



# ADDENDUM

Project Title: Carleton – Sewell Parking Garage	Addendum No: 5
Tender No: <b>2010-081209T</b>	Date: December 8, 2010

Make the following modifications to the above project. Include in the amount of the tender, any additions to or deductions from the cost of the work by reason of these instructions.

The following documents and drawings which form part of addendum #4, are available to download from the City's website at <a href="www.saintjohn.ca">www.saintjohn.ca</a> under the menu option "Tenders and Proposal".

Modifications: (Pages 1-2); Responses to Questions: (Pages 1-9); Architectural & Structural Addendum: (Pages 1-7),

> Sketches A303SK-01, A403SK-01, A403SK-02, A403SK-03, A403SK-04, A403SK-05, A404SK-01, A404SK-02, A404SK-03, A601SK-01, A601SK-02;

Structural Metal Framing – Div 5: Section 05410 (Pages 1 - 7);

Electrical Addendum: (Pages 1 - 1)

Materials and Fleet Management

<u>Bidders are to sign and attach this Addendum to their tender submission. Failure to do so will result in rejection of your tender.</u>

Also, to confirm receipt of this addendum, you are requested to complete the attached confirmation page and return by fax immediately.

#### SIGN AND RETURN THIS ADDENDUM WITH YOUR TENDER

BY:	
Dave Logan	Contractor's Signature
Purchasing Agent	



RECEIVER SIGNATURE:



#### CONFIRMATION - RECEIPT OF ADDENDUM

# Upon receipt of this document, fax this page to (506) 658-4742 to confirm receipt of this addendum.

Project litle: Carleton – Sewell Parking Garage	Addendum No: 5
Tender No: <b>2010-081209T</b>	Date: December 8, 2010
CONTRACTOR NAME:	
ADDRESS:	
PHONE: FAX	
RECEIVER NAME (PRINT)	

This Addendum forms part of the Contract Documents and is to be read, interpreted, and coordinated with all other parts. The cost of all contained herein is to be included in the Tender Price. The following revisions supersede the information contained in the original drawings and specifications issued for the above-named project to the extent referenced and shall become part thereof. Bidders are to sign and attach the cover page of this addendum to their tender submission. Failure to do so will result in rejection of your tender

#### **DIVISION 00 – GENERAL REQUIREMENTS**

#### SECTION 004100 - FORM OF TENDER

#### 3. BONDING COMMITMENTS

#### 3.1 Tender (Bid) Bond

Paragraph 2 should read:

Provided is a Tender (Bid) Bond payable to **The Saint John Parking Commission** in the amount equal to or exceeding ten percent (10%) of the Tender Price.

#### SECTION 007300 – SUPPLEMENTARY CONDITIONS

Add after Owner's the following words "or the City's" to paragraph 3.2.5.

Add after Owner the following words "or the City" to paragraph 3.2.6.

<u>Add</u> after the sentence "[...] other than that resulting from the work of the *Owner*" the following words "or the *City*," to paragraph 3.13.2.

Add after Owner the following words "or the City" to paragraph 3.13.3.

**<u>Delete</u>** all references to "party" and <u>substitute</u> with "*Party*" in paragraph 6.6.4.

<u>Delete</u> after the semicolon in the fourth line the sentence with "...however, if such cost..." in its entirety and **add** a comma after "*Contract Price*," in subparagraph 7.1.5.3.

**<u>Delete</u>** in the first line "work" and <u>substitute</u> with "*Work*" in paragraph 7.2.6.

**<u>Delete</u>** the words "property adjacent to the *Place of the Work*" and **<u>substitute</u>** with "all properties neighbouring, adjacent to or contiguous with the *Place of the Work*" in subparagraph 9.5.2.2.

Renumber heading GC 13.2 CONSTRUCTION LIENS to GC 13.1 CONSTRUCTION LIENS.

**Renumber** paragraph 13.2.1 to 13.1.1.

**Renumber** paragraph 13.2.2 to 13.2.1.

**Renumber** heading GC 13.3 CONTRACTOR DISCHARGE OF LIABILITIES to GC 13.2 CONTRACTOR DISCHARGE OF LIABILITIES.

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Addendum #5

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Renumber paragraph 13.3.1 to 13.2.1.

**Renumber** heading GC 13.4 RECORDS/DAILY REPORTS/ DAILY LOGS to GC 13.3 RECORDS/DAILY REPORTS/ DAILY LOGS.

**Renumber** paragraph 13.4.1 to 13.3.1.

Renumber paragraph 13.2.2 to 13.1.2.

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- Question 1- For the shoring rock anchors do you require a Duct Retainer (Trumpett) attached to the underside of the 300 x 300 x 30 galv. plate.
- Answer 1 A trumpet may be used if desired.
- Question 2 Are the rock anchors on Drawing S301 & S302 a DCP anchors or plain bar. What grade of bar is required for these anchors.
- Answer 2 Anchor shall be DCP and designed to resist the factored loads shown on the drawings.
- Question 3 Please indicate if anchors on S301 & S302 are to have a free stressing length and are the anchor head details the same as shoring rock anchors.
- Answer 3 A minimum free length of 150 mm is required Anchor detail similar to shoring rock anchors.
- Question 4 Supplier also asked "What are the factored loads"
- Answer 4 Loads indicated on the drawings are factored loads.

#### Question 5 - Roof Drains

The roof drains for the roof installation are specified in Section 07520, Clause 2.10.3 ACCESSORIES as Zurn Z-100 and also in Section 15400 (issued with Addendum 1), Clause 2.02.2 and .3. Who is responsible for purchasing the roof drains on this project.

Answer 5 - Roof Drains are to be supplied by Division 15

#### Question 6 - Roof Over Stair No. 1

Drawing A402 Wall Sections indicates a structural concrete deck. Drawing S207 indicated 50mm concrete on 76mm composite metal deck. Please clarify.

Drawing A207 and S207 indicate a scupper roof drain with pipe down to the Level 7 parking deck.

Drawing M009 indicates a RD-1 100mm Traffic Area Drain in a different location than that shown on A207 and S207 with I assume a RWL inside the structure.

Please clarify type of drain and location and if a scupper is required, who supplies to the roofer for installation, and who is responsible for the pipe installation on the outside wall down to the Level 7 parking deck?

Is EF-1 located on the roof or within the structure below the roof deck and exhausting through a louver on the North Elevation wall? If mounted on the roof what is the curb detail?

Detail 14 on Drawing A403 shows a Equipment Sleeper Detail for the Diesel Generator. Drawings A207 and M009 do not indicate the number of sleepers required, there direction, or length?

How many special sleeves will be required to supply the Diesel Generator with fuel and to supply the structure with electrical power in an emergency. Where will they be located and there size and the type of sleeves required (Thaler?)?

Please advise the minimum and maximum total thickness of the tapered roof insulation required including the 1 inch fiberboard overlay on this roof area.

Answer 6 – Drawing S207 is correct.

A207 and S207 are correct. Drain and downspout provide in Division 15.

Yes, EF-1 is located within the covered shaft and exhausts through the north wall of the shaft. The fan is mounted on steel beams.

Roof slopes clarified in Architectural and Structural Addendum No. 1.

#### Question 7 - Roof Over Stair No. 2

Drawing M009 shows a RD-1 100mm Traffic Roof Drain drain located in the upper left corner. Drawing A207 indicates a standard (ie Zurn Z-100) located in the lower left corner (see Detail 3 on A404). Please clarify drain location and type?

Answer 7 - A207 is correct. Provided in Division 15.

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Question 8 -Lobby & Garage Entrance Roof Area Drawing A207 and S207 indicate the 3" steel deck sloping down 100mm to one (1) drain location. Drawing M009 indicates two (2) or three (3) drain locations? Drawing Details 4 & 5 on A404 indicate a 1-1/2" flat metal deck with Tapered Insulation. Please clarify the deck required, is it sloped or flat, and the number and location of the roof drains? Answer 8 -A207 and S207 are correct. Roof drain provided by Division 15. Roof slopes clarified in Architectural and Structural Addendum No. 1. Question 9-Do progress photos have to be taken by a professional photographer or can they just be professional looking? Answer 9-Professional Quality is required. Question 10-There are no specifications for the bike racks. Answer 10-Bike rack model and suppliers are provided. There are no specifications for the access door to the vent shaft (ref A201)? Question 11 -Answer 11-Provide same door as for Parking to Mechanical / Electrical. Clarified in Architectural and Structural Addendum No. 2. Question 12-Section cut 1/A300 window openings do not match Elevation openings on A301 & A303. Answer 12-Section 1/A300 applies to openings in centre wall along line C, not exterior walls shown on A301 and A303. Question 13-There are no concrete curb & sidewalk details. Answer 13-Typical details are shown on the structural drawings. Question 14-There are no plans & details for the entrance apron in front of Lv5 entrance (ref A101). Answer 14-Refer to A205 and specifications. Question 15-There are no plans & details for the concrete slab under the precast pavers. Answer 15-Refer to A205 and specifications.

