

401

2" Ø PIN

27'-6"

PLAN - INTERMEDIATE BENT

SCALE 3/8" = 1'-0"

-402

PLAN - END BENT

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

В

501 802

5 EQ. SPS.

= 4'-2"

5 EQ. SPS.

\_\_6"

9¾"

404

2" Ø PIN

В

= 4'-0"

3'-5"

403

3'-5"

NO CHAMFER

NO CHAMFER 13'-9"

6'-10"

3'-6"

♠ BENT AND PILES

2'-315/16"

1'-41/4"

405

406-

SEE PLAN

VIEW

2 SPS @ 6"

= |'-0"

2 SPS @ 6"

1'-1" (804)

1'-2"(803 & 502)

1/2" CHAMFER

16'-01/2'

GUTTERLINE

c

C

5 EQ. SPS.

5 EQ. SPS.

= 4'-0"

803 & 804

6" Ø PIN

803 OR

804

HALF ELEVATION - END BENT

SCALE 3/8" = 1'-0"

502

334" Ø PIN

24'-10"

4'-6"

802

6" Ø PIN

401

8 SPS. @ 1'-6" = 12'-0" (601)

SYMM. ABOUT & BENT

EXCEPT AS SHOWN

(804)

11" (803 8 502)

SYMM. ABOUT & BENT

EXCEPT AS SHOWN

SYMM, ABOUT & BENT

EXCEPT AS SHOWN

75° 804-

13'-9"

6'-10"

16'-43/6"

-GUTTERLINE

12'-31/4"

√L BENT & PILES

8 SPS. @ 1'-6" = 12'-0" (601)

PREFORMED JOINT MATERIAL

A |802-

= 4'-2"

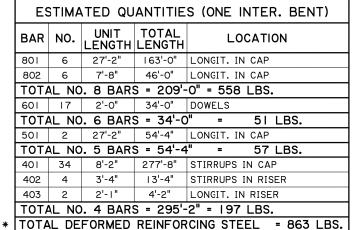
5 EQ. SPS.

402

2" Ø PIN

= 4'-0"

10'-3"



TOTAL DEFORMED REINFORCING STEEL = 863 LBS. CLASS AI CONCRETE = 4.59 CU. YDS. MAX. PILE LOAD: SERVICE DEAD LOAD = 18 TONS

SERVICE LIVE LOAD = 30 TONS

FACTORED TOTAL LOAD = 67 TONS

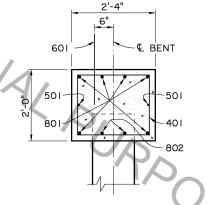
\* ADD 51 LBS. OF REINFORCING STEEL (17-601 DOWELS) WHEN TWO FIXED ENDS OCCUR ON THE SAME BENT.

E	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		
TOT	AL NO	. 6 BAR	S = 34'-C	)" = 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		

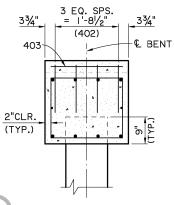
TOTAL NO. 4 BARS = 452'-2" = 302 LBS. TOTAL DEFORMED REINFORCING STEEL = 963 LBS. CLASS AI CONCRETE = 5.38 CU. YDS. SERVICE DEAD LOAD = 18 TONS MAX. PILE LOAD:

SERVICE LIVE LOAD = 30 TONS FACTORED TOTAL LOAD = 67 TONS

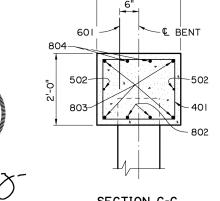
⊕ 16" # PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD O.O4 CU. YDS. OF CLASS AI CONCRETE PER BENT WHEN 14" # PPC





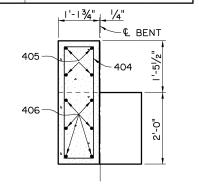


SECTION B-B SCALE: 3/4" = 1'-0"



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

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



END ELEVATION SCALE 34" = 1'-0"

1	NOTES:
d	CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD
۳.	SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS
4	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-II (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).

05/17/17

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS AI.
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 SUBSECTION 805.08 OF THE STANDARD
SPECIFICATIONS, EXCEPT WHEN SPECIFIED ELSEWHERE IN THE PLANS.

REINFORCING STEEL: ALL REINFORCING 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 3/6" 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.

BASIS OF PAYMENT: ALL MATERIALS SHALL BE PAID FOR UNDER "BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE" ACCORDING TO THE SPECIFICATIONS.

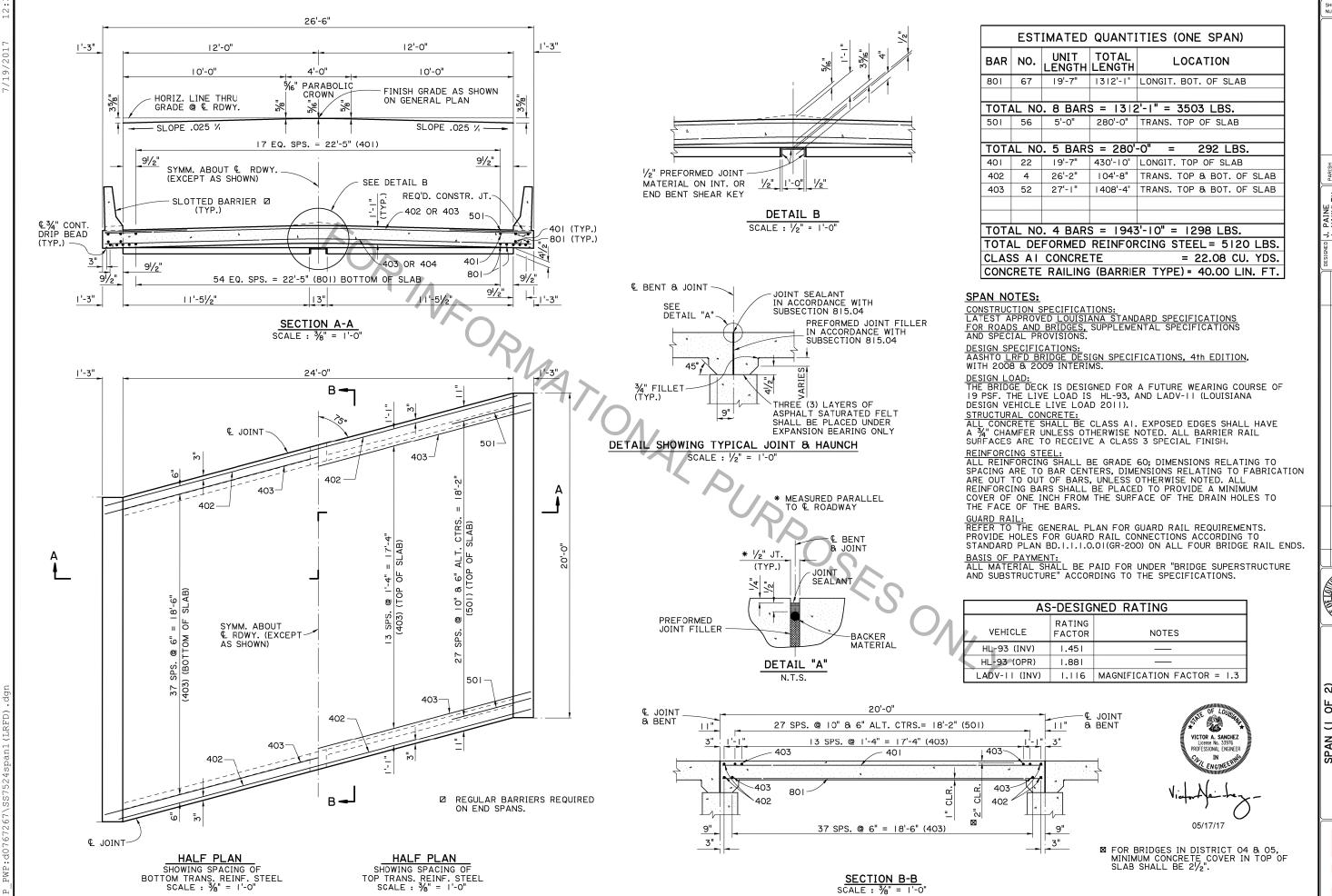


@ -; || ci -; ||

BENTS
NFORCED CONCRETE PILE BENTS 24-0" CLEAR ROADWAY
CROSSING TWO WAY TANGENT PSS-75-24-20KI BENTS

, 22

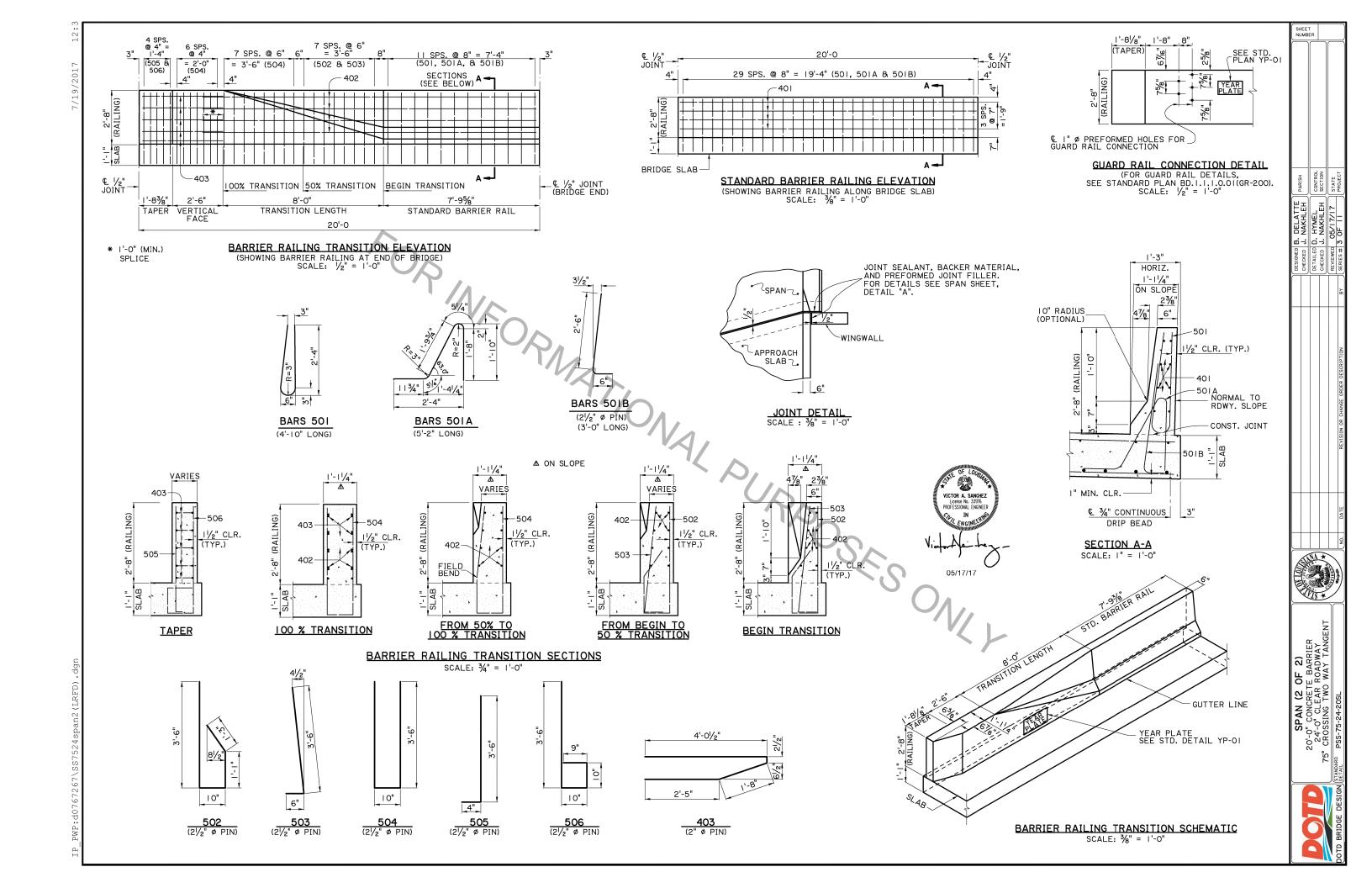




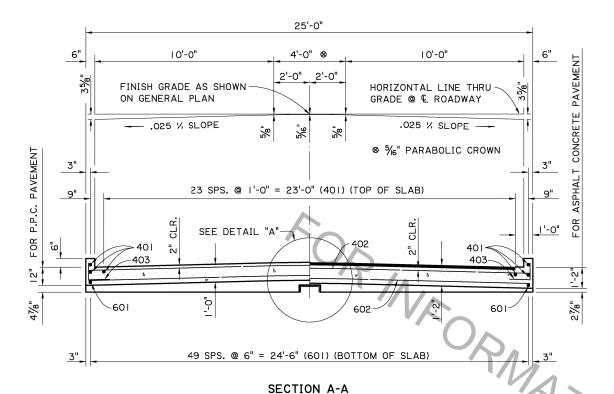
TROL

PAINE NAKHLEH HYMEL NAKHLEH O5/17/17 -;-||c|-;||`

20"-75°



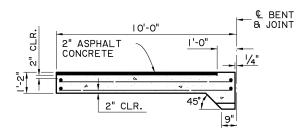




SCALE: 3/8" = 1'-0"

10'-0" € BENT 2" CLR. 2" CLR.

