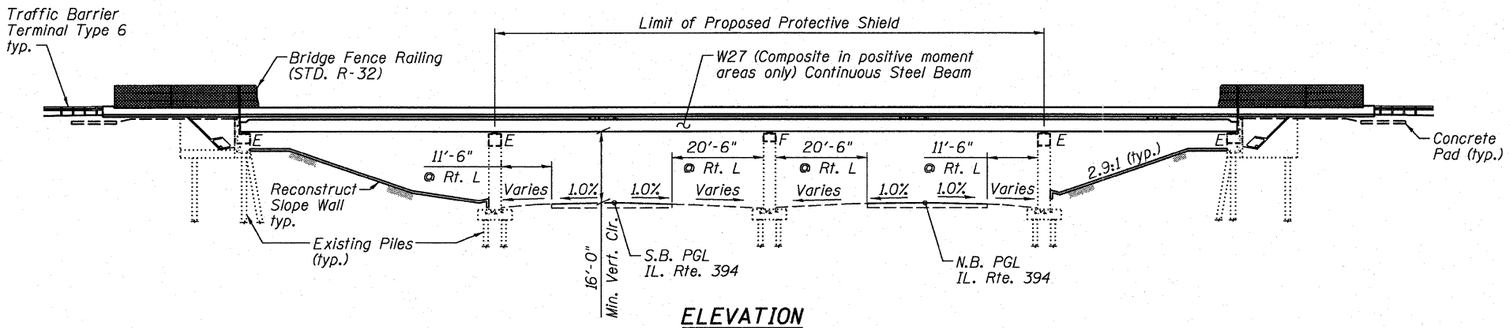
BM #117: Chiseled square located on top of jersey wall at the south end of easterly pier of Joe Orr Road bridge El. 635.00

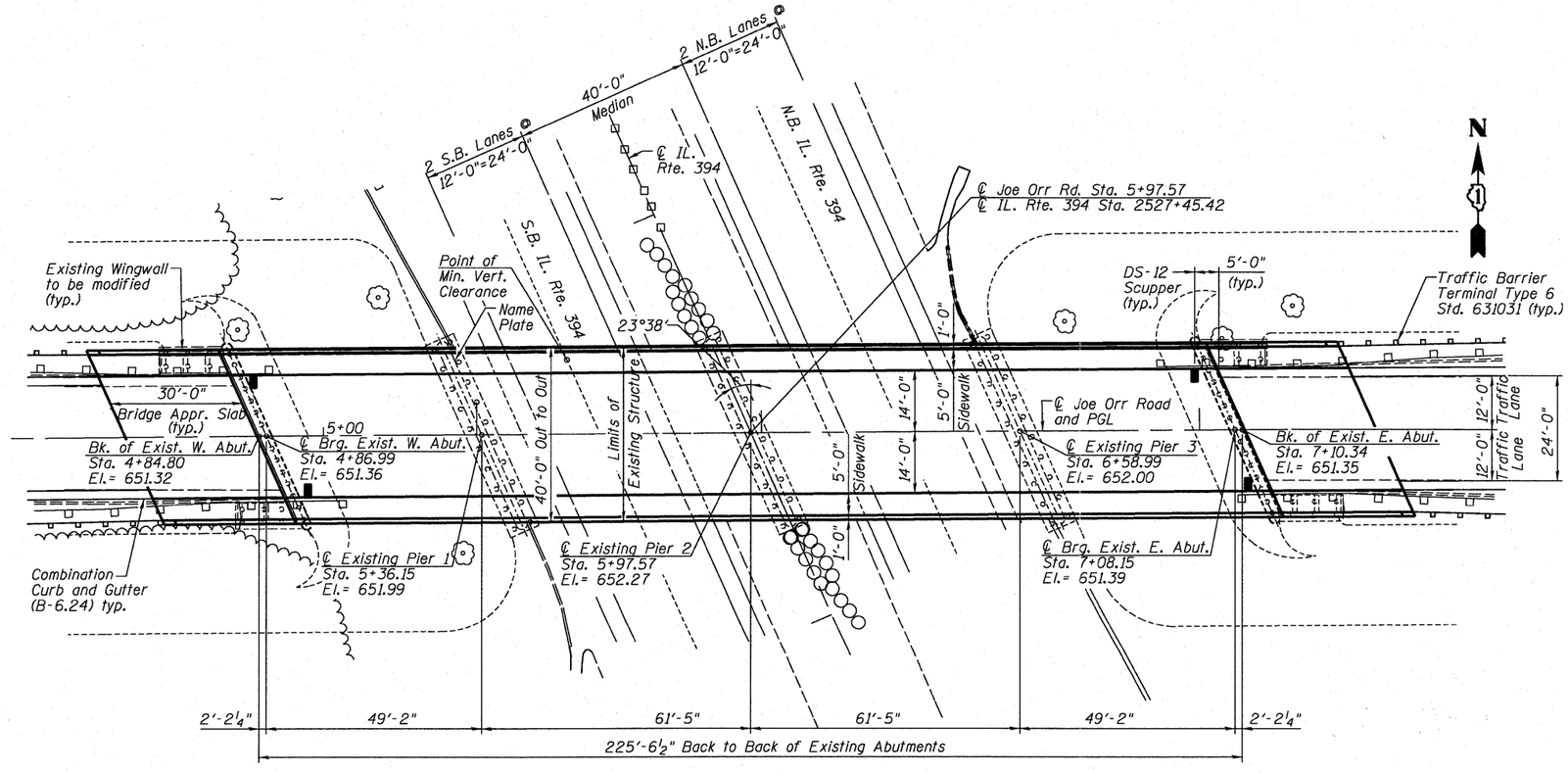
Existing Structure: S.N. 016-2121 Built in 1954 as part of F.A. Route 122 Section 066B-0101.1 at Sta. 5+97.57. The structure is a four-span bridge 225′-6½" long back to back of abutments and 40′-0" out to out of deck carrying two lanes of traffic. The superstructure consists of reinforced concrete deck on continuous wide flange steel beam structure. The substructure consists of solid stem concrete piers and spill thru abutments supported on concrete piles. The existing structure has a substandard minimum vertical clearance height of 14′-3" over IL Route 394.

