

STATION 116+30
 BRIDGE 198- BY
 STATE OF ILLINOIS
 F.A. RTE 714 SECTION BY
 F.A. PROJ. F-714/1-1
 LEADING 10 50
 STA. NO. 116-012

NAME PLATE
 604 50 2133

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Class X Concrete-Super	cu yd	124.3	—	124.3
Class X Concrete	cu yd	—	24.2	24.2
Forming Epoxy Control	lb	20,000	—	20,000
Reinforcement Bars	lbs	—	12,150	12,150
Structural Steel	Lump Sum	1	—	1
Reinforced B. Deck	sq ft	76	—	76
Forming Steel Pile	sq ft	—	1116	1116
Forming Steel Pile	sq ft	—	1116	1116
Top Piles-Small HP #34	ea	—	2	2
Expansion Bars	ea	—	150	150
Aluminum Rivets, Type L	ea	214	—	214
Truss Bridge Roll	sq ft	150	—	150
Structure Excavation	cu yd	—	207	207
Public Filled Concrete	cu yd	—	310	310
Drainage Scaffer (Special)	ea	2	—	2
Protective Coat	sq yd	440	—	440
Stone Filling	cu yd	1	—	1
Concrete Removal	cu yd	110	2.6	21.6
Form Lining	sq	0	—	0

GENERAL NOTES

SEE PROPOSAL FOR BORING DATA.

FASTENERS SHALL BE HIGH STRENGTH BOLTS (A307 OR 316, TYPE 31). BOLTS 3/4" Ø, OPEN HOLES 15/16" Ø, UNLESS OTHERWISE NOTED.

CALCULATED WEIGHT OF STRUCTURAL STEEL = 37,320.

FOR BOND CALCULATIONS AND WELDING SYSTEM SHALL BE USED FOR SHOP AND FIELD WELDING OF STRUCTURAL STEEL EXCEPT WHERE OTHERWISE NOTED.

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 PILE 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 TENSILE LOAD CAPACITY OF MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR WELDED JOINTS, ZONE 2. THE COMPONENTS ARE THE WELD PLACES BEAMS-PLUS ALL STEEL MATERIAL.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615, A-616, OR A-617 GRAD 60.

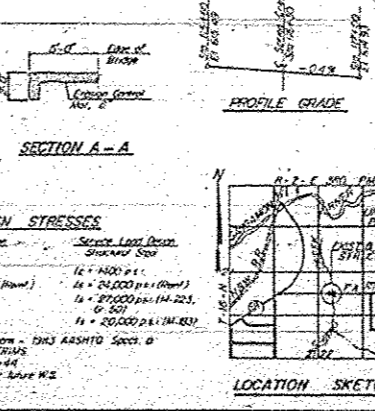
WELDS SHALL BE MADE IN THE FIELD TO AVOID CORROSION CONDITIONS AS DIRECTED BY THE ENGINEER.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO MINOR 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 DETERMINATION OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD = 40,000 LBS., AND 3/4" Ø X 12" HEIGHT BOLTS.

BEARING SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE ESTABLISHED ELEVATIONS WITHIN A TOLERANCE OF 1/8" (INCH). ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/2" ADVANTING SHIMS, OF THE THICKNESS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OF SHIMS.

THE CONTRACTOR SHALL DRIVE 3" X 10" X 10" TEE PILES IN A PERMANENT LOCATION AT THE NEAR END OF THE BRIDGE AT STA. 116+30 AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMOVAL OF PILES.



WATERWAY INFORMATION

Channel	Area	Flow	Depth	Width	Velocity	Capacity
Design	50	2854	660	608.5	0.1	608.01
Base	120	2717	633	609.6	0.1	609.61
Overtopping	300	3542	777	611.0	0.1	611.01

DESIGN STRESSES

Live Load Stress: 1.25 x 1000 psi (1 + 0.00000 psi + 0.00000 psi)

Shrinkage Stress: 1.25 x 1000 psi (1 + 0.00000 psi + 0.00000 psi)

Temperature Stress: 1.25 x 1000 psi (1 + 0.00000 psi + 0.00000 psi)

Wind Stress: 1.25 x 1000 psi (1 + 0.00000 psi + 0.00000 psi)

Seismic Stress: 1.25 x 1000 psi (1 + 0.00000 psi + 0.00000 psi)

APPROVED

FOR STRUCTURAL DESIGN

GENERAL PLAN B ELEVATION

F.A. RTE. 714
 SECTION 120 BY
 OVER
 SPRING CREEK
 MACON COUNTY
 STA. 116+30
 SA058-012

