

Bench Mark 206: Cut "x" in top northwest bolt of fire hydrant connection, northwest quadrant of ILL. Rte. 34 and Mace Rd. Elevation 435.457

Bench Mark 207: Chiseled square in southwest corner of south abutment of SN 028-0047. Elevation 419.341

Bench Mark 471: Existing railroad spike in power pole. Station 374+70, right of centerline. Elevation 421.603

Bench Mark 208: Chiseled square in southwest corner of south headwall of box culvert. Station 401+25. Elevation 460.603

Existing Structure: The original two-span structure was built in 1928 with a reinforced concrete deck girder on reinforced concrete closed abutments and pier with a length of 76'-1 1/4" back-to-back of abutments. The structure was widened in 1975. The superstructure was replaced with P.P.C. deck beams with a total width of 33'-0" out-to-out of superstructure and the substructure was modified accordingly.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.P. 869	10IBR-1	FRANKLIN	14	15 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		

Contract #78024

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications
for Highway Bridges

LOADING HS20-44

No Allowance for Future Wearing Surface.

DESIGN STRESSES

FIELD UNITS

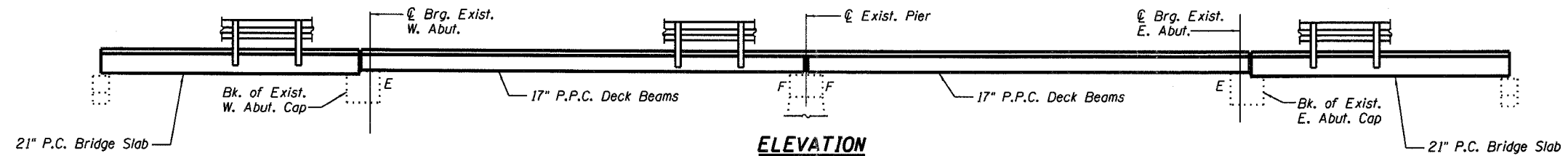
$f'_c = 5,000$ psi (Concrete Wearing Surface)
 $f'_c = 3,500$ psi (All concrete except CWS)
 $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

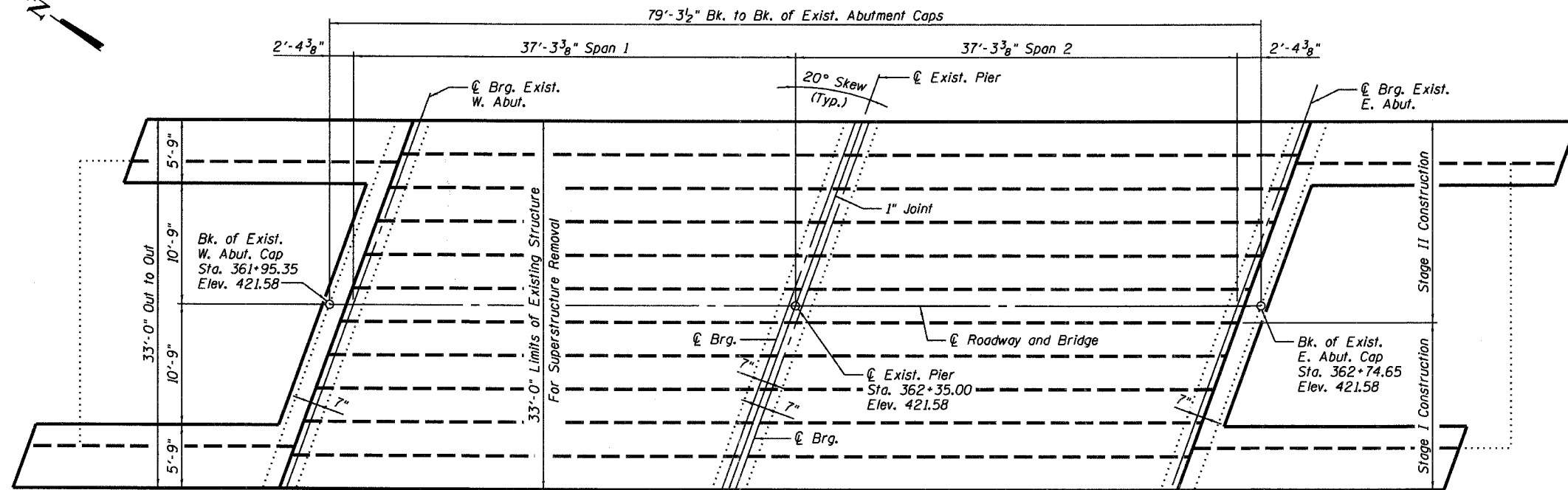
$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" ϕ low lax. strands)
 $f_{si} = 201,960$ psi (1/2" ϕ low lax strands)

PRECAST UNITS

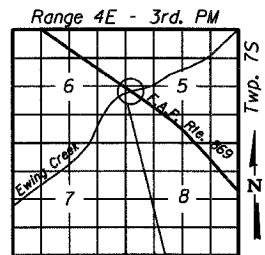
$f'_c = 4,500$ psi
 $f_y = 60,000$ psi (reinforcement)



ELEVATION



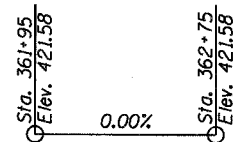
PLAN



PROPOSED
REHABILITATION
LOCATION SKETCH



DESIGNED	RLM
CHECKED	MEL
DRAWN	AEC
CHECKED	RLM



PROFILE GRADE
(Along ϕ Roadway)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



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

GENERAL PLAN & ELEVATION
ILL. ROUTE 34 OVER EWING CREEK
F.A.P. ROUTE 869 SECTION 10IBR-1
FRANKLIN COUNTY
STATION 362+35.00
STRUCTURE NO. 028-0047