GENERAL NOTES

1. Fasteners shall be AASHTO MI64 Type 1, mechanically galvanized bolts. Bolts 78" diameter, open holes 1516 " diameter, unless otherwise noted.

- 2. Calculated weight of Structural Steel: AASHTO (M270 GR 50) = 748.170 poundsAASHTO (M270 GR 36) = 68,490 pounds
- 3. No field welding is permitted except as specified in the contract documents.
- 4. 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, the tension flanges and webs of the plate girders, and all splice plate material except fill plates.
- 5. Materials, fabrication welding, and non-destructive testing for the members identified as Fracture Critical Member and member components (F.C.M.) in the contract plans shall conform to the requirements of Section 12 of the current ANSI / AASHTO / AWS / D 1.5 Bridge Welding Code.
- 6. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
- 7. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of l_8 ". Adjustments shall be made either by arinding the surface or by shimming the bearing. Two $I_{\rm B}$ " adjusting shims. of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
- 8. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
- 9. Concrete Sealer shall be applied to the seat area of the East and West Abutments.
- 10. When the deck pour is stopped for the day at one or more of the Transverse Bonded Construction joints in the deck Pouring Sequence as shown, the next pour shall not be made until both of the following requirements are met:
- 1. At least 72 hours shall have elapsed from the end of the previous pour.
- 2. The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.
- 11. In addition to all other requirements of section 512 of the Standard Specifications, splices for the 12" metal shell 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.
- 12. The existing structural steel coating contains lead. The contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 13. All construction joints shall be bonded.
- 14. 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 503.06b 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.
- 15. The organic zinc rich primer/epoxy/urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures."
- 16. Slipforming of the parapaets is not allowed.
- 17. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- 18. Wherever reference is made to Neoprene Expansion Joint in these plans it shall be interpreted to mean Preformed Joint Strip Seal.

ITEM	UNIT	SUB-STRUCT.	SUPER-STRUCT.	TOTAL
Removal of Existing Structures	EACH			1
Structure Excavation	CU YD	401		401
Preformed Joint Strip Seal	FOOT		524	524
Concrete Structures	CU YD	770		770
Concrete Superstructure	CU YD		858	858
Bridge Deck Grooving	SQ YD		2935	2935
Protective Coat	SQ YD		3456	3456
Furnishing and Erecting Structural Steel	L.S.		1	1
Stud Shear Connectors	EACH		16981	16981
Reinforcement Bars, Epoxy Coated	POUND	89390	233410	322800
Aluminum Railing, Type L	FOOT		408	408
Furnishing Metal Shell Piles 12" x 0.250"	FOOT	15910		15910
Driving Piles	FOOT	15910		15910
Test Pile Metal Shells	EACH	3		3
Temporary Sheet Piling	SQ FT	3000		3000
Name Plates	EACH	1		1
Concrete Sealer	SQ FT	1415		1415
Temporary Mechanically Stabilized Earth Wall	SQ FT	1600		1600
Drainage Scuppers, DS-11	EACH		4	4
Drainage System	L.S.		1	1 -
High Load Multi-Rotation Bearings, Fixed-250 K	EACH		13	13
High Load Multi-Rotation Bearings, Guided Expansion, 100 K	EACH		26	26
High Load Multi-Rotation Bearings, Guided Expansion, 350 K	EACH		2	2
			1	

FACH

EACH

EACH

EACH

SQ YD

EACH

EACH

EACH

567

224

52

20

TOTAL BILL OF MATERIAL

High Load Multi-Rotation Bearings, Guided Expansion, 650 K

High Load Multi-Rotation Bearings, Non-Guided Expansion, 75 K

High Load Multi-Rotation Bearings, Non-Guided Expansion, 200 K

High Load Multi-Rotation Bearings, Non-Guided Expansion, 50 K EACH

High Load Multi-Rotation Bearings, Non-Guided Expansion, 100 K EACH

High Load Multi-Rotation Bearings, Non-Guided Expansion, 150 K EACH

Bar Splicers

Protective Shield

Anchor Bolts, 1"

Anchor Bolts, 14"

Anchor Bolts, 1¹2"

2

8

6

6

6

4

1239

1146

224

52

20

8

6

6

6

4

672

1146



1		·						
				F.A.I. RTE.		COUNTY	TOTAL SHEETS	SHEET NO.
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				STA.		TO STA.		
				FED. R		CONTRACT		709
INDE	X OF SHE	<u>ETS</u>				CONTRACT	NU. 78	09
S-01	General Plan			S-60	Pier Plan &	Elevation	- Stage	II
S-02	Bridge Geomet	ry		S-61	Pier Details			
S-03		B.O.M., & Index of Shee		S-62	Pier & Pile I			
	Foundation Pla				Bar Splicer	Assembly		
S-05 S-06	Existing Struc	Piling & Temp, MSE Wall		S-64 S-65	Boring Logs Boring Logs			
S-07	-	ction Deck Sections		S-66	Boring Logs			
S-08	Temporary Co			S-67	Boring Logs			
S-09	Screed Plan -			S-68	Boring Logs			
S-10	Deck Elevation	ns - IL 162						
S-11	Deck Elevation							
S-12		Ramps A thru D						
S-13 S-14		Deck Elevations Deck Elevations						
S-15		& Pour Sequence						
S-16	Deck Plan -							
S-17		mps A & B-Top Bars						
S-18		mps A & B-Bottom Bars						
S-19		mps C & D-Top Bars						
		mps C & D-Bottom Bars ection - IL 162						
		ections - Ramps A & B						
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		i Island Details I at Ramp Corners						
		tions & Details-Ramps A,	B. & Nor	th Isla	nd			
		tions - Ramps B, C, & S						
S-30	Superimposed	Median Details						
S-31	Superstructur							
	Expansion Joi Preformed Joi							
	Bridge Draina	•						
	Drainage Scup							
S-36	Type L Railing							
	Framing Key I							
	Framing Plan Framina Plan	- Ramps A & B						
		- Ramps C & D						
	Elevation - Gi							
	Elevation - Gi		0					
		rders 3 thru 15, Top of amp Girders, Top of Girde						
		eaction Tables - Ramp G		10				
		eaction Tables - Girders						
S-47	Steel Details	- Splices						
		- Diaphragms & Bearing						
S-49 S-50		- Diaphragms & Ramp Co ti-Rotation Bearings - Fi		on-Cui	doid			
S-50 S-51	•	ti-Rotation Bearings - Fi						
	Not Used							
		t Plan & Elevation - Stag						
		t Plan & Elevation - Stag	je II					
	East Abutmen		ТΑ					
5-56 S-57		t Plan & Elevation - Stag t Plan & Elevation - Stag						
S-58	West Abutmen	-						
S-59	Pier Plan & E	levation - Stage I						
		REVISIONS NAME DATE	ILLIN	IOIS DE	PARTMENT OF	TRANSPOR	TATION	
			IL	ROUTE	E 162 OVER I-	-55/70 IN	TROY	
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