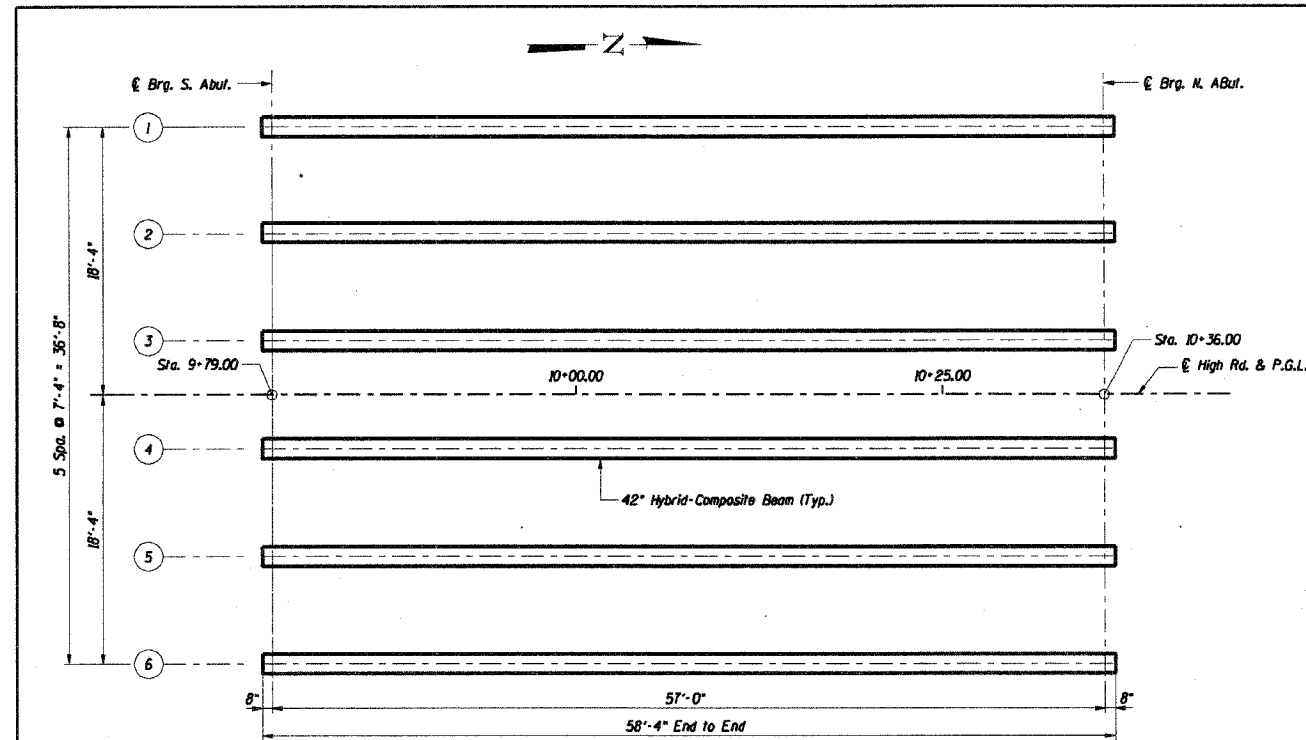


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			64	26
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
02-11106-01-BR				CONTRACT NO. 83949



FRAMING PLAN

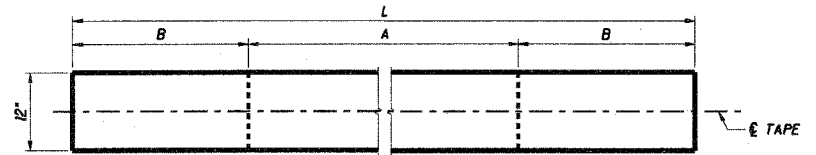
0.5 Span		
I _{HCB}	(in ⁴)	68134
I _c	(in ⁴)	104024
S _b HCB	(in ³)	
S _b c	(in ³)	
S _t HCB	(in ³)	
S _t c	(in ³)	
DL	(k-ft)	0.9M
M DL	(k-ft)	371
s DL	(k-ft)	0.470
M _s DL	(k-ft)	191
M LL	(k-ft)	504
M (Imp)	(k-ft)	136
S _t (Mu+I)	(k-ft)	1065
M _o	(k-ft)	2119
M _u	(k-ft)	5201

