

**INFORMATION FROM A D D E N D U M NO. 1**  
**OF CONTRACT 13-078**

**DELETE**      **the following specifications**  
01 31 00      Project Management and Coordination

**ADD**            **the following specifications**

01 31 00      Project Management and Coordination (dated May 29, 2013)  
03 10 00      Concrete Form Work and Reinforcing  
03 35 00      Concrete Finishing

**ARCHITECTURAL SPECIFICATIONS**

Item 1.0 Specification Section 01 31 00 - Project Management and Coordination

- 1.1 Page 8. Remove article 26.15 'Existing Building Survey'.
- 1.2 Page 15; Appendix "A"; remove followings:
  - Item 1.0 (Identification of participants): remove Regional Manager & Store Director
  - Item 2.0 (Point People): Remove "Owner's (district manager) " & " Owner's (store manager)"
  - Item 6.0 (Schedule of Submissions): Remove "Existing Building Survey"
  - Item 10.0 (security): Remove "Night work – coordinate with staff"
  - Item 11.0 (Deliveries): Remove "Receiving binder" And "Use the equipment list as a means to keep track of fixtures, equipment, and any items being delivered for job during the construction period".
- 1.3 Page 19: Revise Appendix "C" as per attached.

Item 2.0 Specification Section 01 31 13 ' Project Coordination'

- 2.1 Page 3. Remove article 1.4.5" Security grilles, supply and installation"

Item 3.0 Specification Section 01 35 13 "Special Project Procedures'

- 3.1 Page 1. Remove article 1.2 "existing Facilities and New Construction" and the clauses: 1.2.1; 1.2.2; 1.2.3, and 1.2.5.
- 3.2 Page 1. Remove article 1.3.8.

Item 4.0 Specification Section 01 50 00 - Temporary Facilities & Temporary Controls

- 4.1 Page 1. Revise 1.2.4. to delete ".....when the store is LOCKED DOWN"
- 4.2 Page 1. Revise 1.4.1. to delete ".....with-in the back room storage area"

Item 5.0 Specification Section 01 74 00 'Cleaning and Waste Management'

- 5.1 Page 1. Revise 1.4.4 to read "The contractor is to schedule daily cleaning of the Building. This cleaning is to include the wet mopping of all floors and dusting."
- 5.2 Page 1. Remove 1.4.5. 2

Item 6.0 Specification Section 05 55 00 'Metal Fabrication

- 6.1 Add to the list of Schedule of Miscellaneous metals 3.4.5.:  
3.4.5: Sign mounted pole (Barrier Free Parking Sign): Provide 1 ½" diameter pipe; hot dipped galvanized finish. Set pole into concrete and extend 4'-0" (1200 mm) above finished grade and 4'-0" below grade/slab or as noted. Coordinate exact pole locations with the Owner's Project manager.

Item 7.0 New Specification Sections

- 7.1 New Specification Section: Section 03 10 00 - Concrete Formwork and Reinforcing.
- 7.2 New Specification Section:: Section 03 35 00 - Concrete Finishing.

**ARCHITECTURAL DRAWINGS**

Item 1.0 Reference Drawing SP-1 'Site Plan'

- 1.1 Contractor to verify the location of existing hydro line from hydro pole to hydro service entrance to the Building, and to provide necessary protection when excavating for the new foundations.

Item 2.0 Reference Drawing AD-110 'Demolition Floor Plan'

- 2.1 Add to the Drawings Notes for: Saw cut for the new Mechanical Plumbing.

Item 3.0 Reference Drawing A-110 'Floor Plan'

- 3.1 Add to the he Drawings Notes: Provide Wood Blocking for all the washroom Accessories.

Item 4.0 Reference Drawing A-111 'Floor Finish Plan'

- 4.1 Remove the hatch on drawings indicating the locations of new sanitary drainages. Refer to Mechanical Drawings for complete scope.

Item 5.0 Reference Drawing A-401 'Details'

- 5.1 Revise the note "6 mil poly wrap" to "Air Barrier- Tyvek " on details # 2,3,5, and 6.

Item 6.0 Reference Drawing A-301, 302 , 303 ' Wall Sections'

- 6.1 Revise the roof Insulation R value to R-30.