The existing superstructure will be removed and replaced. The existing substructure will be repaired, modified and reused to increase the minimum vertical clearance to 16′-0". The concrete slope wall will be reconstructed. The traffic will be detoured to an alternate route.

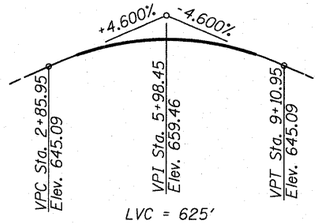
Salvage: None, except existing protective shield to be salvaged and returned to the IDOT Bridge Maintenance office located at Biesterfield Road in Elk Grove Village, IL. Phone No. 847-956-1501. 24 Hours advance notice is required. This work shall not be paid separately but shall be included in the cost of the work.



ELEVATION



PLAN



PROFILE GRADE
(along ℄ Joe Orr Road)

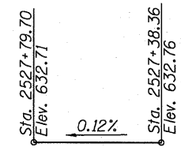
DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS 20-44
Allow 25#/sq. ft. for future wearing surface.

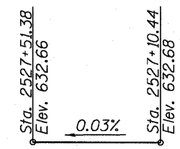
DESIGN STRESSES
FIELD UNITS (New Construction)
f′c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

FIELD UNITS (Existing Construction)
fc = 1,400 psi
fs = 20,000 psi (Reinforcement)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.5



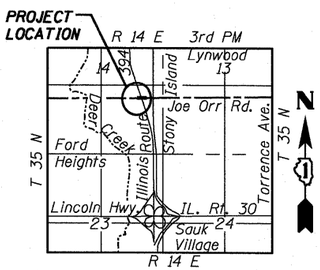
PROFILE GRADE
(along S.B. PGL IL. Rte. 394)



PROFILE GRADE
(along N.B. PGL IL. Rte. 394)

STATION 2527+45.42
RE-BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 332 SEC. 0101.1 BR-3
LOADING HS20-44
STR. NO. 016-2121

NAME PLATE
Existing Name Plate located on the west face of the Pier 3 shall be removed and discarded. Existing Name Plate located on the east face of the Pier 1 shall be cleaned and new Name Plate shall be located next to it. Cost included with Name Plates.



LOCATION MAP

PIJUSH K. CHATTERJEE 081-005076 LICENSED STRUCTURAL ENGINEER ILLINOIS

Pijush K. Chatterjee 6-30-2011
Expires: 11-30-2012

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

Note:

Section thru Abutment and Slopewall Details shown on sheet S24.

GENERAL PLAN AND ELEVATION
IL ROUTE 394 at JOE ORR ROAD
F.A.P. RT. 332 SECTION 0101.1 BR-3
COOK COUNTY
STATION 2527+45.42
STRUCTURE NO. 016-2121

FILE NAME = ...\Structure\0162121-001-GPE.dgn	DESIGNED EV	REVISED -	
PLOT TIME = 12:17:51 PM	DRAWN JCP	REVISED -	
PLOT DATE = 6/30/2011	CHECKED PC	REVISED -	
	DATE 07 01 2011	REVISED -	

EPSTEIN
800 WEST FULTON STREET, CHICAGO, ILLINOIS 60661-1258
TEL 312 454 9100 FAX 312 588 1217 WEB www.epsteinglobal.com

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. S1 OF S29 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	0101.1 BR-3	COOK	60	16
		CONTRACT NO. 62421		
	ILLINOIS FED. AID PROJECT			