

CCDC 2

Stipulated Price Contract

2020

Downtown Arts Centre, 16 Elizabeth Walk, Elliot Lake, ON

This agreement is protected by copyright and is intended by the parties to be an unaltered version of CCDC 2 – 2020 except to the extent that any alterations, additions or modifications are set forth in supplementary conditions.



CANADIAN CONSTRUCTION DOCUMENTS COMMITTEE
CANADIAN CONSTRUCTION DOCUMENTS COMMITTEE
CANADIAN CONSTRUCTION DOCUMENTS COMMITTEE

CCDC 2 STIPULATED PRICE CONTRACT

TABLE OF CONTENTS

AGREEMENT BETWEEN OWNER AND CONTRACTOR

- A-1 The Work
- A-2 Agreements and Amendments
- A-3 Contract Documents
- A-4 Contract Price
- A-5 Payment
- A-6 Receipt of and Addresses for Notices in Writing
- A-7 Language of the Contract
- A-8 Succession

DEFINITIONS

- Change Directive
- Change Order
- Construction Equipment
- Consultant
- Contract
- Contract Documents
- Contract Price
- Contract Time
- Contractor
- Drawings
- Notice in Writing
- Owner
- Other Contractor
- Payment Legislation
- Place of the Work
- Product
- Project
- Ready-for-Takeover
- Shop Drawings
- Specifications
- Subcontractor
- Substantial Performance of the Work
- Supplemental Instruction
- Supplier
- Temporary Work
- Value Added Taxes
- Work
- Working Day

GENERAL CONDITIONS

PART 1 GENERAL PROVISIONS

- GC 1.1 Contract Documents
- GC 1.2 Law of the Contract
- GC 1.3 Rights and Remedies
- GC 1.4 Assignment

PART 2 ADMINISTRATION OF THE CONTRACT

- GC 2.1 Authority of the Consultant
- GC 2.2 Role of the Consultant
- GC 2.3 Review and Inspection of the Work
- GC 2.4 Defective Work

PART 3 EXECUTION OF THE WORK

- GC 3.1 Control of the Work
- GC 3.2 Construction by the Owner or Other Contractors
- GC 3.3 Temporary Work
- GC 3.4 Construction Schedule
- GC 3.5 Supervision
- GC 3.6 Subcontractors and Suppliers
- GC 3.7 Labour and Products
- GC 3.8 Shop Drawings

PART 4 ALLOWANCES

- GC 4.1 Cash Allowances
- GC 4.2 Contingency Allowance

PART 5 PAYMENT

- GC 5.1 Financing Information Required of the Owner
- GC 5.2 Applications for Payment
- GC 5.3 Payment
- GC 5.4 Substantial Performance of the Work and Payment of Holdback
- GC 5.5 Final Payment
- GC 5.6 Deferred Work
- GC 5.7 Non-conforming Work

PART 6 CHANGES IN THE WORK

- GC 6.1 Owner's Right to Make Changes
- GC 6.2 Change Order
- GC 6.3 Change Directive
- GC 6.4 Concealed or Unknown Conditions
- GC 6.5 Delays
- GC 6.6 Claims for a Change in Contract Price

PART 7 DEFAULT NOTICE

- GC 7.1 Owner's Right to Perform the Work, Terminate the Contractor's Right to Continue with the Work or Terminate the Contract
- GC 7.2 Contractor's Right to Suspend the Work or Terminate the Contract

PART 8 DISPUTE RESOLUTION

- GC 8.1 Authority of the Consultant
- GC 8.2 Adjudication
- GC 8.3 Negotiation, Mediation and Arbitration
- GC 8.4 Retention of Rights

PART 9 PROTECTION OF PERSONS AND PROPERTY

- GC 9.1 Protection of Work and Property
- GC 9.2 Toxic and Hazardous Substances
- GC 9.3 Artifacts and Fossils
- GC 9.4 Construction Safety
- GC 9.5 Mould

PART 10 GOVERNING REGULATIONS

- GC 10.1 Taxes and Duties
- GC 10.2 Laws, Notices, Permits, and Fees
- GC 10.3 Patent Fees
- GC 10.4 Workers' Compensation

PART 11 INSURANCE

- GC 11.1 Insurance

PART 12 OWNER TAKEOVER

- GC 12.1 Ready-for-Takeover
- GC 12.2 Early Occupancy by the Owner
- GC 12.3 Warranty

PART 13 INDEMNIFICATION AND WAIVER

- GC 13.1 Indemnification
- GC 13.2 Waiver of Claims

CCDC 2 is the product of a consensus-building process aimed at balancing the interests of all parties on the construction project. It reflects recommended industry practices. The CCDC and its constituent member organizations do not accept any responsibility or liability for loss or damage which may be suffered as a result of the use or interpretation of CCDC 2.

CCDC Copyright 2020

Must not be copied in whole or in part without the written permission of the CCDC.

AGREEMENT BETWEEN OWNER AND CONTRACTOR

For use when a stipulated price is the basis of payment.

This Agreement made on 10 day of January in the year 2023
by and between the parties
City of Elliot Lake

hereinafter called the "Owner"

and

Quinan Construction Limited

hereinafter called the "Contractor"

The Owner and the Contractor agree as follows:

ARTICLE A-1 THE WORK

The Contractor shall:

- 1.1 perform the Work required by the Contract Documents for (insert below the description or title of the Work)
Downtown Arts Centre

located at (insert below the Place of the Work)

16 Elizabeth Walk, Elliot Lake, ON

for which the Agreement has been signed by the parties, and for which (insert below the name of the Consultant)

MET Energy Systems

is acting as and is hereinafter called the "Consultant" and

- 1.2 do and fulfill everything indicated by the Contract Documents, and
- 1.3 commence the Work by the 6 day of February in the year 2023 and, subject to adjustment in Contract Time as provided for in the Contract Documents, attain Ready-for-Takeover, by the 11 day of August in the year 2023 .

ARTICLE A-2 AGREEMENTS AND AMENDMENTS

- 2.1 The Contract supersedes all prior negotiations, representations or agreements, either written or oral, relating in any manner to the Work, including the bid documents that are not expressly listed in Article A-3 of the Agreement – CONTRACT DOCUMENTS.
- 2.2 The Contract may be amended only as provided in the Contract Documents.

ARTICLE A-3 CONTRACT DOCUMENTS

3.1 The following are the *Contract Documents* referred to in Article A-1 of the Agreement – THE WORK:

- Agreement between *Owner* and *Contractor*
- Definitions
- General Conditions

*

Downtown Arts Centre - Architectural Design Drawings (Attached)
Downtown Arts Centre - Structural Design Drawings (Attached)
Downtown Arts Centre - Mechanical Design Drawings (Attached)
Downtown Arts Centre - Plumbing Design Drawings (Attached)
Downtown Arts Centre - Electrical Design Drawings (Attached)
Downtown Arts Centre - Tender Specifications (Attached)
Downtown Arts Centre - Addendum #1 (Attached)
Downtown Arts Centre - Addendum #2 (Attached)
Downtown Arts Centre - Letter of Recommendation
Downtown Arts Centre - Quinan Construction Limited Tender Bid (Attached)

* (Insert here, attaching additional pages if required, a list identifying all other *Contract Documents* e.g. supplementary conditions; Division 01 of the Specifications – GENERAL REQUIREMENTS; Project information that the Contractor may rely upon; technical Specifications, giving a list of contents with section numbers and titles, number of pages and date; material finishing schedules; Drawings, giving drawing number, title, date, revision date or mark; addenda, giving title, number, date; time schedule)

ARTICLE A-4 CONTRACT PRICE

4.1 The *Contract Price*, which excludes *Value Added Taxes*, is:

One Million Three Hundred Twenty Thousand Dollars

/100 dollars \$ 1,320,000.00

4.2 *Value Added Taxes* (of 13 %) payable by the *Owner* to the *Contractor* are:

One Hundred Seventy One Thousand Six Hundred Dollars

/100 dollars \$ 171,600.00

4.3 Total amount payable by the *Owner* to the *Contractor* for the *Work* is:

One Million Four Hundred Ninety One Thousand Six Hundred Dollars

/100 dollars \$ 1,491,600.00

4.4 These amounts shall be subject to adjustments as provided in the *Contract Documents*.

4.5 All amounts are in Canadian funds.

ARTICLE A-5 PAYMENT

5.1 Subject to the provisions of the *Contract Documents* and *Payment Legislation*, and in accordance with legislation and statutory regulations respecting holdback percentages, the *Owner* shall:

- .1 make progress payments to the *Contractor* on account of the *Contract Price* when due in the amount certified by the *Consultant* unless otherwise prescribed by *Payment Legislation* together with such *Value Added Taxes* as may be applicable to such payments,
- .2 upon *Substantial Performance of the Work*, pay to the *Contractor* the unpaid balance of the holdback amount when due together with such *Value Added Taxes* as may be applicable to such payment, and
- .3 upon the issuance of the final certificate for payment, pay to the *Contractor* the unpaid balance of the *Contract Price* when due together with such *Value Added Taxes* as may be applicable to such payment.

5.2 Interest

- .1 Should either party fail to make payments as they become due under the terms of the *Contract* or in an award by adjudication, arbitration or court, interest at the following rates on such unpaid amounts shall also become due and payable until payment:
 - (1) 2% per annum above the prime rate for the first 60 days.
 - (2) 4% per annum above the prime rate after the first 60 days.

Such interest shall be compounded on a monthly basis. The prime rate shall be the rate of interest quoted by
(Insert name of chartered lending institution whose prime rate is to be used)

Royal Bank Of Canada

for prime business loans as it may change from time to time.

- .2 Interest shall apply at the rate and in the manner prescribed by paragraph 5.2.1 of this Article on the settlement amount of any claim in dispute that is resolved either pursuant to Part 8 of the General Conditions – DISPUTE RESOLUTION or otherwise, from the date the amount would have been due and payable under the *Contract*, had it not been in dispute, until the date it is paid.

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

6.1 *Notices in Writing* will be addressed to the recipient at the address set out below.

6.2 The delivery of a *Notice in Writing* will be by hand, by courier, by prepaid first class mail, or by other form of electronic communication during the transmission of which no indication of failure of receipt is communicated to the sender.

6.3 A *Notice in Writing* delivered by one party in accordance with this *Contract* will be deemed to have been received by the other party on the date of delivery if delivered by hand or courier, or if sent by mail it will be deemed to have been received five calendar days after the date on which it was mailed, provided that if either such day is not a *Working Day*, then the *Notice in Writing* will be deemed to have been received on the *Working Day* next following such day.

6.4 A *Notice in Writing* sent by any form of electronic communication will be deemed to have been received on the date of its transmission provided that if such day is not a *Working Day* or if it is received after the end of normal business hours on the date of its transmission at the place of receipt, then it will be deemed to have been received at the opening of business at the place of receipt on the first *Working Day* next following the transmission thereof.

6.5 An address for a party may be changed by *Notice in Writing* to the other party setting out the new address in accordance with this Article.

Owner

City of Elliot Lake

*name of Owner**

45 Hillside Dr. North, Elliot Lake, ON

address

bgoulding@city.elliottlake.on.ca

email address

Contractor

Quinan Construction Limited

*name of Contractor**

55 Progress Drive, Unit 1, Orillia, ON

address

mike.unwin@quinan.ca

email address

Consultant

MET Energy Systems

*name of Consultant**

477 Queen Street East Suite 304, Sault Ste. Marie, ON

address

tsjanzen@meteng.on.ca

email address

** If it is intended that a specific individual must receive the notice, that individual's name shall be indicated.*

ARTICLE A-7 LANGUAGE OF THE CONTRACT

- 7.1 When the *Contract Documents* are prepared in both the English and French languages, it is agreed that in the event of any apparent discrepancy between the English and French versions, the English / ~~French~~ # language shall prevail.
Complete this statement by striking out inapplicable term.
- 7.2 This Agreement is drawn in English at the request of the parties hereto. La présente convention est rédigée en anglais à la demande des parties.

ARTICLE A-8 SUCCESSION

- 8.1 The *Contract* shall enure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representatives, successors, and assigns.

In witness whereof the parties hereto have executed this Agreement by the hands of their duly authorized representatives.

SIGNED AND DELIVERED
in the presence of:

WITNESS

OWNER

City of Elliot Lake

name of Owner

signature

signature

name of person signing

name and title of person signing

WITNESS

CONTRACTOR

Quinan Construction Limited

name of Contractor

signature

signature

name of person signing

name and title of person signing

- N.B. Where legal jurisdiction, local practice or Owner or Contractor requirement calls for:
- (a) proof of authority to execute this document, attach such proof of authority in the form of a certified copy of a resolution naming the representative(s) authorized to sign the Agreement for and on behalf of the corporation or partnership; or
 - (b) the affixing of a corporate seal, this Agreement should be properly sealed.

DEFINITIONS

The following Definitions shall apply to all *Contract Documents*.

Change Directive

A *Change Directive* is a written instruction prepared by the *Consultant* and signed by the *Owner* directing the *Contractor* to proceed with a change in the *Work* within the general scope of the *Contract Documents* prior to the *Owner* and the *Contractor* agreeing upon adjustments in the *Contract Price* and the *Contract Time*.

Change Order

A *Change Order* is a written amendment to the *Contract* prepared by the *Consultant* and signed by the *Owner* and the *Contractor* stating their agreement upon:

- a change in the *Work*;
- the method of adjustment or the amount of the adjustment in the *Contract Price*, if any; and
- the extent of the adjustment in the *Contract Time*, if any.

Construction Equipment

Construction Equipment means all machinery and equipment, either operated or not operated, that is required for preparing, fabricating, conveying, erecting, or otherwise performing the *Work* but is not incorporated into the *Work*.

Consultant

The *Consultant* is the person or entity engaged by the *Owner* and identified as such in the Agreement. The *Consultant* is the Architect, the Engineer or entity licensed to practise in the province or territory of the *Place of the Work*.

Contract

The *Contract* is the undertaking by the parties to perform their respective duties, responsibilities and obligations as prescribed in the *Contract Documents* and represents the entire agreement between the parties.

Contract Documents

The *Contract Documents* consist of those documents listed in Article A-3 of the Agreement – CONTRACT DOCUMENTS and amendments agreed upon between the parties.

Contract Price

The *Contract Price* is the amount stipulated in Article A-4 of the Agreement – CONTRACT PRICE.

Contract Time

The *Contract Time* is the time from commencement of the *Work* to the date of *Ready-for-Takeover* as stipulated in paragraph 1.3 of Article A-1 of the Agreement – THE WORK .

Contractor

The *Contractor* is the person or entity identified as such in the Agreement.

Drawings

The *Drawings* are the graphic and pictorial portions of the *Contract Documents*, wherever located and whenever issued, showing the design, location and dimensions of the *Work*, generally including plans, elevations, sections, details, and diagrams.

Notice in Writing

A *Notice in Writing*, where identified in the *Contract Documents*, is a written communication between the parties or between them and the *Consultant* that is transmitted in accordance with the provisions of Article A-6 of the Agreement – RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING.

Owner

The *Owner* is the person or entity identified as such in the Agreement.

Other Contractor

Other Contractor means a contractor, other than the *Contractor* or a *Subcontractor*, engaged by the *Owner* for the *Project*.

Payment Legislation

Payment Legislation means such legislation in effect at the *Place of the Work* which governs payment under construction contracts.

Place of the Work

The *Place of the Work* is the designated site or location of the *Work* identified in the *Contract Documents*.

Product

Product or Products means material, machinery, equipment, and fixtures forming part of the *Work*, but does not include *Construction Equipment*.

Project

The *Project* means the total construction contemplated of which the *Work* may be the whole or a part.

Ready-for-Takeover

Ready-for-Takeover shall have been attained when the conditions set out in paragraph 12.1.1 of GC 12.1 – READY-FOR-TAKEOVER have been met, as verified by the *Consultant* pursuant to paragraph 12.1.4.2 of GC 12.1 – READY-FOR-TAKEOVER.

Shop Drawings

Shop Drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures, *Product* data, and other data which the *Contractor* provides to illustrate details of portions of the *Work*.

Specifications

The *Specifications* are that portion of the *Contract Documents*, wherever located and whenever issued, consisting of the written requirements and standards for *Products*, systems, workmanship, quality, and the services necessary for the performance of the *Work*.

Subcontractor

A *Subcontractor* is a person or entity having a direct contract with the *Contractor* to perform a part or parts of the *Work* at the *Place of the Work*.

Substantial Performance of the Work

Substantial Performance of the Work is as defined in the lien legislation applicable to the *Place of the Work*.

Supplemental Instruction

A *Supplemental Instruction* is an instruction, not involving adjustment in the *Contract Price* or *Contract Time*, in the form of *Specifications*, *Drawings*, schedules, samples, models, or written instructions, consistent with the intent of the *Contract Documents*. It is to be issued by the *Consultant* to supplement the *Contract Documents* as required for the performance of the *Work*.

Supplier

A *Supplier* is a person or entity having a direct contract with the *Contractor* to supply *Products*.

Temporary Work

Temporary Work means temporary supports, structures, facilities, services, and other temporary items, excluding *Construction Equipment*, required for the execution of the *Work* but not incorporated into the *Work*.

Value Added Taxes

Value Added Taxes means such sum as shall be levied upon the *Contract Price* by the Federal or any Provincial or Territorial Government and is computed as a percentage of the *Contract Price* and includes the Goods and Services Tax, the Quebec Sales Tax, the Harmonized Sales Tax, and any similar tax, the collection and payment of which have been imposed on the *Contractor* by tax legislation.

Work

The *Work* means the total construction and related services required by the *Contract Documents*.

Working Day

Working Day means a day other than a Saturday, Sunday, statutory holiday, or statutory vacation day that is observed by the construction industry in the area of the *Place of the Work*.

GENERAL CONDITIONS

PART 1 GENERAL PROVISIONS

GC 1.1 CONTRACT DOCUMENTS

- 1.1.1 The intent of the *Contract Documents* is to include the labour, *Products* and services necessary for the performance of the *Work* by the *Contractor* in accordance with these documents. It is not intended, however, that the *Contractor* shall supply products or perform work not consistent with, not covered by, or not properly inferable from the *Contract Documents*.
- 1.1.2 The *Contract Documents* are complementary, and what is required by one shall be as binding as if required by all. Performance by the *Contractor* shall be required only to the extent consistent with the *Contract Documents*.
- 1.1.3 The *Contractor* shall review the *Contract Documents* for the purpose of facilitating co-ordination and execution of the *Work* by the *Contractor*.
- 1.1.4 The *Contractor* is not responsible for errors, omissions or inconsistencies in the *Contract Documents*. If there are perceived errors, omissions or inconsistencies discovered by or made known to the *Contractor*, the *Contractor* shall promptly report to the *Consultant* and shall not proceed with the work affected until the *Contractor* has received corrected or additional information from the *Consultant*.
- 1.1.5 If there is a conflict within the *Contract Documents*:
- .1 the order of priority of documents, from highest to lowest, shall be
 - the Agreement between *Owner* and *Contractor*,
 - the Definitions,
 - Supplementary Conditions,
 - the General Conditions,
 - Division 01 of the *Specifications*,
 - technical *Specifications*,
 - material and finishing schedules,
 - the *Drawings*.
 - .2 *Drawings* of larger scale shall govern over those of smaller scale of the same date.
 - .3 dimensions shown on *Drawings* shall govern over dimensions scaled from *Drawings*.
 - .4 amended or later dated documents shall govern over earlier documents of the same type.
 - .5 noted materials and annotations shall govern over graphic indications.
- 1.1.6 Nothing contained in the *Contract Documents* shall create any contractual relationship between:
- .1 the *Owner* and a *Subcontractor*, a *Supplier*, or their agent, employee, or other person performing any portion of the *Work*.
 - .2 the *Consultant* and the *Contractor*, a *Subcontractor*, a *Supplier*, or their agent, employee, or other person performing any portion of the *Work*.
- 1.1.7 Words and abbreviations which have well known technical or trade meanings are used in the *Contract Documents* in accordance with such recognized meanings.
- 1.1.8 References in the *Contract Documents* to the singular shall be considered to include the plural as the context requires.
- 1.1.9 Neither the organization of the *Specifications* nor the arrangement of *Drawings* shall control the *Contractor* in dividing the work among *Subcontractors* and *Suppliers*.
- 1.1.10 *Specifications*, *Drawings*, models, and copies thereof furnished by the *Consultant* are and shall remain the *Consultant's* property, with the exception of the signed *Contract* sets, which shall belong to each party to the *Contract*. All *Specifications*, *Drawings* and models furnished by the *Consultant* are to be used only with respect to the *Work* and are not to be used on other work. These *Specifications*, *Drawings* and models are not to be copied or altered in any manner without the written authorization of the *Consultant*.
- 1.1.11 Physical models furnished by the *Contractor* at the *Owner's* expense are the property of the *Owner*.

GC 1.2 LAW OF THE CONTRACT

- 1.2.1 The law of the *Place of the Work* shall govern the interpretation of the *Contract*.

GC 1.3 RIGHTS AND REMEDIES

- 1.3.1 Except as expressly provided in the *Contract Documents*, the duties and obligations imposed by the *Contract Documents* and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights, and remedies otherwise imposed or available by law.

- 1.3.2 No action or failure to act by the *Owner*, the *Consultant* or the *Contractor* shall constitute a waiver of any right or duty afforded any of them under the *Contract*, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

GC 1.4 ASSIGNMENT

- 1.4.1 Neither party to the *Contract* shall assign the *Contract* or a portion thereof without the written consent of the other, which consent shall not be unreasonably withheld.

PART 2 ADMINISTRATION OF THE CONTRACT

GC 2.1 AUTHORITY OF THE CONSULTANT

- 2.1.1 The *Consultant* will have authority to act on behalf of the *Owner* only to the extent provided in the *Contract Documents*, unless otherwise modified by written agreement as provided in paragraph 2.1.2.
- 2.1.2 The duties, responsibilities and limitations of authority of the *Consultant* as set forth in the *Contract Documents* shall be modified or extended only with the written consent of the *Owner*, the *Consultant* and the *Contractor*.

GC 2.2 ROLE OF THE CONSULTANT

- 2.2.1 The *Consultant* will provide administration of the *Contract* as described in the *Contract Documents*.
- 2.2.2 The *Consultant* will visit the *Place of the Work* at intervals appropriate to the progress of construction to become familiar with the progress and quality of the work and to determine if the *Work* is proceeding in general conformity with the *Contract Documents*.
- 2.2.3 If the *Owner* and the *Consultant* agree, the *Consultant* will provide at the *Place of the Work*, one or more project representatives to assist in carrying out the *Consultant's* responsibilities. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in writing to the *Contractor*.
- 2.2.4 Based on the *Consultant's* observations and evaluation of the *Contractor's* applications for payment, the *Consultant* will determine the amounts owing to the *Contractor* under the *Contract* and will issue certificates for payment as provided in Article A-5 of the Agreement – PAYMENT, GC 5.3 – PAYMENT and GC 5.5 – FINAL PAYMENT.
- 2.2.5 The *Consultant* will not be responsible for and will not have control, charge or supervision of construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs required in connection with the *Work* in accordance with the applicable construction safety legislation, other regulations or general construction practice. The *Consultant* will not be responsible for the *Contractor's* failure to perform the *Work* in accordance with the *Contract Documents*.
- 2.2.6 Except with respect to GC 5.1 – FINANCING INFORMATION REQUIRED OF THE OWNER, the *Consultant* will be, in the first instance, the interpreter of the requirements of the *Contract Documents*.
- 2.2.7 Matters in question relating to the performance of the *Work* or the interpretation of the *Contract Documents* shall be initially referred in writing to the *Consultant* by the party raising the question for interpretations and findings and copied to the other party.
- 2.2.8 Interpretations and findings of the *Consultant* shall be consistent with the intent of the *Contract Documents*. In making such interpretations and findings the *Consultant* will not show partiality to either the *Owner* or the *Contractor*.
- 2.2.9 The *Consultant's* interpretations and findings will be given in writing to the parties within a reasonable time.
- 2.2.10 With respect to claims for a change in *Contract Price*, the *Consultant* will make findings as set out in GC 6.6 – CLAIMS FOR A CHANGE IN CONTRACT PRICE.
- 2.2.11 The *Consultant* will have authority to reject work which in the *Consultant's* opinion does not conform to the requirements of the *Contract Documents*. Whenever the *Consultant* considers it necessary or advisable, the *Consultant* will have authority to require inspection or testing of work, whether or not such work is fabricated, installed or completed. However, neither the authority of the *Consultant* to act nor any decision either to exercise or not to exercise such authority shall give rise to any duty or responsibility of the *Consultant* to the *Contractor*, *Subcontractors*, *Suppliers*, or their agents, employees, or other persons performing any of the *Work*.
- 2.2.12 During the progress of the *Work* the *Consultant* will furnish *Supplemental Instructions* to the *Contractor* with reasonable promptness or in accordance with a schedule for such instructions agreed to by the *Consultant* and the *Contractor*.
- 2.2.13 The *Consultant* will review and take appropriate action upon *Shop Drawings*, samples and other submittals by the *Contractor*, in accordance with the *Contract Documents*.

- 2.2.14 The *Consultant* will prepare *Change Orders* and *Change Directives* as provided in GC 6.2 – CHANGE ORDER and GC 6.3 – CHANGE DIRECTIVE.
- 2.2.15 The *Consultant* will conduct reviews of the *Work* to determine the date of *Substantial Performance of the Work* and verify that *Ready-for-Takeover* has been attained.
- 2.2.16 All certificates issued by the *Consultant* will be to the best of the *Consultant's* knowledge, information and belief. By issuing any certificate, the *Consultant* does not guarantee the *Work* is correct or complete.
- 2.2.17 The *Consultant* will receive and review written warranties and related documents required by the *Contract* and provided by the *Contractor* and will forward such warranties and documents to the *Owner* for the *Owner's* acceptance.
- 2.2.18 If the *Consultant's* engagement is terminated, the *Owner* shall immediately engage a *Consultant* against whom the *Contractor* makes no reasonable objection and whose duties and responsibilities under the *Contract Documents* will be that of the former *Consultant*.

GC 2.3 REVIEW AND INSPECTION OF THE WORK

- 2.3.1 The *Owner* and the *Consultant* shall have access to the *Work* at all times. The *Contractor* shall provide sufficient, safe and proper facilities at all times for the review of the *Work* by the *Consultant* and the inspection of the *Work* by authorized agencies. If parts of the *Work* are in preparation at locations other than the *Place of the Work*, the *Owner* and the *Consultant* shall be given access to such work whenever it is in progress.
- 2.3.2 If work is designated for tests, inspections or approvals in the *Contract Documents*, by the *Consultant's* instructions, or by the laws or ordinances of the *Place of the Work*, the *Contractor* shall give the *Consultant* reasonable notification of when the work will be ready for review and inspection. The *Contractor* shall arrange for and shall give the *Consultant* reasonable notification of the date and time of inspections by other authorities.
- 2.3.3 The *Contractor* shall furnish promptly to the *Consultant* two copies of certificates and inspection reports relating to the *Work*.
- 2.3.4 If the *Contractor* covers, or permits to be covered, work that has been designated for special tests, inspections or approvals before such special tests, inspections or approvals are made, given or completed, the *Contractor* shall, if so directed, uncover such work, have the inspections or tests satisfactorily completed, and make good covering work at the *Contractor's* expense.
- 2.3.5 The *Consultant* may order any portion or portions of the *Work* to be examined to confirm that such work is in accordance with the requirements of the *Contract Documents*. If the work is not in accordance with the requirements of the *Contract Documents*, the *Contractor* shall correct the work and pay the cost of examination and correction. If the work is in accordance with the requirements of the *Contract Documents*, the *Owner* shall pay the cost of examination and restoration.
- 2.3.6 The *Contractor* shall pay the cost of making any test or inspection, including the cost of samples required for such test or inspection, if such test or inspection is designated in the *Contract Documents* to be performed by the *Contractor* or is required by the laws or ordinances applicable to the *Place of the Work*.
- 2.3.7 The *Contractor* shall pay the cost of samples required for any test or inspection to be performed by others if such test or inspection is designated in the *Contract Documents*.

GC 2.4 DEFECTIVE WORK

- 2.4.1 The *Contractor* shall promptly correct defective work that has been rejected by the *Consultant* as failing to conform to the *Contract Documents* whether or not the defective work was incorporated in the *Work* or the defect is the result of poor workmanship, use of defective products or damage through carelessness or other act or omission of the *Contractor*.
- 2.4.2 The *Contractor* shall make good promptly *Other Contractors'* work destroyed or damaged by such corrections at the *Contractor's* expense.
- 2.4.3 If in the opinion of the *Consultant* it is not expedient to correct defective work or work not performed as provided in the *Contract Documents*, the *Owner* may deduct from the amount otherwise due to the *Contractor* the difference in value between the work as performed and that called for by the *Contract Documents*. If the *Owner* and the *Contractor* do not agree on the difference in value, they shall refer the matter to the *Consultant* for a finding.

PART 3 EXECUTION OF THE WORK

GC 3.1 CONTROL OF THE WORK

- 3.1.1 The *Contractor* shall have total control of the *Work* and shall effectively direct and supervise the *Work* so as to ensure conformity with the *Contract Documents*.

- 3.1.2 The *Contractor* shall be solely responsible for construction means, methods, techniques, sequences, and procedures and for co-ordinating the various parts of the *Work* under the *Contract*.

GC 3.2 CONSTRUCTION BY THE OWNER OR OTHER CONTRACTORS

- 3.2.1 The *Owner* reserves the right to award separate contracts in connection with other parts of the *Project* to *Other Contractors* and to perform work with own forces.
- 3.2.2 When separate contracts are awarded for other parts of the *Project*, or when work is performed by the *Owner's* own forces, the *Owner* shall:
- .1 provide for the co-ordination of the activities and work of *Other Contractors* and the *Owner's* own forces with the *Work* of the *Contract*;
 - .2 enter into separate contracts with *Other Contractors* under conditions of contract which are compatible with the conditions of the *Contract*;
 - .3 ensure that insurance coverage is provided to the same requirements as are called for in GC 11.1 – INSURANCE and co-ordinate such insurance with the insurance coverage of the *Contractor* as it affects the *Work*; and
 - .4 take all reasonable precautions to avoid labour disputes or other disputes on the *Project* arising from the work of *Other Contractors* or the *Owner's* own forces.
- 3.2.3 When separate contracts are awarded for other parts of the *Project*, or when work is performed by the *Owner's* own forces, the *Contractor* shall:
- .1 afford the *Owner* and *Other Contractors* reasonable opportunity to store their products and execute their work;
 - .2 co-ordinate and schedule the *Work* with the work of *Other Contractors* or the *Owner's* own forces that are identified in the *Contract Documents*;
 - .3 participate with *Other Contractors* and the *Owner* in reviewing their construction schedules when directed to do so; and
 - .4 report promptly to the *Consultant* in writing any apparent deficiencies in the work of *Other Contractors* or of the *Owner's* own forces, where such work affects the proper execution of any portion of the *Work*, prior to proceeding with that portion of the *Work*.
- 3.2.4 Where a change in the *Work* is required as a result of the co-ordination and integration of the work of *Other Contractors* or *Owner's* own forces with the *Work*, the changes shall be authorized and valued as provided in GC 6.1 – OWNER'S RIGHT TO MAKE CHANGES, GC 6.2 – CHANGE ORDER and GC 6.3 – CHANGE DIRECTIVE.
- 3.2.5 Disputes and other matters in question between the *Contractor* and *Other Contractors* shall be dealt with as provided in Part 8 of the General Conditions – DISPUTE RESOLUTION provided the *Other Contractors* have reciprocal obligations. The *Contractor* shall be deemed to have consented to arbitration of any dispute with any *Other Contractor* whose contract with the *Owner* contains a similar agreement to arbitrate. In the absence of *Other Contractors* having reciprocal obligations, disputes and other matters in question initiated by the *Contractor* against *Other Contractors* will be considered disputes and other matters in question between the *Contractor* and the *Owner*.
- 3.2.6 Should the *Owner*, the *Consultant*, *Other Contractors*, or anyone employed by them directly or indirectly be responsible for ill-timed work necessitating cutting or remedial work to be performed, the cost of such cutting or remedial work shall be valued as provided in GC 6.1 – OWNER'S RIGHT TO MAKE CHANGES, GC 6.2 – CHANGE ORDER and GC 6.3 – CHANGE DIRECTIVE.

GC 3.3 TEMPORARY WORK

- 3.3.1 The *Contractor* shall have the sole responsibility for the design, erection, operation, maintenance, and removal of *Temporary Work* unless otherwise specified in the *Contract Documents*.
- 3.3.2 The *Contractor* shall engage and pay for registered professional engineering personnel skilled in the appropriate disciplines to perform those functions referred to in paragraph 3.3.1 where required by law or by the *Contract Documents* and in all cases where such *Temporary Work* is of such a nature that professional engineering skill is required to produce safe and satisfactory results.
- 3.3.3 Notwithstanding the provisions of GC 3.1 – CONTROL OF THE WORK, paragraphs 3.3.1 and 3.3.2 or provisions to the contrary elsewhere in the *Contract Documents* where such *Contract Documents* include designs for *Temporary Work* or specify a method of construction in whole or in part, such designs or methods of construction shall be considered to be part of the design of the *Work* and the *Contractor* shall not be held responsible for that part of the design or the specified method of construction. The *Contractor* shall, however, be responsible for the execution of such design or specified method of construction in the same manner as for the execution of the *Work*.

GC 3.4 CONSTRUCTION SCHEDULE

3.4.1 The *Contractor* shall:

- .1 prepare and submit to the *Owner* and the *Consultant* prior to the first application for payment, a construction schedule that indicates the timing of the major activities of the *Work* and provides sufficient detail of the critical events and their inter-relationship to demonstrate the *Work* will be performed in conformity with the *Contract Time*;
- .2 monitor the progress of the *Work* relative to the construction schedule and update the schedule on a monthly basis or as stipulated by the *Contract Documents*; and
- .3 advise the *Consultant* of any revisions required to the schedule as the result of extensions of the *Contract Time* as provided in Part 6 of the General Conditions – CHANGES IN THE WORK.

GC 3.5 SUPERVISION

- 3.5.1 The *Contractor* shall provide all necessary supervision and appoint a competent representative who shall be in attendance at the *Place of the Work* while the *Work* is being performed. The appointed representative shall not be changed except for valid reason.
- 3.5.2 The appointed representative shall represent the *Contractor* at the *Place of the Work*. Information and instructions provided by the *Consultant* to the *Contractor's* appointed representative shall be deemed to have been received by the *Contractor*, except with respect to Article A-6 of the Agreement – RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING.

GC 3.6 SUBCONTRACTORS AND SUPPLIERS

- 3.6.1 The *Contractor* shall preserve and protect the rights of the parties under the *Contract* with respect to work to be performed under subcontract, and shall:
- .1 enter into contracts or written agreements with *Subcontractors* and *Suppliers* to require them to perform their work as provided in the *Contract Documents*;
 - .2 incorporate the applicable terms and conditions of the *Contract Documents* into all contracts or written agreements with *Subcontractors* and *Suppliers*; and
 - .3 be as fully responsible to the *Owner* for acts and omissions of *Subcontractors*, *Suppliers* and any persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the *Contractor*.
- 3.6.2 The *Contractor* shall indicate in writing, if requested by the *Owner*, those *Subcontractors* or *Suppliers* whose bids have been received by the *Contractor* which the *Contractor* would be prepared to accept for the performance of a portion of the *Work*. Should the *Owner* not object before signing the *Contract*, the *Contractor* shall employ those *Subcontractors* or *Suppliers* so identified by the *Contractor* in writing for the performance of that portion of the *Work* to which their bid applies.
- 3.6.3 The *Owner* may, for reasonable cause, at any time before the *Owner* has signed the *Contract*, object to the use of a proposed *Subcontractor* or *Supplier* and require the *Contractor* to employ one of the other subcontract bidders.
- 3.6.4 If the *Owner* requires the *Contractor* to change a proposed *Subcontractor* or *Supplier*, the *Contract Price* and *Contract Time* shall be adjusted by the difference occasioned by such required change.
- 3.6.5 The *Contractor* shall not be required to employ as a *Subcontractor* or *Supplier*, a person or firm to which the *Contractor* may reasonably object.
- 3.6.6 The *Owner*, through the *Consultant*, may provide to a *Subcontractor* or *Supplier* information as to the percentage of the *Subcontractor's* or *Supplier's* work which has been certified for payment.

GC 3.7 LABOUR AND PRODUCTS

- 3.7.1 The *Contractor* shall maintain good order and discipline among the *Contractor's* employees engaged on the *Work* and employ only workers that are skilled in the tasks assigned.
- 3.7.2 The *Contractor* shall provide and pay for labour, *Products*, tools, *Construction Equipment*, water, heat, light, power, transportation, and other facilities and services necessary for the performance of the *Work* in accordance with the *Contract*.
- 3.7.3 Unless otherwise specified in the *Contract Documents*, *Products* provided shall be new. *Products* which are not specified shall be of a quality consistent with those specified and their use acceptable to the *Consultant*.

GC 3.8 SHOP DRAWINGS

- 3.8.1 The *Contractor* shall provide *Shop Drawings* as required in the *Contract Documents*.
- 3.8.2 The *Contractor* shall provide *Shop Drawings* to the *Consultant* to review in accordance with an agreed schedule, or in the absence of an agreed schedule, in orderly sequence and sufficiently in advance so as to cause no delay in the *Work* or in the work of *Other Contractors* or the *Owner's* own forces.

- 3.8.3 The *Contractor* shall review all *Shop Drawings* before providing them to the *Consultant*. The *Contractor* represents by this review that:
- .1 the *Contractor* has determined and verified all applicable field measurements, field construction conditions, *Product* requirements, catalogue numbers and similar data, or will do so, and
 - .2 the *Contractor* has checked and co-ordinated each *Shop Drawing* with the requirements of the *Work* and of the *Contract Documents*.
- 3.8.4 The *Consultant's* review is for conformity to the design concept and for general arrangement only.
- 3.8.5 At the time of providing *Shop Drawings*, the *Contractor* shall expressly advise the *Consultant* in writing of any deviations in a *Shop Drawing* from the requirements of the *Contract Documents*. The *Consultant* shall indicate the acceptance or rejection of such deviation expressly in writing.
- 3.8.6 The *Consultant's* review shall not relieve the *Contractor* of responsibility for errors or omissions in the *Shop Drawings* or for meeting all requirements of the *Contract Documents*.
- 3.8.7 The *Consultant* will review and return *Shop Drawings* in accordance with the schedule agreed upon, or, in the absence of such schedule, with reasonable promptness so as to cause no delay in the performance of the *Work*.

PART 4 ALLOWANCES

GC 4.1 CASH ALLOWANCES

- 4.1.1 The *Contract Price* includes the cash allowances, if any, stated in the *Contract Documents*. The scope of the *Work* or costs included in such cash allowances shall be as described in the *Contract Documents*.
- 4.1.2 The *Contract Price*, and not the cash allowances, includes the *Contractor's* overhead and profit in connection with such cash allowances.
- 4.1.3 Expenditures under cash allowances shall be authorized by the *Owner* through the *Consultant*.
- 4.1.4 Where the actual cost of the *Work* under any cash allowance exceeds the amount of the allowance, any unexpended amounts from other cash allowances shall be reallocated, at the *Consultant's* direction, to cover the shortfall, and, in that case, there shall be no additional amount added to the *Contract Price* for overhead and profit. Only where the actual cost of the *Work* under all cash allowances exceeds the total amount of all cash allowances shall the *Contractor* be compensated for the excess incurred and substantiated, plus an amount for overhead and profit on the excess only, as set out in the *Contract Documents*.
- 4.1.5 The net amount of any unexpended cash allowances, after providing for any reallocations as contemplated in paragraph 4.1.4, shall be deducted from the *Contract Price* by *Change Order* without any adjustment for the *Contractor's* overhead and profit on such amount.
- 4.1.6 The value of the *Work* performed under a cash allowance is eligible to be included in progress payments.
- 4.1.7 The *Contractor* and the *Consultant* shall jointly prepare a schedule that shows when the items called for under cash allowances must be ordered to avoid delaying the progress of the *Work*.

GC 4.2 CONTINGENCY ALLOWANCE

- 4.2.1 The *Contract Price* includes the contingency allowance, if any, stated in the *Contract Documents*.
- 4.2.2 The contingency allowance includes the *Contractor's* overhead and profit in connection with such contingency allowance.
- 4.2.3 Expenditures under the contingency allowance shall be authorized and valued as provided in GC 6.1 – OWNER'S RIGHT TO MAKE CHANGES, GC 6.2 – CHANGE ORDER and GC 6.3 – CHANGE DIRECTIVE.
- 4.2.4 The *Contract Price* shall be adjusted by *Change Order* to provide for any difference between the expenditures authorized under paragraph 4.2.3 and the contingency allowance.

PART 5 PAYMENT

GC 5.1 FINANCING INFORMATION REQUIRED OF THE OWNER

- 5.1.1 The *Owner* shall, at the request of the *Contractor*, before signing the *Contract*, and promptly from time to time thereafter, furnish to the *Contractor* reasonable evidence that financial arrangements have been made to fulfill the *Owner's* obligations under the *Contract*.
- 5.1.2 The *Owner* shall give the *Contractor Notice in Writing* of any material change in the *Owner's* financial arrangements to fulfill the *Owner's* obligations under the *Contract* during the performance of the *Contract*.

GC 5.2 APPLICATIONS FOR PAYMENT

- 5.2.1 Applications for payment on account as provided in Article A-5 of the Agreement – PAYMENT shall be submitted monthly to the *Owner* and the *Consultant* simultaneously as the *Work* progresses.
- 5.2.2 Applications for payment shall be dated the last day of each payment period, which is the last day of the month or an alternative day of the month agreed in writing by the parties.
- 5.2.3 The amount claimed shall be for the value, proportionate to the amount of the *Contract*, of *Work* performed and *Products* delivered to the *Place of the Work* as of the last day of the payment period.
- 5.2.4 The *Contractor* shall submit to the *Consultant*, at least 15 calendar days before the first application for payment, a schedule of values for the parts of the *Work*, aggregating the total amount of the *Contract Price*, so as to facilitate evaluation of applications for payment.
- 5.2.5 The schedule of values shall be made out in such form as specified in the *Contract* and supported by such evidence as the *Consultant* may reasonably require.
- 5.2.6 Applications for payment shall be based on the schedule of values accepted by the *Consultant* and shall comply with the provisions of *Payment Legislation*.
- 5.2.7 Each application for payment shall include evidence of compliance with workers' compensation legislation at the *Place of the Work* and after the first payment, a declaration by the *Contractor* as to the distribution made of the amounts previously received using document CCDC 9A 'Statutory Declaration'.
- 5.2.8 Applications for payment for *Products* delivered to the *Place of the Work* but not yet incorporated into the *Work* shall be supported by such evidence as the *Consultant* may reasonably require to establish the value and delivery of the *Products*.

GC 5.3 PAYMENT

- 5.3.1 After receipt by the *Consultant* and the *Owner* of an application for payment submitted by the *Contractor* in accordance with GC 5.2 – APPLICATIONS FOR PAYMENT:
 - .1 The *Consultant* will issue to the *Owner* and copy to the *Contractor*, no later than 10 calendar days after the receipt of the application for payment, a certificate for payment in the amount applied for, or in such other amount as the *Consultant* determines to be properly due. If the *Consultant* certifies a different amount, or rejects the application or part thereof, the *Owner* shall promptly issue a written notice to the *Contractor* giving reasons for the revision or rejection, such written notice to be in compliance with *Payment Legislation*.
 - .2 The *Owner* shall make payment to the *Contractor* on account as provided in Article A-5 of the Agreement – PAYMENT on or before 28 calendar days after the receipt by the *Owner* and the *Consultant* of the application for payment, and in any event, in compliance with *Payment Legislation*.

