Specifications for:

# INTERIOR SQUASH COURT RENOVATION

at

# NORTH HURON WESCAST COMMUNITY COMPLEX 99 KERR DRIVE WINGHAM, ONTARIO

# Prepared for:

Township of North Huron 274 Josephine Street Wingham, Ontario N0G 2W0

# Prepared by:

JPM Architecture Inc. 51 Kingston Street Goderich, Ontario N7A 3K3

North Huron No. RFP-11-2025

Project No. 2251.00

Bid Issue Date: 24-June-2025

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# 2251.00 Interior Squash Court Renovation

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#### SECTION 00002 - STIPULATED PRICE BID FORM

#### INTERIOR SQUASH COURT RENOVATION North Huron Wescast Community Complex 99 Kerr Drive, Wingham, Ontario

Submitted To: Carson Lamb **Township of North Huron 274 Josephine Street** Wingham, Ontario N0G 2W0

Bidder Legal Name:			
Address:			
	City	Province	Postal Code

#### **Bid Price**

Having examined the Bid Documents, as listed herein, and Addenda No.\_\_\_\_\_ to No.\_\_\_\_, inclusive, all as issued by the Consultant and having visited the Place of the Work, we hereby offer to enter into a Contract to perform the Work required by the Bid Documents for the stipulated price of

in Canadian funds. This price excludes Value Added Taxes (HST). \$. amount in figures

#### **Declarations**

We hereby declare that:

we agree to perform the Work in compliance with the following schedule: (a)

- -Mobilize on Site ..... August 4, 2025.
- no person, firm or corporation other than the undersigned has any interest in this Bid or in the proposed (b) Contract for which this Bid is made:
- this Bid is open to acceptance for a period of 30 days from the date of bid closing: (c)
- the information provided in the attached Appendices form an integral part of this Bid. (d)

#### **Enclosures**

This Bid includes the following enclosures:

- Bid Surety in accordance with Section 00100 Instructions to Bidders. (a)
- Letter from Bidders financial institution that the Security Deposit will be fulfilled should the Contract be (b) awarded to the Bidder, or Agreement to Bond, in accordance with Section 00600 - Security Deposit
- Appendices to Bid Form. (c)

#### List of Bid Documents

The following is a list or description of the Bid Documents referred to in the Bid, for the above named Project:

- Specifications in accordance with Table of Contents Section 00001. (a)
- (b) Drawings in accordance with List of Drawings Section 00005.
- (c) Addenda

#### Signatures

SIGNED AND SUBMITTED for and on behalf of:

company name

Affix Corporate Seal

name and title of authorized signing officer

signature of authorized signing officer

name of witness

signature of witness

name and title of authorized signing officer

signature of authorized signing officer

name of witness

signature of witness

Date: \_\_\_\_\_, 2025

#### APPENDIX 'A' - LIST OF SUBCONTRACTORS & ITEMIZED PRICES

#### INTERIOR SQUASH COURT RENOVATION North Huron Wescast Community Complex 99 Kerr Drive, Wingham, Ontario

Bidder:

We, the above-named bidder, propose to use the subcontractors named below, for the Project/Contract named above.

We, the above named bidder, provide below the requested itemized prices for Work, included in our Bid Price, as entered on the Stipulated Bid Price Form. It is understood that these itemized prices are provided for information purposes only and will not be used to modify the scope of the Work or adjust our Bid Price.

# Itemized Allowances

1.	Contingency		\$ 10,000.00		
2.	Division 11 Work: Relocating exist	ing backboards	\$ 14,500.00		
Tota	al			\$	10,000.00
ltem	n of Work	Name of Subcontractor		Itemize	ed Price
Divi	sion 3 - Concrete			\$	
	sion 9 - Resilient Athletic Surface			\$	

NOTE: TOTAL OF ITEMIZED PRICING IS **NOT** REQUIRED.

signature of authorized signing officer

date

#### SECTION 00005 - LIST OF DRAWINGS

#### 1.0 DRAWINGS

The Drawings upon which the Bid and Contract are to be based include the following:

<u>Drawing No.</u>	<u>Title</u>	<u>Date</u>
A1	Code Matrix, Key Plan and Demolition Plan	24-June-2025
A2	Floor Plan and Reflected Ceiling Plan	24-June-2025
A3	Interior Elevations	24-June-2025

#### SECTION 00100 - INSTRUCTIONS TO BIDDERS

#### PART 1 - INVITATION

#### 1.1 Bid Call

.1 Bids for the provision of labour, products and services necessary for the performance of the Work, signed under seal, executed and dated, will be received by:

Township of North Huron 274 Josephine Street Wingham, Ontario Att: Carson Lamb

until Bid Closing at 2:00:00 PM Local Time, Tuesday, July 08, 2025.

- .2 Submissions not received by or before the exact time stated above will not be accepted by the Owner/Consultant.
- .3 The Owner will open the Bids in private immediately following bid close.
- .4 Bid Documents, including Drawings and Specifications, will be on display at the Consultant's Office.
- .5 Bid Documents will only be issued to invited Bidders.
- 1.2 Intent: The intent of this bid call is to obtain an offer to perform the Work of

INTERIOR SQUASH COURT RENOVATION North Huron Wescast Community Complex 99 Kerr Drive Wingham, Ontario

on the basis of a Stipulated Lump Sum Price, in accordance with the Contract Documents.

- .1 The Bid Price, stated by the Bidder in the Stipulated Price Bid Form Section 00002, shall be for the performance of the Work in accordance with the specified sequence and scheduled completion dates, and recognizing the location of the Place of the Work and existing conditions.
- .2 Time requirements, stated in the Contract Documents, are of the essence to the Contract. The intent, at this time, is to award the Contract on or before <u>Tuesday</u>, July 22, 2025.
- 1.3 Bid Documents Identification
  - .1 The Bid Documents are identified as

INTERIOR SQUASH COURT RENOVATION North Huron Wescast Community Complex 99 Kerr Drive Wingham, Ontario

North Huron No.: RFP-11-2025 Project No.: 2251.00

as issued by the Consultant and are listed in the Stipulated Price Bid Form.

#### PART 2 - BID DOCUMENTS

- 2.1 Definitions
  - .1 Contract Documents: defined in CCDC2-2020 Definitions, which are included in the Agreement between Owner and Contractor and in the General Conditions of the Stipulated Price Contract.
  - .2 Bid Documents: as identified in the Stipulated Price Bid Form.
  - .3 Bid: act of submitting an offer under seal.
  - .4 Owner:

Township of North Huron 274 Josephine Street Wingham, Ontario N0G 2W0

.5 Consultant:

JPM Architecture Inc. 51 Kingston Street Goderich, Ontario N7A 3K3

- .6 Bidder: Invited General Contractors.
- .7 Addenda: any written orders, directives or instructions, of Owner or Consultant, relating to the Work and issued by the Consultant prior to execution of Contract.

#### 2.2 Availability

- .1 Only Digital copies of the Drawings and Specifications are available. It is the bidders responsibility, at their own expense, to print the Bid Documents for bidding purposes.
- .2 Bidders will have access to Bid Documents via Township of North Huron Bids and Tenders portal. It is the Bidder's responsibility to access the tender portal and ensure that all required documents are downloaded, and to monitor the site for addenda.
- .3 After submission of Bid, Bidders shall shred and recycle paper Bid Documents and delete electronic versions of the documents in their possession. Do not return Bid Documents to the Consultant.

#### 2.3 Examination

- .1 Upon receipt of Bid Documents, each Bidder shall verify that the documents are complete. Notify Consultant should the documents be incomplete.
- .2 Immediately notify Consultant upon finding discrepancies or omissions in Bid Documents.
- .3 The Drawings, upon which the Bid is based, are listed in the List of Drawings Section 00005.

#### 2.4 Queries - Addenda

- .1 Direct questions to the Consultant at:
  - Email: MN@JPMArchitecture.ca Att: Matt Nigh.
- .2 Questions will be accepted only from invited Bidders. Subcontractors or suppliers shall obtain information from the Contractors, for whom they are providing bids.
- .3 Any interpretation of or change to Bid Documents, prior to Bid Closing, will be made only by written Addenda, issued via North Huron Bids and Tenders Portal by Owner, and such Addenda shall become part of the Bid Documents.
- .4 No other interpretation or explanations shall be valid.
- .5 Verbal answers are binding only when confirmed by written Addenda.
- .6 If no Addenda have been received insert the word "None" instead.

#### 2.5 Voluntary Alternatives

- .1 Products specified by trade name shall be furnished per the Specifications. Review of proposed voluntary alternatives will be completed after Bid Close and will only be permitted after review and written approval by the Consultant. Such voluntary alternatives are NOT included within the Bid Price.
- .2 The Owner reserves the right to accept any or all voluntary alternatives. Adjustments to the Bid Price will be made, by the amounts stated, prior to award of Contract.
- .3 Voluntary Alternative Products
  - .1 Proposals for Voluntary Alternatives, to specified products, may be proposed as an attachment to the Bid Form.
  - .2 Submission of proposed Voluntary Alternative must be:
    - .1 in writing on appended "Voluntary Alternative Checklist" form;
    - .2 made in good faith as verifiably equal to or superior to the specified products.
  - .3 The Contractor shall accept full responsibility that a proposed Voluntary Alternative will not exceed space requirements, as shown on the Drawings, and that coordination and cost of installation, including interference with other areas of the work, is included in the Voluntary Alternative proposal.
  - .4 Submittals must account for applicable product requirements included on the Drawings and in the Specifications:
    - .1 Complete names and descriptions;
    - .2 Dimensions;
    - .3 Performance figures, as applicable;
    - .4 Latest catalogue numbers.
  - .5 When requested by Consultant, submit laboratory tests, product data, proof of standards, compliance, etc.
- .4 Voluntary Alternative Checklist
  - .1 For the convenience of Contractors, a checklist is provided as Appendix ITB 1 to this Section, to expedite the proposal of Voluntary Alternatives. The page must be copied and submitted as an enclosure with the Bid Form, however, the Base Bid Price must include products and systems per the Bid Documents.

#### PART 3 - SITE ASSESSMENT

#### 3.1 Site Examination

- .1 Visit the Place of Work and surrounding properties before submitting a Bid.
- .2 The Place of the proposed Work is located at:
  - 99 Kerr Drive, Wingham, Ontario
- .3 Arrangements for individual site visits, during the bidding period, may be made by contacting: Matt Nigh at JPM Architecture Inc.
  - Tel: 519-524-5313

Email: MN@JPMArchitecture.ca

.4 Bidders shall visit and examine the site, and fully inform themselves of existing conditions, limitations and difficulties, which may arise, and include in their Bid the cost of work required to complete the Work. The Bidder, if awarded the Contract, will not be allowed any compensation by reason of any matter or thing, concerning that which such Bidder might have fully informed themselves of, prior to bidding.

#### PART 4 - BID SUBMISSION

- 4.1 Bid Ineligibility
  - .1 Bids that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alteration or irregularities of any kind, may be regarded informal and subject to rejection.
  - .2 Bid Form including improperly prepared appendices and enclosures, may be declared informal and subject to rejection.
  - .3 Bids from unsolicited Bidders will be returned unopened.
  - .4 Bids containing escalation clauses will not be considered.
- 4.2 Submissions
  - .1 Bidders shall be solely responsible for the delivery and submission of their Bid in the manner and within the time specified.
  - .2 Submit 1 copy of the executed Bid, on the forms provided, signed and corporate seal affixed, together with the required security and appendices, in a sealed opaque envelope, clearly identified as "BID", with project identification and Bidder's name and address on the outside.
  - .3 Electronic submissions of Bids are not acceptable.
  - .4 No oral, telephone or facsimile proposals will be considered.
- 4.3 Bid Amendments
  - .1 Amendments to a submitted Bid will be permitted, if received in writing prior to Bid closing and endorsed by the same party or parties who signed the Bid, and submitted in the same manner as the Bid.
  - .2 Modification of bid shall not reveal the original amount nor the revised amount, only the amount to be added or subtracted from the original bid amount shall be stated.
- 4.4 Withdrawal of Bid
  - .1 A Bidder may request, by letter, email, or in person, that their Bid be withdrawn. The withdrawal shall be allowed if the request is made prior to the Bid Close. Telephone and facsimile requests will not be considered. When withdrawals are made in person, the Official receiving the Bid shall obtain a signed withdrawal form confirming the details. If the person is other than a Senior Official of the Company, and for letter withdrawals, the authenticity of the request must be confirmed by telephoning a responsible Official of the Company. The withdrawal of a Bid does not disqualify a Bidder from submitting another Bid.

#### PART 5 - BID ENCLOSURES

- 5.1 Security Deposit
  - .1 Bid shall be accompanied by a Bid Surety, in the form of a certified cheque, money order, bank draft, Irrevocable Letter of Credit, or Bid Bond in the amount of 10% of Bid Price, valid for a period of 30 days from the date of Bid close.
  - .2 Bid Surety shall be in the name of the Owner as Obligee, signed and sealed by the principal and surety as applicable.
  - .3 The Bid security deposit will be returned after delivery, to the Owner, of required Performance Bond and Labour and Materials Payment Bond by the accepted Bidder.
  - .4 If the Bidder fails in their obligation to enter into a formal Contract with the Owner within 10 calendar days after receiving written notice from the Owner of Award of Contract and to provide the specified Security Deposit, then the Bidder is obliged to pay the Owner the difference in money between the amount of their Bid and the amount for which the Owner legally contracts with another party to do the Work, up to the face amount of the Bid Surety.
- 5.2 Bid Form Requirements
  - .1 The Bidder, in submitting the Bid, accepts the Time period and dates stated in the Bid Documents for performing the Work.
  - .2 The completion date in the Agreement shall be the completion Time added to the Contract Award date.
  - .3 Except for Value Added Tax (HST), include in the Bid Price other Federal and Provincial Sales Taxes and other Customs, Duties and Excise Taxes for the Work, regardless of any possible tax exemptions.
- 5.3 Bid Signing
  - .1 The Bid shall be signed under seal by the Bidder.
  - .2 Sole Proprietorship: Signature of sole proprietor in the presence of a witness who will also sign. Affix seal.
  - .3 Limited Company or Corporation: Signature of duly authorized signing officer with the corporate seal affixed is required. If the Bid is signed by officials other than the company President, Secretary or Treasurer of the company, a copy of the bylaw resolution of the Board of Directors, authorizing them to do so, must also be submitted with the Bid in the bid envelope.
  - .4 If the Bidder is a Joint Venture, each party to the Joint Venture shall execute the Bid under seal in the manner appropriate to such party.

#### PART 6 - OFFER ACCEPTANCE - REJECTION

- 6.1 Duration of Offer
  - .1 Bid shall remain open to acceptance and shall be irrevocable for a period of 60 days, after the bid closing date.

#### 6.2 Acceptance of Offer

- .1 The Owner reserves the right to:
  - .1 Accept or reject any or all offers, including without limitation the lowest Bid, and to award the Contract to whomever the Owner in its sole and absolute discretion deems appropriate notwithstanding any custom of the trade to the contrary nor anything contained in the Contract Documents or herein. The Owner shall not, under any circumstance, be responsible for any costs incurred by the Bidder in the preparing of its Bid.
  - .2 Not open the Bid envelop, if only one Bid is received prior to closing. In this case, the unopened Bid will be returned to the Bidder.
  - .3 Negotiate with one or more low, compliant bidders, in accordance with CCDC 23 A Guide to Calling Bids and Awarding Construction Contracts, when required to explore modifications of the Work to reduce costs, in an effort to comply with the Owner's budget.
  - .4 Require any Bidder to submit qualification information prior to the award of the Contract.
- .2 It shall be noted that prior to award of the Work a meeting may be held to review the Bid and the Bidder's understanding of the Work, the terms and conditions which will apply and the requirements of the schedule.
- .3 The Owner will issue the successful bidder a written Bid Acceptance.
- .4 The successful Bidder shall sign a formal contract document with the Owner, based on the Standard Construction Document, CCDC 2 2020 for Stipulated Price Contract.
- .5 By submitting a Bid, the Bidder waives all claims against, or entitlement to damages from, the Owner by reason of the Owner's rejection of its bid or all bids or failure to satisfy any Conditions Precedent referred to herein.
- 6.3 The Bidder agrees that if their Bid is acceptable to the Owner, the Bidder will:
  - .1 Accept a Letter of Intent as authority to commence work before executing a formal Contract.
  - .2 Submit to the Consultant certified copies of insurance policies, as required by the Conditions of the Contract.
  - .3 Submit, immediately, Notice of Project to the Ministry of Labour.
  - .4 Submit, immediately, Security Deposit in accordance with Section 00600.
  - .5 Submit to the Consultant, within 7 working days, a Certificate of Clearance from the Workers Compensation Board of Ontario and lost time frequency record and severity record per IAPA Standards.
  - .6 Submit to Consultant, within 7 working days, a detailed schedule of Work and the direction, phasing and scheduling of the Work.
  - .7 Submit to the Consultant, a breakdown of federal and provincial taxes other than Value Added Taxes (HST), for use by Owner.
  - .8 Furnish to the Consultant, with first Application for Payment, a breakdown of the Contract Price in such form and detail as required by the Consultant, for progress payments, taxation and internal accounting purposes.
  - .9 Submit to the Consultant, within 7 working days, a written copy of Contractor's Health and Safety Policy.

### APPENDIX ITB 1 - VOLUNTARY ALTERNATIVE CHECKLIST

Note that this page must be copied and included with the Bid Form, <u>one for each</u> proposed voluntary alternative product.

Bidder or subtrade nam	ne:
Proposed voluntary alte	ernative:
Reason for change:	Problem with existing requirement
	Improvement to result from proposed change
	Proposed change needed to comply with codes or regulations as understood by trade
Estimated change to co	onstruction time (+ or -)
Estimated change to bi	d cost (+ or -)

To the best of our knowledge, opinion and belief, the proposed voluntary alternative is genuinely equal to or superior to the original requirement.

Signed.....

Owner Use Only:

Trade Affected	Comparable quality validated	Comparable Quality not validated	Date	Signature
General Trades				
Structural				
Mechanical				
Electrical				
Other				
Other				
Other				

#### APPENDIX ITB 2 - LIST OF INVITED / PREQUALIFIED CONTRACTORS

- 1.1 The following Contractors have been prequalified to Bid this Project:
- 1. Bronnenco Construction Ltd. 1971 Mallard Road London, Ontario N6H 5L8 Contact: Justin Nguyen Tel: 519-601-7375 Email: jnguyen@bronnenco.com
- 2. Feltz Design Build Ltd. 8 Hahn Court Stratford, Ontario N5A 7M3 Contact: Hainsley Bailey Tel: 519-273-1989 Email: hainsley@feltz.ca

- J.P. Commercial Contractors Inc. 281227 Shouldice Block Road Shallow Lake, Ontario N0H 2K0 Contact: Andy Smit Tel: 519-372-2476 Email: <u>asmit@jpcommercial.ca</u>
- W.H. Smith Construction Ltd.
   55 Birch Street
   Seaforth, Ontario N0K 1W0
   Contact: Chris Goodman
   Tel: 519-639-9513
   Email: chrisg@whsmithconstruction.ca

#### SECTION 00600 - SECURITY DEPOSIT

Performance and Labour and Material Payments Security Deposit

- 1. The successful Bidder shall furnish a Security Deposit in the form of an Irrevocable Letter of Credit, a Certified Cheque from a Chartered Canadian Bank or recognized financial institution in the name of the Owner, or a Performance Bond and a Labour and Material Payment Bond in the amount of 50% of the Contract Price.
- 2. The Security Deposit shall provide indemnity to the Owner, up to the face value of the Security Deposit, in the event of default by the Contractor, as defined by the Contract Documents.
- 3. This Security Deposit shall guarantee that all claimants will be paid for labour and materials furnished to the Contractor for use on the Project. "Claimant" is one who is allowed a lien under the Construction Act, 1990, Amended 2019, Province of Ontario.
- 4. The Security Deposit shall extend from the date of Award of Contract until the fulfilment of the Contract, one year from the date of Substantial Performance of the Work.

#### SECTION 00700 - AGREEMENT, DEFINITIONS AND GENERAL CONDITIONS

The Agreement, Definitions and General Conditions contained in the Standard Construction Document for Stipulated Price Contract CCDC No. 2, revised 2020, shall become a part of the Contract and shall apply to all Contractors and Sub-Contractors.

#### A-3 CONTRACT DOCUMENTS

The following Contract Documents are required to be listed in Article A-2 of the Agreement:

- 1. Agreement as per CCDC2-2020, Common Law Version, Pages 1 to 5.
- 2. General Conditions as per CCDC2-2020, Common Law Version, Pages 8 to 28.
- 3. Definitions as per CCDC2-2020, Common Law Version, Pages 6 and 7.
- 4. Section 00810 Supplementary Conditions.
- 5. Division 1 General Requirements Sections as listed in Section 00001.
- 6. Contract Specifications, as listed in Section 00001, except Section 00002 and Section 00100, which will be deleted as not applicable after award of Contract.
- 7. Drawings, as listed in Section 00005.
- 8. Modifications, as listed in Section 00900.

#### SECTION 00810 - SUPPLEMENTARY CONDITIONS

#### CONTRACT DOCUMENTS

The Standard Construction Document for CCDC 2 Stipulated Price Contract, 2020 English version, consisting of the Agreement Between *Owner* and *Contractor*, Definitions, and General Conditions of the Stipulated Price Contract, Parts 1 to 13 inclusive, governing same is hereby made part of these Contract Documents, with the following amendments, additions and modifications. Where these amendments, additions, and modifications specifically reference a change to the Agreement, Definitions, or General Conditions, these amendments, additions shall govern.

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.

#### AMENDMENTS TO AGREEMENT

The following are amendments to CCDC 2, 2020 Agreement Between Owner and Contractor:

#### ARTICLE A-5 PAYMENT

.1 In paragraph 5.1.1 of Article A-5 <u>add</u> the following words to the end: "or, where there is no *Payment Certifier*, jointly by the *Owner* and *Contractor*"

#### ARTICLE A-6 RECEIPT AND ADDRESSES FOR NOTICES IN WRITING

- .1 <u>Delete</u> paragraph 6.5 of Article A-6 in its entirety and replace it with the following:
  - 6.5 Contact information for a party may be changed by *Notice in Writing* to the other party setting out the new contact information in accordance with this Article.

#### AMENDMENTS TO DEFINITIONS

Add the following definitions:

#### **Proper Invoice**

Proper Invoice means a "proper invoice" as defined in the Payment Legislation, if any, and as may be modified by written agreement between the parties to the extent permitted by such Payment Legislation.

