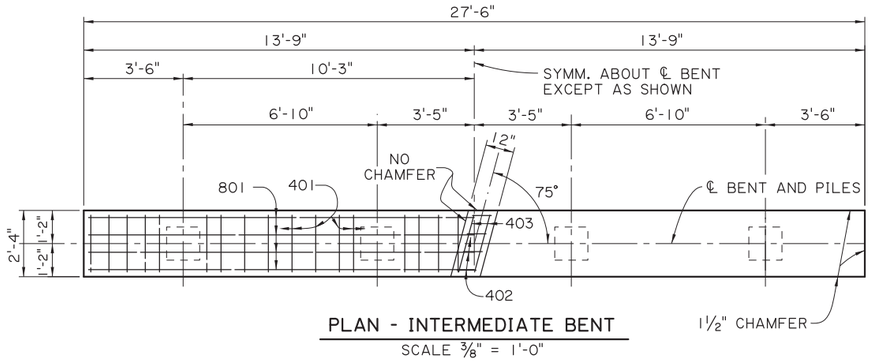
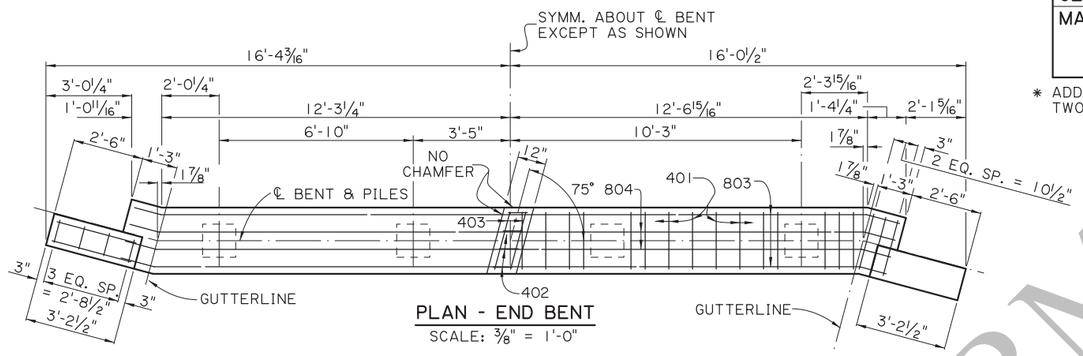


PLAN - INTERMEDIATE BENT

SCALE ⅜" = 1'-0"



PLAN - END BENT

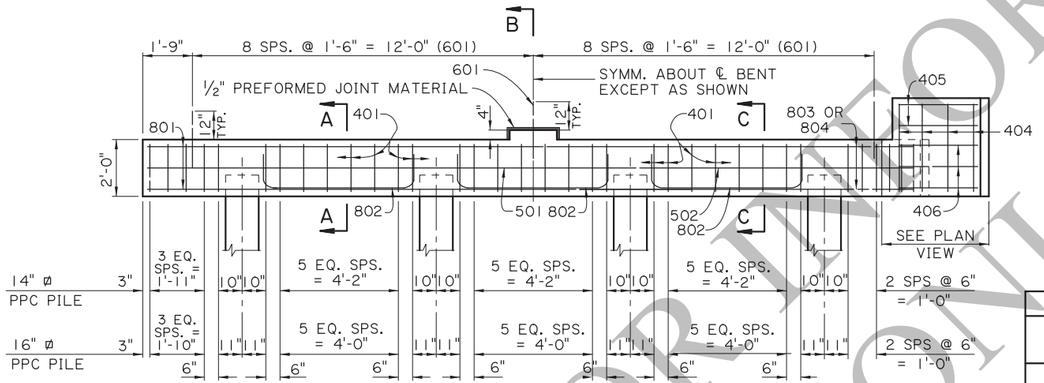
SCALE: ⅜" = 1'-0"

ESTIMATED QUANTITIES (ONE INTER. BENT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	6	27'-2"	163'-0"	LONGIT. IN CAP
802	6	7'-8"	46'-0"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 209'-0" = 558 LBS.				
601	17	2'-0"	34'-0"	DOWELS
TOTAL NO. 6 BARS = 34'-0" = 51 LBS.				
501	2	27'-2"	54'-4"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 54'-4" = 57 LBS.				
401	34	8'-2"	277'-8"	STIRRUPS IN CAP
402	4	3'-4"	13'-4"	STIRRUPS IN RISER
403	2	2'-1"	4'-2"	LONGIT. IN RISER
TOTAL NO. 4 BARS = 295'-2" = 197 LBS.				
* TOTAL DEFORMED REINFORCING STEEL = 863 LBS.				
⊖ CLASS A1 CONCRETE = 4.59 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 18 TONS SERVICE LIVE LOAD = 30 TONS FACTORED TOTAL LOAD = 67 TONS				

* ADD 51 LBS. OF REINFORCING STEEL (17-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.

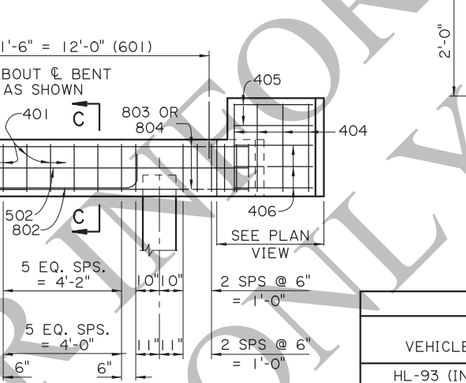
ESTIMATED QUANTITIES (ONE END BENT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
802	6	7'-8"	46'-0"	LONGIT. IN CAP
803	4	26'-11"	107'-8"	LONGIT. IN CAP
804	2	26'-11"	53'-10"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 207'-6" = 554 LBS.				
601	17	2'-0"	34'-0"	DOWELS
TOTAL NO. 6 BARS = 34'-0" = 51 LBS.				
502	2	26'-11"	53'-10"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 53'-10" = 56 LBS.				
401	36	8'-2"	294'-0"	STIRRUPS IN CAP
402	4	3'-4"	13'-4"	STIRRUPS IN RISER
403	2	2'-1"	4'-2"	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 = 452'-2" = 302 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 963 LBS.				
⊖ CLASS A1 CONCRETE = 5.38 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 18 TONS SERVICE LIVE LOAD = 30 TONS FACTORED TOTAL LOAD = 67 TONS				

⊖ 16" ø PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.04 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14" ø PPC PILES ARE USED.)



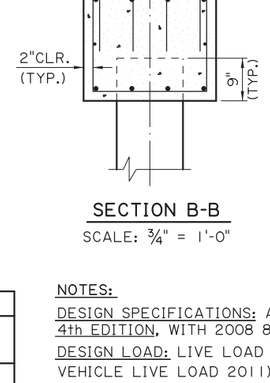
HALF ELEVATION - INTERMEDIATE BENT

SCALE ⅜" = 1'-0"



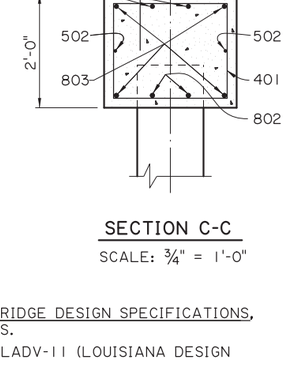
SECTION A-A

SCALE: ¾" = 1'-0"



SECTION B-B

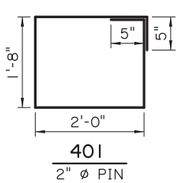
SCALE: ¾" = 1'-0"



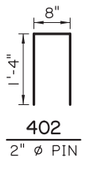
SECTION C-C

SCALE: ¾" = 1'-0"

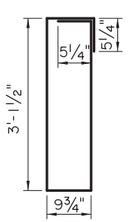
AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.365	——
HL-93 (OPR)	1.770	——
LADV-11 (INV)	1.050	MAGNIFICATION FACTOR = 1.3



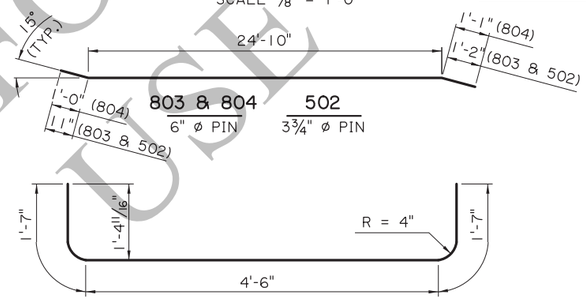
401
2" ø PIN



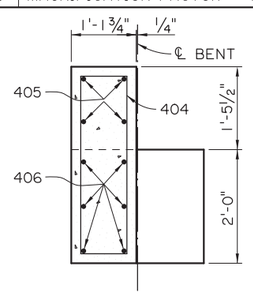
402
2" ø PIN



404
2" ø PIN



802
6" ø PIN



END ELEVATION

SCALE ¾" = 1'-0"

NOTES:

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 ¾" CHAMFER UNLESS SPECIFIED OTHERWISE. ALL EXPOSED FACES OF WINGWALLS AND ENDS OF CAPS SHALL RECEIVE A SURFACE FINISH AS PER THE SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.

REINFORCING STEEL: ALL REINFORCING SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE. DOWELS (601 BARS) SHALL BE PROVIDED AT ALL FIXED BEARINGS AND APPROACH SLAB BEARINGS. 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: CONFORM TO PILE STANDARD PLAN AND PROJECT PLANS FOR FABRICATION AND INSTALLATION. PILES WILL BE PAID FOR UNDER THE DESIGNATED PILE PAY ITEMS.

PREFORMED JOINT MATERIAL: PREFORMED JOINT MATERIAL SHALL BE IN ACCORDANCE WITH SPECIFICATIONS.

PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	B. DELATTE	J. NAKHLEH
CHECK		
DETAIL	D. HYMEL	J. NAKHLEH
CHECK		
REVIEW	SERIES # 1 OF 11	

APPROVED BY CHIEF ENGINEER: DATE: 12/10/2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

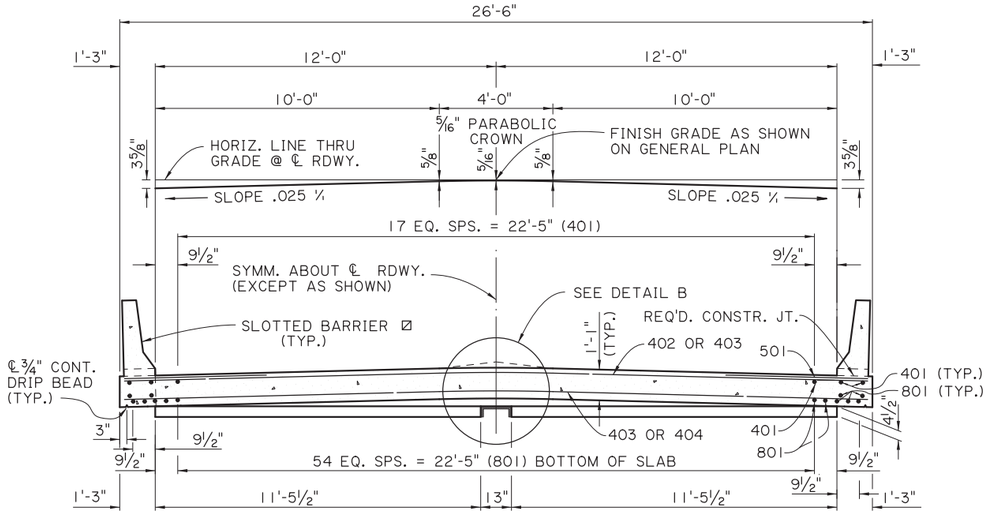
BENTS REINFORCED CONCRETE PILE BENTS

24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

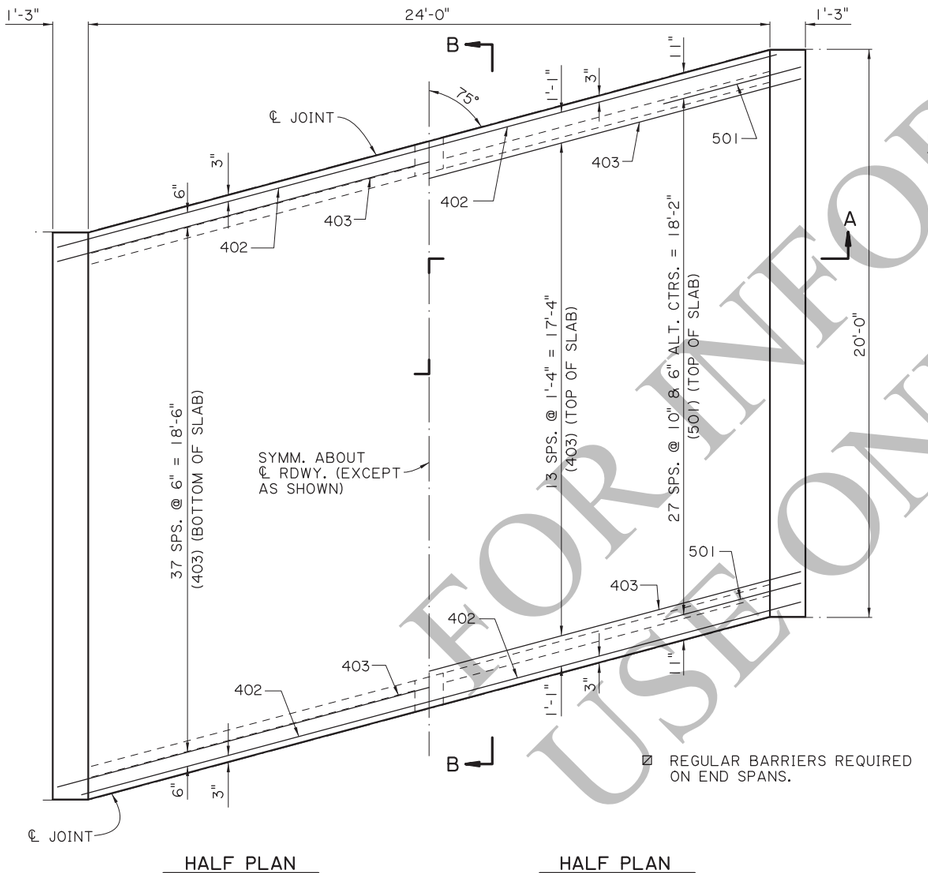
PSS-75-24-20SL

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN



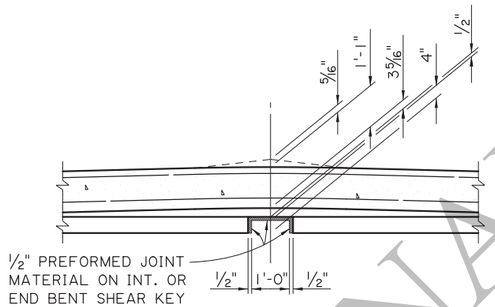
SECTION A-A
SCALE : ⅜" = 1'-0"



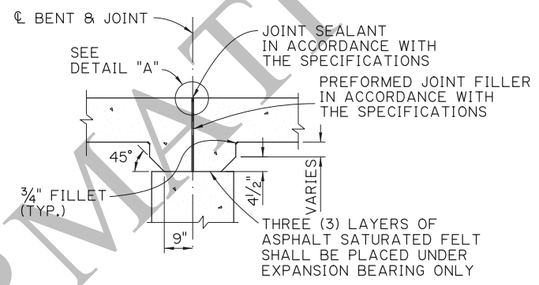
HALF PLAN
SHOWING SPACING OF BOTTOM TRANS. REINF. STEEL
SCALE : ⅜" = 1'-0"

HALF PLAN
SHOWING SPACING OF TOP TRANS. REINF. STEEL
SCALE : ⅜" = 1'-0"

⊠ REGULAR BARRIERS REQUIRED ON END SPANS.

