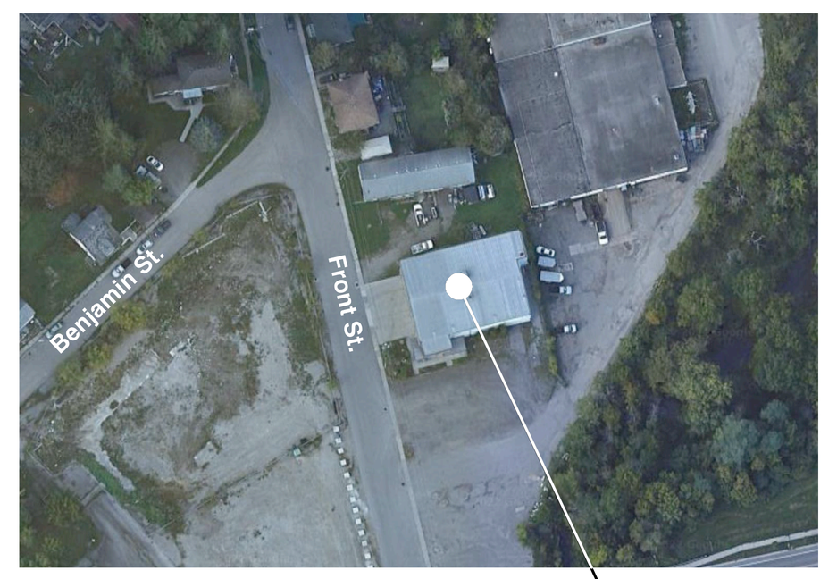
Wilmot Fire Station 2

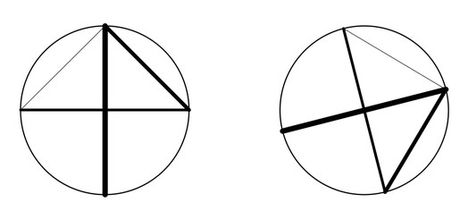
55 Front Street
New Dundee, ON N0B 2E0



Key Plan n.t.s.

Location of Work:

55 Front Street
New Dundee, ON N0B 2E0



True North   Project North

Project Consultants:

Architectural & Prime Consultant:
John MacDonald Architect inc.
Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
(519) 579-1700
Contact: Sulaf AlHusaini
e-mail: sulaf@johnmacdonaldarchitect.ca

General Notes:

Professional Design

The design prepared by John MacDonald Architect inc. (the Consultant) is intended to govern changes or alterations as indicated in Documents, solely for the specific project noted, for use by the Owner under the terms and conditions of an agreement between the Owner and John MacDonald Architect inc. The Documents do not imply a contractual relationship on the part of John MacDonald Architect inc. to any other party for any purpose, including but not limited to their use in the performance of the Work under agreements between other parties, or the use of the Work by other parties.

The design is based upon assumptions regarding existing conditions, which are implied in the design.
The Contractor shall verify existing conditions as the work proceeds, and identify immediately to the Owner any condition revealed in the course of the Work which may not conform to initial assumptions expressed or implied by The Documents.

Specifications and Contract

The Drawings shall be read in conjunction with the Contract General Conditions as amended by Supplementary Conditions which are separately bound from the Drawings.

All notes and drawings shall be read in conjunction with the Specifications. In case of discrepancy, the more stringent shall apply.

Description of the Work:

The work of this Contract is the Interior Renovations and Upgrades, all as set out in the Documents. The place of the Work is located at 55 Front Street, New Dundee, Ontario, to a portion of the Main Floor and the to add a Mezzanine above the renovated Main floor portion for training purposes.

The Work includes provision of products and materials shown on the drawings, Building Systems performance, and related construction and design services, all as described in the Contract Documents. Provide for all setting out, co-ordination, administration, liaison with authorities, construction, and include measures for the safety and protection of the Work, existing conditions, building occupants, workforce, and the public. Provide all items of work reasonably inferable as necessary for the construction, regardless of whether shown on drawings, at no further cost to the Owner.

The Contractor shall obtain clarification of requirements from the Consultant or Owner, in all cases of uncertainty prior to proceeding with aspects of the Work.

The Contractor shall employ subcontractors (referenced through the documents as Subcontractors or Trade Contractors), suppliers, tradesmen, and labour that have clearly demonstrated experience in achieving the requirements that form an integral part of the Work. This includes the ability to integrate work and services to achieve design intent using further design and services as necessary to continue the design through the construction phase of the project.

The design that forms the basis for the work described involves the integration of aspects of the construction into distinct Building Systems that are identified in the Contract Documents. The Contractor shall examine requirements, organise the planning, and direct the performance of the Work so as to achieve the prescriptive and performance standards for each Building System as identified in or reasonably inferred by the Contract Documents.

Documents Required:

Maintain at the job site, one copy each of following:

1. Complete Contract documents;
2. Complete Permit Documents as issued by Authorities;
3. Copies of all Reviews, Supplemental Instructions, Notices of Proposed Changes, Change Orders and Change Directives;
3. All documents relating to any modifications to Contract;
4. Reviewed and accepted Submittals;
5. Updated, reviewed and accepted Construction Schedule;
6. Manufacturers' installation instructions for all Products;
7. Reference Standards listed in the Documents;
9. Copies of all applicable regulations and legislation in force at the Place of the Work.

Project Schedule:

The Schedule shall be an integral part of the Contract. Work shall be performed in a timely and efficient manner, without delay, and with proper planning and co-ordination. The Contract is to be substantially completed on or prior to the dates identified in the Contract Documents.

The Work shall be undertaken in accordance with a plan and schedule of construction organisation. Submit plan to Owner for review and acceptance prior to start of construction. The Plan must incorporate all conditions of the Work and Place of the Work, including the Owner's Operations, Safety, and Security Conditions.

Existing Services and Building Systems:

Ensure that existing services are not damaged during construction operations, wherever performed. Should existing services be accidentally uncovered and disrupted, make complete restoration immediately at no additional cost to the Owner. Unless otherwise specified, restore services on which work is performed to original condition. Existing systems, including all distribution and performance of devices and equipment, shall not be interrupted without permission of Owner and to a plan and timetable agreed with the Owner prior to the interruption.

Contractor's Use of Property:

The fire station is active and must remain operational during construction. Some provisions can be made as agreed with the client.
Limit access by construction personnel to the Place of the Work to locations and times strictly necessary for performance of the Work. Prohibit lounging and smoking on the property. Keep areas clean under work of contract, and return them to an "as new" condition at completion of construction. Replace, or make good as approved by the Owner, damage to Facility, property, fixtures and fittings caused howsoever. Include cost of installation and making good of other work thereby affected in replacement. Access to the Place of Work is governed by the Owner's Operations, Security and Safety Conditions as provided by the Owner and defined as Existing Conditions for the performance of the Work.

List of Documents:

Architectural Drawings:

A001 Cover & General Notes
A002 OBC Matrix, Information & Assembly Types
A201 Main Floor Removals Plan
A212 Main Floor Plan
A213 Mezzanine Floor Plan
A401 Building Sections
A501 Reflected Ceiling Plan
A601 Wall Sections
A701 Stair Details
A731 Sections Details
A801 Interior Elevations Main Floor
A802 Interior Elevations Mezzanine Floor
A901 Openings & Room Finishes Schedules

Structural:

S001 Structural Notes and Schedules
S101 Foundation Plan & Details
S201 Mezzanine Level Framing Plan & Details

Mechanical:

M001 Mechanical General Notes
M101 Mechanical Plumbing Plans
M201 Mechanical HVAC Main Floor Plan
M202 Mechanical HVAC Mezzanine Floor Plan

Electrical:

E001 Electrical General Notes
E211 Electrical Lighting & Power Main Floor Plan
E212 Electrical Lighting & Power Mezzanine Floor

Owner's Operations, Safety, and Security Requirements:

The Documents shall be read in conjunction with the Owner's Operations, Security, and Safety Requirements document.

All Owner requirements for its continued use and enjoyment of the Facility during the construction period shall be solicited by the bidding Contractors and shall be incorporated into the ways and means for accomplishing the Work.

All costs for temporary measures and accommodation of the Owner's requirements for continuous occupancy
of the Facility (except for areas turned over to the Contractor) are included in the Contract Price.

General Requirements:

This Work includes all measures required for protection of the public, users and the Work, including barriers, and protection required for installation of materials and products to highest standards of quality for workmanship. See Division 1 of the Specifications.

List of Abbreviations:

See also Specifications section 01090

ALUM	Aluminium
ANOD	Anodized
BF	Barrier Free
CB	Concrete Block or Catch Basin
C.L.	Centre Line
CMU	Concrete Masonry Unit
CONC	Concrete
CJ	Control Joint
C/W	Complete With
DIM	Dimension
Elec	Electrical
EP	Electrical Panel
Ex.	Existing
Exist.	Existing
EJ	Expansion Joint
F.E.	Fire Extinguisher
F.R.R.	Fire Resistance Rating
F.S.	Fire Separation
GL	Glass
G.L.	Gridline
GWB	Gypsum Wallboard
HWD	Hardwood
I/S	Inside
LAP	Lay-in Acoustic Panel
LF	Light Fixture
Mech	Mechanical
MG	Make Good
N/A	Not Applicable
O/S	Outside
P.LAM	Plastic Laminate
PLY	Plywood
PT	Paint
TBD	To Be Determined
TG	Tempered Glass
UC	Undercut
UNO	Unless Noted Otherwise
j.c.	Job Check: Contractor to confirm measurements to consultant immediately upon completion of selective demolition prior to proceeding with new Work. In case of discrepancy confirm instructions prior to proceeding.
HOLD	Critical dimension: Contractor to maintain exact dimension.
N.I.C.	Not in Contract: The only means by which something shown or specified shall be indicated as not being in the contract is by the use of the initials "NIC" or the words "not in (the) contract", or "by Owner".

Authorities having Jurisdiction

Work undertaken is for Interior Renovations and Upgrades – Station 2 (New Dundee)
See Sheet A002 for OBC diagrams.

It is the Consultant's understanding based upon information from the Owner and the Township of Wilmot that site plan approval is not required for this project. Minor interior renovation only.

All work is to be performed to exceed the standards and regulations of Codes and authorities having jurisdiction.

General Note to Work Space Separation:

Provide temporary demarcation fencing to separate the Area of the Work from the area of the facility occupied by the Owner.

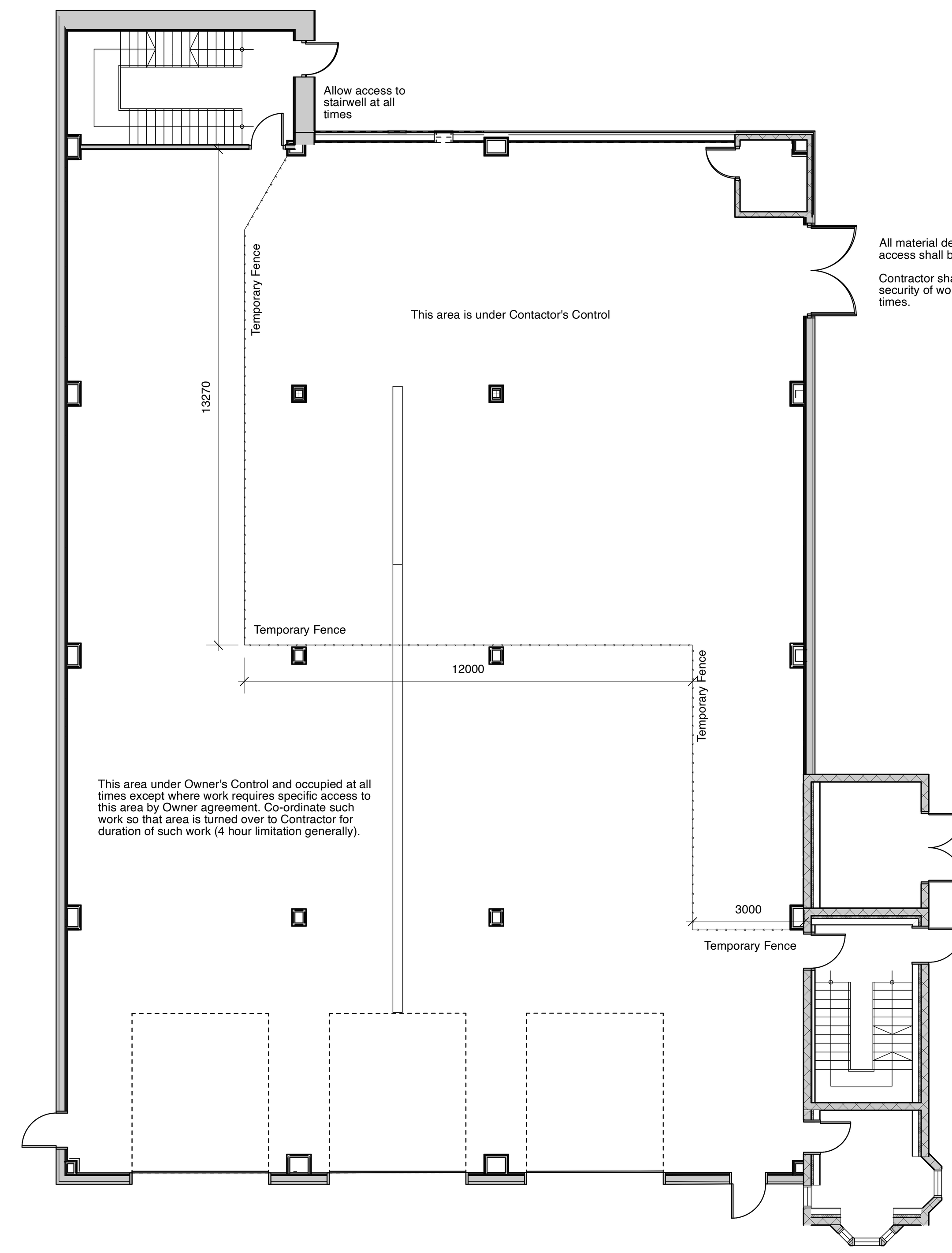
All cutting shall be using wet methods. Contractor shall provide all temporary dust protection and shall minimize dust. Co-ordinate work which may generate risk of dust of any kind with the Owner to ensure equipment is removed or protected during such operations.

Fire alarm system shall remain operational at all times unless by arrangement with Authority.

Contractor provides fire watch at its own expense whenever fire alarm is arranged to be off-line.

Legend:

Symbol	Description
1 / A301	Building Elevation See A300 series Sheets
1 / A401	Building Section See A400 series Sheets
1 / A601	Wall Section See A600 series Sheets
w#	Foundation Wall Type, Wall Type See A000 series Sheets
f#	Floor Type, Roof Type See A000 series Sheets
p#	Partition Type See A000 series Sheets
c#	Ceiling Type See A000 series Sheets
07	Room Numbers See Room Finish Schedule(s)
10	Opening Numbers See Opening Schedule(s)
Wxx	Window Type, see A300 Sheets for Window Schedule(s)
Mxx	Millwork Type See A710 series Sheets
1.1	Equipment Numbers See Equipment Schedule(s)
	Denotes Existing Assembly
	Denotes Fire Separation
F.S.	Denotes Fire Separation
F.R.R.	Denotes Fire Resistance Rating
j.c.	job check indicates dimension which must be confirmed onsite



1 / A001 Working Area Fencing Plan
n.t.s

No.	Issued for Purpose	Date	Initial
1	Issued for Comment	Sept 19 '22	JHM
2	65% Documents	Nov. 18 '22	JHM
3	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmebly Types see Sheet A002
For Floor Plans see A200 series Sheets
For Building Sections see A400 series Sheets
For Wall Sections see A600 series Sheets
For Stair Details see A700 series Sheets
For Section Details see A730 series Sheets
For Interior Elevations see A800 series Sheets
For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved	
Checked	JHM
Drawn	SH

Drawing Title

Cover and
General Notes

Scale (for 36x48" printing): n.t.s.

Dwg. No.: A001

John MacDonald Architect

Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
JohnMacDonaldArchitect.ca | (519) 579 1700

OBC DATA MATRIX: PART 11 - RENOVATION OF EXISTING BUILDING

CONSULTANT:	**JOHN MACDONALD ARCHITECT INC.** **Public Utilities Commission Building** **Suite 202, 195 King Street West** **Kitchener, ON, N2G 2X8** **p: 519-579-1700** **e: info@johnmacdonaldarchitect.ca**					
CONTACT:	**John MacDonald, Architect** **Sulaf Alhusaini, Project Leader**					
PROJECT NAME:	**Wilmot Fire Station 2**					
ADDRESS/LOCATION:	**55 Front Street** **New Dundee, ON, N0B 2E0**					
DATE:	**July 8, 2024**					Seal & Signature
11.00 BUILDING CODE VERSION	O.Reg. 332/12	LAST AMENDMENT		O.Reg. 191/14		OBC REF. [1]
11.01 PROJECT TYPE	APPLICABLE PART	DESCRIPTION				[A] 1.1.2.
	Part 11	Interior renovations within the apparatus bay on the main floor, and adding a mezzanine work platform for training purposes.				
11.02 MAJOR OCCUPANCY CLASSIFICATION	OCCUPANCY	GROUP/DIVISION	DESCRIPTION OF USE			3.1.2.1.(1)
	EXISTING	**F2**	**Fire Hall**			
	PROPOSED	**F2**	**Fire Hall**			
11.03 SUPERIMPOSED MAJOR OCCUPANCIES	NO	DESCRIPTION: N/A				3.2.2.7.
	-					
11.04 BUILDING AREA (m2)	DESCRIPTION		EXISTING	NEW	TOTAL	[A] 1.4.1.2.
	Main Floor		**631.66 m²**	**0 m²**	**631.66 m²**	
	Mezzanine		**-**	**137.6 m²**	**137.6 m²**	**See Note 3**
	Second		**576.5 m²**	**0 m²**	**576.5 m²**	
	TOTAL		**1208.18 m²**	**137.6 m²**	**1345.78 m²**	
11.05 BUILDING HEIGHT	NO. OF STOREYS ABOVE GRADE		**2**	(m) ABOVE GRADE	**10.06 m +/-**	[A] 1.4.1.2. &
	NO. OF STOREYS BELOW GRADE				None	3.2.1.1.
11.06 # OF STREETS/FIREFIGHTER ACCESS	**1 (one), as existing**					3.2.2.10. & 3.2.5.
11.07 BUILDING SIZE	Medium					T.11.2.1.1.B.-N.
11.08 EXISTING BUILDING CLASSIFICATION	DESCRIPTION		EXISTING	NEW	NOTES	
	CHANGE IN MAJOR OCCUPANCY		Group F, Div. 2	Group F Div. 2		11.2.1.1.
	CONSTRUCTION INDEX (C.I.)		5	5	no change	T.11.2.1.1.A.
	HAZARD INDEX (H.I.)		5	5	no change	T.11.2.1.1.B.-N.
	IMPORTANCE CATEGORY		normal	normal	no change	
11.09 RENOVATION TYPE	BASIC / EXTENSIVE RENOVATION?		**Basic Renovation**			11.3.3.1. & 11.3.3.2.
11.10 OCCUPANT LOAD	FLOOR LEVEL/AREA (LIST)		OCCUPANCY TYPE	BASED ON	OCCUPANT LOAD	3.1.17.
	Ground Floor		**Apparatus Bay+ Services**	no change	no change	
	Mezzanine		**Training**	no change	no change	**See Note 1**
	Upper Floor		**Offices+Training**	no change	no change	
	TOTAL		-	no change	no change	
11.11 PLUMBING FIXTURE REQUIREMENTS	RATIO OF MALE:FEMALE = 50:50 EXCEPT AS NOTED OTHERWISE					3.7.4.
	FLOOR AREAS	OCCUPANT LOAD	OBC REFERENCE	FIXTURES REQUIRED	FIXTURES PROVIDED	
	Ground Floor	-	-	-	-	**See Note 2**
	Mezzanine	-	-	-	-	
	Upper Floor	-	-	-	-	
11.12 BARRIER-FREE DESIGN						11.3.3.2.(2)
11.13 REDUCTION IN PERFORMANCE LEVEL	STRUCTURAL					11.4.2.1.
	Additional Mezzanine structure					
	INCREASE IN OCCUPANT LOAD					11.4.2.2.
	N/A - No increase in occupant load proposed. Therefore no reduction in performance level.					
	CHANGE OF MAJOR OCCUPANCY					11.4.2.3.
	N/A - No change in occupancy proposed. Therefore no reduction in performance level.					
	PLUMBING					11.4.2.4.
	N/A - No changes to plumbing proposed. Therefore no reduction in performance level.					
	SEWAGE SYSTEM					11.4.2.5.
	N/A - No existing or proposed sewage system. Therefore no reduction in performance level.					
11.14 COMPENSATING CONSTRUCTION	STRUCTURAL					11.4.3.2.
	Mezzanine structure shall conform to Part 4 (engineered Joists by shop drawing submission)					
	INCREASE IN OCCUPANT LOAD					11.4.3.3.
	N/A					
	CHANGE OF MAJOR OCCUPANCY					11.4.3.4.
	N/A					
	PLUMBING					11.4.3.5.
	N/A					
	SEWAGE SYSTEM					11.4.3.6.
	N/A					
11.15 COMPLIANCE ALTERNATIVES	NUMBER	DESCRIPTION				11.5.1.1.
	N/A	**N/A**				
	N/A	**N/A**				
	N/A	**N/A**				
11.16 NOTES	1. No increase in occupancy is proposed. The added mezzanine work platform is training area for current occupants.					11.5.1.1.
	2. Existing Washrooms to remain unchanged.					
	3. Mezzanine is a work platform for authorized personnel training.					
Ontario Building Code Data Matrix, Part 11 Ontario Association of Architects	*1. ALL REFERENCES ARE TO DIV. B OF THE OBC UNLESS PRECEDED BY [A] FOR DIV. A OR [C] FOR DIV. C*					

General Notes to OBC Matrix:

Refer also to Sheet A001 for "Notes to Authorities Having Jurisdiction"

Mezzanine Work Platform signage, access and use:

"Authorized Personnel" signage shall be installed at bottom of stairs on restricted chain.

"No Material Storage" signage shall be installed. Under no circumstance shall any material be stored on the work platform.

The access panel in the floor must be secured at all times. Opening shall be surrounded with permanent painted caution markings.

Access Panel shall be permanently labeled with the following:

"Use of removable panel shall be for authorized training purposes only. Comply with all fall protection requirements."

As the work platform is for training, only fire figther personnel will be authorized to use this space.

Wall Types (w):

#	Plan	Description
(wx1)		Ex. Steel Panel on Steel Stud Wall (FRR of 2 hours): - Steelox Steel Panel - R 20 batt Insulation - 6" steel stud - 6 mil vapour barrier - 3 layers 16mm Type 'X' gypsum wallboard Existing to remain u.n.o. noted
(wx2)		Ex. Concrete Block Wall: - Ex. 6" 75% Solid concrete Block Existing to remain u.n.o. noted
(wx3)		Ex. Concrete Block Wall: - Ex. 8" split face concrete block - Ex. 6" steel stud @ 6" o.c. on vertical wood strapping - Ex. R20 batt insulation - Ex. 6 mil poly Vapour barrier - Ex. 5/8" drywall Existing to remain u.n.o. noted
Ext. (wx4) Int.	2 hours f.r.r.	Existing Steel Panel on Steel Stud Wall: - Ex. Steelox Steel Panel - New R 20 batt Insulation; - New 2x6 nominal wood studs at 400mm centres (to 061000); - New 6 mil vapour retarder; - New 3 layers 16mm Type 'X' wallboard taped, spackled, sanded (to 092000). - Reinstall salvaged interior metal siding (to 07450). Construct stud wall, as part of the Building Structural System, to receive and transmit forces to foundations. See Structural documents.

Partition Types (p):

#	Plan	Description
(xp)		Existing 150mm Concrete Block Partition: to remain
(p)	45 min. f.r.r.	2x6 Wood Stud Structural Load-Bearing Partition @ Main Floor Wall: - 16mm type 'X' wallboard taped, spackled, sanded (to 092000) & painted (to 099000); - 2x6 nominal wood studs at 400mm centres (to 061000); - 16mm type 'X' wallboard taped, spackled, sanded (to 092000) & painted (to 099000) constructed, as part of the Building Structural System, to receive and transmit forces to foundations. Provide steel cross bracing strap to locations shown. See Structural documents.
(p)		2x4 Wood Stud Partition: - 13mm wallboard taped, spackled, sanded (to 092000) & painted (to 099000); - 2x4 nominal wood studs at 400mm centres (to 061000); - 13mm wallboard taped, spackled, sanded (to 092000) & painted (to 099000). Provide steel cross bracing strap to locations shown. See structural drawings.
(p)		2x4 1800mm Wood Stud Partition, Mezzanine Walls: - 11mm (7/16") OSB Panel (to 062000); - 4x4 nominal wood studs on corners and middle of room wall, or @ 2400mm max, to ceiling/structure above (to 061000), and 2x4 nominal wood studs in between the 4x4, same of wall height @ 400mm on centres; - 11mm (7/16") OSB Panel (to 062000x) All top plates shall be fastened to posts to resist guard forces applied to partition wherever partition forms guard. Provide breakthrough area to locations indicated.
(p) w		Moisture-Resistant Partition: - Same as any partition above except provide tile-backerwallboard (to 092000) in lieu of other wallboard 'w' indicates wallboard one side 'w2' indicates wallboard both side
(p) x	45 min. f.r.r.	Fire Rated Partition: - same as any partition above, except provide 16mm type 'X' wallboard both sides in lieu of the wallboard of this assembly. Construct Partition to achieve 45 min. fire resistance rating to ULC design W453. Firestop all penetrations (to 078400)
(p) xp	45 min. f.r.r.	Fire Rated and Moisture-Resistant Partition: - same as 'pl' above, except provide 16mm Fire Rated and Moisture-Resistant type 'XP' wallboard in lieu of wallboard of this assembly. xp indicates xp on the Apparetus Buy side xp2 indicates xp both sides Construct Partition to achieve 45 min. fire resistance rating to ULC design W453. Firestop all penetrations (to 078400)

Floor Types (fl):

#	Section	Description
Int. (fx1)	175	Existing Slab-on-Grade (to remain): - Provide saw cutting (033500) as per Structural docs. as a minimum. - Provide new 175mm concrete infill slab as required to repair and make good - ex. 150mm concrete slab-on-grade, on - ex. 150mm gran. 'A' base - renew insulation and finish where affected by work Provide doweling to join new to existing @ 450 o.c.
Int. (fx2)		Existing Floor (Second Floor): to remain
Int. (f1) Int.	295 45 min. f.r.r.	Wood Floor (Mezzanine Floor): - 19 mm tongue and grooved plywood sub-floor (to 061000), sealed and secured; to - 2 5/16x9 1/2 nominal wood I @ 400mm o.c. (to 061000); c/w - 150mm mineral wool batt insulation to complete fill of joist space (to 092000); - resilient channels @ 400mm o.c. (to 092000); on - wallboard (see Ceiling Types) Minimum fire resistance rating is achieved in accordance with MMAH Supplementary Standard SB-2 component additive method (40 minutes for wallboard membrane + 10 minutes for floor joists). Firestop all penetrations (to 078400). See also Room Finishes Schedule. See also Ceiling Types this Sheet.
Int. (f2) Int.	238 45 min. f.r.r.	Fire Rated Wood Floor (Mezzanine Floor): Same of above, except provide; - 2x8 nominal wood joists @ 400mm o.c. (to 061000) in lieu of the wood I

Ceiling Types (c):

#	Section	Description
(cx1) Int.		Existing Ceiling: to remain
(c1) Int.		GWB to u/s of structure: - 16mm type 'X' wallboard taped, spackled, primed (to 092000), painted (to 099000); on - wood structure (see Structural docs.)
(c2)		Sloped Canopy (Electrical Room): - Steel panels to form sloped canopy (to 07450); on - 2x2 nominal strapping @ 600mm o.c. (to 061000); on - 2x6 nominal joists @ 600mm o.c. (to 061000).

