



Public Works and  
Government Services  
Canada

Travaux publics et  
Services gouvernementaux  
Canada

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**DRAWING LIST**

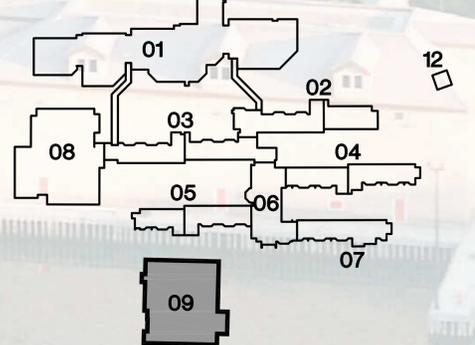
DEMOLITION  
538447-09-AD-101-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 100 DEMO FLOOR PLAN  
538447-09-AD-102-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 200 DEMO FLOOR PLAN  
538447-09-AD-103-ARCHITECTURAL-LOUIS S. ST. LAURENT MACHINE SHOP-LEVEL 300 DEMO FLOOR PLAN  
538447-09-AD-104-ARCHITECTURAL-LOUIS 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 Incorporated  
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**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: 4450mm
- 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.
  - 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.
  - DEMOLISH AND DISPOSE OF EXISTING DOOR FRAME AND HARDWARE.
  - 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).
  - 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 CLIPBOARDS 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 SHAFT 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.
  - DEMOLITION AT TOP, BASE AND MID POINT BETWEEN FLOOR LEVELS OF THE EXISTING H/S 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
  - 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.
  - 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.

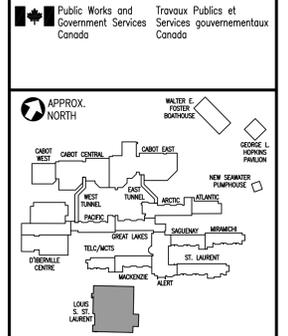
NOTE: ALL ITEMS IN THE LEGEND MAY NOT APPEAR ON THE DRAWING, ONLY THOSE ITEMS THAT APPLY WILL BE SHOWN ON THE FLOOR PLAN.

**LEGEND:**

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

**GENERAL NOTES:**

- 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.
- CONSTRUCTION ASSEMBLIES DESCRIBED WERE TAKEN FROM THE AS-BUILT DRAWINGS. THE GENERAL CONTRACTOR IS TO VERIFY THE EXISTING CONSTRUCTION ASSEMBLY PRIOR TO DEMOLITION.
- 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.
- 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.
- 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.
- 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, SHELVE AND CLIPBOARDS.
- 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.
- REFER TO STRUCTURAL DRAWINGS (WHERE APPLICABLE) FOR ANY TEMPORARY AND/OR PERMANENT SHORING AND SUPPORT REQUIRED.
- REMOVE DEMOLISHED MATERIALS AND DEBRIS FROM THE WORK AREA ON A CONTINUAL BASIS.
- 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.
- DEMOLISH, SALVAGE, RE-USE AND/OR DISPOSE OF PRODUCTS AS INDICATED IN THE DOCUMENTS.
- 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.
- 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.
- ALL CUTTING/PATCHING WORK SHALL BE DONE IN A MANNER TO RECEIVE NEW WORK AND FINISHES.
- LEVEL AND PATCH DAMAGE TO SUBFLOOR CAUSED BY REMOVAL OF FLOOR FINISHES.
- 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.
- PROVIDE CUTTING AND PATCHING OF CEILINGS, FLOORS AND WALLS TO ACCOMMODATE THE REMOVAL OF ELECTRICAL SERVICE, CONTROL SERVICES AND PNEUMATIC PIPING.



