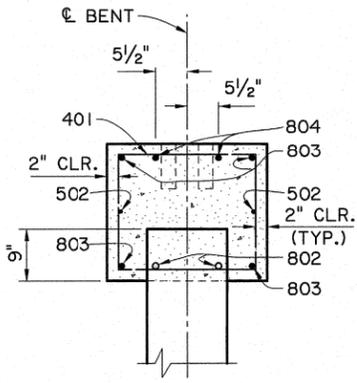
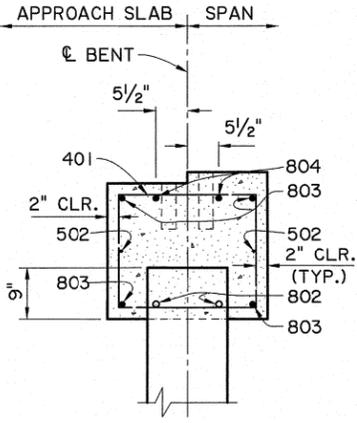


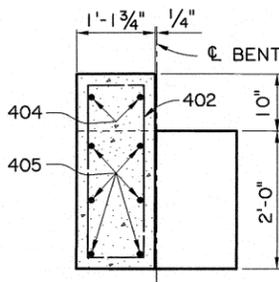
**SECTION A-A**  
SCALE: 3/4" = 1'-0"



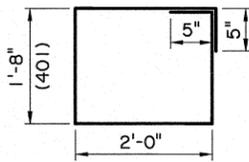
**SECTION B-B**  
SCALE: 3/4" = 1'-0"  
(WHEN PORTLAND CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB)



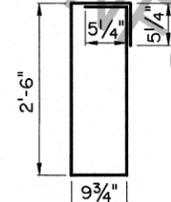
**SECTION B-B**  
SCALE: 3/4" = 1'-0"  
(WHEN ASPHALTIC CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB)



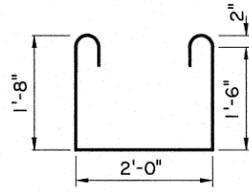
**END ELEVATION**  
SCALE: 3/4" = 1'-0"



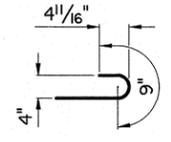
**401**  
2" Ø PIN



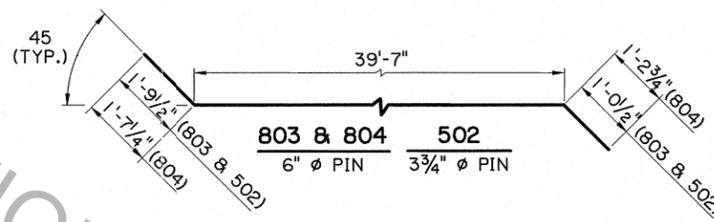
**402**  
2" Ø PIN



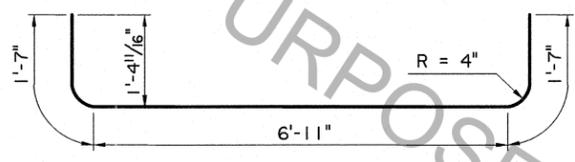
**403**  
2" Ø PIN



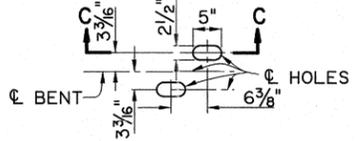
**180° HOOK FOR 403 BARS**  
3" Ø PIN



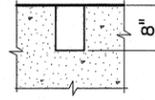
**502**  
3 3/4" Ø PIN



**802**  
6" Ø PIN



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



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

**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-11 (LOUISIANA DESIGN VEHICLE LIVE LOAD 2011).  
 STRUCTURAL CONCRETE: ALL CONCRETE SHALL BE CLASS A. 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 805.13 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.  
 PRECAST CONCRETE PILES: FOR DETAILS OF PILES SEE STANDARD DETAIL C.S. 216. EXTERIOR PILES ARE TO BATTERED OUTWARD AT 1 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.

