

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A.S. 1907	21BR-1	ALEXANDER	82	13	16 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #78032

Bench Mark: Chiseled square in S.E. corner of Northeast wingwall of SN 002-0028, Elevation 336.58.

Existing Structure: The original three-span structure was built in 1983 with P.P.C. deck beams on pile supported stub abutments and solid wall encased pile bent piers with a length of 115'-0" back to back of abutments. The structure was resurfaced and keyways were repaired in 2003.

Proposed Improvements: The existing superstructure is to be replaced with P.P.C. deck beams and a 5" concrete overlay. Minor substructure repairs are required. Traffic to be maintained at all times utilizing stage construction.

No Salvage.

DESIGN SPECIFICATIONS

2007 AASHTO LRFD
Bridge Design Specification, 4th Edition

LOADING HL-93

No allowance for Future Wearing Surface.

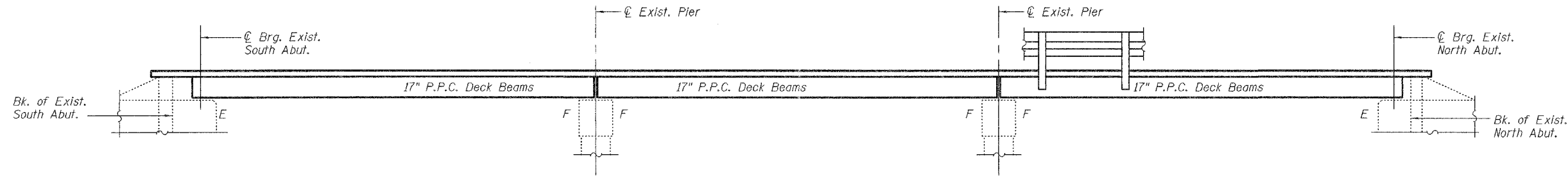
DESIGN STRESSES

FIELD UNITS

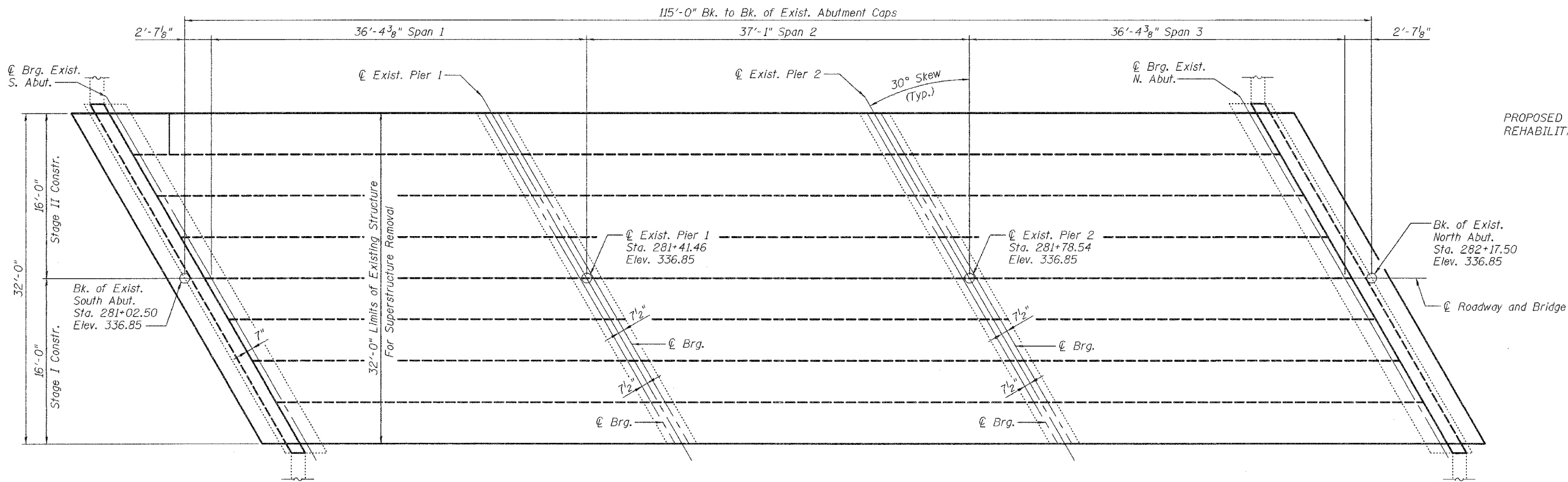
$f'_c = 5,000$ psi (Concrete Wearing Surface)
 $f'_c = 3,500$ psi (All concrete except CWS)
 $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

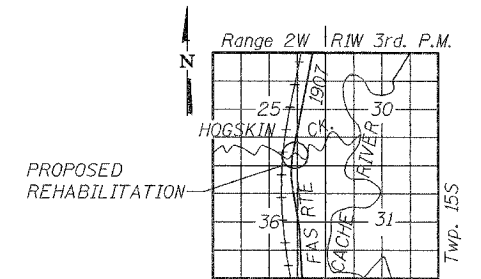
$f'_c = 6,000$ psi
 $f'_{ci} = 5,000$ psi
 $f_{pu} = 270,000$ psi ($\frac{1}{2}$ " low lax. strands)
 $f_{pbt} = 201,960$ psi ($\frac{1}{2}$ " low lax. strands)



ELEVATION



PLAN

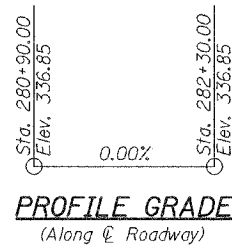


LOCATION SKETCH

STATION 281+60
REBUILT 200_ BY
STATE OF ILLINOIS
F.A.S. RT. 1907 SEC. 21BR-1
LOADING HL93
STR. NO. 002-0028

NAME PLATE
See Std. 515001

Notes:
Existing name plate shall be cleaned and relocated adjacent to the new name plate. Cost included with Name Plates.
Locate name plates at outside face of top steel railing tube at southeast corner of bridge.



PROFILE GRADE
(Along \varnothing Roadway)



DESIGNED	YSS
CHECKED	RLM
DRAWN	PRC
CHECKED	YSS

03/04/08

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TD)
ENGINEER OF BRIDGES AND STRUCTURES



David W. Petermeier 3/13/08

DAVID W. PETERMEIER
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-005642
EXPIRES NOV. 30, 2008

GENERAL PLAN & ELEVATION
ILL. ROUTE 127 OVER HOGSKIN CREEK
F.A.S. ROUTE 1907 - SECTION 21BR-1
ALEXANDER COUNTY
STATION 281+60.00
STRUCTURE NO. 002-0028