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmebly Types see Sheet A002
For Site Plans see A200 series Sheets
For Building Sections see A400 series Sheets
For Wall Sections see A600 series Sheets
For Stair Details see A700 series Sheets
For Section Details see A730 series Sheets
For Interior Elevations see A800 series Sheets
For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

No.	Revision	Date	Initial

Project

Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title

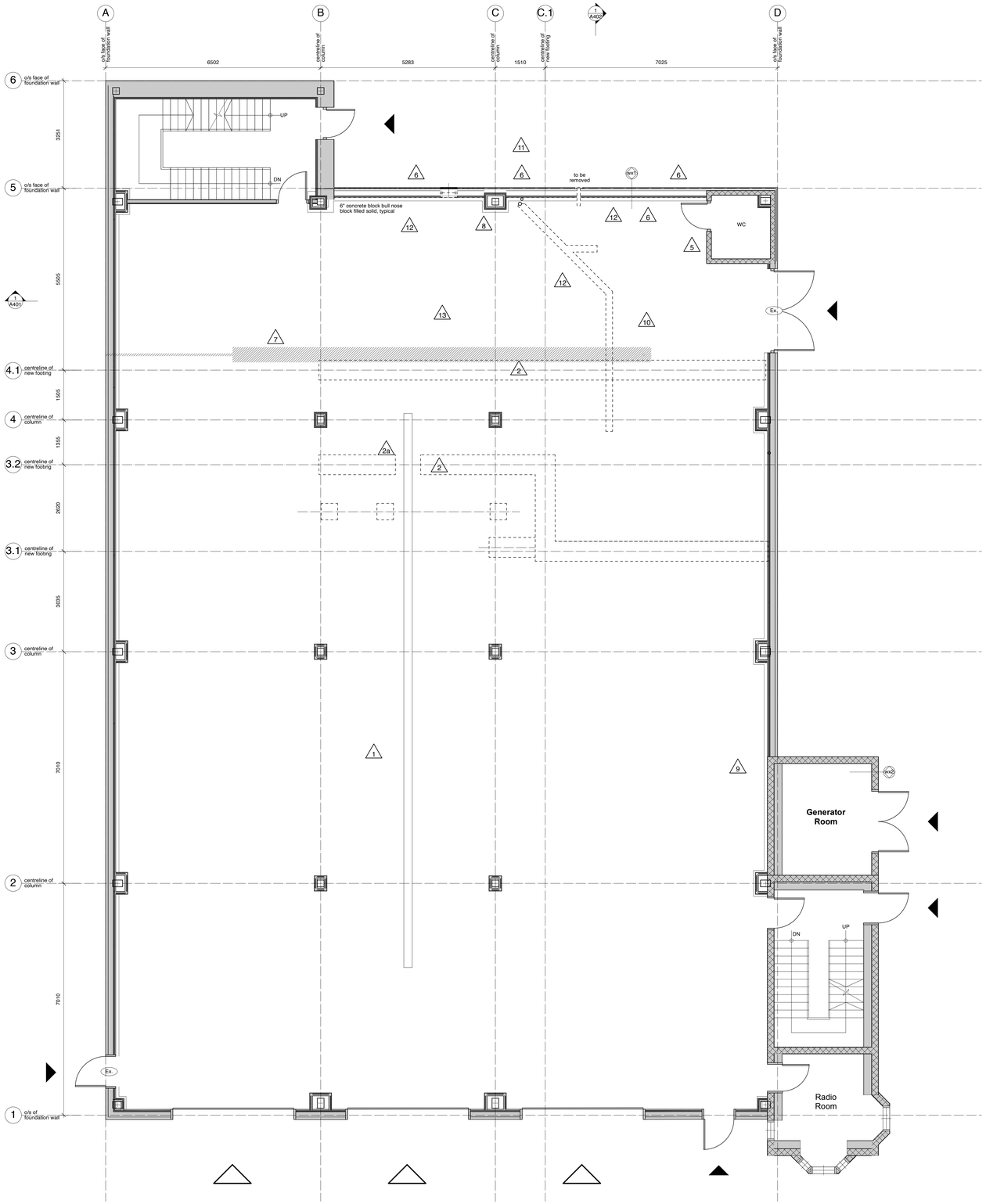
OBC Matrix, Information and Assembly Types

Scale (for 36x48" printing)
n.t.s.

Dwg. No.
A002

John MacDonald Architect

Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
JohnMacDonaldArchitect.ca | (519) 579 1700



1 A201 Main Floor Removals Plan
1:50

Legend:

- 1 / A301 — Building Elevation, See A300 series Sheets
- 1 / A401 — Building Section, See A400 series Sheets
- 1 / A601 — Wall Section, See A600 series Sheets
- wf — Foundation Wall Type, Wall Type, See A000 series Sheets
- fr — Floor Type, Roof Type, See A000 series Sheets
- pt — Partition Type, See A000 series Sheets
- cf — Ceiling Type, See A000 series Sheets
- 07 — Room Numbers, See Room Finish Schedule(s)
- 10 — Opening Numbers, See Opening Schedule(s)
- Wxx — Window Type, see A300 Sheets for Window Schedule(s)
- Mxx — Millwork Type, See A710 series Sheets
- Denotes Fire Separation
- F.S. — Denotes Fire Separation
- F.R.R. — Denotes Fire Resistance Rating
- indicates Person door/entry
- indicates Vehicle entry/exit
- j.c. — job check indicates dimension which must be confirmed onsite

General Notes to Floor Plans:

Equipment shown is for space planning purposes only, and for layout of electrical power and devices. All equipment is provided by Owner unless specifically noted otherwise. Notwithstanding, Contractor shall provide blocking in assemblies as necessary to suit wall-mounted equipment, and any other surface mounted equipment supplied by the Owner for installation by this Contract.

Provide all cutting and patching required for the mechanical and electrical work of this contract. Co-ordinate requirements and costs with trade contractors. All costs for this work are included in the Contract.

Dimensions are clear dimensions to face of finished surface, unless noted otherwise.

For layout of plumbing fixtures and washroom accessories in Universal Toilet Rooms and Accessible washroom areas, and abbreviations for washroom accessories throughout, see Sheet A012.

DN	denotes Down
FA	denotes From Above
FB	denotes From Below
FD	denotes Floor Drain
PB	denotes Barrier-free auto-door operator Push Button control, see also Electrical docs.
PTL	denotes Push to Lock
TA	denotes To Above
TB	denotes To Below
UP	denotes UP

General Notes to Removals:

Remove exhaust fan, see HVAC drawing M201, for new location. All removals including sawcutting of concrete must be accomplished only, to minimize dust generation. Perform such removals as a single operation and protect the existing conditions and all Owner equipment. Owner will make arrangements for removal of certain equipment and apparatus during the operation. Co-ordinate schedule of removals with the Owner to ensure contamination is eliminated.

General Notes to Fire Alarm System:

Retain all fire alarm system unless noted otherwise.

Notes to Main Plan Ground Floor:

1. Modify the Ex. Trench Drain, make 12,000mm long. Cordinate with Mech.
2. Cut and remove portions of existing concrete slab-on-grade as required to suit new footing (F1). Provide all removals of granular material as required, reinstall and compact prior to new slab installation. See also Assembly Types, foundation plan and Structural Dwgs. Slab removals shown approximate, subject to Job Check. All cutting must be with wet methods under special scheduling with Owner and to minimize dust.
2a. To this area ensure that concrete cutting does not interfere with existing floor trench and retains concrete for 600 mm each side. See Structural Documents.
3. Remove exhaust fan, see HVAC drawing M201, for new location.
4. Reserved.
5. Job check height of WC, if higher 2440mm (underside of J1 Joist) remove the ceiling and as much block rows as required to put the new Mezzanine Floor finish at 2700mm, and take the required action.
6. Perform all removals as required to facilitate installation of new loadbearing wood studwork to top of existing foundation wall, including removal of steel siding girts and all mechanical and electrical. Interior metal siding to be salvaged for re-use in the Work. Cut cladding at Mezzanine Floor Height.
7. Existing Radiant Heater to be removed, and replaced with the new RH-1 Radiant Heater. Take the required actions. Provide all cutting and patching required to facilitate any new holing to exterior wall that may be required for the new unit. Selectively demolish gas piping and electrical as required to relocate.
8. Ensure that existing fire protection to structure is maintained.
9. Provide electrical removals to this area as required for alterations to panels, equipment and devices. All electrical shall remain operational unless with specific and limited permission of Owner.
10. Provide all removals to existing slab to facilitate new u/slab plumbing. Ensure existing pipe routing is determined and all piping laid out before commencing any cutting operations. All cutting must be wet methods under special scheduling with Owner and to minimize dust.
11. Provide all removals to existing wall to facilitate new mechanical HVAC openings for F-1 and HRV-1. See Mechanical Drawings.
12. Provide all removals of existing equipment and fixtures to this area, to facilitate the Work and to relocate equipment and fixtures as required, including housekeeping pads.
13. Remove all existing lighting to the ceiling of new training Area, for replacement with new lighting. Circuits shall be separated from other existing circuits and control, and shall be fed from new sipparel.

No.	Issued for Purpose	Date	Initial
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3	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

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For Stair Details see A700 series Sheets
For Section Details see A730 series Sheets
For Interior Elevations see A800 series Sheets
For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

Project North

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Main Floor
Removals Plan

Scale (for 36x48" printing)
1:50

Dwg. No.
A201

John MacDonald Architect
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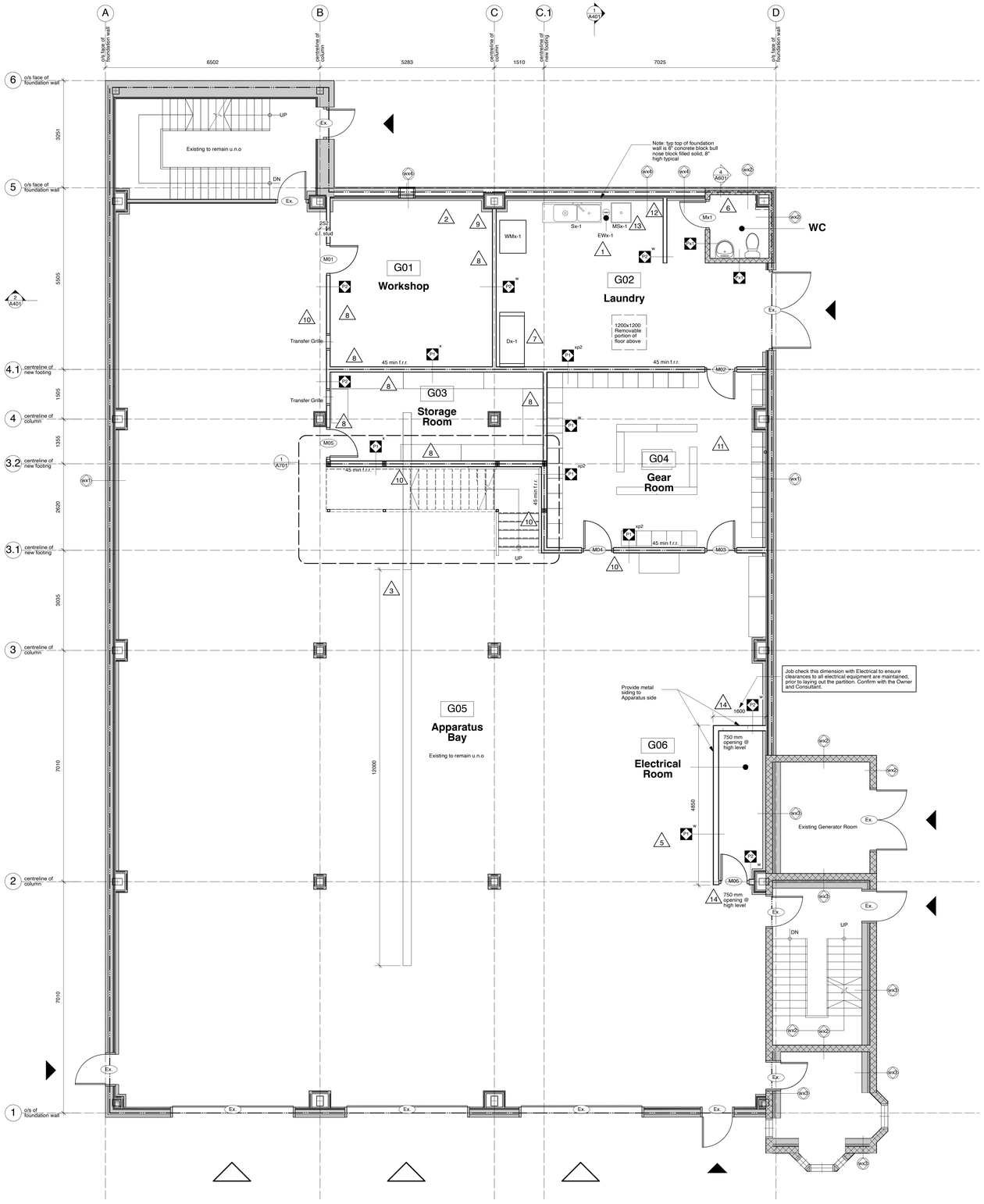

1 A212 Main Floor Plan
1:50

Legend:

- 1 / A301 — Building Elevation, See A300 series Sheets
- 1 / A401 — Building Section, See A400 series Sheets
- 1 / A601 — Wall Section, See A600 series Sheets
- xWF — Foundation Wall Type, Wall Type, See A000 series Sheets
- 1F — Floor Type, Roof Type, See A000 series Sheets
- 1PF — Partition Type, See A000 series Sheets
- CF — Ceiling Type, See A000 series Sheets
- 07 — Room Numbers, See Room Finish Schedule(s)
- 10 — Opening Numbers, See Opening Schedule(s)
- Wxx — Window Type, see A300 Sheets for Window Schedule(s)
- Mxx — Millwork Type, See A710 series Sheets
- Denotes Fire Separation
- F.S. — Denotes Fire Separation
- F.R.R. — Denotes Fire Resistance Rating
- indicates Person door/entry
- indicates Vehicle entry/exit
- j.c. — job check indicates dimension which must be confirmed onsite

General Notes to Floor Plans:

Equipment shown is for space planning purposes only, and for layout of electrical power and devices. All equipment is provided by Owner unless specifically noted otherwise. Notwithstanding, Contractor shall provide blocking in assemblies as necessary to suit wall-mounted equipment, and any other surface mounted equipment supplied by the Owner for installation by this Contract.

Provide all cutting and patching required for the mechanical and electrical work of this contract. Co-ordinate requirements and costs with trade contractors. All costs for this work are included in the Contract.

Dimensions are clear dimensions to face of finished surface, unless noted otherwise.

For layout of plumbing fixtures and washroom accessories in Universal Toilet Rooms and Accessible washroom areas, and abbreviations for washroom accessories throughout, see Sheet A012.

DN	denotes Down
FA	denotes From Above
FB	denotes From Below
FD	denotes Floor Drain
PB Button	denotes Barrier-free auto-door operator Push control, see also Electrical docs.
PTL	denotes Push to Lock
TA	denotes To Above
TB	denotes To Below
UP	denotes UP

Notes to Main Plan Ground Floor:

1. Mop Sink, Sink, and Eye Wash Existing to remove and re-install including piping and connections where required to facilitate the work to the rear wall stud bearing wall.
2. Infill opening of the removed exhaust fan with same assembly of same wall assembly, make good. Relocate the exhaust fan.
3. Existing trench drain to remain. Co-ordinate with structural.
4. Relocate existing compressed air device to the next column in the Apparatus Bay, c/w all electrical and changes to CA piping.
5. Roof of Electrical Room to be sloped.
6. Check the north WC block wall if filled solid with mortar and reinforced. Fill and reinforce if not already. Take the required action for this wall to receive new stud wall.
7. Relocate existing dryer to this location, complete with all connections.
8. Provide OSB to this side of the wall, on GWB wallboard.
9. Clad this column with 3 layers of 5/8" drywall on 1 1/2" furring channels, to have 2 hours FFR.
10. Provide Cladding on this wall on the Apparatus Bay side to match existing, to top of Mezzanine wall.
11. Gear Racks and benches shall be supplied by the owner for installation by this trade contractor.
12. Finish this wall with the salvaged metal panels of the same wall.
13. See Mechanical for F-1 furnace at u/s ceiling. Provide all openings to mezzanine above and to exterior. At openings through mezzanine framing, and for all joist spaces which contain ductwork, provide one layer of 5/8" type X wallboard to completely line the joist space and blocking such that the new structure retains its 45 minute fire resistance rating.
14. Provide 750 by 750 opening at 2700 above finished floor to this location, for ventilation of the Electrical Room.

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P/T	for Permit/Tender	Jul 08 '24	JHM

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For Schedules see A950 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

Project North

No.	Revision	Date	Initial

Project

Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title

Main Floor Plan

Scale (for 36x48" printing)
1:50

Dwg. No.
A212

John MacDonald Architect

Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON, N2G 1B1
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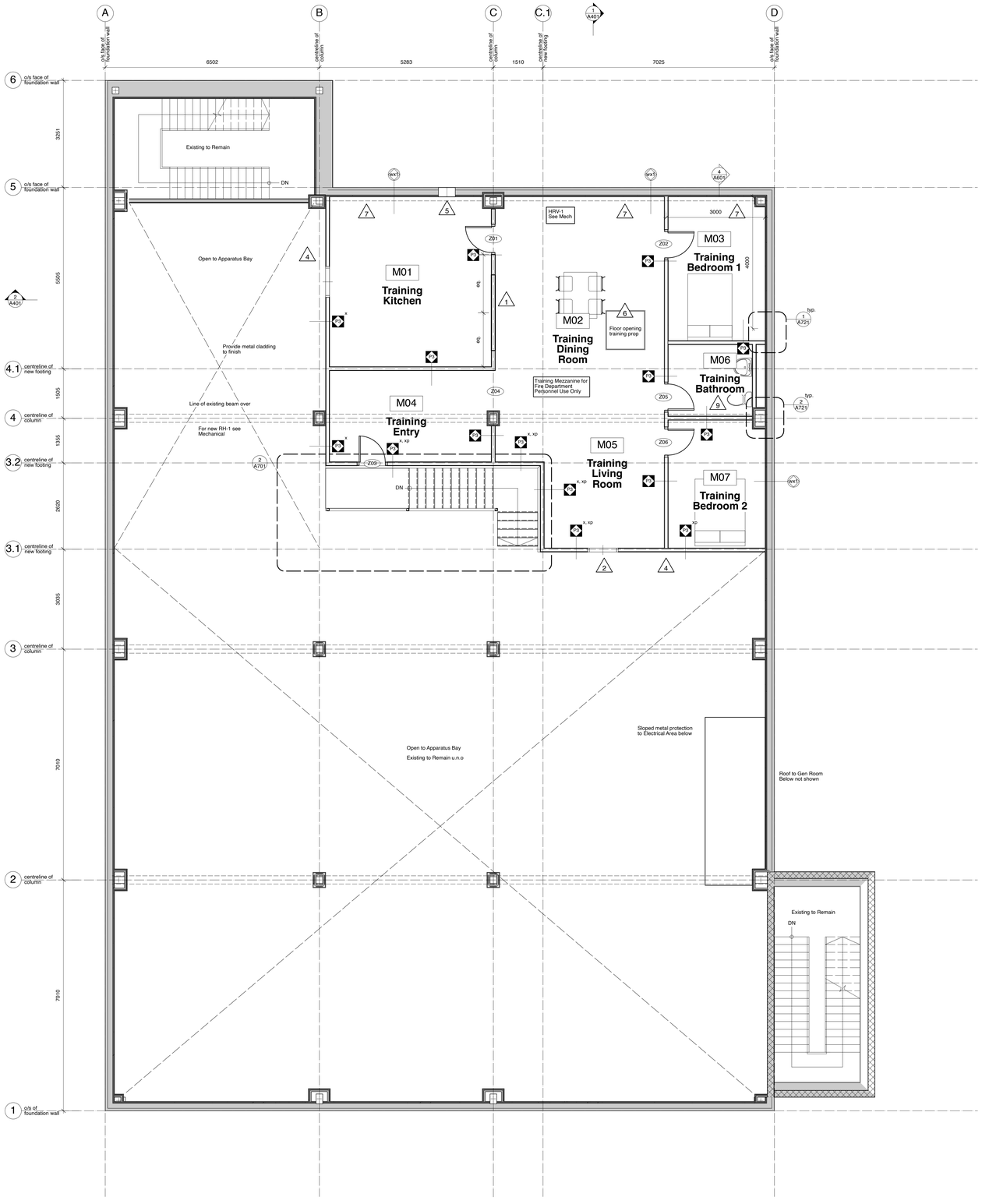

1 A213 Mezzanine Floor Plan
1:50

Legend:

- 1 / A301 — Building Elevation — See A300 series Sheets
- 1 / A401 — Building Section — See A400 series Sheets
- 1 / A601 — Wall Section — See A600 series Sheets
- wf — Foundation Wall Type, Wall Type — See A000 series Sheets
- rf — Floor Type, Roof Type — See A000 series Sheets
- pf — Partition Type — See A000 series Sheets
- cf — Ceiling Type — See A000 series Sheets
- 07 — Room Numbers — See Room Finish Schedule(s)
- 10 — Opening Numbers — See Opening Schedule(s)
- Wxx — Window Type, see A300 Sheets for Window Schedule(s)
- Mxx — Millwork Type — See A710 series Sheets
- Denotes Fire Separation
- F.S. — Denotes Fire Separation
- F.R.R. — Denotes Fire Resistance Rating
- indicates Person door/entry
- indicates Vehicle entry/exit
- j.c. — job check indicates dimension which must be confirmed onsite

General Notes to Floor Plans:

Equipment shown is for space planning purposes only, and for layout of electrical power and devices. All equipment is provided by Owner unless specifically noted otherwise. Notwithstanding, Contractor shall provide blocking in assemblies as necessary to suit wall-mounted equipment, and any other surface mounted equipment supplied by the Owner for installation by this Contract.

Provide all cutting and patching required for the mechanical and electrical work of this contract. Co-ordinate requirements and costs with trade contractors. All costs for this work are included in the Contract.

Dimensions are clear dimensions to face of finished surface, unless noted otherwise.

For layout of plumbing fixtures and washroom accessories in Universal Toilet Rooms and Accessible washroom areas, and abbreviations for washroom accessories throughout, see Sheet A012.

DN	denotes Down
FA	denotes From Above
FB	denotes From Below
FD	denotes Floor Drain
PB	denotes Barrier-free auto-door operator Push Button control, see also Electrical docs.
PTL	denotes Push to Lock
TA	denotes To Above
TB	denotes To Below
UP	denotes UP

Notes to Mezzanine Floor Plan:

1. Provide framing and all systems to this 8' wide area to form training "breeching wall" to Owner's requirements.
   Ensure that all electrical systems are not routed through this area. Owner requires simulated electrical wiring shall be clearly labelled.
2. Window opening with no window in. See Sections for sill height at min. 1050 aff.
3. Existing compressed air pipe to be relocated and extended to serve new compressor location and to provide CA to workshop to Owner's selected location.
4. Clad new wall from the Apparatus Bay side to the top of Mezzanine walls.
5. Relocate existing Exhaust fan to Workshop below.
6. 1200 x 1200 removable portion of floor. See Structural.
7. Ensure that selective demolition of interior finish to this wall is co-otdinated with the new mezzanine floor level. Cut metal cladding to suit and remove and re-install as required to facilitate the new wall below.
8. Provide all openings to this wall as required for HRV-1 penetrations to exterior. Make good exterior finish and provide prefinished steel trim to openings in co-ordination with Mechanical Trade and Louvers.
9. Note: all plumbing fixtures and furnishings to the Training Mezzanine are provided by the Owner. Plumbing fixtures are mock fixtures only, not operational.

General Note to all Mezzanine Partitions:

All Partitions are 1800 above mezzanine floor level typical except lateral framing posts which shall extend to underside of concrete over. Provide connection to slab for lateral restraint but to allow vertical movement of slab without contact to partition.

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1	Issued for Comment	Sept 19 '22	JHM
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For Electrical see E series Sheets

Project North

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Mezzanine Floor Plan

Scale (for 36x48" printing)
1:50

Dwg. No.
A213

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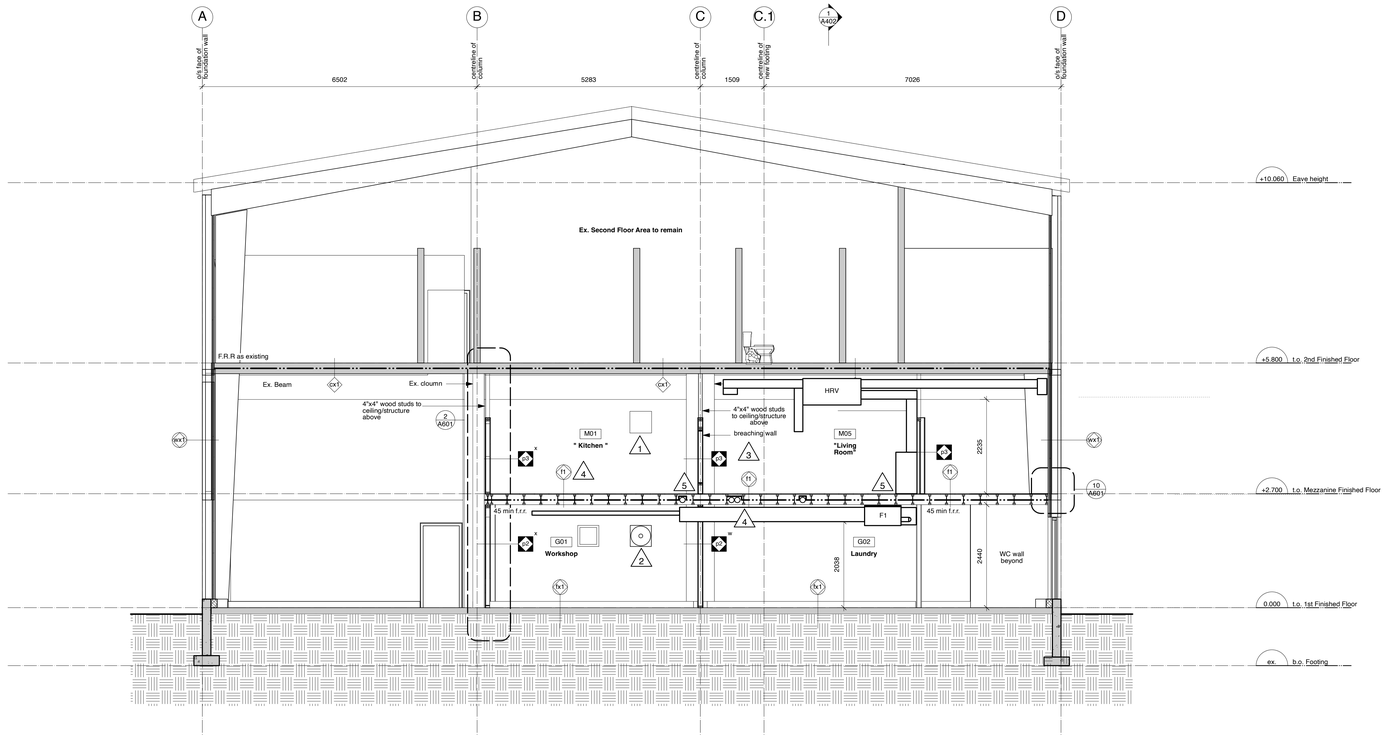
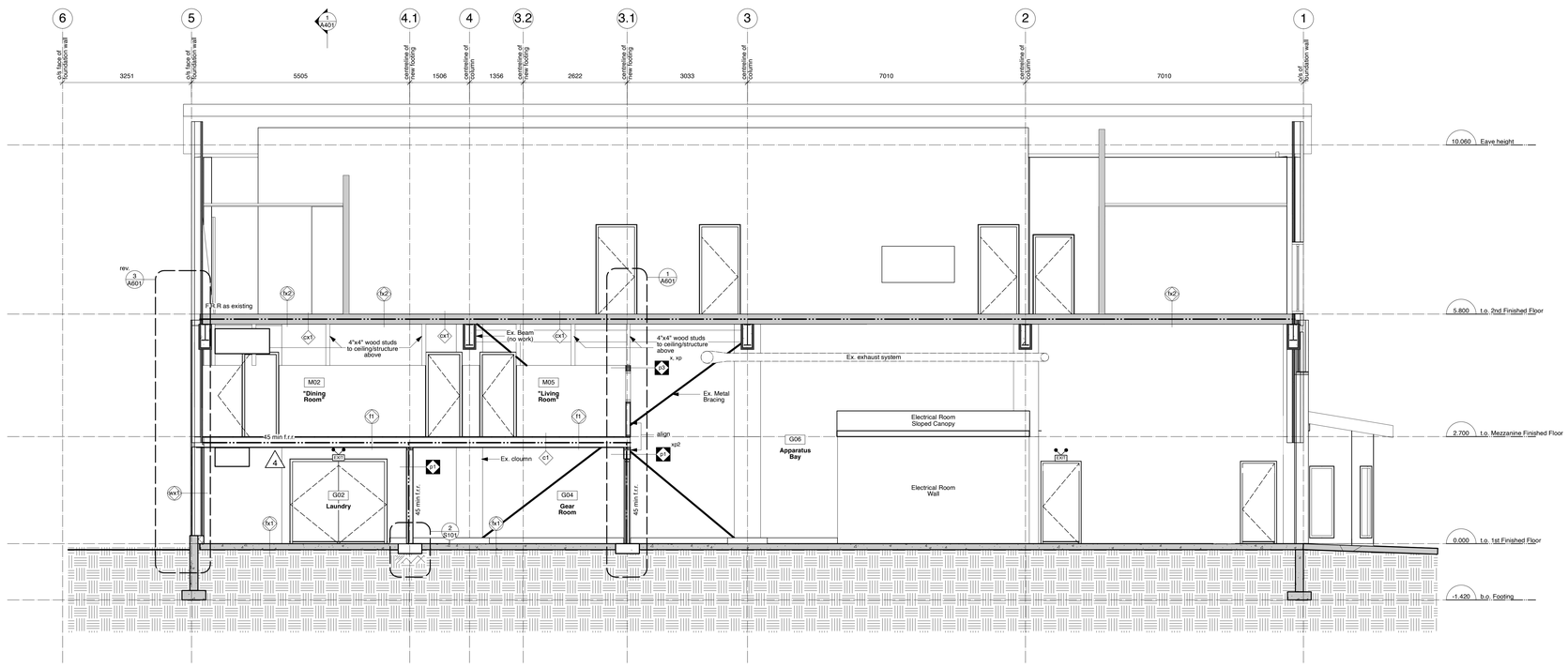


2 A401 Cross Section
1 : 50



1 A401 Longitudinal Section
1 : 50

Legend:

- 1 / A301 — Building Elevation — See A300 series Sheets
- 1 / A401 — Building Section — See A400 series Sheets
- 1 / A601 — Wall Section — See A600 series Sheets
- wf — Foundation Wall Type, Wall Type — See A000 series Sheets
- lf — Floor Type, Roof Type — See A000 series Sheets
- pf — Partition Type — See A000 series Sheets
- cf — Ceiling Type — See A000 series Sheets
- 07 — Room Numbers — See Room Finish Schedule(s)
- 10 — Opening Numbers — See Opening Schedule(s)
- Wxx — Window Type, see A300 Sheets for Window Schedule(s)
- Mxx — Millwork Type — See A710 series Sheets
- Denotes Fire Separation
- F.S. — Denotes Fire Separation
- F.R.R. — Denotes Fire Resistance Rating
- j.c. — job check indicates dimension which must be confirmed onsite

General Notes to Building Sections:

Slopes to slabs-on-grade shown diagrammatic. Refer to Floor Plans & Division 03.

