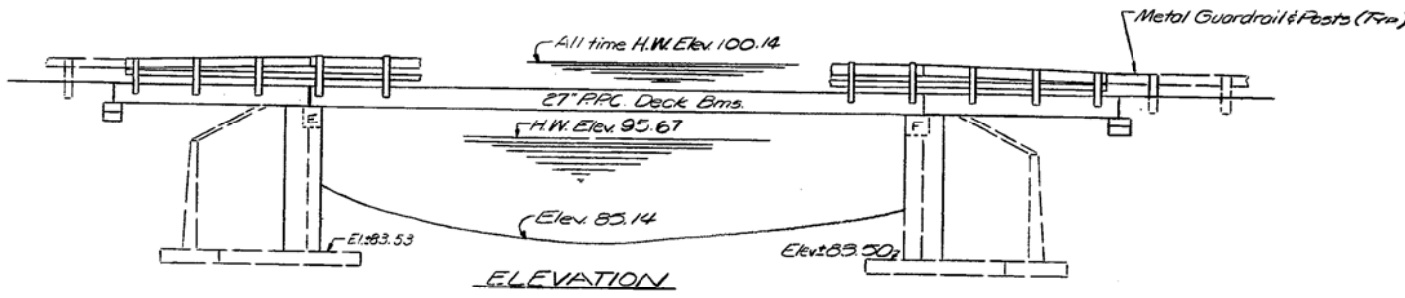


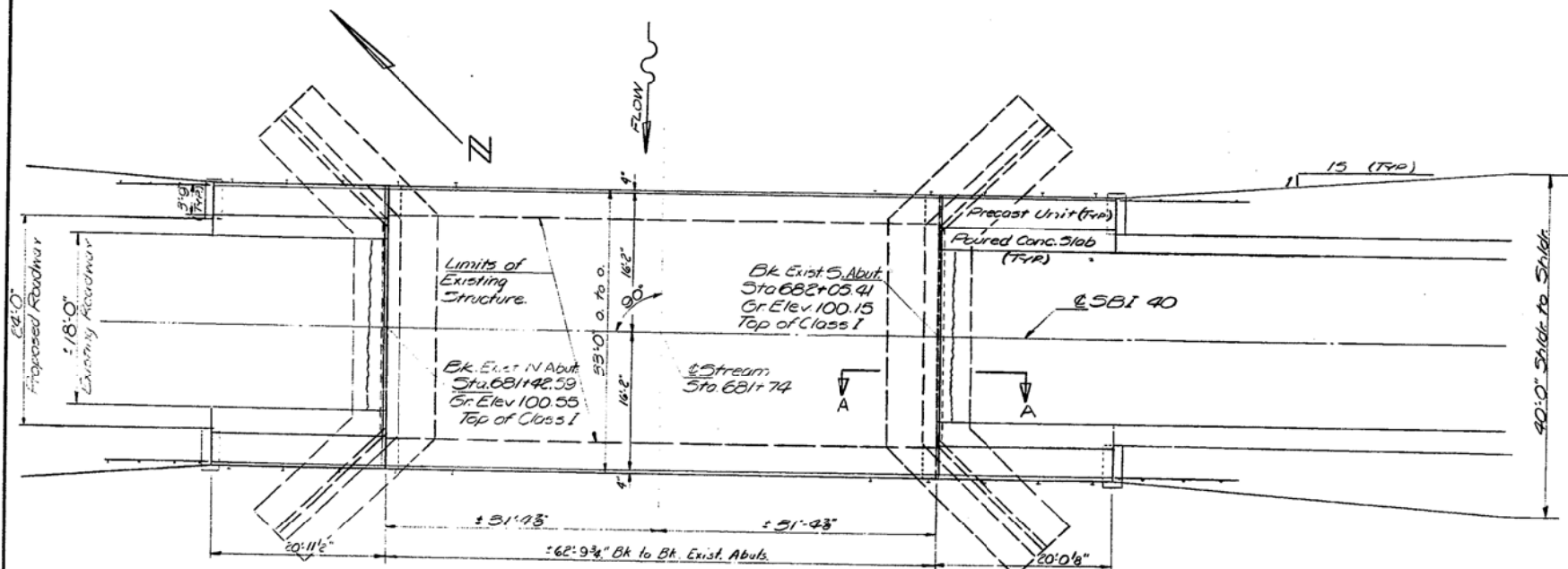
3' W. Top of W. Wall of exist. bridge. Elev. 100.00
 Existing Structure: Built as SBI. 40, Sec. 5B, Sta. 681+74
 in 1925, Superstr. is R.C. Deck Girder.
 Substructure is R.C. Closed Abutts.
 Traffic to be maintained with Staged Construction.
 Superstr. to be removed by Bridge Contractor.
 No Salvage

