TOWNSHIP OF UXBRIDGE

TENDER U18-29

30'x 34' Storage Shed at the Goodwood Community Park

TENDER CLOSING:

September 12, 2018 2:00 P.M. LOCAL TIME

TENDERS RECEIVED BY:

Debbie Leroux
Clerk/Director of Legislative Services
Township of Uxbridge
51 Toronto Street South
P.O. Box 190
Uxbridge, ON
L9P 1T1

(905) 852-9181

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1 INFORMATION FOR BIDDERS

1.1 SUBMISSION OF QUOTATIONS

1. GENERAL

(a) Sealed tenders will be received by the undersigned in the envelopes clearly marked with the tender number until: 2:00p.m., September 12, 2018 Bids must be delivered to Debbie Leroux, Director of Legislative Services, Township of Uxbridge, 51 Toronto Street South, Uxbridge, L9P 1T1
Late responses will not be considered. **Faxed and Emailed bid submissions will <u>not</u> be considered.**

The Form of Tender Pricing Schedule and the duly executed Signature Page must be included with the Bid Submission or the Bid will be rejected.

A certified cheque made out to The Township of Uxbridge in the amount of the bid bond must be included with the Bid Submission or the Bid will be rejected.

Bids will be irrevocable for sixty (60) days after close of bidding.

The lowest or any Quotation not necessarily accepted.

<u>Mandatory Submission Requirement(s)</u>

The conditions below must be met in order for the Quotation to be considered compliant. Failure to meet these conditions will result in rejection of Quotation.

- ✓ **Received at the location on the date and time detailed on Quotation title page**

- ✓ **4.1 Form of Quotation**: completed
- ✓ **4.2 Pricing Schedule Section** <u>and</u> duly executed
- ✓ **4.3 Signature Page Section**
- ✓ **4.4 Agreement to Bond Form**
- ✓ **Appendix 'B' - Confirmation of Favourable Health and Safety Practice Form**
- ✓ **Schedule 1 - Bidder's Reference Form**
- ✓ **Schedule 2 - Subcontractor Form**
- ✓ **Schedule 3 - Contractor Environmental Acknowledgement Form**
- ✓ **Certified cheque in the required amount for the Bid Bond**

1.2 OVERVIEW OF REQUIREMENTS

To construct a 30' x 34' Storage Building at the Goodwood Community Park as per drawings.

1.3 DEFINITIONS

Agreement / Purchase Order	A Contract that the Consultant / Company enters into with the Township authorizing the Consultant / Company to do the work. Includes the RFP document, its Appendices and addenda and the Consultant / Company's Proposal.
Award	The acceptance by the Township of a Proposal to carry out the Work.
Consultant's / Company's Project Manager	The individual designated by the Consultant / Company to lead their efforts to complete the Work. This person is the primary contact for the Consultant / Company.
Contract	See Agreement
Consultant / Company	The individual, contractor, company, supplier, corporation or consortium retained by the Township to carry out the Work.
Procurement Officer	The individual designated by the Region to undertake responsibility for the procurement process on the RFP.
Proposal	Written response to the RFP.
Proposal Submission Deadline	The date and time by which all Proposals must be received from those parties interested in becoming Respondents.
Township	The Township of Uxbridge, its successors and assigns.
Township's Contact Person	The individual designated by the Township to respond to questions and clarifications on the RFP.
Township's Project Manager	The individual designated by the Township to manage and administer the Work, once the Approved Respondent executes the Agreement
Township's Staff	Person(s) employed by the Township of Uxbridge
Regional Chair or Chair	The person elected by the members of Regional Council to hold the lead position of Chair at Regional Council and to represent the Region.
Township Council	The governing body of the Township of Uxbridge comprised of elected officials from the wards that make up the Township.
Registered Document Taker	Person, firm, company or consultant who has formally registered through the Bidding Opportunities link on the Township of

	Uxbridge's Website and logged in to receive the competitive Bid Document (RFQ/RFT/RFP).
Request for Proposals (RFP)	The document issued by the Township offering Respondents the opportunity to submit a Proposal to carry out the Work. Includes all Appendices and Addenda.
Respondent	The person, firm, company, corporation or consultant submitting a Proposal in response to this RFP in the form and format specified in the document. Can mean more than one Respondent if a joint or consortium Proposal is submitted.
Selected Respondent	Respondent recommended by the Township to carry out the Work, still requiring Township Council approval.
Selection Committee	Representatives of the Township and other stakeholders appointed to evaluate the Proposals and recommend the Selected Respondent.
Sub-Consultant Sub-Contractor	An individual, consultant, company or corporation having a contractual relationship with the Consultant / Company for any part of the Work.
Upset Limit	Maximum price paid to the Consultant / Company for the Work to be performed by the Consultant / Company which includes all costs, disbursements and applicable duty and excise taxes, but **excludes** Harmonized Sales Tax (H.S.T.),
Work	All labour, material, equipment, fixtures, services, supplies, acts and deliverables required to be done, furnished, provided or performed by the Consultant / Company to manage the Work, as defined in the Agreement/ Purchase Order and contained in the Consultant's / Company's Proposal.

1.4 INQUIRY

All Information contained in the Bid Documents, including attachments and Addenda may not be changed or qualified by the Bidder (except for filling in the blanks or sections as stipulated in the Bid Documents), and any Bid containing such changes or qualifications will be grounds for disqualification of the Bid.

Should a Bidder have concerns regarding any Term or Condition within the Tender document, these must be addressed **before** Tender closing, during the inquiry period noted below.

Any questions regarding this Tender must be received in writing by e-mail no later than **five (5) business days** prior to the Tender closing and must be directed to Ben Kester **via email** at bkester@town.uxbridge.on.ca

If required, a reply will be in the form of a Tender Addendum, issued by email only to all **Registered Document Takers** issued Tender documents, no later than **two (2) business days** prior to the Tender Closing Date.

The Bidder is solely responsible for ensuring receipt of all Addenda and that they have been taken into account in the formation of their Bid.

In submitting a Bid, the Bidder acknowledges, understands and accepts the conditions noted in this Article.

1.5 PRE-BID MEETINGS

Not applicable for this Work.

1.6 REVIEW OF SITE CONDITIONS

Mandatory site visit to take place at 268 Highway 47, Goodwood, on September 5, 2018 @ 10 a.m.

1.7 BID SECURITY REQUIREMENTS

Not applicable for this Work.

1.8 EXPERIENCE / REFERENCES

Firms bidding on this Tender to have a minimum 5 **years'** experience on projects of a similar size and scope.

The Township reserves the right not to award this Tender to any Bidder whose qualifications or experience are unsatisfactory as referenced in **Article 2.9**. The Township also reserves the right not to award this Tender to any Bidder with whom the Township has experienced consistent service-related problems within the past two years from the date of this Tender.

Bidders to complete the **attached Bidder's Reference Form (Section 5 - Schedule 1)** for their company and submit it with their bid. By completing this information, Bidders consent to the Township contacting the references provided or any obtained independently to acquire further information in relation to the quality and scope of work provided by the Bidder.

1.9 PROPOSED EQUIVALENT PRODUCTS

Not applicable for this Work.

1.10 SUBCONTRACTING

Using the **Subcontractor Form in Section 5 – Schedule 2**, Bidders to provide and submit with the Bid a list of all proposed subcontractors to be used if awarded this Tender.

1.11 TAXES ON BID PRICES

Bidders shall exclude H.S.T. from all prices bid on this Work. HST will be added to all invoices submitted for payment.

1.12 BID ACCEPTANCE

The winning contractor will be chosen by The Township of Uxbridge and will be notified by the Township immediately. The winning contractor must respond and acknowledge acceptance of the contract within 24 hours of being notified.
If there is any reason the winning contractor cannot comply with the requirements of this document, The Township must be notified within 24 hours of the winning notification and either enter into a negotiation of contract changes or withdraw from accepting the contract.

1.13 BASIS OF AWARD

It is the intention of the Township to award this RFQ based on the lowest acceptable, compliant and responsive Bid that demonstrates the capability of meeting the requirements of appropriate experience, qualifications, provision of documentation evidencing the required license(s) for performance of the required work as detailed in the Specifications of this Tender**,** and any other requirements as noted in this document.

The Township reserves the right in its sole discretion not to award a Contract to any Bidder who has failed to demonstrate the required experience, qualifications and license(s) identified in the bid document as necessary for performing the required Work.

The award of this Tender is subject to the availability of finances and the review and approval by Township Management, any applicable Standing Committee(s), Finance Committee and Township Council, as appropriate. Any of these parties may elect not to approve the award of this Quotation for any reason. **IF THIS TENDER IS CANCELLED THE BIDDER AGREES TO WAIVE ANY RIGHT TO CLAIM ANY DAMAGES OR COST RECOVERIES WHATSOEVER AGAINST**

THE TOWNSHIP OF UXBRIDGE, ITS ELECTED OFFICIALS, EMPLOYEES AND AUTHORIZED AGENTS.

The Township reserves the right, in its sole and unfettered discretion, to:

- Issue an Award for this Work in whole or in part
- Refrain from making an Award if it determines that to be in its best interest
- Not make an award to the lowest compliant Bidder, or any Bidder, if it is determined by the Township that the costs of completing the Work exceed budgetary constraints

No liability shall accrue to the Township for its decision in this regard.

1.14 ELECTRONIC COPY OF QUOTATION

Not applicable

1.15 LIMITATION OF LIABILITY

By submitting a bid, each Bidder agrees that, other than the direct costs attributable to the preparation of a Bid,

(a) neither the Township, nor any of its employees, advisors or representatives will be liable, under any circumstances, for any claim arising out of this tender process including but not limited to loss of profits, loss of opportunity or for any other claim; and

(b) the Bidder waives any claim for any compensation of any kind whatsoever, including loss of profit or loss of opportunity by reason of the Township's decision to not accept the bid submitted by the Bidder, to award a contract to any other supplier or to cancel this Tender process, and the Bidder shall be deemed to have agreed to waive such right or claim.

1.16 QUOTATION QUANTITIES

Refer to **Section 3 – Specifications**, **Section 4 – Form of Tender** and/or **Section 5 – Appendices and Schedules**.

2 CONTRACT TERMS AND CONDITIONS

2.1 CONTRACT DURATION / TIMING OF WORK COMPLETION

By signing the Form of Quotation the Bidder confirms their ability to comply with the completion dates of this project.

Time is of the essence. All Work under the Contract shall be completed by November 30, 2018 but is to commence as soon as possible after the date of issue of the Notice to Commence Work Order**.** Commencement date is to be approved by Township Project Manager.

2.2 LOCATIONS

The materials and/or services shall be delivered **FOB 268 Highway 47, Goodwood, Ontario.**

It is understood that this Contract shall be open to participation by all Township departments.

2.3 PRICING PROVISIONS

Pricing is to be submitted in accordance with the Pricing Section of the Form of Tender and shall be firm for the term of the Contract.

2.4 PAYMENT PROCESS

Payment of invoices shall be within thirty (30) days of receipt of an invoice. Original hardcopy invoices must be delivered or mailed to the Township of Uxbridge, Director of Public Works, 51 Toronto Street South, PO Box 190, Uxbridge, Ontario, L9P 1T1. Invoices must provide the Tender number, complete description of good/services, contact name and location of the requesting department/location, the date in which the goods/services were picked up or delivered, HST registration number and complete prices in accordance with the Contract provisions. **Failure to submit an invoice with the correct information may result in payment delays**.

At any time during the term of the Contract including any extensions, the Township reserves the right to terminate the contract where billing errors are consistently identified and/or not resolved in a timely manner.

2.5 SURETY REQUIREMENTS

A 10% Bid Bond in the form of a certified cheque or bid bond, is required to accompany the bid when it is submitted at the town office. The cheque is to be made out to The Township of Uxbridge.

An Agreement to Bond form from a bonding company, licensed to do business in Ontario must accompany the Tender Bid.

A 100% Performance Bond, signed by a surety company, is required prior to signing of the contract.

A 100% Material and Labor Bond, signed by a surety company, is required prior to signing the agreement.

2.6 INSURANCE REQUIREMENTS

Insurance

Insurance coverage is a requirement for this Contract. A certificate of insurance must be submitted by the Contractor, within **five (5) business days** of winning the contract in the amount of $5,000,000.

2.7 WORKPLACE SAFETY & INSURANCE BOARD (WSIB) REQUIREMENTS

All Companies that employ workers, including a Company's personnel and owners must be covered by an insurance plan under the Workplace Safety and Insurance Act, 1997. Upon award of a Contract, prior to the commencement of the Work or upon a request by the Township, the Company must supply to the Township:

A valid Clearance Certificate (for Schedule 1 employers) or A letter of Good Standing (for Schedule 2 employers) indicating the Company has an active account with WSIB in good standing; or,

Alternatively, where appropriate, a letter from WSIB stating the Company is <u>not</u> required to register with WSIB; or,

A letter that confirms the Company falls under a "By-Application" industry, where WSIB confirms a Company (that employs workers) is exempt from coverage based on their business activity.

Prior to final payment, a Clearance Certificate must be received by the Township indicating all payments by the Company to the Board in conjunction with the

subject Contract have been made and that the Township will not be liable to the Board for future payments in connection with the Company's fulfillment of the contract. Further WSIB Certificates of Clearance or other types of certificates shall be provided upon request.

Single Independent Contractors / Owners / Operators, where required by the Township, must also carry optional WSIB insurance coverage and must also provide a clearance certificate from WSIB verifying they have purchased the optional WSIB coverage, and indicating the Company has an active account with WSIB in good standing.

2.8 EXPERIENCE

Throughout the Contract Term, in performing the services, Contractor(s) are to each have and provide upon Contract Award conclusive proof of acceptable qualifications, certifications and related business experience as detailed in **Specifications - Section 3**. The assessment of acceptable qualifications and related business experience will be based on a range of measures including as appropriate professional and technical qualifications and competence of the firm and all staff performing the work, the firm's financial resources, the equipment and other facilities available to provide the services, managerial capability, reliability, experience and reputation, personnel available, the firm's legal capacity to enter into contract, their solvency and any outstanding litigation, their good standing regarding the payment of taxes and any history of false representation regarding qualifications and related experience.

The Township reserves the right in its sole discretion to terminate the Contract if the Contractor, or any of their subcontractors, are deemed to be unsuitable by the Township.

2.9 SUBCONTRACTING

Where allowed under **Section 1, Article 1.10**, all proposed subcontractors must possess the required qualifications, experience and valid Licenses. The Township reserves the right in its sole discretion to terminate the Contract if any named subcontractor(s) is/are deemed to be unsuitable by the Township, do not possess a valid license or has/have an unsatisfactory health and safety record. Contractor using subcontractors shall be responsible for quality of work and restoration of substandard work performed by subcontractors.

Prior to any sub-contractor commencing Work, the Contractor shall ensure that each sub-contractor hired by the Contractor carries the required amount of Insurance subject to the inclusive limits as noted in this Contract.

Throughout the Contract term, where requested by the Township, the Contractor shall provide proof of the required insurance from each sub-contractor. Each certificate of insurance is to be sent to the Township.

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2.10 CRIMINAL REFERENCE BACKGROUND CHECK / NON-DISCLOSURE AGREEMENT (NDA)

Not applicable for this Work.

2.11 HEALTH AND SAFETY

Contractor shall acknowledge and fully comply with all of the Township of Uxbridge's Corporate Healthy Workplace Policy and the following requirements listed under this clause if awarded a Contract.

2.11.1 HEALTH AND SAFETY PRACTICE FORM

Contractor must complete and submit the "**Confirmation of Favorable Health and Safety Practice Form**" enclosed in Section 5 – Appendix 'B' with the quote. The Township reserves the right to cancel the award to, or the contract of, any contractor whose Health and Safety Record is not deemed to be satisfactory.

2.11.2 HEALTH AND SAFETY WARNING

The Township will retain the right to document contractor(s) for all health and safety warnings and/or to stop any work if any of the previously mentioned items are not in compliance. Similarly, the Township will have the right to issue warnings and/or to stop work if there are any violations by the contractor of the Occupational Health and Safety Act (OHSA) and all amendments thereto, Regional Health and Safety programs, policies, rules and/or if the contractor(s) create(s) an unacceptable health or safety hazard.

Written warnings and/or stop work orders will be issued to contractor(s) using the **Contractor Health and Safety Warning/Stop Work Order Form**. It will be the responsibility of the individual receiving the warning on behalf of the contractor(s) to forward the same to the contractor(s) health and safety committee where applicable.

2.12 ASBESTOS

Not applicable for this Work as new construction.

2.13 LIST OF DESIGNATED SUBSTANCE AT THE SITE (S)

Designated substance survey attached in Appendix D

2.14 LIST OF HAZARDOUS MATERIALS TO BE BROUGHT ON SITE BY CONTRACTORS

Prior to bringing any hazardous materials on site, where applicable, Contractors must provide a hazardous material inventory of materials that will be brought on site during performance of the Contract.

2.15 MATERIAL SAFETY DATA SHEETS (MSDS)

Contractors must submit with quote all applicable Material Safety Data Sheets (MSDS) for all chemical substances that will be supplied or brought on site in performing this Contract. This must include the MSDS for the spray insulation.

2.16 CONSTRUCTION LIEN ACT

Not applicable for this Work.

2.17 PERMITS AND APPROVALS

Within five (5) business days of a request from the Township, the contractor(s) shall be responsible for obtaining all necessary permits and approvals required for this Work as noted in **Section 3 – Specifications,** and shall ensure that all Work performed will be in strict accordance with all applicable standards and requirements including those found in any legislation, regulations, building codes, municipal standards, bylaws and the requirements of any authorities having jurisdiction.

2.18 DRAWINGS

See attached in Appendix A.

2.19 TERMINATION FOR BREACH

The Township, acting reasonably, may at any time by providing notice in writing to the Contractor, terminate for breach of contract the Services or any portion thereof at any stage of the undertaking. In the event of a termination for breach, the Contractor shall not be entitled to any further payment under this Agreement.

Upon receipt of such notice as set out above, the Contractor shall perform no further Services other than those reasonably necessary to close out the Services.

The Township shall not be liable to the Contractor for loss of anticipated profit, interest lost or any other damages or loss occasioned to the Contractor on the terminated portion or portions of the Services.

Any termination of the Agreement by the Township, as aforesaid, shall be without prejudice to any other rights or remedies the Township may have.

2.20 EXCLUSIVITY OF CONTRACT

The Contract executed with the Contractor will not be an exclusive Contract for the provision of the described deliverables. The Township at its sole discretion may contract with others for the same or similar deliverables to those described in this RFQ or may obtain the same or similar deliverables internally.

No liability shall accrue to the Township for its decision in this regard.

2.21 SITE SAFETY

A Construction fence, 1.8m in height minimum, that is properly installed, positioned and maintained on the site will contain the debris and wreckage within the construction or demolition area and keep all other areas relatively clean and uninhibited. The construction fence will provide limited security and safety measures for both construction personnel and the public. Entrance and exit points are clearly defined as part of the construction fence providing safe ingress and egress of construction vehicles and equipment.

Construction area is to be properly signed for easy identification of dangers, limitations of access and identification of any hazards.

All materials must including supplies, garbage and equipment must be stored so that they cannot topple or fall.

3 SPECIFICATIONS

General Description of Work

The Township of Uxbridge requires the construction of a storage building measuring 30' x 34' at the Goodwood Community Pak as per drawings attached. Address is 268 Highway 47, Goodwood, Ontario. This building will consist of a poured in place concrete frost wall, poured concrete floors, 2"x6" wall construction wall structure and engineered trusses. The interior will be composed of two equal sized rooms, both accessed from the exterior.

A 36" door opening is required in the existing Goodwood Community Centre to allow access from the new storage building from the exterior.

All work must conform to Occupational Health and Safety Act, ONTARIO REGULATION 213/91, CONSTRUCTION PROJECTS AND THE contractor must be familiar with this act in its entirety.

Provide new materials equal in all respects to those specified.

No substitutions will be allowed unless the following arrangements are made: Written permission is obtained from the Architect/Engineer.

The Contractor ensures that substitutions can be both physically and dimensionally incorporated in the work with no loss of intention, function or construction time and at no additional cost to the Township of Uxbridge.

The Contractor shall reimburse all Consultants for additional expenses due to these substitutions at their respective normal hourly rates.

Construction fencing must be supplied and secured around the perimeter of the work site and access must be posted and controlled at all times. This is for safety as well as materials controls. No materials are allowed to be positioned so as to cause toppling or falling. Township of Uxbridge is not responsible for any stolen or damaged materials or equipment.

Do not allow water to accumulate or flow beyond work area. Provide receptacles and mop-up as work proceeds

Work site is to be kept neat and tidy at all times and appropriate garbage and recycling bins must be supplied for demolition, construction and domestic materials. All must be sorted as per local disposal practices and laws and must be disposed of at the cost of the winning contractor. Do not allow any garbage to reach neighboring properties, and all

garbage must be contained in appropriate containers at the end of each work day. Selling or burning of materials on site is not permitted.

At end of project, the site must be cleaned and returned to the same or better condition that when the project began.

Site Access

There is a newly paved path to the east of the location leading from the parking lot to the park behind the Community Centre. This can be used for access to the site from the parking lot. The Township will take responsibility for reasonable damages to the asphalt during construction. Any damage is to be reported daily to the Project Manager with photos and decisions will be made as to what is reasonable. Anything deemed not reasonable must be repaired back to original at the contractors cost.

Do not block access of the path, and do not block access to the parking lot or any other area of the community park that residents, emergency services, township workers and public business need access to.

There will be no additional cost incurred by the Township for the winning contractor's management of this project, including sub-contractors.

Demolition

Demolition required for the door opening must be done in an orderly and carful manner. Explosives are not allowed at this site and demolition must be done in a manner so as to cause the least amount of disruption to the functions of the Community Park and the neighboring properties.

Provide necessary shoring and supports to assure safety of structure prior to cutting.

Where practical, sawcut and remove material as required and use suitable hand tools.

Demolish, cut-out and remove from site all other work noted on drawings or required to permit new construction.

Fill all openings in concrete block walls with concrete masonry units, coursing to match existing, prepare ready to receive new finishes to match existing. Provide bond beams in new openings cut into existing concrete masonry unit walls. Provide finished end masonry units to patch and repair for new jamb sections in existing concrete masonry unit walls.

Fill all openings in gypsum board walls with gypsum board and steel framing to match existing, skim coat to make wall smooth and even

Provide exterior and interior finish materials, matching existing adjacent materials, to provide an even-plane surface of uniform appearance.

3.1 Foundation and Floors

Provide Portland Cement of Canadian Manufacture conforming with CSA Standard CAN/CSA-A5. **Type 10**, unless noted otherwise on plans, (from the same source for entire project for concrete exposed to view). Verify that no salts are present which will cause efflorescence. Shall be quality controlled concrete conforming with CSA-A23.1

Footings to be installed as per drawings and provide 1 ½"' deep x 3 ½" wide continuous key in all footings under reinforced concrete walls and wall joints below grade.

Borehole and Test Pit Records are included in Appendix 'C' for reference.

Elevations of site are in Appendix "F" for reference.

Weather

All placement of concrete shall conform with the requirements of CSA Standard CAN/CSA-A23M, and as hereinafter specified.

Cold Weather Protection Requirements.

1 Effective means shall be provided for maintaining the temperature of the concrete in place above the minimum limits shown in Table 14 in CAN/CSA-A23.1-M for a minimum period of three (3) days or until sufficient hydration has occurred to protect the concrete from frost damage.

2 If, subsequent to the above period of protection, the ambient conditions are not likely to be favourable for continuous strength development, the protection period shall be extended until the concrete has achieved sufficient strength for structural safety.

3 When subsequent ambient conditions are not conducive to continued curing and strength development, the protection period shall be extended until total period of seven (7) days at temperature above 10EC has been attained.

4 The Architect may instruct that additional protection and/or heating facilities be provided, if in his opinion, that which has already been provided is inadequate, at no extra cost to the contract.

5 Equipment and materials capable of maintaining adequate temperature, humidity and protection shall be available on site and be ready for operation when any concrete is placed.

Hot Weather Protection Requirements**.**

1.Must also conform to ACI Standard 305

2 Facilities shall be provided for protection of the concrete in place from the effects of hot and/or drying weather conditions. In extremely hot weather, the formwork, reinforcement and concreting equipment shall be protected from the direct rays of the sun, or cooled by fogging and evaporation.

3.When the air temperature is at or above 25EC or when there is a probability of it rising to this during the placing (as forecast by the local official meteorological office) special effort shall be made to maintain the temperature of the concrete as low as practicable and in no case more than that stipulated in Table 14 in CAN/CSA-A23.1-M.

General

Ensure that no water is present. No flooding water is permitted on foundation beds. Provide skim coats where footings and other concrete work are to be placed on soils which do not provide an acceptable working surface. Place concrete only on frost-free ground. Remove previously frozen bearing surfaces.

Ensure that all spread foundations bear on undisturbed soil or approved engineered fill. If bearing surfaces are disapproved because conditions do not meet those anticipated during design, make adjustments only as directed. No extra payment will be made for adjustments made necessary because of damage to bearing surfaces caused by weather, traffic, or removal of frozen material, or by presence of adjacent construction or services incorporated in the Work.

Ensure that compacted fill has been placed to meet specified requirements and that under-slab services have been installed, inspected, tested and approved.

Keep excavations dry while placing concrete. Pump as required.

Verify anchors, seats, plates reinforcement and other items to be cast into concrete are accurately placed, held securely and are not disturbed during pouring of concrete.

Reinforcement shall be stored in such a manner that it is off the ground and kept free of mud and foreign matter.

Before concrete is placed, all reinforcing steel, accessories and hangers, inserts, conduits, sleeves, outlets, etc., must be securely tied in place and reviewed.

Before casting concrete, obtain Engineer's approval of reinforcement in place

Concrete floor in both sections area is to be poured and cured when there is no possibility of freezing temperatures. Bidder must supply a description of how they will finish the surface of the concrete floor to provide an even, level, horizontal surface that is smooth enough for an interior storage environment. Concrete mix is to be approved by Township Project Manager before ordering for approval.

Concrete floor area to have all organic material removed and a minimum of 6" granular A compacted to 98% placed directly below the 2" of ridged insulation.

Do no unload excess concrete from concrete trucks and do not deposit in undesignated and unauthorized locations within the Scope of Work boundaries whether concealed or not.

Testing

Concrete Strength Tests must be performed and results submitted to Consultant.

Obtain representative samples of fresh concrete from each 130 cubic yards or fraction thereof and of each mix design of concrete placed in any one (1) day. Testing to conform with CSA Standard CAN/CSA-A23M.

Perform a standard slump test to conform with CSA Standard CAN/CSA-A23M for each set of specimens.

It is the responsibility of the Contractor to co-ordinate testing of the concrete. Inspection company does not need to supervise placement of concrete, they are only responsible for retrieving proper samples, performing testing and providing test results as soon as possible.

If test result's show concrete strength levels below required, Township of Uxbridge and Consultant must be made aware of this by phone as soon as possible and told what caused the low results.

Defective Concrete

1 Concrete not meeting the requirements of the specifications and drawings shall be considered defective concrete.

2 Concrete not conforming to lines, details, quality and grade specified or as shown on the drawings shall be modified or replaced at no increase to the contract price, and to the satisfaction of the Architect and Engineer.

3 Finished lines, dimensions and surfaces shall be correct and true within tolerances specified.

4 Cores drilled and tested from areas in question, as directed by the Engineer and in accordance with CSA Standard CAN/CSA-A23M and/or load testing of the structural elements in accordance with the requirements of the Engineer shall be done at no increase to the contract price.

5 Defective concrete shall be replaced to the Architect's and Engineer's satisfaction at no increase to the contract price.

