FREEMAN FIT-UP

ADDRESS: 2295 ST.LAURENT BLVD | OTTAWA, ON

PROJECT NO: 1927

DATE: 2019-11-29

ISSUED FOR TENDER

ARCHITECTURAL DRAWINGS

0000 COVER

A001 FIRE SEPARATIONS, CONSTRUCTION ASSEMBLIES & NOTATION LEGEND
A003 DOOR SCHEDULE, DOOR & FRAME TYPES, MATERIALS & PRODUCT SCHEDULE

D101 LEVEL 01 & 02 - DEMOLTION PARTITON PLANS

D102 LEVEL 01 & 02 - DEMOLTION CEILING PLANS

A101 LEVEL 01 & 02 - PARTITION PLANS A111 LEVEL 01 & 02 - FINISHES PLANS

A151 LEVEL 01 & 02 - REFLECTED CEILING PLANS

A401 STAIR C - ENLARGED PLANS, SECTIONS, AND DETAILS

A402 WC - ENLARGED PLANS AND ELEVATIONS

A701 INTERIOR DETAILS

A801 MILLWORK PLANS, ELEVATIONS, AND DETAILS

A802 MILLWORK CONTINUED

MECHANICAL ENGINEER

Quadrant Engineering Ltd

203-2283 St. Laurent Blvd. Ottawa, Ontario K1G 5A2

DRAWING LIST

REFER TO MECHANICAL TITLE SHEET

ELECTRICAL ENGINEER

Quadrant Engineering Ltd

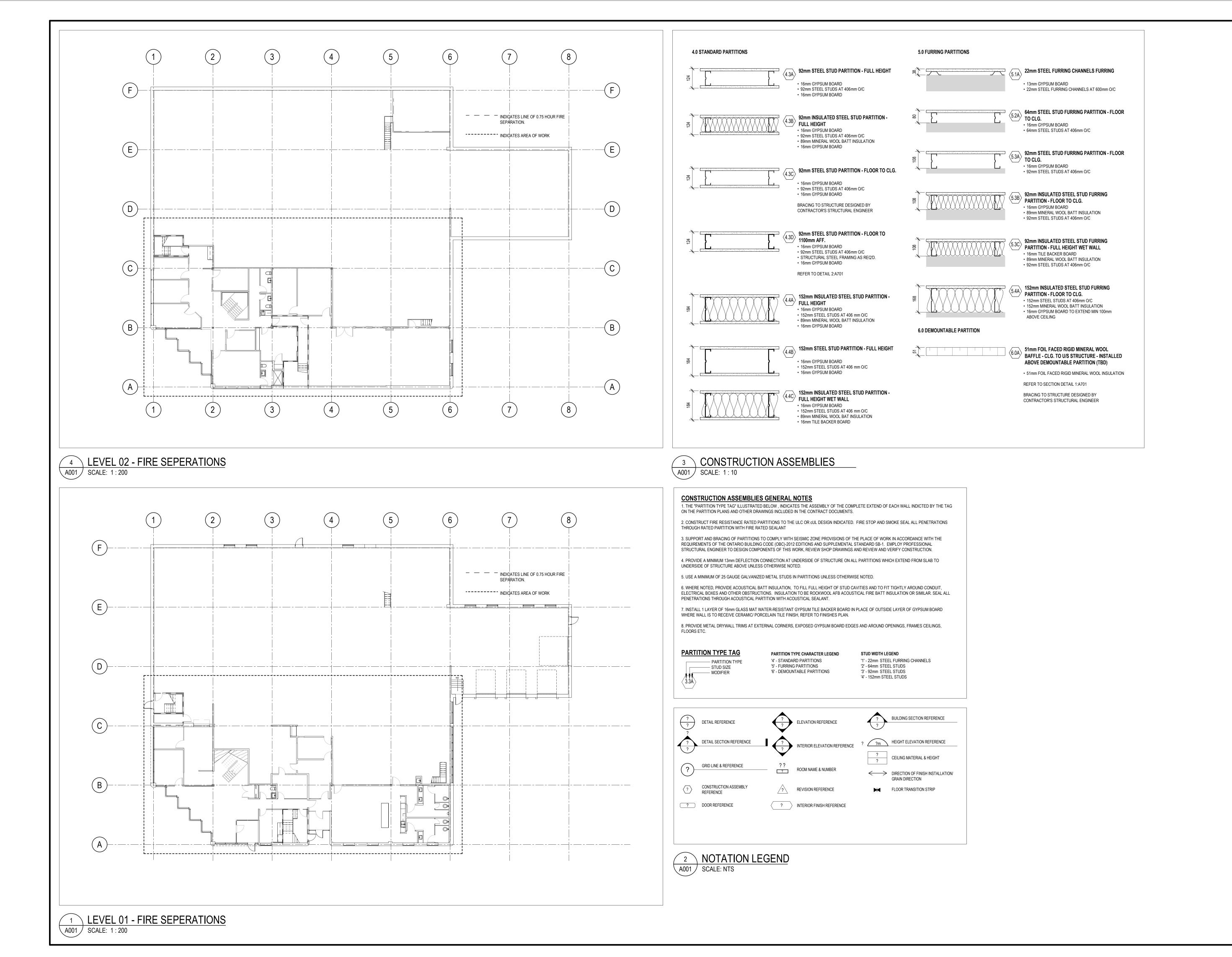
203-2283 St. Laurent Blvd. Ottawa, Ontario K1G 5A2

DRAWING LIST

REFER TO ELECTRICAL TITLE SHEET



Project1 Studio Incorporated | 613.884.3939 | mail@project1studio.ca



NERAL ARCHITECTURAL NOTES:

This drawing is the property of the Architect and may not be reproduced or used hout the expressed consent of the Architect. Drawings are not to be scaled. The Contractor is responsible for checking and erifying all levels and dimensions and shall report all discrepancies to the Architect and btain clarification prior to commencing work. Upon notice in writing, the Architect will provide written/graphic clarification or

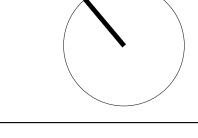
pplementary information regarding the intent of the Contract Documents. The Architectural drawings are to be read in conjuction with all other Contract

ocuments including Project Manuals and the Structural, Mechanical and Electrical

Positions of exposed or finished Mechanical or Electrical devices, fittings and xtures are indicated on the Architectural Drawings. Locations shown on the rchitectural Drawings shall govern over Mechanical and Electrical Drawings. lechanical and Electrical items not clearly located will be located as directed by the These documents are not to be used for construction unless specifically noted for

ISSUED FOR TENDER 2019-11-29 ISSUED FOR BUILDING PERMIT 2019-11-15

ISSUE RECORD



Project1 Studio Incorporated |613.884.3939 |mail@project1studio.ca

FREEMAN FIT-UP

2295 St.Laurent Blvd

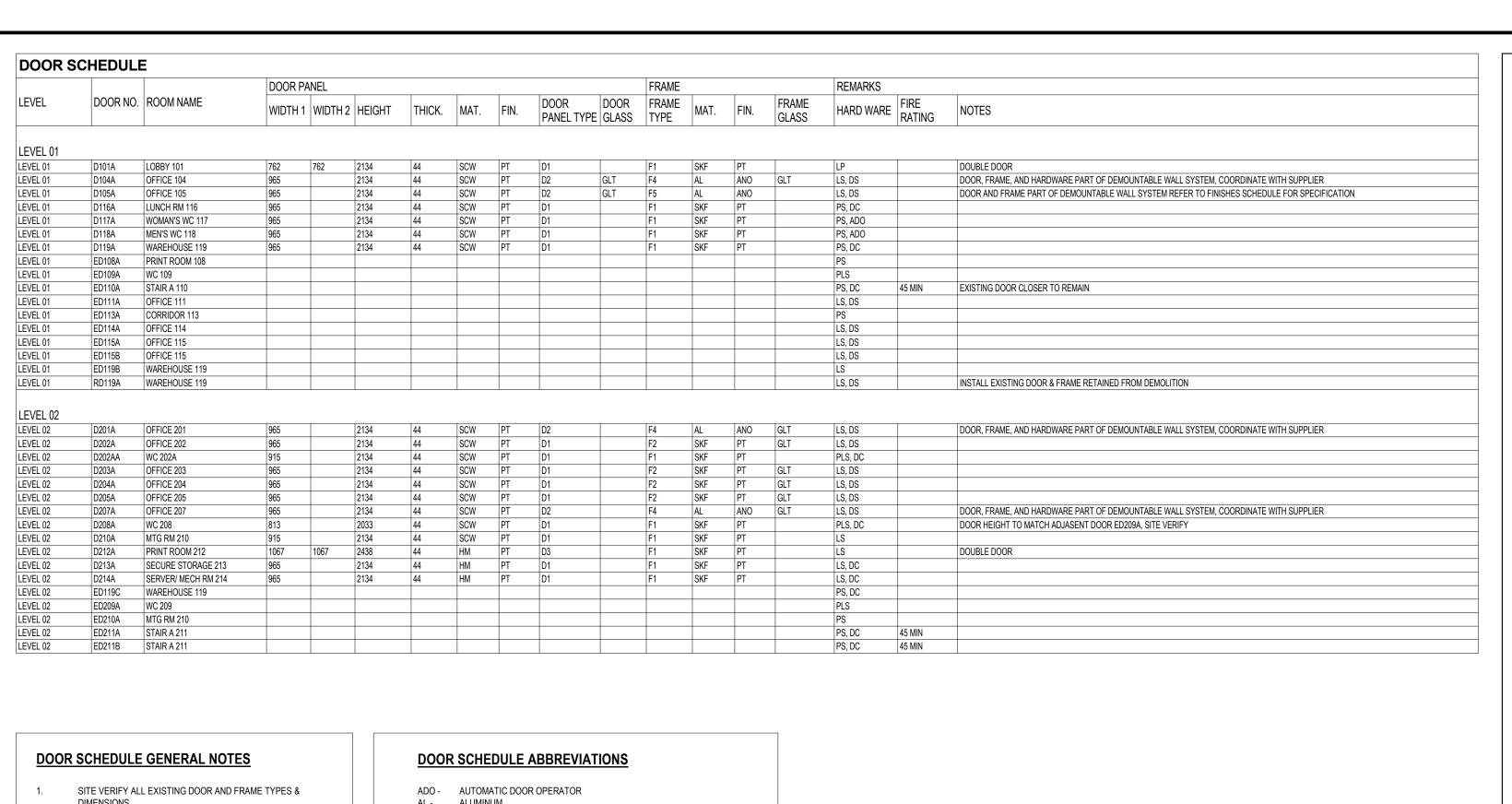
Ottawa ON

1927 NOTED AP

RMK

FIRE SEPARATIONS, CONSTRUCTION ASSEMBLIES & NOTATION LEGEND

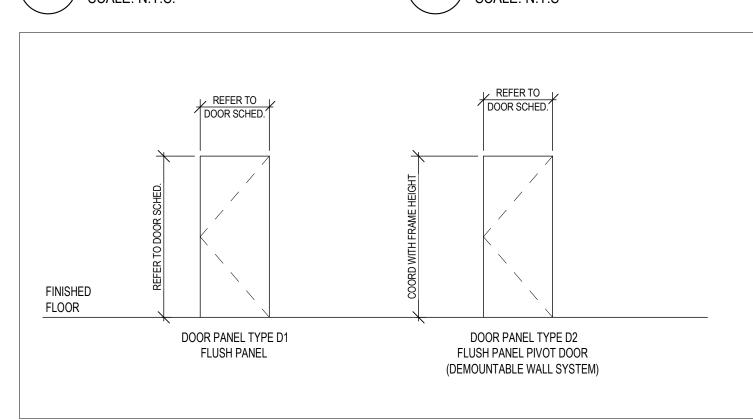
REVIEWED

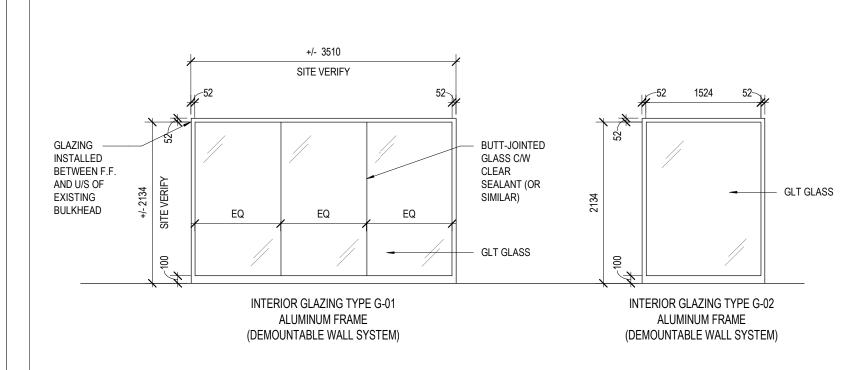


- REPLACE / ADD HARDWARE AS NOTED ON EXISTING DOORS.
- PATCH & REPAIR DOOR AND FRAME AS REQ'D.
- ALUMINUM ANO - CLEAR ANODIZED
- DB -DEADBOLT
- DOOR CLOSER DS-DROP SEAL
- DWS DEMOUNTABLE WALL SYSTEM GL -GLT -GLASS
- TEMPERED GLASS (12mm) HM- HOLLOW METAL
- HO HOLD OPEN DEVICE
- KDF- STEEL KNOCK DOWN FRAME LADDER PULL
- LOCKSET PLS- PRIVACY LOCK SET
- PS PASSAGE SET PSF -PRESSED STEEL FRAME
- SCW SOLID CORE WOOD SKF- STEEL KNOCK-DOWN FRAME
- *REFER TO MATERIALS AND FINISHES SCHED. FOR PAINT

DOOR SCHEDULE NOTES SCALE: N.T.S.

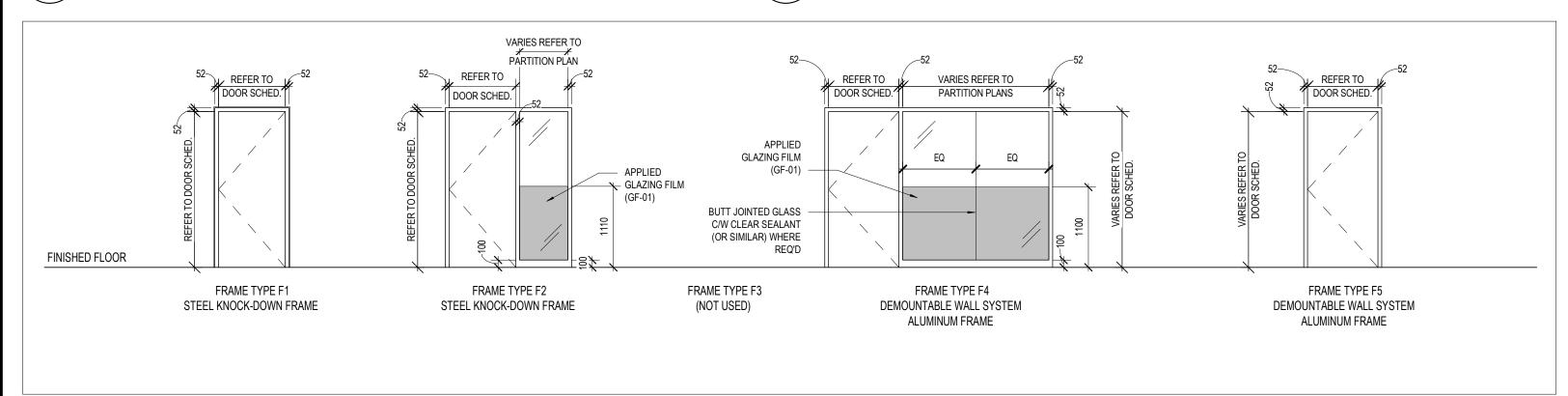
DOOR SCHEDULE ABBREVIATIONS SCALE: N.T.S





DOOR PANEL TYPES SCALE: 1:50

INTERIOR GLAZING TYPES SCALE: 1:50



DOOR FRAME ELEVATIONS SCALE: 1:50

2 ISSUED FOR TENDER 2019-11-29 1 ISSUED FOR BUILDING PERMIT 2019-11-15 ISSUE RECORD

ENERAL ARCHITECTURAL NOTES:

without the expressed consent of the Architect.

obtain clarification prior to commencing work.

This drawing is the property of the Architect and may not be reproduced or used

Drawings are not to be scaled. The Contractor is responsible for checking and

verifying all levels and dimensions and shall report all discrepancies to the Architect and

3. Upon notice in writing, the Architect will provide written/graphic clarification or supplementary information regarding the intent of the Contract Documents. 4. The Architectural drawings are to be read in conjuction with all other Contract Documents including Project Manuals and the Structural, Mechanical and Electrical

5. Positions of exposed or finished Mechanical or Electrical devices, fittings and

Mechanical and Electrical items not clearly located will be located as directed by the

6. These documents are not to be used for construction unless specifically noted for

fixtures are indicated on the Architectural Drawings. Locations shown on the

Architectural Drawings shall govern over Mechanical and Electrical Drawings.

Project1 Studio Incorporated |613.884.3939 | mail@project1studio.ca

FREEMAN FIT-UP

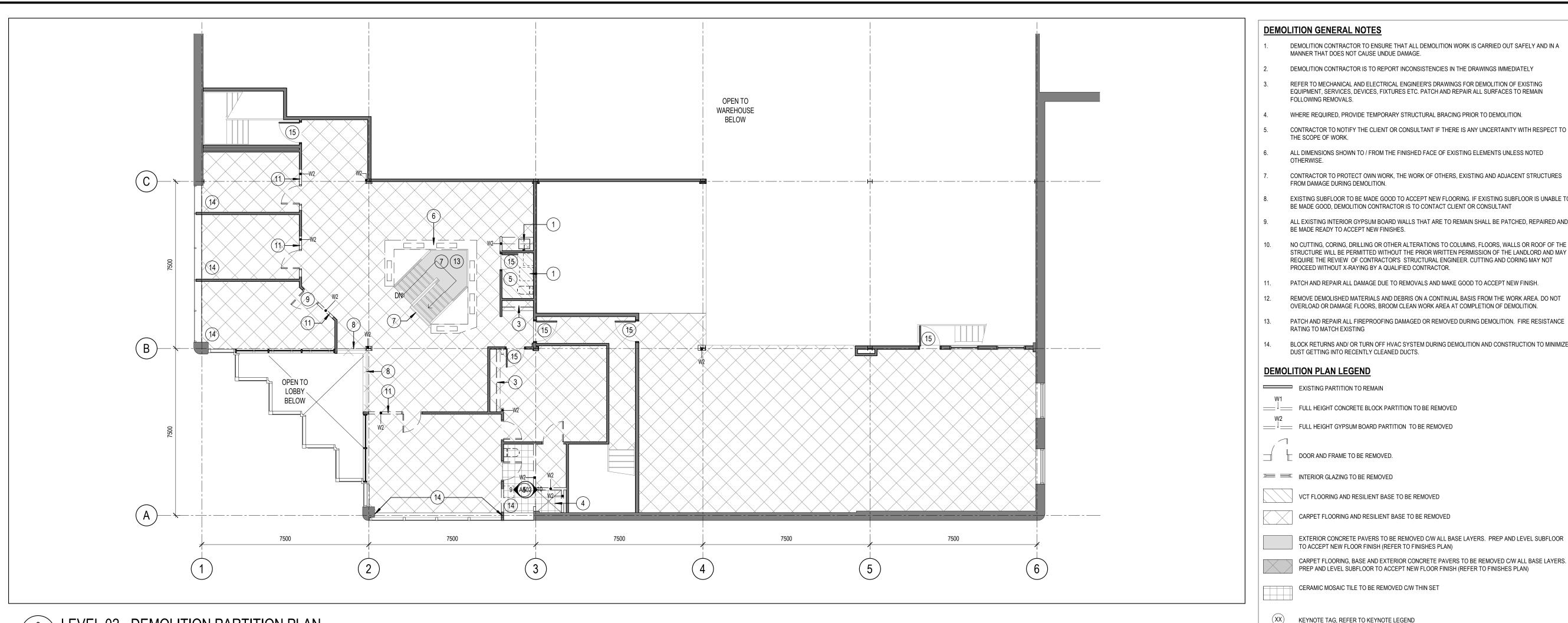
2295 St.Laurent Blvd Ottawa ON

1927 NOTED

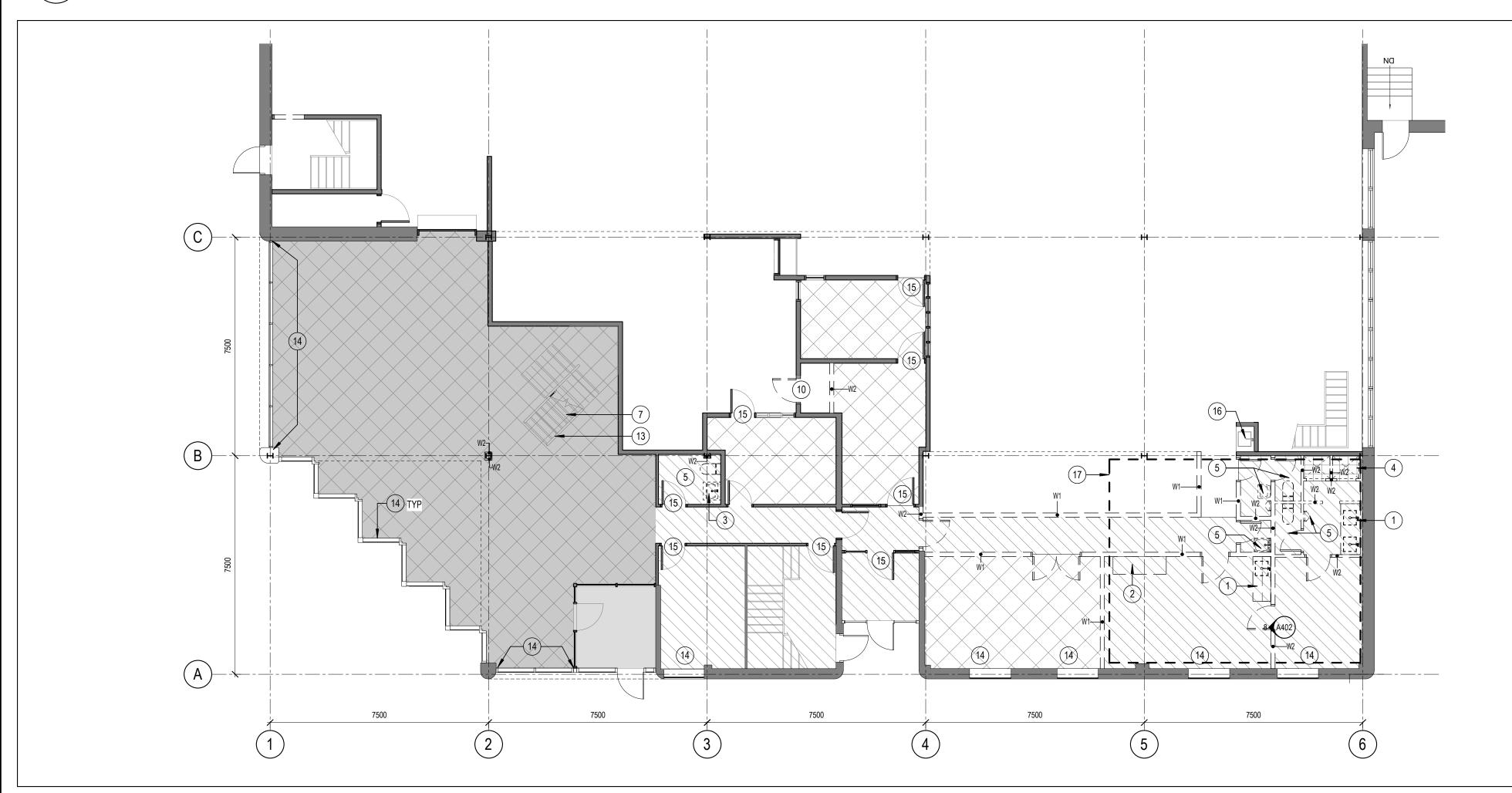
DRAWN REVIEWED WB

DOOR SCHEDULE, DOOR & FRAME TYPES, MATERIALS & PRODUCT SCHEDULE

RMK



2 LEVEL 02 - DEMOLITION PARTITION PLAN
SCALE: 1:100



DEMOLITION GENERAL NOTES

- DEMOLITION CONTRACTOR TO ENSURE THAT ALL DEMOLITION WORK IS CARRIED OUT SAFELY AND IN A MANNER THAT DOES NOT CAUSE UNDUE DAMAGE.
- DEMOLITION CONTRACTOR IS TO REPORT INCONSISTENCIES IN THE DRAWINGS IMMEDIATELY
- REFER TO MECHANICAL AND ELECTRICAL ENGINEER'S DRAWINGS FOR DEMOLITION OF EXISTING EQUIPMENT, SERVICES, DEVICES, FIXTURES ETC. PATCH AND REPAIR ALL SURFACES TO REMAIN FOLLOWING REMOVALS.
- WHERE REQUIRED, PROVIDE TEMPORARY STRUCTURAL BRACING PRIOR TO DEMOLITION.
- CONTRACTOR TO NOTIFY THE CLIENT OR CONSULTANT IF THERE IS ANY UNCERTAINTY WITH RESPECT TO THE SCOPE OF WORK.
- CONTRACTOR TO PROTECT OWN WORK, THE WORK OF OTHERS, EXISTING AND ADJACENT STRUCTURES FROM DAMAGE DURING DEMOLITION.
- EXISTING SUBFLOOR TO BE MADE GOOD TO ACCEPT NEW FLOORING. IF EXISTING SUBFLOOR IS UNABLE TO BE MADE GOOD, DEMOLITION CONTRACTOR IS TO CONTACT CLIENT OR CONSULTANT
- ALL EXISTING INTERIOR GYPSUM BOARD WALLS THAT ARE TO REMAIN SHALL BE PATCHED, REPAIRED AND
- NO CUTTING, CORING, DRILLING OR OTHER ALTERATIONS TO COLUMNS, FLOORS, WALLS OR ROOF OF THE STRUCTURE WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE LANDLORD AND MAY REQUIRE THE REVIEW OF CONTRACTOR'S STRUCTURAL ENGINEER. CUTTING AND CORING MAY NOT PROCEED WITHOUT X-RAYING BY A QUALIFIED CONTRACTOR.
- 11. PATCH AND REPAIR ALL DAMAGE DUE TO REMOVALS AND MAKE GOOD TO ACCEPT NEW FINISH.
- REMOVE DEMOLISHED MATERIALS AND DEBRIS ON A CONTINUAL BASIS FROM THE WORK AREA. DO NOT OVERLOAD OR DAMAGE FLOORS, BROOM CLEAN WORK AREA AT COMPLETION OF DEMOLITION.
- PATCH AND REPAIR ALL FIREPROOFING DAMAGED OR REMOVED DURING DEMOLITION. FIRE RESISTANCE
- 14. BLOCK RETURNS AND/ OR TURN OFF HVAC SYSTEM DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE DUST GETTING INTO RECENTLY CLEANED DUCTS.

DEMOLITION PLAN LEGEND

EXISTING PARTITION TO REMAIN

—— J —— FULL HEIGHT CONCRETE BLOCK PARTITION TO BE REMOVED

—— J FULL HEIGHT GYPSUM BOARD PARTITION TO BE REMOVED

DOOR AND FRAME TO BE REMOVED.

INTERIOR GLAZING TO BE REMOVED

VCT FLOORING AND RESILIENT BASE TO BE REMOVED

CARPET FLOORING AND RESILIENT BASE TO BE REMOVED

TO ACCEPT NEW FLOOR FINISH (REFER TO FINISHES PLAN) CARPET FLOORING, BASE AND EXTERIOR CONCRETE PAVERS TO BE REMOVED C/W ALL BASE LAYERS. PREP AND LEVEL SUBFLOOR TO ACCEPT NEW FLOOR FINISH (REFER TO FINISHES PLAN)

(XX) KEYNOTE TAG, REFER TO KEYNOTE LEGEND

(1) MILLWORK TO BE REMOVED, REFER TO MECH. DWGS FOR PLUMBING REMOVALS

(2) WALL MOUNTED COUNTER TO BE REMOVED

(3) CLOSET MILLWORK TO BE REMOVED

REMOVE SHOWER CURB AND BASE C/W CERAMIC TILE ON WALL & CEILING SURFACES TO BE REMOVED, REFER TO MECH. DWGS FOR PLUMBING REMOVALS

(5) ALL PLUMBING FIXTURES WITHIN THIS AREA TO BE REMOVED, REFER TO MECH DWGS

(6) 1062MM HIGH GYPSUM BOARD PLANTER TO BE REMOVED

ALL GLASS FROM EXISITING STAIR RAILINGS AND GUARDS TO BE REMOVED. RETAIN ALL RAILING, BALUSTERS, BRACKETS AND MOUNTING HARDWARE FOR REINSTALLATION.

GLASS FROM EXISITING GUARDS TO BE REMOVED. RETAIN ALL RAILING, BALUSTERS, BRACKETS AND MOUNTING HARDWARE FOR REINSTALLATION.

9 REMOVE AND RETAIN DOOR AND FRAME FOR REINTALLATION IN OFFICE 111, REFER TO PARTITION PLAN. RETAIN ALL HARDWARE EXCEPT FOR DOOR KNOB

(10) REMOVE EXISTING DOOR AND FRAME

PORTION OF PARTITION TO BE REMOVED TO ACCOMODATE NEW DOOR AND FRAME, COORDINATE WITH PARTITION PLAN

EXTERIOR CONCRETE PAVERS C/W BASE LAYERS FROM STAIRS TREADS AND LANDINGS TO BE REMOVED. PREP AND LEVEL REMAINING SURFACES TO ACCEPT NEW FLOOR FINISH (REFER TO FINISHES PLAN)

(14) BLINDS TO BE REMOVED

(15) DOOR KNOB HARDWARE TO BE REMOVED

(16) EXISTING SINK AND COUNTER TO REMAIN

PROVIDE TRENCHING IN THIS AREA TO ACCOMODATE NEW PLUMBING AND ELECTRICAL, COORD WITH MECH & ELEC DWGS. PATCH AND LEVEL FLOOR SUBSTRATE TO MAKE READY FOR NEW FINISHES

KEYNOTE LEGEND SCALE: N.T.S.

This drawing is the property of the Architect and may not be reproduced or used

hout the expressed consent of the Architect. Drawings are not to be scaled. The Contractor is responsible for checking and rifying all levels and dimensions and shall report all discrepancies to the Architect and btain clarification prior to commencing work.

Upon notice in writing, the Architect will provide written/graphic clarification or pplementary information regarding the intent of the Contract Documents. The Architectural drawings are to be read in conjuction with all other Contract cuments including Project Manuals and the Structural, Mechanical and Electrical

Positions of exposed or finished Mechanical or Electrical devices, fittings and

xtures are indicated on the Architectural Drawings. Locations shown on the rchitectural Drawings shall govern over Mechanical and Electrical Drawings. lechanical and Electrical items not clearly located will be located as directed by the These documents are not to be used for construction unless specifically noted for

ISSUED FOR TENDER 2019-11-29 ISSUED FOR BUILDING PERMIT 2019-11-15 **ISSUE RECORD**



Project1 Studio Incorporated |613.884.3939 |mail@project1studio.ca

FREEMAN FIT-UP

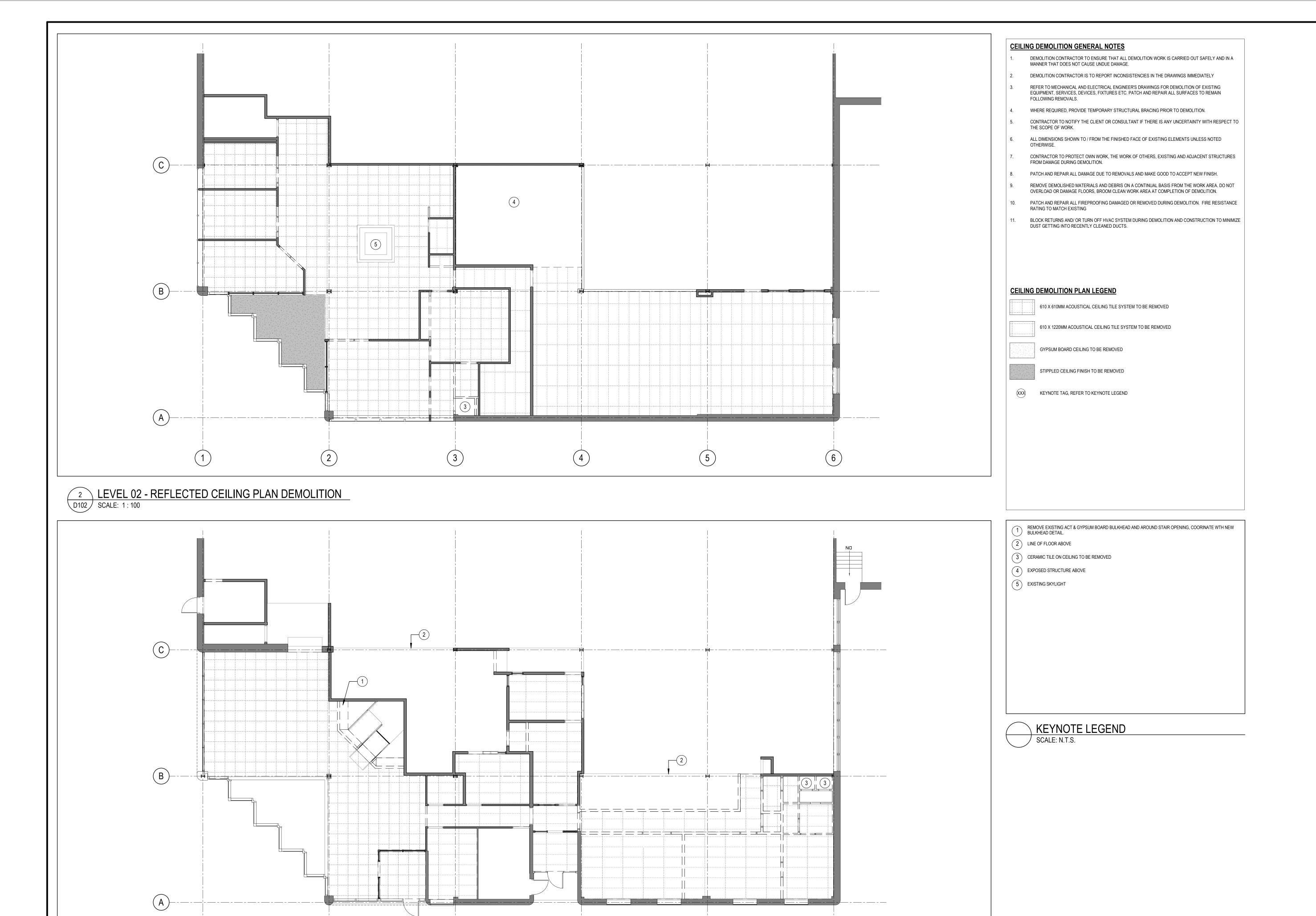
2295 St.Laurent Blvd Ottawa ON

1927 NOTED WB

DRAWN REVIEWED

LEVEL 01 & 02 - DEMOLTION PARTITON PLANS

RMK



LEVEL 01 - REFLECTED CEILING PLAN DEMOLITION

D102 SCALE: 1:100

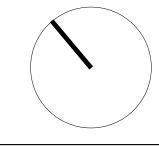
This drawing is the property of the Architect and may not be reproduced or used hout the expressed consent of the Architect. Drawings are not to be scaled. The Contractor is responsible for checking and rifying all levels and dimensions and shall report all discrepancies to the Architect and btain clarification prior to commencing work.

