

# RS-RFP-002-2021 Haileybury Fire Station - Design Build



**CGV BUILDERS INC.**

April 15, 2021

Authored by: Robert Vezeau, Vice President.  
56 Connaught Avenue, Cochrane, ON P0L 1C0

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## Section 1 – Understanding of the Project

On behalf of CGV Builders Inc “(CGV)” I would like to thank the city of Temiskaming Shores “(Owner)” for considering our company as your design builder for the Haileybury Fire Station project. With the help of proven local trades and suppliers the CGV team has put together a solid proposal that we view compliant with the RFP requirements and the city’s expectations. We understand that the evaluation team will likely have questions or require some clarifications during the bid review process. All such inquiries should be addressed to myself and I will provide the information as soon as possible.

Excluding only the supply & installation of the pre-engineered building itself “raw steel”, CGV has committed the rest of the required trades & materials to local reputable trades and suppliers that own and operate businesses in Temiskaming Shores.

Following award, critical path will be to start working on the site plan control agreement “(SPCA)”. Throughout this process our Architectural team will finalize the building floor plan and wall assemblies. Prior to commencing detailed working drawings CGV would expect the owner to sign off on the floor layout. With an approved floor plan the design team will work towards a full set of working drawings.

Following site plan control and layout approval, critical path will be to place the order on the pre-engineered steel building. The current market for pre-engineered steel buildings is very challenging. Steel prices are escalating weekly and lead time on the delivery of buildings is getting longer as we get close to summer. Currently, the lead time on a building following approved shop drawings is 16 – 20 weeks. As a result, if we are awarded the project in early May, I would not expect to have the building delivered to site earlier then late September or early October. The anticipated complicated turnover date is late 2021.

Following is a high-level design brief of our proposed scope of work:

### General Conditions

- Architectural, Structural, Electrical, Mechanical, Civil Engineered drawings
- Site Supervision
- Temporary Facilities
- Permits & Insurance.



## Site Work

- Site servicing, within property line only.
- Engineered gravel surface parking lot and entrances.
- Remove and replace curbs & gutter at Rourke avenue entrances and provide new dropped curb and gutter.
- Concrete sidewalks as noted on site plan.
- Storm water management study and work plan
- Landscaping and environmental as noted on site plan.
- Optional asphalt apron, see add on price.

## Foundation

For estimating purposes, we have a preliminary design for a reinforced raft foundation, refer to section 12. Please note that once we get into detailed design, we might change our approach to a shallow type of foundation.

## Masonry

See add price for option partial masonry veneer front elevation. See construction wall assembly details in section 12.

## Metals & Building Envelope

CGV has been a Steelway Building systems design builder dating back to the early 1980's. Together with Steelway CGV has successfully completed many design build projects across northern Ontario. For more information on Steelway building systems visit [www.steelway.com](http://www.steelway.com)

The inside face of the exterior wall and ceiling will be skinned with a 29 gage metal liner. The building envelope assemblies will be designed to satisfy the OBC energy efficiency requirements.

## Doors & Windows, Interior Finishes

Doors and frames will be designed of hollow metal. Windows will be aluminum and glazing. Overhead doors will be power operated. Wheelchair accessible power operators included for main entrance and universal washroom.

Refer to section 12, wall assemblies. Bathroom partitions and washroom accessories as required by code.

## **Equipment, Furnishing, Special Construction, Conveying Systems**

Not included in this proposal.

## **Mechanical**

Complete engineered certified plumbing and HVAC scope of work has been carried in our proposal in compliant to the RFP.

A detailed scope of work will be provided upon request.

## **Electrical**

Complete electrical scope of work has been carried in our proposal that includes but not limited to the following:

### **Lighting:**

- Apparatus Bay 24 LED High Bay light
- Offices / hallways etc... 48 led flat panel light
- 8 -exit light
- 10 -remote heads
- Total 25 lighting sensor switches
- 8-outdoor lights on building
- 2- pole lights (2 heads)
- 1- pole light (1 head)

### **Power, Service & Distribution**

- 4- door openers
- 1- Handicap washroom
- 6 -outside plugs
- 105 -120volt receptacles location as per owner
- Data as directed by owner
- 200amp single phase service
- 22/19.5 kw standby generator
- Automatic transfer switch
- Lithonia lighting package
- Wiring to ESA standards
- ESA permit / inspection
- Telecommunications system conduits &

Bobby Vezeau, P.Eng  
Vice President



Tel: [REDACTED]

Cell: [REDACTED]

Fax: 705-272-3453

Email: [REDACTED]

Website: [www.cgvblders.ca](http://www.cgvblders.ca)





## Section 2 - Management Team

## Section 3 – Similar Projects

The management team proposed for this assignment would include the following team members:

### **Management**

- Robert Vezeau, P.Eng. – Design & Construction Manager
- Michel Brousseau, Architectural Technologist (M.A.A.T.O) – Project Manager
- Joel Vezeau, PQS, CET, Project Coordinator
- Eric Vezeau, P.Eng. – Project Administrator

### **Robert Vezeau, P.Eng. – Design & Construction Manager**

Robert is a Professional Engineer licensed in the Province of Ontario and is the Design & Construction Manager for the CGV team. As Design & Construction Manager, Robert leads the project team and controls the project schedule, budget, and performance to ensure that every project is delivered within acceptable timelines. He is responsible for keeping up with industry trends. Driven by industry standards and financial values, he is forward thinking with vast experience in residential, commercial, institutional, and industrial sectors. In his executive role, Robert has extensive knowledge of construction and engineering principles, practices, and theories in the construction industry.

### **Michel Brousseau, Architectural Technologist (M.A.A.T.O) - Project Manager**

Michel is an architectural technologist with 15 years of experience as a project manager and team lead in the architectural and construction sectors. Michel is a well-versed professional in his field and provides leadership and guidance to the construction management team. As Project Manager, he leads the project team and controls the project schedule, budget, and performance to ensure acceptable project delivery.

Michel's technical background, written and oral communication skills are key components that contribute to his excellent track-record of successful project delivery. His practical approach to project management and profound understanding of the various principles of design, construction and building methods are indispensable to the construction team.

### **Joel Vezeau, PQS, CET – Project Coordinator**

Joel is a Professional Quantity Surveyor licensed in the Province of Ontario and a Certified Civil Engineering Technologist. As Project Coordinator for the CGV team, Joel's duties include the coordination



and management of supervisors, workforce, sub-trades, managing the procurement and delivery of building materials and equipment, and preparing/managing CCO's, CCN's, RFI's, etc. He is responsible for creating and maintaining weekly tracking of baseline versus actual construction schedules, anticipating short comings, and reporting to the Project Manager. Joel also maintains purchase orders documentation and updates the project budget.

#### **Eric Vezeau, P.Eng. – Project Administrator**

Eric is a Professional Engineer licensed in the Province of Ontario and is a Project Administrator for the CGV team. As Project Administrator, he is responsible for the overall coordination and preparation of contractual documents and communications for construction projects. He is also responsible for coordinating and managing our quality assurance program. Eric negotiates and issues subcontracts and major purchase orders to reach cost effective agreements and monitors their progress and schedule. His role as Project Administrator also consists of coordinating training for workers requiring specialized licenses and certifications, including determination of safety procedures for specific tasks, handling of dangerous goods, etc.

### **Section 3 – Qualifications, Expertise, Similar Projects**

Over the past few years, CGV Builders has successfully delivered a multitude of design-build projects across Northern Ontario – all of which were completed on time, and on budget (generally in a fixed-price, turn-key fashion). Several of these design-build projects are similar in size and in nature to the proposed Haileybury Fire Station in Temiskaming Shores (i.e., pre-engineered steel buildings, commercial garages, etc.) Below is a short list of similar design-build project completed in the past three years:

- Lillabelle Lake Aircraft Hanger (4,800 sq.ft pre-engineered steel building), 2020 – Cochrane, ON
- Certarus Office & Garage Building (6,200 sq.ft pre-engineered steel building), 2020 – Timmins, ON
- The Bucket Shop Phase II (Two - 11,000 sq.ft pre-engineered steel buildings), 2020 – Timmins, ON
- Georgia Pacific Vacuum Truck Garage (1,000 sq.ft pre-engineered steel building), 2017 – Englehart, ON
- Mill-Ore Industries Fabrication Shop (2,500 sq.ft pre-engineered steel building), 2017 – Timmins, ON

In addition to the above, we would like to highlight a few recent projects that were completed using a design-build approach - where CGV Builders was the Prime Consultant.

#### **Project No. 1: The Bucket Shop – Office and Fabrication Shop**



**Location:** Timmins, ON  
**Client:** The Bucket Shop  
**Completion Date:** January 2017  
**Project Type:** Design-Build (CGV Prime Consultant)

CGV Builders was retained by The Bucket Shop to design and build an office / research and fabrication facility ("the Facility"). The Bucket Shop is a Timmins,



Ontario based bucket repair and manufacturing company that produces specialty buckets for excavators, scoop trams, etc. for the mining industry.

