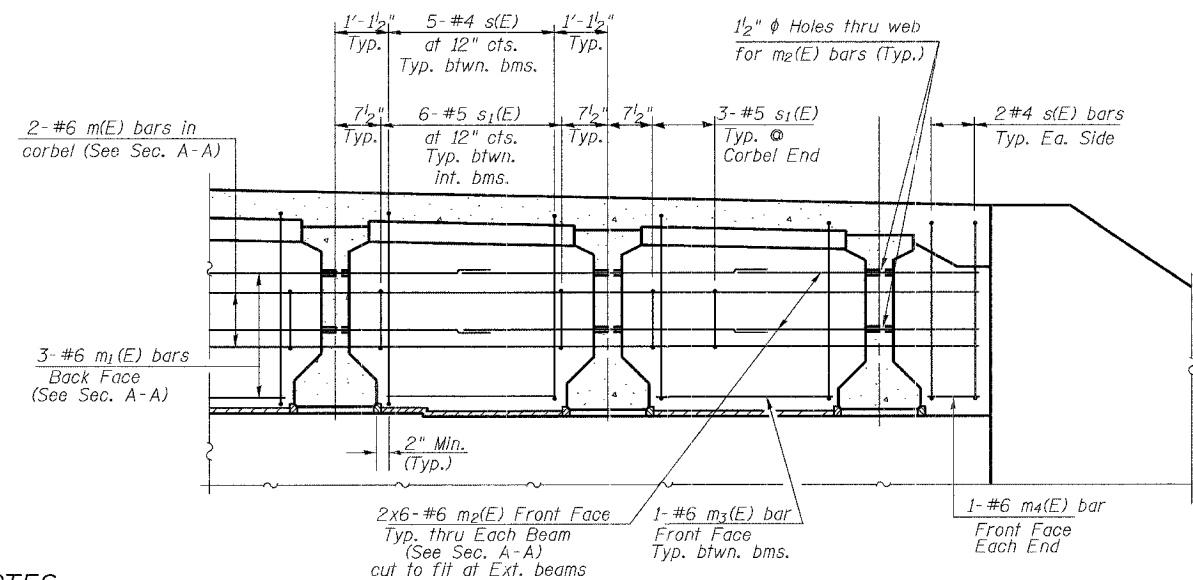
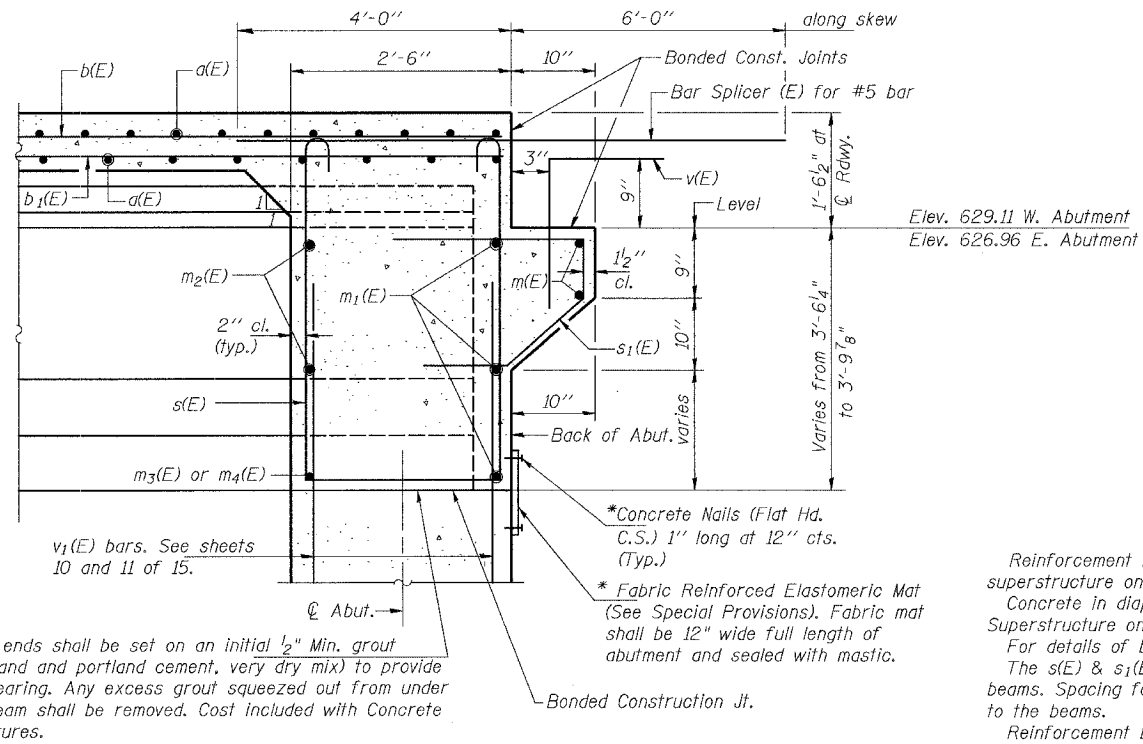


FAS RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
732	*	MACOUPIN	15	7

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT
 *02-00083-00-BR



NOTES

Reinforcement bars in diaphragm are billed with superstructure on sheet 6 of 15.
 Concrete in diaphragm is included with Concrete Superstructure on sheet 6 of 15.
 For details of bars s(E) & s1(E) see sheet 6 of 15.
 The s(E) & s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
 Reinforcement bars designated (E) shall be epoxy coated.