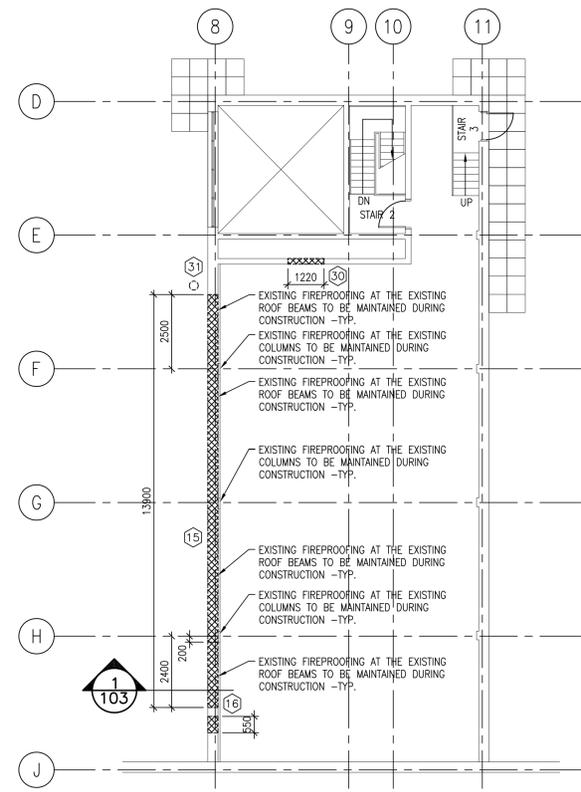
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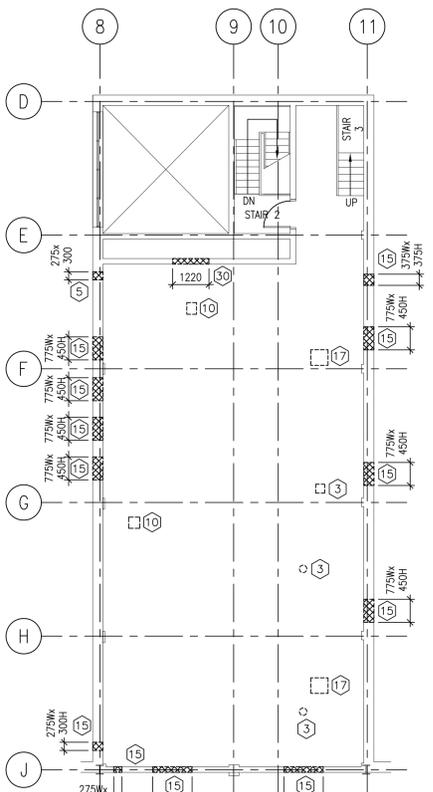
**GENERAL NOTES:**  
 DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES. USE DIMENSIONS AS NOTED.  
 THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND GENERAL CONTRACTUAL CONDITIONS.  
 ALL DIMENSIONS AND CONDITIONS ARE TO BE VERIFIED ON SITE. ALL DISCREPANCIES ARE TO BE REPORTED 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	
drawing	design	
designer	LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300	
designer	DEMO FLOOR PLANS	
designed LLA	conçu	
date	07/06/18	
drawn LLA	dessiné	
date	07/06/18	
approved LLA	approuvé	
date	07/06/18	
Tender	Soumission	
Joan Muiise	no. du projet	
PWGSC Project Manager	Administrateur de projets TP50C	
project number	R.065476.710	
drawing no.	no. du dessin	
	09-AD-103	



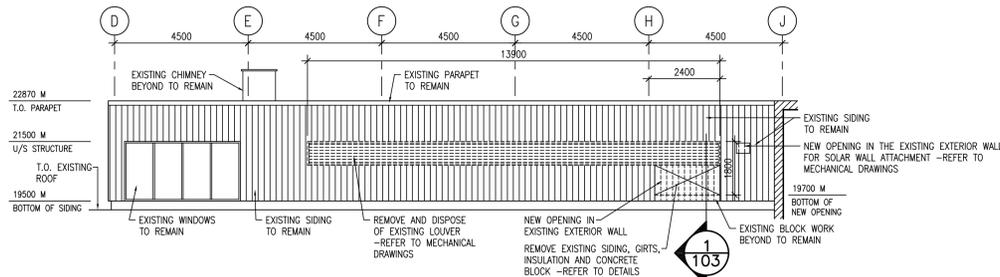
**LOUIS S. ST. LAURENT MACHINE SHOP - LEVEL 300**

SCALE : 1:100



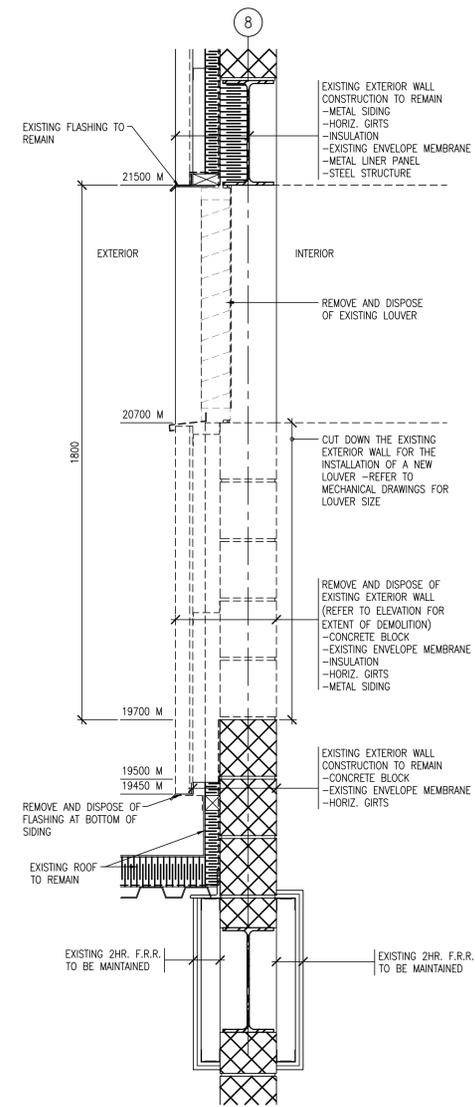
**LOUIS S. ST. LAURENT MACHINE SHOP PARTIAL LEVEL 300 AT ELEV. 18100**

SCALE : 1:100



**EAST ELEVATION**

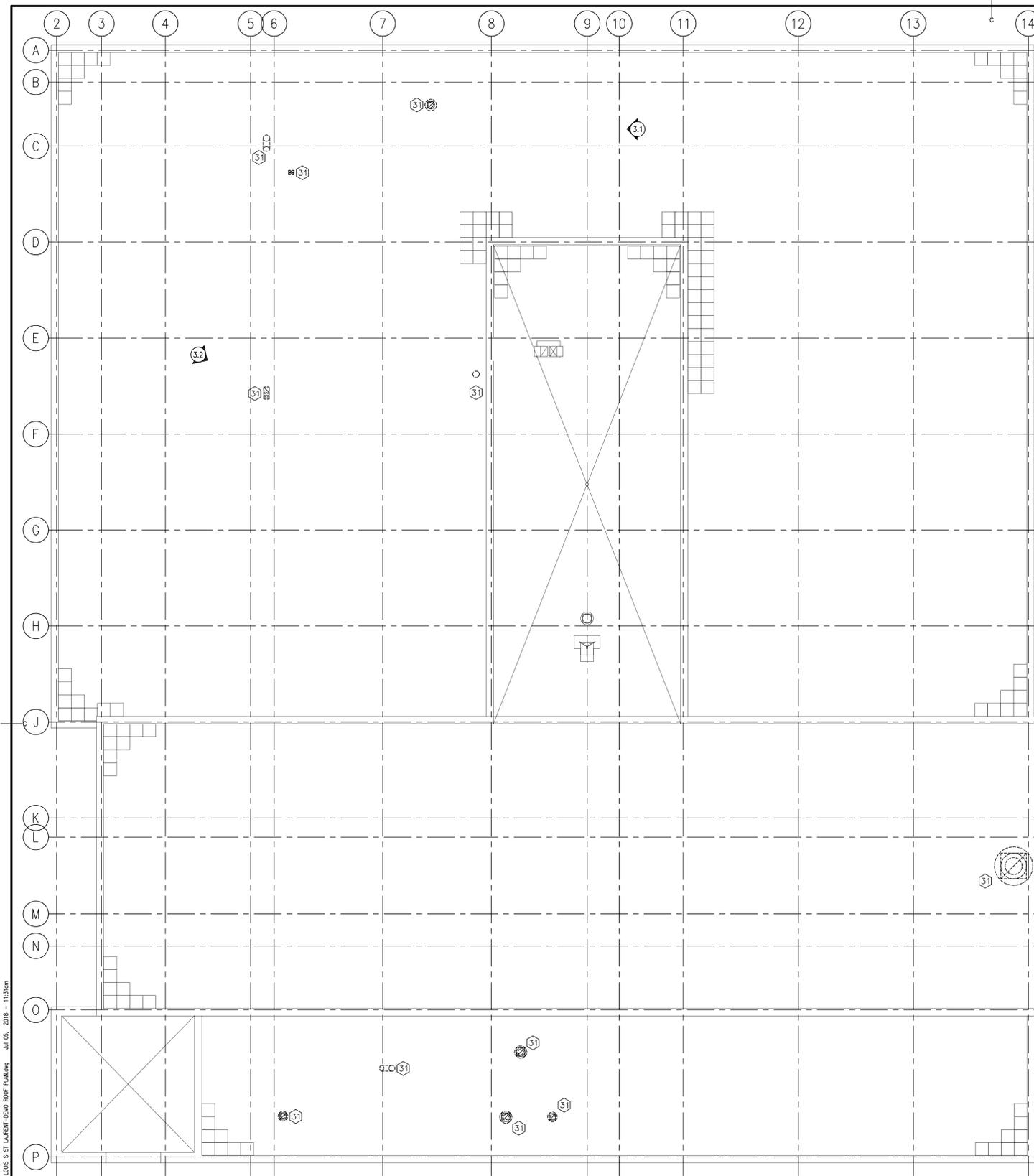
SCALE : 1:125



**EXISTING EXTERIOR WALL REMOVAL AT EXISTING LOUVER**

SCALE : 1:10





**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.
- 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. CAREFULLY REMOVE THE EXISTING CEDAR SIDING TO ALLOW FOR THE WEAVING OF NEW CEDAR SIDING INTO THE EXISTING.
- 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.
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- 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 CLIPBOARDS 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 TO THE EXISTING STRUCTURE.
- 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.



**3.1 - PHOTO**  
EXISTING ROOF TO REMAIN -TYP.



**3.2 - PHOTO**  
EXISTING SIDING AND PARAPET TO REMAIN -TYP.

**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.

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

**LEGEND:**

- - - - - EXISTING TO BE REMOVED
- XXXXX EXISTING TO BE REMOVED
- 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, 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 CLIPBOARDS.
- 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.

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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 **LOUIS S. ST. LAURENT MACHINE SHOP** design

**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 **R.065476.710** no. du projet  
drawing no. **09-AD-104** no. du dessin



**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:**

A. CONSTRUCTION ASSEMBLIES DESCRIBED WERE TAKEN FROM THE AS-BUILT DRAWINGS. THE GENERAL CONTRACTOR IS TO VERIFY THE EXISTING CONSTRUCTION ASSEMBLY PRIOR TO DEMOLITION.

B. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REMOVALS.

C. VERIFY EXISTING CEILING HEIGHTS PRIOR TO REMOVAL AND REPORT ANY DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE PRIOR TO DEMOLITION.

