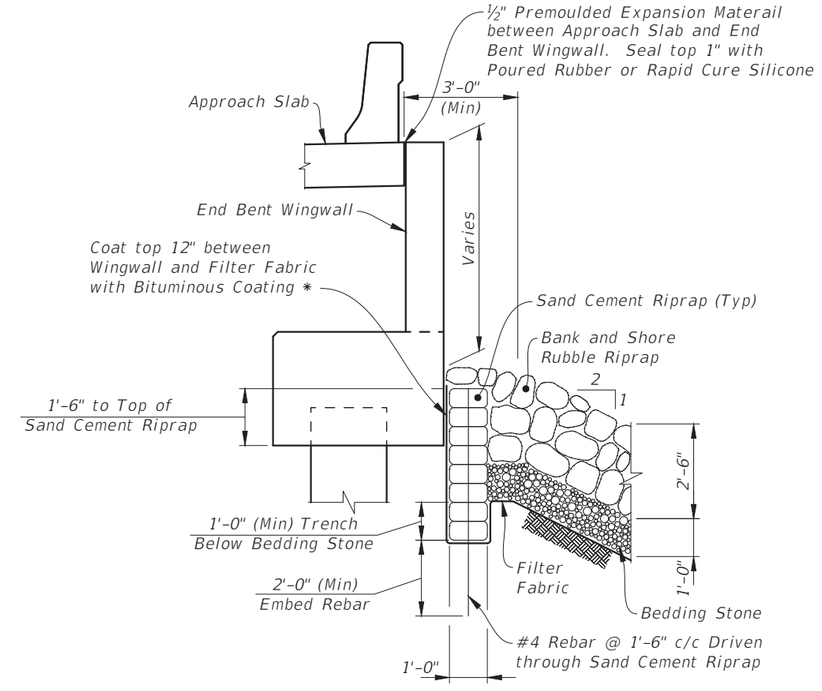


ELEVATION - SLOPE PROTECTION DETAIL



* Coating shall be applied immediately prior to installation of the Filter Fabric.

SECTION A-A



SECTION B-B

Bridge No. 134130

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No.	REVISIONS	DATE	BY

SCALE: 1/4" = 1'-0"
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

SLOPE PROTECTION DETAILS (3 OF 3)

SHEET NO.: B-84

Compton, Kathy 2/15/2018 2:44:05 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1RiprapRubble03.dwg

MARK		LENGTH	NO	TYP	STY		B	C	D	E	F	H	J	K	N	Ø
SIZE	DES	FT IN	BARS	BAR	A	G	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	NO	ANG
LOCATION END BENT 1											NO. REQUIRED = 1					
5	E1	11- 3	234	4	4	4	2- 3 1/2	2-10								
9	E2	127- 0	8	41			37- 2	52- 8	37- 2				6- 4		2	
8	E3	123- 3	6	41			36- 3	50- 9	36- 3				4- 6		2	
6	E4	10-11	36	18	3	3	8-11									
9	E5	123- 6	4	41			42- 0	39- 6	42- 0				4- 6		2	
5	E6	3- 4	448	1			3- 4									
5	E7	5- 6	448	1			5- 6									
5	E8	116-10	2	41			35- 2	46- 6	35- 2				2- 2		2	
5	E9	77- 2	2	2			2- 2	75- 0							1	
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		18-10	0	1			19- 1									
8	E29	19- 1	3	1			19- 1									
8	E30	18- 6	3	1			18- 6									
9	E31	19- 1	2	1			19- 1									
9	E32	18- 6	2	1			18- 6									
6	E33	VARY	3	17	3		14- 8									
		15-10	0	17	3		15- 0									
5	E34	19- 1	10	1			19- 1									
5	E35	19- 1	2	1			19- 1									
5	E36	4- 0	16	18	3	3	2- 3 1/2									
5	E37	4-11	16	11			2- 1	1- 5	1- 5							
6	E38	VARY	4	18	3	3	3- 1									
		5- 4	0	18	3	3	3- 6									
5	E39	4-10	8	18	3	3	3- 2									
5	E40	7- 2	5	15			1- 5	3- 4	2- 5						270	168
5	E41	7- 2	5	15			1- 5	3- 4	2- 5						90	168
5	E42	7- 2	5	15			1- 5	3- 4	2- 5						90	167
5	E43	7- 2	5	15			1- 5	3- 4	2- 5						270	167
6	E44	VARY	4	18	3	3	3- 3									
		5- 6	0	18	3	3	3- 8									

