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**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise
indicated, all other terms and conditions of the Solicitation
remain the same.

Ce document est par la présente révisé; sauf indication contraire,
les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address
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Public Works and Government Services Canada - Pacific
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Title - Sujet Operation Building Kitchen Upgrade	
Solicitation No. - N° de l'invitation EZ899-182079/A	Amendment No. - N° modif. 004
Client Reference No. - N° de référence du client	Date 2018-01-31
GETS Reference No. - N° de référence de SEAG PW-\$PWY-022-8277	
File No. - N° de dossier PWY-7-40317 (022)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-02-05	Time Zone Fuseau horaire Pacific Standard Time PST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Arthur (PWY), Carolyn	Buyer Id - Id de l'acheteur pwy022
Telephone No. - N° de téléphone (604) 364-2752 ()	FAX No. - N° de FAX (604) 775-6633
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Parks Canada (PCA) - Fort Langley National Historic Park - Fort Langley, BC	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

Solicitation No. - N° de l'invitation
EZ899-182079/A
Client Ref. No. - N° de réf. du client

Amd. No. - N° de la modif.
004
File No. - N° du dossier
PWY-7-40317

Buyer ID - Id de l'acheteur
PWY 022
CCC No./N° CCC - FMS No./N° VME

Amendment 004 is raised to:

- 1) Incorporate Addendum No. 2
-

- 1) Please see the attached Addendum No. 2.

All other terms and conditions remain unchanged.

ADDENDUM #2

Date: January 31, 2018

Fort Langley National Historical Park
Kitchen Upgrade
23433 Mavis Ave,
Langley, British Columbia, Canada.
Project No: R.081108.001

The following revisions supersede the information contained in the original drawings and specification issued for the above named project, and shall become part thereof. No consideration will be allowed for extras due to the contractor or any subcontractor not being familiar with this Addendum.

1.0 STRUCTURAL ADDENDUM

1.1 In reference to Addendum #1 SPECIFICATIONS that was not attached.

6.0 05 12 23 STRUCTURAL STEEL FOR BUILDINGS

6.1 ADD 05 12 23 STRUCTURAL STEEL FOR BUILDINGS enclosed.

8.0 06 10 11 ROUGH CARPENTRY

8.1 REPLACE all pages of 06 10 11 ROUGH CARPENTRY with enclosed.

1.2 Allow cost for Rebar & Concrete Pad on top of grease interceptor and excavation for burying grease interceptor tank.

2.0 MECHANICAL ADDENDUM

2.1 Refer to Mechanical Addendum No. 2 dated 2018-Jan-30 (3 page).

3.0 QUESTIONS AND ANSWERS

Q1. Looking at the specs in division 6, it mentions SS vanity tops for the washrooms. I don't see any details or elevations in the architectural plans for new millwork in the washrooms. Please clarify. Is there a spec on the existing siding for matching with new?

A1. There is no stainless steel fabricated vanity tops in the scope of work.

Q2. What is the flooring spec for the kitchen, corridor and the area directly outside the kitchen. Male and female washrooms seem to be the only rooms with the flooring spec in them.

A2. Refer specification section 09 06 00 Room Finish Schedule. There is no new flooring in the corridor and the area directly outside the kitchen.

Q3. What is the metal soffit ceiling spec?

A3. Refer specification section 09 51 33 ACOUSTICAL METAL PANEL CEILINGS

END OF ADDENDUM #2

1.0 GENERAL

1.1 RELATED SECTIONS

- .1 Section 05 31 00 – Steel Decking.
- .2 Section 05 50 00 – Metal Fabrication.