3.2 Carpentry

Refer to Drawings in Appendix A for drawings that are to be followed for construction and for materials.

If there are any questions about materials specified or if there is a need to deviate from the designed materials, this must be authorized by the Townships Project Manager and the township will incur no extra costs for these deviations unless authorization is received from the township before these materials are purchased.

Materials for construction are to be brought on site as needed, no excessive storage is allowed, and stored in an orderly fashion and all materials that may be affected by the elements are to be protected at all times.

All construction work is to be done in compliance with the current Ontario Building Code and all applicable other codes

Framing lumber to be Spruce #1 as a minimum and must be dry and straight.

Trusses

Trusses are the responsibility of the winning contractor. Ensure final framed spans are available to truss company for accurate truss design. Ensure truss company is aware the overhead door will be suspended from the trusses and the weight of the door and rails. Engineer stamped truss drawings and truss layout must be supplied to the township upon delivery of trusses.

Windows, Doors and Trim

All trim to be white.

All windows to be non-opening, white vinyl, low-e, argon, double pane windows.

Overhead door and man doors to be trimmed with white vinyl.

All man doors to be grey steel, and installed with a keyed, lockable, exterior door lever system. Exterior doors are to be solid with no windows. Interior man doors to be solid with no windows and have an interior, keyed lockable door lever system. Installation must provide a complete weather seal and doors must operate smoothly and as designed.

Door Stops and Hardware

Wall stops to be installed on the masonry.

Provide gray rubber exposed resilient parts.

Surface mount overhead door stops may be used unless they conflict with the door closer. All overhead stops are to be set to 90^0 opening**.**

All door hardware to be finished as stainless steel, be rated as exterior and be keyed and lockable. Keying must be different for all doors.

Rolling Overhead door to be white in color, insulated, have rails that hang from the trusses and be lockable. Installation must provide a complete weather seal and door must operate smoothly and as designed. Ensure truss designer is informed of weight/specifications of overhead door system.

Overhead door to be manually operated.

Ensure all shedding water from building is captured in eves trough and directed away from all buildings, driveways and equipment as per all local watershed requirements. Townships Project Manager to help with requirements.

Steel Siding

Steel Siding to be a 28 gage with profile and color approved before ordering by Consultant.

Steel Siding is to be coated with an anti-graffiti coating, SI-COAT 531. This is to applied as per manufacturer's data sheet.

3.3 ELECTRICAL AND LIGHTING

Refer to drawings in Appendix A for approximate layout. Exact layout to be confirmed with a site visit accompanied by a representative of the Township of Uxbridge knowledgeable in the requirements. This meeting is to be arranged by the winning contractor and take place after the walls of the addition have been completed. If additional meetings are required because of construction progress or changes, this is the organizational responsibility of the contractor and the Township will not be invoiced any additional costs for these meetings. It is the winning contractor's responsibility to be clear on the final placement of all lighting, switches and outlets before installation and transmit this information to any sub-contractors, and be responsible for the sub-contractor's placement, installation and compliance with all applicable codes. Locations of switches and plugs on drawings are approximate.

All electrical installations must meet or exceed all applicable codes.

All electrical wiring is to be housed in conduit sized to accept a minimum of one more wire than installed, have enough additional room for the additional wire to be easily pulled and be equipped with a fish line that is accessible.

All outlets and switches must be equipped with appropriate covers.

<u>Lighting</u>

Exterior Fixtures to be 5 pin NEMA socket compatible, complete with photocell. To be installed as shown on drawings. Fixture details in Appendix E.

Interior LED Motion Activated Fixtures, GE Evolve Area Light, to be installed as per drawings and fixtures to be supplied by winning company.

Installation of all fixtures must be as per manufactures instructions and meet all codes requirements applicable to this construction.

3.4 General

Use only products of Canadian manufacture unless such products are not manufactured in Canada, are specified otherwise, or are not competitive

Where alternatives are proposed, these products claimed by the Contractor as equivalent shall be comparable in construction, type, function, quality, performance, and, where applicable, in appearance. Where equivalents are used, they shall be subject to final approval before use and shall incur no extra cost to the Township of Uxbridge.

Incorporate products in the work in strict accordance with Manufacturers' directions, instructions, data sheets and specifications, where reference is made to them, shall include full information on storing, handling, preparing, mixing, installing, erecting, applying, and other matters concerning the materials that are pertinent to their use and their relationship to materials with which they are incorporated.

Products delivered to the Project site for incorporation in the work shall be considered the property of the Township of Uxbridge.

Do not install permanently incorporated labels, trademarks and nameplates, in visible locations unless required for operating instructions or by authorities having jurisdiction.

4 TENDER

4.1 FORM OF TENDER

Construction of 30'x 34' Storage Shed at the Goodwood Community Park and Door opening into Community Centre

PLEASE USE INK OR PRINTER

Name of Company

Address/City/Town Postal Code

Telephone Number Fax Number

E-Mail Address

Name of Person Signing for Company

Position of Person Signing for Company

Name of Contact Person

INCLUDE WITH BID SUBMISSION

4.2 PRICING SCHEDULE

The Bidder, by submitting a Bid in response to this RFQ, hereby offers to complete the Work specified in accordance with the terms, conditions and specifications of this RFQ, for the following Lump Sum Price:

FOOTINGS, FROST WALLS AND POURED CONCRETE FLOORS $_____*

ELECTRICAL AND LIGHTING $_____*

TRUSSES $_____*

FRAMING – ALL ASPECTS NOT COVERED ABOVE $_____*

(All prices bid exclude H.S.T.)

For Information Only:

Hourly rate of pay
Daytime (7:30AM to 4:30PM): $_____

Saturdays $_____

Sundays & Holidays $_____

Per Diem (daily) $_____

* Basis of Award *Amount(s).*

THIS PAGE MUST BE INCLUDED WITH BID SUBMISSION OR BID WILL BE REJECTED

Name of Firm: _____

4.3 SIGNATURE PAGE

Received Addenda No.:_____ to No.:_____ Inclusive

The undersigned declares that the Bid Submission is NOT made in connection with any other Bidder submitting a bid for the same work and is in all respects fair and without collusion or fraud.

The undersigned declares that if any real or potential conflict of interest is known to exist, a statement is included in the Bid identifying the nature of the conflict of interest.

The undersigned declares that they have ensured receipt of all Addenda issued by the Region and that they have been taken into account in the formation of their Bid.

The undersigned declares that, in submitting a Bid, they acknowledge, understand and accept all the conditions noted in this Article.

The undersigned hereby agrees to perform the services specified in this Quotation Number U18-01 for the prices quoted in the pricing section herein and in accordance with all Terms and Conditions disclosed in this Quotation document. Furthermore, it is certified that the undersigned is/are authorized and empowered to sign and submit this Bid.
Executed by me/us and bearing date this _____ day of _____ 20__.

_____
Signed (I have the authority to bind the Corporation)

_____
Print Name of Above Signing Officer

_____
Position

_____
Name of Firm

The signature of a signing officer with the authority to bind the Corporation is required for the bid to be valid. Failure to provide the signature will result in the tender being rejected.

THIS PAGE MUST BE INCLUDED WITH BID SUBMISSION OR BID WILL BE REJECTED

Name of Firm: _____

4.4 Agreement to Bond

To: The Township of Uxbridge (the "*Town*")
51 Toronto Street South,
PO Box 190
Uxbridge, ON. L9P 1T1

And to: Contractor (the "*Contractor*")

Contractor Name	

We, the undersigned, hereby undertake and agree to become bound as Surety for the **Contractor** as follows if the bid for the **Tender noted below** is accepted by the **Town**

Tender Number	**U18-29**
Tender Description	**30'x 34' Storage Shed at the Goodwood Community Park**

Bond	**Percent of the Total Price**
(a) A performance bond conforming to the form of a Performance Bond in the format of C.C.D.C. 221 or in a form acceptable to the **Town.**	%
(b) A labour and material payment bond conforming to the form of labour and material payment bond in the format of C.C.D.C. 222 or in a form acceptable to the **Town.**	%

Surety Information	Print or Type Details
Dated at (City or Town)	
Date	
Surety	
Signature of Authorized Signing Officer	
Office or Position of Authorized Signing Officer	

If the above-mentioned bid is accepted, the undersigned will execute the bond within ten (10) days of notification of acceptance of the bid.

Note: This agreement must be executed on behalf of the Surety Company by its authorized officers under the company's Corporate Seal and the Surety Company must be a satisfactory Guarantee Company, authorized by law to carry on business in the Province of Ontario.

Name of Firm: _____

5 APPENDICES AND SCHEDULES

The following list is applicable to this Quotation.

Appendix 'A' – Drawings for Building

Appendix 'B' - Confirmation of Favourable Health and Safety Practice Form

Appendix 'C' – Borehole and Test Pit Records

Appendix "D" – Designated Substance Survey

Appendix "E" – Exterior Light Fixture Details

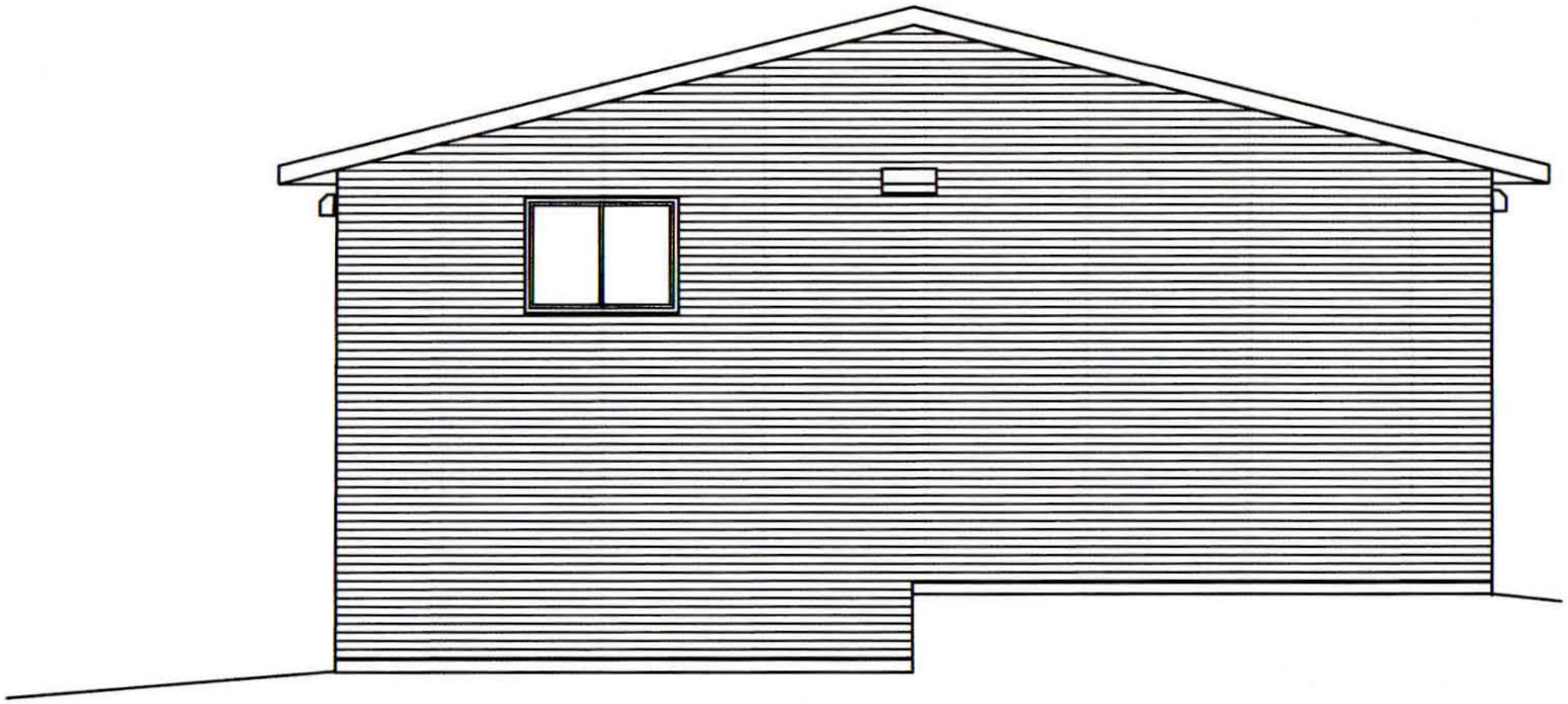
Appendix "F" – Site Elevations

Schedule 1 - Bidder's Reference Form

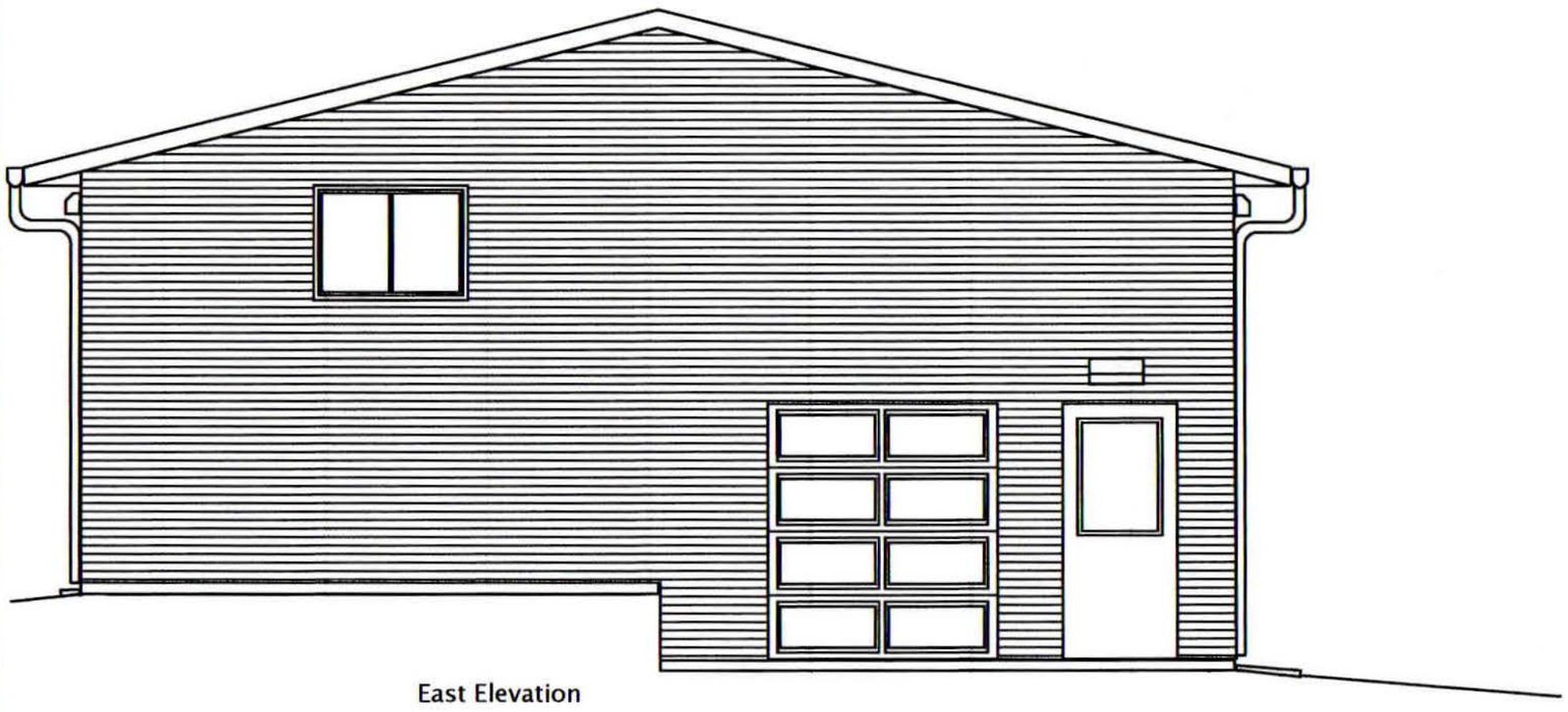
Schedule 2 - Subcontractor Form

Schedule 3 - Contractor Environmental Acknowledgement Form

Appendix 'A'
Drawings



West Elevation



East Elevation

Orr Engineering Inc

P.O.Box 488
Uxbridge, ON
L9P 1M9

Stamp

LICENSED PROFESSIONAL ENGINEER
COLLEEN E. ORR
PROVINCE OF ONTARIO

Customer

Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

Revision	Date

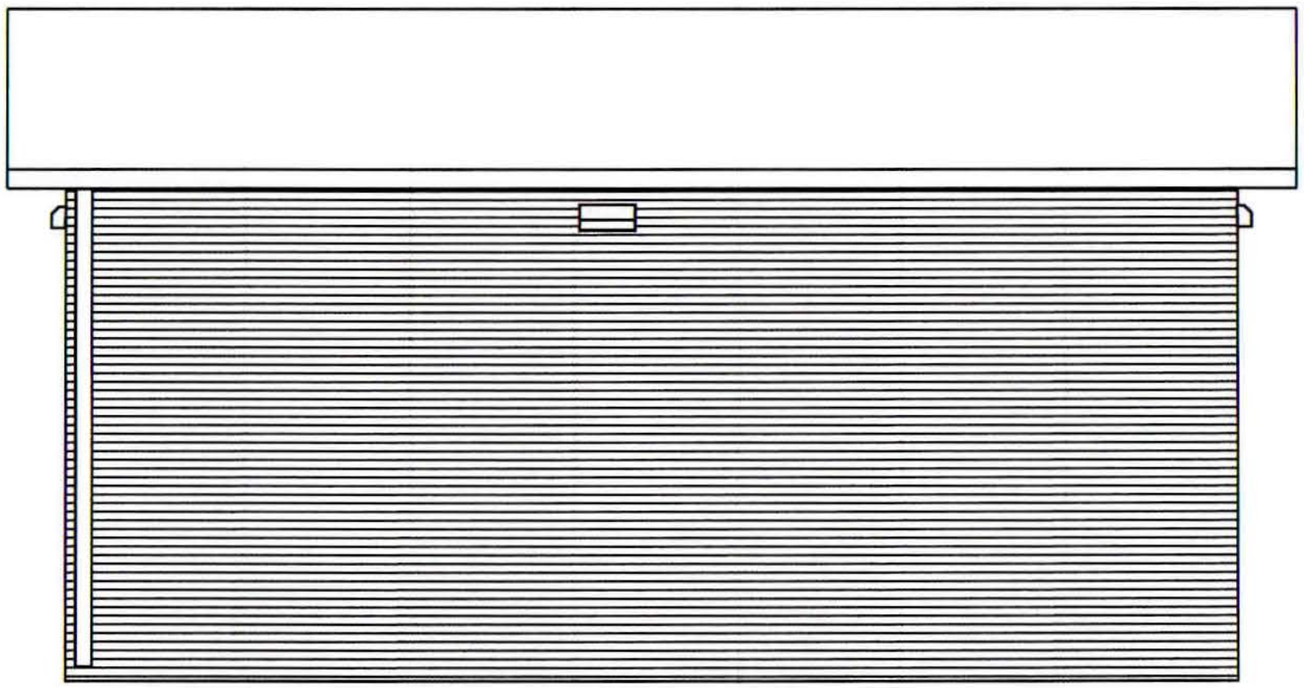
Project

New Storage Building

Drawing Name

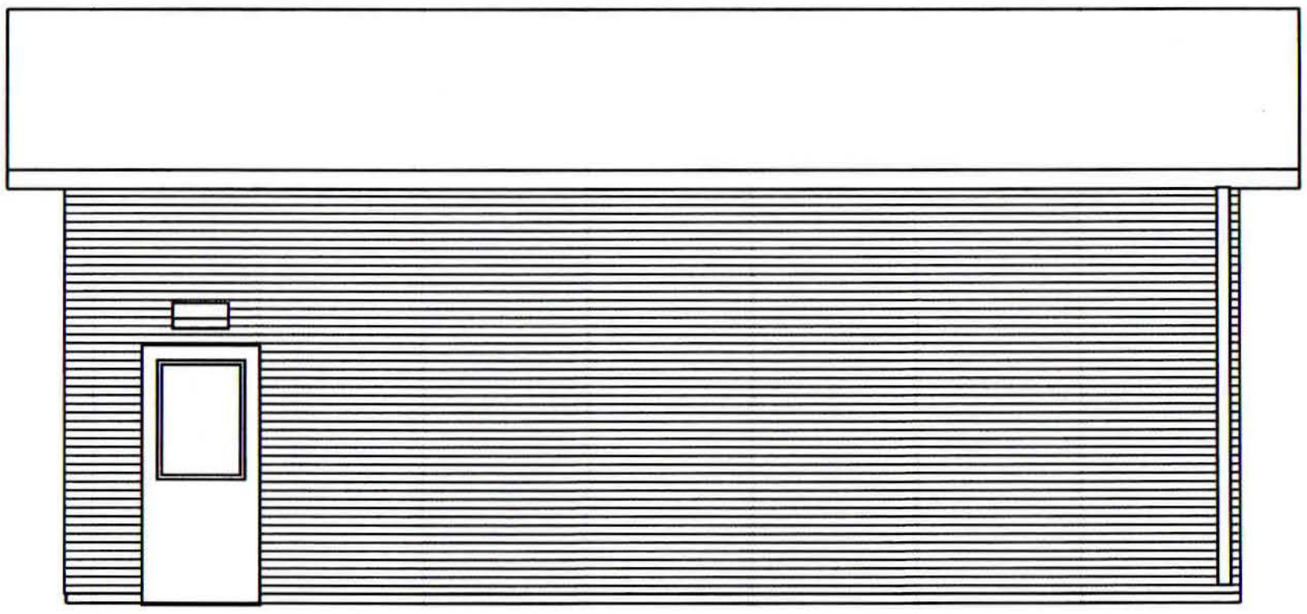
Elevations East and West

August 2018



North Elevation

Note: Grade so that water shedding from downspouts exists away from all buildings



South Elevation

Orr Engineering Inc

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Uxbridge, ON
L9P 1M9

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COLLEEN E. ORR
PROVINCE OF ONTARIO

Customer

Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

Revision	Date

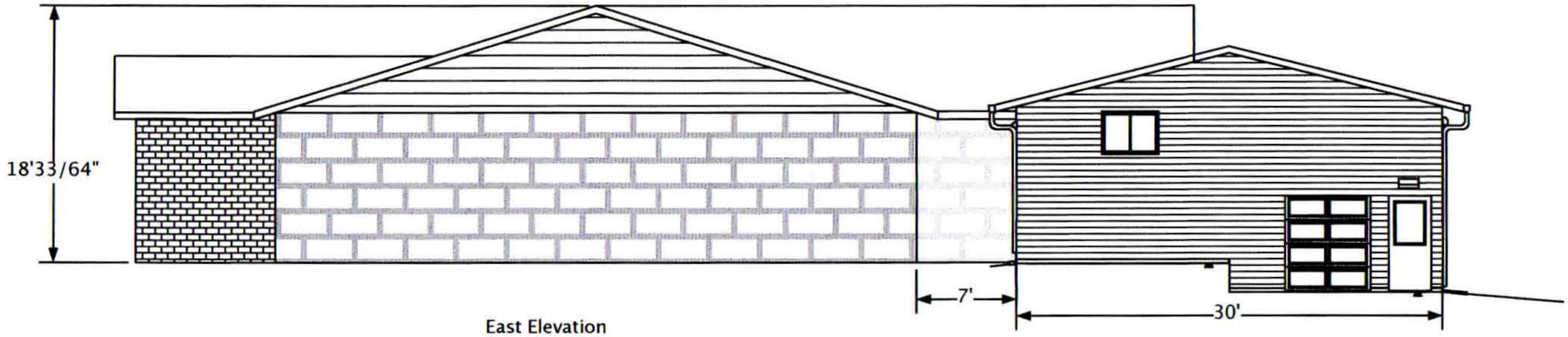
Project

New Storage Building

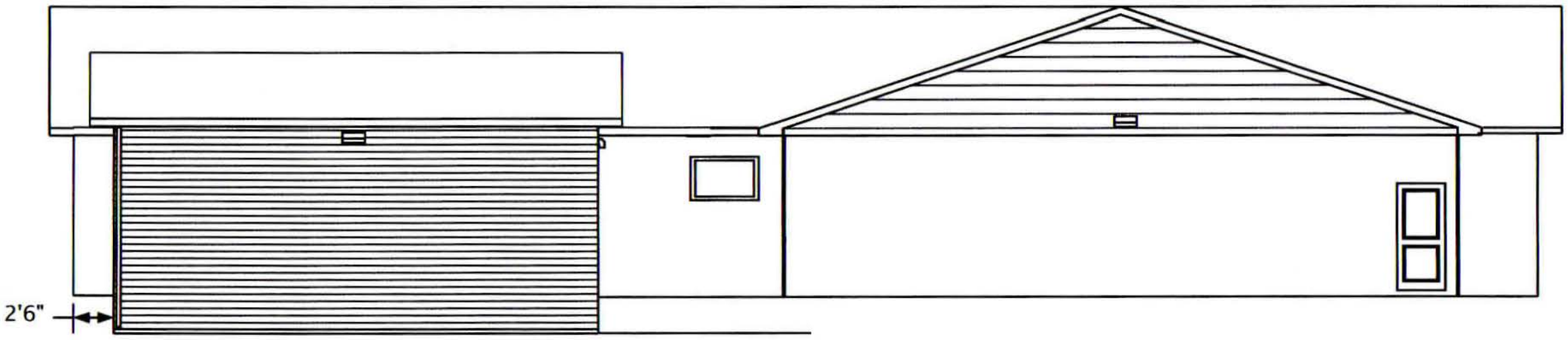
Drawing Name

Elevations North and South

August 2018



East Elevation



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Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

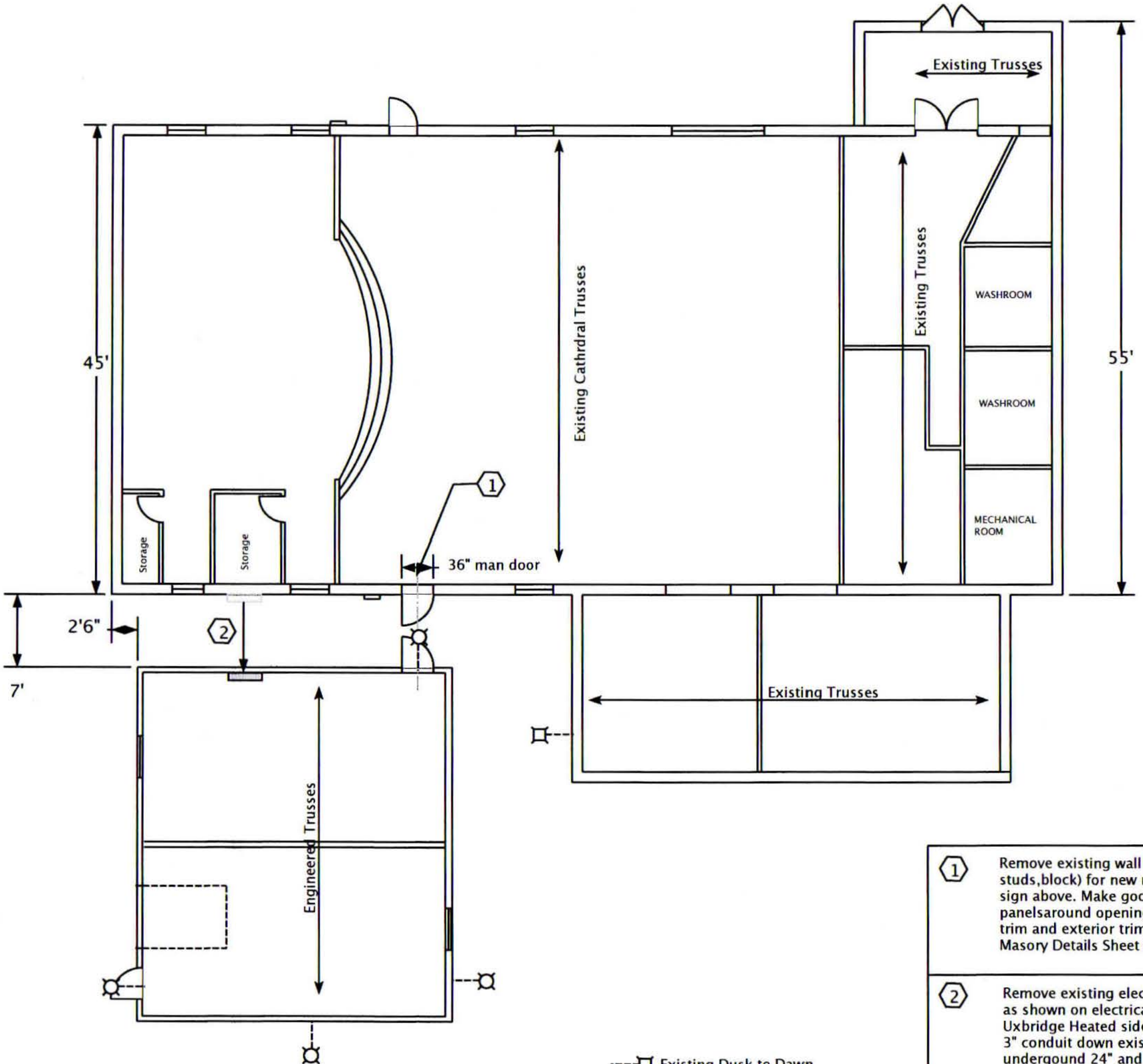
Scale 3/8" = 1'

Revision	Date

Project: New Storage Building

Drawing Name: Overall Elevations

August 2018



Existing Dusk to Dawn

New Exterior Motion Wall Pack

1. Remove existing wall (plaster,mesh,wood studs,block) for new man door, provice EXIT sign above. Make good existing decrative panelsaround opening and provide interior trim and exterior trim of man door. See Masory Details Sheet for Lintel Size.

