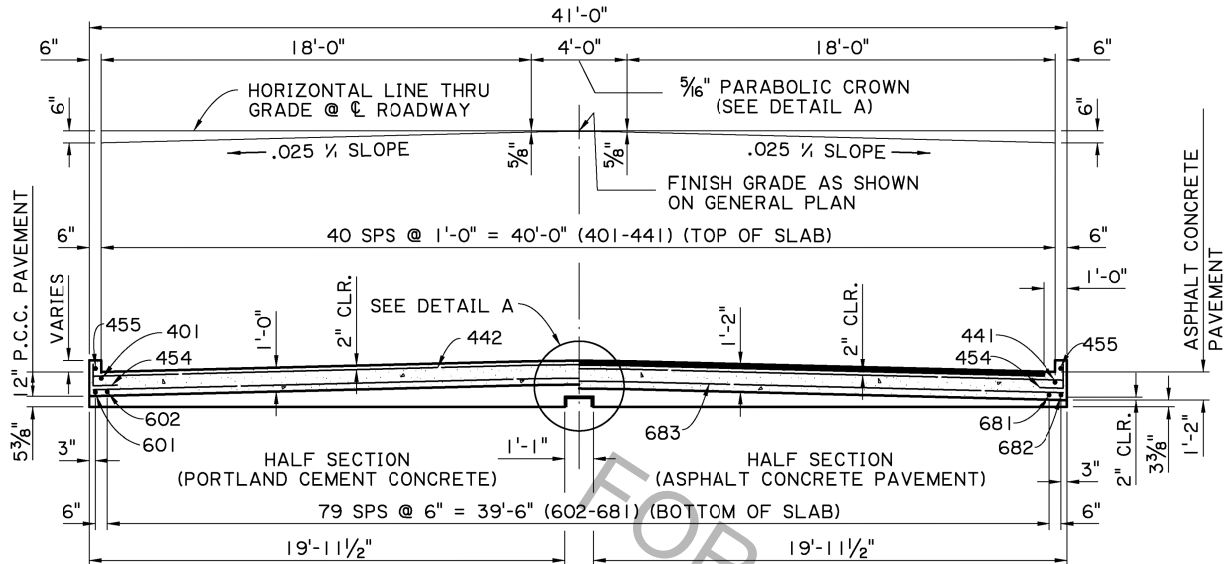
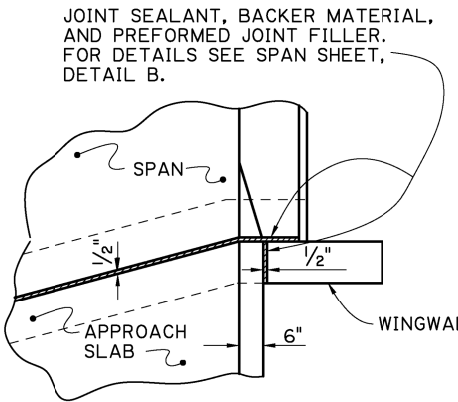


7/19/2017 10:2

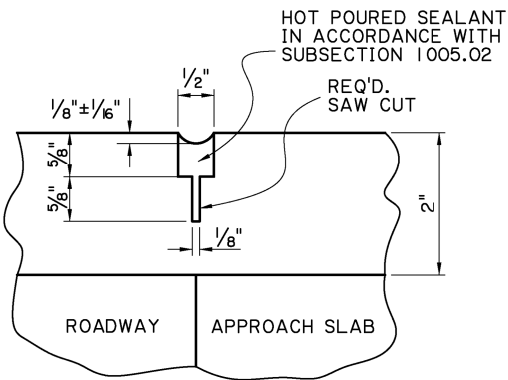
IP\_PWP:c0767269\SS7540aprs.lab(20) (LRFD).dgn



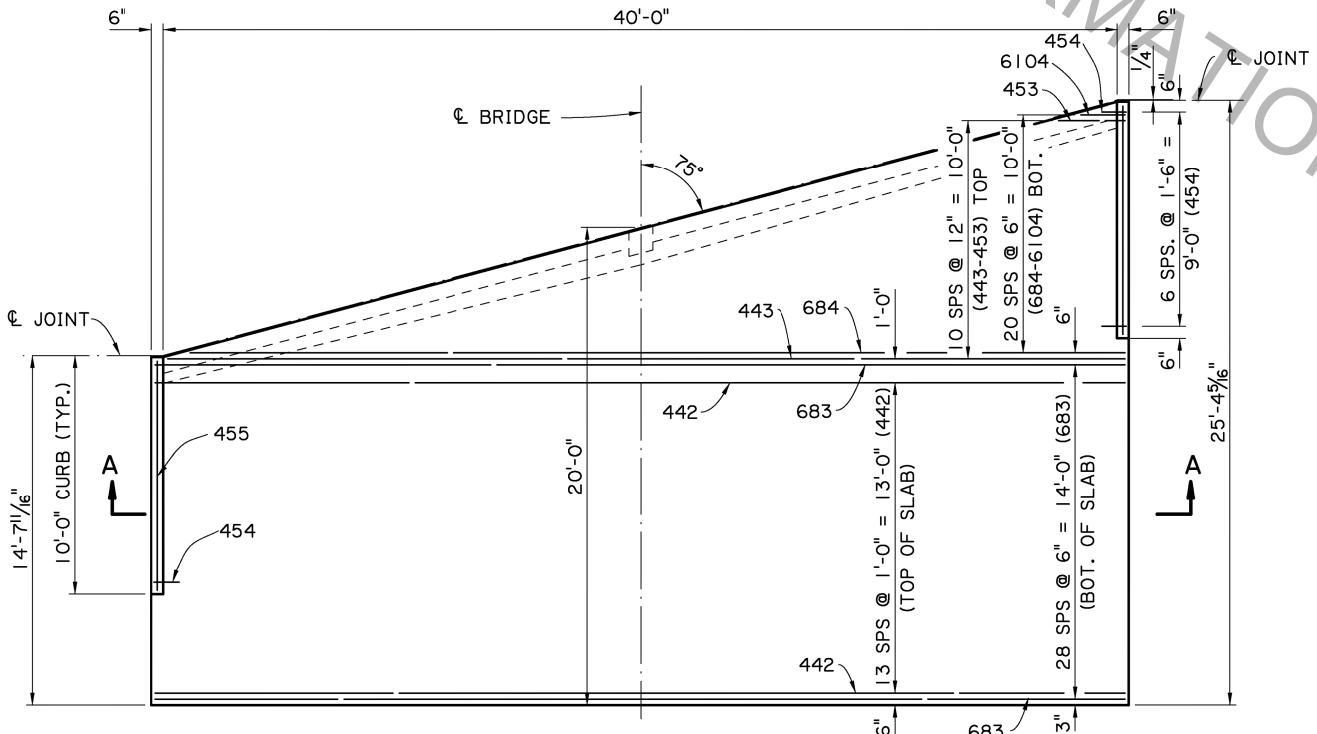
**SECTION A-A**  
SCALE : 1/4" = 1'-0"



