

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	LEVEE	SHEET NO.	SHEET NO. 1 16 SHEETS
FAP 22	127BR-1	HENRY	33	15	
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

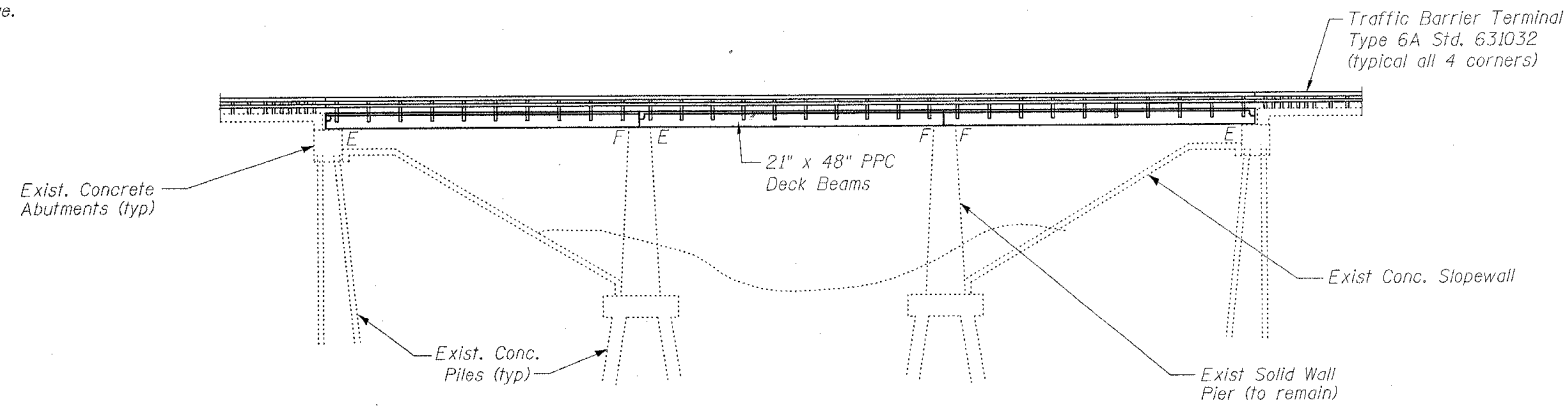
Contract # 64B24

Bench Mark: B.M. #1 - Chiseled square on top of SW wingwall, 23.6' Lt.
Sta. 542+24.60 Elev. 696.98

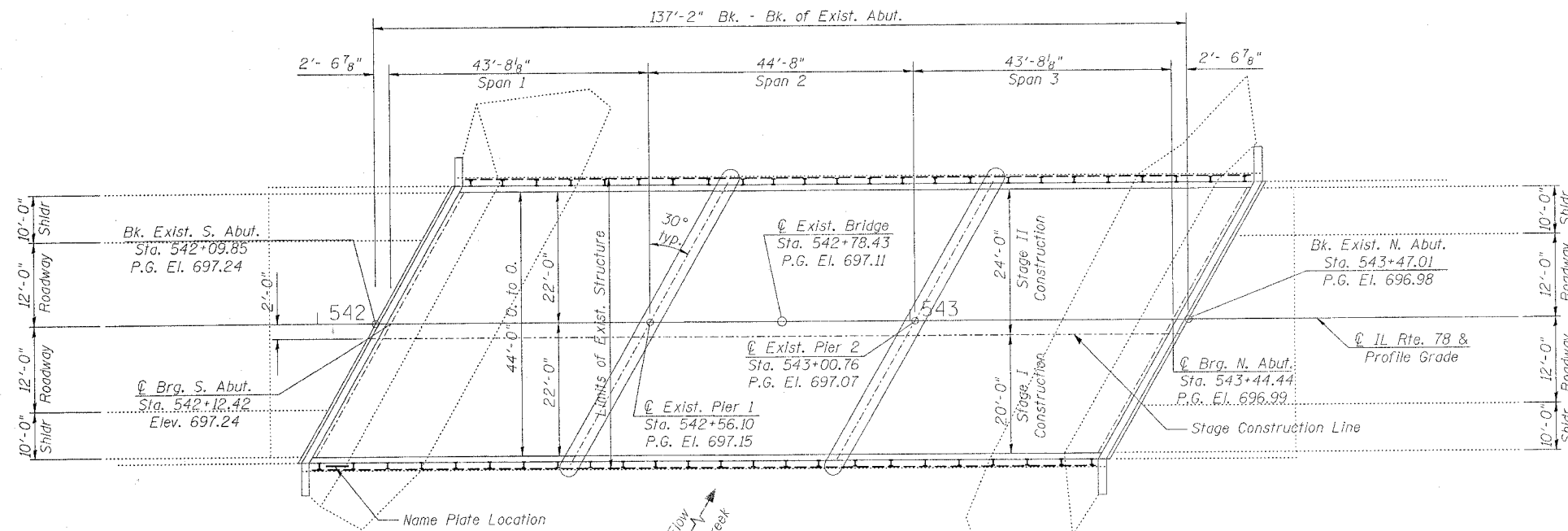
S.N. 037-0125 Built as F.A. Route 57 Sec. 127BR in 1974. Three-span precast prestressed concrete deck beam (21" depth) superstructure on concrete abutments and reinforced concrete solid wall piers. Abutments and piers are supported by concrete piles. Structure length: 137'-2" Bk.-Bk. of abutments ±46' 0.-0. deck (±44' F.-F.). The existing bridge superstructure shall be removed and replaced. Traffic to be maintained during superstructure replacement by stage construction. No Salvage.