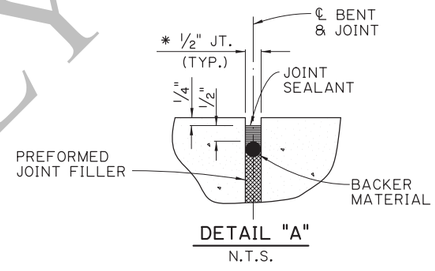


DETAIL B
SCALE : ½" = 1'-0"



DETAIL SHOWING TYPICAL JOINT & HAUNCH
SCALE : ½" = 1'-0"

* MEASURED PARALLEL TO ℄ ROADWAY



DETAIL "A"
N.T.S.

ESTIMATED QUANTITIES (ONE SPAN)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	67	19'-7"	1312'-1"	LONGIT. BOT. OF SLAB
TOTAL NO. 8 BARS = 1312'-1" = 3503 LBS.				
501	56	5'-0"	280'-0"	TRANS. TOP OF SLAB
TOTAL NO. 5 BARS = 280'-0" = 292 LBS.				
401	22	19'-7"	430'-10"	LONGIT. TOP OF SLAB
402	4	26'-2"	104'-8"	TRANS. TOP & BOT. OF SLAB
403	52	27'-1"	1408'-4"	TRANS. TOP & BOT. OF SLAB
TOTAL NO. 4 BARS = 1943'-10" = 1298 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 5120 LBS.				
CLASS A1 CONCRETE = 22.08 CU. YDS.				
CONCRETE RAILING (BARRIER TYPE) = 40.00 LIN. FT.				

SPAN NOTES:

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).

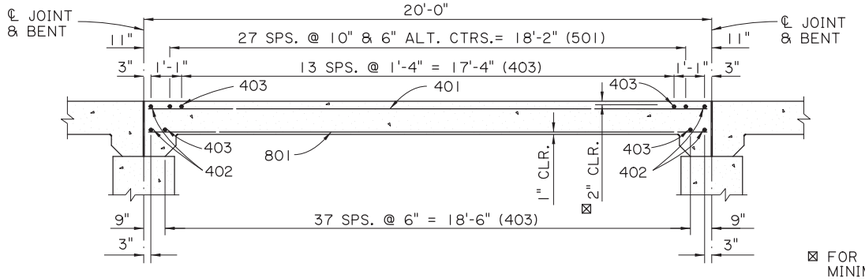
STRUCTURAL CONCRETE:
ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A ¾" CHAMFER UNLESS SPECIFIED OTHERWISE. ALL BARRIER RAIL SURFACES ARE TO RECEIVE A CLASS 3 SPECIAL FINISH.

REINFORCING STEEL:
ALL REINFORCING SHALL BE GRADE 60; DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. 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.

GUARD RAIL:
CONFORM TO PROJECT PLANS AND GUARD RAIL STANDARD PLANS.

PAYMENT:
ALL WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.451	——
HL-93 (OPR)	1.881	——
LADV-11 (INV)	1.116	MAGNIFICATION FACTOR = 1.3



SECTION B-B
SCALE : ⅜" = 1'-0"

⊠ FOR BRIDGES IN DISTRICT 04 & 05, MINIMUM CONCRETE COVER IN TOP OF SLAB SHALL BE 2½".

SHEET NUMBER

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN J. PAINE | CHECK J. NAKHLEH | DETAIL D. HYMEL | CHECK J. NAKHLEH | REVIEW | SERIES # 2 OF 11

APPROVED BY CHIEF ENGINEER: DATE: 12/10/2025

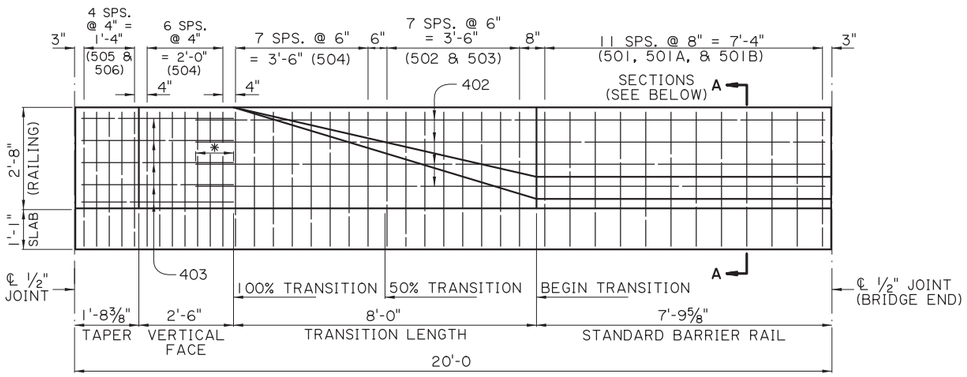
REVISION OR CHANGE ORDER DESCRIPTION | BY | DATE | NO.

SPAN (1 OF 2)
20'-0" CONCRETE SLAB SPAN
24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

PSS-75-24-20SL

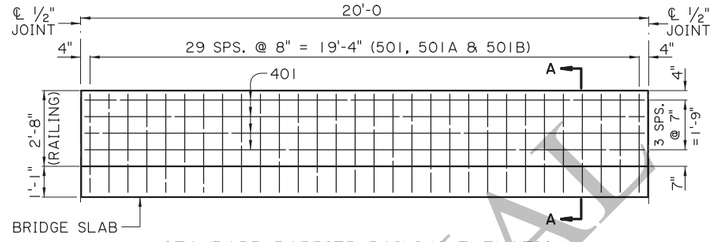
DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

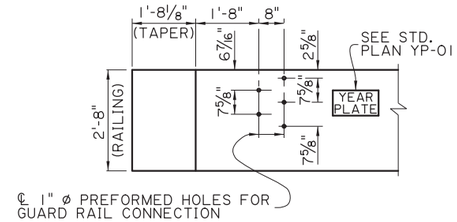


* 1'-0" (MIN.) SPLICE

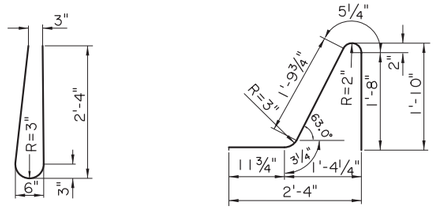
BARRIER RAILING TRANSITION ELEVATION
(SHOWING BARRIER RAILING AT END OF BRIDGE)
SCALE: ½" = 1'-0"



STANDARD BARRIER RAILING ELEVATION
(SHOWING BARRIER RAILING ALONG BRIDGE SLAB)
SCALE: ⅜" = 1'-0"

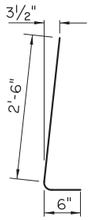


GUARD RAIL CONNECTION DETAIL
CONFORM TO GUARD RAIL STANDARD PLANS
SCALE: ½" = 1'-0"

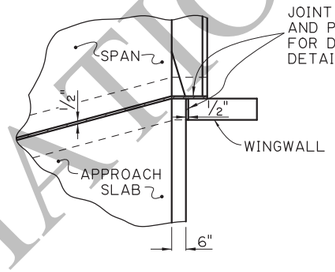


BARS 501
(4'-10" LONG)

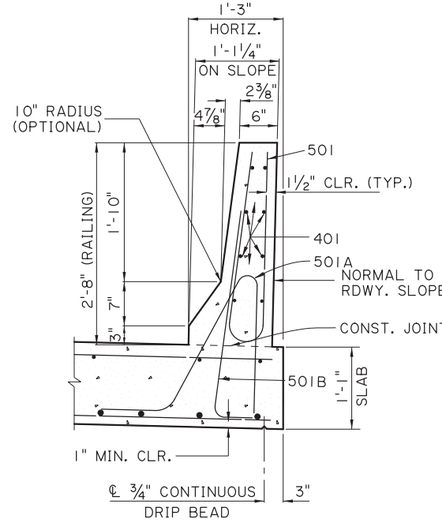
BARS 501A
(5'-2" LONG)



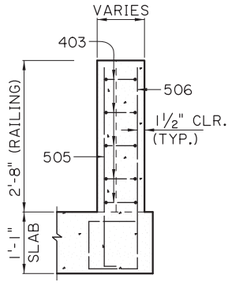
BARS 501B
(2½" ø PIN)
(3'-0" LONG)



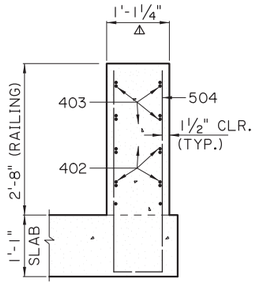
JOINT DETAIL
SCALE : ⅜" = 1'-0"



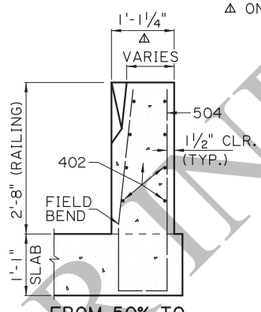
SECTION A-A
SCALE: 1" = 1'-0"



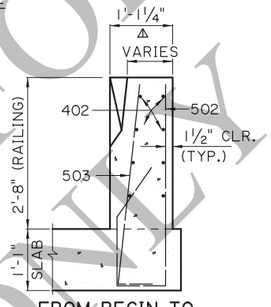
TAPER



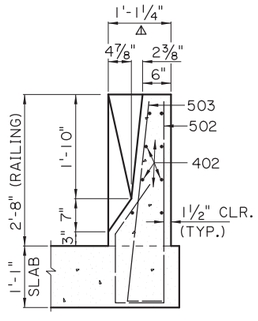
100 % TRANSITION



FROM 50% TO 100 % TRANSITION



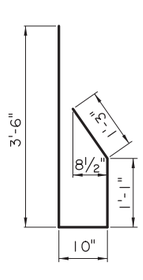
FROM BEGIN TO 50 % TRANSITION



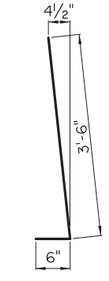
BEGIN TRANSITION

BARRIER RAILING TRANSITION SECTIONS
SCALE: ¾" = 1'-0"

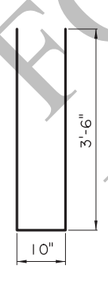
△ ON SLOPE



502
(2½" ø PIN)

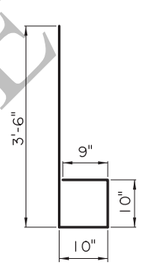


503
(2½" ø PIN)

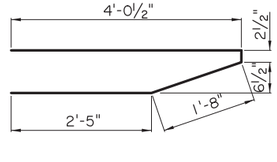


504
(2½" ø PIN)

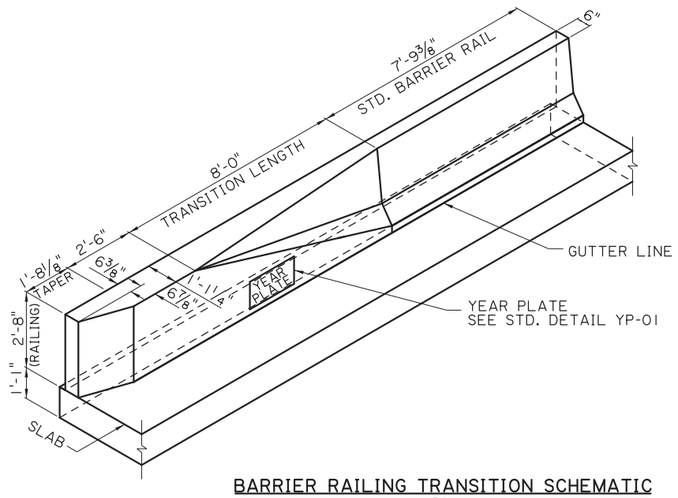
505
(2½" ø PIN)



506
(2½" ø PIN)



403
(2" ø PIN)



BARRIER RAILING TRANSITION SCHEMATIC
SCALE: ⅜" = 1'-0"

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	B. DELATTE	DETAIL	D. HYMEL	REVIEW	SERIES # 3 OF 11
CHECK	J. NAKHLEH	CHECK	J. NAKHLEH		

APPROVED BY CHIEF ENGINEER: DATE: 12/10/2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

