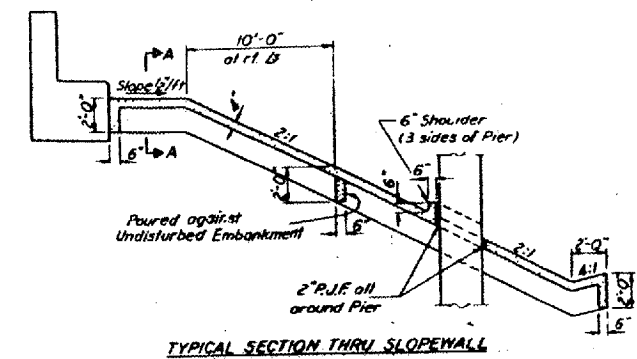
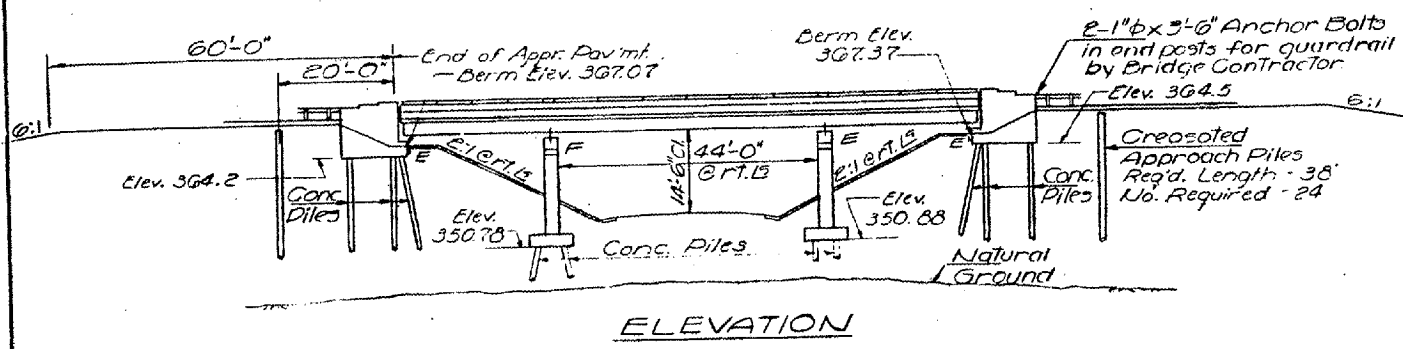


ROUTE NO.	SECTION	COUNTY	DATE	SCALE
24	3	MASSAC	76	30

14 SHEETS

B.M. #32 Bot Spike in 12" Sasfras
 400' Lt. of Station 419 Elev. 342.64

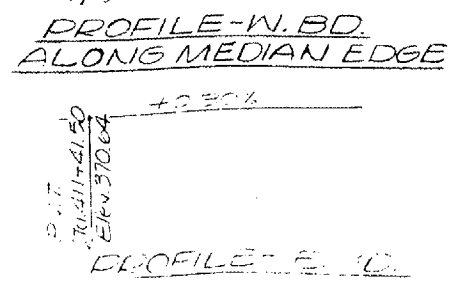
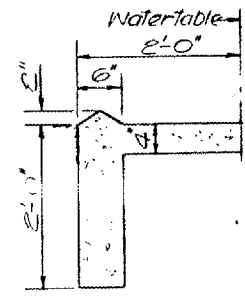
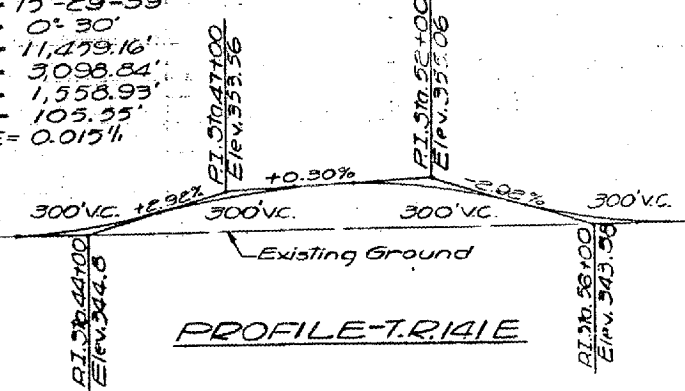
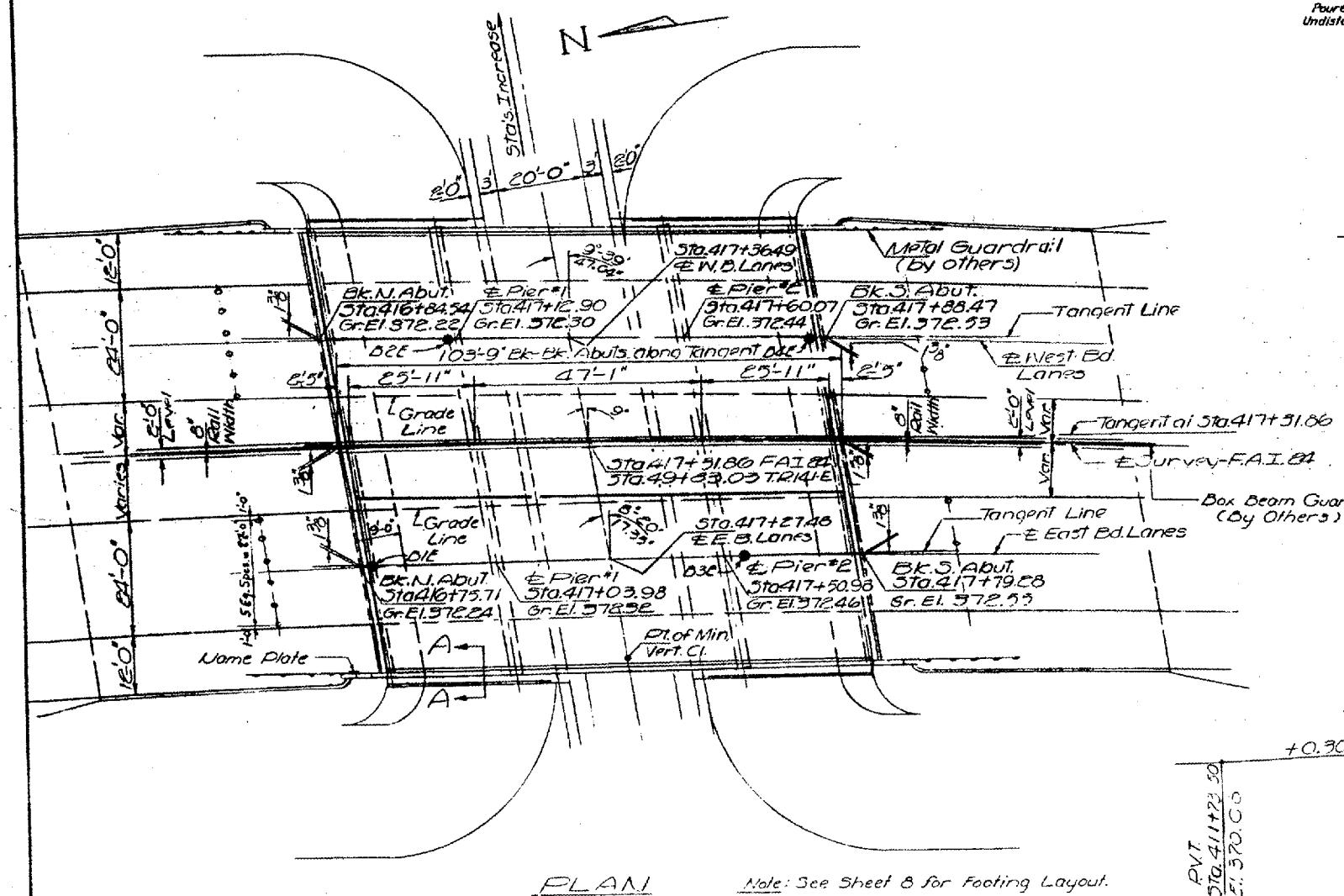
STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS
 DIVISION OF HIGHWAYS



