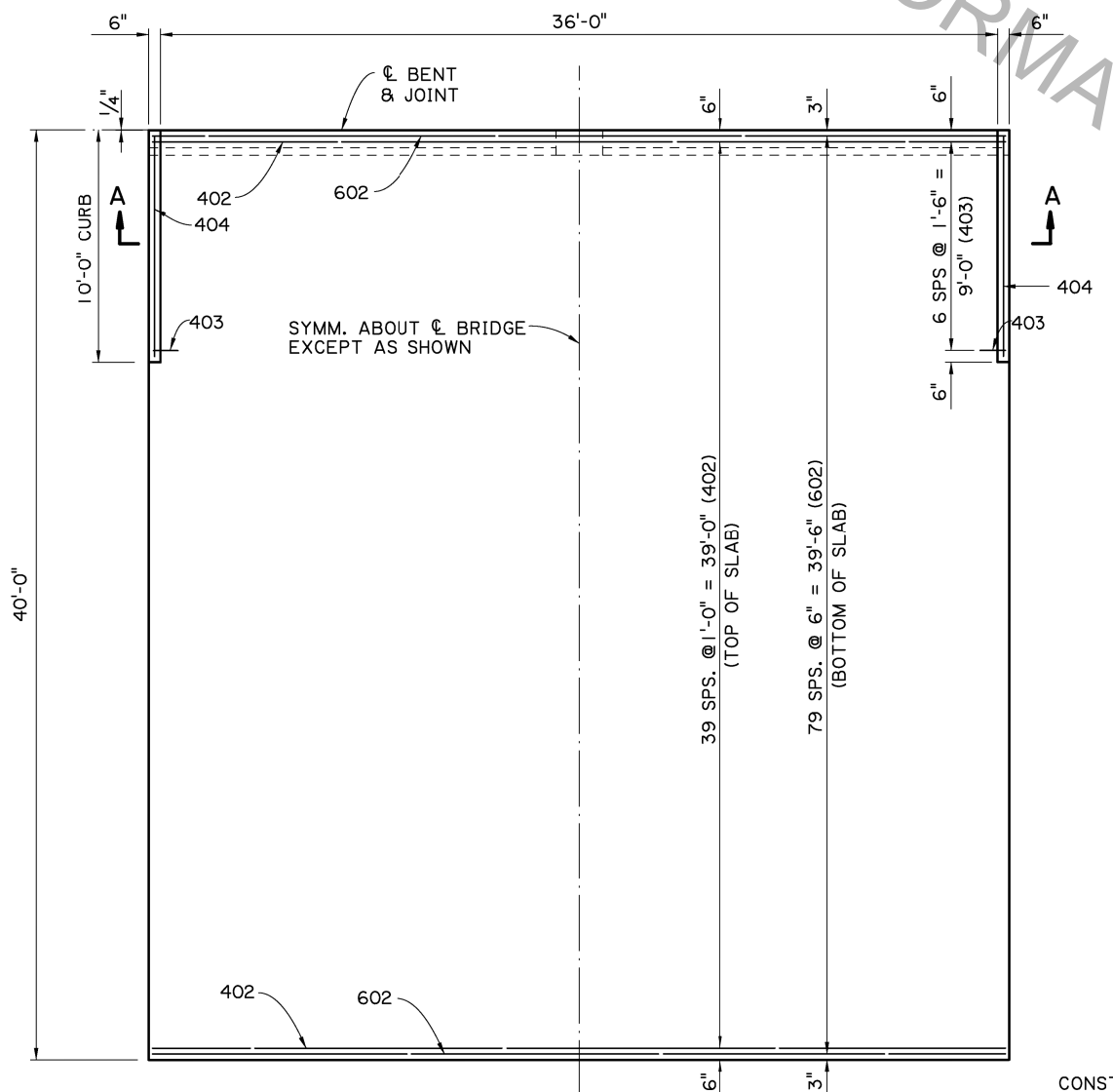
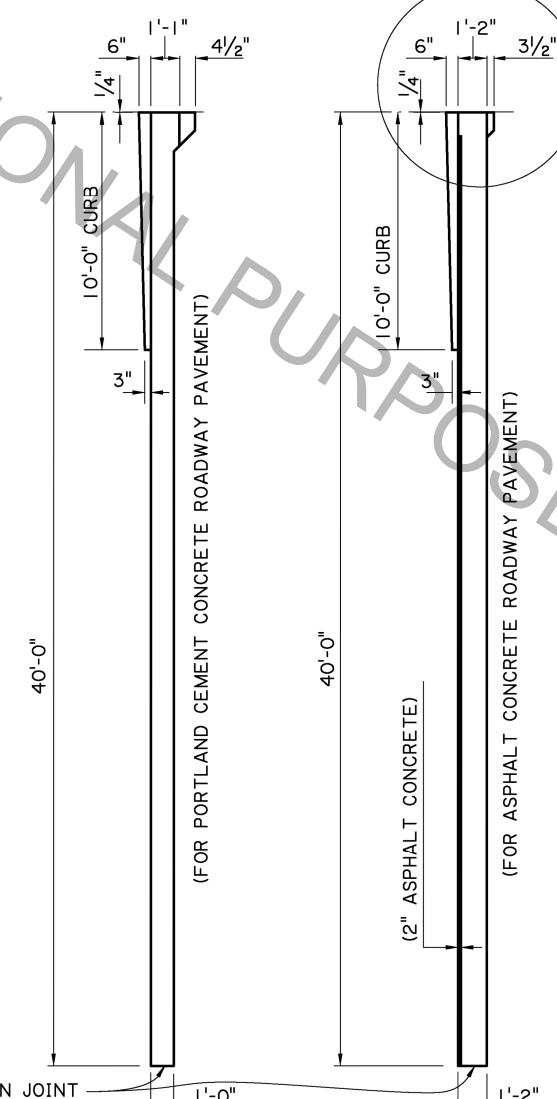


