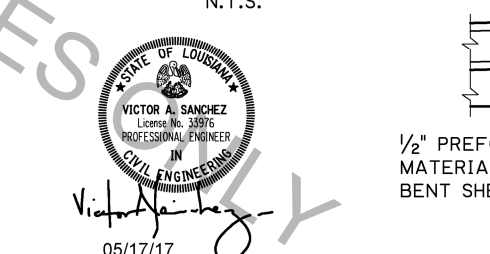
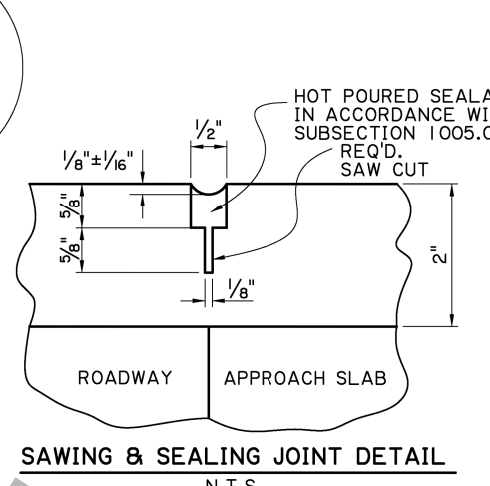
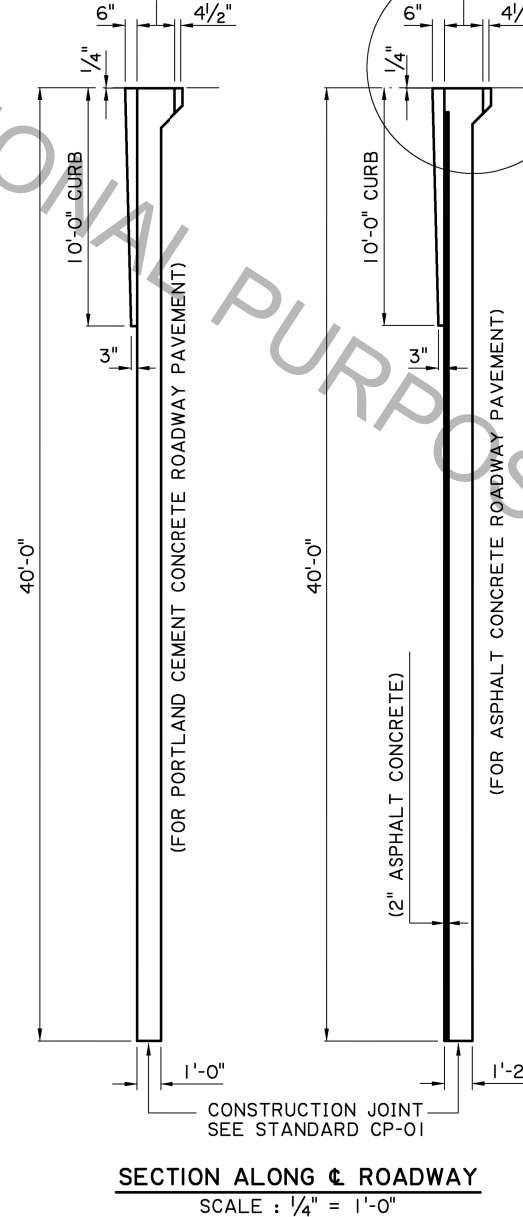
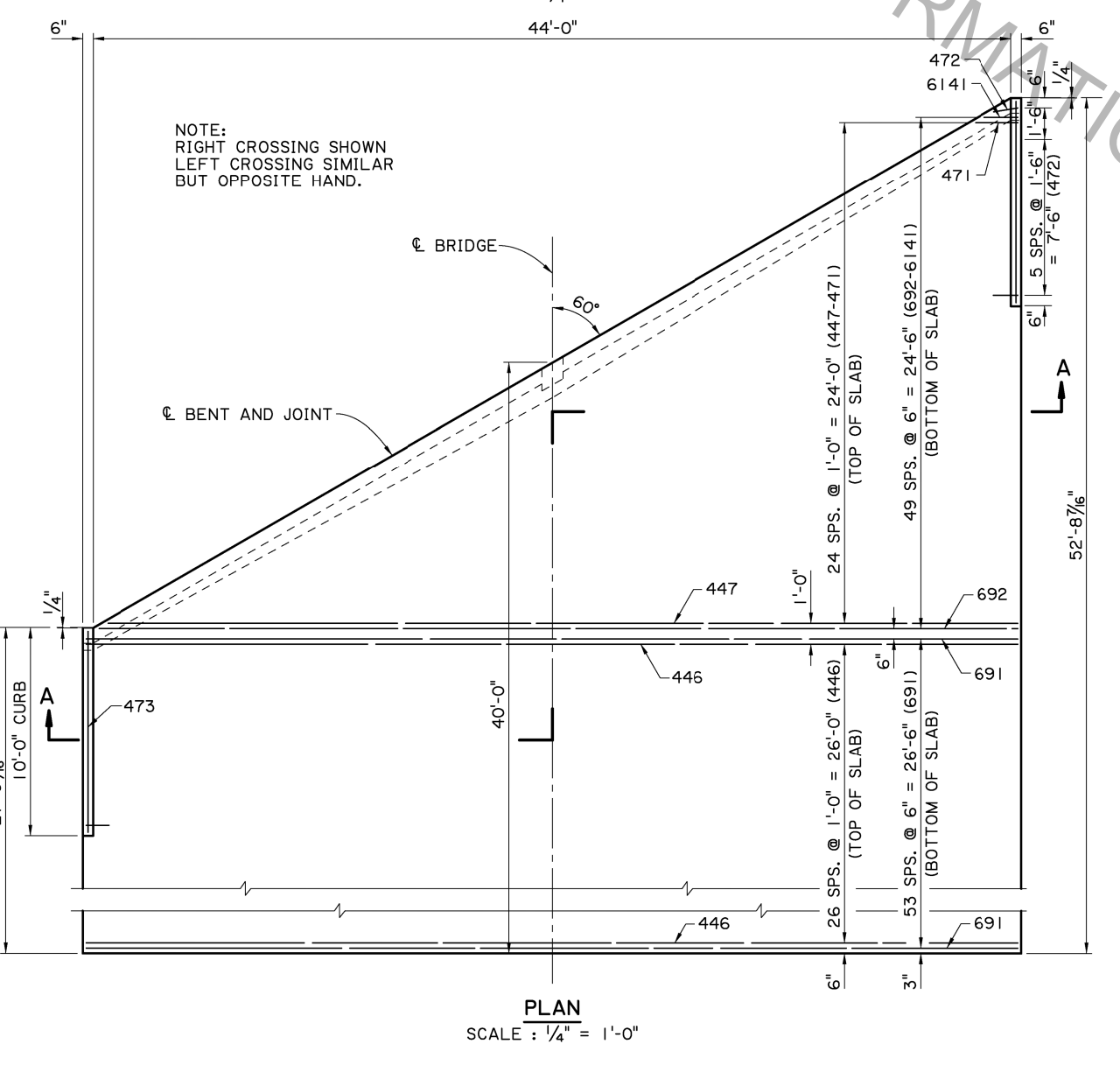
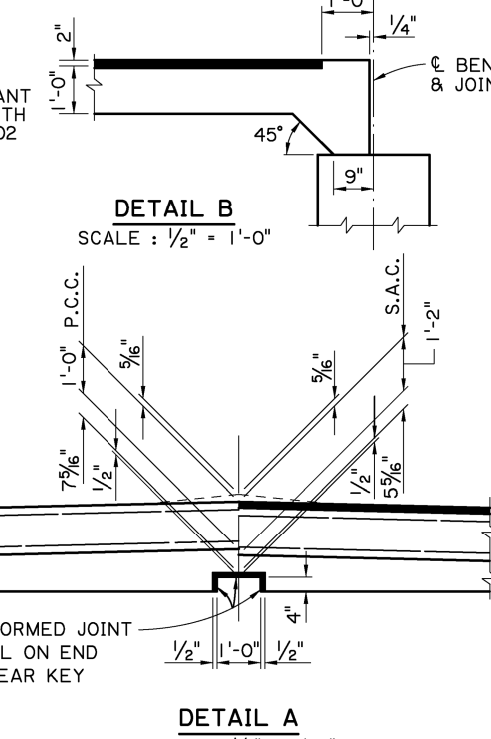