#### **Proposed Change Notice**

A *Proposed Change Notice* is a notice describing a proposed change in the *Work* prepared by the *Consultant*. A *Proposed Change Notice* is not an authorization to proceed with changes in the *Work*. The *Contractor* shall present, to the *Consultant* within 12 calendar days of notice, in a form acceptable to the *Consultant*, a method of adjustment or amount of adjustment for the *Contract Price*, if any, and the adjustment in *Contract Time*, if any, for the proposed change in the *Work*.

#### Submittals

*Submittals* are documents or items required by the *Contract Documents* to be provided by the *Contractor*, such as:

- *Shop Drawings*, samples, models, mock-ups to indicate details or characteristics, before the portion of the *Work* that they represent can be incorporated into the *Work*; and
- As-built drawings and manuals to provide instructions to the operation and maintenance of the *Work*.

#### PART 1 GENERAL CONDITIONS

#### GC 1.1 CONTRACT DOCUMENTS

- .1 <u>Delete</u> paragraphs 1.1.3 and 1.1.4 in their entirety and replace them with the following:
  - 1.1.3 The *Contractor* shall review the *Contract Documents* for the purpose of facilitating and co-ordination and execution of the *Work* by the *Contractor*. The *Contractor* shall report promptly to the *Consultant* any ambiguities, design issues or other matters requiring clarification made known to the *Contractor* or that the *Contractor* may discover from such a review. Such review by the *Contractor* shall comply with the standard of care described in paragraph 3.9.1 of the *Contract*.
  - 1.1.4 Except for its obligation to review the *Contract Documents* and report the result pursuant to paragraph 1.1.3, the *Contractor* is not responsible for ambiguities, design issues or other matters requiring clarification in the *Contract Documents* and does not assume any responsibility to the *Owner* or to the *Consultant* for the accuracy of the *Contract Documents*. Without limiting the foregoing, the *Contractor* shall not be liable for any damages or costs resulting from any ambiguities, design issues or other matters requiring clarification in the *Contract Documents* which the *Contractor* could not reasonably have discovered from such a review in accordance with the standard of care. If the *Contractor* does discover any ambiguities, design issues or other matters requiring clarification in the *Contract Documents*, the *Contractor* shall not proceed with the work affected until the *Contractor* has received modified or additional information from the *Consultant*. The impacts of any ambiguities, design issues or other matters requiring clarification in the *Contract Documents*, including to the *Contract Price* and *Contract Time*, shall be addressed by the parties in accordance with Part 6 CHANGES."
- .2 <u>Add</u> the following to the end of subparagraph 1.1.6.2:

Except to the extent the *Consultant* is indemnified as a third party beneficiary as provided in subparagraphs 9.2.7.4 and 9.5.3.4 and in paragraph 13.1.3.

#### PART 2 ADMINISTRATION OF THE CONTRACT

#### GC 2.2 ROLE OF THE CONSULTANT

.1 In paragraph 2.2.3 <u>add</u> the following to the end:

"Without limiting the foregoing, the *Consultant* may appoint one or more authorized representatives in writing who may fulfill the obligations of the *Consultant* under this *Contract.*"

- .2 In paragraph 2.2.8 <u>add</u> the words ", written statements" after the word "interpretations" in both the first and second sentences; and
  - i. <u>add</u> the following to the end of paragraph 2.2.8:

The *Owner* and the *Contractor* shall waive any claims against the *Consultant* arising out of its making of any interpretations, written statements or findings in accordance with paragraphs 2.2.6, 2.2.7, 2.2.8, and 7.1.2, but only to the extent that any such interpretations, written statements, and findings are made by the *Consultant* in an unbiased manner, and in accordance with the *Consultant's* professional standard of care at law.

.3 In paragraph 2.2.13 add the words "which are provided" before the words "by the Contractor".

#### GC 2.4 DEFECTIVE WORK

- .1 In paragraph 2.4.1:
  - i. Add after the words "shall promptly correct" the phrase "in a manner acceptable to the *Owner* and the *Consultant*"; and
  - ii. Add after the words "*Contract Documents*" the phrase "or work that the *Contractor* discovers to be defective, whether or not the defective work had been identified by the *Consultant*, and".
- .2 <u>Add</u> new paragraph 2.4.4 as follows
  - 2.4.4 The *Contractor* shall prioritize the correction of any defective work which, in the sole discretion of the *Owner*, adversely affects the day to day operation of the *Owner*.

#### PART 3 EXECUTION OF THE WORK

#### GC 3.1 CONTROL OF THE WORK

- .1 <u>Add</u> new paragraph 3.1.3:
  - 3.1.3 Prior to commencing individual procurement, fabrication and construction activities, the *Contractor* shall verify, at the *Place of the Work*, all relevant measurements and levels necessary for proper and complete fabrication, assembly and installation of the *Work* and shall further carefully compare such field measurements and conditions with the requirements of the *Contract Documents*. Where dimensions are not included or contradictions exist, or exact locations are not apparent, the *Contractor* shall immediately notify the *Consultant* in writing and obtain written instructions from the *Consultant* before proceeding with any part of the affected work.

#### GC 3.2 CONSTRUCTION BY OWNER AND OTHER CONTRACTORS

- .1 <u>Add</u> new paragraph 3.2.7 as follows:
  - 3.2.7 At the commencement of the *Work*, the *Contractor* shall prepare for the review and acceptance of the *Owner* and the *Consultant*, a schedule indicating the times, within the construction schedule referred to in GC 3.4, that items that are specified to be *Owner* purchased and *Contractor* installed or hooked up are required at the site to avoid delaying the progress of the *Work*.

#### GC 3.7 LABOUR AND PRODUCTS

.1 <u>Add</u> the following to the end of paragraph 3.7.1:

The *Contractor* represents that it has sufficient skilled employees to replace, subject to the *Owner's* approval, acting reasonably, its designated supervisor and project manager in the event of death, incapacity, removal or resignation.

- .2 Add new paragraphs 3.7.4 and 3.7.5 as follows:
  - 3.7.4 The *Owner* shall provide the *Contractor* in a timely manner with all relevant information (including storage, protection, and installation requirements) regarding *Products* to be supplied by the *Owner* or other contractors and, prior to delivery of any such *Products* to the *Place of the Work*, the *Owner* shall obtain the *Contractor's* written approval of the delivery date and proposed storage, protection and installation requirements.
  - 3.7.5 Once the *Contractor* has accepted delivery of *Products*, the *Contractor* shall be responsible for the safe storage and protection of *Products* as required to avoid dangerous conditions or contamination to the *Products* or other persons or property. *Products* shall be stored in locations and at the *Place of the Work* to the satisfaction of the *Owner* and the *Consultant* as agreed and approved by the *Contractor* pursuant to paragraph 3.7.4.

Notwithstanding the foregoing, the *Contractor* shall not be responsible for any *Products* supplied by the *Owner* or other contractors unless:

- (i) the Contract Documents expressly stipulate that such Product is to be the Contractor's responsibility and to be installed by the Contractor as part of the Work;
- (ii) the *Contractor* has or has received from the *Owner* proof of insurance coverage sufficient, at a minimum, to cover the replacement cost of such *Product*; and
- (iii) the Owner obtained the Contractor's approval as required by paragraph 3.7.4.

#### GC 3.8 SHOP DRAWINGS

- .1 <u>Add</u> the words "AND OTHER SUBMITTALS" to the Title of G.C. 3.8 after the words "SHOP DRAWINGS".
- .2 <u>Add</u> the words "and *Submittals*" after the words "*Shop Drawings*" in paragraphs 3.8.1, 3.8.2, 3.8.3, 3.8.3.2, 3.8.5, 3.8.6 and 3.8.7.
- .3 <u>Delete</u> paragraph 3.8.2 in its entirety and <u>replace</u> it with new paragraph 3.8.2 as follows:
  - 3.8.2 Prior to the first application for payment, the *Contractor* and the *Consultant* shall jointly prepare a schedule of the dates for submission and return of *Shop Drawings* and *Submittals* in an orderly sequence.
- .4 <u>Delete</u> the words "with reasonable promptness so as to cause no delay in the performance of the *Work*" and <u>replace</u> them with the words "within 10 *Working Days* or such longer period as may be reasonably required" in paragraph 3.8.7.

#### GC 3.9 PERFORMANCE BY CONTRACTOR

.1 Add new General Condition GC 3.9 as follows:

#### GC 3.9 PERFORMANCE BY CONTRACTOR

3.9.1 In performing its services and obligations under the *Contract*, the *Contractor* shall exercise a standard of care, skill and diligence that would normally be provided by an experienced and prudent contractor supplying similar services for similar projects. The *Contractor* acknowledges and agrees that throughout the *Contract*, the *Contractor's* obligations, duties and responsibilities shall be interpreted in accordance with this standard. The *Contractor* shall exercise the same standard of due care and diligence in respect of any *Products*, personnel, or procedures which it may recommend to the *Owner*.

#### PART 4 ALLOWANCES

#### GC 4.1 CASH ALLOWANCES

- .1 <u>Delete</u> paragraph 4.1.7 in its entirety and <u>replace</u> it with the following:
  - 4.1.7 At the commencement of the *Work*, the *Contractor* shall prepare for the review and acceptance of the *Owner* and the *Consultant* a schedule indicating the times within the construction schedule referred to in GC 3.4 that items called for under cash allowances are required to be delivered to the *Place of the Work* to avoid delaying the progress of the *Work*.
- .4 <u>Add</u> new paragraph 4.1.8 as follows:
  - 4.1.8 The *Owner* reserves the right to call, or to have the *Contractor* call, for competitive bids for portions of the *Work*, to be paid for from cash allowances.

#### PART 5 PAYMENT

#### GC 5.2 APPLICATIONS FOR PAYMENT

.1 <u>Delete</u> the word "first" in paragraph 5.2.7 and <u>replace</u> it with the word "second."

#### GC 5.4 PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF THE WORK

- .1 <u>Delete</u> all paragraphs of GC 5.4 in their entirety and <u>replace</u> them with the following paragraphs:
  - 5.4.1 When the Contractor considers that the Work is substantially performed, or if permitted by the lien legislation applicable to the *Place of the Work* a designated portion thereof which the *Owner* agrees to accept separately is substantially performed, the *Contractor* shall, within five (5) *Working Days*, deliver to the *Consultant* and to the *Owner* a comprehensive list of items to be completed or corrected, together with a written application for a review by the <u>Consultant</u> to establish *Substantial Performance of the Work* or substantial performance of the designated portion of the *Work*. Failure to include an item on the list does not alter the responsibility of the *Contractor* to complete the *Contract*.
  - 5.4.2 The *Consultant* will review the *Work* to certify or verify the validity of the application and shall promptly, and in any event, no later than 10 calendar days after receipt of the *Contractor's* application:
    - .1 advise the *Contractor* in writing that the *Work* or the designated portion of the *Work* is not substantially performed and give reasons why, or
    - .2 state the date of *Substantial Performance of the Work* or a designated portion of the *Work* in a certificate and issue a copy of that certificate to each of the *Owner* and the *Contractor*.
  - 5.4.3 Where the holdback amount required by the applicable lien legislation has not been placed in a separate lien holdback account, the *Owner* shall, no later than 10 calendar days prior to the expiry of the holdback period stipulated in the lien legislation applicable to the *Place of the Work*, place the holdback amount in a bank account in the joint names of the *Owner* and the *Contractor*.
  - 5.4.4 Subject to the requirements of any *Payment Legislation*, all holdback amounts prescribed by the applicable lien legislation for the *Place of the Work* shall become due and payable to the *Contractor* no later than 10 *Working Days* following the expiration of the holdback period stipulated in the lien legislation applicable to the *Place of the Work*, as certified or verified by the *Consultant* when permitted by any *Payment Legislation*.
  - 5.4.5 The Contractor shall submit an application for release of the lien holdback amount in accordance with the lien legislation applicable to the Place of the Work. Except to the extent required by any Payment Legislation, such application for release of the holdback shall not constitute an application for payment that is subject to Proper Invoice requirements.

- 5.4.6 Where legislation permits progressive release of the holdback for a portion of the *Work* and the *Consultant* has certified or verified that the part of the *Work* has been performed prior to *Substantial Performance of the Work*, the *Owner* hereby agrees to release, and shall release the holdback for such portion of the *Work* to the *Contractor* in accordance with such legislation.
- 5.4.7 Notwithstanding any progressive release of the holdback, the *Contractor* shall ensure that such parts of the *Work* are protected pending the issuance of a final certificate for payment or until the *Owner* takes early occupancy in accordance with GC12.2, whichever comes first, and shall be responsible for the correction of defects or work not performed regardless of whether or not such was apparent when the holdback was released.

#### GC 5.5 FINAL PAYMENT

.1 <u>Add</u> to the end of paragraph 5.5.1 the following sentence:

The application for final payment shall meet the requirements of a *Proper Invoice*.

.2 <u>Add</u> the following to the end of paragraph 5.5.3:

Subject to any *Payment Legislation*, when the *Consultant* finds the *Contractor's* application for final payment to be not valid, the *Contractor* shall revise and resubmit the application when the *Contractor* has addressed the reasons given by the *Consultant*.

#### PART 6 CHANGES IN THE WORK

#### GC 6.3 CHANGE DIRECTIVE

- .1 <u>Delete</u> the word "and" from the end of subparagraph 6.3.7.17.
- .2 <u>Delete</u> the period from the end of subparagraph 6.3.7.18 and <u>replace</u> it with "; and".
- .3 <u>Add</u> new subparagraph 6.3.7.19 as follows:
  - .19 safety measures and requirements.

#### GC 6.4 CONCEALED OR UNKNOWN CONDITIONS

- .1 <u>Add</u> new paragraph 6.4.5:
  - 6.4.5 The *Contractor* confirms that, prior to bidding the *Project*, it carefully reviewed the *Place of the Work* and applied to that review the degree of care and skill described in paragraph 3.9.1, given the amount of time provided between the issue of the bid documents and the actual closing of bids, the degree of access provided to the *Contractor* prior to submission of bid, and the sufficiency and completeness of the information provided by the *Owner*. The *Contractor* is not entitled to compensation or to an extension of the *Contractor* by such review undertaken in accordance with this paragraph 6.4.5.

#### GC 6.6 CLAIMS FOR A CHANGE IN CONTRACT PRICE

.1 <u>Add</u> the words "as noted in paragraph 6.6.3" after the words "of the claim" in paragraph 6.6.5 and add the words "and the *Consultant*", at the end of paragraph 6.6.5.

#### PART 8 DISPUTE RESOLUTION

#### GC 8.2 ADJUDICATION

.1 Delete the word "prescribed" from paragraph 8.2.1 and substitute the words "provided for".

#### GC 8.3 NEGOTIATION, MEDIATION AND ARBITRATION

- .1 <u>Add</u> the following new paragraphs 8.3.9 to 8.3.13:
  - 8.3.9 Within five *Working Days* of receipt of the notice of arbitration by the responding party under paragraph 8.3.6, the *Owner* and the *Contractor* shall give the *Consultant* a written notice containing:
    - .1 copy of the notice of arbitration;
    - .2 a copy of supplementary conditions 8.3.9 to 8.3.14 of this *Contract*, and;
    - .3 any claims or issues which the *Contractor* or the *Owner*, as the case may be, wishes to raise in relation to the *Consultant* arising out of the issues in dispute in the arbitration.
  - 8.3.10 The *Owner* and the *Contractor* agree that the *Consultant* may elect, within ten days of receipt of the notice under paragraph 8.3.9, to become a full party to the arbitration under paragraph 8.3.6 if the *Consultant*:
    - .1 has a vested or contingent financial interest in the outcome of the arbitration;
    - .2 gives the notice of election to the *Owner* and the *Contractor* before the arbitrator is appointed;
    - .3 agrees to be a party to the arbitration within the meaning of the rules referred to in paragraph 8.3.6, and,
    - .4 agrees to be bound by the arbitral award made in the arbitration.
  - 8.3.11 Without limiting and subject to the *Owner* and *Contractor's* rights under paragraph 8.3.12 to challenge whether the *Consultant* has satisfied the requirements of paragraph 8.3.10, if an election is made under paragraph 8.3.10:
    - .1 the Owner or Contractor may request particulars and evidence of the Consultant's vested or contingent financial interest in the outcome of the arbitration;
    - .2 the Consultant shall participate in the appointment of the arbitrator; and,
    - .3 notwithstanding the rules referred to in paragraph 8.3.6, the time period for reaching agreement on the appointment of the arbitrator shall begin to run from the date the respondent receives a copy of the notice of arbitration.
  - 8.3.12 The arbitrator in the arbitration in which the *Consultant* has elected under paragraph 8.3.10 to become a full party may:
    - .1 on application of the *Owner* or the *Contractor*, determine whether the *Consultant* has satisfied the requirements of paragraph 8.3.10, and;
    - .2 make any procedural order considered necessary to facilitate the addition of the *Consultant* as a party to the arbitration.

8.3.13 The provisions of paragraph 8.3.9 shall apply (with all appropriate changes being made) to written notice to be given by the *Consultant* to any sub-consultant.

#### PART 9 PROTECTION OF PERSONS AND PROPERTY

#### CG 9.1 PROTECTION OF WORK AND PROPERTY

- .1 <u>Delete</u> subparagraph 9.1.1.1 in its entirety and <u>replace</u> it with the following:
  - 9.1.1.1 Errors or omissions in the *Contract Documents* which the *Contractor* could not have discovered applying the standard of care described in paragraph 3.14.1;
- .2 <u>Delete</u> paragraph 9.1.2 in its entirety and <u>replace</u> it with the following:
  - 9.1.2 Before commencing any *Work*, the *Contractor* shall determine the locations of all underground utilities and structures indicated in the *Contract Documents*, or that are discoverable by applying to an inspection of the *Place of the Work* the degree of care and skill described in paragraph 3.9.1.

#### GC 9.2 TOXIC AND HAZARDOUS SUBSTANCES

.1 Add the following words to paragraph 9.2.6 after the word "responsible":

or whether any toxic or hazardous substances or materials already at the *Place of the Work* (and which were then harmless or stored, contained or otherwise dealt with in accordance with legal and regulatory requirements) were dealt with by the *Contractor* or anyone for whom the *Contractor* is responsible in a manner which does not comply with legal and regulatory requirements, or which threatens human health and safety or the environment, or material damage to the property of the *Owner* or others,

- .2 <u>Add</u> the words "and the *Consultant*" after the word "*Contractor*" in subparagraph 9.2.7.4.
- .3 Add the following words to paragraph 9.2.8 after the word "responsible":

or that any toxic or hazardous substances or materials already at the *Place of the Work* (and which were then harmless or stored, contained or otherwise dealt with in accordance with legal and regulatory requirements) were dealt with by the *Contractor* or anyone for whom the *Contractor* is responsible in a manner which does not comply with legal and regulatory requirements, or which threatens human health and safety or the environment, or material damage to the property of the *Owner* or others,

#### GC 9.5 MOULD

.1 <u>Add</u> the words "and the *Consultant*" after the word "*Contractor*" in subparagraph 9.5.3.4.

#### GC 10.2 LAWS, NOTICES, PERMITS AND FEES

.4 <u>Delete</u> from the first line of paragraph 10.2.5 the word, "The" and <u>substitute</u> the words: "Subject to paragraph 3.9.1, the"

#### PART 12 OWNER TAKEOVER

#### GC 12.1 READY FOR TAKEOVER

.1 After the second occurrence of the term "Ready-for-Takeover" <u>insert</u> before the term "Ready-for-Takeover" in paragraph 12.1.3 the words "determination of".

#### GC 12.2 EARLY OCCUPANCY BY THE OWNER

.1 <u>Delete</u> the word "achieve" in paragraph 12.2.4 and replace it with the words "have achieved".

#### GC 12.3 WARRANTY

.1 **Delete** the word "The" from the first line of paragraph 12.3.2 and replace it with the words "Subject to paragraph 3.9.1, the ".

#### PART 13 INDEMNIFICATION AND WAIVER

#### GC 13.1 INDEMNIFICATION

- .1 <u>Add</u> new paragraph 13.1.0 as follows:
  - 13.1.0 The *Contractor* shall indemnify and hold harmless the *Consultant*, its agents and employees from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings by third parties that arise out of, or are attributable to the *Contractor's* performance of the *Contract*, provided such claims are:
    - .1 attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, and
    - .2 caused by negligent acts or omissions of the *Contractor* or anyone for whose negligent acts or omissions the *Contractor* is liable, and
    - .3 made by *Notice in Writing* within a period of 6 years from the *Ready-for-Takeover* date or within such shorter such period as may be prescribed by any limitation statute or the Province or Territory of the Place of Work.
- .2 <u>Add</u> the words "13.1.0," after the word "paragraphs" in paragraph 13.1.3.

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# CANADIAN CONSTRUCTION ĐOCUMENTS COMMITTEE CANADIAN CONSTRUCTION ĐOCUMENTS COMMITTEE CANADIAN CONSTRUCTION ĐOCUMENTS COMMITTEE

### CCDC 41 CCDC INSURANCE REQUIREMENTS

## PUBLICATION DATE: December 14, 2020

- 1. General liability insurance shall be with limits of not less than \$10,000,000 per occurrence, an aggregate limit of not less than \$10,000,000 within any policy year with respect to completed operations, and a deductible not exceeding \$10,000. The insurance coverage shall not be less than the insurance provided by IBC Form 2100 (including an extension for a standard provincial and territorial form of non-owned automobile liability policy) and IBC Form 2320. To achieve the desired limit, umbrella or excess liability insurance may be used. Subject to satisfactory proof of financial capability by the *Contractor*, the *Owner* may agree to increase the deductible amounts.
- 2. Automobile liability insurance in respect of vehicles that are required by law to be insured under a contract by a Motor Vehicle Liability Policy, shall have limits of not less than \$10,000,000 inclusive per occurrence for bodily injury, death and damage to property, covering all vehicles owned or leased by the *Contractor*. Where the policy has been issued pursuant to a government-operated automobile insurance system, the *Contractor* shall provide the *Owner* with confirmation of automobile insurance coverage for all automobiles registered in the name of the *Contractor*.
- 3. Manned Aircraft and watercraft liability insurance with respect to owned or non-owned aircraft and watercraft (if used directly or indirectly in the performance of the *Work*), including use of additional premises, shall have limits of not less than \$10,000,000 inclusive per occurrence for bodily injury, death and damage to property including loss of use thereof and limits of not less than \$10,000,000 for aircraft passenger hazard. Such insurance shall be in a form acceptable to the *Owner*.
- 4. Unmanned aerial vehicle liability insurance with respect to owned or non-owned aircraft (if used directly or indirectly in the performance of the Work), shall have limits of not less than \$5,000,000 per occurrence or accident for bodily injury, death and damage to property or such amounts as required by any applicable law or regulation.
- 5. "Broad form" property insurance shall have limits of not less than the sum of 1.1 times *Contract Price* and the full value, as stated in the *Contract*, of *Products* and design services that are specified to be provided by the *Owner* for incorporation into the *Work*, with a deductible not exceeding \$10,000. The insurance coverage shall not be less than the insurance provided by IBC Forms 4042 and 4047 or their equivalent replacement. Subject to satisfactory proof of financial capability by the *Contractor*, the *Owner* may agree to increase the deductible amounts.
- 6. Boiler and machinery insurance shall have limits of not less than the replacement value of the permanent or temporary boilers and pressure vessels, and other insurable objects forming part of the *Work*. The insurance coverage shall not be less than the insurance provided by a comprehensive boiler and machinery policy including hot testing and commissioning.
- 7. Contractors' equipment insurance coverage written on an "all risks" basis covering *Construction Equipment* used by the *Contractor* for the performance of the *Work*, shall be in a form acceptable to the *Owner* and shall not allow subrogation claims by the insurer against the *Owner*. Subject to satisfactory proof of financial capability by the *Contractor* for self-insurance, the *Owner* may agree to waive the equipment insurance requirement.
- 8. Contractors' Pollution liability insurance shall have limits of not less than \$5,000,000 per occurrence for bodily injury, death and damage to property.