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Question 16-	Can we install our standard 1 speed fan?
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Answer 16 - No – a 2-speed fan and 3-position key switch shall be provided.

#### Question 17 - Regarding the dimensions in 2.2.12

- a) Why is the pit so deep? (2060mm) Our standard pit for this product is 1525 mm.
- b) Is this an existing pit?

#### Answer 17 -

- a) The pit has been sized to accommodate multiple suppliers, not just ATIA. Pit depth will be reused to suit successful bidder.
- b) This is not an existing pit.
- Question 18- 2.2.16 states heavy duty door operator. What is deemed to be heavy duty?
- Answer 18 A heavy duty door operator is one that easily provides the door performance specified, taking its size and mass into consideration.
- Question 19- Center opening doors do NOT meet barrier free requirements at a capacity of 3000lb/1360kgs. Is there NBC clearance for this? If side opening doors are provided then 2 Car Operating panels cannot be provided
- Answer 19 Centre doors do meet NBC barrier free requirements.
- Question 20 2.2.17 states that the control space is located on P7 when the drawings indicate it is at P6. Please clarify.
- Answer 20- The control space is located on level P6 as indicated on drawing A206.
- Question 21 Section 2.29.1 asks for swing return panel. Can we provide Otis applied return panel?
- Answer 21 No a swing return panel shall be provided.

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Question 22 -	Ref drawing C-001. There are 2 notes on this drawing regarding hydro removals (underground service, overhead service, poles) Is this work by G.C. Or S.J.E.?
Answer 22-	Removal / relocation of overhead and underground hydro services along Carleton Street will be performed by S.J.E. as part of ongoing municipal infrastructure improvements.
	Removal / relocation of overhead and underground hydro services along Sewell Street and within the property lines shall be performed by S.J.E. but coordinated by The General Contractor and paid for out of an Electrical subtrade cash allowance of \$50,000.00. This allowance includes service connection cost.
	Remaining \$50,000.00 municipal service connection cash allowance is for miscellaneous service connections as required. Total Municipal Services Cash allowance is \$100,000.00.
Question 23-	Detail 6 on drawing A209 shows typical stairs being waterproofed and painted striped stair treads. The roof finish schedule shows ceramic tile stair finish. Please clarify
Answer 23 -	Follow drawing A209.
Questions 24 -	Please provide top of curb elevations or bottom of precast elevations for the following details, 2,3,4/S301.
Answer 24-	Dimensions of openings will be as per precast supplier's requirements. Approximate dimensions 600 x 1700. Will be issued in Addendum.
Question 25 -	Could you please clarify the spacing of the line drilling. The notes and details on drawing SH-1 and SH-2 indicate two different spacings.
Answer 25 –	Correct
Question 26 -	Drawing SH-2 indicates Miradrain waterproofing at the face of the rock and shotcrete to be spaced at 3600mm, where as the product and installation procedures specified in division -2620 Foundation Drainage indicate a continuous application. Please clarify.
Answer 26-	A continuous application is required. S4-2 will be revised accordingly
Question 27-	Please provide additional dimensions on drawing S205 in order to quantify concrete work. More specifically for retaining walls and footings on grid lines 1,7 & E.
Answer 27-	This information is on Drawing S201.

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Question 29 -	Details 2,3,4,5,6/S301 show the slab on grade poured over the concrete wall. This detail requires the slab on grade to in place prior to the erection of the precast. In order to erect the precast, cranes will be required within the building area. Are we allowed to situate cranes within the building on the slab on grades? If not, the above mentioned details should be changed to show the slab on grades poured independently of the building foundation.
Answer 29-	Detail must be constructed as shown for lateral restraint of foundation. A cold joint in S.O.G is acceptable. Subject to a detailed review of proposed outrigger loading and distribution cranes may also be permitted to operate on completed S.O.G.
Question 30-	Design load of maximum 3600 kg (8000 lbs) GVW or 18 KN (4000lbs) max., concentrated load cannot be exceeded by asphalt paving equipment including transportation of the asphalt to the roof level.
Answer 30-	Agreed – will be flagged in Asphaltic Waterproofing specifications on the parking slabs.
Question 31 -	Who is responsible for design of the reinforcing in the composite topping for the flexural strength and diaphragm action? Inter-tee flange connections will be provided as per specification section 03400, clause 1.5.4 for flange alignment, but will not be used for transferring vertical service loads. The designer of the composite topping must consider load transfer across tee joints.
Answer 31-	There is no composite topping called for. Clause 1.5.4 will be revised to eliminate reference to topping. Double tee flange connection shall be designed by supplier to resist all applied loads on the parking floors.
Question 32-	Why are the importance factors on drawing S101 under design loads, assigned to seismic and snow higher than wind? It is our interpretation of the NBCC that importance factors should be the same for seismic, snow and wind because the structure is the same category. Please advise.
Answer 32-	Important Factor for Seismic is 1.0. Design loads will be corrected and issued by Addenda.

Question 33- Specification section 03400, clause 1.4.3 is contradictory with note 2 on the Lateral Force System Key Plan on contract drawing S101, as note 2 clearly indicates the loads cannot be used for overturning moments. Please clarify.

Answer 33-	The precast concrete supplier is responsible for lateral design of the precast structure to NBC 2005. The lateral load resisting system shown on the drawings represents one design solution. The foundations are designed to support seismic loads appropriate to that solution. Shop drawings provided by the precast supplier shall show all factored loads to be applied to the cast-in-place concrete structure for confirmation of design. Changes to the C.I.P. design if required will be provided for under the unit rates identified on the tender form.
Question 34-	The seismic loads caused by the panels along Line A will not be distributed to the shear walls indicated, but rather the seismic load of the wall on Line A will remain there.  Please confirm the foundation design has considered this. Similarly, the precast walls at grids 3 and 4 will transfer their own seismic load into the foundations at those locations. Please confirm.
Answer 34-	See question 33.
Question 35-	Specification section 03480, clause 1.3.10 is not consistent with reinforced concrete LSD. We propose to design connections following LSD with an additional 1.33 connection overload factor. Please confirm this will be acceptable.
Answer 35-	Confirmed.
Question 36-	We recommend the stair tower and elevator shaft be designed as independent structures to avoid the possibility of volume change restraint occurring, resulting in unexpected cracking. Please confirm if acceptable.
Answer 36-	Agreed. Supplier must provide approved seal of all precast concrete joints that is fully compatible with waterproofing systems.
Question 37-	As the 75mm topping is composite with the double tee flange, we recommends that the surface finish of the double tee be raked to minimum amplitude of 6mm to ensure good bond with the topping. Please confirm that this is acceptable.
Answer 37-	No composite topping is called for on double tee flanges.
Question 38-	Contract drawings do not indicate any snow gates that allow snow to be pushed through

the gate and eliminate snow build-up. Please be advised it will not be permitted to pile

snow and allow the snow to accumulate on the roof before removal.

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No. 1.

# Addendum #5 Responses to Questions

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Answer 38	No snow gates are to be provided. Snow will be lifted over parapet and dropped adjacent to building. Design P7 level deck from grid lines A to E and from grid lines 4a to 7 to support a uniform live load of 4.8 KPA to accommodate temporary snow accumulation.
Question 39-	At shear walls, it is our intent to tie groups of panels together, as required, to resist wind/seismic loading. It is not recommended to tie all panels together to emulate a monolithic wall as volume change restraint forces will build-up at connections, resulting in considerable distress. We wish to advise the SEOR that due to the configuration of tying groups of panels together being possibly different that modeled by SEOR, a different load distribution of forces to the foundation may occur than assumed by the SEOR. Please advise.
Answer 39-	See question 33
Question 40-	There are discrepancies with the datum elevations, as it relates the plan drawings to the cross-section drawings. Please clarify.
Answer 40-	Datum elevations on plans are correct. Datum elevations shown on A300 revised to match plans in Architectural and Structural Addendum No. 1.
Question 41-	The top of curb that the precast panels sit, do not indicate finish grade elevations. Because the slab elevations vary due to sloping, along with the notations on the structural drawings that the curb heights vary, it is proving impossible to determine the top of curb elevations. Please provide.
Answer 41-	The top of curb elevations will be coordinated with Precast Concrete Supplier requirements. No further information will be provided at this time.
Question 42-	Do the precast parapet heights at level P7 meet the City of Saint John code requirements?
Answer 42-	Parapet heights will meet NBC 2005 requirements.
Question 43-	Section 07100- Asphaltic Waterproofing states under sub-section 2.1 that the asphalt wear-course shall be 40mm thick, except in locations where snow-melting cables will be received (65mm thick). Drawing A208 notes the asphalt topping to be 50mm thick. Please clarify.
Answer 43-	Asphalt topping to be 50 mm thick except at heating cables where 65 mm is required.  Specification and drawings coordinated in Architectural and Structural Addendum

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Question 44-	The table of contents drawings. Please clar	identifies Division 4 – Masonry, yet no ify.	one appears on the tender
Answer 44-		nry will be required as infill at elevator sonry required. Section 04213 deleted No. 1.	
Question 45-	Section 07180 – conc subsection 2.1. Pleas	rete Surface Sealer does not specify an e provide.	approved sealer in
Answer 45 -	List of approved prod	ucts available from ATU.	
Question 46-	Does the precast pand shaft?	el pass over the vestibule door betwee	n stair #1 and the elevator
Answer 46-	Yes.		
Question 47-	•	omposite panels mounted to the preca ail be provided that will prevent water	•
Answer 47-	Composite panels are	e designed on rain-screen principal. No	caulking required.

