

Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

PRIME CONSULTANT:



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DRAWING LIST

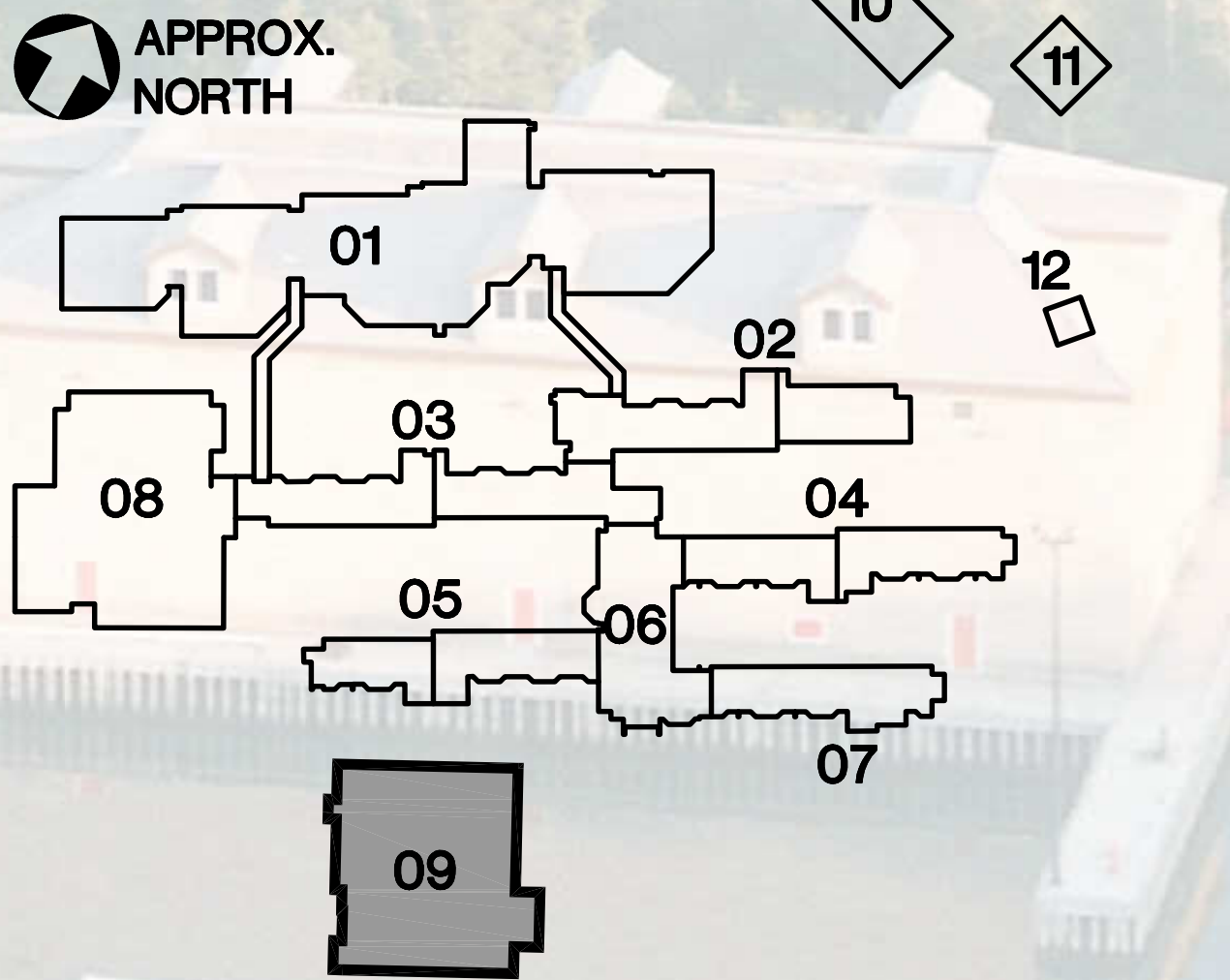
DEMOLITION
538447-09-AD-101-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 DEMO FLOOR PLAN
538447-09-AD-102-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 DEMO FLOOR PLAN
538447-09-AD-103-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 300 DEMO FLOOR PLAN
538447-09-AD-104-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-DEMO ROOF PLAN
538447-09-AD-105-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 DEMOLITION REFLECTED CEILING PLAN
538447-09-AD-106-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 DEMOLITION REFLECTED CEILING PLAN
538447-09-MDP-101-PLUMBING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVELS 100, 200 & 300 DEMOLITION
538447-09-MDH-101-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 DEMOLITION
538447-09-MDH-102-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 DEMOLITION
538447-09-MDH-103-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 300 DEMOLITION
538447-09-MDV-101-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 DEMOLITION
538447-09-MDV-102-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 DEMOLITION
538447-09-MDV-103-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 300 DEMOLITION
538447-09-FPD-101-FIRE PROTECTION-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 & 300 DEMOLITION
538447-09-ED-101-ELECTRICAL-LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 DEMOLITION
538447-09-ED-102-ELECTRICAL-LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 DEMOLITION
538447-09-ED-103-ELECTRICAL-LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 DEMOLITION
STRUCTURAL
538447-09-S-100-STRUCTURAL-LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100-200 PARTIAL PLANS
538447-09-S-101-STRUCTURAL-LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 PLAN, SECTION, & DETAILS
538447-09-S-102-STRUCTURAL-LOUIS S. ST. LAURENT MACHINE SHOP ROOF PLAN, SECTIONS, & DETAILS
ARCHITECTURAL
538447-09-A-101-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 NEW FLOOR PLAN
538447-09-A-102-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 NEW FLOOR PLAN
538447-09-A-103-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 300 NEW FLOOR PLAN, SECTIONS, & DETAILS
538447-09-A-104-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-NEW ROOF PLAN, SECTIONS, & DETAILS
538447-09-A-105-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 NEW REFLECTED CEILING PLAN
538447-09-A-106-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 NEW REFLECTED CEILING PLAN
MECHANICAL: PLUMBING
538447-09-MP-101-PLUMBING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 NEW WORK
538447-09-MP-102-PLUMBING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVELS 200 & 300 NEW WORK
538447-09-MP-501-PLUMBING-LOUIS S. ST. LAURENT MACHINE SHOP DETAILS & SCHEMATICS
MECHANICAL: HVAC PIPING
538447-09-MH-101-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 NEW WORK
538447-09-MH-102-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 NEW WORK
538447-09-MH-103-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 300 NEW WORK
538447-09-MH-501-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP DETAILS
538447-09-MH-502-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP DETAILS
538447-09-MH-601-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP SCHEMATICS
538447-09-MH-602-HVAC PIPING-LOUIS S. ST. LAURENT MACHINE SHOP SCHEDULES
MECHANICAL: VENTILATION
538447-09-MV-101-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 NEW WORK
538447-09-MV-102-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 NEW WORK
538447-09-MV-103-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 300 NEW WORK
538447-09-MV-104-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP-ROOF NEW WORK
538447-09-MV-301-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP-MECHANICAL PENTHOUSE NEW WORK & SECTIONS
538447-09-MV-501-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP DETAILS
538447-09-MV-502-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP DETAILS
538447-09-MV-601-VENTILATION-LOUIS S. ST. LAURENT MACHINE SHOP SCHEDULES
MECHANICAL: CONTROLS
538447-09-MC-101-CONTROLS-LOUIS S. ST. LAURENT MACHINE SHOP SCHEMATICS
538447-09-MC-102-CONTROLS-LOUIS S. ST. LAURENT MACHINE SHOP SCHEMATICS
FIRE PROTECTION
538447-09-FP-101-FIRE PROTECTION-LOUIS S. ST. LAURENT MACHINE SHOP-LEVELS 100 & 300 NEW WORK
ELECTRICAL
538447-09-E-001-ELECTRICAL-LOUIS S. ST. LAURENT MACHINE SHOP LEGEND
538447-09-EP-101-ELECTRICAL POWER-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 NEW WORK
538447-09-EP-102-ELECTRICAL POWER-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 NEW WORK
538447-09-EP-103-ELECTRICAL POWER-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 300 NEW WORK
538447-09-E-601-ELECTRICAL-LOUIS S. ST. LAURENT MACHINE SHOP SCHEDULES
538447-09-E-602-ELECTRICAL-LOUIS S. ST. LAURENT MACHINE SHOP SCHEDULES & DISTRIBUTION EQUIPMENT

LSSL MET MECHANICAL UPGRADES
CANADIAN COAST GUARD COLLEGE,
SYDNEY, NOVA SCOTIA
CANADA

ISSUED FOR TENDER
JULY 6th, 2018

PROJECT NO. R.065476.710

KEY PLAN:



BUILDINGS BY NUMBER:

- 01 - CABOT
- 02 - ARCTIC / ATLANTIC
- 03 - PACIFIC / GREAT LAKES
- 04 - SAGUENAY / MIRAMICHI
- 05 - TELC/MCTS / MACKENZIE
- 06 - ALERT
- 07 - ST. LAURENT
- 08 - D'IBERVILLE CENTRE
- 09 - LOUIS S. ST. LAURENT
- 10 - WALTER E. FOSTER
- 11 - GEORGE L. HOPKINS
- 12 - SEAWATER PUMPHOUSE

MECHANICAL/ELECTRICAL

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ENERGY MODELING

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STRUCTURAL

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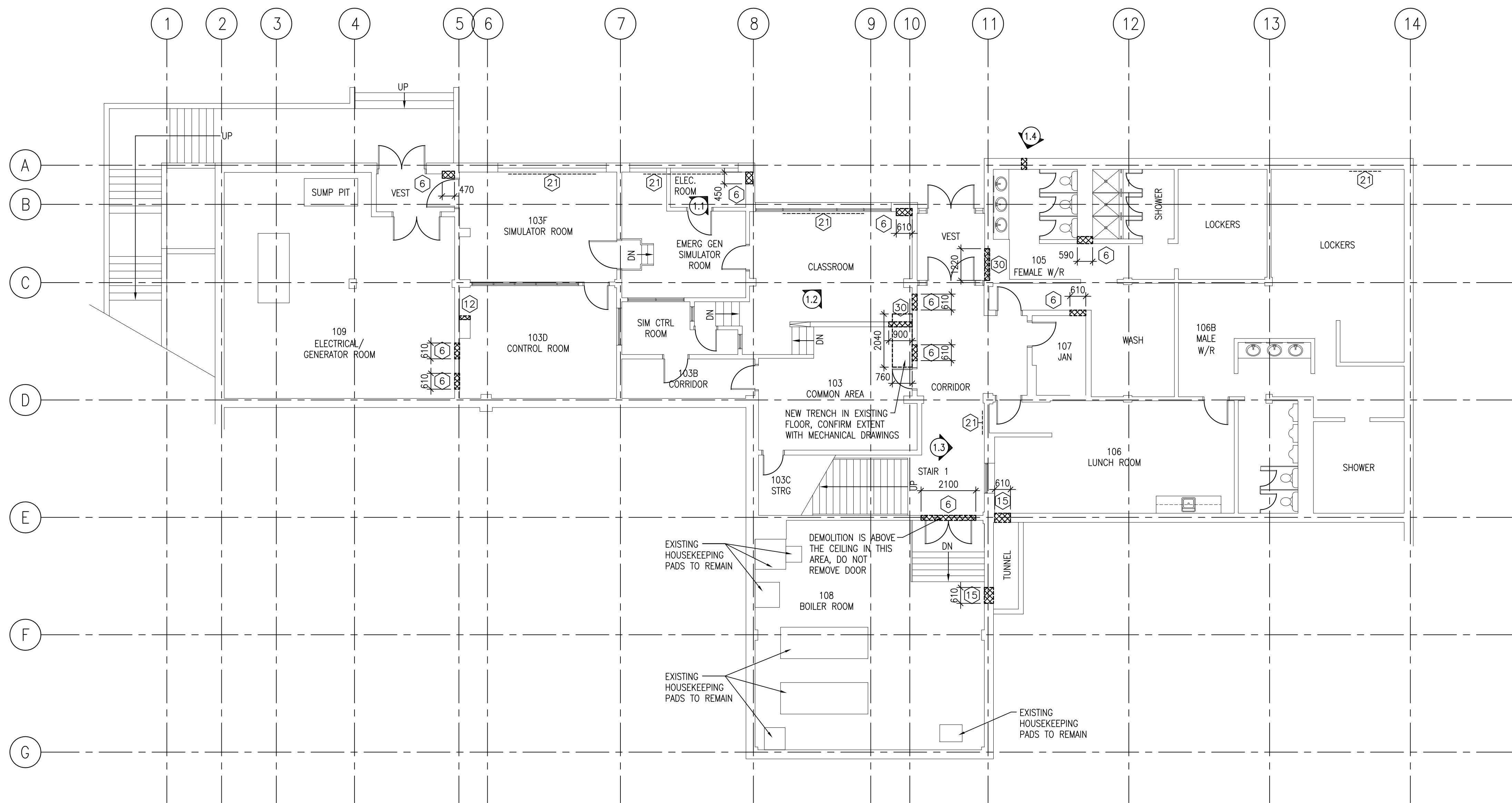
CANADIAN COAST GUARD COLLEGE



COST MANAGEMENT

QSolv
QSolv Incorporated
p: 902 478 1623
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LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

LEGEND:

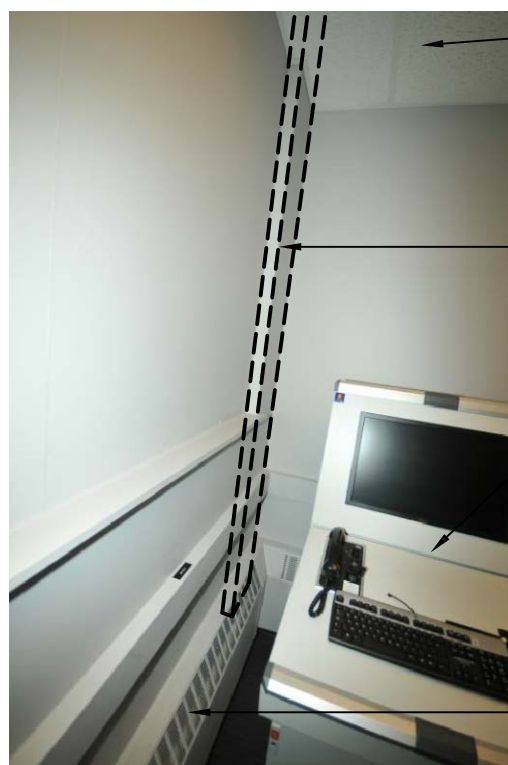
- EXISTING TO BE REMOVED
- XXXXX EXISTING TO BE REMOVED
- REMOVE AND DISPOSE OF EXISTING DOOR, FRAME AND HARDWARE, U.N.O.
- EXISTING TO REMAIN
- EXISTING WALL MOUNTED BASEBOARD RADIANT HEATERS TO BE DEMOLISHED AND DISPOSED OF

GENERAL NOTES:

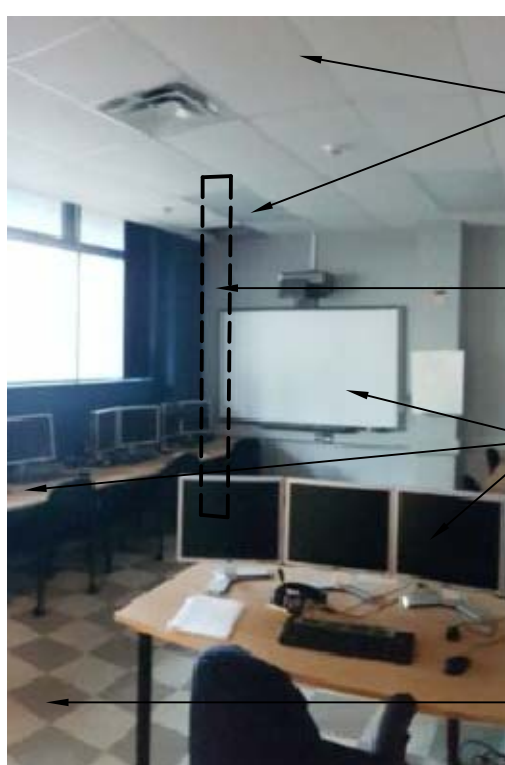
- A. DIMENSIONS SHOWN ARE APPROXIMATE, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO DEMOLITION AND TO REPORT ANY DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE PRIOR TO CONSTRUCTION.
- B. CONSTRUCTION ASSEMBLIES DESCRIBED WERE TAKEN FROM THE AS-BUILT DRAWINGS. THE GENERAL CONTRACTOR IS TO VERIFY THE EXISTING CONSTRUCTION ASSEMBLY PRIOR TO DEMOLITION.
- C. LOCATIONS AND QUANTITIES OF AREAS TO BE DEMOLISHED ARE APPROXIMATE, GENERAL CONTRACTOR TO VERIFY THE LOCATIONS OF PIPES AND MECHANICAL DUCTS PRIOR TO DEMOLITION –REFER TO MECHANICAL DRAWINGS.
- D. MINIMIZE TO THE GREATEST EXTENT POSSIBLE, DAMAGE TO ADJACENT SURFACES DURING DEMOLITION. MAKE GOOD ANY SURFACES OR MATERIALS NOT INTENDED TO BE REMOVED WHICH ARE DAMAGED BY THIS WORK. DETERMINE SPECIFICATION AND QUALITY OF SUCH SURFACES OR MATERIALS BY INSPECTION.
- E. PROTECT OWN WORK, THE WORK OF OTHERS, AND NEW, EXISTING AND ADJACENT STRUCTURES FROM DAMAGE DURING DEMOLITION. PROTECTION SHALL INCLUDE BUT SHALL NOT BE LIMITED TO MILLWORK, PLUMBING FIXTURES, WINDOWS, FLOORS, CEILINGS, AND DOORS.
- F. TEMPORARILY RELOCATE AND REINSTATE OWNER'S EXISTING FURNITURE, FITTINGS AFFIXED TO THE WALL AS NECESSARY TO GAIN ACCESS AND TO ACCOMMODATE THE EXECUTION OF THE WORK. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO: BOOK SHELVES, SHELVING AND CUPBOARDS.
- G. IMMEDIATELY REPORT ANY UNEXPECTED DISCOVERY OF MATERIAL THAT MAY CONTAIN DESIGNATED SUBSTANCES (E.G. ASBESTOS). STOP WORK IN THE AREA UNTIL BUILDING OWNER OR PROPERTY MANAGER AUTHORIZES CONTINUATION OF WORK. ALL CLEAN UP, REMOVAL AND DISPOSAL OF DESIGNATED MATERIAL SHALL STRICTLY CONFORM TO PROVINCIAL MINISTRY OF LABOR REGULATIONS.
- H. REFER TO STRUCTURAL DRAWINGS (WHERE APPLICABLE) FOR ANY TEMPORARY AND/OR PERMANENT SHORING AND SUPPORT REQUIRED.
- I. REMOVE DEMOLISHED MATERIALS AND DEBRIS FROM THE WORK AREA ON A CONTINUAL BASIS.
- J. PROVIDE ALL NECESSARY AND REQUIRED MEANS FOR BOTH THE REMOVAL AND DISPOSAL OF ALL RUBBISH, DEBRIS, DEMOLISHED FIXTURES AND FITTINGS AND ALL OTHER ITEMS NOT SCHEDULED TO REMAIN AT THE PLACE OF THE WORK, RESULTING FROM THE OPERATIONS OF THIS WORK. PROVIDE ALL NECESSARY AND REQUIRED GARBAGE BINS AND GARBAGE CHUTES.
- K. DEMOLISH, SALVAGE, RE-USE AND/OR DISPOSE OF PRODUCTS AS INDICATED IN THE DOCUMENTS.
- L. CAREFULLY REMOVE, STORE AND PROTECT IN AN APPROPRIATE MANNER EXISTING MATERIALS THAT REMAIN THE PROPERTY OF THE OWNER, THAT ARE TO BE REUSED IN THE WORK, OR STORED FOR FUTURE USE.
- M. TAG AND STORE IN SETS, ITEMS THAT ARE SCHEDULED FOR RE-USE INCLUDING BUT NOT LIMITED TO LIGHT FIXTURES, DOORS AND FRAMES. RE-INSTALL PRODUCTS IN THEIR ORIGINAL SETS WHERE POSSIBLE.
- N. ALL CUTTING/PATCHING WORK SHALL BE DONE IN A MANNER TO RECEIVE NEW WORK AND FINISHES.
- O. LEVEL AND PATCH DAMAGE TO SUBFLOOR CAUSED BY REMOVAL OF FLOOR FINISHES.
- P. MAKE GOOD ALL REQUIRED FIREPROOFING OR FIRE RESISTANCE RATED ASSEMBLIES DAMAGED OR REMOVED IN THE PERFORMANCE OF THE WORK. FIRE RESISTANCE RATING SHALL MATCH EXISTING, UNLESS NOTED OTHERWISE. ALL PENETRATIONS THROUGH WALL AND FLOOR SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.
- Q. PROVIDE CUTTING AND PATCHING OF CEILINGS, FLOORS AND WALLS TO ACCOMMODATE THE REMOVAL OF ELECTRICAL SERVICE, CONTROL SERVICES AND PNEUMATIC PIPING.

PICTURE NOTES:

GENERAL NOTE:
PICTURES ILLUSTRATE TYPICAL CONDITIONS AND MAY NOT CONTAIN ALL INFORMATION TO DESCRIBE THE FULL SCOPE OF WORK. THE PICTURES ARE OF THE INTERIOR OF THE ROOM U.N.O. REPORT INCONSISTENCIES AND OMISSIONS TO THE DEPARTMENTAL REPRESENTATIVE FOR CLARIFICATION BEFORE COMMENCING WITH THE WORK.



1.1 – PHOTO



1.2 – PHOTO



1.3 – PHOTO

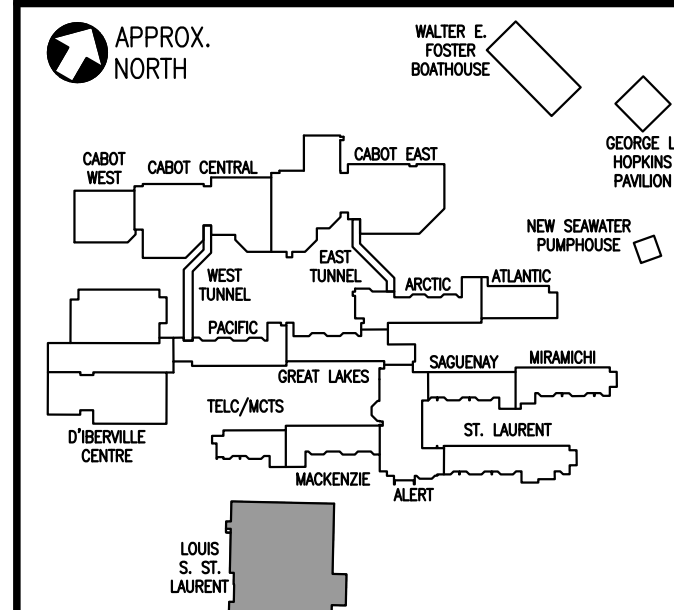


1.4 – PHOTO

DEMOLITION NOTES:

- NOTE: ON AVERAGE THE HEIGHTS OF THE OPENINGS BETWEEN THE U/S OF THE EXISTING CEILING TO THE U/S OF THE EXISTING STRUCTURE ARE: ±450mm
- 1 REMOVE AND DISPOSE OF EXISTING 2 LAYERS OF 12.7mm GYPSUM BOARD FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. THE SIDE OF THE WALL WHERE THE TAG IS SHOWN IS TO BE THE SIDE OF THE WALL THAT DEMOLITION TAKES PLACE ON.
 - 2 REMOVE AND DISPOSE OF EXISTING 2 LAYERS OF 12.7mm GYPSUM BOARD FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL CABINETS. THE SIDE OF THE WALL WHERE THE TAG IS SHOWN IS TO BE THE SIDE OF THE WALL THAT DEMOLITION TAKES PLACE ON.
 - 3 REMOVE PORTION OF FLOOR TO REMOVE AND DISPOSE OF MECHANICAL FIRE DAMPERS IN THE FLOOR.
 - 4 REMOVE AND DISPOSE OF EXISTING GYPSUM BOARD AND STUDS FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. REMOVE AND DISPOSE OF EXISTING ACCESS DOOR, FRAME AND HARDWARE IF APPLICABLE.
 - 5 REMOVE AND DISPOSE OF EXISTING FLOOR / WALL MOUNTED MECHANICAL CABINET.
 - 6 REMOVE PORTION OF EXISTING MASONRY BLOCK WALL ABOVE THE CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS.
 - 7 REMOVE PORTION OF EXISTING WALL NEAR THE CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. REMOVE AND DISPOSE OF EXISTING ACCESS DOOR, FRAME AND HARDWARE IF APPLICABLE.
 - 8 REMOVE PORTION OF EXISTING EXTERIOR WALL NEAR THE CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. CAREFULLY REMOVE THE EXISTING CEDAR SIDING TO ALLOW FOR THE WEAVING OF NEW CEDAR SIDING INTO THE EXISTING.
 - 9 DEMOLISH AND DISPOSE OF EXISTING DOOR FRAME AND HARDWARE.
 - 10 CREATE A NEW OPENING(S) IN THE EXISTING FLOOR FOR A NEW MECHANICAL SHAFT(S) C/W FLOOR MOUNTED FIRE DAMPERS AS REQUIRED –REFER TO MECHANICAL DRAWINGS FOR DUCT SIZE(S).
 - 11 REMOVE EXISTING MILLWORK AND STORE FOR REINSTALLATION.
 - 12 REMOVE AND DISPOSE OF EXISTING 1 LAYER OF 12.7mm GYPSUM BOARD FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. THE SIDE OF THE WALL WHERE THE TAG IS SHOWN IS TO BE THE SIDE OF THE WALL THAT DEMOLITION TAKES PLACE ON.
 - 13 REMOVE AND DISPOSE OF EXISTING GYPSUM BOARD AT EACH SIDE OF THE WALL, FROM THE U/S OF THE EXISTING CEILING TO THE U/S OF THE EXISTING STRUCTURE TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. –SITE VERIFY THICKNESS AND NUMBER OF LAYERS OF GYPSUM BOARD REQUIRED TO BE REMOVED.
 - 14 EXISTING WASHROOM FIXTURES, COUNTERS, MILLWORK AND CUPBOARDS TO REMAIN AND BE PROTECTED DURING DEMOLITION. EXISTING WASHROOM ACCESSORIES AND EXISTING MIRRORS TO BE CAREFULLY REMOVED AND RETAINED FOR REUSE.
 - 15 REMOVE AND DISPOSE OF EXISTING MECHANICAL LOUVERS AND / OR DUCTS IN THE EXISTING EXTERIOR WALL –REFER TO MECHANICAL DRAWINGS FOR LOUVER AND DUCT SIZES.
 - 16 CREATE NEW OPENING IN THE EXISTING EXTERIOR WALL FOR THE INSTALLATION OF NEW MECHANICAL LOUVERS AND / OR DUCTS. –REFER TO MECHANICAL DRAWINGS FOR LOUVER AND DUCT SIZES.
 - 17 ENLARGE EXISTING MECHANICAL OPENING IN THE EXISTING FLOOR FOR A NEW MECHANICAL SHAFT C/W FLOOR MOUNTED FIRE DAMPERS –REFER TO MECHANICAL DRAWINGS FOR DUCT SIZE AND REFER TO STRUCTURAL DRAWINGS FOR REINFORCING REQUIRED.
 - 18 ACCESS DOOR TO BE REMOVED, PROVIDE FLOOR INFILL –REFER TO STRUCTURAL DRAWINGS.
 - 19 REMOVE PORTION OF EXISTING WALL TO ALLOW FOR THE INSTALLATION OF A NEW DOOR AND FRAME –REFER TO DOOR SCHEDULE.
 - 20 REMOVE PORTION OF EXISTING WALL TO ALLOW FOR THE INSTALLATION OF NEW F.R.R. FIRE EXTINGUISHER CABINET –REFER TO MECHANICAL DRAWINGS FOR SIZE.
 - 21 EXISTING WALL MOUNTED RADIANT HEATERS TO BE DEMOLISHED AND DISPOSED OF –REFER TO MECHANICAL DRAWINGS FOR HEATERS. NOTE: EXISTING AND NEW HEATERS IN THE TUNNELS ARE MOUNTED AT THE U/S OF THE CEILING.
 - 22 DEMOLITION IS REQUIRED IN THE EXISTING FLOOR FOR THE INSTALLATION OF NEW FOOTINGS AND COLUMNS –REFER TO STRUCTURAL DRAWINGS.
 - 23 REMOVE EXISTING FLOOR FINISH AND PREPARE EXISTING SURFACE FOR NEW FLOOR FINISH.
 - 24 DEMOLITION AT TOP, BASE AND MID POINT BETWEEN FLOOR LEVELS OF THE EXISTING HSS COLUMNS TO EXPOSE THE COLUMN FOR CONCRETE FILLING AND THE INSTALLATION OF STEAM VENT HOLES TO ACHIEVE A 1HR. F.R.R. –REFER TO STRUCTURAL DRAWINGS.
 - 25 DEMOLITION IS REQUIRED AT THE EXISTING EXTERIOR WALL FOR CONNECTION TO THE EXISTING COLUMN. ENSURE THAT THE EXISTING BUILDING EXTERIOR ENVELOPE IS NOT PENETRATED DURING DEMOLITION.
 - 26 DEMOLISH AND DISPOSE OF EXISTING COLUMN SURROUND AND PREPARE EXISTING COLUMN TO RECEIVE SPRAY-APPLIED FIRE-RESISTIVE MATERIAL.
 - 27 REMOVE PORTION OF THE EXISTING INTERIOR WALL FOR THE INSTALLATION OF SPRAY-APPLIED FIRE-RESISTIVE MATERIAL TO THE EXISTING STRUCTURE.
 - 28 REMOVE AND DISPOSE OF EXISTING WOOD FLOOR AND STRUCTURE.
 - 29 REMOVE AND DISPOSE OF EXISTING CONCRETE PADS AND FOOTINGS, WALL SUPPORTS AND WOOD SLEEPERS TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS.
 - 30 REMOVE AND DISPOSE OF EXISTING CONCRETE BLOCK FROM FLOOR TO U/S OF STRUCTURE ABOVE TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS.
 - 31 DEMOLISH AND DISPOSE OF EXISTING MECHANICAL PIPES AND DUCTS IN THE EXISTING ROOF.

NOTE: ALL ITEMS IN THE LEGEND MAY NOT APPEAR ON THE DRAWING, ONLY THOSE ITEMS THAT APPLY WILL BE SHOWN ON THE FLOOR PLAN.



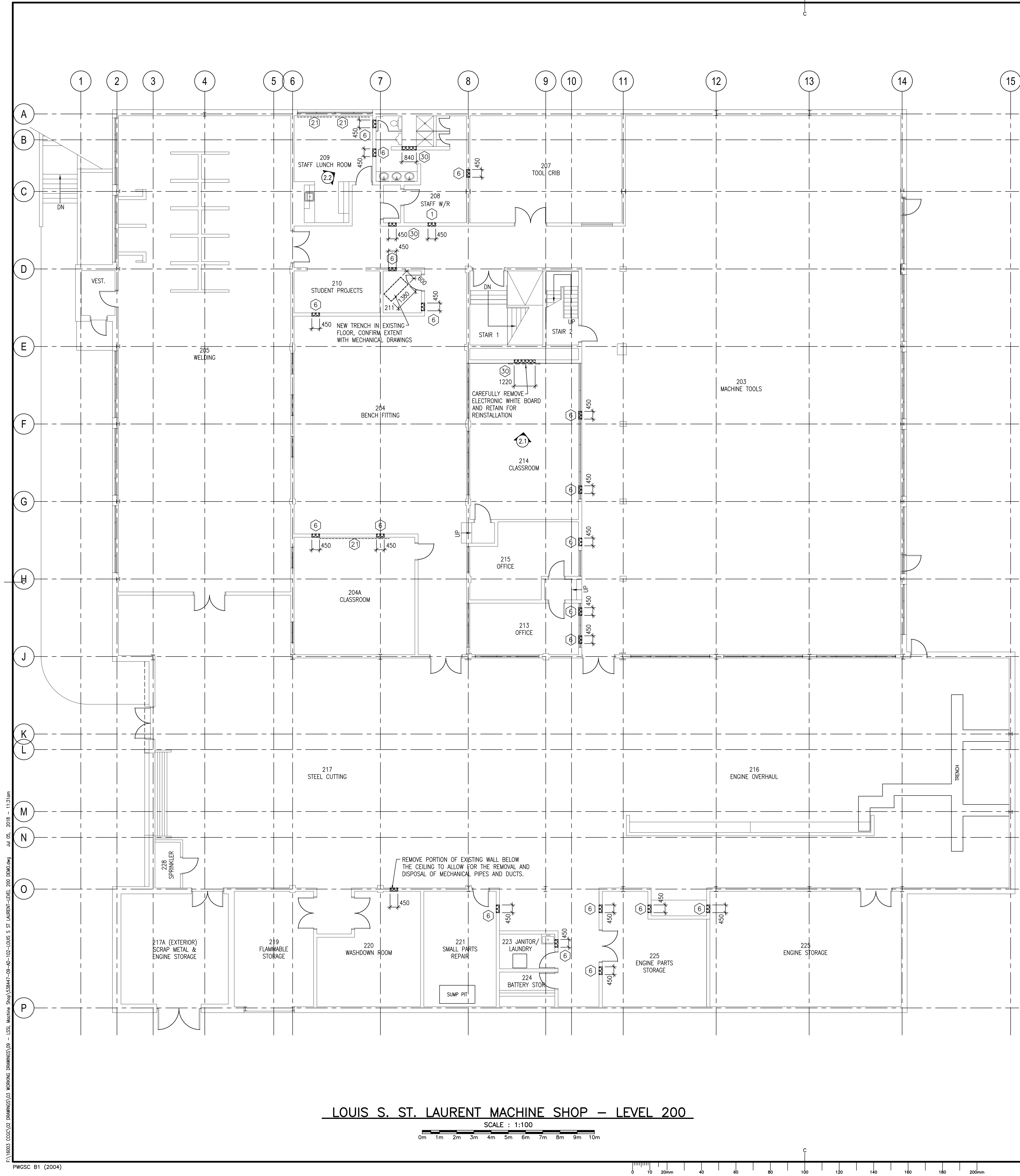
GENERAL NOTES :
DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES.
USE DIMENSIONS AS NOTED.
THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND GENERAL CONTRACTUAL CONDITIONS.
ALL DIMENSIONS AND CONDITIONS ARE TO BE VERIFIED ON SITE. ALL DISCREPANCIES ARE TO BE REPORTED TO THE DEPARTMENTAL REPRESENTATIVE AND AGREED UPON WITH THEM IN WRITING BEFORE PROCEEDING WITH WORK.
INFORMATION ON THESE DRAWINGS IS TO BE USED FOR THIS PROJECT ONLY AND SHALL NOT BE USED FOR ANY OTHER PURPOSE.

0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	
project		

drawing design
LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100

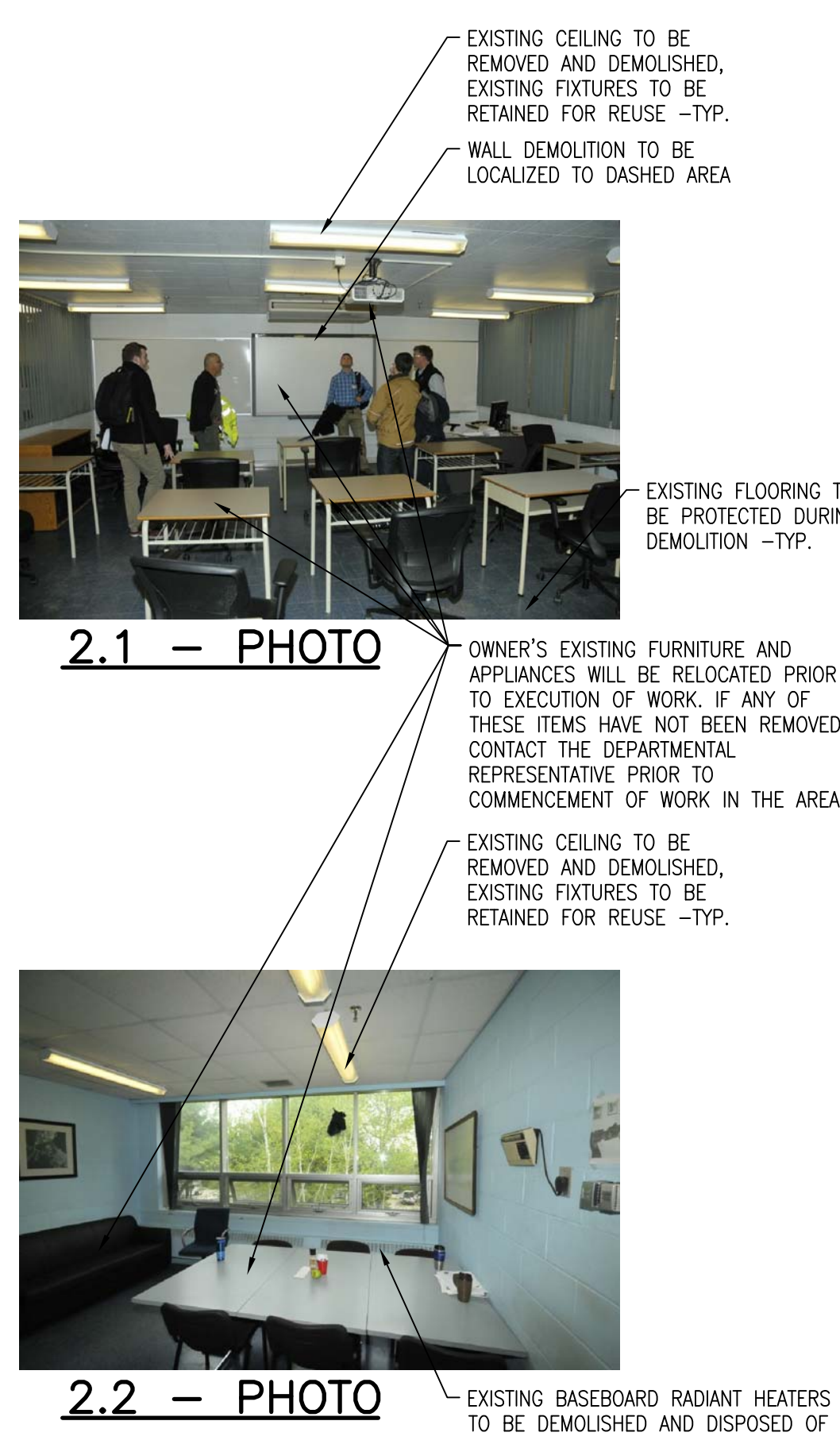
DEMO FLOOR PLAN

designed LLA	conçu
date 07/06/18	
drawn LLA	dessiné
date 07/06/18	
approved LLA	approuvé
date 07/06/18	
Tender	Soumission
Joan Muise	
PWGSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-AD-101	



PICTURE NOTES:

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2.1 – PHOTO

2.2 – PHOTO

- LEGEND:**
- EXISTING TO BE REMOVED
 - XXXXX EXISTING TO BE REMOVED
 - REMOVE AND DISPOSE OF EXISTING DOOR, FRAME AND HARDWARE, U.N.O.
 - EXISTING TO REMAIN
 - EXISTING WALL MOUNTED BASEBOARD RADIANT HEATERS TO BE DEMOLISHED AND DISPOSED OF

- GENERAL NOTES:**
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- B. CONSTRUCTION ASSEMBLIES DESCRIBED WERE TAKEN FROM THE AS-BUILT DRAWINGS. THE GENERAL CONTRACTOR IS TO VERIFY THE EXISTING CONSTRUCTION ASSEMBLY PRIOR TO DEMOLITION.
- C. LOCATIONS AND QUANTITIES OF AREAS TO BE DEMOLISHED ARE APPROXIMATE, GENERAL CONTRACTOR TO VERIFY THE LOCATIONS OF PIPES AND MECHANICAL DUCTS PRIOR TO DEMOLITION -REFER TO MECHANICAL DRAWINGS.
- D. MINIMIZE TO THE GREATEST EXTENT POSSIBLE, DAMAGE TO ADJACENT SURFACES DURING DEMOLITION. MAKE GOOD ANY SURFACES OR MATERIALS NOT INTENDED TO BE REMOVED WHICH ARE DAMAGED BY THIS WORK. DETERMINE SPECIFICATION AND QUALITY OF SUCH SURFACES OR MATERIALS BY INSPECTION.
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- J. PROVIDE ALL NECESSARY AND REQUIRED MEANS FOR BOTH THE REMOVAL AND DISPOSAL OF ALL RUBBISH, DEBRIS, DEMOLISHED FIXTURES AND FITTINGS AND ALL OTHER ITEMS NOT SCHEDULED TO REMAIN AT THE PLACE OF THE WORK, RESULTING FROM THE OPERATIONS OF THIS WORK. PROVIDE ALL NECESSARY AND REQUIRED GARBAGE BINS AND GARBAGE CHUTES.
- K. DEMOLISH, SALVAGE, RE-USE AND/OR DISPOSE OF PRODUCTS AS INDICATED IN THE DOCUMENTS.
- L. CAREFULLY REMOVE, STORE AND PROTECT IN AN APPROPRIATE MANNER EXISTING MATERIALS THAT REMAIN THE PROPERTY OF THE OWNER, THAT ARE TO BE REUSED IN THE WORK, OR STORED FOR FUTURE USE.
- M. TAG AND STORE IN SETS, ITEMS THAT ARE SCHEDULED FOR RE-USE INCLUDING BUT NOT LIMITED TO LIGHT FIXTURES, DOORS AND FRAMES. RE-INSTALL PRODUCTS IN THEIR ORIGINAL SETS WHERE POSSIBLE.
- N. ALL CUTTING/PATCHING WORK SHALL BE DONE IN A MANNER TO RECEIVE NEW WORK AND FINISHES.
- O. LEVEL AND PATCH DAMAGE TO SUBFLOOR CAUSED BY REMOVAL OF FLOOR FINISHES.
- P. MAKE GOOD ALL REQUIRED FIREPROOFING OR FIRE RESISTANCE RATED ASSEMBLIES DAMAGED OR REMOVED IN THE PERFORMANCE OF THE WORK. FIRE RESISTANCE RATING SHALL MATCH EXISTING, UNLESS NOTED OTHERWISE. ALL PENETRATIONS THROUGH WALL AND FLOOR SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.
- Q. PROVIDE CUTTING AND PATCHING OF CEILINGS, FLOORS AND WALLS TO ACCOMMODATE THE REMOVAL OF ELECTRICAL SERVICE, CONTROL SERVICES AND PNEUMATIC PIPING.

DEMOLITION NOTES:

- NOTE: ON AVERAGE THE HEIGHTS OF THE OPENINGS BETWEEN THE U/S OF THE EXISTING CEILING TO THE U/S OF THE EXISTING STRUCTURE ARE: ±450mm
- REMOVE AND DISPOSE OF EXISTING 2 LAYERS OF 12.7mm GYPSUM BOARD FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. THE SIDE OF THE WALL WHERE THE TAG IS SHOWN IS TO BE THE SIDE OF THE WALL THAT DEMOLITION TAKES PLACE ON.
 - REMOVE AND DISPOSE OF EXISTING 2 LAYERS OF 12.7mm GYPSUM BOARD FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL CABINETS. THE SIDE OF THE WALL WHERE THE TAG IS SHOWN IS TO BE THE SIDE OF THE WALL THAT DEMOLITION TAKES PLACE ON.
 - REMOVE PORTION OF FLOOR TO REMOVE AND DISPOSE OF MECHANICAL FIRE DAMPERS IN THE FLOOR.
 - REMOVE AND DISPOSE OF EXISTING GYPSUM BOARD AND STUDS FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. REMOVE AND DISPOSE OF EXISTING ACCESS DOOR, FRAME AND HARDWARE IF APPLICABLE.
 - REMOVE AND DISPOSE OF EXISTING FLOOR / WALL MOUNTED MECHANICAL CABINET.
 - REMOVE PORTION OF EXISTING MASONRY BLOCK WALL ABOVE THE CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS.
 - REMOVE PORTION OF EXISTING WALL NEAR THE CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. CAREFULLY REMOVE THE EXISTING CEDAR SIDING TO ALLOW FOR THE WEAVING OF NEW CEDAR SIDING INTO THE EXISTING.
 - DEMOLISH AND DISPOSE OF EXISTING DOOR FRAME AND HARDWARE.
 - CREATE A NEW OPENING(S) IN THE EXISTING FLOOR FOR A NEW MECHANICAL SHUT(S) C/W FLOOR MOUNTED FIRE DAMPERS AS REQUIRED -REFER TO MECHANICAL DRAWINGS FOR DUCT SIZE(S).
 - REMOVE EXISTING MILLWORK AND STORE FOR REINSTALLATION.
 - REMOVE AND DISPOSE OF EXISTING 1 LAYER OF 12.7mm GYPSUM BOARD FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. THE SIDE OF THE WALL WHERE THE TAG IS SHOWN IS TO BE THE SIDE OF THE WALL THAT DEMOLITION TAKES PLACE ON.
 - REMOVE AND DISPOSE OF EXISTING GYPSUM BOARD AT EACH SIDE OF THE WALL, FROM THE U/S OF THE EXISTING CEILING TO THE U/S OF THE EXISTING STRUCTURE TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. SITE VERIFY THICKNESS AND NUMBER OF LAYERS OF GYPSUM BOARD REQUIRED TO BE REMOVED.
 - EXISTING WASHROOM FIXTURES, COUNTERS, MILLWORK AND CUPBOARDS TO REMAIN AND BE PROTECTED DURING DEMOLITION. EXISTING WASHROOM ACCESSORIES AND EXISTING MIRRORS TO BE CAREFULLY REMOVED AND RETAINED FOR REUSE.
 - REMOVE AND DISPOSE OF EXISTING MECHANICAL LOUVERS AND / OR DUCTS IN THE EXISTING EXTERIOR WALL -REFER TO MECHANICAL DRAWINGS FOR LOUVER AND DUCT SIZES.
 - CREATE NEW OPENING IN THE EXISTING EXTERIOR WALL FOR THE INSTALLATION OF NEW MECHANICAL LOUVERS AND / OR DUCTS. -REFER TO MECHANICAL DRAWINGS FOR LOUVER AND DUCT SIZES.
 - ENLARGE EXISTING MECHANICAL OPENING IN THE EXISTING FLOOR FOR A NEW MECHANICAL SHUT C/W FLOOR MOUNTED FIRE DAMPERS -REFER TO MECHANICAL DRAWINGS FOR DUCT SIZE AND REFER TO STRUCTURAL DRAWINGS FOR REINFORCING REQUIRED.
 - ACCESS DOOR TO BE REMOVED, PROVIDE FLOOR INFILL -REFER TO STRUCTURAL DRAWINGS.
 - REMOVE PORTION OF EXISTING WALL TO ALLOW FOR THE INSTALLATION OF A NEW DOOR AND FRAME -REFER TO DOOR SCHEDULE.
 - REMOVE PORTION OF EXISTING WALL TO ALLOW FOR THE INSTALLATION OF NEW F.R.R. FIRE EXTINGUISHER CABINET -REFER TO MECHANICAL DRAWINGS FOR SIZE.
 - EXISTING WALL MOUNTED RADIANT HEATERS TO BE DEMOLISHED AND DISPOSED OF -REFER TO MECHANICAL DRAWINGS FOR HEATERS. NOTE: EXISTING AND NEW HEATERS IN THE TUNNELS ARE MOUNTED AT THE U/S OF THE CEILING.
 - DEMOLITION IS REQUIRED IN THE EXISTING FLOOR FOR THE INSTALLATION OF NEW FOOTINGS AND COLUMNS -REFER TO STRUCTURAL DRAWINGS.
 - REMOVE EXISTING FLOOR FINISH AND PREPARE EXISTING SURFACE FOR NEW FLOOR FINISH.
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 - DEMOLISH AND DISPOSE OF EXISTING COLUMN SURROUND AND PREPARE EXISTING COLUMN TO RECEIVE SPRAY-APPLIED FIRE-RESISTIVE MATERIAL.
 - REMOVE PORTION OF THE EXISTING INTERIOR WALL FOR THE INSTALLATION OF SPRAY-APPLIED FIRE-RESISTIVE MATERIAL TO THE EXISTING STRUCTURE.
 - REMOVE AND DISPOSE OF EXISTING WOOD FLOOR AND STRUCTURE.
 - REMOVE AND DISPOSE OF EXISTING CONCRETE PADS AND FOOTINGS, WALL SUPPORTS AND WOOD SLEEPERS TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS.
 - REMOVE AND DISPOSE OF EXISTING CONCRETE BLOCK FROM FLOOR TO U/S OF STRUCTURE ABOVE TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS.
 - DEMOLISH AND DISPOSE OF EXISTING MECHANICAL PIPES AND DUCTS IN THE EXISTING ROOF.
- NOTE: ALL ITEMS IN THE LEGEND MAY NOT APPEAR ON THE DRAWING, ONLY THOSE ITEMS THAT APPLY WILL BE SHOWN ON THE FLOOR PLAN.

Public Works and Government Services Canada / Travaux Publics et Services gouvernementaux Canada

APPROX. NORTH

WALTER E. BOARDHOUSE, GEORGE L. KOPPING PARKWAY, NEW SWANSEA TOWNSHIP, SACKENAY, ST. LAURENT, TEL. CENTS, WOODSIDE, ALERT, ST. LAURENT, L'ARDEUR CENTRE, O'BRIEN CENTRE, WEST TUNNEL, EAST TUNNEL, CANOE WEST, CANOE CENTRAL, CANOE EAST

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Halifax, Nova Scotia B3J 2A2
Tel: (902) 422-1446
Fax: (902) 422-1449

GENERAL NOTES :

DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES. USE DIMENSIONS AS NOTED.

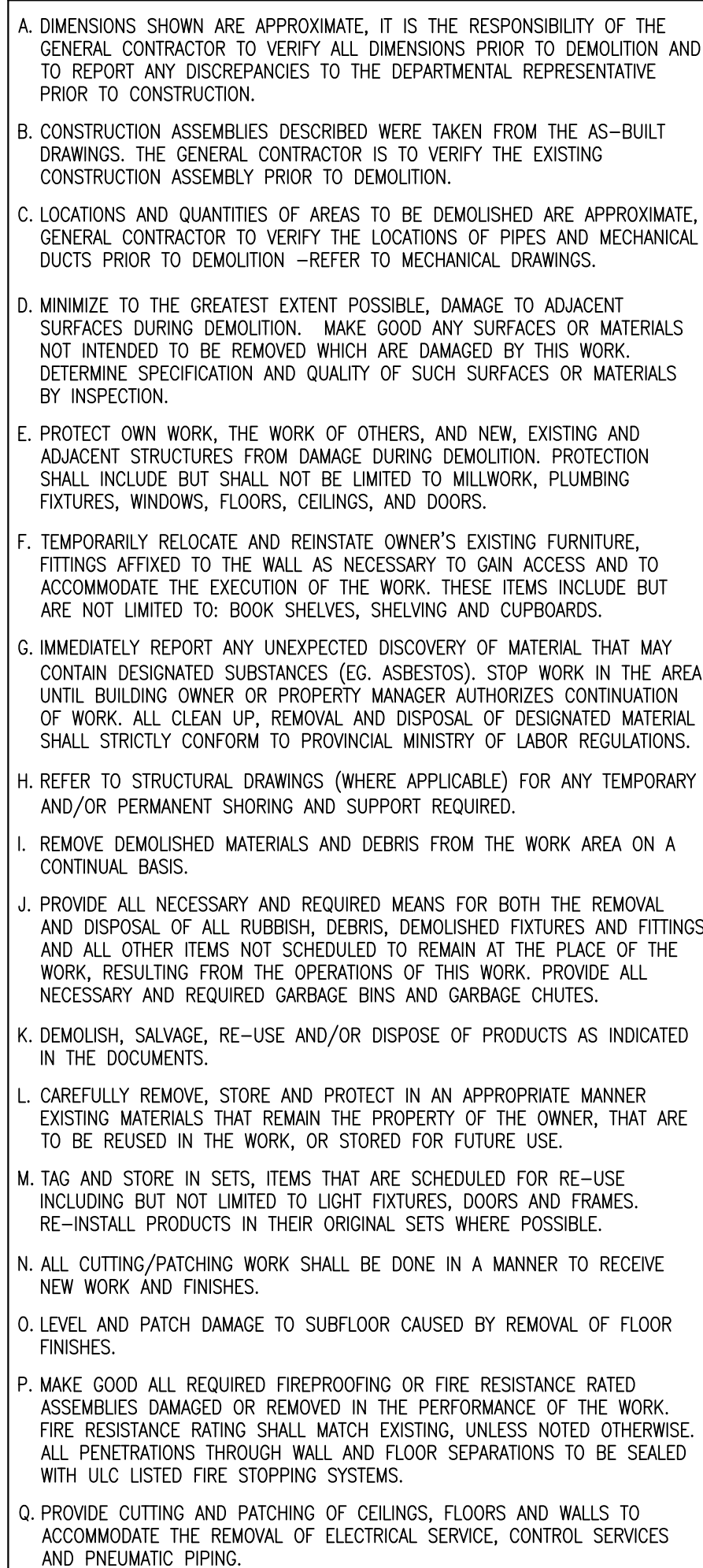
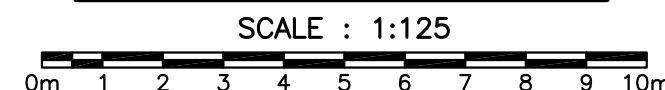
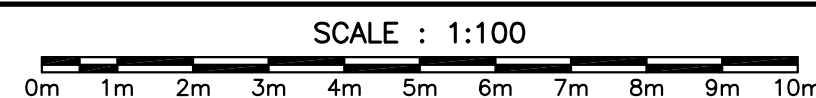
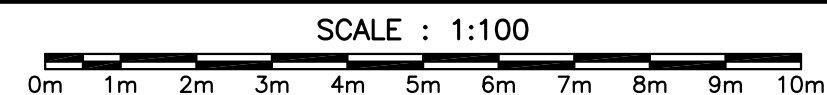
THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND GENERAL CONTRACTUAL CONDITIONS.

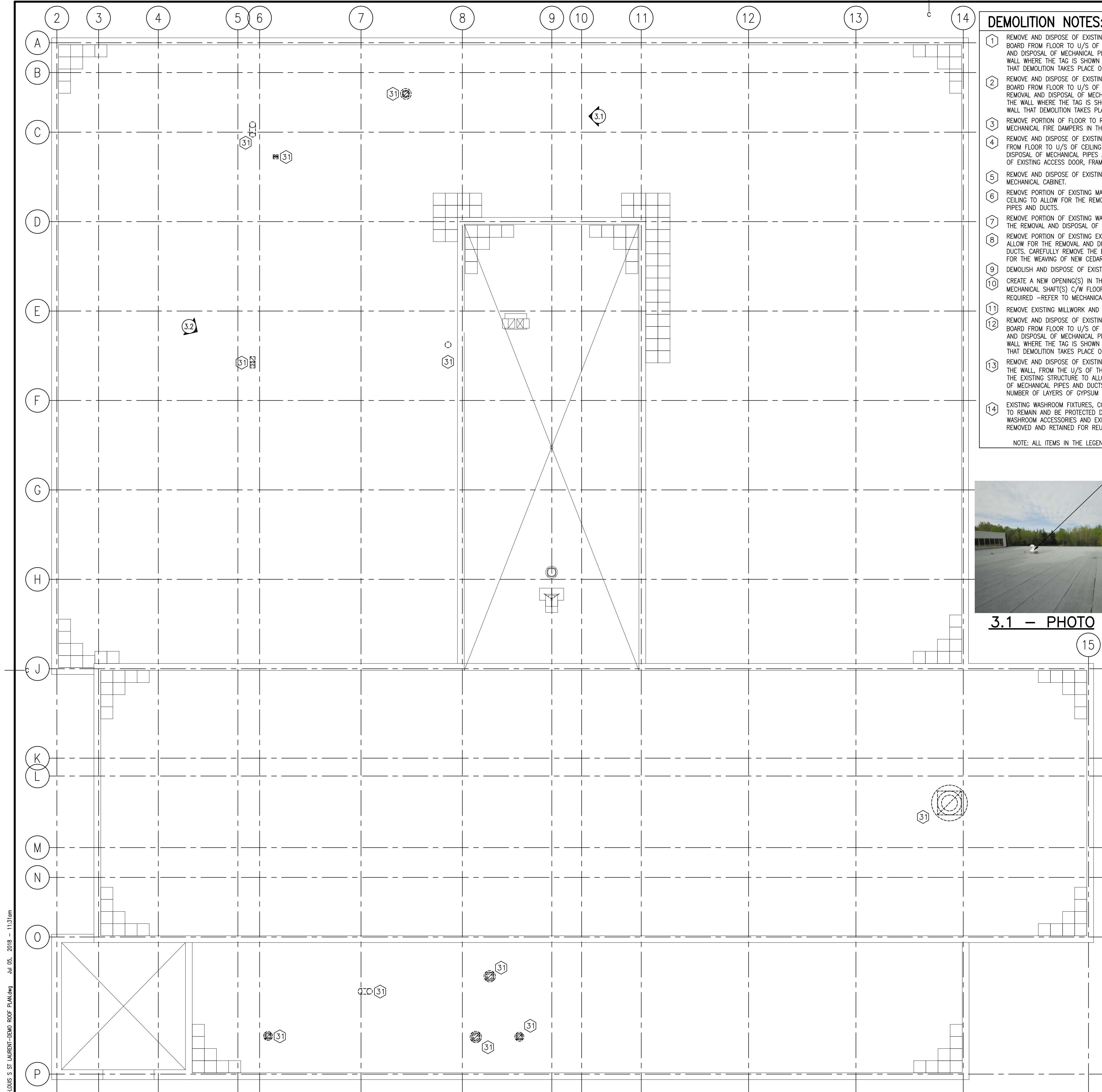
ALL DIMENSIONS AND CONDITIONS ARE TO BE VERIFIED ON SITE. ALL DISCREPANCIES ARE TO BE REPORTED TO THE DEPARTMENTAL REPRESENTATIVE AND AGREED UPON WITH THEM IN WRITING BEFORE PROCEEDING WITH WORK.

INFORMATION ON THESE DRAWINGS IS TO BE USED FOR THIS PROJECT ONLY AND SHALL NOT BE USED FOR ANY OTHER PURPOSE.

0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	project
drawing		design
LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200		
DEMO FLOOR PLAN		
designed LLA		conçu
date 07/06/18		
drawn LLA		dessiné
date 07/06/18		
approved LLA		approuvé
date 07/06/18		
Tender		Soumission
Joan Muise		
PWOSC Project Manager		Administrateur de projets TPSGC
project number		no. du projet
R.065476.710		
drawing no.		no. du dessin
09-AD-102		

E-DRM/CDD-E: 538447





LOUIS S. ST. LAURENT MACHINE SHOP
ROOF PLAN

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

DEMOLITION NOTES:

- 1 REMOVE AND DISPOSE OF EXISTING 2 LAYERS OF 12.7mm GYPSUM BOARD FROM FLOOR TO U/S OF CEILING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PIPES AND DUCTS. THE SIDE OF THE WALL WHERE THE TAG IS SHOWN IS TO BE THE SIDE OF THE WALL THAT DEMOLITION TAKES PLACE ON.
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- 11 REMOVE EXISTING MILLWORK AND STORE FOR REINSTALLATION.
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NOTE: ALL ITEMS IN THE LEGEND MAY NOT APPEAR ON THE DRAWING, ONLY THOSE ITEMS THAT APPLY WILL BE SHOWN ON THE FLOOR PLAN.



3.1 - PHOTO

EXISTING ROOF TO REMAIN -TYP.



3.2 - PHOTO

WALL DEMOLITION TO BE LOCALIZED TO DASHED AREA

PICTURE NOTES:

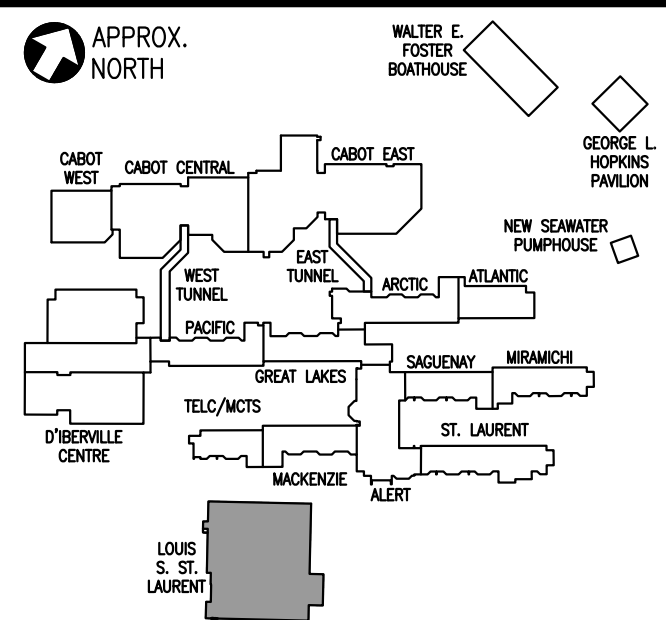
GENERAL NOTE:
PICTURES ILLUSTRATE TYPICAL CONDITIONS AND MAY NOT CONTAIN ALL INFORMATION TO DESCRIBE THE FULL SCOPE OF WORK. THE PICTURES ARE OF THE INTERIOR OF THE ROOM U.N.O. REPORT INCONSISTENCIES AND OMISSIONS TO THE DEPARTMENTAL REPRESENTATIVE FOR CLARIFICATION BEFORE COMMENCING WITH THE WORK.

LEGEND:

- EXISTING TO BE REMOVED
- XXXXXX EXISTING TO BE REMOVED
- EXISTING TO REMAIN
- EXISTING WALL MOUNTED BASEBOARD RADIANT HEATERS TO BE DEMOLISHED AND DISPOSED OF

GENERAL NOTES:

- A. DIMENSIONS SHOWN ARE APPROXIMATE, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO DEMOLITION AND TO REPORT ANY DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE PRIOR TO CONSTRUCTION.
- B. CONSTRUCTION ASSEMBLIES DESCRIBED WERE TAKEN FROM THE AS-BUILT DRAWINGS. THE GENERAL CONTRACTOR IS TO VERIFY THE EXISTING CONSTRUCTION ASSEMBLY PRIOR TO DEMOLITION.
- C. LOCATIONS AND QUANTITIES OF AREAS TO BE DEMOLISHED ARE APPROXIMATE, GENERAL CONTRACTOR TO VERIFY THE LOCATIONS OF PIPES AND MECHANICAL DUCTS PRIOR TO DEMOLITION -REFER TO MECHANICAL DRAWINGS.
- D. MINIMIZE TO THE GREATEST EXTENT POSSIBLE, DAMAGE TO ADJACENT SURFACES DURING DEMOLITION. MAKE GOOD ANY SURFACES OR MATERIALS NOT INTENDED TO BE REMOVED WHICH ARE DAMAGED BY THIS WORK. DETERMINE SPECIFICATION AND QUALITY OF SUCH SURFACES OR MATERIALS BY INSPECTION.
- E. PROTECT OWN WORK, THE WORK OF OTHERS, AND NEW, EXISTING AND ADJACENT STRUCTURES FROM DAMAGE DURING DEMOLITION. PROTECTION SHALL INCLUDE BUT SHALL NOT BE LIMITED TO MILLWORK, PLUMBING FIXTURES, WINDOWS, FLOORS, CEILINGS, AND DOORS.
- F. TEMPORARILY RELOCATE AND REINSTATE OWNER'S EXISTING FURNITURE, FITTINGS AFFIXED TO THE WALL AS NECESSARY TO GAIN ACCESS AND TO ACCOMMODATE THE EXECUTION OF THE WORK. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO: BOOK SHELVES, SHELVS AND CUPBOARDS.
- G. IMMEDIATELY REPORT ANY UNEXPECTED DISCOVERY OF MATERIAL THAT MAY CONTAIN DESIGNATED SUBSTANCES (EG. ASBESTOS). STOP WORK IN THE AREA UNTIL BUILDING OWNER OR PROPERTY MANAGER AUTHORIZES CONTINUATION OF WORK. ALL CLEAN UP, REMOVAL AND DISPOSAL OF DESIGNATED MATERIAL SHALL STRICTLY CONFORM TO PROVINCIAL MINISTRY OF LABOR REGULATIONS.
- H. REFER TO STRUCTURAL DRAWINGS (WHERE APPLICABLE) FOR ANY TEMPORARY AND/OR PERMANENT SHORING AND SUPPORT REQUIRED.
- I. REMOVE DEMOLISHED MATERIALS AND DEBRIS FROM THE WORK AREA ON A CONTINUAL BASIS.
- J. PROVIDE ALL NECESSARY AND REQUIRED MEANS FOR BOTH THE REMOVAL AND DISPOSAL OF ALL RUBBISH, DEBRIS, DEMOLISHED FIXTURES AND FITTINGS AND ALL OTHER ITEMS NOT SCHEDULED TO REMAIN AT THE PLACE OF THE WORK, RESULTING FROM THE OPERATIONS OF THIS WORK. PROVIDE ALL NECESSARY AND REQUIRED GARBAGE BINS AND GARBAGE CHUTES.
- K. DEMOLISH, SALVAGE, RE-USE AND/OR DISPOSE OF PRODUCTS AS INDICATED IN THE DOCUMENTS.
- L. CAREFULLY REMOVE, STORE AND PROTECT IN AN APPROPRIATE MANNER EXISTING MATERIALS THAT REMAIN THE PROPERTY OF THE OWNER, THAT ARE TO BE REUSED IN THE WORK, OR STORED FOR FUTURE USE.
- M. TAG AND STORE IN SETS, ITEMS THAT ARE SCHEDULED FOR RE-USE INCLUDING BUT NOT LIMITED TO LIGHT FIXTURES, DOORS AND FRAMES. RE-INSTALL PRODUCTS IN THEIR ORIGINAL SETS WHERE POSSIBLE.
- N. ALL CUTTING/PATCHING WORK SHALL BE DONE IN A MANNER TO RECEIVE NEW WORK AND FINISHES.
- O. LEVEL AND PATCH DAMAGE TO SUBFLOOR CAUSED BY REMOVAL OF FLOOR FINISHES.
- P. MAKE GOOD ALL REQUIRED FIREPROOFING OR FIRE RESISTANCE RATED ASSEMBLIES DAMAGED OR REMOVED IN THE PERFORMANCE OF THE WORK. FIRE RESISTANCE RATING SHALL MATCH EXISTING, UNLESS NOTED OTHERWISE. ALL PENETRATIONS THROUGH WALL AND FLOOR SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.
- Q. PROVIDE CUTTING AND PATCHING OF CEILINGS, FLOORS AND WALLS TO ACCOMMODATE THE REMOVAL OF ELECTRICAL SERVICE, CONTROL SERVICES AND PNEUMATIC PIPING.



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USE DIMENSIONS AS NOTED.
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ALL DIMENSIONS AND CONDITIONS ARE TO BE VERIFIED ON SITE. ALL DISCREPANCIES ARE TO BE REPORTED TO THE DEPARTMENTAL REPRESENTATIVE AND AGREED UPON WITH THEM IN WRITING BEFORE PROCEEDING WITH WORK.
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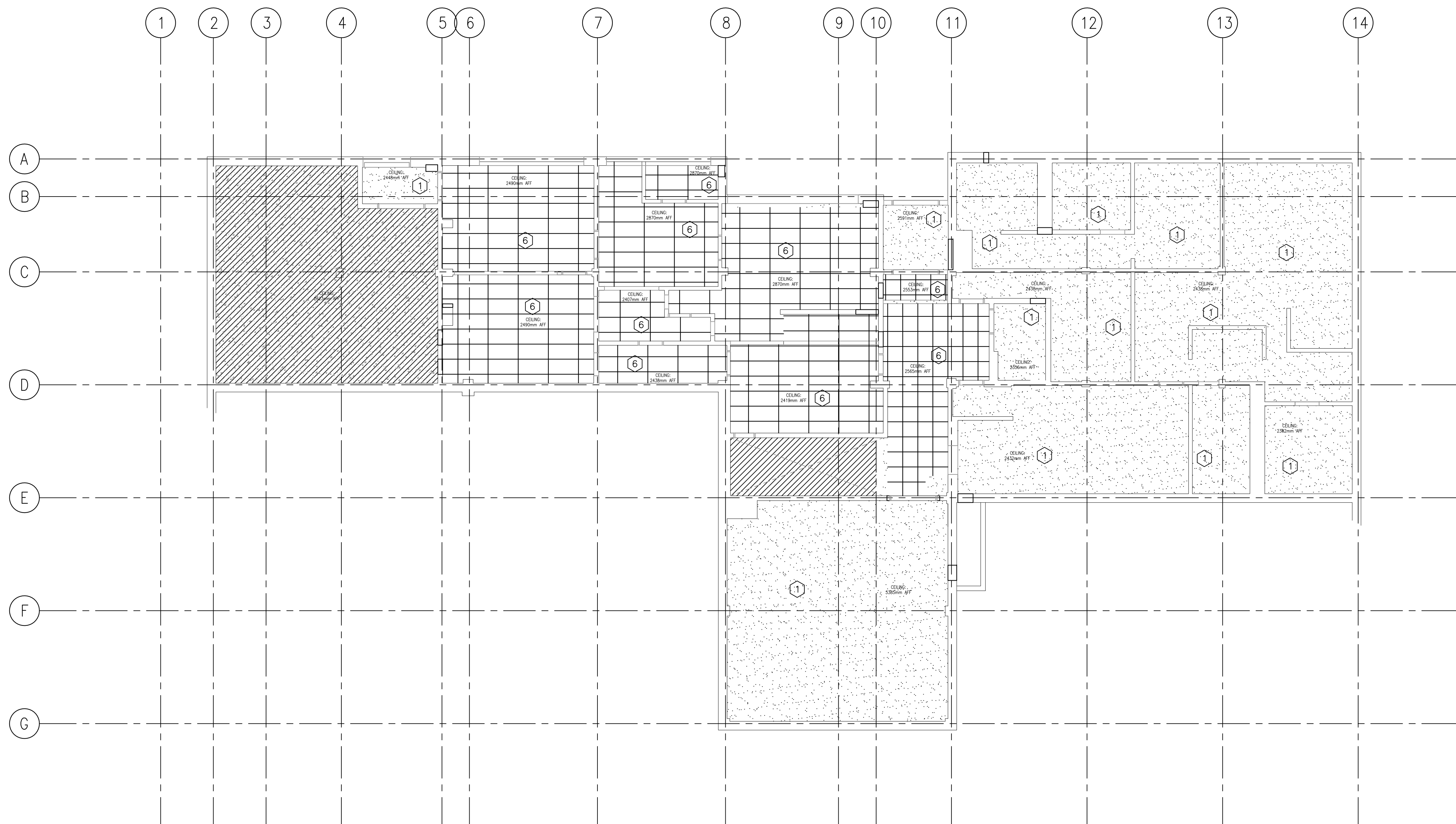
0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	
project		

drawing design
LOUIS S. ST. LAURENT MACHINE SHOP

DEMO ROOF PLAN

designed LLA	conçu
date 07/06/18	
drawn LLA	dessiné
date 07/06/18	
approved LLA	approuvé
date 07/06/18	
Tender	Submission
Joan Muise	
PWGSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-AD-104	

E:\10002_02020101 DRAWINGS\03 WORKING DRAWINGS\05 - LSS - Machine Shop\100-AD-105-LOUIS S. ST. LAURENT RCP-LEVEL 100 DEMO.dwg Jul 05, 2018 - 1:59pm



LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

LEGEND:

- EXISTING CEILINGS TO REMAIN
- EXISTING STRUCTURE TO REMAIN
- EXISTING SUSPENDED T-BAR CEILING
- EXISTING SUSPENDED WOOD CEILING
- EXISTING GYPSUM BOARD CEILING AND/OR BULKHEAD

GENERAL NOTES:

- CONSTRUCTION ASSEMBLIES DESCRIBED WERE TAKEN FROM THE AS-BUILT DRAWINGS. THE GENERAL CONTRACTOR IS TO VERIFY THE EXISTING CONSTRUCTION ASSEMBLY PRIOR TO DEMOLITION.
- REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REMOVALS.
- VERIFY EXISTING CEILING HEIGHTS PRIOR TO REMOVAL AND REPORT ANY DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE PRIOR TO DEMOLITION.

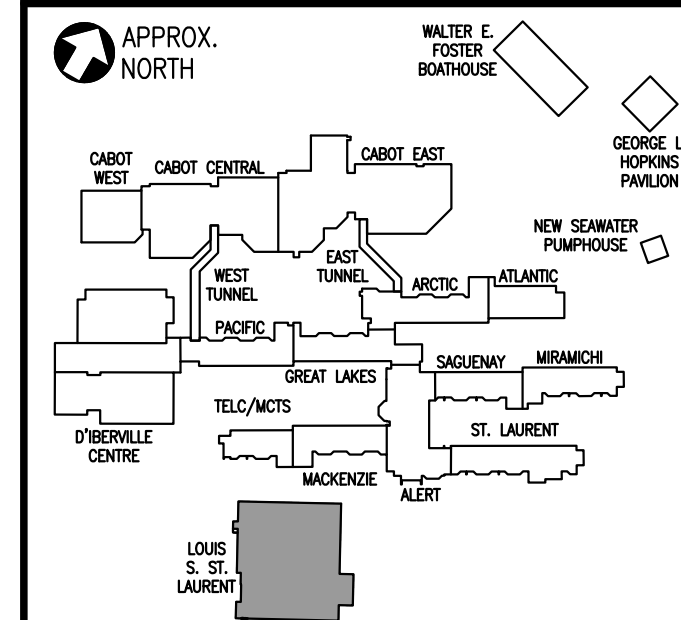
DEMOLITION NOTES:

- REMOVE AND DISPOSE OF EXISTING 2 LAYERS OF 12.7mm GYPSUM BOARD AND FURRING FROM THE U/S OF THE EXISTING STRUCTURE C/W CEILINGS IN CLOSETS. TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED 2 LAYERS OF 12.7mm GYPSUM BOARD AND FURRING. TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS. GYPSUM BOARD ON THE U/S OF THE EXISTING STRUCTURE IS TO REMAIN.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED WOOD BOARDS, BOARD INSULATION AND SUPPORTING FRAMING. TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS. GYPSUM BOARD ON THE U/S OF THE EXISTING STRUCTURE IS TO REMAIN.
- REMOVE AND DISPOSE OF GYPSUM BOARD BULKHEADS AND SUPPORTING FRAMING. ALL TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED 1 LAYER OF 12.7mm GYPSUM BOARD AND FURRING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED T-BAR CEILING C/W SUSPENSION SYSTEM TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED GYPSUM BOARD CEILING C/W SUSPENSION SYSTEM AND ACOUSTICAL CEILING TILES TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED METAL CEILING C/W SUSPENSION SYSTEM TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.

FIXTURE LEGEND:

NOTE: READ IN CONJUNCTION WITH ENGINEERS DRAWINGS.

- FLUORESCENT LIGHTING FIXTURE
- FLUORESCENT LIGHTING FIXTURE
- DOWNLIGHT
- TRACK LIGHTING
- FLUORESCENT LIGHTING FIXTURE, WALL MOUNTED
- JUNCTION BOX
- ACCESS HATCH
- WIRELESS ACCESS POINT
- CCTV SURVEILLANCE CAMERA
- FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR
- FIRE ALARM SPRINKLER SUPERVISORY SWITCH
- FIRE ALARM SPRINKLER ZONE ALARM
- FIRE ALARM ADDRESSABLE INTERFACE MODULE
- EXIT SIGNS
- EXIT SIGN, WALL MOUNTED
- EMERGENCY LIGHTING, WALL MOUNTED
- EMERGENCY LIGHTING
- EMERGENCY LIGHTING, WALL MOUNTED
- EMERGENCY LIGHTING, RECESSED IN T-BAR CEILING
- SUPPLY AIR DIFFUSER
- SUPPLY AIR DIFFUSER
- RETURN AIR GRILLE
- RETURN AIR GRILLE
- SPRINKLER HEAD



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0	Issued for Tender	07/06/18
revisions		date
project		project

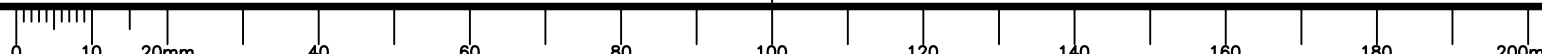
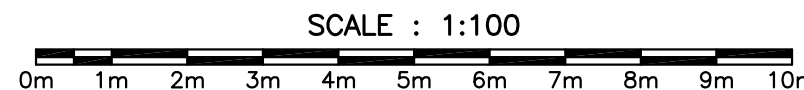
**CANADIAN COAST
GUARD COLLEGE,
SYDNEY, NS
MECHANICAL &
SPRINKLER UPGRADES**

drawing design

**LOUIS S ST LAURENT
MACHINE SHOP
LEVEL 100
DEMO
REFLECTED CEILING PLAN**

designed LLA	conçu
date 07/06/18	
drawn LLA	dessiné
date 07/06/18	
approved LLA	approuvé
date 07/06/18	
Tender	Soumission
Joan Muise	
PWOSC Project Manager	Administrateur de projets TPSOC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-AD-105	

LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 200



LEGEND:

- EXISTING CEILINGS TO REMAIN
- EXISTING STRUCTURE TO REMAIN
- EXISTING SUSPENDED T-BAR CEILING
- EXISTING SUSPENDED WOOD CEILING
- EXISTING GYPSUM BOARD CEILING AND/OR BULKHEAD

GENERAL NOTES:

- CONSTRUCTION ASSEMBLIES DESCRIBED WERE TAKEN FROM THE AS-BUILT DRAWINGS. THE GENERAL CONTRACTOR IS TO VERIFY THE EXISTING CONSTRUCTION ASSEMBLY PRIOR TO DEMOLITION.
- REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REMOVALS.
- VERIFY EXISTING CEILING HEIGHTS PRIOR TO REMOVAL AND REPORT ANY DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE PRIOR TO DEMOLITION.

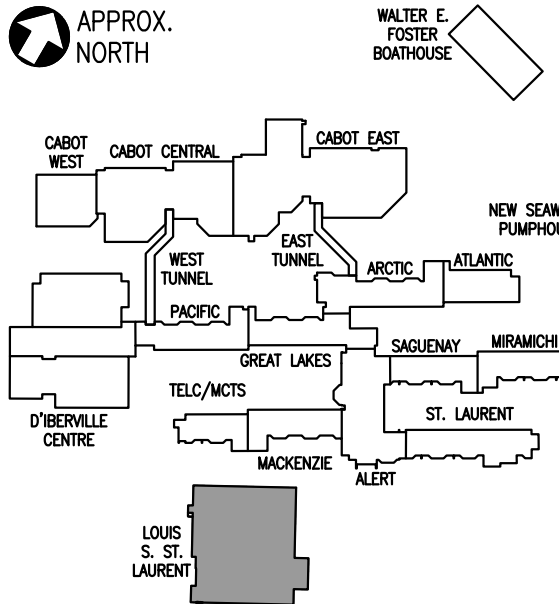
DEMOLITION NOTES:

- REMOVE AND DISPOSE OF EXISTING 2 LAYERS OF 12.7mm GYPSUM BOARD AND FURRING FROM THE U/S OF THE EXISTING STRUCTURE C/W CEILING INSULATION. TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED 2 LAYERS OF 12.7mm GYPSUM BOARD AND FURRING. TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS. GYPSUM BOARD ON THE U/S OF THE EXISTING STRUCTURE IS TO REMAIN.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED WOOD BOARDS, BOARD INSULATION AND SUPPORTING FRAMING. TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS. GYPSUM BOARD ON THE U/S OF THE EXISTING STRUCTURE IS TO REMAIN.
- REMOVE AND DISPOSE OF GYPSUM BOARD BULKHEADS AND SUPPORTING FRAMING. ALL TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED 1 LAYER OF 12.7mm GYPSUM BOARD AND FURRING TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED T-BAR CEILING C/W SUSPENSION SYSTEM TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED GYPSUM BOARD CEILING C/W SUSPENSION SYSTEM AND ACOUSTICAL CEILING TILES TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
- REMOVE AND DISPOSE OF EXISTING SUSPENDED METAL CEILING C/W SUSPENSION SYSTEM TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.