2. Remove existing electrical panel and relocate as shown on electrical layout, sheet 12, inside Uxbridge Heated side of the new building. Run 3" conduit down existing building, undergound 24" and up insude new building.

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Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

Revision	Date

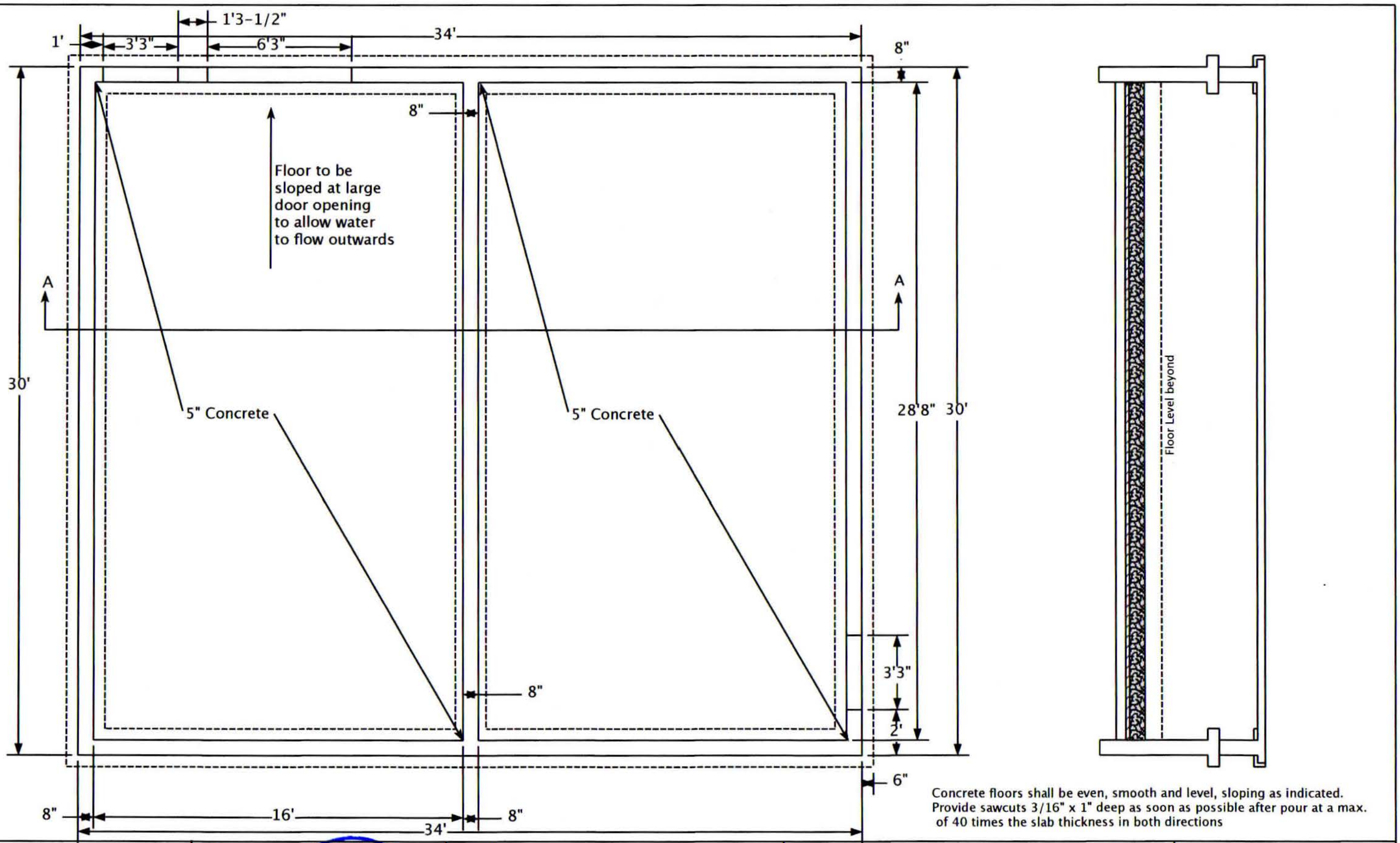
Project

New Storage Building

Drawing Name

Overall Floor Plan

August 2018



Concrete floors shall be even, smooth and level, sloping as indicated. Provide sawcuts 3/16" x 1" deep as soon as possible after pour at a max. of 40 times the slab thickness in both directions

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Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

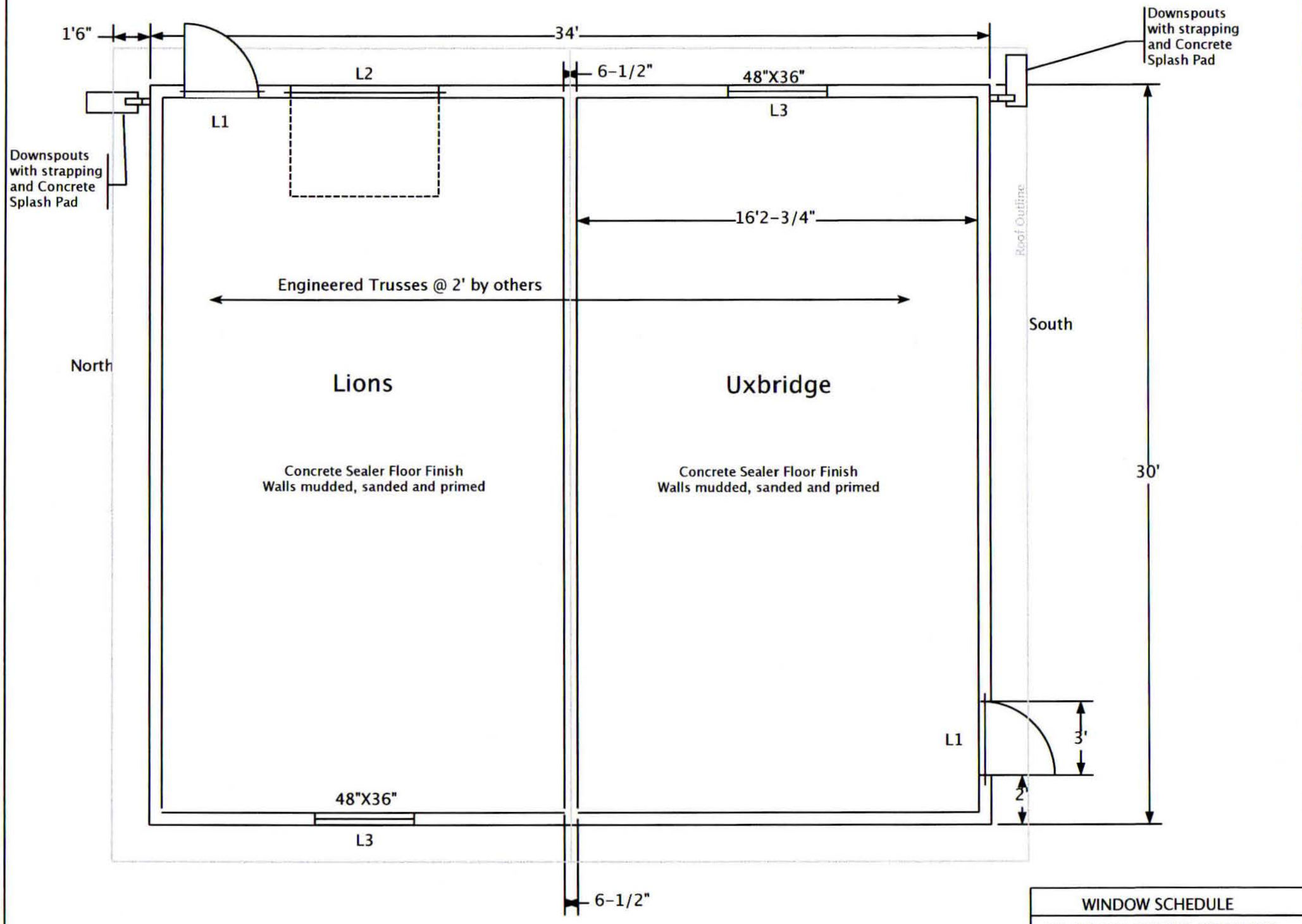
Scale 1/4"=1'

Revision | Date

Project
New Storage Building

Drawing Name
Foundation Plan

August 2018



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Goodwood Community Park
268 Highway 47
Goodwood, ON

Revision	Date

WINDOW SCHEDULE

48"x36" NON-OPENING, WHITE VINYL, LOW-E, ARGON, DOUBLE PANE

DOOR SCHEDULE

OPENING	HEIGHT	TYPE	COMMENTS
36"	84"	GREY STEEL INSULATED (NO WINDOW)	PROVIDE LOCKSET, KICK PLATE, WEATHER STRIPPING, THRESHOLD, DOORSTOP, CYLINDERS, HINGES
72"	84"	ALUMINIUM OVERHEAD PREFINISHED	PROVIDE WEATHERSTRIPPING, LOCK

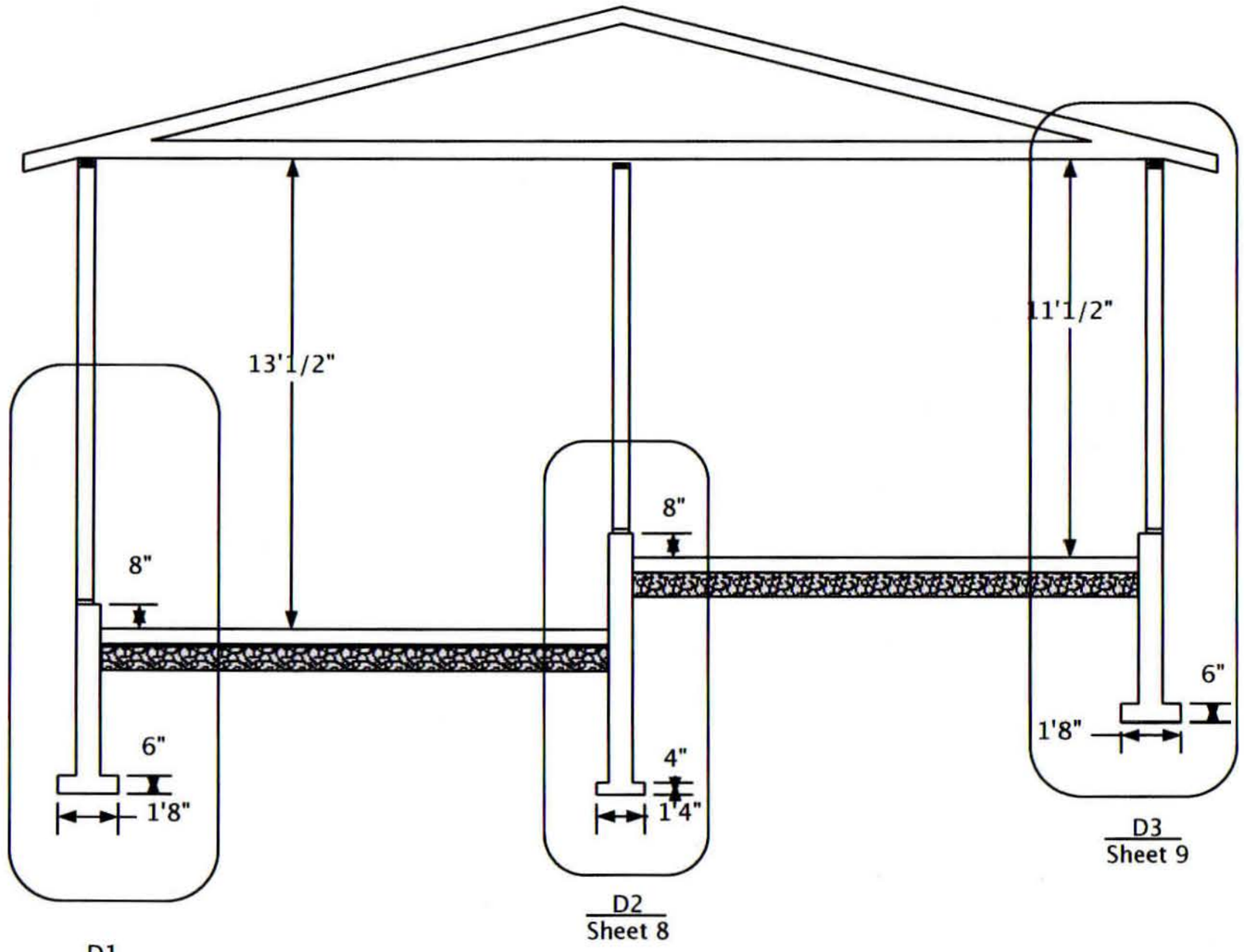
LINTEL SCHEDULE

L1 2-2"X6"
L2 2-2"X6"
L3 2-2"X6"

Project
New Storage Building

Drawing Name
1st Floor

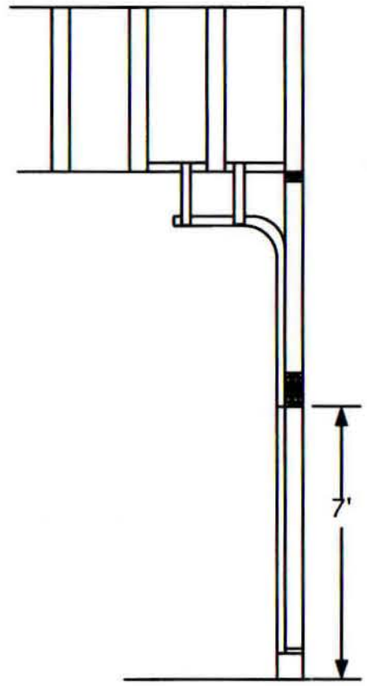
August 2018



D1
Sheet 8

D2
Sheet 8

D3
Sheet 9



7' Overhead
Door Detail

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Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

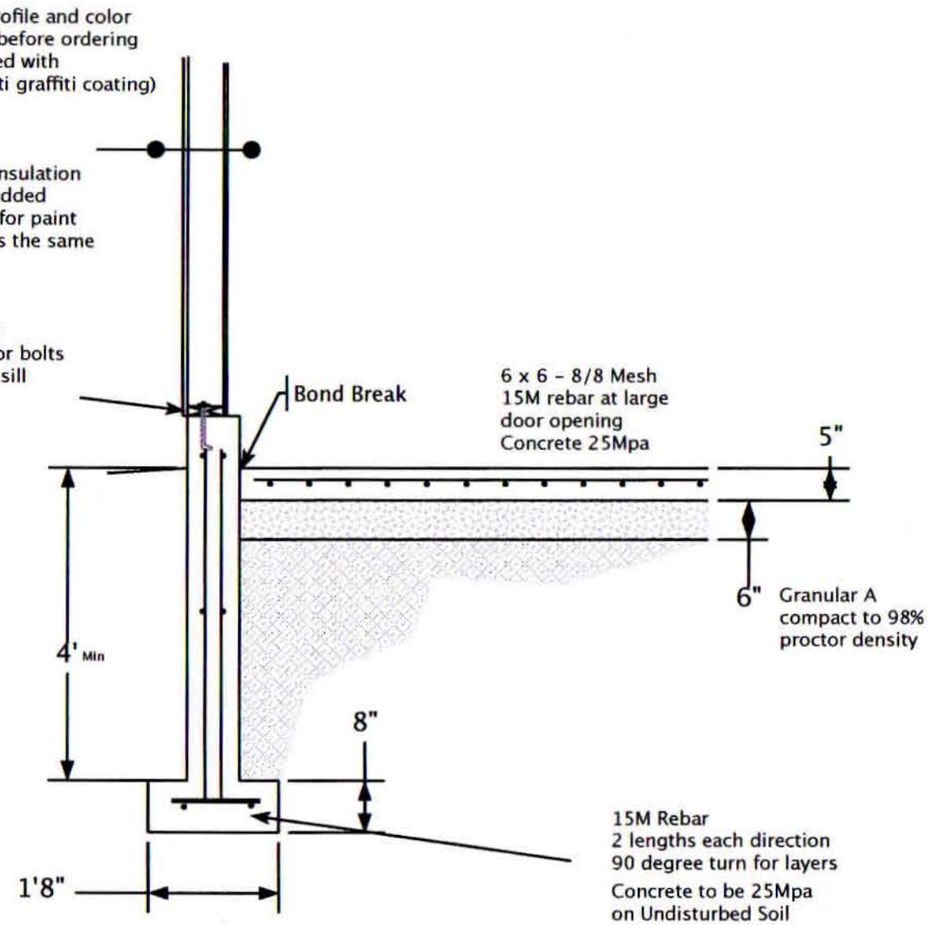
Scale 1/4" = 1'

Revision | Date

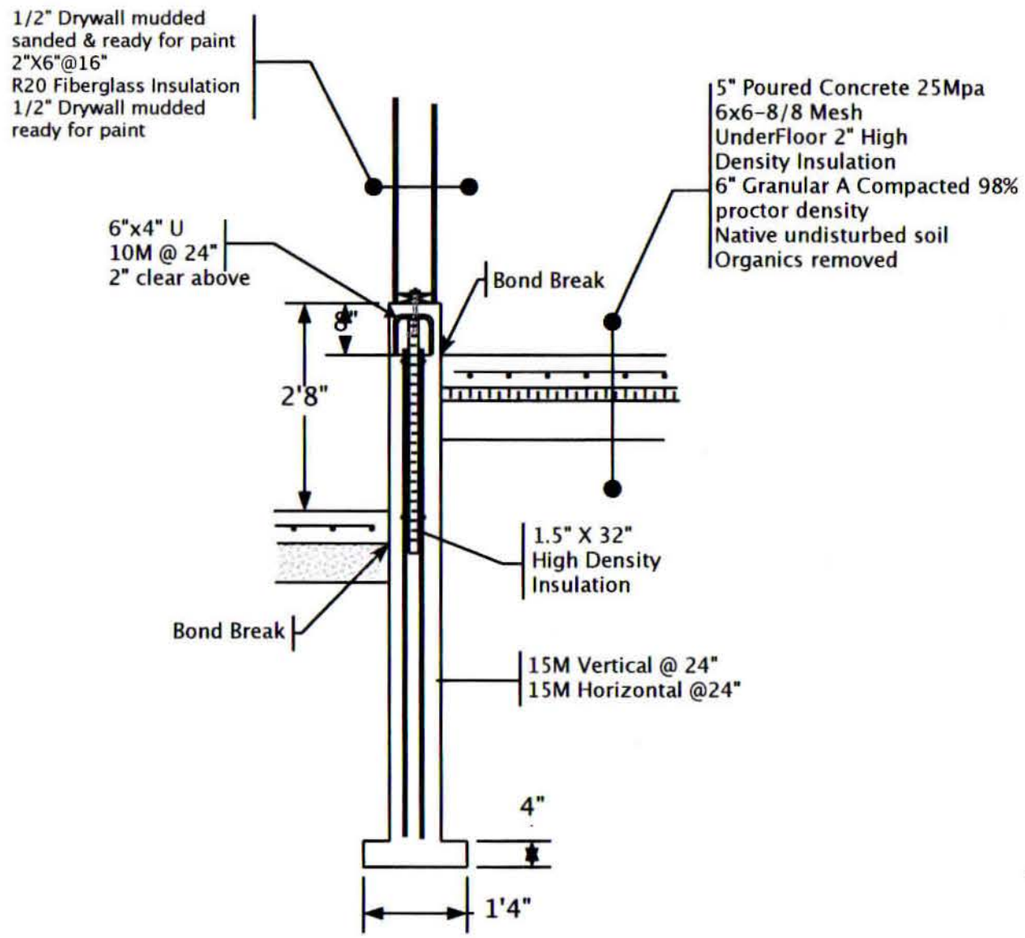
Project
New Storage Building

Drawing Name
Section A-A

August 2018



North Exterior Wall Detail
Scale 1/2" = 1'



Centre Sandwich Wall Detail
Sacle 1/2" = 1'

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Uxbridge, ON
L9P 1M9

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Customer

Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

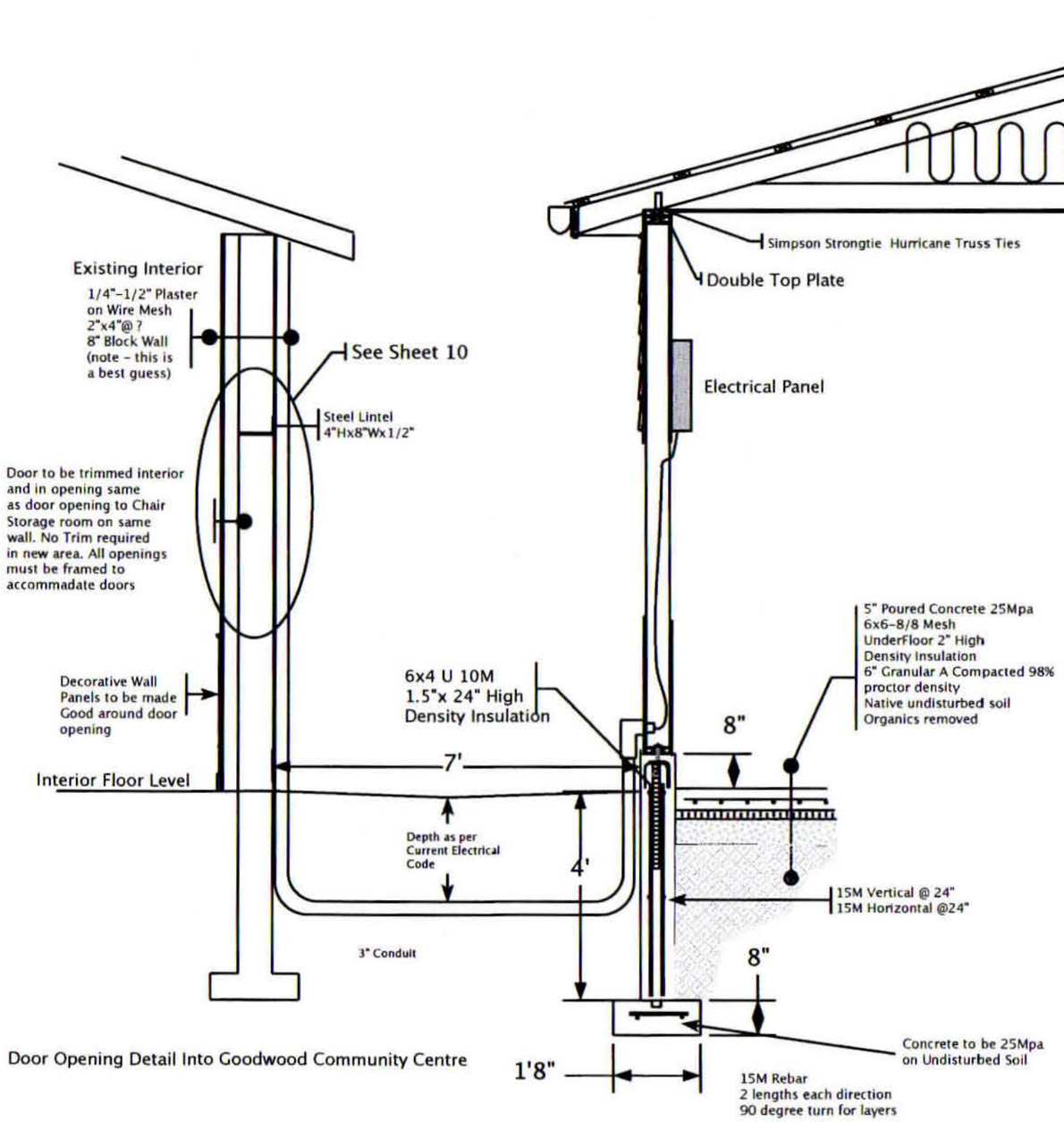
Scale

Revision | Date

Project
New Storage Building

Drawing Name
Details D1 and D2

August 2018 | 8 of 13



Door Opening Detail Into Goodwood Community Centre

Proposed New Storage

Note:
1. All electrical is to meet or exceed current electrical codes.
2. See sheet 11 for sandwich wall detail
3. Hurricane Ties to be Simpson Strong Tie H10S .

