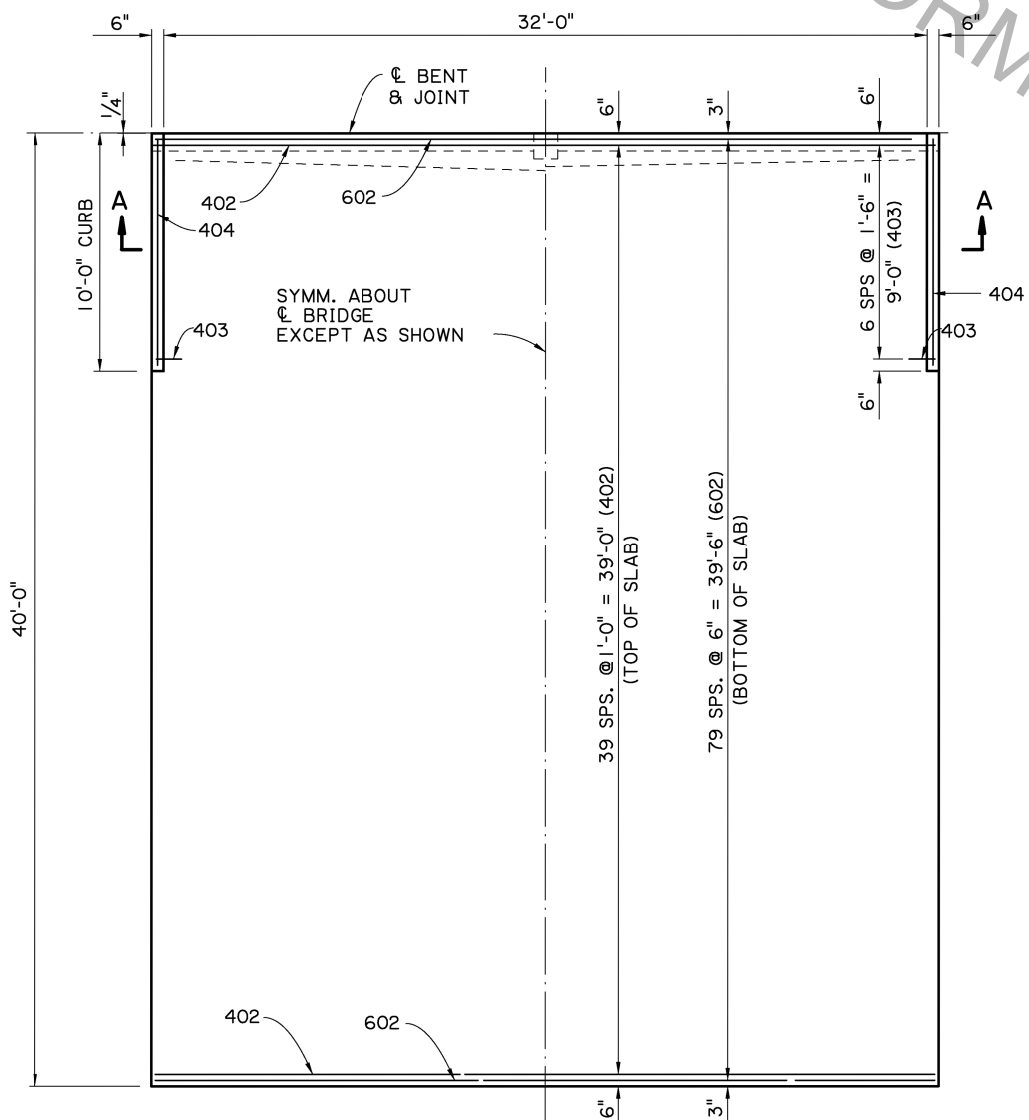
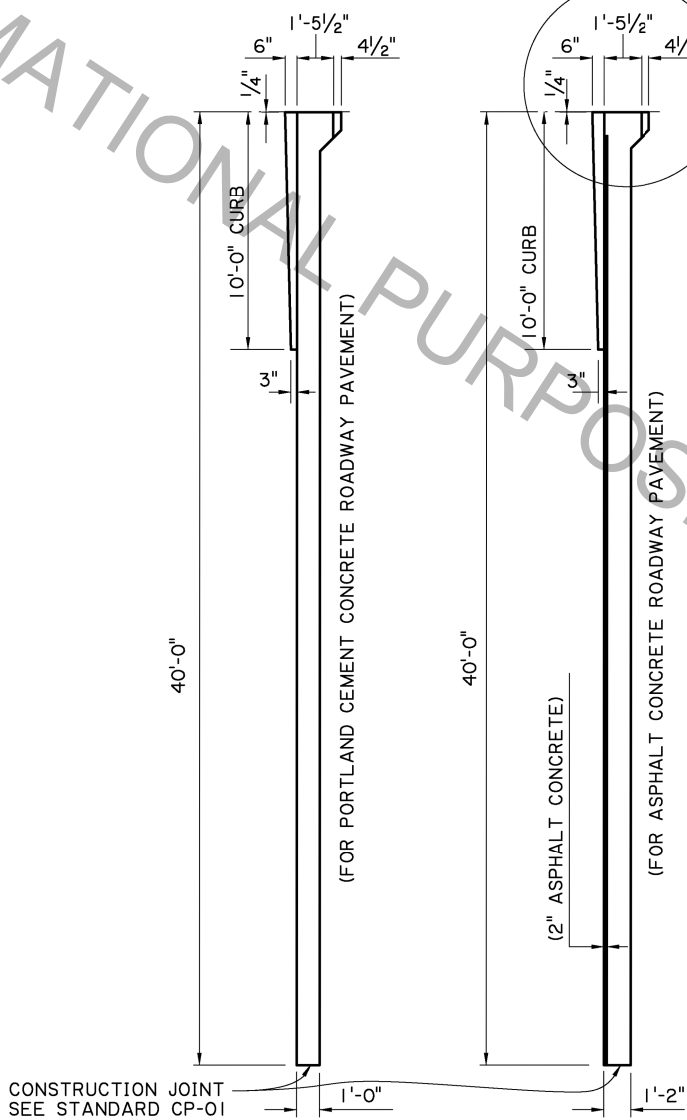


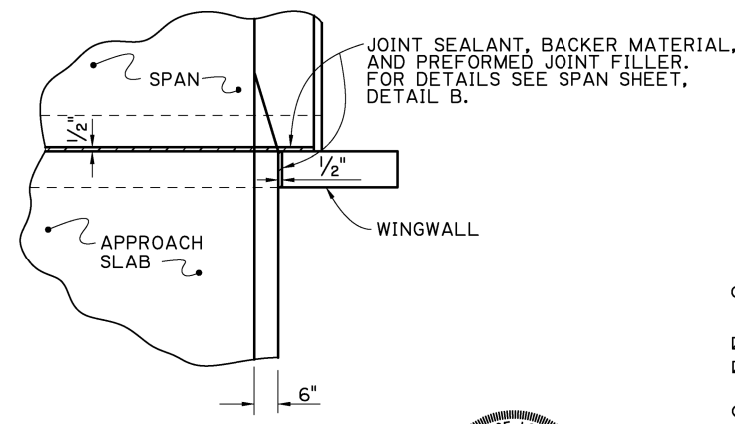
**SECTION A-A**  
SCALE: 1/4" = 1'-0"



