



REQUEST FOR TENDERS	
Requirement	Tiverton Sports Centre Washroom Renovation
RFT#	CS-2025-07
Issued By	The Municipality of Kincardine 1475 Concession 5 Kincardine, Ontario, Canada N2Z 2X6
Issue Date	March 28, 2025
Tender Notice Platform	www.kincardine.ca
Bidding System	Emailed to: tenders@kincardine.ca
RFT Documents	RFT documents may be downloaded from the Tender Notice Platform.
Site Visit	A Site Visit will be held at Tiverton Sports Centre, 20 McLaren St, Tiverton ON, 1:00 PM ET on April 10, 2025
Bidder Inquiries	Questions and requests for changes to this RFT must be submitted through the Bidding System.
Deadline for Questions	The Municipality will respond to inquiries received by 5:00:00 PM ET on April 16, 2025.
Bid Submission	Bids must be submitted via the Bidding System.
Submission Deadline	Bids must be fully received by the Bidding System by 2:00:00 PM ET on April 22, 2025.
RFT Contact	All inquiries must be directed through the Bidding System.
Contract Award	The Municipality anticipates that the contract will be awarded in May, 2025.
Project Completion by:	July 1, 2025

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PART 1: RFT PROCESS

1. Introduction

The Municipality of Kincardine is a municipality with a population of approximately 12,000 people located on the shores of Lake Huron in the province of Ontario, Canada. The current municipality was created in 1999 by the amalgamation of the Municipality of Kincardine, the Municipality of Kincardine, and the Municipality of Bruce. For more information on the municipality, visit kincardine.ca.

The Municipality is seeking Bids from contractors to complete the project described in the Scope of Work in Part 2 of this RFT.

Below is a description of the tendering process.

2. Definitions

In this RFT document:

“Addendum” and “Addenda” mean a document released following posting of the RFT that amends or clarifies the content of the RFT.

“Bid” and “tender” are synonymous and refer to supplier’s submission in response to this RFT.

“Bidder” means a supplier that submits a Bid.

“Bidder’s Workbook” means the document attached as Schedule 1.

“Contractor” means the Bidder that has been awarded a contract with the Municipality to provide the Work.

“Work” means all the goods and services to be supplied by the Contractor as specified in Part 2 -Scope of Work.

Other capitalized terms have the meanings assigned on the cover page of this RFT document.

3. RFT Overview

This RFT is comprised of the following parts:

Part 1: RFT Process	General description of the tendering process.
Part 2: Scope of Work	<ul style="list-style-type: none"> • Drawings and Specifications
Part 3: Contract Terms	<ul style="list-style-type: none"> • Agreement between Municipality and Contractor (based on CCDC 2 2020 Stipulated Price Contract) • Supplementary General Conditions
Schedule 1: Bidder’s Workbook	<ul style="list-style-type: none"> • Site Visit instructions (if any) • Insurance requirements • Bid submission forms

4. Binding Offers

All compliant Bids are binding offers to supply the Work in accordance with the Scope of Work in Part 2 and the terms and conditions of the contract in Part 3. By submitting a Bid, a Bidder accepts (a) to be bound by all the terms and conditions of this RFT and Bid Forms and (b) to sign the Contract without modifications.

5. Bidder Questions

Bidders should submit any questions relating to this RFT through the Bidding System before the Deadline for Questions.

6. Addenda

Responses to questions received by the Deadline for Questions will be provided through an Addendum posted via the Tender Notice Platform. Addenda will not identify the Bidders that submitted the inquiry.

The Municipality will make reasonable efforts to respond to all Bidder inquiries. The Municipality may edit Bidder inquiries for clarity, exclude inquiries that are either unclear or inappropriate, and provide a single answer to similar inquiry posed by multiple Bidders.

It is a Bidder's sole responsibility to check the Tender Notice Platform often for new addenda. Bidders should ensure they have checked the Tender Notice Platform immediately before Bid submission to ensure nothing has been missed.

7. Bid Preparation Instructions

(a) General Requirements

Mandatory Bid process requirements are denoted by the terms "must" or "shall" and preferred requirements are denoted by the word "should". To be considered, Bids must meet all mandatory Bid process requirements including the following which must be met:

- i. Include the completed forms in the Bidders Workbook;
- ii. be written in English;
- iii. respond to the Municipality's requirements; and
- iv. include all requested pricing information in Canadian dollars.

(b) No Counterproposals, Conflicts, Qualifiers or Assumptions

Bidders must not make assumptions when preparing their Bid. Bidders also must not add language in their Bid that either conflicts with the Municipality's requirements, qualifies the Bid or makes the Bid conditional. The period for questions is intended to provide Bidders a full opportunity to ask questions or obtain changes to the RFT prior to Bid submission and failure to use the question period is at Bidder's sole risk.

If assumptions, counterproposals, conditions or qualifications appear in a Bid, the Municipality may either (a) disqualify the Bid; or (b) require that the foregoing be removed from the Bid, without any change to pricing, before the Bid can be considered further.

(c) Equivalents (if applicable)

When a component of the Work in Part 2 - Scope of Work is specified by its trade or other name (whether such name is followed by the phrase 'or approved equivalent' or not), the Municipality will consider Bids proposing equivalent goods or services that demonstrably fulfil the requirement of the procurement. Whether the equivalent good or service demonstrably fulfills the requirement will be determined in the Municipality's sole discretion. Where an equivalent product is approved prior to the Bid Submission Deadline, an Addendum will be posted to inform all Bidders of the approved equivalent.

To avoid unnecessary investment in Bid preparation and Bid disqualification, Bidders should request the Municipality's opinion on the acceptability of an equivalent good or service prior to the Deadline for Questions to receive a determination in advance of the Bid Submission Deadline.

8. Bid Submission Instructions

Bidders must submit their Bids through the Bidding System. Bidders may edit and resubmit their Bid Submission prior to the Submission Deadline. Bidders are solely responsible for making sure their Bid is fully received by the Bidding System (the IT system) prior to the Submission Deadline. **Delays caused by technical issues, such as internet connectivity issues or file sizes being too large, do not excuse a late Bid.** Bidders are advised to allow sufficient time to resolve any technological issues that may arise with Bid Submission.

9. No Public Opening

Since a full evaluation of the Bid documents for compliance is required prior to award, and in cases where Bidders are given the option of providing equivalent (substitutes) for evaluation, and/or because of the volume of units to be priced, prices will not be read out at Bid opening time.

10. Bid Evaluation and Ranking Process

Bids submitted on time will be examined and ranked in accordance with the following steps:

(a) Review of Mandatory Requirements

Bids will be reviewed to ensure they meet mandatory Bid process requirements, in particular to ensure all required Bid forms have been included in the Bid. If a mandatory requirement is not satisfied, the Bid will be disqualified and will not proceed any further. A minor administrative or clerical omission will not be considered a non-compliance where it does not have a substantial impact on the outcome of the process. For example, a missing confirmation of addenda on the Offer Form or missing administrative information such as an element of the Bidder's address, or a missing signature on a form is considered an administrative omission. Missing or substantially incomplete Bid forms, missing financial information and

missing bid security are examples of material non-compliances that will result in a disqualification. Bidders will be provided with the opportunity to remedy a minor administrative or clerical omission.

(b) Financial Bid Evaluation

Bidders must provide all requested pricing information in accordance with the instructions in the Offer Form in the Bidder's Workbook. The Total Bid Price will be used to determine the lowest priced Bid.

(c) Ranking

Bidders will be ranked based on the lowest Total Bid Price and only compliant Bids will be eligible for a contract award.

11. Pre-Contract Verification Process

Prior to finalizing the contract with the selected Bidder, the Municipality may verify the information provided in the selected Bidder's Bid to confirm the Bidder's capacity to perform the Work consistent with this RFT and that the award of contract to the Bidder is in the Municipality's and the public and ratepayers' interest.

The Municipality may choose not to proceed to contract with the selected Bidder if the Municipality becomes aware of information that indicates, in the Municipality's reasonable opinion, that the Bidder is incapable of delivering the project as described in this RFT in accordance with their Bid, or if it would not be in the public interest to award the contract to the highest Bidder, such as where there is evidence of criminal activity, professional misconduct, insolvency, or a history of significant or persistent deficiencies in performance.

(a) Verification of References, Experience and Qualifications

The Municipality may check the selected Bidder's references. If references are verified, the process described in the Reference Form in the Bidder's Workbook will be used. The Municipality may also consider the selected Bidder's past performance or conduct on previous contracts with the Municipality.

The Municipality may choose not to contract with any Bidder that fails the reference check, has a history of poor past performance, or has misrepresented its experience or qualifications.

(b) Verification of Pricing

The selected Bidder may be asked to provide additional breakdown of its pricing as part of a pre-contract verification process.

If the selected Bidder's pricing appears to be abnormally low, the Bidder may be required to provide a detailed explanation of the pricing information and confirm that all requirements have been taken into account. This may require the Bidder to provide invoices from other projects where the prices were applied, or to otherwise justify and explain its cost structure, including Bidder's actual costs, assumed profit and overhead. The Municipality may choose not to contract with any Bidder that is unable to account for the abnormally low pricing to the satisfaction of the Municipality.

If the selected Bidder's pricing appears to be unbalanced (i.e., pricing is abnormally low for some elements or phases of the Work and abnormally high for other elements or phases of the Work), the Bidder may be asked to adjust the allocation of prices to ensure pricing is balanced across different elements and phases of Work. The Municipality may choose not to contract with any Bidder that is unable to correct unbalanced pricing to the satisfaction of the Municipality.

(c) Verification of Workplan and Schedule

The selected Bidder may be asked to confirm its workplan and schedule for completion of the Work. If the RFT includes specific project delivery or completion deadlines, the Municipality may choose not to contract with any Bidder that is unable to confirm its ability to meet those deadlines.

12. Award of Contract (No Negotiation)

Following successful completion of the pre-contract verification process, the selected Bidder will be sent a notice of selection and asked to enter into a contract with the Municipality based on the Contract in Part 3 of this RFT.

The Municipality may accept to clarify certain aspects of the Contract however the terms and conditions of the Contract are not negotiable and no substantive changes will be made.

The selected Bidder is expected to enter into the Contract and provide proof of insurance, contract security, health and safety certifications and other pre-contract materials specified in the Bidder's Workbook within 10 days of the selection notice, or such other longer period of time as may be specified by the Municipality. If the selected Bidder does not enter into the contract or provide the pre-contracting materials within the required timelines, the Bidder will forfeit any bid security provided and the Municipality may proceed to the next ranked Bidder or cancel the RFT process.

13. Notification and Debriefs

After the Municipality has entered into a contract for the Work, for advertised RFT processes, a notice of award will be posted on the Tender Notice Platform. Upon request, the Municipality will provide an unsuccessful Bidder with a debrief to explain why the Bid was not successful. Bidders should submit a request a debrief by emailing the RFX Contact identified on the cover page of the Bid solicitation document within 30 calendar days of the award notice.

14. Complaint Resolution

Any Bidder that has questions or concerns about the outcome of the Bid process is encouraged to first request a debrief. If, following the debrief, the Bidder wishes to challenge the Municipality's decision in respect of the Bid process, the Bidder should submit a written complaint to the RFX Contact identified on the cover page of this RFX document within 5 business days of attending the debrief or within 10 business days of (i) becoming aware of the basis for a procurement complaint or (ii) publication of the notice of award of contract. The Municipality will review and respond to the Bidder's complaint within 20 business days.

To be considered by the Municipality, a complaint must be in writing and must include the following details:

- (a) A precise statement of the relevant facts;
- (b) An identification of the decision being challenged and the issues to be resolved;
- (c) A clear summary of the Bidder's position and supporting documentation; and
- (d) The Bidder's requested remedy.

15. Bidder Standards of Conduct

A Bidder may be disqualified at any time if it violates any of the terms or standards of conduct set out in the Bid Submission Form in the Bidders Workbook.

PART 2: SCOPE OF WORK

1. GENERAL

- 1.1. For purposes of the Contract, this Scope of Work including attached documents comprises the Specifications as defined in CCDC 2 2020.

2. LOCATION AND GENERAL SCOPE OF WORK

- 2.1. The Work is the Tiverton Sports Centre project for the construction of Washroom Renovations at 20 McLaren St, Tiverton, ON.

3. CONTRACT TIME

- 3.1. The Contractor shall complete the Work described in this Contract in accordance with the following schedule:
- 3.2. The project must achieve Ready-for-Takeover on: **July 1, 2025**
- 3.3. If the time limit specified above is not sufficient to permit completion of the Work by the Contractor working a normal number of hours each day or week on a single daylight shift basis, it is expected that augmented and/or additional daylight shifts will be required throughout the life of the Contract to the extent deemed necessary by the Contractor to ensure that the Work will be completed within the time limit specified. Any additional costs occasioned by compliance with these provisions will be considered to be included in the prices bid for the various items of Work and no additional compensation will be allowed therefor. All requests for extension of said completion dates shall be made in accordance with the General Conditions.

4. DRAWINGS AND SPECIFICATIONS

1. Specifications
2. A_M_E Drawings 1 of 1 – 24” x 36”
3. Washroom Accessories – 11” x 17”

5. UTILITY CO-ORDINATION

- 5.1. The Contractor shall be responsible for determining the location of all Utilities, and for safeguarding same during construction. Utility re-locations which are required as a result of the Work under this Contract will be carried out by the utility companies prior to, or during, the construction Work. The Contractor shall co-ordinate his Work with the utility companies and shall schedule his Work as necessary to allow for the re-locations.
- 5.2. The Contractor shall have no claim against the Municipality for any costs associated with utility protection or relocation, or any delays resulting from the scheduling of these relocations.

6. WEEKEND AND HOLIDAY WORK RESTRICTIONS

- 6.1. Work is not to be carried out on a Saturday, Sunday, or statutory holiday, unless expressly permitted by the Contract Administrator. If the Contractor wishes to carry out any Work on a weekend or holiday, he must make application to do so, together with his reason. The decision of the Contract Administrator shall be final.

7. HEALTH AND SAFETY, MUNICIPALITY OF KINCARDINE CONTRACTOR HEALTH & SAFETY HANDBOOK

- 7.1. It is the Contractor's responsibility as "Constructor" under the provision of the *Occupational Health and Safety Act* to coordinate the activities of all employers and works operating within the contract limits to ensure that the requirements of the *Occupation and Health and Safety Act* are satisfied.
- 7.2. The Contractor shall comply with the Municipality of Kincardine Contractor Health and Safety Agreement.

PART 3: CONTRACT

The form of agreement to be used for the Work is CCDC 2 2020.

Additional Contract Documents - attached. The following attached documents will be included in the Contract and will supersede CCDC 2 2020:

- Additional Contract Terms
- CCDC 2020 Supplementary Conditions

ADDITIONAL CONTRACT TERMS

- | | | |
|----------------------------------|----|---|
| 1. Definitions | .1 | "Owner" and " Municipality" are synonymous in the Contract. |
| 2. Other Contractor s | .1 | Other contractors, subcontractors and the Municipality's own forces, may be performing work on the site at the same time as the Work is being done under this Contract. The Contractor shall provide all reasonable co-operation and collaboration with these other forces to ensure a timely completion of the Work. The Contractor shall at all times remain the constructor for purposes of health and safety matters at the Work site(s) and shall remain responsible for ensuring all persons are required to respect applicable health and safety requirements. |
| 3. Use of the Site | .1 | The Contractor must carry out the Work so as to have the least possible interference and disturbance to the normal use of the premises. |
| | .2 | Except as expressly agreed by the Municipality in writing, the Contractor must maintain services to existing buildings and provide for personnel and vehicle access. |
| | .3 | The Contractor must restrict construction and related activities to the Municipality-approved location and must not allow construction traffic to block entrances or exits to municipal facilities for any reason. |
| | .4 | The Contractor must co-ordinate any interference with Owner's operation at the Work site(s) and abide by Owner's direction in this regard. In cases of conflicting requirements, Owner's operation takes precedence but all reasonable effort to accommodate the Contractor's needs will be made. |
| 4. Cutting, Patching | .1 | The Contractor must generally, patch and "make good" any and all surfaces cut, damaged, exposed, or disturbed to comply with any applicable statutory requirements and to the Owner's reasonable satisfaction. |
| 5. Protection of Property | .1 | The Contractor must protect surrounding private and public property from damage during the performance of the Work. |
| 6. Fire Protection | .1 | The Contractor must provide and maintain temporary fire protection equipment during the performance of the Work as required by governing codes, regulations and by-laws. |
| | .2 | Open fires and burning of rubbish are not permitted on site. |
| 7. Workplace Policies | | The Contractor must comply with the Municipality's applicable workplace policies when performing in-person Work on municipal property. This includes all health and safety policies and the policy on COVID-19 vaccination. |

- 8. Occupational Health and Safety**
- .1 The Contractor must follow the provincial Occupational Health and Safety Act and Regulations for construction projects. For the purposes of the act, the company contracted to carry out the Work shall be exclusively deemed the "constructor".
 - .2 Hazardous materials not identified by the Owner may be encountered at the worksite. The Contractor must use all necessary precautions when handling such material. It is possible that asbestos may exist in some form and if encountered the Contractor is responsible to notify the Owner and to follow Ontario Ministry of Labour regulations governing the handling of asbestos in the workplace.
 - .3 The Owner may, where the risk to health and safety is material or imminent, cause those who do not comply with the applicable health and safety laws and regulations to be escorted from the site.
- 9. Contractor Health and Safety Agreement**
- .1 The Contractor is required to sign the Municipality's Health and Safety Agreement and when signed, the Agreement becomes part of the Contract.
- 10. Protection of Building Finishes and Equipment**
- .1 The Contractor must prevent movement, settlement, or other damage to other adjacent structures, utilities, and parts of building to remain in place. Provide bracing and shoring if required.
 - .2 The Contractor must keep noise, dust, and inconvenience to occupants to a very minimum.
 - .3 The Contractor must protect building systems, services and equipment. Protect all furnishings within Work area with polyethylene film during construction.
 - .4 The Contractor must provide temporary dust tight screens, partitions, covers, railings, barricades, supports and/or other protection as required. Protect Workers, finished areas of Work and public.
- 11. Parking**
- .1 All vehicles must be parked in a designated parking area (except for reasonable loading and unloading of equipment and/or materials to a local entrance). Failure to observe these requirements may result the vehicle being ticketed and/or towed.
- 12. Signs and Advertisements**
- .1 No signs or advertisements of any description shall be displayed at the Work site(s) without permission of the Owner other than notices regarding safety.

- .2 Contractor shall ensure notices regarding safety and signs re-routing Municipality community whether driving or walking are prominently displayed.
 - .3 Upon completion of the Work, all signs shall be removed except those specifically directed by the Owner to remain.
- 13. Clean-up**
- .1 The Contractor must maintain the Work area in tidy condition, free from the accumulation of waste products and debris.
 - .2 The Contractor must remove waste and materials regularly so as to maintain a tidy Work site. Do not dispose of any waste in Municipality facilities unless specifically directed to do so by authorized personnel.
 - .3 The Contractor must store materials in areas specially designated by the Municipality. The Contractor must dispose of this debris in a legal manner so as to avoid causing a hazard to occupants and visitors on Municipality property.
- 14. Matching**
- .1 Where new work occurs in or adjacent to pre-existing work, it is the intent that colours and textures of visible finishes within these areas shall be matched to the satisfaction of the Owner.
- 15. Permits, Fees, Certificates**
- .1 The Contractor must obtain and pay for all required permits with the exception of the building permit, which shall be obtained and paid for by Municipality.
 - .2 The Contractor must arrange and pay for all inspection certificates required by authorities having jurisdiction, (i.e., Electrical Safety Authority Certificate). The Contractor must provide Municipality with copies of these certificates upon completion.
- 16. Disruption of Services**
- .1 The Contractor is responsible to provide adequate written notice to the Owner of any interruption of services (i.e., mechanical, electrical etc.) for the connection of new services or the alteration of existing services.
- 17. Sanitary Facilities**
- .1 Temporary sanitary facilities will be designated by the Municipality. The sanitary facilities so designated shall be the only facilities used by Contractor personnel during the Work.
- 18. Power**
- .1 Maximum power of 115V will be available at no cost. Any connection to this power source will be done at the Contractor's expense and liability, and in accordance with the Canadian Electrical Code. Connections to higher power requirements will be at the Contractor's cost.

- 19. Water Supply** .1 Water supply from an Owner-approved source is available for the Project at no cost. Connection and disconnection will be at Contractor's expense and liability.
- 20. Temporary Facilities** .1 Any temporary facilities provided at the site by the Contractor must be removed upon completion of the Work and the area used must be returned to the original condition.
- 21. Provisional Items** .1 Provisional Items (if any specified in the Contract) may be used in whole, part or not at all, at the discretion of the Consultant.
- .2 The unit price for provisional Items shall apply regardless of the actual quantity required.

CCDC 2 2020 SUPPLEMENTARY CONDITIONS

This document entitled CCDC 2020 Supplementary Conditions amends the Standard Construction Document CCDC-2 2020 for Stipulated Price Contract, English version and is part of the Contract Documents.

AGREEMENT BETWEEN OWNER AND CONTRACTOR

ARTICLE A-5 – PAYMENT

.1 Delete paragraph 5.1.1 in its entirety and substitute new paragraph 5.1.1:

5.1.1 make progress payments to the Contractor on account of the Contract Price within 28 days of receipt of a Proper Invoice subject to required holdbacks and amounts that the Owner disputes provided that a Notice of Non-Payment has been provided as required by the Ontario Construction Act.

.2 Delete paragraph 5.2.1 in its entirety and substituted new paragraph 5.2.1

5.2.1 Should either party fail to make payments as they become due under the terms of the Contract or in an award by arbitration or court, interest at the “prejudgment interest rate” determined in the Ontario Courts of Justice Act 27(2) on such unpaid amounts shall also become due and payable until payment. Such interest shall be compounded on a monthly basis.

DEFINITIONS

.1 Add the following definitions:

As-Built Drawings

As-Built Drawings means drawings prepared by the Contractor by marking on a copy of the Drawings the changes from the Drawings which occur during construction including, but are not limited to, the exact location of major building components that were shown generally on the Drawings.