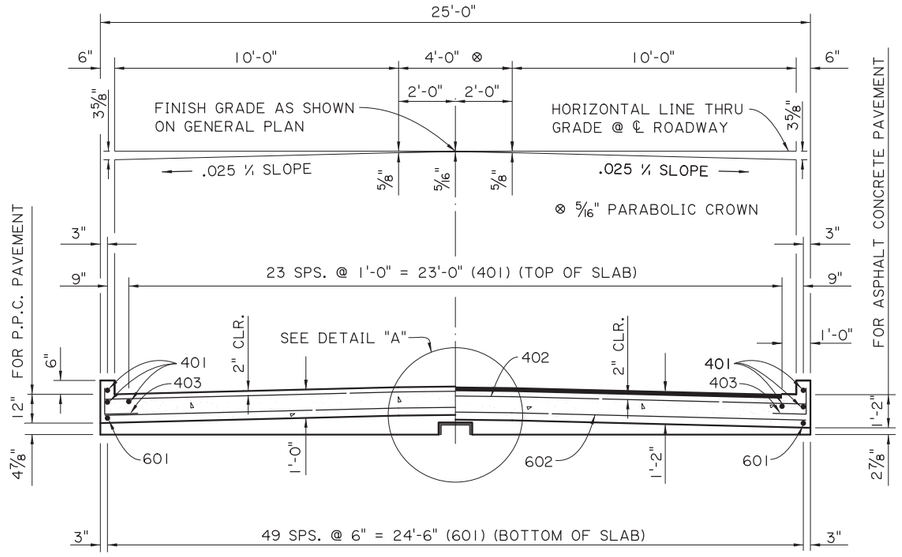
SPAN (2 OF 2)
20'-0" CONCRETE BARRIER

24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

PSS-75-24-20SL

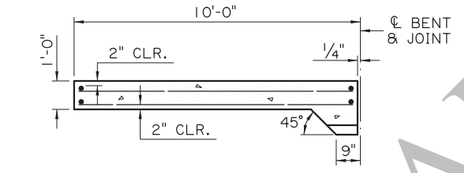
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

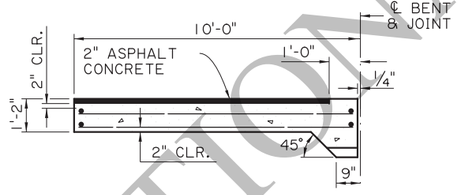


SECTION A-A

SCALE: ⅜" = 1'-0"



(FOR PORTLAND CEMENT CONCRETE ROADWAY PAVEMENT)



(FOR ASPHALT CONCRETE ROADWAY PAVEMENT)

SECTION ALONG ℄ ROADWAY

SCALE: ⅜" = 1'-0"

ESTIMATED QUANTITIES (ONE SLAB)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
601	50	9'-7"	479'-2"	LONGIT. BOT. OF SLAB
602	20	25'-6"	510'-0"	TRANSV. BOT. OF SLAB
TOTAL NO. 6 BARS = 989'-2" = 1,486 LBS.				
401	28	9'-7"	268'-4"	LONGIT. TOP OF SLAB & CURB
402	11	25'-6"	280'-6"	TRANSV. TOP OF SLAB
403	14	2'-0"	28'-0"	DOWELS IN CURB
TOTAL NO. 4 BARS = 576'-10" = 385 LBS.				
⊙ TOTAL DEFORMED REINFORCING STEEL = 1,871 LBS.				
CONCRETE APPROACH SLAB = 27.78 SQ. YDS.				
⊙☑ ASPHALTIC CONCRETE = 2.5 TONS				
⊙☑ SAW CUT AND SEAL = 24 LIN. FT.				

⊙ TO BE PAID FOR UNDER ITEM 'CONCRETE APPROACH SLABS'.

☑ REQUIRED WHEN APPROACH SLAB IS ADJACENT TO ASPHALT CONCRETE PAVEMENT.

APPROACH SLAB NOTES:

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

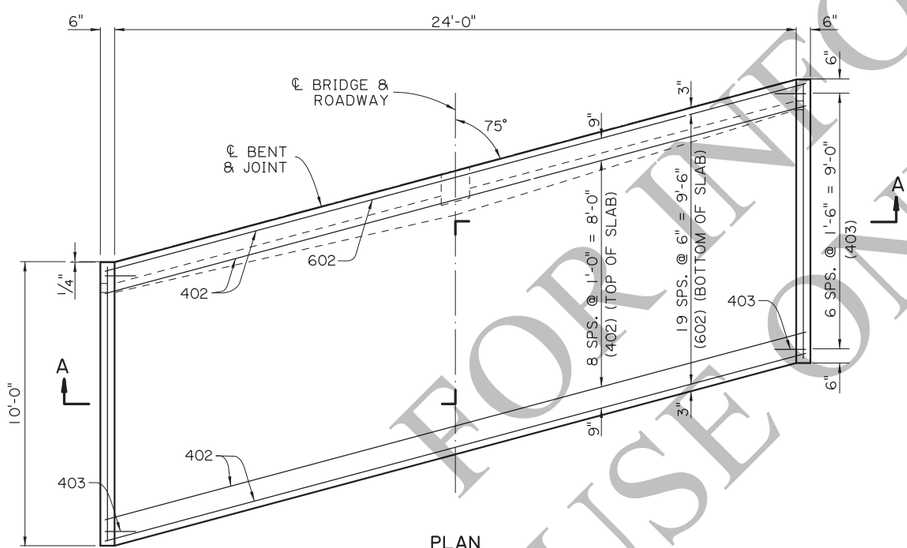
STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A ¾" CHAMFER, UNLESS SPECIFIED OTHERWISE.

REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO THE FABRICATION ARE OUT-TO-OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE.

BEDDING MATERIAL: FOR DETAILS OF BEDDING MATERIAL AND UNDERDRAINS, SEE APPROACH SLAB STANDARD DETAILS.

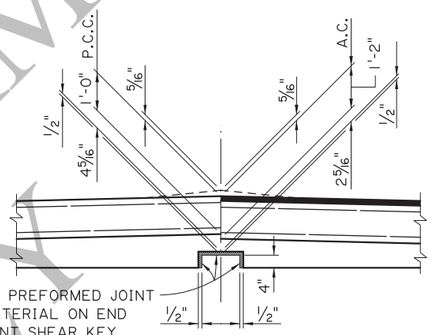
SAWING & SEALING: THE ASPHALT CONCRETE SHALL BE SAW CUT AT THE END OF THE CONCRETE APPROACH SLAB THE ENTIRE ROADWAY WIDTH AND SEALED, WHICH WILL BE BE PAID FOR UNDER THE DESIGNATED ROADWAY PAY ITEM.

PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE CONCRETE APPROACH SLAB PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.



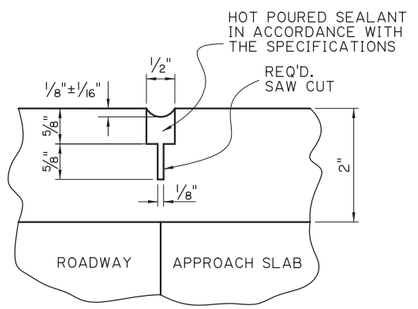
PLAN

SCALE: ⅜" = 1'-0"



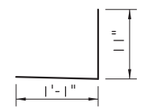
DETAIL A

SCALE : ½" = 1'-0"



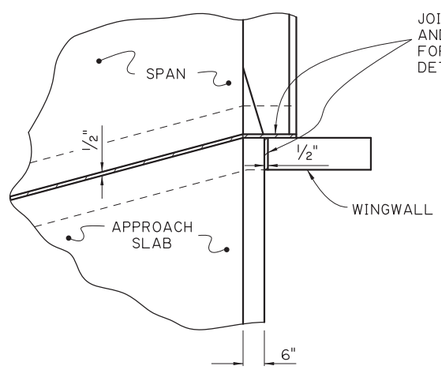
SAWING & SEALING JOINT DETAIL

N.T.S.



403

2" ø PIN



JOINT DETAIL

SCALE : ⅜" = 1'-0"

SHEET NUMBER

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. DELATTE | DETAIL D. HYMEL | REVIEW | SERIES # 4 OF 11

CHECK J. NAKHLEH | CHECK J. NAKHLEH

APPROVED BY CHIEF ENGINEER:

DATE: 12/10/2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

APPROACH SLAB
10'-0" CONCRETE APPROACH SLAB

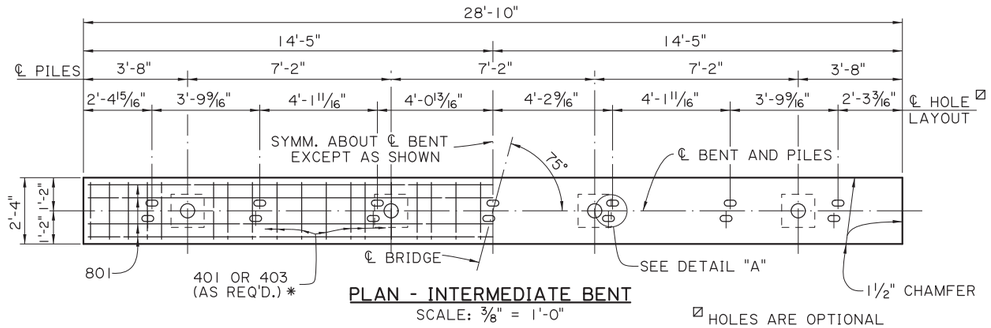
24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

PSS-75-24-20SL

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

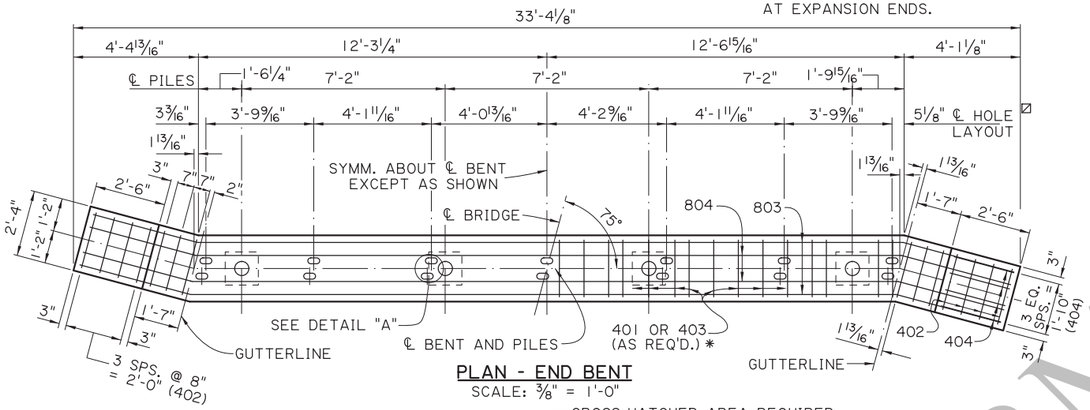
IP_PWP:d1246417\SS7524aprslab(LRFD).dgn
11/24/2025 16:4



PLAN - INTERMEDIATE BENT

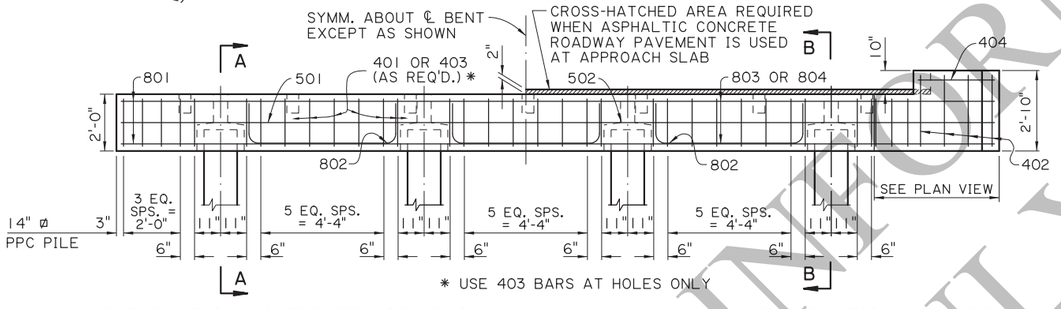
SCALE: 3/8" = 1'-0"

⊠ HOLES ARE OPTIONAL AT EXPANSION ENDS.