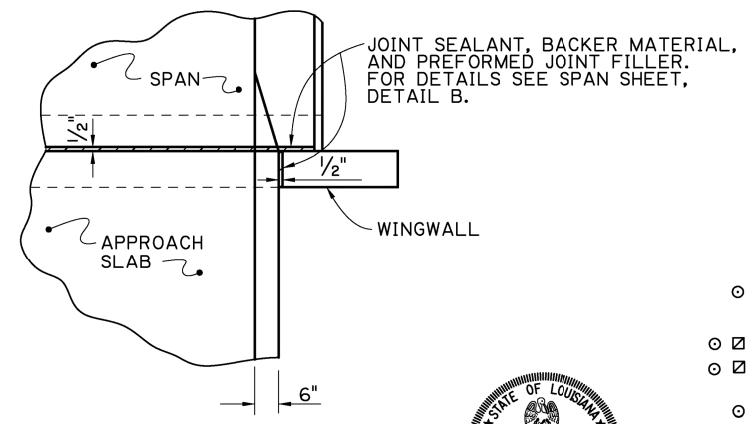
SECTION A-A
SCALE: 1/4" = 1'-0"



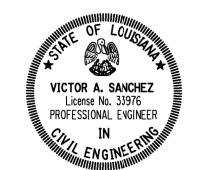
PLAN
SCALE: 1/4" = 1'-0"



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



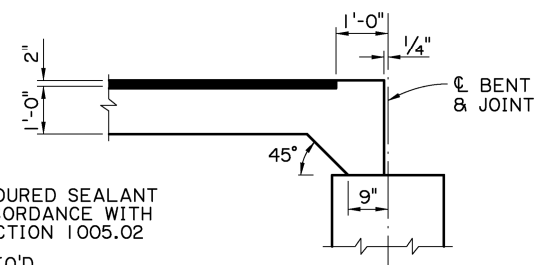
JOINT DETAIL
SCALE: 1/2" = 1'-0"



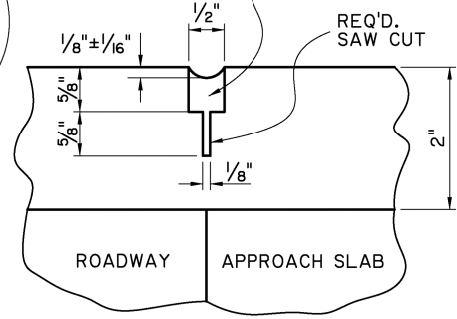
Victor Sanchez
05/17/17

| ESTIMATED QUANTITIES (ONE SLAB) | | | | |
|---|-------------|--------------|----------|----------------------|
| BAR NO. | UNIT LENGTH | TOTAL LENGTH | LOCATION | |
| 601 | 74 | 39'-7" | 2929'-2" | LONGIT. BOT. OF SLAB |
| 602 | 80 | 36'-8" | 2933'-4" | TRANSV. BOT. OF SLAB |
| TOTAL NO. 6 BARS = 5862'-6" = 8805 LBS. | | | | |
| 401 | 37 | 39'-7" | 1464'-7" | LONGIT. TOP OF SLAB |
| 402 | 40 | 36'-8" | 1466'-8" | TRANSV. TOP OF SLAB |
| 403 | 14 | 2'-0" | 28'-0" | DOWELS IN CURB |
| 404 | 2 | 9'-7" | 19'-2" | LONGIT. IN CURB |
| TOTAL NO. 4 BARS = 2978'-5" = 1990 LBS. | | | | |
| TOTAL DEFORMED REINFORCING STEEL = 10,795 LBS. | | | | |
| CONCRETE APPROACH SLAB = 164.44 SQ.YDS. | | | | |
| ASPHALT CONCRETE = 16.7 TONS | | | | |
| SAW CUT & SEAL = 35 LIN. FT. | | | | |

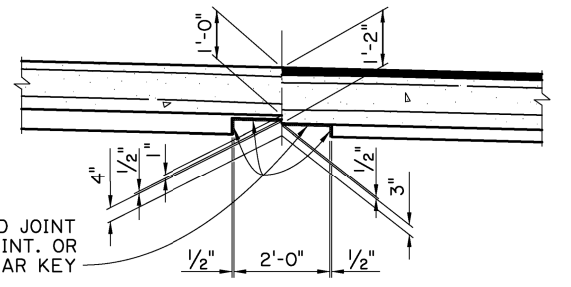
- TO BE PAID FOR UNDER ITEM CONCRETE APPROACH SLABS.
- ☑ REQUIRED WHEN APPROACH SLAB IS ADJACENT TO ASPHALT CONCRETE PAVEMENT.



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



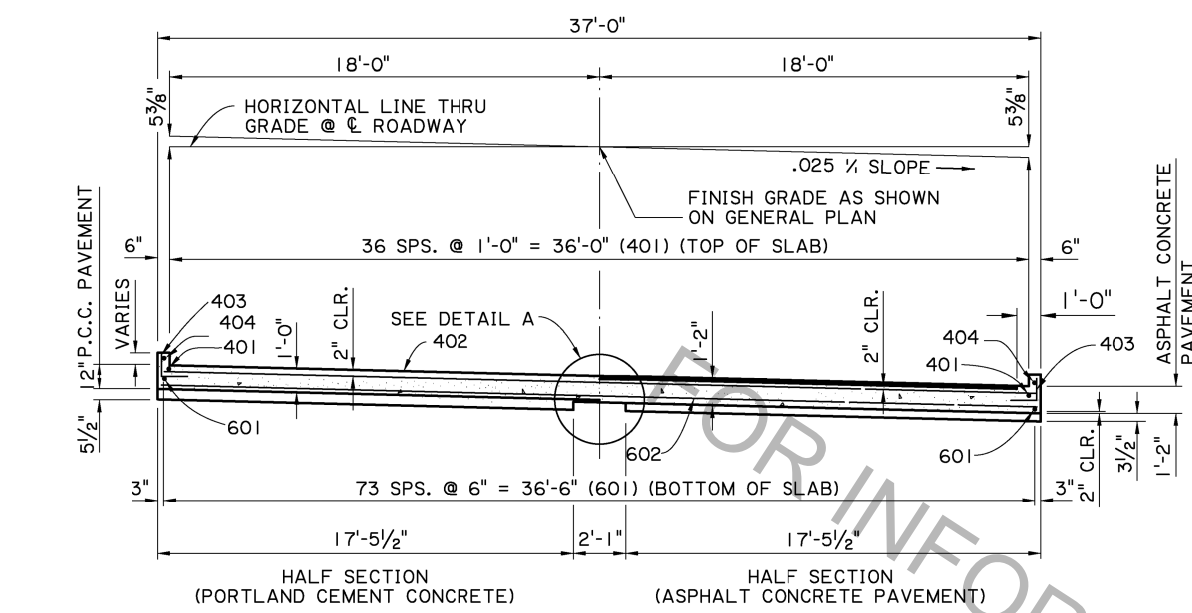
SAWING & SEALING JOINT DETAIL
N.T.S.