GC 5.4 SUBSTANTIAL PERFORMANCE OF THE WORK AND PAYMENT OF HOLDBACK

- 5.4.1 The *Consultant* will review the *Work* to certify or verify the validity of the application for *Substantial Performance of the Work* and will promptly, and in any event, no later than 20 calendar days after receipt of the *Contractors* 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*.
- 5.4.2 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*.
- 5.4.3 Subject to the requirements of any *Payment Legislation*, all holdback amount prescribed by the applicable lien legislation for 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*.
- 5.4.4 The *Contractor* shall submit an application for payment of the lien holdback amount in accordance with GC 5.3 – PAYMENT.
- 5.4.5 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, such portion to the *Contractor* in accordance with such legislation.

- 5.4.6 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 and 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

- 5.5.1 When the *Contractor* considers that the *Work* is completed, the *Contractor* shall submit an application for final payment.
- 5.5.2 The *Consultant* will, no later than 10 calendar days after the receipt of an application from the *Contractor* for final payment, review the *Work* to verify the validity of the application and when the *Consultant* finds the *Contractor's* application for final payment valid, the *Consultant* will promptly issue a final certificate for payment to the *Owner*, with a copy to the *Contractor*.
- 5.5.3 If the *Consultant* rejects the application or part thereof, the *Owner* will promptly issue a written notice to the *Contractor* giving reasons for the revision or rejection, such written notice to be in compliance with *Payment Legislation*.
- 5.5.4 Subject to the provision of paragraph 10.4.1 of GC 10.4 – WORKERS' COMPENSATION, and any legislation applicable to the *Place of the Work*, the *Owner* shall, no later than 5 calendar days after the issuance of a final certificate for payment, pay the *Contractor* as provided in Article A-5 of the Agreement – PAYMENT and in any event, in compliance with *Payment Legislation*.

GC 5.6 DEFERRED WORK

- 5.6.1 If because of climatic or other conditions reasonably beyond the control of the *Contractor*, or if the *Owner* and the *Contractor* agree that, there are items of work that must be deferred, payment in full for that portion of the *Work* which has been performed as certified by the *Consultant* shall not be withheld or delayed by the *Owner* on account thereof, but the *Owner* may withhold, until the remaining portion of the *Work* is finished, only such an amount that the *Consultant* determines is sufficient and reasonable to cover the cost of performing such deferred *Work*.

GC 5.7 NON-CONFORMING WORK

- 5.7.1 No payment by the *Owner* under the *Contract* nor partial or entire use or occupancy of the *Work* by the *Owner* shall constitute an acceptance of any portion of the *Work* or *Products* which are not in accordance with the requirements of the *Contract Documents*.

PART 6 CHANGES IN THE WORK

GC 6.1 OWNER'S RIGHT TO MAKE CHANGES

- 6.1.1 The *Owner*, through the *Consultant*, without invalidating the *Contract*, may make:
- .1 changes in the *Work* consisting of additions, deletions or other revisions to the *Work* by *Change Order* or *Change Directive*, and
 - .2 changes to the *Contract Time* for the *Work*, or any part thereof, by *Change Order*.
- 6.1.2 The *Contractor* shall not perform a change in the *Work* without a *Change Order* or a *Change Directive*.

GC 6.2 CHANGE ORDER

- 6.2.1 When a change in the *Work* is proposed or required, the *Consultant* will provide the *Contractor* with a written description of the proposed change in the *Work*. The *Contractor* shall promptly present to the *Consultant*, in a form that can be reasonably evaluated, a method of adjustment or an amount of adjustment for the *Contract Price*, if any, and the adjustment in the *Contract Time*, if any, for the proposed change in the *Work*.
- 6.2.2 When the *Owner* and the *Contractor* agree to the adjustments in the *Contract Price* and *Contract Time* or to the method to be used to determine the adjustments, such agreement shall be effective immediately and shall be recorded in a *Change Order*. The value of the work performed as the result of a *Change Order* shall be included in the applications for progress payment.

GC 6.3 CHANGE DIRECTIVE

- 6.3.1 If the *Owner* requires the *Contractor* to proceed with a change in the *Work* prior to the *Owner* and the *Contractor* agreeing upon the corresponding adjustment in *Contract Price* and *Contract Time*, the *Owner*, through the *Consultant*, shall issue a *Change Directive*.
- 6.3.2 A *Change Directive* shall only be used to direct a change in the *Work* which is within the general scope of the *Contract Documents*.
- 6.3.3 A *Change Directive* shall not be used to direct a change in the *Contract Time* only.

- 6.3.4 Upon receipt of a *Change Directive*, the *Contractor* shall proceed promptly with the change in the *Work*.
- 6.3.5 For the purpose of valuing *Change Directives*, changes in the *Work* that are not substitutions or otherwise related to each other shall not be grouped together in the same *Change Directive*.
- 6.3.6 The adjustment in the *Contract Price* for a change carried out by way of a *Change Directive* shall be determined on the basis of the cost of the *Contractor's* actual expenditures and savings attributable to the *Change Directive*, valued in accordance with paragraph 6.3.7 and as follows:
- .1 If the change results in a net increase in the *Contractor's* cost, the *Contract Price* shall be increased by the amount of the net increase in the *Contractor's* cost, plus the *Contractor's* percentage fee on such net increase.
 - .2 If the change results in a net decrease in the *Contractor's* cost, the *Contract Price* shall be decreased by the amount of the net decrease in the *Contractor's* cost, without adjustment for the *Contractor's* percentage fee.
 - .3 The *Contractor's* fee shall be as specified in the *Contract Documents* or as otherwise agreed by the parties.
- 6.3.7 The cost of performing the work attributable to the *Change Directive* shall be limited to the actual cost of the following in as much as it contributes directly to the implementation of the *Change Directive*:

Labour

- .1 rates that are listed in the schedule or as agreed by the *Owner* and the *Contractor* including wages, benefits, compensation, contributions, assessments, or taxes incurred for such items as employment insurance, provincial or territorial health insurance, workers' compensation, and Canada or Quebec Pension Plan for:
 - (1) trade labour in the direct employ of the *Contractor*;
 - (2) the *Contractor's* personnel when stationed at the field office;
 - (3) the *Contractor's* personnel engaged at shops or on the road, in expediting the production or transportation of materials or equipment; and
 - (4) the *Contractor's* office personnel engaged in a technical capacity, or other personnel identified in Article A-3 of the Agreement – CONTRACT DOCUMENTS for the time spent in the performance of the *Work*;

Products, Construction Equipment and Temporary Work

- .2 cost of all *Products* including cost of transportation thereof;
- .3 in the absence of agreed rates, cost less salvage value of *Construction Equipment*, *Temporary Work* and tools, exclusive of hand tools under \$1,000 owned by the *Contractor*;
- .4 rental cost of *Construction Equipment*, *Temporary Work* and tools, exclusive of hand tools under \$1,000;
- .5 cost of all equipment and services required for the *Contractor's* field office;

Subcontract

- .6 subcontract amounts of Subcontractor with pricing mechanism approved by the *Owner*;

Others

- .7 travel and subsistence expenses of the *Contractor's* personnel described in paragraph 6.3.7.1;
- .8 deposits lost provided that they are not caused by negligent acts or omissions of the *Contractor*;
- .9 cost of quality assurance such as independent inspection and testing services;
- .10 charges levied by authorities having jurisdiction at the *Place of the Work*;
- .11 royalties, patent license fees, and damages for infringement of patents and cost of defending suits therefor subject always to the *Contractor's* obligations to indemnify the *Owner* as provided in paragraph 10.3.1 of GC 10.3 – PATENT FEES;
- .12 premium for all contract securities and insurance for which the *Contractor* is required, by the *Contract Documents*, to provide, maintain and pay in relation to the performance of the *Work*;
- .13 losses and expenses sustained by the *Contractor* for matters which are the subject of insurance under the policies prescribed in GC 11.1 – INSURANCE when such losses and expenses are not recoverable because the amounts are in excess of collectible amounts or within the deductible amounts;
- .14 taxes and duties, other than *Value Added Taxes*, income, capital, or property taxes, relating to the *Work* for which the *Contractor* is liable;
- .15 charges for voice and data communications, courier services, expressage, transmittal and reproduction of documents, and petty cash items;
- .16 cost for removal and disposal of waste products and debris;
- .17 legal costs, incurred by the *Contractor*, in relation to the performance of the *Work* provided that they are not:
 - (1) relating to a dispute between the *Owner* and the *Contractor* unless such costs are part of a settlement or awarded by arbitration or court,
 - (2) the result of the negligent acts or omissions of the *Contractor*, or
 - (3) the result of a breach of this *Contract* by the *Contractor*;
- .18 cost of auditing when requested by the *Owner*; and
- .19 cost of *Project* specific information technology in accordance with the method determined by the parties.

- 6.3.8 Notwithstanding any other provisions contained in the General Conditions of the *Contract*, it is the intention of the parties that the cost of any item under any cost element referred to in paragraph 6.3.7 shall cover and include any and all costs or liabilities attributable to the *Change Directive* other than those which are the result of or occasioned by any failure on the part of the *Contractor* to exercise reasonable care and diligence in the *Contractor's* attention to the *Work*. Any cost due to failure on the part of the *Contractor* to exercise reasonable care and diligence in the *Contractor's* performance of the *Work* attributable to the *Change Directive* shall be borne by the *Contractor*.
- 6.3.9 The *Contractor* shall keep full and detailed accounts and records necessary for the documentation of the cost of performing the *Work* attributable to the *Change Directive* and shall provide the *Consultant* with copies thereof.
- 6.3.10 For the purpose of valuing *Change Directives*, the *Owner* shall be afforded reasonable access to all of the *Contractor's* pertinent documents related to the cost of performing the *Work* attributable to the *Change Directive*.
- 6.3.11 Pending determination of the final amount of a *Change Directive*, the undisputed value of the *Work* performed as the result of a *Change Directive* is eligible to be included in progress payments.
- 6.3.12 If the *Owner* and the *Contractor* do not agree on the proposed adjustment in the *Contract Time* attributable to the change in the *Work*, or the method of determining it, the adjustment shall be referred to the *Consultant* for a finding.
- 6.3.13 When the *Owner* and the *Contractor* reach agreement on the adjustment to the *Contract Price* and to the *Contract Time*, this agreement shall be recorded in a *Change Order*.

GC 6.4 CONCEALED OR UNKNOWN CONDITIONS

- 6.4.1 If the *Owner* or the *Contractor* discover conditions at the *Place of the Work* which are:
- .1 subsurface or otherwise concealed physical conditions which existed before the commencement of the *Work* and differ materially from those indicated in the *Contract Documents*; or
 - .2 physical conditions, other than conditions due to weather, that are of a nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the *Contract Documents*,
- then the observing party shall give *Notice in Writing* to the other party of such conditions before they are disturbed and in no event later than 5 *Working Days* after first observance of the conditions.
- 6.4.2 The *Consultant* will promptly investigate such conditions and make a finding. If the finding is that the conditions differ materially and this would cause an increase or decrease in the *Contractor's* cost or time to perform the *Work*, the *Owner*, through the *Consultant*, shall issue appropriate instructions for a change in the *Work* as provided in GC 6.2 – CHANGE ORDER or GC 6.3 – CHANGE DIRECTIVE.
- 6.4.3 If the *Consultant* finds that the conditions at the *Place of the Work* are not materially different or that no change in the *Contract Price* or the *Contract Time* is justified, the *Consultant* will promptly inform the *Owner* and the *Contractor* in writing.
- 6.4.4 If such concealed or unknown conditions relate to toxic and hazardous substances and materials, artifacts and fossils, or mould, the parties will be governed by the provisions of GC 9.2 – TOXIC AND HAZARDOUS SUBSTANCES, GC 9.3 – ARTIFACTS AND FOSSILS and GC 9.5 – MOULD.

GC 6.5 DELAYS

- 6.5.1 If the *Contractor* is delayed in the performance of the *Work* by the *Owner*, the *Consultant*, or anyone employed or engaged by them directly or indirectly, contrary to the provisions of the *Contract Documents*, then the *Contract Time* shall be extended for such reasonable time as the *Consultant* may recommend in consultation with the *Contractor*. The *Contractor* shall be reimbursed by the *Owner* for reasonable costs incurred by the *Contractor* as the result of such delay.
- 6.5.2 If the *Contractor* is delayed in the performance of the *Work* by a stop work order issued by a court or other public authority and providing that such order was not issued as the result of an act or fault of the *Contractor* or any person employed or engaged by the *Contractor* directly or indirectly, resulting in the failure of the *Contractor* to attain *Ready-for-Takeover* by the date stipulated in Article A-1 of the Agreement – THE WORK, then the *Contract Time* shall be extended for such reasonable time as the *Consultant* may recommend in consultation with the *Contractor*. The *Contractor* shall be reimbursed by the *Owner* for reasonable costs incurred by the *Contractor* as the result of such delay.
- 6.5.3 If the *Contractor* is delayed in the performance of the *Work* by:
- .1 labour disputes, strikes, lock-outs (including lock-outs decreed or recommended for its members by a recognized contractors' association, of which the *Contractor* is a member or to which the *Contractor* is otherwise bound),
 - .2 fire, unusual delay by common carriers or unavoidable casualties,
 - .3 abnormally adverse weather conditions, or

- 4 any cause beyond the *Contractor's* control other than one resulting from a default or breach of *Contract* by the *Contractor*, then the *Contract Time* shall be extended for such reasonable time as the *Consultant* may recommend in consultation with the *Contractor*. The extension of time shall not be less than the time lost as the result of the event causing the delay, unless the *Contractor* agrees to a shorter extension. The *Contractor* shall not be entitled to payment for costs incurred by such delays unless such delays result from actions by the *Owner*, the *Consultant* or anyone employed or engaged by them directly or indirectly.

- 6.5.4 No extension shall be made for delay unless *Notice in Writing* of the cause of delay is given to the *Consultant* not later than 10 *Working Days* after the commencement of the delay. In the case of a continuing cause of delay only one *Notice in Writing* shall be necessary.
- 6.5.5 If no schedule is made under paragraph 2.2.12 of GC 2.2 – ROLE OF THE CONSULTANT, then no request for extension shall be made because of failure of the *Consultant* to furnish instructions until 10 *Working Days* after demand for such instructions has been made.

GC 6.6 CLAIMS FOR A CHANGE IN CONTRACT PRICE

- 6.6.1 If the *Contractor* intends to make a claim for an increase to the *Contract Price*, or if the *Owner* intends to make a claim against the *Contractor* for a credit to the *Contract Price*, the party that intends to make the claim shall give timely *Notice in Writing* of intent to claim to the other party and to the *Consultant*.
- 6.6.2 Upon commencement of the event or series of events giving rise to a claim, the party intending to make the claim shall:
- .1 take all reasonable measures to mitigate any loss or expense which may be incurred as a result of such event or series of events, and
 - .2 keep such records as may be necessary to support the claim.
- 6.6.3 The party making the claim shall submit within a reasonable time to the *Consultant* a detailed account of the amount claimed and the grounds upon which the claim is based and the *Consultant* will make a finding upon such claim.
- 6.6.4 Where the event or series of events giving rise to the claim has a continuing effect, the detailed account submitted under paragraph 6.6.3 shall be considered to be an interim account and the party making the claim shall, at such intervals as the *Consultant* may reasonably require, submit further interim accounts giving the accumulated amount of the claim and any further grounds upon which it is based. The party making the claim shall submit a final account after the end of the effects resulting from the event or series of events.
- 6.6.5 The *Consultant's* findings, with respect to a claim made by either party, will be given by *Notice in Writing* to both parties within 30 *Working Days* after receipt of the claim by the *Consultant*, or within such other time period as may be agreed by the parties.
- 6.6.6 If such finding is not acceptable to either party, the claim shall be settled in accordance with Part 8 of the General Conditions – DISPUTE RESOLUTION.

PART 7 DEFAULT NOTICE

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

- 7.1.1 If the *Contractor* is adjudged bankrupt, or makes a general assignment for the benefit of creditors because of the *Contractor's* insolvency, or if a receiver is appointed because of the *Contractor's* insolvency, the *Owner* may, without prejudice to any other right or remedy the *Owner* may have, terminate the *Contractor's* right to continue with the *Work*, by giving the *Contractor* or receiver or trustee in bankruptcy *Notice in Writing* to that effect.
- 7.1.2 If the *Contractor* neglects to perform the *Work* properly or otherwise fails to comply with the requirements of the *Contract* to a substantial degree and if the *Consultant* has given a written statement to the *Owner* and *Contractor* which provides the detail of such neglect to perform the *Work* properly or such failure to comply with the requirements of the *Contract* to a substantial degree, the *Owner* may, without prejudice to any other right or remedy the *Owner* may have, give the *Contractor Notice in Writing*, containing particulars of the default including references to applicable provisions of the *Contract*, that the *Contractor* is in default of the *Contractor's* contractual obligations and instruct the *Contractor* to correct the default in the 5 *Working Days* immediately following the receipt of such *Notice in Writing*.
- 7.1.3 If the default cannot be corrected in the 5 *Working Days* specified or in such other time period as may be subsequently agreed in writing by the parties, the *Contractor* shall be in compliance with the *Owner's* instructions if the *Contractor*:
- .1 commences the correction of the default within the specified time,
 - .2 provides the *Owner* with an acceptable schedule for such correction, and
 - .3 corrects the default in accordance with the *Contract* terms and with such schedule.

- 7.1.4 If the *Contractor* fails to correct the default in the time specified or in such other time period as may be subsequently agreed in writing by the parties, without prejudice to any other right or remedy the *Owner* may have, the *Owner* may by giving *Notice in Writing*:
- .1 correct such default and deduct the cost thereof from any payment then or thereafter due the *Contractor* for the *Work* provided the *Consultant* has certified such cost to the *Owner* and the *Contractor*, or
 - .2 terminate the *Contractor*'s right to continue with the *Work* in whole or in part or terminate the *Contract*.
- 7.1.5 If the *Owner* terminates the *Contractor*'s right to continue with the *Work* as provided in paragraphs 7.1.1 and 7.1.4, the *Owner* shall be entitled to:
- .1 take possession of the *Work* and *Products* at the *Place of the Work*; subject to the rights of third parties, utilize the *Construction Equipment* at the *Place of the Work*; finish the *Work* by whatever method the *Owner* may consider expedient, but without undue delay or expense,
 - .2 withhold further payment to the *Contractor* until a final certificate for payment is issued,
 - .3 charge the *Contractor* the amount by which the full cost of finishing the *Work* as certified by the *Consultant*, including compensation to the *Consultant* for the *Consultant*'s additional services and a reasonable allowance as determined by the *Consultant* to cover the cost of corrections to work performed by the *Contractor* that may be required under GC 12.3 – WARRANTY, exceeds the unpaid balance of the *Contract Price*; however, if such cost of finishing the *Work* is less than the unpaid balance of the *Contract Price*, the *Owner* shall pay the *Contractor* the difference, and
 - .4 on expiry of the warranty period, charge the *Contractor* the amount by which the cost of corrections to the *Contractor*'s work under GC 12.3 – WARRANTY exceeds the allowance provided for such corrections, or if the cost of such corrections is less than the allowance, pay the *Contractor* the difference.
- 7.1.6 The *Contractor*'s obligation under the *Contract* as to quality, correction and warranty of the work performed by the *Contractor* up to the time of termination shall continue in force after such termination of the *Contract*.

GC 7.2 CONTRACTOR'S RIGHT TO SUSPEND THE WORK OR TERMINATE THE CONTRACT

- 7.2.1 If the *Owner* is adjudged bankrupt, or makes a general assignment for the benefit of creditors because of the *Owner*'s insolvency, or if a receiver is appointed because of the *Owner*'s insolvency, the *Contractor* may, without prejudice to any other right or remedy the *Contractor* may have, terminate the *Contract* by giving the *Owner* or receiver or trustee in bankruptcy *Notice in Writing* to that effect.
- 7.2.2 If the *Work* is suspended or otherwise delayed for a period of 20 *Working Days* or more under an order of a court or other public authority and providing that such order was not issued as the result of an act or fault of the *Contractor* or of anyone directly or indirectly employed or engaged by the *Contractor*, the *Contractor* may, without prejudice to any other right or remedy the *Contractor* may have, terminate the *Contract* by giving the *Owner* *Notice in Writing* to that effect.
- 7.2.3 The *Contractor* may give *Notice in Writing* to the *Owner*, with a copy to the *Consultant*, that the *Owner* is in default of the *Owner*'s contractual obligations if:
- .1 the *Owner* fails to furnish, when so requested by the *Contractor*, reasonable evidence that financial arrangements have been made to fulfill the *Owner*'s obligations under the *Contract*,
 - .2 the *Consultant* fails to issue a certificate as provided in Part 5 of the General Conditions – PAYMENT,
 - .3 the *Owner* fails to pay the *Contractor* when due the amounts certified by the *Consultant* or awarded by adjudication, arbitration or court, or
 - .4 the *Owner* fails to comply with the requirements of the *Contract* to a substantial degree and the *Consultant*, except for GC 5.1 – FINANCING INFORMATION REQUIRED OF THE OWNER, gives a written statement to the *Owner* and the *Contractor* that provides detail of such failure to comply with the requirements of the *Contract* to a substantial degree.
- 7.2.4 The *Contractor*'s *Notice in Writing* to the *Owner* provided under paragraph 7.2.3 shall advise that if the default is not corrected within 5 *Working Days* following the receipt of the *Notice in Writing*, the *Contractor* may, without prejudice to any other right or remedy the *Contractor* may have, suspend the *Work* or terminate the *Contract*.
- 7.2.5 If the *Contractor* terminates the *Contract* by giving a *Notice in Writing* to the *Owner* under the conditions set out above, the *Contractor* shall be entitled to be paid for all work performed including reasonable profit, for loss sustained upon *Products* and *Construction Equipment*, and such other damages as the *Contractor* may have sustained as a result of the termination of the *Contract*.

PART 8 DISPUTE RESOLUTION

GC 8.1 AUTHORITY OF THE CONSULTANT

- 8.1.1 Differences between the parties to the *Contract* as to the interpretation, application or administration of the *Contract* or any failure to agree where agreement between the parties is called for, herein collectively called disputes, which are not resolved

in the first instance by findings of the *Consultant* as provided in GC 2.2 – ROLE OF THE CONSULTANT, shall be settled in accordance with the requirements of Part 8 of the General Conditions – DISPUTE RESOLUTION.

- 8.1.2 If a dispute arises under the *Contract* in respect of a matter in which the *Consultant* has no authority under the *Contract* to make a finding, the procedures set out in paragraph 8.1.3 and paragraphs 8.3.3 to 8.3.8 of GC 8.3 – NEGOTIATION, MEDIATION AND ARBITRATION, and in GC 8.4 – RETENTION OF RIGHTS apply to that dispute with the necessary changes to detail as may be required.
- 8.1.3 If a dispute is not resolved promptly, the *Consultant* will give such instructions as in the *Consultant's* opinion are necessary for the proper performance of the *Work* and to prevent delays pending settlement of the dispute. The parties shall act immediately according to such instructions, it being understood that by so doing neither party will jeopardize any claim the party may have. If it is subsequently determined that such instructions were in error or at variance with the *Contract Documents*, the *Owner* shall pay the *Contractor* costs incurred by the *Contractor* in carrying out such instructions which the *Contractor* was required to do beyond what the *Contract Documents* correctly understood and interpreted would have required, including costs resulting from interruption of the *Work*.

GC 8.2 ADJUDICATION

- 8.2.1 Nothing in this *Contract* shall be deemed to affect the rights of the parties to resolve any dispute by adjudication as may be prescribed by applicable legislation.

GC 8.3 NEGOTIATION, MEDIATION AND ARBITRATION

- 8.3.1 In accordance with the rules for mediation as provided in CCDC 40 'Rules for Mediation and Arbitration of Construction Industry Disputes' in effect at the time of bid closing, the parties shall appoint a Project Mediator
- .1 within 20 *Working Days* after the *Contract* was awarded, or
 - .2 if the parties neglected to make an appointment within the 20 *Working Days*, within 10 *Working Days* after either party by *Notice in Writing* requests that the Project Mediator be appointed.
- 8.3.2 A party shall be conclusively deemed to have accepted a finding of the *Consultant* under GC 2.2 – ROLE OF THE CONSULTANT and to have expressly waived and released the other party from any claims in respect of the particular matter dealt with in that finding unless, within 15 *Working Days* after receipt of that finding, the party sends a *Notice in Writing* of dispute to the other party and to the *Consultant*, which contains the particulars of the matter in dispute and the relevant provisions of the *Contract Documents*. The responding party shall send a *Notice in Writing* of reply to the dispute within 10 *Working Days* after receipt of such *Notice in Writing* setting out particulars of this response and any relevant provisions of the *Contract Documents*.
- 8.3.3 The parties shall make all reasonable efforts to resolve their dispute by amicable negotiations and agree to provide, without prejudice, frank, candid, and timely disclosure of relevant facts, information and documents to facilitate these negotiations.
- 8.3.4 After a period of 10 *Working Days* following receipt of a responding party's *Notice in Writing* of reply under paragraph 8.3.2, the parties shall request the Project Mediator to assist the parties to reach agreement on any unresolved dispute. The mediated negotiations shall be conducted in accordance with the rules for mediation as provided in CCDC 40 in effect at the time of bid closing.
- 8.3.5 If the dispute has not been resolved at the mediation or within such further period as is agreed by the parties, the Project Mediator will terminate the mediated negotiations by giving *Notice in Writing* to the *Owner*, the *Contractor* and the *Consultant*.
- 8.3.6 By giving a *Notice in Writing* to the other party and the *Consultant*, not later than 10 *Working Days* after the date of termination of the mediated negotiations under paragraph 8.3.5, either party may refer the dispute to be finally resolved by arbitration under the rules of arbitration as provided in CCDC 40 in effect at the time of bid closing. The arbitration shall be conducted in the jurisdiction of the *Place of the Work*.
- 8.3.7 On expiration of the 10 *Working Days*, the arbitration agreement under paragraph 8.3.6 is not binding on the parties and, if a *Notice in Writing* is not given under paragraph 8.3.6 within the required time, the parties may refer the unresolved dispute to the courts or to any other form of dispute resolution, including arbitration, which they have agreed to use.
- 8.3.8 If neither party, by *Notice in Writing*, given within 10 *Working Days* of the date of *Notice in Writing* requesting arbitration in paragraph 8.3.6, requires that a dispute be arbitrated immediately, all disputes referred to arbitration as provided in paragraph 8.3.6 shall be:
- .1 held in abeyance until:
 - (1) *Ready-for-Takeover*,
 - (2) the *Contract* has been terminated, or
 - (3) the *Contractor* has abandoned the *Work*,whichever is earlier; and

- .2 consolidated into a single arbitration under the rules governing the arbitration under paragraph 8.3.6.

GC 8.4 RETENTION OF RIGHTS

- 8.4.1 It is agreed that no act by either party shall be construed as a renunciation or waiver of any rights or recourses, provided the party has given the *Notice in Writing* required under Part 8 of the General Conditions – DISPUTE RESOLUTION and has carried out the instructions as provided in paragraph 8.1.3 of GC 8.1 – AUTHORITY OF THE CONSULTANT.
- 8.4.2 Nothing in Part 8 of the General Conditions – DISPUTE RESOLUTION shall be construed in any way to limit a party from asserting any statutory right to a lien under applicable lien legislation of the jurisdiction of the *Place of the Work* and the assertion of such right by initiating judicial proceedings is not to be construed as a waiver of any right that party may have under paragraph 8.3.6 of GC 8.3 – NEGOTIATION, MEDIATION AND ARBITRATION to proceed by way of arbitration to adjudicate the merits of the claim upon which such a lien is based.

PART 9 PROTECTION OF PERSONS AND PROPERTY

GC 9.1 PROTECTION OF WORK AND PROPERTY

- 9.1.1 The *Contractor* shall protect the *Work*, the *Owner's* property and property adjacent to the *Place of the Work* from damage which may arise as the result of the *Contractor's* operations under the *Contract*, and shall be responsible for such damage, except damage which occurs as the result of:
- .1 errors or omissions in the *Contract Documents*; or
 - .2 acts or omissions by the *Owner*, the *Consultant*, *Other Contractors*, or their agents and employees.
- 9.1.2 Before commencing any work, the *Contractor* shall determine the location of all underground utilities and structures indicated in the *Contract Documents* or that are reasonably apparent in an inspection of the *Place of the Work*.
- 9.1.3 Should the *Contractor* in the performance of the *Contract* damage the *Work*, the *Owner's* property or property adjacent to the *Place of the Work*, the *Contractor* shall be responsible for making good such damage at the *Contractor's* expense.
- 9.1.4 Should damage occur to the *Work* or the *Owner's* property for which the *Contractor* is not responsible, as provided in paragraph 9.1.1, the *Contractor* shall make good such damage to the *Work* and, if the *Owner* so directs, to the *Owner's* property. The *Contract Price* and *Contract Time* shall be adjusted as provided in GC 6.1 – OWNER'S RIGHT TO MAKE CHANGES, GC 6.2 – CHANGE ORDER and GC 6.3 – CHANGE DIRECTIVE.

GC 9.2 TOXIC AND HAZARDOUS SUBSTANCES

- 9.2.1 For the purposes of applicable legislation related to toxic and hazardous substances, the *Owner* shall be deemed to have control and management of the *Place of the Work* with respect to existing conditions.
- 9.2.2 Prior to the *Contractor* commencing the *Work*, the *Owner* shall,
- .1 take all reasonable steps to determine whether any toxic or hazardous substances are present at the *Place of the Work*, and
 - .2 provide the *Consultant* and the *Contractor* with a written list of any such substances that are known to exist and their locations.
- 9.2.3 The *Owner* shall take all reasonable steps to ensure that no person's exposure to any toxic or hazardous substance exceeds the time weighted levels prescribed by applicable legislation at the *Place of the Work* and that no property is damaged or destroyed as a result of exposure to, or the presence of, toxic or hazardous substances which were at the *Place of the Work* prior to the *Contractor* commencing the *Work*.
- 9.2.4 Unless the *Contract* expressly provides otherwise, the *Owner* shall be responsible for taking all necessary steps, in accordance with applicable legislation in force at the *Place of the Work*, to dispose of, store or otherwise render harmless any toxic or hazardous substance which was present at the *Place of the Work* prior to the *Contractor* commencing the *Work*.
- 9.2.5 If the *Contractor*
- .1 encounters toxic or hazardous substances at the *Place of the Work*, or
 - .2 has reasonable grounds to believe that toxic or hazardous substances are present at the *Place of the Work*, which were not brought to the *Place of the Work* by the *Contractor* or anyone for whom the *Contractor* is responsible and which were not disclosed by the *Owner* or which were disclosed but have not been dealt with as required under paragraph 9.2.4, the *Contractor* shall
 - .3 take all reasonable steps, including stopping the *Work*, to ensure that no person's exposure to any toxic or hazardous substance exceeds any applicable time weighted levels prescribed by applicable legislation at the *Place of the Work*, and
 - .4 immediately report the circumstances to the *Consultant* and the *Owner* in writing.

- 9.2.6 If the *Owner* and the *Contractor* do not agree on the existence, significance of, or whether the toxic or hazardous substances were brought onto the *Place of the Work* by the *Contractor* or anyone for whom the *Contractor* is responsible, the *Owner* shall retain and pay for an independent qualified expert to investigate and determine such matters. The expert's report shall be delivered to the *Owner* and the *Contractor*.
- 9.2.7 If the *Owner* and the *Contractor* agree or if the expert referred to in paragraph 9.2.6 determines that the toxic or hazardous substances were not brought onto the place of the *Work* by the *Contractor* or anyone for whom the *Contractor* is responsible, the *Owner* shall promptly at the *Owner's* own expense:
- .1 take all steps as required under paragraph 9.2.4;
 - .2 reimburse the *Contractor* for the costs of all steps taken pursuant to paragraph 9.2.5;
 - .3 extend the *Contract Time* for such reasonable time as the *Consultant* may recommend in consultation with the *Contractor* and the expert referred to in 9.2.6 and reimburse the *Contractor* for reasonable costs incurred as a result of the delay; and
 - .4 indemnify the *Contractor* as required by GC 13.1 – INDEMNIFICATION.
- 9.2.8 If the *Owner* and the *Contractor* agree or if the expert referred to in paragraph 9.2.6 determines that the toxic or hazardous substances were brought onto the place of the *Work* by the *Contractor* or anyone for whom the *Contractor* is responsible, the *Contractor* shall promptly at the *Contractor's* own expense:
- .1 take all necessary steps, in accordance with applicable legislation in force at the *Place of the Work*, to safely remove and dispose the toxic or hazardous substances;
 - .2 make good any damage to the *Work*, the *Owner's* property or property adjacent to the place of the *Work* as provided in paragraph 9.1.3 of GC 9.1 – PROTECTION OF WORK AND PROPERTY;
 - .3 reimburse the *Owner* for reasonable costs incurred under paragraph 9.2.6; and
 - .4 indemnify the *Owner* as required by GC 13.1 – INDEMNIFICATION.
- 9.2.9 If either party does not accept the expert's findings under paragraph 9.2.6, the disagreement shall be settled in accordance with Part 8 of the General Conditions – DISPUTE RESOLUTION. If such disagreement is not resolved promptly, the parties shall act immediately in accordance with the expert's determination and take the steps required by paragraph 9.2.7 or 9.2.8 it being understood that by so doing, neither party will jeopardize any claim that party may have to be reimbursed as provided by GC 9.2 – TOXIC AND HAZARDOUS SUBSTANCES.

GC 9.3 ARTIFACTS AND FOSSILS

- 9.3.1 Fossils, coins, articles of value or antiquity, structures and other remains or things of scientific or historic interest discovered at the *Place or Work* shall, as between the *Owner* and the *Contractor*, be deemed to be the absolute property of the *Owner*.
- 9.3.2 The *Contractor* shall take all reasonable precautions to prevent removal or damage to discoveries as identified in paragraph 9.3.1, and shall advise the *Consultant* upon discovery of such items.
- 9.3.3 The *Consultant* will investigate the impact on the *Work* of the discoveries identified in paragraph 9.3.1. If conditions are found that would cause an increase or decrease in the *Contractor's* cost or time to perform the *Work*, the *Owner*, through the *Consultant*, shall issue appropriate instructions for a change in the *Work* as provided in GC 6.2 – CHANGE ORDER or GC 6.3 – CHANGE DIRECTIVE.

GC 9.4 CONSTRUCTION SAFETY

- 9.4.1 The *Contractor* shall be responsible for establishing, initiating, maintaining, and supervising all health and safety precautions and programs in connection with the performance of the *Work* in accordance with the applicable health and safety legislation.
- 9.4.2 The *Owner* and the *Contractor* shall comply with all health and safety precautions and programs established at the *Place of the Work*.
- 9.4.3 The *Owner* and the *Contractor* shall comply with the rules, regulations and practices required by the applicable health and safety legislation.
- 9.4.4 The *Owner* shall cause the *Consultant*, *Other Contractors* and the *Owner's* own forces to comply with all health and safety precautions and programs established by the *Contractor* at the *Place of the Work*.
- 9.4.5 Nothing in this *Contract* shall affect the determination of liability under the applicable health and safety legislation.

GC 9.5 MOULD

- 9.5.1 If the *Contractor* or the *Owner* observes or reasonably suspects the presence of mould at the *Place of the Work*, the remediation of which is not expressly part of the *Work*,
- .1 the observing party shall promptly report the circumstances to the other party in writing,
 - .2 the *Contractor* shall promptly take all reasonable steps, including stopping the *Work* if necessary, to ensure that no person suffers injury, sickness or death and that no property is damaged as a result of exposure to or the presence of the mould, and

- 3 if the *Owner* and the *Contractor* do not agree on the existence, significance or cause of the mould or as to what steps need be taken to deal with it, the *Owner* shall retain and pay for an independent qualified expert to investigate and determine such matters. The expert's report shall be delivered to the *Owner* and the *Contractor*.
- 9.5.2 If the *Owner* and the *Contractor* agree, or if the expert referred to in paragraph 9.5.1.3 determines that the presence of mould was caused by the *Contractor*'s operations under the *Contract*, the *Contractor* shall promptly, at the *Contractor*'s own expense:
 - 1 take all reasonable and necessary steps to safely remediate or dispose of the mould,
 - 2 make good any damage to the *Work*, the *Owner*'s property or property adjacent to the *Place of the Work* as provided in paragraph 9.1.3 of GC 9.1 – PROTECTION OF WORK AND PROPERTY,
 - 3 reimburse the *Owner* for reasonable costs incurred under paragraph 9.5.1.3, and
 - 4 indemnify the *Owner* as required by GC 13.1 – INDEMNIFICATION.
- 9.5.3 If the *Owner* and the *Contractor* agree, or if the expert referred to in paragraph 9.5.1.3 determines that the presence of mould was not caused by the *Contractor*'s operations under the *Contract*, the *Owner* shall promptly, at the *Owner*'s own expense:
 - 1 take all reasonable and necessary steps to safely remediate or dispose of the mould,
 - 2 reimburse the *Contractor* for the cost of taking the steps under paragraph 9.5.1.2 and making good any damage to the *Work* as provided in paragraph 9.1.4 of GC 9.1 – PROTECTION OF WORK AND PROPERTY,
 - 3 extend the *Contract Time* for such reasonable time as the *Consultant* may recommend in consultation with the *Contractor* and the expert referred to in paragraph 9.5.1.3 and reimburse the *Contractor* for reasonable costs incurred as a result of the delay, and
 - 4 indemnify the *Contractor* as required by GC 13.1 – INDEMNIFICATION.
- 9.5.4 If either party does not accept the expert's finding under paragraph 9.5.1.3, the disagreement shall be settled in accordance with Part 8 of the General Conditions – DISPUTE RESOLUTION. If such disagreement is not resolved promptly, the parties shall act immediately in accordance with the expert's determination and take the steps required by paragraphs 9.5.2 or 9.5.3, it being understood that by so doing neither party will jeopardize any claim the party may have to be reimbursed as provided by GC 9.5 – MOULD.

PART 10 GOVERNING REGULATIONS

GC 10.1 TAXES AND DUTIES

- 10.1.1 The *Contract Price* shall include all taxes and customs duties in effect at the time of the bid closing except for *Value Added Taxes* payable by the *Owner* to the *Contractor* as stipulated in Article A-4 of the Agreement – CONTRACT PRICE.
- 10.1.2 Any increase or decrease in costs to the *Contractor* due to changes in taxes and duties after the time of the bid closing shall increase or decrease the *Contract Price* accordingly.

GC 10.2 LAWS, NOTICES, PERMITS, AND FEES

- 10.2.1 The laws of the *Place of the Work* shall govern the *Work*.
- 10.2.2 The *Owner* shall obtain and pay for development approvals, building permit, permanent easements, rights of servitude, and all other necessary approvals and permits, except for the permits and fees referred to in paragraph 10.2.3 or for which the *Contract Documents* specify as the responsibility of the *Contractor*.
- 10.2.3 The *Contractor* shall be responsible for the procurement of permits, licences, inspections, and certificates, which are necessary for the performance of the *Work* and customarily obtained by contractors in the jurisdiction of the *Place of the Work* after the issuance of the building permit. The *Contract Price* includes the cost of these permits, licences, inspections, and certificates, and their procurement.
- 10.2.4 The *Contractor* shall give the required notices and comply with the laws, ordinances, rules, regulations, or codes which are or become in force during the performance of the *Work* and which relate to the *Work*, to the preservation of the public health, and to construction safety.
- 10.2.5 The *Contractor* shall not be responsible for verifying that the *Contract Documents* are in compliance with the applicable laws, ordinances, rules, regulations, or codes relating to the *Work*. If the *Contract Documents* are at variance therewith, or if, subsequent to the time of bid closing, changes are made to the applicable laws, ordinances, rules, regulations, or codes which require modification to the *Contract Documents*, the *Contractor* shall advise the *Consultant* in writing requesting direction immediately upon such variance or change becoming known. The *Consultant* will issue the changes required to the *Contract Documents* as provided in GC 6.1 – OWNER'S RIGHT TO MAKE CHANGES, GC 6.2 – CHANGE ORDER and GC 6.3 – CHANGE DIRECTIVE.

- 10.2.6 If the *Contractor* fails to advise the *Consultant* in writing; fails to obtain direction as required in paragraph 10.2.5; and performs work knowing it to be contrary to any laws, ordinances, rules, regulations, or codes; the *Contractor* shall be responsible for and shall correct the violations thereof; and shall bear the costs, expenses and damages attributable to the failure to comply with the provisions of such laws, ordinances, rules, regulations, or codes.
- 10.2.7 If, subsequent to the time of bid closing, changes are made to applicable laws, ordinances, rules, regulations, or codes of authorities having jurisdiction which affect the cost of the *Work*, either party may submit a claim in accordance with the requirements of GC 6.6 – CLAIMS FOR A CHANGE IN CONTRACT PRICE.

GC 10.3 PATENT FEES

- 10.3.1 The *Contractor* shall pay the royalties and patent licence fees required for the performance of the *Contract*. The *Contractor* shall hold the *Owner* harmless from and against claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of the *Contractor's* performance of the *Contract* which are attributable to an infringement or an alleged infringement of a patent of invention by the *Contractor* or anyone for whose acts the *Contractor* may be liable.
- 10.3.2 The *Owner* shall hold the *Contractor* harmless against claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of the *Contractor's* performance of the *Contract* which are attributable to an infringement or an alleged infringement of a patent of invention in executing anything for the purpose of the *Contract*, the physical model, plan or design of which was supplied to the *Contractor* as part of the *Contract*.

GC 10.4 WORKERS' COMPENSATION

- 10.4.1 Prior to commencing the *Work*, and again with the *Contractor's* applications for payment, the *Contractor* shall provide evidence of compliance with workers' compensation legislation at the *Place of the Work*.

PART 11 INSURANCE

GC 11.1 INSURANCE

- 11.1.1 Without restricting the generality of GC 13.1 – INDEMNIFICATION, the *Contractor* shall provide, maintain and pay for the following insurance coverages, the requirements of which are specified in CCDC 41 'CCDC Insurance Requirements' in effect at the time of bid closing except as hereinafter provided:
- .1 General liability insurance in the name of the *Contractor* and include, or in the case of a single, blanket policy, be endorsed to name, the *Owner* and the *Consultant* as insureds but only with respect to liability, other than legal liability arising out of their sole negligence, arising out of the operations of the *Contractor* with regard to the *Work*. General liability insurance shall be maintained from the date of commencement of the *Work* until one year from the date of *Ready-for-Takeover*. Liability coverage shall be provided for completed operations hazards from the date of *Ready-for-Takeover* on an ongoing basis for a period of 6 years following *Ready-for-Takeover*.
 - .2 Automobile Liability Insurance from the date of commencement of the *Work* until one year after the date of *Ready-for-Takeover*.
 - .3 Unmanned aerial vehicle aircraft, manned aircraft or watercraft Liability Insurance when owned or non-owned manned or unmanned aircraft or watercraft are used directly or indirectly in the performance of the *Work*.
 - .4 "Broad form" property insurance in the joint names of the *Contractor*, the *Owner* and the *Consultant*. The policy shall include as insureds all *Subcontractors*. The "Broad form" property insurance shall be provided from the date of commencement of the *Work* until the earliest of:
 - (1) 10 calendar days after the date of *Ready-for-Takeover*;
 - (2) on the commencement of use or occupancy of any part or section of the *Work* unless such use or occupancy is for construction purposes, habitational, office, banking, convenience store under 465 square metres in area, or parking purposes, or for the installation, testing and commissioning of equipment forming part of the *Work*; and
 - (3) when left unattended for more than 30 consecutive calendar days or when construction activity has ceased for more than 30 consecutive calendar days.
 - .5 Boiler and machinery insurance in the joint names of the *Contractor*, the *Owner* and the *Consultant*. The policy shall include as insureds all *Subcontractors*. The coverage shall be maintained continuously from commencement of use or operation of the boiler and machinery objects insured by the policy and until 10 calendar days after the date of *Ready-for-Takeover*.
 - .6 The "Broad form" property and boiler and machinery policies shall provide that, in the case of a loss or damage, payment shall be made to the *Owner* and the *Contractor* as their respective interests may appear. In the event of loss or damage:
 - (1) the *Contractor* shall act on behalf of the *Owner* for the purpose of adjusting the amount of such loss or damage payment with the insurers. When the extent of the loss or damage is determined, the *Contractor* shall proceed to restore the *Work*. Loss or damage shall not affect the rights and obligations of either party under the *Contract* except

that the *Contractor* shall be entitled to such reasonable extension of *Contract Time* relative to the extent of the loss or damage as the *Consultant* may recommend in consultation with the *Contractor*;

- (2) the *Contractor* shall be entitled to receive from the *Owner*, in addition to the amount due under the *Contract*, the amount which the *Owner's* interest in restoration of the *Work* has been appraised, such amount to be paid as the restoration of the *Work* proceeds in accordance with the progress payment provisions. In addition the *Contractor* shall be entitled to receive from the payments made by the insurer the amount of the *Contractor's* interest in the restoration of the *Work*; and
- (3) to the *Work* arising from the work of the *Owner*, the *Owner's* own forces or *Other Contractors*, the *Owner* shall, in accordance with the *Owner's* obligations under the provisions relating to construction by the *Owner* or *Other Contractors*, pay the *Contractor* the cost of restoring the *Work* as the restoration of the *Work* proceeds and as in accordance with the progress payment provisions.