Upon notice in writing, the Architect will provide written/graphic clarification or pplementary information regarding the intent of the Contract Documents. The Architectural drawings are to be read in conjuction with all other Contract ocuments including Project Manuals and the Structural, Mechanical and Electrical Positions of exposed or finished Mechanical or Electrical devices, fittings and

xtures are indicated on the Architectural Drawings. Locations shown on the rchitectural Drawings shall govern over Mechanical and Electrical Drawings. lechanical and Electrical items not clearly located will be located as directed by the These documents are not to be used for construction unless specifically noted for

ISSUED FOR TENDER 2019-11-29 ISSUED FOR BUILDING PERMIT 2019-11-15

ISSUE RECORD





|613.884.3939 | mail@project1studio.ca

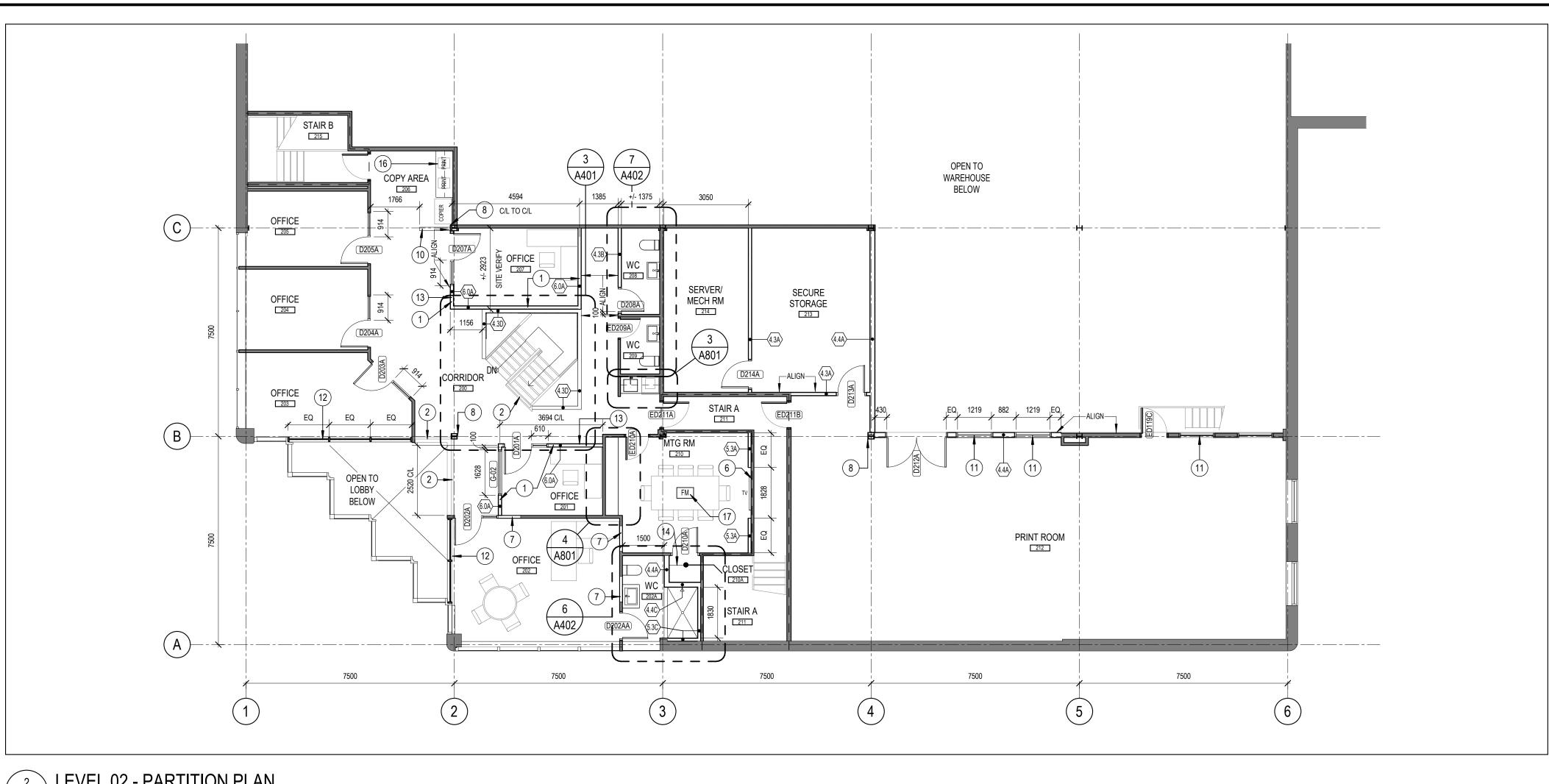
FREEMAN FIT-UP

2295 St.Laurent Blvd Ottawa ON

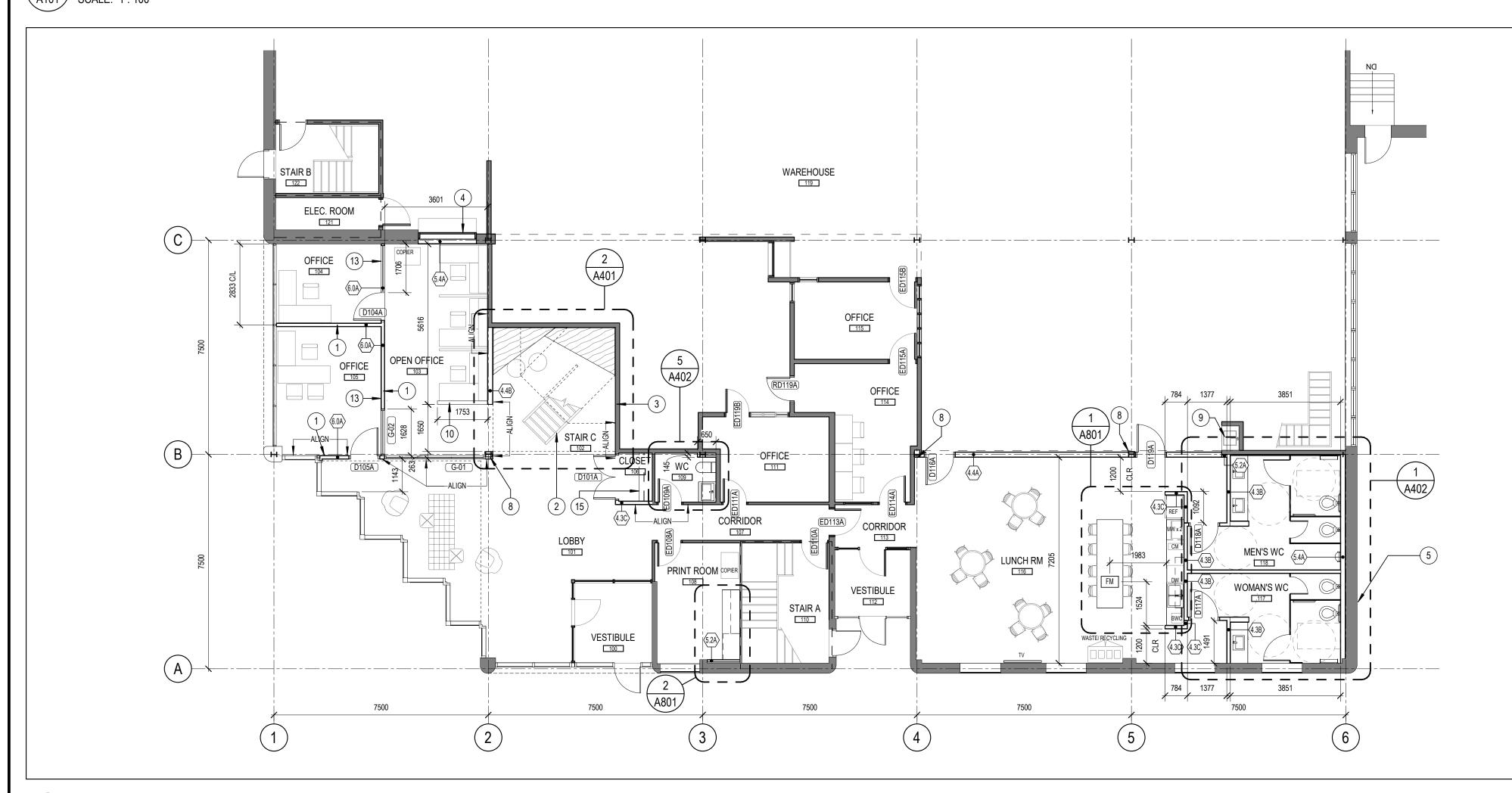
PROJ SCALE DRAWN
1927 NOTED WB

DRAWN REVIEWED

LEVEL 01 & 02 - DEMOLTION **CEILING PLANS**



2 LEVEL 02 - PARTITION PLAN SCALE: 1:100



PARTITION GENERAL NOTES

1. PARTITIONS ARE DIMENSIONED FROM FINISHED FACE OF PARTITIONS. HOLD CLEAR DIMENSIONS TO A TOLERANCE OF 3mm.

2. SLAB TO SLAB PARTITIONS TO BE CONSTRUCTED TO UNDERSIDE OF METAL DECK ON ALL LEVELS.

3. ALL DIMENSIONS TO THE EXTERIOR WALL ARE TO THE INSIDE FACE OF EXISTING SILL

4. ALL DOORS TO BE 100mm FROM CORNER OF ROOM UNLESS OTHERWISE INDICATED. DIMENSION TO EDGE OF DOOR LEAF.

5. PATCH AND REPAIR EXISTING PARTITIONS ADEQUATELY TO ACCEPT SCHEDULED FINISHES.

6. PROVIDE ADEQUATE FIRE TREATED OR NON-COMBUSTIBLE BLOCKING IN PARTITIONS TO SUPPORT SHELVING, HANG RODS, MILLWORK, ACCESSORIES, FURNITURE AND OTHER ITEMS THAT ARE PART OF

7. PROVIDE FIRESTOPPING AT ALL PENETRATIONS THROUGH FIRE SEPARATIONS. MAINTAIN THE FIRE RESISTANCE RATING OF ALL FIRE SEPARATIONS.

8. REFER TO MILLWORK PLANS AND ELEVATIONS FOR ARCHITECTURAL MILLWORK FINISHES. INTERIOR OF CABINETS TO HAVE WHITE MELAMINE FINISH UNLESS OTHERWISE NOTED,

SUBMITTALS AND SHOP DRAWINGS TO BE SUBMITTED TO CONSULTANT FOR REVIEW PRIOR TO

D. PROVIDE DOOR, FRAME AND HARDWARE SCHEDULES TO CONSULTANT FOR REVIEW

11. PROVIDE ARCHITECTURAL WOODWORKING SHOP DRAWINGS, CABINET HARDWARE CUT SHEETS AND FINISHES SAMPLES TO CONSULTANT FOR REVIEW

PATCH AND REPAIR GYPSUM BOARD AND INSULATION (WHERE EXISTS) AT EXISTING EXTERIOR AND INTERIOR WALLS AND COLUMNS WHICH WAS REMOVED DURING DEMOLITION TO COMPLETE EXPLORATORY WORK

BLOCK RETURNS AND/ OR TURN OFF HVAC SYSTEM DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE DUST GETTING INTO RECENTLY CLEANED DUCTS.

PARTITION PLAN LEGEND

ORDERING AND/ OR MANUFACTURING.

NEW PARTITION REFER TO PARTITION TYPE DETAILS ON A001

EXISTING PARTITION TO REMAIN

_ _ _ _ INDICATES LINE OF 0.75 HOUR FIRE SEPARATION.

KEYNOTE TAG, REFER TO PARTITION PLAN KEYNOTES

NEW DOOR & FRAME. REFER TO DOOR SCHEDULE ON A003

EXISTING DOOR & FRAME TO REMAIN

RELOCATED DOOR & FRAME

NEW INTERIOR GLAZING, REFER TO DETAILS ON A003

DEMOUNTABLE PARTITION, SEISMIC BRACING TO STRUCTURE BY SUPPLIER

REPLACE EXISTING GLASS PANELS IN STAIR AND BALCONY GUARDS WITH NEW CLEAR HEAT STRENGTHENED LAMINATED GLASS CONFORMING TO OBC-2012 AND SUPPLEMENTAL STANDARD SB-13.

NEW FLUSH MOUNTED FLOOR MONUMENT, REFER TO ELEC. DWGS.

3 REMOVE EXISTING MECHANICAL GRILL AND RE-ROUTE DUCTWORK, REFER TO MECHANICAL DRAWINGS

4 EXISTING ROLL UP DOOR TO REMAIN

5 LOCATE WASHROOM EXHAUST VENT THROUGH EXTERIOR WALL, REFER TO 3:A701 AND MECHANICAL DRAWINGS

PROVIDE FIRE RETARDANT/ NON COMBUSTABLE BLOCKING WITHIN PARTITION FOR MOUNTING OF CLIENT

SUPPLIED MONITOR. COORD HEIGHT WITH CLIENT
PROVIDE INSULATED STEEL STUD PARTITION WALL WITH 16mm GYPSUM TO MATCH EXISTING WALL

THICKNESS

LAMINATE NEW GYPSLIM ON COLLIMN FLANGE AND INFILL WITH 64mm STEEL STLID FLIRRING PARTITION

8 LAMINATE NEW GYPSUM ON COLUMN FLANGE AND INFILL WITH 64mm STEEL STUD FURRING PARTITION. PROVIDE FURRING TO ALIGN COLUMN COVERINGS WITH ADJACENT FINISHES AS NOTED.

9 EXISTING SINK AND COUNTER TO REMAIN

(10) PARTIAL HEIGHT DEMOUNTABLE PARTITION AT 1100 AFF.

MOUNT RELOCATED WINDOWS IN NEW WALL TO MATCH HEIGHT OF EXISTING WINDOWS

(12) EXISTING WINDOW TO REMAIN

STEEL STUD FRAMING SUSPENDED FROM U/S OF STRUCTURE TO SUPPORT AIR TRANSFER OPENINGS DESIGNED BY CONTRACTOR'S STRUCTURAL ENGINEER, REFER TO MECHANICAL DRAWINGS FOR LOCATION

4 NEW ADJUSTABLE CLOSET SHELVES WITH WHITE MELAMINE FINISH

15) NEW CLOSET SHELF, WHITE MELAMINE FINISH, AND HANGER ROD

(16) MILLWORK BY OWNER

(17) COORD FINAL LOCATION OF FLOOR MONUMENT WITH CLIENT SUPPLIED FURNITURE



2ISSUED FOR TENDER2019-11-291ISSUED FOR BUILDING PERMIT2019-11-15

ISSUE RECORD

NERAL ARCHITECTURAL NOTES:

out the expressed consent of the Architect.

tain clarification prior to commencing work.

This drawing is the property of the Architect and may not be reproduced or used

Drawings are not to be scaled. The Contractor is responsible for checking and rifying all levels and dimensions and shall report all discrepancies to the Architect and

Upon notice in writing, the Architect will provide written/graphic clarification or plementary information regarding the intent of the Contract Documents.

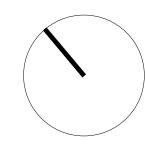
The Architectural drawings are to be read in conjuction with all other Contract uments including Project Manuals and the Structural, Mechanical and Electrical

Positions of exposed or finished Mechanical or Electrical devices, fittings and

lechanical and Electrical items not clearly located will be located as directed by the

These documents are not to be used for construction unless specifically noted for

ktures are indicated on the Architectural Drawings. Locations shown on the rchitectural Drawings shall govern over Mechanical and Electrical Drawings.





Project1 Studio Incorporated | 613.884.3939 | mail@project1studio.ca

FREEMAN FIT-UP

2295 St.Laurent Blvd Ottawa ON

PROJ SCALE
1927 NOTED

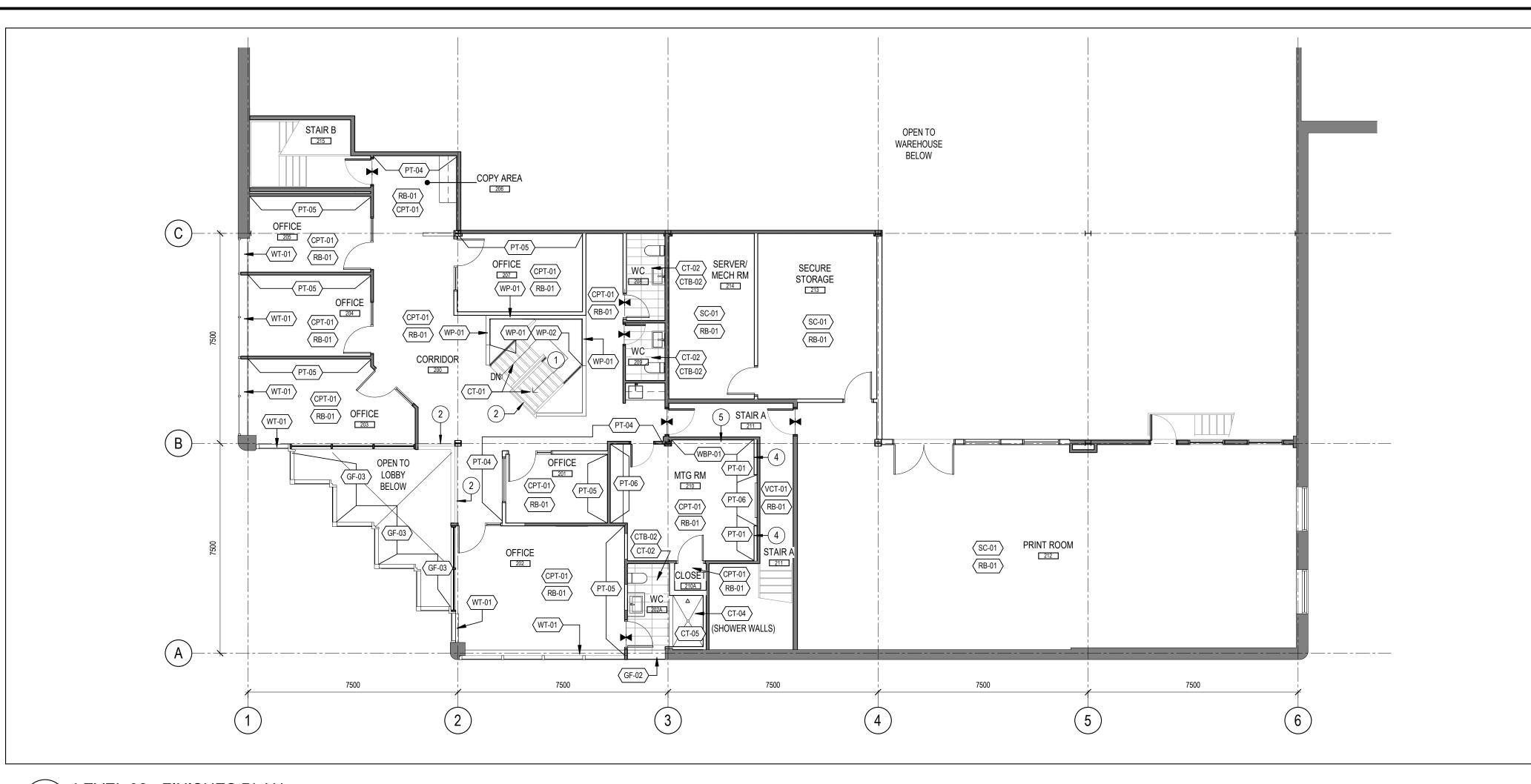
TED AP

LEVEL 01 & 02 - PARTITION PLANS

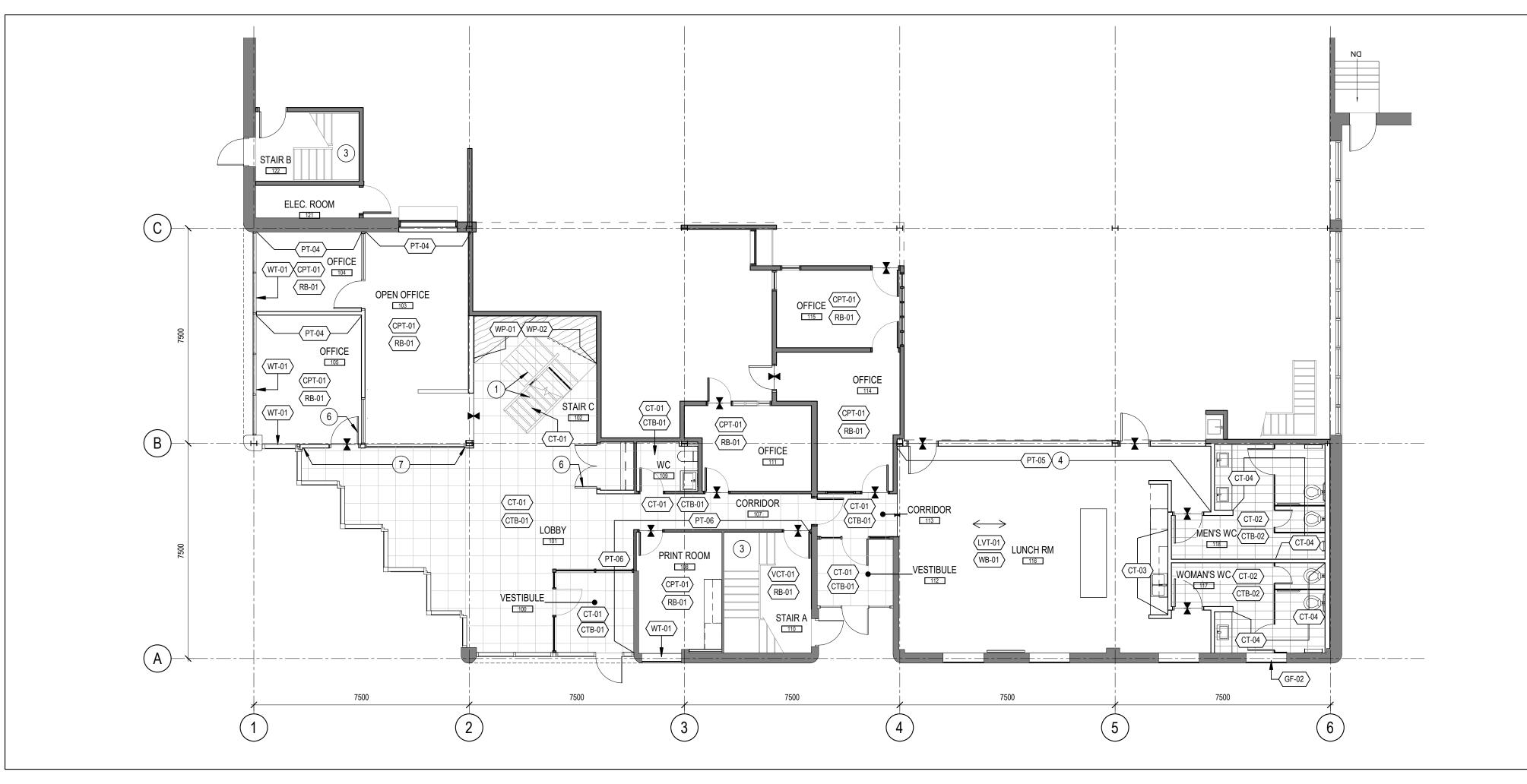
A101

RMK

1 LEVEL 01 - PARTITION PLAN
SCALE: 1:100



2 LEVEL 02 - FINISHES PLAN A111 SCALE: 1:100



FINISHES GENERAL NOTES

- REFER TO MATERIALS AND PRODUCTS SCHEDULE FOR ALL FINISH SPECIFICATIONS
- PROVIDE SAMPLES AND PRODUCT DATA OF ALL FINISHES TO CONSULTANT FOR REVIEW PRIOR TO
- FEATHER CONCRETE FLOORS WITH CONCRETE TOPPING AS REQUIRED TO BRING ADJACENT MATERIALS
- PROVIDE FLOOR TRANSITION STRIPS OR METAL DIVIDER STRIPS AS INDICATED ON PLAN AT MATERIAL
- ALL INTERSECTIONS OF FLOOR FINISH MATERIALS SHALL BE LOCATED DIRECTLY UNDER THE CENTER OF DOOR UNLESS OTHERWISE NOTED

ALL FLOORING FINISHES SHALL BE INSTALLED UNDER MILLWORK CABINETS PRIOR TO INSTALLATION OF

- MILLWORK.
- INSTALL BEAD IF CAULKING TO MATCH FLOOR FINISH ALONG BOTTOM OF DOOR AND GLAZING FRAMES AT RESILIENT FLOORING
- PATCH AND REPAIR EXISTING SURFACES TO REMAIN TO MAKE READY FOR NEW FINISHES
- INSTALL SPECIFIED BASEBOARD AROUND ALL DRYWALL PARTITIONS.
- PAINT ALL NEW AND EXISTING WALLS PT-01 UNLESS OTHERWISE NOTED. PAINT ALL NEW AND EXISTING DOORS PT-04 UNLESS OTHERWISE NOTED.
- REFER TO REFLECTED CEILING PLAN FOR CEILING FINISHES

FINISHES PLAN LEGEND

⟨CTB-02⟩ 100 X 600mm CERAMIC TILE BASE

CT-02

NOTE: REFER TO MATERIALS AND PRODUCTS SCHEDULE FOR ALL FINISH SPECIFICATIONS

CT-01 600 X 600mm CERAMIC TILE GF-03 GLAZING FILM 300 X 600mm CERAMIC TILE

CG-01 CORNER GUARD ⟨ CT-03 ⟩ 50 X 400mm CERAMIC TILE

PT-03 ACCENT PAINT FINISH

⟨ WT-01⟩ WINDOW TREATMENTS - ROLLAR SHADES ⟨ CT-04 ⟩ 100 X 600mm CERAMIC TILE PT-01 GENERAL PAINT FINISH ⟨CTB-01⟩ 100 X 600mm CERAMIC TILE BASE PT-02 CEILING PAINT FINISH

460 X 915mm CARPET TILE PT-04 ACCENT PAINT FINISH

 $\langle LVT-01 \rangle$ 152 X 1220mm LUXURY VINYL TILE PT-05 ACCENT PAINT FINISH ⟨VCT-01⟩ 305 X 305mm VINYL COMPOSITE TILE PT-06 ACCENT PAINT FINISH

 $\langle RB-01 \rangle$ 102mm RESILIENT BASE PT-07 ACCENT PAINT FINISH

102mm WOOD BASEBOARD, PAINTED WBP-01 WHITEBOARD PAINT FINISH

WP-01 WOOD WALL & CEILING PANELS ⟨SC-01⟩ SEALED CONCRETE FINISH

⟨WP-02⟩ WOOD WALL PANELS (XX) KEYNOTE TAG, REFER TO KEYNOTE LEGEND

⟨ GF-01 ⟩ GLAZING FILM GF-02 GLAZING FILM

1) PAINT GYP BD ON UNDERSIDE OF STAIR, STAIR RISERS, STRINGERS, BALUSTERS AND BRACKETS WITH PT-3 PAINT

(2) PAINT BALUSTERS AND BRACKETS WITH PT-3 PAINT

(3) EXISTING STAIR FINISH TO REMAIN

CLIENT SUPPLIED WALL GRAPHIC TO BE INSTALLED AFTER OCCUPANCY. GYP BD PARTITION TO HAVE LEVEL

(5) GYP BD PARTITION TO HAVE LEVEL 5 FINISH AT WHITEBOARD PAINT

(6) DOOR AND FRAME FINISIH TO MATCH ADJACENT WALL COLOUR IN SEMI-GLOSS FINISH

(7) CLIENT SUPPLIED GRAPHIC TO BE INSTALLED ON WALL AND GLASS AFTER OCCUPANCY

KEYNOTE LEGEND

SCALE: N.T.S.

ISSUED FOR TENDER 2019-11-29 ISSUED FOR BUILDING PERMIT 2019-11-15

This drawing is the property of the Architect and may not be reproduced or used

Drawings are not to be scaled. The Contractor is responsible for checking and rifying all levels and dimensions and shall report all discrepancies to the Architect and

Upon notice in writing, the Architect will provide written/graphic clarification or

Positions of exposed or finished Mechanical or Electrical devices, fittings and xtures are indicated on the Architectural Drawings. Locations shown on the

lechanical and Electrical items not clearly located will be located as directed by the

These documents are not to be used for construction unless specifically noted for

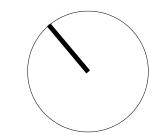
olementary information regarding the intent of the Contract Documents. The Architectural drawings are to be read in conjuction with all other Contract uments including Project Manuals and the Structural, Mechanical and Electrical

chitectural Drawings shall govern over Mechanical and Electrical Drawings.

out the expressed consent of the Architect.

tain clarification prior to commencing work.