- DEMOLITION NOTES:**
- 1 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.
  - 2 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.
  - 3 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.
  - 4 REMOVE AND DISPOSE OF GYPSUM BOARD BULKHEADS AND SUPPORTING FRAMING. ALL TO ALLOW FOR THE REMOVAL AND DISPOSAL OF MECHANICAL PLUMBING PIPES AND DUCTS.
  - 5 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.
  - 6 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.
  - 7 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.
  - 8 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
- 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
- RETURN AIR GRILLE
- SPRINKLER HEAD

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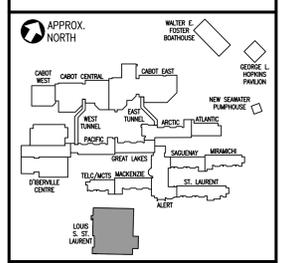
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	
drawing	design	

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	
PWSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-AD-105	



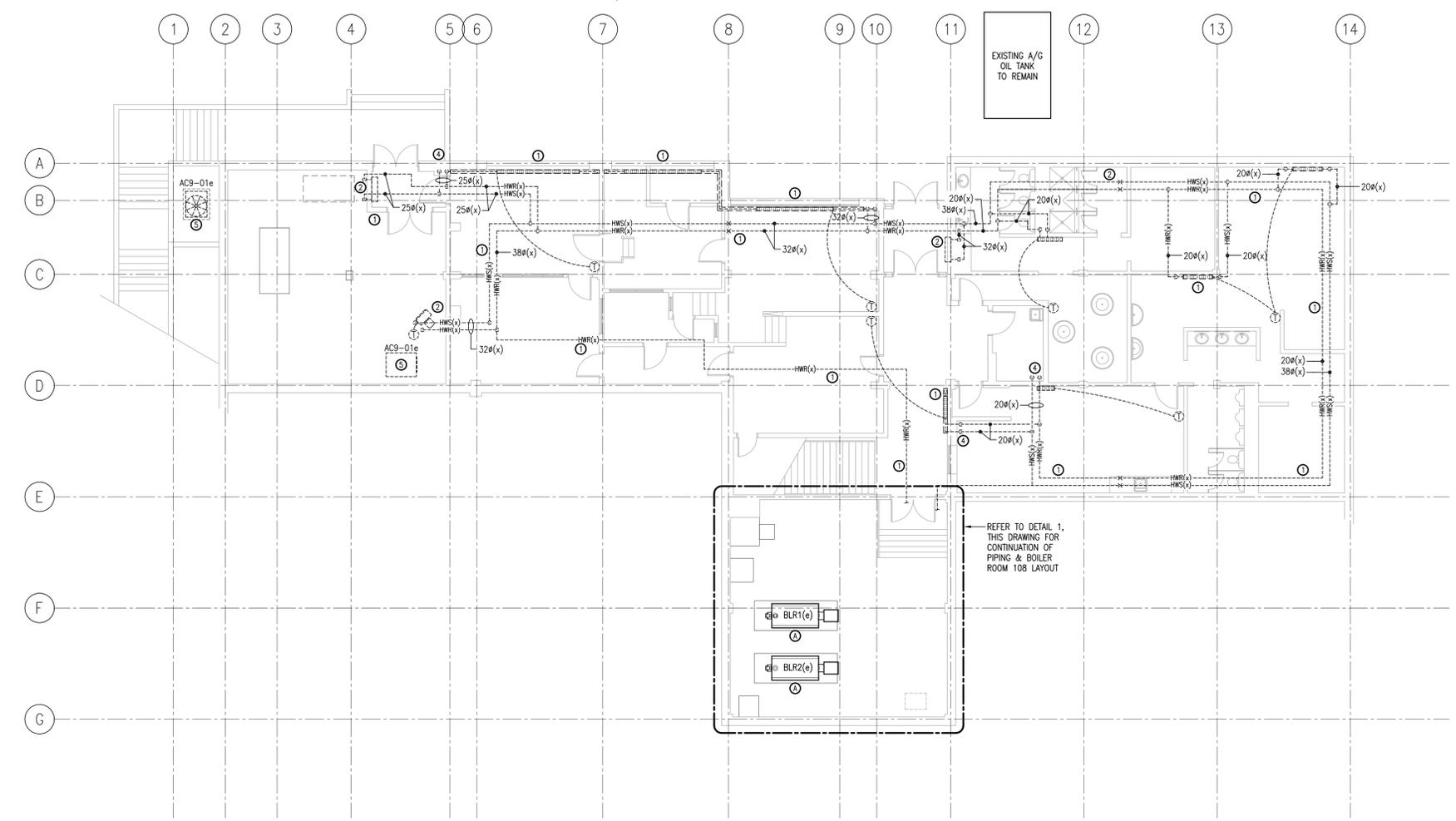




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HVAC PIPING LEGEND	
