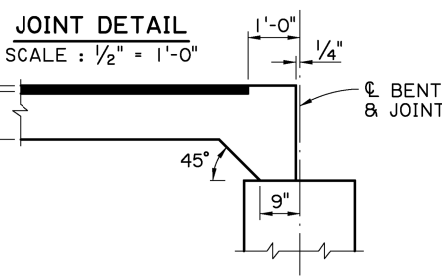
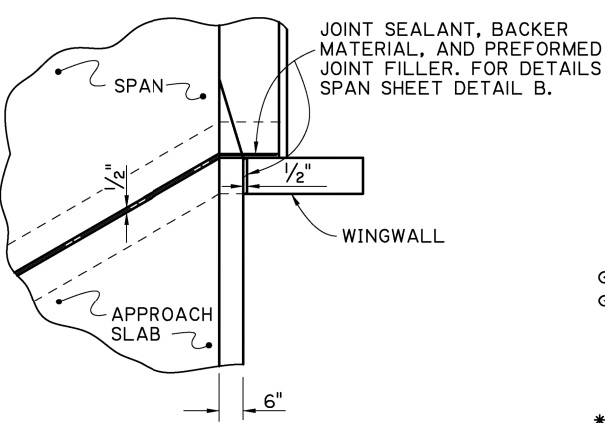
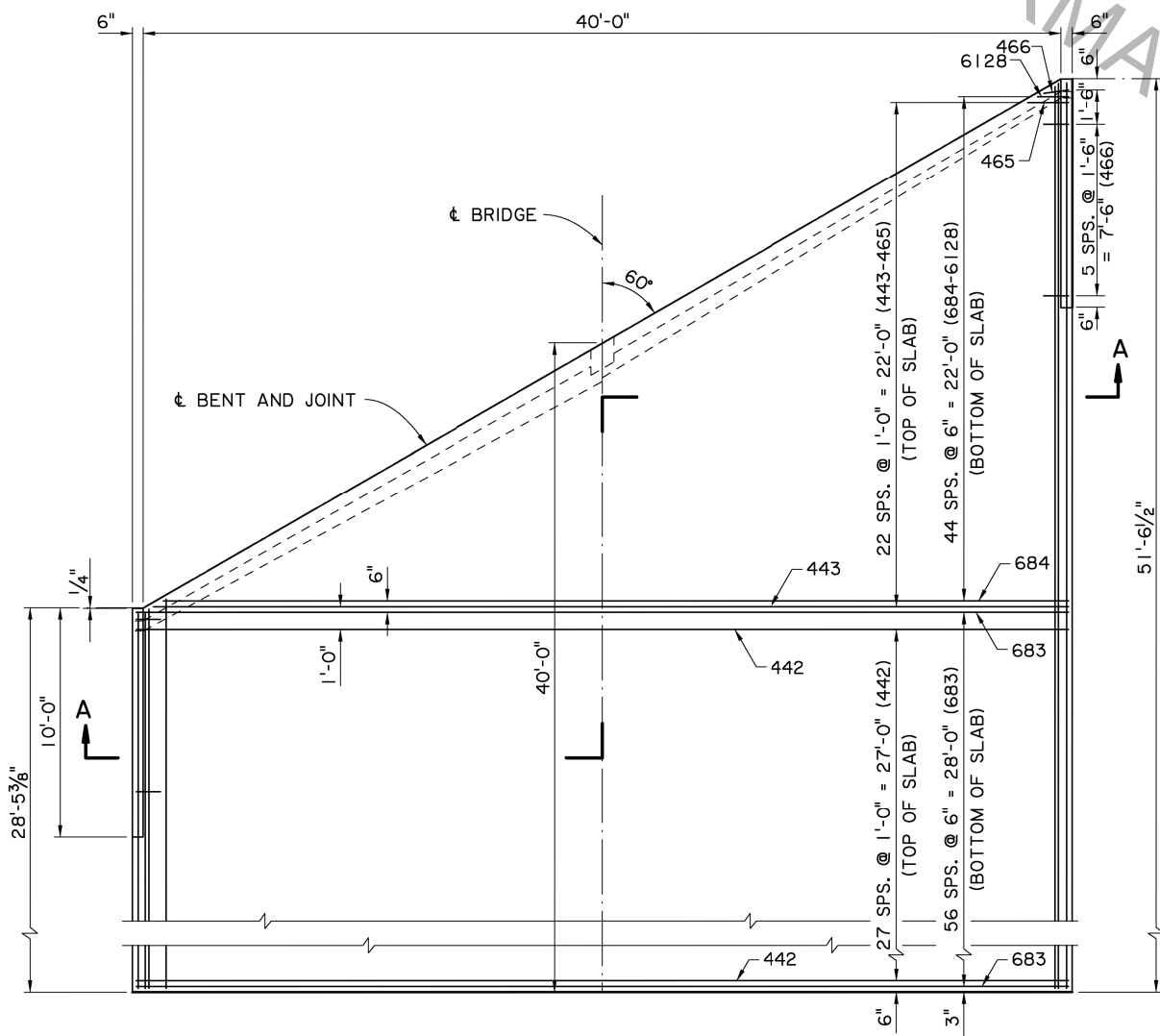


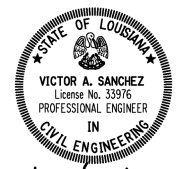
SECTION A-A
SCALE: 1/4" = 1'-0"



