

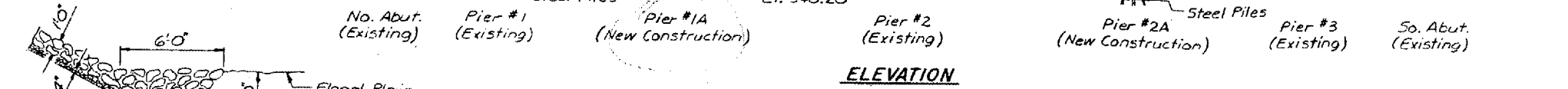
Sec. 129 BC-BR

Structure: #100-0032, Sec. 129 BC - Built in 1931,
 Truss Steel Spans @ 163'-0 3/4", 2 R.C. Deck
 Approach Spans @ 50'-0", Clear Roadway = 21'-1",
 250'-1 1/2" Bk-Bk. Abuts.

B.M.: R.R. Spike in 24" Ash Tree
 28' L.F. Sta. 167+96, Elev. 384.50

Contractor shall remove existing
 superstructure, widen the existing
 substructures, construct 2 new
 piers and construct a new super-
 structure utilizing wide flange beams.

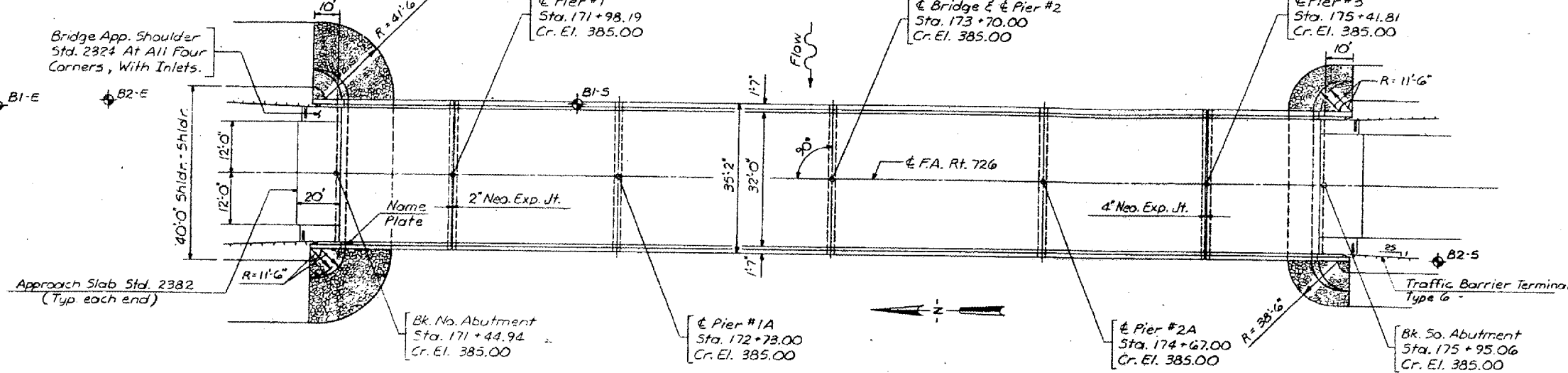
No Salvage.



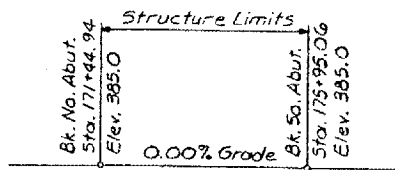
ELEVATION



RIP RAP ANCHOR DETAIL



PLAN



PROFILE GRADE

DESIGN STRESSES

Concrete: Load Factor Design
 $f_c = 3500$ p.s.i.
 $f_y = 60,000$ p.s.i. (Reinforcement)
 $n = 9$
 Structural Steel: Load Factor Design
 $f_y = 50,000$ p.s.i. (M-222 Unpainted)
 Loading: AASHTO HS 20-44
 Allowance for 25 p.s.f. future wearing surfaces
 1977 AASHTO Specifications and 1978,
 1979 & 1980 Interim Specifications.