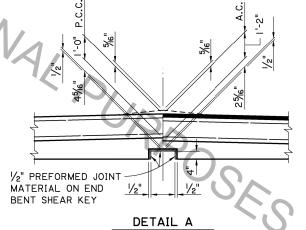
(FOR PORTLAND CEMENT CONCRETE ROADWAY PAVEMENT)



(FOR ASPHALT CONCRETE ROADWAY PAVEMENT)

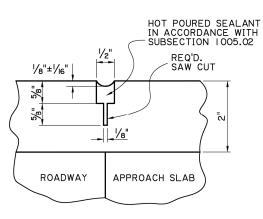
# SECTION ALONG & ROADWAY

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

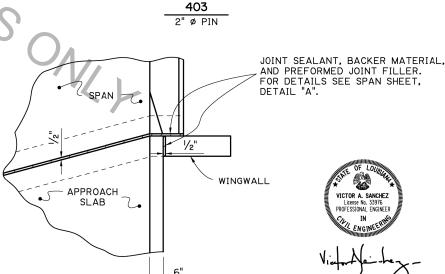


SCALE :  $\frac{1}{2}$ " = 1'-0"

| |-|"



SAWING & SEALING JOINT DETAIL



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

	ESTIMATED QUANTITIES (ONE SLAB)						
BAR	BAR NO. UNIT			LOCATION			
601	50	9'-7"	479'-2"	LONGIT. BOT. OF SLAB			
602	20	25'-6"	510'-0"	TRANSV. BOT. OF SLAB			
TOT	TOTAL NO. 6 BARS = 989'-2" = 1,486 LBS.						
401	28	9'-7"	268'-4"	LONGIT. TOP OF SLAB & CURI			
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. O TO BE PAID FOR UNDER ITEM 'CONCRETE APPROACH SLABS'.

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

# APPROACH SLAB NOTES:

CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

<u>DESIGN SPECIFICATIONS:</u> AASHTO <u>LRFD BRIDGE DESIGN SPECIFICATIONS</u>, 4th EDITION, WITH 2008 8 2009 INTERIMS.

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS AI. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER, UNLESS OTHERWISE

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, UNLESS OTHERWISE NOTED.

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. COST TO BE INCLUDED

WITH CONCRETE APPROACH SLABS.

BASIS OF PAYMENT: ALL MATERIAL SHALL BE PAID FOR UNDER CONCRETE APPROACH SLABS' ACCORDING TO THE SPECIFICATIONS.