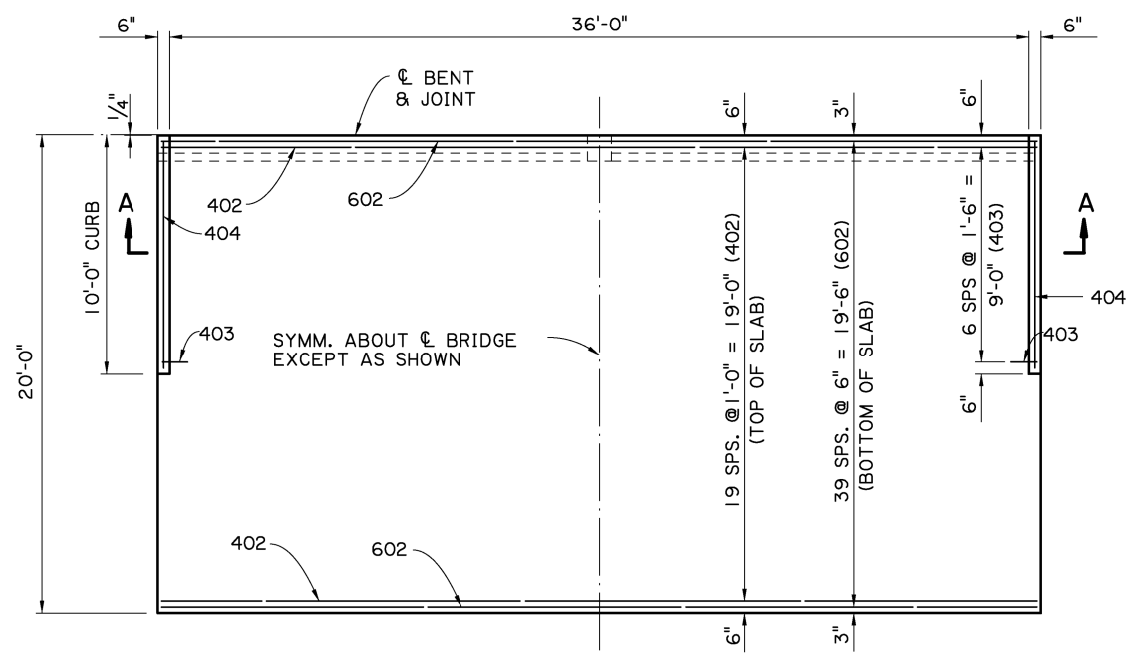
DETAIL "B"
SCALE: 1/2" = 1'-0"

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.

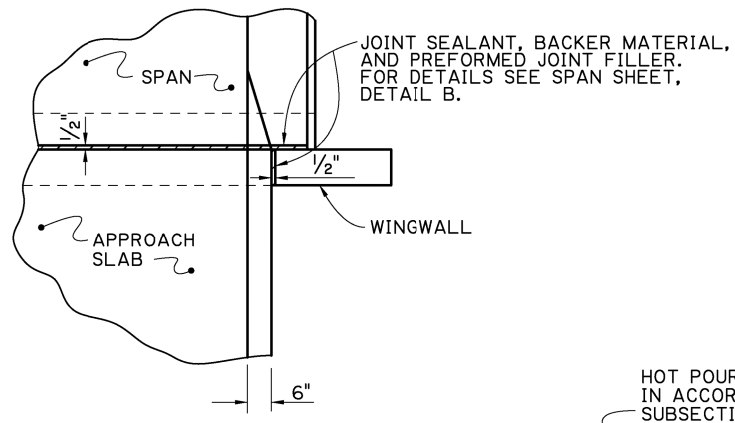
| | | | | |
|---|---------------|------------|------------|----------|
| SHEET NUMBER | PARISH | DESIGNED | CHECKED | DATE |
| | J. NAKHLEH | J. NAKHLEH | J. NAKHLEH | 05/17/17 |
| CONTROL SECTION | STATE PROJECT | Detailed | Checked | Series # |
| | D. HYMEL | J. NAKHLEH | J. NAKHLEH | 05/17/17 |
| REVISION OR CHANGE ORDER DESCRIPTION | NO. | DATE | BY | |
| | | | | |
| STATE OF LOUISIANA | | | | |
| APPROACH SLAB CONCRETE APPROACH SLAB 36'-0" CLEAR ROADWAY 90° CROSSING ONE WAY TANGENT | | | | |
| STANDARD DETAIL CASBR-90-36T-40L-20SL | | | | |
| DOTD DOT BRIDGE DESIGN | | | | |



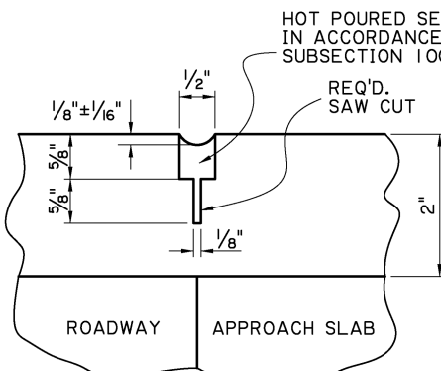
SECTION A-A
SCALE: 1/4" = 1'-0"