ESTIMATED QUANTITIES (ONE SLAB)						
BAR NO.	NO.	SHORT BAR (INCHES)	LONG BAR	TOTAL LENGTH	LOCATION	
601	1		26'-11"	26'-11"	LONGITUDINAL BOTTOM OF SLAB	
602-689	1 EA.	27'-0"	3.4713	52'-2"	LONGITUDINAL BOTTOM OF SLAB	
690	1		52'-4"	52'-4"	LONGITUDINAL BOTTOM OF SLAB	
691	54		44'-8"	2412'-0"	TRANSVERSE BOTTOM OF SLAB	
692-6141	1 EA.	1'-7"	10.3878	44'-0"	TRANSVERSE BOTTOM OF SLAB	
TOTAL NO. 6 BARS = 7114'-2" = 10685 LBS.						
401-423	1 EA.	26'-11"	6.9091	39'-7"	LONGITUDINAL TOP OF SLAB	
424-445	1 EA.	41'-10"	6.9048	53'-11"	LONGITUDINAL TOP OF SLAB	
446	27		46'-4"	1251'-0"	TRANSVERSE TOP OF SLAB	
447-449	1 EA.	41'-9"	21.0000	45'-3"	TRANSVERSE TOP OF SLAB	
450-471	1 EA.	2'-0"	20.8095	38'-5"	TRANSVERSE TOP OF SLAB	
472	14		2'-0"	28'-0"	DOWELS IN CURB	
473	2		9'-7"	19'-2"	LONGITUDINAL IN CURB	
TOTAL NO. 4 BARS = 3691'-3" = 2466 LBS.						
* DEFORMED REINFORCING STEEL					= 13151 LBS.	
CONCRETE APPROACH SLAB					= 200.00 SQ. YDS.	
ASPHALT CONCRETE					= 20.5 TONS	
SAW CUT & SEAL					= 43 LIN. FT.	

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



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 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 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.

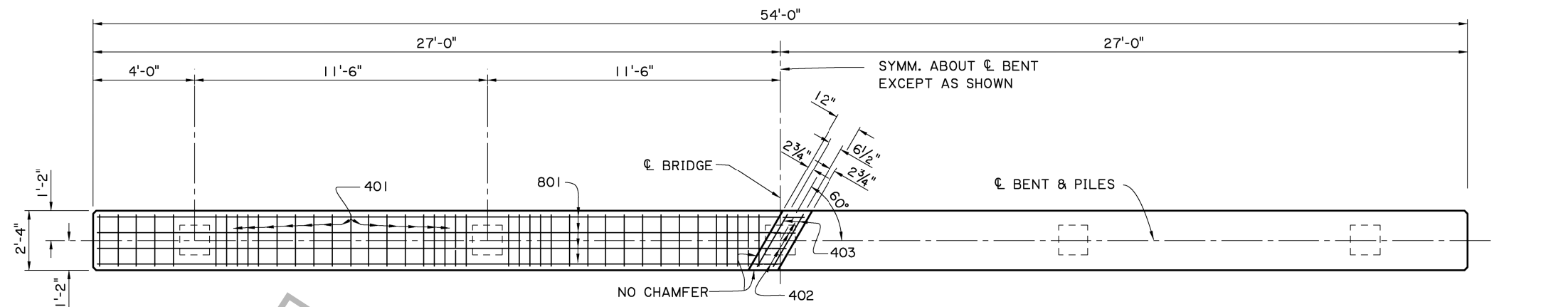


SHEET NUMBER	NO.	DATE	BY
DESIGNED	J. NAKHLEH	REVISION OR CHANGE	ORDER DESCRIPTION
CHECKED	B. DELATTE	NO.	DATE
CONTROL SECTION	D. HYMEL	NO.	DATE
STATE PROJECT	J. NAKHLEH	NO.	DATE
REVIEWED	OS/17/17	NO.	DATE
SERIES #		NO.	DATE

APPROACH SLAB
 40'-0" CONCRETE APPROACH SLAB
 44'-0" CLEAR ROADWAY
 60" CROSSING TWO WAY TANGENT

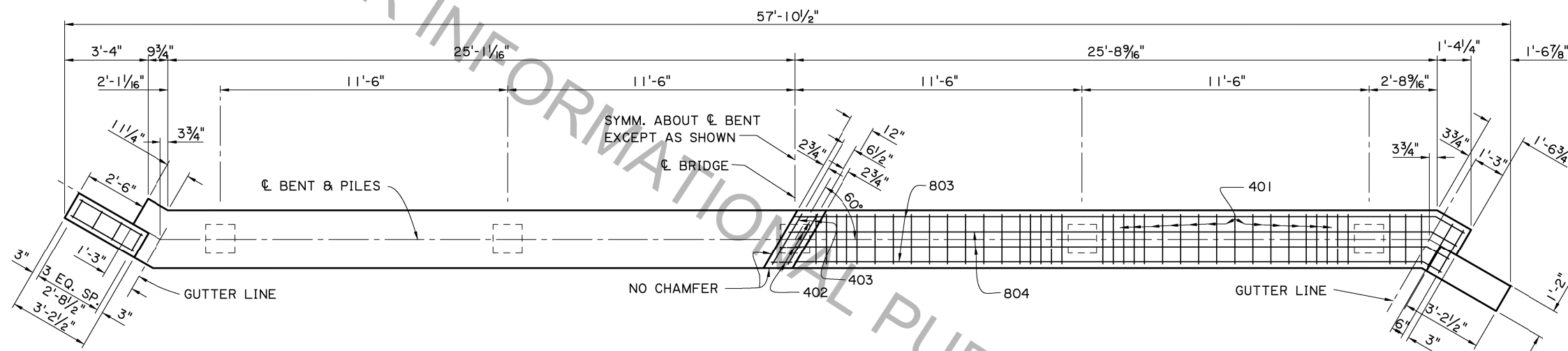
STANDARD DETAIL
 CASBR-60-44TWT-40L-20SL

