

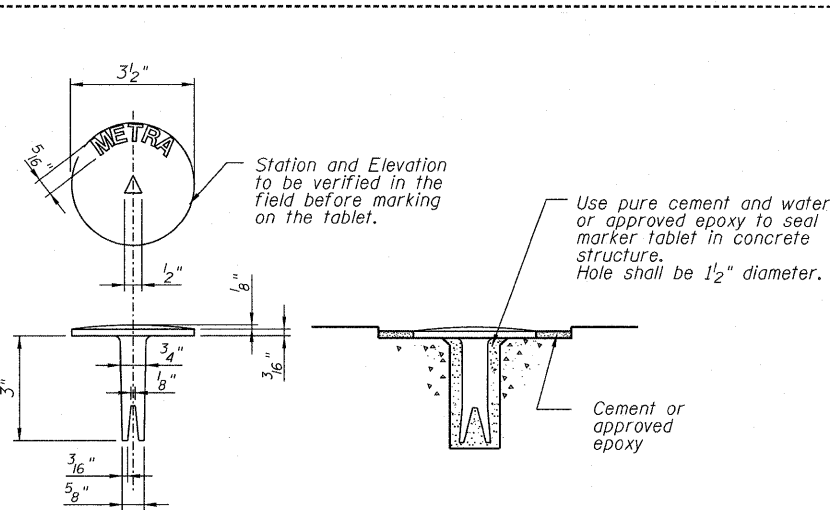
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MOMENT TABLE	
Description	Through Plate Girder At Mid Span
Span Length	97'-11 1/4"
Dead Load Moment (k-ft)	9625
Live Load Moment (k-ft)	12893
Impact Moment (k-ft)	3623
Total Moment (k-ft)	26141
Web Section (in)	1" X 120"
Flange Section (in)	3 1/4" X 24"
Gross I Furnished (in4)	736,569
Section Modulus (in3)	11,645
Allowable Stress fb (ksi)	27.5
Actual Stress fb (ksi)	26.9
Allowable Deflection (in)	1.84
Actual Deflection (in)	1.68

SHEAR TABLE	
Description	Through Plate Girder At End
Dead Load Shear (k)	385
Live Load Shear (k)	600
Impact Shear (k)	169
Total Shear (k)	1154
Web Shear Area (in2)	120
Allow. Shear Stress (ksi)	17.5
Actual Shear Stress (ksi)	9.6

Description	MOMENT TABLE	
	Typical Floor Beam At Mid Span	End Floor Beam At Support
Span Length	34'-0"	21'-8"
Dead Load Moment (k-ft)	160	170
Live Load Moment (k-ft)	575	371
Impact Moment (k-ft)	225	150
Total Moment (k-ft)	960	691
Section	W27x235	W36x210
Gross I Furnished (in4)	9,700	13,200
Section Modulus (in3)	674	719
Allowable Stress (ksi)	27.5	27.5
Actual Stress (ksi)	17.0	7.4
Allowable Deflection (in)	0.64	0.41
Actual Deflection (in)	0.61	0.20