**JOINT DETAIL**  
SCALE : 1/2" = 1'-0"



**SAWING & SEALING JOINT DETAIL**  
N.T.S. SEE DETAIL B



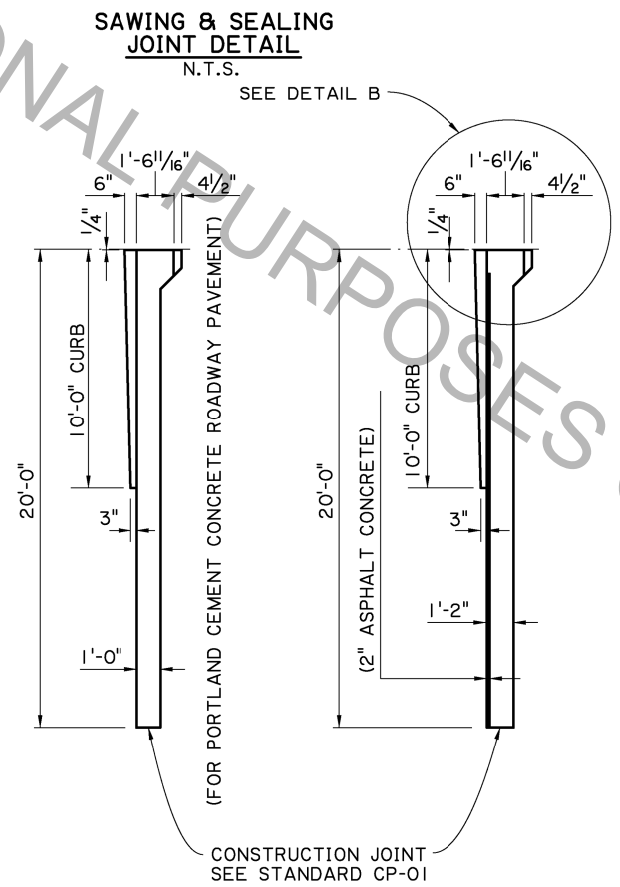
**PLAN**  
SCALE : 1/4" = 1'-0"



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



*Victor A. Sanchez*  
05/17/17



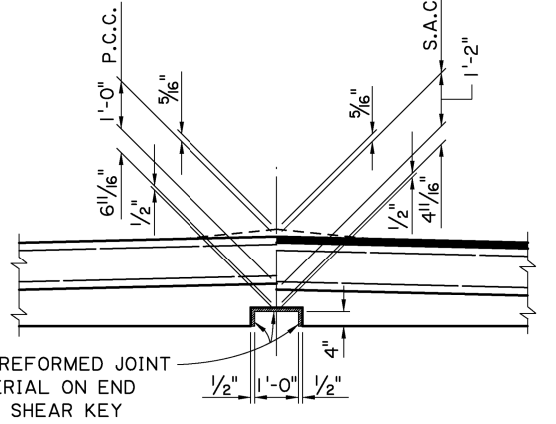
**SECTION ALONG & ROADWAY**  
SCALE : 1/4" = 1'-0"

ESTIMATED QUANTITIES (ONE SLAB)						
BAR	NO.	SHORT BAR	VAR. (IN.)	LONG BAR	TOTAL LENGTH	LOCATION
601	1			14'-3"	14'-3"	LONGIT. BOT. OF SLAB
602-681	EA.	14'-4"	1.6076	24'-11"	1570'-0"	LONGIT. BOT. OF SLAB
682	1			25'-0"	25'-0"	LONGIT. BOT. OF SLAB
683	29			40'-8"	1179'-4"	TRANSV. BOT. OF SLAB
684-6104	EA.	1'-10"	22.4000	39'-2"	430'-6"	TRANSV. BOT. OF SLAB
<b>TOTAL NO. 6 BARS = 3219'-1" = 4835 LBS.</b>						
401-441	EA.	14'-3"	6.1429	25'-0"	431'-9"	LONGIT. TOP OF SLAB
442	14			42'-6"	595'-0"	TRANSV. TOP OF SLAB
443-453	EA.	2'-8"	44.8000	40'-0"	234'-8"	TRANSV. TOP OF SLAB
454	14			2'-0"	28'-0"	DOWELS IN CURB
455	2			9'-7"	19'-2"	LONGITUDINAL IN CURB
<b>TOTAL NO. 4 BARS = 1308'-7" = 874 LBS.</b>						
<b>○ TOTAL DEFORMED REINFORCING STEEL</b>						<b>= 5709 LBS.</b>
<b>○ CONCRETE APPROACH SLAB</b>						<b>= 91.02 SQ.YDS.</b>
<b>□ ASPHALT CONCRETE</b>						<b>= 9.1 TONS</b>
<b>□ SAW CUT &amp; SEAL</b>						<b>= 39 LIN. FT.</b>

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

○ TO BE PAID FOR UNDER ITEM CONCRETE APPROACH SLABS.

□ REQUIRED WHEN APPROACH SLAB IS ADJACENT TO ASPHALT CONCRETE. PAID FOR UNDER ITEM ASPHALT CONCRETE AND SAWING AND SEALING TRANSVERSE JOINTS IN ASPHALT CONCRETE OVERLAY.