R. or S. Abut.		
R DL	(k)	39.4
R LL	(k)	38.6
Imp.	(k)	10.4
R (Total)	(k)	88.4

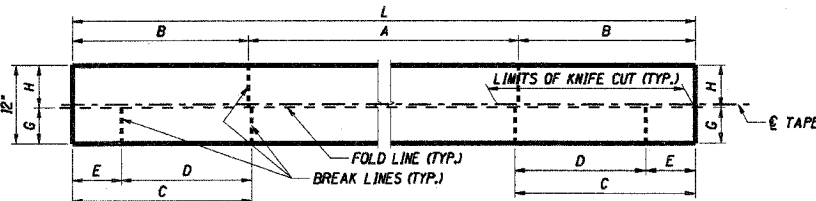
I_{HCB} is the moment of inertia of the HCB beam section.
 I_c is the moment of inertia of the HCB acting compositely with the deck slab.
 S_b and S_b' are the non-composite section modulus for the bottom fiber of the HCB.
 S_t and S_t' are the non-composite and composite section modulus for the top fiber of the HCB.
 M DL is the moment due to dead loads on the composite prestressed beam. It is conservatively calculated as 0.5 of the span.
 M_s DL is the moment due to dead loads on the composite section.
 M LL is the moment due to live load on the composite section.
 M (Imp) is the moment due to live load impact on the composite section.
 M_o (applied moment) = 1.3 [M DL + M_s DL + 5/3 (M LL + I)].
 M_u is the full ultimate moment capacity for Hybrid-composite beam acting compositely with the deck slab.

HARDWARE BENDING TABLE (all dimensions in inches)

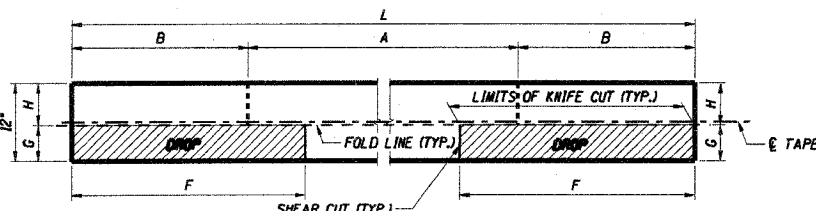
LAYER	TYPE	L	A	B	C	D	E	F	G	H
1 R	B1	782.14	699.61	41.26	-	-	-	-	-	-
1 L	B2	782.14	699.61	41.26	41.31	19.46	21.85	-	6.00	6.00
2 R	B3	781.94	699.51	41.21	-	-	-	63.11	5.95	6.05
2 L	B1	781.94	699.51	41.21	-	-	-	-	-	-
3 R	B1	781.74	699.41	41.16	-	-	-	-	-	-
3 L	B3	781.74	699.41	41.16	-	-	-	62.96	5.90	6.10
4 R	B2	781.54	699.31	41.11	41.16	19.36	21.80	-	5.85	6.15
4 L	B1	781.54	699.31	41.11	-	-	-	-	-	-
5 R	B1	781.34	699.21	41.06	-	-	-	-	-	-
5 L	B2	781.34	699.21	41.06	41.11	19.26	21.85	-	5.80	6.20
6 R	B3	781.14	699.11	41.01	-	-	-	62.96	5.75	6.25
6 L	B1	781.14	699.11	41.01	-	-	-	-	-	-



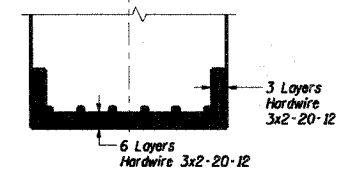
TYPE B1 (6 THUS)



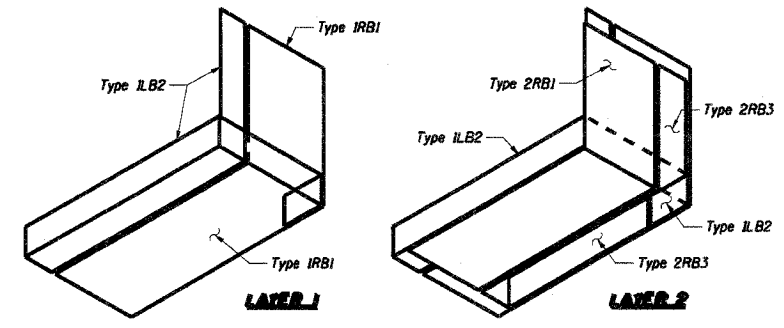
TYPE B2 (3 THUS)



TYPE B3 (3 THUS)



SECTION THRU BEAM



HARDWARE BENDING & LAY-UP SCHEMATIC

Work this sheet with Sht. S-11.

REVISIONS	
NAME	DATE

LOCKPORT TOWNSHIP HIGHWAY DEPARTMENT
 TR216A HIGH ROAD OVER LONG RUN CREEK
 SECTION 02-11106-01-BR

FRAMING PLAN

SCALE: DATE: 9-07-2007 DRAWN BY: KK, HBJ
 CHECKED BY: JRH

TENG

BONDHILL BONDHILL
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