Scale = 3/8" = 1'

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P.O.Box 488
Uxbridge, ON
L9P 1M9

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COLLEEN E. ORR
PROVINCE OF ONTARIO

Customer

Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

Revision	Date

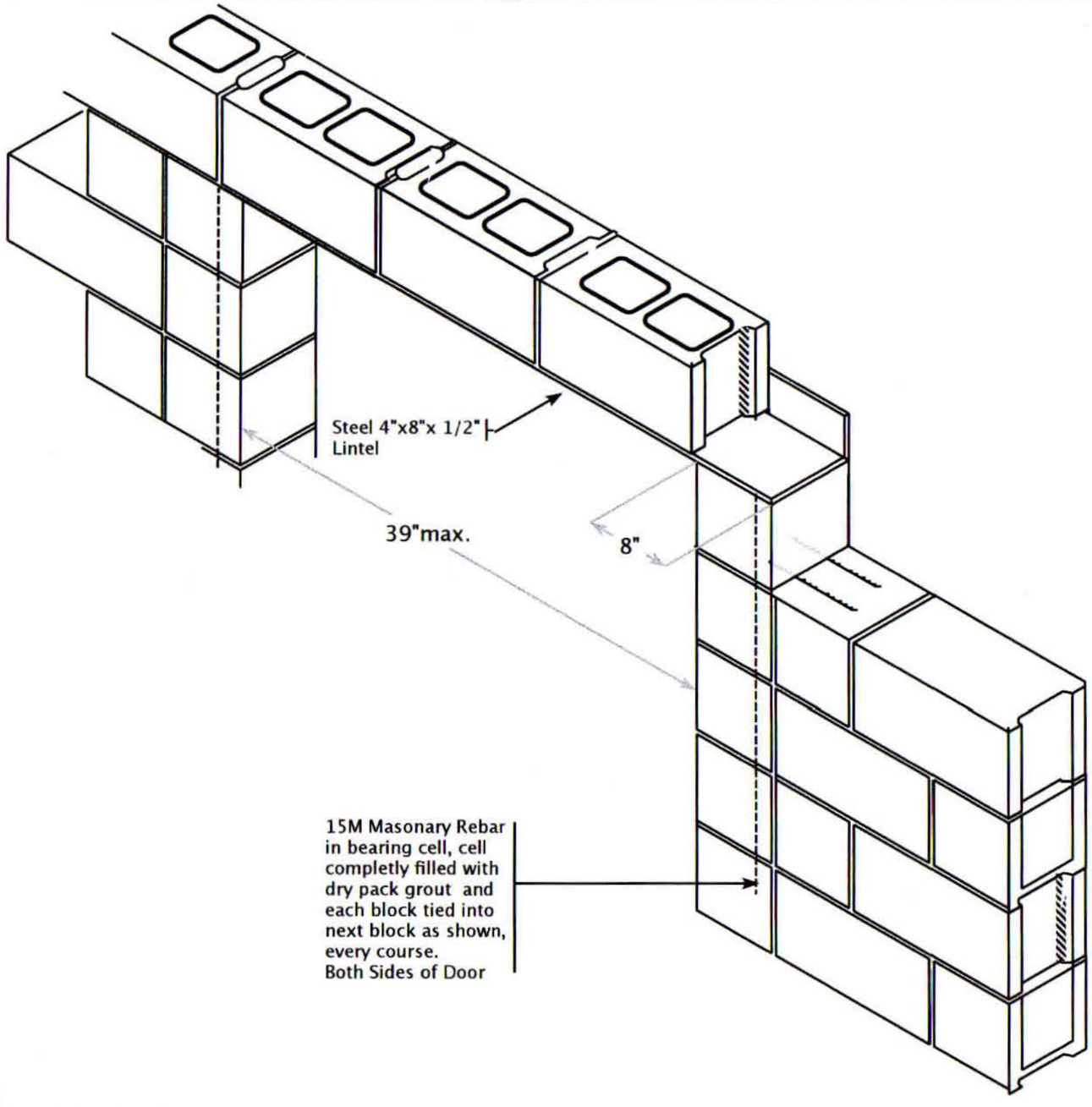
Project

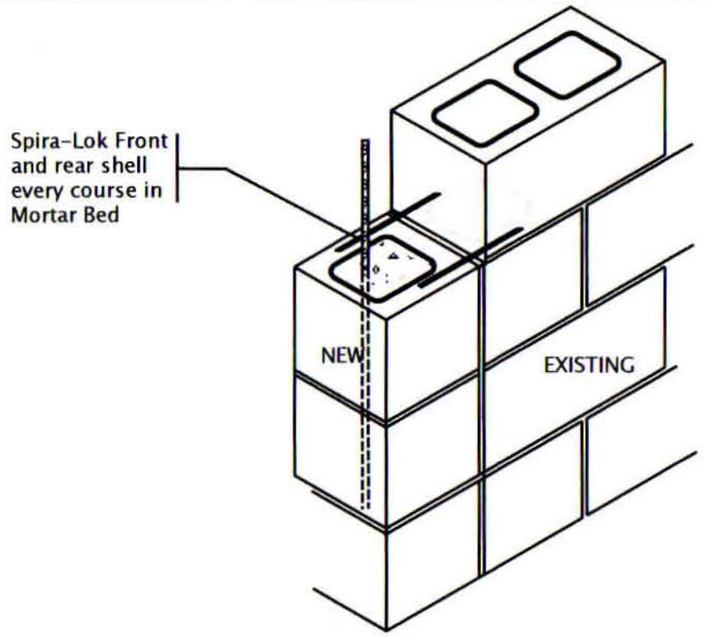
New Storage Building

Drawing Name

Detail D3

August 2018





MASONARY TIED TO EXISTING WALL

Notes:
1. Door location to be finalized on site
2. 15M vertical rebar to be doweled into existing footing a min. 5". Holes to be drilled 1/8" larger than rebar and cleaned before epoxy and rebar placed.

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Uxbridge, ON
L9P 1M9

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Customer

Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

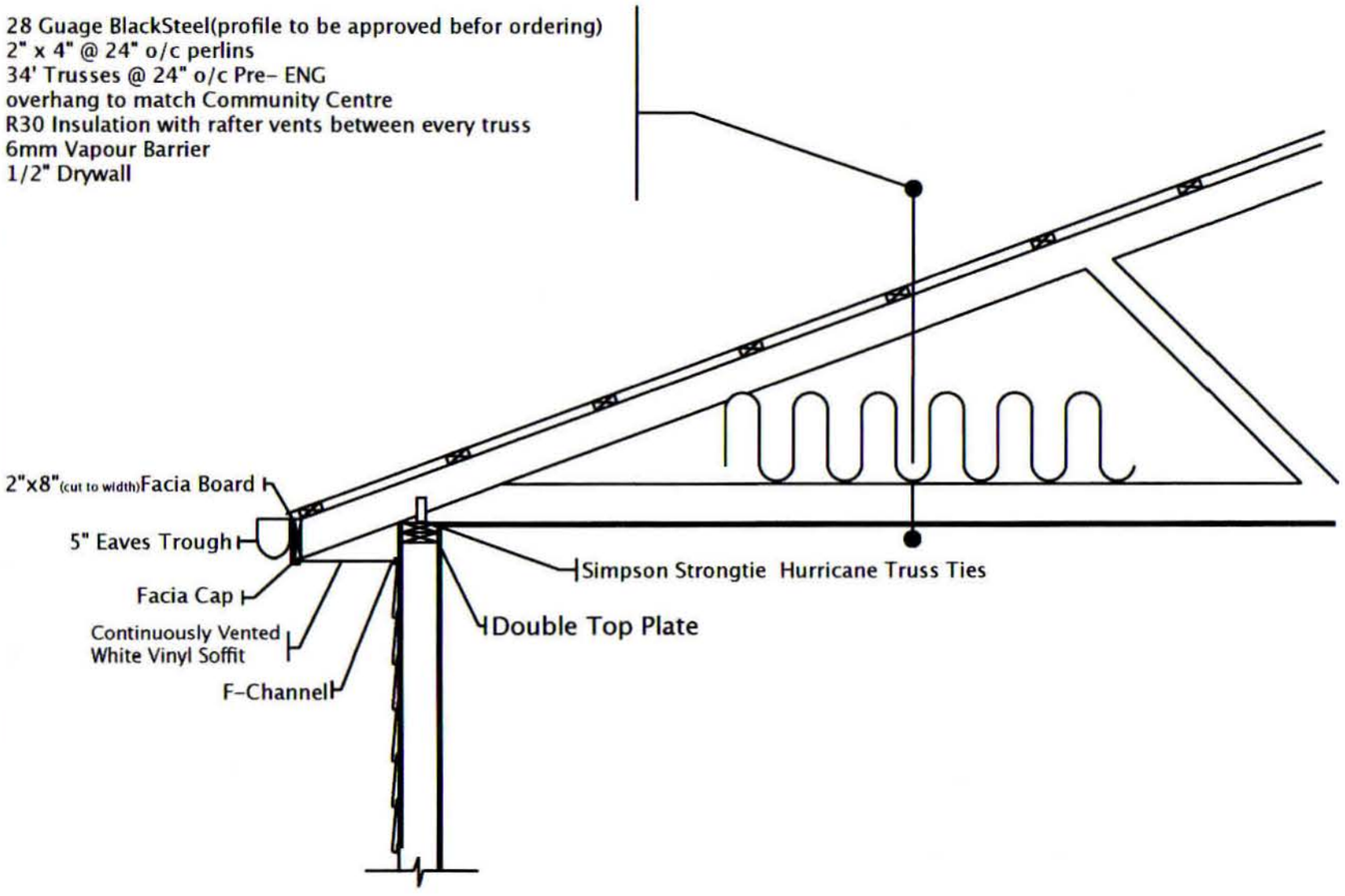
Scale NTS

Revision	Date

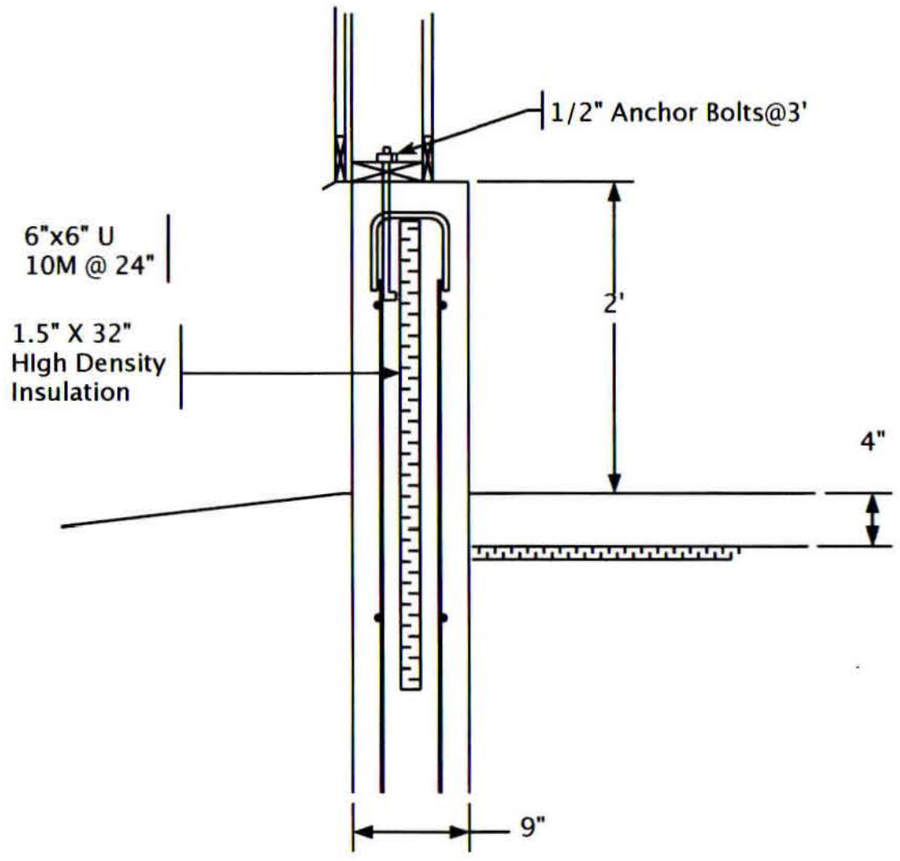
Project
New Storage Building

Drawing Name
Masonry Details

August 2018



Roof Connection Detail
1/2" = 1'



Sandwich Wall Detail
1" = 1'

Note:
1. Hurricane Ties to be Simpson Strong Tie H10S .

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Uxbridge, ON
L9P 1M9

Stamp

LICENSED PROFESSIONAL ENGINEER
COLLEEN E. ORR
Aug 22/18
PROVINCE OF ONTARIO

Customer

Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

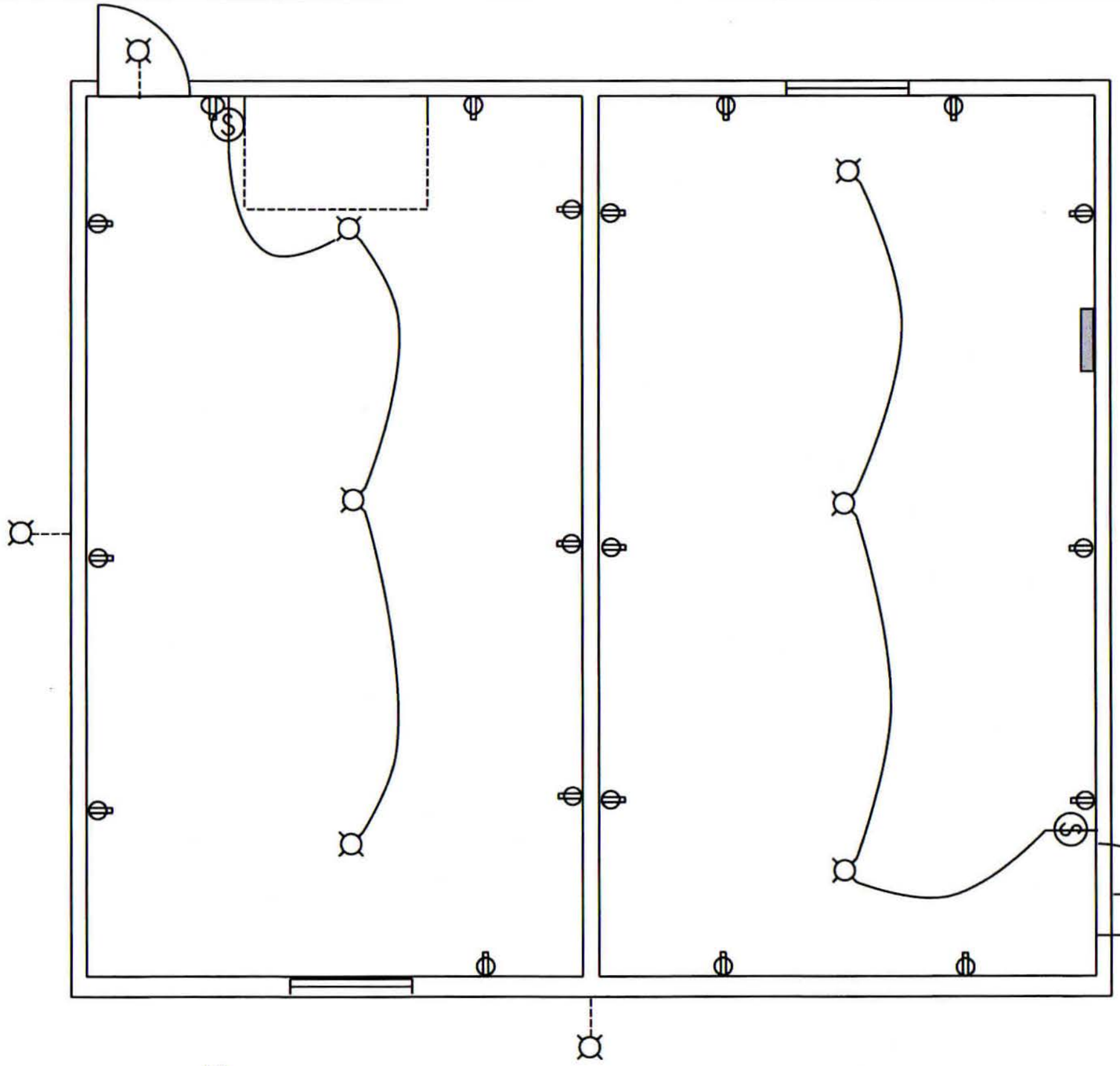
Scale

Revision	Date

Project
New Storage Building

Drawing Name
Roof and Sandwich Wall Details

August 2018 | 11 of 13



L2

- Duplex outlet
- Lithonia 10"x24" 80WattLED Shop with Motion Sensor
- Single Wall Switch
- GE Evolve LED Area Light with Motion Sensor
- Elecrical Panel

Orr Engineering Inc
P.O.Box 488
Uxbridge, ON
L9P 1M9

Stamp

LICENSED PROFESSIONAL ENGINEER
COLLEEN E. ORR
PROVINCE OF ONTARIO

Customer

Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

Scale

Revision	Date

Project

New Storage Building

Drawing Name

Lighting and Electrical

August 2018

General Notes

1. The most recent issue of any standard, codes or regulations mentioned in the drawings provided must be used, unless indicated other wise in the specifications.

2. All workmanship and framing must conform to the most recent issue requirements of NBCC, OBC, applicable local building codes and CSA requirements.

3. The contractor responsibilities include:
   - obtaining approvals from all required local authorities.
   - safeguard all existing structures affected by the construction.
   - obtaining field measurements required for fabrication.

4. Preserve fire rating when penetrating ceilings, floors and walls.

5. Drawings are not to be scaled.

6. To avoid damage to the existing roof, adequate protection (plywood sheets) must be provided by the contractor for the entire duration of the construction. Constructoin loads must not exceed a concentrated load of 1.3kN or uniform distributed load of 1.0 kPa.

7. All shop and installation drawings must be submitted to Orr Engineering by the contractor for review prior to fabrication of the materials if any involved with this project.

8.Concrete drilling in areas occupied by tenants shall be coordinated with the buildings owner/manager and may be required to be completed outside normal working hours. Services damaged must be repaired by the contractor at his own expense.

9. Drawings to be read in conjunction with all other contract documents including electrical drawings. No changes from the drawings are permitted unless authorized by the engineer.

Concrete Notes

1. All workmanship must be in accordance with the latest edition of all applicable standards.

2. Reinforcing steel must be grade 400 deformed bars to CAN/CSA G30, 18, unless noted otherwise. Concrete cover to be 3" min. unless otherwise stated.

3. Welded steel must have a minimum yield strength of 40MPa and conform to CSA G30.5 (Provide in flat sheets only)

4. Bend and detail reinforcing steel as indicated in the Reinforcing Steel Manual of Standard Practice by the Reinforcing Steel Instituite of Canada.

5.Cast in place concrete to have a minimum 28 Day minimum compressive strength of 32MPa unless otherwise noted.

6. Slump at point of discharge to not exceed 127mm unless otherwise stated.

7. All concrete exposed to freezing and thawing or de-icing chemicals must contain entrainment air.

8. All concrete exposed corner edges shall be chamfered 1" x 1".

9. All grout used shall be non-shrinking, installed to manufacturers instructions, unless otherwise noted.

10. Contractor is not to cut any reinforcment without permission from the structural engineer.

11. Concrete shall be consolidated by internal vibration.

12. Load bearing of soil to be confirmed on site by a geotechnical engineer before footings and floors are poured

Wood Frame & Structural Timber Notes

1. All workmanship must be in accordance with the latest edition of the OBC and any other applicable standards.

2. Nails to conform to CSA C111-1974 galvanized for the exterior locations and treated lumber. Nailing pf frame per OBC tables 9.23.3.4 unless otherwise specified.

Design Loads

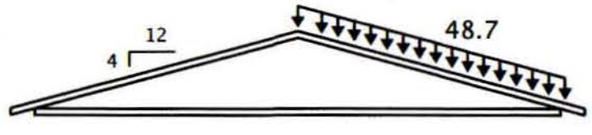
Cs = 0.71
Cw = 0.75 (WIND SWEPT)
Ca = 1.17

1. GROUND SNOW LOAD	43.8 PSF
2. RAIN LOAD	8.4 PSF
3. ULS BALANCED LOAD	35.6 PSF
4. ULS UNBALANCED LOAD	48.7 PSF
5. BTM CHORD DEAD LOAD	8.0 PSF
6. TOP CHORD DEAD LOAD	4.0 PSF

SOIL BEARING PRESSURE REQUIRED 3000 PSF

Case 1 - Balanced Snow Load Windswept Location

Case 2 - Unbalanced Snow Load



Total Roof Dead Load = 10 PSF

Orr Engineering Inc
P.O.Box 488
Uxbridge, ON
L9P 1M9

Stamp

Customer

Township of Uxbridge
Goodwood Community Park
268 Highway 47
Goodwood, ON

Revision	Date

Project

New Storage Building

Drawing Name

General Notes

August 2018 | 13 of 13

Appendix 'B'

CONFIRMATION OF FAVOURABLE HEALTH AND SAFETY PRACTICE FORM

Name of Firm: _____

APPENDIX 'B'

CONFIRMATION OF FAVOURABLE

HEALTH AND SAFETY PRACTICE FORM

To Contractor(s):

The Township of Uxbridge is committed to:

1. The prevention of workplace injury and illness to all workers at Township work locations.
2. The belief that contractor safety is compatible with the safety policy of the Township and is good business.
3. Assuming a leadership role by citing contractors for any violations of the contract.

To ensure the Township workplace is a healthy and safe working environment, contractors, constructors and sub-contractors must have knowledge of and operate in compliance with the Occupational Health and Safety Act and any other legislation pertaining to employee health and safety.

For long term contracts, or contracts involving pre-selected contractors, the Township reserves the right to cancel (or place on probation) the contract of any contractor who is charged and/or convicted of offences under the Occupational Health and Safety Act while carrying out any part of a project with the Region.

Contractor's Statement of Responsibility

As a contractor retained to perform work for the Township of Uxbridge, I/we accept the following health and safety responsibilities:

- I/we will comply with all procedures and requirements of the Occupational Health and Safety Act, Regional safety policies and procedures, department and site specific policies and procedures and all applicable legislation or regulations.
- I/we will work safely with skill and care so as to prevent accidental injury to ourselves, fellow employees and all other persons on the site of the work.
- For contracts or sub-contracts that involve commercial motor vehicles as defined by the Highway Traffic Act, I/we acknowledge possession of a current Carrier CVOR abstract with one of the following safety ratings: Excellent; Satisfactory; Conditional; or Satisfactory - Unaudited.
- I/we will advise the Township if the CVOR safety rating of our firm is changed to "Unsatisfactory" at any time during the course of the contract and, upon request, will provide the Township with a copy of the most recent Carrier CVOR abstract indicating the sanctions imposed by the Ministry of Transportation.

_____	_____
Contractor	Name of Person Signing for Contractor
_____	_____
Signature of Contractor	Date

Appendix 'C'
Borehole and Test Pit Records

For Reference Only

Stantec Consulting Ltd.
300W-675 Cochrane Drive, Markham ON L3R 0B8

September 20, 2017
File: 160621777

Attention: Mr. Ben Kester, C.E.T., Director of Public Works
Township of Uxbridge
51 Toronto Street South
P.O. Box 190
Uxbridge, ON L9P 1T1

Dear Mr. Kester,

Reference: Test Pit Assessment
Proposed Building Addition
Goodwood Community Centre
268 Highway 47
Goodwood, Ontario

Further to your request, Stantec Consulting Ltd. (Stantec) has completed a test pit assessment to assist with the design of the foundations for the proposed building addition for the Goodwood Community Centre located at the municipal address of 268 Highway 47 in Goodwood, Ontario. This letter report provides a brief summary of the test pit findings and outlines the recommendations for review by the Township of Uxbridge (Uxbridge).

PROPOSED COMMUNITY CENTRE ADDITION

The proposed building addition will be used for additional floor space usage for the community centre. Based on Information provided by Uxbridge, the proposed building addition will have an area of approximately 46.45 m^2.

The FFE of the building addition will match the existing FFE of the existing community centre.

It is understood that shallow foundations consisting of strip footings are being considered as the foundation system for the proposed building addition. It is anticipated that the foundation system will extend beyond the depth required for frost protection.

At the time of the test pit assessment, Uxbridge excavated one (1) test pit against the foundation wall of the existing building to determine the depth and size of the existing footing. The test pit excavation revealed the following: (1) the depth of the footing from the ground surface to the top of the footing is approximately 1.21 m; (2) the footing extends out from the wall approximately 10.1 cm and; (3) the footing is approximately 15.24 cm thick. The test pit remained open prior to backfilling was stable with no indication of groundwater seepage or sloughing.

Reference: Test Pit Assessment
Proposed Building Addition
Goodwood Community Centre
268 Highway 47
Goodwood, Ontario

FIELD WORK

The subsurface investigation was carried out on August 4, 2017, using a backhoe to excavate one (1) test pit to obtain subsurface information and to visually assess the quality of the subsurface soil conditions. Specifically, the test pit provided an opportunity to view the conditions associated with:

- The stability of open cut excavations;
- Presence of earth fill;
- Presence of seepage and/or static groundwater; and,
- The presence of cobbles and/or boulders.

The test pit which was intended to be excavated to a depth of 2.4 m would provide an opportunity to collect bulk samples for laboratory testing purposes.

The test pit was excavated at the location shown on Figure No. 1 in the appendix.

The conditions encountered in the test pit was recorded by a Senior Geotechnical Consultant. Samples of the material encountered in the test pit were collected, placed in moisture-proof containers, and transported to Stantec's laboratory.

The test pit was backfilled with the excavated soil upon completion. The backfill was tamped in place using the excavator bucket and the ground surface roughly leveled with the surrounding ground.

SURVEY

The location of the test pit was confirmed in the field by a representative of Uxbridge.

LABORATORY TESTING

All soil samples returned to the laboratory were subjected to detailed visual examination and classification.

Unless requested in advance, all samples will be stored in our laboratory for a period of two months, from completion of the field work.

Reference: Test Pit Assessment
Proposed Building Addition
Goodwood Community Centre
268 Highway 47
Goodwood, Ontario

GEOTECHNICAL ENGINEERING ASSESSMENT

The subsurface conditions encountered in the test pit are shown on the Test Pit Record provided in the appendix.

The results of the grain size analysis test on a sample of the native silty sand is illustrated in the appendix.

An explanation of the symbols and terms used on the Test Pit Record is also provided in the appendix.

The stratigraphy encountered in the test pit generally consists of topsoil, approximately 600 mm thick, overlying a stratum of silty sand extending beyond the investigated depth of 2.1 m.

Based on the rod probing the consistency of the silty sand deposit can be considered as compact to dense.

The test pit remained dry upon completion.

WORKS BUILDING FOUNDATION

Conventional shallow strip footing foundations can be founded in the native silty sand soil. Geotechnical design parameters are provided the table below.

Conventional Strip Footings on Native Silty Sand

Footing Size	Factored ULS Resistance (kPa)	SLS Reaction (kPa)
Strip Footings		
0.45 m wide	250	150
0.6 m wide	250	150

The ULS values provided above include a resistance factor of 0.5. The SLS reaction values have been calculated to provide a total settlement of 25 mm (or less) and differential settlement of 19 mm.

The Ontario Building Code and the guidelines in the Canadian Foundation Engineering Manual require any exterior footings and footings in unheated areas exposed to freezing temperatures be

Reference: Test Pit Assessment
Proposed Building Addition
Goodwood Community Centre
268 Highway 47
Goodwood, Ontario

provided with a conservative minimum of 1.2 m of soil, or equivalent insulation, for adequate frost protection.

Where construction is undertaken during winter conditions, the footing subgrade must be protected from freezing.

Floor Slab

A conventional slab-on-grade can be used for the planned addition, provided that the subgrade is prepared in accordance with the recommendations provided herein.

It is recommended that a moisture break be installed prior to construction of the floor slab. The moisture break should consist of a 200 mm thick layer of OPSS Granular A compacted to a minimum of 100% of the materials SPMDD.

A modulus of subgrade reaction, k_{v1}, of 20 MPa/m [based on a loaded area of 300 mm x 300 mm] can be used for design of the floor slab at this site, provided that the construction is in accordance with the recommendations provided herein.

A perimeter drainage system will not be required, provided that the proposed finished floor is a minimum of 150 mm above the exterior grade and the ground surface around the perimeter of the building slopes down away from the building walls.

Under floor drains will not be required for the planned building addition.

The floors slabs should not be tied to any load-bearing walls or columns.

Backfilling Against the Foundation Wall

The results of the gradation analysis undertaken on one (1) sample of the native soil indicated that the soils are predominantly fine grained in that they contain little to no gravel content. The predominant grain size in the sample was sand, with varying amounts of silt.

This material is assessed as having a moderate frost susceptibility in accordance in accordance with Section 3.1.5 of the MTO's Pavement Design and Rehabilitation Manual.

This material should not be considered as free draining. Therefore, this soil should not be used as backfill in any application requiring the use of free draining material, such as for drainage layers,

perimeter foundation wall backfill, service pipe bedding, or sub-base and base layers in pavements.