Proper Invoice

Proper Invoice means an invoice that complies with the requirements of the Ontario Construction Act and also includes the following:

- .1 a breakdown of the invoice amount by trade or division as required by the specifications,
- .2 an updated schedule in a form and level of detail acceptable to the owner showing the percentage complete on each task,
- .3 a Workplace Safety and Insurance Board clearances showing current coverage, and
- .4 a Statutory Declaration in the form of CCDC 9A 2018 (for every invoice after the first invoice)

Approved

Wherever the words “approved”, “satisfactory”, “selected”, “directed”, “permitted”, “inspected”, “instructed”, “required”, “submit”, “ordered” are used in the Contract Documents, it shall be understood that the words “by the Consultant” follow, unless the context provides otherwise.

GENERAL CONDITIONS OF THE STIPULATED PRICE CONTRACT

Where a General Condition or paragraph of the General Conditions of the Stipulated Price Contract is deleted by these Supplementary Conditions, the numbering of the remaining General Conditions or paragraphs shall remain unchanged, and the numbering of the deleted item will be retained, unused.

GC 1.1 CONTRACT DOCUMENTS

.1 Delete subparagraph 1.1.5.1 and add the following new subparagraph 1.1.5.1:

If there is a conflict within the Contract Documents:

.1 the order of priority of documents, from highest to lowest, shall be

- the Additional Contract Terms
- CCDC 2 Supplementary Conditions
- the CCDC 2 Agreement between Owner and Contractor,
- the CCDC 2 Definitions,
- the General Conditions,

As applicable:

- Division 01 of the Specifications,
- technical Specifications,
- material and finishing schedules,
- the Drawings.

GC 3.4 CONSTRUCTION SCHEDULE

Add new paragraph 3.4.2:

3.4.2 If, at any time, it should appear to the Owner or the Consultant that the actual progress of the Work is behind schedule or is likely to become behind schedule, or if the Contractor has given notice of such to the Owner or the Consultant pursuant to subparagraph 3.4.1.3, the Contractor shall take appropriate steps to cause the actual progress of the Work to conform to the schedule or minimize the resulting delay and shall produce and present to the Owner and the Consultant a recovery plan demonstrating how the Contractor will achieve the recovery of the schedule. If the Contractor intends to apply for a change in the Contract Price in relation to a schedule recovery plan, then the Contractor shall proceed in accordance with General Condition 6.5 – DELAYS.

GC 5.2 APPLICATIONS FOR PROGRESS PAYMENT

.1 Add to the end of paragraph 5.2.8 the following new sentence:

“Any Products delivered to the Place of the Work but not yet incorporated into the Work shall remain at the risk of the Contractor notwithstanding that title has passed to the Owner pursuant to General Condition 13.1 - OWNERSHIP OF MATERIALS.”

.2 Add new paragraphs 5.2.9 and 5.2.10:

5.2.9 As a condition of receiving each progress payment after the first, the Contractor shall submit:

- (a) a Proper Invoice;
- (b) a Statutory Declaration on an original form CCDC Document 9A-2001, attesting to the truth of the statements made therein;
- (c) a Workplace Safety & Insurance Board Clearance Certificate with each application for progress payment.

5.2.10 If requested by the Consultant, the Contractor shall prepare and deliver to the Consultant current and accurate As-Built Drawings during the course of the Work, which current As-Built Drawings shall be maintained by the Contractor and made available to the Consultant for review and Consultant approval with each application for progress payment.

GC 5.3 PAYMENT

.1 Delete subparagraph 5.3.1.2 in its entirety and substitute new subparagraph 5.3.1.2:

5.3.1.2 the Owner shall make payment to the Contractor on account as provided in Article A-5 of the Agreement - PAYMENT on or before 28 calendar days after receipt of a Proper Invoice with the required supporting documents, as specified herein.

GC 5.5 FINAL PAYMENT

.1 Add new paragraph 5.5.5:

5.5.5 Prior to the release of the finishing holdback provided for under the Construction Act, the Contractor shall submit:

- .1 Contractor’s written request for release of the finishing holdback, including a statement that no written notices of lien have been received by it;
- .2 a Statutory Declaration CCDC 9A-2001;
- .3 a final Workplace Safety & Insurance Board Clearance of Certificate.

GC 7.1 OWNER’S RIGHT TO PERFORM THE WORK, TERMINATE THE CONTRACTOR’S RIGHT TO CONTINUE WITH THE WORK OR TERMINATE THE CONTRACT

.1 Add new paragraph 7.1.7

7.1.7 If the Owner's funding for the project is reduced or lost, or if any other reason arises which requires a termination of all or part of the project, the Owner may issue a Change Order terminating all or part of the project, as described in the Change Order. In the event of such termination, (a) the Contractor shall be required to promptly demobilize and restore the Place of Work to a safe and tidy condition and free from the accumulation of waste products, debris, other than that caused by the Owner, other contractors or the Owner's employees; and (b) the Owner shall pay the Contractor an amount for Work actually performed, and accepted by the Consultant, up to the effective date of termination and any additional, reasonable and unavoidable direct costs that would not have been incurred but for such termination and that could not be reasonably mitigated to be calculated and processed as a Change Order pursuant to the Contract. Notwithstanding anything to the contrary in the Contract, the Contractor shall not be entitled to any payment for costs not incurred or for Work not performed, including, without limitation, any lost profits relating to Work not performed whether the Contract prices are based on a fixed or unit price arrangement. The amount payable under this Section is the only amount payable to the Contractor for termination of the Contract pursuant to this Section. Without limiting the generality of the foregoing, in no event shall the Owner have any other liability to the Contractor for such termination.

GC 11.1 INSURANCE

.1 Delete paragraph 11.1.2 in its entirety and substitute new paragraph 11.1.2:

11.1.2 Each of the policies of insurance shall also contain a provision requiring not less than 30 days' written notice to each named insured prior to cancellation or any material change that would reduce coverage. At least 10 calendar days prior to commencement of the Work and upon any renewal, amendment, or extension of all or any part of the insurance, the Contractor shall promptly provide the Owner with confirmation of coverage and, if required, a certified true copy of the policies certified by an authorized representative of the insurer together with copies of any amending endorsements applicable to the Work. Further, the Owner shall be named as an additional insured on each respective policy and such policy shall contain a cross-liability endorsement.

.2 Add new subparagraph 11.1.9:

11.1.9 The parenthetical reference in CCDC 41 - INSURANCE REQUIREMENTS, paragraph 4 which reads: "(excluding flood and earthquake)" is deleted and replaced with the following: "(including flood, earthquake, testing, and commissioning)".

.3 Add new subparagraph 11.1.10:

11.1.10 **For Contracts with an initial Contract Price lower than \$1M**, the following insurance coverages in CCDC 41 are replaced with the following lower coverages: 1. General liability insurance shall be with

limits of not less than \$5M per occurrence; 1. Automobile liability insurance shall have limits of not less than \$5M.

Add new GC 14.1 as follows:

GC 14.1 CONTRACT SECURITY

14.5.1 The Contractor shall, prior to commencement of the Work or within the specified time, provide the Owner any Contract security specified in the Contract Documents.

14.5.2 If the Contract Documents require surety bonds to be provided, such bonds shall be issued by a duly licensed security company authorized to transact the business in the province or territory of the Place of Work and shall be maintained in good standing until the fulfillment of the Contract. The form of such bonds shall be in accordance with the Ontario Construction Act.

BIDDER'S WORKBOOK

BIDDER'S WORKBOOK

1. Introduction

The Bidder's Workbook sets out instructions relating to site visits, bid and contract security and includes the Bid submission forms. Bidders must use the forms in this Bidder's Workbook when preparing their Bid.

2. Site Visit Instructions

1. Meet in front of the Tiverton Sports Centre at designated time.
2. Subtrades may attend.

3. Bid Security (not required)

4. Contract Security:

Contract Security must be in the form of either a certified cheque, bank draft, money order or irrevocable letter of credit from a financial institution that is subject to the Bank Act and authorized to do business in Ontario, in the amount of 20% of the Tender Amount.

Bonds/contract security will be held until expiration of the Warranty Period in the Contract. The security may be returned before this time has elapsed provided there is satisfactory evidence that all liabilities incurred by the Contractor in carrying out the Work have been satisfied and that all liens have expired or have been satisfied, discharged or provided for and that a clearance certificate from the Workplace Safety Insurance Board (W.S.I.B.) is provided.

5. Insurance Requirements

For the insurance required to be maintained, see the CCDC 41 2020 as amended by CCDC 2 2020 SUPPLEMENTARY CONDITIONS in Part 3 for details. The cost of insurance is included in the Total Bid Price.

6. Pre-Contract Documentation

Bidders are advised that, if successful, they will be required to submit the following documents within 10 days of notification of award of contract:

- Certificates of insurance evidencing the required insurance coverage
- WSIB certificate
- Municipal Health and Safety Agreements

7. Bid Submission Forms

The following Bid Submission Forms, which are included in the Bidder's Workbook, must be used in the preparation of Bidder's Bid package:

FORM	REQUIRED?
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SCHEDULE 1: BIDDER'S WORKBOOK

Offer Form	YES
Contract Security	YES

BID SUBMISSION FORMS

OFFER FORM

RFT NUMBER CS-2025-07
Project Title: Tiverton Sports Centre Washroom Renovation
Address/Location: 20 McLaren St, Tiverton ON

SUBMITTED ON BEHALF OF (Bidder to complete):

The full legal name of the Bidder:	
Bidder Address:	
Bidder Contact Person (name, title):	
Telephone:	
Email:	

The Bidder offers to enter into the contract included in this RFT, to do all of the Work and to furnish all necessary labour, machinery, tools, apparatus, and other means of construction, and to provide, furnish, deliver and place all materials described, in strict accordance with the Scope of Work, including all plans, specifications and supplemental specifications at the following Total Bid Price:

TOTAL BID PRICE, EXCLUSIVE OF HST:	<hr/> [To be completed by Bidder]
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The above Bid price is in Canadian funds and is all inclusive except as otherwise explicitly noted in the RFT. For certainty, the firm Bid price includes, without limitation, all work, materials, equipment, labour, insurance, contract security and applicable taxes in force at this date except the Harmonized Sales Tax. The HST will be chargeable and shown on invoices.

1. Confirmation of Addenda

THE BIDDER HAS REVIEWED THE FOLLOWING NUMBER OF ADDENDA:	<hr/> [To be completed by Bidder]
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BID SUBMISSION FORMS

2. Completed Attachments

The following attachments are included with the Bid:	Bidder to check/confirm
1. Contract Security – Letter of Credit etc	<input type="checkbox"/>

3. Confirmation of Substantial Performance Date

By submitting this Offer Form, the Bidder confirms that *Ready-for-Takeover* as defined in CCDC 2 terms forming part of the contract can be attained by the date set out below.

READY-FOR-TAKEOVER DATE:	July 1, 2025
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4. Minimum Bidder Standards of Conduct

- (a) No Public Statements or Lobbying. The Bidder must not publish, issue or make any statements or news release, electronic or otherwise, concerning its Bid, or any other Bid, the Bid process, or the award of the Contract, without the express prior written consent of the Municipality. The Bidder must not engage in any form of political or other lobbying whatsoever with respect to this Bid process, or otherwise attempt to influence the outcome of the process directly or indirectly by any manner whatsoever other than by submitting a Bid.
- (b) No Collusion or Bid Rigging. The Bidder certifies that:
- i. the prices in their Bid have been arrived at independently from those of any other bidders;
 - ii. the prices in their Bid have not been knowingly disclosed by the Bidder, and will not knowingly be disclosed by the Bidder prior to award, directly or indirectly to any other bidder or competitor; and
 - iii. no attempt has been made, nor will be made, to induce any other person to submit, or not to submit a Bid, for the purpose of restricting competition.
- (c) Disqualification. A failure to respect the above requirements may lead to disqualification of the Bidder from the process.

5. Municipality's Reserved Rights

- (a) Bidder Errors in Calculations. Wherever there are unit prices or subtotal prices used to calculate a total or extended Bid price and the total or extended Bid price does not accord with the correct calculation of the extended price or total price, the unit price and sub-total prices shall govern. The calculation of the total or extended price shall be corrected by the Municipality and the corrected extended or total prices will be used for evaluation and contracting purposes.
- (b) Municipality's Rights and Privileges. Notwithstanding any other provisions of this RFT, the Bidder accepts that the Municipality may exercise the rights below, in its discretion and without any liability to any Bidder.

BID SUBMISSION FORMS

- i. Amend the scope, schedule, or details of the RFT, or modify, cancel, amend, supplement, clarify or suspend the whole or any part of this RFT at any time for any reason without any liability to Bidder.
- ii. If only 1 Bid is received, the Municipality deems it is not in the public interest to award the Contract as there is no ability to ensure the Bid prices are competitive. In such cases, the Municipality reserves the right to cancel the RFT process and to negotiate prices with the Bidder that submitted the single Bid.
- iii. Where the successful Bid is over budget, the Municipality may cancel the RFT process and negotiate reductions in pricing with the successful Bidder. Where the parties are unable to achieve acceptable price reductions, either party may terminate negotiations without any liability to the other.
- iv. Verify or clarify with any Bidder, or with a third party, any information contained in or submitted as part of the Bid and reject a Bid that the Municipality discovers contains misleading or inaccurate information.
- v. Disqualify any Bidder that engages in prohibited or illegal conduct, including any form of political or other lobbying whatsoever with respect to this RFT, or otherwise attempt to influence the outcome of the RFT process directly or indirectly by any manner whatsoever other than by submitting a Bid.
- vi. Reject a subcontractor proposed by a selected Bidder.
- vii. Re-advertise for new Bids or enter into negotiations for the Work or for goods and services of a similar nature following cancellation of this RFT for any reason.
- viii. Require Bidders with a tied bids to submit a best and final offer (“BAFO”) and select the lowest priced bid following the BAFO process or, if Bids are still tied, to select the winning bidder based on a coin toss.

6. Limitation of Municipality’s Liability

Each Bidder, by submitting a Bid, irrevocably waives any claim, action or proceeding against the Municipality, including without limitation claims for damages, expenses or costs including costs of preparation of a Bid, cost of participation in the processes described in the RFT, loss of anticipated profits, loss of opportunity, legal fees or for any other matter. For greater clarity and without limitation, each Bidder specifically agrees that it will have absolutely no claim against the Municipality nor any representative of the Municipality for any reason whatsoever and the Municipality shall have no liability to the Bidder whether in contract, tort, equity or other principle of law, including without limitation if the Municipality does not select a lowest priced Bidder; suspends, cancels or in any way modifies the requirements, the RFT; or accepts any compliant or non-compliant Bid.

If, notwithstanding the above, a Bidder is determined by a court or administrative body of competent jurisdiction to be entitled to compensation arising from this RFT or for the actions of the Municipality or any representative, including without limitation any exercise the Municipality’s sole discretion, Bidders expressly acknowledge and agree by submitting a Bid that the total maximum compensation for, without limitation, any and all direct and indirect damages, economic losses, profits, opportunities, expenses, costs or other losses, whether or not foreseeable, either individually or cumulatively, is limited to one thousand dollars (\$1,000.00).

BID SUBMISSION FORMS

7. Governing Law

This RFT shall be interpreted and construed in accordance with laws of Ontario and applicable laws of Canada. If any provision of this RFT is in conflict with any statute or legal principle or is determined by a court of competent jurisdiction to be illegal or unenforceable, then such provision will be automatically amended only as needed to remove the conflict, illegality or unenforceability. All of the other provisions of the RFT will remain as they are and in full force and effect.

8. Bid Irrevocability

The Bidder agrees that its Bid is an irrevocable offer which is firm in effect and open for acceptance **for 90 calendar days** (the “**Irrevocability Period**”) from the Submission Deadline. If the Municipality deems it necessary to extend the Irrevocability Period, the Bidder agrees to extend the Irrevocability Period, unless the Bidder revokes its Bid in writing within 5 calendar days of notice of such extension by the Municipality.

ON BEHALF OF BIDDER, THE FOLLOWING DULY AUTHORIZED SIGNATORY CONFIRMS THIS OFFER AND ACKNOWLEDGES ITS ACCEPTANCE THE TERMS OF THE RFT PROCESS:

Signature:	
Name:	
Title:	
Date:	

This form may be executed by hand-written or electronic signature.

Washroom Renovations – Tiverton and District Sports Centre

24105

PROJECT SPECIFICATIONS MANUAL

April 2025

LIST OF DOCUMENTSVOLUME 1DOCUMENT 00 CONTRACT REQUIREMENTS

<u>Section #</u>	<u>Section Title</u>	<u>No. of Pages</u>
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DIVISION 01 GENERAL REQUIREMENTS

01 00 10	Summary of Work	2
01 00 30	Coordination	2
01 00 40	Renovation Project Procedures	3
01 00 45	Cutting and Patching	1
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01 30 00	Submittals	5
01 54 00	Protection of Work and Property	1
01 64 00	Cleaning	2
01 70 00	Close-Out	3
01 70 40	Warranties	2

DIVISION 02 SITEWORK

02 00 50	Demolition	2
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DIVISION 03 CONCRETE

03 30 00	Cast-In-Place Concrete	7
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DIVISION 04 MASONRY

04 20 00	Masonry	3
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DIVISION 05 STEEL

05 50 00	Metal Fabrications	4
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Tiverton Arena – BF Washroom Renovations

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DIVISION 06 WOOD AND PLASTICS

06 20 00 Finish Carpentry 4

DIVISION 08 DOORS AND WINDOWS

08 11 00 Steel Doors, Frames and Screens 4

08 71 00 Finish Hardware 2

DIVISION 09 FINISHES

09 67 00 Epoxy Flooring 4

09 90 00 Painting 6

1. CLOSE-OUT PROCEDURE

1.1. General:

1.1.1. The procedure for completing the Contract and acceptance by the Owner is to be in accordance with the following eight stages:

Stage 1	Submission and Approval of Operating Manuals and As-built Drawings
Stage 2	Contractor's Inspection for Substantial Performance
Stage 3	Contractor's Application for Certificate of Substantial Performance
Stage 4	Architect's Certificate of Substantial Performance
Stage 5	Architect's Certificate for Payment of Holdback Monies
Stage 6	Final Inspection for Total Performance
Stage 7	Architect's Final Payment Certificate
Stage 8	Guarantee Period(s).

1.2. Publication Copy:

Submit promptly one copy of the construction trade newspaper containing publication of copy of the Certificate of Substantial Performance. Arrange and pay all costs associated with publication notices.

1.3. Deficiency and Guarantee:

1.3.1. A deficiency is an item of the Work required by the Contract which has not been installed or put into operating condition.

1.3.2. A guarantee item is an item of Work, installed under a contract which the Contractor agrees to maintain in perfect condition for a specific period of time, after the Owner's acceptance of the Work.

1.3.4. When, in the Architect's opinion, the Work under the Contract is Substantially Performed, and prior to the final inspection by the Owner, a preliminary inspection shall be made at which time all deficiencies shall be listed.

1.4. Deficiency Lists:

1.4.1. The Architect will not be responsible for the issue of extensive lists of deficiencies. The Contractor is to understand that, the prime responsibility for ensuring that all items shown on the Drawings and described in the Specifications are completed is the Contractors. Any inspections to approve Certificates of Substantial Performance must be immediately cancelled if, in the opinion of the Architect, it becomes obvious that extensive deficiencies are outstanding.

1.4.2. Make every effort to ensure that both defects and deficiencies are made good prior to final inspection.

1.4.3. During the inspection, decision must be made as to which defects must be rectified before the building can be accepted and which defects are to be treated as guarantee items.

1.4.4. Deficiencies shall be made good before the Contract is considered complete.

2. FINAL CLEANING

2.1. Final cleaning is to include new construction and all existing surfaces and items.

2.2. Immediately prior to occupancy by Owner, clean and dust and remove all stains and smudges from all finished surfaces, and all exposed fixtures and equipment.

2.3. Remove dust and soil from all surfaces by vacuuming, damp mopping, washing or scrubbing, as required. Vacuum behind grilles, louvres and screens.

2.4. Wash down exterior paved walkways and roadways.

2.5. Glass, mirrors and polished metal surfaces shall be cleaned and polished free of streaks.

2.6. Clean all mechanical and electrical equipment, plumbing fixtures, light fixtures, casework, specialties and accessories.

2.7. Remove all temporary labels, protective coatings, markings and tags, thoroughly clean surfaces of adhesive.

2.8. Wax, seal, shampoo or prepare floor finishes.

2.9. Clean drains and drainage systems and leave open and functioning.

2.10. Purge potable water system.

2.11. Methods and materials for cleaning shall be in accordance with the manufacturer's recommendations for the finishes involved. Exercise extreme care with abrasive and chemical cleaning agents, and verify their compatibility with the finish and materials to be cleaned.

3. SYSTEMS DEMONSTRATION

3.1. Prior to final inspection, demonstrate operation of each system to Owner, Architect, and Engineers.

3.2. Instruct personnel in operation, adjustment, and maintenance of equipment and systems, using provided operation and maintenance data as the basis for instruction.

3.3. The Contractor and responsible personnel from the sub-trades whose Work is

being demonstrated shall be present at these demonstrations.

4. PROJECT COMMISSIONING

- 4.1. Expedite and complete deficiencies and defects identified.
- 4.2. Review maintenance manual contents (operating, maintenance instructions, record "as-built" Drawings, materials) for completeness. Review supply and completeness of all spare parts required by the documents and the manufacturers.
- 4.3. Submit required documentation such as statutory declarations, Workers' Compensation Certificates, warranties, certificates of approval or acceptance from the authorities.
- 4.4. Attend 'end-of-work' testing and break-in or start-up demonstrations.
- 4.5. Arrange and co-ordinate instruction of Owner's staff in care, maintenance and operation of building systems and finishes by Suppliers or Subcontractors.
- 4.6. When partial occupancy of uncompleted Project is required by the Owner, co-ordinate Owner's uses, requirements, access, with Contractor's requirements to complete Project.
- 4.7. Co-ordinate Owner's moving-in of staff, furnishings, equipment with building accessibility, traffic, and Contractor's and Subcontractor's cleaning-up and completion activities all to suit Owner's Work schedule and not disrupt Owner's productivity.
- 4.8. Provide on-going review, inspection and attendance to building call-back, maintenance and repair problems during the warranty periods.

