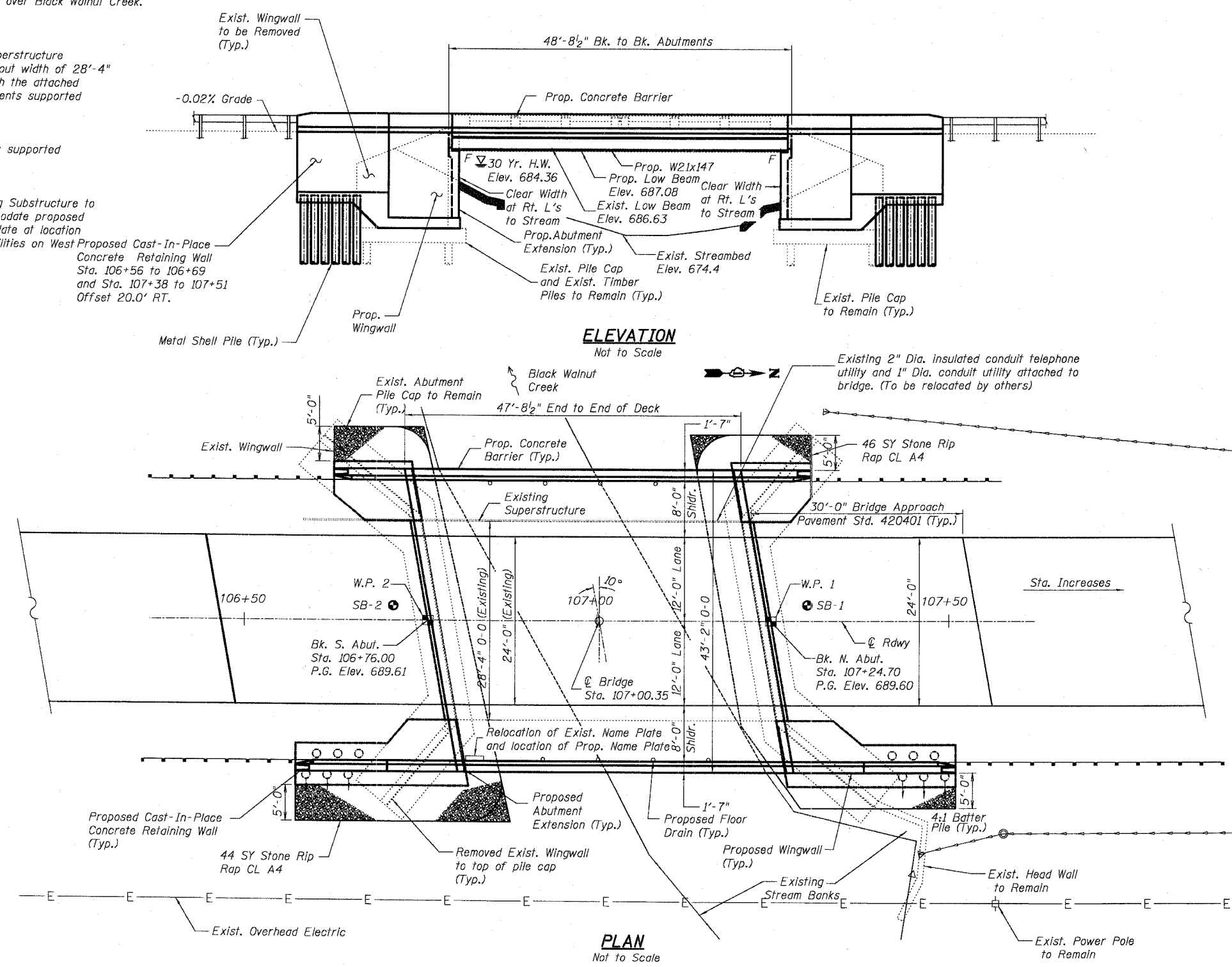


Benchmarks:
 BM 1: Cut square in top of concrete wingwall at the South East corner of the Harlem Avenue Bridge over Black Walnut Creek. Elev. 689.71
 BM 2: Cut square in top of concrete headwall adjacent to the wingwall at the North East corner of the Harlem Avenue Bridge over Black Walnut Creek. Elev. 685.35

Existing Structure:
 Bridge Constructed in 1962 (S.N.# 099-3091). The Superstructure consists of a precast concrete bridge with an out-to-out width of 28'-4" and a total length of 48'-8 1/2" to be removed along with the attached bridge rail. The Substructure consists of closed abutments supported on untreated timber piles to remain.

New Structure:
 One span composite concrete deck on Steel W sections supported on existing closed abutments.

Salvage:
 Existing Superstructure to be removed and the existing Substructure to be partially demolished, repaired and modified to accommodate proposed Superstructure. Salvage and re-install existing Name Plate at location indicated below. Also salvage and re-install existing utilities on West Proposed Cast-In-Place Concrete Retaining Wall Sta. 106+56 to 106+69 and Sta. 107+38 to 107+51 Offset 20.0' RT.



DESIGN SPECIFICATIONS
 2002 AASHTO with 2003 & 2004 Interims

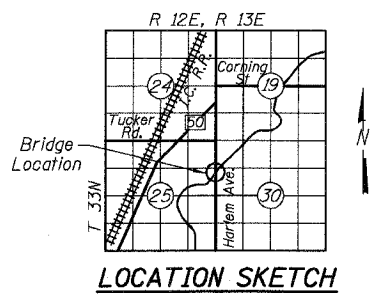
***LOADING HS20-44**
 50#/sq. ft. for future wearing surface.
 * Also designed for 120,000 Lb. Permit loading

DESIGN STRESSES

FIELD UNITS
 $f_y = 60,000$ psi (Reinforcement Bars)
 $f'_c = 4,000$ psi (Class SI)
 $f_c = 3,500$ psi (Class BD)
 $f_s = 27,500$ psi (Structural Steel)

SEISMIC DATA

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



DRECKSLER BRIDGE
 REBUILT 200- BY
 WILL COUNTY
 SEC. 01-00139-02-BR
 LOADING HS20-44
 S.N. 099-3091

NAME PLATE
 See Std. 515001

To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Robert & David
 IL Licensed Structural Engineer
 Date 5/26/05



WATERWAY INFORMATION

Drainage Area = 15.7 mi ²		Low Grade Elev. 689.45 ft.		Sta. 107+76.2			
Freq. Yr.	Q C.F.S.	Opening Exist.	Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft. Exist. Prop.	Headwater El. Exist. Prop.	
Design	30	1455	323.0	323.0	684.36	0.09 0.09	684.45 684.45
Base	100	2091	397.0	384.6	686.09	0.00 0.16	686.04 686.19

DESIGNED	MGH
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 General Plan and Elevation
 Harlem Avenue/Dreckler Road
 Over Black Walnut Creek
 Will County
 Section 01-00139-02-BR
 SN. 099-3091
 DATE 5-26-2005