ISSUE RECORD





Project1 Studio Incorporated |613.884.3939 |mail@project1studio.ca

FREEMAN FIT-UP

2295 St.Laurent Blvd Ottawa ON

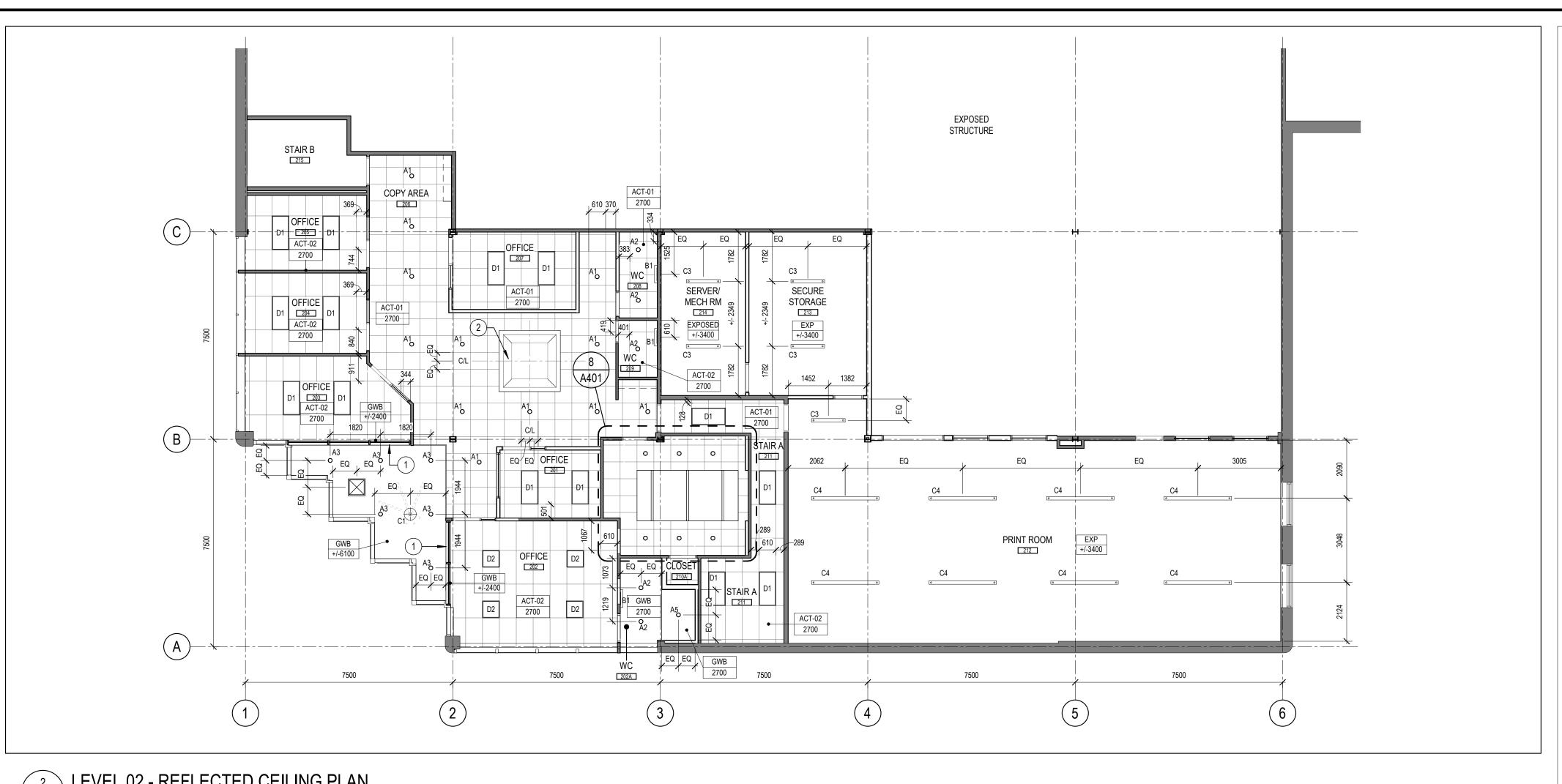
1927 NOTED

WB

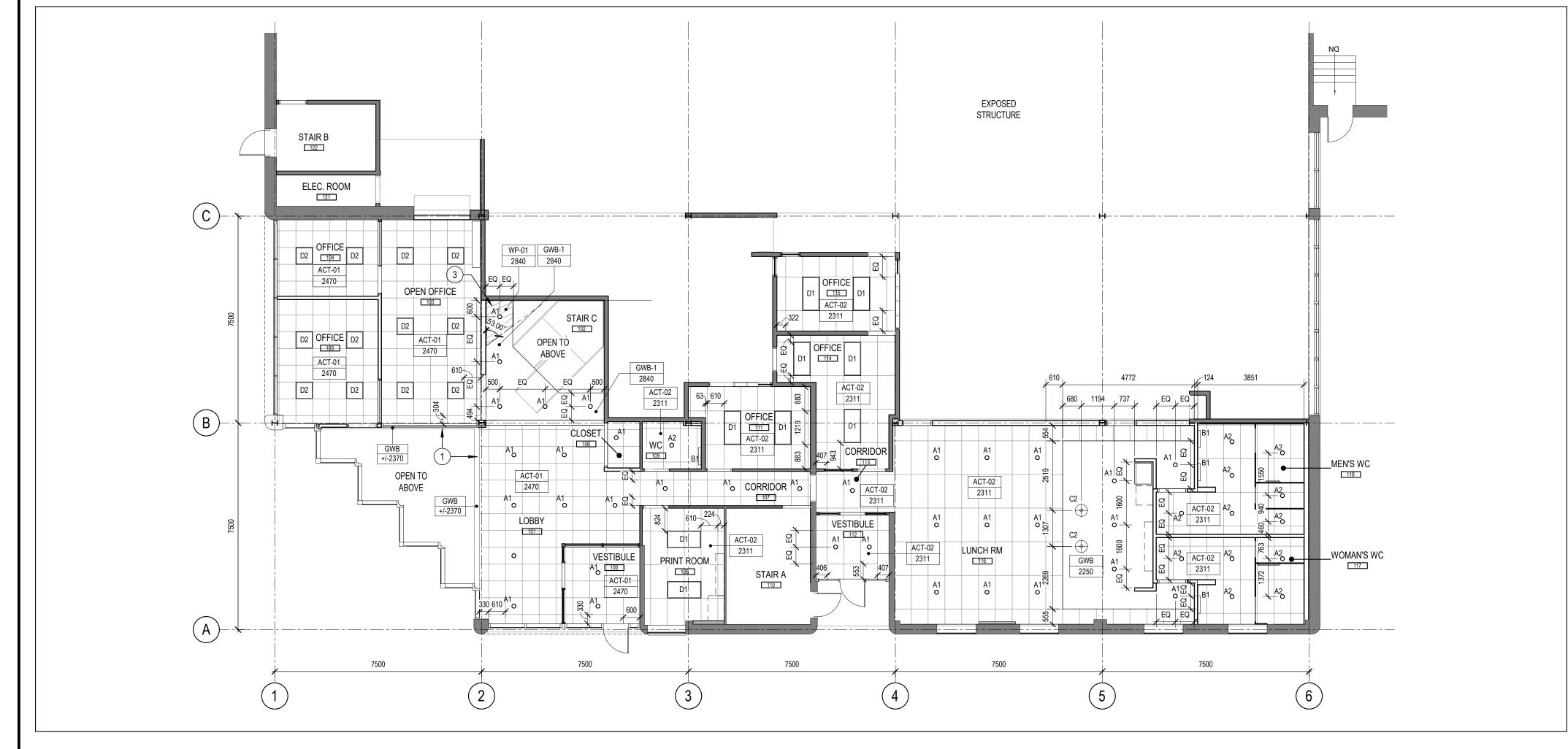
LEVEL 01 & 02 - FINISHES

PLANS

RMK



2 LEVEL 02 - REFLECTED CEILING PLAN
SCALE: 1:100



GENERAL REFLECTED CEILING NOTES

1. THIS DRAWING IS NOT INTENDED TO INDICATE THE COMPLETE SCOPE OF MECHANICAL AND ELECTRICAL WORK. REFER TO MECHANICAL AND ELECTRICAL ENGINEERS' DRAWINGS FOR COMPLETE SPECIFICATIONS, INCLUDING COLOUR AND FINISHES OF DEVICES AND COVER PLATES. REPORT ANY DISCREPANCIES BETWEEN THIS DRAWING AND THE ENGINEERS' DRAWINGS TO THE CONSULTANT IMMEDIATELY.

2. ADVISE CONSULTANT IMMEDIATELY UPON DISCOVERY OF INTERFERENCE WITH STRUCTURAL MEMBERS, DUCTS, PIPES, OR OTHER BUILDING SERVICES THAT WILL AFFECT LAYOUT AS INDICATED ON DRAWINGS. ADJUST LOCATIONS AS REQUIRED AND AGREED TO BY CONSULTANT.

3. DIMENSIONS ARE TO THE CENTERLINE OF FIXTURES UNLESS OTHERWISE NOTED.

4. RECESSED FIXTURES AND SPRINKLER HEADS LOCATED IN CEILING TILE ARE TO BE CENTERED ON TILE UNLESS DIMENSIONED OTHERWISE.

5. REVIEW LOCATIONS OF ALL ACCESS PANELS WITH CONSULTANT. ADJUST LOCATIONS AS REQUIRED BASED ON REVIEW.

6. PAINT ALL BASE BUILDING GYPSUM BOARD SURFACES ON PERIMETER SOFFITS AND BULKHEADS TO MATCH THE ROOM OR AREA THEY ARE PART OF UNLESS

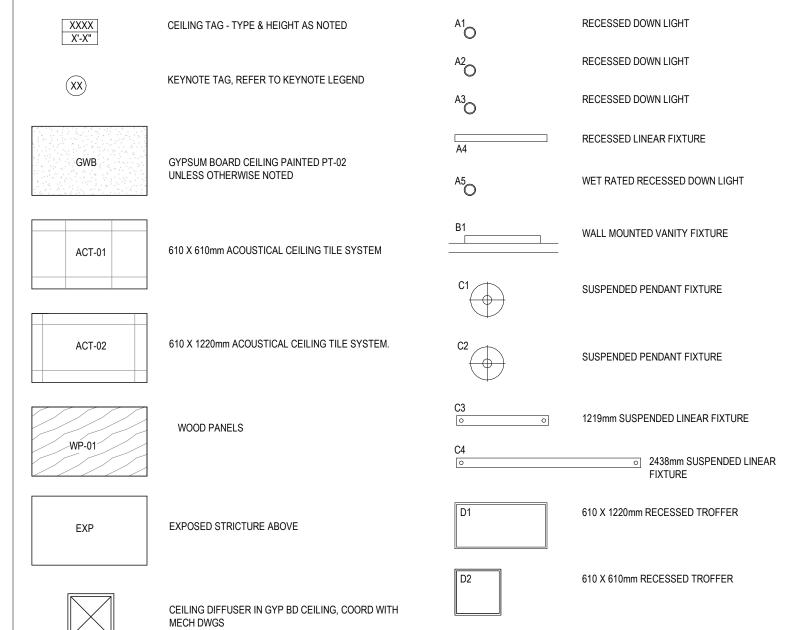
7. PAINT ALL COVES AND RECESSES IN GYPSUM BOARD CEILINGS TO MATCH ADJACENT WALLS UNLESS OTHERWISE NOTED.

8. PROVIDE CUT SHEETS LIGHT FIXTURES TO CONSULTANT FOR REVIEW PRIOR TO ORDERING

9. PROVIDE SAMPLES AND PRODUCT DATA OF CEILING FINISHES TO CONSULTANT FOR REVIEW PRIOR TO ORDERING

REFLECTED CEILING LEGEND - CEILING AND LIGHTING TYPES

NOTE: REFER TO MATERIALS AND FINISHES SCHEDULE FOR FINISH SPECIFICATIONS
REFER TO LIGHT FIXTURE SCHEDULE & ELEC DWGS FOR LIGHT FIXTURE SPECIFICATIONS



1 PAINT UNDERSIDE AND FACE OF EXISTING BULKHEAD PT-01

2 PAINT EXISTING BULKHEAD AT SKYLIGHT PT-02

3 ANGLE OF WOOD PANEL CEILING TO MATCH ANGLE OF WOOD PLATFORM BELOW

KEYNOTE LEGEND

SCALE: N.T.S.

2 ISSUED FOR TENDER 2019-11-29
1 ISSUED FOR BUILDING PERMIT 2019-11-15

ISSUE RECORD

NERAL ARCHITECTURAL NOTES:

hout the expressed consent of the Architect.

tain clarification prior to commencing work.

This drawing is the property of the Architect and may not be reproduced or used

Drawings are not to be scaled. The Contractor is responsible for checking and ifying all levels and dimensions and shall report all discrepancies to the Architect and

Upon notice in writing, the Architect will provide written/graphic clarification or

uments including Project Manuals and the Structural, Mechanical and Electrical

Positions of exposed or finished Mechanical or Electrical devices, fittings and

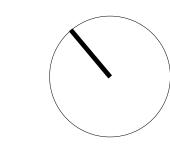
These documents are not to be used for construction unless specifically noted for

plementary information regarding the intent of the Contract Documents.

The Architectural drawings are to be read in conjuction with all other Contract

ixtures are indicated on the Architectural Drawings. Locations shown on the Architectural Drawings shall govern over Mechanical and Electrical Drawings.

Mechanical and Electrical items not clearly located will be located as directed by the





Project1 Studio Incorporated |613.884.3939 | mail@project1studio.ca

FREEMAN FIT-UP

2295 St.Laurent Blvd Ottawa ON

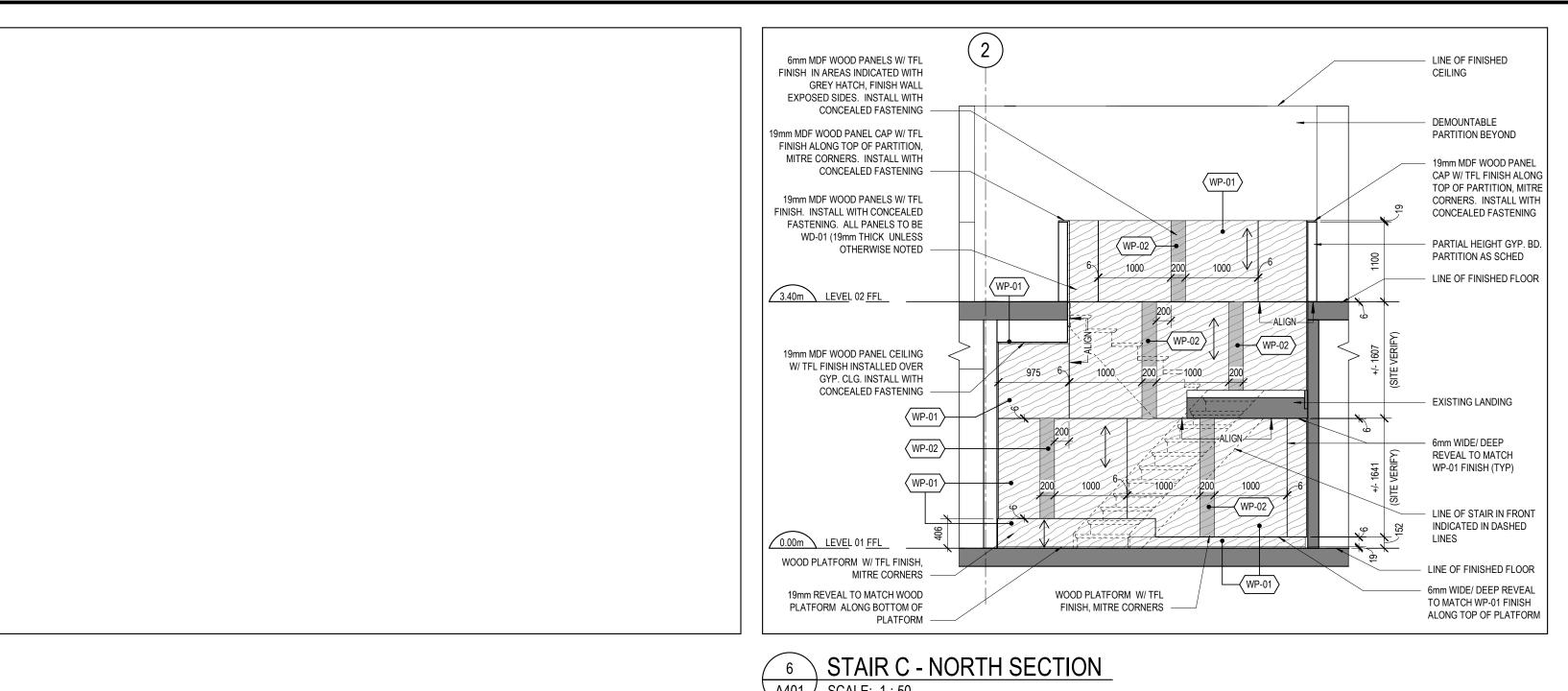
1927 NOTED

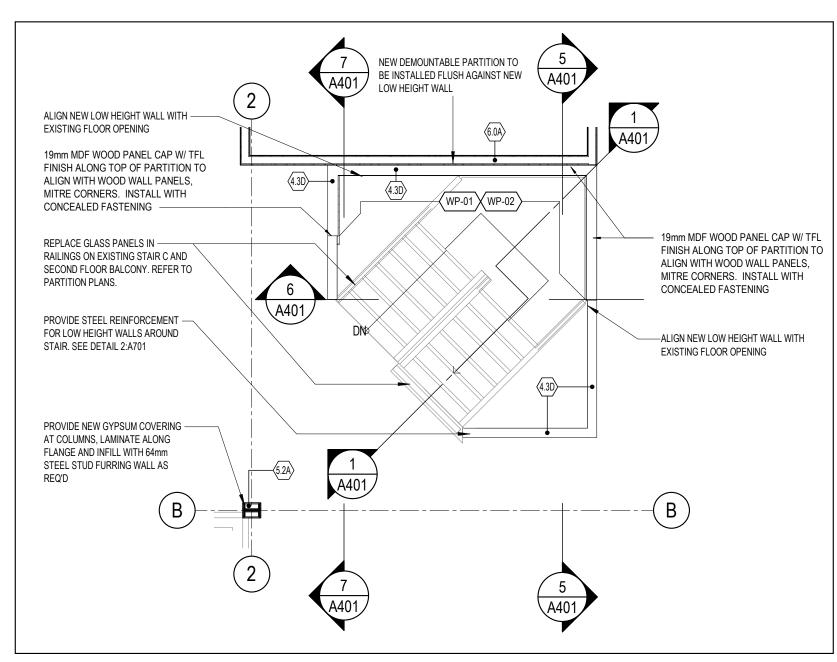
WB/ RMK

LEVEL 01 & 02 - REFLECTED CEILING PLANS

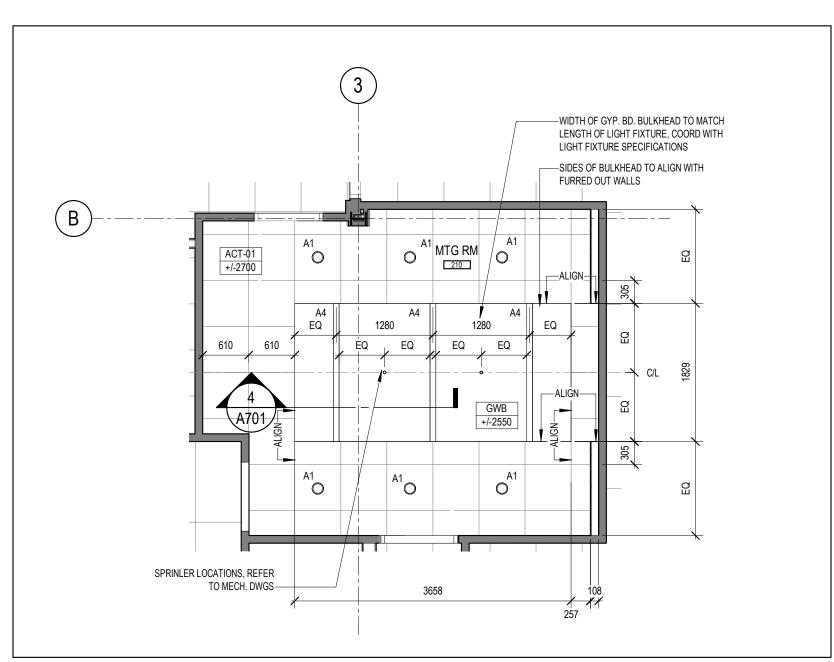
A151

1 LEVEL 01 - REFLECTED CEILING PLAN
SCALE: 1:100

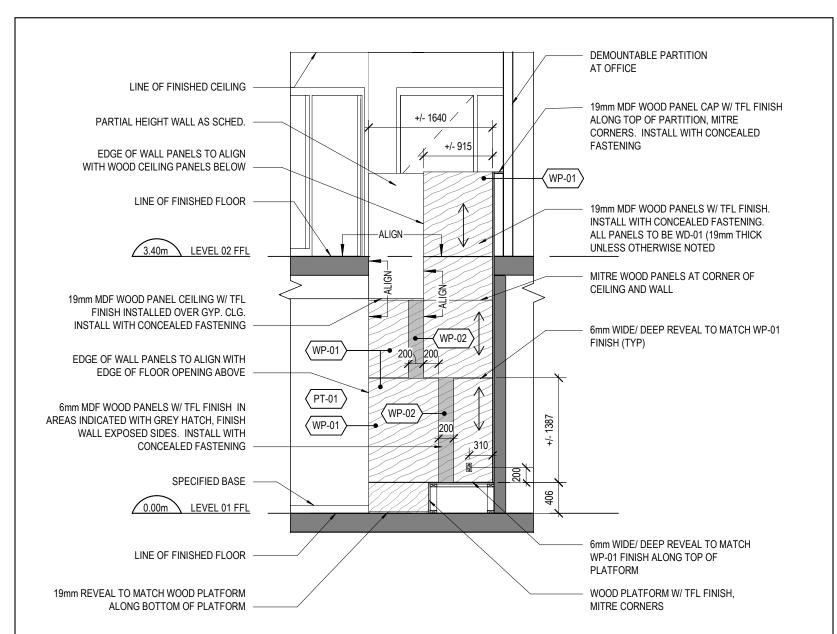




3 DETAIL PLAN LEVEL 02 AT STAIR C
SCALE: 1:50



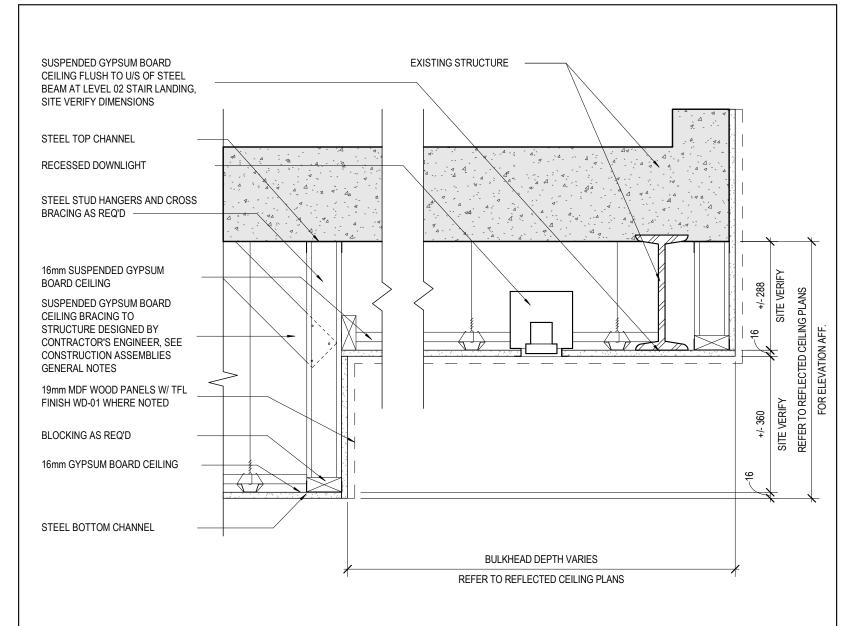
8 LEVEL 02 - MTG ROOM 210 ENLARGED CEILING PLAN
A401 SCALE: 1:50



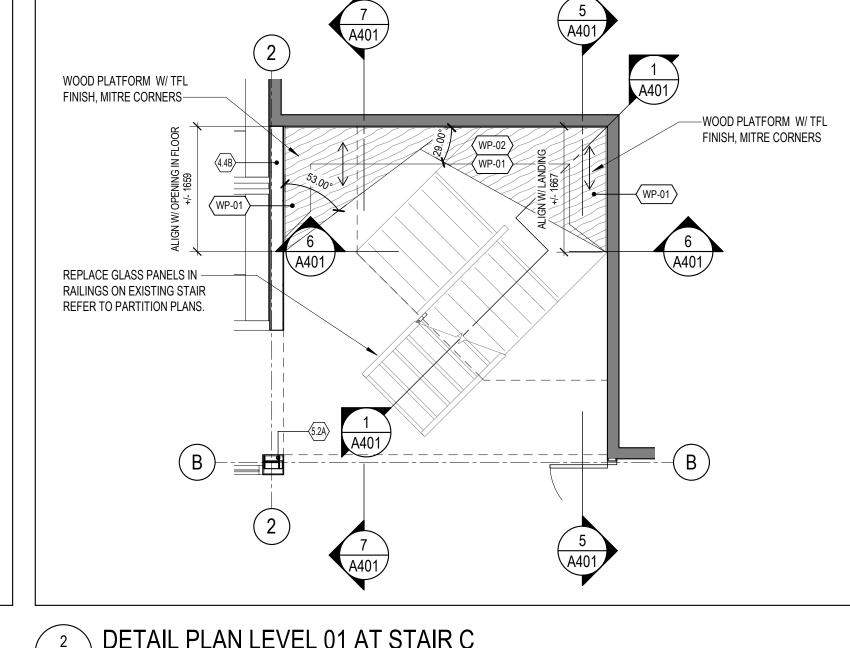
7 STAIR C - WEST SECTION
A401 SCALE: 1:50

LINE OF FINISHED CEILING 19mm MDF WOOD PANEL CAP W/ TFL FINISH ALONG TOP OF PARTITION, MITRE CORNERS. INSTALL WITH CONCEALED FASTENING 19mm MDF WOOD PANELS W/ TFL FINISH. INSTALL WITH CONCEALED FASTENING. ALL PANELS TO BE WD-01 (19mm THICK UNLESS OTHERWISE NOTED DEMOUNTABLE PARTITION AT OFFICE - LINE OF FINISHED FLOOR 6mm MDF WOOD PANELS W/ TFL FINISH IN AREAS INDICATED WITH GREY HATCH, FINISH WALL EXPOSED SIDES. INSTALL WITH CONCEALED FASTENING EDGE OF WALL PANELS EXISTING LANDING TO ALIGN WITH EDGE OF LANDING 6mm WIDE/ DEEP SPECIFIED BASE REVEAL TO MATCH WP-01 FINISH (TYP) - LINE OF FINISHED FLOOR 6mm WIDE/ DEEP REVEAL TO MATCH WP-01 FINISH ALONG TOP OF PLATFORM 19mm REVEAL TO MATCH WOOD PLATFORM ALONG BOTTOM OF PLATFORM WOOD PLATFORM W/ TFL FINISH. MITRE CORNERS

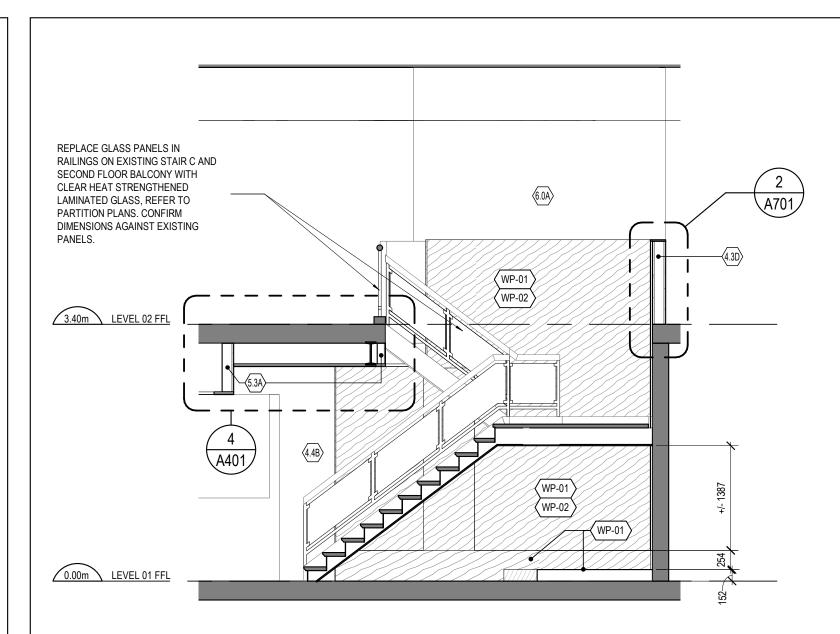
5 STAIR C - EAST SECTION
SCALE: 1:50



4 SECTION DETAIL AT STAIR C STEPPED CEILING
A401 SCALE: 1:10



2 DETAIL PLAN LEVEL 01 AT STAIR C A401 SCALE: 1:50



1 DETAIL SECTION AT EXISTING STAIR C
A401 SCALE: 1:50

ISSUED FOR BUILDING PERMIT 2019-11-15

2019-11-29

ISSUED FOR TENDER

ISSUE RECORD

NERAL ARCHITECTURAL NOTES:

out the expressed consent of the Architect.

tain clarification prior to commencing work.

This drawing is the property of the Architect and may not be reproduced or used

Drawings are not to be scaled. The Contractor is responsible for checking and

rifying all levels and dimensions and shall report all discrepancies to the Architect and

Upon notice in writing, the Architect will provide written/graphic clarification or

The Architectural drawings are to be read in conjuction with all other Contract

uments including Project Manuals and the Structural, Mechanical and Electrical

Positions of exposed or finished Mechanical or Electrical devices, fittings and

lechanical and Electrical items not clearly located will be located as directed by the

These documents are not to be used for construction unless specifically noted for

olementary information regarding the intent of the Contract Documents.

ixtures are indicated on the Architectural Drawings. Locations shown on the

chitectural Drawings shall govern over Mechanical and Electrical Drawings.



FREEMAN FIT-UP

2295 St.Laurent Blvd Ottawa ON

1927 NOTED

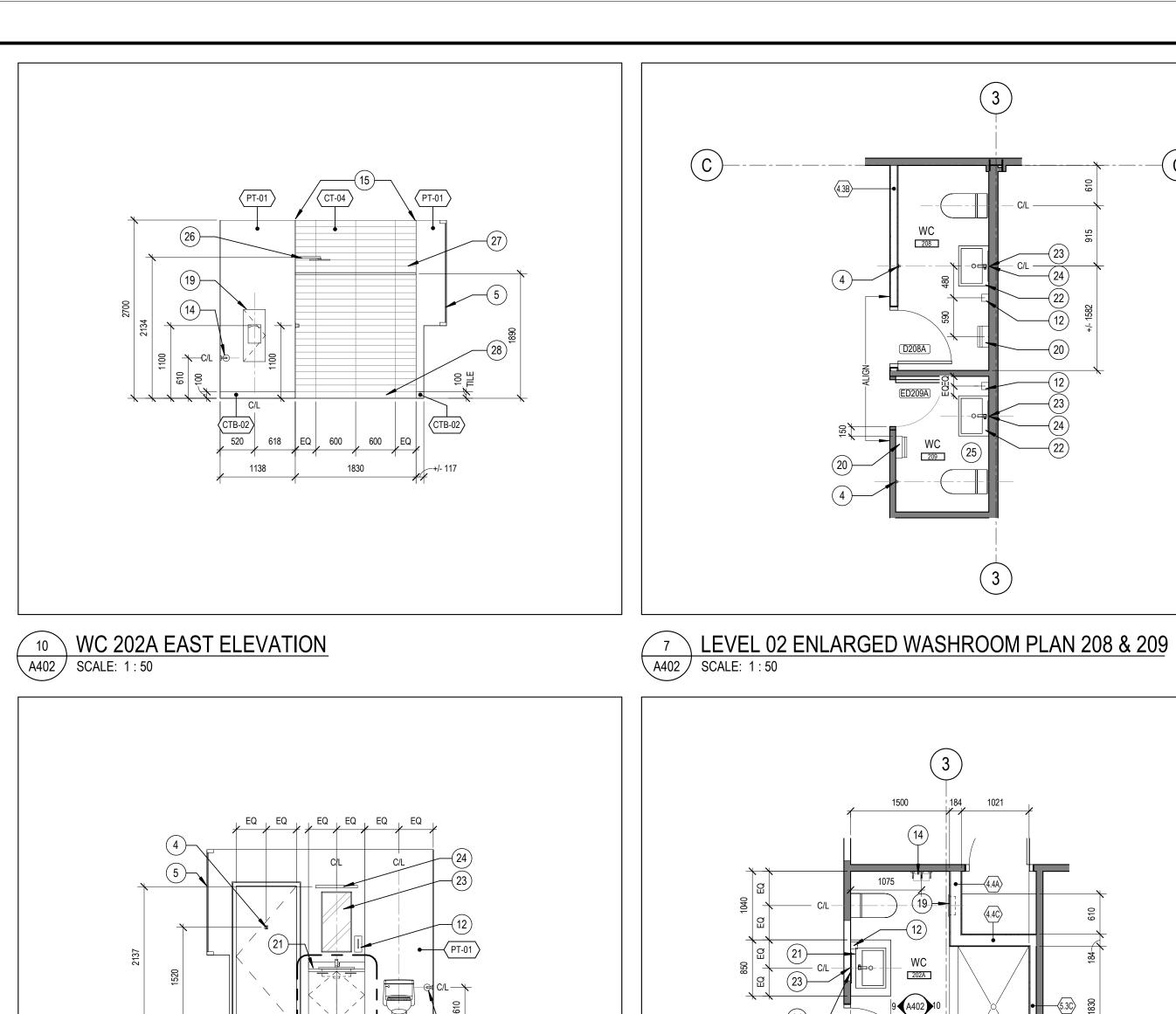
STAIR C - ENLARGED PLANS, SECTIONS, AND DETAILS

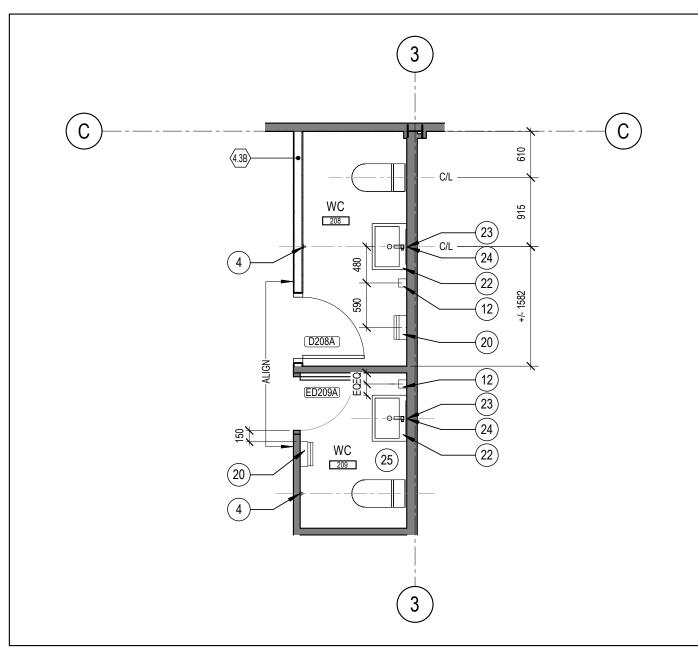
DRAWN **AP**/

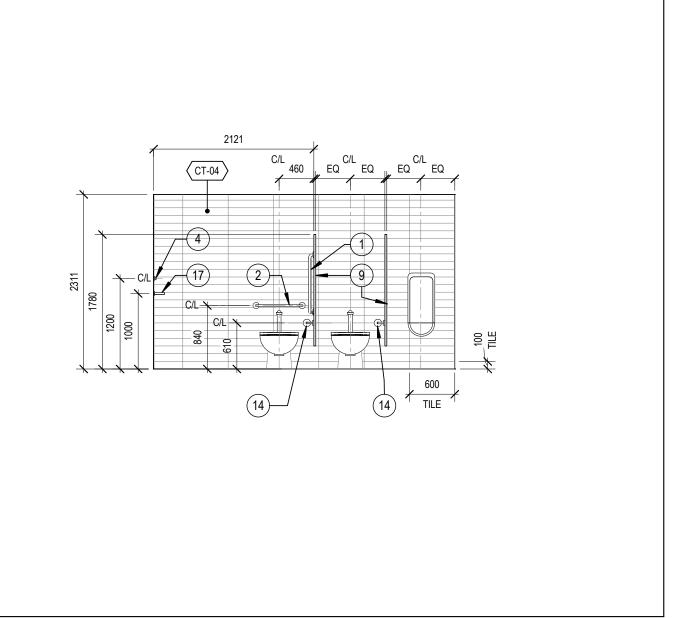
Δ401

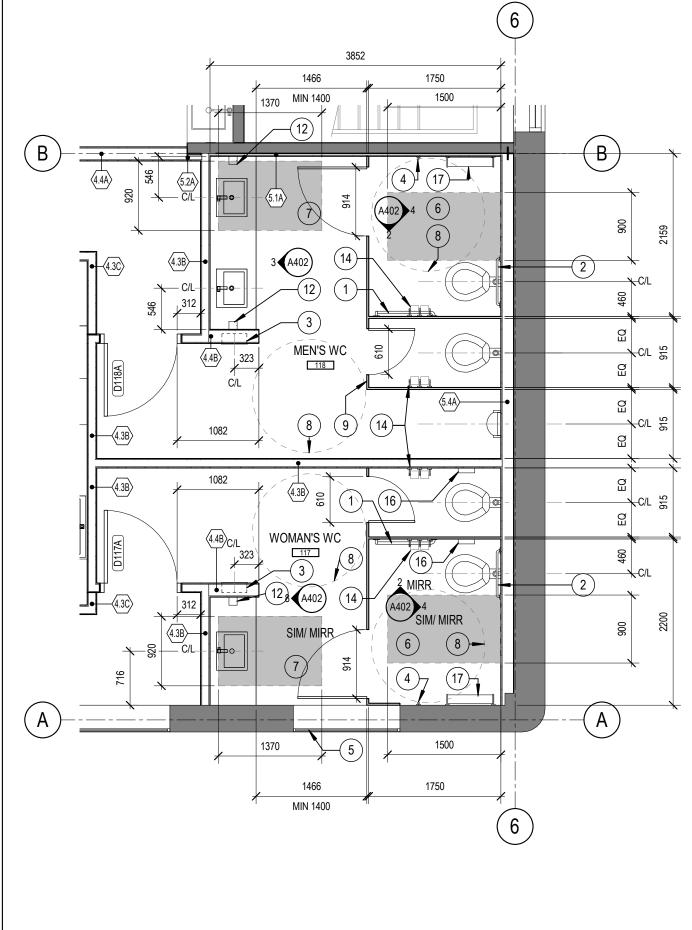
REVIEWED

RMK









LEVEL 01 ENLARGED WASHROOM PLANS 117 & 118

A402 SCALE: 1:50

24" GRAB BAR (WA-2)

(4) COAT HOOK (WA-7)

1 30" X 30" L-SHAPED GRAB BAR (WA-1)

(6) PROVIDE CLEAR TRANSFER SPACE BESIDE WATER CLOSET AS PER OBC 3.8.3.8 (2)

(10) MIRROR ON 3/4" MDF INSET 1" ON ALL SIDES. EXPOSED SIDES PAINTED BLACK

(12) SURFACE MOUNTED SOAP DISPENSER (WA-5)

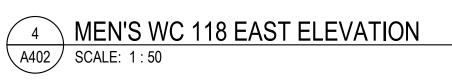
KEYNOTE LEGEND

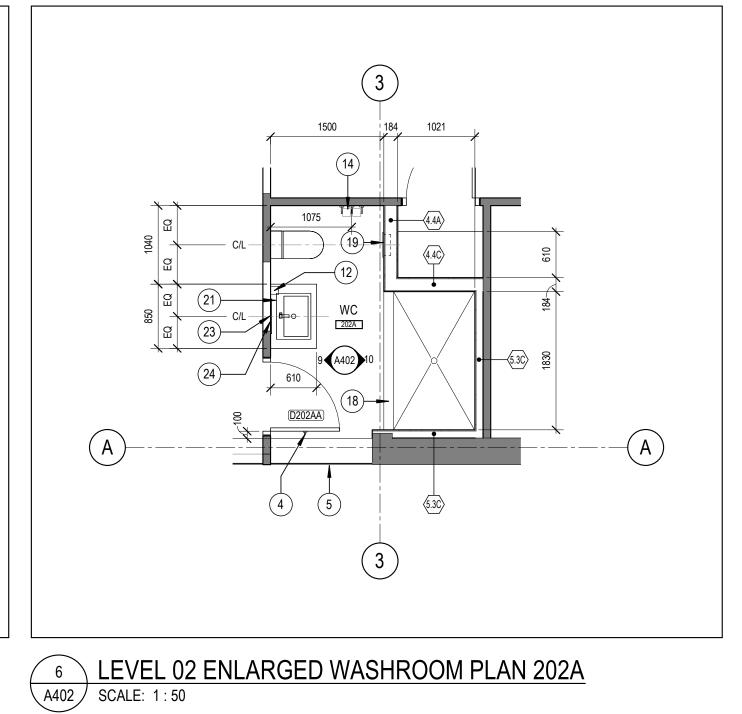
SCALE: N.T.S.

