

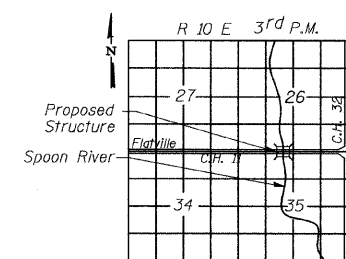
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. II	10-00962-00-BR	CHAMPAIGN	40	9
STA.	TO STA.			
F.H.W.A. REG.	ILLINOIS PROJECT			

BENCHMARK DATA:

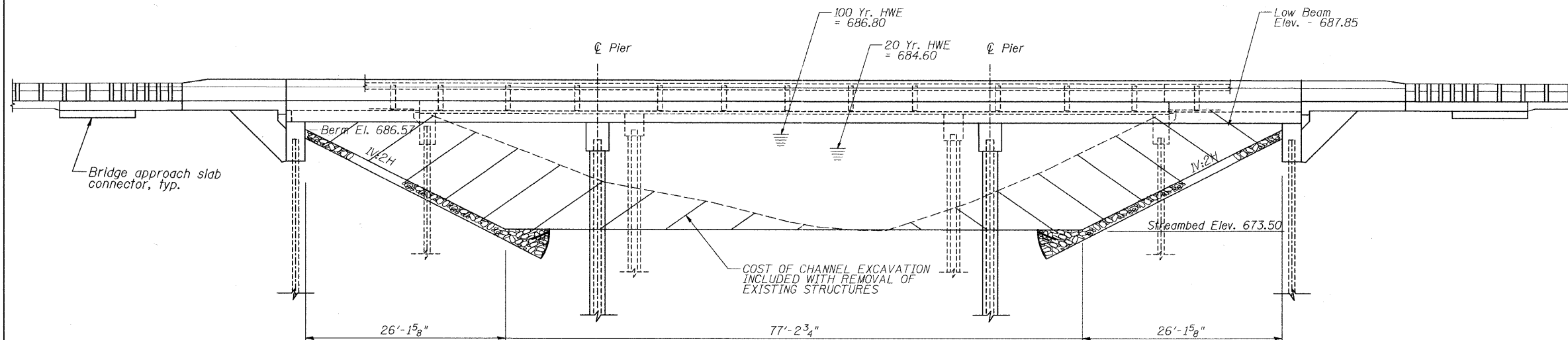
BM #1 - Cotton spindle in north side of 1st power pole west of bridge. Sta. 7+09.64, 31.5' Rt., Elev. 687.59
 BM #2 - Cotton spindle in north side of 1st power pole east of bridge. Sta. 10+78.43, 32.5' Rt., Elev. 688.12

EXISTING STRUCTURE DESCRIPTION

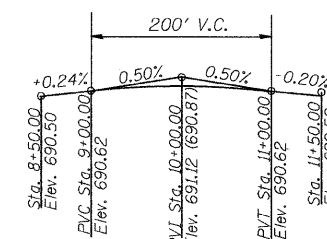
NO. 010-4306, three span 99'-0" long, back to back abutments, with a 30'-0" roadway surface, with precast concrete deck beams supported on concrete abutments and concrete piers supported by precast concrete piles. Built as Sec. 84-00620-00-BR at sta. 9+86.50 in 1985. The contractor shall remove the existing structure as required. The existing structure shall be replaced with a three span steel girder concrete deck bridge at a 0° Skew



LOCATION SKETCH



ELEVATION



PROFILE GRADE
(along Q Roadway)

