

BENCH MARK:

Existing Structure: S.N. 016-0349, was originally built in 1968 as S.B.I. Route 58, Section 582-R-1. In 1994 the Structure was repaired, at that time the Bituminous Concrete Surface was removed and replaced. In 2002 the Structure was patched and the Existing Bituminous Surface was removed and replaced with Concrete Wearing Surface, 4". In 2006 Beams 26 thru 30 were removed and replaced and a Bike Path with a Bicycle Railing were added. The Existing single span structure consists of Precast Prestressed Concrete Deck Beams supported by closed abutments. Dimensions are 71'-11" bk. to bk. Abutments and 90'-3" out to out with a 27°-30' Skew.

PROPOSED IMPROVEMENT:

The existing Precast Concrete Deck Beams and Concrete Overlay shall be removed and replaced utilizing Stage Construction. While maintaining the existing Alignment & Profile. Substructure repairs as shown shall be performed.

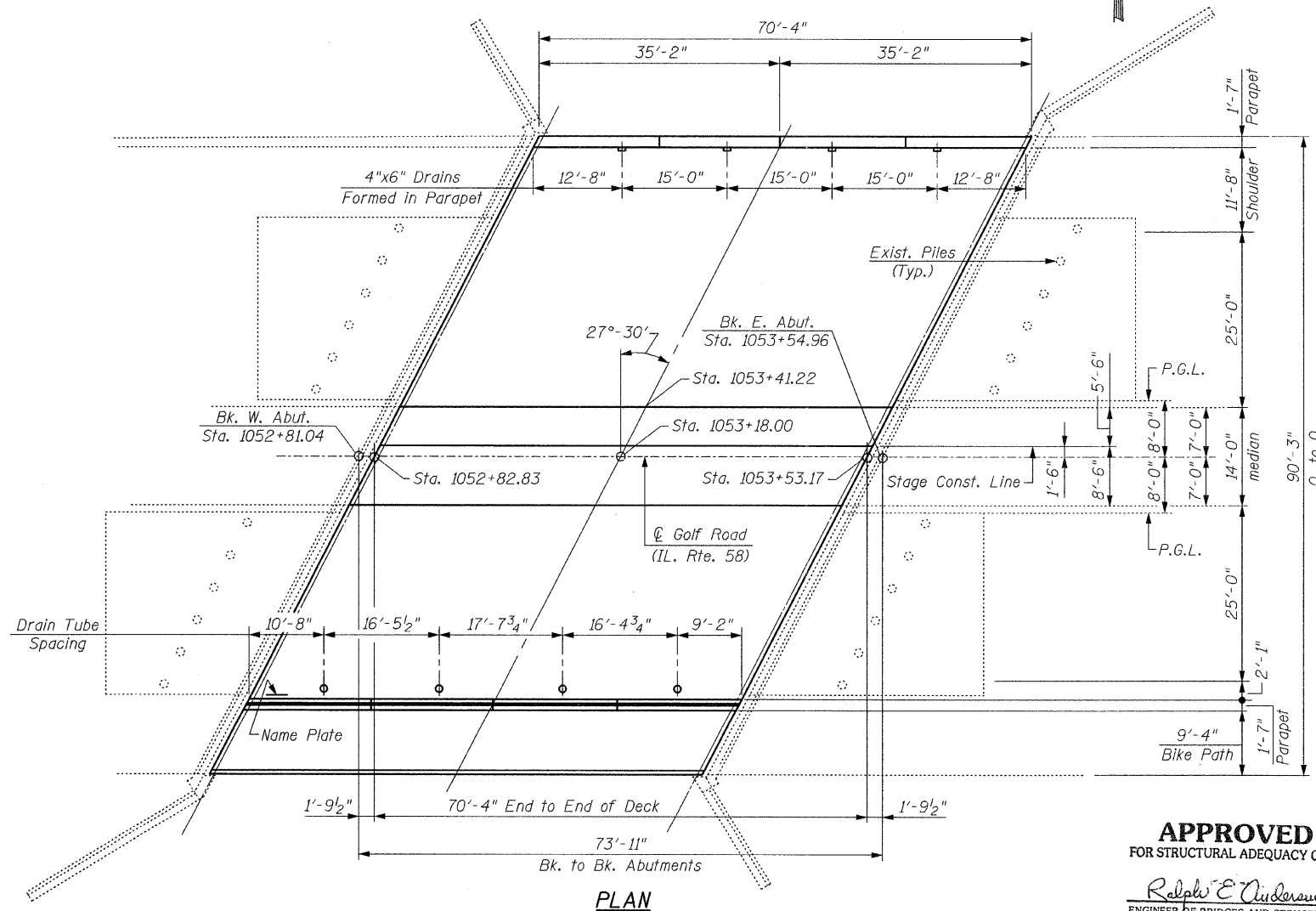
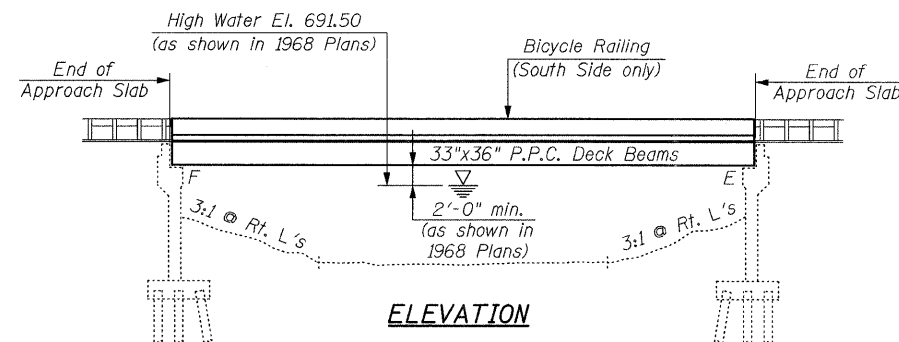
Salvage: None