1.2 REFERENCES

- .1 American Society for Testing and Materials International, (ASTM)
 - .1 ASTM A 36/A 36M-12, Specification for Carbon Structural Steel.
 - .2 ASTM A 307-12, Specification for Carbon Steel Bolts and Studs, 60,000psi Tensile.
 - .3 ASTM A 325-10e1, Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
 - .4 ASTM A 325M-13, Standard Specification for Structural Bolts, Steel, Heat Treated, 830 MPa Minimum Tensile Strength Metric.
- .2 Canadian Institute of Steel Construction (CISC)/Canadian Paint Manufacturer's Association (CPMA).
 - .1 CISC/CPMA 1-73a, Quick-Drying, One-Coat Paint for Use on Structural Steel.
 - .2 CISC/CPMA 2-75, Quick-Drying, Primer for Use on Structural Steel.
- .3 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-G40.20-04 (R2009), General Requirements for Rolled or Welded Structural Quality Steel.
 - .2 CAN/CSA-G40.21-04 (R2009), Structural Quality Steels.
 - .3 CAN/CSA-G164-M92 (R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .4 CAN/CSA-S16-09, Design of Steel Structures.
 - .5 CSA W47.1-09, Certification of Companies for Fusion Welding of Steel Structures.
 - .6 CSA W48-06 (R2011), Electrodes.
 - .7 CSA W55.3-08, Resistance Welding Qualification Code for Fabricators of Structural Members Used in Buildings.
 - .8 CSA W59-03 R(2008), Welded Steel Construction (Metal Arc Welding)

1.3 DESIGN OF DETAILS AND CONNECTIONS

- .1 Design details and connections in accordance with requirements of CAN/CSA-S16-09 to resist forces, moments, shears and allow for movements indicated.
- .2 If connection for shear only (standard connection) is required:
 - .1 Select framed beam shear connections from an industry accepted publication such as 'Handbook of the Canadian Institute of Steel Construction'.
- .3 If shears are not indicated, select or design connections to support reaction from 120% maximum uniformly distributed load that can be safely supported by beam in bending (60% each end), provided no point loads act on beam.

- .4 At the Departmental Representative's request, submit sketches and design calculations for non-standard connections, stamped and signed by qualified professional engineer licensed in the Province of British Columbia, Canada.

1.4 SHOP DRAWINGS

- .1 Submit shop drawings including fabrication and erection documents and materials list in accordance with Section 01 33 00 – Submittal Procedures.
- .2 On erection drawings, indicate all details and information necessary for assembly and erection purposes such as, description of methods, sequence of erection, type of equipment used in erection and temporary bracings.
- .3 All shop drawings to be signed, sealed by professional engineer licensed in British Columbia, Canada.
- .4 The Professional Engineer responsible for the shop drawings shall inspect the installation of the work for conformance with the design and the shop drawings, and shall upon completion of the work submit to the Consultant a completed Schedule S-B: Assurance of Professional Design and Commitment for Field Review by Supporting Registered Professional, and Schedule S-C: Assurance of Professional Field Review and Compliance by Supporting Registered Professional.

1.5 QUALITY ASSURANCE

- .1 Submit 2 copies of mill test reports showing chemical and physical properties and other details of steel to be incorporated into work at least 2 weeks prior to fabrication of structural steel. Mill test reports shall be certified by metallurgists qualified to practice in British Columbia, Canada.
- .2 Fabricator of structural steel shall, in addition, provide an affidavit stating that materials and products used in fabrication conform to applicable material and products standards called for by design drawings and specifications.

1.6 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 19 – Waste Management and Disposal.

2.0 PRODUCTS

2.1 MATERIALS

- .1 Structural steel: to CAN/CSA-G40.21 Grade as indicated on drawings.
- .2 Anchor bolts: ASTM A307 unless noted otherwise on drawings.
- .3 Bolts, nuts and washers: to ASTM A325.
- .4 Welding materials: to CSA W48 Series and CSA W59 and certified by Canadian Welding Bureau.

- .5 Shop paint primer: to CISC/CPMA 1.
- .6 Hot dip galvanizing: galvanize steel, where indicated, to CAN/CSA-G164 (Withdrawn), minimum zinc coating of 600 g/m².
- .7 Galvanize touch-up primer: to CISC/CPMA 1.
- .8 Shear studs: to CSA W59, Appendix H.

2.2 FABRICATION

- .1 Fabricate structural steel in accordance with CAN/CSA-S16 and in accordance with reviewed shop drawings.
- .2 Install shear studs in accordance with CSA W59.
- .3 Continuously seal members that required by remediation with continuous field welds where appropriate. Grind smooth.

2.3 SHOP PAINTING

- .1 Clean, prepare surfaces and field prime structural steel in accordance with CAN/CSA-S16 except where members to be encased in concrete.
- .2 Clean members, remove loose mill scale, rust, oil, dirt and other foreign matter. Prepare surface according to SSPC SP7 brush off blast.
- .3 Apply one coat of CISC/CMPD2-75 primer in shop to steel surfaces to achieve minimum dry film thickness of 3 to 4 mils, except:
 - .1 Surfaces to be encased in concrete.
 - .2 Surfaces to receive field installed stud shear connections.
 - .3 Surfaces and edges to be field welded.
 - .4 Faying surfaces of friction-type connections.
 - .5 Below grade surfaces in contact with soil.
- .4 Apply paint under cover, on dry surfaces when surface and air temperatures are above 5 degrees C.
- .5 Maintain dry condition and 5 degrees C minimum temperature until paint is thoroughly dry.
- .6 Strip paint from bolts, nuts, sharp edges and corners before prime coat is dry.

3.0 EXECUTION

3.1 GENERAL

- .1 Structural steel work: in accordance with CAN/CSA-S16.
- .2 Welding: in accordance with CSA W59.

- .3 Companies to be certified under Division 1 or 2.1 of CSA W47.1 for fusion welding of steel structures and/or CSA W55.3 for resistance welding of structural components.

3.2 CONNECTION TO EXISTING WORK

- .1 Verify dimensions and condition of existing work, report discrepancies and potential problem areas to Departmental Representative for direction before commencing fabrication.

3.3 MARKING

- .1 Mark materials in accordance with CAN/CSA G40.20/G40.21. Do not use die stamping. If steel is to be left in unpainted condition, place marking at locations not visible from exterior after erection.
- .2 Match marking: shop mark, bearing assemblies and splices for fit and match.

3.4 ERECTION

- .1 Erect structural steel, as indicated and in accordance with CAN/CSA-S16 and in accordance with reviewed erection drawings.
- .2 Field cutting or altering structural members: to approval of Departmental Representative.
- .3 Clean with mechanical brush and touch up shop primer to bolts, rivets, welds and bumed or scratched surfaces at completion of erection.
- .4 Continuously seal members by continuous welds where indicated. Grind smooth.

3.5 FIELD QUALITY CONTROL

- .1 The Departmental Representative will not be responsible for inspection of the Contractor's work as described in Clause 7.12 of the CISC Code of Standard Practice for Structural Steel. The Contractor is responsible for the accuracy and completeness of his own work and shall verify that the structural steel has been fabricated, erected and finished in accordance with the contract specifications.
- .2 Inspection and testing of materials and workmanship will be carried out by testing laboratory designated by Departmental Representative.
- .3 Testing requirements are as follows:
- .1 Visual Field Inspection and Bolt Torque Testing (Random 10% of Bolts) of all bolted connections.
 - .2 Non-Destructive Testing of Welds:
 - 100% of all welds to be visually inspected
 - 10% of all moment connections to be ultrasonically tested.

- 10% of all full-strength splice connections to be ultrasonically tested.
- .3 Verify the certification and conformance of the steel fabricator and erector to any relevant CSA Standards.
- .4 Provide safe access and working areas for testing on site, as required by testing agency and as authorized by Departmental Representative.
- .5 Submit test reports to Departmental Representative within 1 week of completion of inspection.
- .6 Costs of tests will be borne by Contractor as specified in Section 01 11 55 – General Instructions.

3.6 FIELD PAINTING

- .1 Paint in accordance with Section 09 91 13 – Exterior Painting and Section 09 91 23 – Interior Painting.
 - .1 Touch up all damaged surfaces and surfaces without shop coat with primer to MPI Product #76 except as specified otherwise. Apply in accordance with MPI system INT5.1A.

