

The following are to be included in the tender for this project and are to be completed in accordance with the specifications and all terms and conditions of the contract documents. The following changes in the bid documents are effectively immediately. This addendum will form part of the contract documents.

<b>#</b>	<b>Reference</b>	<b>Item</b>
<b>1</b>	Question  Response	Can you please provide a floor coating specification that can be applied to wet concrete?  The specified primer and sealant can be applied to wet concrete as long as no ponding water or moisture coming through the concrete.
<b>2</b>	Question  Response	Please provide details for mezzanine grating as stated 3.2.8 specification section 233100 sheet metal.  Section 233100 has been renamed 055000. Mezzanine grating does not apply to this project. Stair tread is specified on detail 4/S100.
<b>3</b>	Question  Response	Please provide location of specifications section 055000 metal fabrication.  Specification 233100 sheet metal has been renamed to 055000 metal fabrication. See revised specification attached.
<b>4</b>	Question  Response	For drawing S-100, detail 2/S100: Please provide quantity or area of needs to be patched of the patch sump pit wall.  Contractor to provide for patching the entire surface of sump pit after hydrodemolition
<b>5</b>	Question  Response	For drawing S-100, detail 3/S100: In reference to repair of cracked wall at entrance of tunnel. Do we have to include for installation steel angle at the vertical edge of wall?  No angle channel is required at the vertical edge of wall.

		
6	Question	The tender documents do not indicate the need for crack injection in the pit area. Without proper sealing of existing cracked walls & floors, the moisture will pose a challenge when applying the specified product. Please advise if further works are required.
	Response	We do not anticipate any crack injection in the pit walls.
7	Question	The valve at the output of the pumps is specified at 2-1/5". But the specified valve is only offered to 2". Should the valve be throttle down to 2" to accommodate the specified valve? Or we be supplying a flanged 2.5" valve?
	Response	Use a 2-1/2" Kitz 69 full port ball valve for use on copper discharge lines from pumps. Use flanged valves as specified for isolation piping larger than 3" Ø see attached cutsheet.

Enclosed: 5 pages

End of Addendum No. 001

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## PART 1 - GENERAL

### 1.1 GENERAL REQUIREMENTS

- .1 Division 1, General Requirements, is a part of this Section and shall apply as if repeated here.

### 1.2 WORK IN OTHER SECTIONS

- .1 Related Work Specified in Other Sections
  - Section 03 30 00 : Cast-in-Place Concrete
  - Section 05 12 00 : Structural Metal Framing
- .2 Products Supplied Under Work of This Section  
and Installed Under Work of Other Sections
  - Section 03 30 00 : To install anchors, bolts and inserts

### 1.3 REFERENCE STANDARDS

CSA S16-09: Design of Steel Structures  
CSA W59-03 (R2008): Welded Steel Construction (Metal Arc Welding)  
G40.20-04: General Requirements for Rolled or Welded Structural Quality Steel  
G40.21-04 (R2009): Structural Quality Steel  
CSA W47.1-09: Certification of Companies for Fusion Welding of Steel  
W48-06: Filler Metals and Allied Materials for Metal Arc Welding  
CAN/CSA G164-M92 (R2003): Hot Dip Galvanizing of Irregularly Shaped Articles  
The Ontario Building Code, (O. Reg. 350/06)

### 1.4 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Indicate connections, details, dimensions, and all other data as required to accommodate installation.

