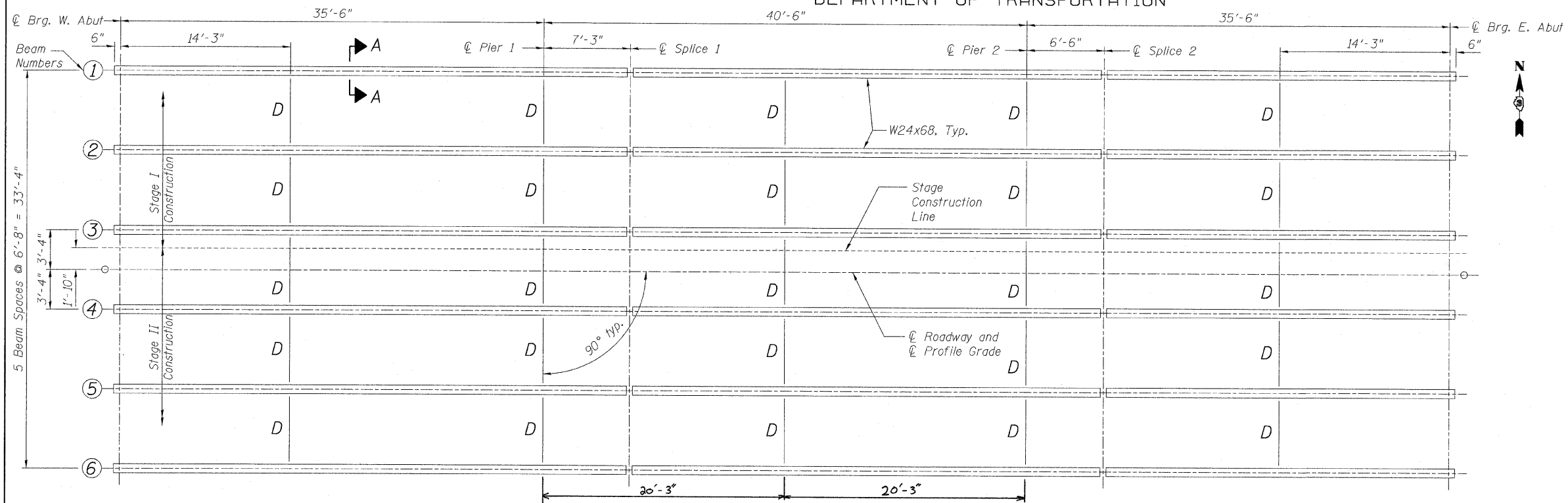


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.S.L. F.A.	(3)BR-1	LASALLE	44	22
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

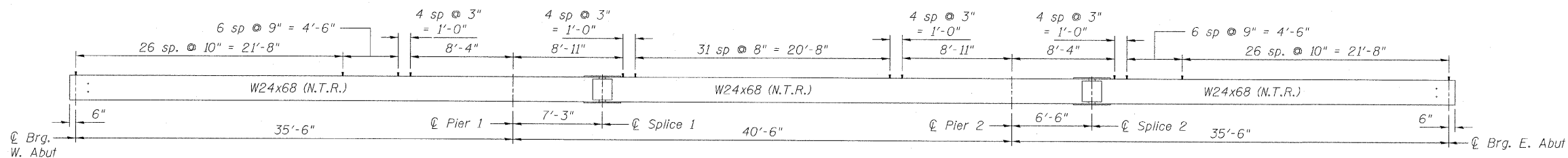
SHEET NO. 12
OF 23 SHEETS

CONTRACT NO. 66619



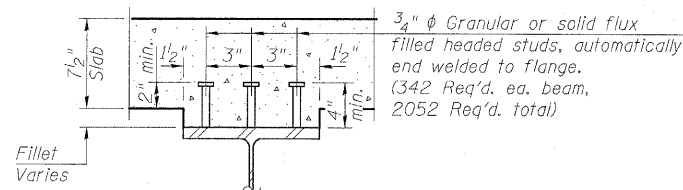
FRAMING PLAN

See Sheet 13 of 23 for Splice and Diaphragm Details



BEAM ELEVATION

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.



SECTION A-A

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
© Brg. W. Abut.	633.02	633.14	633.25	633.25	633.14	633.02
Pier 1	633.07	633.19	633.30	633.30	633.19	633.07
Splice 1	633.04	633.16	633.27	633.27	633.16	633.04
Pier 2	633.08	633.20	633.31	633.31	633.20	633.08
Splice 2	632.99	633.11	633.22	633.22	633.11	632.99
© Brg. E. Abut.	632.99	633.11	633.22	633.22	633.11	632.99

TOP OF BEAM ELEVATIONS

For Fabrication only

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1	Piers	0.5 Sp. 2
I_s	(in ⁴)	1830	1830	1830
I_c (n)	(in ⁴)	6153		6153
I_c (3n)	(in ⁴)	4675		4675
S_s	(in ³)	154	154	154
S_c (n)	(in ³)	254		254
S_c (3n)	(in ³)	230		230
Z	(in ³)			
\bar{D}	(k/ft.)	0.720	1.170	0.720
$M\bar{D}$	(k)	67.5	154.5	44.5
$s\bar{D}$	(k/ft.)	0.450		0.450
$Ms\bar{D}$	(k)	47.2		40.1
$M\bar{L}$	(k)	192	103	195
M (Imp)	(k)	58	31	58
$S_3[M\bar{L} + M$ (Imp)]	(k)	417	223	422
Ma	(k)	691	491	659
* Mu	(k)	1131		1283
$fs\bar{D}$ non-comp (k.s.i.)		5.3	12.1	3.5
$fs\bar{D}$ (comp) (k.s.i.)		2.5		2.1
$fsS_3(L + Imp)$ (k.s.i.)		19.7	17.4	19.9
fs (Overload) (k.s.i.)		27.5	29.5	25.5
** fs (Total) (k.s.i.)			38.4	
VR	(k)	43.5		36.8

INTERIOR GIRDER REACTION TABLE			
	Abuts.	Piers	
$R\bar{D}$	(k)	16.4	48.7
$R\bar{L}$	(k)	30.9	38.5
Imp.	(k)	9.3	11.5
R (Total)	(k)	56.6	98.7

* Compact section

** Braced non-compact section

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 and S_c 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) = $1.3[M\bar{D} + Ms\bar{D} + S_3(M\bar{L} + M$ (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 $M\bar{D} + Ms\bar{D} + S_3(M\bar{L} + M$ (Imp)).

fs (Total) (Non-compact section) is the sum of the stresses due to $1.3[M\bar{D} + Ms\bar{D} + S_3(M\bar{L} + M$ (Imp))].

FRAMING PLAN
US ROUTE 52 AND IL ROUTE 23 OVER
CROOKED LEG CREEK
F.A.P. ROUTE 68 SECTION (3) BR-1
LASALLE COUNTY
STATION 419+80.00
STRUCTURE NUMBER 050-0240