- .7 *Contractors' Equipment Insurance* from the date of commencement of the *Work* until one year after the date of *Ready-for-Takeover*.
- .8 *Contractors' Pollution Liability Insurance* from the date of commencement of the *Work* until one year after the date of *Ready-for-Takeover*.

- 11.1.2 Prior to commencement of the *Work* and upon the placement, renewal, amendment, or extension of all or any part of the insurance, the *Contractor* shall promptly provide the *Owner* with confirmation of coverage and, if required, a certified true copy of the policies certified by an authorized representative of the insurer together with copies of any amending endorsements applicable to the *Work*.
- 11.1.3 The parties shall pay their share of the deductible amounts in direct proportion to their responsibility in regards to any loss for which the above policies are required to pay, except where such amounts may be excluded by the terms of the *Contract*.
- 11.1.4 If the *Contractor* fails to provide or maintain insurance as required by the *Contract Documents*, then the *Owner* shall have the right to provide and maintain such insurance and give evidence to the *Contractor* and the *Consultant*. The *Contractor* shall pay the cost thereof to the *Owner* on demand or the *Owner* may deduct the cost from the amount which is due or may become due to the *Contractor*.
- 11.1.5 All required insurance policies shall be with insurers licensed to underwrite insurance in the jurisdiction of the *Place of the Work*.
- 11.1.6 If a revised version of CCDC 41 is published, which specifies reduced insurance requirements, the parties shall address such reduction, prior to the *Contractor's* insurance policy becoming due for renewal, and record any agreement in a *Change Order*.
- 11.1.7 If a revised version of CCDC 41 is published, which specifies increased insurance requirements, the *Owner* may request the increased coverage from the *Contractor* by way of a *Change Order*.
- 11.1.8 A *Change Directive* shall not be used to direct a change in the insurance requirements in response to the revision of CCDC 41.

PART 12 OWNER TAKEOVER

GC 12.1 READY-FOR-TAKEOVER

- 12.1.1 The prerequisites to attaining *Ready-for-Takeover* of the *Work* are limited to the following:
 - .1 The *Consultant* has certified or verified the *Substantial Performance of the Work*.
 - .2 Evidence of compliance with the requirements for occupancy or occupancy permit as prescribed by the authorities having jurisdiction.
 - .3 Final cleaning and waste removal at the time of applying for *Ready-for-Takeover*, as required by the *Contract Documents*.
 - .4 The delivery to the *Owner* of such operations and maintenance documents reasonably necessary for immediate operation and maintenance, as required by the *Contract Documents*.
 - .5 Make available a copy of the as-built drawings completed to date on site.
 - .6 Startup, testing required for immediate occupancy, as required by the *Contract Documents*.
 - .7 Ability to secure access to the *Work* has been provided to the *Owner*, if required by the *Contract Documents*.
 - .8 Demonstration and training, as required by the *Contract Documents*, is scheduled by the *Contractor* acting reasonably.
- 12.1.2 If any prerequisites set forth in paragraphs 12.1.1.3 to 12.1.1.6 must be deferred because of conditions reasonably beyond the control of the *Contractor*, or by agreement between the *Owner* and the *Contractor* to do so, *Ready-for-Takeover* shall not be delayed.
- 12.1.3 When the *Contractor* considers that the *Work* is *Ready-for-Takeover*, the *Contractor* shall deliver to the *Consultant* and to the *Owner* a comprehensive list of items to be completed or corrected, together with a written application for *Ready-for-Takeover* for review. Failure to include an item on the list does not alter the responsibility of the *Contractor* to complete the *Contract*.
- 12.1.4 The *Consultant* will review the *Work* to verify the validity of the application and will promptly, and in any event, no later than 10 calendar days after receipt of the *Contractor's* list and application:

- .1 advise the *Contractor* in writing that the *Work* is not *Ready-for-Takeover* and give reasons why, or
 - .2 confirm the date of *Ready-for-Takeover* in writing to each of the *Owner* and the *Contractor*.
- 12.1.5 Immediately following the confirmation of the date of *Ready-for-Takeover*, the *Contractor*, in consultation with the *Consultant*, shall establish a reasonable date for finishing the *Work*.
- 12.1.6 The provision of GC 12.1 – READY-FOR-TAKEOVER shall be subject to GC 12.2 – EARLY OCCUPANCY BY THE OWNER.

GC 12.2 EARLY OCCUPANCY BY THE OWNER

- 12.2.1 The *Owner* may take occupancy of a part or the entirety of the *Work* before *Ready-for-Takeover* has been attained only as agreed by the *Contractor* which agreement shall not be unreasonably withheld.
- 12.2.2 The *Owner* shall not occupy a part or the entirety of the *Work* without prior approval by authorities having jurisdiction.
- 12.2.3 If the *Owner* takes occupancy of a part of the *Work* before *Ready-for-Takeover* has been attained:
- .1 The part of the *Work* which is occupied shall be deemed to have been taken over by the *Owner* as from the date on which it is occupied.
 - .2 The *Contractor* shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the *Owner*.
 - .3 The warranty period specified in paragraph 12.3.1 of GC 12.3 – WARRANTY for that part of the *Work* shall start from the date on which it is occupied.
- 12.2.4 If the *Owner* takes occupancy of the entirety of the *Work* before all the prerequisites are met as described in paragraph 12.1.1 of GC 12.1 – READY-FOR-TAKEOVER, the *Work* shall, subject to the requirements of the applicable lien legislation, be deemed to achieve *Ready-for-Takeover*. This shall not relieve the *Contractor*'s responsibility to complete the *Work* in a timely manner.

GC 12.3 WARRANTY

- 12.3.1 Except for extended warranties as described in paragraph 12.3.6, the warranty period under the *Contract* is one year from the date when *Ready-for-Takeover* has been attained.
- 12.3.2 The *Contractor* shall be responsible for the proper performance of the *Work* to the extent that the design and *Contract Documents* permit such performance.
- 12.3.3 The *Owner*, through the *Consultant*, shall promptly give the *Contractor Notice in Writing* of observed defects and deficiencies which occur during the one year warranty period.
- 12.3.4 Subject to paragraph 12.3.2, the *Contractor* shall correct promptly, at the *Contractor*'s expense, defects or deficiencies in the *Work* which appear prior to and during the one year warranty period.
- 12.3.5 The *Contractor* shall correct or pay for damage resulting from corrections made under the requirements of paragraph 12.3.4.
- 12.3.6 Any extended warranties required beyond the one year warranty period as described in paragraph 12.3.1, shall be as specified in the *Contract Documents*. Extended warranties shall be issued by the warrantor to the benefit of the *Owner*. The *Contractor*'s responsibility with respect to extended warranties shall be limited to obtaining any such extended warranties from the warrantor. The obligations under such extended warranties are solely the responsibilities of the warrantor.

PART 13 INDEMNIFICATION AND WAIVER

GC 13.1 INDEMNIFICATION

- 13.1.1 Without restricting the parties' obligation to indemnify respecting toxic and hazardous substances, patent fees and defect in title claims all as described in paragraphs 13.1.4 and 13.1.5, the *Owner* and the *Contractor* shall each indemnify and hold harmless the other from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings whether in respect to losses suffered by them or in respect to claims by third parties that arise out of, or are attributable in any respect to their involvement as parties to this *Contract*, provided such claims are:
- .1 caused by:
 - (1) the negligent acts or omissions of the party from whom indemnification is sought or anyone for whose negligent acts or omissions that party is liable, or
 - (2) a failure of the party to the *Contract* from whom indemnification is sought to fulfill its terms or conditions; and
 - .2 made by *Notice in Writing* within a period of 6 years from the *Ready-for-Takeover* date or within such shorter period as may be prescribed by any limitation statute of the Province or Territory of the *Place of the Work*.
- The parties expressly waive the right to indemnify for claims other than those provided for in this *Contract*.

- 13.1.2 The obligation of either party to indemnify as set forth in paragraph 13.1.1 shall be limited as follows:
- .1 In respect to losses suffered by the *Owner* and the *Contractor* for which insurance is to be provided by either party pursuant to GC 11.1 – INSURANCE, the minimum liability insurance limit for one occurrence, of the applicable insurance policy, as referred to in CCDC 41 in effect at the time of bid closing.
 - .2 In respect to losses suffered by the *Owner* and the *Contractor* for which insurance is not required to be provided by either party in accordance with GC 11.1 – INSURANCE, the greater of the *Contract Price* as recorded in Article A-4 – CONTRACT PRICE or \$2,000,000, but in no event shall the sum be greater than \$20,000,000.
 - .3 In respect to indemnification by a party against the other with respect to losses suffered by them, such obligation shall be restricted to direct loss and damage, and neither party shall have any liability to the other for indirect, consequential, punitive or exemplary damages.
 - .4 In respect to indemnification respecting claims by third parties, the obligation to indemnify is without limit.
- 13.1.3 The obligation of either party to indemnify the other as set forth in paragraphs 13.1.1 and 13.1.2 shall be inclusive of interest and all legal costs.
- 13.1.4 The *Owner* and the *Contractor* shall indemnify and hold harmless the other from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of their obligations described in GC 9.2 – TOXIC AND HAZARDOUS SUBSTANCES.
- 13.1.5 The *Owner* shall indemnify and hold harmless the *Contractor* from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings:
- .1 as described in paragraph 10.3.2 of GC 10.3 – PATENT FEES, and
 - .2 arising out of the *Contractor*'s performance of the *Contract* which are attributable to a lack of or defect in title or an alleged lack of or defect in title to the *Place of the Work*.
- 13.1.6 In respect to any claim for indemnity or to be held harmless by the *Owner* or the *Contractor*:
- .1 *Notice in Writing* of such claim shall be given within a reasonable time after the facts upon which such claim is based become known; and
 - .2 should any party be required as a result of its obligation to indemnify another to pay or satisfy a final order, judgment or award made against the party entitled by this contract to be indemnified, then the indemnifying party upon assuming all liability for any costs that might result shall have the right to appeal in the name of the party against whom such final order or judgment has been made until such rights of appeal have been exhausted.

GC 13.2 WAIVER OF CLAIMS

- 13.2.1 Subject to any lien legislation applicable to the *Place of the Work*, the *Contractor* waives and releases the *Owner* from all claims which the *Contractor* has or reasonably ought to have knowledge of that could be advanced by the *Contractor* against the *Owner* under the *Contract*, including, without limitation, those arising from negligence or breach of contract in respect to which the cause of action is based upon acts or omissions which occurred prior to or on the *Ready-for-Takeover* date, except as follows:
- .1 claims arising prior to or on the *Ready-for-Takeover* date for which *Notice in Writing* of claim has been received by the *Owner* from the *Contractor* no later than 5 calendar days before the expiry of the lien period provided by the lien legislation applicable at the *Place of the Work* or 20 calendar days following the *Ready-for-Takeover* date, whichever is later;
 - .2 indemnification for claims advanced against the *Contractor* by third parties for which a right of indemnification may be asserted by the *Contractor* against the *Owner* pursuant to the provisions of this *Contract*;
 - .3 claims respecting toxic and hazardous substances, patent fees and defect in title matters for which a right of indemnity could be asserted by the *Contractor* pursuant to the provisions of paragraphs 13.1.4 or 13.1.5 of GC 13.1 – INDEMNIFICATION; and
 - .4 claims resulting from acts or omissions which occur after the *Ready-for-Takeover* date.
- 13.2.2 The *Contractor* waives and releases the *Owner* from all claims resulting from acts or omissions which occurred after the *Ready-for-Takeover* date except for:
- .1 indemnification respecting third party claims, and claims respecting toxic and hazardous substances, patent fees and defect in title matters, all as referred in paragraphs 13.2.1.2 and 13.2.1.3; and
 - .2 claims for which *Notice in Writing* of claim has been received by the *Owner* from the *Contractor* within 395 calendar days following the *Ready-for-Takeover* date.
- 13.2.3 Subject to any lien legislation applicable to the *Place of the Work*, the *Owner* waives and releases the *Contractor* from all claims which the *Owner* has or reasonably ought to have knowledge of that could be advanced by the *Owner* against the *Contractor* under the *Contract*, including, without limitation, those arising from negligence or breach of contract in respect to which the cause of action is based upon acts or omissions which occurred prior to or on the *Ready-for-Takeover* date, except as follows:
- .1 claims arising prior to or on the *Ready-for-Takeover* date for which *Notice in Writing* of claim has been received by the *Contractor* from the *Owner* no later than 20 calendar days following the *Ready-for-Takeover* date;

- .2 indemnification for claims advanced against the *Owner* by third parties for which a right of indemnification may be asserted by the *Owner* against the *Contractor* pursuant to the provisions of this *Contract*;
 - .3 claims respecting toxic and hazardous substances for which a right of indemnity could be asserted by the *Owner* against the *Contractor* pursuant to the provisions of paragraph 13.1.4 of GC 13.1 – INDEMNIFICATION;
 - .4 damages arising from the *Contractor*'s actions which result in substantial defects or deficiencies in the *Work*. "Substantial defects or deficiencies" mean those defects or deficiencies in the *Work* which affect the *Work* to such an extent or in such a manner that a significant part or the whole of the *Work* is unfit for the purpose intended by the *Contract Documents*;
 - .5 claims arising pursuant to GC 12.3 – WARRANTY; and
 - .6 claims arising from acts or omissions which occur after the *Ready-for-Takeover* date.
- 13.2.4 Respecting claims arising upon substantial defects and deficiencies in the *Work*, as referenced in paragraph 13.2.3.4, and notwithstanding paragraph 13.2.3.5, the *Owner* waives and releases the *Contractor* from all claims except claims for which *Notice in Writing* of claim has been received by the *Contractor* from the *Owner* within a period of six years from the *Ready-for-Takeover* date, provided that any limitation statute of the Province or Territory of the *Place of the Work* permit such agreement. If the applicable limitation statute does not permit such agreement, the time within which any such claim may be brought shall be such shorter period as may be prescribed by any limitation statute of the Province or Territory of the *Place of the Work*.
- 13.2.5 The *Owner* waives and releases the *Contractor* from all claims arising from acts or omissions which occur after the *Ready-for-Takeover* date, except for:
- .1 indemnification for claims advanced against the *Owner* by third parties, as referenced in paragraph 13.2.3.2;
 - .2 claims respecting toxic and hazardous substances for which a right of indemnity could be asserted by the *Owner* against the *Contractor*, as referenced in paragraph 13.2.3.3;
 - .3 claims arising under GC 12.3 – WARRANTY; and
 - .4 claims for which *Notice in Writing* has been received by the *Contractor* from the *Owner* within 395 calendar days following the *Ready-for-Takeover* date.
- 13.2.6 "Notice in Writing of claim" as provided for in GC 13.2 – WAIVER OF CLAIMS to preserve a claim or right of action which would otherwise, by the provisions of GC 13.2 – WAIVER OF CLAIMS, be deemed to be waived, must include the following:
- .1 a clear and unequivocal statement of an intention to claim;
 - .2 a statement as to the nature of the claim and the grounds upon which the claim is based; and
 - .3 a statement of the estimated quantum of the claim.
- 13.2.7 A claim for lien asserted under the lien legislation prevailing at the *Place of the Work* shall qualify as notice of claim for the purposes of this *Contract*.
- 13.2.8 The party giving the *Notice in Writing* of claim as provided for in GC 13.2 – WAIVER OF CLAIMS shall submit within a reasonable time a detailed account of the amount claimed.
- 13.2.9 Where the event or series of events giving rise to a claim made under paragraphs 13.2.1 or 13.2.3 has a continuing effect, the detailed account submitted under paragraph 13.2.8 shall be considered to be an interim account and the party making the claim shall submit further interim accounts, at reasonable intervals, giving the accumulated amount of the claim and any further grounds upon which such claim is based. The party making the claim shall submit a final account after the end of the effects resulting from the event or series of events.
- 13.2.10 Nothing in GC 13.2 – WAIVER OF CLAIMS shall be deemed to affect the rights of the parties under any lien legislation or limitations legislation prevailing at the *Place of the Work*.



Addendum 1

MET ENERGY SYSTEMS
Consulting Engineering
477 Queen Street East, Suite 304
Sault Ste. Marie, ON P6A 1Z5
Tel: (705) 942-3344
Fax: (705) 942-1477
www.meteng.on.ca

ATTENTION: Bidders DATE: Jan.3 2023
COMPANY: MET REF.: 22M11
FROM: John Veltri ADDENDUM NO.: 1
COPIES: Tim Janzen, Bill Goulding FAX NO.:
SUBJECT: DOWNTOWN ARTS CENTRE – ELLIOT LAKE, ON
NO. PAGES: 1 (Including this page)

The Bid documents are hereby amended as follows:

Specifications

1. Tender Closing Date to be extended to **Friday, January 6th, 2023 at 1:00p.m.**
2. Drawing a5.0 - Clarification
 - A. Finish General Notes - Delete note '5' – All existing walls to be covered with new gypsum board except 103,104,105 & 106
 - B. All existing walls are to be patched and painted.

End of Addendum #1



Addendum 2

MET ENERGY SYSTEMS
Consulting Engineering
477 Queen Street East, Suite 304
Sault Ste. Marie, ON P6A 1Z5
Tel: (705) 942-3344
Fax: (705) 942-1477
www.meteng.on.ca

ATTENTION: Bidders **DATE:** Jan.5 2023
COMPANY: **MET REF.:** 22M11
FROM: John Veltri **ADDENDUM NO.:** 1
COPIES: Tim Janzen, Bill Goulding **FAX NO.:**
SUBJECT: DOWNTOWN ARTS CENTRE – ELLIOT LAKE, ON
NO. PAGES: 1 (Including this page)

The Bid documents are hereby amended as follows:

Clarifications

1. Delete any references to Drawing S10. All bracing for the RTU's should be referenced to drawing S7. Reference notes, on drawing S5 regarding RTU supports should be S7 not S10 as shown.
2. Drawing E3 – Legend – Description for HD (Heat Detector) is described as SD (Smoke Detector) and Description of SD (Smoke Detector) is described as HD (Heat Detector).

End of Addendum #2

DOWNTOWN ARTS CENTRE

16 ELIZABETH WALK

ELLIOT LAKE, ON

ISSUED FOR TENDER DECEMBER 16 2022

MET PROJECT No. 22M11
DEA PROJECT No. 22-33
TULLOCH PROJECT No. 22-0714

DRAWING LIST

ARCHITECTURAL	MECHANICAL/ELECTRICAL
<p>000 DDC MARK, NOTES AND LEGENDS</p> <p>001 GROUND FLOOR FINE SEPARATION PLAN</p> <p>002 FINE SEPARATION PLAN</p> <p>003 FINE SEPARATION PLAN</p> <p>004 INTERIOR VIEW OF THE DDC</p> <p>005 INTERIOR VIEW OF THE DDC</p> <p>006 INTERIOR VIEW OF THE DDC</p> <p>007 INTERIOR VIEW OF THE DDC</p> <p>008 INTERIOR VIEW OF THE DDC</p> <p>009 INTERIOR VIEW OF THE DDC</p> <p>010 INTERIOR VIEW OF THE DDC</p> <p>011 INTERIOR VIEW OF THE DDC</p> <p>012 INTERIOR VIEW OF THE DDC</p> <p>013 INTERIOR VIEW OF THE DDC</p> <p>014 INTERIOR VIEW OF THE DDC</p> <p>015 INTERIOR VIEW OF THE DDC</p> <p>016 INTERIOR VIEW OF THE DDC</p> <p>017 INTERIOR VIEW OF THE DDC</p> <p>018 INTERIOR VIEW OF THE DDC</p> <p>019 INTERIOR VIEW OF THE DDC</p> <p>020 INTERIOR VIEW OF THE DDC</p> <p>021 INTERIOR VIEW OF THE DDC</p> <p>022 INTERIOR VIEW OF THE DDC</p> <p>023 INTERIOR VIEW OF THE DDC</p> <p>024 INTERIOR VIEW OF THE DDC</p> <p>025 INTERIOR VIEW OF THE DDC</p> <p>026 INTERIOR VIEW OF THE DDC</p> <p>027 INTERIOR VIEW OF THE DDC</p> <p>028 INTERIOR VIEW OF THE DDC</p> <p>029 INTERIOR VIEW OF THE DDC</p> <p>030 INTERIOR VIEW OF THE DDC</p> <p>031 INTERIOR VIEW OF THE DDC</p> <p>032 INTERIOR VIEW OF THE DDC</p> <p>033 INTERIOR VIEW OF THE DDC</p> <p>034 INTERIOR VIEW OF THE DDC</p> <p>035 INTERIOR VIEW OF THE DDC</p> <p>036 INTERIOR VIEW OF THE DDC</p> <p>037 INTERIOR VIEW OF THE DDC</p> <p>038 INTERIOR VIEW OF THE DDC</p> <p>039 INTERIOR VIEW OF THE DDC</p> <p>040 INTERIOR VIEW OF THE DDC</p> <p>041 INTERIOR VIEW OF THE DDC</p> <p>042 INTERIOR VIEW OF THE DDC</p> <p>043 INTERIOR VIEW OF THE DDC</p> <p>044 INTERIOR VIEW OF THE DDC</p> <p>045 INTERIOR VIEW OF THE DDC</p> <p>046 INTERIOR VIEW OF THE DDC</p> <p>047 INTERIOR VIEW OF THE DDC</p> <p>048 INTERIOR VIEW OF THE DDC</p> <p>049 INTERIOR VIEW OF THE DDC</p> <p>050 INTERIOR VIEW OF THE DDC</p> <p>051 INTERIOR VIEW OF THE DDC</p> <p>052 INTERIOR VIEW OF THE DDC</p> <p>053 INTERIOR VIEW OF THE DDC</p> <p>054 INTERIOR VIEW OF THE DDC</p> <p>055 INTERIOR VIEW OF THE DDC</p> <p>056 INTERIOR VIEW OF THE DDC</p> <p>057 INTERIOR VIEW OF THE DDC</p> <p>058 INTERIOR VIEW OF THE DDC</p> <p>059 INTERIOR VIEW OF THE DDC</p> <p>060 INTERIOR VIEW OF THE DDC</p> <p>061 INTERIOR VIEW OF THE DDC</p> <p>062 INTERIOR VIEW OF THE DDC</p> <p>063 INTERIOR VIEW OF THE DDC</p> <p>064 INTERIOR VIEW OF THE DDC</p> <p>065 INTERIOR VIEW OF THE DDC</p> <p>066 INTERIOR VIEW OF THE DDC</p> <p>067 INTERIOR VIEW OF THE DDC</p> <p>068 INTERIOR VIEW OF THE DDC</p> <p>069 INTERIOR VIEW OF THE DDC</p> <p>070 INTERIOR VIEW OF THE DDC</p> <p>071 INTERIOR VIEW OF THE DDC</p> <p>072 INTERIOR VIEW OF THE DDC</p> <p>073 INTERIOR VIEW OF THE DDC</p> <p>074 INTERIOR VIEW OF THE DDC</p> <p>075 INTERIOR VIEW OF THE DDC</p> <p>076 INTERIOR VIEW OF THE DDC</p> <p>077 INTERIOR VIEW OF THE DDC</p> <p>078 INTERIOR VIEW OF THE DDC</p> <p>079 INTERIOR VIEW OF THE DDC</p> <p>080 INTERIOR VIEW OF THE DDC</p> <p>081 INTERIOR VIEW OF THE DDC</p> <p>082 INTERIOR VIEW OF THE DDC</p> <p>083 INTERIOR VIEW OF THE DDC</p> <p>084 INTERIOR VIEW OF THE DDC</p> <p>085 INTERIOR VIEW OF THE DDC</p> <p>086 INTERIOR VIEW OF THE DDC</p> <p>087 INTERIOR VIEW OF THE DDC</p> <p>088 INTERIOR VIEW OF THE DDC</p> <p>089 INTERIOR VIEW OF THE DDC</p> <p>090 INTERIOR VIEW OF THE DDC</p> <p>091 INTERIOR VIEW OF THE DDC</p> <p>092 INTERIOR VIEW OF THE DDC</p> <p>093 INTERIOR VIEW OF THE DDC</p> <p>094 INTERIOR VIEW OF THE DDC</p> <p>095 INTERIOR VIEW OF THE DDC</p> <p>096 INTERIOR VIEW OF THE DDC</p> <p>097 INTERIOR VIEW OF THE DDC</p> <p>098 INTERIOR VIEW OF THE DDC</p> <p>099 INTERIOR VIEW OF THE DDC</p> <p>100 INTERIOR VIEW OF THE DDC</p>	<p>001 MECHANICAL/ELECTRICAL GENERAL</p> <p>002 MECHANICAL/ELECTRICAL GENERAL</p> <p>003 MECHANICAL/ELECTRICAL GENERAL</p> <p>004 MECHANICAL/ELECTRICAL GENERAL</p> <p>005 MECHANICAL/ELECTRICAL GENERAL</p> <p>006 MECHANICAL/ELECTRICAL GENERAL</p> <p>007 MECHANICAL/ELECTRICAL GENERAL</p> <p>008 MECHANICAL/ELECTRICAL GENERAL</p> <p>009 MECHANICAL/ELECTRICAL GENERAL</p> <p>010 MECHANICAL/ELECTRICAL GENERAL</p> <p>011 MECHANICAL/ELECTRICAL GENERAL</p> <p>012 MECHANICAL/ELECTRICAL GENERAL</p> <p>013 MECHANICAL/ELECTRICAL GENERAL</p> <p>014 MECHANICAL/ELECTRICAL GENERAL</p> <p>015 MECHANICAL/ELECTRICAL GENERAL</p> <p>016 MECHANICAL/ELECTRICAL GENERAL</p> <p>017 MECHANICAL/ELECTRICAL GENERAL</p> <p>018 MECHANICAL/ELECTRICAL GENERAL</p> <p>019 MECHANICAL/ELECTRICAL GENERAL</p> <p>020 MECHANICAL/ELECTRICAL GENERAL</p> <p>021 MECHANICAL/ELECTRICAL GENERAL</p> <p>022 MECHANICAL/ELECTRICAL GENERAL</p> <p>023 MECHANICAL/ELECTRICAL GENERAL</p> <p>024 MECHANICAL/ELECTRICAL GENERAL</p> <p>025 MECHANICAL/ELECTRICAL GENERAL</p> <p>026 MECHANICAL/ELECTRICAL GENERAL</p> <p>027 MECHANICAL/ELECTRICAL GENERAL</p> <p>028 MECHANICAL/ELECTRICAL GENERAL</p> <p>029 MECHANICAL/ELECTRICAL GENERAL</p> <p>030 MECHANICAL/ELECTRICAL GENERAL</p> <p>031 MECHANICAL/ELECTRICAL GENERAL</p> <p>032 MECHANICAL/ELECTRICAL GENERAL</p> <p>033 MECHANICAL/ELECTRICAL GENERAL</p> <p>034 MECHANICAL/ELECTRICAL GENERAL</p> <p>035 MECHANICAL/ELECTRICAL GENERAL</p> <p>036 MECHANICAL/ELECTRICAL GENERAL</p> <p>037 MECHANICAL/ELECTRICAL GENERAL</p> <p>038 MECHANICAL/ELECTRICAL GENERAL</p> <p>039 MECHANICAL/ELECTRICAL GENERAL</p> <p>040 MECHANICAL/ELECTRICAL GENERAL</p> <p>041 MECHANICAL/ELECTRICAL GENERAL</p> <p>042 MECHANICAL/ELECTRICAL GENERAL</p> <p>043 MECHANICAL/ELECTRICAL GENERAL</p> <p>044 MECHANICAL/ELECTRICAL GENERAL</p> <p>045 MECHANICAL/ELECTRICAL GENERAL</p> <p>046 MECHANICAL/ELECTRICAL GENERAL</p> <p>047 MECHANICAL/ELECTRICAL GENERAL</p> <p>048 MECHANICAL/ELECTRICAL GENERAL</p> <p>049 MECHANICAL/ELECTRICAL GENERAL</p> <p>050 MECHANICAL/ELECTRICAL GENERAL</p> <p>051 MECHANICAL/ELECTRICAL GENERAL</p> <p>052 MECHANICAL/ELECTRICAL GENERAL</p> <p>053 MECHANICAL/ELECTRICAL GENERAL</p> <p>054 MECHANICAL/ELECTRICAL GENERAL</p> <p>055 MECHANICAL/ELECTRICAL GENERAL</p> <p>056 MECHANICAL/ELECTRICAL GENERAL</p> <p>057 MECHANICAL/ELECTRICAL GENERAL</p> <p>058 MECHANICAL/ELECTRICAL GENERAL</p> <p>059 MECHANICAL/ELECTRICAL GENERAL</p> <p>060 MECHANICAL/ELECTRICAL GENERAL</p> <p>061 MECHANICAL/ELECTRICAL GENERAL</p> <p>062 MECHANICAL/ELECTRICAL GENERAL</p> <p>063 MECHANICAL/ELECTRICAL GENERAL</p> <p>064 MECHANICAL/ELECTRICAL GENERAL</p> <p>065 MECHANICAL/ELECTRICAL GENERAL</p> <p>066 MECHANICAL/ELECTRICAL GENERAL</p> <p>067 MECHANICAL/ELECTRICAL GENERAL</p> <p>068 MECHANICAL/ELECTRICAL GENERAL</p> <p>069 MECHANICAL/ELECTRICAL GENERAL</p> <p>070 MECHANICAL/ELECTRICAL GENERAL</p> <p>071 MECHANICAL/ELECTRICAL GENERAL</p> <p>072 MECHANICAL/ELECTRICAL GENERAL</p> <p>073 MECHANICAL/ELECTRICAL GENERAL</p> <p>074 MECHANICAL/ELECTRICAL GENERAL</p> <p>075 MECHANICAL/ELECTRICAL GENERAL</p> <p>076 MECHANICAL/ELECTRICAL GENERAL</p> <p>077 MECHANICAL/ELECTRICAL GENERAL</p> <p>078 MECHANICAL/ELECTRICAL GENERAL</p> <p>079 MECHANICAL/ELECTRICAL GENERAL</p> <p>080 MECHANICAL/ELECTRICAL GENERAL</p> <p>081 MECHANICAL/ELECTRICAL GENERAL</p> <p>082 MECHANICAL/ELECTRICAL GENERAL</p> <p>083 MECHANICAL/ELECTRICAL GENERAL</p> <p>084 MECHANICAL/ELECTRICAL GENERAL</p> <p>085 MECHANICAL/ELECTRICAL GENERAL</p> <p>086 MECHANICAL/ELECTRICAL GENERAL</p> <p>087 MECHANICAL/ELECTRICAL GENERAL</p> <p>088 MECHANICAL/ELECTRICAL GENERAL</p> <p>089 MECHANICAL/ELECTRICAL GENERAL</p> <p>090 MECHANICAL/ELECTRICAL GENERAL</p> <p>091 MECHANICAL/ELECTRICAL GENERAL</p> <p>092 MECHANICAL/ELECTRICAL GENERAL</p> <p>093 MECHANICAL/ELECTRICAL GENERAL</p> <p>094 MECHANICAL/ELECTRICAL GENERAL</p> <p>095 MECHANICAL/ELECTRICAL GENERAL</p> <p>096 MECHANICAL/ELECTRICAL GENERAL</p> <p>097 MECHANICAL/ELECTRICAL GENERAL</p> <p>098 MECHANICAL/ELECTRICAL GENERAL</p> <p>099 MECHANICAL/ELECTRICAL GENERAL</p> <p>100 MECHANICAL/ELECTRICAL GENERAL</p>



met
energy systems
CONSULTING ENGINEERING
477 GREEN STREET, EAST WILKINSON
SALT LAKE CITY, UT 84143
PHONE: (801) 462-3344
HTTP://WWW.METENERGY.COM



design
ARCHITECTURAL CONSULTANT
200 CHURCH STREET, SUITE 100
SALT LAKE CITY, UT 84143
PHONE: (801) 233-4333
EMAIL: info@design.com



TULLOCH
ENGINEERING
STRUCTURAL CONSULTANT
71 BLACK HAWK, SUITE 100
SALT LAKE CITY, UT 84143
PHONE: (801) 462-1457
EMAIL: info@tulloch.com

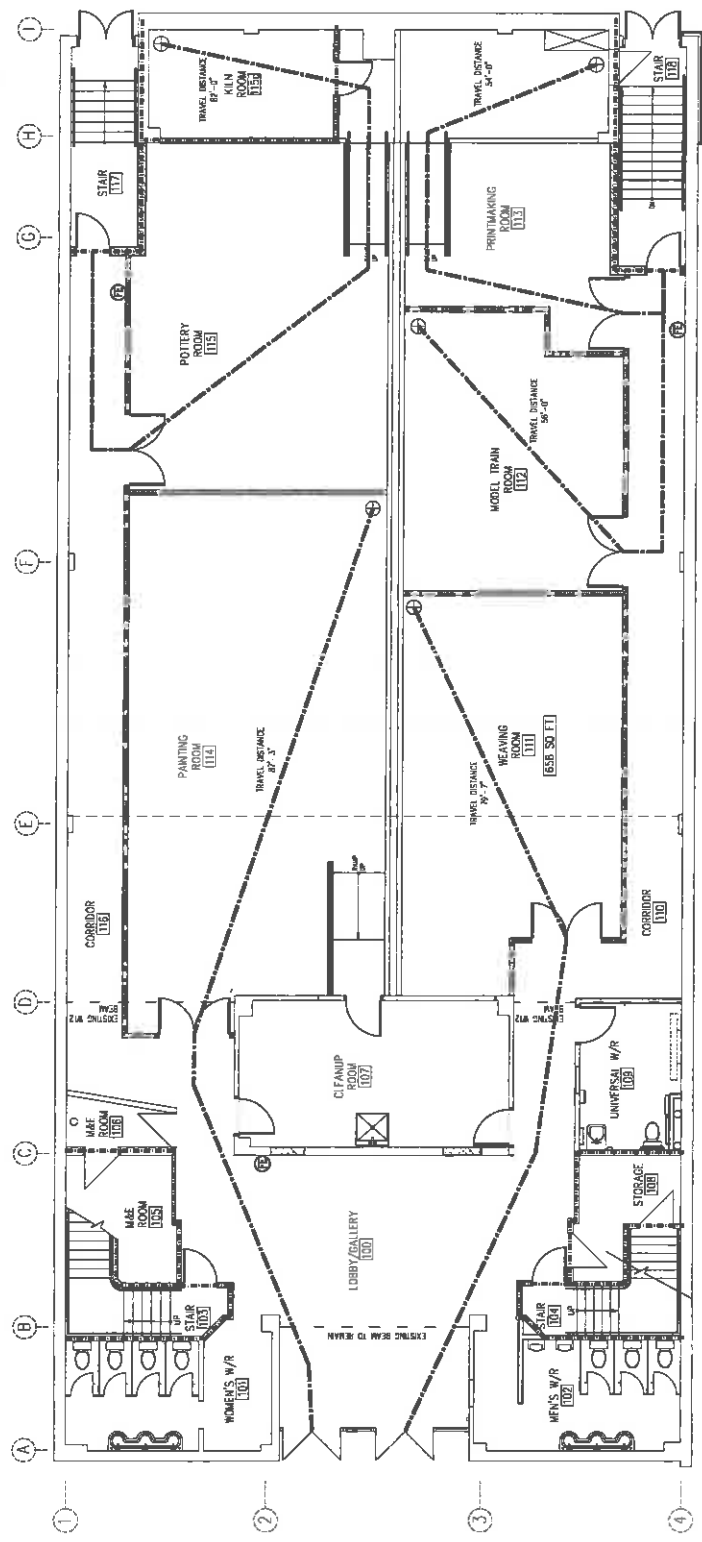


LEGEND

NEW 1 HOUR FIRE SEPARATION

10 LB ABC FIRE EXTINGUISHER

NOTE: REFER TO DRAWING 400 REFLECTED CEILING PLAN FOR CEILING FLOOR FIRE SEPARATION



GROUND FLOOR - FIRE SEPARATION

met
ARCHITECTURAL CONSULTANT

477 BAYVIEW AVE. SUITE 204
DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELLIOT LAKE, ON
N4Y 1B6
TEL: (905) 881-1111
WWW.METARCHITECT.COM

design
ARCHITECTURAL CONSULTANT

3401 STE. 100, 1000 SHEPPARD AVE. E.
UNIT 100, SCARBOROUGH, ONT. M1S 1T5
TEL: (416) 291-1111
WWW.DESIGNARCHITECT.COM

THE ARCHITECTS, ENGINEERS, PLANNERS AND DESIGNERS HAVE PREPARED THIS DOCUMENT FOR THE CLIENT'S USE. IT IS THE CLIENT'S RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AUTHORITIES. THE ARCHITECTS, ENGINEERS, PLANNERS AND DESIGNERS SHALL NOT BE RESPONSIBLE FOR ANY CONSEQUENCES ARISING FROM THE USE OF THIS DOCUMENT FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED.

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMITS	2023.12.14
2	REVISED	2024.01.11

PROJECT LOCATION: DOWNTOWN ARTS CENTRE, ELIZABETH WALK, ELLIOT LAKE, ON

PROJECT DESCRIPTION: ARCHITECTURAL GROUND FLOOR FIRE SEPARATION PLAN

SCALE:	3/32"=1'-0"	1:128
DATE:	14 DEC 2023	
CHECKED BY:	SHAWNEY	DATE: 18 DEC 2023
PROJECT NO.:	22010401	FILE NO. 22010401

SHEET NO.	2 of 29
REV.	0



- GENERAL DEMOLITION**
- 1 REMOVE ALL EXISTING ELECTRICAL RECEPTACLES, SWITCHES AND ANY OTHER DEVICES AND ASSOCIATED WIRING FOR WALLS BEING DEMOLISHED. CLEAN AND PATCH ALL HOLES IN WALLS BEING REMOVED.
 - 2 REMOVE ALL EXISTING CEILING SYSTEMS INCLUDING ALL CEILING, LIGHT FIXTURES, TRUSSES AND ASSOCIATED WIRING IN ALL ROOMS. REMOVE ALL EXISTING PARTITION WALLS, TRUSSES AND PROTECTION ROOM PARTIES.
 - 3 REMOVE ALL FLOORING ON GROUND FLOOR AND MAKE READY FOR NEW FINISHES.
 - 4 ALL WALLS, DOORS, SINKS AND MILLWORK SHOWN HEREIN TO BE REMOVED AND REPAIRED WITH NEW RETER. ROOF ACCESS HATCH TO BE REMOVED AND REPAIRED WITH NEW RETER. TO MATCH EXISTING AND SURROUNDING CONDITIONS.
 - 5 ALL REMAINS TO BE COORDINATED WITH OWNER RETIRE HOSPITAL.
 - 6 ROOF ACCESS HATCH TO BE REMOVED AND REPAIRED WITH NEW RETER. TO MATCH EXISTING AND SURROUNDING CONDITIONS.

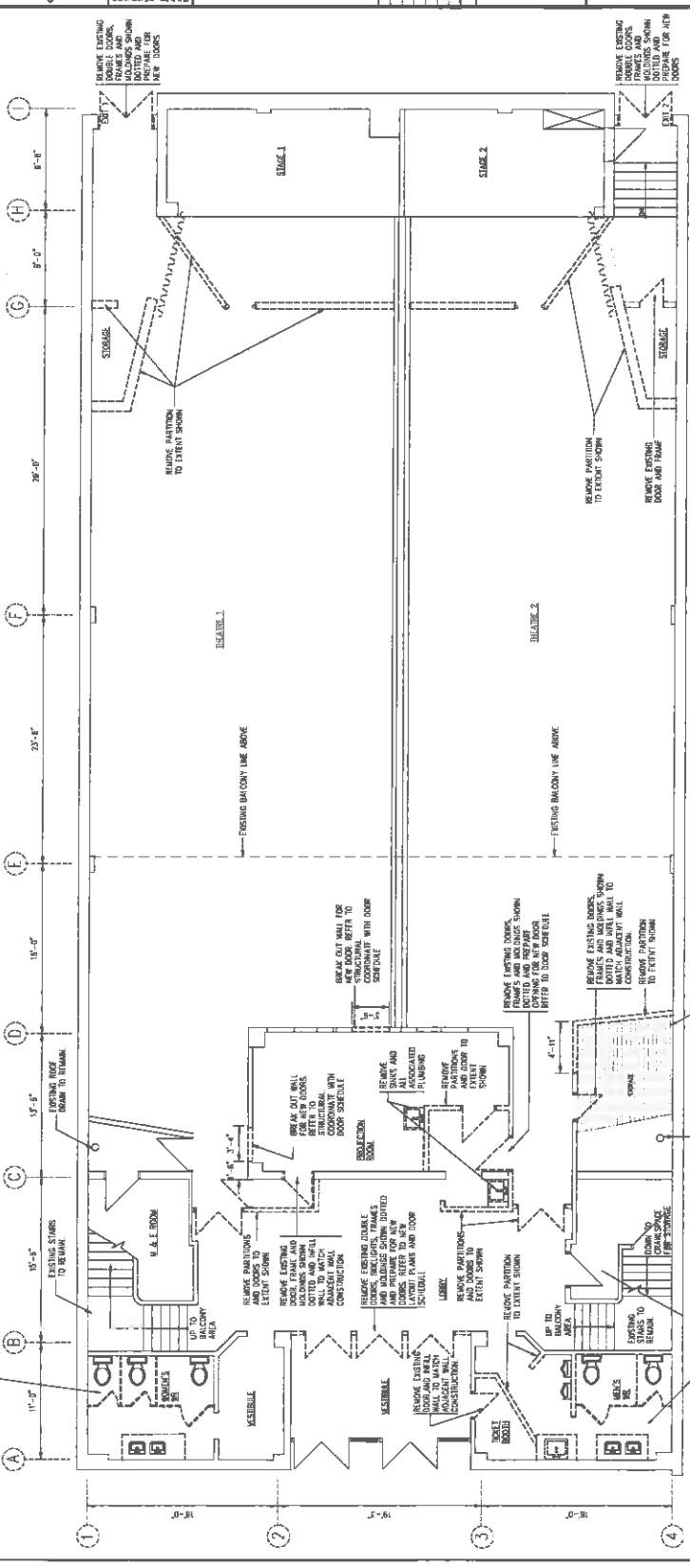
REMOVE ALL WATER CLOSING, SINK AND ALL ASSOCIATED HARDWARE. EXISTING SANITARY TO BE CARRIED AT HANDS AND BE REMOVED FOR NEW PAPER DISPENSERS AND PAPER TOWEL DISPENSERS. EXISTING WALKS ARE TO BE PATCHED AND REPAIRED PRIOR TO INSTALLING NEW FINISHES AND FINISHES.