Item 7.0 Reference Drawing D-1 Island Millwork

- 7.1 Add to the drawing D-1 Island Millwork detail which provides details on the interior millwork to be supplied and installed as a separate price.

## **MECHANICAL**

### Item 1.0 Reference Drawing M101 and sketch SKM-1

- 1.1 Revise location of existing 6" diameter supply air take-off ad connected 18 x 10 supply air duct to reflect existing site conditions as per SKM-1

### Item 2.0 Reference Drawing M403

- 2.1 Revise item 19 in Part B of Mechanical specification as follows: "Insulate all domestic hot and cold water piping. Insulation shall be 1: (for piping under 1 ½" diameter) or 1 ½" (for piping 1 ½" diameter or larger) fibreglass insulation with vapour barrier. Install as per manufacturer's recommendation. Recover exposed piping with 6 ounces canvas jacket and two coats of lagging adhesive."

## **ELECTRICAL**

### Item 1.0 Reference Drawing E101 and sketch SKE-1

- 1.1 Revise note #4 to read as follows: "Indicates surface mounted conduit feeding outside pylon sign. At this location, provide access door at LB fitting.
- 1.2 Revise note #7 to read as follows: "Indicated junction box is to be extended to suit new ceiling/wall finish. Provide stainless steel cover plate.
- 1.3 Revise notation on devices as per sketch SKE-1

### Item 2.0 Reference Drawing E201, E301 and sketches SKE-2 to SKE-5

- 2.1 Add the new room names to drawings E201 and E301 as per sketches SKE-2 and SKE-3.
- 2.2 New panel '4' to be a 72 circuit panel as per sketch SKE-4.
- 2.3 In Light Fixture Schedule, add manufacturer equal to item 'A' and revise item 'C' as per sketch SKE-5.

### Item 3.0 Reference Drawing E301 and sketch SKE-6

- 3.1 In Equipment Wiring Schedule, in control device column, revise ON/ON/SELECTOR to read 'PUSH BUTTON'.
- 3.2 Provide junction box with associated note as per sketch SKE-6

### Item 4.0 Reference Drawing E40

- 3.1 In electrical specification:
  - Delete note #8 under 'Disconnect Switches'.
  - Delete note #17 under 'Panel boards'.
  - Delete note #3 under 'Occupancy Sensors'.
  - Revised note #10 under 'Fire Alarm Systems' to read "Update annunciator to suit new zone".

**APPENDIX 'C'  
 GENERAL LIST OF  
 PRE-OCCUPANCY LIFE SAFETY REQUIREMENTS &  
 PROJECT CLOSE OUT DOCUMENTS**

	Item
	<b>Architectural Requirements</b>
1.	All doors and hardware to operable. Automatic door operator & exit devices to operate (energized).
2.	Clear path of travel to all required exits
3.	All fire rating/stopping in place
4.	Sidewalks/pads at entrances
5.	Flooring (completed).
6.	Washrooms (operational)
	<b>Mechanical &amp; Electrical completion Requirements</b>
1.	Emergency lighting & Exit signs
2.	General Lighting
3.	Exterior building and parking lot lighting
4.	Heating system
5.	Exhaust systems
	<b>Project Close Out Documents</b>
1.	Final City Inspection and Occupancy Certificate
5.	Sprinkler Design Engineer's Letter (N/A)
	Final Electrical Inspection Certificate
6.	TSSA Gas Pressure Test Tag (copy)
9.	Fire Alarm Engineers System/ Letter c/w hood suppression system
10.	Commissioning of roof top units.
11.	Fire Alarm System - Engineers Verification letter (Alberta only).
14.	Potable water test
15.	As Builts Drawings in electronic and paper formats
16.	Maintenance Manuals 5 days after substantial performance
17.	Operating Instruction to Owners & Systems Demonstrations
18.	Contract Cost Summary from GC.
19.	Warranties, Guaranties, Spare Materials, As built Drawings
21.	Final Utility Readings to Reconcile Energy Costs During Construction

**DIVISION 03 - CONCRETE**

**PART 1 - GENERAL**

**1.1 GENERAL REQUIREMENTS**

- .1 The Instructions to Bidders, the General Conditions of CCDC 2 -1994, Supplementary Conditions and all Sections of Division 01 apply to and form part of this section of the specification.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

- .1 Cast-In-Place Concrete Section 03 30 00
- .2 Concrete Finishing Section 03 35 00

**1.3 WORK INSTALLED BUT FURNISHED BY OTHERS**

- .1 Install all inserts, plates, dovetail slots, anchor bolts and other related items supplied by other Sections and required to be cast in the concrete to receive the work of those Sections.