NOTE: Work this sheet with "Standard Bar Bending Details", FDOT Std. Index No. 21300.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MH

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

REINFORCING BAR LIST (1 OF 7)

SHEET NO.: B-85

Compton, Kathy 2/15/2018 2:44:11 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1RebarList01.dwg

MARK		LENGTH	NO	TYP	STY		B	C	D	E	F	H	J	K	N	Ø
SIZE	DES	FT IN	BARS	BAR	A	G	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	NO	ANG
LOCATION END BENT 16											NO. REQUIRED = 1					
5	E1	11- 3	252	4	4	4	2- 3 1/2	2-10								
9	E2	129-10	8	41			37- 9	54- 4	37- 9				6- 4		2	
8	E3	126- 2	6	41			36-10	52- 6	36-10				4- 6		2	
6	E4	11- 2	36	18	3	3	9- 2									
9	E5	126- 6	4	41			43- 2	40- 2	43- 2				4- 6		2	
5	E6	3- 4	460	1			3- 4									
5	E7	5- 7	460	1			5- 7									
5	E8	121- 6	2	41			35- 8	50- 2	35- 8				2- 2		2	
5	E9	89- 6	2	2			2- 2	87- 4							1	
5	E10	122- 0	8	41			35- 8	50- 8	35- 8				2- 5		2	
6	E11	3- 4	28	23			1- 3	0- 3	1- 3							
5	E12	9- 9	40	5			2- 3 1/2	3-10	0-11	0- 5						
4	E13	8- 2	60	11			2-10	2- 8	2- 8							
4	E14	8- 0	60	11			2- 8	2- 8	2- 8							
4	E15	12- 1	17	4	4	4	2-11	2- 9								
5	E16	10- 9	80	4	4	4	2- 3 1/2	2- 7								
5	E17	8- 9	8	5			2- 3 1/2	3- 4	0- 5	0- 5						
9	E18	VARY	5	1			18- 6									
		19- 1	0	1			19- 7									
8	E19	18- 8	3	1			18- 8									
8	E20	19- 7	3	1			19- 7									
9	E21	18- 8	2	1			18- 8									
9	E22	19- 7	2	1			19- 7									
6	E23	VARY	3	17	3		14- 9									
		16- 0	0	17	3		15- 3									
5	E24	4- 5	118	1			4- 5									
5	E25	4- 6	118	1			4- 6									
5	E26	18- 8	10	1			18- 8									
5	E27	18- 8	2	1			18- 8									
9	E28	VARY	5	1			18- 4									
		18-10	0	1			19- 3									
8	E29	19- 3	3	1			19- 3									
8	E30	18- 4	3	1			18- 4									
9	E31	19- 3	2	1			19- 3									
9	E32	18- 4	2	1			18- 4									
6	E33	VARY	3	17	3		14- 8									
		15-11	0	17	3		15- 2									
5	E34	19- 3	10	1			19- 3									
5	E35	19- 3	2	1			19- 3									
5	E36	4- 0	16	18	3	3	2- 3 1/2									
5	E37	4-11	16	11			2- 1	1- 5	1- 5							
6	E38	VARY	4	18	3	3	3- 5									
		5- 9	0	18	3	3	4- 1									
5	E39	4-10	8	18	3	3	3- 2									
5	E40	7- 2	5	15			1- 5	3- 4	2- 5						270	162
5	E41	7- 2	5	15			1- 5	3- 4	2- 5						90	162
5	E42	7- 2	5	15			1- 5	3- 4	2- 5						90	163
5	E43	7- 2	5	15			1- 5	3- 4	2- 5						270	163
6	E44	VARY	4	18	3	3	3- 4									
		5- 8	0	18	3	3	4- 0									