Slopes to roof areas shown diagrammatic.

Mechanical equipment & other building services shown diagrammatic. See Mechanical & Electrical documents. Co-ordinate for interferences & suit to building systems hierarchy of installation.

For grading & patterns of drainage to exterior, see Civil documents.

Notes to Building Sections:

1. Relocate existing Exhaust fan to lower place to be in the Workshop. Close opening.
2. Exhaust fan new location.
3. Breaching wall what to include inside.
4. At all duct locations within joist spaces provide complete 16 mm Type X GWB to side of joists and underside of floor sheathing to form 45 min FRR to framing of mezzanine. Typical all locations. See notes to Ground Floor RCP
5. Provide solid blocking at 1200 o.c. max for support of all non-loadbearing partitions parallel to joists.

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For Electrical see E series Sheets

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Building Sections

Scale (for 36x48" printing)
1:50

Dwg. No.
A401

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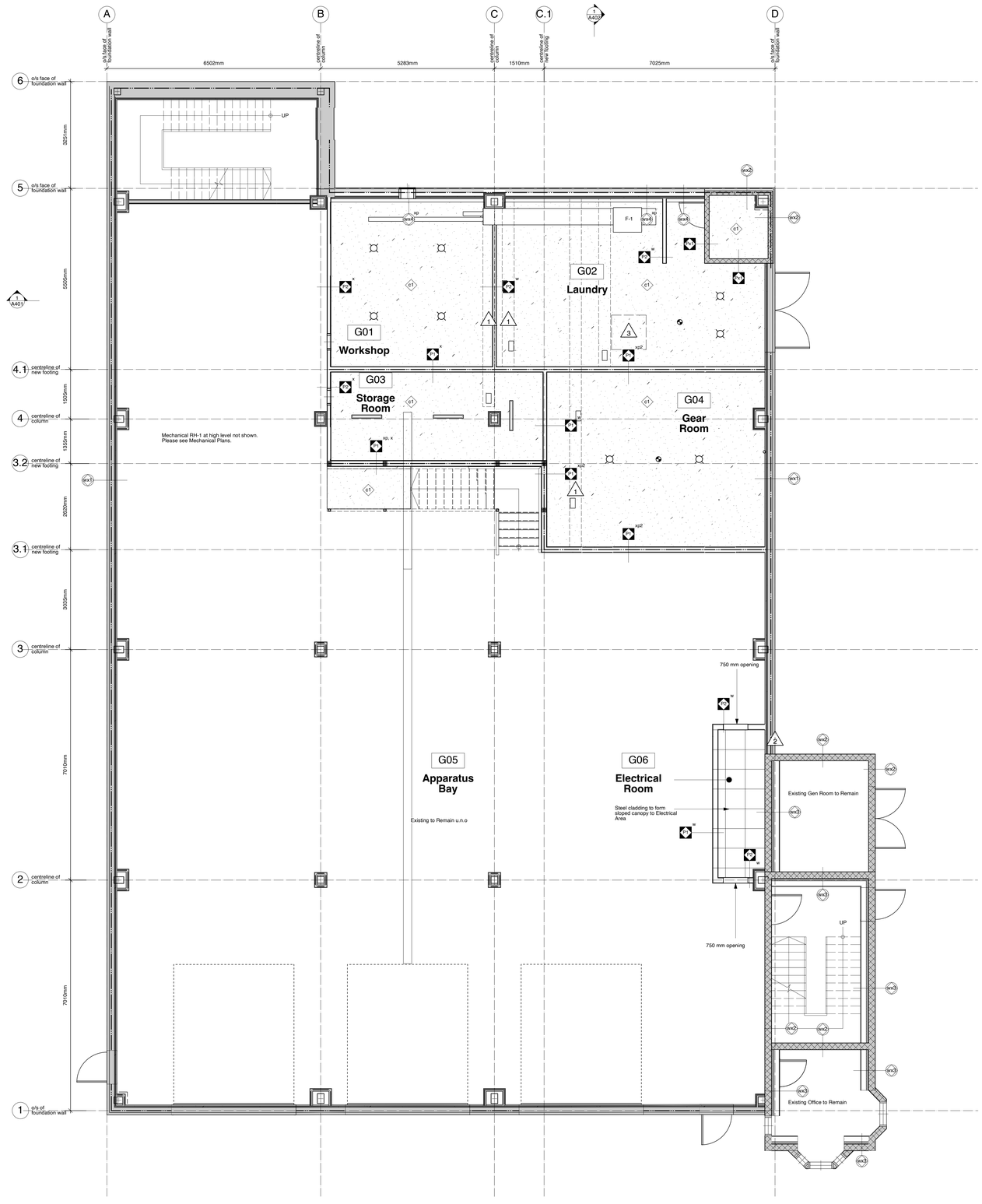

1 A501 Reflected Ceiling Plan
1 : 50

RCP Legend:

- Mechanical supply diffuser, see also mechanical documents
- Mechanical return grille, see also mechanical documents
- Mechanical exhaust fan, see also mechanical documents
- Suspended light fixture
- Pot light fixture
- Wall sconce light fixture
- Light fixture
- Light fixture (Hidden)
- Light fixture (Night)
- Track light fixture w/ heads
- Emergency light, battery unit w/ heads (2)
- Emergency light, remote head (2)
- Emergency light, remote head (1)
- Exit sign
- Occupancy Sensor
- Heat detector
- Smoke detector
- Sprinkler head, pendant type (SP)
- Sprinkler head, wall type (SP)
- Fire alarm horn
- Fire alarm bell
- Wallboard ceilings (to 092500)
- Suspended lay-in-panel (LAP) ceilings

General Notes to RCPs:

Where discrepancy exists between the RCPs and the Mechanical and Electrical documents, the most stringent and/or onerous condition shall apply.

Layout of all new piping runs shall be to the acceptance of the Consultant.

For required extent of cleaning, see Section 024119.

Mount exit signs and emergency lighting to an elevation that will ensure they are visible. Do not install exit signs so that they are obstructed by hanging light fixtures or ductwork. Typical all exit sign locations.

All piping, conduit, ductwork shall be within or tight to underside of joists.

a.f.f.	denotes Above Finished Floor
FA	denotes From Above
FB	denotes From Below
TA	denotes To Above
RWL	denotes Rain Water Leader

Notes to Reflected Ceiling Plan:

1. To all joist spaces containing mechanical ducts provide 1 layer of 16 mm Type X GWB to side of joist and underside of ply deck to form fire resistance protection to the mezzanine framing within the joist space. Provide blocking to close off the joist space at end of duct run with similar GWB protection.
2. Provide 2x6 ledger fastened to existing wall with expansion fasteners (2 per joist location).
3. Provide 1200 by 1200 removable panel to floor assembly. Line opening with 16mm Type X GWB to protect joist and floor assembly for 45 min FRR. Assembly of removable panel shall match assembly of adjacent floor. Provide 50x100rh6 mm steel angle surround to opening, bolted with 10 mm ø bolts at 400 o.c. through adjacent framing to recieve panel. See Structural for detail.

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P/T	for Permit/Tender	Jul 08 '24	JHM

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For Electrical see E series Sheets

Project North

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, On, N0B 2E0

Approved
Checked
Drawn SH

Drawing Title
Reflected Ceiling Plan

Scale (for 36x48" printing) 1:50
Dwg. No. A501

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No.	Issued for Purpose	Date	Initial
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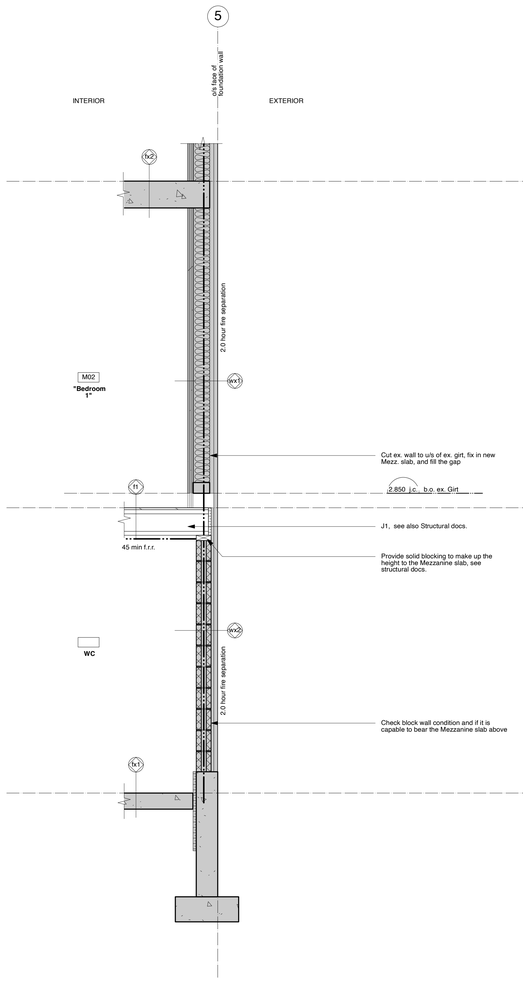
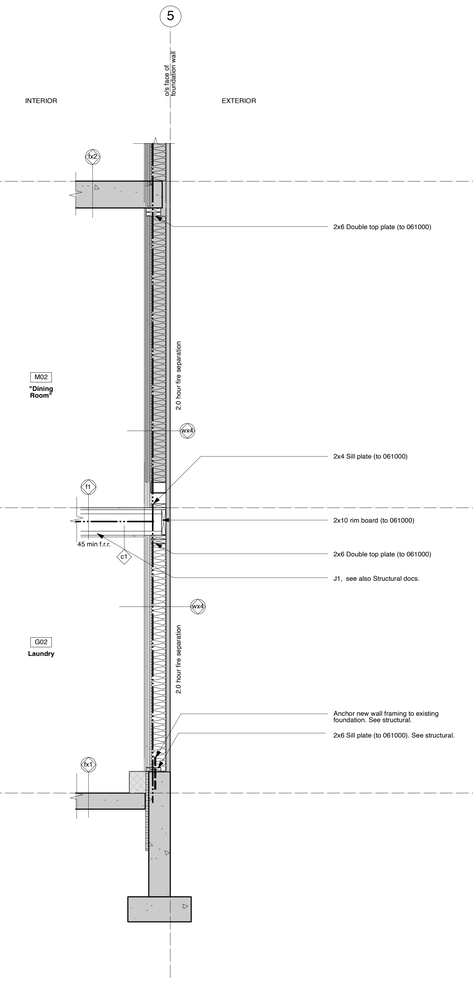
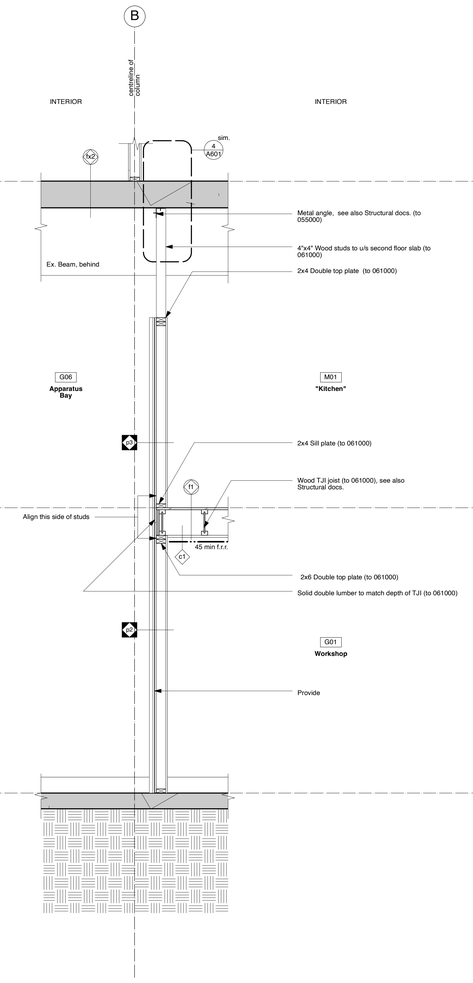


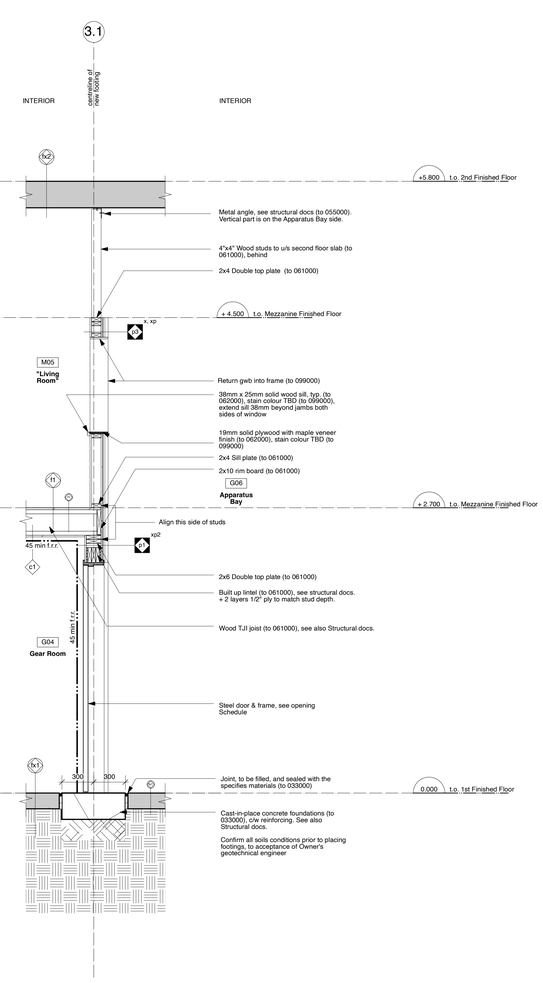
4 A601 Wall Section
1 : 20



3 A601 Wall Section
1 : 20



2 A601 Wall Section
1 : 20



1 A601 Wall Section
1 : 20

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Wall Sections

Scale (for 36x48" printing)
1:20

Dwg. No.
A601

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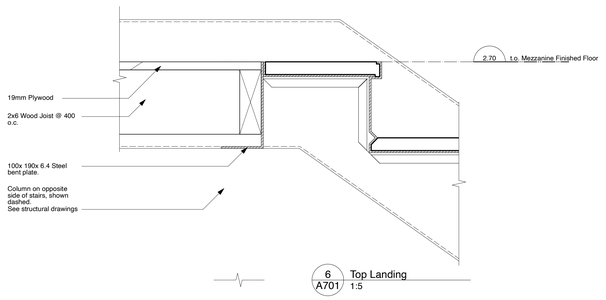
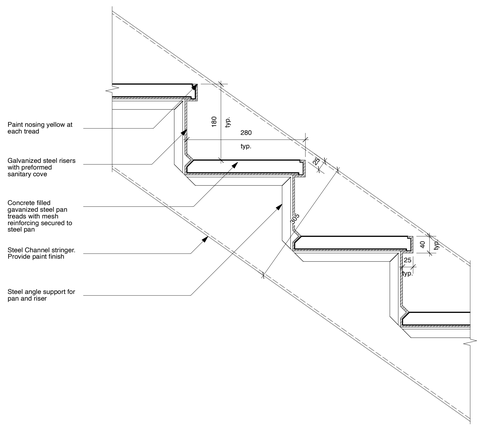
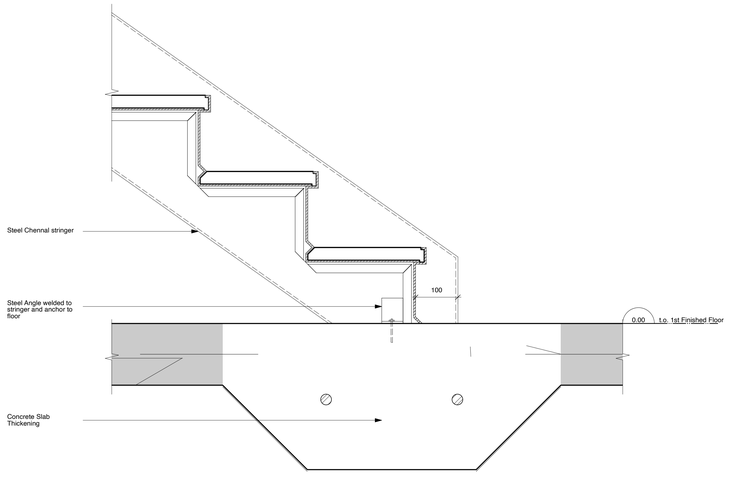


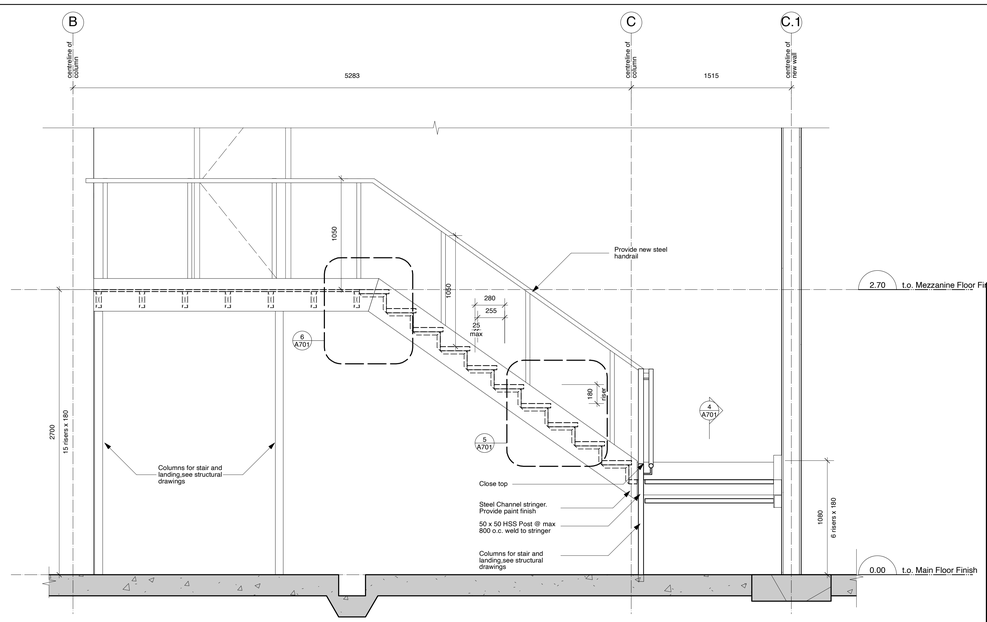
6 A701 Top Landing 1:5



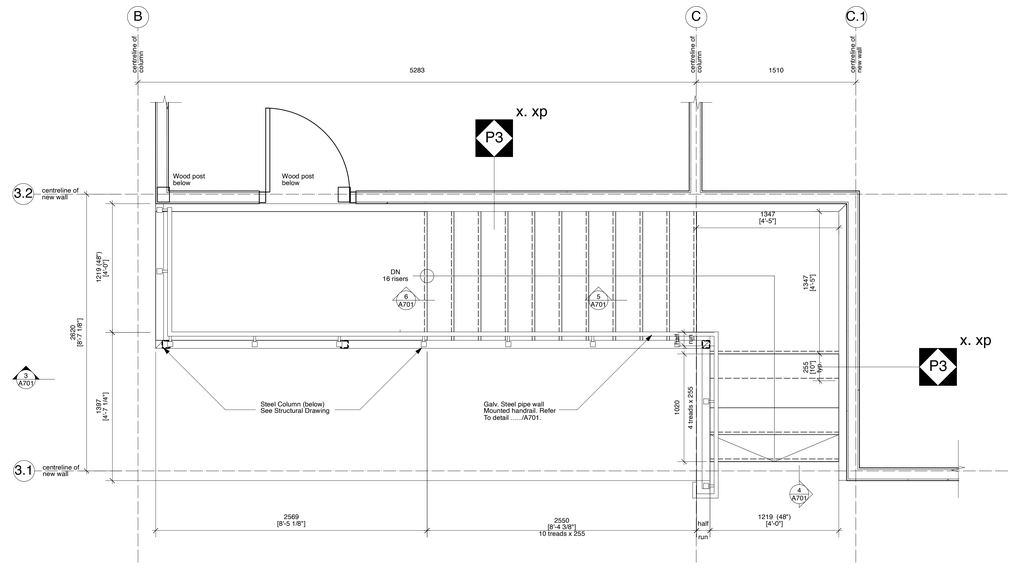
5 A701 Steel Pan Tread Detail 1:5



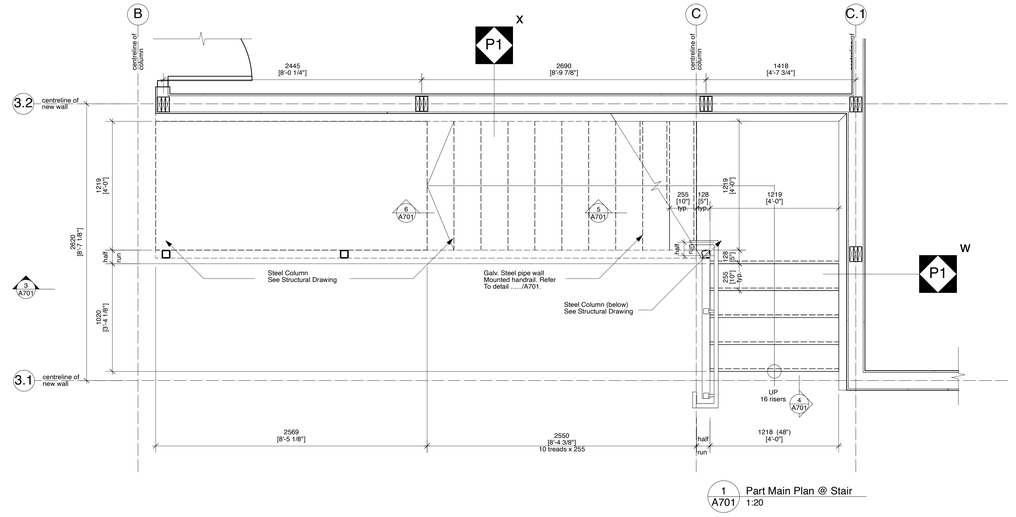
4 A701 Bottom Landing 1:5



3 A701 Part Section @ Stair 1:20



2 A701 Part Mezzanine Plan @ Stair 1:20



1 A701 Part Main Plan @ Stair 1:20

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

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For Mechanical see M series Sheets
For Electrical see E series Sheets

NOT FOR CONSTRUCTION

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Stair Details

Scale (for 36x48" printing)
as noted

Dwg. No.
A701

John MacDonald Architect
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No.	Issued for Purpose	Date	Initial
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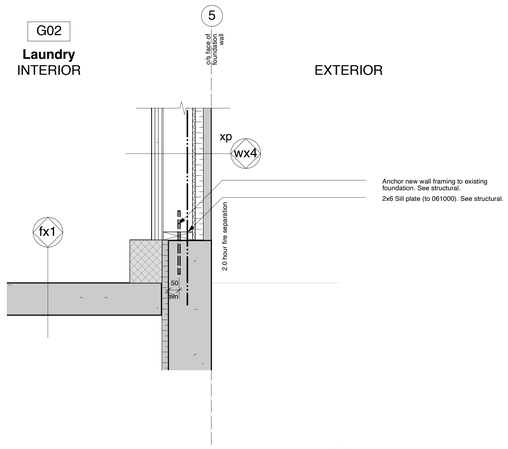
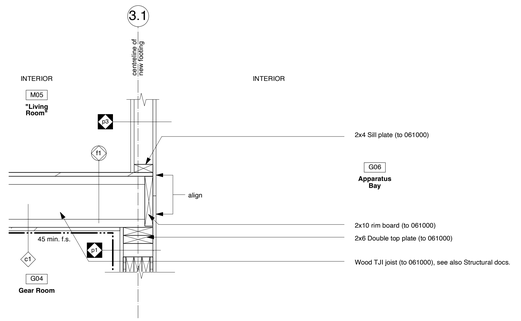
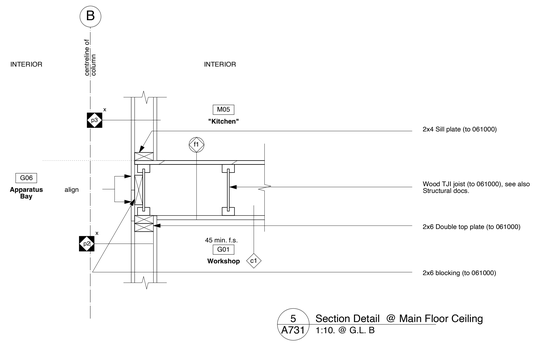


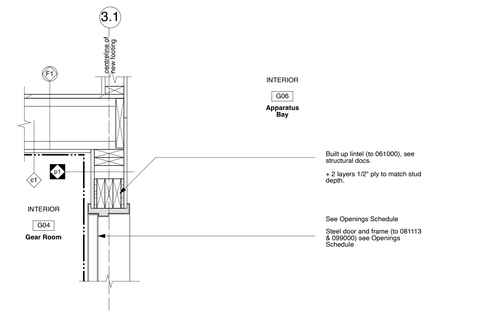
6 A731 Section Detail @ t.o. Foundation Wall
1:10 @ G.L. 5 typ.



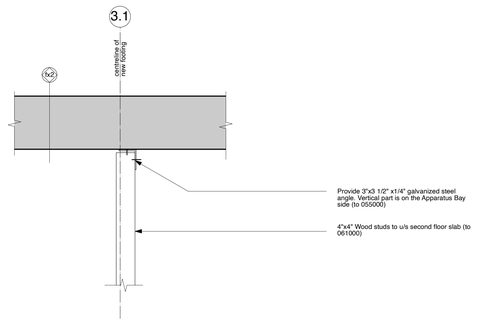
3 A731 Section Detail @ Main Floor Ceiling
1:10.@ G.L. 3.1



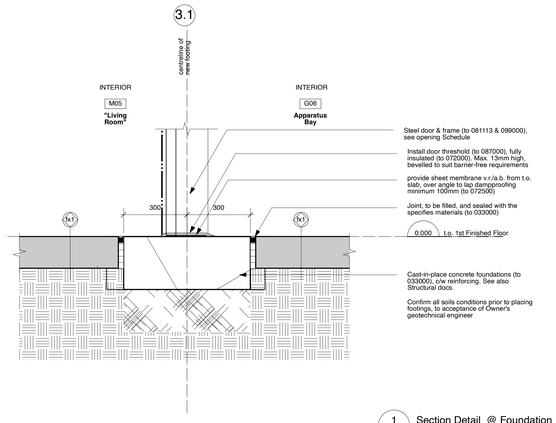
5 A731 Section Detail @ Main Floor Ceiling
1:10. @ G.L. B



2 A731 Section Detail @ Door Head
1:10 @ G.L. 3.1 typ.



4 A731 Section Detail @ Mezzanine Ceiling
1:10 @ G.L. 3.1



1 A731 Section Detail @ Foundation
1:10. @ G.L. 3.1

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

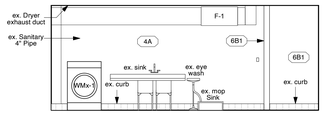
Drawing Title
Section Details

Scale (for 36x48" printing)
1:10

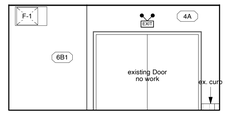
Dwg. No.
A731

John MacDonald Architect

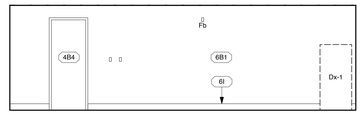
Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
JohnMacDonaldArchitect.ca | (519) 579 1700



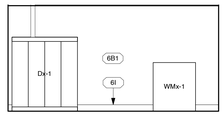
North Elevation



East Elevation

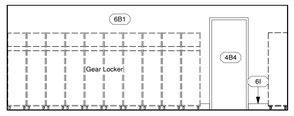


South Elevation

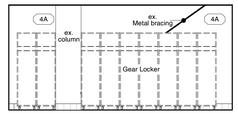


West Elevation

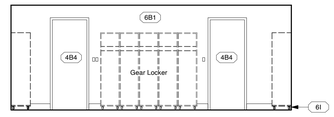
1 A801 Laundry
1 : 50



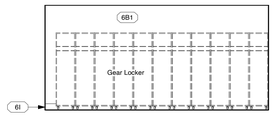
North Elevation



East Elevation

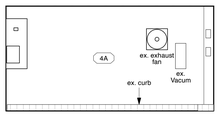


South Elevation

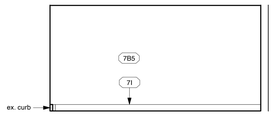


West Elevation

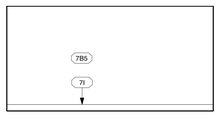
2 A801 Gear Room
1 : 50



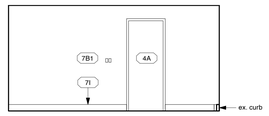
North Elevation



East Elevation

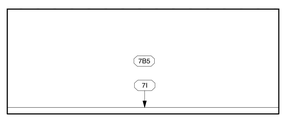


South Elevation

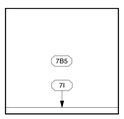


West Elevation

3 A801 Workshop
1 : 50



North Elevation



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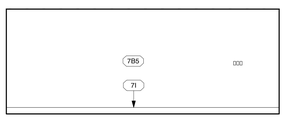
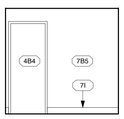
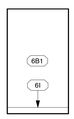


South Elevation

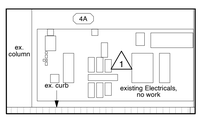


West Elevation

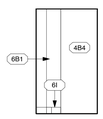
4 A801 Storage Room
1 : 50



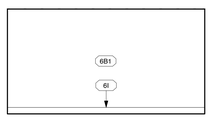
North Elevation



East Elevation



South Elevation

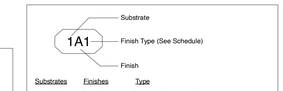


West Elevation

5 A801 Electrical Room
1 : 50

Legend of Related Finish Abbreviations:

A.F.F.	-	above finished floor	GWB	-	gypsum wall board	PLY	- plywood
ALUM	-	aluminium	HWD	-	hardwood	PRE	- prefinished
CBLK	-	concrete block	LAM	-	laminate	PT	- paint
CLG	-	ceiling	LAP	-	lay-in acoustic tile	PTL	- push to lock
CMU	-	concrete masonry unit	LINO	-	linoleum	QT	- quarry tile
CONC	-	concrete	L&P	-	lath and plaster	R	- resilient flooring
CPT	-	carpet	MLWK	-	millwork	RBC	- rubber base cove
CPTT	-	carpet tile	MRT	-	marble tile	RSV	- resilient sheet vinyl
CT	-	ceramic tile	MT	-	mosaic tile	SEAL	- sealed concrete
EXP	-	exposed structure	N/A	-	not applicable	SV	- sheet vinyl
F or FL	-	floor	NIC	-	not in contract	TER	- terrazzo
FRR	-	fire resistance rating	PB	-	push button	U/F	- unfinished
FS	-	fire separation	PCC	-	precast concrete	VBC	- vinyl base cove
GL	-	glass	PLAM	-	plastic laminate	VCT	- vinyl composite tile
						VWC	- vinyl wall covering



Substrates	Finishes	Type
1. CONC	A. PRE	1. Paint Colour - PT1 - Walls
2. PCC	B. PT	2. Paint Colour - PT2 - Ceilings
3. CB/CMU	C. SEAL	3. Paint Colour - PT3 - Steel Railings & Stairs
4. STL	D. PCT	4. Paint Colour - PT4 - Steel Doors & Frames
5. ALUM.	E. U/F	5. Paint Colour - PT5 - Wood Carpentry
6. GWB	F. STN	
7. PLY/OSB	G. EQUIV.	Note: All colours to Consultants selection
8. WD	H. Wall Base	
9. HWD	I. RBC	
10. GL		
11. TG		
12. LAP		
13. SSC		

General Notes to Interior Elevations:

Light fixtures suspended from ceilings not shown, see elec. doc..