END OF SECTION 05 12 23

1.0 GENERAL

1.1 RELATED SECTIONS

- | | | |
|----|---------------------------|----------------------------------|
| .1 | Section 01 74 19 | Waste Management and Disposal |
| .2 | Section 03 10 00 | Concrete Forming and Accessories |
| .3 | Structural Drawings S 101 | Wood Products General Notes |

1.2 REFERENCE STANDARDS

- .1 Canadian Standards Association (CSA International)
 - .1 CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
 - .2 CAN/CSA-G164-M92 (R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .3 CSA O121-08 (R2013), Douglas Fir Plywood.
 - .4 CAN/CSA-O141-05 (R2014), Softwood Lumber.
 - .5 CSA O151-09 (R2014), Canadian Softwood Plywood.
 - .6 CAN/CSA-O325-07 (R2012), Construction Sheathing.
 - .7 Comply with AWPAM4 and revisions specified in CAN/CSA-080 Series, Supplementary Requirements to AWPAM Standard M2.
- .2 National Lumber Grades Authority (NLGA)
 - .1 Standard Grading Rules for Canadian Lumber 2014.

1.3 QUALITY ASSURANCE

- .1 Lumber identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood identification: by grade mark in accordance with applicable CSA standards.
- .3 Plywood, OSB and wood based composite panel construction sheathing identification: by grademark in accordance with applicable CSA standards.

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 19 - Waste Management And Disposal.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
- .4 Divert unused wood materials from landfill to recycling, reuse and composting facility approved by Departmental Representative.

- .5 Do not dispose of preservative treated wood through incineration.
- .6 Do not dispose of preservative treated wood with materials destined for recycling or reuse.
- .7 Dispose of treated wood, end pieces, wood scraps and sawdust at sanitary landfill approved by Departmental Representative.
- .8 Dispose of unused wood preservative material at official hazardous material collections site approved by Departmental Representative.
- .9 Do not dispose of unused preservative material into sewer system, into streams, lakes, onto ground or in other locations where they will pose health or environmental hazard.

2.0 PRODUCTS

2.1 LUMBER MATERIAL

- .1 Lumber: unless specified otherwise, softwood, S4S, moisture content 19% or less in accordance with following standards:
 - .1 CAN/CSA-O141.
 - .2 NLGA Standard Grading Rules for Canadian Lumber.
- .2 Furring, blocking, nailing strips, grounds, rough bucks, cants, curbs, fascia backing and sleepers:
 - .3 Board sizes: "Standard" or better grade.
 - .4 Dimension sizes: "Standard" light framing or better grade.
 - .5 Post and timbers sizes: "Standard" or better grade species except as indicated.
 - .4 Framing and board lumber: in accordance with NBCC 2010 Subsection 9.3.2, except as follows:
 - .1 Deck joists, studs, chords in built-up beams: D-Fir NLGA No.2 or better U.N.O.
 - .2 Post and Beams: D-Fir species, NLGA No.1 grade.
 - .3 Wall studs: D-Fir species, NLGA No.2 grade or better.
 - .4 Boardwalk plank: Yellow Cedar species, NLGA No.2 grade or better.
- .3 Glued end-jointed (finger-jointed) lumber products are acceptable for framing of interior non-load bearing studs.

2.2 PANEL MATERIALS

- .1 Douglas fir plywood (DFP): to CSA O121, standard construction.
- .2 Canadian softwood plywood (CSP): to CSA O151, standard construction.
- .3 Plywood, OSB and wood based composite panels: to CAN/CSA-O325.

2.3 PANEL MATERIALS END USES

- .1 Roof sheathing: DFP sheathing grade square edge, 12.5 mm thick.
- .2 Wall sheathing: DFP sheathing grade square edge, 12.5 mm thick.
- .3 Miscellaneous plywood panels: DFP or CSP sheathing grade square edge, 19 mm thick, for wall backing, panel mounting boards and as indicated.
- .4 Wall sheathing under wall waterproofing membrane: DFP sheathing grade T&G edge, 16 mm thick pressure preservative treated to para. 2.7.1.