REMOVE EXISTING DOORS, SINKS AND MILLWORK SHOWN HEREIN TO BE REMOVED AND REPAIRED WITH NEW RETER. ROOF ACCESS HATCH TO BE REMOVED AND REPAIRED WITH NEW RETER. TO MATCH EXISTING AND SURROUNDING CONDITIONS.

REMOVE EXISTING DOORS, SINKS AND MILLWORK SHOWN HEREIN TO BE REMOVED AND REPAIRED WITH NEW RETER. ROOF ACCESS HATCH TO BE REMOVED AND REPAIRED WITH NEW RETER. TO MATCH EXISTING AND SURROUNDING CONDITIONS.

REMOVE EXISTING DOORS, SINKS AND MILLWORK SHOWN HEREIN TO BE REMOVED AND REPAIRED WITH NEW RETER. ROOF ACCESS HATCH TO BE REMOVED AND REPAIRED WITH NEW RETER. TO MATCH EXISTING AND SURROUNDING CONDITIONS.

REMOVE EXISTING DOORS, SINKS AND MILLWORK SHOWN HEREIN TO BE REMOVED AND REPAIRED WITH NEW RETER. ROOF ACCESS HATCH TO BE REMOVED AND REPAIRED WITH NEW RETER. TO MATCH EXISTING AND SURROUNDING CONDITIONS.



GROUND FLOOR - REMOVALS PLAN

met
ARCHITECTS
CONSULTING ENGINEERING
477 QUEEN STREET EAST SUITE 204
TORONTO, ONTARIO M5E 1B3
PHONE: (416) 593-1111 FAX: (416) 593-1112
http://www.met-arch.com

design
david ellis architect inc.
ARCHITECTURAL CONSULTANTS
SUITE 101, 100 KING STREET WEST
TORONTO, ONTARIO M5X 1C5
PHONE: (416) 593-1111 FAX: (416) 593-1112
http://www.design-arch.com

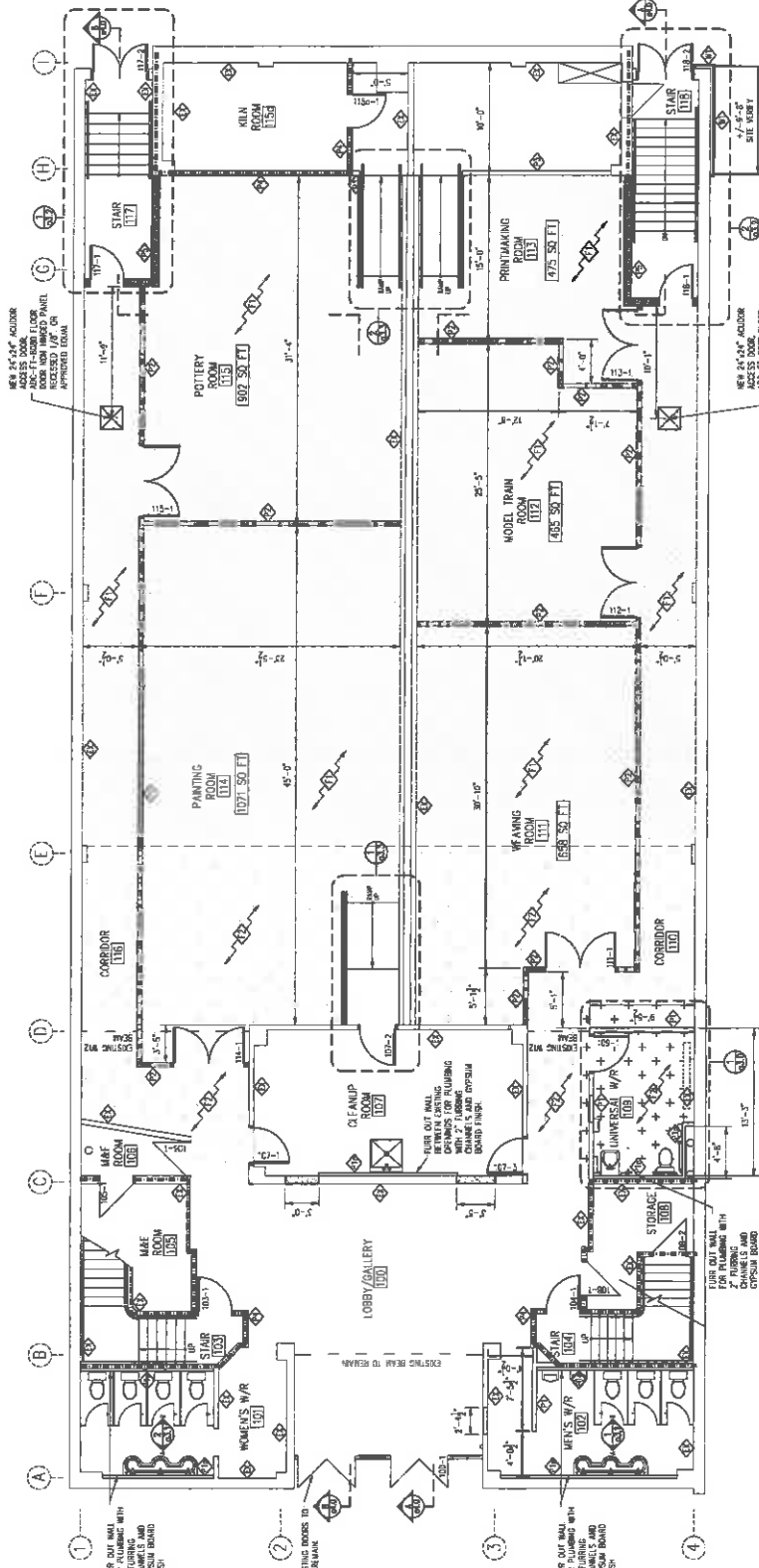
THE WORK SHOWN ON THIS PLAN IS THE PROPERTY OF THE ARCHITECT. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT. ANY VIOLATION OF THIS AGREEMENT WILL BE CONSIDERED A BREACH OF CONTRACT AND SUBJECT TO LEGAL ACTION.

NO.	REVISION	DATE
1	ISSUED FOR PERMIT	2023.12.12
2	REVISION	
3	REVISION	
4	REVISION	
5	REVISION	
6	REVISION	
7	REVISION	
8	REVISION	
9	REVISION	
10	REVISION	

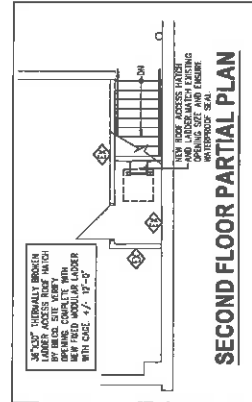
PROJECT DESCRIPTION
DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELIOT LANE, ON

DATE: 2/28/2024
DRAWN BY: J. J. J. J.
CHECKED BY: J. J. J. J.
PROJECT NO: 24-03
FILE NO: 20240001

SCALE: 3/8"=1'-0"	DATE: 12/12/2023
DRAWN BY: J. J. J. J.	CHECKED BY: J. J. J. J.
PROJECT NO: 24-03	FILE NO: 20240001
SHEET NO: 3 OF 28	REV: 0



NEW MAIN FLOOR PLAN





met
ARCHITECTURAL CONSULTING
CONSULTING ENGINEERING
470 DART STREET, SUITE 204
DARTMOUTH, NS B3A 2G4
PHONE (902) 241-1111 FAX (902) 241-1112
http://www.metns.ca



david ellis architect inc.
ARCHITECTURAL CONSULTING
SANT ST. MADE, ON T6A 1K6
PHONE (416) 593-2222
FAX (416) 593-2223
http://www.dellisarchitect.com

REV	DESCRIPTION	DATE
0	ISSUED FOR PERMIT	2012.12.16
1	REVISION	2013.03.16

PROJECT DESCRIPTION
DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELLIOT LANE, ON

DRAWING DESCRIPTION
ARCHITECTURAL
NEW PLAN
GROUND FLOOR

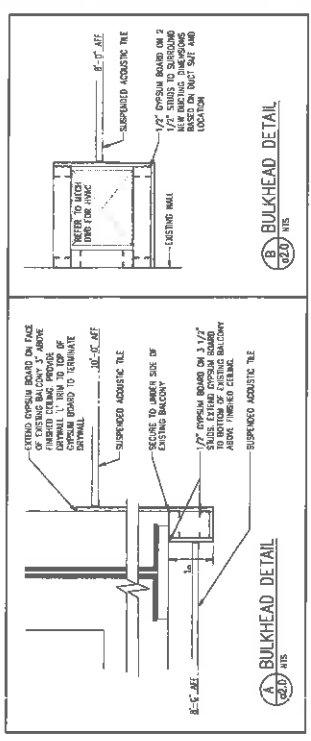
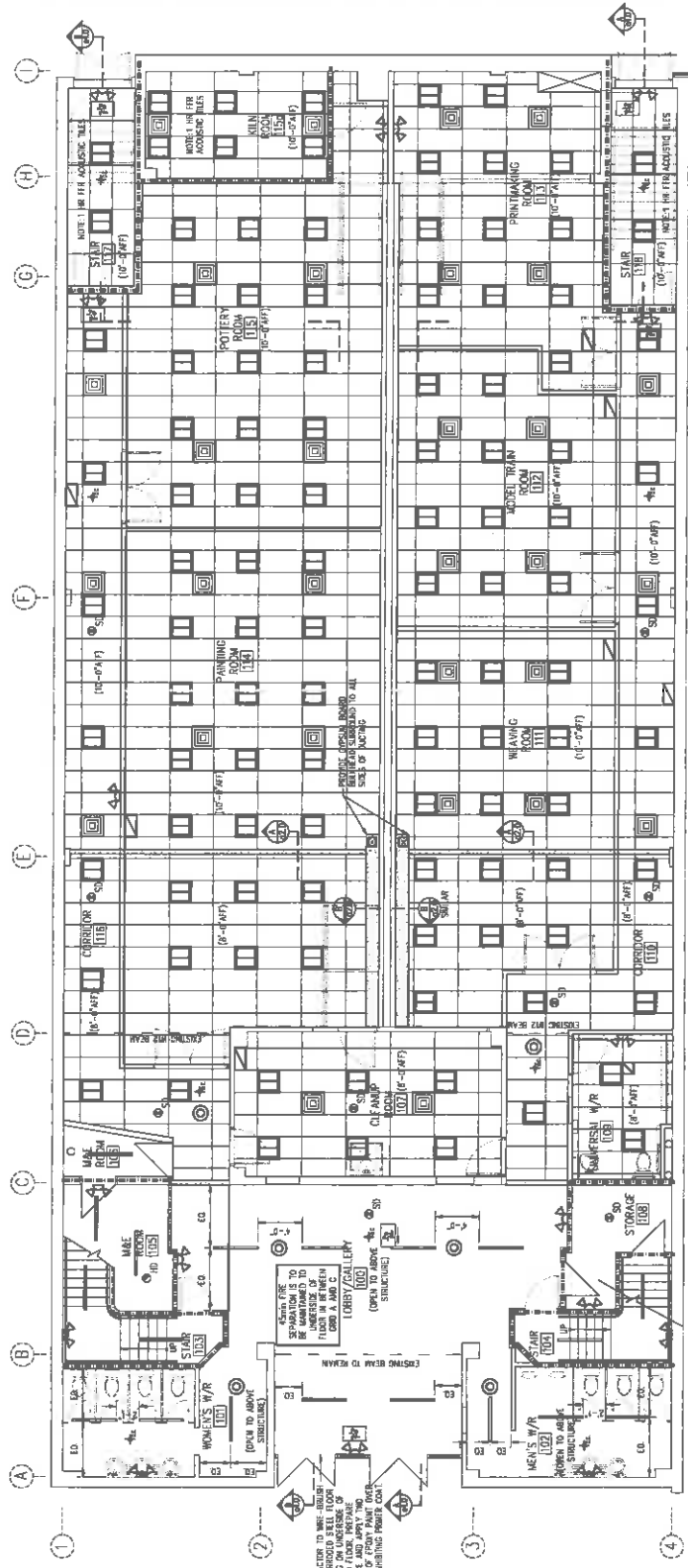
SCALE: 3/32"=1'-0" 1/8"=1'-0"

DRAWN BY: JAM DATE: 10 DEC 2012
CHECKED BY: REMARK DATE: 11 DEC 2012
PROJECT NO: 220111 FILE NO: 220111.0


SHEET NO:
4 of 29
0
REV




- GENERAL NOTES**
1. CEILING OPEN TO ABOVE STRUCTURE TO BE PAINTED WHITE. EXPOSED DUCT WORK TO BE PAINTED TO MATCH.
 2. ALL NEW EPSIUM SOUND CEILING AND BULKHEAD TO RECEIVE PAINT FINISH.
 3. 65mm FIRE SEPARATION IS TO BE MAINTAINED TO UNDERSIDE OF FLOOR IN BETWEEN GRID A AND C.



GROUND FLOOR - REFLECTED CEILING PLAN



met
ENERGY SYSTEMS
CONSULTING ENGINEERING
470 QUEEN STREET EAST SUITE 204
TORONTO, ONTARIO M5E 1B3
PHONE (416) 593-1111 FAX (416) 593-1112
info@metgroupinc.com



david ellis architect inc.
ARCHITECTURAL CONSULTANTS
SALT SPRING ISLAND ON TSN 3540
4000 SHEPPARD AVENUE EAST SUITE 100
SCARBOROUGH, ONTARIO M1S 1T6
416-291-1111
www.dellisarchitect.com

NO.	REVISION	DATE
1	ISSUED FOR TENDER	2022.12.16
2	REV. DESCRIPTION	2022.12.16

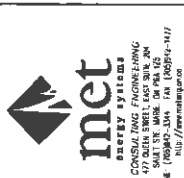
PROJECT DESCRIPTION:
DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELLIOT LANE, ON

REFERENCE DESCRIPTION:
ARCHITECTURAL
GROUND FLOOR
REFLECTED CEILING PLAN

SCALE:	3/32"=1'-0"	1:30
DRAWN BY:	AM	DATE: 10.06.2022
CHECKED BY:	ISA	DATE: 10.06.2022
PROJECT NO:	2201	FILE NO: 2201020

SHEET NO.	5 of 29
REV.	0

a2.0



CONSULTING ENGINEERING
477 QUEEN STREET, EAST SUITE 204
SAULT STE. MARIE, ON P6A 1E5
E: (905)42-1144 FAX (905)546-9411
http://www.mahling.on.ca



David ELLIS architect Inc.
ARCHITECTURAL CONSULTANT
287 CANTON STREET
SALAT STE. WARE, ON P6A 1E5p6
(705) 213-4133

THE NEW YORK PUBLIC LIBRARY
ASTOR LENOX TILDEN FOUNDATIONS
100 N. 5TH ST. NEW YORK, N.Y. 10017

ENGINEER'S SEAL

REV	DESCRIPTION	DATE
0	ISSUED FOR REPAIR	2022.12.16

DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELIOT LAKE, ON

HOLDING COMPANY

ARCHITECTURAL
MAIN FLOOR
UNIVERSAL WASHROOM PLAN
AND INTERIOR ELEVATIONS

SCALE: 1/4"=1'-0"	TURN BY AM	DATE: 10 DEC 2002	NO. OF SHEET
	CHECKED BY SUREKSY	DATE: 11 DEC 2002	
	PROJECT NO. 20041	FILE NO. 20041-0	
SHEET NO.			6 of 29
a3.0			0

ACCESSIBILITY

4. **WARDROOM TO MEET ALL FIRE ACCESSIBILITY REQUIREMENTS**
5. **STORAGE** ALL TOILET ROOMS SHALL BE IDENTIFIED WITH COMPLIANCE AND A NOTICE BOARD SIGNED OF COMPLIANCE - 1200 H.F.S. MIN. 1500 H.F.S. MAX. (14-15)
6. **MAINTENANCE** MIN. 47-1/2" TO CEILINGLINE OF ROOF ON LATCH SIDE JAMB
7. **WATER TIGHTENING** 110 BROWN FAIRFAXMAN HALL AT TOILET
8. **WINDUP** EXPLODED HOT WIRE BURNERS UNDER LAVATORY AND SHINE SHALL BE ILLUMINATED ON CHIFFONIER CONTAINED IN PROTECT AGAINST CONTACT
9. **SURFACES** THERE SHALL BE NO SHAMPOO OR AIRBORNE SURFACES LAVATORY AND SHINE
10. **MAINTAINING CLEARANCE** EACH TOILET, BATH, AND SHOWER ROOM SHALL HAVE A CLEAR SPACE NOT INTERRUPTED BY FURNITURE OR EXITS AS FOLLOWS - 30" MIN. DIA. CIRCLE OR 60" VEL. BE WHEN MAX. AND CHAIR BACK
11. **GRAB BARS** 1-1/4" TO 1-1/2" DIA. OR WITH 6 DRIPPING SURFACES WITH 1-1/2" SPACE FITTINGS SHALL NOT ALLOW GRAB BAR ROTATION
12. **GRAB BARS AND WALL** ON OTHER SURFACES ADJACENT TO GRAB BARS SHALL BE FREE OF SHAMPOO OR AIRBORNE ELEMENTS. TOILET SHALL HAVE A MINIMUM OF 1/8" MIN.
13. **ALUMINUM** THECEIN OF THERMOPLASTIC, POLAR AND THERMO SHALL NOT BE EXCEEDED THE MATERIAL USED WHEN A VERTICAL OR HORIZONTAL FLOOR OF 250 H.F.S. IS APPLIED AT ANY POINT ON THE GRAB BAR
14. **NO BARRED ENTRY** NO BARRED ENTRY ON SUPPORTING STRUCTURE
15. **NO BARRED ENTRY** NO BARRED ENTRY COMPLETE WITH ACTIVATIONS ON LAVATORY ROOMHOLD

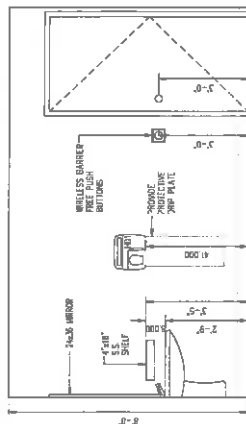
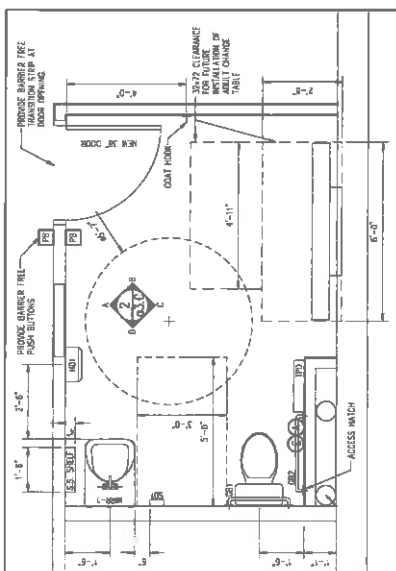
BILL OF MATERIAL

- AMERICAN SPECIALTIES 37-387 FORD AVE., TULSA, OK 74106 OR SIMILAR TO BENT BARBER FREE STANDARDS

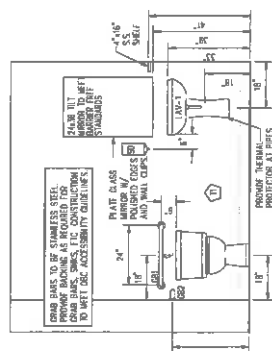
52

- CONTRACTOR TO SITE VERIFY ALL DIMENSIONS PRIOR TO ORDERING OF EQUIPMENT
- ALL WALLS AFFECTED FROM DEMOLITION AND REBUILDING TO BE REINFORCED, PATCHED AND MADE GOOD TO MATCH EXISTING CONSTRUCTION OR TO RECEIVE NEW FINISHES. TYPICAL ALL AREAS
- ORDER TO SUPPLY WASHROOM ACCESSORIES. CONTRACTOR TO INSTALL.

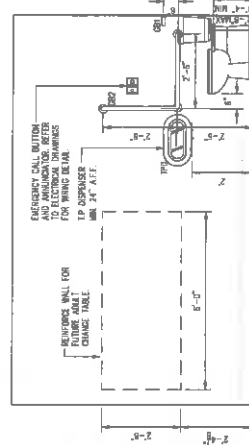
1 NEW UNIVERSAL WASHROOM PLAN



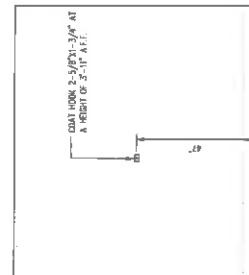
2A UNIVERSAL W/R ELEVATION



2B UNIVERSAL W/R ELEVATION
230



2C UNIVERSAL W/R ELEVATION.



20 UNIVERSAL W/R ELEVATION



CONSULTING ENGINEERING
171 QUEEN STREET EAST SUITE 204
SUITE 204
TORONTO, ONTARIO M5H 1G5
PHONE: (416) 593-1471
FAX: (416) 593-1472
WWW.METARCHITECT.COM



david ellis architect inc.
ARCHITECTURAL CONSULTANT
171 QUEEN STREET EAST SUITE 204
TORONTO, ONTARIO M5H 1G5
PHONE: (416) 593-1471
FAX: (416) 593-1472
WWW.METARCHITECT.COM

THIS DOCUMENT IS THE PROPERTY OF MET ARCHITECTURAL CONSULTANT. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF MET ARCHITECTURAL CONSULTANT. ANY UNAUTHORIZED USE OF THIS DOCUMENT IS STRICTLY PROHIBITED. MET ARCHITECTURAL CONSULTANT ACCEPTS NO LIABILITY FOR ANY DAMAGE OR LOSS, INCLUDING CONSEQUENTIAL DAMAGES, ARISING FROM THE USE OF THIS DOCUMENT. THE USER ASSUMES ALL LIABILITY FOR ANY DAMAGE OR LOSS, INCLUDING CONSEQUENTIAL DAMAGES, ARISING FROM THE USE OF THIS DOCUMENT.

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

FOR: [Signature]

PROJECT NO: 2023-12-10

DATE: 10/10/2023

BY: [Signature]

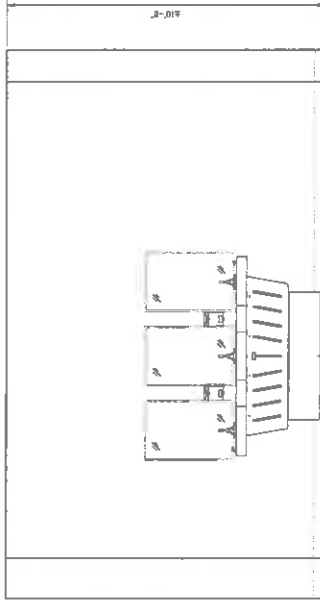
FOR: [Signature]

PROJECT NO: 2023-12-10

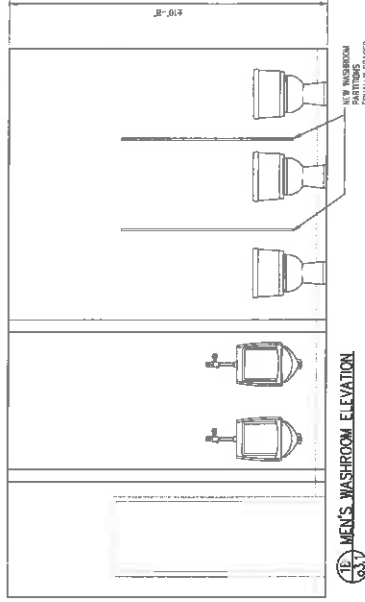
DATE: 10/10/2023

BY: [Signature]

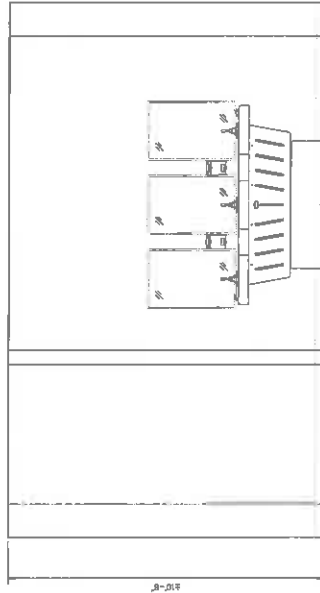
FOR: [Signature]



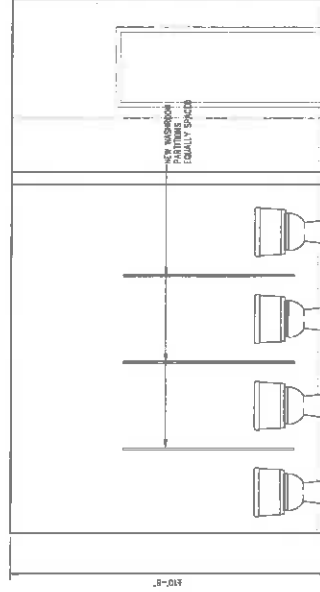
1A MEN'S WASHROOM ELEVATION



1B MEN'S WASHROOM ELEVATION



2A WOMEN'S WASHROOM ELEVATION



2B WOMEN'S WASHROOM ELEVATION

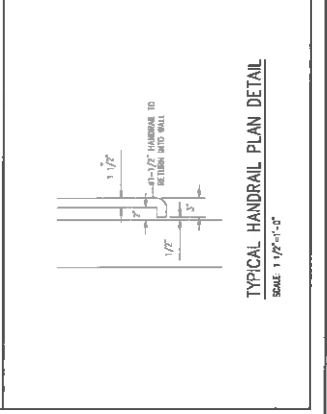
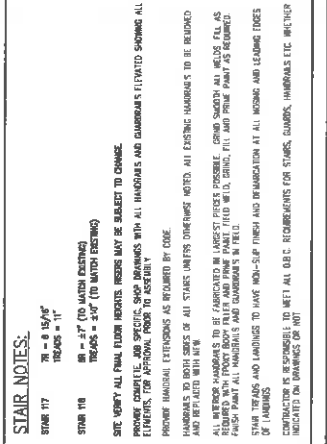
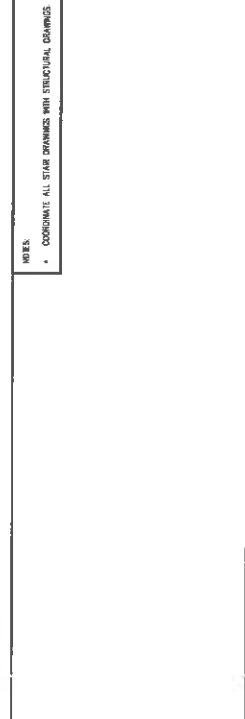
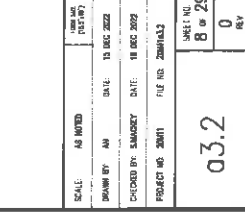
- NOTES:
- CONTRACTOR TO SITE VERIFY ALL DIMENSIONS PRIOR TO ORDERING OF EQUIPMENT
 - ALL WALLS AFFECTED FROM DEMOLITION AND REPAIRS TO BE REFINISHED TO MATCH EXISTING FINISHES. ALL REPAIRS TO BE MATCHED TO EXISTING FINISHES. ALL REPAIRS TO BE MATCHED TO EXISTING FINISHES.
 - TOILET PARTITIONS TO BE: MARBLED PORCELAIN COVER - MARBLED PORCELAIN STANDARD COLOUR: D10 BLACK OR APPROVED EQUAL.
 - WASHROOM ACCESSORIES SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR.

q3.1

SHEET NO.
7 of 29

0

KEY





met
METAL FABRICATING
CONSULTING ENGINEERING
4700 STEEL STREET, SUITE 200
PHILADELPHIA, PA 19124-1411
TEL: (215) 381-1111 FAX: (215) 381-1112
http://www.metfab.com



design
architect inc.
david ellis architect inc.
ARCHITECTS
300 N. 3RD STREET, SUITE 200
PHILADELPHIA, PA 19107
TEL: (215) 381-1111 FAX: (215) 381-1112
http://www.designarchitect.com

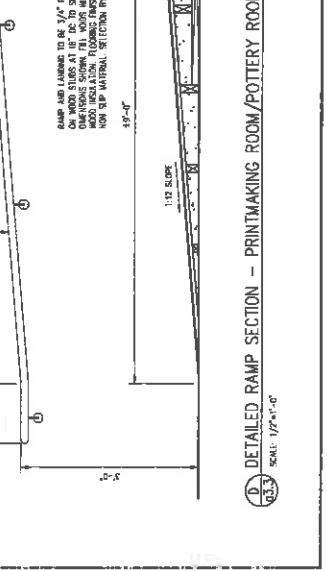
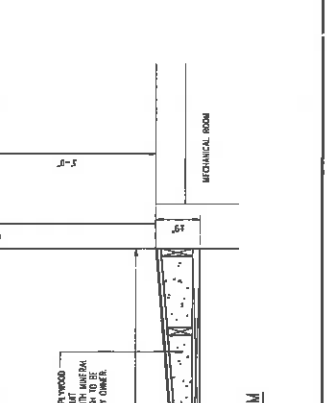
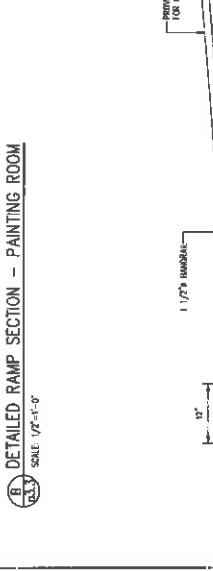
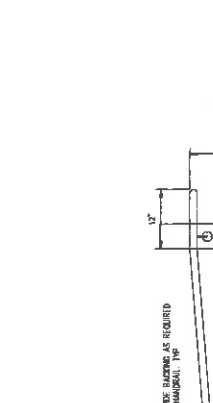
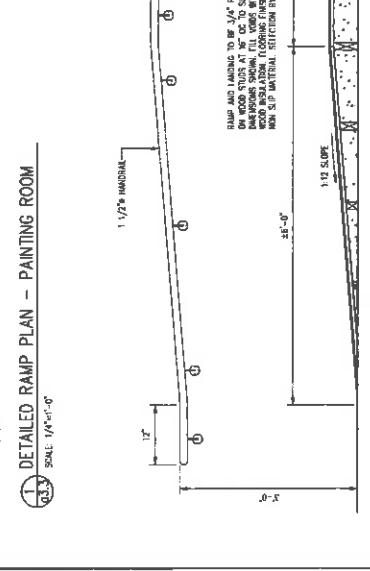
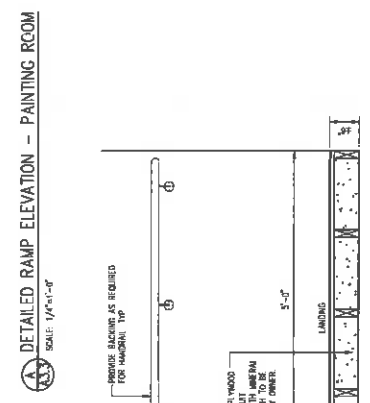
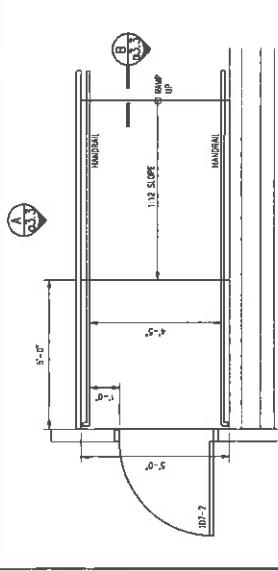
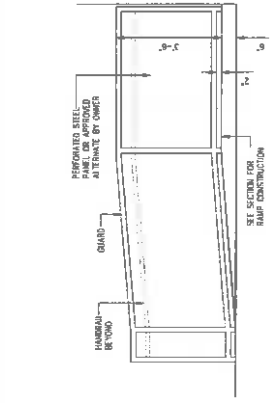
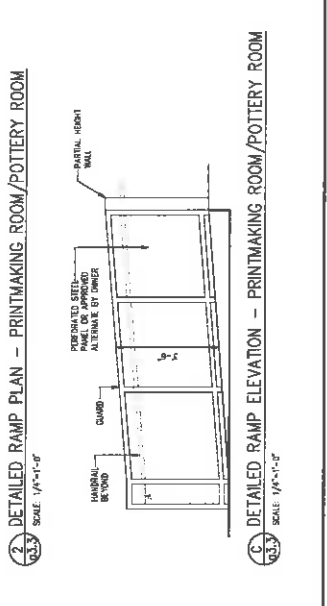
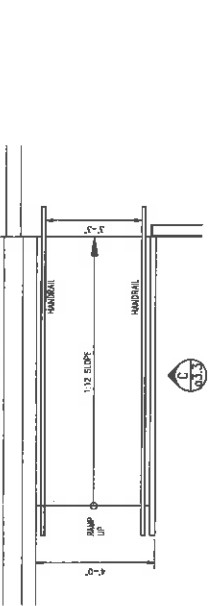
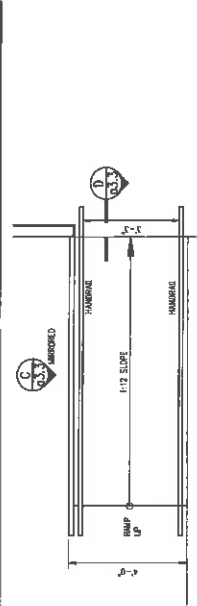
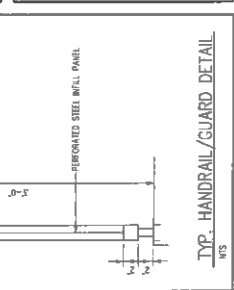
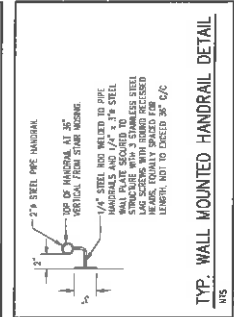
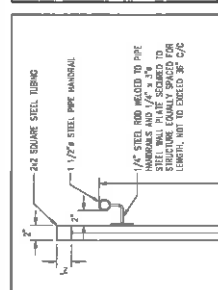
THESE DRAWINGS ARE THE PROPERTY OF DAVID ELLIS ARCHITECT INC. AND ARE NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DAVID ELLIS ARCHITECT INC. ANY VIOLATION OF THIS NOTICE WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

DATE	ISSUED FOR TENDER	NOV 12 13
REV	DESCRIPTION	DATE
1	ISSUED FOR TENDER	NOV 12 13
2	ISSUED FOR TENDER	NOV 12 13
3	ISSUED FOR TENDER	NOV 12 13
4	ISSUED FOR TENDER	NOV 12 13
5	ISSUED FOR TENDER	NOV 12 13
6	ISSUED FOR TENDER	NOV 12 13
7	ISSUED FOR TENDER	NOV 12 13
8	ISSUED FOR TENDER	NOV 12 13
9	ISSUED FOR TENDER	NOV 12 13
10	ISSUED FOR TENDER	NOV 12 13

PROJECT DESCRIPTION
THEATRE RENOVATIONS
ELIZABETH WALK
ELIOT LANE, ON

SCALE	AS NOTED	DATE	14 DEC 2013
DATE	14 DEC 2013	DATE	14 DEC 2013
PROJECT NO.	20011	FILE NO.	20011.1
SHEET NO.	9	OF	29
REV	0		

NOTES
ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.
RAMP TO BE CONSTRUCTED IN ACCORDANCE TO ONE SECTION 18.3.4
PROVIDE HANDRAIL EXTENSIONS AS PER ONE REQUIREMENTS
HANDRAILS TO BE 1 1/2" STEEL PIPE TO BOTH SIDES OF RAMP
FULLY WELD ALL CONNECTIONS ALL VERTICAL HANDRAILS TO BE
WELDED TO 2" X 4" STUDS AND 2" X 4" STUDS TO BE PAINTED
BLACK.
CONTRACTOR TO PROVIDE SHOP DRAWINGS PRIOR TO CONSTRUCTION.



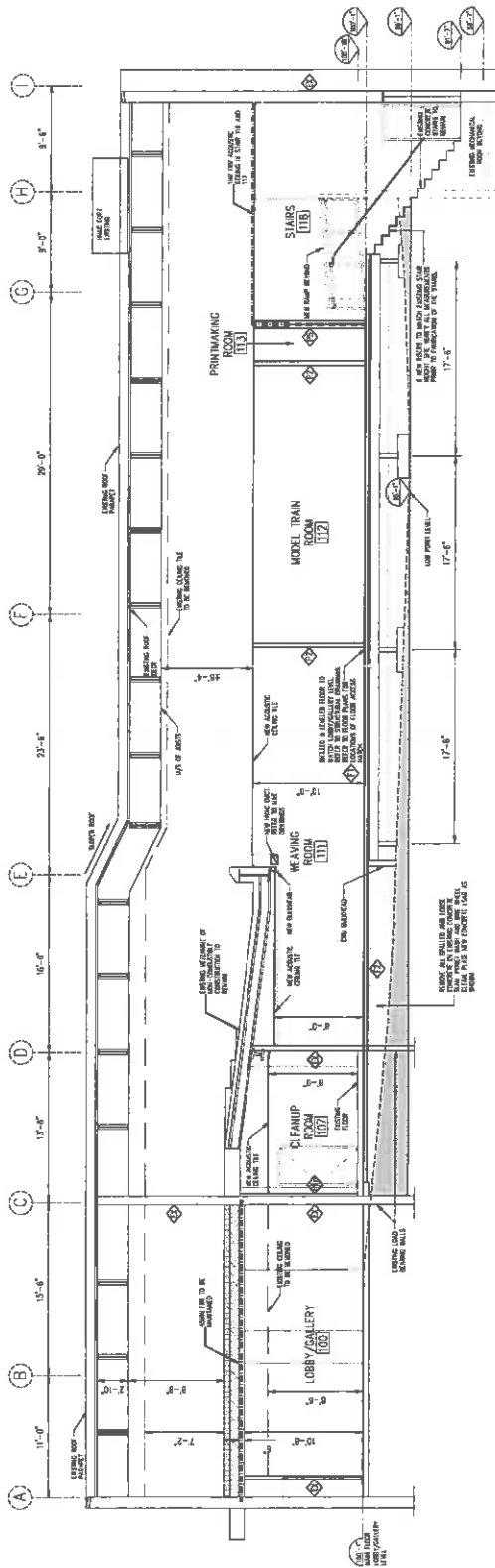
0	ISSUED FOR REPAIR	2022 12 15
0000	DESCRIPTION:	0000

PROJECT DESCRIPTION:	DOWNTOWN ARTS CENTRE ELIZABETH WALK ELLIOT LAKE, ON
----------------------	---

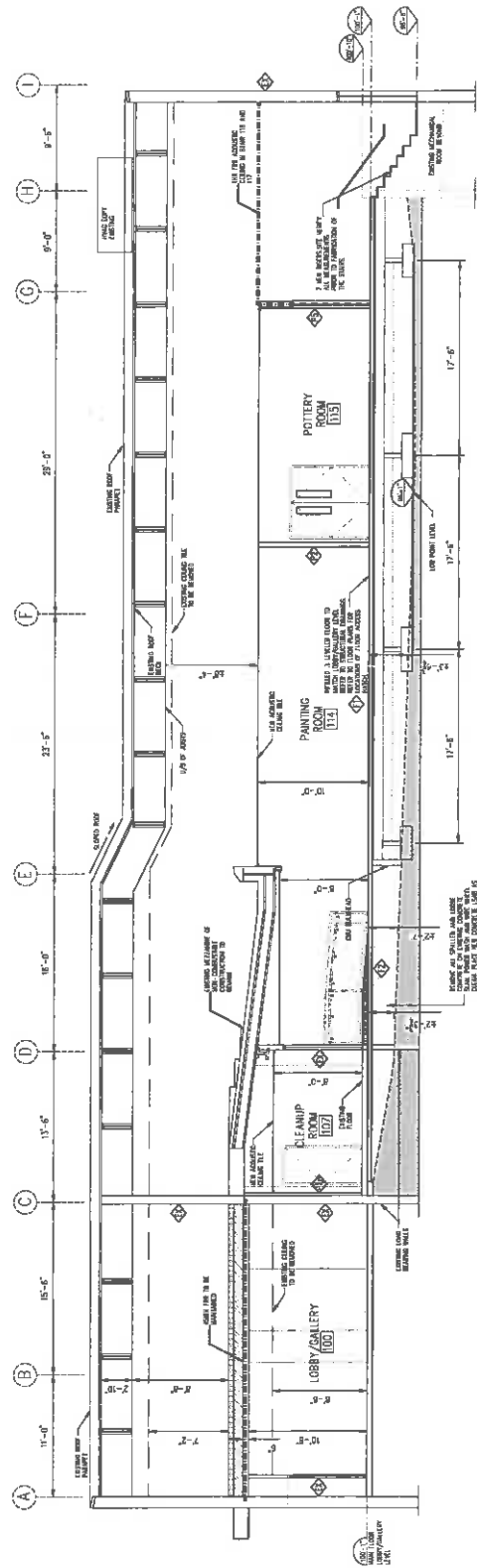
DRAWING DESCRIPTION
ARCHITECTURAL
BUILDING SECTIONS

SCALE: $3/32"=1'-0"$	1:13B	100% S21 (40.3'x10')
DRAWN BY: AM	DATE: 15 DEC 2022	
CHECKED BY: S. MACHELY	DATE: 18 DEC 2022	

NOV 07 10 22AM	FILE NO: 228H1640	SHEET NO: 10 of 29	0
		d4.0	



CROSS SECTION A



CROSS SECTION B



ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. DATE 08-20-2010 BY 60322 UCBAW/STP

PROJECT DESCRIPTION:

ARCHITECTURAL

PROJECT NO: 22-35 FILE NO: 20111050

SHEET NO.

