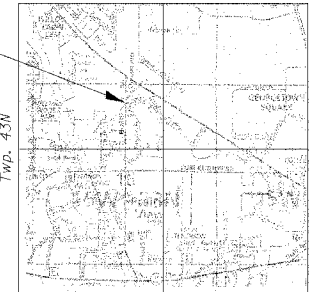


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2666	00-00254-01-BR	LAKE	70	24
STA. 98+50		TO STA. 107+57		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

Sheet 1 of 35 Sheets
 PROJECT NO. BHM-8003(213)
 CONTRACT NO. 83875

R 11E - 3rd P.M.



LOCATION SKETCH

CURVE DATA

PI STA. = 104+80.05
 $\Delta = 10^\circ 49' 10''$ (LT)
 $D = 7^\circ 09' 43''$
 $R = 800.00'$
 $T = 75.76'$
 $L = 151.07'$
 $E = 3.58'$
 $e = 3.4\%$
 $T.R. = 83'$
 $S.E. RUN = 140'$
 $P.C. STA = 104+04.30$
 $P.T. STA = 105+55.36$

INDIAN CREEK
 BUILT 2007 BY
 LAKE COUNTY
 SEC. 00-00254-01-BR
 F.A.U. RT. 2666 STA. 101+50
 STR. NO. 049-3043 LOADING HS 20

NAME PLATE

See Std. 515001-02

I certify that 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."



Ahmad T. Idriss
 Ahmad T. Idriss, P.E., S.E.
 Illinois Licensed Structural Engineer
 License Number: 081-005753
 Expiration Date: November 30, 2006

BENCH MARKS:

B.M. #1 - Chiseled square on South end of walk at Leikams Tap, at intersection of Il. 21 and US 45, go NW 1 mile to mark.

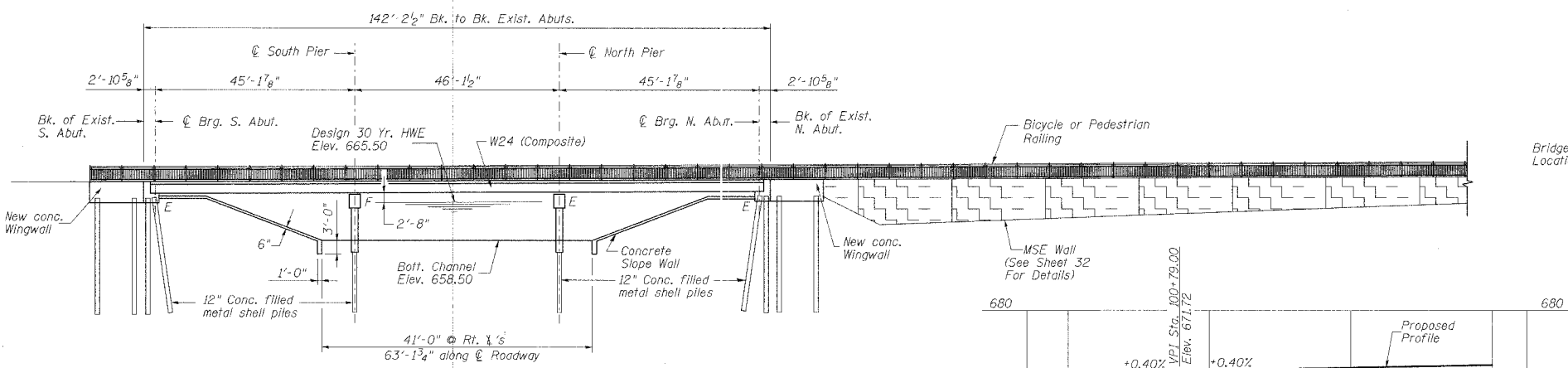
EXISTING STRUCTURE:

S.N. 049-3043 Built in 1965. The structure is a three span simply supported precast prestressed deck beam bridge with Bk. to Bk. of abutment length of 142'-2 1/2" and out-to-out width of 34'-0". The substructure consists of reinforced concrete pile bent abutments and piers, all supported on end bearing 12" concrete filled metal shell piles. The structure is skewed 49.5° Rt. forward.

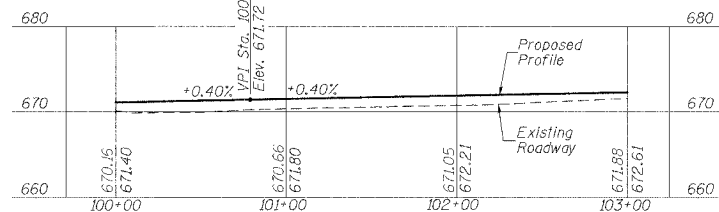
PROPOSED IMPROVEMENTS:

Existing superstructure to be removed and replaced with a three span continuous steel stringer bridge supported by existing substructure. The bridge will be widened to accommodate two extra roadway lanes and a bike path. Existing substructure to be repaired and new bearings installed. The road to be kept open to two lanes of traffic (one each way) at all times by utilizing staged construction.