DETAIL B
SCALE: 1/2" = 1'-0"



PLAN
SCALE: 1/4" = 1'-0"

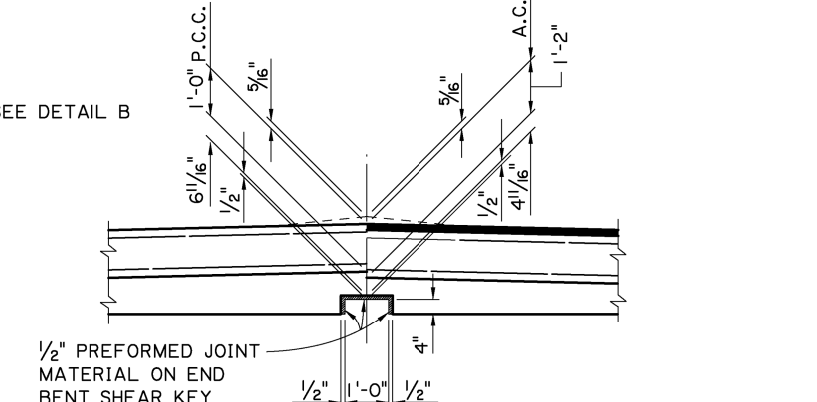


Victor A. Sanchez
05/17/17

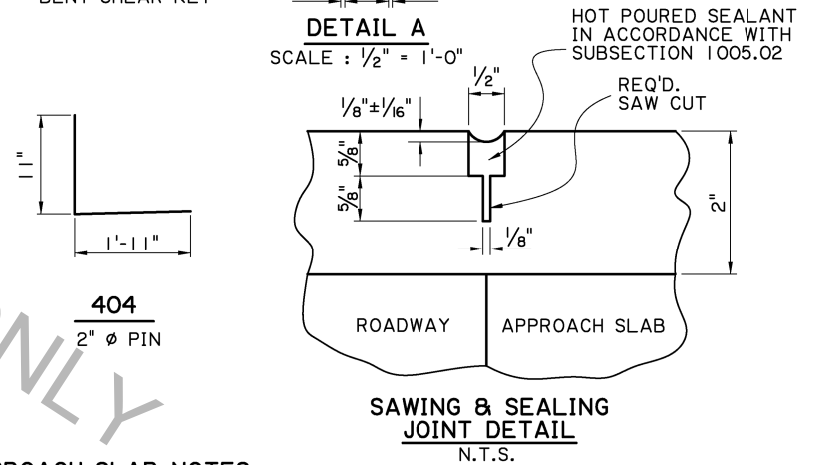
SECTION ALONG & ROADWAY
SCALE: 1/4" = 1'-0"

ESTIMATED QUANTITIES (ONE SLAB)						
BAR NO.	NO.	SHORT BAR	VAR. (INCHES)	LONG BAR	TOTAL LENGTH	LOCATION
601	1			28'-1"	28'-1"	LONGITUDINAL BOTTOM OF SLAB
602-681	EA.	28'-2"	3.4684	51'-0"	3166'-8"	LONGITUDINAL BOTTOM OF SLAB
682	1			51'-2"	51'-2"	LONGITUDINAL BOTTOM OF SLAB
683	57			40'-8"	2318'-0"	TRANSVERSE BOTTOM OF SLAB
684-6128	EA.	1'-4"	10.3864	39'-5"	916'-11"	TRANSVERSE BOTTOM OF SLAB
TOTAL NO. 6 BARS = 6,480'-10" = 9,734 LBS.						
401	1			28'-1"	28'-1"	LONGITUDINAL TOP OF SLAB
402-421	EA.	28'-7"	6.9474	39'-7"	681'-8"	LONGITUDINAL TOP OF SLAB
422-441	EA.	41'-10"	6.9474	52'-10"	946'-8"	LONGITUDINAL TOP OF SLAB
442	28			43'-4"	1213'-4"	LONGITUDINAL TOP OF SLAB
443-465	EA.	1'-9"	20.7727	39'-10"	478'-3"	TRANSVERSE TOP OF SLAB
466	14			2'-0"	28'-0"	DOWELS IN CURB
467	2			9'-7"	19'-2"	LONGITUDINAL IN CURB
TOTAL NO. 4 BARS = 3395'-2" = 2,268 LBS.						
* TOTAL DEFORMED REINFORCING STEEL = 12,002 LBS.						
CONCRETE APPROACH SLAB = 182.22 SQ.YDS.						
ASPHALT CONCRETE = 18.6 TONS						
SAW CUT & SEAL = 39 LIN. FT.						

- * TO BE PAID FOR UNDER ITEM CONCRETE APPROACH SLABS.
- INCLUDES 1'-8" MINIMUM LAP SPLICE. ALL LAP SPLICES ARE TO BE STAGGERED.
- REQUIRED WHEN APPROACH SLAB IS ADJACENT TO ASPHALT CONCRETE PAVEMENT, PAID FOR UNDER ITEM ASPHALT CONCRETE, AND SAWING AND SEALING TRANSVERSE JOINTS IN ASPHALTIC CONCRETE OVERLAY.