DOTD
 DOTD BRIDGE DESIGN



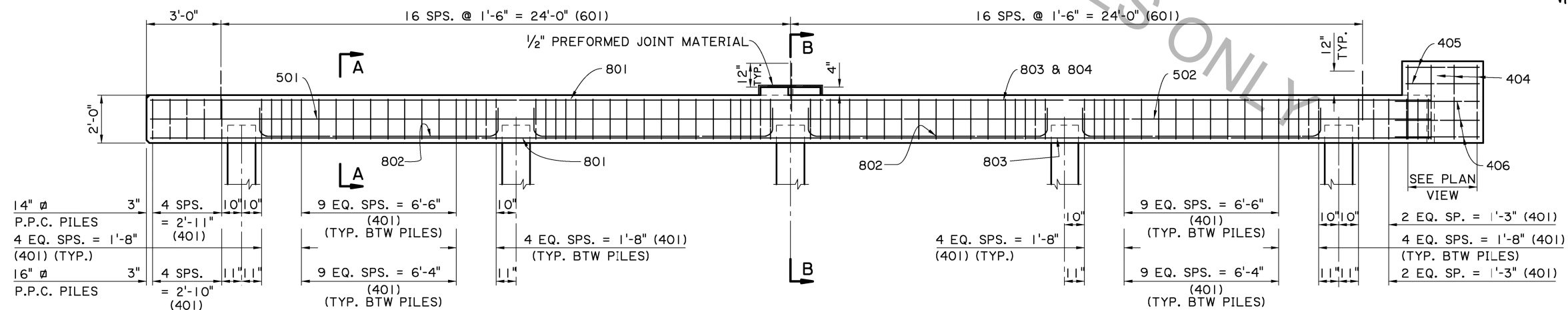
PLAN - INTERMEDIATE BENT

SCALE : $\frac{3}{8}'' = 1'-0''$



PLAN - END BENT

SCALE : $\frac{3}{8}'' = 1'-0''$



HALF ELEVATION - INTERMEDIATE BENT

SCALE : $\frac{3}{8}'' = 1'-0''$

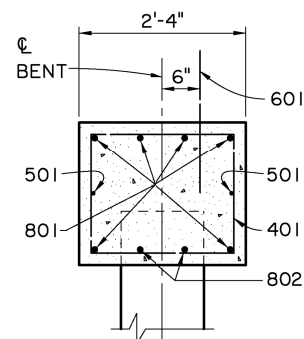
HALF ELEVATION - END BENT

SCALE : $\frac{3}{8}'' = 1'-0''$

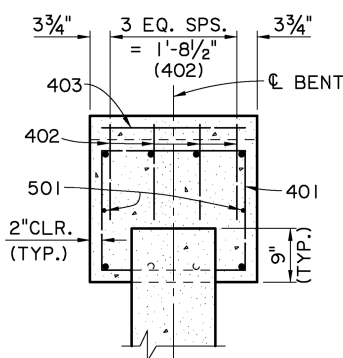


Victor A. Sanchez
05/17/17

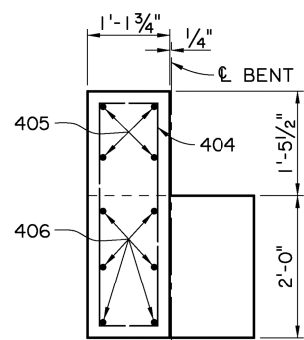
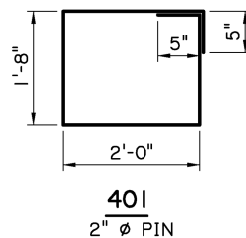
SHEET NUMBER	PARISH	DESIGNED	CONTROL SECTION	STATE PROJECT
		P. J. PAINE		
		CHECKED		
		J. NAKHLEH		
		REVIEWED		
		D. HAMEL		
		J. NAKHLEH		
		05/17/17		
		1 OF 2		
BY				
REVISION OR CHANGE ORDER DESCRIPTION				
NO.				
DATE				
BENTS (1 OF 2) REINFORCED CONCRETE PILE BENT 44'-0" CLEAR ROADWAY 60° CROSSING TWO WAY TANGENT STANDARD DETAIL BCSSBR-60-44TWT-20SL				
DOTD BRIDGE DESIGN				



