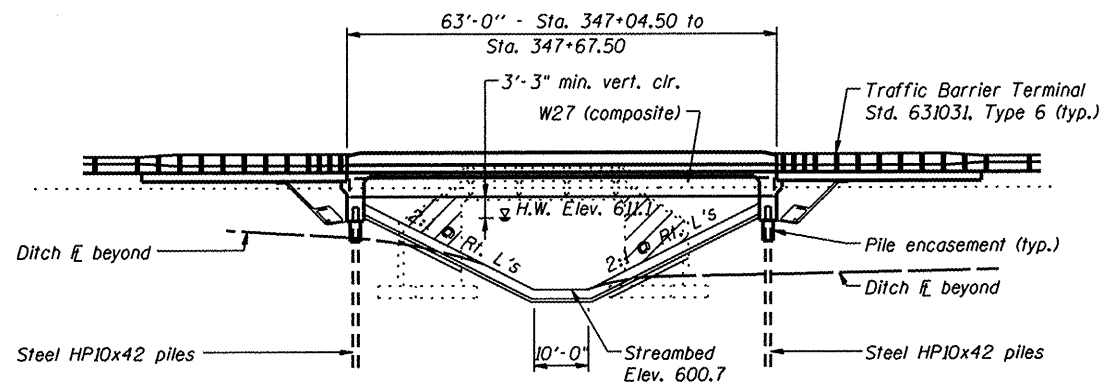


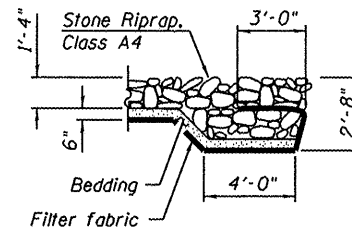
Bench Mark: Chiseled "□" on wingwall at northeast corner of existing bridge S.N. 036-0011 Elev. 615.26

Existing Structure: S.N. 036-0011, single span 26'-0" Back to Back abutments 33'-0" Out to Out R.C. slab bridge on closed abutments. Built as S.B.I. Rte. 94 Sec. 109B at Sta. 347+33.30 in 1928 and Rebuilt in 1977. The contractor shall remove the existing structure and replace it with a single span wide flange superstructure on integral abutments. Traffic to be maintained utilizing stage construction.

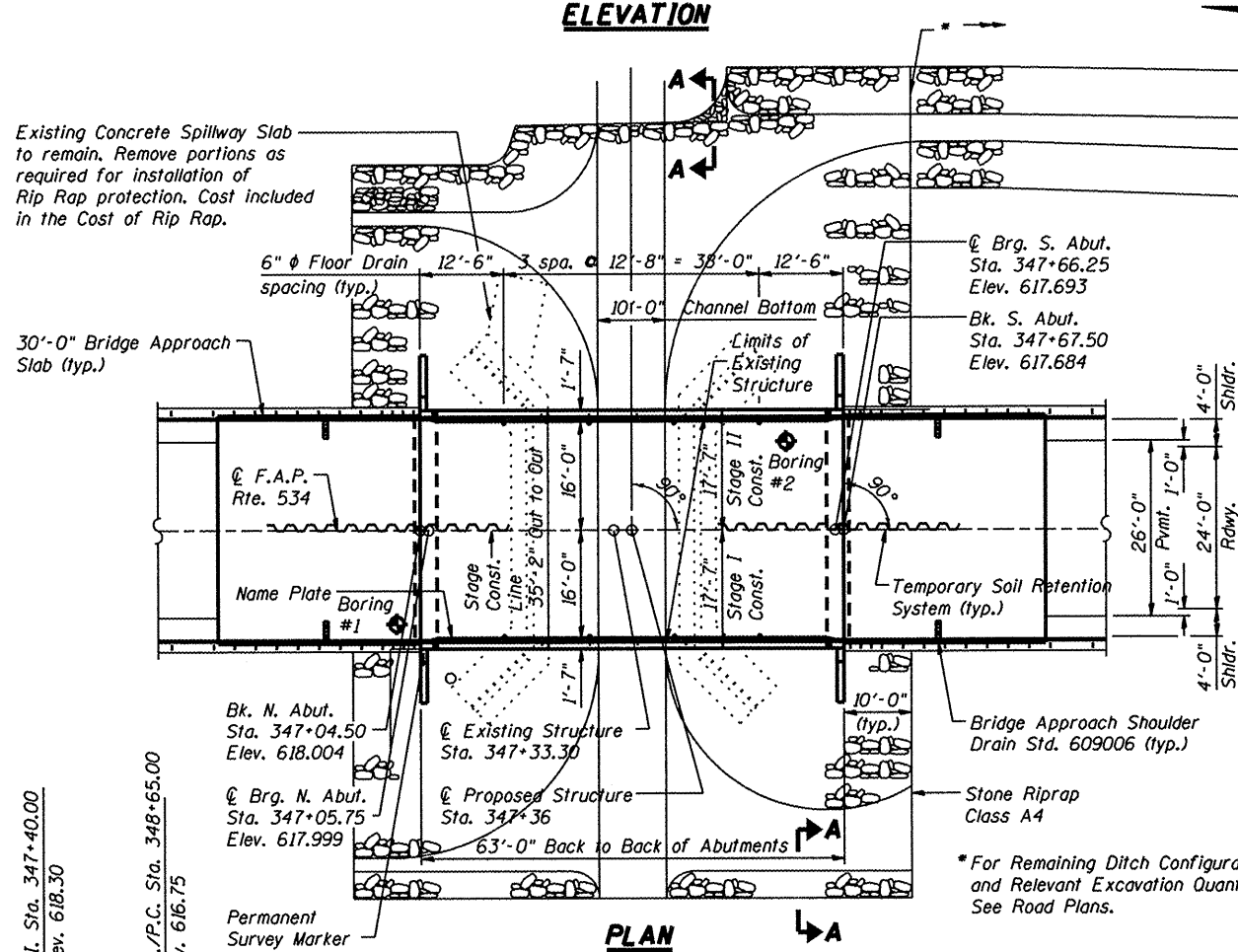
No Salvage.