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

(FOR ASPHALT CONCRETE ROADWAY PAVEMENT)

**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 A 1. 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

DESIGNED: J. NAKHLEH, CHECKED: B. DELATTE, PARISH

DETAILED: D. HYMEL, CONTROL SECTION

CHECKED: J. NAKHLEH, STATE PROJECT

REVIEWED: OS/17/17, SERIES #

BY

NO. DATE

REVISION OR CHANGE ORDER DESCRIPTION

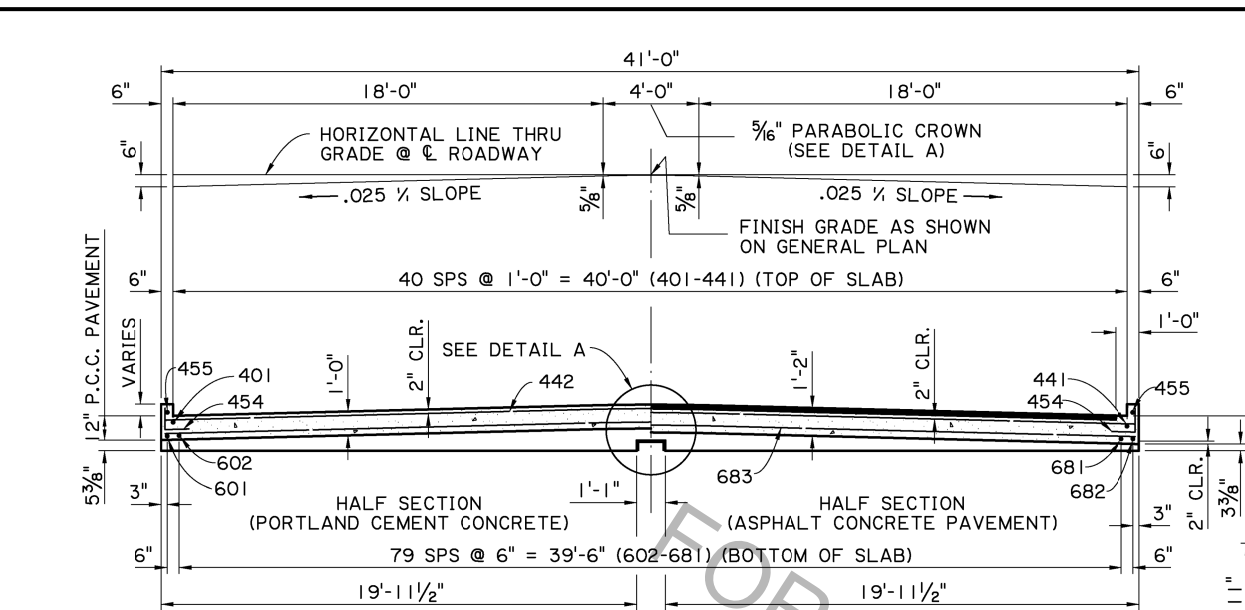
NO. DATE

APPROACH SLAB  
20'-0" CONCRETE APPROACH SLAB  
40'-0" CLEAR ROADWAY  
75° CROSSING TWO WAY TANGENT

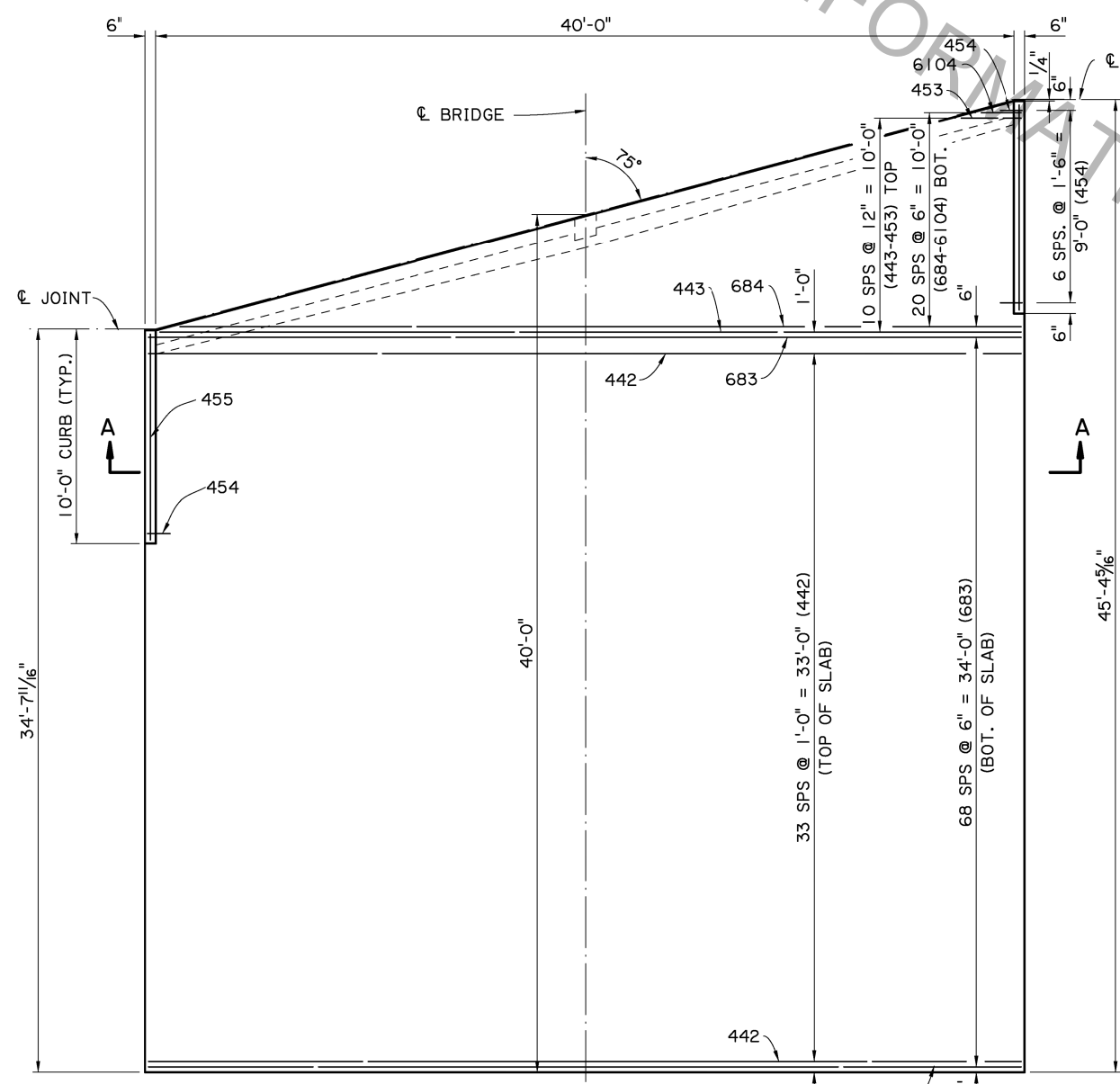
STANDARD DETAIL  
CASBR-75-40TWT-20L-20SL

LOUISIANA  
STATE ENGINEERING BOARD  
REGISTERED PROFESSIONAL ENGINEERS

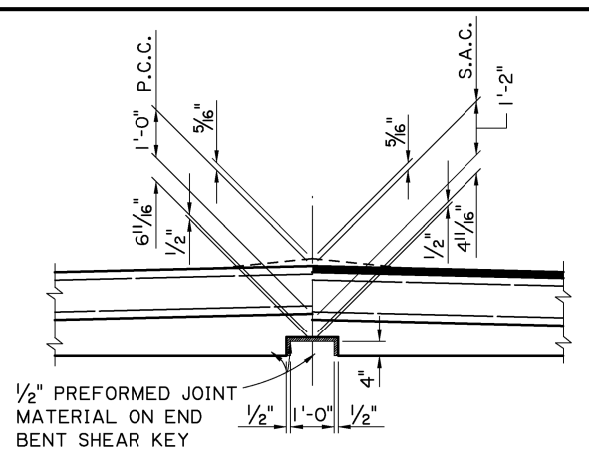
DOTD  
DOTD BRIDGE DESIGN



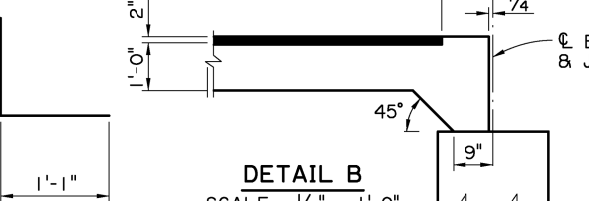
SECTION A-A  
SCALE: 1/4" = 1'-0"



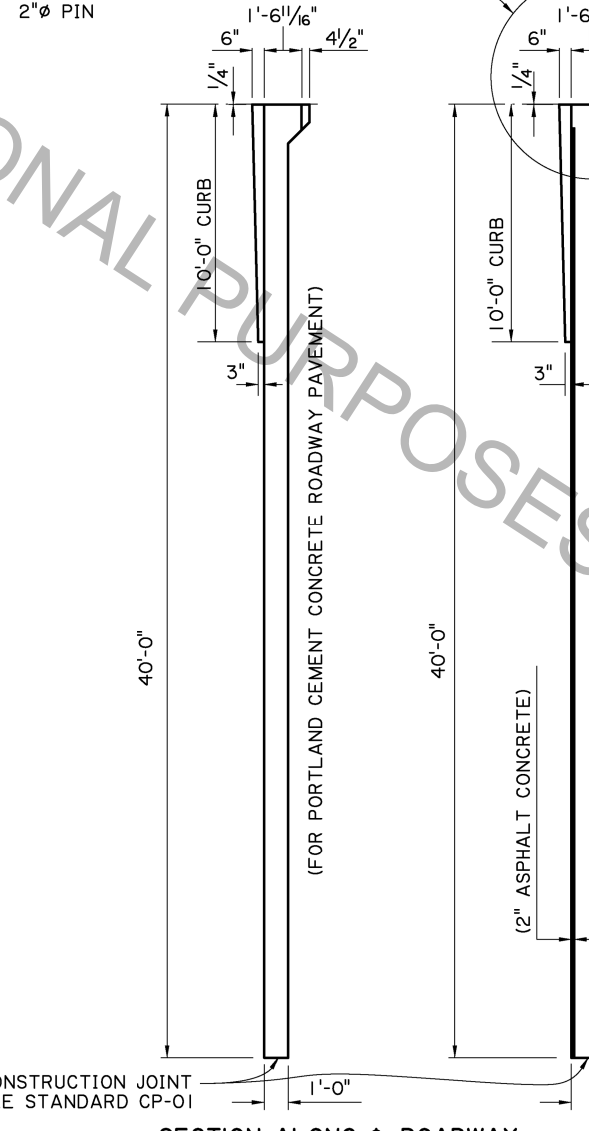
PLAN  
SCALE: 1/4" = 1'-0"



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



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

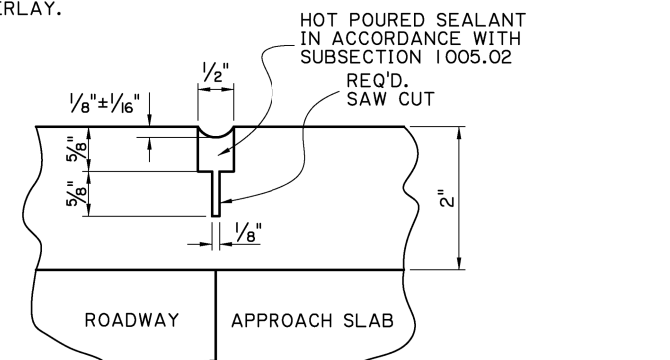


SECTION ALONG ROADWAY  
SCALE: 1/4" = 1'-0"

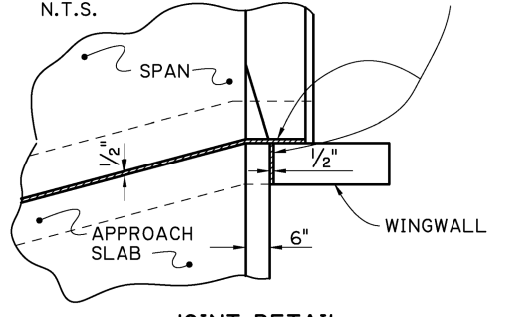
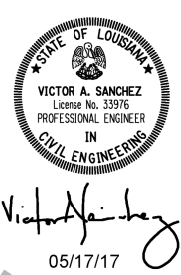
ESTIMATED QUANTITIES (ONE SLAB)						
BAR	NO.	SHORT BAR	VAR. (IN.)	LONG BAR	TOTAL LENGTH	LOCATION
601	1			34'-3"	34'-3"	LONGIT. BOT. OF SLAB
602-681	EA.	34'-4"	1.6076	44'-11"	3170'-0"	LONGIT. BOT. OF SLAB
682	1			45'-0"	45'-0"	LONGIT. BOT. OF SLAB
683	69			40'-8"	2806'-0"	TRANSV. BOT. OF SLAB
684-6104	EA.	1'-10"	22.4000	39'-2"	430'-6"	TRANSV. BOT. OF SLAB
<b>TOTAL NO. 6 BARS = 6485'-9" = 9742 LBS.</b>						
401-422	EA.	34'-2"	3.2381	39'-10"	814'-0"	LONGIT. TOP OF SLAB
423-441	EA.	41'-10"	3.2222	46'-8"	840'-9"	LONGIT. TOP OF SLAB
442	34			42'-6"	1445'-0"	TRANSV. TOP OF SLAB
443-453	EA.	2'-8"	44.8000	40'-0"	234'-8"	TRANSV. TOP OF SLAB
454	14			2'-0"	28'-0"	DOWELS IN CURB
455	2			9'-7"	19'-2"	LONGITUDINAL IN CURB
<b>TOTAL NO. 4 BARS = 3381'-7" = 2259 LBS.</b>						
<b>TOTAL DEFORMED REINFORCING STEEL = 12001 LBS.</b>						
<b>CONCRETE APPROACH SLAB = 182.13 SQ.YDS.</b>						
<b>ASPHALT CONCRETE = 18.6 TONS</b>						
<b>SAWCUT &amp; SEAL = 39 LIN. FT.</b>						