**1.4 QUALITY ASSURANCE**

- .1 Requirements of Regulatory Agencies Applicable Codes and Standards governing the work of this Section:
  - .1 O.B.C. Ontario Building Code 2006
  - .2 CSA CAN3-A23.1&2-M94 Concrete Materials and Methods of Concrete Construction.
  - .3 Methods of Test for Concrete ACI SP4
- .2 Do reinforcing work to CAN3-A23.1-M94, CAN/CSA – S269.3-M92 and CAN3-A23.3-M94 and welding of reinforcing to CSA W186-1990, except where otherwise specified.
- .3 Upon request, provide the Consultant with a certified copy of mill tests of steel supplied, showing physical and chemical analysis.
- .4 Refer to general notes on structural drawings.
- .5 Design
  - .1 The design and engineering of the formwork, as well as its' construction, shall be the responsibility of the Contractor.

1.4 **QUALITY ASSURANCE (CONT'D)**

- .2 Forms shall be of sufficient strength and rigidity to support all concrete and construction loads and wind, taking into account proposed rate and method of pouring concrete so that the resultant finished concrete shall conform to the shapes, lines and dimensions of the members shown on the drawings.
- .3 The formwork shall be designed for the loads and lateral pressures outlined in the ACI publication "Formwork for Concrete SP" and wind pressures and allowable stresses as set down in the National Building Code and in accordance with GSA CAN3-A23.1&2.

- .6 False work to be in accordance with CSA – S269.1- 1975.

1.5 **SUBMITTALS**

.1 Shop Drawings

- .1 Prepare shop drawings according to ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI) 315-80 and the Metric Supplement issued by the Reinforcing Steel Institute and to a minimum scale of 1/4"=1'-0". Detail walls and grade beams in full elevation.
- .2 Clearly indicate bar sizes, spacing, location and quantities of reinforcement, welded wire fabric, chairs, spacers and hangers with identifying code marks to permit correct placement without reference to structural drawings.
- .3 Provide details to show placement of reinforcing where special conditions occur.
- .4 Submit for the Architects review, shop drawings showing type, extent and location of items to be cast in, and opening to be formed in concrete work, prior to placing of concrete. Shop Drawings to be submitted in accordance with the General Requirements.

1.6 **SUBSTITUTES**

- .1 Substitutes of different size bars will be permitted only upon written approval of the Engineer.

**PART 2 - PRODUCTS**

2.1 **MATERIALS**

- .1 General - use materials specified herein or approved equal as defined in General Requirements.
- .2 Forms - shall be constructed from either steel or wood to conform to the shape, lines and

- 2.1 dimension of the finished concrete as called for in the drawings.
- MATERIALS (CONT'D)**
- .3 Lumber: plywood and wood formwork materials conforming to CAN3-A23.1-M77, Clause 11.3.
- .4 Form stripping agent: non-staining, colourless, mineral oil free of kerosene and compatible with the permanent finish coating of the concrete surface.
- .5 Form ties: removable or snap-off ties, fixed or adjustable length, free of devices that will leave holes larger than 25 mm Clause 11.4. Twisted wire ties will not be accepted.
- .6 Reinforcing steel: new billet steel, grade 400 deformed bars conforming to CSA G30.12-M1977, unless indicated otherwise.
- .7 Chairs, bolsters, bar supports, spacers: adequate for strength and support to reinforcing construction conditions.
- .8 Nails, spikes, lag bolts, through bolts, anchorages: Sized as required; of sufficient strength and character to maintain formwork in place while pouring concrete.
- .9 Rigid Insulation for under slab: Styrofoam HI-40 by Dow Chemical Canada Inc. - Rigid blue coloured closed cell extruded expanded polystyrene insulation board to requirements CAN/ULC S701 Type 4, thickness as noted on drawings or "Foamular 400" by Owens Corning.
- .10 Rigid Insulation for Foundation Wall: Styrofoam SM insulation, 30 psi by Dow Chemical Canada Inc. or Celfort 300 by Owens Corning.