2.4 SHEATHING PAPER

- .1 Exterior wall sheathing paper:
 - .1 Single ply asphalt-kraft sheet conforming to CAN/CGSB 51.32M77, US st'd UUB-790a as a 30 minute water resistant paper applied in two layers.

2.5 DAMPROOF MEMBRANE

- .1 Wood plates in contact with concrete: use pressure preservative treated wood D-Fir Grade No. 1 or better with compressible gasket filler of either 25 mm fibreglass insulation, closed cell polyethylene sponge 3 mm thick or roll roofing.
 - .1 Fibre glass insulation to: Section 07 21 30.
 - .2 Roll roofing: to CSA A123.2, Type S.
 - .3 Poly closed cell sponge gasket: as approved by Departmental Representative.
- .2 Waterproofing membrane: Self-adhering or adhesive-applied SBS modified bituminous membrane minimum 1.5 mm thickness reinforced with material for application over primed substrate; of steel, aluminium, galvanized steel, gypsum board and plywood, conforming to the following:
 - .1 Tensile strength: 150 n/5 cm.
 - .2 Air permeance: less than 0.01 l/m sq. at 75 Pa pressure difference.
 - .3 Sheet membrane: conforming to CGSB 37-GP-56M-1980.
 - .4 Acceptable products:
 - .1 Perm-a-Barrier System 4000, Grace Membrane Group
 - .2 BlueSkin SA Air Barrier Membrane, Monsey-Bakor.
 - .3 Sopraseal Stick 1100, Soprema.
 - .4 QSC-705 Carlisle Coatings and Waterproofing.

2.6 ACCESSORIES

- .1 Nails, spikes and staples: to CSA B111. All nailing shall be common nails. If P-nails (Power driven nails) are intended as substitution, submit P-nails information for Departmental representative's review prior to use. Adjustment of nails spacing or requirements may be required.
- .2 Bolts: 12.5 mm diameter unless indicated otherwise, complete with nuts and cut steel washers. All bolts and anchor bolts shall conform to ASTM A307. Bolt holes shall be 1 mm

larger than the bolt diameter. Bolts in wood shall not be less than 7 diameter from the end and 4 diameters from the edge unless otherwise detailed.

- .3 Proprietary fasteners: toggle bolts, expansion shields and lag bolts, screws and lead or inorganic fibre plugs, explosive actuated fastening devices, recommended for purpose by manufacturer.
- .4 Steel plates: All steel plates used in connection details shall be grade 300W.
- .5 Lag screws: Lag screws shall be predrilled with a bit size of 65% of the shank diameter for the threaded portion. Lead holes shall be the same length as the unthreaded portion and the same diameter as the shank. Screw all lags into place. Cut washers shall be provided under heads which bear on wood.
- .6 No checks or splits allowed at areas to be bolted or lagged.
- .7 All bolts, steel plates/connections and nails for use with Yellow cedar wood to be hot dipped galvanized to ASTM A653 class G184 as produced by Simpson Strong Tie or approved equal by the Departmental representative.
- .8 Galvanizing: to CSA G164 unless noted otherwise. Use galvanized fasteners for exterior work, interior highly humid areas and fire-retardant treated lumber.
- .9 Joist/beam hangers, post bases: unless noted otherwise shall be hot dipped galvanized as per manufacture and approved by the Departmental representative.

2.7 FINISHES

- .1 Galvanizing: to CAN/CSA-G164(Withdraw) with zinc coating of 610g/m², use galvanized fasteners for exterior work, interior highly humid areas, pressure- preservative, and
- .2 Stainless steel: use stainless steel Grade 316 or alloy for fastener for work mentioned in .1 above or alternative are acceptable and at contractors cost.

2.8 WOOD PRESERVATIVE

- .1 Surface-applied wood preservative: clear, coloured, or copper naphthenate or 5% pentachlorophenol solution, water repellent preservative.
- .2 Pentachlorophenol use is restricted to building components that are in ground contact and subject to decay or insect attack only. Where used, pentachlorophenol-treated wood must be covered with two coats of an appropriate sealer.
- .3 Structures built with wood treated with pentachlorophenol and inorganic arsenicals must not be used for storing food nor should the wood come in contact with drinking water.