Door hardware not shown, see Openings Schedule and Sections 087000.

EL denotes Emergency Light, see elec. docs.

ER denotes Electrical Receptacle, see elec. docs.

ES denotes Electrical Switch, see elec. docs.

LF denotes Light Fixture

Notes to Main Floor Interior Elvations:

1 Electric panel and all swiches are existing and shown digramatic.

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Asemebly Types see Sheet A002
For Floor Plans see A200 series Sheets
For Building Sections see A400 series Sheets
For Wall Sections see A600 series Sheets
For Stair Details see A700 series Sheets
For Section Details see A730 series Sheets
For Interior Elevations see A800 series Sheets
For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

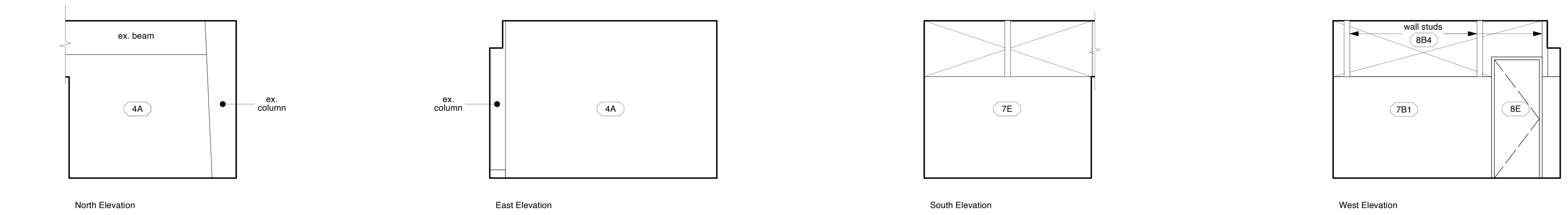
Approved
Checked JHM
Drawn SH

Drawing Title
Interior Elevations
Main Floor

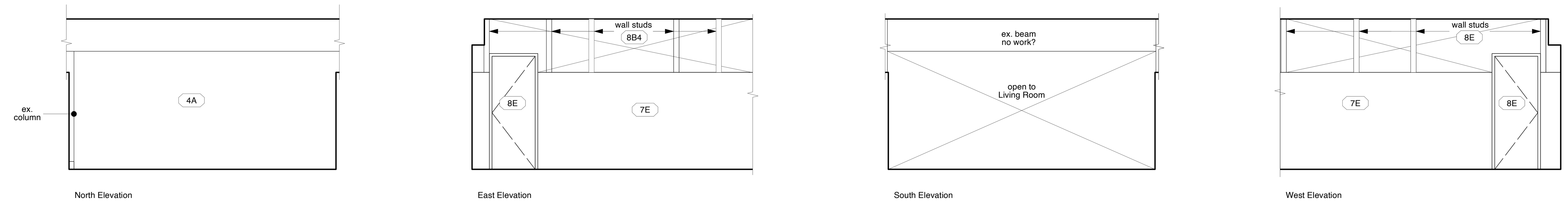
Scale (for 36x48" printing)
1:50

Dwg. No.
A801

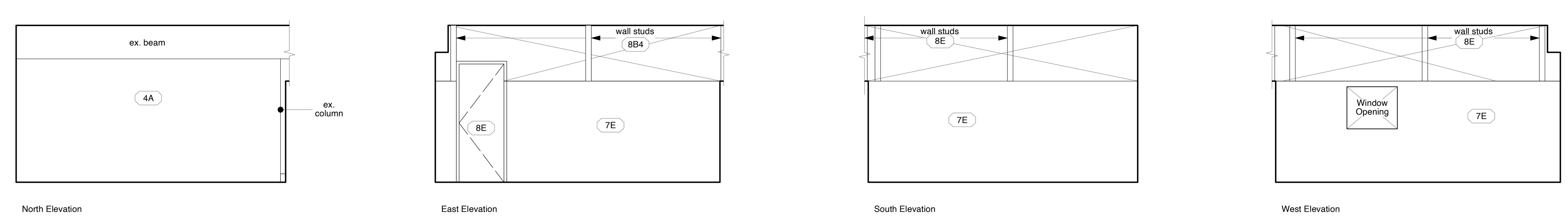
John MacDonald Architect
Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
JohnMacDonaldArchitect.ca | (519) 579 1700



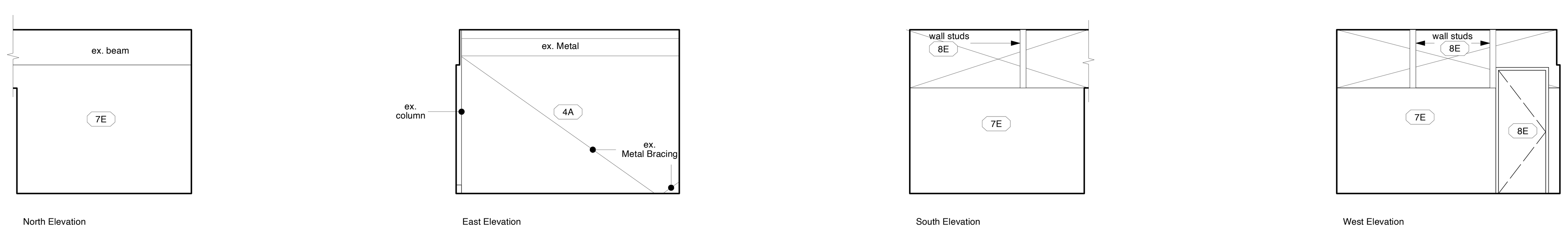
1 A802 Bedroom 1
1 : 50



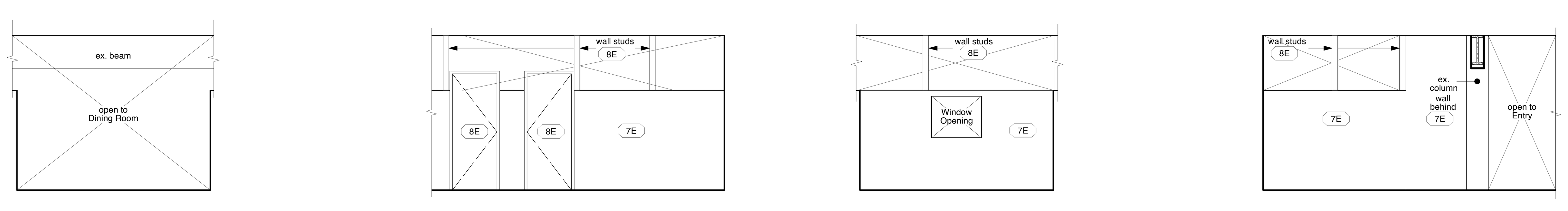
1 A802 Dining Room
1 : 50



1 A802 Kitchen
1 : 50



1 A802 Bedroom 2
1 : 50



1 A802 Living Room
1 : 50

1 A802 Entry
1 : 50

Legend of Related Finish Abbreviations:

A.F.F.	-	above finished floor	GWB	-	gypsum wall board	PLY	-	plywood
ALUM	-	aluminium	HWD	-	hardwood	PRE	-	prefinished
CB	-	concrete block	LAM	-	laminate	PT	-	paint
CLG	-	ceiling	LAP	-	lay-in acoustic tile	PTL	-	push to lock
CMU	-	concrete masonry unit	LINO	-	linoleum	QT	-	quarry tile
CONC	-	concrete	L&P	-	lath and plaster	R	-	resilient flooring
CPT	-	carpet	MLWK	-	millwork	RBC	-	rubber base cove
CPTT	-	carpet tile	MRT	-	marble tile	RSV	-	resilient sheet vinyl
CT	-	ceramic tile	MT	-	mosaic tile	SEAL	-	sealed concrete
EXP	-	exposed structure	N/A	-	not applicable	SV	-	sheet vinyl
F or FL	-	floor	NIC	-	not in contract	TER	-	terrazzo
FRR	-	fire resistance rating	PB	-	push button	U/F	-	unfinished
FS	-	fire separation	PCC	-	precast concrete	VBC	-	vinyl base cove
GL	-	glass	PLAM	-	plastic laminate	VCT	-	vinyl composite tile
						VWC	-	vinyl wall covering

1A1 — Substrate / Finish Type (See Schedule) / Finish

Substrates	Finishes	Type
1. CONC	A. PRE	1. Paint Colour - PT1 - Walls
2. PCC	B. PT	2. Paint Colour - PT2 - Ceilings
3. CB/CMU	C. SEAL	3. Paint Colour - PT3 - Steel Railings & Stairs
4. STL	D. PCT	4. Paint Colour - PT4 - Steel Doors & Frames
5. ALUM.	E. U/F	5. Paint Colour - PT5 - Wood Carpentry
6. GWB	F. STN	
7. PLY/OSB	G. EPOXY	Note: All colours to Consultants selection
8. WD	H. Wall Base	
9. HWD	I. RBC	
10. GL		
11. TG		
12. LAP		
13. SSC		

General Notes to Interior Elevations:

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Door hardware not shown, see Openings Schedule and Sections 087000.

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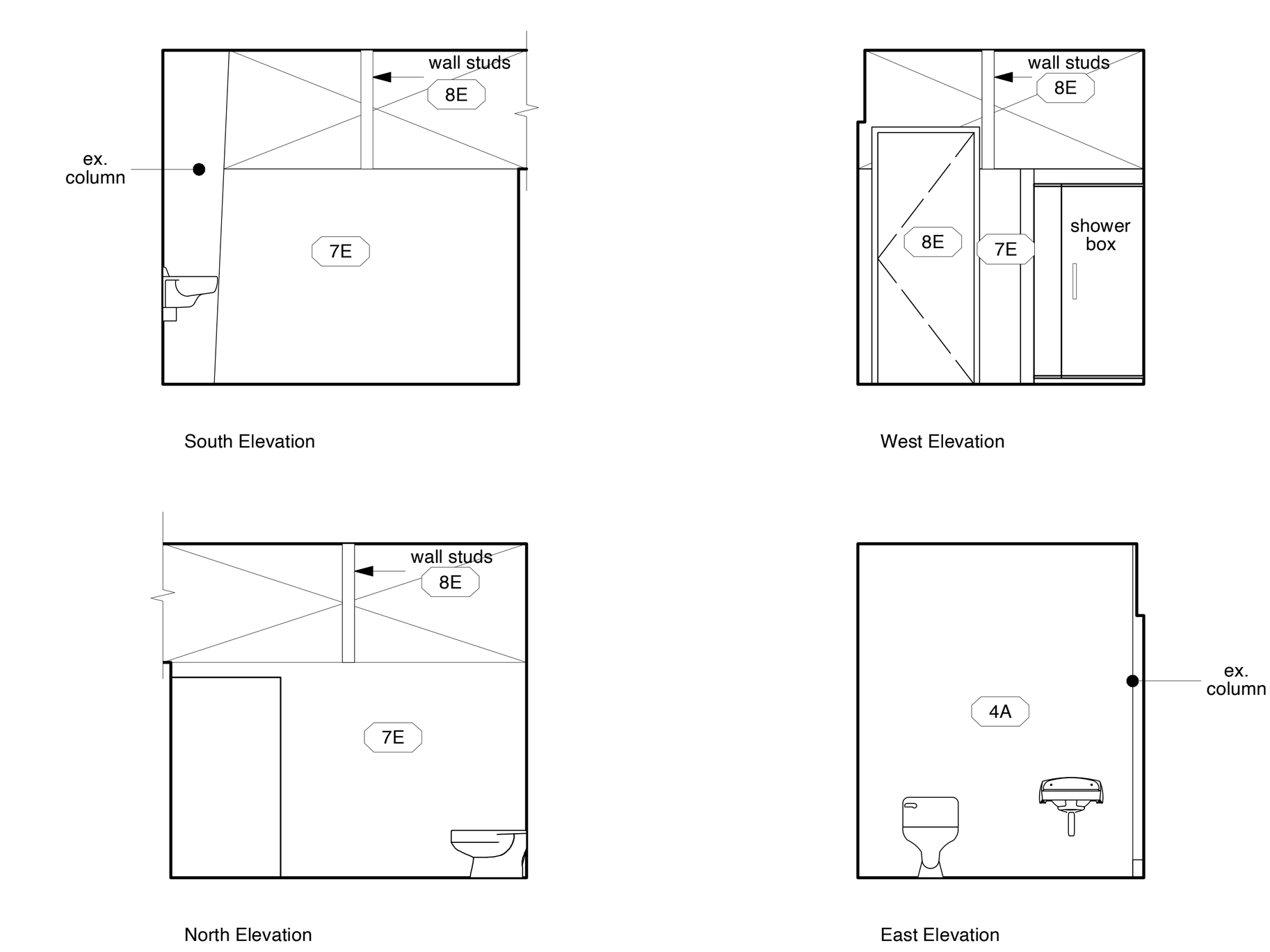

1 A802 Bathroom
1 : 50

No.	Issued for Purpose	Date	Initial
1	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmebly Types see Sheet A002
For Floor Plans see A200 series Sheets
For Building Sections see A400 series Sheets
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For Stair Details see A700 series Sheets
For Section Details see A730 series Sheets
For Interior Elevations see A800 series Sheets
For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

No.	Revision	Date	Initial

Project

Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title

Interior Elevations
Mezzanine Floor

Scale (for 36x48" printing)
1:50

Dwg. No.
A802

John MacDonald Architect

Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
JohnMacDonaldArchitect.ca | (519) 579 1700

Openings Schedule

No.	Room		Room	Rating: Assembly	Rating: Opening	Frame (to 081113 & 081400): Type	Material	Finish	Frame Remarks	Door/Screen (to 081113 & 081400): Leaf	Nominal Size	Handing	Type	Material	Inner Finish	Outer Finish	Door Remarks
Main Floor Level																	
M01	Workshop	to	Apparatus Bay	-	-	F1	HM SUW	PT	To 081113 & 099000	1	3'-2" x 7'-0"	LH	D1	HM	PT	PT	To 081113 & 099000
M02	Laundry	to	Gear Room	-	-	F1	HM SUW	PT	To 081113 & 099000	1	3'-2" x 7'-0"	RHR	D1	HM	PT	PT	To 081113 & 099000
M03	Gear Room	to	Apparatus Bay	-	-	F1	HM SUW	PT	To 081113 & 099000	1	3'-2" x 7'-0"	RH	D1	HM	PT	PT	To 081113 & 099000
M04	Gear Room	to	Apparatus Bay	-	-	F1	HM SUW	PT	To 081113 & 099000	1	3'-2" x 7'-0"	LH	D1	HM	PT	PT	To 081113 & 099000
M05	Storage Room	to	Apparatus Bay	-	-	F1	HM SUW	PT	To 081113 & 099000	1	3'-2" x 7'-0"	RH	D1	HM	PT	PT	To 081113 & 099000
M06	Electrical Room	to	Apparatus Bay	-	-	F1	HM SUW	PT	To 081113 & 099000	1	2'-6" x 7'-0"	LH	D1	HM	PT	PT	To 081113 & 099000
Mezzanine Floor Level																	
Z01	"Kitchen"	to	"Dining Room"	-	-	F2	WD	PT	To 081400 & 099000	1	2'-6" x 6"-8"	LHR	D2	HCWD	PT	PT	To 081400 & 099000
Z02	"Bedroom1"	to	"Dining Room"	-	-	F2	WD	PT	To 081400 & 099000	1	2'-6" x 6"-8"	RHR	D2	HCWD	PT	PT	To 081400 & 099000
Z03	"Entry"	to	Stairs	-	-	F2	WD	PT	To 081400 & 099000	1	3'-0" x 6'-8"	RHR	D2	HCWD	PT	PT	To 081400 & 099000
Z04	"Dining Room"		"Entry"	-	-	-	GWB	PT	New wallboard to return into opening, to complete perimeter, to 092000 & 099000	-	-	-	-	-	PT	PT	To 099000
Z05	"Bathroom"	to	"Living Room"	-	-	F2	WD	PT	To 081400 & 099000	1	2'-6" x 6"-8"	LHR	D2	HCWD	PT	PT	To 081400 & 099000
Z06	"Bedroom2"	to	"Living Room"	-	-	F2	WD	PT	To 081400 & 099000	1	2'-6" x 6"-8"	RHR	D2	HCWD	PT	PT	To 081400 & 099000

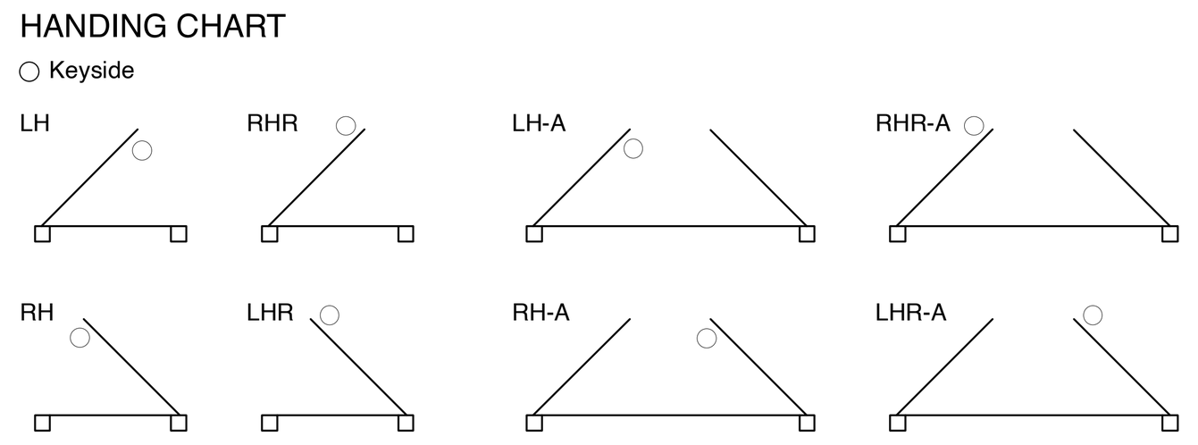
No.	Hardware (see 087000): Hinges	Function	Trim	ED	Bolt	Stop	CLSR	KP	TH	WS	SWP	ADO	ES	Acoustic Seal	HO	MAG	Hardware Remarks	Building Systems (see 019010): Electrical	Fire Alarm	Security	Building Systems Remarks
Main Floor Level																					
M01	3	KEYED	LEVER	-	-	O/H	-	Y (2)	-	-	-	-	-	-	-	-	To 087000	-	-	-	
M02	3	PASS	LEVER	-	-	O/H	-	Y (2)	-	-	-	-	-	-	-	-	To 087000	-	-	-	
M03	3	PASS	LEVER	-	-	O/H	-	Y (2)	-	-	-	-	-	-	-	-	To 087000	-	-	-	
M04	3	PASS	LEVER	-	-	O/H	-	Y (2)	-	-	-	-	-	-	-	-	To 087000	-	-	-	
M05	3	STOR	LEVER	-	-	WALL	-	Y (2)	-	-	-	-	-	-	-	-	To 087000	-	-	-	
M06	3	STOR	LEVER	-	-	WALL	-	Y (2)	-	-	-	-	-	-	-	-	To 087000	-	-	-	
Mezzanine Floor Level																					
Z01	2	PASS	LEVER	-	-	O/H	-	-	-	-	-	-	-	-	-	-	To 087000	-	-	-	
Z02	2	PASS	LEVER	-	-	O/H	-	-	-	-	-	-	-	-	-	-	To 087000	-	-	-	
Z03	2	PASS	LEVER	-	-	O/H	-	-	-	-	-	-	-	-	-	-	To 087000	-	-	-	
Z04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Z05	2	PASS	LEVER	-	-	WALL	-	-	-	-	-	-	-	-	-	-	To 087000	-	-	-	
Z06	2	PASS	LEVER	-	-	WALL	-	-	-	-	-	-	-	-	-	-	To 087000	-	-	-	

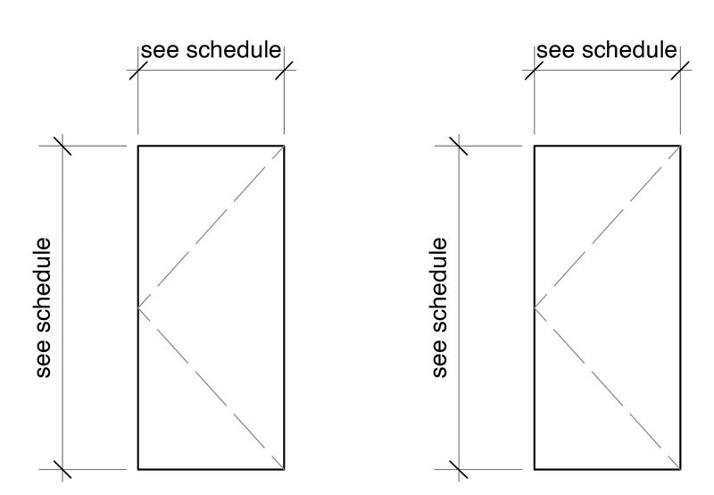
Room Finishes Schedule

Room: No.	Room Name	Flooring: Floor	Floor Remarks	Base	Base Remarks	North Wall: Sub	Finish	Special Finish	East Wall: Sub	Finish	Special Finish
Main Floor Level											
G06 G01	Workshop	Existing	-	RBC	To 096510 & no base at STL siding	EX STL	PRE	-	OSB	PT	-
G02	Laundry	Existing	patch and make good as required	RBC	To 096510 & no base at STL siding	EX STL	PRE	-	EX STL	PRE	-
G03	Storage Room	Existing	-	RBC	-	OSB	PT	-	OSB	PT	-
G04	Gear Room	Existing	patch and make good as required	RBC	To 096510 & no base at STL siding	GWB	PT	-	EX STL	PRE	-
G05	Apparatus Bay	Existing	patch and make good as required	RBC	To 096510 & no base at STL siding	STL siding	PRE	-	STL siding	PRE	-
G06	Electrical Room	Existing	-	RBC	To 096510 & no base at STL siding	GWB	PT	-	STL siding	PRE	-
ST1	Stair to Mezzanine	SEAL	to 033500	RBC	To 096510 & no base at STL siding	STL siding	PRE	-	STL siding	PRE	-
Mezzanine Floor Level											
Z01	"Kitchen"	OSB	To 062000	-	-	EX STL	PRE	-	OSB	U/F	-
Z02	"Bedroom1"	OSB	To 062000	-	-	EX STL	PRE	-	EX STL	PRE	-
Z03	"Entry"	OSB	To 062000	-	-	OSB	U/F	-	OSB	U/F	-
Z04	"Dining Room"	OSB	To 062000	-	-	EX STL	PRE	-	OSB	U/F	-
Z05	"Bathroom"	OSB	To 062000	-	-	OSB	U/F	-	EX STL	PRE	-
Z06	"Bedroom2"	OSB	To 062000	-	-	OSB	U/F	-	EX STL	PRE	-

Room: No.	South Wall: Sub	Finish	Special Finish	West Wall: Sub	Finish	Special Finish	Wall Finish Remarks	Ceilings: Substrate	Finish	Height (a.f.f.)	Ceiling Remarks	Bulkheads: Substrate	Finish	Height (+/-)	Bulkhead Remarks
Main Floor Level															
G06 G01	OSB	PT	-	OSB	PT	-	Provide paint finishes to 099000	GWB	PT	-	-	-	-	-	-
G02	GWB	PT	-	GWB	PT	-	Provide paint finishes to 099000	GWB	PT	-	-	-	-	-	-
G03	OSB	PT	-	OSB	PT	-	Provide paint finishes to 099000	GWB	PT	-	-	-	-	-	-
G04	GWB	PT	-	GWB	PT	-	Provide paint finishes to 099000	GWB	PT	2500 mm	To 092000 & 099000	-	-	-	-
G05	EX	EX	-	EX	EX	-	Existing STL siding to remain, new walls facing G05 to receive new STL siding to 074650	EX	EX	-	-	-	-	-	-
G06	GWB	PT	-	GWB	PT	-	Provide paint finishes to 099000	GWB	PT	2500 mm	To 092000 & 099000	-	-	-	-
ST1	-	-	-	-	-	-	To 074650	EX	EX	-	-	-	-	-	-
Mezzanine Floor Level															
Z01	OSB	U/F	-	OSB	U/F	-	-	-	-	-	-	-	-	-	-
Z02	OSB	U/F	-	OSB	U/F	-	-	-	-	-	-	-	-	-	-
Z03	OSB	U/F	-	OSB	U/F	-	-	-	-	-	-	-	-	-	-
Z04	OSB	U/F	-	OSB	U/F	-	-	-	-	-	-	-	-	-	-
Z05	OSB	U/F	-	OSB	U/F	-	-	-	-	-	-	-	-	-	-
Z06	OSB	U/F	-	OSB	U/F	-	-	-	-	-	-	-	-	-	-

HANDING CHART





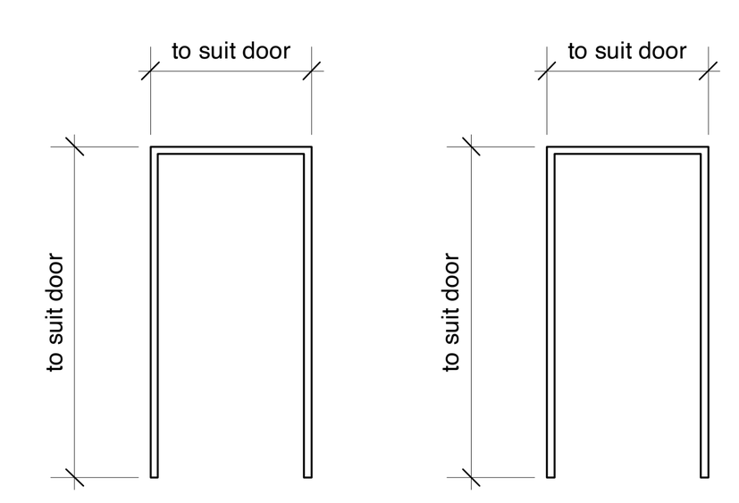
Door Type 'D1'

New HM slab type door, 1 3/4" thick (to 081113)

Door Type 'D2'

New HCWD slab type door, 1 3/8" thick (to 081400)

1 A901 Doors (D) 1 : 50



Frame Type 'F1'

New frame to suit door. (to 081113)

Frame Type 'F2'

New simple WD frame to suit door to be trimmed out with 2" wide trim for paint finish (to 081400)

2 A901 Frames (F) 1 : 50

Legend of Related Opening Abbreviations:

ADO - auto door operator
ALUM - aluminum
ANOD - anodized
CLASS - classroom function
CLR - clear
CLSR - closer
CONT - continuous
CYL - cylinder
DA - HC door activator
DB - dead bolt
DC - door contact
DL - dead lock
DP - offset 'D' style pull
DS - door stop
DT - dummy trim
ED - exit device
ES - electric strike
EX - existing to remain
EXIT - exit function
EXT - exterior
FL - floor or floor stop
FRR - fire resistance rating
FS - fire separation
FSH - flush
GALV - galvanized
GL - glass
GWG - georgian wired glass
HDWR - hardware
HCWD - hollow core wood
HM - hollow metal
H/O - hold open
IHM - insulated hollow metal
IN - interior
INSUL - insulation or insulated
INT - integral
J.C. - job check
KD - knock down
KH - keyed hookbolt
KO - knock out
KP - kick plate
LAM - laminate
LAS - latch set
LH - left-hand
LHR - left-hand reverse
LOC - lock
LT - lever trim
MAX - maximum
MG - make good
MIN - minimum
N - no
N/A - not applicable
N.I.C. - not in contract
OFF - office function
O/H - over head
O/S - outside
P/P - push/pull
P.LAM - plastic laminate
PRE - prefinished
PRI - privacy function
PT - paint
RH - right-hand
RHR - right-hand reverse
RO - rough opening
SCN - screen
SCWD - solid core wood
SLC - sealed concrete
SP - solid plastic
SS - stainless steel
STD - standard
STL - steel
STOR - storage function
SUR - surface
SUW - set up and welded
SV - sheet vinyl
SWP - sweep
TG - tempered glass
T.O. - top of
TH - threshold
UC - under cut
U/F - unfinished
U/S - underside
VBC - vinyl base cove
w/ - with
WD - wood
WALL - wall stop
WS - weatherstripping
Y - yes

Legend of Related Finish Abbreviations:

A.F.F. - above finished floor
ALUM - aluminium
CB - concrete block
CLG - ceiling
CMU - concrete masonry unit
CONC - concrete
CPT - carpet
CPTT - carpet tile
CT - ceramic tile
EXP - exposed structure
F or FL - floor
FRR - fire resistance rating
FS - fire separation
GL - glass
GWB - gypsum wall board
HWD - hardwood
LAM - laminate
LAP - lay-in acoustic tile
LINO - linoleum
L&P - lath and plaster
MLWK - millwork
MRT - marble tile
MT - mosaic tile
N/A - not applicable
NIC - not in contract
OWSJ - open-web steel joist
PCC - precast concrete
PLAM - plastic laminate
PLY - plywood
PT - waterborne epoxy paint
QT - quarry tile
R - resilient flooring
RBC - rubber base cove
RSV - resilient sheet vinyl
SEAL - sealed concrete
SV - sheet vinyl
TER - terrazzo
U/F - unfinished
VBC - vinyl base cove
VCT - vinyl composite tile
VWC - vinyl wall covering

General Notes to Hardware:

Door hardware shall be supplied by Cash Allowance (to Div. 1) for installation this Contract. See Specification Section 087000.

