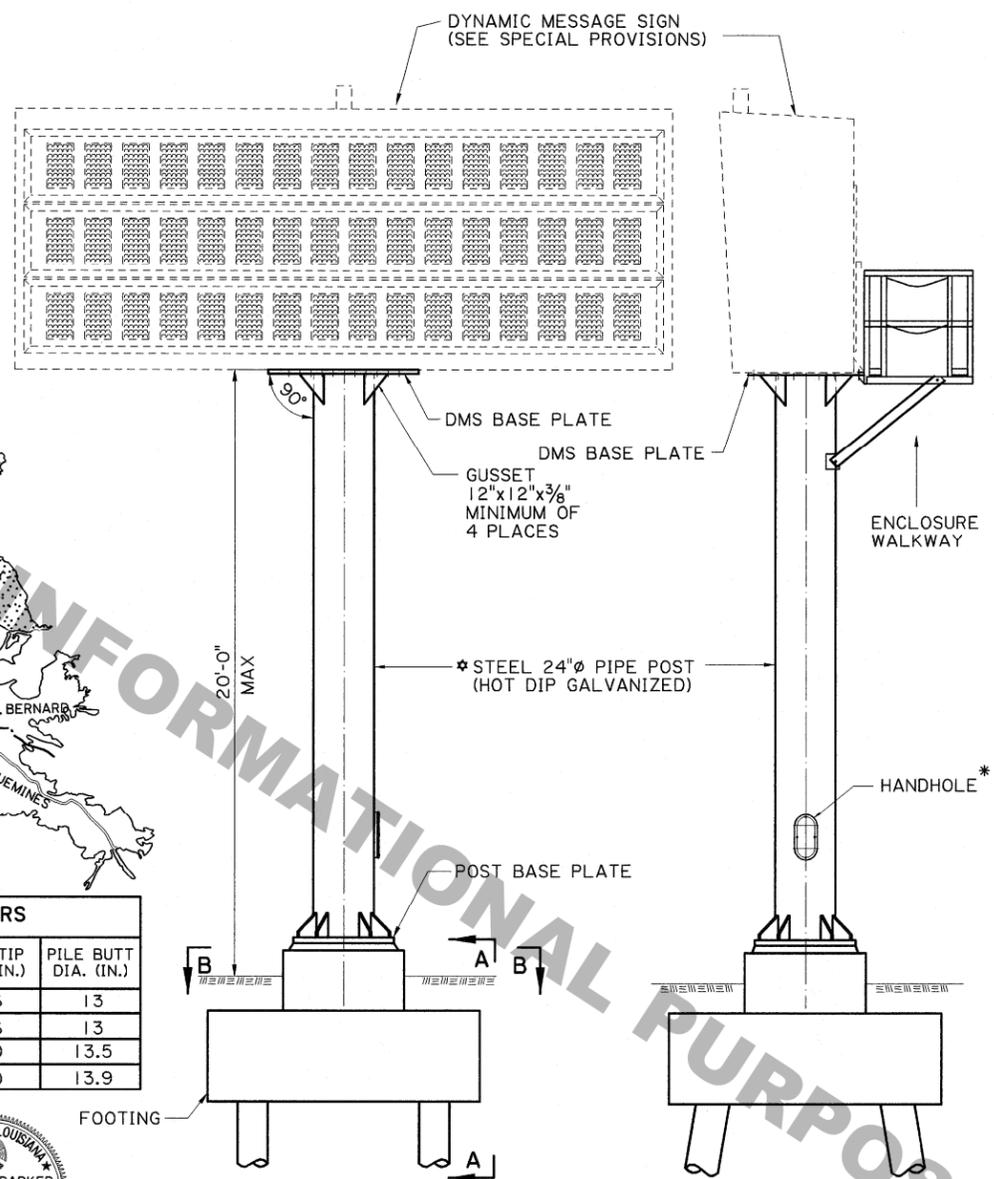


WIND LOAD MAP (AASHTO 2001)

WIND LOAD MAP LEGEND				DMS DESIGN PARAMETERS					
SYMBOL	ZONE	WIND VELOCITY (MPH)⊗	SIGN LOAD (PSF)Δ	POST LOAD (PSF)⊚	MAX PILE LOADS (TONS)	MAX PILE UPLIFT (TONS)	PILE LENGTH (FT)	PILE TIP DIA. (IN.)	PILE BUTT DIA. (IN.)
Zone 1 symbol	1	90	39	9	16	3	40	8.6	13
Zone 2 symbol	2	110	58	14	21	8	40	8.6	13
Zone 3 symbol	3	120	69	16	24	11	70	8.0	13.5
Zone 4 symbol	4	130	81	19	27	14	75	8.0	13.9