FIXTURE LEGEND:

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- DOWNLIGHT
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- EMERGENCY LIGHTING
- EMERGENCY LIGHTING, WALL MOUNTED
- EMERGENCY LIGHTING, RECESSED IN T-BAR CEILING
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- SUPPLY AIR DIFFUSER
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- RETURN AIR GRILLE
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0	Issued for Tender	07/06/18
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project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	project

drawing design
LOUIS S ST LAURENT MACHINE SHOP LEVEL 200 DEMO REFLECTED CEILING PLAN

designed LLA	conçu
date 07/06/18	
drawn LLA	dessiné
date 07/06/18	
approved LLA	approuvé
date 07/06/18	
Tender	Soumission
Joan Muise	
PWGC Project Manager	Administrateur de projets TPSC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-AD-106	

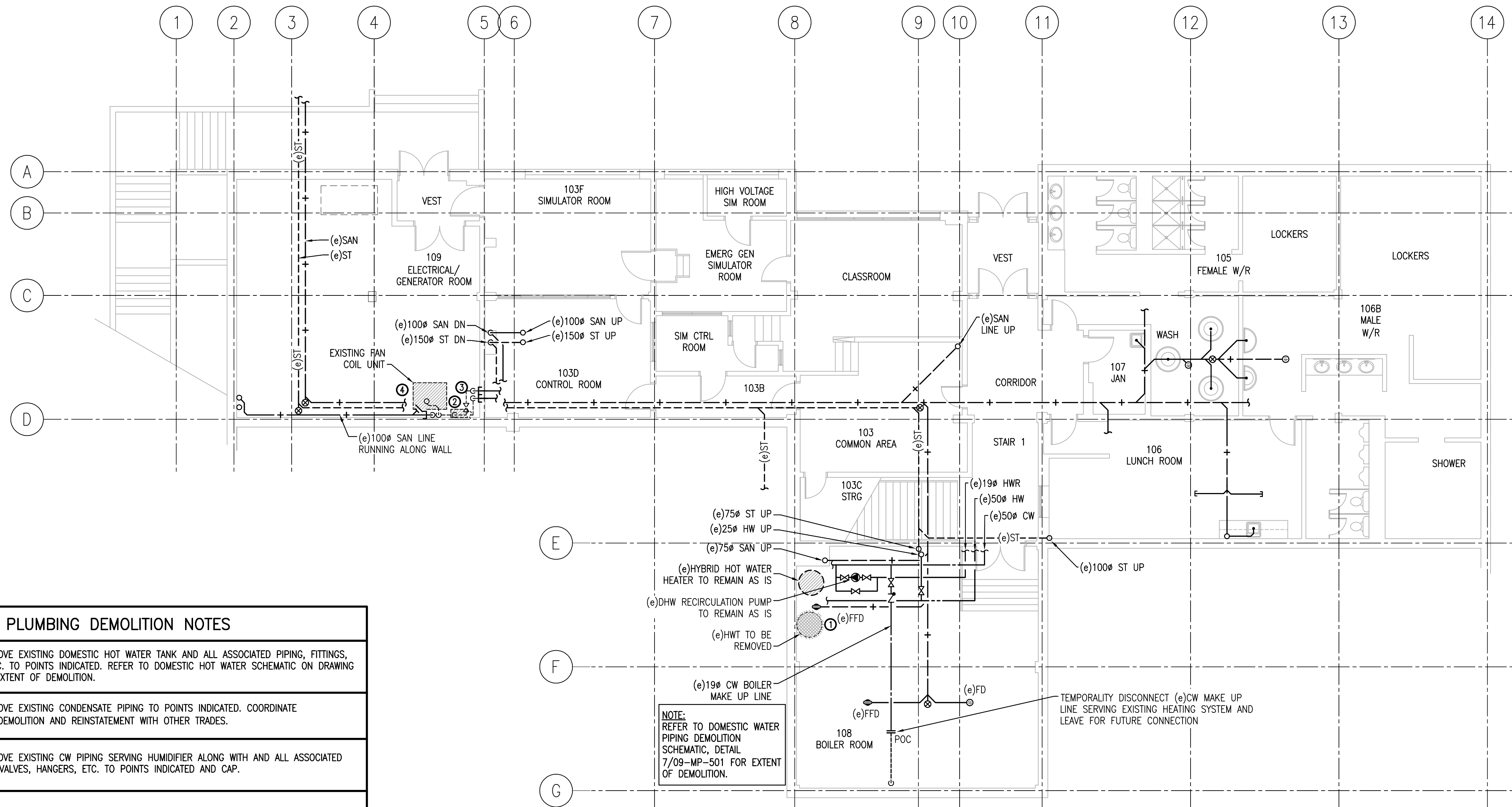
P:\10-15-17\1712 - LSS: Machine Shop\38442-09-MDP-101-PLUMBING-MACHINE SHOP-LEVEL 100 DEMO.dwg Jd 06, 2018 - 11:50am
PWSC B1 (2004)

PLUMBING GENERAL NOTES

1. MINIMUM SIZE OF UNDERGROUND PIPING SHALL BE 50mm.
2. UNDERGROUND DRAINAGE PIPING TO BE PVC EXCEPT AS NOTED OTHERWISE.
3. ALL SANITARY PIPING 50mm AND 75mm SHALL HAVE A 2% SLOPE.
4. ALL SANITARY PIPING 100mm AND LARGER SHALL HAVE A 1% SLOPE.
5. LOCATION OF SANITARY AND STORM PIPE STUBS ARE APPROXIMATE. EXACT PIPE STUB LOCATIONS SHALL BE COORDINATED WITH ARCHITECTURAL FLOOR PLANS TO ENSURE PIPES WILL BE CONCEALED.
6. INSTALL CLEANOUTS AT BASE OF ALL SANITARY WASTE AND STORM WATER STACKS.
7. INSTALL CLEANOUTS WHERE REQUIRED BY THE NATIONAL PLUMBING CODE OF CANADA TO CLEAN OUT ENTIRE DRAINAGE SYSTEM. WHEN USING A DOUBLE TY, INSTALL CLEANOUT BELOW CONNECTION.
8. EQUIPMENT AND FIXTURE LOCATIONS MAY NOT BE PRECISE. VERIFY LOCATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.
9. HOLE THROUGH CONCRETE FLOORS AND WALLS. IN A NEAT FASHION, ARE TO BE PROVIDED BY THIS CONTRACTOR.
10. ALL PIPING IN CONCRETE BLOCK WALLS, TO BE RUN VERTICALLY UP AND DOWN FROM THE CEILING, DO NOT RUN HORIZONTALLY IN WALL.
11. PROVIDE FLOOR DRAINS WITH A 100mm DRAIN AND TRAP SEAL PRIMER PIPE UNLESS INDICATED OTHERWISE.
12. COORDINATE LOCATIONS OF FLOORS DRAINS IN MECHANICAL ROOMS FOR DRAINAGE OF EQUIPMENT, PRESSURE RELIEF VALVES, ETC. TO AVOID TRIPPING HAZARDS.
13. PROVIDE ACCESS HATCHES FOR ISOLATION VALVES IN GYROCK CEILINGS.
14. INSTALL WATER HAMMER ARRESTORS AS SPECIFIED, INSTALL WHERE RECOMMENDED BY MANUFACTURER.
15. CONTRACTOR TO INSTALL ALL CONDENSATE LINES AS REQUIRED FROM AHU'S, ERV'S, FAN COILS, SPLIT SYSTEMS, INTAKE AND EXHAUST PLENUMS, ETC.
16. ALL PIPING PENETRATIONS THRU FIRE RATED WALLS/FLOORS TO BE FIRE STOPPED.
17. DUE TO THE SMALL SCALE OF THE DRAWINGS, NOT ALL OFFSETS, FITTINGS, ETC. AS SHOWN. PROVIDE ALL REQUIRED PIPING, ETC. FOR A COMPLETE WORKING SYSTEM IN ACCORDANCE WITH CODES.
18. ALL CORE DRILLING TO BE COORDINATED WITH THE GENERAL CONTRACTOR.
19. PROVIDE ACCESS DOORS IN WALL WHERE NEW STANDPIPE ARE PROVIDED. ACCESS DOOR TO BE FIRE RATED WHERE REQUIRED.
20. COORDINATE THE SHUT DOWN OF SERVICES WITH DEPARTMENTAL REPRESENTATIVE.

PLUMBING LEGEND

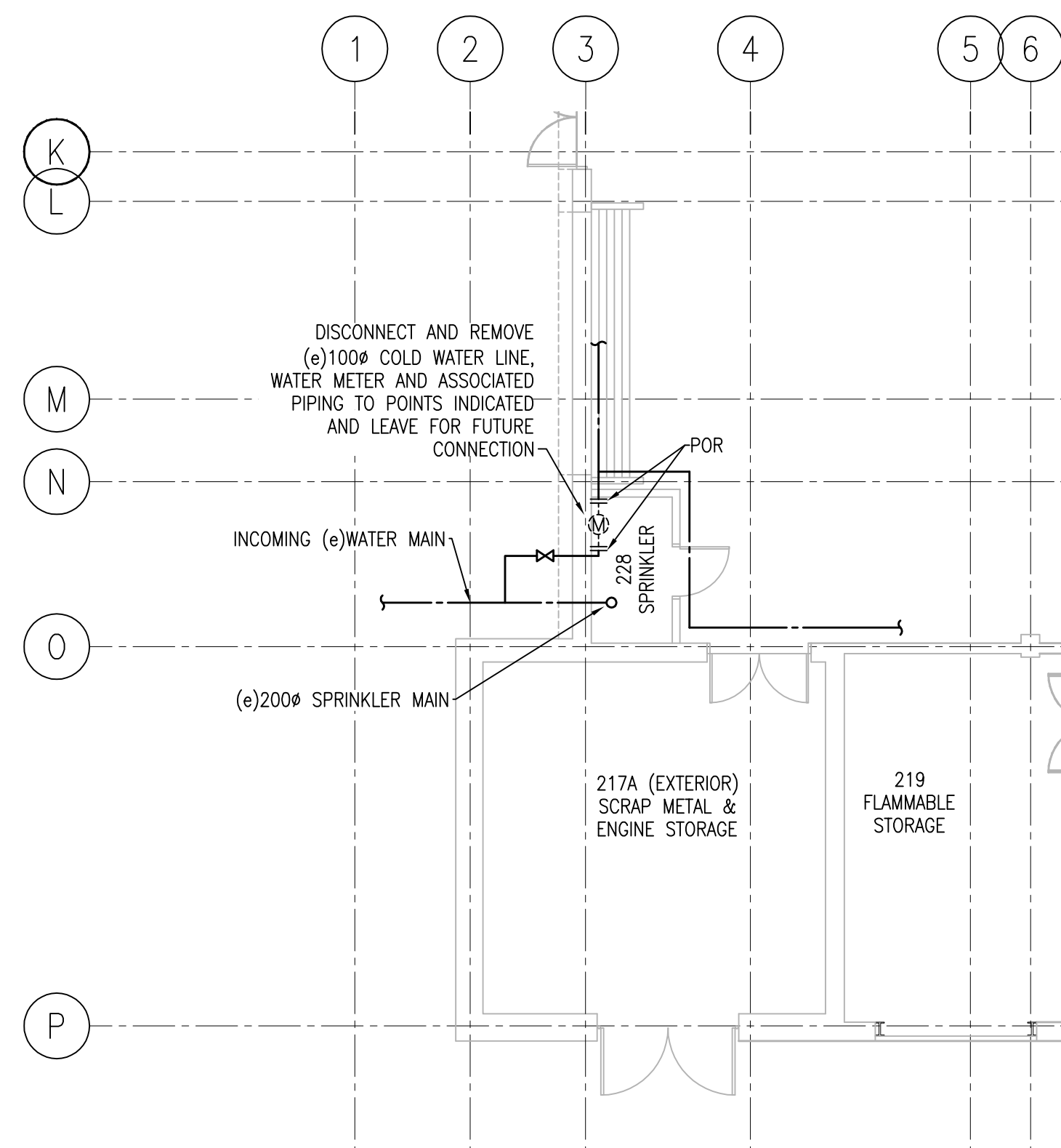
NEW	EXISTING	
----	----	DOMESTIC COLD WATER PIPING
----	----	DOMESTIC HOT WATER PIPING
----	----	DOMESTIC HOT WATER RECIRCULATION PIPING
-+-----	-+-----	SANITARY WASTE PIPING (BELOW GRADE)
-+-----	-+-----	SANITARY WASTE PIPING (ABOVE GRADE)
-+V-----	-+V-----	VENT PIPING
-----TP----	-----TP----	TRAP PRIMER PIPING
-----CD----	-----CD----	CONDENSATE PIPING
-----RWL----	-----RWL----	RAINWATER LEADER PIPING (BELOW GRADE)
-----RWL----	-----RWL----	RAINWATER LEADER PIPING (ABOVE GRADE)
-----ST----	-----ST----	STORM PIPING
-----O----	-----O----	OIL INTERCEPTOR PIPING
○-----	○-----	PIPE UP/PIPE RISER
○-----	○-----	PIPE DOWN
○-----	○-----	PIPE DOWN (BOTTOM OF PIPE TAKE-OFF)
⌵	⌵	SHUT-OFF VALVE
⌵	⌵	GLOBE VALVE
⌵	⌵	BALL VALVE
⌵	⌵	CHECK VALVE
⌵	⌵	HOSE BIBB
⌵	⌵	NON FREEZE WALL HYDRANT
⌵	⌵	PIPE CAP
⌵	⌵	PIPE CONTINUATION
⌵	⌵	WATER METER
⌵	⌵	REDUCED PRESSURE BACKFLOW PREVENTOR
⌵	⌵	TRAP PRIMER - 1-4 OUTLETS
⌵	⌵	CLEANOUT ABOVE FLOOR
⌵	⌵	CLEANOUT AT FLOOR
⌵	⌵	FLOOR DRAIN
⌵	⌵	FUNNEL FLOOR DRAIN
⌵	⌵	POINT OF CONNECTION/POINT OF REMOVALS
⌵	⌵	STANDPIPE



PLUMBING - LOUIS S. ST. LAURENT MACHINE SHOP - LEVEL 100 DEMOLITION

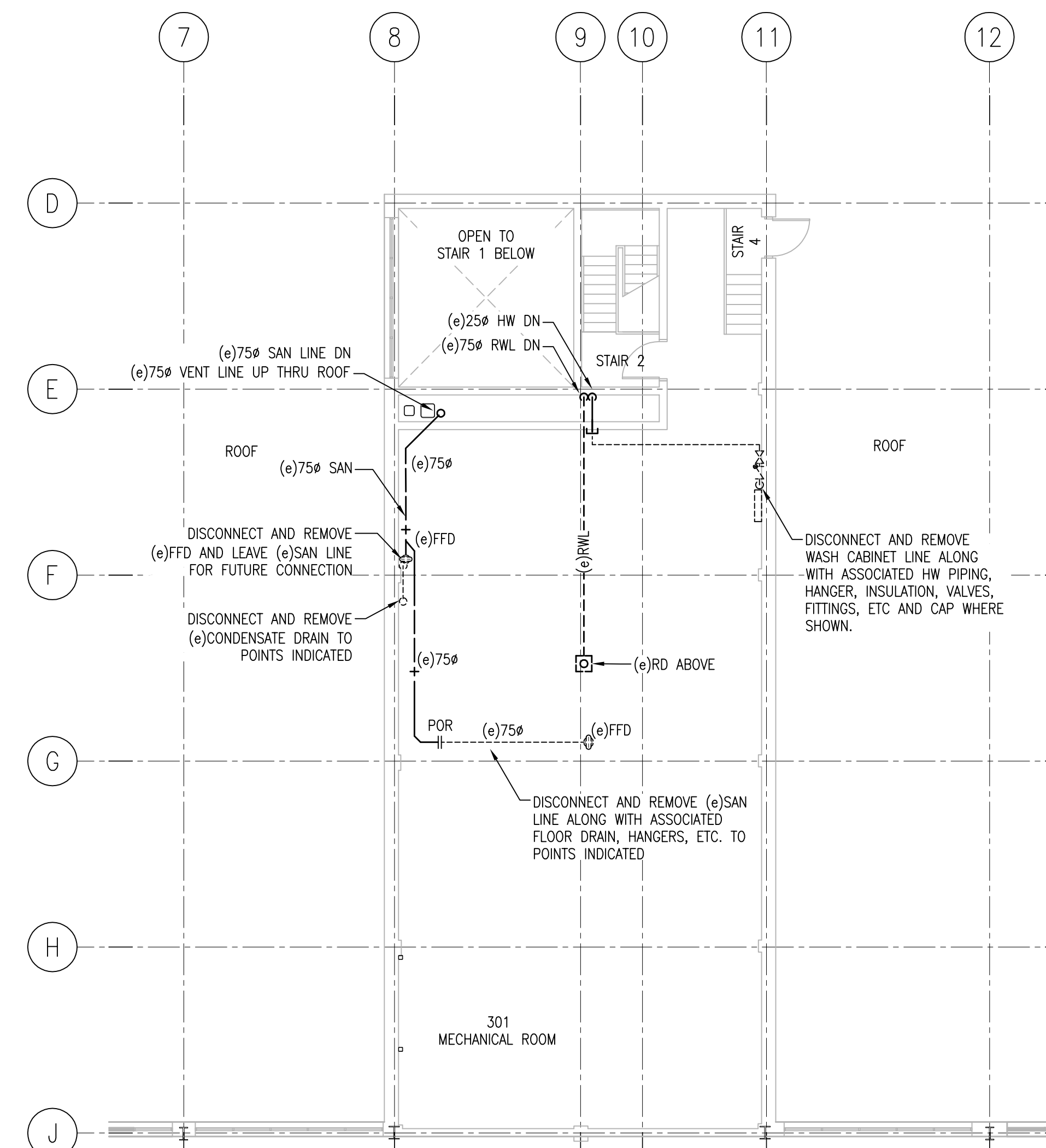
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PLUMBING DEMOLITION NOTES	
①	DISCONNECT AND REMOVE EXISTING DOMESTIC HOT WATER TANK AND ALL ASSOCIATED PIPING, FITTINGS, VALVES, HANGERS, ETC. TO POINTS INDICATED. REFER TO DOMESTIC HOT WATER SCHEMATIC ON DRAWING MP-501 FOR EXACT EXTENT OF DEMOLITION.
②	DISCONNECT AND REMOVE EXISTING CONDENSATE PIPING TO POINTS INDICATED. COORDINATE WALL/FLOOR/CEILING DEMOLITION AND REINSTATEMENT WITH OTHER TRADES.
③	DISCONNECT AND REMOVE EXISTING CW PIPING SERVING HUMIDIFIER ALONG WITH AND ALL ASSOCIATED INSULATION, FITTINGS, VALVES, HANGERS, ETC. TO POINTS INDICATED AND CAP.
④	DISCONNECT AND REMOVE EXISTING SAN PIPING TO POINT INDICATED AND CAP



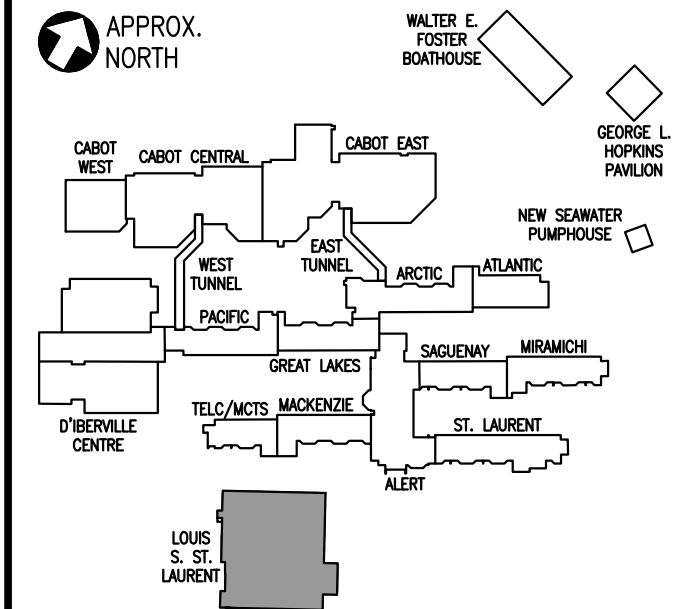
PLUMBING - LOUIS S. ST. LAURENT MACHINE SHOP - LEVEL 200 DEMOLITION

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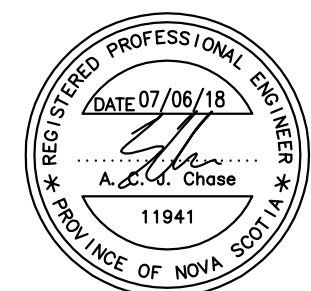


PLUMBING - LOUIS S. ST. LAURENT MACHINE SHOP - LEVEL 300 DEMOLITION

SCALE : 1:100
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project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
project		

drawing	PLUMBING LOUIS S. ST. LAURENT MACHINE SHOP LEVELS 100, 200 & 300 DEMOLITION	
desain		

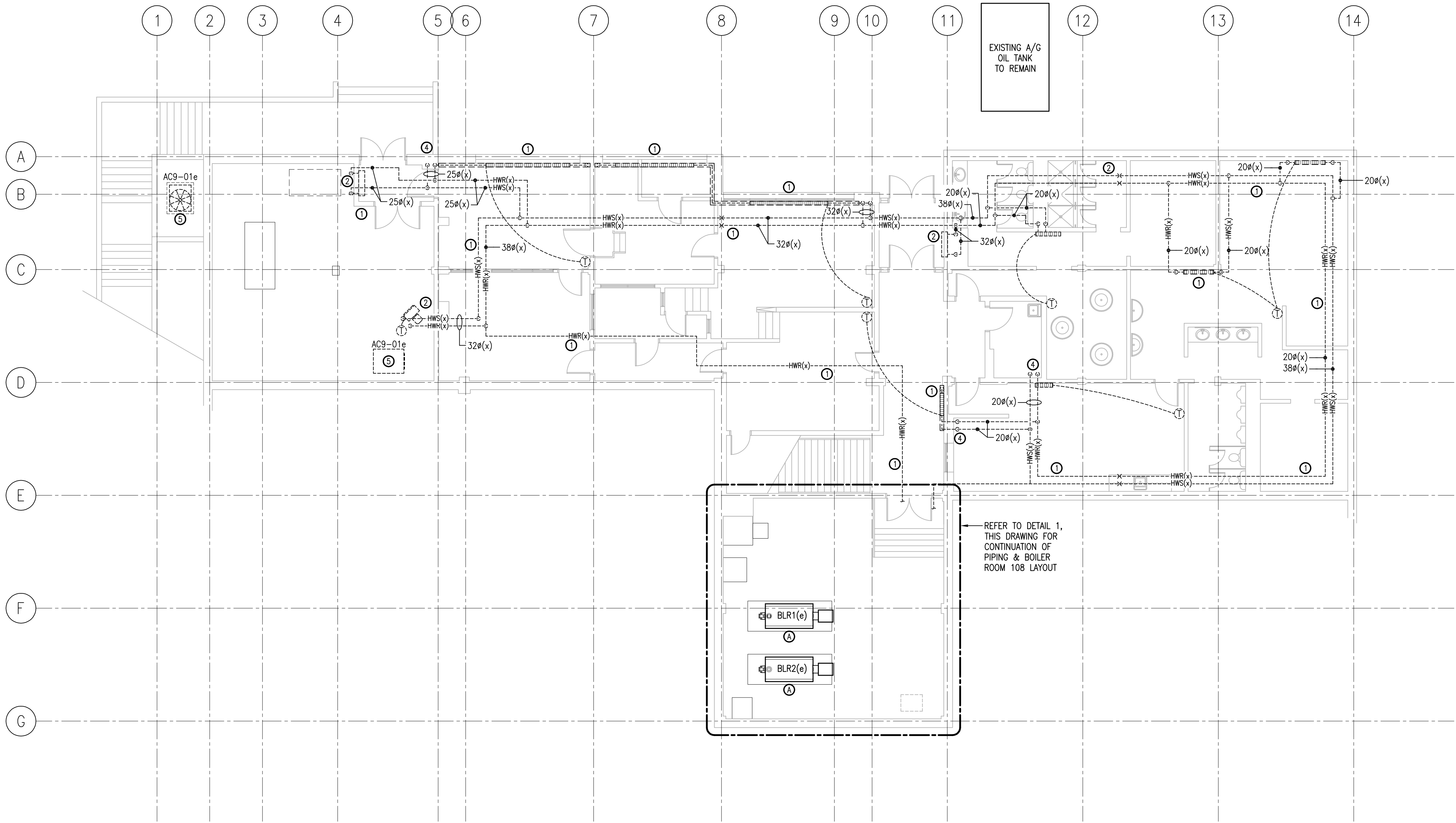
designed MJM	conçu	
date 07/06/18		
drawn CAB	dessiné	
date 07/06/18		
approved ACJC	approuvé	
date 07/06/18		
Tender Joan Muise	Soumission	
PWSC Project Manager	Administrateur de projets TPSGC	
project number R.065476.710	no. du projet	
drawing no. 09-MDP-101	no. du dessin	

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HVAC PIPING LEGEND	
-----HWS(x)-----	EXISTING HOT WATER SUPPLY PIPING TO BE REMOVED
-----HWR(x)-----	EXISTING HOT WATER RETURN PIPING TO BE REMOVED
-----HWS(e)-----	EXISTING HOT WATER SUPPLY PIPING
-----HWR(e)-----	EXISTING HOT WATER RETURN PIPING
-----HWS-----	NEW HOT WATER SUPPLY PIPING
-----HWR-----	NEW HOT WATER RETURN PIPING
-----FOS(e)-----	EXISTING FUEL OIL SUPPLY PIPING
-----FOR(e)-----	EXISTING FUEL OIL RETURN PIPING
-----GLS-----	GLYCOL SUPPLY PIPING
-----GLR-----	GLYCOL RETURN PIPING
-----RL/RC-----	NEW REFRIGERANT LIQUID & GAS PIPING
-----HP/LP-----	NEW HIGH PRESSURE & LOW PRESSURE REFRIGERANT PIPING
-----	PIPE DOWN
-----	PIPE UP
-----	PIPE DOWN (UNDER)
-----	PIPE CONTINUATION
-----	PIPE CAP
-----	FLOW ARROW
-----	SHUT-OFF VALVE
-----	3-WAY CONTROL VALVE
-----	CONTROL VALVE
-----	CIRCUIT SETTER VALVE
-----	CHECK VALVE
-----	FILTER STRAINER
-----	IN-LINE CIRCULATOR PUMP
-----	PIPE ANCHOR
-----	AUTOMATIC AIR VALVE c/w PET COCK
-----	PRESSURE RELIEF VALVE
-----	EXISTING BASEBOARD RADIATION ELEMENT TO BE REMOVED
-----	NEW BASEBOARD RADIATION ELEMENT/ RADIANT HEATING PANEL
-----	UNIT HEATER, TYPE X
-----	CABINET UNIT HEATER, TYPE X
-----	NEW AIR SEPARATOR/HYDRAULIC SEPARATOR
-----	NEW IN-LINE PUMP
-----	NEW HEAT EXCHANGER
-----	NEW PAD-MOUNTED OUTDOOR CONDENSING UNIT
-----	NEW WALL-MOUNTED DUCTLESS FAN COIL UNIT
-----	NEW 4-WAY CEILING CASSETTE FAN COIL UNIT
-----	NEW CEILING CONCEALED DUCTED FAN COIL UNIT
-----	EXISTING THERMOSTAT & CONTROL WIRING TO BE REMOVED
-----	NEW THERMOSTAT & CONTROL WIRING
-----	NEW NITROGEN OXIDE SENSOR
-----	NEW CARBON MONOXIDE SENSOR
-----	CONSTRUCTION/DEMOLITION NOTE
-----	RHP-X X = TYPE Y mm Z = LENGTH, in mm Z = OUTPUT, in kW
-----	CAB-X X = TYPE Y = OUTPUT, in kW

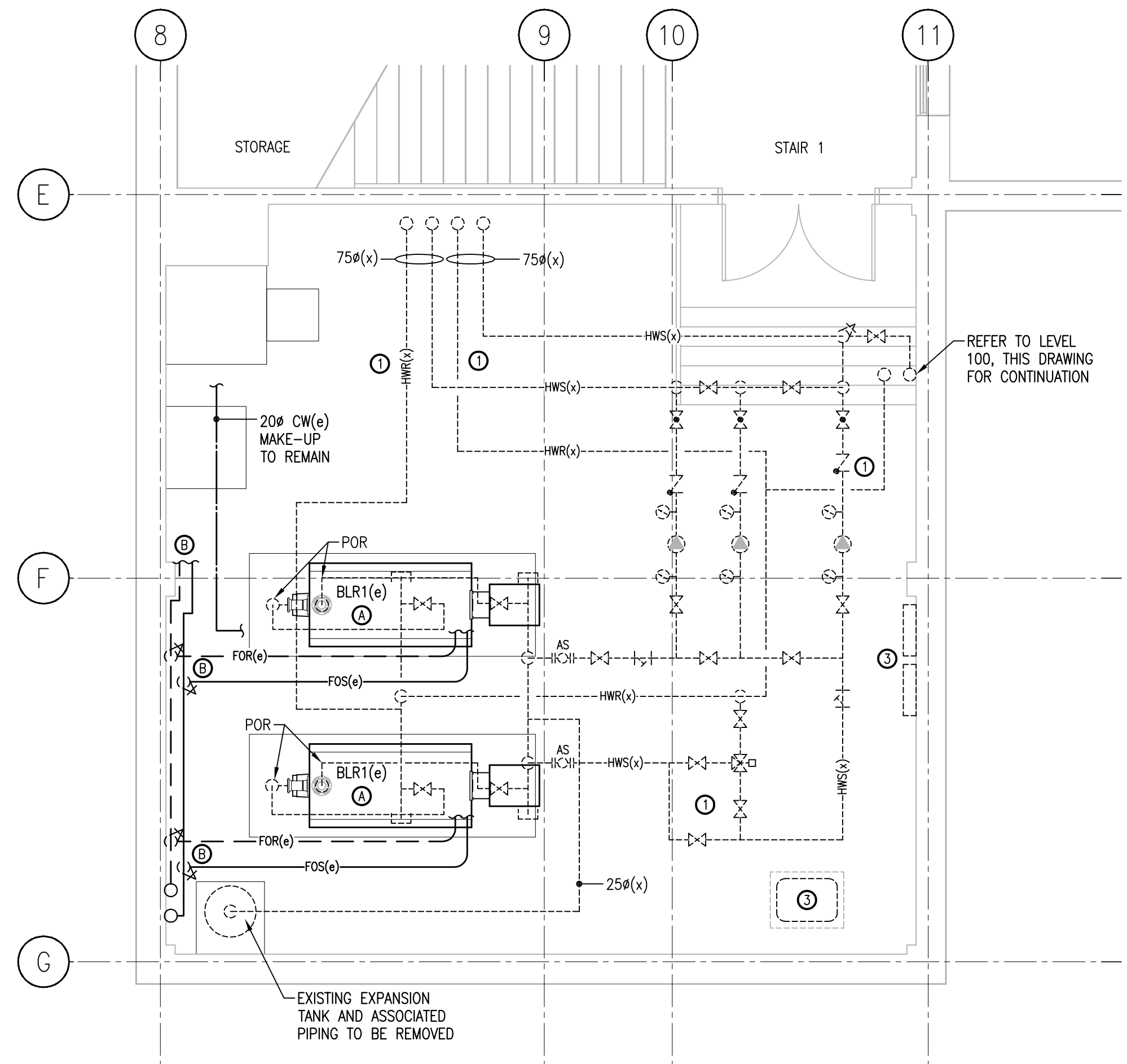
DEMOLITION NOTES	
①	DISCONNECT AND REMOVE EXISTING HOT WATER SUPPLY AND RETURN PIPING, INSULATION, BASEBOARD RADIATION, HANGERS, VALVES, PIPE ANCHORS, GUIDES, CONTROLS, WIRING, T'STATS, AND PNEUMATIC TUBING TO POINTS INDICATED.
②	DISCONNECT AND REMOVE EXISTING CABINET HEATER, RADIANT HEATING PANEL, OR UNIT HEATER, ASSOCIATED PIPING, HANGERS, VALVES, CONTROLS, ETC.
③	DISCONNECT AND REMOVE EXISTING PNEUMATIC CONTROLS SYSTEM, INCLUDING COMPRESSOR, PNEUMATIC TUBING, CONTROLS PANELS, AND ALL ASSOCIATED EQUIPMENT.
④	LINES LOCATED IN IN MASONRY BLOCK WALL CAVITIES TO BE CAPPED AND ABANDONED IN PLACE.
⑤	DISCONNECT AND REMOVE EXISTING SPLIT SYSTEM INCLUDING OUTDOOR CONDENSING UNIT, INDOOR DUCTED FAN COIL UNIT, CONDENSATE PUMP, REFRIGERANT AND DRAIN PIPING, ASSOCIATED DUCTWORK, CONTROLS, ETC. REPAIR PIPING PENETRATION THROUGH EXTERIOR WALL/ROOF & MAKE WATERIGHT. TURN SYSTEM OVER TO OWNER. REFER TO EXISTING SPLIT SYSTEM SCHEDULE, DRAWING 09-MDH-101 FOR DETAILS.
⑥	DISCONNECT AND REMOVE EXISTING HEATING COIL SERVING EXISTING AHU IN THIS AREA.
⑦	EXISTING BOILERS AND ACCESSORY PIPING, INCLUDING T&P VENT, LOW WATER CUT-OFF, CONDENSATE DRAIN PIPING, CONTROLS, AND WIRING TO REMAIN.
⑧	EXISTING FUEL OIL SUPPLY AND RETURN LINES TO REMAIN.

09 - LOUIS S. ST. LAURENT MACHINE SHOP - EXISTING SPLIT SYSTEMS SCHEDULE						
MARK	INVENTORY TAG	SERVING	INDOOR UNIT MODEL	OUTDOOR CONDENSING UNIT MODEL	NOMINAL CAPACITY (kW)	SYSTEM NOTES
AC9-01e	0049	LEVEL 100 SIMULATOR ROOMS	TRANE TWE060AW00BB	TRANE TTA060CWOAD	17.6	SYSTEM TO BE REMOVED & TURNED OVER TO OWNER
AC9-02e	2855	CLASSROOM 214	MITSUBISHI PCFY-P30	MITSUBISHI PUY-A30NH42	8.8	SYSTEM TO BE REMOVED & TURNED OVER TO OWNER



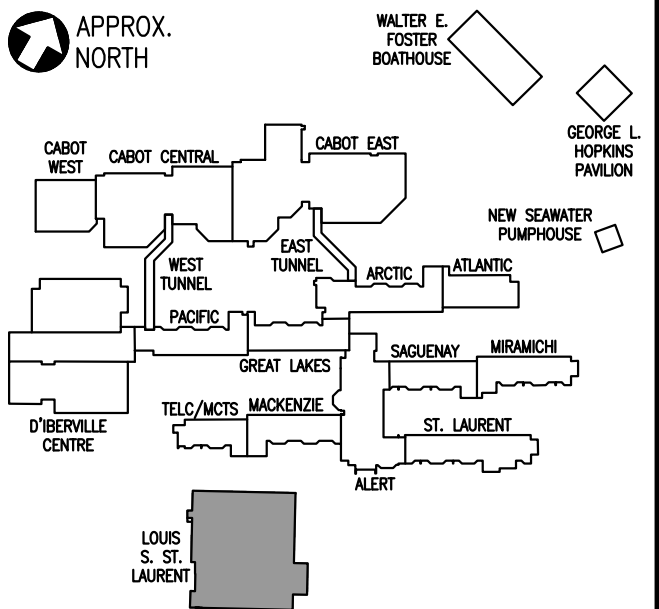
HVAC PIPING – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100 DEMOLITION

SCALE : 1:100
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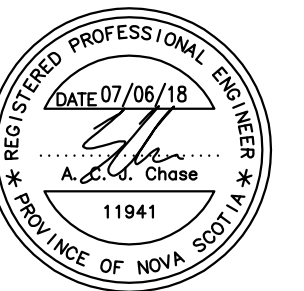


HVAC PIPING – BOILER ROOM 108 DEMOLITION LAYOUT 1

SCALE : 1:50
0m 1m 2m 3m 4m 5m



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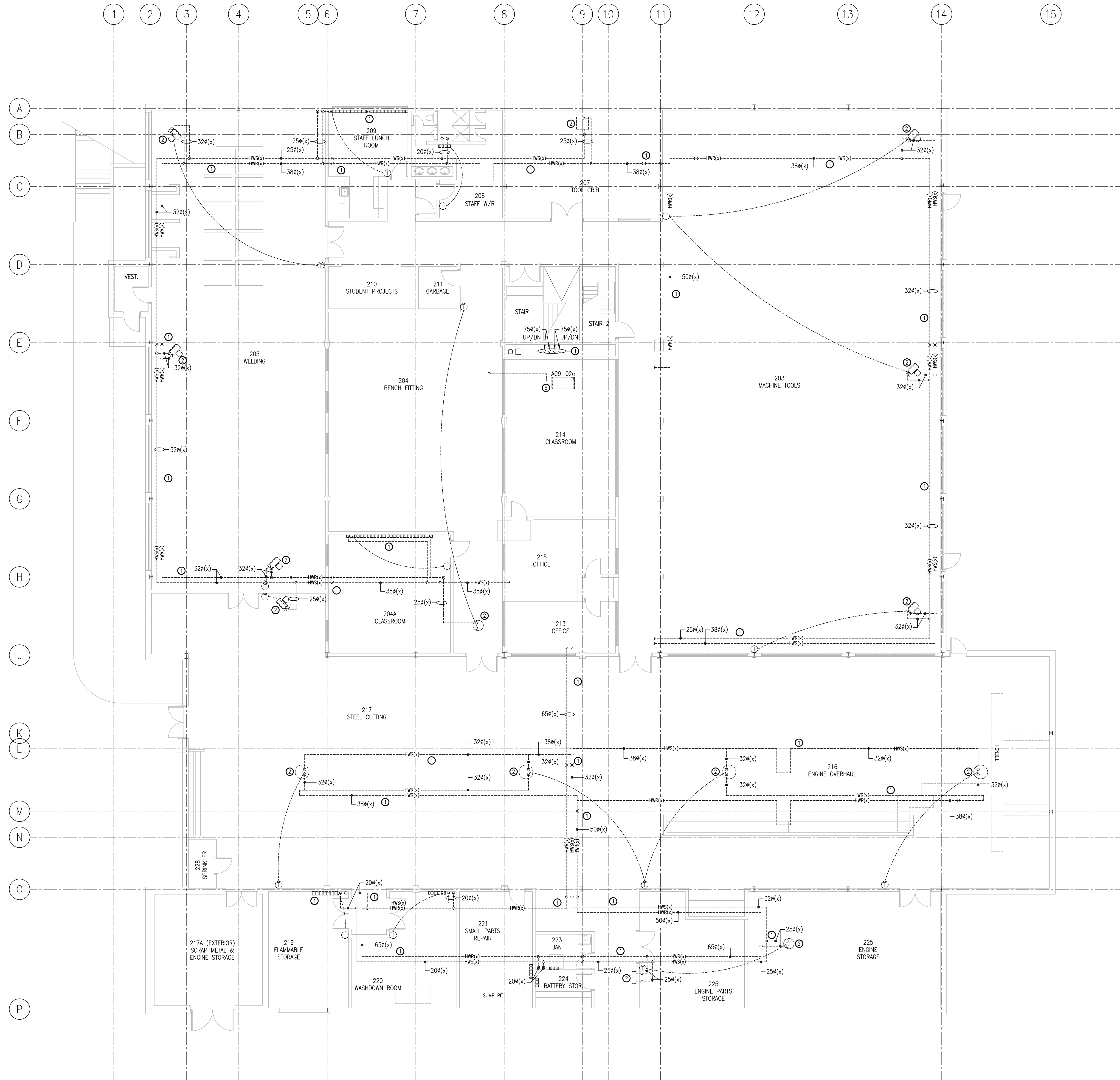


0 Issued for Tender 07/06/18
revisions date
project CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES project

drawing HVAC PIPING design
LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 DEMOLITION

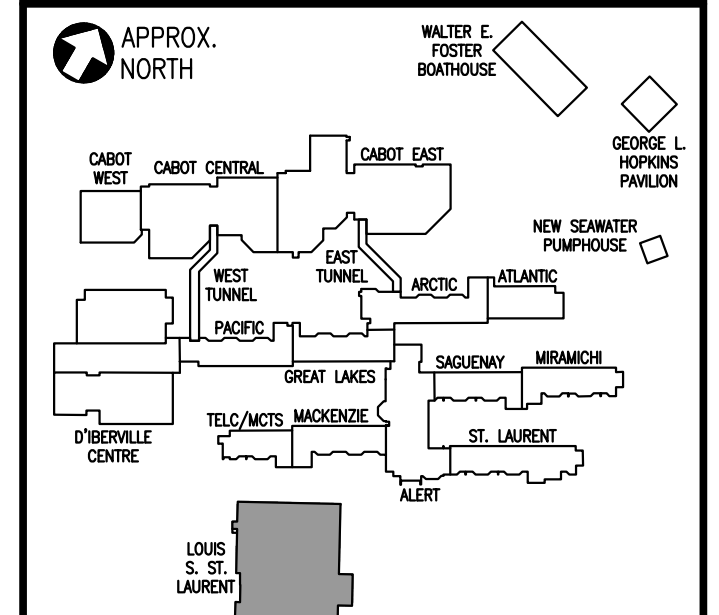
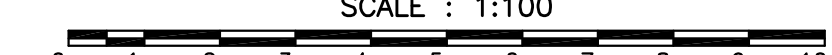
designed MJM conçu
date 07/06/18
drawn MAC dessiné
date 07/06/18
approved ACJC approuvé
date 07/06/18
Tender Joan Muise Soumission
PWGSC Project Manager Administrateur de projets TPSGC
project number R.065476.710 no. du projet
drawing no. 09-MDH-101 no. du dessin

DEMOLITION NOTES	
①	DISCONNECT AND REMOVE EXISTING HOT WATER SUPPLY AND RETURN PIPING, INSULATION, BASEBOARD RADIATION, HANGERS, VALVES, PIPE ANCHORS, GUIDES, CONTROLS, WIRING, T'STATS, AND PNEUMATIC TUBING TO POINTS INDICATED.
②	DISCONNECT AND REMOVE EXISTING CABINET HEATER, RADIANT HEATING PANEL, OR UNIT HEATER, ASSOCIATED PIPING, HANGERS, VALVES, CONTROLS, ETC.
③	DISCONNECT AND REMOVE EXISTING PNEUMATIC CONTROLS SYSTEM, INCLUDING COMPRESSOR, PNEUMATIC TUBING, CONTROLS PANELS, AND ALL ASSOCIATED EQUIPMENT.
④	PIPES LOCATED IN IN MASONRY BLOCK WALL CAVITIES TO BE CAPPED AND ABANDONED IN PLACE.
⑤	DISCONNECT AND REMOVE EXISTING SPLIT SYSTEM INCLUDING OUTDOOR CONDENSING UNIT, INDOOR FAN COIL UNIT, CONDENSATE PUMP, REFRIGERANT AND DRAIN PIPING, ASSOCIATED DUCTWORK, CONTROLS, ETC. REPAIR PIPING PENETRATION THROUGH EXTERIOR WALL/ROOF & MAKE WATER TIGHT. TURN SYSTEM OVER TO OWNER. REFER TO EXISTING SPLIT SYSTEM SCHEDULE, DRAWING 09-MDH-101 FOR DETAILS.
⑥	DISCONNECT AND REMOVE EXISTING HEATING COIL SERVING EXISTING AHU IN THIS AREA.
⑦	EXISTING BOILERS AND ACCESSORY PIPING, INCLUDING T&P VENT, LOW WATER CUT-OFF, CONDENSATE DRAIN PIPING, CONTROLS, AND WIRING TO REMAIN.
⑧	EXISTING FUEL OIL SUPPLY AND RETURN LINES TO REMAIN.



HVAC PIPING – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 200 DEMOLITION

SCALE : 1:100

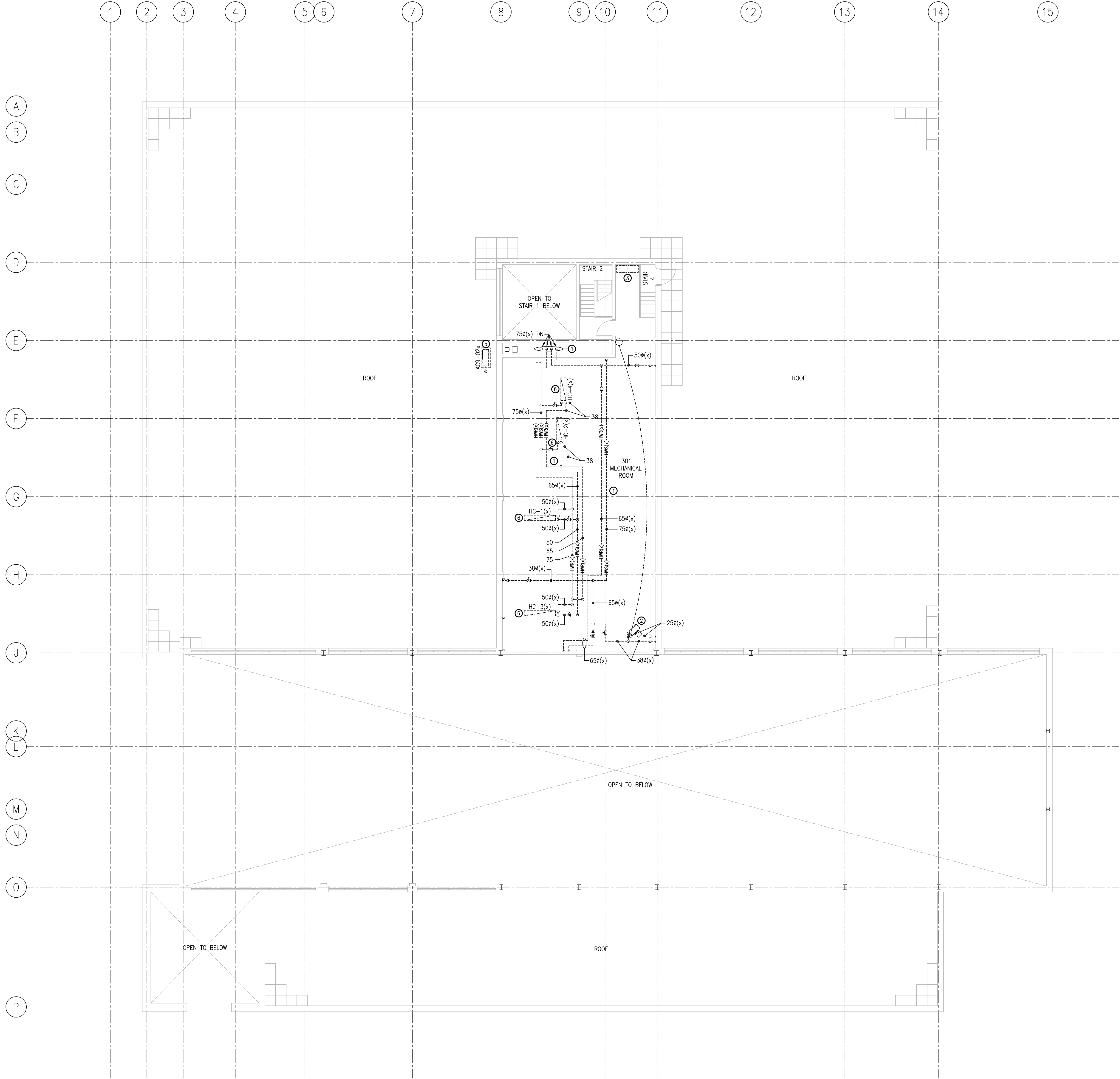


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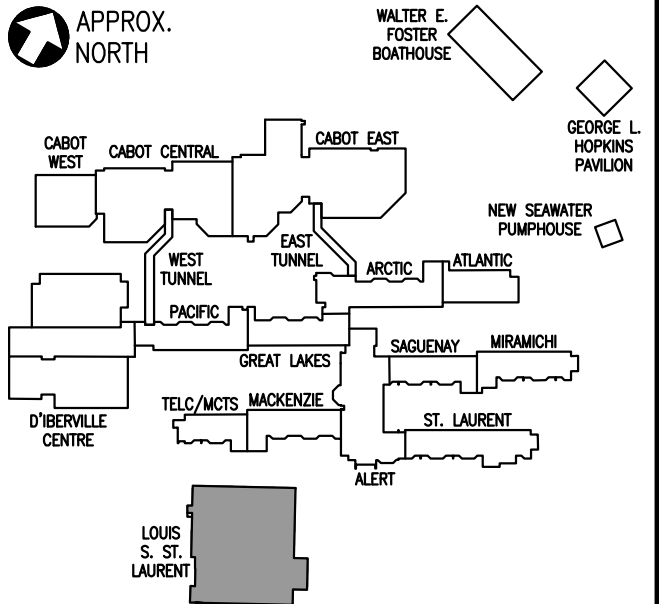
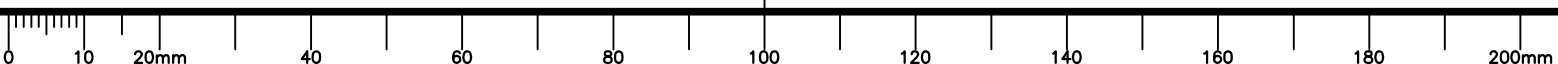
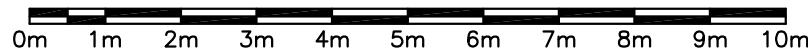
0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 DEMOLITION	
designed MJM	conçu	
date 07/06/18		
drawn MAC	dessiné	
date 07/06/18		
approved ACJC	approuvé	
date 07/06/18		
Tender	Joan Muise	
PWOSC Project Manager	Administrateur de projets TPSGC	
project number	R.065476.710	
drawing no.	09-MDH-102	

DEMOLITION NOTES	
①	DISCONNECT AND REMOVE EXISTING HOT WATER SUPPLY AND RETURN PIPING, INSULATION, BASEBOARD RADIATION, HANGERS, VALVES, PIPE ANCHORS, GUIDES, CONTROLS, WIRING, T'STATS, AND PNEUMATIC TUBING TO POINTS INDICATED.
②	DISCONNECT AND REMOVE EXISTING CABINET HEATER, RADIANT HEATING PANEL, OR UNIT HEATER, ASSOCIATED PIPING, HANGERS, VALVES, CONTROLS, ETC.
③	DISCONNECT AND REMOVE EXISTING PNEUMATIC CONTROLS SYSTEM, INCLUDING COMPRESSOR, PNEUMATIC TUBING, CONTROLS PANELS, AND ALL ASSOCIATED EQUIPMENT.
④	LINES LOCATED IN IN MASONRY BLOCK WALL CAVITIES TO BE CAPPED AND ABANDONED IN PLACE.
⑤	DISCONNECT AND REMOVE EXISTING SPLIT SYSTEM INCLUDING OUTDOOR CONDENSING UNIT, INDOOR FAN COIL UNIT, CONDENSATE PUMP, REFRIGERANT AND DRAIN PIPING, ASSOCIATED DUCTWORK, CONTROLS, ETC. REPAIR PIPING PENETRATION THROUGH EXTERIOR WALL/ROOF & MAKE WATER TIGHT. TURN SYSTEM OVER TO OWNER. REFER TO EXISTING SPLIT SYSTEM SCHEDULE, DRAWING 09-MDH-101 FOR DETAILS.
⑥	DISCONNECT AND REMOVE EXISTING DUCT-MOUNTED HEATING COIL SERVING EXISTING AIR HANDLING SYSTEM IN THIS AREA.
⑦	EXISTING BOILERS AND ACCESSORY PIPING, INCLUDING T&P VENT, LOW WATER CUT-OFF, CONDENSATE DRAIN PIPING, CONTROLS, AND WIRING TO REMAIN.
⑧	EXISTING FUEL OIL SUPPLY AND RETURN LINES TO REMAIN.

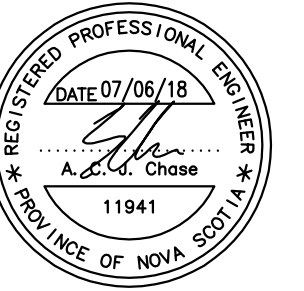


HVAC PIPING – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 300 DEMOLITION

SCALE : 1:100



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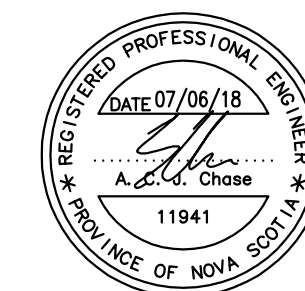
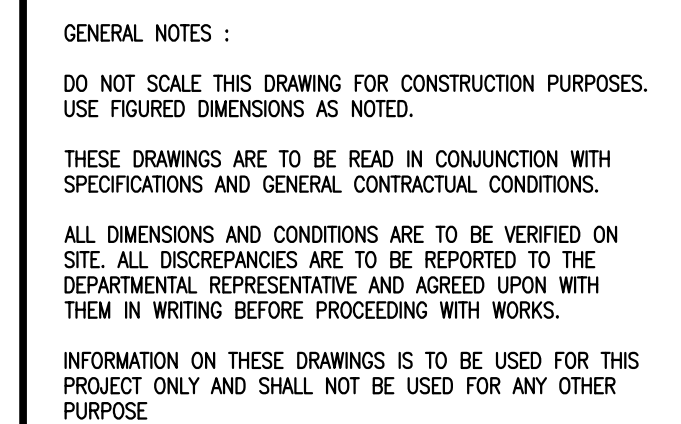
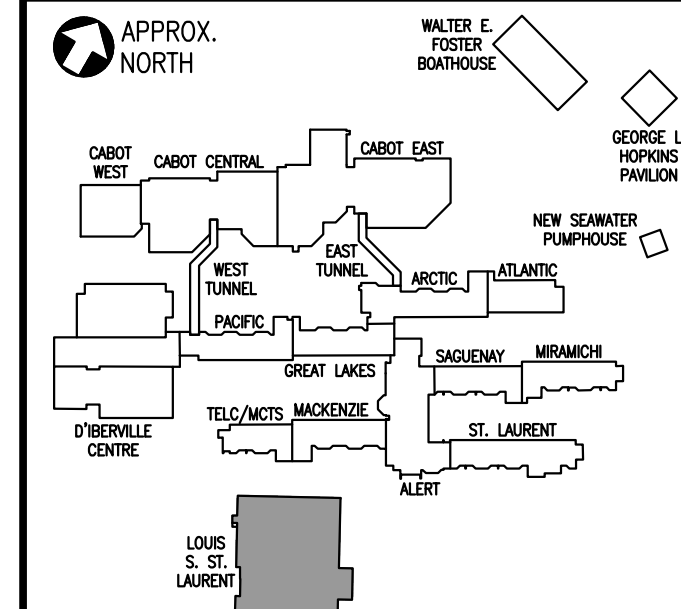


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drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 DEMOLITION	

designed MJM	conçu
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drawn MAC	dessiné
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date 07/06/18	
Tender Joan Muise	Soumission
PWGSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-MDH-103	

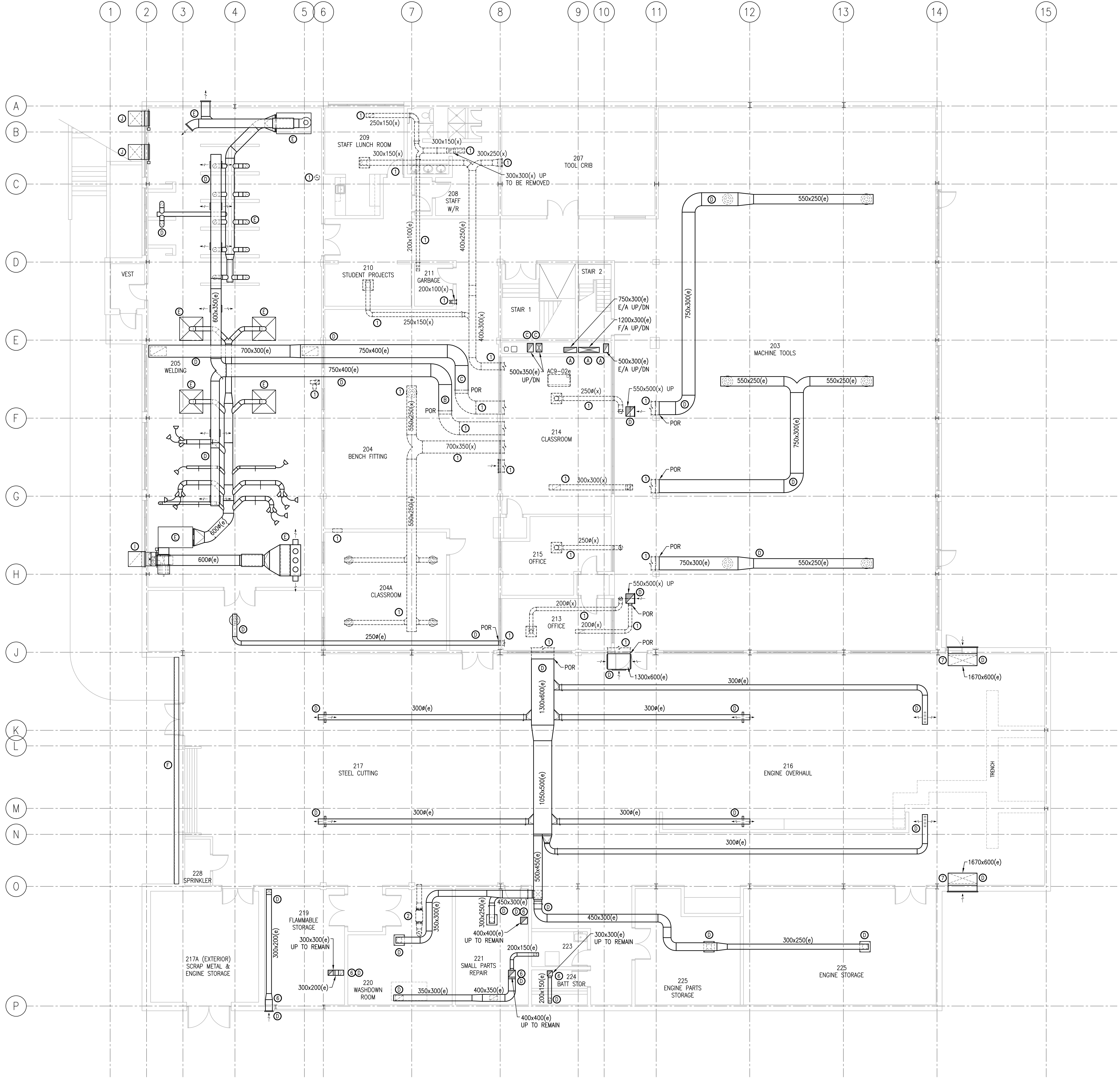
	NEW DUCTWORK
	EXISTING DUCTWORK
	REMOVALS
	NEW FLEXIBLE DUCTWORK
	NEW ACOUSTICALLY LINED DUCTWORK
	NEW FLEX CONNECTION
	FIRE DAMPER
	BALANCING DAMPER
	MOTORIZED DAMPER
	FRESH/SUPPLY AIR DUCT RISER OR SECTION
	EXHAUST/RETURN AIR DUCT RISER OR SECTION
	AIR FLOW
	NEW SQUARE CONE CEILING DIFFUSER
	NEW ROUND CONE CEILING DIFFUSER
	NEW LAY-IN TYPE RETURN GRILLE
	NEW DUCTED CEILING EXHAUST/RETURN GRILLE
	NEW DOOR GRILLE, TYPE 1
	NEW SIDEWALL GRILLE
	NEW PAD-MOUNTED OUTDOOR CONDENSING UNIT
	NEW WALL-MOUNTED DUCTLESS FAN COIL UNIT
	NEW 4-WAY CEILING CASSETTE FAN COIL UNIT
	NEW CEILING CONCEALED DUCTED FAN COIL UNIT
	NEW SQUARE CONE SUPPLY DIFFUSER, TYPE 1, 100 L/s
	NEW ROUND CONE SUPPLY DIFFUSER, TYPE 1, 100 L/s
	NEW CEILING EXHAUST/RETURN GRILLE, TYPE 1, 100 L/s
	NEW SIDEWALL SUPPLY/EXHAUST/RETURN GRILLE, TYPE 1, 100 L/s
	NEW STORM LOUVER, BUILDING X, NUMBER Y, 1000 L/s
	DEMOLITION/CONSTRUCTION NOTE
	DEMOLITION/CONSTRUCTION NOTE
POR	POINT OF REMOVAL
POC	POINT OF CONNECTION

①	EXISTING DUCTWORK, ASSOCIATED GRILLES/DIFFUSERS, DAMPERS, HANGERS, ETC. TO BE REMOVED. PENETRATION(S) THROUGH FLOOR(S), WALL(S), & CEILING(S) THAT ARE NOT REUSED TO BE INFILLED. MAINTAIN FIRE RATINGS AS NECESSARY.
②	EXISTING FAN, ASSOCIATED DUCTWORK, GRILLES, CONTROLS, WIRING, DAMPERS, HANGERS, ETC. TO BE REMOVED.
③	EXISTING HUMIDIFIER SYSTEM, STEAM GENERATOR, PIPING, MANIFOLD, CONTROLS, WIRING, ETC. TO BE DISCONNECTED AND REMOVED.
④	ABANDON DUCTWORK IN PLACE WHERE IT RUNS OUTSIDE OF THE BUILDING ENVELOPE IN EXISTING CONCRETE TRENCH. CAP AT BOTH ENDS.
⑤	EXISTING BREACHING TO BE DISCONNECTED FROM EXISTING BOILERS AND REMOVED BACK TO RISER, TYPICAL OF 2.
⑥	EXISTING MOTORIZED DAMPER TO BE DISCONNECTED FROM DUCTWORK AND REMOVED.
⑦	EXISTING PNEUMATIC ACTUATOR, PNEUMATIC PIPING, AND CONTROLS TO BE DISCONNECTED AND REMOVED.
⑧	EXISTING AHU/ERV, ASSOCIATED DUCTWORK, SUPPLY AND RETURN FANS, HEATING COILS, DAMPERS, HANGERS, ETC. TO BE REMOVED. PATCH AND REPAIR DUCTWORK PENETRATIONS THROUGH FLOORS, WALLS, & CEILINGS THAT ARE NOT REUSED. MAINTAIN EXISTING FIRE RATINGS AS NECESSARY.
⑨	EXISTING E/A PLENUM TO BE DISCONNECTED FROM LOUVER AND REMOVED.
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⑬	EXISTING DUCT RISER TO REMAIN.
⑭	EXISTING INTAKE AND EXHAUST DUCTWORK SERVING ELECTRICAL/GENERATOR ROOM 109 TO REMAIN.
⑮	EXISTING BOILER ROOM SUPPLY AND EXHAUST DUCTWORK TO REMAIN.
⑯	EXISTING DUCTWORK, ASSOCIATED GRILLES/DIFFUSERS, DAMPERS, HANGERS, ETC. TO REMAIN.
⑰	EXISTING WELDING SHOP FUME/DUST COLLECTION SYSTEM TO REMAIN
⑱	EXISTING SOLAR WALL & ASSOCIATED DUCTWORK, FAN, GRILLE, HANGERS, ETC. TO REMAIN.
⑲	EXISTING BOILERS TO REMAIN.
⑳	EXISTING EXHAUST AIR LOUVER TO REMAIN.
㉑	EXISTING EXHAUST FANS, ASSOCIATED DUCTWORK, WEATHER HOODS, MOTORIZED DAMPERS, & CONTROLS TO REMAIN, TYPICAL OF 2
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E-DRM/GDD-E: 538447

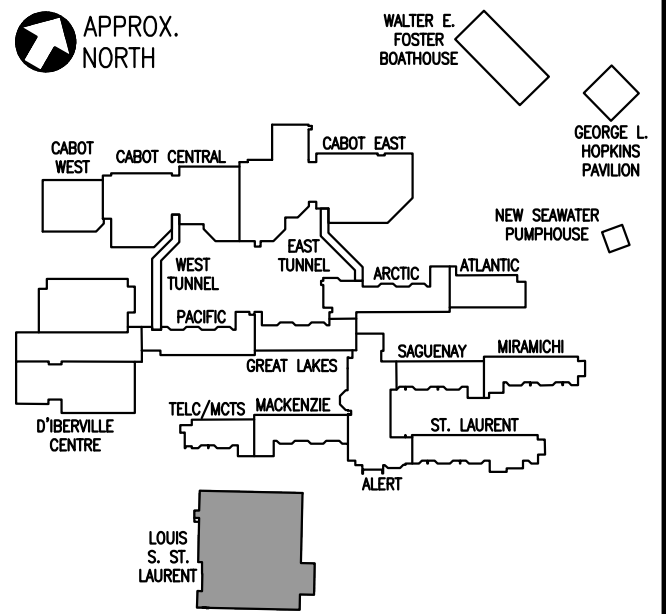
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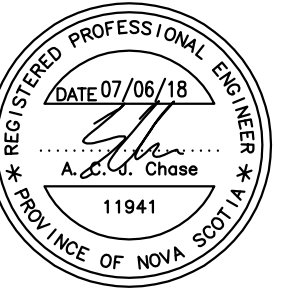
VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 200 DEMOLITION

SCALE : 1:100
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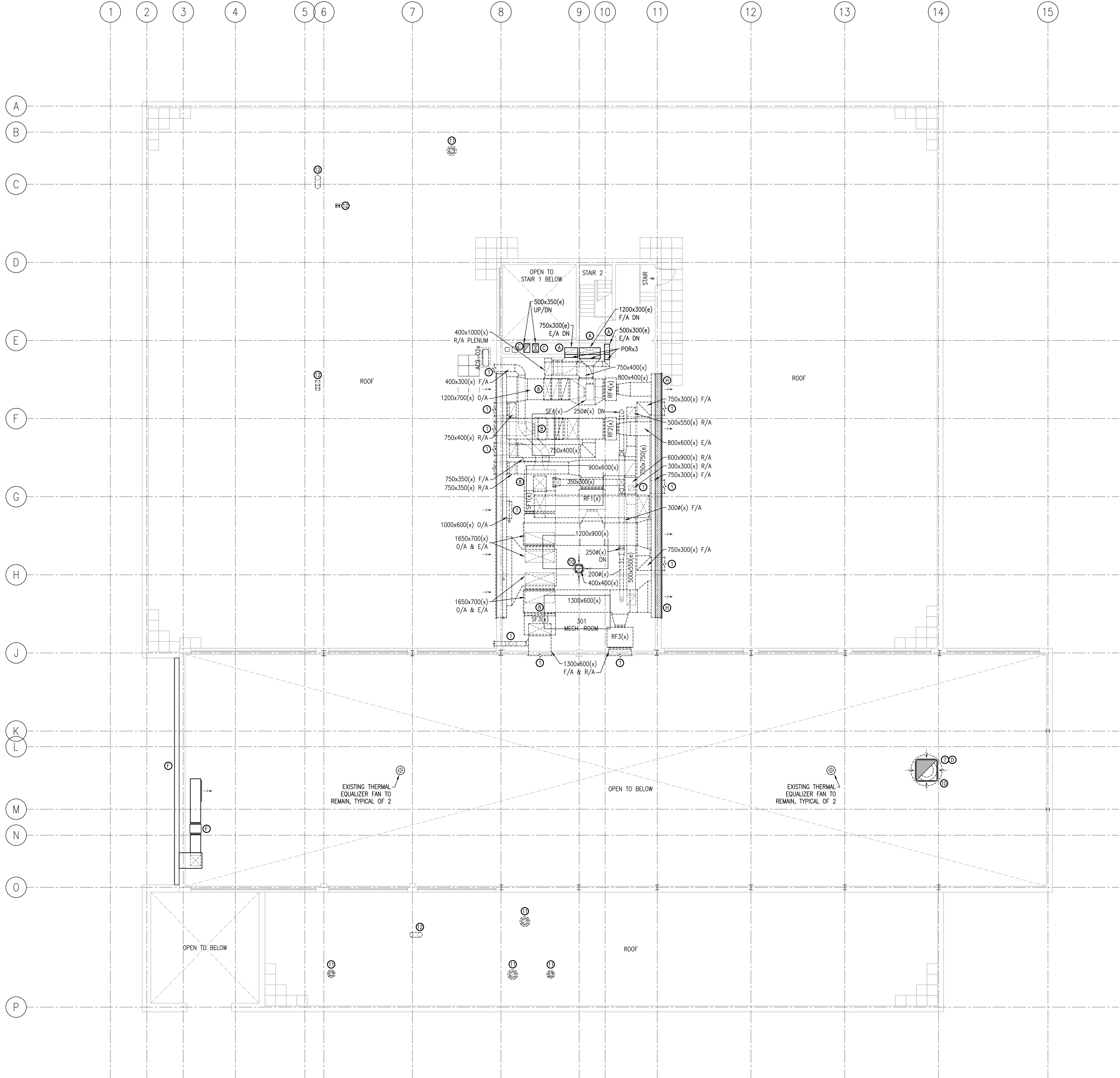


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revisions		date
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drawing	VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 DEMOLITION	

designed MJM	conçu
date 07/06/18	
drawn MAC	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	
Tender Joan Muise	Soumission
PWOSC Project Manager	Administrateur de projets TPSGC
project number R.065476.710	no. du projet
drawing no. 09-MDV-102	no. du dessin

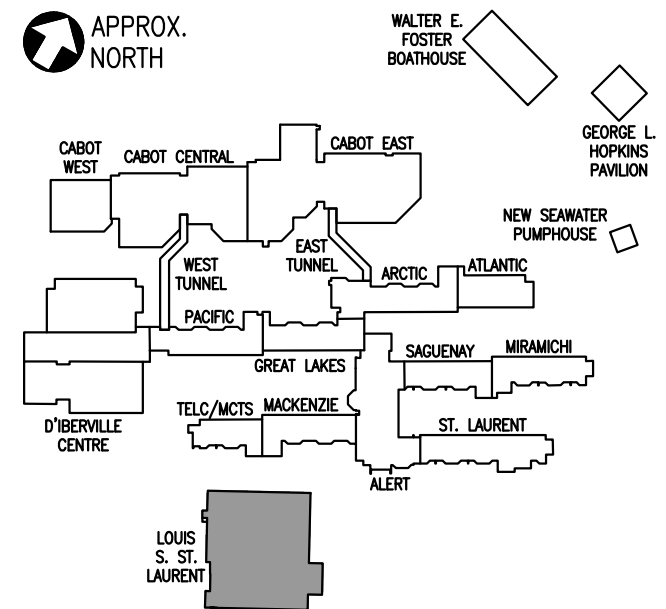
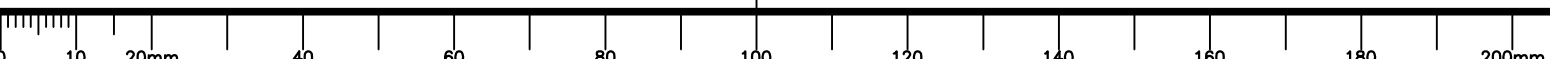
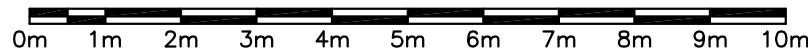
P:\10-15-17\12 - LSS - Machine Shop\38442-09-MD-103-VENTILATION-MACHINE SHOP-LEVEL 300.DWG Jul 06, 2018 - 2:20pm
PWGSC B1 (2004)

DEMOLITION NOTES	
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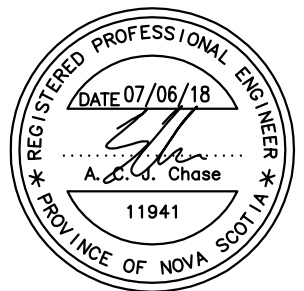


VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 300 DEMOLITION

SCALE : 1:100



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designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Joan Muise	Soumission
PWGSC Project Manager	Administrateur de projets TPSGC	
project number	R.065476.710	
drawing no.	09-MDV-103	

E:\10-15-17113 - LSS - Brouha\Proj\09 - LSS - Machine Shop\38442-09-FPD-101-FIRE PROTECTION-MACHINE SHOP-LEVEL 100.DWG.dwg Jul 06, 2018 - 1:15pm

PW50C B1 (2004)

FIRE PROTECTION GENERAL NOTES

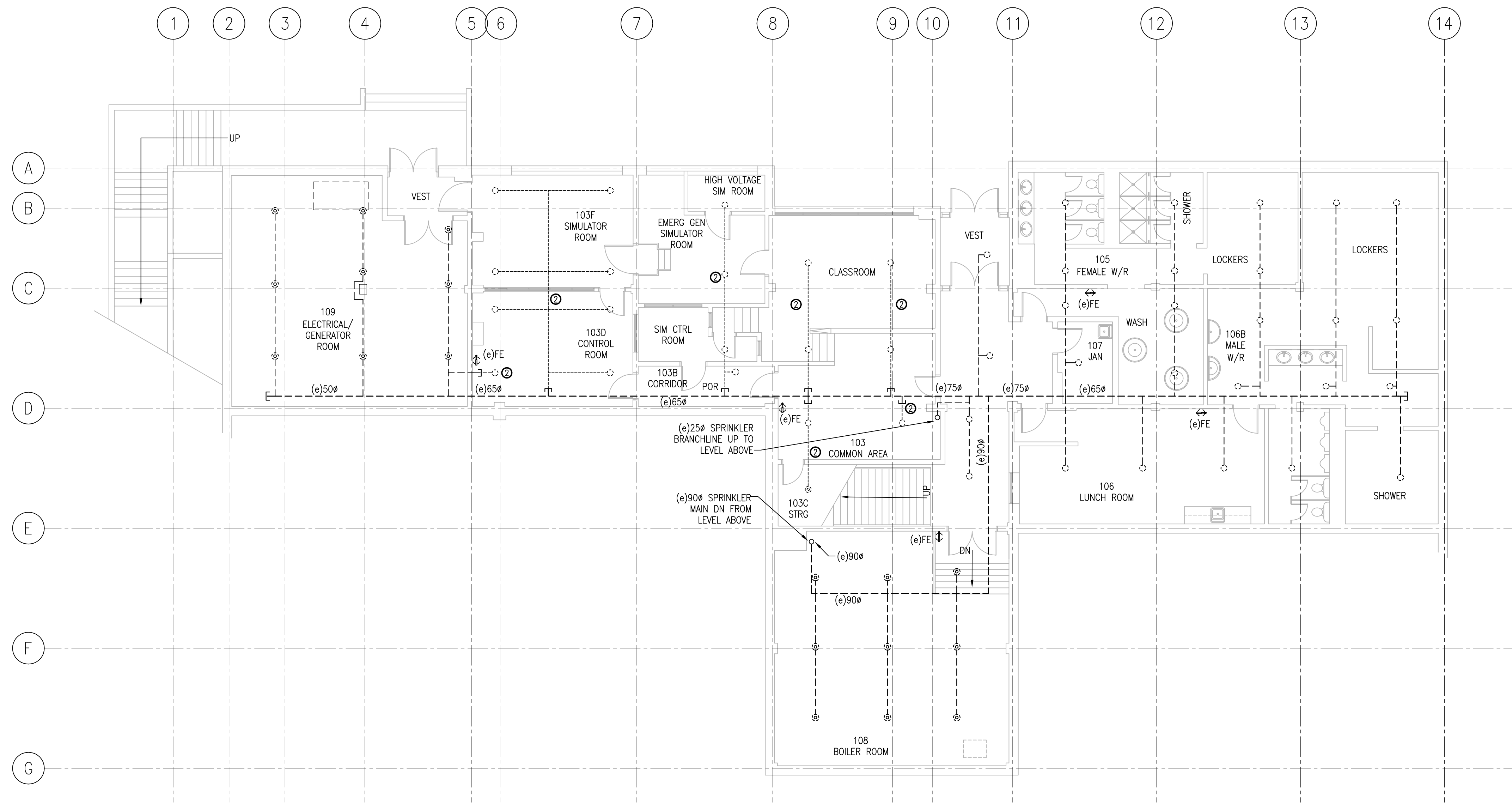
1. THE SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER SYSTEMS WITH THE STRUCTURAL, ELECTRICAL, MECHANICAL AND THE ARCHITECTURAL DRAWINGS.
2. CONTRACTOR TO PROVIDE ADDITIONAL HEADS AND PIPING, AS NOTED IN SPECIFICATIONS FOR CO-ORDINATION WITH DUCTWORK AND EQUIPMENT.
3. PROVIDE GUARDS ON ALL SPRINKLERS SERVING MECHANICAL ROOMS
4. CONTRACTOR TO PROVIDE LOW POINT DRAINS AS REQUIRED.
5. ALL PIPING PASSING THRU FIRE RATED ASSEMBLIES TO BE PROPERLY SEALED WITH APPROVED FIRE STOPPING MATERIAL.
6. PROVIDE SPARE HEADS, AS PER NFPA AND SPECIFICATIONS.
7. PROVIDE SHOP DRAWINGS IN ELECTRONIC FORMAT, AS NOTED IN SPECIFICATIONS.
8. COORDINATE THE SHUT DOWN OF SERVICES WITH THE DEPARTMENTAL REPRESENTATIVE.
9. ALL PIPING TO BE VERTICALLY HUNG FROM STRUCTURE.
10. ALL WORK TO BE DONE IN ACCORDANCE WITH REQUIREMENTS OF NFPA-13 - LATEST EDITION.
11. CONTRACTOR TO BEAR ALL COST FOR TESTING AND APPROVALS.
12. PIPE HANGERS TO BE ULC LISTED AND INSTALLED IN ACCORDANCE WITH NFPA 13.
13. SPRINKLERS TO BE FRANGIBLE BULB TYPE.
14. COORDINATE LOCATION OF HOLES REQUIRED FOR PIPES WITH THE WORK OF OTHER TRADES.
15. TEST AND CERTIFY IN ACCORDANCE WITH NFPA 13, TEST IS TO BE WITNESSED BY REPRESENTATIVE OF AUTHORITIES HAVING JURISDICTION.
16. ALL SHOP DRAWINGS TO BE IN METRIC.

FIRE PROTECTION LEGEND

-----	EXISTING SPRINKLER MAIN
-----	EXISTING SPRINKLER BRANCHLINE
-----	NEW SPRINKLER MAIN
-----	NEW SPRINKLER BRANCHLINE
-----	SPRINKLER PIPING TO BE REMOVED
○	PIPE UP
○	PIPE DOWN
—	PIPE CONTINUATION
—	FLUSHING CONNECTION
POC	POINT OF CONNECTION
POR	POINT OF REMOVAL
●	NEW & EXISTING PENDANT C/W GUARD
●	NEW & EXISTING PENDANT HEAD
●	NEW & EXISTING UPRIGHT HEAD
●	NEW & EXISTING UPRIGHT HEAD C/W GUARD
—	NEW & EXISTING FIRE HOSE CABINET
(e)FE	EXISTING FIRE EXTINGUISHER
N	CHECK VALVE
—	PRE-ACTION SYSTEM

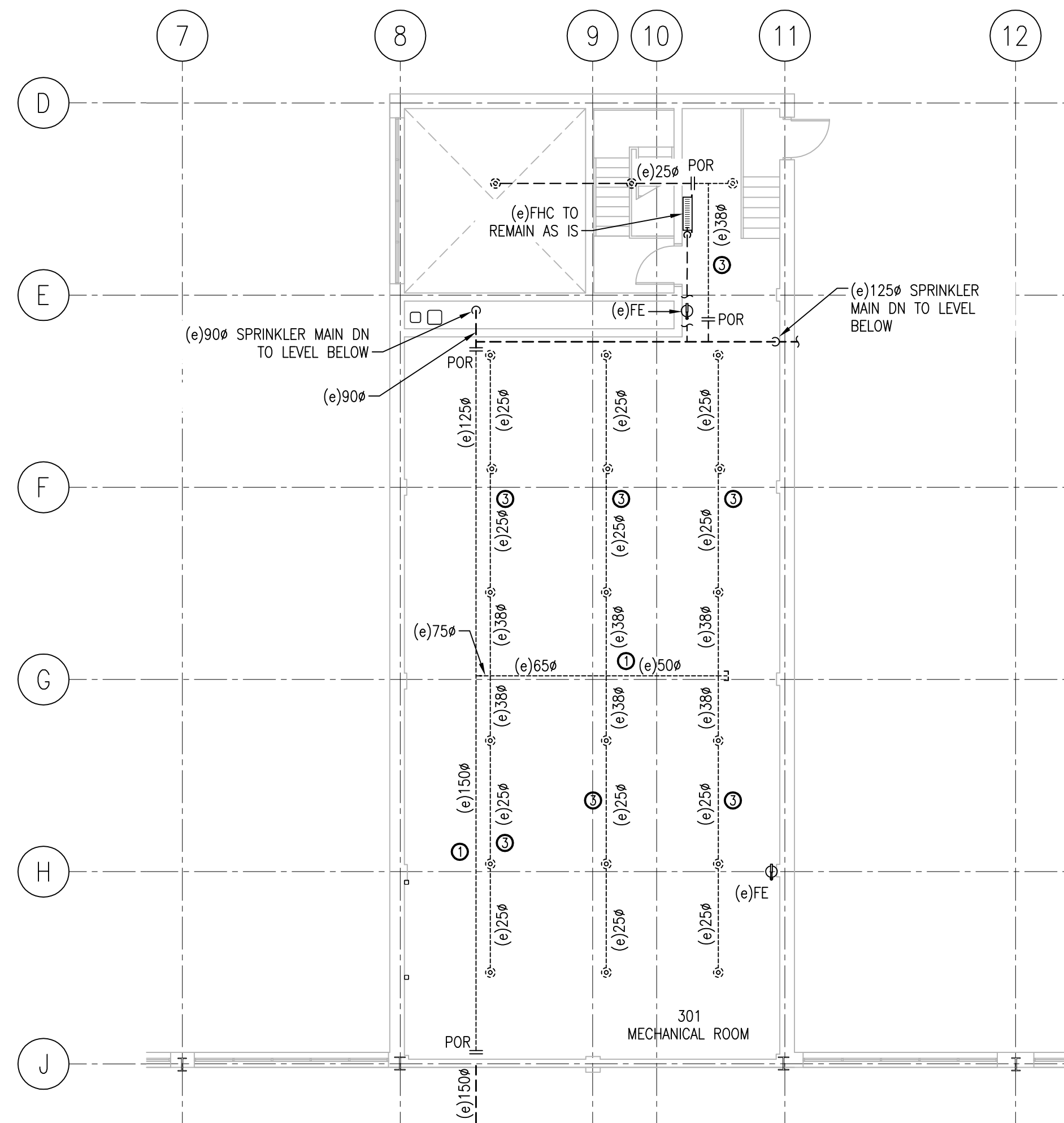
FIRE PROTECTION DEMOLITION NOTES

①	DISCONNECT AND REMOVE EXISTING SPRINKLER MAIN, ALONG WITH ALL ASSOCIATED HANGERS, VALVES, ETC. TO POINTS INDICATED.
②	DISCONNECT AND REMOVE EXISTING BRANCHLINES ALONG WITH ALL ASSOCIATED HANGERS, VALVES, SPRINKLER HEADS, ETC. TO POINTS INDICATED AND CAP.
③	DISCONNECT AND REMOVE EXISTING BRANCHLINES ALONG WITH ALL ASSOCIATED HANGERS, VALVES, SPRINKLER HEADS, ETC. TO POINTS INDICATED AND LEAVE FOR FUTURE CONNECTION.