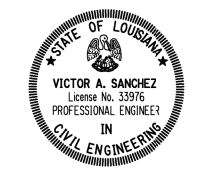
**PLAN**  
SCALE: 1/4" = 1'-0"



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



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

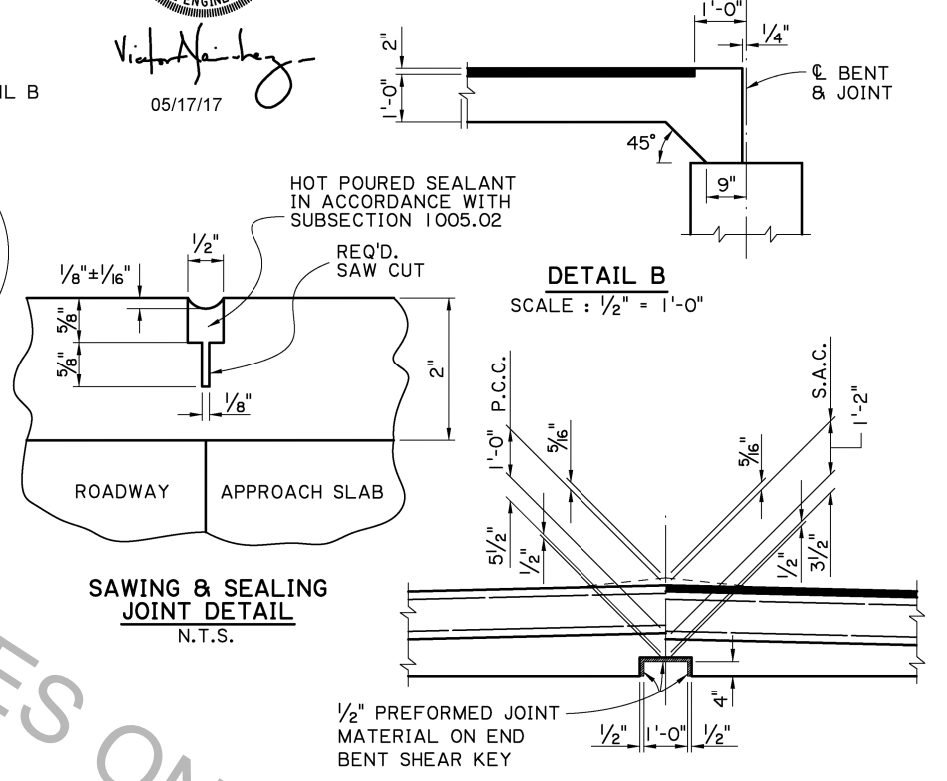


*Victor A. Sanchez*  
05/17/17

| ESTIMATED QUANTITIES (ONE SLAB)                 |             |              |          |                      |
|---|-------------|--------------|----------|----------------------|
| BAR NO.   | UNIT LENGTH | TOTAL LENGTH | LOCATION |                      |
| 601   | 66          | 39'-7"       | 2612'-6" | LONGIT. BOT. OF SLAB |
| 602   | 80          | 32'-8"       | 2613'-4" | TRANSV. BOT. OF SLAB |
| <b>TOTAL NO. 6 BARS = 5225'-10" = 7849 LBS.</b> |             |              |          |                      |
| 401   | 33          | 39'-7"       | 1306'-3" | LONGIT. TOP OF SLAB  |
| 402   | 40          | 32'-8"       | 1306'-8" | TRANSV. TOP OF SLAB  |
| 403   | 14          | 2'-0"        | 28'-0"   | DOWELS IN CURB       |
| 404   | 2           | 9'-7"        | 19'-2"   | LONGIT. IN CURB      |
| <b>TOTAL NO. 4 BARS = 2660'-1" = 1777 LBS.</b>  |             |              |          |                      |

- TOTAL DEFORMED REINFORCING STEEL = 9626 LBS. CONCRETE APPROACH SLAB = 146.59 SQ.YDS.
- ☑ ASPHALT CONCRETE = 14.8 TONS
- ☑ SAW CUT & SEAL = 31 LIN. FT.

- TO BE PAID FOR UNDER ITEM CONCRETE APPROACH SLABS.
- ☑ 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.



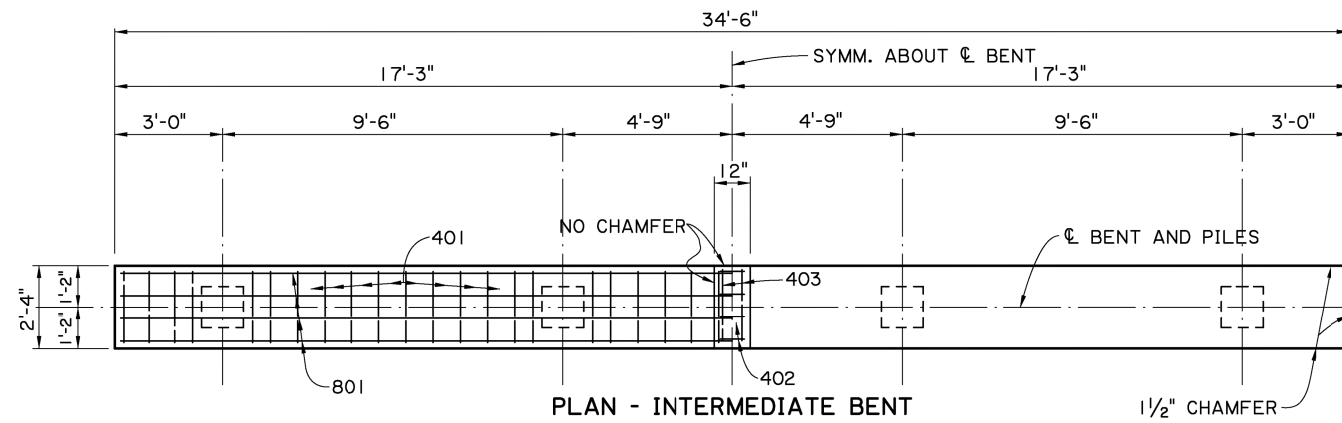
**SAWING & SEALING JOINT DETAIL**  
N.T.S.