PLAN - END BENT

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



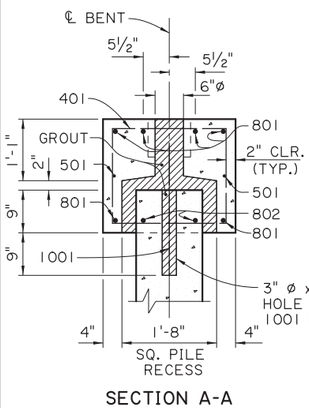
* USE 403 BARS AT HOLES ONLY

HALF ELEVATION - INTERMEDIATE BENT

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

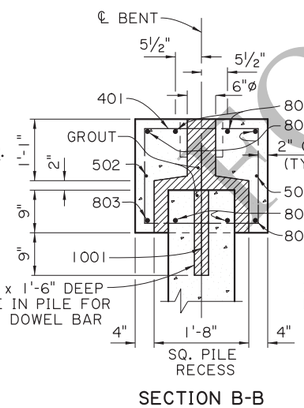
HALF ELEVATION - END BENT

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



SECTION A-A

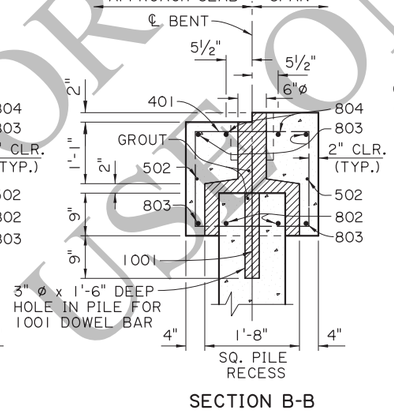
SCALE: 3/4" = 1'-0"



SECTION B-B

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

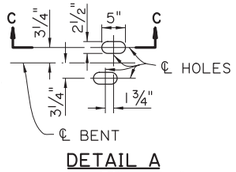
(WHEN PORTLAND CEMENT CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB)



SECTION B-B

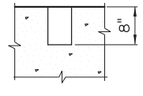
SCALE: 3/4" = 1'-0"

(WHEN ASPHALTIC CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB)



DETAIL A

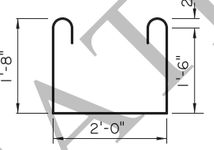
SCALE: 3/4" = 1'-0"



SECTION C-C

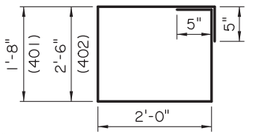
SCALE: 3/4" = 1'-0"

ESTIMATED QUANTITIES (ONE INTER. BENT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
1001	4	2'-4"	9'-4"	DOWELS IN PILES
TOTAL NO. 10 BARS = 9'-4" = 40 LBS.				
801	6	28'-6"	171'-0"	LONGIT. IN CAP
802	6	7'-10"	47'-0"	LONGIT. IN CAP BTW. PILES
TOTAL NO. 8 BARS = 218'-0" = 582 LBS.				
501	2	28'-6"	57'-0"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 57'-0" = 59 LBS.				
401	30	8'-2"	245'-0"	STIRRUPS IN CAP
403	4	6'-6"	26'-0"	STIRRUPS IN CAP
TOTAL NO. 4 BARS = 271'-0" = 181 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 862 LBS.				
TOTAL CLASS P1 CONCRETE = 4.64 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 17 TONS SERVICE LIVE LOAD = 34 TONS FACTORED TOTAL LOAD = 72 TONS				
TOTAL GROUT FOR PILE RECESSES = 0.28 CU. YDS.				



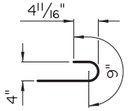
403

2" ø PIN



401 & 402

2" ø PIN

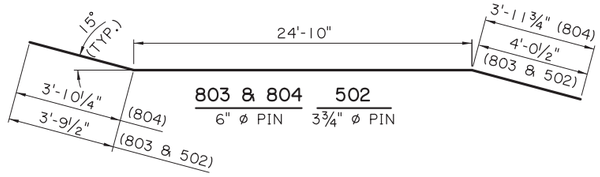


180° HOOK FOR 403 BARS

3" ø PIN

ESTIMATED QUANTITIES (ONE END BENT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
1001	4	2'-4"	9'-4"	DOWELS IN PILES
TOTAL NO. 10 BARS = 9'-4" = 40 LBS.				
802	6	7'-10"	47'-0"	LONGIT. IN CAP BTW. PILES
803	4	32'-8"	130'-8"	LONGIT. IN CAP
804	2	32'-8"	65'-4"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 243'-0" = 649 LBS.				
502	2	32'-8"	65'-4"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 65'-4" = 68 LBS.				
401	30	8'-2"	245'-0"	STIRRUPS IN CAP
402	8	9'-10"	78'-8"	STIRRUPS IN WINGWALL
403	4	6'-6"	26'-0"	STIRRUPS IN CAP
404	8	2'-2"	17'-4"	LONGIT. IN WINGWALL
TOTAL NO. 4 BARS = 367'-0" = 245 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 1002 LBS.				
⊗ TOTAL CLASS P1 CONCRETE = 5.72 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 17 TONS SERVICE LIVE LOAD = 34 TONS FACTORED TOTAL LOAD = 72 TONS				
TOTAL GROUT FOR PILE RECESSES = 0.28 CU. YDS.				

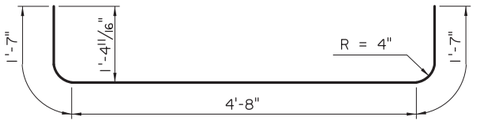
⊗ ADD 0.20 CU. YDS. OF CLASS P1 CONCRETE PER BENT WHEN ASPHALTIC CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB.



803 & 804 6" ø PIN

502 3¾" ø PIN

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.468	——
HL-93 (OPR)	1.903	——
LADV-11 (INV)	1.129	MAGNIFICATION FACTOR = 1.3



802

6" ø PIN

ALTERNATE BENT NOTES:

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 P1. STEEL SIDE FORMS AND STEEL OR CONCRETE BOTTOM FORMS SHALL BE USED FOR PRECAST COMPONENTS. EXPOSED EDGES SHALL HAVE A ¾" CHAMFER UNLESS SPECIFIED OTHERWISE. ALL SURFACES SHALL RECEIVE A CLASS 1 ORDINARY SURFACE FINISH UPON REMOVAL OF THE FORMS. ALL EXPOSED FACES OF WINGWALLS AND ENDS OF CAPS SHALL RECEIVE A CLASS 3 SPECIAL FINISH.
REINFORCING STEEL: ALL REINFORCING SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE.
GROUT: THE GROUT SHALL BE AN APPROVED FLOWABLE NON-SHRINK GROUT LISTED ON AML. THE GROUT SHALL BE TESTED FOR ACCEPTANCE PRIOR TO USAGE. SURFACES SHALL BE THOROUGHLY SATURATED WITH WATER BY FLOODING THE VOID FOR APPROXIMATELY 5 MINUTES IMMEDIATELY BEFORE THE GROUT IS PLACED. ONLY POTABLE WATER SHALL BE USED FOR SATURATION AND MIXING PURPOSES.
PRECAST UNITS: THE PLANS FOR AN ONGOING OPERATION OF FABRICATING FACILITIES SHALL BE APPROVED BY THE DEPARTMENT. EACH UNIT SHALL HAVE THE FABRICATOR'S MARK AND UNIQUE NUMBER, MEETING THE APPROVAL OF THE ENGINEER, STAMPED OR SCRIBED IN THE PLASTIC CONCRETE. ALL UNITS SHALL BE HELD AT THE PLANT FOR A MINIMUM OF 10 DAYS AFTER CASTING. THE CONCRETE SHALL REACH A MINIMUM STRENGTH OF 3,000 PSI BEFORE HANDLING IS PERMITTED. THE LIFTING INSERTS SHALL BE 1" TYPE S INSERTS AS MANUFACTURED BY DAYTON-SUPERIOR CORPORATION OR AN APPROVED EQUAL. EACH INSERT SHALL HAVE A MINIMUM LOAD CAPACITY OF 10,000 POUNDS. FOUR INSERTS WITH 1" ø x 5" LONG COIL BOLTS SHALL BE PLACED IN THE TOP OF THE UNITS AND LOCATED AT A DISTANCE 21% OF ITS LENGTH (+/- 6") FROM EACH END AND 6" FROM THE EDGES. INSERT HOLES SHALL BE GROUT FILLED AFTER PLACEMENT OF THE UNIT. AT THE CONTRACTOR'S OPTION, A SLING OF SUFFICIENT CAPACITY MAY BE USED FOR LIFTING, PROVIDED THE SAME PICKUP LOCATIONS FROM THE ENDS ARE USED.
PRECAST CONCRETE PILES: CONFORM TO PILE STANDARD PLAN AND PROJECT PLANS FOR FABRICATION AND INSTALLION. IF TOP CENTER OF DRIVEN PILE IS OUTSIDE OF SPECIFIED HORIZONTAL TOLERANCES BUT WITHIN SPECIFIED VERTICAL TOLERANCES, PROVIDE CAST-IN-PLACE BENT CAP IN ACCORANCE WITH THIS STANDARD PLAN. PILES WILL BE PAID FOR UNDER THE DESIGNATED PILE PAY ITEMS.
PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	B. DELATTE	J. NAKHLEH
CHECK		
DETAIL	D. HYMEL	J. NAKHLEH
CHECK		
REVIEW	SERIES #	5 OF 11

APPROVED BY CHIEF ENGINEER: DATE: 12/10/2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA

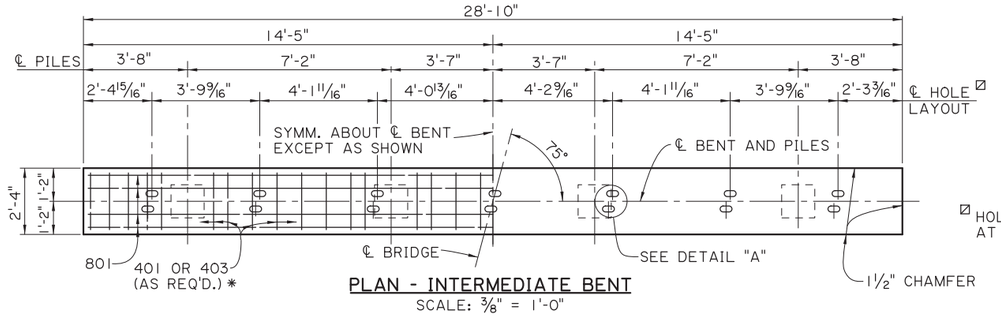
ALTERNATE BENTS
PRECAST CONCRETE BENTS

24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

PSS-75-24-20SL

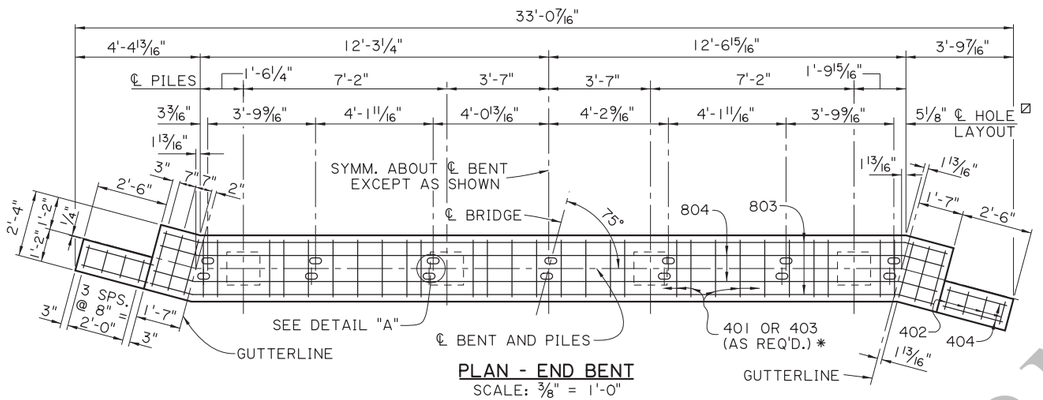
DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

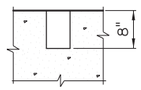


PLAN - INTERMEDIATE BENT
SCALE: 3/8" = 1'-0"

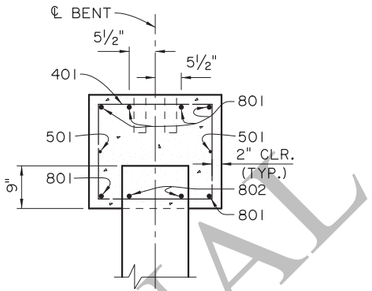
⊠ HOLES ARE OPTIONAL AT EXPANSION ENDS.



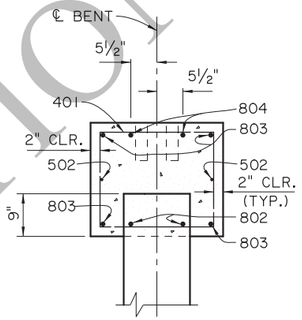
PLAN - END BENT
SCALE: 3/8" = 1'-0"



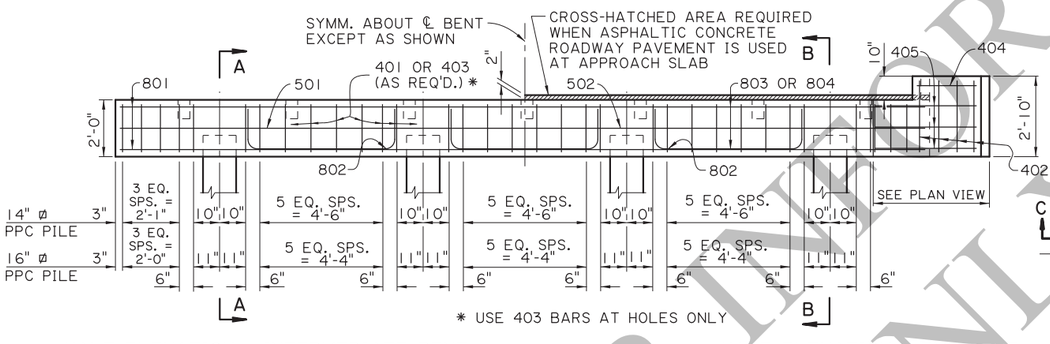
SECTION C-C
SCALE: 3/4" = 1'-0"



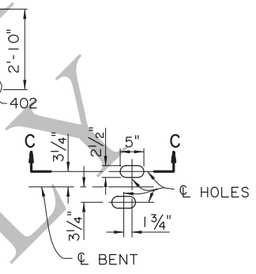
SECTION A-A
SCALE: 3/4" = 1'-0"



SECTION B-B
SCALE: 3/4" = 1'-0"
(WHEN PORTLAND CEMENT CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB)

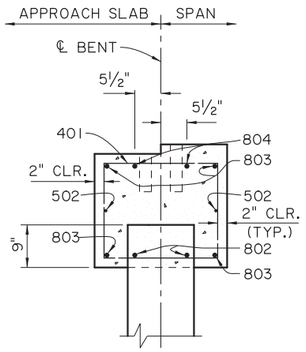


HALF ELEVATION - INTERMEDIATE BENT
SCALE: 3/8" = 1'-0"



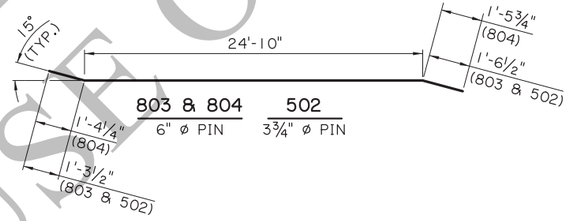
HALF ELEVATION - END BENT
SCALE: 3/8" = 1'-0"