3.0 EXECUTION

3.1 PREPARATION

- .1 Comply with AWP.A.M4, use copper naphthenate to manufacturer's instructions.

- .2 Treat surfaces of material with wood preservative, before installation.
- .3 Apply preservative by dipping, or by brush to completely saturate and maintain wet film on surface for minimum 3 minute soak on lumber and one minute soak on plywood.
- .4 Re-treat surfaces of PT Lumber and plywood exposed by cutting, trimming or boring with liberal brush application of preservative before installation.
- .5 Treat material as indicated and as follows:
 - .1 Wood cants, fascia backing, curbs, nailers, sleepers on roof deck.
 - .2 Wood furring for member on outside surface of exterior masonry and concrete walls.
 - .3 Wood sleepers supporting wood subflooring over concrete slabs in contact with ground or fill.
 - .4 Plywood wall sheathing under water proofing membrane.

3.2 INSTALLATION

- .1 Comply with requirement of NBCC 2015, Part 9 and General Notes on Structural Drawings. Where conflict exists, the more stringent requirements will apply.
- .2 Install members true to line, levels and elevations.
- .3 Construct continuous members from pieces of longest practical length.
- .4 Install spanning members with "crown-edge" up.
- .5 Install all exterior pressure treated timber sill plates using 16 DIA. Anchor bolts @ 1000 o.c. into ground U.N.O.; Anchor interior non-structural wall sill plates with minimum 12 Dia. Anchor bolts @ 2400 o.c.
- .6 Stud walls abutting a concrete or masonry wall shall be bolted to the wall with 12 Dia. Anchor bolts @ 600 o.c. through a double stud.
- .7 Install lumber and panel materials so that grade-marks and other defacing marks are not visible or are removed by sanding at location (s) where exposed in final assembly.
- .8 All built-up beams to be D-fir Grade No. 2 or better nailed through each lamination using 82 min. nails on a 150 mm grid.
- .9 Install plywood roof sheathing with surface grain at right angles to roof framing. Provide solid blocking necessary to ensure maximum span on roof sheathing edge does not exceed 610 mm in either direction.
- .10 Install sheathing over framing members as indicated using nails to NBCC part 9 requirements and in accordance with structural drawing.
- .11 Install wall sheathing with panel side joints on solid bearing staggered at least 800 mm. Nail at perimeter edge 150 mm o.c. minimum and at interior of panels 300 mm o.c. minimum. Use minimum 65 mm long nails. Refer to general Notes on structural drawing for nailing pattern.

- .12 Apply peel and stick waterproof membrane at all window and door openings at jambs, head and sill. Apply waterproofing membrane over wood framing where wood framed wall is adjacent to backfill and concrete.
- .13 Apply building paper in two layer application over sheathing using staples or auto-nailer.
- .14 Install furring, strapping and solid backing in walls and structures as required to space-out and support casework, cabinets, applied finishes, facings, pipe chases, wall mounted door stops, access hatches, electrical and mechanical fixtures, washroom accessories, benches, prefab showers, overhead door hardware and other work as required. Use solid blocking or 19 mm plywood securely nailed to framing members.
- .15 Frame and strap for suspended gypsum board ceiling finishes.
- .16 Align and plumb faces of furring and blocking to tolerance of 1:600.
- .17 Install furring and blocking as required to space-out and support casework, cabinets, wall and ceiling finishes, facings, fascia, soffit, siding and other work as required.
- .18 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
- .19 Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized, or steel fasteners.
- .20 Install wood backing, dressed, tapered and recessed slightly below top surface of roof insulation for roof hopper.
- .21 Install sleepers as indicated.
- .22 Use caution when working with particle board. Use dust collectors and high quality respirator masks.

3.3 ERECTION

- .1 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.
- .2 Countersink bolts where necessary to provide clearance for other work.