0.00

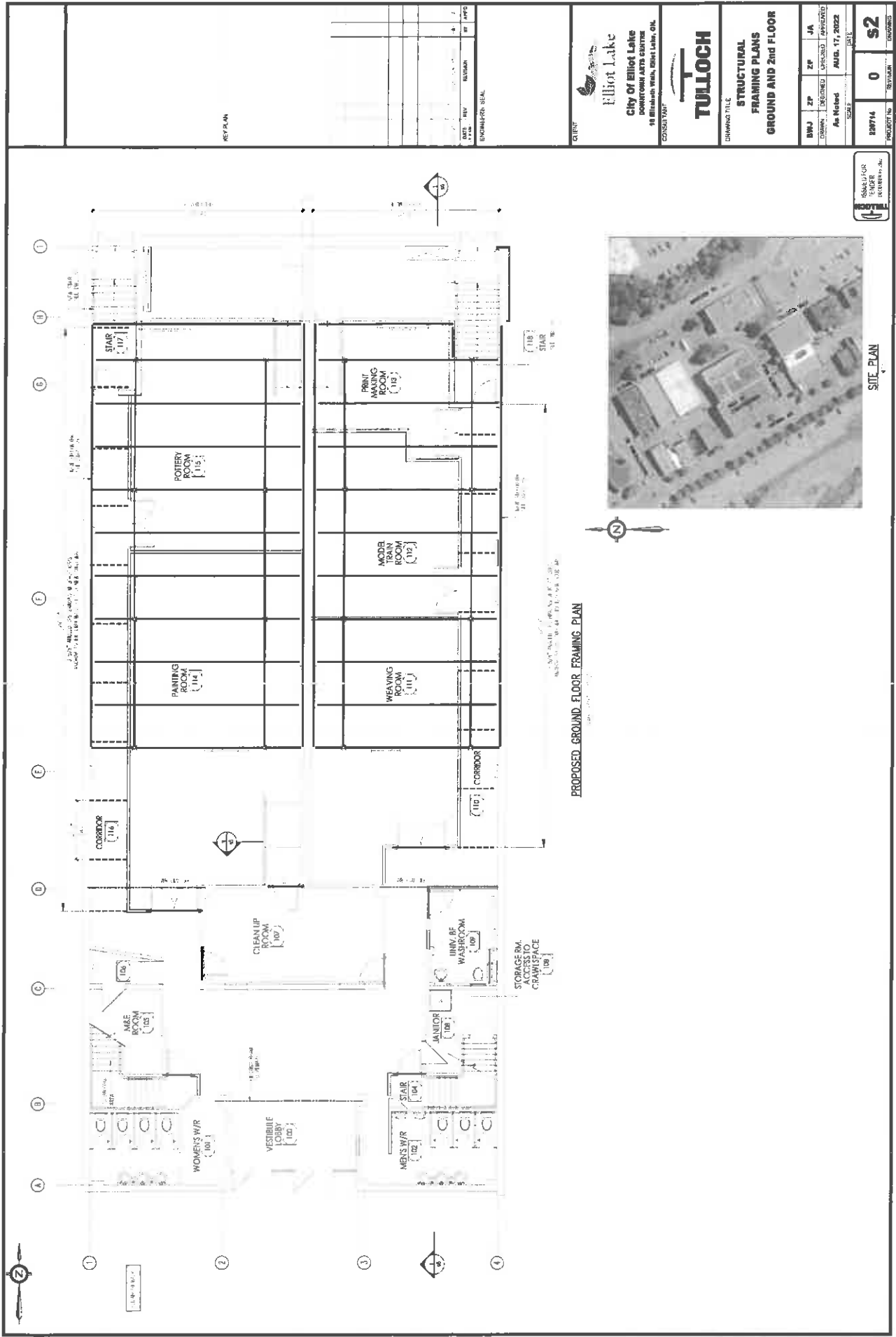
1000000

- | | |
|----------|------------|
| 11.5a--1 | SALES ROOM |
|----------|------------|



1. RESTORE ALL FISHES DAMAGED

-



REF PLAN

ENGINEER SEAL

CLIENT

Elliot Lake
City of Elliot Lake
DOWNTOWN ARTS CENTRE
18 Elizabeth Way, Elliot Lake, ON
CONSULTANT

CONSULTANT

TULLOCH

DRAWING TITLE

**STRUCTURAL
FRAMING PLANS
GROUND AND 2nd FLOOR**

DATE	BY	CHKD	APPD
2022.11.17	JA	JA	JA
As Noted	As Noted	As Noted	As Noted

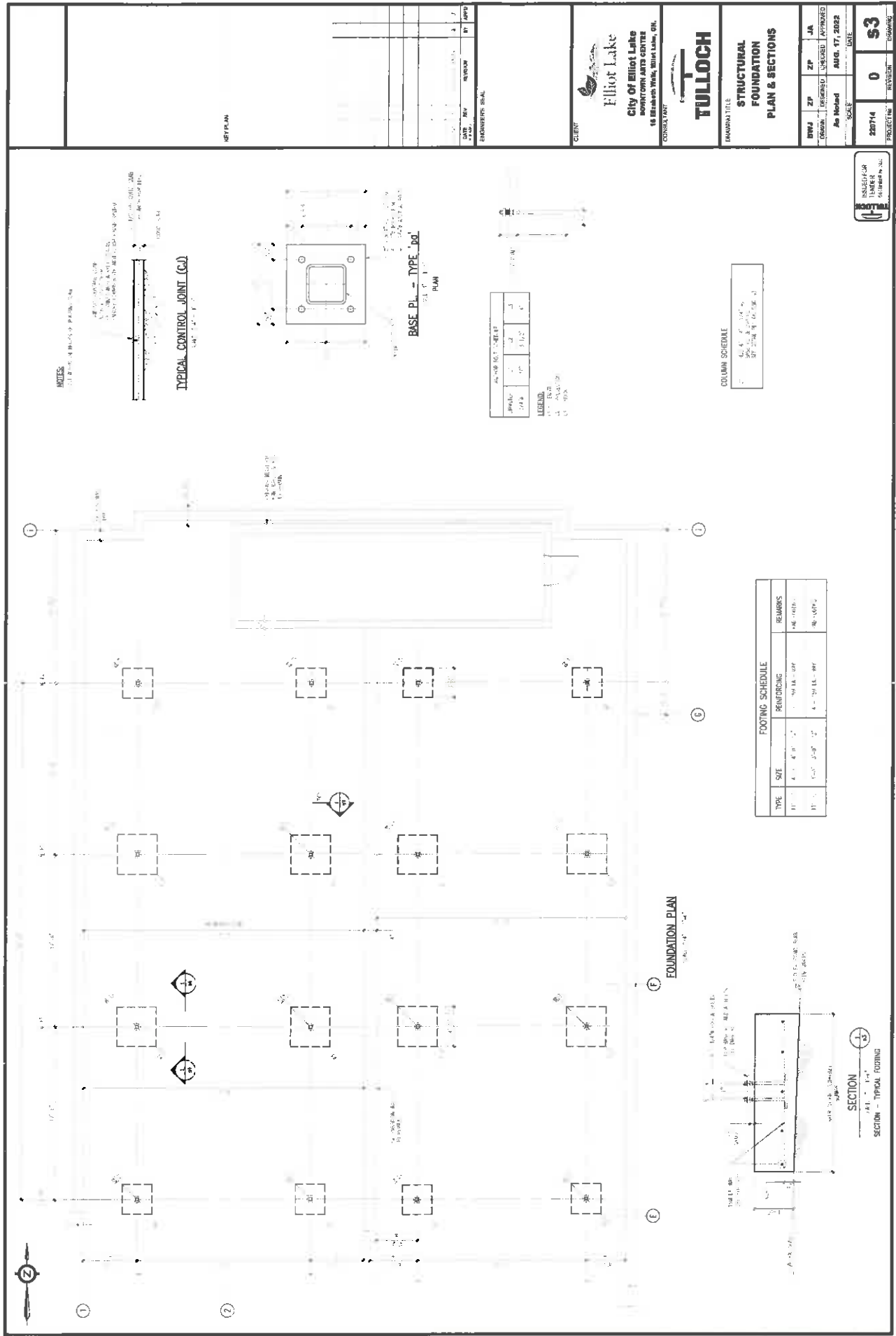
PROJECT NO.	REVISION	DATE
2022.11.17	0	S2

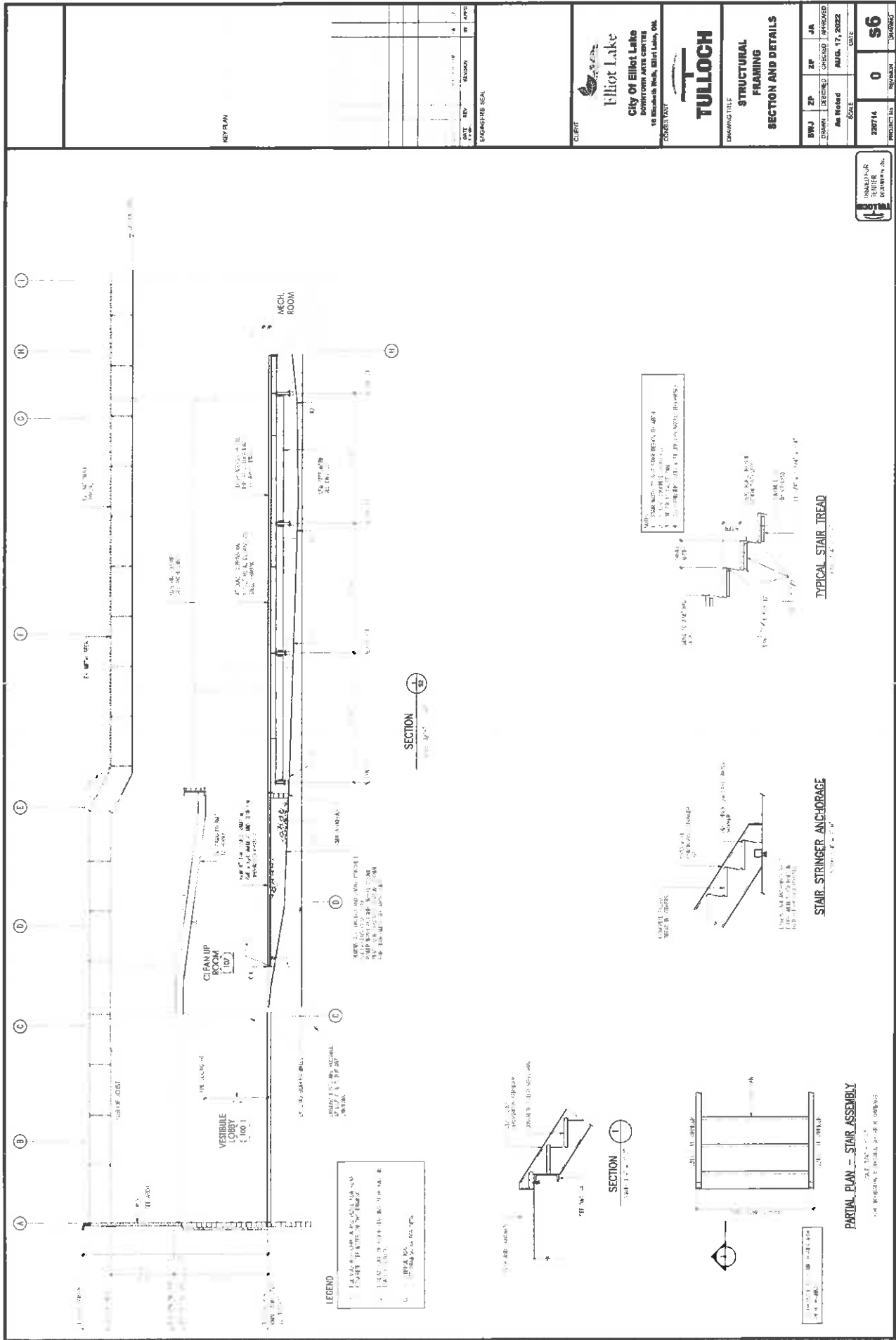
ISSUED FOR
TENDER
DATE: 2022.11.17



SITE PLAN

PROPOSED GROUND FLOOR FRAMING PLAN





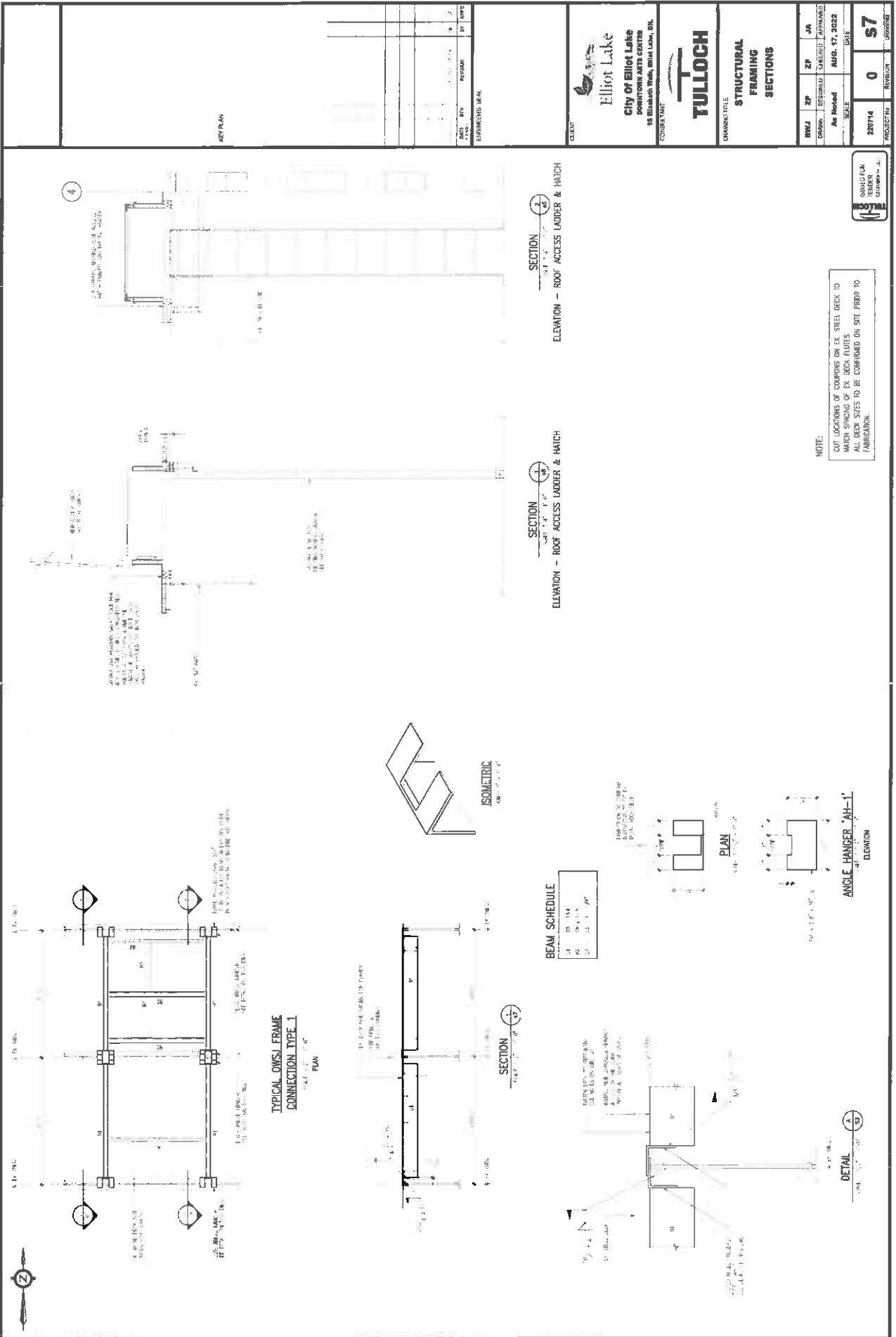
DATE	REV	BY	APP
08/17/22	1	JAT	

City of Elliot Lake
DOWNTOWN ARTS CENTER
100 BROADWAY, ELLIOT LAKE, ON
N4B 1Y1

TULLOCH
ENGINEERING

STRUCTURAL FRAMING
SECTION AND DETAILS

PROJECT NO.	220714
REVISION	0
DATE	AUG. 17, 2022
SCALE	AS NOTED
DESIGNED	CHKD
APP'D	JAT



City of Elliot Lake
DOWNTOWN ARTS CENTER
18 Elizabeth Walk, Elliot Lake, ON

TULLOCH

STRUCTURAL
FRAMING
SECTIONS

DATE	2022/14	0	S7
PROJECT NO.	2022/14	0	S7
REVISION			



PHOTO 1
NORTH WALL



PHOTO 2
EXISTING INTERIOR BEAM



PHOTO 3
BRACING SOFTEN - EXISTING INTERIOR BEAM



PHOTO 4
FRONT CANOPY- EXISTING DECK REPLACEMENT



PHOTO 5
FRONT CANOPY AT ENTRANCE - REWORK



PHOTO 6
NORTH EXTERIOR WALL - REPAIR AREA

DEFERRED SCOPE.
CONTRACTOR TO PROVIDE SEPARATE PRICE.



PHOTO 7
EX 34\"/>



PHOTO 8
EX 34\"/>



PHOTO 9
EX ROOF ACCESS HATCH & LADDER

PHOTO 10 EX 34\"/>

PHOTO 11 EX 34\"/>

PHOTO 12 EX 34\"/>

PHOTO 13 EX 34\"/>

PHOTO 14 EX 34\"/>

PHOTO 15 EX 34\"/>

PHOTO 16 EX 34\"/>

PHOTO 17 EX 34\"/>

PHOTO 18 EX 34\"/>

PHOTO 19 EX 34\"/>

PHOTO 20 EX 34\"/>

PHOTO 21 EX 34\"/>

PHOTO 22 EX 34\"/>

PHOTO 23 EX 34\"/>

PHOTO 24 EX 34\"/>

PHOTO 25 EX 34\"/>

PHOTO 26 EX 34\"/>

PHOTO 27 EX 34\"/>

PHOTO 28 EX 34\"/>

PHOTO 29 EX 34\"/>

PHOTO 30 EX 34\"/>

PHOTO 31 EX 34\"/>

PHOTO 32 EX 34\"/>

PHOTO 33 EX 34\"/>

PHOTO 34 EX 34\"/>

PHOTO 35 EX 34\"/>

PHOTO 36 EX 34\"/>

PHOTO 37 EX 34\"/>

PHOTO 38 EX 34\"/>

PHOTO 39 EX 34\"/>

PHOTO 40 EX 34\"/>

PHOTO 41 EX 34\"/>

PHOTO 42 EX 34\"/>

PHOTO 43 EX 34\"/>

PHOTO 44 EX 34\"/>

PHOTO 45 EX 34\"/>

PHOTO 46 EX 34\"/>

PHOTO 47 EX 34\"/>

PHOTO 48 EX 34\"/>

PHOTO 49 EX 34\"/>

PHOTO 50 EX 34\"/>

PHOTO 51 EX 34\"/>

PHOTO 52 EX 34\"/>

PHOTO 53 EX 34\"/>

PHOTO 54 EX 34\"/>

PHOTO 55 EX 34\"/>

PHOTO 56 EX 34\"/>

PHOTO 57 EX 34\"/>

PHOTO 58 EX 34\"/>

PHOTO 59 EX 34\"/>

PHOTO 60 EX 34\"/>

PHOTO 61 EX 34\"/>

PHOTO 62 EX 34\"/>

PHOTO 63 EX 34\"/>

PHOTO 64 EX 34\"/>

PHOTO 65 EX 34\"/>

PHOTO 66 EX 34\"/>

PHOTO 67 EX 34\"/>

PHOTO 68 EX 34\"/>

PHOTO 69 EX 34\"/>

PHOTO 70 EX 34\"/>

PHOTO 71 EX 34\"/>

PHOTO 72 EX 34\"/>

PHOTO 73 EX 34\"/>

PHOTO 74 EX 34\"/>

PHOTO 75 EX 34\"/>

PHOTO 76 EX 34\"/>

PHOTO 77 EX 34\"/>

PHOTO 78 EX 34\"/>

PHOTO 79 EX 34\"/>

PHOTO 80 EX 34\"/>

PHOTO 81 EX 34\"/>

PHOTO 82 EX 34\"/>

PHOTO 83 EX 34\"/>

PHOTO 84 EX 34\"/>

PHOTO 85 EX 34\"/>

PHOTO 86 EX 34\"/>

PHOTO 87 EX 34\"/>

PHOTO 88 EX 34\"/>

PHOTO 89 EX 34\"/>

PHOTO 90 EX 34\"/>

PHOTO 91 EX 34\"/>

PHOTO 92 EX 34\"/>

PHOTO 93 EX 34\"/>

PHOTO 94 EX 34\"/>

PHOTO 95 EX 34\"/>

PHOTO 96 EX 34\"/>

PHOTO 97 EX 34\"/>

PHOTO 98 EX 34\"/>

PHOTO 99 EX 34\"/>

PHOTO 100 EX 34\"/>

PHOTO 101 EX 34\"/>

PHOTO 102 EX 34\"/>

PHOTO 103 EX 34\"/>

PHOTO 104 EX 34\"/>

PHOTO 105 EX 34\"/>

PHOTO 106 EX 34\"/>

PHOTO 107 EX 34\"/>

PHOTO 108 EX 34\"/>

PHOTO 109 EX 34\"/>

PHOTO 110 EX 34\"/>

PHOTO 111 EX 34\"/>

PHOTO 112 EX 34\"/>

PHOTO 113 EX 34\"/>

PHOTO 114 EX 34\"/>

PHOTO 115 EX 34\"/>

PHOTO 116 EX 34\"/>

PHOTO 117 EX 34\"/>

PHOTO 118 EX 34\"/>

PHOTO 119 EX 34\"/>

PHOTO 120 EX 34\"/>

PHOTO 121 EX 34\"/>

PHOTO 122 EX 34\"/>

PHOTO 123 EX 34\"/>

PHOTO 124 EX 34\"/>

PHOTO 125 EX 34\"/>

PHOTO 126 EX 34\"/>

PHOTO 127 EX 34\"/>

PHOTO 128 EX 34\"/>

PHOTO 129 EX 34\"/>

PHOTO 130 EX 34\"/>

PHOTO 131 EX 34\"/>

PHOTO 132 EX 34\"/>

PHOTO 133 EX 34\"/>

PHOTO 134 EX 34\"/>

PHOTO 135 EX 34\"/>

PHOTO 136 EX 34\"/>

PHOTO 137 EX 34\"/>

PHOTO 138 EX 34\"/>

PHOTO 139 EX 34\"/>

PHOTO 140 EX 34\"/>

PHOTO 141 EX 34\"/>

PHOTO 142 EX 34\"/>

PHOTO 143 EX 34\"/>

PHOTO 144 EX 34\"/>

PHOTO 145 EX 34\"/>

PHOTO 146 EX 34\"/>

PHOTO 147 EX 34\"/>

PHOTO 148 EX 34\"/>

PHOTO 149 EX 34\"/>

PHOTO 150 EX 34\"/>

PHOTO 151 EX 34\"/>

PHOTO 152 EX 34\"/>

PHOTO 153 EX 34\"/>

PHOTO 154 EX 34\"/>

PHOTO 155 EX 34\"/>

PHOTO 156 EX 34\"/>

PHOTO 157 EX 34\"/>

PHOTO 158 EX 34\"/>

PHOTO 159 EX 34\"/>

PHOTO 160 EX 34\"/>

PHOTO 161 EX 34\"/>

PHOTO 162 EX 34\"/>

PHOTO 163 EX 34\"/>

PHOTO 164 EX 34\"/>

PHOTO 165 EX 34\"/>

PHOTO 166 EX 34\"/>

PHOTO 167 EX 34\"/>

PHOTO 168 EX 34\"/>

PHOTO 169 EX 34\"/>

PHOTO 170 EX 34\"/>

PHOTO 171 EX 34\"/>

PHOTO 172 EX 34\"/>

PHOTO 173 EX 34\"/>

PHOTO 174 EX 34\"/>

PHOTO 175 EX 34\"/>

PHOTO 176 EX 34\"/>

PHOTO 177 EX 34\"/>

PHOTO 178 EX 34\"/>

PHOTO 179 EX 34\"/>

PHOTO 180 EX 34\"/>

PHOTO 181 EX 34\"/>

PHOTO 182 EX 34\"/>

PHOTO 183 EX 34\"/>

PHOTO 184 EX 34\"/>

PHOTO 185 EX 34\"/>

PHOTO 186 EX 34\"/>

PHOTO 187 EX 34\"/>

PHOTO 188 EX 34\"/>

PHOTO 189 EX 34\"/>

PHOTO 190 EX 34\"/>

PHOTO 191 EX 34\"/>

PHOTO 192 EX 34\"/>

PHOTO 193 EX 34\"/>

PHOTO 194 EX 34\"/>

PHOTO 195 EX 34\"/>

PHOTO 196 EX 34\"/>

PHOTO 197 EX 34\"/>

PHOTO 198 EX 34\"/>

PHOTO 199 EX 34\"/>

PHOTO 200 EX 34\"/>

PHOTO 201 EX 34\"/>

PHOTO 202 EX 34\"/>

PHOTO 203 EX 34\"/>

PHOTO 204 EX 34\"/>

PHOTO 205 EX 34\"/>

PHOTO 206 EX 34\"/>

PHOTO 207 EX 34\"/>

PHOTO 208 EX 34\"/>

PHOTO 209 EX 34\"/>

PHOTO 210 EX 34\"/>

PHOTO 211 EX 34\"/>

PHOTO 212 EX 34\"/>

PHOTO 213 EX 34\"/>

PHOTO 214 EX 34\"/>

PHOTO 215 EX 34\"/>

PHOTO 216 EX 34\"/>

PHOTO 217 EX 34\"/>

PHOTO 218 EX 34\"/>

PHOTO 219 EX 34\"/>

PHOTO 220 EX 34\"/>

PHOTO 221 EX 34\"/>

PHOTO 222 EX 34\"/>

PHOTO 223 EX 34\"/>

PHOTO 224 EX 34\"/>

PHOTO 225 EX 34\"/>

PHOTO 226 EX 34\"/>

PHOTO 227 EX 34\"/>

PHOTO 228 EX 34\"/>

PHOTO 229 EX 34\"/>

PHOTO 230 EX 34\"/>

PHOTO 231 EX 34\"/>

PHOTO 232 EX 34\"/>

PHOTO 233 EX 34\"/>

PHOTO 234 EX 34\"/>

PHOTO 235 EX 34\"/>

PHOTO 236 EX 34\"/>

PHOTO 237 EX 34\"/>

PHOTO 238 EX 34\"/>

PHOTO 239 EX 34\"/>

PHOTO 240 EX 34\"/>

PHOTO 241 EX 34\"/>

PHOTO 242 EX 34\"/>

PHOTO 243 EX 34\"/>

PHOTO 244 EX 34\"/>

PHOTO 245 EX 34\"/>

PHOTO 246 EX 34\"/>

PHOTO 247 EX 34\"/>

PHOTO 248 EX 34\"/>

PHOTO 249 EX 34\"/>

PHOTO 250 EX 34\"/>

PHOTO 251 EX 34\"/>

PHOTO 252 EX 34\"/>

PHOTO 253 EX 34\"/>

PHOTO 254 EX 34\"/>

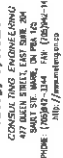
PHOTO 255 EX 34\"/>

PHOTO 256 EX 34\"/>

PHOTO 257 EX 34\"/>

PHOTO 258 EX 34\"/>

PHOTO 259 EX



david ellis architect inc.
 ARCHITECTURAL CONSULTANT
 267 CANAL STREET
 SAULT STE. MARIE, ON P6A 1L5
 PH (705) 253-4X33
 FAX (705) 253-4X33
 david@ellisarchitect.com

ALL RIGHTS RESERVED. THIS IS A COMMERCIAL DOCUMENT AND IS SUPPLIED TO YOU FOR YOUR INFORMATION AND USE ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE NATIONAL ARCHIVES. FOR MORE INFORMATION, CONTACT THE NATIONAL ARCHIVES AT COLLEGE PARK, MARYLAND 20740-6001, (301) 837-1400, OR WWW.NATIONALARCHIVES.GOV.

EMERGENCY SEAL

[illegible]

DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELLIOT LAKE, ON

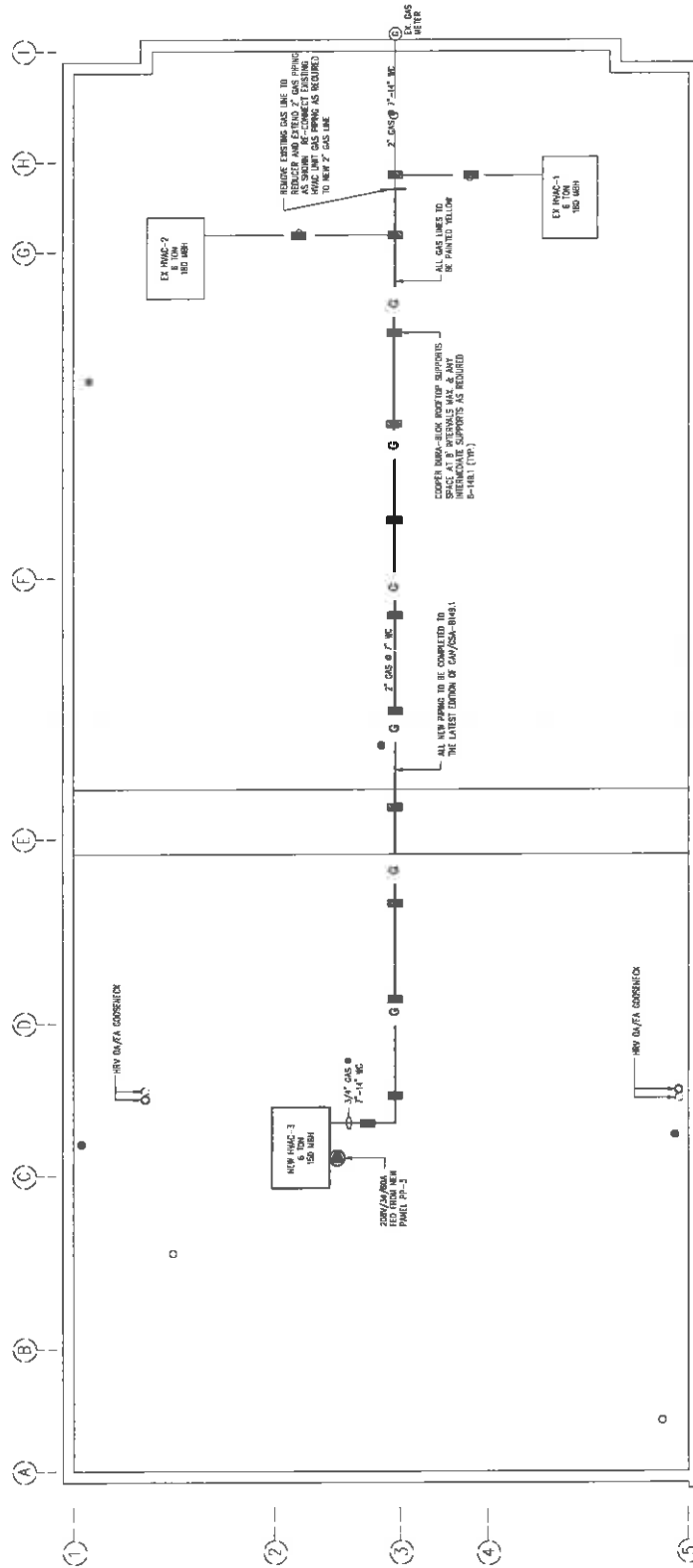
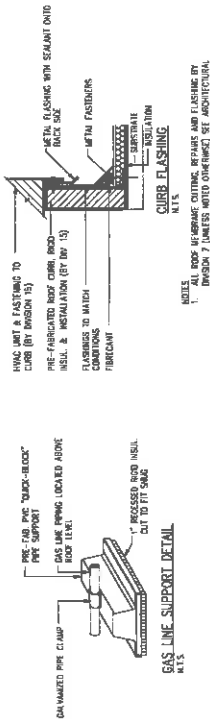
DRAWING DESCRIPTION.

9041	3/02-1-0	1:28	1000 MW (43500)
DRAMA BY	DATE	OCT 17 2002	
CHECKED BY	TSJ	DATE	OCT 17 2002
PROJECT NO. 22001	FRI NO. 22001-MPE		

MPE2

SHEET NO.	Q
21 of 29	

GAS LOADING		LEGEND	
EX HVAC-1	100 MM	EXISTING GAS PIPING	0
EX HVAC-2	100 MM		
EX HVAC-3	150 MM		
NEW HVAC-1	150 MM	NEW GAS PIPING	0
TOTAL	510 MM		

[illegible]



met
safety systems
CONSULTING ENGINEERING
1000 WESTERN AVENUE, SUITE 200
SALT LAKE CITY, UT 84119
PHONE: (801) 462-1344 FAX: (801) 462-1345
http://www.meteng.com

david ellis architect inc.

ARCHITECT
201 EAST 1000 SOUTH, SUITE 100
SALT LAKE CITY, UT 84119
PHONE: (801) 462-1344 FAX: (801) 462-1345
http://www.dellisarch.com

PROJECT NO. 236-29
DATE: 10/17/2022
DRAWN BY: JH
CHECKED BY: JH
PROJECT NO. 236-29
DATE: 10/17/2022
DRAWN BY: JH
CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

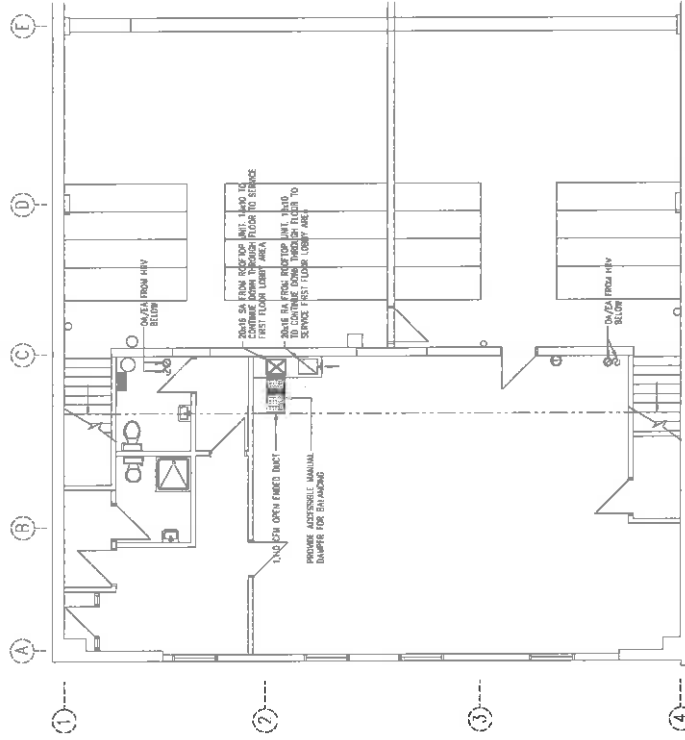
PROJECT NO. 236-29

DATE: 10/17/2022

DRAWN BY: JH

CHECKED BY: JH

PROJECT NO. 236-29



- NOTES
1. CONTRACTOR TO THERMALLY WRAP FIRST TO OF DUCTING
 2. ALL DUCTING IN CHASES TO BE THERMALLY WRAPPED
 3. ALL EXPOSED DUCTWORK AND INSULATION TO BE PAINTED TO MATCH CEILING COLOR.
 4. ALL DUCTWORK BETWEEN CEILING JOISTS TO BE INSTALLED TIGHT TO 3/4" OF JOIST
 5. ALL DUCTWORK RUNNING BELOW CEILING JOISTS IS TO BE INSTALLED TO 1/2" OF JOISTS
 6. BRANCH DUCTING TO RUN BETWEEN DOUBLE JOISTS



PHONE (205) 942-1344 FAX (205) 942-1417
http://www.melinq.co.ca

pH (NO₃) 7.53–4.53
 60 mg/L dissolved oxygen (DO) (20)

EMCAULT®'S SEAL

PRODUCT DESCRIPTION:

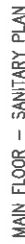
Product description:

DRYING DESCRIPTION
1. Drying in air
2. Drying in oven
3. Drying in microwave
4. Drying in vacuum
5. Drying in sunlight
6. Drying in shade
7. Drying in water
8. Drying in oil
9. Drying in alcohol
10. Drying in ether
11. Drying in acetone
12. Drying in benzene
13. Drying in toluene
14. Drying in xylene
15. Drying in chloroform
16. Drying in carbon tetrachloride
17. Drying in nitrobenzene
18. Drying in dimethyl sulfoxide
19. Drying in dimethyl formamide
20. Drying in dimethyl carbonate
21. Drying in diethyl carbonate
22. Drying in triethylamine
23. Drying in triethylamine hydrochloride
24. Drying in triethylamine hydrochloride
25. Drying in triethylamine hydrochloride
26. Drying in triethylamine hydrochloride
27. Drying in triethylamine hydrochloride
28. Drying in triethylamine hydrochloride
29. Drying in triethylamine hydrochloride
30. Drying in triethylamine hydrochloride
31. Drying in triethylamine hydrochloride
32. Drying in triethylamine hydrochloride
33. Drying in triethylamine hydrochloride
34. Drying in triethylamine hydrochloride
35. Drying in triethylamine hydrochloride
36. Drying in triethylamine hydrochloride
37. Drying in triethylamine hydrochloride
38. Drying in triethylamine hydrochloride
39. Drying in triethylamine hydrochloride
40. Drying in triethylamine hydrochloride
41. Drying in triethylamine hydrochloride
42. Drying in triethylamine hydrochloride
43. Drying in triethylamine hydrochloride
44. Drying in triethylamine hydrochloride
45. Drying in triethylamine hydrochloride
46. Drying in triethylamine hydrochloride
47. Drying in triethylamine hydrochloride
48. Drying in triethylamine hydrochloride
49. Drying in triethylamine hydrochloride
50. Drying in triethylamine hydrochloride
51. Drying in triethylamine hydrochloride
52. Drying in triethylamine hydrochloride
53. Drying in triethylamine hydrochloride
54. Drying in triethylamine hydrochloride
55. Drying in triethylamine hydrochloride
56. Drying in triethylamine hydrochloride
57. Drying in triethylamine hydrochloride
58. Drying in triethylamine hydrochloride
59. Drying in triethylamine hydrochloride
60. Drying in triethylamine hydrochloride
61. Drying in triethylamine hydrochloride
62. Drying in triethylamine hydrochloride
63. Drying in triethylamine hydrochloride
64. Drying in triethylamine hydrochloride
65. Drying in triethylamine hydrochloride
66. Drying in triethylamine hydrochloride
67. Drying in triethylamine hydrochloride
68. Drying in triethylamine hydrochloride
69. Drying in triethylamine hydrochloride
70. Drying in triethylamine hydrochloride
71. Drying in triethylamine hydrochloride
72. Drying in triethylamine hydrochloride
73. Drying in triethylamine hydrochloride
74. Drying in triethylamine hydrochloride
75. Drying in triethylamine hydrochloride
76. Drying in triethylamine hydrochloride
77. Drying in triethylamine hydrochloride
78. Drying in triethylamine hydrochloride
79. Drying in triethylamine hydrochloride
80. Drying in triethylamine hydrochloride
81. Drying in triethylamine hydrochloride
82. Drying in triethylamine hydrochloride
83. Drying in triethylamine hydrochloride
84. Drying in triethylamine hydrochloride
85. Drying in triethylamine hydrochloride
86. Drying in triethylamine hydrochloride
87. Drying in triethylamine hydrochloride
88. Drying in triethylamine hydrochloride
89. Drying in triethylamine hydrochloride
90. Drying in triethylamine hydrochloride
91. Drying in triethylamine hydrochloride
92. Drying in triethylamine hydrochloride
93. Drying in triethylamine hydrochloride
94. Drying in triethylamine hydrochloride
95. Drying in triethylamine hydrochloride
96. Drying in triethylamine hydrochloride
97. Drying in triethylamine hydrochloride
98. Drying in triethylamine hydrochloride
99. Drying in triethylamine hydrochloride
100. Drying in triethylamine hydrochloride

[illegible]

DRAWN BY: JH DATE: OCT 17 2022

NO. OF DAY	NO. OF NIGHT	NO. OF DAY	NO. OF NIGHT
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
28	28	28	28
29	29	29	29
30	30	30	30
31	31	31	31
32	32	32	32
33	33	33	33
34	34	34	34
35	35	35	35
36	36	36	36
37	37	37	37
38	38	38	38
39	39	39	39
40	40	40	40
41	41	41	41
42	42	42	42
43	43	43	43
44	44	44	44
45	45	45	45
46	46	46	46
47	47	47	47
48	48	48	48
49	49	49	49
50	50	50	50
51	51	51	51
52	52	52	52
53	53	53	53
54	54	54	54
55	55	55	55
56	56	56	56
57	57	57	57
58	58	58	58
59	59	59	59
60	60	60	60
61	61	61	61
62	62	62	62
63	63	63	63
64	64	64	64
65	65	65	65
66	66	66	66
67	67	67	67
68	68	68	68
69	69	69	69
70	70	70	70
71	71	71	71
72	72	72	72
73	73	73	73
74	74	74	74
75	75	75	75
76	76	76	76
77	77	77	77
78	78	78	78
79	79	79	79
80	80	80	80
81	81	81	81
82	82	82	82
83	83	83	83
84	84	84	84
85	85	85	85
86	86	86	86
87	87	87	87
88	88	88	88
89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

24 of 29[illegible]

LEGEND	
---	EXISTING SANITARY (BELOW GRADE)
---	NEW SANITARY (BELOW GRADE)
---	NEW SANITARY (ABOVE GRADE)
FD	NEW FLOOR DRAIN WITH TRAP SEAL PROBE

[illegible]



david ellis architect inc.
ARCHITECTURAL CONSULTANT
157 CATHCART STREET
SAULT STE. MARIE, ON P6A 1E5

ALL RIGHTS RESERVED. THIS IS A CONFIDENTIAL DOCUMENT AND IS SUPPLIED FOR THE USE OF THE ADDRESSEES ONLY. THE DISCLOSURE OF ANY INFORMATION CONTAINED HEREIN TO ANY OTHER PERSON OR THE REPRODUCTION OF ANY PORTION OF IT IN ANY MANNER IS PROHIBITED. THIS DOCUMENT IS THE PROPERTY OF THE UNITED STATES GOVERNMENT AND IS LOANED TO YOU. IT AND ITS CONTENTS ARE TO BE RETURNED TO THE NATIONAL ACADEMIES OF SCIENCES, 2101 CONSTITUTION AVENUE, WASHINGTON, D.C. 20054.

© 2000 NCS GROUP SYSTEMS

ALL REPRODUCIBLES MUST BE RETURNED TO THE DISSEMINATION AND MATERIALS INFORMATION ACT, THE PROPERTY OF THE UNITED STATES GOVERNMENT. NO REPRODUCTION OR TRANSMISSION OF ANY INFORMATION CONTAINED HEREIN IS TO BE MADE WITHOUT PERMISSION OF THE NATIONAL ACADEMIES OF SCIENCES. NO REPRODUCTION OR TRANSMISSION OF ANY INFORMATION CONTAINED HEREIN IS TO BE MADE WITHOUT PERMISSION OF THE NATIONAL ACADEMIES OF SCIENCES.

ENGINEER'S SEAL

[illegible]

CT DESIGNS WARE
DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELLIOT LAKE, ON

DRAWING DESCRIPTION.

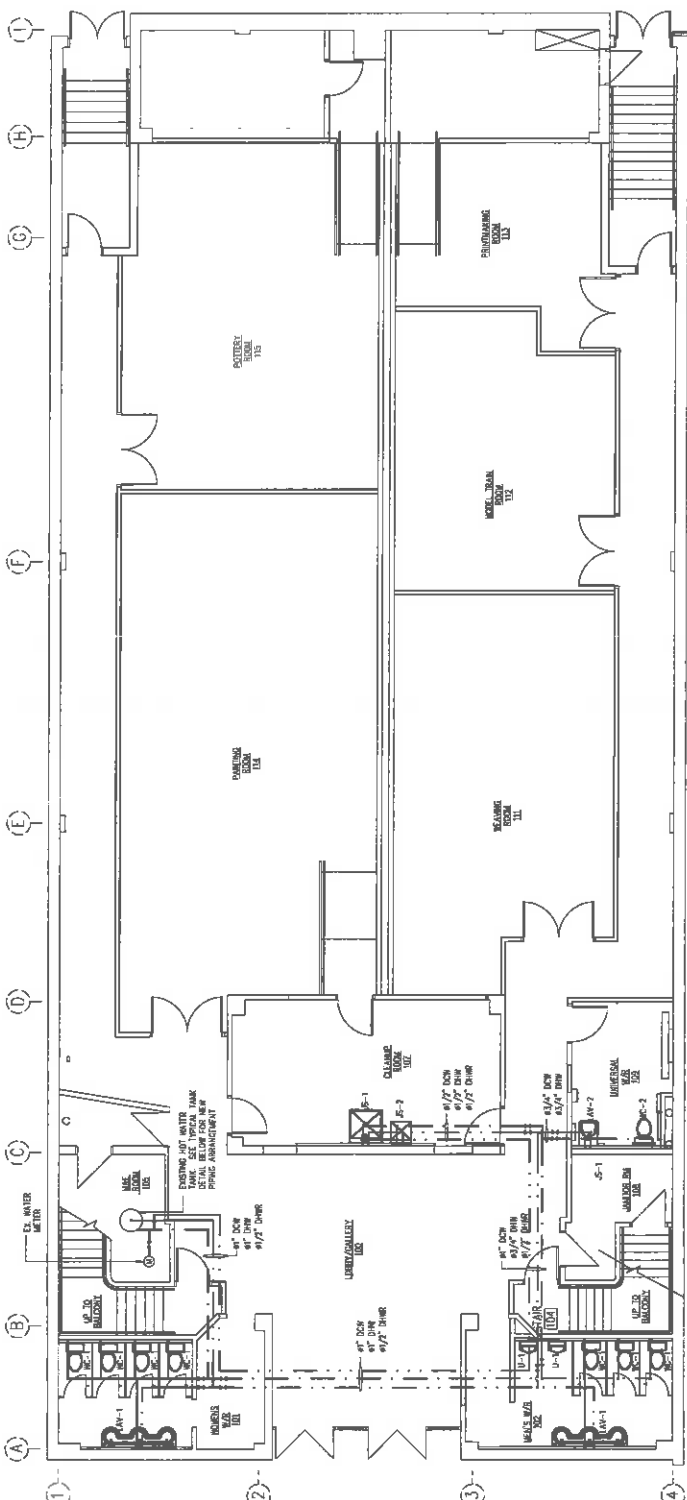
PUBLISHING

MAIN PROGRAM

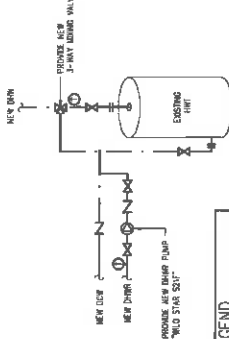
MAIN FLOOR

SCALE:	3/32"=1'-0"	1:120	FORM NO. 151-1073
DRAWN BY:	JW	DATE:	OCT 17 2022
CHECKED BY:	TSJ	DATE:	OCT 17 2022

P2	SHUTT AND 25029	0 200
----	--------------------	----------



MAIN FLOOR -- FIRE ALARM



LEGEND	
NEW DOMESTIC COLD WATER	—
NEW DOMESTIC HOT WATER	—
NEW DOMESTIC HOT WATER RETURN	—

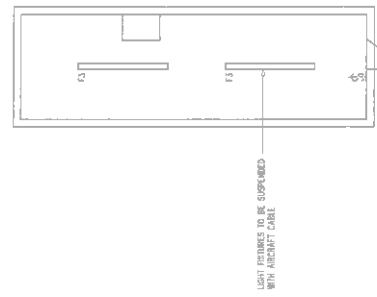
PIPE SIZING LEGEND				
FEATURE	TAG	SANITARY	DCW	DATE
WATER CLOSET	WC-1	3"	1/2"	-
URINAL	U-1	2"	1/2"	-
LAVATORY	LAV-1	1.5"	1/2"	1/2"
JAN. SINK	JS-1	2"	1/4"	1/2"

NOTES

[illegible]

BILL OF MATERIAL

[illegible]



LIGHT FIXTURES TO BE SUSPENDED
WITH AIRCRAFT CABLE

ELECTRICAL ROOM BELOW STAGE

 **met**
energy systems

CONSULTING ENGINEERING
431 DULIN STREET, LAST SUITE, 204
SARATO, ONTARIO, CANADA
TEL: (905) 942-3144 FAX: (905) 942-1411
E-MAIL: info@meteng.com

design
david ellis architect inc
ARCHITECTURAL CONSULTANT
269 DUNDAS STREET
SUITE 101 W. TORONTO, ONT. M5T 1G5

[illegible]

CONSUMER REPLY:

D	ISSUED FOR RENTER	DEC. 19 2018
---	-------------------	--------------

PROJECT DESCRIPTION:
DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELLIOT LAKE, ON

P-TIME
ELECTRICAL
MAIN FLOOR
LIGHTING

SCALE	3/32"-1"=0'	1:120	1200 X 1800 (8.5 X 10')
DRAWN BY	JW	DATE	OCT 17 2022
CHECKED BY	TSJ	DATE	OCT 17 2022
PROJECT NO:	22011	FILE NO:	22011-03

E2

LEGEND

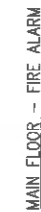
- | | |
|----|--|
| \$ | QUAL TECHNOLOGY, BEING ADJUSTED, LOW VOLTAGE, OCCUPANCY SENSOR C/P, ALL REQUIRED DELAYS AND ACCESSORIES FAIR |
| \$ | MODEL DMC-87-2000 OR APPROVED EQUAL. |
| \$ | SECOND MODEL / POWER SWITCH |
| \$ | SECOND MODEL / SWITCH |

NOTES

- 1) CONTRACTOR TO PROVIDE ALL NECESSARY CABLES, POWER PIGS, ETC. TO INTERCONNECT SYSTEM TO CREATE A FULLY FUNCTIONAL LIGHTING CONTROL SYSTEM.
- 2) ALL WIRING TO BE INSTALLED IN CONDUIT
- 3) REMOVE ALL REDUNDANT WIRING AND DATA CABLEING IN EXISTING CEILING. RE-SUPPORT ALL EXISTING WIRING IN CEILING TO MEET STANDARDS

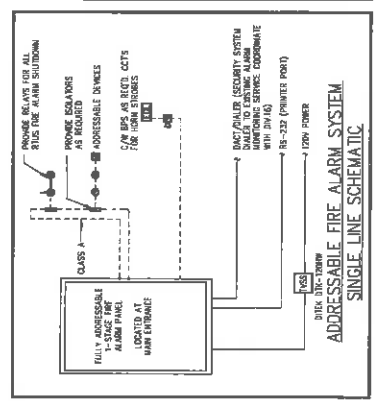
BILL OF MATERIAL

- | | |
|----|--|
| F1 | 7'x2" LED FUTURE 4000 LUMENS, 4000K, "DOOPER LIGHTING MODEL
7052-24-14-WH-BL-CO-LI" OR APPROXIMATE EQUIVA. |
| F2 | 4" SUSPENDED STROP LIGHT, 5733 LUMEN, 4000K, LED LIGHT FUTURE
"DOOPER LIGHTING MODEL ES573554000-UN" |
| F3 | R SUSPENDED STROP LIGHT, 11487 LUMEN, 4000K, LED LIGHT FUTURE
"DOOPER LIGHTING MODEL ES573519600-JAY" |
| F4 | 7'x2" SURFACE MOUNTED FLAT PANEL LIGHT, 4200 LUMENS, 4000K,
"DOOPER LIGHTING MODEL ZB72420" CAN SURFACE MOUNTING KIT OR APPROXIMATE |



FIRE ALARM NOTES

1. ALL WORK SHALL BE COMPLETED FROM VIEW. ALL WIRING TO BE CLASS A.
2. ALL WORK SHALL BE CHECKED AND TESTED TO CANADIAN ZENITH-AI AND VERIFICATION TO CANALIC SSST-43.
3. CONTRACTOR TO ALLOW FOR FULL INSTALLATION, PROGRAMMING, TESTING ETC. OF (3) ADDITIONAL HORN/VARIABLES.
4. PROVIDE SOUND TESTING THROUGHOUT THE BUILDING TO VERIFY CITY BUILDING OPERATIONAL RE-TEST AFTER ADDITIONAL VECTORS ARE ADDED.
5. CONTRACTOR TO PROVIDE A COMPLETELY NEW ADDRESSABLE FIRE DETECTION SYSTEM COMPATIBLE WITH EXISTING FIRE ALARM PANEL. TO CARRY OUT THE PROTECTIONS FOLLOWINGS, INCLUDING BUT NOT LIMITED TO REDUNDANT ALARM SIGNALS, SUPERVISORY SIGNAL CONTROLS, ACTUATING ZONE INDICATIONS AND INITIATING MANUAL SOUNDS.
6. CONTRACTOR RESPONSIBLE FOR ALL WIRING TO PROVIDE A FULLY FUNCTIONAL SYSTEM.

[illegible]



met
ARCHITECTURAL CONSULTANTS
477 ADELA STREET EAST SUITE 204
TORONTO, ONTARIO M5C 1A5
PHONE: 416-593-1472
WWW.METARCHITECTS.COM

david ellis architect inc.
ARCHITECTURAL CONSULTANTS
477 ADELA STREET EAST SUITE 204
TORONTO, ONTARIO M5C 1A5
PHONE: 416-593-1472
WWW.METARCHITECTS.COM

ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM MET ARCHITECTS. THIS DOCUMENT IS THE PROPERTY OF MET ARCHITECTS AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE USED FOR ANY OTHER PROJECT OR SITE WITHOUT THE WRITTEN PERMISSION OF MET ARCHITECTS. ANY REUSE OF THIS DOCUMENT FOR ANY OTHER PROJECT OR SITE WITHOUT THE WRITTEN PERMISSION OF MET ARCHITECTS IS STRICTLY PROHIBITED. ANY VIOLATION OF THIS AGREEMENT WILL BE CONSIDERED A BREACH OF CONTRACT AND WILL BE SUBJECT TO LEGAL ACTION.

ENGINEER'S SEAL

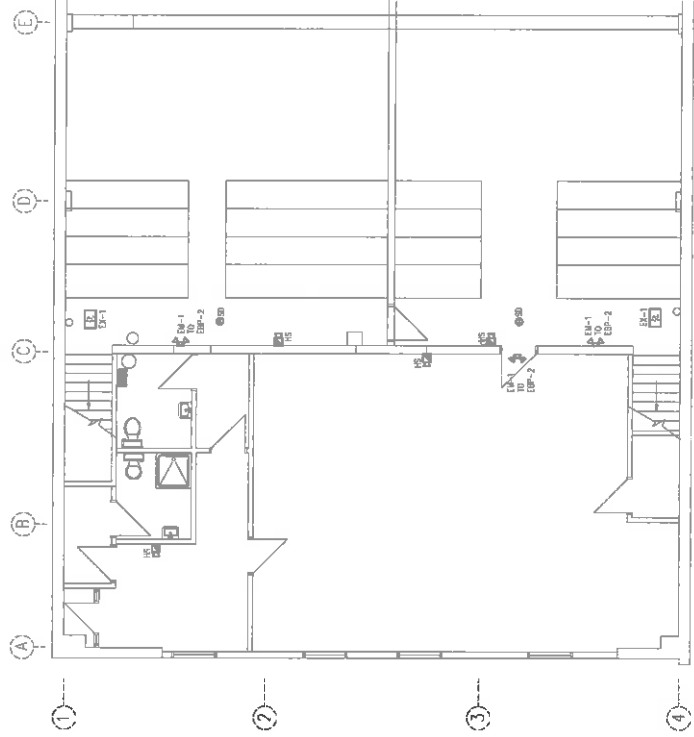
NO.	ISSUED FOR REVIEW	DATE
1	10/15/2022	10/15/2022

PROJECT DESCRIPTION:
DOWNTOWN ARTS CENTRE
ELIZABETH WALK
ELLIOT LAKE, ON

DRAWING DESCRIPTION:
ELECTRICAL
SECOND FLOOR
FIRE ALARM/EMERGENCY

SCALE	3/32"=1'-0"	11/28
DRAWN BY	JF	DATE
CHECKED BY	TSJ	DATE
PROJECT NO.	22041	FILE NO. 22041-E4

SHEET NO.	29 of 29
REV.	0





MET ENERGY SYSTEMS
Consulting Engineering
477 Queen Street East, Suite 304
Sault Ste. Marie, ON P6A 1Z5
Tel: (705) 942-3344
Fax: (705) 942-1477
www.meteng.on.ca

TECHNICAL SPECIFICATIONS

Downtown Arts Centre



FOR:

CITY OF ELLIOT LAKE

Elizabeth Walk
Elliot Lake, ON

**This Invitation to Bid Closes before 3:00:00 p.m. January 4th, 2023 unless
otherwise stated in an Addendum.**

Section	Title	Number of Pages
	Title Page	
	Table of Contents.....	1
00100	Instruction to Bidders	7
00300	Tender Form	3
01001	General Requirements.....	10
01510	Temporary Facilities and Utilities.....	5
15010	General Mechanical Requirements	15
16010	General Electrical Requirements.....	7
16100	General Electrical Work	3

Appendix A – Supplementary Conditions to CCDC

End of Section

1 Tender Instructions

1.1 Sealed Tenders made on the enclosed (attached) Tender Form together with all other documents required by the Tender Documents shall be filed on or before the official closing date and time.

1.2 The Tender Form and required documents shall be submitted to the office of:

**MET Energy Systems
477 Queen St. East-Suite 304
Sault Ste. Marie, Ontario
P6A 1Z5**

1.3 Sealed Tenders will be received no later than **3:00:00 p.m. Wednesday January 4th, 2023**

1.4 No Tender will be received or accepted after the specified closing date and time.

1.5 Emailed tenders will be accepted in lieu of hand delivered. Emailed tenders shall be submitted to Tim Janzen (tsjanzen@meteng.on.ca) John Veltri (jveltri@meteng.on.ca) and Bill Goulding (bgoulding@city.elliottlake.on.ca) It is the Contractor's responsibility to ensure emailed bids were received prior to closing. Hand-delivered tenders shall be in a plain envelope, clearly marked as noted below. Faxed tenders will not be accepted.

Tender for: **Downtown Arts Centre
Elizabeth Walk
Elliot Lake, ON**

Project No. **MET No. 22M11**

1.6 Amendments to delivered bid amounts will be accepted until bid close by fax or email in the form of a clearly indicated **add** or **deduct** amount.

Emails are to be sent to;

Tim Janzen (tsjanzen@meteng.on.ca)
and

John Veltri (jveltri@meteng.on.ca)

And

Bill Goulding (bgoulding@city.elliottlake.on.ca)

Contractor is responsible to verify emails were received prior to closing.

1.7 Tenders which are incomplete, conditional, illegible or obscure, or that contain additions not called for, reservations, alterations and/or irregularities of any kind, may be rejected as informal. Owner reserves the right to waive informalities at its discretion.

1.8 A Contract will not necessarily be issued as a result of this Tender or lowest price may not be necessarily be accepted.

1.9 Fill in blank spaces on the Tender Form completely. State Tender Price in writing and figures.

- 1.10 No allowances will subsequently be made for failure to make proper site investigations, or to completely understand the full nature of the work involved.
- 1.11 Each Tender must bear the signature of a legal signing authority. In the case of a corporation tendering, the Tender shall also bear the corporate seal of such corporation, in a manner to bind the corporation.
- 1.12 Any Tender offered on other forms or with alterations, additions or erasures may be rejected as informal.
- 1.13 Tender form shall be clear and complete. Such omissions may disregard tender.
- 1.14 Time shall be of the essence and the Contractor acknowledges this with the Tender submission.

2 State of Emergency

- 2.1 The within Tender is subject to the provisions of *Ontario Regulation 119/20* made under the *Emergency Management and Civil Protection Act*, R.S.O. 1990, c.E.9 as amended (Order under Sub-section 7.0.2(4) – Closure of Places of Non-Essential Businesses).
- 2.2 The within Tender cannot be awarded until the repeal of *Ontario Regulation 119/20* made under the *Emergency Management and Civil Protection Act*, R.S.O. 1990, c.E.9, or any regulation which supersedes or replaces *Ontario Regulation 119/20*. The Owner retains in its absolute and unfettered discretion the right to:
 - (a) refuse to award the Tender to any Bidder;
 - (b) withdraw the Tender at any time without providing any reason whatsoever;
 - (c) Re-Tender the project;
 - (d) disregard and not accept any Tender;
 - (e) award the Tender on a conditional basis that work may commence upon the repeal of the aforesaid Regulation.
- 2.3 The Bidder, by submitting a Bid pursuant to this Tender, agrees that the Owner maintains the complete and unfettered discretion to deal with any Tender on the above basis and herein releases the Owner from any and all claims that it may have as a consequence of or arising from this Tender howsoever arising.
- 2.4 Refer to Supplementary General Conditions sections GC 6.5.3 and GC 7 for additional information on impact to Contract.

3 Sales Tax

- 3.1 The bid price shall include all applicable Taxes and Duties.

4 Permits

- 4.1 The Contractor shall include all applicable permits, fees, etc. required by Municipal, City or Provincial Departments covering the work.

5 Bid Bond/Agreement to Bond

No Bonding is required for Contract.

6 As-Built Drawings

- 6.1 Provide as-built drawings clearly marked with all changes and dimensions clearly shown.
- 6.2 Record drawings will be kept confidential and shall remain the property of the Consultant and or his sub-consultants, including all copyrights applying thereto.
- 6.3 No use shall be made of the files for any purpose other than the one stated above.

7 Site Examination

- 7.1 Contractors submitting Tenders shall examine and ascertain all conditions of the site and premises pertinent to the work of this Contract. The Owner does not guarantee site information indicated in the Tender Documents. The Contractor must evaluate such information relative to actual conditions. To proceed with the work shall mean acceptance of the site conditions and failure to comply with the clause shall in no way be the basis of any claims.

8 Pre-Tender Meeting

There will be a non-mandatory site visit Thursday, December 22nd at 12 pm. Contractors are encouraged to visit the site as required. Additional site visits can be arranged after this meeting.

9 Scope of Work

- 9.1 Contractor shall supply all materials, labour, equipment and all necessary items to complete the entire project listed.

10 Discrepancies

- 10.1 Should a bidder find discrepancies in or omissions from the Tender Documents or other Contract Documents, or should be in doubt as to their meaning they should, at once, notify Consultant who may send written instructions to all bidders.

Inquiries shall be made to MET Energy Systems, please contact;

Tim Janzen
tsjanzen@meteng.on.ca

John Veltri
jveltri@meteng.on.ca

- 10.2 Verbal answers are only binding when confirmed by written Addenda.

11 Qualifications

- 11.1 Firms or persons submitting tenders shall be actually engaged in the line of work required by the proposed Contract Documents and shall be able to refer to work of similar nature completed by them.

- 11.2 It is the bidder's responsibility to closely review the qualifications to confirm they meet and can readily demonstrate their ability to meet or exceed the listed qualifications. Any questions or concerns with the qualifications or evaluation process must be identified to the Consultant ten (10) days prior to the tender close.
- 11.3 The Owner has identified a number of Contractor Qualifications that will be used in the Tender Evaluation process to determine the best value for the Owner's project. Bidders are *not* required to submit qualifications with their tender submissions but may be requested to submit this information as supplemental to inform the evaluation process. The Owner reserves the right to request additional information as required to evaluate the Contractor against these qualifications. The Owner identified qualifications are as noted below:
- 11.3.1 **Previous Construction Experience:** The Contractor must be able to demonstrate successful completion of at least three (3) previous construction projects of similar size, budget and/or construction type. At least one of the projects must be a renovation or addition to an occupied facility. *If requested*, submit to the Consultant the relevant project experience for review. For each project include: Project title, year completed, project budget, brief project description, Client and Consultants Contact information
- 11.3.2 **Superintendents Experience:** The Contractor must be able to demonstrate that the proposed Superintendent has at least ten (10) years' experience in the Construction Industry, has relevant experience as the full time Superintendent on similar Construction projects, specifically managing renovation construction projects. *If requested*, submit to the Consultant the Superintendents Resume inclusive of education, past project experience and at least two (2) references that can speak to the Superintendents previous project experience and character.
- 11.3.3 **Contractor References:** The Contractor must be able to provide References (a mix of Client and Consultant) that can validate the Contractors previous project experience and provide an opinion on the Contractors quality of work, ability to coordinate with trades, ability to maintain a project schedule, fairness in addressing changes and unforeseen conditions that arise during construction. *If requested*, submit to the Consultant at least three (3) References complete with Reference Name, Company, Title, Phone Number, Email Address and Project Title for which they are providing a reference on.
- 11.3.4 **Safety:** The Owner would like to ensure that the successful Contractor understands and their responsibility for health and safety for this project, has comprehensive internal health and safety policies, and is engaging an experienced individual to act as the Health and Safety Coordinator. *If requested*, submit to the Consultant the Contractors Health and Safety Manual and the Resume for the proposed Health and Safety Coordinator.
- 11.4 Subcontractors
- 11.4.1 The Owner reserves right to reject a proposed subcontractor for reasonable cause.
- 11.4.2 Refer to CCDC2 - 2008, Article GC 3.7 of General Conditions.
- 11.4.3 The Owner may request any proposed subcontractor to provide satisfactory evidence that they have the ability, experience, capital and plant to enable them to execute their portion of the work of the contract.

- 11.4.4 Nothing contained in the Contract Documents shall be interpreted as the Owner having any contractual obligations or relationships to a subcontractor.

12 Cash Allowances

- 12.1 Refer also to the Canadian Construction Documents Committee (CCDC), CCDC 2 Stipulated price contract 2008 GC 4.1 Cash Allowances
- 12.2 The Contract Price includes Cash Allowances, if any, stated in the Contract Documents.
- 12.3 Contract Price, and not the Cash Allowance(s), includes Contractor's overhead, profit, and other associated costs, in connection with such Cash Allowance
- 12.4 Allowances shall include Harmonized Sales Tax (HST)
- 12.5 Where costs exceed the Cash Allowances, the Contractor will be compensated for the excess costs plus overhead and profit as per the terms of the Contract Documents.
- 12.6 Any unexpended portions of Cash Allowances will revert back to the Owner as a credit.

13 Contingency Allowances

- 13.1 Refer also to the Canadian Construction Documents Committee (CCDC), CCDC 2 Stipulated price contract 2008 GC 4.2 Contingency Allowance.
- 13.2 The Contract Price includes the contingency allowance, if any, stated in the Contract Documents.
- 13.3 The contingency allowance includes the Contractor's overhead and profit in connection with such contingency allowance.
- 13.4 Expenditures under the contingency allowance shall be authorized and valued as provided in GC 6.1 - Owners right to make changes, GC 6.2 - Change Order and GC 6.3 - Change Directive.
- 13.5 The Contract Price shall be adjusted by Change Order to provide any difference between the expenditures authorized under paragraph 4.2.3 and the contingency allowance.

14 Addenda

- 14.1 Any addenda to the Tender Documents issued during the period of tendering shall be considered part of the Tender Documents and any items mentioned therein are to be included in the Contract.
- 14.2 Include in the Tender any addenda issued during the bidding period. Such addenda will form part of the Contract.

15 Contract Schedule

- 15.1 The Bidder shall declare on tender bid form the amount of time required to complete **all Work** as described in the tender documents. This shall be expressed in a number of Calendar Weeks.

15.2 This declared completion time may be used by the Owner for the purpose of evaluating "best overall value". For the purpose of tender evaluations "best overall value" can be measured by contemplating the lowest overall price against the best overall declared completion time.

15.3 The successful bidder will be required to prepare an initial schedule in form of a horizontal chart and submit within 7 days after award of work Contract.

16 Alternative Proposals

16.1 The Owner will consider alternative proposals from a Tenderer, provided that it has submitted a Tender on the basis requested herein, and further provided that the alternative proposals are submitted in a separate letter without qualification to the basic Tender. Where a product or equivalent is specified, it will be assumed that the Tenderers' bid is based on the product specified unless otherwise noted in the Tender.

16.2 Application for substitution of material or method after the Tender date will be considered only if made in writing by the Contractor. Such application shall state the credit or extra involved and be accompanied by detailed specification data and other pertinent data of the desired substitute.

17 Alternate Price

17.1 A price for a particular article or item of work. The difference in cost shall include overhead, applicable taxes and profit, and is to be either added to or deducted from the Tender Price, if accepted by the Client Corporation or the Project Manager.

18 Itemized Price

18.1 A price for a particular article or item of work, set out in the Tender Form. The itemized price is included in the Tender Price and shall include overhead, applicable taxes and profit. The itemized prices are submitted for information purposes only.

19 Offer Acceptance/Rejection

19.1 Duration of Offer Acceptance/Rejection

19.1.1 Tenders shall remain open to acceptance and irrevocable for a period of **sixty (60)** days after the Tender closing date. If withdrawn the respective Tenderer shall forfeit his Security Deposit. No telephone calls, facsimiles or telegrams will be considered.

19.2 Acceptance of Offer

19.2.1 The Owner reserves the right to accept or reject any or all offers

19.2.2 The Owner reserves the power and right to reject tenders received from parties who cannot show a reasonable acquaintance of the class of work herein specified and shown on the drawings.

19.2.2.1 Evidence of such competency must be furnished by tenderer when requested.

- 19.2.3 In the receipt of tenders for the work, no obligation is incurred by the Owner to accept the lowest or any proposal provided by a tenderer. The Owner reserves the right to refuse any or all tenders for any sub-division of the work or to decline to proceed with all the work if the Owner so determines.
- 19.2.4 After acceptance by Owner, the Consultant will issue a letter (Letter of Intent) to the successful Tenderer, relating the Owners acceptance of the Tender. This Letter of Intent will form the start date of the Contract.
- 19.2.5 The Owner reserves the right to request any other additional information they may require to evaluate the submission. Failure to provide the information requested in a timely manner may result in the tender being disqualified.
- 19.2.6 Upon acceptance, the successful Tenderer shall provide, within ten (10) business days the following documentation.
- Bonding Certificates (if applicable)
 - Workplace Safety and Insurance Board Certificate
 - Certificate of Insurance
 - Project Schedule
 - Copies of applicable permits
 - Contractor's Health and Safety Policy
 - Other(s) as may be reasonably requested
- 19.3 Tender Securities
- 19.3.1 Only after Tender has been accepted by the Owner, the Consultant will notify the unsuccessful Tenders that their Tender Securities will be available for pick-up.

End of Section

To: **MET Energy Systems**
477 Queen Street East, Suite 304
Sault Ste. Marie, ON

(See Section 00100 - Instruction to Bidders - Article 1.12 for instructions for submitting tenders)

By:
Contractor's Name:

Address: _____

Telephone: _____ Fax: _____

PRICING

The undersigned herein offer to provide all labour, material and services required to complete the work of all trades and agree to enter into a Contract for the completion of:

Downtown Arts Centre
Elizabeth Walk
Elliott Lake, ON

According to all Drawings, Specifications and issued Addendum No.'s _____ through _____

Alternate Price #1 – Roofing and back wall restoration \$ _____

Alternate Price #2 – Removal of Front Canopy Lip \$ _____

Base Tender Total (Including All Allowances and Separate Prices)

For the stipulated Lump Sum Price of (Exclusive of HST): \$ _____

(Written amount)

Harmonized Sales Tax in addition to the base tender amount listed above \$ _____

ALTERNATE MATERIALS

The following is a list of alternate materials proposed for substitution and the difference to the base tender price. (These substitutions must meet performance criteria of specifications.)

MET Energy Systems

I/We understand that the price(s) submitted in the bid is/are based upon the acceptance of the bid within forty-five (45) days of the bid closing date. In cases where the expiry date of the acceptance period falls on a Saturday, Sunday, or holiday, the time for acceptance shall be extended to the first following business day.

COMPLETION DATE

I/We estimate that the earliest that the Contract could be completed is _____
Weeks from commencement of the Work.

Starting Date: _____ Ending Date: _____

I/We also submit the names of our proposed Sub-Contractors from whom sub-bids were received, and upon which my/our Bid is based. I/We also submit the sub-bid prices for the trades listed.

	<u>TRADE</u>	<u>COMPANY</u>	<u>SUB BID PRICE</u>
1	Mechanical		
2	Electrical		
3	Plumbing		
4	Drywall		
5	Painting		
6	Flooring		

SIGNATURES AND SEAL

Contractor's Name and Address:

Seal:

Authorized Signatures:

Name:

Title:

Signature:

Name:

Title:

Signature: _____

Witness: _____

Title: _____

Date: _____

End of Section

1 Definitions

- 1.1 **Owner** – means the Owner or the Owner's authorized agent or representative as designated to the Contractor in writing, but does not include the consultant.
- 1.2 **Consultant** – means the Engineer, or entity licensed to practice in the territory of the Place of Work. The term Consultant means the Consultant or the Consultant's authorized representative.
- 1.3 **Work** - means the whole of the Works including all labor, materials, products, and services required to be supplied, installed and/or erected by the Contractor under the Contract.
- 1.4 **Material** - means all commodities, articles, and other things required to be furnished under the Contract.
- 1.5 **Materials & Supplies** - means tools, implements, machinery, vehicles, equipment, commodities and all other articles necessary to perform the Work.
- 1.6 **Contract** - means, but shall not necessarily be limited to, the complete Tender Documents including: Instructions to Bidders, General Conditions, Scope of Work, Service Standards, Tender Form and Tender Attachments (as may be required).

2 Assignment of Contract

- 2.1 Owner has the right to refuse any Contractor or Sub-Contractor.
- 2.2 Work shall be performed under one Contract utilizing the Canadian Construction Document CCDC 2, 2008 - Stipulated Price Contract. The contract shall govern the performance of each section of the specifications.
- 2.2 These General Requirements generally specify work and co-ordination that is the responsibility of the General Contractor but are not intended to define the responsibilities between the Contractor and Sub-Contractors. Ensure that Sub-Contractors fully understand the Contract
- 2.3 Notwithstanding paragraph 2.1, no assignment or sub Contract shall relieve the Contractor from any obligation under the Contract or impose any liability upon Owner to an assignee or sub Contractor
- 2.4 Subject to the preceding provisions of this section, the Contract shall ensure to the benefit of and shall be binding upon the successors and assigns of Owner and the Contractor.

3 Interpretation of Contract

- 3.1 Owner/Consultant shall be the interpreter of the Contract and of the obligations of the Contractor thereunder.

4 Conflict of Interest

- 4.1 The Contractor declares that the Contractor has no pecuniary interest in the business of any third party that would cause a conflict of interest or seem to cause a conflict of interest in carrying out the Work. Should such an interest be acquired during the life of the Contract, the Contractor shall declare it in writing immediately to the Consultant.
- 4.2 The Contractor shall provide competent supervision of its Workers, which Workers will be

skilled in the tasks assigned to them. This supervisor will be accessible to Consultant and will receive any order or communication relating to the Work on behalf of the Contractor.

Supervisors and Workers not satisfactory to Owner/Consultant shall be removed from the Work and replaced forthwith.

4.3 Any Person involved in the Work will be required to meet the Client Corporation's security clearance criteria.

4.4 It is the responsibility of the Contractor in formulating the bid to ascertain the labor conditions existing at the Place of Work with particular reference to union non-union labor and comply with these conditions. The cost of doing so shall be included in the Tender price.

4.5 The Contractor will cooperate fully with other Contractors or Workers sent to the site of Work.

5 Protection and Housekeeping

5.1 The Contractor shall guard and otherwise protect from damage, the Work, the property of the Owner and property adjacent to the site. The Contractor shall make good all damage resulting from the Contractor's operations or negligence under the Contract at its own expense.

5.2 The Contractor shall repair within seventy-two (72) hours any damage caused by the Contractor.

5.3 The Contractor will daily, upon completion of the day's Work, clear and clean the Work and its site to the satisfaction of, and in accordance with, any decision of the Facility/Project Manager.

6 Site Conditions

6.1 Before any planning or installation of Piping, Ductwork, Electrical, All related divisions shall meet and co-ordinate with General Contractor to determine spacing and routing of all Piping, Ductwork, Conduits, Wiring etc.

6.2 Dedicated on-site parking shall be indicated to the Contractor by the Owner.

6.3 Materials pertinent to immediate future use shall be stored on site only. No interference of facility operation will be permitted. Dedicated area will be indicated to contractor by owner prior to commencement of work.

6.4 Contractor is solely responsible for all construction aids, hoisting equipment, and all items necessary to complete entire scope of work.

6.5 Construction may take place during normal working hours. If construction poses a disturbance "or" safety issue to standard facility operation, work shall take place after normal working hours at no additional expenses.

7 Debris

7.1 During construction, the trades shall remove from the project site debris caused by their work immediately. No corridors shall be blocked and there shall be no interference with any production at any time. All debris removed shall be at the Contractors expense. No On-Site

refuse bins shall be used unless approval received in writing by owner.

- 7.2 The Contractor shall enforce the requirements of this Specification, regulatory authorities and specific requests, which the Prime Consultant may issue.
- 7.3 Bulk containers which the Contractor may provide for assembly of debris shall: be placed in a convenient area not obstructing the Owner's operations, be covered or otherwise protected, be emptied when full but at a time not obstructing the Owner's use of the grounds. Coordinate efforts to remove debris with the Owner.

8 Notice

- 8.1 Provide any notices indicated via mail, fax and e-mail.

9 Records to be kept by the Contractor

- 9.1 The Contractor shall keep proper accounts and records of the cost of the Work and all expenditures or commitments made by the Contractor including invoices, receipts and vouchers, which shall with two (2) days written notice be open to audit and inspection by Owner or Consultant.

10 Occupational Health and Safety Act

- 10.1 The Contractor shall provide a qualified staff person on site at all times who is knowledgeable in the obligations of the Act and will ensure that the requirements of the Act are fully complied with.
- 10.2 It is specifically drawn to the attention of the Contractor that the Occupational Health and Safety Act provides in addition to other matters that;
- A Constructor shall ensure that, on a project undertaken by the Constructor, that the measures and procedures prescribed by this At and Regulations, are carried out on this project.
 - Every employer and every Worker performing work on the project complies with the Act and the Regulations and
 - The Health and Safety of Workers on the project is protected.
 - The Contractor shall pay all such assessments as will protect him and the Algoma District School Board from claims under the Workplace Safety and Insurance Act.

11 Health and Safety Qualifications

- 11.1 The Successful Contractor shall supply the following documents;
- Workers Safety & Insurance Board CAD rating and Certificate of Clearance.
 - Certificate of Clearance documentation is to remain current throughout the course of the project with updated certificates submitted to the Consultant.
 - Copy of the Signed Contractors Health and Safety Policy with proof of training and listing of programs developed that support the Policy Statement.
 - A copy of Proof of Training for each employee, by a valid first aid instructor to show compliance with Workplace Safety & Insurance Act Regulation 110 showing the level of training and expiry dates, and details of level of First Aid supplies present at work site are required. A signed statement by the Contractor attesting to compliance with the following:

- WHMIS Regulations including proof of annual refresher for all personnel.
- Occupational Health and Safety Act
- Specifically, that all engaged in the project have completed the 'Basics of Fall Protection' training program by the Construction Safety Association of Ontario
- Personal protective equipment required by provincial legislation and Owner's requirements-including but not limited to:
 - Class B Hard Hat
 - Approved CSA Footwear
 - Approved CSA Hearing Protection where necessary
 - Approved Safety Glasses

12 Rejected or Defective Work

- 12.1 Defective or damaged Work, attributable to the Contractor, which has been rejected by either Owner/Consultant or the Client Corporation, shall be replaced and/or made good by the Contractor in accordance with the Contract at the Contractor's expense.
- 12.2 The Contractor shall, at its own expense, rectify and make good any defect in the Work and resulting damage, which may appear within one (1) year from the date of the final acceptance of the Work by Owner.

13 Laws, Notices and Permits

- 13.1 The Contractor shall give the required notices and shall comply with the laws, ordinances, rules, regulations, codes and orders of any authorities and utilities having jurisdiction that relate to the Work and the preservation of public health and safety.
- 13.2 The Contractor is responsible to apply and pay for all permits pertaining to the project.
- 13.3 The Contractor warrants and certifies that it has complied with Article (15) of Federal Regulation number 89, which states that an employer who hires a person in insurable employment shall request the employee to produce to the employer a Social Insurance Number Card within three (3) days after the employee commences employment. Non-compliance with this Article is cause for termination without notice of this Contract.

14 Taxes and Duties

- 14.1 The Contractor shall pay all government taxes and duties, including the HST, with respect to the Contract. The Contract Price, set out in the Tender Form is exclusive of the HST.

15 Indemnification by the Contractor

- 15.1 The Contractor shall indemnify and save Owner, their agents and employees harmless, from and against all claims, demands, losses, costs, including legal costs, damages, actions, suits or proceedings by whomever made, brought or prosecuted in any manner based upon, arising out of, related to, occasioned by or attributable to the activities of the Contractor, its servants, agents and sub-contractors in performing the Work, including an infringement or an alleged infringement of a patent of invention or any other kind of intellectual property.
- 15.2 The Contract between Owner and Contractor contains a clause relieving Owner and any person engaged in the Work from liability for any loss of revenues, loss of profit or any other indirect or consequential damages suffered by the Contractor.

16 Insurance

- 16.1 The Contractor, at its own expense, procure and maintain in force for the duration of this Agreement:
- 16.2 Comprehensive General Liability Insurances, with a minimum limit not less than five million dollars (\$5,000,000.00) inclusive of bodily injury (including death) and property damage per occurrence or series of occurrences arising from one cause. The policy or policies shall cover all operations of the Contractor, products and completed operations, personal injury non-owned automobiles, contractual liability.
- 16.3 Builder's Risk Insurance/Installation Floater (for projects) insuring the full value of any work in the amount of the contract price and the full value, as stated, of products that are specified to be provided by Owner into any work. The policy shall insure against all risks of direct loss or damage and shall apply to all products, labor and supplies of any nature whatsoever, the property of the insured's or others for which the insured's may have assumed responsibility, to be used in or pertaining to site preparation, demolition of existing structures, erection and/or repair or any insured project while on site or in transit.
- 16.4 The foregoing insurance coverage's shall be underwritten by an insurers licensed in the provinces in which the Contractor provides the Services under this Agreement.
- 16.5 Owner is to be added as additional insured's to all of the above policies, but with respect to the operations covered by this Agreement.
- 16.6 The Contractor shall deliver to Consultant a certificate or certificates of insurance as evidence that the required coverage's are in effect and that Owner shall be given thirty days prior written notice of cancellation or expiry of or material change to such coverages.
- 16.7 It is the sole responsibility of the Contractor to determined what additional insurance coverages, if any, are necessary and advisable for its own protection or to fulfill its obligations under this Agreement. Any such additional insurance shall be provided and maintained by the Contractor at its own expense.

17 Suspension or Termination

- 17.1 Owner may suspend or terminate the Contract as per CCDC.

18 Applications for Payment and Payment

- 18.1 The Contractor will make an application for payment monthly as per CCDC.
- 18.2 Application for payment shall be submitted to Consultant, approved and re-submitted to Owner for release of monies.
- 18.3 Notwithstanding the number of Work orders or other written notices issued to the Contractor by Owner, within any calendar month, Owner will pay for any Work undertaken by he Contractor under this Contract only once per month.
- 18.4 Any payment made by Owner shall not be construed as evidence that the Work is satisfactory or in accordance with the Contract.
- 18.5 Substantial Performance will not be granted until all Manuals, As-Builts, ESA Certificate, Fire Alarm Verification, owner training, commissioning, City building permit etc. has been completed and submitted. All systems must be operational prior

to Substantial Performance being awarded.

19 Workers Compensation

- 19.1 The Contractor will provide Owner with current certificates of clearance from the Workers Compensation Board or Commission de la Santé et Sécurité au Travail of the Province in which the Work is being undertaken throughout the course of the Contract.

20 Toxic and Hazardous Substances and Materials

- 20.1 If the Contractor encounters toxic or hazardous substances or materials the Contractor shall take all reasonable steps to ensure that no person suffers injury, sickness or death and that no property is injured or destroyed as a result of exposure to or the presence of the substances or material and shall immediately report its findings to Owner by telephone or fax and confirm in writing.
- 20.2 If the Contractor is delayed or incurs additional costs as a result of encountering heretofore-unknown toxic substances or materials the time for performance of the Work shall be extended and the Contractor will be reimbursed its proper costs.
- 20.3 The Contractor shall dispose of all toxic and hazardous substances and materials in accordance with all federal, provincial and municipal standards, codes and regulations.

21 Cooperation and Protection

- 21.1 The Contractor shall cooperate fully with other Contractors or Workers sent onto the Place of Work.
- 21.2 Perform Work with a minimum disturbance to occupants, public and normal use of the premises.
- 21.3 The Contractor shall give the required notices and shall comply with the laws, ordinances, rules, regulations, codes and orders of Authorities having jurisdiction that relate to the Work, the preservation of public health and to construction safety.
- 21.4 The Contractor will comply with the requirements of the current building use. All required documents are available for study from Owner. Make all provisions for required training from Owner.
- 21.5 The Contractor will be responsible for security for security of the building. Further building shall be secured at end of each shift including locking or securing of all entry points and arming of security system. If failure to secure and arm building owner may require third party security company to be retained at contractors expense.
- 21.6 The Contractor shall be solely responsible for construction safety at the place of the Work.
- 21.7 Should the prosecution of the Work require interference with any electronic voice and data equipment operated by the Owner then the Contractor will adhere to and comply with the Owner's operational procedure.

22 Controlled Products

- 22.1 The Contractor shall ensure that where substances classified as controlled products under the Control Products Regulations are to be used at the place of the Work, the Contractor shall ensure that his employees receive appropriate training as per Provincial/Federal Regulations and the Workplace Hazardous Materials Information System (WHMIS).

22.2 The Contractor shall ensure that all controlled products are identified to the Consultant and shall obtain Material Safety Data sheet (MSDS) for controlled products, which shall be made available at the place of Work.

22.3 Owner must be advised when controlled products are brought onto the place of Work.

23 Quality Control

23.1 Upon award of Contract the Contractor, if requested, shall submit to Owner a quality management plan indicating quality goals, objectives and implementation processes and proposed reporting mechanisms. Where possible the Contractor shall conform to ISO 9000 standards and practices.

24 Amendments

24.1 No amendment of the Contract nor waiver of any of the terms and provisions shall be valid unless effected by a written amendment, signed by authorized representatives of the Contractor and Owner.

25 Entire Agreement

25.1 The Contract constitutes the entire agreement between the parties with respect to the subject matter of the Contract and supersedes all previous negotiations, communications and other agreements relating to it unless they are incorporated by reference in the Contract.

25.2 Valuation of Changes in the Work

25.3 When the valuation of a change in the Work is to be determined either by estimate and acceptance in lump sum, or by cost and a fixed or percentage fee, the valuation shall be in accordance with the following:

Work Performed by Own Forces + 10%
Work Performed by Sub-Contractors + 5%

Contractor to provide detailed breakdown of estimate if requested.

26 Guarantee

26.1 The Contractor shall: a) guarantee all materials and Workmanship used in the Work to be strictly in accordance with the tender documents and to be of the best quality; b) provide a first class job with proper and efficient operations and free from all defects.

26.2 Any defects that may appear in any of the Work within one (1) year after the written acceptance by Owner, (ordinary wear and tear accepted) all be replaced by the Contractor without additional expense to Owner.

26.3 Where any such defects occur, this Contractor shall be held responsible for all costs incurred in making good the defective Work. All damage to other materials, equipment, systems, fixtures, building and landscape caused by such defects, repairs, maintenance and servicing shall be made good at the Contractor's expense.

27 Extension of Contract

- 27.1 Extension of Contract will not be granted without providing just cause delivered to Consultant and approved by Owner
- 28 Security Clearance**
- 28.1 The Contractor shall, upon request by Owner, provide and cause all persons employed on the Work to provide personal data for Security Clearances purposes. Such security clearance may include criminal background check..
- 29 Cutting And Patching**
- 29.1 Submit written request in advance of cutting or alteration which affects; Structural integrity of any element of Project, Integrity of weather-exposed or moisture-resistant elements, Efficiency, maintenance, or safety of any operational element, Visual qualities of sight-exposed elements, Work of Owner or separate contractor.
- 29.2 Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- 29.3 Prior to breaking any walls or openings, provide a letter from a professional engineer certifying the method of breaking and patching of the walls is acceptable and will not affect the structural integrity of the building.
- 29.4 Perform removal, cutting, fitting, and patching to complete the Work.
- 29.5 Perform work to avoid damage to other work.
- 29.6 Restore work with new products in accordance with Contract Documents.
- 29.7 At penetration of fire-rated wall, ceiling, of floor construction, completely seal voids with fire-rated, fire-resistant material, full thickness of construction element.
- 30 Shop Drawings and Product Data**
- 30.1 "Shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of the Work.
- 30.2 Provide Shop Drawings and Product Data for all new Equipment listed within Contract Documents.
- 30.3 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connection, explanatory notes and other information necessary for completion of Work.
- 30.4 Adjustments made on shop drawings by Engineer are not intended to change Contract Price.
- 30.5 Submit digital copies of shop drawings for each requirement requested in specification Sections and as Engineer may reasonably request for review. Upon review and approval of digital shop drawings the Contractor shall provide (3) hard copies in 3-ring binder to Engineer.

31 Record Drawings

- 31.1 After award of Contract, Engineer will provide a set of drawings for purpose of maintaining record drawings. Accurately and neatly record deviations from Contract Documents caused by site conditions and changes ordered by Owner. Use sharp red pencil indicating all deviations from contract documents.
- 31.2 Identify drawings as "Project Record Copy". Maintain in new condition and make available for inspection on site by Engineer. On completion of each phase of Work and prior to final inspection, submit record documents to Engineer.
- 31.3 As Built drawings in CAD format to be provided to owner with maintenance manuals. Contractor to include \$1,500 for consultant to prepare autoCAD as-builts from contractor mark-ups.

32 Maintenance Manuals/Data Books

- 32.1 At Substantial Performance, submit to Engineer, a digital copy of operating and maintenance manuals for review.
- 32.2 Manuals to contain operational information on sophisticated materials, equipment any maintenance information and part replacements.
- 32.3 Upon review and approval of digitally submitted manuals. Contractor to provide (3) hard copy manuals which shall be bound 8"x11" and divided in a neat and orderly fashion.

33 Construction Facilities And Temporary Controls

- 33.1 Existing building will be occupied and cleaned during construction. Execute Work to cause minimum interference with activities in existing construction and maintain maximum safety to occupants. Take reasonable measures to minimize and control noise, dirt and dust during Work.
- 33.2 Before entering existing premises to carry out Work or to obstruct or take out of use any area of existing premises, or to cause any other interference, request meeting with Owner's representative in order to reach agreement as to time and length of time you may cause interference, possess, obstruct or remove from use any such area or services.
- 33.3 Provide construction facilities and temporary controls in order to execute work expeditiously. Remove from site all such work after use.
- 33.4 Furnish and install all necessary temporary wiring and panels and upon completion of the Work, remove all such temporary facility.
- 33.5 Furnish and install area distribution boxes so located that the individual trades may use 30 m (100') maximum length extension cords to obtain adequate power and artificial lighting at all points where required for the Work, for inspection and safety.
- 33.6 Telephone: Contractor to make their own arrangements for telephone facilities.
- 33.7 One (1) Existing facility (clearly indicated before commencement of work by owner) within the building are available for the Contractor's use. Keep facilities clean and neat.
- 33.8 Maintain all temporary facilities and controls as long as needed for the safe and proper completion of the Work. Remove all such temporary facilities and controls as rapidly as

progress of the Work will permit, or as directed by the Engineer.

34 Certificates And Transcripts

- 34.1 Prior to signing of the Contract, submit the following:
- 34.2 Liability Insurance Policy, General Conditions as amended by the Supplementary Conditions, Name of the Contractor's Superintendent, Certificate of Clearance from the Workers' Compensation Board, Construction Schedule of Work, and any other items requested.
- 34.3 Prior to the application of first payment claim, submit the following:
- 34.4 Schedule and Schedule of Values, Estimate of Monthly Progress Claims Job Progress Schedule Updates, and any other items requested.
- 34.5 Prior to submission of final payment claim, submit the following:
- 34.6 Record Drawings, Maintenance Manuals/Data Books, Final inspection certificate by Electrical Safety Authority, Statutory Declaration, Certificate of Clearance from Workers' Compensation Board and any other items requested.

End of Section

PART 1 - GENERAL

- | | | |
|--|----|--|
| <u>1.1 Section Includes</u> | .1 | Temporary utilities. |
| <u>1.2 Related Sections</u> | .1 | Section 01000 – General Instructions. |
| <u>1.3 Installation and Removal</u> | .1 | Provide temporary utilities and controls in order to execute work expeditiously. |
| | .2 | Remove from site all such work after use. |
| <u>1.4 Temporary Heating and Ventilation</u> | .1 | Provide temporary ventilation or heating required during construction period, including attendance, maintenance and fuel. <ul style="list-style-type: none">.1 Prevent accumulations of dust, fumes, mists, vapours or gases in areas occupied during construction..2 Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas..3 Dispose of exhaust materials in manner that will not result in harmful exposure to persons..4 Ventilate storage spaces containing hazardous or volatile materials..5 Ventilate temporary sanitary facilities..6 Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful contaminants. |
| | .2 | Maintain strict supervision of operation of temporary heating and ventilating equipment to: <ul style="list-style-type: none">.1 Conform with applicable codes and standards..2 Enforce safe practices..3 Prevent abuse of services..4 Prevent damage to finishes..5 Vent direct-fired combustion units to outside. |
| | .3 | Be responsible for damage to Work due to failure in providing adequate heat and protection during construction. |
| | .4 | Ventilate heated areas and keep building free of exhaust or combustion gases. |
| | .5 | Construction heaters used inside the building must be Vented to outside or be non-flameless type. Solid fuel Salamanders are not permitted. |
| | .5 | Use of new or existing systems for temporary heating, ventilating or air conditioning will not be permitted. |
| | .6 | Contractor to review HVAC equipment delivery dates during bidding period. Should delivery and installation of such equipment be delayed beyond completion date, Contractor shall be responsible to provide and install temporary |

		heating and ventilation measures to satisfy Owner requirements. All temporary measures shall be coordinated and agreed upon with Owner and Design Team.
<u>1.5 Temporary Power and Light</u>	.1	Contractor to provide and maintain temporary power during construction for temporary lighting and operating of power tools inside of the building.
	.3	Arrange for connection with appropriate utility company. Pay all costs for installation, maintenance and removal.
	.4	Provide and maintain temporary lighting throughout project.
	.5	Connect to power supply in accordance with Canadian Electrical Code and provide meters and switching
	.6	Electrical power and lighting systems installed under this Contract may be used for construction requirements only with prior approval of consultant provided that guarantees are not affected. Make good damage to electrical system caused by use under this Contract. Replace lamps which have been used for more than 3 months.
<u>1.6 Temporary Sanitary Facilities</u>	.1	Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
	.2	Post notices and take such precautions as required by local health authorities. Keep area and premises in sanitary condition.
	.3	When permanent water and drain connections are completed, provide temporary water closets and urinals complete with temporary enclosures, inside building. Permanent facilities may be used on approval of consultant.
	.4	Building facilities may be used at the Owner's discretion.
<u>1.7 Temporary Offices</u>	.1	Provide and maintain in clean condition during progress of Work, adequately lighted, heated, ventilated and weatherproof temporary office. Office shall be of sufficient size to accommodate site meetings and be furnished with a drawing layout table and telephone. A temporary office space will be provided in the school if available.
	.2	Install in approved location for use by Contractor and Consultant.
	.3	Provide adequate required first aid facilities.
<u>1.8 Temporary Communication Facilities</u>	.1	Provide and pay for temporary telephone and separate fax hook up, lines and equipment necessary for own use and use of Consultant.
<u>1.9 Fire Protection</u>	.1	Provide and maintain temporary fire protection equipment

during performance of Work required by insurance companies having jurisdiction and governing codes, regulations and bylaws.

- .2 Burning rubbish and construction waste materials is not permitted on site.

1.11 Barriers

- .1 Provide barriers for protection of the public, and against contamination of occupied portions of the floor, including, but not limited to:

- .1 protection from falling/flying debris;
- .2 protection from dust, debris;
- .3 barriers for contamination control.

- .2 Types of barriers:

- .1 Generally, barriers indicated are classified as visual, semi-solid or solid. Erect the type specifically suited to the job conditions and/or as regulatory authorities or as specifically stated on the Drawings.

- .2 Weather Enclosures:

- .1 Provide weathertight closures to unfinished door and window openings, tops of shafts and other openings in floors and roofs.

- .2 Close off floor areas where walls are not finished; seal off other openings; enclose building interior work area for temporary heat.

- .3 Dust Tight Screens for contamination control:

- .1 Provide dust tight screens or partitions to localize dust generating activities, and for protection of workers, finished areas of Work and public.

- .2 Maintain and relocate protection until such work is complete.

- .3 Assembly of these barriers to meet contamination control standards.

- .4 Visual barriers shall:

- .1 present horizontal obstruction;

- .2 be solid but easily movable;

- .3 be continuous for length of protection required.

- .5 Semi-solid barriers shall:

- .1 present physical obstruction;

- .2 resist general day-to-day abuse;

- .3 be of 'snow fence' characteristic or similar.

- .6 Solid barriers shall:

- .1 resist heavy impact;

- .2 be constructed of framing lumber and plywood to withstand expected forces;

- .3 be provided with hinges access where necessary complete with locking devices;

- .4 not allow transmission of dust.

- .3 Markings on barriers shall be provided by way of signs, reflectors or flashing devices to indicate degree of hazard.

.4 Contamination Control:

The proposed renovation project occurs in locations which require adherence to contamination control standards. In all cases, the Contractor will be responsible for maintaining the highest level of control against the various forms of contamination which can potentially adversely affect the adjacent floor areas.

.1 The Contractor will protect against various forms of contamination. This list includes but is not limited to:

- .1 air born contaminants such as dust - other;
- .2 noise;
- .3 vibration.

.2 The Contractor will:

- .1 Erect dust barriers which meet specific standards for contamination control. These will be removed at end of the project.
- .2 Where possible, will adjust or manipulate the building's ventilation system in order to create negative pressures within the renovation zones. This may also be achieved by cross-ventilation - opening of existing operable windows, etc.
- .3 Daily cleanup of dust and potential contaminants.

1.12 Construction Aids

.1 Scaffolding

.1 When not provided as part of normal practice by sub trades, provide, erect, move and dismantle scaffolding necessary to complete the work.

.2 Scaffold must be rigid, secure and provided with necessary planking and barriers required by regulatory authorities.

.3 Protect non-finished and finished work equally from damage by the use of scaffolding and replace immediately and damaged work.

.2 Hoists and Cranes

.1 Employ hoists and cranes or other powered lifting equipment in strict accordance with safety requirements or regulatory authorities.

.2 Hoisting operations shall not create hazards or damage to existing conditions.

.3 Scheduling of major hoisting shall be performed to create the least on-site use of machinery as possible.

.4 Special consideration shall be given to use of large equipment which might impede operations and functions of existing building.

1.13 Signs

.1 Erection of signs is not permitted, other than for safety use.

.2 Construction safety signs may be posted to the

requirements of regulatory authorities.

PART 3 - EXECUTION

End of Section

1 General

1.1 GENERAL REQUIREMENTS

1.1.1 Conform to Sections of Division 1 as applicable.

1.1.2 This Section applies to and governs the Work of all Sections of Division 15.

1.1.3 Where other Mechanical Trades Sections conflict with requirements specified in this Section the Specifications of that particular Section govern.

1.2 RELATED WORK

1.2.1 Conform to Section 16010, General Electrical Requirements.

1.2.2 Demolition and removal of mechanical equipment and services: Division 15.

1.2.3 Firestopping and smoke seals: Division 15.

1.2.4 Reinsulation of pipework: Section 15081, Piping Insulation.

1.3 REFERENCES

- | | |
|--|--|
| ANSI B31.1 to B31.9 | - Piping. |
| ASTM Standards. | |
| ASTM Boiler and Pressure Vessel Code, Section V:Non-destructive Examination. | |
| CAN/CGSB-24.3 | - Identification of Piping Systems. |
| CSA A23.1-94 | - Concrete Materials and Methods of Concrete Construction. |
| CSA S16.1-94 | - Limit States Design of Steel Structures. |
| CAN/CSA-G40.21 | - Structural Quality Steel |
| CSA W117.2-94 | - Safety in Welding, Cutting and Allied Processes. |
| CAN/CGSB-1.40 | - Primer, Structural Steel, Oil Alkyd Type. |
| CSA B51 | - Boiler, Pressure Vessel and Pressure Piping Code. |
| CSA B52 | - Mechanical Refrigeration Code. |
| CSA W47.1 | - Certification of Companies for Fusion Welding of Steel Structures. |
| CSA W48.1 | - Carbon Steel Covered Electrodes for Shielded Metal Arc Welding |
| CSA W59 | - Welded Steel Construction (Metal Arc Welding) |
| ISO Standard 2372 | |
| ISO Standard 3945 | |
| ISO Standard 2954 | |
| OPSS 1010 | - Material Specifications for Aggregates - Granular A, B, M and Select Subgrade Material |

1.4 DESCRIPTION

1.4.1 Provide work in accordance with the full intent and meaning of the Drawings and Specifications as required to result in complete operating systems.

1.4.2 The Drawings show the arrangement and general design. The work is suitably outlined on the Drawings with regard to sizes, locations, general arrangements and installation details. The mains and connections thereto are shown more or less in diagram except where in certain cases the Drawings may include details giving the exact locations and arrangements required.

1.5 WORK COVERED BY OTHER DIVISIONS OR CONTRACTS

1.5.1 Refer to other Divisions of the specifications and to the Drawings for work related to the mechanical work to avoid interferences with work of other trades (and other Contractors) and to ensure proper completion of the work as a whole.

1.6 APPORTIONMENT OF THE WORK

1.6.1 Classify and apportion all materials and the performance of all labour to the several trades involved in accordance with all local customs, rules, regulations, jurisdictional awards, decisions, etc., insofar as they may apply and as required to efficiently execute the work involved in this contract.

1.7 PERMITS AND FEES

1.7.1 Obtain all permits required for the installation of mechanical trades work, arrange for inspections and tests therewith and pay all fees and costs for the permits, inspections and fees. Obtain permits immediately after notification of award of Contract.

1.7.2 Obtain copies of Drawings from the Engineer for submission with application for permits.

1.8 EXISTING SERVICE

1.8.1 Do not shut down or make connections to any existing service without written permission of the Engineer. Heat shall be maintained in the building at all times and temperature maintained at all times during school hours.

1.9 MATERIALS AND EQUIPMENT

1.9.1 Use materials and equipment as specified herein, or specified equivalent. Design of mechanical systems has been based on the first listed supplier and model number/size stated on the Equipment Schedules on the Drawings.

1.9.2 Locations and dimensions of curbs and flues, where indicated on the Drawings, are based on an arrangement to suit the above named supplier. Be responsible to verify the actual size requirements of the openings, and notify the Engineer immediately in case the dimension of the unit supplied and the

connecting ductwork/piping, etc. are at variance with the dimensions given on the Drawings. Equals or alternates may be submitted together with applicable savings.

- 1.9.3 Bear all costs for modification of curbs and floor/roof openings resulting from failure to notify the Engineer prior to the fabrication or construction of curbs.

1.10 SUBMITTALS

1.10.1 Shop Drawings

Submit shop drawings in accordance with General Conditions of the Contract for items hereinafter listed which are exactly as specified. Supplement shop drawings with brochures where necessary or as required. The initial submission of shop drawings for any one trade shall include a checklist of all related specified items for that trade to ensure complete submittal and review.

Stamp as follows: SHOP DRAWINGS FOR RECORD PURPOSES ONLY -
CHECKED FOR CONSTRUCTION IN ACCORDANCE WITH CONTRACT
DOCUMENTS.

- 1.10.1.1 Record purpose submissions shall include:

-All equipment in bill of material.

- 1.10.1.2 Submit seven copies of such Drawings or Brochures to the Engineer, who will review such Drawings or Brochures. If items are not as specified, re-submit seven corrected copies.

- 1.10.1.3 Submit Shop Drawings for all other mechanical equipment in accordance with the requirements.

- 1.10.1.4 Prepare Shop Drawings specifically for this work by qualified drafters and in sufficient detail to avoid decisions being made in the shop or field.

- 1.10.1.5 General Shop Drawings showing more than one size or model will not be considered unless properly marked up.

- 1.10.1.6 Include performance data and characteristic curves with all fan and pump Shop Drawings.

- 1.10.1.7 Include wiring diagrams and schematics for all equipment which has electrical controls or devices furnished with the equipment. Wiring diagrams alone are not sufficient; schematic and interconnecting drawings, and sequence of operation of equipment are required for review.

- 1.10.1.8 Clearly indicate the materials and/or equipment being supplied, all details of construction, finish, accurate dimensions, capacities and performance on Shop Drawings and brochures. Have all drawings certified correct for construction by the manufacturer, before submission. Identify equipment Shop Drawings with

designations as shown on the Drawings or in the Specifications. If not complied with, Shop Drawings will not be reviewed and will be returned to the Contractor.

- 1.10.1.9 Each Shop Drawing and/or brochure must bear the stamp and signature of a responsible official in the Contractor's and the subcontractor's organization for each submission as evidence that the drawing has been checked against the requirements as called for in the specifications and Drawings. Also, in the case where the equipment attaches to and/or where there is external wiring connecting to other equipment, that it has been properly coordinated with this equipment, whether supplied under this or other contracts.
- 1.10.1.10 Revisions to shop drawings will not be allowed after they are reviewed unless further review and submission is required.
- 1.10.2 **Record Drawings:** Maintain an accurate dimensional record of all underground piping and all deviations and changes in above ground piping, ductwork and equipment from the Contract Drawings. Transfer this information to two (2) sets of record drawings filed at the job site and submit to the Engineer at the completion of the job.
- 1.10.3 **Installation and Start-up Instructions:** Furnish five copies of installation instructions and three copies of start-up instructions for any item of equipment when requested by the Engineer.
- 1.10.4 **Operating and Maintenance Instruction Manuals**
 - 1.10.4.1 Provide three (3) of complete operating and maintenance instructions for equipment furnished under this Contract.
 - 1.10.4.2 Bind instructions in loose-leaf 3-ring binders. When only one volume is required, provide a complete index. When more than one volume is required, include in the first book a complete index of all volumes and an individual index in each succeeding volume. Include the following manuals:
 - Schematic diagram of electrical systems, and piping as installed.
 - Control Shop Drawings and operating sequence including wiring of components.
 - Wiring diagram of control panels.
 - Non-dimensional layout showing location of all electrical devices on mechanical equipment.
 - Operating instructions, including start-up and shut-down procedure.
 - Maintenance instructions including preventive maintenance instructions for components of the equipment.
 - Lubricating instructions and recommended cycle of lubrication for each item of equipment, including various types of lubricants.

-Complete parts list of assemblies and their component parts, showing manufacturer's name, catalogue number, and nearest replacement source.

-List of recommended spare parts and quantity of each item to be stocked.

-Manufacturers' warranties and guarantees.

-All the above applies to component parts of equipment whether they are manufactured by the supplier of the equipment or are supplied as a component part of an item of equipment.

1.11 QUALITY ASSURANCE

1.11.1 Regulatory Requirements

1.11.1.1 Conform to governing Municipal or Provincial Codes, Rules and Regulations and/or Authorities having jurisdiction.

1.11.1.2 Codes and Standards referred to hereinafter are by inference, in each case, the latest issue of the Specified Code or Standard, including all revisions and amendments thereto as adopted and published at date of tender closing.

1.11.1.3 Do all work and supply all equipment in accordance with the requirements and recommendations of the latest issue of the applicable standards and codes of the:

National Standards of Canada (NS Can)
Canadian General Standards Board (CGSB)
Canadian Standards Association (CSA)
American National Standards Institute (ANSI)
American Society for Testing and Materials (ASTM)
American Society of Mechanical Engineers (ASME)
Ontario Regulation 413/90 (Ontario Building Code) (OBC)
Ontario Building Code, Part 7 (Plumbing) O.Reg. 160, Ministry of Housing
Ontario Regulation 189 and 190 - Non-Venting of Refrigerants
Ontario Regulation 413 - Halon Fire Extinguishing Equipment
Ontario Fire Code
Ontario Ministry of Labour
American Society of Heating, Refrigerating and
Air Conditioning Engineers (ASHRAE)
Sheetmetal and Air Conditioning Contractors' National Association (SMACNA)

1.12 ELECTRICAL REQUIREMENTS

1.12.1 General

- 1.12.1.1 Comply with the requirements of the Ontario Electrical Safety Code.
- 1.12.1.2 All equipment specified in Division 15 or shown on the Mechanical drawings to be supplied and installed by Division 15 and wired by Division 16 unless specifically indicated otherwise. Generally, all wiring above 50 volts by Division 16 and all low voltage control wiring below 50 volts by Division 15 unless otherwise indicated.
- 1.12.1.3 The nominal electrical service available for mechanical equipment is 120/208 volts, 3Ø, 60 Hz, unless specifically stated otherwise on the Drawings.
- 1.12.1.4 Provide motors with all electrically driven equipment furnished under this Contract. Provide starters for all of the circulation pumps.
- 1.12.1.5 If the Engineer gives approval of substitution of any item of mechanical equipment, include and pay for all necessary electrical changes (labour, materials, overhead, etc.) due to the substitution of the equipment.
- 1.12.2 **Starters, Disconnects, Motor Control Centres, etc.:** As specified in Division 16.
- 1.12.3 **Identification of Electrical Equipment:** As specified in Section 16010.
- 1.12.4 **Identification of Motors:** Provide all motors with brass tags attached by small chain loop, bearing the equipment identification of the driven equipment as described on the Mechanical Equipment Schedules. Stamp or engrave identification information with lettering of 9 mm high min.
- 1.12.5 **Wiring:** Provide power and control wiring as defined under respective Sections of Divisions 15 and 16. Refer to and conform with Division 16 for details of raceways, boxes, wiring, colour coding, etc.

2 Products

2.1 DRIVES AND ACCESSORIES

2.1.1 Lubricating Devices

- 2.1.1.1 Furnish equipment with oil reservoirs with level indicators, or pressure grease fittings. Where fittings are not readily accessible, provide extended tubes to an accessible location. Grease fittings may be Zerk or Alemite but all fittings on the project shall be one type.

3 Execution

3.1 GENERAL CONSTRUCTION REQUIREMENTS

3.1.1 General

- 3.1.1.1 Conform with applicable requirements of the Occupational Health and Safety Act and Regulations for Construction Projects, Ontario Regulation 691.
- 3.1.2 **Measurements and Deviations**
 - 3.1.2.1 Where any parts of the mechanical work are specifically located by dimensions on the Drawings, check and verify these dimensions on the site prior to installation.
 - 3.1.2.2 Before installing piping, review all drawings with mechanical drawings. Where interference may occur and departures from arrangements as shown are required, consult with other trades involved, come to agreement as to changed locations or elevations and obtain approval of the Engineer for proposed changes before proceeding with the work.
 - 3.1.2.3 Examine work of other trades or contractors, prior to commencement of mechanical installations. Report in writing, to the Engineer, any discrepancies which will affect mechanical installations. Failure to do so shall be considered acceptance of the conditions.
 - 3.1.2.4 Where site conditions require minor deviations from indicated arrangements or locations, make such changes on approval of the Engineer without additional cost to the Owner.
 - 3.1.2.5 Should any discrepancies occur during installation of mechanical work, which will necessitate major revisions to the mechanical trades work or the work of other trades or contractors, notify the Engineer immediately and obtain his written authorization before proceeding with the work.
- 3.1.3 **Scaffolding and Hoisting Equipment**
 - 3.1.3.1 Refer to and comply with the requirements of Section 01001.
 - 3.1.3.2 Do not drill, cut or weld the building steel or building structure for erection of materials or equipment without prior written approval of the Engineer.
- 3.1.4 **Overloading**
 - 3.1.4.1 During installation of mechanical work, do not load any part of the building structure with a load greater than it is capable of bearing. Bear full responsibility should any accident occur or damage result through the violation of this requirement.
 - 3.1.4.2 Any temporary supports used during installation must be as strong as permanent supports.
- 3.1.5 **Attachment to Building Construction**
 - 3.1.5.1 Use welding studs of size not larger than 10 mm for attaching miscellaneous

materials and equipment to building steel. If the weight of materials or equipment require bolts or studs larger than 10 mm dia., use steel clips or brackets, secured to building steel by welding or bolting as approved by the Engineer.

- 3.1.5.2 Use self drilling expansion type concrete inserts for securing miscellaneous equipment and materials to masonry or concrete construction already in place, of sufficient number and size to prevent concrete from breaking away. The use of powder or power actuated fasteners will not be allowed unless prior written approval is obtained from the Engineer.

3.1.6 Cutting and Patching

- 3.1.6.1 Cutting of all holes and related patching shall be done under Division 15.
- 3.1.6.2 Do not cut, remove or burn structural parts or sections of the building, whether they are steel, concrete or masonry, without the written authorization of the Engineer.
- 3.1.6.3 Should cutting, repairing, and patching of previously finished work of other trades be required to allow installation of mechanical work, pay all costs for the trade concerned to perform the work.

3.2 EQUIPMENT INSTALLATION

3.2.1 General

- 3.2.1.1 Erect equipment in a compact, neat and workmanlike manner. Align, level and adjust for satisfactory operation. Install in such a manner that connecting and disconnecting of piping and accessories can be made readily and that all parts are easily accessible for inspection, operation, maintenance and repair.
- 3.2.1.2 Install and start up items of equipment in complete accordance with the manufacturer's printed installation and operating instructions.

- 3.2.2 **Noise and Vibration:** Select noise and vibration levels of equipment and systems to conform to design intent. If unnecessary noise or vibration should be created by any mechanical equipment and systems and transmitted to occupied portions of building or other mechanical work, make all necessary changes and additions as approved by the Engineer without additional cost.

- 3.2.3 **Lubrication:** Lubricate all equipment prior to start up, in accordance with the manufacturer's printed instructions. Provide all lubrication including sufficient quantity for drainage and refilling of oil sumps, etc., when required by manufacturer's instructions.

3.2.4 Equipment Bases and Pads

- 3.2.4.1 Provide all concrete work for this Division including bases and curbs.
- 3.2.4.2 Verify size of bases shown on Drawings with actual requirements and advise

the Engineer and the respective trades if change in size or shape of pad is required.

3.2.4.3 Construct bases and pads the same height as existing. Extend bases 75 mm (3") beyond centreline of anchor bolts or to a minimum of 50 mm (2") beyond equipment base. Chamfer all upper perimeter edges of base. Provide fully adhered joints to existing pads.

3.2.4.4 Supply anchor bolts and sleeves to trade constructing bases in sufficient time for setting in formwork prior to placing concrete and provide anchor bolt location drawing or template for locating anchor bolts. Check anchor bolt locations for proper position before concrete is poured.

3.3 DISCONNECTION AND DEMOLITION OF EXISTING WORK

3.3.1 Disconnect and seal off mechanical equipment and services as required on Site.

3.3.2 Be responsible for demolition and removal of mechanical equipment and services designated for removal on Drawings and as required by work, unless otherwise specified

3.4 PIPING CONSTRUCTION METHODS

3.4.1 General

3.4.1.1 Unless specified otherwise herein, construct and install all piping in accordance with ANSI Sections B31.1 to B31.9 as applicable to service, except that soldered joints will not be permitted in compressed air piping.

3.4.1.2 Inspect pipe and fittings for soundness and clean of all dirt and other foreign matter immediately prior to installation. Reject all damaged items.

3.4.1.3 Install piping in the most direct, straight and functional manner possible. Except where otherwise shown, install all vertical lines plumb, and run horizontal lines parallel to building walls. Install piping close to walls, partitions and ceilings. On multiple runs of piping, space piping to allow for installation of insulation and for proper servicing of valves.

3.4.1.4 Piping below grade are dry and firm when laying pipe.

3.4.2 Lines, Grades and Slopes

3.4.2.1 Install liquid lines free of pockets and pitch to drain at low points in the line with valves or traps installed as required for drainage of the lines.

3.4.2.2 When slope is not shown on the drawings, install piping to the following slopes:

-Hot water heating - slope up 1:500 in direction of flow.

3.4.3 Immersion Wells and Sensing Bulbs

3.4.3.1 Where a temperature sensing bulb or immersion well is installed in piping of NPS 2ø" size and less, increase the tee fitting and piping as required in which the bulb or well is inserted a minimum of one pipe size larger than the adjoining pipe to prevent restriction of flow of liquid.

3.4.3.2 To improve heat transfer pack all immersion wells in piping for liquids up to a temperature of 150 deg C (300 deg F) with a mineral type grease prior to installation of sensing bulb.

3.4.4 Pipe Joints

3.4.4.1 Ream all pipe ends and thoroughly clean all dirt, cuttings and foreign matter from pipe after cutting and threading. Thoroughly clean all fittings, valves and equipment before connections are made. Cut copper tubing with a tube cutter and clean the joining surfaces of the tubing and fitting with fine emery cloth. Wipe clean with a dry cloth.

3.4.4.2 Make screwed joints with Teflon tape or Masters metallic compound with the compound applied to the male threads only and particular care taken to prevent the compound from reaching the interior of the pipe or fittings.

3.4.4.5 Assemble mechanical joint on ductile iron pressure pipe with cast iron gland, rubber sealing gasket and high strength malleable iron bolts in accordance with the manufacturer's recommendations.

3.4.4.6 Install couplings, fittings, etc. on grooved end piping systems in accordance with manufacturer's printed instructions.

3.4.4.7 Make soldered joints on copper tubing in accordance with the following usage:

<u>Service</u>	<u>Solder Type</u>
a) Hot water heating	100% Lead Free

3.4.4.8 Do not use core type solder. Use solder conforming to ASTM requirements.

3.4.4.9 Make carbon steel welded joints in compliance with latest acceptable practices, either by electric arc welding, gas metal arc welding, or oxy-acetylene gas welding.

3.4.4.10 Employ qualified welders holding a current up-to-date Provincial Certificate for the process and rating involved as required by the Provincial Regulations.

3.4.4.11 Conform to ANSI B31.1 Section IX for welding and be responsible to ensure that supervisory staff, fitters and welders are fully conversant with the requirements laid down by that Standard prior to the commencement of

welding.

3.4.4.12 Unless more stringent methods of inspections are specified the Engineer will visually inspect welded joints for fusion of metal, icicles, alignment, etc. Remove any defects and remake the joint to his satisfaction.

3.4.4.13 For welding of materials other than carbon steel conform to the requirements specified in the relevant section of the Specification.

3.4.5 Unions and Flanges

3.4.5.1 Provide unions or flanges in the following locations:

-For by-passes around equipment or control valves or devices in piping systems.

-At connections to equipment. Locate between shut-off valve and equipment.

-In screwed or solder joint drainage tubing at inlet side of trap.

3.4.5.2 Provide dielectric unions or isolating type companion flanges at all connections between copper tubing and ferrous piping.

3.4.5.3 Assemble flanged joints with appropriate flanges, gaskets and bolting. Provide clearance between flange faces such that the connections can be gasketed and bolted tight without undue strain on the piping system with flange faces parallel and bores concentric. Centre gaskets on the flange faces so as not to project into the bore. Lubricate bolts before assembly to assure uniform bolt stressing. Machine off raised face flanges when joining to a flat companion flange and use a full face gasket.

3.4.6 Fittings

3.4.6.1 The use of couplings between fittings, valves or equipment, will not be permitted except on long runs in pipe sizes NPS 2" or smaller. Where the length of pipe between fittings requires a connection, make the joint by welding. Do not use running couplings in any pipeline.

3.4.6.2 Fittings and ancillary items installed in systems operating at pressures in excess of 103 kPa (15 psig) must be registered in accordance with CSA B51.

3.4.6.3 Use eccentric reducing fittings in locations where piping changes size and at connections to equipment and control valves, to provide proper drainage or venting of the lines. Do not use bushings.

3.4.6.4 Tee connections in welded piping may utilize either of the following:

-Factory fabricated standard buttweld fittings.

-Bonney Forge "Weldolets", "Thredolets" or "Sockolets".

- 3.4.6.5 Mitering, notching or direct welding of branches to mains, will not be permitted.
- 3.4.6.6 Use standard pipe fittings for changing direction of piping. No mitered joints or field fabricated pipe bends are permitted. Use long radius welded steel elbows unless short radius elbows are specifically authorized by the Engineer.

In copper tubing, direct connection of branch into main using "T-Drill" method may be used where allowed by Ontario Building Code, Part 7 (Plumbing) O.Reg.160, in lieu of manufactured tee fittings.

3.4.7 **Piping Connections to Mains**

- 3.4.7.1 Make branch connections of steam, gas and compressed air lines to respective horizontal piping of larger diameter to the upper quadrant of the larger pipe.
- 3.4.7.2 Make down feed piping connections of all water piping to horizontal supply and return mains to the bottom quadrant of the mains.

3.4.8 **Valves**

- 3.4.8.1 Supply and install valves in all locations shown on the Drawings, at all piping connections to equipment, at all connections to control valves or control devices, and where required for sectionalizing a system or floor.
- 3.4.8.2 Use gate or butterfly valves for shut-off purposes and globe or plug valves for throttling purposes.
- 3.4.8.3 Install check valves wherever required to ensure flow of liquid in one direction.
- 3.4.8.4 Provide drain valves with hose thread outlet connection or valve with long nipple on outlet at all low points of each water system and above all riser or branch stop valves for proper drainage of lines.
- 3.4.9 **Air Venting:** Install all vents at high points of all water piping systems and connect to nearest drain.

3.5 **PRESSURE TESTS**

- 3.5.1 Make specified pressure tests on all piping included in this Contract. Furnish all pumps, compressors, gauges and connectors necessary for the tests.
- 3.5.2 Conduct tests in the presence of the Engineer and all other personnel of governing authorities having jurisdiction. Notify all parties in ample time to permit them to be present. Conduct tests before piping is painted, covered or concealed.
- 3.5.3 Conduct hydrostatic tests for a minimum period of 2 hours, or longer when

requested by the Engineer or governing authority at the test pressure specified under the respective Section of the Specifications

- 3.5.4 During this time the pressure shall remain constant and the exterior surfaces of pipe or fittings shall not show any cracks or other form of leak.
- 3.5.5 Conduct final tests on natural or propane gas piping in accordance with the requirements of the local Utility or governing authority. If feasible, make tests when ambient air temperature is approximately constant. Take into account corrections for pressure change due to temperature differential as approved by the Engineer.
- 3.5.6 Disconnect pumps or compressors used for applying the test pressure, during the test period.
- 3.5.7 Disconnect and/or remove equipment or specialties not designed to withstand the test pressure during the test and reconnect same after completion of test.
- 3.5.8 Promptly correct any defects that develop through tests and re-test to the complete satisfaction of the Engineer and other parties involved.
- 3.5.9 Forward copies of all final tests on all pressure and drainage piping and a copy of governing authority approvals to the Engineer immediately on acceptance of tests and/or approvals.
- 3.5.10 Final payment for the work will not be made until the above has been received.

3.6 PERFORMANCE TESTING AND BALANCING

- 3.6.1 Assume responsibility for testing, balancing and placing all air handling and liquid systems in operation, prior to final acceptance in presence and under direction of Engineer.
- 3.6.2 Standard test sheets are appended to this Section. Fill out applicable sheets during performance tests, start-up procedures, and commissioning procedures. Submit 3 copies to Engineer prior to acceptance.
- 3.6.3 Provide all instruments required to test and balance systems. Install test probe inlets in ductwork and equipment in locations selected by the Engineer. Balance systems in accordance with design requirements indicated on the Drawings. Report to the Engineer immediately any deficiencies in the systems or equipment performance resulting in design requirements being unobtainable.
- 3.6.4 On completion of testing and balancing of all systems, submit to Engineer a typewritten report (4 copies) of findings, including complete data of fan performance, static pressures, air quantities, final readings at all outlets, and ampere readings of all motors, taken at motor terminals when equipment is operating under full load conditions.

- 3.6.5 Submit with each copy of the report, complete sets of duct layout prints neatly marked in red ink, showing all locations at which test readings were taken, the air volume, velocity and static pressure in each supply and return duct, and the final reading at all outlets. Obtain duct layout prints for mark-up purposes from the Engineer.

3.7 CLEANING, TESTING AND APPROVAL RECORDS

- 3.7.1 Maintain records of all pressure tests and flushing and sterilization tests, glycol/water concentrations, inspections and approvals by the Plumbing Inspector, etc. and forward these to the Owner on completion of the work. Provide Engineer with copy of records on completion of each test, cleaning operation, etc.

3.8 ADJUSTMENT AND OPERATION OF SYSTEMS

- 3.8.1 When the work is complete, adjust all equipment items of the various systems for proper operation within the framework of design intent, and the operating characteristics as published by the equipment manufacturer.

- 3.8.2 Note: Additional instructions are specified under the respective Sections of this Division.

- 3.8.3 The Engineer reserves the right to require the services of an authorized representative of the manufacturer in the event that any item of equipment is not adjusted properly. Arrange for such services and bear all incurred costs thereof. After completion of adjustments, place the systems in full operating condition and advise the Engineer that the work is ready for acceptance.

3.9 ACCEPTANCE

- 3.9.1 After all equipment has been installed and adjusted and all systems balanced, conduct performance tests in the presence of the Engineer and the Owner. Arrange the time for these tests at the convenience of the Engineer and Owner. Conduct tests under climatic circumstances to ensure complete and comprehensive tests and of such a manner and duration as the Engineer may deem necessary.

- 3.9.2 During these tests, demonstrate the correct performance of all equipment items and of the systems they comprise. Should any system or any equipment item fail to function as required, make such changes, adjustments or replacements necessary to meet the performance requirements. Repeat tests until these requirements have been fully satisfied and all systems accepted by the Engineer.

End of Section.

1 GENERAL

1.1.1 All equipment specified in Division 15 or shown on the Mechanical drawings to be Supplied and installed by Division 15 and wired by Division 16 unless specifically indicated otherwise. Generally, all wiring above 50 volts by Division 16 and all low voltage control wiring below 50 volts by Division 15 unless otherwise indicated.

1.1.2 Section 16010 shall apply to and govern work of all Sections of Division 16.

1.2 SYSTEM DESCRIPTION

1.2.1 Incoming Service Data

1.2.1.1 Available electric service is 120/208 volts, 60 Hz, 3 phase, 4 wire, (grounded).

1.2.1.2 Co-ordinate ratings and characteristics of all pertinent electrical equipment to ensure safe and satisfactory operations.

1.3 16010 DEMOLITION AND REMOVAL

1.3.1 Be responsible for demolition and removal of electrical equipment services scheduled for removal on Drawings and as required by Work.

1.3.2 Do disconnecting and capping prior to authorizing removal.

1.3.3 Ballasts of fluorescent light fixtures may contain PCB. Take adequate precautions, remove and pack light fixtures in steel drums. Store drums in secure container on Site. Deliver to designated storage site when directed by Engineer. Owner will be responsible for cost and arrangement of transportation of materials containing PCB.

1.4 SHOP DRAWINGS

1.4.1 Submit shop drawings in accordance with the General Conditions of the Contract and as specified in each section of Division 16.

1.4.2 When equipment and apparatus of 1 system must be co-ordinated with or installed in a given area with equipment and apparatus of other system(s), prepare and submit necessary co-ordinated composite drawings for checking interferences.

1.5 AS-BUILT DRAWINGS

1.5.1 Submit "as built" drawings in accordance with requirements of specifications

1.5.1.1 Colour code changes using red for additions, and green for deletions.

1.6 OPERATION AND MAINTENANCE DATA

1.6.1 Submit operation and maintenance data . Make changes or submit additional information if required.

- 1.6.2 Review instructions with Engineer to ensure a thorough understanding of equipment and its operation.

1.7 REGULATORY REQUIREMENTS

- 1.7.1 The Electrical Safety Authority Approval: Immediately upon award of the Contract, submit complete set of electrical drawings to The Electrical Safety Authority for approval. Prepare and submit any other documents required for approval.

- 1.7.2 Materials and workmanship shall be in accordance with requirements and recommendations of applicable rules, regulations, standards and codes as specified hereunder. All products shall bear certification label of CSA, ULC, The Electrical Safety Authority, as applicable.

The Electrical Safety Code (OESC)-publication containing Canadian Electrical Code and The Electrical Safety Authority Supplements.

Canadian Standards Association (CSA)

Underwriter's Laboratories of Canada (ULC)

Electrical and Electronic Manufacturers Association of Canada (EEMAC)

Joint Industrial Council (JIC)

Ontario Building Code (OBC)

Ontario Fire Code (OFC)

Association of Edison Illuminating Companies (AEIC)

American Society for Testing and Materials (ASTM)

Insulated Power Cable Engineers Association (ICEA)

Boards, Service Companies or other Authorities having jurisdiction.

- 1.7.3 Permits, Fees and Certificates: Except as provided in the General Conditions of the Contract, give notices, obtain permits, pay fees required for work of Division 16. Before final certificate of payment is issued by Owner, furnish certificates as evidence that work installed conforms with laws and regulations of all governing authorities. Determine detailed requirements of local authorities having jurisdiction and conform to those requirements.

1.7.4 Qualifications

- 1.7.4.1 Work shall be executed by Electrical Contractor or his designated sub-contractor, holding a valid Contractors' license (Master License).

- 1.7.4.2 Work shall be performed by qualified Electricians holding valid Ontario certificates of qualifications.

- 1.7.4.3 Work on signal, communication, related control and other similar systems shall be performed by relevant competent tradesmen.

1.8 PROJECT/SITE CONDITIONS

1.8.1 Existing Conditions

- 1.8.1.1 Examine Site and Contract Documents in accordance with Instructions to Bidders.

- 1.8.1.2 Electrical installations in areas classified as hazardous locations, corrosive environments, and other special area application, shall be governed by relevant Industry Standards and Regulatory Requirements.

1.8.2 Interruption of Services

- 1.8.2.1 Any interruption of electrical services to any part of existing building(s) shall come at a time agreeable to Engineer. Make all necessary arrangements with those concerned, and include in Contract Price for any overtime required to ensure that interruption is held to a minimum.

- 1.8.2.2 All such overtime work shall be carried out without additional cost to Owner.

1.9 PERMITS

- 1.9.1 Contractor is responsible for all electrical wiring, permits and controls to complete this project. If fire alarm or security system is down at any time, contractor is responsible to provide a fire watch.

2 PRODUCTS

2.1 MATERIALS

- 2.1.1 Inserts: Supply and deliver inserts, anchors, bolts, sleeves, ferrules and other items to be built into work of other Divisions, with necessary templates, adequate instructions and assistance for locating and installing.

- 2.1.2 Access Panels: For ceilings and/or masonry walls, 12 gauge steel, size 460 mm x 460 mm unless indicated on Drawings, concealed hinges, key-locked type, prime coated, to match ceiling and/or wall finish.

3 EXECUTION

3.1 EXAMINATION

- 3.1.1 Where any parts of systems and/or pieces of equipment are located by dimensions on Drawings, check and verify such dimensions at Site.

- 3.1.2 Notify Engineer before proceeding further if any discrepancy or interference with other equipment is found which will necessitate revision in or deviation from Work as indicated or specified.

- 3.1.3 Location of conduit, raceways, wiring and other equipment shall be altered without charge to Owner if so directed by Engineer provided change is ordered before installation, and does not necessitate additional labour and material.

3.2 CUTTING AND PATCHING

- 3.2.1 Cutting of holes shall be done under Division 16.

3.3 INSTALLATION

- 3.3.1 Instruct and supervise other Sections doing related work.

- 3.3.2 Electrical products and methods of installation shall be in accordance with relevant Sections of Division 16, and applicable requirements of other Divisions.

