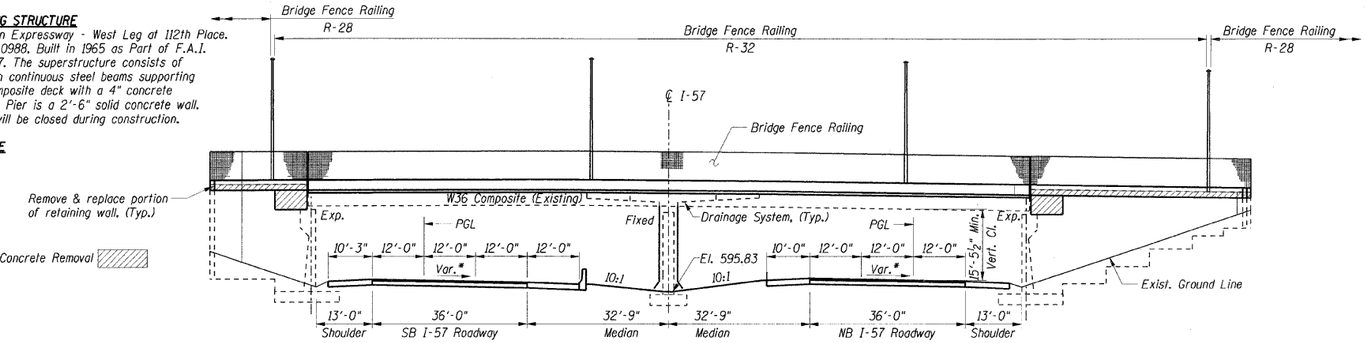
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1920.1B-R	COOK	101	067
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62533

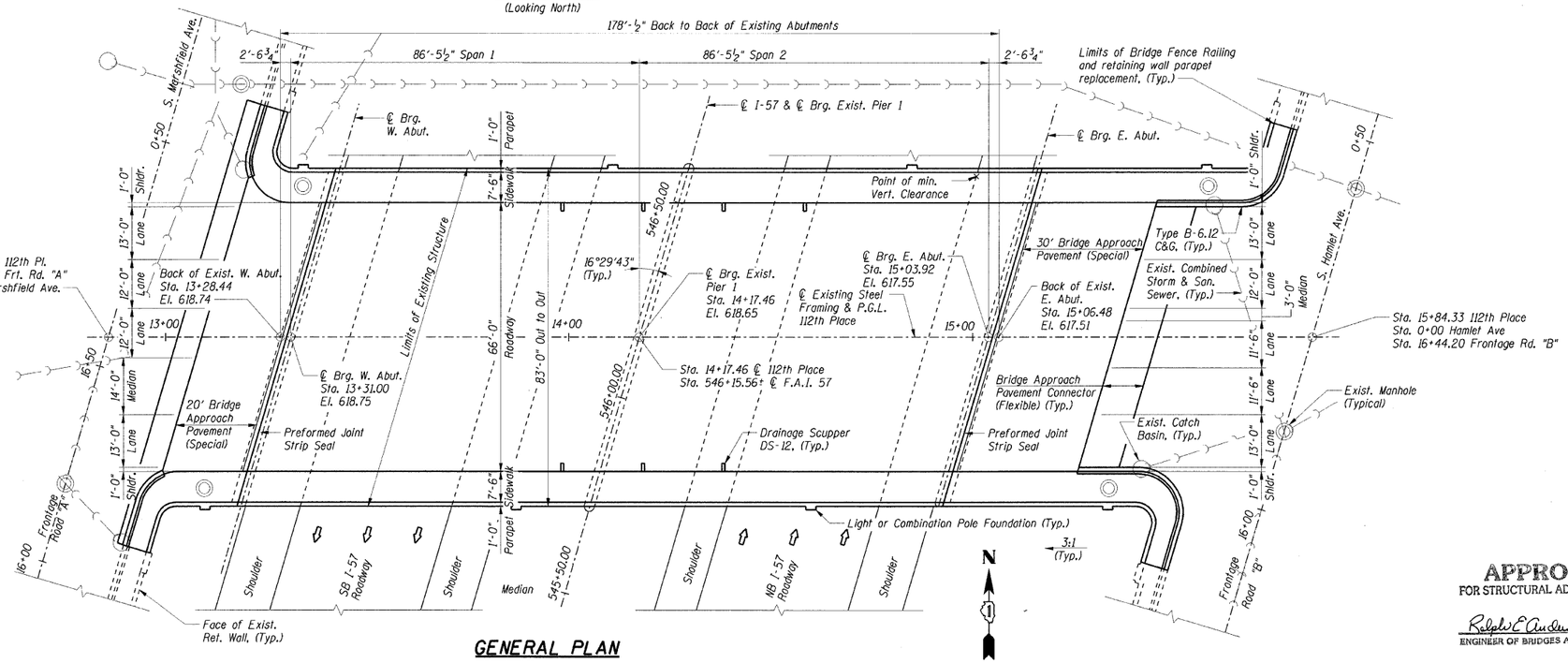
BENCH MARK
Chiseled "X" on west flange bolt of fire hydrant, El. 619.17 located at the NW corner of 112th Pl. and S. Marshfield Ave.