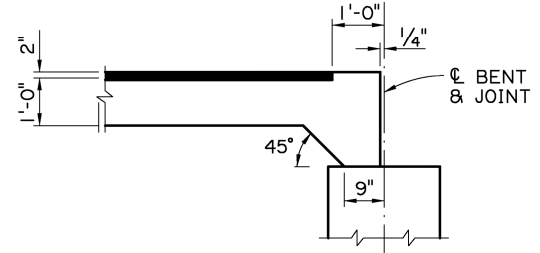
PLAN
SCALE: 1/4" = 1'-0"



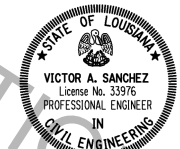
JOINT DETAIL
SCALE: 1/2" = 1'-0"



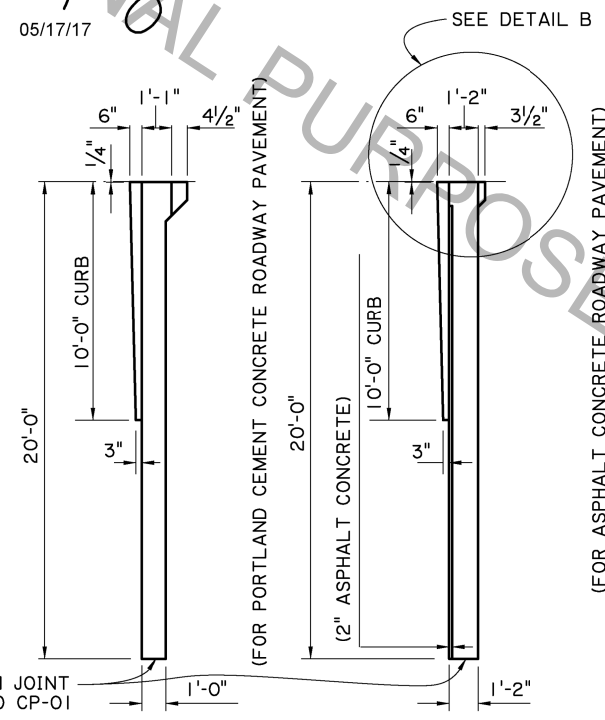
SAWING & SEALING JOINT DETAIL
N.T.S.



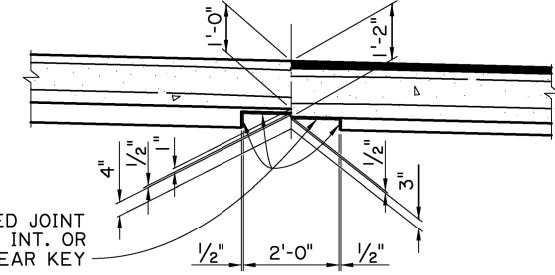
DETAIL B
SCALE: 1/2" = 1'-0"



Victor A. Sanchez
05/17/17



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



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

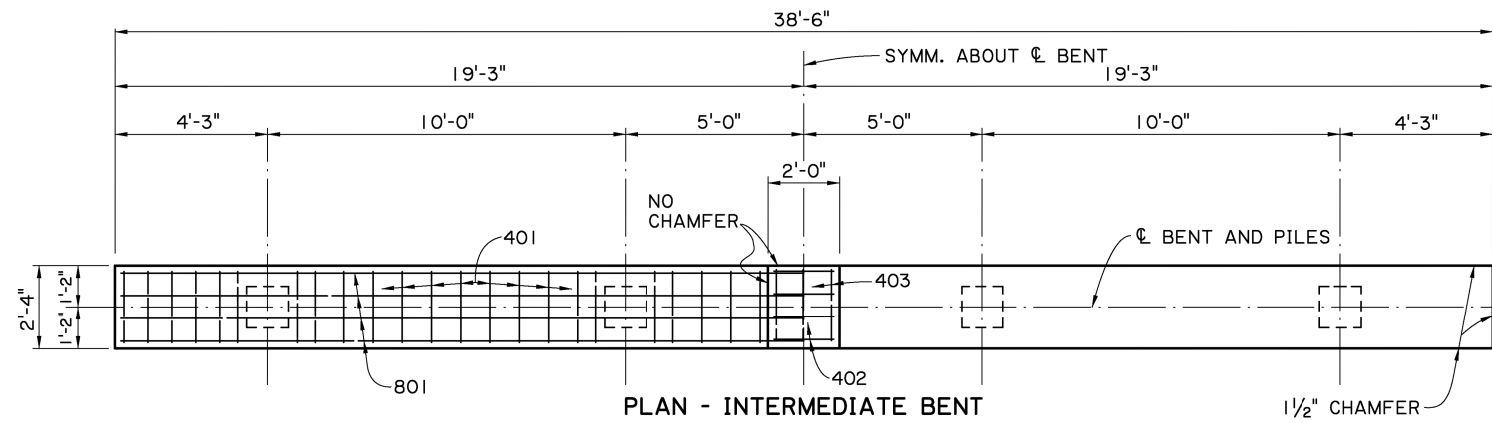
APPROACH SLAB NOTES:

- 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.

| ESTIMATED QUANTITIES (ONE SLAB) | | | | |
|---|-------------|--------------|----------|----------------------|
| BAR NO. | UNIT LENGTH | TOTAL LENGTH | LOCATION | |
| 601 | 74 | 19'-7" | 1449'-2" | LONGIT. BOT. OF SLAB |
| 602 | 40 | 36'-8" | 1466'-8" | TRANSV. BOT. OF SLAB |
| TOTAL NO. 6 BARS = 2915'-10" = 4380 LBS. | | | | |
| 401 | 37 | 19'-7" | 724'-7" | LONGIT. TOP OF SLAB |
| 402 | 20 | 36'-8" | 733'-4" | TRANSV. TOP OF SLAB |
| 403 | 14 | 2'-0" | 28'-0" | DOWELS IN CURB |
| 404 | 2 | 9'-7" | 19'-2" | LONGIT. IN CURB |
| TOTAL NO. 4 BARS = 1505'-1" = 1005 LBS. | | | | |
| TOTAL DEFORMED REINFORCING STEEL = 5385 LBS. | | | | |
| CONCRETE APPROACH SLAB = 82.22 SQ.YDS. | | | | |
| ASPHALT CONCRETE = 8.1 TONS | | | | |
| SAW CUT & SEAL = 35 LIN. FT. | | | | |

