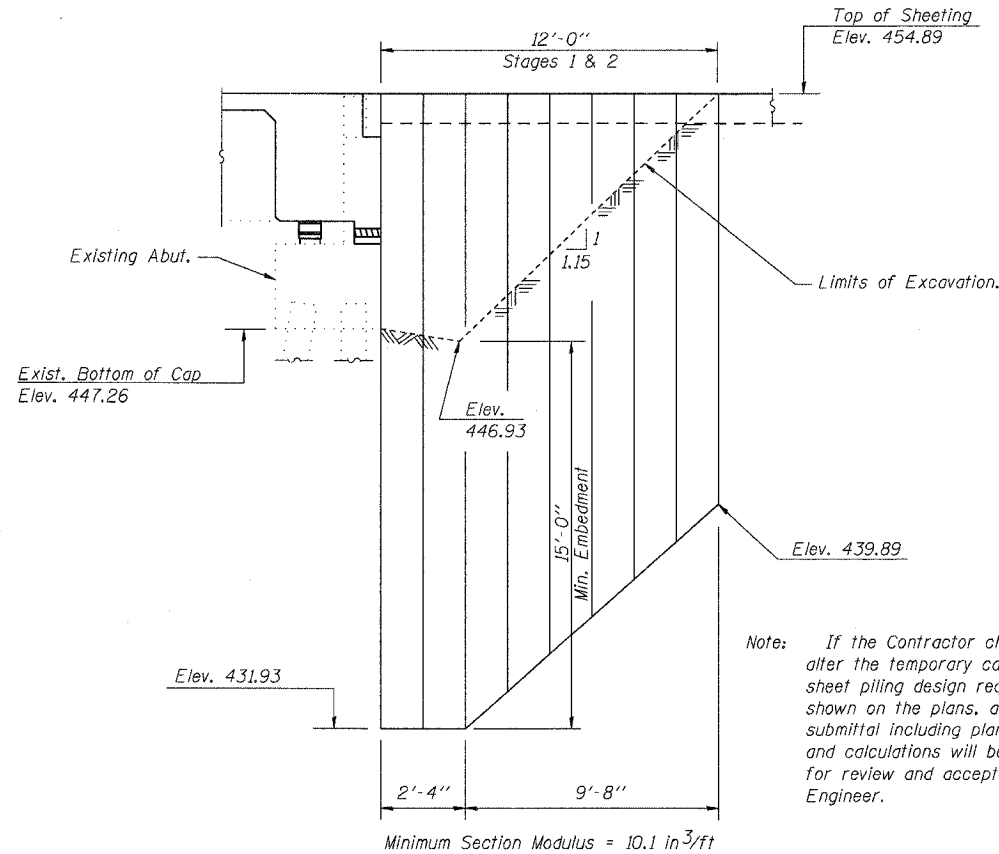


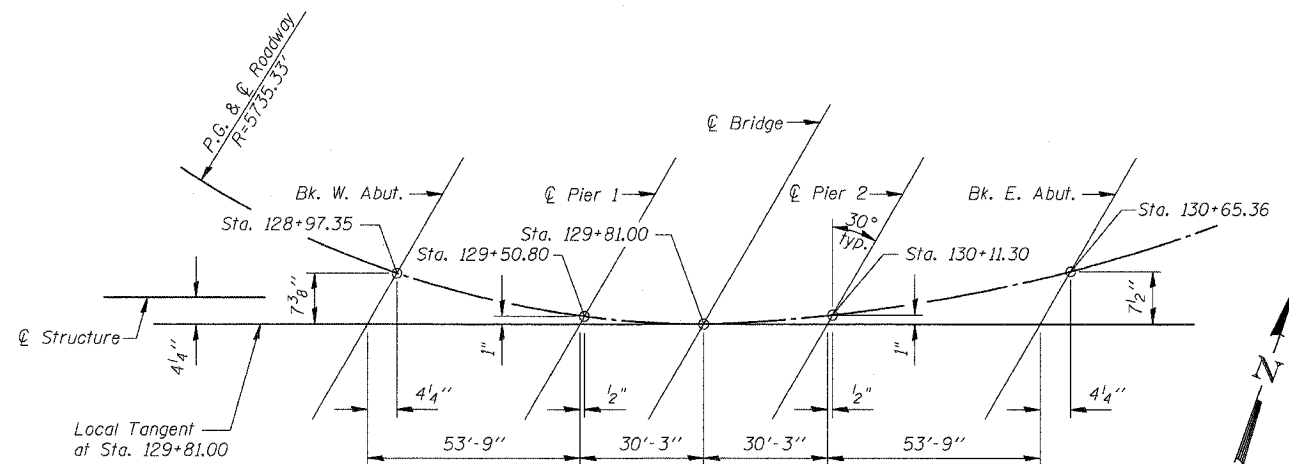
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 821	05-2)BR	JEFFERSON	33	14
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		
Sheet 2 of 19			CONTRACT #98958	