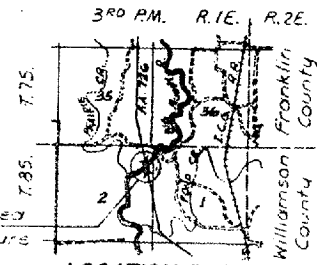
WATERWAY INFORMATION

Drainage Area		793 Sq. Mi.		Low Grade Elev. 382.93		At Sta. 150+00			
Flood	Freq. Yr.	Q C.F.S.	Opening Exist.	Sq. Ft. Prop.	Nat. H.W.E. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Prop.	Prop.
Design	50	20800	8707	8131	382.3	0.14	0.16	382.44	382.46
Base	100	22300	8877	8131	382.8	0.15	0.13	382.96	382.98
Overlapping									
Max. Calc.	500								

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Removal of Existing Superstructure	Each	1		1
Concrete Removal	Cu.Yd.		69.1	69.1
Expansion Bolts, 3/4"	Each		162	162
Structure Excavation	Cu.Yd.		96	96
Cofferdam Excavation	Cu.Yd.		726	726
Cofferdam (Pier 1A)	Each		1	1
Cofferdam (Pier 2A)	Each		1	1
Floor Drains	Each	60		60
Protective Coat	Sq.Yd.	1,985		1,985
Class X Concrete	Cu.Yd.	474.2	342.5	816.7
Seal Coat Concrete	Cu.Yd.		154.1	154.1
Structural Steel	L. Sum.	1		1
Stud Shear Connectors	Each	5,530		5,530
Reinforcement Bars	Pound	43,830	27,710	71,540
Reinforcement Bars (Epoxy Coated)	Pound	70,540		70,540
Steel Piles, HP 36 x 36	Lin. Ft.		425	425
Steel Piles, HP 42 x 42	Lin. Ft.		973	973
Test Piles, Steel HP 36 x 36	Each		1	1
Name Plate	Each	1		1
Stone Riprap	Sq.Yd.		862	862
Elastomeric Bearing Assembly, Type I	Each		20	20
Elastomeric Bearing Assembly, Type II	Each		5	5
Elastomeric Bearing Assembly, Type III	Each		5	5
Neoprene Expansion Joint (2")	Lin. Ft.	34		34
Neoprene Expansion Joint (4")	Lin. Ft.	34		34

- See Sheet 2 of 15 for Boring Data.
- Fasteners shall be high strength bolts AASHTO M-164, Type 3. Bolts 3/4", open holes 9/16" unless otherwise noted.
- Calculated weight of Structural Steel = 365,890 Lbs.
- All structural steel shall be AASHTO M-222 unpainted type.
- All structural steel for a distance of three times the depth of the beams, but not exceeding 10 feet, each way from deck joints shall be cleaned and given one coat of the basic lead silica chromate primer and maroon final coat. Both coats to be applied in the shop with spot painting only in the field.
- Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length, each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
- Anchor bolts shall be set before bolting diaphragms over supports.
- The contractor shall drive one test pile in a permanent location at Pier 2A as directed by the Engineer before ordering the remainder of piles.
- Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,080 Lbs., and 3/4" x 12" hooked bolts.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 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, shims of the dimensions of the top bearing plate shall be provided and placed as detailed.
- 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.
- Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.
- All contact surfaces of joints for the diaphragms shall be free of paint or lacquer.
- 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,



LOCATION PLAN

FOR INFORMATION ONLY:

BRIDGE NO. 6 STRUCTURE 100-0032

STATION 173+70
 BUILT 198 BY
 STATE OF ILLINOIS
 F.A. RT. 726 SEC. 129 BC-BR
 PROJECT FR-726(21)
 LOADING HS20
 STR. NO. 100-0032

LETTERING FOR NAME PLATE
 Locate Name Plates at Northwest
 corner of Bridge. (See Std. 2113)

GENERAL PLAN AND ELEVATION
 FEDERAL AID PRIMARY RT. 726 (ILL. 148)
 SECTION 129 BC-BR
 OVER BIG MUDDY RIVER
 WILLIAMSON COUNTY
 STATION 173+70.00

APPROVED R.O.D.
 CHECKED
 DRAWN D.A.V.
 DESIGNED

HANSON ENGINEERS INCORPORATED
 8052006
 11-12-81