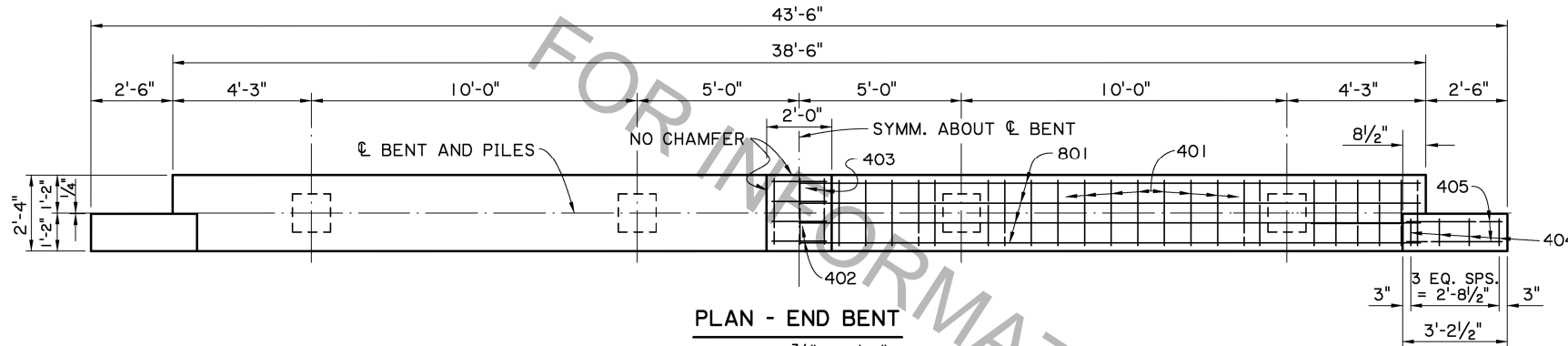
- TO BE PAID FOR UNDER ITEM CONCRETE APPROACH SLABS.
- REQUIRED WHEN APPROACH SLAB IS ADJACENT TO ASPHALT CONCRETE PAVEMENT.

| | | | |
|---|------------|------------|------|
| SHEET NUMBER | PARISH | DESIGNED | DATE |
| | J. NAKHLEH | 05/17/17 | |
| CONTROL SECTION | CHECKED | REVIEWED | BY |
| | D. HYMEL | J. NAKHLEH | |
| STATE PROJECT | NO. | DATE | NO. |
| | | | |
| | | | |
| APPROACH SLAB 20'-0" CONCRETE APPROACH SLAB 36'-0" CLEAR ROADWAY 90° CROSSING ONE WAY TANGENT | | | |
| STANDARD DETAIL CASBR-90-36T-20L-20SL | | | |
| | | | |



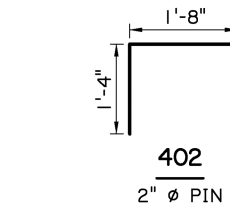
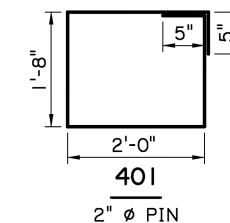
PLAN - INTERMEDIATE BENT

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



PLAN - END BENT

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



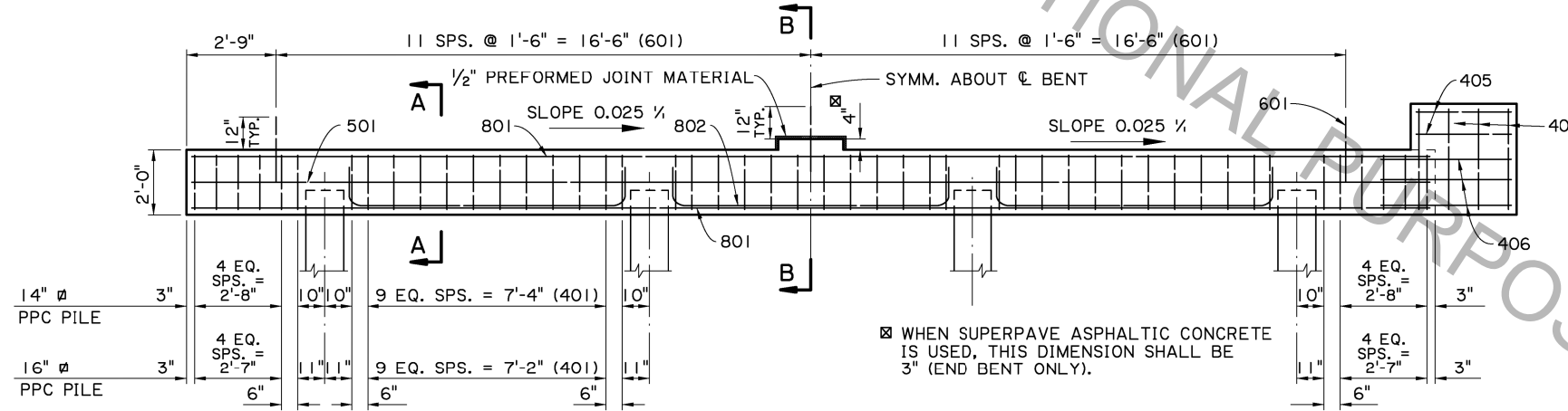
Victor Sanchez
05/17/17

| ESTIMATED QUANTITIES (ONE INTER. BENT) | | | | |
|---|-------------|--------------|-------------------|--|
| BAR NO. | UNIT LENGTH | TOTAL LENGTH | LOCATION | |
| 801 | 7 | 38'-2" | LONGIT. IN CAP | |
| 802 | 9 | 10'-10" | LONGIT. IN CAP | |
| TOTAL NO. 8 BARS = 364'-8" = 974 LBS. | | | | |
| 601 | 23 | 2'-0" | DOWELS | |
| TOTAL NO. 6 BARS = 46'-0" = 69 LBS. | | | | |
| 501 | 2 | 38'-2" | LONGIT. IN CAP | |
| TOTAL NO. 5 BARS = 76'-4" = 80 LBS. | | | | |
| 401 | 48 | 8'-2" | STIRRUPS IN CAP | |
| 402 | 4 | 4'-4" | STIRRUPS IN RISER | |
| 403 | 4 | 2'-0" | LONGIT. IN RISER | |
| TOTAL NO. 4 BARS = 417'-4" = 279 LBS. | | | | |
| TOTAL DEFORMED REINFORCING STEEL = 1402 LBS. | | | | |
| CLASS A1 CONCRETE = 6.52 CU. YDS. | | | | |
| MAX. PILE LOAD: SERVICE DEAD LOAD = 27 TONS | | | | |
| SERVICE LIVE LOAD = 41 TONS | | | | |
| FACTORED TOTAL LOAD = 94 TONS | | | | |

* ADD 69 LBS. OF REINFORCING STEEL (23-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.

| ESTIMATED QUANTITIES (ONE END BENT) | | | | |
|---|-------------|--------------|----------------------|--|
| BAR NO. | UNIT LENGTH | TOTAL LENGTH | LOCATION | |
| 801 | 7 | 38'-2" | LONGIT. IN CAP | |
| 802 | 9 | 10'-10" | LONGIT. IN CAP | |
| TOTAL NO. 8 BARS = 364'-8" = 974 LBS. | | | | |
| 601 | 23 | 2'-0" | DOWELS | |
| TOTAL NO. 6 BARS = 46'-0" = 69 LBS. | | | | |
| 501 | 2 | 38'-2" | LONGIT. IN CAP | |
| TOTAL NO. 5 BARS = 76'-4" = 80 LBS. | | | | |
| 401 | 48 | 8'-2" | STIRRUPS IN CAP | |
| 402 | 4 | 4'-4" | STIRRUPS IN RISER | |
| 403 | 4 | 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 | |
| TOTAL NO. 4 BARS = 558'-0" = 373 LBS. | | | | |
| TOTAL DEFORMED REINFORCING STEEL = 1496 LBS. | | | | |
| CLASS A1 CONCRETE = 7.34 CU. YDS. | | | | |
| MAX. PILE LOAD: SERVICE DEAD LOAD = 27 TONS | | | | |
| SERVICE LIVE LOAD = 41 TONS | | | | |
| FACTORED TOTAL LOAD = 94 TONS | | | | |

⊕ 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.)

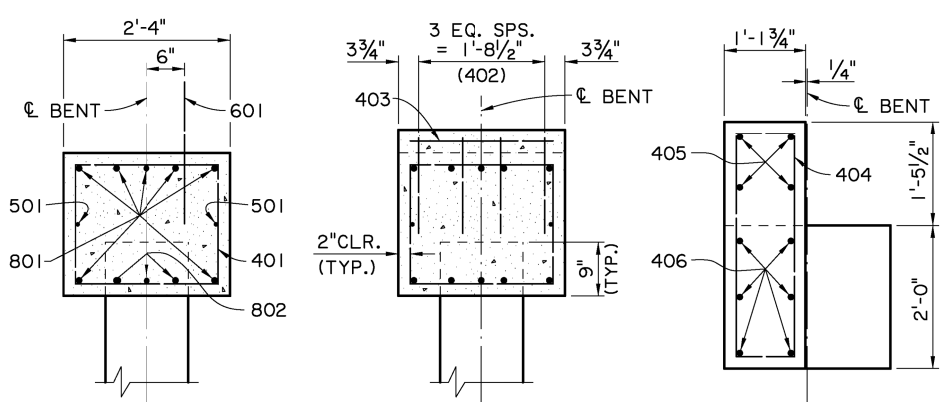


HALF ELEVATION - INTERMEDIATE BENT

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) | 1.536 | |
| HL-93 (OPR) | 1.991 | |
| LADV-11 (INV) | 1.182 | MAGNIFICATION FACTOR = 1.3 |

802

6" # PIN

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 3/8" 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: _____

DESIGNED BY: J. NAKHLEH
 CHECKED BY: D. HYMEL
 PARISH: _____
 CONTROL SECTION: _____
 STATE PROJECT: _____
 REVIEWED BY: J. NAKHLEH
 DATE: 05/17/17
 SERIES #: _____