**END OF SECTION** 



Suite 500 144 Front Street West Toronto, ON M5J 2L7 Canada 416 977-5335 Fax 416 977-1427 www.rjc.ca

Project: Carleton - Sewell Parking Garage

Saint John, New Brunswick

Tender No: 2010-081209T

Project No.: RJC # TOR.014444.0008

# ARCHITECTURAL AND STRUCTURAL ADDENDUM NO. 2

Date Issued: December 7, 2010

Issued By: Scott Wallace, P.Eng. (RJC)

Colin Turner, AANB (ADI)

#### **SPECIFICATIONS**

#### 1.0 Section 01005 - General Requirements

.1 Add new clause 1.6.1:

General Contractor shall conduct condition survey of The Rectory and Church to The East, The Michael J. Taylor building to the South and the Federal Government building to the South West. The survey shall be documented in writing, photographs and videos as appropriate, noting surface finish condition and any observed defects. Submit report to Consultant prior to start of work.

.2 Renumber subsequent clauses.

#### 2.0 Section 01020 - Allowances

- .1 Clause 1.3.1.1 Delete.
- .2 Renumber subsequent clauses.
- .3 Clause 1.3.1.4 Municipal Services Connections.

Clarification: Removal / relocation of overhead and underground hydro services along Carleton Street will be performed by S.J.E. as part of ongoing municipal infrastructure improvements.

Removal / relocation of overhead and underground hydro services along Sewell Street and within the property lines shall be performed by S.J.E. but coordinated by The General Contractor and paid for out of an Electrical subtrade cash allowance of \$50,000.00. This allowance includes service connection cost.

Remaining \$50,000.00 municipal service connection cash allowance is for miscellaneous service connections as required.

Total Municipal Services Cash allowance is \$100,000.00.

.4 Revise Total Cash Allowance to \$526,000.00.

#### 3.0 Section 05410 - Structural Metal Framing

.1 Add Section 05410 to the specifications. See Section 05410 attached.

#### 4.0 Section 05500 - Metal Fabrications

.1 Revise 2.8.1: change to read:

"Fabricate from steel sections to size and shape as indicated, all welded connections, hot dipped galvanized finish".

### 5.0 Section 06101 - Rough Carpentry

- .1 Add: 2.3.4 Air Barrier: spunbonded polyolefin membrane.
  - .1 Air Penetration: 0.001 cfm/ft<sup>2</sup> at 75 Pa, when tested in accordance with ASTM E2178. Type I per ASTM E1677.
  - .2 Water Vapor Transmission: 28 perms, when tested in accordance with ASTM E96, Method B.
  - .3 Water Penetration Resistance: Minimum 280 cm when tested in accordance with AATCC Test Method 127.
  - .4 Basis Weight: Minimum 2.7 oz/yd², when tested in accordance with TAPPI Test Method T-410.
  - .5 Air Resistance: Air infiltration at >1500 seconds, when tested in accordance with TAPPI Test Method T-460.
  - .6 Tensile Strength: Minimum 38/35 lbs/in., when tested in accordance with ASTM D882, Method A.
  - .7 Tear Resistance: 12/10 lbs., when tested in accordance with ASTM D1117.
  - .8 Surface Burning Characteristics: Class A, when tested in accordance with ASTM E84. Flame Spread: 10, Smoke Developed: 10.
  - .9 Standard of acceptance: TYVEK COMMERCIAL WRAP.

#### 6.0 Section 07520 - Modified Bituminous Membrane Roofing

- .1 Add: 1.3.6, Factory Mutual (FM Global).
- .2 Revise: 1.7.2 to read:

#### **Shop Drawings:**

- .1 Indicate flashing, control joints, tapered insulation, mechanical fasteners and pattern and all related details.
- .2 Provide layout for tapered insulation
- .3 Revise: 2.10.6 to read:
  - .1 ROOF HATCH
  - .1 Roof hatch: size 762 x 914 mm; 14 ga. galvanized steel curb with 25 mm rigid fibreboard insulation, integral cap flashing; 14 ga. steel cover, 25 mm fibreglass insulation, 22 ga. galvanized liner, automatic hold-open and operating arm, spring latch with inside-outside handles and padlock hasp.
    - .1 Standard of acceptance: BILCO MODEL "S" ROOF SCUTTLE.
- .4 Add: 2.11 STEEL DECK COVERING
  - .1 Glass Mat, Gypsum Board: to ASTM C 1177 thickness 16 mm.
    - .1 Standard of acceptance:
      - .1 GEROGIA PACIFIC DENSE DECK ROOF GUARD.
      - .2 CGC SECUROCK.
    - .2 Fasteners for covering to deck to be as per Factory Mutual and as follows: Screws to CSA B35.3-1962, #2 Phillips, recessed head, complete with 75 mm diameter x 0.80 mm thick galvanized steel plates.
      - .1 Standard of acceptance: BUILDEX GRIPDEK, DEKFAST DECK SCREW #11-16.
- .5 Add: 3.14 PREPARATION OF STEEL DECK (CHANNEL TYPE)
  - .1 Mechanically fasten to steel deck, gypsum board sheathing with screws to steel deck's upper rib surfaces, spaced minimum 305 mm on centre each way. A 2440 mm x 1220 mm sheet to have a minimum 10 fasteners per sheet in field of roof, 15 fasteners at perimeters and 24 fasteners in the exterior corners.

#### 7.0 Section 08443 - Glazed Aluminum Curtain Walls

- .1 2.1.1- add Anotec Series 3400 to standard of acceptance.
- .2 2.1.2- add Anotec Series 60i to standard of acceptance.
- .3 2.5.1- add Anotec Series 23M to standard of acceptance.

#### 8.0 Section 08800 - Glazing

.1 Add: 2.2.3 - TYPE 3 - Insulating glass units: to CAN/CGSB-12.8, double unit, 25 mm overall thickness.

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- .1 Glass: outer pane clear tempered safety glass to CAN/CGSB-12.1
- .2 Glass: inner pane clear tempered safety glass to CAN/CGSB-12.1
- .3 Glass thickness: 6 mm each light.
- .4 Inter-cavity space thickness: 13 mm with low conductivity spacers.
- .5 Glass coating: surface number 3 low "E".
- .6 Inert gas fill: argon.

### 9.0 Section 09250 - Gypsum Board

.1 Revise: 2.2 references from "07 92 00" to "07900".

#### **DRAWINGS**

#### 1.0 A301 - North Elevation and Details

- .1 Revise Level P6 and Level P7 elevations to read "33.00 and 36.50" respectively.
- .2 Increase height of precast concrete parapet wall by 163mm.
- .3 Increase height of composite metal panels, colour 1 (CMP1) by 163mm.
- .4 Move Level P6 openings vertically up facade by 100mm.

#### 2.0 A302 -West Elevation and Details

- .1 Revise Level P6 and Level P7 elevations to read "33.00 and 36.50" respectively.
- .2 Increase height of precast concrete parapet wall between stairwell (near grid line "A") and immediately to the left of grid line "C" by 375mm.
- .3 Increase height of precast concrete parapet wall between immediate left of grid line "C" and grid line "E" by 85mm.

#### 3.0 A303 -South Elevation and Details

- .1 Revise Level P6 and Level P7 elevations to read "33.00 and 36.50" respectively.
- .2 Increase height of precast concrete parapet wall between grid line "1" and step in wall approximately mid way between grid lines "2" and "3" by 470mm.
- .3 Increase height of precast concrete parapet wall between grid line "6" and immediate right of the elevator core by 90mm.
- .4 Detail 1/A303: revise South Elevation to the right of grid line "3" per new Drawing A303SK-01 attached.

#### 4.0 A304 -East Elevation and Details

- .1 Revise Level P6 and Level P7 elevations to read "33.00 and 36.50" respectively.
- .2 Increase height of precast concrete parapet wall between grid line"E" and immediate right of grid line "C" by 90mm.
- .3 Increase height of precast concrete parapet wall between grid line "A" and immediate right of grid line "C" by 163mm.

December 7, 2010 RJC No.: TOR.014444.0008

#### 5.0 A403 - Details

Addendum No. 2

- .1 Provide structural metal framing in accordance with new Section 05410 attached.
- .2 Provide "fire seal base flashing" at all roof associated exposed wood in accordance with Section 07520.
- .3 Detail 1/A403: provide as per new Drawing A403SK-01 attached.
- .4 Detail 9/A403: provide as per new Drawing A403SK-02 attached.
- .5 Detail 10/A403: provide as per new Drawing A403SK-03 attached.
- .6 Detail 12/A403: provide as per new Drawing A403SK-04 attached.
- .7 Detail 13/A403: provide as per new Drawing A403SK-05 attached.

#### 6.0 A404 - Details

- .1 Provide structural metal framing in accordance with new Section 05410 attached.
- .2 Provide "fire seal base flashing" at all roof associated exposed wood in accordance with Section 07520.
- .3 Details 2/A404, 3/A404: insulate around penetrations through roof deck and around roof drains with "sprayed insulation" in accordance with Section 07219.
- .4 Detail 4/A404: provide as per new Drawing A404SK-01 attached.
- .5 Detail 5/A404: provide as per new Drawing A404SK-02 attached.
- .6 Detail 8/A404: provide as per new Drawing A404SK-03 attached.

#### 7.0 A501-Stair 1 and Details & A502-Stair 2 and Details

.1 Increase height between Level P5 and Level P6 by 100mm, coordinate with stair design.

#### 8.0 A601 - Schedules, Revision 1

- .1 Door & Frame Elevations: provide as per new Drawing A601SK-01.
- .2 Room Finish Schedule: provide as per new Drawing A601SK-02.
- .3 Provide Hollow metal door and frame at P1 level exhaust shaft same as Parking/Mech. Elec. room doors indicated on door schedule.

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#### 9.0 S104

Add the following Bollard Schedule to drawing:

Level	S.O.G.	S.S.
Level	Bollards	Bollards
P1	5	-
P2	7	3
P3	-	7
P4	-	7
P5	-	7
P6	12	10
P7	-	7
Totals	24	41

### 10.0 SH-1 - Shoring Wall Installation Procedures

Line 2 - change "900 mm C/C" to "300 mm C/C"

This Addendum shall be read in conjunction with and becomes part and parcel of the tender documents, and shall supersede drawings and/or specifications where applicable.

END OF ARCHITECTURAL AND STRUCTURAL ADDENDUM NO. 2

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#### Part 1 General

#### 1.1 RELATED SECTIONS

.1 09110 - Non-Structural Metal Framing.

#### 1.2 REFERENCES

- .1 American Society for Testing and Materials International (ASTM)
  - .1 ASTM A653/A653M, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc Iron Alloy-Coated (Galvanealed) by the Hot-Dip Process.
- .2 Canadian General Standards Board (CGSB)
  - .1 CAN/CGSB-1.181, Ready-Mixed Organic Zinc-Rich Coating.
- .3 Canadian Standards Association (CSA International)
  - .1 CAN/CSA-G164, Hot Dip Galvanizing of Irregularly Shaped Articles.
  - .2 CSA W47.1, Certification of Companies for Fusion Welding of Steel.
  - .3 CSA W59, Welded Steel Construction (Metal Arc Welding) (Metric Version).
  - .4 CSA S136, North American Specification for the Design of Cold-Formed Steel Structural Members.
- .4 Canadian Sheet Steel Building Institute (CSSBI)
  - .1 CSSBI Fact Sheet #3 June 1994, Care and Maintenance of Prefinished Sheet Steel Building Products.
  - .2 CSSBI Technical Bulletin Vol. 7, No. 2 February 2004, Changing Standard Thicknesses for Canadian Lightweight Steel Framing Applications.

#### 1.3 DESCRIPTION OF SYSTEM

- .1 Wind bearing stud systems includes:
  - .1 Wall studs subjected to lateral loads. No axial load other than self weight and weight of applied finishes.
  - .2 Steel bridging.
  - .3 Top and bottom track.
  - .4 Head and sill members and jamb studs for wall openings.
  - .5 Stud, bridging and track connections.
  - .6 Top and bottom track connections to main structure including detailing to accommodate floor deflections.

#### 1.4 **DEFINITIONS**

- .1 Camber: the deviation from straightness of a member or any portion of a member with respect to its major axis.
- .2 Sweep: the deviation from straightness of a member or any portion of a member with respect to its minor axis.

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#### 1.5 DESIGN CRITERIA

- .1 Design shall be based on Limit States Design principles using factored loads and resistances.
- .2 Determine factored loads and resistances in accordance with National Building Code of Canada 2005 and CSA S136.
- .3 Design components and assemblies to accommodate specified erection tolerances of the structure.
- .4 Select studs to meet maximum deflections under specified loads conforming to the following:
  - .1 Wall studs supporting materials susceptible to cracking (ie. masonry veneer, portland cement plaster, ceramic tile) L/720.
  - .2 Wall studs supporting materials not susceptible to cracking (ie. metal cladding, synthetic veneers) L/360.
- .5 Splices:
  - .1 No splices permitted in studs.
  - .2 Splices are permitted in bridging. Show splice detail on shop drawings.
- .6 Design bridging and anchorage to prevent member rotation and member translation perpendicular to minor axis. Provide for secondary stress effects due to torsion between lines of bridging.
- .7 Allow for movement of structure. Design end connections to accommodate vertical deflection movement of the structure without imposing axial loads onto the framing.
- .8 Double (nested) track system required at top of stud walls.
- .9 Make connections between lightweight steel framing members using bolts, sheet metal screws or by welding.
- .10 Base the resistance for sheet metal screws on manufacturer's lower bound test values multiplied by appropriate resistance factor c, given in CSA \$136.
- .11 Conform to requirements of specified fire rated assemblies.
- .12 Stud depths and spacings are shown on drawings. Adjust stud material thickness, spacing or both as required by the design criteria. Select track thickness as required by design criteria. Maximum spacing of studs 400 mm o.c.

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#### 1.6 SUBMITTALS

- .1 Make submittals in accordance with Division 1.
- .2 Shop Drawings:
  - .1 Submit four copies of shop drawings to Consultant for review.
  - .2 Each shop drawing submitted shall bear the stamp and signature of a qualified professional engineer registered in the Province of New Brunswick.
  - .3 Include necessary shop details and erection diagrams.
  - .4 Indicate:
    - .1 Design loads.
    - .2 Member sizes, locations, thicknesses exclusive of coating, coatings and materials.
    - .3 Include connection details for attaching framing to itself and for attachment to structure. Show splice details, where splices are permitted. Show screw sizes and spacing.
    - .4 Include manufacturers data sheets for anchors, angle clips, etc.
    - .5 Indicate welds by welding symbols as defined in CSA W59. Include manufacturer's data sheets for anchors, angle clips, etc.
    - .6 Indicate dimensions, openings, requirements of related work and critical installation procedures. Show temporary bracing required for erection purposes.
    - .7 Show wall elevations, indicating locations that accommodate deflection and movement.
- .3 Submit samples of framing components and fasteners to Consultant.
- .4 Prior to beginning Work, submit: certified copies of mill reports covering material properties.
- .5 Submit to Consultant manufacturer's written report, within 3 days of review, verifying compliance of Work, as described in Article 3.7 Field Quality Control

#### 1.7 QUALITY ASSURANCE

- .1 Design professional:
  - .1 Retain a professional engineer registered or licensed to practice in the province of New Brunswick to design the wind bearing steel stud wall system; to prepare, seal and sign all shop drawings; and to perform field review.
- .2 Site Meetings: as part of Manufacturer's Services as described in Article 3.7 Field Quality Control, schedule site visits, to review Work, at stages listed:
  - .1 After delivery and storage of products, and when preparatory Work is complete but before installation begins.
  - .2 Twice during progress of Work at 25% and 60% complete.
  - .3 Upon completion of Work, after cleaning is carried out.

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# 1.8 DELIVERY, STORAGE AND HANDLING

- .1 Protect steel studs during transportation, site storage and installation in accordance with CSSBI Sheet Steel Facts #3.
- .2 Handle and protect galvanized materials from damage to zinc coating.

#### Part 2 Products

#### 2.1 MATERIALS

- .1 Steel: to CSA \$136, fabricated from ASTM A653/A653M, Grade 340 steel.
- .2 Zinc coated steel sheet: quality to ASTM A653/A653M, with Z180 designation coating.
- .3 Welding materials: to CSA W59 and certified by Canadian Welding Bureau.
  - .1 Welding electrodes: 480 MPa minimum tensile strength series (e.g., E480XXX, E480S-X).
- .4 Screws: self-drilling, self-tapping sheet metal screws, corrosion protected with minimum zinc coating thickness of 0.008 mm, length as required by design. Other coatings providing equal or better corrosion protection may be used.
- .5 Anchors: concrete expansion anchors or other suitable drilled type fasteners.
- .6 Bolts, nuts, washers: hot dipped galvanized in accordance with CAN/CSA-G164.
- .7 Touch up primer: zinc rich, to CAN/CGSB-1.181.
- .8 Sill plate gasket: closed cell polyethylene foam, width to suit stud.