GENERAL NOTES

- Fasteners shall be high strength bolts. Bolts $\frac{7}{8}$ " ϕ , open holes $\frac{15}{16}$ " ϕ , unless otherwise noted.
 - Calculated weight of structural steel = 55,800 lbs (M270 Grade 36).
 - Field welding of construction accessories will not be permitted to beams.
 - Anchor bolts shall be set before bolting diaphragms over supports.
 - 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.
 - Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
 - Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 - 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 work; however, the Contractor will be paid for the quantity actually furnished at the unit price per bid for the work.
 - Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two adjusting shims shall be provided for each bearing and placed as detailed.
 - The contractor shall drive one HP12x53 test pile in a permanent location at Pier 1 as directed by the Engineer before ordering the remainder of piles.
 - Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams and end diaphragms in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams and end diaphragms in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work shall be paid for according to Article 109.04.
- All existing construction accessories welded to the top flange over the piers between the quarter points of the beams shall be removed. The remaining weld shall be ground smooth and inspected for cracks using magnetic particle testing. Any cracks that can not be removed by grinding approximately $\frac{1}{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of this work shall be paid for according to Article 109.04.
- In addition to all other requirements of Section 512 of the Standard Specifications, splices for steel H-piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.
 - 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.
 - Partial depth saw cutting of the existing concrete deck over the top of beam or girder flanges shall be permitted. See Special Provision for Removal of Existing Non-Composite Bridge Decks.
 - Field painting of structural steel shall be done under a separate painting contract.
 - Contact surfaces of existing structural steel where new steel is to be installed shall be cleaned and painted prior to erection as required by the special provision Cleaning and Painting Contact Surface Areas of Existing Steel Structures.
 - All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M300, Type I.



TEMPORARY SHEET PILING AT ABUTMENTS
Slopes and Dimensions are Along Tangent



OFFSET LAYOUT SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		165	165
Stone Riprap, Class A4	Sq. Yd.		900	900
Filter Fabric	Sq. Yd.		900	900
Concrete Removal	Cu. Yd.		25.0	25.0
Slope Wall Removal	Sq. Yd.		230	230
Removal of Existing Concrete Deck	Each	1		1
Structure Excavation	Cu. Yd.		398	398
Floor Drains	Each	7		7
Concrete Structures	Cu. Yd.		25.3	25.3
Concrete Superstructure	Cu. Yd.	260.0		260.0
Bridge Deck Grooving	Sq. Yd.	720		720
Protective Coat	Sq. Yd.	930		930
Elastomeric Bearing Assembly, Type I	Each		16	16
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3,450		3,450
Jack and Remove Existing Bearings	Each	18		18
Reinforcement Bars, Epoxy Coated	Pound	56,080	3,640	59,720
Furnishing Steel Piles HP12x53	Foot		280	280
Driving Steel Piles	Foot		280	280
Test Pile Steel HP12x53	Each		1	1
Concrete Encasement	Cu. Yd.		6.5	6.5
Temporary Sheet Piling	Sq. Ft.		474	474
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		100	100
Pipe Underdrains for Structures 4"	Foot		180	180
Bar Splicers	Each	594	4	598
Underwater Structure Excavation Protection-Location 1	Each		1	1
Underwater Structure Excavation Protection-Location 2	Each		1	1

DESIGNED	Ruben V. Boehler
CHECKED	Tim S. Howard
DRAWN	TSH / RVB
CHECKED	Michael D. Cummins

NOTE

Plan elevations relative to the existing structure have been taken from existing plans and reduced by 0.40 feet to match benchmark datum.

GENERAL NOTES AND TOTAL BILL OF MATERIAL
IL ROUTE 15 OVER SEVEN MILE CREEK
F.A.P. ROUTE 821 SECTION (15-2)BR
JEFFERSON COUNTY
STA. 129+81.00
S.N. 041-0027

CUMMINS ENGINEERING CORPORATION
JOB #: 2175
FILE: 2175billmat
DATE: 8/7/06