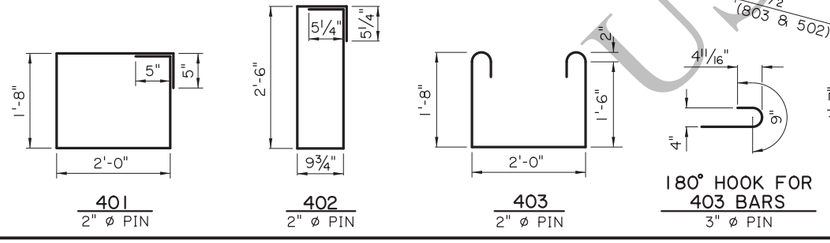
DETAIL A
SCALE: 3/4" = 1'-0"

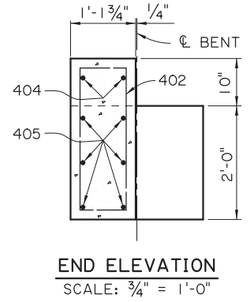


SECTION B-B
SCALE: 3/4" = 1'-0"
(WHEN ASPHALTIC CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB)

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.438	——
HL-93 (OPR)	1.864	——
LADV-11 (INV)	1.106	MAGNIFICATION FACTOR = 1.3







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

ESTIMATED QUANTITIES (ONE INTER. BENT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	6	28'-6"	171'-0"	LONGIT. IN CAP
802	6	7'-10"	47'-0"	LONGIT. IN CAP BTW. PILES
TOTAL NO. 8 BARS = 218'-0" = 582 LBS.				
501	2	28'-6"	57'-0"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 57'-0" = 59 LBS.				
401	30	8'-2"	245'-0"	STIRRUPS IN CAP
403	4	6'-6"	26'-0"	STIRRUPS IN CAP
TOTAL NO. 4 BARS = 271'-0" = 181 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 822 LBS.				
⊠ TOTAL CLASS A1 CONCRETE = 4.79 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 17 TONS SERVICE LIVE LOAD = 34 TONS FACTORED TOTAL LOAD = 72 TONS				

⊠ 16" ø PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.04 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14" ø PPC PILES ARE USED.)

ESTIMATED QUANTITIES (ONE END BENT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
802	6	7'-10"	47'-0"	LONGIT. IN CAP BTW. PILES
803	4	27'-8"	110'-8"	LONGIT. IN CAP
804	2	27'-8"	55'-4"	LONGIT. IN CAP
TOTAL NO. 8 BARS = 213'-0" = 569 LBS.				
502	2	27'-8"	55'-4"	LONGIT. IN CAP
TOTAL NO. 5 BARS = 55'-4" = 58 LBS.				
401	30	8'-2"	245'-0"	STIRRUPS IN CAP
402	8	7'-6"	60'-0"	STIRRUPS IN WINGWALL
403	4	6'-6"	26'-0"	STIRRUPS IN CAP
404	4	2'-2"	8'-8"	LONGIT. IN WINGWALL
405	12	3'-11"	47'-0"	LONGIT. IN WINGWALL
TOTAL NO. 4 BARS = 386'-8" = 258 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 885 LBS.				
⊗ TOTAL CLASS A1 CONCRETE = 5.24 CU. YDS.				
MAX. PILE LOAD: SERVICE DEAD LOAD = 17 TONS SERVICE LIVE LOAD = 34 TONS FACTORED TOTAL LOAD = 72 TONS				

⊗ 16" ø PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.04 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN 14" ø PPC PILES ARE USED.) ADD 0.20 CU. YDS. OF CLASS A1 CONCRETE PER BENT WHEN ASPHALTIC CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB.

ALTERNATE BENT NOTES:

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 ¾" CHAMFER UNLESS OTHERWISE NOTED. ALL EXPOSED FACES OF WINGWALLS AND ENDS OF CAPS SHALL RECEIVE A SURFACE FINISH AS PER THE SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.

REINFORCING STEEL: ALL REINFORCING SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE.

PRECAST CONCRETE PILES: CONFORM TO PILE STANDARD PLAN AND PROJECT PLANS FOR FABRICATION AND INSTALLATION. PILES WILL BE PAID FOR UNDER THE DESIGNATED PILE PAY ITEMS.

PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

SHEET NUMBER

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. DELATTE | CHECK J. NAKHLEH | DETAIL D. HYMEL | CHECK J. NAKHLEH | REVIEW | SERIES # 6 OF 11

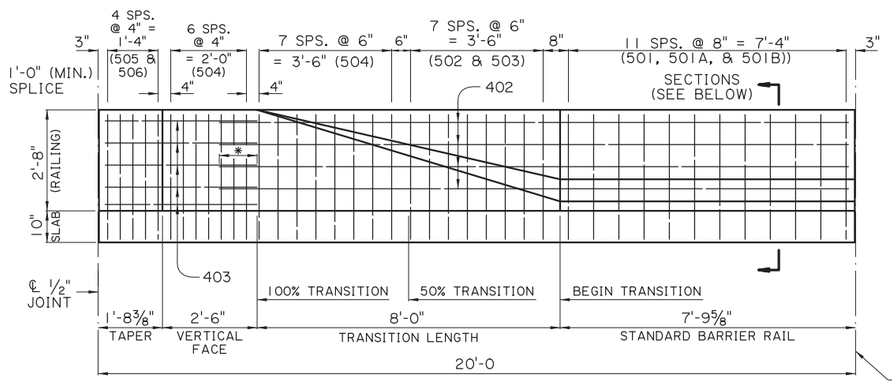
APPROVED BY CHIEF ENGINEER: DATE: 12/10/2025

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

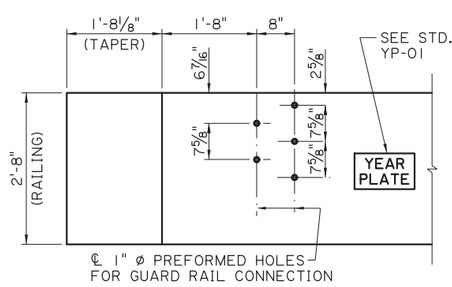
ALTERNATE BENTS
CAST-IN-PLACE CONCRETE BENTS
24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT
PSS-75-24-20SL

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

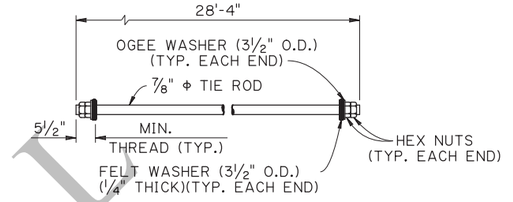
STANDARD PLAN



BARRIER RAILING TRANSITION ELEVATION
(SHOWING BARRIER RAILING AT END OF BRIDGE)
SCALE: ½" = 1'-0"

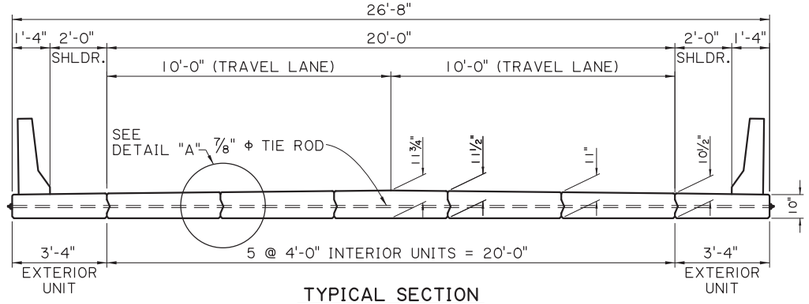


GUARD RAIL CONNECTION DETAIL
CONFORM TO GUARD RAIL STANDARD PLANS
SCALE: ¾" = 1'-0"

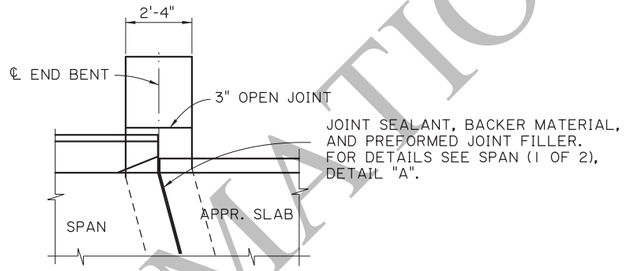


NOTE:
THE NUTS & WASHERS FOR THE TIE ROD SHALL BE ZINC COATED AND THE EXPOSED ENDS TO THE TIE RODS SHALL BE PAINTED WITH AN APPROVED COATING. AS A FINAL OPERATION THE CONTRACTOR SHALL BE REQUIRED TO TORQUE THE INSTALLED TIE ROD TO 170 FT. LBS. JUST PRIOR TO PAINTING. ALL EXPOSED ENDS SHALL BE PAINTED WITH AN APPROVED COATING AFTER STRESSING. ONE (1) MECHANICAL SPLICE MAY BE USED IN SPLICING THE ⅞" ø TIE ROD. THE SPLICE SHALL DEVELOP AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH OF THE TIE ROD IN TENSION. THE MECHANICAL SPLICE SHALL BE ZINC COATED OR PAINTED WITH AN APPROVED COLD GALVANIZING REPAIR COMPOUND FROM AML PRIOR TO PLACING THE TIE ROD IN THE STRUCTURE.

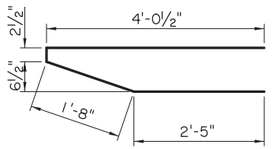
DETAILS OF TIE ROD



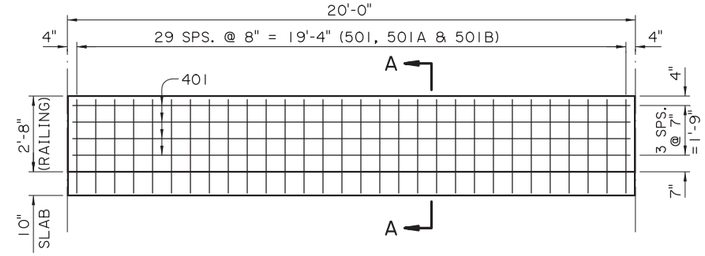
TYPICAL SECTION
SCALE: ⅜" = 1'-0"



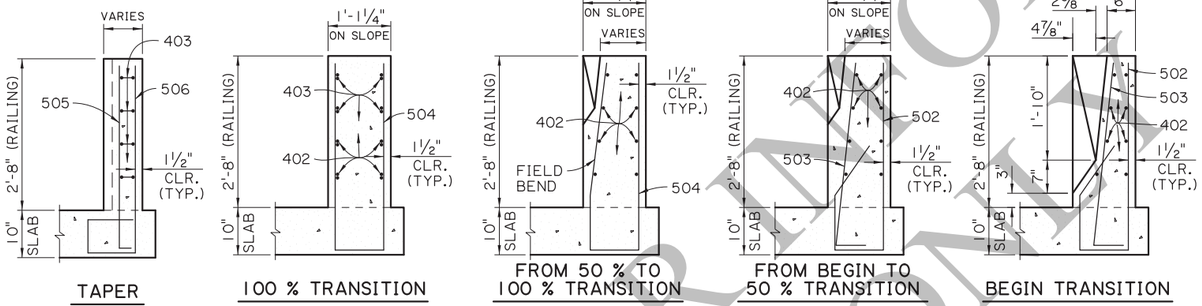
JOINT DETAIL
N.T.S.



403
(2" ø PIN)
(8'-4" LONG)



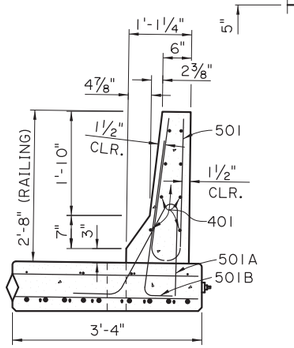
STANDARD BARRIER RAILING ELEVATION
(SHOWING BARRIER RAILING ALONG BRIDGE END)
SCALE: ⅜" = 1'-0"



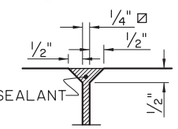
TAPER | 100 % TRANSITION | FROM 50 % TO 100 % TRANSITION | FROM BEGIN TO 50 % TRANSITION | BEGIN TRANSITION

BARRIER RAILING TRANSITION SECTIONS
SCALE: ¾" = 1'-0"

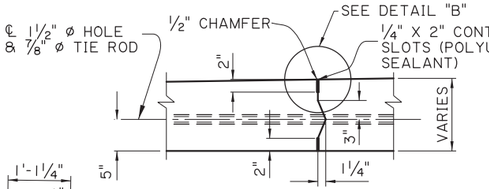
BARS 501 (4'-10" LONG) | BARS 501A (4'-7" LONG) | BARS 501B (2½" ø PIN) (2'-9" LONG) | 502 (2½" ø PIN) (6'-2" LONG) | 503 (2½" ø PIN) (3'-9" LONG) | 504 (2½" ø PIN) (7'-4" LONG) | 505 (2½" ø PIN) (3'-7" LONG) | 506 (2½" ø PIN) (5'-5" LONG)



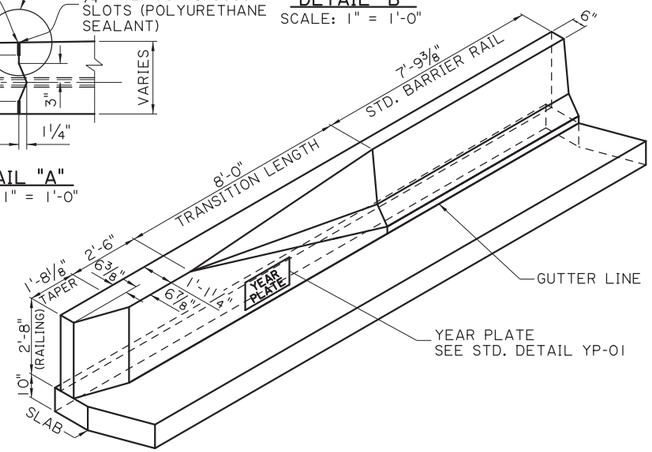
SECTION A-A
SCALE: ¾" = 1'-0"



