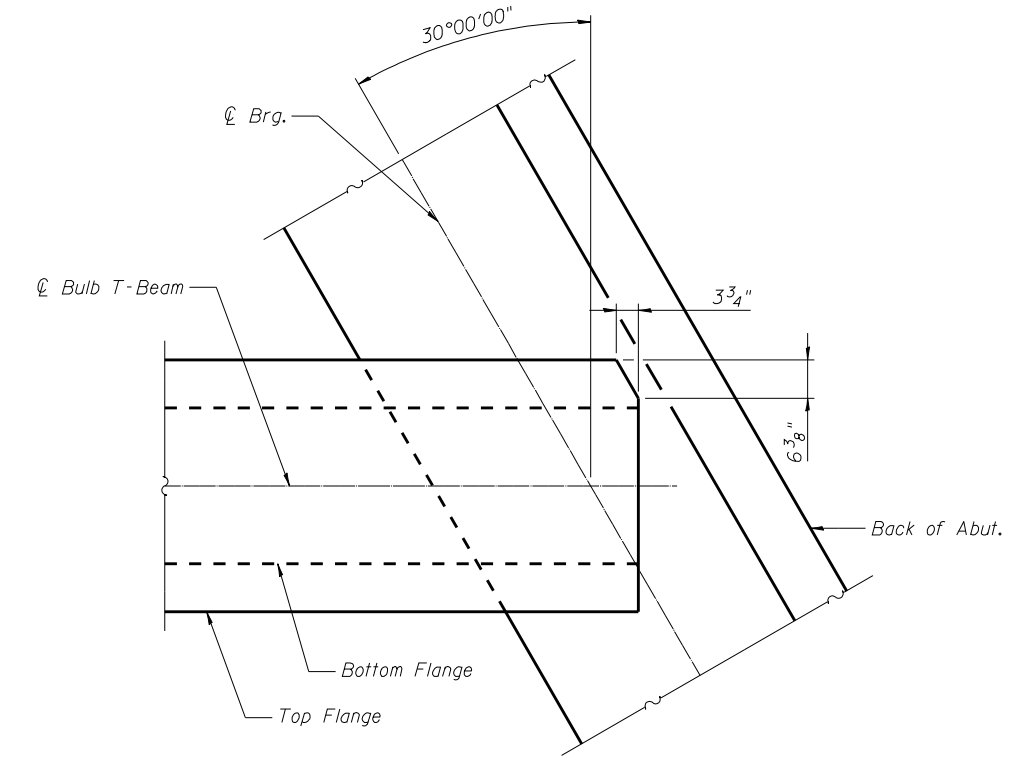


72" BULB T-BEAM FRAMING PLAN-EB

INTERIOR BEAM MOMENT TABLE		
0.5 Span		
<i>I</i>	(in ⁴)	545894
<i>I'</i>	(in ⁴)	929607
<i>S_b</i>	(in ³)	14915
<i>S_b'</i>	(in ³)	18882
<i>S_t</i>	(in ³)	15421
<i>S_t'</i>	(in ³)	40832
<i>DC1</i>	(k/')	1.4
<i>M_{DC1}</i>	(k)	2730
<i>DC2</i>	(k/')	0.11
<i>M_{DC2}</i>	(k)	220
<i>DW</i>	(k/')	0.27
<i>M_{DW}</i>	(k)	521
<i>M_{L + IM}</i>	(k)	2194

INTERIOR BEAM REACTION TABLE		
Abut.		
<i>R_{DC1}</i>	(k)	87.5
<i>R_{DC2}</i>	(k)	6.9
<i>R_{DW}</i>	(k)	16.9
<i>R_{L + IM}</i>	(k)	88.3
<i>R_{Total}</i>	(k)	199.6

I: Non-composite moment of inertia of beam section (in⁴).
I': Composite moment of inertia of beam section (in⁴).
S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
S_b': Composite section modulus for the bottom fiber of the prestressed beam (in³).
S_t: Non-composite section modulus for the top fiber of the prestressed beam (in³).
S_t': Composite section modulus for the top fiber of the prestressed beam (in³).
DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
M_{L + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).



DETAIL 1

NOTE: See Sht. S-31 for Permanent Bracing Details

FILE NAME = 0820119-0120-76884-028-FramingEB.dgn



USER NAME = brazzara	DESIGNED - MJK	REVISED - -
PLOT SCALE = 1/8" = 1'-0"	CHECKED - JAN	REVISED - -
PLOT DATE = 10/19/2011	DRAWN - MJK	REVISED - -
	CHECKED - JAN	REVISED - -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN, MOMENT AND REACTION TABLE EASTBOUND
STRUCTURE NO. 082-0119 (E.B.) & 082-0120 (W.B.)**

SHEET NO. S-28 OF S-51 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	27-1-VHB-1	ST. CLAIR	277	205
CONTRACT NO. 76884			ILLINOIS FED. AID PROJECT	