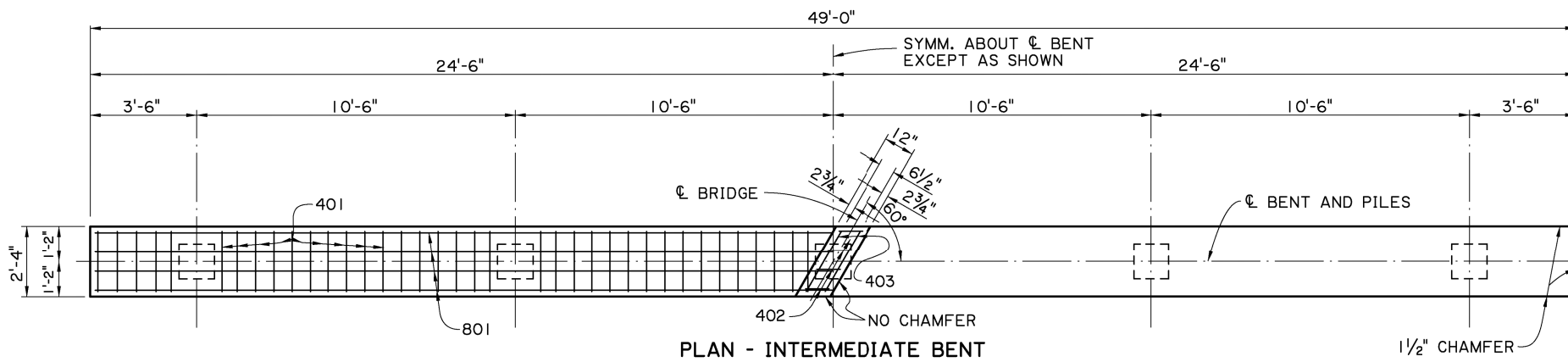


DETAIL A
SCALE: 1/2" = 1'-0"

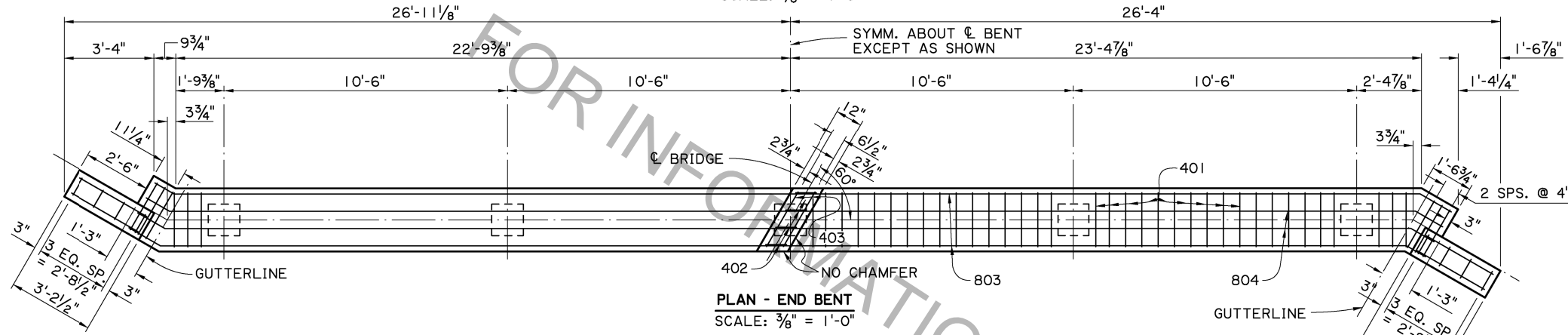


APPROACH SLAB NOTES:
CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.
DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 4th EDITION, WITH 2008 & 2009 INTERIMS.
STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER, UNLESS OTHERWISE NOTED.
ASPHALT CONCRETE: TO BE THE SAME TYPE AS THE ASPHALT CONCRETE USED FOR THE APPROACH ROADWAY PAVEMENT OR OVERLAY.
REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO THE FABRICATION ARE OUT-TO-OUT OF BARS, UNLESS OTHERWISE NOTED. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS.
BEDDING MATERIAL: FOR DETAILS OF BEDDING MATERIAL AND UNDERDRAINS. SEE STANDARD DETAIL BD.2.10.1.0.07.
SAWING & SEALING: THE ASPHALT CONCRETE SHALL BE SAW CUT AT THE END OF THE CONCRETE APPROACH SLAB THE ENTIRE ROADWAY WIDTH AND SEALED.
BASIS OF PAYMENT: ALL MATERIAL SHALL BE PAID FOR UNDER 'CONCRETE APPROACH SLABS' ACCORDING TO THE SPECIFICATIONS, EXCEPT WHERE NOTED ON THIS SHEET.