NO. _____

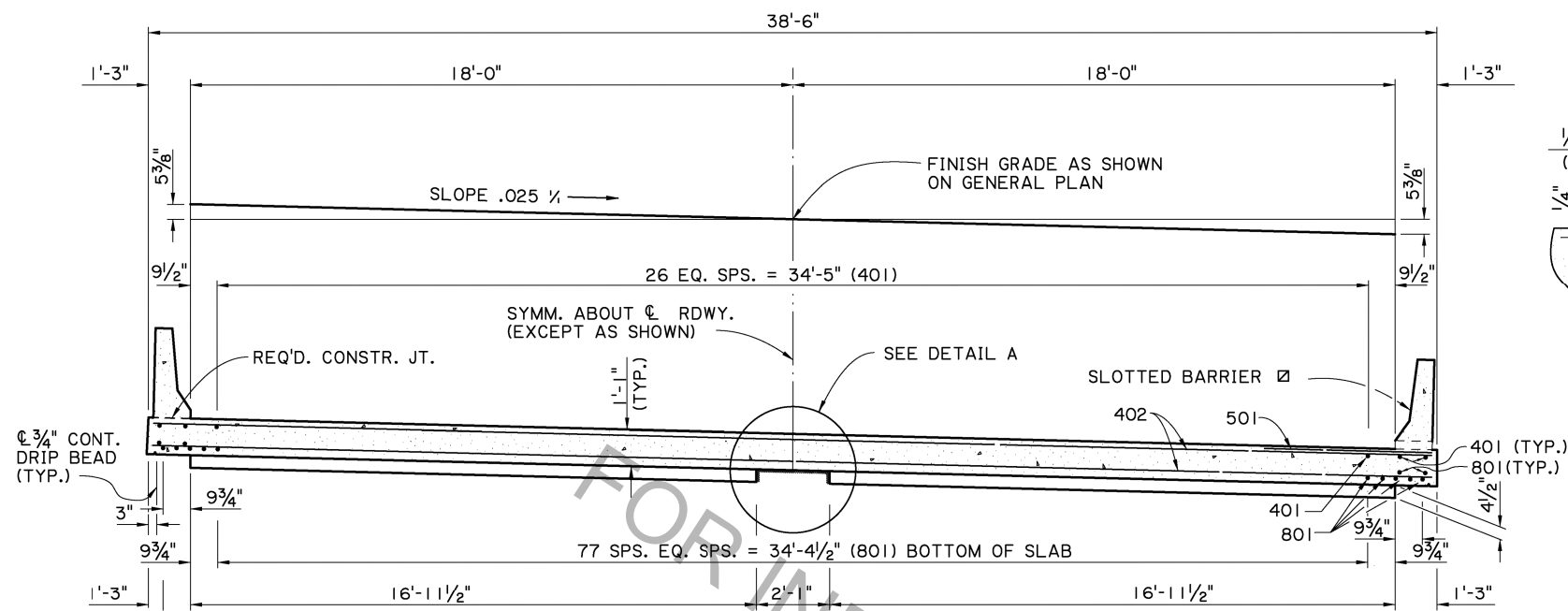
DATE _____

REVISION OR CHANGE ORDER DESCRIPTION _____

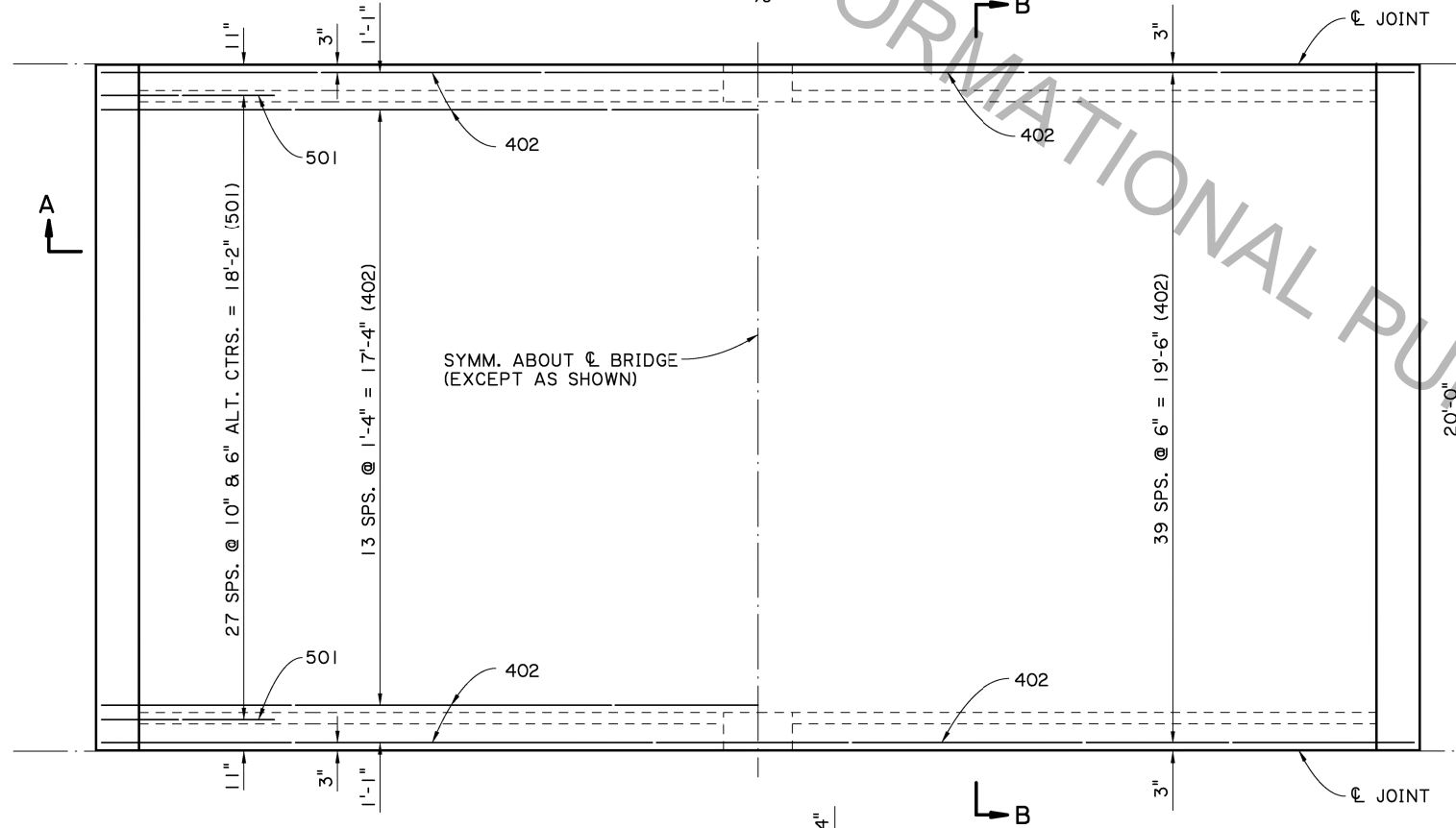
BY _____

DOTD
 STANDARD
 DOTD BRIDGE DESIGN

REINFORCED CONCRETE PILE BENT
 36'-0" CLEAR ROADWAY
 90° CROSSING ONE WAY TANGENT
 BCSSBR-90-36T-20SL

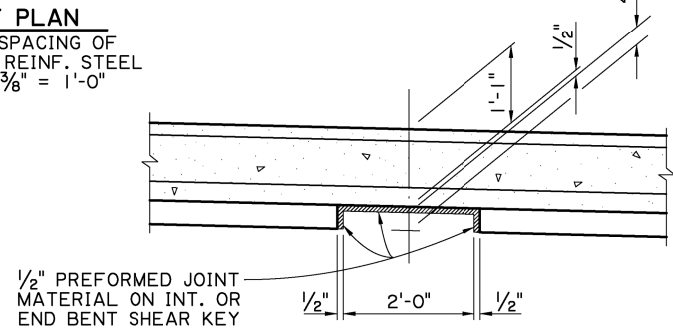


SECTION A-A
SCALE: 3/8" = 1'-0"

