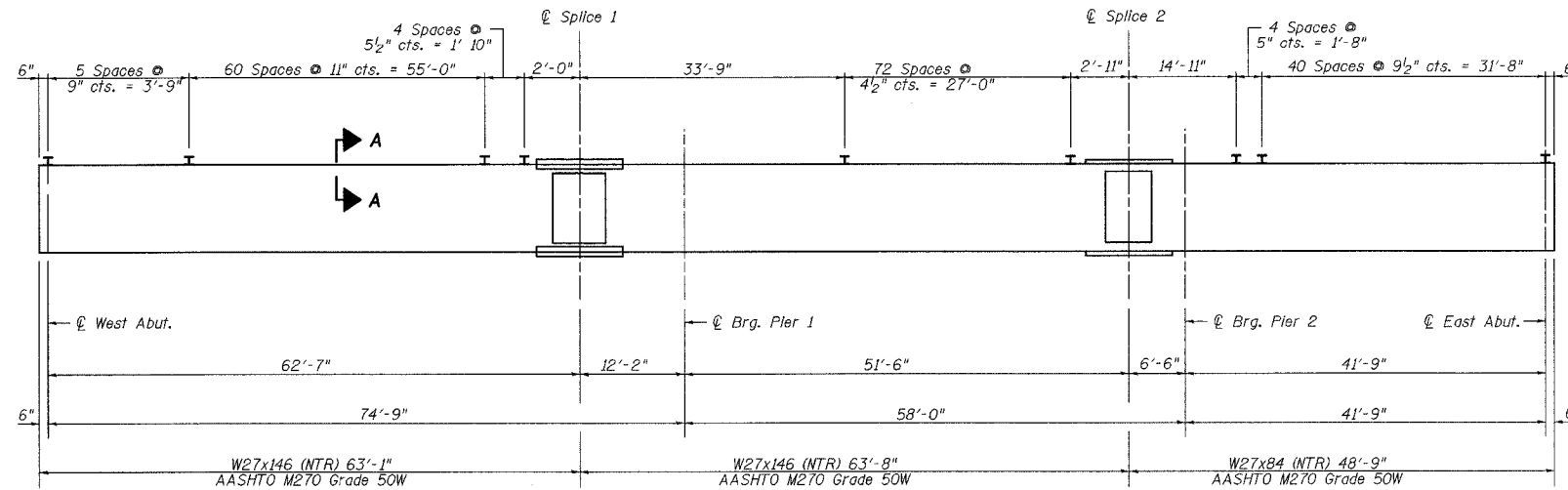


F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
95	7B-1	EFFINGHAM	409	353
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 94356