The Facility is a 12,000 square-foot office building with an attached 65,000 square-foot fabrication shop. The office building is a wood framed structure, and the fabrication shop is a **pre-engineered steel building**. The new fabrication shop contains nine overhead cranes ranging from 15 to 75 tons, a heavy bay (to accommodate large rock trucks weighing approximately 130,500 kg), several welding stations and fifteen pieces of metal fabrication equipment; the largest consists of a 62,000-kilogram hydraulic press brake with an output capacity of 780 tons.

### **Project No. 2: Peter Sutherland Sr. Hydroelectric Development Project – Powerhouse Building & Auxiliary Buildings**



**Location:** New Post Creek, ON  
**Client:** Kiewit/Aecon Partnership  
**Completion Date:** February 2017  
**Project Type:** Design-Build (CGV Prime Consultant)

CGV Builders was retained by Kiewit / Aecon to design and build a powerhouse building (“the Facility”) as part of the Peter Sutherland Sr. Hydroelectric Development project for Ontario Power Generation and Taykwa Tagamou Nation. The contract also included the design and

construction of a spillway intake building, an intake gate hoist building, and an electrical service building.

The Facility is a 12,000 square-foot structural steel building that houses two 14 MW horizontal axis water turbines, two synchronous generators and a 100-tonne overhead crane. The turbines use a portion of the water flowing down New Post Creek to generate electricity by moving water 250 meters through a penstock to the powerhouse building located on the edge Abitibi River. The intake gate hoist building is an 800 square-foot structural steel building with a removable roof hatch. The spillway intake building, and the electrical service building are both 600 square-foot in size and consist of metal stud framing for the walls and roof.

### **Project No. 3: Super 8 Hotel**



**Location:** Moosonee, ON  
**Client:** Complex RE Partnership (Division of Moose Cree Group of Companies)  
**Completion Date:** September 2020  
**Project Type:** Design-Build (CGV Prime Consultant)

CGV Builders was retained by Complex RE Limited Partnership (Division of Moose Cree Group of Companies) to design and build a new 40-room hotel (“the Hotel”) in Moosonee, ON. The Hotel is part of the Super 8 brand chain

of hotels by Wyndham Hotels & Resorts – Moosonee.

The Hotel is a 26,000 square-foot two storey wood framed building that offers 40 suites, and features several amenities including a modern foyer, a boardroom, and a breakfast area with kitchen. The hotel is centrally located and is the first of its kind in the community.

## Section 4 – Preliminary Schedule

Should we be successful with our submission the CGV has the capacity and resources to keep up with the following schedule:

- Mid-April
- Late April
- Award
- Pre-Engineered Steel Building Order
- Working Drawings
- Shop Drawings / Procurement
- Mobilization
- Foundation & Site Grading
- Pre-Engineered Steel Building Erection
- Interior Finishing
- Hand over

Submission  
Evaluation period  
Early May  
Early June  
End of June  
July – August  
Mid-August  
Mid-August – End of September  
Month of October  
November and December  
Before Christmas 2021

## Section 5 – Form of Quotation







## Form of Quotation

### City of Temiskaming Shores RS-RFP-002-2021

#### Haileybury Fire Station – Design Build

Each Submission should contain the legal name under which the Proponent carries on business, telephone number and email address, as well the name or names of appropriate contact personnel which the City may consult regarding the Quotation.

We, the undersigned, understand and accept those specifications, conditions, and details as described herein, and, for these rates/prices offer to furnish all documentation, materials and labour as are required to satisfy this Request for Proposal.

Description	Amount	
Lump sum price for completion of required work as outlined in RFP (Exclusive of HST)	\$ 2,060,000.00	+ HST

Optional Pricing Items (Exclusive of HST)		
Natural Gas, in-floor heating	\$	40,000.00
Asphalt Apron	\$	15,000.00
Mid-Span Brick Cladding on Front Wall	\$	35 / sqf .00

We/I, CGV Builders Inc.

(Registered Company Name/Individuals Name)

Of, 56 Connaught Avenue, Cochrane, ON P0L 1C0

(Registered Address and Postal Code)

Business:

Phone Number ( 705 ) - 272-5404

Email Address [REDACTED]



Bidder's Authorized Official:

Robert Vezeau

Title:

Vice-President

Signature:

Date:

April 8-2021

**7. Appendix 4**

A layout of the proposed lot with approximate elevation, grading and sizing shall be added to RS-RFP-002-2021 as Appendix 4 and included at the end of this addendum.

**End of Addendum 01**

**Declaration:** We hereby acknowledge receipt of the above referenced Addendum and it shall be incorporated into our Request for Proposal submission.

**Company:** CGV Builders Inc

**Signature of Authorized Representative:** 

**Name/Title [print]:** Robert Vezeau / Vice President



## Section 6 – List of Proposed Sub- Contractors





**City of Temiskaming Shores**  
**RS-RFP-002-2021**  
Haileybury Fire Station – Design Build

**List of Proposed Sub-Contractors**

Name	Address	Component
Helm & Sons Mechanical		Mechanical
Pedersen Construction		Civil
G. Belanger Construction		Architectural
Licop Electric		Electrical
CGV Builders Inc		Masonry
Steelway		Pre Engineered Steel Building
BB Gunn Contracting		Building Erector

I / We verify that the information provided above is accurate and that the individuals are qualified, experienced operators capable of completing the work outlined in this Quotation document.

Signed by Company Official

**Robert Vezeau**

Printed

Signed

## Section 7 – Non-Collusion Affidavit







**City of Temiskaming Shores**  
**RS-RFP-002-2021**  
Haileybury Fire Station – Design Build

**NON-COLLUSION AFFIDAVIT**

I/ We Robert Vezeau the undersigned am fully informed respecting the preparation and contents of the attached quotation and of all pertinent circumstances respecting such bid.

Such bid is genuine and is not a collusive or sham bid.

Neither the bidder nor any of its officers, partners, owners, agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, firm or person to submit a collective or sham bid in connection with the work for which the attached bid has been submitted nor has it in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached bid or of any other Bidder, or to fix any overhead, profit or cost element of the bid price or the price of any bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Temiskaming Shores or any person interested in the proposed bid.

The price or prices quoted in the attached bid are fair and proper and not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

The bid, quotation or proposal of any person, company, corporation or organization that does attempt to influence the outcome of any City purchasing or disposal process will be disqualified, and the person, company, corporation or organization may be subject to exclusion or suspension.

Signed

Company Name

CGV BUILDERS INC.

Title

Vice President

## Section 8 – Conflict of Interest Declaration





**City of Temiskaming Shores**  
**RS-RFP-002-2021**  
Haileybury Fire Station – Design Build

**Conflict of Interest Declaration**

Please check appropriate response:

- ☒ I/we hereby confirm that there is not nor was there any actual, or perceived conflict of interest in our quotation submission or performing/providing the Goods/Services required by the Agreement.
- ☐ The following is a list of situations, each of which may be a conflict of interest, or appears as potentially a conflict of interest in our Company's quotation submission or the contractual obligations under the Agreement.

List Situations:

NA

In making this quotation submission, our Company has / has no (*strike out inapplicable portion*) knowledge of or the ability to avail ourselves of confidential information of the City (other than confidential information which may have been disclosed by the City in the normal course of the quotation process) and the confidential information was relevant to the Work/Services, their pricing or quotation evaluation process.

Dated at Cochrane, ON this 15<sup>th</sup> day of APRIL, 2021.

FIRM NAME:

C6U BUILDERS INC.

BIDDER'S AUTHORIZED OFFICIAL:

Robert Vezeau

TITLE:

Vice President

SIGNATURE:



## Section 9 – Proof of General Liability Insurance

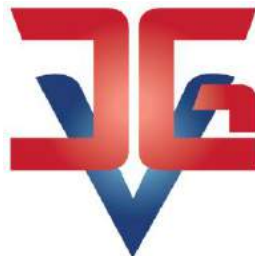


## Section 10 – Quality Assurance Plan



# **Quality Assurance Plan**

(CGV Builders Design-Build Projects)



## **1.0 Introduction**

The information, templates and examples provided in this dossier represent a Quality Assurance Plan (“QAP”) developed by CGV Builders (“CGV”) and for a typical design-build construction project.

The QAP will be revised and modified at the outset of each project to ensure that the work is completed in compliance with the project specific quality requirements of the Client and other project shareholders.

This dossier outlines the practices and procedures that CGV Builders and affiliated subcontractors / suppliers will undertake for all design activities, fabricating operations, construction processes, preparation of documents and inspections / testing with regard to quality control.

The QAP and all related documents will be maintained and revised for the duration of the project; as applicable.

