

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. RTE. 774	107BY	EFFINGHAM	273	227
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

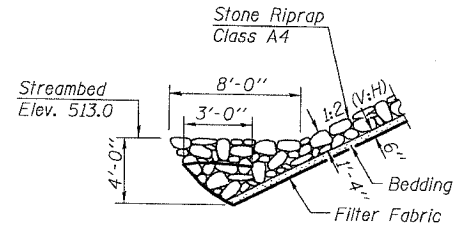
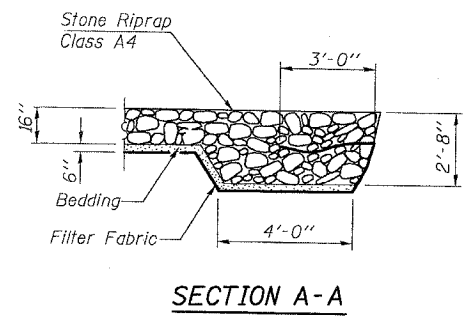
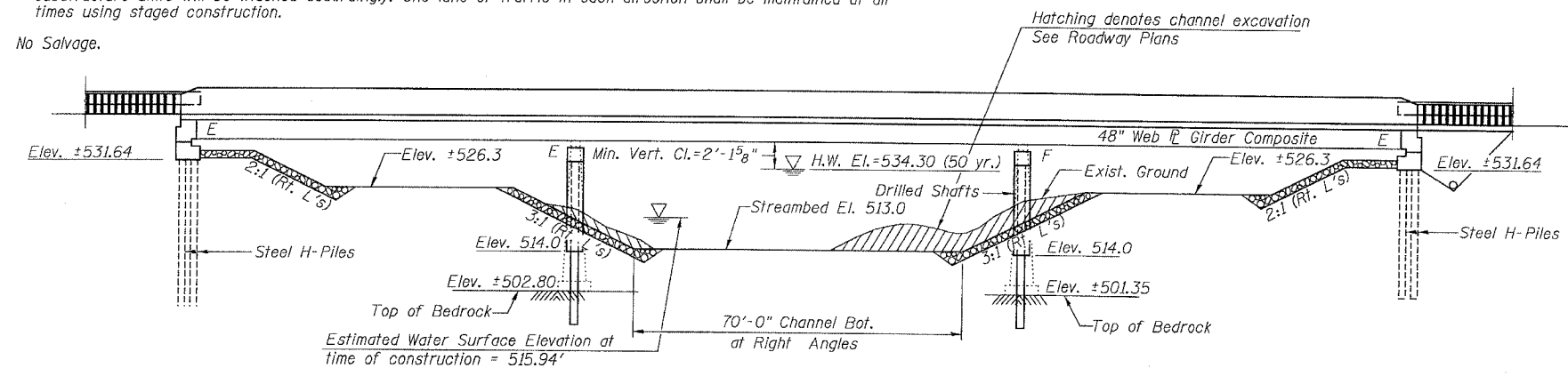
CONTRACT NO. 94827

Curve Data

P.I. = Sta. 1014+09.68
 $\Delta = 25^{\circ}19'45''$ (RT)
 $D = 0^{\circ}30'00''$
 $R = 11,456.75'$
 $L = 5,064.76'$
 $T = 2,574.44'$
 $E = 285.69'$
 $S.E. = 1.56\%$
P.C. = Sta. 988+35.24
P.T. = Sta. 1039+00.00
S.E. Attained Sta. 985+68.57 to Sta. 989+68.57
S.E. Removed Sta. 1037+66.67 to Sta. 1041+66.67

Bench Mark: Chiseled "□" above bridge name plate El. = 543.53
Existing Structure: SN 025-0078 built in 1971 as FA Route 74 at Sta. 1011+47.8. Existing structure is 264'-0" back to back of abutments and 46'-0" out to out of deck. The existing superstructure is supported by 48" Plate Girders. The existing substructure consists of pile bent abutments and solid wall piers on footings. The existing deck is to be removed and replaced with a wider deck to accommodate additional lanes. The existing substructure units will be widened accordingly. One lane of traffic in each direction shall be maintained at all times using staged construction.

No Salvage.



LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

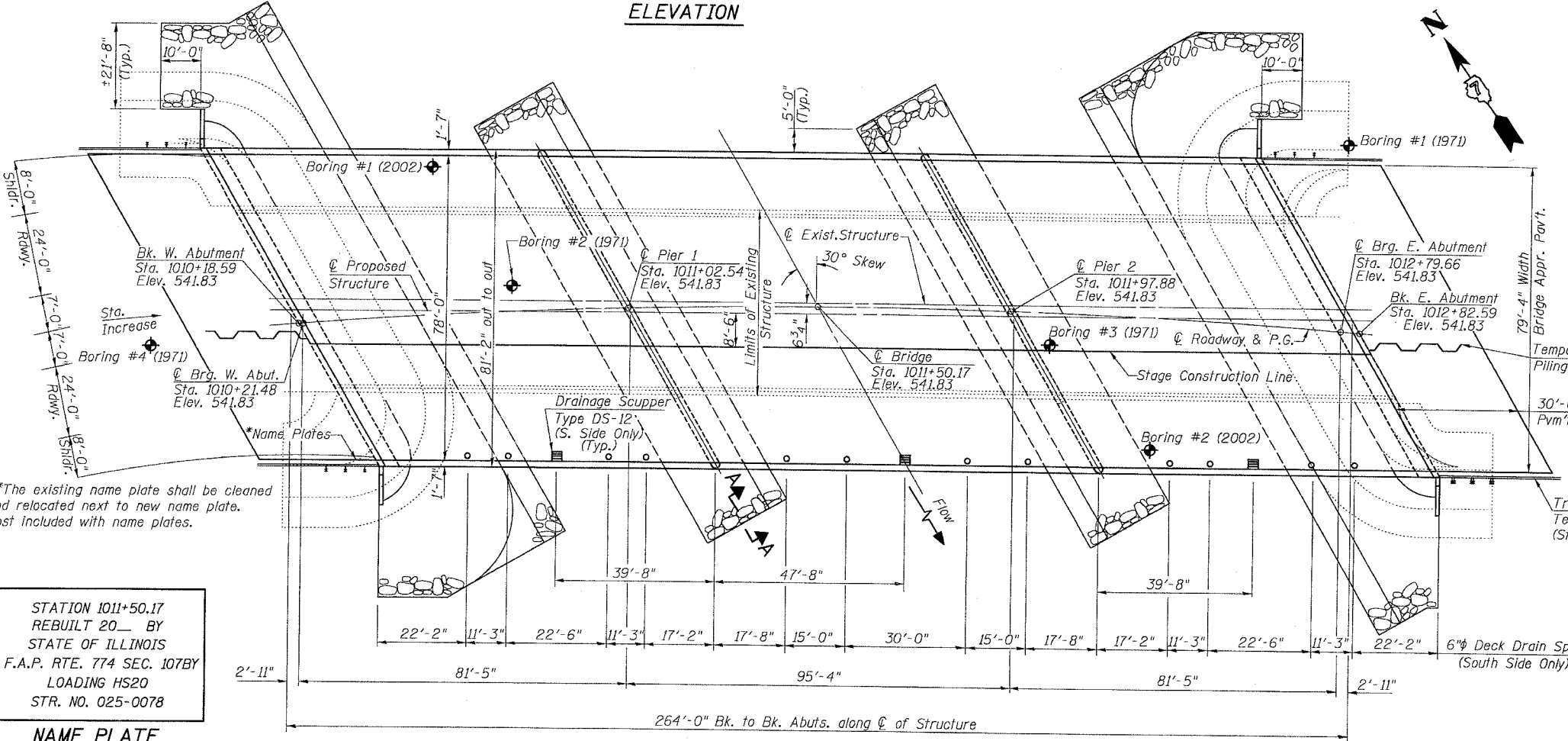
AASHTO 1996 and Interims 1997 Thru 2002 and 1995 Seismic Retrofitting Manual for Highway Bridges FHWA-RD-94-052.

DESIGN STRESSES

NEW CONSTRUCTION	EXISTING CONSTRUCTION
$f'_c = 3,500$ psi	$f_y = 36,000$ psi St. Steel
$f_y = 60,000$ psi (reinf.)	
$f_y = 36,000$ psi (M270 Grade 36)	

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.07g
Site Coefficient (S) = 1.0



STATION 1011+50.17
REBUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 774 SEC. 107BY
LOADING HS20
STR. NO. 025-0078

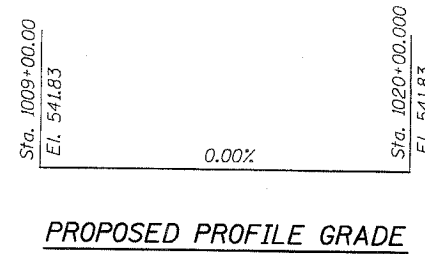
NAME PLATE
See Std. 515001

WATERWAY INFORMATION

Drainage Area = 220 Sq. Miles Low Grade Elev. = 541.3 @ Sta. 1010+00 Max. Rec. H.W.E. = Unk.

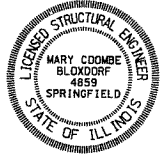
Flood Yr.	Freq. C.F.S.	Q _{bridge} C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head-Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	19,000	11272	2521	534.3	0.5	0.5	534.8	534.9
Base	100	21,700	12690	2687	535.0	0.5	0.5	535.5	535.5
Max. Calc.	500	28,000	16171	3037	536.7	0.6	0.7	537.3	537.4

PLAN

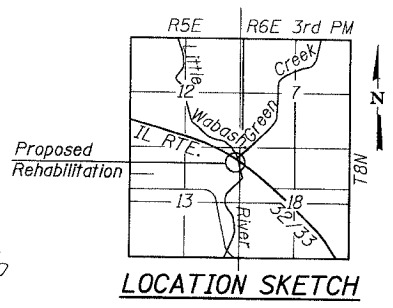


APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



Manuel Bladon
Illinois Structural No. 4859
Expires 11-30-2004
Date: 12/23/03



GENERAL PLAN AND ELEVATION

PROJECT	IL RTE. 32/33 OVER LITTLE WABASH RIVER F.A.P. RTE. 774 SECTION 107BY EFFINGHAM COUNTY STATION 1011+50.17 STRUCTURE NO. 025-0078	PROJECT NO.	02017
SCALE		DATE	
DRAWN BY	TFG	CHECKED BY	GJB/MCB
DRAWING NO.			

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

1
OF 29 SHTS