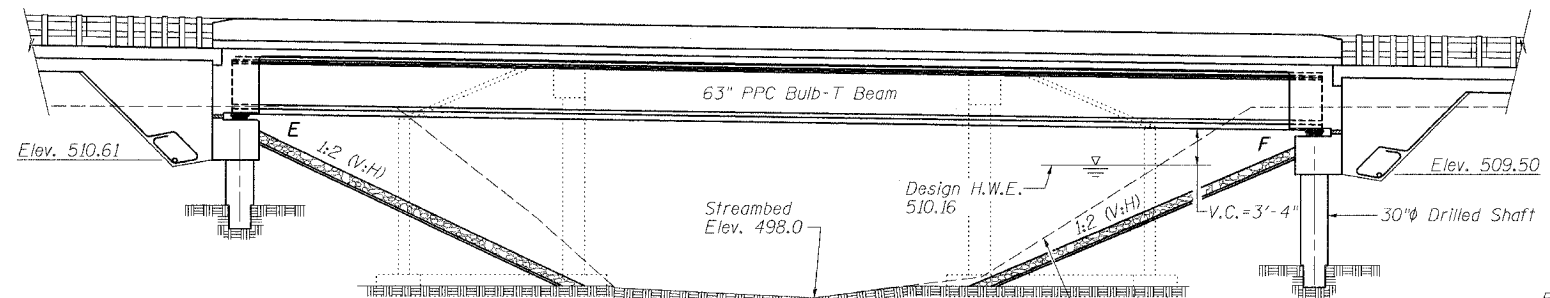


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

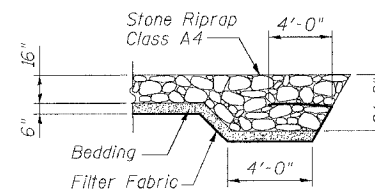
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. 1
FAP 609	*	ST. CLAIR	46	21	15 SHEETS
FED. ROAD DIST. NO.					76268
ILLINOIS					FED. PROJ. NO.
* 76-3BR					

Existing Structure: S.N. 082-0134. Built 1931 as FAS 841 Sect. 76-150 Sta. 252+20 with RC Girders & RC closed abutments. Rebuilt superstructure and widened, 1971. Single span (38'-0" Bk. - Bk. x 24'-0" ff) PPC Dk. Bm. (17"). To be removed in Stages to maintain one lane of traffic at all times. No Salvage.

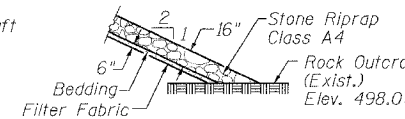
Bench Mark: Chiseled "□" in N.E. Wingwall. Elevation 516.93



ELEVATION



SECTION A-A



STONE RIPRAP DETAIL

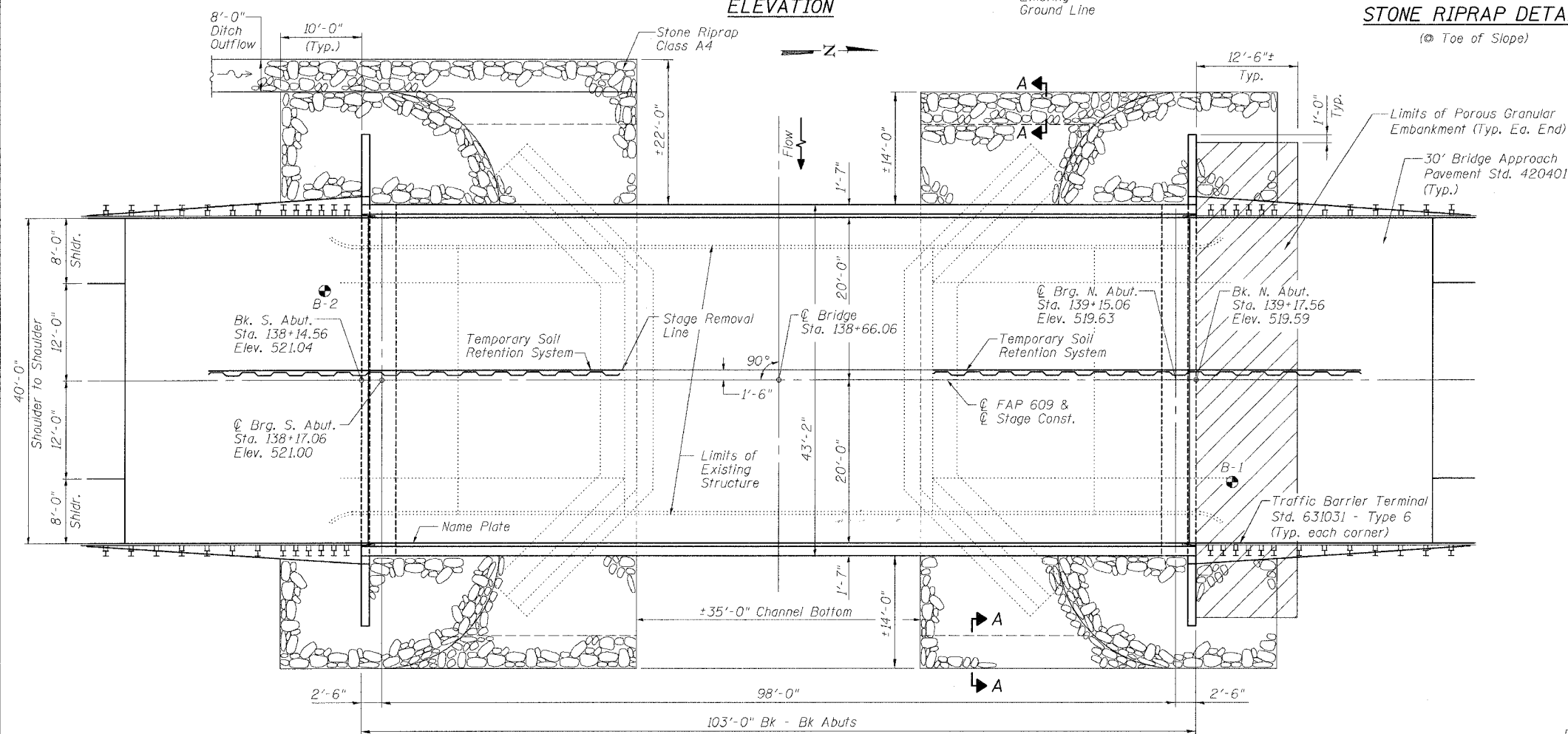
(@ Toe of Slope)