NOTE: Work this sheet with "Standard Bar Bending Details", FDOT Std. Index No. 21300.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MH

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

REINFORCING BAR LIST (2 OF 7)

SHEET NO.: B-86

Compton, Kathy 2/15/2018 2:44:12 PM S:\Projects_RDWY\ProjFdot\ProjFD0T\V8\60460213000\struct\B1RebarList01.dwg

MARK		LENGTH		NO	TYP	STY		B			C			D			E			F			H			J			K			N	Ø
SIZE	DES	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
LOCATION INT BENTS 2 THRU 15 NO. REQUIRED = 14																																	
5	B1	10- 4		320	4	4	4	2- 4			2- 4																						
9	B2	42- 3		14	17	3		40- 8																									
8	B3	121- 6		4	41			43- 2			35- 2			43- 2												4- 6						2	
9	B4	121- 6		2	41			43- 2			35- 2			43- 2												4- 6						2	
6	B5	7- 0		70	18	3	3	5- 0																									
5	B6	8-10		75	5			2- 4			3- 4			0- 5			0- 5																
5	B7	3-10		12	18	3	3	2- 2																									
5	B8	4-10		8	18	3	3	3- 2																									
9	B9	44- 9		8	17	3		43- 2																									
9	B10	35- 2		4	1			35- 2																									
9	B11	44- 0		7	1			44- 0																									
4	B12	5-10		80	11			2- 8			1- 7			1- 7																			
4	B13	4- 6		140	11			1- 4			1- 7			1- 7																			

NOTE: Work this sheet with "Standard Bar Bending Details", FDOT Std. Index No. 21300.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MH

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

REINFORCING BAR LIST (3 OF 7)

SHEET NO.: B-87

Compton, Kathy 2/15/2018 2:44:13 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1RebarList01.dwg

MARK		LENGTH		NO	TYP	STY		B			C			D			E			F			H			J			K			N	Ø
SIZE	DES	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
LOCATION SUPERSTRUCTURE UNIT 1 NO. REQUIRED = 1																																	
5	S01	111-10		1102	41			57- 0			54-10															2- 2						1	
5	S02	7- 0		400	1			7- 0																									
5	S03	310-10		111	41			60- 0			60- 0			60- 0			60- 0			60- 0			10-10			2- 2						5	
5	S04	35- 0		220	1			35- 0																									
5	S05	VARY		30	2			2- 2			60- 6																					1	
		86- 5		0	2			2- 2			108- 0																					1	
5	S05	VARY		30	2			2- 2			60- 6																					1	
		86- 5		0	2			2- 2			108- 0																					1	
5	S06	104- 4		504	41			60- 0			44- 4															2- 2						1	
5	S07	12- 0		530	1			12- 0																									
5	S08	VARY		35	1			3- 3																									
		31- 1		0	1			58-10																									
5	S08	VARY		35	1			3- 3																									
		31- 1		0	1			58-10																									
5	S09	VARY		26	1			3- 3																									
		31- 1		0	1			58-10																									
5	S09	VARY		26	1			3- 3																									
		31- 1		0	1			58-10																									
5	S10	VARY		23	2			2- 2			61- 0																					1	
		86- 9		0	2			2- 2			108- 1																					1	
5	S10	VARY		23	2			2- 2			61- 0																					1	
		86- 9		0	2			2- 2			108- 1																					1	
5	S11	14- 7		63	42			0- 6			3- 4			6- 6			3- 4						14- 2										
5	S12	119- 0		18	41			35- 0			49- 0			35- 0												2- 2						2	
5	S13	7- 0		28	1			7- 0																									
4	S14	8- 4		200	25			0- 9			2- 2			0- 9			0- 9			2- 2			2- 2										
5	S15	15- 1		63	42			0- 6			3- 4			7- 0			3- 4						14- 8										
4	S16	1- 9		60	11			0- 9			0- 6			0- 6																			