SHEET NO. 8
SHEETS 18

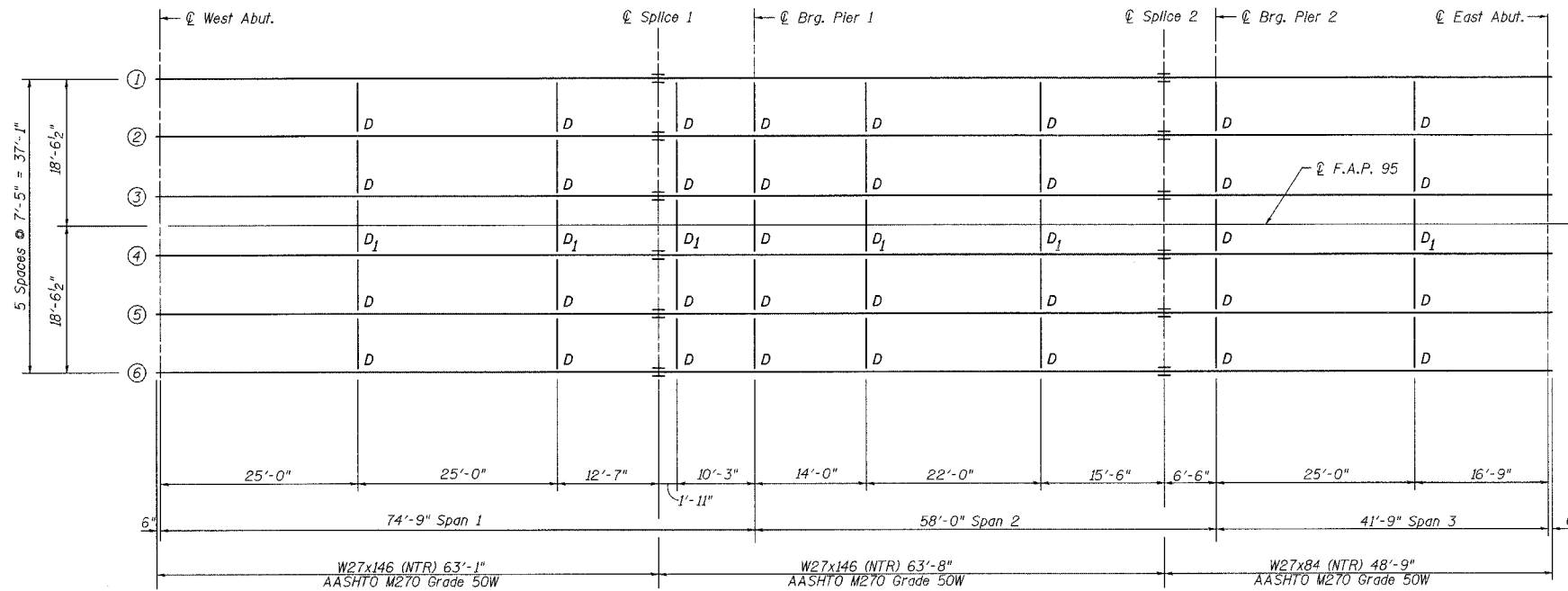


ELEVATION

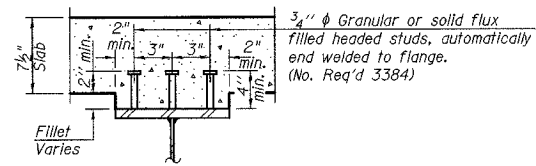
INTERIOR GIRDER MOMENT TABLE						
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in ⁴)	5630	5630	5630	2850	2850
I_c	(in ⁴)	14244		14244		8635
I_c	(in ⁴)	10516		10516		6588
S_s	(in ³)	411	411	411	213	213
S_c	(in ³)	576		576		330
S_c	(in ³)	524		524		301
Z	(in ³)		461			
ϕ	(k/?)	0.890	1.373	0.890	1.303	0.820
$M\phi$	(k)	407	666	81	217	113
$s\phi$	(k/?)	0.483		0.483		0.483
$Ms\phi$	(k)	248		78		74
$M\phi$	(k)	614	292	387	150	270
M	(k)	154	77	105	43	81
$5_3[M\phi + M(Imp)]$	(k)	1280	615	820	322	585
Ma	(k)	2516	1665	1273	701	1004
Mu	(k)	2801	1921	2347		1285
$fs\phi$ non-comp	(ksi)	11.9	19.5	2.4	12.3	6.4
$fs\phi$ (comp)	(ksi)	5.7		1.8		3.0
$fs\phi_3 [M\phi + M(Imp)]$	(ksi)	26.7	18.0	17.1	18.2	21.3
fs (Overload)	(ksi)	44.3	37.5	21.3	30.5	30.7
fs (Total)	(ksi)					39.7
VR	(k)	54.1		51.0		50.3

INTERIOR GIRDER REACTION TABLE					
		E. Abut.	Pier 1	Pier 2	W. Abut.
$R\phi$	(k)	42.4	107.8	64.5	22.0
$R\phi$	(k)	41.4	51.1	43.7	36.1
$Imp.$	(k)	12.4	14.0	9.7	10.8
R (Total)	(k)	96.2	172.9	117.9	68.9

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 $I_{c(3)}$ and $S_{c(3)}$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)
 VR is the maximum Live Load + Impact shear range in span.
 Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
 Ma (Applied Moment) = $1.3[M\phi + Ms\phi + 5_3(M\phi + M(Imp))]$.
The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.
 fs (Overload) is the sum of the stresses due to $M\phi + Ms\phi + 5_3(M\phi + M(Imp))$.
 fs (Total) (Non-compact section) is the sum of the stresses due to $1.3[M\phi + Ms\phi + 5_3(M\phi + M(Imp))]$.



FRAMING PLAN



SECTION A-A

	W. Abut.	Splice 1	Pier 1	Splice 2	Pier 2	E. Abut.
Beam 1 and 6	544.00	542.60	542.35	541.61	541.49	541.21
Beam 2 and 5	544.15	542.75	542.50	541.76	541.64	541.36
Beam 3 and 4	544.26	542.86	542.61	541.87	541.75	541.47

TOP OF BEAM ELEVATIONS

(For Fabrication use Only)

Notes:
Steel designated with N.T.R. shall conform to the requirements for Notch Toughness (Zone 2).

Work this Sheet with Sheet 9 of 18.

ILLINOIS DEPARTMENT OF TRANSPORTATION
FRAMING PLAN AND BEAM DETAILS
ILLINOIS ROUTE 33 OVER
BIG SALT CREEK
F.A.P. ROUTE 95
SECTION 7B-1
EFFINGHAM COUNTY
STA. 146+62.50
STRUCTURE NUMBER 025-0101

DATE: OCT. 2003

DRAWN BY: MLO/HJV
CHECKED BY: PBB/SJK