Association of Canadian Engineering Companies

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The Royal Architectural Institute of Canada

#### SECTION 00900 - ADDENDA & MODIFICATIONS

Addenda and modifications, as listed herein, are included on the following issues:

#### SECTION 01110 - SUMMARY OF WORK

#### PART 1 - GENERAL

- 1.1 Work of this Contract
  - .1 *Work of this Contract* comprises the following and is not to be misconstrued as all inclusive.
    - .1 Removal and disposal of existing concrete masonry units, gypsum board, steel studs, flooring and wall panels.
    - .2 Relocation of existing basketball backstops.
    - .3 Relocation of existing light fixtures.
    - .4 Cleaning and reinstallation of sidewall panels.
    - .5 Supply and installation of wall panels and acoustic panels.
    - .6 Toothing in concrete masonry units, patching gypsum board and painting.
    - .7 Supply and installation of sports flooring and line painting.
    - .8 Items to be Relocated and Moved by Owner
      - .1 All loose materials, equipment, furnishings, etc. will be removed from the work area and temporarily stored, by Owner forces, prior to mobilization by the Contractor.
    - .9 Temporary Utilities: Refer to Section 01510.
    - .10 Construction Facilities: Refer to Section 01520.
    - .11 Safety Guidelines & Protections: Refer to 01545.
    - .12 Temporary Barriers and Enclosures: Refer to Section 01560.
    - .13 Temporary Controls: Refer to Section 01570.
    - .14 Permit: Refer to GC. 10.2 and Section 00810 Supplementary Conditions.
  - .2 Municipal Address:99 Kerr Drive, Wingham, Ontario
  - .3 Legal Description: Part Lot 2 & 3, Concession 1 RP 22R2176 Parts 2, 3, 4, Former Turnberry Township, Now Wingham
- 1.2 Site Description:
  - .1 The existing property is located on the North side of Amberley Road (County Road 86). Access to the parking lot is off Kerr Drive.
  - .2 Parking with drive aisles and fire routes are located on all four sides of the building.
- 1.3 The Existing Building
  - .1 The existing building contains a lobby, arena, indoor pool, fitness facility, hall and administrative spaces.
  - .2 The Building is constructed with concrete foundations, slab-on-grade, steel frame superstructure with precast concrete floor decks and a mix of precast concrete and metal pan roof decks. Walls and partitions are constructed of concrete masonry units and steel studs with gypsum board. Roofing is a mix of exposed fastener metal roofing with pinched fibreglass blankets on steel purlins and single ply roofing with insulation on precast conrete/metal deck.
  - .3 The above description is intended to provide the Contractor with a preliminary understanding of the existing building. There is no guarantee that as-found conditions will match the above description. The above description is not a substitute for contractor confirmation of actual site conditions. Copies of reference Drawings, for each building, are included with the Bid Documents.
- 1.4 Designated Substances
  - .1 Asbestos: Asbestos abatement procedures are not expected within the scope of work. Should suspected asbestos products be discovered in the work area, notify the Consultant immediately regarding course of action. Friable asbestos material is subject to the requirement for an Asbestos Management Program, as specified under Ontario Regulation 278/05.
  - .2 Silica: Refer to Section 02050 Demolition and Removal.

- 1.5 Division of Work
  - .1 Division of the *Work* among *Subcontractors* and *Suppliers* is solely *Contractor's* responsibility. *Consultant* and *Owner* assume no responsibility to act as an arbiter to establish subcontract limits between Sections or Divisions of the *Work*.
- 1.6 Specifications Language and Style
  - .1 These specifications are written in the imperative mood and in streamlined form. The imperative language is directed to *Contractor*, unless stated otherwise.
  - .2 Complete sentences by reading "shall", "*Contractor* shall", "shall be", and similar phrases by inference. Where a colon (:) is used within sentences and phrases, read the words "shall be" by inference.
  - .3 Fulfill and perform all indicated requirements whether stated imperatively or otherwise.
  - .4 When used in the context of a *Product*, read the word "provide" to mean "supply and install to result in a complete installation ready for its intended use".
- 1.7 Contract Documents for Construction Purposes
  - .1 Owner will supply *Contractor* with a complete set of *Contract Documents* in electronic form before commencement of the *Work*. *Contractor* may print hard copies for construction purposes as required.
- 1.8 Documents at the Site
  - .1 Keep the following documents at *Place of the Work*, stored securely and in good order and available to *Owner* and *Consultant* in hard copy or electronic form:
    - .1 Current Contract Documents, including Drawings, Specifications and addenda.
    - .2 Change Orders, Change Directives, and Supplementary Instructions.
    - .3 Reviewed Shop Drawings, Product data and samples.
    - .4 Field test reports and records.
    - .5 Construction progress schedule.
    - .6 Meeting minutes.
    - .7 Manufacturer's certifications.
    - .8 Permits, inspection certificates, and other documents required by authorities having jurisdiction.
    - .9 Current as-built drawings.
    - .10 Material Safety Data Sheets (MSDS) for all controlled *Products*.
- 1.9 Contractor's Use of the Premises
  - .1 Except as otherwise specified, *Contractor* has restricted use of *Place of the Work* from time of *Contract* award until *Substantial Performance of the Work*. Refer to Section 01140 for details.
  - .2 Confine *Construction Equipment*, *Temporary Work*, storage of *Products*, waste products and debris, and all other construction operations to limits required by laws, ordinances, permits, and *Contract Documents*, whichever is most restrictive.
  - .3 Do not unreasonably encumber Place of the Work.

#### SECTION 01140 - WORK RESTRICTIONS

#### PART 1 - GENERAL

#### 1.1 Related Work

.1 Summary of Work ...... Section 01110.

#### 1.2 Restrictions on Use of Premises

- .1 Limit use of premises for *Work*, for storage, and for access, as shown on Drawings, to allow;
  - .1 *Owner* occupancy.
  - .2 Public usage.
- .2 Coordinate use of premises under direction of *Owner*.
- .3 The playing of radio and music is prohibited.
- .4 No smoking is permitted on the property.
- .5 No work shall occur on Sundays or Statutory Holidays.
- .6 The site area is restricted and therefore storage of materials and stockpiles of materials is limited. Deliver materials to the site as they are required for installation.
- .7 Comply with Township of North Huron noise bylaw.
- 1.3 Work Sequence
  - .1 Schedule and construct *Work* in stages to accommodate *Owner's* continued use of premises during construction.
  - .2 Schedule and construct *Work* in stages to provide for continuous public usage. Do not close off public usage of facilities.
- 1.4 Owner Occupancy and Access
  - .1 Owner will occupy premises during entire construction period.
  - .2 Cooperate with Owner in scheduling operations to minimize disruptions and to facilitate Owner usage.
  - .3 Provide unobstructed access/exiting to and from the facility.
  - .4 Provide protection at access/exit points to the building, as applicable.
  - .5 Provide temporary enclosure of work areas, as required by work process, to control dust dispersion.
  - .6 The building is alarmed. The Owner will open the building each day at 6:00AM and close the building at 10:00PM.
  - .7 No work shall occur on Saturdays, Sundays or Statutory Holidays.
  - .8 The playing of music loud music is prohibited.
  - .9 No smoking is permitted on the property.
- 1.5 Access to the Site
  - .1 Contractor's primary access to the site and staging/laydown/storage area will be via Kerr Drive North of the Building.
  - .2 The north side door is available for Contractor use.
  - .3 Public and staff will utilize the north, east and south entrance doors.
  - .4 Vehicular access to the building shall be restricted to short term delivery and pickup.
  - .5 Refer to Section 01520 for Contractor parking.

- 1.6 Restricted Hours of Work in Occupied Areas
  - .1 No work shall occur on Sundays and Statutory Holidays.
  - .2 Disruption to the facilities must be minimal and the schedule as compact as possible.
  - .3 Allow for hours of work restrictions in construction progress schedule.
  - .4 Schedule excessively noisy work to avoid disturbance to building occupants. Perform excessive noise generating work outside of Owner's business hours.
- 1.7 Maintaining Life Safety Systems in Occupied Facilities
  - .1 Maintain operational life safety systems and public access to exits in occupied areas during all stages of the Work.
  - .2 Determine nature and exact locations of existing fire and smoke sensors prior to the commencement of the Work. Avoid direct or indirect jarring while working in adjacent areas and exercise caution to avoid triggering these devices.
  - .3 Be responsible for costs incurred by Owner on account of false fire alarms activated as a result of the execution of the Work without adequate precautions.
- 1.8 Emergency Exiting of Building
  - .1 The east door and Exit Stair SR01 is a required exit and must remain useable at all times for building occupants.
  - .2 Emergency lighting and exit signage must be operational through construction.

#### SECTION 01210 - ALLOWANCES

#### PART 1 - GENERAL

.1

- 1.1 Refer to General Conditions GC 4.1. Contractor shall be responsible for carrying Allowance amounts in Stipulated Price Bid.
- 1.2 Specific Cash Allowances
  - .1 Expend each Allowance as directed. Allowance will be adjusted to actual cost, as defined hereunder, by means of a credit or by extra Change Order, processed during the period of the Contract.

#### .2 Division 11 Relocating Existing Backboards: \$14,500.00

- .1 Remove existing ceiling mounted nets, supply and install parts as required to change orientation 90° and reinstall. Reuse existing backboard, goals, winch, autoloc, height adjuster and mast framework. Access and Electrical Work excluded.
  - .1 Forum Athletic Products Inc. 9 Browning Ct Unit 1 Bolton, Ontario L7E 1G8 Attn. Steven Strazzabosco Cell: 647-218-3742 Email: <u>steve@forumathletic.ca</u>
- 1.3 Definition of scope of Cash Allowances
  - Cash Allowances for Supply Only of Products
  - .1 Amount of each cash allowance includes:
    - .1 Cost of *Products* as invoiced by the *Supplier*, including delivery and applicable taxes but excluding Value Added Taxes.
    - .2 In addition to amounts of Allowances, include in Contract Price base costs for:
      - .1 Unloading, handling, uncrating, storage and hoisting on site.
      - .2 Protection from elements, from damage.
      - .3 Labour, installation and finishing.
      - .4 Other expenses required to complete installation.
  - .5 Overheads and profits related to the cash allowance.
  - .2 Cash Allowances for Supply and Installation of Products:
    - .1 Amount of each cash allowance includes:
      - .1 All costs to provide the specified *Products*, including supply, installation, and related costs, excluding *Value Added Taxes*.
      - .2 *Subcontractor's* and sub-*Subcontractor's* overheads and profits related to the cash allowance.
      - .2 Amount of each cash allowance does not include Contractor's overhead and profit, and other related costs, which shall be included in the Contract Price and not in the cash allowance.
  - .3 Cash Allowances for Services
    - .1 Amount of each cash allowance includes:
      - .1 All costs related to the services, excluding Value Added Taxes.
      - .2 *Subcontractor's* and sub-*Subcontractor's* overheads and profits related to the cash allowance.
    - .2 Amount of each cash allowance does not include Contractor's overhead and profit, and other related costs, which shall be included in the Contract Price and not in the cash allowance.

- 1.4 Expenditure of Cash Allowances
  - .1 *Owner*, through *Consultant*, will provide *Contractor* with documentation required to permit pricing of a cash allowance item.
  - .2 *Owner*, through *Consultant*, may request *Contractor* to identify potential *Suppliers or Subcontractors*, as applicable, and to obtain at least three competitive prices for each cash allowance item.
  - .3 *Owner*, through *Consultant*, may request the *Contractor* to disclose originals of all bids, quotations, and other price related information received from potential *Suppliers* or *Subcontractors*.
  - .4 *Owner*, through *Consultant*, will determine by whom and for what amount each cash allowance item will be performed. Obtain *Owner's* prior written approval in the form of a *Change Order* before entering into a subcontract, amending an existing subcontract, or performing own forces work included in a cash allowance. Upon issuance of the *Change Order*, the *Contractor's* responsibilities for a cash allowance item shall be the same as for other work of the Contract.
- 1.5 Contingency Allowance
  - .1 Refer to General Conditions Article GC4.2.
  - .2 **\$10,000.00 -** Include Contingency Allowance in the Stipulated Price Bid. The cost of authorized changes to the Work, after Award of Contract, will be applied against the Contingency Allowance.
  - .3 Do not include overhead and profit in the Stipulated Price Bid by reason of the Contingency Allowance. Mark-up on cost for authorized changes will be covered by the Fees stated in Section 00810 Supplementary Condition.

## SECTION 01250 - SUBSTITUTION PROCEDURES

- 1.1 Definition
  - .1 In this Section "Substitution" means a *Product*, a manufacturer, or both, not originally specified in *Contract Documents* by proprietary name but proposed for use by *Contractor* in place of a *Product*, a manufacturer, or both, specified by proprietary name.
- 1.2 Substitution Procedures
  - .1 *Contractor* may propose a Substitution wherever a *Product* or manufacturer is specified by proprietary name(s), unless there is accompanying language indicating that Substitutions will not be considered.
  - .2 *Contractor* may propose a Substitution wherever a *Product* or manufacturer is specified by proprietary name(s) and accompanied by language such as "or equal", "or approved equal", or other similar words. Do not construe such language as an invitation to unilaterally provide a Substitution without *Consultant's* prior acceptance in writing. Do not order or install any Substitution without a *Supplemental Instruction* or *Change Order*.
  - .3 Provided a proposed Substitution submission includes all of the information specified in this Section under Submission Requirements For Proposed Substitutions, *Consultant* will promptly review and accept or reject the proposed Substitution.
  - .4 *Consultant* may accept a Substitution if satisfied that:
    - .1 the proposed substitute *Product* is the same type as, is capable of performing the same functions as, interfaces with adjacent work the same as, and meets or exceeds the standard of quality, performance and, if applicable, appearance and maintenance considerations, of the specified Product,
    - .2 the proposed substitute manufacturer has capabilities comparable to the specified manufacturer, and
    - .3 the Substitution provides a benefit to *Owner*.
  - .5 If *Contractor* fails to order a specified *Product* or order a *Product* by a specified manufacturer in adequate time to meet *Contractor's* construction schedule, *Consultant* will not consider that a valid reason to accept a Substitution.
  - .6 If *Consultant* accepts a Substitution and subject to *Owner's* agreement, the change in the *Work* will be documented in the form of either a *Supplemental Instruction* or *Change Order* as specified in Section 01260 Contract Modification Procedures.
  - .7 If a Substitution is accepted in the form of a *Supplemental Instruction* or *Change Order*, *Contractor* shall not revert to an originally specified Product or manufacturer without *Consultant's* prior written acceptance.

# 1.3 Submission Requirements for Proposed Substitutions

- .1 Include with each proposed Substitution the following information:
  - .1 Identification of the Substitution, including product name and manufacturer's name, address, telephone numbers, and web site.
    - .2 Reason(s) for proposing the Substitution.
    - .3 A statement verifying that the Substitution will not affect the *Contract Price* and *Contract Time* or, if applicable, the amount and extent of a proposed increase or decrease in *Contract Price* and *Contract Time* on account of the Substitution.
    - .4 A statement verifying that the Substitution will not affect the performance [or warranty] of other parts of the *Work*.
    - .5 Manufacturer's Product literature for the Substitution, including material descriptions, compliance with applicable codes and reference standards, performance and test data, compatibility with contiguous materials and systems, and environmental considerations.
    - .6 Product samples as applicable.
    - .7 A summarized comparison of the physical properties and performance characteristics of the specified Product and the Substitution, with any significant variations clearly highlighted.
    - .8 Availability of maintenance services and sources of replacement materials and parts for the Substitution, as applicable, including associated costs and time frames.
    - .9 If applicable, estimated life cycle cost savings resulting from the Substitution.
    - .10 Details of other projects and applications where the Substitution has been used.
    - .11 Identification of any consequential changes in the Work to accommodate the Substitution and any consequential effects on the performance of the Work as a whole. A later claim for an increase to the Contract Price or Contract Time for other changes in the Work attributable to the Substitution will not be considered.

#### SECTION 01260 - CONTRACT MODIFICATION PROCEDURES

- 1.1 Schedule of Labour Rates
  - .1 Prior to the first application for payment, submit for the Consultant's review a schedule of labour rates for all trades and classifications of trades, such as journeymen, apprentices, and foremen that will be employed in the Work. Provide a breakdown of payroll burden component of labour rates.
  - .2 Labour rates shall reflect the salaries, wages, and benefits paid to personnel in the direct employ of the Contractor, Subcontractors, and sub-Subcontractors, stated as hourly rates, that will be used when:
    - .1 preparing price quotations for Change Orders, and
    - .2 determining the cost of work attributable to Change Directives.
  - .3 Labour rates stated in the schedule of labour rates shall be consistent with rates that will actually be paid, and payroll burden costs that will actually be incurred, in the normal performance of the Work, during regular working hours. Labour rates shall not include any additional overhead and profit component.
  - .4 Where collective agreements apply, the labour rates shall not exceed those established by collective agreement.
  - .5 Obtain the Owner's written acceptance of the schedule of labour rates before submitting the first Change Order quotation.
  - .6 Accepted schedule of labour rates will be used solely for evaluating Change Order quotations and cost of performing work attributable to Change Directives.
  - .7 The Contractor may request amendments to the accepted schedule of labour rates if changes in the labour rates that will actually be paid, or payroll burden cost that will actually be incurred, in the normal performance of the Work can be demonstrated. Obtain the Owner's written acceptance of such changes.
- 1.2 Schedule of Equipment Rates
  - .1 Prior to the first application for payment, submit for the Consultant's review a schedule of equipment rates for Contractor owned Construction Equipment.
  - .2 Equipment rates shall reflect the rates that will be used when:
    - .1 preparing price quotations for Change Orders, and
    - .2 determining the cost of work attributable to Change Directives.
  - .3 Equipment rates stated in the schedule shall be consistent with local equipment rental market rates and shall not include any additional overhead and profit component.
  - .4 Obtain the Owner's written acceptance of the schedule of equipment rates before submitting the first Change Order quotation.
  - .5 Accepted schedule of equipment rates will be used solely for evaluating Change Order quotations and cost of performing work attributable to Change Directives.
  - .6 The Contractor may request amendments to the accepted schedule of equipment rates if changes in local equipment rental market rates can be demonstrated. Obtain the Owner's written acceptance of such changes.
- 1.3 Method of Contract Price Adjustment Change Orders
  - .1 Unless otherwise agreed, the adjustment of the Contract Price on account of a proposed change in the Work shall be based on a quotation for a fixed price increase or decrease to the Contract Price regardless of the Contractor's actual expenditures and savings.

# 1.4 Change Order Procedures

- .1 Upon issuance by the Consultant to the Contractor of a proposed change in the Work, and unless otherwise requested in the proposed change or unless otherwise agreed:
  - .1 Submit to the Consultant a fixed price quotation for the proposed change in the Work within 12 days after receipt of the *Proposed Change Notice*.
  - .2 If requested in the proposed change, provide a detailed breakdown of the price quotation including the following to the extent applicable, with appropriate supporting documentation:
    - .1 Estimated labour costs, including hours and applicable hourly rates based on the accepted schedule of labour rates.
    - .2 Estimated Product costs, including Supplier quotations, estimated quantities and unit prices.
    - .3 Estimated Construction Equipment costs.
    - .4 Enumeration of all other estimated costs included in the price quotation.
    - .5 Estimated credit amounts for labour and Products not required on account of the proposed change.
    - .6 Fees, not exceeding the applicable percentages for overhead and profit as specified in this Section.
    - .7 Where applicable, Subcontractor quotations, also including a detailed breakdown of all of the above.
  - .3 Include in the quotation the increase or decrease to the Contract Time, if any, for the proposed change, stated in number of days.
  - .4 Include in the quotation the number of days for which the quotation is valid.
  - .5 The quotation will be evaluated by the Consultant and the Owner and, if accepted by the Owner, be documented in the form of a signed Change Order.
  - .6 For the convenience of Contractor, a checklist is provided on the following page to expedite the proposal of changes, where such changes are initiated by the Contractor. The page may be freely copied and should be emailed or delivered to the Consultant's office within the stipulated time to notify of requested changes.
- 1.5 Fees for Overhead and Profit Change Orders
  - .1 Where the Contractor's price quotation for a Change Order results in a net increase to the Contract Price, the Contractor's entitlement to a fee for overhead and profit in the quotation shall be as follows, as applicable:
    - .1 For work to be performed by the Contractor's own forces, 5% of the Contractor's price quotation before the Contractor's fee of 10% is applied.
    - .2 For work to be performed by a Subcontractor, 10% of the Subcontractor's price quotation including the Subcontractor's fee.
  - .2 Where a Subcontractor's price quotation for a Change Order results in a net increase to the Subcontractor's contract price, the Subcontractor's entitlement to a fee for overhead and profit in the quotation shall be as follows, as applicable:
    - .1 For work to be performed by the Subcontractor's own forces, 5% of the Subcontractor's price quotation before the Subcontractor's fee of 10% is applied.
    - .2 For work to be performed by a sub-Subcontractor, 10% of the sub-Subcontractor's price quotation including the sub-Subcontractor's fee.
  - .3 Where the Contractor's or a Subcontractor's price quotation for a Change Order results in a net decrease in price before adjustment for fees for overhead and profit, such a price quotation shall be for the net decrease without any adjustment for fees for overhead and profit.
- 1.6 Method of Contract Price Adjustment Change Directives
  - .1 Unless the Owner and the Contractor reach an earlier agreement on the adjustment to the Contract Price by means of a Change Order that cancels the Change Directive, the adjustment in the Contract Price for change carried out by way of a Change Directive shall be determined as specified in the General Conditions of Contract after the change in the Work is completed.