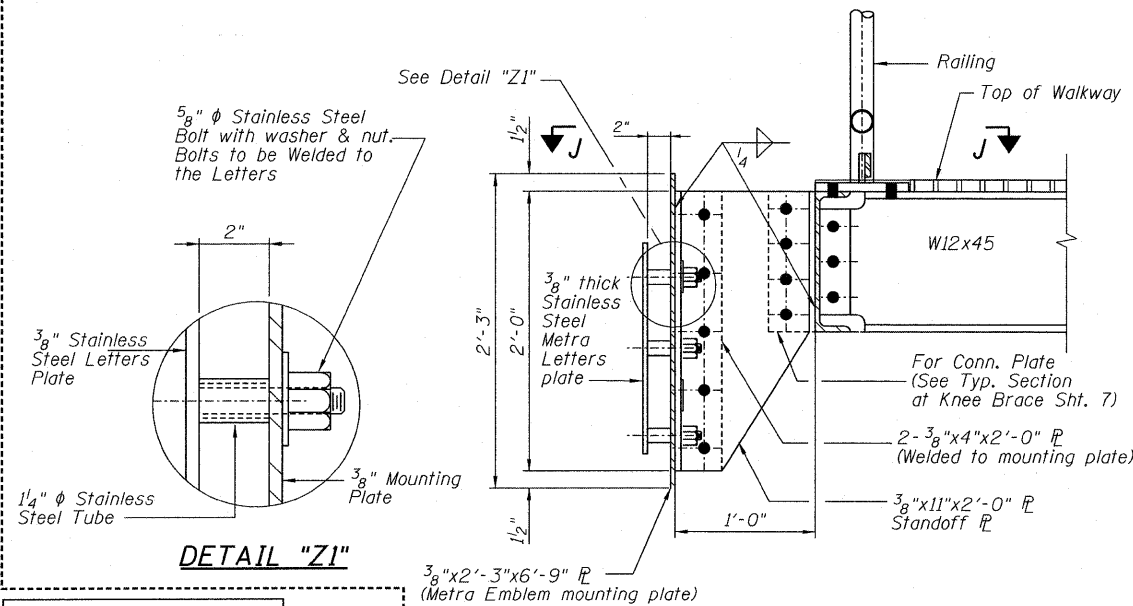
Description	SHEAR TABLE	
	Typical Floor Beam At End	End Floor Beam At End
Dead Load Shear (k)	16	46
Live Load Shear (k)	51	115
Impact Shear (k)	27	46
Total Shear (k)	94	207
Web Shear Area (in2)	21.7	27.0
Allowable Shear Stress (ksi)	17.5	17.5
Actual Shear Stress (ksi)	4.3	7.7



**TABLET  
CONSTRUCTED IN CONCRETE**

BRONZE TABLET

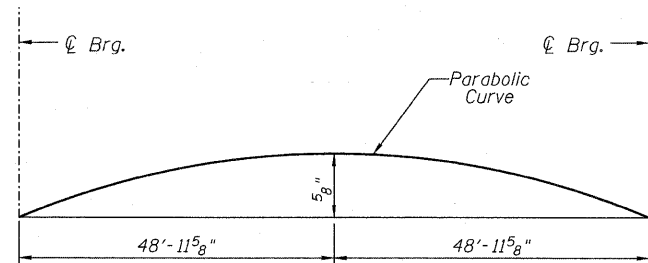
**PERMANENT SURVEY MARKER**  
Location shall be approved by Engineer.



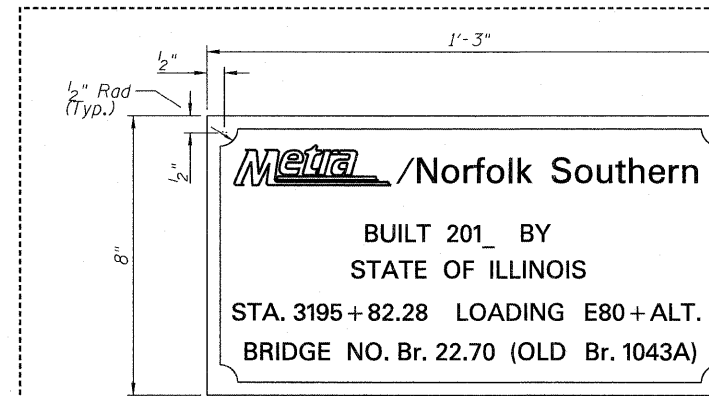
**SECTION Z-Z**

N.I.C.