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
All construction joints shall be bonded.
Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before stage I removal.
All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M300, Type 1.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.	-	319.2	319.2
Stone Riprap, Class A4	Sq. Yd.	-	581	581
Filter Fabric for use with Riprap	Sq. Yd.	-	581	581
Removal of Existing Structures	Each	-	-	1
Structure Excavation	Cu. Yd.	-	626	626
Concrete Structures	Cu. Yd.	-	61.3	61.3
Concrete Superstructure	Cu. Yd.	202.3	-	202.3
Bridge Deck Grooving	Sq. Yd.	428	-	428
Protective Coat	Sq. Yd.	544	-	544
Elastomeric Bearing Assembly, Type I	Each	6	-	6
Furnishing and Erecting Precast Prestressed Concrete Bulb T-Beams 63"	Foot	596	-	596
Furnishing and Erecting Structural Steel	Pound	3841.6	-	3841.6
Reinforcement Bars, Epoxy Coated	Pound	31,900	10,730	42,630
Name Plates	Each	-	-	1
Temporary Soil Retention System	Sq. Ft.	-	1189	1189
Bar Splicers	Each	392	24	416
Drilled Shaft in Soil 30"	Foot	-	100.9	100.9
Drilled Shaft in Rock 24"	Foot	-	32	32



PLAN

WATERWAY INFORMATION TABLE

Drainage Area = 4.413 Sq. Mi. Low Grade Elev. = 516.58 @ Sta. 142+67.81

Flood	Freq. Yr.	Q C.F.S.	Opening, Sq. Ft.		Natural Head - Feet			Headwater Elev.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	50	2,954	347	676	510.16	1.09	0.43	511.25	510.59
Base	100	3,442	356	698	510.44	1.70	0.70	512.14	511.14
Overtopping									
Max. Calc.	500	4,637	373	737	510.92	3.22	1.46	514.14	512.38

DESIGN SPECIFICATIONS

2002 AASHTO
LOADING HS20-44
Allow 50# / sq. ft. for future wearing surface.

PRECAST PRESTRESSED UNITS

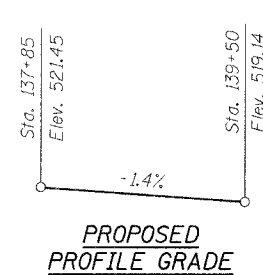
f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (1/2" φ low lax strands)
f'si = 201,960 psi (1/2" φ low lax strands)

DESIGN STRESSES

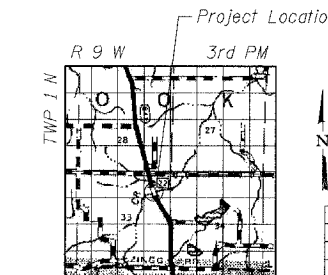
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.115
Site Coefficient (S) = 1.2



PROPOSED PROFILE GRADE

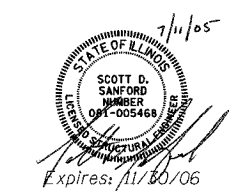


LOCATION SKETCH

STATION 138+66.06
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 609 SEC. 76-3BR
LOADING HS20
STR. NO. 082-0305

NAME PLATE
See Std. 515001

APPROVED FOR STRUCTURAL ADEQUACY ONLY
Robert E. Anderson (TS)
ENGINEER OF BRIDGES AND STRUCTURES



ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION

FAP RTE 609 (L. 163) PRAIRIE DUPONT CR.
SECTION 76-3BR
ST. CLAIR COUNTY
STA. 138+66.06
S.N. 082-0305

REVISIONS	
NAME	DATE

SCALE: VERT. 1" = 10'
HORIZ. 1" = 40'
DATE: 7/26/04
DRAWN BY: LANDREY
DESIGNED BY: WATKINS
CHECKED BY: SANFORD
COMPUTER FILE NO. SN0820305_GPE
PROJECT 02076
7/1/05-MML

FILE NAME = I:\02076\DRAWINGS\SN082-0305\SN0820305_gpe.dgn
PLOT SCALE = 1/4" = 1'-0"
PLOT DATE = 7/27/2005
PLOT TIME = 11:36:48 AM
OPERATOR = michellel