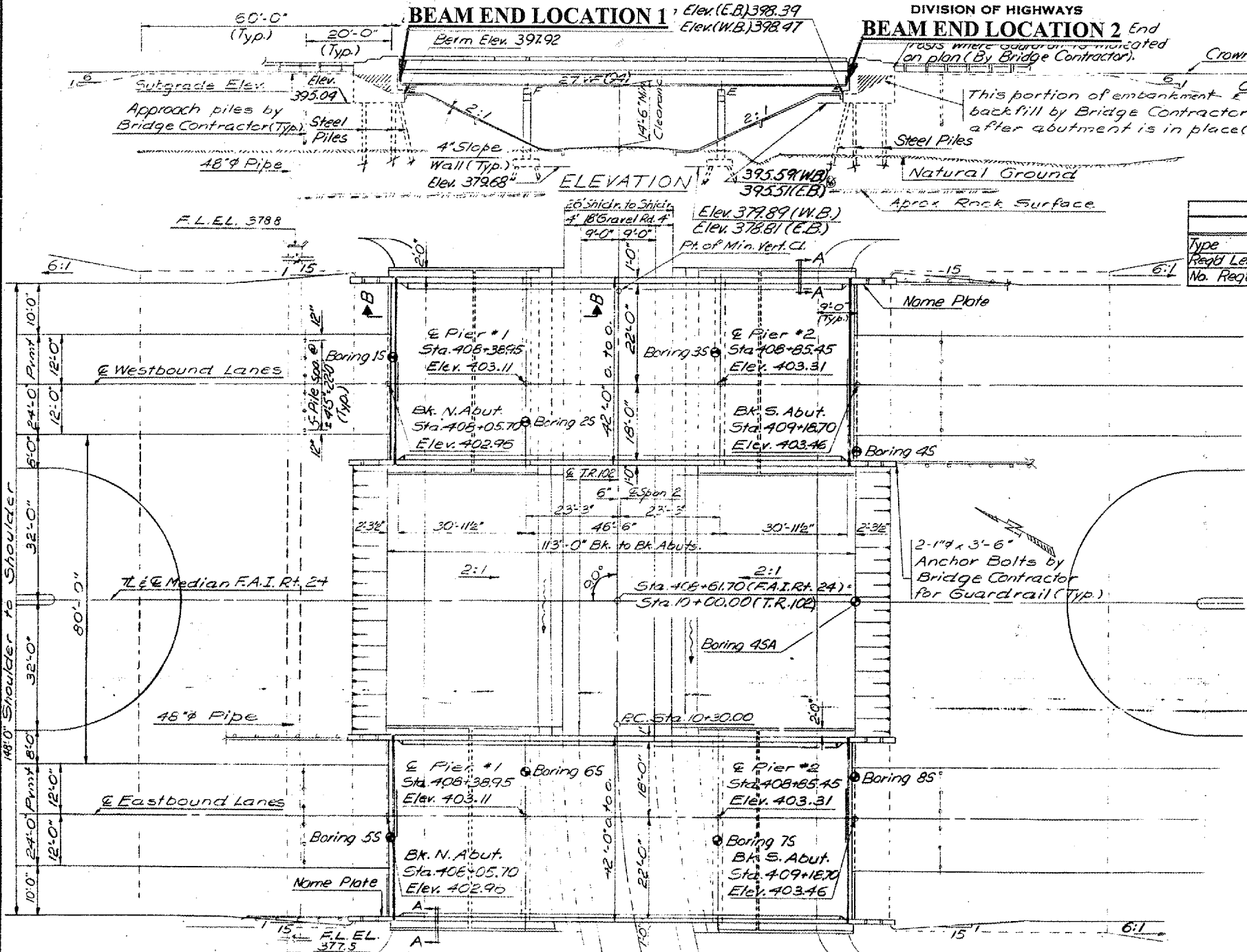


E.M.: Spike in 30" Oak 249' Rt. Sta. 406+00
 & Med. F.A.I. - 24 Elev. 381.12

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

FAI 24
 D9 BRIDGE PAINTING FY 08-1
 JOHNSON & WILLIAMSON COUNTIES
 CONTRACT 78020
 SHEET 6 OF 35

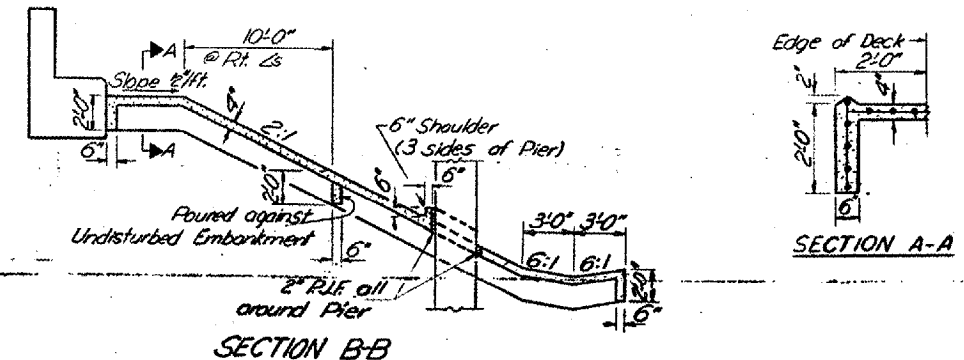


APPROACH PILE DATA

	West Bd. Lanes	East Bd. Lanes
N. Abut. S. Abut.	N. Abut. S. Abut.	N. Abut. S. Abut.
Type	Creosoted	Creosoted
Reqd Length	17 Feet	18 Feet
No. Reqd	6	6