END OF SECTION

1. DESCRIPTION

1.1. Requirements Included:

1.1.1. Scope of Project.

1.1.2. Work Site.

1.1.3. General Requirements.

1.1.4. Completion of the Work.

2. SCOPE OF PROJECT

2.1. The intent of this project is to convert a portion of the existing Concession Room into a Universal Washroom. Also included is the installation of a new epoxy floor covering over the concrete floor of the existing male and female washrooms.

3. WORK SITE

3.1. Confine all equipment, materials, debris, offices, storage sheds and storage areas within the Site and building.

4. GENERAL REQUIREMENTS

4.1. Conform to all Divisions and all parts of the Contract Documents.

4.2. Imperative Sentences:

The Specifications are directed at the Contractor. Sentences written in the imperative form apply to the Contractor.

4.3. Supply means:

Deliver to the Site and place as directed by the Contractor.

4.4. Install means:

accommodate in the Work, receive, store, uncrate, assemble, adjust, trim, and fit as necessary, locate as per the documents as adjusted by the Architect, affix to the Work and connect to services as per manufacturers instructions and as required by the documents in conformance with Shop Drawings and as required for full operation or service and make final trimming and adjustment, test, clear, make fully operational, provide operating and reference data required by Section 01300, warrant and demonstrate use to the Owner.

4.5. Provide means: supply and install:

4.6. Make Good means:

to remove and replace, repair, patch, trim, sand and paint, as necessary, all affected

Tiverton Arena – BF Washroom Renovations

McCallum Sather Architects

items and surfaces using materials and procedures to match adjacent materials and finishes.

4.7. Not in the Contract:

The means by which something shown or specified shall be indicated as not being in the Contract is by the use of the initials "NIC" or the words "not in (the) Contract", "by Owner" or "by another Contractor".

4.8. Number:

In all cases where a device or part of the equipment is referred to in the Specifications in the singular number, it is intended that such reference shall apply to as many such devices as are required to complete the installation. The word "all", whether used or not, is intended to apply to all Products and cases (events) mentioned in the Specifications, unless the context clearly and specifically provides otherwise.

4.9. Authority of the Consultant:

Wherever the words "approved", "satisfactory", "directed", "permitted", "inspected", "instructed", "required", "submit", "ordered", or similar words or phrases are used in the Contract Documents, it shall be understood, unless the context provides otherwise, that "by (to) the Consultant" follow.

4.10. Contract Documents:

4.10.1. Trades are advised that all *items*, *systems* and *information* described in the Specifications, and all *lines*, *surfaces*, *items* and *information* noted on the Drawings (referred to as *items*) have a value associated with them. The Trades price must include a price for all *items* noted.

4.10.2. If a discrepancy within the Contract Documents is discovered, a Site Instruction will be issued by the Architect clarifying the discrepancy and, if in the opinion of the Architect, the clarification involves the deletion of an item from the Contract, a Contemplated Change Notice will be issued and a credit to the Contract will be determined.

5. COMPLETION OF THE WORK

5.1. The progress of the Work shall be carried forward with all possible haste until completion and acceptance by the Architect. Continue full scale operations throughout all seasons.

5.2. Restrict noise to acceptable levels and times. Clean construction debris and dust from the building on a regular basis and at the end of each *Working Day*.

5.3. It is understood that the Base Bid Price includes sufficient funds for the provisions of temporary heating, temporary shelters and all other necessary measures to enable all trades to proceed without delay regardless of weather.

5.4. If necessary due to special construction conditions, or if it becomes necessary in order to complete the Work within the Contract time, to work overtime, the Contractor shall pay all necessary overtime and provide all necessary services, permits etc. for same.

END OF SECTION

PART 1- GENERAL

1.1 General

- .1 *Provide* the *Work* in accordance with the *Contract Documents* and be responsible for delays or costs resulting from failure to properly inspect or coordinate the *Work*, and for replacement or corrective work required.

1.2 Identification of Systems

- .1 *Provide* identification of electrical and mechanical system installations and other automated systems or equipment in compliance with *Contract Documents*.

1.3 Commissioning and Systems Demonstrations

- .1 Provide testing, adjusting, balancing and certification and commissioning of mechanical and electrical installations and other automated systems.
- .2 Instruct *Owner's* designated representatives in operation and maintenance of mechanical and electrical installations and other automated systems or equipment.

1.4 Superintendence

- .1 Provide superintendent and necessary supporting staff personnel in attendance at the *Place of the Work* while *Work* is being performed, with proven experience in erecting, supervising, testing and adjusting projects of comparable nature and complexity.

1.5 Dimensions

- .1 Verify dimensions at the *Place of the Work* before commencing shop drawings. Before fabrication commences report discrepancies to *Consultant* in writing. Incorporate accepted variances on shop drawings and as-built records.

1.6 Coordination

- .1 Coordinate and ensure workers, *Subcontractors*, and *Suppliers* cooperate to ensure that the *Work* will be carried out expeditiously and in proper sequence.
- .2 Make adjustments to allow adjustable work fit to fixed work.

1.7 Building Dimension, Templates, Built-ins, and Coordination

- .1 Take necessary dimensions for the proper execution of the *Work*. Assume complete responsibility for the accuracy and completeness of such dimensions, and for coordination.
- .2 *Provide* forms, templates, anchors, sleeves, inserts and accessories required to be fixed to or inserted in the *Work* and set in place or instruct separate *Subcontractors* as to their location.
- .3 Supply items to be built in, as and when required together with templates, measurements, shop drawings and other related information and assistance.

- .4 Pay the cost of extra work and make up time lost as a result of failure to provide necessary information and items to be built in.
- .5 Verify that the *Work*, as it proceeds, is executed in accordance with dimensions and positions indicated which maintain levels and clearances to adjacent work, as set out by requirements of the *Contract Documents*, and ensure that work installed in error is rectified before construction resumes.
- .6 Check and verify dimensions referring to interfacing of services. Verify such dimensions with interconnected portions of the *Work*.
- .7 Do not scale directly from drawings. Obtain clarification from *Consultant* if there is ambiguity or lack of information.
- .8 Details and measurements of any work which is to fit or to conform with work installed shall be taken at the *Place of the Work*.
- .9 Advise *Consultant* of discrepancies and omissions in the *Contract Documents*, that affect aesthetics, or that interfere with services, equipment or surfaces. Do not proceed with work affected by such items without clarification from *Consultant*.
- .10 Prepare and submit setting drawings, templates and other information necessary for the location and installation of material, holes, sleeves, inserts, anchors, accessories, fastenings, connections and access panels.
- .11 Direct *Subcontractors* on site of specific locations required for sleeves and openings.

END OF SECTION

1. DESCRIPTION

1.1. Requirements Included:

1.1.1. Alterations Project Procedures.

2. GENERAL

2.1. Protection

2.1.1. Protect salvaged items from damage and deliver items unused in the final work to location as directed by Owner.

3. CONTINUED OCCUPANCY OF BUILDING

3.1. Existing premises will remain occupied during the Work.

3.2. Areas of Work and storage areas on Site will be accurately designated by Owner before commencement of work, and boundaries established thereby shall be strictly observed.

3.3. Execute work to cause minimum interference with the activities of existing premises and maintain maximum safety to occupants during work. Take reasonable measure for control of noise during operations while building is in use.

3.4. Maintain continuation of fire protection in existing building.

3.5. Ensure proper and safe means of egress from all parts of existing building to open spaces are provided at all times to the approval of authorities having jurisdiction. Mark, install exit lights, and illuminate temporary means of egress.

3.6. Whenever Contractor contemplates entering any area of existing premises to carry out work or to obstruct or take out of use any area of existing premises, he shall request a meeting with the Consultant in order to reach agreement as to time and length of time he may possess, obstruct or remove from use any such area.

3.7. Use facilities, storage spaces and access in existing building only as designated by Consultant.

3.8. Assume total responsibility for security of existing building upon commencement of the work, except for those areas specifically retained by the Owner for his exclusive use during construction.

4. RELOCATION AND REMOVAL OF EXISTING ITEMS

4.1. Where existing items are designated for relocation or removal, relocate or remove these items unless specified to be done by other Sections of the Specifications.

- 4.2. Turn over designated items to the Owner in agreed manner. Remove from Site items not designated to be turned over to the Owner or to be relocated.
- 4.3. Unless otherwise noted, all loose furnishings will be removed by the Owner.
- 4.4. Do all required construction, alterations and making good to existing items being relocated to be serviceable in, and fit new location.
- 4.5. Make good all surfaces and finishes in areas from which items have been removed or in which items are being relocated.
- 4.6. Cap off all existing services required to be severed to affect the alterations.
5. WORK ON EXISTING BUILDING
 - 5.1. Demolition and Removal
 - 5.1.1. Perform demolition in accordance with requirements of the most recent publication of the following:
 - .1 CSA Standard for the Code of Practice for Safety in Demolition of Structures.
 - .2 Occupational Health and Safety Act for the Province of Ontario.
 - .3 Regulations respecting Asbestos on Construction Projects and in Buildings and Repair Operations under the Occupational Health and Safety Act.
 - 5.1.2. Demolish and Remove those elements of the building designated on Drawings as necessary for incorporation of new work.
 - 5.1.3. Limit removal of items to smallest areas possible, and make good disturbed existing work.
 - 5.1.4. Demolish to minimize dusting. Keep dusty materials wetted.
 - 5.1.5. Remove existing equipment, services, and obstacles where required for refinishing or making good of existing surfaces, and replace as work progresses.
 - 5.1.6. Do not sell or burn materials on site.
 - 5.1.7. Remove contaminated or dangerous materials from Site and dispose of in a safe manner to minimize danger at Site or during disposal and in accordance with authorities having jurisdiction.
 - 5.1.8. At end of day's work, leave work in safe condition so that no part is in danger of toppling or falling. Protect interiors of parts not to be demolished.
 - 5.2. New and Replacement Work
 - 5.2.1. Make good materials, and prepare surfaces and refinish all existing surfaces damaged, marred, replaced, or otherwise remedied in the existing building.
 - 5.2.2. Finish new surfaces flush with existing surfaces. Make junctions between existing and new work, or at replaced or remedial work visually undetectable. Make surfaces adjacent to one another of the same material, unit sizes, colour and texture. If this is impossible, make a proposal of intended method of making

good for approval, before installation.

5.2.3. Make good existing surfaces which are specified to receive new finish.

5.3. Services in existing building

5.3.1. Unless specifically stated otherwise, maintain existing mechanical and electrical services, parts and equipment to, or within, the Place of Work.

5.3.2. Alterations or attachments to existing services shall be completed quickly. The amount of time such services can be interrupted shall be determined in consultation with the Consultant and the Owner. Provide notice to the Consultant and Owner well in advance of contemplated interruptions of services. Abide by the time allotted and when interruptions extend past this time make arrangements to provide and install temporary services, parts and equipment to maintain the function of discontinued services until permanent alterations and attachments can be completed.

5.3.3. Should existing services be accidentally uncovered and disrupted, make complete restoration immediately, and ensure adequate protection to avoid further disruption until alternative means of providing permanent continuation of the service are made.

- .1 Make payment for work specified in the foregoing at no additional cost to the Owner if, in the opinion of the Consultant, such work could have been foreseen and which has been caused by lack of proper care and protection.

END OF SECTION

1. DESCRIPTION

1.1. Requirements Included:

- 1.1.1. General Regulatory Requirements.
- 1.1.2. Authorities.
- 1.1.3. Codes and Acts.

2. GENERAL REGULATORY REQUIREMENTS

- 2.1. The Architect has the right of the authority named in any referenced or applicable standard to approve, select, interpret or otherwise exercise any authority afforded by the standard.
- 2.2. Where the Contract Documents exceed the requirements of this Section, provide such additional requirements.

3. AUTHORITIES

- 3.1. Conform to all requirements of all authorities having jurisdiction including the public utilities. The above are referred to in the Contract Documents as the authorities.
- 3.2. Notwithstanding 3.3 and 3.4., the Architect has applied for, and the Owner will pay for the Building Permit.
- 3.3. The Contractor is to apply for, pay for and obtain all other permits required by the authorities. Include cost of such in the Base Bid Price.
- 3.4. Keep the "Building Permit Copy" of the Drawings and Specifications, as approved by the local Building Department, on the job Site and maintain in good condition to completion of the Work. On completion of the Work, deliver this Building Permit copy in good condition to the Architect.

4. CODES AND ACTS

- 4.1. Conform to: 2024 Building Code Compendium;
- 4.2. The Occupational Health and Safety Act, 1990 and Regulations for Construction Projects (Ontario Regulation 691/1990);
- 4.3. The Canadian Electrical Code (Canadian Standards Association (CSA) C22 Series, latest editions).

END OF SECTION

1. CO-ORDINATION AND CO-OPERATION

- 1.1. Co-ordinate all Sections. Maintain efficient and continuous supervision. Ensure co-operation of workers in laying out the Work. Be responsible for co-ordination and placement of openings, sleeves and accessories. Take into account previously installed installations to ensure best arrangement of components in the available space. For critical locations where adequate direction is not given by the Documents, consult the Architect.
- 1.2. The Work noted in each Section of the Specifications and the description of the various systems shall not relieve the Contractor from their responsibility to assign the various parts of the Work to the appropriate Subcontractors and forces and shall not impose upon the Architect or Owner the duty to arbitrate disputes between the Contractor and the Subcontractors nor shall it relieve the Subcontractors from their responsibility for carefully examining all the Drawings and Specifications and co-ordinate their Work with each other and the Contractor.
- 1.3. Take field dimensions relative to the Work. Fabricate and erect Work to suit field dimensions and field conditions. Provide forms, templates, anchors, sleeves, inserts and accessories required to be fixed to or inserted in the Work and set in place or instruct related Sections as to their location, giving required supervision.
- 1.4. Pay cost of extra Work caused by, and make up time lost as a result of failure to co-ordinate all Sections or to obtain from them co-operation and information necessary to co-ordinate their Work with others.
- 1.5. Co-operate and co-ordinate with other Contractors on the Project as required for satisfactory and expeditious completion of the Project.
- 1.6. Afford all other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their Work.

2. CUTTING, PATCHING AND MAKING GOOD

- 2.1. Cut, patch and make good to leave Work in a finished condition. Cutting in this sense shall mean the actual cutting of components to allow other components to pass through or to provide new openings.
- 2.2. The Section requiring cuts, holes or sleeves for its Work shall locate same. Contractor to make cuts using trade trained in such Work. Cuts shall be clean, true with smooth edges.
- 2.3. Patching shall be done by Section, which did original Work being patched, or by trade trained in such Work. Patches shall be invisible in final assembly. Complete and tightly fit, and seal if exterior wall, all construction to pipes, ducts and conduits which pass through construction to completely prevent the passage of

air. Maintain or restore vapour barrier, air barrier, insulation and cavity in the building envelope. Maintain or restore fire or smoke rating of cut element.

- 2.4. Damaged Work shall be made good by appropriate trades trained in such Work but at the expense of those causing damage. Make good using matching materials.

3. AUTHORITIES

- 3.1. Conform to all requirements of all authorities having jurisdiction including the public utilities. The above are referred to in the Contract Documents as the authorities.
- 3.2. Apply for, pay for and obtain all permits required by the authorities for the Work. Include cost of such in the Base Bid Price.
- 3.3. The mechanical and electrical Subcontractors shall obtain and pay for all permits applicable to their respective Work.
- 3.4. The "Building Permit Copy" of the Drawings and Specifications as approved by the local Building Department shall be kept on the job and maintained in good condition, from commencement to completion of the Work. On completion of the Work, this Building Permit copy shall be delivered in good condition to the Architect.

4. CODES AND ACTS

- 4.1. Comply with all Codes and Acts, in force within the area of jurisdiction, throughout the period of the Contract.

5. SITE EXAMINATION

- 5.1. Before tender closing, examine site conditions and other Work upon which your Work depends. Immediately notify the Project Manager of any existing conditions, which are not as indicated in the Contract Documents.

6. WORKMANSHIP

- 6.1. Workmanship shall be the best quality, executed by workers experienced and skilled in the respective duties for which they are employed. Immediately notify the Architect if necessary Work is such as to make it impractical to produce required results.
- 6.2. Do not employ any unfit person or anyone unskilled in their required duties. The Architect reserves the right to require the dismissal from the site of workers deemed incompetent, careless, insubordinate or otherwise objectionable.

- 6.3. Decisions as to the quality or fitness of workmanship in cases of dispute rest solely with the Architect, whose decision is final.

7. ALCOHOL AND DRUGS

- 7.1. Bar all workers impaired by drugs or alcohol from the Work.

8. SERVICES AND UTILITIES

- 8.1. Verify the location and/or availability of services and utilities within the building site, or on adjoining properties, sidewalks and streets. Should there be any variance with the provisions of the Contract Documents, notify the Architect.

- 8.2. Neither the Architect nor the Owner shall assume responsibility for the scope or accuracy of any information given on the Drawings relating to existing services.

- 8.3. Protect, relocate and maintain existing active services wherever they are encountered. Wherever inactive services are encountered, cap them off and remove the unwanted portion, with the approval of the authorities and/or the public utility concerned in the manner approved by them.

- 8.4. In case of damage to active services, notify the Architect, utilities and authorities immediately, and make all required repairs under direction of appropriate utility. Carry out repairs during off-hours if required. In absence of specific requirements or direction, plug or cap unused or abandoned utility lines or as required by utilities, codes and authorities. Make necessary repairs at no cost to Owner.

9. UNUSED SLEEVES AND HOLES

- 9.1. Fill solid all unused sleeves and holes to level of construction that they penetrate.

10. CONCEALED SERVICES AND HEADROOM

- 10.1. Install and arrange ducts, piping, tubing, conduit, equipment and fixtures in such a way as to conserve headroom and space as much as possible, to provide minimum interference and to be neat, orderly and tidy. Unless otherwise noted, run pipes, ducts, tubing and conduit, vertical, horizontal and square with building grid. Conceal pipes, ducts, tubing and conduit above ceilings, behind furring or in walls, except in mechanical rooms, equipment rooms and unfinished spaces, unless indicated or specified otherwise.

11. FLOOR SURFACES

- 11.1. Adequately protect troweled concrete floors and finished flooring from damage. Take special measures when moving heavy loads or equipment on them.

- 11.2. Keep floors free from oils, grease, or other materials likely to damage them,

discolour them or affect bond of applied finishes. Once building is enclosed, keep floors dry.

12. DISSIMILAR METALS AND METAL CONTACT

12.1. Insulate metals where necessary to prevent corrosion due to contact between dissimilar metals, and between metals and masonry, concrete or gypsum board. Use Bituminous paint, butyl tape, building paper or other approved means. Use bituminous paint only on aluminum surfaces.

13. FASTENINGS

13.1. Supply all fastenings, anchors and accessories and adhesives required for fabrication and erection of the Work.

13.2. Exposed metal fastenings and accessories shall be of same texture, colour and finish as base metal on which they occur unless specified otherwise.

13.3. Metal fastenings shall be of the same material as the metal component they are anchoring or of a metal which will not set up an electrolytic action which would cause damage to the fastening or metal component under moist conditions. In general, exterior anchors for windows, roofing sheet metal and anchors occurring on or in an exterior wall or slab shall be non-corrosive, hot dip galvanized steel, stainless steel or brass.

13.4. Anchoring and fastening devices or adhesive shall be of appropriate type and shall be used in sufficient quantity and in such a manner as to Provide positive permanent anchorage of the unit to be anchored in position. Install anchors at spacing to provide for required load carrying capacity.

13.5. Keep exposed fastenings to a minimum, evenly spaced and neatly laid out.

13.6. Supply adequate instructions and templates and, if necessary, supervise installation where fastenings or accessories are required to be built into Work of other trades.

13.7. Fastenings shall be of permanent type. Wood plugs permitted with prior approval by Architect.

14. TRADEMARKS AND LABELS

14.1. Trademarks and labels shall not be exposed in the finished Work except for labels of ULC and other similar authorities and except where necessary to identify mechanical and electrical equipment for maintenance and replacement and except where specified otherwise.

14.2. Locate permitted trademarks and labels on concealed or inconspicuous

surfaces. Remove trademarks and labels not permitted by grinding if necessary or paint out where surfaces painted, if located conspicuously.

15. PRECONSTRUCTION MEETING

- 15.1. Attend a meeting requested by the Architect following award of the Contract. Senior representatives of the Owner, Contractor, Subcontractors requested by Architect and Sub-Consultants will be in attendance.

16. ADMINISTRATION OF PROJECT MEETINGS

- 16.1. Schedule and administer Project meetings twice a month.
- 16.2. Prepare agenda for meetings.
- 16.3. Provide physical space and make arrangements for meetings.
- 16.4. Record the minutes, include significant proceedings and decisions, and identify 'action by' parties.
- 16.5. Reproduce and distribute copies of minutes within 48 hours after each meeting and transmit to meeting participants, affected parties not in attendance and the Owner .

17. DAILY RECORD

- 17.1. Maintain a permanent written record on the Site of the progress of the Work and forward a copy of each week's daily records to the Architect every following Monday.
- 17.2. Daily record shall contain the following:
- a. Dates of commencement and completion of all trades and parts of the Work under the Contract,
 - b. Daily weather conditions,
 - c. Number of workers engaged on the Work daily including the Subcontractors' names,
 - d. Conditions such as manufacturing and shipping delays affecting the Work,
 - e. A brief summary of Work accomplished that day,
 - f. Any tests made and their final results, if known,
 - g. Any oral instructions received,
 - h. Visitors to the Site,
 - i. Any injuries or found safety hazards,

END OF SECTION

1. DESCRIPTION

1.1. Work Included:

- 1.1.1. Make submittals to the Architect as called for throughout the Contract Documents including those called for in this Section, in conformance with this Section.
- 1.1.2. Make any changes in submittals which the Architect may require, consistent with the Contract Documents and resubmit unless otherwise directed by the Architect.

2. GENERAL REQUIREMENTS

2.1. Contractor's Responsibility for Submittals:

- 2.1.1. Check all submittals for conformity to Drawings and Specifications or approved substitutions and contractual requirements before submission to the Architect for review. All submittals must bear the stamp of the Contractor and the signature of a responsible official in the Contractor's organization indicating in writing that such submittals have been checked and co-ordinated by the Contractor. The Contractor is required to signify his approval on all submittals before forwarding to the Architect.
- 2.1.2. The review of submittals by the Architect is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that the Architect approves the detail design inherent in the submittals, responsibility for which shall remain with the Contractor submitting same. Such review shall not relieve the Contractor of their responsibility for errors or omissions in the submittals, or of their responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the Site, for information that pertains solely to fabrication processes or to techniques of construction and installation, and for co-ordination of the Work of all Subcontractors.
- 2.1.3. Assume responsibility for any conflicts occurring between Subcontractors which result from lack of comparison and co-ordination of submittals of the Work of the affected trades.
- 2.1.4. The Work shall conform with reviewed submittals subject to the above conditions.

3. CONSTRUCTION SCHEDULE

- 3.1. Submit a construction schedule to the Architect at least seven days prior to the first job meeting.
- 3.2. Schedule to include (but not limited to) the following:

- a. Start of Construction.
 - b. Critical path through all trades.
 - c. Individual submission dates for all Shop Drawings and samples.
 - d. Anticipated return dates of all Shop Drawings and samples.
 - e. Anticipated delivery dates of materials and equipment.
 - f. Completion date of Contract.
 - g. Deficiency repair.
 - h. Warranty period.
4. CERTIFICATES AND TRANSCRIPTS
- 4.1. Immediately after award of Contract and prior to commencing Work on Site, submit Workers' Compensation Board status and transcript of insurances.
5. SHOP DRAWINGS AND PRODUCT DATA
- 5.1. Submit Shop Drawings and Product data as requested under the various Sections.
 - 5.2. Provide one reproducible print and four opaque prints of Shop Drawings. Drawings not larger than 11" x 17" may be considered reproducible by photocopy. The Contractor shall provide the Architect and the Subcontractors with any additional copies required.
 - 5.3. Shop Drawings and Product Data shall show all:
 - a. Necessary plans, elevations, sections and details to show all applicable information as required herein;
 - b. dimensions;
 - c. configurations, types and sizes required: identify each unit type on Drawing and on Product;
 - d. placing patterns, spacing, layout, locations, erection diagrams;
 - e. integral reinforcement, framing, fabrication;
 - f. anchoring, anchoring devices;
 - g. control joints, joints and connections between elements;
 - h. preparation and reinforcement for other Products to be attached;
 - i. welds: For structural welds use American Welding Society (AWS) symbols and clearly show net weld lengths and sizes;
 - j. design loads for engineered Products such as deck, mechanical and electrical equipment;
 - k. descriptions of materials;

- l. metal, glass, board, panel, etc. thicknesses;
 - m. finishes, shop and integral including thicknesses, colours, textures;
 - n. glues, adhesives, joinery;
 - o. installation details and instructions (for Products to be installed by other Subcontractors);

- 6. SAMPLES
 - 6.1. Submit two identical samples of each item required. One of each pair of accepted samples will be returned to the Contractor who shall hold it on Site until removal of it from the Site is permitted by the Architect.
 - 6.2. Samples shall show specified or proposed materials, construction, finish, colour, texture and pattern.
 - 6.3. Any materials or assemblies, whether incorporated in the Work or not, which do not match approved samples, shall be removed and replaced at no extra cost to the Owner.

- 7. RECORD DRAWINGS
 - 7.1. The Contractor and mechanical/electrical Subcontractors shall obtain from the Architect a complete and separate set of white prints to keep on the Site at all times. These prints shall be marked up to record clearly, neatly, accurately and promptly all locations of buried mechanical and electrical Work and deviations from the Contract Documents.
 - 7.2. The accurate location, depth, size and type of each underground utility and service line shall be recorded before concealment to ensure accurately directed future access to these buried lines.
 - 7.3. The record Drawings will be reviewed at monthly intervals by the Architect and the quality of performance by the Contractor and Subcontractors in developing these records will be taken into consideration when reviewing the monthly applications for payment submitted by the Contractor.

- 8. OPERATING MANUALS AND REFERENCE DATA
 - 8.1. Three weeks prior to request for Substantial Performance the Contractor shall forward electronic copy of the Operating Manuals and Reference Data to the Architect in conformance with the specified take-over procedures.
 - 8.2. Architect and Consultants will review submitted data for compliance with Contract Document requirements. Substantial Performance Certificate will not be issued by the Architect until Operating Manuals and Reference Data

have been submitted, reviewed and accepted by Architect and appropriate Consultants.

- 8.3. Organize manuals by divisions corresponding to the Project Manual. Title the cover sheet as follows:

Name of Project. - Tiverton Arena – BF Washroom Renovations

Name of Architect - McCallum Sather Architects Inc.

Name of Contractor -

Date of Substantial Performance -

- 8.4 Each Division to contain the following:

- a. Copy Specifications sections organized by division. Mark in red to indicate actual Products and Work provided by section.
- b. Copies of all Addenda issued. Mark in red each item related to section.
- c. Copies of all Change Orders and Site Instructions. Mark in red each item related to section.
- d. List of all Subcontractors, major Suppliers, and local equipment service representatives, their addresses and telephone numbers.
- e. Date of substantial completion (commencement of warranty periods) and termination dates of warranties.
- f. Operating manuals including lubricating, repair and other instructions to keep all mechanical and electrical/electronic equipment in good working order. Reviewed Shop Drawings of same.
- g. Final hardware schedule, including lock manufacturer's descriptive and service literature.
- h. Maintenance instructions for all types of floor finish and other special finishes, if applicable, including instructions for cleaning, repairing, refinishing and freshening, and warnings on wrong maintenance procedures where necessary.
- i. Maintenance and service instructions and manufacturer's literature for all special architectural features - windows, patent glazing, etc.
- j. All duly completed and signed guarantees, warranties, etc. which extend beyond the one year general period, for all Work and equipment as specified or as otherwise available from manufacturers and trades.
- k. Field test results including Air Balancing Report in Division 15.
- l. Certificates of Approval of the Work by the City of Hamilton Building Department and Authorities Having Jurisdiction.
- m. Ontario Hydro Certificate of inspection.

- 8.5. Rectify any Product damaged by faulty maintenance materials, or by failure

of the Contractor to provide proper maintenance information.

9. CASH FLOW FORECAST

9.1. Submit with the progress schedule a separate cash flow forecast chart calendarized on a monthly basis in an approved manner. Indicate anticipated Contractor's net monthly progress billings (i.e. excluding holdback) from commencement of the Work to completion and shall show a breakdown of the forecast and billings into major trade divisions.

9.2. Update the cash flow chart each month and submit a copy with each monthly progress bill.

10. BASE BID PRICE BREAKDOWN

10.1. After award of the Contract; Contractor to submit a breakdown of the Contract Price in a format acceptable to the Owner.

END OF SECTION

1. THE WORK, WORK IN PROGRESS, PROPERTY AND PERSONS
 - 1.1. Protect the Work during construction from damage by construction activities and weather. Provide protection as required to protect Work in progress from damage and to Provide suitable conditions for the progress of finishing Work.
 - 1.2. Take reasonable and required measures, including those required by authorities having jurisdiction to protect the public and those employed on the Work from bodily harm. Comply with requirements of The Occupational Health and Safety Act, and Regulations for Construction Projects.
2. ADJACENT PROPERTY, EXISTING CURBS and ROADS
 - 2.1. Protect adjacent property from damage caused by Work under this Contract. Immediately repair any damage so caused and incur all costs of repair Work.
3. FREEZING AND FROST UNDER FOOTINGS AND SLABS
 - 3.1. Protect excavation from frost by placing of suitable approved insulating material to adequate depth if placing of concrete is delayed and after placing of concrete until backfilling sufficient to prevent freezing has been done, or freezing conditions terminate.
4. FIRE PROTECTION
 - 4.1. Take necessary precautions to eliminate fire hazards and to prevent damage to the Work, building materials, equipment and other property both public and private.
 - 4.2. Do not store any flammable Products such as paint or fuel in the building without the Owner's permission in writing.

END OF SECTION

1. DESCRIPTION

1.1. Requirements Included:

1.1.1. Cleaning of the Work in progress.

1.2. Related Requirements:

1.2.1. Contract Close-Out Section 01 70 00

2. GENERAL CLEANING

2.1. Clean the Site each week during the construction period. All debris and excess material shall be removed from the Site immediately after clean up.

2.1.1. Should the Contractor fail to perform such clean up and/or removal, then the Consultant shall notify the Contractor in writing that he is in default of his contractual obligations and instruct the Contractor to undertake said Work within five days of receiving the notice.

2.1.2. If the Contractor fails to comply with the direction, then the Owner may undertake such Work and may deduct the cost thereof from the payment then and thereafter due to Contractor.

2.2. Remove oily rags and waste and other combustible debris from building at close of each day, or more often if required, and from Site at least once a week.

3. EXTERIOR GLASS

3.1. At the completion of the construction period, clean all exterior glass in areas affected by the Work. Turn the Work over in new condition, or if existing, in a clean condition.

4. SUBFLOORS

4.1. Where floors which are to receive adhered floor finishes are contaminated with grease or oil, obtain and follow manufacturer's instructions for cleaning procedure, subject to Consultant's approval, before installing flooring.

5. STRIPPABLE COATINGS AND LABELS

5.1. Remove from finished surfaces all labels and strippable protective coatings before they become baked on, or thermoset, or difficult to remove.

6. FINISHED SURFACES

6.1. Clean finished surfaces upon the completion of the Work of each Section for inspection by the Consultant.

7. FINISHED AREAS

- 7.1. Close off rooms and areas where Work of installing finished flooring, painting and wall covering is in progress or complete.

END OF SECTION

1. CLOSE-OUT PROCEDURE

1.1. General:

1.1.1. The procedure for completing the Contract and acceptance by the Owner is to be in accordance with the following eight stages:

Stage 1	Submission and Approval of Operating Manuals and As-built Drawings
Stage 2	Contractor's Inspection for Substantial Performance
Stage 3	Contractor's Application for Certificate of Substantial Performance
Stage 4	Architect's Certificate of Substantial Performance
Stage 5	Architect's Certificate for Payment of Holdback Monies
Stage 6	Final Inspection for Total Performance
Stage 7	Architect's Final Payment Certificate
Stage 8	Guarantee Period(s).

1.2. Publication Copy:

Submit promptly one copy of the construction trade newspaper containing publication of copy of the Certificate of Substantial Performance. Arrange and pay all costs associated with publication notices.

1.3. Deficiency and Guarantee:

1.3.1. A deficiency is an item of the Work required by the Contract which has not been installed or put into operating condition.

1.3.2. A guarantee item is an item of Work, installed under a contract which the Contractor agrees to maintain in perfect condition for a specific period of time, after the Owner's acceptance of the Work.

1.3.4. When, in the Architect's opinion, the Work under the Contract is Substantially Performed, and prior to the final inspection by the Owner, a preliminary inspection shall be made at which time all deficiencies shall be listed.

1.4. Deficiency Lists:

1.4.1. The Architect will not be responsible for the issue of extensive lists of deficiencies. The Contractor is to understand that, the prime responsibility for ensuring that all items shown on the Drawings and described in the Specifications are completed is the Contractors. Any inspections to approve Certificates of Substantial Performance must be immediately cancelled if, in the opinion of the Architect, it becomes obvious that extensive deficiencies are outstanding.

1.4.2. Make every effort to ensure that both defects and deficiencies are made good prior to final inspection.

1.4.3. During the inspection, decision must be made as to which defects must be rectified before the building can be accepted and which defects are to be treated as guarantee items.

1.4.4. Deficiencies shall be made good before the Contract is considered complete.

2. FINAL CLEANING

2.1. Final cleaning is to include new construction and all existing surfaces and items.

2.2. Immediately prior to occupancy by Owner, clean and dust and remove all stains and smudges from all finished surfaces, and all exposed fixtures and equipment.

2.3. Remove dust and soil from all surfaces by vacuuming, damp mopping, washing or scrubbing, as required. Vacuum behind grilles, louvres and screens.

2.4. Wash down exterior paved walkways and roadways.

2.5. Glass, mirrors and polished metal surfaces shall be cleaned and polished free of streaks.

2.6. Clean all mechanical and electrical equipment, plumbing fixtures, light fixtures, casework, specialties and accessories.

2.7. Remove all temporary labels, protective coatings, markings and tags, thoroughly clean surfaces of adhesive.

2.8. Wax, seal, shampoo or prepare floor finishes.

2.9. Clean drains and drainage systems and leave open and functioning.

2.10. Purge potable water system.

2.11. Methods and materials for cleaning shall be in accordance with the manufacturer's recommendations for the finishes involved. Exercise extreme care with abrasive and chemical cleaning agents, and verify their compatibility with the finish and materials to be cleaned.

3. SYSTEMS DEMONSTRATION

3.1. Prior to final inspection, demonstrate operation of each system to Owner, Architect, and Engineers.

3.2. Instruct personnel in operation, adjustment, and maintenance of equipment and systems, using provided operation and maintenance data as the basis for instruction.

3.3. The Contractor and responsible personnel from the sub-trades whose Work is

being demonstrated shall be present at these demonstrations.

4. PROJECT COMMISSIONING

- 4.1. Expedite and complete deficiencies and defects identified.
- 4.2. Review maintenance manual contents (operating, maintenance instructions, record "as-built" Drawings, materials) for completeness. Review supply and completeness of all spare parts required by the documents and the manufacturers.
- 4.3. Submit required documentation such as statutory declarations, Workers' Compensation Certificates, warranties, certificates of approval or acceptance from the authorities.
- 4.4. Attend 'end-of-work' testing and break-in or start-up demonstrations.
- 4.5. Arrange and co-ordinate instruction of Owner's staff in care, maintenance and operation of building systems and finishes by Suppliers or Subcontractors.
- 4.6. When partial occupancy of uncompleted Project is required by the Owner, co-ordinate Owner's uses, requirements, access, with Contractor's requirements to complete Project.
- 4.7. Co-ordinate Owner's moving-in of staff, furnishings, equipment with building accessibility, traffic, and Contractor's and Subcontractor's cleaning-up and completion activities all to suit Owner's Work schedule and not disrupt Owner's productivity.
- 4.8. Provide on-going review, inspection and attendance to building call-back, maintenance and repair problems during the warranty periods.

END OF SECTION

1. DESCRIPTION

1.1. Requirements Included:

- 1.1.1. Date of Commencement of Warranty Period;
- 1.1.2. Submittals;
- 1.1.3. Transition to Warranty Period;
- 1.1.4. Extended or Special Warranties.

2. DEFINITIONS

- 2.1. Failure of a Product, a system of Products, a piece of equipment or a system of equipment to operate in the manner in which they were designed and/or specified shall constitute a defect.
- 2.2. The term "defect" shall not be construed as embracing such imperfections as would naturally follow misuse, failure to perform recommended maintenance or accident.
- 2.3. Generally, any manufactured item or material which, when used as directed, must be capable of such use for the duration of the specified warranty period. Failure to comply with this requirement shall be considered as being a "defect".
- 2.4. The costs of investigations, tests, repairs and/or replacement and the making good of any resulting damage shall be borne by the Contractor.
- 2.5. Perform all required remedial Work without undue delay.

3. DATE OF COMMENCEMENT OF WARRANTY PERIOD

- 3.1. The warranty period for each Product or installation commences on the date of Substantial Performance as certified by the Architect or the date of acceptance of a Product or system, whichever comes later.
- 3.2. The above applies for Products or installations used by the Contractor during the progress of the Work, and the Contractor assumes such upon putting to use such Products and installations.

4. SUBMITTALS

- 4.1. Submit a fully executed and notarized copy of each extended warranty and each warranty with special provisions, worded as per the Specifications, along with application for Certificate of Substantial Performance.
- 4.2. Submit, at time of Substantial Performance, a complete list of all extended and special warranties as above in Operating Manuals in Section 01300.

5. TRANSITION TO WARRANTY PERIOD

- 5.1. Execute transition of Performance Bond to warranty period requirements.

6. EXTENDED OR SPECIAL WARRANTIES

- 6.1. In accordance with GC 12.3 Warranty, as amended by Supplementary Conditions, each Section of the Specifications will list any items which extend beyond the 24 months required under the General Conditions of Contract or which have special conditions attached to them. All such warranties are applicable and in force.

END OF SECTION

1. PART GENERAL

1.1. GENERAL REQUIREMENTS

- 1.1.1. Conform to Division 01, General Requirements

1.2. DESCRIPTION

1.2.1. Work Included

- a. Demolition and removal of existing building components not required in final Work.
- b. Remove all debris from the site.

1.3. REGULATORY REQUIREMENTS

- 1.3.1. Conform to applicable code for demolition of structures, safety of adjacent structures, dust control, runoff control and disposal.
- 1.3.2. Obtain required permits from authorities.
- 1.3.3. Notify affected utility companies before starting Work and comply with their requirements.
- 1.3.4. Do not close or obstruct roadways, sidewalks, or utilities without permits.

2. PART PRODUCTS not used

2.1. GENERAL

- 2.1.1. Unless otherwise indicated, all materials requiring demolition and not forming a permanent part of Work shall be removed from site.

2.2. FILL MATERIALS

- 2.2.1. Type 1 Fill: Clean approved excavated materials having a moisture content within 3% of optimum, free from waste materials, debris, rubbish, frozen portions organic or cohesive matter and rocks larger than 100mm in diameter.
- 2.2.2. Type 2 Fill: Existing granular materials salvaged from Site.

3. PART EXECUTION

3.1. PREPARATION

- 3.1.1. Follow procedures as outlined in jurisdictional guidelines for the safe removal and disposal of designated hazardous substances present within the existing structure
- 3.1.2. Provide, erect, and maintain temporary barriers and security devices as required.
- 3.1.3. Mark location of utilities. Make arrangements with Utilities for disconnection of existing hydro, gas, telephone and water service.

3.2. DEMOLITION REQUIREMENTS

- 3.2.1. Conduct demolition to minimize interference with adjacent lands.
- 3.2.2. Provide, erect, and maintain temporary bracing, shoring and reinforcement as required at walls, items and structures designated for removal.
- 3.2.3. Conduct operations with minimum interference to public or private accesses. Maintain egress and access at all times.
- 3.2.4. Sprinkle Work with water to minimize dust. Provide hoses and water connections for this purpose.
- 3.2.5. Arrange with hydro, telephone, gas, water utilities to have all abandoned services disconnected, capped off and removed and made safe as applicable to Authorities.
- 3.2.6. When contaminated or dangerous material is encountered, remove from Site and dispose of by safe means so that no danger is involved at job Site or in disposing operations. Selling from Site is not permitted.

3.3. DEMOLITION

- 3.3.1. Disconnect, cap off and remove exposed utilities not required in final work. Mark on as-built drawing exact location and size of abandoned lines.
- 3.3.2. Remove demolished materials from site.
- 3.3.3. Do not burn or bury materials on site. Leave site in clean condition.

END OF SECTION

1. PART GENERAL

1.1. GENERAL REQUIREMENTS

- 1.1.1. Conform to Division 01, General Instructions.

1.2. DESCRIPTION

1.2.1. Work Included:

All cast-in place concrete for the Work.

1.3. QUALITY ASSURANCE

1.3.1. Requirements of Regulatory Agencies - Comply with latest version of:

- a. The 2012 Building Code Compendium, Part 4, Structural Design.
- b. CSA-A23.1-09, Concrete Materials and Methods of Concrete Construction;
- c. CAN/CSA-A3001: Portland Cement
- d. CAN/CSA-A23.5-M86: Supplementary Cementing Materials
- e. CAN/CSA-A362-93: Blended Hydraulic Cement
- f. CAN/CSA G30.18-09: Cold-Drawn Steel Wire for Concrete Reinforcement
- g. ASTM A820/A820M-06, Standard Specification for Steel Fibres for Fibre Reinforced Concrete
- h. CAN/CSA-A23.3-04, Design of Concrete Structures for Buildings;
- i. Concrete Reinforcing Steel Institute (CRSI) Recommended Practice for Placing Reinforcing Bars;
- j. Reinforcing Steel Institute of Canada (R.S.I.C.) Reinforcing Steel Manual of Standard Practice;
- k. American Concrete Institute (ACI) 315, Details and Detailing of Concrete Reinforcement.

1.4. SAMPLES

- 1.4.1. At least (3) weeks prior to commencing work, inform the Consultant of the proposed mix design and proposed source of ready mixed concrete.

1.5. CERTIFICATES

- 1.5.1. Provide certification that plant, equipment, and materials to be used in concrete comply with requirements of CSA-A23.1.
- 1.5.2. Provide certification that mix proportions selected will produce concrete of specified quality and yield and that strength will comply with CSA-A23.1.

1.6. QUALITY ASSURANCE

- 1.5.1. Contractor to employ an independent inspection and testing company to carry out all testing and inspection as required. Consultant will appoint the inspection and testing company. The cost of inspection and testing shall be paid by the Contractor, out of the Cash Allowance carried for this testing under Division 1.
- 1.5.2. Perform compression tests in accordance with CSA-A23.2 and good practice.
- 1.5.3. Failure to meet strength requirements will result in rejection of materials, strengthening or replacement of those portions that failed to develop the specified strength.
- 1.5.4. Do not add water and admixtures on the site.

2. PART PRODUCTS

2.1. MATERIALS

- 2.1.1. Concrete Materials: Conform to standards specified in paragraph 1.3 above, except as specified otherwise.
- 2.1.2. Steel Reinforcement:
 - a. Bars: Conform to CSA G30.18-09.
 - b. Welded Steel Wire Fabric: Conform to CSA G30.15,
 - c. Deformed Steel Wire: Conforming to CSA G30.14-M.
- 2.1.3. Cement Dispersing Agent: Conform to ASTM C494, Pozzolith by Master Buildings Ltd., or WRDA by W.R. Grace & Co. Ltd., or Nihon Cement Co. Ltd.
- 2.1.4. Acrylic/Latex Additive:

Acrylic or Latex or combination additive to increase the flexural and tensile strength of concrete, as manufactured by Alvert Chemical Co. Ltd., W.R. Meadows of Canada Ltd., or Sika Canada Limited.
- 2.1.5. Joint Filler:

Premoulded bituminous impregnated fibre type, 12mm thickness to full depth of slab, conforming to ASTM D1751.
- 2.1.6. Porous Fill (under slab on grade): Approved clean, pit run gravel, or crushed stone containing not more than 60% material that will pass a 6.4mm screen and no stones larger than 37.5mm.
- 2.1.7. Non-Shrink Grout:

M-Bed by Sika Canada Limited, or V-3 Pre-Mixed Construction Grout by W.R. Meadows of Canada Ltd., or Masterflow 713 by Master Buildings Co. Ltd., or Tartan No-Iron Grout by Webster & Sons Ltd., or Set Non-Shrink Grout by Set Products (Canada) Ltd., or In-Pakt by C.C. Chemicals Ltd.