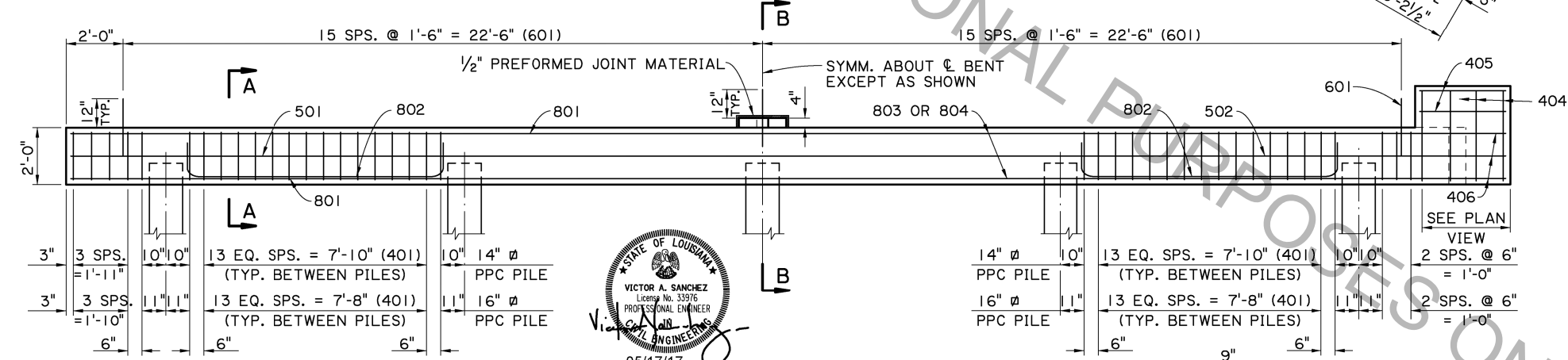
SHEET NUMBER	PARISH	DESIGNED	DATE
	J. NAKHLEH	J. NAKHLEH	05/17/17
CONTROL SECTION	CHECKED	REVIEWED	BY
	D. HYMEL	J. NAKHLEH	
STATE PROJECT	NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION
APPROACH SLAB 40'-0" CONCRETE APPROACH SLAB 40'-0" CLEAR ROADWAY 60" CROSSING TWO WAY TANGENT			
DOTD BRIDGE DESIGN DETAIL CASBR-60-40TWT-40L-20SL			



PLAN - INTERMEDIATE BENT
SCALE: 3/8" = 1'-0"

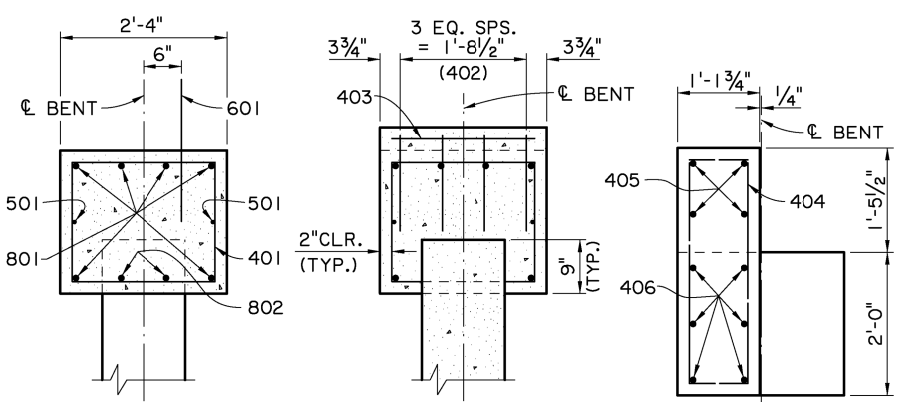


PLAN - END BENT
SCALE: 3/8" = 1'-0"



HALF ELEVATION - INTERMEDIATE BENT
SCALE: 3/8" = 1'-0"

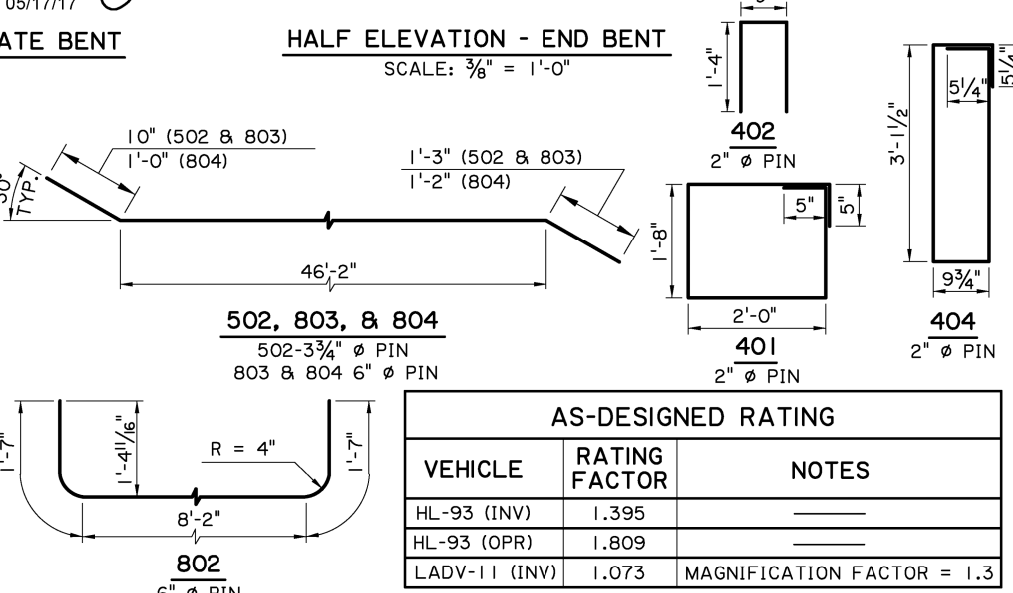
HALF ELEVATION - END BENT
SCALE: 3/8" = 1'-0"



SECTION A-A
SCALE: 3/4" = 1'-0"

