

054-0078

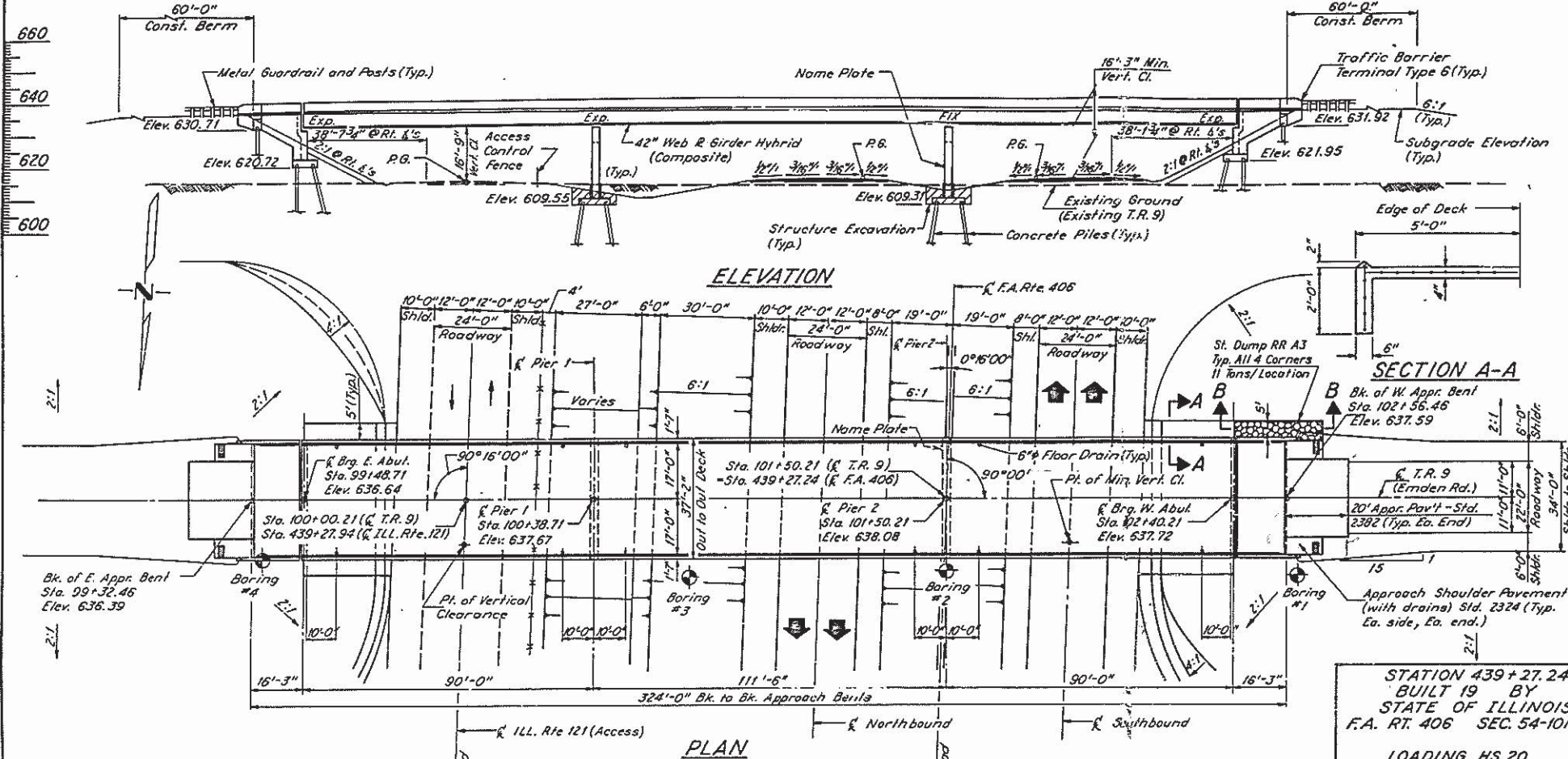
054-0078

SHEET 1 OF 16

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
406	54-10HB-3	LOGAN	51	18
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJ.		

D.M. No. 507 Revised on S.W. Corner of Hdwl.
-34' R.R. Sta. 100+31 T.R. 9 (Emden Rd.) Elev. 615.12

No Existing Structure.



GENERAL NOTES:

- See Proposal for Boring Data.
- Fasteners shall be high strength bolts. Bolts 7/8" Ø open holes 15/16" unless otherwise noted.
- Calculated Weight of Structural Steel: M223 = 132450 Lbs. and M183 = 136620 Lbs.
- The zinc-silicate and vinyl paint system shall be used for shop and field painting of structural steel. THE COLOR OF THE FINAL FINISH COAT SHALL BE MUMFELL NO. 106 416.
- Field welding of construction accessories will not be permitted to the bottom flange of 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.
- The contractor shall drive one concrete test pile in a permanent location at each substructure unit as directed by the Engineer before ordering the remainder of piles.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustments shall be made either by grinding the surface or by shimming the bearing. Two 1/2" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, shims of the dimensions of the top plate shall be provided and placed as detailed.
- The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Match Toughness Zone 2. These components are the tension flanges, webs and all splice plate material of the steel girders.
- Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53 Grade 60.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
- Concrete piles of approach bents shall be driven in holes precast thru the embankment in accordance with Article 513.09(C) of the Standard Specifications.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Registered Structural Engineer