Notes to Hardware:

1 Reserved.

General Notes to Room Finishes Schedule:

For Extent of Finishes & locations of Finish types see also Interior Elevations.

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmebly Types see Sheet A002
For Floor Plans see A200 series Sheets
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For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

No.	Revision	Date	Initial

Project

Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title

Openings Schedule and Room Finishes Schedule

Scale (for 36x48" printing)
as noted

Dwg. No.
A901

John MacDonald Architect

Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
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General Notes to Structure:

All Work shall conform to the Ontario Building Code and all standards referenced therein, local regulations and bylaws, the Occupational Health and Safety Act for construction projects, and any applicable acts of authority having jurisdiction. The latest versions of standards shall apply.

Read structural drawings in conjunction with all other contract documents.

Where discrepancies exist between contract documents including drawings and applicable codes and acts, the most stringent shall govern.

The Contractor shall visit the site and familiarize themselves with all conditions which may affect the proper completion of the Work of this Contract, including all reference documentation. Contractor shall check all dimensions on drawings and shall notify Consultant and Structural Engineer of any and all discrepancies prior proceeding with the work.

The design documents are prepared solely for the use by the party with whom the design professional has entered into a contract and there are no representations of any kind made by the design professional to any party with whom the design professional has not entered into a contract.

All work is to be performed in accordance with the Occupational Health and Safety Act and Regulations for Construction Projects - O.REG. 213/91.

The use of these drawings is limited to that identified in the revision column. Do not construct from these drawings unless marked "issued for construction"

Under no circumstances are these drawing to be scaled, including for preparation of shop drawings, construction layout, or bidding purposes. Errors made by persons scaling these drawings are not be the responsibility of the Consultant or Structural Engineer.

See Architectural, Mechanical and Electrical drawings for finishes, locations and sizes of pits, bases, housekeeping pads, sumps, trenches, depressions, not shown on Structural drawings.

The Contractor shall retain an independent inspection and testing company to ensure that all work is done in accordance with the contract documents, including but not necessarily limited to Compaction Testing, Reinforcing Steel placement, Concrete testing and Structural Steel.

The Contractor shall notify the Consultant and Engineer with a minimum of 24 hours notice, for all required construction reviews. The Consultant and/or Engineer provides general review of construction in accordance with the performance standards of the Association of Professional Engineering of Ontario by means of a rational sampling procedure to determine whether the construction of work on the Consultant's drawings is in general conformity with the plans, sketches, drawings and specifications. The contractor is solely responsible for the quality control and the performance of the work in accordance with the contract. The Consultant is not responsible for the acts of omissions of the contractor, subcontractor, or any other person performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.

The Contractor shall made adequate provisions for construction loads and temporary bracing to ensure safety, and the building is plumb, square and in true alignment at all phases of construction, as per O.Reg 213/91. All bracing members shown on the drawings are designed for the finished structure and may not be sufficient for erection purposes. Shoring and bracing is required until proposed structure is properly and effectively in place. Shoring and bracing shall be designed, reviewed and approved by a Professional Engineer licensed to Practice in the Province of Ontario. All submittals (i.e. shop drawings) shall bear the P.Eng's stamp for review and acceptance of the Consultant and Structural Engineer prior to start of construction.

Substitutions from specified products and materials are not permitted unless accepted in writing by the Consultant and Engineer prior to ordering of materials. The Contractor shall reimburse the Owner for Consultants' additional costs incurred for review and changes to documents to incorporate substitutions.

It is the responsibility of the Contractor to notify the Consultant of construction progress so the Consultant can complete general reviews.

Notes to Foundations:

Foundations are to bear directly on naturally consolidated, undisturbed soil or compacted fill with a minimum soil bearing capacity of 75 kPa (SLS).

Contractor shall engage a qualified Geotechnical Engineering firm approved by the Owner and Engineer, to confirm minimum soils bearing capacity.

No foundation may be poured before the bearing material has been accepted by the Consultant. Notify the Consultant a minimum of 48 hours before the intended concrete pour.

Co-ordinate heights and installation to include any below slab insulation. Refer to Architectural Documents.

Place all footings exposed to freezing a minimum of 1,200mm (4'-0") below grade unless otherwise protected. Protect soil below and adjacent to all footings from freezing during construction.

Insulation is shown only partially. Refer to Architectural Drawings for other insulation not shown on the structural drawings.

Locate all piers and footings concentric under columns and walls unless otherwise notes.

Notes to Lumber:

Wood framing design and construction shall conform to the latest version of CSA O86.

All Sawn lumber shall conform to the requirements of CAN/CSA-O141 and be S-P-F Grade No.2, or better.

Prefabricated wood I Joists Prefabricated wood trusses shall conform to the latest version of CSA O86 and the Wood Design Manual. Truss Plates shall conform to the latest version of CSA S347. Lumber for wood trusses is to be kiln fried and well seasoned. Trusses shall bear flat on support members. Provide dropped gable trusses to allow ladder framing for soffits. Provide over-framing trusses as required for dormers and roof infill areas or provide adequate loading of each truss that be over-framed for point loads of strick framed roofs.

Structural Composite Lumber shall be:

a) Laminated Strand Lumber (LSL) - Timberstrand Grade 1.5SE as manufacturer by Weyerhaeuser or approved equivalent

b) Laminated Veneer Lumber (LVL) - Microlam Grade 2.0E as manufactured by Weyerhaeuser or approved equivalent.

c) Parallel Strand Lumber (PSL) - Parallam Grade 1.0E as manufactured by Weyerhaeuser or approved equivalent.

Glue Laminated members are to conform to the latest version of CAN/CSA-0122. The Manufacturer shall be qualified per CSA Standard 0177. Connections and end bearing conditions to conform to CSA Standard S16. Glue Laminated members are not to be cut or modified in the field. Coat ends of glue laminated members with approved end sealer.

Preservative-treated lumber of 1 1/2" or smaller dimension shall not be incised.

Vertical clearance shall be provided between lateral blocking restraints and new roof structure so as to allow for vertical settlement, as per OBC.

Nails shall conform to steel wire nails and spikes as defined in CSA B111 unless noted otherwise.

Laterally support all steel beams by Pre-drilling flanges for 13mm (1/2") bolted attachment of wood nailers with 16mm (5/8") holes staggered at 600mm (24") on centre.

Provide solid horizontal blocking at 1200mm (48") on centre in the first two joist spaces adjacent to the exterior walls. Bridging shall be attached to the exterior wall to provide lateral stability.

All lumber used in exterior conditions shall be pressure treated unless specifically noted otherwise.

All nails and fasteners in contact with pressure treated wood are to be hot dip galvanized or stainless steel. No exceptions.

Joists hangers shall be minimum 0.879 mm (0.0346") galvanized steel and shall conform to the International Conference of Building Officials "acceptance criteria for joist hangers and similar devices".

All stud walls shall be anchored to the foundation or floor slab with minimum 13mm (1/2") ø, 400mm (16") long hooked anchors at maximum 800mm (32") on centre. Anchor bolts shall be placed within 400mm (16") of the exterior edge of stud walls.

Re-tighten all bolted connections 6 (six) months after first installation, and every 6 (six) months thereafter until no appreciable change is evident.

Coordinate location of blocking prior to installation of insulation and vr/ab. Ensure VR/AB is inspected and accepted by Consultant and Building Official prior to installation of any interior layer of sheathing.

All structural framing members including but not limited to wall studs, shall be located with due regard for support for exterior enclosure loading system, so that wall clips slope to roofs and other aspects of design intended to be achieved by the structural elements are provided.

Supplier of manufactuered lumber materials shall provide shop drawings and connection details for both typical and specific conditions. Lateral bracing of bottom of members, blocking, and connection to adjacent support and diaphragms shall be to supplier's instruction.

Sizes shown are estimated only. Supplier shall size members, and shall limit deflection to L/360 or better for floors, L/240 or better for roofs.

Notes to Steel:

Structural steel shall conform to the latest version of CAN/CSA-S16 and the CISC code of standard practice.

Structural steel shall confirm to the latest version of CAN/CSA G40.20, G40.21 Grade 350W Class C for H.S.S., G40.21 Grade 350W for W shape sections and G40.21 Grade 350W for Channels, Angles and Miscellaneous Metal.

Bolted connections shall use Grade A325 Bolts.

Anchor Bolts shall be fabricated using steel rod conforming to the latest version of CSA G40.21 Grade 300W.

Welding shall conform to CSA W59 and CSA W47 Division 1 or Division 2.1 by the Canadian Welding Bureau. Welding shall be completed by CWB Certified Fabricator and Erector to the CSA Standards W178.1 and W178.2.

Where forces are not shown on the drawings, beam reactions shall be 1/2 the total uniform distributed factored loads noted in the beam load tables or Part 5 of the CISC's Handbook of Steel Construction.

Column bearing grout shall be 40 MPa minimum, non-shrink and 38mm (1 1/2") minimum thick.

Structural steel members shall not be splices without prior written approval of the Structural Engineer.

All structural steel is to be shop prime painted unless noted otherwise. Structural steel exposed to exterior conditions shall be hot dip galvanized conforming to the latest version of CAN/CSA-G164. All coatings are to be touched up on site with approved paint for primed steel and zinc rich paint for galvanized steel.

Steel beams bearing on concrete to have min. 4" bearing, u.n.o.

Concrete Requirements:

USE	CSA CLASS	28 DAY COMP. STRENGTH (MPa)	MAX. W/C RATIO	AIR CONTENT (%)	MAX. AGGREGATE SIZE (mm)	SLUMP (mm)
FOOTINGS	N	20	AS NEEDED	NONE	20	80 ±30
FOUNDATION/ RETAINING WALLS	F-2	25	0.55	4-7	20	80 ±30
INTERIOR SLAB ON GRADE	N	25	0.50 (MAX)	NONE	20	80 ±30

Nailing Requirements:

MEMBER CONNECTION	MIN. NAIL LENGTH	SPACING OR MIN. NUMBER REQ'D.
STUD TO WALL PLATE	3 1/4"	2 (two)
BOTTOM WALL PLATE TO FLOOR JOISTS	3 1/4"	16" o.c.
BUILT-UP BEAMS	3 1/4"	2 rows @ 16" o.c.
BUILT-UP LINTELS	3 1/4"	12" x 2 1/2" o.c.
KING/JACK POSTS	3 1/4"	2 rows @ 12" o.c.
BUILT-UP POSTS AND COLUMNS	3 1/4"	2 rows @ 12" o.c.
FLOOR AND/OR CEILING JOIST TO TOP PLATE	3 1/4"	2 (two)
ROOF RAFTER TO TOP PLATE	3 1/4"	3 (three)
LINTEL TO KING POST	3 1/4"	2" o.c.
ROOF RAFTER TO RIDGE BEAM	3 1/4"	3 (three)
COLLAR TIE TO ROOF RAFTER	3 1/4"	3 (three)
WALL SHEATHING - PERIMETER - INTERIOR	2"| 2"	6" o.c. 12" o.c.
ROOF SHEATHING - PERIMETER - INTERIOR	2"| 2"	6" o.c. 12" o.c.
FLOOR SHEATHING - PERIMETER - INTERIOR	2" screws 2" crews	6" o.c. 12" o.c.
CONNECTION BETWEEN ROOF TRUSS/JOIST & EXT. WALL STUDS - AT EACH STUD - AT EACH JOIST - AT EACH TRUSS	 3" 3" 3"	 3 (three) 4" o.c. 8" o.c.

ITEM	REQ'D?	COMMENTS
Soil Compaction	YES	By Soil Engineer or Building Inspector
Soil Bearing Capacity		
Concrete Compressive Tests	YES	Cost by Cash Allowance.
Concrete Slump	YES	Cost by Cash Allowance.
Mortar Cubes	YES	Cost by Cash Allowance.

Other testing and inspection shall be by Cash Allowance except where documents note that such testing is at Contractor cost.

Cost of testing that the Contractor wishes to undertake to confirm for itself that contract requirements are being met shall be at Contractor cost and not by allowance.

ITEM	REQ'D?	P.ENG STAMP REQ'D?	NOTES
REBAR SHOP DRAWINGS	NO	NO	Fabricate to suit
CONCRETE MIX DESIGNS	YES	NO	See Chart for reqmts
WOOD Joist DRAWINGS	YES	YES	Confirm for LL
HELICAL PILE FOUNDATIONS	NO	NO	Submit to Consultant and AHJ
STEEL FABRICATION	YES	YES	Submit to Consultant

Footing (F) Schedule:

Mark	Size	Remarks
Fx1	1675mm x 1675mm x 355mm	Ex. footing to remain
Fx2	1525mm x 1525mm x 305mm	Ex. footing to remain
Fx3	610mmx 203mm	Ex. strip footing to remain
F1	600mm x 300mm	New concrete strip footing c/w 2-15M continuous bottom
F2	600mm x 600mm x 300mm	New concrete footing c/w 3-15M e.w.bot.
F3	600mm x 300mm	New concrete strip footing c/w 2-15M continuous bottom. Anchor stair to footing, see Detail 4/S101

All footings are to be centered on walls above u.n.o.
Top of footing shall match floor slab level and finish
All strip footings shall have 1/2" a.b.'s at 800 o.c.

Foundation Wall (FW) Schedule:

Mark	Size	Remarks
Fwx	203mm	Existing Foundation Wall to remain

Structural Wall (SW) Schedule:

Mark	Size	Remarks
SW1	2"x6"	2x6 nominal wood studs @400mm centres, c/w 5/8" diameter a.b.'s @1200mm o.c. max.

Column (C) Schedule

Mark	Size	Remarks
Cx1	HSS8"x8"x1/4"	Existing to remain
Cx2	Ex. Designed Structure Steel Column	Existing lintel to remain u.n.o. Job Check and report sizes to Consultant
C1	HSS3"x3"x1/4"	Base Plate 8"x8"x3/8" w/ 3/8" ø anchor bolts x 8" long w/ deformed end

Wood Post (WP) Schedule:

Mark	Size	Remarks
WP1	3 - 2"x6"	SPF no.2 min., stair support

Design Loads to Mezzanine:

Assumed Dead Load 1 kPa (20 psf)

Live Loading is for Designated Use (personnel training purposes only, mock residential, 2 kPa (40 psf)

All joist submittals shall be designed for this loading and shall bear engineer's stamp.

Soil bearing capacity 75kPa minimum, shall be confirmed by Geotechnical Engineer inspection.

Floor Joist (J) Schedule:

Mark	Size	Remarks (OBC Table A-1)
J1	2 5/16"x9 1/2"	TJI 360-9 1/2"@400mm o.c.
J2	2"x6" nominal	New S.P.F. No. 1/2 @ 600mm o.c.
J3	2"x8" nominal	New S.P.F. No. 1/2 @ 400mm o.c.

Note: All manufactured joists shall be submitted by Engineered Shop Drawing

Steel Beam (SB) Schedule:

Mark	Size	Remarks
SB1	W6"x6"	Steel beam

Provide steel beams complete will ALL connections and bearing. Submit P.Eng stamped shop drawings of all connections for review and acceptance.

Lintel (L) Schedule:

Mark	Size	Remarks
L1	3-2"x6" c/w 1-2x6 jack + 1-2"x6" king studs	+ 2 layers 1/2" ply to match stud depth.

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmebly Types see Sheet A002
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No.	Revision	Date	Initial

Project

Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved	
Checked	JHM
Drawn	SH

Drawing Title

Structural Notes & Schedules

Scale (for 36x48" printing)	Dwg. No.
1:50	S001

John MacDonald Architect

Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
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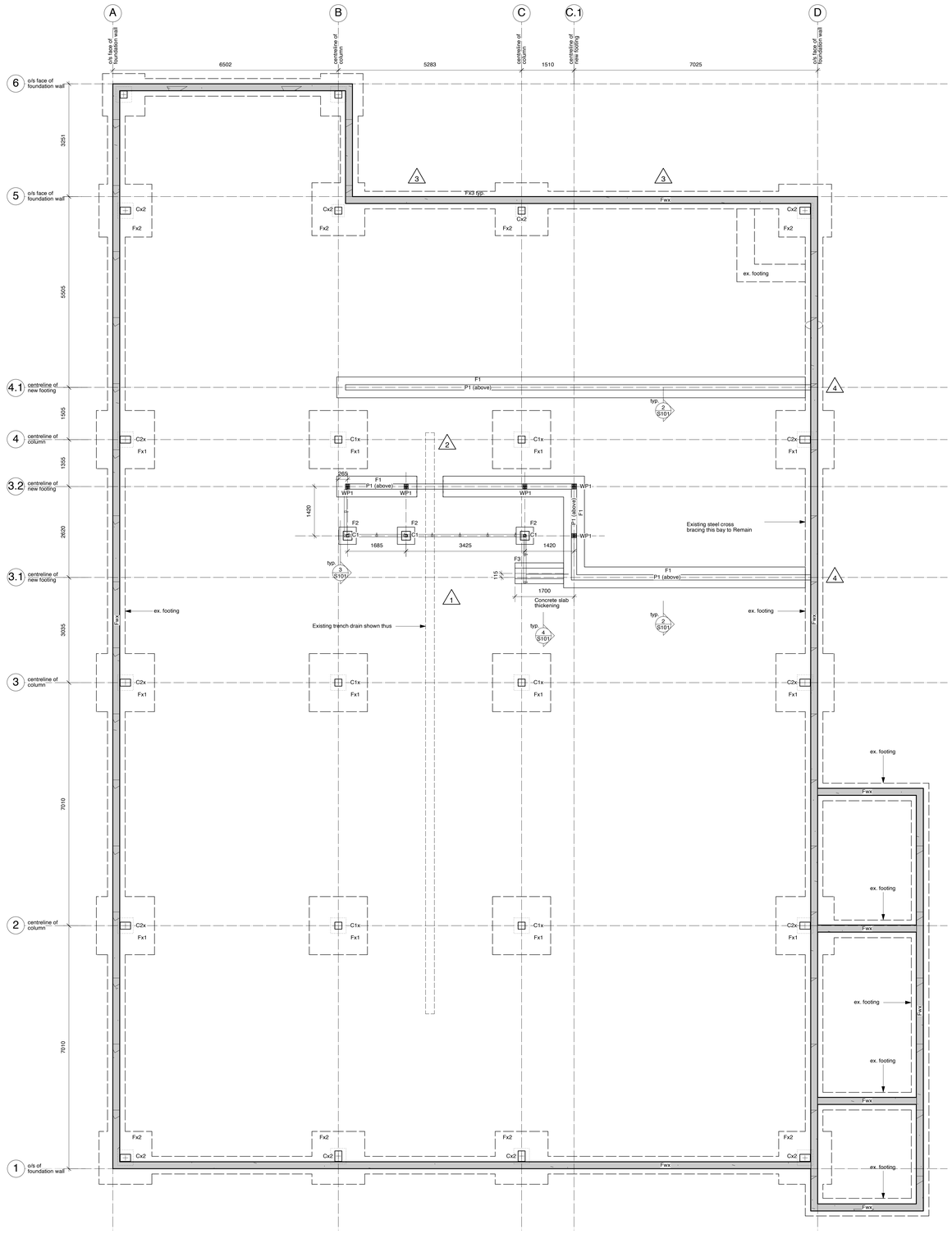


1 S101 Foundation Plan
1:50

General Notes to Foundations:

Work is shown diagrammatic. See Architectural Sheets for locations and details u.n.o. For connections to site systems, see A1 series Sheets. SF denotes step in footing.

Notes to Foundations:

See Soils Conditions note this page.

All columns and wall footings shall bear directly on naturally consolidated, undisturbed soil or compacted fill with a minimum soil bearing capacity of 150 kPa (SLS) and 250 kPa (ULS) at the depths indicated on the drawings.

No foundation may be poured before the bearing material has been accepted by the geotechnical engineer. Notify the geotechnical engineer a minimum of 24 hours before the intended concrete pour.

Proof-roll existing fill material. Remove any loose or softened areas beneath Footings before placing granular fill.

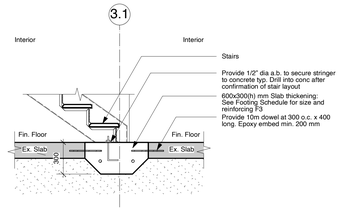
Place Footings on material capable of safely supporting building dead and live loads. Before casting the slab place 150 mm (6") of clear crushed stone or compacted granular A over the sub-base and thoroughly roll and consolidate to the levels required. Co-ordinate heights and installation to include any below slab insulation.

Insulation is shown only partially. Refer to Architectural Drawings for other insulation not shown on the structural drawings.

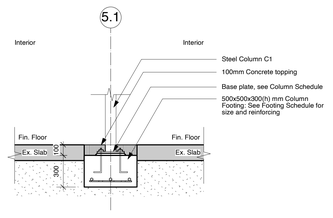
Found all footings below the level at which potential damage resulting from frost and freezing action can occur, but a minimum 1200 mm (4 ft.) below finished exterior grade, unless noted as shown otherwise.

Notes to Foundation Plan:

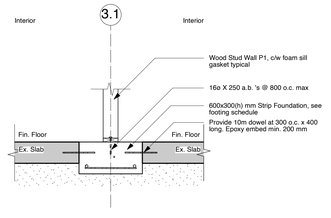
1. Existing Trench Drain to Remain. Interrupt footing. Co-ordinate sawcutting of floor to ensure trench concrete surround is not affected.
2. To area of existing trench drain provide 3-2x8 + 2 1/2" ply lintel to top of the stud bottom plate, to bridge existing trench drain area.
3. Confirm that existing block foundation wall is grouted. Provide new 13 o.a.h.'s at max. 800 o.c.
4. Provide 2-15M dowels, epoxy into ex. foundation wall , and lap to footing reinforcement.



4 S101 Section Detail @ New Stair Base
1 : 20



3 S101 Section Detail @ New Column C1 Footing
1 : 20



2 S101 Typical Section Detail @ New Strip Foundation
1 : 20

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmebly Types see Sheet A002
For Floor Plans see A200 series Sheets
For Building Sections see A400 series Sheets
For Wall Sections see A600 series Sheets
For Stair Details see A700 series Sheets
For Section Details see A730 series Sheets
For Interior Elevations see A800 series Sheets
For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

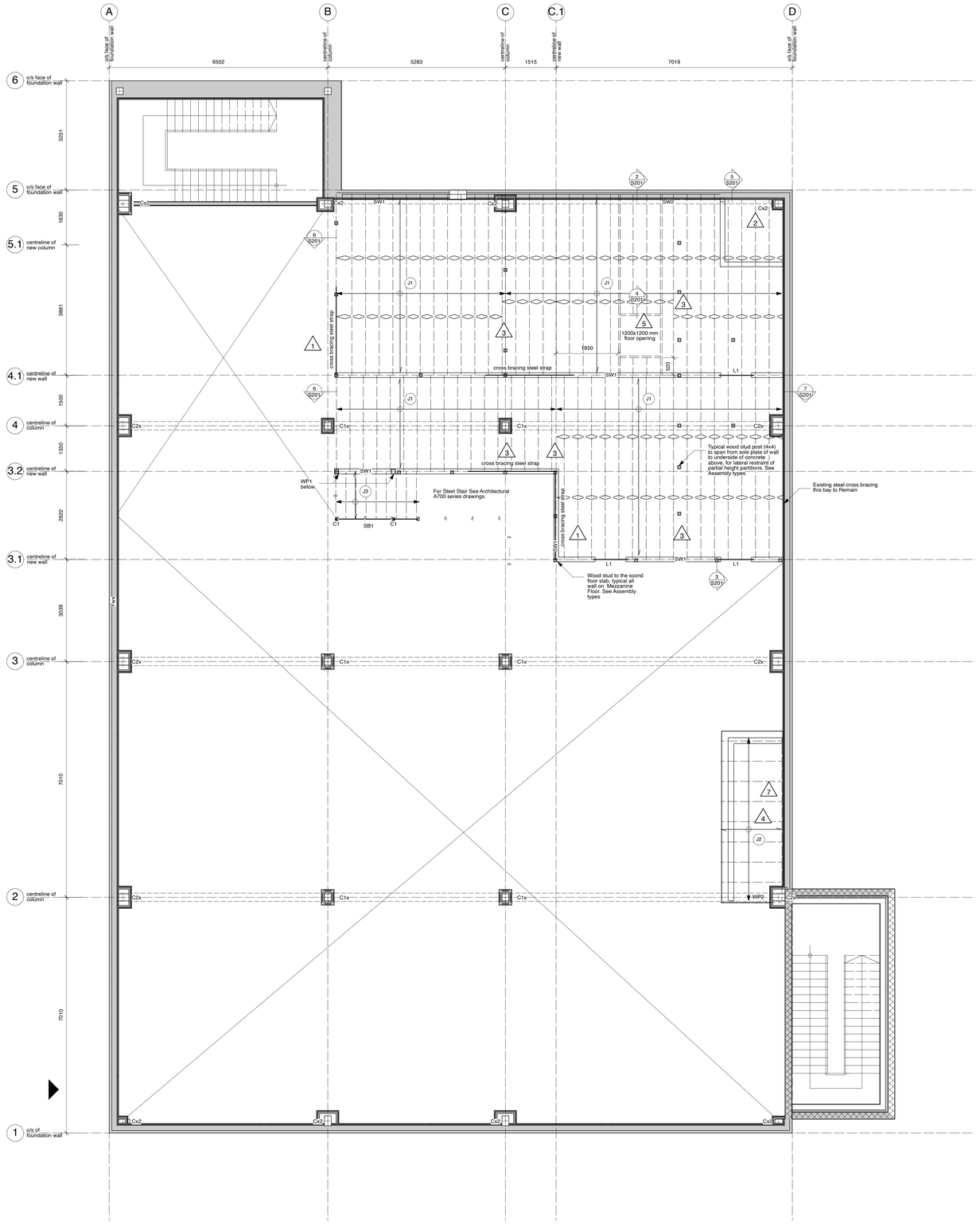
	Approved
	Checked JHM
Drawing Title	Drawn SH

Foundation Plan
& Details

Scale (for 36x48" printing).	Dwg. No.
1:50	S101

John MacDonald Architect

Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
JohnMacDonaldArchitect.ca | (519) 579 1700



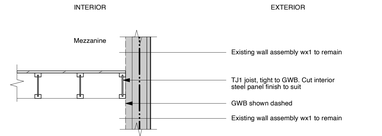
1 Mezzanine Level Framing Plan
S201 1:50

Legend:

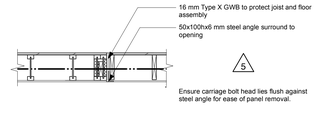
- Building Elevation — See A300 series Sheets
- Building Section — See A400 series Sheets
- Wall Section — See A600 series Sheets
- wf — Foundation Wall Type, Wall Type — See A000 series Sheets
- lf — Floor Type, Roof Type — See A000 series Sheets
- pf — Partition Type — See A000 series Sheets
- cf — Ceiling Type — See A000 series Sheets
- 07 — Room Numbers — See Room Finish Schedule(s)
- 10 — Opening Numbers — See Opening Schedule(s)
- Wxx — Window Type, see A300 Sheets for Window Schedule(s)
- Mxx — Millwork Type — See A710 series Sheets
- 1:1 — Equipment Numbers — See Equipment Schedule(s)
- Denotes Existing Assembly
- Denotes Fire Separation
- F.S. — Denotes Fire Separation
- F.R.R. — Denotes Fire Resistance Rating
- j.c. — job check indicates dimension which must be confirmed onsite

Notes to Framing Plans:

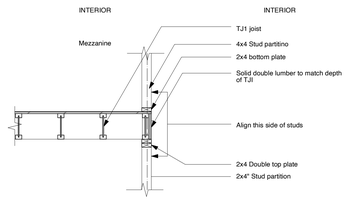
1. Provide steel cross bracing strap to locations shown.
2. Existing .75% solid 140mm block c/w reinforcement and grout. Verify condition and report to Consultant
3. Provide solid blocking at 1200mm o.c. max for support of all non-loadbearing partitions parallel to joists.
4. Fasten joists to top plate with Simpson hurricane ties Typ each joist.
5. Provide 1200x1200mm removable panel to floor assembly. Line opening with 16 mm Type X GWB to protect joist and floor assembly for 45 min FRR. Assembly of removable panel shall match assembly of adjacent floor. provide 50x100hx6 mm steel angle surround to opening, bolted with 10 mm ø bolts at 400 o.c. through adjacent framing, to receive panel.
6. Provide 4"x4" stud partition vertical post c/w 100x100x6mm by 150mm long steel channel section bolted to underside of concrete with Hilti HY-150 adhesive and two 13mm ø bolts. Provide slotted holing to angle and connection to wood post to allow vertical movement of slab under live loads (min 13 mm) typical to all wood posts.
7. Provide 2x6 ledger fastened to existing wall with expansion fasteners (2 per joist location).