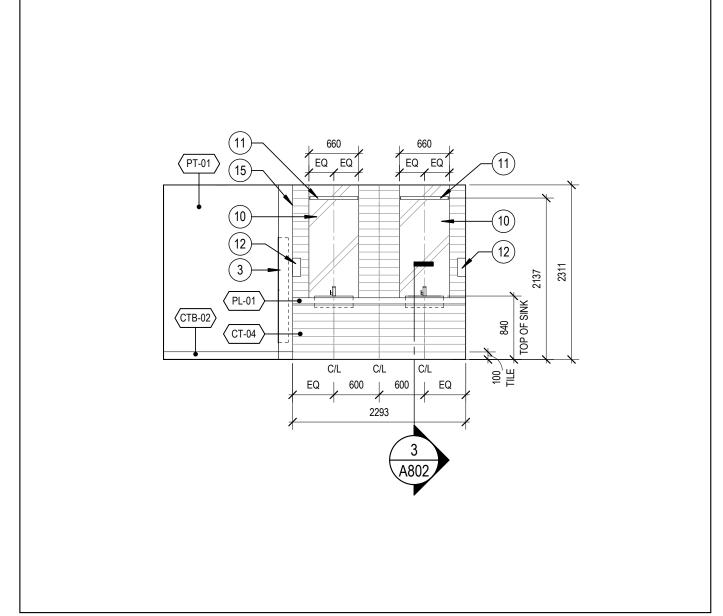
(11) VANITY LIGHT FIXTURE INSTALLED ON MIRROR, COORDINATE WITH ELEC. DRAWINGS

7 PROVIDE CLEAR TRANSFER SPACE IN FRONT OF LAVATORY AS PER OBC 3.8.3.11 (1) (f)

 $(\:9\:)$ FLOOR TO CEILING ANCHORED TOILET PARTITION (TP-01), PROVIDE BLOCKING IN WALLS AND CEILINGS AS REQUIRED.





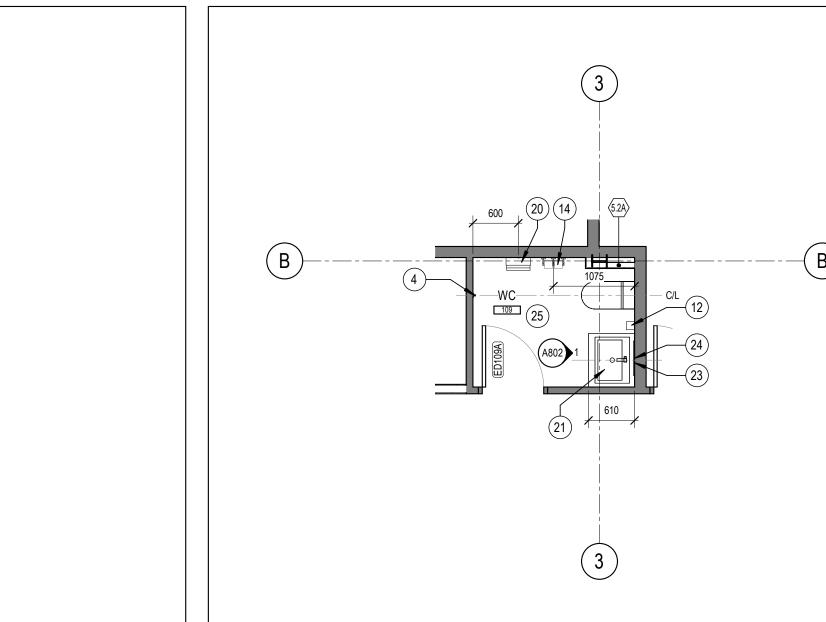


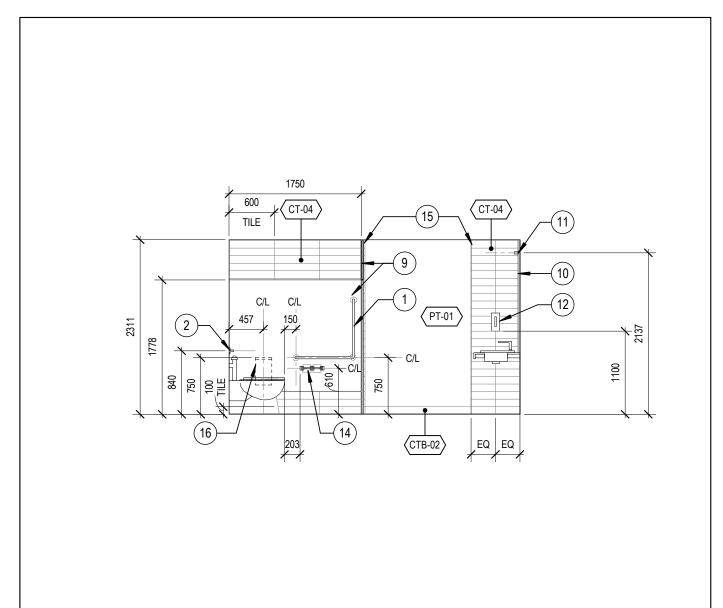
(3) RECESSED PAPER TOWEL DISPENSER AND DISPOSAL (WA-4), INSTALLED WITH TOWEL DISPENSER AT 1100mm AFF. (5) INSTALL OPAQUE FILM (GF-02) TO EXISTING WINDOW

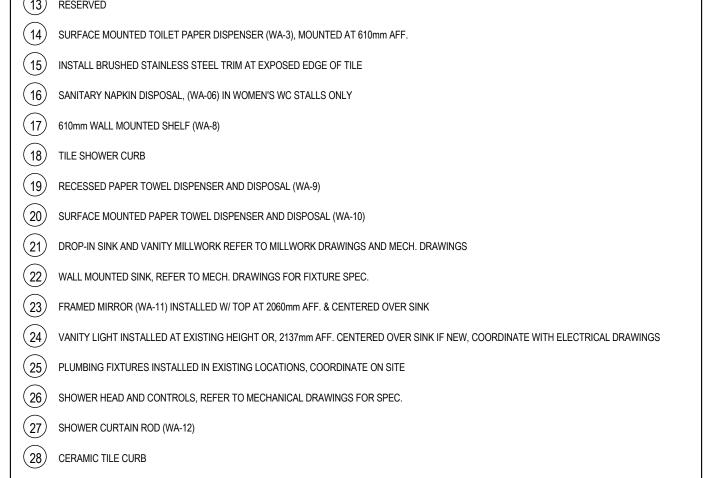
3 MEN'S WC 118 WEST ELEVATION A402 SCALE: 1:50

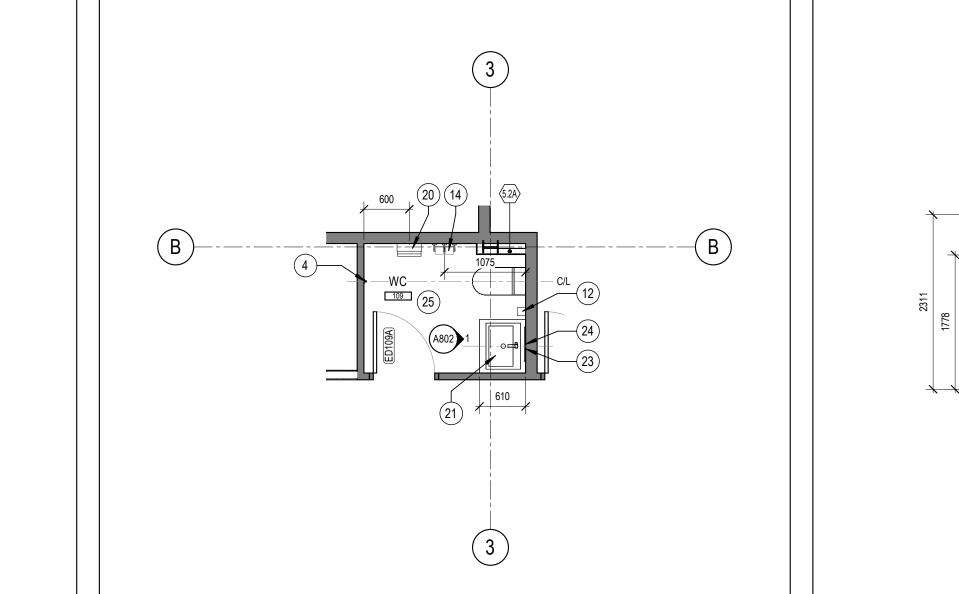
9 WC 202A WEST ELEVATION A402 SCALE: 1:50

A802









5 LEVEL 01 ENLARGED WASHROOM PLAN 109
SCALE: 1:50

2 MEN'S WC 118 SOUTH ELEVATION
SCALE: 1:50



This drawing is the property of the Architect and may not be reproduced or used

The Architectural drawings are to be read in conjuction with all other Contract

hitectural Drawings shall govern over Mechanical and Electrical Drawings.

out the expressed consent of the Architect.

FREEMAN FIT-UP

2295 St.Laurent Blvd Ottawa ON

2 ISSUED FOR TENDER

ISSUE RECORD

1 ISSUED FOR BUILDING PERMIT 2019-11-15

2019-11-29

1927 NOTED

DRAWN

WC - ENLARGED PLANS AND **ELEVATIONS**

REVIEWED

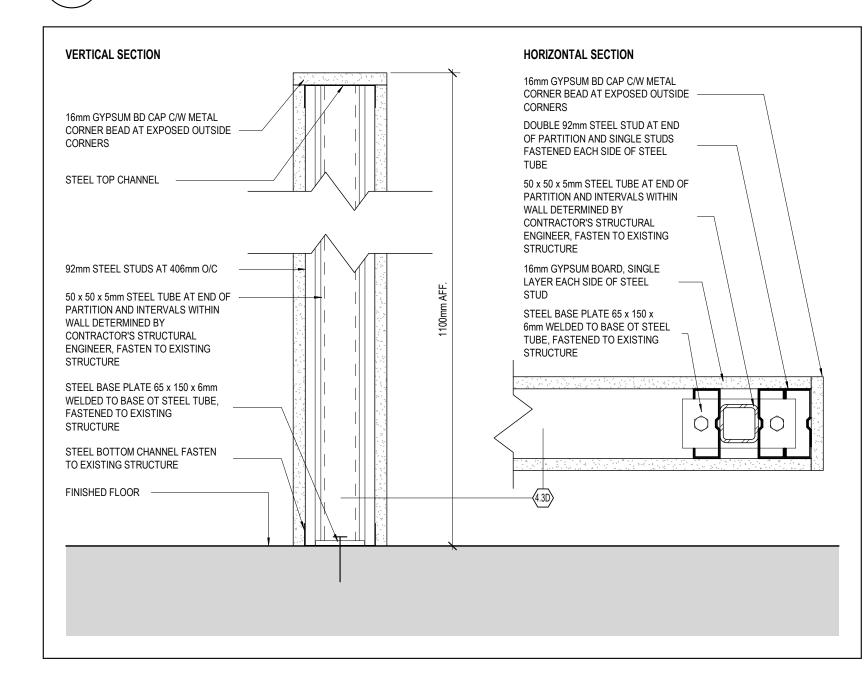
RMK

8 WOMAN'S WC 117 WEST ELEVATION
SCALE: 1:50

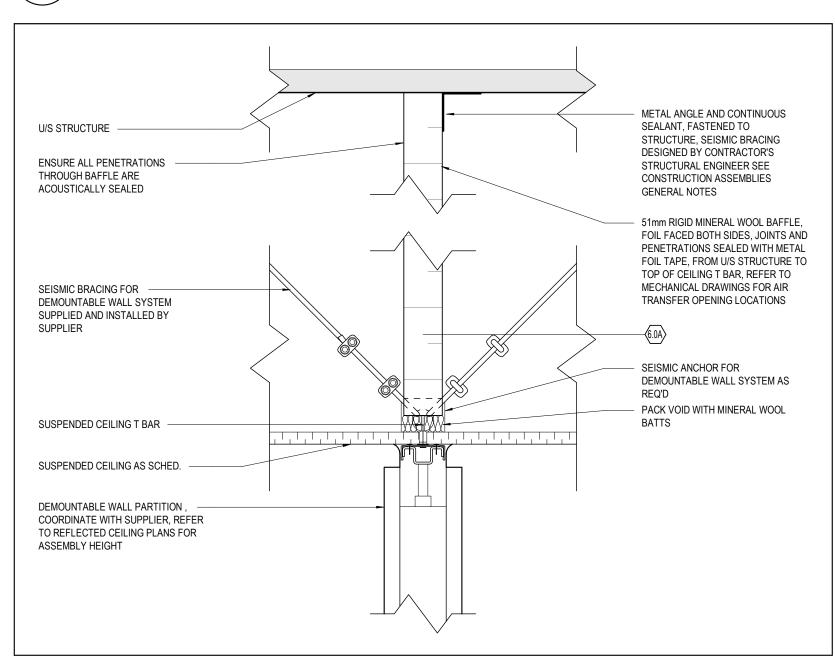
(11)(15)(12)(3)

EXISTING 90mm SQUARE GRID COLOURED FACE BLOCK EXISTING 50mm RIGID INSULATION SEALANT BETWEEN GRILLE AND C/W VAPOUR BARRIER EXISTING STRUCTURE ON TOP AND SIDES OF GRILLE, SEALANT EXISTING 240mm CONC. BLOCK EXCLUDED ON BOTTOM FACE DOUBLE WALL BOX EXHAUST VENT. REFER TO MECH. DRAWINGS BAFFLE AND NEOPRENE BACKDRAFT DAMPER HINGED AT TOP OF WALLBOX 6" DIAMETER RIGID DUCT WITH 1" THICK THERMAL INSULATION C/W VAPOUR BARRIER. REFER TO MECH. DRAWINGS SEALANT BETWEEN WALLBOX AND EXISTING STRUCTURE ON ALL SEALANT AND BACKER ROD —— BETWEEN INSULATED DUCT AND FOUR SIDES NEW VOID IN CMU WALL AROUND CIRCUMFERENCE OF DUCT

3 WC VENT PENETRATION THROUGH EXTERIOR WALL A701 SCALE: 1:10



2 SECTION DETAILS AT LOW HEIGHT PARTITION 4.1D SCALE: 1:5



SECTION DETAIL AT DEMOUNTABLE PARTITION BAFFLE

SCALE: 1:5

project Studio Incorporated

|613.884.3939 |mail@project1studio.ca

2019-11-29

FREEMAN FIT-UP

ISSUED FOR TENDER

ISSUE RECORD

ISSUED FOR BUILDING PERMIT 2019-11-15

2295 St.Laurent Blvd Ottawa ON

NERAL ARCHITECTURAL NOTES:

ithout the expressed consent of the Architect.

obtain clarification prior to commencing work.

This drawing is the property of the Architect and may not be reproduced or used

Drawings are not to be scaled. The Contractor is responsible for checking and verifying all levels and dimensions and shall report all discrepancies to the Architect and

Upon notice in writing, the Architect will provide written/graphic clarification or supplementary information regarding the intent of the Contract Documents.
 The Architectural drawings are to be read in conjuction with all other Contract Documents including Project Manuals and the Structural, Mechanical and Electrical

Positions of exposed or finished Mechanical or Electrical devices, fittings and

Mechanical and Electrical items not clearly located will be located as directed by the

6. These documents are not to be used for construction unless specifically noted for

fixtures are indicated on the Architectural Drawings. Locations shown on the

Architectural Drawings shall govern over Mechanical and Electrical Drawings.

PROJ SCALE
1927 NOTED

D AP/ WB

DRAWN

REVIEWED

RMK

INTERIOR DETAILS

A70⁻

4 SECTION DETAIL AT MTG RM BULKHEAD
A701 SCALE: 1:5

16mm GYPSUM BOARD

BEADS AT ALL EDGES

BULKHEAD C/W CORNER

TRIMLESS RECESSED LINEAR FIXTURE

WITH MUD-IN TRIM & FINISHED OPEN "DADO" ENDS, REFER TO LIGHT FIXTURE

CUT SHEET

GYPSUM BOARD BULKHEAD BRACING TO STRUCTURE

ENGINEER.

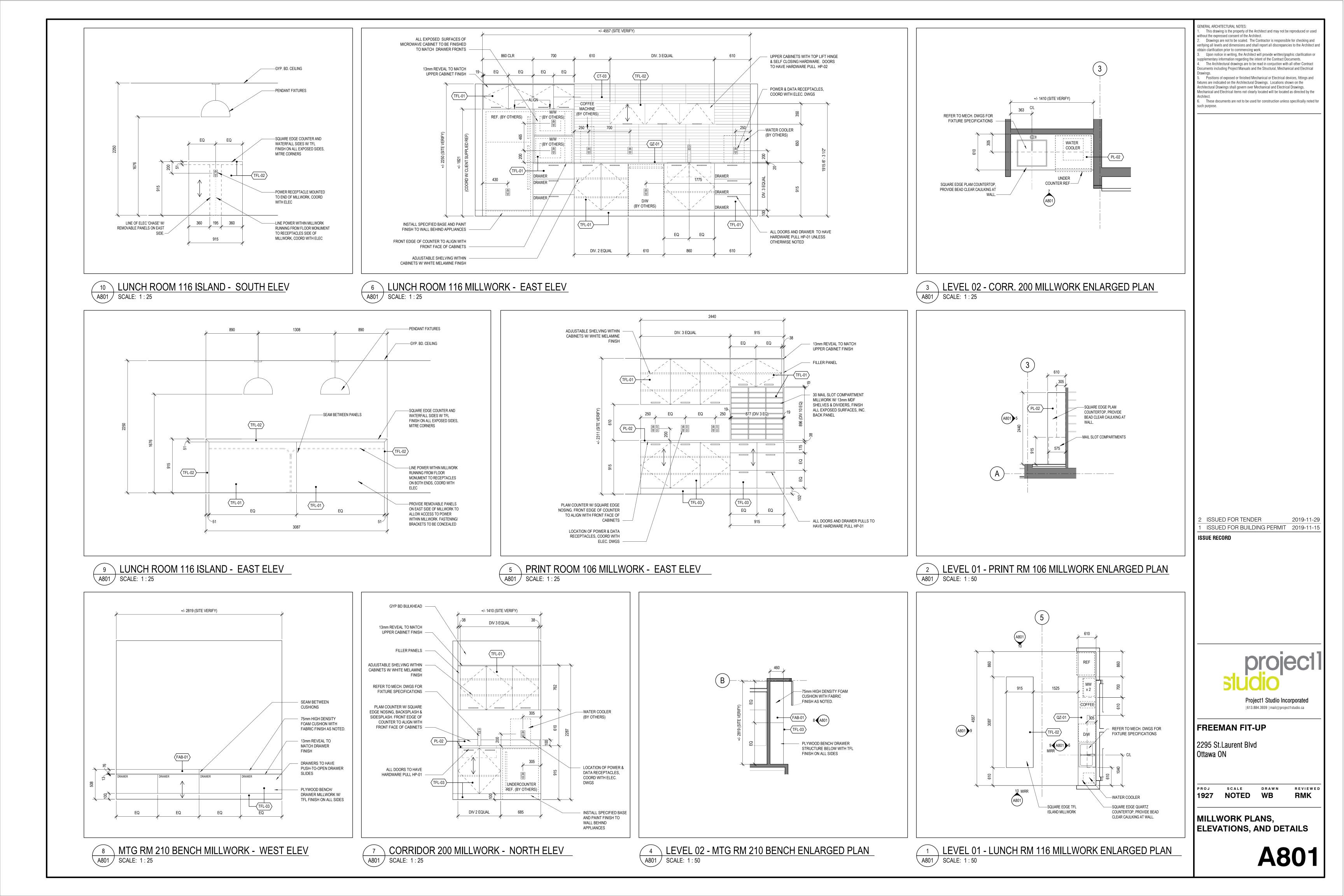
ACT CEILING -

16mm GYPSUM BOARD

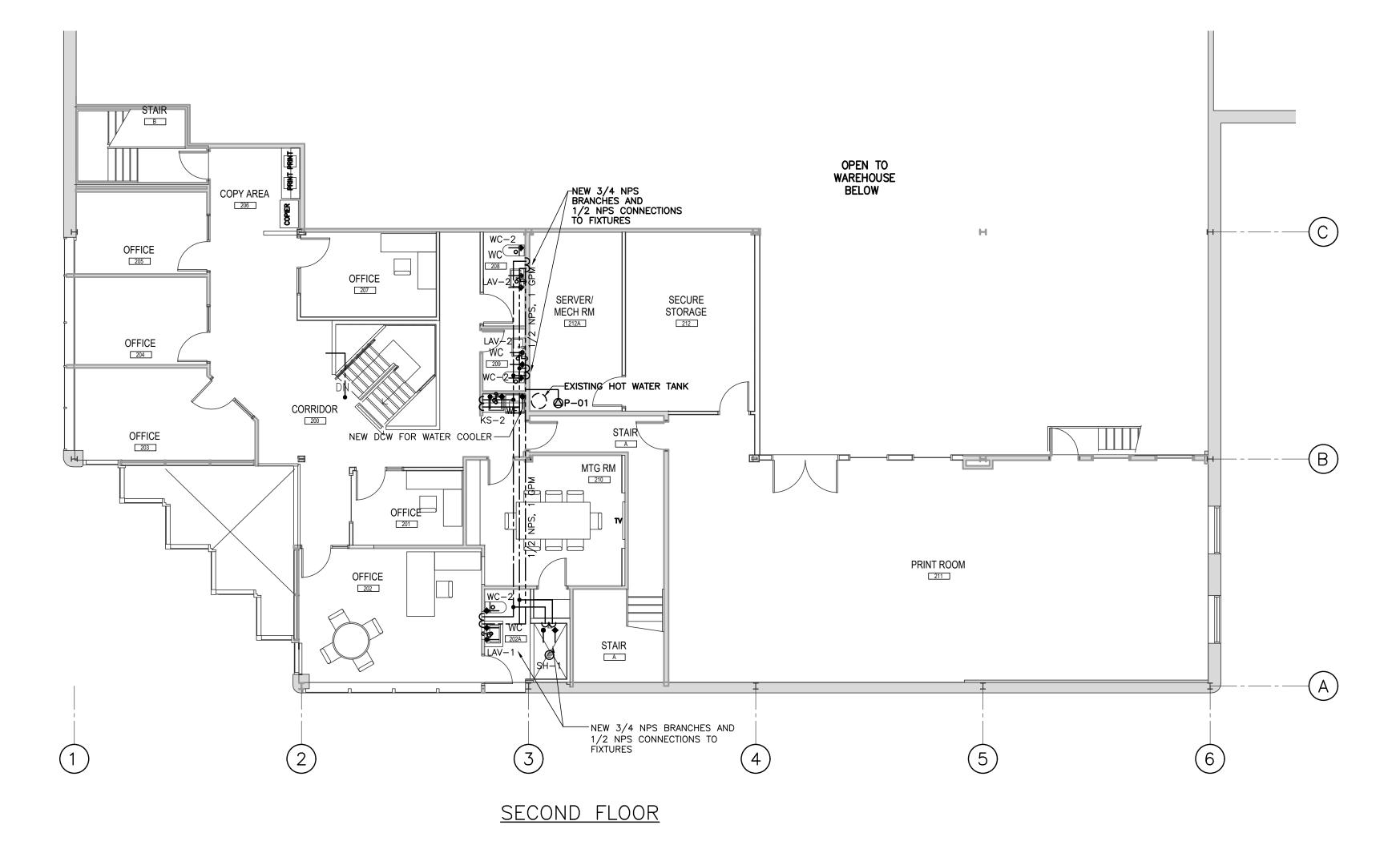
UPSTAND

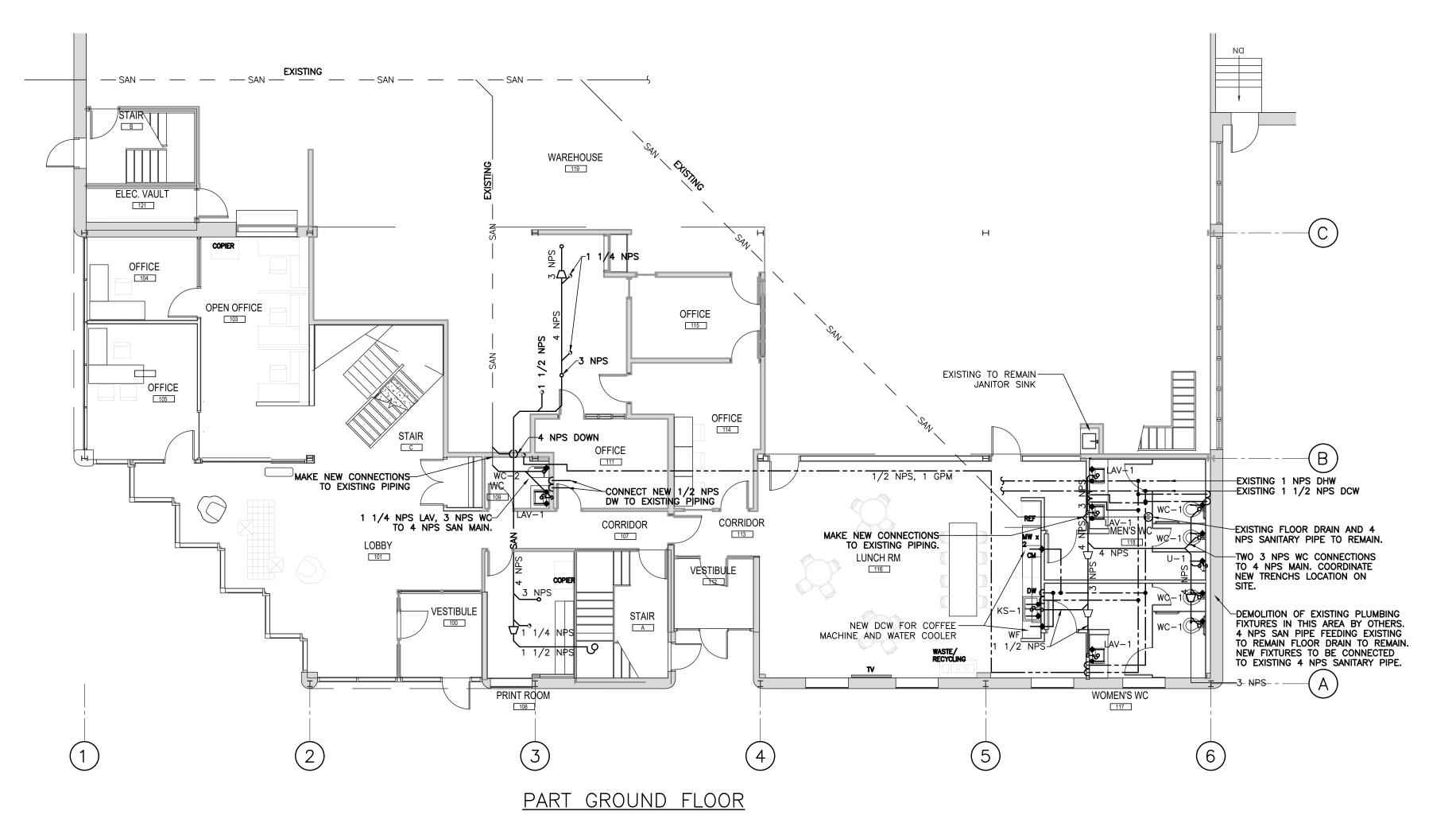
DESIGNED BY CONTRACTOR'S

ACT EDGE TRIM AT BULKHEAD -



ENERAL ARCHITECTURAL NOTES: This drawing is the property of the Architect and may not be reproduced or used without the expressed consent of the Architect. Drawings are not to be scaled. The Contractor is responsible for checking and verifying all levels and dimensions and shall report all discrepancies to the Architect and obtain clarification prior to commencing work. PARTITION TYPE AS Upon notice in writing, the Architect will provide written/graphic clarification or SPECIFIED supplementary information regarding the intent of the Contract Documents. 4. The Architectural drawings are to be read in conjuction with all other Contract ocuments including Project Manuals and the Structural, Mechanical and Electrical MIRROR ON 19mm MDF 19mm PLYWOOD COUNTER W/ PLAM FINISH Positions of exposed or finished Mechanical or Electrical devices, fittings and fixtures are indicated on the Architectural Drawings. Locations shown on the rchitectural Drawings shall govern over Mechanical and Electrical Drawings. REFER TO MECH. DWGS FOR DROP IN SINK AND FAUCET SPEC. - 6mm FACE PLATE WELDED TO Mechanical and Electrical items not clearly located will be located as directed by the HSS TO SUPPORT VALANCE 610 INSULATE EXPOSED PIPES 6. These documents are not to be used for construction unless specifically noted for BELOW COUNTER - 19mm PLYWOOD VALANCE W/ PLAM FINISH, MITRE CORNER APPLY CLEAR BEAD OF CAULKING WHERE -COUNTERTOP MEETS WALL WELDED HSS SUPPORTS 205 MIN. BEYOND 1300 MIN. DASHED LINE INDICATES
BARRIER FREE CLEARANCES BELOW VANITY 6mm BASE PLATE WELDED TO HSS AND ANCHORED TO SLAB WC 117 & 118 VANITY SECTION PROVIDE BEAD CLEAR CAULKING AT JUNCTION OF COUNTER & BACKSPLASH -PLAM COUNTER W/ SQUARE EDGE NOSING & BACKSPLASH. FRONT EDGE OF COUNTER TO ALIGN WITH FRONT FACE OF CABINETS — REFER TO MECH. DWGS FOR FIXTURE SPECIFICATIONS -HARDWARE PULL HP-01 -ADJUSTABLE SHELVING WITHIN -CABINETS W/ WHITE MELAMINE FINISH 2 ISSUED FOR TENDER 2019-11-29 1 ISSUED FOR BUILDING PERMIT 2019-11-15 ISSUE RECORD WASHROOM 202A - VANITY ELEV SCALE: 1:25 PROVIDE BEAD CLEAR CAULKING AT JUNCTION OF COUNTER & BACKSPLASH & SIDE WALL REFER TO MECH. DWGS FOR FIXTURE SPECIFICATIONS -PLAM COUNTER W/ SQUARE EDGE NOSING & BACKSPLASH. FRONT EDGE OF COUNTER TO ALIGN WITH FRONT FACE OF CABINETS Project1 Studio Incorporated HARDWARE PULL HP-01 |613.884.3939 | mail@project1studio.ca FILLER PANEL TO ADJUSTABLE SHELVING WITHIN CABINETS W/ WHITE MELAMINE FINISH MATCH CABINET FINISH FREEMAN FIT-UP 2295 St.Laurent Blvd Ottawa ON DRAWN REVIEWED 1927 NOTED WB **RMK** MILLWORK CONTINUED 1 WASHROOM 109 - VANITY ELEV
A802 SCALE: 1:25