- 1.7 Change Directive Procedures
  - .1 If a Change Directive is issued for a change in the Work for which a proposed change was previously issued, but no Change Order has yet been signed, the Change Directive shall cancel the proposed change and any Contractor quotations related to that change in the Work.
  - .2 When proceeding with a change in the Work under a Change Directive, keep accurate records of daily time sheets for labour and Construction Equipment, and invoices for Product and Construction Equipment costs. Submit such records to the Consultant [daily] [weekly], until the Change Order superseding the Change Directive is issued.
- 1.8 Fees for Overhead and Profit Change Directives
  - .1 The Contractor's entitlement to a fee for overhead and profit on the Contractor's expenditures and savings attributable to a Change Directive shall be as follows, as applicable:
    - .1 For work performed by the Contractor's own forces, 5% of the Contractor's net increase in costs before the Contractor's fee of 10% is applied.
    - .2 For work performed by a Subcontractor, 10% of the sum of the Subcontractor's net increase in costs plus the Subcontractor's fee.
  - .2 A Subcontractor's entitlement to a fee for overhead and profit on the Subcontractor's expenditures and savings attributable to a Change Directive shall be as follows, as applicable:
    - .1 For work performed by the Subcontractor's own forces, 5% of the Subcontractor's net increase in costs before the Subcontractor's fee of 10% is applied.
    - .2 For work performed by a Sub-subcontractor, 10% of the sum of the Sub-subcontractor's net increase in costs plus the Sub-subcontractor's fee.
  - .3 Where a Change Directive results in net savings on account of work not required to be performed and a net decrease in the Contractor's or Subcontractor's cost, the net savings to the Contractor or Subcontractor shall be calculated without any adjustment for fees for overhead and profit.
  - .4 When a Change Directive is ultimately recorded as a Change Order, there shall be no additional entitlement to fees for overhead and profit beyond those specified in this article.
- 1.9 Supplemental Instructions
  - .1 The Consultant may issue Supplemental Instructions to provide clarifications to the Contract Documents, provide additional information, or make minor variations in the Work not involving adjustment in the Contract Price or Contract Time.
  - .2 If the Contractor considers a Supplemental Instruction to require an adjustment in Contract Price or Contract Time, the Contractor shall promptly notify the Consultant and the Owner in writing and shall not proceed with any work related to the Supplemental Instruction pending receipt of a Change Order, a Change Directive, or, in accordance with the dispute resolution provisions of the General Conditions of Contract, a Notice in Writing of a dispute and instructions to proceed.

## CONTRACTOR REQUEST FOR CHANGE ORDER

Note that this page must be emailed or delivered to the Consultant's office, prior to 14 days of need for a final opinion from the Consultant by the Contractor to ensure that the project incurs no delays. Use only 1 page for each proposed change.

Proposed change		
Reason for change:		Problem with existing requirement
		Improvement to result from proposed change
		Proposed change needed to comply with Codes or Regulations as understood by trade or as indicated by Authorities having jurisdiction
Estimated change to o	construction t	ime (+ or -)
Estimated change to I	bid cost (+ or	-)
Contractor or subtrade	e	
Signed		

#### Consultant Use Only:

Consultant Affected	Need for change validated	Need for change not validated	Date	Signature
Architect				
Structural				
Mechanical				
Electrical				
Landscape				
Other				
Other				
Contemplated change order initiated				

Change order initiated
Change order Number
General comments

#### SECTION 01290 - PAYMENT PROCEDURES

- 1.1 Schedule of Values: Application for Payment
  - .1 Prior to the first application for payment, submit for Consultant's review an initial schedule of values. Modify the initial schedule of values if and as requested by Consultant. Obtain Consultant's written acceptance of the initial schedule of values prior to the first application for payment. Before submitting each "Application for Payment", the Contractor shall review with the Consultant the percentage of work completed for each item of work within the application.
  - .2 Together with the first and all subsequent applications for payment, submit updated versions of the schedule of values to indicate the values, to the date of application for payment, of work performed and Products delivered to Place of the Work. Refer to the attached "Application for Payment" form and Schedule of Values form, completed as specified herein. The Contractor may copy these forms and use them as a base for payment application. Both the Schedule of Values form and the Application for Payment forms must be submitted for each progress payment application.
  - .3 Provide the schedule of values in an electronic spreadsheet format that provides for inclusion of the following information:
    - .1 Identifying information including title and location of the Work, name of Contractor, number and date of application for payment, and period covered by the application for payment.
    - .2 A work breakdown structure based on Contractor, Subcontractor and sub-Subcontractor work breakdown. Include separate line items for closeout procedures including closeout submittals, demonstration and training, start-up and testing, and commissioning collectively valued at minimum \$5000.00.
    - .3 For each item in the work breakdown structure, provide as a minimum the following information, under headings as indicated:
      - .1 Breakdown Amount: A dollar amount, including an appropriate pro rata portion of Contractor's overhead and profit.
      - .2 Performed to Date: The value of Work performed and Products delivered to Place of the Work up to the date of the application for payment, stated as a percentage of the Contract Price and in dollars.
      - .3 Previously Performed: The value of Work performed and Products delivered to the Place of the Work for which payment has been previously certified, stated in dollars.
      - .4 Current Period: The value of Work performed and Products delivered to Place of the Work for which Contractor is currently applying for payment, stated in dollars.
      - .5 Balance to Complete: The value of Work not yet performed and Products not yet delivered to Place of the Work, stated in dollars.
    - .4 Provide the Application for Payment in an electronic spreadsheet format that provides for inclusion of the following information:
      - .1 the Contractor's H.S.T. Registration Number
      - .2 the H.S.T. applicable to the Current Contract Price
      - .3 the amount payable, including H.S.T.

# **APPLICATION FOR PAYMENT**

Contractor:	
Address:	
Tai	IDM Architecture Inc

- To: JPM Architecture Inc. 51 Kingston Street, Goderich, Ontario N7A 3K3 Attn: Jason Morgan - Project Architect
- Project: Interior Squash Court Renovation 99 Kerr Drive, Wingham, Ontario

Owner: Township of North Huron

Contractor's H.S.T. Registration #

CONTRACT STATUS (All prices excluding H.S.T.)

	Total Amount	Work P to Date %	erformed Value	Value Previously Performed	Value Current Period
Original Contract (Totals per schedule of Values)	\$	%		\$	
Approved C.O. #'s	\$			\$	
Current Contract Total	\$			\$	
H.S.T. @ <u>13</u> %	\$			\$	
Total including H.S.T.	\$			\$	

**REQUEST FOR PAYMENT** (All prices excluding H.S.T.)

Current Value of Work Performed (and pro	\$			
Total Holdback @ % :	\$			
Holdback Released to Date:	\$			
Net Holdback Retained:	\$	\$		
Cumulative Amount Claimed (Value of wo holdback retained):	\$			
Less Amount Previously Certified on Certi	\$			
TOTAL AMOUNT DUE THIS APPLICATION	\$			
H.S.T. payable on application @ <u>13</u> %:	\$			
Total Payment Due this application includi	\$			
Prepared by :				

For submission with "Schedule of Values"

Progress Billing # \_\_\_ Date: \_\_\_\_

> Period Covered: From: \_\_\_\_\_ To: \_\_\_\_\_

# SCHEDULE OF VALUES

Contractor	:					or submission with	
Address:						ation for Payment"	
To: JPM Architecture Inc. 51 Kingston Street, GODERICH, Attn: Jason Morgan - Project Arch				I7A 3K3		Progress Billing # Date: Period Covered: From:	
Project:	Interior Squash Cour 99 Kerr Drive, Wingł					To:	
Owner:	Township of North H	uron					
COST BRI	EAKDOWN (All prices	excluding H.S	<u>S.T.)</u>				
Division #	Description	Total Amount	Work To Da	Performed te	Value Previously	Value Current	
			%	Value	Performed	Period	
		\$	%	\$	\$	\$	
Totals		\$	%	\$	\$	\$	

- 1.2 Application for Payment Enclosure Requirements 1
  - Each Application for Payment shall include:
    - the attached "Application for Payment" form, completed as specified herein; .1
    - the "Schedule of Values" form, completed as specified herein; .2
    - Certificate of Clearance from the Worker's Compensation Board .3
  - With second and subsequent Applications for Payment, include a completed CCDC 9A -.2 Statutory Declaration of Progress Payment Distribution by Contractor, per the attached sample form. Ensure that the form is completed in accordance with CCDC guidelines and affix copyright seal.
- 1.3 **Cash Flow Projection** 
  - Prior to the first application for payment submit, for Consultant's review, a forecast of approximate .1 monthly progress payments for each month of the Contract Time.
  - .2 Submit revised cash flow forecasts [when required due to significant changes in rate of progress of the Work or significant changes in the Contract Price] [monthly] [when requested by Consultant].
- 1.4 Payment for Products Stored Off Site
  - Owner may, due to extraordinary circumstances and at Owner's sole discretion, make payments for Products delivered to and stored at a location other than Place of the Work, subject to:
    - a request submitted by Contractor in writing, with appropriate justification, and .1
    - .2 whatever conditions Owner or Consultant may establish for such payments, as required to protect Owner's interests.
- Release of Holdback 1.5

.1

Documents for "basic" holdback release shall include a "tear sheet" from the Daily Commercial 1 News or Link2Build Ontario showing publication of the certificate of Substantial Performance of the Work of the Contract as issued by the Consultant. Note: Contractor must not publish its own certificate, but must use the certificate issued and signed by the Consultant.

# **Statutory Declaration**

Standard Construction Document

# of Progress Payment Distribution by Contractor

# CCDC 9A - 2001

To be made by the Contractor prior to payment when required as a	The last application for progress payment for which the
condition for either:	Declarant has received payment is No.
second and subsequent progress payments; or	dated the day of .
release of holdback.	
Identification of Contract	in the year

Name of Contract (Location and description of the Work as it appears in the Contract Documents)

Date of Contract:

Day

Month

Year

Name of Owner

Name of Contractor

Identification of Declarant

Name of Declarant

Position or Title (of office held with Contractor)

#### Declaration

<ul> <li>I solemnly declare that, as of the date of this declaration, I am an authorized signing officer, partner or sole proprietor of the Contractor named in the Contract identified above, and as such have authority to bind the Contractor, and have personal knowledge of the fact that all accounts for labour, subcontracts, products, services, and construction machinery and equipment which have been incurred directly by the Contractor in the performance of the work as required by the Contract, and for which the Owner might in any way be held responsible, have been paid in full as required by the Contract up to and including the latest progress payment received, as identified above, except for:</li> <li>1) holdback monies properly retained,</li> <li>2) payments deferred by agreement, or</li> <li>3) amounts withheld by reason of legitimate dispute which have been identified to the party or parties, from whom payment has been withheld.</li> <li>I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.</li> </ul>				
Declared before me in	this	day of ,		
in the year	City/Town and Province			
Signature of Declarant	(A Commissioner for Oaths, Notary	Public, Justice of the Peace, etc.)		
The making of a false or fraudulent declarat of the Criminal Code of Canada, and could o penalties including fines or imprisonment.		Apply a CCDC 9 copyright seal here.		

Use of this form without a CCDC 9 copyright seal constitutes an infringement of copyright. Use of this form with a CCDC 9 copyright seal demonstrates that it is intended by the parties to be an accurate and unamended version of CCDC 9A - 2001.

Canadian Construction Documents Committee

# SECTION 01311 - PROJECT MEETINGS

- 1.1 Construction Start-Up Meeting
  - .1 Promptly after Contract award, Consultant will establish the time and location of a construction start-up meeting to review and discuss administrative procedures and responsibilities. Consultant will notify Contractor at least 5 Working Days before the meeting.
  - .2 Senior representatives of Owner, Consultant, and Contractor, including Contractor's project manager and site superintendent, shall be in attendance.
  - .3 Consultant's representative will chair the meeting and record and distribute the minutes.
  - .4 Agenda will include following:
    - .1 Appointment of official representatives of Owner, Contractor and Consultant.
    - .2 Project communications.
    - .3 Contract Documents for construction purposes.
    - .4 Documents at the site.
    - .5 Contractor's use of premises.
    - .6 Owner-supplied Products.
    - .7 Work restrictions.
    - .8 Cash allowances.
    - .9 Contract modification procedures.
    - .10 Payment procedures.
    - .11 Construction progress meetings.
    - .12 Construction progress schedule, including long lead time items.
    - .13 Submittals schedule and procedures.
    - .14 Quality requirements, including testing and inspection procedures.
    - .15 Contractor's mobilization.
    - .16 Temporary utilities.
    - .17 Existing utility services.
    - .18 Construction facilities.
    - .19 Temporary barriers and enclosures.
    - .20 Temporary controls.
    - .21 Site safety.
    - .22 Site security.
    - .23 Cleaning and waste management.
    - .24 Closeout procedures and submittals.

#### 1.2 Construction Progress Meetings

- .1 Schedule one construction progress meeting. Contractor shall prepare meeting agenda, chair the meeting, and record and distribute the minutes.
- .2 Arrange for and provide physical space for meetings.
- .3 Contractor shall record in the meeting minutes significant decisions and identify action items and action dates by attendees or the parties they represent.
- .4 Contractor shall distribute copies of minutes within three Working Days after each meeting to meeting attendees and any affected parties who may not be in attendance.
- .5 Ensure that Subcontractors attend as and when appropriate to the progress of the Work.
- .6 Agenda for each meeting shall include the following, as a minimum:
  - .1 Work progress.
  - .2 Field observations, including any problems, difficulties, or concerns.
  - .3 Construction progress schedule.
  - .4 Submittals schedule.
  - .5 Proposed changes in the Work.
  - .6 Requests for information.
  - .7 Site safety issues.
  - .8 Other business.

#### SECTION 01320 - CONSTRUCTION PROGRESS DOCUMENTATION

- 1.1 Summary
  - .1 This Section specifies Contractor's responsibilities for preparation and submission of schedules and other documentation related to tracking construction progress, in accordance with General Conditions GC 3.4.
  - .2 The purpose of submitting progress schedules is to:
    - .1 inform Owner and Consultant of actual progress versus planned progress, and
    - .2 provide assurance that scheduling issues are being proactively identified and addressed in a timely manner, and that planned progress is being maintained as closely as possible.
  - .3 Include in the schedule the requirements of Section 01110 Summary of Work and Section 01140 Work Restrictions.
- 1.2 Construction Progress Schedule
  - .1 Format and Content:
    - .1 Prepare schedule in the form of a Critical Path Method (CPM) Gantt chart using appropriate scheduling software.
    - .2 Provide a work breakdown structure identifying key activities, work packages, and major milestones, including long delivery Products, inspection and testing activities, and similar items, at a sufficient level of detail to effectively manage construction progress.
    - .3 Indicate milestone date for Substantial Performance of the Work.
  - .2 Submission:
    - .1 Submit initial schedule to Owner and Consultant within 7 Working Days after Contract award.
    - .2 Submit schedule via e-mail as .pdf files.
    - .3 Consultant will review format and content of initial schedule and request necessary changes, if any, within 5 Working Days after receipt.
    - .4 If changes are required, resubmit finalized initial schedule within 5 Working Days after return of review copy.
- 1.3 Submittals Schedule
  - .1 Format and Content:
    - .1 Prepare schedule identifying all required Shop Drawing, Product data, and sample submissions.
    - .2 Prepare schedule in electronic format.
    - .3 Provide a separate line for each required submittal, organized by Specifications section names and numbers, and further broken down by individual Products and systems as required.
    - .4 For each required submittal, show planned earliest date for initial submittal and latest date for return of reviewed submittal without causing delay.
    - .5 Allow time in schedule for resubmission of submittals, should resubmission be necessary.
  - .2 Submission
    - .1 Submit initial schedule to Consultant within 15 Working Days after Contract award.
    - .2 Submit schedule via e-mail as .pdf files.
    - .3 Consultant will review format and content of initial schedule and request necessary changes, if any, within 5 Working Days after receipt.
    - .4 If changes are required, resubmit finalized schedule within 5 Working Days after return of review copy.
    - .5 Submit updated submittals schedule monthly to Consultant.

- 1.4 Schedule Management
  - .1 A schedule submitted as specified and accepted by Consultant shall become the baseline schedule and shall be used as the baseline for updates.
  - .2 At each regular progress meeting, review and discuss current construction progress and submittals schedules with Consultant [and Owner], including activities that are behind schedule and planned measures to regain schedule slippage in key areas on or near the critical path.
  - .3 Activities considered behind schedule are those with start or completion dates later than the dates shown on the baseline schedule.
- 1.5 Recording Actual Site Conditions on As-Built Drawings
  - .1 Obtain from Consultant an electronic copy of the construction Drawings for the purpose of creating as-built drawings. Record information in electronic form, clearly identifying as-built deviations from the originally obtained construction Drawings.
  - .2 Clearly label each drawing as "AS-BUILT DRAWING". Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
  - .3 Record actual construction including:
    - .1 Measured depths of elements of foundation in relation to finish first floor datum.
    - .2 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
    - .3 Measured locations of pipes, ducts, conduits, outlets, fixtures, access panels, and appurtenances, referenced to visible and accessible features of construction.
    - .4 Field changes of dimension and detail.
    - .5 Changes made by Change Orders and Supplemental Instructions.
    - .6 References to Shop Drawings, where Shop Drawings show more detail.
  - .4 Do not use as-built drawings for construction purposes.
- 1.6 Progress Photographs
  - .1 Arrange for periodic digital photography to document and provide a photographic record of the progress of the Work. Submit progress photographs at the request of the Consultant or Owner.
  - .2 Identify each photograph by project name and date taken.

#### SECTION 01330 - SUBMITTAL PROCEDURES

#### PART 1 - GENERAL

- 1.1 Administrative
  - .1 Submit specified submittals to Consultant for review. Submit with reasonable promptness and in orderly sequence so as to not cause delay in the Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time or for Product substitutions or other deviations from the Drawings and Specifications.
  - .2 Where required by authorities having jurisdiction, provide submittals to such authorities for review and approval.
  - .3 Do not proceed with Work affected by a submittal until review is complete.
  - .4 Review submittals, provide verified field measurements where applicable, and affix Contractor's review stamp prior to submission to Consultant. Contractor's review stamp represents that necessary requirements have been determined and verified, and that the submittal has been checked and coordinated with requirements of the Work and Contract Documents.
  - .5 Verify field measurements and that affected adjacent work is coordinated.
  - .6 Submittals not meeting specified requirements will be returned with comments.
  - .7 Reproduction of construction Drawings to serve as background for Shop Drawings is permitted. If construction Drawings are used for this purpose, remove references to Consultant.
  - .8 Do not propose Substitutions or deviations from Contract Documents via Shop Drawing, Product data and sample submittals.
- 1.2 Shop Drawings and Product Data
  - .1 Indicate Products, methods of construction, and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of the Work.
  - .2 Where Products attach or connect to other Products, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross-references to Drawings, Specifications and other already reviewed Shop Drawings.
  - .3 Accompany submittals with a transmittal information including:
    - .1 Date.

.4

- .2 Project title and number.
- .3 Contractor's name and address.
- .4 Identification of each submittal item and quantity.
- .5 Other pertinent data.
- Shop Drawing submittals shall include:
- .1 Date and revision dates.
- .2 Project title and number.
- .3 Name and address of:
  - .1 Subcontractor.
    - .2 Supplier.
    - .3 Manufacturer.
- .4 *Contractor's* stamp, date, and signature of *Contractor's* authorized representative responsible for *Shop Drawing* review, indicating that each Shop Drawing has been reviewed for compliance with *Contract Documents* and, where applicable, that field measurements have been verified.

- .5 Details of appropriate portions of the *Work* as applicable:
  - .1 Fabrication.
  - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
  - .3 Setting or erection details.
  - .4 Capacities.
  - .5 Performance characteristics.
  - .6 Standards.
  - .7 Operating weight.
  - .8 Wiring diagrams.
  - .9 Single line and schematic diagrams.
  - .10 Relationships to other parts of the Work.
- .5 *Product* data submittals shall include material safety data sheets (MSDS) for all controlled Products.
- .6 Submit electronic copy of *Shop Drawings* where specified in the technical *Specifications*.
- .7 Submit electronic copy of *Product* data sheets or brochures where specified in the technical *Specifications*.
- .8 Where a submittal includes information not applicable to the *Work*, clearly identify applicable information and strike out non-applicable information.
- .9 Supplement standard information to include details applicable to *Project*.
- .10 If upon Consultant's review no errors or omissions are discovered, or if only minor corrections are required as indicated, submittal will be returned and fabrication or installation of Work may proceed. Submittal will be marked "Reviewed" and/or "Reviewed as Noted".
- .11 If upon Consultant's review significant errors or omissions are discovered, a so noted copy will be returned for correction and resubmission. Do not commence fabrication or installation. Submittal will be marked "Revise and Resubmit".
- .12 Consultant's notations on submittals are intended to ensure compliance with Contract Documents and are not intended to constitute a change in the Work requiring change to the Contract Price or Contract Time. If Contractor considers any Consultant's notation to be a change in the Work, promptly notify Consultant in writing before proceeding with the Work.
- .13 Resubmit corrected submittals through same procedure indicated above, before any fabrication or installation of the Work proceeds. When resubmitting, notify Consultant in writing of any revisions other than those requested by Consultant.

#### 1.3 Samples

- .1 Submit samples for Consultant's review in duplicate where specified in the technical Specifications. Label samples as to origin, Project name, and intended use.
- .2 Deliver samples prepaid to Consultant's business address.
- .3 Notify Consultant in writing of any deviations in samples from requirements of Contract Documents.
- .4 Where a required colour, pattern or texture has not been specified, submit full range of available Products meeting other specified requirements.
- .5 Consultant selection from samples is not intended to change the Contract Price or Contract Time. If a selection would affect the Contract Price or Contract Time, notify Consultant in writing prior to proceeding with the Work.
- .6 Resubmit samples as required by Consultant to comply with Contract Documents.
- .7 Reviewed and accepted samples will establish the standard against which installed Work will be reviewed.

