Benchmark:

Benchmark #1 - cut "□" in south end of west bridge curb.

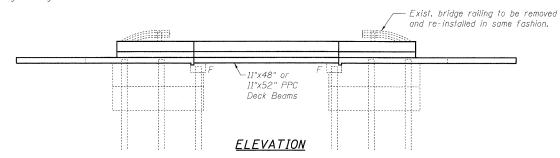
Assumed elevation = 100.00'

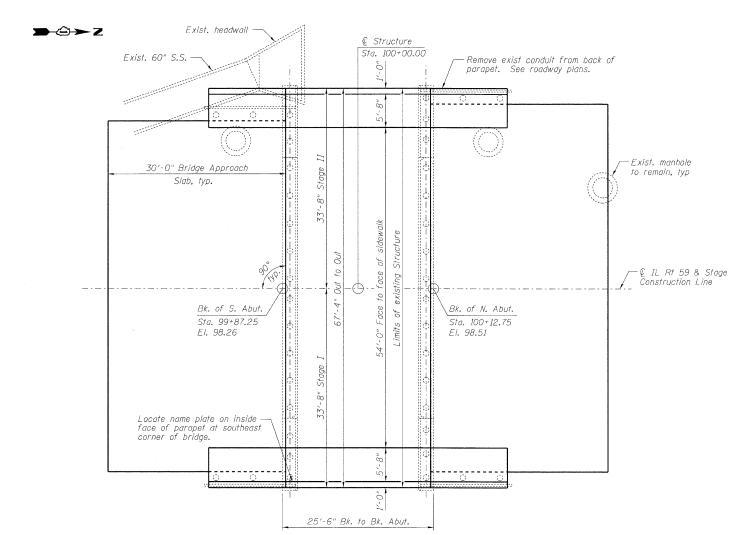
## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

Existing Structure: S.N. 049-0152 built in 1921 and completely replaced in 1977 as a single span 11"x52" PPC Deck Beam bridge with 2" bituminous wearing surface on closed abutments consisting of a concrete cap on concrete piles with concrete planks. The bridge was widened in 1990 using 11"x48" PPC Deck Beams. The structure measures 25'-6" back to back abutments and 67'-4" out to out. Traffic is to be maintained utilizing stage construction. One lane for each direction is to be provided.

Salvage:

Steel Bridge Railing





PLAN

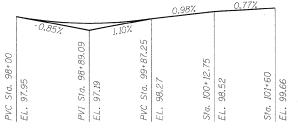
DESIGNED -SLV CHECKED -DJB DRAWN CHECKED -DJB

CONSULTING ENGINEERS 1560 WALL ST. SUITE 222 NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

STATION 100+00.00 REBUILT 20\_ \_ BY STATE OF ILLINOIS F.A.P. ROUTE 338 SEC 108 B-1 LOADING HL-93 STRUCTURE NO. 049-0152

# NAME PLATE

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



PROFILE GRADE

#### LOADING HL-93

Allow 50 psf for future wearing surface

### DESIGN SPECIFICATIONS

2007 AASHTO LRFD 4th Edition

# DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi

f'c = 5000 psi (Concrete Wearing Surface)

fy = 60000 psi (Reinforcement)

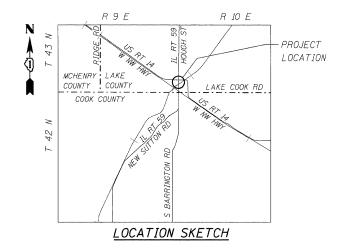
#### PRECAST PRESTRESSED UNITS

f'c = 6000 psi

f'ci = 5000 psi f's = 270,000 psi (1/2" \( \phi\) low lax. strands) f'si = 201,900 psi (1/2" \( \phi\) low lax. strands)

### SEISMIC DATA

Seismic Performance Category (SPC) = A Bedrock acceleration coefficient (A) = .04 Site Coefficient (S) = 1.2



APPROVED FOR STRUCTURAL ADEQUACY ONLY Rolph & Anderson (100) ENGINER OF BRIDGES AND STRUCTURES



GENERAL PLAN AND ELEVATION IL RT 59 OVER FLINT CREEK F.A.P RT. 338 SECTION 108 B-1 LAKE COUNTY STA. 100+00.00 STRUCTURE NO. 049-0152

SHEET	NO. S1	F.A.P. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
0,,		338	338 108 B-1			LAKE	40	13
OF S17	SHEETS		D-91-289-0	CONTRACT	NO. 60F92			
		FED. ROAD DIST. NO ILLINOIS FED. AID PROJECT						