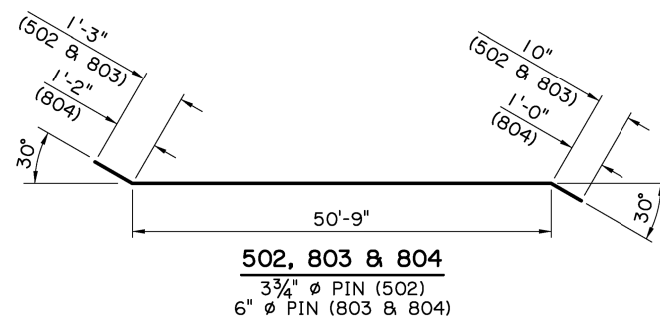
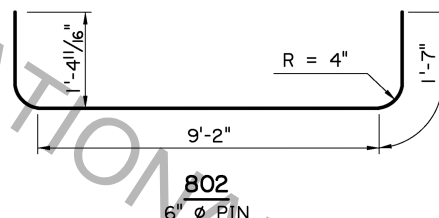
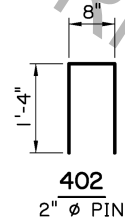
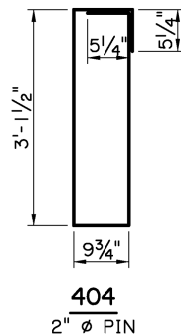
SECTION A-A
SCALE: 3/4" = 1'-0"



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



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



502, 803 & 804
3 3/4" Ø PIN (502)
6" Ø PIN (803 & 804)

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 SUB-SECTION 805.08 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.2.5.1.0.01(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.

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.452	
HL-93 (OPR)	1.883	
LADV-11 (INV)	1.117	MAGNIFICATION FACTOR = 1.3

ESTIMATED QUANTITIES (ONE INTER. BENT)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
801	6	53'-8"	322'-0"	LONGIT. IN CAP
802	8	12'-4"	98'-8"	LONGIT. IN CAP BETWEEN PILES
TOTAL NO. 8 BARS = 420'-8" = 1123 LBS.				
601	33	2'-0"	66'-0"	DOWELS
TOTAL NO. 6 BARS = 66'-0" = 99 LBS.				
501	2	53'-8"	107'-4"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 107'-4" = 112 LBS.				
401	82	8'-2"	669'-8"	STIRRUPS IN CAP
402	4	3'-4"	13'-4"	STIRRUPS IN RISER
403	2	2'-3"	4'-6"	LONGIT. IN RISER
TOTAL NO. 4 BARS = 687'-6" = 460 LBS.				
* TOTAL DEFORMED REINFORCING STEEL = 1794 LBS.				
⊖ CLASS A1 CONCRETE = 9.12 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 31 TONS				
SERVICE LIVE LOAD = 41 TONS				
FACTORED TOTAL LOAD = 99 TONS				

* ADD 99 LBS. OF REINFORCING STEEL (33-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.

ESTIMATED QUANTITIES (ONE END BENT)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
802	8	12'-4"	98'-8"	LONGIT. IN CAP BETWEEN PILES
803	4	52'-10"	211'-4"	LONGIT. IN CAP
804	2	52'-11"	105'-10"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 415'-10" = 1110 LBS.				
601	33	2'-0"	66'-0"	DOWELS
TOTAL NO. 6 BARS = 66'-0" = 99 LBS.				
502	2	52'-10"	105'-8"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 105'-8" = 110 LBS.				
401	82	8'-2"	669'-8"	STIRRUPS IN CAP
402	4	3'-4"	13'-4"	STIRRUPS IN RISER
403	2	2'-3"	4'-6"	LONGIT. IN RISER
404	8	8'-9"	70'-0"	STIRRUPS IN WINGWALL
405	8	2'-10"	22'-8"	LONGIT. IN WINGWALL
406	12	4'-0"	48'-0"	LONGIT. IN WINGWALL
TOTAL NO. 4 BARS = 828'-2" = 554 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 1873 LBS.				
⊖ CLASS A1 CONCRETE = 9.82 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 31 TONS				
SERVICE LIVE LOAD = 41 TONS				
FACTORED TOTAL LOAD = 99 TONS				

⊖ 16" Ø PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.05 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14" Ø PPC PILES ARE USED.)



SHEET NUMBER

DESIGNED BY: P.J. PAINE
 CHECKED BY: J. NAKHLEH
 DETAILED BY: D. HYMEL
 CHECKED BY: J. NAKHLEH
 REVIEWED BY: OS/17/17
 SERIES #: 2 OF 2