CURVE DATA (TR-102)

$\Delta = 90^{\circ}-00'-00''$
 $D = 22^{\circ}-55'-06''$
 $R = 250.00$
 $L = 392.70$
 $T = 250.00$
 $E = 103.55$
 $S.E. = 0.0611\%$
 $S.E. \text{ ATTAINED: STA. } 9+58.00 \text{ TO STA. } 10+56.00$
 $\text{STA. } 13+86.70 \text{ TO STA. } 14+94.70$



All reinforcement shown.
 Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ " & open holes $\frac{1}{16}$ ", unless otherwise noted.
 Calculated weight of Structural Steel = 161,170 Lbs

The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.

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 bolting diaphragms over supports. Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 sq. ft.

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

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.

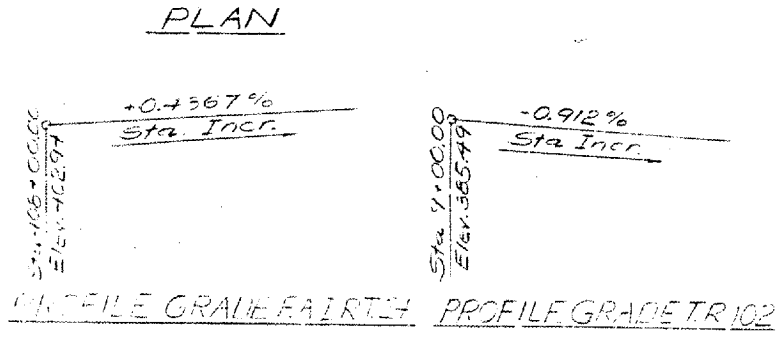
The Contractor shall drive 1 steel test pile (8 BP 36) at North Abutment Westbound lanes and Pier #2 Eastbound lanes respectively as directed by the Engineer before ordering the remainder of piles.

CURVE DATA (F.A.I. RTE. 24)

$P.I. \text{ Sta. } 429+99.45$
 $\Delta = 19^{\circ}-59'-40''$
 $D = 0^{\circ}-30'-00''$
 $R = 11459.16'$
 $T = 2020.00'$
 $L = 3998.92'$
 $E = 176.68'$
 $S.E. = 0.015 \text{ Ft}/\text{Ft}$
 $S.E. \text{ Attained}$
 $\text{Sta. } 408+46.12 \text{ To Sta. } 410+46.12$
 $\text{Sta. } 451+11.70 \text{ To Sta. } 449+11.70$

DESIGNED J. M. Patel
 CHECKED Nathan K. Chaudhri
 DRAWN R. Doty
 CHECKED Nathan K. Chaudhri

EXAMINED [Signature]
 PASSED [Signature]
 APPROVED [Signature]



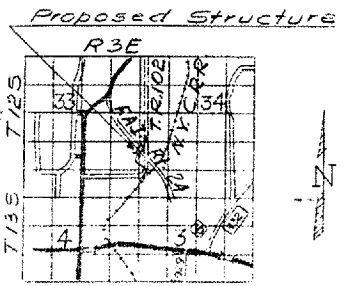
Note: For Stress Table see sheet #3.

DESIGN STRESSES

$f_c = 1,200 \text{ psi Slab}$
 $f_c = 1,400 \text{ psi Parapet, Sidewalk}$
 $f_c = 20,000 \text{ psi Substructure}$
 $f_s = 20,000 \text{ psi Structural Steel}$
 $f_s = 20,000 \text{ psi Reinforcement}$
 $n = 10$

STATION 408+61.70
 BUILT BY
 STATE OF ILLINOIS
 F.A.I. RT. 24 SEC. 44-5HB-2
 FA. PROJ. IG-24-1(18)
 LOADING HS 20+ ALT.

See Std. 213-1
NAME PLATE
 (2 Required)



Note: Allow 25 #/sq. ft. wearing surf.

TOTAL BILL OF MATERIALS

Item	Super	Sub.	Total
Protective Coat	Sq. Yds. 1152		1152
Structure Excavation	Cu. Yds. 153		153
Class X Concrete	Cu. Yds. 281.8	399.0	680.8
Structural Steel	Lump Sum. L.S.		L.S.
Aluminum Railing	Lin. Ft. 439		439
Reinforcement Bars	Lbs. 66,600	32,860	99,460
Creosoted Piles (Up to 20) Lin. Ft.		288	288
Creosoted Piles (20.1 to 38) Lin. Ft.		132	132
Test Piles Steel (8 BP 36)	Ea.	2	2
Steel Piles (8 BP 36) Lin. Ft.		1912	1912
Slope Wall 4"	Sq. Yd.	1030	1030
Name Plates	Ea.	2	2
Preformed Joint Compound	Sq. Yd.	168	168

BRIDGE NO. 1
 S.N. 044-0041
 FOR INFORMATION ONLY

STA. 408+61.70 (F.A.I. RTE. 24)
 STA. 10+00.00 (T.R. 102)