**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.

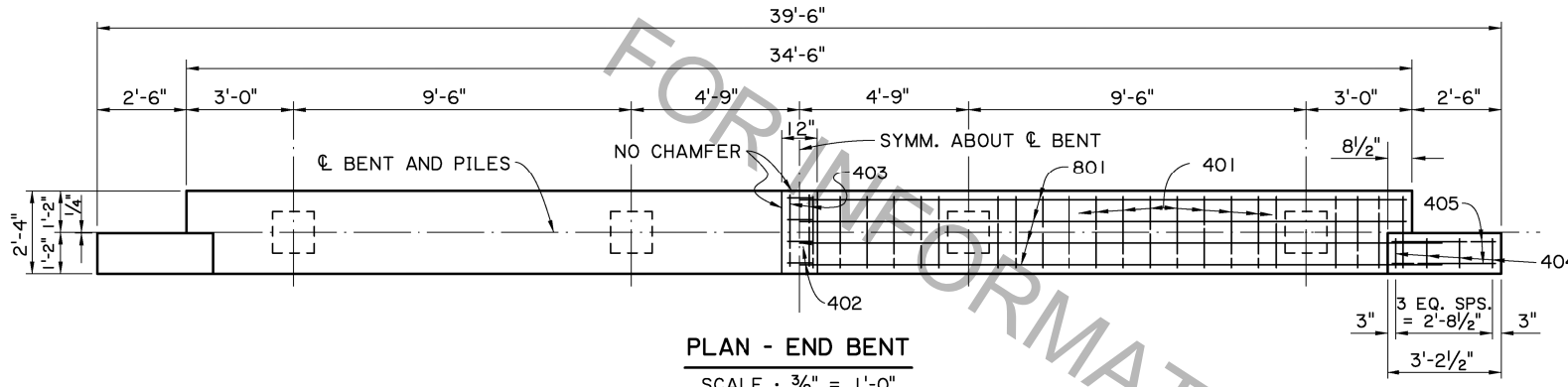
|   |               |            |            |          |
|---|---------------|------------|------------|----------|
| SHEET NUMBER  | PARISH        | DESIGNED   | CHECKED    | DATE     |
|   | J. NAKHLEH    | J. NAKHLEH | J. NAKHLEH | 05/17/17 |
| CONTROL SECTION   | STATE PROJECT | Detailed   | Checked    | Reviewed |
|   | D. HYMEL      | J. NAKHLEH | J. NAKHLEH | 05/17/17 |
| REVISION OR CHANGE ORDER DESCRIPTION  | NO.           | DATE       | BY         |          |
|   |               |            |            |          |
|   |               |            |            |          |
| <b>APPROACH SLAB</b><br>40'-0" CONCRETE APPROACH SLAB<br>32'-0" CLEAR ROADWAY<br>90° CROSSING TWO WAY TANGENT |               |            |            |          |
| STANDARD DETAIL<br>CASBR-90-32TWT-40L-20SL  |               |            |            |          |
| DOTD<br>DOTD BRIDGE DESIGN  |               |            |            |          |





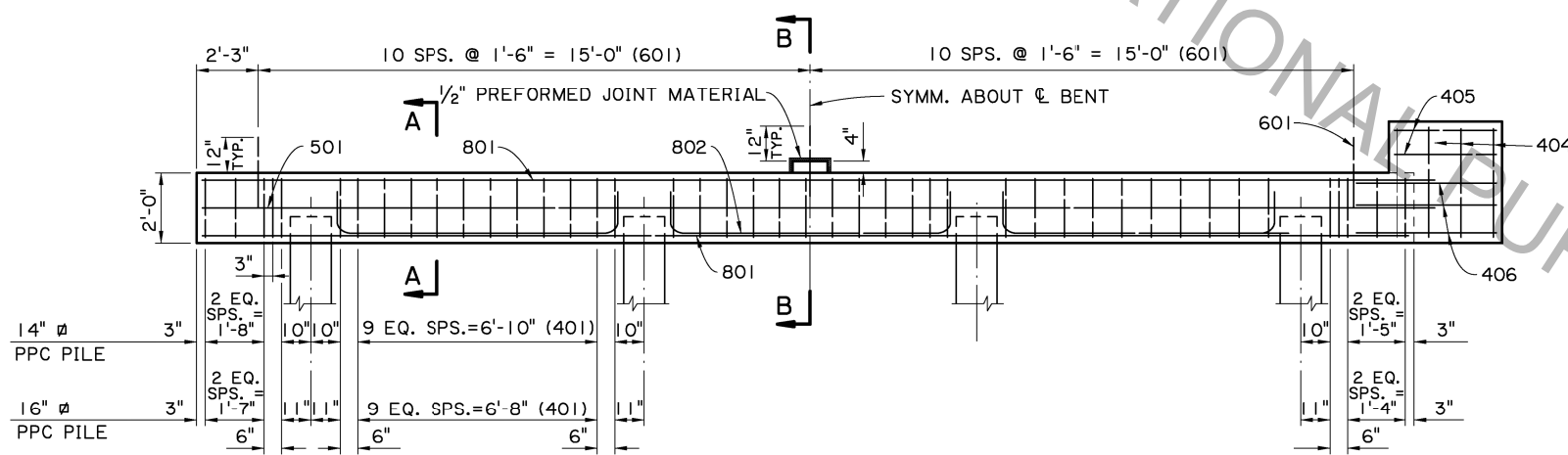
PLAN - INTERMEDIATE BENT

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



PLAN - END BENT

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

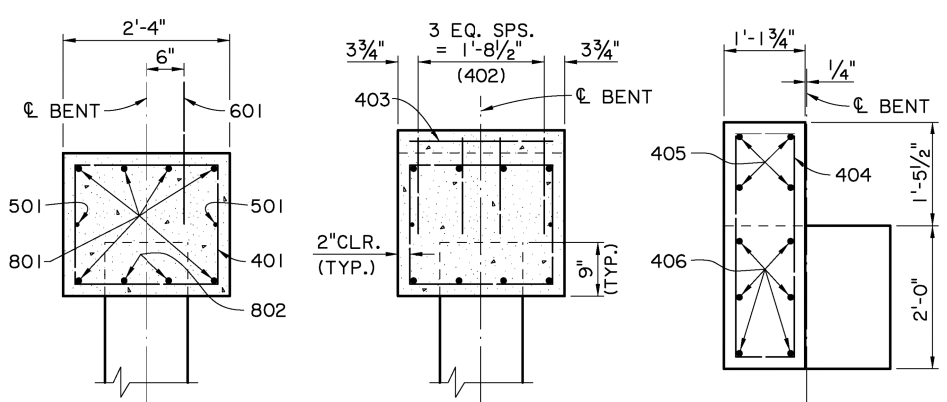


HALF ELEVATION - INTERMEDIATE BENT

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

HALF ELEVATION - END BENT

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



SECTION A-A

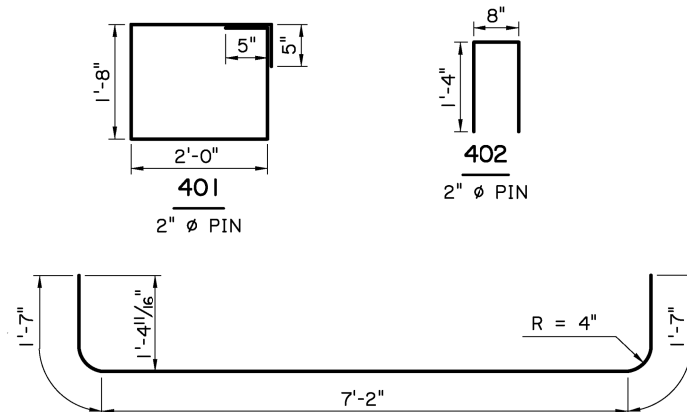
SCALE : 3/4" = 1'-0"