### **PART 3 - EXECUTION**

- 3.1 **PREPARATION**
- .1 Verify all lines, levels and column centres before proceeding with any work and ensure that all dimensions agree with the drawings.
- .2 Check the drawings and specifications for the requirements of other trades which will affect the forming, placing of concrete, and reinforcing steel.
- .3 Give instructions and information, in writing, or by schedules, to other trades, of the requirements necessary for services, materials or inserts prepared and/or supplied by other trades which will affect the work of this Division.

### 3.2 INSTALLATION OF FORMWORK

#### .1 General

1. Verify lines, levels and column centres before proceeding with formwork and ensure that dimensions agree with Drawings.
2. Design and install forms and shores so as to carry the load of the fresh concrete plus and additional loads which may be applied without settlement and lateral displacement.
3. Camber formwork for 6 mm per 3 metre of span unless shown otherwise. Maintain slab thickness from cambered surface. The camber noted shall be to the concrete surface before stripping of the forms.
4. Use new form plywood for concrete surfaces which will be exposed to view.
5. Forms shall be constructed sufficiently tight to prevent the loss of mortar from the concrete. Chamfer strips shall be placed in the corners of forms to produce bevelled edges on permanently exposed surfaces.
6. Positive means of adjustment of shores and struts by means of wedges or jacks shall be provided and all settlement shall be taken up during concrete operations. Forms shall be securely braced against lateral deflections.
7. Runways for moving equipment shall be provided with struts or legs shall be supported directly on the formwork or structural member without resting on the reinforcing steel.
8. Form accessories to be partially or wholly embedded in the concrete, such as ties and hangers, shall be constructed so that the ends or end fasteners can be removed without causing appreciable spalling at the face of the concrete. After the ends or end fasteners of form ties have been removed the embedded portion of the ties shall terminate not less than 2 diameters or twice the minimum dimensions of the tie from the formed face of the concrete.
9. Wedges used for final adjustment of forms prior to concrete placement shall be fastened in position after the final check.
10. Construction joints shall be made only where located on the drawings and shall incorporate the keyways and any continuous reinforcement. The contact surface of the form sheathing for flush surfaces exposed to view shall overlap the hardened concrete in the previous placement by not more than 1 inch. The forms shall be held against the hardened concrete to prevent offsets or loss of mortar at the construction joints and to maintain a true surface.



3.2 **INSTALLATION OF FORMWORK (CONT'D)**

11. All surfaces of forms and embedded materials shall be cleaned of any accumulated mortar or grout from previous concreting, and of all other foreign material before concrete is placed in them.
12. Before placing the reinforcing steel and the concrete, the surfaces of the forms shall be coated with an approved, non-staining, form release agent that will effectively prevent absorption of moisture and prevent bond with the concrete. Excess form oil shall not be allowed to stand in puddles on the forms or to come into contact with hardened concrete against which fresh concrete is to be placed, or reinforcing steel.
13. Install all inserts, plates, dovetails slots, anchor bolts and other related items supplied by other Sections and required to be cast in the concrete to receive the work of those Sections. The Section requiring the built-in item will supply the items as well as setting drawings indicating the location and tolerances to which this Section will work.

.2 Construction Tolerances

- .1 Formwork shall be constructed so that the concrete surfaces will conform to the tolerance limits listed in CSA CAN3-A23.1&2.

3.3 **FABRICATION OF REINFORCING STEEL**

- .1 Fabricate reinforcing steel according to CAN3-A23.1-M90.
- .2 The Consultant is to approve locations of reinforcement splices not indicated on Drawings.
- .3 Fabricate reinforcing steel within the following tolerances:
  - .1 Sheared length: plus or minus 25 mm.
  - .2 Stirrups, ties and spirals: plus or minus 12.7 mm.
  - .3 Other bends: plus or minus 25 mm.
- .4 Ship bundles of bar reinforcement clearly identified in accordance with bar lists.

