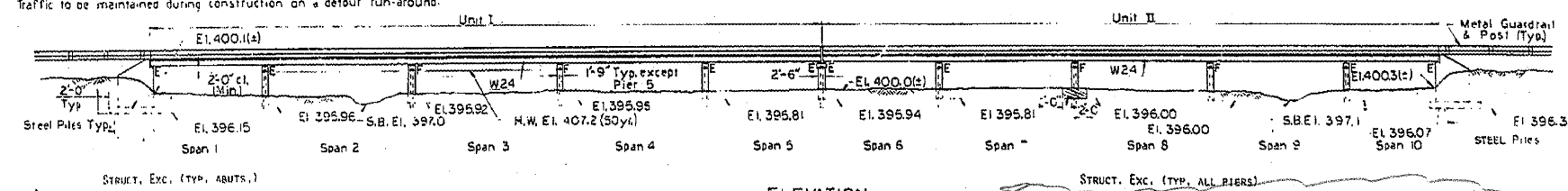


BM-Chiseled 'D' NW Wing Skillet Fork Overflow. Elev. 410.67
 Existing Structure: Structure No. 096-0002. Original Structure built in 1922 as S.B.I. Rt. 15, Section 17c, Wayne County, Sta. 957+90. Twenty Span R.C. Slab, closed abutts. Structure widened in 1958 under Section 17 B.Y. Sta. 957+95 to 26'-0" Rwy. Superstructure and parts of the substructure are to be removed as necessary by the Bridge Contractor after completion of detour. No salvage.
 Traffic to be maintained during construction on a detour run-around.

ROUTE NO.	SECTION	COUNTY	POST MILE	SHEET NO.
F.A. 821	17BR-1	WAYNE	27	5
ILLINOIS PROJECT	Sheet 1 of 18			

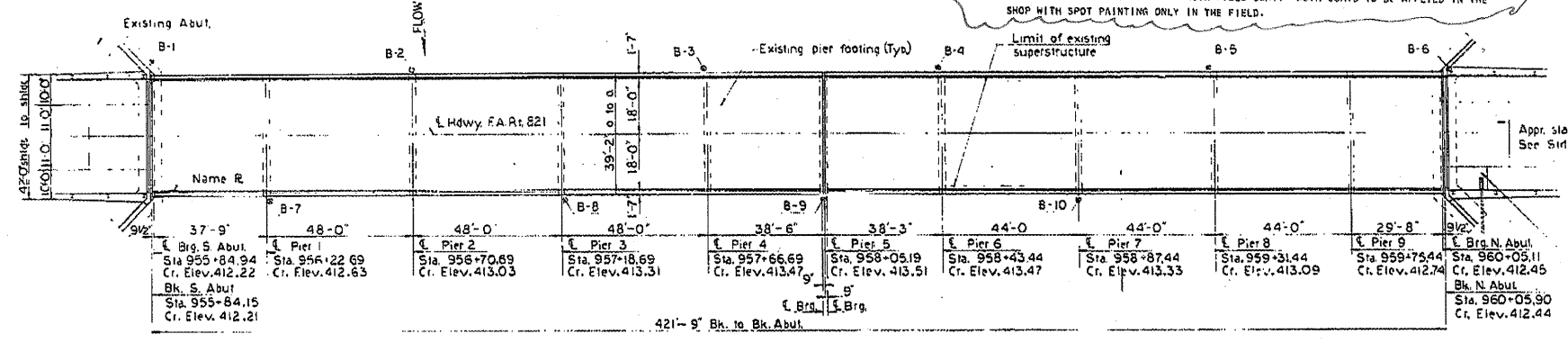
GENERAL NOTES

SEE PROPOSAL FOR BONDING LOG.
 REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS IN AASHTO M-222 OR M-223 GRADE 60.
 FASTENERS SHALL BE HIGH STRENGTH BOLTS, AASHTO M-294 TYPE 3 BOLTS 3/4" OPEN HOLES 1/4" MIN., UNLESS OTHERWISE NOTED.
 CALCULATED WEIGHT OF STRUCTURAL STEEL = 237,448 LBS.
 ALL STRUCTURAL STEEL SHALL BE AASHTO M-222 UNPAINTED EXCEPT EXPANSION JOINT ANGLES AND ATTACHED BARS WHICH SHALL BE AASHTO M-183 AND SHOP PAINTED WITH TWO COATS OF BASIC LEAD SILICO CHROMATE PAINT.
 FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR RIBBERS 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 6 STEEL TEST PILES IN PERMANENT LOCATIONS AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES: ONE TEST PILE EACH AT N. AND S. ABUT. AND ONE TEST PILE EACH AT PIERS 7, 4, 6, 8.
 THE STATIONING OF THE ABUTMENTS OF THE NEW STRUCTURE IS BASED FROM THE FIELD SURVEY, IN RELATION TO THE EXISTING STRUCTURE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD, AND TO NOTIFY THE ENGINEER OF ANY VARIATION IN THE DATA SHOWN ON THE PLANS PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
 BEARING 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 SKIMMING THE BEARING. TWO 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.
 THE MAIN LOAD-CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH SENSITIVE ZONE 2. THESE COMPONENTS ARE THE WIDE FLANGE BEAMS AND ALL SPICE PLATE MATERIAL.
 *INCLUDING 2, 110 LBS. AASHTO M-114 STEEL FOR EXPANSION DEVICE
 BRIDGE APPROACH SHOULDER PAVEMENT TYPICAL ALL CORNERS STANDARD 2324