SECTION B-B

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

END ELEVATION

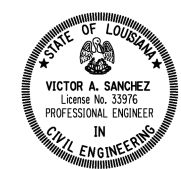
SCALE : 3/4" = 1'-0"



802

6" PIN

| AS-DESIGNED RATING |               |                            |
|--------------------|---------------|----------------------------|
| VEHICLE            | RATING FACTOR | NOTES                      |
| HL-93 (INV)        | 1.464         | ---                        |
| HL-93 (OPR)        | 1.898         | ---                        |
| LADV-11 (INV)      | 1.126         | MAGNIFICATION FACTOR = 1.3 |



Victor A. Sanchez  
05/17/17

ESTIMATED QUANTITIES (ONE INTER. BENT)

| BAR NO.   | UNIT LENGTH | TOTAL LENGTH | LOCATION          |
|---|-------------|--------------|-------------------|
| 801   | 6           | 34'-2"       | LONGIT. IN CAP    |
| 802   | 6           | 10'-4"       | LONGIT. IN CAP    |
| <b>TOTAL NO. 8 BARS = 267'-0" = 713 LBS.</b>          |             |              |                   |
| 601   | 21          | 2'-0"        | DOWELS            |
| <b>TOTAL NO. 6 BARS = 42'-0" = 63 LBS.</b>            |             |              |                   |
| 501   | 2           | 34'-2"       | LONGIT. IN CAP    |
| <b>TOTAL NO. 5 BARS = 68'-4" = 71 LBS.</b>            |             |              |                   |
| 401   | 46          | 8'-2"        | STIRRUPS IN CAP   |
| 402   | 4           | 3'-4"        | STIRRUPS IN RISER |
| 403   | 2           | 2'-0"        | LONGIT. IN RISER  |
| <b>TOTAL NO. 4 BARS = 393'-0" = 263 LBS.</b>          |             |              |                   |
| <b>* TOTAL DEFORMED REINFORCING STEEL = 1110 LBS.</b> |             |              |                   |
| <b>CLASS A1 CONCRETE = 5.79 CU. YDS.</b>              |             |              |                   |
| <b>MAX. PILE LOAD: SERVICE DEAD LOAD = 27 TONS</b>    |             |              |                   |
| <b>SERVICE LIVE LOAD = 40 TONS</b>                    |             |              |                   |
| <b>TOTAL FACTORED LOAD = 94 TONS</b>                  |             |              |                   |

\* ADD 81 LBS. OF REINFORCING STEEL (27-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.

ESTIMATED QUANTITIES (ONE END BENT)

| BAR NO.   | UNIT LENGTH | TOTAL LENGTH | LOCATION             |
|---|-------------|--------------|----------------------|
| 801   | 6           | 34'-2"       | LONGIT. IN CAP       |
| 802   | 6           | 10'-4"       | LONGIT. IN CAP       |
| <b>TOTAL NO. 8 BARS = 267'-0" = 713 LBS.</b>        |             |              |                      |
| 601   | 23          | 2'-0"        | DOWELS               |
| <b>TOTAL NO. 6 BARS = 42'-0" = 63 LBS.</b>          |             |              |                      |
| 501   | 2           | 34'-2"       | LONGIT. IN CAP       |
| <b>TOTAL NO. 5 BARS = 68'-4" = 71 LBS.</b>          |             |              |                      |
| 401   | 46          | 8'-2"        | STIRRUPS IN CAP      |
| 402   | 4           | 3'-4"        | STIRRUPS IN RISER    |
| 403   | 2           | 2'-0"        | LONGIT. IN RISER     |
| 404   | 8           | 8'-9"        | STIRRUPS IN WINGWALL |
| 405   | 8           | 2'-10"       | LONGIT. IN WINGWALL  |
| 406   | 12          | 4'-0"        | LONGIT. IN WINGWALL  |
| <b>TOTAL NO. 4 BARS = 533'-8" = 357 LBS.</b>        |             |              |                      |
| <b>TOTAL DEFORMED REINFORCING STEEL = 1204 LBS.</b> |             |              |                      |
| <b>CLASS A1 CONCRETE = 6.62 CU. YDS.</b>            |             |              |                      |
| <b>MAX. PILE LOAD: SERVICE DEAD LOAD = 27 TONS</b>  |             |              |                      |
| <b>SERVICE LIVE LOAD = 40 TONS</b>                  |             |              |                      |
| <b>TOTAL FACTORED LOAD = 94 TONS</b>                |             |              |                      |

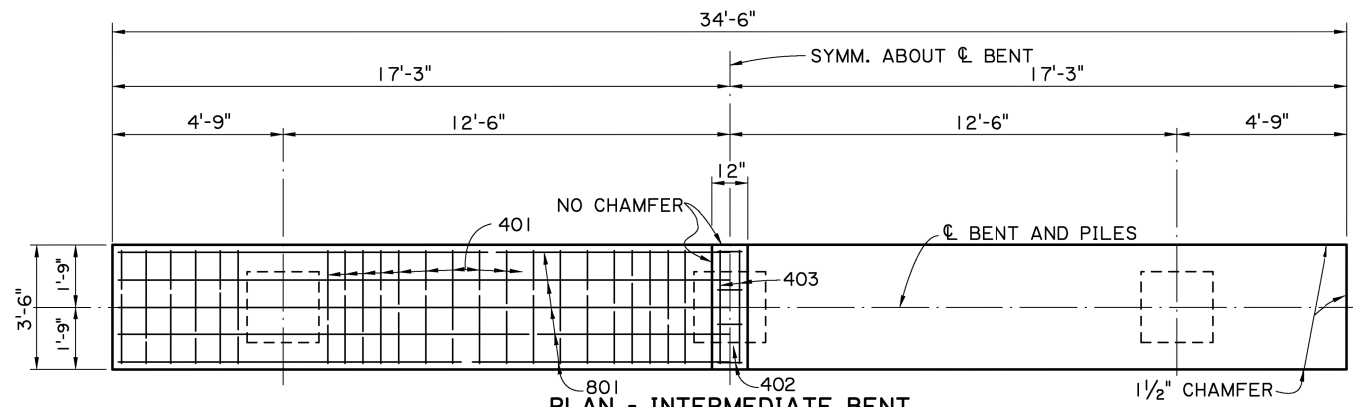
\* 16" # PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.05 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14" # PPC PILES ARE USED.)

**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 805.08.5.3 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.2.5.1.0.01(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    | NO.         | DATE               | BY                |
| DESIGNED        | J. NAKHILEH | REVISION OR CHANGE | ORDER DESCRIPTION |
| CHECKED         | I. DELATTE  | NO.                | DATE              |
| CONTROL SECTION | D. HYMEL    | NO.                | DATE              |
| STATE PROJECT   | J. NAKHILEH | NO.                | DATE              |
| REVIEWED        | OS/17/17    | NO.                | DATE              |
| SERIES #        |             | NO.                | DATE              |

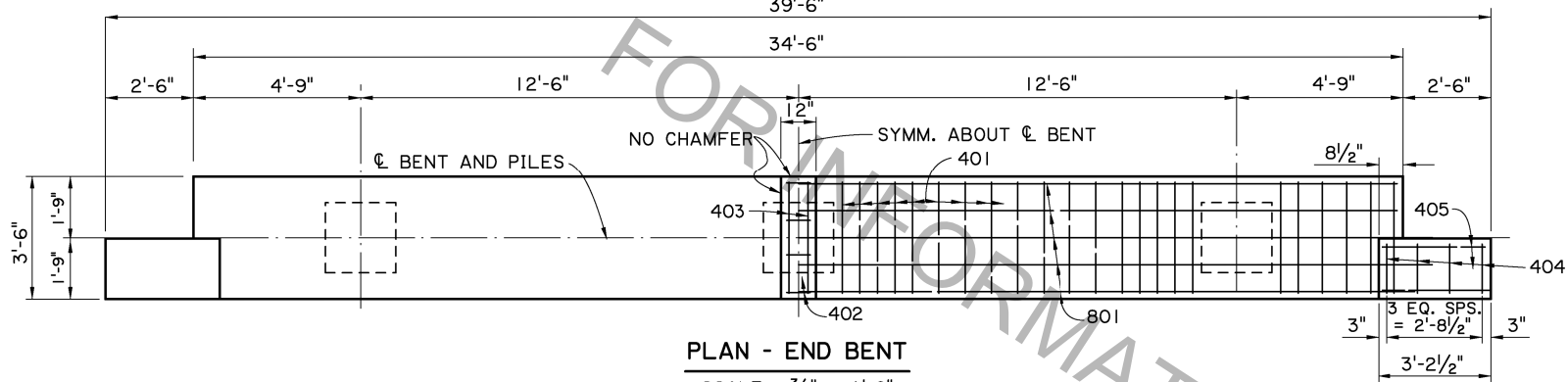
REINFORCED CONCRETE PILE BENT  
 32'-0" CLEAR ROADWAY  
 90° CROSSING TWO WAY TANGENT  
 STANDARD DETAIL  
 BCSSBR-90-32TWT-20SL