<u>NOTES</u>

- 1. THE PROJECT CONSISTS OF A RENOVATION OF AN EXISTING OFFICE BUILDING. WAREHOUSE TO REMAIN AS IT IS.
- 2. ALL EXISTING AND NEW SAN PIPING UNDERGROUND TO BE CCTV CHECKED PRIOR TO OCCUPANCY.
- 3. TYPICAL: CONNECT NEW SANITARY PIPING TO EXISTING BUILDING PIPING.
- 4. TYPICAL: CONNECT NEW WATER PIPING TO EXISTING BUILDING WATER
- 5. TYPICAL: CONNECT NEW FIXTURES TO EXISTING BUILDING VENT PIPING.
- 6. LINE BREAKS ARE FOR CLARITY AND DO NOT NECESSARILY SHOW ORDER OF INSTALLATION.
- 7. NOT ALL REQUIRED CLEANOUTS ARE SHOWN. PROVIDE ALL CODE
- REQUIRED CLEANOUTS.
- 8. NUMBER, LOCATIONS OF FIXTURES: ARCHITECTURAL DRAWINGS TO
- 9. IT IS THE INTENT OF THESE DRAWINGS THAT THE MECHANICAL CONTRACTOR PROVIDE A COMPLETE EQUIPMENT AND FITTINGS, WHETHER OR NOT ALL SUCH ITEMS ARE EXPLICITLY SHOWN ON THESE DRAWINGS. IN ALL CASES OF UNCERTAINTY THE ENGINEER SHALL BE REQUESTED IN WRITING TO PROVIDE CLARIFICATION IN WRITING.
- 10. CONTRACTOR TO VISIT SITE BEFORE TENDER AND ASCERTAIN ALL SITE CONDITIONS BEFORE BIDDING. REPORT ALL DISCREPANCIES TO ENGINEER
- 11. MECHANICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND ELECTRICAL PLANS.
- 12. CONTRACTOR IS TO CO-ORDINATE LOCATIONS OF DUCTWORK, PIPING AND FIXTURES WITH OTHER TRADES.
- 13. SEAL ALL PENETRATIONS OF WALLS BY PIPING, CONTROL WIRING AND
- 14. ESCUTCHEON COVERS TO BE PROVIDED FOR ALL PIPING PASSING THROUGH FINISHED WALLS.
- 15. ALL PIPING INSTALLED ALONG OUTSIDE WALLS IS TO BE ROUTED ON THE WARM SIDE OF THE BUILDING INSULATION.
- 16. PROVIDE ISOLATION VALVES ON ALL WATER SUPPLY CONNECTIONS TO PLUMBING FIXTURES.
- 17. ALL VALVES AND STRAINERS TO BE LINE SIZE.
- 18. ALL EXPOSED PLUMBING IS TO BE FINISHED AND CHROMED PLATED.
- 19. PROVIDE AS-BUILT PLANS. CONTRACTORS ARE RESPONSIBLE FOR INDICATING THE EXACT LOCATIONS OF UNDERGROUND PIPING.
- 20. PIPE SIZES ARE IN NPS.
- 21. MECHANICAL CONTRACTOR TO PROVIDE ACCESS DOORS FOR ALL CONCEALED VALVES AND EQUIPMENT. GENERAL CONTRACTOR TO INSTALL
- 22. WC-1: AMERICAN STANDARD, MADERA FLOWISE, FLOOR MOUNT ELONGATED FLUSHOMETER VALVE TOILET, VITREOUS CHINA 4.2 LPF, 10" ROUGHING-IN, 16-1/2" RIM HEIGHT, 1-1/2" TOP SPUD, OPEN FRONT SEAT WITH COVER. FLUSH VALVE: MODEL 6047.121 ADA COMPLIANT NON-HOLD OPEN HANDLE, CHLORAMINE-RESISTANT EPDM SEALS, ADJUSTABLE TAILPIECE.
- 23. WC-2: AMERICAN STANDARD, TOFINO CONCEALED TRAPWAY DUAL FLUSH ELONGATED ONE PIECE TOILET WITH SEAT 2996C.203 ELONGATED BOWL, ONE PIECE TOILET WITH SLOW CLOSE SEAT WITH COVER, SIPHON JET BOWL.4.1LPF, 15-1/4" (387MM) RIM HEIGHT, CHROME-PLATED TOP MOUNTED PUSH BUTTON ACTUATOR, SUPPLY IWTH STOP.
- 24. U-1: AMERICAN STANDARD, PINTBROOK URINAL, VITREOUS CHINA, 1.9 LPF, 3/4" INLET TOP SPUD, OUTLET CONNECTION THREADED 2" NPT, WALL HANGERS.
- 25. LAV-1: AMERICAN STANDARD, STUDIO MODEL 0643-001, DROP IN UNIVERSAL ACCESS LAV, DELTA TRINSIC SINGLE LEVER 5.7 L/M FAUCET MODEL 559, TRAP, DRAIN, PLUG. 1/2 NPS DW, 1 1/4 NPS SAN, VENT.
- 26. LAV-2: AMERICAN STANDARD, DECORUM MODEL, WALL-HUNG LAVATORY, 20"x18" VITREOUS CHINA, DELTA TRINSIC SINGLE LEVER 5.7 L/M FAUCET MODEL 559, TRAP, DRAIN, PLUG. 1/2 NPS DW, 1 1/4 NPS SAN, VENT.
- 27. KS-1: UNDERMOUNT KITCHEN SINK, KINDRED STAINLESS STEEL MODEL 123.0078.543, DOUBLE BOWL, DELTA TRINSIC MODEL 4159-DST SINGLE LEVER 5.7 L/M FAUCET, TRAP, DRAIN, CRUMB CUP STRAINER, SOUND DEADENING PAD. 1/2 NPS DW, 1 1/2 NPS SAN, VENT.
- 28. KS-2: DROP IN KITCHEN SINK, KINDRED STAINLESS STEEL MODEL 101.0191.918, SINGLE BOWL, DELTA TRINSIC MODEL 4159-DST SINGLE LEVER 5.7 L/M FAUCET, TRAP, DRAIN, CRUMB CUP STRAINER, SOUND DEADENING PAD. 1/2 NPS DW, 1 1/2 NPS SAN, VENT.
- 29. P-01: DHW RECIRC. PUMP. ALL BRONZE, AQUASTAT, 120V/1PH 1/4HP. CONNECT TO EXISTING DHW PIPING NEAR EXISTING HOT WATER TANK.
- 30. WF: BOTTLE WATER COOLER, CULLIGAN, EXECUTIVE SERIES COUNTER TOP, 1/4 NPS DCW INLET.
- 31. SH-1: SHOWER BUILT UP BY OTHERS, STAINLESS STEEL CURTAIN ROD BY OTHERS, ULTRA THIN LED DOME LIGHT, CHROME DRAINS, PAN LINER, TRAP. SHOWER TRIM TO BE MANUFACTURED BY DELTA, MODEL TRINSIC #T14259 PRESSURE BALANCED SHOWER VALVE 6.6 LPM.

LEGEN	ND	
	PROGRAMMABLE THERMOSTAT	
月毋↓	BRANCH DUCT CONNECTION WITH BALANCING DAMPER	
	FLEXIBLE CONNECTION	
	SQUARE TO ROUND TRANSITION	
— SAN —	SANITARY DRAIN ABOVE GRADE/FLOOR	
—— SAN ———	SANITARY DRAIN BURIED	
	DOMESTIC COLD WATER	
	DOMESTIC HOT WATER	
─ > ─	PIPE DROPS, PIPE RISES	
	DIELECTRIC UNION	
⊕ □ FD	FLOOR DRAIN WITH TRAP	
⊚ FFD	FUNNEL FLOOR DRAIN	
O H.D.	HUB DRAIN	
	ISOLATING VALVE	
\neg	CLEANOUT ABOVE FLOOR	
— Þ	CLEANOUT IN FLOOR	
♦ —	DCW CONNECTION TO FAUCET	
•—	DHW CONNECTION TO FAUCET	
(FE)	FIRE EXTINGUISHER ON WALL BRACKET	
NEW SEMI-RECESSED PENDENT SPRINKLER HEAD		
©	NEW UPRIGHT SPRINKLER HEAD	

THIS DRAWING, OR PARTS THEREOF, MAY NOT BE REPRODUCED OR USED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT THE WRITTEN PERMISSION OF QUADRANT ENGINEERING.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION. WHERE CONFLICT ARISES

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY OF QUADRANT ENGINEERING (QE)

THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF THESE DOCUMENTS BY OTHERS.

UPON WRITTEN APPLICATION QE WILL PROVIDE WRITTEN CLARIFICATION REGARDING THE INTENT OF THE CONTRACT

QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS, ON SITE, REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE DESIGN TEAM BEFORE COMMENCING WORK.

DRA	WING LIST
DRAWING NUMBER	NAME
M-01	PLUMBING, LEGEND AND NOTES
M-02	HVAC AND SPRINKLERS
M-03	SPECIFICATION

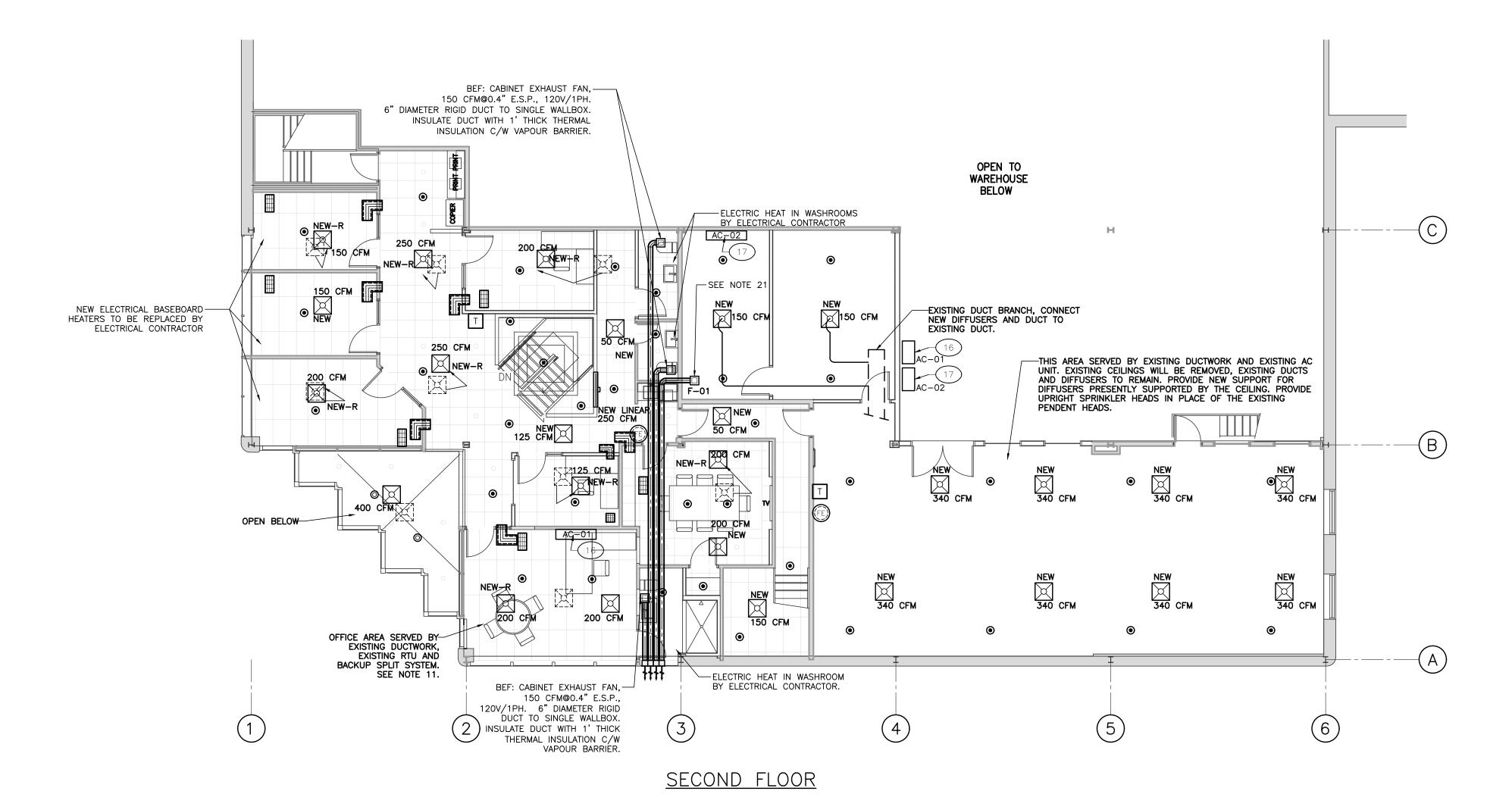
2	ISSUED FOR PRICING	29 NOV 201
1	ISSUED FOR PERMIT	15 NOV 201
NO.	REVISION	DATE
DOMONITOT	· · · · · · · · · · · · · · · · · · ·	

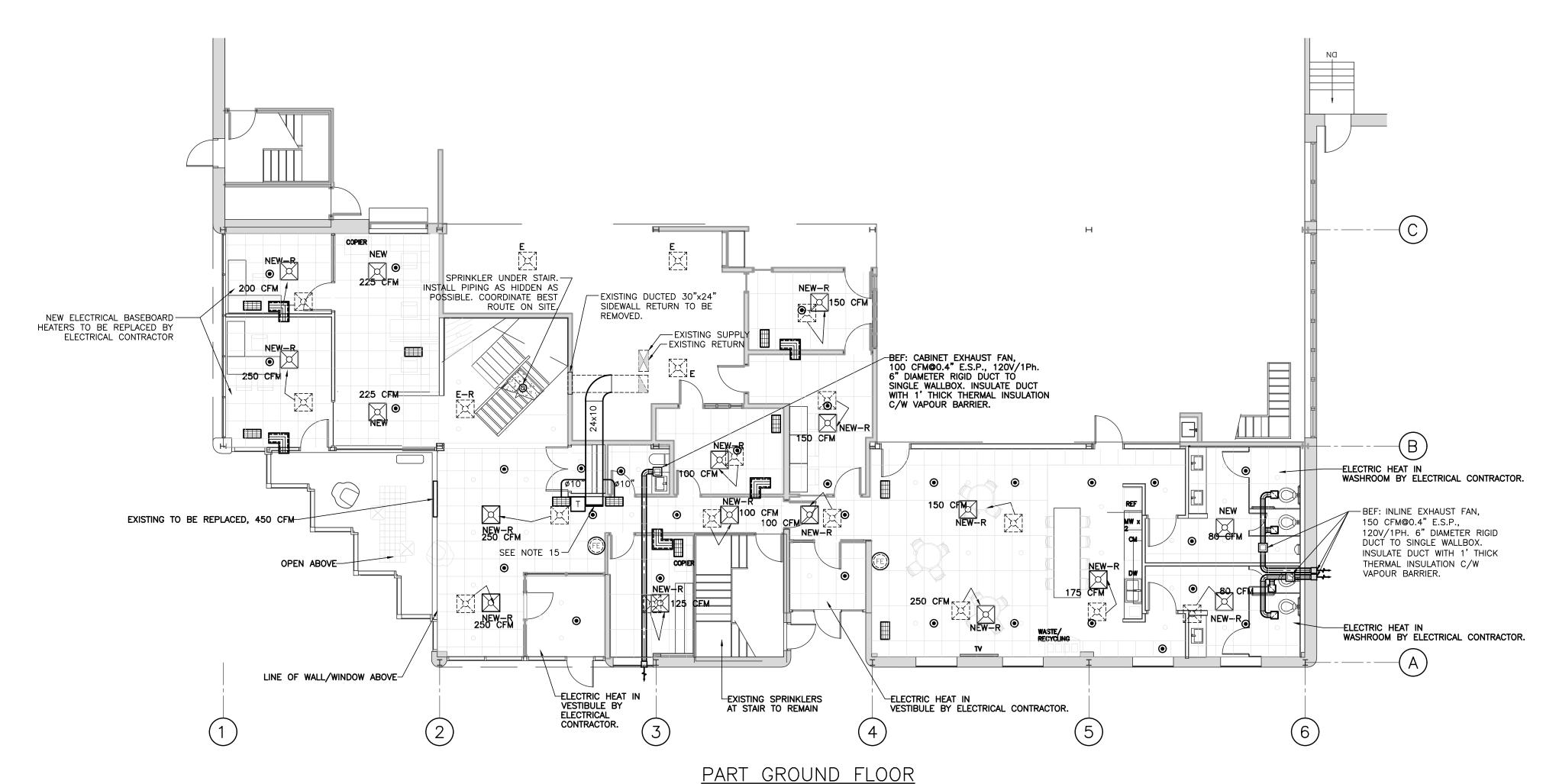
2295 ST. LAURENT FIT UP OTTAWA, ONTARIO

2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2 TEL. (613) 567-1487 FAX. (613) 567-1493 E-Mail: mail@quadrantengineering.ca

CURRENT	DATE Fri, 29 Nov 2019, 14 5
SCALE	1:100
DRAWN	CWC
DESIGNED	CWC
CHECKED	CWC
PROJECT	19-Q025
DRAWING 1	NUMBER
M-	01

PLUMBING, LEGEND AND NOTES





<u>NOTES</u>

1. SEE NOTES ON M-01.

ELECTRICAL HEATERS.

36" OF ALUMINUM FLEX DUCT.

- 2. EXISTING ROOFTOP PACKAGED UNITS TO BE REPLACED UNDER SEPARATE CONTRACT. UNIT OUTSIDE AIR TO BE SET AT 15%. NEW THERMOSTATS TO BE 7-DAYS PROGRAMMABLE.
- GROUND FLOOR IS SUPPLIED BY A NEW 10 TON AC UNIT AND EXISTING DUCTWORK.
- 2ND FLOOR IS SUPPLIED BY A NEW 7.5 TON AND NEW 5 TON UNIT AND EXISTING DUCTWORK.
- 5. SEE ELECTRICAL DRAWING E-200 FOR EXISTING AND NEW BASEBOARD
- 6. EXISTING DUCTWORK ABOVE THE CEILING TO REMAIN UNLESS NOTED.
- 7. PATCH AND MAKE GOOD ALL EXISTING DUCT INSULATION.
- 8. EXISTING DIFFUSERS TO BE REMOVED. NEW DIFFUSERS, 24x24 3 CONE STEEL WITH DAMPER, TO BE INSTALLED AND CONNECTED TO EXISTING DUCTWORK. NEW DIFFUSERS NOT ASSOCIATED WITH AN EXISTING DIFFUSER NOTED AS "NEW". NEW DIFFUSERS ASSOCIATED WITH AN
- EXISTING—REMOVED DIFFUSER NOTED AS NEW—R. NEW LINEAR DIFFUSER TO BE VERTICAL MOUNTED IN THE NEW BULKHEAD AT THE STAIRS, SDS WITH PLENUM OR SIMILAR APPROVED.

 9. NEW AND NEW—R DIFFUSERS TO BE CONNECTED WITH NO MORE THAN
- 10. EXISTING SPRINKLER SYSTEM IN THE OFFICE AREA TO BE REVISED TO SUIT THE NEW LAYOUT. MAINS AND MAIN BRANCHES TO BE LEFT AS—IS. PROVIDE NEW SPRINKLER HEADS IN NEW LOCATIONS. NEW UPRIGHT AND SEMI—RECESSED PENDENT HEADS TO BE USED. PROVIDE ANY NEW PIPE REQUIRED.
- 11. FIRE PROTECTION CONTRACTOR TO SUBMIT SHOP DRAWINGS SHOWING ALL HEAD LOCATIONS AND MAIN BRANCH LINES. WORK SHALL NOT START UNTIL ENGINEER AND ARCHITECT REVIEW IS SATISFIED. CONTRACTOR SHALL PROVIDE TWO SEALED COPIES, OVER AND ABOVE THOSE REQUIRED FOR ENGINEER'S REVIEW, FOR SUBMISSION TO THE AUTHORITY HAVING JURISDICTION AS A PART OF THE BUILDING PERMIT APPLICATION. FIRE PROTECTION SHOP DRAWINGS FOR ALL EQUIPMENT. INCUDE CONFIRMATION THAT THE DESIGN CONFORMS TO SEISMIC REQUIREMENTS OF NFPA, STRUCTURAL ENGINEER AND AUTHORITY
- 12. FIRE PROTECTION SHOP DRAWINGS TO BE DONE BY A PROFESSIONAL ENGINEER PERMANENTLY LICENSED IN THE PROVINCE OF ONTARIO.
- 13. THE FIRE PROTECTION CONTRACTOR SHALL OBTAIN A COMPLETE SET OF ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR USE IN PREPARING THE TENDER BEFORE SUBMITTING THE TENDER.
- PROVIDE FIRE EXTINGUISHERS AS PER CODE AND APPROVAL OF LOCAL AUTHORITIES HAVING JURISDICTION.
- 15. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO CONFLICTS WITH OTHER TRADES OCCUR. SHOP DRAWINGS WILL BE REVIEWED BY THE ENGINEER AND THE ARCHITECT.
- 16. AC-01: DUCTLESS SPLIT SYSTEM, 1 TON CAPACITY, WIRELESS THERMOSTAT, PIPE CONDENSATE TO ADJACENT DRAIN IN BATHROOM. CONDENSING UNIT TO BE INSTALLED IN WAREHOUSE ON WALL BRACKETS AND NEOPRENE ISOLATORS. REFRIGERANT PIPING TO BE RUN IN THE CEILING, COORDINATE WITH EXISTING TO REMAIN DUCTWORK AND SPRINKLER PIPING. 208-230V, 1PH, 9.1A FLA, 11.2A
- 17. AC-02: DUCTLESS SPLIT SYSTEM, 1.5 TON CAPACITY, WIRELESS THERMOSTAT, PIPE CONDENSATE TO ADJACENT DRAIN IN BATHROOM. CONDENSING UNIT TO BE INSTALLED IN WAREHOUSE ON WALL BRACKETS AND NEOPRENE ISOLATORS. REFRIGERANT PIPING TO BE RUN IN THE CEILING, COORDINATE WITH EXISTING TO REMAIN DUCTWORK AND SPRINKLER PIPING. 208-230V, 1PH, 15.3A FLA, 19A MCA, 25 MOP.
- 18. RETURN GRILLES: 24"X12" R/A EGGCRATE, STEEL 1/2"X1/2", WHITE.
- 19. TRANSFER GRILLES, 16"X12" C/W 1" THICK ACOUSTIC INSULATION,
- 20. END OF RETURN DUCT WITH 24"X10" GRILLE FOR CEILING RETURN FROM ADJACENT SPACES
- 21. F-01: CABINET EXHAUST FAN, 300 CFM@0.4" E.S.P., 120V/1PH/1.5A. 8" DIAMETER RIGID DUCT TO SINGLE WALLBOX. INSULATE DUCT WITH 1' THICK THERMAL INSULATION C/W VAPOUR BARRIER.
- 22. ELECTRICAL CONTRACTOR TO PROVIDE SHUT DOWN TIMERS FOR BEF IN ALL WASHROOMS.
- 23. DUCT DIMENSIONS ARE IN INCHES. DUCT DIMENSIONS ARE OUTSIDE DIMENSIONS.
- 24. CONTRACTOR IS TO PROVIDE RIGID METALLIC DUCTWORK AND/OR A MAXIMUM OF 6 FT. OF METALLIC FLEXIBLE DUCTWORK ON GRILL/DIFFUSER CONNECTIONS.
- 25. PROVIDE BALANCING DAMPER ON EACH DUCT TAKEOFF TO A SUPPLY DIFFUSER/GRILL.
- 26. PROVIDE BALANCING DAMPER ON EACH DUCT TAKEOFF TO AN EXHAUST
- GRILL IN WASHROOMS.

 27. ALIGN ALL DIFFUSERS TO NEW CEILING LAYOUT.
- 28. WALL BOXES TO BE LEAK-PROOF, 26 GA. STEEL, ALUMINUM GRILLE, NEOPRENE BACKDRAFT DAMPER.

THIS DRAWING, OR PARTS THEREOF, MAY NOT BE REPRODUCED OR USED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT THE WRITTEN PERMISSION OF QUADRANT ENGINEERING.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION. WHERE CONFLICT ARISES THE MORE STRINGENT OF THE TWO SHALL APPLY.

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY OF QUADRANT ENGINEERING (QE)

THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF THESE DOCUMENTS BY OTHERS.

UPON WRITTEN APPLICATION QE WILL PROVIDE WRITTEN CLARIFICATION REGARDING THE INTENT OF THE CONTRACT

QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS, ON SITE, REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE DESIGN TEAM BEFORE COMMENCING WORK.

2	ISSUED FOR PRICING	29 NOV 2
1	ISSUED FOR PERMIT	15 NOV 2
NO.	REVISION	DATE

OTTAWA, ONTARIO

2295 ST. LAURENT

FIT UP

QUAQRANT

2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2
TEL. (613) 567—1487 FAX. (613) 567—1493
E—Mail: mail@quadrantengineering.ca

CURRENT	DATE Fri, 29 Nov 2019, 14 5
SCALE	1:100
DRAWN	CWC
DESIGNED	CWC
CHECKED	CWC
PROJECT	19-Q025
DRAWING 1	NUMBER
M-	02

HVAC AND SPRINKLERS

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THESE DOCUMENTS BY OTHERS.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY

THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL

CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF

JPON WRITTEN APPLICATION QE WILL PROVIDE WRITTEN

QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE

CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

THE DESIGN TEAM BEFORE COMMENCING WORK.

CLARIFICATION REGARDING THE INTENT OF THE CONTRACT

CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS ON SITE, REQUIRED TO PERFORM THE WORK AND REPORT

ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO

PROVIDE COMPLETE HEATING/COOLING VENTILATING SYSTEM, PLUMBING AND GAS ISTRIBUTION AS GENERALLY SHOWN ON DRAWINGS AND DESCRIBED HEREIN. CO-ORDINATE INSTALLATION WITH THE VARIOUS TRADES. FURNISH INSPECTION CERTIFICATES PRIOR TO FINAL PAYMENT TO SHOW THAT ALL INTENDED WORK CONFORMS WITH DRAWINGS AND SPECIFICATIONS AND WITH BY-LAWS AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION.

PROJECT DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO THIS GENERAL SPECIFICATION. IN CASES OF CONFLICT, AMBIGUITY OR DOUBT APPLY TO THE ENGINEER FOR A RULING IN WRITING.

DRAWINGS IN PART ARE DIAGRAMMATIC AND INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL LAYOUT OF MECHANICAL SYSTEMS. DO NOT SCALE DRAWINGS. ALL JOBS MUST BE COMPLETE, PERFORMED AND FINISHED IN A WORKMANLIKE MANNER. WORK AND MATERIALS OF AN INCIDENTAL NATURE, NECESSARY BY IMPLICATION TO PRODUCE THE FINISHED JOB AS SPECIFIED, SHALL BE SUPPLIED EVEN WHEN NOT LISTED OR DESCRIBED IN DETAIL.

NO DEVIATIONS FROM THE SPECIFICATIONS OR DRAWINGS WILL BE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

FOR MECHANICAL SERVICES SHALL BE OBTAINED FROM THE EQUIPMENT SUPPLIERS IN ADVANCE OF THE BUILDING CONSTRUCTION AND SHALL FORM PART OF THE CONTRACT DRAWINGS.

SUBMISSION OF TENDER IS DEEMED TO BE CONFIRMATION THAT THE CONTRACTOR HAS INSPECTED THE SITE AND EXAMINED ALL CONTRACT DOCUMENTS. NO EXTRAS WILL BE CONSIDERED FOR FAILURE TO COMPLY WITH THE ABOVE.

WITHIN 10 DAYS OF AWARD OF CONTRACT SUBMIT FIVE (5) COPIES OF SHOP DRAWINGS FOR ALL MECHANICAL SYSTEM COMPONENTS C/W DESCRIPTIVE DATA. REVIEW OF DRAWINGS INDICATES ONLY THAT THE QUALITY AND GENERAL DESIGN OF THE EQUIPMENT IS ACCEPTABLE. VERIFICATION OF DIMENSIONS ON THE LOCATION OF CONNECTIONS TO THE EQUIPMENT SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR. DO NOT SUBSTITUTE ALTERNATIVES TO EQUIPMENT SPECIFIED UNLESS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL PROBLEMS ARISING FROM ANY SUCH SUBSTITUTED EQUIPMENT WILL BE CONSIDERED SOLELY THE RESPONSIBILITY OF THE CONTRACTOR MAKING THE SUBSTITUTION. SHOP DRAWINGS SHALL SHOW: OVERALL DIMENSIONS, ROUGHING—IN DIMENSIONS AND CLEARANCE DIMENSIONS. CERTIFIED PERFORMANCE DATA INDICATING OPERATING FLOWS, PRESSURES, MAXIMUM TEMPERATURE AND PRESSURES, ENTERING AND LEAVING CONDITIONS OF AIR AND FLUID, OPERATING WEIGHT, ELECTRICAL CHARACTERISTICS AND BREAK HORSEPOWER REQUIREMENTS. GAUGE OF FABRICATED MATERIAL AND TYPE OF FINISH.

SHOW ALL REVISIONS AND ALTERATIONS OF THE ENTIRE MECHANICAL CONTRACT ON ONE SET OF PRINTS AND SUBMIT TO ENGINEER PRIOR TO SUBSTANTIAL COMPLETION OF JOB. AS BUILTS ARE TO BE KEPT ON SITE AND UPDATED DAILY. NO CHANGES TO THE ORIGINAL LAYOUT OR SPECIFICATION WILL BE PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE CONSULTANT. AS BUILT DRAWINGS TO BE TRANSPOSED ONTO REPRODUCIBLE SEPIAS BY THE CONTRACTOR BEFORE FINAL INSPECTION FOR REVIEW BY THE CONSULTANT. GOOD DRAFTING PROCEDURES TO BE MAINTAINED.

SUPPLY THREE (3) COPIES OF MAINTENANCE AND OPERATION MANUALS FOR EACH PIECE OF MAJOR APPARATUS AND EQUIPMENT. INCLUDE NAMES OF SPARE PARTS SUPPLIERS, AND ADDRESSES. COPIES SHALL BE COMPILED IN SETS IN HARD COVER THREE—RING—BINDERS WITH AN INDEX PAGE AND INDEXING TABS.

IN ACCORDANCE WITH THE CONSTRUCTION SCHEDULE, PROVIDE FOR TRANSPORTATION OF EQUIPMENT AND MATERIALS TO THE SITE AND FOR RIGGING, HAULING, STORAGE AND SETTING IN PLACE OF EQUIPMENT.

CONCEAL ALL PIPING AND DUCTWORK IN PARTITIONS, WALLS AND BETWEEN FLOOR AND CEILINGS. PROVIDE ACCESS DOORS (FOR INSTALLATION BY OTHERS) AT ALL VALVES, CLEANOUTS, AND FIRE DAMPERS, ETC. IN FINISHED AREAS ONLY.

CUTTING, DRILLING, AND PATCHING REQUIRED BY THE PASSAGE OF PIPES, AND DUCTS THROUGH WALLS, FLOORS AND ROOF STRUCTURES DOES NOT FORM PART OF THIS CONTRACT, AND IS TO BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

SUPPLY AND LOCATE ALL PIPE AND DUCT SLEEVES, GENERALLY FABRICATED FROM 0.80MM MINIMUM GALVANIZED SHEET STEEL. WHERE PIPES OR DUCTS ARE INSULATED, SLEEVES SHALL BE OF SUFFICIENT DIAMETER TO ACCOMMODATE INSULATION, AND CAULK VOIDS.

PROVIDE WHERE PIPES RUN THROUGH WALLS, FLOORS AND CEILINGS IN ALL FINISHED AREAS.

MATERIALS AND EQUIPMENT DESCRIBED ON THE DRAWINGS ARE USED TO ESTABLISH A STANDARD OF MATERIALS AND WORKMANSHIP TO WHICH CONTRACTOR AND SUBCONTRACTOR SHALL ADHERE. WHERE MANUFACTURER'S TRADE NAMES ARE USED, THE TENDER PRICE SHALL BE BASED UPON THOSE PRODUCTS. CONTRACTOR MAY LIST OTHER MANUFACTURERS EQUIPMENT AS ALTERNATES ONLY AT THE TIME OF TENDER. SUBMISSION OF ALTERNATES WILL NOT BE ALLOWED AFTER TENDER CLOSING. ALL ALTERNATES WILD BY THE CONSULTANT PRIOR TO TENDER CLOSING AND APPROVAL ISSUED BY ADDENDUM. NO ADDENDUM WILL BE ISSUED FOR THIS PURPOSE WITHIN THREE WORKING DAYS OF TENDER CLOSING.

MAINTAIN ON SITE, A COMPETENT FOREMAN TO SUPERVISE THE WORK FOR THE DURATION OF THE CONTRACT. FOLLOW RECOMMENDED STANDARDS OF INSTALLATION AS PUBLISHED BY APPLICABLE INDUSTRY OR TRADE ASSOCIATIONS. ONLY FIRST CLASS WORKMANSHIP IN TRADE IN THE PROPERTY OF THE PROPERTY OF TRADE IN THE PROPERTY OF THE PROPERTY

15A.15 PROTECTION AND CLEANING PROTECT ALL MATERIALS AND EQUIPMENT SUPPLIED DURING CONSTRUCTION UNTIL THE BUILDING IS FORMALLY ACCEPTED BY THE OWNER. STORE MATERIALS AND EQUIPMENT DELIVERED TO THE SITE IN A SAFE, DRY LOCATION. AFTER INSTALLATION, PROTECT ALL EQUIPMENT AND PLUMBING, FIXTURES USING SHIPPING CRATES, CARTONS, OR TARPAULINS.