DESIGNED BY: J. NAKHLEH  
 CHECKED BY: B. DELATTE  
 PARISH: LA  
 DETAILED BY: D. HYMEL  
 CONTROL SECTION: J. NAKHLEH  
 CHECKED BY: J. NAKHLEH  
 STATE: LA  
 PROJECT: 05/17/17  
 REVISION OR CHANGE ORDER DESCRIPTION: BY: NO. DATE

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



SAWING & SEALING JOINT DETAIL  
SCALE: 1/2" = 1'-0"



JOINT DETAIL  
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.

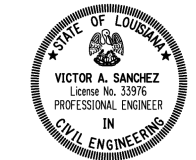
**SAWING & SEALING:** THE ASPHALTIC CONCRETE SHALL BE SAW CUT AT THE END OF THE CONCRETE APPROACH SLAB THE ENTIRE ROADWAY WIDTH AND SEALED.

**BASIS OF PAYMENT:** ALL MATERIAL SHALL BE PAID FOR UNDER 'CONCRETE APPROACH SLABS' ACCORDING TO THE SPECIFICATIONS, EXCEPT WHERE NOTED ON THIS SHEET.

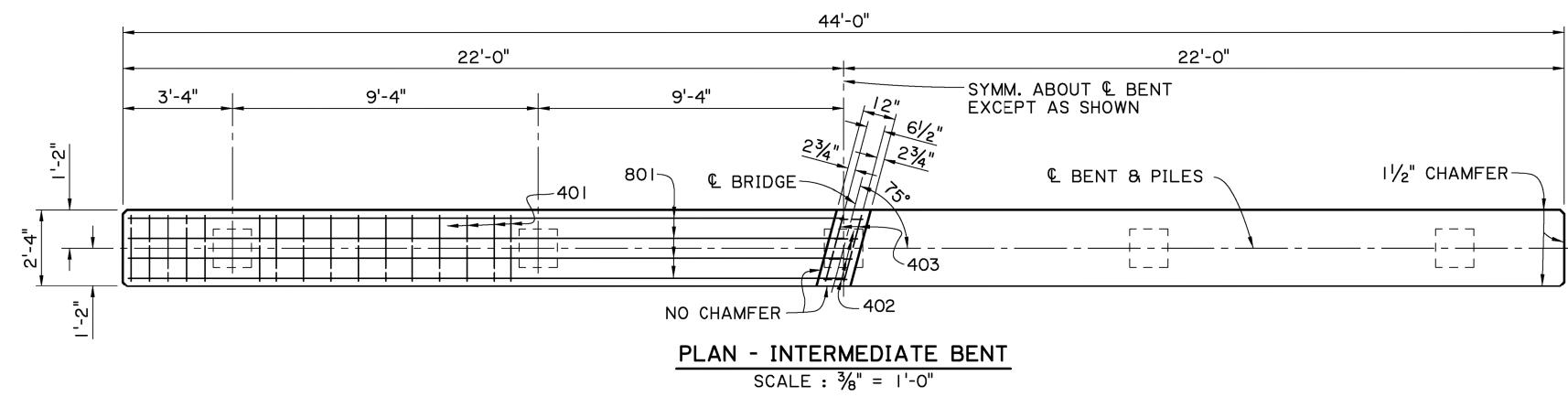
APPROACH SLAB  
 40'-0" CONCRETE APPROACH SLAB  
 40'-0" CLEAR ROADWAY  
 75° CROSSING TWO WAY TANGENT

DOTD  
 DOTD BRIDGE DESIGN

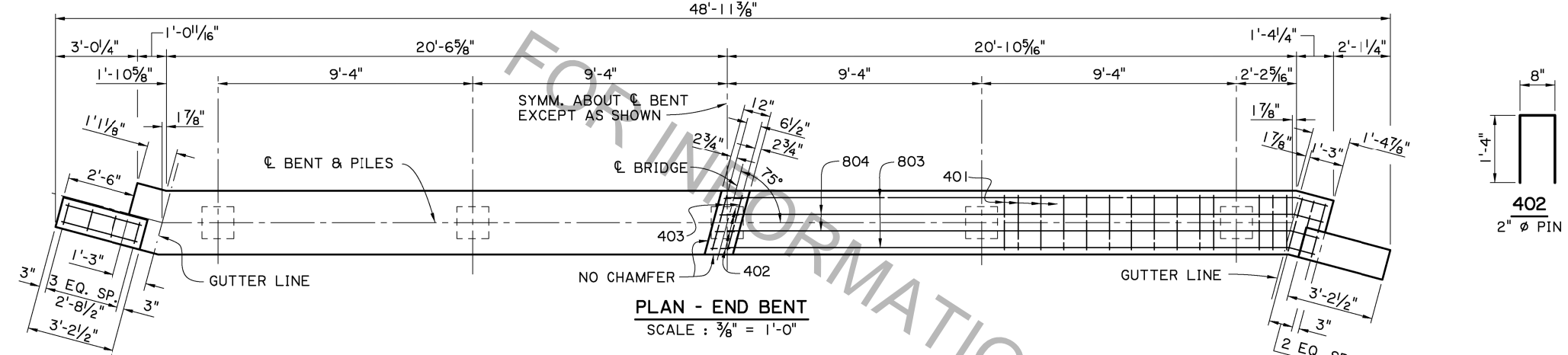
STANDARD DETAIL  
 CASBR-75-40TWT-40L-20SL