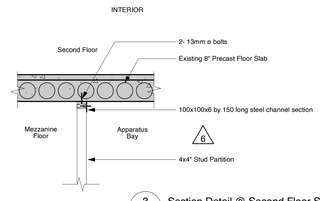
7 Framing Detail @ Exterior East Wall
S201 1 : 20



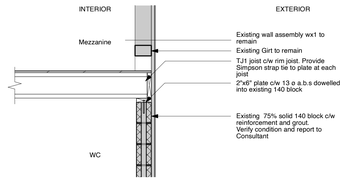
4 Framing Detail @ Access Hatch
S201 1 : 20



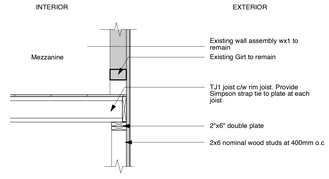
6 Framing Detail
S201 1 : 20



3 Section Detail @ Second Floor Slab
S201 1 : 20



5 Framing Detail @ WC Block Wall
S201 1 : 20



2 Framing Detail @ Exterior North Wall
S201 1 : 20

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

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For Section Details see A730 series Sheets
For Interior Elevations see A800 series Sheets
For Schedules see A000 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

NOT FOR CONSTRUCTION

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Mezzanine Level Framing Plan

Scale (for 36x48" printing) 1:50
Dwg. No. S201

John MacDonald Architect
Public Utilities Commission Building
195 King Street West, Suite 202, Kitchener, ON N2G 1B1
JohnMacDonaldArchitect.ca | (519) 579 1700

Mechanical General Notes and Specifications:

1. General Requirements:

   Comply with the Conditions of the Contract, as provided by the Owner, which form part of the Mechanical portion of the Work as if repeated here.

2. Description of Work:

   The HVAC and Plumbing Trade Contractors shall furnish all labour, material tools, equipment, supervision and other services as required to execute the work described in this Sheet, the Contract Conditions, and the drawings and specifications for HVAC and Plumbing Trades respectively.

3. Site Examination:

   Before start the work, carefully examine the drawings and specifications having a bearing on the Work. Visit the site of the existing building and thoroughly ascertain the extent and nature of all conditions affecting the performance of Work. Include all such work in the submitted price.

4. Co-operation of Trades:

   Read drawings and specifications of other trades and conform with their requirements before proceeding with any work specified in this specification related to the other trades. Co-operate with all other trades on the job so that all equipment can be satisfactorily installed and no delay is caused to any other trade.

5. Drawings:

   Contract drawings are diagrammatic and indicate the general arrangement of the mechanical systems and Work. Where the exact locations of existing equipment, fixtures and piping are not definitely established, the Trade Contractor shall survey the systems, find exact location and coordinate with new work. Request for clarification to Owner/Tenant in all cases of uncertainty.

6. Abbreviations:

   Many words or expressions that are repeated frequently on drawings or within specifications on drawings, and herein, are abbreviated to reduce wording that might otherwise obscure detailing. To avoid misinterpretation abbreviations are listed in legends on drawings throughout the documents. The Owner/Tenant's interpretation of the meaning and intent of abbreviations shall be final. In the case of uncertainty obtain Consultant clarification prior to proceeding.

7. Alteration to Existing

   Where existing material or equipment is damaged, make good to the satisfaction of Owner/Tenant. If it is found in an unsuitable condition, notify Owner/Tenant for instructions prior to proceeding.

   Obtain written authorization from Owner/Tenant for alteration work that is not specifically called for or clearly inferrable from the Documents.

8. Protection of Openings

   Protect existing and new equipment and systems openings from dirt, dust, and other foreign materials. Each Trade Contractor shall protect finished and unfinished work of his own and other Trade Contractors from damage due to carrying out his work. Each Trade Contractor shall be responsible for the condition of all materials and equipment supplied under the contract or removed from existing building for reuse and shall provide all necessary protection to the same. Each Trade Contractor shall be responsible for the protection and maintenance of the work of its portion of the work, until the building has been completed and accepted.

9. Cutting and Patching

   The layout of all openings to any other surfaces, finishes and the structure of the building shall be the responsibility of the Trade Contractor requiring the holing. All cutting to existing elements of the building shall not be by the trade, unless otherwise noted. All sleeves and openings to new elements shall be formed and placed by the trade installing such elements. Mechanical trade contractors shall supply sleeves, roofing curbs, cones, and other elements required to form openings, whether to existing or new surfaces. Before cutting of openings in any structural element, including masonry walls, the Trade Contractor shall identify to the Owner/Tenant and the Contractor which sections of the existing walls, ceilings, floors and roof are to be cut back and the required dimensions of such cutting to achieve fire stopping to ULC standards.

   Under no circumstances shall any cutting or burning of the structural parts of the building be undertaken without the written authority of the Owner/Tenant.

10. Equipment Installation

    1. Provide space for servicing, disassembly and removal of equipment and components as indicated or as recommended by manufacturer.

    2. Shut-offs, isolation valves, unions and flanges: provide these items for ease of maintenance and disassembly, and to isolate all sections of systems and all items of equipment or fixturing, whether shown on drawings or not.

    3. Locate equipment so that control panels, electrical panels and wiring termination points on equipment have minimum 40" clearance.

    4. All equipment, fixtures, and pipes and insulation shall be installed in accordance with manufacturer's recommendations.

11. Tests by Each Trade Contractor

    1. Insulate or conceal work only after testing and approval by authorites and acceptance by Consultant.

    2. Bear all costs in connection with all tests, including temporary plugs, tracing and repairing leaks, retesting and making good.

    3. Prior to tests, isolate all equipment and other parts which are not designed to withstand test pressures or test medium.

    4. Provide certificates indicating results of all tests including test logs.

    5. Test for plumbing lines shall be tested in accordance with the Ontario Building Code.

    6. Tests for natural gas piping shall be in accordance with the requirements of Natural Gas Installation Code CSA-B149.1.

    7. Ball test or similar as required by authorities shall be performed in accordance with Township of Wilmot Building Department requirements and OBC 7.8.6.7., for any changes to below grade sanitary plumbing. Testing shall be conducted in the presence of the Township inspector.

12. Equipment Supports

    1. Equipment supports shall be supplied by equipment manufacturer or as required to meet written recommendations.

    2. Equipment supports not supplied by equipment manufacturer: fabricate from structural grade steel, and provide as part of the work.

13. Painting

    1. Apply at least one coat of corrosion resistant primer paint to ferrous supports and site fabricated work.

    2. Prime and touch up marred finished paint work to match original.

    3. Restore to new condition, finishes which have been damaged too extensively to be merely primed and touched up.

    4. At areas where cutting and patching has taken place, painting of these areas shall be undertaken by the affected (expert) trade at the expense of the Mechanical Contractor.

14. Excavation of Pipes

    Excavation for plumbing pipes shall be by general contractor. Backfilling and compaction of plumbing pipes shall be by plumbing contractor. All backfilling shall be new clean granular fill brought in specifically for the purpose of backfilling. All backfilling shall be compacted at intervals of not more than 6 in. (150 mm) layers.

15. Electrical Work

    All wiring and conduit for 120V power shall be by Electrical Contractor. Unless specifically noted otherwise, all wiring, conduit and connections that are related to low voltage and automatic control systems shall be by the HVAC Trade Contractor or Plumbing Trade Contractor, as applicable.

16. Submittals:

    Equipment shop drawings shall be submitted by all Trade Contractors to the Owner/Tenant for review and acceptance prior to proceeding with confirmation of orders.

    Shop drawings and product data shall show mounting arrangements, operating and maintenance clearances (eg. access door, swing spaces), type, name, catalogue numbers, technical performance data, wiring diagrams etc.

    Submit layout of services in areas of exposed ceilings for Consultant acceptance prior to their installation.

17. Identification

    .1 Identify and label equipment and pipework services on completion of the project.

    .2 Drain piping shall show service and direction of flow.

    .3 Natural gas pipe exterior to the building shall be painted entirely in yellow and inside the building shall be identified with yellow bands where such identification is not existing or has been degraded.

    .4 Equipment, panels and cabinets: system nameplates shall be 1/8" (3 mm) thick laminated plastic with letters and numbers machine engraved into core.

18. Cleaning

    Upon completion and in preparation for final acceptance, all Trade Contractors shall remove protective coverings, clean and refurbish all equipment, free all obstructions, replace filters and leave in operating condition. All surplus and waste material shall be promptly removed from the premises and disposed of without charge to the Owner.

19. Trial Usage

    .1 Obtain written permission from Consultant to start and test permanent equipment and systems to acceptance by Owner.

    .2 Consultant and Owner may use equipment and systems for test purposes prior to acceptance. Supply labour, material and instruments required for testing.

20. Demonstration of Operation and Maintenance

    Supply tools, equipment and personnel to demonstrate and instruct Owner's representative during regular work hours and prior to acceptance in operating, controlling, and adjusting of all systems and equipment.

21. Operation and Maintenance Written Instructions

    Each Trade Contractor shall provide 2 (two) copies of operation and maintenance data for incorporation into project manuals. Operation and maintenance manual to be approved by and final copies deposited with Owner/Tenant.

22. Record Drawings

    1. Each Trade Contractor shall provide record drawings in accordance with General requirements.

    2. Site record on a hard copy set of mechanical drawings, all changes as work progresses and as changes occur. Make available for reference purposes and inspection at all times.

    3. As-Built Drawings:

       1. Submit to Owner/Tenant for acceptance and make corrections as directed.
       2. Submit completed reproducible as-built drawings with operating and maintenance written instructions.

23. Warranties

    Each Trade Contractor shall warrant materials, equipment, and workmanship against defects for a period of one year from substantial performance or acceptance of system, whichever is later. Trade Contractor agrees to remove and replace defective items of work promptly when notified by the Owner, without cost to the Owner. Submit warranty on Owner's standard form.

    All equipment and material warranties shall be standard as offered by the Manufacturer or Supplier, and shall be to the direct benefit of the Owner. Each Trade Contractor shall solicit and provide such warranties, and arrange for and execute all required paperwork.

    All mechanical equipment, including but not limited to fixtures, trim, fans, mixing valves, pumps, and similar shall be warranted against defect and/or failure of any kind, on a full replacement basis, for 5 years.

24. Building Systems Requirements

    Provide all materials, products, work and service required to achieve the design intent and standards for detailed design, procedures, products, systems and execution of Building Systems as reasonably inferred in the Documents, including the proper functioning of each system, and their coordinated relation to other Systems.

    The following mechanical building systems are specifically identified, with responsibility for performance assigned to the Trade Contractor performing the Work:

    - Water Supply System, by Plumbing Trade Contractor;
    - Sanitary Sewerage System, by Plumbing Trade Contractor;
    - HVAC Systems, by the HVAC Trade Contractor.

    The Work of mechanical building systems relates to the following Building Systems described elsewhere in the Documents:

    - Fire Separation System, as components of that system (such as fire dampers, etc.);
    - The Barrier-free Path of Travel System
    - The Interior Finishing System(s), for components of mechanical systems exposed to view in the finished Work;
    - The Electrical Distribution System, for connections to equipment, devices and fixtures.

    Drawings for Building Systems are schematic diagrams only, and do not govern the amount of work, product, or material required to achieve conformance with Contract requirements.

General Plumbing Requirements:

1. All plumbing above the floor slab is to be non-combustible copper or cast iron except where specifically permitted by the Ontario Building Code for combustible construction, in which case approved grades of combustible piping may be used.

Plumbing Systems:

1. All domestic water piping within the building shall be seamless copper water tube, type L or M with soldered joints unless plastic piping has been accepted by Owner/Tenant and Authority in each case. Piping shall be third party certified bearing permanent markings.

2. All domestic hot water lines shall be insulated with preformed sectional fibreglass pipe insulation with vapour barrier jacket, or expanded closed-cell structure insulation. Pipe insulation shall have a maximum flame spread rating of 25 and a maximum smoke developed rating of 50. Insulation thickness shall be minimum 13mm (1/2"). Where plastic piping is accepted, insulation is not required to such piping.

3. Where supporting copper pipe, it shall be isolated from any non-copper hanger with electrolytic action tape or equivalent.

4. Provide valved supplies at all plumbing fixtures and equipment. Isolation valves shall be bronze ball valves, solder ends.

5. Drain valves not shown on drawings. Provide drain valves at all low points in domestic water supply system so that system can be fully drained by Owner.

6. Provide water hammer arrestors on all main branch piping runs ahead of each plumbing fixture group, and as otherwise necessary to eliminate risk of and to prevent water hammer. Water hammer arrestors shall be Watts "Shok-gard" SG or equivalent by Zurn, hard drawn copper construction with prechanged air chamber, Delrin PL pistons with Buna N "O" rings sized in accordance with manufacturer's recommendation.

7. Provide stop valves at all Plumbing Fixtures. All escutcheons and wall plates shall be cast brass, chrome-plated, set screw type and stainless steel, and other approved non-corrosive material. All items must bear name of manufacturer or identifying trademark.

8. Gravity sanitary and vent pipe and fittings:

   1. Below ground shall be PVC-SDR35, ABS-DWV or PVC-DWV with solvent weld fittings.

   2. Above ground up to 65mm (2 1/2") diameter shall be ABS-DWV, PVC-DWV ULC approved with solvent weld fittings or copper DWV with wrought copper fittings. Use ABS only where accepted by Authorities.

   3. Above ground for 75mm (3") diameter and over shall be ABS-DWV, PVC-DWV ULC approved with solvent weld fittings, copper DWV with wrought copper fittings, or cast iron with mechanical joints, neoprene or butyl rubber compression gaskets and stainless steel clamps. Use ABS only where accepted by Authorities.

9. Where ABS or PVC pipe crosses a fire separation it shall be fitted with approved fire stop device(s).

10. For all pipe penetrations, voids around pipes shall be sealed and caulked to keep required integrity.

11. Floor Drains - Watts Drainage Products CO-200 series epoxy coated cast iron floor drains with 5-1/8" (130mm) round adjustable nickel bronze (standard) top and hub connection as applicable to condition of installation including floor covering. Provide model for priming and prime all floor drain traps.

12. Clean-outs (required at top end of all runs without exception) - Watts Drainage Products CO-200-R epoxy coated cast iron floor cleanout with 5-1/8" (130mm) round adjustable nickel bronze (standard) top and no hub (MJ) connection as applicable to condition of installation including floor covering.

13. Install trap seal primer for floor drains on cold water supply to nearest frequently used plumbing fixture or to a trap seal primer. Install soft copper tubing to floor drains and trench drains.

14. All plumbing lines shall be flushed clean prior to installation of finish plumbing and at project completion.

15. Install piping free from strains and with proper allowance for thermal expansion and contraction, with anchors placed as required. Solder joints to be made in accordance with current Plumbing Code Requirements. Evenly heat the joint to ensure effective distribution of solder over the full area of contact. At pumps and equipment install isolation valves and pipe with unions so that equipment can be removed without cutting of pipe system.

16. Venting is not shown on drawings. All venting shall be concealed in partitions and walls, except high level laterals at underside of roof joists.

17. Provide certification of all existing backflow prevention devices at water service entry. Provide backflow prevention devices at all equipment with connection to potable water, and vacuum breaker to all hose bibb connections whether existing or new. All backflow prevention shall be to requirements of authorities having jurisdiction.

Plumbing Fixtures & Trim:

1. Provide all Plumbing Fixtures to locations shown, and as Scheduled.
2. Provide installation report certifying compliance with applicable codes & regulations.
3. Clean all Plumbing Fixtures and trim to the area of the Work, whether existing or new, prior to handover to Owner.
4. Do not use Plumbing Fixtures during construction without consent of Owner.

HVAC Systems:

1. All systems shall be installed in accordance with code requirement, and to ASHRAE and SMACNA standards. All Material and equipment shall be new. Ductwork shall be of gauge as outlined by SMACNA standards. Equipment to be as outlined on the drawings. All joints and seams shall be sealed.

2. Duct installation: refer to section 200501 "Basic Material and Methods". Acoustic lining shall be 1/2" thick and shall be mechanically pinned and glued to the inside of ductwork. Install acoustic insulation as shown (or noted) and at minimum the first 10 feet of supply and return ductwork.
   Thermal insulation shall be 2" thick foil backed and be secured to the outside of ductwork. Thermally insulate as shown (or noted) and at minimum all outdoor air intake ductwork and the last 6 feet of exhaust ductwork from exterior termination.

3. Exhaust air registers shall be as Scheduled, with removable key operating balancing damper.

4. Fire Dampers: dynamic fire dampers shall be ULC approved and installed as per manufacturer's requirements and in accordance with the Ontario Building Code. Nailor industries or equivalent. Install where shown or as noted on the drawings. All fire dampers shall be tested after installation and a report submitted certifying their operation. Reset dampers after testing.

5. For duct penetrations at wall, voids around duct shall be sealed and caulked to maintain required integrity.

6. Provide access doors of suitable size for access to installed equipment, and where necessary for access to fire dampers. Make doors of aluminium to match ductwork, with quick opening fastening devices to give tight closure on fire resistant gasket.

7. Install flexible connections at inlet and outlet of exhaust fans. Shall be aluminium frame 24 gauge with fabric clenched by means of double locked seams. Dimensions 75mm (3") metal, 75mm (3") fabric, 75mm (3") metal. Neoprene double coated glass fabric, non-combustible, self-exhausting, airtight and waterproof, temperature rated at -40°F to +199°F and density of 39oz/yd2.

8. Ductwork is NOT required to be insulated.

Natural Gas Distribution System:

1. Gas piping is shown, and shall remain as existing.

2. Natural gas piping where required new or for alteration shall be black steel schedule 40 and installed in accordance with Ontario Gas Utilization Code and local utility requirements. Plug valves shall be installed at all gas fired equipment. Review of existing gas line and resizing, new gas line sizing and distribution shall be determined by Mechanical Contractor. HVAC Trade Contractor may re-use and relocate existing gas piping. Ensure "as new" finished installation.

Renovations

1. The mechanical contractor shall visit the Site and examine the existing mechanical conditions. Mechanical trade contractor to make allowances in price for removal/ relocation/ re-routing/ reconnection of existing mechanical equipment/ system as may be necessary for the completion of this project.

2. Mechanical equipment located in areas being altered or demolished, but serving other equipment required to remain is service shall be re-routed as required to maintain continuity of service.

3. Sequence of removal and relocation of existing equipment shall be coordinated with the other trades and Owner/Architect. System interruptions shall be kept to minimum.

4. All existing mechanical equipment which is not to be re-used shall become the property of the Owner. If the Owner decides they do not want it, the mechanical trade contractor shall dispose of it.

5. Mechanical trade contractor shall provide adequate protection to existing equipment throughout the project and particularly where equipment has become exposed to mechanical injury or moisture in the course of alterations or new construction.

Manufacturer's Representaion

1. Manufacturer of firestopping material (Hilti, 3M, etc.) is to provide firestopping listings to the satisfaction of building officials. Were necessary, mechanical trade contractor is to arrange manufacturer's preservative to visit site and meet with building officials and mechanical consultant.

2. Mechanical trade contractor shall consult with pipe material firestopping, support spacing, accommodation of expansion-contraction, proper solvent cementing procedure etc. during construction, manufacturer's preservative is to visit and review rough-in installation.

Submittals

1. Shop Drawings: refer to Section 013030.

   Operation and maintenance manual: Mechanical trade contractor shall supply to the Owner copy of operation and maintenance manual for all mechanical equipment. refer to section 200500 "Mechanical General Work Requirements".

2.

Testing and Balancing

1. New plumbing systems are to be tested to satisfaction of local authorities having jurisdictions.

2. Air Systems: Test all piping to agreed test pressure for compressed air system.

Legend of Related Mechanical Abbreviations:

ACC	-	Air Compressor Connection
AHU	-	Air Handling Unit
BBH	-	Base Board Heater
BD	-	Balancing Damper
BDD	-	BackDraft Damper
BF	-	Barrier-Free
BFP	-	BackFlow Preventer
BPD	-	By-pass Damper
BTU	-	British Thermal Unit
BTUH	-	British Thermal Unit per Hour
CB	-	Catch Basin
CFFD	-	Combined Funnel Floor Drain
CFM	-	Cubic Feet per Minute
CO	-	Clean Out or Carbon Monoxide
CO2	-	Carbon Dioxide
CSW	-	Cold Soft water
CTE	-	Connect to the Existing
DN	-	Down
DTBS	-	Down To Below Slab
EF	-	Exhaust Fan
EG	-	Exhaust Grille
EQUIP	-	Equipment
ERV	-	Energy Recovery Ventilator
ET	-	Expansion Tank
EX	-	Existing
EXIST	-	Existing
EXH	-	Exhaust
FA	-	From Above
FB	-	From Below
FD	-	Fire Damper
FD	-	Floor Drain
FDD	-	Funnel Floor Drain
FE	-	Fire Extinguisher
FEC	-	Fire Extinguisher Cabinet
FFH	-	Force Flow Heater
FHC	-	Fire Hose Cabinet
FM	-	Forcemain
FS	-	Float Switch
G	-	Gas
GA	-	Gauge
GAL	-	Gallon
GM	-	Gas Meter
GV	-	Gas Valve
HB	-	Hose Bib
HP	-	Horse Power
HRV	-	Heat Recovery Ventilator
HTR	-	Heater
HVAC	-	Heating Ventilation & Air Conditioning
HW	-	Hot Water or Hand Well
HWH	-	Hot Water Heater
HSW	-	Hot Soft Water
IRH	-	Infrared Heater
kPa	-	Kilopascal
LAV	-	Lavatory
L	-	Litre
LPS	-	Litres per Second
MD	-	Motorized Damper
MECH	-	Mechanical
MS	-	Mop Sink
MUA	-	Make Up Air
NFHB	-	Non-Freeze Hose Bib
NFWH	-	Non-Freeze Wall Hydrant
NO2	-	Nitrogen Dioxide
OED	-	Open Ended Duct
PG	-	Pressure Gauge
PRV	-	Pressure Reducing Valve
PT	-	Pressure Tank
RA	-	Return Air
RD	-	Roof Drain
RG	-	Return Grille
RH	-	Radiant Heater
RTU	-	Roof Top Unit
RWL	-	Rain Water Leader
SA	-	Supply Air
SAN	-	Sanitary
SD	-	Supply Diffuser
SP	-	Static Pressure or Sprinkler
SS	-	Stainless Steel Sink
STM	-	Storm
TA	-	To Above
TB	-	To Below
TD	-	Trench Drain
TEMP	-	Temperature
TG	-	Transfer Grille
TSTAT	-	Thermostat
U/C	-	Undercut
VAV	-	Variable Air Volume
VENT	-	Ventilated, Ventilator or Ventilation
VOL	-	Volume
WC	-	Washroom or Water Closet
WH	-	Wall Hung
WS	-	Water Softener
WV	-	Water Valve

No.	Issued for Purpose	Date	Initial
1	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmebly Types see Sheet A002
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For Interior Elevations see A800 series Sheets
For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

No.	Revision	Date	Initial

Project

Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title

Mechanical General Notes

Scale (for 36x48" printing) n.t.s.

Dwg. No. M001

John MacDonald Architect

Public Utilities Commission Building
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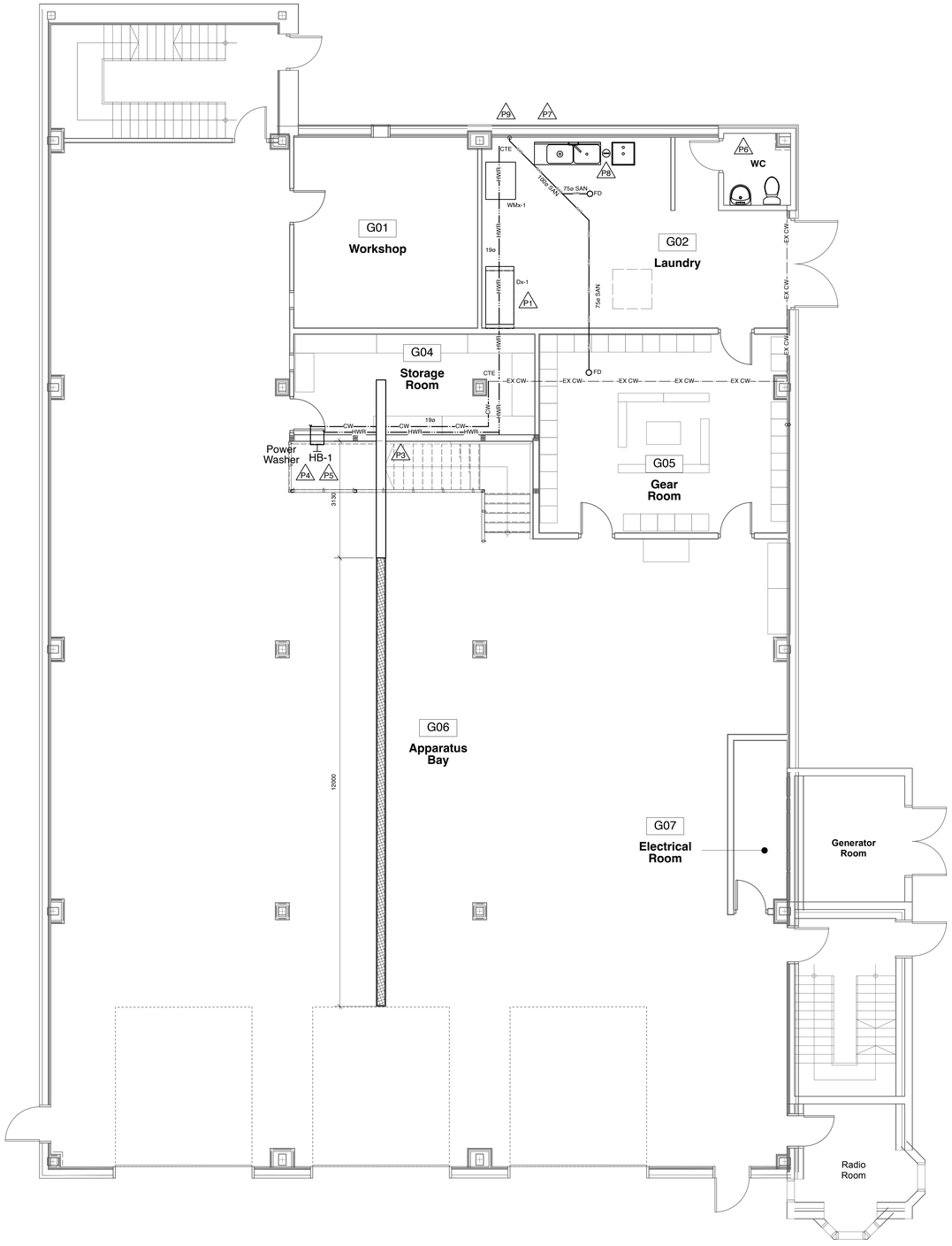

1 M101 Mechanical Plumbing Plan
1:50

Plumbing Fixture Schedule

Type	Fixture	Description	CW	HW	TW	DR	Vent	Remarks
S-X	Double Compartment Sink	Existing to remain	-		-	-	-	
MS-X	Mop Sink (Floor Mount)	Existing to remain	-	-	-	-	-	
HB-1	Indoor Hose Bib	Indoor mixing hot/cold water Bib	12.5 mm (1/2")	12.5 mm (1/2")	-	-	-	
FD	Floor Drain	FD-200-A	-	-	-	75	-	
WC-1	Water Closet	-	-	-	-	-	-	For the Mezzanine Washroom. No connection to service is requied.
LV-1	Lavatory	-	-	-	-	-	-	For the Mezzanine Washroom. No connection to service is requied.