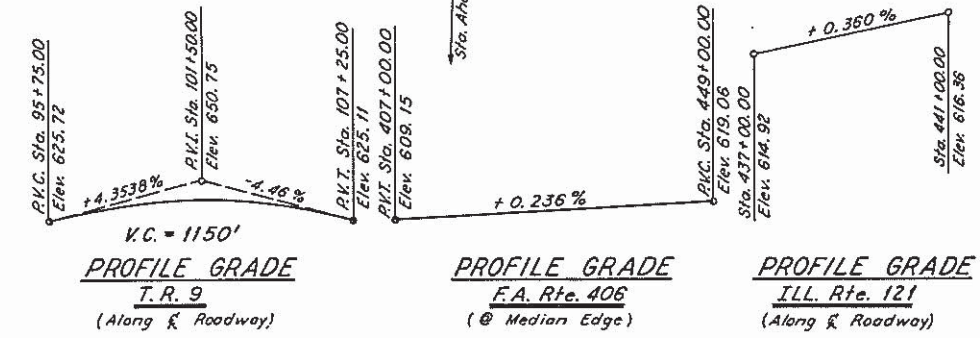
STATION 439+27.24
BUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 406 SEC. 54-10HB-3
LOADING HS 20
STR. NO. 054-0078
NAME PLATE
See Std. 2113

DESIGN SPECIFICATIONS
1983 AASHTO 1984 thru 1988 Interim Specifications
LOADING HS 20-44

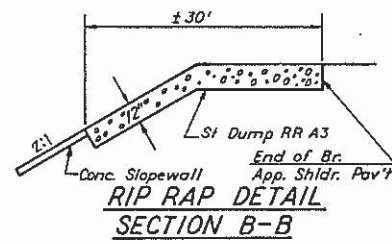
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER-STRUCT.	SUB-STRUCT.	TOTAL
Structure Excavation	Cu. Yds.		132	132
Protective Coat *	Sq. Yds.	1490		1490
Class X Concrete Superstructure	Cu. Yds.	374.7		374.7
Class X Concrete	Cu. Yds.		273.5	273.5
Furnishing and Erecting Structural Steel	Yump Sum	1		1
Reinforcement Bars	Lbs.	4870	24840	29710
Reinforcement Bars - Epoxy Coated	Lbs.	90760	5450	96210
Concrete Piles	Lin. Ft.		3956	3956
Test Piles - Concrete	Each		4	4
Neoprene Expansion Joint (4")	Lin. Ft.	36		36
Preformed Joint Seal (4")	Lin. Ft.	37		37
Name Plates	Each		1	1
Slope Wall	Sq. Yds.		326	326
Stud Shear Connectors	Each	2775		2775
Sand Backfill	Cu. Yds.		156	156
Elastomeric Bearing Assembly, Type I	Each		10	10
Elastomeric Bearing Assembly, Type II	Each		5	5
Floor Drains	Each	12		12
STONE DUMPED RIPRAP CLASS A5	TON		44	44
BRIDGE SEAT SEALER	L. GUM			1

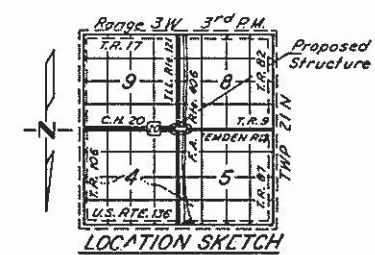
REV 4-12-10 BY HLG CHANGED REINFORCEMENT BARS FROM 2834C TO 24710 LBS. CHANGED REINFORCEMENT BARS - EPOXY COATED FROM 42430 TO 46730 LBS. ADDED STONE DUMPED RIPRAP CLASS A5 44 TON ADDED BRIDGE SEAT SEALER 1 L. GUM



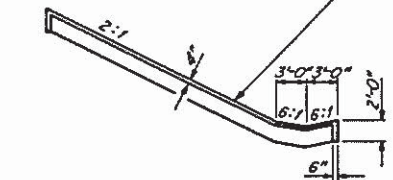
DESIGNED PLH
CHECKED RBQ
DRAWN P. Roy
CHECKED PLH & RBQ



Robert B. Quisenberry
REGISTERED STRUCTURAL ENGINEER
STATE OF ILLINOIS



Sloped wall shall be reinforced with welded wire fabric, 6" x 6" W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
EMDEN ROAD OVER ILLINOIS ROUTE 121
F.A. RTE. 406 SECTION 54-10HB-3
Sta. 101+50.21 (EMDEN ROAD)
Sta. 439+27.24 (F.A. RTE. 406)
LOGAN COUNTY
STRUCTURE NUMBER 054-0078