EXISTING STRUCTURE
Dan Ryan Expressway - West Leg at 112th Place. No. 016-0988. Built in 1965 as Part of F.A.I. Route 57. The superstructure consists of two span continuous steel beams supporting a 7" composite deck with a 4" concrete overlay. Pier is a 2'-6" solid concrete wall. Bridge will be closed during construction.

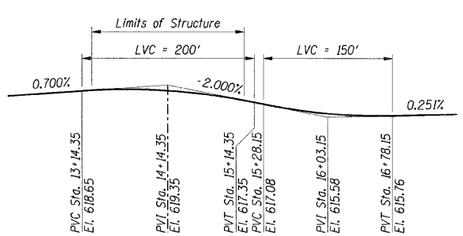
SALVAGE
None.



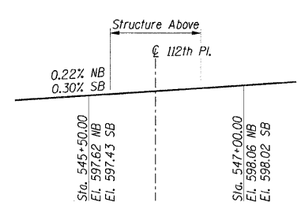
ELEVATION
(Looking North)



GENERAL PLAN



PROFILE GRADE 112th Pl.



PROFILE GRADE I-57

DESIGN SPECIFICATIONS:
AASHTO Standard Specifications for Highway Bridges 17th Edition, 2002. Load Factor Design

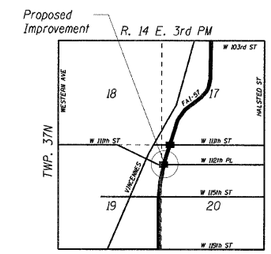
DESIGN LOADING:
Roadway Live Load: HS20-44
Future Wearing Surface = 50 psf

DESIGN STRESSES:
New Construction:
Class BS Concrete, f'c = 4,000 psi
Class SI Concrete, f'c = 3,500 psi
Reinforcement, fy = 60,000 psi
Structural Steel, fy = 36,000 psi
fy = 50,000 psi (Bearing Plates and Extensions)

Existing Construction:
Concrete, fc = 1,400 psi
Reinforcement, fy = 40,000 psi
Structural Steel, fy = 36,000 psi

SEISMIC DATA:
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

Alignment Note:
The alignments for I-57 and 112th Place shown on the Shts. S-001 thru S-014 are based on record plan information. The alignments for I-57 and 112th Place shown on Sht. 015 are based on best fit alignments.



APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
RALPH E. ANDERSON
No. 062-036203
CHICAGO
IL
LICENSED STRUCTURAL ENGINEER
DATE: 1/16/09
EXP: 11/30/10

SHT. S-001

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 57 (INTERSTATE 57)
112TH PLACE BRIDGE DECK REPLACEMENT
112th PLACE OVER I-57
SN 016-0988 STA. 546+15.56
COOK COUNTY

GENERAL PLAN AND ELEVATION

DATE: 01/16/09
DRAWN BY: TMH
CHECKED BY: JLR

TENG
TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE., CHICAGO, IL 60601
TELEPHONE: 312.616.0000

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