Plumbing Legend:

Symbol	Description
—SAN—	sanitary above slab
—SAN—	sanitary below slab
-STM-	storm above slab
—STM—	storm below slab
-CW-	cold water
-CSW-	cold soft water
HW	hot water
REC	recirculating hot water
TW	tempered water
CO	clean out
FD	floor drain (75mm u.n.o.)
HD	hub drain (75mm u.n.o.)
RD	roof drain
NFHB	non-freeze hose bib
BD	balancing damper
FA	from above
FB	from below
TA	to above
TB	to below
DTBS	down to below slab
M	water meter
WC-1	Equipment Identification

Legend of Related Mechanical Abbreviations:

AD - Area Drain
BF - Barrier-Free
BFP - BackFlow Preventer
CFFD - Combined Funnel Floor Drain
CO - Clean Out
CS - Cold Soft water
CW - Cold Water
DTBS - Down To Below Slab
EQUIP - Equipment
ET - Expansion Tank
EX. - Existing
EXIST. - Existing
FA - From Above
FB - From Below
FD - Floor Drain
FDD - Funnel Floor Drain
FM - Forcemain
FS - Flow Switch
G - Gas
GA - Gauge
GAL - Gallon
GM - Gas Meter
GV - Gas Valve
HD - Hub Drain
HW - Hot Water
HWH - Hot Water Heater
LAV - Lavatory
L - Litre
MECH - Mechanical
NFHB - Non-Freeze Hose Bib
PG - Pressure Gauge
PRV - Pressure Reducing Valve
PT - Pressure Tank
RH - Radiant Heater
RWL - Rain Water Leader
SAN - Sanitary
SS - Stainless Steel Sink
STM - Storm
TA - To Above
TB - To Below
TD - Trench Drain
WC - Washroom or Water Closet
WH - Wall Hung
WS - Water Softener
WV - Water Valve

General Notes to Main Floor Plumbing Plan:

For General Notes to Plumbing and Mechanical Work see sheet M001.

All existing Plumbing to remain, no change u.n.o. or if required for removal and re-installation to accommodate other work.

Notes to Main Floor Plumbing Plan:

P1 Existing Dryer to be relocated, Follow the manufacturer instructions, take the required actions.

P2 Reserved.

P3 At this location note that new structural wall bridges the existing floor trench. Co-ordinate concrete removals work for wall footing with concrete adjacent trench to ensure trench remains undamaged.

P4 Provide New 1/2" hot/cold hose bibb kit.

P5 Relocate Power Washer to this location, including supply water line. Route line to acceptance of Consultant in concealed location.

P6 Plumbing to remain u.n.o.

P7 Rework all piping including compressed air to suit structural work to this wall.

P8 All Plumbing fixtures, piping and associated on this wall shall be removed as necessary for the new structural stud wall to be constructed. Following stud wall acceptance, re-install back all fixtures, piping and related items, and connect properly to water and sanitary pipes as required.

P9 Assumed location of main plumbing stack and exit of sanitary from building to septic system. Confirm prior to commencement of Work.

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3	90% Check Set	Jun 20 '24	JHM
P/T	for Permit/Tender	Jul 08 '24	JHM

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For Electrical see E series Sheets

Project North

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Mechanical Plumbing Plans

Scale (for 36x48" printing)
1:50

Dwg. No.
M101

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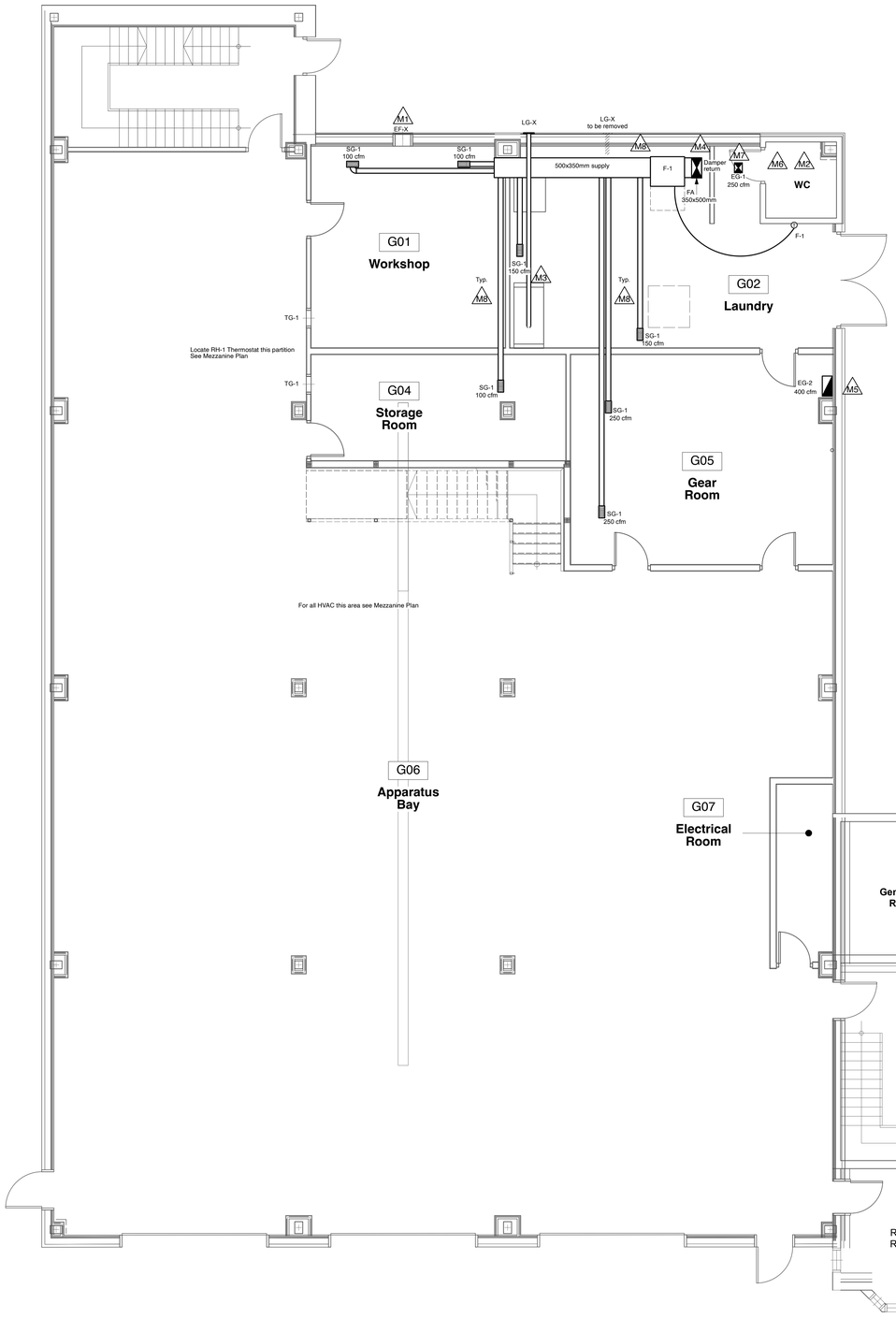


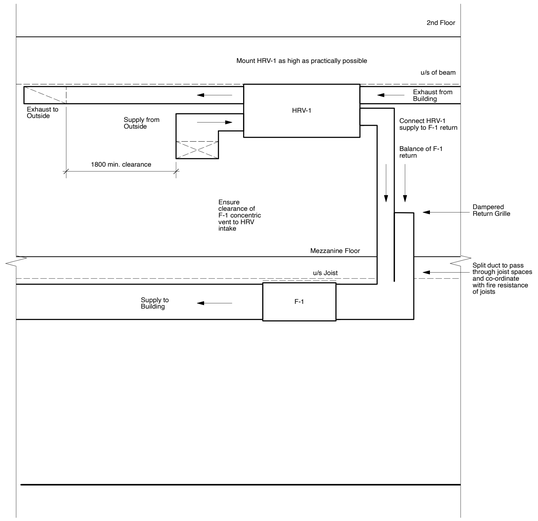
1 M201 Main Floor HVAC Plan 1:50

HVAC Equipment Schedule:

Type	Unit	Description	Electrical	Remarks	Weight	Dimensions		
						L	W	H
F-1	Furnace	Rheem Two Stage Multi position Gas Furnace, RE6TA0402317MSA, 42,000/29,400 BTU Heating 41,000 BTU/HR Cooling 1,162 W.C. E.S.P.	115V, 60HZ, 1 phase 1/2 H.P.	c/w 7day/24hr auto prog. T'stat, vent & comb. pipes, concentric wall vent termination kit vibration isolation. Interlock with HRV.				
HRV-1	Heat Recovery Ventilator	Heat Recovery Ventilator, Lifebreath 650fd (Fan Defrost), set at mid speed supply to air 500 cfm/exhaust air 500 cfm at 0.5" s.p.	120V/1/60 2.3, 3.0, 4.6 AMP rating	shall be complete with night set-back 99-DET01 controller, 7 day 24 hour time clock with wi-fi capability, air filter, timed exhaust frost control, frost control light, hand-off auto switch and on/off light, all condensate 19 ø indirect connection to nearest sanitary drain location.	-	1,067 mm (42")	845mm (33 1/4")	819 mm (32 1/4")
LG-X	Louvre Grille	Existing to remain	-	-	-	-	-	-
RH-1	Radiant Heater	Roberts Gordon CGTH-40 Caribe 40,000 btu/h , propane, c/w 24V t-package remote mounted, or equivalent	120V/1/60, 1.0 A	Straight tube, overall tube length 10', 3/8" gas connection, thermostat shall be remote mounted, c/w wall venting kits, indirect plug-in elec connection	-	3,505mm (11'6")	-	-
RH-X	Radiant Heater	Existing to remain	-	-	-	-	-	-
EF-X	Exhaust Fan	Existing for removal, salvage, and re-installation to new location	as Existing, Relocate	-	-	-	-	-

Grilles and Louvers Schedule:

Type	Unit	Description	Electrical	Remarks	Weight	Dimensions		
						L	W	H
SG-1	Supply Grille	Nailor 61DH-HD-O	-	250x150mm Steel Heavy Duty Spoly Grilles, double deflection.c/w balancing damper and boot. Check plans for Airflow. White Finish. Nailor or equivalent.	-	10" (250 mm)	6" (150 mm)	-
EG-1	Exhaust Grille	Nailor 67ECI-O) TYPE S	-	250x250mm Stainless Steel Eggcrate Return Grilles. Surface mount, white Finish, for ceiling or wall application	-	10" (250 mm)	10" (250 mm)	-
EG-2	Exhaust Grille	Nailor 67ECI-O) TYPE S	-	350x300mm Stainless Steel Eggcrate Return Grilles. Surface mount, white Finish, for ceiling or wall application . Provide damper where noted.	-	14" (350 mm)	14" (350 mm)	-
TG-1	Transfer Grille	Nailor 5155H	-	250x150mm Single Transfer Grille Sightproof. Colour white. Nailor or equivalent. For partition installation.	-	10" (250 mm)	6" (150 mm)	-
LV-1	Exterior Louver	Ventex 2425 flange frame	-	450x300mm prefinished exterior louvre , stormproof typ, depth 4-7/8" blade centre, 45 deg. Blade angle complete with birdscreen. Colour shall be match colour of exterior finish in which the louvre is located. Confirm colour with Consultant. Ventex or equivalent.	-	18" (450 mm)	12" (300 mm)	-



2 M201 HVAC Schematic Diagram 1:50

Mechanical Legend

Symbol	Description	Symbol	Description
	supply duct	—SAN—	sanitary above slab
	return or exhaust duct	—SAN—	sanitary below slab
A 100 ø 200 Supply Diffuser Type cfm grille		—ST—	storm above slab
		—ST—	storm below slab
EG1 75 150 x 200 Rt or E Grille Type cfm grille		—CW—	cold water
		—HW—	hot water
	acoustic insulation 13mm	REC	recirculating water
	thermal insulation 25mm	—CS—	cold soft water
F.D.	fire damper	G	gas line
M.D.	motorized damper	CO	clean out
B.D.	manual balancing damper	FD	floor drain (75mm u.n.o.)
RG	Return Grille	HD	hub drain (75mm u.n.o.)
EG	Exhaust Grille	RD	roof drain
TG	transfer grille	NFHB	non-freeze hose bib
T	thermostat	FATB	from above to below
S	speed control	FA	from above
EF-1	Equipment Identification	TB	to below
1.1	Owner's equipment (see Arch.)	DTBS	down to below slab

Legend of Related HVAC Abbreviations:

AHU - Air Handling Unit
BBH - Base Board Heater
BD - Balancing Damper
BDD - BackDraft Damper
BF - Barrier-Free
BPD - By-pass Damper
BTU - British Thermal Unit
BTUH - British Thermal Unit per Hour
CFM - Cubic Feet per Minute
CO - Carbon Monoxide
CO2 - Carbon Dioxide
EF - Exhaust Fan
EG - Exhaust Grille
EQUIP - Equipment
ERV - Energy Recovery Ventilator
EX. - Existing
EXIST. - Existing
EXH - Exhaust
FA - From Above
FB - From Below
FD - Fire Damper
FE - Fire Extinguisher
FFH - Force Flow Heater
FS - Flow Switch
GA - Gas
GAS - Gas
GM - Gas Meter
GV - Gas Valve
HP - Horse Power
HRV - Heat Recovery Ventilator
HTR - Heater
HVAC - Heating Ventilation & Air Conditioning
kPa - Kilopascal
MD - Motorized Damper
MECH - Mechanical
MUA - Make Up Air
OED - Open Ended Duct
RA - Return Air
RG - Return Grille
RH - Radiant Heater
SA - Supply Air
SD - Supply Diffuser
SP - Static Pressure or Sprinkler
TA - To Above
TB - To Below
TEMP - Temperature
TG - Transfer Grille
TSTAT - Thermostat
U/C - Undercut
VENT - Ventilated, Ventilator or Ventilation
VOL - Volume

General Notes to Main Floor HVAC:

All ductwork shall be steel, commercial grade thickness, c/w 25 mm insulation with vapour retarder outer cover for all ductwork within 1.8 m of exterior louvres.

Notes/Questions to Main Ground Floor:

M1 Relocate existing Exhaust fan from mezzanine to be in the Workshop on the Main Floor. See M202.

M2 Ex. Baseboard heater to remain.

M3 Ex. dryer exhaust duct and its wall grille are to be lowered to fit within the new joist space. Coordinate with general contractor. Current duct height is 2515mm floor to u/s duct.

M4 Connect HRV-1 supply to F-1 Return duct going down 356x200mm.

M5 Return to above, to HRV return ductwork at the Mezzanine level.

M6 Local fan duct to exterior 100 cfm operates on occ sensor for lights. Existing to remain.

M7 Connect with HRV duct above.

M8 Provide F-1 c/w suspension kit and flex connections. Mount at highest practical level, in horizontal orientation. Provide concentric vent kit to exterior and co-ordinate all holing and sealing with GC. See required sequence of operation this sheet and interlink with HRV-1. Ensure clearance space for maintenance of unit. Provide 25 mm filter and filter rack to R/A.

M9 125 ø supplies within joist space typ. Co-ordinate with fire resistance detail within joist space for full length of duct run.

F-1 sequence of operation

F-1 is controlled by 24/7 programmable thermostat with wi-fi and Owner remote monitoring capability. Locate thermostat in Ground Floor Laundry Room. Mechanical trade programs the thermostat for interlink to HRV time clock, such that when HRV-1 is activated the furnace shall run fan regardless of temperature control.

Fire Dampers and Protection

Note that mezzanine structure has fire-resistance rating but is not a fire separation. Fire dampers are not required for penetrations through the assembly. All mechanical HVAC located within the assembly shall be installed in stud and joist spaces which are lined with 16 mm (5/8") Type X wallboard to ensure continuity of fire-resistance rating to the partition and/or floor assembly wherever ducts, grilles, diffusers, or transfers are located in the assembly. Mechanical Trade Contractor shall co-ordinate this work with the Contractor.

No.	Issued for Purpose	Date	Initial
1	Issued for Comment	Sept 19 '22	JHM
2	65% Documents	Nov. 18 '22	JHM
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P/T	for Permit/Tender	Jul 08 '24	JHM

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For Electrical see E series Sheets

Project North

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Mechanical HVAC
Main Floor Plan

Scale (for 36x48" printing) 1:50
Dwg. No. M201

John MacDonald Architect
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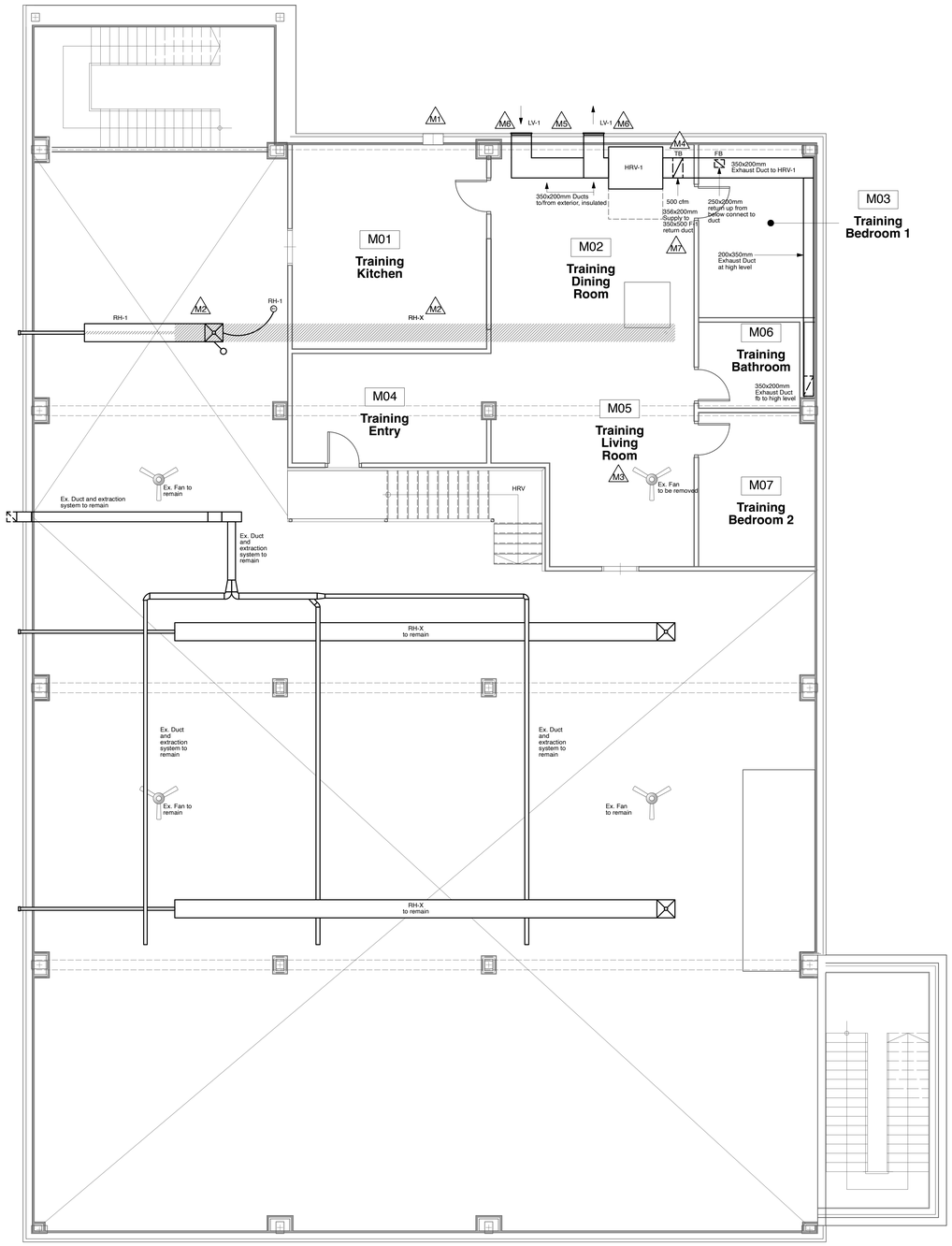

1 M202 Mezzanine HVAC Plan
1:50

Mechanical Legend

Symbol	Description	Symbol	Description
	supply duct	—SAN—	sanitary above slab
	return or exhaust duct	—SAN—	sanitary below slab
A 100 ø 200 Supply Diffuser Type cfm grille		—ST—	storm above slab
		—ST—	storm below slab
EG1 75 150 x 200 R or E Grille Type cfm grille		—CW—	cold water
		—HW—	hot water
	acoustic insulation 13mm	REC	recirculating water
	thermal insulation 25mm	—CS—	cold soft water
F.D.	fire damper	—G—	gas line
M.D.	motorized damper	CO	clean out
B.D.	manual balancing damper	FD	floor drain (75mm u.n.o.)
RG	Return Grille	HD	hub drain (75mm u.n.o.)
EG	Exhaust Grille	RD	roof drain
TG	transfer grille	NFHB	non-freeze hose bib
T	thermostat	FATB	from above to below
S	speed control	FA	from above
EF-1	Equipment Identification	TB	to below
1.1	Owner's equipment (see Arch.)	DTBS	down to below slab

Legend of Related HVAC Abbreviations:

AHU	-	Air Handling Unit
BBH	-	Base Board Heater
BD	-	Balancing Damper
BDD	-	BackDraft Damper
BF	-	Barrier-Free
BPD	-	By-pass Damper
BTU	-	British Thermal Unit
BTUH	-	British Thermal Unit per Hour
CFM	-	Cubic Feet per Minute
CO	-	Carbon Monoxide
CO2	-	Carbon Dioxide
EF	-	Exhaust Fan
EG	-	Exhaust Grille
EQUIP	-	Equipment
ERV	-	Energy Recovery Ventilator
EX.	-	Existing
EXIST.	-	Existing
EXH	-	Exhaust
FA	-	From Above
FB	-	From Below
FD	-	Fire Damper
FE	-	Fire Extinguisher
FFH	-	Force Flow Heater
FS	-	Flow Switch
G	-	Gas
GA	-	Garage
GM	-	Gas Meter
GV	-	Gas Valve
HP	-	Horse Power
HRV	-	Heat Recovery Ventilator
HTR	-	Heater
HVAC	-	Heating Ventilation & Air Conditioning
kPa	-	Kilopascal
MD	-	Motorized Damper
MECH	-	Mechanical
MUA	-	Make Up Air
OED	-	Open Ended Duct
RA	-	Return Air
RG	-	Return Grille
RH	-	Radiant Heater
SA	-	Supply Air
SD	-	Supply Diffuser
SP	-	Static Pressure or Sprinkler
TA	-	To Above
TB	-	To Below
TEMP	-	Temperature
TG	-	Transfer Grille
TSTAT	-	Thermostat
U/C	-	Undercut
VENT	-	Ventilated, Ventilator or Ventilation
VOL	-	Volume

General Notes to Mezzanine HVAC Plan:

See Sheet M001 for notes and specifications.

All ductwork shall be steel, commercial grade thickness.

All ductwork within 1.8 m of exterior louvres shall be c/w 25 mm insulation with vapour retarder outer cover.

Notes to Mezzanine HVAC Plan:

M1. Relocate existing Exhaust fan from this location on the Mezzanine to lower level within Workshop. Provide new opening to exterior and seal. Blank off existing opening.

M3. Existing Radiant Heater to be removed, and replaced with the new RH-1 Radiant Heater. Take the required actions. Relocation of elec for the Radiant heat unit is by elec trade. Relocation of gas and all provisions for venting and combustion air shall be provided by Mechanical. Co-ordinate any holing to exterior wall with GC. Relocate RH-1 thermstat or interlink with existing thermostat to suit the new layout.

M3. Existing Fan to be removed, take the required actions.

M4. Suspend HRV with suspension kit from slab above. Provide all ducts, penetrations and louvres for connections to exterior, including louvre plenums and insulation. Connect return ductwork to HRV and connect tempered HRV supply air to F-1 return duct going down. All ducts 356x200mm unless noted otherwise.

M5. Ensure clearance of louvres to Code and co-ordinate with exterior finishes. Mount at differing heights to achieve clearance and provide all transitions to ductwork.

M6. Provide duct to exterior and Exterior Grille LV-1.

M7. Provide ducted 356 by 356 return to F-1 with dampered grille for balance of return air to F-1

HRV sequence of operation

HRV is started and stopped by 24/7 programmable time clock with wi-fi and Owner web-based monitoring capability. Locate time clock in Ground Floor Laundry Room adjacent F-1. Mechanical trade provides and programs the LV time clock to Owner instruction and for interface with HRV 2-speed 99-BC02 controller. Do not operate HRV by interruption of power to unit.

Fire Dampers and Protection

Note that mezzanine structure has fire-resistance rating but is not a fire separation. Fire dampers are not required for penetrations through assembly. All mechanical penetrations through fire-rated assembly shall be installed in stud and joist spaces which are lined with 16 mm (5/8") Type X wallboard to ensure continuity of fire-resistance rating to the partition and/or floor assembly wherever ducts, grilles, diffusers, or transfers are located in the assembly. Mechanical Trade Contractor shall co-ordinate this work with the Contractor.

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Project North

NOT FOR CONSTRUCTION

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title

Mechanical HVAC
Mezzanine Floor Plan

Scale (for 36x48" printing)
1:50

Dwg. No.
M202

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Electrical General Notes and Specifications:

General:

All work shall be in full accordance with the requirements of the Canadian Electrical Code, Electrical Safety Authority (ESA),authorities having jurisdiction and local inspection requirements.

The Electrical Trade Contractor shall incorporate all notes & requirements related to general contract terms and conditions and Division 1 requirements as if repeated here. Include all costs for work described as the responsibility of the Trade Contractor and all other terms and conditions of the Trade Contract as provided by the Owner and/or Contractor.

This trade contractor is required to pay all fees to the ESA & local authorities for field inspections and electrical permit.

The Contractor shall submit a complete set of drawings to the inspection department of the authorities having jurisdiction for approval, including ESA, and pay all required fees, inspection, printing, and application costs.

This trade contractor shall maintain adequate liability insurance acceptable to the Owner and Contractor.

All workmanship shall be executed to a standard determined by best practice.

Review all bid forms and furnish all pricing to the bidding contractors. Bidding shall be based upon the specified equipment and material. Requests for consideration of alternatives to the specified equipment and/or materials shall be made in accordance with the Owner's instructions to bidders prior to bid closing and shall include manufacturer and model. Costs of any change required to other trades as a result of using alternatives are to be incurred by the electrical trade contractor and are included in the bid price.

The Owners reserve the right to alter the location of any item up to 3m without incurring extra costs, provided the request is made prior to installation.

All material and equipment used on this project shall meet specification requirements, and the standard established by the selected products as determined by the Consultant.

All material and equipment used on this project shall be CSA approved or must bear an Ontario Hydro Commission special approval label, or must be accepted by the authorities having jurisdiction.

All cutting and patching for electrical work shall be done by the contractor at the electrical trade contractor's expense, unless other arrangements are previously set out in writing.

The electrical drawings shall be read in conjunction with the architectural, structural, & mechanical drawings. Any discrepancies or contradictions shall be brought to the Owner's attention. In all cases the most expensive provision shall govern.

The electrical Trade Contractor shall investigate the Existing Conditions prior to submitting a price for the work. Submission of a price shall be deemed proof of such investigation.

Electrical trade contractor shall provide submittals in accordance with the general requirements outlined the Shortfrom Div. 01. Materials shall not be ordered until review has been completed. Consultant acceptance is for general design and arrangement only. Submit catalogue cuts for all electrical components in the Work whether specifically identified in the Documents or not.

Dimensions and graphic descriptions shall be read as diagrammatic only. Make reference to architectural drawings for further information regarding placement of items. In case of uncertainty, obtain clarification from Consultant.

The electrical utilization voltage shall be as existing.

Provide construction lighting in cooperation with Contractor. All temporary lighting and power during construction shall be by the General Contractor's arrangements with the Electrical Trade Contractor.

Support equipment and fixtures in accordance with Code requirements and include all costs for this work in the Contract Price. Electrical Trade Contractor coordinates responsibility with Contractor for provision of all support elements, including framing if required, prior to submission of pricing for the Work.

Provide fire-stopping to all openings and penetrations through all fire separations and rated assemblies, whether existing or new, in accordance with fire and smoke separation system requirements and to the standards of the architectural specifications. Only a single manufacturer of fire-stopping materials is permitted on this project. Coordinate with the general contractor.

All workmanship shall be executed to a standard determined by good practice and the requirements of this contract, whichever is the more stringent. The electrical trade contractor shall warrant the installation in accordance with the general requirements outlined in the Shortform Div. 01, for one year from substantial performance. Provide extended warrants as indicated elsewhere in this specification.

Charges for premium time labour required to complete the work construction schedule and interim milestones are included in the tender price, allowing for hours, weekend and holiday labout requirements.

Circuiting & Devices:

Provide all devices to Code (including splits, arc Fault breakers for bedroom, etc.).

All branch circuit wiring shall be run in Electrical Metallic Tubing (E.M.T) or flexible armoured cable (AC90) recessed in walls or ceilings except where specifically noted on the plans. No wiring smaller than #12 gauge shall be used. all wiring to be copper.

All surface wiring shall be T90 copper in EMT conduit where wiring and conduit cannot be recessed.

All devices mounted on the existing concrete floor slab to be surface mounted.

All devices mounted to concrete block shall be fed through the block cores.

Supply all labour and materials to provide electrical complete with feeders and branch circuits for finished and functioning system to approval of authorities, including all devices shown in the documents. Provide all devices, wiring, accessories, and any other items reasonably inferable as necessary to the system, whether indicated specifically by the documents or not, without further cost to the Owner.