## **2.0 Quality Policy**

The CGV team is committed to quality excellence and will consistently strive to provide services that surpass client expectations. Project success will be guaranteed through knowledge, experience, strong relations with subcontractors / suppliers, use of best industry practices and a safe work environment for our employees and all those that could be affected by our actions. Quality is a requirement, not only in the final product, but in our relationships with clients and business partners.

## **3.0 Project Quality Control Implementation**

### **3.1 Scheduling and Work Planning**

#### **3.1.2 Pre-Construction Meeting**

A pre-construction meeting will be held on a date, time and location that has been mutually agreed upon by the Client, CGV and all other parties involved in the construction of the project.

The meeting will outline key elements of the project and will establish the necessary roles and responsibilities of all participating parties.

Critical items to be discussed will include, but not limited to:

- establishing construction phase procedures,
- identifying project milestones,
- determining the work that will require inspections and / or testing, including hold points,
- establishing lines of communication,



- forming key contacts,
- reviewing project schedules and submittal requirements,
- discussing existing site conditions and identifying potential safety concerns,
- creating / documenting formal meeting minutes.

### **3.1.3 Work Plans**

A detailed work plan will be prepared for each major project task. The work plan will describe the proper procedures that must be undertaken to achieve a compliant outcome. Work plans will be completed no later than one week prior to the pre-activity meeting and will consist of a work sequence, a list of materials, a safety plan, a list of activity milestones, a sign-off checklist, a list of required inspections and / or testing and a thorough description of the responsibilities for all parties involved. Work plans will be revised and modified as required throughout the project.

A sample work plan is included in Appendix A of this QAP.

### **3.1.4 Work Plan Sign-Off Checklist**

A sign-off checklist will be included at the end of each work plan. The field crew quality representative will sign-off on each checklist item to confirm that all tasks that are specified in the work plan have been completed. A copy of each work plan sign-off checklist will be returned to the CGV head office for review and documentation.

### **3.1.5 Pre-Activity Meetings**

Pre-activity meetings will take place 24-hours prior to the start of each new activity. The intent is to communicate the details and procedures that are specified in the activity's work plan. Attendees shall include the project superintendent and / or supervisor, the quality assurance officer and all CGV employees and sub-trades that will participate in the activity. The project superintendent or supervisor will be responsible for coordinating and leading pre-activity meetings.

### **3.1.6 Weekly Schedules**

Weekly schedules will outline the planned project activities for the upcoming two-week period. The schedules will be prepared in Gantt chart format. The schedules will be communicated to the project team during weekly progress meetings. Typical information can include planned work for the upcoming period, identifying new activities, upcoming pre-activity meetings, required hold points and / or inspections, among others. All revisions to the weekly schedule will be promptly communicated to all parties and a revised copy of the schedule will be circulated.

The Client will be notified well in advance of all weekly progress meetings. A sample weekly schedule is included in Appendix A.

### **3.1.7 Job-Forecasting**

Project quality management personnel will meet regularly to examine the schedule and discuss future activities that could potentially result in setbacks to the project. These can include construction activities, deliverables, inspections, and others. Preparatory actions and procedures will be determined in order to mitigate the risk of complications or delays to the project schedule.

## **3.2 Inspection and Testing**

### **3.2.1 Inspection and Test Plans (ITP)**

An Inspection and Test Plan ("ITP") will be prepared for all major activities performed by CGV and collaborating sub-trades throughout the duration of the project. ITP's will identify the elements within an activity that require inspection, confirmation and / or verification before initiating subsequent work activities. Key components of the ITP include date / time of the inspection, inspector name with credentials, type of inspection / test, inspecting / testing procedure requirements, acceptance criteria, cause of rejection, commentary on results, corrective actions required and reference drawings / specifications. ITP's will ensure that all work is completed in accordance with project standards, specifications, and applicable codes.

A sample ITP is included in Appendix A.

### **3.2.2 Daily Quality Report**

Daily Quality Reports will be completed by the project Quality Assurance Officer and will be used to summarize the work performed on-site and outline the observations that pertain to quality control. Other items can include weather/site conditions, inspections, deliveries and a list of sub-trades performing work on-site. A sample daily inspection report is included in Appendix A.

### **3.2.3 Witness Point**

A witness point is an identified point during the execution of the project that may require a consultant and/or a licensed professional engineer to review, witness or inspect the process of work. The succeeding activities after witness may proceed and no approval is required.

All preliminary witness points for this project have been established and are listed in Appendix A.

### **3.2.4 Hold Points**

A hold point is a mandatory verification point during the construction phase that requires the approval of a consultant, a licenced professional engineer or a municipality inspector in order to proceed with the succeeding activity. Once the quality of the completed work has been verified and approved, the hold is released by means of inspection request approval.

All preliminary hold points for this project have been established and are listed in Appendix A.

### **3.2.5 Inspection Request**

An inspection request will be submitted to the appropriate professional no less than 3 days prior to attaining a hold point. In the event that corrective actions are required following an inspection, the instruction to rectify will need to be addressed/released within a 3-day maximum turnaround period. This turnaround period is required to avoid any significant delays to the project schedule.

### **3.2.6 Substantial Inspection**

As soon as the contractor believes substantial completion has been achieved, they may apply for a Substantial Inspection. This inspection conforms to the Construction Lien Act and requires all Life Safety Items and a 97% completion (more information in the Act). This will begin the process for holdback release.

## **3.3 Receipt of Material**

### **3.3.1 Material Receipt Verification Form**

The overall condition of the materials delivered to the construction site will be visually assessed in order to confirm that they are compliant based on material specifications.

The assessment results will be documented in a Material Receipt Verification Form along with field notes and other pertinent information. Material characteristics that can be examined include: appropriate dimensions, quantities, overall condition, special features and markings, among others. Any non-conforming material will be handled as instructed in Section 4.3.5.

A sample Material Receipt Verification Form is included in Appendix A.

### **3.3.2 Storage of Material**

All material will be stored in an environment that will ensure that the preservation of its quality and integrity is maintained. On-site material storage areas will be coordinated with the Client and storage methods/procedures shall conform to manufacturer recommendations and industry standards. Stored material will be re-verified prior to use in order to ensure the condition coincides with the information described in the Material Receipt Verification Form.

### **3.3.3 General Procurement**

A schedule listing all key delivery dates for the project will be available on the CGV Builders electronic document management system and will be revised as necessary.



### **3.3.4 Non-Conforming Work or Material**

All work and material not conforming to contract requirements will be identified and mitigation procedures will be established. The subject matter will be documented in a Non-Conformance Report.

### **3.3.5 Non-Conformance Mitigation Procedures**

The non-conformance work and/or material rectification process is as follows:

1. Non-conforming work and/or material are identified,
2. A Non-Conformance Report is issued and is accompanied with commentary and a proposed resolution,
3. Client to approve or reject the proposed path forward,
4. In the event of a rejected proposal, both parties shall collaborate until an acceptable resolution is mutually agreed upon,
5. The approved resolution is executed,
6. Required inspections are performed.

### **3.3.6 Preventive Action Process**

The preventive action process involves identifying the source of non-conforming work and establishing guidelines that will help prevent similar situations from occurring in the future.

## **3.4 Continual Improvement of Quality Management System**

CGV Builders have established programs such as management reviews and quality audits that aim to continuously improve the effectiveness and efficiency of the quality management system. Quality management personnel is responsible for ensuring that all employees and subcontractors are aware of the importance of continuous improvement and are actively engaged in its implementation with regard to the performance to the work.

### **3.5 Site and Safety Issues**

#### **3.5.1 Health and Safety Policy**

CGV Builders is committed to protecting the health and safety of all employees. To achieve this, our employees are required to work in a safe manner and are responsible for reporting any unsafe/unhealthy conditions to their supervisors, co-workers, Health and Safety Representative.

Management is responsible for ensuring that appropriate steps have been taken to control or eliminate all potential hazards and to ensure that safe and healthy work conditions are maintained throughout our work facilities.

Any contractors/subcontractors hired to perform work or to provide a service to CGV Builders is responsible for ensuring that their workers work in compliance with the regulations specified in the Occupational Health and Safety Act and any other legislation relating to the work/services being provided.

The CGV Builders Health and Safety Manual is included in Appendix A.

## **4 Quality Documentation**

### **4.2 Document Management System**

All project documentation including the items stated in Section 4 will be electronically stored/maintained by CGV Builders and made accessible to the Client. The web-based document management system that will be employed is Dropbox.

### **4.3 Retention of Documents**

All quality related documents for this project will be retained for a period of 7 years following substantial completion. This includes both electronic and hard copy documents.

### **4.4 Shop Drawings**

Shop drawings that require submission, review and approval will be specified in the Shop Drawing Management Schedule. The schedule can be accessed using the online document management system described in Section 5.1 and its content will be revised as required. A sample Shop Drawing Management Schedule is included in Appendix A.

#### **4.5 Quality Control Turnover Package**

A complete package of all quality management plan forms and reports will be assembled and bound. This package will include, but is not limited to; ITP's, Work Plans, Daily Quality Reports, Non-Conformance Reports, etc.