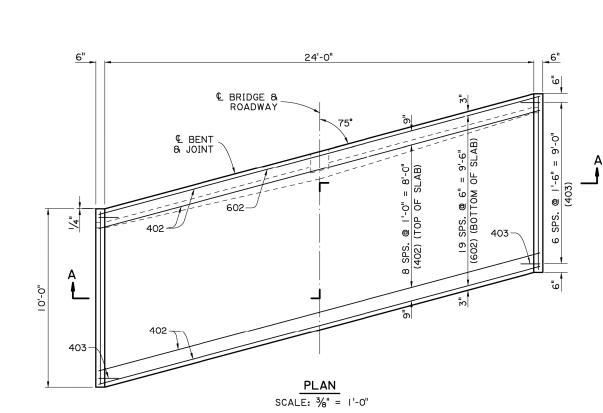
ല്∹∥ല്∹∥`

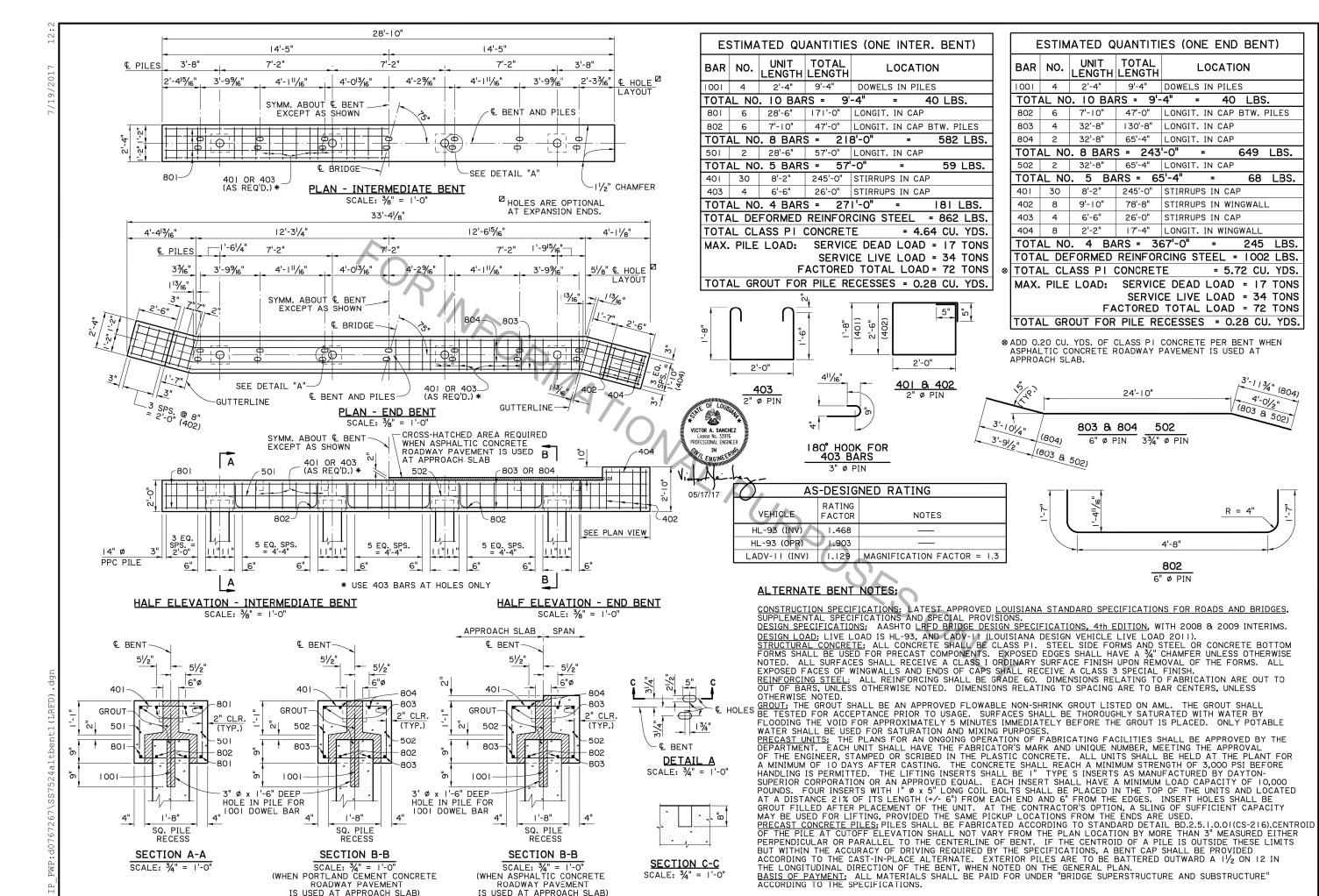
SLAB

0-0



05/17/17





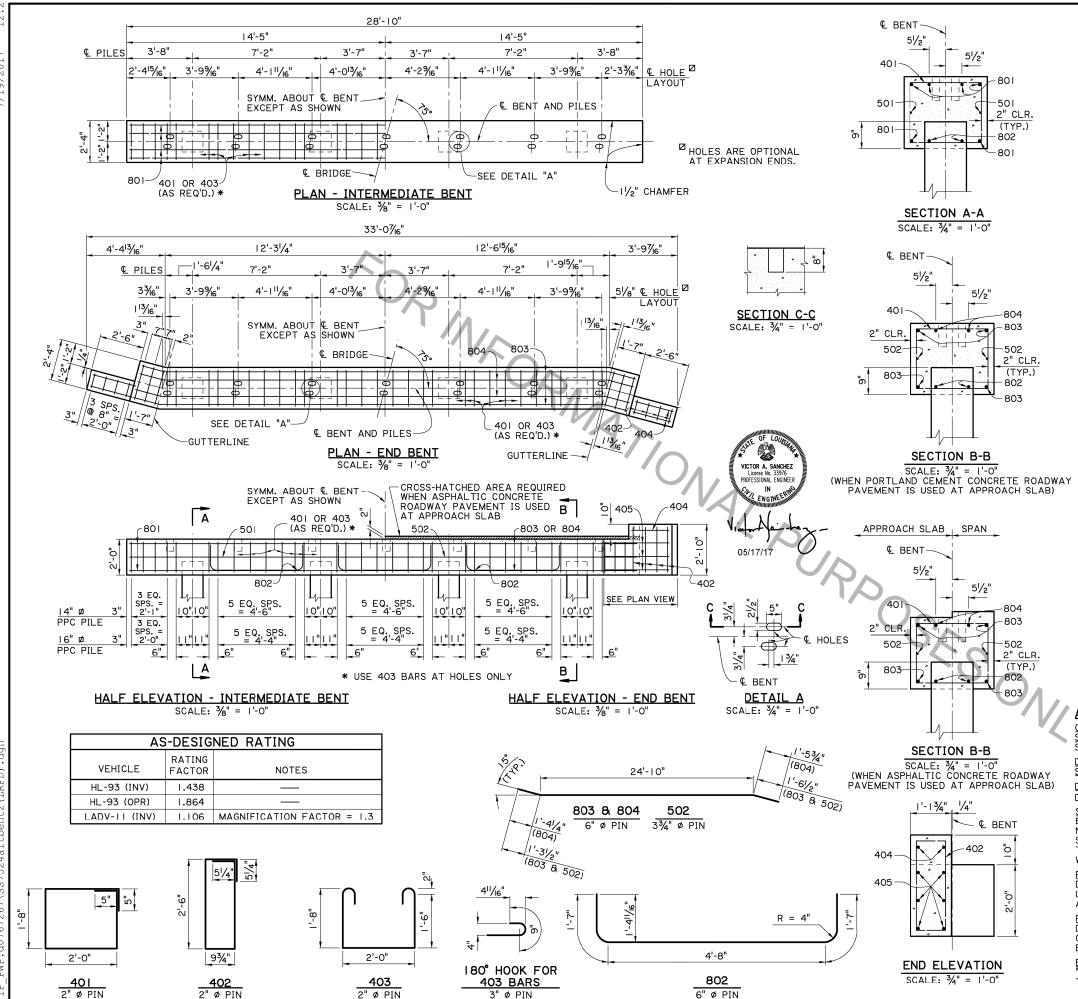
യ്∹∥ല്∹∭`

68 LBS.

LBS.

4'-01/2"

LTERNATE BENTS
CAST CONCRETE BENTS
4'-0" CLEAR ROADWAY
OSSING TWO WAY TANGENT



3" Ø PIN

6" Ø PIN

2" Ø PIN

2" Ø PIN

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

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

	ESTIMATED QUANTITIES (ONE END BENT)							
	BAR	BAR NO. UNIT		TOTAL LENGTH	LOCATION			
	802	6	7'-10"	47'-0"	LONGIT. IN C	AP BTW. P	ILES	
l	803	4	27'-8"	110'-8"	LONGIT. IN C	AP		
l	804	2	27'-8"	55'-4"	LONGIT. IN C	AP		
	TOTA	AL NO	. 8 BAR	S = 213	s'-O" =	569	LBS.	
	502	2	27'-8"	55'-4"	LONGIT. IN C	AP		
	TOTA	AL NO	. 5 BA	RS = 5	5'-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 W	VINGWALL		
	405	12	3'-11"	47'-0"	LONGIT. IN W	/INGWALL		
	TOTA	AL NO	. 4 BA	RS = 3	86'-8" =	258	LBS.	
	TOTA	L DE	FORMED	REINFOF	RCING STEE	L = 885	LBS.	
⊗	TOTA	L CL	ASS AI	CONCRET	E = 5	5.24 CU.	YDS.	
ı	MAX.	PILE	LOAD:	SERVIC	E DEAD LO	AD = 17	TONS	
				SERVIO	CE LIVE LO	AD = 34	TONS	
			F <i>A</i>	CTORED	TOTAL LO	AD = 72	TONS	

⊗ 16" Ø PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD O.O4 CU. YDS. OF CLASS AI CONCRETE PER BENT WHEN I4" Ø PPC PILES ARE USED.) ADD O.20 CU. YDS. OF CLASS AI CONCRETE PER BENT WHEN ASPHALTIC CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB.