#### 2.2 STEEL STUD DESIGNATIONS

.1 Colour code: in accordance with CSSBI Technical Bulletin Vol. 7, No. 2.

#### 2.3 METAL FRAMING

- .1 Steel studs: to CSA S136, fabricated from metallic coated steel, depth as indicated.
  - .1 Minimum steel thickness of 1.37 mm.
- .2 Stud tracks: fabricated from same material and finish as steel studs, depth to suit.
- .3 Bridging: fabricated from same material and finish as studs, 38 x 12 x 1.09 mm minimum thickness.
- .4 Angle clips: fabricated from same material and finish as studs. Dimension and thickness as determined by structural metal stud framing design professional.

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.5 Tension straps and accessories: as recommended by manufacturer.

#### 2.4 SOURCE QUALITY CONTROL

.1 Ensure mill reports covering material properties are reviewed by Consultant.

#### Part 3 Execution

#### 3.1 GENERAL

.1 Fabrication and erection shall conform to reviewed shop drawings. Modifications required to accommodate as-built conditions (other than minor dimensional changes) shall be submitted for review.

#### 3.2 WELDING

- .1 Do welding in accordance with CSA W59.
- .2 Companies engaged in welding shall be certified by the Canadian Welding Bureau in accordance with CSA W47.1, and have welding procedures approved and welders qualified for base material types and thicknesses being welded.
- .3 Welds shall conform to CSA W59 or ANSI/AWS D1.3 whichever is applicable.
- .4 For material less than 3 mm thick, shop drawings may show nominal weld leg sizes. For such material, the effective throats of welds shall not be less than thickness of thinnest connected part.
- .5 Touch up welds and coatings damaged by welding with touch-up paint. Prior to touching-up prepare surface in accordance with paint manufacturer's instructions.

#### 3.3 SCREWS

- .1 Diameter of steel screws shall equal or exceed minimum diameter indicated on shop drawings.
- .2 Ensure screw penetration beyond joined materials is not less than 3 exposed threads.
- .3 Thread types and drilling capability shall conform to manufacturer's recommendations.
- .4 Screws covered by sheathing materials shall have low profile heads.

#### 3.4 ERECTION

- .1 Erect components to requirements of reviewed shop drawings.
- .2 Install sill plate gasket under bottom track.

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#### STRUCTURAL METAL FRAMING

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- .3 Anchor tracks securely to structure at 400 mm on centre maximum, unless lesser spacing prescribed on shop drawings.
- .4 Erect true and plumb within specified tolerances. Use temporary bracing where necessary to withstand loads to which steel stud wall system may be subject during erection and subsequent construction. Leave temporary bracing in place as long as required for safety and integrity of wall system. Erector shall ensure that during erection a margin of safety consistent with the requirements of the National Building Code and CSA S136 exists in the uncompleted structure.
- .5 Seat studs into bottom tracks and top track.
- .6 Install studs at not more than 50.0 mm from abutting walls, openings, and each side of corners and terminations with dissimilar materials. Spacing of studs shall not be more than ±3 mm from design spacing. Cumulative error in spacing shall not exceed requirements of finishing materials.
- .7 Replace damaged members.
- .8 Brace steel studs with horizontal internal bridging at 1200 mm maximum.
  - .1 Fasten bridging to steel clips fastened to steel studs with screws or by welding.
- .9 Frame openings in stud walls to adequately carry loads by use of additional framing members and bracing as detailed on shop drawings.
- .10 Place insulation, equal to that specified, in jamb and header assemblies that will be inaccessible after their installation into wall. Ensure that insulation is kept dry and not compressed.
- .11 Touch up welds with coat of zinc rich primer.

#### 3.5 ERECTION TOLERANCES

- .1 Plumb: not to exceed 1/500th of member length up to a maximum of 10 mm.
- .2 Camber: not to exceed 1/1000th of member length up to a maximum of 10 mm.
- .3 Spacing: not more than +/- 3.0 mm from design spacing.
- .4 Gap between end of stud and track web: not more than 4.0 mm.

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#### 3.6 CUTOUTS

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.1 Maximum size of cutouts for services as follows:

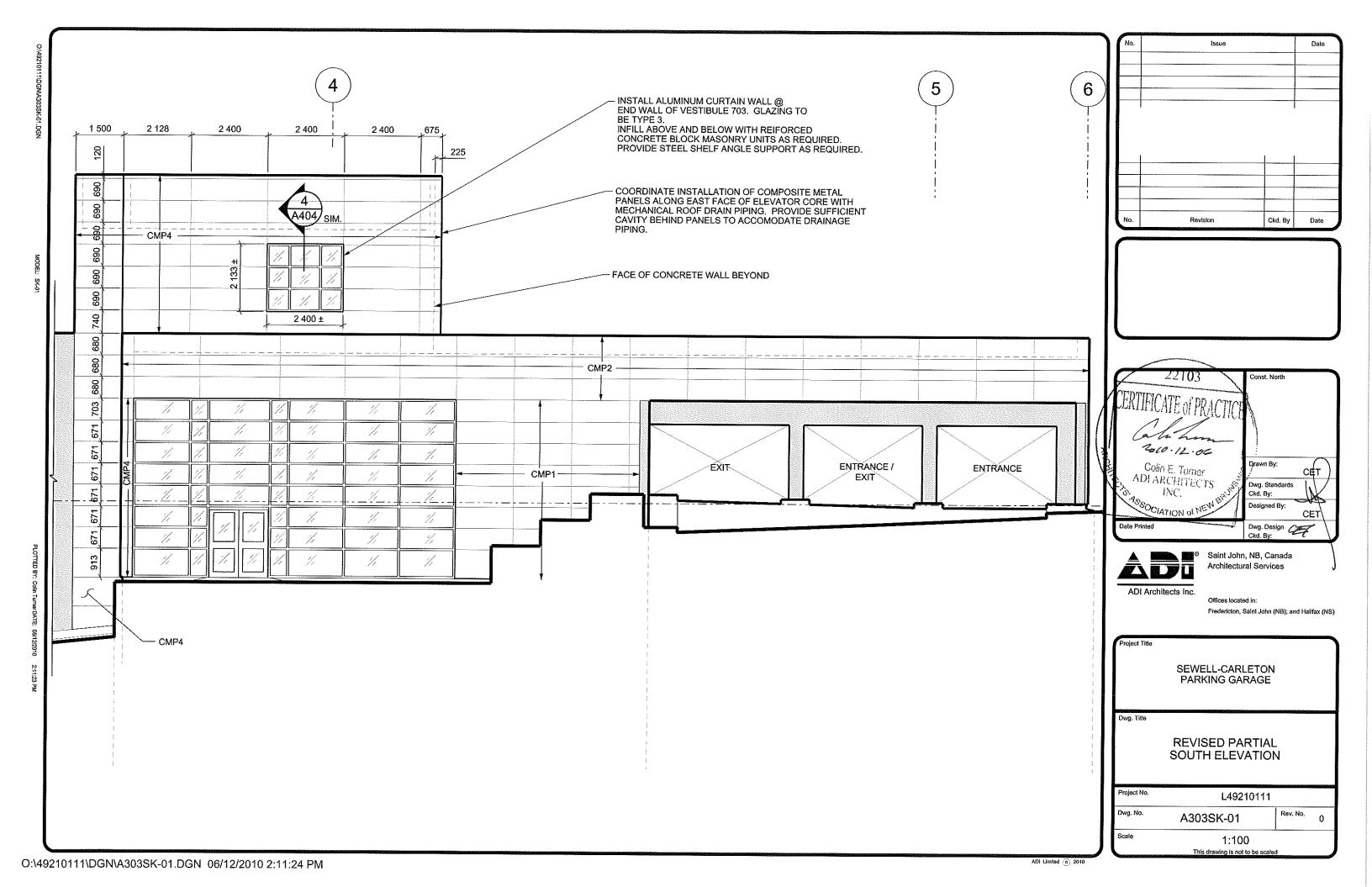
Member Depth	Across Member Depth	Along Member Length	Centre to Centre Spacing (mm)
92	40 max.	105 max.	600 min.
102	40 max.	105 max.	600 min.
152	65 max.	115 max.	600 min.

