

B.M. - 60d Nail in Power Pole 18' Rt. Sta. 142+37.67, Elev. = 503.15

Existing Structure- Steel two unit, six span 24" WF beams with concrete deck 22'-0" o - o deck, 249'-1" Bk - Bk abutments. Spill thru abutments and concrete pile bent piers. Bridge to be closed during construction.

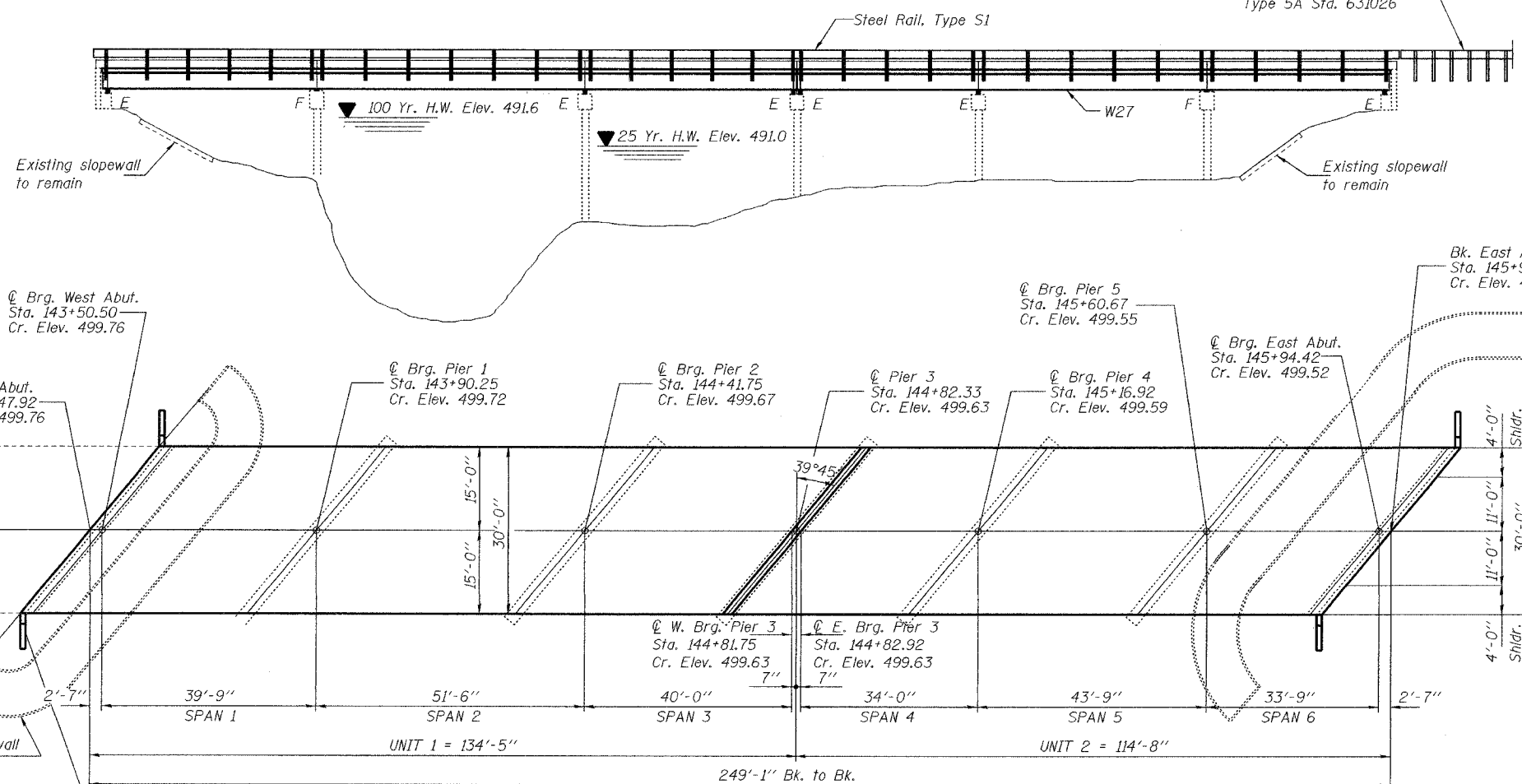
Salvage- None

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.S. 738	SECTION *	COUNTY Greene	SHEETS 28	SHEET 5	SHEET NO. 1 20 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT - CONTRACT NO. 97249		