All junction boxes are to be accessible and be provided with screwed plates colour matched to adjacent wall or ceiling finishes. All conduits and cables to be securely fastened with approved clips and screws. Nails or tie wires are not acceptable.

All wiring shall be parallel with architectural lines and design, grouped for least intrusion in the Work.

Provide a pull string in all empty conduit. Pull boxes shall be provided every 30m and every two 90 degrees bends.

Flexible conduit shall be used for fixture and equipment connections. Wiring to fixtures in suspended ceilings to consist of AC90 'DROPS' with a maximum length of 4.5m (15 feet) and T90 wiring in EMT conduit back to source.

Do not mount wall outlets back to back in walls, stagger to prevent sound transfer.

Electrical Equipment:

All branch circuit wiring shall be recessed in walls or ceilings. No wiring smaller than #12 gauge shall be used. All wiring to be copper.

The electrical service equipment and each circuit system shall be permanently and effectively grounded/bonded in accordance with the ontario electrical safety code. See specifications.

All electrical equipment must be properly identified with name plates on panels and have a typed directory of installed circuitry.

All electrical panels to have bolt-on breakers and lockable doors.

All electrical equipment, devices, and wiring are to be independently supported. Keep clear of mechanical piping where possible. Wiring for mechanical equipment shall be as detailed on the plans.
All switch and receptacle plates shall be to Owner's selection.

Device mounting heights shall be confirmed by the Electrical Trade Contractor to the Consultant prior to rough-in. Ensure power & communication devices have equal heights. Generally, heights shall be as follows:

Light switches	1100mm
Receptacle	400mm
Telephone Outlets	400mm
End of line resistors	1700mm
Universals Washroom control	1000mm
Universal Washroom Audible/Visual	2300mm
Thermostats	1200mm
Power Door Operators	1000mm
Other Building Controls	1000mm

Wiring for mechanical equipment shall be in strict accordance with written instructions from the equipment manufacturer.

The electrical contractor is to provide 21mm (3/4") conduit raceway between mechanical equipment and controls as per mechanical and electrical plans.

Lighting and Lighting Fixtures:

Electrical trade contractor shall install all fixtures and lamps as per the manufacturers' written instructions.

All luminaires are to have a colour temperature of 3500k unless otherwise agreed with the Owner.

Install all fixtures parallel with building lines unless indicated otherwise.

All fixtures located within ceilings having a fire resistance rating shall be installed in accordance to Detail 1/E0.
Co-ordinate w/ contractor who is responsible for framing all ceiling fixture rated box surrounds prior to fixture installation. Ensure all clearance measurements from light fixtures & their housing is in accordance with codes & manufacturer's written instructions. Adjust Detail 1/E0 for depth of blocking and rating in order to achieve greater clearances to fixture housings.

Lighting control wiring is to be plenum rated (FT6). Lighting control wiring that runs in a shared raceway is to be rated for the highest voltage in that raceway.

Provide safety 'Jack Chain' on all fixtures installed in suspended ceilings.

Install a separate neutral conductor to each branch circuit feeding light fixtures.

The electrical contractor shall supply and install lighting fixtures as noted on the electrical plans but locate them in accordance with architectural layout in case of discrepancy. Confirm layout with Consultant prior to rough-in.

Communication Equipment:

Not applicable this Contract.

Where Owner elects to add such wiring and/or devices, cooperate with the Owner's nominated trade contractor and provide rough-in work as additional to Contract.

Wiring to Telephone, Data, TV, and Sound:

Not applicable this Contract.

Where Owner elects to add such wiring and/or devices, cooperate with the Owner's nominated trade contractor and provide rough-in work as additional to Contract.

Notes to Circuitry:

Taking heed of electrical switching diagramming and existing conditions, ensure circuitry and wiring is sized to meet deratings and wattage use for all circuits.

Notes to Electrical Service:

Electrical Contractor shall test operating current draw of all equipment and shall provide circuits to ensure balanced draw for panel phases.

Electrical Service for this project is existing to remain.

Provide bonding and grounding to all existing and new, in accordance with the latest Electrical Safety Code.

All panels and electrical equipment shall be surface mounted on fire-retardant treated painted ply backboard.

Notes to Ceiling Areas:

The Electrical Trade Contractor shall identify all proposed items of electrical requiring service or inspection access within the ceiling space as required for access to Code.

Provide all access doors to specification and pay all costs. Access in fire-rated membranes shall be rated models to suit.

Ceiling access in GWB ceilings to be eliminated completely wherever possible. Plan distribution accordingly.

Layout of all work is by General Contractor.
Trades do not locate devices.

Notes to Elec Distribution:

Feeds to outlets and door operator shall be routed within membranes and partitions. No distribution shall be exposed in the finished work u.n.o.

All branch circuit wiring shall be run in electrical metallic tubing (E.M.T.) from existing junction in ceiling. No Bx cabling shall be used in masonry. No wiring smaller than #12 gauge shall be used. All wiring shall be copper.

Notes to Emergency Lighting and Exit Signage:

Provide separate circuits as necessary for emergency lighting and exit signage devices . See schedules for devices. Locate to acceptance of Consultant and Authorities Having Jurisdiction.

Exit fixtures are to be provided with graphical symbols indicating the path of egress from the building.

The electrical contractor shall supply and install a DC battery lighting system if indicated on the plans or in the Schedules. The battery unit shall be provided with sealed long life batteries.

Emergency lighting fixtures shall be supplied with minimum 4W LED MR16 lamps or 3W LED PAR18 lamps unless scheduled otherwise.

Emergency light fixtures and battery are to be tested to conform to requirements of code. Submit certification letter to Owner and to Authorities for all devices.

Caution:

Not all electrical work is shown on these drawings. The drawings are diagrammatic to support the Trade Contractor's further required design of the electrical system.

Trade Contractor shall verify all selections and locations of devices and equipment prior to beginning circuiting design and rough-in work.

Existing Conditions:

1. The electrical trade contractor shall visit the place of the work and site, shall examine the existing conditions and the existing documents, and shall include in their Tender price for all removals, relocations, re-routing and/or reconnections of existing electrical equipment and wiring, as necessary for execution of the work.
2. Service and distribution system power interruptions shall be kept to a minimum. Power interruptions must be coordinated with the owner and all other trades by this contractor. Written approval for electrical interruptions must be received from the owner indicating the date, time and estimated duration of the interruption. Application for approval of the power interruptions must be submitted to the owners and/or architects at least two weeks prior to the requested shutdown date.
3. Existing electrical equipment, removed and indicated for reuse, shall be cleaned, repaired and repainted (if required) before re-installation.
4. Wiring located in areas being altered or demolished, but feeding outlets or equipment to remain in service, must be reworked in order to maintain the continuity of these services.
5. Repairs to existing walls, floors, and ceilings are to be performed by the general contractor to meet the existing conditions.
6. Sequence of removal and relocation of existing equipment and wiring shall be coordinated with the other trades and shall conform to the requirements and conditions outlined.
7. The contractor shall provide adequate protection to existing wiring and equipment throughout the project, particularly where wiring and electrical equipment have become exposed to mechanical damage or moisture in the course of alternations or new construction.
8. In some instances, new outlets and equipment are shown in the same location as existing outlets. these may be fed through the existing conduits provided that the conduits and wiring are in good condition and are acceptable to the ESA inspection department as reusable. All unused conduit entrance openings shall be sealed.

Selective Demolition and Removals:

1. All selective demolition and removals shall be undertaken in accordance with section 024119 and this specification.
2. Existing electrical equipment, wiring, and rough-in devices are to be removed completely to suit the demolition and renovation of the spaces. All existing electrical equipment removed which is not being re-used, shall become the property of the owner. If the owner decides that he does not want it, the electrical contractor shall be responsible for disposing it.
3. Remove and transport from the construction site all equipment made obsolete at completion of the work.
4. All PCB/PCB ballasts (i.e. transformers and ballasts) are to be collected and shipped to a recycling company specializing in PCB containment. Provide consultant with receipt indicating such items have been disposed of safely. all costs for such recycling are included in the contract price, by the electrical trade contractor.

Close Out Procedures:

1. Provide close-out documentation in accordance with this specification and the general requirements of Div. 01 series sheets as if repeated herein.
2. Electrical contractor to submit ESA certificate of inspections and signed copy of emergency lighting test report.
3. Emergency lighting test report to provide written verification that the emergency lighting was tested to determine the runtime of the lighting when normal power is lost.
4. Electrical contractor to provide training sessions to the owner of all major electrical systems including lighting controls.
5. Electrical contractor is to provide record drawings of actual installation to owners within 30 days of project completion. Drawings are to include single line diagram of distribution system and floor plans showing the location of distribution system and floor plans showing the location of distribution equipment and the areas served by that equipment.
6. Electrical contractor is to provide operation and maintenance manuals of electrical distribution system to owners. The manuals must include equipment nameplate ratings, installed options and accessories, required maintenance procedures (routine and otherwise), names and addresses of at least one qualified service agency, and a clear indication of the purpose and operation of each piece of equipment (individually and as a system).
7. After completion of work remove all debris and waste.
8. All major systems to be commissioned by manufacturers representative including lighting control systems.
9. Lighting control system testing is to include occupancy sensor placement, sensitivity, and control setting calibration. Properly operating occupancy sensors are to turn off lights within a reasonable period of time in unoccupied spaces and shall not turn lights on unless a space is occupied. All lighting control system testing is to be performed by manufacturers representative at electrician's expense. Testing certification is to be included in close-out documents.

Reviews By Consultant:

1. Contractor to contact consultants office to notify when reviews are required. Allow for minimum three business days of notice prior to review.
2. Reviews are required at the following milestones:
   2.1 Device rough-in (prior to drywall)
   2.2. Final inspection.

Extended Warranties:

1. Provide in extended warranty for two years on all exit and emergency lighting batteries.
2. Provide an extended warranty for five years on all led luminaries including driver replacement.

New Subpanel LP-B (24 cct.)
Mains Amperage: 100 A
Voltage: 120/208 V 1P
Mounting: Surface Drip Proof: No

Circuit Description		A	B		Circuit Description
Furnace F-1	15A	1	2	A	2P relocated equipment cct from LP-A
HRV-1	15A	3	4		
New Lighting Grd F	15A	5	6	15A	New Lighting Mezzanine
New Receptacles Grd F	15A	7	8	15A	New Receptacles Mezzanine
New Receptacles GFI GF	15A	9	10	15A	New Receptacles Mezzanine
Relocated cct from LP-A	A	11	12	A	Relocated cct from LP-A
	15A	13	14	15A	Spare
Spare	15A	15	16	15A	Spare
Spare	20A	17	18	20A	Spare
Spare	15A	19	20	15A	Spare
Blank		21	22		Blank
Blank		23	24		Blank

List of Electrical Documents:

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit and Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmelty Types see Sheet A002
For Floor Plans see A200 series Sheets
For Building Sections see A400 series Sheets
For Wall Sections see A600 series Sheets
For Stair Details see A700 series Sheets
For Section Details see A730 series Sheets
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For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

No.	Revision	Date	Initial

Project

Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title

Electrical General Notes

Scale (for 36x48" printing)

n.t.s.

Dwg. No.

E001

John MacDonald Architect

Public Utilities Commission Building
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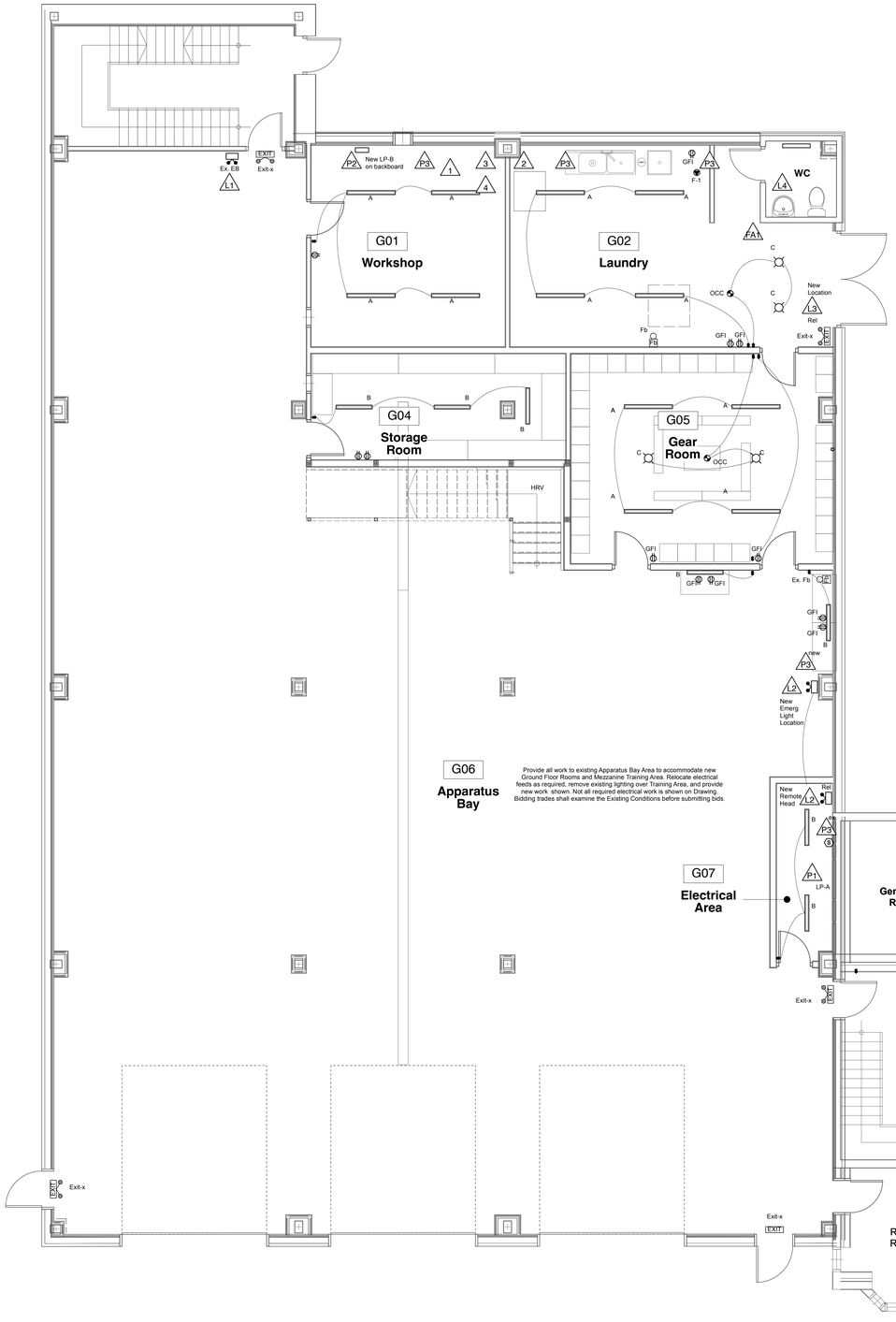

1 / E211 Main Floor Lighting and Power Plan
1:50

Light Fixture Schedule:

Type	Req'd	Description	Location	Notes
A	New	Metalux, 4SWLED-20SL-LW-UNV-L835-CD2, Surface LED, 4' linear, 120V	Surface mounted, Ceiling	
B	New	Metalux, 3SWLED-20SL-LW-UNV-L835-CD2, Surface LED, 3' linear, 120V	Surface mounted	Mount on ceiling or wall, depending upon location. See Plan.
C	New	Halo, SMD12RTRMWH. Round Surface Mount Downlight, UNV 120V–277V options, 2000 lumen	Surface mounted, Ceiling	Provide compatible occupancy switch and/or 0-10V dimmer, wherever noted on drawings
OCC	New	Greengate, OAC-P-1500-DMV-MicroSet PIR, 360 Degree	Surface mounted, Ceiling	see RCP for layout
		Emergency Lighting and Signage	Surface mounted, wall	To Match Existing

NOTE: All light fixtures to the new Grpund Floor enclosed area and Mezzanine Training Area are new. Provide all trim to suit ceiling and wall conditions at each location. Provide all switching and dimming to Owner instruction, as shown, and for occupancy sensors where shown.

Wiring for Mechanical Equipment Schedule

Equipment		Remarks
Symbol	Description	
F-1	Furnace	Supplied by HVAC Trade Contractor, for power feed connection by Electrical.
HRV-1	Heat Recovery Ventilator	Supplied by HVAC Trade Contractor, for power feed connection by Electrical.
RH-1	Radiant Heater	Supplied by HVAC Trade Contractor, for power feed connection by Electrical relocated from existing locaiton.

Mechanical Equipment Work by the Electrical Trade Contractor:

Electrical Trade Contractor provides (supplies and installs) all hand dryers and force flow heaters complete, wherever shown on drawings. These are not architectural or mechanical items.

See Sheet E001 for further Electrical / Mechanical Co-ordination

General Note to Phone/Data and Camera/Security Work:

See notes Sheet E001.

General Notes to Main Floor Lighting & Power Plan:

See Notes Sheet E001.

All lighting fixtures in the area of work shall be removed, and replaced with new fixtures in accordance with Lighting plans.

All light fixtures are new. Provide all trim to suit ceiling and wall condition. Provide all switching to Owner instruction, and occupancy sensors where shown.

Note that powerpacks and other required lighting products to suit the lighting as scheduled are not shown on drawings. The Work requires all products, wiring for power and control, occupancy sensors, and override switches as necessary for the installation and performance of the Interior Lighting System.

All emergency light fixtures and battery shall be tested to conform to requirements of code. Submit certification letter to Owner and to Authorities.

Notes to Main Floor Lighting Power Plan & Fire Alarm:

P1. Existing LP-A to this location. Investigate circuits to identify three circuits serving rear area of building, and relocate these circuits and all wiring to new equivalent breakers in new subpanel LP-B at rear of building. See plan for location. Re-organize ccts. within panel as required to provide new 100A three-pole breaker for feed new 100A LP-B. Feed LP-B with appropriate wire size and conduit across underside of slab above.

P2. Provide new LP-B panel on ply backboard to this location. See schedule, Sheet E001. Note that panel shall be installed after completion of all structural studwork and new interior finish to this wall. Provide new cct's for new construction and to accommodae existing cct's relocated from LP-1

P3. To this wall provide all work to disconnect and temporarily remove electrical items and feeds located on this wall, to facilitate construction of new loadbearing stud wall along this existing exterior wall. Upon completion of stud wall construction perform all work to refeed the existing through the new stud wall.

P4. Relocate electrical devices for battery charging this locatation to the new location.

L1. Relocate the Emergency light from the other side of the door to this location inside the Workshop, take the required actions.

L2. Relocate the ex. Emergency light to new location further along wall, to provide coverage to the Apparatus Bay Area as existing. Provide further remote emergency head fed from the relocated emergency light to provide emergency lighting to Electrical Area.

L3. Relocate ex. Exit sign from above the door to this location, take the required actions.

L4. Existing Lighting and local switch to WC to remain.

1. Relocate existing Exhaust fan electrical feed to new location within the Workshop, in cooperation with Mechanical Trade Contractor.

2. Relocate existing compressed air device to the next column in the Apparatus Bay, take the required actions.

3. Relocate power feed to the Fire Truck Exhaust System control board to suit new location shown on Mechanical Drawings or as selected by Consultant.

4. Relocate the existing power feed to the Vacuum unit to a location on adjacent wall of the new Workshop Room.

FA. Evaluate audibility of fire alarm bell in this room. If deficient, install new 150 dia bell by Owner's forces to this location.

Electrical Legend - Power

	Duplex receptacle	T	Thermostat (R = reverse acting)
	Duplex receptacle (100mm above counter backsplash, or as shown)		Direct electrical connection
	20A T-slot receptacle		Motor
	20A T-slot receptacle (100mm above counter backsplash, or as shown)		Unfused disconnect switch
	Duplex receptacle, controlled by switch		Power panel
	Special receptacle	M	Meter
GFI	Ground Fault Protection	CR	Card Reader
WP	Weatherproof	ES	Electric Strike
FL	Floor Mounted	DC	Door Contact
CL	Ceiling Mounted	JB	Junction Box
IG	Isolated Ground to Receptacle	DH	Door Hold Opener
	Telephone outlet		Push Button
	Telephone outlet (100mm above counter backsplash, or as shown)		Speaker
	Data outlet	R	Relay
	Data outlet (100mm above counter backsplash, or as shown)	J	J-Hook
	Tele/Data outlet	CCTV	Security CCTV Camera
	Tele/Data outlet (100mm above counter backsplash, or as shown)	FA	Fire Alarm Bell

Electrical Legend - Lighting

A	Light fixture (type as per schedule)
A	Night Light fixture (type as per schedule)
	Wall-mounted light cove (type as per schedule)
A	Light fixture (type as per schedule)
A	Night Light fixture (type as per schedule)
A	Wall Mounted Light fixture (type as per schedule)
A	Wall Mounted Night Light fixture (type as per schedule)
	Ceiling Mounted Exit Light (shaded portion indicates face)
	Wall Mounted Exit Light (shaded portion indicates face)
	Directional Exit Light (shaded portion indicates face)
	Emergency Battery Unit c/w Emergency Lighting Heads
	Remote Emergency Lighting Head (double, as shown)
	Remote Emergency Lighting Head (single, as shown)
	Emergency Battery Unit
$	Toggle switch (3,4 = 3 or 4 way, k = key operated)
	Motion Sensor (type as per schedule)

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit and Tender	Jul 08 '24	JHM

General Notes:

For General Notes & Cover see Sheet A001
For OBC Matrix, Data and Assmebly Types see Sheet A002
For Floor Plans see A200 series Sheets
For Building Sections see A400 series Sheets
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For Stair Details see A700 series Sheets
For Section Details see A730 series Sheets
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For Schedules see A900 series Sheets
For Structural see S series Sheets
For Mechanical see M series Sheets
For Electrical see E series Sheets

Project North

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved
Checked JHM
Drawn SH

Drawing Title
Electrical Lighting & Power Main Floor Plan

Scale (for 36x48" printing) 1:50

Dwg. No. E211

John MacDonald Architect
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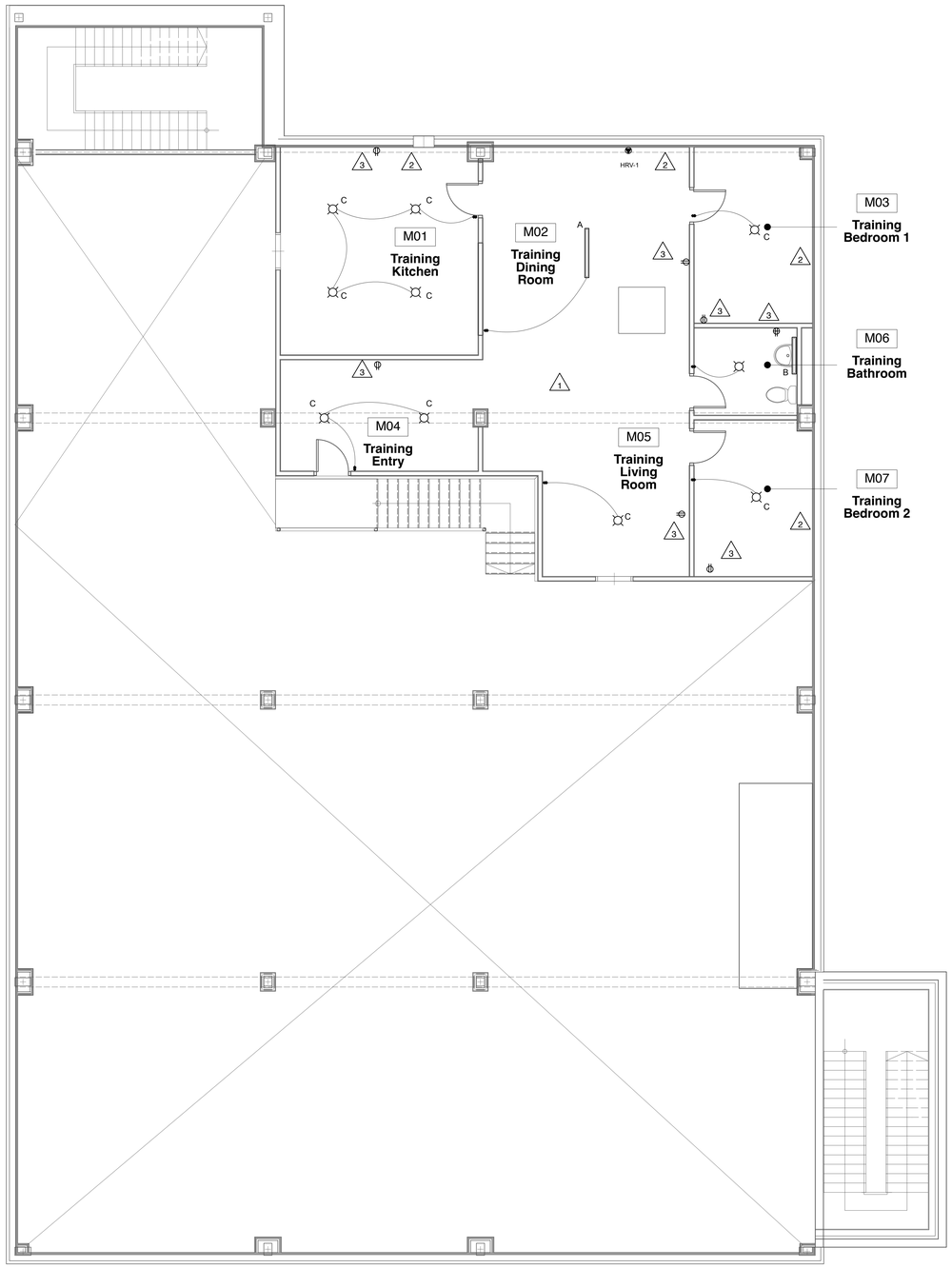

1 Mezzanine Lighting and Power Plan
E212 1:50

Electrical Legend - Power

	Duplex receptacle	T	Thermostat (R = reverse acting)
	Duplex receptacle (100mm above counter backsplash, or as shown)		Direct electrical connection
	20A T-slot receptacle		Motor
	20A T-slot receptacle (100mm above counter backsplash, or as shown)		Unfused disconnect switch
	Duplex receptacle, controlled by switch		Power panel
	Special receptacle	M	Meter
GFI	Ground Fault Protection	CR	Card Reader
WP	Weatherproof	ES	Electric Strike
FL	Floor Mounted	DC	Door Contact
CL	Ceiling Mounted	JB	Junction Box
IG	Isolated Ground to Receptacle	DH	Door Hold Opener
	Telephone outlet		Push Button
	Telephone outlet (100mm above counter backsplash, or as shown)		Speaker
	Data outlet	R	Relay
	Data outlet (100mm above counter backsplash, or as shown)	J	J-Hook
	Tele/Data outlet		Security CCTV Camera
	Tele/Data outlet (100mm above counter backsplash, or as shown)	FA	Fire Alarm Bell

Electrical Legend - Lighting

A	Light fixture (type as per schedule)
A	Night Light fixture (type as per schedule)
	Wall-mounted light cove (type as per schedule)
A	Light fixture (type as per schedule)
A	Night Light fixture (type as per schedule)
A	Wall Mounted Light fixture (type as per schedule)
A	Wall Mounted Night Light fixture (type as per schedule)
	Ceiling Mounted Exit Light (shaded portion indicates face)
	Wall Mounted Exit Light (shaded portion indicates face)
	Directional Exit Light (shaded portion indicates face)
	Emergency Battery Unit c/w Emergency Lighting Heads
	Remote Emergency Lighting Head (double, as shown)
	Remote Emergency Lighting Head (single, as shown)
	Emergency Battery Unit
$	Toggle switch (3,4 = 3 or 4 way, k = key operated)
	Motion Sensor (type as per schedule)

General Notes to Mezzanine Lighting & Power Plan:

See Notes Sheet E001.

Existing lighting fixtures in the area of work shall be removed, and replaced with new fixtures in accordance with Lighting plans.

All light fixtures are new. Provide all trim to suit ceiling and wall condition. Provide all switching to Owner instruction, and occupancy sensors where shown.

Note that powerpacks and other required lighting products to suit the lighting as scheduled are not shown on drawings. The Work requires all products, wiring for power and control, occupancy sensors, and override switches as necessary for the installation and performance of the Interior Lighting System.

All emergency light fixtures and battery shall be tested to conform to requirements of code. Submit certification letter to Owner and to Authorities.

Notes to Mezzanine Lighting and Power Plan:

1. Remove existing fixtures to ceiling of this area. Relocate existing connection for radiant heat unit to new location. See Mechanical for new Location.
2. Provide all removals necessary to this wall to facilitate installation of wall structure below, and re-install to new structural wall once completed.
3. Provide duplex outlet this location. Note that outlet circuits do not need to conform to residential rules for outlets (fire training facility). Feed circuits from new subpanel.

No.	Issued for Purpose	Date	Initial
1	65% Documents	Nov. 18 '22	JHM
2	90% Check Set	Jun 20 '24	JHM
P/T	for Permit and Tender	Jul 08 '24	JHM

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For Mechanical see M series Sheets
For Electrical see E series Sheets

Project North

NOT FOR CONSTRUCTION

No.	Revision	Date	Initial

Project
Wilmot Fire Station 2

55 Front Street
New Dundee, ON, N0B 2E0

Approved	
Checked	JHM
Drawn	SH

Drawing Title

Electrical Lighting & Power
Mezzanine Floor

Scale (for 36x48" printing)	Dwg. No.
1:50	E212

John MacDonald Architect

Public Utilities Commission Building
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