NOTE: Work this sheet with "Standard Bar Bending Details", FDOT Std. Index No. 21300.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MH

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

REINFORCING BAR LIST (4 OF 7)

SHEET NO.: B-88

Compton, Kathy 2/15/2018 2:44:13 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1RebarList01.dwg

MARK		LENGTH	NO	TYP	STY		B	C	D	E	F	H	J	K	N	Ø
SIZE	DES	FT IN	BARS	BAR	A	G	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	NO	ANG
LOCATION SUPERSTRUCTURE UNITS 2, 3 AND 4 NO. REQUIRED = 3																
5	S01	111-10	1066	41			57- 0	54-10					2- 2		1	
5	S02	6- 6	400	1			6- 6									
5	S03	310-10	111	41			60- 0	60- 0	60- 0	60- 0	60- 0	10-10	2- 2		5	
5	S04	35- 0	220	1			35- 0									
5	S05	VARY	30	2			2- 2	60- 6							1	
		86- 5	0	2			2- 2	108- 0							1	
5	S05	VARY	30	2			2- 2	60- 6							1	
		86- 5	0	2			2- 2	108- 0							1	
5	S05	VARY	30	2			2- 2	60- 6							1	
		86- 5	0	2			2- 2	108- 0							1	
5	S05	VARY	30	2			2- 2	60- 6							1	
		86- 5	0	2			2- 2	108- 0							1	
5	S06	104- 4	501	41			60- 0	44- 4					2- 2		1	
5	S07	11- 8	528	1			11- 8									
5	S08	VARY	35	1			3- 3									
		31- 1	0	1			58-10									
5	S08	VARY	35	1			3- 3									
		31- 1	0	1			58-10									
5	S08	VARY	35	1			3- 3									
		31- 1	0	1			58-10									
5	S08	VARY	35	1			3- 3									
		31- 1	0	1			58-10									
5	S09	NOT USED														
5	S10	NOT USED														
5	S11	15- 1	63	42			0- 6	3- 4	7- 0	3- 4		14- 8				
5	S12	119- 0	18	41			35- 0	49- 0	35- 0				2- 2		2	
5	S13	6- 6	28	1			6- 6									
4	S14	8- 4	198	25			0- 9	2- 2	0- 9	0- 9	2- 2	2- 2				
5	S15	15- 1	63	42			0- 6	3- 4	7- 0	3- 4		14- 8				
4	S16	1- 9	60	11			0- 9	0- 6	0- 6							

NOTE: Work this sheet with "Standard Bar Bending Details", FDOT Std. Index No. 21300.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MH

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

REINFORCING BAR LIST (5 OF 7)

SHEET NO.: B-89

Compton, Kathy
2/15/2018 2:44:14 PM
S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1RebarList01.dwg