#### **4.6 Close Out Documents**

A complete package of all administration items will be compiled and bound. The package will include, but is not limited to; as-built drawings, permits, maintenance manuals, specifications, etc.

### **5 Communications**

#### **5.2 Internal Communications**

Effective communication practices within the CGV Builders management team will be ensured through weekly team meetings. These meetings will cover overall project objectives and risk assessments. Daily conference calls with the site superintendent are essential for daily activities. Email correspondence will be documented and stored in directories accordingly.

#### **5.3 Client Communications**

Client communications will be maintained throughout the duration of the project. Continuous communication efforts will be ensured through regular coordination meetings on-site and at management level to discuss project concerns. Weekly conference calls will be implemented to ensure roll out of project. Substantial meetings can be arranged if the client or contractor deems appropriate for emergency items.

### **6 Quality Management Personnel**

The responsibilities and authorities of key quality management personnel are defined in the following sections.

## **6.2 Quality Management Organizational Chart**

All CGV Builders quality management personnel described in Section 7.0 are listed in the name-specific organizational chart in Appendix A. Each position is accompanied with relevant qualifications.

## **6.3 Quality Manager (QM)**

The Quality Manager is responsible for the overall management and coordination of all quality control activities performed by or on behalf of CGV Builders. Qualifications are attached in Appendix A. QM responsibilities and authorities:

- Ensure that the Quality Assurance Plan is implemented and maintained.
- Ensure that quality management personnel responsibilities and authorities are communicated and understood.
- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart.
- Identify the activities and processes that require ITP's, work plans, hold points etc. and develop/implement these documents.
- Coordinate with quality assurance officer to ensure that ITP's are scheduled and performed.
- Manage and coordinate all activities related to the quality of material fabrication, material delivery, material assembly/erection and all required inspections and testing.
- Develop mitigation procedures for all non-conforming work and/or material.
- Establish all hold points and witness points for the project.
- Provide all necessary resources to meet initial quality objectives.
- Responsible for approving and storing all documents pertaining to quality control.
- Main point of contact for all quality related inquiries.

## **6.4 Quality Assurance Officer (QAO)**

The Quality Assurance Officer is responsible for overseeing day-to-day operations on the construction site and ensuring that quality standards are met. Qualifications are attached in Appendix A. QAO responsibilities and authorities:



- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart,
- Participate in pre-activity meetings and communicate the ITP's that will be performed for the activity,
- Collaborate with project superintendent/supervisor with regards to weekly scheduling to ensure quality control requirements are met.
- Contribute quality related elements to all required project work plans.
- Ensure ITP's are performed and documented,
- Responsible for assessing non-conforming work and material and preparing a Non-Conformance Report accompanied with mitigation procedures.
- Submit inspection requests prior to attaining hold points,
- Coordinate and facilitate the quality assurances of all manufacturers, expeditors and sub-trades.

### **6.5 Engineering Manager (EM)**

The Engineering Manager is responsible for managing activities related to the overall design of the project. Qualifications are attached in Appendix A. EM responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart,
- Manage operations of civil, structural, mechanical and electrical departments,
- Establish working relationship with the client on matters relating to design,
- Responsible for assuring that all required engineering inspections are performed and approved by qualified personnel.

### **6.6 Project Manager (PM)**

The Project Manager is responsible for the overall planning, coordination, control and execution of the project. Qualifications are attached in Appendix A. PM responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart,
- Manage all operations related to the execution of the project,
- Prepare and maintain project schedule,
- Collaborate with quality manager to develop mitigation procedures for non-conforming work and/or material,
- Develop a list of activities that will require a pre-activity meeting,
- Main point of contact for all project related inquiries.

## **6.7 Site Superintendent/Supervisor (SS)**

The Site Superintendent/Supervisor is responsible for overseeing all on-site operations and controlling the short-term schedule. SS Qualifications are attached in Appendix A. SS responsibilities and authorities:

Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart.

- Coordinate quality related inspections with daily operations performed by CGV Builders and sub-trades.
- Prepare Daily Quality Reports,
- Schedule and lead pre-activity meetings.
- Develop and distribute weekly schedules that outline project activities for the following two week period.
- Control and maintain short term scheduling of the project.
- Ensure that sub-trades/suppliers are provided with the most recent set of drawings and project specifications.
- Submit inspection requests prior to attaining hold points,
- Ensure subcontractor field operations meet project quality objectives,
- Verify the overall condition/characteristics of all material delivered on-site and confirm that storage areas are suitable. Document this information in a Material Receipt Report,
- Responsible for subcontractor coordination.
- Promptly communicate on-site issues and all non-conforming material and work to quality management personnel.
- Responsible for timely submitting inspection requests.
- Main point of contact for all on-site inquiries.

## **6.8 Project Administrator (PA)**

The Project Administrator will control, maintain and coordinate all contractual and project related documentation for the entire project. The PA will correspond with the Project Manager and the Quality Assurance Manager on a day to day basis to ensure project administration activities are in compliance with the Quality Management Plan. Qualifications are attached in Appendix A. PA responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart,
- Maintain the document management system,
- Responsible for processing project documents,

- Expedite flow of project communication and deliverables,
- Main point of contact for all administration related inquiries.

## **6.9 Manufacturing Manager (MM)**

The Manufacturing Manager is responsible for managing daily operations and performance of the manufacturing facility. Qualifications are attached in Appendix A. MM responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart.
- Oversee the manufacturing process of materials and ensure that they meet design, quality and safety requirements.

## **6.10 Quality Control Inspectors (QCI)**

Third party Quality Control Inspector's are responsible for performing required inspections during all phases of the project. Qualifications are attached in Appendix A.

QCI responsibilities and authorities:

- Perform all required ITP's and prepare related documentation,
- Recognize non-conforming work and/or material and promptly inform CGV quality management personnel.

## **6.11 Expediter**

The Expediter is responsible for the safe and timely transportation of materials to the construction site. The expediter's responsibilities and authorities:

- Ensure that materials are delivered in-line with the project schedule.
- Ensuring the safe transportation and surveillance of materials.
- Verify that shipment contains appropriate materials and quantities.

## Section 11 – Presentation Drawings

The presentation drawings issued as part of this proposal represent an illustration of the entire potential development. Our base bid includes for only the items referred to in the request for proposal. Our base bid does not include for any asphalt or concrete curbs and sidewalks for the parking lot and entrances. We have included for some concrete sidewalks along the building for wheelchair accessibility.

SECTION 2.1.