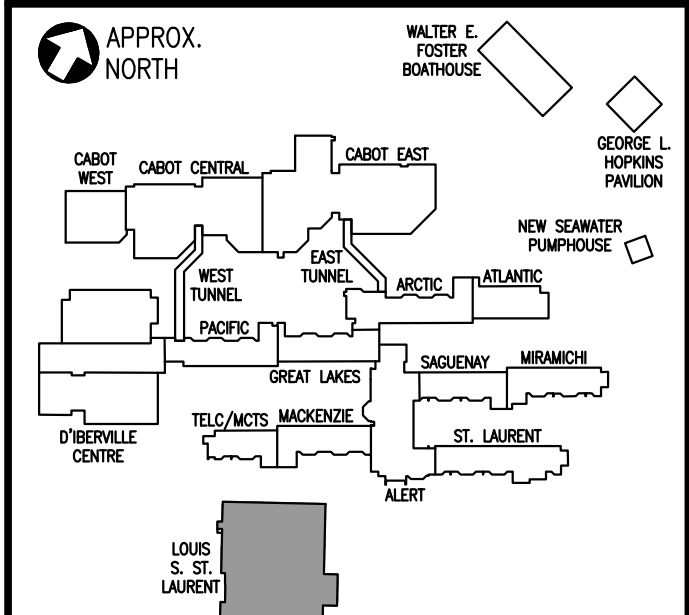
FIRE PROTECTION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100 DEMOLITION

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

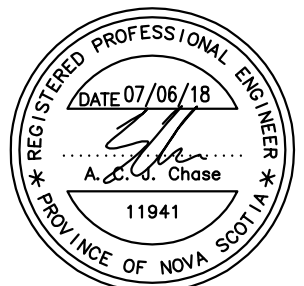


FIRE PROTECTION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 300 DEMOLITION

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m



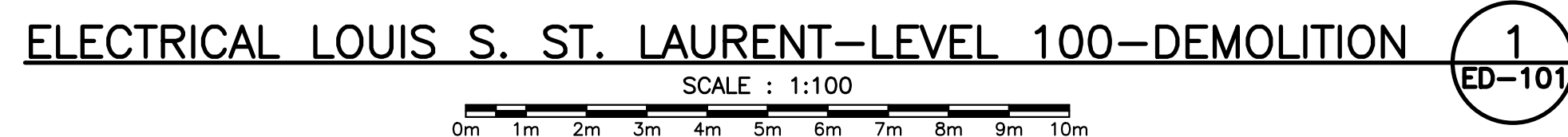
GENERAL NOTES :
DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES.
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	dessein	

**FIRE PROTECTION
LOUIS S. ST. LAURENT
MACHINE SHOP
LEVELS 100 & 300
DEMOLITION**

designed MJM	conçu
date 07/06/18	
drawn CAB	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	
Tender	Submission
Joan Muise	
PW50C Project Manager	Administrateur de projets TP50C
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-FPD-101	



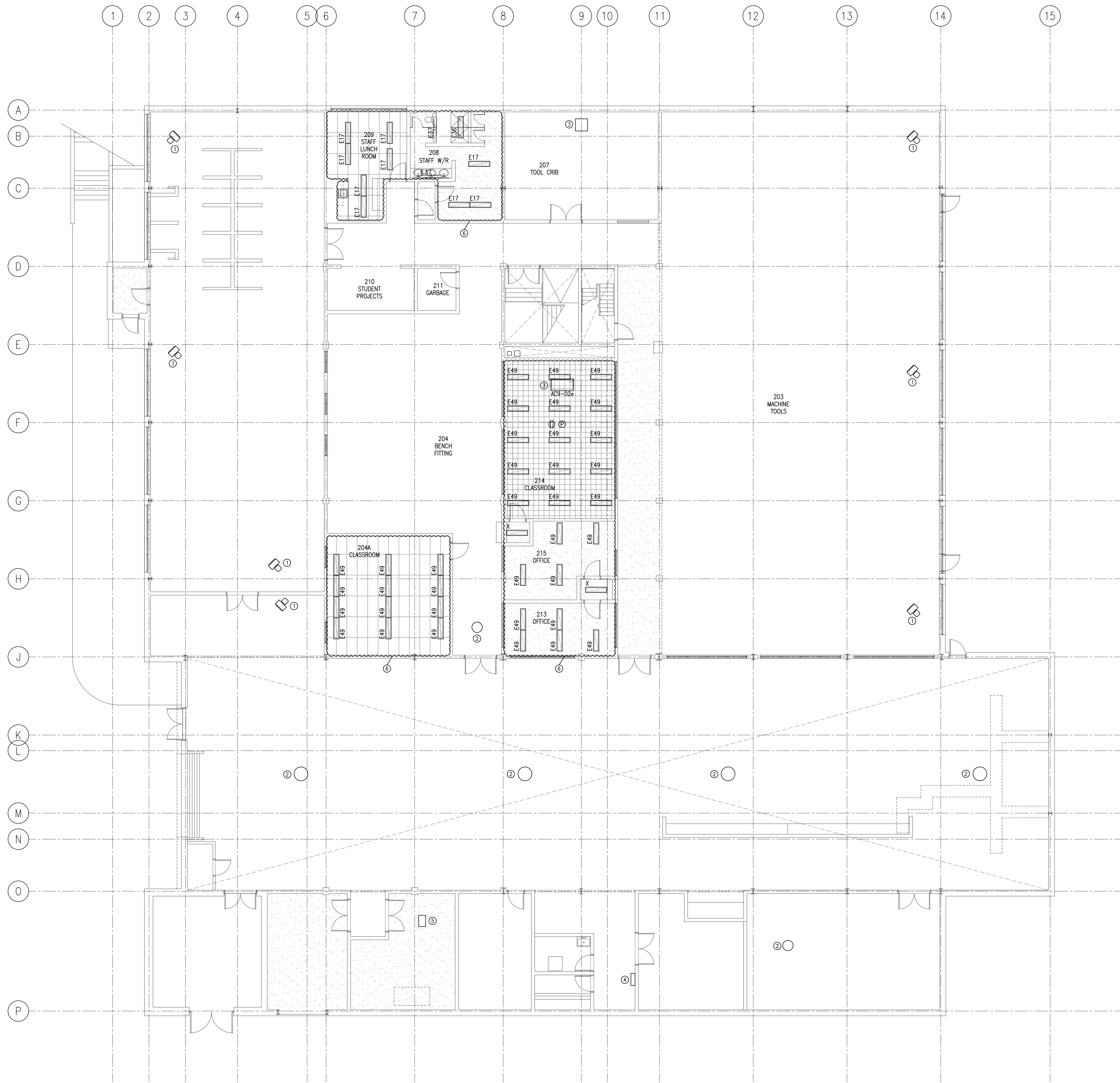
 Public Works and
Government Services
Canada



P:\10-15-127.12 - LSSL MACHINE SHOP\Plot\09 - LSSL MACHINE SHOP\539447-09-ED-101-ELECTRICAL-MACHINE SHOP LEVEL 100 DEMO.dwg Jul 06, 2018 - 8:48am

P:\Vo-E-17112 - LSS - Breakdown\Drawings - LSS - MACHINE SHOP\33447-00-ED-102-ELECTRICAL-MACHINE SHOP-LEVEL 200 DEMO.dwg Jul 06, 2018 - 8:40am

PWGSC B1 (2004)



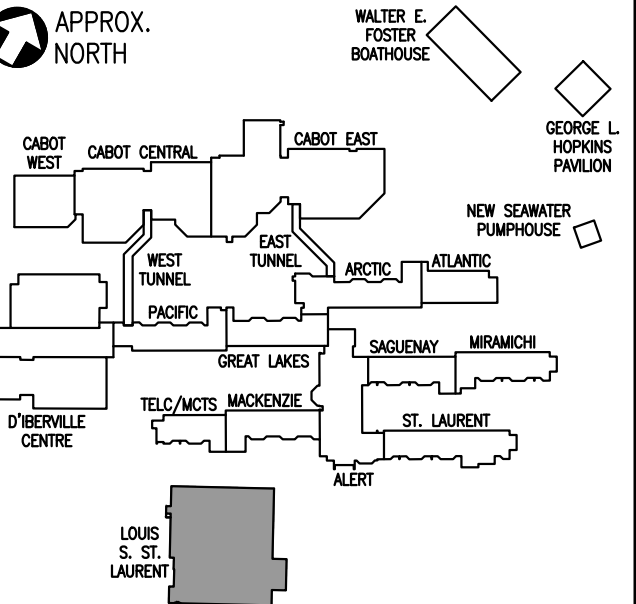
ELECTRICAL LOUIS S. ST. LAURENT-LEVEL 200-DEMOLITION

SCALE : 1:100

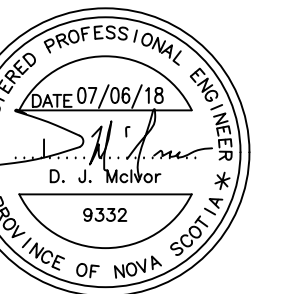
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

1
ED-102

DEMOLITION NOTES	
①	EXISTING CEILING MOUNTED UNIT HEATER TO BE REMOVED. DISCONNECT 120VAC CONNECTION AND WALL MOUNTED TOL SWITCH MOUNTED ADJACENT TO UNIT.
②	EXISTING CEILING MOUNTED VERTICAL UNIT HEATER TO BE REMOVED. DISCONNECT 120VAC CONNECTION AND WALL MOUNTED TOL SWITCH MOUNTED ADJACENT TO UNIT.
③	EXISTING CEILING MOUNTED CABINET HEATER TO BE REMOVED. DISCONNECT 120VAC CONNECTION AND WALL MOUNTED TOL SWITCH MOUNTED ADJACENT TO UNIT.
④	EXISTING WALL MOUNTED CABINET HEATER TO BE REMOVED. DISCONNECT 120VAC CONNECTION AND WALL MOUNTED TOL SWITCH.
⑤	EXISTING EXHAUST FAN TO BE REMOVED. DISCONNECT 120VAC CONNECTION AND DISCONNECT SWITCH.
⑥	CEILING MOUNTED DEVICES HIGHLIGHTED BY CLOUDED AREAS SHALL BE DISCONNECTED, REMOVED AND RE-INSTALLED IN COORDINATION WITH CEILING REMOVALS AND INSTALLATIONS.



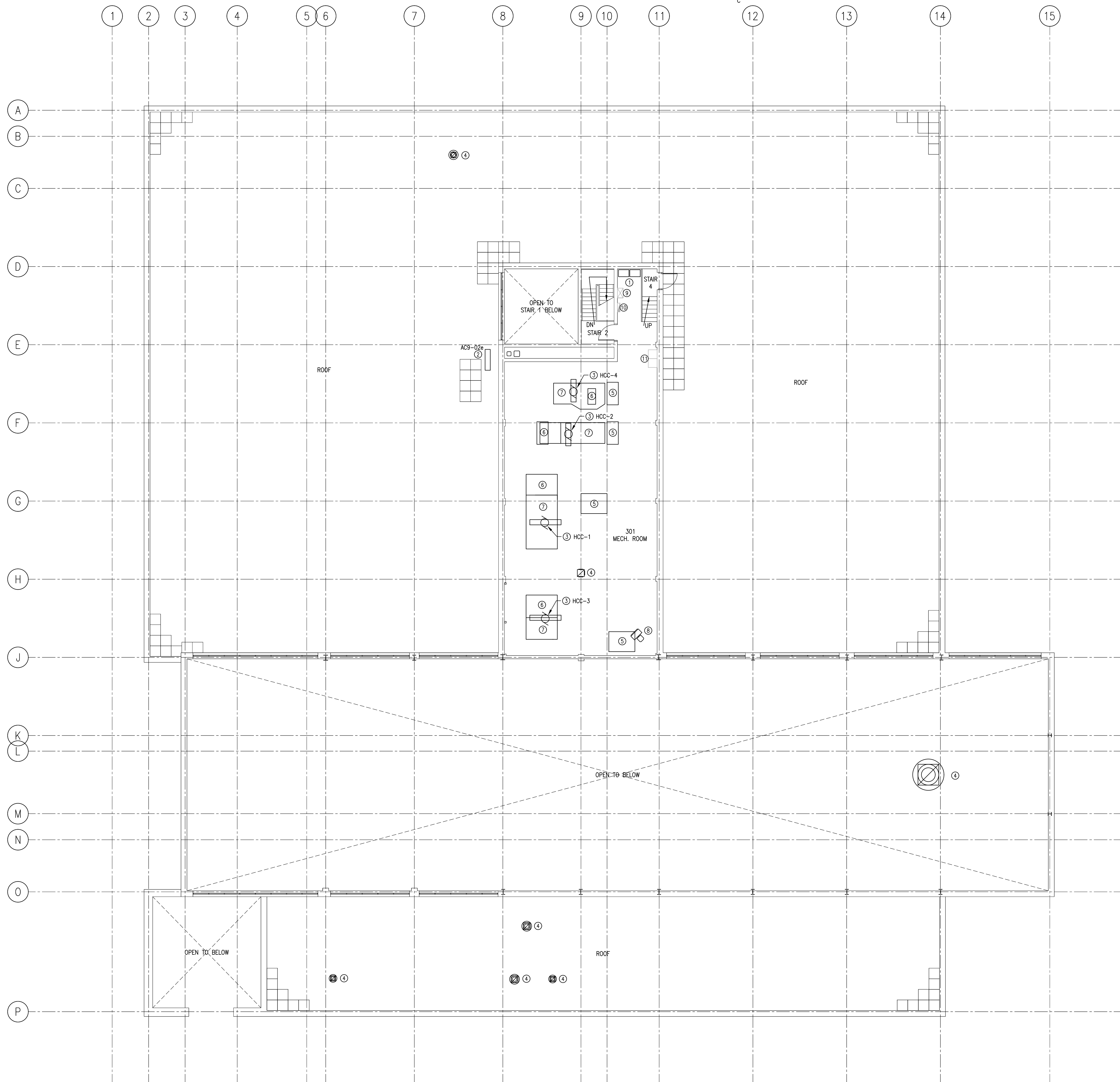
GENERAL NOTES :
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 DEMOLITION	
designed CGN	conçu	
date 07/06/18		
drawn MAS	dessiné	
date 07/06/18		
approved DJM	approuvé	
date 07/06/18		
Tender Joan Muise	Soumission	
PWGSC Project Manager	Administrateur de projets TPSCC	
project number R.065476.710	no. du projet	
drawing no. 09-ED-102	no. du dessin	

P:\Vo-E-17112 - LSS - Brouillette\Proj\08 - LSS - MACHINE SHOP\33M47-09-ED-103-ELECTRICAL MACHINE SHOP-LEDS 300 DEMO.dwg Jul 06, 2018 - 8:40am

PWSSC B1 (2004)

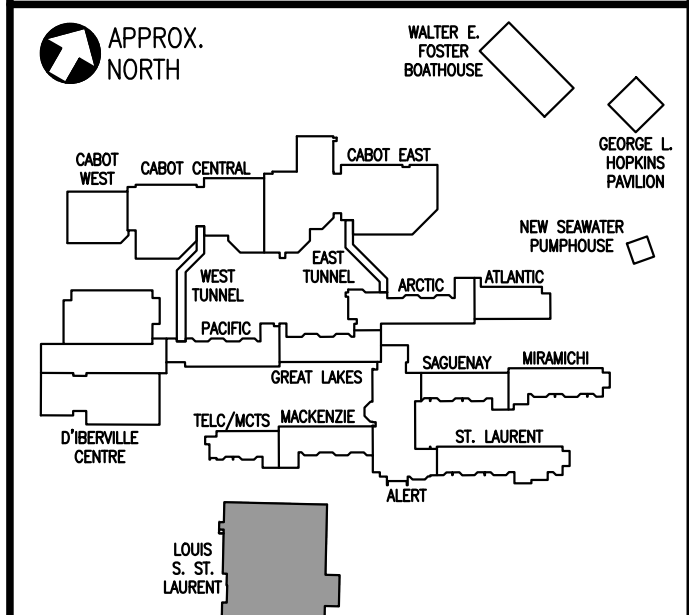


ELECTRICAL LOUIS S. ST. LAURENT-LEVEL 300-DEMOLITION

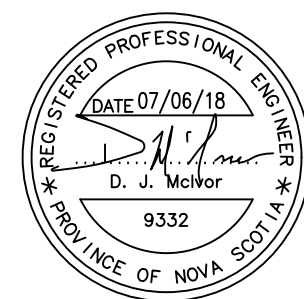
SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

DEMOLITION NOTES

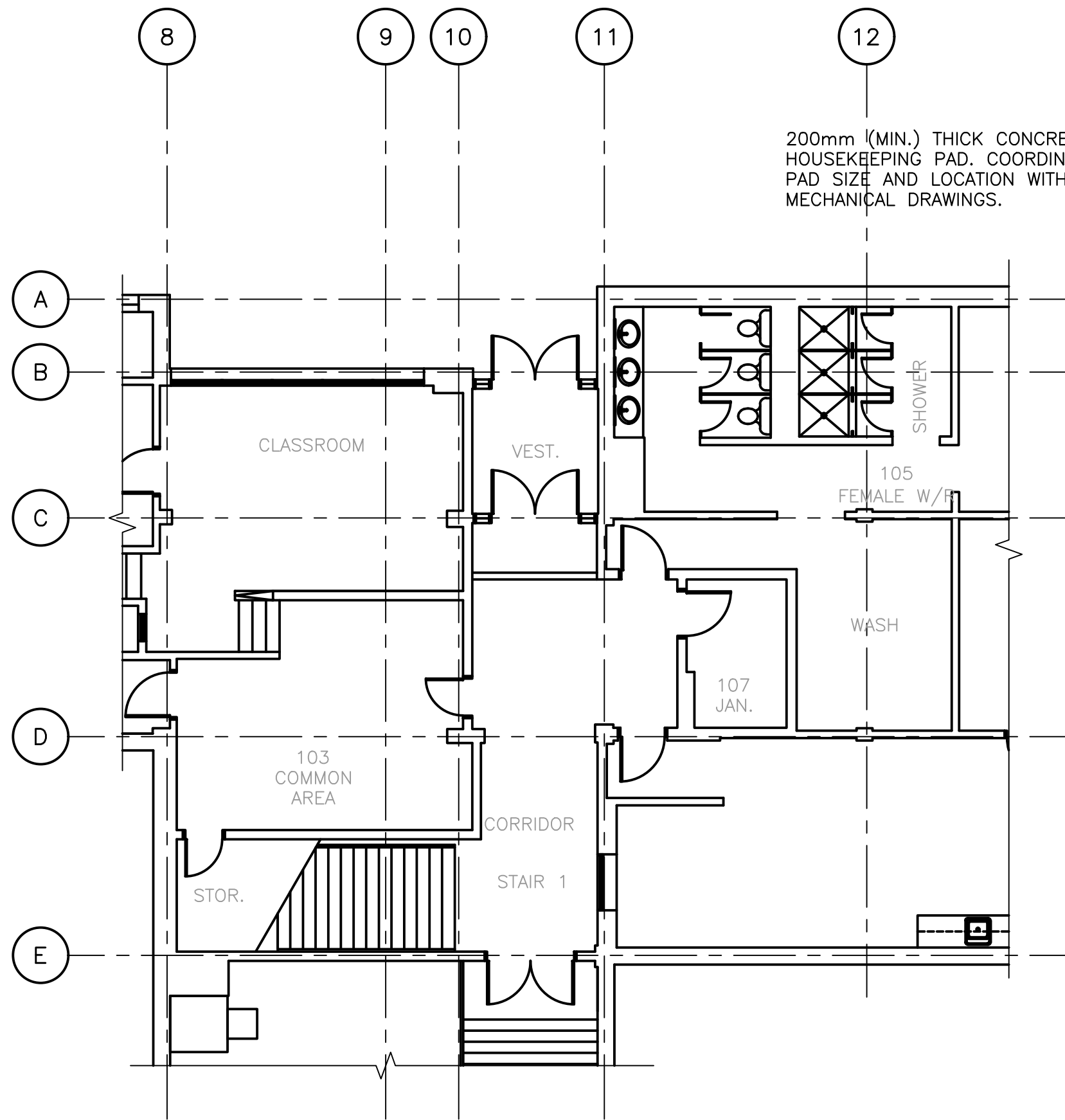
①	EXISTING PNEUMATIC CONTROL PANELS TO BE REMOVED. DISCONNECT 120VAC CONNECTION.
②	EXISTING ROOF MOUNTED CONDENSING UNIT TO BE REMOVED. DISCONNECT 208VAC CONNECTION AND DISCONNECT SWITCH.
③	EXISTING HEATING COIL CIRCULATOR PUMP TO BE REMOVED. DISCONNECT 120VAC CONNECTION AND TOL SWITCH.
④	EXISTING ROOF MOUNTED EXHAUST FAN TO BE REMOVED. DISCONNECT 120VAC OR 600VAC CONNECTION AND DISCONNECT SWITCH.
⑤	EXISTING RETURN FAN TO BE REMOVED. DISCONNECT 600VAC CONNECTION AND DISCONNECT SWITCH.
⑥	EXISTING SUPPLY FAN TO BE REMOVED. DISCONNECT 600VAC CONNECTION AND DISCONNECT SWITCH.
⑦	EXISTING AIR HANDLING UNIT TO BE REMOVED. DISCONNECT 120VAC CONNECTION TO LIGHTS, CONVENIENCE PLUG AND DISCONNECT SWITCH.
⑧	EXISTING CEILING MOUNTED UNIT HEATER TO BE REMOVED. DISCONNECT 120VAC CONNECTION AND TOL SWITCH MOUNTED ADJACENT TO UNIT.
⑨	EXISTING 30kVA 600-120/208V DRY-TYPE TRANSFORMER TO BE REMOVED.
⑩	EXISTING 225A, 120/208V, 3-PHASE, 4-WIRE, 24CCT PANELBOARD "107" TO BE REMOVED.
⑪	EXISTING 100A, 600V, 3-PHASE, 4-WIRE MOTOR CONTROL CENTRE "MCC-2" TO BE REMOVED.



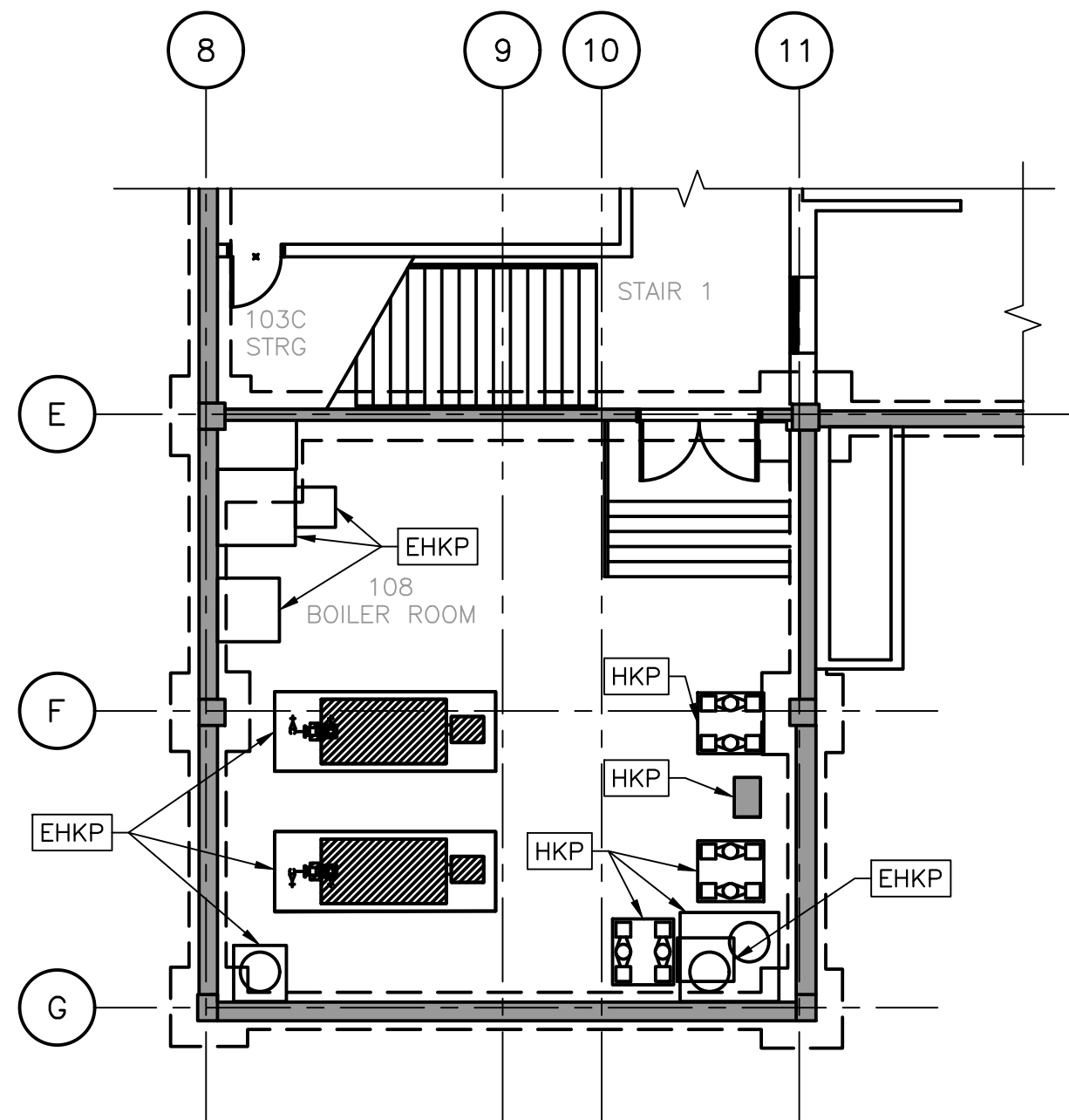
GENERAL NOTES :
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 DEMOLITION	
designed CGN	conçu	
date 07/06/18		
drawn MAS	dessiné	
date 07/06/18		
approved DJM	approuvé	
date 07/06/18		
Tender	Soumission	
Joan Muise PWSSC Project Manager	Administrateur de projets TPSSC	
project number	no. du projet	
	R.065476.710	
drawing no.	no. du dessin	
	09-ED-103	

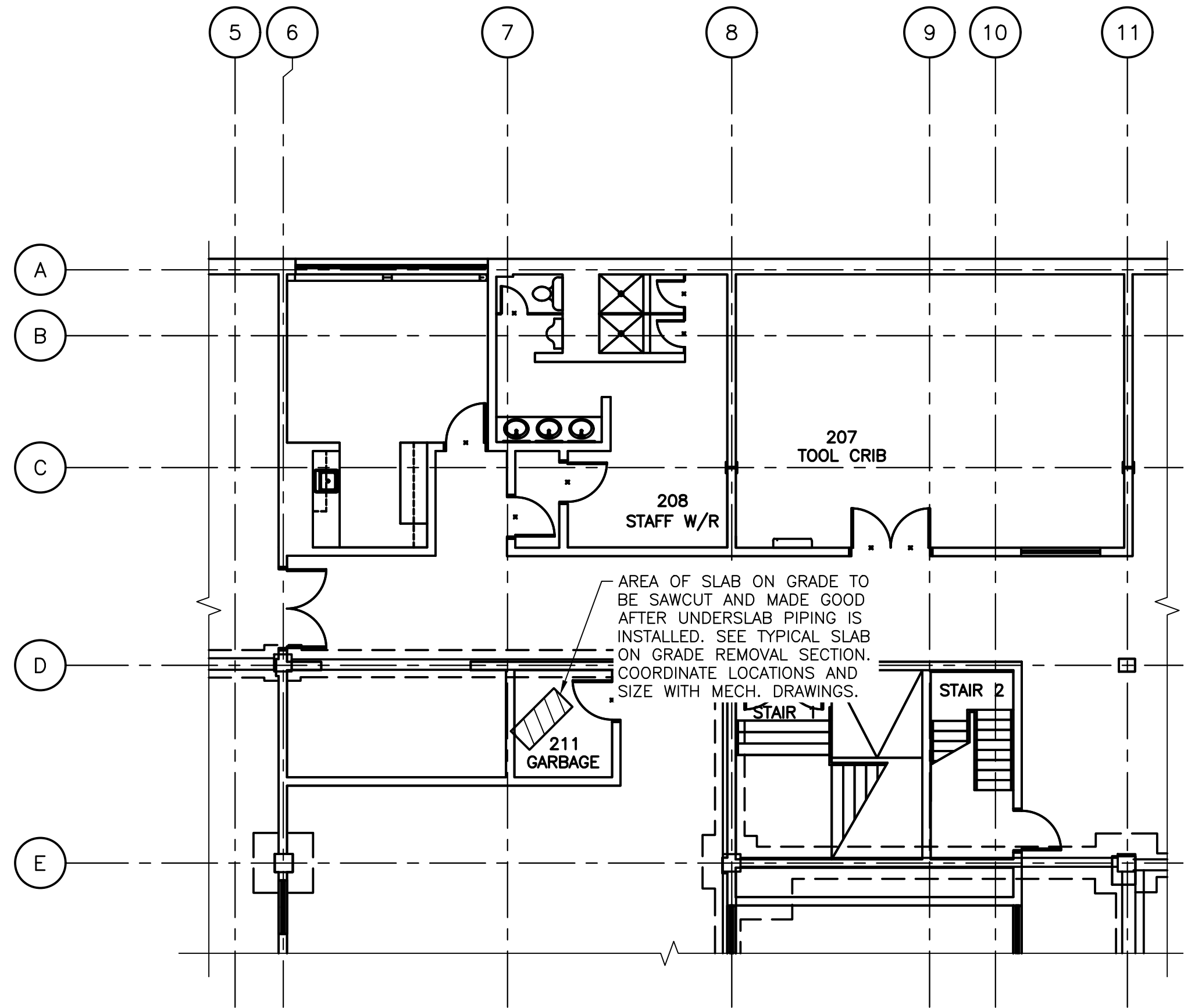
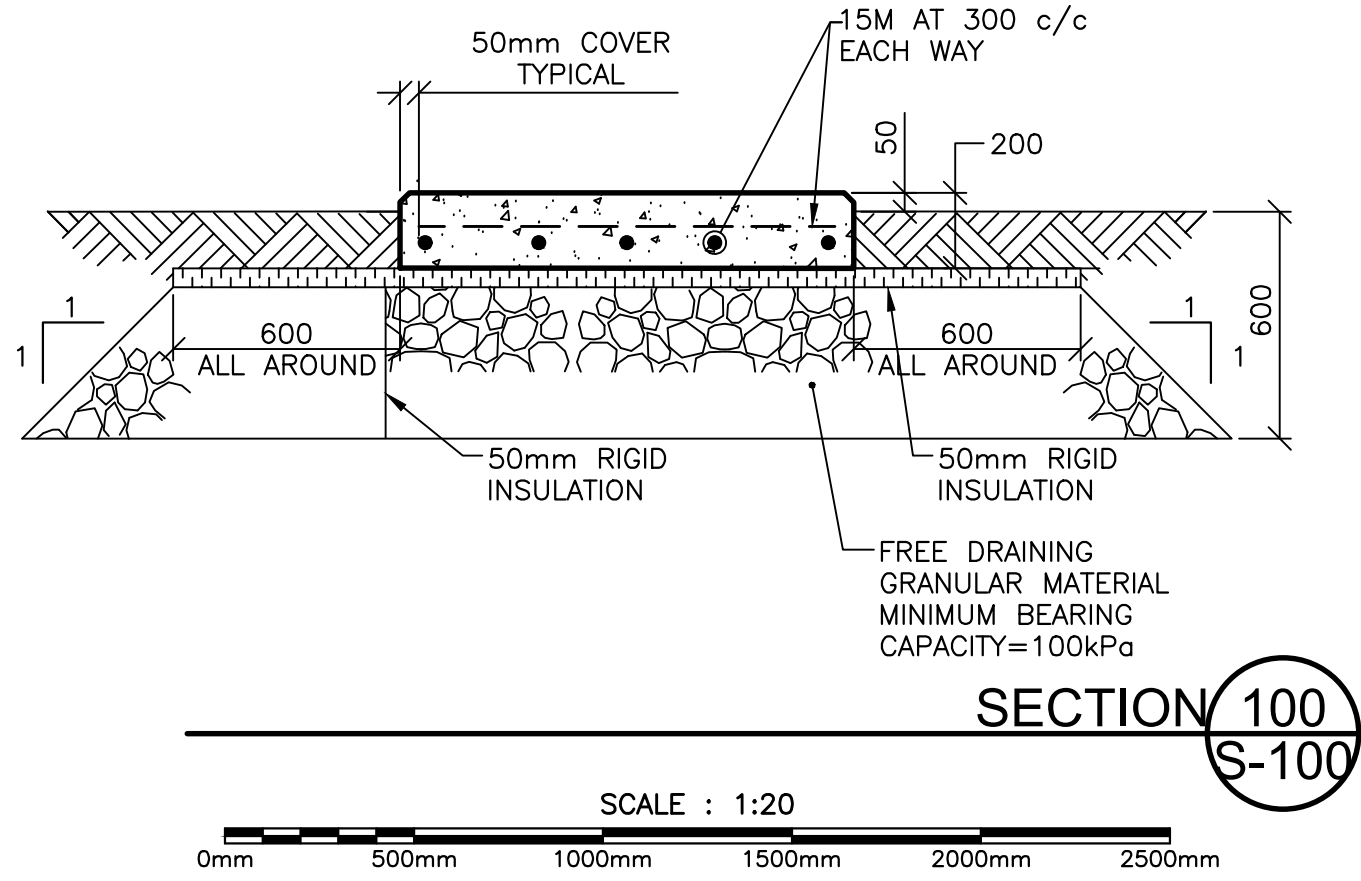


PARTIAL PLAN – LOUIS S. ST. LAURENT MACHINE SHOP
– LEVEL 100
SCALE : 1:100

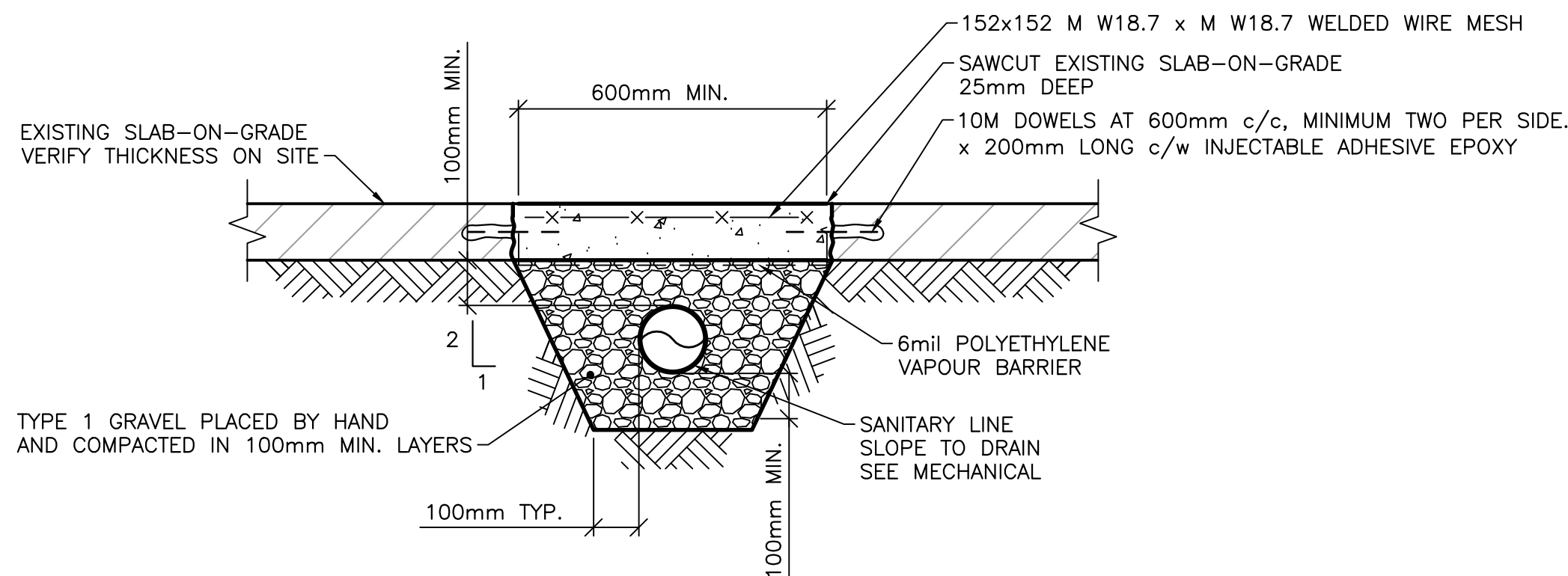


PARTIAL PLAN – LOUIS S. ST. LAURENT MACHINE SHOP
– LEVEL 100 – BOILER ROOM 108
SCALE : 1:100

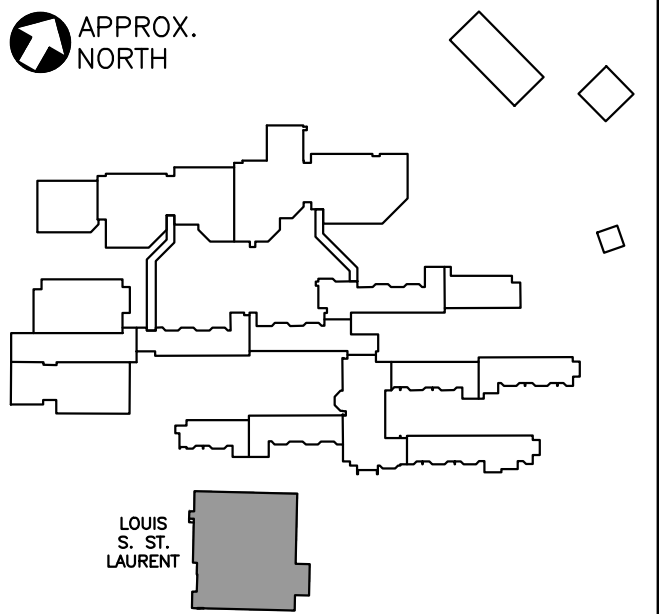
- [HKP]: NEW 100mm THICK HOUSEKEEPING PAD REINFORCED WITH 152x152 MW18.7xMW18.7 WELDED WIRE MESH. COORDINATE PAD LOCATIONS AND SIZES WITH MECHANICAL DRAWINGS.
- [EHKP]: EXISTING HOUSEKEEPING PADS TO BE REMOVED. DO NOT DAMAGE STRUCTURE BELOW. EXISTING SLAB TO BE GROUND SMOOTH FOLLOWING REMOVALS.



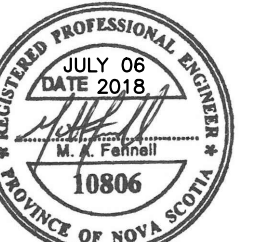
PARTIAL PLAN – LOUIS S. ST. LAURENT MACHINE SHOP
– LEVEL 200
SCALE : 1:100



TYPICAL SLAB ON GRADE REMOVAL
AND REINSTATEMENT SECTION
SCALE : 1:10



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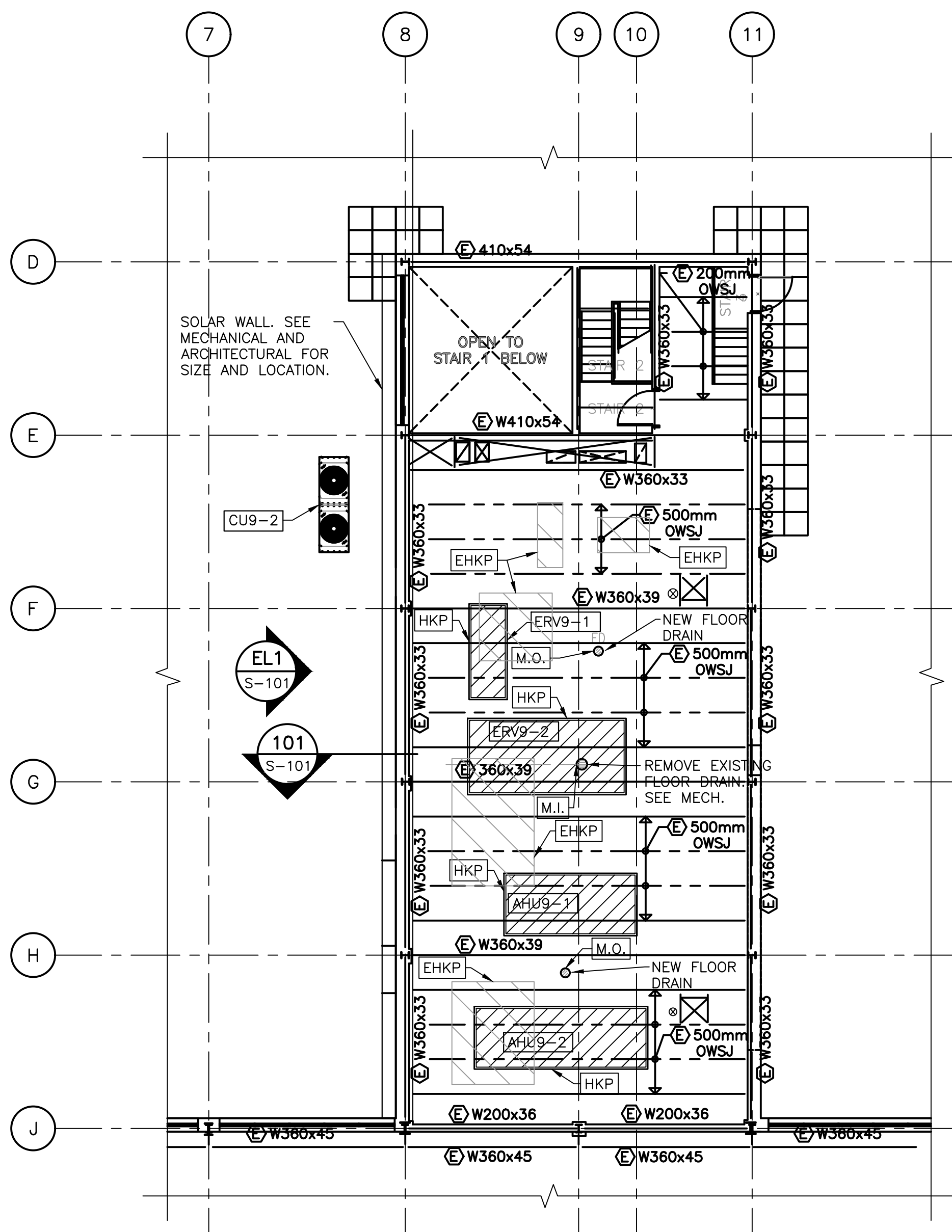


0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	desain	

STRUCTURAL
LOUIS S. ST. LAURENT
MACHINE SHOP
LEVEL 100-200
PARTIAL PLANS

designed M.F.	conçu
date 07/06/18	
drawn STAFF	dessiné
date 07/06/18	
approved M.C.	approuvé
date 07/06/18	
Tender Joan Muise	Submission
PWOSC Project Manager	Administrateur de projets TPSCC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09–S– 100	

Z:\Cdr-Drawing\Canadian Coast Guard College (138163)\09 - Louis St. Laurent Machine Shop\538447-09-S-101 - STRUCTURAL-MACHINE SHOP-LEVEL 300 PLAN, SECTION & DETAILS.dwg Jul 06, 2018 - 11:56am



PARTIAL PLAN - LOUIS S. ST. LAURENT MACHINE SHOP
- LEVEL 300

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

[M.I.] : MECHANICAL INFILLS IN EXISTING STEEL DECK WITH CONCRETE TOPPING. SEE MECHANICAL FOR SIZE AND LOCATION. SEE TYPICAL STEEL DECK WITH CONCRETE TOPPING INFILL DETAIL (CIRCULAR).

[M.O.] : MECHANICAL OPENING THROUGH EXISTING STEEL DECK WITH CONCRETE TOPPING. SEE MECHANICAL FOR SIZE AND LOCATION. SEE CORE DRILL CONCRETE AND CUT STEEL DECK AS REQUIRED.

[HKP] : NEW 100mm THICK HOUSEKEEPING PAD REINFORCED WITH 152x152 MW18.7xMW18.7 WELDED WIRE MESH. COORDINATE WITH MECHANICAL DRAWINGS.

[EHKP] : EXISTING HOUSEKEEPING PADS TO BE REMOVED. DO NOT DAMAGE STRUCTURE BELOW. EXISTING SLAB TO BE GROUND SMOOTH FOLLOWING REMOVALS.

CU9-2 : CONDENSING UNIT
WEIGHT = 475kg

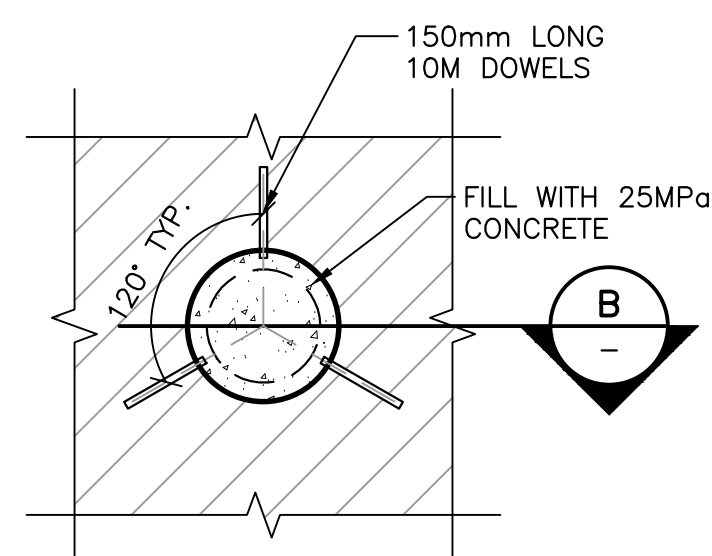
ERV9-1 : ENERGY RECOVERY VENTILATOR
WEIGHT = 480kg

ERV9-2 : ENERGY RECOVERY VENTILATOR
WEIGHT = 2680kg

AHU9-1 : AIR HANDLING UNIT
WEIGHT = 1025kg

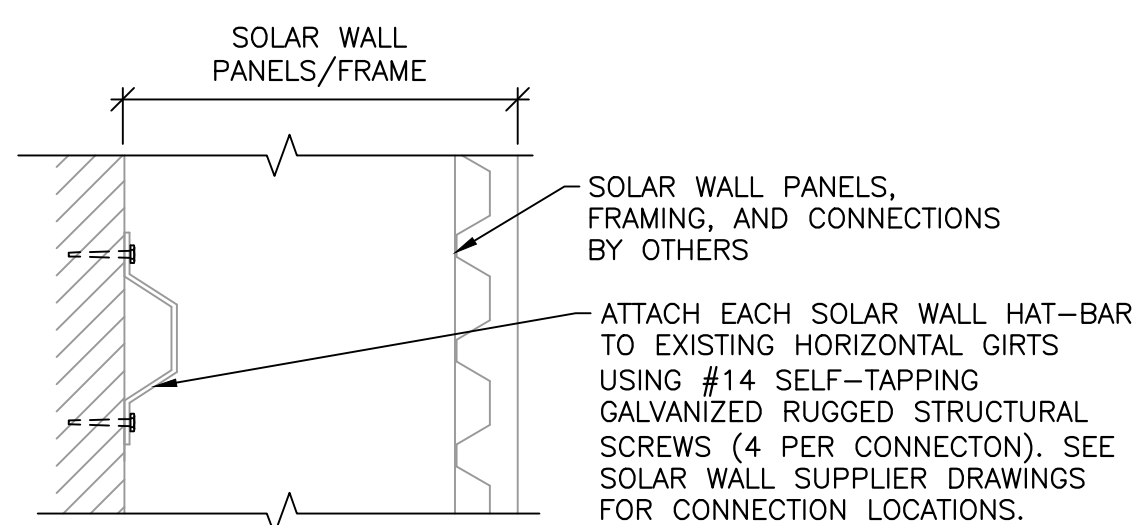
AHU9-2 : AIR HANDLING UNIT
WEIGHT = 1095kg

SOLAR WALL SELF WEIGHT = 19.5kg/m²



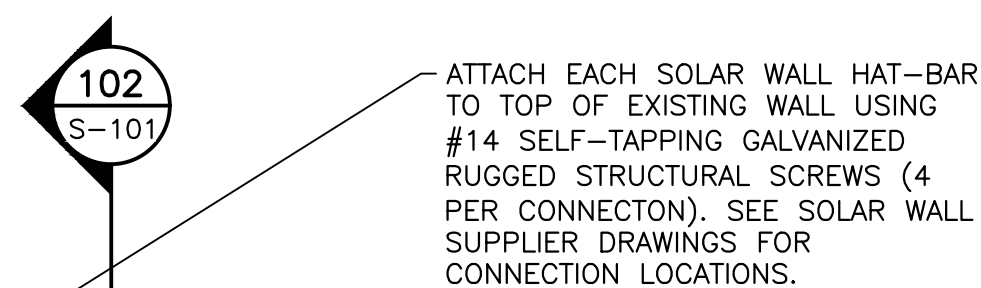
TYPICAL STEEL DECK WITH CONCRETE
TOPPING DETAIL (CIRCULAR)

SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



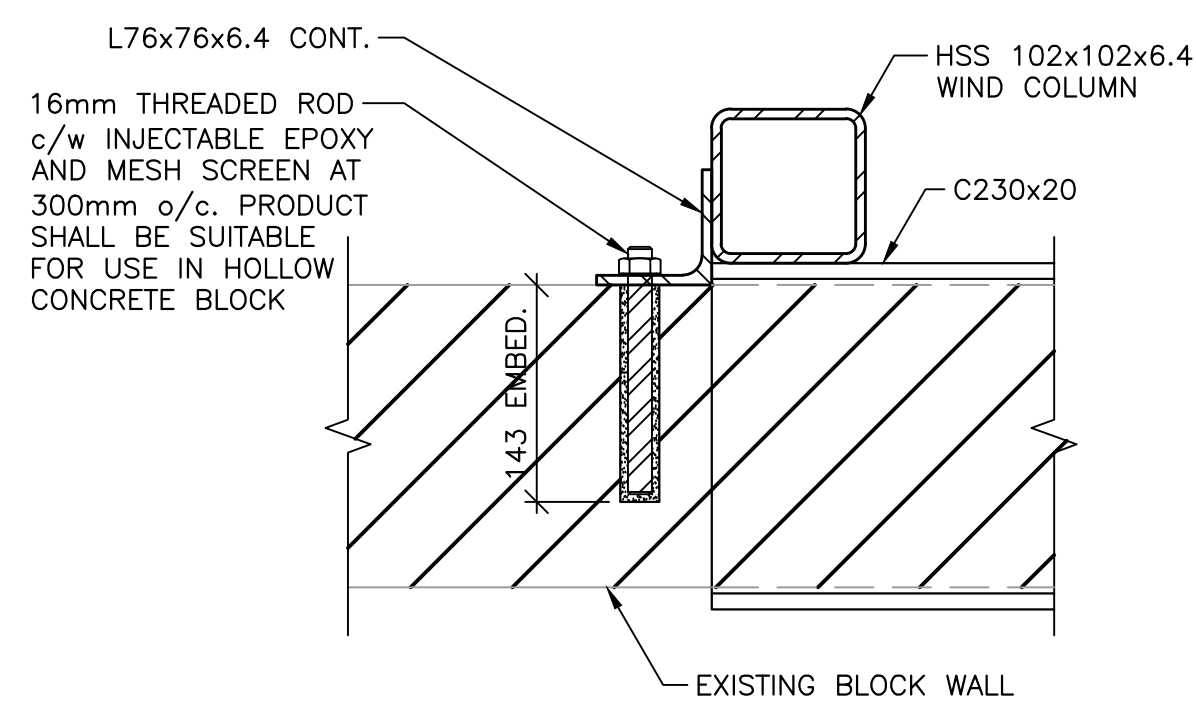
SECTION 102

SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



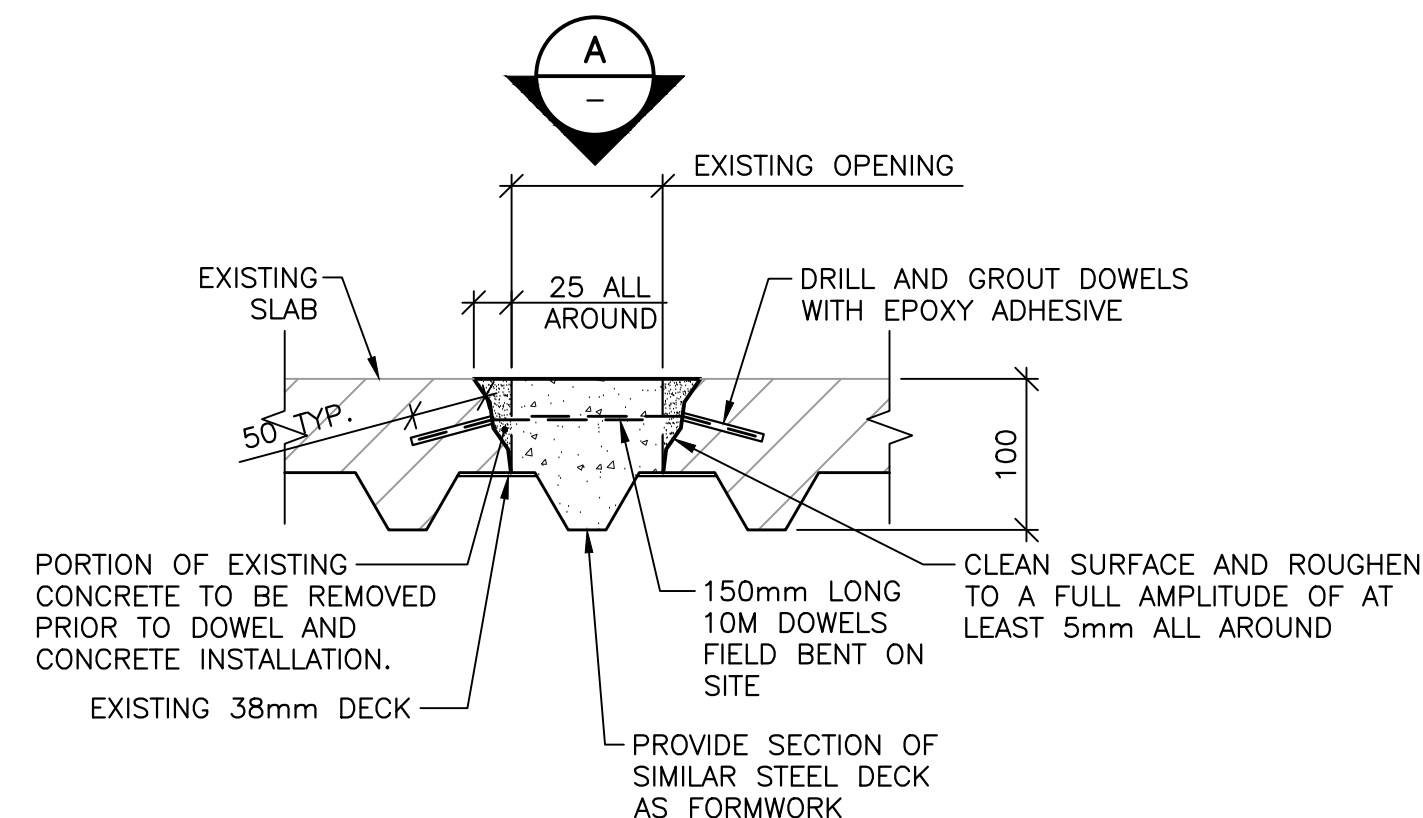
SECTION 101

SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



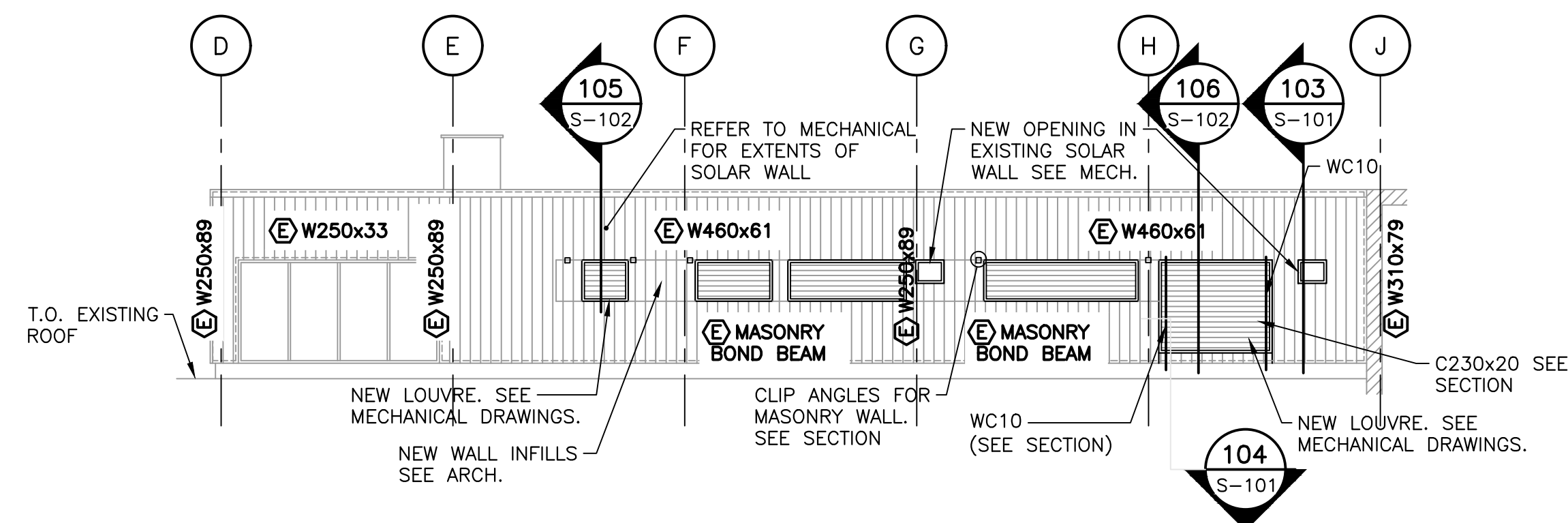
SECTION 104

SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



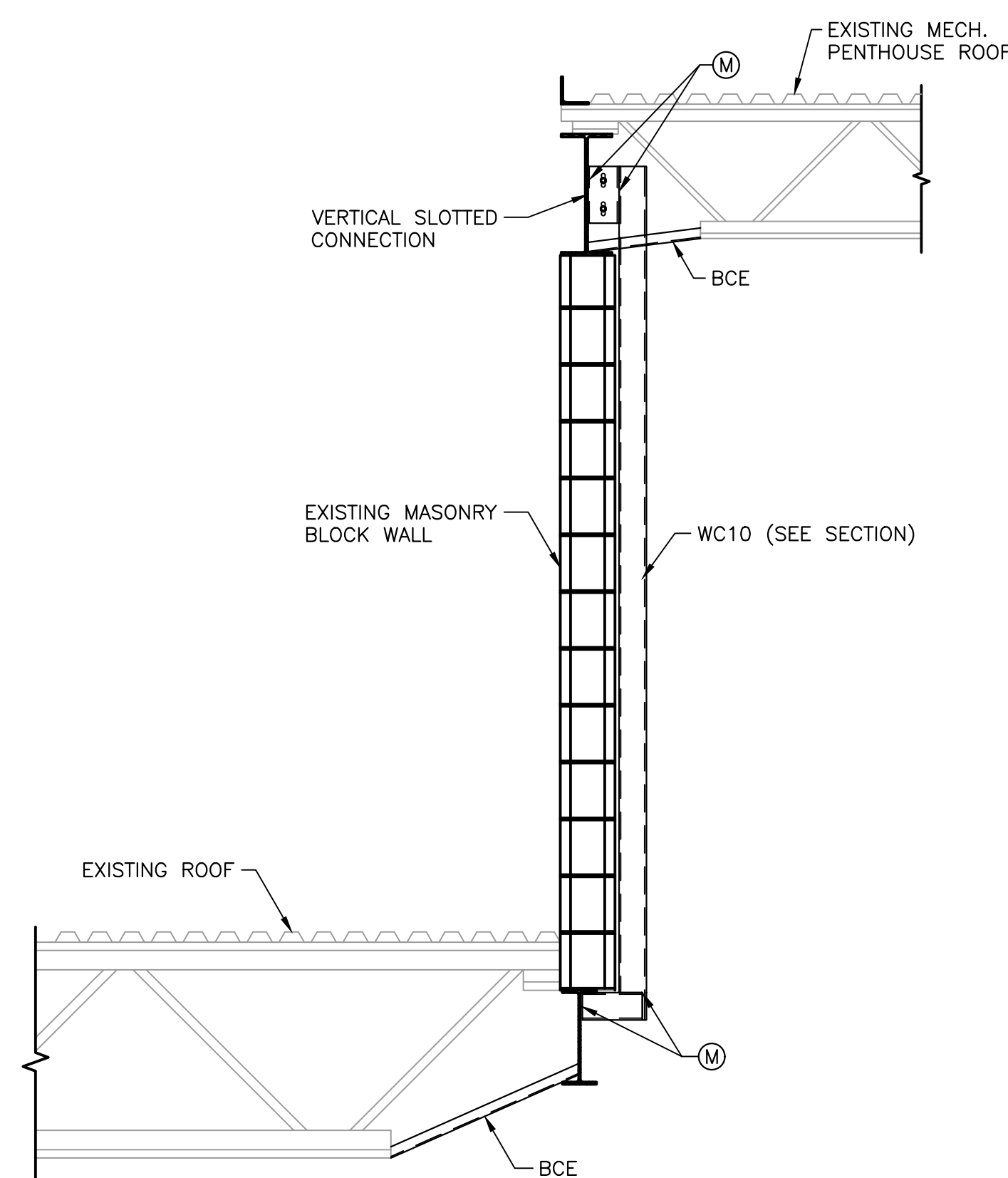
SECTION B

SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



ELEVATION EL1

SCALE: 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

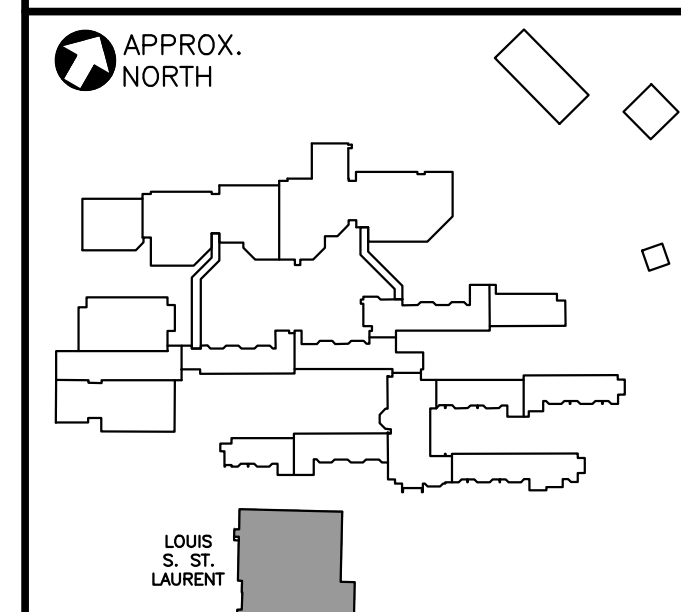


WIND COLUMN SECTION 103

SCALE: 1:20
0mm 500mm 1000mm 1500mm 2000mm 2500mm

BCE: BOTTOM CHORD EXTENSION
2-L38x38x4.8
Af = ±5kips

M: MOMENT CONNECTION M_p = ±5kft



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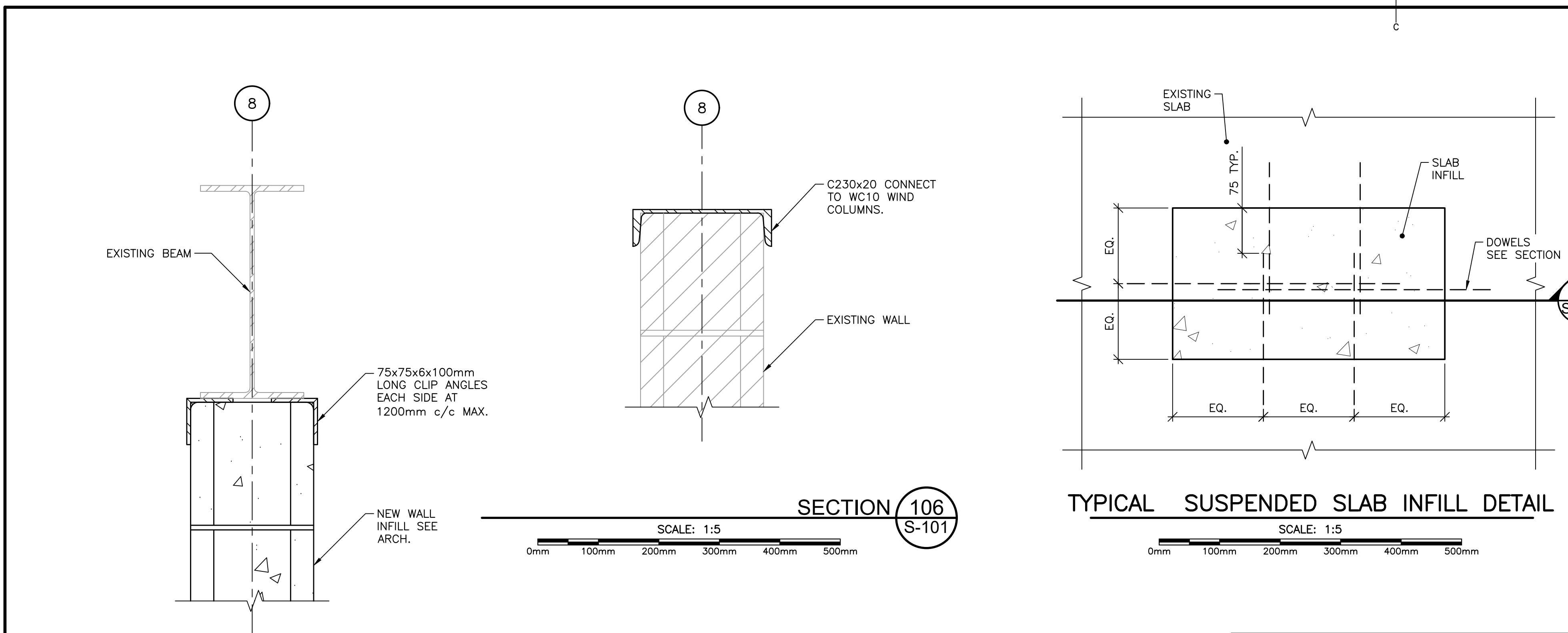


0 Issued for Tender 07/06/18
revisions date
project CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES project

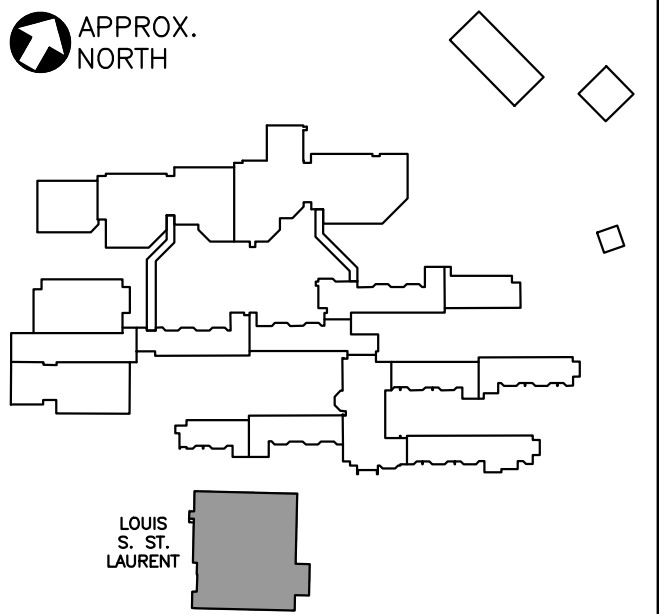
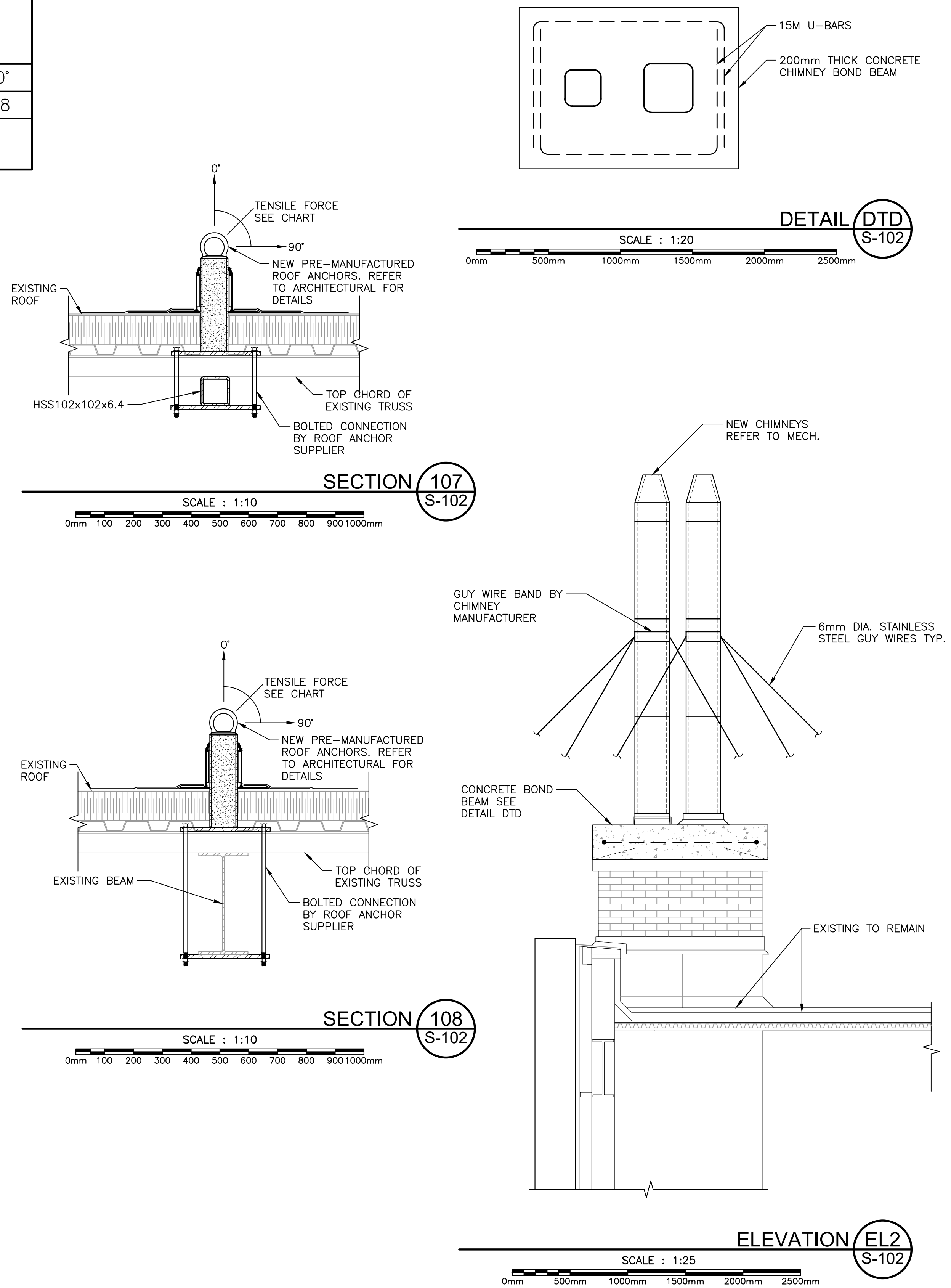
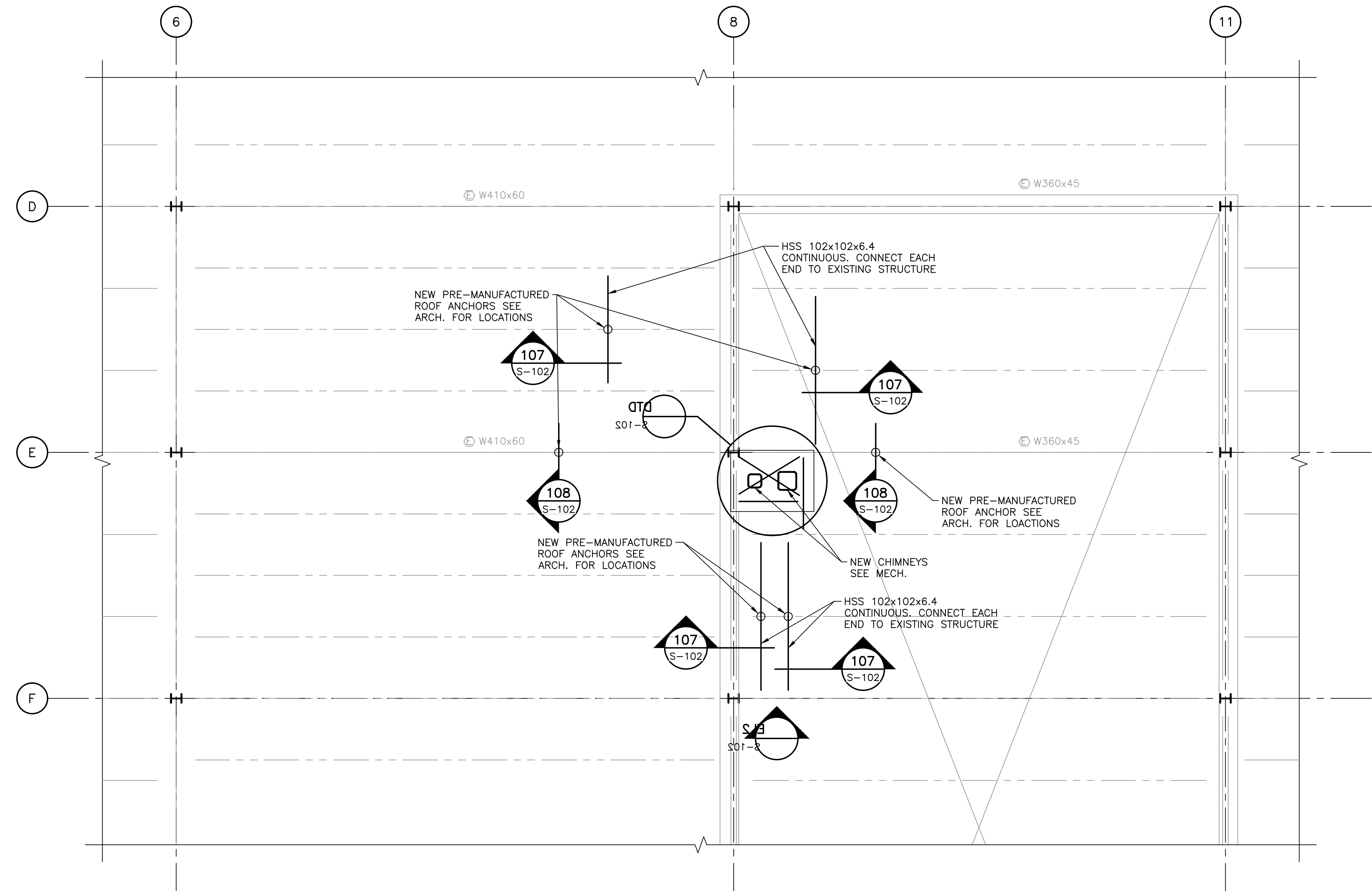
drawing design
STRUCTURAL
LOUIS S. ST. LAURENT
MACHINE SHOP
LEVEL 300 PLAN
SECTIONS & DETAILS

designed M.F. conçu
date 07/06/18
drawn STAFF dessiné
date 07/06/18
approved M.C. approuvé
date 07/06/18
Tender Joan Muise
PWSC Project Manager Administrateur de projets TPSC
project number R.065476.710 no. du projet
drawing no. 09-S-101 no. du dessin

Z:\Cds-Drawing\Cad Canadian Coast Guard College (138161)\09 - Louis St. Laurent Machine Shop\09-S-102-STRUCTURAL-MACHINE SHOP-LEVEL ROOF PLAN, SECTIONS & DETAILS.dwg Jul 06, 2018 - 11:56am



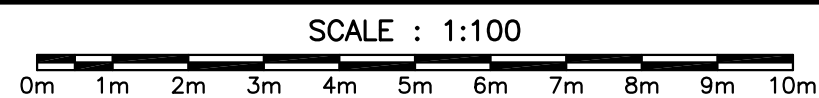
ALLOWABLE TENSILE FORCE (kN)					
0°	30°	45°	60°	90°	
23.1	9.8	6.9	6.5	5.8	
FOR USE IN PRE-MANUFACTURED ROOF ANCHOR SELECTION					

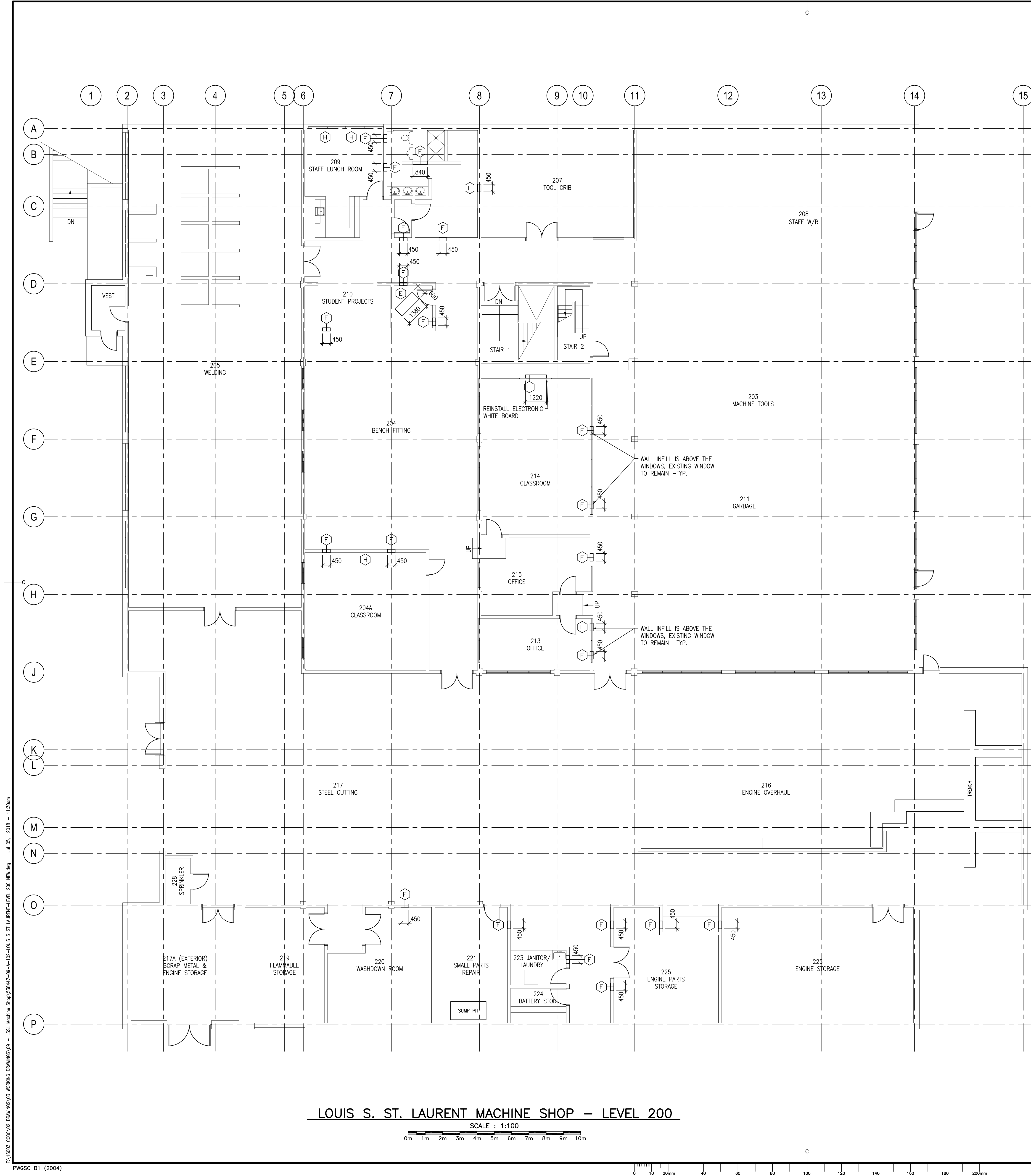


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revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	STRUCTURAL LOUIS S. ST. LAURENT MACHINE SHOP ROOF PLAN SECTIONS & DETAILS	
designed M.F.		conçu
date 07/06/18		
drawn STAFF		dessiné
date 07/06/18		
approved M.C.		approuvé
date 07/06/18		
Tender Joan Muise		Submission
PWOSC Project Manager		Administrateur de projets TPSCC
project number R.065476.710		no. du projet
drawing no. 09-S-102		no. du dessin





LEGEND:

- NON-RATED
- 45 MIN. F.R.R.
- 1 HOUR F.R.R.
- 1.5 HOUR F.R.R.
- 2 HOUR F.R.R.
- PARTITION TYPE - REFER TO SECTIONS ON THIS DRAWING
- NEW WALL INFILL AND OR REPAIR - REFER TO PARTITION TYPES AND NEW CONSTRUCTION NOTES.

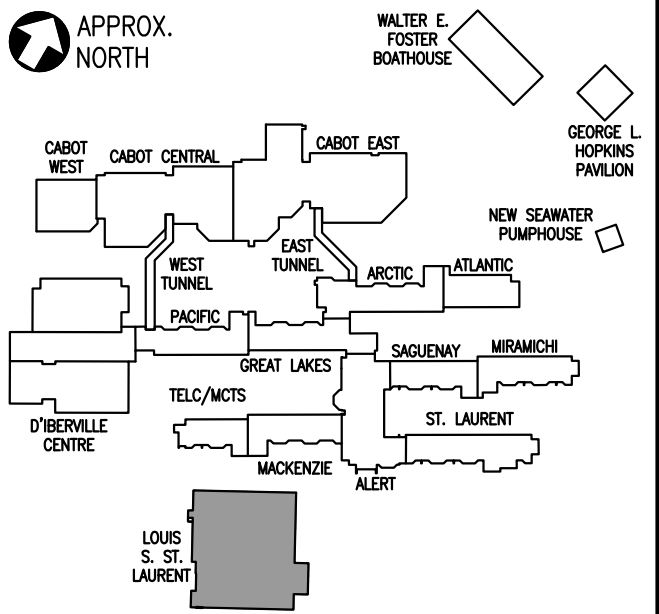
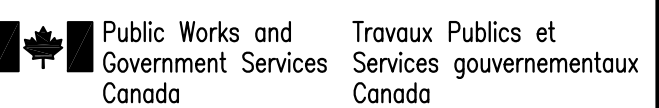
NOTE: ALL PENETRATIONS THROUGH FIRE SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.

GENERAL NOTES:

- PROTECT ALL EXISTING WALLS, FLOORS AND CEILINGS FROM DAMAGE DURING DEMOLITION.
- REPAIR AND MAKE GOOD ANY WALLS, FLOORS AND CEILINGS DAMAGED DURING DEMOLITION -MATCH EXISTING ADJACENT FINISH.
- ALL REPAINTING TO INCLUDE REPAINTING ALL REPAIR AREAS -MATCH EXISTING ADJACENT FINISH.
- REPAINTING WORK SHALL INCLUDE THE ENTIRE WALL SURFACE TO ENSURE CONTINUITY OF APPEARANCE. -MATCH EXISTING ADJACENT FINISH.
- ALL REPAINTING WORK SHALL COMPLY WITH MPI LATEST ADDITION -REFER TO SPECIFICATION.

NEW CONSTRUCTION NOTES:

- NOTES:
- ALL PENETRATIONS THROUGH FIRE SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.
 - ALL ITEMS IN THE LEGEND MAY NOT APPEAR ON THE DRAWING, ONLY THOSE ITEMS THAT APPLY WILL BE SHOWN ON THE FLOOR PLAN.
- A WHERE EXISTING MECHANICAL PIPING OR DUCTWORK HAS BEEN REMOVED FROM THE INTERIOR SIDE OF AN EXISTING EXTERIOR WALL, REINSTATE THE EXTERIOR WALL ASSEMBLY
- INSTALL NEW INSULATION TO COMPLETELY FILL THE CAVITY
 - INSTALL NEW VAPOUR BARRIER AND COMPLETELY SEAL TO THE EXISTING VAPOUR BARRIER
 - INSTALL 1 LAYER OF 12.7mm GYPSUM BOARD TO MATCH THE EXISTING ADJACENT
 - ANY FLOOR BASES AFFECTED DURING DEMOLITION TO BE REPLACED TO MATCH EXISTING
 - PAINT WALLS AFFECTED BY DEMOLITION TO MATCH EXISTING
- B WHERE EXISTING MECHANICAL PIPING OR DUCTWORK HAS BEEN REMOVED FROM THE EXISTING EXTERIOR WALL, REINSTATE THE EXTERIOR WALL ASSEMBLY
- INSTALL NEW CEDAR SIDING BY, WEAVING THE NEW CEDAR SIDING INTO THE EXISTING
 - INSTALL NEW BUILDING PAPER TIED INTO THE EXISTING BUILDING PAPER
 - NEW PLYWOOD SHEATHING, THICKNESS TO MATCH THE EXISTING ADJACENT
 - INSTALL NEW INSULATION TO COMPLETELY FILL THE CAVITY
 - INSTALL NEW VAPOUR BARRIER AND COMPLETELY SEAL TO THE EXISTING VAPOUR BARRIER
 - INSTALL 1 LAYER OF 12.7mm GYPSUM BOARD TO MATCH THE EXISTING ADJACENT
 - ANY FLOOR BASES AFFECTED DURING DEMOLITION TO BE REPLACED TO MATCH EXISTING
 - PAINT WALLS AFFECTED BY DEMOLITION TO MATCH EXISTING
- C REINSTATE EXISTING WOOD HANDRAIL, USE WOOD PLUGS TO COVER FASTENERS.
- D NEW WOOD HANDRAIL IN PLACE OF REMOVED MECHANICAL CABINET TO MATCH EXISTING ADJACENT, USE WOOD PLUGS TO COVER FASTENERS.
- E NEW FLOOR INFILL, MATCH FINISH OF EXISTING ADJACENT FLOOR FINISH. -REFER TO STRUCTURAL DRAWINGS FOR CONSTRUCTION.
- F PROVIDE CONCRETE BLOCK INFILL IN EXISTING WALL, MATCH EXISTING ADJACENT -REFER TO LEGEND FOR REQUIRED F.R.R.
- G PROVIDE NEW F.R.R. FIRE EXTINGUISHER CABINET IN EXISTING WALL -REFER TO MECHANICAL DRAWINGS FOR SIZE.
- H NEW WALL MOUNTED BASEBOARD RADIANT HEATERS, REFER TO PARTITION TYPE 8 (FLOOR / WALL MOUNTED) TYPE 12 (WALL / CEILING MOUNTED) FOR PATCH AND REPAIR REQUIREMENTS PRIOR TO INSTALLATION OF NEW HEATERS -REFER TO MECHANICAL DRAWINGS. NOT USED
- I NEW CONCRETE BLOCK WALL FULL HEIGHT, MATCH EXISTING THICKNESS OF CONCRETE BLOCK
- REFER TO LEGEND FOR REQUIRED F.R.R.
 - PAINT WALLS AFFECTED BY DEMOLITION TO MATCH EXISTING
- K NEW SHAFT WALL, FULL HEIGHT
- 12.7mm GYPSUM BOARD FULL HEIGHT
 - 92 METAL STUDS AT 400 O.C.
- L NEW MECHANICAL DUCT ON EXISTING ROOF CURB, ENSURE ROOF MEMBRANES ARE FLASHED INTO NEW MECHANICAL DUCTWORK TO CREATE A WEATHERPROOF SEAL. -REFER TO MECHANICAL DRAWINGS
- M REPAIR AND MAKE GOOD EXISTING ROOF WHERE EXISTING MECHANICAL DUCTS HAVE BEEN REMOVED, ENSURE CONTINUITY OF ROOF MEMBRANES TO CREATE A WEATHERPROOF SEAL.
- N NEW MECHANICAL DUCT ON NEW ROOF CURB, ENSURE ROOF MEMBRANES ARE FLASHED INTO NEW MECHANICAL DUCTWORK TO CREATE A WEATHERPROOF SEAL. -REFER TO MECHANICAL DRAWINGS



GENERAL NOTES :

DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES.

USE DIMENSIONS AS NOTED.

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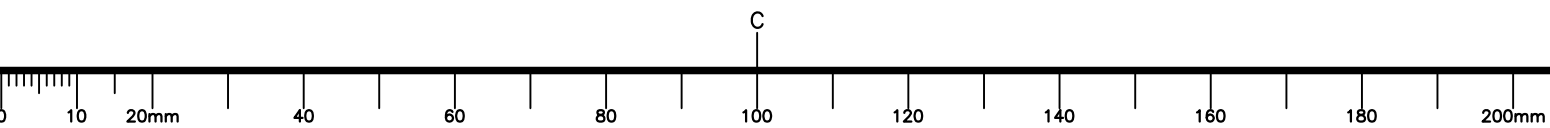
INFORMATION ON THESE DRAWINGS IS TO BE USED FOR THIS PROJECT ONLY AND SHALL NOT BE USED FOR ANY OTHER PURPOSE.

0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	
drawing	design	

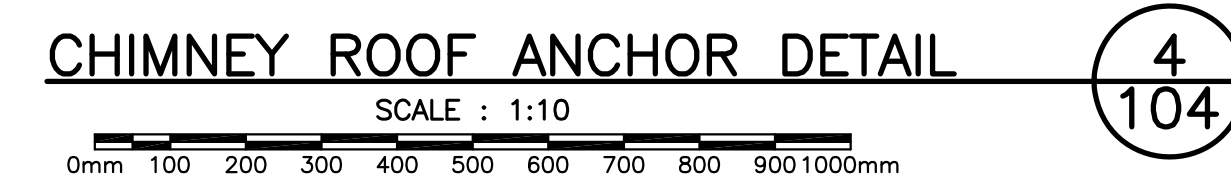
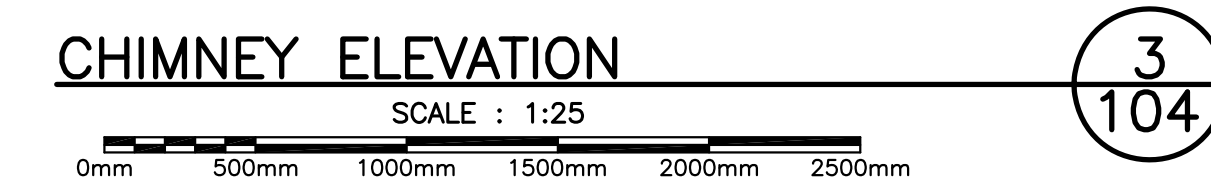
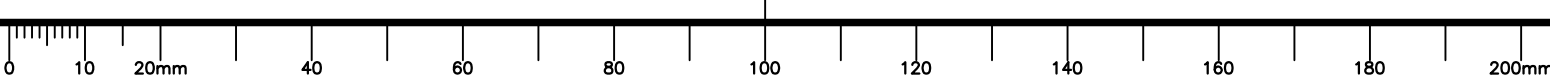
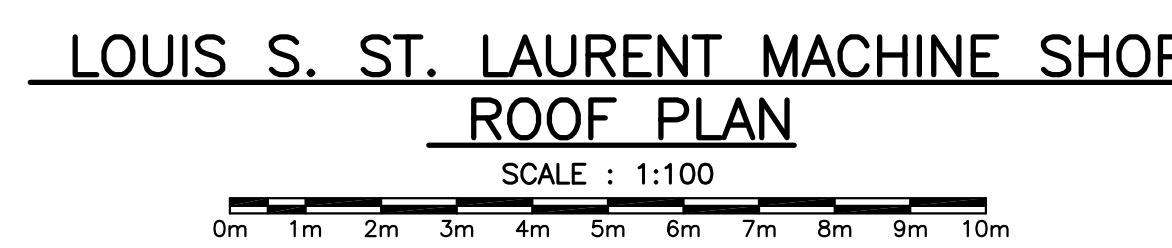
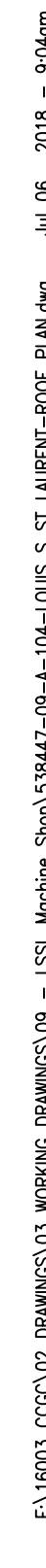
LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200

NEW FLOOR PLAN


designed LLA	conçu
date 07/06/18	
drawn LLA	dessiné
date 07/06/18	
approved LLA	approuvé
date 07/06/18	
Tender	Soumission
Joan Muise	
PWSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-A-102	



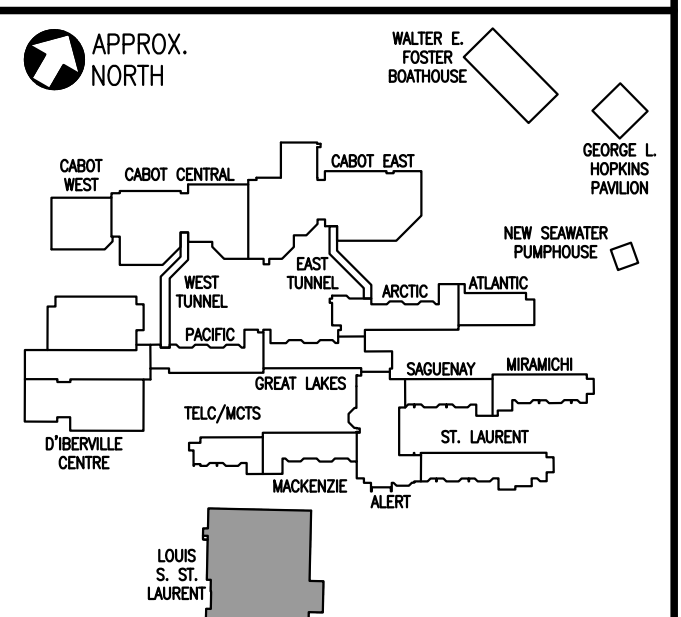




GENERAL NOTES:	
1.	PROTECT ALL EXISTING WALLS, FLOORS AND CEILINGS FROM DAMAGE DURING DEMOLITION.
2.	REPAIR AND MAKE GOOD ANY WALLS, FLOORS AND CEILINGS DAMAGED DURING DEMOLITION –MATCH EXISTING ADJACENT FINISH.
3.	ALL REPAINTING TO INCLUDE REPAINTING ALL REPAIR AREAS –MATCH EXISTING ADJACENT FINISH.
4.	REPAIRMENT WORK SHALL INCLUDE THE ENTIRE WALL SURFACE TO ENSURE CONTINUITY OF APPEARANCE. –MATCH EXISTING ADJACENT FINISH.
5.	ALL REPAIRMENT WORK SHALL COMPLY WITH MPI LATEST ADDITION –REFER TO SPECIFICATION.

 Public Works and
Government Services
Canada

Travaux Publics et
Services gouvernementaux
Canada



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LYDON LYNCH

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1668 Barrington Street, 4th Floor
Halifax, Nova Scotia B3J 2A2
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Fax: (902) 422-1449



GENERAL NOTES :

DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES.
USE FIGURED DIMENSIONS AS NOTED.

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PURPOSE.

0	Issued for Tender	07/06/18
revisions		date
project	project	
<p align="center">CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES</p>		
drawing	dessin	
<p align="center">LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 NEW ROOF PLAN SECTIONS AND DETAILS</p>		
designed	LLA	conçu
date	07/06/18	
drawn	LLA	dessiné
date	07/06/18	
approved	LLA	approuvé
date	07/06/18	
Tender	Soumission	
Joan Muise	PWSCS Project Manager Administrateur de projets TPSCG	
project number	no. du projet	
<p align="center">R.065476.710</p>		
drawing no.	no. du dessin	
<p align="center">09-A-104</p>		

E:\10002_0200200 DRAWINGS\03 WORKING DRAWINGS\09 - LSS - Machine Shop\158447-09-A-105-LOUIS S. ST. LAURENT RPT-LEVEL 100 NEW.dwg Jul 05, 2018 - 11:30am



LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

LEGEND:

- EXISTING CEILINGS TO REMAIN
- NEW SUSPENDED T-BAR CEILING
- NEW SUSPENDED INSULATED GYPSUM BOARD CEILING
- NEW GYPSUM BOARD CEILING AND OR BULKHEAD
- NON-RATED
- 45 MIN. F.R.R.
- 1 HOUR F.R.R.
- 1.5 HOUR F.R.R.
- 2 HOUR F.R.R.

NOTE: ALL PENETRATIONS THROUGH FIRE SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.

NOTE: REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURES, REFER TO MECHANICAL DRAWINGS FOR DIFFUSERS AND SPRINKLERS

GENERAL NOTES:

- PROTECT ALL EXISTING WALLS, FLOORS AND CEILINGS FROM DAMAGE DURING DEMOLITION.
- REPAIR AND MAKE GOOD ANY WALLS, FLOORS AND CEILINGS DAMAGED DURING DEMOLITION.
- VERIFY CEILING HEIGHTS SHOWN ON THE DRAWINGS, NEW CEILING HEIGHTS TO MATCH EXISTING CEILING HEIGHTS.

NEW CONSTRUCTION NOTES:

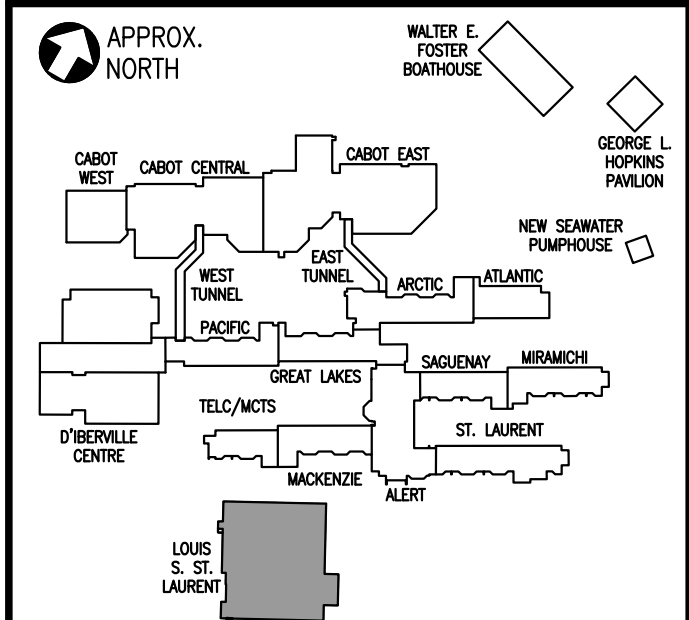
NOTE: ALL PENETRATIONS THROUGH FIRE SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.

- NEW GYPSUM BOARD CEILING
 - EXISTING STRUCTURE TO REMAIN
 - NEW 19mm FURRING CHANNELS AT 400 O.C.
 - NEW 1 LAYER OF 15.9 GYPSUM BOARD
 - NEW PAINTING, REFER TO SPECIFICATION
- NEW SUSPENDED T-BAR CEILING
 - EXISTING STRUCTURE TO REMAIN
 - NEW SUSPENSION SYSTEM
 - NEW 610 x 610 ACOUSTICAL PANEL CEILING TILES
- NEW SUSPENDED INSULATED GYPSUM BOARD CEILING
 - EXISTING STRUCTURE TO REMAIN
 - NEW 64mm STUDS AT 400 O.C. SUSPENSION SYSTEM C/W SPRINGS
 - 50mm ACOUSTICAL BATT INSULATION
 - NEW 2 LAYERS OF 12.7 GYPSUM BOARD, JOINTS STAGGERED
 - NEW 305 x 305 ACOUSTICAL PANEL CEILING TILES, GLUED TO GYPSUM BOARD
 - NEW PAINTING, REFER TO SPECIFICATION

FIXTURE LEGEND:

NOTE: READ IN CONJUNCTION WITH ENGINEERS DRAWINGS.

- FLUORESCENT LIGHTING FIXTURE
- FLUORESCENT LIGHTING FIXTURE
- DOWNLIGHT
- TRACK LIGHTING
- FLUORESCENT LIGHTING FIXTURE, WALL MOUNTED
- JUNCTION BOX
- ACCESS HATCH
- WIRELESS ACCESS POINT
- CCTV SURVEILLANCE CAMERA
- FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR
- FIRE ALARM SPRINKLER SUPERVISORY SWITCH
- FIRE ALARM SPRINKLER ZONE ALARM
- FIRE ALARM ADDRESSABLE INTERFACE MODULE
- EXIT SIGNS
- EXIT SIGN, WALL MOUNTED
- EMERGENCY LIGHTING, WALL MOUNTED
- EMERGENCY LIGHTING
- EMERGENCY LIGHTING, WALL MOUNTED
- EMERGENCY LIGHTING, RECESSED IN T-BAR CEILING
- SUPPLY AIR DIFFUSER
- SUPPLY AIR DIFFUSER
- RETURN AIR GRILLE
- RETURN AIR GRILLE
- SPRINKLER HEAD

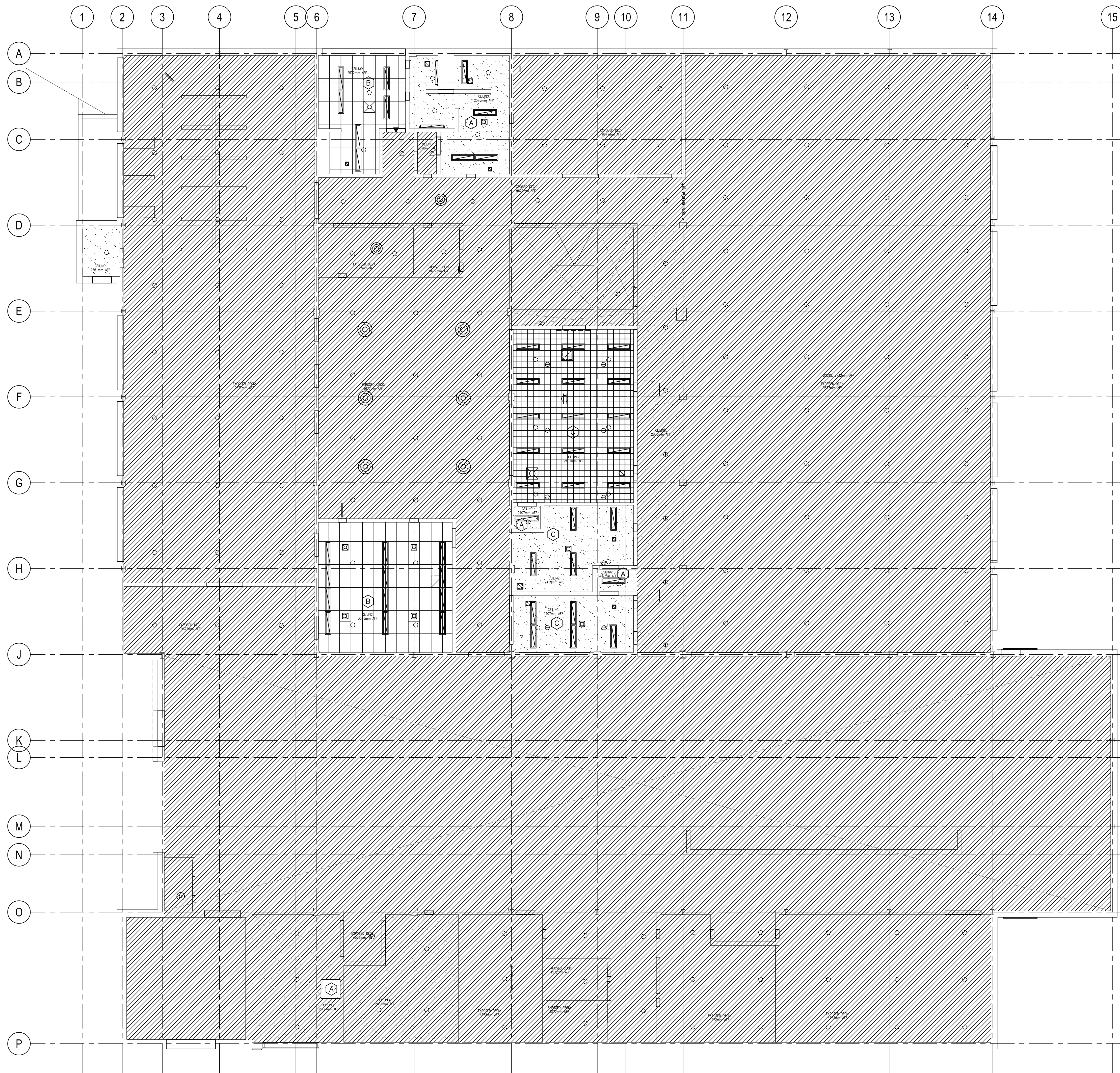


GENERAL NOTES :
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USE DIMENSIONS AS NOTED.
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	
project		

drawing design
LOUIS S ST LAURENT MACHINE SHOP LEVEL 100
NEW
REFLECTED CEILING PLAN

designed LLA	conçu
date 07/06/18	
drawn LLA	dessiné
date 07/06/18	
approved LLA	approuvé
date 07/06/18	
Tender	Soumission
Joan Muise	
PWOSC Project Manager	Administrateur de projets TPSOC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-A-105	



LOUIS S. ST. LAURENT MACHINE SHOP - LEVEL 200

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

LEGEND:

- EXISTING CEILINGS TO REMAIN
- NEW SUSPENDED T-BAR CEILING
- NEW SUSPENDED INSULATED GYPSUM BOARD CEILING
- NEW GYPSUM BOARD CEILING AND OR BULKHEAD
- NON-RATED
- 45 MIN. F.R.R.
- 1 HOUR F.R.R.
- 1.5 HOUR F.R.R.
- 2 HOUR F.R.R.

NOTE: ALL PENETRATIONS THROUGH FIRE SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.

NOTE: REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURES, REFER TO MECHANICAL DRAWINGS FOR DIFFUSERS AND SPRINKLERS

GENERAL NOTES:

- PROTECT ALL EXISTING WALLS, FLOORS AND CEILINGS FROM DAMAGE DURING DEMOLITION.
- REPAIR AND MAKE GOOD ANY WALLS, FLOORS AND CEILINGS DAMAGED DURING DEMOLITION.
- VERIFY CEILING HEIGHTS SHOWN ON THE DRAWINGS, NEW CEILING HEIGHTS TO MATCH EXISTING CEILING HEIGHTS.

NEW CONSTRUCTION NOTES:

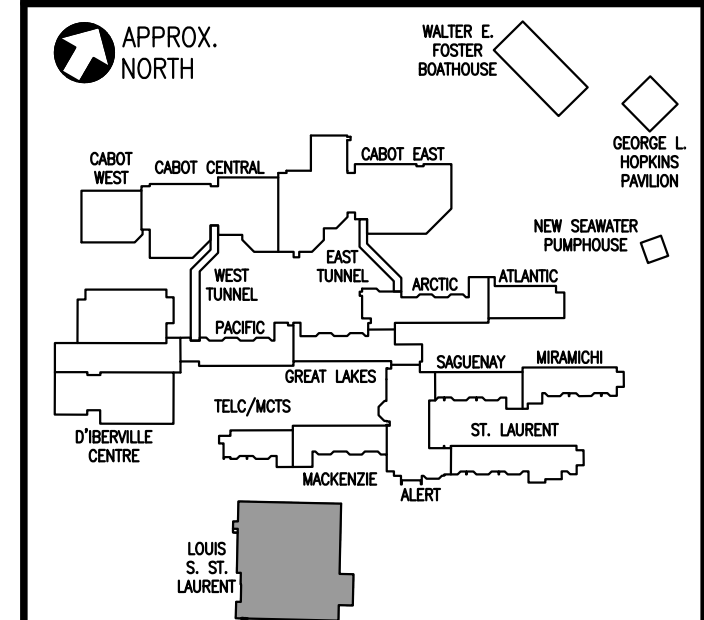
NOTE: ALL PENETRATIONS THROUGH FIRE SEPARATIONS TO BE SEALED WITH ULC LISTED FIRE STOPPING SYSTEMS.

- NEW GYPSUM BOARD CEILING
 - EXISTING STRUCTURE TO REMAIN
 - NEW 19mm FURRING CHANNELS AT 400 O.C.
 - NEW 1 LAYER OF 15.9 GYPSUM BOARD
 - NEW PAINTING, REFER TO SPECIFICATION
- NEW SUSPENDED T-BAR CEILING
 - EXISTING STRUCTURE TO REMAIN
 - NEW SUSPENSION SYSTEM
 - NEW 610 x 610 ACOUSTICAL PANEL CEILING TILES
- NEW SUSPENDED INSULATED GYPSUM BOARD CEILING
 - EXISTING STRUCTURE TO REMAIN
 - NEW 64mm STUDS AT 400 O.C. SUSPENSION SYSTEM C/W SPRINGS
 - 50mm ACOUSTICAL BATT INSULATION
 - NEW 2 LAYERS OF 12.7 GYPSUM BOARD, JOINTS STAGGERED
 - NEW 305 x 305 ACOUSTICAL PANEL CEILING TILES, GLUED TO GYPSUM BOARD
 - NEW PAINTING, REFER TO SPECIFICATION

FIXTURE LEGEND:

NOTE: READ IN CONJUNCTION WITH ENGINEERS DRAWINGS.

- FLUORESCENT LIGHTING FIXTURE
- FLUORESCENT LIGHTING FIXTURE
- DOWNLIGHT
- TRACK LIGHTING
- FLUORESCENT LIGHTING FIXTURE, WALL MOUNTED
- JUNCTION BOX
- ACCESS HATCH
- WIRELESS ACCESS POINT
- CCTV SURVEILLANCE CAMERA
- FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR
- FIRE ALARM SPRINKLER SUPERVISORY SWITCH
- FIRE ALARM SPRINKLER ZONE ALARM
- FIRE ALARM ADDRESSABLE INTERFACE MODULE
- EXIT SIGNS
- EXIT SIGN, WALL MOUNTED
- EMERGENCY LIGHTING, WALL MOUNTED
- EMERGENCY LIGHTING
- EMERGENCY LIGHTING, WALL MOUNTED
- EMERGENCY LIGHTING, RECESSED IN T-BAR CEILING
- SUPPLY AIR DIFFUSER
- SUPPLY AIR DIFFUSER
- RETURN AIR GRILLE
- RETURN AIR GRILLE
- SPRINKLER HEAD



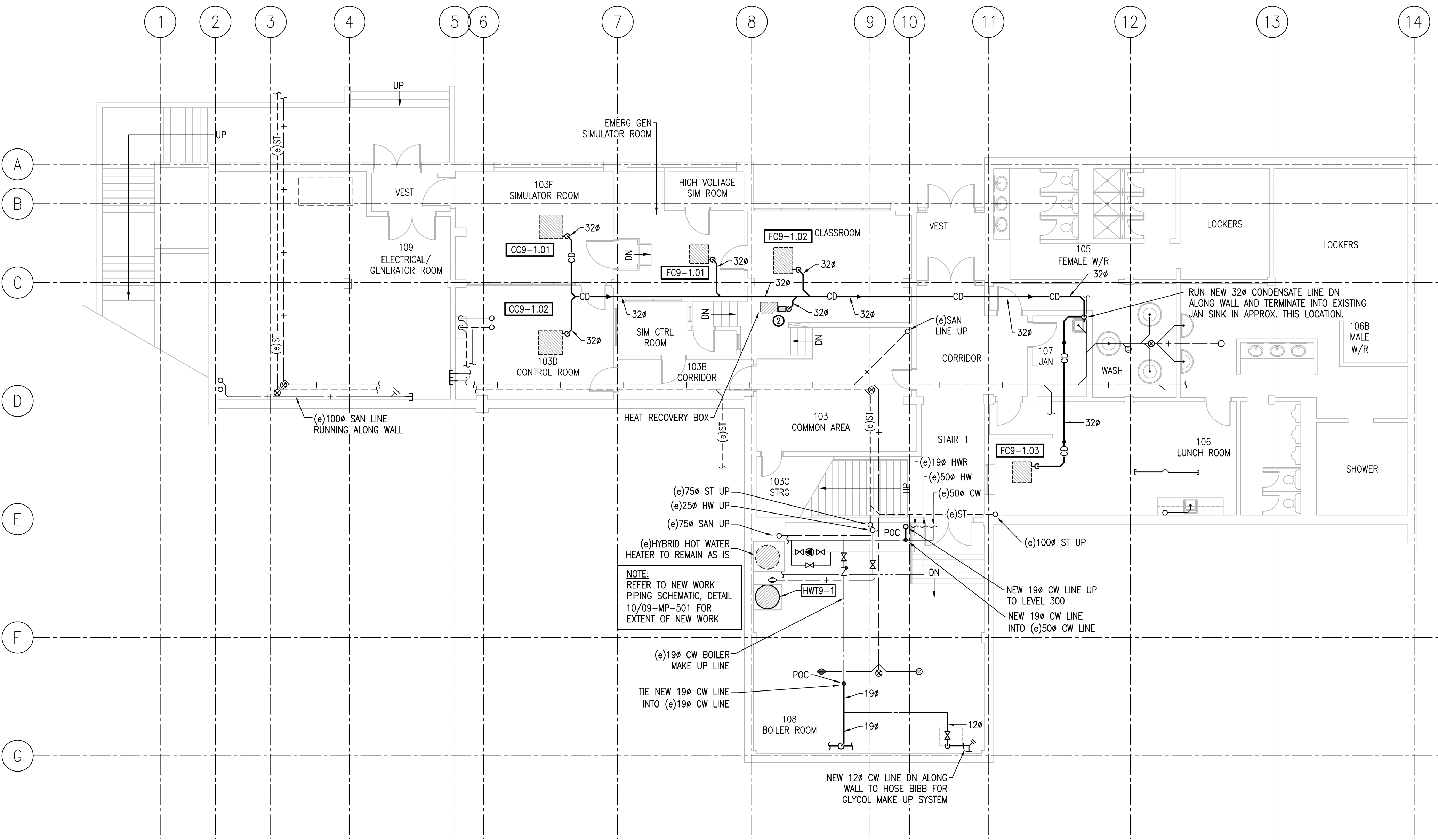
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	
project		

drawing design
LOUIS S ST LAURENT MACHINE SHOP LEVEL 200 NEW REFLECTED CEILING PLAN

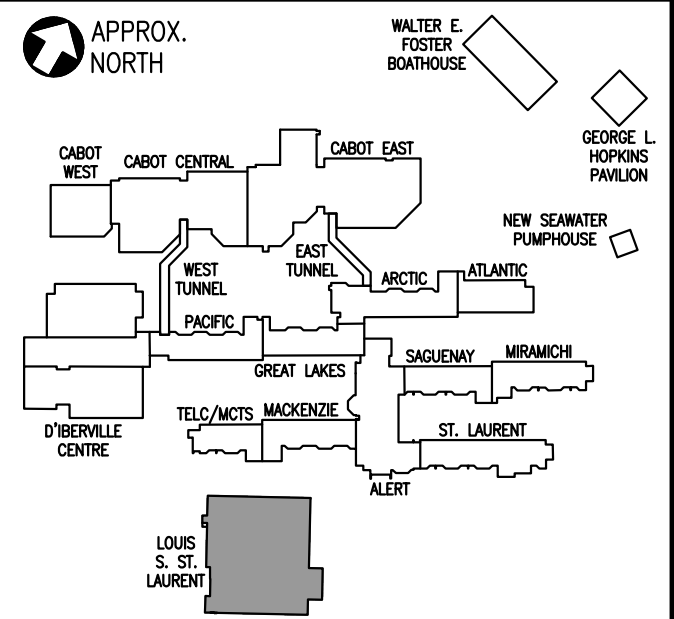
designed LLA	conçu
date 07/06/18	
drawn LLA	dessiné
date 07/06/18	
approved LLA	approuvé
date 07/06/18	
Tender	Soumission
Joan Muise	
PWGSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-A-106	

PLUMBING CONSTRUCTION NOTES	
①	PLUMBING CONTRACTOR TO INSTALL CONDENSATE PUMP, P-COND1, INSIDE THE WALL MOUNTED EVAPORATOR ENCLOSURE, COORDINATE INSTALLATION OF THE CONDENSATE PUMP WITH VENTILATION CONTRACTOR. SEE DETAIL FOR MORE INFO
②	PLUMBING CONTRACTOR TO INSTALL CONDENSATE PUMP, P-COND2, INSIDE ENCLOSURE, COORDINATE INSTALLATION OF THE CONDENSATE PUMP WITH VENTILATION CONTRACTOR. SEE DETAIL FOR MORE INFORMATION

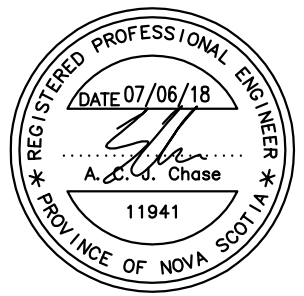


PLUMBING – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100 NEW WORK

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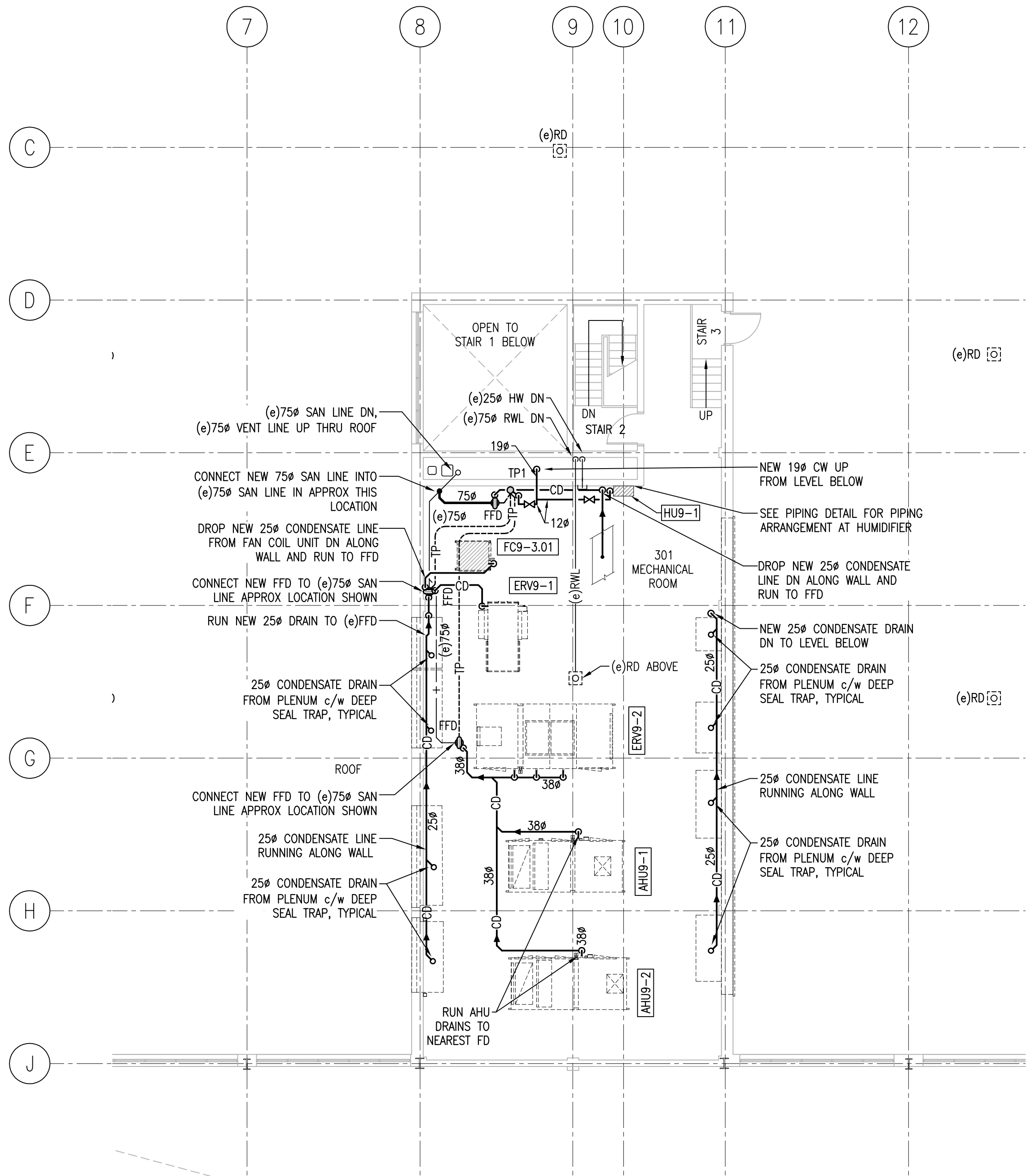


GENERAL NOTES :
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	PLUMBING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 NEW WORK	
designed	MJM	conçu
date	07/06/18	
drawn	CAB	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Joan Muise	
project number	PWGSOC Project Manager	Administrateur de projets TPSOC
	R.065476.710	
drawing no.	09-MP-101	

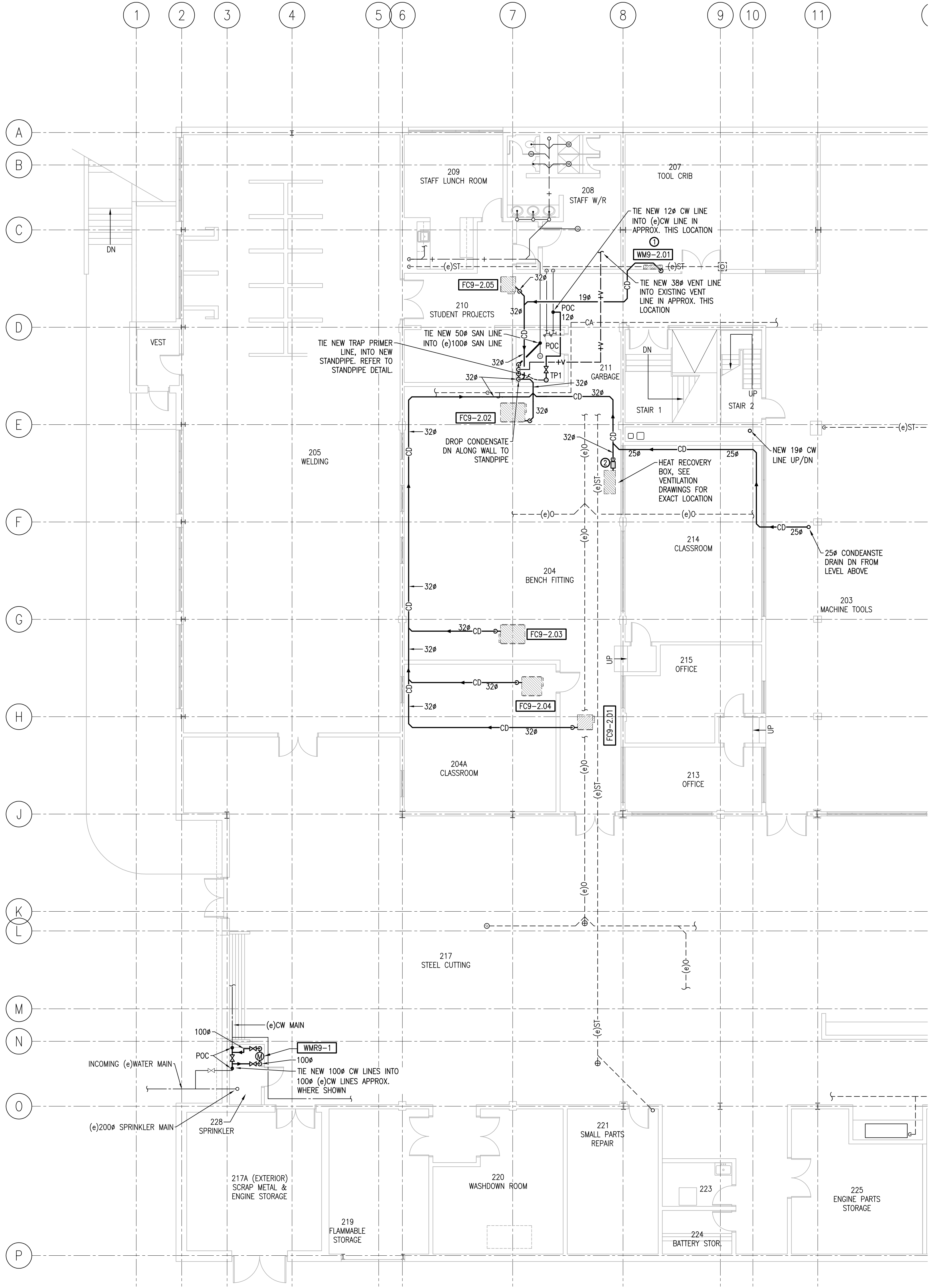
PLUMBING CONSTRUCTION NOTES	
①	PLUMBING CONTRACTOR TO INSTALL CONDENSATE PUMP, P-COND1, INSIDE THE WALL MOUNTED EVAPORATOR ENCLOSURE. COORDINATE INSTALLATION OF THE CONDENSATE PUMP WITH VENTILATION CONTRACTOR. SEE DETAIL FOR MORE INFO
②	PLUMBING CONTRACTOR TO INSTALL CONDENSATE PUMP, P-COND2, INSIDE THE ENCLOSURE. COORDINATE INSTALLATION OF THE CONDENSATE PUMP WITH VENTILATION CONTRACTOR. SEE DETAIL FOR MORE INFORMATION



PLUMBING – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 300 NEW WORK

SCALE : 1:100

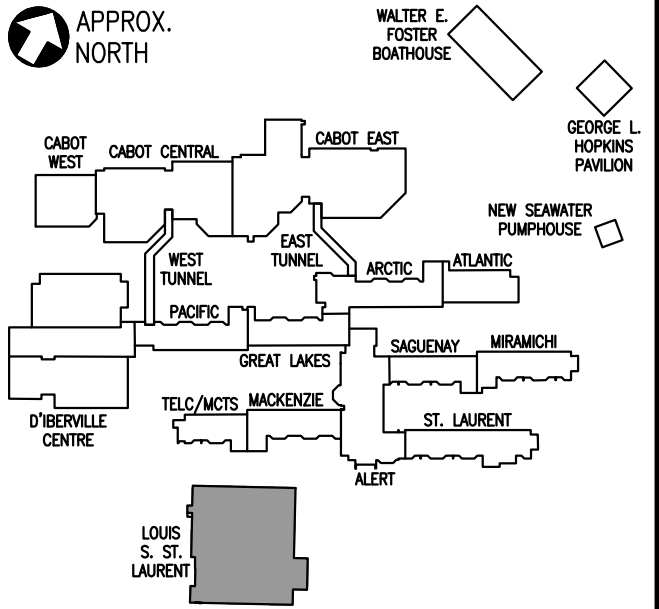
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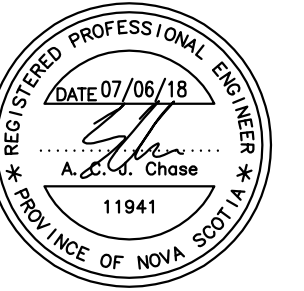
PLUMBING – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 200 NEW WORK

SCALE : 1:100

0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m



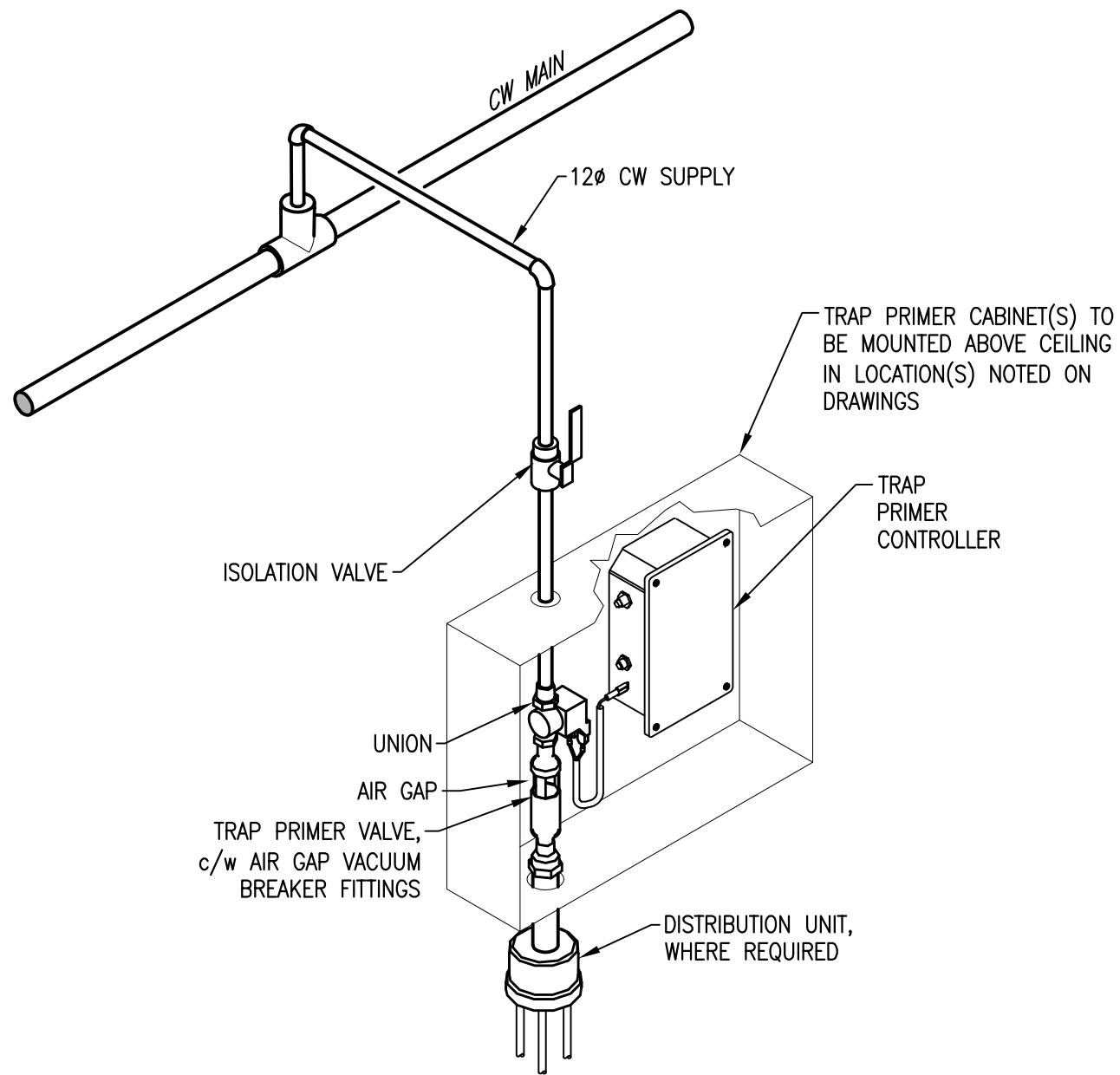
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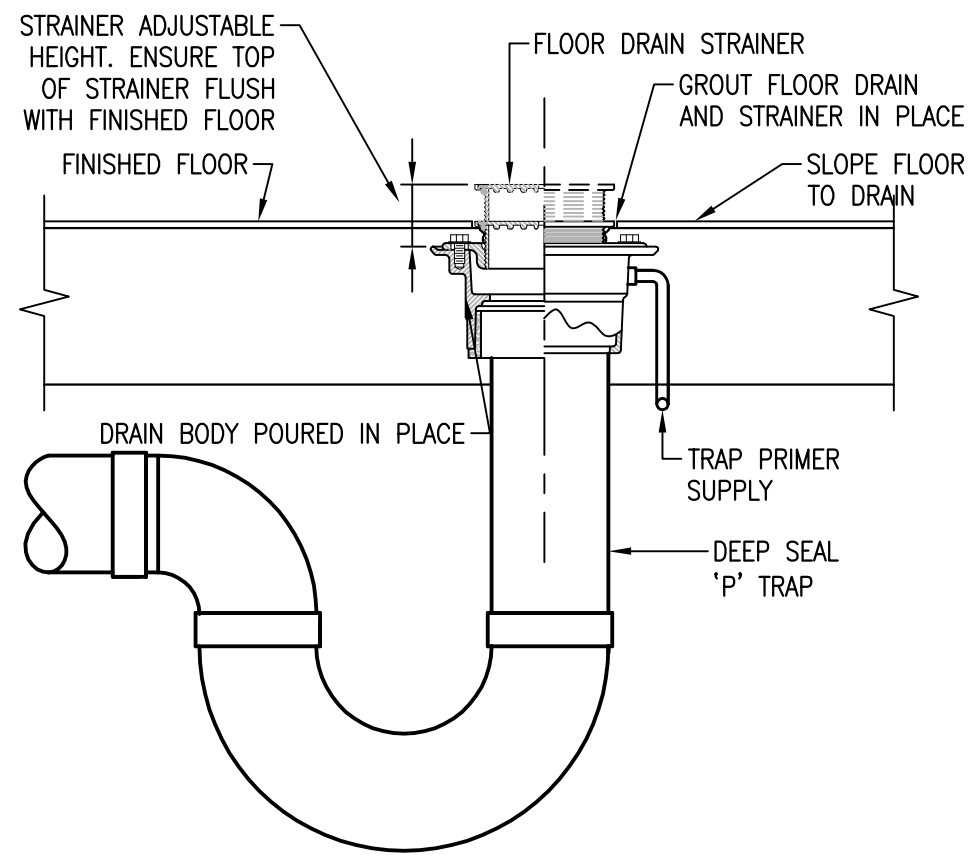
0 Issued for Tender 07/06/18
revisions date
project CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES project

drawing design
PLUMBING
LOUIS S. ST. LAURENT MACHINE SHOP
LEVELS 200 & 300
NEW WORK

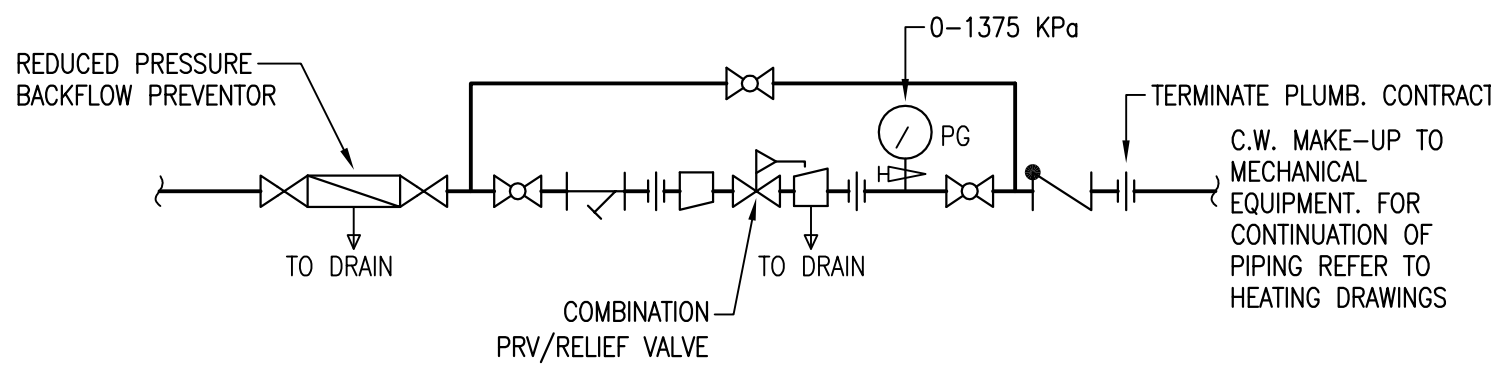
designed MJM conçu
date 07/06/18
drawn CAB dessiné
date 07/06/18
approved ACJC approuvé
date 07/06/18
Tender Submission
Joan Muise
PWGSC Project Manager Administrateur de projets TPSGC
project number no. du projet
R.065476.710
drawing no. no. du dessin
09-MP-102



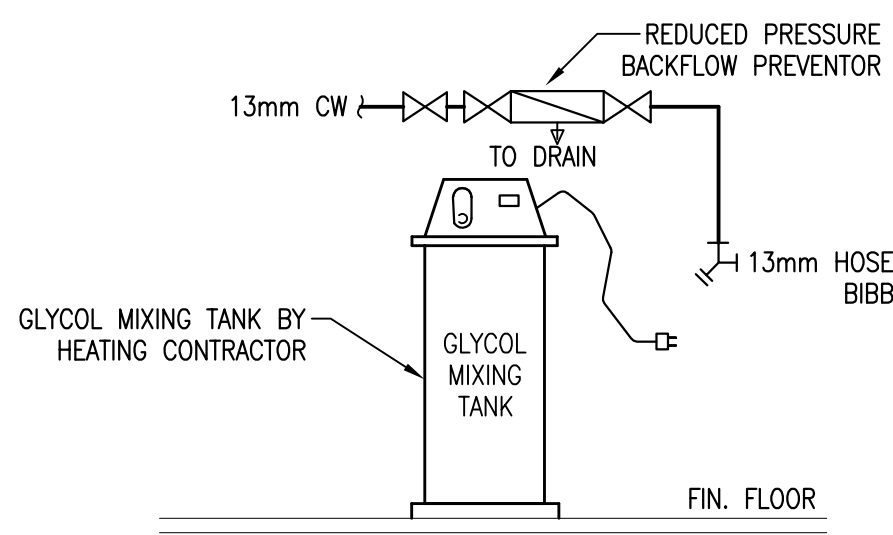
TRAP PRIMER VALVE & PIPING DETAIL
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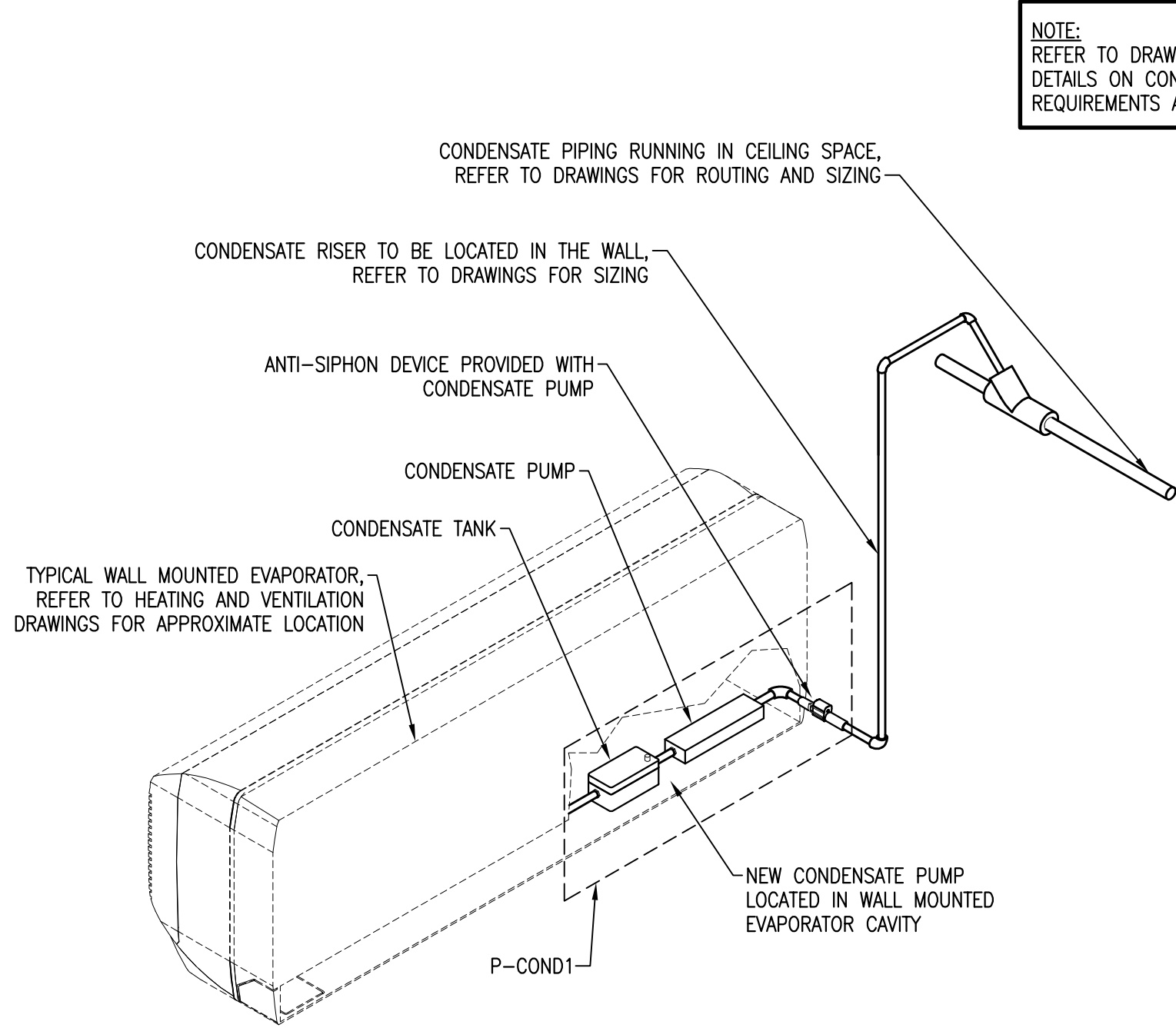
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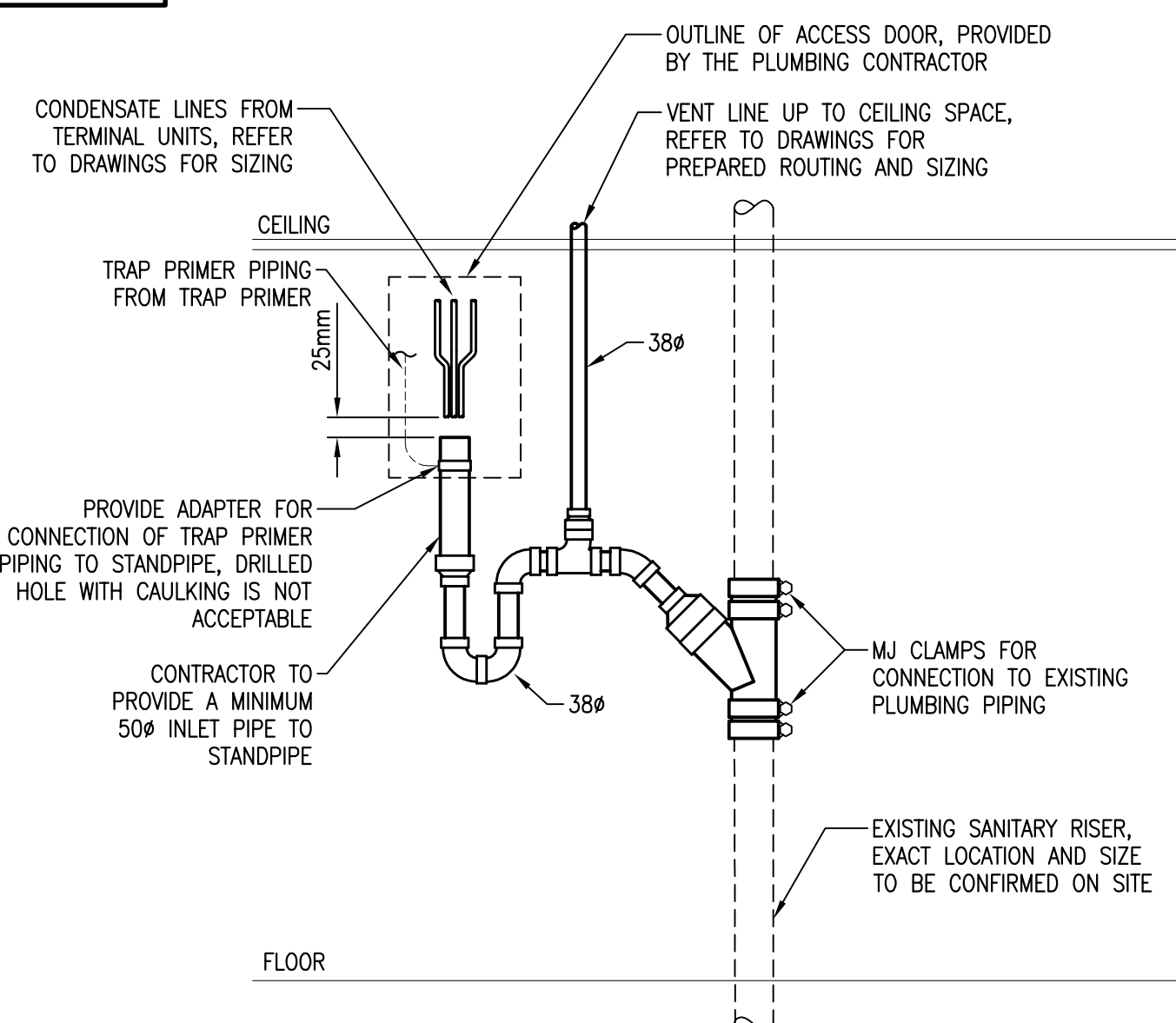
COLD WATER MAKE-UP DETAIL
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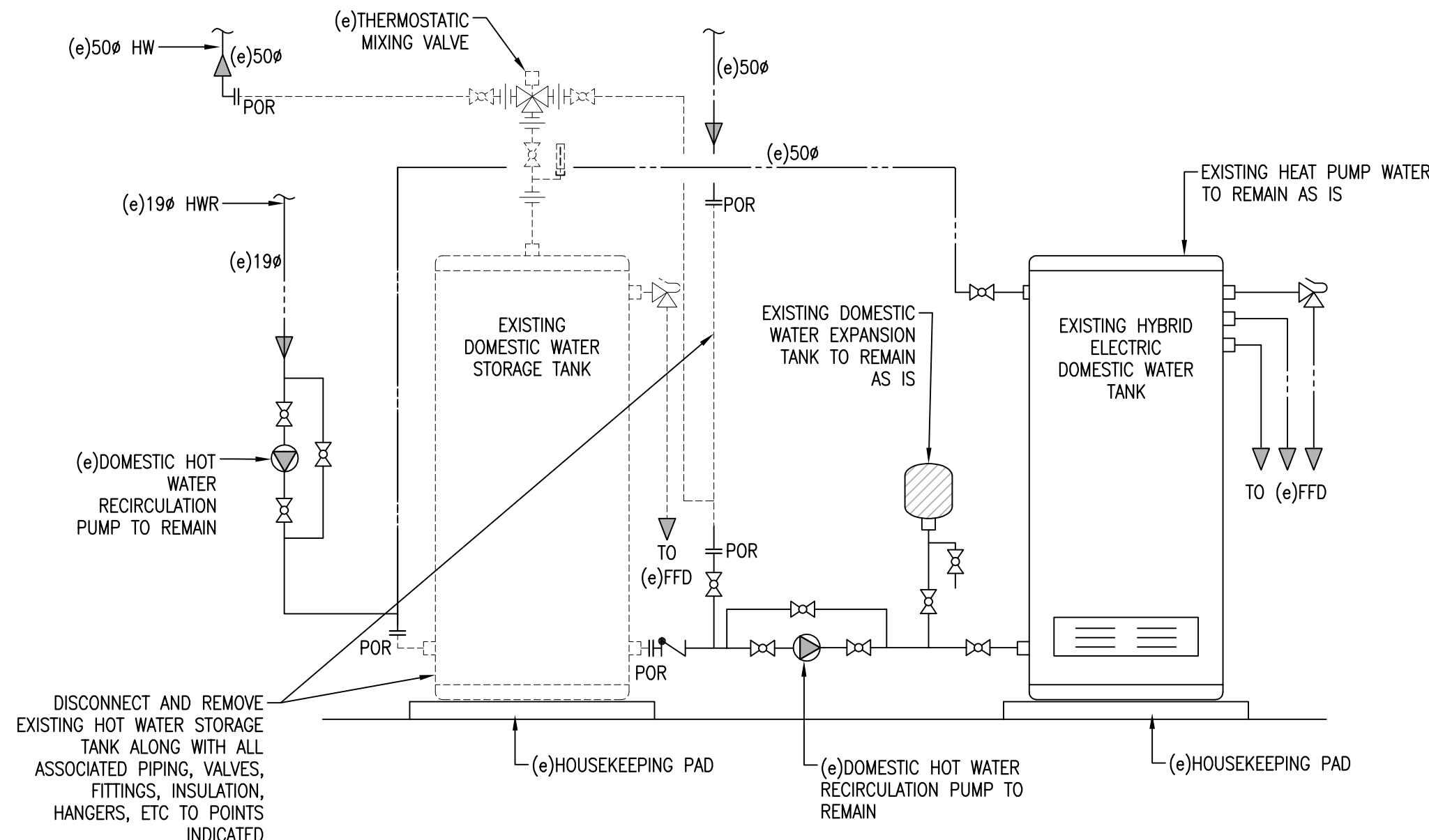
GLYCOL MIXING TANK MAKEUP DETAIL
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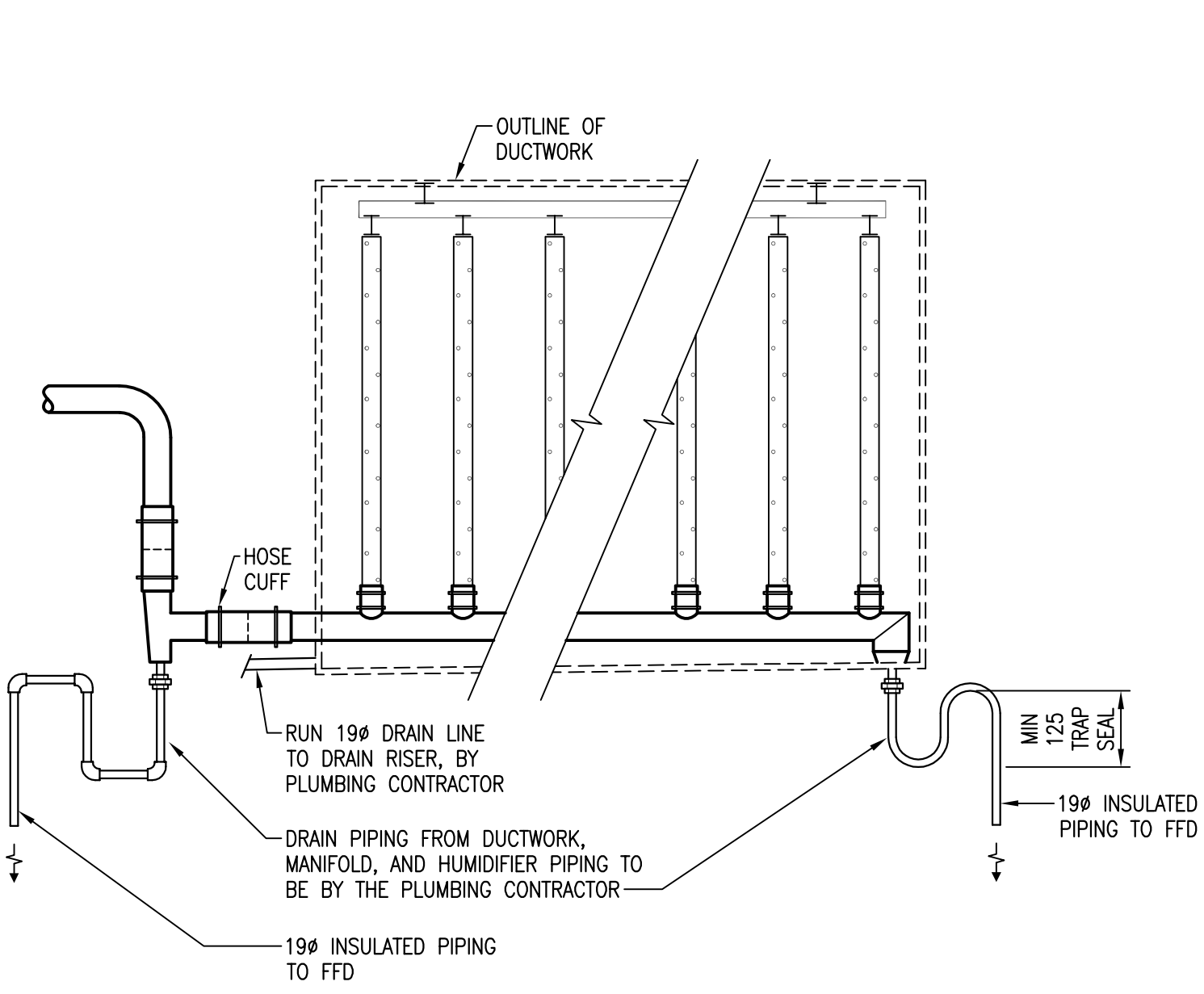
WALL MOUNTED EVAPORATOR WITH CONDENSATE PUMP (P-COND1)
SCALE : N.T.S.



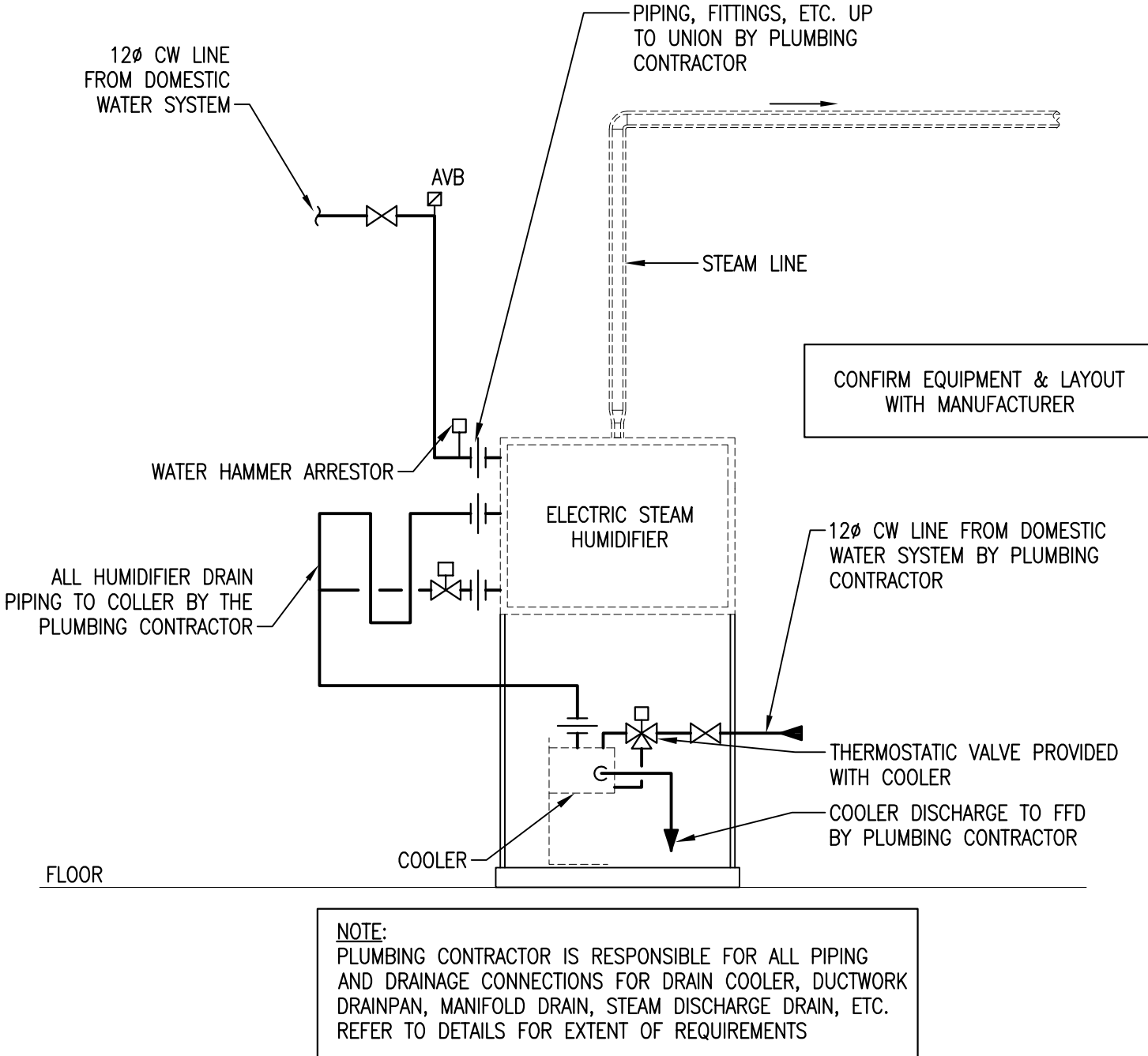
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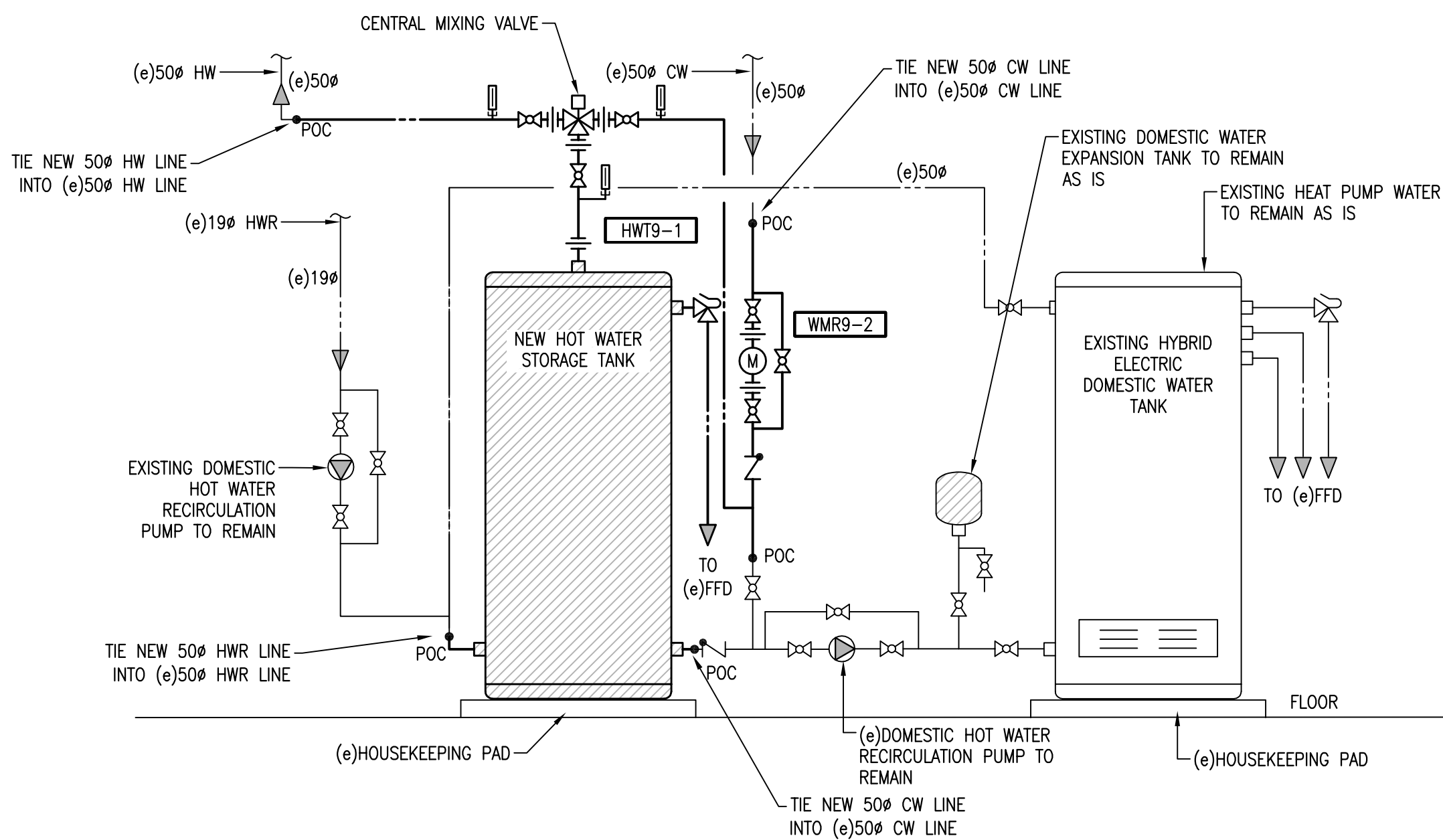
DOMESTIC WATER DEMOLITION PIPING SCHEMATIC
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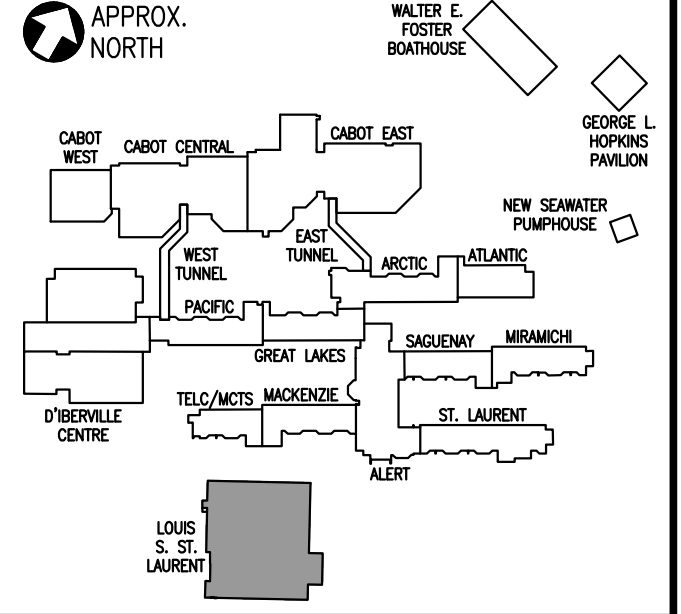
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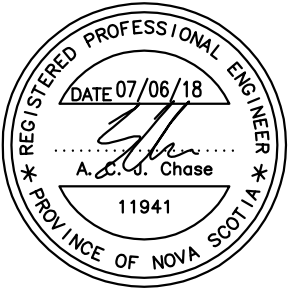
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DOMESTIC WATER HEATER PIPING NEW WORK SCHEMATIC
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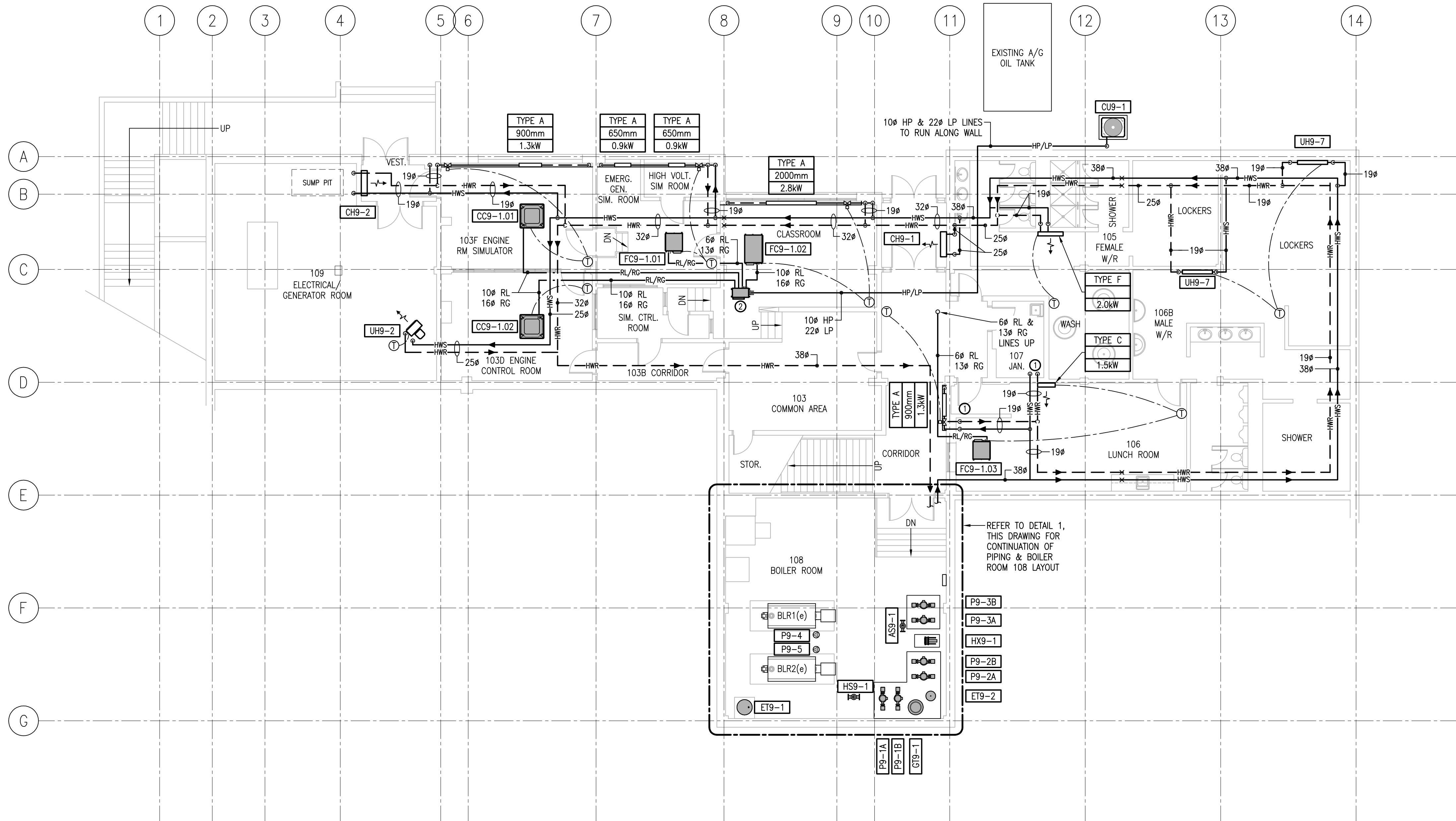


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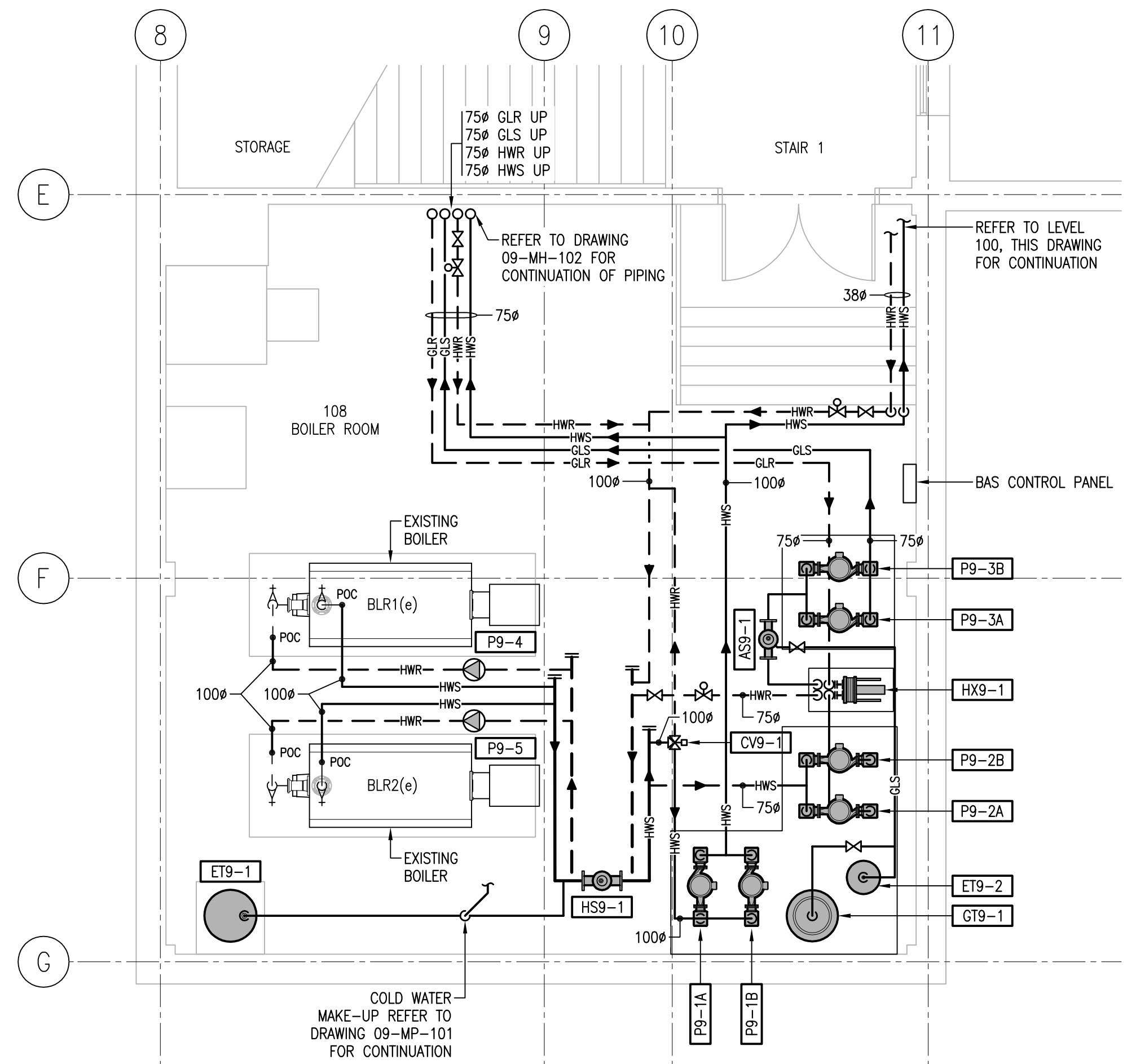
0	Issued for Tender	07/06/18
revisions		date
project	project	
CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES		
drawing	dessin	
PLUMBING LOUIS S. ST. LAURENT MACHINE SHOP DETAILS AND SCHEMATICS		
designed MJM	conçu	
date 07/06/18		
drawn CAB	dessiné	
date 07/06/18		
approved ACJC	approuvé	
date 07/06/18		
Tender	Soumission	
Joan Muise		
PW500 Project Manager	Administrateur de projets TP500	
project number	no. du projet	
R.065476.710		
drawing no.	no. du dessin	
09-MP-501		

CONSTRUCTION NOTES	
①	NEW HOT WATER SUPPLY AND HOT WATER RETURN LINES TO RUN DOWN EXTERIOR OF EXISTING WALL IN THIS AREA.
②	NEW HEAT RECOVERY BRANCH BOX MOUNTED FROM CEILING STRUCTURE c/w BALL VALVES ON REFRIGERANT LIQUID & REFRIGERANT GAS LINE CONNECTIONS.
③	NEW HWS & HWR PIPES TO BE INSTALLED CLEAR OF CRANE OPERATIONAL AREA.



HVAC PIPING – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100 NEW WORK

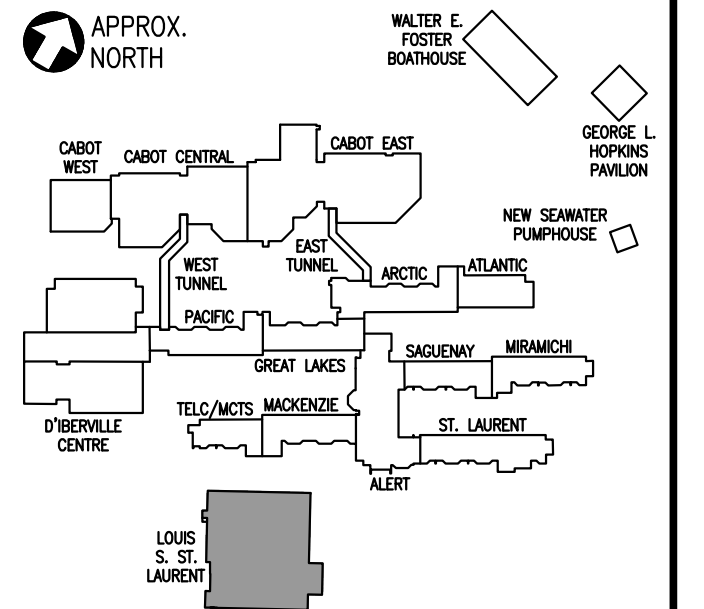
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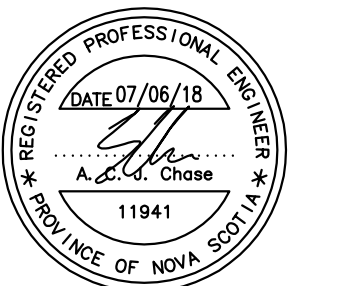
HVAC PIPING – BOILER ROOM 108 NEW WORK LAYOUT 1

SCALE : 1:50

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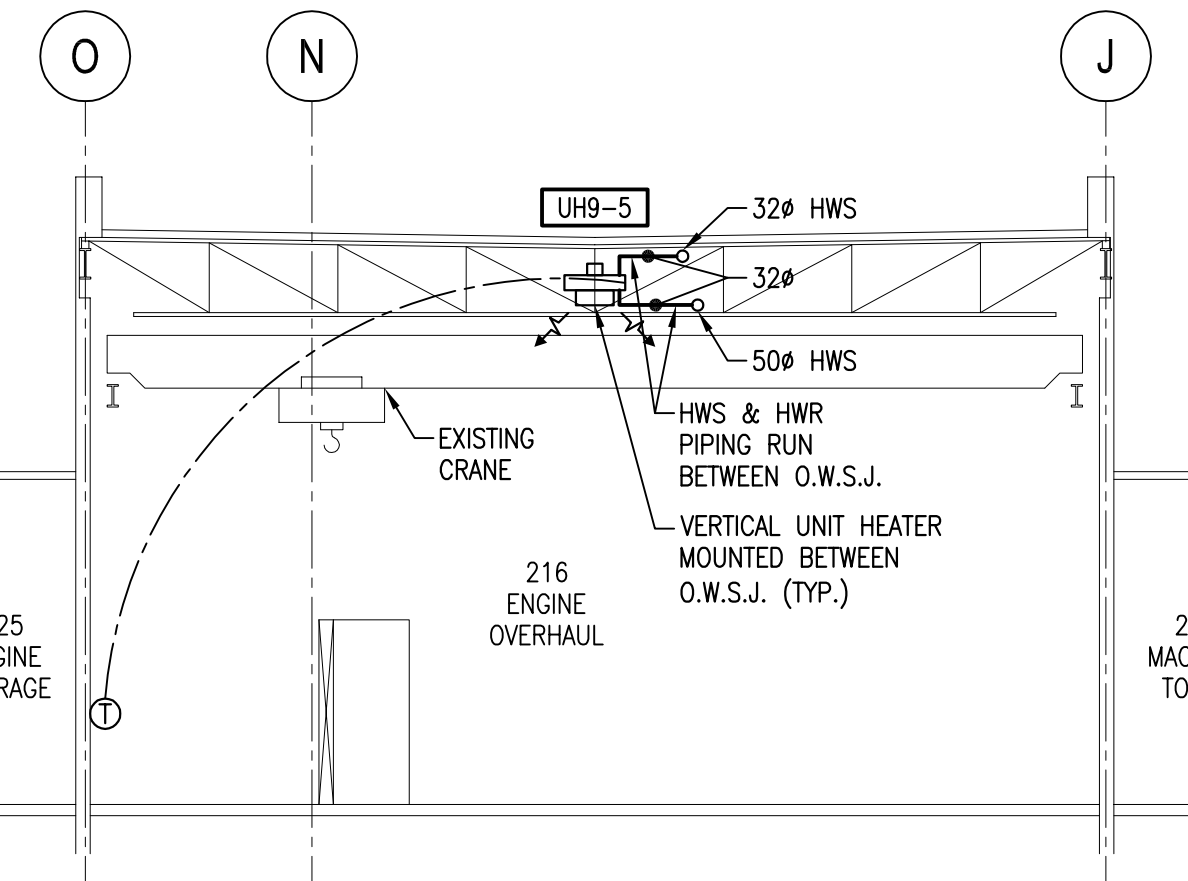
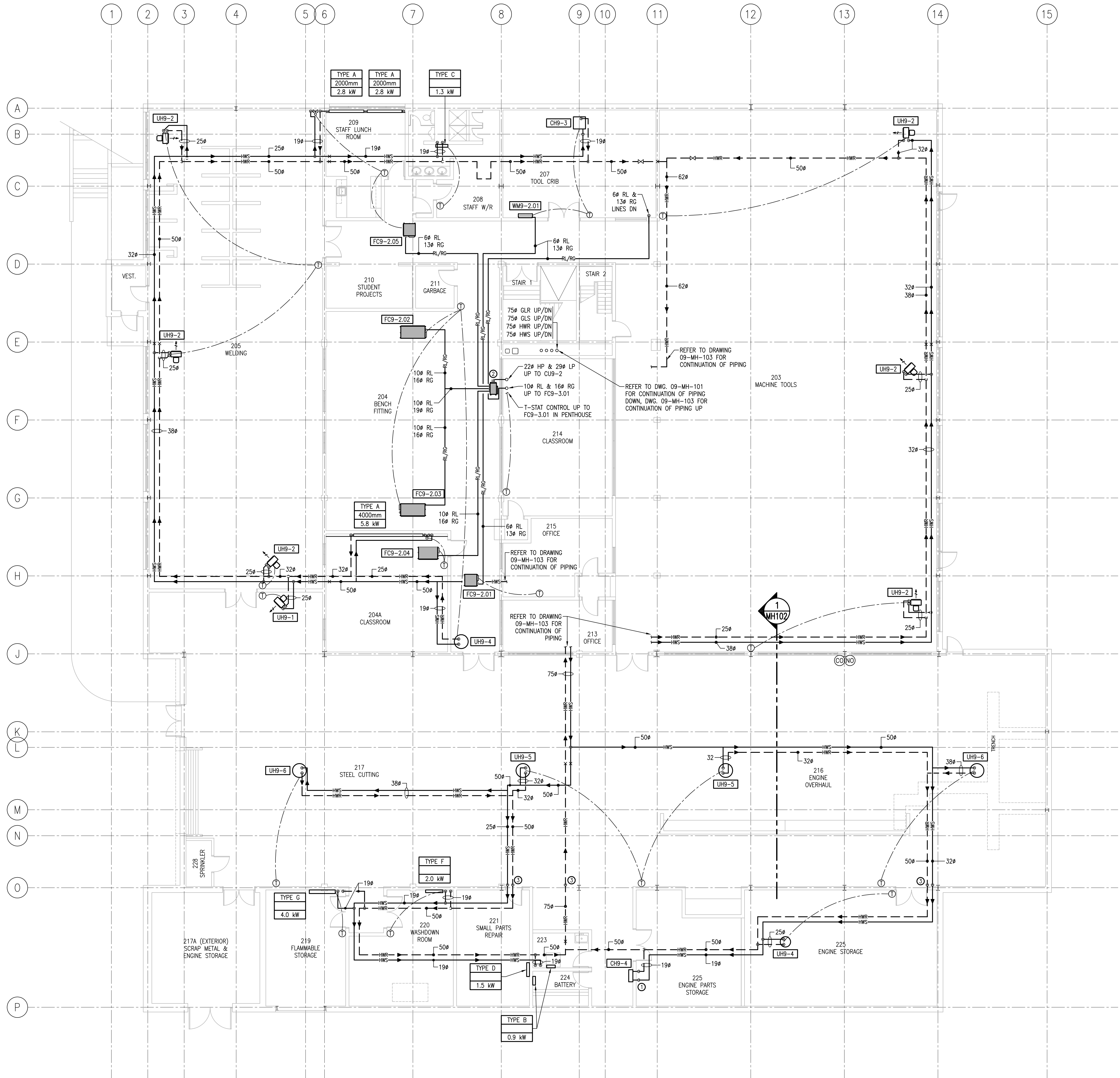


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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 NEW WORK	
designed MJM	conçu	
date 07/06/18		
drawn MAC	dessiné	
date 07/06/18		
approved ACJC	approuvé	
date 07/06/18		
Tender Joan Muise	Submission	
PWOSC Project Manager	Administrateur de projets TPSC	
project number	no. du projet	
		R.065476.710
drawing no.	no. du dessin	
		09-MH-101

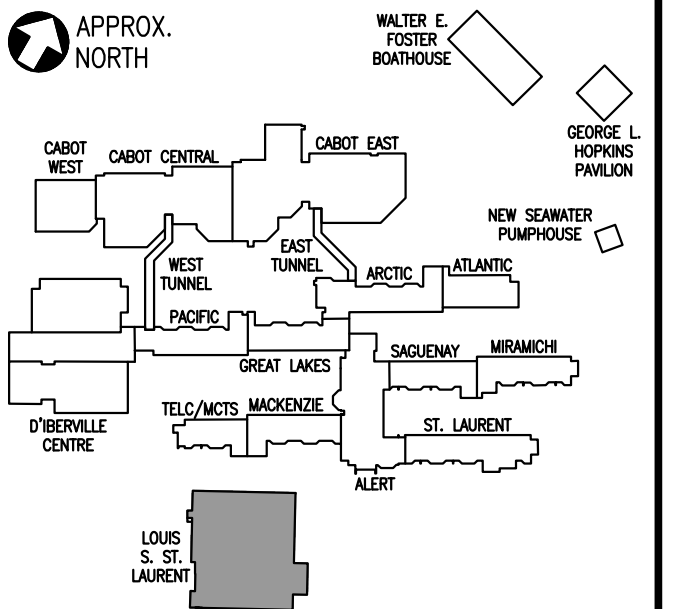
CONSTRUCTION NOTES	
①	NEW HOT WATER SUPPLY AND HOT WATER RETURN LINES TO RUN DOWN EXTERIOR OF EXISTING WALL IN THIS AREA.
②	NEW HEAT RECOVERY BRANCH BOX MOUNTED FROM CEILING STRUCTURE c/w BALL VALVES ON REFRIGERANT LIQUID & REFRIGERANT GAS LINE CONNECTIONS.
③	NEW HWS & HWR PIPES TO BE INSTALLED CLEAR OF CRANE OPERATIONAL AREA.



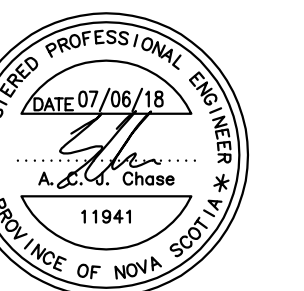
LEVEL 200 - SECTION A 1
SCALE : 1:100
MH102

HVAC PIPING - LOUIS S. ST. LAURENT MACHINE SHOP - LEVEL 200 NEW WORK

SCALE : 1:100



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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 NEW WORK	

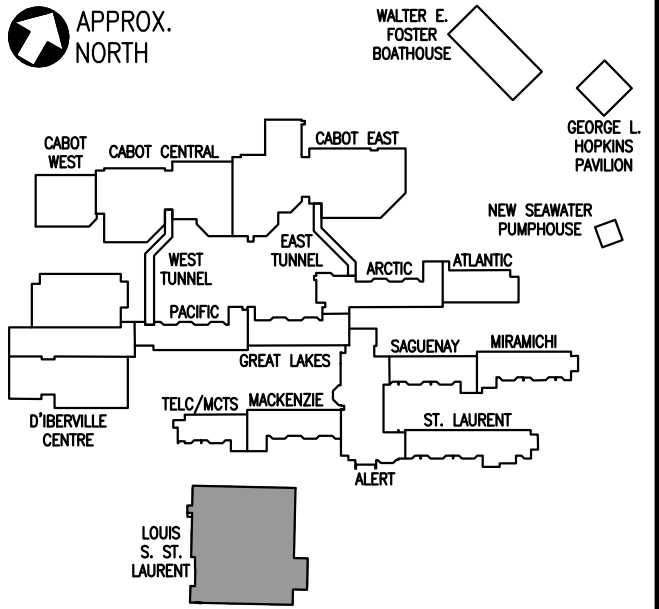
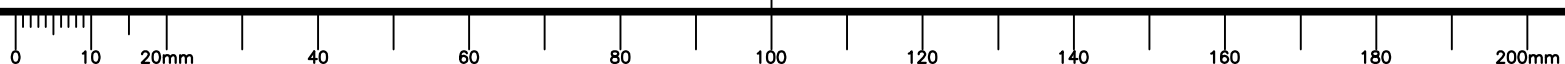
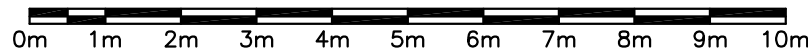
designed MJM	conçu
date 07/06/18	
drawn MAC	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	
Tender Joan Muise	Soumission
PWOSC Project Manager	Administrateur de projets TPSOC
project number R.065476.710	no. du projet
drawing no. 09-MH-102	no. du dessin

CONSTRUCTION NOTES	
①	NEW HOT WATER SUPPLY AND HOT WATER RETURN LINES TO RUN DOWN EXTERIOR OF EXISTING WALL IN THIS AREA.
②	NEW HEAT RECOVERY BRANCH BOX MOUNTED FROM CEILING STRUCTURE c/w BALL VALVES ON REFRIGERANT LIQUID & REFRIGERANT GAS LINE CONNECTIONS.
③	NEW HWS & HWR PIPES TO BE INSTALLED CLEAR OF CRANE OPERATIONAL AREA.

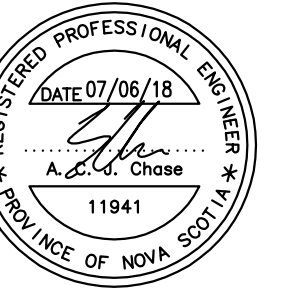


HVAC PIPING – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 300 NEW WORK

SCALE : 1:100



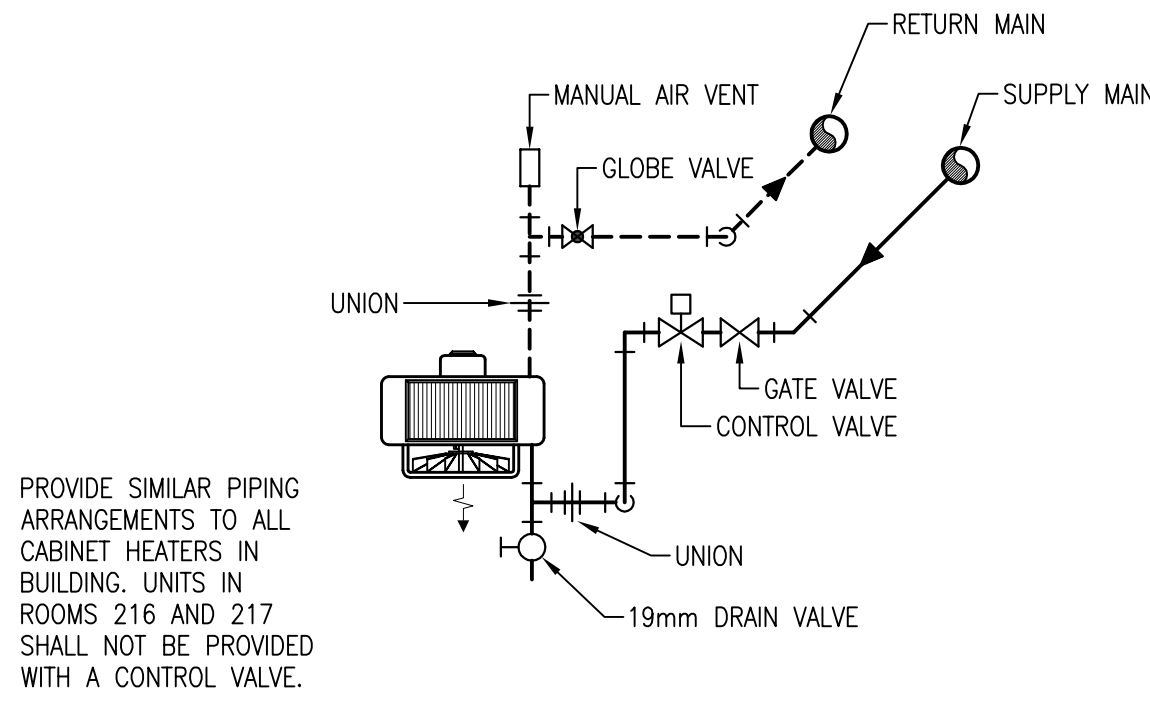
GENERAL NOTES :
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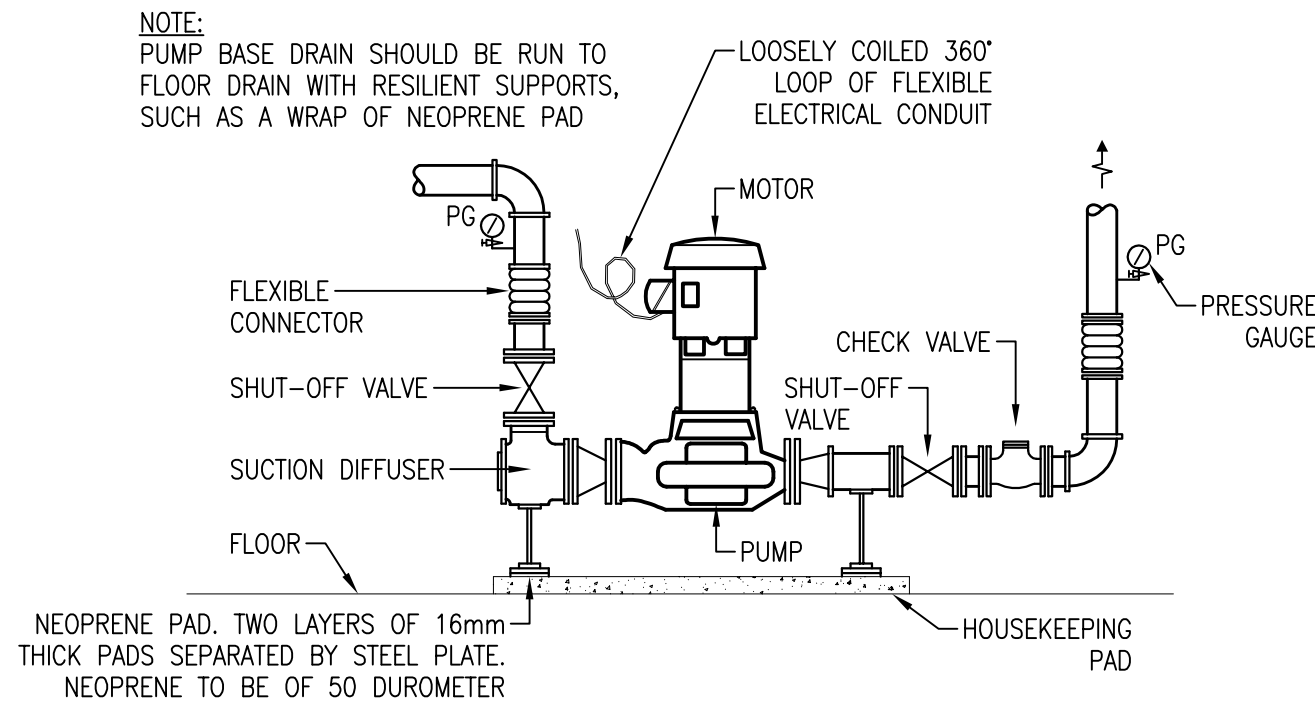
0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 NEW WORK	

designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Joan Muise	Submission
PWOSC Project Manager	Administrateur de projets TPSC	
project number	R.065476.710	no. du projet
drawing no.	09-MH-103	no. du dessin

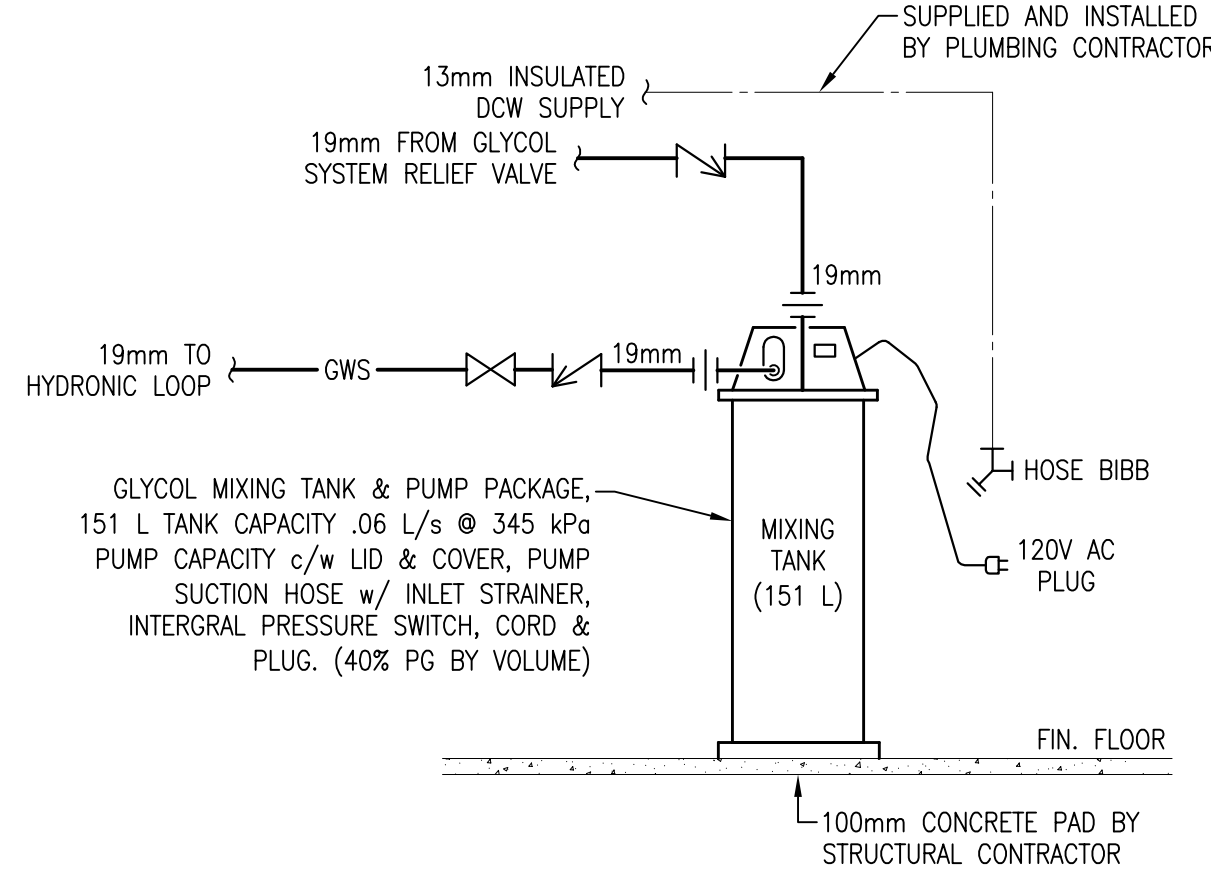
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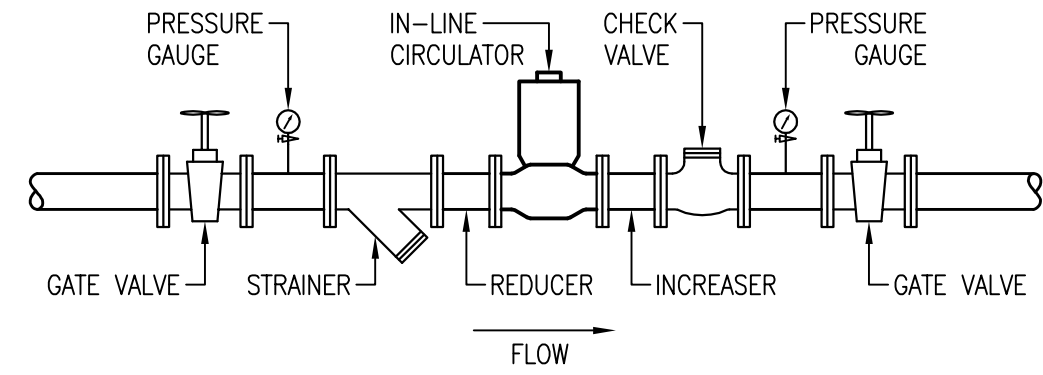
VERTICAL HOT WATER UNIT HEATER PIPING DETAIL 1
SCALE : N.T.S. MH501



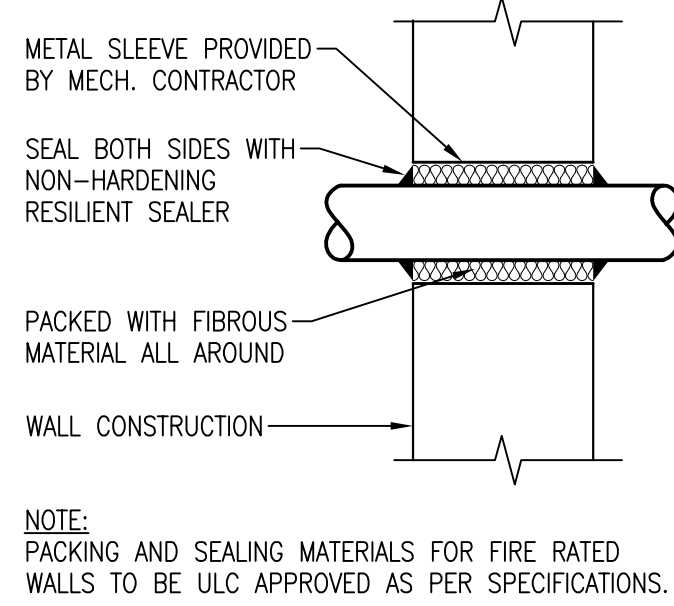
VERTICAL INLINE PUMP DETAIL 2
SCALE : N.T.S. MH501



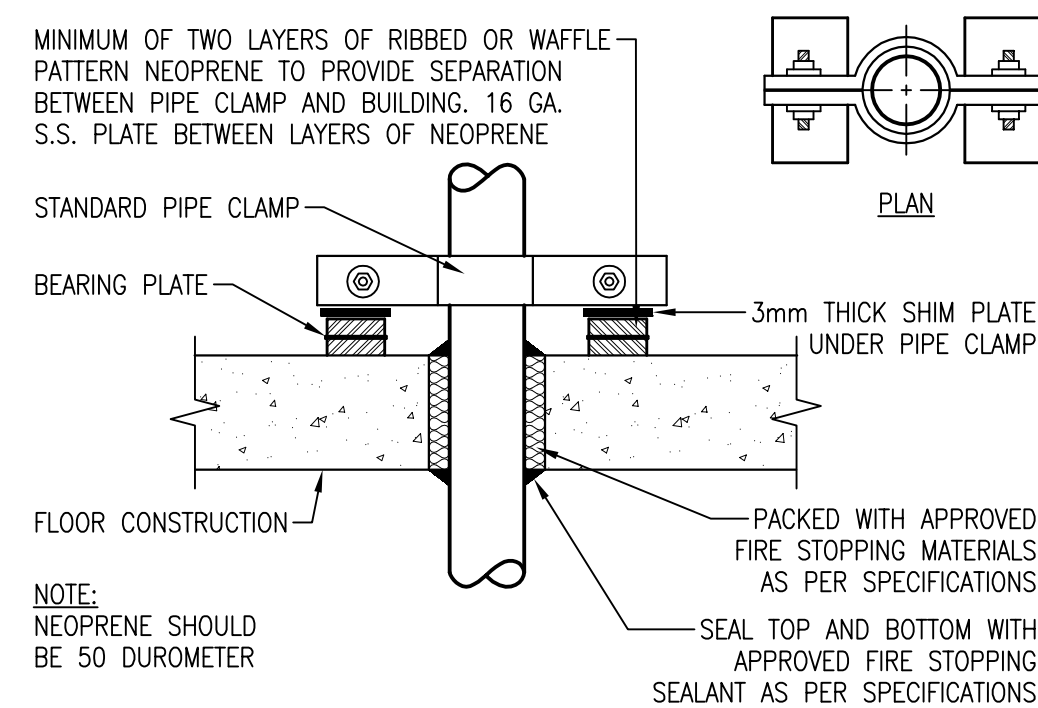
PROPYLENE GLYCOL MIXING TANK DETAIL 3
SCALE : N.T.S. MH501



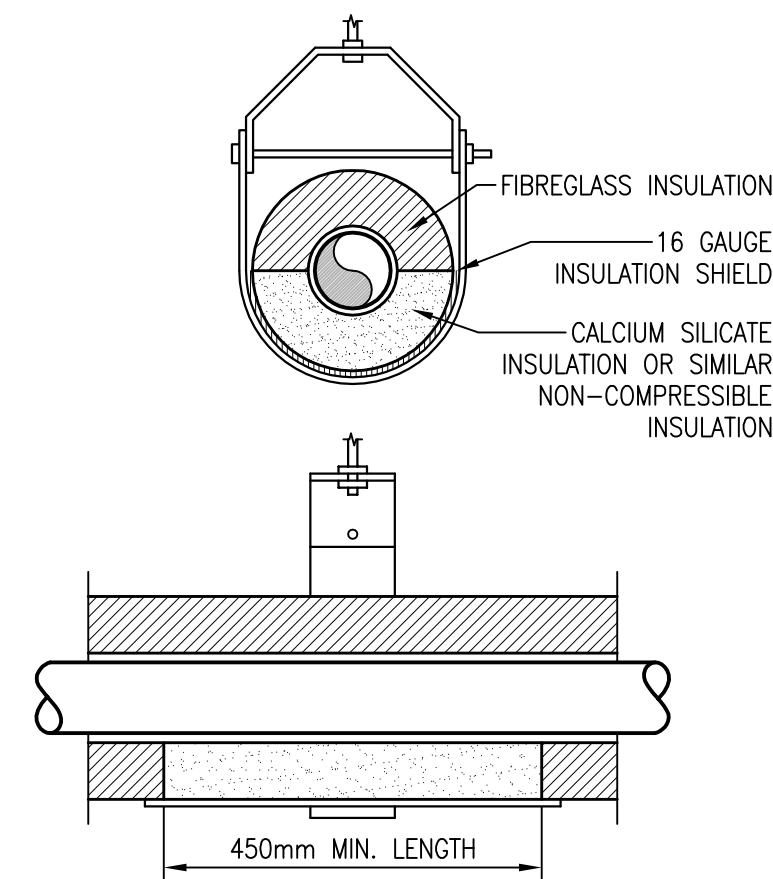
VERTICAL INLINE CIRCULATOR DETAIL 4
SCALE : N.T.S. MH501



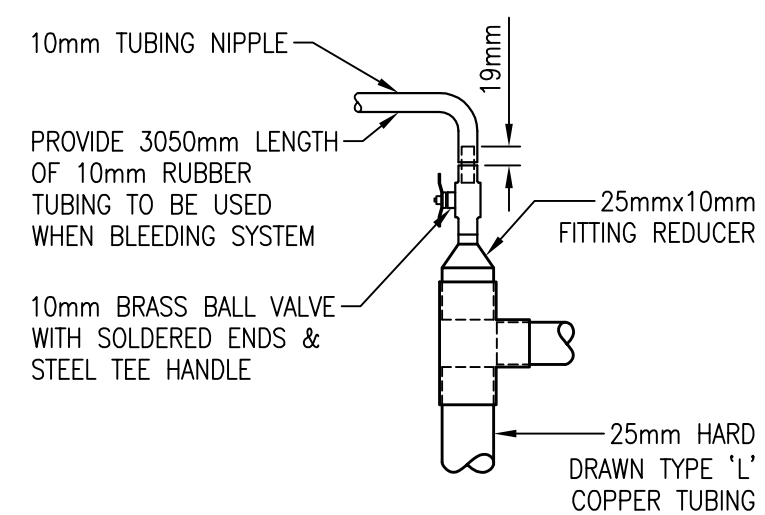
TYPICAL WALL PENETRATION FOR PIPES 5
SCALE : N.T.S. MH501



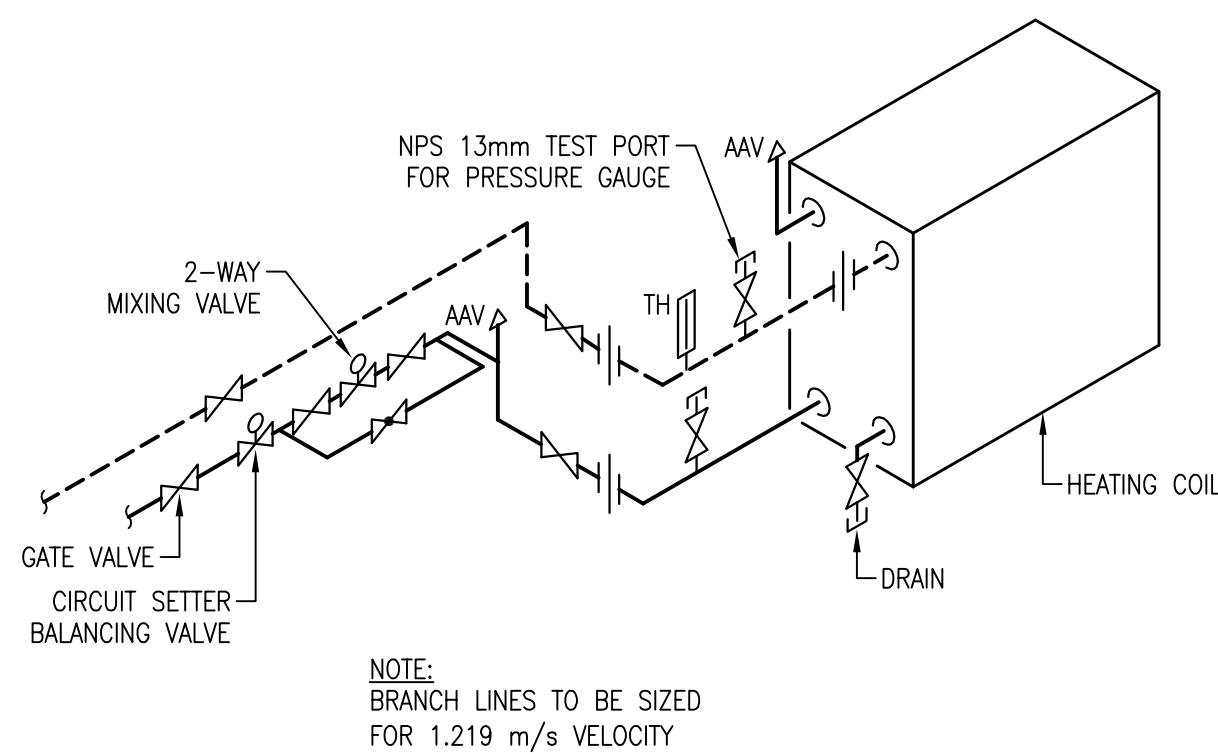
TYPICAL FLOOR PENETRATION FOR PIPING 6
SCALE : N.T.S. MH501



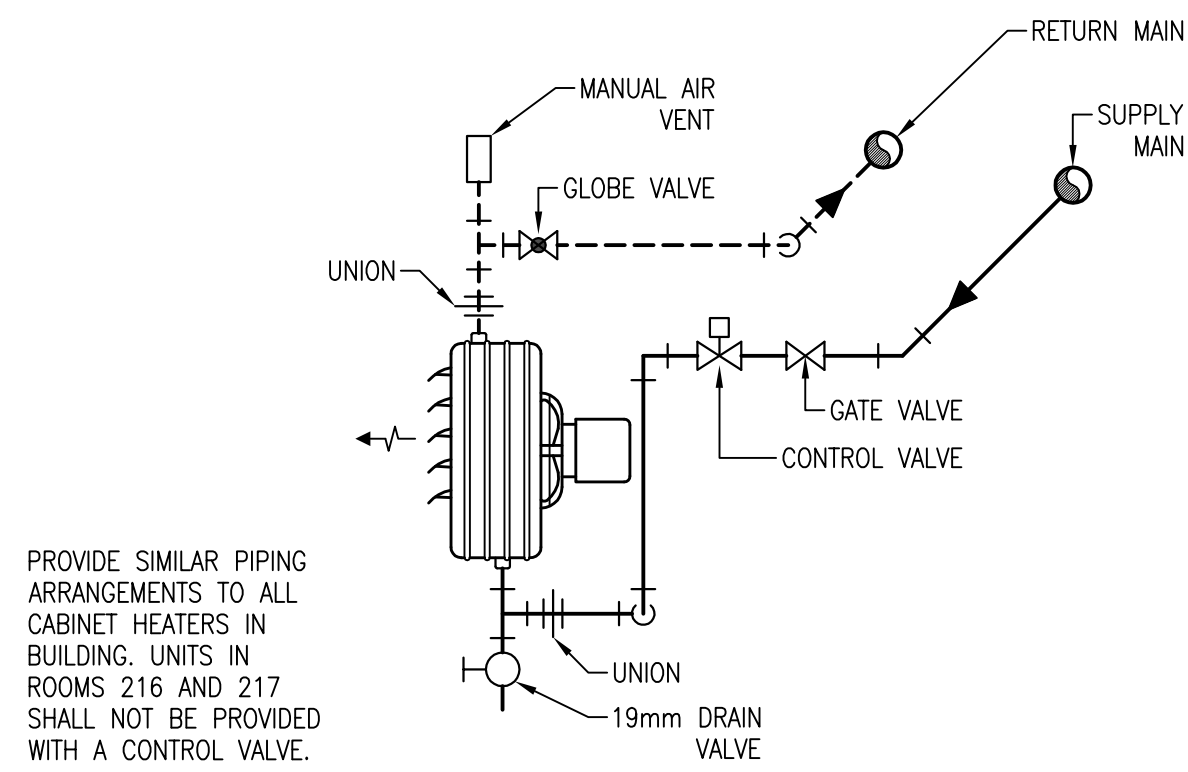
INSULATION AT PIPE HANGER DETAIL 7
SCALE : N.T.S. MH501



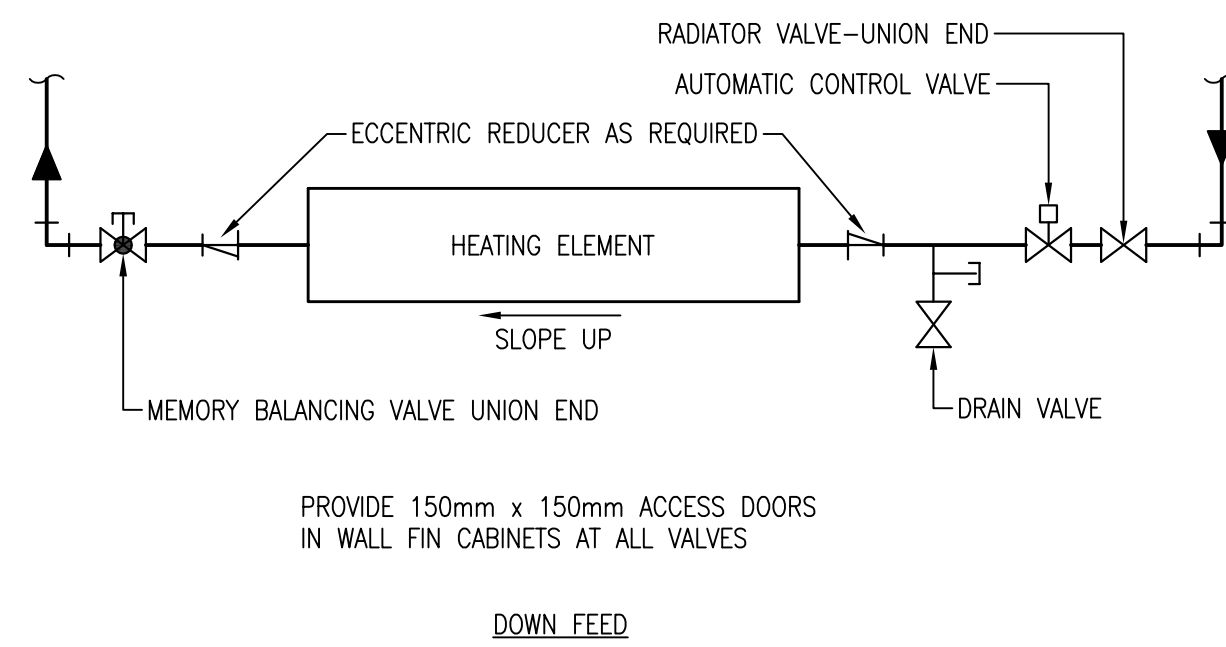
HEATING SYSTEM VENTING DETAIL 8
SCALE : N.T.S. MH501



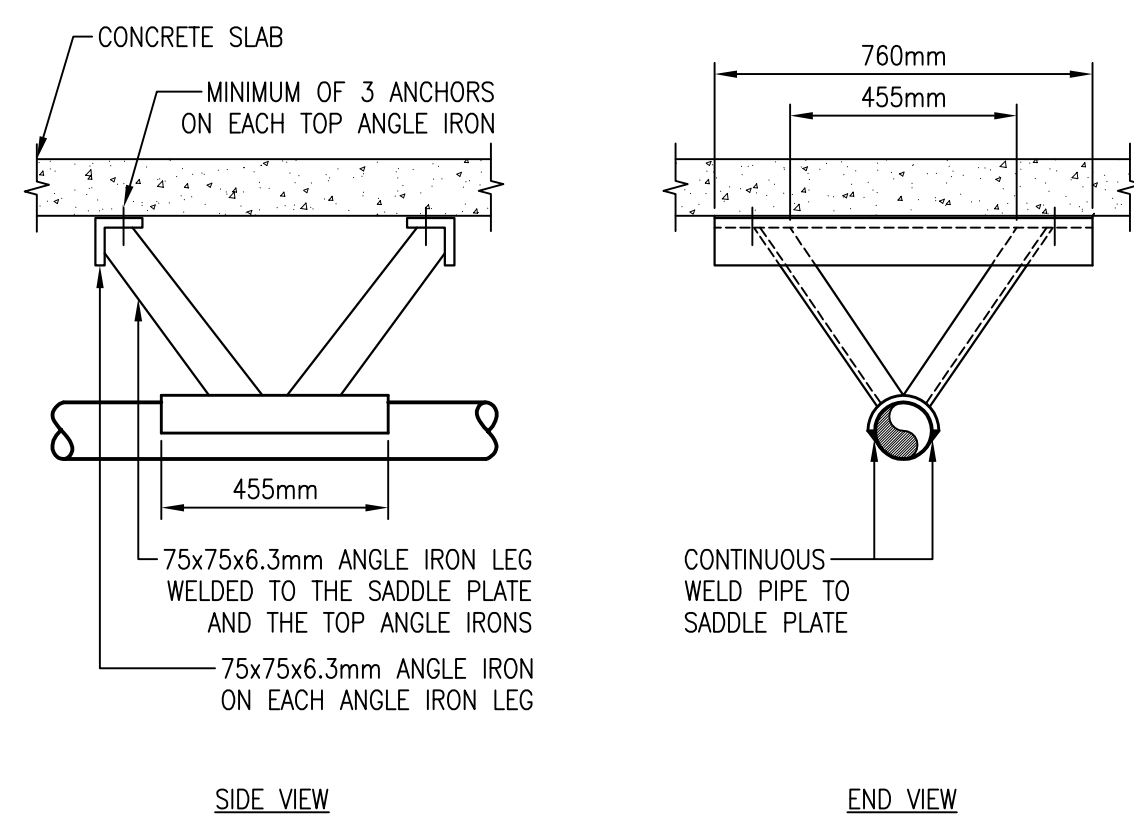
HEATING COIL PIPING DETAIL 2-WAY CONTROL VALVE 9
SCALE : N.T.S. MH501



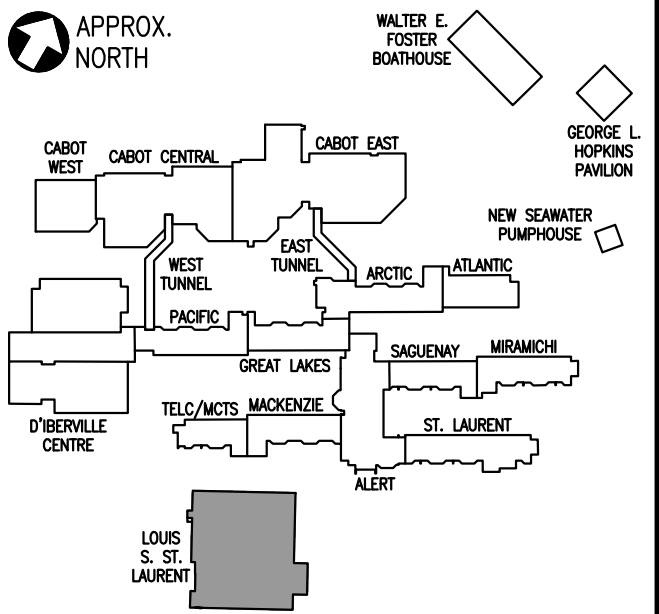
HORIZONTAL HOT WATER UNIT HEATER PIPING DETAIL 10
SCALE : N.T.S. MH501



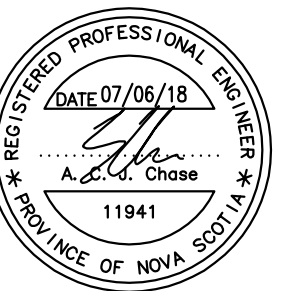
PANEL RADIATOR PIPING DIAGRAM 11
SCALE : N.T.S. MH501



PIPE ANCHOR DETAIL 12
SCALE : N.T.S. MH501



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revisions		date

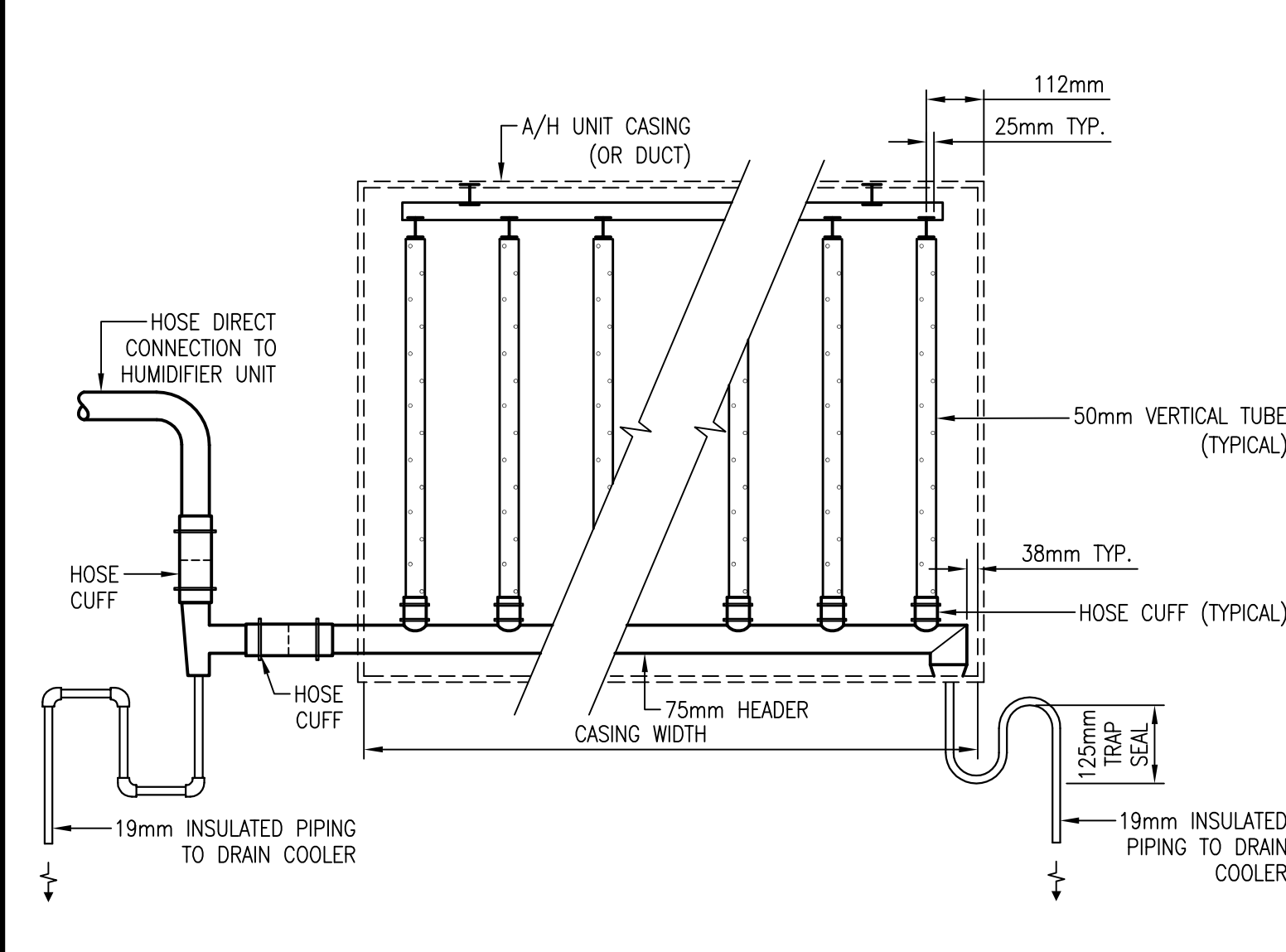
project CANADIAN COAST GUARD COLLEGE, SYDNEY, NS
LSSL MET MECHANICAL UPGRADES

drawing HVAC PIPING
LOUIS S. ST. LAURENT MACHINE SHOP DETAILS

designed MJM	conçu
date 07/06/18	
drawn MAC	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	
Tender Joan Muise	Soumission
PWGC Project Manager	Administrateur de projets TPSGC
project number R.065476.710	no. du projet
drawing no. 09-MH-501	no. du dessin

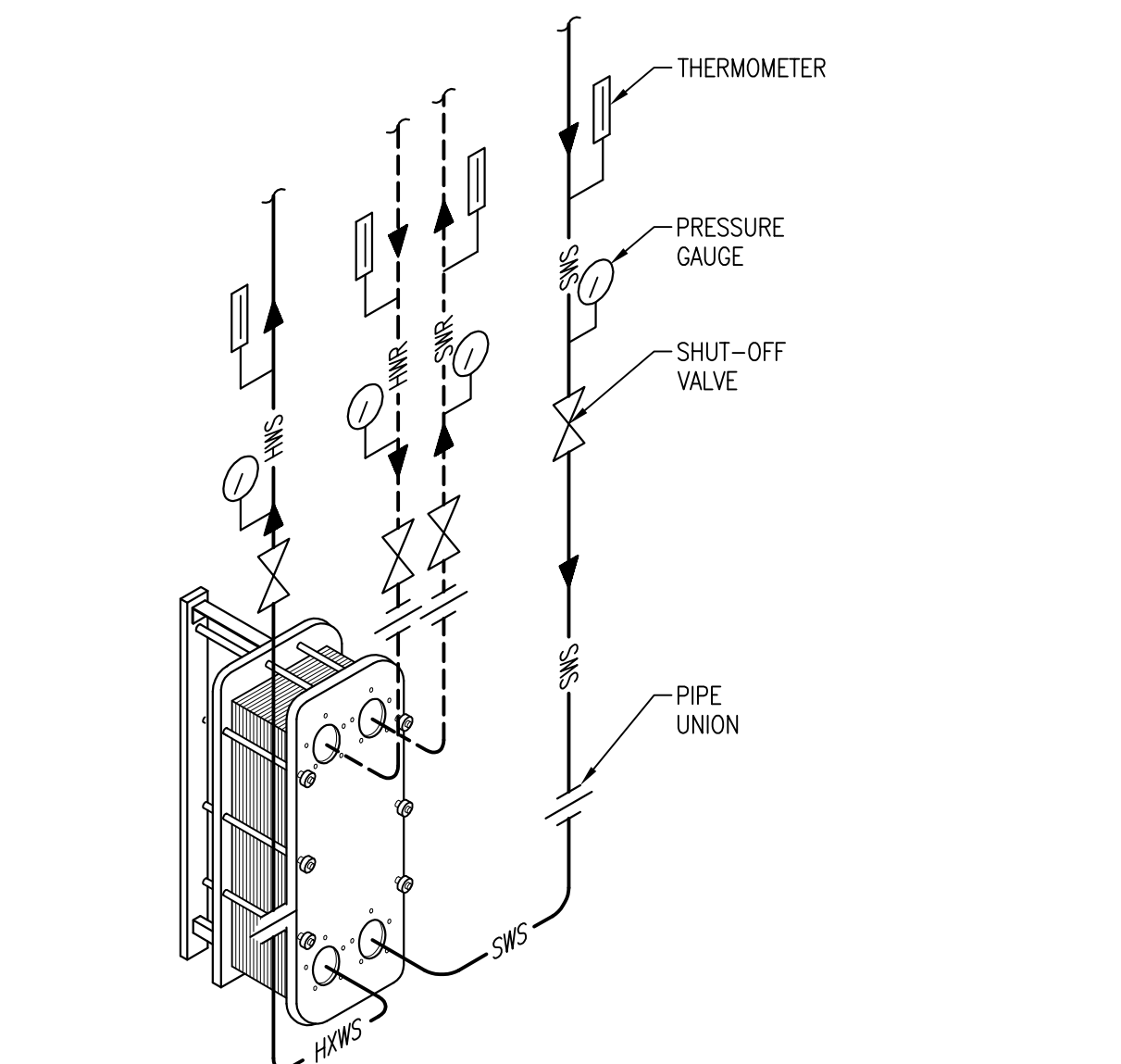
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PW50C B1 (2004)



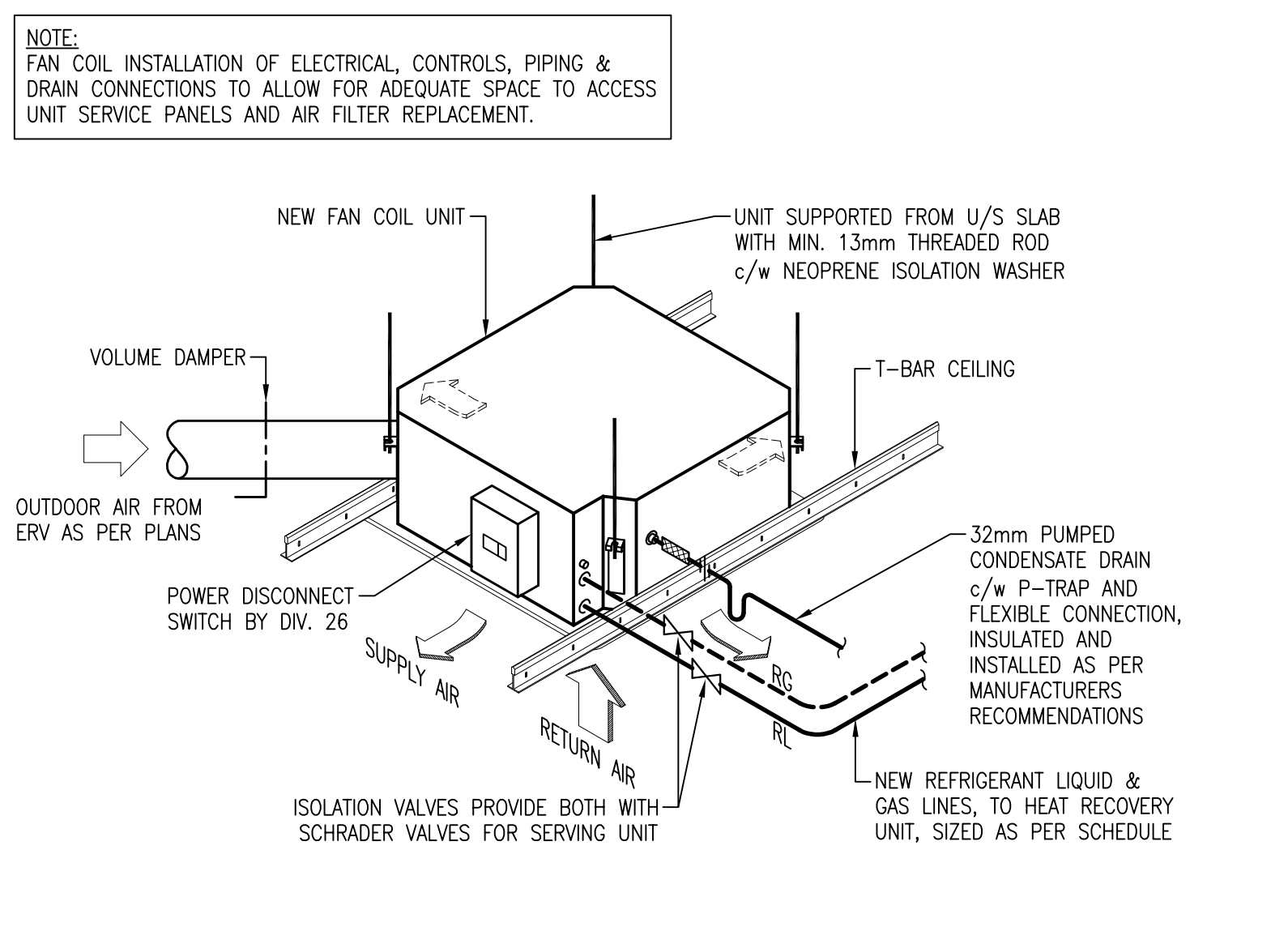
HUMIDIFIER MANIFOLD DETAIL
SCALE : N.T.S.

1
MH502



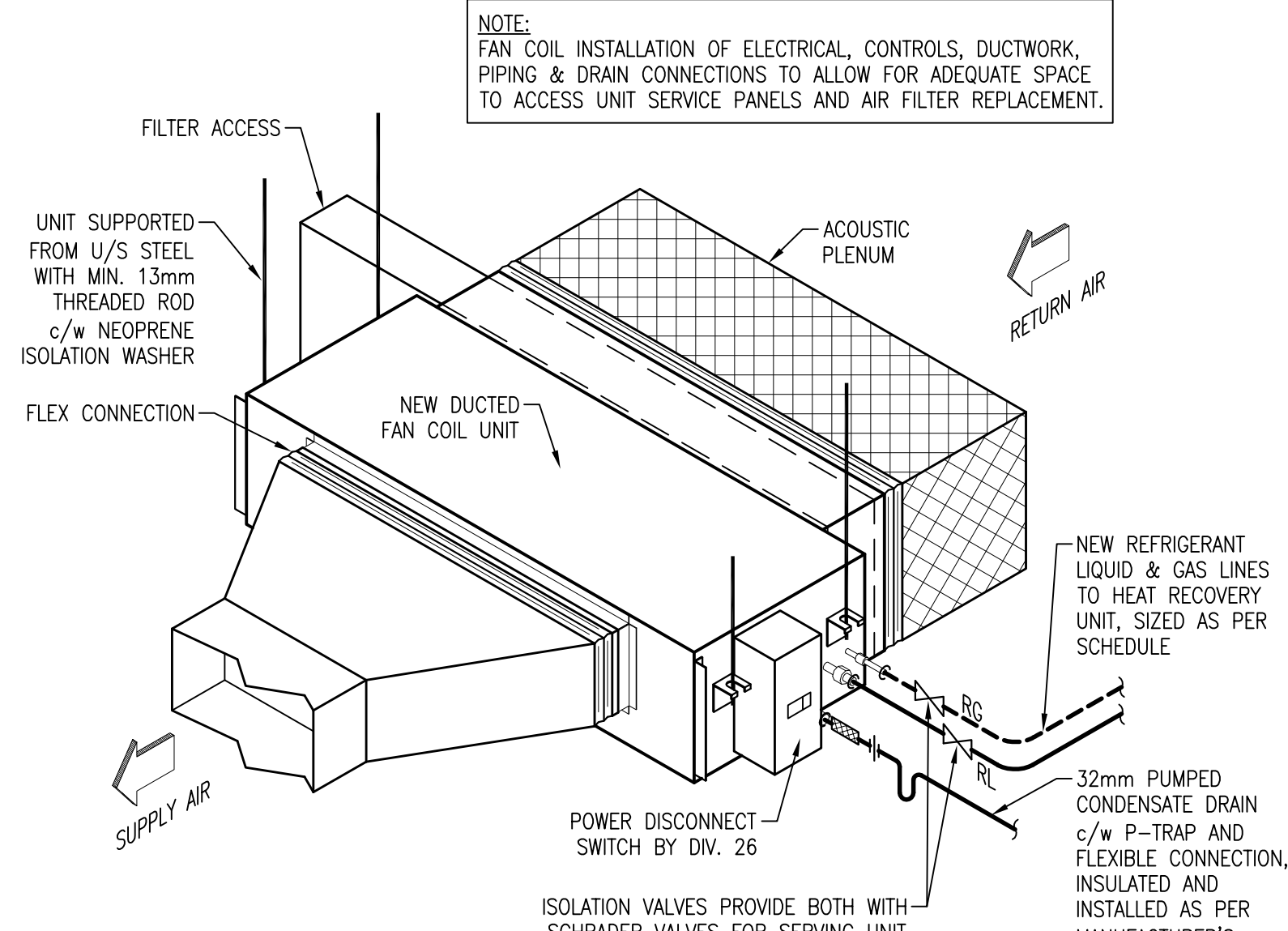
HEAT EXCHANGER PIPING DETAIL
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2
MH502



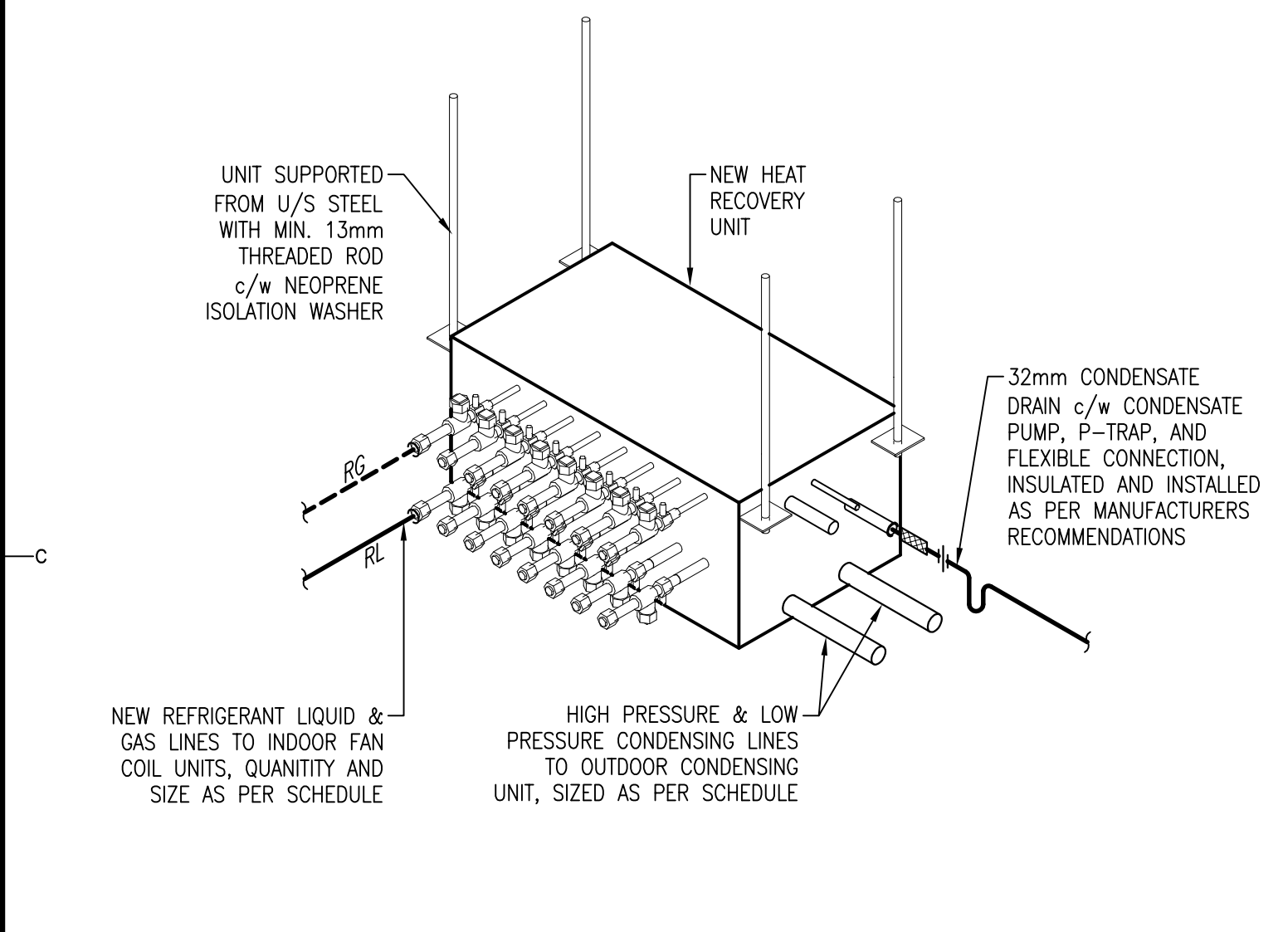
VRF DUCTLESS CASSETTE FAN COIL INDOOR UNIT
SCALE : N.T.S.

3
MH502



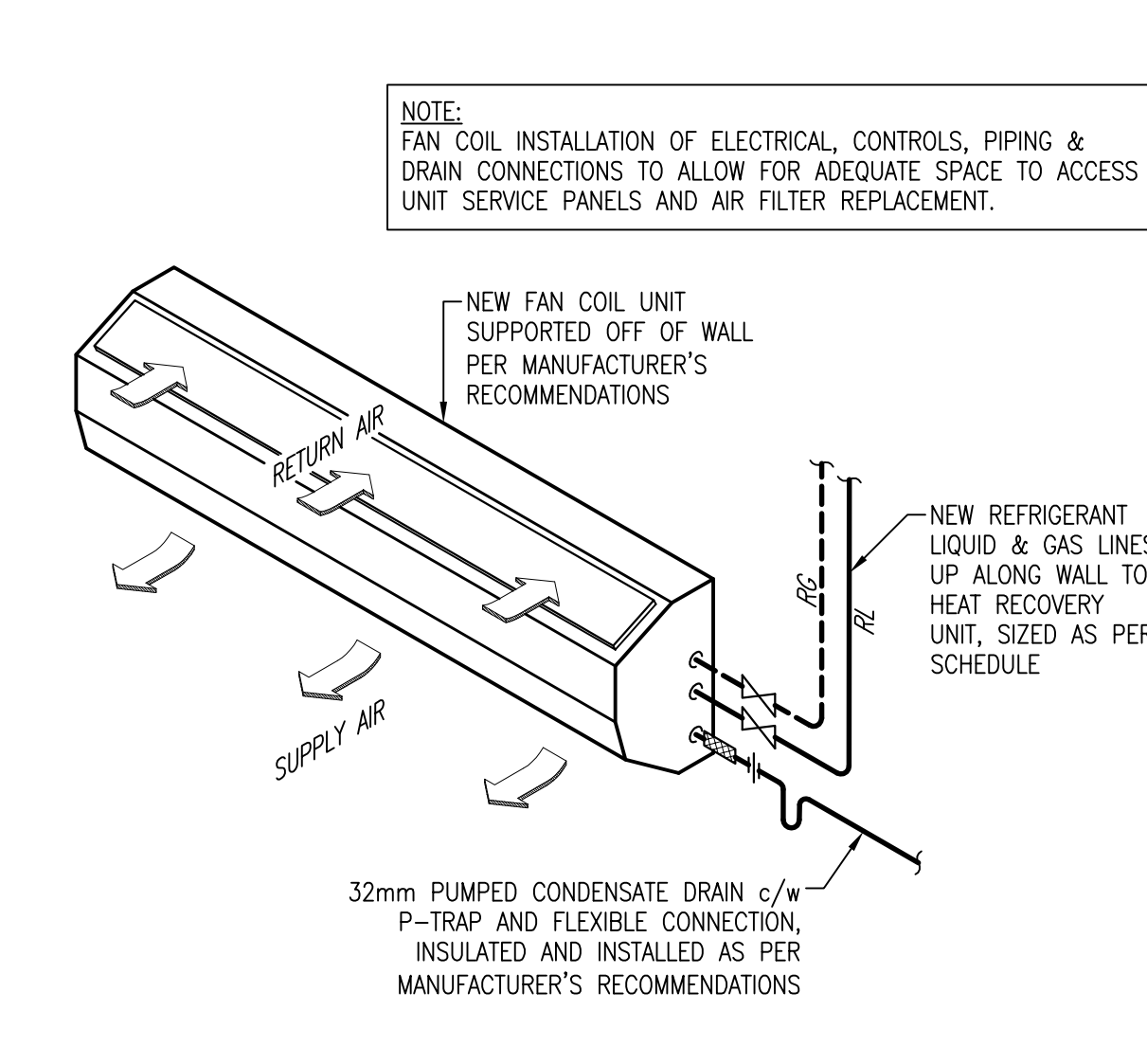
VRF DUCTED FAN COIL INDOOR UNIT
SCALE : N.T.S.

4
MH502



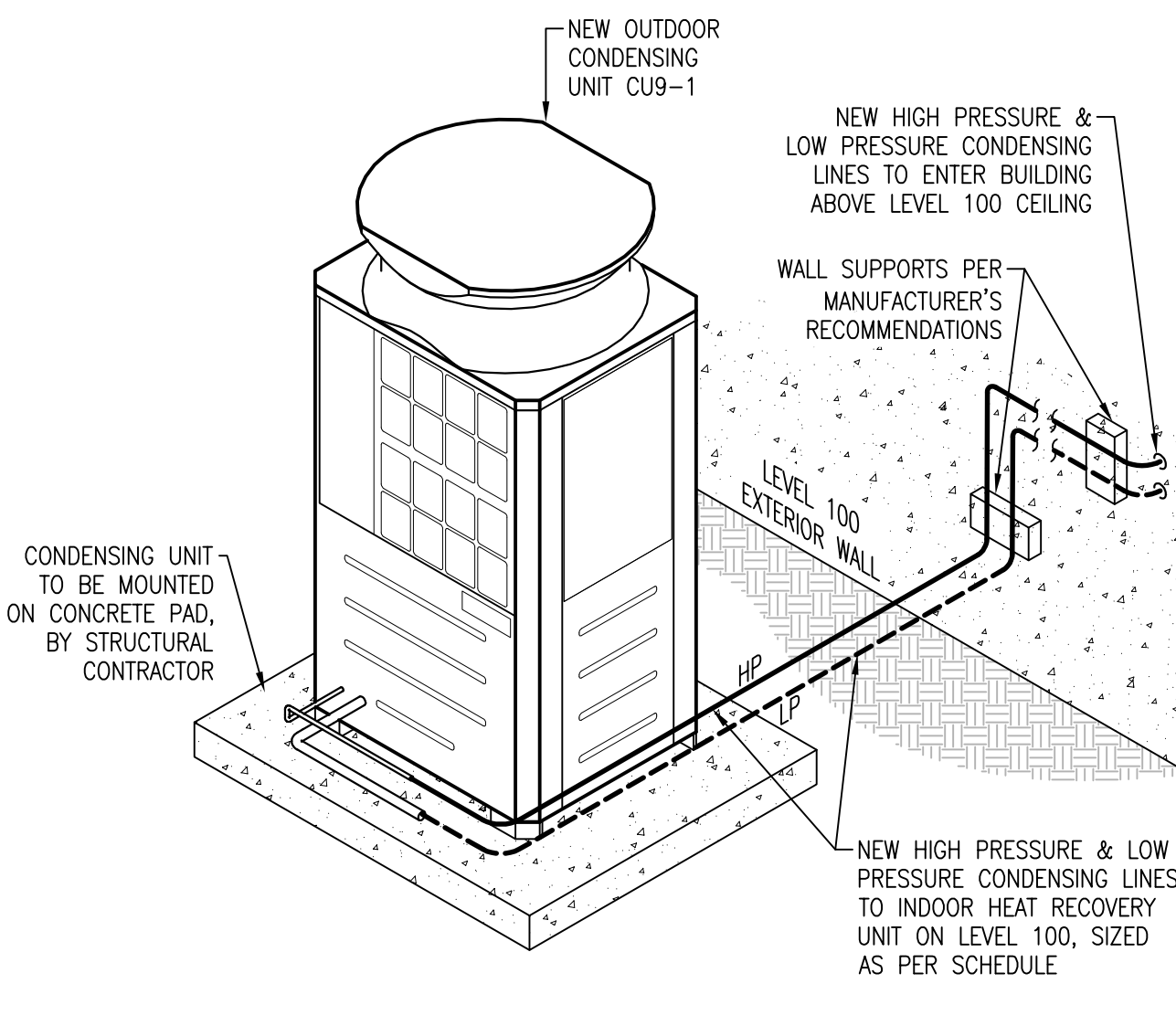
VRF HEAT RECOVERY UNIT
SCALE : N.T.S.

5
MH502



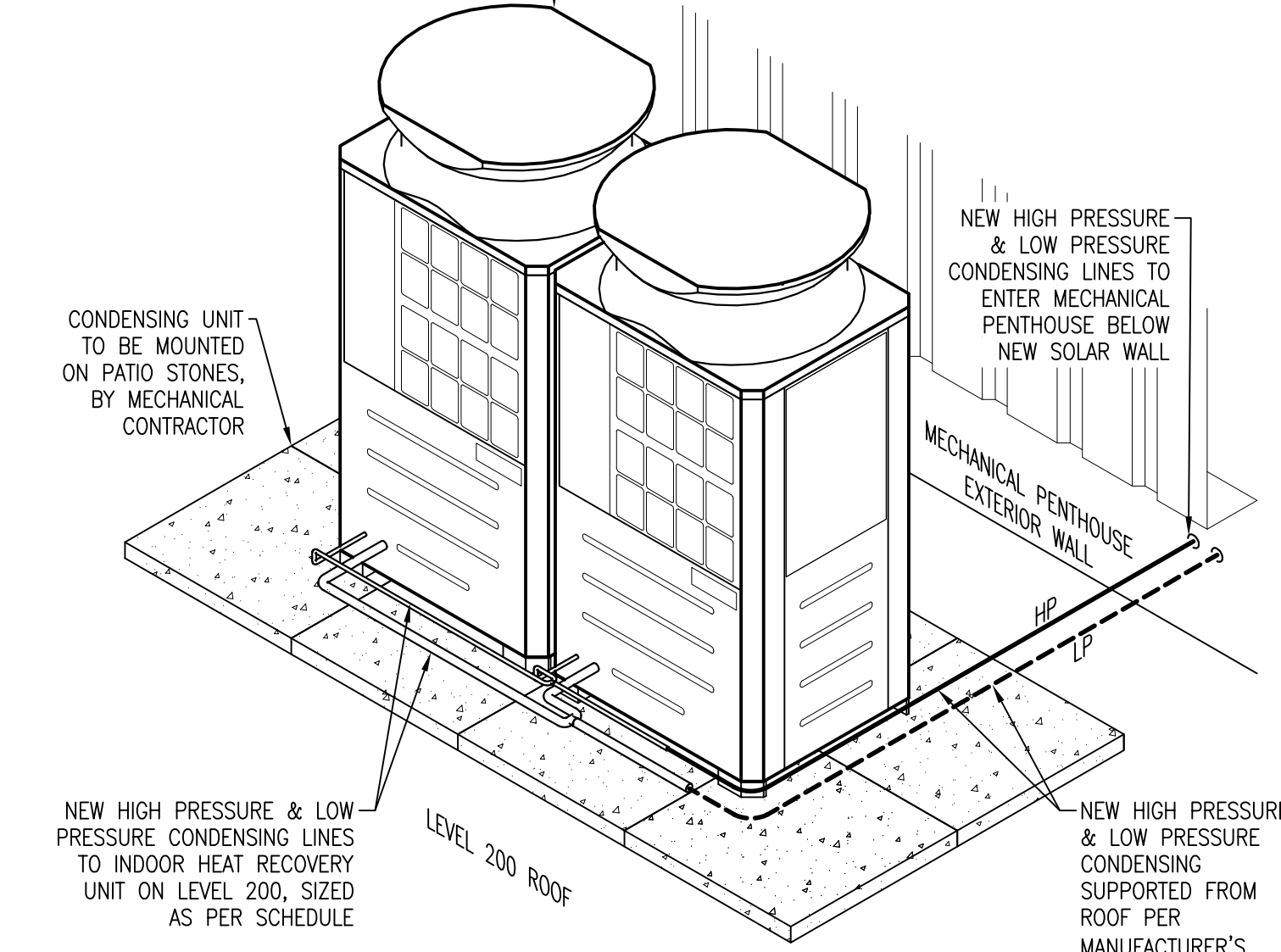
VRF DUCTLESS WALL MOUNT FAN COIL INDOOR UNIT
SCALE : N.T.S.

6
MH502



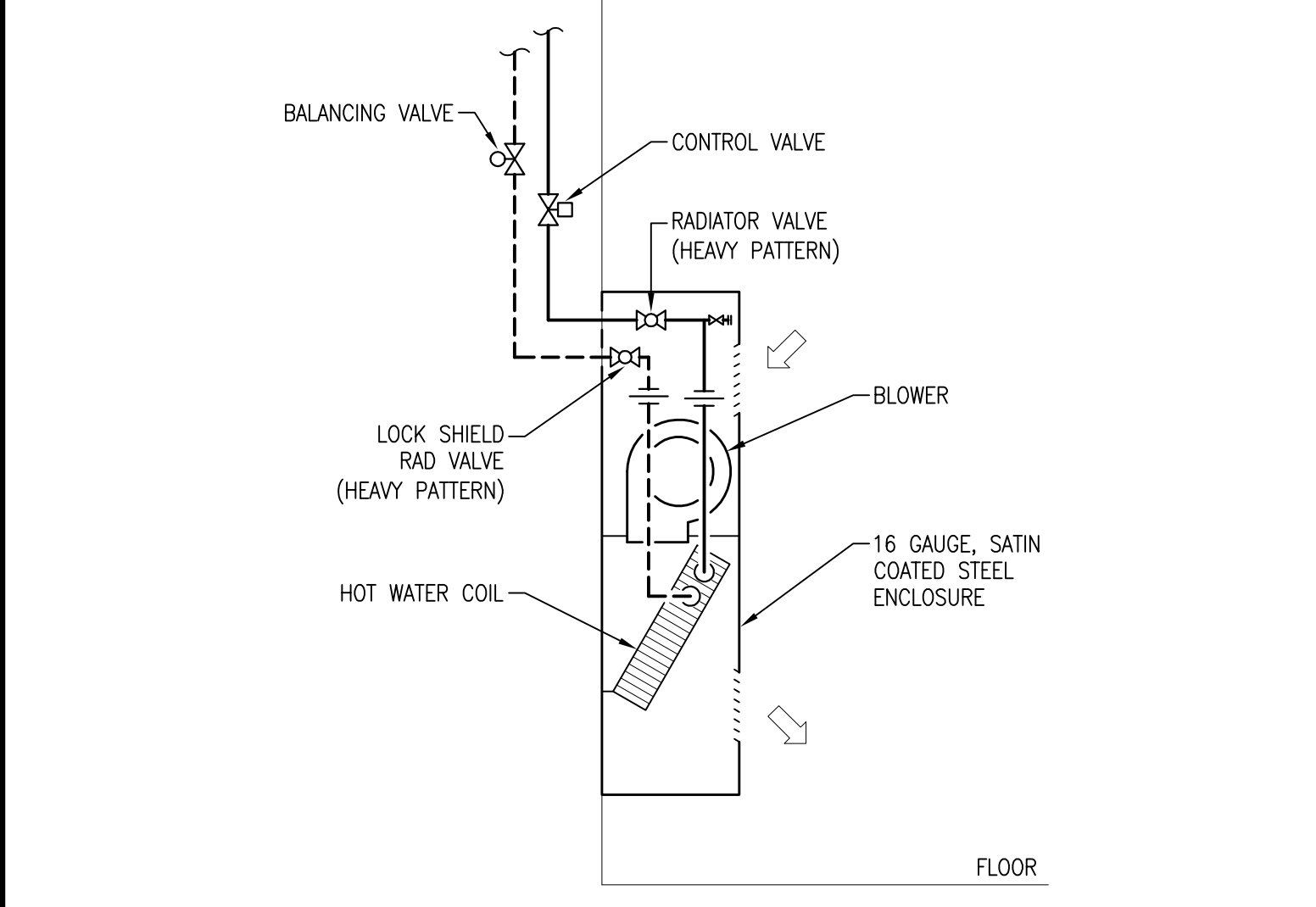
VRF OUTDOOR CONDENSING UNIT CU9-1
SCALE : N.T.S.

