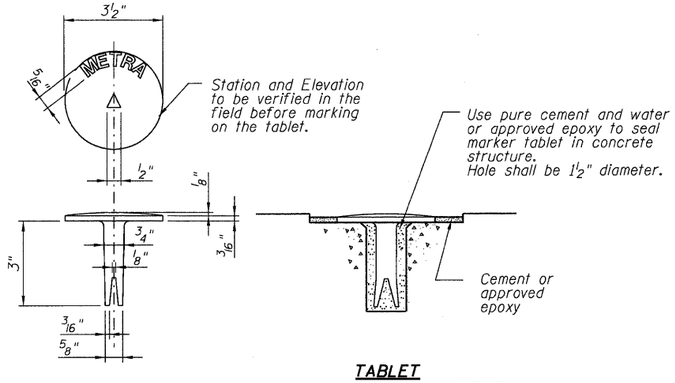
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MOMENT TABLE	
	Through Plate Girder
Description	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	
	Through Plate Girder
Description	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

MOMENT TABLE			
	Typical Floor Beam	End Floor Beam	
Description	At Mid Span	At Mid Span	At Support
Span Length	34'-0"	21'-8"	21'-8"
Dead Load Moment (k-ft)	160	91	170
Live Load Moment (k-ft)	575	253	371
Impact Moment (k-ft)	225	102	150
Total Moment (k-ft)	960	446	691
Section	W27x235	W36x210	W36x210
Gross I Furnished (in4)	9,700	13,200	13,200
Section Modulus (in3)	674	719	719
Allowable Stress (ksi)	27.5	27.5	27.5
Actual Stress (ksi)	17.0	7.4	11.5
Allowable Deflection (in)	0.64	0.41	-
Actual Deflection (in)	0.61	0.20	-

SHEAR TABLE		
	Typical Floor Beam	End Floor Beam
Description	At End	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

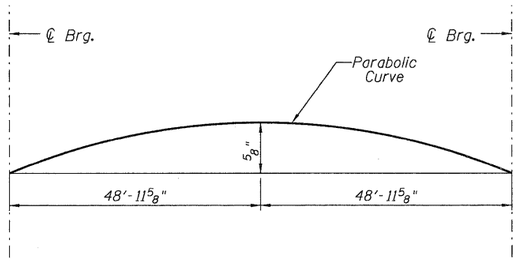


BRONZE TABLET

TABLET CONSTRUCTED IN CONCRETE

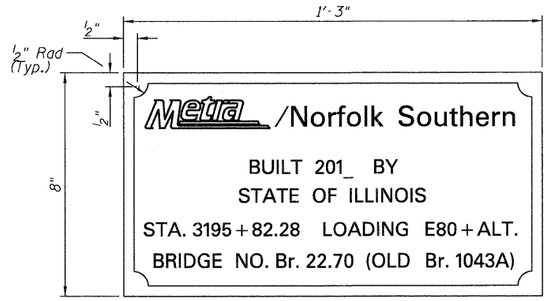
PERMANENT SURVEY MARKER

Location shall be approved by Engineer.



CAMBER DIAGRAM

For Girders G1 & G2



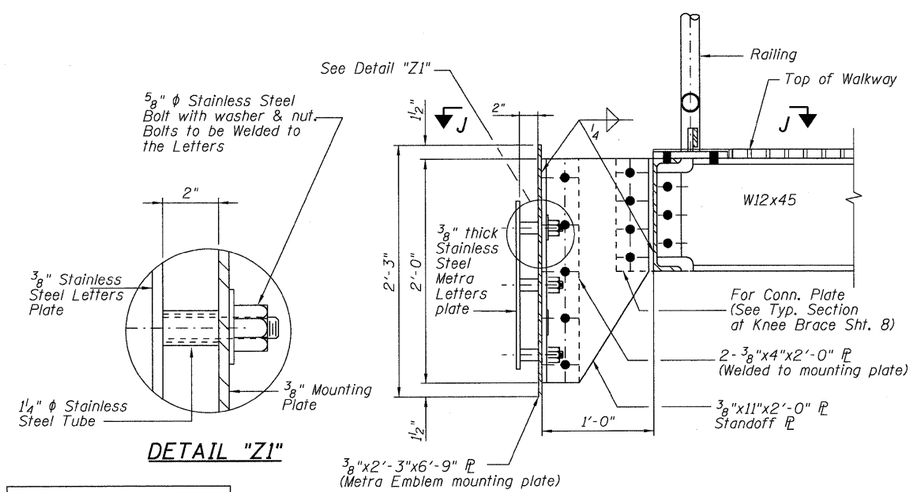
NAME PLATE - SPECIAL

Name Plate shall have four lugs at least 3" long cast on the back of the plate.
For plate location. See Sheet 21

METRA/NORFOLK SOUTHERN
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 330 SEC. 73 R-B
STA. 293+19.58 LOADING E80
STRUCTURE NO. 016-6201

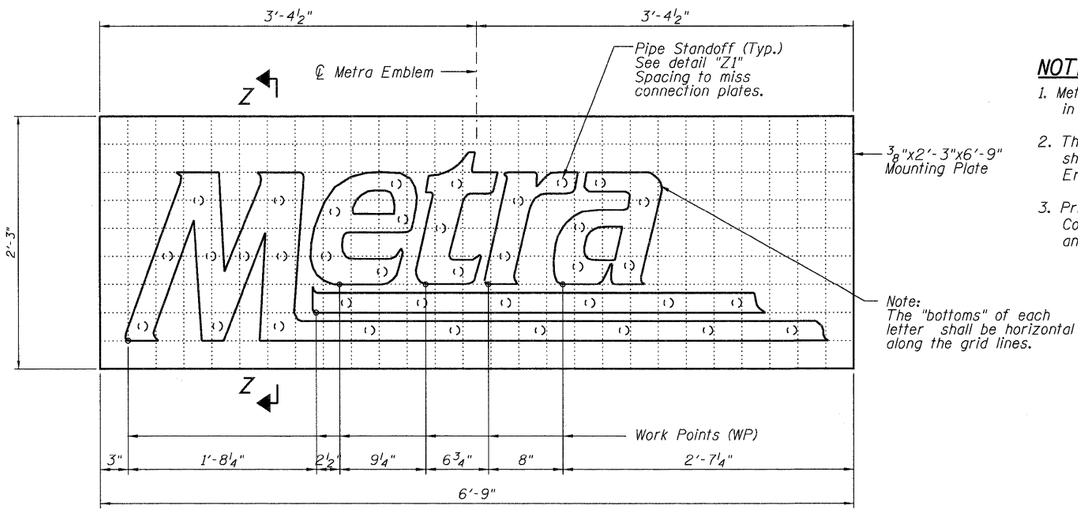
NAME PLATE

See STD 515001
For Plate Location. See Sheet 21



DETAIL "Z1"

SECTION Z-Z



METRA EMBLEM

2 Required
For Location of Metra Emblem See Framing Plans Sht. 4 & 5.

NOTES:

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

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

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

McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street Chicago, Illinois 60601

SHEET NO. 11	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
25 SHEETS	330	73 R-B	COOK	136	63
			CONTRACT NO. 60K64		
	DATE: 12/17/10	ILLINOIS	FED. AID PROJECT		

0166201-60K64-011-Design_Tables.dgn