INDEX OF SHEETS

1. General Plan & Elevation
2. General Notes, Total Bill of Material & Rail Elev.
3. Staging Details
- 4-8. Superstructure Details
9. Type SM Steel Bridge Rail Side Mounted
10. Bridge Joint System-Expansion
11. Bar Splicer Assembly Detail
12. Anchor Bolt Details
- 13-14. Abutment Details
15. Pier 1 Repair Details
16. Pier 2 Repair Details



ELEVATION



PLAN

STATION 542+78.43
REBUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RTE. 22
SEC. 127BR-1
LOADING HS20
STR. NO. 037-0125

NAME PLATE
See Std. 515001

LOADING HS20-44
Allow 50#7/sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

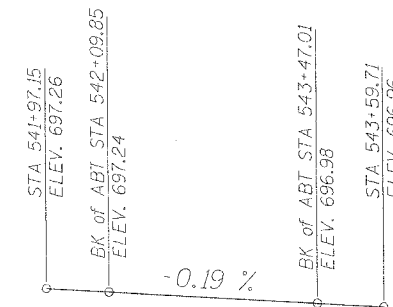
FIELD UNITS
 $f'_c = 5,000$ psi (Conc. wearing surface)
 $f'_c = 3,500$ psi (All others)
 $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

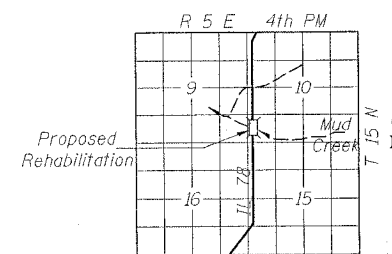
$f'_c = 5,000$ psi
 $f'_ci = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" ϕ low lax strands)
 $f'_si = 210,960$ psi

SCOPE OF WORK

1. Remove existing surfacing, concrete railings, deck beams, and abutment hatch blocks. Reconstruct a three-span PPC Deck Beam superstructure with concrete wearing surface and Steel Bridge Rail Type SM utilizing stage construction.
2. Seal existing cracks and repair delaminated/spalled concrete areas on abutments and piers. Sound and repair bearing seats at abutments and piers as required.
3. Place new PPC Deck Beams and place concrete wearing surface with joints.
4. Pour abutment hatch blocks to elevation of concrete wearing surface.



PROFILE GRADE



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
IL 78 OVER MUD CREEK
F.A.P. RTE. 22 - SECTION 127BR-1
HENRY COUNTY
STA. 542+78.43 - STR. NO. 037-0125

DESIGNED	BAS
CHECKED	KEF & RJA
DRAWN	
CHECKED	

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

Kristen E. Fields 11-2-05
ILLINOIS STRUCTURAL NO. 5714 (Expires 11/30/06)