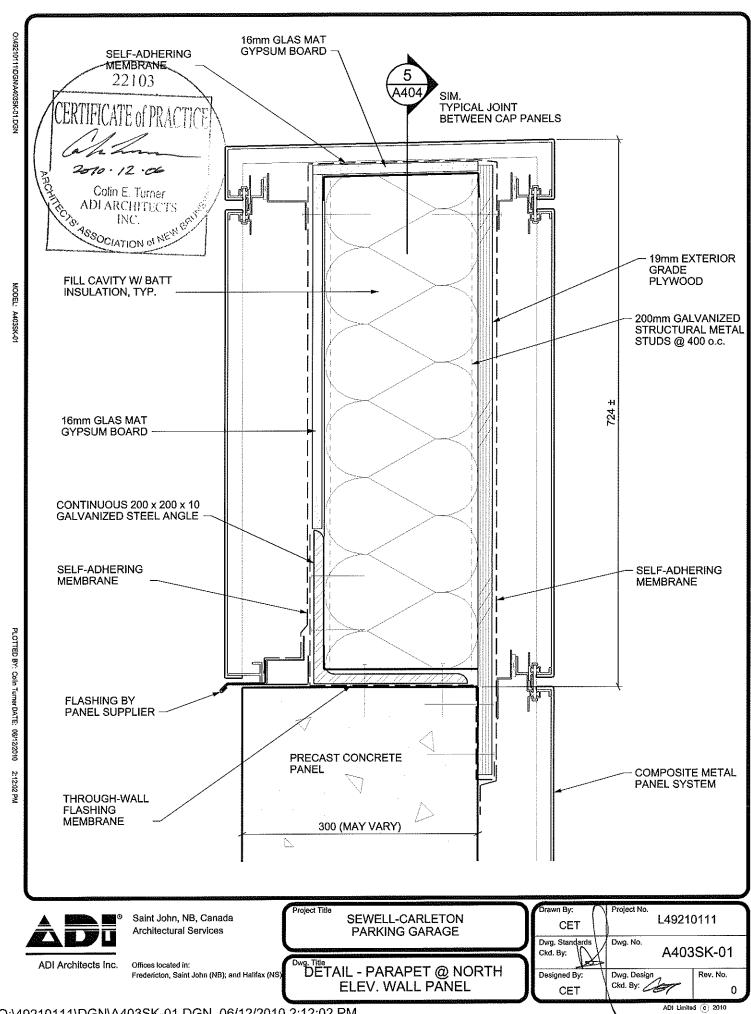
.2 Limit distance from centerline of last unreinforced cutout to end of member to less than 300 mm.

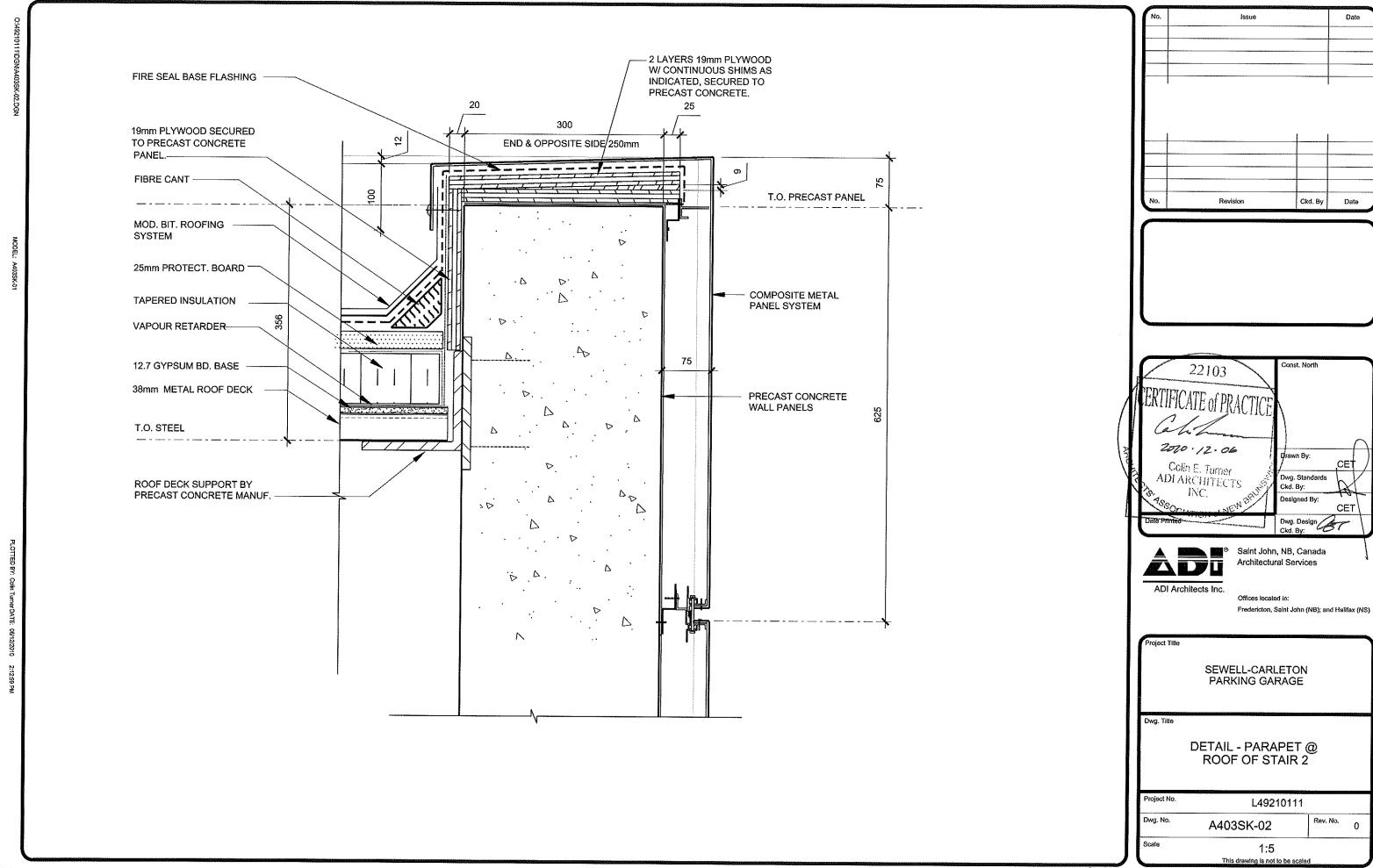
#### 3.7 FIELD QUALITY CONTROL

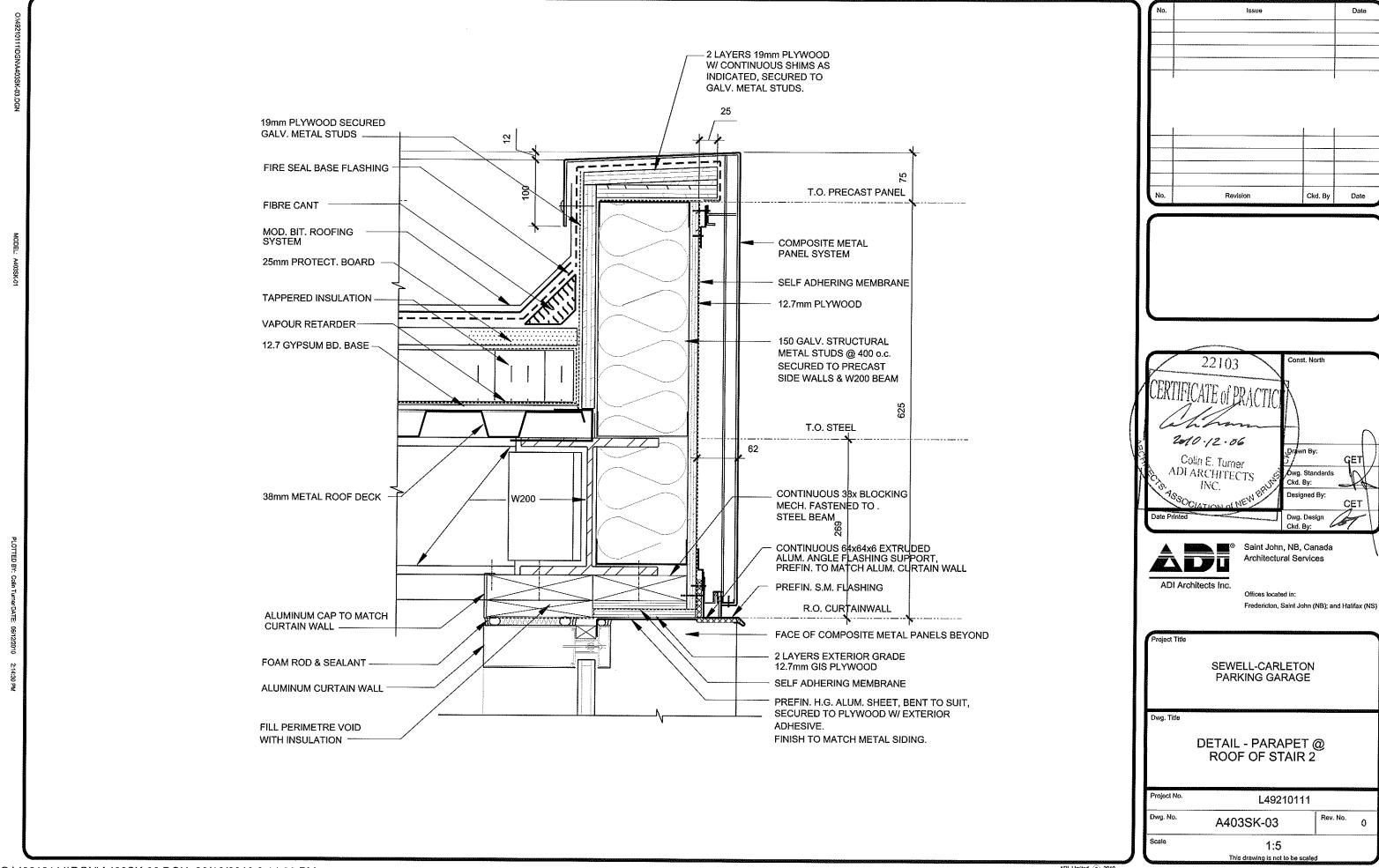
- .1 Manufacturer's Field Services:
  - Obtain written report from manufacturer's verifying compliance of Work, in handling, installing, applying, protecting and cleaning of product and submit Manufacturer's Field Reports as described in Article 1.3 Submittals.
  - .2 Provide manufacturer's field services consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions.
  - .3 Schedule site visits, to review Work, as directed in Article 1.4 Quality Assurance.