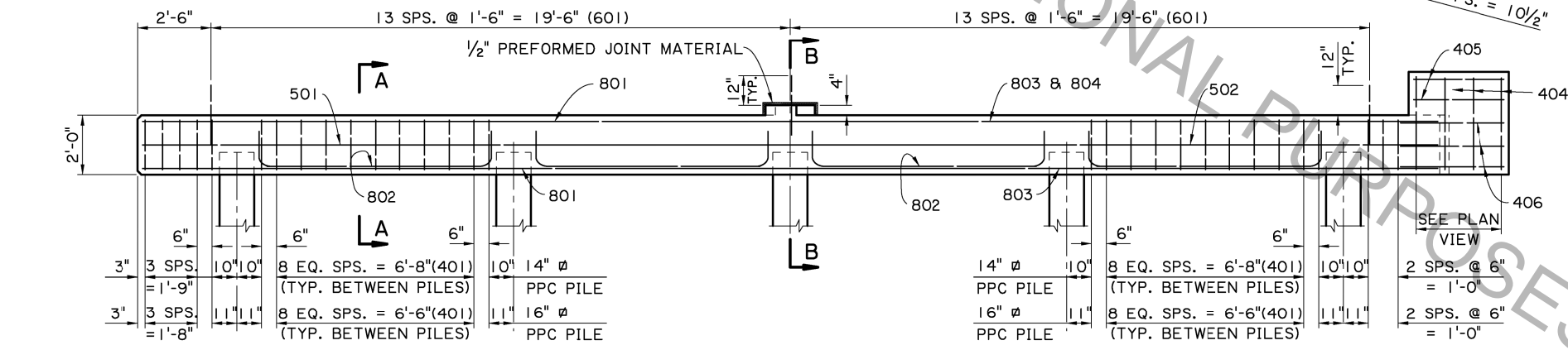
Victor A. Sanchez  
05/17/17



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

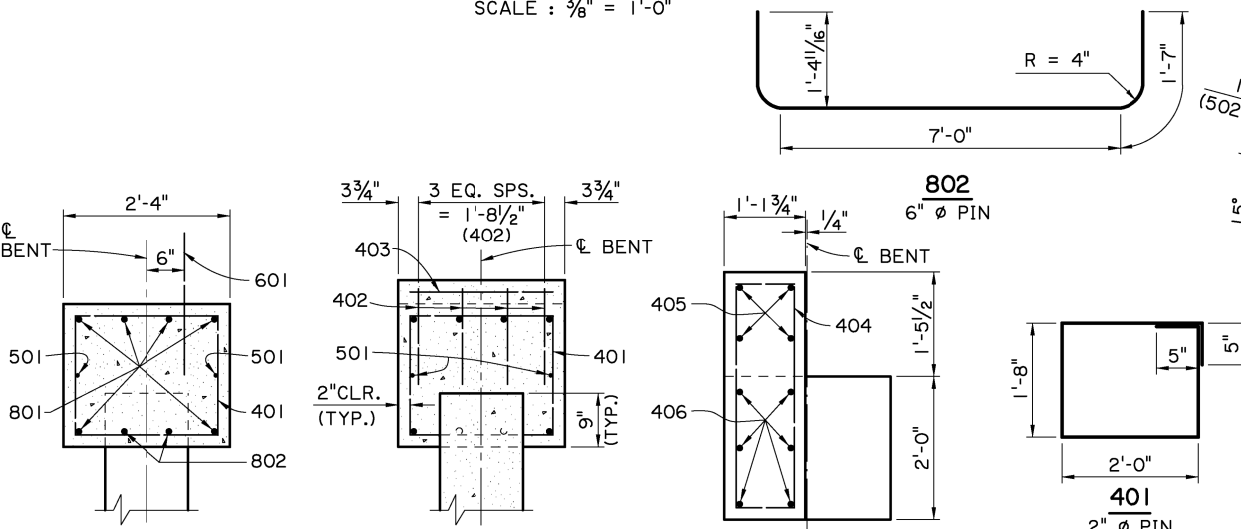


**PLAN - END BENT**  
SCALE : 3/8" = 1'-0"



**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"

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.470	
HL-93 (OPR)	1.905	
LADV-11 (INV)	1.130	MAGNIFICATION FACTOR = 1.3

ESTIMATED QUANTITIES (ONE INTER. BENT)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
801	6	43'-8"	262'-0"	LONGIT. IN CAP
802	8	10'-2"	81'-4"	LONGIT. IN CAP BETWEEN PILES
<b>TOTAL NO. 8 BARS = 343'-4" = 917 LBS.</b>				
601	27	2'-0"	54'-0"	DOWELS
<b>TOTAL NO. 6 BARS = 54'-0" = 81 LBS.</b>				
501	2	43'-8"	87'-4"	LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 87'-4" = 91 LBS.</b>				
401	54	8'-2"	441'-0"	STIRRUPS IN CAP
402	4	3'-4"	13'-4"	STIRRUPS IN RISER
403	2	2'-0"	4'-0"	LONGIT. IN RISER
<b>TOTAL NO. 4 BARS = 458'-4" = 306 LBS.</b>				
<b>* TOTAL DEFORMED REINFORCING STEEL = 1395 LBS.</b>				
<b>CLASS A1 CONCRETE = 7.39 CU. YDS.</b>				
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 26 TONS</b>				
<b>SERVICE LIVE LOAD = 38 TONS</b>				
<b>FACTORED TOTAL LOAD = 87 TONS</b>				
<b>* ADD 81 LBS. OF REINFORCING STEEL (27-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.</b>				