#### SECTION 01400 - QUALITY REQUIREMENTS

#### PART 1 - GENERAL

#### 1.1 Reference Standards

- .1 "Reference standards" means consensus standards, trade association standards, guides, and other publications expressly referenced in Contract Documents.
- .2 Where an edition or version date is not specified, referenced standards shall be deemed to be the latest edition or revision issued by the publisher at the time of bid closing. However if a particular edition or revision date of a specified standard is referenced in an applicable code or other regulatory requirement, the regulatory referenced edition or version shall apply.
- .3 Reference standards establish minimum requirements. If Contract Documents call for requirements that differ from a referenced standard, the more stringent requirements shall govern.
- .4 If compliance with two or more reference standards is specified and the standards establish different or conflicting requirements, comply with the most stringent requirement. Refer uncertainties to Consultant for clarification.
- .5 Within the Specifications, reference may be made to the following standards writing, testing, or certification organizations by their acronyms or initialisms:
  - .1 ACI American Concrete Institute
  - .2 AISC American Institute of Steel Construction
  - .3 ANSI American National Standards Institute
  - .4 ASTM American Society for Testing and Materials
  - .5 AWI Architectural Woodworking Institute
  - .6 AWMAC Architectural Woodwork Manufacturers Association of Canada
  - .7 AWPA American Wire Producers Association
  - .8 CCMC Canadian Construction Materials Centre
  - .9 CNRC National Research Council Canada
  - .10 CRCA Canadian Roofing Contractors Association
  - .11 CSDFMA Canadian Steel Door and Frame Manufacturers Association
  - .12 CGSB Canadian General Standards Board
  - .13 CISC Canadian Institute of Steel Construction
  - .14 COFI Council of Forest Industries of British Columbia
  - .15 CSA Canadian Standards Association
  - .16 CWB Canadian Welding Bureau
  - .17 ICC International Code Council
  - .18 NFPA National Fire Protection Association
  - .19 NHLA National Hardwood Lumber Association
  - .20 NLGA National Lumber Grades Authority
  - .21 RFCI Resilient Floor Covering Institute
  - .22 ULC Underwriters' Laboratories of Canada

- 1.2 Independent Inspection and Testing Agencies
  - .1 Except as otherwise specified, Owner will retain and pay for independent inspection and testing agencies to inspect, test, or perform other quality control reviews of parts of the Work.
  - .2 Retain and pay for inspection and testing that is for Contractor's own quality control or is required by regulatory requirements.
  - .3 For inspection and testing required by Contract Documents or by authorities having jurisdiction, provide Consultant and inspection and testing agencies with timely notification in advance of required inspection and testing.
  - .4 Submit test samples required for testing [in accordance with submittals schedule specified in Section 01320 Construction Progress Documentation.
  - .5 Provide labour, construction equipment and temporary facilities to obtain and handle test samples on site.
- 1.3 Inspection and Testing Agency Reports
  - .1 For inspection and testing required by Contract Documents or by regulatory requirements, and performed by Contractor retained inspection and testing agencies, submit to Consultant and Owner copies of reports. Submit within 5 days after completion of inspection and testing.
  - .2 For inspection and testing performed by Owner retained inspection and testing agencies, copies of inspection and testing agency reports will be provided to Contractor.

## PART 1 - GENERAL

- 1.1 Temporary Utilities General
  - .1 Provide temporary utilities, as specified, and as otherwise necessary to perform the Work expeditiously.
  - .2 Remove temporary utilities after use.
- 1.2 Temporary Water Supply
  - .1 Connect to and use Owner's existing water supply for temporary use during construction, subject to existing available volume and pressure. Usage at no cost to Contractor.
  - .2 Arrange and pay for necessary water supply connections and disconnections.
- 1.3 Existing Building Heating, Ventilation, Power and Lighting
  - .1 Existing building heating, ventilation, power, and lighting may be relied upon and used during construction.
  - .2 Arrange and pay for necessary connections and disconnections of temporary utilities in accordance with regulatory requirements.
  - .3 Ensure that hazardous, noxious, or volatile substances do not migrate to Owner occupied spaces.

#### PART 1 - GENERAL

- 1.1 Construction Facilities General
  - .1 Provide temporary construction facilities as necessary for performance of the Work and in compliance with applicable regulatory requirements.
  - .2 Maintain temporary construction facilities in good condition for the duration of the Work.
  - .3 Remove temporary construction facilities from Place of the Work when no longer required.
- 1.2 Construction Parking
  - .1 Limited parking will be permitted at Place of the Work at locations indicated on Drawings.
- 1.3 Vehicular Access
  - .1 Provide and maintain adequate access to Place of the Work.
- 1.4 Site Offices
  - .1 A site office is not required for this Project. Provide site foreman with a cell phone.
- 1.5 Sanitary Facilities
  - .1 Contractor use of public washrooms, is permitted by the Owner. Contractor must keep sanitary facilities clean and fully stocked with necessary supplies. Abuse of the facilities will require Contractor to provide a portable washroom on site. Costs associated with the portable washroom is at Contractor's expense.
  - .2 Post notices and take such precautions as required by local health authorities.
- 1.6 Project Signage
  - .1 No other signs or advertisements, other than safety, warning, or directional signs, are permitted without Consultant's prior approval.

#### SECTION 01545 - SAFETY GUIDELINES & PROTECTIONS

- 1.1 Construction Safety Measures
  - .1 Observe and enforce construction safety measures required by Ontario Building Code (latest revision), Provincial Government, Worker's Compensation Board and Municipal statutes and Authorities.
  - .2 This project is classed as Notifiable under Provincial Department of Labour regulations. Submit proof, to the Consultant, within 5 days of commencement of project, indicating that the Department has been duly notified.
  - .3 The Ontario Ministry of Labour also requires that the appended "Registration of Constructors and Employers Engaged in Construction" be completed and posted at the site of the Work.
  - .4 In event of conflict between any provisions of above authorities, the most stringent provision will apply.
- 1.2 Construction Safety
  - .1 Provide an on-site safety meeting, for all principal trades and their on-site personnel, before work on the project commences.
  - .2 Take all necessary steps to protect persons on or affected by the Work from any harm during the construction. Conform to all relevant Safety Standards. Ensure that the site is monitored at all times and that any incompetent or non-complying (to safety requirements) personnel are removed from the site.
  - .3 On-site accidents and reports by inspectors noting noncompliance with Safety Standards must be reported immediately, in writing, to the Consultant.
  - .4 Be responsible for the safety performance of all sub-trades. Include all safety requirements of this Contract in agreements with sub-trades.
  - .5 Where the Drawings or Specifications require the Contractor to provide temporary footway, erection of structures or equipment, protection for workmen or others, the Contractor shall assume all expense and responsibility.
- 1.3 Public Safety
  - .1 Notwithstanding instructions elsewhere in this Specification, take steps to ensure that members of the public are protected from falling debris, movement of vehicles and other operations, which may cause death or injury.
  - .2 Immediately comply with orders of safety officials and rectify situations, which may cause danger to the general public.

# 1.4 WHMIS

- .1 The Contractor will adequately train and instruct their workers in accordance with WHMIS requirements.
- .2 The Contractor will consult with the Owner's WHMIS coordinator, regarding the physical set up of the job site and comply with any orders of the coordinator in that regard.
- .3 The Contractor will supply the Owner with a list of hazardous materials to be used and MSDS (Material Safety Data Sheets) to be kept in a readily accessible location, for the duration of the project.
- .4 The Owner will supply the Contractor with information regarding any hazardous materials known to be on the site, prior to construction. The Consultant will assist in this, where possible, but it is agreed by the two parties to the Contract that the Consultant has no responsibility in this Contract for the discovery or provision of this information.
- .5 The Contractor will not bring any controlled products onto the property that are not labelled in accordance with WHMIS requirements.
- .6 The WHMIS coordinator is permitted to inspect the work site at any time and to speak to workers to determine the adequacy of their safety knowledge, if considered necessary. Repeated or serious violations may result in cancellation of the Contract.
- .7 The Contractor will indemnify the Owner for any costs incurred as a result of their failure to comply with the Occupational Health and Safety Act.
- 1.5 Fire Safety Requirements
  - .1 Comply with requirements of fire safety, as may be defined by the Provincial Fire Marshal.
  - .2 Comply with requirements as issued by the local Fire Chief.
  - .3 Maintain on site fire extinguishers, during the operations, for emergency use by work crews. Extinguishers shall be class A, B or C, as required and appropriate, depending on the types of operations and flammables in the vicinity.
  - .4 Remove rubbish and flammable materials daily. Do not dispose of waste material by burning on or near the premises.
  - .5 Locate fire extinguishing equipment near all welding and cutting operations. Use incombustible shields for welding executed within 10 feet of flammable materials.
  - .6 Do not use open flames on the job.

# 1.6 Overloading

.1 Ensure no part of the Work is subjected to a load, which will endanger its safety or will cause permanent deformation.

#### 1.7 Falsework

.1 Design and construct falsework in accordance with CSA S269.1.



# Registration of Constructors and Employers Engaged in Construction Inscription des constructeurs et des employeurs associés à des travaux de construction

Pursuant to section 5 of the Construction Regulations made under the OHSA, "Before beginning work at a project, each constructor and employer engaged in construction shall complete an approved registration form. The constructor shall ensure that each employer at the project provides to the constructor a completed approved registration form; and a copy of the employer's completed form is kept at the project while the employer is working there."

Conformément à l'article 5 du règlement intitulé Construction Projects, pris en application de la Loi sur la santé et la sécurité au travail, «les constructeurs et les employeurs associés à des travaux de construction doivent remplir un formulaire officiel avant de commencer leurs travaux. Les constructeurs doivent veiller à ce que tous les employeurs associés au chantier lui remettent un formulaire d'inscription dûment rempli. Une copie du formulaire d'inscription des employeurs doit être gardée au chantier tant et aussi longtemps que les employeurs y travaillent.»

Nature of Business (check one) Genre d'entreprise (cochez une cas	e)		
	prietorship Partners étaire unique D En nom	ship Corporation collectif Société	Joint Venture Coentreprise
Name and Full Address of Business	/ Nom et adresse complète	de l'entreprise	
Telephone No.:		Fax:	
N° de téléphone		N° de télécopieur	
Names of Corporations	Main Busine		
Nom des sociétés	Adresse prii	ncipale	
1.			
Telephone No.:		Fax:	
N° de téléphone		N° de télécopieur	
2.			
Telephone No.:		Fax:	
N° de téléphone		N° de télécopieur	
Names of Directors & Principal Offic		Title	Date Appointed
Nom des directeurs et des principau	ıx dirigeants	Titre	Date d'entrée en fonction
1.			
2.			
Average No. of Employees on Project	~t		
Nombre moyen d'employées sur le ch		6 - 19 20 - 49	50 + / 50 et plus
Master Business Licence No.	Retail Sales Tax No.	WSIB No.	WSIB Rate No.
N° du permis principal	N° de taxe de vente	N° de compte (CSPAAT)	N° de groupe tarifaire
d'entreprise (MCC)	au détail		(CSPAAT)
I hereby certify that the above inform	nation is correct / <i>J'atteste pa</i>	nr la présente que les renseigne	ements donnés plus haut sont exacts.
Position & Title		Signature	Date
Poste et titre		Signature	Date
		C C	

Employers are required to submit the completed form to the Constructor for posting/display at the project. Les employeurs doivent remettre le formulaire dûment rempli au constructeur pour qu'il puisse l'afficher sur le chantier.

This form may be photocopied / Ce formulaire peut être photocopié.

## SECTION 01560 - TEMPORARY BARRIERS AND ENCLOSURES

#### PART 1 - GENERAL

- 1.1 Barriers and Enclosures General
  - .1 As per the General Conditions Article GC 3.3 the Contractor shall have sole responsibility for the design, erection, operation, maintenance, and removal of temporary supports, structures, and facilities and the design and execution of construction methods required in their use.
  - .2 The Contractor shall engage and pay for registered professional engineering to perform functions related to such temporary supports, structures and facilities, in accordance with the General Conditions. Submit, for review, temporary work shop drawings stamped by a Structural Engineer, registered in the Province of Ontario, as applicable under Section 01545.
  - .3 This work includes but is not limited to temporary platforms, scaffolding, and temporary support of existing structures to carry construction loads.
  - .4 Provide temporary barriers and enclosures necessary to protect the public and to secure Place of the Work during performance of the Work.
  - .5 Provide protection of existing structures and landscaping adjacent to work areas, including asphalt pavement, concrete sidewalks and patios, trees, bushes, grassed areas etc.
  - .6 Comply with applicable regulatory requirements.
  - .7 Remove temporary barriers and enclosures from Place of the Work when no longer required.

## 1.2 Fencing

- .1 Erect temporary security and safety site fencing of type and height determined by Contractor, subject to applicable regulatory requirements.
- .2 Design enclosure for local wind load and anchor fencing with ballast. Maintain site fencing in good repair until removed.
- .3 Provide lockable access gates as required to facilitate construction access.
- 1.3 Storage Enclosures
  - .1 Provide enclosed lockable trailer(s), truck or box storage as may be required. Store and protect all materials in the Work area, which are to be used in the Work.
  - .2 Site storage shall be within the construction compound.
- 1.4 Dust Tight Partitions and Floor Protection
  - .1 Provide dust tight polyethylene screens to localize interior building areas from dust generating activities.
  - .2 Erect, maintain, and relocate screens as required to facilitate construction operations and Owner's operational requirements.
  - .3 Provide protective floor covering, similar to "Ram Board Plus", over resilient. Maintain floor protection throughout construction until Substantial Performance has been met. Make certain floor protection lays flat and does not constitute a tripping hazzard or interferes with tenant use, and barrier-free path of travel.
- 1.5 Fire Routes
  - .1 Maintain fire access routes, including overhead clearances, for use by emergency response vehicles.
- 1.6 Protection of Building Finishes
  - .1 Provide necessary temporary barriers and enclosures to protect [existing and] completed or partially completed finished surfaces from damage during performance of the Work.

## SECTION 01570 - TEMPORARY CONTROLS

#### PART 1 - GENERAL

- 1.1 Temporary Controls General
  - .1 Provide temporary controls as necessary for performance of the Work and in compliance with applicable regulatory requirements.
  - .2 Maintain temporary controls in good condition for the duration of the Work.
  - .3 Remove temporary controls and Construction Equipment used to provide temporary controls from Place of the Work when no longer required.
- 1.2 Dust and Particulate Control
  - .1 Implement and maintain dust and particulate control measures in accordance with applicable regulatory requirements.
  - .2 Execute Work by methods that minimize dust from construction operations and spreading of dust on site or to adjacent properties.
  - .3 Provide temporary enclosures to prevent extraneous materials resulting from sandblasting or similar operations from contaminating air beyond immediate work area.
  - .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.
  - .5 Use appropriate covers on trucks hauling fine, dusty, or loose materials.
- 1.3 Pollution Control
  - .1 Take measures to prevent contamination of soil, water, and atmosphere through uncontrolled discharge of noxious or toxic substances and other pollutants, potentially causing environmental damage.
  - .2 Control emissions from equipment per local authorities emission requirements.
  - .3 Be prepared, by maintaining appropriate materials, equipment, and trained personnel on site, to intercept, clean up, and dispose of spills or releases that may occur. Promptly report spills and releases that may occur to:
    - .1 authority having jurisdiction,
    - .2 person causing or having control of pollution source, if known, and
    - .3 Owner and Consultant.
  - .4 Contact manufacturer of pollutant, if known and applicable, to obtain material safety data sheets (MSDS) and ascertain hazards involved and precautions and measures required in cleanup or mitigating actions.
  - .5 Take immediate action to contain and mitigate harmful effects of the spill or release.
- 1.4 Hazardous Materials
  - .1 Comply with the requirements of designated substances regulations under the Ontario Occupational Health and Safety Act.

#### SECTION 01610 - COMMON PRODUCT REQUIREMENTS

#### PART 1 - GENERAL

- 1.1 General
  - .1 Provide Products that are not damaged or defective, and suitable for purpose intended, subject to specified requirements. If requested by Consultant, furnish evidence as to type, source and quality of Products provided.
  - .2 Unless otherwise specified, maintain uniformity of manufacture for like items throughout.
- 1.2 Product Options
  - .1 Subject to the provisions of Section 01250 Substitution Procedures:
    - .1 Wherever a Product or manufacturer is specified by a single proprietary name, provide the named Product only.
    - .2 Wherever more than one Product or manufacturer is specified by proprietary name for a single application, provide any one of the named Products.
  - .2 Wherever a Product is specified by reference to a standard only, provide any Product that meets or exceeds the specified standard. If requested by Consultant, submit information verifying that the proposed Product meets or exceeds the specified standard.
  - .3 Wherever a Product is specified by descriptive or performance requirements only, provide any Product that meets or exceeds the specified requirements. If requested by Consultant, submit information verifying that the proposed Product meets or exceeds the specified requirements.
- 1.3 Product Availability and Delivery Times
  - .1 Promptly upon Contract award and periodically during construction, review and confirm Product availability and delivery times. Order Products in sufficient time to meet the construction progress schedule and the Contract Time.
  - .2 If a specified Product is no longer available, promptly notify Consultant. Consultant will take action as required.
  - .3 If delivery delays are foreseeable, for any reason, promptly notify Consultant.
    - .1 If a delivery delay is beyond Contractor's control, Consultant will provide direction.
      - .2 If a delivery delay is caused by something that was or is within Contractor's control, Contractor shall propose actions to maintain the construction progress schedule for Consultant's review and acceptance.
- 1.4 Storage, Handling and Protection
  - .1 Store, handle, and protect Products during transportation to Place of the Work and before, during, and after installation in a manner to prevent damage, adulteration, deterioration and soiling.
  - .2 Comply with manufacturer's instructions for storage, handling and protection.
  - .3 Store packaged or bundled Products in original and undamaged condition with manufacturer's seals and labels intact. Do not remove from packaging or bundling until required in Work.
  - .4 Comply with the requirements of the workplace hazardous materials information system (WHMIS) regarding use, handling, storage, and disposal of hazardous materials, including requirements for labeling and the provision of material safety data sheets (MSDS).
  - .5 Store Products subject to damage from weather in weatherproof enclosures.
  - .6 Store sheet Products on flat, solid, supports and keep clear of ground. Slope to shed moisture.
  - .7 Remove and replace damaged Products.

#### SECTION 01710 - EXAMINATION AND PREPARATION

#### PART 1 - GENERAL

- 1.1 Verification of Existing Conditions
  - .1 Where work specified in any Section is dependent on the work of another Section or Sections having been properly completed, verify that work is complete and in a condition suitable to receive the subsequent work. Commencement of work of a Section that is dependent on the work of another Section or Sections having been properly completed, means acceptance of the existing conditions.
  - .2 Verify that ambient conditions are suitable before commencing the work of any Section and will remain suitable for as long as required for proper setting, curing, or drying of Products used.
  - .3 Ensure that substrate surfaces are clean, dimensionally stable, cured and free of contaminants.
  - .4 Notify Consultant in writing of unacceptable conditions.

# SECTION 01730 - EXECUTION

#### PART 1 - GENERAL

- 1.1 Summary
  - .1 Except where otherwise specified in technical Specifications or otherwise indicated on Drawings, comply with requirements of this Section.
- 1.2 Codes and Standards
  - .1 Perform work in accordance with Ontario Building Code (latest revision) and any other code of provincial or local application, provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.
  - .2 Meet or exceed requirements of Contract Documents, specified standards, codes and referenced documents.
- 1.3 Manufacturer's Instructions
  - .1 Install, erect, or apply Products in strict accordance with manufacturer's instructions.
  - .2 Notify Consultant, in writing, of conflicts between Contract Documents and manufacturer's instructions where, in Contractor's opinion, conformance with Contract Documents instead of the manufacturer's instructions may be detrimental to the Work or may jeopardize the manufacturer's warranty.
  - .3 Do not rely on labels or enclosures provided with Products. Obtain written instructions directly from manufacturers.
  - .4 Provide manufacturer's representatives with access to the Work at all times. Render assistance and facilities for such access so that manufacturer's representatives may properly perform their responsibilities.
- 1.4 Delivery and Storage
  - .1 Deliver, store and maintain packaged material and equipment with manufacturer's seals and labels intact.
  - .2 Prevent damage, adulteration and soiling of material and equipment, during delivery, handling and storage. Immediately remove rejected material and equipment from site.
  - .3 Store material and equipment in accordance with suppliers instructions.
  - .4 Touch up damaged factory-finished surfaces to Consultant's satisfaction. Use primer or enamel to match original. Do not paint over name plates or plates carrying equipment specifications and/or code compliance information.

# 1.5 Concealment

- .1 Conceal pipes, ducts, and wiring in floors, walls and ceilings in finished areas:
  - .1 after review by Consultant and authority having jurisdiction, and
  - .2 where locations differ from those shown on Drawings, after recording actual locations on as-built drawings.
- .2 Provide incidental furring or other enclosures as required.
- .3 Notify Consultant in writing of interferences before installation.

#### 1.6 Fastenings - General

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent materials.
- .2 Prevent electrolytic action and corrosion between dissimilar metals and materials by using suitable non-metallic strips, washers, sleeves, or other permanent separators to avoid direct contact.
- .3 Use non-corrosive fasteners and anchors for securing in spaces where high humidity levels are anticipated.
- .4 Space anchors within individual load limit or shear capacity and ensure they provide positive permanent anchorage.
- .5 Keep exposed fastenings to a minimum, space evenly and install neatly.
- .6 Do not use fastenings or fastening methods that may cause spalling or cracking of material to which anchorage is made.
- .7 When using explosive, actuated fastening devices, comply with CSA Z166.
- .8 The Contractor may use low velocity powder-actuated fasting tools, only if operated by an operator holding a valid operator's certificate for the device being used.
- .9 Fastenings in corrosive materials, or in locations where corrosion may occur, shall be treated or coated as necessary to resist such corrosion.
- .10 All steel fastening shall be galvanized, except where otherwise noted.
- .11 Provide fastenings as shown on Drawings and as specified in various Sections of these Specifications.
- 1.7 Fastenings Equipment
  - .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
  - .2 Bolts shall not project more than one diameter beyond nuts.
- 1.8 Fire-Rated Assemblies
  - .1 When penetrating fire rated walls, ceiling, or floor assemblies, completely seal voids with fire-stopping materials, smoke seals, or both, in full thickness of the construction element as required to maintain the integrity of the fire rated assembly.
- 1.9 Alteration and Repairs to Existing Building
  - .1 Provide temporary means to maintain security of the building at all times.
  - .2 Provide temporary dust screens, barriers and warning signs in locations where renovation and alteration work is being executed adjacent to occupied areas.
- 1.10 Location of Fixtures, Outlets and Devices
  - .1 Location of equipment, fixtures and outlets indicated or specified:
    - .1 Are to be considered as approximate unless specifically dimensioned.
    - .2 It is the responsibility of the Contractor to bring mounting heights of electrical boxes and other equipment items to the attention of the sub-trades involved.
    - .3 Where electrical or mechanical outlets or devices are shown, in relationship to elements such as openings or doors, they shall be positioned centred vertically and horizontally on each such element, unless dimensioned or indicated otherwise.
  - .2 Locate equipment, fixtures and distribution systems to provide minimum interference and maximum usable space, and in accordance with manufacturer's recommendations for safety, access and maintenance. Report any interference between items and installed assemblies, prior to cutting for such installations.
  - .3 Inform Consultant of impending installation and obtain approval for actual locations.
  - .4 Submit field drawings to indicate relative position of various services and equipment, when required by Consultant.

- 1.11 Protection of Completed Work and Work In-Progress
  - .1 Adequately protect parts of the Work completed and in progress from any kind of damage.
  - .2 Promptly remove, replace, clean, or repair, as directed by Consultant, work damaged as a result of inadequate protection.
  - .3 Do not load or permit to be loaded any part of the Work with a weight or force that will endanger the safety or integrity of the Work.

# 1.12 Remedial Work

.1 Notify Consultant of, and perform remedial work required to, repair or replace defective or unacceptable work. Ensure that properly qualified workers perform remedial work. Coordinate adjacent affected work as required.

#### SECTION 01732 - CUTTING AND PATCHING

#### PART 1 - GENERAL

- 1.1 Request for Cutting, Patching and Remedial Work
  - .1 Submit written request in advance of cutting, coring, or alteration which affects or is likely to affect:
    - .1 Structural integrity of any element of the Work.
    - .2 Integrity of weather-exposed or moisture-resistant elements.
    - .3 Efficiency, maintenance, or safety of any operational element.
    - .4 Visual qualities of sight-exposed elements.
    - .5 Work of Owner or other contractors.
    - .6 Warranty of Products affected.
  - .2 Include in request:
    - .1 Identification of Project.
    - .2 Location and description of affected work, including drawings or sketches as required.
    - .3 Statement on necessity for cutting or alteration.
    - .4 Description of proposed work, and Products to be used.
    - .5 Alternatives to cutting and patching.
    - .6 Effect on work of Owner or other contractors.
    - .7 Written permission of affected other contractors.
    - .8 Date and time work will be executed.
- 1.2 Products
  - .1 Unless otherwise specified, when replacing existing or previously installed Products in the course of cutting and patching work, use replacement Products of the same character and quality as those being replaced.
  - .2 If an existing or previously installed Product must be replaced with a different Product, submit request for substitution in accordance with Section 01250 Substitution Procedures.

#### 1.3 Preparation

- .1 Inspect existing conditions in accordance with Section 01710 Examination and Preparation.
- .2 Provide supports to ensure structural integrity of surroundings; provide devices and methods to protect other portions of the Work from damage.
- .3 Provide protection from elements for areas that may be exposed by uncovering work.

- 1.4 Cutting, Patching and Remedial Work
  - .1 Coordinate and perform the Work to ensure that cutting and patching work is kept to a minimum.
  - .2 Perform cutting, fitting, patching, and remedial work to make the affected parts of the Work come together properly and complete the Work.
  - .3 Provide openings in non-structural elements of the Work for penetrations of mechanical and electrical work.
  - .4 Perform cutting by methods to avoid damage to other work.
  - .5 Provide proper surfaces to receive patching, remedial work, and finishing.
  - .6 Perform cutting, patching, and remedial work using competent and qualified specialists familiar with the Products affected, in a manner that neither damages nor endangers the Work.
  - .7 Do not use pneumatic or impact tools without Consultant's prior approval.
  - .8 Ensure that cutting, patching, and remedial work does not jeopardize manufacturers' warranties.
  - .9 Refinish surfaces to match adjacent finishes. For continuous surfaces refinish to nearest intersection. For an assembly, refinish entire unit.
  - .10 Fit work to pipes, sleeves, ducts, conduit, and other penetrations through surfaces with suitable allowance for deflection, expansion, contraction, acoustic isolation, and firestopping.
  - .11 Maintain fire ratings of fire rated assemblies where cutting, patching, or remedial work is performed. Completely seal voids or penetrations of assembly with firestopping material to full depth or with suitably rated devices.

#### SECTION 01740 - CLEANING AND WASTE MANAGEMENT

- 1.1 Regulatory Requirements
  - .1 Comply with applicable regulatory requirements when disposing of waste materials.
  - .2 Obtain permits from authorities having jurisdiction and pay disposal fees where required for disposal of waste materials and recyclables.
- 1.2 General Cleaning Requirements
  - .1 Provide adequate ventilation during use of volatile or noxious substances.
  - .2 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
  - .3 Prevent cross-contamination during the cleaning process.
  - .4 Notify the Consultant of the need for cleaning caused by Owner or other contractors.
- 1.3 Progressive Cleaning and Waste Management
  - .1 Maintain the Work in a tidy and safe condition, free from accumulation of waste materials and construction debris.
  - .2 Provide appropriate, clearly marked, containers for collection of waste materials and recyclables.
  - .3 Remove waste materials and recyclables from work areas, separate, and deposit in designated containers at end of each Working Day. Collect packaging materials for recycling or reuse.
  - .4 Remove waste materials and recyclables from Place of the Work at regular intervals.
  - .5 Clean interior building areas prior to start of finish work and maintain free of dust and other contaminants during finishing operations.
  - .6 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly finished surfaces nor contaminate building systems.
- 1.4 Final Cleaning
  - .1 Before final cleaning, arrange a meeting at Place of the Work to determine the acceptable standard of cleaning. Ensure that Owner, Consultant and Contractor are in attendance.
  - .2 Remove from Place of the Work surplus Products, waste materials, recyclables, Temporary Work, and Construction Equipment not required to perform any remaining work.
  - .3 Lock or otherwise restrict access to each room or area after completing final cleaning in that area.
  - .4 Re-clean as necessary areas that have been accessed by Contractor's workers prior to Owner occupancy.

- .5 Remove stains, spots, marks, and dirt from finished surfaces, electrical and mechanical fixtures, furniture fitments, walls and floors.
- .6 Clean and polish glass, mirrors, hardware, wall tile, stainless steel, chrome, porcelain enamel, baked enamel, plastic laminate, and all other finished surfaces, including mechanical and electrical fixtures. Replace broken, scratched or otherwise damaged glass.
- .7 Remove dust from lighting reflectors, lenses, lamps, bulbs, and other lighting surfaces.
- .8 Vacuum clean and dust exposed wall, floor, and ceiling surfaces, behind grilles, louvres and screens.
- .9 Clean mechanical, electrical, and other equipment.
- 1.5 Waste Management and Disposal
  - .1 Dispose of waste materials and recyclables at the North Huron Landfill, 86165 Currie Line, Wingham, Ontario N0G 2W0 in accordance with applicable regulatory requirements, without charge to the Contractor.
  - .2 Do not burn or bury waste materials at Place of the Work.
  - .3 Do not dispose of volatile and other liquid waste such as mineral spirits, oil, paints and other coating materials, paint thinners, cleaners, and similar materials together with dry waste materials or on the ground, in waterways, or in storm or sanitary sewers. Collect such waste materials in appropriate covered containers, promptly remove from Place of the Work, and dispose of at recycling facilities or as otherwise permitted by applicable regulatory requirements.
  - .4 Cover or wet down dry waste materials to prevent blowing dust and debris.

#### SECTION 01770 - CLOSEOUT PROCEDURES

- 1.1 Inspection and Review Before Substantial Performance
  - .1 Contractor's Inspection: Before applying for the Consultant's review to establish Substantial Performance of the Work:
    - .1 Conduct an inspection of the Work to identify defective, deficient, or incomplete work.
    - .2 Prepare a comprehensive and detailed list of items to be completed or corrected.
    - .3 Provide an anticipated schedule and costs for items to be completed or corrected.
  - .2 Deficiency Reviews
    - .1 Consultant and sub-consultants will conduct one (1) deficiency review site visit, at the end of the project, and one (1) inspection to verify that deficiencies are completed. Upon completion of the listed deficiencies, the Contractor shall complete the form on the following page verifying that deficiencies have been attended to and completed, and that the site is ready for final review. Should an additional inspection be required by the Consultant, and/or any other sub-consultants, as a result of deficiencies that have been claimed as completed but are found to be incomplete, any additional site visits or inspections, required of the Consultants, to verify such completion will be charged at the Consultant's contractual rate to the Owner (including expenses) and such charges will be deducted from the amount payable by the Owner to the Contractor.
    - .2 The form on the following page may be copied freely by the Contractor.

# CONTRACTOR REQUEST FOR FINAL INSPECTION

Note that this page must be emailed or delivered to the Consultant's office within 7 days of the requested final inspection.

This is to certify that (Name of Contractor)
has completed the work identified as deficient in the site inspection and deficiency list
prepared by the Consultant on
and received by our office on
and that the site is now ready for final inspection. Rectification and completion of these
deficiencies does not in any way relieve us of the terms and conditions of the Contract for the
completion of the work in accordance with the Contract Documents.

Contractor or subtrade .....

Consultant Use Only:

Consultant Affected	Work completed as per deficiency list	Work not completed per list attached	Date	Signature
Architect				
Structural				
Mechanical				
Electrical				
Landscape				
Other				
Other				

| General | com | men | ts | ••• | <br> | ••• | <br> |       | <br> | • • | <br>• • | • |
|---------|-----|-----|----|-----|------|-----|------|-------|------|------|------|------|------|------|------|------|------|-----|---------|---|
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|         |     |     |    | ••• | <br> | ••• | <br> | • • • | <br> | • • | <br>    | • |

- .3 Consultant's Review: Upon receipt of the Contractor's application for review, together with the Contractor's list of items to be completed or corrected, the Consultant will review the Work. The Consultant will advise the Contractor whether or not the Work is substantially complete and will provide the Contractor with a list of items, if any, to be added to the Contractor's list of items to be completed or corrected. Provide the Consultant with a copy of the Contractor's revised list.
- .4 Maintain the list of items to be completed or corrected and promptly correct or complete defective, deficient and incomplete work. The Contractor's inspection and Consultant's review procedures specified above shall be repeated until the Work is substantially complete and no items remain on the Contractor's list of items to be completed or corrected.
- .5 When the Consultant determines that the Work is substantially complete, the Consultant will notify the Contractor and the Owner in writing to that effect.
- 1.2 Prerequisites to Final Payment
  - .1 After Ready-for-Takeover of the Work and before submitting an application for final payment in accordance with the General Conditions of Contract:
    - .1 Correct or complete all remaining defective, deficient, and incomplete work.
    - .2 Remove from the Place of the Work all remaining surplus Products, Construction Equipment, and Temporary Work.
    - .3 Perform final cleaning and waste removal necessitated by the Contractor's work performed after Ready-for-Takeover, as specified in Section 01740 Cleaning and Waste Management.
- 1.3 Substantial Performance of the Work
  - .1 The prerequisites to, and the procedures for, attaining substantial performance of the Work, or similar such milestone as provided for in the lien legislation applicable to the Place of the Work, shall be:
    - .1 independent of those for attaining Ready-for-Takeover of the Work, and
    - .2 in accordance with the lien legislation applicable to the Place of the Work.

## SECTION 01780 - CLOSEOUT SUBMITTALS

#### PART 1 - GENERAL

- 1.1 Operation and Maintenance Manual
  - .1 Prepare a comprehensive operation and maintenance manual, in the language of the Contract, using personnel qualified and experienced for this task.
  - .2 Submit an initial draft of the operation and maintenance manual for Consultant's review in electronic PDF format. If required by Consultant's review comments, revise manual contents and resubmit for Consultant's review. If required, repeat this process until Consultant accepts the draft manual in writing.
  - .3 Submit final version to Owner in electronic format.
- 1.2 Operation and Maintenance Manual Format
  - .1 Provide electronic copy of manual in PDF format.
  - .2 Provide electronic copy of Shop Drawings in manual as scaled PDF files.
- 1.3 Operation and Maintenance Manual General Content
  - .1 Table of contents for each volume.
  - .2 Introductory information including:
    - .1 Date of manual submission.
      - .2 Complete contact information for Consultant, subconsultants, other consultants, and Contractor, with names of responsible parties.
      - .3 Schedule of Products and systems indexed to content of volume.
  - .3 For each Product or system, include complete contact information for Subcontractors, Suppliers and manufacturers, including local sources for supplies and replacement parts.
  - .4 Product Data: mark each sheet to clearly identify specific products, options, and component parts, and data applicable to installation. Delete or strike out inapplicable information. Supplement with additional information as required.
  - .5 Reviewed Shop Drawings.
  - .6 Permits, certificates, letters of assurance and other relevant documents issued by or required by authorities having jurisdiction.
  - .7 Warranties.
  - .8 Operating and maintenance procedures, incorporating manufacturer's operating and maintenance instructions, in a logical sequence.
- 1.4 Operation and Maintenance Manual Products and Finishes Content
  - .1 Include Product data, with catalogue number, options selected, size, composition, and colour and texture designations. Provide information for re-ordering custom manufactured Products.
  - .2 Instructions for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
  - .3 Include an outline of requirements for routine and special inspections and for regular maintenance to ensure that on-going performance of the building envelope will meet the initial building envelope criteria.
  - .4 Include additional content as specified in technical Specifications sections.

- 1.5 Operation and Maintenance Manual Warranties Content
  - .1 Separate each warranty with index tab sheets keyed to Table of Contents listing.
  - .2 List each warrantor with complete contact information.
  - .3 Verify that documents are in proper form and contain full information. Ensure that warranties are for the correct duration and are in Owner's name.
  - .4 [Include maintenance bond(s)].
- 1.6 Contractor's As-Built Drawings
  - .1 Submit final as-built drawings in the form specified in Section 01320 Construction Progress Documentation to Consultant.
- 1.7 Spare Parts, Maintenance Materials and Special Tools
  - .1 Supply spare parts, maintenance materials, and special tools in quantities specified in technical Specifications sections.
  - .2 Ensure spare parts and maintenance materials are new, not damaged nor defective, and of same quality, manufacturer, and batch or production run as installed Products.
  - .3 Provide tags for special tools identifying their function and associated Product.
  - .4 Deliver to and store items at location directed by Owner at Place of the Work. Store in original packaging with manufacturer's labels intact and in a manner to prevent damage or deterioration.
  - .5 Catalogue all items and submit to Consultant an inventory listing organized by Specifications section. Include Consultant reviewed inventory listing in operation and maintenance manual.

# SECTION 02050 - DEMOLITION & REMOVAL

# PART 1 - GENERAL

## 1.1 Work Included

- .1 Provide demolition and removal work including but not limited to the following:
  - .1 Various demolition and removals work as shown on the Drawings.
  - .2 Restoration of damaged or disturbed work.
  - .3 Removal of surplus materials and debris from the site.
- .2 Requirements specified herein or elsewhere shall be considered the minimum requirements and Contractor is responsible for providing and performing things required and necessary to complete the work, in a safe, proper and workmanlike manner.
- .3 Temporary partitions, screens and enclosures.

## 1.2 Related Work

.1	Temporary Barriers and Enclosures:	Section 01560.
.2	Cleaning and Waste Management:	Section 01740.

## 1.3 Maintaining Traffic

- .1 Maintain and preserve Owner's access requirements to and from existing building in areas where demolition and removal work is being carried out and throughout the existing building for life safety requirements.
- .2 Do not close, obstruct, place or store material in required passageways Tenant occupied areas. Conduct operations with minimum interference to roads, streets, driveways and passageways.
- .3 Provide and erect barriers, maintain guard heights, and traffic control as required by the Owner, Municipal traffic regulations or Building By-Laws.
- .4 Comply with the requirements of "Occupational Health and Safety Act".
- 1.4 Hauling Operations
  - .1 Haul and move machines, vehicles and equipment over designated route and within work areas.
  - .2 Maintain roadways and paving in the hauling areas clean on a continuous basis and as required by Municipal authorities.
- 1.5 Interruptions to Owner's Operations
  - .1 There will be absolutely no interruptions to Tenant operations permitted during specific time periods. Therefore, it is imperative operations and machine and equipment movements, deliveries and removals are executed at time or times that will permit uninterrupted Tenant operations in and around buildings, including deliveries and site access and egress.
  - .2 Carry out work in such a manner to comply with Section 01140 and do not interrupt Tenants while they are in the Building.
- 1.6 Coordination
  - .1 Coordinate with other Sections as required for the satisfactory completion of the work of this Section.
  - .2 Ensure this trade performs work in conjunction with trades of other Sections to ensure necessary work to complete demolition and removals work is performed.

# 1.7 Protection

- .1 Protect work to remain against damage of any kind.
- .2 Protect building floor against damage from operations under this Section, including lifting, moving, rolling, etc., of materials. Use 13mm (½") thick plywood covers with ends mechanically joined, over floor for any such handling. Over roof, provide 19mm (¾") thick plywood underlaid with 25mm (1") thick polystyrene insulation board adhered to same. Provide same when working from, or over roof surfaces. Be responsible for repairs to flooring or roofing for any damage caused.
- .3 Pay particular attention to prevention of fire and elimination of fire hazards which would endanger the work or adjacent premises.
- .4 Provide and maintain necessary fire extinguishers throughout the work at all times to the approval of the Fire Marshall, and located at convenient and accessible points.
- 1.8 Maintaining Services
  - .1 Many of the service lines which are being modified, particularly those on or in existing structures, must be kept in service throughout the construction period except for brief changeover periods.
  - .2 Do work required to maintain such services, including preparation of sketches, detail scheduling of such work and coordinating and obtaining approval from Owner's site staff.
- 1.9 Designated Substances
  - .1 Silica:
    - .1 Free crystalline silica (quartz) may be component of acoustic ceiling tile. It may also be present as amorphous diatomaceous earth in pipe fittings, and other insulation materials. Silica may be present in mortar, concrete, concrete block and plaster.
    - .2 Disturbance of materials containing silica will occur during demolition of walls and ceilings, saw cutting floor slabs and removal of lay-in acoustic ceiling tiles containing silica. The contractor undertaking this work is responsible to ensure that the workers performing the work are not exposed to airborne silica levels in excess of 0.20 mg/m<sup>3</sup>. This can be accomplished by:
      - .1 providing workers with suitable respiratory protection and disposable coveralls if airborne levels are in excess of regulated limits;
      - .2 misting work area with water to suppress dust levels and avoiding dry sweeping of dust and debris during clean-up (i.e. use damp mopping or HEPA vacuums;
      - .3 ensuring that adequate temporary ventilation is available inside the work area.
    - .3 It should be noted that the use of mechanically powered tools for demolition work increases the concentration of airborne silica and therefore requires more stringent respiratory protection and controlled work procedures.
    - .4 Precautions must be taken, during construction disturbance of silica, to ensure that building occupants and persons in the vicinity of the Work are protected. Provide wet cutting of concrete and masonry. Constructing physical barriers and using polyethylene drop sheets or enclosures to isolate the work area will control silica levels in occupied areas.
    - .5 Comply with "Guideline Silica on Construction Projects", dated April 2011, Occupational Health and Safety Branch, Ministry of Labour.

# PART 2 - PRODUCTS

## 2.1 Materials

- .1 Temporary Wood Studs: Construction Grade Spruce.
- .2 Polyethylene Sheet: 0.152mm (6 mil), thick, clear, stapled in place.
- .3 Plywood: Douglass Fir plywood.

# PART 3 - EXECUTION

- 3.1 Temporary Partitions and Screens
  - .2 Dust Proof Partitions (Screens): Before any work proceeds in any particular area in the existing building, temporarily enclose the area and access thereto, with light stud and clean polyethylene sheet material overlapped 100mm (4") and taped at floor, ceiling and doors, walls or intersecting members, in a manner to prevent dust and dirt infiltration into the adjoining areas. Take every possible precaution to prevent dust and dirt resulting from the contract operations from entering Owner's operational areas. Adjust and relocate such partitions (screens) as required for the various operations under the Work.
- 3.2 Demolition and Removals
  - .1 Mechanical and electrical trades to cut off, cap, divert or remove existing water, gas, electric and other services which interfere with the work of this Section as required.
  - .2 Carry out demolition work, removal or existing materials and equipment, and disposal of resultant debris not specifically called for under various Sections of the Specification but which is required to complete the Work. Proceed with demolition of, or alteration to, any portion of existing building ONLY after thorough protection of existing building has been achieved.
  - .3 During demolition operations, keep work wetted down with fog sprays as appropriate to removal location, to prevent dust and dirt rising. Provide temporary water line for this purpose and furnish connections that may be required. Upon completion, remove installed temporary water lines. Use covered chutes, watered down.
  - .4 In occupied tenant/public areas, confine operations and workmen to cause least disruption, and exercise great care not to damage existing construction beyond that necessary for the carrying out new work and make good any such damage in every respect. Provide temporary partitions as required for safety and cleanliness.
  - .5 Materials To Be Reused: Where indicated on Drawings to be removed and stored for future use by Owner, or for later reuse by other trades, remove, handle and transport such items to storage area. Perform such work carefully and with diligence to prevent any damage to the items during removal and in storage.
  - .6 Cutting:
    - .1 Perform required cutting using power operated cutting devices. Breaking out shall commence only after sawcutting of the cutoff points has been performed in order to prevent damage to remainder of structure and to obtain straight and clean junctions of new and existing works.
    - .2 Demolish masonry and concrete in small sections.
    - .3 Coordinate with mechanical and electrical trades and sawcut and breakout existing structures to accommodate services. Have mechanical and electrical trades lay out and supervise work.

# 3.3 Disposal of Materials, Rubble and Debris

- .1 Rubble and Debris: Rubbish and debris resulting from execution of the Work shall be cleaned up as they are generated. Dispose of same at end of each day or place in waste disposal bins which must be emptied on a regular basis. Stockpiling of rubble and debris will not be permitted.
- .2 Dispose of waste materials and recyclables at the North Huron Landfill, 86165 Currie Line, Wingham, Ontario N0G 2W0 in accordance with applicable regulatory requirements, without charge to the Contractor.

# 3.4 Cleaning-up

.1 Leave building areas in a "broom-clean" condition on an area by area or room by room basis.

## SECTION 03300 - CAST-IN-PLACE-CONCRETE

#### PART 1 - GENERAL

- 1.1 Work Included
  - .1 Provide cast-in-place concrete as shown on Drawings and as specified herein.
- 1.2 References

.2

- ASTM C494 .1
  - Specification for chemical Admixtures for Concrete CAN3-A5-M - Portland Cements
  - Concrete Materials and Methods of Concrete Construction CAN3-A23.1-M
- .3 .4 CAN3-A23.2-M - Methods of Test for Concrete
- Guidelines for Use of Admixtures in Concrete .5 CAN3-A266.4
- 1.3 Storage and General Protection
  - Store materials on site in a manner to prevent damage thereto. Protect from the weather. 1 Comply with the requirements of CAN3-A23.1-M.
- 1.4 **Environmental Conditions** 
  - Conform to all requirements of CAN3-A23.1-M. 1
- 1.5 Tolerances
  - Concrete in place shall be plumb, level and true to linear building lines. Maximum variations .1 (not accumulative) as follows:
    - .1 Variation from level or grade indicated on Drawings for tops of walls shall not exceed 1/4" in 10'-0", nor <sup>w</sup> in any one bay.
- 1.6 Records
  - Keep a written record of concrete pours, showing location, date, cubic yards or metres of .1 concrete including signed trip ticket for each truck, ambient air temperature, and unusual occurrences during placement of each pour. Permit inspection of records by Consultant at any time. At completion of work, submit a summary of such data to Consultant.

