

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 1 33 SHEETS
F.A.P. 595	5HBR	Rock Island	1/39	51	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #64931

Bench Mark: Brass plug on NE corner of R.R. structure, Sta. 636+89.44, Offset ±37'-2" Rt., Elev. 619.08

Existing Structure: S.N. 081-0093 was built in 1966 as F.A.S. Route 205, Section 5HB, at station 390+67.79. Significant repairs that included vertical realignment of piers were performed in 1986. The existing four span structure consists of continuous wide flange beams supported on pile bent abutments and multi-column piers. The structure is 227'-8" back to back of abutments. The structure width varies from ±102'-3" to ±85'-4" out to out. The existing structure will be replaced. Stage construction will be utilized to maintain two lanes of traffic at all times.

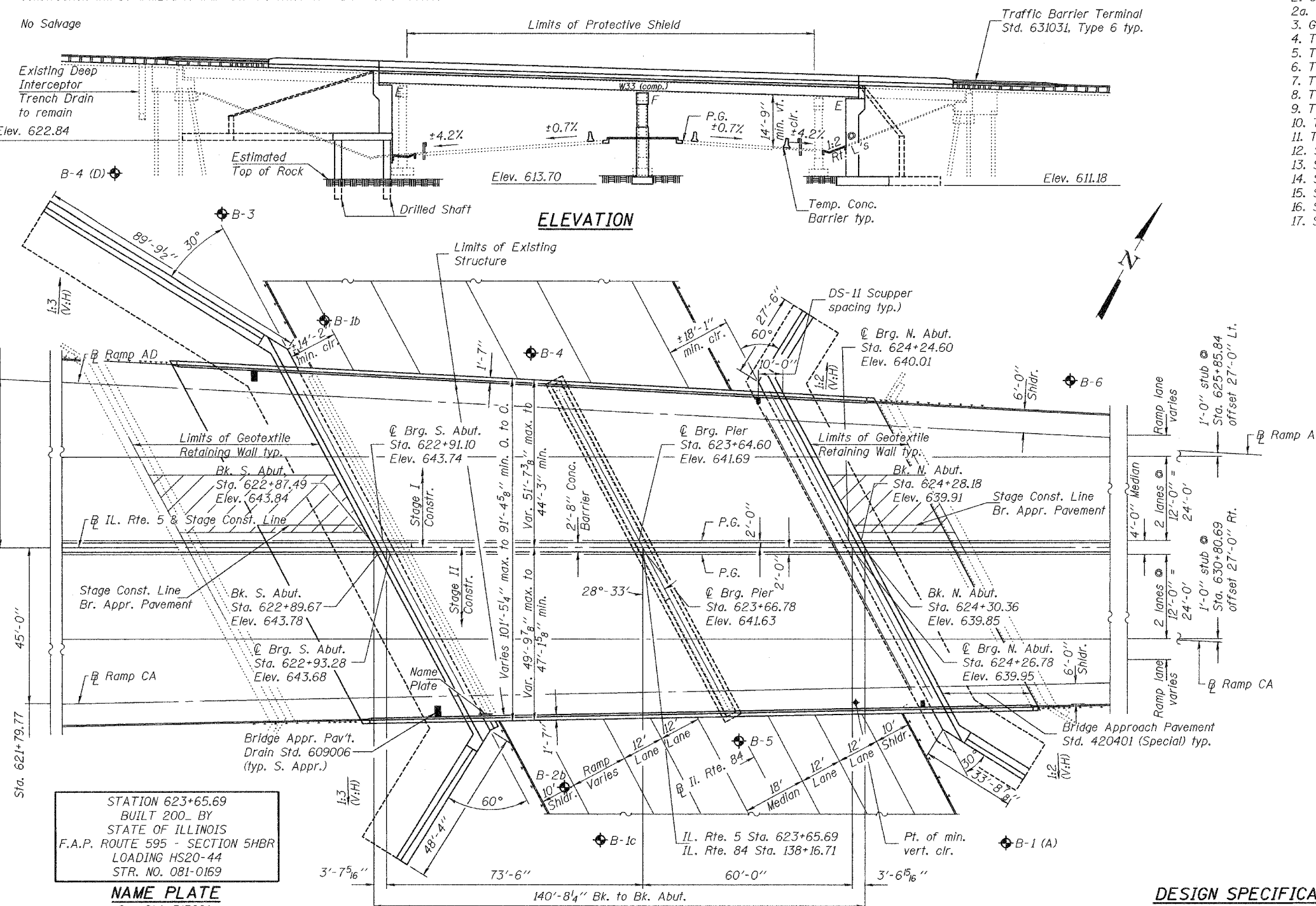
No Salvage

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TOTAL BILL OF MATERIAL

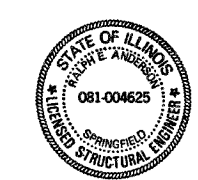
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		1,910	1,910
Protective Shield	Sq. Yd.			1231
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.	2,396		2,396
Rock Excavation for Structures	Cu. Yd.		103.5	103.5
Concrete Structures	Cu. Yd.		1699.2	1699.2
Concrete Superstructure	Cu. Yd.	391.8		391.8
Bridge Deck Grooving	Sq. Yd.	1,375		1,375
Protective Coat	Sq. Yd.	1,559		1,559
Furnishing and Erecting Structural Steel	L. Sum	1.0		1.0
Stud Shear Connectors	Each	5,631		5,631
Reinforcement Bars, Epoxy Coated	Pound	105,980	543,400	649,380
Bar Splicers	Each	475	417	892
Slope Wall 4 Inch	Sq. Yd.			120
Name Plates	Each	1		1
Drilled Shaft in Soil	Cu. Yd.		250	250