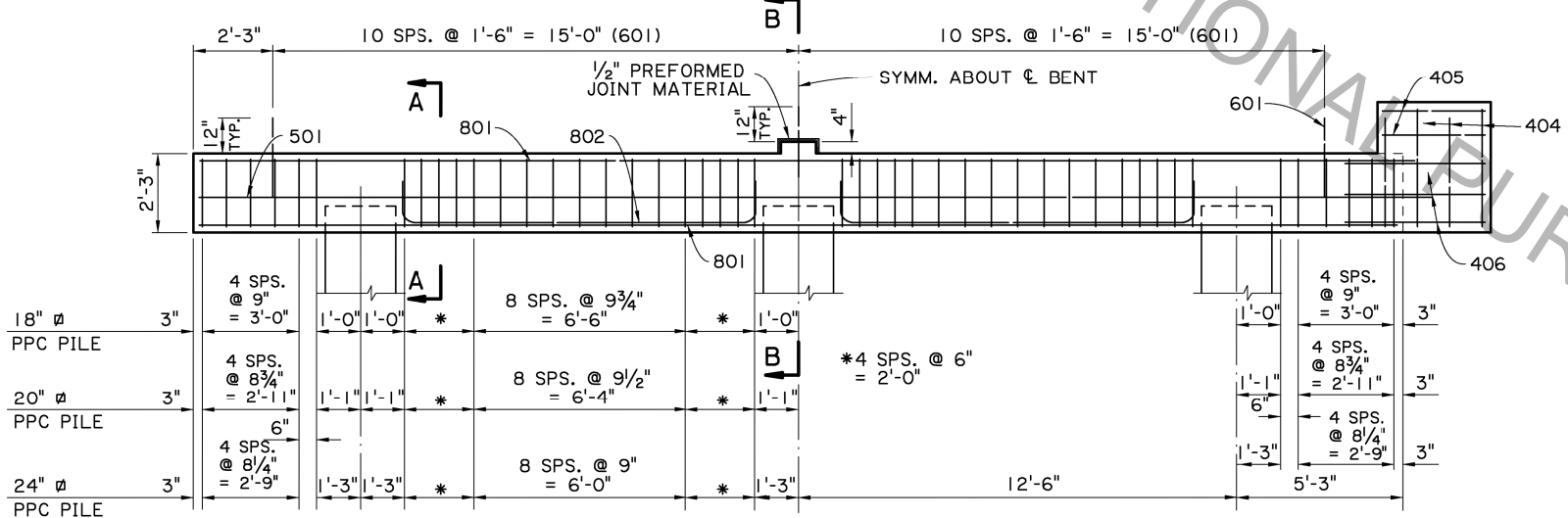
PLAN - INTERMEDIATE BENT

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



PLAN - END BENT

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

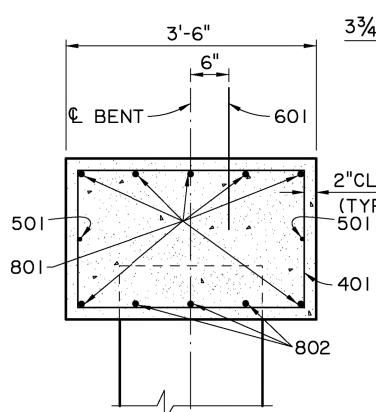


HALF ELEVATION - INTERMEDIATE BENT

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

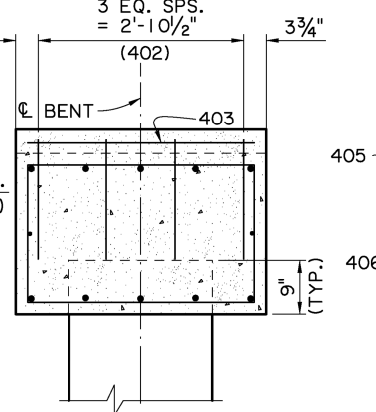
HALF ELEVATION - END BENT

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



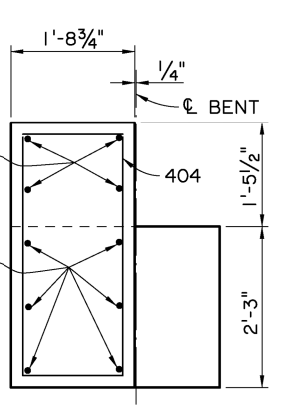
SECTION A-A

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



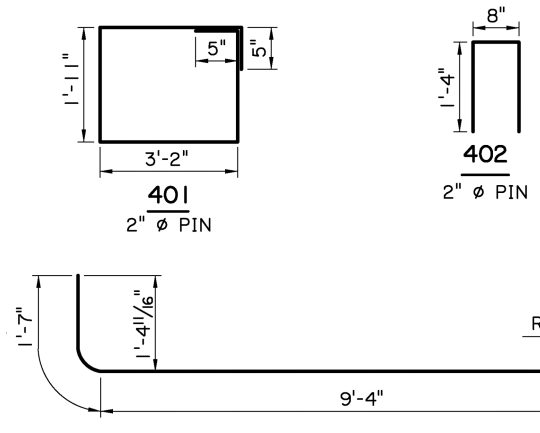
SECTION B-B

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



END ELEVATION

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



401

2" Ø PIN

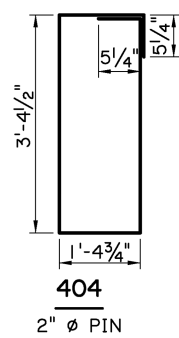
402

2" Ø PIN

802

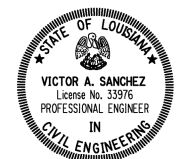
6" Ø PIN

| AS-DESIGNED RATING |               |                            |
|--------------------|---------------|----------------------------|
| VEHICLE            | RATING FACTOR | NOTES                      |
| HL-93 (INV)        | 1.474         | ---                        |
| HL-93 (OPR)        | 1.911         | ---                        |
| LADV-11 (INV)      | 1.134         | MAGNIFICATION FACTOR = 1.3 |



404

2" Ø PIN



Victor A. Sanchez  
05/17/17

| ESTIMATED QUANTITIES (ONE INTER. BENT)              |     |             |              |                          |
|---|-----|-------------|--------------|--------------------------|
| BAR NO.   | NO. | UNIT LENGTH | TOTAL LENGTH | LOCATION                 |
| 801   | 7   | 34'-2"      | 239'-2"      | LONGIT. IN CAP           |
| 802   | 6   | 12'-6"      | 75'-0"       | LONGIT. IN CAP B/W PILES |
| <b>TOTAL NO. 8 BARS = 314'-2" = 839 LBS.</b>        |     |             |              |                          |
| 601   | 21  | 2'-0"       | 42'-0"       | DOWELS                   |
| <b>TOTAL NO. 6 BARS = 42'-0" = 63 LBS.</b>          |     |             |              |                          |
| 501   | 2   | 34'-2"      | 68'-4"       | LONGIT. IN CAP           |
| <b>TOTAL NO. 5 BARS = 68'-4" = 71 LBS.</b>          |     |             |              |                          |
| 401   | 46  | 11'-0"      | 506'-0"      | STIRRUPS IN CAP          |
| 402   | 4   | 3'-4"       | 13'-4"       | STIRRUPS IN RISER        |
| 403   | 2   | 3'-2"       | 6'-4"        | LONGIT. IN RISER         |
| <b>TOTAL NO. 4 BARS = 525'-8" = 351 LBS.</b>        |     |             |              |                          |
| <b>TOTAL DEFORMED REINFORCING STEEL = 1324 LBS.</b> |     |             |              |                          |
| <b>CLASS A1 CONCRETE = 9.77 CU. YDS.</b>            |     |             |              |                          |
| <b>MAX. PILE LOAD: SERVICE DEAD LOAD = 41 TONS</b>  |     |             |              |                          |
| <b>SERVICE LIVE LOAD = 54 TONS</b>                  |     |             |              |                          |
| <b>TOTAL FACTORED LOAD = 132 TONS</b>               |     |             |              |                          |

| ESTIMATED QUANTITIES (ONE END BENT)                 |     |             |              |                          |
|---|-----|-------------|--------------|--------------------------|
| BAR NO.   | NO. | UNIT LENGTH | TOTAL LENGTH | LOCATION                 |
| 801   | 7   | 34'-2"      | 239'-2"      | LONGIT. IN CAP           |
| 802   | 6   | 12'-6"      | 75'-0"       | LONGIT. IN CAP B/W PILES |
| <b>TOTAL NO. 8 BARS = 314'-2" = 839 LBS.</b>        |     |             |              |                          |
| 601   | 21  | 2'-0"       | 46'-0"       | DOWELS                   |
| <b>TOTAL NO. 6 BARS = 42'-0" = 63 LBS.</b>          |     |             |              |                          |
| 501   | 2   | 34'-2"      | 68'-4"       | LONGIT. IN CAP           |
| <b>TOTAL NO. 5 BARS = 68'-4" = 71 LBS.</b>          |     |             |              |                          |
| 401   | 46  | 11'-0"      | 506'-0"      | STIRRUPS IN CAP          |
| 402   | 4   | 3'-4"       | 13'-4"       | STIRRUPS IN RISER        |
| 403   | 2   | 3'-2"       | 6'-4"        | LONGIT. IN RISER         |
| 404   | 8   | 10'-5"      | 83'-4"       | 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 = 679'-8" = 454 LBS.</b>        |     |             |              |                          |
| <b>TOTAL DEFORMED REINFORCING STEEL = 1427 LBS.</b> |     |             |              |                          |
| <b>CLASS A1 CONCRETE = 11.09 CU. YDS.</b>           |     |             |              |                          |
| <b>MAX. PILE LOAD: SERVICE DEAD LOAD = 41 TONS</b>  |     |             |              |                          |
| <b>SERVICE LIVE LOAD = 54 TONS</b>                  |     |             |              |                          |
| <b>TOTAL FACTORED LOAD = 132 TONS</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 805.08.5.3 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 3/8" 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.

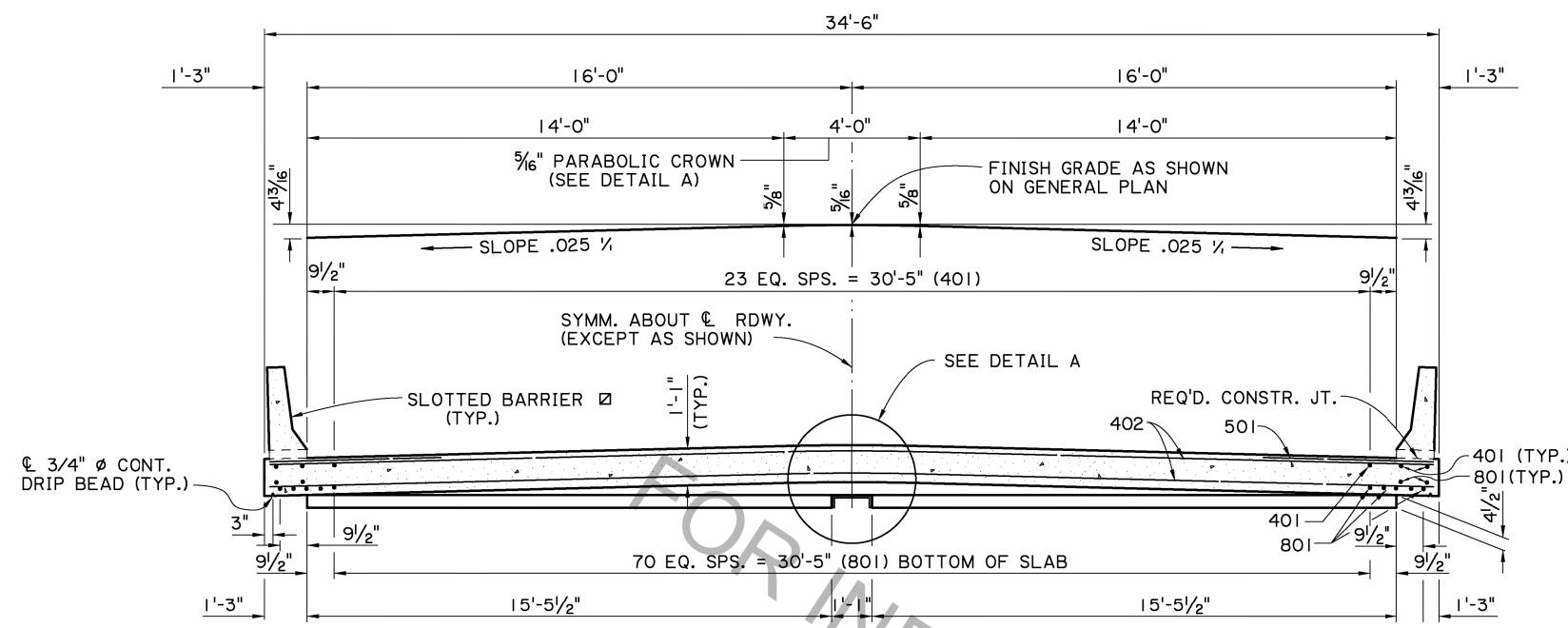
|              |            |                                      |    |
|--------------|------------|--------------------------------------|----|
| SHEET NUMBER | NO.        | DATE                                 | BY |
| DESIGNED     | J. NAKHLEH | PARISH                               |    |
| CHECKED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