MARK		LENGTH		NO	TYP	STY		B			C			D			E			F			H			J			K			N	Ø
SIZE	DES	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
LOCATION SUPERSTRUCTURE UNIT 5																				NO. REQUIRED = 1													
5	S01	111	-10	1066	41			57	- 0		54	-10														2	- 2					1	
5	S02	6	- 6	400	1			6	- 6																								
5	S03	310	-10	111	41			60	- 0		60	- 0		60	- 0		60	- 0		60	- 0		10	-10		2	- 2					5	
5	S04	35	- 0	220	1			35	- 0																								
5	S05	VARY		30	2			2	- 2		60	- 6																				1	
		86	- 5	0	2			2	- 2		108	- 0																				1	
5	S05	VARY		30	2			2	- 2		60	- 6																				1	
		86	- 5	0	2			2	- 2		108	- 0																				1	
5	S06	104	- 4	504	41			60	- 0		44	- 4														2	- 2					1	
5	S07	11	- 8	530	1			11	- 8																								
5	S08	VARY		35	1			3	- 3																								
		31	- 1	0	1			58	-10																								
5	S08	VARY		35	1			3	- 3																								
		31	- 1	0	1			58	-10																								
5	S09	VARY		36	1			3	- 3																								
		31	- 1	0	1			58	-10																								
5	S09	VARY		36	1			3	- 3																								
		31	- 1	0	1			58	-10																								
5	S10	VARY		31	2			2	- 2		61	- 0																				1	
		86	- 9	0	2			2	- 2		108	- 1																				1	
5	S10	VARY		31	2			2	- 2		61	- 0																				1	
		86	- 9	0	2			2	- 2		108	- 1																				1	
5	S11	15	- 1	63	42			0	- 6		3	- 4		7	- 0		3	- 4					14	- 8									
5	S12	119	- 6	18	41			35	- 0		49	- 6		35	- 0											2	- 2					2	
5	S13	6	- 6	28	1			6	- 6																								
4	S14	8	- 4	200	25			0	- 9		2	- 2		0	- 9		0	- 9		2	- 2		2	- 2									
5	S15	15	- 1	63	42			0	- 6		3	- 4		7	- 0		3	- 4					14	- 8									
4	S16	1	- 9	60	11			0	- 9		0	- 6		0	- 6																		

NOTE: Work this sheet with "Standard Bar Bending Details", FDOT Std. Index No. 21300.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MH

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

REINFORCING BAR LIST (6 OF 7)

SHEET NO.: B-90

Compton, Kathy 2/15/2018 2:44:15 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1RebarList01.dwg

MARK		LENGTH	NO	TYP	STY		B	C	D	E	F	H	J	K	N	Ø
SIZE	DES	FT IN	BARS	BAR	A	G	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	FT IN FR	NO	ANG
LOCATION APPROACH SLAB 1 WESTBOUND BRIDGE NO. REQUIRED = 1																
5	A1	30- 4	55	1			30- 4									
8	A2	30- 4	73	1			30- 4									
5	A3	4- 7	18	1			4- 7									
5	B	54-11	72	1			54-11									
5	C	5- 0	60	1			5- 0									
5	D	11- 9	13	1			11- 9									
LOCATION APPROACH SLAB 1 EASTBOUND BRIDGE NO. REQUIRED = 1																
5	A1	30- 4	50	1			30- 4									
8	A2	30- 4	66	1			30- 4									
5	B	49- 9	72	1			49- 9									
5	C	5- 0	60	1			5- 0									
LOCATION APPROACH SLAB 2 WESTBOUND BRIDGE NO. REQUIRED = 1																
5	A1	31- 3	55	1			31- 3									
8	A2	31- 3	73	1			31- 3									
5	A3	4- 9	18	1			4- 9									
5	B	56- 5	72	1			56- 5									
5	C	5- 0	60	1			5- 0									
5	D	11-11	13	1			11-11									
LOCATION APPROACH SLAB 2 EASTBOUND BRIDGE NO. REQUIRED = 1																
5	A1	31- 2	50	1			31- 2									
8	A2	31- 2	66	1			31- 2									
5	B	51- 1	72	1			51- 1									
5	C	5- 0	60	1			5- 0									

NOTE: Work this sheet with "Standard Bar Bending Details", FDOT Std. Index No. 21300.

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: MH

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

REINFORCING BAR LIST (7 OF 7)

SHEET NO.: B-91

Compton, Kathy 2/15/2018 2:44:16 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1RebarList01.dwg

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

Table Date 07-01-15

Table 1 - LFR or ASR

Level	Vehicle	Weight (tons)	Load Factors		Moment (Strength) or Stress (Service)					Shear (Strength)					Comments:
			LL	DL	Distribution Factor (DF)	Rating Factor	Tons	Location	Dimension	Distribution Factor (DF)	Rating Factor	Tons	Location	Dimension	Interior/exterior beam DF method if other than Standard Spec. Other appropriate comments
Inventory (Strength)	HS-20	36.0	2.17	1.30											
Inventory (Service)	HS-20	36.0	1.0	1.0						N/A	N/A	N/A	N/A	N/A	
Operating (Strength)	HS-20	36.0	1.30	1.30											

General Notes:
1. This table is based on the requirements established in the January 2016 "Structures Manual".