For backfill for perimeter foundation walls, it is recommended that the backfill consist of non-frost susceptible granular fill material such as OPSS Granular B-Type 1 material.

Earthquake Design Considerations

The Ontario Building Code (O. Reg. 350/06) specifies that structures should be designed to withstand forces due to earthquake.

For the purpose of earthquake design the relevant geotechnical information required based on the conditions at this site is the "Site Class".

Given the discussions above, we recommend that Site Class D be applied to this site, in accordance with Table 4.1.8.4.A of the Ontario Building Code (2012).

Excavation and Groundwater Control

Temporary excavations must be carried out in accordance with the latest edition of the Occupational Health and Safety Act (OHSA).

The compact to dense silty sand should be classified as a Type 2 soil. The maximum excavation side slope for a Type 2 soil is 1:1 (Horizontal: Vertical) in accordance with the OHSA regulation.

The side slopes of the excavations in soils should be protected from exposure to precipitation and associated ground surface runoff, to prevent further softening and loss of strength soils that could lead to additional sloughing and caving.

If space is restricted such that the side slopes cannot be safely cut back in accordance with the OHSA Regulation, or sloughing and cave-in are encountered in the excavation, the slopes should be flattened to achieve a stable configuration or temporary shoring provided.

Groundwater seepage was not encountered upon completion in the test pit. If encountered, conventional sump pits and contractor's pumps should be suitable for use in handling the infiltration and standing water accumulated in localized, shallow excavations.

This report provides our test pit findings and recommendations for review by Uxbridge.

Reference: **Test Pit Assessment**
Proposed Building Addition
Goodwood Community Centre
268 Highway 47
Goodwood, Ontario

We trust this meets your present requirements. Should you have any questions, please feel free to contact the undersigned.

Regards,

STANTEC CONSULTING LTD.

Original signed by

Eric Fron, C.E.T
Senior Geotechnical Consultant
Tel: 905-415-6365
Fax: 905-474-9889
eric.fron@statnec.com

Original signed by

Ron Howieson, P. Eng.
Senior Principal, Geotechnical Engineering
Tel: 905-415-6430
Fax: 905-474-9889
ron.howieson@stantec.com

APPENDICES Statement of General Conditions
Figure No. 1 - Test Pit Location Plan
Symbols and Terms Used on Borehole and Test Pit Records
Test Pit Records
Laboratory Test Results
Photo log

STATEMENT OF GENERAL CONDITIONS

USE OF THIS REPORT: This report has been prepared for the sole benefit of the Client or its agent and may not be used by any third party without the express written consent of Stantec Consulting Ltd. and the Client. Any use which a third party makes of this report is the responsibility of such third party.

BASIS OF THE REPORT: The information, opinions, and/or recommendations made in this report are in accordance with Stantec Consulting Ltd.'s present understanding of the site specific project as described by the Client. The applicability of these is restricted to the site conditions encountered at the time of the investigation or study. If the proposed site specific project differs or is modified from what is described in this report or if the site conditions are altered, this report is no longer valid unless Stantec Consulting Ltd. is requested by the Client to review and revise the report to reflect the differing or modified project specifics and/or the altered site conditions.

STANDARD OF CARE: Preparation of this report, and all associated work, was carried out in accordance with the normally accepted standard of care in the state or province of execution for the specific professional service provided to the Client. No other warranty is made.

INTERPRETATION OF SITE CONDITIONS: Soil, rock, or other material descriptions, and statements regarding their condition, made in this report are based on site conditions encountered by Stantec Consulting Ltd. at the time of the work and at the specific testing and/or sampling locations. Classifications and statements of condition have been made in accordance with normally accepted practices which are judgmental in nature; no specific description should be considered exact, but rather reflective of the anticipated material behavior. Extrapolation of in situ conditions can only be made to some limited extent beyond the sampling or test points. The extent depends on variability of the soil, rock and groundwater conditions as influenced by geological processes, construction activity, and site use.

VARYING OR UNEXPECTED CONDITIONS: Should any site or subsurface conditions be encountered that are different from those described in this report or encountered at the test locations, Stantec Consulting Ltd. must be notified immediately to assess if the varying or unexpected conditions are substantial and if reassessments of the report conclusions or recommendations are required. Stantec Consulting Ltd. will not be responsible to any party for damages incurred as a result of failing to notify Stantec Consulting Ltd. that differing site or sub-surface conditions are present upon becoming aware of such conditions.

PLANNING, DESIGN, OR CONSTRUCTION: Development or design plans and specifications should be reviewed by Stantec Consulting Ltd., sufficiently ahead of initiating the next project stage (property acquisition, tender, construction, etc), to confirm that this report completely addresses the elaborated project specifics and that the contents of this report have been properly interpreted. Specialty quality assurance services (field observations and testing) during construction are a necessary part of the evaluation of sub-subsurface conditions and site preparation works. Site work relating to the recommendations included in this report should only be carried out in the presence of a qualified geotechnical engineer; Stantec Consulting Ltd. cannot be responsible for site work carried out without being present.

\\cd1215-f01\work_group\01606\Active\160621777\Drawing\GIS\mxd\Geotech\ReportFigures\20170920_268_HWY_47_Test_Pit_Location\160621777_Fig01_Test_Pit_Location.mxd Revised: 2017-09-20 By: bcowper

644000

644000

Legend

Property Boundary (Approximate)

Test Pit Location

0 20 40 metres

1:1,547 (at original document size of 8.5x11)

Stantec

Project Location
Durham Regional Municipality

160621777 REVA
Prepared by BCC on 2017-09-20
Technical Review by ABC on yyyy-mm-dd
Independent Review by ABC on yyyy-mm-dd

Client/Project
TOWNSHIP OF UXBRIDGE
268 HIGHWAY 47, GOODWOOD, ON

Figure No.
1

DRAFT

Title
Test Pit Location Plan

Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2016.
3. Orthoimagery © First Base Solutions, 2017. Imagery Date, 2016.

SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

SOIL DESCRIPTION

Terminology describing common soil genesis:

Rootmat	- vegetation, roots and moss with organic matter and topsoil typically forming a mattress at the ground surface
Topsoil	- mixture of soil and humus capable of supporting vegetative growth
Peat	- mixture of visible and invisible fragments of decayed organic matter
Till	- unstratified glacial deposit which may range from clay to boulders
Fill	- material below the surface identified as placed by humans (excluding buried services)

Terminology describing soil structure:

Desiccated	- having visible signs of weathering by oxidization of clay minerals, shrinkage cracks, etc.
Fissured	- having cracks, and hence a blocky structure
Varved	- composed of regular alternating layers of silt and clay
Stratified	- composed of alternating successions of different soil types, e.g. silt and sand
Layer	- > 75 mm in thickness
Seam	- 2 mm to 75 mm in thickness
Parting	- < 2 mm in thickness

Terminology describing soil types:
The classification of soil types are made on the basis of grain size and plasticity in accordance with the Unified Soil Classification System (USCS) (ASTM D 2487 or D 2488) which excludes particles larger than 75 mm. For particles larger than 75 mm, and for defining percent clay fraction in hydrometer results, definitions proposed by Canadian Foundation Engineering Manual, 4th Edition are used. The USCS provides a group symbol (e.g. SM) and group name (e.g. silty sand) for identification.

Terminology describing cobbles, boulders, and non-matrix materials (organic matter or debris):
Terminology describing materials outside the USCS, (e.g. particles larger than 75 mm, visible organic matter, and construction debris) is based upon the proportion of these materials present:

Trace, or occasional	Less than 10%
Some	10-20%
Frequent	> 20%

Terminology describing compactness of cohesionless soils:
The standard terminology to describe cohesionless soils includes compactness (formerly "relative density"), as determined by the Standard Penetration Test (SPT) N-Value - also known as N-Index. The SPT N-Value is described further on page 3. A relationship between compactness condition and N-Value is shown in the following table.

Compactness Condition	SPT N-Value
Very Loose	<4
Loose	4-10
Compact	10-30
Dense	30-50
Very Dense	>50

Terminology describing consistency of cohesive soils:
The standard terminology to describe cohesive soils includes the consistency, which is based on undrained shear strength as measured by *in situ* vane tests, penetrometer tests, or unconfined compression tests. Consistency may be crudely estimated from SPT N-Value based on the correlation shown in the following table (Terzaghi and Peck, 1967). The correlation to SPT N-Value is used with caution as it is only very approximate.

Consistency	Undrained Shear Strength		Approximate SPT N-Value
	kips/sq.ft.	kPa	
Very Soft	<0.25	<12.5	<2
Soft	0.25 - 0.5	12.5 - 25	2-4
Firm	0.5 - 1.0	25 - 50	4-8
Stiff	1.0 - 2.0	50 – 100	8-15
Very Stiff	2.0 - 4.0	100 - 200	15-30
Hard	>4.0	>200	>30

ROCK DESCRIPTION

Except where specified below, terminology for describing rock is as defined by the International Society for Rock Mechanics (ISRM) 2007 publication "The Complete ISRM Suggested Methods for Rock Characterization, Testing and Monitoring: 1974-2006"

Terminology describing rock quality:

RQD	Rock Mass Quality
0-25	*Very Poor Quality*
25-50	*Poor Quality*
50-75	*Fair Quality*
75-90	*Good Quality*
90-100	*Excellent Quality*

Alternate (Colloquial) Rock Mass Quality	
Very Severely Fractured	*Crushed*
Severely Fractured	*Shattered or Very Blocky*
Fractured	*Blocky*
Moderately Jointed	*Sound*
Intact	*Very Sound*

RQD (Rock Quality Designation) denotes the percentage of intact and sound rock retrieved from a borehole of any orientation. All pieces of intact and sound rock core equal to or greater than 100 mm (4 in.) long are summed and divided by the total length of the core run. RQD is determined in accordance with ASTM D6032.

SCR (Solid Core Recovery) denotes the percentage of solid core (cylindrical) retrieved from a borehole of any orientation. All pieces of solid (cylindrical) core are summed and divided by the total length of the core run (It excludes all portions of core pieces that are not fully cylindrical as well as crushed or rubble zones).

Fracture Index (FI) is defined as the number of naturally occurring fractures within a given length of core. The Fracture Index is reported as a simple count of natural occurring fractures.

Terminology describing rock with respect to discontinuity and bedding spacing:

Spacing (mm)	Discontinuities	Bedding
>6000	*Extremely Wide*	-
2000-6000	*Very Wide*	*Very Thick*
600-2000	*Wide*	*Thick*
200-600	*Moderate*	*Medium*
60-200	*Close*	*Thin*
20-60	*Very Close*	*Very Thin*
<20	*Extremely Close*	*Laminated*
<6	-	*Thinly Laminated*

Terminology describing rock strength:

Strength Classification	Grade	Unconfined Compressive Strength (MPa)
Extremely Weak	R0	<1
Very Weak	R1	1 – 5
Weak	R2	5 – 25
Medium Strong	R3	25 – 50
Strong	R4	50 – 100
Very Strong	R5	100 – 250
Extremely Strong	R6	>250

Terminology describing rock weathering:

Term	Symbol	Description
Fresh	W1	No visible signs of rock weathering. Slight discoloration along major discontinuities
Slightly	W2	Discoloration indicates weathering of rock on discontinuity surfaces. All the rock material may be discolored.
Moderately	W3	Less than half the rock is decomposed and/or disintegrated into soil.
Highly	W4	More than half the rock is decomposed and/or disintegrated into soil.
Completely	W5	All the rock material is decomposed and/or disintegrated into soil. The original mass structure is still largely intact.
Residual Soil	W6	All the rock converted to soil. Structure and fabric destroyed.

STRATA PLOT

Strata plots symbolize the soil or bedrock description. They are combinations of the following basic symbols. The dimensions within the strata symbols are not indicative of the particle size, layer thickness, etc.

Boulders Cobbles Gravel | Sand | Silt | Clay | Organics | Asphalt | Concrete | Fill | Igneous Bedrock | Meta-morphic Bedrock | Sedi-mentary Bedrock

SAMPLE TYPE

SS	Split spoon sample (obtained by performing the Standard Penetration Test)
ST	Shelby tube or thin wall tube
DP	Direct-Push sample (small diameter tube sampler hydraulically advanced)
PS	Piston sample
BS	Bulk sample
HQ, NQ, BQ, etc.	Rock core samples obtained with the use of standard size diamond coring bits.

WATER LEVEL MEASUREMENT

measured in standpipe, piezometer, or well

inferred

RECOVERY

For soil samples, the recovery is recorded as the length of the soil sample recovered. For rock core, recovery is defined as the total cumulative length of all core recovered in the core barrel divided by the length drilled and is recorded as a percentage on a per run basis.

N-VALUE

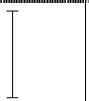
Numbers in this column are the field results of the Standard Penetration Test: the number of blows of a 140 pound (63.5 kg) hammer falling 30 inches (760 mm), required to drive a 2 inch (50.8 mm) O.D. split spoon sampler one foot (300 mm) into the soil. In accordance with ASTM D1586, the N-Value equals the sum of the number of blows (N) required to drive the sampler over the interval of 6 to 18 in. (150 to 450 mm). However, when a 24 in. (610 mm) sampler is used, the number of blows (N) required to drive the sampler over the interval of 12 to 24 in. (300 to 610 mm) may be reported if this value is lower. For split spoon samples where insufficient penetration was achieved and N-Values cannot be presented, the number of blows are reported over sampler penetration in millimetres (e.g. 50/75). Some design methods make use of N-values corrected for various factors such as overburden pressure, energy ratio, borehole diameter, etc. No corrections have been applied to the N-values presented on the log.

DYNAMIC CONE PENETRATION TEST (DCPT)

Dynamic cone penetration tests are performed using a standard 60 degree apex cone connected to 'A' size drill rods with the same standard fall height and weight as the Standard Penetration Test. The DCPT value is the number of blows of the hammer required to drive the cone one foot (300 mm) into the soil. The DCPT is used as a probe to assess soil variability.

OTHER TESTS

S	Sieve analysis
H	Hydrometer analysis
k	Laboratory permeability
γ	Unit weight
G_s	Specific gravity of soil particles
CD	Consolidated drained triaxial
CU	Consolidated undrained triaxial with pore pressure measurements
UU	Unconsolidated undrained triaxial
DS	Direct Shear
C	Consolidation
Q_u	Unconfined compression
I_p	Point Load Index (I_p on Borehole Record equals $I_p(50)$ in which the index is corrected to a reference diameter of 50 mm)

	Single packer permeability test; test interval from depth shown to bottom of borehole
	Double packer permeability test; test interval as indicated
	Falling head permeability test using casing
	Falling head permeability test using well point or piezometer

Stantec

TEST PIT RECORD

TP 1

CLIENT Township of Uxbridge

PROJECT No. 160621777

LOCATION Goodwood Community Centre, 268 Highway 47, Goodwood, ON

DATUM Geodetic

EXCAVATION DATE: August 4, 2017

WATER LEVEL

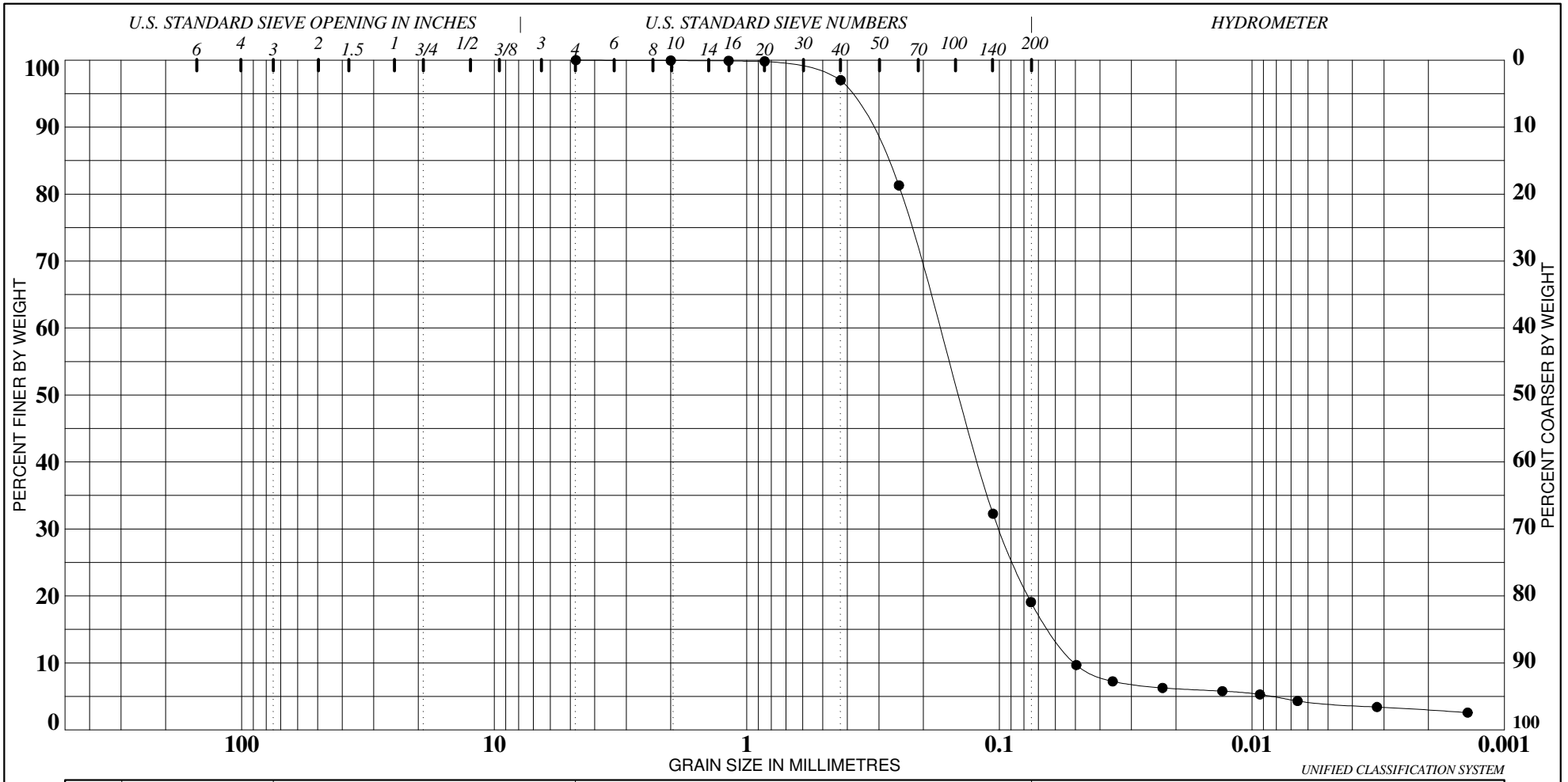
TPC ELEVATION

DEPTH (m)	ELEVATION (m)	STRATA DESCRIPTION	STRATA PLOT	WATER LEVEL	DEPTH (ft)	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY (mm) TCR(%) / SCR(%)	SAMPLES N-VALUE OR RQD(%)	UNDRAINED SHEAR STRENGTH (kPa) 50 100 150 200 / WATER CONTENT & ATTERBERG LIMITS W_P W W_L / DYNAMIC CONE PENETRATION TEST, BLOWS/0.3m ▼ / STANDARD PENETRATION TEST, BLOWS/0.3m ●	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
0		600 mm TOPSOIL			0					10 20 30 40 50 60 70 80 90 100	
					1	GS	1				
		Loose, brown, silty SAND - moist			2						
1					3	GS	2				
		- compact			4						
					5	GS	3				
					6						
2		- dense			7	GS	4				0 81 16 3
		END OF TEST PIT at approximately 2.1 m below existing grade. Test pit dry upon completion of excavation.			8						
					9						
3					10						
					11						
					12						
4					13						
					14						
					15						
5					16						

□ Field Vane Test, kPa

■ Remoulded Vane Test, kPa

△ Pocket Penetrometer Test, kPa



BLDs	COBBLES	GRAVEL		SAND			SILT & CLAY	
		coarse	fine	coarse	medium	fine	SILT	CLAY

Sample	Depth (m)	Description	W%	W_L	W_P	I_P	%Gravel	%Sand	%Silt	%Clay
● TP 1	2.0	Silty SAND (SM)	13				0	81	16	3

Stantec

Project: Township of Uxbridge

Location: Goodwood Community Centre, 268 Highway 47, Goodwood, ON

Project No.: 160621777

GRADATION CURVE (ASTM D422)

Figure: 1

Remarks:

Photo No. 1: Location of Test Pit #1 being excavated (facing east).

Photo No. 2: Overall view of proposed building addition (facing east) on north elevation wall.

Appendix 'D'

Designated Substance Survey for Goodwood Community Centre

ASBESTOS & DESIGNATED SUBSTANCES SURVEY

Goodwood Community Centre

268 Highway 47, Goodwood, Ontario

Prepared for:
Township of Uxbridge

GENIVAR Inc.
600 Cochrane Drive, 5th Floor
Markham, Ontario, L3R 5K3
www.GENIVAR.com

June 6, 2013
Project No. 131-17517-00

GENIVAR

Executive Summary

GENIVAR Inc. (GENIVAR) was retained by the Township of Uxbridge (the Client) to conduct a Designated Substances and Hazardous Materials Survey (DSHMS) of the Goodwood Community Centre "subject building" located at 268 Highway 47, Goodwood, Ontario. The building surveyed was reportedly constructed in 1972 and is a single level structure.

The scope of work consisted of a non-destructive DSHMS for the purposes of identifying designated substances and hazardous materials, including (but not limited to): asbestos, lead, mercury, silica, mould, PCBs, and ODS in the subject building. GENIVAR's survey consisted of a thorough, room-by-room assessment of the accessible interior spaces, the building's exterior, and associated buildings located on the property (if any). Bulk sampling of suspected asbestos-containing materials (ACM) and lead-containing paints (LCP) were conducted in accordance with applicable Occupational Health & Safety Regulations.

The DSHMS was conducted by GENIVAR on May 16th, 2013.

The primary findings of the survey are summarized below:

Designated Substance/ Hazardous Material	Survey Findings
Asbestos	The following materials were identified as asbestos-containing materials (ACM): • ***Ceiling textured coating in front lobby and hallway to washrooms*** • ***Vinyl sheet flooring in kitchen***
Lead	Of the seven (7) paint samples collected and analyzed two (2) samples were identified as "lead-based" paints under the federal *Hazardous Products Act* (*Surface Coating Materials Regulation).* • ***Exterior dark green paint on south exit door of the main hall*** • ***Exterior beige paint on north exit door of the kitchen***
Silica	Building/construction materials known to contain silica such as glass, concrete, masonry, stone and mortar were observed throughout the subject building.
Mercury	Mercury is presumed to be present within the fluorescent light tubes throughout the subject building and in the thermostats.
PCBs	Polychlorinated Biphenyls (PCBs) are suspected to be present within some of the fluorescent light ballasts based on the age of the building. Transformers were not observed during the survey.
ODS	Refrigerator units were observed in the food preparation area within the subject building, these may contain ozone-depleting substances (ODS).
Mould	Water staining/damage on acoustic ceiling tiles was observed on the ceiling in various rooms in the subject building (photo 8). Sources of water leaks should be identified, and repaired in a timely manner as these conditions are conducive to mould growth. Routine surveillance of these areas is recommended.

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1. Introduction

1.1 Background

GENIVAR Inc. (GENIVAR) was retained by the Township of Uxbridge to conduct a Designated Substances and Hazardous Materials Survey (DSHMS) of the Goodwood Community Centre "subject building" located at 268 Highway 47, Goodwood, Ontario. The building surveyed was reportedly constructed in 1972 and is a single level structure.

The DSHMS was conducted by GENIVAR on May 16th, 2013.

1.2 Survey Objectives

The objectives of this survey were as follows:

1) To identify the designated substances and/or hazardous materials present at the subject building.
2) To prepare a report documenting the identities, usages and locations of the designated substances and hazardous materials identified at the subject building.
3) To provide Town of Uxbridge with recommendations for the abatement considerations in support of renovation activities.

1.3 Scope of Work

A thorough intrusive, but not destructive, survey was undertaken of the following:

- Building construction materials
- Components, fixtures, and fixed equipment/furniture
- All accessible areas and building spaces within the subject building

The DSHMS consisted of the following tasks:

- A systematic (room-by-room) survey of the specified locations, materials and components
- Bulk sampling of suspect asbestos and lead-containing materials
- Visual identification of the other designated substances and hazardous materials
- Submission of bulk samples to an accredited, independent laboratory for analysis
- Reduction of analytical data for the identification of asbestos and lead-containing materials
- Recommendations for the management of the designated substances and hazardous materials

1.4 Site Description

The Goodwood Community Centre is located at 268 Highway 47, Goodwood, Ontario. The building surveyed was reportedly constructed in 1972 and is a single level structure.

The subject building is comprised a large main hall with an attached raised stage area. There is a kitchen, a storage room and a food serving area (with a broom closet) all adjacent to the main hall. The rest of the building contains three washrooms, a mechanical room, a front lobby and a coat room.
The building has a main entrance accessible from the south side of the building, with two other exit doors on the south and the north of the building.

The building's facade is a combination of bricks/concrete and metal siding. The roofing is sloped in structure. Interior finishes in the subject area include: vinyl flooring, tile and concrete flooring, gypsum and cement wallboard with flat painted and stucco ceilings. The building is a single level with an insulated attic space, the surveyor did not identify any basements, crawlspaces, or tunnels associated with the site. There are no external buildings associated to the subject building.

2. Regulatory Context

2.1 Asbestos

In Ontario, an asbestos-containing material (ACM) is defined as any material that contains at least 0.5% asbestos by dry weight. Among the designated substances, asbestos is unique in that it is governed by two regulations under the Occupation Health & Safety Act (the Act) - one for the general mining and processing operations of asbestos and one for asbestos on construction projects and in buildings and repair operations, the latter being the one applicable to this survey.

Ontario Regulation 278/05, made under the Act, entitled "Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations" came into effect on November 1st, 2005, with some sections contained therein becoming effective on November 1st, 2007. This regulation revoked and replaced the previous asbestos regulation, *O. Reg. 838/90.*

O. Reg. 278/05 introduced significant changes to how asbestos management is regulated in Ontario. Many of the regulatory changes in *O.Reg. 278/05* were already widely used by the consulting industry as "good–practice". Noteworthy regulatory changes included modifications to asbestos assessment requirements, the management of asbestos on-site, abatement operations and procedures (i.e. Type 1, 2 and 3), the use of personal protective equipment (PPE) and air monitoring requirements.

2.2 Lead

In April 2005, the federal *Surface Coating Materials Regulation (SOR/2005-109)* limited the allowable concentration of total lead present in a surface coating material (with some exceptions) to 600 mg/kg (600 ppm).

In December 2010, the Federal Government lowered the total lead limit in surface coating materials from 600 mg/kg to 90 mg/kg under subsections 4(1) and 5(1) and section 8 of the *Surface Coatings Materials Regulations (SOR/2005-109)*. The lowering of this limit aligns Canada with the United States in respect of total lead levels in surface coating materials and certain products with surface coating materials applied to them.

Therefore, using this revised threshold limit, those surface coating materials with lead concentrations that exceed 90 ppm (0.009% by weight) are considered to be lead-based for the purposes of this assessment.

2.3 Polychlorinated Biphenyls (PCBs)

Polychlorinated Biphenyls (PCBs) are industrial chemicals which were synthesized and commercialized in North America starting in 1929. PCB oils were used in the manufacturing of fluorescent light ballasts, electrical equipment, heat exchangers, hydraulic systems, and several other specialized applications up to the late 1970s. They were never manufactured in Canada but were nevertheless widely used.

The CEPA regulation regarding PCBs (SOR/2008-273)) should be referred to regarding the use, storage, labelling, reporting and eventual disposal of PCB-containing materials.