SECTION B-B
SCALE: 3/4" = 1'-0"

END ELEVATION
SCALE: 3/4" = 1'-0"



ESTIMATED QUANTITIES (ONE INTER. BENT)

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	6	48'-8"	LONGIT. IN CAP
802	8	11'-4"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 382'-8" = 1,022 LBS.			
601	31	2'-0"	DOWELS
TOTAL NO. 6 BARS = 62'-0" = 93 LBS.			
501	2	48'-8"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 97'-4" = 102 LBS.			
401	74	8'-2"	STIRRUPS IN CAP
402	4	3'-5"	STIRRUPS IN RISER
403	2	2'-3"	LONGIT. IN RISER
TOTAL NO. 4 BARS = 622'-6" = 416 LBS.			
* TOTAL DEFORMED REINFORCING STEEL = 1,633 LBS.			
CLASS A1 CONCRETE = 8.26 CU. YDS.			
MAX. PILE LOAD: SERVICE DEAD LOAD = 30 TONS			
SERVICE LIVE LOAD = 42 TONS			
TOTAL FACTORED LOAD = 100 TONS			
* ADD 93 LBS. OF REINFORCING STEEL (31-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.			

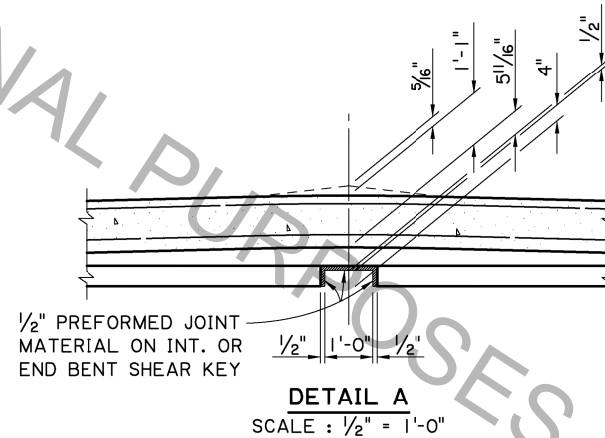
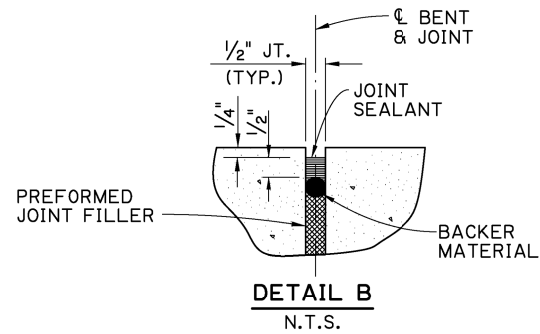
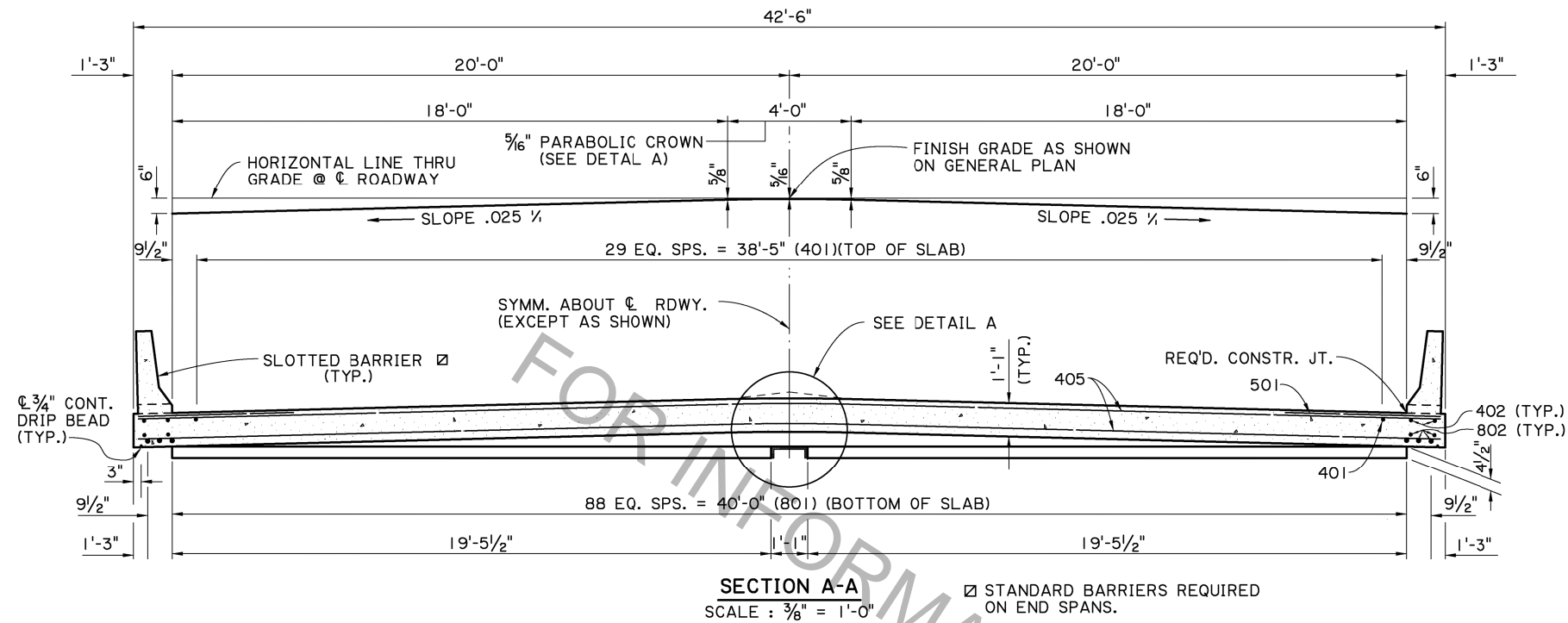
ESTIMATED QUANTITIES (ONE END BENT)

