B.M. #61 -
Iron rod in cap, Station 545+17.14, Elevation 770.77, Offset 65.08' Right.
Northing: 2063761.44, Easting: 2429432.89.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 301	177-2	STEPHENSON	386	141
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
47 SHEETS

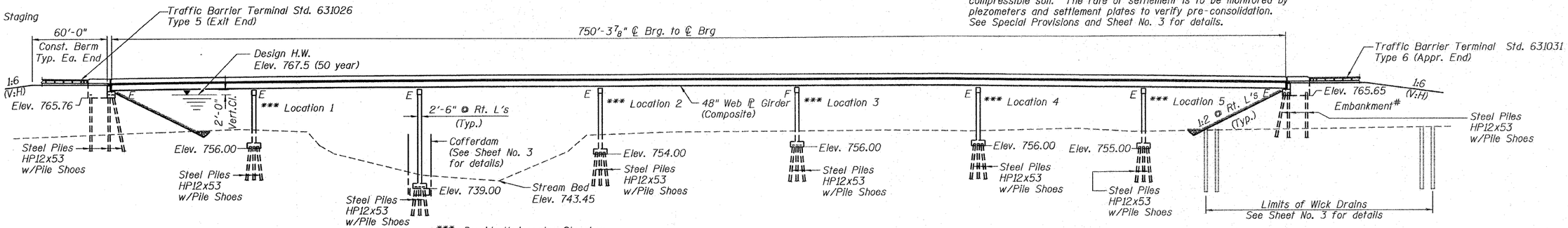
Contract No. 64799

Existing Structure: There is no existing structure. The existing adjacent structure (SN 089-0045) will become eastbound only.

No Salvage

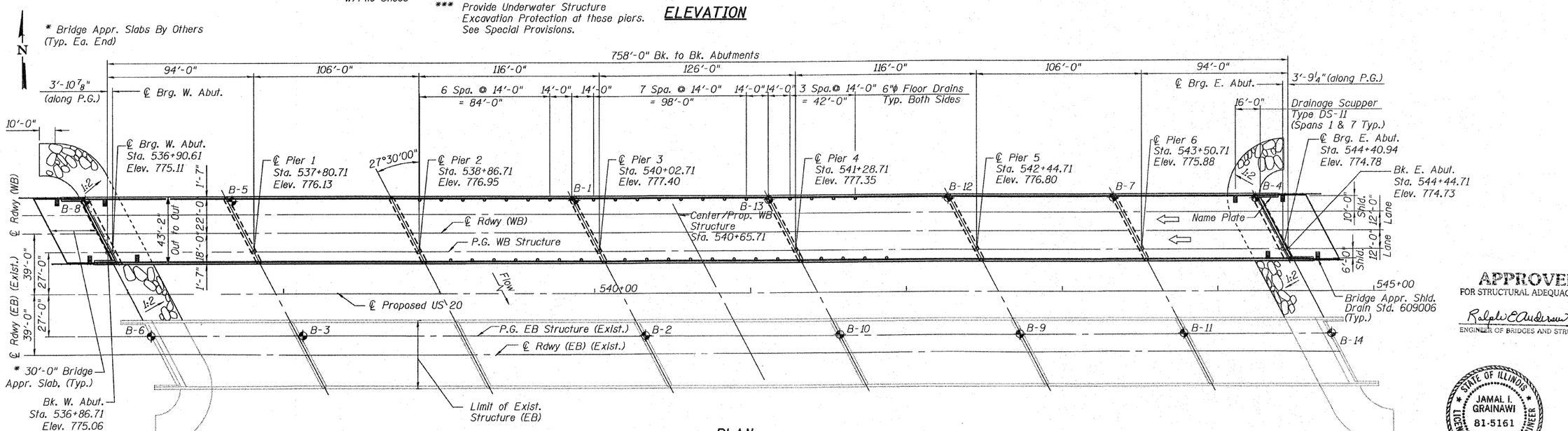
No Staging

Embankment plus 3 feet of surcharge is to be placed three (3) months minimum prior to pile installation and abutment construction to allow for at least 95% consolidation of the compressible soil. The rate of settlement is to be monitored by piezometers and settlement plates to verify pre-consolidation. See Special Provisions and Sheet No. 3 for details.



*** Provide Underwater Structure Excavation Protection at these piers. See Special Provisions.

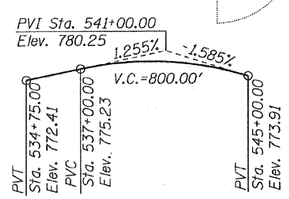
ELEVATION



PLAN

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TDN)
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
JAMAL I. GRAINAWI
81-5161
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER



PROFILE GRADE
Along P.G. (Proposed WB)

WATERWAY INFORMATION TABLE

Exist. Low Grade Elev. 767.9 @ Sta. 551+00
Drainage Area = 1296 sq. miles — Low Grade Elev. 768.1 @ Sta. 528+00

	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	13000	5219	5219	765.0	0.4	0.4	765.4	765.4
Design	50	20700	6381	6381	766.8	0.7	0.7	767.5	767.5
Base	100	24800	7345	7345	768.4	0.7	0.8	769.1	769.2
Overtopping	68	22200	6769	6769	767.4	0.7	0.7	768.1	768.1

10 Year Velocity through Exist. Bridge =2.5 fps 10 Year Velocity through Prop. Bridge =2.5 fps

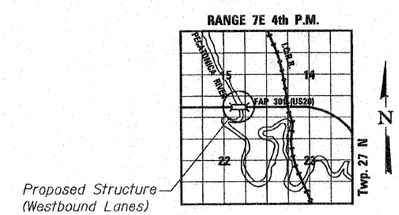
LEGEND
1975 Soil Boring location shown thus: B-1

DESIGN SPECIFICATIONS
2002 AASHTO

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (AASHTO M270, GR. 50W)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.032g
Site Coefficient (S) = 1.0



LOCATION SKETCH

Signed Jamal Grainawi
Jamal I. Grainawi, S.E. IL. Lic. No. 081-005161
Expires 11-30-2010
Date 1/25/2010

DESIGNED	J.ZUO/S.CHELBIAN
CHECKED	A.HAMMAD
DRAWN	J.ZUO/S.CHELBIAN
CHECKED	J.GRAINAWI

PARSONS BRINCKERHOFF

GENERAL PLAN & ELEVATION
U.S. ROUTE 20 OVER
PECATONICA RIVER
PUBLIC WATER
F.A.P. ROUTE 301 SECTION 177-2B-1
STEPHENSON COUNTY
STATION 540+65.71
STRUCTURE NO. 089-0082

T:\16814A\Struct\Cadd\Prefinal\US20 Bridge 089-0082 (Pecatonica River Bridge)\000000-64799-000-000-001.dgn
25-JAN-2010 13:46