2.4 Ozone-Depleting Substances (ODS)

Certain chemicals such as, chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) and halons are recognized as ozone-depleting substances (ODS) because they breakdown in the stratosphere and release chlorine or bromine, which destroy the stratospheric ozone layer. The most common uses of ODS are as refrigerants in commercial, home and vehicle air conditioners and refrigerators, foam blowing agents, solvents, aerosol spray propellants, fire extinguishing agents and chemical reactants.

There is currently one regulation made under Ontario's Environmental Protection Act which governs the discharge, making, use, sale, transfer, display, transport, store and disposal of ozone-depleting substances and other halocarbons in Ontario: *O. Reg. 463/10.*

In addition, Sections 30 to 42 of the General Waste Management regulation (*O. Reg. 347/90*) sets out requirements for the disposal of mobile and stationary refrigerant waste, and section 5 of the Classification and Exemption of Spills and Reporting of Discharges regulation (*O. Reg. 675/98)* provides exemptions for a spill of refrigerant of less than 100 kilograms from the reporting provisions of Part X of the Environmental Protection Act.

In January 2011, Ontario's Ministry of the Environment consolidated five ODS regulations into one single regulation as part of its efforts to modernize regulations by updating and removing obsolete regulatory requirements (*O. Reg. 463/10*).

2.5 Urea Formaldehyde Foam Insulation (UFFI)

Urea Formaldehyde Foam Insulation (UFFI) was and still is used as a retrofitted insulating material in walls and ceiling spaces. This material was used during the late 1970s to retroactively insulate balloon frame construction houses and other buildings to increase energy efficiency. It can be found in common areas and walls of semi-detached homes, offices, apartment buildings, condominiums and other habitable spaces. The use of UFFI as an insulator has been banned in Canada since the early 1980s.

2.6 Mould

There is currently no regulatory framework in Canada specifically regulating mould in buildings. However, many guidelines exist, including Standard Construction Document CCA 82, 2004 entitled *Mould Guidelines for the Canadian Construction Industry,* published by Canadian Construction Association (CCA). Employers are required to take all reasonable measures to protect the health and safety of their workers, which includes a duty to protect against exposure to potentially harmful substances such as mould. These measures require the immediate and safe removal of any mould growth in buildings, while ensuring the protection of workers, building occupants and the surrounding environment.

2.7 Other Designated Substances

The following substances were also included in GENIVAR's investigation; silica, benzene, acrylonitrile, arsenic, coke oven emissions, ethylene oxide, isocyanates, and vinyl chloride. In Ontario, these substances along with asbestos, lead and mercury are classified as "Designated Substances" under the Occupational Health & Safety Act. Exposure to designated substances is known to be harmful to human health, and these substances were therefore included in the investigation for this reason. Background information on designated substances and hazardous materials including a brief description of their past uses is provided in **Appendix E** of this report.

3. Survey Methodology

Bulk samples were collected only from suspected potential asbestos-containing building materials or lead-containing paints (i.e. paint chips). Survey procedures specific to asbestos-containing materials and lead are documented in Sections 3.1 and 3.2 of this report, respectively.

GENIVAR's survey was intrusive, but non-destructive in nature and therefore destructive sampling/testing of building materials such as sampling/identifications of sub-floors (i.e. beneath carpets), bridging materials, caulks, roof membrane materials, etc. were not undertaken. Therefore, it is recommended that prior to demolition or construction activities which might disrupt these types of materials, that further assessments or sampling be conducted.

3.1 Asbestos

The surveyor inspected the subject areas for the presence of friable and non-friable asbestos-containing materials (ACM) including, but not limited to:

- Sprayed insulation;
- Mechanical insulation;
- Drywall joint compound;
- Plaster;
- Acoustic ceiling tiles;
- Vinyl flooring;
- Mastics/adhesives; and,
- Asbestos cement.

Bulk samples were collected from suspect building materials and analyzed to confirm the presence/absence of asbestos.

The collection of bulk asbestos samples was performed in accordance with Ontario Regulation 278/05 and its amendments.

The bulk material sample collection methodology for this survey was based on the methodology outlined in *O. Reg. 278/05* made under the Ontario Occupational Health & Safety Act. *O. Reg. 278/05* specifically outlines the minimum number of bulk material samples to be collected for various types of materials and is also consistent with industry standards. Table 3-1 outlines these bulk sample requirements.

Table 3-1 Minimum Number of Bulk Samples to be Collected Under O. Reg. 278/05 According to Material Area, Application and Friability

Type of Material	Size of Homogenous Material	Minimum Number of Bulk Samples
Surfacing material, including without limitation material that is applied to surfaces by spraying, by trowelling or otherwise, such as acoustical plaster on ceilings, fireproofing materials on structural members and plaster	Less than 90 m^2	3
	Between 90m^2 and 450m^2	5
	450m^2 or more	7
Thermal insulation, except as described below	Any size	3
Thermal insulation patch	Less than 2m or 0.5m^2	1
Other material	Any size	3

A summary of the bulk samples collected from the facility, including a description of the material, sampling location, type of analysis, and laboratory test results is provided in Table 4-1, 4-2 and 4-3.

Samples were collected from discrete locations with every attempt to minimize damage to building finishes. All sample locations were left in a safe condition. The following procedures for collection of bulk samples were followed:

- The surface of the material was wetted with amended water using a spray bottle. In situations where the material could not be wetted, a plastic sample bag or other containment device was placed around the sampling device.
- A sample was obtained by one of two methods:
  1) A sharp sampling device was slowly pushed into the material with a twisting motion until the entire thickness was penetrated, followed by extraction of the sample, or;
  2) A knife was cleaned and then used to excise a piece of the material.
- Each sample was placed in a clear bag with a tight closure, labelled appropriately and placed in a second, similar bag.
- Debris was cleaned with wet paper towels and discarded into a plastic bag.
- Damage to the material sampled was repaired with tape and/or filler material as needed.
- A chain of custody form was completed for all samples collected on-site and accompanied the samples during shipment to an independent laboratory for analysis.

Bulk samples from suspect building/construction materials were collected and submitted to IATL Laboratories of Mount Laurel, New Jersey, for analysis using Polarized Light Microscopy (PLM). The analysis was conducted following the U.S. EPA/600/R-93/116 Methods. IATL is certified under the National Voluntary Laboratory Accreditation Program (NVLAP) to perform asbestos analysis of bulk samples. All samples were archived for a minimum period of 60 days from the date they were received by the laboratory.

3.2 Lead

Bulk paint samples (paint chips) from distinct colours observed within the subject building were collected during the survey and submitted for analysis of lead content. Samples were collected with the aid of a thin-bladed knife, which was cleaned prior to each sampling event. The site surveyor selected sample locations where it appeared that the paint application was most representative of all areas on which it was applied. Each paint chip sample was placed in a clear bag with a tight closure, labelled appropriately and

placed in a second, similar bag. A chain of custody form was completed for all samples collected on-site and accompanied the samples during shipment to an independent laboratory for analysis.

To determine their lead content, samples were submitted to IATL Laboratories of Mount Laurel, New Jersey and analyzed using Atomic Absorption Spectroscopy (AAS).

A summary of the bulk paint samples collected, including a sample description, sampling location, type of analysis, and laboratory test results is provided in Table 4-3 and the Laboratory certificates of Analysis are provided in **Appendix C** of this report.

3.3 Silica

The surveyor inspected the subject areas for the presence of materials known to contain silica. Silica is present in materials such as such as glass, concrete, masonry, stone and mortar which are prevalent materials in construction.

3.4 Mercury

The surveyor inspected the subject areas for equipment which is likely to contain mercury. Information on the type of equipment, model and serial numbers and quantities were recorded, where available.

3.5 Polychlorinated Biphenyls (PCBs)

The surveyor inspected the subject areas for equipment which may contain PCBs. Equipment that is generally suspected of containing PCBs includes lamp ballasts, transformers, hydraulic fluid, compressors, switchgears and capacitors.

3.6 Ozone-Depleting Substances (ODS)

The surveyor inspected the subject areas for equipment which may contain ODS. Information on the type of equipment, manufacturer, and type and quantity of refrigerants used was recorded, where available.

3.7 Urea Formaldehyde Foam Insulation (UFFI)

The surveyor inspected the subject areas for the potential presence of UFFI. This included an exterior and interior assessment of repaired openings in wall structures. Where available, the surveyor documented plugs in the building exterior, and pulled the plug to examine the insulation material.

3.8 Mould

The surveyor inspected the subject areas for the presence of mould. This included a non-intrusive visual assessment of exterior and interior surfaces for evidence of visible mould and/or moisture and water damage.

4. Observations and Results

Designated substances and hazardous materials identified by this survey are detailed below. The locations of bulk samples can be found in tables 4-1 and 4-3 of this report. Laboratory Certificates of Analysis provided in **Appendix C** of this report. Relevant photographs taken during the survey are presented in **Appendix B** of this report.

4.1 Asbestos-Containing Materials

A total of forty (40) bulk material samples were collected from homogeneous materials observed throughout the subject building. Laboratory analysis revealed that the bulk samples collected and submitted were composed of various layers. Table 4-1 summarizes the asbestos-containing materials identified by the survey along with recommended remedial actions for each material. It should be noted that asbestos-containing materials (ACM) may be concealed by existing building finishes. If demolition or renovation work activities uncover materials suspected of containing asbestos, all work must stop and the materials should either be presumed as being asbestos-containing or samples of the material must be collected and analyzed for asbestos content. If the laboratory analysis identifies the material as being asbestos-containing, it must be handled in accordance will all applicable asbestos regulations and procedures.

Table 4-1 Summary of Asbestos-Containing Materials

Material	Location	Description	Assessment[1]	Action[2]	Photo[3]
Textured Ceiling Coat (TC-01)	Ceiling of lobby and the hallway leading to the washrooms	Off white textured ceiling coating ≈300 ft^2.	- ***Sample ID***: GWD-TC-02-A to G - ***Concentration***: 10.*% Chrysotile* - ***Material:*** Friable - ***Accessibility***: C (Exposed) - ***Condition***: Good	Routine surveillance to monitor its condition Follow Type 3 procedures when handling or removing this material if work is limited to the use of non-powered hand tools	1,2
Vinyl Floor Tile (VFT-01)	Kitchen and storage room floor	Off-white vinyl sheet flooring ≈1100 ft^2.	- ***Sample ID***: GWD-VFT-01-A,B,C - ***Concentration***: 20% *Chrysotile* - ***Material:*** Non-Friable - ***Accessibility***: A - ***Condition***: Good	Routine surveillance to monitor its condition Follow Type 1 procedures when handling or removing this material if work is limited to the use of non-powered hand tools	3,4

1. For sample ID and concentration levels refer to **Appendix C** – Laboratory Certificates of Analysis.
2. Actions recommended are in compliance with Ontario and federal regulations. See **Appendix D** – ACM Evaluation Criteria.
3. For photographs taken during the survey refer to **Appendix B** – Project Photographs.

4.2 Non Asbestos-Containing Materials

Table 4-2 summarizes the sampled materials identified as "non-asbestos" during the survey of the subject building.

Table 4-2 Summary of Non Asbestos-Containing Materials

Material	Description	Sample ID[1]
Textured Wall Coat (TC-01)	Off-white textured wall coating in the main hall and stage	GWD-TC-01-A to G
Drywall Joint Compound (DWJC)	White drywall joint compound on ceiling and wall of mechanical room	GWD-DWJC-01-A to G
Transite Cement Paneling (TRAN)	Cement wallboard in mechanical room	GWD-TRAN-01-A,B,C

1. For sample ID and concentration levels refer to **Appendix C** – Laboratory Certificates of Analysis.

4.3 Lead-Containing Materials

A total of seven (7) paint chip samples from distinct paint colours observed within the subject building were collected and submitted for analysis of lead content. Table 4-3 summarizes the lead-containing paint identified during the survey along with recommended remedial actions.

Table 4-3 Summary of Lead-Containing Materials

Material	Location	Description	Assessment[1]	Action[2]	Photo[3]
Dark Green Paint	Exterior	Dark green paint observed on the south exit door of the main hall	- ***Sample ID***: GWD-Pb-06 - ***Concentration***: <0.019% - ***Condition***: Poor	Areas observed to be in *poor* condition (areas of severe cracking/chipping/flaking and debris), be repaired by removing the loose paint and applying a new coat of paint or abate under type 1 procedure.	
Beige Paint	Exterior	Beige paint observed on the north exit door from the kitchen	- ***Sample ID***: GWD-Pb-07 - ***Concentration***:< 0.016% - ***Condition***: Fair	Areas in *fair* condition should be encapsulated with a fresh coat of paint or abate under type 1 procedure.	

1. For sample ID and concentration levels refer to **Appendix C** – Laboratory Certificates of Analysis.
2. Actions recommended are in compliance with Ontario and federal regulations.
3. For photographs taken during the survey refer to **Appendix B** – Project Photographs.

Work that will disrupt and/or pulverize (including drilling, cutting, grinding or abrading) lead-containing materials must follow the recommendations provided in the *Ministry of Labour Guideline for Lead on Construction Projects*, dated September 2004. In addition, the aforementioned painted surfaces (containing lead) should be handled with appropriate health and safety precautions so as to comply with requirements of the Designated Substances regulation, *O. Reg. 490/09*, and disposal of these materials must also comply with the requirements of *Reg. 347 – General – Waste Management*.

4.4 Ozone-Depleting Substances

Certain chemicals are recognized as ozone-depleting substances (ODS) because they breakdown in the stratosphere and release chlorine or bromine, which destroy the stratospheric ozone layer. Most of these

substances are also greenhouse gases. Ozone-depleting substances are used as foam blowing agents, solvents, fire extinguishing agents and refrigerants for air conditioning and refrigeration applications.

Refrigerators were observed in the food preparation areas within the subject building. These refrigerators may contain ODS refrigerant, and should be tested prior to decommissioning and/or removal.

4.5 Other Designated Substances and Hazardous Materials

GENIVAR's survey included the identification of other designated substances and hazardous materials in the subject building. Table 4-4 summarizes these other designated substances and hazardous materials identified during the survey of the subject building along with recommended remedial actions.

Table 4-4 Other Designated Substances and Hazardous Materials Identified within the Subject Building

Material	Description	Action
Mercury	Based on the date of construction, mercury may be present within fluorescent light tubes identified within the subject building. A Mercury containing thermostat was observed within the subject building (photo 7).	Mercury vapour within light fixtures and thermostats poses no risk to workers or occupants provided the mercury containment remains intact and undisturbed. Removal and disposal of mercury-containing equipment is required prior to demolition activities that may disturb the equipment. The handling, transport, and disposal of mercury containing equipment must follow all applicable provincial and federal regulations and guidelines pertaining to Mercury.
PCBs	Fluorescent light ballasts were observed within the subject building. Individual lamp ballasts were not inspected during the survey due to health & safety concerns. However, based on the date of construction, PCBs may be present in some of the lamp ballasts within the subject building.	When decommissioned, verify the PCB content of fluorescent light ballasts as per the *Environment Canada* publication "Identification of Lamp Ballasts Containing PCBs", 1991. Handle, store and dispose of PCB-containing ballasts in accordance with *Federal Regulation SOR/92-507* and under *Hazardous Materials Regulation*.
Silica	Building components containing silica such as concrete floor slabs and walls were observed throughout the surveyed areas.	Work that may disturb silica-containing materials should follow all applicable provincial and federal regulations and guidelines pertaining to Silica.
Mould	At the time this survey was conducted Mould was observed underneath the two gas ranges in the kitchen, it has since been removed.	No action required.
Benzene	Benzene was not observed in the area of work during the time of the survey.	No action required.
Acrylonitrile	Acrylonitrile was not observed in the area of work during the time of the survey.	No action required.
Arsenic	Arsenic was not observed in the area of work during the time of the survey.	No action required.
Coke Oven Emissions	Coke oven emissions were not observed in the area of work during the time of the survey.	No action required.
Ethylene Oxide	Ethylene oxide was not observed in the area of work during the time of the survey.	No action required.
Isocyanates	Isocyanates were not observed in the area of work during the time of the survey.	No action required.
Vinyl Chloride	Vinyl chloride was not observed in the area of work during the time of the survey.	No action required.

5. Limitations

This report describes the designated substances observed within the subject building envelope. The survey assessed the structure, finishes and permanent mechanical equipment. The assessment does not define contaminants that may or may not be present in the soil or air around the subject building.

The field observations and laboratory analyses presented herein are considered sufficient in detail and scope to form a general inventory of Designated Substances in the subject building. The findings and conclusions contained herein have been prepared in accordance with generally accepted environmental survey methods. There is a possibility that designated substances may exist which could not be reasonably identified within the scope of the assessment or which were not apparent during the site visit. GENIVAR Inc. cannot warrant or guarantee that the information provided herein is absolutely complete or accurate beyond current environmental consulting standards.

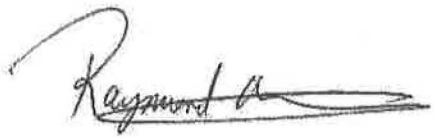
6. Closure

Should there be any questions regarding the contents of this report, please do not hesitate to contact the undersigned.

Sincerely,

GENIVAR Inc.

Prepared by:



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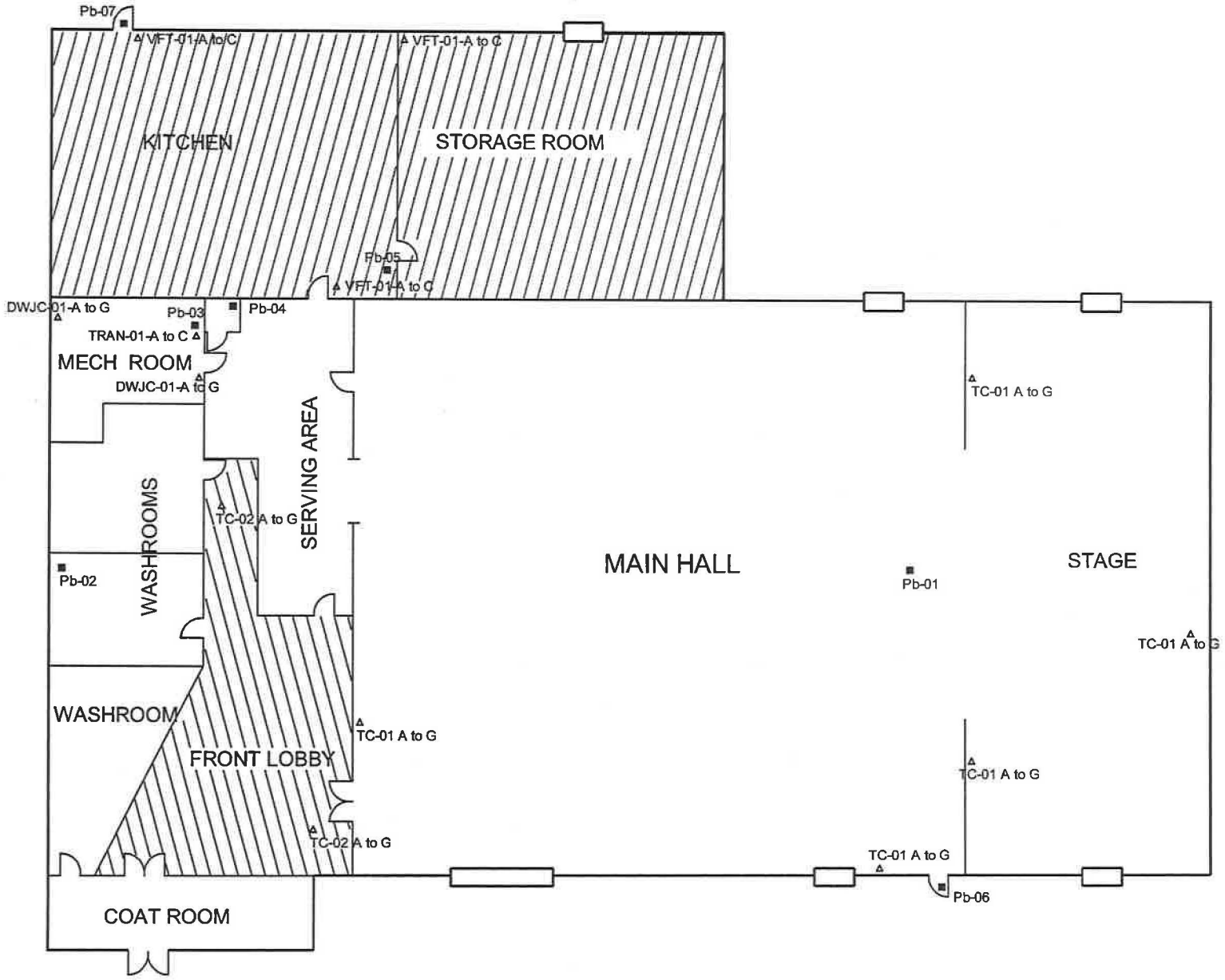


Legend	Project No: 131-17517-00	Client: GOODWOOD COMMUNITY CENTER	- LOCATIONS OF ASBESTOS AND LEAD BULK SAMPLES - LOCATIONS OF ASBESTOS CONTAINING MATERIALS	Figure No: 1
ASBESTOS-CONTAINING VINYL FLOORING TILING (VFT) ASBESTOS-CONTAINING TEXTURED CEILINGCODING (TC) △ ASBESTOS BULK SAMPLE LOCATION ■ LEAD PAINT BULK SAMPLE LOCATION	Scale: Not To Scale Date: June 5, 2013 Drawn By: OO App'd By: CP	Site Address: 268 Highway 47, Goodwood, Ontario		GENIVAR

Appendix A

Designated Substance Summary Tables

131-17517-00

TABLE 1
SUMMARY: CONFIRMED ASBESTOS-CONTAINING MATERIAL (ACM)
Designated Substance & Hazardous Materials Survey
Township of Uxbridge
Goodwood Community Centre, 268 Highway 47, Goodwood, Ontario
June 6, 2013

FLOOR LEVEL	FUNCTIONAL SPACE	MATERIAL CODE	DESCRIPTION (Flooring-Including a Description of all flooring layers from top to bottom including non-ACM layers)	SAMPLE NUMBER	ASBESTOS CONTENT TYPE	ASBESTOS CONTENT % RANGE	QUANTITY	UNIT	CONDITION	FRIABLE?	ACCESS	ACTION	COMMENTS
Main	Main Lobby Area	TC-02	Off white textured ceiling coating	GWD-TC-02-A to G	Chrysotile	10	250	sq.ft.	Good	No	A	7	
Main	Kitchen and Storage Room floor	VFT1	Off-white vinyl sheet flooring	GWD-VFT-01-A,B,C	Chrysotile	20	1100	sq.ft.	Good	No	A	7	

Action Level Classifications
(Refer to Appendix E for a detailed desccription for each Action Level)
"Action Level 1" - Immediate clean-up of debris that is likely to be disturbed
"Action Level 2" - Type 2 precautions for entry into areas with ACM debris
"Action Level 3" - ACM removal required for compliance
"Action Level 4" - Type 2 precautions for access into areas where ACM is present and likely to be disturbed by access "
"Action Level 5" - Proactive ACM removal
"Action Level 6" - ACM Repair
"Action Level 7" - Asbestos management program with routine surveillance
"Action Level 8" - Suspect materials

Accessibility Classification
A - Areas of the building within reach (from floor level) of all building users
B - Frequently entered maintenance ares within reach of staff, without the need for a ladder
C - Areas of the building above 2.4 m (8ft.) where the use of a ladder is required to reach ACM
D - Areas of the building behind inacccessible solid ceiling systems, walls, or mechanical equipment, etc., where demolition of the ceiling, wall, or equipment, etc., is required to reach the ACM

Notes
ACM - Asbestos-Containing Material
N/A - Not Applicable
sq.ft. - square feet
l.ft. - linear feet

TABLE 2
SUSPECTED ASBESTOS SAMPLE SUMMARY
Designated Substance & Hazardous Materials Survey
Township of Uxbridge
Goodwood Community Centre, 268 Highway 47, Goodwood, Ontario
June 6, 2013

FLOOR LEVEL	SAMPLE NUMBER	MATERIAL CODE	FUNCTIONAL SPACE	DESCRIPTION (Flooring-Including a description of all flooring layers from top to bottom including non-	LIST SAMPLE NUMBERS FOR: POSITIVE SAMPLES	NEGATIVE SAMPLES	NOT ANALYZED	NO. OF SAMPLES ANALYZED	COMMENTS
Main	GWD-TC-01-A to G	TC01	Main Hall and Stage	Off-White Textured Wall Coating		GWD-TC-01-A to G		14	
Main	GWD-TC-02-A to G	TC02	Main Lobby Ceiling Area	Off White Textured Ceiling Coating	GWD-TC-02-A to G			7	Asbestos-containing material
Main	GWD-DWJC-01-A to G	DWJC	Ceiling and Wall of Mechanical Room	White Drywall Joint Compound		GWD-DWJC-01-A to G		10	
Main	GWD-TRAN-01-A,B,C	TRAN	Mechanical Room	Transite Cement Paneling		GWD-TRAN-01-A,B,C		5	
Main	GWD-VFT-01-A,B,C	VFT1	Kitchen and Storage Room	Off-White Vinyl Sheet Flooring	GWD-VFT-01-A,B,C			3	Asbestos-containing material
								39	

TABLE 3
LEAD SAMPLE SUMMARY
Designated Substance & Hazardous Materials Survey
Township of Uxbridge
Goodwood Community Centre, 268 Highway 47, Goodwood, Ontario
June 6, 2013

FLOOR LEVEL	SAMPLE NUMBER	FUNCTIONAL SPACE	DESCRIPTION	LEAD CONTENT BY WEIGHT (%)*	CONDITION	COMMENTS
Main	GWD-Pb-01	Main Hall Floor	Green Paint	<0.0056	Good	
Main	GWD-Pb-02	Lobby, Serving Area and Washrooms	Beige Paint	<0.0063	Good	
Main	GWD-Pb-03	Wall of Mechanical Room	Off White Paint	<0.0063	Fair	
Main	GWD-Pb-04	Wall of Broom Closet	Beige/White Paint	<0.0061	Good	
Main	GWD-Pb-05	Kitchen Wall	Beige Paint	0.0054	Good	
Main	GWD-Pb-06	South Side Outside Door	Dark Green Paint	<0.019	Poor	Lead-containing paint
Main	GWD-Pb-07	Outside North Kitchen Door	Beige Paint	<0.016	Fair	Lead-containing paint

Notes: *Samples in excess of 0.009% are considered to be lead-containing materials. Homogeneous paint applications throughout the facility should be considered lead-containing unless proven otherwise.

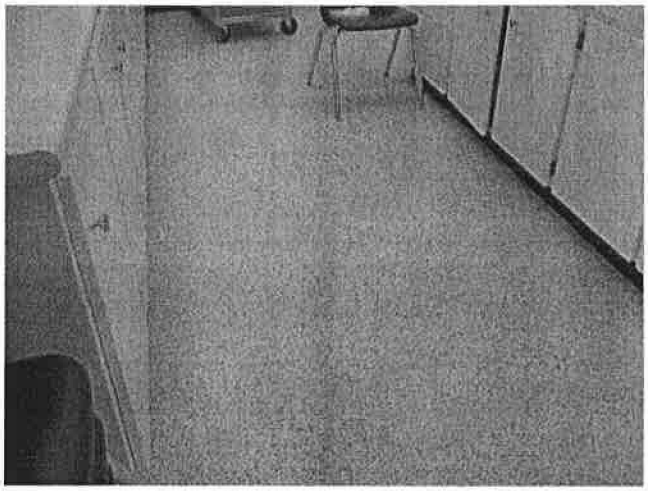
Appendix B

Project Photographs

131-17517-00

Photograph 1: ACM **b**rown vinyl floor tile, Storage Room #1 in Community Center (UX-VFT-01-A,B,C).

