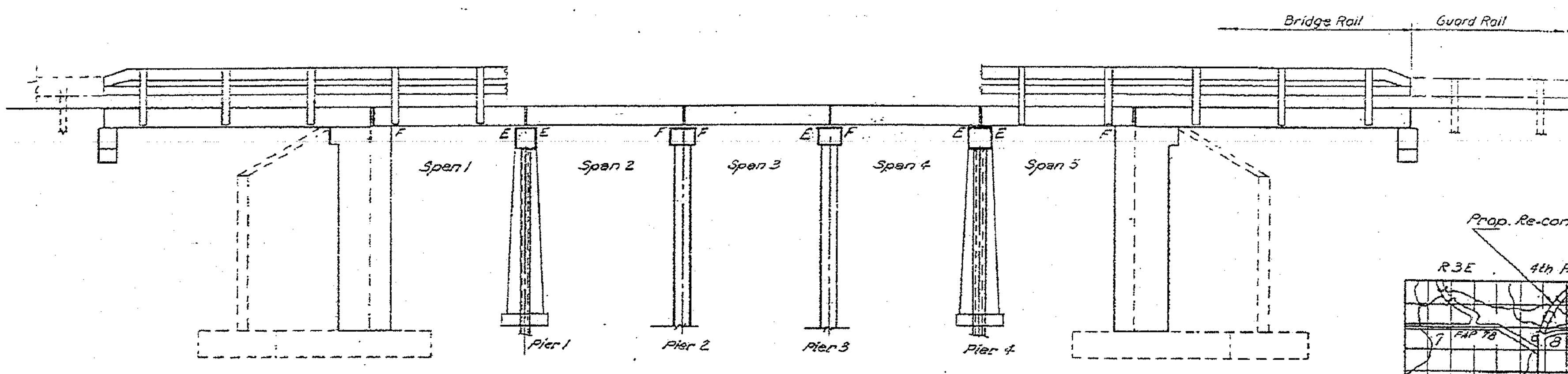
CONTRACT NO. 88753

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	***	FULTON	684	139
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

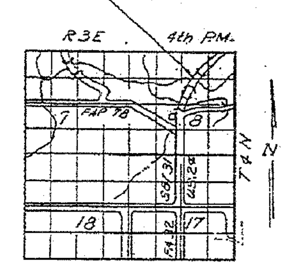
*** 18I,(18BRY&18BRY-1)BR,18B-1

Built as S.B.I. Rt. 31, Section 18-A3C, Sta. 64+75, Year 1926 Sec. 18BI-1 in 1965
Existing Structure: R.C. Abutments, R.C. Piers, 2 Spans PPC Bms to remain in place.
1 Span Steel Truss 150' long (22' Roadway). Salvage Steel Truss by contractor.

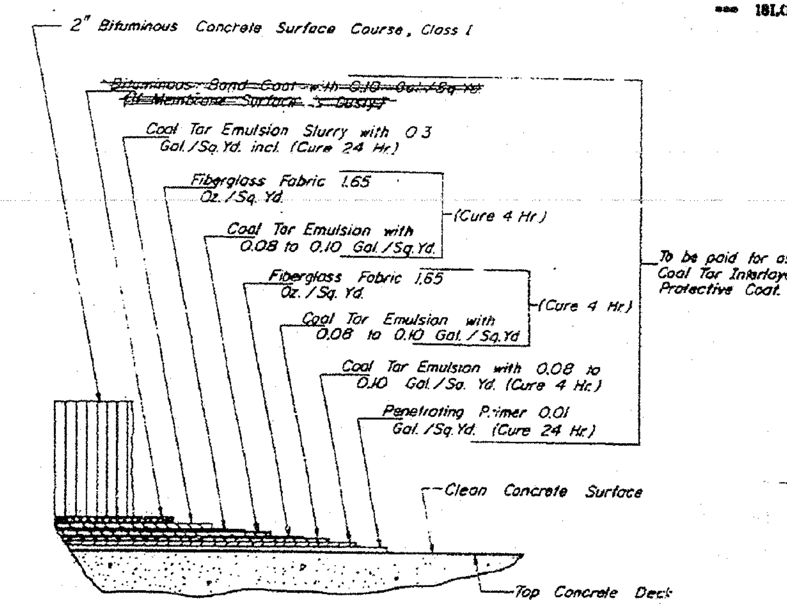
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS



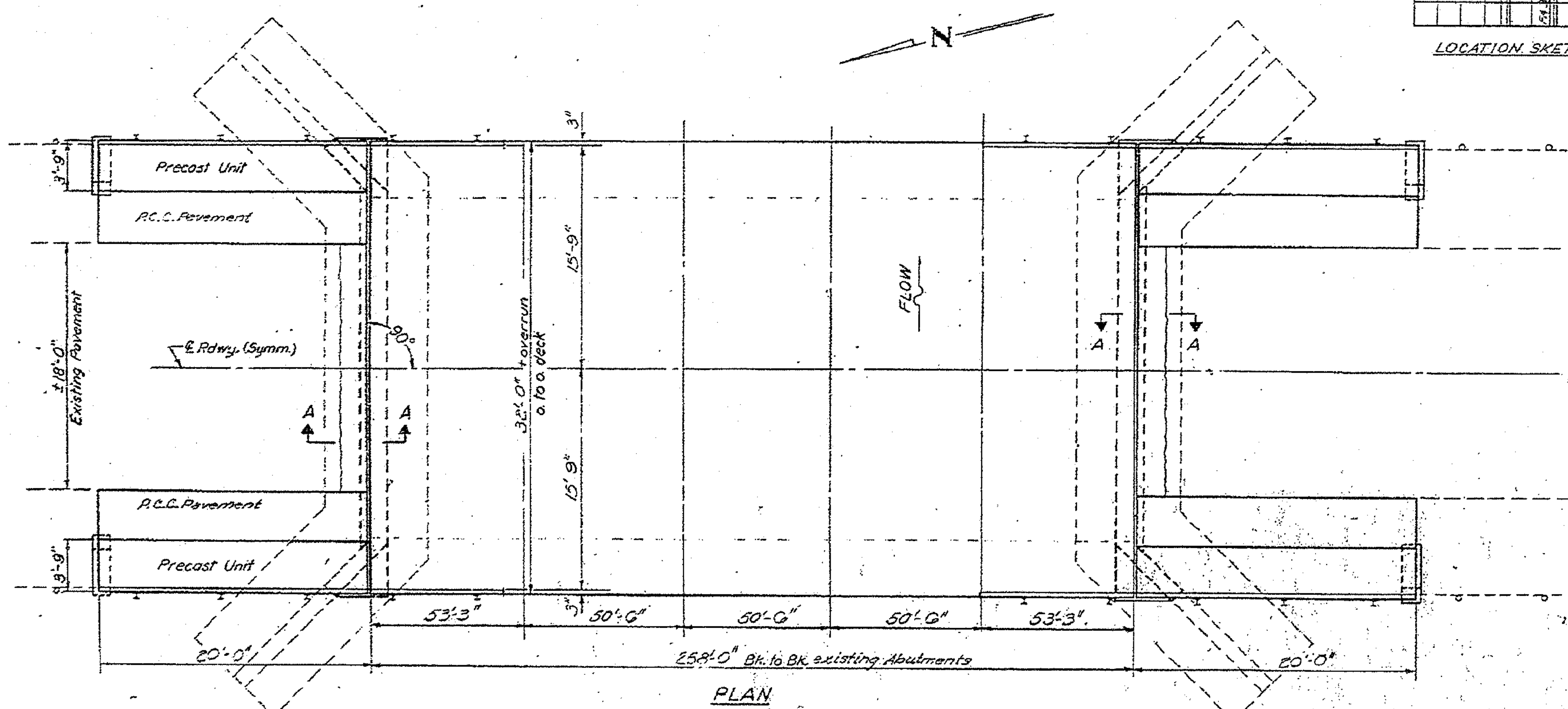
ELEVATION



LOCATION SKETCH



DETAIL OF DECK SURFACING



PLAN

GENERAL NOTES

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

It shall be the responsibilty of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

An alternate strand pattern using Extra High Strength Prestressing strand (270 ksi.) is permitted.

Expansion bolts shall consist of self drilling expansion anchors and ¾"φ hooked bolts. Hooked bolts shall extend a minimum of 12" into new concrete.

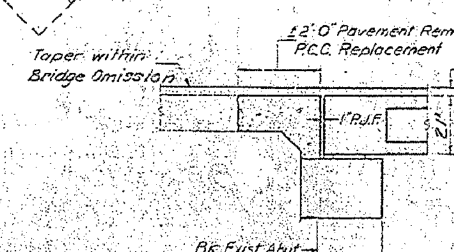
Shoulder transition to wingwall shall be shaped with broken concrete. Cost Incidental.

Limits of Coal Tar Interlayer Protective Coat shall be back to back of abutments.

The Contractor shall drive one Metal Shell test pile in a permanent location at Pier 2 as directed by the Engineer before ordering the remainder of Piles

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Class A Excavation	Cu. Yds		104	104
Portland Cement Concrete Pavement (10")	Sq. Yds.	29		29
Pavement Fabric	Sq. Yds.	29		29
Concrete Removal	Cu. Yds.	9	10	19
Expansion Bolts (¾"φ)	Each	52	156	208
Class X Concrete	Cu. Yds.	1.6	91.8	93.4
Precast Concrete Bridge Slab	Sq. Ft.	299		299
Precast Prestressed Concrete Deck Beams (21")	Sq. Ft.	5701		5701
Steel Railing, Type N	Lin. Ft.	596		596
Reinforcement Bars	Lbs.		7260	7260
Pavement Removal & P.C.C. Replacement, Type 2 (10")	Sq. Yds.	8		8
Coal Tar Interlayer Protective Coat	Sq. Yds.	917		917
Bituminous Concrete Surface Removal	Sq. Yds.	247		247
Removal of Existing Superstructure	Each	1		1
Metal Shell Piles (12"φ)	Lin. Ft.		874	874
Test Piles (Metal Shell Piles)	Each		1	1
Bridge Handrail Removal	Lin. Ft.	212		212



SECTION A-A

DESIGNED	Simon Ustorich / John Schuetter
CHECKED	James Hamilton
DRAWN	J. L. Armstrong
CHECKED	J.H.

February 6 1970
EXAMINED (signature)
PASSED W. E. Baumann
APPROVED Richard H. Golterman

DESIGN STRESSES

FIELD UNITS	PRECAST PRESTR. UNITS
f_c = 1400 psi. (super)	f'_c = 5000 psi.
f_c = 1000 psi. (sub)	f'_{ci} = 4000 psi.
f_s = 20,000 psi. (reinf.)	f'_s = 248,000 psi.
v_c = 75 psi. (footing)	f_{si} = 173,600 psi.
n = 10	

LOADING HS 20-44

GENERAL PLAN & ELEVATION
S.B.I. RT. 31 - SEC. 18BRY
FULTON COUNTY
STATION 64+75

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING OVERFLOW STRUCTURE
FOR INFORMATION ONLY

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY