Bid Opportunity 930-2015 Wilkes Reservoir North Cell Rehabilitation

Supplemental Architectural Specifications

City of Winnipeg Water and Waste Department

METAL FABRICATIONS

Section 05 50 00 Page 1 of 3 2015-11-20

Part 1 General

1.1 REFERENCES

- .1 American Society for Testing and Materials International, (ASTM)
 - .1 ASTM A53/A53M-07, Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Steamless.
 - .2 ASTM A123/A123M-09, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - .3 ASTM A307-07b, Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.
- .2 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-G40.20/G40.21-04(R2009), General Requirements for Rolled or Welded Structural Quality Steel.
 - .2 CAN/CSA-S16.1-94(R2000), Limit States Design of Steel Structures.
 - .3 CSA W48-06(R2011), Filler Metals and Allied Materials for Metal Arc Welding (Developed in co-operation with the Canadian Welding Bureau).
 - .4 CSA W59-1989(R2001), Welded Steel Construction (Metal Arc Welding) (Imperial Version).

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Shop Drawings
 - .1 Submit Shop Drawings in accordance with the Specifications.
 - .2 Indicate materials, core thicknesses, finishes, connections, joints, method of anchorage, number of anchors, supports, reinforcement, details, and accessories.

Part 2 Products

2.1 MATERIALS

- .1 Steel sections and plates: to CAN/CSA-G40.20/G40.21, Grades 300W and 350W as required.
- .2 Welding materials: to CSA W59.
- .3 Welding electrodes: to CSA W48 Series
- .4 Bolts and anchor bolts: to ASTM A307.
- .5 Grout: non-shrink, non-metallic, flowable, 30 MPa at twenty-four (24) hours

Bid Opportunity 930-2015 Wilkes Reservoir North Cell Rehabilitation

Supplemental Architectural Specifications

City of Winnipeg Water and Waste Department

METAL FABRICATIONS

Section 05 50 00 Page 2 of 3 2015-11-20

2.2 FABRICATION

- .1 Fabricate work square, true, straight and accurate to required size, with joints closely fitted and properly secured.
- .2 Use self-tapping shake-proof flat headed screws on items requiring assembly by screws or as indicated.
- .3 Where possible, fit and shop assemble work, ready for erection.
- .4 Ensure exposed welds are continuous for length of each joint. File or grind exposed welds smooth and flush.

2.3 FINISHES

2.4 Galvanized: to ASTM A123/A123M-09, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.

2.5 LIST OF PRINCIPLE ITEMS

- .1 Items below are principle items only. Refer to Drawing details for items not specifically listed.
 - .1 Drip plates
 - .2 Rods

Part 3 Execution

3.1 ERECTION

- .1 Do welding work in accordance with CSA W59 unless specified otherwise.
- .2 Erect metalwork square, plumb, straight, and true, accurately fitted, with tight joints and intersections.
- .3 Provide suitable means of anchorage acceptable to Contract Administrator such as dowels, anchor clips, bar anchors, expansion bolts and shields, and toggles.
- .4 Exposed fastening devices to match finish and be compatible with material through which they pass.
- .5 Provide components for building by other sections in accordance with Shop Drawings and schedule.
- .6 Make field connections with bolts to CAN/CSA-S16.1, or weld.
- .7 Touch-up field welds, bolts and burnt or scratched surfaces after completion of erection.

Bid Opportunity 930-2015 Wilkes Reservoir North Cell Rehabilitation

Supplemental Architectural Specifications

Supplemental in emicetal at Specifications		
City of Winnipeg	METAL FABRICATIONS	Section 05 50 00
Water and Waste		Page 3 of 3
Department		2015-11-20

3.2 CLEANING

- .1 Perform cleaning after installation to remove construction and accumulated environmental dirt.
- .2 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION