REQUEST FOR
DESIGN / BUILD PROPOSALS

CANNING & AREA
MULTI-COMPLEX FACILITY

17 April 2015

harveyARCHITECTURE

I N D E X

1 INTRODUCTION

.1 The Village of Canning is seeking Design-Build proposals for selected proponents for the design and construction of Canning & Area Multi-Complex Facility.

2 PROPOSAL

.1 Proposal documents are available from:

harveyARCHITECTURE:
7071 Bayers Road, Halifax, NS, B3L 2C2
Telephone No.: (902) 444-0555
Fax No.: (902) 444-7522
Email: richard@harch.ca

3 PROPOSAL SUBMISSION

.1 Submit three (3) copies of the completed proposal and all required attachments in a sealed envelope marked as follows:

"Proposal – Canning & Area Multi-Complex"
Attention: Ruth Pearson

.2 The Proposal shall be delivered to Village of Canning, 2229 North Avenue, P.O. Box 9, Canning, NS, B0P 1H0, on or before **1 p.m. local time, 11 May 2015**

.3 A complete proposal consists of the following:

.1 Requirements of Section 00200 Minimum Proposal Submission Requirements.

.2 Statement of Compliance: A signed statement from the proponent agreeing to the terms and conditions of this request for proposals or outlining any proposed adjustment to the requirements of this Request for Proposals.

.4 Proponents shall be solely responsible for the delivery of their proposals in the manner and time prescribed. Late submissions will not be opened.

.5 Proposals must be submitted on forms provided and attached to this document as Section 00300. The Proposal Form must be completely filled out in ink or by typewriter, with the signature in longhand. Proposal Forms that are incorrectly filled out or are not accompanied by all of the required attachments may be rejected.

.6 Email or faxed Proposal Form submissions will not be accepted.

.7 Faxed transmissions sent to 1 902 582 3068 or paper submissions delivered as set out in Clause 3.2 that modify an already submitted Proposal Form are acceptable prior to the Closing Time when signed by the same person of the original proposal. The Client Group assumes no liability for the receipt of the fax transmission or for their proper inclusion with original proposal.

.8 Proposals will be opened in public at 1:15pm at the Canning Fire Hall on the day of tender close. The proposals will be reviewed in private following the opening.

.9 All Bids submissions shall remain open for acceptance/rejection by client for a period of 60 days following the close of tender. It is anticipated that the contract will be awarded within 14 days of opening/reviewing the submissions.

The Client reserves the right to accept or reject any and all tenders and to accept any tender which it may consider to be in its best interests.

.10 Contractor shall provide **two (2) written references** capable of addressing questions related to construction services of a similar nature received from Contractor.

4 CONTRACT DOCUMENTS

.1 The Contract Documents consist of:

.1 Instructions to Proponents Section 00100.
.2 Proposal Form 00300 and all required attachments.
.3 Supplementary General Conditions Section 00600.
.4 Specification Sections 00800, 00900, 01000, 15000 and 16000.
.5 Drawings.
.6 Room Data Sheets.
.7 The Contract Agreement between the Owner and the successful Proponent, CCA Document 14.
.8 Post proposal submissions or conditions set out in the Award Letter.

5 DESCRIPTION OF WORK

.1 Work under this Proposal covers the design and construction of a new Multi-Complex Facility encompassing a Fire hall and Civic Spaces as indicated on the Architectural Schematic Layout with all required site works, road/signage modifications.

6 CLARIFICATION AND ADDENDA

.1 Proponents finding any discrepancies or omissions in the Request for Proposal Documents, or having any doubt as to the meaning or intent of any part thereof, shall at once notify Richard White in writing at fax number (902) 444-7522 or

email richard@harch.ca not less than five (5) working days before the Closing Date. A discrepancy in the Contract Document shall not limit the obligation of the Proponent to perform all of the Work described by the Contract Documents

.2 If the Client Group considers that correction, explanation or interpretation is necessary; it will issue a written addendum. All addenda will form part of the Contract Documents.

.3 Proponents must confirm that all addenda have been received on the Proposal Form. Failure to do so may result in disqualification.

.4 Verbal instructions will not bind the Client Group.

7 PROPOSAL EVALUATION

.1 In the evaluation of proposals, the Client Group may consider, but will not be limited to, the following criteria:
- .1 The cost of the Design-Build proposal. (80%)
- .2 The Proponent's compliance with the Proposal Documents. (5%)
- .3 Proposed Schedule. (10%)
- .4 The Proponent's experience and references. (5%)

.2 Proposal
- .1 The Client Group may refuse to evaluate a proposal which has been received prior to the closing time where:
  - .1 It is not submitted on the required Proposal Form.
  - .2 There are omissions of significant information.
  - .3 It is not signed as required.
  - .4 The Proposal fails to meet one or more standards specified in the Design-Build RFP.
  - .5 All addenda have not been acknowledged.
  - .6 Any other defect which, in the opinion of the Client Group, brings the meaning of the RFP into question.

8 SECURITY

.1 There are no proposed security requirements.

.2 Provide a separate price for the cost of a 50% Performance Bond or equivalent security.

9 DEVELOPMENT AND BUILDING PERMITS, ETC.

.1 It shall be the Proponent's sole responsibility to apply for and pay for all building permits.

10 GIFTS IN KIND

.1 The Client Group may obtain, from various sources, gifts of products or services. For the purposes of the RFP, proponents are to provide for a complete facility as described. The successful proponent agrees to negotiate appropriate savings resulting from such gifts and coordinate their incorporation into the Work. Proponent will indicate on submission the percentage mark-up on products and labour should either be gifted to the project.

11 SCHEDULE

.1 The current schedule established by the Client Group requires a construction start July 2015.

.2 Provide, as part of the RFP response a simple bar chart schedule indicating design, permit, construction and occupancy.

12 CASH FLOW

.1 Within two (2) weeks of award, provide a projected monthly cash flow for the duration of the project.

13 DESIGN CONSULTANTS

.1 The Proponent is responsible for all design consultants who will work with the Design-Build Contractor to prepare the necessary architectural documents.

.2 The Village of Canning, engaged ***harveyARCHITECTURE Limited*** to prepare concept designs to prepare this RFP and require the successful proponent to continue the design with ***harveyARCHITECTURE Limited*** as the Architect of Record throughout the all design phases and construction/warranty phase of the Contract. Please note that the Proponent will engage and pay for the design services under their own contract with the Architect for this period of the works.

14 SITE INFORMATION

.1 Geotechnical reports and topographical as well boundary surveys are the responsibility of the Design-Build Contractor.

.3 Provide in the lump sum amount an allowance for rock removal including a unit rate. The quoted unit rate will be used to adjust to the as-found condition.

.4 The Design–Build Contractor is responsible for the procurement and costs of any geotechnical and concrete testing.

.15 FAMILIARIZATION

.1 Bidders will be deemed to have familiarized themselves with site conditions, existing conditions and the conditions as outlined in these documents. No consideration of extra payments or extension of time will be given to comply with these requirements.

END OF SECTION 00100

1 GENERAL

.1 Submit, with the Proposal, the following information. Provide information in sufficient detail that evaluators can fully understand the design approach.

2 SITE

.1 Site development plans and landscaping plans where varies from RFP document.

3 ARCHITECTURAL / STRUCTURAL

.1 Provide a complete description of all exterior wall systems and assemblies. Include type of construction, insulation levels, air/vapour barrier, exterior finishes and interior finishes. Include sizes and thicknesses of all materials.

.2 Provide a complete description of the structural systems.

.3 Provide a complete description of the roofing systems

4 MECHANICAL

.1 Provide a description of the proposed heating/cooling and ventilation systems.

5 ELECTRICAL

.1 Provide a description of the proposed power, lighting, alarm and data systems.

.2 Provide a description of the proposed power backup systems.

6 SCHEDULE

.1 A simple bar chart schedule assuming award by 01 June 2015.

7 RECORD DOCUMENTS AND MANUALS

.1 Provide an acknowledgement of responsibility for the production of the Project Record Drawings, Operation and Maintenance Manuals.

END OF SECTION 00200

From: _____

_____

_____

To: ***Canning Multi-Complex Facility***
Village of Canning
2229 North Avenue
P.O. Box 9
Canning, NS
B0P 1H0
Attention: **Ruth Pearson**

Re: Proposal for: **Design-Build Canning Multi-Complex Facility**
J. Jordan Road, Canning, NS

Having carefully examined the bid documents, drawings and specifications, we hereby offer to furnish all materials and labour necessary for the proper completion of the design and construction of the entire project, including all tools, equipment, supervision, permits, insurance, government sales and other taxes, (excluding HST) in accordance with the above mentioned documents for the total stipulated sum of:

_____

_____ ($_____)

50% Performance Bond: indicate a separate sum for this component which is in addition to the tender bid.

_____

_____ ($_____)

Priced Alternative Roofing: indicate a sum for this component (negative or positive figures to be added to the above amount.

_____

_____ ($_____)

Contractors mark up for Gifts in Kind:

1. Indicate the percentage amount that will be added to a 'product' gift (this includes any material item within the contract). _____

2. Indicate the percentage amount that will be added to a 'labour' gift (this includes any level of man power within the contract). _____

Completion Date

We hereby confirm that should the project be awarded within 14 days of receipt of tenders, we will complete the construction of the building with _____weeks.

Contract

If our Design/Build proposal is selected, we further agree to execute the Document CCA No. 14, latest edition – Design/Build Stipulated Price Contract (available from the Construction Association of Nova Scotia), complete with Supplementary General Conditions.

Addenda:

We acknowledge that we have received the following Addenda:

Date	No. of Pages
_____	_____
_____	_____
_____	_____

In submitting this Proposal, we recognize the right of the Owner to accept or reject any or all Proposals, while not necessarily accepting the lowest bid, or to accept any Proposal which it may consider to be in its best interest. Further, this Proposal is submitted on the understanding that revised Proposal shall not be called for if minor changes are contemplated by the Owner and that counter proposals, other than approved alternates, will not be considered and the Owner reserves the right to reject any Proposal containing any such counter proposal.

Dated this _____ day of _____ 2015.

_____
AUTHORIZED SIGNING AGENT-CONTRACTOR

_____
CONSTRUCTION COMPANY

The General Conditions of the CCA Document 14 Contract will be amended as follows:

Item 19:

DEFINITIONS, SUBSTANTIAL PERFORMANCE OF THE WORK

Change to the following:
Substantial performance of the Work in accordance with the Builders' Lien Act to be when the Work or improvement is ready for use or is being used for the purpose intended; and when the Work to be done under the Contract is capable of completion or correction at a cost of not more than two and one-half percent of the Contract Price; and in addition is so certified by the Owner's Consultant in writing.

GC5.2 – APPLICATION FOR PROGRESS PAYMENT

5.4.2 Delete beginning at the end of the third line "and Products delivered to the Place of the Work at that date".

Add the following: "Accompanying the second and all subsequent Progress Claims, the Contractor shall provide Statutory Declaration stating that all accounts for previous claims have been paid".

GC5.3 – PROGRESS PAYMENT

5.3.1 Change 15 days to 30 days.

GC5.5 – PAYMENT OF HOLDBACK

5.5.5 Add the following:
"The Owner will not release holdback monies until the Design/Builder has supplied Record Drawings (01300, Para.1.7), Operation and Maintenance Manuals and Guarantees (01300, Para. 1.9), Workers' Compensation Board Clearances, and a sworn statement from a lawyer that no liens have been recorded against the Work.

5.6 Progressive Release of Holdback – delete this clause.

GC6.3 – CHANGE ORDERS

6.3.8 Add the following:
"Change Orders will be priced in detail giving actual material trade prices and actual labour and equipment costs. To these prices, the Design/Builder shall be allowed to add a mark-up of Ten Percent (10%) for profit and overhead if he performs the Work. A Design/Builder processing a Subcontractor's Change Order will be eligible for only a Five Percent (5%) mark-up. Subcontractor mark-up is to be limited to Ten Percent (10%) maximum.

GC6.4 – CONCEALED OR UNKNOWN CONDITIONS – Delete this Clause.

GC6.5 – DELAYS

GC6.5.1 and delete the following:
"the Design/Builder shall be reimbursed by the Owner for reasonable costs incurred by the Design/Builder as the result of such delay".

GC12.3 – WARRANTEE

Add: **12.3.9 EXTENDED MOISTURE PENETRATION WARRANTEE**
"The Design/Builder shall provide the Owner with an extended warrantee for two additional years. During this period, the Design/Builder will, at no expense to the Owner, repair any water leaks in the buildings and any water damage caused by any such leaks".

END OF SECTION 00600

.1 GENERAL

.1 It is the intent that the Proponent will provide site services and site facilities, complete, to fully support the operation of the Building.

.2 Meet all municipal and provincial requirements for development of this Site.

.3 Provide universal access. All areas of the site to be barrier free.

.2 REFERENCE STANDARDS

.1 Do Work in accordance with the Standard Specification for Municipal Services published by the Nova Scotia Road Builders Association and Consulting engineers Nova Scotia Joint Committee on Contract Documents, latest edition.

.2 Barrier free access to be in accordance with CAN/CSA-B651.

.3 Install and maintain erosion and sedimentation control in accordance with the requirements of the Nova Scotia Department of Environment.

.3 PARKING AND DRIVEWAYS

.1 All driveways and parking areas shall be surfaced with asphalt pavement or gravel as noted.

.2 Fire Hall will have a reinforced concrete apron directly in-front of the building 80 feet by the full width of apparatus bays as shown on site plan.

.3 Provide traffic signs and pavement markings in accordance with the TAC Manual on Uniform Traffic Control Devices, latest edition.

.4 Barrier free parking and access to the building must be provided in line with Building Code standards. Barrier free areas must be paved to provide ease of access.

.4 WALKWAYS

.1 Walkways, plaza and terrace to be surfaced with high quality cast in-situ concrete. With saw cuts at 6 feet intervals with sealed expansion joints at 30 feet intervals.

On granular base, type 1 gravel as specified in the Nova Scotia Department of Transportation Standard Specification for highway construction and maintenance Manual, Latest Edition. Place fill in maximum 6 inch layers and compact to 100% Standard Proctor Density to ASTM D698. Obtain consultants approval of

subgrade prior to placing granular base, place granular base in max. 6inch layers and compact to 100% Standard Proctor Density to ASTM D698

Concrete mixes and materials to provide min strength of 35 MPA after 28 days to the approval of the Consultants.

Immediately after floating, give pavement surface uniform broom finish to produce regular corrugations not exceeding 1/16 inch deep, by drawing broom in direction normal to centre line.

Provide edging with ½ inch radius edging tool.

Slip-form pavers equipped with string line system for line and grade control may be used if quality of work acceptable to Consultant can be demonstrated. Hand finish surfaces when directed by Consultant.

Cure concrete by adding moisture continuously in accordance with CAN/CSA-A23.1 to exposed finished surfaces for at least 1 day after placing, or sealing moisture in by curing compound approved by Consultant.

Where burlap is used for moist curing, place two prewetted layers on concrete surface and keep continuously wet during curing period.

Apply curing compound evenly to form continuous film in accordance with manufacturer's requirements. Allow concrete to cure for 7 days prior to backfilling.

Provide linseed oil treatment to seal concrete

.5 LANDSCAPING

.1 All disturbed areas of the site are to be graded even and covered with min of 6 inches of topsoil. All disturbed areas to be sodded, except for areas indicated to be seeded.

.2 Existing trees are to be retained unless otherwise noted.

.3 Seed mixture to contain not less than 40% Kentucky Blue Grass cultivars and 30% Chewing Fescue or Creeping Red Fescue cultivars

.4.1 Topsoil: Imported material consisting of a mixture of mineral particulates, micro organic and organic matter which provides suitable medium for supporting intended plant growth.

.4.2 Soil texture: sandy loam, based on The Canadian System of Soil Classification, to consist of 20% to 70% sand and contain 2 to 10% organic matter by weight.

.4.3 Fertility: major soil nutrients present in following ratios:
- .1 Nitrogen (N): 20 to 40 micrograms of available N per gram of topsoil.
- .2 Phosphorus (P): 10 to 20 micrograms of phosphate per gram of topsoil.
- .3 Potassium (K): 80 to 120 micrograms of potash per gram of topsoil.
- .4 Calcium, magnesium, sulfur and micro-nutrients present in balanced ratios to support germination and/or establishment of intended vegetation.

.4.4 Ph value: 6.5 to 8.0

.4.5 Contain no toxic elements or growth inhibiting materials.

.4.6 Free form:
- .1 Debris and stones over 1" diameter.
- .2 Course vegetative material, ½" diameter and 4" length, occupying more than 2% of soil volume.

.4.7 Consistence: friable when moist.

.5 Trees: root preparation, sizing and quality to comply with Metric Guide Specifications for Nursery Stock, Canadian Nursery Trades Association, latest edition.

.6 SITE GRADING

.1 Minimum slope of 2% and maximum grade of 5% in the new gravel parking lot.

.2 Minimum slope of 2% and maximum grade of 3H: 1V for all landscaped areas.

.3 Contractor to provide positive drainage from building to drainage ditches or swales.

.7 SANITARY SEWER

.1 The Design Build Contractor is responsible for design of all sanitary sewer systems and all associated permits.

.8 STORM WATER

.1 New catch basins are to be incorporated to control surface water from directly running off the site. Sewer manholes and catch basins shall be 42" precast

concrete as manufactured by Shaw, Strescon or approved equal complete with frame and covers (R-10) or frame and grates (S401).

.2 PVC storm sewer piping shall conform to CSA 182.1 standards.

.3 Concrete storm sewer piping shall conform to ASTM C-76 (Class III).

.4 All work to be constructed and tested in accordance with the Standard specifications for Municipal Services as prepared by NS Roadbuilders Association and the NS Consulting Engineers latest edition (2011).

.5 All work to be completed in accordance with NS Labour and Workforce Regulations and applicable Municipal bylaws.

.9 EROSION AND SEDIMENTATION CONTROL

.1 Use of silt fencing immediately down slope of developed/graded areas of exposed soils.

.2 Installation of silt bags in the new catch basins to capture sediment prior to entering the catch basin piped system and municipal storm system.

.3 Use of straw cover of exposed soils and plastic to cover stockpiled soils/materials to prevent erosion.

.4 Areas of exposed earthwork activity will be limited to reduce the potential for erosion of site soils.

.5 Contractors must prevent erosion and sedimentation of surface runoff leaving the construction site through the use of erosion and sedimentation controls. Contractor to follow the NSDOE erosion and sedimentation control handbook for construction sites (latest edition). Contractor to prepare an erosion and sedimentation control plan for the project and assign an individual who has a DTIR green card.

.10 TESTING

.1 Provide geotechnical and concrete testing as required.

.11 GEOTECHNICAL

.1 Is the responsibility of the Design Build Contractor.

END OF SECTION 00800

.1 GENERAL DESIGN REQUIREMENTS

.1 UPVC windows to exterior in general accordance with plans and rendering and to minimum Code requirements and to match sizes of those in existing building. Clear finish hardwood stools and aprons. White finish, clear insulated low E glazing units. Punched windows to have awning operators complete with insect screens.

.2 Carry all walls to underside of floor or roof above, including wall cladding as shown on elevations/details.

.3 Provide wall assemblies as required to meet the specified STC ratings.

.4 Provide rated roof space access hatches to access all roof space cavities, all in accordance with Code requirements.

.2 FOUNDATIONS

As required to meet the requirements of proposed structural systems.

.3 STRUCTURAL SYSTEMS

Design Build Contractor to propose system to suit building.

.4 EXTERIOR WALLS

.1 Exterior walls shall be the following:

.1 Wood or steel stud framing at minimum 16" o.c. as per drawings.
Note that inner wythes may vary to proponent's specification but is to be of non combustible construction. Interior finish as per room data sheets. (with associated vapour barrier and insulation within the exterior wall)

.2 Gypsum based sheathing board or equivalent.

.3 Air/Moisture Barrier

.4 Air space

.5 Full height and low level walls as per elevations:

.1 Clay brick to be Shaw Tapestry Range – colour to be approved by Client. Provide an alternate price for Valley Stone brick by V.J. Rice.

- Cavity ties to be galvanized to suit substrate construction.
- Through wall flashing to be Copper Sealtite 2000 3oz by Advanced Building Products.

.2 Metal Cladding: Vicwest CL815R or equal and approved, colour to the approval of the client. Orientation and direction of cladding may vary to provide some visual relief.

.2 Minimum insulation levels: to comply with current NS Building Code.

.3 Vapour and air barriers as per NS Building Code, to floors, walls and ceilings/roof constructions.

.5 INTERIOR WALLS

.1 4" Timber or steel stud (20 gauge min) framing at maximum 16" o.c.

.2 Sound batt insulation as required by STC requirement see below as a general guide:

Washroom Walls	STC 45 rating min.
Walls to corridors	STC 45 rating min.
Walls to meeting rooms	STC 50 rating min.
Walls to offices	STC 45 rating min.
Walls to services spaces	STC 55 rating min.

.3 ⅝" gypsum board minimum, type X as required for rated walls or as indicated within room data sheet requirements.

.4 Plywood substrate to facilitate wall displays as noted on the drawings.

.5 Full height to u/s roof or floor framing.

.6 Ratings as required by NBC.

.7 Stone/Brick masonry veneer as per drawings.

.8 Reinforce for accessories, wall mounted cabinets, etc. Coordinate requirements for owner supplied specialties and exhibit contractor.

.6 WINDOWS

.1 UPVC windows. Punched windows to be thermally broken upvc or curtainwall with awning operators and screens in accordance with drawings.

.2 Minimum glazing: 25 mm thick insulating units with a hermetically sealed air space of ½", Low E coating on surface #3, argon filled.

.7 ENTRANCE DOORS

.1 3/4 glass aluminum in thermally broken aluminum frame. Clear tempered insulated glass. Colour to match Windows, 1¾" thick, 4" nominal stile width.

.2 Power assisted door openers to entrance and vestibule door. Note that Vestibule will have an override lock to disable power opener during allocated times of operation.

.3 Refer to room data sheets for hardware requirements.

.8 OTHER EXTERIOR DOORS

.1 Other exterior exit doors to be flush hollow metal in thermally broken pressed steel frames.

.2 Refer to room data sheets for hardware requirements.

.9 INTERIOR DOORS

.1 Flush metal – painted, service rooms all per schedule on drawings.

.2 Stain grade hardwood veneer elsewhere, rated where required, clear finish in painted pressed steel frames, all per schedule on drawings.

.3 Clear tempered glazing (fire rated glazing as required by Code) to all room doors excluding storage rooms.

.4 Painted pressed steel frames.

.5 Refer to room data sheets for hardware requirements.

.10 ROOFING SYSTEMS / WATERPROOFING

.1 Sloped roofs:

.1 Prefinished standing seam metal roof complete with watertight membrane at substrate.

.2 Vicwest 3000 system with TSR finish sheet and Barrier Series finish or equal or approved.

.3 Provide ice and snow guards at eaves.

Provide alternative price for 50 year asphalt shingles, with ice and water shield lapped with water tight roofing membrane on substrate.
Certainteed or equal - colour / style to approval of client.

.2 Minimum insulation levels:

.1 Sloped roofs – to meet current NS building Code requirements

.3 Air/vapour barrier and strapping with minimum ⅝" Type X board taped and filled.

.11 HARDWARE

.1 Reference to room data sheet for specific requirements.

.12 SPECIALTIES

.1 Washroom Partitions / Accessories
.1 Refer also to Room Data Sheets.

.2 Exterior signage refer to room data sheet notes for requirements. Location to be agreed by client and approved by local authority.

.3 Window Treatment for both windows and borrowed lites to be provided by Contractor

.4 Tackboards and communication boards to be supplied by Contract where indicated on Room Data Sheets.

.5 Operable Wall:
Provide partition to subdivide large civic space into two rooms as shown on architectural plans.

.6 Fire Extinguishers to be in accordance with Building Code.

.13 PAINT

.1 All colour schemes/selections by Design/Build Contractor in conjunction with and to approval of the Owner.

.2 Allow for two (2) wall colours per room.

.3 All paints to be of one (1) manufacturer.

.4 Low VOC products.

.5 Flat ceilings, eggshell walls, semi-gloss doors and trim.

.6 Water based epoxy paint where noted.

.14 MILLWORK

.1 Scope to include kitchen cabinets, vanities and closet rods and shelves, etc., all in accordance with Room Data Sheets and Drawings.

.2 Millwork to be MCP with ⅛" vinyl edge with stainless steel countertops and backsplashes.

.3.1 Architectural woodwork shall be manufactured and/or installed to the current AWMAC Architectural Woodwork Standards and shall be subject to an inspection at the plant and/ or site by an appointed AWMAC Certified Inspector. Inspection cost shall be included in the tender price for this project. (Contact your local AWMAC Chapter for details of inspection cost). Shop drawings shall be submitted to the AWMAC Chapter office for review before work commences. Work that does not meet the AWMAC Architectural Woodwork Standards, as specified, shall be replaced, reworked and/or refinished by the architectural woodwork contractor, to the approval of AWMAC, at no additional cost to the owner.

.3.2 If the woodwork contractor is an AWMAC Manufacturer member in good standing, a two (2) year AWMAC Guarantee Certificate will be issued. The AWMAC Guarantee shall cover replacing, reworking and/or refinishing any deficient architectural woodwork due to faulty workmanship or defective materials supplied and/or installed by the woodwork contractor, which may appear during a two (2) year period following the date of issuance.

.3.3 If the woodwork contractor in *not* an AWMAC Manufacturer member they shall provide the owner with a two (2) year maintenance bond, in lieu of the AWMAC Guarantee Certificate, to the full value of the architectural woodwork contract.

.4 Provide chair rails to meeting room and civic space.

.15 FLOOR FINISHES

.1 Resilient Sheet

Mondo Harmoni 3mm or equivalent/equal and approved.

.2 Resilient Cove Base

4" rubber cove base

.3 Hard Tile

12" x 24" x 3/8" porcelain to CAN/CGSB-75.1 M88, Type 2, Class MR2, COF dry 0.62, wet 0.77, base to match complete with Schluter Jolly cap in aluminum.

- Interior Series by Ceragres
- Centura Europa Collection Basaltina
- Approved equivalent

.16 CEILING FINISHES

.1 Typical

.1 4’ x 2’ Ecologo certified cellulose fibre fine fissured pattern (48” x 24” x 5/8”) white

.2 4’ x 2’ two directional exposed tee bar grid prefinished white. Narrow profile grid.

.17 FIXTURES, FURNITURE & APPLIANCES

.1 To be supplied by Owner. Design/Build Contractor to coordinate design requirements.

END OF SECTION 00900

.1 GENERAL

.1 This section specifies administrative and procedural requirements.

.2 SCHEDULING AND COORDINATION

.1 Submit to the Client Group within seven (7) days of Date of Award detailed schedule showing milestones and performance of the Work by Completion Date. Revise, update and submit schedule as directed. See Section 00100 for schedule requirements with RFP submission.

.3 SUBMITTALS

.1 Design Drawings:
Submit to Client Group two (2) copies of approved Schematic Design and Design Development Documents at the appropriate stages of the design.

Submit to the Client Group two (2) copies of working drawings and specifications prior to the start of construction. Progress review sets may be requested.

.2 Operating and Maintenance Data:
- .1 Submit one (1) copy to the Client Group prior to occupancy:
  - .1 General description, list of equipment including nameplate information, installation, operation and maintenance instructions and parts list.
  - .2 Names, addresses and phone numbers of Sub-contractors, suppliers and manufacturers.
  - .3 Guarantees and warranties.

.3 Record Drawings:
Submit one (1) hard copy of a complete set of record drawings to the Owner within twenty-eight (28) days of occupancy. All record drawings are also to be submitted to the Owner in electronic format (AutoCAD latest edition) and recorded on a CD.

.4 Test Results:
Submit one (1) copy to the Owner of all certificates and monitoring, test and inspection reports.

.4 BUILDING TAKE-OVER

.1 Prior to occupancy, the Owner will inspect the property and advise of any deficiencies to be corrected. Proponent will have thirty (30) days to correct

during which appropriate funds will be held reflective of the value of the outstanding work.

.5 OPERATING INSTRUCTIONS

.1 Provide the Client Group with a complete demonstration of all systems and equipment at the following times:

.1 Seven (7) days prior to occupancy.

.2 Thirty (30) days after the date of occupancy.

END OF SECTION 01000

1 GENERAL

.1 Mechanical Building Systems:
- .1 The mechanical systems will include plumbing, heating, ventilation, humidification, controls system and fire protection.
- .2 The mechanical systems for this facility shall be designed by a Professional Engineer licensed to practice in the Province of Nova Scotia, in conformance with all federal, provincial and municipal laws and regulations and shall conform to the latest edition or revision of the reference codes and standards listed below.

.2 Reference Codes and Standards:
- .1 Model National Energy Code of Canada for Buildings.
- .2 National Building Code of Canada 2010.
- .3 Nova Scotia Building Code Regulations, Building Code Act.
- .4 National Fire Code of Canada.
- .5 Canadian Electrical Code of Canada 2012.
- .6 The following standards/codes are referenced in the above codes:
  - .1 NFPA 96 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.
  - .2 American Society of Heating, Refrigeration and Air Conditioning Engineers Handbooks.
  - .3 ASHRAE 62 Ventilation for Acceptable Indoor Air Quality
  - .4 C22.1 Canadian Electrical Code Part 1
  - .5 SMACNA HVAC Duct Construction Standards - Metal and Flexible.
  - .6 CSA B51Boiler, Pressure Vessel and Pressure Piping Code.
  - .7 ASSE 1017 – Master Mixing Valves
  - .8 NSF 61 – Drinking Water System Components – Health Effects

.3 Submittals
- .1 Shop Drawings indicating equipment and systems compliance with contract documents.
- .2 Field Test Reports for equipment and systems.
- .3 As Built drawings.
- .4 Maintenance Manuals.
- .5 Copy of permits

.4 Testing and Commissioning
- .1 Field testing of the mechanical systems is required to assure that the equipment is operational and within industry and manufacturer's tolerances and is installed in accordance with design specifications.
- .2 The contractor will be responsible to correct any deficiencies found in the testing process as well as any required retesting.
- .3 The contractor will be required to verify that the equipment provided is suitable for its application.

2 INSULATION

.1 All domestic cold water pipe and insulated as follows:
  .1 13 mm thick pipe insulation in NPS ½ runouts.
  .2 25 mm thick pipe insulation elsewhere.
.2 Domestic hot water pipe and domestic hot water recirculation pipe insulated as follows:
  .1 13 mm thick pipe insulation on NPS ½ vertical drops concealed in walls.
  .2 25 mm thick pipe insulation on NPS 4 and under.
  .3 38 mm thick pipe insulation on over NPS 4.
.3 Hot water heating pipe except infloor heat piping insulated as follows:
  .1 25 mm thick pipe insulation on NPS 2 and under.
  .2 38 mm thick pipe insulation on over NPS 2 ½ to NPS 3.
  .3 51 mm thick pipe insulation on over NPS 4.
.4 All pipe insulation to be rigid formed mineral fiber.
.5 Insulation covers for all valves over NPS 2 including control valves and strainers shall be removable cloth covered flexible insulation complete with metal clips.
.6 Protection shields for cold insulated domestic water pipe over NPS 2.
.7 All exposed insulation finished with ULC listed plain weave, 220 g/m^2 canvas and 2 coats lagging adhesive.
.8 PVC jacketing for elbows and fittings only.
.9 One 25 mm layer of duct insulation for supply ductwork not in return plenum.
.10 One 25 mm layer of duct insulation for return ductwork in attic space.
.11 25 mm layer of duct insulation for exhaust from heat recovery ventilators and for exhaust air ducting for 3 meters from exhaust fan.
.12 One 25 mm layer of duct insulation for outside air for boiler rooms, combustion air intakes and outside air for electrical rooms.
.13 Kitchen range hood exhaust duct wrapped from hood to exhaust fan with 2 hour rated enclosure and zero clearance to combustibles.

3 VALVING, THERMOMETERS, PRESSURE GAUGES AND DRAINS

.1 Quarter-turn (ball) shut-off valves (No Gate) for piping NPS 2 and smaller.
.2 Quarter-turn butterfly and Gate shut-off valves over NPS 2.
.3 Circuit balancing valves for each hydronic zone.
.4 Drains from pumps, strainers and equipment terminating with hose end drain valves.
.5 One strainer per heating system loop
.6 Pressure Gauges:
  .1 Complete with mini ball valves as gauge cocks.
  .2 At domestic water entrance backflow preventer discharge.
  .3 At dishwasher.
.7 Thermometers for hydronic and plumbing systems.
  .1 At boiler headers.

.2 At each zone supply and return pipe.
.3 At discharge of programmed water control valves.
.4 At DHW tanks.

4 SOUND ATTENUATION & VIBRATION CONTROL

.1 Acoustic flexible ductwork at each diffuser connection.
.2 Spring or neoprene isolators for inline fans.

5 PLUMBING

.1 For storm drainage below grade PVC-SDR 35 and cast iron pipe for storm drainage below grade.
.2 For storm drainage above grade, cast iron pipe or PVC-DWV with flame spread not more than 25 and smoke developed classification not more than 50.
.3 Sanitary sewer extended to site service.
.4 For sanitary drainage below grade, ABS, PVC-DWV and cast iron pipe.
.5 For sanitary drainage above grade Type DWV Copper, cast iron pipe and PVC-DWV with flame spread not more than 25 and smoke developed classification not more than 50.
.6 For urinal piping and associated vent pipe to 1200 mm AFF: Cast Iron to CAN/CSA-B70 or PVC DWV 25-50.
.7 For sanitary serving dishwashers and pot sinks in commercial kitchens cast iron below grade and copper above grade.
.8 Domestic cold water from municipal source. Backflow prevention and water entrance as per requirements of Authority having Jurisdiction
.9 Reduced pressure zone backflow preventers on water supply to boiler rooms.
.10 Domestic cold water from water entrance to domestic hot water tanks and to all plumbing fixtures
.11 Domestic Hot, Cold and Recirculation Tubing, within Building:
  .1 Copper tube, hard drawn, Type L: to ASTM B88.
  .2 All solder joints to be lead free.
  .3 Copper pipe NPS 2 ½ and larger: roll grooved couplings complete with EPDM flush seal gaskets.
.12 Branch Domestic Hot and Cold Water Lines NPS ¾ and under, from main to individual fixtures:
  .1 Copper or PEX Pressure Tubing to CAN/CSA-B137-5.
.13 Soft type L copper and PEX pipe for trap primer connections.
.14 Domestic hot water generated and maintained in indirect DHW tank
.15 140^{o} F Domestic hot water to Pot Sink and Dishwasher.
.16 Domestic hot water master mixer to temper DHW to for public and general use outlets.
.17 Domestic hot water recirculation for 140^{o} F Domestic hot water to Pot Sink and Dishwasher.

.18 Domestic hot water recirculation for public and general use outlets
.19 Valve connections for future Solar heat
.20 Bronze body recirculation pumps.
.21 Bellows type stainless steel water hammer arresters with accessible isolation valve for water lines to solenoid valves, flush valves and to group of fixtures.
.22 Electronic trap priming device for all floor drains.
.23 Self-draining non-freeze wall hydrants Canning Fire Hall Building Requirement Documents
.24 Interior hose connections with vacuum breakers.
.25 Institutional grade CSA approved plumbing fixtures and brass.
.26 Barrier free plumbing fixtures as per architectural.
.27 WC-1: Floor Mounted Water Closet 4.8 liter/flush with elongated rim, open front seat and exposed electronic flush valves.
.28 WC-2: Floor Mounted Water Closet 4.8 liter/flush with elongated rim, open front seat with cover and exposed electronic flush valves– Barrier Free Height.
.29 U-1: Wall Hung 0.5 liter/flush urinal with exposed manual electronic flush valves mounted at standard height.
.30 U-2: Wall Hung 0.5 liter/flush urinal with exposed manual electronic flush valves mounted at barrier free height.
.31 L-1: Vanity Stainless Steel Lavatory with open grid strainer and single lever faucet.
.32 L-2: Vanity Stainless Steel Barrier-Free Lavatory with open grid strainer and single lever faucet.
.33 L-9: Wall hung, stainless steel barrier free lavatory, integral back splash up, with open grid strainer and single lever faucet.
.34 CS-1: Countertop stainless steel single compartment sink with single lever faucet and spout.
.35 CS2: Countertop stainless steel double compartment sink with single lever faucet and spout.
.36 CS-3: Countertop stainless steel single compartment barrier free sink with single lever faucet and spout.
.37 CS-4: Countertop stainless steel double compartment barrier free sink with single lever faucet and spout.
.38 CS-8: Double compartment molded stone construction sink on 4 white baked enamel steel legs with wall mount swing spout faucet and solids interceptor.
.39 PS-1: Triple compartment, stainless steel, rolled rim, legs with adjustable bullet feet, NPS 1 1/2 standpipe and guard, backslash drilled for faucet. Backslash mounted chrome plated brass pre-rinse unit with add-on faucet, coupling nuts, spring action type gooseneck, low flo spray valve with squeeze handle, spring check valves, wall bracket, lever handles.
.40 EWS: Eye-Wash Shower Stations: gentle spray eye wash with stainless steel bowl, wall bracket, drench shower, emergency sign and tempered water blending system.

.41 MS-1: Molded stone 900 x 600 x 250 mm floor mounted mop sink with wall mounted faucet and continuous pressure vacuum breaker.
.42 SH-1: Shower mixing valve with bent shower arm and ball joint shower head flow restricted to 7.6/m @ 550 kPa.
.43 SH-2: Barrier Free Shower mixing valve with 1500 mm flexible hose, supply elbow and flange, inline vacuum breaker, swivel connector, 600 mm chrome plated slide bar with adjustable shower mount, flow restricted to 7.6 l/m @ 550 kPa.
.44 Chrome plated screwdriver stops where sinks and lavatories stops are exposed.
.45 Mini-ball valves for stops where sinks and lavatories stops are concealed.
.46 Grease interceptor for pot sink.

6 OIL

.1 Oil from onsite double walled storage tank to boilers.
.2 Oil lift pumps
.3 Electronic Oil tank vacuum monitor
.4 Levelometer installed in boiler room

7 COMPRESSED AIR

.1 As per Canning Firehall Building Requirement Documents.

8 HEATING

.1 Boiler Plant:
  .1 Multiple oil fired near-condensing boilers.
  .2 Insulated double wall stainless steel all fuels pressure stack. One per boiler.
.2 Reverse return hydronic mains.
.3 Perimeter heating with programmed water.
.4 In floor heating.
.5 Glycol heat exchanger for air tempering.
.6 Unit heaters in Mechanical Room and compressor Room.
.7 Valve connections for future Solar heat
.8 Hydronic Pipe and Joints:
  .1 Steel Pipe to ASTM A-53 Grade B.
  .2 NSP 2 and smaller pipe joints:
    .1 Schedule 40: Screwed, roll grooved couplings.
    .2 Schedule 10: roll grooved couplings.
  .3 NPS 2 ½ up to NPS 8 Pipe Joints:
    .1 Schedule 40: Welded, flanged roll grooved couplings.
.9 Where rolled grooved couplings and fittings are used they shall be of the same manufacturer.

9 AIR DISTRIBUTION

.1 Ductwork constructed in accordance with ASHRAE Standards, SMACNA Standards.
.2 Hall/Boardroom/Exercise Rm: Ducted Split A/C air distribution system with glycol heat supplies tempered air during occupied periods.
.3 Kitchen: Packaged make-up air unit, glycol heating coil. Motorized damper in kitchen supply duct interlocked with Kitchen exhaust fan.
.4 Radio Room/Offices/Village Store: HRV with gylcol tempering coil, plus ductless splits
.5 Bathroom Group: Exhausted via HRV
.6 Apparatus Bays: HRVs Apparatus Bays: HRV with glycol coil
.7 Apparatus Bays: AirMATION recirculating air purification system designed for diesel exhaust. CO/NO2 sensor w/ audible alarm
.8 Boiler room: Free Area Combustion air opening, matched supply and exhaust fans with reverse acting thermostat and low limit.
.9 Branch supply, return and exhaust ducts volume dampers.
.10 Branch ducts to supply diffusers to have flexible acoustic duct except where duct exposed.
.11 Vertical discharge, roof mounted, kitchen exhaust fan with backdraft damper.
.12 Liquid tight duct, stainless steel hood, etc., provide over kitchen range all in accordance with NFPA-96.
.13 Transfer fan serving main communication room.

10 CONTROLS

.1 Native BACnet system Building Automation System (BAS) throughout project.
.2 Terminal located in maintenance area complete with remote communication
.3 Individual room control with room temperature sensor controlling a control valve.
.4 Wiring in exposed areas such as mechanical rooms run in conduit.
.5 Pump status by current sensing relay to AI Point.
.6 Fans status by differential pressure switch to DI point.

END OF SECTION 15000

.1 GENERAL

.1 Electrical Building Systems:

.1 The electrical systems will include an interior and exterior lighting system, a normal power distribution system, an emergency power distribution system, an Access Control system, an emergency egress lighting and Exit signage system, a fire alarm system, an Intrusion Detection system, a Video Surveillance system, a Public Address system and a structured wiring system for voice and data.

2. The electrical systems for this facility shall be designed by a Professional Engineer licensed to practice in the Province of Nova Scotia, in conformance with all federal, provincial and municipal laws and regulations and shall conform to the latest edition or revision of the reference codes and standards listed below.

.2 Reference Codes and Standards:

.1 Nova Scotia Building Code Regulations, Building Code Act.
.2 National Building Code of Canada.
.3 National Fire Code of Canada.
.4 Canadian Electrical Code of Canada 2015.
.5 The Model National Energy Code of Canada for Buildings.
.6 BICSI/TDMM - Telecommunications Distribution Methods Manual.
.7 IESNA Standards.
.8 CAN/ULC – S524-14, Standard for the Installation of Fire Alarm Systems.
.9 J-STD-607A Commercial Building Grounding and Bonding Requirements for Telecommunications.

.3 Submittals:

.1 Shop Drawings indicating equipment and systems compliance with contract documents.
.2 Field Test Reports for equipment and systems.
.3 As Built drawings.
.4 Maintenance Manuals.

.4 Testing and Commissioning

1. Field testing of the electrical systems is required to assure that the equipment is operational and within industry and manufacturer's tolerances and is installed in accordance with design specifications.
2. The contractor will be responsible to correct any deficiencies found in the testing process as well as any required retesting.
3. The contractor will be required to verify that the equipment provided is suitable for its application and is capable of safely interrupting available

fault currents at its location in the distribution system.

4. Conduct and pay for tests of the following:
   - .1 Power distribution system including phasing, insulation resistance testing, voltage, grounding and load balancing.
   - .2 Circuits originating from branch distribution panels.
   - .3 Lighting and its control.
   - .4 Motors, heaters and associated control equipment including sequenced operation of system where applicable.
   - .5 Polarity check on all receptacles.
   - .6 Fire Alarm system.
   - .7 Emergency lighting system.
   - .8 Generator and Automatic Transfer Switch.
   - .9 Intrusion Detection system.
   - .10 Video Surveillance system.
   - .11 Public Address system.

.5 **Secondary Distribution Protection and Coordination Study and Arc Flash Study:**

- .1 This contractor will be responsible to provide a fault level analysis, equipment interrupting evaluation, a protective device coordination study and an Arc Flash study for the entire electrical distribution system.

.6 **Permits, Fees, Contribution to Construction Fees and Utility Inspection Services:**

- .1 Submit to Electrical Inspection Department and Supply Authority necessary number of drawings and specifications for examination and approval prior to commencement of work.
- .2 Pay associated fees.
- .3 Furnish Certificates of Acceptance from Inspection Department and authorities having jurisdiction on completion of work.

.2 INCOMING ELECTRICAL SERVICE

.1 This contractor will negotiate with NSPI for a new 3 phase electrical utility service to the Canning Civic Centre and Fire Hall. This service will consist of utility supplied, pole mounted transformers and an underground secondary extending from the terminal pole to the main electrical room located on the second floor. Design shall meet all requirements of the NSPI Utility Service Requirements manual. All contributions to construction levied by the Utility associated with this work are to be included in the electrical tender price.

.2 System voltage will be 120/208 V, 3 phase, 4 wire. Electrical system ampacity shall be calculated based on CEC Section 8 plus an additional 25% spare capacity, however the minimum acceptable service entrance ampacity will be 400 amps.

.3 The main electrical room will be adequately sized to accommodate the main service entrance switchboard, Automatic Transfer Switch (ATS), panelboards, ground bar and communications service entrance backboard. Provide all CEC mandated clearances around electrical equipment.

.3 INCOMING TELECOMMUNICATIONS SERVICE

.1 This contractor will negotiate with the service provides (SPs) for voice, cable television and fibre to provide servicing to the new facility. All contributions to construction levied by these Utilities associated with this work are to be included in the electrical tender price.

.2 The contractor will be required to provide two (2) underground conduits to house communications cabling from the service providers to a main telephone terminal, located on a plywood backboard in the main electrical room. Conduits to be a minimum of 78.

.4 SERVICE ENTRANCE EQUIPMENT

.1 The main service entrance switchboard will be free standing and will consist of a bussed incoming wireway, main overcurrent device, utility metering compartment to meet Utility requirements and a distribution section. Busbars will be fabricated of tin plated copper. Owner's digital meter and TVSS module will be incorporated. The switchboard is expected to take the following form:

- .1 Bussed incoming wireway.
- .2 Main moulded case circuit breaker, 100% rated with electronic, solid state trip unit with LSI features.
- .3 Utility metering compartment with current and voltage metering transformers.
- .4 T.V.S.S. module with alarm and surge counter, as follows:
  - .1 Surge current (amps):
    - .1 Per Phase - 250 Ka.
    - .2 Line to Neutral - 125 Ka.
    - .3 Line to Ground - 125 Ka.
- .5 Molded case circuit breakers feeding the building distribution system.
- .6 Customer's digital metering equipment.

.2 Provide and locate a meter base to suit Utility requirements.

.5 ELECTRICAL POWER DISTRIBUTION SYSTEM

.1 The electrical power distribution system will be designed to meet current anticipated needs with sufficient spare capacity to allow reasonable load growth

over the life of the building. Panelboards within the facility will be strategically located to provide the required electrical power while limiting voltage drop. The branch circuit wiring panel serving the Radio room will be equipped with a TVSS module.

.2 The main electrical service entrance will be grounded to the requirements of the Canadian Electrical Code. All panel feeders will contain a bonding conductor sized to the requirements of the Canadian Electrical Code, Table 16.

.3 Distribution and branch circuit panelboards will consist of tin-plated aluminum main busbars, factory installed bonding terminal strip and bolt-on circuit breaker assemblies. Panel tubs will be a nominal 510 mm wide and 150 mm deep. All panelboards will be provided with 10% spare unassigned circuit breakers and a minimum of 25% unassigned space.

.4 The branch circuit wiring panel serving the Radio room will be equipped with a TVSS module.

.5 The entire building electrical distribution system will be fed through an Automatic Transfer Switch (ATS) and powered by an emergency generator. The generator set will be sized to carry the electrical load of the entire facility, plus a 25% spare capacity for future load growth. Generally, the system will consist of the following:

.1 One diesel engine driven, radiator cooled, three phase generator, located on site including the following features:

.1 Battery charger and battery.
.2 Alternator digital metering and control panel.
.3 Critical Silencer.
.4 Structural steel mounting base.
.5 Sound Attenuated, weatherproof enclosure. Overall sound level to be 73.6 dBA measured at 7 metres while operating at full load.
.6 Emergency stop kit.
.7 ULC listed, closed top, double wall, skid mounted fuel tank base, 24 hour capacity, with fuel alarm unit (low level and leak detected).
.8 Single point power connection for all auxiliary devices (battery charger, heaters, etc.).
.9 Cooling jacket water heater and controls.
.10 Generator strip heater and control relay.
.11 Run relay kit.
.12 Permanent magnet excitation and digital voltage regulation.
.13 Common alarm and shutdown indication dry contacts.
.14 Remote monitoring and alarm panel.
.15 Factory test report.

.16 Site start up with 4 hour full load bank test.
.17 Extended 60 month, 2500 hour warranty.

.2 Automatic Transfer Switch (ATS) complete with the following:
.1 Solenoid operating mechanism.
.2 Three pole transfer.
.3 Solid neutral block.
.4 Double throw, interlocked transfer mechanism.
.5 Manually operated Bypass and Isolation feature.
.6 Programmable microprocessor controller.
.7 Plant exerciser.
.8 In-phase monitor.
.9 Normal source Surge Protective Device (SPD) module.
.10 Auxiliary contact sets.
.11 Built-in microprocessor with the ability to communicate serially through a serial communication module.
.12 CSA Type 1 enclosure, with drip shield.
.13 Auxiliary contact sets.
.14 Front connected switch.
.15 CSA Type 1 enclosure.
.16 Extended Five year, 2500 hour warranty.

.6 Electrical connections for all mechanical equipment.

.7 Electrical connections for all kitchen equipment.

.8 Electrically fed, heat generating equipment located under the kitchen exhaust hood will be shut down upon activation of the hood fire suppression system.

.9 Electrically powered garage door operators and controls required for each door in the Apparatus Bay. Main door control station located in Radio room. Additional door control station adjacent each door complete with a green indicating light to signal that door is fully open.

.10 Power and control rough-in required to operate Digital sign mounted on building exterior in location near street edge (final location to be approved by Client and Local Authority)

.11 Power and control rough-in for TV/IM Responding system for Gear Stalls in Apparatus Bay.

.6 STRUCTURED WIRING SYSTEM (VOICE AND DATA)

.1 The system will include Category 6 UTP cabling, communication outlets and terminals.

.2 Provide a complete structured cabling system to carry voice and data, as indicated on the drawings. System components include but may not be limited to the following:
- .1 Equipment racks.
- .2 Modular Patch Panels.
- .3 Patch cords.
- .4 Category 6 UTP wiring.
- .5 Cable management.
- .6 Information outlets and faceplates.
- .7 Wireless Interface points.
- .8 IDC connectors and mounts.
- .9 Backbone copper voice cable CMP.
- .10 Grounding and bonding system.
- .11 Identification of all network components, terminations, information outlets, etc.
- .12 Complete project documentation and as built drawings.
- .13 25 year warranty on parts and labour.

.3 Horizontal voice and data distribution cables will be installed in a conduit system originating in an equipment rack located in an electrical closet.

.4 Refer to Room Data sheets for quantity.

.7 TELECOM AND RADIO

.1 An intercom system will be provided as per Program document.

.2 A separate 2 inch conduit will be extended from the Radio room to the radio tower.

.8 FIRE ALARM SYSTEM

.1 A complete fire alarm system will be provided to suit building layout.

.2 System to be in accordance with the National Building Code and be designed around a fully supervised, analog, addressable, multiplexed microprocessor system.

.3 System wiring will be installed in a conduit system, to the requirements to the Canadian Electrical Code, Section 32.

.3 Signaling devices shall include both audible and visual appliances.

.4 The Fire Alarm system will be connected to the Intrusion Detection system to

allow remote monitoring of Fire Alarm system alarms, supervisory and trouble conditions.

.5 Fire alarm system will include manual pull stations, signaling appliances, duct mounted smoke detectors, smoke and heat detectors.

.6 Provide a duct mounted smoke detector in the supply air duct of each air handling system to meet the requirements of NBC 3.2.4.13. Provide an addressable relay to shut down each AHU upon a fire alarm condition to meet this requirement.

.9 MULTI-MEDIA CAPABILITY

.1 Rough-in will be provided for ceiling mounted projectors in the following areas:
- .1 Community Board Room.
- .2 Hall Training/Exercise room.
- .3 Where indicated in Room Data sheets.

.2 Ceiling outlets will be provided in main hall assembly area and Community Boardroom for Owner's supplied overhead projectors.

.10 LIGHTING SYSTEM

.1 The building will be equipped with an interior lighting system designed to meet the illumination requirements of the Illuminating Engineering Society of North America (IESNA) and the Program document.

.2 The lighting system will be operated at 120 volts throughout with local switching at each area.

.3 Light Emitting Diode (LED) technology will be utilized for all areas with a colour temperature of 4000 K.

.4 Daylight harvesting capability in the following areas:
- .1 Hall Training/Exercise room.
- .2 Offices.
- .3 Where indicated in Room Data sheets.

.5 Occupancy sensor control in areas indicated in Room Data sheets.

.6 Dimming system required for the Hall Training/Exercise room, subdivided to control each area as indicated.

.7 Exterior lighting will be provided to the requirements of the IESNA recommended standards and will include the illumination of vehicular drives,

sidewalks, and landscaping features to orient users and to enhance the safety and security of the facility perimeter. Exterior lighting willed be zoned to allow various control strategies and will be switched via a low voltage relays and an electronic, astronomic, programmable time clock. All light fixtures shall be dark sky compliant. The lighting designer must be sensitive to building aesthetics and take care in placement of luminaires and be sensitive to neighbors.

.11 EXIT LIGHTING SYSTEM

.1 The exit lighting system will be provided to meet the requirements of the National Building Code and will be pictogram “Running Man” type.

.2 All exit fixtures will be lit using LEDs to conserve energy.

.12 EMERGENCY LIGHTING SYSTEM

.1 This Contractor shall supply and install an Emergency lighting system throughout the proposed addition as required by the National Building Code and in conformance with CEC Section 46.

.2 Emergency lighting will generally consist of unit equipment battery packs and remote heads.

.3 Battery packs c/w heads are required in the electrical and communication rooms.

.13 ACCESS CONTROL SYSTEM

.1 An access control system will be provided consisting of door controllers, card readers and electric strikes as follows:
- .1 Community Board Room.
- .2 Office.
- .3 Village Storage.
- .4 Q M Storage.
- .5 Radio Room.
- .6 Vestibule.
- .7 Exercise Room
- .8 Where indicated in Room Data sheets.

.2 Refer to Room Data Sheets for locations of all electrified hardware.

.14 SECURITY SYSTEMS

.1 **Intrusion Alarm System:**

.1 A complete intrusion alarm system will be provided to suit building layout. System will include motion sensors, keypads and door contacts to suit building layout.

.2 System will be an addressable type.

.3 A dual phone line interface fire control communicator with DSC GS3060 CDN GSM wireless alarm communicator, c/w SIM card. will be provided; UL listed for commercial applications, to allow remote monitoring of Fire Alarm and Security systems alarms, supervisory and trouble conditions.

.4 All intrusion alarm system wiring will be installed in a conduit system.

.2 **Video Surveillance System:**

.1 A complete video surveillance system will be provided to assist in providing a safe and secure environment by providing a record of events that will aid investigations of criminal or other inappropriate behavior.

.2 The video surveillance system shall be an IP based, integrated system including HD Network Video Recorder (NVR) Server (minimum two weeks usable storage), High Definition IP cameras, patch panels, Power Over Ethernet (PoE) switches, interior and exterior dome enclosures, computer work station with monitor, keyboard and mouse, equipment rack, power supplies, Network Video Management Software (NVMS), site licenses, cable and connectors, wire and conduits, programming, training and commissioning. Provide sufficient memory to allow for a 14 days period.

.3 Cameras shall be high grade, commercial quality, fixed direction, progressive scan, 1.3 Megapixel, network enabled, compact dome cameras. Cameras are to be located to suit the architectural layout and as a minimum will be strategically located to cover the Main Entrance, alternate entrance points, all exterior elevations, Apparatus bay and entrance corridor to the main bank of washrooms. Allow for a minimum of ten cameras.

.4 Provide remote monitoring software to allow remote viewing capability off site.

.5 All video surveillance system wiring will be installed in a conduit system.

.15 PUBLIC ADDRESS SYSTEM

1. The system will include a telephone interface, amplifier, speakers, wiring and conduit.

2. Speakers will be located to allow an announcement to be heard throughout the building.

.16 GROUNDING AND BONDING SYSTEM

.1 Main service entrance board shall have the neutral and ground bars connected to the electrical system ground.

.2 Electrical Room will be equipped with a copper ground bar, electrically connected to the main service entrance ground bar, mounted on isolated supports.

.3 Bonding conductors will extend from the ground bar to the following systems.
- .1 Metallic water distribution system.
- .2 Metallic waste water system.
- .3 Communications systems.
- .4 Propane gas main.

.17 WIRING DEVICES

.1 All receptacles and switches will be heavy duty specification grade. All cover plates, with the exception of resident areas, will be stainless steel. All cover plates will be stainless steel.

.2 Ground fault circuit interrupters (GFCI) will be employed to meet the requirements of the Canadian Electrical Code.

.3 Recessed floor boxes with duplex receptacles are required in the following areas:
- .1 Hall Training/Exercise room.
- .2 Apparatus bay.
- .3 Community Boardroom
- .4 Where indicated in Room Data sheets.

.4 Recessed ceiling mounted receptacles are required in the following areas:
- .1 Apparatus bay.
- .2 Gear Stalls in Apparatus bay.
- .3 Where indicated in Room Data sheets.

.5 Refer to Room Data sheets for quantity of receptacles.

.18 BUILDING WIRE

.1 Conductors (phase, neutral, bond, isolated ground) installed on this project shall be stranded, soft drawn copper, with RW90 XLPE insulation rated for a minimum of 600 VAC. The minimum wire size will be #12 AWG. ACM conductors will be used for all circuits with an ampacity of 100 amps and more.

.2 Grounding and bonding conductors to have green coloured RW90 X-link insulation.

.3 Unless noted otherwise, phase colour coding as per C.E.C. rule 4-036, will apply.

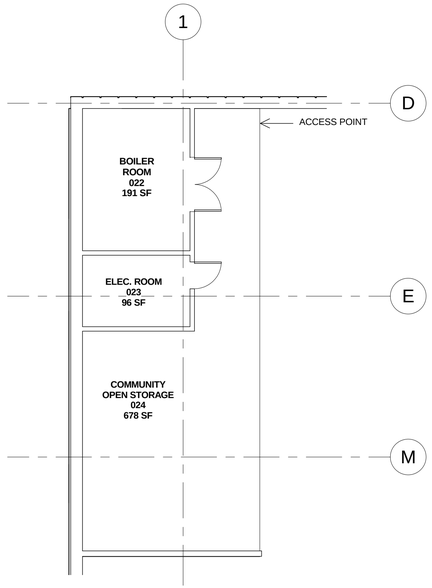
.4 All phase conductors sized from #12 AWG up to and including #2 AWG to have appropriate coloured insulation (red, black & blue).

.5 All neutral, grounds and/or bond conductors sized to have appropriate coloured insulation (white or green).

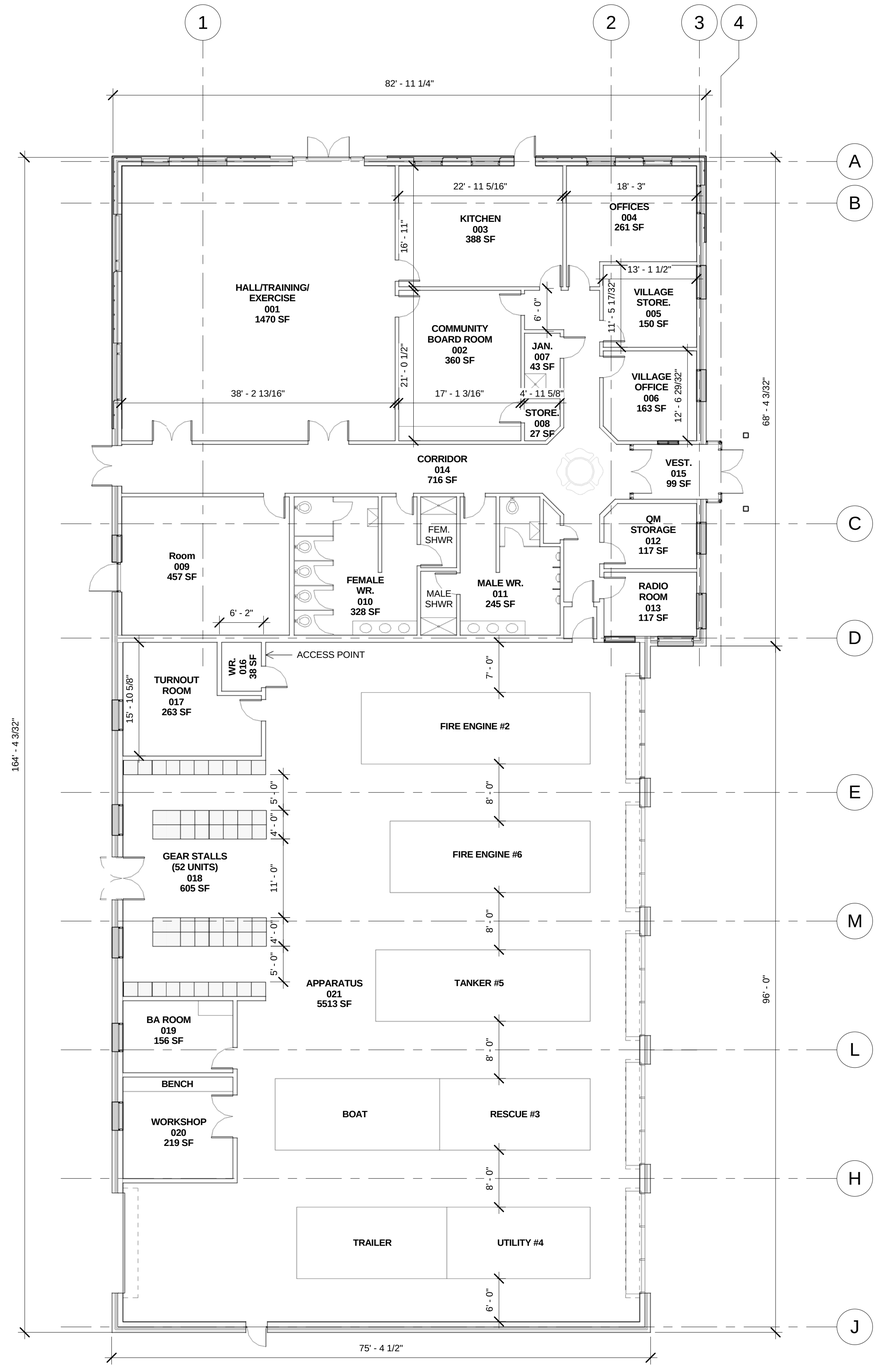
.6 Multi-conductor AC-90 cables containing a single white coloured conductor are not to be used where more than one neutral conductor is required.

.7 Maximum voltage drop shall not exceed 5 % of the line voltage.

END OF SECTION 16000



2 LEVEL 2 - MEZZANINE
1/8" = 1'-0"



1 LEVEL 1
1" = 10'-0"

harveyARCHITECTURE

No.	Description	Date
07	ISSUE FOR TENDER	2015.04.16
06	TENDER REVIEW	2015.04.02
05	REDUCED APPARATUS	2015.02.20
04	REVISION 2	2015.02.20
03	BOILER RM. & MEZZANINE	2015.01.13
02	REVISION 1	2014.11.18
01	ISSUE DATE	2014.07.09

Canning Civic Centre & Firehall

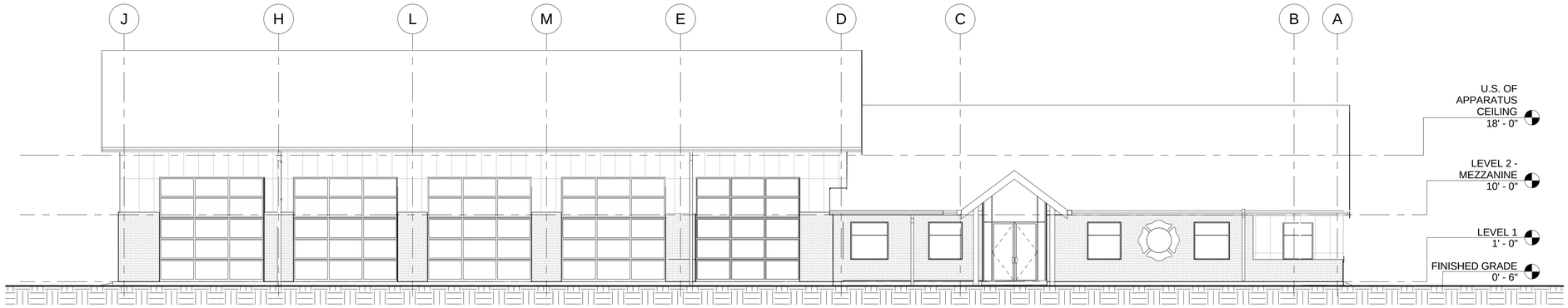
Canning, Nova Scotia

Level 1 & 2 Floorplans

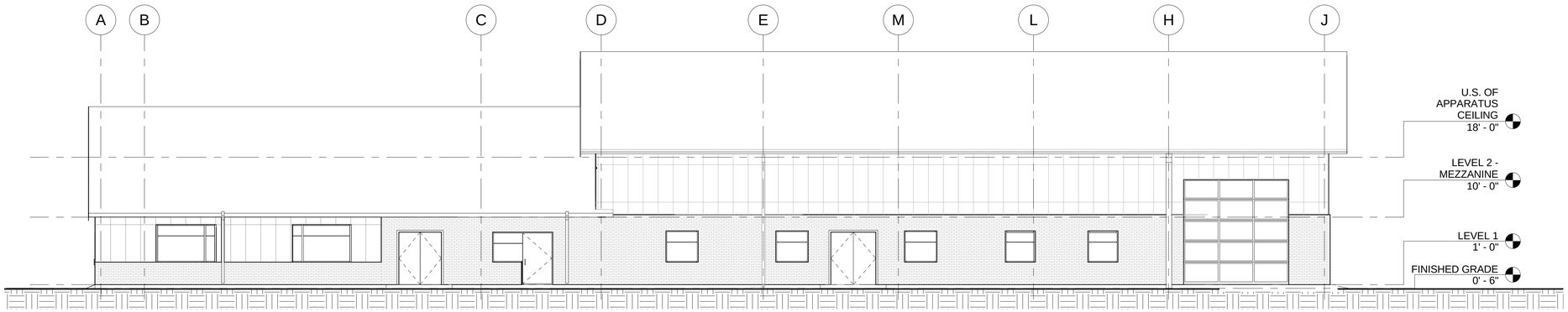
Project Number	13070
Date	2014.07.23
Drawn By	SNF
Checked By	RW

A101

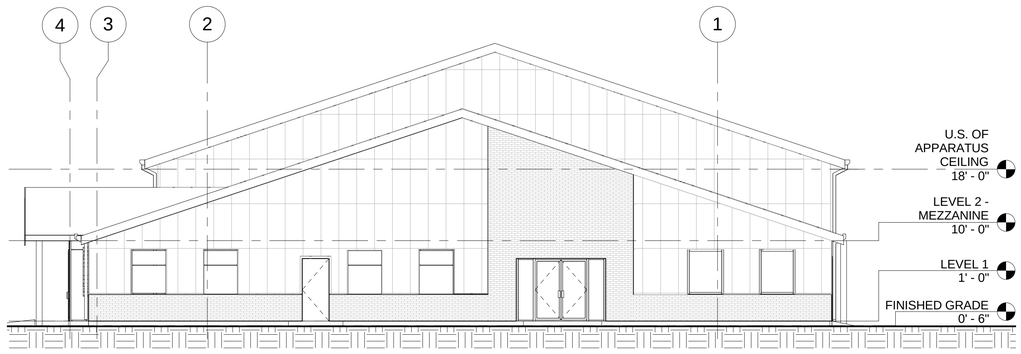
Scale: As indicated



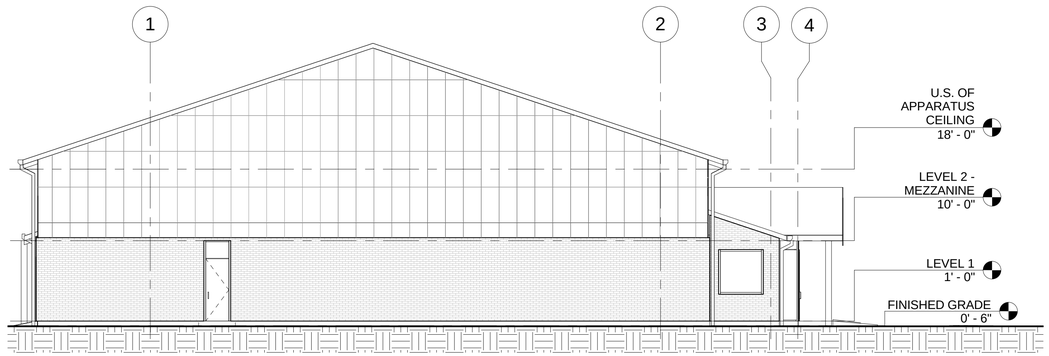
1 East - Front View
1/8" = 1'-0"



2 West - Back View
1/8" = 1'-0"



3 North - Left View
1/8" = 1'-0"



4 South - Right View
1/8" = 1'-0"

harveyARCHITECTURE

No.	Description	Date
03	ISSUE FOR TENDER	2015.04.16
02	TENDER REVIEW	2015.04.02
01	ISSUE DATE	2014.07.09

Canning Civic Centre & Firehall

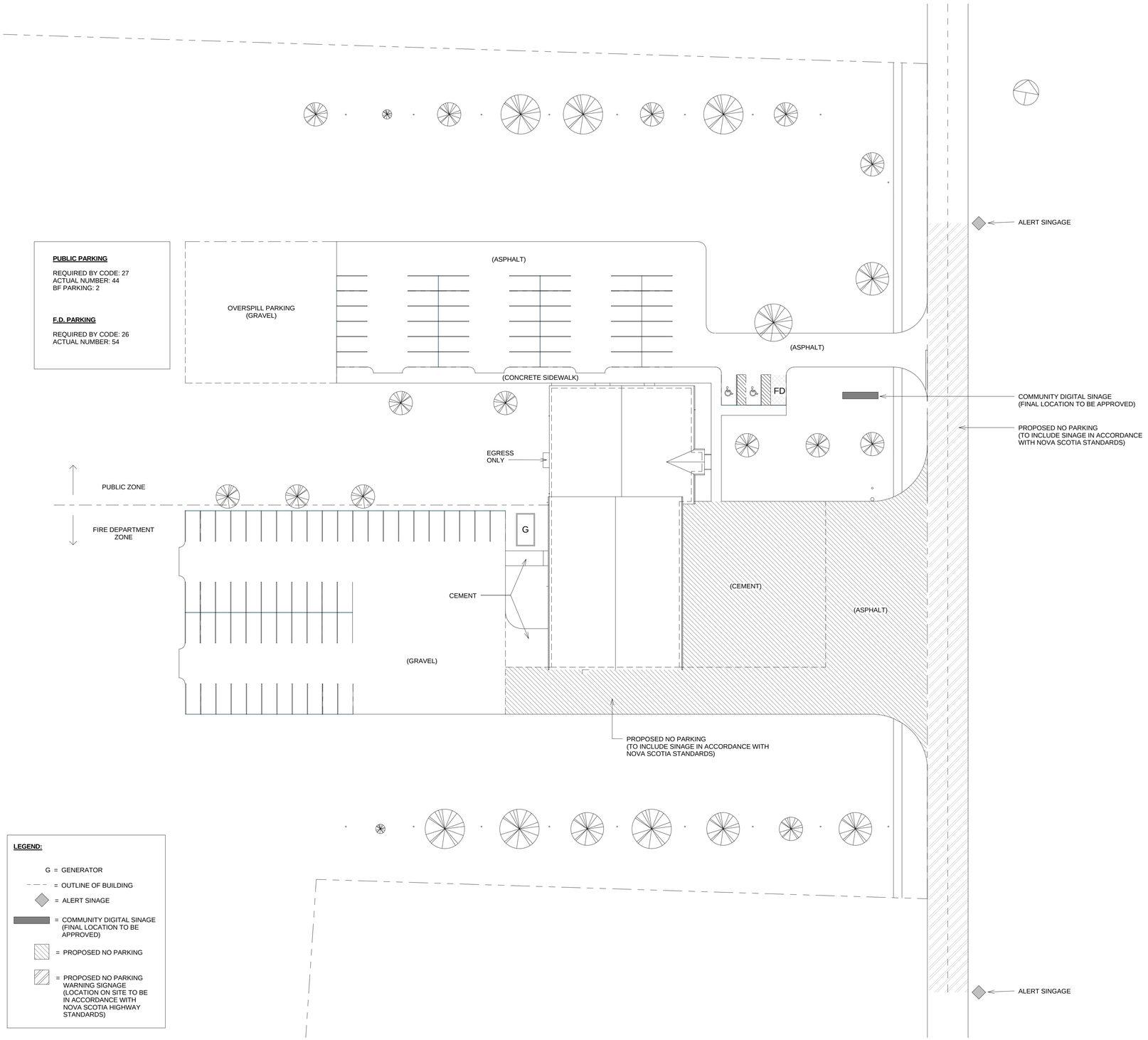
Canning, Nova Scotia

Elevations

Project Number	13070
Date	2014.07.23
Drawn By	SNF
Checked By	RW

A301

Scale 1/8" = 1'-0"



1 Site
1" = 30'-0"

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No.	Description	Date
03	ISSUE FOR TENDER	2015.04.16
02	TENDER REVIEW	2015.04.02
01	ISSUE DATE	2014.07.09

Canning Civic Centre & Firehall

Canning, Nova Scotia

Site Plan

Project Number	13070
Date	2014.07.23
Drawn By	Author
Checked By	Checker

A302

Scale 1" = 30'-0"

NORTH EASTERLY VIEW (FRONT/STREET VIEW)

EASTERLY VIEW (FRONT/STREET VIEW)

SOUTH WESTERLY VIEW (REAR OF BUILDING)

WESTERLY VIEW (REAR OF BUILDING)

NOTE: COLOURS NOT REFLECTIVE OF MATERIAL
ALL MATERIALS TO BE APPROVED BY CLIENT

harveyARCHITECTURE

No.	Description	Date
02	ISSUE FOR TENDER	2015.04.16
01	TENDER REVIEW	2015.04.02

Canning Civic Centre & Firehall

Canning, Nova Scotia

3D Renderings

Project Number	13070
Date	2014.07.23
Drawn By	SNF
Checked By	RW

A303

Scale: As indicated

1 Room Data Sheet:

Department:	Village Hall		
Name:	Hall/Training/Exercise	Min Size:	1, 470 Sq. Ft. (3, 516)
Room Number:	001		
Activities:	Multi-use facility		

Finishes:	Floor:	VCT		
	Walls:	Abuse resistant drywall, taped and filled to receive paint finish – acoustic insulation within wall cavity. Paint Finish to all walls and trims. Colour to be approved.		
	Door(s):	Steel with steel casing, with glazed view panel to receive paint finish. Colour to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	No echo, acoustic insulation within wall cavity
Specialties:	(N/A)
Special Mechanical:	Ventilation and cooling by ducted A/C. Infloor heat, thermostat control. Sprinklers
Special Electrical:	15 duplex power outlets Lighting controls to dim the lights (zoned to permit subdivision of room as shown) Daylight harvesting LED lighting
Communications/IT:	Wi-Fi/ Ceiling mounted media projector and screen 4 Cat 6 cables (2x data, 2x voice – within each subdivided room)
Equipment:	Tables & chairs
Remarks:	(N/A)

2 Room Data Sheet:

Department:	Civic Centre Spaces		
Name:	Community Board Room	Min Size:	360 Sq. Ft.
Room Number:	002		
Activities:	A board room shared by the Community and Fire Department; used to hold meetings		

Finishes:	Floor:	VCT		
	Walls:	Drywall, taped and filled to receive paint finish, Paint Finish to all walls and trims. Colour to be approved.		
	Door(s):	Steel with steel casing, (with window), Colour to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Max. 10' FFL to FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	Soundproof – acoustic insulation within wall cavity
Specialties:	(N/A)
Special Mechanical:	Ventilation and cooling by ducted A/C. Infloor heat, thermostat control. Sprinklers
Special Electrical:	7 duplex power outlets 2 duplex ceiling power outlets Electronic door locks key fob - Access control by electrical Lighting LED - Daylight harvesting
Communications/IT:	Ceiling mounted Projector and (powered) screen (Monitor (HDMI/VGA connections)) 2 Cat 6 cables (1x data, 1x voice)
Equipment:	Board room table 10-12 chairs
Remarks:	(N/A)

3 Room Data Sheet:

Department:	Civic Centre Spaces		
Name:	Kitchen	Min Size:	388 Sq. Ft.
Room Number:	003		
Activities:	Food preparation		

Finishes:	Floor:	VCT
	Walls:	Abuse/moisture resistant drywall, taped and filled to receive paint finish, Paint Finish to all walls and trims. Colour to be approved.
	Door(s):	Steel with steel casing. Colour to be approved. Internal Steel door with Steel casing to Hallway with window. Colour to be approved. Internal Steel door with Steel casing to Community Hall. Colour to be approved.
	Ceiling:	Suspended acoustic panels with high performance — Height: Max. 10' FFL to FCL

Millwork/Casework:	Wall and floor cabinets for the storage of kitchen items (some lockable)
Acoustic Requirements:	Acoustic insulation within wall cavity
Specialties:	Wall Cabinets (10 meters linear length; accessible) Accessible sink Countertops should be commercial stainless steel Pass through area into Community Hall – with secure shutter (roller/folding type) Prep area, including a layout space for prepared and ready food.
Special Mechanical:	NFPA 96 Range Hood and Exhaust System. Make up air Unit Interlocked with EF. Infloor Heat. General Ventilation from HRV. Thermostat Controls. Sprinklers
Special Electrical:	8 duplex power outlets Lighting LED Kitchen will be on Back-up Generator Electrical Shut off for Heat Generating Fittings as per Electrical Requirements.
Communications/IT:	Wi-Fi 2 Cat 6 cables (1x data, 1x voice)
Equipment:	1 telephone Commercial Dishwasher 3 compartment sink Double door industrial fridge Double door industrial freezer 6 burner stove – all electric unit
Remarks:	The kitchen should be accessible off of the auditorium. Daylight harvesting

Room Data Sheet:

Department:	Fire Department Spaces		
Name:	Office	Min Size:	261 Sq. Ft.
Room Number:	004		
Activities:	Captain and Chief's office		

Finishes:	Floor:	VCT		
	Walls:	Drywall, taped and filled to receive paint finish, Paint Finish to all walls and trims. Colour to be approved		
	Door(s):	Solid timber door with steel casing (with window) Painted timber doors – colour to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	1 set of wrap-around cabinets (lockable)
Acoustic Requirements:	Soundproof - acoustic insulation within wall cavity
Specialties:	Storage with shelving
Special Mechanical:	Ventilated from HRV, cooled by Ductless Split unit, Heat by Infloor/Ductless split unit. Thermostat control. Sprinklers
Special Electrical:	8 duplex power outlets Electronic locking door key fob Lighting LED - Daylight harvesting
Communications/IT:	Wi-Fi 3 Cat 6 cables (3x data, 3x voice) 1 ceiling plug
Equipment:	3 workstations 3 telephone Filing cabinets (legal) x3
Remarks:	(N/A)

5 Room Data Sheet:

Department:	Village Space		
Name:	Village Storage	Min Size:	150 Sq. Ft.
Room Number:	005		
Activities:	Storage for archives, Christmas lights, bird houses, other misc. items. Storage for Water Utility Meters		

Finishes:	Floor:	Vinyl Composite Tile (VCT)		
	Walls:	Drywall, taped and filled to receive paint finish, Paint finish to all walls, and trims, Colour to be approved.		
	Door(s):	Solid timber door with steel casing (to receive paint finish) Colour to be approved.		
	Ceiling:	Suspended acoustic panels	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Shelving and cabinets
Acoustic Requirements:	Acoustic insulation within wall cavity
Specialties:	(N/A)
Special Mechanical:	Store to be heated by in-floor heating, separate thermostat. Ventilation by HRV Sprinklers
Special Electrical:	8 duplex power outlets Electronic locking door key fob Lighting LED - Daylight harvesting
Communications/IT:	Wi-Fi 2 Cat 6 cables (1x data, 1x voice)
Equipment:	Place for a ladder
Remarks:	Adjacent to Civic Space(s)/Village Office water meter storage

Department:	Village Space		
Name:	Village Office	Min Size:	163 Sq. Ft.
Room Number:	006		
Activities:	General clerical/one-on-one meetings		

Finishes:	Floor:	VCT		
	Walls:	Drywall, taped and filled to receive paint finish, Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Solid timber door with steel casing (to receive paint finish). Colour to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Wall Cabinets for storage of office supplies (paper/binders/toner/envelopes/other office supplies.) Open shelving next to the desk area (for payment books/water books/receipt books.) Lockable window hatch to receive customer payments with ability to place a desk next to the window/ work space shelf in front of the payment window; will require some shelves to store water meters
Acoustic Requirements:	Insulated walls to reduce sound travel (min ST 55)
Specialties:	Need for exterior window and internal transaction (secure) window into secure vestibule
Special Mechanical:	Ventilated from HRV, cooled by Ductless Split unit, Heat by Infloor/Ductless split unit. Thermostat control. Sprinklers/
Special Electrical:	Minimum 8 duplex power outlets (2 required close to shelving and desk) Electronic Locking Door – Key Fob Lighting LED - Daylight harvesting
Communications/IT:	Wi-Fi 4 Cat 6 cables (2x data, 2x voice)
Equipment:	1 telephone Filing cabinets Desk 2 monitors on desktop with under desk towers Desktop printer/fax/scanner Adding machine Paper shredder Small movable workstation
Remarks:	Access to natural daylight.

7 Room Data Sheet:

Department:	Civic Centre Space		
Name:	Janitor's Closet	Min Size:	43 Sq. Ft.
Room Number:	007		
Activities:	Small closet/room where janitor may store cleaning supplies		

Finishes:	Floor:	Tile Floor with tile base to wall. Water proof edge to area to protect drywall construction.		
	Walls:	Abuse and moisture/mould resistant drywall, taped and filled to receive paint finish, Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing, Colour to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Shelving to span the wall
Acoustic Requirements:	(N/A)
Specialties:	Floor sink (MS-1) Mop hooks and shelving
Special Mechanical:	Dedicated Exhaust Fan Infloor Heating Sprinklers
Special Electrical:	2 duplex electrical outlets GFI LED Lighting
Communications/IT:	(N/A)
Equipment:	Washout sink
Remarks:	(N/A)

Department:	Civic Centre Space		
Name:	Board Room Storage	Min Size:	27 Sq. Ft.
Room Number:	008		
Activities:	Storage		

Finishes:	Floor:	VCT		
	Walls:	Drywall, taped and filled to receive paint finish. Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing. Colour to be approved.		
	Ceiling:	Suspended acoustic panels	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Shelving (pantry style)
Acoustic Requirements:	(N/A)
Specialties:	Lots of commercial shelving that is adjustable
Special Mechanical:	Sprinklers
Special Electrical:	LED lighting
Communications/IT:	(N/A)
Equipment:	(N/A)
Remarks:	(N/A)

Department:	Fire Department Spaces		
Name:	Exercise Room	Min Size:	457 Sq. Ft.
Room Number:	009		
Activities:	For use of exercise equipment		

Finishes:	Floor:	VCT		
	Walls:	Abuse and Moisture resistant drywall, taped and filled to receive paint finish. Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Solid timber door with steel casing. Colour to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	Acoustic insulation within wall cavity
Specialties:	(N/A)
Special Mechanical:	Ventilation and cooling by ducted A/C. Infloor heat, thermostat control. Sprinklers
Special Electrical:	10 duplex outlets + 2 duplex outlets on ceiling Electronic Locking - Key Fob LED lighting Power for machines (treadmills, etc...)
Communications/IT:	Wi-Fi 2 cat 6 cables (1x Voice, 1x Data) 2 ceiling plugs
Equipment:	Phone, Desk and Computer.
Remarks:	(N/A)

Department:	Fire Department Spaces		
Name:	Female Washroom & Shower	Min Size:	328 Sq. Ft.
Room Number:	010		
Activities:	Women's washrooms with accessible facilities (including shower room)		

Finishes:	Floor:	VCT	
	Walls:	Abuse, moisture and mould resistant drywall, taped and filled to receive paint/tile finish. Paint finish to all walls, and trims. Colour to be approved.	
	Door(s):	Steel with steel casing. Colour to be approved.	
	Ceiling:	Moisture and mould resistant suspended acoustic panels with high performance	Height: Min. 10' FFL to FCL

Millwork/Casework:	Base cabinetry for sinks (accessible compliant)
Acoustic Requirements:	Soundproof - acoustic insulation within wall cavity
Specialties:	Electric hand dryers - RI by electrical only Automatic soap dispensers Automatic hand washing stations (with the ability to have an override) Coat/bag Hooks on back of doors. Sanitary Napkin Disposal Containers to each washrooms. Toilet Paper dispensers in each washroom
Special Mechanical:	Exhaust by HRV, Infloor heating, Thermostat control Plumbing fixtures as per architectural layout, floor drains Sprinklers
Special Electrical:	2 duplex power outlets with GFI's Automatic LED lighting
Communications/IT:	(N/A)
Equipment:	Baby change station
Remarks:	(N/A)

11 Room Data Sheet:

Department:	Fire Department Spaces		
Name:	Male Washroom & Shower	Min Size:	245 Sq. Ft.
Room Number:	011		
Activities:	Men's washrooms with accessible facilities (including shower room)		

Finishes:	Floor:	VCT if appropriate for washroom		
	Walls:	Abuse, moisture and mould resistant drywall, taped and filled to receive paint/tile finish. Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing. Colour to be approved.		
	Ceiling:	Moisture and mould resistant suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Base cabinetry for sinks (accessible compliant)
Acoustic Requirements:	Soundproof - acoustic insulation within wall cavity
Specialties:	Electric hand dryers - Wire and RI by electrical only (dryer by others) Automatic soap dispensers Automatic hand washing stations (with the ability to have an override) Coat/bag Hooks on back of doors. Toilet Paper dispensers in each washroom
Special Mechanical:	Exhaust by HRV, Infloor heating, Thermostat control Plumbing fixtures as per architectural layout, floor drains Sprinklers
Special Electrical:	2 duplex power outlets with GFI's Automatic LED lighting
Communications/IT:	(N/A)
Equipment:	Baby change station
Remarks:	(N/A)

Department:	Fire Department Spaces		
Name:	Quartermaster Storage	Min Size:	117 Sq. Ft.
Room Number:	012		
Activities:	Storage for the Quartermaster		

Finishes:	Floor:	VCT		
	Walls:	Drywall, taped and filled to receive paint finish. Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing. Colours to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Closet for clothes (hanging and shelves); extra shelving; set of cabinets that can be locked if necessary Free standing industrial type metal shelves, secured back to walls.
Acoustic Requirements:	Acoustic insulation within wall cavity
Specialties:	(N/A)
Special Mechanical:	Ventilated by HRV, Infloor heating, Thermostat control. Sprinklers
Special Electrical:	4 duplex power outlets Electronic locking door key fob LED lighting
Communications/IT:	4 duplex power outlets Electronic locking door key fob 2 cat 6 cables (1x date 1x voice)
Equipment:	Small desk Chair
Remarks:	Must be close to the Apparatus Bay

Department:	Fire Department Spaces		
Name:	Radio Room	Min Size:	117 Sq. Ft.
Room Number:	013		
Activities:	Radio dispatch		

Finishes:	Floor:	VCT		
	Walls:	Drywall, taped and filled to receive paint finish. Paint finish to all walls, and trims. Colour to be approved. (want to be able to mount maps)		
	Door(s):	Solid timber with steel casing (unless a steel door is cheaper; with window) Colour to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	1 large, durable, 2-person built in desk with the ability to wheel up to it in a wheelchair, cabinets above the desk (allows one person on front wall with window looking out onto J. Jordan Road and the other looking into the Apparatus Bay)
Acoustic Requirements:	Soundproof - acoustic insulation within wall cavity
Specialties:	Automatic door openers (for apparatus bay doors) (all labeled, with one Master Panic Kill Switch) Large Map Pin boards
Special Mechanical:	Ventilated from HRV, cooled by Ductless Split unit, Heat by Infloor/Ductless split unit. Thermostat control. Sprinklers
Special Electrical:	Electronic locking door key fob Min. 9 duplex power outlets LED Lighting (Daylight harvesting)
Communications/IT:	Wi-Fi 2 Cat 6 cables (2x data, 2x voice) Closed camera security
Equipment:	2 walls have built in wall desks - desk big enough for two people 2 computers – towers to be concealed underneath the desk Printer/copier/fax, VHF Base Radio, TMR Base Radio, 2 phones (1 to run the backup system), Date and time clock should be digital 24hr, 2 large screen computers
Remarks:	

Department:	Village Space/Fire Department Space		
Name:	Fire Department Circulation	Min Size:	716 Sq. Ft.
Room Number:	014		
Activities:	Shared entrance and circulation spaces		

Finishes:	Floor:	VCT (in the entrance to the public area have a different tile design)		
	Walls:	Abuse resistant drywall, taped and filled to receive paint finish. Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Solid timber with steel casing (to receive paint finish, with window). Colour to be approved.		
	Ceiling:	Suspended acoustic panels	Height:	Min. 10' FFL to FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	(N/A)
Specialties:	(N/A)
Special Mechanical:	Force Flow Cabinet Heater, Heat by Infloor heating, Cooling by ducted split A/C Sprinklers
Special Electrical:	8-10 duplex power outlet with GFI (2'-0" on walls above finished floor) LED Lighting
Communications/IT:	Wi-Fi
Equipment:	(N/A)
Remarks:	Tile Design to show it's a different area (in the foyer)

Department:	Village Space		
Name:	Vestibule	Min Size:	99 Sq. Ft.
Room Number:	015		
Activities:	Main entrance to Fire Department		

Finishes:	Floor:	VCT		
	Walls:	Abuse Resistance Drywall, taped and filled to receive paint finish. Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Glass storefront door with aluminum frame. Colour to be approved.		
	Ceiling:	Suspended acoustic panels	Height:	Min. 10' FFL to FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	(N/A)
Specialties:	(N/A)
Special Mechanical:	Force Flow Cabinet Heater Sprinklers
Special Electrical:	2 duplex power outlet with GFI (2'-0" on walls above finished floor) 2 duplex power outlet with GFI (7'-0" on walls above finished floor) 2 duplex power outlet with GFI on ceiling. LED Lighting
Communications/IT:	(N/A)
Equipment:	Electronic Lock control system Electronic controlled assessable door opener (lock override)
Remarks:	(N/A)

Department:	Fire Department Spaces		
Name:	Washroom (In App. Bay)	Min Size:	38 Sq. Ft.
Room Number:	016		
Activities:	Unisex washroom facility		

Finishes:	Floor:	Concrete with drain		
	Walls:	100% Tile		
	Door(s):	Steel with steel casing, Colour to be approved.		
	Ceiling:	Suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Cabinet above sink
Acoustic Requirements:	Soundproof
Specialties:	(N/A)
Special Mechanical:	Dedicated Exhaust Fan Sprinklers
Special Electrical:	2 duplex power outlet with GFI (4'-0" on walls above finished floor) LED lighting
Communications/IT:	(N/A)
Equipment:	Paper towel dispenser Automatic hand dryer - RI only by electrical Automatic Soap dispenser Toilet and sink (2 pieces)
Remarks:	Room must be able to be washed with a hose Direct access to Apparatus Area

Department:	Fire Department Spaces		
Name:	Turnout Room	Min Size:	263 Sq. Ft.
Room Number:	017		
Activities:	For the washing/drying of equipment and uniforms		

Finishes:	Floor:	Concrete with drain		
	Walls:	Concrete, Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing, Colour to be approved.		
	Ceiling:	Moisture and mould resistant suspended acoustic panels with high performance	Height:	Min. 10' FFL to FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	(N/A)
Specialties:	Need to be able to wash this room down with a hose Require industrial sink/washer/etc.
Special Mechanical:	Dedicated Exhaust, Infloor Heat Sprinklers
Special Electrical:	4 duplex power outlets Special Outlet for drying rack Outlets required for commercial washer and commercial dryer LED Lighting
Communications/IT:	
Equipment:	RamAir gear drying rack 4-IHT, RedRack or rear GearGrid storage area, washer, slop sink, drying rack, hanging rack for gear, shelves
Remarks:	Room must be washed with a hose if contamination occurs

Department:	Fire Department Spaces		
Name:	Gear Stalls in the Apparatus Bay	Min Size:	605 Sq. Ft.
Room Number:	018		
Activities:	For the storage of gear and equipment		

Finishes:	Floor:	Concrete	
	Walls:	Concrete, Paint finish to all walls, and trims. Colour to be approved.	
	Door(s):	Steel with steel casing (double doors coming into the location; open into the Apparatus Bay), Colour to be approved.	
	Ceiling:	Suspended acoustic panels with high performance	Height: Min. 10' FFL to FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	(N/A)
Specialties:	(N/A)
Special Mechanical:	Infloor Heat Floor Drains Spinklers
Special Electrical:	TV/IM responding (notification monitor linked to central systems) 8 duplex power outlets (2 close to the ceiling for fans if required for drying equipment in the stall and 2 for ceiling outlets) 1 Duplex ceiling plug for TV (IM responding) LED Lighting
Communications/IT:	Internet Hardwired to IM Wi-Fi 2 Cat 6 cables (1x data, 1x voice) 42" monitor for IM Responding
Equipment:	1 telephone 52 Stalls @ 2ft per stall RedRack or GearGrid wire metal stalls so air flows through them with lockable wheels, nameplates on each stall, and to have a lockable section/clasp where a padlock may be attached at the top part of the stall.
Remarks:	(N/A)

Department:	Fire Department Spaces		
Name:	Breathing Apparatus Room	Min Size:	156 Sq. Ft.
Room Number:	019		
Activities:	Breathing equipment (some storage required) Refilling and cleaning of bottles Located in Apparatus Bay		

Finishes:	Floor:	Concrete		
	Walls:	Concrete, Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing, Colour to be approved.		
	Ceiling:	Drywall (to receive paint finish)	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Hardened room in case of projectile
Acoustic Requirements:	Soundproof
Specialties:	8 hooks on the wall (to hang masks) Outside fresh air vent, all in one room with cascade SCBA fill station and bottles; racking (made of metal/plastic like Kentville FD)
Special Mechanical:	Needs air coming into the room to cool down the machine Water is required in this room Drain in Floor Large 3 Compartment Steel Sink with Spray Nozzle (PS-1) Air Pack Drying Station Sprinklers
Special Electrical:	3 phase electrical - for to supply air compressor for breathing apparatus. 6 duplex power outlets with GFI Good lighting required LED
Communications/IT:	Wi-Fi 2 Cat 6 cables (1x data, 1x voice)
Equipment:	1 telephone RedRack or GearGrid SCBA workstation 25 cylinders storage – 25 bottles mounted on the wall Min. of 8 hooks for hanging face masks.
Remarks:	Rack space, counter space, work station to record information, drafting-style desk Generator room should not be next to SCBA room because of the exhaust from the generator (diesel fumes will be sucked into the BA room)

Department:	Fire Department Spaces/Civic Centre Spaces		
Name:	Workshop/Parts (in the Apparatus Bay)	Min Size:	219 Sq. Ft.
Room Number:	020		
Activities:	Shared workshop/parts storage area		

Finishes:	Floor:	Concrete with drain		
	Walls:	Concrete, Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing (large double doors with window so large things may be brought into the room). Colour to be approved.		
	Ceiling:	Economical, yet durable	Height:	Min. 10' FFL to FCL

Millwork/Casework:	Steel/commercial cabinets Industrial metal stand alone shelving units
Acoustic Requirements:	Soundproof Hooks on walls for ear muff storage
Specialties:	Laundry Tub
Special Mechanical:	Capture hood over work area with direct exhaust to outside area. Piped in compressed air Sprinklers
Special Electrical:	8 duplex power outlets (to be located 4'-0" on walls ,or above work benches, above the finished floor), 1 voice/telephone LED Lighting
Communications/IT:	Wi-Fi 2 Cat 6 cables (1x data, 1x voice) Phone Intercom System
Equipment:	Heavy commercial workbench and vice storage shelving
Remarks:	(N/A)

Department:	Fire Department Spaces		
Name:	Apparatus Bay	Min Size:	5, 513 Sq. Ft.
Room Number:	021		
Activities:	Location of fire trucks and other large equipment used in emergency services		

Finishes:	Floor:	Sealed concrete slab, gripped and non-slip		
	Walls:	Exposed concrete (if tilt-up) other impermeable finish if other construction method used. Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Solid Steel door with steel casing (to receive paint finish) with windows. Colour to be approved. Sectional up-and-over bay doors (glazed lites within sections)		
	Ceiling:	Open ceiling to structure	Height:	14 ft wide by the standard height

Millwork/Casework:	Steel doors with steel casings
Acoustic Requirements:	Acoustic & Fire separation required between bay space and administration/civic type areas.
Specialties:	6 doors with automatic door openers (in the trucks) for each of the doors with buttons on the wall beside the doors as backup (on the driver's side of the truck) and within radio room. Single drive-through bay (designed for ATV equipment trailer)
Special Mechanical:	CO/NO2 detector. General Ventilation by HRV, Air Purification for Diesel Exhaust (Airmation) Infloor Heat Infloor Drains Sprinkers
Special Electrical:	LED lighting (each bay to be individually switched/controlled) Green light at each door visible to driver, activates when door is in full up position. 10 duplex power outlets (to be located on walls 4'-0" above the finished floor spread throughout apparatus bay) additional plug required for flashlights and radios on the apparatus bay floor (must be near the gear stalls) Additional plugs required for flashlights, and radios – min. 6 duplex power outlets by gear stalls with 3 outlets on each side on the exterior wall; 10 additional power outlets to be located on wall adjacent washrooms. All truck/large equipment positions in the bay require an electrical drop and compressed air drop (battery charging and air brake charging) The air hoses should be dropped in the same areas but with ability for a quick connect. Drops for all truck positions need to be on the driver's side; 10 locations on ceiling with 6 actual reels Announcer speaker system Alarms/sounders Provide Automatic Door openers for up and over doors – for fire truck access. Wiring for 2 telephones (1 near wash bay)

Communications/IT:	Wi-Fi coverage in complete area of bay 2 Cat 6 cables (2x voice) – 1 located at rear door near wash bay and 2nd location to be confirmed by Client.
Equipment:	2 telephones (one near wash bay area) Trench drainage required – 1% grade max. (Avoid having trucks drive through the drain area if possible.) Bar fridge for water on the Apparatus Bay floor
Remarks:	Emergency shower and eye wash station outside of the workshop area, and close to where the foam is stored. Direct access to BA room Vehicle Bay minimum 20' x 40' (NFPA STANDARD) Wash bay at the rear of Bay #6 Water lines (regular flow) with tap station (for washing trucks in place) between 1&2 and 3&4 Water line (with standard 2-1/2" thread couplings to allow use of fire hose) for filling trucks to be located between door 2 &3 Concrete apron in front of bays 1-5 extending 80 feet towards J Jordan; Asphalt

Department:	Fire Department Spaces		
Name:	Boiler Room	Min Size:	191 Sq. Ft.
Room Number:	022		
Activities:	Mechanical plant		

Finishes:	Floor:	VCT		
	Walls:	Abuse Resistance Drywall, taped and filled to receive paint finish. Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing. Colour to be approved.		
	Ceiling:	(N/A)	Height:	Min. 10' FFL FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	(N/A)
Specialties:	(N/A)
Special Mechanical:	See outline specification Floor drain, Stainless steel drain pan under boiler(s) and filter assemblies. Sprinklers
Special Electrical:	LED lighting
Communications/IT:	(N/A)
Equipment:	(N/A)
Remarks:	Room to have water dam to prevent flooding

Department:	Fire Department Spaces		
Name:	Electrical Room	Min Size:	96 Sq. Ft.
Room Number:	023		
Activities:	Electrical plant		

Finishes:	Floor:	VCT		
	Walls:	Drywall to receive paint finish, Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	Steel with steel casing, Colour to be approved.		
	Ceiling:	(N/A)	Height:	Min. 10' FFL FCL

Millwork/Casework:	(N/A)
Acoustic Requirements:	(N/A)
Specialties:	(N/A)
Special Mechanical:	Sprinklers
Special Electrical:	Generator outside and wired into the electrical room
Communications/IT:	(N/A)
Equipment:	(N/A)
Remarks:	

Department:	Fire Department Spaces		
Name:	Open Storage Area	Min Size:	678 Sq. Ft.
Room Number:	024		
Activities:	Open storage		

Finishes:	Floor:	VCT		
	Walls:	Drywall to receive paint finish, Paint finish to all walls, and trims. Colour to be approved.		
	Door(s):	(N/A)		
	Ceiling:	(N/A)	Height:	(N/A)

Millwork/Casework:	(N/A)
Acoustic Requirements:	(N/A)
Specialties:	(N/A)
Special Mechanical:	Sprinklers
Special Electrical:	LED Lighting 12 duplex power outlets along walls.
Communications/IT:	(N/A)
Equipment:	(N/A)
Remarks:	(N/A)

Other Items of note:

1. A hydrant out back behind the building is required. This could be a dry hydrant in a concrete pond used for water collection (with a 4 inch line); or it could be a line brought off of the main line on J Jordan Rd which comes into a regular hydrant to be used for training and filling.