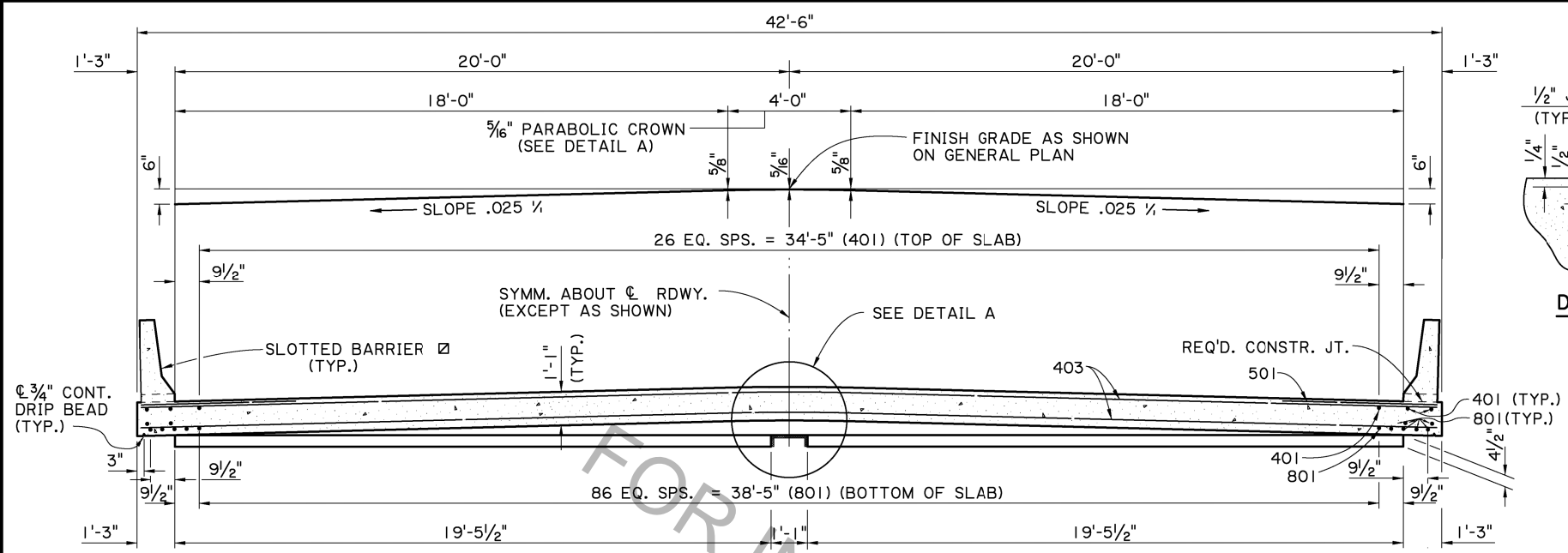
ESTIMATED QUANTITIES (ONE END BENT)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
802	8	10'-2"	81'-4"	LONGIT. IN CAP BETWEEN PILES
803	4	43'-7"	174'-4"	LONGIT. IN CAP
804	2	43'-7"	87'-2"	LONGIT. IN CAP
<b>TOTAL NO. 8 BARS = 342'-10" = 915 LBS.</b>				
601	27	2'-0"	54'-0"	DOWELS
<b>TOTAL NO. 6 BARS = 54'-0" = 81 LBS.</b>				
502	2	43'-7"	87'-2"	LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 87'-2" = 91 LBS.</b>				
401	56	8'-2"	457'-4"	STIRRUPS IN CAP
402	4	3'-4"	13'-4"	STIRRUPS IN RISER
403	2	2'-0"	4'-0"	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
<b>TOTAL NO. 4 BARS = 615'-4" = 411 LBS.</b>				
<b>TOTAL DEFORMED REINFORCING STEEL = 1498 LBS.</b>				
<b>CLASS A1 CONCRETE = 8.19 CU. YDS.</b>				
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 26 TONS</b>				
<b>SERVICE LIVE LOAD = 38 TONS</b>				
<b>FACTORED TOTAL LOAD = 87 TONS</b>				
<b>16" PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.05 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14" PPC PILES ARE USED.)</b>				

**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.

SHEET NUMBER	PROJECT
DESIGNED BY: J. PAINE	CONTROL SECTION: J. HAMEL
CHECKED BY: J. NAKHLEH	REVIEWED BY: J. NAKHLEH
DATE: 05/17/17	SERIES: #
REVISION OR CHANGE ORDER DESCRIPTION	NO.
DATE	BY

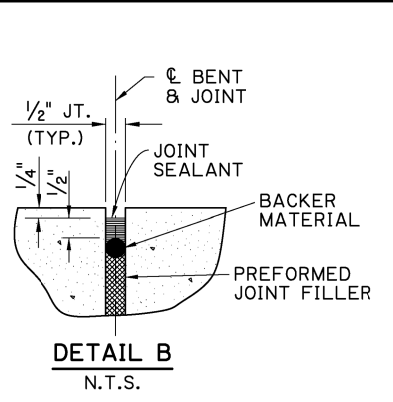
REINFORCED CONCRETE PILE BENT  
40'-0" CLEAR ROADWAY  
75' CROSSING TWO WAY TANGENT

STANDARD DETAIL  
BCSSBR-75-40WT-20SL



**SECTION A-A**  
SCALE: 3/8" = 1'-0"  
NOTE: NORMAL BARRIERS REQUIRED ON END SPANS

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.374	
HL-93 (OPR)	1.781	
LADV-11 (INV)	1.057	MAGNIFICATION FACTOR = 1.3



**DETAIL B**  
N.T.S.

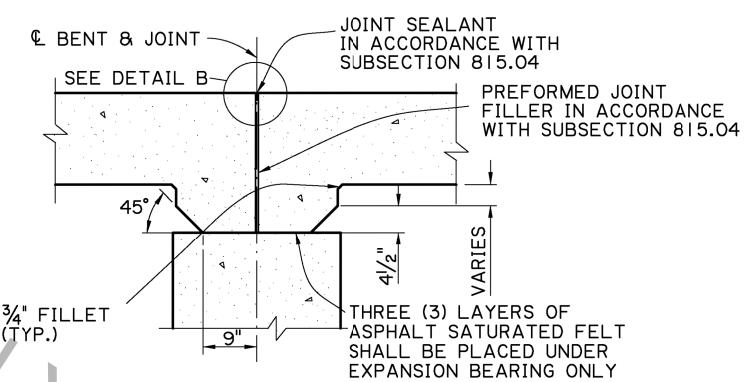
ESTIMATED QUANTITIES (ONE SPAN)				
BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION	
801	99	19'-7"	1938'-9"	LONGIT. BOT. OF SLAB
<b>TOTAL NO. 8 BARS = 1938'-9" = 5176 LBS.</b>				
501	56	5'-0"	280'-0"	TRANS. TOP OF SLAB
<b>TOTAL NO. 5 BARS = 280'-0" = 292 LBS.</b>				
401	34	19'-7"	665'-10"	LONGIT. TOP OF SLAB
402	4	44'-3"	177'-0"	TRANS. TOP & BOT. OF SLAB
403	52	45'-3"	2353'-0"	TRANS. TOP & BOT. OF SLAB
<b>TOTAL NO. 4 BARS = 3195'-10" = 2135 LBS.</b>				
<b>TOTAL DEFORMED REINFORCING STEEL = 7603 LBS.</b>				
<b>CLASS A1 CONCRETE = 35.86 CU. YDS.</b>				
<b>CONCRETE RAILING (BARRIER TYPE) = 40.00 LIN. FT.</b>				