AFTER COMPLETION OF THE CONTRACT, REMOVE ALL DEBRIS, AND REPLACE ANY DAMAGED COMPONENTS. CLEAN EQUIPMENT AND LUBRICATE FAN AND MOTOR BEARINGS.

SUPPLY ACCESS DOORS FOR INSTALLATION BY OTHERS, FOR ALL CONCEALED VALVES, FIRE DAMPERS, COCKS, CLEANOUTS, AIR VENTS, DAMPERS, AND OTHER EQUIPMENT WHICH REQUIRES MAINTENANCE OR ADJUST. WHERE REQUIRED, ACCESS DOORS SHALL HAVE THE SAME FIRE RATING AS SURROUNDING STRUCTURE.

SUPPLY, ERECT AND REMOVAL SCAFFOLDING NECESSARY FOR THE PERFORMANCE OF THE WORK.

THE CONTRACTOR SHALL FURNISH THE OWNER WITH A WRITTEN GUARANTEE FOR THE SATISFACTION OF ALL WORK AND EQUIPMENT INSTALLED UNDER THIS CONTRACT AND REPLACE AT NO COST TO THE OWNER) IMMEDIATELY, ANY PART WHICH MAY FAIL OR PROVE DEFECTIVE WITHIN A PERIOD OF 12 MONTHS AFTER FINAL ACCEPTANCE OF THE COMPLETE CONTRACT. THIS GENERAL GUARANTEE SHALL NOT ACT AS A WAIVER FOR ANY SPECIFIED GUARANTEE THAT IS GREATER THAN 12 MONTHS. 15A.19 RELATED WORK

ELECTRICAL: POWER SUPPLIES TO MECHANICAL EQUIPMENT, AND LINE VOLTAGE CONTROL

NG TO THE ATTENTION OF THE ENGINEER ANY DISCREPANCIES ON THESE DRAWINGS DURING E TENDER PERIOD. CLAIMS FOR EXTRA PAYMENT BASED SOLELY MISINTERPRETATIONS OF THE TENDER PERIOD. CLAIMS FOR EXTRA PATHE REQUIREMENTS WILL NOT BE CONSIDERED.

15A.21 PERMITS & CERTIFICATES OBTAIN NECESSARY PERMITS AND COVER COSTS OF SUCH PERMITS. 15A.22 CODES & STANDARDS

CONFORM TO ALL APPLICABLE AND STANDARDS INCLUDING BUT NOT LIMITED TO: E BUILDING CODE. IY AND REGIONAL BYLAWS AND STANDARDS.

THE PLUMBING CODE.
GAS UTILIZATION CODE.
NFPA 13.

SMACNA. ASHRAE STANDARDS. TSSA.

DO NOT OPERATE EXHAUST OF AIR CONDITIONING FAN DURING OPERATIONS SUCH AS SANDING. REPLACE ALL FILTERS AT COMPLETION OF PROJECT AND LEAVE ONE SET OF SPARE FILTERS FOR EACH PIECE OF EQUIPMENT SITE FOR USE BY CLIENT.

DO IDENTIFICATION WORK IN ACCORDANCE WITH CGSB 24-GP-3A EXCEPT WHERE SPECIFIED OTHERWISE. PROVIDE ULC AND/OR CSA REGISTRATION PLATES, AS REQUIRED BY RESPECTIVE AGENCY. INDICATE SIZE, EQUIPMENT MODEL, MANUFACTURER'S NAME, SERIAL NUMBER, VOLTAGE, CYCLE, PHASE AND POWER OF MOTORS. PIPING: TO CGSB 24-GP-3A. IDENTIFY MEDIUM BY LETTERED LEGEND, CLASSIFICATION B PRIMARY AND SECONDARY COLOURS, DIRECTION OF FLOW BY ARROWS.

FOR THE PURPOSES OF THESE SPECIFICATIONS THE FOLLOWING DEFINITIONS SHALL APPLY: .1 "CONCEALED" — HIDDEN FROM NORMAL SIGHT IN FURRED SPACES, SHAFTS, CEILING SPACES, WALLS AND PARTITIONS. .2 "EXPOSED" - ALL MECHANICAL WORK NORMALLY VISIBLE, INCLUDING WORK IN EQUIPMENT ROOMS, TUNNELS, ETC...

.3 "PROVIDE" - (AND TENSES OF "PROVIDE") SUPPLY, INSTALL AND CONNECT COMPLETE. .4 "INSTALL" - (AND TENSES OF "INSTALL") INSTALL AND CONNECT COMPLETE.

.6 "APPROVED" — ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AND/OR ACCEPTABLE TO THE ENGINEER. .7 "AUTHORITY HAVING JURISDICTION" — THE ORGANIZATION, OFFICE, OR INDIVIDUAL RESPONSIBLE FOR APPROVING EQUIPMENT, AN INSTALLATION, OR A PROCEDURE. .8 "IDENTIFIED" — CAPABLE OF BEING RECOGNIZED BY A PERSON OF NORMAL VISION WITHOUT CAUSING UNCERTAINTY ABOUT THE LOCATION OR OPERATING PROCESS OF THE IDENTIFIED ITEM.

15A.26 FABRICATION DRAWINGS THE FABRICATION OF THE DUCTWORK WILL BE DETERMINED FROM FIELD MEASUREMENTS BY THIS CONTRACTOR. THIS CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE DUCTWORK WITH ALL OTHER TRADES. THIS CONTRACTOR SHALL PROVIDE FABRICATION AND INTERFERENCE DRAWINGS TO DETERMINE ROUTING OF THE DUCTWORK AND SHALL PROVIDE ALL OFFSETS, ELBOWS AND TRANSITIONS AS REQUIRED TO MAKE A FULLY OPERATIONAL SYSTEM.

THIS CONTRACTOR TO RETAIN SEISMIC RESTRAINT SPECIALIST TO PERFORM CALCULATIONS AND SPECIFY SEISMIC RESTRAINT EQUIPMENT. ALL PIPING AND EQUIPMENT TO BE SEISMICALLY RESTRAINED AS REQUIRED. SHOP DRAWINGS TO BE STAMPED BY A PROFESSIONAL ENGINEER IN THE PROVINCE OF ONTARIO EXPERIENCED IN SEISMIC DESIGN. THE CONTRACTOR SHALL PROVIDE DOCUMENTARY EVIDENCE THAT THE DESIGN CONFORMS TO SEISMIC REQUIREMENTS OF RELEVANT DOCUMENTARY EVIDENCE THAT THE DESIGN CONFORMS TO SEISMIC REQUIREMENTS OF THE CONTRACTOR'S CODES, STRUCTURAL ENGINEER AND AUTHORITY HAVING JURISDICTION. THE CONTRACTOR'S ENGINEER SHALL HAVE A CURRENT BUILDING CODE IDENTIFICATION NUMBER AND SAID NUMBER SHALL BE SHOWN ON ALL DRAWINGS AND CALCULATIONS. THE CONTRACTOR SHALL PROVIDE A STATEMENT THAT THE MECHANICAL SYSTEM HAS BEEN INSTALLED, INSPECTED AND ALL TESTS PERFORMED AS PER RELEVANT CODES AND STANDARDS. THIS STATEMENT SHALL BE SEALED AND SIGNED BY THE CONTRACTOR'S ENGINEER.

TSSA REVIEW IS REQUIRED FOR ALL NATURAL GAS INSTALLATION, PIPING AND EQUIPMENT PRIOR TO FINAL OCCUPANCY.

THE ABOVE REVIEWS SHALL TAKE THE FORM OF A REPORT BY A TSSA EMPLOYED INSPECTOR, SIGNED BY THAT INSPECTOR. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR ALL SITE VISITS. THE CONTRACTOR SHALL MAKE GOOD, AT THE EXPENSE, ALL DEFICIENCIES FOUND BY THE TSSA INSPECTOR. THE INSPECTOR'S INSTRUCTIONS SHALL BE FINAL. THE CONTRACTOR SHALL COORDINATE TSSA REVIEW AND ANY SUBSEQUENT WORK WITH ALL OTHER TRADES AND THE OWNER.

FINAL SIGN-OFF BY THE ENGINEER WILL NOT BE GRANTED UNTIL THE TSSA INSPECTOR'S REPORT IS CLEAR OF DEFICIENCIES.

THE PLUMBING AND DRAINAGE SYSTEMS SHALL BE IN ACCORDANCE WITH THE ONTARIO WATER RESOURCES COMMISSION ACT AND WITH MUNICIPAL AND PROVINCIAL CODES AND BY-LAWS 15B.2 REFERENCE STANDARDS

PROVIDE PIPE, FITTINGS AND VALVES TO THE FOLLOWING STANDARDS:

PIPES AND FITTINGS: CSA, ASTM, ANSI.

VALVES: ANSI. FIXTURES: CSA 815. PIPING INSTALLATION

ARRANGE AND INSTALL PIPING APPROXIMATELY AS INDICATED. FORM RIGHT ANGLES ON PARALLEL LINES WITH BUILDING WALLS. SLOPE PIPING TO ACHIEVE PROPER DRAINAGE AND AIR ELIMINATION. PROVIDE DRAIN VALVES ON ALL LOW POINTS OF THE PIPING SYSTEM. PROVIDE AIR VENTS AT HIGH POINTS OF THE SYSTEM. ALL PIPING SHALL BE NEW, CLEAN AND FREE FROM CUTTING BURRS AND DEFECTS IN STRUCTURE OR THREADING AND SHALL BE THOROUGHLY BRUSHED AND SCALE BLOW OUT. FLUSH AND CLEAN ALL PIPING SYSTEMS AFTER FINAL TESTING.

FOR DOMESTIC WATER SERVICE USE LEAD FREE SOLDER ON SIZES UP TO 75MM PROVIDE DI-ELECTRIC UNIONS AT ALL COUPLINGS OF FERROUS AND NON-FERROUS PIPE. ALL GROUPS OF FIXTURES SHALL HAVE SHOCK ABSORBERS OF THE SEALED MANUFACTURED TYPE, SIZED TO SUIT THE NUMBER OF FIXTURES SERVED. 15B.4 PIPE SUPPORTS AND HANGERS

THE HANGERS SUPPORTING INSULATED PIPING SHALL FIT AROUND THE OUTSIDE OF THE INSULATION. INSULATION SHIELDS SHALL BE SUPPLIED AND INSTALLED. DO NOT SUSPEND ON PIPE FROM ANOTHER.

SPACING AND MIDDLE ATTACHMENT (ROD) DIAMETER AS SPECIFIED IN PARAGRAPHS BELOW OR AS IN TABLE BELOW, WHICHEVER IS MORE STRINGENT.

PLUMBING PIPING: MOST STRINGENT REQUIREMENTS OF CANADIAN PLUMBING CODE, PROVINCIAL CODE, OR AUTHORITY HAVING JURISDICTION. TO APPLICABLE FIRE CODE.

COPPER PIPING: UP TO NPS 1/2: EVERY 1500.
FLEXIBLE JOINT ROLL GROOVE PIPE: IN ACCORDANCE WITH TABLE BELOW, BUT NOT LESS THAN ONE HANGER AT JOINTS.

2 1/2 3 1/2

HANGER INSTALLATION OFFSET HANGER SO THAT ROD IS VERTICAL IN OPERATING POSITION. ADJUST HANGERS TO EQUALIZE LOAD.

CONNECTIONS OR APPARATUS.

FILL ALL NEW WATER SYSTEMS WITH WATER AND HYDRAULICALLY TEST WITH A PRESSURE OF ONE AND ONE-HALF TIMES THE WORKING PRESSURE AND MAINTAIN SUCH PRESSURE FOR 24 HOURS. SHOULD LEAKS APPEAR DURING THE TESTS, REPAIR THE DEFECT, AND RETEST.

INSTALL LEVEL AND IN A MANNER WHICH PROVIDES A WATER TIGHT SEAL AT THE FLOOR. ALL TRAPS TO BE PROTECTED BY 12 MM WATTS TRAP SEAL PRIMERS SUPPLIED FROM THE NEAREST FIXTURE. RUN TYPE 'K' COPPER UNDER SLABS TO TRAPS FROM PRIMERS.

ALL VALVES TO BE FROM ONE MANUFACTURER.

ALL VALVES TO BE SUITABLE FOR REPACKING UNDER PRESSURE. VALVES FORTHROTTLIN PURPOSES AND BY-PASS VALVES TO BE GLOBE TYPE. UNLESS OTHERWISE SPECIFIED OF NOTED, VALVES TO BE ANSI CLASS 200 WOG OR 125/200 WOG NON-SHOCK, SCREWED OR SOLDERED ENDS, MALLEABLE IRON HANDLE. IN EQUIPMENT ROOMS, PROVIDE OS & Y.

SPECIFIED PRODUCT FOR DOMESTIC COLD AND HOT WATER VALVES: CRANE JENKINS

SCREWED | SOLDER | FLANGE | SCREWED | SOLDER | FLANGE 1320 810 313 4092

FIT COMPOSITION DISC GLOBE VALVES FOR DOMESTIC HOT WATER SERVICE WITH DISCS SUITABLE FOR HOT WATER TO A MAXIMUM TEMPERATURE OF 77°C. PIPING MATERIAL SCHEDULE

138.9 PIPING MATERIAL SCHEDULE			
ALL PIPING OF THE PLUMBING SYSTEMS SHALL COMPY WITH REQUIREMENTS OF THE O.B.C., SECTION 7.			
SERVICE	MATERIAL	JOINT	PRESSURE
CW DOMESTIC BELOW GROUND	2 NPS & SMALLER COPPER K	MECHANICAL	PLUMBING CODE
H & CW DOMESTIC ABOVE GROUND	COPPER TYPE "L" OR ASTM SOLDER B88	SOLDER	PLUMBING CODE
SANITARY, STORM, VENT BELOW GROUND	PVC (DWV) TO CSA B181.2 ABS (DWV) TO CSA B181.1	SOLVENT WELDED	PLUMBING CODE
SANITARY AND VENT ABOVE GROUND	COPPER (DWV) TO ASTM CAST IRON PVC-SYSTEM 15	SOLDER AND MJ MECHANICAL JOINTS FOR CAST IRON SOLVENT WELDING	PLUMBING CODE
BUILDING SEWER	PVC-SDR-35	SOLVENT	PLUMBING CODE

ABC PIPING SHALL NOT BE INSTALLED IN A NON-COMBUSTIBLE

NO PLASTIC PIPING SHALL BE INSTALLED IN A RETURN AIR PLENUM UNLESS IT MEETS THE REQUIREMENTS OF THE SECTION 3.1.5.15 OF THE O.B.C. (FLAME SPREAD LESS THAN 25. SMOKE DEVELOPMENTS LESS THAN 50). ALL PENETRATIONS OF FIRE RATED SEPARATIONS MUST BE SEALED BY APPROVED FIRE STOPPING MATERIALS.

ALL PIPING SYSTEMS SHALL BE INSTALLED AS PER MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURES. HEATING AND CHILLED WATER PIPING - COPPER M, STEEL, VICTAULIC OR PRESSFIT AND ACCEPTABLE ALTERNATES.

15C HEATING, VENTILATING AND AIR CONDITIONING

JNLESS OTHERWISE NOTED, ALL DUCTWORK SHALL BE FABRICATED FROM GALVANIZED IRON

(0.22 KG. ZINC COATING MIN.).

ALL RECTANGULAR DUCTWORK SHALL BE MANUFACTURED FROM "CROSS-BROKEN" SHEETS. PROVIDE BALANCING DAMPERS AT EACH BRANCH TAKE-OFF. DETAILS, CONSTRUCTION AND MATERIALS NOT SPECIFIED HEREIN SHALL BE AS PER THE LATEST EDITION ASHRAE OR SMACNA STANDARDS. BRACE AND SUPPORT DUCT IN SUCH A MANNER THAT IT WILL NOT SAG, IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.

DUCT LEAKAGE SHALL NOT BE MORE THAN 5% OF TOTAL SYSTEM DESIGN WHEN SYSTEM IS OPERATING AT DESIGN CAPACITY. FLOWS TO EACH ROOM OR AREA SHALL BE BALANCED TO GIVE PROPORTIONALLY THE SAME FLOW AS INDICATED ON THE DRAWINGS. SUPPORT DUCT ON HANGERS. SIZE, SPACING AND SUPPORT ROD DIAMETER IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.

ALL DUCT SIZES LISTED ARE CLEAR OUTSIDE DIMENSIONS.

ALL SQUARE ELBOWS SHALL HAVE DOUBLE WALL TURNING VANES. SQUARE ELBOWS SHALL NOT BE USED IN LIEU OF LONG RADIUS ELBOWS.

SEE ALSO 15A.16 . PROVIDE DUCT ACCESS DOORS AS INDICATED OR REQUIRED FOR ACCESS TO FIRE OR OTHER DAMPERS AND FOR SERVICE OR INSPECTION, AND FOR CLEANOUTS WHERE REQUIRED ON SPECIALTY ITEMS. HINGED TYPE ACCESS DOORS 300 MM X 300 MM UNLESS OTHERWISE STATED, COMPLETE WITH TWO SASH LOCKS. ACCESS DOOR SHALL NOT COMPROMISE THE FIRE RATING OF THE PARTITION INTO WHICH IT IS INSTALLED.

BALANCING: PROVIDE MANUAL DAMPERS AT EACH BRANCH TAKE-OFF IN ALL LOW PRESSURE DUCTWORK. FABRICATE FROM 1.2 MM THICK GALVANIZED STEEL OR HEAVIER.

BACKDRAFT: AUTOMATIC MULTI-BLADE LOW LEAKAGE LOUVRE TYPE CONSTRUCTED OF LIGHT GAUGE ALUMINUM. BLADES TO BE JOINED WITH A TIE BAR, HAVE RUSTPROOF SHAFTS AND BRONZE BUSHINGS. BLADES TO HAVE FELT EDGES. FIRE: ALL FIRE DAMPERS SHALL BE DYNAMIC FIRE DAMPERS UNLESS OTHERWISE NOTED. PROVIDE IN-DUCT FUSIBLE LINK FOR OUT-OF-THE-AIRSTREAM TYPE FIRE DAMPERS. EQUIPMENT MUST BEAR UL LABEL AND MUST NOT CONTAIN ASBESTOS.

THERMOSTATS SHALL BE INSTALLED AND WIRED BY DIVISION 15. ALL THERMOSTATS LOCATED IN PUBLIC AREAS SHALL BE PROTECTED BY CLEAR, KEY OPERATED PLASTIC COVERS. THERMOSTATS IN STORAGE, SHIPPING/RECEIVING OR SIMILAR AREAS SHALL BE PROTECTED BY A LOCKABLE METAL COVER.

DO NOT LOCATE HOLES CLOSER THAN SIX FEET FROM ELBOWS. SPACE OPENINGS EVERY 150 MM ACROSS THE AIRSTREAM. PROVIDE NEOPRENE PLUGS FOR TEST OPENINGS.

INSULATE ALL WATER PIPING COLDER THAN 5°C OR HOTTER THAN 37°C. APPLY PIPE INSULATION WHEN REQUIRED HYDROSTATIC TESTS HAVE BEEN COMPLETED. INSULATION SHALL BE APPLIED TO CLEAN DRY PIPE AND DUCTS. ALL DUCT JOINTS BUTTED FIRMLY AND LAPPED WITH 100 MM WIDE STRIP OF APPROVED ADHESIVE VAPOUR PROOF TAPE.

COVER ALL PIPE FITTINGS USING FABRICATED SECTION FROM THE PIPE COVERING. APPLY AN APPROVED VAPOUR BARRIER OVER ALL PIPES HAVING COLD SURFACES AND ENSURE A SUITABLE SEAL.

PROVIDE FIBREGLASS FLEXIBLE INSULATION FACED WITH "RGGRK" VAPOUR BARRIER. ADHERE INSULATION WITH 100MM STRIPS OF INSULATION BONDING ADHESIVE AT 200MM O.C. TAPE ALL JOINTS AS PER SUPPLIER'S INSTRUCTIONS. INSULATE ALL HORIZONTAL AND VERTICAL RAINWATER LEADERS AND UNDERSIDE OF ROOF DRAIN BODIES AND PANS. TEMPERATURE/THICKNESS, DOMESTIC COLD WATER UNDER 5°C, CHILLED

FLUID TEMPERATURE 1 NPS AND UNDER 1 1/4 - 2 2 1/2 - 4 5 & OVER (THICKNESS IN MM) TEMPERATURE/THICKNESS, DOMESTIC HOT WATER (60°C), HEATING WATER FLUID TEMPERATURE 1 NPS AND UNDER 1 1/4 - 2 2 1/2 - 4 5 & OVER

15D.5 DUCTWORK (THERMAL) WHERE INDICATED ON DRAWINGS AND

INSULATE A/C DUCTWORK WITHIN CEILING SPACE WITH 25MM FIBREGLAS INSULATION AND ANTI-SWEAT VAPOUR BARRIER. INSULATE ALL EXTERIOR DUCTWORK WITH 50MM FIBREGLASS INSULATION AND "RFFRK" VAPOUR BARRIER C/W 2 LAYERS OF WATERPROOFING. INSULATE ALL EXHAUST DUCTWORK PASSING THROUGH AN EXTERIOR WALL 1800MM BACK FROM WALL WITH 50MM FIBREGLAS INSULATION AND ANTI-SWEAT VAPOUR BARRIER. INSULATE ALL FRESH AIR INTAKE DUCTS WITH 2" THICK INSULATION

15D.6 DUCTWORK (ACOUSTIC) WHERE INDICATED ON DRAWINGS

PROVIDE 25MM THICK RIGID FIBREGLAS WITH A DENSITY OF 32 KG/CU.M. COAT THE EXPOSED SURFACE WITH A BLACK NEOPRENE COMPOUND. LINER TO BE GLUE AND SCREW FASTENED WITH METAL EDGING. INCREASE DUCT SIZES SHOWN ON DRAWINGS TO ACCOMMODATE INSULATION THICKNESS WHERE ACOUSTIC INSULATION IS REQUIRED.

POTABLE WATER DISTRIBUTION PIPING, PEX

1.1. INCLUDED – ALL LABOUR, MATERIALS, TRANSPORTATION, EQUIPMENT AND SERVICES TO INSTALL A POTABLE WATER DISTRIBUTION SYSTEM WHERE INDICATED ON THE DRAWINGS FOR THE PROJECT. 1.2. RELATED WORK — EXAMINE ALL OTHER PORTIONS OF THE SUBCONTRACT DOCUMENTS FOR WORK OR OTHER TERMS AND CONDITIONS RELATED TO THE WORK OF THIS SECTION. PROVIDE ALL WORK HEREUNDER AS REQUIRED FOR THE SUPPORT AND ACCOMMODATION OF RELATED WORK.

2.1. ALL COMPONENTS OF SYSTEM SHALL BE PROVIDED BY ONE MANUFACTURER INCLUDING TUBING, TUBING FITTINGS, MANIFOLDS AND TUBING BEND SUPPORTS AS MANUFACTURED BY WIRSBO OR APPROVED EQUAL.

.1 TUBING SHALL CARRY A TWENTY—FIVE (25) YEAR
NON—PRORATED WARRANTY, FROM DATE OF SUBSTANTIAL COMPLETION, AGAINST FAILURE
DUE TO MANUFACTURING DEFECT OR WORKMANSHIP. .2 FITTINGS SHALL BE WARRANTED FOR TWENTY—FIVE (25) YEARS FROM DATE OF SUBSTANTIAL COMPLETION. .3 WARRANTY OF TUBE, FITTING AND CONNECTION SHALL PROVIDE FOR MATERIALS LABOR AND ON SEQUENTIAL DAMAGE AS OUTLINED IN THE CURRENT WIRSBO OF CANADA LTD. LIMITED WARRANTY. .4 WARRANTY SHALL BE IN FORCE ONLY AFTER COMPLETION OF MANUFACTURER'S CERTIFIED PROJECT CHECKLIST.

3. SECTION 3 - PRODUCTS AND MATERIALS

3.1.1. TUBING SHALL BE CROSS-LINKED POLYETHYLENE (DENOTED PEX OR AQUAPEX BELOW), RATED AT 180°F MAXIMUM WORKING TEMPERATURE AND UP TO 100 PSI WORKING PRESSURE (200°F © 80 PSI) IN ACCORDANCE WITH ASTM STANDARD F876-877, AS MANUFACTURED BY WIRSBO. TUBING SHALL BE CSA APPROVED TO CSA STANDARD CSA-B137.5-M97.

3.1.2. Tubing shall be manufactured by the "engel method."

5 WARRANTY SHALL BE TRANSFERABLE TO SUBSEQUENT OWNERS.

3.1.3. TUBING SHALL NOT LEACH TOXINS INTO THE POTABLE WATER. 3.1.4. TUBING SHALL BE MANUFACTURER APPROVED FOR CONTINUOUS CIRCULATION. 3.1.5. TUBING SHALL ALLOW FOR REPAIR OF KINKS WITH A HEAT GUN WITH NO DAMAGE TO THE TUBE.

3.1.6. TUBING SHALL HAVE A 25 FLAME SPREAD CLASSIFICATION, 50 SMOKE DEVELOPED CLASSIFICATION WHEN TESTED IN ACCORDANCE WITH CAN/ULC S102.2-M88, STANDARD FOR BURNING CHARACTERISTICS OF FLOORING, FLOOR COVERING AND MISCELLANEOUS MATERIALS AND ASSEMBLIES. 3.1.7. THE MINIMUM BEND RADIUS FOR COLD BENDING OF THE TUBING SHALL NOT BE LESS THAN EIGHT(8) TIMES THE OUTSIDE DIAMETER. BENDS WITH A RADIUS LESS THAN STATED REQUIRE THE USE OF A BEND SUPPORT SUPPLIED BY THE TUBING MANUFACTURER.FOR THIS PROJECT.

3.2. MANIFOLDS — SHALL BE TYPE "L" COPPER CONSTRUCTION APPROVED TO CSA-B137.5-M97. 3.3. TUBE FITTINGS — SHALL BE MANUFACTURED OF DEZINCIFICATION RESISTANT BRASS OR POLYSULFONE. FITTINGS TO BE SUPPLIED BY THE TUBING MANUFACTURER. TUBE FITTING SHALL CONSIST OF A COMBINATION INSERT/PLUMBING CONNECTION AND COLOR CODED PEX RING. TUBE FITTINGS SHALL BE APPROVED TO CSA—B137.5—M97. 3.4. DROP EAR BEND SUPPORTS — SHALL BE USED FOR TUBE EXITING A WALI

PRE-MANUFACTURED PVC "J-BRACKET" 3.6. FIXTURE SHUT-OFFS - SHALL BE BY TUBING MANUFACTURER OR AS INDICATED.

3.7. FIRESTOP — REFER TO APPLICABLE SUBCONTRACT DOCUMENTS FOR FIRESTOPPING REQUIREMENTS. APPROVED FIRESTOP COMPOUND — WIRSBO AQUAPEX FIRESTOP SEALANT. 3.8 DELIVERY, STORAGE AND HANDLING

.2 ORDERING: COMPLY WITH MANUFACTURER'S ORDERING INSTRUCTIONS AND LEAD—TIME REQUIREMENTS TO AVOID CONSTRUCTION DELAYS. 3 DELIVERY: DELIVER MATERIALS TO JOB SITE IN MANUFACTURER'S ORIGINAL JNOPENED, UNDAMAGED CONTAINERS WITH IDENTIFICATION LABELS INTACT. .4 STORAGE AND PROTECTION: STORE MATERIALS PROTECTED FROM EXPOSURE HARMFUL WEATHER AND JOB SITE SITE CONDITIONS. .5 STORE PEX TUBING IN CARTONS OR UNDER COVER TO AVOID DIRT OR FOREIGN MATERIAL FROM BEING INTRODUCED INTO THE TUBING. .6. DO NOT EXPOSE PEX TUBING TO DIRECT SUNLIGHT FOR MORE THAN 30 DAYS. IF CONSTRUCTION DELAYS ARE ENCOUNTERED, INSTALLER SHALL BE RESPONSIBLE FOR PROVIDING COVER TO PORTIONS OF TUBING EXPOSED TO DIRECT SUNLIGHT.

4. SECTION 4 - EXECUTION

1. INSTALLER QUALIFICATIONS: INSTALLER EXPERIENCED IN PERFORMING WORK OF THIS SECTION WHO HAS SPECIALIZED IN INSTALLATION OF WORK SIMILAR TO THAT REQUIRED Installer shall provide, in writing, to project owner that the PEX Tubing furnished under this specification conforms to the material and mechanical requirements specified Herein. 3. CERTIFICATE: SUBMIT CERTIFICATE INDICATING CERTIFICATION AS A MANUFACTURER'S TRAINED INSTALLER. 4.2. PRE—INSTALLATION MEETINGS: CONDUCT PRE—INSTALLATION MEETING TO VERIFY PROJECT REQUIREMENTS, SUBSTRATE CONDITIONS, MANUFACTURER'S INSTALLATION INSTRUCTIONS AND MANUFACTURER'S WARRANTY REQUIREMENTS. COMPLY WITH DIVISION 1 PROJECT MANAGEMENT AND COORDINATION (PROJECT MEETINGS) SECTION.

4.3 POTABLE WATER TUBING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. 4.4 IN STRUCTURAL SLABS, TUBING SHALL BE SLEEVED WITH UTILITY GRADE POLYETHYLENE TUBING OR RIGID PVC CONDUIT. UTILITY GRADE POLYETHYLENE SLEEVING FOLTETHTEENE TOBING OR RIGID PVC CONDOIL OTIETT GRADE POLTETHTEENE SLEEVING SHALL BE SUPPORTED BY "J-BRACKET" WHERE TUBING ENTERS/EXITS THE SLAB. TUBING ENCASED IN CONCRETE TOPPING SHALL BE SLEEVED WITH THE APPROVED APPROPRIATE MATERIAL AS REQUIRED BY THE AUTHORITY HAVING JURISDICITON. 4.5 TUBING SHALL EXIT WALL AT FIXTURE.

4.6 ON COMPLETION OF THE INSTALLATION, THE SYSTEM SHALL BE CHARGED WITH POTABLE WATER OR AIR TO A PRESSURE WHICH MEETS LOCAL PLUMBING CODE REQUIREMENTS. 4.7 PRIOR TO COMMISSIONING THE POTABLE WATER SYSTEM, THE TUBING SHALL BE INSPECTED BY THE LOCAL PLUMBING INSPECTOR AND A REPORT SHALL BE OBTAINED IN WRITING. 4.8 THE CONTRACTOR SHALL PROVIDE POTABLE WATER OR OIL—FREE AIR FOR PRESSURIZING TESTING.

4.9 FIELD QUALITY REQUIREMENTS 1 SITE TESTS (INSTALLATION AND POST-INSTALLATION TESTING): [SPECIFY APPLICABLE TEST REQUIREMENTS TO BE PREFORMED DURING AND AFTER PRODUCT INSTALLATION].

2 MANUFACTURER'S FIELD SERVICES: PROVIDE MANUFACTURER'S FIELD SERVICE CONSISTING OF PRODUCT USE RECOMMENDATIONS AND PERIODIC SITE VISIT FOR

NSPECTION OF PRODUCT INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S NSTRUCTIONS.

