

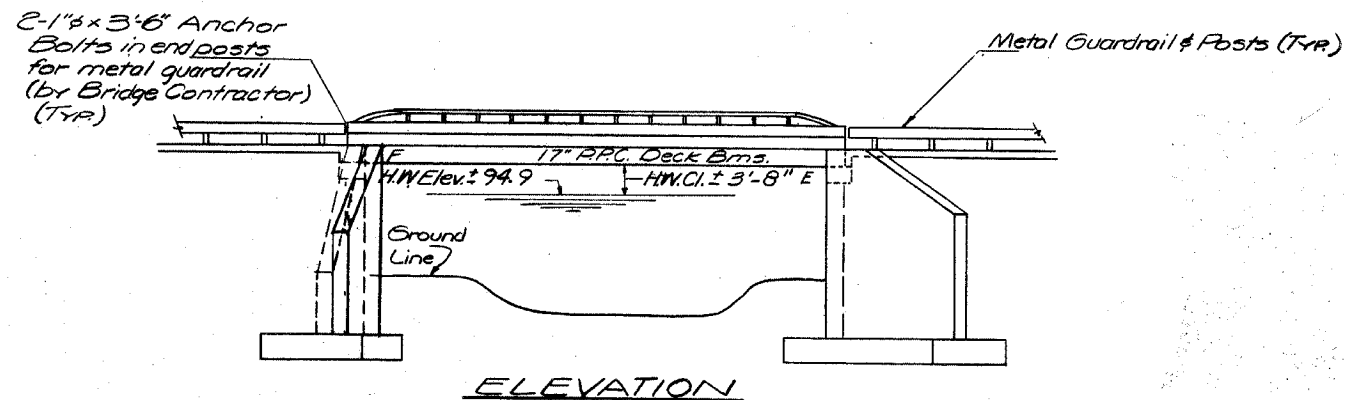
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

FOR INFORMATIONAL
PURPOSES ONLY

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS
318	102-B	LEE	28
PROJECT NO.			21

SHEET NO. 1
8 SHEETS

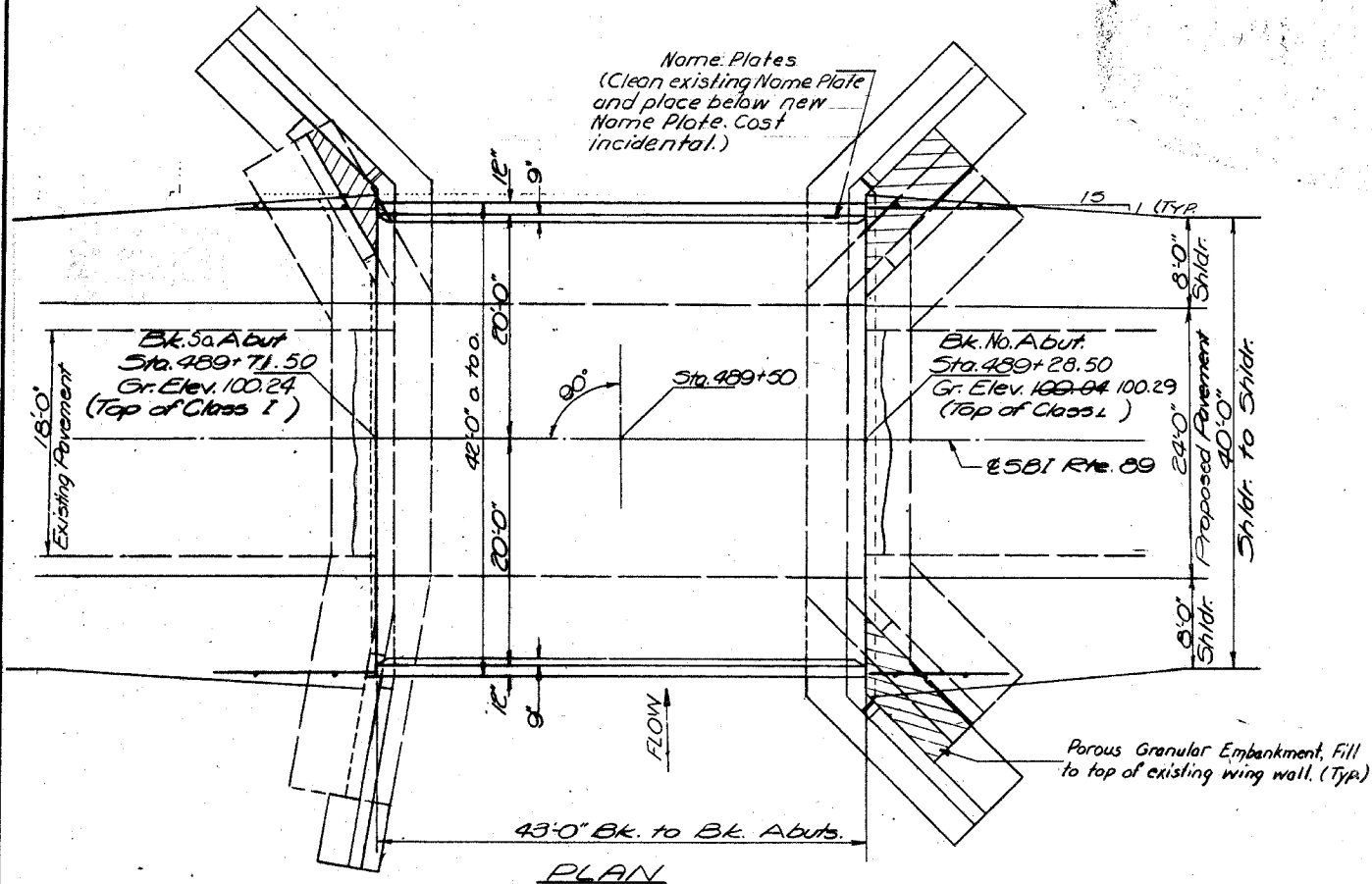
B.M.: Top of northwest wingwall-existing bridge. Elev. 100.00
Existing Structure: Built as S.B.I. 89 Sec. 102-B Sta. 489+50
in 1929. Superstr. is RC Deck Girder. Substr. is
RC Closed Abut.
Superstructure to be removed in stages by Bridge
Contr. No. Salvage.



GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
All structural steel shall be shop painted with 2 coats of basic lead silico chromate paint.
It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.
For Waterproofing Membrane System see Special Provisions.

The concrete rail section above deck beam shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
Expansion bolts shall consist of self drilling expansion anchors and 3/4" ϕ x 9" hooked bolts.
Back surface of the new abutment and wing walls shall be waterproofed above the top of the footings.
Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.
The top surfaces of the beams shall be finished in accordance with Art. 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.



STATION 489+50
REBUILT BY
STATE OF ILLINOIS
S.B.I. RT. 89 SEC. 102-BR

LOADING HS20
NAME PLATE
See Std. 2113

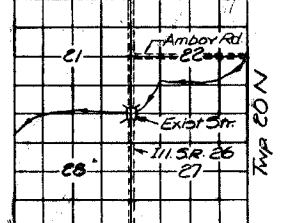
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Superstructure	Each	1		1
Concrete Removal	Cu. Yds.		5	5
Class X Concrete	Cu. Yds.	12.9	113.9	126.8
Aluminum Railing	Lin. Ft.	80		80
Reinforcement Bars	Lbs.	1500	11240	12600
Portland Cement Mortar fairings	Lin. Ft.	551		551
Waterproofing Memb. Syst.	Sq. Yds.	194		194
Preformed Jt. Sealer	Lin. Ft.	45		45
Part. Removal and P.C.C.				
Replacement Type I (10")	Sq. Yds.	8		8
Precast Prestressed Concrete Deck Beams (17")	Sq. Ft.	1779		1779
Protective Coat	Sq. Yds.	32		32
Expansion Bolts 3/4" ϕ	Each		155	155
Temporary Guardrail	Lin. Ft.	43		43
Structural Steel	Lbs.	2800		2800
Name Plates	Each	1		1
Bituminous Concrete Surface Course Class I	Tons	23		23
Untreated Piles (up to 30')	Lin. Ft.		660	660
Test Pile (Timber)	Each		1	1
Porous Granular Embankment	Cu. Yds.		60	60

WATERWAY INFORMATION

Drainage Area, 17.45 sq. Mi.
Character, Rolling, sand, wooded
Present Opening 360.5 sq. Ft.
Road Opening 360.5 sq. Ft.
Proposed Opening 360.5 sq. Ft.
Q(50) 1821 cfs.

Range 9E 3rd. P.M.



LOCATION SKETCH

FIELD UNITS

f_c : 1400 psi (Super) (Sub)
 f_s : 20000 psi (Reinf.)
 v_c : 75 psi (Footng)
 n : 10

PRECAST PRESTRESSED UNITS

f_c : 5000 psi.
 f_{ci} : 4000 psi.
 f_s : 270,000 psi.
 f_{si} : 189,000 psi.

LOADING HS20-44

DESIGNED J.M. Patel
CHECKED J.B. Nelson
DRAWN FERRANDO
CHECKED JBN

NOVEMBER 24 1971
EXAMINED [Signature]
PASSED [Signature]
APPROVED Richard H. Hollerman



GENERAL PLAN & ELEVATION
SBI RT. 89 SEC. 102-B
LEE COUNTY
STA. 489+50