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

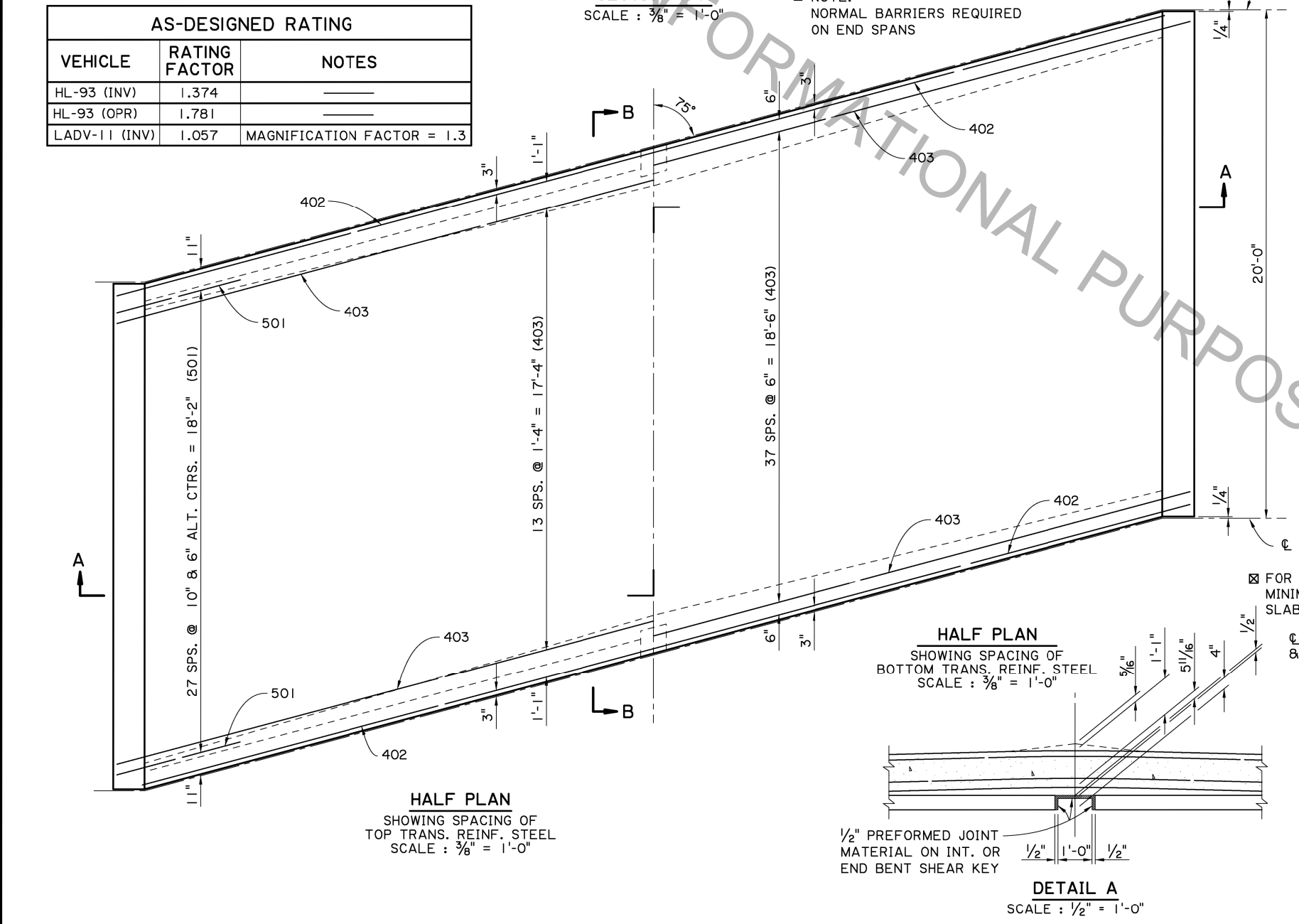
**SPAN NOTES:**  
**CONSTRUCTION SPECIFICATIONS:** LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PREVISIONS.  
**DESIGN SPECIFICATIONS:** AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION WITH 2008 & 2009 INTERIMS.  
**DESIGN LOAD:** 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 COVER OF ONE INCH FROM 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.2.6.1.14.02 (BR-02).



*Victor A. Sanchez*  
05/17/17

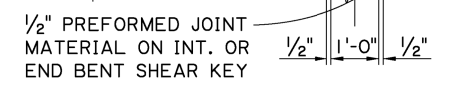


**DETAIL SHOWING TYPICAL JOINT & HAUNCH**  
SCALE: 1/2" = 1'-0"

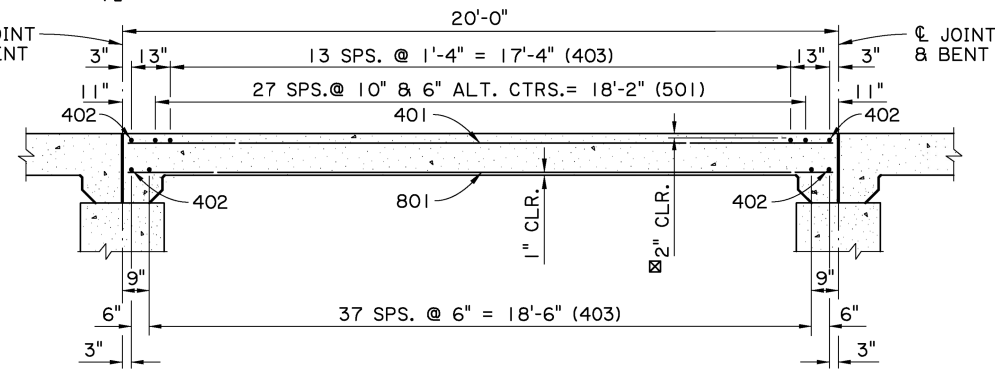


**HALF PLAN**  
SHOWING SPACING OF BOTTOM TRANS. REINF. STEEL  
SCALE: 3/8" = 1'-0"

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



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



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

SHEET NUMBER	PARISH	CONTROL SECTION	STATE PROJECT
DESIGNED	CHECKED	DATE	NO.
BY: J. NAKHLEH	BY: J. PAINE	DATE: 05/17/17	NO.:
REVISION OR CHANGE ORDER DESCRIPTION	REVISION OR CHANGE ORDER DESCRIPTION	REVISION OR CHANGE ORDER DESCRIPTION	REVISION OR CHANGE ORDER DESCRIPTION
NO.	DATE	NO.	DATE
SPAN 20'-0" CONCRETE SLAB SPAN 40'-0" CLEAR ROADWAY 75° CROSSING TWO WAY TANGENT STANDARD DETAIL CSSBR-75-40TWT-20SL			