## PART 2 - PRODUCTS

- 2.1 Materials
  - Portland Cement: CAN3-A5-M Normal, Type 10 Portland Cement. .1
  - Cementious Hydraulic Slag: to CAN3-A363-M. .2
  - .3 Blended Hydraulic Cement: to CAN3-A362-M.
  - Coarse Aggregate: CAN3-A23.1-M, Clause 5.4, Group I, 20-5mm. .4
  - .5 Fine Aggregate: CAN3-A23.1-M, Clause 5.3.
  - Water: CAN3-A23.1-M. .6
  - Bonding Agent: "Sika-Dur 32 Hi-Mod" by Sika Canada Inc. or "Bondlok" by W.R. Meadows. .7
  - Interior Sawcut Joint Sealant: epoxy modified urethane sealant, W.R. Meadows "Bondflex" or .8 Sika Canada Inc. "Sika Loadflex 1-2-1".

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# 2.2 Concrete Mixes

- .1 Provide concrete proportions in accordance with CAN3-A23.1-M, Clause 14 and as follows:
  - .1 Minimum allowable compressive strength shall be 25 MPa at 28 days of age for floor slabs.
  - .2 Minimum cement content shall be as required by concrete strengths.
  - .3 Slump at point of deposit shall be 25mm (1") min to 75mm (3") maximum. Increased slumps for floor slabs will only be allowed by use of super plasticizers, added per manufacturer's recommendations, not by the addition of water.
  - .4 Maximum water-cement ratio shall not exceed 0.50.

# 2.3 Admixtures

- .1 Add admixtures to concrete mix in accordance with manufacturer's recommendations.
- .2 Except as specified herein, comply with requirements of CAN3-A266.4-M.
- .3 The use of calcium chloride or additional admixtures, other than those specified, is not acceptable.

# PART 3 - EXECUTION

- 3.1 Examination
  - .1 Obtain Consultant's site review of reinforcement and formwork before placing concrete. Provide 24 hour notice prior to placing of concrete.
  - .2 Confirm that surfaces on which concrete is to be placed are free of frost, water, and debris before placing concrete.
- 3.2 Placing of Concrete
  - .1 Place concrete in accordance with CAN3-A23.1-M, Clause 19.
  - .2 Install sluices to limit height of free fall of concrete to 4'-0" maximum. Place concrete to prevent layering and segregation and vibrate sufficiently to ensure thorough compaction, maximum density and according to CAN3-A23.1-M. Hand spade concrete adjacent to forms with metal spatulas.
  - .3 Before placing fresh concrete against set or partially set concrete, clean surfaces to remove all dirt, scum, shavings, debris, laitance, etc. On set surfaces, brush generously with a bonding mixture.
  - .4 Check work frequently with accurate instruments during placing of concrete.

## 3.3 Sealant Application

- .1 Prime, prepare substrate and apply sealant full joint depth in accordance with manufacturer's printed direction. Tool to a smooth semi-concave finish.
- 3.4 Floor Placement
  - .1 Pour and screed slabs.

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#### 3.5 Floor Finish

- Slab: Screed, float and trowel interior concrete slabs to smooth level and dense surfaces free .1 from trowel marks, ridges and depressions. Maximum variation of concrete slab shall not exceed 6mm (1/4" in 10'-0") non accumulative from datum line. Upon completion of work, survey floor with respect to conformance to the specified tolerance. Grind any unevenness as required to meet tolerance specified.
- .2 Do not sprinkle dry cement or dry cement and sand mixture over concrete surfaces.

#### 3.6 Curing/Sealing

Immediately after steel trowelling operations, apply curing/sealing compound sealer, except for .1 floor slab to receive subsequent topping water cure and cover with polyethylene.

#### 3.7 Sawcutting

- Provide sawcut control joints as soon as possible after trowelling and when saw can be run .1 over concrete surface without leaving treadmarks, or ravelling concrete, but not more than 24 hours after finishing is complete.
- Provide sawcut joint pattern to provide maximum areas within construction and control .2 (sawcuts) joints of 26 m<sup>2</sup> (280 square feet). Provide sawcuts 5mm  $({}^{3}/{}_{16}{}^{"})$  wide x one quarter thickness of slab.
- .3
- Spray water on saw blade at all times during sawing. Grind edges of final sawcuts to eliminate .4 burrs; do not grind to bevel or chamfer joint edges. After final sawing and grinding, clean joints with a jet of water, and blow-out with compressed air. Broom and wash-clean residue caused by sawing operation so as to not stain concrete.

#### 3.8 Joint Sealant

- .1 Strip removable top section of joint filler and clean edges of recess. Fill joints over premoulded joint filler with urethane sealant. Fill sawcut control joints with epoxy modified joint sealant.
- 3.9 **Defective Concrete** 
  - Remove defective concrete, blemishes and embedded debris and repair or replace as directed 1 by Consultant.

### SECTION 04050 - MASONRY PROCEDURES

#### PART 1 - GENERAL

1.1	Rela	ted Work	
	.1	Mortar and grout for masonry	. Section 04100.
	.2	Concrete unit masonry	. Section 04220.

## 1.2 Reference Standard

.1 Do masonry work in accordance with CAN3-S304.1-04 (R2010) Design of Masonry Structures, except where shown or specified otherwise.

#### 1.3 Qualifications

- .1 Provide competent trade foreman, well skilled and experienced in the specialized type of work required, for continuous supervision.
- .2 Provide specialized skilled and competent tradesmen who have had considerable experience in this type of work.
- .3 Submit, if requested, a detailed list of projects and experience relating to any of the above workers.
- 1.4 Product Delivery, Storage and Handling
  - .1 Deliver materials to job site in dry condition.
  - .2 Keep materials dry until use.
  - .3 Store under waterproof cover on pallets or plank platforms held off ground by means of plank or timber skids.
- 1.5 Protection
  - .1 Keep masonry dry using waterproof, non-staining coverings that extend over walls and down sides sufficient to protect walls from wind driven rain, until masonry work is completed and protected by flashings or other permanent construction.
  - .2 Protect masonry and other work from marking and other damage. Protect completed work from mortar droppings. Use non-staining coverings.
  - .3 Provide temporary bracing of masonry work during and after erection until permanent lateral support is in place.

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# 1.6 Designated Substances

- .1 Silica is present in mortar and concrete block. Disturbance of materials containing silica will occur during cutting or grinding of concrete unit masonry. The Contractor undertaking this work is responsible to ensure that workers performing the work are not exposed to airborne silica levels in excess of 0.20 mg/m<sup>3</sup>. This can be accomplished by:
  - .1 providing workers with suitable respiratory protection and disposable coveralls if airborne levels are in excess of regulated limits;
  - .2 misting work area with water to suppress dust levels and avoiding dry sweeping of dust and debris during clean-up (i.e. use damp mopping or HEPA vacuums;
  - .3 ensuring that adequate temporary ventilation is available inside the work area.
- .2 It should be noted that the use of mechanically powered tools for the work increases the concentration of airborne silica and therefore requires more stringent respiratory protection and controlled work procedures.
- .3 Precautions must be taken, during construction disturbance of silica, to ensure that persons exposed are protected. Constructing physical barriers and using polyethylene drop sheets or enclosures to isolate the work area will control silica levels.
- .4 Comply with "Guideline Silica on Construction Projects", dated April 2011, as issued by Occupational Health and Safety Branch Ministry of Labour.

# PART 2 - PRODUCTS

# 2.1 Materials

.1 Masonry materials are specified in related Sections of the Specifications.

# PART 3 - EXECUTION

- 3.1 Workmanship
  - .1 Build masonry plumb, level, and true to line, with vertical joints in proper alignment.
  - .2 Layout coursing and bond to achieve correct coursing heights, and continuity of bond above and below openings, with minimum of cutting.

# 3.2 Tolerances

- .1 Walls exposed in the finish work: plumb within 1:600.
- .2 Deviation in joint thickness: ±3 mm.

## 3.3 Exposed Masonry

.1 Remove chipped, cracked, mis-matched finishes, and otherwise damaged units in exposed masonry and replace with undamaged units.

## 3.4 Jointing

- .1 Tool with round jointer to provide smooth, compressed, uniformly concave joints.
- .2 Rake joints uniformly to 6mm depth and compress with square tool to provide smooth, compressed, raked joints of uniform depth where raked joints are indicated.

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# 3.9 Provision for Movement

- .1 Leave 3 mm space below shelf angles.
- .2 Leave 6 mm space between top of non-load bearing walls and partitions and structural elements. Do not use wedges.

## 3.12 Existing Work

- .1 Provide for making good and patching of existing work, including cutting and patching for mechanical and electrical trades.
- .2 Match coursing, bond and joint profiles of existing portion of structure in new work where same is exposed.

# SECTION 04100 - MORTAR & GROUT FOR MASONRY

# PART 1 - GENERAL

1.1

 Related Work
 .1
 Masonry procedures
 .1
 Section 04050.

# 1.2 Reference Standard

.1 Do masonry mortar and grout work in accordance with CSA A179-M except where specified otherwise.

## 1.3 Submittals

- .1 Submit manufacturer's product data for each component of mortar and grout.
- .2 Submit duplicate samples of cured mortar for each mortar mix for review of colour and texture. Colour and texture to match existing adjacent work.

## PART 2 - PRODUCTS

- 2.1 Materials
  - .1 Mortar and Grout: CAN/CSA A179-04. Ready mixed mortar for unit masonry, where acceptable, shall conform to ASTM C 1142.

## 2.2 Admixtures

- .1 Do NOT use:
  - .1 Air-entraining admixtures or material containing air-entraining admixtures.
  - .2 Antifreeze compounds
  - .3 Compounds containing chlorides
- .2 Colour pigments as manufactured by Northern Pigment.

#### 2.3 Material Source

.1 Use same brands of materials and source of aggregate for entire project.

# 2.4 Mortar Types

.1 Block Mortar:

 $\frac{1}{2}$  part Portland cement (CAN/CSA-A5-M Normal) to 1 part masonry cement (CAN/CSA-A8-M Type H) to 4  $\frac{1}{2}$  parts damp sand plus water to produce mortar with a minimum compressive strength of 12.5 MPa at 28 days of age, conforming to CAN/CSA A179-04, Type "S".

#### 3.1 Measurement and Mixing

- .1 Mix grout to semifluid consistency.
- .2 Incorporate admixtures into mixes in accordance with manufacturer's instructions.
- .3 Prehydrate pointing mortar for brick by mixing ingredients dry, then mix again adding just enough water to produce damp workable mix that will retain its form when pressed into ball. Allow to stand for not less than 1 hour nor more than 2 hours then remix with sufficient water to produce mortar of proper consistency for pointing.
- .4 Measure and batch mortar materials either by volume or weight, such that the required proportions can be accurately controlled and maintained. Measurement of sand or other materials exclusively by shovel will not be permitted.
- .5 Mix mortar with the maximum amount of water consistent with workability to provide maximum tensile bond strength within the capacity of the mortar.
- .6 Do not use mortar which has begun to set or if more than  $2\frac{1}{2}$  hours have elapsed since initial mixing. Retemper mortar during the  $2\frac{1}{2}$  hour period only as required to restore workability.

# SECTION 04220 - CONCRETE UNIT MASONRY

## PART 1 - GENERAL

#### 1.1 Related Work

.1	Masonry procedures	Section 04050.
.2	Mortar and grout for masonry	Section 04100.

## PART 2 - PRODUCTS

#### 2.1 Materials

- .1 Non-Load Bearing Masonry Partitions: Lightweight concrete masonry units: to CSA A165.1-94: .1 Size: metric modular
- .2 Furnish CBM Canadian Building Materials Company block units in light grey colour as selected by Consultant, including but not limited to:
  - .1 Solid units
  - .2 Furnish shapes and finishes as shown on Drawings

## PART 3 - EXECUTION

- 3.1 Laying Concrete Masonry Units
  - .1 Bond: running stretcher.
  - .2 Coursing height: 200mm for one block and one joint.
  - .3 Jointing: concave in exposed areas or areas to be painted, struck flush under waterproofing and air/vapour barrier membranes and at ceramic tile finishes.
- 3.2 Cleaning
  - .1 Allow mortar droppings on masonry to partially dry then remove by means of trowel, followed by rubbing lightly with small piece of block and finally by brushing. Marred or discoloured exposed tinted units will require removal and replacement.

# PART 1 - GENERAL

#### 1.1 Work Included

- .1 Provide gypsum board work as shown on Drawings and specified herein, including, but not limited to the following:
  - .1 Gypsum board walls, partitions, etc., fire-rated and non fire-rated;
  - .2 Corner beads, tear-way L-bead, corner reinforcement, etc.;
  - .3 Taping and filling.

# 1.2 Related Work

.1	Rough Carpentry	Section 06100.
.2	Painting	Section 09900.

## 1.3 Submittals

.1 Submit manufacturer's product data for gypsum board and accessories.

#### 1.4 Examination

.1 Examine the Drawings and Specifications to determine the extent of the work involved, together with other necessary data affecting the work. In no circumstances will any claims against the Owner be allowed resulting from failure to ascertain the extent of such work herein described or implied.

## 1.5 Reference Standards

.1 This work shall be done by workers skilled in gypsum board work in accordance with the requirements of this Specification and the latest printed directions and specifications of the manufacturer.

## PART 2 - PRODUCTS

## 2.1 Materials

- .1 General
  - .1 All materials shall be manufactured or supplied by CGC Inc. or CertainTeed Gypsum Canada Inc., unless specifically stated otherwise.
- .2 Gypsum Board
  - .1 Gypsum Board:
    - .1 5/8" (16 mm) Sheetrock® Brand Firecode® X Panels, with tapered edges for joint filling, to conform to CSA A82.27 and ASTM C1396/C1396M-22. Gypsum board shall be in 48" (1200 mm) wide sheets of maximum practical lengths to minimize end joints.
- .3 Fastenings and Adhesives
  - .1 Nails, screws and staples: to CSA A82.31-M.

- .4 Accessories
  - .1 Joint Reinforcement Tape: perforated paper tape conforming to ASTM C475.
  - .2 Trims: Furnish vinyl trims for gypsum board, manufactured by Trim-Tex Inc., as follows:
    - .1 Mud Set Rigid Corner Bead, in longest possible lengths.
    - .2 Tear-Away® L Bead 5/8", Stock Number: 9110.
- .5 Joint Compound: Conform to requirements of ASTM C475. Drying-type (ready-mixed);: equivalent to CGC SHEETROCK® brand taping joint compound and topping joint compound, asbestos-free..

# PART 3 - EXECUTION

- 3.1 Gypsum Panel Application
  - .1 Do not apply gypsum board until bucks, anchors, blocking, electrical and mechanical work are approved.
- 3.2 Accessories
  - .1 Erect accessories straight, plumb or level, rigid and at proper plane. Use full length pieces where practical. Make joints tight, accurately aligned and rigidly secured. Mitre and fit corners accurately, free from rough edges. Secure at maximum 150mm o.c.
  - .2 Install fill type Beads at locations shown on Drawings and where gypsum board butts against surfaces having no trim, concealing junction. Seal joint between adjacent materials with small sealant bead.
    - .1 Beads
      - .1 Measure and cut the bead to length. Dry fit to test proper cut.
      - .2 Spray the bead and substrate with 1 coat each of Trim-Tex 847 Spray Adhesive and position the bead into place.
      - .3 Once in position, pressure the leg using handle of your taping knife.
      - .4 Staple the mud leg into place every at maximum 6" with  $\frac{1}{2}$ " staples.
      - .5 Apply joint compound providing smooth transition between bead and gypsum board surface.
      - .6 Remove tear-off strips, if equipped, after mudding but before sanding. Sand as usual.
  - .3 Install insulating strips continuously at edges of gypsum board or casing beads abutting metal window or exterior door frames, to provide thermal break.

#### 3.3 Taping, Filling and Finishing

- .1 Finish face panel joints and internal angles with joint system consisting of joint compound, joint tape and taping compound installed according to manufacturer's directions and feathered out onto panel faces.
- .2 Finish corner beads, control joints and trim as required with two coats of joint compound and one coat of taping compound, feathered out onto panel faces.
- .3 Fill screw head depressions with joint and taping compounds to bring flush with adjacent surface of gypsum board so as to be invisible after painting is completed.
- .4 Sand lightly to remove burred edges and other imperfections. Avoid sanding adjacent surface of board.
- .5 Completed installation to be smooth, level or plumb, free from waves and other defects and ready for painting.
- .6 Provide the following levels of gypsum board finish:
  - .1 Walls, partitions, provide Level 4 finish: All joints and interior angles shall have tape embedded in joint compound and shall be immediately wiped with a joint knife or trowel, leaving a thin coating of joint compound over all joints and interior angles. In addition, two separate coats of joint compound shall be applied over all flat joints and one separate coat of joint compound applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. All joint compounds shall be smooth and free of tool marks and ridges. The prepared surface shall be covered with a drywall primer prior to the application of the final decoration.

## SECTION 09660 - RESILIENT ATHLETIC SURFACING

#### PART 1 - GENERAL

1.1 Work Included
 .1 Provide resilient tile flooring, base and accessories as shown on Drawings and specified herein.

1.2	Relat	ed Work	
	.1	Concrete floor slab	Section 03300.

#### 1.3 Submittals

.1 Samples:

.1

- Submit for approval three (3) sets of the indoor resilient multipurpose surfacing, manufacturer's brochures, samples or sample boards of all of the available colors, textures and styles.
- .2 Submit color samples of all the available game line paint colors for selection and approval.

## 1.4 Quality Assurance

- .1 Qualifications:
  - .1 The indoor resilient multipurpose surfacing shall have been actively marketed for a minimum of ten (10) years.
  - .2 The indoor resilient multipurpose surfacing shall be manufactured in an ISO 9001 certified plant.
  - .3 The indoor resilient multipurpose surfacing shall be manufactured in an ISO 14001 certified plant.
  - .4 The indoor resilient multipurpose surfacing supplier shall be an established firm, experienced in the field, and competent in the techniques required by the manufacturer.
  - .5 The installer of the indoor resilient multipurpose surfacing shall have a minimum of five (5) years of experience in the field installing indoor resilient multipurpose surfacing and have worked on at least five (5) projects of similar size, type and complexity.

#### 1.5 Delivery, Storage and Handling

- .1 Delivery:
  - .1 Material shall not be delivered until all related work is in place and finished and/or proper storage facilities and conditions can be provided and guaranteed stable according to Advantage Sport recommendations.
- .2 Storage:
  - .1 Store the material in a secure, clean and dry location.
  - .2 Maintain temperature between 55° and 85° Fahrenheit.
  - .3 Store the indoor resilient athletic surfacing rolls in an upright position on a smooth flat surface immediately upon delivery to jobsite.
  - .4 Rolls shipped in rigid protective cardboard containers can be laid horizontally prior to unpacking and installation.

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#### 1.6 **Project/Site Conditions**

- It is the responsibility of the general contractor/construction manager to maintain project/site .1 conditions acceptable for the installation of the indoor resilient multipurpose flooring.
- .2 The area in which the indoor resilient multipurpose surfacing will be installed shall be dry and weather tight. Permanent heat, light and ventilation shall be installed and operable.
- All other trades shall have completed their work prior to the installation of the resilient athletic .3 flooring. The general contractor or construction manager shall maintain a secure and clean working environment before, during and after the installation.
- Maintain a stable room temperature of at least 65°F for a minimum of one (1) week prior to, .4 during and thereafter installation.
- .5 Concrete subfloor surface pH level within the 7 to 11 range dependent upon installation type.
- .6 Concrete subfloor should be no greater than 1/8" within a 10 ft diameter. This tolerance can be measured in accordance with ASTM E1155. A specified (FF) of 50 and an (FL) of 30 should reach this degree of floor flatness and floor level. There is no numerical correlation between F numbers and the deviation from the straight edge. However, the above specified numbers should achieve a flat floor with minimal deviation in the slab. Reference ACI 117 and ACI 302.1R. The general contractor should provide a certificate of compliance with the above recommendations.
- Concrete subfloor must be clean and free of all foreign materials or objects including, but not .7 limited to, curing compounds and sealers.
- Fill cracks, grooves, voids, depressions, and other minor imperfections. Follow the .8 manufacturer's directions. Moveable joints must be treated utilizing specific transitioning joint devices depending upon the architect's recommendations. Follow current ASTM F710 guidelines for the preparation of concrete slabs to receive resilient flooring.

#### 1.7 Warranty .1

- Α. Special Limited Warranty:
  - Manufacturer's standard form in which manufacturer agrees to repair or replace .1 sports flooring including labor that fails within specified warranty period.
  - Material warranty must be direct from the product manufacturer. .2
  - Material warranties must come from original manufacturer or division thereof. Private .3 label warranties from distributors or brokers are not valid. Supply original point of manufacturing upon request. .4
    - Failures include, but are not limited to, the following:
      - Material manufacturing defects. .1
        - Surface wear and deterioration to the point of wear-through of wear layer .2 per ASTM F410/ASTM F1303.
        - .3 Failure due to substrate moisture exposure exceeding 98 percent relative humidity when tested according to ASTM F2170.
  - Warranty Period: .5
    - For material defects and surface wear-through: 25 years from date of .1 substantial completion.
  - Installer's Limited Warranty: .6
    - Installer's standard form in which installer agrees to repair or replace sports .1 flooring that fails due to poor workmanship or faulty installation within the specified warranty period.
    - Warranty Period: 2 years from date of substantial completion. .2

# PART 2 - PRODUCTS

#### 2.1 Manufacturers

- .1 The basis of the design for the indoor resilient multipurpose surfacing is Omnisports Speed as manufactured by Tarkett.
- .2 All other installation accessories and related components must be either made or approved by the indoor resilient athletic surfacing manufacturer.
- .3 Other products may be approved as equal if deemed gualified and submitted in accordance with the General Conditions.
- .4 Test reports confirming compliance from an independent sports laboratory must be provided along with samples, technical data, installation, maintenance, and warranty prior to acceptance as an alternative product.

