

DATE	BY	CHKD	APPD	REV	SHEET NO.
11-1	PLASKI	217	63	12	12 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
BEAM END
LOCATION 2 E1.362.54

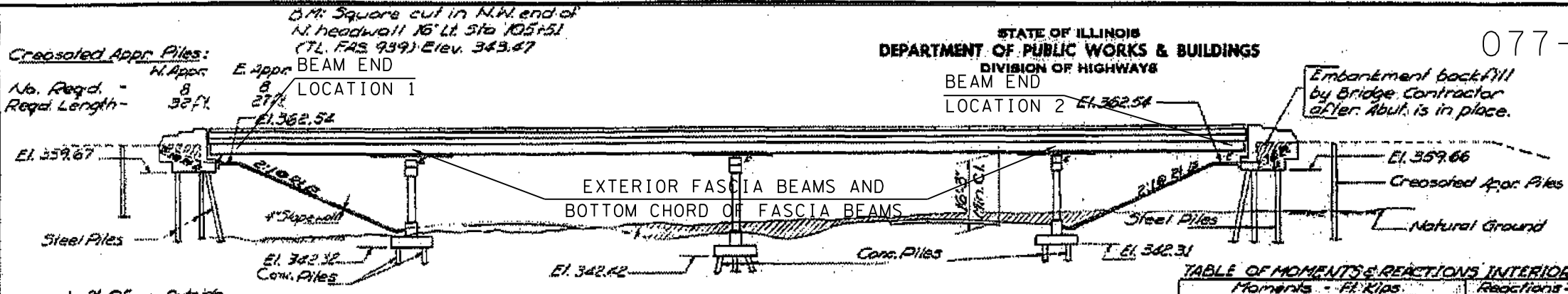


TABLE OF MOMENTS & REACTIONS INTERIOR BEAM

	Moments - Ft. Kips.			Reactions - Kips.		
	4.5span Pier 1	5.5span Pier 2	Abut. Pier 1	Pier 1	Pier 2	Pier 2
D.L.	83	322	746	148	302	449
L.L.	263	349	402	431	312	309
Imp.	79	94	96	116	100	73.8
Total	425	765	1240	695	714	831.8

D.L. = Dead Load L.L. = Live Load Imp. = Impact

GENERAL NOTES

Class X Concrete shall be used throughout. Coarse aggregate to be used in parapet handrails and end post must be absolutely free of chert, flint, limonite, lignite and soft sandstone.

The concrete floor slab shall be finished in accordance with Art. 51.19 of the Standard Specifications. Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, #4 wires, weighing 58# per 100 Sq. Ft. All reinforcement bars shall be lapped 20 dia. unless otherwise shown.

Rivets 3/8" Open holes 3/8" unless otherwise noted. Anchor bolts shall be set before riveting diaphragms over supports.

The exposed surfaces of the expansion guards shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.

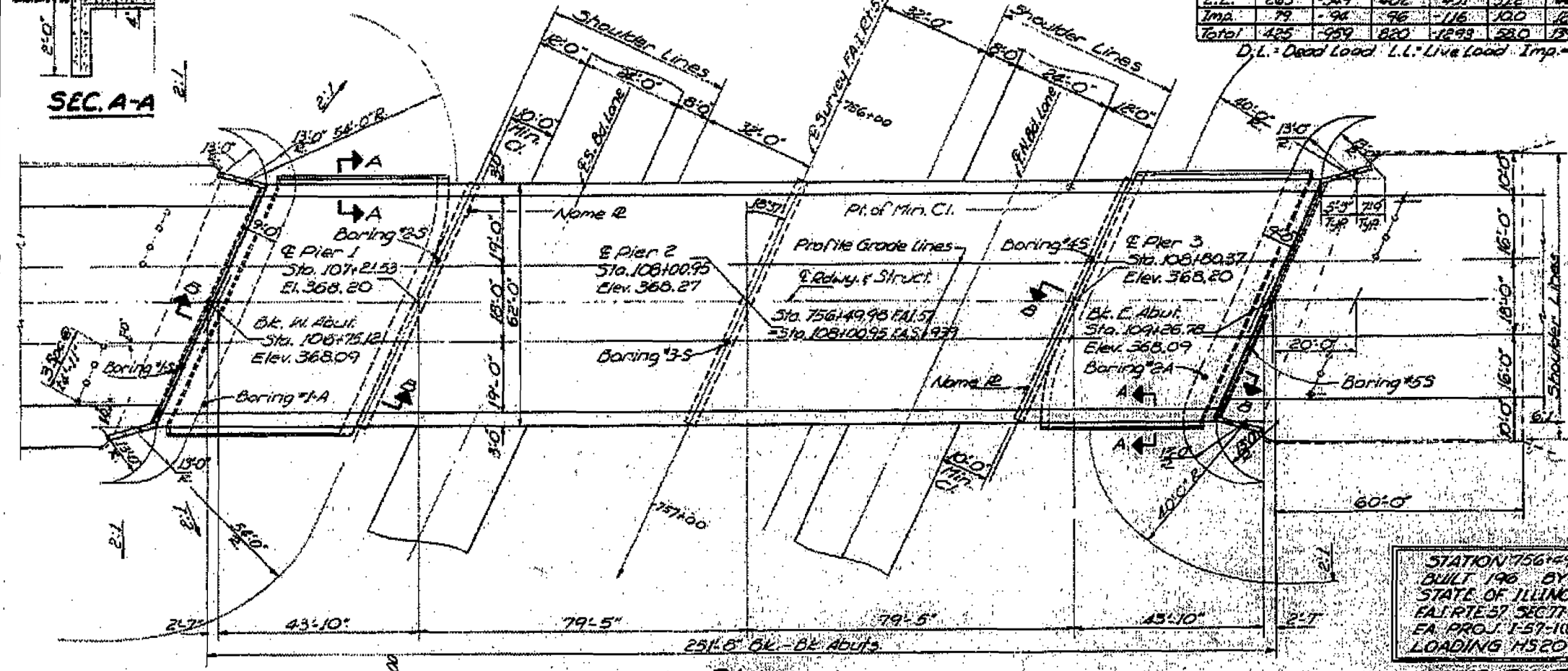
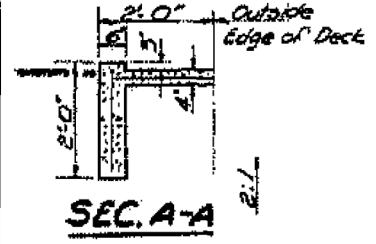
Expansion guards are in the quantity of Struct Steel Est. weight 2430 lbs.