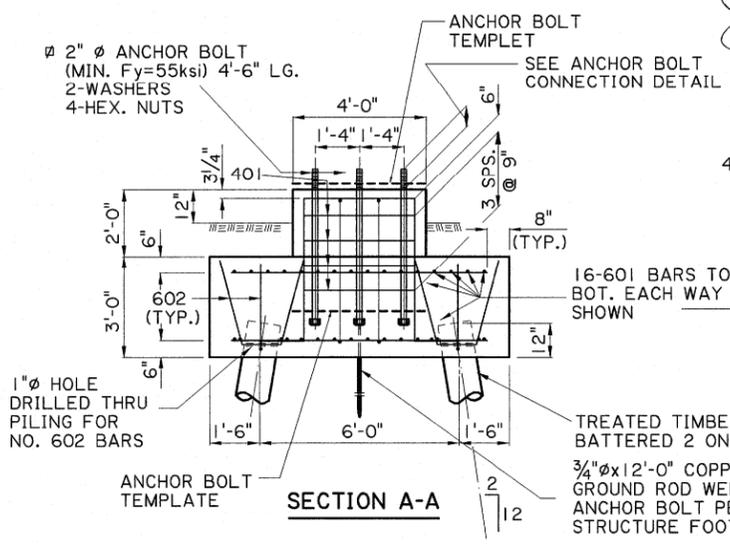
- ⊗ 50 YEAR MEAN RECURRENCE INTERVAL.
- Δ INCLUDES  $C_d = 1.7$  (TABLE 3-6).
- ⊚ INCLUDES  $C_d = 0.45$  (TABLE 3-6).
- CONTRACTOR SHALL USE THE PILE SIZES AND LENGTHS WHICH CORRESPOND TO THE APPROPRIATE REGION, AS INDICATED IN THE TABLE ABOVE.



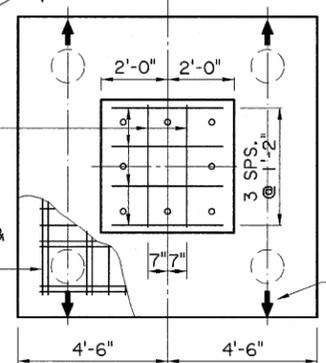
\* SECTION AT HANDHOLE TO BE REINFORCED TO HAVE EQUIVALENT MODULUS AS THE SECTION WITHOUT THE HOLE. HANDHOLE COVERS SHALL BE HINGED WITH PROVISIONS FOR LOCKING. DETAILS TO BE SUBMITTED WITH SHOP DRAWINGS FOR APPROVAL.

ESTIMATED QUANTITIES - ONE DMS SIGN				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
601	64	7'-8"	490'-8"	FOOTING
602	8	6'-4"	50'-8"	FOOTING
<b>TOTAL NO. 6 BARS = 541'-4"</b>			<b>=</b>	<b>813 LBS.</b>
401	4	14'-10"	59'-4"	STIRRUPS IN FOOTING & PED.
402	6	13'-10"	83'-0"	STIRRUPS IN FOOTING & PED.
<b>TOTAL NO. 4 BARS = 142'-4"</b>			<b>=</b>	<b>95 LBS.</b>
<b>TOTAL DEFORMED REINFORCING STEEL</b>				<b>= 908 LBS.</b>
<b>TOTAL CLASS "A" CONCRETE</b>				<b>= 7.04 CU.YDS.</b>
<b>STRUCTURAL EXCAVATION</b>				<b>= 21.3 CU.YDS.</b>
<b>STRUCTURAL STEEL, ANCHOR BOLTS (F1554, GR 55)</b>				<b>= 385 LBS.</b>
* <b>STRUCTURAL STEEL, POST (A-53, 24"Ø x 1/2", ZONE 1)</b>				<b>= 2387 LBS.</b>
* <b>STRUCTURAL STEEL, POST (A-53, 24"Ø SCHED. 40, ZONE 2 &amp; 3)</b>				<b>= 3258 LBS.</b>
* <b>STRUCTURAL STEEL, POST (A-53, 24"Ø SCHED. 60, ZONE 4)</b>				<b>= 4533 LBS.</b>
<b>STRUCTURAL STEEL, ALL OTHER MISC. (A-709, GR 50)</b>				<b>= 2320 LBS.</b>
<b>STRUCTURAL STEEL, GRATING (#3 RYEX EX. METAL)</b>				<b>= 17.50 SQ. FT.</b>
<b>ASTM D25 TREATED TIMBER PILES</b>				<b>= VARIES (SEE TABLE)</b>