7
MH502



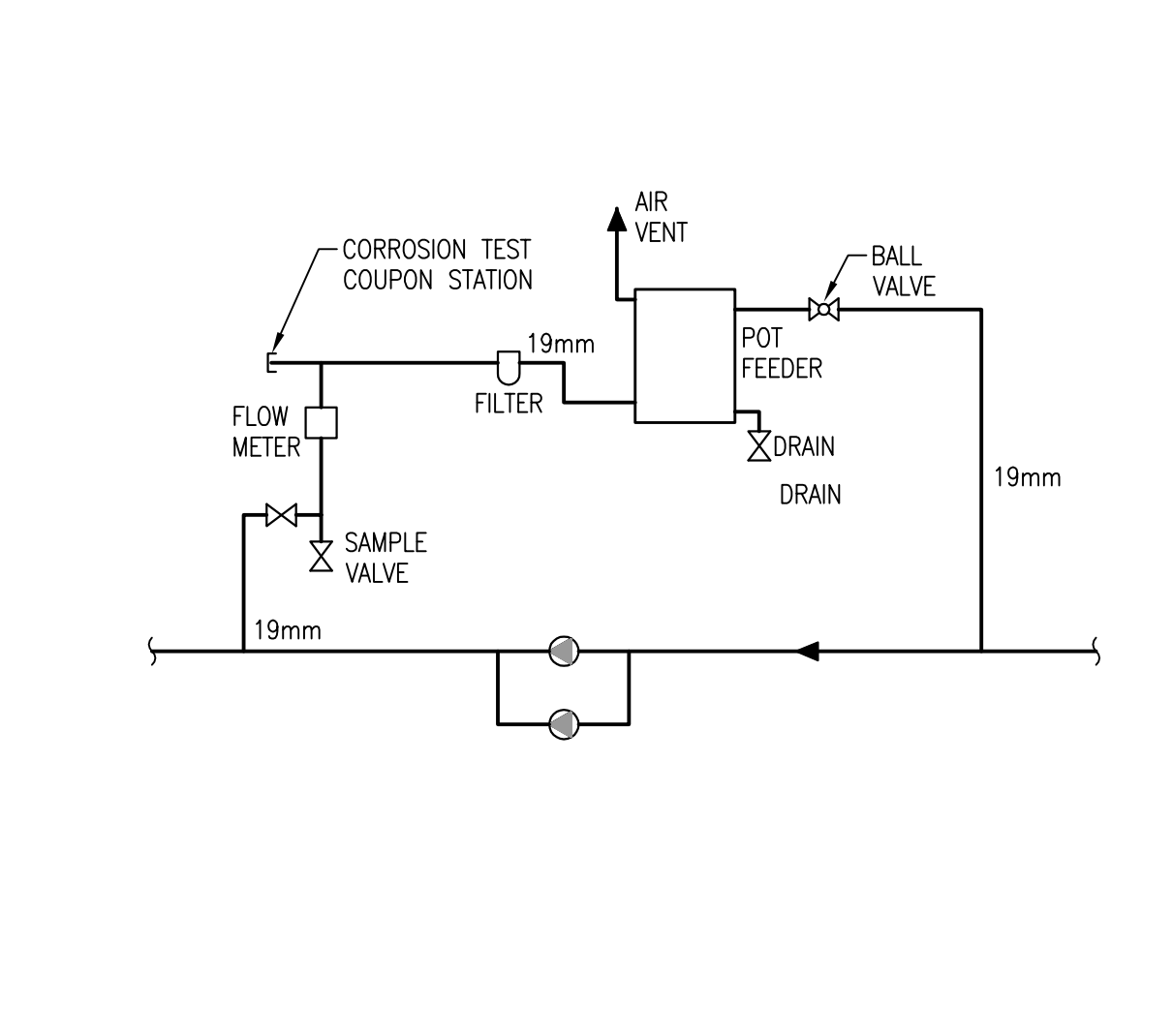
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8
MH502



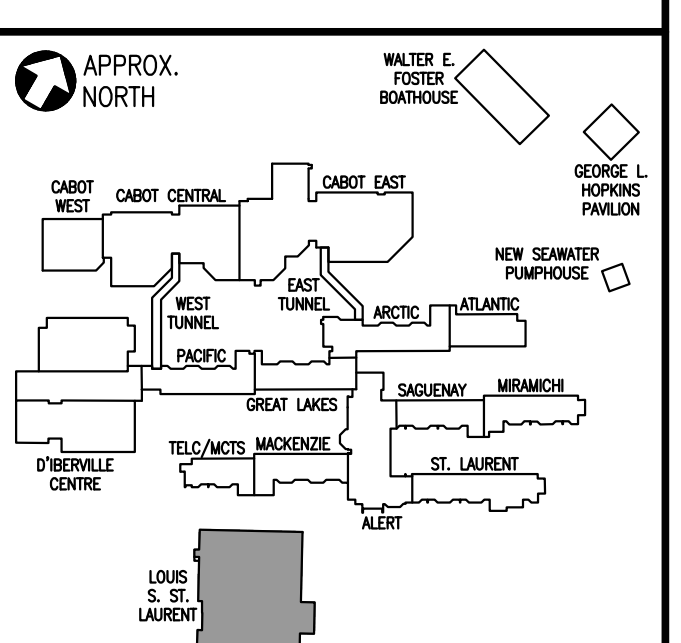
CABINET HEATER DETAIL
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9
MH502



CHEMICAL POT FEEDER DETAIL
SCALE : N.T.S.

10
MH502

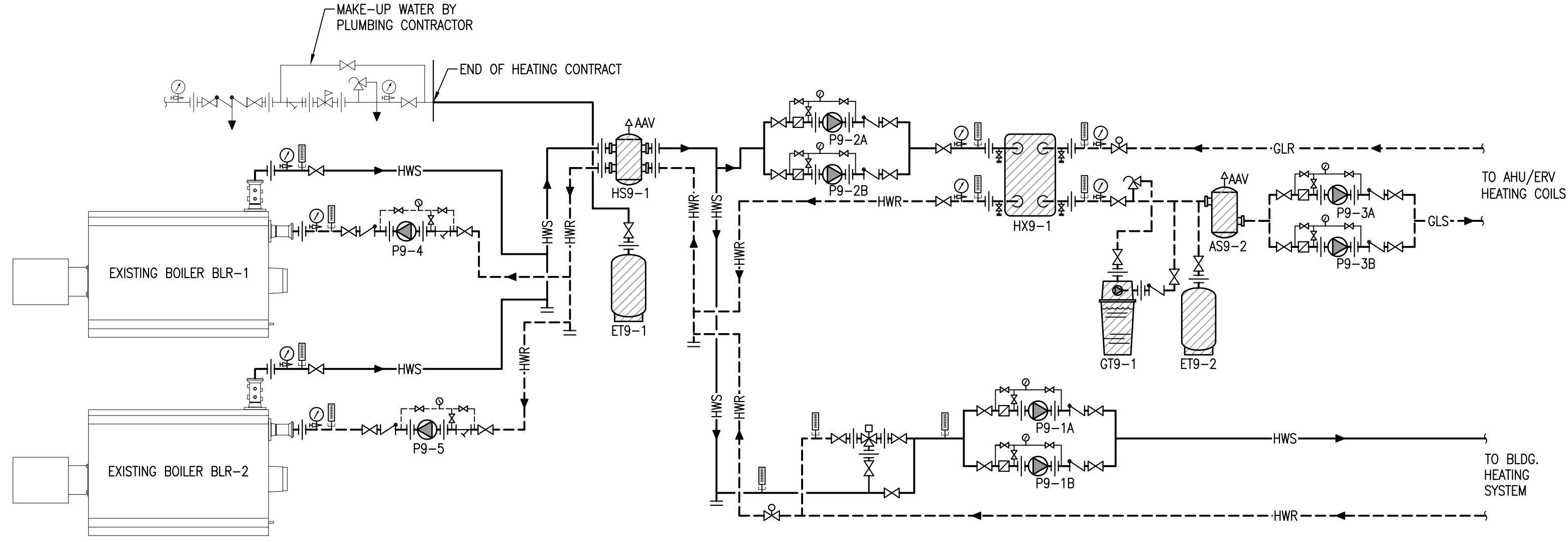


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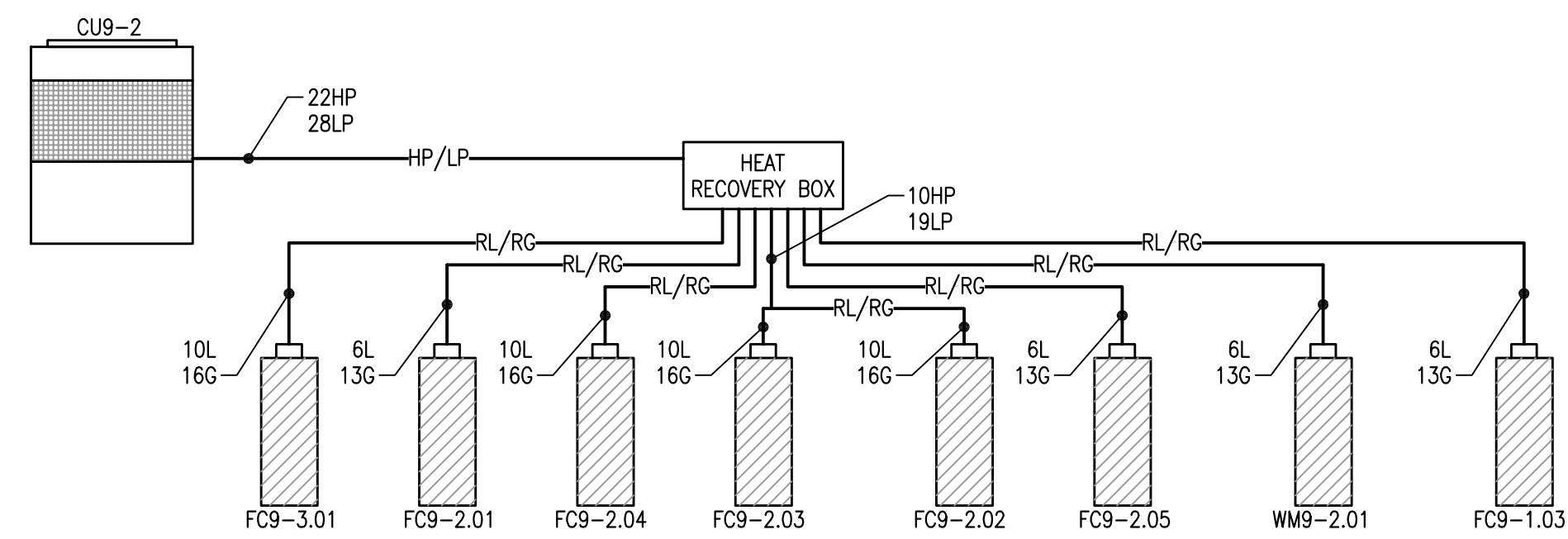


0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP DETAILS	
designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Joan Muise	Submission
PW50C Project Manager	Administrateur de projets TP50C	
project number	R.065476.710	
drawing no.	09-MH-502	

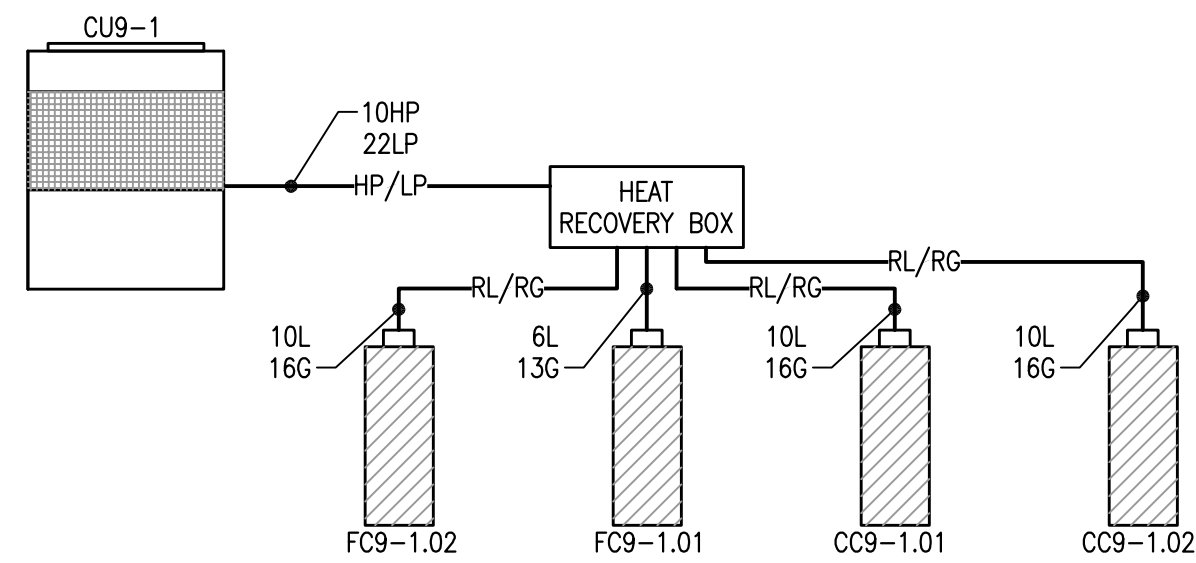
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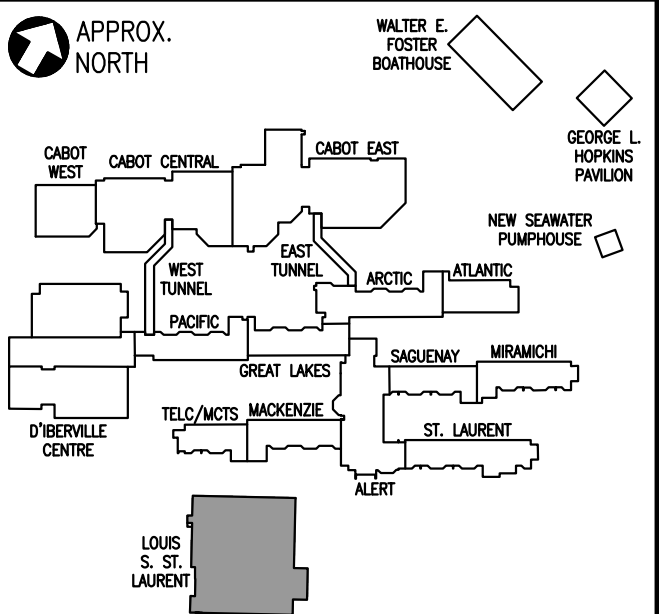
HEATING SYSTEM SCHEMATIC - BOILER ROOM 108 1
SCALE : N.T.S. MH601



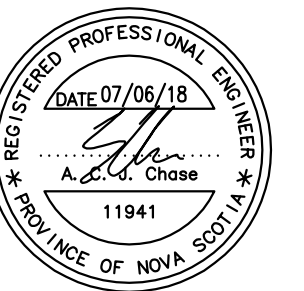
VRF SYSTEM PIPING SCHEMATIC (CU9-2) 2
SCALE : N.T.S. MH601



VRF SYSTEM PIPING SCHEMATIC (CU9-1) 3
SCALE : N.T.S. MH601



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revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP SCHEMATICS	
designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Joan Muiise	
PWGSC Project Manager	Administrateur de projets TPSGC	
project number	R.065476.710	
drawing no.	09-MH-601	

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09 – LOUIS S. ST. LAURENT BUILDING – SPLIT SYSTEM – INDOOR FAN COIL UNIT SCHEDULE																			
DESIGNATION	OUTDOOR UNIT	SERVING	TYPE	NOMINAL TONNAGE (kW)	AIRFLOW (L/s)	OUTDOOR AIR (L/s)	ESP (Pa)	COOLING			HEATING		ELECTRICAL			CONNECTIONS			COMMENTS
								TOTAL CAP. (kW)	SENS. CAP. (kW)	EER	TOTAL CAP. (kW)	COP	MCA	MOCP	VOLT/PH	LIQUID (mm)	SUCTION (mm)	DRAIN (mm)	
CC9-1.01	CU9-1	LEVEL 100 SIM ENGINE ROOM	4-WAY CEILING CASSETTE	7.0	300	38	–	7.0	–	–	7.9	–	0.54A	–	208/1	10	16	32	c/w BUILT-IN CONDENSATE LIFT PUMP AND FRESH AIR DUCT FLANGE
CC9-1.02	CU9-1	LEVEL 100 SIM ENGINE CTRL RM	4-WAY CEILING CASSETTE	8.8	300	38	–	8.8	–	–	10.0	–	0.57A	–	208/1	10	16	32	c/w BUILT-IN CONDENSATE LIFT PUMP AND FRESH AIR DUCT FLANGE
FC9-1.01	CU9-1	LEVEL 100 SIM AND CONTROL	DUCTED FAN COIL UNIT	3.5	150	54	77	3.5	–	–	4.0	–	1.20A	–	208/1	6	13	32	c/w BUILT-IN CONDENSATE LIFT PUMP
FC9-1.02	CU9-1	LEVEL 100 SIM CLASSROOM	DUCTED FAN COIL UNIT	8.8	290	77	77	8.8	–	–	10.0	–	2.73A	–	208/1	10	16	32	c/w BUILT-IN CONDENSATE LIFT PUMP
FC9-1.03	CU9-2	CADET LUNCH ROOM 106	DUCTED FAN COIL UNIT	1.8	100	52	75	1.8	–	–	2.0	–	0.50A	15A	208/1	6	13	32	c/w BUILT-IN CONDENSATE LIFT PUMP
FC9-2.01	CU9-2	OFFICES 213 & 215	DUCTED FAN COIL UNIT	3.5	135	25	109	3.5	–	–	4.0	–	0.68A	15A	208/1	6	13	32	c/w BUILT-IN CONDENSATE LIFT PUMP
FC9-2.02	CU9-2	BENCH FITTING 204	DUCTED FAN COIL UNIT	10.5	465	175	79	10.5	–	–	11.7	–	3.32A	–	208/1	10	16	32	c/w BUILT-IN CONDENSATE LIFT PUMP
FC9-2.03	CU9-2	BENCH FITTING 204	DUCTED FAN COIL UNIT	10.5	465	110	79	10.5	–	–	11.7	–	3.32A	–	208/1	10	16	32	c/w BUILT-IN CONDENSATE LIFT PUMP
FC9-2.04	CU9-2	CLASSROOM 204A	DUCTED FAN COIL UNIT	7.0	290	100	79	7.0	–	–	7.9	–	2.73A	–	208/1	10	16	32	c/w BUILT-IN CONDENSATE LIFT PUMP
FC9-2.05	CU9-2	STAFF LUNCH ROOM 209	DUCTED FAN COIL UNIT	3.5	150	29	79	3.5	–	–	4.0	–	1.20A	–	208/1	6	13	32	c/w BUILT-IN CONDENSATE LIFT PUMP
FC9-3.01	CU9-2	CLASSROOM 214	DUCTED FAN COIL UNIT	8.8	350	79	107	8.8	–	–	10.0	–	2.73A	–	208/1	10	13	32	c/w BUILT-IN CONDENSATE LIFT PUMP
WM9-2.01	CU9-2	TOOL CRIB 207	WALL MOUNTED UNIT	1.8	85	–	–	1.8	–	–	2.0	–	0.19A	15A	208/1	6	13	16	c/w CONDENSATE LIFT PUMP

NOTE: PROVIDE WIRED PROGRAMMABLE T'STATS WITH INDOOR UNITS AS PER DRAWINGS

09 – LOUIS S. ST. LAURENT BUILDING – SPLIT SYSTEM – OUTDOOR CONDENSING UNIT SCHEDULE																								
DESIGNATION	ARRANGEMENT	NOMINAL TONNAGE (kW)	NOMINAL TONNAGE OF MODULES (kW)	AIRFLOW (L/s)	COOLING			HEATING		ELECTRICAL			FANS		COMPRESSORS			UNIT CONNECTIONS		TWINING KIT CONNECTIONS	WEIGHT (kg)	MAX SOUND LEVEL (dBA)	COMMENTS	
					TOTAL CAP. (kW)	SENS. CAP. (kW)	EER	TOTAL CAP. (kW)	COP	MCA	MOCP	VOLT/PH	NO.	MOTOR (kW)	NO.	MOTOR (kW)	RPM	LIQUID (mm)	GAS (mm)					
CU09-1	–	27.0	–	2,924	27.0	–	–	31.7	–	34 A	57	208/3	1	0.92	1	6.7	–	19	22	–	–	244	58	HEAT RECOVERY BOX, SALT RESISTANT CONSTRUCTION, AND AIR INLET GUIDES
CU09-2	–	49.2	22.2	2,920	49.2	–	–	55.1	–	24 A	35	208/3	1	0.92	1	4.7	–	16	19	22	29	472	61	HEAT RECOVERY BOX, SALT RESISTANT CONSTRUCTION, AIR INLET GUIDES, AND TWINNING KIT
			27.0	2,920		–	–		–	34 A	57	208/3	1	0.92	1	6.7	–	19	22					
NOTE: PROVIDE Bacnet-BMS INTERFACE MODULE TO CONNECT BOTH UNITS TO BAS AS PER SCHEMATICS.																								

09 – LOUIS S. ST. LAURENT – ELECTRIC HUMIDIFIER SCHEDULE													
MARK	LOCATION	SYSTEM	ARRANGEMENT	TYPE	AIRFLOW (L/s)	ASORPTION DISTANCE (mm)	CAPACITY (kg/hr)	DUCT SIZE WxH (mm)	DISPERSION	ELECTRICAL			COMMENTS
										kW	VOLT/PH	AMPS	
HUS-1	301 MECH ROOM	ERV9-1	WALL MOUNT	ELECTRIC ELEMENT	1515	750	25	750x600	VERTICAL MULTITUBE	25.0	575/3	24.1	–

09 – LOUIS S. ST. LAURENT – CABINET AND UNIT HEATER SCHEDULE									
MARK	ARRANGEMENT	HEATING CAPACITY (kW)	AIR QUANTITY		WATER SIDE		MOTOR		COMMENTS
			FLOW (L/s)	SP (Pa)	FLOW (L/s)	PD (kPa)	kW	RPM	
CH9-1	WALL MOUNTED	11.6	228	–	0.25	6.7	0.037	1075	–
CH9-2	WALL MOUNTED	6.0	115	–	0.13	9.7	0.03	1050	–
CH9-3	CEILING MOUNTED FULLY EXPOSED	6.0	115	–	0.13	9.7	0.03	1050	–
UH9-1	HORIZONTAL UNIT HEATER	9.5	260	–	0.21	3.9	0.037	1500	–
UH9-2	HORIZONTAL UNIT HEATER	14.5	396	–	0.33	4.2	0.062	1500	–
UH9-3	HORIZONTAL UNIT HEATER	18.4	472	–	0.41	3.0	0.062	1500	–
UH9-4	VERTICAL UNIT HEATER	14.4	335	–	0.32	2.8	0.037	1500	–
UH9-5	VERTICAL UNIT HEATER	28.9	556	–	0.65	3.1	0.062	1500	C/W LOUVER CONE DIFFUSER
UH9-6	VERTICAL UNIT HEATER	42.5	1086	–	0.95	6.1	0.124	1075	C/W LOUVER CONE DIFFUSER
UH9-7	CEILING MOUNTED	2.9	87	–	0.07	–	0.009	1100	–

NOTE: HEATER PERFORMANCE BASED ON ENTERING WATER TEMPERATURE OF 87°C AND 11° C WATER TEMPERATURE DROP.

09 – LOUIS S. ST. LAURENT – HOT WATER HEATING COIL SCHEDULE												
MARK	AREA SERVED	AIRFLOW (L/s)	COIL SIZE H x NTL (mm)	FACE AREA (m²)	FACE VELOCITY (m/min)	EAT (°C)	LAT (°C)	COIL CAPACITY (kW)	FLUID FLOW (L/s)	WATER PD (kPa)	AIR FRICTION (Pa)	COMMENTS
HC9-1	ERV9-1 SYSTEM	1515	750x600	0.45	200	-1.1	26.7	45.4	1.04	3.6	44	-

09 – LOUIS S. ST. LAURENT – WALL FIN RADIATION SCHEDULE											
TYPE	STYLE	HEATING CAPACITY (W/m)	DIMENSIONS HEIGHT (mm)	DEPTH (mm)	NO. OF ROWS	CENTRE SPACING (mm)	TUBE SIZE (mm)	FINS/m	EWI (°C)	LWT (°C)	COMMENTS
A	SLOPED TOP	1440	457	127	1	–	32	164	87	76	–

09 – LOUIS S. ST. LAURENT – CONVECTOR RADIATOR SCHEDULE											
TYPE	STYLE	HEATING CAPACITY (kW)	DIMENSIONS LENGTH (mm)	HEIGHT (mm)	DEPTH (mm)	EWI (°C)	LWT (°C)	FLOW (L/s)	PRESSURE DROP (kPa)	COMMENTS	
A	SLOPED TOP WALL CABINET	0.9	508	508	152	87	76	0.022	0.14	UNIT IN ROOM 224 TO BE ACID RESISTANT	
B	SLOPED TOP WALL CABINET	1.3	711	508	152	87	76	0.028	0.24	–	
C	SLOPED TOP WALL CABINET	1.5	813	508	152	87	76	0.033	0.34	–	
D	SLOPED TOP WALL CABINET	1.7	914	508	152	87	76	0.039	0.55	–	
E	SLOPED TOP WALL CABINET	2.0	1016	508	152	87	76	0.043	0.75	–	
F	SLOPED TOP WALL CABINET	4.0	1524	660	203	87	76	0.085	0.90	–	

09 – LOUIS S. ST. LAURENT – RUN OUT SIZE FOR WALL FIN RADIATION SHCHEDULE	
HEATING CAPACITY (kW)	PIPE SIZE (NPS)
0 – 8.9	3/4
9.0 – 15.9	1
16.0 – 35.5	1 1/4

09 – LOUIS S. ST. LAURENT – PUMP SCHEDULE															
DESIGNATION	LOCATION	APPLICATION	ARRANGE.	FLOW RATE (L/s)	HEAD (kPa)	MOTOR (kW)	ELECT. DATA	MOTOR RPM	STARTER	STARTER LOCATION	CONTROLS	VIBRATION ISOLATORS			COMMENTS
												TYPE	SPRING	STATIC DEF.	
P9-1A/B	LSSL BOILER ROOM 108	PERIMETER HOT WATER HEATING	IN-LINE	8.12	116	2.23	575/3	3600	VFD	PUMP MOUNTED	EMCS	NSN	-	-	-
P9-2A/B	LSSL BOILER ROOM 108	HOT WATER HEAT EXCHANGER	IN-LINE	5.05	53	0.56	575/3	1800	VFD	PUMP MOUNTED	EMCS	NSN	-	-	-
P9-3A/B	LSSL BOILER ROOM 108	GLYCOL HEATING COILS	IN-LINE	5.39	115	1.49	575/3	3600	VFD	PUMP MOUNTED	EMCS	NSN	-	-	-
P9-4/5	LSSL BOILER ROOM 108	BOILER CIRCULATORS	IN-LINE	5.79	42	2.23	575/3	3600	MAGNETIC	PUMP MOUNTED	EMCS	NSN	-	-	-

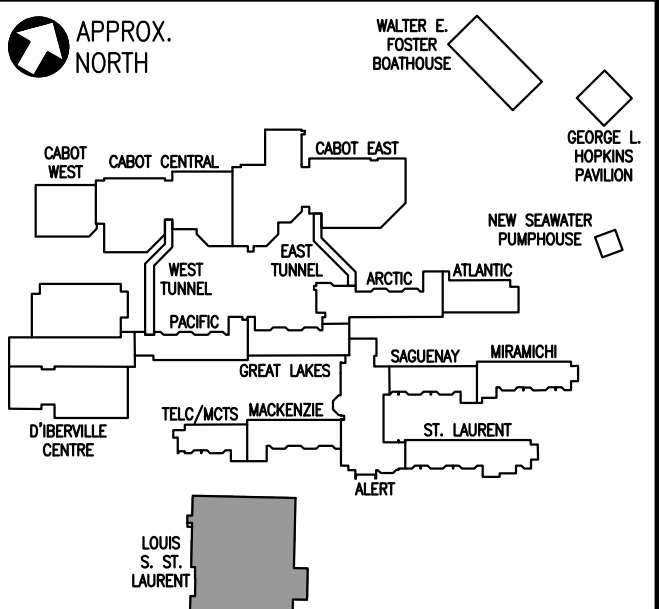
09 – LOUIS S. ST. LAURENT – CONTROL VALVE SIZE FOR WALL FIN RADIATION SHCHEDULE		
HEATING CAPACITY (kW)	VALVE SIZE (NPS)	Cv INDEX
0 – 4.2	1/2	1.5
4.3 – 6.7	1/2	2.3
6.8 – 11.0	3/4	3.8
11.1 – 20.4	1	7.0
20.5 – 30.5	1 1/4	12.0

09 – LOUIS S. ST. LAURENT – PLATE HEAT EXCHANGER SCHEDULE																	
DESIGNATION	LOCATION	APPLICATION	TYPE	HOT SIDE					COLD SIDE					TOTAL HEAT TRANSFER (kW)	DESIGN PRESSURE (kPa)	TEST PRESSURE (kPa)	REMARKS
				FLUID	FLOW (L/s)	INLET (°C)	OUTLET (°C)	MAX PD (kPa)	FLUID	FLOW (L/s)	INLET (°C)	OUTLET (°C)	MAX PD (kPa)				
HX9-1	108 BOILER ROOM	HOT WATER/ GLYCOL EXCHANGER	GASKETED PLATE HEAT EXCHANGER	H ₂ O	5.05	87.0	76.0	21.8	40% GLYCOL	5.39	71.0	82.0	26.5	228.0	1,034	1,344	–

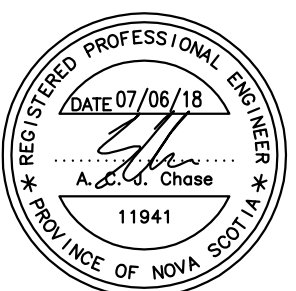
09 – LOUIS S. ST. LAURENT – AIR SEPARATOR SCHEDULE							
MARK	SYSTEM	TYPE	CAPACITY (L/s)	TANGENTIAL OPENING SIZES (mm)	DIMENSIONS (mm)		REMARKS
					LENGTH	DIA.	
AS9-1	GLYCOL HEATING COILS	INLINE	–	75	–	–	–
HS9-1	HOT WATER HEATING	INLINE	–	100	–	–	c/w AIR SEPARATOR, DRAIN VALVE, AND MAGNETIC DIRT SEPARATOR

09 – LOUIS S. ST. LAURENT – EXPANSION TANK SCHEDULE						
MARK	SYSTEM	VOLUME (LITRES)	ACCEPT. (LITRES)	DIMENSIONS (mm) HEIGHT DIA.	CONNECTIONS	REMARKS
ET9-1	PRECHARGED DIAPHRAGM TYPE VERTICAL	292	130	1240 610	25mm	–
ET9-2	PRECHARGED DIAPHRAGM TYPE VERTICAL	121	43	1207 390	25mm	–

09 – LOUIS S. ST. LAURENT – MINIMUM HVAC PIPE INSULATION THICKNESS (mm) NECB 2015 TABLE 5.2.5.3							
DESIGN TEMPERATURE RANGE (°C)	INSULATION		NOMINAL PIPE DIAMETER, INCHES (mm)				
	CONDUCTIVITY (W/m °C)	RATING TEMP.(°C)	RUNOUTS ≤ 1 (20)	≤ 1 (25)	1-1/4 TO 2 (32 TO 50)	2-1/2 TO 4 (63 TO 100)	≥ 5 (125)
HEATING SYSTEMS (HOT WATER)							
> 177	0.046–0.049	121	38	114	127	127	127
122–177	0.042–0.045	93	38	76	101	114	114
94–121	0.039–0.043	65	38	63	63	76	76
61–93	0.036–0.042	52	25	38	50	50	50
41–60	0.035–0.040	38	25	25	38	38	38
COOLING SYSTEMS (CHILLED WATER)							
5–13	0.030–0.039	24	25	25	25	25	25
< 5	0.030–0.039	24	25	25	38	38	38

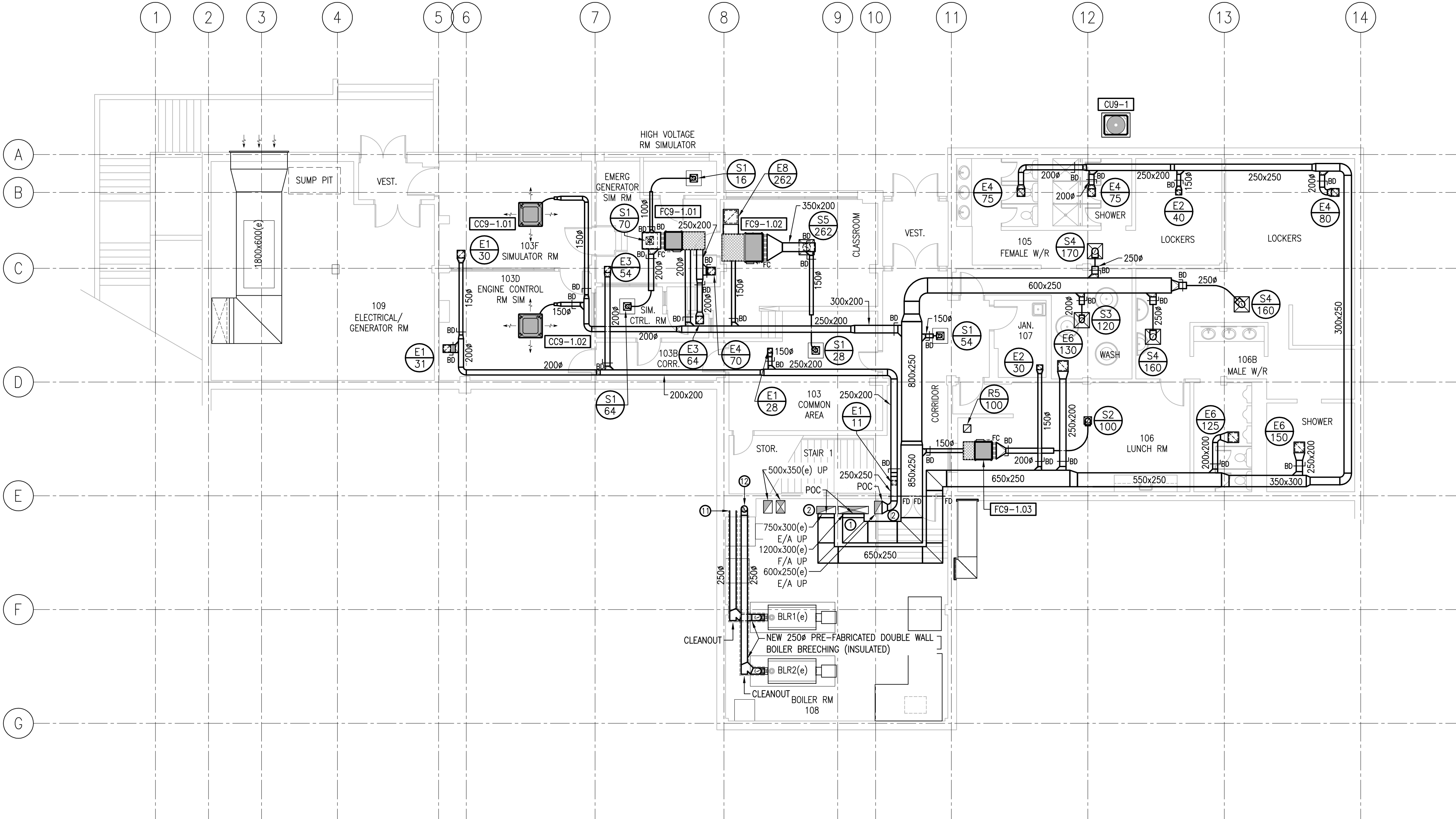


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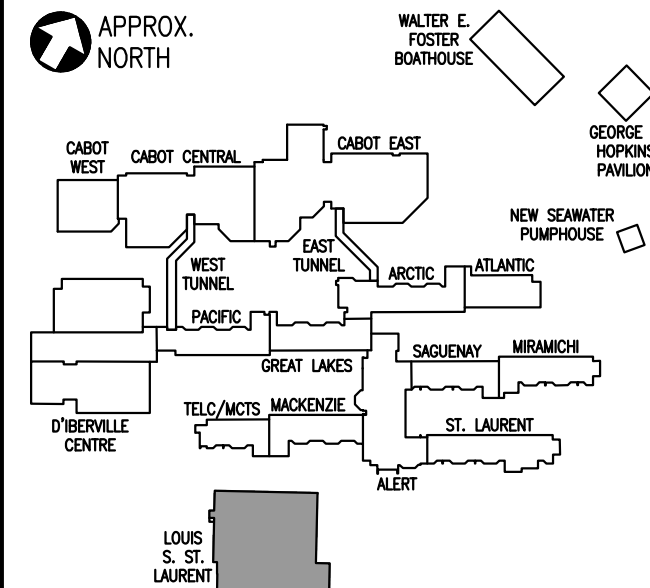
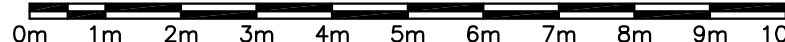
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①	NEW FRESH AIR DUCTWORK TO THE INTO EXISTING FRESH AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
②	NEW EXHAUST AIR DUCTWORK TO THE INTO EXISTING EXHAUST AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
③	PROVIDE NEW EXPLOSION-PROOF MOTORIZED DAMPER IN DUCT.
④	PROVIDE NEW ACTUATOR FOR EXISTING MOTORIZED DAMPER.
⑤	COORDINATE NEW FRESH AIR AND EXHAUST AIR DUCTWORK WITH EXISTING PENETRATIONS THROUGH WALLS WHERE POSSIBLE.
⑥	NEW DUCTWORK TO RUN BETWEEN OPEN WEB STEEL JOISTS IN THIS AREA.
⑦	PROVIDE NEW MOTORIZED DAMPER IN EXISTING EXHAUST AIR DUCT UP TO NEW EXHAUST FAN.
⑧	REFER TO DETAIL 1, DRAWING MV-301 FOR CONTINUATION OF DUCTWORK.
⑨	REFER TO LEVEL 200, DRAWING MV-102 FOR CONTINUATION OF DUCTWORK.
⑩	NEW EXHAUST FAN c/w NEW ROOF CURB TO THE INTO EXISTING EXHAUST AIR DUCTWORK DOWN TO LEVEL BELOW.
⑪	CONNECT NEW 250# PRE-FABRICATED DOUBLE WALL BREECHING TO EXISTING 250x250 MASONRY CHIMNEY WHERE SHOWN.
⑫	NEW 250# PRE-FABRICATED DOUBLE WALL BREECHING TO TRANSITION TO SINGLE WALL BREECHING AT EXISTING 300x300 MASONRY CHIMNEY AND RUN UP/DN INSIDE EXISTING 300x300 MASONRY CHIMNEY.
⑬	NEW 250# PRE-FABRICATED DOUBLE WALL BREECHING UP/DN INSIDE EXISTING 300x300 MASONRY CHIMNEY.
⑭	DISCONNECT AND REMOVE EXISTING EXHAUST AND INTAKE GOOSENECKS BACK TO CURB PLATE, AND PROVIDE NEW EXHAUST AND INTAKE GOOSENECKS, SIZED TO MATCH EXISTING, c/w with 13mm WIRE MESH BROSSCREEN ON OPENINGS, REFER TO DETAIL 2, DRAWING 09-MV-502, FOR ADDITIONAL DETAILS.



VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100 NEW WORK

SCALE : 1:10



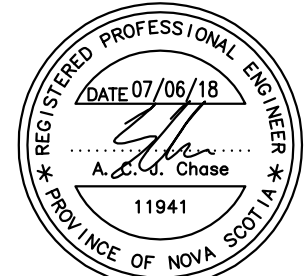
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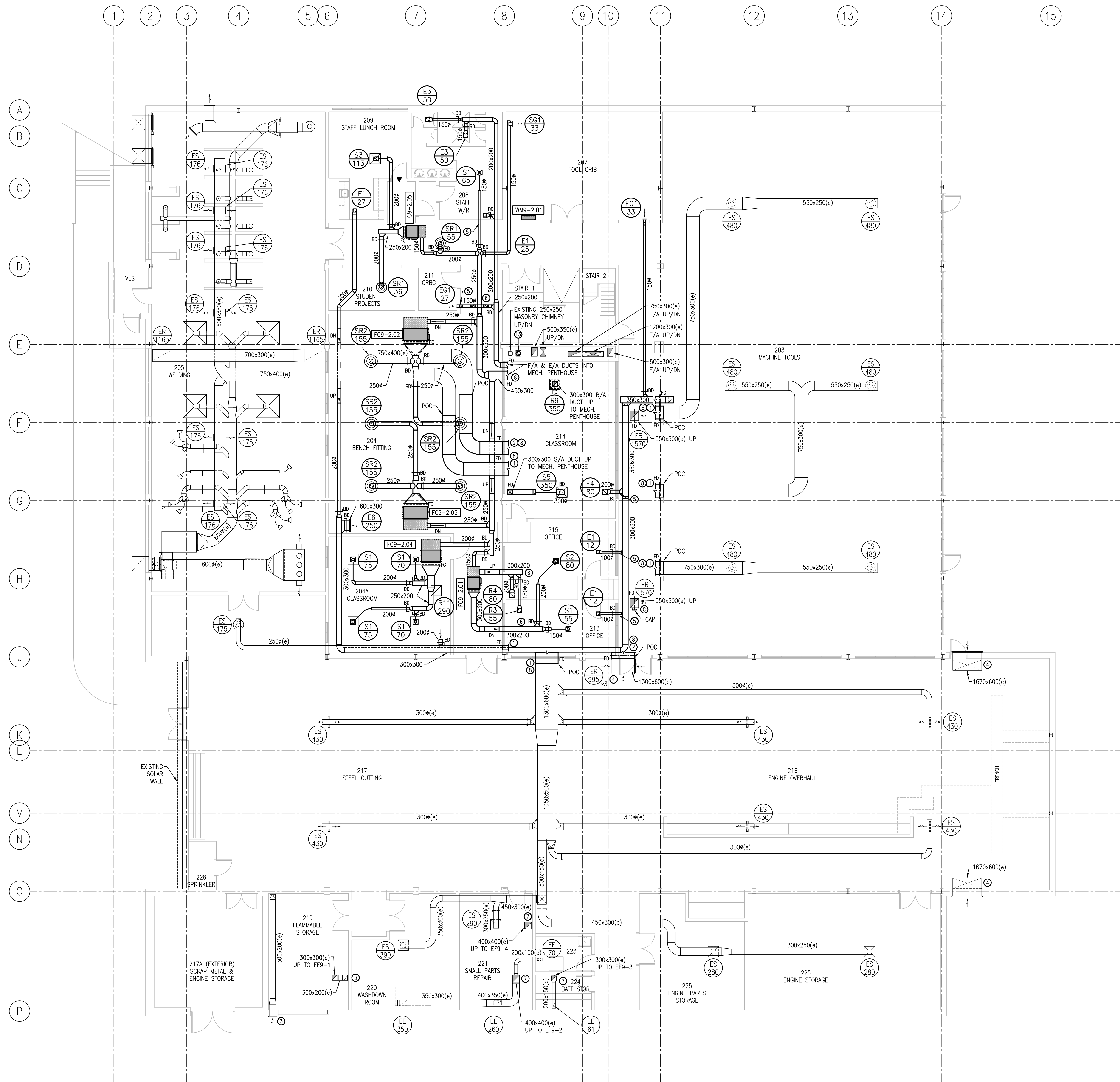
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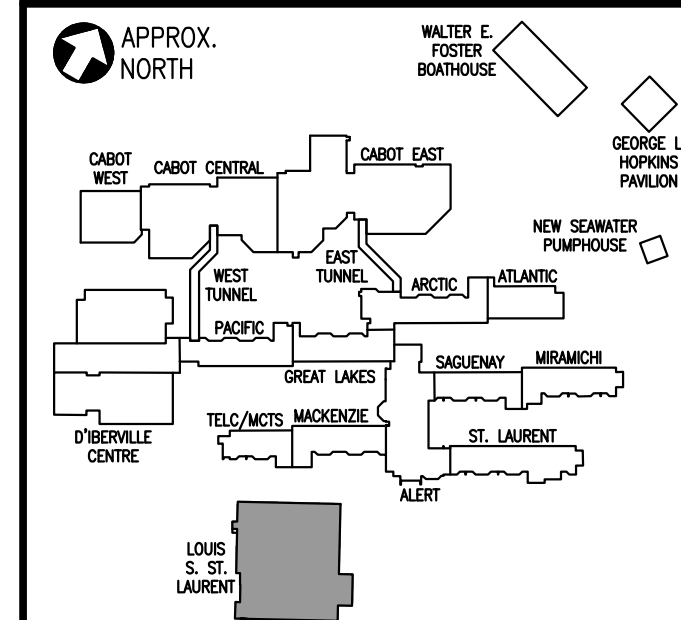
Q	Issued for Tender	07/18
revisions		date
project	project	
<p align="center">CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES</p>		
drawing	dessin	
<p align="center">VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 NEW WORK</p>		
designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Soumission	
Joan Muise		
PWOSC Project Manager	Administrateur de projets TPSC	
project number	no. du projet	
R.065476.710		
drawing no.	no. du dessin	
09-MV-101		

CONSTRUCTION NOTES	
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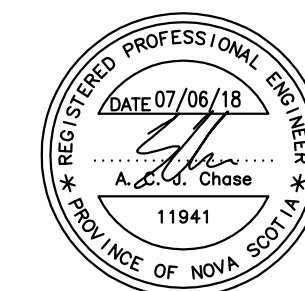


VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 200 NEW WORK

SCALE : 1:100



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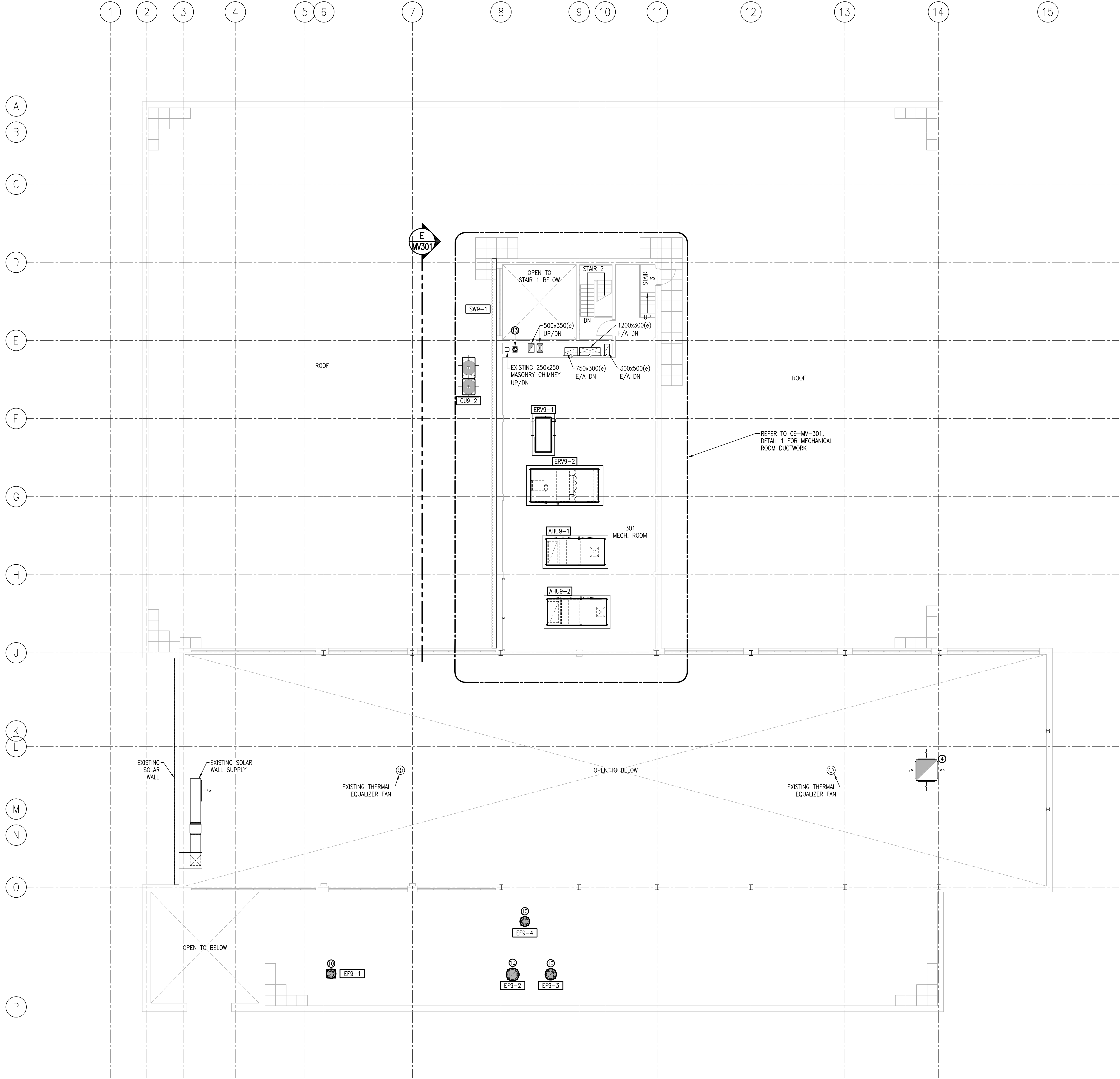


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drawing design
VENTILATION
LOUIS S. ST. LAURENT
MACHINE SHOP
LEVEL 200
NEW WORK

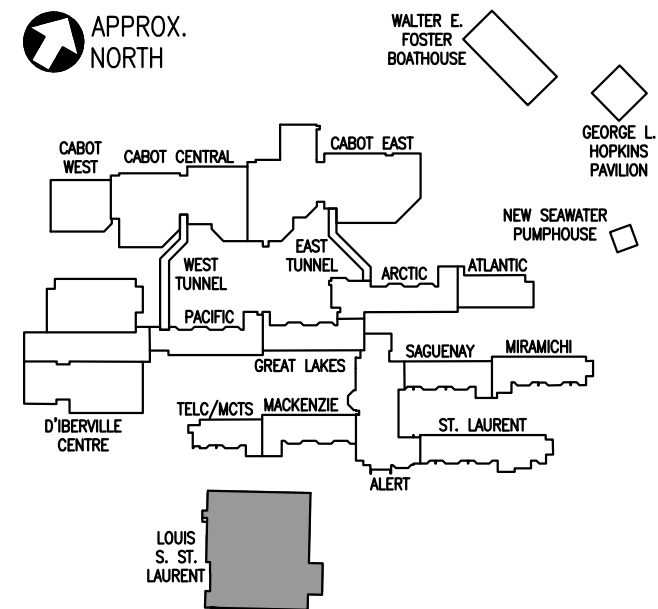
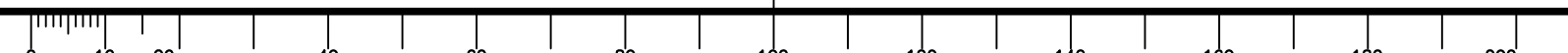
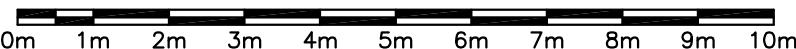
designed MJM conçu
date 07/06/18
drawn MAC dessiné
date 07/06/18
approved ACJC approuvé
date 07/06/18
Tender Submission
Joan Muise
PWGSC Project Manager Administrateur de projets TPSGC
project number no. du projet
R.065476.710
drawing no. no. du dessin
09-MV-102

CONSTRUCTION NOTES	
①	NEW FRESH AIR DUCTWORK TO TIE INTO EXISTING FRESH AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
②	NEW EXHAUST AIR DUCTWORK TO TIE INTO EXISTING EXHAUST AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
③	PROVIDE NEW EXPLOSION-PROOF MOTORIZED DAMPER IN DUCT.
④	PROVIDE NEW ACTUATOR FOR EXISTING MOTORIZED DAMPER.
⑤	COORDINATE NEW FRESH AIR AND EXHAUST AIR DUCTWORK WITH EXISTING PENETRATIONS THROUGH WALLS WHERE POSSIBLE.
⑥	NEW DUCTWORK TO RUN BETWEEN OPEN WEB STEEL JOISTS IN THIS AREA.
⑦	PROVIDE NEW MOTORIZED DAMPER IN EXISTING EXHAUST AIR DUCT UP TO NEW EXHAUST FAN.
⑧	REFER TO DETAIL 1, DRAWING MV-301 FOR CONTINUATION OF DUCTWORK.
⑨	REFER TO LEVEL 200, DRAWING MV-102 FOR CONTINUATION OF DUCTWORK.
⑩	NEW EXHAUST FAN c/w NEW ROOF CURB TO TIE INTO EXISTING EXHAUST AIR DUCTWORK DOWN TO LEVEL BELOW.
⑪	CONNECT NEW 250# PRE-FABRICATED DOUBLE WALL BREECHING TO EXISTING 250x250 MASONRY CHIMNEY WHERE SHOWN.
⑫	NEW 250# PRE-FABRICATED DOUBLE WALL BREECHING TO TRANSITION TO SINGLE WALL BREECHING AT EXISTING 300x300 MASONRY CHIMNEY AND RUN UP/DN INSIDE EXISTING 300x300 MASONRY CHIMNEY.
⑬	NEW 250# PRE-FABRICATED DOUBLE WALL BREECHING UP/DN INSIDE EXISTING 300x300 MASONRY CHIMNEY.
⑭	DISCONNECT AND REMOVE EXISTING EXHAUST AND INTAKE GOOSENECKS BACK TO CURB PLATE, AND PROVIDE NEW EXHAUST AND INTAKE GOOSENECKS, SIZED TO MATCH EXISTING, c/w WITH 13mm WIRE MESH BIRDSCREEN ON OPENINGS, REFER TO DETAIL 7, DRAWING 09-MV-502, FOR ADDITIONAL DETAILS.

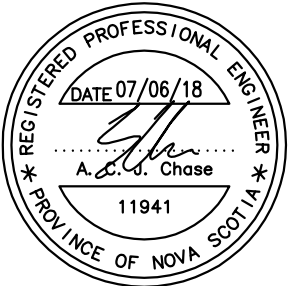


VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 300 NEW WORK

SCALE : 1:100



GENERAL NOTES :
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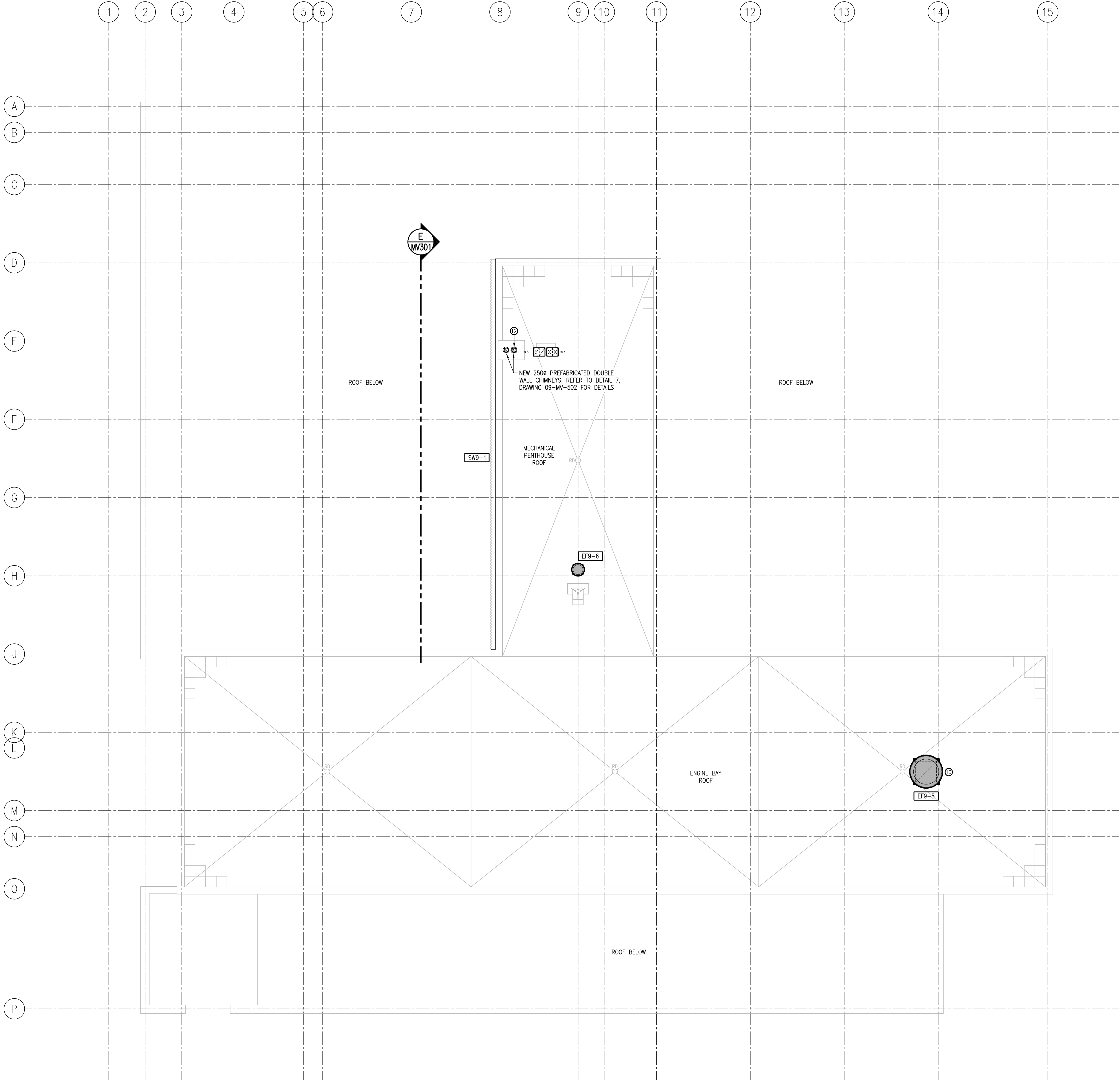


0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 NEW WORK	

designed	MJM	conçu	
date	07/06/18	drawn	MAC
date	07/06/18	approved	ACJC
date	07/06/18	Tender	Joan Muise
project number	PWGSC Project Manager	Administrateur de projets	TPSGC
R.065476.710			
drawing no.	09-MV-103		

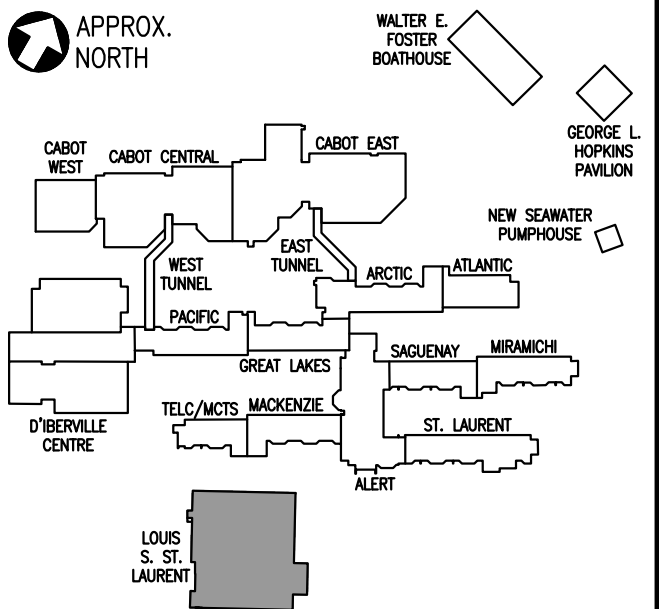
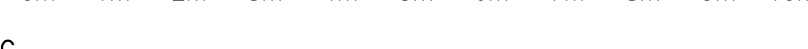
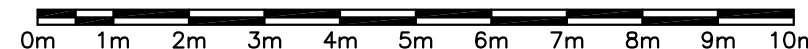
P:\10-15-17\112 - LSS - Machine Shop\38442-09-MV-104-VENTILATION-MACHINE SHOP-ROOF NEW.dwg Jul 06, 2018 - 1:25pm
PWGSC B1 (2004)

CONSTRUCTION NOTES	
①	NEW FRESH AIR DUCTWORK TO TIE INTO EXISTING FRESH AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
②	NEW EXHAUST AIR DUCTWORK TO TIE INTO EXISTING EXHAUST AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
③	PROVIDE NEW EXPLOSION-PROOF MOTORIZED DAMPER IN DUCT.
④	PROVIDE NEW ACTUATOR FOR EXISTING MOTORIZED DAMPER.
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⑥	NEW DUCTWORK TO RUN BETWEEN OPEN WEB STEEL JOISTS IN THIS AREA.
⑦	PROVIDE NEW MOTORIZED DAMPER IN EXISTING EXHAUST AIR DUCT UP TO NEW EXHAUST FAN.
⑧	REFER TO DETAIL 1, DRAWING MV-301 FOR CONTINUATION OF DUCTWORK.
⑨	REFER TO LEVEL 200, DRAWING MV-102 FOR CONTINUATION OF DUCTWORK.
⑩	NEW EXHAUST FAN c/w NEW ROOF CURB TO TIE INTO EXISTING EXHAUST AIR DUCTWORK DOWN TO LEVEL BELOW.
⑪	CONNECT NEW 250# PRE-FABRICATED DOUBLE WALL BREECHING TO EXISTING 250x250 MASONRY CHIMNEY WHERE SHOWN.
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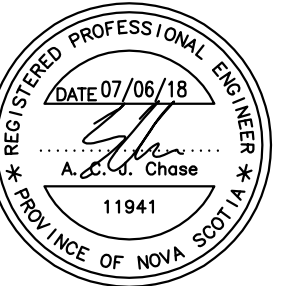


VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – ROOF NEW WORK

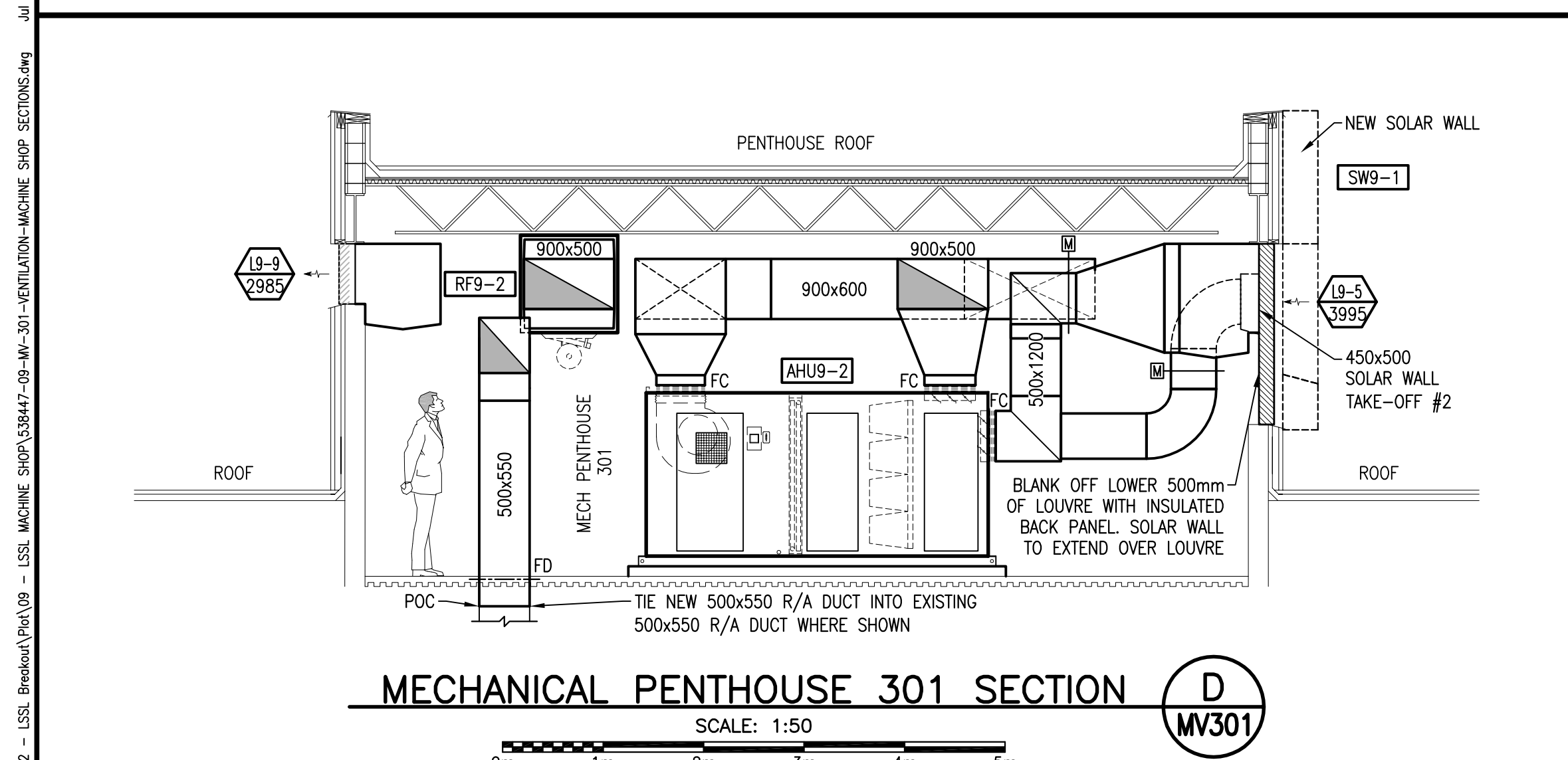
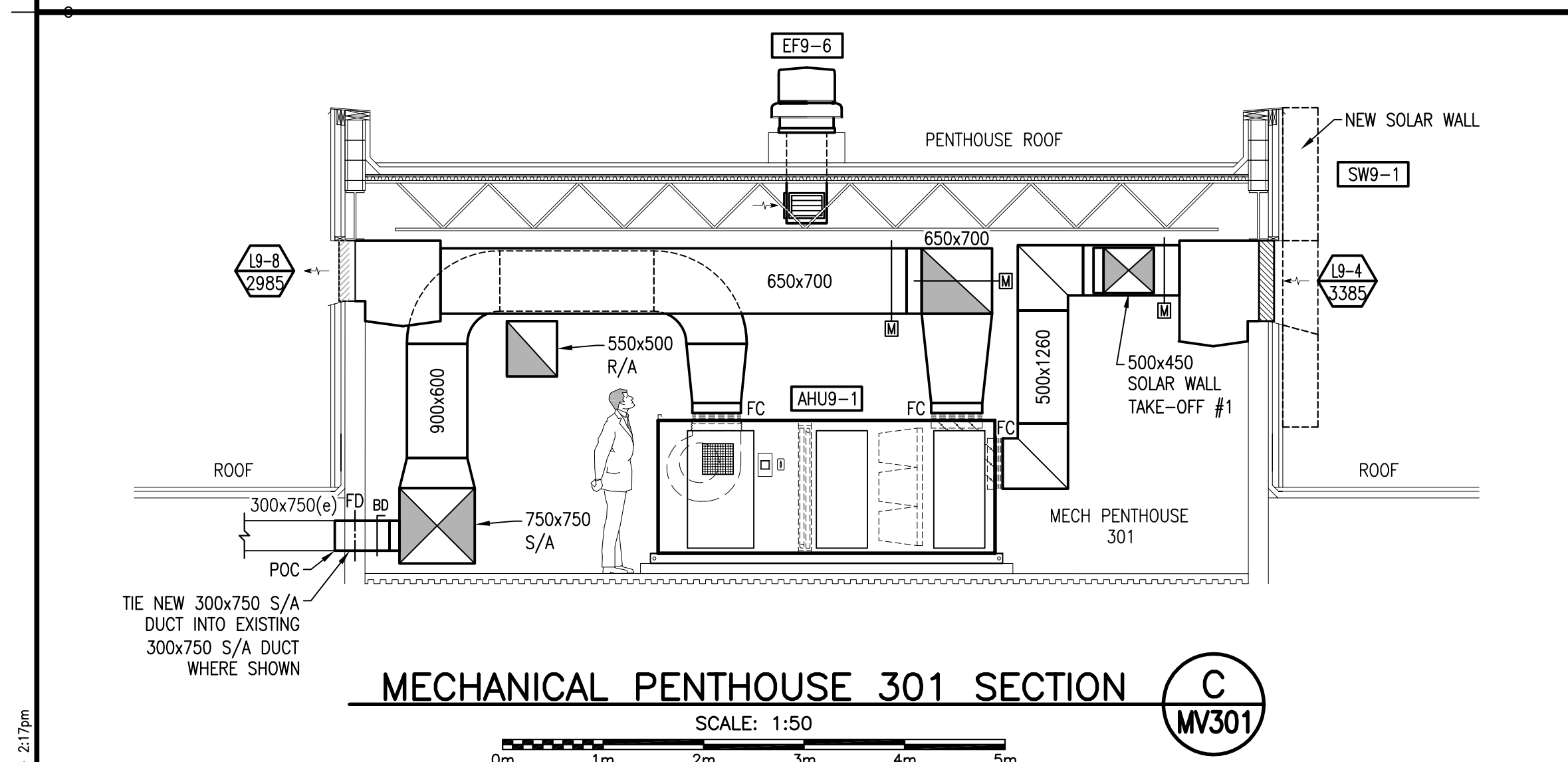
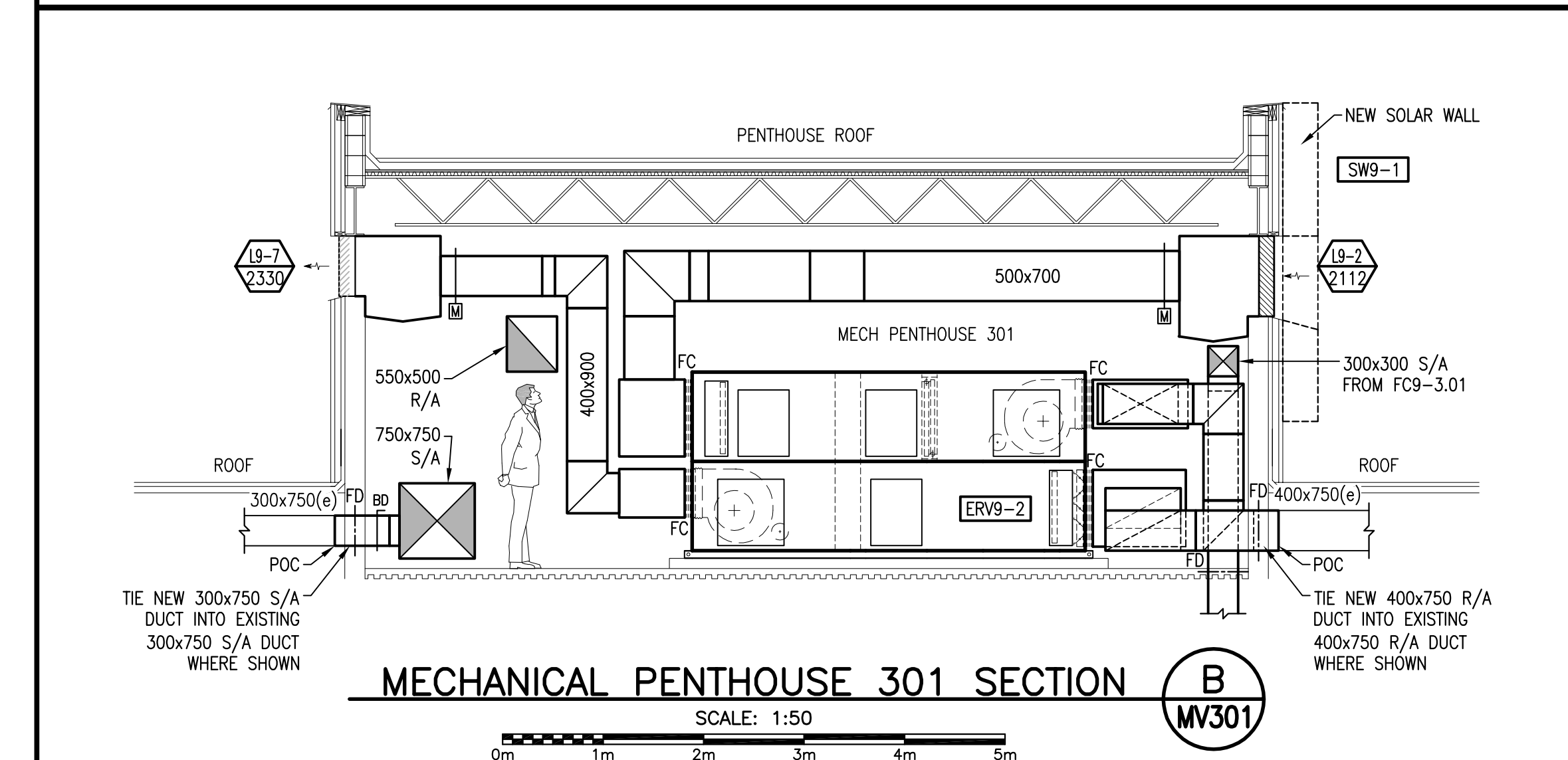
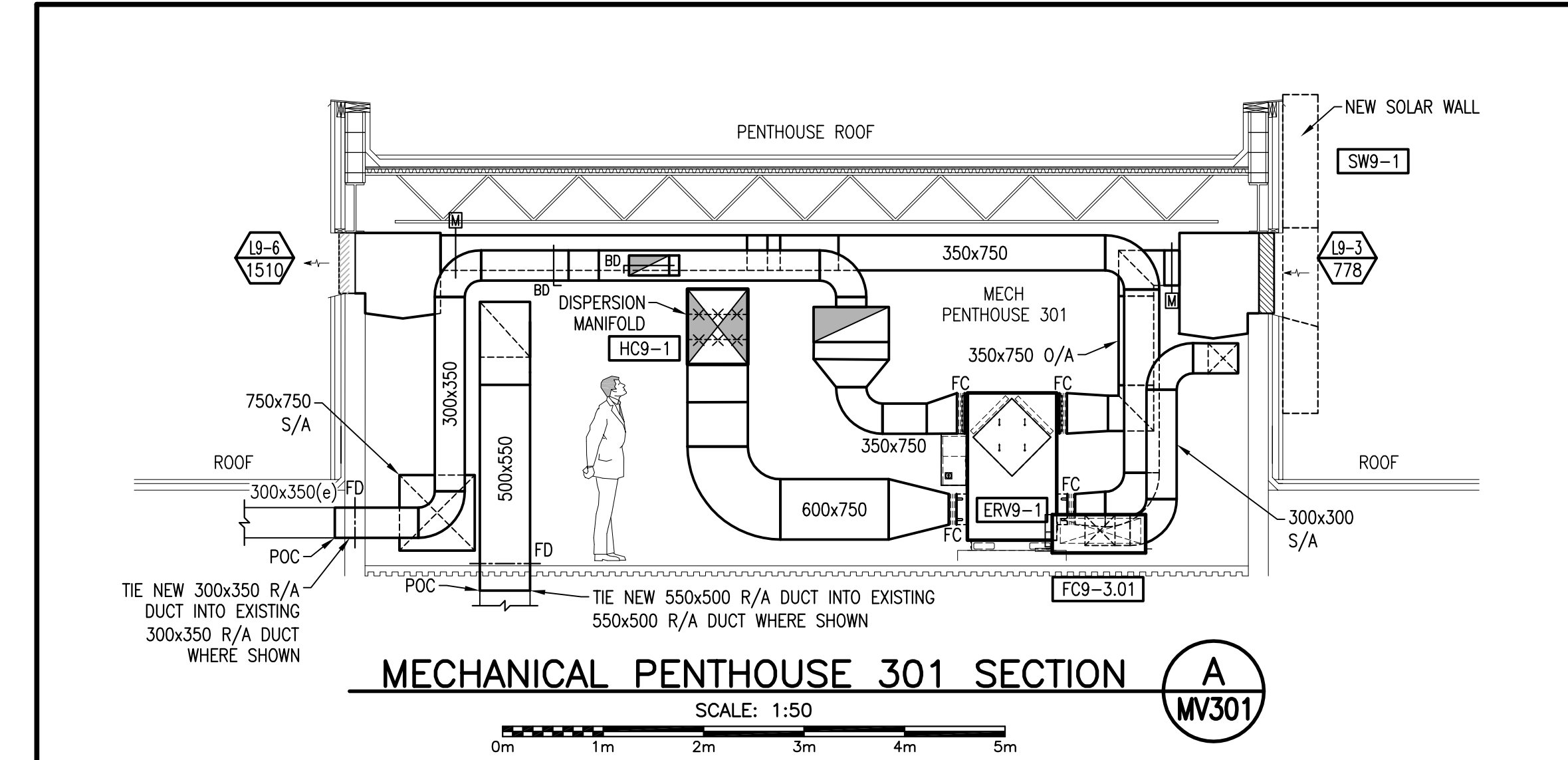
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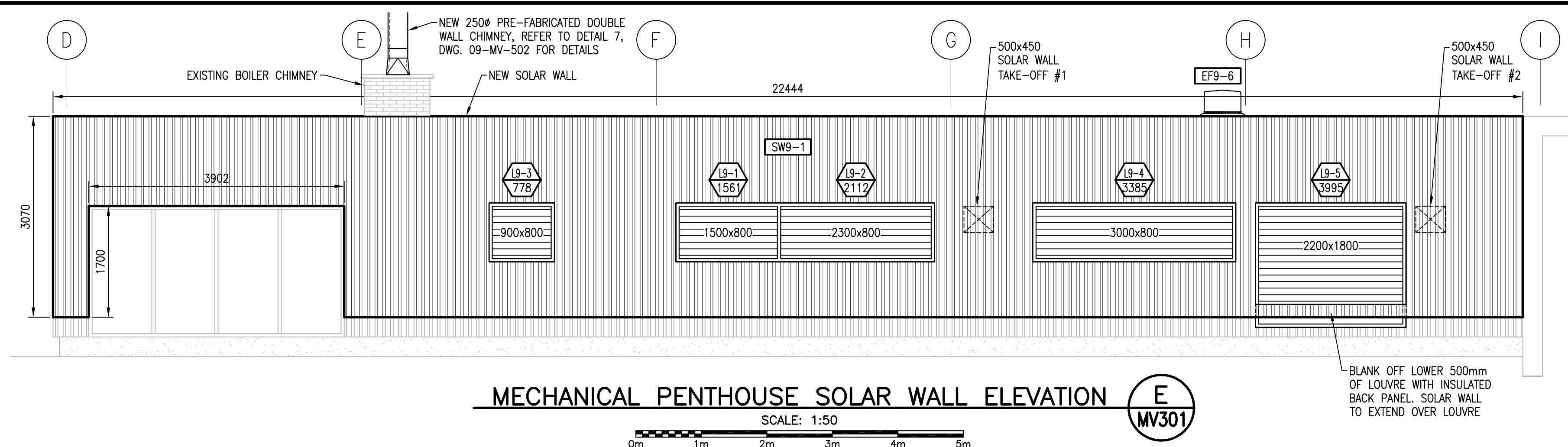
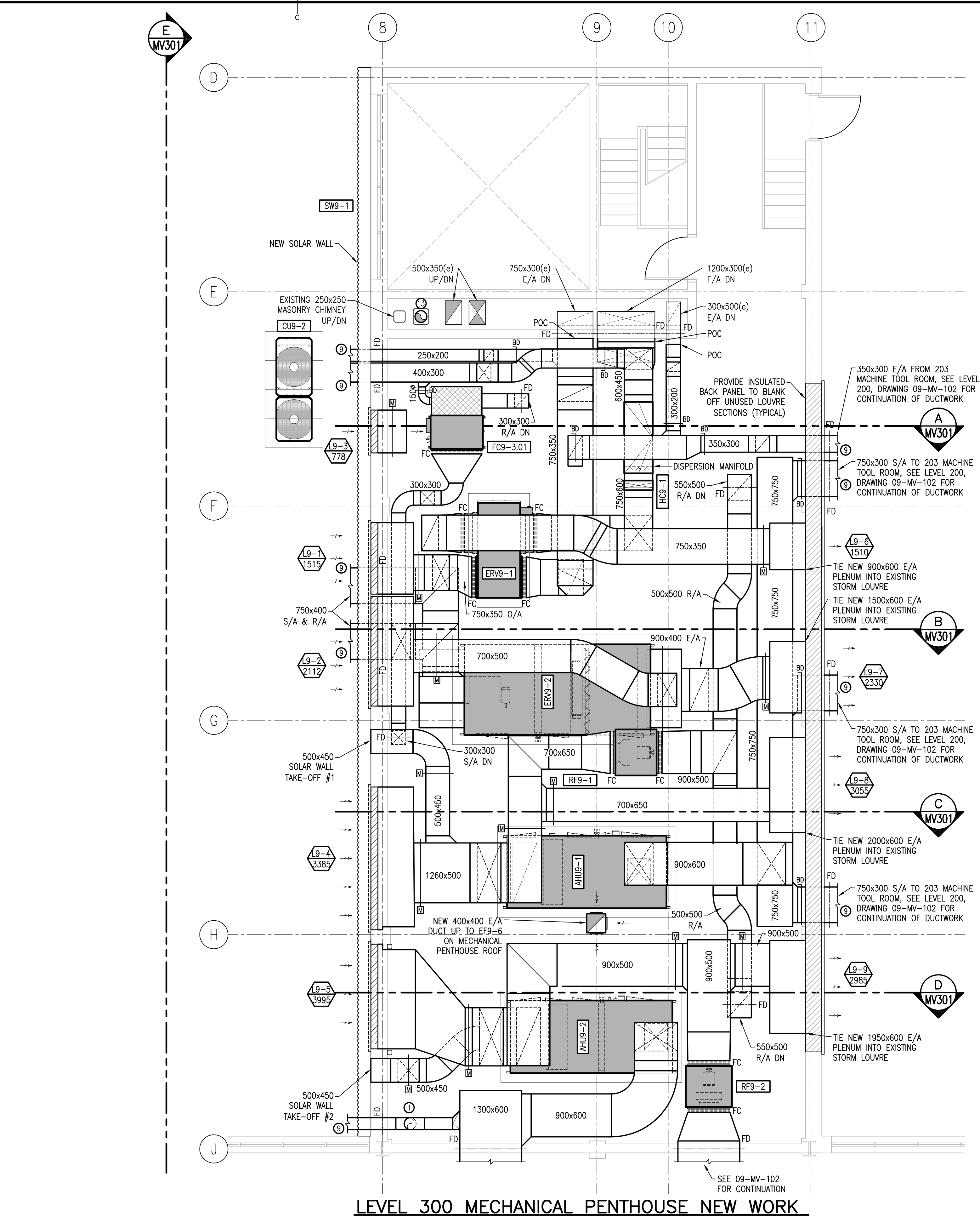
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	dessein	
designed MJM	conçu	
date 07/06/18		
drawn MAC	dessiné	
date 07/06/18		
approved ACJC	approuvé	
date 07/06/18		
Tender Joan Muise	Soumission	
PWGSC Project Manager	Administrateur de projets TPSGC	
project number R.065476.710	no. du projet	
drawing no. 09-MV-104	no. du dessin	



P:\10-15-17113 - LSS - Machine Shop\38442-09-MV-301-VENTILATION-MACHINE SHOP SECTIONS.dwg
 Jul 05, 2018 - 2:17pm
 PWSC B1 (2004)



Public Works and Government Services Canada

Travaux Publics et Services gouvernementaux Canada

APPROX. NORTH

M&R ENGINEERING
5531 Cornwallis St. Halifax, NS B3K 1B3
Tel: (902) 422-7393 Fax: (902) 422-4045
www.mreng.ca