GENERAL NOTES

Fasteners shall be high strength bolts AASHTO M164, Type 3 in unpainted areas and mechanically galvanized AASHTO M164, Type 1 or Type 2 in painted areas. Bolts 3/4" ϕ open holes 13/16" ϕ , unless otherwise noted.
Calculated weight of Structural Steel = 135,540 Pounds
Anchor bolts shall be set before bolting diaphragms over supports.
The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.
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 and all splice plate material except fill plates.
Field welding of construction accessories will not be permitted to the beams.
Reinforcement bars shall conform to the requirements of AASHTO M31, M322 Grade 60.
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
All Construction joints shall be bonded.
All structural steel shall be AASHTO M 270 Grade 50W.
AASHTO M 270 Grade 50W structural steel shall only be painted for a distance of three times the depth of the beams or girders (but not exceeding 10 feet) each way from the deck joints. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".
The Contractor shall take care during construction to protect the existing slopewall.
If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06 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.

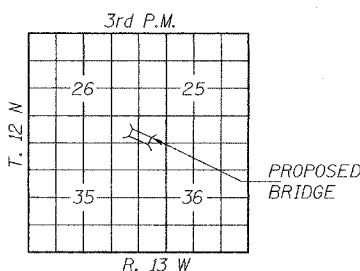
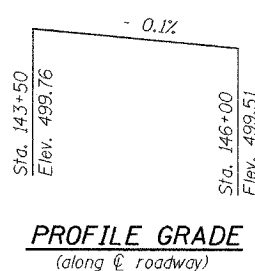


Locate Name Plate on outside face of Southwest Wingwall. See sheet 17 of 20 for location.

WATERWAY INFORMATION

Drainage Area = 22.35 Sq. Mi. Low Grade Elev. = 499.73 @ Sta. 149+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	25	4245	458.9	458.9	491.0	1.4	1.4	492.3	492.3	
Base	100	5740	759.1	759.1	491.6	2.3	2.3	493.7	493.7	
Overtopping										
Max. Calc.	500	7521	968.8	968.8	493.0	1.7	1.7	494.7	494.7	



HURRICANE CREEK
REBUILT 200_ BY
GREENE COUNTY
SEC. 01-00072-00-BR
F.A.S. RT. 738 STA. 144+72.46
STR. NO. 031-3005 LOADING HS 20

LETTERING FOR NAME PLATE

See Std. 515001-02

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO with Interims

DESIGN STRESSES

FIELD UNITS

f_c = 3,500 psi
 f_y = 60,000 psi (reinforcement)
 f_y = 50,000 psi (structural steel) M270 Grade 50W

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.055g
Site Coefficient (S) = I

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.		8.6	8.6
Removal of Existing Superstructure	Each	1		1
Structure Excavation	Cu. Yd.		48	48
Neoprene Expansion Joint 2"	Foot	78		78
Neoprene Expansion Joint 2 1/2"	Foot	39		39
Elastomeric Bearing Assembly Type I	Each	20		20
Elastomeric Bearing Assembly Type II	Each	10		10
Concrete Structures	Cu. Yd.		12.9	12.9
Furnishing and Erecting Structural Steel	L. Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound	50360	3300	53660
Steel Bridge Rail, Type S-1	Foot	492		492
Name Plates	Each		1	1
Bridge Deck Grooving	Sq. Yd.	765		765
Protective Coating	Sq. Yd.	819		819
Concrete Superstructure	Cu. Yd.	198.4		198.4

GENERAL PLAN
F.A.S. 738 OVER
HURRICANE CREEK
SECTION 01-00072-00-BR
GREENE COUNTY
STA. 144+72.46
STR. NO. 031-3005

DESIGNED	ABG
CHECKED	ZBU
DRAWN	SMS
CHECKED	JFS

JANUARY 31, 2005
EXAMINED
PASSED
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2006