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
802	8	11'-4"	LONGIT. IN CAP
803	4	48'-3"	LONGIT. IN CAP
804	2	48'-4"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 380'-4" = 1,015 LBS.			
601	31	2'-0"	DOWELS
TOTAL NO. 6 BARS = 62'-0" = 93 LBS.			
502	2	48'-3"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 96'-6" = 101 LBS.			
401	76	8'-2"	STIRRUPS IN CAP
402	4	3'-5"	STIRRUPS IN RISER
403	2	2'-3"	LONGIT. IN RISER
404	8	8'-9"	STIRRUPS IN WINGWALL
405	8	2'-10"	LONGIT. IN WINGWALL
406	12	4'-0"	LONGIT. IN WINGWALL
TOTAL NO. 4 BARS = 779'-6" = 521 LBS.			
TOTAL DEFORMED REINFORCING STEEL = 1,730 LBS.			
CLASS A1 CONCRETE = 9.01 CU. YDS.			
MAX. PILE LOAD: SERVICE DEAD LOAD = 30 TONS			
SERVICE LIVE LOAD = 42 TONS			
TOTAL FACTORED LOAD = 100 TONS			
* 16" # PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.06 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14" # PPC PILES ARE USED.)			

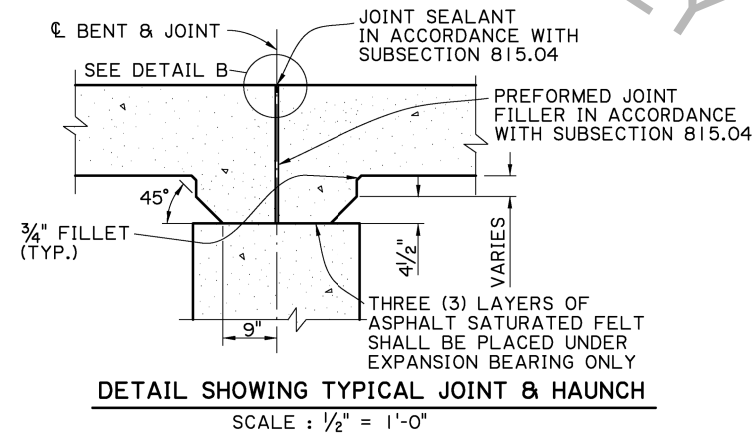
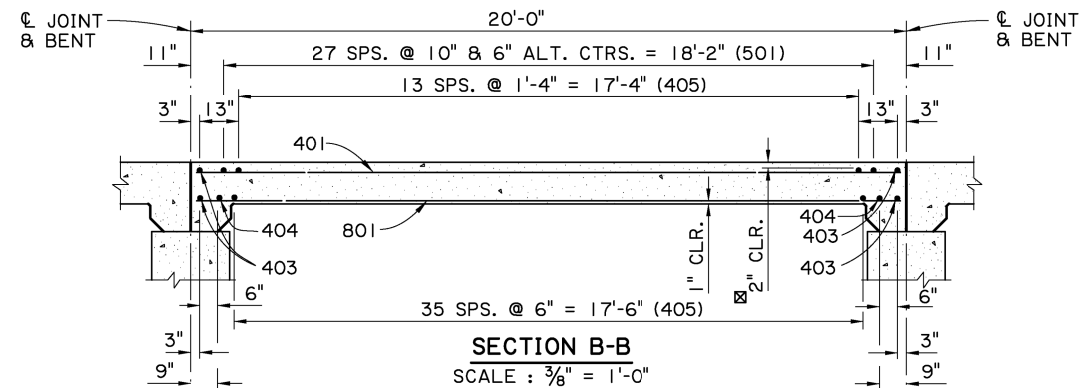
BENT NOTES:

CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.
DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION, WITH 2008 & 2009 INTERIMS.
DESIGN LOAD: LIVE LOAD IS HL-93, AND LADV-11 (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).
STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER UNLESS OTHERWISE NOTED. ALL EXPOSED FACES OF WINGWALLS AND ENDS OF CAPS SHALL RECEIVE A SURFACE FINISH AS PER SUBSECTION 805.08.5.3 OF THE STANDARD SPECIFICATIONS, EXCEPT WHEN SPECIFIED ELSEWHERE IN THE PLANS. 1#2" PREFORMED JOINT MATERIAL AND ASPHALT SATURATED FELT SHALL BE INCLUDED IN THE PRICE BID FOR CLASS A1 CONCRETE.
REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS UNLESS OTHERWISE NOTED. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS UNLESS OTHERWISE NOTED. DOWELS (601 BARS) SHALL BE PROVIDED AT ALL FIXED BEARINGS AND APPROACH SLAB BEARINGS (SEE GENERAL PLAN). ALL EXPOSED ENDS OF DOWELS SHALL BE WRAPPED WITH TWO LAYERS OF 15 LB. ASPHALT SATURATED FELT. CLOSE FITTING TUBES OF COMPRESSIBLE MATERIAL NOT LESS THAN 3/16" THICK MAY BE SUBSTITUTED.
PRECAST CONCRETE PILES: FOR DETAILS SEE STANDARD DETAIL BD.2.5.1.0.0.1 (CS-216). EXTERIOR PILES ARE TO BE BATTERED OUTWARD AT 1/2 ON 12 IN THE LONGITUDINAL DIRECTION OF THE BENT, WHEN NOTED ON THE GENERAL PLAN.
PREFORMED JOINT MATERIAL: PREFORMED JOINT MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 815.04 OF THE STANDARD SPECIFICATIONS.