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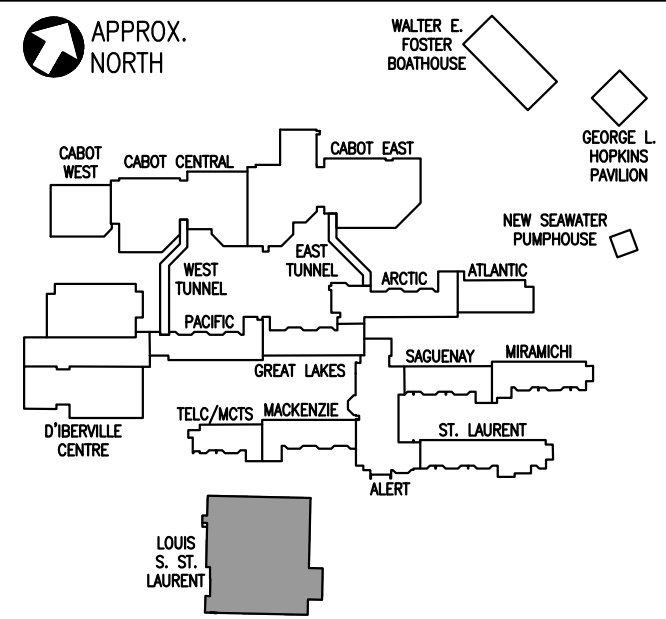
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revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	design	
VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP MECHANICAL PENTHOUSE NEW WORK & SECTIONS		
designed MJM	conçu	
date 07/06/18		
drawn MAC	dessiné	
date 07/06/18		
approved ACJC	approuvé	
date 07/06/18		
Tender Joan Muise	Soumission	
PWSC Project Manager	Administrateur de projets TPSGC	
project number	no. du projet	
R.065476.710		
drawing no.	no. du dessin	
09-MV-301		

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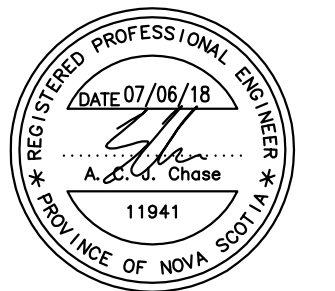
GENERAL NOTES :

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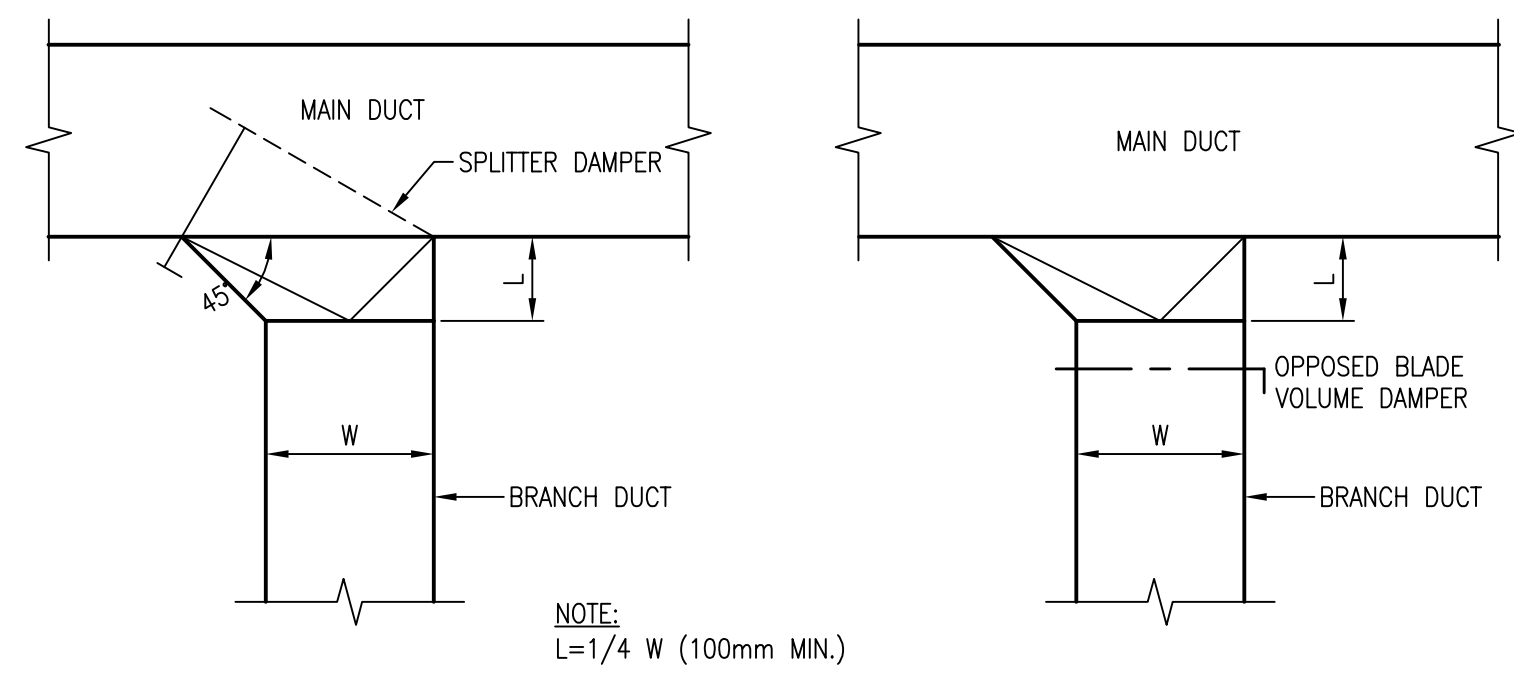
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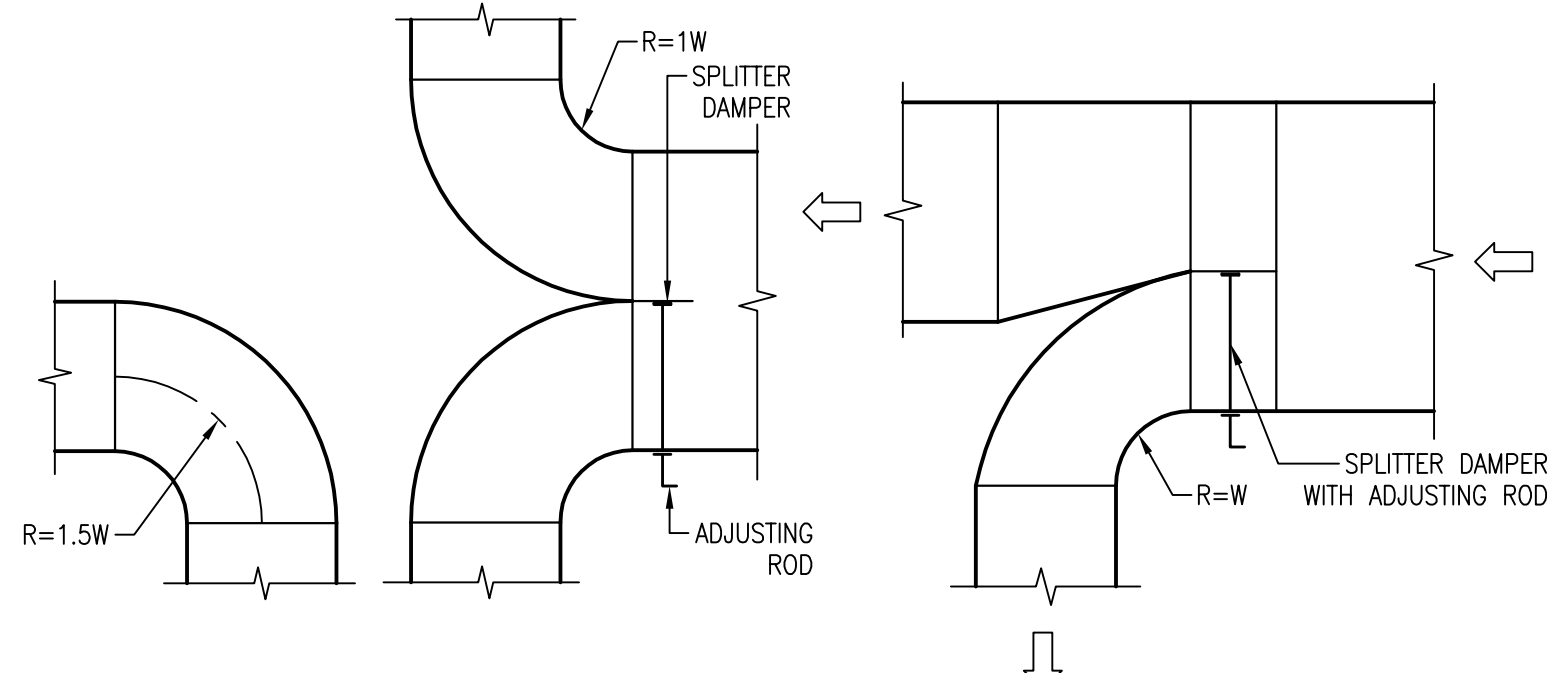
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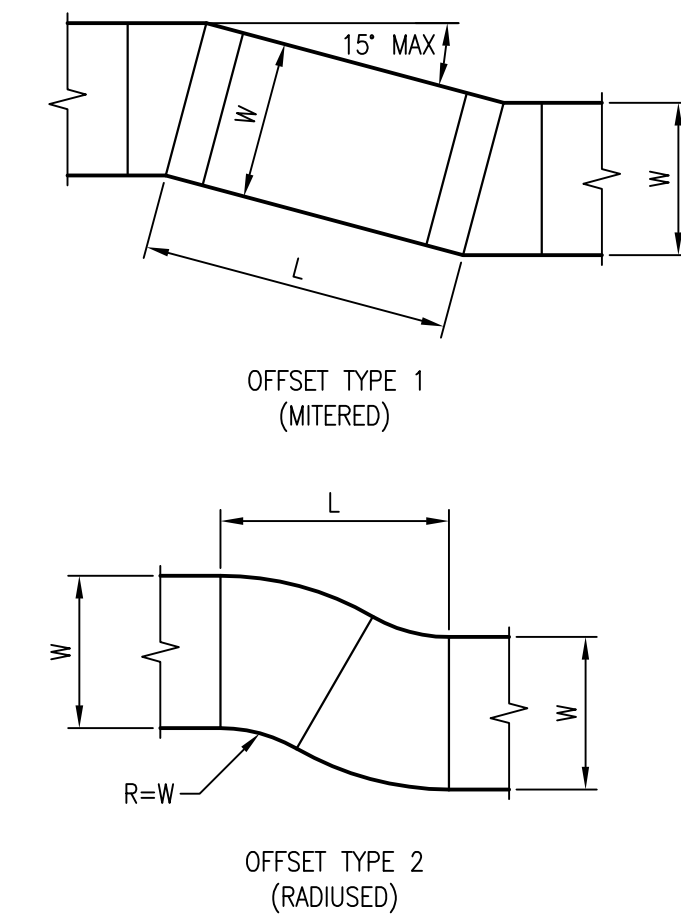
0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP DETAILS	
designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Joan Muise	Submission
PWGC Project Manager	Administrateur de projets TPSGC	
project number	R.065476.710	no. du projet
drawing no.	09-MV-501	no. du dessin



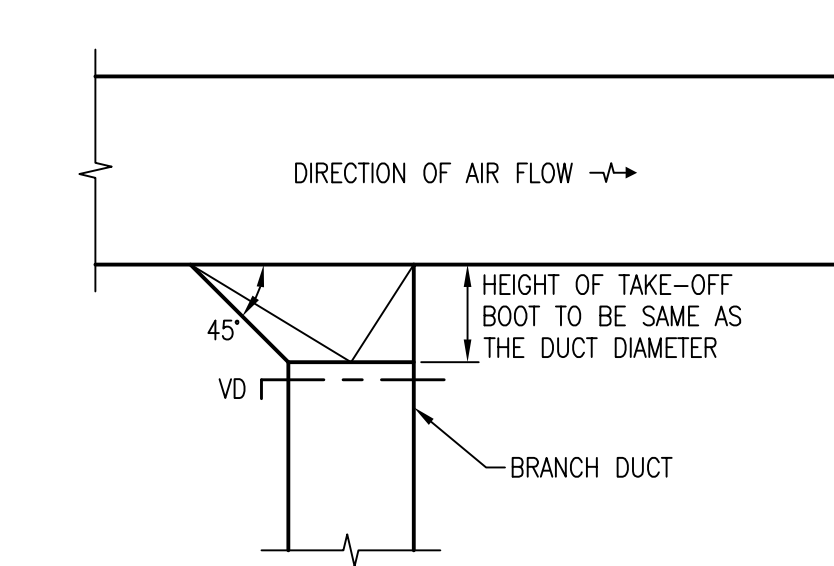
LOW VELOCITY BRANCH TAKE-OFF DETAIL 1
SCALE : N.T.S. MV501



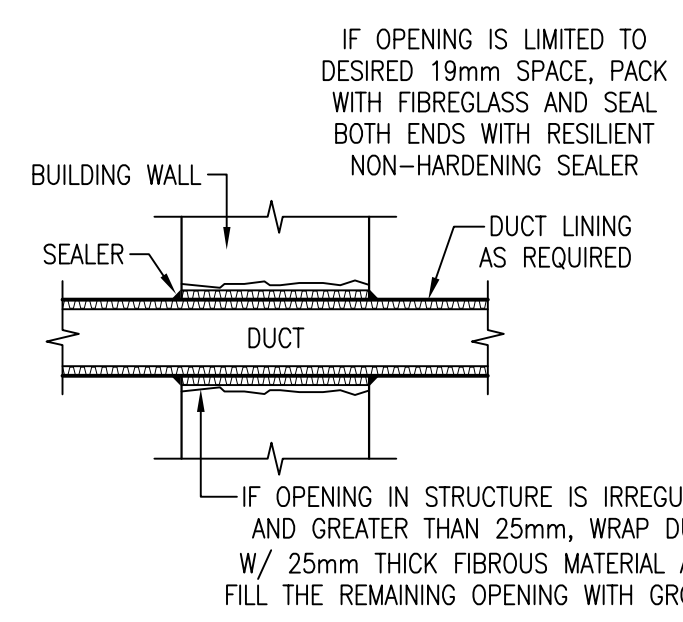
DUCTWORK DETAILS 2
SCALE : N.T.S. MV501



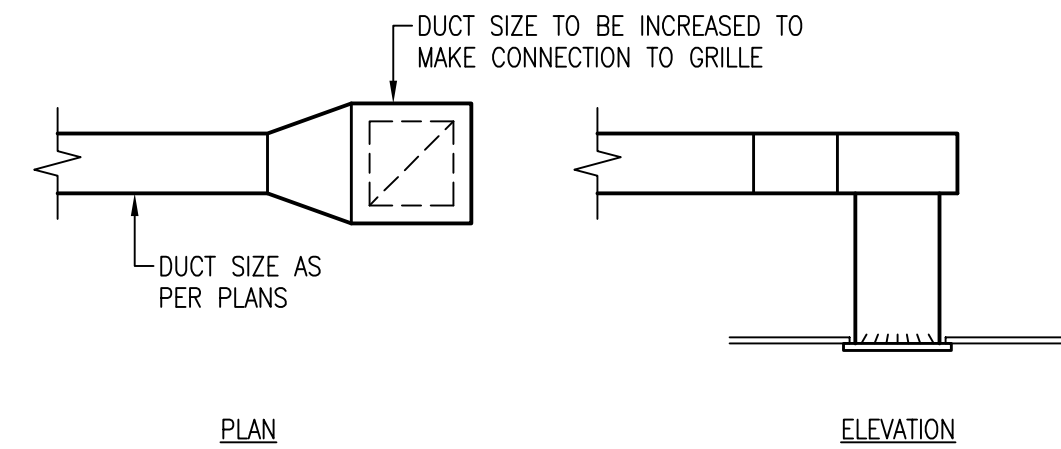
DUCTWORK DETAILS 3
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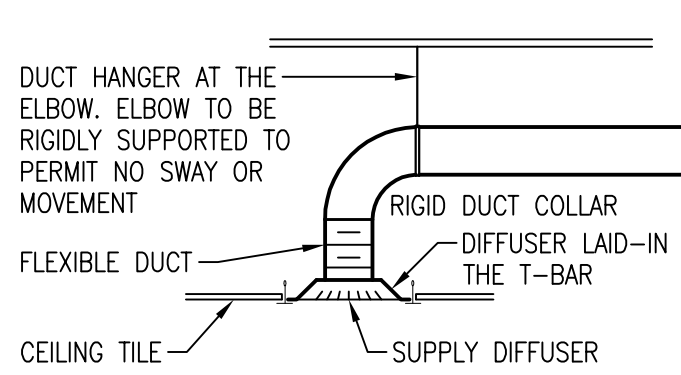
TAKE-OFF BOOT ON SUPPLY DETAIL 4
SCALE : N.T.S. MV501



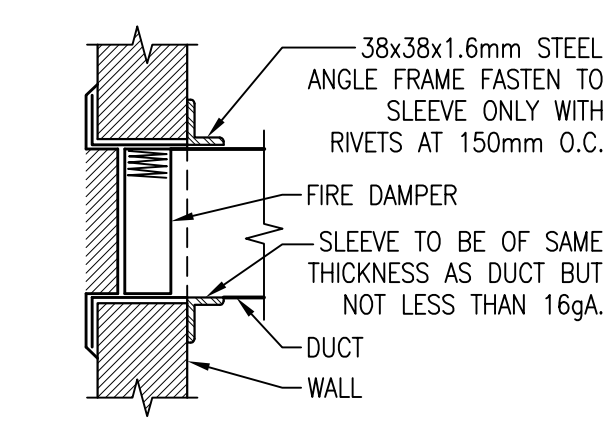
WALL PENETRATION - DUCTWORK 5
SCALE : N.T.S. MV501



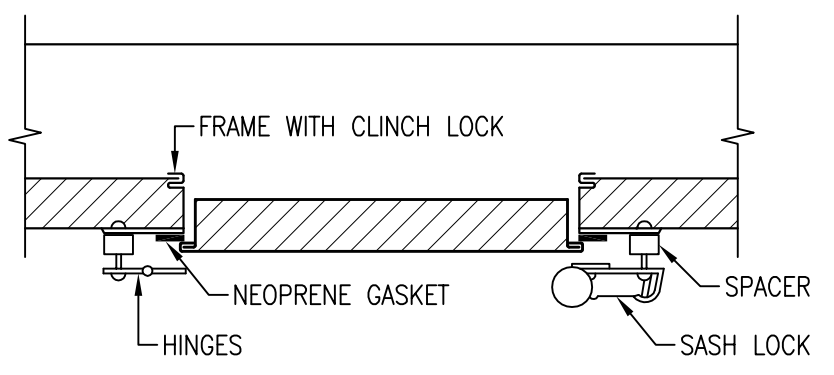
RETURN/EXHAUST GRILLE CONNECTION DETAIL 6
SCALE : N.T.S. MV501



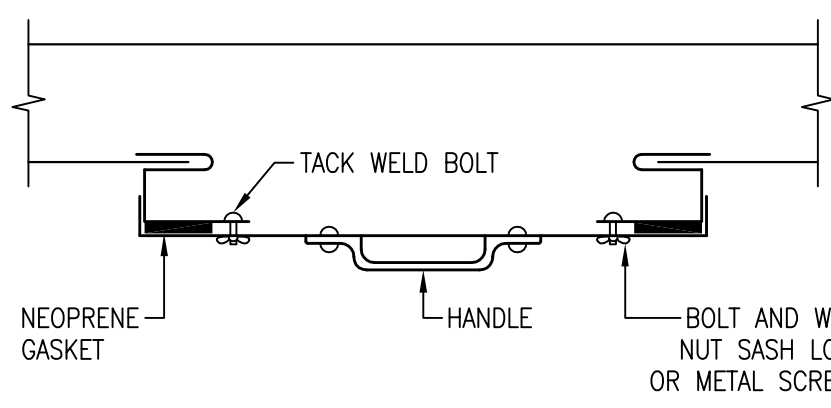
LAY-IN TYPE DIFFUSER DETAIL 7
SCALE : N.T.S. MV501



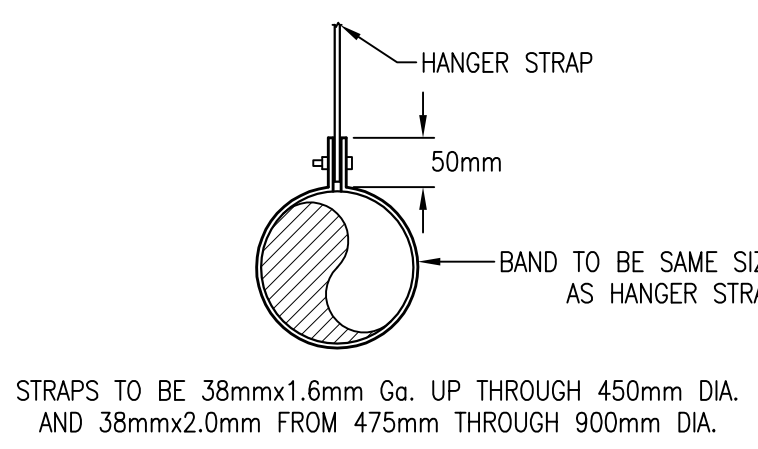
SIDEWALL GRILLE WITH FIRE DAMPER 8
SCALE : N.T.S. MV501



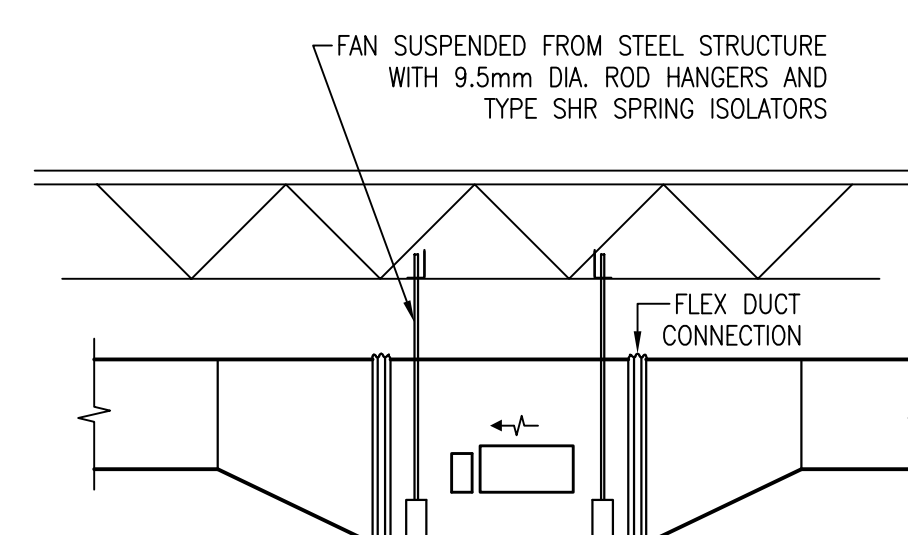
TYPICAL INSULATED ACCESS DOOR DETAIL 9
SCALE : N.T.S. MV501



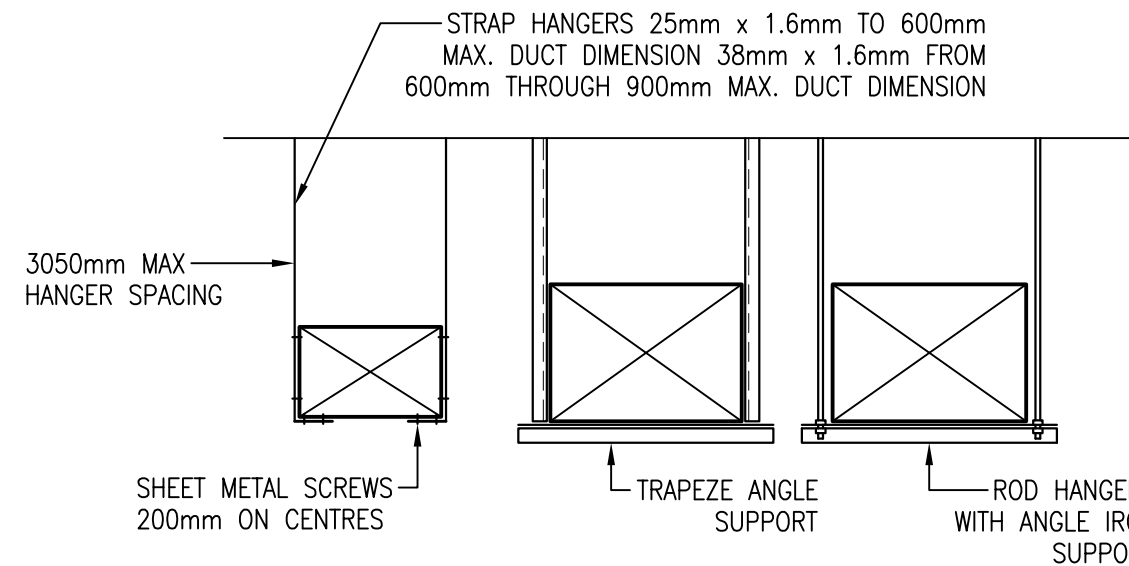
TYPICAL UNINSULATED ACCESS DOOR DETAIL 10
SCALE : N.T.S. MV501



HANGERS FOR DUCTS UP THROUGH MAXIMUM 900mm DIA 11
SCALE : N.T.S. MV501



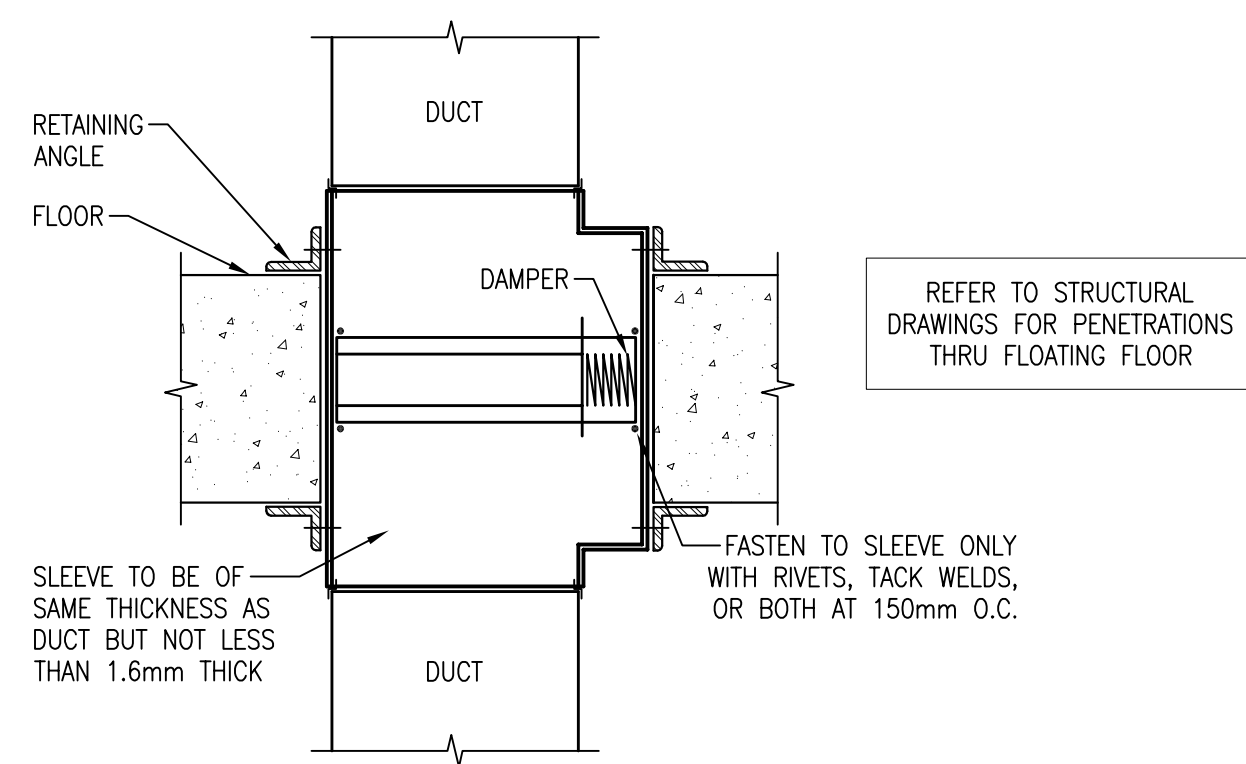
TYPICAL INSTALLATION DETAIL FOR INLINE FAN 12
SCALE : N.T.S. MV501



ROD AND ANGLE SIZES TO BE AS FOLLOWS					
MAX. DUCT DIMENSION (mm)	MIN. ATTACH RATING (kg)	ROD HANGER SIZE (mm)	NO. OF HANGERS	TRAPEZE ANGLE (mm)	MAX. SPACING
UP THRU. 450	750	6	2	38x38x3	3050mm
475 TO 900	1000	6	2	38x38x3	3050mm
925 TO 1525	2000	9	2	50x50x6	2400mm
1550 TO 3000	2400	9	2	50x50x6	2400mm

ALTERNATE HANGERS FOR RECTANGULAR DUCTS UP TO 3.0m MAXIMUM DIMENSION

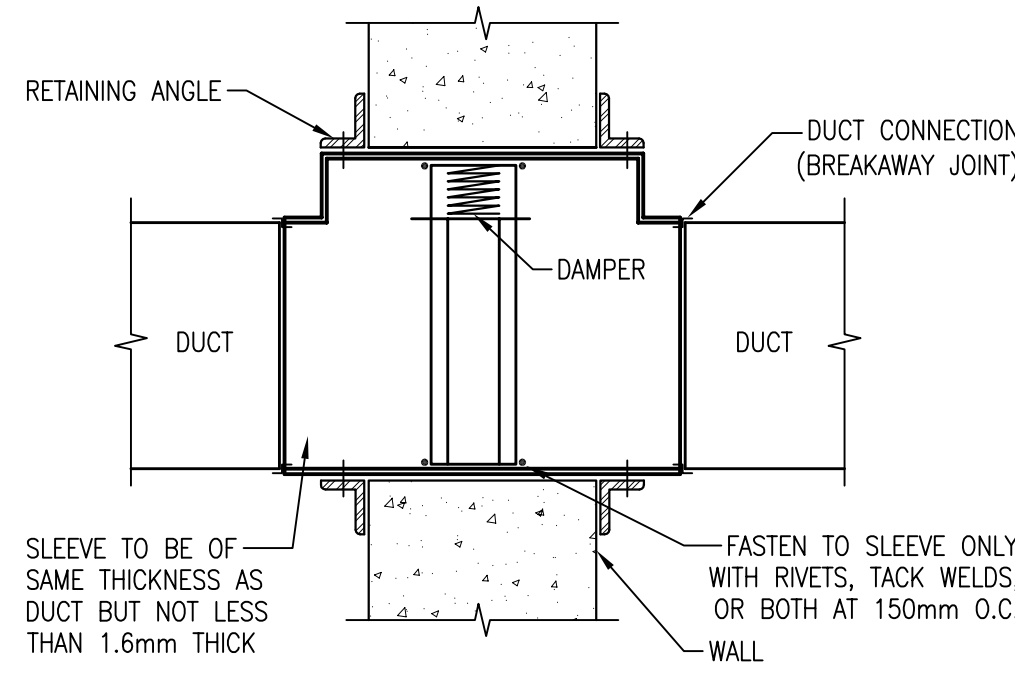
SCALE : N.T.S.



- NOTES:
- FOR FIRE DAMPERS OVER 1220mm, STEEL ANGLE SHALL BE 38mm x 38mm x 3mm
 - PROVIDE ACCESS DOOR IN DUCT

HORIZONTAL FIRE DAMPER DETAIL

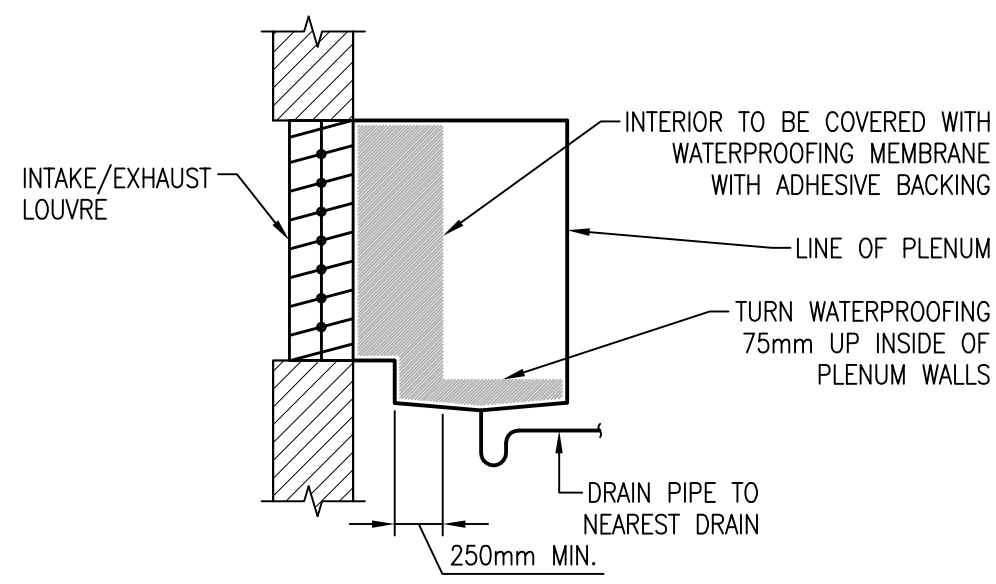
SCALE : N.T.S.



- NOTES:
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 - PROVIDE ACCESS DOOR IN DUCT

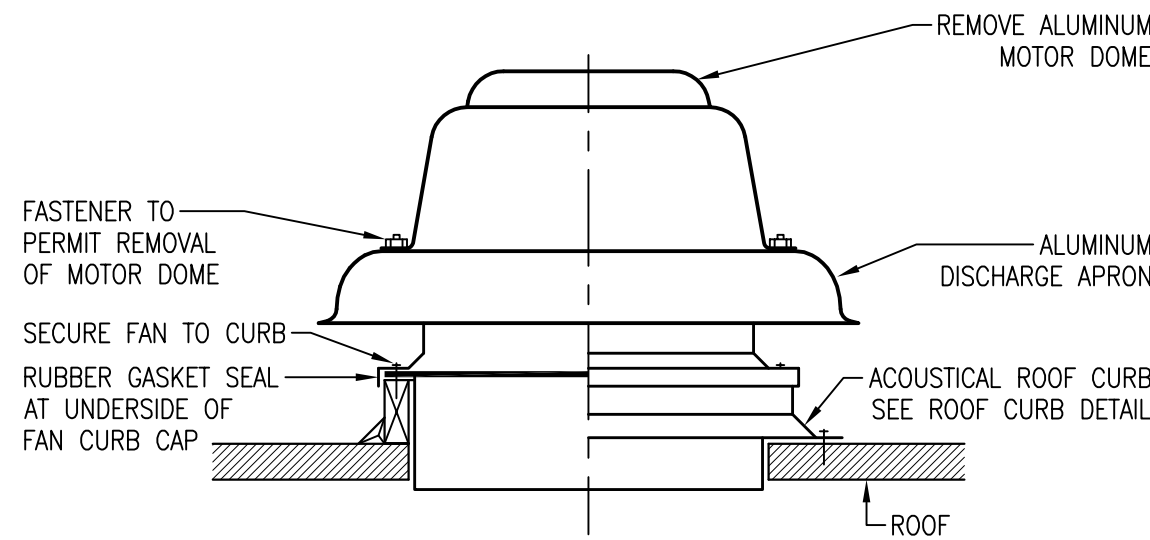
VERTICAL FIRE DAMPER DETAIL

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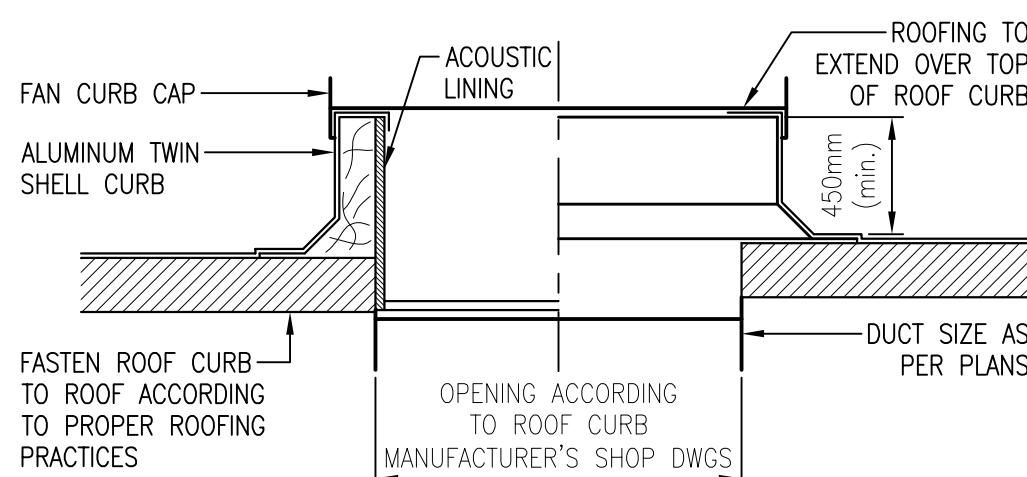


INTAKE/EXHAUST DRAINED PLENUM DETAIL

SCALE : N.T.S.



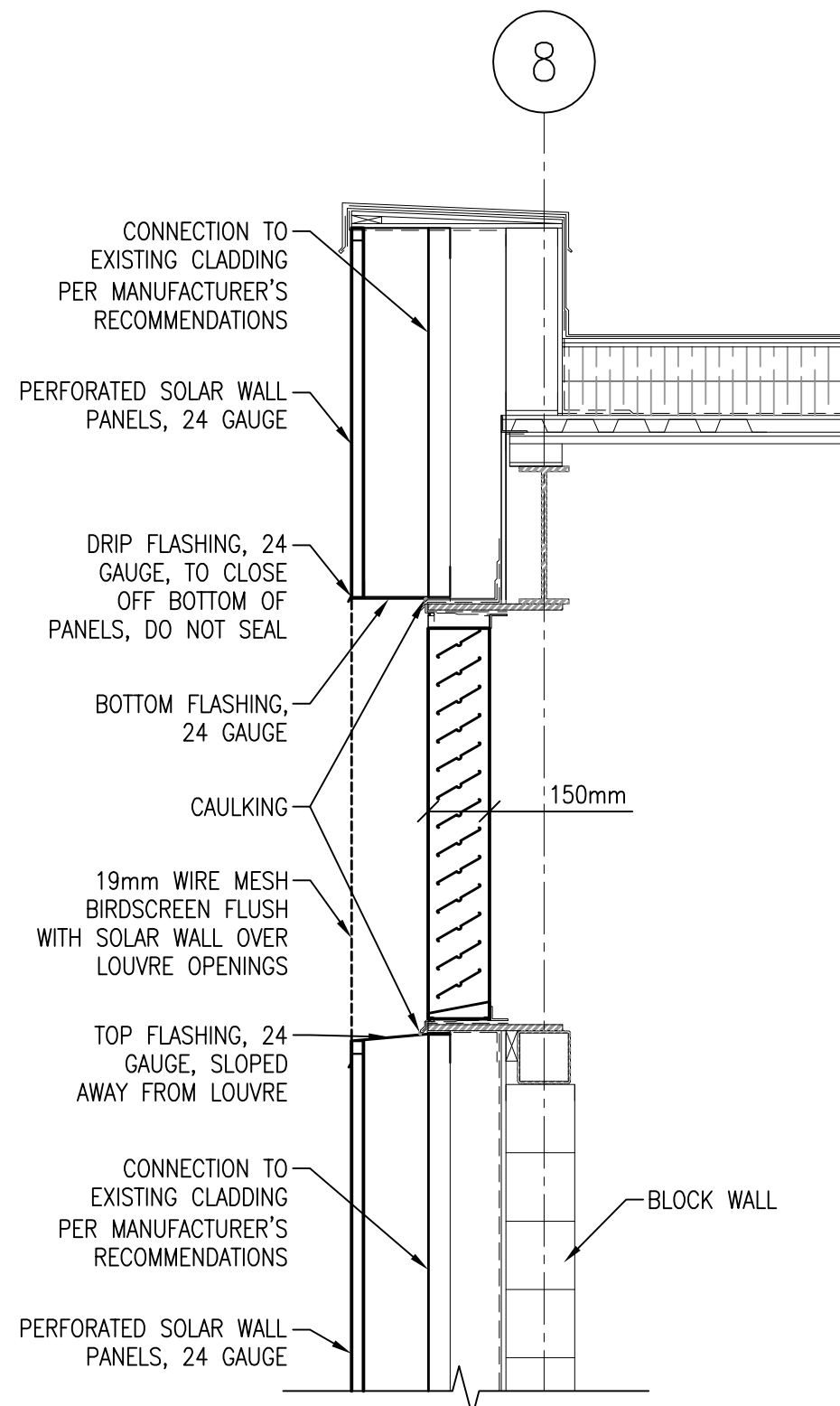
EXHAUST FAN DETAIL



ROOF CURB DETAIL

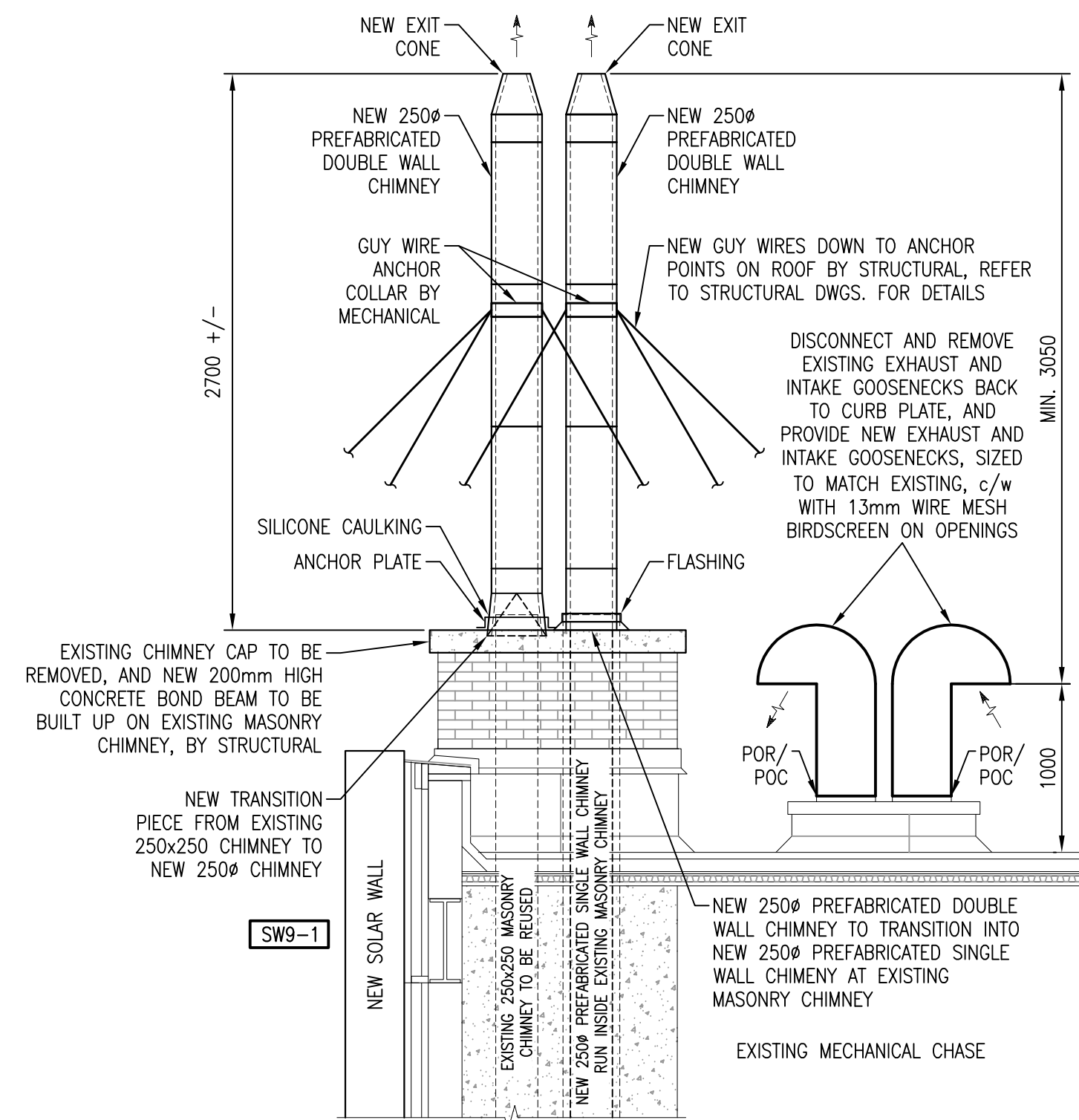
ROOF MOUNTED EXHAUST FAN DETAIL

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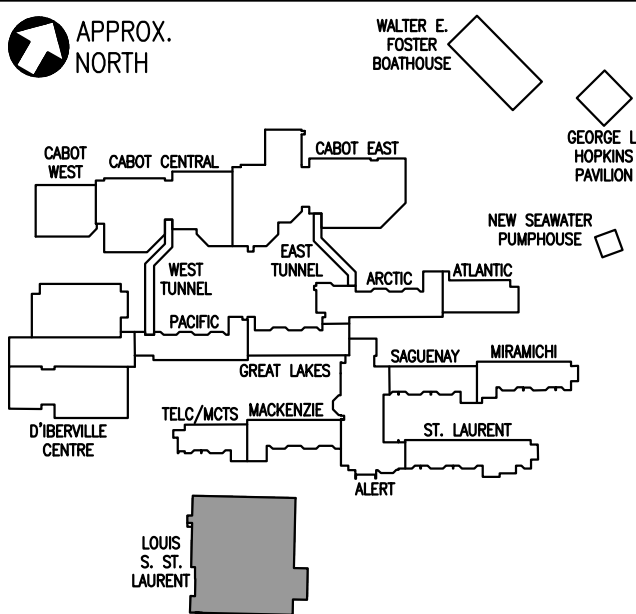
LOUVRE PENETRATION AT SOLAR WALL DETAIL

SCALE : N.T.S.



BOILER CHIMNEY DETAIL

SCALE : N.T.S.



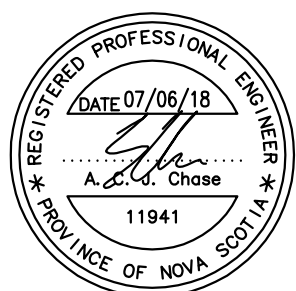
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drawing	VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP DETAILS	
designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Joan Muise	
PWGSC Project Manager	Administrateur de projets TPSGC	
project number	R.065476.710	
drawing no.	09-MV-502	

09 – LOUIS S. ST. LAURENT BUILDING – SOLAR WALL SCHEDULE						
MARK	TYPE	SIZE (m ²)	AIRFLOW CAPACITY (L/s)	COLOR	SOLAR ABSORPTIVITY	COMMENTS
SW9-1	1-STAGE	55	1652	BLACK	0.94	–

09 – LOUIS S. ST. LAURENT BUILDING – AIR HANDLING UNIT SCHEDULE																											
MARK	LOCATION	SERVING	TYPE AND SIZE OF FAN UNIT	ARRANGEMENT & DRIVE	MOUNTING	FAN DATA				MOTOR DATA		STARTER DATA		FAN INTERLOCKING	VIBRATION ISOLATORS			REMARKS	SOUND POWER LEVEL (dB) (OCTAVE BANDS)								
						L/S	S.P. (Pa)	O.V. (m/s)	BKW	RPM	KW	ELECT.	TYPE		LOCATION	BASE	SPRINGS		STATIC DEF (mm)	1	2	3	4	5	6	7	8
AHU9-1	PENTHOUSE MECHANICAL ROOM	MACHINE SHOP 203	–	–	AS SHOWN	4,012	1,242	–	–	1,999	7.50	575/3/60	VSD	REFER TO DIV 26 DWGS	EMCS FIRE ALARM RF9-1	INTEGRAL STEEL	SL	50	REFER TO UNIT DETAILS & SPEC SECTION 23.73.00.13 FOR ADDITIONAL UNIT REQUIREMENTS	–	–	–	–	–	–	–	–
AHU9-2	PENTHOUSE MECHANICAL ROOM	ENGINE BAY	–	–	AS SHOWN	4,248	1,264	–	–	1,717	7.51	575/3/60	VSD	REFER TO DIV 26 DWGS	EMCS FIRE ALARM RF9-2	INTEGRAL STEEL	SL	50	REFER TO UNIT DETAILS & SPEC SECTION 23.73.00.13 FOR ADDITIONAL UNIT REQUIREMENTS	–	–	–	–	–	–	–	–

09 – LOUIS S. ST. LAURENT BUILDING – AIR HANDLING UNIT SCHEDULE																														
MARK	TYPE AND SIZE	ROWS	HEATING COIL					COOLING COIL										FILTERS (RECOMMENDED FINAL RESISTANCE SHOWN)												
			FACE AREA (m ²)	FACE VEL. (m/s)	E.A.T. (°C)	L.A.T. (°C)	E.W.T. (°C)	FLOW (L/s)	AIR FRICT. (Pa)	WATER P.D. (KPa)	TYPE AND SIZE	ROWS	CIRCUITS	TUBE FACE	FACE AREA (m ²)	FACE VEL. (m/s)	ENT. AIR D.B. (°C)	W.B. (°C)	L.V.G. AIR D.B. (°C)	W.B. (°C)	COOLING CAPACITY (kW)	E.W.T. (°C)	L.W.T. (°C)	WATER FLOW (L/s)	AIR FRICT. (Pa)	WATER P.D. (KPa)	TYPE AND SIZE	TOTAL FILTER AREA (m ²)	AIR FRICT. (Pa)	FACE VEL. (m/s)
AHU9-1	40% PROP. GLY. CAP: 40.8 kW	AS REQ'D	–	2.55	13.3	23.3	82.2	0.946	–	6.3	–	–	–	–	–	–	–	–	–	–	SEN: – TOT: –	–	–	–	–	–	MERV 8 PREFILTER (50mm) MERV 14 FINAL FOOTER (300mm)	–	–	–
AHU9-2	40% PROP. GLY. CAP: 47.7 kW	AS REQ'D	–	2.50	13.3	23.2	82.2	1.072	–	5.3	–	–	–	–	–	–	–	–	–	–	SEN: – TOT: –	–	–	–	–	–	MERV 8 PREFILTER (50mm) MERV 14 FINAL FOOTER (300mm)	–	–	–

09 – LOUIS S. ST. LAURENT BUILDING – ENERGY RECOVERY VENTILATION SCHEDULE																		
DESIGNATION	LOCATION	SERVING	ARRANGEMENT	TYPE	SUPPLY FAN			EXHAUST FAN			ELECTRICAL VOLT/PH	CORE PERFORMANCE EFFECTIVENESS				COMMENTS		
					AIRFLOW (L/s)	ESP (Pa)	FAN RPM	MOTOR (kW)	AIRFLOW (L/s)	ESP (Pa)		FAN RPM	MOTOR (kW)	SUMMER TOTAL	WINTER TOTAL		SENSIBLE	
ERV9-1	PENTHOUSE MECHANICAL ROOM	LEVEL 100 AND OFFICES & CLASSROOMS ON LEVEL 200	VERTICAL FLOOR MOUNTED	STATIC PLATE	1515	200	1627	3.73	1507	150	1627	3.73	575/3	–	–	–	c/w MERV 8 FILTERS, DOUBLE WALL CONSTRUCTION, AND FILTER ALARMS	
ERV9-2	PENTHOUSE MECHANICAL ROOM	WELDING SHOP 205	HORIZONTAL FLOOR MOUNTED	SENSIBLE HEAT PIPE	2112	1100	2420	5.59	2330	740	1600	3.73	575/3	–	–	–	c/w HEATING COIL, MERV8 FILTERS ON SUPPLY AND RETURN	

09 – LOUIS S. ST. LAURENT BUILDING – EXHAUST/RETURN FAN SCHEDULE																					
MARK	SERVING	LOCATION	ARRANGEMENT & DRIVE	FAN DATA			MOTOR DATA		STARTER DATA		FAN INTERLOCKING	DISCHARGE SOUND (Hz)							COMMENTS		
				AIR FLOW (L/s)	SP (Pa)	FAN RPM	MOTOR (kW)	ELECTRICAL (VOLT/PH)	TYPE	LOCATION		63	125	250	500	1000	2000	4000		8000	
EF9-1	FLAMMABLE STORAGE 219	ROOF	ROOF MOUNT/DIRECT	169	90	1550	0.037	115/1	TOL	–	EMCS	–	–	–	–	–	–	–	–	EXPLOSION PROOF MOTOR, TYPE A SPARK RESISTANT, ALL ALUMINIUM CONSTRUCTION	
EF9-2	WASHDOWN 220, PARTS REPAIR 221, JANITOR 223	ROOF	ROOF MOUNT/DIRECT	680	90	981	0.37	115/1	TOL	–	AHU9-2	–	–	–	–	–	–	–	–	–	
EF9-3	BATTERY STORAGE 224	ROOF	ROOF MOUNT/DIRECT	61	90	1058	0.19	115/1	TOL	–	WALL SWITCH	–	–	–	–	–	–	–	–	EXPLOSION PROOF MOTOR, TYPE A SPARK RESISTANT, ACID RESISTANT	
EF9-4	SMALL PARTS REPAIR 221	ROOF	ROOF MOUNT/DIRECT	283	90	1384	0.12	115/1	TOL	–	EMCS, AHU9-2	–	–	–	–	–	–	–	–	–	
EF9-5	ENGINE OVERHAUL 216	ROOF	ROOF MOUNT/BELT	8857	90	364	3.73	575/3	MAGNETIC	–	WALL SWITCH	–	–	–	–	–	–	–	–	–	
EF9-6	MECHANICAL PENTHOUSE	ROOF	ROOF MOUNT/DIRECT	778	90	1070	0.37	115/1	TOL	–	REVERSE ACTING T'STAT	–	–	–	–	–	–	–	–	–	
RF9-1	AHU9-1	MECHANICAL PENTHOUSE	INLINE/ BELT	3500	160	590	1.49	575/3	VFD	–	AHU9-1	–	–	–	–	–	–	–	–	–	
RF9-2	AHU9-2	MECHANICAL PENTHOUSE	INLINE/ BELT	2984	180	818	1.49	575/3	VFD	–	AHU9-2	–	–	–	–	–	–	–	–	–	

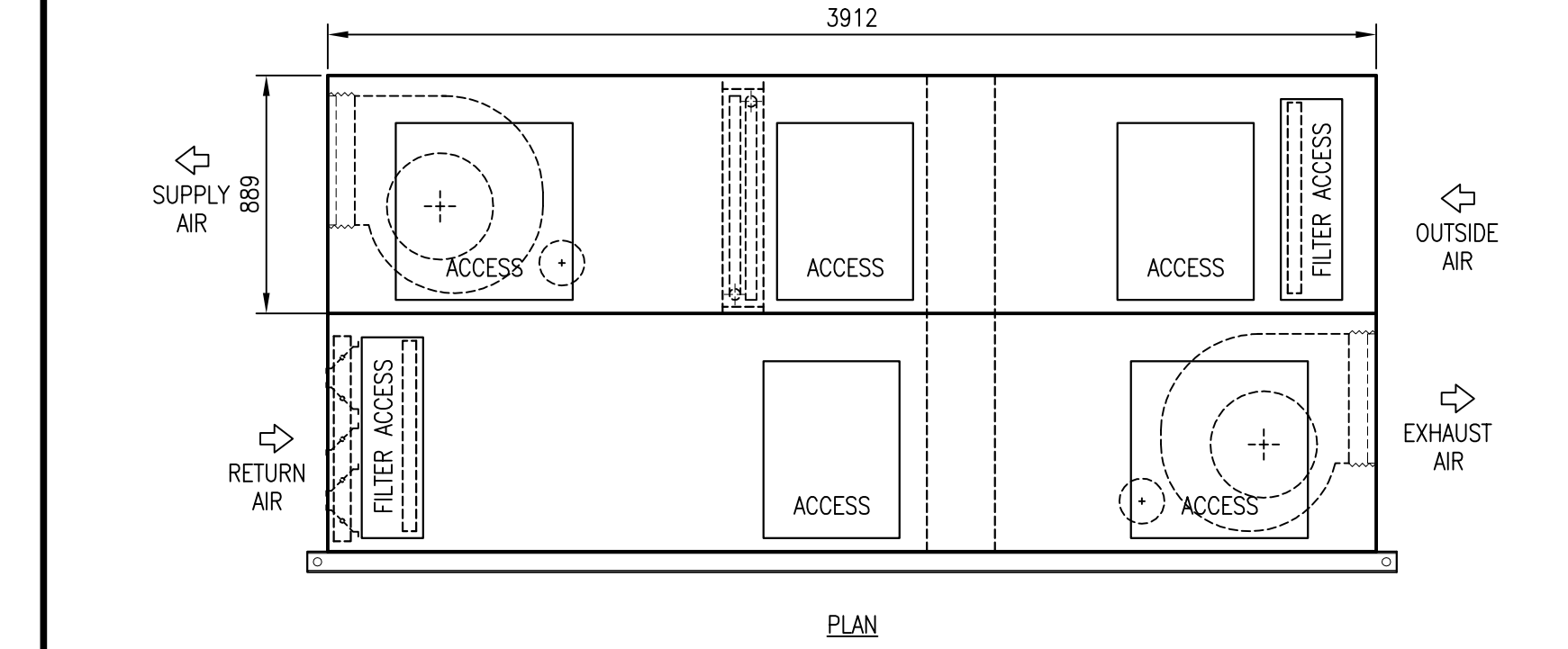
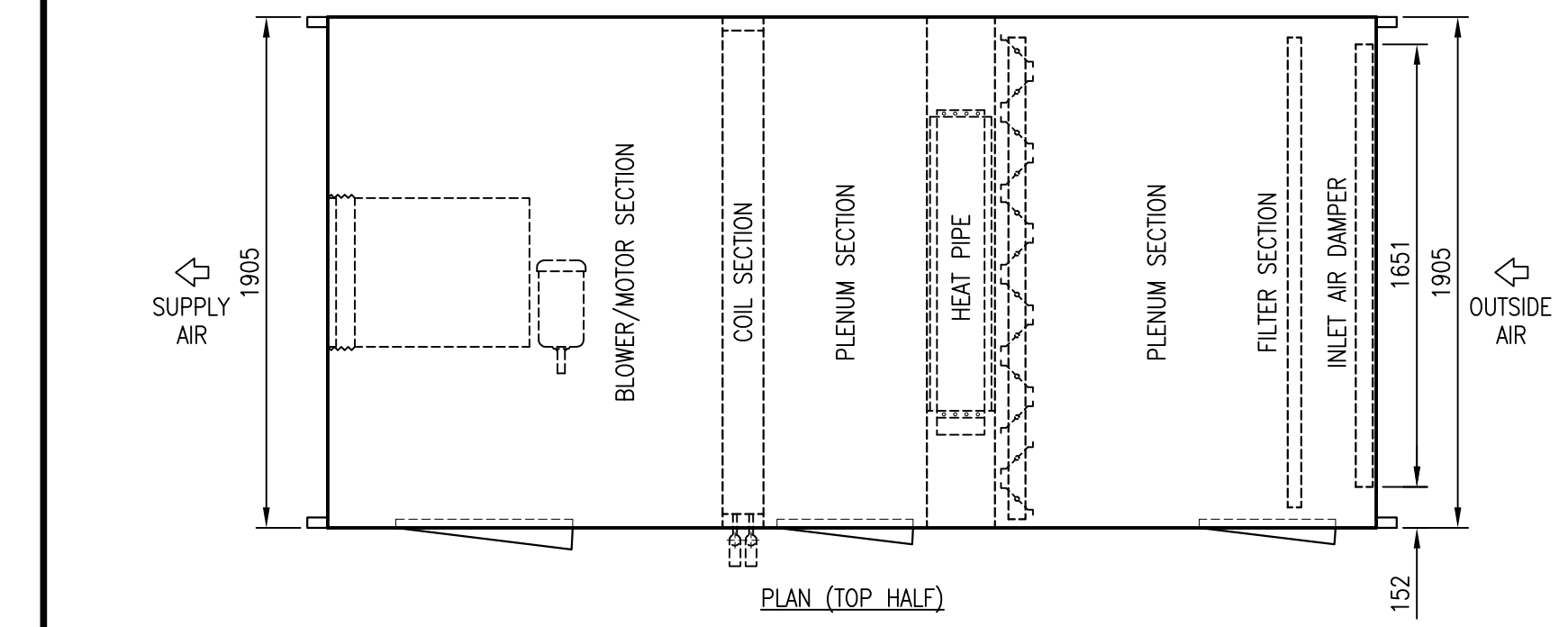
09 – LOUIS S. ST. LAURENT BUILDING – LOUVRE SCHEDULE									
MARK	TYPE	STYLE	SERVING	AIRFLOW (L/s)	DIMENSIONS		COMMENTS		
					HEIGHT (mm)	LENGTH (mm)			
L9-1	DRAINABLE EXTRUDED ALUM.	FIXED 35° BLADE	ERV9-1 INTAKE	1515	800	1500	BIRDSCREEN NOT REQUIRED		
L9-2	DRAINABLE EXTRUDED ALUM.	FIXED 35° BLADE	ERV9-2 INTAKE	2112	800	2300	BIRDSCREEN NOT REQUIRED		
L9-3	DRAINABLE EXTRUDED ALUM.	FIXED 35° BLADE	MECHANICAL PENTHOUSE INTAKE	778	800	900	BIRDSCREEN NOT REQUIRED		
L9-4	DRAINABLE EXTRUDED ALUM.	FIXED 35° BLADE	AHU9-1 INTAKE	2880	800	3000	BIRDSCREEN NOT REQUIRED		
L9-5	DRAINABLE EXTRUDED ALUM.	FIXED 35° BLADE	AHU9-2 INTAKE	3995	1200	2200	BIRDSCREEN NOT REQUIRED, c/w INSULATED BACK PANEL TO BLANK OFF BOTTOM 500mm		
L9-6	EXISTING	EXISTING	ERV9-1 EXHAUST	1507	600	900	–		
L9-7	EXISTING	EXISTING	ERV9-2 EXHAUST	2330	600	1500	–		
L9-8	EXISTING	EXISTING	AHU9-1 EXHAUST	3055	600	2000	–		
L9-9	EXISTING	EXISTING	AHU9-2 EXHAUST	2984	600	1950	–		

09 – LOUIS S. ST. LAURENT BUILDING – SIDEWALL RETURN/EXHAUST GRILLE SCHEDULE												
MARK	TYPE	STYLE	NECK SIZE (mm)	FACE SIZE (L/s)	CAPACITY (L/s)	NC LEVEL	SP (Pa)	COMMENTS				
RG1/EG1	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	150x150	150x150	0–47	NC–20	5.0	–				
RG2/EG2	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	250x150	300x200	47–70	NC–20	5.0	–				
RG3/EG3	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	350x200	400x250	71–95	NC–20	3.3	–				
RG4/EG4	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	400x250	450x300	96–140	NC–20	3.3	–				
RG5/EG5	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	450x300	500x350	141–190	NC–20	3.3	–				
RG6/EG6	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	600x300	650x350	191–285	NC–20	3.3	–				
RG7/EG7	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	750x350	800x400	286–450	NC–20	3.3	–				
RG8/EG8	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	600x600	650x650	451–650	NC–20	3.3	–				
RG9/EG9	LOUVERED FACE EXHAUST/RETURN	FIXED 45° DEFLECTION	900x450	950x500	651–755	NC–20	3.3	–				

09 – LOUIS S. ST. LAURENT BUILDING – CEILING SUPPLY DIFFUSER SCHEDULE									
MARK	TYPE	STYLE	NECK SIZE (mm)	CLG. SIZE (L/s)	CAPACITY (L/s)	NC LEVEL	SP (Pa)	COMMENTS	
S1	SQUARE CONE	FIXED PATTERN	150ø	300x300	0–75	NC–26	7.5	–	
S2	SQUARE CONE	FIXED PATTERN	200ø	300x300	76–105	NC–26	5.0	–	
S3	SQUARE CONE	FIXED PATTERN	200ø	600x600	106–150	NC–26	10.0	–	
S4	SQUARE CONE	FIXED PATTERN	250ø	600x600	151–205	NC–25	7.5	–	
S5	SQUARE CONE	FIXED PATTERN	350ø	600x600	350	NC–21	20	–	

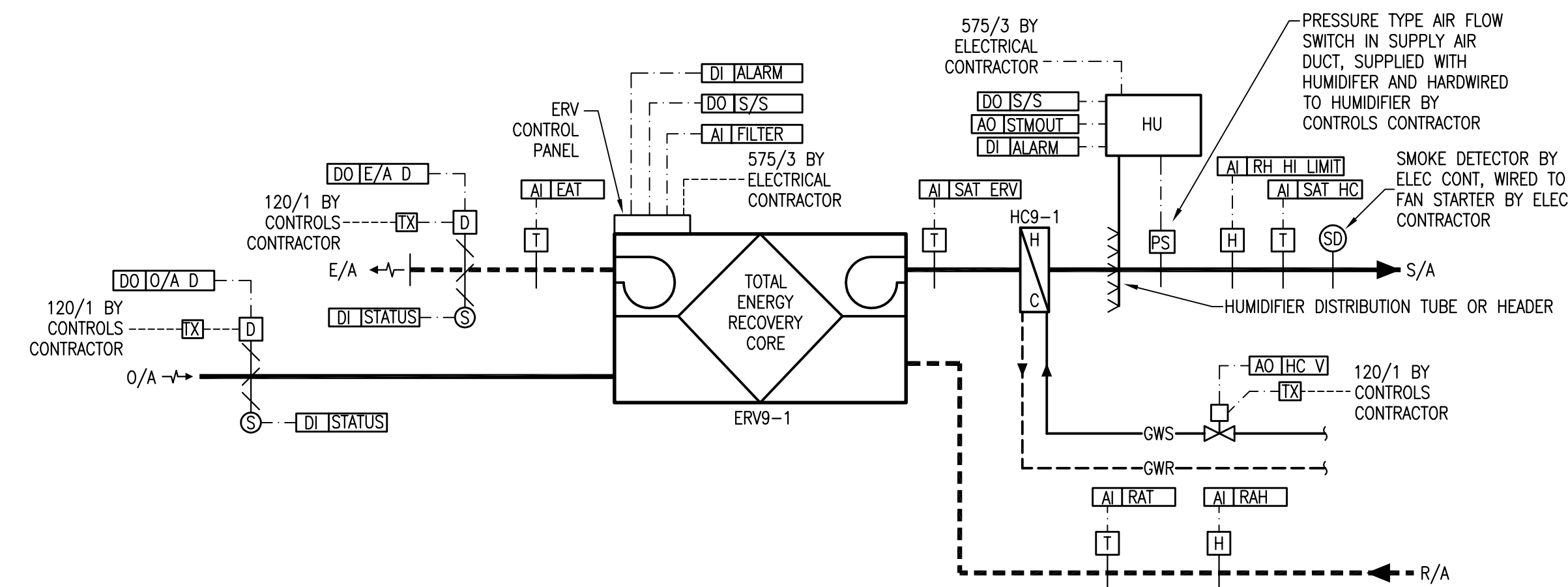
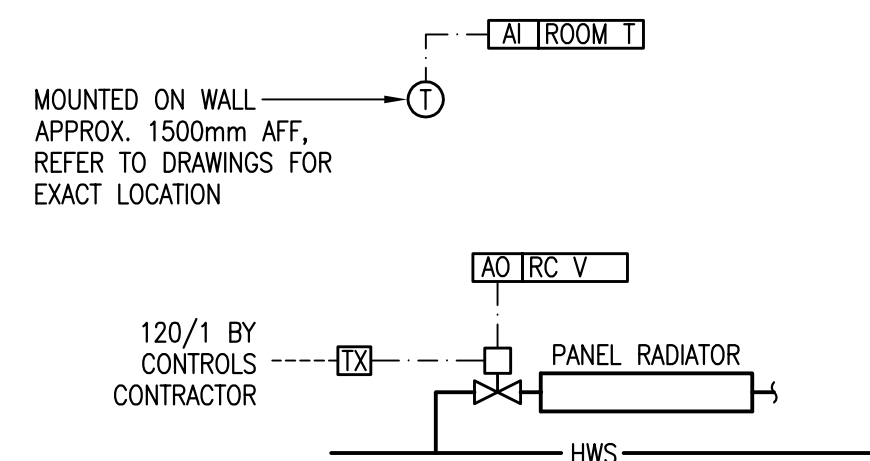
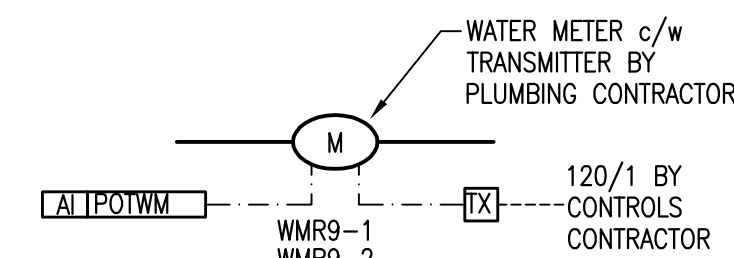
09 – LOUIS S. ST. LAURENT BUILDING – ROUND SUPPLY DIFFUSER SCHEDULE									
MARK	TYPE	STYLE	NECK SIZE (mm)	CLG. SIZE (L/s)	CAPACITY (L/s)	NC LEVEL	SP (Pa)	COMMENTS	
SR1	ROUND CONE	FIXED BLADE	200ø	457ø	0–115	NC–20	5.7	–	
SR2	ROUND CONE	FIXED BLADE	250ø	572ø	116–175	NC–20	5.7	–	
SR3	ROUND CONE	FIXED BLADE	300ø	686ø	176–260	NC–20	5.7	–	

09 – LOUIS S. ST. LAURENT BUILDING – CEILING RETURN/EXHAUST REGISTER/GRILLE SCHEDULE									
MARK	TYPE	STYLE	CLG. SIZE (mm)	CAPACITY (L/s)	NC LEVEL	SP (Pa)	COMMENTS		
R1/E1	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	150x150	0–30	NC–17	17.4	19mm GRILLE SPACING, c/w OPPOSED BLADE DAMPER, SURFACE MOUNT BORDER, COUNTER SUNK SCREWS, BLADES PARALLEL TO LONG DIMENSION		
R2/E2	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	200x150	31–45	NC–20	22.4			
R3/E3	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	200x200	45–65	NC–21	17.4			
R4/E4	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	250x250	66–85	NC–20	12.4			
R5/E5	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	300x300	86–120	NC–19	12.4			
R6/E6	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	350x350	121–150	NC–21	12.4			
R7/E7	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	400x400	151–225	NC–23	12.4			
R8/E8	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	450x450	226–295	NC–22	12.4			
R9/E9	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	500x500	296–375	NC–27	14.9			
R10/E10	AIRFOIL EXHAUST/RETURN	SURFACE MOUNT	600x600	376–485	NC–28	–			
R11	EGG CRATE RETURN	LAY-IN	600x600	–	–	–			



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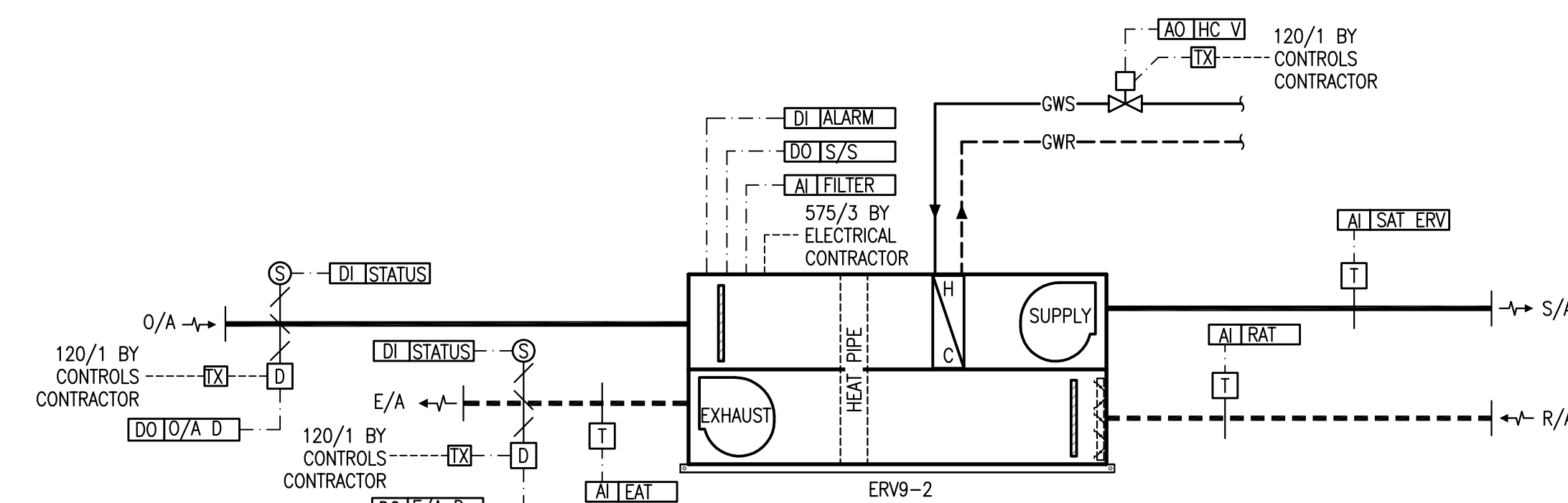
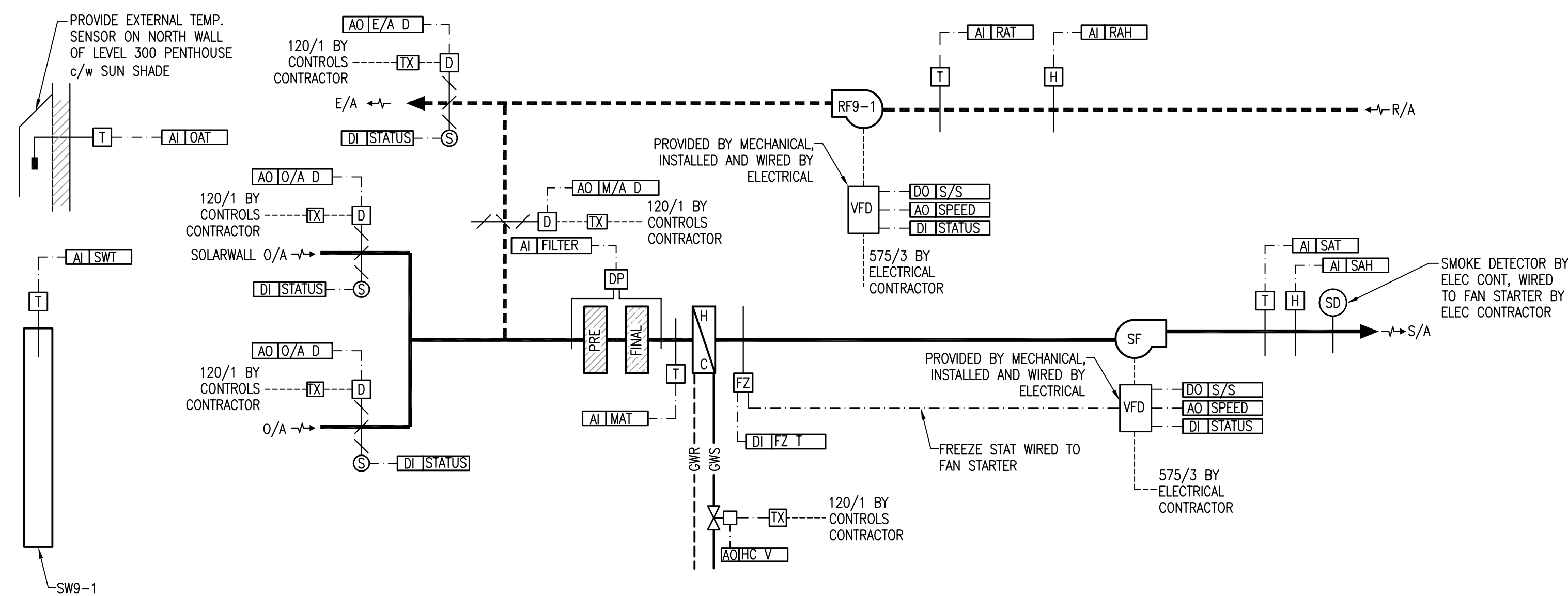
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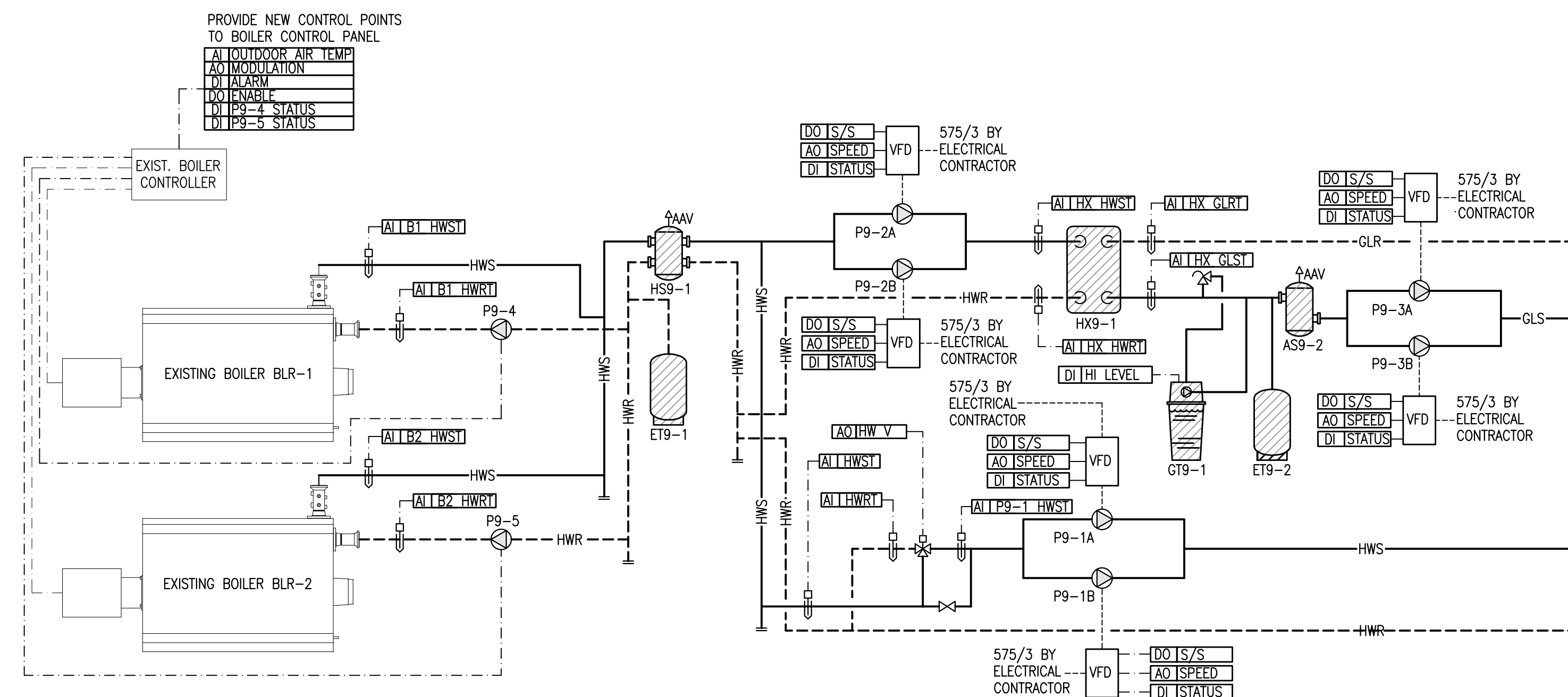
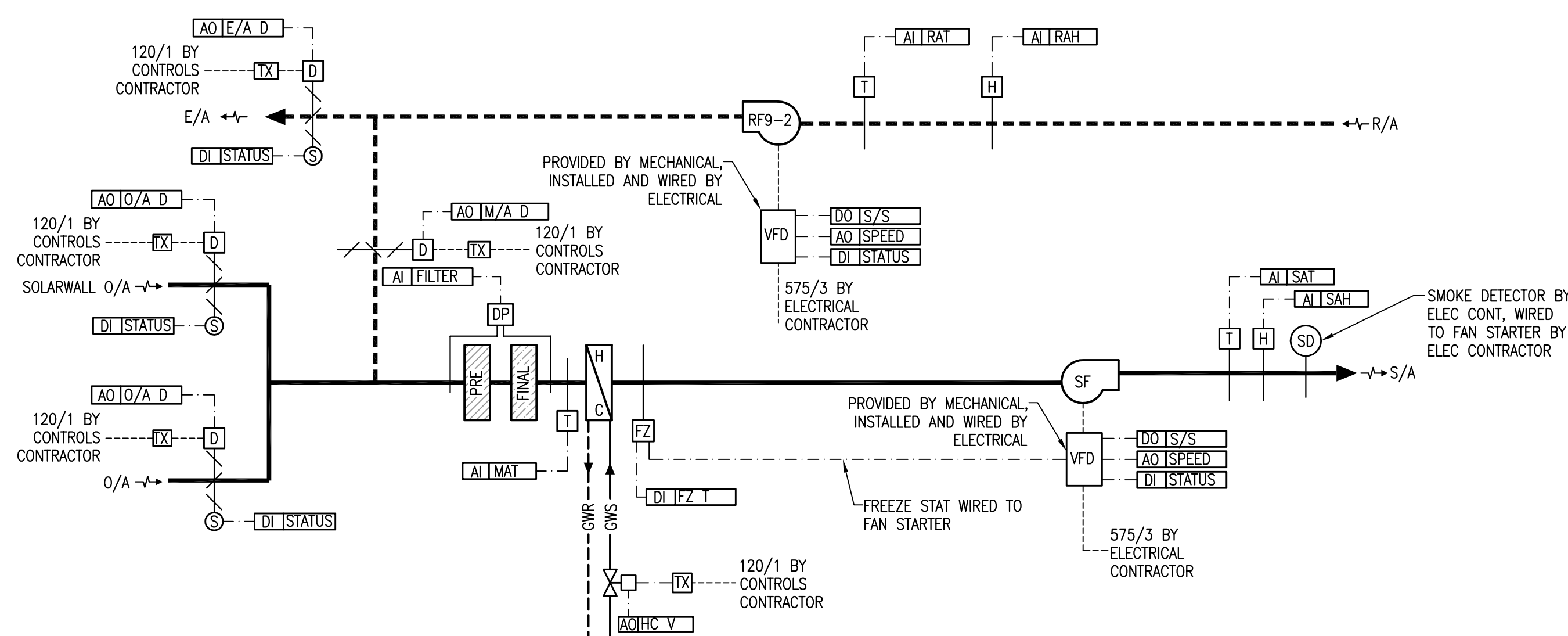
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ERV9-1 CONTROL 3 MC101
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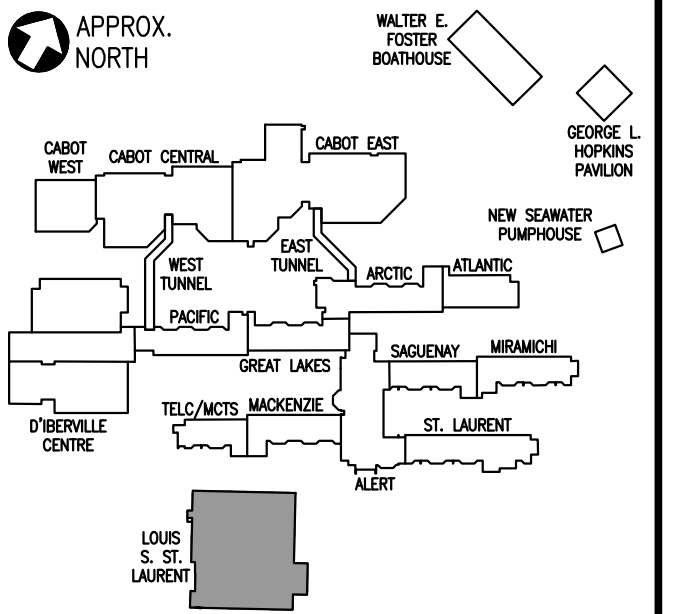
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ERV9-2 CONTROL 5 MC101
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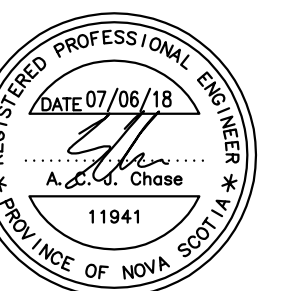


AHU9-2 CONTROL 6 MC101
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HEATING SYSTEM CONTROL - BOILER ROOM 108 7 MC101
N.T.S.