PARISH CONTROL SECTION STATE PROJECT

NO. DATE

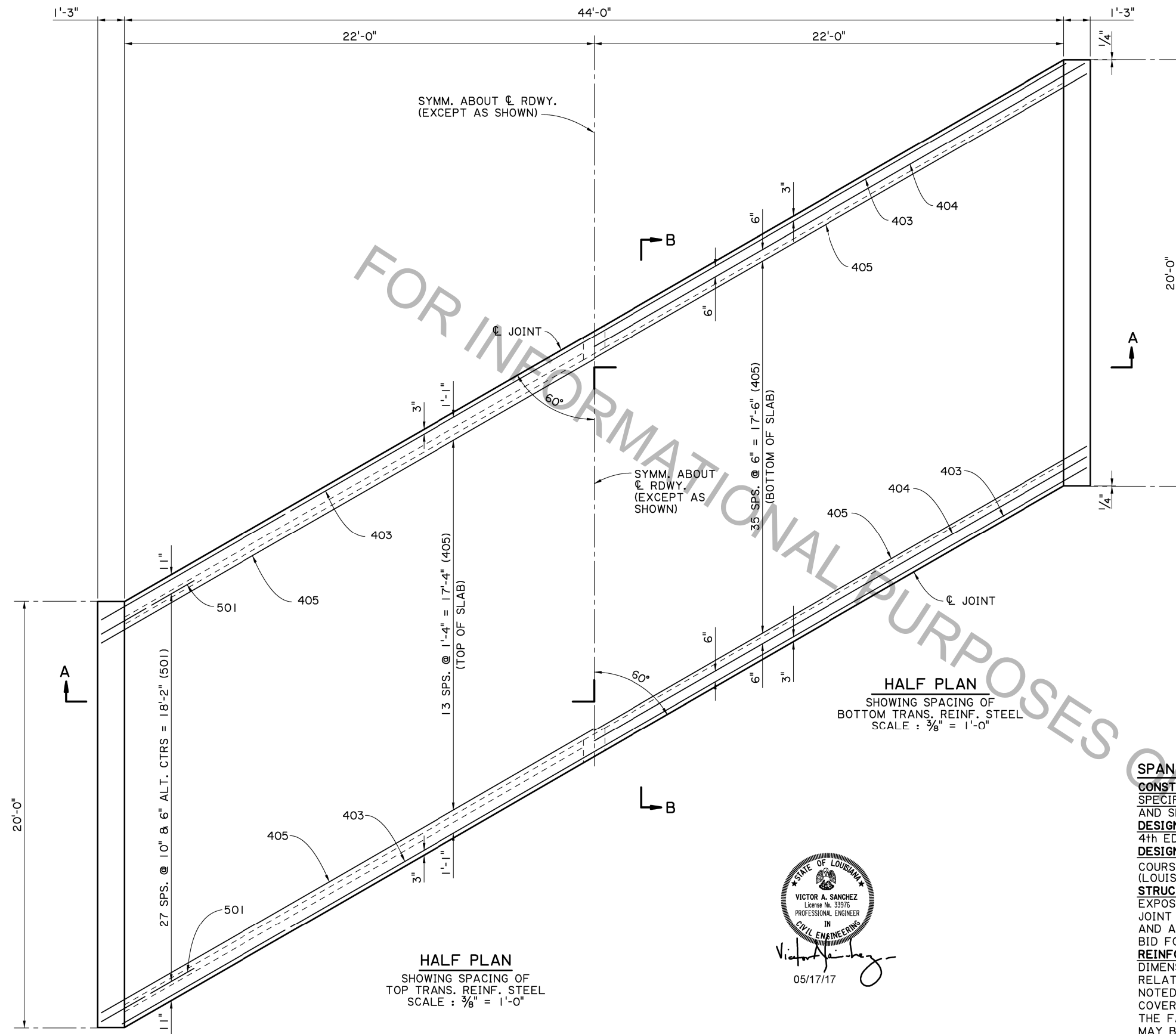
REVISION OR CHANGE ORDER DESCRIPTION

BY

REINFORCED CONCRETE PILE BENT
 44'-0" CLEAR ROADWAY
 60° CROSSING TWO WAY TANGENT
 STANDARD DETAIL BCSSBR-60-44TW-20SL

STATE OF LOUISIANA
 CIVIL ENGINEERING

DOTD
 DOTD BRIDGE DESIGN



FOR INFORMATIONAL PURPOSES

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.416	---
HL-93 (OPR)	1.835	---
LADV-11 (INV)	1.089	MAGNIFICATION FACTOR = 1.3

NOTE:
FOR SECTIONS A-A AND B-B, SEE SHEET 2 OF 2.

HALF PLAN
SHOWING SPACING OF
BOTTOM TRANS. REINF. STEEL
SCALE : 3/8" = 1'-0"

HALF PLAN
SHOWING SPACING OF
TOP TRANS. REINF. STEEL
SCALE : 3/8" = 1'-0"

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.

