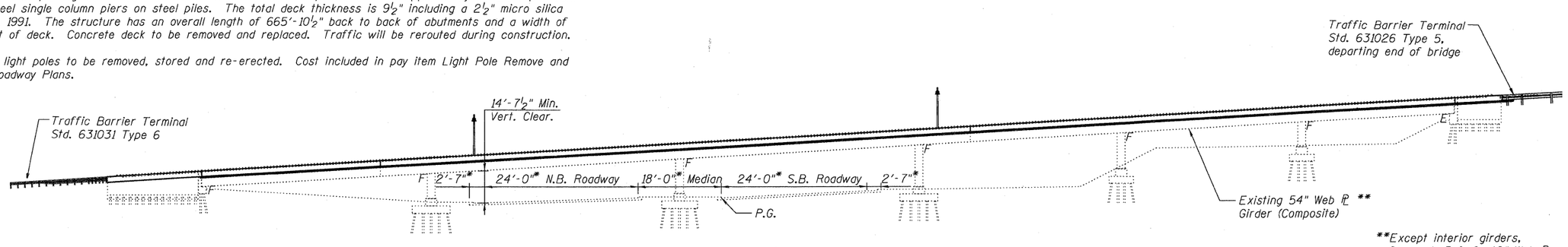
Bench Mark: Chiseled square on N.W. wingwall of I-74 N.B. structure, Sta. ±86+32.2, 124.71 Lt. Elev. 635.06
Existing Structure: S.N. 081-0115, built in 1973 as F.A.I. Route 74, Section 81-1HB. The existing structure is a composite 6 span steel plate girder structure in 3 units connected with pins and links supported by concrete pile bent abutments and steel single column piers on steel piles. The total deck thickness is 9½" including a 2½" micro silica overlay applied in 1991. The structure has an overall length of 665'-10½" back to back of abutments and a width of 34'-0" out to out of deck. Concrete deck to be removed and replaced. Traffic will be rerouted during construction.

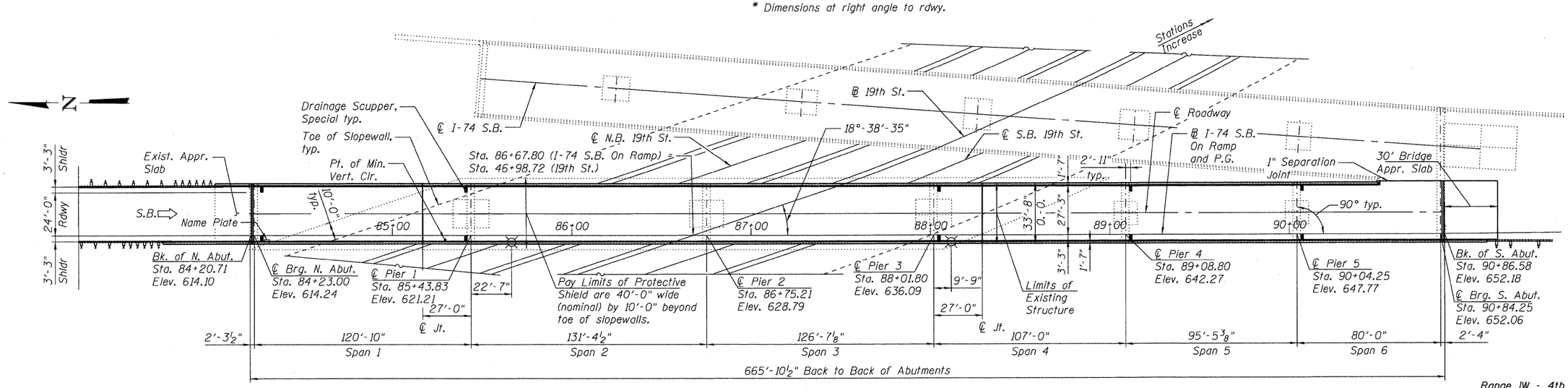
Salvage: Existing light poles to be removed, stored and re-erected. Cost included in pay item Light Pole Remove and Re-Erect, see Roadway Plans.



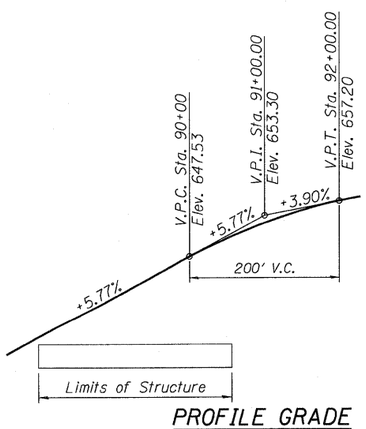
**Except interior girders, Spans 4, 5 & 6: 42" Web PL.

ELEVATION

* Dimensions at right angle to rdwy.

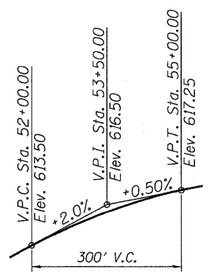


PLAN



PROFILE GRADE
I-74 SB ON RAMP

(Obtained from 2009 survey data)



PROFILE GRADE
19th STREET
(EXIST. PLANS)

(℄ median edge of S.B. pavement)

LOADING HS20-44 & ALT. MILITARY LOADING (New Const.)

No allowance for future wearing surface

DESIGN SPECIFICATIONS

(New Const.)

2002 AASHTO

DESIGN STRESSES

FIELD UNITS (NEW CONST.)

f'c = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (AASHTO M270 Grade 50)

FIELD UNITS (EXISTING CONST.)

f'c = 3,500 psi
fy = 40,000 psi (reinforcement)
fy = 36,000 psi (structural steel)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.034g
Site Coefficient (S) = 1.0

STATION 86+67.80
RE-BUILT 20XX BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. (81-1HB)D
LOADING HS20 & ALT.
STRUCTURE NO. 081-0115

NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost included with Name Plates.

LICENSED STRUCTURAL ENGINEER
MICHAEL B. QUIRIN
081-006070
CHICAGO, ILLINOIS
STATE OF ILLINOIS

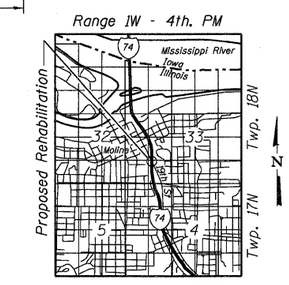
SIGNED Michael B. Quirin

DATE: 10-29-10

EXPIRES: November 30, 2010

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

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



LOCATION SKETCH

GENERAL PLAN & ELEVATION
I-74 S.B. ON RAMP OVER 19TH ST.
F.A.I. RTE. 74 - SECTION (81-1HB)D
ROCK ISLAND COUNTY
STATION 86+67.80
STRUCTURE NO. 081-0115

FILE NAME = 0810115-64D95-SA01-GPE.dgn	USER NAME = JACOBS	DESIGNED - LJH	REVISED -
JACOBS		CHECKED - MBQ	REVISED -
	PLOT SCALE =	DRAWN - LJH	REVISED -
	PLOT DATE = 10/28/2010	CHECKED - MBQ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. SA1 OF SA28 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1HB)D	ROCK ISLAND	78	19
		CONTRACT NO. 64D95		
	ILLINOIS	FED. AID PROJECT		