3.4 SCHEDULES

- .1 Provide electrical equipment backboards for mounting electrical equipment as indicated. Use 19 mm thick plywood on 19 x 38 mm furring around spacing, perimeter and at maximum 300 mm intermediate.

END OF SECTION 06 10 11

To: CTA
Att: Tony Yip, Architect

By email only

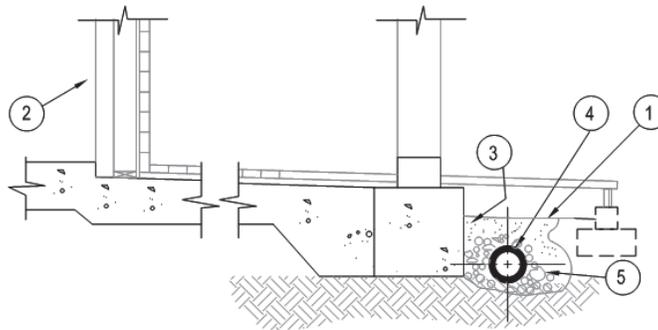
From: Ivan Nikolic, P.Eng

Total no. of pages: 3+0

This Addendum forms part of the Contract Documents and is to be read, interpreted and co-coordinated with all other parts. Include cost of all work contained herein in the Contract Price. The following revisions supersede information contained in the original drawings and specification issued of the above named project to the extent referenced and become part thereof. Please acknowledge receipt of this Addendum on the Form of Tender.

Please issue an Addendum with the following wording:

1. Refer to IFT Plumbing Drawing P-01, Operations Building – Details, Legend and Abbreviations:
 - 1.1 Sub-Soil Drain Detail: Replace detail with detail shown below.



- | | |
|---|--------------------------------|
| 1. FINISH GRADE. | 4. SUB-SOIL DRAIN PIPE. |
| 2. FOUNDATION WALL. | 5. GRANULAR FILL AS SPECIFIED. |
| 3. BACKFILL MATERIAL, REFER TO SOILS SPECIFICATION. | |

SUB-SOIL DRAIN
N.T.S.

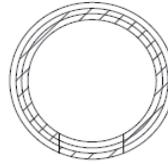
NOTE:

PROVIDE GEO TEXTILE FILTER CLOTH AS PER GEOTECH REPORT REQUIREMENTS

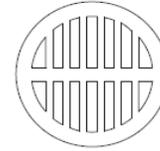
- 1.2 Sub-soil Drain Clean-out Detail:
Add Note: All clean-outs at patio decking should be extended and installed flashed with decking as required.
2. Refer to IFT Plumbing Drawing P-03, Operations Building – Partials Floor Plans for Basement and Ground Floor – Renovation – Plumbing.
 - 2.1 A 100 sub-soil drain connection to the existing 150mm sub-soil drain at Basement foundation will be provided by others (3.5 meters deep excavation is not required). A new connection point will be terminated approximately one meter below ground floor elevation at GL 2/C.
 - 2.2 Use GPR in the area of excavation prior digging.
 - 2.3 Implement a hand digging in the area of excavation to prevent damage on the existing services (telecom. hydro, 150mm water, 50mm gas).
3. Refer to Mechanical addendum Add. #1M, Item 6.
 - 3.1 Item 6.1 is to remain.
 - 3.2 Delete Item 6.2. New Item 6.2 should read.
 - 6.2 Provide new Lawn Basin LB-1 (1000mm deep, Ø450mm diam. with 125mm knock-out, one hole only, base and cast iron grate). Provide 100mm storm connection with removable reverse down elbow in lawn basin. Lawn basin should be installed in grass area [low point]. Exact location should be verified on the site with Architect prior installation. The lawn basin should be connected with 100mm storm line.