DESIGNED - KJH
CHECKED - MGB
DRAWN - RJ
CHECKED - MGB

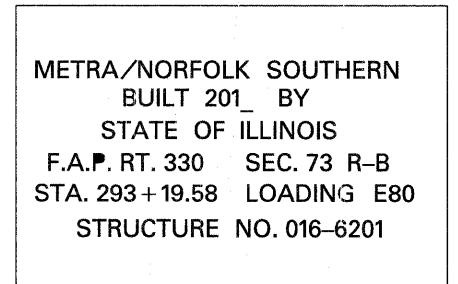


**CAMBER DIAGRAM**  
For Girders G1 & G2



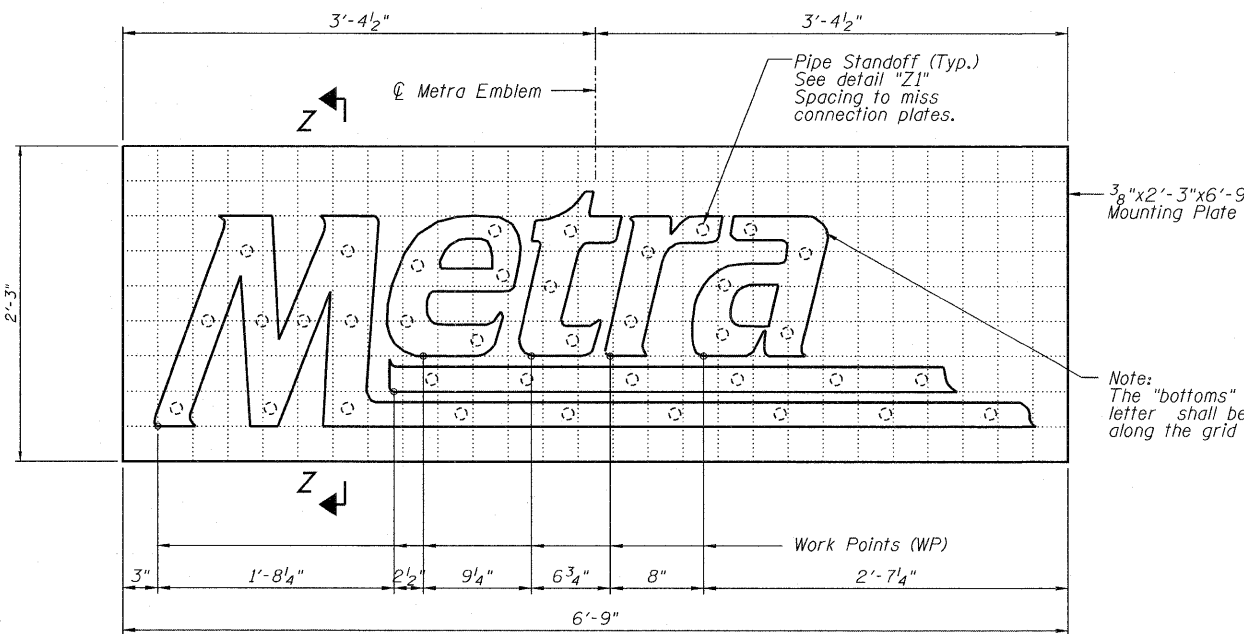
**NAME PLATE - SPECIAL**

Name Plate shall have four lugs at least 3" long cast on the back of the plate.  
For plate location, See Sheet



**NAME PLATE**

See STD 515001  
For Plate Location, See Sheet



**METRA EMBLEM**

2 Required  
For Location of Metra Emblem  
See Framing Plans Sht. 3 & 4.

**NOTES:**

- Metra Emblem is referred to as Sign Panel-Type 2 in the Total Bill Of Material.
- The cost of connecting accessories for Metra Emblem shall be included in the Lump Sum Bid Price of Erecting Structural Steel.
- Prior to Fabrication of Metra Emblems, the Contractor shall obtain the current Standards and Specifications of the Emblem from Metra.

Note:  
The "bottoms" of each letter shall be horizontal along the grid lines.

**DESIGN DATA AND MISC. DETAILS  
STRUCTURE NO. 016-6201**

SHEET NO. 10  13 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	330	2010-074-F	COOK	15	12
DATE: 08/12/10			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60L60					

**McDonough Associates Inc.**  
Engineers / Architects  
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