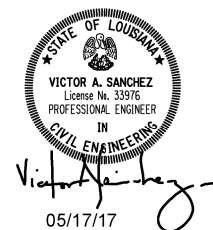
DESIGN LOAD: THE BRIDGE DECK IS DESIGNED FOR A FUTURE WEARING COURSE OF 19 PSF. THE LIVE LOAD IS HL-93, AND LADV-11 (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A 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.2.6.1.1.14.02 (BR-02).

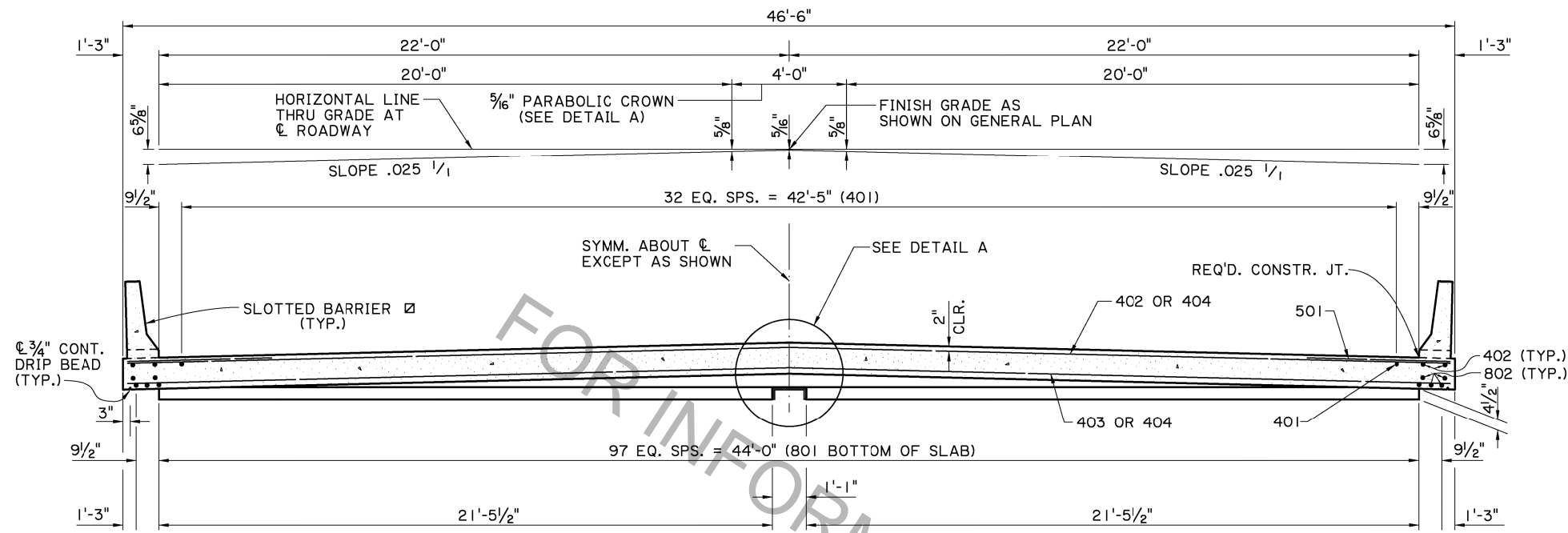


SHEET NUMBER	PARISH	DESIGNED	CHECKED	REVIEWED	SERIES #
	MAKHEH	J. NAKHEH	J. PAINÉ	D. HYTEL	05/17/17
	CONTROL SECTION	CHECKED	J. NAKHEH	CHECKED	1 OF 2
	STATE PROJECT				

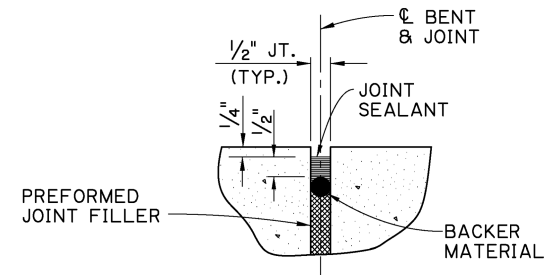
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION

SPAN (1 OF 2)
20'-0" CONCRETE SLAB SPAN
44'-0" CLEAR ROADWAY
60° CROSSING TWO WAY TANGENT
STANDARD
DETAIL
CSSBR-60-44TWT-20SL

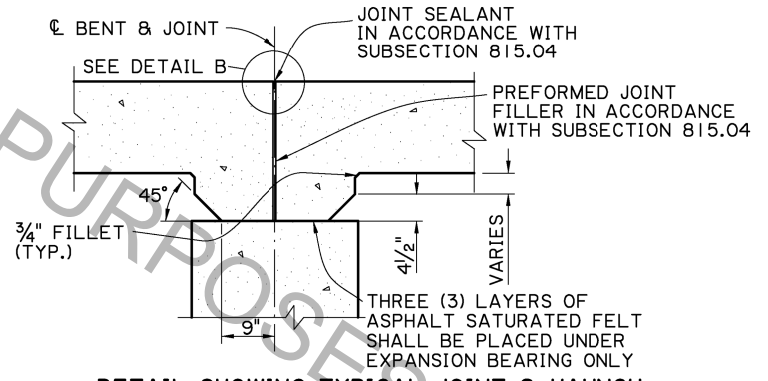
DOTD
LOUISIANA
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE DESIGN