MIN. BAR LAP
 #6 bar = 2'-9"

INTERIOR BEAM MOMENT TABLE

0.5 Pt.

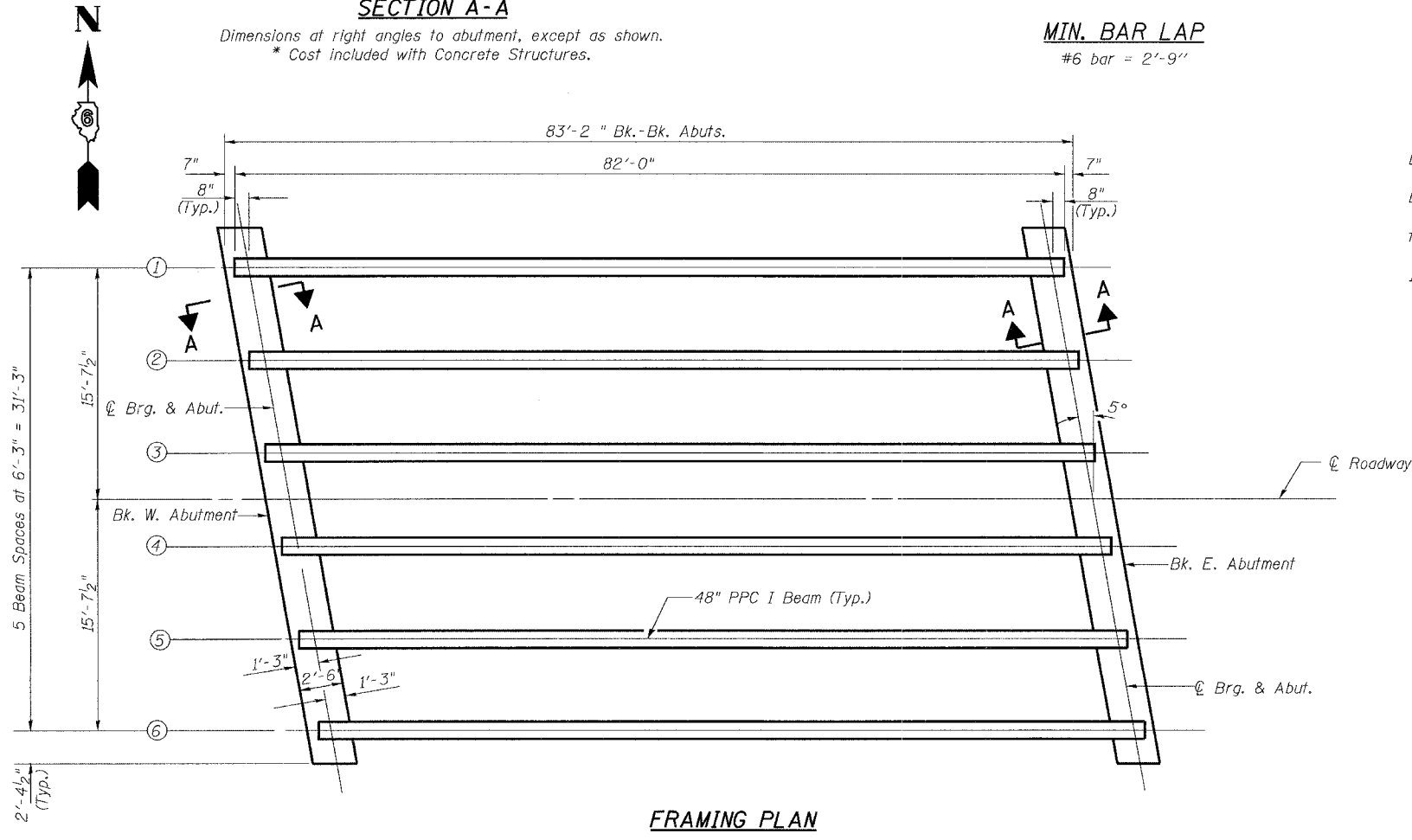
I	(in ⁴)	144,117
I'	(in ⁴)	375,274
S _b	(in ³)	6,834
S _b '	(in ³)	10,963
S _t	(in ³)	5,355
S _t '	(in ³)	27,253
D	(k/')	1,201
M _D	('k)	977
s _D	(k/')	0.333
M _{sD}	('k)	271
M _L	('k)	669
M (Imp)	('k)	162

I and I' are the moment of inertia and composite moment of inertia of the beam section.
 S_b and S_b' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.
 S_t and S_t' are the non-composite and composite section modulus for the top fiber of the prestressed beam.
 M_D is the moment due to dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.
 M_{sD} is the Moment due to dead loads on composite section.
 M_L is the Moment due to live load on composite section.
 M (Imp) is the Moment due to live load impact on composite section.

INTERIOR BEAM REACTION TABLE

Abut.

R _D	(k)	49.1
R _{sD}	(k)	12.9
R _L	(k)	36.2
Imp.	(k)	8.8
R (Total)	(k)	107.0



SHEET TITLE
 FRAMING PLAN & DIAPHRAGM DETAILS

PROJECT: C.H. 12 OVER SOLOMON CREEK
 FAS ROUTE 732 SEC. 02-00083-00-BR
 MACOUPIN COUNTY
 STATION 9+90.00
 STRUCTURE NUMBER 059-3465

DESIGNED BY: MRL/REG/MCB
 DRAWING NO.:

PROJECT NO. 03016
 SCALE: 1/8" = 1'-0"
 DATE: 2/16/04
 DRAWN BY: TFC
 CHECKED BY: MRL/REG/MCB
 DRAWING NO.:

COOMBE-BLOXDORF P.C.
 Engineers / Land Surveyors
 Springfield, Illinois
 Design Firm License No. 184-002703

7
 OF 15 SHTS

SI-DI 4-30-97