ISSUED FOR PRICING 29 NOV 2019 ISSUED FOR PERMIT 15 NOV 2019

> DATE 2295 ST. LAURENT

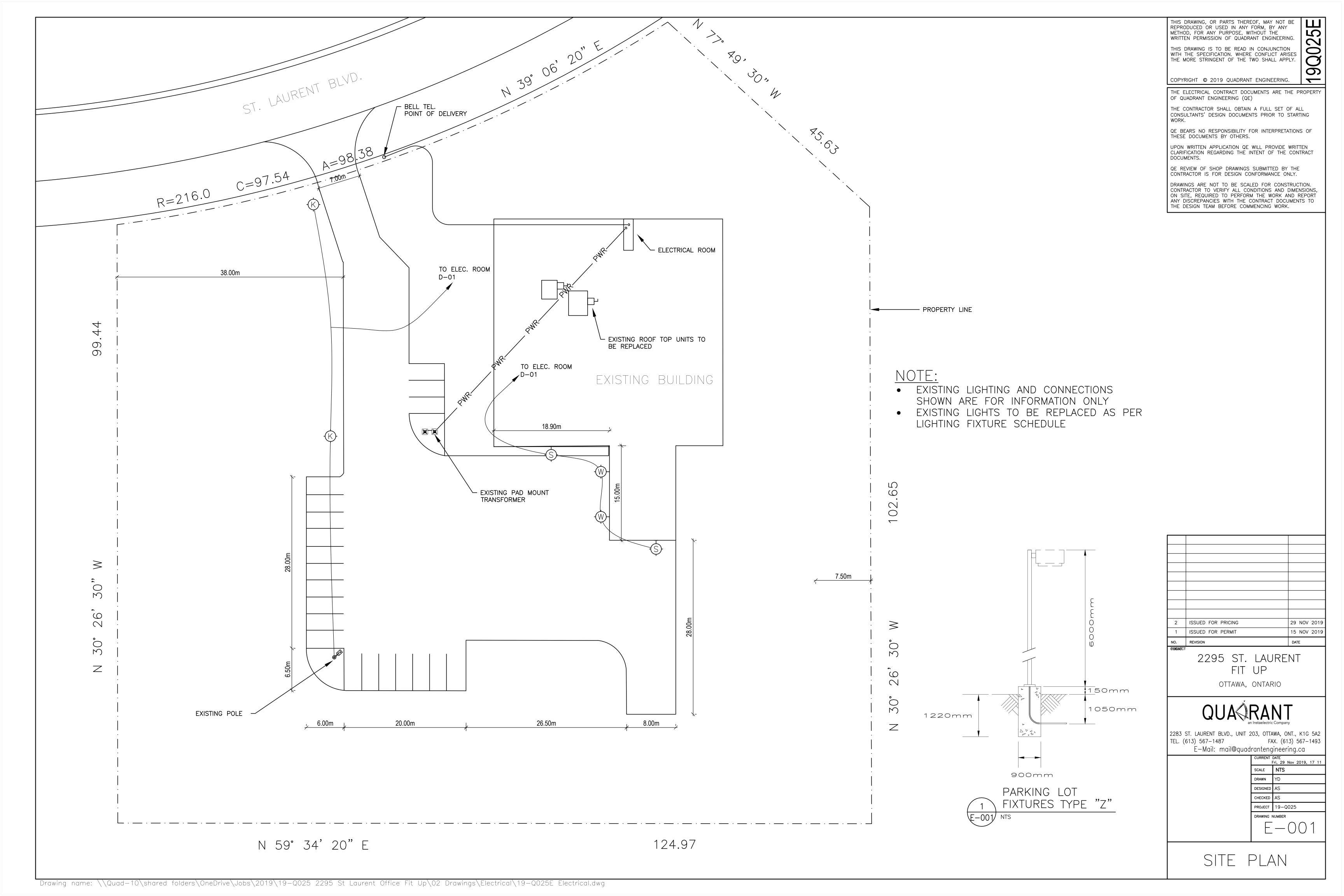
> > OTTAWA, ONTARIO

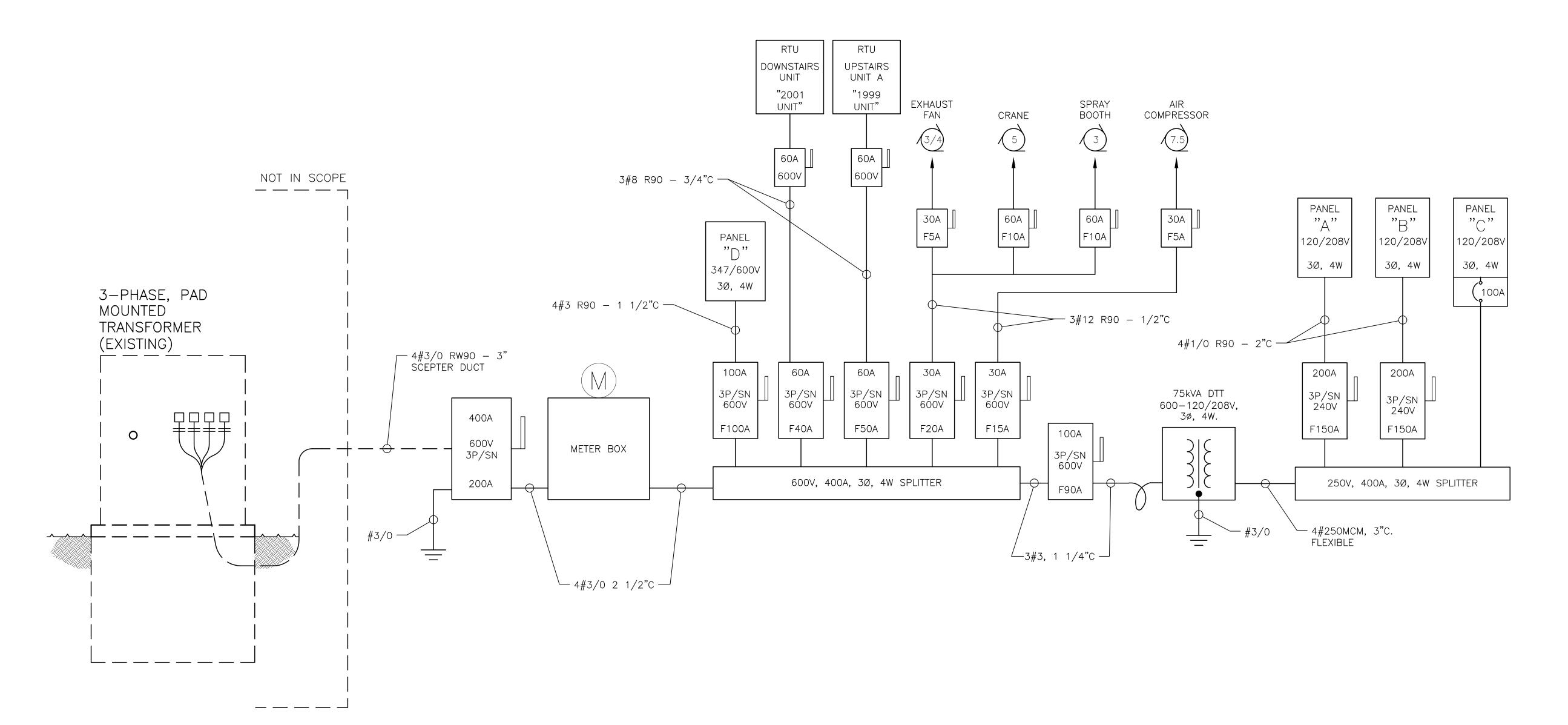
2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2 TEL. (613) 567-1487 FAX. (613) 567-1493 E-Mail: mail@quadrantengineering.ca

CURRENT F	DATE Fri, 29 Nov 2019, 14
SCALE	NTS
DRAWN	CWC
DESIGNED	CWC
CHECKED	CWC
PROJECT	19-Q025
DRAWING 1	NUMBER
M-	03

SPECIFICATION

Drawing name: \\Quad—10\shared folders\OneDrive\Jobs\2019\19—Q025 2295 St Laurent Office Fit Up\02 Drawings\Mechanical\19—Q025M Mechanical.dwg





EXISTING DISTRIBUTION DIAGRAM

DISTRIBUTION NOTE: Existing service to remain THIS DRAWING, OR PARTS THEREOF, MAY NOT BE REPRODUCED OR USED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT THE WRITTEN PERMISSION OF QUADRANT ENGINEERING.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION. WHERE CONFLICT ARISES THE MORE STRINGENT OF THE TWO SHALL APPLY.

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY OF QUADRANT ENGINEERING (QE)

THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING WORK.

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF THESE DOCUMENTS BY OTHERS.

UPON WRITTEN APPLICATION QE WILL PROVIDE WRITTEN CLARIFICATION REGARDING THE INTENT OF THE CONTRACT DOCUMENTS.

QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS, ON SITE, REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE DESIGN TEAM BEFORE COMMENCING WORK.

2	ISSUED FOR PRICING	29 NOV 20
1	ISSUED FOR PERMIT	15 NOV 20
NO.	REVISION	DATE
EBNENE C	CT CT	

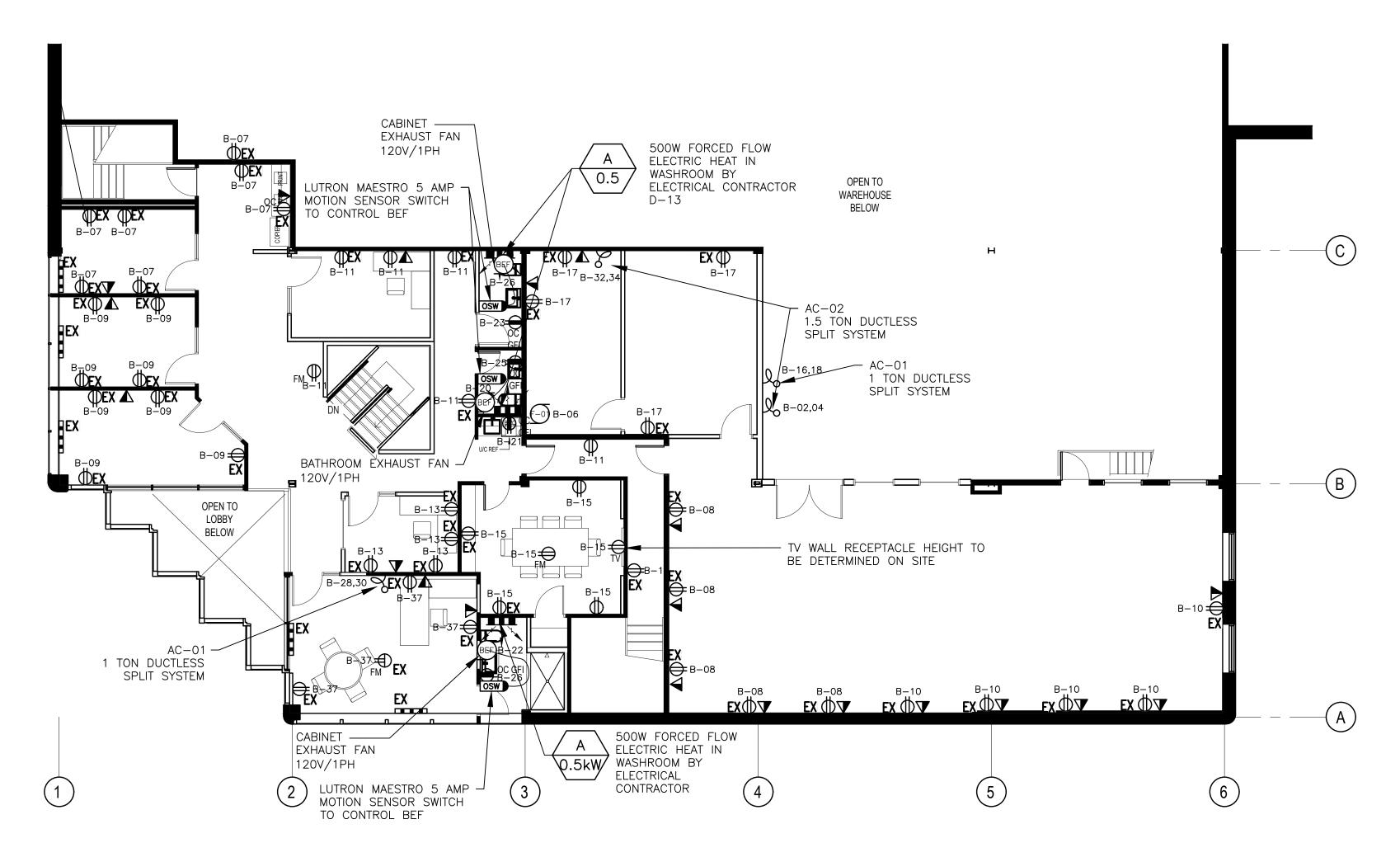
2295 ST. LAURENT FIT UP OTTAWA, ONTARIO

QUA RAN7

2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2 TEL. (613) 567-1487 FAX. (613) 567-1493 E-Mail: mail@quadrantengineering.ca

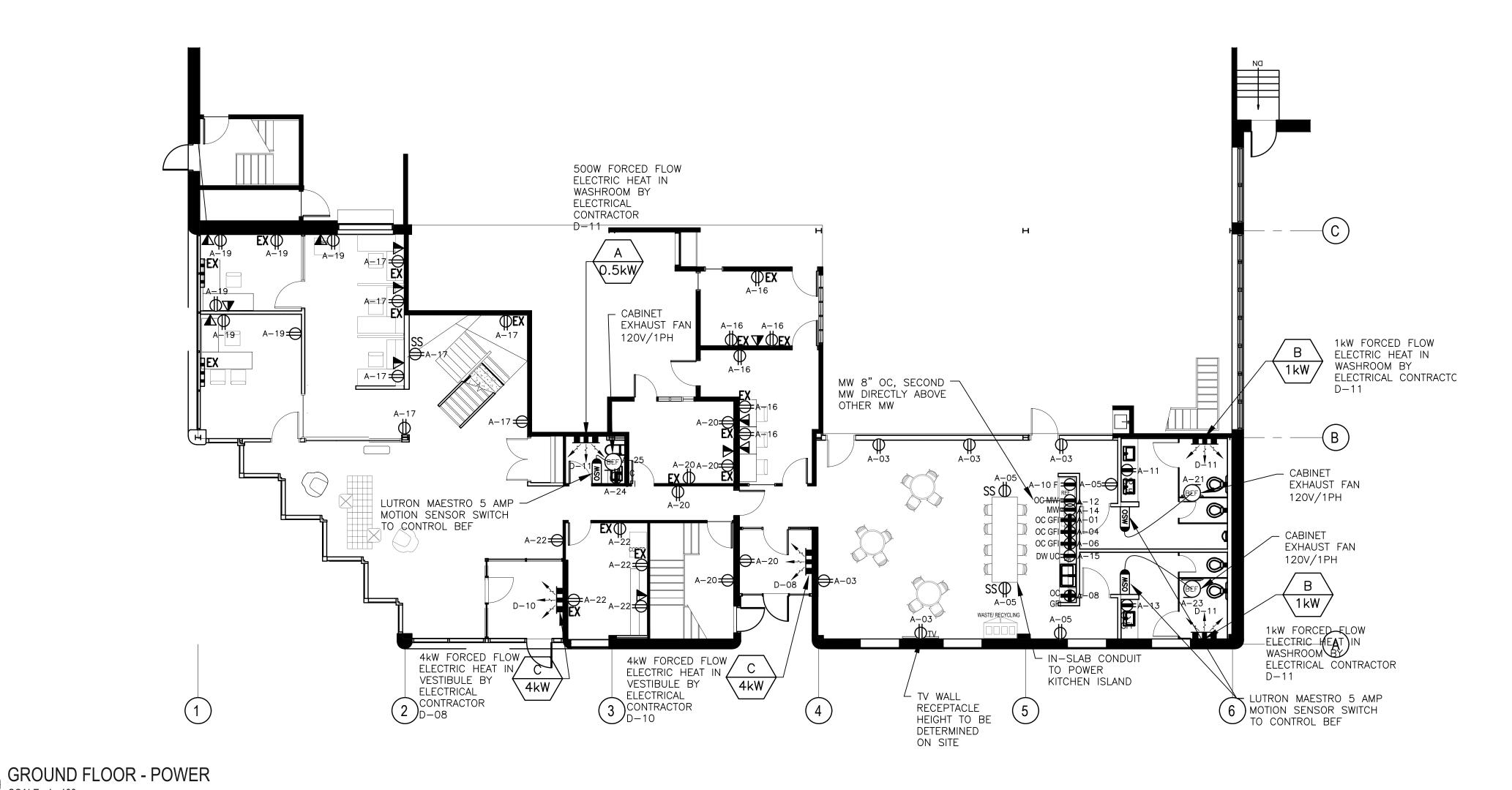
III III ali e quau	aar arreorigii ioorii igioo		
	CURRENT DATE Fri, 29 Nov 2019, 17 1		
	SCALE	NTS	
	DRAWN	YD	
	DESIGNED	AS	
	CHECKED	AS	
	PROJECT	19-Q025	
	DRAWING 1	NUMBER	
	E	-002	

DISTRIBUTION DRAWING



2 2ND FLOOR - POWER E-200 SCALE: 1:100

E-200 SCALE: 1:100



THIS DRAWING, OR PARTS THEREOF, MAY NOT BE REPRODUCED OR USED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT THE WRITTEN PERMISSION OF QUADRANT ENGINEERING.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION. WHERE CONFLICT ARISES THE MORE STRINGENT OF THE TWO SHALL APPLY.

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY OF QUADRANT ENGINEERING (QE)

8

THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING

THESE DOCUMENTS BY OTHERS. UPON WRITTEN APPLICATION QE WILL PROVIDE WRITTEN CLARIFICATION REGARDING THE INTENT OF THE CONTRACT

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF

DOCUMENTS. QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS, ON SITE, REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE DESIGN TEAM BEFORE COMMENCING WORK.

GENERAL NOTES:

- ALL EXISTING FLOOR MOUNTED RECEPTACLES TO BE REPLACED UNITS FLUSH WITH THE GROUND
- ALL RECEPTACLES TO BE 8" ABOVE MILLWORK. OTHERWISE HEIGHT TO BE COORDINATED ON SITE
- WHERE APPLICABLE, EXISTING BASEBOARD HEATERS TO REMAIN

2	ISSUED FOR PRICING	29 NOV 201
1	ISSUED FOR PERMIT	15 NOV 201
NO.	REVISION	DATE
EBIEINE CT		
		K 1 T

2295 SI. LAURENI FIT UP

OTTAWA, ONTARIO

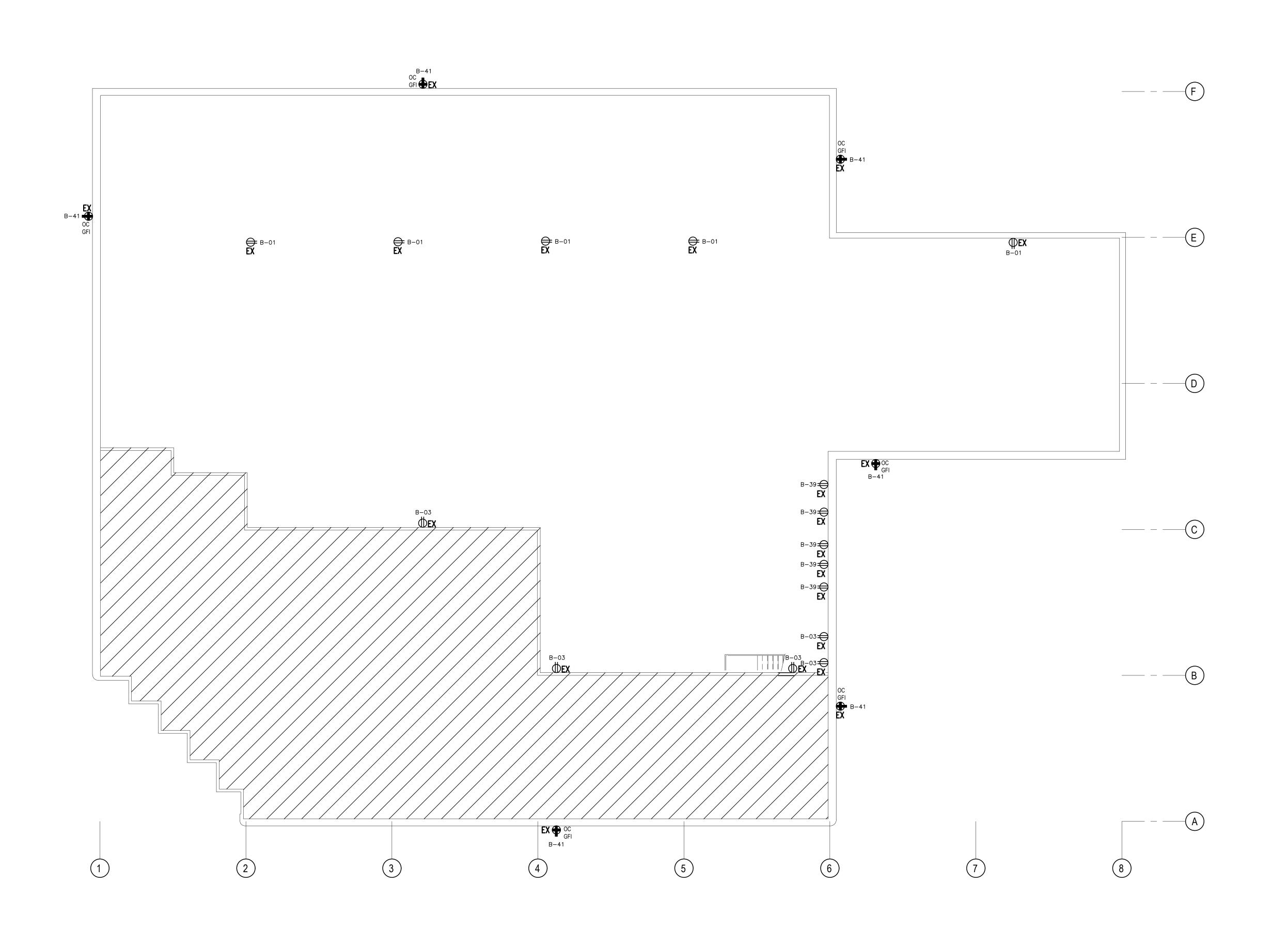
2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2 TEL. (613) 567-1487 FAX. (613) 567-1493 É-Mail: mail@quadrantengineering.ca

CURRENT DATE Fri, 29 Nov 2019, 17	
SCALE	1:100
DRAWN	YD
DESIGNED	AS
CHECKED	AS
PROJECT	19-Q025
DRAWING 1	NUMBER

E - 200

POWER LAYOUT

Drawing name: \\Quad—10\shared folders\OneDrive\Jobs\2019\19—Q025 2295 St Laurent Office Fit Up\02 Drawings\Electrical\19—Q025E Electrical.dwg



THIS DRAWING, OR PARTS THEREOF, MAY NOT BE REPRODUCED OR USED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT THE WRITTEN PERMISSION OF QUADRANT ENGINEERING.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION. WHERE CONFLICT ARISES THE MORE STRINGENT OF THE TWO SHALL APPLY.

00

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY OF QUADRANT ENGINEERING (QE)

THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING WORK.

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF THESE DOCUMENTS BY OTHERS.

UPON WRITTEN APPLICATION QE WILL PROVIDE WRITTEN CLARIFICATION REGARDING THE INTENT OF THE CONTRACT DOCUMENTS.

QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS, ON SITE, REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE DESIGN TEAM BEFORE COMMENCING WORK.

GENERAL NOTES:

- ALL EXISTING FLOOR MOUNTED RECEPTACLES TO BE REPLACED UNITS FLUSH WITH THE GROUND
- ALL RECEPTACLES TO BE
 8" ABOVE MILLWORK.
 OTHERWISE HEIGHT TO
 BE COORDINATED ON
 SITE
- WHERE APPLICABLE, EXISTING BASEBOARD HEATERS TO REMAIN

2	ISSUED FOR PRICING	29 NOV 201
1	ISSUED FOR PERMIT	15 NOV 201
NO.	REVISION	DATE

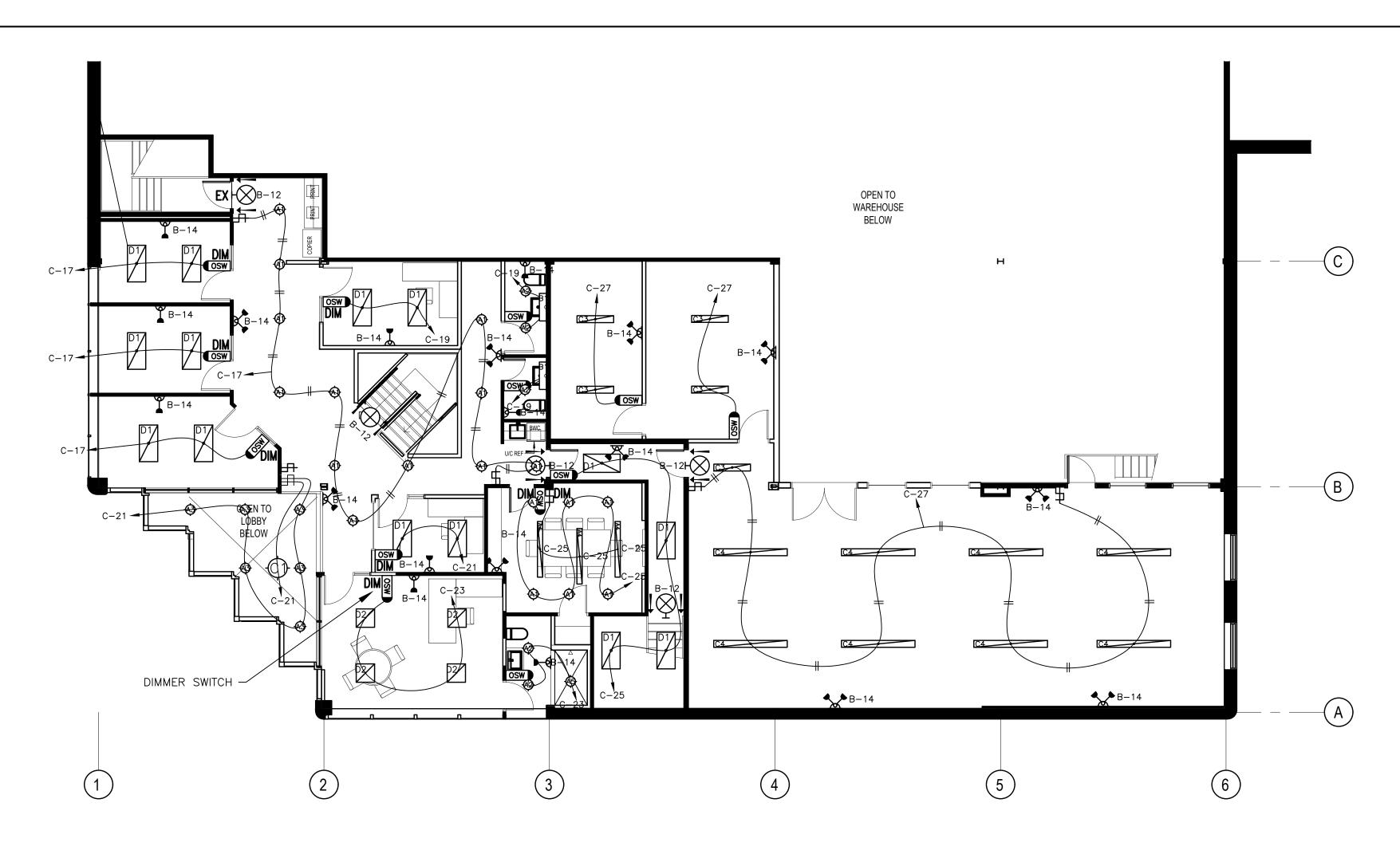
2295 ST. LAURENT FIT UP OTTAWA, ONTARIO

QUA RANT

2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2 TEL. (613) 567-1487 FAX. (613) 567-1493 E-Mail: mail@quadrantengineering.ca

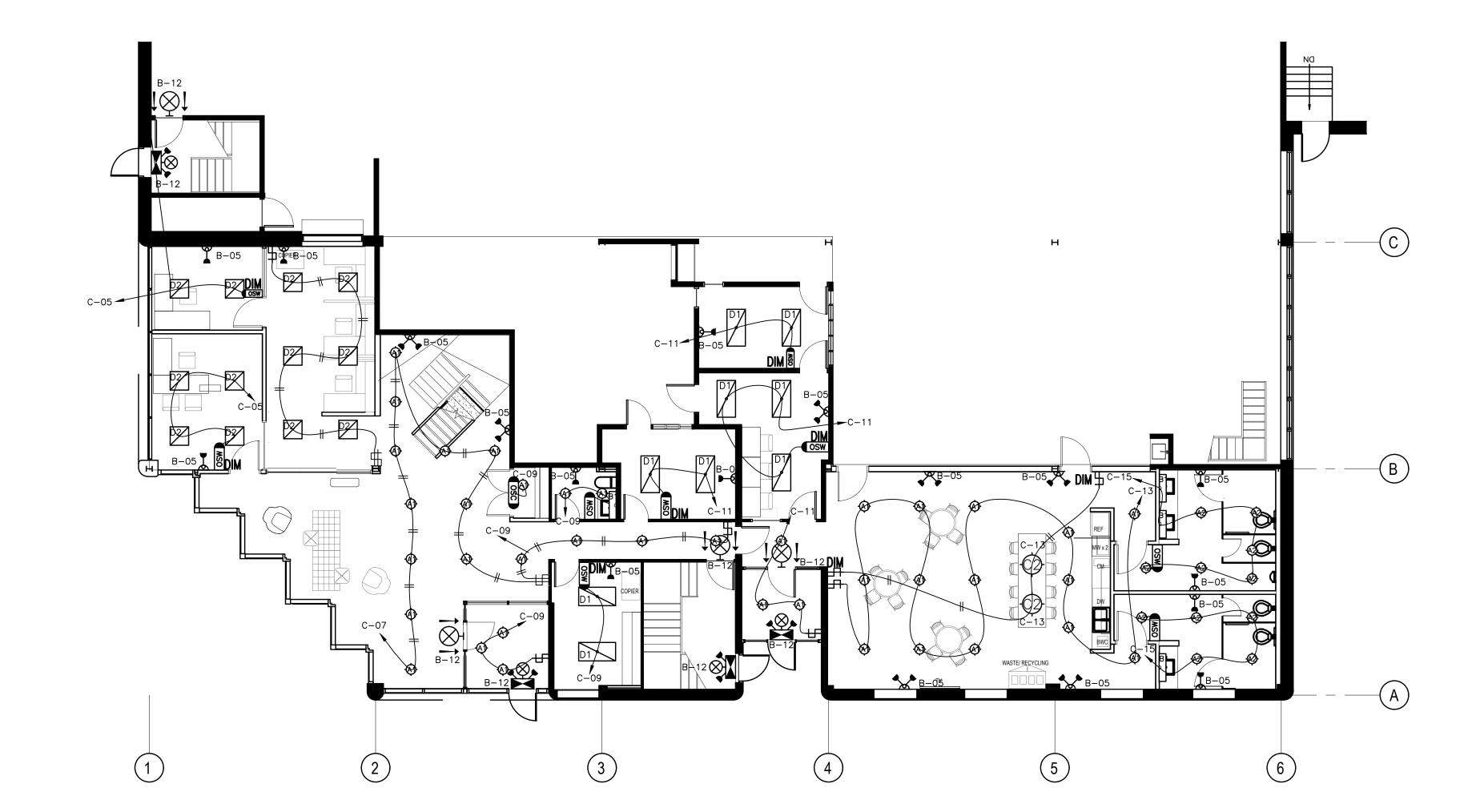
CURRENT I	DATE Fri, 29 Nov 2019, 17-1
SCALE	1:100
DRAWN	YD
DESIGNED	AS
CHECKED	AS
PROJECT	19-Q025
DRAWING I	NUMBER
E	-200

POWER LAYOUT WAREHOUSE



2 2ND FLOOR - LIGHTING SCALE: 1:100

GROUND FLOOR - LIGHTING



Drawing name: \Quad-10\shared folders\OneDrive\Jobs\2019\19-Q025 2295 St Laurent Office Fit Up\02 Drawings\Electrical\19-Q025E Electrical.dwg

THIS DRAWING, OR PARTS THEREOF, MAY NOT BE REPRODUCED OR USED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT THE WRITTEN PERMISSION OF QUADRANT ENGINEERING.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION. WHERE CONFLICT ARISES THE MORE STRINGENT OF THE TWO SHALL APPLY.

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY OF QUADRANT ENGINEERING (QE)

THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING WORK.

THESE DOCUMENTS BY OTHERS.

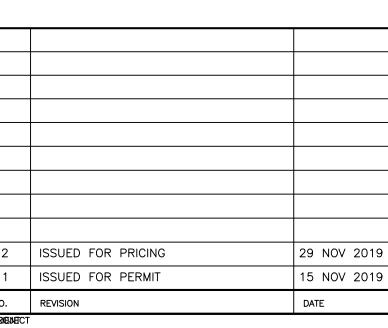
UPON WRITTEN APPLICATION QE WILL PROVIDE WRITTEN

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF

CLARIFICATION REGARDING THE INTENT OF THE CONTRACT DOCUMENTS.

QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS, ON SITE, REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE DESIGN TEAM BEFORE COMMENCING WORK.



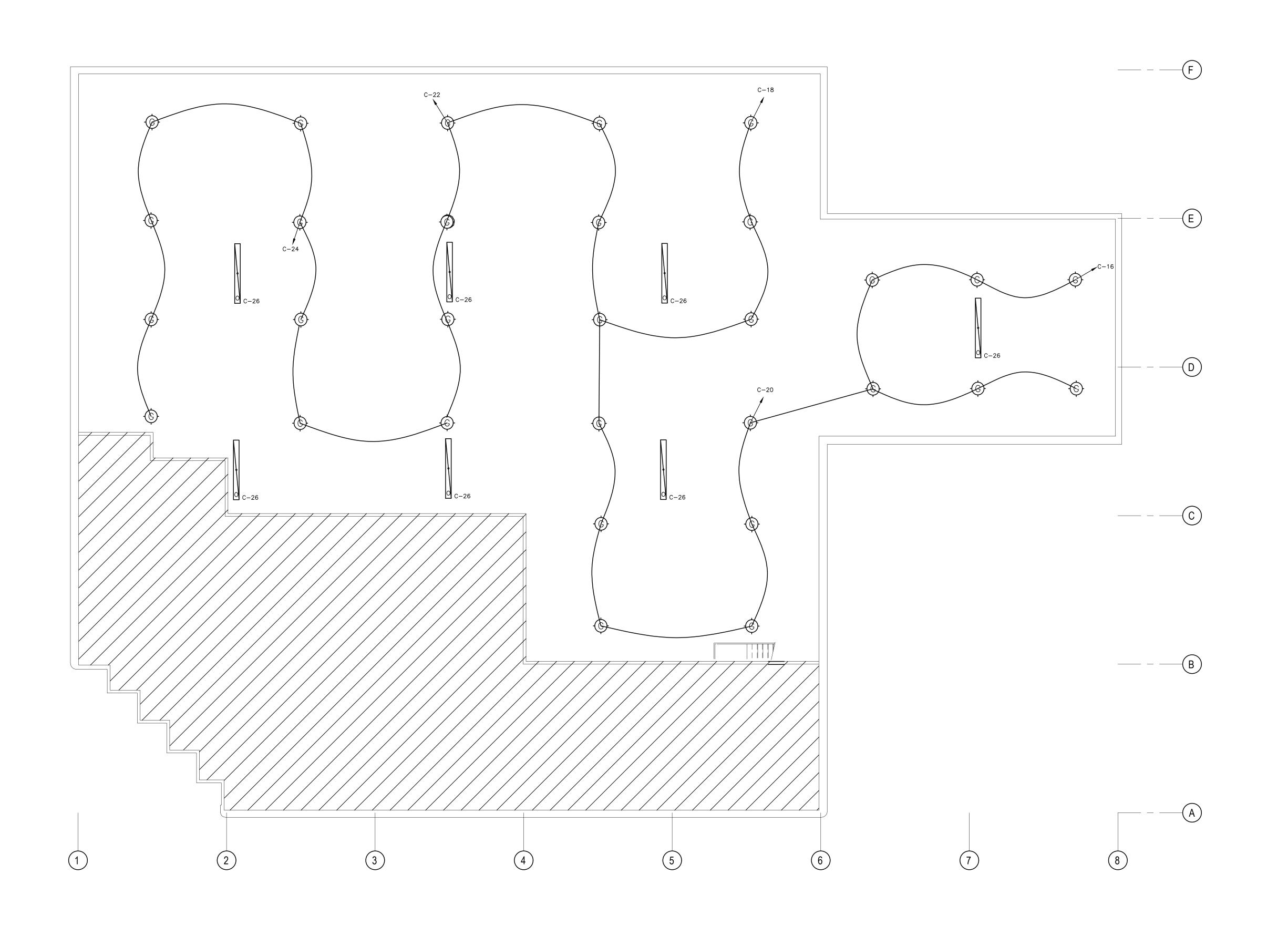
2295 ST. LAURENT FIT UP OTTAWA, ONTARIO

QUA RANT

2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2 TEL. (613) 567-1487 FAX. (613) 567-1493 E-Mail: mail@quadrantengineering.ca

E-Maii:	maii@quaa	ranteng	ineering.ca	
		CURRENT DATE Fri, 29 Nov 2019, 17 12		
		SCALE	1:100	
		DRAWN	YD	
		DESIGNED	AS	
		CHECKED	AS	
		PROJECT	19-Q025	
		DRAWING 1	NUMBER	
		E	-202	

LIGHTING LAYOUT



THIS DRAWING, OR PARTS THEREOF, MAY NOT BE REPRODUCED OR USED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT THE WRITTEN PERMISSION OF QUADRANT ENGINEERING.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION. WHERE CONFLICT ARISES THE MORE STRINGENT OF THE TWO SHALL APPLY.