- 3.3.3 Correct installed work as directed by authorized inspector of such authorities.

- 3.3.4 Notwithstanding the General Conditions of the Contract, no increase to Contract Price shall apply for electrical items relocated from location indicated and prior to installation requiring extra labour and material up to 3 meters (10'-0") from original location, nor will decrease to Contract Price apply where relocation up to 3 meters (10'-0") reduces materials and labour.

3.4 SYMBOLS

- 3.4.1 Electrical work is indicated generally on Drawings using standard symbols.

- 3.4.2 For lighting layout Drawings, letters in a circle indicate type of fixture to be supplied. Letters and numbers outside and adjacent to circle indicate panel and circuit number.

3.5 MOUNTING HEIGHTS

- 3.5.1 Measure mounting height dimension from operator's working floor level (finish) to centre-line of electrical device or enclosure, unless otherwise indicated or specified herein.

- 3.5.2 Mounting heights shall be as follows, unless otherwise indicated or specified as directed on Site:

Lighting Switches	(36") 900mm to (44") 1100mm
Thermostats	(48") 1200mm
Pull Stations	(48") 1200mm
Exit Lights	(96") 2400mm (Minimum)

- 3.5.2.1 Heights are subject to change to suit structural requirements, and other Site conditions, and therefore as work progresses, and before installing equipment, obtain instructions or directions from Engineer for alternative heights or relocation.

3.6 EXISTING INSTALLATIONS

- 3.6.1 Execute changes, alterations, relocations, removals, additions, and connections to existing electrical installation as indicated on Drawings or as specified.

- 3.6.2 Check electrically-operated equipment for proper wiring connection and operation before disconnecting and reconnecting it thereafter. Report defects in equipment to Engineer before proceeding work.

- 3.6.3 Where connections are required to existing electrical equipment, install necessary raceways and wiring and connect up complete as required for proper operation.
- 3.6.4 Check for proper size and safety of existing feeders and wiring to be re-used and reconnected to equipment. Correct as required.
- 3.6.5 Disconnect wiring from old panel where existing equipment is to be fed from a new panel.
- 3.6.6 Remove exposed existing conduit and its wiring made redundant by Work. Cut off and cap conduits concealed or embedded in concrete, flush with finished walls, ceiling and floors.
- 3.6.7 Provide new wiring for new and affected existing lighting fixtures, switches, receptacles, outlets and other electrical equipment indicated on Drawings, unless stated otherwise.
- 3.6.8 Repair damage caused by such works, including repainting required due to lack of reasonable care. Bring discrepancies regarding installation to Owner's Designee's attention for decision regarding procedure to be taken.
- 3.6.9 Maintain and protect during construction, existing wiring required to be retained. Where interruption of services cannot be avoided, conform to requirements specified herein.
- 3.6.10 Provide temporary feeder connections to equipment where interruption of services is not allowed.
- 3.6.11 Existing minor installations, such as conduits, boxes and wiring devices, which interfere with new electrical equipment installation, may be rerouted or relocated on prior approval of Engineer.
- 3.6.12 Safely carry out (demolition and) removal of existing electrical installation and equipment as specified or as indicated on Drawings. Removed equipment shall become property of Division 16, unless noted otherwise.
- 3.6.13 Disconnect and seal off electrical equipment and services as required on Site.
- 3.6.14 Be responsible for demolition and removal of electrical equipment and services designated for removal on Drawings and as required by Work.
- 3.7 Grounding**
 - 3.7.1 Ground electrical equipment in accordance with requirements of The Electrical Safety Authority Electrical Safety Code.
 - 3.7.2 Arrange grounds so that under normal operating conditions, no injurious amount of current will flow in any grounding conductor. Connect single phase loads so that there is least possible unbalance of supply.

3.8 FIELD QUALITY CONTROL

3.8.1 Trial Usage

- 3.8.1.1 Trial usage by Engineer of any electrical device, machinery, apparatus, equipment and other work supplied under this Division before final completion and written acceptance by Engineer is not to be construed as evidence of acceptance by Owner.
- 3.8.1.2 Engineer shall have privilege of such trial usage as soon as Contractor claims that said work is completed, in accordance with Drawings and specifications for such reasonable length of time as Engineer deems sufficient for making a complete test.
- 3.8.1.3 No claim for damage shall be made for injury to or breaking of any parts of such tested work, whether caused by weakness or inaccuracy of structural parts or by defective materials or workmanship of any kind whatsoever.
- 3.8.1.4 At completion of installation, conduct grounding resistance test, voltage test, and empty conduit test in presence of Engineer and make corrections where necessary and as directed.
- 3.8.1.5 Resistance of ground electrodes shall not exceed maximum permissible values for each type of installation or equipment concerned and if necessary change arrangement until satisfactory results are obtained.
- 3.8.1.6 Voltage provided to equipment in installation shall not exceed minimum and maximum permissible limits for equipment.
- 3.8.1.7 Perform insulation tests for installed wiring and equipment with appropriate "Megger" testing equipment. Megger lighting and power circuit feeders and if resistance to ground is less than recommendations on any lighting or power circuit, consider such circuit defective and replace it.
- 3.8.1.8 Test performance of equipment for mechanical and electrical defects. Make adjustments necessary for such equipment. When equipment has been placed in permanent operation give to operating personnel all necessary tuition and instructions for its operation and maintenance.
- 3.8.1.9 Test conduits that are required to be installed but left empty for clear bore, using ball mandrel, brushes and snake. Use lignum vitae ball of diameter equal to approximately 85% of conduit inside diameter. Clear any conduit that rejects ball mandrel in an approved manner and without damage thereto.
- 3.8.1.10 Furnish labour, materials, instruments and bear other costs in connection with all tests, obtain required certificates of approval, acceptance, and compliance with regulations of agencies having jurisdiction and as specified. Work shall not be deemed complete and final certificate of acceptance will not be issued, until such certificates have been delivered to Engineer.

3.9 CLEANING

- 3.9.1 Before starting and commissioning operations, installed new electrical enclosures, equipment and control devices, open-frame motors shall be air-blown and/or vacuum-

cleaned.

- 3.9.2 Ensure no foreign objects, tools, and materials are left inside switchgears, cabinets, panelboards, control panels and similar enclosures before such equipment is energized.

End of Section

1 GENERAL

1.1 GENERAL REQUIREMENTS

1.1.1 Conform to Sections of Division 1 as applicable.

1.1.2 Conform to General Electrical Requirements, Section 16010 as applicable.

1.2 REFERENCES

CAN3 C17	Alternating-Current Electricity Metering
CAN/CSA C22.2 No. 4	Enclosed Switches
CAN/CSA C22.2 No. 18	Outlet Boxes, Conduit Boxes, Fittings and Associated Hardware
CAN/CSA C22.2 No. 47	Air-Cooled Transformers (Dry Type)
CAN/CSA C22.2 No. 76	Splitters
CAN/CSA C22.2 No. 94	Special Purpose Enclosures
CSA C9	Dry-Type Transformers
CSA C22.2 No. 29	Panelboards and Enclosed Panelboards
CSA C22.2 No. 38	Thermoset Insulated Wires and Cables
CSA C22.2 No. 42	General Use Receptacles, Attachment Plugs and Similar Wiring Devices
CSA C22.2 No. 45	Rigid Metal Conduit
CSA C22.2 No. 51	Armoured Cables
CSA C22.2 No. 52	Underground Service-Entrance Cables
CSA C22.2 No. 56	Flexible Metal Conduit and Liquid-Tight Flexible Metal Conduit
CSA C22.2 No. 83	Electrical Metallic Tubing
CSA C22.2 No. 111	General Use Switches
CSA C22.2 No. 123	Aluminum Sheathed Cables
CSA C22.2 No. 144	Ground Fault Circuit Interrupters

1.3 MATERIALS AND EQUIPMENT

1.3.1 Safety (Disconnect) Switches - CAN/CSA C22.2 No. 4; CAN/CSA C22.2 No. 94.

1.3.1.1 Safety (disconnect) switches, in general, shall be fused or unfused, industrial heavy duty-type, switches with quick make, quick break contacts, ratings and types of enclosure, as indicated on Drawings.

1.3.1.2 Fuses shall be non-renewable type except those protecting motors which shall be dual element type, suitably rated to protect motors against overload and short circuit.

1.3.1.3 Wires and Cables, and Accessories

1.3.1.4 Wiring, general, for Power and Lighting Feeders: Copper conductors type "R90", 600V insulation, except as otherwise noted or scheduled on Drawings.

1.3.1.5 Wiring smaller than 8.3 mm² (No. 8) shall be solid. Conductors of 8.3 mm² (No. 8) and larger shall be stranded.

1.3.1.6 Do not use wiring smaller than 3.3 mm² (No. 12) except for control wiring specified under Division 16.

- 1.3.1.7 Size branch circuits and feeders for maximum 2% voltage drop from panelboard to farthest outlet in circuit and large enough to be protected by fuse or breaker of which they form a part.
- 1.3.1.8 Feeders, circuit wiring and ancillary items shall be colour-coded for phase identification.
- 1.3.1.9 Neutral Conductor: Full capacity, white insulation, continuous throughout circuit without fuses, breakers or switches of any kind.
- 1.3.1.10 Main Feeders : Copper conductors, CSA C22.2 No.(52)(123), size as shown on Drawings,(aluminum sheathed), PVC jacketed, RA90/XLPE insulation 600/1000V 90C/-40C, for direct burial, complete with recommended matching connectors, similar to Canada Wire "Corflex" or by Phillips Cables, Advance, Carol ,United, and others.
- 1.3.1.11 Cables for Other Systems: Of type specified in respective Sections. Number of wires for various control, alarm and other systems are intended to show general control scheme. Actual number of wires shall be installed under applicable Sections (and this Section if so specified herein) in accordance with equipment manufacturer's diagrams and requirements as reviewed by Engineer.
- 1.3.1.12 Compression Connectors: Properly sized for joining conductors and insulated, or as recommended by cable manufacturer, Burndy,Ideal, G & W Electric,Ilsco, Joslyn,Thomas & Betts, and others.
- 1.3.2 **Raceway and Boxes**
 - 1.3.2.1 Electrical Metallic Tubing (EMT), Couplings and Connectors: CSA C22.2 No. 83. Use for exposed, concealed surface installation not subject to mechanical stress or injury. Provide ground wire for sizes over 50mm (2").
 - 1.3.2.2 Steel Conduits and Fittings: Rigid galvanized (standard)(heavy) wall, CSA C22.2 No.45. Use where exposed installation is subject to mechanical injury, as required by Code and specified herein, or indicated on Drawings.
 - 1.3.2.3 Flexible Metallic Conduits: CSA C22.2 No.56. Use for connection to motors and recessed luminaires, indoor dry location, within Code requirement.
 - 1.3.2.4 Liquid-tight Flexible Metal Conduits: CSA C22.2 No.56. Use for connection to motors, in damp or wet location, within Code requirement.
 - 1.3.2.5 Cable pulling accessories: Fish cord, polypropylene.
 - 1.3.2.6 Outlet Boxes, Conduit Boxes, and Fittings: CSA C22.2 No.18,electro-galvanized sheet steel construction for outlet boxes; cast-type feraloy 'FS' or 'FD' with standard factory-threaded hubs or adapters as required for conduit boxes.
 - 1.3.2.7 Splitters: CSA C22.2 No.76, boxes or troughs, welded sheet steel metal enclosure complete with necessary mains and branch copper bus bars and lugs, 600V, ratings as specified or shown on Drawings.
 - 1.3.2.8 Box covers, types and sizes to match respective boxes and/or wiring devices as required, complete with screwed covers.

2 EXECUTION

2.1 INSTALLATION

2.1.1 Wires and Cables and Accessories

2.1.2 All power and control wiring is to be installed in conduit.

2.1.2.1 Install wires and cables in raceways and boxes in accordance with OESC requirement and other regulatory bodies having jurisdiction.

2.1.2.2 Terminate conductors in supply panelboards and designated termination points as shown on Drawings and respective panelboard schedule, using approved wire terminating materials and accessories..

2.1.2.3 Provide approved wire markers, complete wire numbers/identification, as per equipment manufacturer's wiring diagram or shop drawing as applicable, and in accordance with latest standards of OESC, CSA, OBC, and other Authorities having jurisdiction.

2.1.3 Raceway and Boxes

2.1.3.1 Install raceway, boxes, and necessary fittings, including supports, fasteners, and accessories, in compliance with current practices and standards by regulatory bodies having jurisdiction.

2.1.3.2 Route exposed raceway neatly, parallel to and perpendicular to building lines, and equally-spaced when in groups with other raceway .

2.1.3.3 Fasten and support boxes independent from raceway supports.

2.1.3.4 Use proper outlet boxes, device boxes to suit type of raceway and installation for general wiring in accordance with standards and practices by regulatory bodies and authorities having jurisdiction.

2.1.3.5 Thoroughly clean raceway and boxes, clear of obstructions, prior to wire and cable pulling.

2.1.3.6 Provide empty conduits and tubing with pulling cord secured at both ends, and cap for future wire installation. Provide blank cover for installed empty boxes.

2.1.3.7 TESTING AND INSPECTION

2.1.3.8 Conduct visual inspection at times for signs of physical damages or defects prior to and after installation.

2.1.3.9 Test installed equipment and wiring for grounds and short-circuit upon completion of work. See also Section 16010: General Electrical Requirements for additional instructions.

End of Section.

APPENDIX 'A'
Supplementary Conditions to
CCDC2

SUPPLEMENTARY CONDITIONS

The Standard Construction Document CCDC-2 2008 for Stipulated Price Contract, English version, consisting of the Agreement Between *Owner* and *Contractor*, Definitions, and General Conditions of the Stipulated Price Contract, Parts 1 to 12 inclusive, governing same is hereby made part of these *Contract Documents*, with the following amendments, additions and modifications.

All references in this contract to the *Owner* shall refer to the entity identified in the Agreement Between *Owner* and *Contractor*, but all rights, benefits, or entitlements reserved to the *Owner* under the terms of this contract shall equally accrue to and be jointly or severally enforceable by *Owner*.

Where an Article, Definition, General Condition or paragraph thereof is deleted by these Supplementary Conditions, the numbering of the remaining Article, Definition, General Conditions or paragraphs shall remain unchanged, and the numbering of the deleted item will be retained, unused.

AGREEMENT BETWEEN OWNER AND CONTRACTOR

ARTICLE A-9 – CONFLICT OF INTEREST

Add new Article A-9 – Conflict of Interest:

- 9.1 The *Contractor*, all of the *Subcontractors*, and any of their respective advisors, partners, directors, officers, employees, agents, and volunteers shall not engage in any activity or provide any services where such activity or the provision of such services creates a conflict of interest (actually or potentially, in the sole opinion of the *Owner*) with the provision of the *Work* pursuant to the *Contract*. The *Contractor* acknowledges and agrees that a conflict of interest includes the use of *Confidential Information* where the *Owner* has not specifically authorized such use.
- 9.2 The *Contractor* shall disclose to the *Owner*, in writing, without delay any actual or potential situation that may be reasonably interpreted as either a conflict of interest or a potential conflict of interest, including the retention of any *Subcontractor* or *Supplier* that is directly or indirectly affiliated with or related to the *Contractor*.
- 9.3 A breach of this Article by the *Contractor*, any of the *Subcontractors*, or any of their respective advisors, partners, directors, officers, employees, agents, and volunteers shall entitle the *Owner* to terminate the *Contract*, in addition to any other rights and remedies that the *Owner* has in the *Contract*, in law, or in equity.

DEFINITIONS

Add the following definitions:

a. Affected Party and Affected Parties

Affected Party and Affected Parties have the meaning set out in GC 13.6.4

b. As-Built Drawings

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

GENERAL CONDITIONS OF THE STIPULATED PRICE CONTRACT

GC 1.1 CONTRACT DOCUMENTS

- .1 Add new sentence to the end of paragraph 1.1.6:

1.1.6 The *Specifications* and Drawings are divided into divisions and sections for convenience but shall be read as a whole and neither such division nor anything else contained in the Contract Documents will be construed to Place responsibility on the Consultant to settle disputes among the *Subcontractors* and Suppliers or as between them and the Contractor with respect to such divisions.

- .2 Add new subparagraph 1.1.7.5:

1.1.7.5 noted materials and annotations shall take precedence over graphic indications.

- .3 Delete paragraph 1.1.8 in its entirety and substitute new paragraph 1.1.8:

1.1.8 The *Owner* shall provide the *Contractor*, without charge, a PDF digital copy of the *Contract Documents*. *The Contractor is responsible for printing of copies.*

GC 1.4 ASSIGNMENT

- .1 Delete paragraph 1.4.1 in its entirety and substitute new paragraph 1.4.1:

1.4.1 The *Owner* may assign the *Contract* or a portion thereof without the consent of the *Contractor*, where such assignment is to an entity undertaking the *Project*. The *Contractor* may not assign the *Contract* or a portion thereof without the consent of the *Owner*, and the granting of such consent shall be in the *Owner's* discretion, not to be unreasonably withheld.

GC 2.4 DEFECTIVE WORK

- .1 Add new subparagraphs 2.4.1.1 and 2.4.1.2:

2.4.1.1 The *Contractor* shall rectify, in a manner acceptable to the *Owner* and the *Consultant*, all defective work and deficiencies throughout the *Work*, whether or not they are specifically identified by the *Owner* or the *Consultant*.

2.4.1.2 When applicable, the *Contractor* shall give priority to the correction of any defective work or deficiencies which the *Owner* determines adversely affect its day-to-day operations.

GC 3.1 CONTROL OF THE WORK

- .1 Add new paragraph 3.1.3:

3.1.3 Prior to commencing the *Work*, the *Contractor* shall verify, at the *Place of the Work*, all relevant measurements and levels necessary for the proper completion 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 exact locations are not apparent in the *Contract Documents*, the *Contractor* shall immediately

notify the *Consultant* in writing and obtain *Supplemental Instructions* from the *Consultant* before proceeding with any part of the affected work.

GC 3.2 CONSTRUCTION BY OWNER OR OTHER CONTRACTORS

.1 Add new subparagraph 3.2.3.4:

- 3.2.3.4 Subject to General Condition 9.4 - CONSTRUCTION SAFETY, where paragraph 3.2.4 of General Condition 3.2 - CONSTRUCTION BY OWNER OR OTHER CONTRACTORS applies, for the *Owner's* own forces and for other contractors performing work identified in the *Contract Documents*, assume overall responsibility for compliance with all aspects of the applicable health and safety legislation in the *Place of the Work*, including all of the responsibilities of the constructor as that term is defined in the *Occupational Health and Safety Act*, R.S.O 1990, c. O.1, as amended.

GC 3.4 DOCUMENT REVIEW

.1 Delete paragraph 3.4.1 in its entirety and substitute new paragraph 3.4.1:

- 3.4.1 The *Contractor* shall review the Contract Documents and shall report promptly to the *Consultant* any error, inconsistency, or omission the *Contractor* may discover. Such review by the *Contractor* shall be undertaken with the standard of care described in paragraph 3.14.1 of the *Contract*. Except for its obligation to make such review and report the result, the *Contractor* does not assume any responsibility to the *Owner* or to the *Consultant* for the accuracy of the *Contract Documents*. The *Contractor* shall not be liable for damage or costs resulting from such errors, inconsistencies, or omissions in the *Contract Documents*, which the *Contractor* could not reasonably have discovered through the exercise of the required standard of care. If the *Contractor* does discover any error, inconsistency, or omission in the *Contract Documents*, the *Contractor* shall not proceed with the work affected until the *Contractor* has received corrected or missing information from the *Consultant*.

.2 Add new paragraph 3.4.2:

- 3.4.2 If, at any time, the *Contractor* finds errors, inconsistencies, or omissions in the *Contract Documents* or has any doubt as to the meaning or intent of any part thereof, the *Contractor* shall immediately notify the *Consultant*, and request a *Supplemental Instruction*, *Change Order*, or *Change Directive*, as the case may require. Neither the *Owner* nor the *Consultant* will be responsible for the consequences of any action of the *Contractor* based on oral instructions.

GC 3.8 LABOUR AND PRODUCTS

.1 Delete paragraph 3.8.2 and replace with new paragraph 3.8.2:

- 3.8.2 Unless otherwise specified in the Contract Documents, Products provided shall be new and as specified. The *Contractor* shall not provide substitutions for specified Products without the express written consent of the *Consultant* and the *Owner*.

.2 Add new paragraph 3.8.4:

- 3.8.4 The *Contractor* shall comply with all requirements set out in the *Fair Wage Program Labour Conditions*. The hours of work, the rates of wages paid,

and the working conditions shall be in accordance with the Labour Conditions and applicable Schedule of Fair Wage Rates, included therein, as amended from time to time.

GC 3.11 USE OF THE WORK

.1 Add new paragraph 3.11.3:

- 3.11.3 The *Contractor* shall abide by and enforce directives and policies regarding signs, advertisements, fires and smoking at the *Place of the Work* as directed by the *Owner*.

Add new General Conditions 3.14, 3.15, and 3.16:

GC 3.14 PERFORMANCE BY CONTRACTOR

- 3.14.1 In performing its services and obligations under the *Contract*, the *Contractor* shall exercise the 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 performance of the *Contractor's* obligations, duties, and responsibilities shall be judged against this standard. The *Contractor* shall exercise the same standard of care, skill, and diligence in respect of any *Products*, personnel, or procedures which it may recommend to the *Owner*.
- 3.14.2 The *Contractor* further represents, covenants and warrants to the *Owner* that:
- .1 the personnel it assigns to the *Project* are appropriately experienced;
 - .2 it has a sufficient staff of qualified and competent personnel to replace any of its appointed representatives, subject to the *Owner's* approval, in the event of death, incapacity, removal or resignation; and
 - .3 there are no pending, threatened or anticipated claims that would have a material effect on the financial ability of the *Contractor* to perform its work under the *Contract*.

GC 3.15 RIGHT OF ENTRY

- 3.15.1 The *Owner* shall have the right to enter or occupy the *Work* in whole or in part for the purpose of placing fittings and equipment or for other uses before *Substantial Performance of the Work*, if, in the reasonable opinion of the *Consultant* and *Contractor*, such entry or occupation does not prevent or substantially interfere with the *Contractor's* completion of the *Contract* within the *Contract Time*. Such entry or occupation shall not be considered as acceptance of the *Work* or in any way relieve the *Contractor* from responsibility to complete the *Contract*.

GC 4.1 CASH ALLOWANCES

.1 Delete paragraph 4.1.4 in its entirety and substitute new paragraph 4.1.4:

- 4.1.4 Where the actual cost of the *Work* under any cash allowance exceeds the

amount of the allowance, any unexpended amounts from other cash allowances shall be reallocated, at the *Consultant's* direction, to cover the shortfall, and, in that case, there shall be no additional amount added to the *Contract Price* for overhead and profit. Only where the actual cost of the *Work* under all cash allowances exceeds the total amount of all cash allowances shall the *Contractor* be compensated for the excess incurred and substantiated, plus an amount for overhead and profit on the excess only, as set out in the *Contract Documents*.

- .2 Delete paragraph 4.1.5 in its entirety and substitute new paragraph 4.1.5:

4.1.5 The net amount of any unexpended cash allowances, after providing for any reallocations as contemplated in paragraph 4.1.4, shall be deducted from the *Contract Price* by *Change Order* without any adjustment for the *Contractor's* overhead and profit on such amount.

- .3 Add new paragraph 4.1.8:

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.

GC 5.2 APPLICATIONS FOR PROGRESS PAYMENT

- .1 Add to the end of paragraph 5.2.7 the following new sentence:

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

GC 5.4 SUBSTANTIAL PERFORMANCE OF THE WORK

- .1 Delete paragraph 5.4.3 in its entirety and substitute new paragraph 5.4.3:

5.4.3 Immediately prior to the issuance of the certificate of *Substantial Performance of the Work*, the *Contractor*, in consultation with the *Consultant*, shall establish reasonable dates for finishing the *Work* and correcting deficiencies.

- .2 Add new paragraphs 5.4.4, 5.4.5, 5.4.6, 5.4.7, 5.4.8 and 5.4.9:

5.4.4 Within 7 calendar days of receiving a copy of the certificate of *Substantial Performance of the Work* signed by the *Consultant*, the *Contractor* shall publish a copy of the certificate in a construction trade newspaper (as that term is defined in the *Construction Act* or the regulations promulgated thereunder) and shall provide to the *Consultant* and the *Owner* the date of publication and the name of the construction trade newspaper in which the publication occurred. If the *Contractor* fails to comply with this provision, the *Owner* may publish a copy of the certificate and charge the *Contractor* with the costs so incurred.

5.4.5 Prior to submitting its written application for *Substantial Performance of the Work*, the *Contractor* shall submit to the *Consultant* all:

- .1 guarantees;

- .2 warranties;
- .3 certificates;
- .4 testing and balancing reports;
- .5 distribution system diagrams;
- .6 spare parts;
- maintenance manuals;
- keys
- .7 additional stock
- .8 samples;
- .9 existing reports and correspondence from authorities having jurisdiction in the *Place of the Work*;
- .10 As-Built Drawings

and other materials or documentation required to be submitted under the *Contract*, together with written proof acceptable to the *Owner* and the *Consultant* that the *Work* has been substantially performed in conformance with the requirements of municipal, governmental, and utility authorities having jurisdiction in the *Place of the Work*.

5.4.6 Where the *Contractor* is unable to deliver the documents and materials

Project in a material way, the failure to deliver shall not be grounds for the *Consultant* to refuse to certify *Substantial Performance of the Work*. If the *Contractor* fails to deliver any of the materials required in subparagraphs 5.4.5.7 or 5.4.5.8, the *Consultant* shall retain from the payment of holdback under General Condition 5.5 - PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF THE WORK, the amount set out in paragraph 5.4.7, until the materials required pursuant to subparagraphs 5.4.5.7 or 5.4.5.8 are delivered, provided the *Owner*, within 40 calendar

days after publication of the applicable certification or declaration of *Substantial Performance of the Work*, publishes a notice of non-payment in the form prescribed by the *Construction Act*.

5.4.7 The amount to be retained by the *Consultant* as contemplated in subparagraphs 5.2.10 and 5.4.6 is as follows:

- .1 where the *Contract Price* is less than \$100,000 the amount to be retained is \$5,000;
- .2 where the *Contract Price* is greater than \$100,000 but less than \$500,000, the amount to be retained is 5% of the *Contract Price*;
- .3 where the *Contract Price* is greater than \$500,000 but less than \$5,000,000, the amount to be retained is the greater of \$25,000 or 3% of the *Contract Price*;
- .4 where the *Contract Price* is greater than \$5,000,000, the amount to be retained is 1.5% of the *Contract Price* up to a maximum of \$1,000,000.00.

5.4.8 Except for payment of holdback, from which amounts can only be retained or withheld in accordance with the *Construction Act*, should the *As-Built Drawings* not be delivered in accordance with subparagraph 5.2.10 or any documents or materials not be delivered in accordance with paragraph 5.4.5 by the earlier of 50 days following the date of *Substantial Performance of the Work* and the submission of the *Contractor's* application for final payment under paragraph 5.7.1 of General Condition 5.7 – FINAL PAYMENT, then the amount previously retained pursuant to paragraph

5.2.10 or 5.4.7 shall be forfeit to the *Owner* as compensation for the damages deemed to have been incurred by the *Owner*, and not as a penalty, arising from the failure to deliver the documents or materials, and the *Contract Price* shall be reduced accordingly.

5.4.9 Together with the submission of its written application for *Substantial Performance of the Work*, the *Contractor* shall submit to the *Consultant* and to the *Owner* a statutory declaration setting forth in reasonable detail any then outstanding and unresolved disputes or claims between the *Contractor* and any *Subcontractor* or *Supplier*, including any claims allegedly arising from delay, which are, directly or indirectly, related to any then outstanding or anticipated disputes or claims between the *Contractor* and the *Owner*, and this disclosure shall, at a minimum:

- .1 identify the parties involved;
- .2 identify the amount in dispute;
- .3 provide a brief statement summarizing the position of each party;
- .4 include copies of any correspondence or documents in support of either party's position;
- .5 include copies of any documents of any court or arbitration process related to the matter;
- .6 identify the dispute or claim between the *Contractor* and the *Owner* to which the matter relates; and
- .7 include a copy of any written agreement or a summary of any oral agreement between the parties related to resolution of the matter.

The disclosure requirements detailed herein are of a continuing nature and survive completion of the *Work*. Accordingly, the *Contractor* shall supplement the information provided with the original statutory declaration with additional materials pertaining to new or existing disputes or claims, as they become available. The *Contractor* shall not be entitled to recover from the *Owner* any amount pertaining to any claim or dispute referred to in this paragraph, if the provisions of this paragraph have not been fully complied with. For greater certainty, the *Contractor* is not obliged to make the aforementioned disclosure with respect to any dispute or claim that is not related to or does not touch upon any then outstanding and unresolved dispute or claim between the *Contractor* and the *Owner*.

GC 5.5 PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF THE WORK

.1 Add new subparagraph 5.5.1.3:

5.5.1.3 submit a statement that no written notices of lien have been received by it.

.2 Delete from line 1 of paragraph 5.5.2, the words, "the statement" and substitute the words:

"the documents".

.3 Delete paragraph 5.5.3 in its entirety.

.4 Delete paragraph 5.5.4 in its entirety and substitute new paragraph 5.5.4:

5.5.4 The statutory holdback amount authorized by the certificate for payment referred to in paragraph 5.5.2 is due and payable on the day following the

expiry of the holdback period specified in the *Construction Act* for the retention of holdback funds following *Substantial Performance of the Work*, unless (i) a claim for lien has been registered against title to the *Place of the Work*; (ii) the *Owner* has received a valid written notice of lien in respect of the *Work*; or (iii) the *Owner* has published a notice of non-payment in the form prescribed by the *Construction Act* prior to the 40th calendar day following the publication of the certificate of *Substantial Performance of the Work*.

GC 5.7 FINAL PAYMENT

- .1 Delete paragraph 5.7.1 in its entirety and substitute new paragraph 5.7.1:

5.7.1 When the *Contractor* considers that the *Work* is completed, the *Contractor* shall submit an application for final payment. The *Contractor's* application for final payment shall be accompanied by any documents or materials not yet delivered pursuant to paragraph 5.4.5. The *Work* shall be deemed not to be performed until all of the aforementioned documents have been delivered.

- .2 Delete from the first line of paragraph 5.7.2 the words, "calendar days" and substitute the words:

"*Working Days*".

- .3 Delete from the second line of paragraph 5.7.4 the words, "calendar days" and substitute the words:

"*Working Days*".

GC 6.2 CHANGE ORDER

- .1 Add new paragraphs 6.2.3, 6.2.4, 6.2.5 and 6.2.6 as follows:

6.2.3 The *Contractor* may apply mark-ups for overhead and profit to approved changes to the *Contract Price* as follows:

- .1 10% for work carried out by the *Contractor's* own forces;
and

- .2 5% for work carried out by *Subcontractors*.

Similarly, *Subcontractors* shall be entitled to apply mark-up for overhead and profit as follows:

- .3 10% for work carried out by their own forces; and

- .4 5% for work carried out by their *subcontractors*.

6.2.4 In no event shall the maximum aggregate mark-up applied by all levels of contract for overhead and profit exceed 40% of an approved change.

6.2.5 Where the cost of a proposed change is a credit to the *Contract Price*, such credit shall be exclusive of the *Contractor's* overhead and profit.

- 6.2.6 The *Contractor's* overhead includes without limitation all site and head office costs including head office personnel, insurance and bonding (except where additional bonding is at the *Owner's* expense pursuant to subparagraph 11.2.3), traveling costs, financing costs including those related to hold back; the salaries, premiums for overtime or shift time unless otherwise approved by the *Owner* in writing prior to the *Work* being performed, and other miscellaneous employee benefits of superintendents and sub-trade superintendence, engineers, timekeepers, accountants, clerks, watch persons and security, office administration; processing correspondence, changes, shop drawings, engineering, *As-Built Drawings*, maintenance manuals and all other documents required to be provided prior to certification of *Substantial Performance* of the *Work*, costing and accounting, payroll, technical staff, and all other site supervision staff above foreperson employed directly on the *Work*; coordination with other trades affected, use of temporary offices, plant, tools and equipment including operators, sheds, storage compounds and other general temporary site support facilities and all utilities used therein; first aid, safety and protection measures, including training; licences and permits; scheduling; temporary protection; daily clean up; disposal; garbage chute; scaffolding; hoisting and unloading; commissioning; cutting and patching, health and Safety, cleanup and shall be applied to both extras and credits equally.

GC 6.3 CHANGE DIRECTIVE

- .1 Delete subparagraph 6.3.7.1(1) and replace it with:
- “(1) carrying out the work, including necessary supervisory services.”
- .2 Delete subparagraph 6.3.7.1(2) and replace it with
- “(2) intentionally left blank.”
- .3 Amend subparagraph 6.3.7.1(3) so that, as amended, it reads:
- “(3) engaged in the preparation of *Shop Drawings*, fabrication drawings, coordination drawings and *As-Built Drawings*: or...”
- .4 Amend subparagraph 6.3.7.1(4) so that, as amended, it reads:
- “(4) including clerical staff engaged in processing changes in the *Work*.”

GC 6.4 CONCEALED OR UNKNOWN CONDITIONS

- .1 Add new paragraph 6.4.5:

6.4.5 If the *Contractor* was given access to the *Place of the Work* prior to the submission of the bid on which the *Contract* was awarded, then the *Contractor* confirms that it carefully investigated the *Place of the Work* and, in doing so, applied to that investigation the degree of care and skill required by paragraph 3.14.1. In those circumstances, notwithstanding the provisions of paragraph 6.4.1, the *Contractor* is not entitled to an adjustment to the *Contract Price* or to an extension of the *Contract Time* for conditions which could reasonably have been ascertained by the *Contractor* by such careful investigation, or which could have been reasonably inferred from the material provided with the *Contract Documents*. In those circumstances, should a claim arise, the *Contractor* will have the burden of establishing that it could not have discovered the materially different conditions from a careful investigation, because of restrictions placed on

its access or inferred the existence of the conditions from the material provided with the *Contract Documents*.

GC 6.5 DELAYS

.1 Add new paragraph 6.5.6.

- 6.5.6 If the *Contractor* is delayed in the performance of the *Work* by an act or omission of the *Contractor* or anyone directly or indirectly employed or engaged by the *Contractor*, or by any cause within the *Contractor's* control, then the *Contract Time* shall be extended for such reasonable time as the *Consultant* may decide in consultation with the *Contractor*. The *Owner* shall be reimbursed by the *Contractor* for all reasonable costs incurred by the *Owner* as the result of such delay, including, but not limited to, the cost of all additional services required by the *Owner* from the *Consultant* or any Sub consultants, project managers, or others employed or engaged by the *Owner*.

C 9.1 PROTECTION OF WORK AND PROPERTY

.1 Add new paragraph 9.1.5:

- 9.1.5 With respect to any damage to which paragraph 9.1.4 applies, the *Contractor* shall neither undertake to repair or replace any damage whatsoever to the work of other contractors, or to adjoining property, nor acknowledge that the same was caused or occasioned by the *Contractor*, without first consulting the *Owner* and receiving written instructions as to the course of action to be followed from either the *Owner* or the *Consultant*. Where, however, there is danger to life, the environment, or public safety, the *Contractor* shall take such emergency action as it deems necessary to remove the danger.

.2 Add new paragraph 9.1.6:

- 9.1.6 The *Contractor* shall be responsible for securing the *Place of Work* at all times and shall take all reasonable precautions necessary to protect the *Place of Work*, its contents, materials (including *Owner*-supplied materials) and the public from loss or damage during and after working hours. Where the *Consultant* or the *Owner* deems the provision of security guard services to be necessary, the *Contractor* shall provide those services at the *Owner's* expense.

GC 9.4 CONSTRUCTION SAFETY

.1 Add new paragraphs 9.4.2, 9.4.3 and 9.4.4:

- 9.4.2 Prior to the commencement of the *Work*, the *Contractor* shall submit to the *Owner*:

- .1 a current Workplace Safety & Insurance Board Clearance Certificate;
- .2 copies of the *Contractor's* insurance policies having application to the *Project* or certificates of insurance, at the option of the *Owner*;
- .3 documentation setting out the *Contractor's* in-house safety

programs;

- 4 a copy of the Notice of Project filed with the Ministry of Labour naming itself as "constructor" under the *Occupational Health and Safety Act*, R.S.O 1990, c. O.1, as amended.

- 9.4.3 The *Contractor* shall indemnify and save harmless the *Owner*, its agents, officers, directors, employees, consultants, successors, appointees, and assigns from and against the consequences of any and all safety infractions committed by the *Contractor* under the *Occupational Health and Safety Act*, R.S.O 1990, c. O.1, as amended, including the payment of legal fees and disbursements on a solicitor and client basis. Such indemnity shall apply to the extent to which the *Owner* is not covered by insurance, provided that the indemnity contained in this paragraph shall be limited to costs and damages resulting directly from such infractions and shall not extend to any consequential, indirect or special damages.
- 9.4.4 The *Owner* undertakes to include in its contracts with other contractors and in its instructions to its own forces the requirement that the other contractor or its own forces, as the case may be, comply with the policies and procedures of and the directions and instructions from the *Contractor* with respect to occupational health and safety and related matters. Prior to admission to the *Place of the Work*, the *Contractor* may, as a condition of admission, require any other contractor or the *Owner's* own forces to sign a written acknowledgement in the following form:

Acknowledgement

The undersigned acknowledges that the *Work* it will perform on behalf of the *Owner* requires it to enter a *Place of the Work* which is under the total control of a *Contractor* that has a *Contract* with the *Owner*, pursuant to which the *Contractor* has assumed overall responsibility for compliance with all aspects of the applicable health and safety legislation, including all the responsibilities of the "constructor" under the *Occupational Health and Safety Act*, R.S.O 1990, c. O.1, as amended, as well as responsibility to co-ordinate and schedule the activities of our *Work* with the *Work* of the *Contractor* under its *Contract*. The undersigned agrees to comply with the *Contractor's* directions and instructions with respect to health, safety, co-ordination, and scheduling and acknowledges that its failure to do so will be cause for termination of employment or of the undersigned's *Contract* with the *Owner*, as the case may be. The undersigned also agrees to have the *Contractor* named as an additional insured on any comprehensive liability insurance policy, where such insurance is required.

Name:

Title:

Date:

GC 9.5 MOULD

.1 Add to subparagraph 9.5.2.3 immediately before the comma, the following new words:

“and as a result of the delay”

.2 Delete subparagraph 9.5.3.4 in its entirety.

GC 10.2 LAWS, NOTICES, PERMITS, AND FEES

.1 Add to the end of paragraph 10.2.4 the following words:

10.2.4 “The *Contractor* shall notify the Chief Building Official or the registered code agency, where applicable, of the readiness, substantial completion, and completion of the stages of construction set out in the *Ontario Building Code*. The *Contractor* shall be present at each site inspection by an inspector or registered code agency. If any laws, ordinances, rules, regulations, or codes conflict, the more stringent shall govern.”

GC 10.4 WORKERS' COMPENSATION

.1 Add to subparagraph 10.4.1 immediately after the first comma, the following new words:

“again with each application for progress payment, and”

.2 Add to the beginning of subparagraph 10.4.2 the following new words:

“The *Contractor* shall ensure that each *Subcontractor* complies with the workers' compensation legislation at the *Place of the Work*.”

END OF DOCUMENT



Letter of Recommendation

MET ENERGY SYSTEMS
Consulting Engineering
477 Queen Street East, Suite 304
Sault Ste. Marie, ON P6A 1Z5
Tel: (705) 942-3344
Fax: (705) 942-1477

ATTENTION: Bill Goulding
COMPANY: City of Elliot Lake
FROM: Matthew Rajala
COPIES: Tim Janzen P.Eng (MET)
SUBJECT: PROJECT 22M11 – DOWNTOWN ARTS CENTRE – ELLIOT LAKE, ON
NO. PAGES: 4 (including this page)

DATE: Jan 6 2023
MET REF.: 22M11
DOCUMENT NO.: L-001

Bill,

We have reviewed the bid submission provided and recommend the project be awarded to the low bidder, Quinan Construction Limited.

The submission by Quinan Construction Limited is complete as per the technical specifications.

Bidder Name	Base Bid Amount
Quinan Construction Limited	\$1,320,000.00

In review of the Contractor's submission which is attached, we recommend contract award to **Quinan Construction Limited** in the amount of **\$1,320,000.00 (plus HST)**. MET Energy Systems has discussed the listed schedule with Quinan and they believe the schedule can be improved.

If you have any questions or concerns, feel free to contact us.

Regards,

Matthew Rajala
MET ENERGY SYSTEMS

22M11
Downtown Arts Centre
Elizabeth Walk
Elliott Lake, ON

TENDER FORM

00300

Page 1

To: **MET Energy Systems**
477 Queen Street East, Suite 304
Sault Ste. Marie, ON

(See Section 00100 - Instruction to Bidders - Article 1.12 for instructions for submitting tenders)

By:
Contractor's Name: Quinan Construction Limited

Address: 55 Progress Drive, Unit 1
Orillia, ON L3V 0T7

Telephone: 705-325-7704

Fax: 705-325-2061

PRICING

The undersigned herein offer to provide all labour, material and services required to complete the work of all trades and agree to enter into a Contract for the completion of:

Downtown Arts Centre
Elizabeth Walk
Elliott Lake, ON

According to all Drawings, Specifications and issued Addendum No.'s

1 through 2

Alternate Price #1 – Roofing and back wall restoration

\$ 98,000.00

Alternate Price #2 – Removal of Front Canopy Lip

\$ 28,000.00

Base Tender Total (Including All Allowances and Separate Prices)

For the stipulated Lump Sum Price of (Exclusive of HST):

\$ 1,320,000.00

M.H. THOUSANDS
ONE MILLION THREE HUNDRED AND TWENTY THOUSAND DOLLARS
(Written amount)

Harmonized Sales Tax in addition to the base tender amount listed above

\$ 171,600.00

ALTERNATE MATERIALS

The following is a list of alternate materials proposed for substitution and the difference to the base tender price. (These substitutions must meet performance criteria of specifications.)

MET Energy Systems

I/We understand that the price(s) submitted in the bid is/are based upon the acceptance of the bid within forty-five (45) days of the bid closing date. In cases where the expiry date of the acceptance period falls on a Saturday, Sunday, or holiday, the time for acceptance shall be extended to the first following business day.

COMPLETION DATE

I/We estimate that the earliest that the Contract could be completed is 26
Weeks from commencement of the Work.

Starting Date: FEBRUARY 6, 2023 Ending Date: AUGUST 11, 2023

I/We also submit the names of our proposed Sub-Contractors from whom sub-bids were received, and upon which my/our Bid is based. I/We also submit the sub-bid prices for the trades listed.

	<u>TRADE</u>	<u>COMPANY</u>	<u>SUB BID PRICE</u>
1	Mechanical	MBS PLUMBING	\$160,000 -
2	Electrical	BLANCHETT	\$194,269 -
3	Plumbing	MBS PLUMBING	IN MECHANICAL
4	Drywall	OWN FORCES	\$120,000 -
5	Painting	OWN FORCES	\$23,000 -
6	PAINTING	ESTIMATED	\$50,000 -

22M11
Downtown Arts Centre
Elizabeth Walk
Elliott Lake, ON

TENDER FORM

00300

Page 3

SIGNATURES AND SEAL

Contractor's Name and Address:

Quinan Construction Limited

55 Progress Drive, Unit 1

Orillia, ON L3V 0T7

Seal:

Authorized Signatures:



Name: Michael Unwin

Title: President

Signature:

Name:

Title:

Signature:



Witness: Susan Small

Title: Estimating Assistant

Date: JANUARY 6, 2023

End of Section