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



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



BARRIER RAILING TRANSITION SCHEMATIC
SCALE: ⅜" = 1'-0"

SHEET NUMBER

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. DELATTE | CHECK J. NAKHLEH | DETAIL D. HYMEL | CHECK J. NAKHLEH | REVIEW | SERIES # 7 OF 11

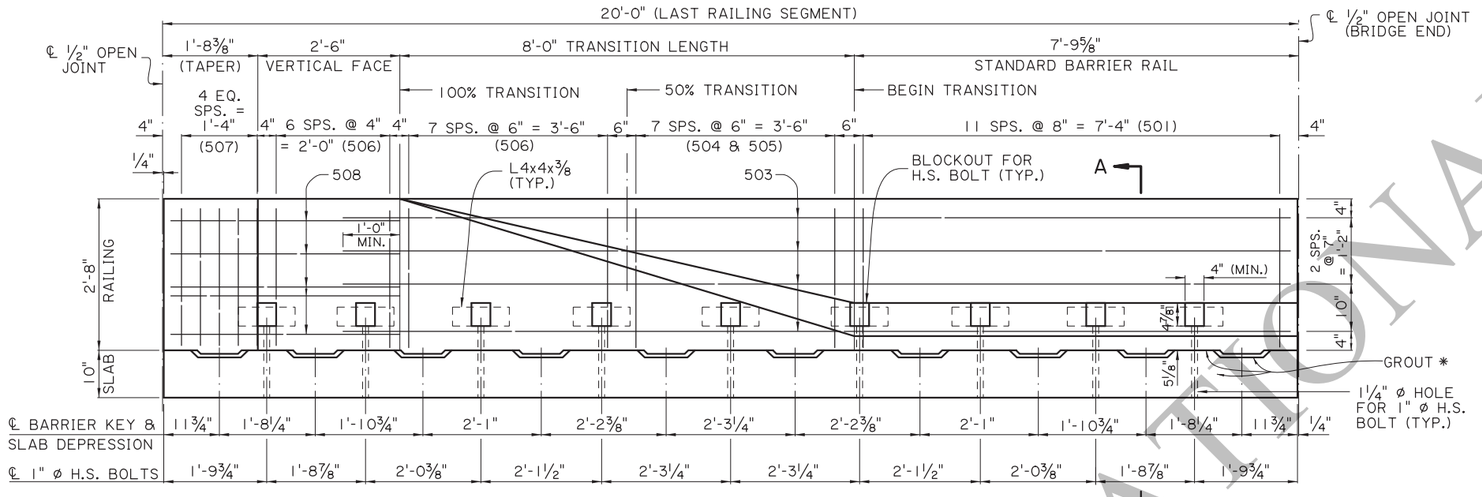
APPROVED BY CHIEF ENGINEER: DATE: 12/10/2025

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

ALTERNATE SPAN (1 OF 4)
20'-0" PRECAST CONC. SLAB SPAN
24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT
PSS-75-24-20SL

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

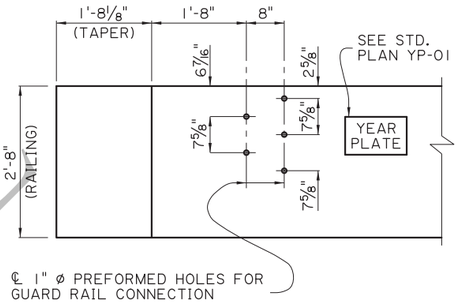


⊠ FOR SECTION A-A & TRANSITION SECTIONS SEE ALTERNATE SPAN (3 OF4)

PRECAST BARRIER RAILING TRANSITION ELEVATION

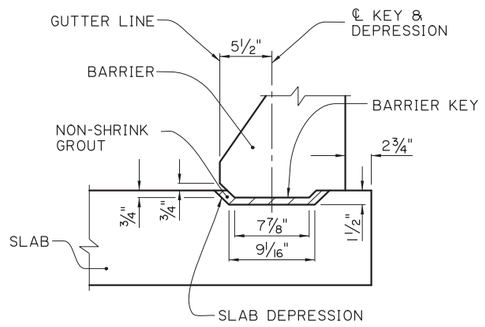
(SHOWING BARRIER RAILING AT END OF BRIDGE)
SCALE: ¾" = 1'-0"

* PLACE OR INJECT NON-SHRINK GROUT AS REQUIRED IN BETWEEN SLAB DEPRESSIONS TO FILL ALL VOIDS AND GAPS FOR FULL EVEN BEARING OF THE BARRIER ON THE SLAB. SEE NOTE 3, SHEET 9 OF 11.



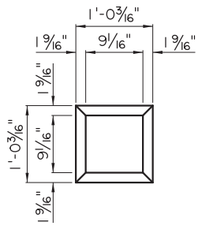
GUARD RAIL CONNECTION DETAIL

CONFORM TO GUARD RAIL STANDARD PLANS
SCALE: ¾" = 1'-0"



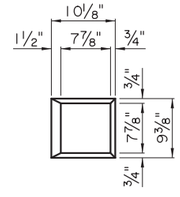
ELEVATION

SCALE: 1½" = 1'-0"



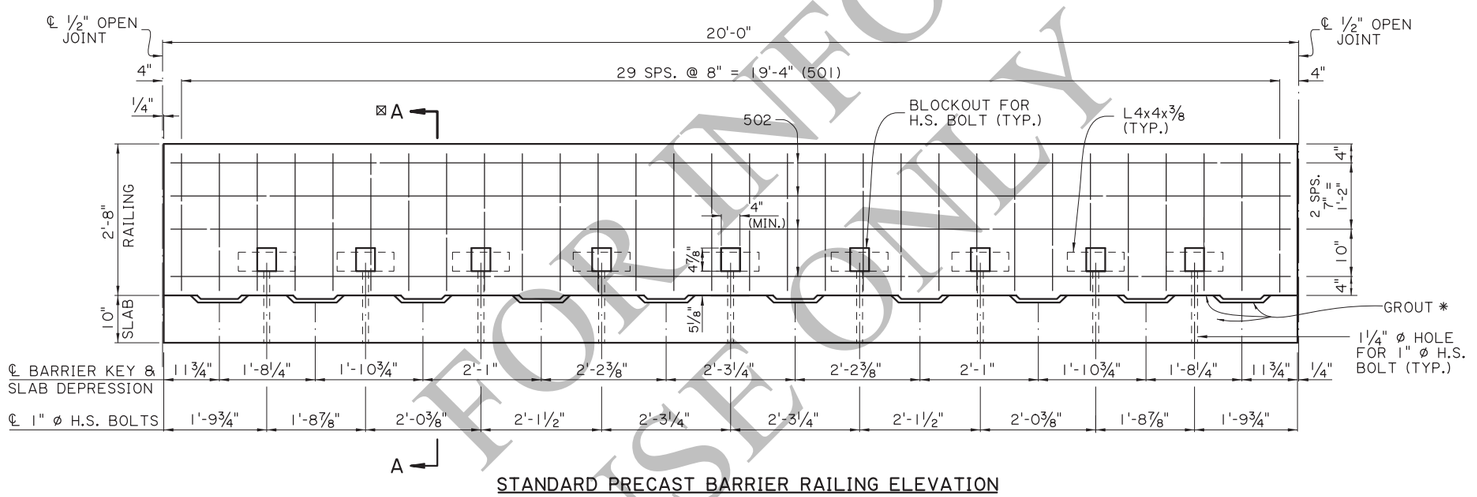
PLAN-DEPRESSION

SCALE: 1" = 1'-0"



PLAN-KEY

SCALE: 1" = 1'-0"



STANDARD PRECAST BARRIER RAILING ELEVATION

(SHOWING BARRIER RAILING ALONG BRIDGE SLAB)
SCALE: ¾" = 1'-0"

BARRIER KEY AND PANEL DEPRESSION DETAILS

SHEET NUMBER

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. DELATTE | CHECK J. NAKHLEH | DETAIL D. HYMEL | CHECK J. NAKHLEH | REVIEW | SERIES # 8 OF 11

APPROVED BY CHIEF ENGINEER: DATE: 12/10/2025

REVISION OR CHANGE ORDER DESCRIPTION | NO. | DATE | BY

ALTERNATE SPAN (2 OF 4)
20'-0" PRECAST CONC. BARRIER
24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

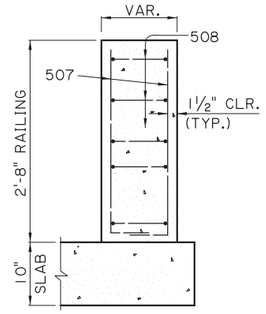
PSS-75-24-20SL

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

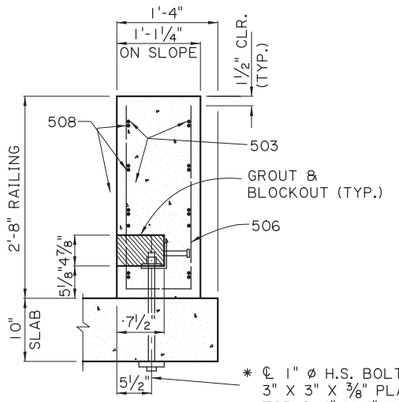
STANDARD PLAN

11/18/2025 11:0

IP_PWP:d1246417\SS7524altspan2(LRFD).dgn

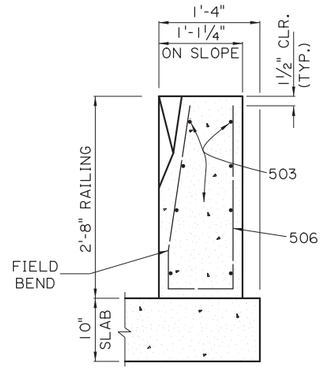


TAPER

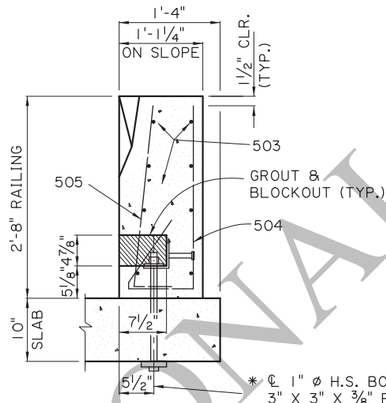


100% TRANSITION

* ℄ 1" ø H.S. BOLT, AND 3" X 3" X ⅜" PLATE WASHER TOP & 4" X 4" X ⅞" PLATE WASHER BOTTOM, AND ONE HEAVY HEX NUT (TYP.).

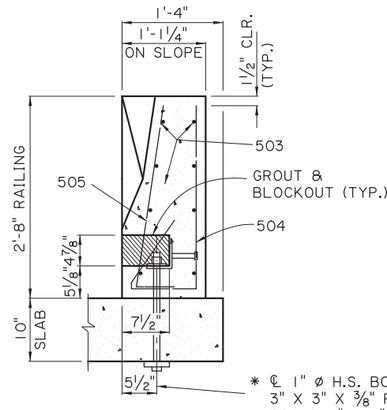


50% TRANSITION



50% TRANSITION

* ℄ 1" ø H.S. BOLT, AND 3" X 3" X ⅜" PLATE WASHER TOP & 4" X 4" X ⅞" PLATE WASHER BOTTOM, AND ONE HEAVY HEX NUT (TYP.).



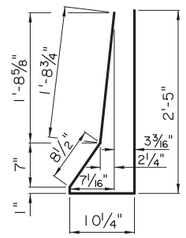
BEGIN TRANSITION

* ℄ 1" ø H.S. BOLT, AND 3" X 3" X ⅜" PLATE WASHER TOP & 4" X 4" X ⅞" PLATE WASHER BOTTOM, AND ONE HEAVY HEX NUT (TYP.).

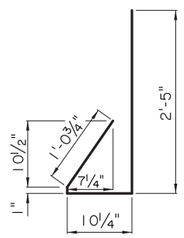
BARRIER RAILING TRANSITION SECTIONS

SCALE: 1" = 1'-0"

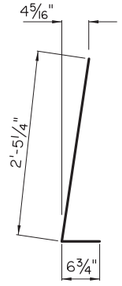
* 1" ø THREADED STUD OF EQUAL STRENGTH, WITH 2 NUTS & 2 WASHERS, MAY BE USED IN LIEU OF H.S. BOLTS.



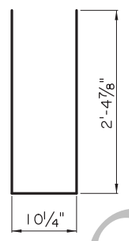
501
(2½" ø PIN)



504
(2½" ø PIN)

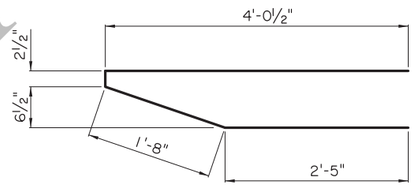


505
(2½" ø PIN)



506
(2½" ø PIN)

507
(2½" ø PIN)



508
(2½" ø PIN)

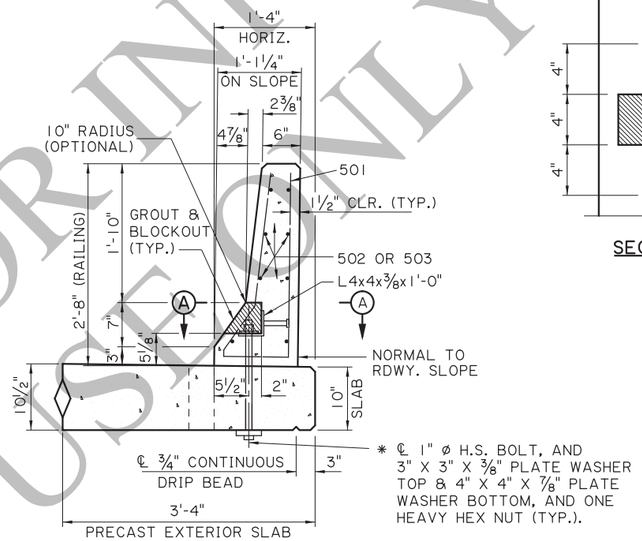
NOTES:

1) ALL BARRIER RAIL SURFACES ARE TO RECEIVE A CLASS 3 SPECIAL FINISH.