2.1.8. Waterstops:

Extrusions of plasticized polyvinyl chloride (PVC) low temperature compound to sizes and shapes required for complete watertight performance, by W.R. Meadows of Canada Ltd, W.R. Grace and Co. of Canada Ltd., or J.E. Goodman Sales Ltd.

2.1.9. Vapour Retarder: Conform to CAN/CGSB-51.34-M86 (amended 1988) ASTM E 1745, Classes A, B and C, Perminator, 15mil by W.R. Meadows Inc., or W.R. Grace & Co. Ltd, or CertainTeed Saint-Gobain, WVT rating of 0.011 grains/sq.ft./hr with perm rating of 0.027 Perms. Provide manufacturer's approved tape at joints.

2.1.10. Interior Cure and Seal Compound: W. R. Meadows "Intex, or Chlorinated rubber-based type, conforming to ASTM C309, Florseal as manufactured by Sternson or Master Builders Technologies or Sika Canada.

2.2. MIXES

2.2.1. Design the mix, including ready-mixed, in accordance with CAN/CSA-A23.1-M, and as follows:

a. Cement Type: Normal Portland cement, Type GU.

.1 Concrete in foundation walls, footings, composite deck toppings and any other unspecified concrete, Classification F2, Proportion normal density concrete in accordance with CSA A23.1-09:

- Cement: Type GU Portland cement, minimum 325 kg/m³
- Maximum 25% slag cement content
- Minimum compressive strength at 28 days: 30 MPa.
- Nominal size of coarse aggregate: 20 mm.
- Slump at time and point of discharge: 50 to 100 mm.
- Air content: 0 to 3%.

.2 Concrete in slabs-on-grade and interior structural slabs, Classification N, Proportion normal density concrete in accordance with CSA-A23.1-09:

- Cement: Type GU Portland cement, minimum 325 kg/m³
- Maximum 25% slag cement content
- Minimum compressive strength at 28 days: 32 MPa.
- Nominal size of coarse aggregate: 20 mm.
- Slump at time and point of discharge: 60 to 100 mm.
- Air content: 0 - 3% maximum.

.3 Concrete in exterior structural slabs and sidewalks/curbs, Classification C-2, proportion normal density concrete in accordance with CSA-A23.1-09:

- Cement: Type GU Portland cement, minimum 275 kg/m³
- Maximum 25% slag cement content
- Minimum compressive strength at 28 days: 32 MPa.

- Class of exposure: C-2.
 - Nominal size of coarse aggregate: 20 mm.
 - Slump at time and point of discharge: 60 to 100 mm.
 - Air content: 5 to 8%.
- .4 Concrete in grouted masonry blocks, proportion normal density concrete in accordance with CSA-A23.1-09, to give following properties:
- Cement: Type GU Portland cement, minimum 275 kg/m³
 - Maximum 25% slag cement content
 - Minimum compressive strength at 28 days: 20 MPa.
 - Nominal size of coarse aggregate: 10 mm.
 - Slump at time and point of discharge: 50 to 100 mm.
 - Air content: 0 - 3% maximum.
- .5 Concrete fill, Classification R-2, Proportion normal density concrete in accordance with CSA-A23.1-09:
- Cement: Type GU Portland cement, minimum 250 kg/m³
 - Maximum 25% slag cement content
 - Minimum compressive strength at 28 days: 10 MPa.
 - Nominal size of coarse aggregate: 10 mm/20 mm.
 - Slump at time and point of discharge: 100 mm.
 - Air content: 0 - 4% maximum.
- b. Compressive Strength: 30 megapascals (MPa) unless otherwise indicated.
- c. Class of Exposure: Conform to Table 11 of CAN/CSA-A23.1-M.
- d. Coarse Aggregate: Conform to Group 1, Table 3 of CAN3-A23.2-M, 20mm maximum size of aggregate, unless otherwise noted on the Drawings. Do not use pit run gravel as a concrete aggregate. The aggregate shall be from an approved source as per Ontario Provincial Standard Specification (OPSS) Form 1002.
- e. Slumps: Maximum and minimum slumps at point of discharge shall be 80 +/- 20mm for foundation walls, slab on pans, footings and slabs on compacted fill; 100 +/- 80mm for columns, reinforced slabs, beams and 50 +/- 20mm for pavements and concrete topping. Design concrete so that material will not segregate and excessive bleeding will not occur.
- f. Air Content: To meet the requirements of Table 10 of CAN/CSA-A23.1-M according to class of exposure, 5 - 7% for concrete exposed to freeze and thaw cycle.
- g. Cement Dispersing Agent: Use cement dispersing agent for increased workability of mix, in accordance with manufacturer's directions.
- h. Maximum and Minimum Mass of Air Dry Concrete: For normal mass concrete, 2400 kgs per m³ and 2250 kgs per minimum; in case of variance from specified requirements, request approval from Consultant.

- i. Concrete for Mechanical and Electrical Work: In accordance with CAN/CSA.A23.1- M, air entrained with 5 - 7% air content if exterior, ASTM C260, 37.5mm maximum size of aggregate, 15 MPa compressive strength, unless otherwise indicated on Drawings.

3. PART EXECUTION

3.1. INSPECTION

- 3.1.1. Ensure that founding base for footings is naturally consolidated undisturbed soil or engineered fill, capable of safely supporting the bearing values shown on the Drawings or required.

3.2. PREPARATION

3.2.1. Place base for concrete slabs on earth as follows:

- a. Properly grade and compact fill after installation of all underground services.
- b. Level fill to required elevations with a tolerance of 12mm under 3m straight edge.
- c. Compact porous fill thoroughly with vibratory compactors to 98% optimum compaction, as determined in accordance with ASTM D698 (Standard Proctor).

3.3. INSTALLATION

3.3.1. General:

- a. When ready-mixed (mixed in transit) concrete is used, the discharge of the concrete shall be complete within a period of 1 hour after the mixing water has been added to the dry material, except when concrete materials are heated, in which case this period shall be reduced to 30 minutes. All concrete delivered at air temperature below 4°C shall have a temperature at the Work of not less than 16°C or more than 32°C.

3.3.2. Slabs on Grade: Lay as follows:

- a. With construction joints between pours keyed, with the reinforcing carried through and the top of the joint slightly rounded with small edging tool.
- b. With expansion joints carefully formed and filled with approved expansion joint material in an approved manner, at the edges of all poured concrete slabs on grade where they abut vertical surfaces, and elsewhere as required.

3.3.3. Reinforcement Concrete Coverage

location	Minimum concrete coverage
footings	75mm
columns	40mm
walls	40mm

beams	40mm
slabs	20mm
T beams	20mm
Slab on grade mesh	20mm

3.3.4. Curing and Protection

- a. Cure and protect newly finished slabs and steps in accordance with CSA A23.1 04.
- b. Coat exterior slabs, curbs with curing compound and leave for 30 days. Apply sealer after curing period has expired.
- c. Cure finished concrete surfaces in a manner which will leave the surface with a uniform appearance and with a minimum of discolouration after drying. Ensure that curing compounds are compatible with adhesives for finishes to be applied later.
- d. For all concrete slabs that are to remain exposed, curing compound is to be applied at a rate required for use as a sealer/hardener, in accordance with the manufacturer's instructions.

3.3.5. Tolerances

- a. Conform in line, level and plumbness to the following tolerances. These are maximum values.
 1. Variation from vertical, in lines and surfaces of walls piers:
In height of 3m (10') - 6mm (1/4")
 2. Variation from level or from grades shown in floors grade:
In any 3m (10') - 3mm (1/8")
In any bay up to 6m (20') - 6mm (1/4")
In any 12m (40') - 12mm (1/2")
 3. Variation from straight or from correct position in walls:
In length up to 6m (20') - 12mm (1/2")
In any 12m (40') - 12mm (1/2")
 4. Variation in size and location of sleeves, floor open and the like and in location of bolts, inserts and fastenings: 6mm (1/4")
 5. Variation in location of bolts, inserts, sleeves and fastenings when in group: 3mm (1/8")
 6. Variation from straight or from correct position in walls:
Maximum oversize - 12mm (1/2")
Maximum undersize - 6mm (1/4")

7. Where drains occur, floors shall be properly and uniformly sloped to allow complete drainage of the area.

3.3.6. Defective Work

- a. Concrete is defective when:
 1. Containing visible honeycombing or embedded debris.
 2. Concrete damaged by freezing or which is unsatisfactory due to placement at too high a temperature.
 3. Average 28 day strength of any three consecutive strength tests is less than specified minimum 28 day strength.
 4. Any 28 day strength test result in less than 88% of specified minimum 28 day strength.
 5. Cracking occurs in locations other than at control and construction joints.
 6. Curing is not carried out strictly according to the specifications.

3.3.7. Cold Weather Protection

- a. Refer to CSA Standards CSA-A23.1 and CSA-A23.2 Provisions and Publications. Include for tarped heated enclosures - no non-freeze additives such as calcium will be tolerated on this project.

END OF SECTION

1. PART GENERAL

1.1. GENERAL REQUIREMENTS

1.1.1. Conform to Division 01, General Instructions.

1.2. DESCRIPTION

1.2.1. Work Included:

- a. Blockwork and installation of metal fabrications as required.
- b. Placing loose steel lintels, steel frames and misc, steel embedments.

1.2.2. Related Work Specified Elsewhere:

- a. Metal Fabrications: Section 05 50 00

1.3. QUALITY ASSURANCE

1.3.1. Requirements of Regulatory Agencies:

- a. The 2012 Building Code Compendium, Part 4, Structural Design.
- b. CAN3-S304.1-95, Masonry Design for Buildings;
- c. CAN3-S371-94, Masonry Construction for Buildings;
- d. CAN3-A370-94, Connectors for Masonry;
- e. CAN3-A179-94, Mortar and Grout for Unit Masonry;
- f. CAN3-A165 Series-94, CSA Standards on Concrete Masonry Units;
- g. CAN/CSA-A82.1-M87 R1993 Burned Clay Brick;
- h. The Code, Part Four, Structural Design;

1.4. SYSTEM DESCRIPTION

1.4.1. Tolerances: Conform to the following:

- a. Exposed facing walls and Substrate for exterior finish by others: 6mm in 3m.

2. PART PRODUCTS

2.1. MATERIALS

2.1.1. Concrete Block:

Metric modular size, autoclaved or bubble cured or carboclave, conforming to CAN3-A165 Series-94, Concrete Masonry Units:

- a. Standard Block: H or S/15/A/M, load-bearing and non-load-bearing;
- b. Lightweight Block: H or S/15/B/M, made of concrete conforming to: L220S.

- c. Fire Separation Ratings: Where concrete block walls are required to act as fire separations or barriers, units shall conform to Ontario Building Code with respect to equivalent thickness and type of concrete.
- 2.1.3. Horizontal Masonry Reinforcement:
- a. Standard: 3.66mm longitudinal wire, 3.66mm cross or diagonal wire, placed as per Specifications unless indicated otherwise on Drawings.
 - b. Heavy Duty: 4.76mm longitudinal wire, 3.66mm cross or diagonal wire.
 - c. Extra Heavy Duty: 4.76mm longitudinal wire, 4.76mm cross or diagonal wire.
 - d. Bright finish for interior walls, hot-dipped galvanized after fabrication for exterior walls in accordance with CSA G164-M;
 - e. Sized max. 50mm narrower than wall or partition;
 - f. Acceptable Manufacturers:
 - 1. Dur-O-Wal Ltd.,
 - 2. Blok-Lok Ltd.
 - 3. Ferrell Industries.
- 2.1.4. Vertical Masonry Reinforcement:
- Deformed reinforcing bars, conforming to CSA G30.18, Grade 400.
- 2.1.5. Mortar Materials: conforming to CSA A179-94.
- a. Aggregate: conforming to CSA A179-94.
 - b. Cement: CAN/CSA-A5/A8 Normal Portland or masonry cement, and hydrated lime.
 - c. Hydrated Lime: Type S hydrated lime, conforming to ASTM C207
- 2.1.6. Grout: Conforming to Section 03300 and CAN 3-S 304-M;
- 2.2. MIXES
- 2.2.1. Mixing:
- Prepare and mix mortar materials under strict supervision, and in small batches for immediate use only. Mix proprietary mortars in strict accordance with manufacturer's instructions to produce the following mortar types in accordance with CSA A179-94. Mortar strength shall not vary more than 25% down nor 50% up from strengths specified.
- 2.2.3. For Structural Masonry:
- a. Use Type 'S' masonry mortar, having a minimum 28 day compressive strength of 10 MPa, composed of:
 - 1/2 part Portland cement, 1 part type N masonry cement, 4 1/2 parts damp loose sand,

3. PART EXECUTION

3.1. INSTALLATION

3.1.1. General:

- a. Lay all masonry in common bond unless noted otherwise on Drawings.
- b. Keep exposed faces free from stains, chips and cracks. Keep tolerance in place to 3mm in 3m. Do not use chipped, cracked or deformed units in exposed Work.
- c. Lay block with webs to align plumb over each other with thick ends of webs up. Reinforce all blockwork as hereinafter specified.
- d. Place vertical reinforcement in vertically aligned cores in accordance with CAN 3- S304-M84.
- e. When mortar is "thumb-print" hard, tool joints where exposed to form a concave profile.

3.1.6. Built-ins:

- a. Build in items provided by other Sections. Build in items to present a neat, rigid, true and plumb installation. Leave wall openings required for ducts, grilles, pipes and other items.
- b. Fill voids between masonry and metal frames as follows:
 1. Interior frames: with masonry mortar.
 2. Exterior frames: with insulation.

3.2. CLEANING

- 3.2.1. Keep wall clean and free of mortar stains during laying. Allow mortar droppings which adhere to exposed wall surfaces to dry out but not set. Then rub with small piece of masonry followed by brushing to remove all traces.

END OF SECTION

1. PART GENERAL

1.1. GENERAL REQUIREMENTS

1.1.1. Conform to Division 01, General Requirements.

1.2. DESCRIPTION

1.2.1. Work Included:

Supply and install, unless specifically designated to be supplied only, all miscellaneous metal Work not included in the Work of other Sections. Where items are required to be built into masonry, concrete or other Work, supply such items to respective Sections with all anchors and accessories for building in.

1.2.2. Related Work Specified Elsewhere:

a. Masonry: Section 04 20 00

1.3. QUALITY ASSURANCE

1.3.1. Requirements of Regulatory Agencies – Comply with latest version of:

Conform to applicable requirements of the latest editions of the following:

- a. The 2012 Building Code Compendium, Part 4, Structural Design.
- b. CSA S16, Design of Steel Structures;
- c. CSA G40.21-04, Welded Structural Quality Steels;
- d. CSA W59-M, Welded Steel Construction and certified by Canadian Welding Bureau;
- e. CAN/CSA G164-M92, Hot Dip Galvanizing of Irregularly Shaped Articles.

1.4. SUBMITTALS

1.4.1. Shop Drawings: Submit Shop Drawings, showing all elements of adjacent walls, floors and roof framing systems and calculations for systems showing design loads and deflections, bearing the stamp and seal of a Professional Engineer licensed in the Province of Ontario.

2. PART PRODUCTS

2.1. MATERIALS

2.1.1. Structural Steel Sections and Steel Plates:

CSA-G40.21-04, Grade 300W, except HSS: Grade 350W, Class H.

2.1.2. Sheet Steel: (Structural Quality) ASTM A570.

- 2.1.3. Sheet Steel: (Commercial Quality) ASTM A366.
- 2.1.4. Galvanized Sheet Steel (Structural Quality):
Galvanizing as specified ASTM A446, structural quality sheets.
- 2.1.5. Galvanized Sheet Steel (Commercial Quality):
Galvanizing as specified ASTM A526, plain commercial galvanized stretcher levelled to temper rolled.
- 2.1.6. Galvanizing (Other):
All steel specified to be galvanized except galvanized sheet steel, CSA G164-M, Hot Dip Galvanizing of Irregularly Shaped Articles.
- 2.1.7. Welding Materials: CSA W59-M.
- 2.1.8. Metal Filler: Polyester based, one of the following:
 - a. M12555 Red Flexibond by Kleen-Flo Tumbler Industries, Scarborough;
 - b. Red Lightnin' by Marson Division, Swingline of Canada Ltd., Toronto;
 - c. M45 by Dura Chemicals Ltd., Hamilton; or
- 2.1.9. Structural Steel Pipe: ASTM A53, Grade B.
- 2.1.10. Square Steel Tube: ASTM A500 or ASTM A501, seamless.
- 2.1.11. Stainless Steel: Type 304, No. 4 finish.
- 2.1.12. Bolts, Nuts and Washers: ASTM A325.
- 2.1.13. Anchors, Bolts, Nuts, Washers for Dissimilar Metals: Of stainless steel alloy with min 12% chromium.
- 2.1.14. Expanded Metal Sheet: 20mm x 2.278mm thickness carbon steel standard diamond pattern mesh, SWD and LWD size to fit designs: Z600 galvanized after fabrication when for exterior use.
- 2.1.15. Grout: non-shrink, non-metallic, epoxy flowable, 12hr., MPa 15, pull-out strength 7.9 MPa.
- 2.1.16. Galvanized Surfaces for Paint: Do not passivate galvanized surfaces to be finish painted.
- 2.1.17. Primer and Touch-Up for Ungalvanized Surfaces: CGSB 1-GP-40M, Primer, Structural Steel, Oil Alkyd Type.
- 2.1.18. Touch-Up Paint for Field Welds on Galvanized Surfaces: ASTM A123/A123M-09, Coating, Zinc-Rich, Organic, ready mixed.
- 2.1.19. Bituminous Paint: CAN/CGSB 1.108-M.
- 2.1.20. Neoprene Sheet: Dense, solid neoprene.

2.2. DESIGN

- 2.2.1. Design each item to be structurally sound.
- 2.2.2. Design steel and iron articles to be galvanized after fabrication in conformance with the referenced standards.

2.3. FABRICATION AND MANUFACTURE

2.3.1. General:

- a. Exchange and coordinate Shop Drawings with related Sections to ensure accurate fit of components with the Work of other Sections.
- b. Fit and assemble Work in shop where possible. Execute Work according to details and reviewed Shop Drawings. Where shop fabrication is not possible, make trial assembly in shop;
- c. Do all welding in accordance with requirements of CSA W59-M. File or grind welds smooth and flush where exposed to view and where specifically indicated on Drawings;
- d. Complete all assembly and welding before galvanizing;
- e. Site assemble by bolting all galvanized items to be left exposed (not finish painted). Perform all welding on such items before galvanizing.
- f. Fit joints and intersecting members accurately. Make Work in true planes with adequate fastening, mitre corners unless specified or shown otherwise.
- g. Supply all fastenings, anchors accessories required for fabrication and erection of Work of this Section. Such items occurring on or in an exterior wall or slab shall be hot dip galvanized.
- h. Make exposed metal fastenings and accessories of same material, texture, colour and finish as base metal on which they occur unless otherwise shown or specified. Keep exposed fastenings to an absolute minimum evenly spaced and neatly laid out. Make fastenings of permanent type unless otherwise indicated;
- i. Fabricate gratings and other items with multiple parts so that a regular pattern is presented in the finished Work with all members lined up or evenly spaced and pattern is unbroken.

2.3.2. Finish:

- a. Shop Prime Paint all interior metals unless otherwise indicated on Drawings. Thoroughly clean all metals and apply one coat of primer. Brush on thoroughly and Work well into all crevices and interstices.
- b. Galvanize all exterior metals (including lintels) unless otherwise indicated on Drawings. Do not prime paint galvanized items to be left as exposed galvanized.

3. PART EXECUTION

3.1. INSTALLATION

- 3.1.1. Build and erect Work plumb, true, square, straight, level and accurate to sized detailed, free from distortion or defects detrimental to appearance and performance.
- 3.1.2. Insulate metals where necessary to prevent corrosion due to contact between dissimilar metals and masonry, concrete or gypsum wallboard. Use bituminous paint, butyl tape, build paper or other approved means. Use bituminous paint only at aluminum surfaces.
- 3.1.3. Supply adequate instructions, templates and, if necessary, supervise installation of fastenings or accessories requiring to be built-in by other Sections of the Work.
- 3.1.4. After erection and installation, thoroughly clean the Work and apply coat field touch up paint to all damaged surfaces of shop-primed or galvanized material. Work primer well into all joints, crevices, interstices and open spaces.

END OF SECTION

1. PART GENERAL

1.1. GENERAL REQUIREMENTS

1.1.1. Conform to Division 01, General Requirements.

1.2. DESCRIPTION

1.2.1. Work Included But Not Limited To:

- a. Provide finish wood items and trim for the Work.
- b. Receive and install: Architectural woodwork, doors, door frames, finish hardware, ceiling access hatches, access doors for concealed mechanical equipment, chalkboards, washroom and janitorial accessories, built-in equipment.
- c. Relocated cabinets.

1.2.2. Related Work Specified Elsewhere:

- a. Items installed by this Section include but are not limited to those supplied by the following Sections:
Section 06 40 00 Architectural Woodwork
Section 08 11 00 Steel Doors and Frames
Section 08 70 10 Finish Hardware
Section 10 80 00 Washroom and Janitorial Accessories.

1.3. QUALITY ASSURANCE

1.3.1. Perform Work of this Section by carpenters familiar with the Work they are installing.

1.3.2. Conform to the requirements of the latest edition of the following;

- a. The Code;
- b. CAN3-086.1-M84, Engineering Design in Wood (Limit States Design).
- c. The National Lumber Grades Authority Standard Grading Rules;
- d. Quality Standards For Custom Architectural Woodwork, 1987, by the Architectural Woodwork Manufacturers Association of Canada (AWMAC);
- e. CSA O112 - Series M, Standards for Wood Adhesives;
- f. CSA O115 - M, Hardwood and Decorative Plywood.
- g. CSA O121 - M, Douglas Fir Plywood;
- h. CSA O141, Softwood Lumber;
- i. CSA O151 - M, Canadian Softwood Plywood;
- j. CSA O153 - M, Poplar Plywood;

1.4. SUBMITTALS

- 1.4.1. Submit installation details and instructions for all Work to be installed by this Section. Where Products are fabricated by other Sections, instructions and details shall be as provided by the fabricator through this Section.