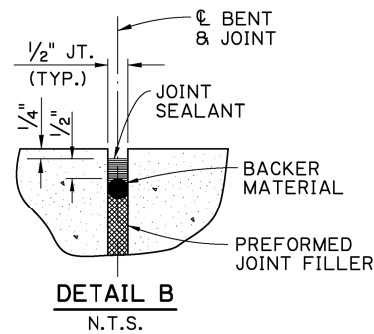


HALF PLAN
SHOWING SPACING OF
TOP TRANS. REINF. STEEL
SCALE: 3/8" = 1'-0"

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



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



DETAIL B
N.T.S.

| ESTIMATED QUANTITIES (ONE SPAN) | | | | |
|---|-------------|--------------|---------------------------|--|
| BAR NO. | UNIT LENGTH | TOTAL LENGTH | LOCATION | |
| 801 | 89 | 1742'-11" | LONGIT. BOT. OF SLAB | |
| TOTAL NO. 8 BARS = 1742'-11" = 4654 LBS. | | | | |
| 501 | 56 | 280'-0" | TRANS. TOP OF SLAB | |
| TOTAL NO. 5 BARS = 280'-0" = 292 LBS. | | | | |
| 401 | 31 | 607'-1" | LONGIT. TOP OF SLAB | |
| 402 | 56 | 2137'-4" | TRANS. TOP & BOT. OF SLAB | |
| TOTAL NO. 4 BARS = 2744'-5" = 1833 LBS. | | | | |
| TOTAL DEFORMED REINFORCING STEEL = 6779 LBS. | | | | |
| CLASS A1 CONCRETE = 32.96 CU. YDS. | | | | |
| CONCRETE RAILING (BARRIER TYPE) = 40.00 LIN. FT. | | | | |

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.

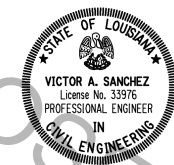
DESIGN LOAD: THE BRIDGE DECK IS DESIGNED FOR A FUTURE WEARING COURSE OF 19 PSF. THE LIVE LOAD IS HL-93, AND LADV-11 (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).

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.

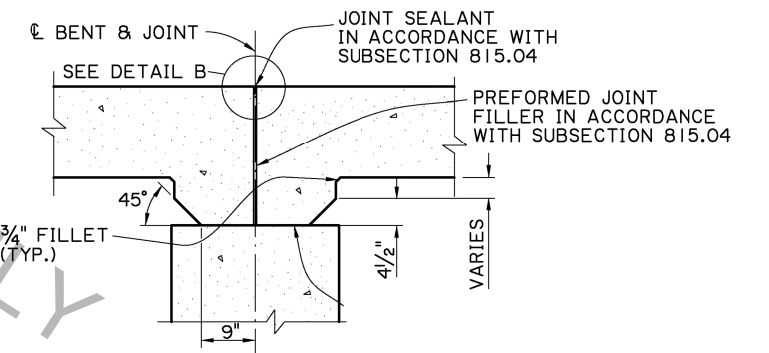
REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS UNLESS OTHERWISE NOTED. ALL REINFORCING BARS SHALL BE PLACED TO PROVIDE A MINIMUM COVER OF ONE INCH FROM THE SURFACE OF THE DRAIN HOLES 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).

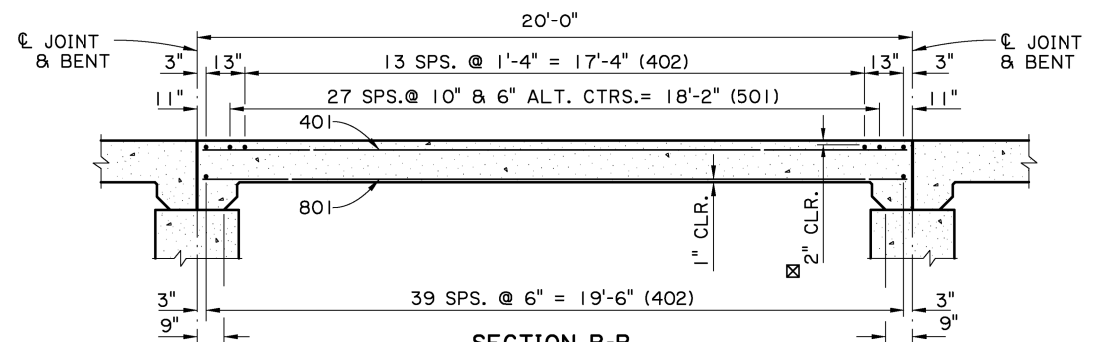


Victor Sanchez
05/17/17



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

- ☒ NOTE: NORMAL 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".



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

| AS-DESIGNED RATING | | |
|--------------------|---------------|----------------------------|
| VEHICLE | RATING FACTOR | NOTES |
| HL-93 (INV) | 1.372 | |
| HL-93 (OPR) | 1.778 | |
| LADV-11 (INV) | 1.055 | MAGNIFICATION FACTOR = 1.3 |

SHEET NUMBER: _____

DESIGNED: J. NAKHLEH
CHECKED: J. PAINE
PARISH: _____

DATE: _____

REVISION OR CHANGE ORDER DESCRIPTION: _____

NO. _____

BY: _____

STATE PROJECT: _____

CONTROL SECTION: _____

CHECKED: J. NAKHLEH
REVIEWED: OS/17/17
SERIES #: _____

STANDARD DETAIL: _____

CSBR-90-36T-20SL

SPAN: 20'-0" CONCRETE SLAB SPAN
36'-0" CLEAR ROADWAY
90° CROSSING ONE WAY TANGENT

DOTD
DOTD BRIDGE DESIGN