2) ALL SURFACES OF THE BLOCKOUTS EXCEPT THE BOTTOM MAY BE TAPERED AND ALL CORNERS MAY BE ROUNDED TO A RADIUS TO ALLOW FOR EASY REMOVAL OF PLUGS OR FORMS. AFTER PLACING AND TIGHTENING THE ANCHOR BOLTS, THE BLOCKOUTS SHALL BE FILLED WITH AN APPROVED NON-SHRINK GROUT FROM AML AND TROWELED TO THE REQUIRED FINISH AND TO THE SATISFACTION OF THE ENGINEER.

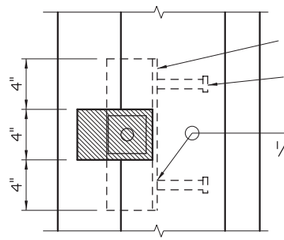
3) AFTER BARRIER IS PLACED AND ALIGNED, ALL GAPS UNDER BARRIER AND TOP OF SLAB SHALL BE FILLED WITH NON-SHRINK GROUT FROM AML AND ALLOWED TO SET PRIOR TO TIGHTENING OF BOLTS. IT IS IMPORTANT TO FILL ALL VOIDS AND GAPS UNDER THE BARRIER TO ENSURE EVEN BEARING ON DECK WHEN THE ANCHOR BOLTS ARE LOADED.

4) ALL 1" ø BOLTS SHALL BE HIGH STRENGTH A325 OR APPROVED EQUAL. BOLT, NUT & WASHER TO BE GALVANIZED AS PER ASTM A-153. BOLTS SHALL BE TENSIONED TO 36 KIPS, OR APPROXIMATELY 540 FOOT-LB. OF TORQUE (LUBRICATED CONNECTION).

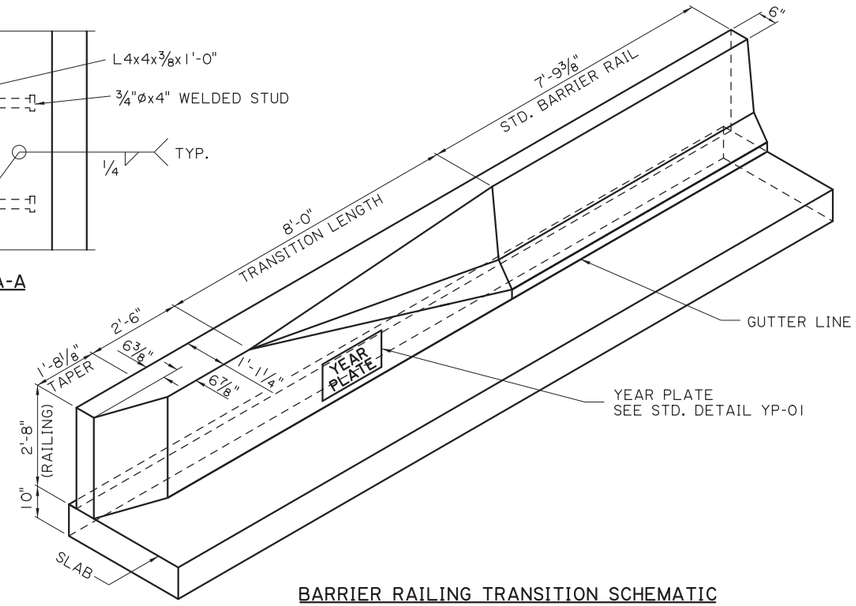


* ℄ 1" ø H.S. BOLT, AND 3" X 3" X ⅜" PLATE WASHER TOP & 4" X 4" X ⅞" PLATE WASHER BOTTOM, AND ONE HEAVY HEX NUT (TYP.).

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



SECTION A-A



BARRIER RAILING TRANSITION SCHEMATIC
SCALE: ½" = 1'-0"

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	B. DELATTE	DETAIL	D. HYMEL	REVIEW
CHECK	J. NAKHLEH	CHECK	J. NAKHLEH	SERIES # 9 OF 11

APPROVED BY CHIEF ENGINEER: DATE: 12/10/2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA

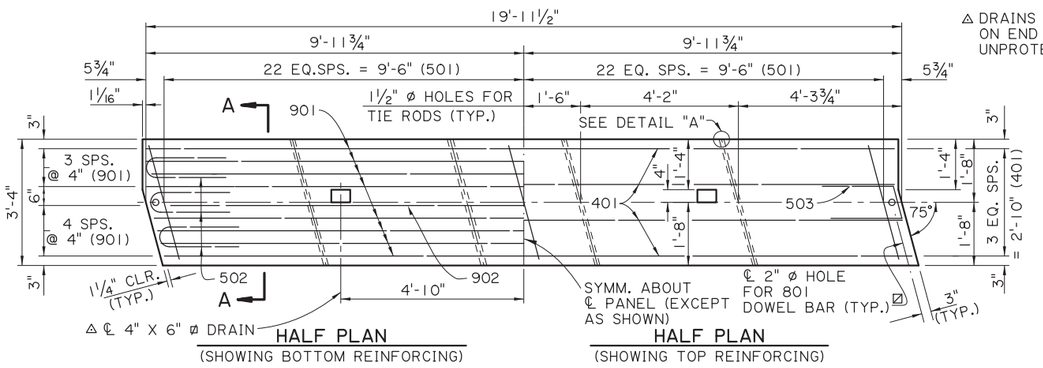
ALTERNATE SPAN (3 OF 4) 20'-0" PRECAST CONC. BARRIER

24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

PSS-75-24-20SL

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

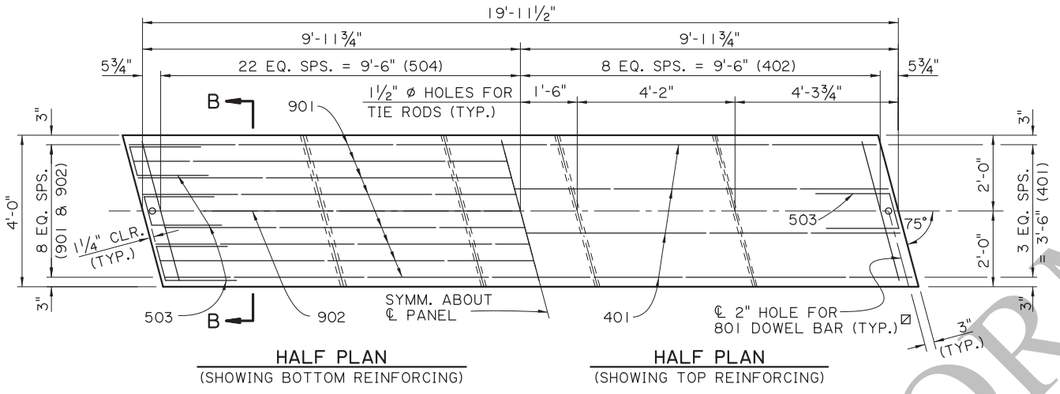
STANDARD PLAN



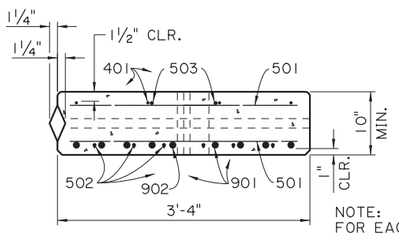
EXTERIOR UNIT
SCALE: ½" = 1'-0"

△ DRAINS ARE NOT REQUIRED ON END SPANS OVER UNPROTECTED SLOPES.

☒ HOLES ARE OPTIONAL AT EXPANSION ENDS.

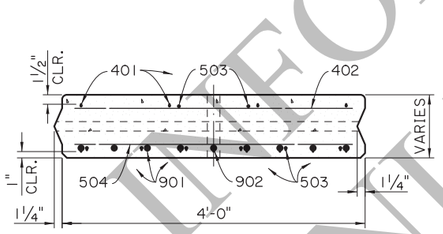


INTERIOR UNIT
SCALE: ½" = 1'-0"

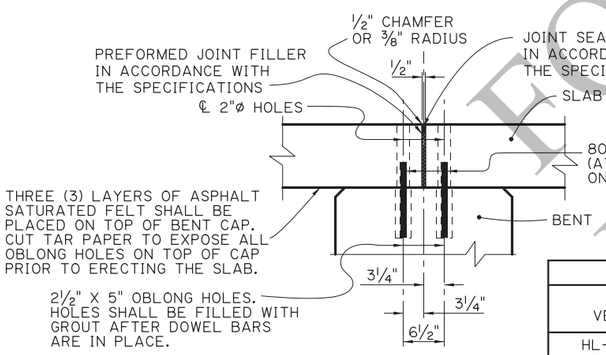


SECTION A-A
EXTERIOR UNIT
SCALE: 1" = 1'-0"

NOTE:
FOR EACH SPAN, ONE EXTERIOR UNIT WILL HAVE A TONGUE AND ONE WILL HAVE A GROOVE.



SECTION B-B
INTERIOR UNIT
SCALE: 1" = 1'-0"



TYPICAL JOINT DETAIL
SCALE: 1" = 1'-0"

NOTES:
FOR ADDITIONAL JOINT DETAILS SEE SHEET OF 2 OF 11.
FOR ½" CHAMFER DETAIL, SEE DETAIL "B", ALTERNATE SPAN 1 OF 4.

AS-DESIGNED RATING		
VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	1.357	——
HL-93 (OPR)	1.759	——
LADV-11 (INV)	1.044	MAGNIFICATION FACTOR = 1.3

ALTERNATE SPAN NOTES:

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 P1. THE BRIDGE RAIL CONCRETE SHALL BE CLASS A1 IF RAIL IS CAST IN PLACE. STEEL SIDE FORMS AND STEEL OR CONCRETE BOTTOM FORMS SHALL BE USED FOR PRECAST COMPONENTS. EXPOSED EDGES SHALL HAVE A ¾" CHAMFER, UNLESS SPECIFIED OTHERWISE. ALL SURFACES SHALL RECEIVE A CLASS 1 ORDINARY SURFACE FINISH UPON REMOVAL OF THE FORMS. THE FINAL FINISH SHALL BE A FINE FINISH IN ACCORDANCE WITH THE SPECIFICATIONS.

REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO FABRICATION ARE OUT TO OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE. ALL REINFORCING BARS SHALL BE PLACED TO PROVIDE A MINIMUMUM COVER OF 1" FROM THE DRAIN HOLES. REINFORCING STEEL MAY BE TACK WELDED FOR A DISTANCE OF NOT MORE THAN 4'-0" FROM EACH END OF UNIT. NO OTHER WELDING SHALL BE PERMITTED.

MISCELLANEOUS STEEL: HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM DESIGNATION A-325. PLATES, TIE RODS, AND DRIFT BOLTS SHALL CONFORM TO ASTM DESIGNATION A709, GRADE 36 (AASHTO M270). STEEL SPECIFIED TO BE ZINC COATED SHALL BE IN CONFORMANCE WITH ASTM DESIGNATION A-123.

GROUT: THE GROUT SHALL BE AN APPROVED FLOWABLE NON-SHRINK GROUT LISTED ON AML. THE GROUT SHALL BE TESTED FOR ACCEPTANCE PRIOR TO USAGE. THE GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI PRIOR TO LOADING SLABS. SURFACES SHALL BE THOROUGHLY SATURATED WITH WATER BY FLOODING THE HOLES FOR APPROXIMATELY FIVE (5) MINUTES IMMEDIATELY BEFORE THE GROUT IS PLACED. ONLY POTABLE WATER SHALL BE USED FOR SATURATION AND MIXING PURPOSES.

PATCHING MATERIAL: THE PATCHING MATERIAL SHALL BE AN APPROVED PATCHING MATERIAL FOR PRECAST OR PRESTREESED CONCRETE PRODUCTS LISTED ON AML(QPL 49). SURFACE PREPARATION, MIXING AND PLACMENT SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. ONLY POTABLE WATER SHALL BE USED FOR SATURATION AND MIXING PURPOSES.

PRECAST UNITS: THE PLANS FOR AN ONGOING OPERATION OF FABRICATION FACILITIES SHALL BE APPROVED BY THE DEPARTMENT. EACH UNIT SHALL HAVE "LIVE LOAD HL-93 & LADV-11", THE FABRICATOR'S MARK, AND UNIQUE NUMBER, MEETING THE APPROVAL OF THE ENGINEER STAMPED OR INSCRIBED IN THE PLASTIC CONCRETE. PRECAST UNITS MAY BE CAST WITH OR WITHOUT CAMBER. IF CAMBER IS PROVIDED IT SHALL NOT EXCEED ¼" AT THE CENTERLINE OF SPAN. ALL UNITS SHALL BE HELD AT THE PLANT FOR A MINIMUM OF TEN(10) DAYS AFTER CASTING. THE CONCRETE SHALL REACH A MINIMUM STRENGTH OF 3,000 PSI BEFORE HANDLING IS PERMITTED. THE LIFTING INSERTS SHALL BE 1", TYPE S INSERTS AS MANUFACTURED BY DAYTON-SUPERIOR CORPORATION OR AN APPROVED EQUAL. EACH INSERT SHALL HAVE A MINIMUM LOAD CAPACITY OF 10,000 POUNDS . FOUR(4) INSERTS WITH 1" ø X 5" LONG COIL BOLTS SHALL BE PLACED IN THE TOP OF THE UNIT AND LOCATED 1'-3" FROM ITS ENDS AND 1'-0" FROM ITS EDGES. INSERT HOLES SHALL BE GROUT FILLED AFTER PLACEMENT OF UNIT. AT THE CONTRACTOR'S OPTION A SLING OF SUFFICIENT CAPACITY MAY BE USED FOR LIFTING, PROVIDED THE SAME PICKUP LOCATION FROM THE ENDS ARE USED. FABRICATION TOLERANCES SHALL BE AS FOLLOWS:

UNIT DEPTH	± 3/16"
UNIT LENGTH	+ ⅛" AND -½"
OVERALL SPAN WIDTH	± 2"

ALL PRECAST UNITS IN EACH BRIDGE SPAN SHALL BE MATCH CAST IN THE SAME CASTING BED TO ENSURE A PROPER FIT DURING INSTALLATION.