2. PART PRODUCTS

2.1. MATERIALS

2.1.1. General:

Conform to:

- a. The National Lumber Grades Authority Standard Grading rules;
 - b. The Architectural Woodwork Manufacturers Association of Canada Millwork Standards, (AWMAC), Custom Grade unless noted otherwise.
- 2.1.2. Moisture Content: All wood Products shall be within the following prescribed range at time of delivery and installation:
- a. Interior Wood: 7%, with range permitted in individual pieces of 5% to 9%.
 - b. Exterior Wood: 12%, with range permitted in individual pieces of 10% to 15%.
- 2.1.3. Unfinished Lumber: NLGA Spruce-Pine-Fir, "Construction" Light Framing Grade.
- 2.1.4. Unfinished Plywood: Douglas Fir, G1S, sanded, waterproof, 19mm thick unless noted.
- 2.1.5. Moisture Resistent Plywood: Douglas Fir, G1S, Marine board, 19mm thick unless noted.
- 2.1.6. Interior Exposed Wood for Paint: Architectural Woodwork Manufacturers Association of Canada (AWMAC) Paint Grade, White birch or Poplar.
- 2.1.7. Interior Exposed Wood for Clear Finish and Concealed Hardwood: AWMAC Custom Grade (Standard Grade at concealed hardwood), Select No.1 Clear Cedar, no knots.
- 2.1.8. Interior Exposed Plywood for Paint: AWMAC Paint Grade, White birch face or faces (each exposed face).
- 2.1.9. Interior Exposed Plywood for Clear Finish: AWMAC Architectural Grade on exposed faces and AWMAC Good Grade on exposed faces as indicated on Drawings, Birch face or faces .(each exposed face).
- 2.1.10. Composite Board: Wood/plastic solid composite, 25mm x 140mm, dark brown.
- 2.1.11. Nails: "Common spiral nails", for unfinished Work, and "spiral finishing nails" for finished Work, conforming to CSA B111. Galvanized nails for exposed exterior use.
- 2.1.12. Wood Screws: CSA B35.4, Wood Screws, non-ferrous, corrosion-resistant alloy finished. Stainless steel for exterior and high humidity areas.

- 2.1.13. Deck Screws: CSA B35.4, #8 Wood Screws, brown paint finish. Length as required.
- 2.1.14. Adhesives: Waterproof, suited to Work for which they are used, conforming to CSA 0112 Series-M.
- 2.1.15. Bird Screen: 12mm x 12mm welded wire grid, galvanized or stainless steel.

2.2. FABRICATION

- 2.2.1. Fabricate Work of this Section to AWMAC Custom Grade.
- 2.2.2. Prep doors and frames for (but not limited to) heavyweight hinges, continuous hinges, concealed vertical rod and mortise lock case exit devices, cylindrical locksets, surface door closures and concealed overhead stops.
- 2.2.3. Fabricate louvres using composite boards and deck screws.

3. PART EXECUTION

3.1. INSTALLATION, INCLUDING BUT NOT LIMITED TO:

- 3.1.1. Finished Woodwork: Conform to AWMAC Millwork Standards for Custom Grade Work.
- 3.1.2. Woodwork: Cut and fit accurately, neatly and true to line. Cope inside corners of wood base, screw fasten at 400 oc min., countersink and fill.
- 3.1.3. Securement: Secure woodwork and other Products in accordance with manufacturer's recommendations for best results, in accordance with AWMAC standards, the Drawings and reviewed Shop Drawings and to best practice to ensure all Work in place for long life under hard use.
- 3.1.4. Installation of Products from Other Sections: Collect and review Shop and installation Drawings of all such Work. Install all such Work in accordance with reviewed installation Drawings and manufacturers printed instructions and directions.
- 3.1.5. Doors and Screens: Hang wood and steel doors and screens plumb and accurately within openings, free of hinge bound condition.
- 3.1.6. Special Doors: Install locking ceiling access doors to manufacturer's instructions. Install access doors for concealed mechanical equipment in accordance with Mechanical Division 15, reviewed Shop Drawings and reviewed instructions. Not required this Project.
- 3.1.8. Hardware: Install all hardware except cabinet hardware, unless specified otherwise. Install in strict accordance with manufacturer's instructions and as dictated by hardware schedule.
- 3.1.9. Chalkboards: Install chalkboards as indicated on the Drawings with concealed fasteners to manufacturer's instructions for installation and cleaning. Not required this Project.

- 3.1.10. Washroom and Janitorial Accessories: Install in accordance with Section 10 80 00, reviewed Shop Drawings and reviewed instructions.
- 3.1.11. Equipment Supplied by Owner: Install in accordance with Suppliers written instructions.

END OF SECTION

1. PART GENERAL

1.1. GENERAL REQUIREMENTS

1.1.1. Conform to Division 1, General Requirements.

1.2. DESCRIPTION

1.2.1. Work Included:

Supply steel doors, frames and screens to Sections installing them.

1.2.2. Related Work Specified Elsewhere:

- | | |
|-------------------------------|------------------|
| a. Installation of doors: | Section 06 20 00 |
| b. Supply of finish hardware: | Section 08 71 00 |
| c. Painting: | Section 09 90 00 |

1.3. QUALITY ASSURANCE

1.3.1. Requirements of Regulatory Agencies:

Perform Work of this Section in accordance with requirements of latest edition of Canadian Manufacturing Specifications for Steel Doors and Frames, of Canadian Steel Door and Frame Manufacturers' Association (CSDFMA), except as otherwise specified herein or shown.

1.3.2. Coordination:

Give full cooperation to finish hardware distributor's representative during preparation of Shop Drawings and execution of shop fabrication.

1.4. SUBMITTALS

1.4.1. Shop Drawings:

- Further to requirements of Section 01 30 00, indicate each type of door, transom panel, door frame and window frame, materials being supplied, sufficient detail to show door construction and anchorage, type of primer, cutouts and reinforcements for hardware, mortar boxes, anchors, fire and sound ratings and location of fastenings.
- Submit on sheets conforming to format of Canadian Steel Door and Frame Manufacturers' Association Guide. Manufacturer's numbering system shall correspond to Architect's numbering system.
- Draw frame profile details at scale not less than 1:5.

2. PART PRODUCTS

2.1. EXAMPLE MANUFACTURERS

2.1.1. S.W. Fleming, Steldor, Daley, Ambico, Macotta or Daybar Industries Ltd.

- 2.1.2. Minimum Specification for Products: Canadian Steel Door and Frame Manufacturers' Association.

2.2. MATERIALS

2.2.1. Sheet Steel:

- a. Doors and frames: Wipe coated galvanized steel to requirements of ASTM A526-80 with zinc coating designation ZF075 to ASTM A525.
- b. Metal jamb anchors occurring in exterior walls: hot dipped galvanized sheet steel.
- c. Minimum core thickness to CSDFMA Specifications Table 1 and as follows:
 - a. Doors, frames and screens: 16ga
 - b. Anchors: 14ga
 - c. Stiffeners: 14ga

2.2.2. Core:

- a. Interior doors: 25mm resin impregnated rot resistant kraft honeycomb.
- b. Exterior doors: steel stiffened, all voids insulated with fibreglass.

2.2.3. Glass:

- a. Tempered Glass: Type 2 tempered, Class B float glass, Category II min. 6mm thick.

2.2.4. Miscellaneous:

- a. Door Bumpers/Silencers: Single stud rubber/neoprene type; acceptable type, Glynn-Johnson #64 of colour selected or Johnsonite Inc., or S.W. Fleming.
- b. Panel Fasteners: Concealed fasteners of hot dip galvanized steel, type to Provide accurate, secure installation.
- c. Glazing Stops: Formed channel, minimum 16mm height.

2.3. FABRICATION

2.3.1. General:

1. Prep doors and frames for (but not limited to) heavyweight hinges, continuous hinges, concealed vertical rod and mortise lock case exit devices, cylindrical locksets, surface door closures and concealed overhead stops.

2.3.2. Frames and Glazed Screens:

1. Fabricate frames to profiles indicated.
2. Mitre corners of frames. Cut accurately and weld continuously on inside of frame profile.
3. Fabricate vertical members to open into heads to allow for mortar fill.
4. Reinforce all frames greater than 900 mm in width with steel angles or channels to Provide continuous unwavering support under all conditions.

5. Mortise, reinforce, box, drill, and tap frames to receive hardware. Reinforce all frames for application of surface mounted closers and for automatic door operators, where scheduled. Protect strike and hinge reinforcements with guard boxes welded to frame. Obtain templates from Finish Hardware Supplier.
6. Provide two welded-in channel or angle spreaders per frame to ensure proper alignment.
7. Provide three rubber bumpers for each door frame.
8. Where frames terminate at finished floor, Provide floor plates for anchorage to floor.
9. Provide adjustable jamb anchors of appropriate type. For frames occurring in masonry walls, Provide minimum three anchors for each jamb up to 2260 mm in height. Provide additional anchors for higher frames in accordance with referenced standard.
10. For glazing, Provide accurately fitted removable steel channel glazing stops with butted corners, and fastened with countersunk Phillips oval head sheet metal screws. Place stops on inner non-secure side of frame.

2.3.3. Doors:

1. Fabricate each face of door from a single sheet of steel.
2. Continuously weld longitudinal edges and grind smooth.
3. Stiffen exterior doors vertically with stiffeners spot welded to face sheets at maximum 150 mm on centre.
4. Close top and bottom of door with recessed projection welded channel end closures. Provide steel top cap on exterior doors to protect against weather.
5. Provide 1 mm clearance at hinge jamb, 1.5 mm clearance at latchside and head, and 6 mm clearance between bottom of door and finished floor line, except where undercutting specified in Door Schedule. Bevel opening edge of single leaf doors 3 mm and of double doors 1.5 mm each.
6. Where door lights are indicated, Provide accurately fitted removable steel channel glazing stops with butted corners, fastened with countersunk Phillips oval head sheet metal screws. Place stops on inner non-secure side of door.
7. Fill internal spaces in exterior doors fully with specified insulation core material.
8. Mortise, reinforce, drill, and tap doors to receive hardware. Note that doors will be fitted with mortise lever locksets. Obtain templates from Finish Hardware supplier.
9. Make all doors 44.5 mm thick between faces.
10. Reinforce stiles and rails of fully glazed doors with continuous channels.

2.3.4. Fire-rated Assemblies:

1. Fabricate assemblies required to have a fire-resistance rating to requirements of testing and labeling agency.
2. Supply assemblies required to have a fire-resistance rating complete with appropriate label of testing and labelling agency affixed in a visible but unobtrusive location.

2.3.5. Welding:

1. To CSA W59.1 and CSA W55.2.
2. Grind exposed welds smooth and flush.
3. Fill open joints, seams and depressions with filler or by continuous brazing or welding. Grind smooth to true arises and profiles, and sand down to smooth, true uniform finish.

2.3.6. Adjust and Clean:

Promptly make good any disfigurement or damage caused by shipping and handling.

END OF SECTION

1. PART GENERAL

1.1. GENERAL REQUIREMENTS

1.1.1. Conform to Division 1, General Requirements.

1.2. DESCRIPTION

1.2.1. Work Included:

- a. Prepare Hardware Schedule.
- b. Supply finish hardware and templates to other Sections as required.

1.2.2. Related Work Specified Elsewhere:

- a. Installation of Hardware: Section 06 20 00

1.3. QUALITY ASSURANCE

1.3.1. Qualifications of Hardware Consultant:

Be an Architectural Hardware Consultant (A.H.C.).

1.3.2. Coordination:

Give full cooperation to other Sections during preparation of Shop Drawings and execution of shop fabrication.

1.3.3. Materials: Conform to the following as a minimum standard: CAN/CGSB-69: 18-M, 19-M, 20-M, 21-m, 22-M, 23-M, 24-M, 25-M, 27-M, 28-M, 29-M, 30-M, 31-M, 32-M, 33-M, 34-M.

1.4. SUBMITTALS

1.4.1. Hardware List:

- a. Provide an itemized hardware schedule which lists all doors by number indicated on Drawings, with complete details and catalogue numbers of the hardware to be supplied. .
- b. Hardware Supplier to examine Contract Documents to determine the final dimensions, size and quantity of the required hardware items.

1.4.2. Samples: Submit samples to Consultant if requested.

1.4.3. Templates: Submit templates and information to all Sections requiring same.

1.4.4. Operating Manuals: Submit operating manuals to Section 01300.

1.5. WARRANTIES

1.4.1. Warrant all hardware for one year and door closers for five years from date of acceptance. State in the warranty that all moving parts will be replaced in part or in whole at no cost to the Owner.

2. PART PRODUCTS

2.1. GENERAL – Doors and frames to be prepared for, but not limited to preparations for heavy weight oversized butt hinges, continuous hinges, cylindrical locksets, concealed vertical rod and mortise lock case exit devices, surface door closers and concealed overhead stops.

2.2.1. Butt Hinges: Permit 175deg swing.

2.2.2. Continuous Hinges: provide at all doors 1015mm wide and larger. Permit 175deg swing where required.

2.2.3. Handles: Smooth curved lever style – not sharp bend.

2.2.4. Locksets: ULC labeled if installed on labeled fire doors.

2.2.5. Exit Devices: ULC labeled if installed on labeled fire doors. Low profile panic style at doors serving greater than 60 occupants.

2.2.6. Door Closers:

a. Permit 175deg swing and be complete with built-in check.

b. ULC labeled if installed on labeled fire doors

2.2.7. Overhead Door Stops:

a. Interior doors: solid steel and plated as specified.

b. Exterior doors: solid bronze and plated as specified.

2.2.87. Fasteners:

a. Supply door pulls with oval head thru bolts and cup washers on doors where no push plate is specified. Where door pulls are specified on one side with push plates on the other, supply flathead thru bolts, countersunk flush with face of door so that pushplates will cover the bolts.

b. Continuously weld longitudinal edges and grind smooth.

c. Stiffen exterior doors vertically with stiffeners spot welded to face sheets at maximum 150 in

3. PART EXECUTION

3.1. INSPECTIONS AND SUPPERVISION

3.1.1. Attend site meetings when so requested

3.1.2. Make periodic inspections of the hardware installations and report improper or unsatisfactory conditions. Expedite the replacement or correction of faulty hardware.

END OF SECTION

1. PART GENERAL

1.1. GENERAL REQUIREMENTS

- 1.1.1. Conform to Division 01 - General Requirements.

1.2. DESCRIPTION

1.2.1. Work Included

- a. Provide *multi-layer concrete floor coating system consisting of a polyaspartic base coat, a full broadcast of vinyl flakes, and a polyaspartic top coat.*

1.2.2. Related Work Specified Elsewhere

- a. Concrete Floor Patch: Sections 03 30 00
b. Concrete Masonry: Sections 04 20 00

1.3. QUALITY ASSURANCE

1.3.1. Reference Documents:

- a. ASTM E 1907-97 - Standard Practices for Determining Moisture-Related Acceptability of Concrete Floors to Receive Moisture-Sensitive Finishes.
b. ASTM D 4263-83 - Indicating Moisture in Concrete by Plastic Sheet Method.
c. ASTM F 1869-98 - Measuring Moisture Vapour Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
d. ASTM D 4414-84 - Measurement of Wet Film Thickness by Notch Gages.
e. CSA A23.2-00 A23.2-6B Method of Test to Determine Adhesion by Tensile Load.
e. International Concrete Repair Institute (I.C.R.I) Guideline Number 03732 - Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings and Polymer Overlays.

1.3.2. Qualifications of Applicator:

- a. Have a minimum of five years experience in the application of this type of flooring and be an 'Approved Applicator' of the material manufacturer.
b. Before application begins arrange a site meeting attended by the Contractor, the materials manufacturer. Discuss Project scope, application procedures, details, inspect and test substrates and review environmental conditions.

1.4. JOB CONDITIONS

- 1.4.1. Erect suitable barriers and post legible signs at points of entry to prevent traffic and trades from entering the Work area during application and cure period of the floor.

- 1.4.2. Store materials indoors in original undamaged condition at a temperature range of 15°C - 21°C (60°F – 70°F) in a dry location.
- 1.4.2. Erect suitable barriers and post legible signs at points of entry to prevent traffic and trades from entering the Work area during application and cure period of the floor.
- 1.4.2. Maintain room temperature at 20°C (68°F) for 48 hours before, during and 48 hours after installation, or until cured.
- 1.4.2. At the time of application ensure the minimum substrate temperature is above 7°C (45°F) and the substrate temperature is 3°C (5.5°F) above the measured dew point.

1.5. SUBMITTALS

- 1.5.1. Submit a letter of certification written by the manufacturer that states the installer is a current 'approved applicator' fully trained in the installation of the specified materials.
- 1.5.2. Before application begins submit three copies of the manufacturer's current technical data sheets and installation details for the materials to be used.
- 1.5.3. Before application begins submit three samples 150 mm x 150 mm (6" x 6") representative of the specified finish and selected colour to the project Architect for approval.

1.6. WARRANTY

- 1.6.1. Warrant the Work of this section against defects in materials and workmanship for a period of two years from the date of acceptance.

2. PART PRODUCTS

2.1. MATERIALS

2.1.1. Epoxy Flooring:

- a. Base Coat: 80% solids polyaspartic coating, fast-curing, UV-stable, with a minimum thickness of 8-10 mils.
- b. Flake Broadcast: 1/4" vinyl flakes, pre-blended color mix (specify color or blend as required), applied to full rejection.
- c. Top Coat: 80% solids polyaspartic coating, clear, high-gloss, UV-stable, with a minimum thickness of 10-12 mils.
- d. Optional Primer: Epoxy or polyaspartic primer for existing concrete surfaces.
- e. Colour: as selected by Architect from complete range.

2.1.2. Performance Requirements:

- a. Thickness: Total system thickness of approximately 20-25 mils (excluding flake height).
- b. Adhesion: >300 psi (concrete failure) per ASTM D4541.
- c. Abrasion Resistance: <40 mg loss per ASTM D4060 (CS-17 wheel, 1000 cycles).
- d. Chemical Resistance: Resistant to common chemicals (e.g., oil, gasoline, mild acids) per ASTM D1308.

3. PART EXECUTION

3.1. EXAMINATION

- 3.1.1. Prior to commencing Work of this section, inspect and test all concrete surfaces and immediately advise in writing to the Contractor and the manufacturer any unsatisfactory conditions which will adversely affect the successful installation of the flooring.

3.2. PREPARATION

- 3.2.1. The concrete surface must be dry, clean and free of contaminants (oil, grease, dirt, paint etc.).
- 3.2.2. Mechanically prepare the surface via diamond grinding or shot blasting to achieve a Concrete Surface Profile (CSP) of 2-3 per ICRI Guidelines.
- 3.2.3. *Repair cracks, spalls, or imperfections with a suitable concrete patching compound and allow to cure.*
- 3.2.4. *Ensure moisture vapor transmission is within acceptable limits (e.g., <3 lbs/1000 sq ft/24 hrs per ASTM F1869 or <75% RH per ASTM F2170).*

3.3. INSTALLATION

3.3.1. Base Coat:

- a. Mix polyaspartic base coat per manufacturers instructions.
- b. *Apply evenly using a notched squeegee and back-roll with a 3/8" nap roller at a rate of 160-200 sq ft/gallon (8-10 mils).*
- c. *Allow to cure until tacky but walkable (typically 1-2 hours, depending on temperature and product).*

3.3.2. Flake Broadcast:

- a. *Broadcast 1/4" vinyl flakes into the wet base coat by hand or mechanical blower until full rejection is achieved (no base coat visible).*
- b. *Allow the system to cure fully (typically 4-6 hours, depending on conditions).*

3.3.3. Top Coat:

- a. Mix polyaspartic top coat per manufacturers instructions.
- d. *Apply evenly using a notched squeegee and back-roll with a 3/8" nap roller at a rate of 130-160 sq ft/gallon (10-12 mils).*
- e. *Ensure uniform coverage over the flake layer.*
- f. *Allow to cure for 4-6 hours (light foot traffic) or 24 hours (full use), depending on product and conditions.*

3.3.4. Cleanup:

- a. *Once cured, sweep or vacuum excess loose flakes from the surface.*
- b. *Lightly scrape or sand the floor to remove any protruding flakes and ensure a smooth surface.*
- c. *Clean with neutral pH clearer.*

3.3.5. Protection

- a. Protect completed floor from damage by trade traffic by suitable means as required.
- b. Protect completed Work from contact with water until cured, approximately sixteen hours at 20°C (68°F)
- c. Protect completed flooring from chemical exposure until fully cured, approximately five days at 20°C (68°F).

END OF SECTION

1. PART GENERAL1.1. GENERAL REQUIREMENTS

1.1.1. Conform to Division 01, General Requirements.

1.2. DESCRIPTION1.2.1. Work Included:

a. Interior - Work shall generally include the following:

1. Paint all surfaces and objects within new and existing rooms, except where specifically indicated or specified otherwise. This includes grilles, pipes, ducts, etc.
2. Paint existing block walls adjacent to new blockwork.

1.2.2. Related Work Specified Elsewhere:

a. Masonry : Section 04 20 00

1.3. QUALITY ASSURANCE

1.3.1. Comply with requirements of Ontario Painting Contractors Association (OPCA) Architectural Specifications Manual, latest edition.

1.3.2. Engage a qualified independent inspector, acceptable to OPCA and Architect, to verify that Work conforms to Contract Documents. Include cost of inspection in Contract.

1.3.2. Job Mock-Up:

- a. Prepare small sample room for painted finish, giving prime coat to one wall, two coats to second wall, and three coats to third wall. Leave sample room for that purpose until majority of Work is finished. Each coat to be tinted a different colour from previous coat.
- b. Prepare small one wall mock-up for each individual paint colour as requested by Architect.