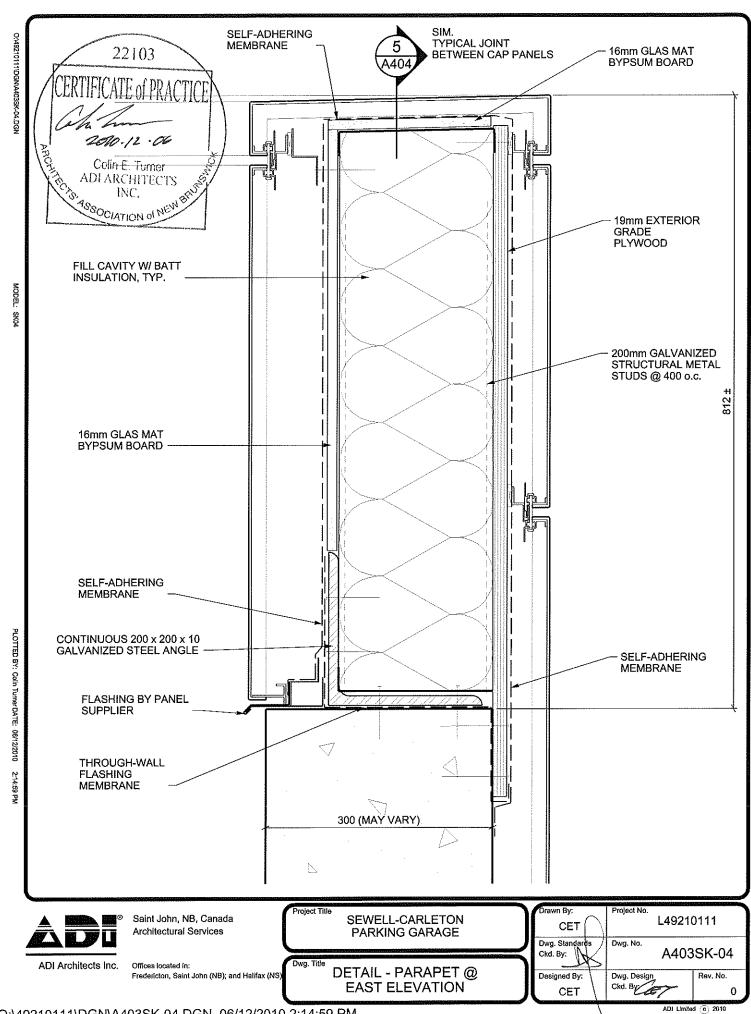
#### END OF SECTION

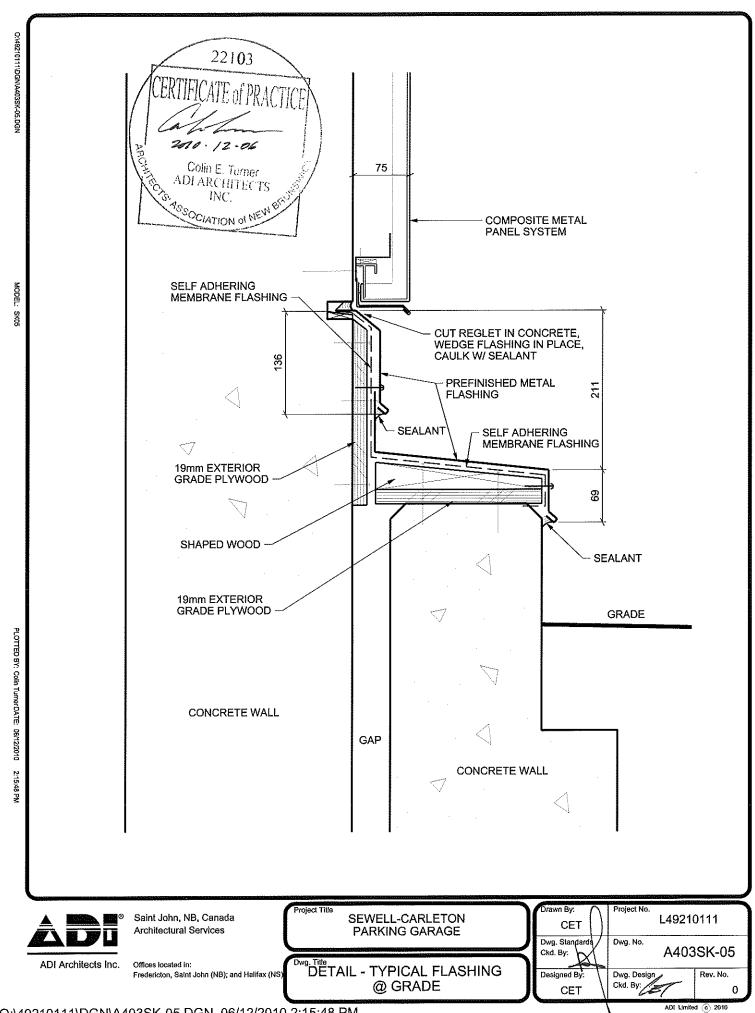


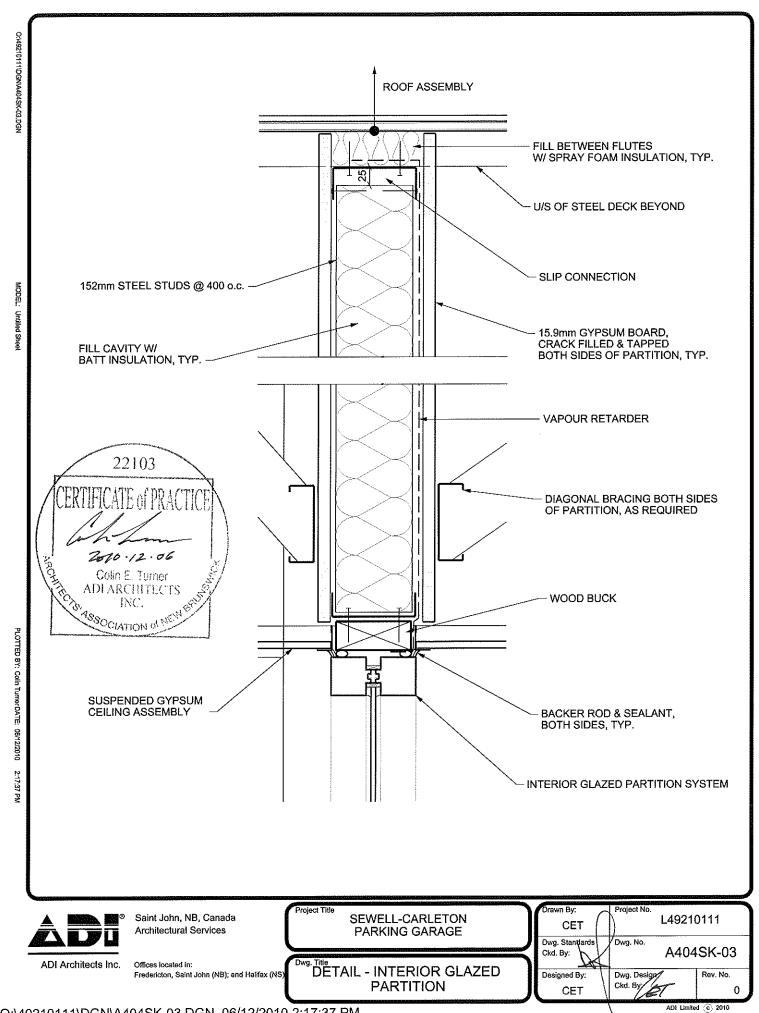


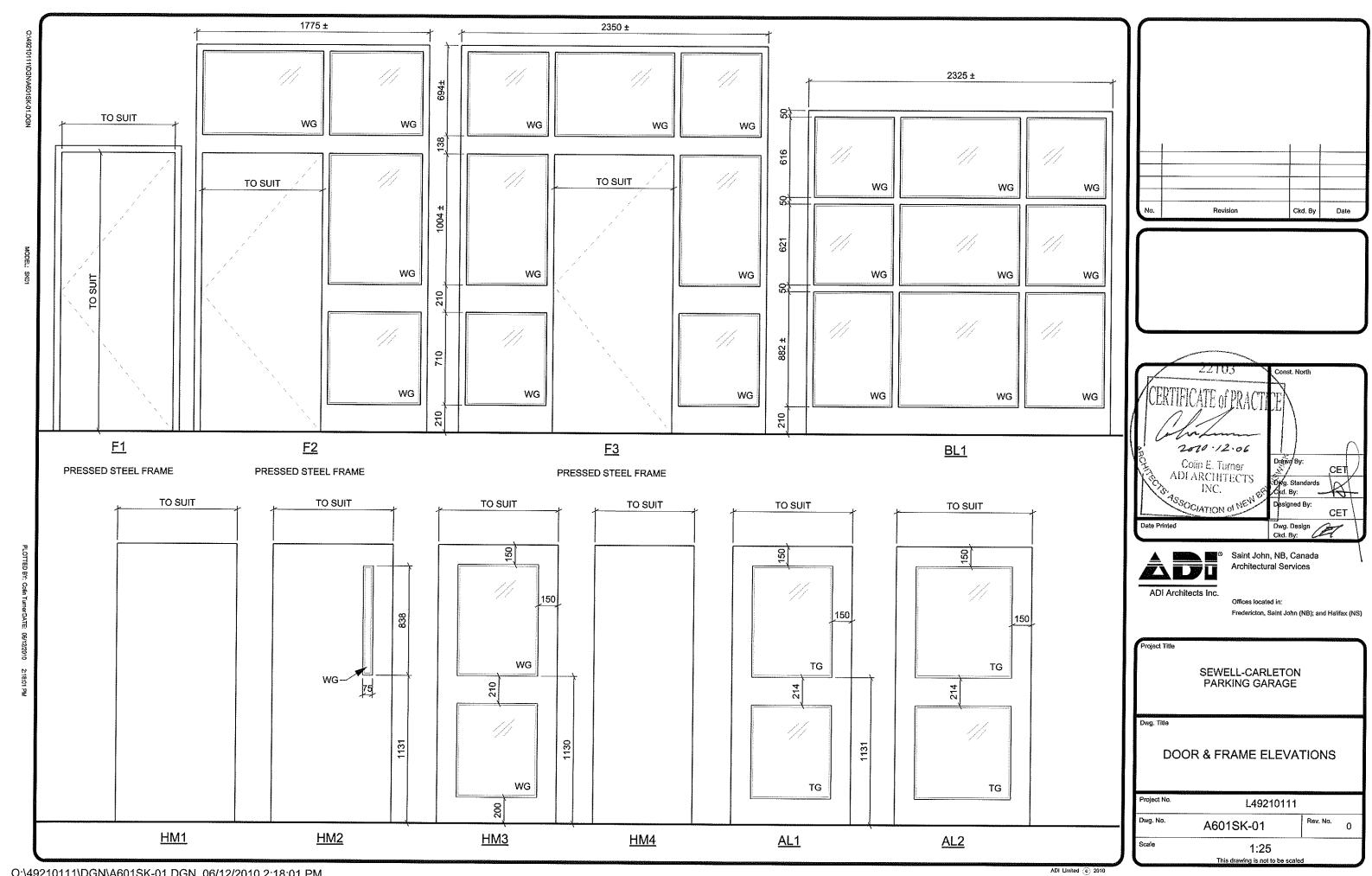












AODEL: SKO2

304 305 **EVEL P4** 401 402 403 404 404 204 205 **EVEL P3** 301 302 303 106 EVEL P2 503 504 505 703 704 706 506 508 509 601 201 202 203 PARKING
PARKING
VESTIBULE
STAIR 1-7
STAIR 2-7
ROOF ACCESS CUSTOMER SERVICE
WASHROOM
MECHANICAL ROOM PARKING
PARKING
VESTIBULE
STAIR1-6
STAIR 2-6
ELECTRICAL
ELEVATOR C PARKING
PARKING
VESTIBULE
STAIR 1-5
STAIR 2-5 PARKING
PARKING
VESTIBULE
STAIR 1-4
STAIR 2-4 PARKING
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STAIR 1-3
STAIR 2-3 PARKING
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PARKING
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STAIR 1-1 TT: TRAFFIC TOPPING CT: CERAMIC TILE CONC: CONCRETE GYP: GYPSUM BOARD EXP: EXPOSED ROOM NAME FLOORS BASE CONC CONC CONC. CONC. CONC. CT CONC/ PAINT CONC. CONC. MAT 의 그 그 의 그 그 19 | | | | ន ΜĀ ្ម 앜 . 22 [일] -잌 의 12 MAT NORTH FIN. \text{\text{\$\times\times\text{\$\times\times\text{\$\times\times\text{\$\times\times\text{\$\times\times\text{\$\times\times\times\text{\$\times\times\times\text{\$\times\times\times\times\times\text{\$\times CONC ROOM FINISH SCHEDULE CONC MAT ΣΞ Ņ CONC CONC CONC CONC CONC CONC CONC CONC MAT \text{\tint{\text{\tin\text{\texit{\ti}\}\\ \\\ \ti}\\\ \\\\ \ti}\tittt{\text{\text{\text{\text{\text{ \text{\text{\$\times\$} \times\$ \times\$ \times\$ \times\$ \times\$ \times\$ \times\$ \times\$ \times\$ CONC CONC EXP EXP EXP EXP EXP EXP EXP EXP NE. PAINT EXP EXP EXP EXP EXP CONC CONC CONC CONC CEILING EEEEE (W)(2)  $\Theta$ SEALER COAT APPLIED TO FLOOR LIGHT SANDBLAST FINISH (WALLS)
100 mm CT BASE, TYP. PAINT CONCRETE MASONRY INFILL AROUND ELEVATOR DOORS /WINDO PAINT EXPOSED STEEL CEILING &
CONCRETE FLOOR
PAINT EXPOSED STEEL CEILING &
CONCRETE FLOOR IT CONCRETE MASONRY INFILL PAINT CONCRETE FLOOR

No.	Revision	Ckd. By	Date