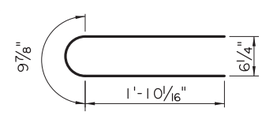
GUARDRAIL: CONFORM TO PROJECT PLANS AND GUARDRAIL STANDARD PLANS.

PAYMENT: ALL WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.

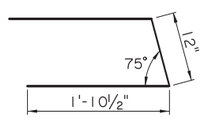
ESTIMATED QUANTITIES (ONE EXTERIOR UNIT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
901	8	19'-8"	157'-4"	LONGIT. BOT. OF SLAB
902	1	18'-11"	18'-11"	LONGIT. BOT. OF SLAB
TOTAL NO. 9 BARS = 176'-3" = 599 LBS.				
801	1	1'-0"	1'-0"	DOWELS
TOTAL NO. 8 BARS = 1'-0" = 3 LBS.				
501	90	3'-1"	277'-6"	TRANS. TOP & BOT. OF SLAB
502	6	4'-6"	27'-0"	BOT. END OF SLAB
503	2	4'-9"	9'-6"	TOP END OF SLAB
TOTAL NO. 5 BARS = 313'-11" = 327 LBS.				
401	4	19'-8"	78'-8"	LONGIT. TOP OF SLAB
TOTAL NO. 4 BARS = 78'-8" = 53 LBS.				
DEFORMED REINFORCING STEEL = 982 LBS.				
CLASS P1 CONCRETE = 2.05 CU. YDS.				
CONCRETE RAILING (PER SPAN) = 40.00 LIN. FT.				

ESTIMATED QUANTITIES (ONE INTERIOR UNIT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
901	8	19'-8"	157'-4"	LONGIT. BOT. OF SLAB
902	1	18'-11"	18'-11"	LONGIT. BOT. OF SLAB
TOTAL NO. 9 BARS = 176'-3" = 599 LBS.				
801	1	1'-0"	1'-0"	DOWELS
TOTAL NO. 8 BARS = 1'-0" = 3 LBS.				
503	8	4'-9"	38'-0"	TOP & BOT. END OF SLAB
504	44	3'-9"	165'-3"	TRANS. BOT. OF SLAB
TOTAL NO. 5 BARS = 203'-0" = 212 LBS.				
401	4	19'-8"	78'-8"	LONGIT. TOP OF SLAB
402	17	3'-9"	63'-9"	TRANS. TOP OF SLAB
TOTAL NO. 4 BARS = 142'-5" = 95 LBS.				
DEFORMED REINFORCING STEEL = 909 LBS.				
CLASS P1 CONCRETE = 2.46 CU. YDS.				

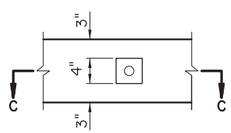
⊙ BASED ON A 10" SLAB THICKNESS



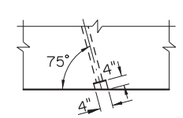
502
5 " ø PIN



503
2½" ø PIN



END VIEW



SECTION C-C

DETAIL "A"
TYP. EXTERIOR EDGE ONLY
SCALE: 1" = 1'-0"

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	CHECK	DETAIL	CHECK	REVIEW	SERIES # 10 OF 11
J. NAKHLEH	B. DELATTE	D. HYMEL	J. NAKHLEH		

APPROVED BY CHIEF ENGINEER:
DATE: 12/10/2025

NO.	DATE	BY	REVISION OR CHANGE ORDER DESCRIPTION

ALTERNATE SPAN (4 OF 4)
20'-0" PRECAST CONC. SLAB UNIT
24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT

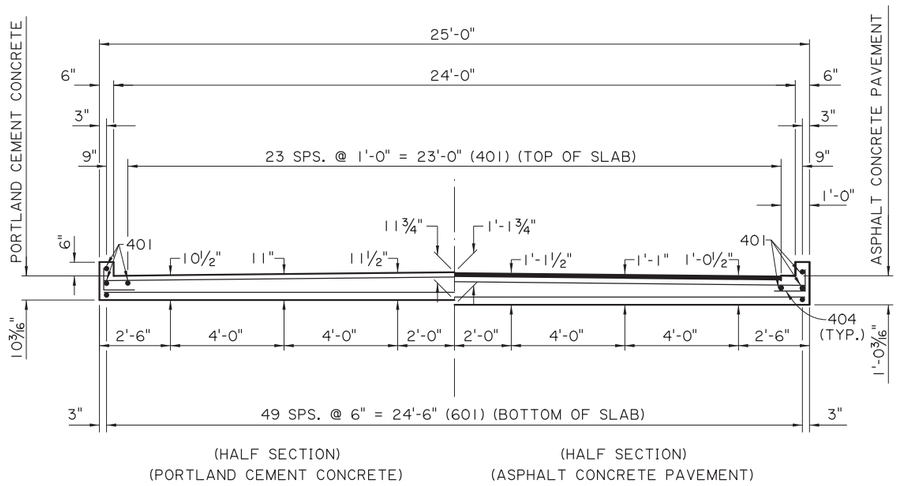
PSS-75-24-20SL

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

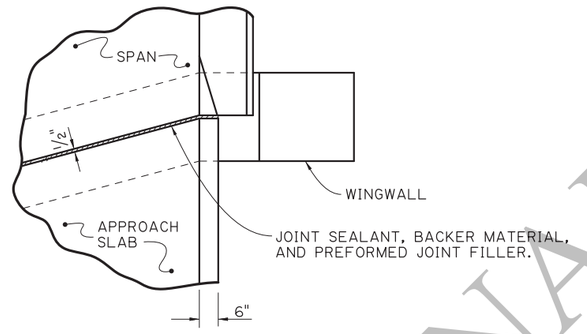
STANDARD PLAN

11/24/2025 15:1

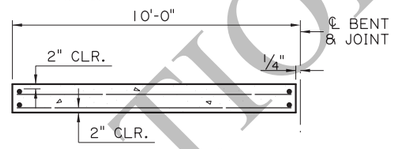
IP_PWP:d1246417\SS7524a1tspan4(LRFD).dgn



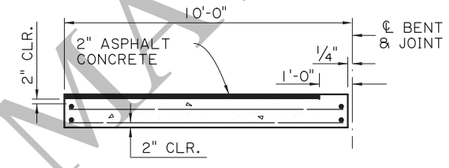
SECTION A-A
SCALE: ⅜" = 1'-0"



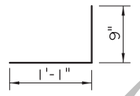
JOINT DETAIL
N.T.S.



(FOR PORTLAND CEMENT CONCRETE ROADWAY PAVEMENT)



(FOR ASPHALT CONCRETE ROADWAY PAVEMENT)



403
2" ø PIN

SECTION ALONG ℄ ROADWAY
SCALE : ¼" = 1'-0"

ESTIMATED QUANTITIES (ONE SLAB)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	6	1'-0"	6'-0"	DOWELS
TOTAL NO. 8 BARS = 6'-0" = 16 LBS.				
601	50	9'-7"	479'-2"	LONGIT. BOT. OF SLAB
602	2	25'-5"	50'-10"	TRANSV. BOT. OF SLAB
603	18	25'-6"	459'-0"	TRANSV. BOT. OF SLAB
TOTAL NO. 6 BARS = 989'-0" = 1,485 LBS.				
401	28	9'-7"	268'-4"	LONGIT. TOP OF SLAB & CURB
402	2	25'-5"	50'-10"	TRANSV. TOP OF SLAB
403	9	25'-6"	229'-6"	TRANSV. TOP OF SLAB
404	14	1'-10"	25'-8"	DOWELS IN CURB
TOTAL NO. 4 BARS = 574'-4" = 384 LBS.				
⊙ TOTAL DEFORMED REINFORCING STEEL= 1,885 LBS.				
CONCRETE APPROACH SLAB = 27.78 SQ. YDS.				
⊙⧄ ASPHALT CONCRETE = 2.5 TONS				
⊙⧄ SAW CUT & SEAL = 24 LIN. FT.				

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

APPROACH SLAB NOTES:

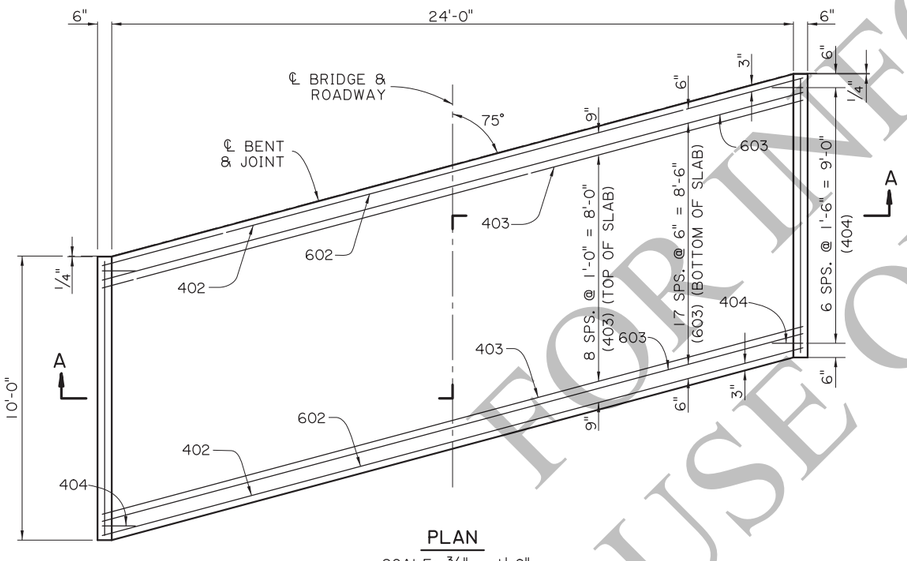
DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION, WITH 2008 & 2009 INTERIMS.

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A1. EXPOSED EDGES SHALL HAVE A ¾" CHAMFER, UNLESS SPECIFIED OTHERWISE.

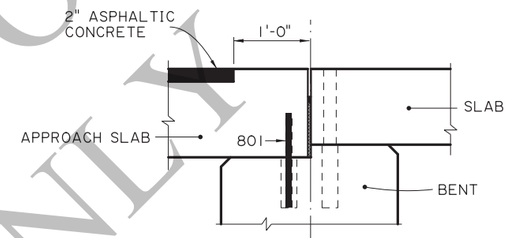
REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS RELATING TO THE FABRICATION ARE OUT-TO-OUT OF BARS, UNLESS SPECIFIED OTHERWISE. DIMENSIONS RELATING TO SPACING ARE TO BAR CENTERS, UNLESS SPECIFIED OTHERWISE.

BEDDING MATERIAL: FOR DETAILS OF BEDDING MATERIAL AND UNDERDRAINS, SEE APPROACH SLAB STANDARD DETAILS.

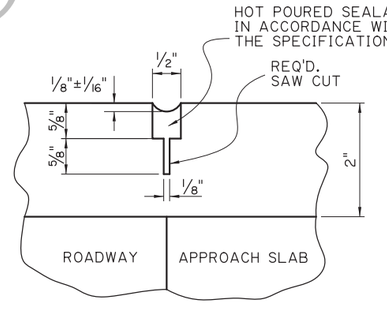
SAWING & SEALING: THE ASPHALT CONCRETE SHALL BE SAW CUT AT THE END OF THE CONCRETE APPROACH SLAB THE ENTIRE ROADWAY WIDTH AND SEALED WHICH WILL BE PAID FOR UNDER THE DESIGNATED ROADWAY PAY ITEM.
PAYMENT: ALL OTHER WORK WILL BE PAID FOR UNDER THE DESIGNATED BRIDGE CONCRETE APPROACH SLAB PAY ITEM AND IN ACCORDANCE WITH THE SPECIFICATIONS.



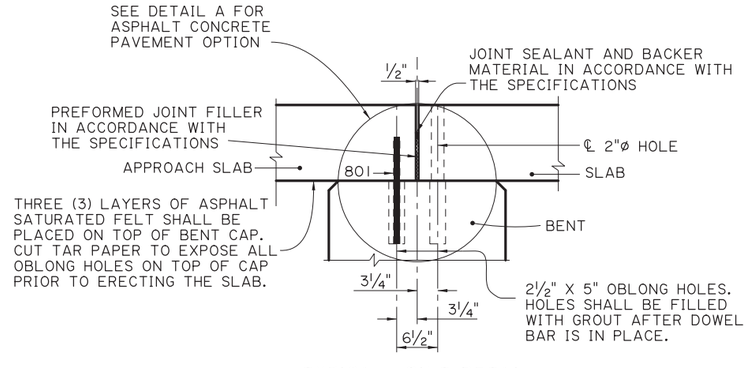
PLAN
SCALE: ⅜" = 1'-0"



DETAIL A
SCALE: 1" = 1'-0"
(ASPHALT CONCRETE PAVEMENT OPTION)



SAWING & SEALING JOINT DETAIL
N.T.S.



TYPICAL JOINT DETAIL
SCALE: 1" = 1'-0"

NOTE: FOR ADDITIONAL JOINT DETAILS SEE SHEET 2 OF 11.

SHEET NUMBER
PARISH
CONTROL SECTION
STATE PROJECT
DESIGN B. DELATTE
CHECK J. NAKHLEH
DETAIL D. HYMEL
CHECK J. NAKHLEH
REVIEW
SERIES # 11 OF 11
APPROVED BY CHIEF ENGINEER:
DATE: 12/10/2025
NO. DATE BY REVISION OR CHANGE ORDER DESCRIPTION

ALTERNATE APPROACH SLAB
10'-0" CAST-IN-PLACE
24'-0" CLEAR ROADWAY
75° CROSSING TWO WAY TANGENT
PSS-75-24-20SL

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
STANDARD PLAN