# **ALTERNATE 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-II (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS AI. 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 SUBSECTION 805.08 OF THE STANDARD SPECIFICATIONS, EXCEPT WHEN SPECIFIED ELSE-WHERE IN THE PLANS.

REINFORCING STEEL: ALL REINFORCING 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.

PRECAST CONCRETE PILES: FOR DETAILS OF PILES SEE STANDARD DETAIL BD.2.5.1.0.01(CS-216). EXTERIOR PILES ARE TO BATTERED OUTWARD AT 1/2 ON 12 IN THE LONGITUDINAL DIRECTION OF THE BENT, WHEN NOTED ON THE GENERAL PLAN.

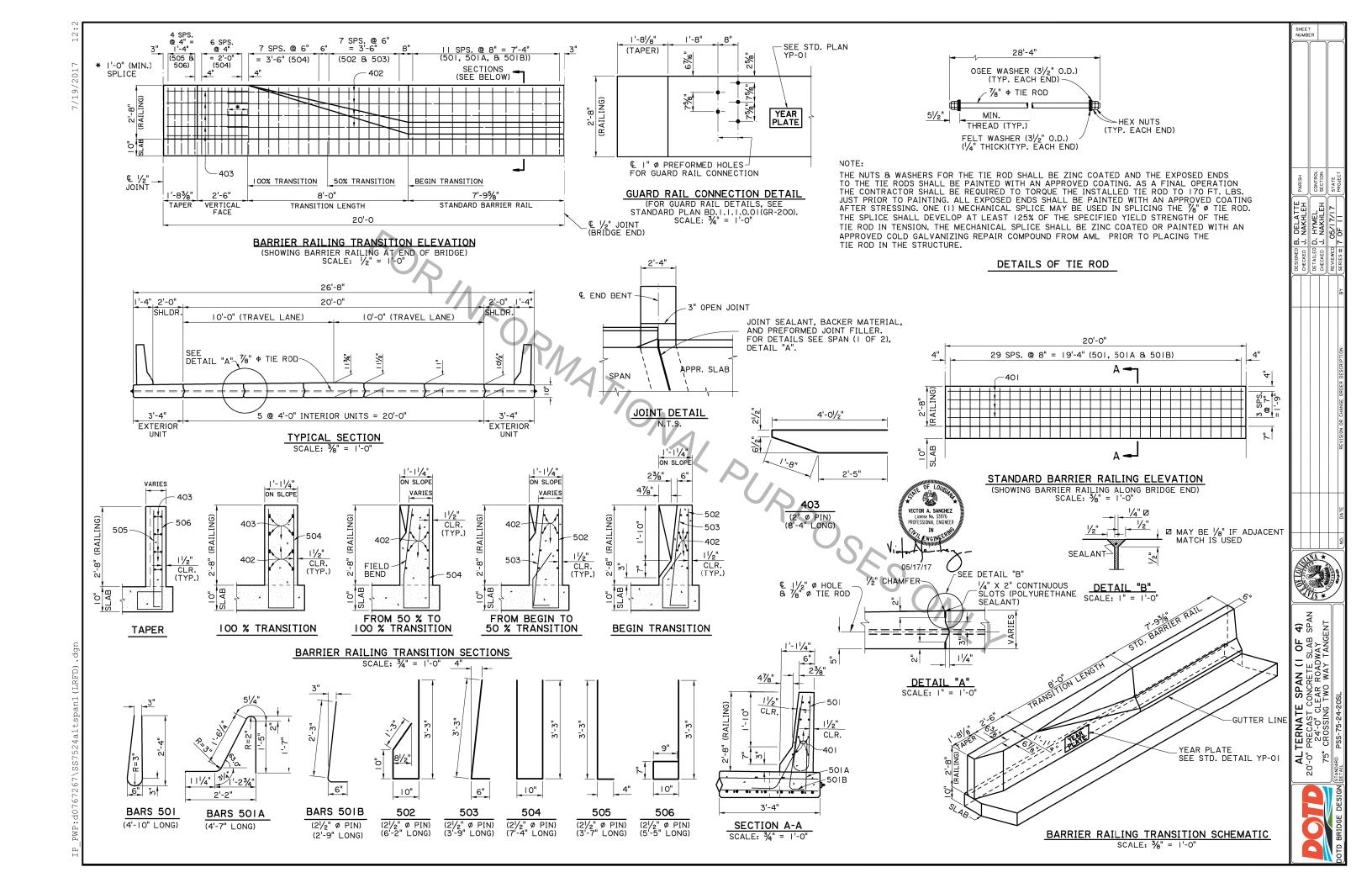
BASIS OF PAYMENT: ALL MATERIALS SHALL BE PAID FOR UNDER "BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE" ACCORDING TO THE SPECIFICATIONS.