Drilled Shaft in Rock	Cu. Yd.		435	435
Elastomeric Bearing Assembly Type I	Each	28		28
Concrete Sealer	Sq. Ft.		8,165	8,165
Geocomposite Wall Drain	Sq. Yd.		941	941
Pipe Underdrains for Structures 4"	Foot		288	288
Geotextile Retaining Wall	Sq. Ft.		1,362	1,362
Preformed Joint Strip Seal	Foot	214		214
Drainage Scuppers, DS-II	Each		2	2
Bridge Drainage System	L. Sum			1
Osterberg Load Cell Test	Each		1	1
Anchor Bolts 1"	Each			56
Anchor Bolts 1/4"	Each			28
Conduit Embedded in Structure, 2" Dia., PVC	Feet	185		185



STATION 623+65.69
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. ROUTE 595 - SECTION 5HBR
LOADING HS20-44
STR. NO. 081-0169
NAME PLATE
See Std. 515001

DESIGNED *Danny H. Coletta*
CHECKED *W.D. Collins*
DRAWN *W.D. Collins*
CHECKED *DNC / OEH*

October 5, 2007
EXAMINED *[Signature]*
PASSED *[Signature]*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2008

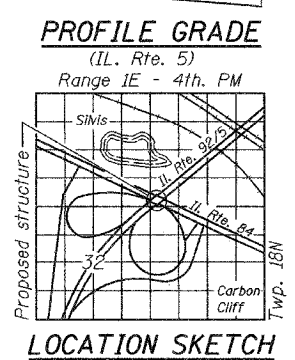
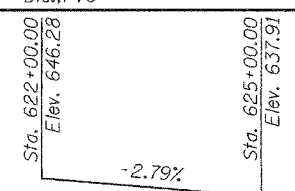
PLAN

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.
North Abutment active equivalent fluid soil weight = 40 lb./ft.³
South Abutment active equivalent fluid soil weight = 100 lb./ft.³
(except lower half of SW wing = 120 lb./ft.³)

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES
FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (M270 Grade 50)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0



GENERAL PLAN
IL. RTE. 5 OVER IL. RTE. 84
F.A.P. RTE. 595 - SECTION 5HBR
ROCK ISLAND COUNTY
STATION 623+65.69
S.N. 081-0169

LOCATION SKETCH
Shows the location of the bridge structure relative to the existing road and surrounding terrain. Includes labels for 'Proposed structure', 'Carbon Cliff', and 'TWC 18H'.