1.4. MATERIAL STANDARDS1.4.1. Conforming to ECP-07-89/ECP-12-89

Interior Latex Type, Flat Paint	CAN/CGSB-1.100-M
Primer-Sealer, Wall, Interior Latex Type	CAN/CGSB-1.119-M
Emulsion Type Filler Masonry Block	CAN/CGSB-1.188-M
Interior Semigloss Latex Paint	CAN/CGSB-1.195-M

1.5. SUBMITTALS

1.5.1. List of Materials:

Before ordering materials, submit in writing a complete list of all types and brands of materials to be used for this job and adjacent to each type state surface and/or location of application. Paint list shall bear manufacturer's certification that materials listed are premium quality. Do not order materials or commence Work until list is approved by Architect. On request of Architect, produce invoices from time to time covering all materials on job.

1.5.2. Samples: Provide 300mm x 300mm samples of each coat of each paint colour as selected by the Architect. Work must match approved samples

1.5.3. Reference Data: Provide data to Operating Manuals and Reference Data specified in Section 01300.

1.5.4. Maintenance Materials:

Provide the Owner with all opened, but not completely used materials in resealed containers, minimum 2 litres of each colour, marked with colour number for maintenance purposes.

1.6. JOB CONDITIONS

1.6.1. Inspection: Inspect all surfaces before commencement of this Work and verify their readiness for this Work.

1.6.2. Scheduling:

Commence interior Work only when building is completely enclosed and sealed, all Sections creating dirt have completed their Work, room doors are installed, heating and ventilation is provided or permanent systems are working and Work areas can be closed to traffic until Work cures.

1.6.3. Environmental Requirements:

Follow manufacturer's recommendations. Do not paint exterior surfaces during cold, windy, rainy or frosty weather when temperature is likely to drop below 10 deg C, when surfaces are damp or exposed to hot sun. Interior temperatures shall be at least 15 deg C, 21 deg C preferable, before commencing interior Work.

1.7. WARRANTY

1.7.1. Provide 2 year warranty.

2. PART PRODUCTS

2.1. MATERIALS

2.1.1. Standards:

a. Water Based Paint Standard:

1. In accordance with Environmental Choice Program guideline ECP-07-89, water based paint shall be formulated or manufactured free from formaldehyde, halogenated solvents, aromatic hydrocarbons, mercury or mercury compounds, or be tinted with pigments of lead, cadmium, chromium VI and their oxides.
2. Paint must have Flash Point of 61.0 deg C or greater, and not contain Volatile Organic Compounds in excess of 250 grams per litre (g/L).

b. Solvent Base Paint Standard:

1. In accordance with ECP guideline ECP-12-89, solvent based paint shall not be formulated with formaldehyde, halogenated solvents, aromatic hydrocarbons in excess of 10% of weight, mercury or mercury compounds, or be tinted with pigments of lead, cadmium, chromium VI and their oxides.
2. Paint shall have Flash Point of 37.8 deg C or greater, and not contain Volatile Organic Compounds in excess of 380 g/L.

c. Coating Removal:

1. Hydrostrip 500 Series by Glidden/ICI Paints (Canada) Inc. or Devoe Paints or Sherwin-Williams.

2.1.2. Manufacturer:

The quality of paint shall be equal to the ECO label formulas prepared by Benjamin Moore "Pristine EcoSpec", Canadian Industries Limited EcoLogo , Glidden, Para Paints Eco Logo, Sherwin Williams EcoLogo, or approved similar, and applied in strict accordance with the manufacturer's directions.

2.1.3. Colours:

Colour schedule will be issued at later date. Not more than twelve colours shall be selected including deep tinted colours.

3. PART EXECUTION3.1. PREPARATION3.1.1. Protection:

- a. Use sufficient drop cloths and protective coverings for full protection of floors and Work not being painted. Clean any components paint spotted or soiled.

3.1.2. Coating Removal:

- a. Apply to manufacturers written instructions. Repeat as required for complete removal of existing paints from glazed blocks and mortar joints.

3.1.3. Surface Preparation:

- a. Surfaces shall be dry, clean, smooth, free from dust, dirt, grease, rust, loose crystals, or extraneous matter. Wire brush metal castings before first coat.

- b. Check non-metallic surfaces with moisture meter, do not proceed if reading is higher than 12-15% without written directions. If substrate is steel, do not apply coatings over moisture or when surface temperature is within 3 degrees Celcius of dew point.
- c. Wash unpainted or shop painted metal free of grease, dirt or oil; remove rust; then prime or spot prime where material is exposed, with rust inhibitive primer. Feather our edges to make touch up paint inconspicuous.
- d. Allow galvanized metal to weather minimum of 26 weeks and Xylene clean or abrade surface with bronze wool prior to coating.
- e. Test masonry surfaces to be painted for alkalinity. Ensure neutral pH before painting.
- f. If concrete to be painted is less than 26 weeks old, etch normal concrete surfaces with muriatic acid solution (1 part commercial 331.45% to 3 parts water). Rinse 2 or 3 times with clean water and bring pH of surface to neutral using Tri-Sodium-Phosphate (TSP) and flush and allow to dry to moisture content of 12-15% or less, read with electronic moisture meter. Confirm that no curing agents have been used on surfaces to be painted.
- g. Inspect millwork to assure surfaces are smooth, free from machine or surface marks and that nailheads have been countersunk. Seal all knots and sapwood where painted.
- h. Ensure shop sealer has been applied to glue-laminated beams.
- i. Inspect gypsum board to ensure joints are completely filled and sanded smooth. Fill small nicks or holes with patching compound and sand smooth. Remove dust prior to painting.
- j. Nail holes, splits or scratches shall be puttied or speckled smooth after prime coat. Where same occurs on transparent finish, putty shall be coloured to match finish.
- k. If woodwork, metal or any other surface to be finished, cannot be put in proper condition for finishing by customary cleaning, sanding, puttying operations, notify Architect in writing, or assume responsibility for and rectify any unsatisfactory finish resulting.
- l. For exposed steel in high humidity areas, prepare steel in accordance with Steel Structures Painting Council Standard SSPC.SP 6 for a Commercial Blast.

3.2. APPLICATION

- 3.2.1. Use same brand of paint for primer, intermediate and finish coats. Use approved sealer for knots and sappy areas under enamels.
- 3.2.2. Permit paint to dry before applying succeeding coats. Touch-up suction spots after application of first coat. Sand lightly between coats with No. 120 sandpaper.

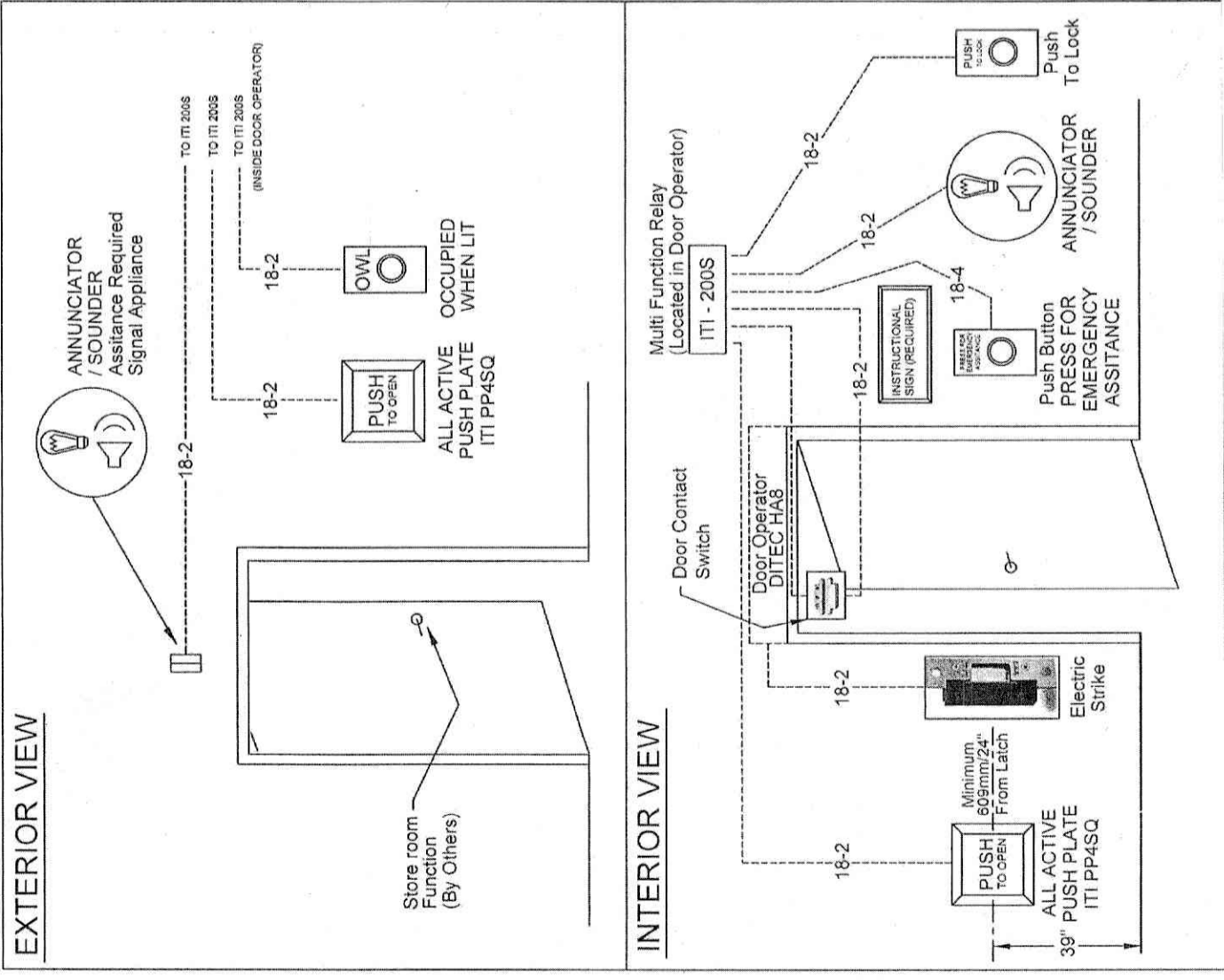
- 3.2.3. Painting coats specified are intended to cover surfaces completely. If materials and colours require additional coats to ensure adequate and uniform coverage, apply further coats until complete satisfactory coverage is achieved. Minimum finish shall be Premium (three coats) as defined by OPCA. Some deep hues or bright colours may require four coats.
- 3.2.4. Areas exhibiting incomplete or unsatisfactory coverage shall have entire plane painted. Patching not acceptable. Paint entire plane of areas which have been cut and patched.
- 3.2.5. Work application:
- a. By skilled tradespeople in accordance with manufacturer's directions and supervision;
 - b. In dust-free and suitable conditions for production of good results;
 - c. Even, uniform in sheen, colour and texture, free from brush or roller marks, sags, crawls, runs or other defects.
- 3.2.6. Apply materials by brush or roller. Airless spray painting may be permitted in specific areas but Architect must be consulted and approve each area before Work commences. Architect may at any time prohibit use of spray painting for such reasons as carelessness, poor masking or protective measures, drifting paint fog, disturbance to other trades or failure to obtain dense, even opaque finish.
- 3.2.7. Mechanical and Electrical Work:
- a. Paint all convectors, grilles, conduit, pipes, ducts, panels, switch boxes, access panels, mechanical and electrical equipment which are not prefinished. Remove grilles, covers, access panels for mechanical and electrical systems from installed location and paint separately, if these items are not prefinished.
 - b. Paint Work to match surfaces they are seen against unless directed otherwise.
 - c. Finish interior surface of ventilation ducts where visible through grilles, diffusers, louvres, etc. Apply two coats of flatblack paint to limit of site line.
 - d. Protect gauges, identification plates and similar items from being painted over or paint splattered.
- 3.3. GENERAL FINISHING:
- 3.3.1. Apply primer coat to unprimed ferrous metal surfaces.
- 3.3.2. Prime woodwork designated for painting immediately upon delivery to site. Prime all surfaces of such woodwork, whether exposed or not, before installation. Back prime woodwork which is to receive transparent finish with 1 coat of transparent finish reduced 25%.
- 3.3.3. Re-seal all cut edges of wood to be painted or finished, if material was cut subsequent to initial sealing. Ensure tops and bottoms of wood doors sealed.

3.4. LIST OF FINISHES:

- a. Interior and Exterior Metal (Ferrous): Exposed Structural and Miscellaneous Steel:
 - 1 coat shop applied, oil Alkyd primer (metal surfaces already primed need only touchup),
 - 1 coat 100% Acrylic emulsion, waterborne, corrosion resistant paint as tie-coat at 1.5 - 2 mils Dry Film Thickness (DFT).
 - 2 coats semi-gloss Acrylic emulsion finish at 1.2 mils/coat DFT. Total 3.9 - 4.4mils DFT.
- b. Concrete Block:
 - 1 coat high-solids, pigmented block filler used full body, VOC complying, 3mils DFT.
 - 2 coats vinyl acrylic Latex enamel, VOC complying, 1.5 mils/coat DFT. Total 6mils DFT.
- c. Painted Concrete:
 - 2 coats high-solids purpose made floor paint with non-slip surface.
- d. Specific Areas:
 1. Existing previously painted walls: including Concrete block, drywall, vinyl faced and Interior Metal (Ferrous) surfaces:
 - a. Prepare existing paint by removing all loose and peeling paint. Prep surfaces to be gloss free and clean of grease and dirt. Sand entire surface using 80 – 100 grit sandpaper followed by a wash of TSP and water and rinsed with clean warm water and allowed to dry.
 - b. Apply:
 - 1 coat Devflex 4020 primer by Devoe or ICI Paints (Canada) Inc. or Sherwin-Williams, backroll to force and fill all pin holes to 3 mils DFT,
 - 2 coats Devflex 4216 to 5mils DFT by Devoe or ICI Paints (Canada) Inc. or Sherwin-Williams.

END OF SECTION

UNIVERSAL WASHROOM (GENERAL) APPLICATION LAYOUT AS REQUIRED BY OBC (Jan. 1, 2015) ONTARIO REGULATION 181/14(2014)



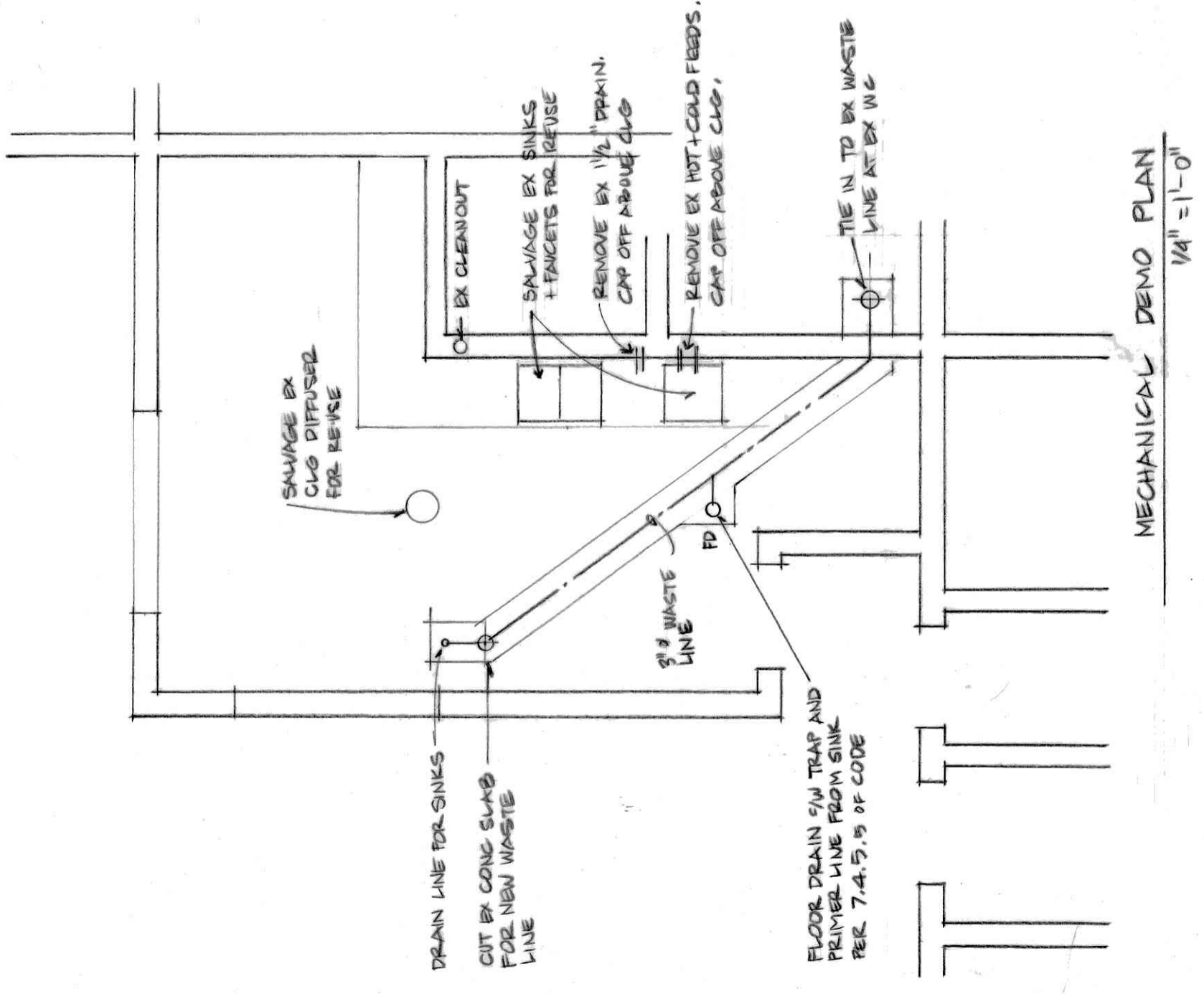
UNIVERSAL WASHROOM ACCESS - CONTROLS
 PROVIDE ALL COMPONENTS FOR COMPLETE OPERATION

Plumbing Rough-in Schedule

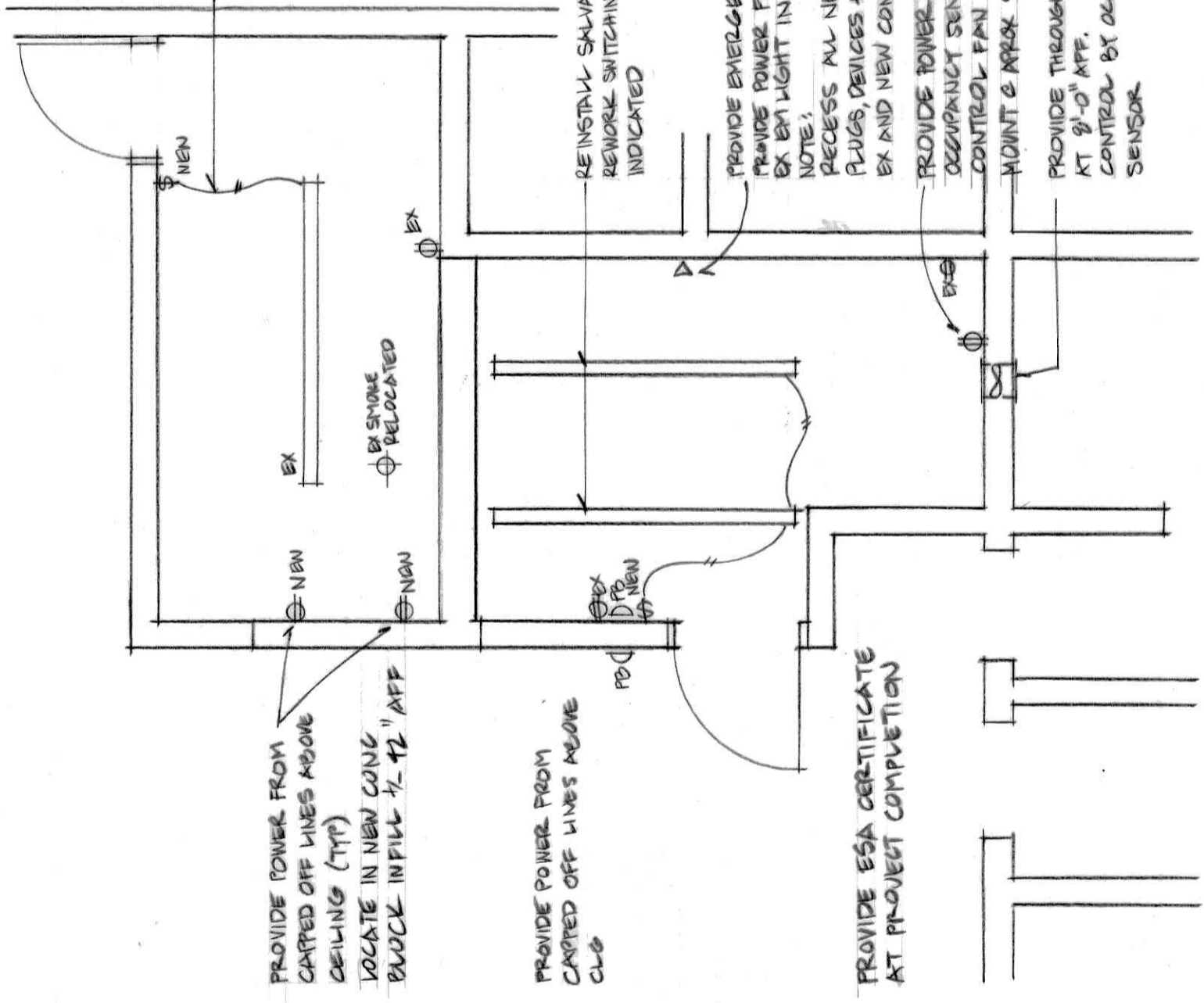
abbr	style	DHW	DCW	San	Vent
sink	Lavatory	1/2"	1/2"	1 1/2"	1 1/2"
	Existing Sinks	1/2"	1/2"	1 1/2"	1 1/2"
WC	Water Closet	1/2"	1/2"	3"	1 1/2"

Plumbing Fixture Schedule

sink	Wall mounted - Kohler/Brenham with shroud model No. K-1999-1N white	chrome	single lever control faucet - chrome
WC	Floor mounted - Kohler/Persuade Curv Comfort - two piece Model K-75790 white c/w soft close seat - Bemis 7300SLEC		



MECHANICAL DEMO PLAN
 1/4" = 1'-0"