**ESTIMATED QUANTITIES (ONE INTER. BENT)**

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	6	45'-8"	274'-0" LONGIT. IN CAP
802	8	10'-1"	80'-8" LONGIT. IN CAP BTW. PILES
<b>TOTAL NO. 8 BARS = 354'-8"</b>			<b>= 947 LBS.</b>
501	2	45'-8"	91'-4" LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 91'-4"</b>			<b>= 95 LBS.</b>
401	52	8'-2"	424'-8" STIRRUPS IN CAP
403	8	6'-6"	52'-0" STIRRUPS IN CAP
<b>TOTAL NO. 4 BARS = 476'-8"</b>			<b>= 318 LBS.</b>
<b>TOTAL DEFORMED REINFORCING STEEL = 1360 LBS.</b>			
<b>TOTAL CLASS A CONCRETE = 7.67 CU. YDS.</b>			
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 22 TONS</b>			
<b>SERVICE LIVE LOAD = 33 TONS</b>			
<b>FACTORED TOTAL LOAD = 76 TONS</b>			

16" Ø PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.06 CU. YDS. OF CLASS A CONCRETE PER BENT WHEN 14" Ø PPC PILES ARE USED.)

**ESTIMATED QUANTITIES (ONE END BENT)**

BAR NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
802	8	10'-1"	80'-8" LONGIT. IN CAP BTW. PILES
803	4	42'-5"	169'-8" LONGIT. IN CAP
804	2	42'-5"	84'-10" LONGIT. IN CAP
<b>TOTAL NO. 8 BARS = 335'-2"</b>			<b>= 895 LBS.</b>
502	2	42'-5"	84'-10" LONGIT. IN CAP
<b>TOTAL NO. 5 BARS = 84'-10"</b>			<b>= 88 LBS.</b>
401	48	8'-2"	392'-0" STIRRUPS IN CAP
402	8	7'-6"	60'-0" STIRRUPS IN WINGWALL
403	8	6'-6"	52'-0" STIRRUPS IN CAP
404	4	2'-2"	8'-8" LONGIT. IN WINGWALL
405	12	3'-11"	47'-0" LONGIT. IN WINGWALL
<b>TOTAL NO. 4 BARS = 559'-8"</b>			<b>= 374 LBS.</b>
<b>TOTAL DEFORMED REINFORCING STEEL = 1,357 LBS.</b>			
<b>TOTAL CLASS A CONCRETE = 7.72 CU. YDS.</b>			
<b>MAX. PILE LOAD: SERVICE DEAD LOAD = 22 TONS</b>			
<b>SERVICE LIVE LOAD = 33 TONS</b>			
<b>FACTORED TOTAL LOAD = 76 TONS</b>			

16" Ø PPC PILES USED FOR ESTIMATING PURPOSES ONLY. (ADD 0.06 CU. YDS. OF CLASS A CONCRETE PER BENT WHEN 14" Ø PPC PILES ARE USED.) ADD 0.31 CU. YDS. OF CLASS A CONCRETE PER BENT WHEN ASPHALTIC CONCRETE ROADWAY PAVEMENT IS USED AT APPROACH SLAB.

**AS-DESIGNED RATING**

VEHICLE	RATING FACTOR	NOTES
HL-93 (INV)	2.536	---
HL-93 (OPR)	3.287	---
LADV-11 (INV)	1.951	MAGNIFICATION FACTOR = 1.3



FOR INFORMATIONAL PURPOSES ONLY

SHEET NUMBER		PARISH	CONTROL SECTION	STATE PROJECT
DESIGNED BY	B. DELATTE	CHECKED BY	J. NAKHLEH	DATE
DETAILED BY	D. HYMEL	CHECKED BY	J. NAKHLEH	DATE
SERIES NUMBER	12/14/2010	REVISION OR CHANGE ORDER DESCRIPTION		DATE
	8 OF 13			

**ALTERNATE BENTS (2 OF 2)**  
 CAST-IN-PLACE CONCRETE BENTS  
 28'-0" CLEAR ROADWAY  
 45° CROSSING TWO WAY TANGENT

STATE OF LOUISIANA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF BRIDGE DESIGN