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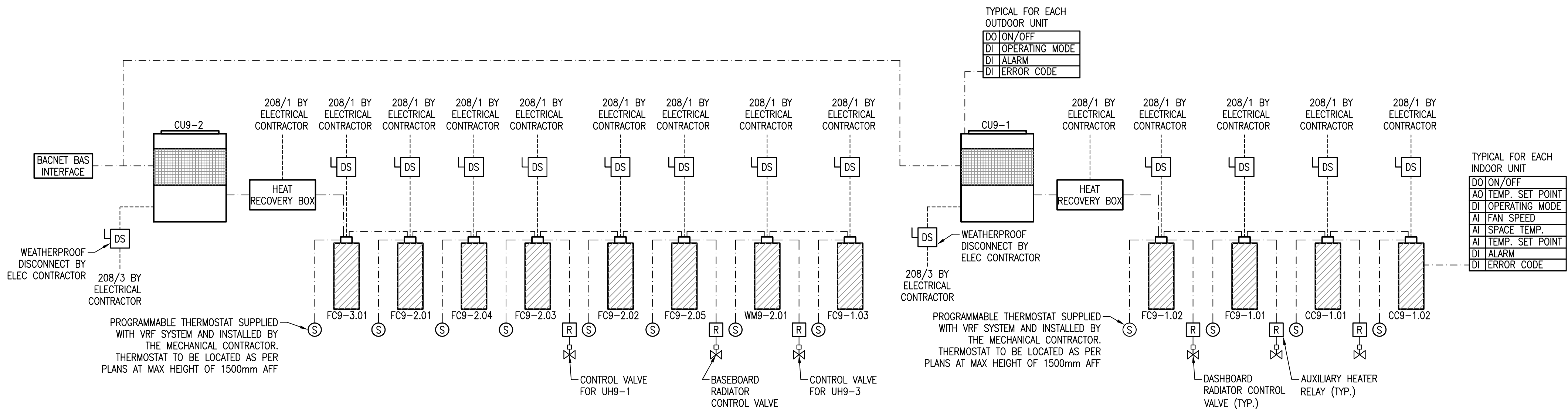


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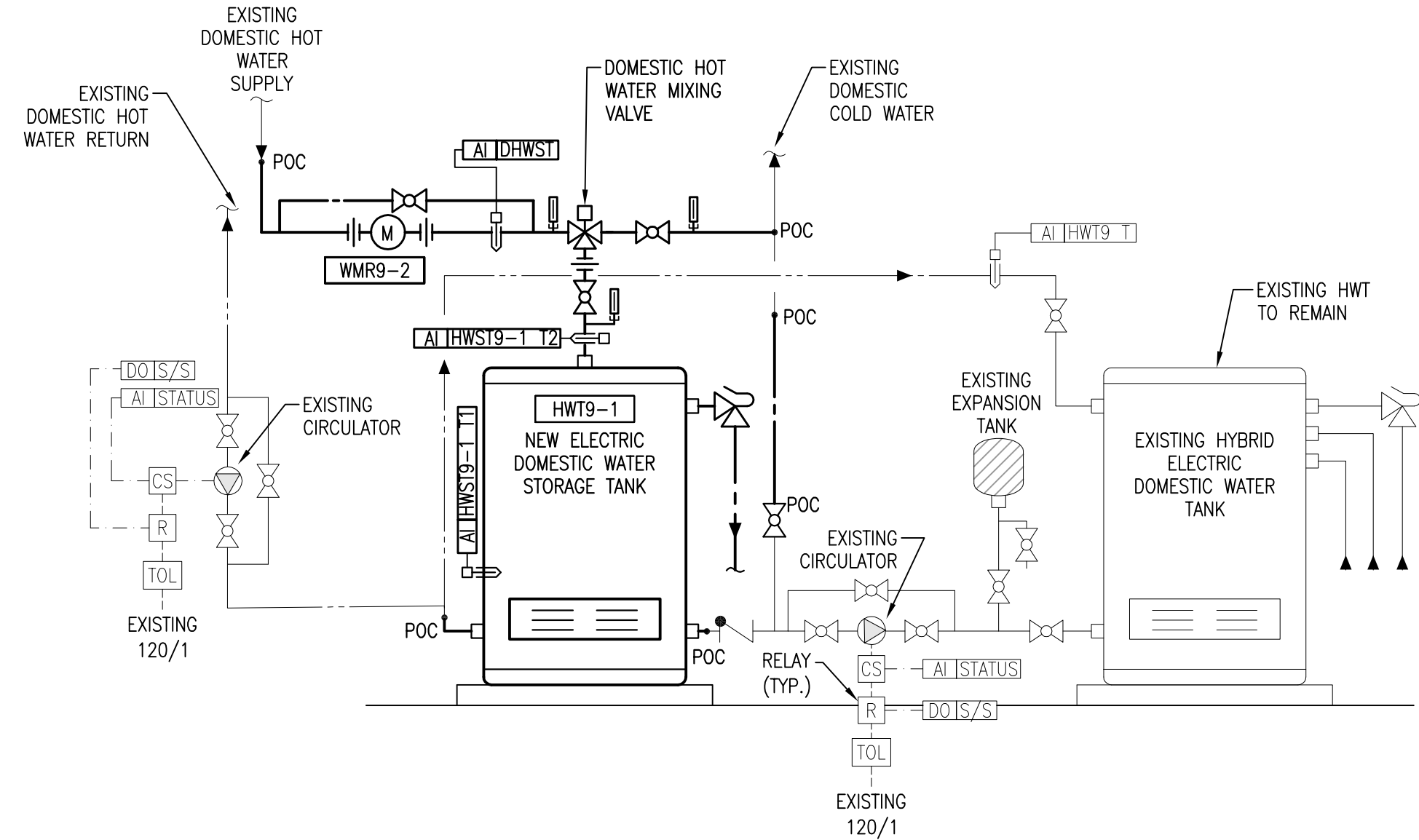
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CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES
project

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dessin

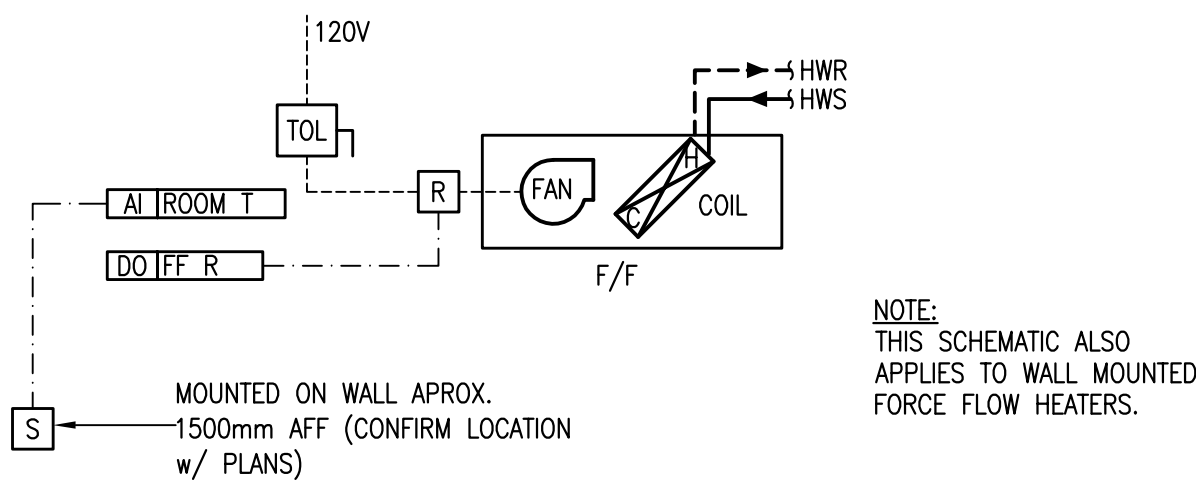
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approved ACJC	approuvé
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Tender Joan Muise	Soumission
PWGSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
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drawing no.	no. du dessin
09-MC-101	



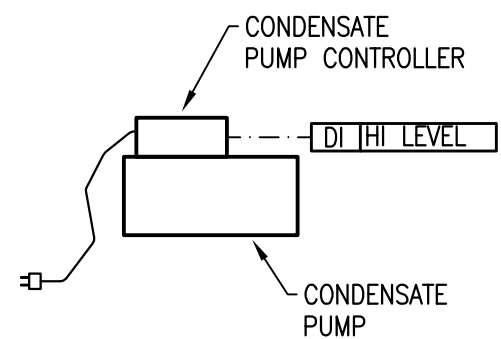
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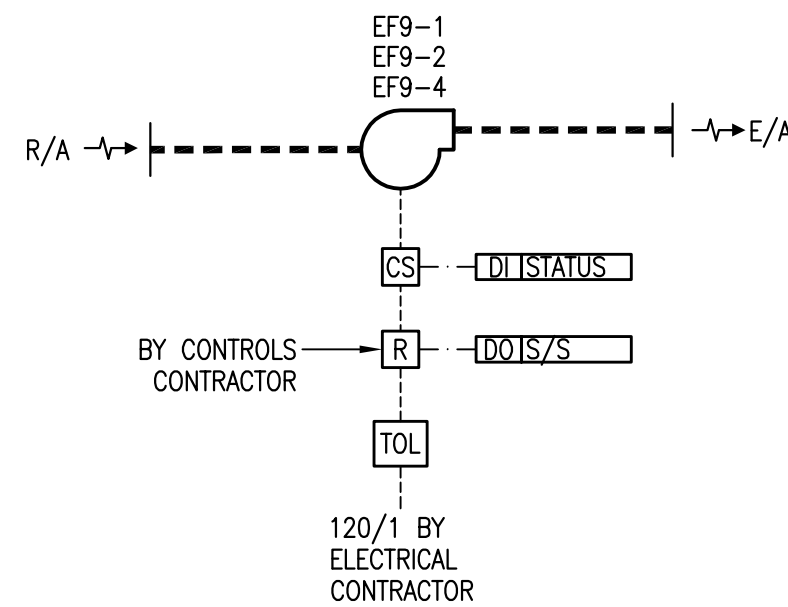
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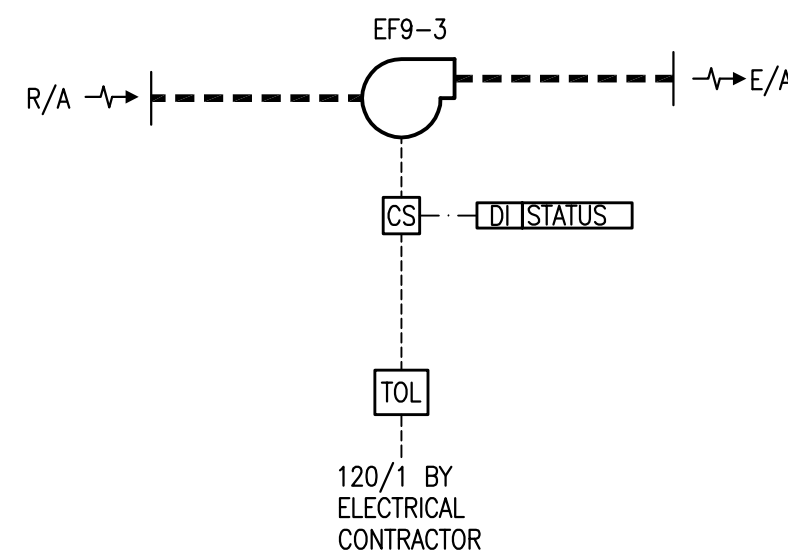
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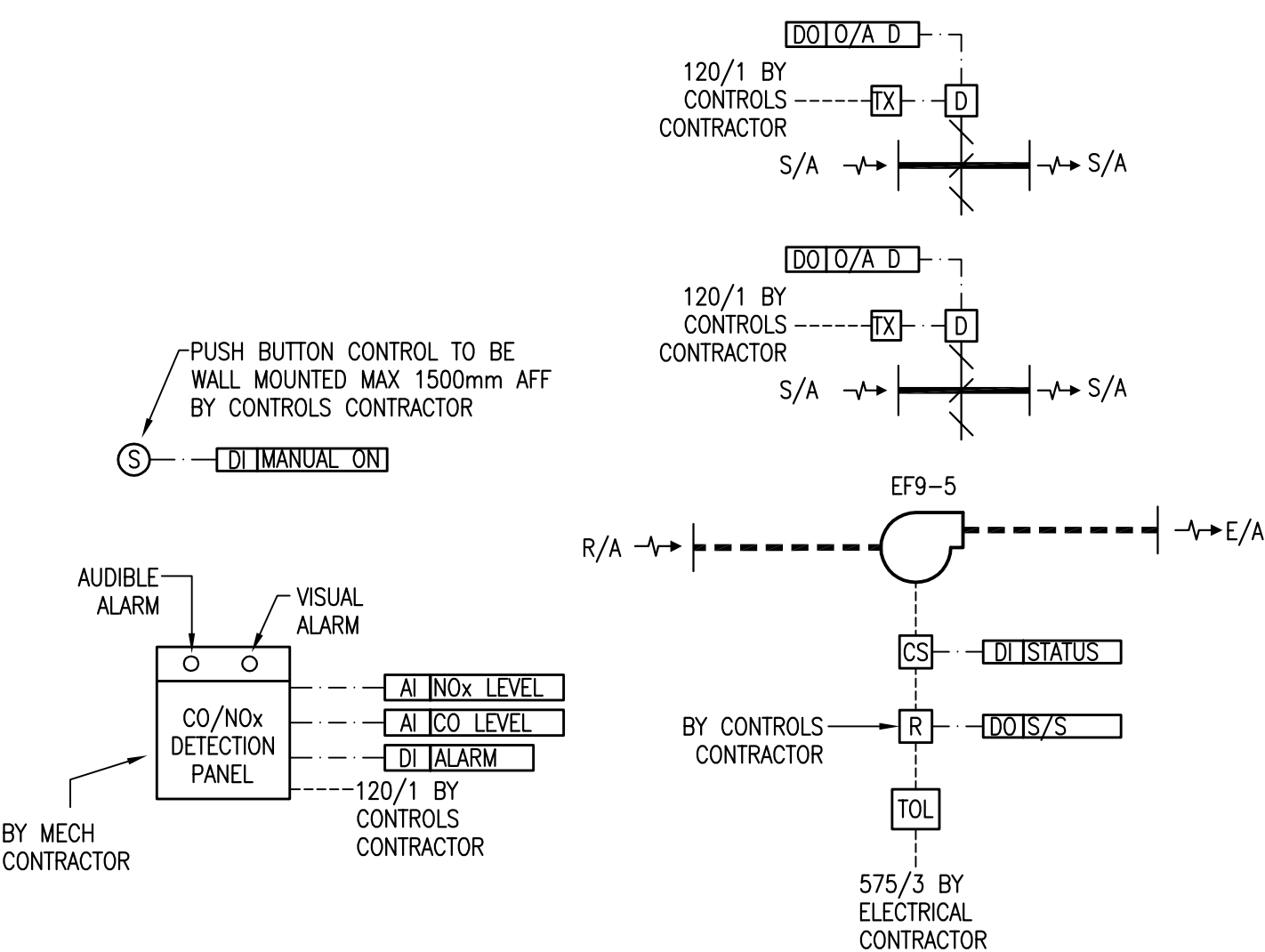
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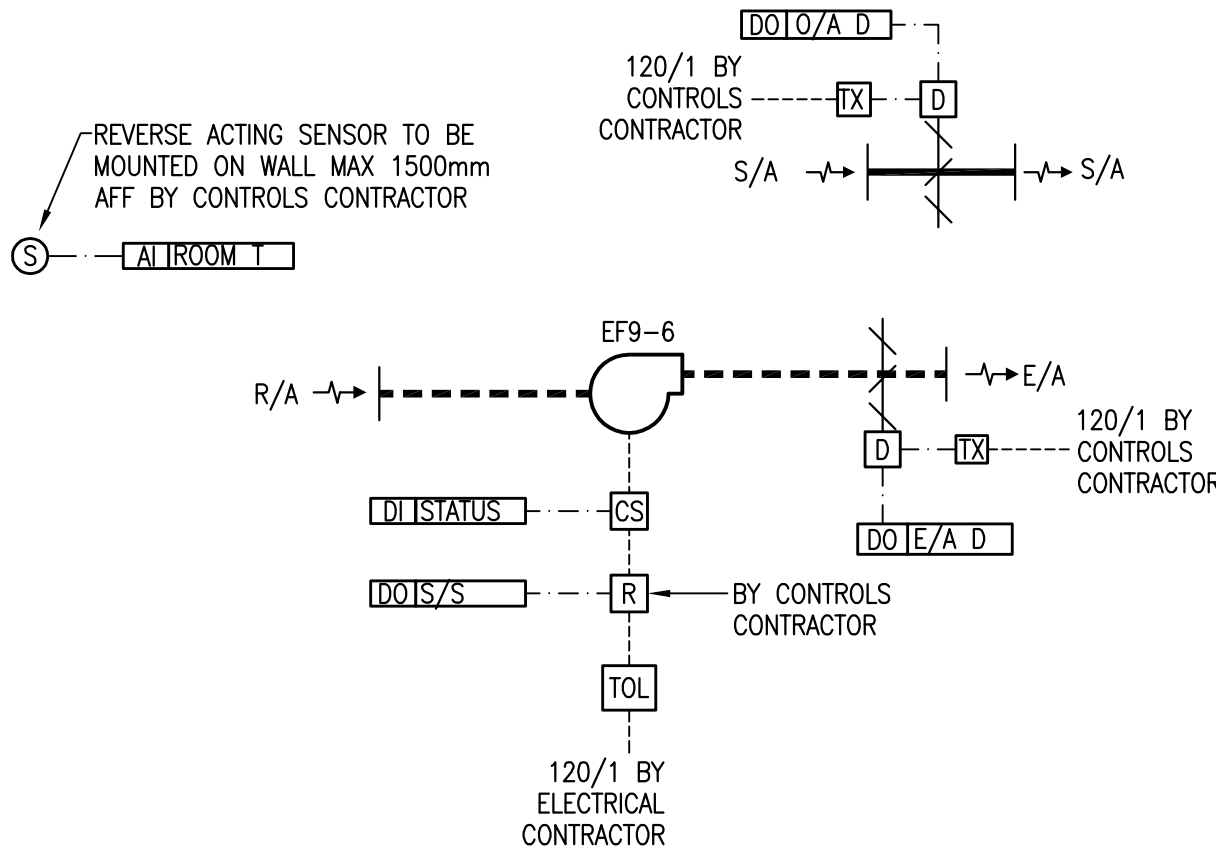
EF9-1 FLAMMABLE STORAGE EXHAUST 5 MC102 N.T.S.



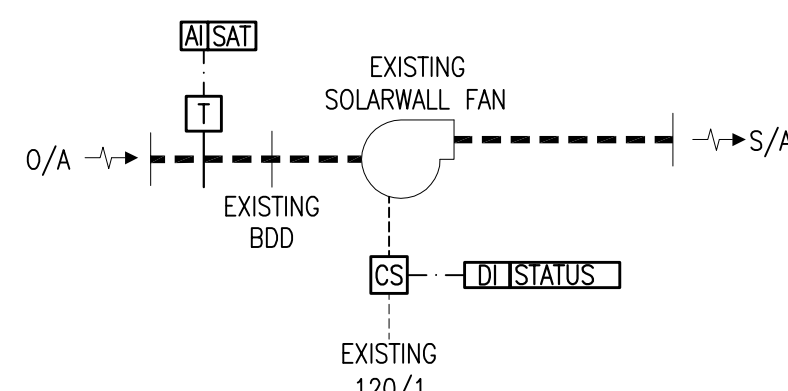
EF9-3 BATTERY CHARGING EXHAUST FAN CONTROL 6 MC102 N.T.S.



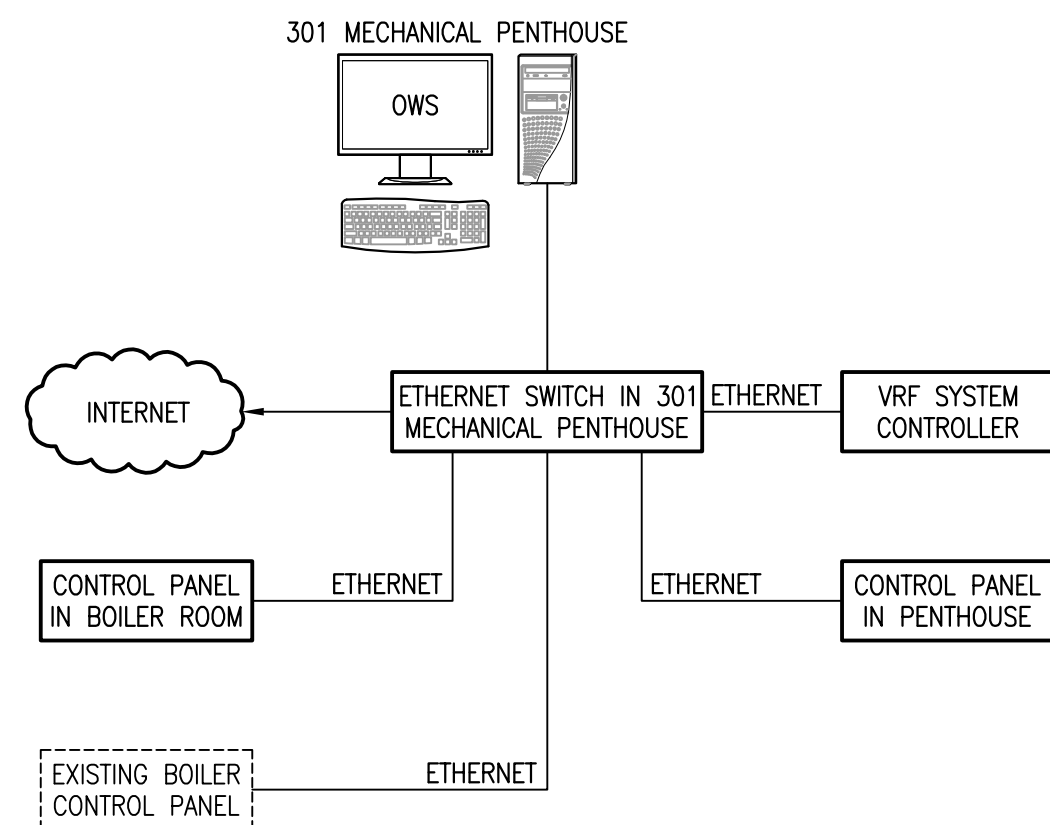
EF9-5 ENGINE BAY EXHAUST FAN CONTROL 7 MC102 N.T.S.



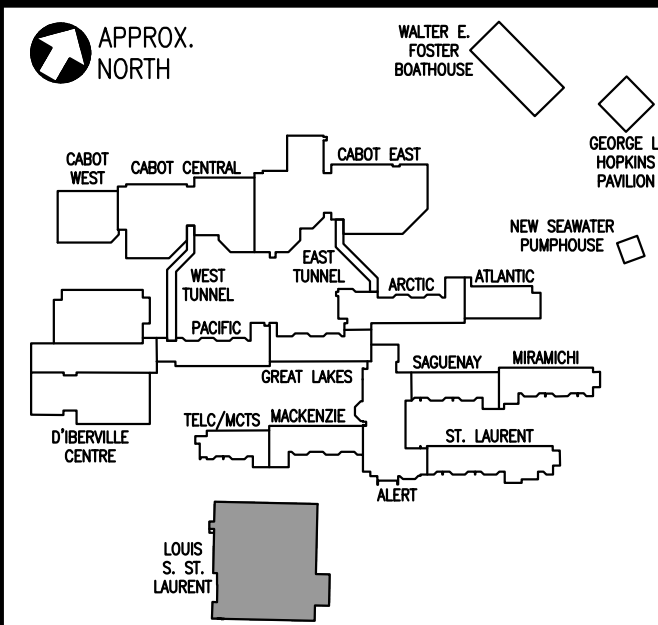
EF9-6 PENTHOUSE EXHAUST FAN CONTROL 8 MC102 N.T.S.



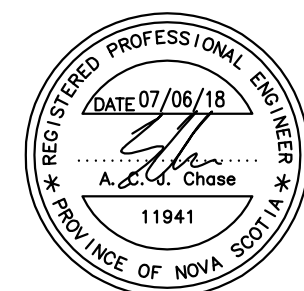
EXISTING SOLARWALL CONTROL 9 MC102 N.T.S.



LSSL SYSTEM ARCHITECTURE 10 MC102 N.T.S.



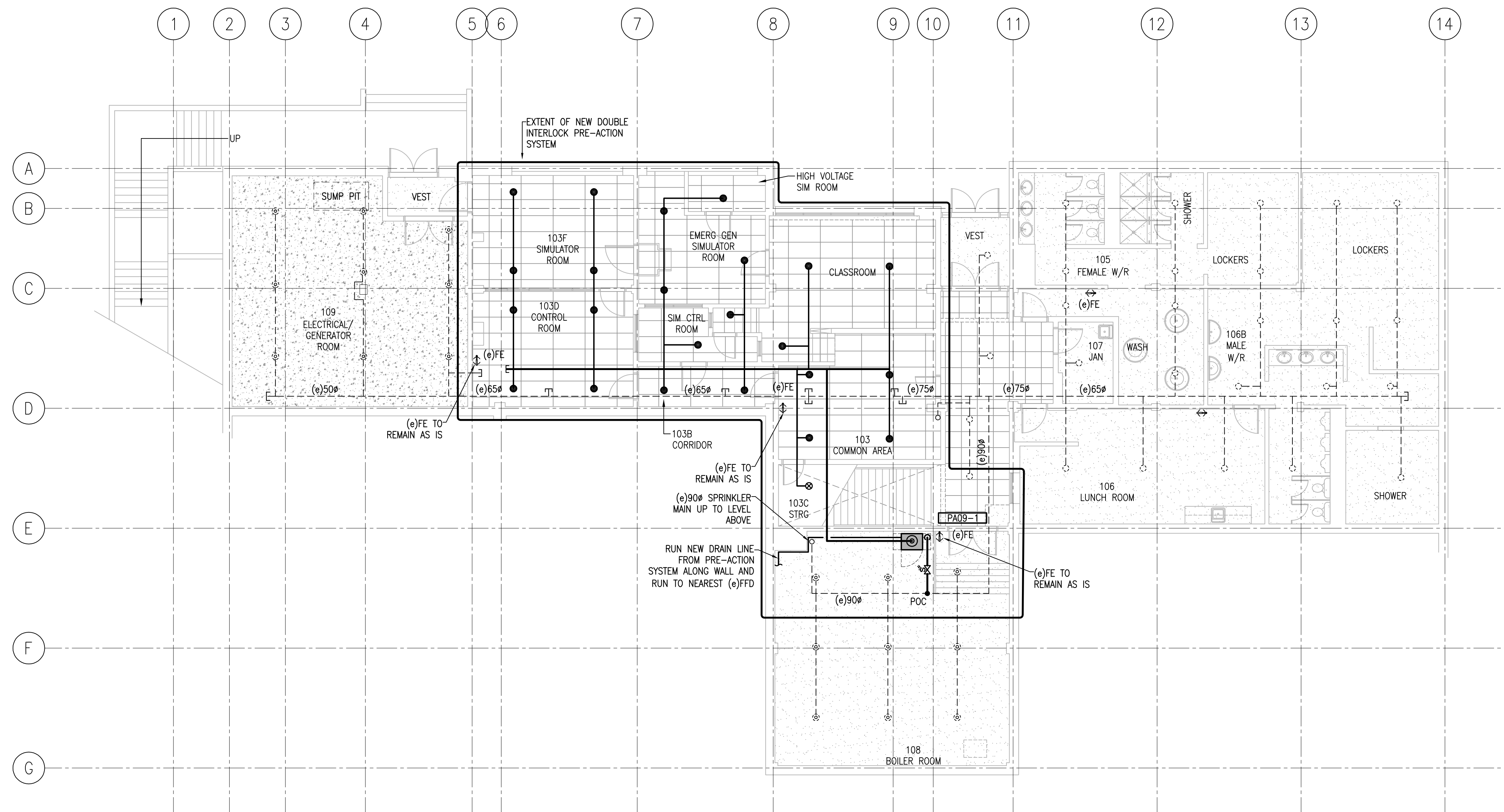
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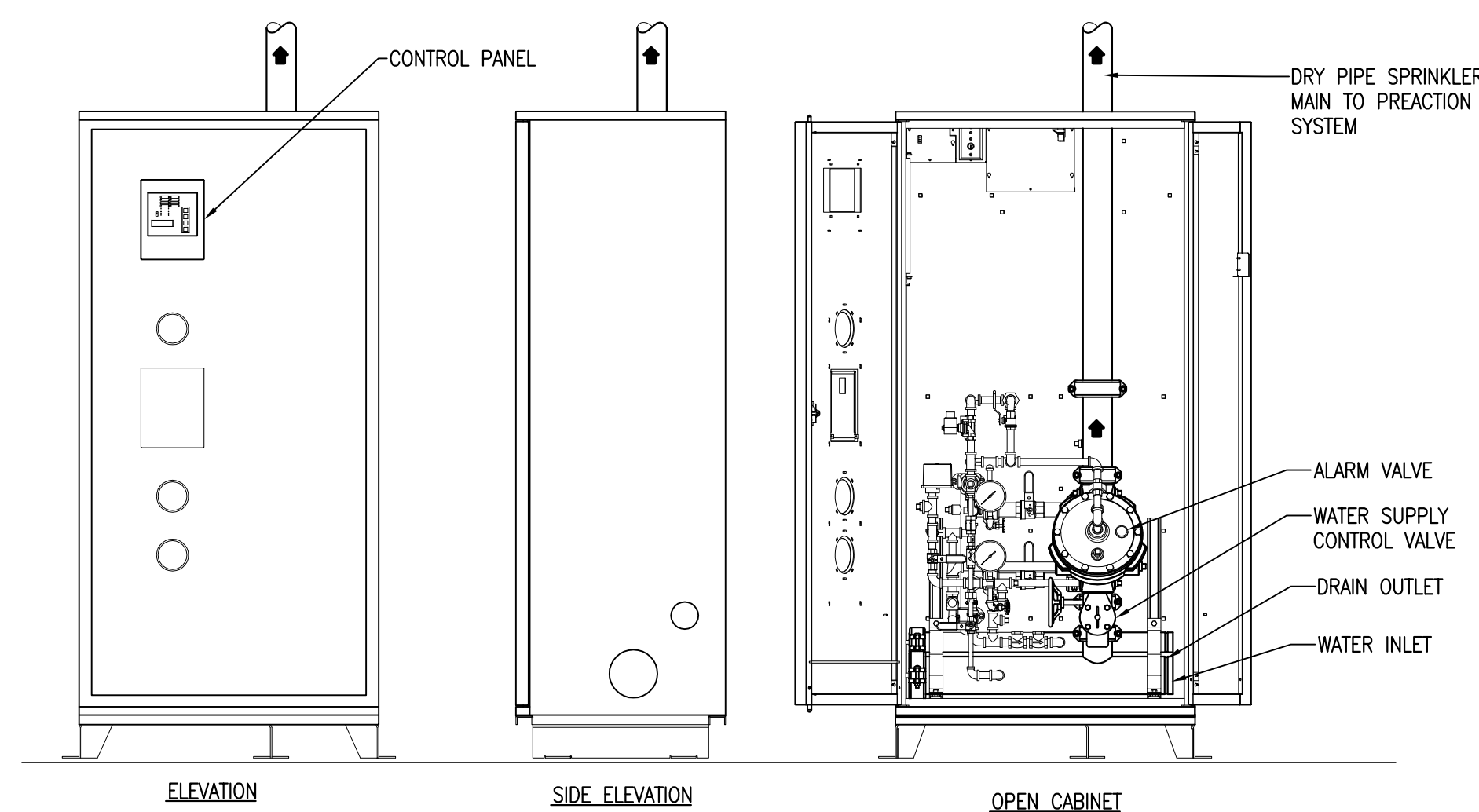
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date 07/06/18
Tender Submission
Joan Muise
PWGSC Project Manager Administrateur de projets TPSGC
project number no. du projet
R.065476.710
drawing no. no. du dessin
09-MC-102

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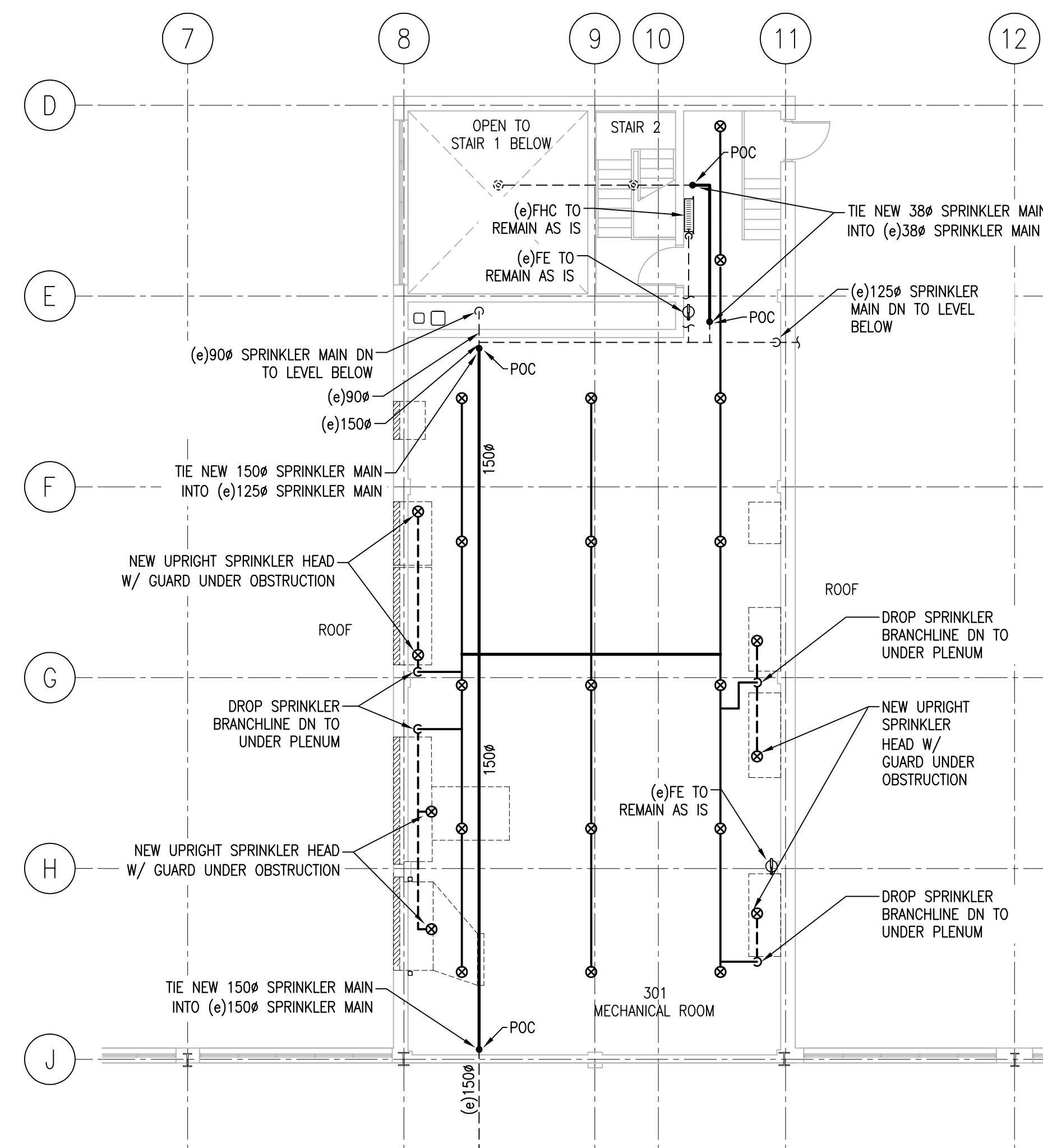
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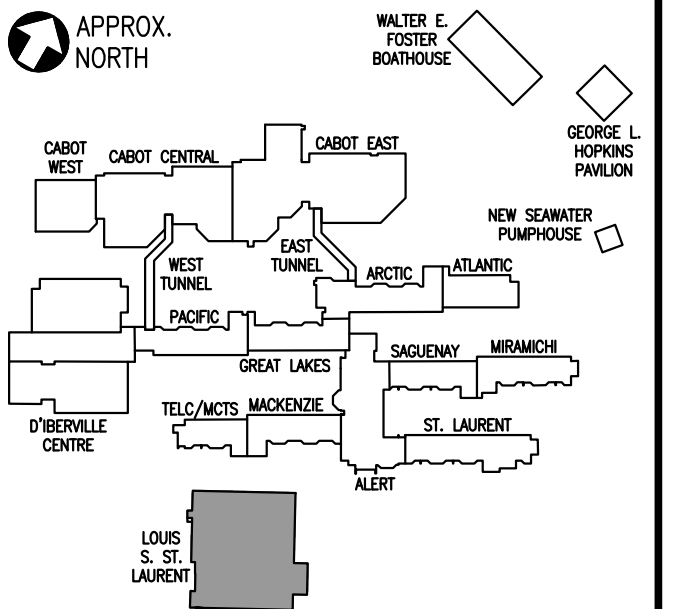
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FP101

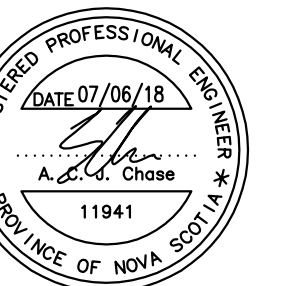


FIRE PROTECTION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 300 NEW WORK

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FIRE PROTECTION
LOUIS S. ST. LAURENT
MACHINE SHOP
LEVELS 100 & 300
NEW WORK

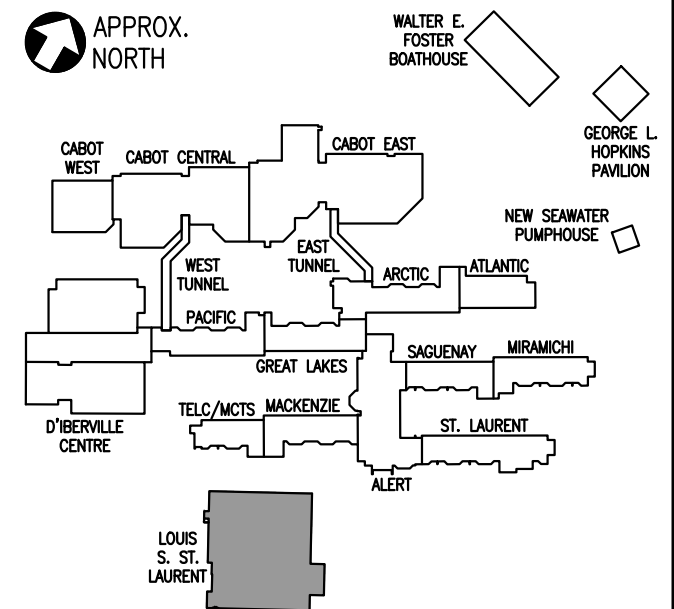
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Tender	Joan Muise	Submission
PWGSC Project Manager	Administrateur de projets TPSGC	
project number	R.065476.710	no. du projet
drawing no.	09-FP-101	no. du dessin

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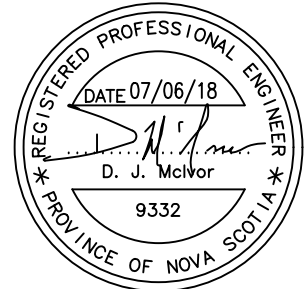
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538477 - 09 - ED-102 - ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 DEMOLITION
538477 - 09 - ED-103 - ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 DEMOLITION
538477 - 09 - EP-101 - ELECTRICAL POWER LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 NEW WORK
538477 - 09 - EP-102 - ELECTRICAL POWER LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 NEW WORK
538477 - 09 - EP-103 - ELECTRICAL POWER LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 NEW WORK
538477 - 09 - E-601 - ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP SCHEDULES
538477 - 09 - E-602 - ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP SCHEDULES & DISTRIBUTION EQUIPMENT

ELECTRICAL LEGEND

LIGHTING		WIRING FOR POWER AND LIGHTING CIRCUITS, ARROWS INDICATE NUMBER OF CIRCUITS, STROKES INDICATE NUMBER OF CONDUCTORS (NOTE: BOND CONDUCTOR IS NOT SHOWN), CONDUCTOR SIZE TO BE AS INDICATED ON DRAWINGS (#12 AWG MINIMUM). "P1-1,3" INDICATES FED FROM PANELBOARD "P1", CIRCUIT "1 AND 3".
		EXISTING 2'x4' FLUORESCENT LIGHTING FIXTURE, CEILING MOUNTED.
		EXISTING 1'x4' FLUORESCENT LIGHTING FIXTURE, CEILING MOUNTED.
		EXISTING 4' FLUORESCENT LIGHTING FIXTURE, WALL MOUNTED.
		EXISTING DOWNLIGHT, CEILING MOUNTED.
POWER		SINGLE, TWO-GANG AND THREE-WAY LINE VOLTAGE LIGHTING SWITCHES, RESPECTIVELY, MOUNTED 1220mm A.F.F.
		125 VOLT, 15 AMP PARALLEL BLADE, U-GROUND, DUPLEX RECEPTACLE (NEMA 5-15R CONFIG.) C/W STAINLESS STEEL COVERPLATE, MOUNTED 460mm A.F.F. "P1-1" INDICATES FED FROM PANEL "P1", CIRCUIT "1".
		125 VOLT, 20 AMP T-SLOT, U-GROUND, DUPLEX RECEPTACLE (NEMA 5-20R CONFIG.) C/W STAINLESS STEEL COVERPLATE, MOUNTED 460mm A.F.F. "P1-1" INDICATES FED FROM PANEL "P1", CIRCUIT "1".
		SURFACE MOUNTED ELECTRICAL PANELBOARD, MOUNTED 1525 A.F.F.
		SINGLE-PHASE MOTOR SUPPLIED AND INSTALLED BY OTHERS, WIRED BY DIVISION 26, COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION. "P1" INDICATES EQUIPMENT TAG, REFER TO MOTOR STARTER AND CONTROL LISTS FOR EXACT REQUIREMENTS.
		THREE-PHASE MOTOR SUPPLIED AND INSTALLED BY OTHERS, WIRED BY DIVISION 26, COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION. "P1" INDICATES EQUIPMENT TAG, REFER TO MOTOR STARTER AND CONTROL LISTS FOR EXACT REQUIREMENTS.
		ENERGY RECOVERY VENTILATOR SUPPLIED AND INSTALLED BY OTHERS, WIRED BY DIVISION 26, COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION. REFER TO SCHEDULES FOR EXACT REQUIREMENTS.
		CEILING MOUNTED FAN COIL SUPPLIED AND INSTALLED BY OTHERS, WIRED BY DIVISION 26, COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION. REFER TO SCHEDULES FOR EXACT REQUIREMENTS.
		WALL MOUNTED FAN COIL SUPPLIED AND INSTALLED BY OTHERS, WIRED BY DIVISION 26, COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION. REFER TO SCHEDULES FOR EXACT REQUIREMENTS.
		CONDENSER SUPPLIED AND INSTALLED BY OTHERS, WIRED BY DIVISION 26, COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION. REFER TO SCHEDULES FOR EXACT REQUIREMENTS.
		SPRINKLER PRE-ACTION SYSTEM SUPPLIED AND INSTALLED BY OTHERS, WIRED BY DIVISION 26, COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION. REFER TO SCHEDULES FOR EXACT REQUIREMENTS.
		MECHANICAL EQUIPMENT TAG.
		VARIABLE SPEED DRIVE SUPPLIED BY DIVISION 25, INSTALLED AS INDICATED ON MOTOR STARTER CONTROL LIST AND WIRED BY DIVISION 26.
		2 x 125 VOLT, 15 AMP PARALLEL BLADE, U-GROUND, DUPLEX RECEPTACLES (5-15R) C/W TWO GANG STAINLESS STEEL COVER PLATE MOUNTED 460mm A.F.F. UNLESS OTHERWISE NOTED.
		125 VOLT, 20 AMP, U-GROUND, DUPLEX RECEPTACLE (5-20R) C/W COVERPLATE, MTD. 460mm A.F.F.
FIRE ALARM AND EMERGENCY/EXIT LIGHTING		COMMUNICATIONS OUTLET, 1 DATA, 1 VOICE, MOUNTED 460mm A.F.F., CONSISTING OF 200mm SQ x 53mmdp BOX, TILE RING, 21mmdc TO ACCESSIBLE CEILING SPACE, GROUNDING BUSHING, ONE DATA JACK, ONE VOICE JACK AND 4 PAIR UTP CABLES TO DATA PATCH PANEL.
		ELECTRONIC TRAP PRIMER, SUPPLIED AND INSTALLED BY MECHANICAL, WIRED BY ELECTRICAL.
		CEILING AND WALL MOUNTED EXIT SIGNS, RESPECTIVELY. SINGLE AND DOUBLE FACED, L.E.D. TYPE, 120VAC/12VDC.
		120VAC/12VDC SELF CONTAINED EMERGENCY LIGHTING BATTERY UNIT C/W TWO (2) 6 WATT MR16 STYLE L.E.D. LAMPS, WALL MOUNTED 2285mm A.F.F.
		120VAC/12VDC SELF CONTAINED EMERGENCY LIGHTING BATTERY UNIT C/W TWO (2) 6 WATT MR16 STYLE L.E.D. LAMPS, CEILING MOUNTED.
		DOUBLE REMOTE EMERGENCY LIGHTING HEAD, 12VDC C/W TWO (2) 6 WATT MR16 STYLE L.E.D. LAMPS, WALL MOUNTED 2285mm A.F.F.
		DOUBLE REMOTE EMERGENCY LIGHTING HEAD, 12VDC C/W TWO (2) 6 WATT MR16 STYLE L.E.D. LAMPS, RECESSED IN T-BAR CEILING.
		FIRE ALARM IONIZATION DETECTOR, SEMI-FLUSH.
		FIRE ALARM MANUAL PULL STATION MOUNTED 1200mm A.F.F.
		FIRE ALARM HORN/STROBE COMBINATION SELF-SYNCHRONIZING, 15cd., MOUNTED 2200mm A.F.F.
		FIRE ALARM SPRINKLER SUPERVISORY SWITCH.
		FIRE ALARM SPRINKLER ZONE ALARM.
		FIRE ALARM ADDRESSABLE INTERFACE MODULE.

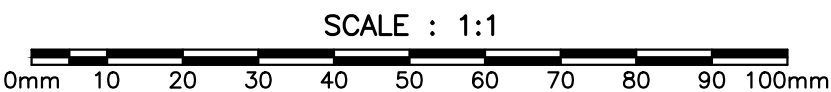


GENERAL NOTES :
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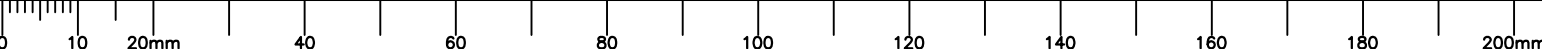


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revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEGEND	

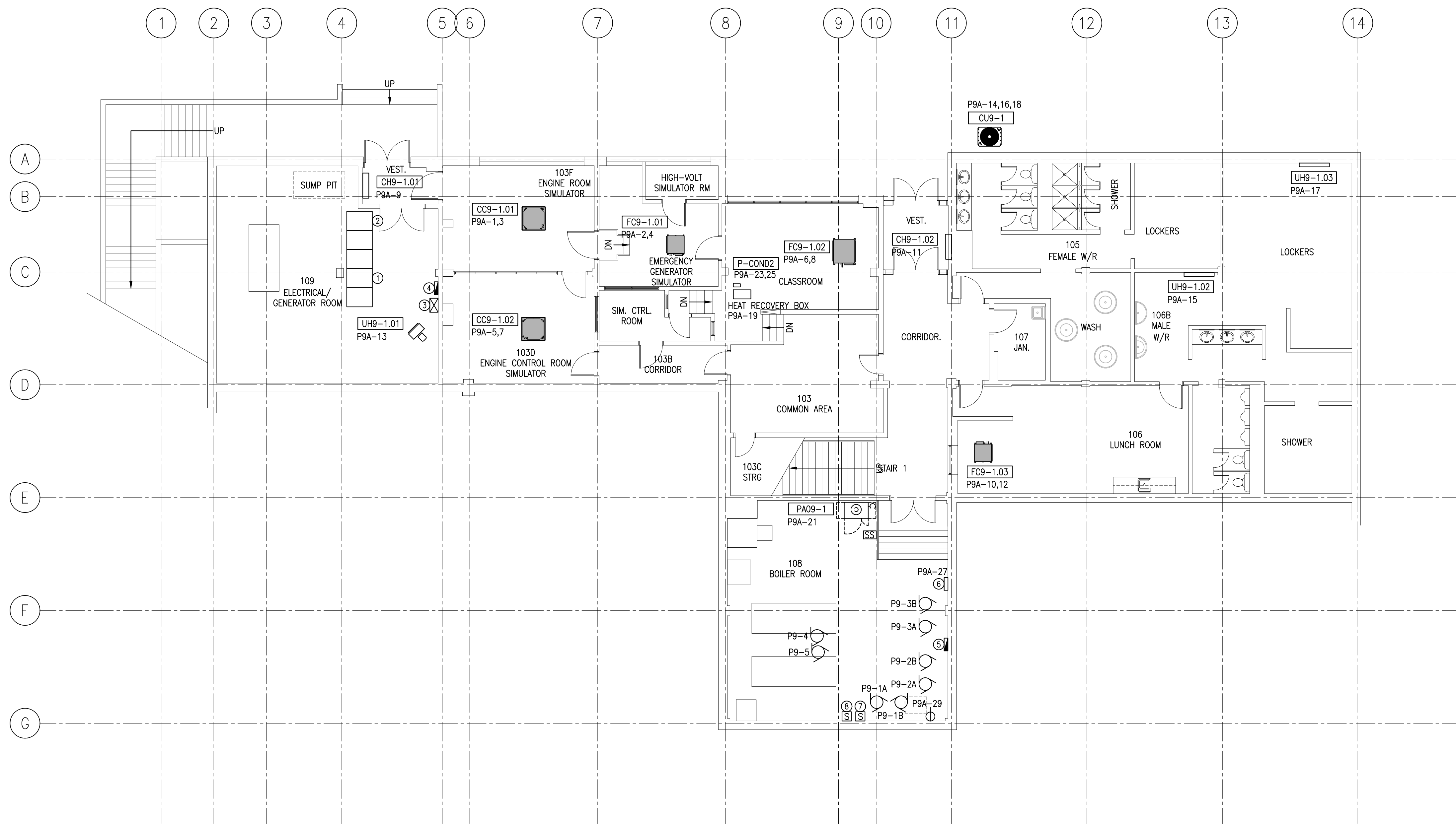
designed	CGN	conçu
date	07/06/18	
drawn	MAS	dessiné
date	07/06/18	
approved	DJM	approuvé
date	07/06/18	
Tender	Joan Muise	Soumission
PWSSC Project Manager	Administrateur de projets TPSSC	
project number	R.065476.710	
drawing no.	09-E-001	



SCALE : 1:1



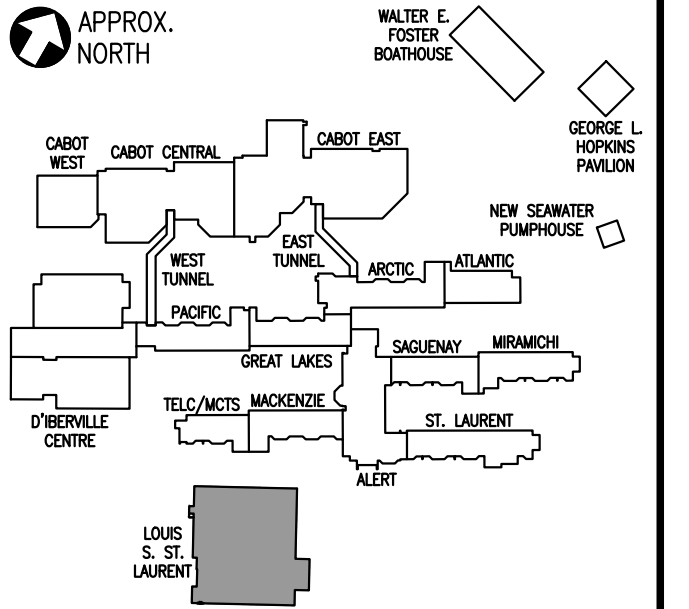
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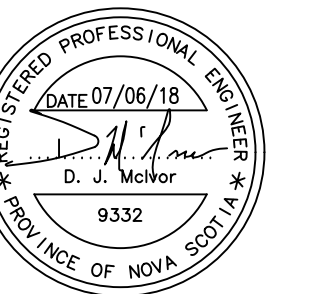
ELECTRICAL POWER LOUIS S. ST. LAURENT-LEVEL 100-NEW WORK

SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

1
EP-101



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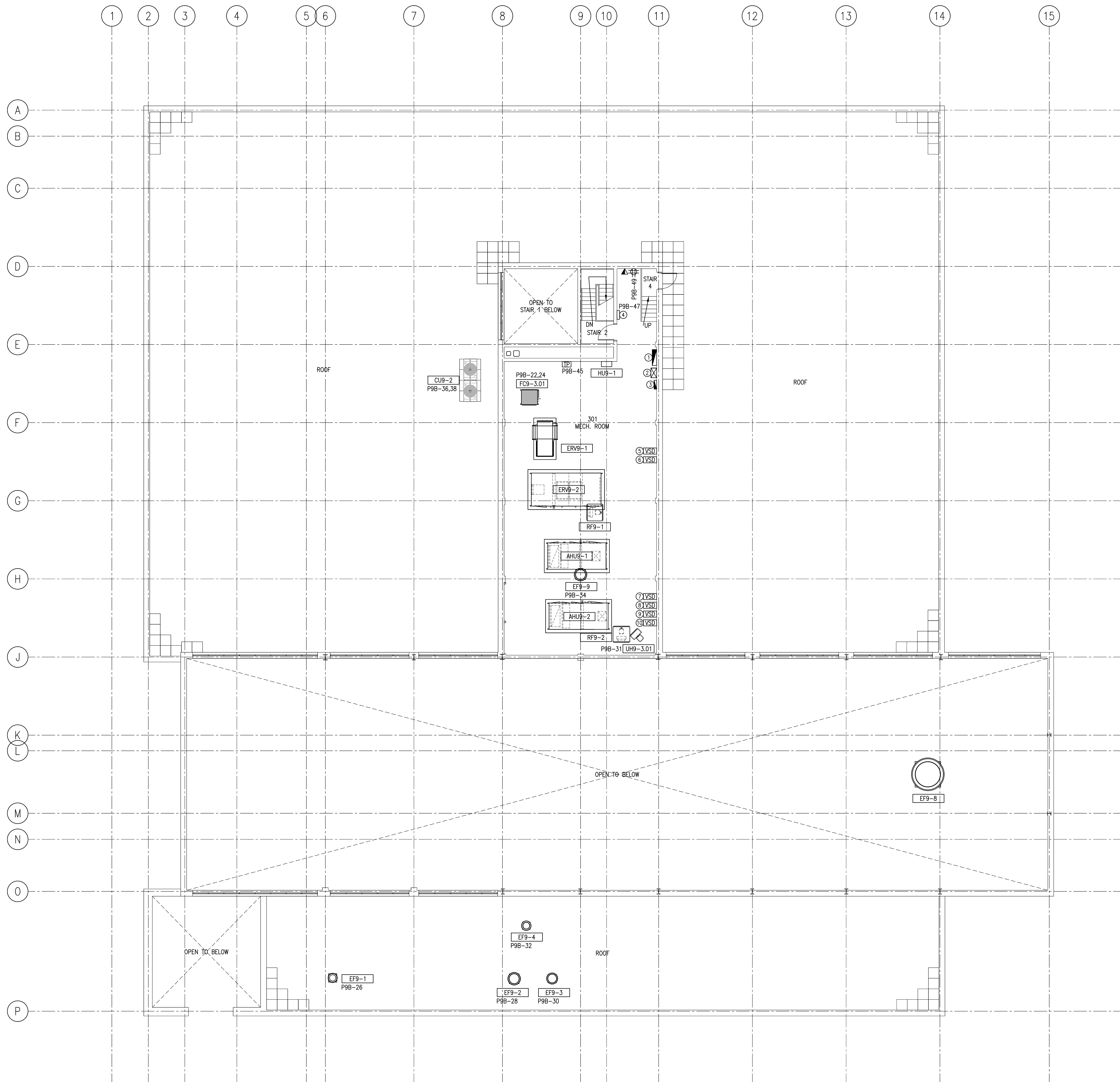


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drawing	ELECTRICAL POWER LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 NEW WORK	
designed	CGN	conçu
date	07/06/18	
drawn	MAS	dessiné
date	07/06/18	
approved	DJM	approuvé
date	07/06/18	
Tender	Joan Muise	Submission
PWSSC Project Manager	Administrateur de projets TPSSC	
project number	R.065476.710	
drawing no.	09-EP-101	

ELECTRICAL POWER LOUIS S. ST. LAURENT-LEVEL 200-NEW WORK 1

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PWSSC B1 (2004)

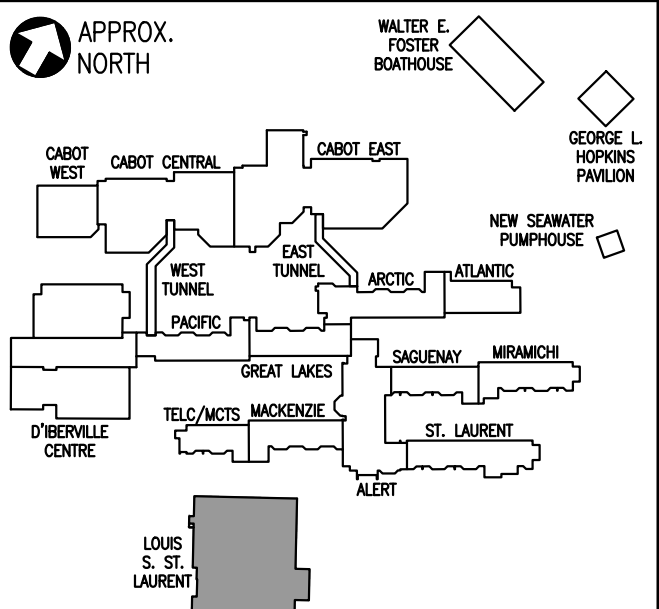


ELECTRICAL POWER LOUIS S. ST. LAURENT-LEVEL 300-NEW WORK 1

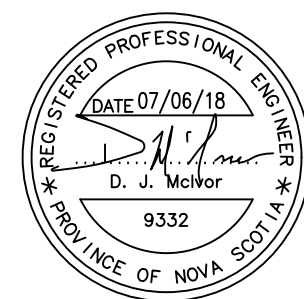
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0 10 20mm 40 60 80 100 120 140 160 180 200mm

DEMOLITION NOTES	
①	NEW 225A, 347/600V, 3-PHASE, 4-WIRE DISTRIBUTION BOARD 'CDP-9B'.
②	NEW 45kVA, 600-120/208V, DRY-TYPE TRANSFORMER.
③	NEW 225A, 120/208V, 3-PHASE, 4-WIRE 42 CCT PANELBOARD 'P9-B'.
④	NEW EMCS CONTROL PANEL.
⑤	VARIABLE SPEED DRIVE FOR ERV9-2, SUPPLY FAN.
⑥	VARIABLE SPEED DRIVE FOR ERV9-2, RETURN FAN.
⑦	VARIABLE SPEED DRIVE FOR RF9-1.
⑧	VARIABLE SPEED DRIVE FOR RF9-1.
⑨	VARIABLE SPEED DRIVE FOR AHU9-2.
⑩	VARIABLE SPEED DRIVE FOR RF9-2.



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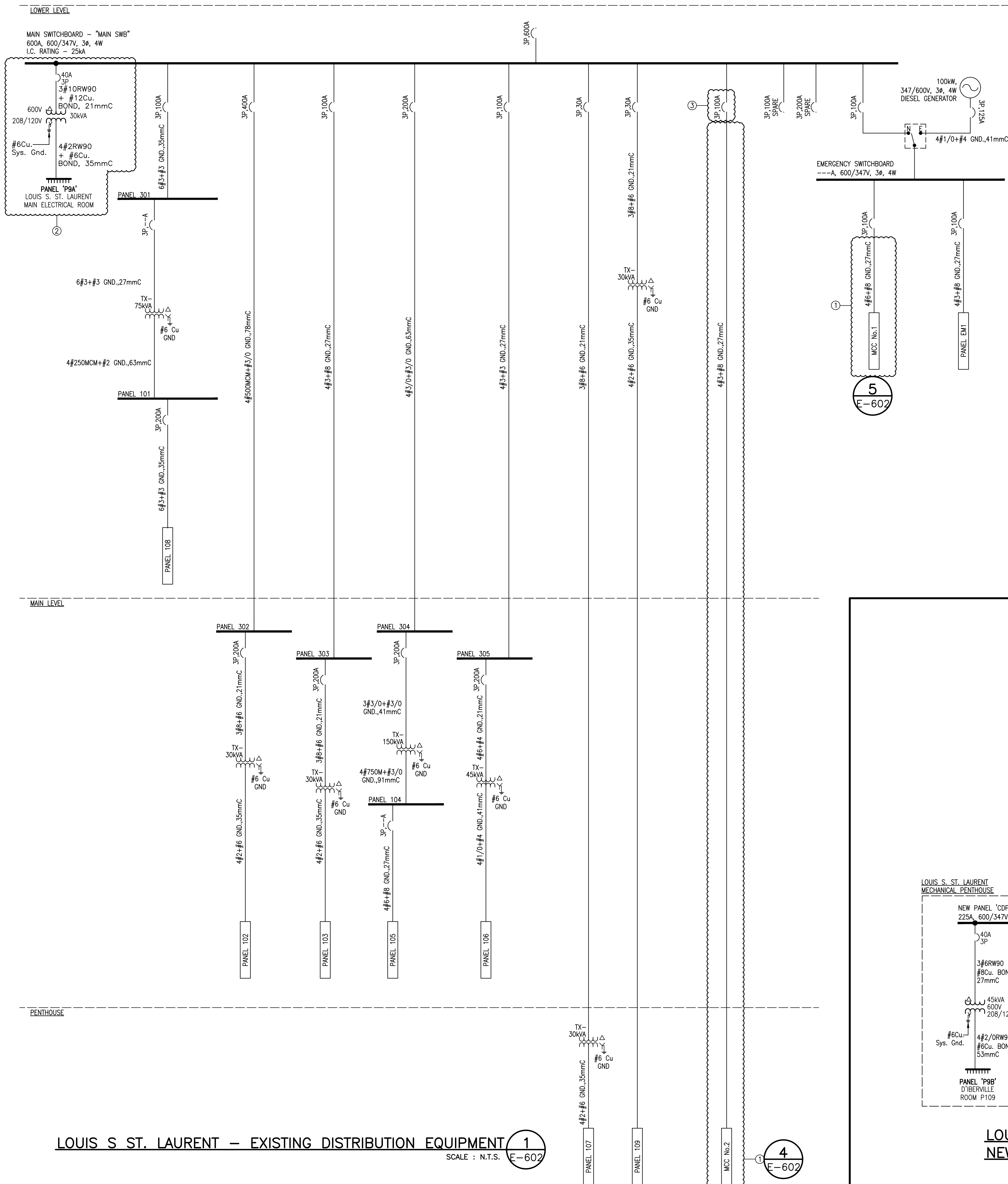
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drawing	ELECTRICAL POWER LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 NEW WORK	
designed CGN	conçu	
date 07/06/18		
drawn MAS	dessiné	
date 07/06/18		
approved DJM	approuvé	
date 07/06/18		
Tender	Soumission	
Joan Muise		
PWSSC Project Manager	Administrateur de projets TPSSC	
project number	no. du projet	
R.065476.710		
drawing no.	no. du dessin	
09-EP-103		

E-DRM/GDD-E: 538447

NEW FAN COIL SCHEDULE – ALERT																						
EQUIPMENT INFORMATION						EQUIP. RATING					LOCATE AT MOTOR					FEEDER DETAILS					EQUIPMENT LABEL	
EQUIPMENT LABEL	LOCATION	APPLICATION	SUPPLIED UNDER DIV.	INSTALLED UNDER DIV.	WIRED UNDER DIV.	KW	FLA	MCA	VOLTAGE	PHASE	CCT NO. & BKG-SIZE OR MCC & FUSE SIZE	DISC. SWITCH	TOGGLE SWITCH	RECEPTACLE	CSA ENCL. TYPE	NOTES	SUPPLIED UNDER DIV.	INSTALLED UNDER DIV.	WIRED UNDER DIV.			
CC9-1.01	LVL 100 SIM ENGINE ROOM	LVL 100 SIM ENGINE ROOM	M	M	E			0.54	208	1	2P, 15A P9A-1,3		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	CC9-1.01	
CC9-1.02	LVL 100 SIM ENG CONTROL RM	LVL 100 SIM ENG CONTROL ROOM	M	M	E			0.57	208	1	2P, 15A P9A-5,7		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	CC9-1.02	
CH9-1.01	LVL 100 VEST	UNIT HEATER	M	M	E				120	1	1P, 15A P9A-9		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	CH9-1.01	
CH9-1.02	LVL 100 VEST	UNIT HEATER	M	M	E	0.03			120	1	1P, 15A P9A-11		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	CH9-1.02	
CH9-2.01	LVL 200 TOOL CRIB 207	CABINET HEATER	M	M	E	0.03			120	1	1P, 15A P9B-1		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	CH9-2.01	
CH9-2.02	LVL 200 NEAR BATT SHOP 224	CABINET HEATER	M	M	E	0.03			120	1	1P, 15A P9B-3		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	CH9-2.02	
FC9-1.01	LVL 100 SIM AND CONTROL	LVL 100 SIM AND CONTROL	M	M	E			1.2	208	1	2P, 15A P9A-6,8		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-1.01	
FC9-1.02	LVL 100 SIM CLASSROOM	LVL 100 SIM CLASSROOM	M	M	E				2.73	208	1	2P, 15A P9A-10,12		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-1.02
FC9-1.03	CADET LUNCH RM 106	CADET LUNCH RM 106	M	M	E			0.5	208	1	2P, 15A P9A-10,12		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-1.03	
FC9-2.01	OFFICES 213 & 215	OFFICES 213 & 215	M	M	E			0.68	208	1	2P, 15A P9B-2,4		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-2.01	
FC9-2.02	BENCH FITTING 204	BENCH FITTING 204	M	M	E			3.32	208	1	2P, 15A P9B-6,8		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-2.02	
FC9-2.03	BENCH FITTING 204	BENCH FITTING 204	M	M	E			3.32	208	1	2P, 15A P9B-10,12		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-2.03	
FC9-2.04	CLASSROOM 204A	CLASSROOM 204A	M	M	E				2.73	208	1	2P, 15A P9B-14,16		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-2.04
FC9-2.05	STAFF LUNCH ROOM 209	STAFF LUNCH ROOM 209	M	M	E			1.2	208	1	2P, 15A P9B-18,20		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-2.05	
FC9-3.01	CLASSROOM 214	CLASSROOM 214	M	M	E				2.73	208	1	2P, 15A P9B-22,24		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	FC9-3.01
UH9-1.01	LVL 100 ELECT/GEN RM 109	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9A-13		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-1.01	
UH9-1.02	LVL 100 MALE W/R 106B	UNIT HEATER	M	M	E	0.009			120	1	1P, 15A P9A-15		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-1.02	
UH9-1.03	LVL 100 MALE LOCKERS	UNIT HEATER	M	M	E	0.009			120	1	1P, 15A P9A-17		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-1.03	
UH9-2.01	LVL 200 WELDING 205	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9B-5		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.01	
UH9-2.02	LVL 200 WELDING 205	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9B-7		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.02	
UH9-2.03	LVL 200 WELDING 205	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9B-9		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.03	
UH9-2.04	LVL 200 MACHINE TOOLS 203	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9B-11		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.04	
UH9-2.05	LVL 200 MACHINE TOOLS 203	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9B-13		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.05	
UH9-2.06	LVL 200 MACHINE TOOLS 203	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9B-15		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.06	
UH9-2.07	LVL 200 STEEL CUTTING 217	UNIT HEATER	M	M	E	0.037			120	1	1P, 15A P9B-17		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.07	
UH9-2.08	LVL 200 STEEL CUTTING 217	UNIT HEATER	M	M	E	0.124			120	1	1P, 15A P9B-19		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.08	
UH9-2.09	LVL 200 NEAR OFFICE 213	UNIT HEATER	M	M	E	0.037			120	1	1P, 15A P9B-21		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.09	
UH9-2.10	LVL 200 STEEL CUTTING 217	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9B-23		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.10	
UH9-2.11	LVL 200 ENGINE OVERHAUL 216	UNIT HEATER	M	M	E	0.062			120	1	1P, 15A P9B-25		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.11	
UH9-2.12	LVL 200 ENGINE STORAGE 225	UNIT HEATER	M	M	E	0.037			120	1	1P, 15A P9B-27		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.12	
UH9-2.13	LVL 200 ENGINE OVERHAUL 216	UNIT HEATER	M	M	E	0.124			120	1	1P, 15A P9B-29		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-2.13	
UH9-3.01	LVL 300 MECHANICAL ROOM 301	UNIT HEATER	M	M	E	0.037			120	1	1P, 15A P9B-31		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	UH9-3.01	
WM9-2.01	TOOL CRIB 207	TOOL CRIB 207	M	M	E			0.19	208	1	2P, 15A P9B-33,35		X		1		E	E	E	2#12 RW90+12 Cu., BOND, 21mmC	WM9-2.01	

C				'CDP--9A'				SOURCE				MAIN SWITCHBOARD			
VOLTAGE				LOCATION				FEEDER				SEE SINGLE LINE DIAGRAM			
PHASE/WIRE				MOUNTING				I.C.				10 KA			
100A															
NOTES	DESIGNATION	WATTAGE			CIR NO.	BKR	Ø	CIR NO.	WATTAGE			DESIGNATION	NOTES		
		PH A	PH B	PH C					PH A	PH B	PH C				
	P9-1A	1350		1	3P 15A	-a-	2	1350				P9-4			
			1350	3		-b-	4		1350						
				5		-c-	6			1350					
			1350	7		-a-	8								
	P9-1B			9	3P 15A	-b-	10	1350		1350		P9-5			
		1350		11		-c-	12								
			1350	13		-a-	14			1350					
	P9-2A	450		15	3P 15A	-b-	16								
			450	17		-c-	18								
				19		-a-	20								
	P9-2B		450	21	3P 15A	-b-	22								
				23		-c-	24								
			450	25		-a-	26								
	P9-3A	935		27	3P 15A	-b-	28								
			935	29		-c-	30								
				31		-a-	32								
	P9-3B		935	33	3P 15A	-b-	34								
				35		-c-	36								
			935	37		-a-	38								
				39		-b-	40								
				41		-c-	42								
ø "A" TOTAL		8170		TOTAL LOAD:											
ø "B" TOTAL		8170		24510		W									
ø "C" TOTAL		8170		23.6		AMPS									

- ① EXISTING EQUIPMENT TO BE REMOVED AND REPLACED, SEE DETAIL AS INDICATED FOR NEW EQUIPMENT.
② NEW EQUIPMENT TO BE SUPPLIED AND INSTALLED, AS INDICATED.
③ REVISE EXISTING 3P, 100A BREAKER TO BE 3P, 225A TO SUIT NEW FEED TO PENTHOUSE.

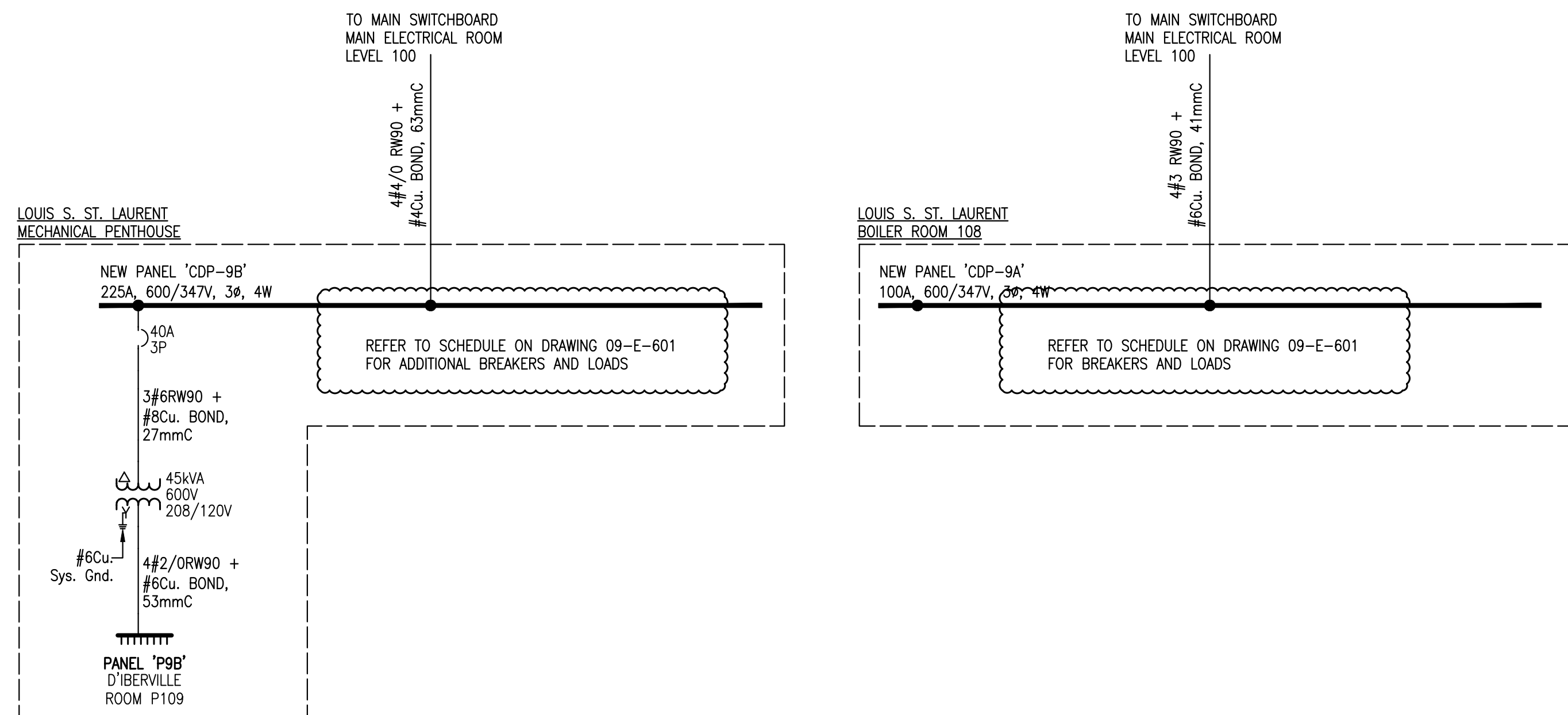


NOTES	VOLTAGE	120/208	PANEL		'P9A'		SOURCE		30KVA TRANSFORMER				
	PHASE/WIRE	3/4	LOCATION	ELECTRICAL ROOM		FEEDER	SEE SINGLE LINE DIAGRAM						
	MAINS	225A	MOUNTING	SURFACE			I.C.	10	KA				
DESIGNATION	WATTAGE			CIR NO.	BKR	Ø	BKR	CIR NO.	WATTAGE			DESIGNATION	NOTES
	PH A	PH B	PH C					PH A	PH B	PH C			
CC9-1.01	56			1	2P	-0-	2P	2	125			FC9-1.01	
CC9-1.02		56		3	15A	-0-	15A	4		125		FC9-1.02	
			59	5	2P	-0-	2P	6		284	52		
CH9-1.01		30		9	15A	-0-	2P	10		52		FC9-1.03	
CH9-1.02			37	11	15A	-0-	15A	12		52			
UH9-1.01	62			13	15A	-0-		14	4083			CU09-1	
UH9-1.02		9		15	15A	-0-	3P	16		4083			
UH9-1.03			9	17	15A	-0-	35A	18		4083			
HEAT RECOVERY BOX	250			19	15A	-0-	15A	20	100			WATER METER	
PA09-1		500		21	15A	-0-		22					
P-COND2			100	23	2P	-0-		24					
EMCS PANEL	100			25	15A	-0-		26					
		250		27	15A	-0-		28					
GLYCOL MIXING TANK			250	29	20A	-0-		30					
				31		-0-		32					
				33		-0-		34					
				35		-0-		36					
SPARE				37	20A	-0-	15A	38				SPARE	
SPARE				39	20A	-0-	15A	40				SPARE	
SPARE				41	20A	-0-	15A	42				SPARE	
ø "A" TOTAL 5119 TOTAL LOAD: 15098 W 41.96 AMPS													
ø "B" TOTAL 5105													
ø "C" TOTAL 4874													

PANELBOARD 'P9A' 2
SCALE : N.T.S. E-602

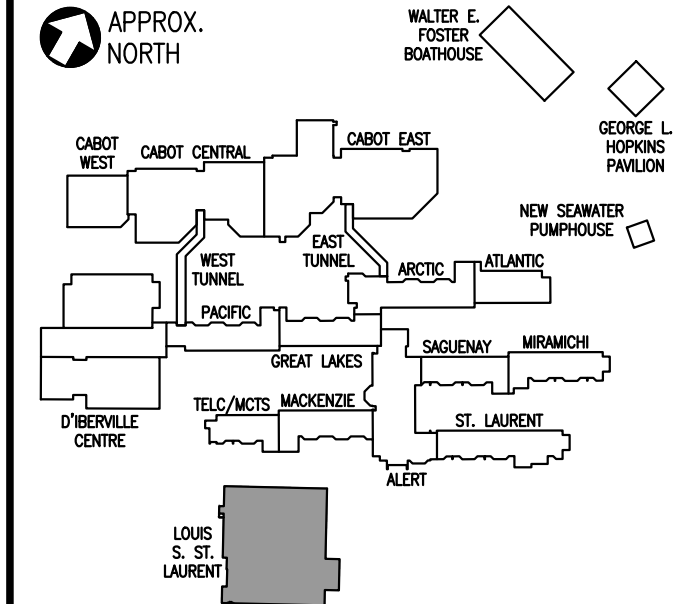
NOTES	VOLTAGE	120/208		PANEL LOCATION MOUNTING	"998"		SOURCE FEEDER	45kVA TRANSFORMER						
	PHASE/WIRE	3/4			MECHANICAL PENTHOUSE			SEE SINGLE LINE DIAGRAM						
	MAINS	225A			SURFACE			1.C. 10 KA						
	DESIGNATION	WATTAGE			CIR NO.	BKR	ø	BKR	CIR NO.	WATTAGE			DESIGNATION	NOTES
		PH A	PH B	PH C						PH A	PH B	PH C		
	CH9-2.01	30			1	15A	-0-	2P	2	71			FC9-2.01	
	CH9-2.02		30		3	15A	-b-	15A	4		71			
	UH9-2.01			62	5	15A	-c--	2P	6			345	FC9-2.02	
	UH9-2.02	62			7	15A	-0-	15A	8	345				
	UH9-2.03		62		9	15A	-b-	2P	10		345		FC9-2.03	
	UH9-2.04			62	11	15A	-0-	15A	12			345		
	UH9-2.05	62			13	15A	-0-	2P	14	247			FC9-2.04	
	UH9-2.06		62		15	15A	-b-	15A	16		247			
	UH9-2.07			37	17	15A	-c--	2P	18			125	FC9-2.05	
	UH9-2.08	124			19	15A	-0-	15A	20	125				
	UH9-2.09		37		21	15A	-b-	2P	22		284		FC9-3.01	
	UH9-2.10			62	23	15A	-c--	15A	24			284		
	UH9-2.11	62			25	15A	-0-	15A	26	37			EF9-1	
	UH9-2.12		37		27	15A	-b-	15A	28		370		EF9-2	
	UH9-2.13			124	29	15A	-0-	15A	30			190	EF9-3	
	UH9-3.01	37			31	15A	-0-	15A	32	120			EF9-4	
					33	2P	-b-	15A	34		370		EF9-6	
	WM9-2.01		20		35	15A	-c--	2P	36			3536	CU09-2	
	HEAT RECOVERY BOX	250			37	15A	-c--	35A	38	3536			DAMPERS	
	P-COND1 & P-COND2		200		39	2P	-0-	15A	40		250		BACNET INTERFACE CONTROLS	
				200	41	15A	-0-	15A	42			250		
	TRAP PRIMERS	250			43	15A	-0-		44					
	EMCS PANEL		250		45	15A	-b-		46					
	EMCS WORKSTATION			500	47	15A	-0-		48					
					49		-0-		50					
					51		-b-		52					
					53		-c--		54					
	SPARE				55	20A	-0-	15A	56				SPARE	
	SPARE				57	20A	-0-	15A	58				SPARE	
	SPARE				59	20A	-0-	15A	60				SPARE	
ø "A" TOTAL 5358 TOTAL LOAD: 14135 W 39.29 AMPS														
ø "B" TOTAL 2635														
ø "C" TOTAL 6142														
NOTES:														

PANELBOARD 'P9B' 3
SCALE : N.T.S. E-602



LOUIS S. ST. LAURENT -
NEW DISTRIBUTION EQUIPMENT 4
SCALE : N.T.S. E-602

LOUIS S. ST. LAURENT -
NEW DISTRIBUTION EQUIPMENT 5
SCALE : N.T.S. E-602



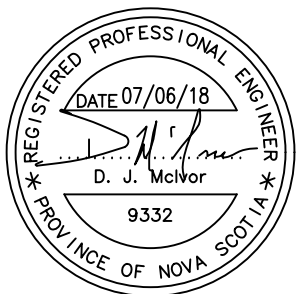
GENERAL NOTES :

DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES.
USE FIGURED DIMENSIONS AS NOTED.

THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH
SPECIFICATIONS AND GENERAL CONTRACTUAL CONDITIONS.

ALL DIMENSIONS AND CONDITIONS ARE TO BE VERIFIED ON
SITE. ALL DISCREPANCIES ARE TO BE REPORTED TO THE
DEPARTMENTAL REPRESENTATIVE AND AGREED UPON WITH
THEM IN WRITING BEFORE PROCEEDING WITH WORKS.

INFORMATION ON THESE DRAWINGS IS TO BE USED FOR THIS
PROJECT ONLY AND SHALL NOT BE USED FOR ANY OTHER
PURPOSE.



0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	project
drawing	ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP SCHEDULES & DISTRIBUTION EQUIPMENT	design
designed CGN		conçu
date 07/06/18		drawn MAS
date 07/06/18		approved DJM
date 07/06/18		Joan Muise PWSSC Project Manager
project number	R.065476.710	Administrateur de projets TPSSC
drawing no.	09-E-602	no. du projet