ELEVATION



SECTION A-A



PLAN

STATION 347+36
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 534 SEC. 109B (BR2)
HENDERSON COUNTY
LOADING HS20
STR. NO. 036-0054

LETTERING FOR NAME PLATE

Locate Name Plate at
Corner of Bridge (See Std. 515001)

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

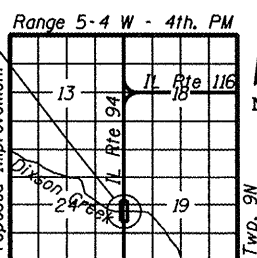
DESIGN STRESSES

FIELD UNITS

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

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 3.8%g
Site Coefficient (S) = 1.5



LOCATION SKETCH

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{3}{4}$ " ϕ holes $\frac{5}{8}$ " ϕ , unless otherwise noted.

Calculated weight of Structural Steel: Grade 50W = 58,390 lbs.
Field welding of construction accessories will not be permitted to beams.
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams.

Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The Contractor shall drive two steel HP10x42 test piles in a permanent location. 1 at each abutment as directed by the Engineer before ordering the remainder of piles.

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.

If the Contractor elects to use cantilever forming brackets on the exterior beams, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06 (b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

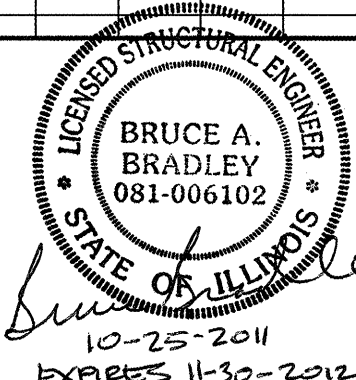
All structural steel shall be AASHTO M 270 Grade 50W.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3". Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel."

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		69	69
Stone Rip Rap, Class A4	Sq. Yd.		1023	1023
Filter Fabric	Sq. Yd.		1023	1023
Removal of Existing Structures No. 2	Each		1	1
Structure Excavation	Cu. Yd.		138	138
Concrete Structures	Cu. Yd.		50.9	50.9
Concrete Superstructure	Cu. Yd.	182.5		182.5
Bridge Deck Grooving	Sq. Yd.	224		224
Protective Coat	Sq. Yd.	566		566
Reinforcement Bars, Epoxy Coated	Pound	42,060	4180	46,240
Furnishing and Erecting Structural Steel	L. Sum	0.5		0.5
Stud Shear Connectors	Each	900		900
Furnishing Steel Piles HP10x42	Foot		490	490
Driving Piles	Foot		490	490
Test Pile Steel HP10x42	Each		2	2
Name Plates	Each		1	1
Geocomposite Wall Drain	Sq. Yd.		59.1	59.1
Pipe Underdrains for Structures 4"	Foot		130	130
Bar Splitters	Each	443		525
Temporary Soil Retention System	Sq. Ft.		396	396
Anchor Bolts, 1"	Each		24	24
Floor Drains	Each		8	8



EXPIRES 11-30-2012

WATERWAY INFORMATION

Drainage Area = 4.00 sq. mi. Low Grade Elev. 615.32 @ Sta. 350+67

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater EL.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	50	1720	225	320	611.1	1.1	0.1	612.8	611.2	
Base	100	2015	235	347	611.6	2.5	0.2	614.6	611.8	
Overtopping	500	2740	254			2.6		615.3		
Max. Calc.	500	2740		385	612.3		0.5		612.8	

PROFILE GRADE
(along ϕ roadway)



APPROVED
For Structural Adequacy Only
Carl Peyer (RD)
Engineer of Bridges & Structures

FILE NAME: #FILE#	USER NAME: #USER#	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION IL 94 OVER DIXON CREEK S.N. 036-0054	F.A.P. RTE. 534	SECTION 109B (BR2)	COUNTY HENDERSON	TOTAL SHEETS 88	SHEET NO. 41	
PLOT SCALE: #SCALE#	CHECKED: -	REVISED: -	SCALE: 1" = 40'			SHEET NO. 1 OF 15 SHEETS	STA. 347+36	CONTRACT NO. 68083		ILLINOIS FED. AID PROJECT	
DATE: -	REVISED: -										