Photograph 2: ACM **t**an vinyl floor tile, Storage Room #1 in Community Center (UX-VFT-02-A,B,C).



Photograph 3: ACM **t**an vinyl floor tile, Ice Pad #1 observation room (UX-VFT-03-A,B,C).

Photograph 4: Dark green exterior lead containing paint, outside door frame of west exit (UX-Pb-09).

Appendix C

Laboratory Certificates of Analysis

131-17517-00

IATL International Asbestos Testing Laboratories

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: GENIVAR Inc.
600 Cochran Drive; Suite 500
Markham ON L3R 5K3

Report Date: 5/20/2013
Report No.: 305300
Project: Goodwood Comm Cntr DSS
Project No.: 131-17517

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010974 **Description / Location:** Off-White Texture
Client No.: GWD-TC-01-A Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010974 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TC-01-A Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010975 **Description / Location:** Off-White Texture
Client No.: GWD-TC-01-B Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010975 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TC-01-B Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: R. Kennedy

Approved By:

Date: 5/20/2013

Frank E. Ehrenfeld, III
Laboratory Director

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Project: Goodwood Comm Cntr DSS
Project No.: 131-17517

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010976 **Description / Location:** Off-White Texture
Client No.: GWD-TC-01-C Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010976 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TC-01-C Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010977 **Description / Location:** Off-White Texture
Client No.: GWD-TC-01-D Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010977 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TC-01-D Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010978 **Description / Location:** Off-White Texture
Client No.: GWD-TC-01-E Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010978 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TC-01-E Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010979 **Description / Location:** Off-White Texture
Client No.: GWD-TC-01-F Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010979 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TC-01-F Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010980 **Description / Location:** Off-White Texture
Client No.: GWD-TC-01-G Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010980 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TC-01-G Main Hall And Stage Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010981 **Description / Location:** Tan Texture
Client No.: GWD-TC-02-A Front Lobby Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
10	Chrysotile	None Detected	None Detected	90

Lab No.: 5010982 **Description / Location:** Tan Texture
Client No.: GWD-TC-02-B Front Lobby Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
10	Chrysotile	None Detected	None Detected	90

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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Project No.: 131-17517

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010983 **Description / Location:** Tan Texture
Client No.: GWD-TC-02-C Front Lobby Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
10	Chrysotile	None Detected	None Detected	90

Lab No.: 5010984 **Description / Location:** Tan Texture
Client No.: GWD-TC-02-D Front Lobby Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
10	Chrysotile	None Detected	None Detected	90

Lab No.: 5010985 **Description / Location:** Tan Texture
Client No.: GWD-TC-02-E Front Lobby Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
10	Chrysotile	None Detected	None Detected	90

Lab No.: 5010986 **Description / Location:** Tan Texture
Client No.: GWD-TC-02-F Front Lobby Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
10	Chrysotile	None Detected	None Detected	90

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010987 **Description / Location:** Tan Texture
Client No.: GWD-TC-02-G Front Lobby Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
10	Chrysotile	None Detected	None Detected	90

Lab No.: 5010988 **Description / Location:** Off-White Plaster
Client No.: GWD-DWJC-01-A Mechanical Room Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010988 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-DWJC-01-A Mechanical Room Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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Project No.: 131-17517

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010989 **Description / Location:** Off-White Plaster
Client No.: GWD-DWJC-01-B Mechanical Room Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010989 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-DWJC-01-B Mechanical Room Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010990 **Description / Location:** Off-White Plaster
Client No.: GWD-DWJC-01-C Mechanical Room Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010990 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-DWJC-01-C Mechanical Room Ceiling

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010991 **Description / Location:** Off-White Joint Compound
Client No.: GWD-DWJC-01-D Mechanical Room Between Walls

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010992 **Description / Location:** Off-White Joint Compound
Client No.: GWD-DWJC-01-E Mechanical Room Between Walls

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010993 **Description / Location:** Off-White Joint Compound
Client No.: GWD-DWJC-01-F Mechanical Room Between Walls

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5010994 **Description / Location:** Off-White Joint Compound
Client No.: GWD-DWJC-01-G Mechanical Room Between Walls

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010995 **Description / Location:** Off-White Plaster
Client No.: GWD-TRAN-01-A Mechanical Room Transite Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	Trace	Cellulose	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010995 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TRAN-01-A Mechanical Room Transite Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010996 **Description / Location:** Off-White Plaster
Client No.: GWD-TRAN-01-B Mechanical Room Transite Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010996 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TRAN-01-B Mechanical Room Transite Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	Trace	Cellulose	100

Note: Different material than indicated on Sample Log / Description.

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5010997 **Description / Location:** Off-White Plaster
Client No.: GWD-TRAN-01-C Mechanical Room Transite Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010997 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: GWD-TRAN-01-C Mechanical Room Transite Wall

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	Trace	Cellulose	100

Note: Different material than indicated on Sample Log / Description.

Lab No.: 5010998 **Description / Location:** Off-White Vinyl Sheet Flooring
Client No.: GWD-VFT-01-A Behind Kitchen Door

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
20	Chrysotile	None Detected	None Detected	80

Lab No.: 5010999 **Description / Location:** Off-White Vinyl Sheet Flooring
Client No.: GWD-VFT-01-B In Kitchen & Kitchen Exit To Outside

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
20	Chrysotile	None Detected	None Detected	80

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5011000
Client No.: GWD-VFT-01-C
Description / Location: Off-White Vinyl Sheet Flooring
AdjacentStorageRoom-InCornerOfStorageRm

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
20	Chrysotile	None Detected	None Detected	80

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: R. Kennedy

Date: 5/20/2013

IATL International Asbestos Testing Laboratories

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: GENIVAR Inc.
600 Cochran Drive; Suite 500
Markham ON L3R 5K3

Report Date: 5/20/2013
Report Number: 305252
Project: Goodwood Comm Cntr DSS
Project No.: 131-17517-00

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.	Client No.	Location / Description	Concentration Lead By Weight (%)
5010824	GWD-Pb-01	Green Paint Floor In Main Hall & Stage	<0.0056
5010825	GWD-Pb-02	Beige Wall Paint In Lobby, Serving Area & Washroom	<0.0063
5010826	GWD-Pb-03	Off White Wall Paint In Mechanical Room	<0.0063***
5010827	GWD-Pb-04	Beige/White Wall Paint In Broom Closet	<0.0061
5010828	GWD-Pb-05	Kitchen Wall Paint	0.0054***
5010829	GWD-Pb-06	Dark Green Paint Outside Door South Side From Main Hall	<0.019*
5010830	GWD-Pb-07	Beige Paint Outside Door North Side From Kitchen	<0.016*

Accreditations: NATIONAL LEAD LABORATORY ACCREDITATION PROGRAM (NLLAP)
AIHA-LAP, LLC No. 100188 NYSDOH-ELAP No. 11021

Analytical Methods: ASTM D3335-85A "Standard Method To Test For Low Concentrations Of Lead In Paint By Atomic Absorption Spectrophotometry"
EPA SW846-(3050B:7000B) "Standard Method To Test For Low Concentrations Of Lead In Soils, Sludges and Sediments By AAS"

Comments: Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation. All results are based on the samples as received at the lab. IATL assumes that appropriate sampling methods have been used and the data upon which these results are based have been accurately supplied by the client. Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Apendix B. Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies. LSD=0.2 ppm MDL=0.0044% by weight. RL= 0.010% by weight (based upon 100 mg sampled). * Insufficient sample provided to perform QC reanalysis (<200 mg) ** Not enough sample provided to analyze (<50 mg) *** Matrix / substrate interference possible. Sample results are not corrected for contamination by field or analytical blanks. This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any government agency. This report shall not be reproduced except in full, without written approval of the laboratory.

te Received: 5/20/2013

Date Analyzed: 5/20/2013

Analyst: C. Shaffer

Approved By: _____

Frank E. Ehrenfeld, III
Laboratory Director

Appendix D

Asbestos-Containing Material Evaluation Criteria

131-17517-00

Asbestos-Containing Material Evaluation Criteria

A description of the criteria used in evaluating the condition, accessibility and exposure risk of asbestos-containing materials (ACM) is provided below. The criteria is generally based on the Public Works and Government Services Canada (PWGSC) document entitled "Deputy Ministers Directive 057 – Asbestos Management" (1997-12-03) and industry standards of practice.

Assessment of Condition

Spray-Applied Fireproofing, Insulation and Textured Finishes

In evaluating the condition of ACM spray applied as fireproofing, thermal insulation or texture, decorative or acoustic finishes, the following criteria apply:

Good
Surface of material shows no significant signs of damage, deterioration or delamination. Up to one percent visible damage to surface is allowed within range of GOOD. Evaluation of sprayed fireproofing requires the Assessor to be familiar with the irregular surface texture typical of sprayed asbestos products. GOOD condition includes unencapsulated or unpainted fireproofing or texture finishes, where no delamination or damage is observed, and encapsulated fireproofing or texture finishes where the encapsulation has been applied after the damage or fallout occurred.

Poor
Sprayed materials show signs of damage, delamination or deterioration. More than one percent damage to surface of ACM spray.

In observation areas, where damage exists in isolated locations, both GOOD and POOR condition may be reported. The extent or percentage of each condition will be recorded on the Assessor reassessment form.

FAIR condition is not utilized or considered as a valid criterion in the evaluation of sprayed fireproofing, sprayed insulation, or texture coat finishes.

The evaluation of ACM spray applied as fireproofing, non-mechanical thermal insulation, or texture, decorative or acoustic finishes which are present above ceilings, may be limited by the number of observations made, and by building components such as ducts or full height walls that obstruct the above ceiling observations. Persons entering the ceiling area are advised to be watchful for ACM DEBRIS prior to accessing or working above ceilings in areas of building with ACM, regardless of the reported condition.

Other ACM

In evaluating the condition of mechanical insulation (on boilers, breaching, ductwork, piping, tanks, equipment etc.) the following criteria are used:

Good
Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor surface damage (i.e., scuffs or stains), but the jacketing is not penetrated.

Fair
Minor penetration damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges should be minor to none.

Poor
Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired. The evaluation of mechanical insulation may be limited by the number of observations made and building components such as ducts or full height walls that obstruct observations. In these circumstances, it is not possible to observe each foot of mechanical insulation from all angles.

Non-Friable and Potentially Friable Materials

Non-friable materials generally have little potential to release airborne fibres, even when damaged by mechanical breakage. However, some non-friable materials, i.e., exterior asbestos cement products, may have deteriorated so that the binder no longer effectively contains the asbestos fibres. In such cases of significantly deteriorated non-friable material, the material will be treated as a friable product.

Evaluation of Accessibility

The accessibility of building materials known or suspected of being ACM is rated according to the following criteria:

Access (A)
Areas of the building within reach of all building users. Includes areas such as gymnasiums, workshops, and storage areas where activities of the building users may result in disturbance of ACM not normally within reach from floor level.

Access (B)
Frequently entered maintenance areas within reach of maintenance staff, without the need for a ladder. Includes: frequently entered pipe chases, tunnels and service areas or areas within reach from a fixed ladder or catwalk, i.e., tops of equipment, mezzanines.

Access (C) Exposed
Areas of the building above 8'0" where use of a ladder is required to reach the ACM. Only refers to ACM materials that are exposed to view, from the floor or ladder, without removing or opening other building components such as ceiling tiles, or service access doors or hatches. Does not include infrequently accessed service areas of the building.

Access (C) Concealed
Areas of the building which require the removal of a building component, including lay-in ceilings and access panels into solid ceiling systems. Includes rarely entered crawl spaces, attic spaces, etc. Observations are limited to the extent visible from the access points.

Access (D)
Areas of the building behind inaccessible solid ceiling systems, walls, or mechanical equipment, etc. where demolition of the ceiling, wall or equipment, etc., is required to reach the ACM. Evaluation of the condition and extent of ACM is limited or impossible, depending on the Assessor's ability to visually examine the materials in Access D.

Definition of Action Levels

Based on the results of the inspection and bulk sample analysis of samples collected and submitted for testing, recommendations were provided for compliance with regulation. These include assigned "Action Levels" to assist in the prioritization of corrective measures. The measures that are to be taken for each "Action Level" are described in full in the following table:

Action Level	Required Action
"Action 1"	**Immediate Clean-Up of Debris that is Likely to Be Disturbed** Restrict access that is likely to cause a disturbance of the ACM DEBRIS and clean up ACM DEBRIS immediately. Utilize correct asbestos procedures. This action is required for compliance with regulatory requirements. The surveyor will immediately notify the owner of this condition.
"Action 2"	**Type 2 Precautions for Entry into Areas with ACM DEBRIS** At locations where ACM DEBRIS can be isolated in lieu of removal or cleaned up, use appropriate means to limit entry to the area. Restrict access to the area to persons utilizing Type 2 asbestos precautions. The precautions will be required until the ACM DEBRIS has been cleaned up, and the source of the DEBRIS has been stabilized or removed.
"Action 3"	**ACM Removal Required for Compliance** Remove ACM for compliance with regulatory requirements. Utilize asbestos procedures appropriate to the scope of the removal work.
"Action 4"	**Type 2 Precautions for Access into Areas Where ACM is Present and Likely to be Disturbed by Access** Use Type 2 asbestos precautions when entry or access into an area is likely to disturb the ACM. ACTION 4 must be used until the ACM is removed (Use ACTION 1 or 2 if DEBRIS is present).
"Action 5"	**Proactive ACM Removal** Remove ACM in lieu of repair, or at locations where the presence of asbestos in GOOD condition is not desirable.
"Action 6"	**ACM Repair** Repair ACM found in FAIR condition, and not likely to be damaged again or disturbed by normal use of the area or room. Upon completion of the repair work, treat ACM as material in GOOD condition and implement ACTION 7. If ACM is likely to be damaged or disturbed, during normal use of the area or room, implement ACTION 5.
"Action 7"	**Asbestos Management Program with Routine Surveillance** Implement an Asbestos Management Program, including routine surveillance of ACM. Trained workers or contractors must use appropriate asbestos precautions (Type 1, Type 2 or Type 3) during disturbance of the remaining ACM.
"Action 8"	**Suspect Materials** Implement the Asbestos Management Program for building materials that historically contained asbestos but cannot, or have not, been sufficiently tested for asbestos content. These materials are identified as SUSPECT MATERIALS.

Appendix E

Background and Past Uses of Designated Substances

131-17517-00

Background and Past Uses of Designated Substances

Prior to the establishment and mainstream acknowledgement of the negative health consequences associated with human exposure to designated substances defined in the Act, these substances found use in an assortment of applications. The adverse health effects and common applications of substances regulated under the Act are summarized in this section.

Asbestos

Unlike other designated substances regulated under the act that are unimolecular (one chemical), asbestos is a term used to describe a group of minerals, all with long, thin fibrous crystals. In the late 19th century, asbestos maintained large popularity among the manufacturing and construction industries due to its resistance to heat, chemical and electrical damage, its sound absorption properties, tensile strength and affordability. These desirable characteristics resulted in the appearance of asbestos-containing materials (ACM) in construction products such as flat and corrugated sheets, pipes and shingles, vinyl flooring, linoleum, roofing felts, reinforced cement products, coatings and mastics and asbestos paper products. Asbestos' thermal insulating properties resulted in its appearance in sprayed insulation and fireproofing for steel structures, often in high relative ratios. Its capacity to absorb both heat and acoustic energy prompted its use as thermal/acoustic insulation for pipes and boilers. The three most prevalent and widely used types of asbestos were; 1) chrysotile; 2) amosite, and; 3) crocidolite.

In the early 1970s, the use of asbestos products declined sharply due to increasing concerns raised over the material's health effects. By mid 1979, the specific prohibition and the availability of safer alternatives largely put an end to the use of many asbestos products.

Due to the extensive use of ACM in the construction industry over a period of approximately 50 years, the concern over the possibility of individuals being exposed to ACM is a legitimate one. It has been shown that inhalation of asbestos fibres at high concentrations or over extended periods of time can cause asbestosis, lung cancer or mesothelioma. However, it has been well established that, unless damaged or disturbed, satisfactorily encapsulated ACM does not pose a hazard to worker or employee health and safety.

Lead

Lead is a heavy metal that has been used by humans in industrial applications for several millennia. Lead may be used in its pure metallic form or combined chemically with other elements to form lead compounds. Inorganic lead compounds (lead salts) result when lead forms an ionic bond with atomic or polyatomic anions, examples of which include lead oxide, lead chromate, lead carbonate and lead nitrate. Inorganic lead compounds may exist in either the solid or liquid state and have found use in applications such as insecticides, pigments, paints, glasses, plastics and rubber compounds. Lead was used as a primary ingredient in many interior and exterior oil-based paints from the early 1900s to the late 1970s. Interior or exterior paints produced after 1970 may however; still contain small amounts of lead. Lead can enter the human body through all known mechanisms of toxicological exposure; inhalation, ingestion and dermal absorption. The toxicological dynamics and kinetics of lead are such that no amount of lead exposure is safe. Worker exposure to lead in the form of a high dose sustained over a short time period or after chronic exposure to low doses can both result in severe adverse health effects.

Lead dust is a particular hazard in buildings. Lead conjugated particulate has been documented to be aerosolized in facilities that house applications such as rifle/gun ranges or industrial processes such as sanding, cutting or grinding of lead-containing materials.

Silica

Silica has found use in a variety of applications, including: sandblasting; abrasive grinding and scouring, resin, moulds casting and glass manufacturing and in processes related to the production of electronic components and fibreglass.

The prolonged inhalation of dust containing free crystalline silica results in a disease known as silicosis. Silicosis is a pneumoconiosis (a lung disease caused by the inhalation of dust) and is characterized by progressive fibrosis of the lungs and marked by shortness of breath, impaired lung function and subsequent complications that sometimes result in death. In the construction sector, silica (as common sand) is a major ingredient of concrete and cement products such as masonry and mortar. Concern over silica's adverse health effects are raised when silica becomes respirable for two reasons; 1) smaller silica particles can more deeply permeate into the lungs, resulting in a higher capacity for the material to cause adverse damage on a per mass basis and; 2) these smaller sized particles are more easily aerosolized than their larger, non-respirable counterparts. Processes such as cutting, abrading, and drilling of concrete and other sand-containing materials creates respirable silica-containing dust that has the potential to be inhaled by workers who do not use appropriate protective measures and personal protective equipment.

Mercury

Mercury is a silver-coloured metal that exists in the liquid state at room temperature. Mercury has been and is currently used in commercial applications as both a pure metal and in metallic, chelated compounds. The greatest use of elemental mercury in Ontario is in electrical equipment such as silent switches. Small amounts of mercury compounds are present in fluorescent tubes and mercury vapour lamps, older thermostats and paints.

Other Designated Substances

Ethylene oxide is used in the pharmaceutical industry and by hospitals as a disinfectant of plastic items that cannot be autoclaved.

Isocyanates are a class of chemicals used in the manufacture of certain types of plastics, foams, coatings and other products.

Acrylonitrile is a clear, (colourless or yellow) liquid that is explosive, flammable and toxic. It is used as a polymer or resin in the production of rubbers, coatings and adhesives.

Coke oven emissions are the benzene-soluble fraction of total particulate matter produced by the destructive distillation or carbonization of coal for the production of coke.

Benzene is a clear, colourless and highly volatile organic solvent. It is used in a tremendous number of processes in chemical laboratories and within the chemical industry and is demonstrated to be highly carcinogenic.

Arsenic is a metalloid used to harden copper, lead and other alloys, in the manufacture of electronics and glass and in numerous other applications. Its mechanism of toxicity is via the arrest of cellular respiration and can be absorbed via ingestion, inhalation or dermal absorption.

Vinyl chloride is a colourless gas with a sweet odour that is used in the manufacture of various products in the building and construction sectors, including the automotive industry, electrical wire insulation, cables, piping, industrial and household equipment, and medical supplies. The carcinogenicity of this substance has been widely established.

Other Hazardous Materials

Polychlorinated Biphenyls (PCBs) have been synthetically manufactured on a commercial basis since 1929. They have never been manufactured in Canada, with the entire supply coming form the USA. By the late 1960s, the toxic effects of PCBs started to gain recognition, as did its bioaccumulative properties, as significant levels of PCBs were being detected within species throughout the world's most remote

environments. Throughout the 1970s, the manufacture of PCBs was phased out; however considerable amounts remain in use.

PCBs were commonly used in electrical equipment because of their excellent electrical and fireresistant properties. For a considerable period of time, askarels (a mixture of chlorobenzenes and PCBs) were the coolants of choice for indoor transformers. Many outdoor transformers with mineral oil coolant became contaminated with PCBs during manufacture or servicing. PCBs were also used in a variety of other products including heat transfer fluids, lubricants, plasticizers, inks, dyes, pesticides and adhesives.

Ozone-Depleting Substances such as halocarbons are synthetic, organic compounds that containing halogen species, namely fluorine, chlorine, and bromine. These substances have either been classified into groups based on chemical structure (such as the fluorocarbons, the halons, the chlorofluorocarbons (CFCs), and the hydrochlorofluorocarbons (HCFCs)) or are molecules that cannot be grouped into such classifications on the basis of their physical/chemical properties (such as carbon tetrachloride, methyl chloroform, and methyl bromide). Canadian environmental legislation aimed at prohibiting the release of these substances is in effect, as they are known contributors to ozone depletion.

ODS-based solvents (particularly CFCs and HCFCs) have found general use in numerous domestic, commercial and industrial applications. Halocarbons are used primarily as a refrigerant and as a blowing agent in foam product manufacturing. In buildings, ODSs are commonly found in refrigeration systems, halon fire extinguishers and air conditioning systems.

Urea Formaldehyde Foam Insulation (UFFI) is a solid product that was used in buildings (particularly residential dwellings) as injectable insulation, often in cases where it was otherwise impractical to provide conventional insulation. UFFI was used extensively throughout the 1970s, with particular usage between 1975 and 1978, the time period during which the Canadian Home Insulation Program, a financial incentive program to encourage home insulation upgrades administered by the federal government, was in effect. The insulation was approved for use in Canada in exterior wood-frame walls only and was banned for use in 1980.

UFFI contains formaldehyde, which in a non-vapour state, is not believed to cause adverse health effects in humans. Concerns regarding the safety of UFFI were raised when it became known that the material has the capacity to release formaldehyde gas, a well-known probable human carcinogen. As a solid product, UFFI is considered to be safe for human contact. However, upon initial application of the foam, small amounts of formaldehyde may be released to the air. Given that there is a finite amount of formaldehyde available for off-gassing, the rate of formaldehyde release from the foam declines steadily as time progresses. Studies have shown that within two years of application, half of the available formaldehyde has been released.

Other Chemicals and Wastes include potentially toxic substances that may exist at the subject building. These may include water treatment chemicals associated with heating and cooling systems, heating fuels, building maintenance supplies such as paint and paint stripper, building cleaning supplies containing chemicals such as sodium hypochlorite and ammonium hydroxide and pesticides. In line with the objectives of this assessment, efforts were made to identify whether substances were in use, are present for intended future use or have become obsolete. It is recommended that; 1) the health and safety information of those substances identified as having use at the subject facility be reviewed in order to ensure that they appropriately stored and handled and; 2) wastes be gathered at a central location, classified and disposed of in accordance with the applicable regulatory requirements.

Appendix 'E'

Exterior Light Fixture Details

Evolve™ LED Area Light

Scalable Wall Pack (EWS3)

current
powered by GE

Product Features

The GE Evolve LED Scalable Wall Pack is optimized for customers looking for an efficient and reliable LED solution to replace 75W - 250W Metal Halide wall mounted, site, area and general lighting applications.

Depending on the application, Evolve™ LED Scalable Wall Pack can yield up to a 75% reduction in system energy consumption compared with standard HID systems. Standard 0-10V dimming and an optional motion sensor with daylight harvesting can provide additional energy savings. The EWS3 offers a typical 105 LPW and is available in key lumen packages and reflective optics to optimize light output for most applications. This reliable system operates well in cold temperatures and offers more than 11 years of service life to reduce maintenance frequency and expense, based on a 50,000 hour rated life and 12 hours of operation per day. Containing no mercury or lead, this environmentally responsible product is RoHS compliant.

Applications

- Wall mounted, site, area and general lighting utilizing an advanced LED optical system providing uniformity, vertical light distribution, reduced offsite visibility, reduced on-site glare and effective security light levels.

Housing

- Die-cast aluminum housing.
- Sleek architectural design incorporating a heat sink directly into the unit ensuring maximum heat transfer and long LED life.
- Meets 1.5 G vibration standards per ANSI C136.31-2010.

LED & Optical Assembly

- Structured LED array for optimized light distribution.
- Evolve™ LED light engine utilizes reflective technology to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 3000K, 4000K & 5000K typical.
- LM-79 tests and reports are performed in accordance with IESNA standards.

Lumen Maintenance

- Projected L90>47,000 hours per IES TM-21
- Projected Lxx per IES TM-21 at 25°C for reference:

SKU	LXX (10K)@HOURS		
	25,000 HR	50,000 HR	100,000 HR
EWS3	L94	L89	L80

Note: 1) Projected Lxx based on LM80 (10,000 hour testing). 2) DOE Lighting Facts Verification Testing Tolerances apply to initial Luminous flux and lumen maintenance measurements.

Lumen Ambient Temperature Factors:

AMBIENT TEMPERATURE (°C)	INITIAL FLUX FACTOR
10	1.02
20	1.01
25	1.00
30	0.99
40	0.98
50	0.97

Ratings

- UL listed, suitable for wet locations.
- cUL listed with option code "J" SKUs.
- IP 65 rated optical enclosure per ANSI C136.25-2013.
- Title 24 compliant with motion sensor option.
- Temperature rated at –40° to 50°C. (35°C for high wattage 90W SKU).
- Upward Light Output Ratio (ULOR) = 0
- Complies with the material restrictions of RoHS.

DLC Standard qualified models available. Please refer to http://www.designlights.org/QPL for complete information.

Mounting

- Flush wall mount to "J" box with inspection hole for IP 65.

Finish

- Corrosion resistant polyester powder paint, minimum 2.0 mil. thickness.
- Standard colors: Black and Dark Bronze.
- RAL & custom colors available.

Electrical

- 120-277 volt and 347-480 volt available.
- System power factor is >90% and THD <20%*.
- Surge protection per ANSI C136.2-2015:
  - Exceeds "Basic" (6kV/3kA) (120 strike)
- EMI: FCC Title 47 CFR Part 15 Class A.
- Motion sensor with dimming capability available with "H" option code.
- Button PE Sensitivity: Fixture on-3.5Fc
  Fixture off-11.8 Fc

** System THD <26% for 347-480v supply with A7 power level.*

Accessories

- Escutcheon Plates - See page 6

Warranty

- 5 Year standard

Ordering Number Logic

Scalable Wall Pack (EWS3)

E W S 3

_ _ _ _   _   _ _   _ _   _ _   _   _ _ _ _   _ _ _

PROD. ID	VOLTAGE	POWER LEVEL	PHOTOMETRIC TYPE	LED COLOR TEMP	PE FUNCTION	COLOR	OPTIONS
E = Evolve **W** = Wallpack **S** = Scalable **3** = Product Generation	**0** = 120-277* **1** = 120 **2** = 208 **3** = 240 **4** = 277 **5** = 480 **D** = 347 **H** = 347-480* *Not available with Fusing. Must choose a descreet voltage with F Option.		**D1** = Asymmetric Forward **E1** = Asymmetric Medium	**30** = 3000K **40** = 4000K **50** = 5000K	**1** = None **3** = Button PE* *Button PE not available with motion sensor option. Only available with descreet voltages. Not available with voltage options D, H or 5.	**BLCK** = Black **DKBZ** = Dark Bronze **GRAY** = Gray **WHTE** = White Contact manufacturer for other colors.	**F** = Fusing **H** = Motion Sensor* **J** = cUL/Canada **XXX** = Special Options *Option H only available in 120-277V. Reference page 5 (under H Motion Sensing Option) for more details.