ELEVATION

ALL STRUCTURAL STEEL FOR A DISTANCE OF THREE TIMES THE DEPTH OF THE BEAMS EACH WAY FROM THE DECK JOINTS SHALL BE CLEANED AND GIVEN ONE COAT OF THE BASIC LEAD SILICO CHROMATE PRIMER AND HARDEN FIELD COAT. BOTH COATS TO BE APPLIED IN THE SHOP WITH SPOT PAINTING ONLY IN THE FIELD.



PLAN

STATION 957+95.03
 BUILT 19 BY
 STATE OF ILLINOIS
 FA RT 821 SEC 17 BR-1
 FA. PROJ. BR-F-821(7)
 LOADING HS 20
 STR. NO. 291

NAME PLATE
 See Std. 2113
 *STRUCTURE NUMBER TO BE SUPPLIED BY DISTRICT

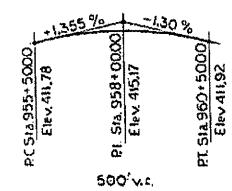
WATERWAY INFORMATION

Drainage Area	475 sq. mi. (Skillet Fork & Overflow)
Character	level & rolling
Required Opening (50 yr. flood)	2957 cfs
Present Opening	2957 cfs
Proposed Opening	2960 cfs
High water El.	4072 (50 yr.) Overflow
High water El.	4077 (100 yr.)
Created Head	.3 ft. (50 yr.)
Created Head	.4 ft. (100 yr.)
Q.50	9315 cfs
Q.100	11,221 cfs

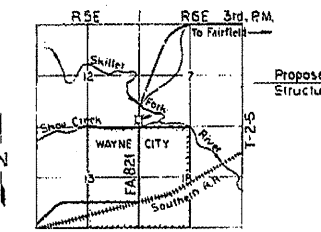
DESIGN STRESSES

$f_c = 3500$ psi
 $f_t = 1000$ psi (Abut. & ww)
 $f_y = 50000$ psi (Re-bars)
 $f_y = 50000$ psi (M-222 S/c unpainted)
 $n = 8$
 Loading HS 20-44
 Allow 25% for future WS

Design Specifications, 1977 AASHTO Specifications, 1978 & 1979 Interim Specifications.



PROFILE GRADE
 F.A. RT. 821



LOCATION SKETCH

TOTAL BILL OF MATERIALS

Item	Unit	Suppl.	Sub.	Total
Removal of Existing Struct.	Each			1
Structure Excavation	Cu Yd		511	511
Protective Coat	Sq Yd	2030		2030
Class X Concrete	Cu Yd	492.9	506.4	999.3
Structural Steel	L.S.			1
Stud Shear Connectors	Each	6210		6210
Reinforcement Bars	Lb.	48580	36120	84700
Rein. Bars (Epoxy Coated)	Lb.	75590		75590
Steel Piles (HP10x42)	Lin. Ft.		6252	6252
Test Pile Steel (HP10x42)	Each		6	6
Preformed Jt. Seal 4"	Lin. Ft.	39		39
Preformed Jt. Seal 2 1/2"	Lin. Ft.	39		39
Name Plates	Each	1		1
Porous Granular Embankment	Cu Yd.			460
Neoprene Exp. Jt. 4"	Lin. Ft.	36		36
Floor Drains	Each	84		84

**STEEL PILES SHALL CONFORM TO AASHTO M-222 SPECIFICATIONS

PROJECT BR-F 821(7)
 F.A. RT. 821 OVER SKILLET FORK OVERFLOW
 GENERAL PLAN & ELEVATION
 F.A. RT. 821 SEC. 17 BR-1
 WAYNE COUNTY
 STA. 957+9503

MTA, INCORPORATED
 DESIGNED: [Signature] CHECKED: [Signature]
 DATE: 11-5-79 NO. 0701

LOCATION 2 SN 096-0062

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 74529