SHEET NUMBER: _____
 DESIGNED: J. NAKHLEH
 CHECKED: I. DELATTE
 DETAILED: D. HYMEL
 CONTROL SECTION: J. NAKHLEH
 STATE PROJECT: 05/17/17
 REVIEWED: _____
 SERIES #: _____
 DATE: _____
 REVISION OR CHANGE ORDER DESCRIPTION: _____
 NO. _____
 BY: _____
 DOTD
 REINFORCED CONCRETE PILE BENT
 40'-0" CLEAR ROADWAY
 60' CROSSING TWO WAY TANGENT
 STANDARD DETAIL
 BCSSBR-60-40TWT-20SL



☒ FOR BRIDGES IN DISTRICTS 04 & 05, MINIMUM CONCRETE COVER IN TOP OF SLAB SHALL BE 2 1/2".



ESTIMATED QUANTITIES (ONE SPAN)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
801	89	19'-6"	1735'-6"	LONGIT. BOT. OF SLAB
802	8	19'-7"	156'-8"	LONGIT. BOT. OF SLAB
TOTAL NO. 8 BARS = 1892'-2" = 5053 LBS.				
501	56	5'-0"	280'-0"	TRANS. TOP OF SLAB
TOTAL NO. 5 BARS = 280'-0" = 292 LBS.				
401	30	19'-6"	585'-0"	LONGIT. TOP OF SLAB
402	4	19'-7"	78'-4"	LONGIT. TOP OF SLAB
* 403	4	49'-2"	196'-8"	TRANS. TOP & BOT. OF SLAB
* 404	2	50'-2"	100'-4"	TRANS. BOT. OF SLAB
* 405	50	50'-4"	2516'-8"	TRANS. TOP & BOT. OF SLAB
TOTAL NO. 4 BARS = 3477'-0" = 2323 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 7668 LBS.				
CLASS A1 CONCRETE = 36.06 CU. YDS.				
CONCRETE RAILING (BARRIER TYPE) = 40.00 LIN. FT.				

* INCLUDES ONE (1) 1'-8" MINIMUM LAP SPLICE. ALL LAP SPLICES ARE TO BE STAGGERED.

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.410	---
HL-93 (OPR)	1.828	---
LADV-11 (INV)	1.085	MAGNIFICATION FACTOR = 1.3