Except as otherwise provided, all struct. steel shall receive one shop coat of red lead paint, and two field coats of aluminum paint.

Permanent forms will not be permitted in forming the concrete floor.

All structural steel shall comply with the specification for structural steel ASTM Designation A-36.

The Contractor shall drive three (3) test piles 1 steel test pile at W. Abut. and 2 concrete test piles, one each at Piers 1 & 2, in a permanent location as directed by the Engr before ordering the remainder of piles.

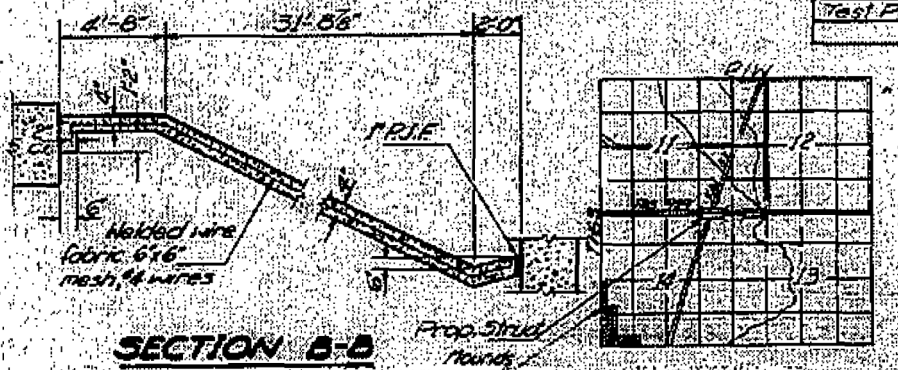
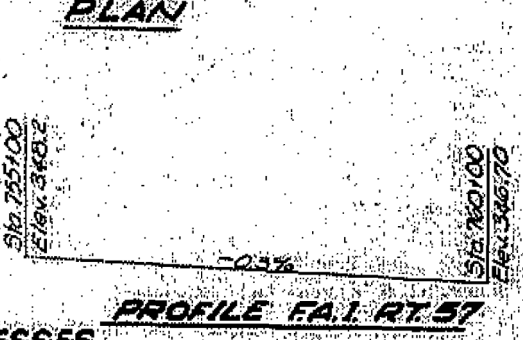
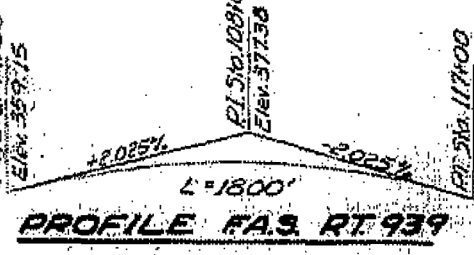


TOTAL BILL OF MATERIAL

ITEM	Super	Sub	Total
Class X Excavation	Cu Yds		336
Class X Concrete	Cu Yds	4420	4756
Structural Steel	Lbs	424570	424570
Aluminum Handrail	Lbs	497	497
Reinforcement Bars	Lbs	129,050	129,050
Crested Piles	Lin. Ft.		472
Concrete Piles	Lin. Ft.		1060
Test Piles (Concrete)	Ft.		2
Name Plates	Ft.		2
Slope Wall (C)	Sq Yds		682
Protective Coat	Sq Yds	1897	1897
Bridge Seal Sealant	Lime Sum		1.5
Steel Piles (103P42)	Lin. Ft.		2255
Test Piles (Steel 103P42)	Ft.		1

STATION 756+49.98
BUILT 196 BY
STATE OF ILLINOIS
FAI RTE 57 SEC 71 4NB-1
EA PROJ. I-57-1185
LOADING H520

NAME PLATE
See Sta. 21137



LOCATION PLAN

DESIGNED A. Venti-Neser
CHECKED A. Borrozo
DRAWN
CHECKED

EXAMINED
APPROVED

DESIGN STRESSES

$f_c = 1400$ psi Super & Sub.
 $f_v = 75$ psi Flgs.
 $f_s = 20,000$ psi Reinf.
 $f_b = 20,000$ psi Struct.
 $n = 10$

Allowable ϵ Deflection $\frac{1}{1000}$
LOADING H520-44

GENERAL PLAN & ELEVATION
PROJ. I-57-1185
FAS RT. 939 OVER FAI RTE 57
FAI RTE 57 SEC 71 4NB-1
PULASKI COUNTY
STA. 756+49.98