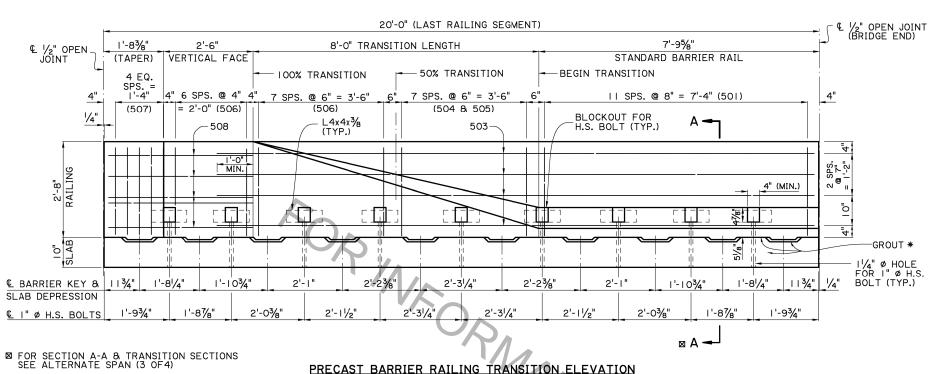


യും ചിലും ചി,

ALTERNATE BENTS
AST-IN-PLACE CONCRETE BENTS
24-0" CLEAR ROADWAY
CROSSING TWO WAY TANGENT
PSS-75-24-00SI CAST 75°C



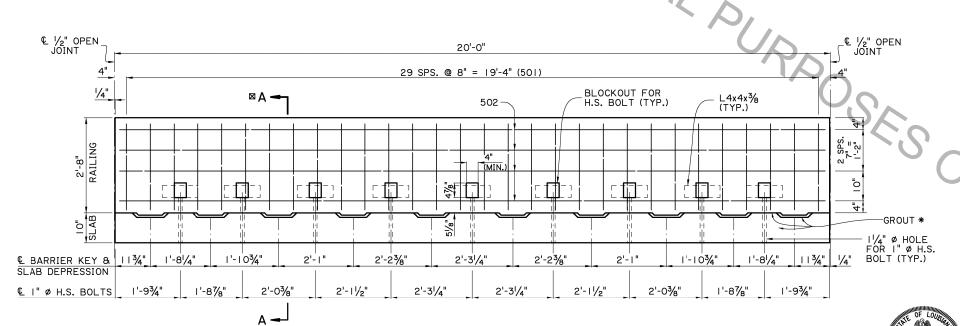




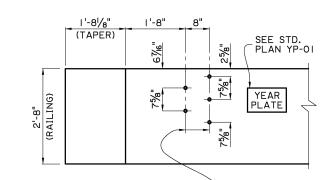
# PRECAST BARRIER RAILING TRANSITION ELEVATION (SHOWING BARRIER RAILING AT END OF BRIDGE) SCALE: 3/4" = 1'-0"

\* 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.

05/17/17



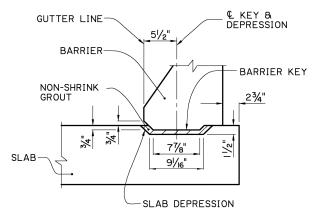
STANDARD PRECAST BARRIER RAILING ELEVATION (SHOWING BARRIER RAILING ALONG BRIDGE SLAB) SCALE:  $\frac{3}{4}$ " = 1'-0"



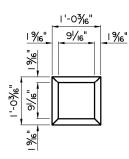
↓ I" Ø PREFORMED HOLES FOR GUARD RAIL CONNECTION

# **GUARD RAIL CONNECTION DETAIL**

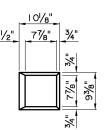
(FOR GUARD RAIL DETAILS, SEE STANDARD PLAN\_BD.I.I.I.O.OI(GR-200). SCALE:  $\frac{3}{4}$ " = 1'-0"



**ELEVATION** SCALE:  $1\frac{1}{2}$ " = 1'-0"



**PLAN-DEPRESSION** 



**PLAN-KEY** 

BARRIER KEY AND PANEL DEPRESSION DETAILS



CONTROL SECTION STATE PROJECT

DESIGNED B. DELATTE

CHECKED J. NAKHLEH

CHECKED J. NAKHLEH

CHECKED J. NAKHLEH

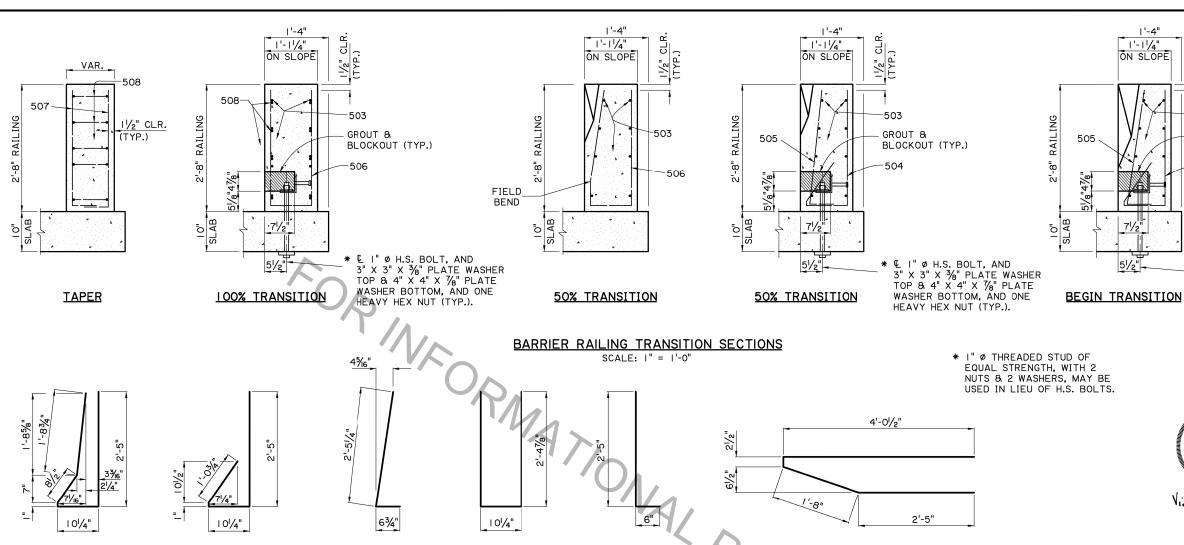
REVIEWED OS/17/17

SERIES # 8 OF 11

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







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

### NOTES:

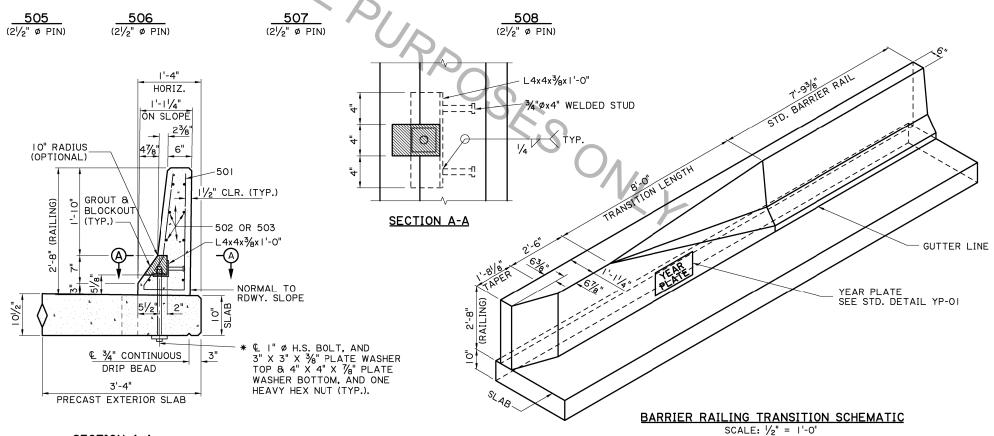
I) ALL BARRIER RAIL SURFACES ARE TO RECEIVE A CLASS 3 SPECIAL FINISH.

 $(2\frac{1}{2}" \otimes PIN)$ 

504

 $(2\frac{1}{2}$  Ø PIN)

- 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.
- 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.
- ALL I" 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).



GROUT &

05/17/17

BLOCKOUT (TYP.)

\* © I" Ø H.S. BOLT, AND 3" X 3" X 3%" PLATE WASHER TOP & 4" X 4" X 3%" PLATE

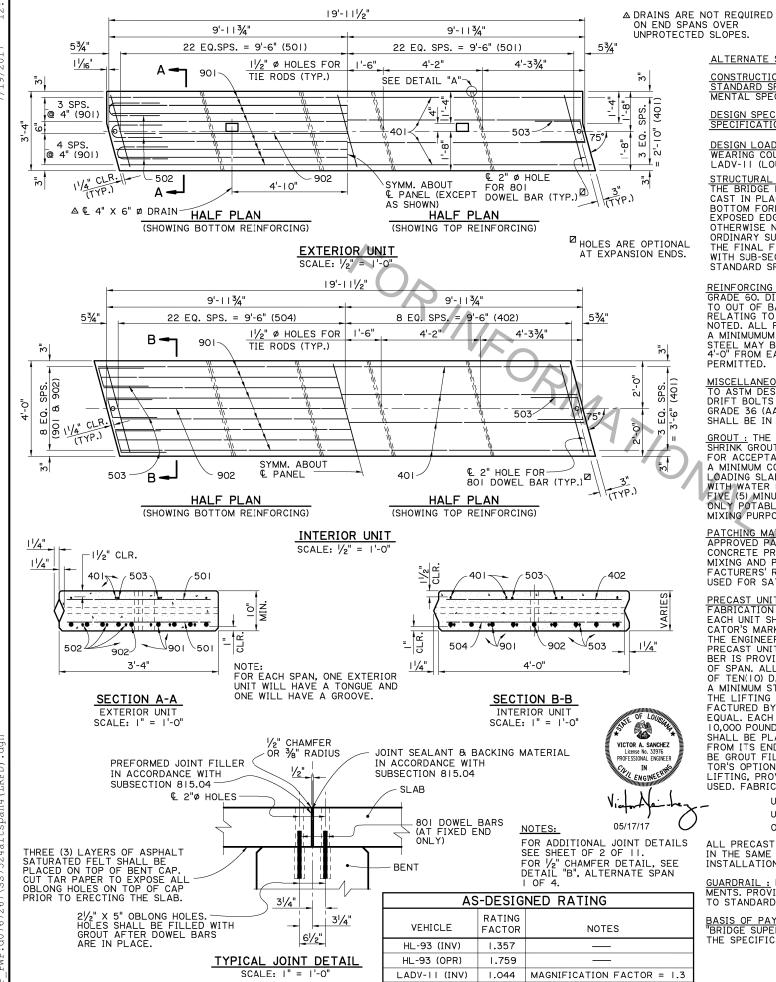
WASHER BOTTOM, AND ONE

HEAVY HEX NUT (TYP.).

اخت احت

LTERNATE SPAN (3 OF 4)
O'-O" PRECAST CONC. BARRIER
24'-O" CLEAR ROADWAY
5° CROSSING TWO WAY TANGENT
PSS-75-24-20SL

AL7 20'-75°



### **ALTERNATE SPAN NOTES:**

CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO <u>LRFD BRIDGE DESIGN</u> 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-II (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).

STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS PI.
THE BRIDGE RAIL CONCRETE SHALL BE CLASS AI 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 3/4" CHAMFER, UNLESS
OTHERWISE NOTED. ALL SURFACES SHALL RECEIVE A CLASS I ORDINARY SURFACE FINISH UPON REMOVAL OF THE FORMS. THE FINAL FINISH SHALL BE A FINE FINISH IN ACCORDANCE WITH SUB-SECTION 805.08.5.3 OF THE LOUISIANA STANDARD SPECIFICATIONS.

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. NOTED. ALL REINFORCING BARS SHALL BE PLACED TO PROVIDE A MINIMUMUM COVER OF I" 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

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-II", 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 1/4" AT THE CENTERLINE OF SPAN, ALL UNITS SHALL BE HELD AT THE PLANT FOR A MINIMUM OF TENTION THE CANCETTE SHALL PROCH 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 I", TYPE S INSERTS AS MANUFACTURED BY DAYTON-SUPERIOR CORPORATION OR AN APPROVED EQUAL. EACH INSERT SHALL HAVE A MINIMUM LOAD CAPACITY OF IO,000 POUNDS . FOUR(4) INSERTS WITH I" Ø X 5" LONG COIL BOLTS SHALL BE PLACED IN THE TOP OF THE UNIT AND LOCATED I'-3" FROM ITS ENDS AND I'-0" FROM ITS EDGES. INSERT HOLES SHALL BE GROUT FILLED AFTER PLACEMENT OF UNIT. AT THE CONTRAC-TOR'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 ± %" UNIT LENGTH + 1/8" AND -1/2" 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.

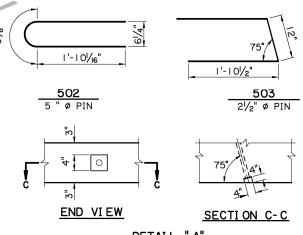
GUARDRAIL: REFER TO GENERAL PLAN FOR GUARDRAIL REQUIRE MENTS. PROVIDE HOLES FOR GUARDRAIL CONNECTIONS ACCORDING TO STANDARD PLAN BD.I.I.I.O.OI(GR-200) ON ALL FOUR(4) BRIDGE ENDS.

BASIS OF PAYMENT: ALL MATERIALS SHALL BE PAID FOR UNDER "BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE" ACCORDING TO THE SPECIFICATIONS.