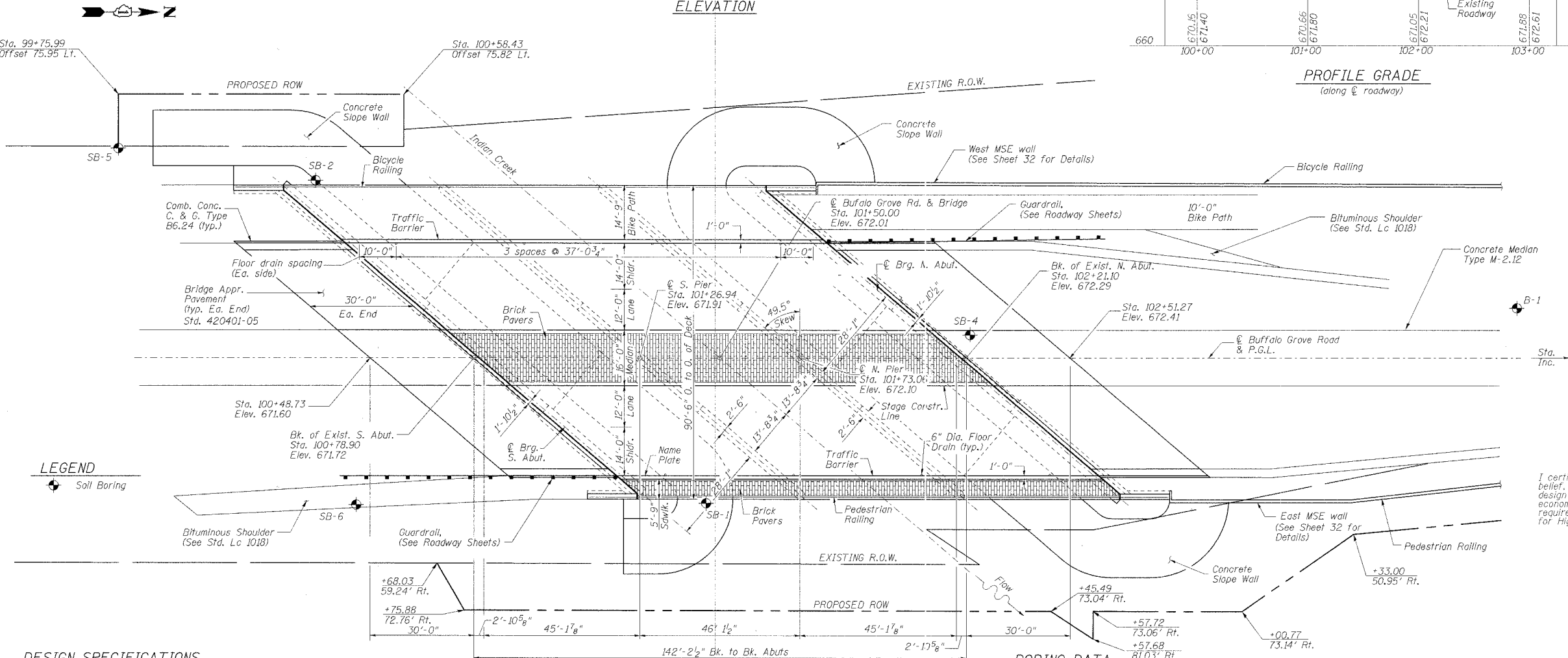
No salvage of items to be removed. Existing substructure to be reused in the Proposed Improvements.



ELEVATION



PROFILE GRADE
 (along centerline roadway)



PLAN

BORING DATA

BORING	STATION	OFFSET
SB - 1	101+45.62	41.82' RT
SB - 2	100+32.88	51.29' LT
SB - 4	102+21.83	6.75' LT
SB - 5	99+75.97	60.64' LT
SB - 6	100+44.45	42.17' RT
B - 1	103+80.00	14.00' LT
B - 2	106+90.00	14.00' LT

B-2 Located beyond limits of this sheet.

REVISIONS	
NAME	DATE

DESIGN SPECIFICATIONS

2002 AASHTO "Standard Specifications for Highway Bridges".

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (AASHTO M270 Grade 50)

LOADING HS20-44

Allow 50# / Sq. Ft. for future wearing surface.

SEISMIC DATA

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



LAKE COUNTY DIVISION OF TRANSPORTATION
 GENERAL PLAN AND ELEVATION

BUFFALO GROVE ROAD
 AT INDIAN CREEK BRIDGE
 SECTION 00-00254-01-BR STATION 101+50.00
 LAKE COUNTY STRUCTURE NO. 049-3043

SCALE: NONE
 DATE: 7/21/06
 DRAWN BY: TBW
 CHECKED BY: ATL, WK

GENERAL PLAN AND ELEVATION

DATE	BY	REVISION

DATE	BY	REVISION

I:\lakeco\0220113\draw\sheet\structure-16-06\general plan and elevation.dgn