#### 2.2 Materials

- Omnisports Speed Prefabricated sport surface (0.14") with wood flooring design, single .1 surface embossing and Extreme Three (3) Layers technology (X3LT) as supplied by Advantage Sport (888.605.3380).
  - Embossing of wood design and solid colors must be the same; varying embossing .1 or surface textures will not be allowed.
  - .2 Printing of wood design shall closely resemble standard wood strip flooring in size, color, board length, and grain appearance.
  - Surface embossing combined with TopClean XP must offer proper balance of .3 surface friction per the ASTM F2772.
  - Surface embossing combined with TopClean XP must provide resistance to stains .4 and scratches. Surface profile must not incorporate linear embossing.
  - The wood design shall be protected by a clear layer of pure PVC (Polyvinyl Chloride) .5 and TopClean XP, a factory-applied UV cured urethane treatment.
  - .6 Extreme Three (3) Layers technology (X3LT) includes Omnisports XCS cushion, glass veil and calendared sheet must offer improved shock absorbing comfort while providing better indentation recovery
  - .7 The XCS cushion force reduction laver shall be high-density closed cell PVC foam with honeycomb embossing, and is applied in one continuous manufacturing process.
  - Laminated or adhered foam layers will not be allowed. .8
  - 9 Field constructed products will not be accepted.
- .2 Design:
  - Colour: Golden Maple .1
  - .2 Hardwood Design Series: High definition printing for a realistic wood surface appearance as available from the indoor resilient athletic surfacing manufacturer's standard range.
- .3 Welding Rod: As supplied by the indoor resilient athletic surfacing manufacturer or supplier.
  - Color to blend with the indoor resilient athletic surfacing color or design. .1 .2 All seams shall be welded to create a monolithic and impermeable surface.
  - Adhesive: As approved by the indoor resilient athletic surfacing manufacturer.
- .4 Game Line Paint and Primer: As approved by the indoor resilient athletic surfacing .5
  - manufacturer.

#### PART 3 - EXECUTION

#### 3.1 Examination

- .1 It is the responsibility of the general contractor/construction manager to ensure that project/site conditions are acceptable for the installation of the indoor resilient athletic flooring.
- .2 Verify that the area in which the indoor resilient athletic surfacing will be installed is dry and weather tight. Verify that permanent heat, light and ventilation are installed and operable.
- .3 Verify that all other work that could cause damage, dirt and dust or interrupt the normal pace of the indoor resilient athletic flooring installation is completed or suspended.
- .4 Verify that there is a stable room temperature of at least 65°F.
- .5 Verify that there are no foreign materials or objects on the subfloor and that the subfloor is clean and ready for installation.
- .6 Direct Full Spread Adhering to Concrete Subfloor Multi-Poxy : moisture content less than 98% RH when tested per ASTM F2170.
- .7 Follow Advantage Sport installation recommendations.
- .8 Do not average the results of the tests. Report all field test results in writing to the General Contractor, Architect, and End User prior to installation.
- .9 Verify that the concrete subfloor surface pH level is within the 7 11 range.
- .10 Document the results confirming the slab is within manufacturer's tolerances for slab deviation.
- 3.2 Preparation of Surfaces
  - .1 Sand the entire surface of the concrete slab.
  - .2 Sweep the concrete slab so as to remove all dirt and dust. If a sweeping compound is to be used it must be a sweeping compound that does not contain oil or other items that may inhibit the adhesive bond.
  - .3 Slab must be dust free. In the event that dust impairs adhesive bond, priming the slab prior to application of adhesive may be necessary. Follow installation guidelines.
  - .4 Follow OSHA guidelines.
- 3.3 Installation
  - .1 The installation area shall be closed to all traffic and activity for a period to be set by the indoor resilient athletic surfacing installer. The indoor resilient athletic surfacing installation shall not begin until the installer is familiar with the existing conditions.
  - .2 All necessary precautions should be taken to minimize noise, smell, dust, the use of hazardous materials and any other items that may inconvenience others.
  - .3 Install the indoor resilient athletic surfacing in strict accordance with the indoor resilient athletic surfacing manufacturer's written instructions.
  - .4 Install the indoor resilient athletic surfacing minimizing cross seams. Provide a seam diagram during the submittal process for approval prior to installation. Vinyl Sheet Flooring Seams: Comply with ASTM F 1516. Rout joints and heat weld to permanently and seamlessly fuse sections together.
  - .5 Paint game lines using approved game line paint primer and game line paint in strict accordance with the game line paint manufacturer's instructions.
  - .6 Install appropriate threshold plates or transition strips where necessary.

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.1 Remove all unused materials, tools, and equipment and dispose of any debris properly. Clean the indoor resilient athletic surfacing in accordance with the manufacturer's instructions.

#### 3.5 Protection

.1 If required, protect the indoor resilient athletic surfacing from damage using coverings approved by the manufacturer until acceptance of work by the customer or their authorized representative.

#### SECTION 09800 - SOUND-ABSORBING WALL PANELS

#### PART 1 - GENERAL

#### 1.1 Related Work

.1 Painting ...... Section 09900.

#### 1.2 Submittals

- .1 Shop Drawings: Layout and details of walls. Show locations of items that are to be coordinated with or supported by the walls.
- .2 Installation Instructions: Submit manufacturer's installation instructions as referenced in Part three, Installation.
- .3 Product Data: Submit manufacturer's technical data for each type of ceiling unit and suspension system required.
- .4 Samples: Minimum 6 x 6 inch samples of specified panel; 8 inch long samples of exposed wall molding and suspension system, including main runner and 4 foot cross tees.

#### 1.3 Quality Assurance

- .1 Single-Source Responsibility: Provide acoustical panel unit components by a single manufacturer.
- .2 Surface Burning Characteristics: As follows, tested per ASTM E 84
- .3 Installer Qualification: Subcontractor is an experienced Installer that has reviewed and understands the system installation instructions thoroughly. Subcontractor will follow written installation instructions and utilize approved equipment and procedures for finishing installation.

## PART 2 - PRODUCTS

#### 2.1 Manufacturer

- .1 Manufacturer: Kinetics Noise Control, Inc.
  - .1 Contact: PO Box 655, 6300 Irelan Place, Dublin, OH 43017; Telephone: (614) 889-0480; Fax: (614) 889-0540; E-mail: intsales@kineticsnoise.com; Web site: www.kineticsnoise.com.

### 2.2 Materials

- .1 High Impact HardSide Panels:
  - .1 Thickness: 1 1/8 inches
  - .2 Size: 24 inches x 48 inches panel.
  - .3 Core: 1 inch thick fiberglass, 6 7 pcf (96 112 kg/m3) density, with bonded facing layer of 10 pcf (192 kg/m3), 1/8 inch (3.2 mm) thick impact resistant fiberglass.
  - .4 Edge Detail: Square hardened with a Class A hardening solution.
    - Facing:100% polyester fabric, FR 701 Style 2100 by Guilford of Maine
    - .1 Color: As selected from panel manufacturer's stocked range of colors.
  - .6 Mounting Accessories: Z-clips.
- 2.3 Fabrication

.5

- .1 General: Treat fabric wrapped panels using heat shrink process to develop fully taut facing.
- .2 Wrap panel edges and return facing fabric 1 2 inches (25.4 51 mm) on back of panel. Secure fabric with adhesive applied to edges and back of panel only.

# PART 3 - EXECUTION

- 3.1 Manufacturer's Instructions
  - .1 Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.
- 3.2 Examination
  - .1 Site Verification of Conditions: Verify that substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.
    - .1 Verify that stud spacing is 16 inches (406 mm) o.c., maximum, for panels installed over open studs.
    - .2 Do not install panels until unsatisfactory conditions are corrected.
- 3.3 Cleaning
  - .1 Follow manufacturer's instructions for cleaning panels soiled during installation. Replace panels that cannot be cleaned to as new condition.
  - .2 Keep site free from accumulation of waste and debris.

# SECTION 09900 - PAINTING

## PART 1 - GENERAL

- 1.1 Work Included
  - .1 Surface preparation of substrates as required for acceptance of painting, including cleaning, small crack repair, patching, caulking, and making good surfaces and areas.
  - .2 Provide painting, stain and clear-coat finishes, as shown on Drawings and specified herein, including but not limited to the following:
    - .1 Gypsum board walls
    - .2 Concrete unit masonry.
- 1.2 Quality Assurance
  - .1 This Contractor shall have a minimum of five (5) years proven satisfactory experience and shall show proof before commencement of work that he will maintain a qualified crew of painters throughout the duration of the work.
  - .2 All materials, preparation and workmanship shall conform to requirements of the latest edition of the Architectural Painting Specification Manual by the Master Painters Institute.

## 1.3 Submittals

- .1 Four (4) weeks before commencement of painting, submit manufacturer product data for each paint coating as specified, for review by Consultant.
- .2 After receipt of Colour Schedule from Consultant, submit a 150mm x 200mm sample drawdown of each finish colour and colour sheen to Consultant for review.
- .3 Submit two samples of each type of wood having stained and clear-coat finish for review by Consultant.
- 1.4 Product Delivery, Storage and Handling
  - .1 Deliver all painting materials in sealed, original labeled containers bearing manufacturer's name, brand name, type of paint or coating and color designation, standard compliance, materials content as well as mixing and/or reducing and application requirements.
  - .2 Store all paint materials in original labeled containers in a secure (lockable), dry, heated and well ventilated single designated area meeting the minimum requirements of both paint manufacturer and authorities having jurisdiction and at a minimum ambient temperature of 45 F (7 C). Only material used on this project to be stored on site.

- 1.5 Project / Site Requirements
  - .1 Unless specifically pre-approved by the specifying body, perform no painting when the ambient air and substrate temperatures are below 50° F (10° C) for both interior and exterior work.
  - .2 Perform no exterior painting work unless environmental conditions are within MPI and paint manufacturer's requirements or until adequate weather protection is provided. Where required, suitable weatherproof covering and sufficient heating facilities shall be in place to maintain minimum ambient air and substrate temperatures for 24 hours before, during and after paint application.
  - .3 Perform no interior painting work unless adequate continuous ventilation and sufficient heating facilities are in place to maintain ambient air and substrate temperatures above minimum requirements for 24 hours before, during and after paint application. Provide supplemental ventilating and heating equipment if ventilation and heating from existing system is inadequate to meet minimum requirements.
  - .4 Perform no painting or decorating work when the relative humidity is above 85% or when the dew point is less than  $5^{\circ}$  F ( $3^{\circ}$  C) variance between the air / surface temperature.
  - .5 Perform no painting work when the maximum moisture content of the substrate exceeds:
    - .1 15% for wood.
    - .2 12 % for gypsum board.
  - .6 Conduct all moisture tests using a properly calibrated electronic Moisture Meter, except test concrete floors for moisture using a simple cover patch test.
  - .7 Test concrete, masonry and plaster surfaces for alkalinity as required.
    - .1 Note: Concrete and masonry surfaces must be installed at least 28 days prior to painting and decorating work and must be visually dry on both sides.
  - .8 Apply paint only to dry, clean, properly cured and adequately prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.
  - .9 Perform no painting or decorating work unless a minimum lighting level of 323 Lux (30 foot candles) is provided on surfaces to be painted or decorated. Adequate lighting facilities shall be provided by the General Contractor.
- 1.6 Maintenance Materials
  - .1 At project completion, provide 4 liters (1 gallon) of each type and color of paint from same production run (batch mix) used in unopened cans, properly labeled and identified for Owner's later use in maintenance. Store where directed.
- 1.7 Work Excluded
  - .1 Stainless steel, prefinished aluminum, anodized aluminum, vinyl, plastic laminate, prefinished steel fabrications and other factory finished products.
- 1.8 Protection
  - .1 Protect all adjacent interior surfaces and areas, including rating and instruction labels on doors, frames, equipment, piping, etc., from painting operations and damage with drop cloths, shields, masking, templates, or other suitable protective means and make good any damage caused by failure to provide such protection.
    - .1 Post signs immediately following application of paint. Exercise proper care to completely protect fixtures, and cabinets that will be installed before painting operations are complete.
    - .2 Do not use fixtures or finished building construction of any type for scaffolding or support of scaffolding.
  - .2 In the event finish materials which require no painting should be accidentally splashed with paint or otherwise disfigured by unauthorized application of paint, and if the paint cannot be removed without damage to the material involved, then these materials shall be removed and replaced with new materials, and all costs incidental thereto shall be paid by the Contractor. Cleaning and removal of unauthorized paint or other such materials shall be accomplished with materials and procedures which are non-injurious to the surface, all as approved by the Consultant.

.3 After completion and acceptance of the painter's work in any area, the Contractor shall be responsible for provision and maintenance of such forms of protection that may be required to protect finished work from damage from any cause prior to acceptance of the job by the Owner. Schedule the work, and exclude traffic and unauthorized personnel from finished areas, to the extent necessary to prevent damage.

# PART 2 - PRODUCTS

- 2.1 Materials
  - .1 Qualified products: only paint materials listed on the CGSB Qualified Products List are acceptable for use on this project. Formulas specified herein are based on Benjamin Moore numbers; equivalent paints by ICI, Glidden, Sherwin-Williams, Colour Your World, Sico, Pratt & Lambert or other quality product manufacturer is acceptable, however, must be approved by Consultant.
  - .2 Paint materials for each coating system to be products of a single manufacturer as possible.

## 2.2 Equipment

- .1 Painting and Decorating Equipment: to best trade standards for type of product and application.
- .2 Spray Painting Equipment: of ample capacity, suited to the type and consistency of paint or coating being applied and kept clean and in good working order at all times.
- 2.3 Mixing and Tinting
  - .1 Unless otherwise specified herein or pre-approved, all paint shall be ready-mixed and pre-tinted. Re-mix all paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and color and gloss uniformity.
  - .2 Paste, powder or catalyzed paint mixes shall be mixed in strict accordance with manufacturer's written instructions.
  - .3 Where thinner is used, addition shall not exceed paint manufacturer's recommendations. Do not use kerosene or any such organic solvents to thin water-based paints.
  - .4 If required, thin paint for spraying according in strict accordance with paint manufacturer's instructions. If directions are not on container, obtain instructions in writing from manufacturer and provide copy of instructions to Consultant.
- 2.4 Finish Schedule
  - .1 Match existing colour and sheen.

## PART 3 - EXECUTION

- 3.1 Manufacturer's Instructions
  - .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and data sheet.
- 3.2 Condition of Surfaces
  - .1 Prior to commencement of work of this section, thoroughly examine (and test as required) all conditions and surfaces scheduled to be painted and report in writing to the Contractor and Consultant any conditions or surfaces that will adversely affect work of this section.
  - .2 No painting work shall commence until all such adverse conditions and defects have been corrected and surfaces and conditions are acceptable to the Painting Subcontractor.
  - .3 Commencement of work shall not be held to imply acceptance of surfaces except as qualified herein. Such surfaces as concrete, masonry, structural steel and miscellaneous metal, wood, gypsum board, shall not be the responsibility of the Painting Subcontractor.

- .4 The Painting Subcontractor shall not be responsible for the condition of the substrate or for correcting defects and deficiencies in the substrate which may adversely affect the painting work except for minimal work normally performed by the Painting Subcontractor and as indicated herein. It shall always, however, be the responsibility of the Painting Subcontractor to see that surfaces are properly prepared before any paint or coating is applied.
- 3.3 Preparation of Surfaces
  - .1 Remove and securely store all miscellaneous hardware and surface fittings / fastenings (e.g. electrical plates, mechanical louvers, door and window hardware (e.g. hinges, knobs, locks, trim, frame stops), removable rating / hazard / instruction labels, washroom accessories, light fixture trim, etc. from wall and ceiling surfaces, doors and frames, prior to painting. Carefully clean and replace all such items upon completion of painting work in each area. Do not use solvent or reactive cleaning agents on items that will mar or remove finishes (e.g. lacquer finishes).
  - .2 Doors shall be removed before painting to paint bottom and top edges and then re-hung.
  - .3 Prepare each substrate in accordance with paint manufacturer's written published recommendations for such substrate and condition.
  - .4 Properly prepare all surfaces to receive the finishes herein specified or as Scheduled. In general, all such work of preparation shall be as follows:
    - .1 Gypsum board drywall surfaces: Taped and filled joints shall have been finished smooth and flush and left ready for application of painted finish by the Gypsum Board Contractor. Any unsatisfactory conditions, such as raised or depressed surfaces, or scuffed paper finish, shall be corrected.
    - .2 Masonry surfaces: Clean surfaces of dirt, laitance, excess mortar, encrustations and foreign matter. Cracks, holes, pits and other imperfection shall be neatly patched flush and smooth, and the entire surface chemically treated as required to counteract lime and alkali burns, and hot spots. Mortar must be cured at least 30 days before painting. pH must be 10.0 or lower.
      - .1 Switch and outlet boxes: See that the wall is properly finished around boxes before start of painting so that joint will be properly covered by standard size switch plates.
- 3.4 Mechanical and Electrical Equipment
  - .1 Do not paint exposed mechanical or electrical equipment.
- 3.5 Interior Paint Systems

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- System No. 4: Gypsum board walls:
  - .1 one coat latex primer sealer K253,
  - .2 two coats acrylic latex Eco Spec Semi-Gloss.
- .2 System No. 11: Existing painted concrete block:
  - .1 one coat latex primer sealer K253,
  - .2 two coats acrylic latex Eco Spec Semi-Gloss F376.

# 3.6 Application

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- .1 Do not paint unless substrates are acceptable and/or until all environmental conditions (heating, ventilation, lighting and completion of other subtrade work) are acceptable for applications of products.
- .2 Apply paint and decorating material in a workmanlike manner using skilled and trade qualified applicators as noted under Quality Assurance.
- .3 Apply paint and coatings within an appropriate time frame after cleaning when environmental conditions encourage flash-rusting, rusting, contamination or the manufacturer's paint specifications require earlier applications.
- .4 Painting coats specified are intended to cover surfaces satisfactorily when applied at proper consistency and in accordance with manufacturer's recommendations.
- .5 Mix materials thoroughly before application, apply evenly under adequate illumination and free from sags, runs, crawls and other defects. Do cutting-in neatly. Furnish drop cloths and protection to adjacent surfaces.
- .6 When the primer-sealer coat is dry, touch up all visible suction spots before the next coat is applied and do not proceed with the work until all suction spots are sealed.
- .7 Apply coats of the proper consistency as received from the container, and brush well showing a minimum of brush marks.
- .8 Sand and dust between each coat to provide an anchor for next coat and to remove defects visible from a distance up to 1000 mm (39").
- .9 Apply coats only when the previous coat is thoroughly dry. Ensure that the number of coats required have been applied. The number of coats specified is minimum that shall be applied. It is intended that paint finishes of even, uniform color, free from cloudy or mottled surfaces, be provided. The work shall be "spot-coated" or undercoated as necessary.
- .10 Final finishes shall provide uniform colour and sheen across the full surface area.
- .11 Apply materials in accordance with the directions and instructions of the manufacturers of the various materials. Do not use adulterants.
- 3.7 Field Quality Control / Standard of Acceptance
  - .1 All surfaces, preparation and paint applications shall be inspected.
  - .2 Painted exterior and interior surfaces shall be considered to lack uniformity and soundness if any of the following defects are apparent:
    - .1 brush / roller marks, streaks, laps, runs, sags, drips, heavy stippling, hiding or shadowing by inefficient application methods, skipped or missed areas, and foreign materials in paint coatings.
    - .2 evidence of poor coverage at rivet heads, plate edges, lap joints, crevices, pockets, corners and re-entrant angles.
    - .3 damage due to touching before paint is sufficiently dry or any other contributory cause.
    - .4 damage due to application on moist surfaces or caused by inadequate protection from the weather.
    - .5 damage and/or contamination of paint due to blown contaminants (dust, spray paint, etc.).
    - Painted surfaces shall be considered unacceptable if any of the following are evident under natural lighting source for exterior surfaces and final lighting source (including daylight) for interior surfaces:
      - .1 visible defects are evident on vertical surfaces when viewed at normal viewing angles from a distance of not less than 1000 mm (39").
      - .2 visible defects are evident on horizontal surfaces when viewed at normal viewing angles from a distance of not less than 1000 mm (39").
      - .3 visible defects are evident on ceiling, soffit and other overhead surfaces when viewed at normal viewing angles.
      - .4 when the final coat on any surface exhibits a lack of uniformity of color, sheen, texture, and hiding across full surface area.

.4 Painted surfaces rejected by the Consultant shall be made good at the expense of the Contractor. Small affected areas may be touched up; large affected areas or areas without sufficient dry film thickness of paint shall be repainted. Runs, sags of damaged paint shall be removed by scraper or by sanding prior to application of paint.

# 3.8 Clean-Up

- .1 Remove all paint where spilled, splashed, splattered or sprayed as work progresses using means and materials that are not detrimental to affected surfaces.
- .2 Keep work area free from an unnecessary accumulation of tools, equipment, surplus materials and debris.
- .3 Remove combustible rubbish materials and empty paint cans each day and safely dispose of same in accordance with requirements of authorities having jurisdiction.
- .4 Clean equipment and dispose of wash water / solvents as well as all other cleaning and protective materials (e.g. rags, drop cloths, masking papers, etc.), paints, thinners, paint removers / strippers in accordance with the safety requirements of authorities having jurisdiction.

#### SECTION 11480 - WALL PANELS

#### PART 1 - GENERAL

#### 1.1 Work Included

- .1 Provide panel system, as shown on Drawings and specified herein.
- 1.2 Quality Assurance & Control
  - .1 The work of this Section shall be executed by a Contractor who has adequate plant, equipment and skilled tradesmen to perform the work expeditiously, has performed satisfactory similar installations, with a minimum of 10 years experience.

#### 1.3 Submittals

- .1 Submit shop drawings for each system, showing assembly interfaces and substrates
- .2 Submit manufacturer's product and systems warranty.
- 1.4 Warranty
  - .1 Furnish manufacturer/installer company warranty covering materials, components and installation of the panel system to be free of defects for a period of 10 years from date of Substantial Performance of the Work.

### PART 2 - PRODUCTS

## 2.1 Materials

- .1 Wall Panels
  - .1 Furnish pre-finished wall panels as manufactured by Fibresin Industries
  - .2 Furnish side wall panels of 20.6mm thick stressed skin design consisting of three (3) layers of 881 kg/m3 density fibreboard totally impregnated and thermally fused with identical pressure melamine resin laminate surfaces on face and back of each panel. Seal panel edges with five (5) coats of acrylic lacquer to match laminate. Composite density of the panel is to be 993 kg/m3.
  - .3 Furnish extruded aluminum splines for wall panels and subassembly steel channels to be fastened to masonry block and gypsum board substrates.
  - .4 Furnish purpose-suited non-corroding fasteners for wall panel assembly.
  - .5 Furnish purpose-suited industrial adhesive for wall panel assembly.

# PART 3 - EXECUTION

# 3.1 Existing Site Conditions

- .1 Provide for an accurate survey and layout of the work
- .2 Check planarity of gypsum board and masonry block substrates. Report any conditions which would jeopardize proper and accurate installation of systems. Unsatisfactory substrates are to be rectified prior to installation of systems.
- .3 Vertical planes of wall systems are to be plumb and level across joints. Intersections between floor and walls are to be square. Planarity of finished system surfaces to be plus or minus 3mm (") over 3000mm (10'-0") non-accumulative.
- .4 Ensure substrates are dry in terms of the systems installation. Test concrete, block and gypsum board substrates for moisture level prior to installation.