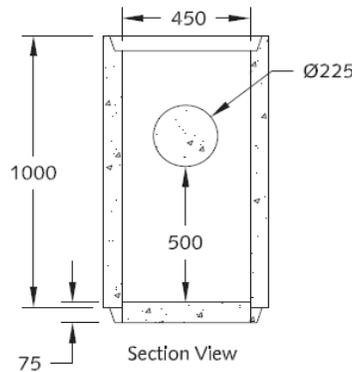
TR27 Style Cast Iron Grate



Plan View



Slotted Concrete Lid

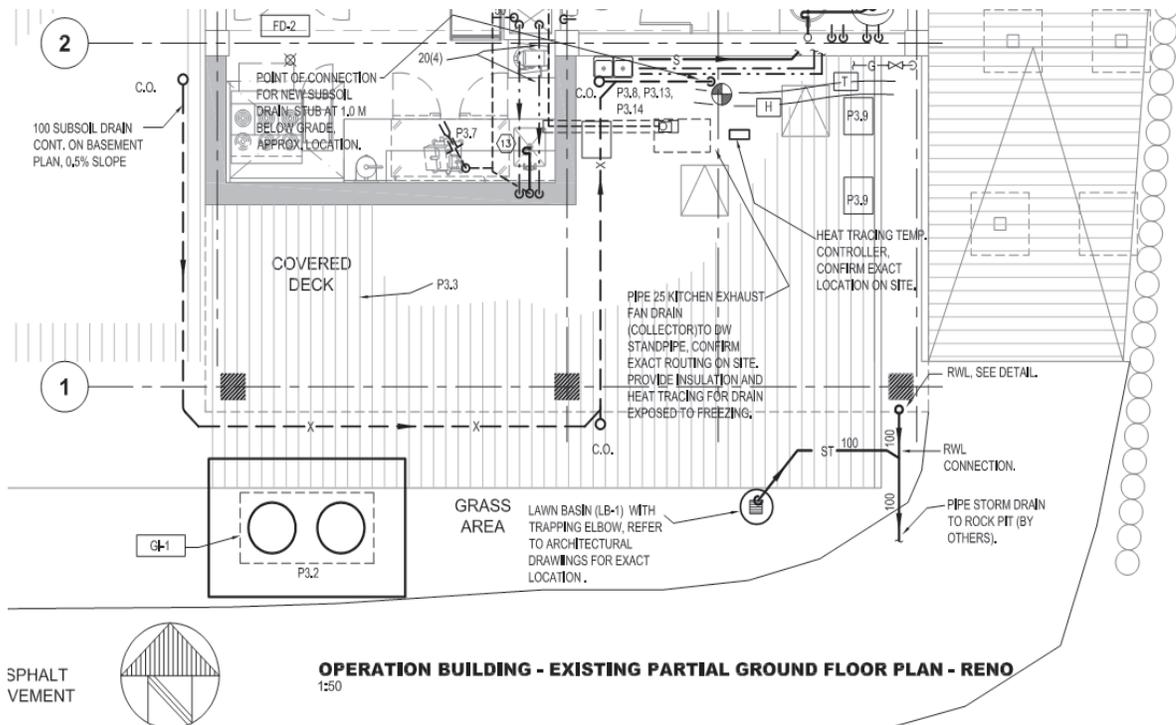


Notes:

1. Lawn Drain suitable for non-traffic or occasional loading use.
2. Supplied with Ø225 'knock-out' core for service connection.
3. Available with or without inside base.
4. Top of section accepts 'drop-in' style TR27 grates, concrete slotted lids, and solid light duty concrete lids.
5. Manufactured to ASTM C14 specifications.
6. Approx. weight: 250 kgs. / 290 kgs. with base.
7. All dimensions are in millimeters.
8. Min. concrete strength: 22.7 MPa.

4. Refer to IFT Plumbing Drawing P-03, Operations Building – Partial Floor Plans for Basement and Ground Floor – Renovation – Plumbing.

- 4.1 Refer to partial drawing below for revised sub-soil drainage pipe routing, lawn basin, rainwater leader, etc.. Start point for sub-soil drain line is to be 0.6 m below the final grade. Drawing is not scaled (NTS).
- 4.2 Provide additional clean-outs.



4.3 Clarification: There will be only one rain water reader and lawn basin.

END OF ADDENDUM # Add. #2M