3.4 **PLACING REINFORCEMENT**

- .1 Place, support and space reinforcement in alignment to position indicated and as follows:
  - .1 Slabs-on-grade, beams, structural slabs, supports reinforcement on and secure to support.
  - .2 Beams: secure top reinforcement to stirrups.

- 3.5           .3       Beams and columns: laterally support along.
- WELDING OF REINFORCING BARS**
- .1       Unless Consultant's approval is obtained in writing, no welding of reinforcing bars is permitted.
- 3.6           **INSPECTION**
- .1       Obtain Consultant's approval of reinforcing steel and placing of reinforcement prior to placing concrete.
- 3.7           **TREATMENT OF FORMED SERVICES**
- .1       Forms shall be left in place until concrete is capable of supporting itself and any super-imposed loads, without overstress. This period shall be at least 1 day in temperatures above 40°F, or 2 days in temperatures below 40°F. Also elephant trunks shall be used where the drop of concrete exceeds 1.5m. No formwork shall be removed without the permission of the Engineer.
- .2       Immediately after the removal of forms, all bolts and ties and nails or other metal not specifically required for construction purposes shall be removed or cut back to a depth of at least 15 mm from the concrete surface. Such areas shall have their edges as nearly perpendicular to the surface as possible, and shall be sufficiently deep to hold a patching mortar.
- .3       All cutout areas and cavities shall be saturated with water and repaired. Scrub the surfaces to be patched with neat cement paste and fill with a finishing cement mortar using the same sand and cement as that used in the concrete. On exposed formed surfaces, blend with white cement to obtain finish colour to match surrounding concrete surfaces.
- .4       In areas of honeycomb, and where other repair is required in the view of the Engineer, the Contractor shall, at his expense, remove the defective areas and fill with polymer- modified mortar placed in strict accordance with the manufacturer's recommendations.
- .5       Additional finish requirements, where required by the Engineer, shall be provided as required and as shown on the Drawings.
- 3.8           **REMOVAL OF FORMS**
- .1       The following table may be used as a guideline for the removal of forms and supports provided the concrete has been kept at 16 degrees Celsius during intervening period between casting and form removal. Should the Contractor request to remove the forms in less than the minimum time shown in the table, he shall, at his own expense, furnish evidence satisfactory to the Architects that the compressive strength of the concrete is equal to or greater than required in the guide chart.

- |     |    |   |         |
|-----|----|---|---------|
| 3.8 | .1 | Columns, Pedestals  | 2 days  |
|     |    | <b>REMOVAL OF FORMS (CONT'D)</b>  |         |
|     | .2 | Side forms on beams and walls   | 2 days  |
|     | .3 | Soffit forms on beams   | 14 days |
|     | .2 | The Contractor shall be responsible for the safety removal of all formwork.                                     |         |
|     | .3 | The Contractor shall be responsible for the safety of the structure both before and after the removal of forms. |         |

END OF SECTION

**DIVISION 03 - CONCRETE**

**PART 1 - GENERAL**

**1.1 GENERAL REQUIREMENTS**

- .1 The Instructions to Bidders, the General Conditions of CCDC2 - 1994, Supplementary Conditions and all Sections of Division 01 apply to and form part of this section of the specification.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

- .1 Concrete Formwork and Reinforcing Section 03 10 00
- .2 Cast-In-Place Concrete Section 03 30 00

**1.3 QUALITY ASSURANCE**

Requirements of Regulatory Agencies

- .1 Applicable Codes and Standards governing the work of this Section.
- .2 Related Standards
  - .1 CSA A23.1-04 Concrete Materials and Methods of Concrete Construction.
  - .2 CSA A23.2-04 Methods of Tests for Concrete.
  - .3 ASTM C 260-01 Air Entraining Admixtures for Concrete.
  - .4 ASTM C 494-04 Chemical Admixtures for Concrete.
- .3 Except as otherwise specified, placing, finishing, curing, joint cutting, and forming and temperature control of concrete slabs on which surface hardeners are to be applied, shall be in accordance with 1.2.1. and 1.2.2. clauses-2.1 and 2.2.
- .4 Work shall be done by a Firm and by Mechanics with at least five years experience in this type of work and who are members of the Concrete Floor Construction Association.