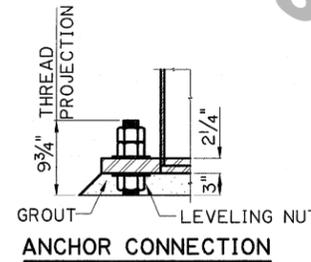
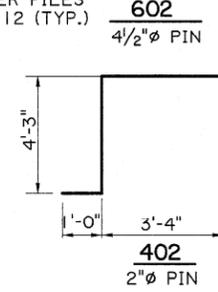
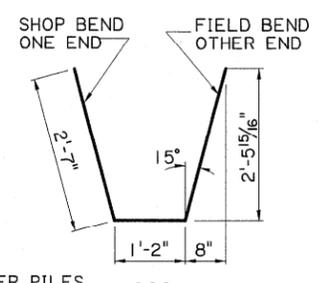
NOTES:  
 DESIGN SPECIFICATIONS: THE STRUCTURAL DESIGN SHALL BE IN ACCORDANCE WITH THE 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, WITH INTERIMS. MAXIMUM DESIGN SIGN AREA 250 SQ. FT. SEE WIND LOAD CHART FOR DESIGN WIND LOAD PRESSURES. MAXIMUM DESIGN DEAD LOAD OF THE DMS PLUS ENCLASURE IS 7000 LBS. WITH THE CENTER OF GRAVITY NO MORE THAN 6.5" FROM C OF SUPPORT IN THE DIRECTION PERPENDICULAR TO THE LENGTH OF THE SIGN AND CENTERED LENGTHWISE WITH THE SUPPORT. MAXIMUM DESIGN LIVE LOAD FOR THE DESIGN OF THE DMS ENCLASURE WALKWAY TO BE 500 LBS. OVER 24" OR 100 P.S.F., WHICHEVER CONTROLS. THE DYNAMIC MESSAGE SIGN ENCLASURE IS A PROPRIETARY ITEM AND SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS. SHOP DRAWINGS SHALL BE SUBMITTED TO LADOTD FOR FINAL APPROVAL. ALL REQUIRED CALCULATIONS WILL BE MADE BY A REGISTERED PROFESSIONAL ENGINEER. UPON REQUEST, COPIES OF ALL CALCULATIONS WILL BE MADE TO THE ENGINEER FOR REVIEW. MANUFACTURER IS RESPONSIBLE FOR THE CONNECTION BETWEEN THE DMS ENCLASURE AND THE SUPPORT POST. STRUCTURAL STEEL SHALL CONFORM TO ASTM A-709, GRADE 50. POST SHALL BE ASTM A-53 TYPE "E" OR "S", GRADE "B". ALL WELDING SHALL CONFORM TO THE L.A. STANDARD SPECIFICATIONS-SECTION 815 AND SUPPLEMENTAL SPECIFICATIONS. GROUT SHALL BE NONSHRINK GROUT AND SHALL NOT CONTAIN ANY CHLORIDES OR OTHER HARMFUL ADDITIVES THAT COULD CAUSE CORROSION OF THE ANCHOR BOLTS ANCHOR BOLTS SHALL BE AASHTO M314 90 (ASTM F1554) GR. 55 UNC SERIES (OR APPROVED EQUAL). ALL OTHER BOLTS CONFORM TO ASTM A325. ANCHOR NUTS SHALL CONFORM TO ASTM A563 GRADE A HEAVY HEX AND FLAT WASHERS TO ASTM F436. ANCHOR BOLT NUTS SHALL BE TIGHTENED TO 1/6 TURN BEYOND SNUG TIGHT. GALVANIZING: POLE SHAFT AND BASE PLATE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. STRUCTURAL BOLTS, NUTS, WASHERS AND OTHER STEEL HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153. ANCHOR BOLTS SHALL BE FURNISHED IN A PREPOSITIONED ANCHOR BOLT ASSEMBLY. (TWO TEMPLATES REQUIRED) PAYMENT: THE ENTIRE DMS ASSEMBLY INCLUDING THE STEEL PIPE POST; ALL STRUCTURAL STEEL, CONCRETE, REBAR, GRATING AND CHAINS; FOUNDATION; ELECTRICAL SYSTEM; DYNAMIC MESSAGE SIGN; AND ALL OTHER ATTACHMENTS AND STRUCTURAL COMPONENTS SHALL BE PAID FOR BY LUMP SUM BY S-ITEM. REINFORCING STEEL SHALL BE GRADE 60.



FOOTING DETAIL



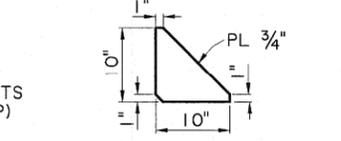
SECTION B-B



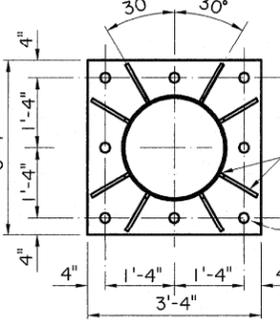
ANCHOR CONNECTION



HANDHOLE (PLAN)

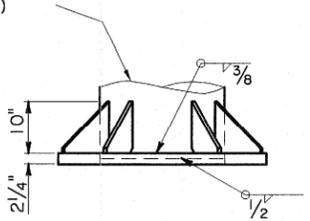


STEEL STIFFENER DETAIL



PLAN

STEEL POST BASE PLATE



ELEVATION

SHEET NUMBER: \_\_\_\_\_

DESIGNED BY: M. ORDOGNE

CHECKED BY: J. PARKER

DATE: NOV. 2005

PROJECT: \_\_\_\_\_

REVISION DESCRIPTION: \_\_\_\_\_

BY: \_\_\_\_\_

DATE: \_\_\_\_\_

INC. \_\_\_\_\_

STANDARD DETAILS: 20' POST & FOUNDATION DETAILS

DYNAMIC MESSAGE SIGN

BRIDGE AND STRUCTURAL DESIGN