SCOPE OF WORK:

Remove and replace the P.P.C. Deck Superstructure and the Concrete Wearing Surface, 4" and perform any needed repairs to the Substructure

INDEX OF SHEETS

- S1 GENERAL PLAN & ELEVATION
- S2 GENERAL NOTES & TOTAL BILL OF MATERIAL
- S3 CONSTRUCTION STAGING-I
- S4 CONSTRUCTION STAGING-II
- S5 REINFORCEMENT PLAN
- S6 NORTH PARAPET DETAILS
- S7 SOUTH PARAPET DETAILS & JOINT DETAILS
- S8 BICYCLE & PARAPET RAILING
- S9 P.P.C. DECK BEAM DETAILS
- S10 ABUTMENT REPAIR
- S11 BAR SPLICER ASSEMBLY DETAILS
- S12 TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION



LOADING HS20-44
Allow 50#/sq. ft. for Future Wearing Surface

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

EXISTING CONDITIONS
(SERVICE DESIGN)

f'c = 1,400 psi
fy = 20,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

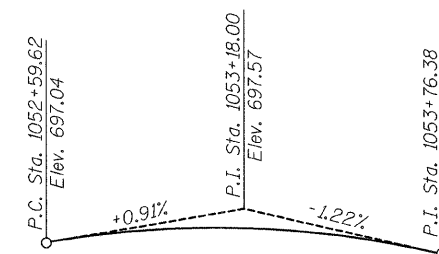
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2"φ Low Relax Strands)
fsi = 201,960 psi (1/2"φ Low Relax Strands)

WATERWAY INFORMATION
(AS SHOWN IN 1968 PLANS)

Drainage Area 21,760 acres
Character Level
Required Opening 50 yr flood
Present Opening
Future Prop. Opening 548 Sq. Ft.
Q = 1,050 cfs

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.2



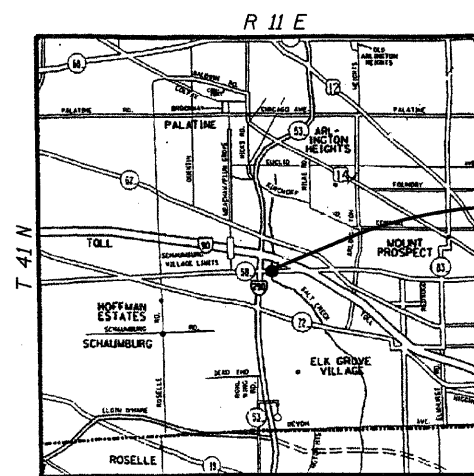
PROFILE
GOLF ROAD
(@ Median Edge)

STATION 1053+18.00
REBUILT 2008 BY
STATE OF ILLINOIS
F.A.P. RTE. 559 SEC. 2008-007-B
LOADING HS20
STRUCTURE NO. 016-0349

NAME PLATE

See Std. 515001

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



LOCATION SKETCH



Bhadresh N. Shah
BHADRESH N. SHAH
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. No. 081-004476
EXPIRES: 11-30-08

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Oudersma (TSD)
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349

FILE NAME = plan.elev.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L. / F.M.	REVISED -
	PLOT SCALE = 1/8" = 1'-0"	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 6/30/2008	DATE - JUNE 30, 2008	REVISED -

SCALE: NONE	SHEET NO. S1 OF S12 SHEETS	STA. TO STA.	F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 12
			CONTRACT NO. 60D55		ILLINOIS FED. AID PROJECT		