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Class X Concrete	Cu. Yds.	287.5	412.9	700.4
Protective Coat	Sq. Yds.	1100		1100
Structural Steel	Lump Sum	0.26		0.26
Aluminum Railing	Lin. Ft.	201		201
Reinforcement Bars	Lbs.	73,940	43,100	117,040
Creosoted Piles (20' to 38')	Lin. Ft.		912	912
Concrete Piles	Lin. Ft.		5600	5600
Test Piles (Concrete)	Each		4	4
Name Plates	Each	1		1
Slope Wall 4"	Sq. Yds.		1010	1010
Stud Shear Connectors	Each	1638		1638
Preformed Joint Sealer	Lin. Ft.	196		196

CURVE DATA
 W.B.L. P.I. 310.406+80.74
 E.B.L. P.I. 310.409+36.72
 P.I. 310.408+08.73
 $\Delta = 15^\circ 29' 39''$
 $D = 0^\circ 30'$
 $R = 11,479.16'$
 $L = 3,098.84'$
 $T = 1,558.93'$
 $E = 105.55'$
 $SE = 0.01511$



DESIGN STRESSES
 $f_c = 12000 \text{ psi} - \text{Deck Slab}$
 $f_c = 1400 \text{ psi} - \text{Gurb, Piers, T.C.B.}$
 $f_s = 20,000 \text{ psi} - \text{Steel}$
 $f_s = 20,000 \text{ psi} - \text{Steel}$
 $t_c = 75 \text{ psi} - \text{Steel}$
 $n = 10$
 Allowable FUTURE 20' 11" available - 100' 11"

* CALCULATED WEIGHT OF STRUCTURAL STEEL = 165,450 Lbs.

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Field connections shall be bolted using high strength bolts. Bolts $\frac{3}{4}$ " open holes $\frac{1}{16}$ ", unless otherwise noted.

Diaphragm connections may be adopted to shop welding subject to approval by the Engineer.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before riveting diaphragms over supports.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 59# per 100 sq. ft.

Concrete piles shall be driven in holes prepared through the embankment in accordance with Article 513.09(c) of the Standard Specifications.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments and piers.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

The Contractor shall drive 4 Concrete test piles in permanent locations as directed by the Engineer, one each at the N. Abut. (N.B. Lanes), S. Abut. (E.B. Lanes), Pier 1 (E.B. Lanes) and Pier 2 (N.B. Lanes) before driving the remainder of piles.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field paint.

A finishing machine as specified in Article 503.16(c) will be required for the two 24 foot lanes. A vibrating screed and hand methods or other methods approved by the Engineer will be permitted for the remaining portions of the deck.

STATION 417 + 31.86
 SURT 19 5Y
 STATE OF ILLINOIS
 P.I. PT. 24 SEC. 24-31E-3
 SA PROJ. P.H. A-103
 LOADING HS20
 NAME PLATE
 310 511 3174

DESIGNED: [Signature]
 CHECKED: George A. Buzi
 DRAWN: [Signature]
 CHECKED: George A. Buzi

EXAMINED: [Signature]
 PASSED: [Signature]
 APPROVED: Richard H. Halterman

FEB 6 1963

GENERAL PLAN & ELEVATION

FOR INFORMATION ONLY:

BRIDGE NO. 13 STRUCTURE 064-0034