Date P	THUATE of PRACTICE  2010 · 12 · 06  Colin E. Turner ADI ARCHITECTS INC.  Desk  Ckd.  Desk  Ckd.  Desk  Architectural Se  I Architects Inc.  Offices located in: Fredericton, Saint John	Standards By: gned By: Design A By: Canada rvices	CET
riojeci	SEWELL-CARLETO PARKING GARAG		
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Project	No. L492101	11	
Project	L492 10 1		v. No. 0



# Addendum

Date: December 7, 2010

156 Front Street West, Suite 600

Toronto, Ontario M5J 2L6

Phone (416) 598-2920 Fax (416) 598-5394 www.mcw.com Project Name: Sewell-Carleton, Parking Garage Project No.: 7540A

Saint John

Client: Read Jones Christoffersen Ltd. ADD No.: 002
To: Read Jones Christoffersen Ltd. Page No.: 1 of 1

Attention: Scott Wallace Office: Toronto

Fax number: 416 977-1427 From: Janaka Rathnayaka

Distribution: swallace@rjc.ca

In accordance with the drawings and specifications, provide in the tender all costs required to complete the work including items as listed below:

#### **Electrical**

1) Revised specification section 16010 and item 1.26.2 and read as follows.

Contractor shall carry \$50,000.00 cash allowance in the bid price for electrical utility connections. Costs are for electrical utility connections to cover following items

- i. Primary cables, utility transformer and utility meter as shown in the drawing E-009.
- ii. Relocation of existing underground duct bank and cables.

(This will be override MCW addendum -001, electrical specification section item number 2)

- 2) Provide 500W, 347V, base board heaters c/w inbuilt thermostat at every smoke detectors in the stairs (Total 8). Base board heaters shall mount in the ceiling 450mm away from the smoke detector and connect to panel ELP6A. Provide 20A, 1P circuit for each stair (Total 2). Base board heater shall be "Stelpro PDH" series or approved equivalent.
- 3) All base board heaters shown in customer services office shall be 347V "Stelpro DBI" series or approved equivalent. Provide in built thermostat. Wattage as per layout drawing.

End of the addendum-002