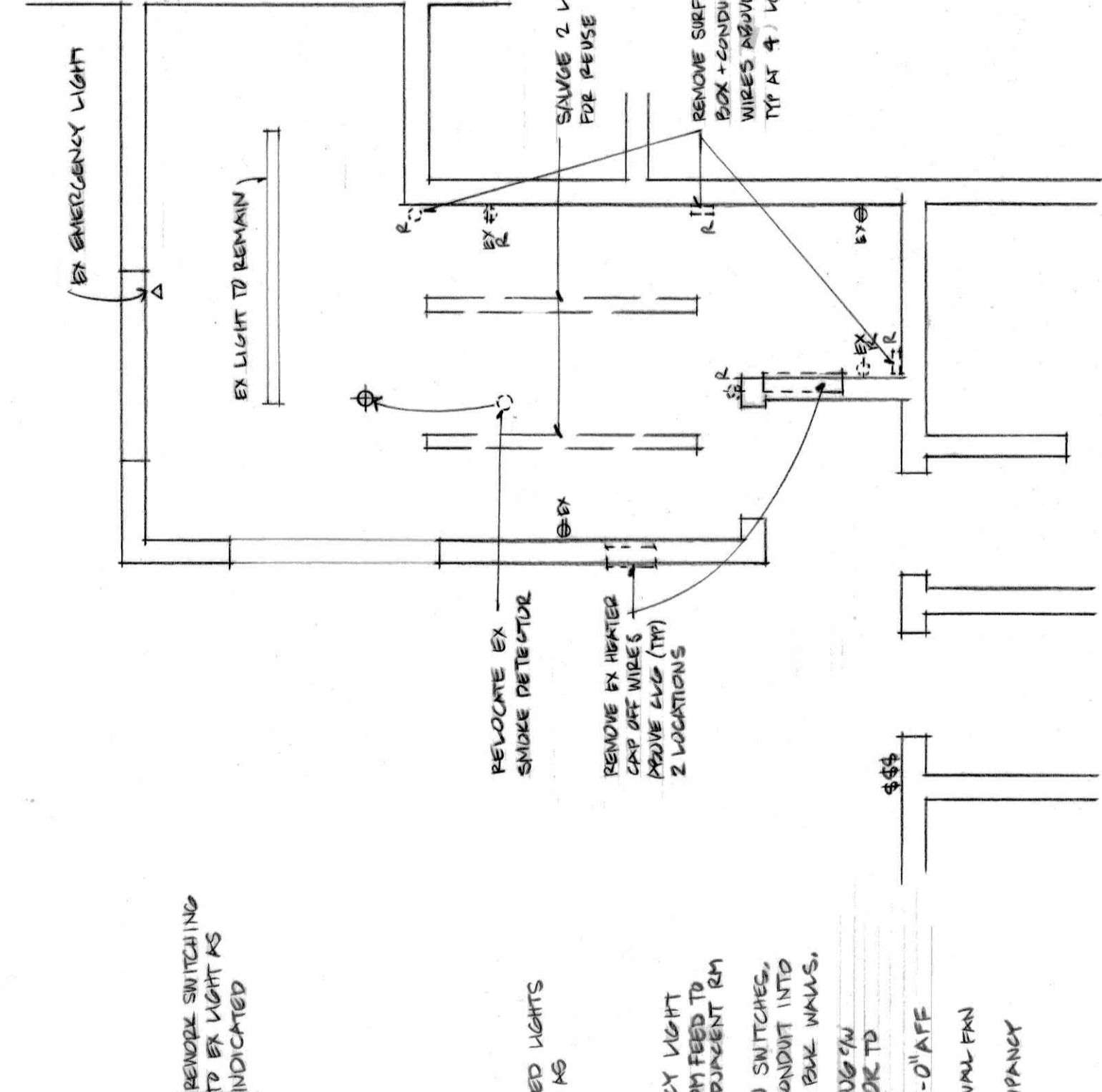
ELECTRICAL PLAN
 1/4" = 1'-0"

Electrical Fixtures

Emergency Lighting	Apmetlux 200lm LED with battery backup AC85-277V Modify for direct connection to junction box above ceiling
Through-wall Fan	SALEFO 6" propeller wall mounted 300 CFM Modify for direct connection to junction box above ceiling

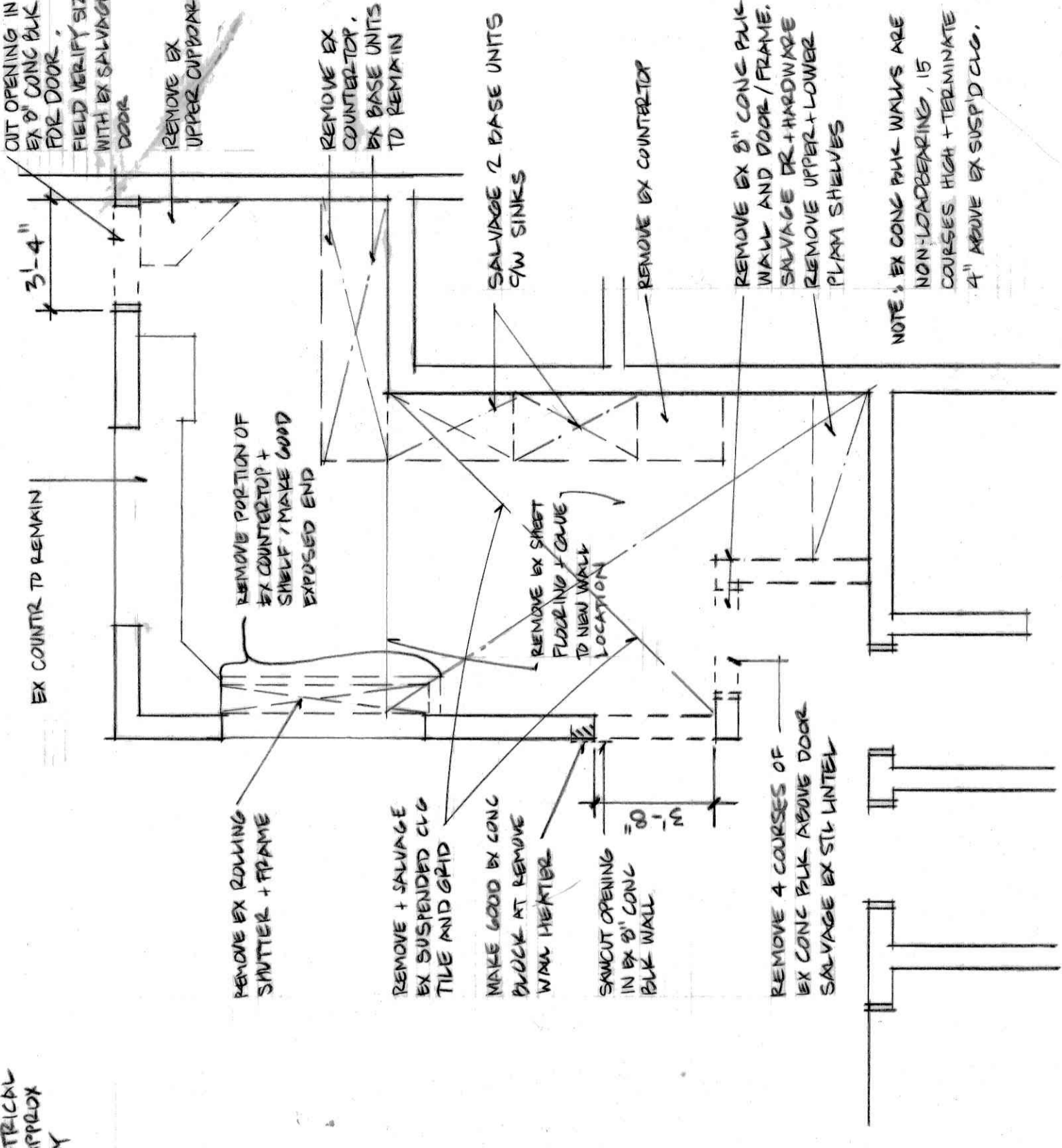
Door Schedule

label	size	type	matl	frame	Remarks
A	3'-4" x 7'-0" x 1 3/4"	A	HM	HM	3 hinges, Storeroom Lockset, Electric Strike, Kickplate, Wall Stop Door operator and Accessories, Push to Lock and Emergency Kit, Sweep Field verify existing door size before ordering new hollow metal frame.
B	ex 3'-0" x 7'-0" x 1 3/4"	ex A	ex HM	ex HM	Salvage and re-use existing hardware, including self closer and wall stop. Handle and hinges

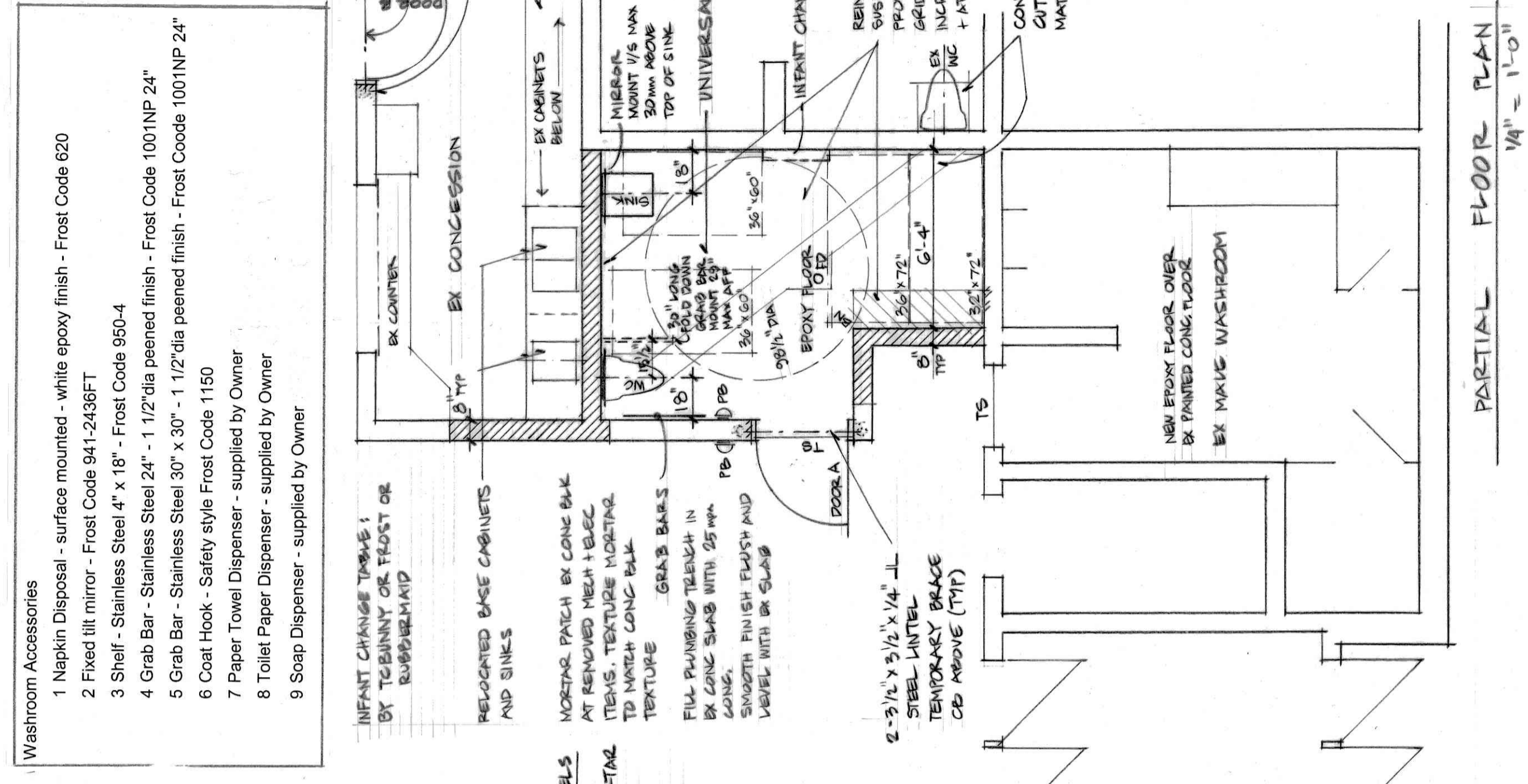


ELECTRIC DEMO PLAN
 1/4" = 1'-0"

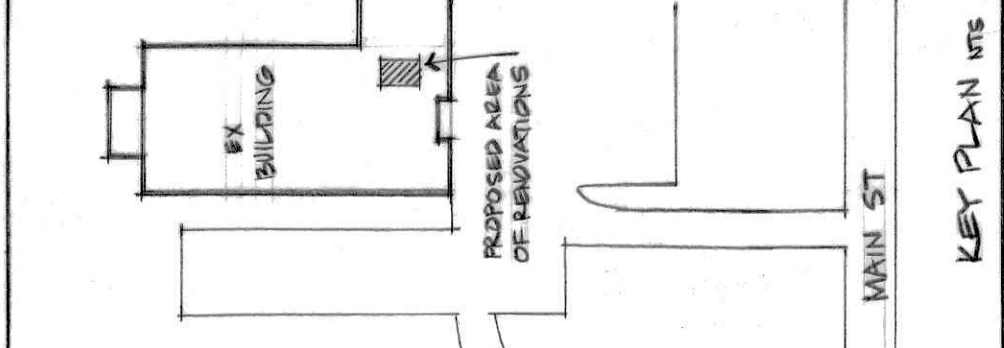
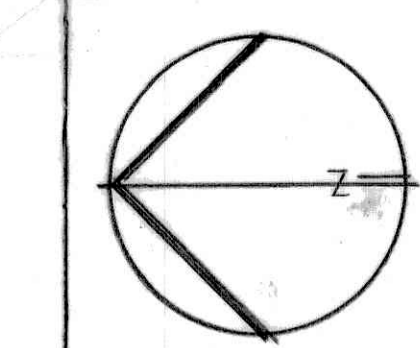
- Washroom Accessories
- 1 Napkin Disposal - surface mounted - white epoxy finish - Frost Code 620
 - 2 Fixed tilt mirror - Frost Code 941-2436FT
 - 3 Shelf - Stainless Steel 4" x 18" - Frost Code 950-4
 - 4 Grab Bar - Stainless Steel 24" - 1 1/2" dia peened finish - Frost Code 1001NP 24"
 - 5 Grab Bar - Stainless Steel 30" x 30" - 1 1/2" dia peened finish - Frost Code 1001NP 24"
 - 6 Coat Hook - Safety style Frost Code 1150
 - 7 Paper Towel Dispenser - supplied by Owner
 - 8 Toilet Paper Dispenser - supplied by Owner
 - 9 Soap Dispenser - supplied by Owner



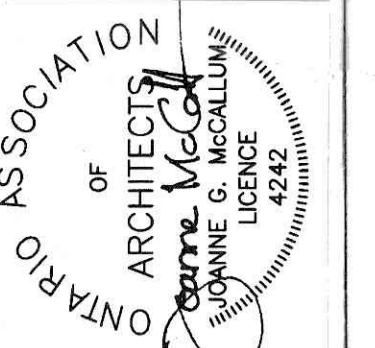
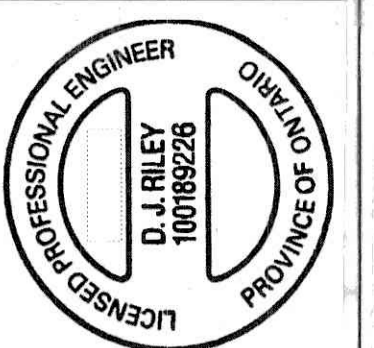
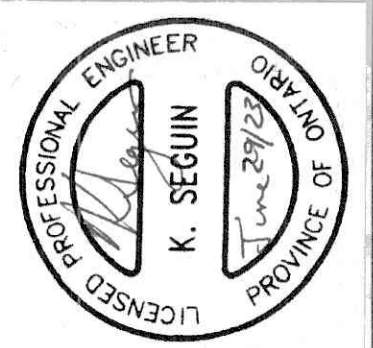
GENERAL DEMO PLAN
 1/4" = 1'-0"



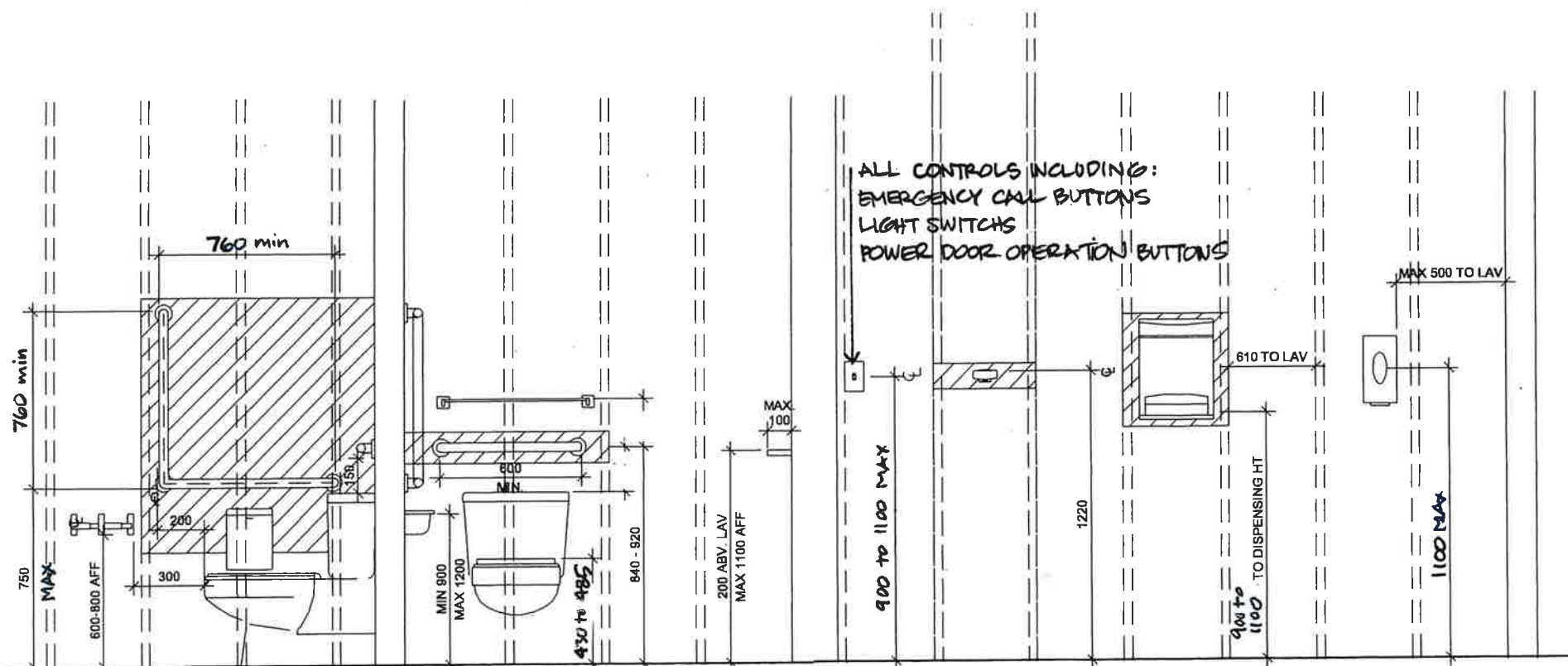
PARTIAL FLOOR PLAN
 1/4" = 1'-0"



KEY PLAN ITS
 MAIN ST



PROJECT: WASHROOM REPAIRS
 TIVERTON + DISTRICT SPORTS CENTRE
 ARCHITECT: McCallum Sawyer
 LICENSE NO: 10018228
 SCALE: 1/4" = 1'-0"
 DATE: FEBRUARY 2024
 DRAWING NO: 1 of 1



ALL CONTROLS INCLUDING:
EMERGENCY CALL BUTTONS
LIGHT SWITCHES
POWER DOOR OPERATION BUTTONS

B.F. W.C. & GRAB BARS
GRAB BARS 3.8.3.8 (5),(6) - OBC 2020
TPD 3.8.3.8 (1)(g) - OBC 2020
3.8.3.8 (2) - OBC 2020

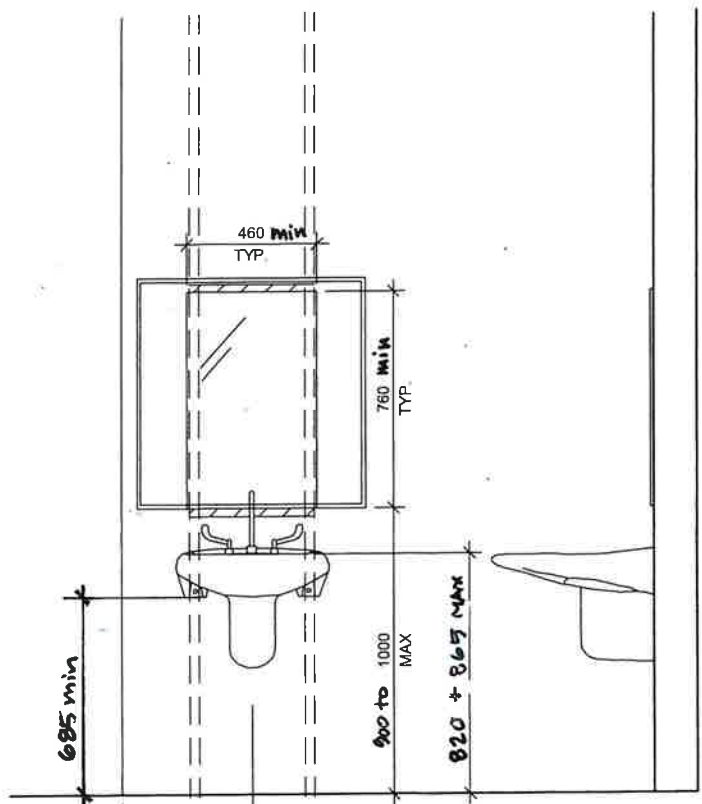
MIN 480
MAX 480

SHELF @ LAV

COAT HOOK
3.8.3.1(e) - OBC 2020

PAPER TOWEL
DISPENSER (P.T.D.)
3.8.3.11(h) - OBC 2020

SOAP DISPENSER
(SD)
3.8.3.11(g) - OBC 2020



WASHROOM ACCESSORIES
CITY OF LONDON PADS
2025