	EST	MAT	ED QUAI	NTITIES	(ONE EX	TERIOR UNIT)
	BAR	NO.	UNIT TOTAL LOCATION			CATION
	901	8	19'-8"	157'-4"	LONGIT. BO	OT. OF SLAB
	902	ı	18'-11"	18'-11"	LONGIT. BO	OT. OF SLAB
	TOTA	L NO	. 9 BARS	S = 176 <sup>1</sup> -	·3" =	599 LBS.
	801	_	1'-0"	1'-0"	DOWELS	
	TOT	AL NO	). 8 BAR	S =  '-0'	=	3 LBS.
	501	90	3'-1"	277'-6"	TRANS. TO	P & BOT. OF SLAB
	502	6	4'-6"	27'-0"	BOT. END	OF SLAB
	503	2	4'-9"	9'-6"	TOP END C	F SLAB
	TOTA	L NO	. 5 BARS	S = 313 <sup>'</sup> -	·  " =	327 LBS.
	401	4	19'-8"			OP OF SLAB
	TOTA	AL NC	. 4 BAR	S = 78' - 8	3" =	53 LBS.
	DEFC	RMED	REINFO	RCING S	TEEL	= 982 LBS.
0	CLAS	SPI	CONCRE	TE	=	2.05 CU. YDS.
	CONC	RETE	RAILING	G (PER S	PAN) =	40.00 LIN. FT.

	ESTIMATED QUANTITIES (ONE INTERIOR UNIT)							
	BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LO	CATION		
	901	8	19'-8"	157'-4"	LONGIT. B	OT. OF SLAB		
	902	I	18'-11"	18'-11"	LONGIT. B	OT. OF SLAB		
	TOTA	AL NO	. 9 BAR	$S = 176^{1}$	-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 & BO	T. END OF SLAB		
	504	44	3'-9"	165'-3"	TRANS. BO	T. OF SLAB		
	TOTA	AL NO	. 5 BAR	s = 203'	-O" =	212 LBS.		
	401	4	19'-8"	78'-8"	LONGIT. T	OP OF SLAB		
	402	17	3'-9"	63'-9"	TRANS. TO	P OF SLAB		
	TOTAL NO. 4 BARS = 142'-5" = 95 LBS.							
	DEFORMED REINFORCING STEEL = 909 LBS.							
0	CLAS	SPI	CONCRE	TE	=	2.46 CU. YI	os.	

○ BASED ON A 10" SLAB THICKNESS



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

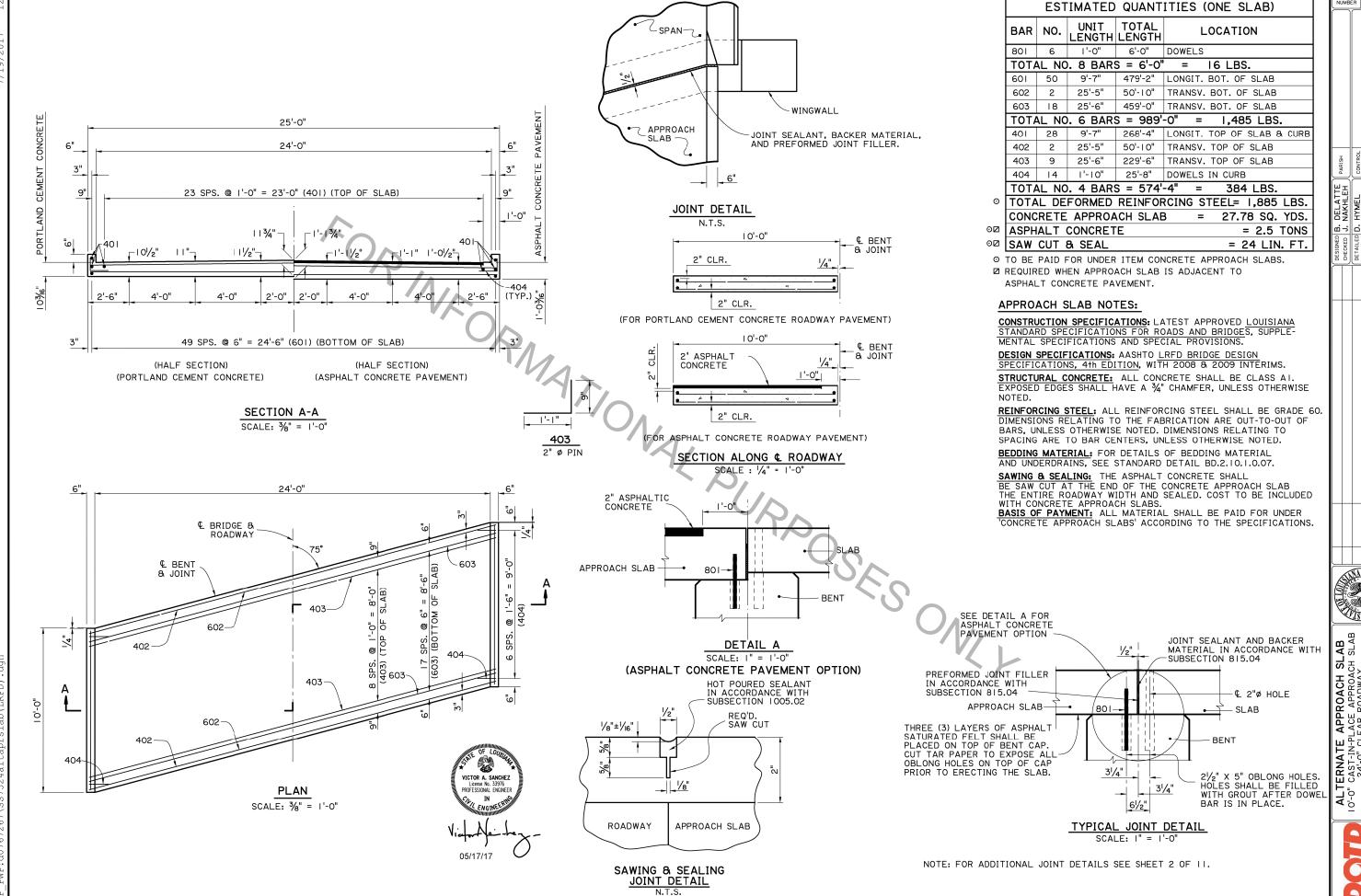


CRETE SLAB UNITER ROADWAY

WAY TANGENT

**4** ≥ i

J. NAKHLEH
B. DELATTE
D. HYMEL
J. NAKHLEH
OS/17/17



75°