---HWS(x)---	EXISTING HOT WATER SUPPLY PIPING TO BE REMOVED
---HWR(x)---	EXISTING HOT WATER RETURN PIPING TO BE REMOVED
---HWS(e)---	EXISTING HOT WATER SUPPLY PIPING
---HWR(e)---	EXISTING HOT WATER RETURN PIPING
---HWS---	NEW HOT 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
UH-X	UNIT HEATER, TYPE X
CH-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
NO	NEW NITROGEN OXIDE SENSOR
CO	NEW CARBON MONOXIDE SENSOR
---	CONSTRUCTION/DEMOLITION NOTE
RHP-X	RADIANT HEATING PANEL TAG, X = TYPE
Y mm	Y = LENGTH, in mm
Z kW	Z = OUTPUT, in kW
CAB-X	CABINET HEATER TAG, X = TYPE
Y kW	Y = OUTPUT, in kW



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

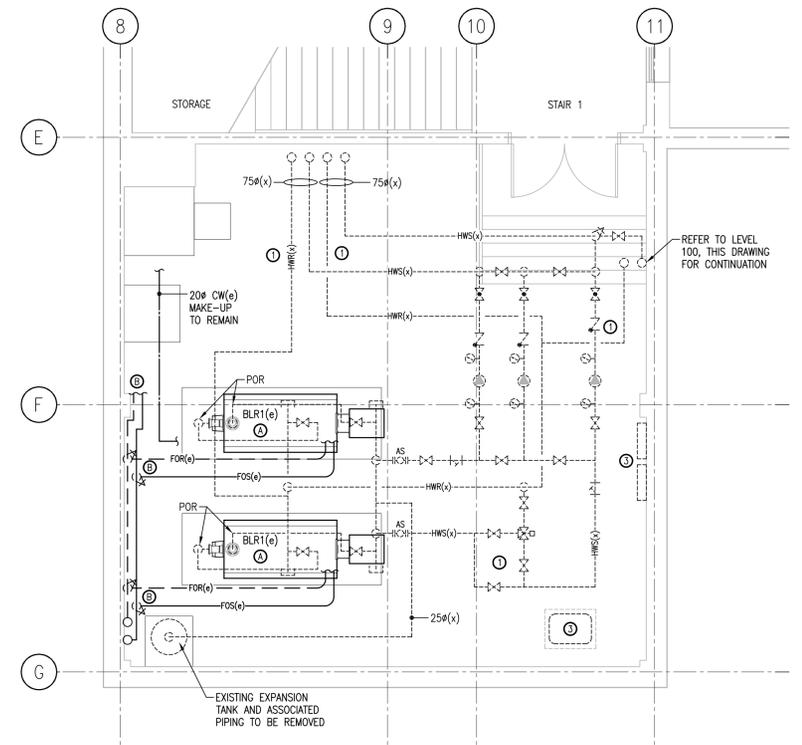
SCALE : 1:100  
 0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

**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 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.

**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 TWE060A00BB	TRANE TTA060C0A00	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 – BOILER ROOM 108 DEMOLITION LAYOUT 1**