**1.4 WARRANTY**

- .1 Contractor shall warrant that materials and workmanship shall be free of defects in accordance with General Conditions for an extended period of one year.

**1.5 SUBMITTALS**

- .1 Submit manufacturers' product data, performance criteria and other documentation for each material specified in this section that is proposed for use including, but not limited to following:
  - .1 Admixtures
  - .2 Curing Compounds
  - .3 Sealing Compounds
  - .4 Surface Hardeners
  - .5 Joint Filler

**PART 2 - PRODUCTS**

**2.1 MATERIALS**

- .1 General Use materials specified herein or approved equal as defined in General Requirements.
- .2 Non-Metallic Hardener : Surfex by Euclid Canada or Mastercron FF by BASF. Refer to Finish Schedule.
- .3 Curing and Sealing Compound: "Diamond Clear" by Euclid Canada or Kure-N-Seal 25 by BASF in areas receiving a floor finish or on exposed concrete finish.
- .4 Joint filler for sawn control joints:
  - .1 For Interior Areas, joint filler to be grey or as selected by the Architect, "Euco 700" by Euclid Canada or "Load Flex" by Sika Canada or other approved manufacturer.
  - .2 For general retail area: Green Concrete Primer over new green concrete substrates.
  - .3 Open Floor Areas: " Euco 700" or "Load Flex" or "Euco QWIKJOIINT 200",  
Colour to be: Grey
- .5 Existing Concrete Floor: " Euco Diamond Hard" by "Euclid Canada".
- .6 For Heal and Seal concrete and penetrating shrinkage cracks: " Dural 50" by "Euclid Canada".
- .7 For Control Joints, Fixture Grouting: " Euco # 452" Epoxy system by "Euclid Canada".
- .8 Follow manufacturer's instruction for surface preparation, direction for use and precautions/

limitations.

**PART 3 - EXECUTION**

**3.1 PREPARATION**

.1 Examination

Before work commences ensure that all preceding work has been completed in accordance with the specifications. Report any deficiencies to the Architects before proceeding with the work.

**3.2 INSTALLATIONS**

Floor Finishes

.1 Unless otherwise specified or directed all floors within the building shall be finished with a power float and power trowel to finish the surface to a smooth, even finish.

.2 Conform to the requirements of CSA A23.1&2-04 Finishing and/or as hereinafter specified.

.3 Employ a minimum amount of hand trowelling to remove any machine marks after the power trowelling.

.4 Provide a non-slip, spin trowel finish where directed.

.5 Secure the Architects approval of finished surfaces before leaving any area.

.6 Cure and protect the surface of finished floors and roofs in accordance with CSA A23.1.

.7 Keep traffic, which would affect and/or otherwise disturb the curing procedures, off the finished surface for a period of seven (7) days minimum.

.8 Protect exposed concrete finishes against damage until the building is accepted by the Architect.

.9 Protect floors which are to receive an Architectural finish against contamination by oil, paint or other deleterious materials.

.10 Floors in all rooms with an exposed concrete floor finish shall receive a non-metallic hardener and curing & sealing compound, applied strictly in accordance with the manufacturer's directions at the rate of 3.9kg/m<sup>2</sup> - 5.0kg/m<sup>2</sup> (80 lbs. to 100 lbs. per 100 s.f.) of surface.

3.2           **INSTALLATIONS (CONT'D)**

- .11       The selected mineral aggregate for the dry shake shall be applied immediately before power floating begins. As soon as concrete is firm enough to support the weight of workmen and their equipment and NO surface water is present, apply the first shake of material. Treat areas adjacent to walls and columns first. Spread the material evenly by sprinkling at right angles in two passes close to floor level. Do NOT broadcast from the stationary position. Approximately two-thirds of the material shall be broadcast uniformly over the surface. Power floating shall begin immediately after application of the dry shake. Work wall, column and door areas first. After this material is adequately embedded or blended into the surface by power floating, the remaining one-third of the material shall be applied to the surface at right angles to the previous application. During the second application, care should be exercised to apply sufficient material to all areas to secure uniform coverage.

3.3           **FINISHING OF FORMED CONCRETE SURFACE**

- .1       Conform to the requirements of Cast-In-Place Concrete: Section 03 30 00, except as hereinafter specified.

END OF SECTION