SHEET NUMBER

DESIGNED BY: J. NAKHLEH
CHECKED BY: J. PAINE
DATE: 05/17/17

CONTROL SECTION: D. HYMEL
CHECKED BY: B. DELATTE
REVIEWED BY: 05/17/17

STATE PROJECT: 1 OF 2

NO. DATE

REVISION OR CHANGE ORDER DESCRIPTION

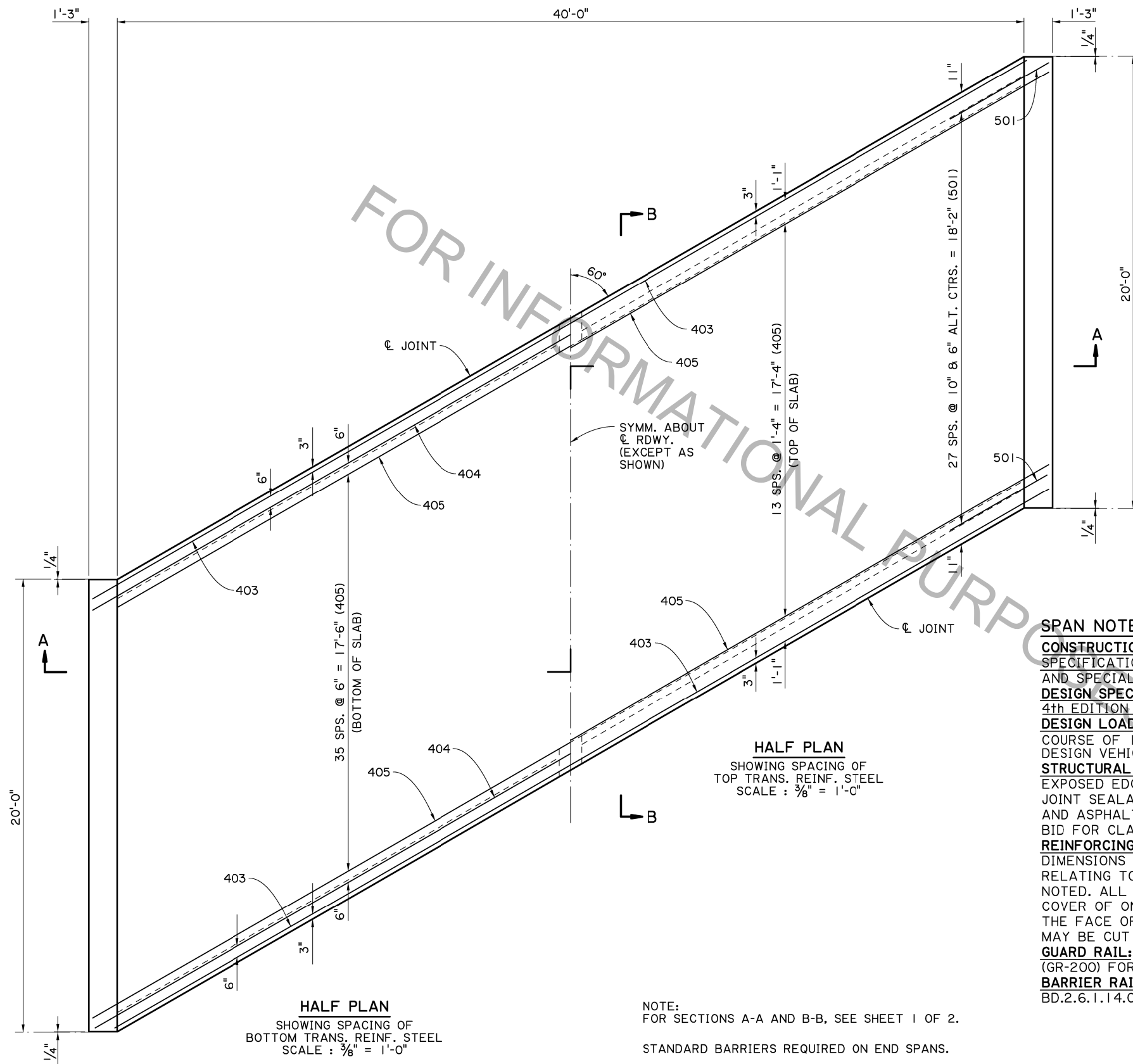
BY

STATE OF LOUISIANA
VICTOR A. SANCHEZ
License No. 33915
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
05/17/17

SPAN (1 OF 2)
20'-0" CONCRETE SLAB SPAN
40'-0" CLEAR ROADWAY
60' CROSSING TWO WAY TANGENT

STANDARD DETAIL
CSSBR-60-40TW-20SL

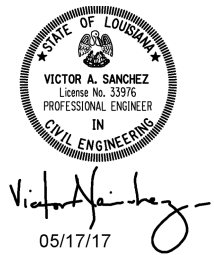
DOTD
DOTD BRIDGE DESIGN



HALF PLAN
SHOWING SPACING OF
BOTTOM TRANS. REINF. STEEL
SCALE : $\frac{3}{8}'' = 1'-0''$

HALF PLAN
SHOWING SPACING OF
TOP TRANS. REINF. STEEL
SCALE : $\frac{3}{8}'' = 1'-0''$

NOTE:
FOR SECTIONS A-A AND B-B, SEE SHEET 1 OF 2.
STANDARD BARRIERS REQUIRED ON END SPANS.



SPAN NOTES:

CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION WITH 2008 & 2009 INTERIMS.

DESIGN LOAD: THE BRIDGE DECK IS DESIGNED FOR A FUTURE WEARING COURSE OF 19 PSF. THE LIVE LOAD IS HL-93, AND LADV-11 (LOUISIANA DESIGN VEHICLE LOAD 2011).

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A $\frac{3}{4}''$ CHAMFER UNLESS OTHERWISE NOTED. JOINT SEALANT, BACKER MATERIAL, PREFORMED JOINT FILLER, AND ASPHALT SATURATED FELT SHALL BE INCLUDED IN THE PRICE BID FOR CLASS A1 CONCRETE.

REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS UNLESS OTHERWISE NOTED. ALL REINFORCING BARS SHALL BE PLACED TO PROVIDE A MINIMUM COVER OF ONE INCH FROM THE SURFACE OF THE DRAIN HOLES TO THE FACE OF THE BARS EXCEPT FOR THE TRANSVERSE BARS WHICH MAY BE CUT FOR THIS PURPOSE.

GUARD RAIL: REFER TO THE GENERAL PLAN AND STANDARD PLAN BD.1.1.1.0.01 (GR-200) FOR GUARD RAIL REQUIREMENTS.

BARRIER RAILING: FOR BARRIER RAILING DETAILS, SEE STANDARD DETAIL BD.2.6.1.1.4.02 (BR-02).

SHEET NUMBER		PARISH	
CONTROL SECTION		STATE PROJECT	
DESIGNED	J. NAKHLEH	CHECKED	J. PAINÉ
DETAILED	D. HYTEL	CHECKED	J. NAKHLEH
REVIEWED	05/17/17	SERIES #	2 OF 2
REVISION OR CHANGE ORDER DESCRIPTION		NO.	DATE
BY		DATE	
		SPAN (2 of 2) 20'-0" CONCRETE SLAB SPAN 40'-0" CLEAR ROADWAY 60" CROSSING TWO WAY TANGENT STANDARD DETAIL CSSBR-60-40TWT-20SL	
DOTD BRIDGE DESIGN			