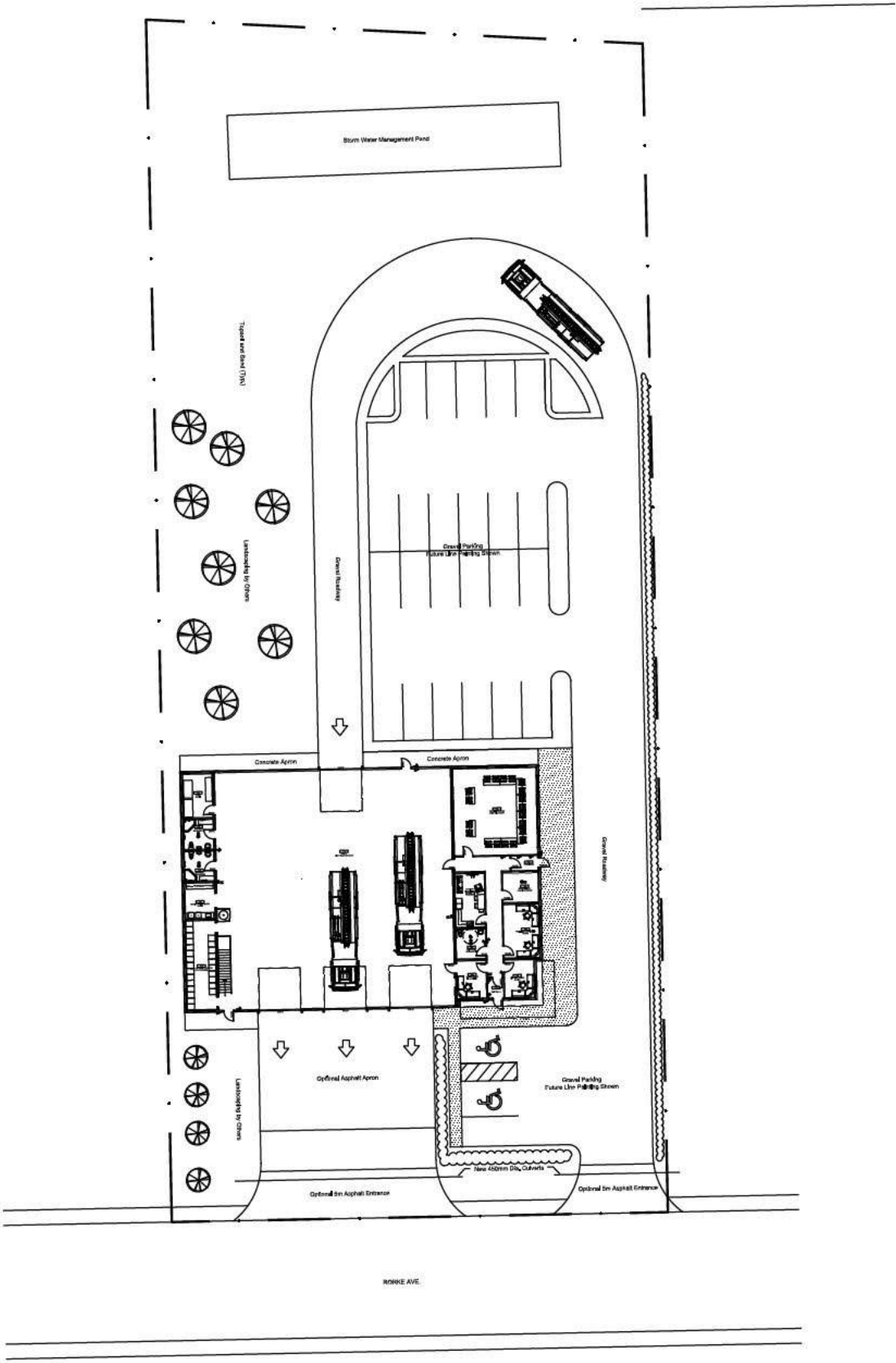
Aerial Axonometric View



SECTION 2.2.

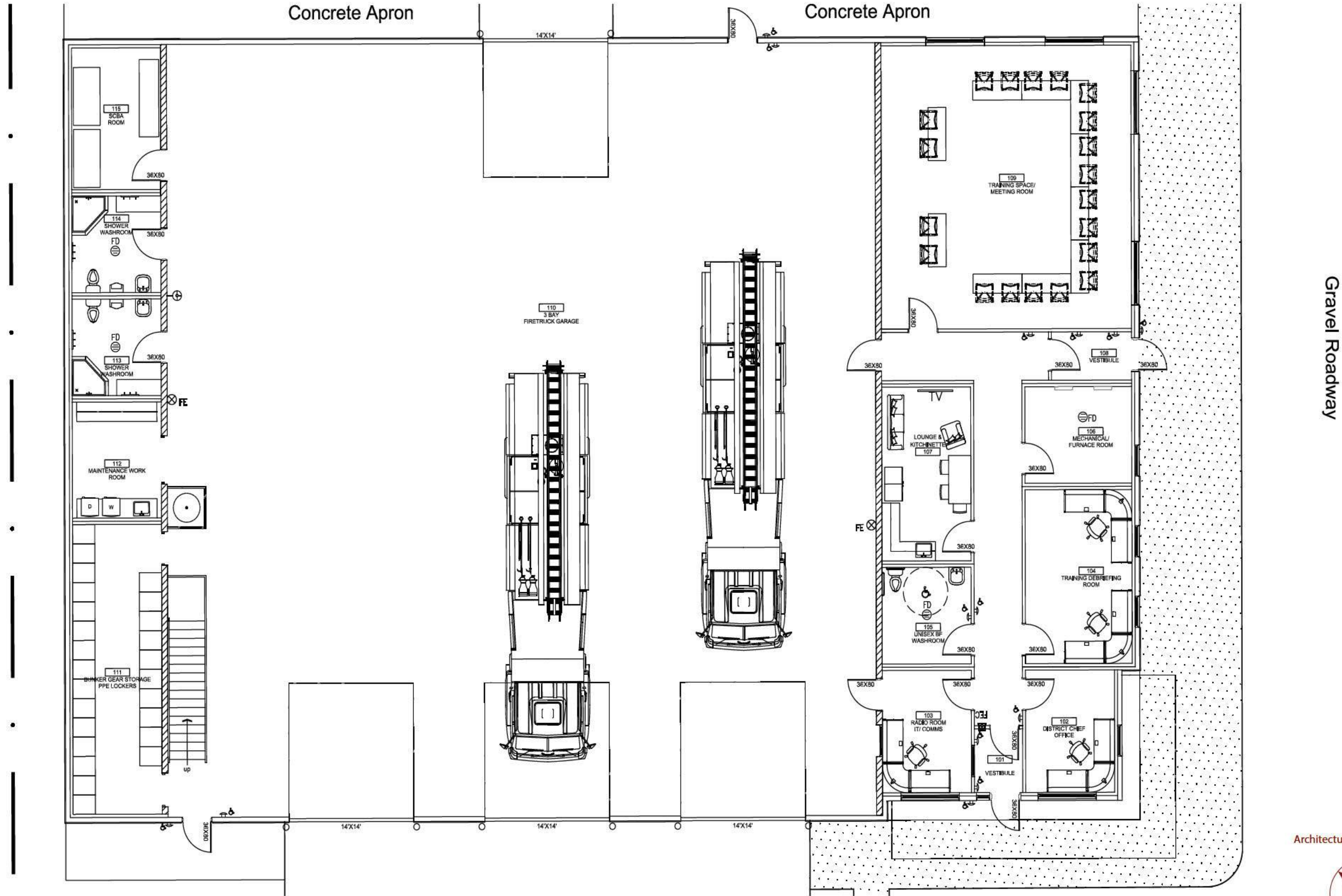


Site Context



Architectural Site Plan

SECTION 2.3.

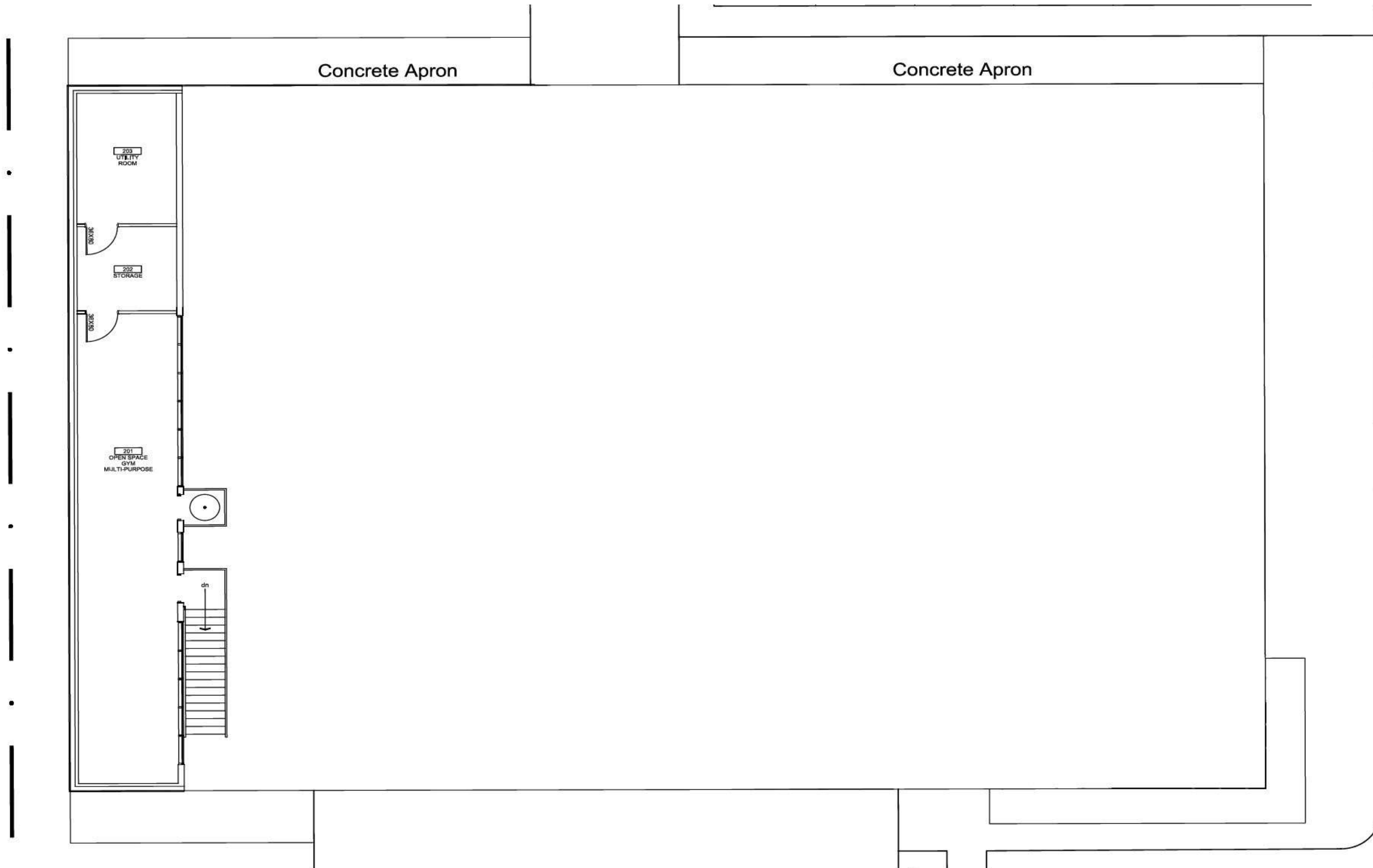


Gravel Roadway

Architectural Level 100 Plan







Architectural Level 200 Plan





SECTION 3.1.



Main Entrance Perspective



SECTION 3.2.



Front Perspective



Front Elevation



SECTION 3.3.



Main Entrance Close-up



Rear Entrance Perspective

## Section 12 – Foundation Design & Interior Wall Assemblies





NOTES:

[illegible]SEAL:

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THIS DRAWING IS NOT TO BE SCALED

HAILEYBURY FIRE  
STATION - DESIGN  
BUILD

TITLE: FLOOR PLAN, CONSTRUCTION ASSEMBLIES

CGV PROJECT #: #####

DATE: 20##-##-##

DRAWN BY:

Author

CHECKED BY:

Checker

SHEET #: 1/2

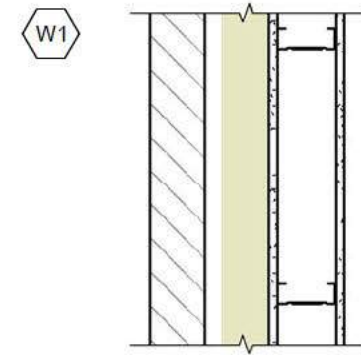
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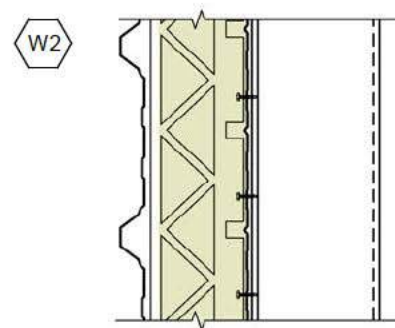
**W1**

**AT STONE/BRICK VENEER**

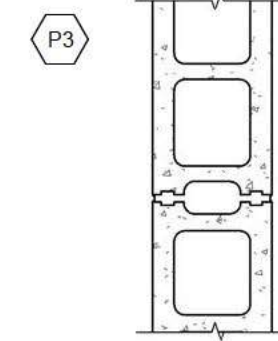
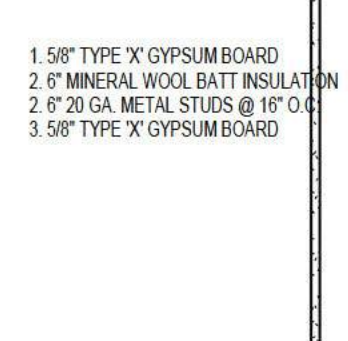
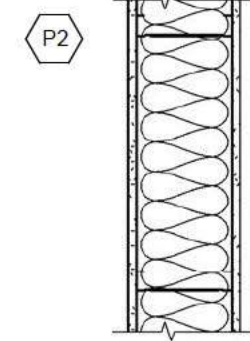
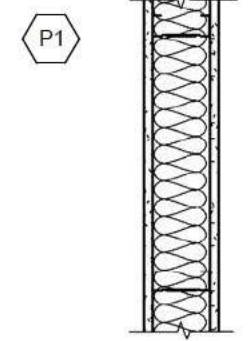
1. STONE/BRICK VENEER
2. AIR SPACE
3. 3" CLOSED CELL SPRAY FOAM
4. 1/2" DENS GLASS SHEATHING
5. R-14 BATT INSULATION
6. 3/8" 20 GA. METAL STUDS @ 16" O.C.
7. 5/8" GYPSUM BOARD



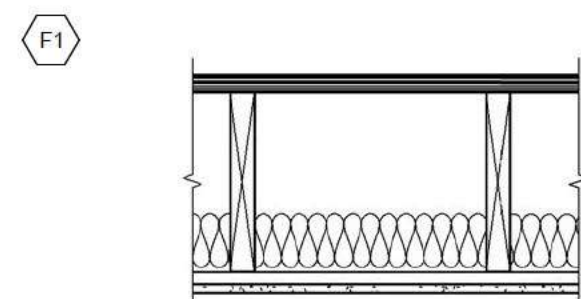
1. 26 GA. STORMSEAL PRE-FIN. WALL PANEL
2. 5 1/2" CLOSED CELL SPRAY FOAM BETWEEN
3. 6" STAND-OFF ZEE
4. 26 GA. LINERSEAL PRE-FIN. LINER PANEL
5. 8" METAL ZEE GIRTS (EXPOSED)



1. 5/8" TYPE 'X' GYPSUM BOARD  
 2. 3" MINERAL WOOL BATT INSULATION  
 3. 3.5/8" 25 GA. METAL STUDS @ 16" O.C.  
 3. 5/8" TYPE 'X' GYPSUM BOARD



1. PAINT FINISH
2. 200mm REINF. CONCRETE BLOCK
3. PAINT FINISH



1. FLOOR FINISH
2. 5/8" T & G PLYWOOD (SCREWED & GLUED)
3. 3" MINERAL WOOL BATT INSULATION
4. 2" x 12" WOOD FLOOR JOISTS @ 16" O.C.
5. 1" X 4" WOOD STRAPPING @ 16" O.C.
6. 5/8" TYPE 'X' GYPSUM BOARD

VINYL FLOOR TILES - ROOMS (102, 103, 104, 106, 107, 109, 112, 115, 202, 203)

JOHNSONITE RUBBER FLOORING - ROOMS (201)  
PORCELAIN TILES - ROOMS (101, 105, 108, 113, 114)

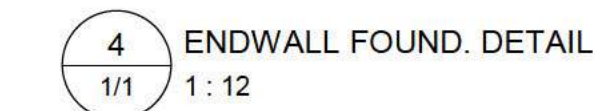
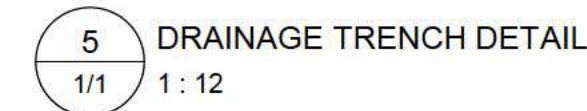
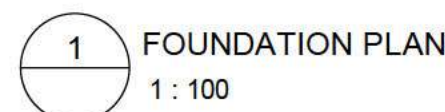
SUSPENDED ACOUSTICAL CEILING - ROOMS (101 TO 109)

GYPSUM BOARD CEILING - ROOMS (111 TO 115)

PRE-FIN. LINER PANEL - ROOMS (110 & 201 TO 203)

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# RS-RFP-002-2021 Haileybury Fire Station - Design Build



**CGV BUILDERS INC.**

April 26, 2021

Authored by: Robert Vezeau, Vice President.  
56 Connaught Avenue, Cochrane, ON P0L 1C0

# Clarifications #1

1. There is no mechanical information provided in the submission. Are you able to provide the detailed scope of work as indicated in the submission?

## HVAC - Office / Meeting room Area

- Ruud U96V 80,000 BTU Nat Gas furnace with 2 stage burner and VS fan 1-Ruud RA16 4 ton A/C with cased coil and refrigeration piping
- Supply air duct system with lay-in ceiling diffusers and ceiling cavity for return as per HVAC duct design.
- Econet WIFI thermostat
- 1-Fantech Hero200 HRV (energy star) 1-Fantech Ecotouch control
- 1-HRV duct system
- Dryer vent to exterior

## HVAC -Locker , Showers ,SCBA room

- 1-Fantech Hero200 HRV
- 1-Fantech Ecotouch control
- 1-HRV duct system

## HVAC - General

- Natural Gas piping system from meter location to service furnace, boiler, water heater and, generator
- Vehicle Exhaust Gas System not included.

## HVAC - Hydronic Heat system **OPTIONAL** Refer to add on price.

- 1-Navien NFB-175 High Efficiency wall hung boiler with outdoor reset
- In-floor heat system for SCBA room, washrooms, maintenance room and locker room as per HVAC Hydronic design
- 1-Hydronic baseboard heater system upper floor - each heating zone controlled by individual thermostats
- 40 Gal Indirect fired water heater to service bathrooms and laundry - glycol additive for freeze protection



## PLUMBING

Rough-in and completions for the following fixtures

- 3-Proflow comfort height toilets
- 1-Proflow urinal with auto flush valve
- 3- Proflow china drop-in basins with Moen faucet
- 2-Longevity A38NA Neo angle shower with pivot door and Moen pressure balance faucet
- 1-Kindred Single Bowl stainless steel kitchen sink with Moen single lever faucet 1-Oatey recessed washer box with water hammer arrestor
- 1-Mop sink and faucet
- Laundry sink and faucet
- All DWV piping as per code.
- Water service /meter piping L copper
- Fixture distribution piping PEX
- Pipe insulation as required.

## PLUMBING - Specialty Items

- 1-Rheem 40 gal power vent Nat Gas water heater to service kitchen and unisex washroom
- 1-Uline H-5101 Guardian Emergency Shower / Eyewash Station
- Zurn oil interceptor to intercept apparatus bays trench drains.
- Interior water hydrant for pumper and tanker filling
- 1-Exterior water hydrant for filling fire and public works vehicles 2-General purpose exterior frost proof hose bibbs
- 4-General purpose interior hose bibbs in apparatus bays
- Pump chamber and sewage pump for force main connection not included.

2. On one of your layouts of the proposed site it indicates there will be a storm water management pond at the back of the property. Was this for illustrative purposes only or has some consideration already been given for how storm water will be managed on the property?

Our proposal includes for the design and construction of a storm water management system. We haven't performed a detailed design but our intentions are as follows:

- Supply & install 100m<sup>3</sup> capacity storm water management pond at the west side of the property draining to south and north lot line swales.
- Supply & install two 450mm diameter entrance culverts to provide drainage from the north lot line swale to the existing ditch inlet catch basin at the southeast corner property line.
- Clean out existing property swales to ensure positive drainage to the southeast ditch inlet catch basin.

3. You have proposed a reinforced raft foundation and indicated that may change as more detailed design is conducted. What is the estimated likelihood that this will be the case? Have you utilized this foundation type for similar past projects? What kind of budget change would be expected if the foundation type changed?

The proposed raft foundation will be our approach. We have used this type of foundation many times and consider it a proven system. Once we get into detailed design if for some reason, we must consider a shallow type of foundation it will come at no additional expense to the project.

4. Please provide detailed cv's for the four members of the project team as listed in Section 2.

CV's attached.

5. The quality assurance plan in section 10 refers to a number of documents in appendix A which doesn't appear to be included. Can you include that appendix for review?

Updated Document attached.

6. Is there anything not included in the original submission that would help us in our review?

Missing was the detailed HVAC and Plumbing scope of work. At the time of closing, our local mechanical contractor had to take some time off work for personnel reasons which is why our original submission was missing HVAC & Plumbing details.

If there are any other questions, or concerns with our original proposal please let know and we'll provide additional information or clarifications.

Regards,

Bobby Vezeau, P.Eng  
Vice President



Tel: [REDACTED]

Cell: [REDACTED]

Fax: 705-272-3453

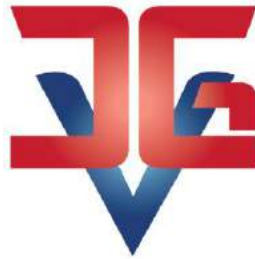
Email: [REDACTED]

Website: [www.cgvblders.ca](http://www.cgvblders.ca)

I 4/26/2021

# Quality Assurance Plan

(Template - Design Build Projects)



## **1.0 Introduction**

The data, information and examples portrayed in this dossier represent a Quality Assurance Plan developed by CGV Builders and prepared for review by the Client as it relates to the Design Build Project.

The Quality Assurance Plan has been established to ensure the project is completed in compliance and conforms to every aspect of the quality requirements described in the contract documents.

This manuscript outlines the practices and procedures that CGV Builders and affiliated subcontractors/suppliers will employ for all; design activities, fabricating operations, construction processes, preparation of documents and inspections/testing, with regard to quality control.

The Quality Assurance Plan and all related documents will be maintained and revised for the duration of the project, as applicable.

## **2.0 Reference Documents**

The following documents were compiled and utilized in the creation of this Quality Assurance Plan:

- TBD

## **3.0 Quality Policy**

The CGV team is committed to quality excellence and will consistently strive to provide services that surpass client expectations. Project success will be guaranteed through; knowledge, experience, strong relations with subcontractors / suppliers, use of best industry practices and a safe work environment for our employees and all those affected by our actions. Quality is a requirement, not only in the final product, but in our relationships with clients and business partners.

## **4.0 Project Quality Control Implementation**

### **4.1 Scheduling and Work Planning**

#### **4.1.2 Pre-Construction Meeting**

A pre-construction meeting will be held on a date, time and location that has been mutually agreed upon by; the Client, CGV Builders and all other parties involved in the construction of the design-build project.

The meeting will outline key elements of the project and will establish the necessary roles and responsibilities of all participating parties.

Critical items to be discussed include, but not limited to:

- establishing the construction phase procedures,
- identifying project milestones,
- work requiring inspections including hold points,
- lines of communication,
- forming key contacts,
- schedules and submittal requirements,
- site and safety issues,
- creation of formal Meeting Minutes on a recorded and documented basis,
- follow-up actions to be established and monitored during the project.

#### **4.1.3 Work Plans**

A detailed work plan will be prepared for each major project activity and will describe the procedures required to achieve a compliant outcome. Work plans will be completed no later than one week prior to the pre-activity meeting and will consist of, but are not limited to: a work sequence, a list of materials, a safety plan, a list of activity milestones, a sign-off checklist, a list of required inspections and a thorough description of responsibilities for all parties involved. Work plans will be modified and revised as required.

#### **4.1.2 Work Plan Sign-Off Checklist**

A sign-off checklist will be included at the end of each work plan. The field crew quality representative will sign-off on each checklist item confirming that all tasks specified in the work plan have been completed and meet requirements.

#### **4.1.3 Pre-Activity Meetings**

Pre-activity meetings will take place 24-hours prior to the start of each new activity. The goal is to communicate the details and procedures specified in the work plan. Attendees may include: the project superintendent/supervisor, the quality assurance officer and all CGV employees and sub-trades required to complete the activity. The project superintendent/supervisor will be responsible for coordinating and executing the pre-activity meetings.

#### **4.1.4 Weekly Schedules**

Weekly schedules will outline the planned project activities for the following two-week period. The content will be communicated through weekly progress meetings and can include: all planned work for the period, identification of new activities, upcoming pre-activity meetings, required hold points and/or inspections,

among others. All revisions to the weekly schedule will be promptly communicated to all parties and a revised copy of the schedule will be distributed.

#### **4.1.5 Job-Forecasting**

Project/Quality management personnel will meet regularly to examine the schedule and anticipate future activities that could potentially result in setbacks to the project. These can include construction activities, deliverables, inspections and others. Preparatory steps and procedures will be established in order to reduce the possibility of complications at all levels of the activity execution.

### **4.2 Inspection and Testing**

#### **4.2.1 Inspection and Test Plans (ITP)**

An Inspection and Test Plan shall be prepared for all major activities performed by CGV Builders and collaborating sub-trades throughout the duration of the project. ITP's will identify the elements within an activity that require inspection, confirmation and/or verification before initiating subsequent work activities. Key components of the ITP can include: date/time of the inspection, inspector name with credentials, type of inspection/test, inspecting/testing procedure requirements, acceptance criteria, cause of rejection, commentary results, corrective actions required and reference drawings/specifications. ITP's will ensure that all work is completed in accordance with project standards, specifications and applicable codes.

#### **4.2.2 Daily Quality Report**

Daily Quality Reports will summarize the work performed on-site and outline the observations that pertain to quality control. Other items can include weather/site conditions, inspections, deliveries, and a list of sub-trades performing work on-site.

#### **4.2.3 Witness Point**

A witness point is an identified point during the execution of the project that may require a consultant and/or a licensed professional engineer to review, witness or inspect the process of work. The succeeding activities after witness may proceed and no approval is required.



#### **4.2.4 Hold Points**

A hold point is a mandatory verification point during the construction phase that requires the approval of a consultant, a licenced professional engineer, or a municipality inspector in order to proceed with the succeeding activity. Once the quality of the completed work has been verified and approved, the hold is released by means of inspection request approval.

#### **4.2.5 Inspection Request**

An inspection request will be submitted to the appropriate professional no less than 3 days prior to attaining a hold point. In the event that corrective actions are required following an inspection, the instruction to rectify will need to be addressed/released within a 3-day maximum turnaround period. This turnaround period is required to avoid any significant delays to the project schedule.

#### **4.2.6 Substantial Inspection**

As soon as the contractor believes substantial completion has been achieved, they may apply for a Substantial Inspection. This inspection conforms to the Construction Lien Act and requires all Life Safety Items and a 97% completion (more information in the Act). This will begin the process for holdback release.

### **4.3 Receipt of Material**

#### **4.3.1 Material Receipt Verification Form**

The overall condition of the materials delivered to the construction site will be visually assessed in order to confirm that they are compliant based on material specifications.

The assessment results will be documented in a Material Receipt Verification Form along with field notes and other pertinent information. Material characteristics that can be examined include: appropriate dimensions, quantities, overall condition, special features and markings, among others. Any non-conforming material will be handled as instructed in Section 4.3.5.

#### **4.3.2 Storage of Material**

All material will be stored in an environment that will ensure that the preservation of its quality and integrity is maintained. On-site material storage areas will be coordinated with the Client and storage methods/procedures shall conform to manufacturer recommendations and industry standards. Stored material will be re-verified prior to use in order to ensure the condition coincides with the information described in the Material Receipt Verification Form.

#### **4.3.3 General Procurement**

A schedule listing all key delivery dates for the project will be available on the CGV Builders electronic document management system and will be revised, as necessary.

#### **4.3.4 Non-Conforming Work or Material**

All work and material not conforming to contract requirements will be identified and mitigation procedures will be established. The subject matter will be documented in a Non-Conformance Report.

#### **4.3.5 Non-Conformance Mitigation Procedures**

The non-conformance work and/or material rectification process is as follows:

1. Non-conforming work and/or material are identified,
2. A Non-Conformance Report is issued and is accompanied with commentary and a proposed resolution,
3. Client to approve or reject the proposed path forward,
4. In the event of a rejected proposal, both parties shall collaborate until an acceptable resolution is mutually agreed upon,
5. The approved resolution is executed,
6. Required inspections are performed.

#### **4.3.6 Preventive Action Process**

The preventive action process involves identifying the source of non-conforming work and establishing guidelines that will help prevent similar situations from occurring in the future.

#### **4.4 Continual Improvement of Quality Management System**

CGV Builders have established programs such as management reviews and quality audits that aim to continuously improve the effectiveness and efficiency of the quality management system. Quality management personnel is responsible for ensuring that all employees and subcontractors are aware of the importance of continuous improvement and are actively engaged in its implementation with regard to the performance to the work.

#### **4.5 Site and Safety Issues**

##### **4.5.1 Health and Safety Policy**

CGV Builders is committed to protecting the health and safety of all employees. To achieve this, our employees are required to work in a safe manner and are responsible for reporting any unsafe/unhealthy conditions to their supervisors, co-workers, Health and Safety Representative.

Management is responsible for ensuring that appropriate steps have been taken to control or eliminate all potential hazards and to ensure that safe and healthy work conditions are maintained throughout our work facilities.

Any contractors/subcontractors hired to perform work or to provide a service to CGV Builders is responsible for ensuring that their workers work in compliance with the regulations specified in the Occupational Health and Safety Act and any other legislation relating to the work/services being provided.

#### **5.0 Quality Documentation**

##### **5.1 Document Management System**

All project documentation including the items stated in Section 4 will be electronically stored/maintained by CGV Builders and made accessible to the Client. The web-based document management system that will be employed is SharePoint. All document distribution will be done through the SharePoint access system.

##### **5.2 Retention of Documents**

All quality related documents for this project will be retained for a period of 7 years following substantial completion. This includes both electronic and hard copy documents.

### **5.3 Shop Drawings**

Shop drawings that require submission, review and approval will be specified in the Shop Drawing Management Schedule. The schedule can be accessed using the online document management system described in Section 5.1 and its content will be revised as required.

### **5.4 Quality Control Turnover Package**

A complete package of all quality management plan forms and reports will be assembled and bound. This package will include, but is not limited to, ITP's, Work Plans, Daily Quality Reports, Non-Conformance Reports, etc.

### **5.5 Close Out Documents**

A complete package of all administration items will be compiled and bound. The package will include, but is not limited to; as-built drawings, permits, maintenance manuals, specifications, etc.

## **6.0 Communications**

### **6.1 Internal Communications**

Effective communication practices within the CGV Builders management team will be ensured through weekly team meetings. These meetings will cover overall project objectives and risk assessments. Daily conference calls with the site superintendent are essential for daily activities. Email correspondence will be documented and stored in directories accordingly.

### **6.2 Client Communications**

Client communications will be maintained throughout the duration of the project. Continuous communication efforts will be ensured through regular coordination meetings on-site and at management level to discuss project concerns. Weekly conference calls will be implemented to ensure roll out of project. Substantial meetings can be arranged if the client or contractor deems appropriate for emergency items.

## **7.0 Quality Management Personnel**

The responsibilities and authorities of key quality management personnel are defined in the following sections.

### **7.1 Quality Management Organizational Chart**

All CGV Builders quality management personnel described in Section 7.0 are listed in a name-specific organizational chart. Each position is accompanied with relevant qualifications.

### **7.2 Quality Manager (QM)**

The Quality Manager is responsible for the overall management and coordination of all quality control activities performed by or on behalf of CGV Builders. QM responsibilities and authorities:

- Ensure that the Quality Assurance Plan is implemented and maintained.
- Ensure that quality management personnel responsibilities and authorities are communicated and understood.
- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart.
- Identify the activities and processes that require ITP's, work plans, hold points etc. and develop/implement these documents.
- Coordinate with quality assurance officer to ensure that ITP's are scheduled and performed.
- Manage and coordinate all activities related to the quality of material fabrication, material delivery, material assembly/erection and all required inspections and testing.
- Develop mitigation procedures for all non-conforming work and/or material.
- Establish all hold points and witness points for the project.
- Provide all necessary resources to meet initial quality objectives.
- Responsible for approving and storing all documents pertaining to quality control.
- Main point of contact for all quality related inquiries.

### **7.3 Quality Assurance Officer (QAO)**

The Quality Assurance Officer is responsible for overseeing day-to-day operations on the construction site and ensuring that quality standards are met. QAO responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart,

- Participate in pre-activity meetings and communicate the ITP's that will be performed for the activity,
- Collaborate with project superintendent/supervisor with regards to weekly scheduling to ensure quality control requirements are met.
- Contribute quality related elements to all required project work plans.
- Ensure ITP's are performed and documented,
- Responsible for assessing non-conforming work and material and preparing a Non-Conformance Report accompanied with mitigation procedures.
- Submit inspection requests prior to attaining hold points,
- Coordinate and facilitate the quality assurances of all manufacturers, expeditors and sub-trades.

#### **7.4 Engineering Manager (EM)**

The Engineering Manager is responsible for managing activities related to the overall design of the project.

EM responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart,
- Manage operations of civil, structural, mechanical and electrical departments,
- Establish working relationship with the client on matters relating to design,
- Responsible for assuring that all required engineering inspections are performed and approved by qualified personnel.

#### **7.5 Project Manager (PM)**

The Project Manager is responsible for the overall planning, coordination, control and execution of the project. PM responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart,
- Manage all operations related to the execution of the project,
- Prepare and maintain project schedule,
- Collaborate with quality manager to develop mitigation procedures for non-conforming work and/or material,
- Develop a list of activities that will require a pre-activity meeting,
- Main point of contact for all project related inquiries.



## **7.6 Site Superintendent/Supervisor (SS)**

The Site Superintendent/Supervisor is responsible for overseeing all on-site operations and controlling the short-term schedule. SS responsibilities and authorities:

Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart.

- Coordinate quality related inspections with daily operations performed by CGV Builders and sub-trades.
- Prepare Daily Quality Reports,
- Schedule and lead pre-activity meetings.
- Develop and distribute weekly schedules that outline project activities for the following two week period.
- Control and maintain short term scheduling of the project.
- Ensure that sub-trades/suppliers are provided with the most recent set of drawings and project specifications.
- Submit inspection requests prior to attaining hold points,
- Ensure subcontractor field operations meet project quality objectives,
- Verify the overall condition/characteristics of all material delivered on-site and confirm that storage areas are suitable. Document this information in a Material Receipt Report,
- Responsible for subcontractor coordination.
- Promptly communicate on-site issues and all non-conforming material and work to quality management personnel.
- Responsible for timely submitting inspection requests.
- Main point of contact for all on-site inquiries.

## **7.7 Project Administrator (PA)**

The Project Administrator will control, maintain, and coordinate all contractual and project related documentation for the entire project. The PA will correspond with the Project Manager and the Quality Assurance Manager on a day-to-day basis to ensure project administration activities are in compliance with the Quality Management Plan. PA responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart,
- Maintain the document management system,
- Responsible for processing project documents,
- Expedite flow of project communication and deliverables,

- Main point of contact for all administration related inquiries.

### **7.8 Manufacturing Manager (MM)**

The Manufacturing Manager is responsible for managing daily operations and performance of the manufacturing facility. MM responsibilities and authorities:

- Establish effective lines of communication with the individuals specified in the Quality Management Organizational Chart.
- Oversee the manufacturing process of materials and ensure that they meet design, quality and safety requirements.

### **7.9 Quality Control Inspectors (QCI)**

Third party Quality Control Inspector's are responsible for performing required inspections during all phases of the project. QCI responsibilities and authorities:

- Perform all required ITP's and prepare related documentation,
- Recognize non-conforming work and/or material and promptly inform CGV quality management personnel.

### **7.10 Expediter**

The Expediter is responsible for the safe and timely transportation of materials to the construction site. The expediter's responsibilities and authorities:

- Ensure that materials are delivered in-line with the project schedule.
- Ensuring the safe transportation and surveillance of materials.
- Verify that shipment contains appropriate materials and quantities.