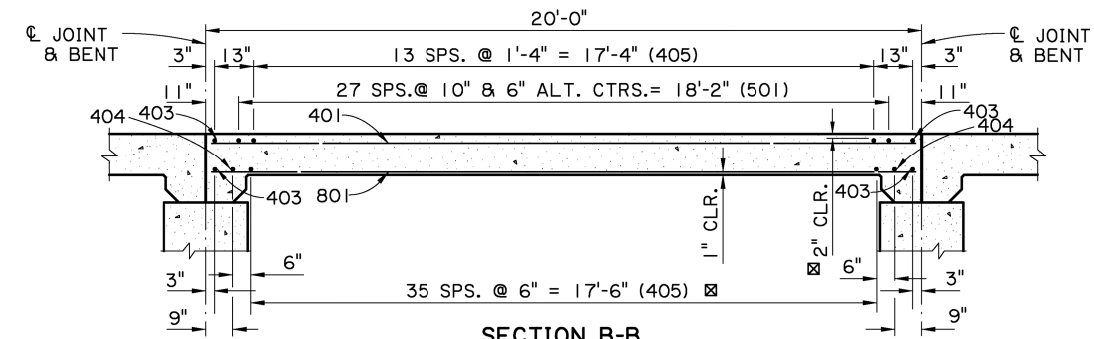
SECTION A-A
SCALE : 3/8" = 1'-0"
☒ STANDARD BARRIERS REQUIRED ON END SPANS.



DETAIL B
N.T.S.

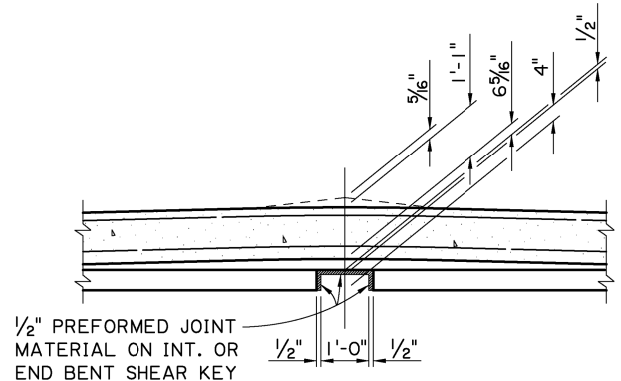


DETAIL SHOWING TYPICAL JOINT & HAUNCH
SCALE : 1/2" = 1'-0"



SECTION B-B
SCALE : 3/8" = 1'-0"

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



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

ESTIMATED QUANTITIES (ONE SPAN)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
801	98	19'-6"	1911'-0"	LONGIT. BOT. OF SLAB
802	8	19'-7"	156'-8"	LONGIT. BOT. OF SLAB
TOTAL NO. 8 BARS = 2067'-8" = 5521 LBS.				
501	56	5'-0"	280'-0"	TRANS. TOP OF SLAB
TOTAL NO. 5 BARS = 280'-0" = 292 LBS.				
401	33	19'-6"	643'-6"	LONGIT. TOP OF SLAB
402	4	19'-7"	78'-4"	LONGIT. TOP OF SLAB
* 403	4	53'-10"	215'-4"	TRANS. TOP & BOT. OF SLAB
* 404	2	54'-10"	109'-8"	TRANS. TOP & BOT. OF SLAB
* 405	50	54'-11"	2745'-10"	TRANS. TOP & BOT. OF SLAB
TOTAL NO. 4 BARS = 3792'-8" = 2534 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 8347 LBS.				
CLASS A1 CONCRETE = 39.68 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.

DESIGNED	J. NAKHLEH	PARISH	
CHECKED	J. PAINE	CONTROL SECTION	
REVIEWED	D. HAMEL	STATE PROJECT	
DATE	05/17/17	SHEET NUMBER	2 OF 2

NO. _____ DATE _____

REVISION OR CHANGE ORDER DESCRIPTION _____

BY _____

STATE OF LOUISIANA
VICTOR A. SANCHEZ
License No. 33976
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
05/17/17

SPAN (2 OF 2)
20'-0" CONCRETE SLAB SPAN
44'-0" CLEAR ROADWAY
60' CROSSING TWO WAY TANGENT
STANDARD DETAIL
CSSBR-60-44TWT-20SL

DOTD
DOTD BRIDGE DESIGN