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY OF QUADRANT ENGINEERING (QE)

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF

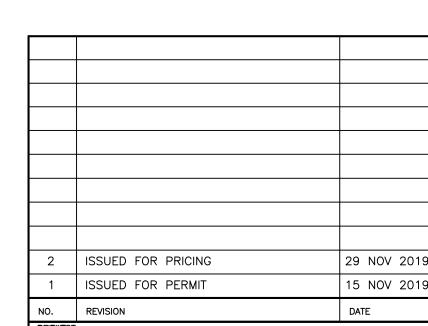
THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING WORK.

THESE DOCUMENTS BY OTHERS.

UPON WRITTEN APPLICATION QE WILL PROVIDE WRITTEN CLARIFICATION REGARDING THE INTENT OF THE CONTRACT DOCUMENTS.

QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS, ON SITE, REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE DESIGN TEAM BEFORE COMMENCING WORK.



2295 ST. LAURENT FIT UP ottawa, ontario

QUARANT

2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2 TEL. (613) 567-1487 FAX. (613) 567-1493 E-Mail: mail@quadrantengineering.ca

runteng	ineering.cu
CURRENT F	DATE Fri, 29 Nov 2019, 17-12
SCALE	1:100
DRAWN	YD
DESIGNED	AS
CHECKED	AS
PROJECT	19-Q025
DRAWING 1	NUMBER
E	-200
	SCALE DRAWN DESIGNED CHECKED PROJECT

LIGHTING LAYOUT WAREHOUSE

ELECTRICAL SPECIFICATION

GENERAL:

ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND BY-LAWS AND BE INSTALLED BY WORKERS SKILLED IN THAT PARTICULAR PORTION OF 16. THE CONTRACT.

SITE EXAMINATION:

EXAMINE SITE AND LOCAL CONDITIONS AFFECTING WORK UNDER THIS DIVISION TO ENSURE THAT WORK UNDER THIS DIVISION CAN BE SATISFACTORILY CARRIED OUT WITHOUT CHANGES TO DRAWINGS. NO ALLOWANCES WILL BE MADE LATER FOR ANY EXPENSES INCURRED THROUGH FAILURE TO MAKE THIS EXAMINATION. START OF WORK WILL BE DEEMED EVIDENCE OF ACCEPTANCE OF, AND SATISFACTION WITH, EXISTING CONDITIONS.

GUARANTEE:

GUARANTEE ALL WORK FOR TWELVE (12) MONTHS FROM _ DATE OF ACCEPTANCE.

PROTECTION:

ENSURE THAT ALL PROTECTIONS ARE TAKEN TO PROTECT ALL PERSONNEL FROM HAZARDS DURING WORK. PROTECT ALL EQUIPMENT FROM DAMAGE FROM ANY CAUSE.

SCOPE OF WORK:

PERFORM ALL WORK AS SHOWN ON ELECTRICAL DRAWINGS AND AS COVERED IN THESE SPECIFICATIONS. FOLLOW MANUFACTURER'S INSTRUCTIONS REGARDING HANDLING, INSTALLING AND TESTING OF EQUIPMENT SPECIFIED HEREIN.

MATERIALS:

USE ONLY NEW MATERIALS, FULLY CERTIFIED FOR USE AS INSTALLED, AND TO MEET THIS SPECIFICATION IN ALL RESPECTS.

CLEAN-UP:

DURING THE COURSE OF INSTALLATION AND UPON COMPLETION, REMOVE ALL RUBBISH AND WASTE RESULTING FROM THIS WORK, TO THE SATISFACTION OF 22. THE ENGINEER. CHECK, CLEAN AND REPAINT WHERE NECESSARY ALL ELECTRICAL EQUIPMENT, AND LEAVE IT IN FIRST CLASS CONDITION.

GROUNDING:

GROUND ALL EQUIPMENT WITH APPROVED FITTINGS AND GROUND CONDUCTORS . ONTARIO ELECTRICAL SAFETY CODE OF AMPLE CAPACITY AS REQUIRED BY THE ALL GROUND CONDUCTORS SHALL HAVE GREEN INSULATION.

RACEWAY AND FITTINGS:

INSTALL ALL WIRING IN EMT CONDUIT WITH THE FOLLOWING EXCEPTIONS:

USE RIGID PVC CONDUIT FOR UNDERGROUND WIRING & WIRING EXPOSED TO WEATHER. USE RIGID PVC CONDUIT OR ELECTRICAL NON-METALLIC

TUBING (COR-LINE) FOR WIRING EMBEDDED IN CONCRETE SLAB.

USE FLEXIBLE METAL CONDUIT FOR CONNECTIONS TO RECESSED LIGHTING FIXTURES. USE LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR

CONNECTIONS TO MOTORS EXPOSED TO WEATHER.

ARMOURED CABLE TYPE AC90 MAY BE USED FOR BRANCH WIRING IN CEILING SPACE AND DOWN TO OUTLETS IN METAL STUD PARTITIONS. NMD90 MAY BE USED IN WOOD FRAME WHERE ACCEPTABLE TO E.S.A.

10. WIRING:

WIRING TO BE COPPER CONDUCTORS, No. 12 AWG MINIMUM OR AS INDICATED, CROSS LINKED POLYETHYLENE INSULATION RW90, EXCEPT AS FOLLOWS: No. 14 AWG FOR CONTROL CIRCUITS FOR MECHANICAL EQUIPMENT.

No. 14 AWG MAY BE USED WITHIN SUITES.

11. WIRING DEVICES:

SWITCHES AND RECEPTACLES TO BE SPECIFICATION GRADE. COVERPLATES FOR ALL WIRING DEVICES IN FLUSH MOUNTED OUTLET BOXES TO BE IVORY, FOR SURFACE MOUNTED BOXES TO BE GALVANIZED SHEET STEEL.

12. PHOTOELECTRIC CELL:

TO BE WEATHERPROOF ENCLOSED, UNAFFECTED BY HUMIDITY, SPST, OPERATING RANGE -40° TO 60°. CONTROL SWITCH TO BE RATED MINIMUM 5A AT 120V TO TURN "ON" AND "OFF" OUTSIDE LIGHTS THROUGH LIGHTING CONTACTOR.

DISCONNECT SWITCHES:

TO BE HEAVY DUTY, FUSED OR UNFUSED AS INDICATED, AND SIZED AS SHOWN ON THE DRAWINGS. DISCONNECT SWITCHES EXPOSED TO WEATHER TO HAVE WEATHERPROOF ENCLOSURE.

14. PANELBOARDS:

PANELS TO BE SURFACE-MOUNTED (OR FLUSH MOUNTED WHERE INDICATED) CODE GAUGE PAINTED STEEL WITH LOCKABLE DOOR AND CONCEALED TRIM SCREWS. BREAKERS TO BE AMBIENT COMPENSATED, TRIP FREE, BOLTED TO THE BUS BARS. PROVIDE TYPEWRITTEN INDEX OF ALL CONNECTED LOADS FOR EACH PANELS, INCLUDING EXISTING PANELS.

15. COMMUNICATIONS:

PROVIDE APPROPRIATE OUTLET BOXES AND EMPTY CONDUITS C/W PULL WIRES FOR COMMUNICATION SYSTEMS, AS SHOWN ON THE DRAWINGS AND AS REQUIRED.

LIGHTING:

PROVIDE AND INSTALL LIGHTING FIXTURES, COMPLETE WITH LAMPS, AS SHOWN IN THE LIGHTING SCHEDULE

EXIT SIGNS:

PROVIDE EXIT SIGNS AS SHOWN ON DRAWINGS WITH THE FOLLOWING FEATURES: TO CONSIST OF A GREEN PICTOGRAM AND WHITE GRAPHIC SYMBOL AS PER ISO-38641

CONSTRUCTED OF ONE PIECE EXTRUDED ALUMINUM HOUSING AND FACE PLATES.

ILLUMINATED WITH WHITE LED LIGHT SOURCE LESS THAN 2.5W UNIVERSAL TYPE FOR WALL, END TO WALL, OR CEILING

DIRECTIONAL ARROWS AS SHOWN. SUITABLE FOR 120V SUPPLY AND 12Vdc EMERGENCY OPERATION.)

MOUNTING, AS REQUIRED.

EMERGENCY LIGHTING: PROVIDE EMERGENCY LIGHTING BATTERY UNIT SUITABLE FOR 120V SUPPLY WITH 12Vdc OUTPUT, COMPLETE WITH TWO INTEGRAL HEADS. SEALED, LONG LIFE LEAD BATTERY MAINTENANCE FREE, WITH 10-YEARS PRO-RATA WARRANTY. INTEGRAL AND REMOTE HEADS TO USE "LED" SEALED BEAM LAMP, 9W, 12Vdc. FULLY ADJUSTABLE MOUNTING SWIVEL COMBINATION TYPE WITH INTEGRAL STANDBY BATTERY

RECORD DRAWINGS:

PACK.

AFTER COMPLETION OF WORK PROVIDE A SET OF MARKED UP AS-BUILT PRINTS FOR RECORD PURPOSES.

ELECTRICAL SAFETY:

TAKE OUT AND PAY FOR ELECTRICAL SAFETY AUTHORITY PERMIT. AT COMPLETION OF JOB, PROVIDE FINAL ELECTRICAL SAFETY AUTHORITY INSPECTION CERTIFICATE BEFORE APPLYING FOR FINAL PROGRESS PAYMENT.

HYDRO OTTAWA CHARGES:

HYDRO-OTTAWA SERVICE CHARGES WILL BE PAID DIRECTLY BY THE OWNER.

23. FIRE PROTECTION:

WHERE CABLES OR CONDUITS PASS THROUGH FLOORS AND FIRE RATED WALLS. PACK SPACE BETWEEN WIRING AND SLEEVE FULL OF FIREPROOF MATERIAL, AND SEAL WITH COMPOUND CONFORMING TO "CGB 19-GP-9MAT-AMDT-OCT-80"

DEMOLITION:

ISOLATE FROM POWER SUPPLY AND MAKE SAFE ALL EXISTING ELECTRIC WORK TO BE REMOVED. DISPOSE OF DEMOLISHED MATERIALS UNLESS NOTED OTHERWISE. REMOVE ALL ABANDONED CONDUIT AND WIRING. EXISTING DEVICES SHOWN ON PLANS ARE APPROXIMATE LOCATION. CONTRACTOR TO VERIFY EXACT LOCATION OF EXISTING DEVICES TO BE USED IN CONJUNCTION WITH NEW RENOVATIONS.

25. SEISMIC RESTRAINTS:

RETAIN A SEISMIC RESTRAINT SPECIALIST TO PERFORM CALCULATIONS AND TO SPECIFY A SEISMIC RESTRAINT SYSTEM AS REQUIRED FOR ANY ELECTRICAL EQUIPMENT, INCLUDING GENERATOR, SWITCHBOARD, DRY TYPE TRANSFORMERS, PANELS, CONDUITS, CABLE TRAY, LIGHT FIXTURES, ETC. THE SEISMIC RESTRAINT SPECIALIST SHALL BE AN INDEPENDENT STRUCTURAL ENGINEER, REGISTERED IN THE PROVINCE OF ONTARIO AND SPECIALIZING IN THIS TYPE OF WORK, AND TO BE ACCEPTABLE TO CONSULTANT. SUPPLY AND INSTALL THE SEISMIC RESTRAINT SYSTEM TO THE SATISFACTION OF THE SEISMIC RESTRAINT SPECIALIST. UPON COMPLETION OF THE PROJECT, PROVIDE A SEALED AND SIGNED STATEMENT FROM THE SEISMIC RESTRAINT SPECIALIST, CERTIFYING THAT ALL COMPONENTS AND PROVISIONS OF THE SEISMIC RESTRAINTS SYSTEM, AS APPLIED TO THE ELECTRICAL EQUIPMENT HAVE BEEN INSTALLED AND TESTED IN ACCORDANCE WITH THE ONTARIO BUILDING

SHOP DRAWINGS PROVIDE [PDF] COPIES OF SHOP DRAWINGS FOR THE FOLLOWING EQUIPMENT: "C.O." CARBON MONOXIDE SYSTEM,

DISCONNECT SWITCHES, ELECTRIC HEATERS - EMERGENCY BATTERY UNIT AND

REMOTE HEADS, LIGHTING CONTACTORS, LIGHTING FIXTURES AND EXIT LIGHTS,

LIGHTING OCCUPANCY SENSOR AND/OR SWITCHES, PANELBOARDS, PHOTOCELL,

WEATHERPROOF RECEPTACLE "WHILE-IN-USE" & "EXTRA-DUTY" COVER PLATE.

LEGEND

CEILING AND WALL MOUNTED

LIGHT FIXTURE POLE MOUNTED

PICTOGRAM - RUNNING MAN

C/W LED 2-HEADS/

MTD: WALL OR CEILING

PICTOGRAM EXIT SIGN

DF - DOUBLE FACE

(MTD 1100mm AFF)

347V TOGGLE SWITCH

(MTD 1100mm AFF)

(MTD 1100mm AFF)

SPEED CONTROL SWITCH

WALL MOUNTED OCCUPANCY SENSOR

CEILING MOUNTED OCCUPANCY SENSOR

DUPLEX RECEPTACLE 120V, 15A

DUPLEX RECEPTACLE 120V, 15A

DUPLEX RECEPTACLE 120V, 15A

SINGLE RECEPTACLE 120V, 15A

SPECIAL PURPOSE RECEPTACLE,

DUPLEX RECEPTACLE 120V, 20A

5-20R (T-SLOT) CSA RECEPTACLE

DIRECT CONNECTION TO EQUIPMENT

WIRING IN FLOOR OR UNDERGROUND

WIRING IN/ON WALL OR CEILING

WIRING UP

WIRING DOWN

CONTROL WIRING

PANELBOARD

MOTORIZED DAMPER

CONTACTOR

TIME SWITCH

PHOTOCELL

120V THERMOSTAT

(MTD. 1100mm AFF)

ELECTRIC UNIT HEATER

HEATER TYPE 'A'

TELEPHONE OUTLET

TELEVISION OUTLET

DATA LINE OUTLET

CHIME

PILOT LIGHT

ELECTRIC BASEBOARD HEATER

ELECTRIC BASEBOARD HEATER C/W BUILT-IN THERMOSTAT

ELECTRIC FORCED FLOW HEATER

COMBINATION DATA/TELEPHONE OUTLET

MANUAL MOTOR STARTER

MAGNETIC MOTOR STARTER

MD

 $\vec{\Delta}$

Т

 $\begin{pmatrix} A \\ 2.0 \end{pmatrix}$

FLEXIBLE CONNECTION

OUTLET BOX 4" x 4" x 2 1/8"

JUNCTION BOX SIZE AS REQUIRED

DISCONNECT SWITCH, FUSED IF NOTED

SINGLE PHASE MOTOR CONNECTION

THREE PHASE MOTOR CONNECTION

COMBINATION MAGNETIC MOTOR STARTER

(100 x 100 x 50mm) OR AS REQUIRED

(QUAD) (2) DUPLEX RECEPTACLES 120V, 15A

AMPS AND VOLTS AS NOTES

FLOOR MOUNTED DUPLEX RECEPTACLE

DUPLEX RECEPTACLE - UPPER HALF

(MTD 1100mm AFF)

(MTD 1100mm AFF)

N SEPARATE CIRCUIT

SPLIT WIRED (2 CIRCUITS)

DIMMER SWITCH

CEILING AND WALL MOUNTED

DIRECTIONAL ARROWS AS SHOWN

SINGLE POLE TOGGLE SWITCH

DOUBLE POLE TOGGLE SWITCH

THREE WAY TOGGLE SWITCH

FOUR WAY TOGGLE SWITCH

UNIVERSAL MOUNT, COMBINATION

EXIT EXIT SIGN/ BATTERY PACK

REMOTE EMERGENCY LED HEADS

CEILING MOUNTED

LIGHT FIXTURE

FLUORESCENT OR LED LIGHT FIXTURE DE FLUORESCENT OR LED LIGHT FIXTURE EMERGENCY LIGHTING BATTERY UNIT WITH TWO INTEGRAL "LED" HEADS

(MTD 1200mm AFF) FIRE ALARM HORN (MTD 2100mm AFF) COMBINATION FIRE ALARM STROBE LIGHT & HORN (MTD 2100mm AFF) CEILING MOUNTED FIRE ALARM STROBE LIGHT FIRE ALARM SMOKE DETECTOR FIRE ALARM HEAT DETECTOR FIRE ALARM SMOKE DETECTOR DUCT MOUNTED 120V COMBINATION STROBE/ SMOKE ALARM C/W SILENCING DEVICE. 120V SELF CONTAINED CARBON MONOXIDE "CO" FIRE ALARM END-OF-LINE RESISTOR

GANGED SWITCHED UNDER ONE COVER

DRYER AMP SENSOR MAG-LOCK CAR READER MAG-LOCK

AFCI ARC FAULT CCT. INTERRUPTER

FIRE ALARM MANUAL PULL STATION

'-DAY BATTERY FOR SMOKE AND INTEGRAL

END-OFF-LINE RESISTER .

FLOW SWITCH

PRESSURE SWITCH

TAMPER SWITCH

FIRE ALARM MAGNETIC DOOR HOLDER

FIREMAN'S VOICE COMMUNICATION

FIRE ALARM - VOICE COMMUNICATION

SPEAKER - CEILING AND WALL MOUNTED

(FOR APT. UNITS ONLY) AMP DRYER AMP SENSOR BEF SUITE - BATHROOM EXHAUST FAN COMM COMMUNICATION BOX CEILING MOUNTED AND/OR MOUNTED HIGH ON WALL (MEANS OF DISCONNECT) IN PUBLIC AREAS.

FM FLOOR MOUNTED GFI GROUND FAULT CCT. INTERRUPTER MW MICROWAVE

UNSWITCHED LIGHT FIXTURES (24hr)

OC OVER COUNTER PNL ELECTRICAL PANEL OR LOAD CENTRE R RANGE

UC UNDER COUNTER UCL UNDER (KITCHEN) CUPBOARD LIGHTING

UCL UNDER COUNTER LIGHTING WP WEATHERPROOF

WP FOR RECEPTACLE: WEATHERPROOF COVER PLATE TO BE "WHILE-IN-USE" & "EXTRA-DUTY"

GENERAL NOTES:

- 1. ALL EMPTY CONDUIT TO BE C/W PULL ROPE.
- EXACT LOCATION OF FOUIPMENT SUBJECTED TO COORDINATION WITH MECHANICAL. ALL NEW AND/OR RELOCATED LIGHT SWITCHES TO BE HEIGHT TAKEN 1100mm AFF. - 1100mm

MOUNTED FROM TOP OF FINISHED FLOOR LEVEL

- "AFF" TO CENTER OF JUNCTION BOX. ALL NEW AND/OR RELOCATED "WALL MOUNTED" F/A HORS & F/A STROBES TO BE HEIGHT TAKEN 2100mm AFF. - 2100mm MOUNTED FROM TOP OF FINISHED FLOOR LEVEL "AFF" TO
- ALL NEW AND/OR RELOCATED F/A PULL STATIONS TO BE HEIGHT TAKEN 1200mm AFF. -1200mm MOUNTED FROM TOP OF FINISHED FLOOR LEVEL "AFF" TO CENTER OF JUNCTION

CENTER OF JUNCTION BOX.

- 6. HANDICAP PUSH DOOR BUTTONS REFER TO ARCHITECTURAL FLOOR PLANS FOR FINAL LOCATION TO EXACT HORIZONTAL PLACEMENT OF HANDICAP DOOR OPERATOR PUSH BUTTONS ALONG WALL - IN CONJUNCTION WITH LOCATIONS OF HC PUSH BUTTONS SHOWN ON ELECTRICAL
- LOCATION OF OUTLETS DO NOT INSTALL OUTLETS BACK-TO-BACK HORIZONTAL 150mm IN WALL; ALLOW MINIMUM CLEARANCE BETWEEN BOXES.
- 8. IN ADDITION TO GENERAL NOTE #7 AND IN KEEPING THE "ELECTRICAL CODE RECEPTACLE SPACING REQUIREMENTS", OUTLETS INSTALLED ON SHARED DEMISING WALLS BETWEEN APARTMENT SUITES ARE NOT TO SHARE THE SAME STUD
- ALL DUPLEX RECEPTACLES MUST COMPLY WITH THE "TAMPERPROOF" REQUIREMENTS OF THE

120V EMERGENCY LIGHTING & EXIT

SYSTEM LAMPS VOLT DESCRIPTION

PICTOGRAM	LED	120V 12V	PICTOGRAM — RUNNING MAN UNIVERSAL MOUNT EXIT LIGHT EXIT LIGHT CEILING & WALL MOUNTED DIRECTION ARROWS AS SHOWN DF — DOUBLE FACE
	9W LED	12Vdc	REMOTE EMERGENCY LED HEADS MTD: WALL OR CEILING
	9W LED	120V 12Vdc	EMERGENCY LIGHTING BATTERY UNIT WITH TWO INTEGRAL LED HEADS SURFACE MOUNTED: PROVIDE 1/2hr RATING (ADD 50W EXTRA)
PICTOGRAM	9W LED	120V 12Vdc	PICTOGRAM — RUNNING MAN UNIVERSAL MOUNT, COMBINATION EXIT EXIT SIGN/ BATTERY PACK C/W LED 2—HEADS/ TO SATISFY THE REQUIREMENTS OF THE ONTARIO BUILDING CODE ALL COMBO UNITS TO HAVE

PROVIDE #10 AWG MINIMUM FOR ALL 12Vdc WIRING

1/2hr RATING.

SYM	LAMPS	VOLT	SPECIFICATIONS:
A1	LED	120V 13.5W	MODEL: 4RLD G3 09LM 35K 90CRI 120 FRPC WWH N Manufacturer: Juno Lighting 4" recessed retrofit trim module white baffle
A2	LED	120V 13.5W	MODEL: 4RLD G3 09LM 30K 90CRI 120 FRPC WWH N Manufacturer: Juno Lighting 4" Recessed retrofit trim module white baffle
A3	LED	120V 42.1W	MODEL: L4 40LM 35K 120 G4 80CRI ZT HN CSS MANUFACTURER: INDY INDY 4" DIA. 1—LED 4000LM, 35K 80CRI, GEN4
A4	LED	120V 18.2W	MODEL: NF1xxBA35[F1/F2/E1/E2/E3/E4]MO4 MANUFACTURER: FLUXWERX ILLUMINATION INC
A5	LED	120V 13.5W	MODEL: EVO6SH 30/10 DFFAMF SOL MANUFACTURER: GOTHAM ARCHITECTURAL LIGHTING EVO 6IN SHOWER, 3000K, 1000LM, FLUSH SOLITE, 80C
B1	LED	120V 13.8W	MODEL: 3541+74541-35_REG-LED
B2	LED	120V 26.1W OR 14.5W	MODEL: 3541+74541-47-LED_HO OR MODEL: 3531-23_HO-LED
C2	LED	120V 30.7W	MODEL: 4257_ANTE
C3	LED	120V 30.7W	MODEL: BLWP4 100L ADP LP835 MANUFACTURER: LITHONIA LIGHTING BLWP 4FT 10000 NOMINAL LUMENS, CURVED LINEAR LE 3500K CCT, 80CRI
C4	LED	120V 30.7W	MODEL: BLWP8 100L ADP LP835 MANUFACTURER: LITHONIA LIGHTING BLWP 4FT 10000 NOMINAL LUMENS, CURVED LINEAR LE 3500K CCT
D1	LED	120V 40.8W	MODEL: CPX 2X4 4000LM 35K XX MANUFACTURER: LITHONIA LIGHTING CPX FLAT PANEL 2X4, 4000 LUMENS, 35K CCT
D2	LED	120V 28.9W	MODEL: CPX 2X2 3200LM 35K XX MANUFACTURER: LITHONIA LIGHTING CPX FLAT PANEL 2X2, 3200 LUMENS, 35K CCT
G	LED	120V 150- 400W	MODEL: 150HB/LED/740/ND WB DL BB 2/1 MANUFACTURER: PHILIPS LIGHTING
0	LED	120V 28.9W	MODEL: T8-344440 MANUFACTURER: PILA LED

LIGHT FIXTURE SCHEDULE - EXTERIOR				
SYM	LAMPS	VOLT	SPECIFICATIONS:	
K	LED	120V 149.2W	LOCATION: — MODEL: AL150-NW-G1-AR-3-6-BZ MANUFACTURER: KEENE BY SIGNIFY	
S	LED	120V 301.1W	LOCATION: — MODEL: FL300-NW-G1-x-FL-6-BZ MANUFACTURER: KEENE BY SIGNIFY	
W	LED	120V 64.6W	LOCATION: — MODEL: LPW-32-70-NW-G3-4 MANUFACTURER: KEENE BY SIGNIFY	
Z	LED	120V 203.1	LOCATION: — MODEL: AL200-NW-G1-AR-4-6-BZ MANUFACTURER: KEENE BY SIGNIFY	

THIS DRAWING, OR PARTS THEREOF, MAY NOT BE REPRODUCED OR USED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT THE WRITTEN PERMISSION OF QUADRANT ENGINEERING. THIS DRAWING IS TO BE READ IN CONJUNCTION

THE MORE STRINGENT OF THE TWO SHALL APPLY.

WITH THE SPECIFICATION. WHERE CONFLICT ARISES

COPYRIGHT © 2019 QUADRANT ENGINEERING.

THE ELECTRICAL CONTRACT DOCUMENTS ARE THE PROPERTY OF QUADRANT ENGINEERING (QE) THE CONTRACTOR SHALL OBTAIN A FULL SET OF ALL

CONSULTANTS' DESIGN DOCUMENTS PRIOR TO STARTING

QE BEARS NO RESPONSIBILITY FOR INTERPRETATIONS OF THESE DOCUMENTS BY OTHERS.

UPON WRITTEN APPLICATION OF WILL PROVIDE WRITTEN CLARIFICATION REGARDING THE INTENT OF THE CONTRACT

QE REVIEW OF SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR IS FOR DESIGN CONFORMANCE ONLY.

DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS, ON SITE. REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE DESIGN TEAM BEFORE COMMENCING WORK.

> DRAWING NUMBER E - 300

29 NOV 2019

| 15 NOV 2019

DATE

FAX. (613) 567-1493

CURRENT DATE Fri, 29 Nov 2019, 17 12

SCALE NTS

DRAWN YD

DESIGNED AS

CHECKED AS

PROJECT 19-Q025

DETAILS, LEGEND, AND NOTES

ISSUED FOR PRICING

ISSUED FOR PERMIT

2295 ST. LAURENT

FIT UP

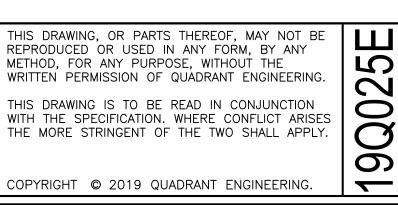
OTTAWA, ONTARIO

2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2

E-Mail: mail@quadrantengineering.ca

NO. REVISION

TEL. (613) 567-1487



EXISTING PANELS TO BE

REUSED AND MODIFIED

TO SUIT NEW LAYOUT.

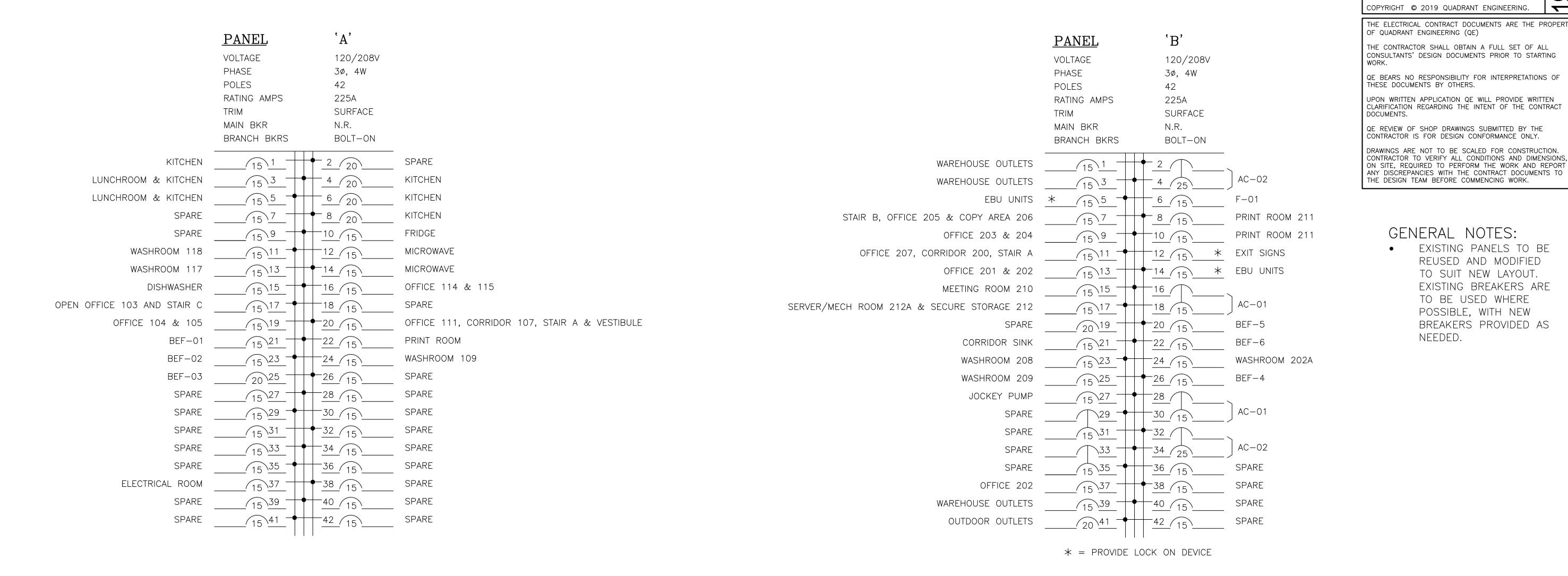
TO BE USED WHERE

POSSIBLE, WITH NEW

NEEDED.

EXISTING BREAKERS ARE

BREAKERS PROVIDED AS



PANEL 347/600V VOLTAGE PHASE 3ø, 4W POLES RATING AMPS 100A SURFACE MAIN BKR N.R. BRANCH BKRS BOLT-ON SPARE ______15 ____ DUCT HEATER SPACE 7 8 15 VESTIBULE HEATER WASHROOM HEATERS _______15 11 + 12 15 FORCED FLOW HEAT WASHROOM HEATERS ______15 15 16 15 FORCED FLOW HEAT OFFICE HEATERS 20 SHOWROOM HEATERS OUTSIDE LIGHTS 20 20 OFFICE HEATERS OFFICE HEATERS 20 21 22 20 SPARE

2	ISSUED FOR PRICING	29 NOV 201		
1	ISSUED FOR PERMIT	15 NOV 201		
NO.	REVISION	DATE		
NO.	NO. REVISION DATE PENGANETOT 2295 ST. LAURENT FIT UP			
	OTTAWA, ONTARIO			

2283 ST. LAURENT BLVD., UNIT 203, OTTAWA, ONT., K1G 5A2

E-Mail: mail@quadrantengineering.ca

TEL. (613) 567-1487

PROJECT 19-Q025 DRAWING NUMBER E - 300

DETAILS, LEGEND, AND NOTES

<u>PANEL</u>

VOLTAGE

PHASE

POLES

LUNCH ROOM 116 & KITCHEN LIGHTS ______15 13 + 14 100_____

WASHROOM 109, CORRIDOR 107 & PRINT ROOM 108 LIGHTS

OFFICE 114, 115, CORRIDOR 113, & VESTIBULE 112 LIGHTS

SPARE

OFFICE 203, 204, 205 & CORRIDOR 200 LIGHTS ______15 17 18 15 _____

RATING AMPS

WASHROOM 118 & 117 LIGHTS ______15 15 16 15 WAREHOUSE LIGHTS

WASHROOM 208, 209 LIGHTS _______15 19 + 20 15 _____ WAREHOUSE LIGHTS

OFFICE 201 & CEILING LIGHTS _______15 21 + 22 15 WAREHOUSE LIGHTS

OFFICE 202 & WASHROOM LIGHTS _______15 23 + 24 15 _____ WAREHOUSE LIGHTS

MAIN BKR

120/208V

3ø, 4W

SURFACE

WAREHOUSE LIGHTS

100A