### 1.5 PRODUCT HANDLING

- .1 Deliver materials as required for erection. If storage becomes necessary stack materials on wood blocking clear of ground and tilted slightly so as to avoid water lying on the material. Storage area to be as close to the building as is practical. Protect finished surfaces from damage or rust.
- .2 Damaged materials shall be replaced by this Contractor without extra cost to the Owner.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- .1 Steel Sections and Plates: to CAN/CSA-G40.21, Grade 350W.
- .2 Hollow Structural Sections: to CAN/CSA-G40.21 Grade 350W.
- .3 Welded Wire Fabric: WWF 50 x 50 x MW11.1 x MW11.1.
- .4 Welding Materials: to CSA W48 Series.
- .5 Hot rolled structural steel shapes: to CAN/CSA-G40.21, Grade 350W.
- .6 Galvanizing: hot dipped galvanizing with zinc coating 600 g/m<sup>2</sup> to CAN/CSA-G164-M92.
- .7 Stainless Steel: bars and rods to ASI Type 316, No. 4 finish.
- .8 Anchors: strap type or approved self drilling type minimum 3 per member.
- .9 Fasteners: as shown on drawings and as required for secure anchorage.

## PART 3 - EXECUTION

### 3.1 FABRICATION

- .1 The jointing in built-up sections shall be made with hairline joints in the least conspicuous location and manner. All work shall be assembled in the most substantial manner and reinforced where necessary with similar fastenings. All screws shall be countersunk unless otherwise noted.
- .2 Provide positive anchorage to the building structure by means of through bolts, welding, or approved inserts cast into the building structure.
- .3 All metal fabrications to be hot dip galvanized. Touch up any galvanized surfaces damaged after erection with galvafruid paint as approved by the Consultant.
- .4 All items shall be fabricated, finished and assembled in the shop as much as possible, consistent with the size and shipping problems. Assembly on the job shall be kept to a minimum.
- .5 All welds, unless noted specifically otherwise, are to be continuous where exposed and ground smooth.

### 3.2 SCHEDULE OF FABRICATION

- .1 Generally: Ensure that all Drawings and Specification Sections, including those for architectural, structural, mechanical and electrical work, are consulted to establish the limits of work included in this Section.

- .2 Columns, Plates and Anchor Bolts:
  - : Steel of sizes shown on structural drawings, details.
  - : Finish: galvanized.
  
- .3 Miscellaneous Channels and Clip Angles:
  - : Provide all miscellaneous fastenings required, including supports, anchor bolts and other items as required and indicated to complete all work as part of this project.
  - : Finish: galvanized.
  
- .4 Fixed Steel Bollards:
  - : Schedule 40 steel pipe, quantity, sizes and lengths as detailed on the drawings.
  - : Finish: galvanized.
  
- .5 Handrail at platform level:
  - : 38mm dia. steel pipe, connection plates to be per drawings.
  - : Finish: galvanized.
  
- .6 Sump Pit Covers and Frames:
  - : As detailed on drawings.
  - : Finish: galvanized.
  
- .7 Access Ladder:
  - : Steel bar, quantities, sizes and lengths as detailed on drawings.
  - : Finish: galvanized.
  
- .8 Mezzanine Grating:
  - : As detailed on drawings and in locations shown.
  - : Construct at the discretion of the fabricator and as detailed on the drawings for entire assembly to support not less than 3.6kN/m<sup>2</sup> live load and to provide clearances as required in accordance with the Ontario Building Code.
  - : Supply all miscellaneous structural supports, bearing and anchorage as required for a complete installation.
  - : Finish: galvanized.
  
- .9 Anchors and Fasteners:
  - : Provide as shown all anchors either welded to components or supplied loose for securing all items noted in this Section.

### 3.3 ERECTION

- .1 Erect work in accordance with shop drawings and in co-ordination with trades whose work relates to this Section.
- .2 Erect work plumb, straight, square and accurately fitted with tight joints at intersections.
- .3 Where possible install work in one continuous piece.
- .4 Anchor all components to structure, walls, floors as required with weld or other methods of anchorage approved by the Consultant.

### 3.4 TOUCH-UP AND REPLACEMENT

- .1 Touch up adjacent galvanized surfaces burned, scratched or otherwise damaged during erection with galvafruid when erection is completed.
- .2 Paint over bare areas on galvanized surfaces and welds with zinc rich paint.
- .3 Replace damaged or unacceptable materials indicated by the Consultants.

END OF SECTION