

**TABLE OF DIMENSIONS  
PROPOSED CATENARY SERVICE**

**DIMENSIONS RELATIVE TO TEMPORARY RELOCATED TRACKS**

SUPP. NUMBER	TEMPORARY Metra #2 Station	Metra #2							Metra #1							D	B + F	A + E	AC Ext.	Metra # 2 T/R Elev	Metra # 1 T/R Elev	Top of Concrete Elev	Bottom of Footing Elev
		A	B	C	X	J	Nose Brkt	Temp Sprt	E	F	G	Y	K	Nose Brkt	Temp Sprt								
2 **	194+63.98	12.80'	N/A	0.02'	N/A	7.80'	No	Yes	12.80'	N/A	0.00'	N/A	7.80'	Yes	Yes	29.25'	N/A	25.61'	Yes	622.66	622.64	622.64	614.75
3	196+38.00	12.05'	12.63'	0.00'	3.00'	7.05'	No	Yes	8.65'	7.98'	0.00'	6.00'	3.65'	Yes	No	27.25'	20.61'	20.69'	No	622.06	622.06	622.06	614.75
4	198+53.00	8.51'	7.97'	0.00'	3.00'	3.51'	No	No	8.51'	9.09'	0.01'	6.00'	3.51'	Yes	No	29.25'	17.06'	17.01'	No	621.55	621.56	621.55	615.05
5	201+53.00	8.52'	8.42'	0.00'	6.00'	3.52'	Yes	No	8.52'	8.63'	0.00'	3.00'	3.52'	No	No	29.25'	17.04'	17.03'	No	621.49	621.49	621.49	613.75
6	203+27.00	8.55'	8.01'	0.02'	6.00'	3.55'	Yes	No	8.55'	9.09'	0.08'	3.00'	3.55'	No	No	27.25'	17.10'	17.10'	No	621.27	621.33	621.25	612.95
7	205+01.00	8.54'	7.99'	0.00'	6.00'	3.54'	Yes	No	8.54'	9.08'	0.17'	3.00'	3.54'	No	No	28.25'	17.07'	17.07'	No	620.79	620.96	620.79	612.65
8	207+45.75	8.50'	9.29'	0.00'	6.00'	3.50'	Yes	No	8.50'	7.71'	0.15'	3.00'	3.50'	No	No	28.25'	17.00'	17.00'	No	619.93	620.08	619.93	613.05
9	209+23.00	8.51'	7.90'	0.00'	6.00'	3.51'	No	No	8.51'	9.30'	0.01'	6.00'	3.51'	Yes	No	27.25'	17.20'	17.01'	No	619.32	619.33	619.32	612.25
10	211+37.00	11.76'	12.27'	0.15'	3.00'	6.76'	No	Yes	8.84'	8.67'	0.00'	6.00'	3.84'	Yes	No	27.25'	20.94'	20.59'	No	618.59	618.44	618.44	610.75
11 **	212+67.00	12.34'	N/A	0.36'	N/A	7.34'	No	Yes	12.34'	N/A	0.24'	N/A	7.34'	Yes	Yes	28.25'	N/A	24.68'	Yes	618.16	618.04	617.80	609.85

**DIMENSIONS RELATIVE TO PERMANENT TRACKS**

SUPP. NUMBER	PERMANENT Metra # 2 Station	Metra #2							Metra #1							D	B + F	A + E	AC Ext.	Metra # 2 T/R Elev	Metra # 1 T/R Elev	Top of Concrete Elev	Bottom of Footing Elev
		A	B	C	X	J	Nose Brkt	Temp Sprt	E	F	G	Y	K	Nose Brkt	Temp Sprt								
2 **	1694+50.00	12.87'	N/A	0.72'	N/A	7.87'	No	Yes	13.54'	N/A	0.71'	N/A	8.54'	Yes	Yes	29.25'	26.42'	26.42'	Yes	622.78	622.77	622.64	614.75
3A **	1697+50.51	12.87'	12.87'	0.00'	3.00'	7.87'	No	No	13.54'	13.54'	0.02'	3.00'	8.54'	No	Yes	28.25'	26.42'	26.42'	Yes	622.46	622.48	622.46	614.45
3	N/A	8.50'	N/A	N/A	N/A	6.00'	N/A	N/A	18.02	N/A	N/A	N/A	10.52'	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9A **	1709+82.15	13.25'	13.25'	0.06'	3.00'	8.25'	No	No	13.25'	13.25'	0.00'	3.00'	8.25'	No	No	28.25	26.50'	26.50'	Yes	618.91	618.85	618.85	610.75
10	N/A	8.50'	N/A	N/A	N/A	6.00'	N/A	N/A	17.69	N/A	N/A	N/A	10.19'	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11 **	1712+47.38	12.15'	N/A	0.31'	N/A	7.15'	No	Yes	13.99'	N/A	0.00'	N/A	8.99'	Yes	Yes	28.25'	26.13'	26.13'	Yes	618.11	617.80	617.80	609.85

\*\* DENOTES PERMANENT STRUCTURE

NOTE: NOSE BRACKET FOR SUPPORT NUMBERS 2 & 11 TO BE REMOVED WHEN ADJUSTED FOR PERMANENT TRACKS - COST INCLUDED IN UNIT PRICE EACH OF CATENARY SUPPORT STRUCTURE

**GENERAL NOTES FOR CATENARY SUPPORT STRUCTURES:**

- HOLLOW STRUCTURAL SHAPES (HSS) SHALL CONFORM TO ASTM A500, GRADE B.
- ALL OTHER STRUCTURAL SHAPES AND PLATES SHALL CONFORM TO ASTM A709, GRADE 50
- BOLTS SHALL BE 3/4" GALVANIZED HIGH STRENGTH BOLTS CONFORMING TO ASTM A325 WITH MATCHING LOCK NUTS. LOCK NUTS SHALL HAVE NYLON OR STEEL INSERTS.
- ANCHOR RODS, NUTS & WASHERS FOR PERMANENT STRUCTURES SHALL BE HOT-DIPPED GALVANIZED STEEL CONFORMING TO ASTM F1554, GRADE 55.
- ANCHOR RODS, NUTS & WASHERS FOR TEMPORARY STRUCTURES SHALL CONFORM TO ASTM F1554, GRADE 55.
- CONCRETE COMPRESSIVE STRENGTH, F'c = 4,000 PSI.
- VENT HOLES OF ADEQUATE SIZE SHALL BE PROVIDED ON UNDERSIDE AT EACH END OF ALL TUBULAR MEMBERS. ALL VENT HOLES SHALL BE DRILLED AND DE-BURRED.
- STEEL REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60
- ALL WELDING TO BE CONTINUOUS UNLESS OTHERWISE SHOWN. ALL WELDING TO BE PERFORMED IN ACCORDANCE WITH CURRENT AWS D1.1 STRUCTURAL WELDING CODE AND THE STANDARD SPECIFICATIONS.
- CAP ALL ENDS OF TUBE SECTIONS WITH WELDED PLATES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 FROM I-294 TO IL RTE 1  
METRA OVER 159TH ST

**CATENARY STRUCTURES  
SUPPORT STRUCTURES  
TABLE OF DIMENSIONS**

SHT. CS-07 OF CS-17  
DATE 2/21/2008

DRAWN BY BKN  
CHECKED BY GAC

3/13/2008 2:39:16 PM

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