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. / TOTAL SHEETS
40	5B-1	CARROLL	16	11	6 SHEETS



GENERAL NOTES
 All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
 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.
 An alternate strand pattern using Extra High Strength Prestressing Strand (270 ksi) is permitted.
 Shoulder transition to wingwall shall be shaped with broken concrete.
 Limits of cool for interlayer protective coat shall be back to back of abutments and out to out of deck.
 Expansion bolts shall consist of self-drilling expansion anchors and 3/4" hooked bolts. Hooked bolts shall extend a minimum of 12" into new concrete unless otherwise shown.
 All excavation shall be incidental to contract.



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Portland Cement Conc. Pavt. (10')	Sq. Yds.	33.2		33.2
Pavement Fabric	Sq. Yds.	33.2		33.2
Concrete Removal	Cu. Yds.		5.0	5.0
Expansion Bolts (3/4")	Each	52	118	170
Class II Concrete	Cu. Yds.	1.6	35.4	37.0
Precast Concrete Bridge Slab	Sq. Ft.	299		299
Precast Prestressed Conc. Deck Bms (27')	Sq. Ft.	2070		2070
Steel Railing, Type (W)	Lin. Ft.	200		200
Reinforcement Bars	Lbs.		1620	1620
Pavt. Rem. & P.C. Repl. Type 2 (10")	Sq. Yds.	12		12
Removal of Existing Superstructures #2 Each		1		1
Bituminous Conc. Surf. Course, Class I	Tons	32		32
Cool for Interlayer Protective Coat	Sq. Yds.	230		230
Preformed Joint Sealer	Lin. Ft.	33		33
Temporary Guardrail	Lin. Ft.	63		63
Structural Steel	Lbs.	1790		1790

DESIGN STRESSES PLAN
 FIELD UNITS PRECAST PRESTRESSED UNITS

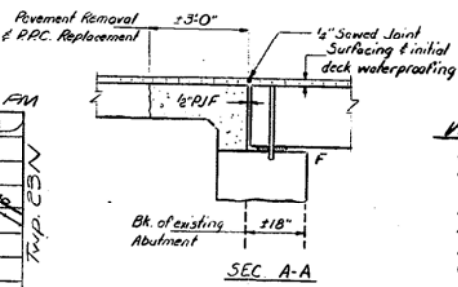
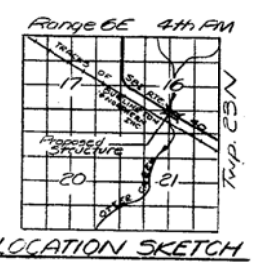
$f_c = 1000 \text{ psi (Sub.)}$
 $f_c = 2000 \text{ psi (Reinf.)}$
 $f_c = 7 \text{ psi (Footings)}$
 $f_t = 10$
 Allowable Future W.S. 25#/50.Ft.
 Design Specifications 1969
 AASHTO (as applicable)

$f_s = 3000 \text{ psi}$
 $f_s = 4000 \text{ psi}$
 $f_s = 243,000 \text{ psi}$
 $f_s = 173,600 \text{ psi}$

LOADING HS20-44

DESIGNED	SAW
CHECKED	SAW
DRAWN	DAZ
CHECKED	DAZ

EXAMINED
 PASSED
 APPROVED
 Richard A. Holterman



WATERWAY INFORMATION

Drainage Area: 14000 Acres
 Character: Rolling, hilly, clay, cultivated and pasture.
 Present Opening: 600 Sq. Ft.
 Req'd Opening: 500 Sq. Ft.
 Proposed Opening: 600 Sq. Ft.
 Q(50) 3773 cfs.

GENERAL PLAN & ELEVATION
 SBI. 40 over OTTER CREEK
 SBI RTE. 40 SEC. 5 BR-1
 CARROLL COUNTY
 STA. 681+74