Table 2 Notes:
1. Permit capacity is determined by using the permit vehicle in all lanes.
2. Service III Design Inventory tensile stress limits = $6\sqrt{f'c}$.
3. Has the AASHTO LRFD Specifications Article 5.8.3.5 longitudinal reinforcement been satisfied? ■ Yes ☐ No
4. Load Rating Analysis preformed using Leap Conspan V8i software, version 14.00.00.19 dated 2014.
5. The Distribution Factors (DF) shown in the Table are reported as Lanes/Beam.

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

Table Date 07-01-15

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	Interior/exterior beam DF method if other than LRFD. Other appropriate comments
Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	1.04	1.21	N/A	A	49.04	1.09	1.21	N/A	B	59.00'	M, V: Span 2, Beam 10
	Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	1.04	1.57	N/A	A	49.04	1.11	1.49	N/A	C	4.43'	M: Span 2, Beam 10/V: Span 2, Beam 2
	Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	1.04	1.12	N/A	A	49.04	N/A	N/A	N/A	N/A	N/A	S: Span 2, Beam 10
Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.98	1.39	83.32	A	49.04	1.05	1.14	68.63	B	59.00'	M, V: Span 2, Beam 10

Abbreviations:

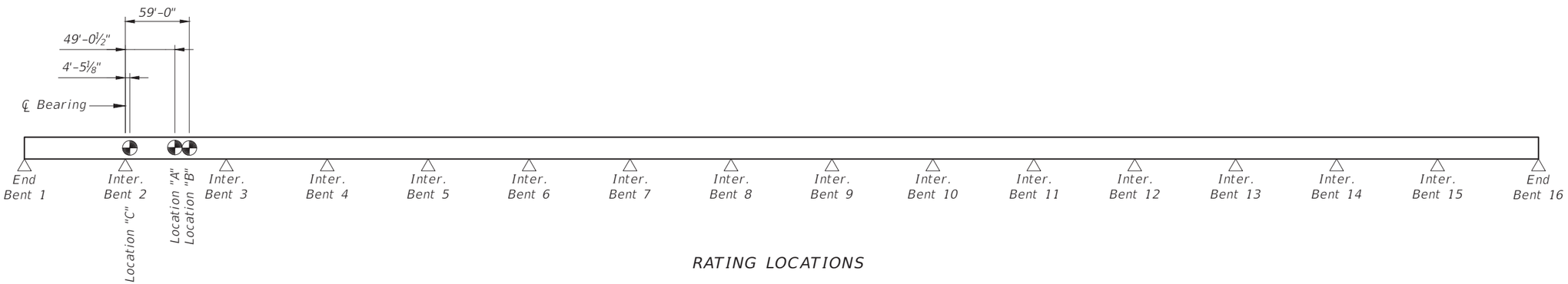
Inv – Inventory

Op – Operating

M – Moment

V – Sheer

S – Stress



RATING LOCATIONS

Bridge No. 134130

No.	REVISIONS	DATE	BY

SCALE: NTS
DESIGNED BY: AR
DRAWN BY: KAC
CHECKED BY: BWJ

AECOM Technical Services, Inc.
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
C.A.No. 8115

DATE: February 2018
PROJECT NO.: 6086960

Manatee County FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER: Mark S. Eicholtz, P.E.
FL. LICENSE NO.: 36078

LOAD RATING SUMMARY SHEET

SHEET NO.: B-92

Compton, Kathy 2/15/2018 2:44:23 PM S:\Projects_RDWY\ProjFdot\ProjFDOT\V8\60460213000\struct\B1DataTableLoadRating01.dwg