REINFORCED CONCRETE PILE BENT  
 32'-0" CLEAR ROADWAY  
 90° CROSSING TWO WAY TANGENT

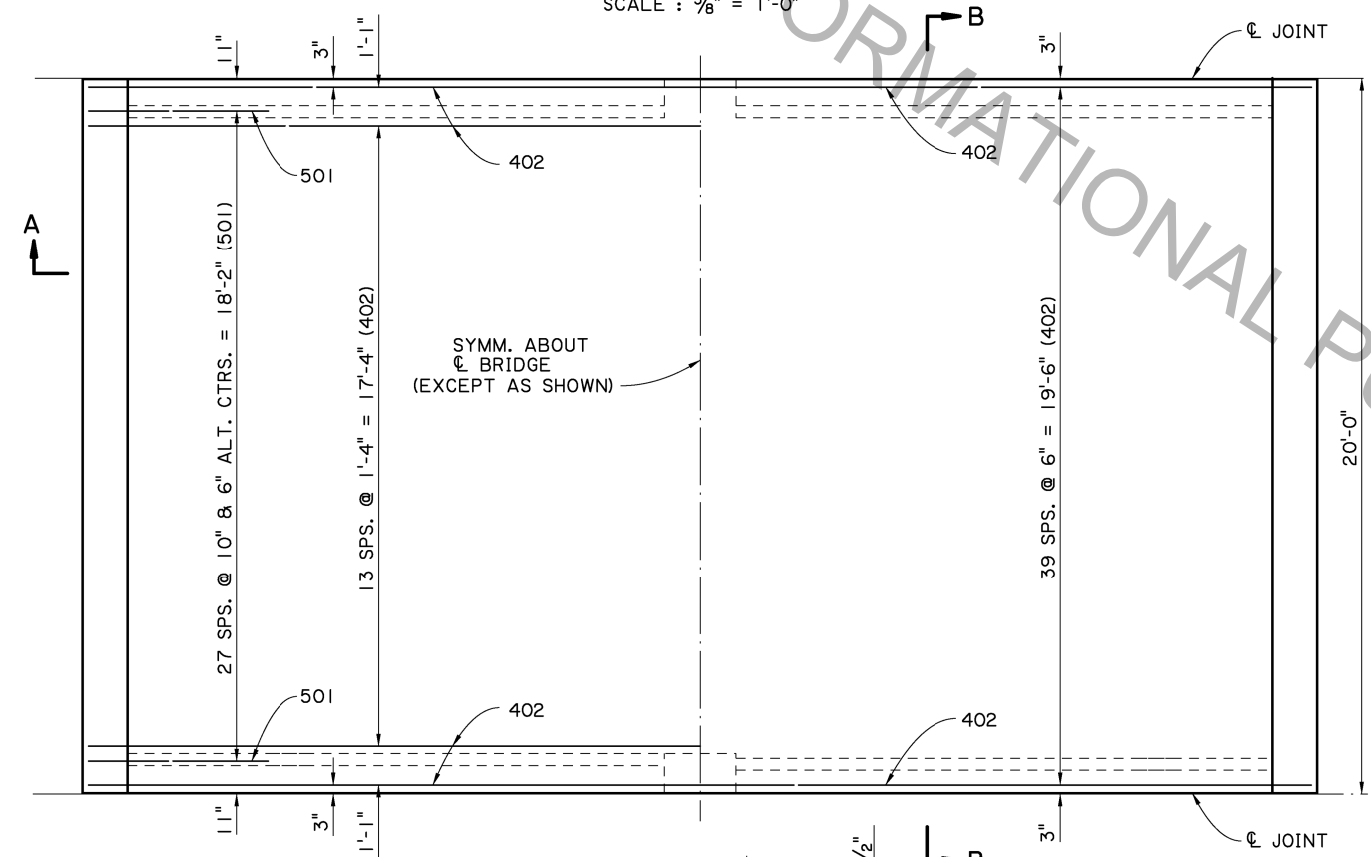
BCSSBR-90-32TW-20SL-24P

DOTD  
 DOT BRIDGE DESIGN



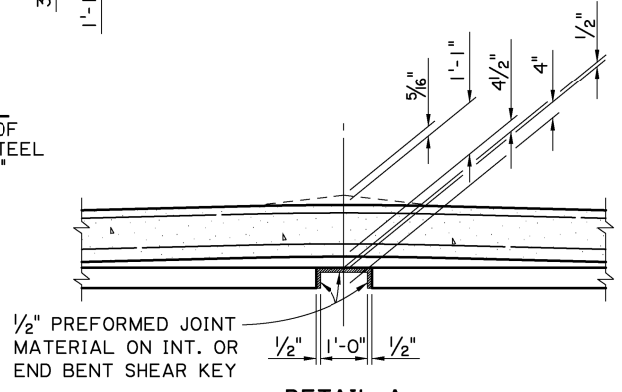


**SECTION A-A**  
SCALE: 3/8" = 1'-0"

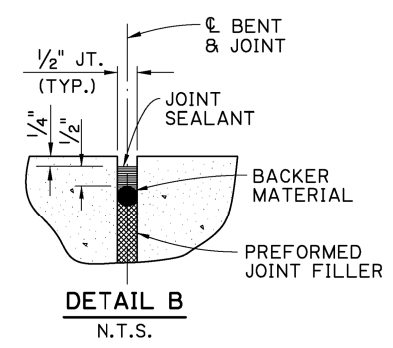


**HALF PLAN**  
SHOWING SPACING OF  
TOP TRANS. REINF. STEEL  
SCALE: 3/8" = 1'-0"

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



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

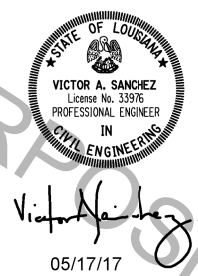


**DETAIL B**  
N.T.S.

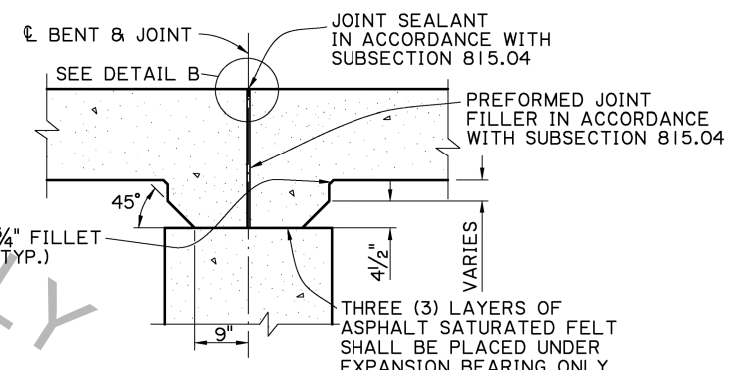
| ESTIMATED QUANTITIES (ONE SPAN)                         |     |             |              |                           |
|---|-----|-------------|--------------|---------------------------|
| BAR   | NO. | UNIT LENGTH | TOTAL LENGTH | LOCATION                  |
| 801   | 83  | 19'-7"      | 1625'-5"     | LONGIT. BOT. OF SLAB      |
| <b>TOTAL NO. 8 BARS = 1625'-5" = 4340 LBS.</b>          |     |             |              |                           |
| 501   | 56  | 5'-0"       | 280'-0"      | TRANS. TOP OF SLAB        |
| <b>TOTAL NO. 5 BARS = 280'-0" = 292 LBS.</b>            |     |             |              |                           |
| 401   | 28  | 19'-7"      | 548'-4"      | LONGIT. TOP OF SLAB       |
| 402   | 56  | 34'-2"      | 1913'-4"     | TRANS. TOP & BOT. OF SLAB |
| <b>TOTAL NO. 4 BARS = 2461'-8" = 1644 LBS.</b>          |     |             |              |                           |
| <b>TOTAL DEFORMED REINFORCING STEEL = 6276 LBS.</b>     |     |             |              |                           |
| <b>CLASS A1 CONCRETE = 28.74 CU. YDS.</b>               |     |             |              |                           |
| <b>CONCRETE RAILING (BARRIER TYPE) = 40.00 LIN. FT.</b> |     |             |              |                           |

**SPAN NOTES:**

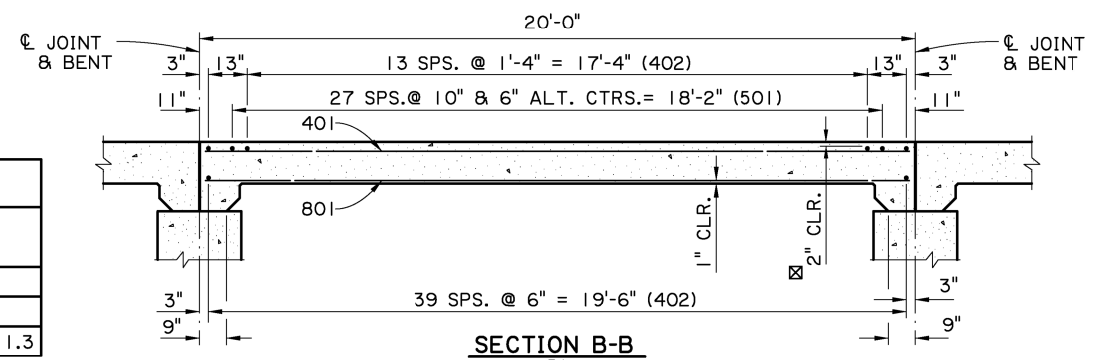
**CONSTRUCTION SPECIFICATIONS:** LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.  
**DESIGN SPECIFICATIONS:** AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION WITH 2008 & 2009 INTERIMS.  
**DESIGN LOAD:** THE BRIDGE DECK 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.2.6.1.14.02 (BR-02).



- ☒ NOTE: STD. BARRIERS ARE REQ'D. ON END SPANS
- ☒ FOR BRIDGES IN DISTRICTS 04 & 05, MINIMUM CONCRETE COVER IN TOP OF SLAB SHALL BE 2 1/2".



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



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

| AS-DESIGNED RATING |               |                            |  |
|--------------------|---------------|----------------------------|--|
| VEHICLE            | RATING FACTOR | NOTES                      |  |
| HL-93 (INV)        | 1.375         |                            |  |
| HL-93 (OPR)        | 1.782         |                            |  |
| LADV-11 (INV)      | 1.057         | MAGNIFICATION FACTOR = 1.3 |  |

|   |                  |                           |                         |
|---|------------------|---------------------------|-------------------------|
| SHEET NUMBER  | PARISH           | CONTROL SECTION           | STATE PROJECT           |
| DESIGNED BY: J. NAKHLEH   | PARISH: J. PAINÉ | CONTROL SECTION: D. HAMEL | STATE PROJECT: 05/17/17 |
| CHECKED BY: J. NAKHLEH  | PARISH: J. PAINÉ | CONTROL SECTION: D. HAMEL | STATE PROJECT: 05/17/17 |
| REVIEWED BY: J. NAKHLEH   | PARISH: J. PAINÉ | CONTROL SECTION: D. HAMEL | STATE PROJECT: 05/17/17 |
| DATE  | NO.              | DATE                      | NO.                     |
| 05/17/17  |                  |                           |                         |
| 20'-0" CONCRETE APPROACH SLAB<br>32'-0" CLEAR ROADWAY<br>90° CROSSING TWO WAY TANGENT |                  |                           |                         |
| STANDARD DETAIL<br>CSSBR-90-32TWT-20SL  |                  |                           |                         |
| DOTD<br>DOT BRIDGE DESIGN   |                  |                           |                         |