Table 1: 120-277 Voltage Versions

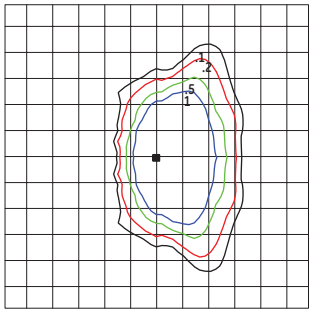
POWER LEVEL	PHOTOMETRIC TYPE	TYPICAL INITIAL LUMENS 3000K	TYPICAL INITIAL LUMENS 4000K & 5000K	TYPICAL SYSTEM WATTAGE 120-277V	TYPICAL SYSTEM WATTAGE 347-480V	B-U-G RATING 3000K	B-U-G RATING 4000K & 5000K	IES FILE NUMBERS 120-277V 3000K	IES FILE NUMBERS 120-277V 4000K	IES FILE NUMBERS 120-277V 5000K
A7	D1	2800	2900	25	28	1-0-1	1-0-1	EWS3_A7D130____-120-277V.IES	EWS3_A7D140____-120-277V.IES	EWS3_A7D150____-120-277V.IES
	E1	2800	2900	25	28	1-0-0	1-0-1	EWS3_A7E130____-120-277V.IES	EWS3_A7E140____-120-277V.IES	EWS3_A7E150____-120-277V.IES
B7	D1	3700	3800	32	35	1-0-1	1-0-1	EWS3_B7D130____-120-277V.IES	EWS3_B7D140____-120-277V.IES	EWS3_B7D150____-120-277V.IES
	E1	3700	3800	32	35	1-0-1	1-0-1	EWS3_B7E130____-120-277V.IES	EWS3_B7E140____-120-277V.IES	EWS3_B7E150____-120-277V.IES
C7	D1	4900	5000	41	45	1-0-1	1-0-1	EWS3_C7D130____-120-277V.IES	EWS3_C7D140____-120-277V.IES	EWS3_C7D150____-120-277V.IES
	E1	4900	5000	41	45	1-0-1	1-0-1	EWS3_C7E130____-120-277V.IES	EWS3_C7E140____-120-277V.IES	EWS3_C7E150____-120-277V.IES
D3	D1	6500	6700	67	67	2-0-1	2-0-1	EWS3_D3D130____.IES	EWS3_D3D140____.IES	EWS3_D3D150____.IES
	E1	6500	6700	67	67	2-0-1	2-0-1	EWS3_D3E130____.IES	EWS3_D3E140____.IES	EWS3_D3E150____.IES
E3	D1	8200	8600	90	90	2-0-2	2-0-2	EWS3_E3D130____.IES	EWS3_E3D140____.IES	EWS3_E3D150____.IES
	E1	8200	8600	90	90	2-0-1	2-0-1	EWS3_E3E130____.IES	EWS3_E3E140____.IES	EWS3_E3E150____.IES

Table 2: 347-480 Voltage Versions

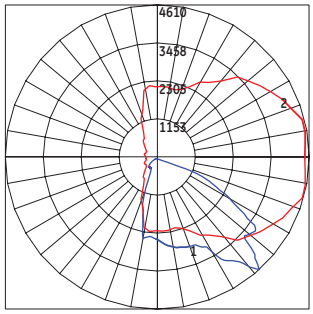
POWER LEVEL	PHOTOMETRIC TYPE	TYPICAL INITIAL LUMENS 3000K	TYPICAL INITIAL LUMENS 4000K & 5000K	TYPICAL SYSTEM WATTAGE 120-277V	TYPICAL SYSTEM WATTAGE 347-480V	B-U-G RATING 3000K	B-U-G RATING 4000K & 5000K	IES FILE NUMBERS 347-480V 3000K	IES FILE NUMBERS 347-480V 4000K	IES FILE NUMBERS 347-480V 5000K
A7	D1	2800	2900	25	28	1-0-1	1-0-1	EWS3_A7D130____-347-480V.IES	EWS3_A7D140____-347-480V.IES	EWS3_A7D150____-347-480V.IES
	E1	2800	2900	25	28	1-0-0	1-0-1	EWS3_A7E130____-347-480V.IES	EWS3_A7E140____-347-480V.IES	EWS3_A7E150____-347-480V.IES
B7	D1	3700	3800	32	35	1-0-1	1-0-1	EWS3_B7D130____-347-480V.IES	EWS3_B7D140____-347-480V.IES	EWS3_B7D150____-347-480V.IES
	E1	3700	3800	32	35	1-0-1	1-0-1	EWS3_B7E130____-347-480V.IES	EWS3_B7E140____-347-480V.IES	EWS3_B7E150____-347-480V.IES
C7	D1	4900	5000	41	45	1-0-1	1-0-1	EWS3_C7D130____-347-480V.IES	EWS3_C7D140____-347-480V.IES	EWS3_C7D150____-347-480V.IES
	E1	4900	5000	41	45	1-0-1	1-0-1	EWS3_C7E130____-347-480V.IES	EWS3_C7E140____-347-480V.IES	EWS3_C7E150____-347-480V.IES
D3	D1	6500	6700	67	67	2-0-1	2-0-1	EWS3_D3D130____.IES	EWS3_D3D140____.IES	EWS3_D3D150____.IES
	E1	6500	6700	67	67	2-0-1	2-0-1	EWS3_D3E130____.IES	EWS3_D3E140____.IES	EWS3_D3E150____.IES
E3	D1	8200	8600	90	90	2-0-2	2-0-2	EWS3_E3D130____.IES	EWS3_E3D140____.IES	EWS3_E3D150____.IES
	E1	8200	8600	90	90	2-0-1	2-0-1	EWS3_E3E130____.IES	EWS3_E3E140____.IES	EWS3_E3E150____.IES

Photometrics

EWS3 - Asymmetric Forward (D1)
8,600 Lumens, 5000K (EWS3_E3D150_____.IES)

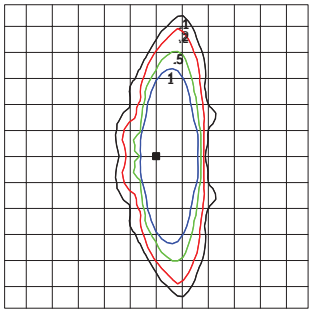


Grid Distance in Units of Mounting Height at 12'
Initial Footcandle Values at Grade

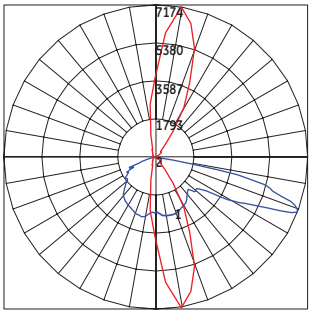


Polar Trace Vertical and Horizontal Plane through
Horizontal Angle of Maximum Candlepower

EWS3-Asymmetric Medium (E1)
8,600 Lumens, 5000K (EWS3_E3E150_____.IES)



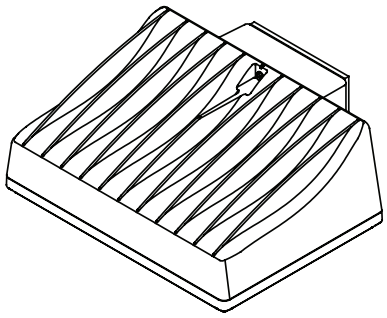
Grid Distance in Units of Mounting Height at 12'
Initial Footcandle Values at Grade



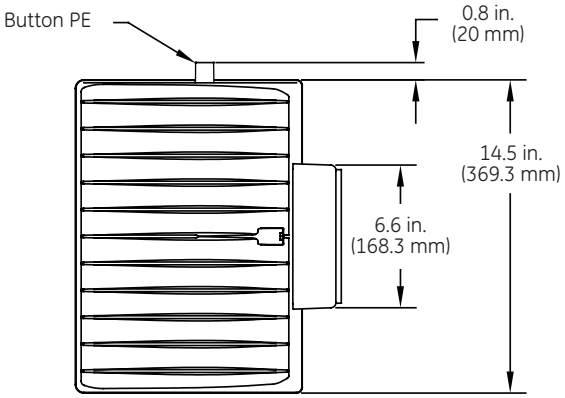
Polar Trace Vertical and Horizontal Plane through
Horizontal Angle of Maximum Candlepower

Product Dimensions

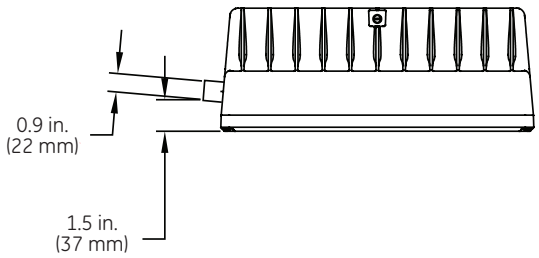
Top/Side View



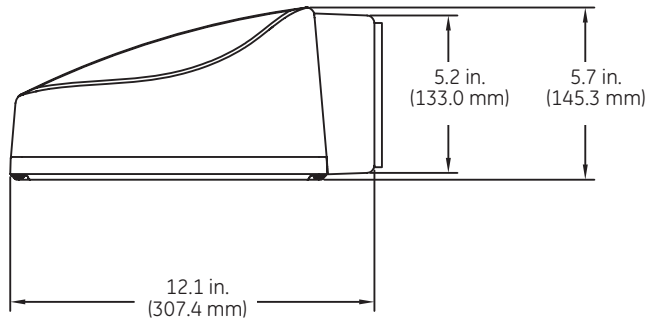
Top View



Front View

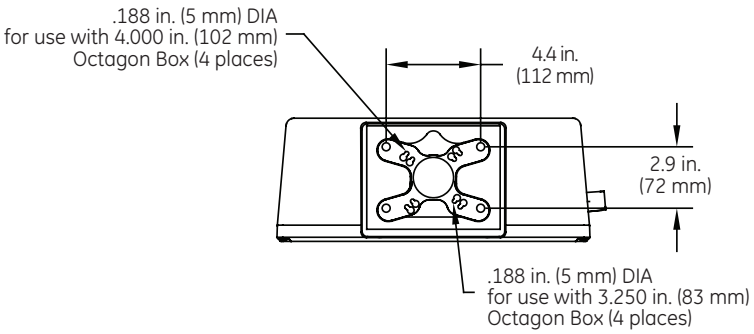


Side View



Product Dimensions

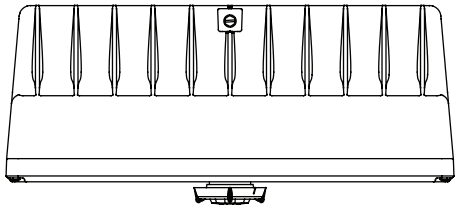
Back View



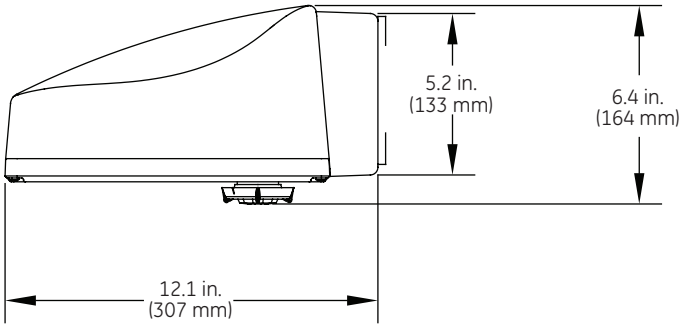
DATA

- Approximate Net Weight: 21 lbs (9.53 kgs)

Front View with Motion Sensor Option



Side View with Motion Sensor Option



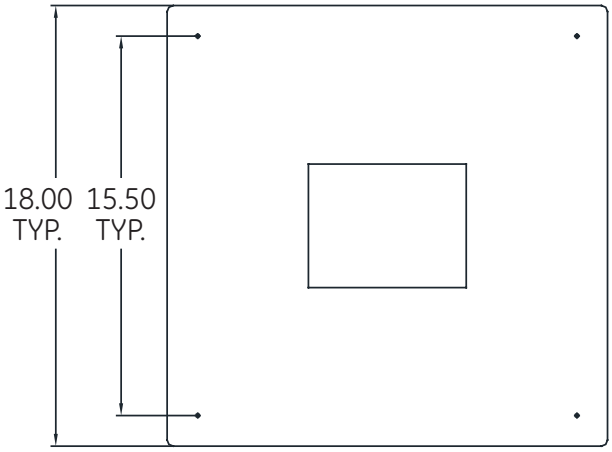
Accessories:

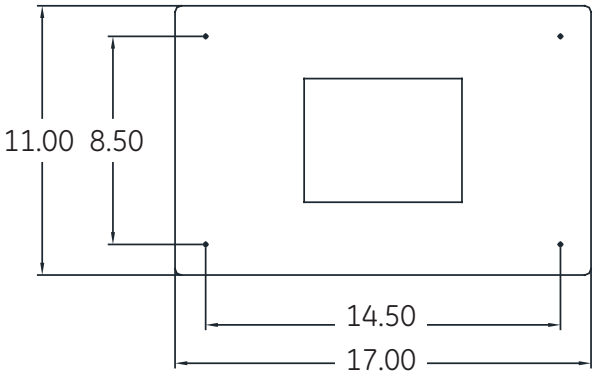
Escutcheon Plates

Cover unsightly debris and marks left behind from replacing HID product with escutcheon plates. Available in square and rectangular sizes, as well as in an assortment of colors to match the luminaire. Accessories are ordered and shipped separately from the luminaire.

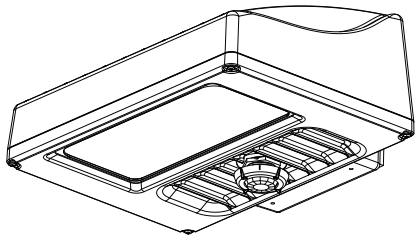
E W N — **E** — — — —

PROD. ID	PHOTOMETRIC SERIES	DETAIL	COLOR
E = Evolve **W** = Wall Pack **N** = Housing Series	**E** = Escutcheon Plate	**1** = 17" x 11" **2** = 18" x 18"	**BLCK** = Black **DKBZ** = Dark Bronze **GRAY** = Gray **WHTE** = White RAL custom colors available. Contact Manufacturer.





H-Motion Sensing Option:



- Intended for 8-25ft mounting heights.
- Provides a coverage area radius for walking motion of 25-30ft.
- Provides 180° of coverage (~180° is blocked by the wall).
- Factory preset to 50% dimming with no occupancy.
- May be reprogrammed using additional remote programmer.
  Remote Programmer part number: WS FSIR-100 PROGRAMMER (197634)
- Photoelectric control is integrated through the motion sensor, and is offered as standard.

Sensor Pattern:

Sensing Pattern Wall Pack Fixture
Up to 25ft.

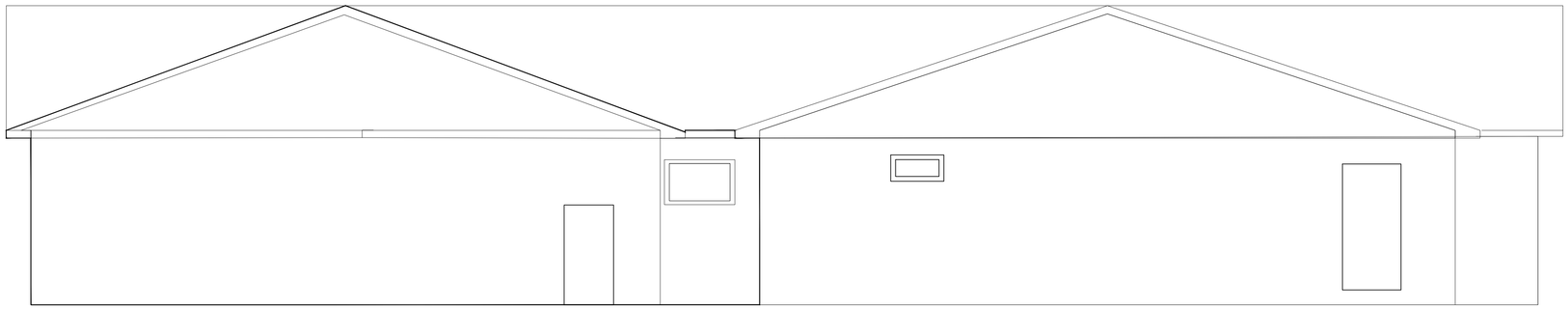
www.currentbyge.com

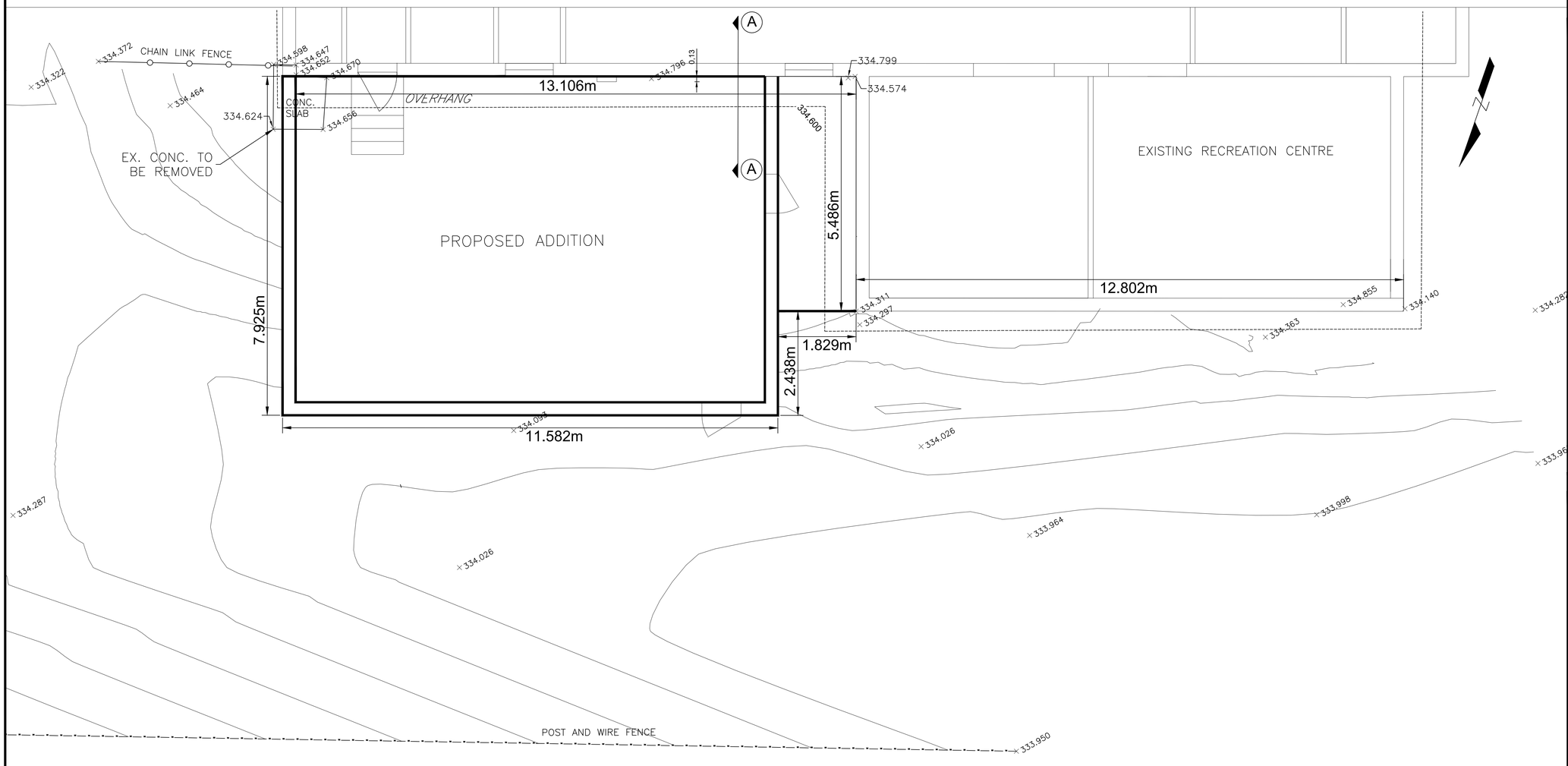
OLP3115 (Rev 01/24/17)

Appendix 'F'

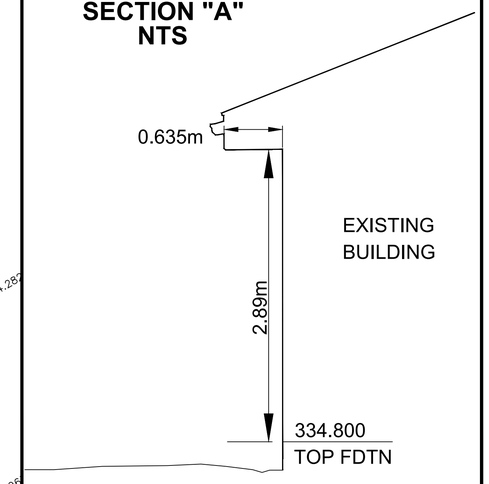
Site Elevations

NORTH ELEVATION VIEW





SECTION "A"
NTS



PRECISION CONSTRUCTION SERVICES

GOODWOOD RECREATION CENTER, GOODWOOD

PROPOSED ADDITION LOCATION

DESIGN			FILE No.
CADD	C.S.	OCT12/2017	SCALE 1:50

2 0 1:50m 2 4

DRAWING: 1 OF 1

SCHEDULE 1

BIDDER'S REFERENCE FORM

Bidders to complete the **Bidder's Reference Form** for their company and submit it with their bid at the time of Quotation closing.

Provide References for projects that comply with requirements in Section 1 – Article 1.8.

Project Description	Completion Date of Contract	Corporation / Owner For Whom Work Was Performed	Name of Contact Person	Phone No.

INCLUDE WITH BID SUBMISSION

Name of Firm: _____

SCHEDULE 2

SUBCONTRACTOR FORM

Sub-Trade Category	Proposed Subcontractor

INCLUDE WITH BID SUBMISSION

Name of Firm: _____

SCHEDULE 3

CONTRACTOR ENVIRONMENTAL ACKNOWLEDGEMENT FORM

As a Contractor for The Township of Uxbridge, your review and acknowledgement of this document is necessary prior to beginning work. The items in this checklist are in addition to any specific environmental requirements identified in the Tender/Contract document. Please complete this form by initialing each item in the checklist and then by signing the acknowledgement at the bottom of the document. It is possible that during the course of the contract work, The Township of Uxbridge may review the information in this document with you and your personnel.

Environmental Policy

I acknowledge that I have been made aware of and will follow The Township of Uxbridge Environmental Policy. The Policy includes the following obligations: Comply with applicable legislation. Conserve resources and prevent pollution. Continually improve our environmental performance. *Initial*

Compliance

I am aware of the environmental regulatory requirements applicable to the project. I understand the importance of compliance with environmental legislation, approvals or permits, and the consequences of non-compliance. *Initial*

Awareness and Competence

I acknowledge that I am responsible for ensuring that environmental responsibilities contained in the Contractor Environmental Responsibilities Package are communicated to all on-site personnel including Subcontractors. I acknowledge that I am responsible for ensuring that all personnel working for this project are competent to perform the assigned work based on training, education and experience. *Initial*

Erosion and Sediment Control

Recognized practices will be utilized that minimize erosion and prevent the movement of sediment into watercourses and storm infrastructure. Where one has been created, the Erosion and Sediment Control Report or Plan will be followed. Any required erosion and sediment control devices will be frequently inspected and maintained during the project, will be removed once the area has been stabilized against erosion and will be disposed of appropriately. *Initial*

Dewatering

Discharges of surface and subsurface water resulting from dewatering activities will be conducted following Town of Uxbridge procedures. Written authorization will be obtained from Water Resources to dispose of water that has accumulated on construction sites by precipitation or groundwater infiltration into the storm/sanitary system. *Initial*

Saw Cutting and Coring

When undertaking saw cutting or coring activities, slurry will not be allowed to enter the storm water system or waterbody. *Initial*

Name of Firm: _____

SECTION '5' – APPENDICES AND SCHEDULES

Soil Conservation and Stockpiles

Appropriate soil conservation and stockpiling practices will be implemented to prevent erosion, the loss of topsoil and spread of weeds. *Initial*

Tree Protection

Adequate protection will be taken to not damage town-owned or controlled trees on-site and on adjacent properties. *Initial*

Site Management

The work site will be maintained free from accumulations of debris or waste. The effects of noise, odor, light, dust emissions, and tracking of dirt and mud will be minimized. Appropriate non-hazardous and hazardous materials management procedures will be implemented. Chemical, fuel and lubricant storage areas will be suitably located and protected to minimize releases. Site specific hazardous materials management procedures will be communicated to all Contractor and Subcontractor personnel. *Initial*

Waste Management

All waste materials generated from activities will be removed and disposed of in accordance with regulatory requirements and facility procedures. In*itial*

Recycling

Generation of waste will be avoided or minimized. At a minimum, the recycling of cardboard, wood, concrete and metal will be considered and assessed. Construction materials with recycled content will be used where reasonably practical and safe. *Initial*

Fueling

Contractor and Subcontractor personnel will be present during fueling operations for the duration of the fueling process. Fueling or maintenance of equipment will not take place within 30 metres of waterways, including the storm water system or environmentally sensitive areas unless a written standard operating procedure is developed. Spill kits will be available on-site. *Initial*

Spill Prevention

Measures will be taken to prevent pollution of land or waterways, including the storm water system. Spill kits will be available on-site. *Initial*

Release Reporting and Cleanup

Spills and releases will be reported to the appropriate regulatory agencies as required by law. Spills and releases will be reported immediately to The Town of Uxbridge Project Designate* and any other regulatory authority with jurisdiction must also be contacted if it is known to be a reportable release. If the product enters or is likely to enter a waterway or sewer system, or assistance is needed, the Contractor should call 911 and request dispatch of the Fire Department. If a spill or release into the

Name of Firm: _____

environment occurs, the affected area will be cleaned up and remediated to the satisfaction of The Town of Uxbridge and appropriate regulatory agency. *Initial*

Contamination Discovery

The Contractor must immediately notify The Town of Uxbridge Fire Department, 911 for emergencies and the Project Designate of any unexpected contamination encountered during the work. The Contractor must also notify Durham Region – ask for Works Technical Support at 905-668-7711 (1-800-841-2729), and any other regulatory authority with jurisdiction if it is known to be a reportable release. Any suspected or potentially hazardous building materials exposed during the work will be reported to The Town of Uxbridge Project Designate* immediately *Initial*

Off-site Disposal of Excavated Soil or Material

Excavated soil or material that is not required for fill or other purposes will be properly disposed of. *Initial*

Imported Fill Material

The source location of any imported fill material will be reported to The Town of Uxbridge Project Designate* prior to material being brought on-site. If requested, the suitability of the material will be verified. *Initial*

Vehicle Idling

Idling of vehicles not essential for performance of work will be minimized. *Initial*

* The Project Designate is The Town of Uxbridge's contact for a specific construction job. This could be a Project Manager, Contract Manager, Site Supervisor, Project Engineer, Foreman or Safety/Environmental Specialist.

I , _____, acknowledge that I have been made aware of these expectations, and I understand it is my responsibility to comply with them and communicate this information to all on-site personnel that are engaged in carrying out the work or providing material to the job site.

Contractor signature:_____

Title:_____

Date_____

Name of Firm: _____