STRUCTURE NO. 010-4550
 SEC. 10-00962-00-BR BUILT 201X
 C.H. II
 CHAMPAIGN COUNTY
 LOADING HS-20

NAME PLATE
 See Std. 515001

DESIGN LOADING

HL 93 and Allowance for 25 P.S.F. Future Wearing Surface

DESIGN STRESSES

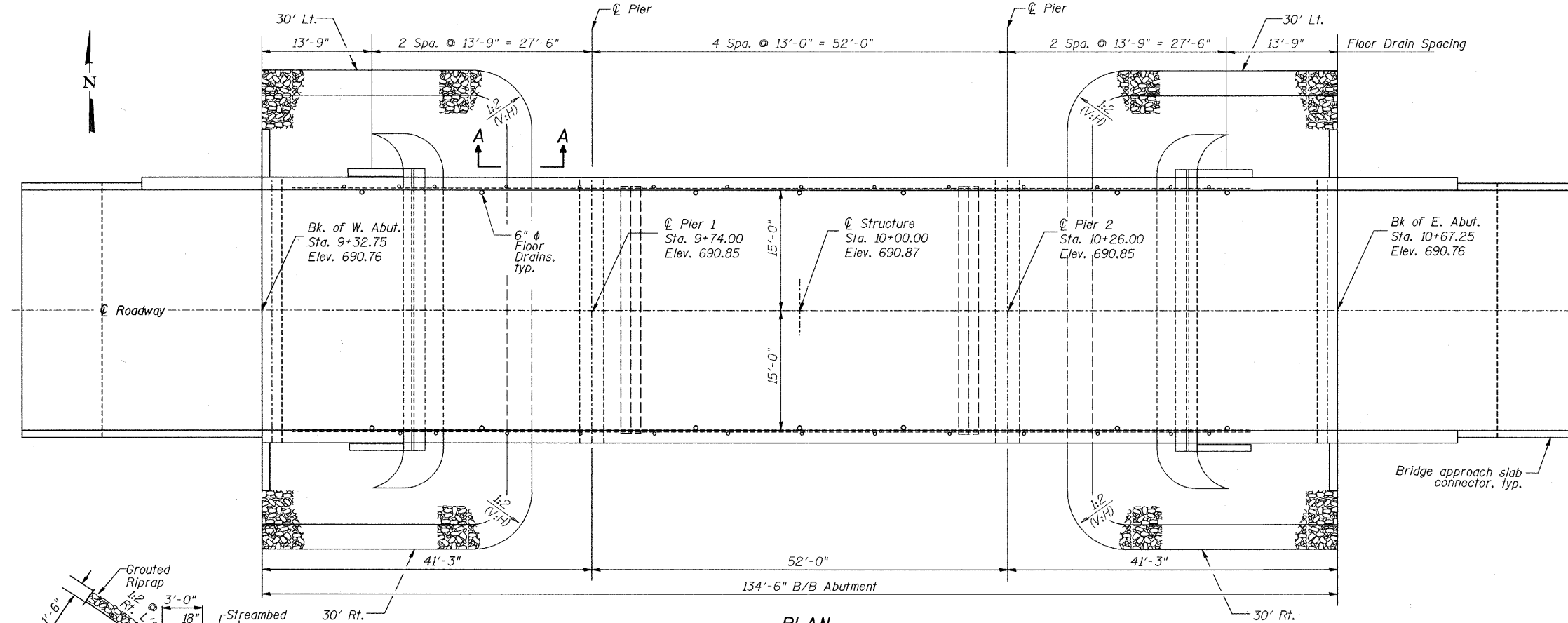
$f'_c = 3,500$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 GRADE 50W)

DESIGN SPECIFICATIONS

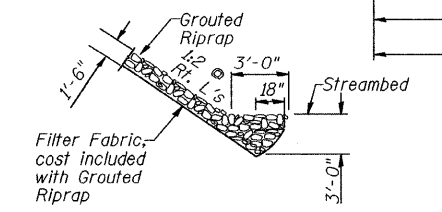
2010 AASHTO LFRD 5th Edition

"This structure has been designed to be stable for scour conditions in accordance with the FHWA Technical Advisory - T 5140.23, "Evaluating Scour at Bridges" and Hydraulic Engineering Circular 18 - Evaluating Scour at Bridges.

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 the requirements of the current "AASHTO Standard Specifications for Highway Bridges".



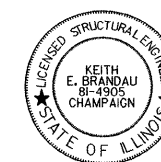
PLAN



SECTION A-A THRU TOE OF RIPRAP
 R-0-W TO R-0-W

WATERWAY DATA

Drainage Area	11.00	Sq. Mi.
Existing Opening (20 Year)	470	Sq. Ft.
Required Opening (20 Year)	416	Sq. Ft.
Proposed Opening (20 Year)	1048	Sq. Ft.
Design Discharge (20 Year)	2108	C.F.S.
Computed Discharge (100 Year)	3140	C.F.S.



KEITH E. BRANDAU
 Illinois Licensed Structural Engineer Number 4905
 License Expires 11/30/12

GENERAL PLAN AND ELEVATION
 SECTION: 10-00962-00-BR
 CHAMPAIGN COUNTY
 Q STATION 10+00