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

MH101



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

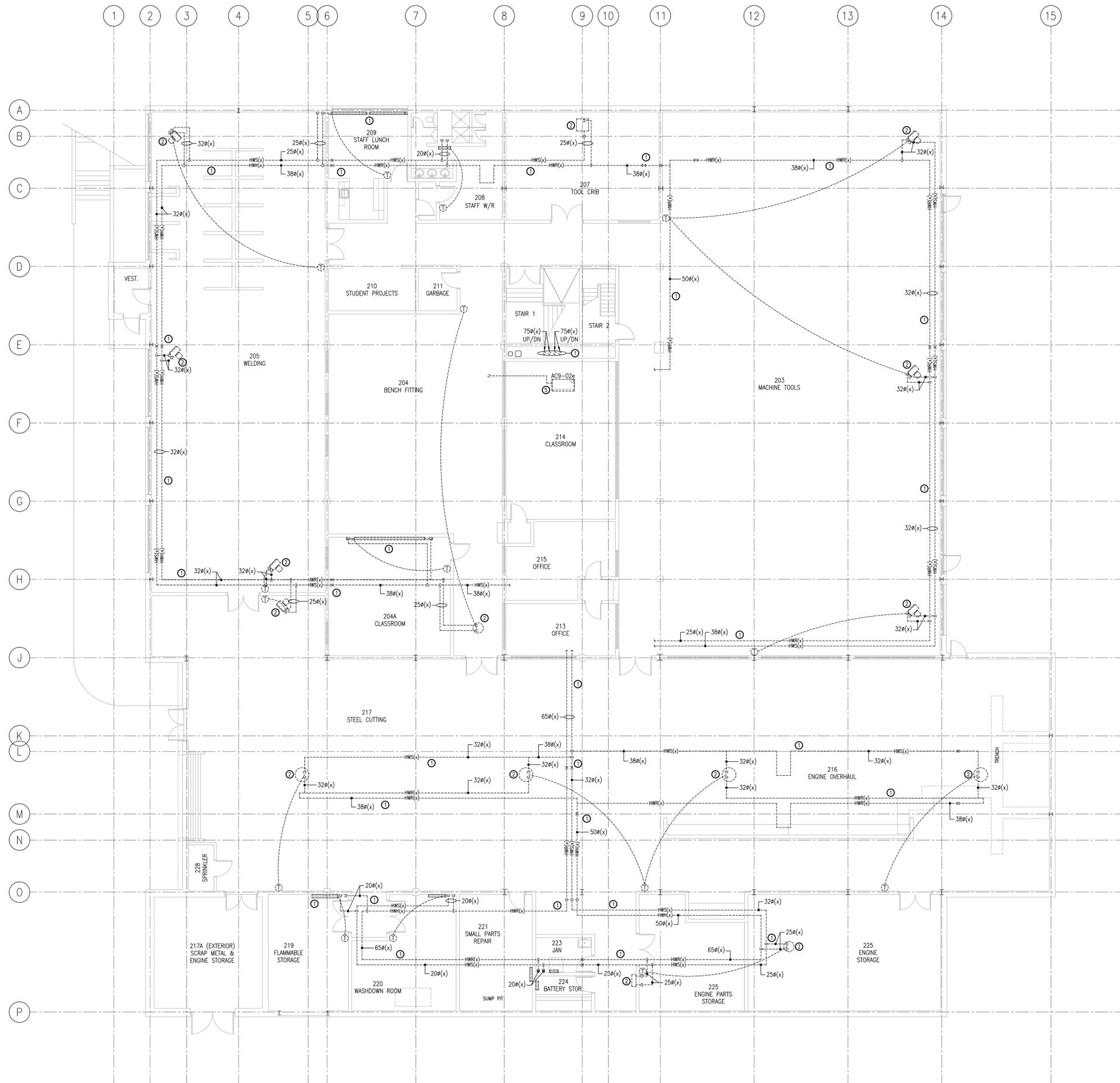
drawing **HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 DEMOLITION** design

designed MJM	conçu
date 07/06/18	
drawn MAC	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	
Tender	Soumission
Joan Muiise	
PWGSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet

**R.065476.710**

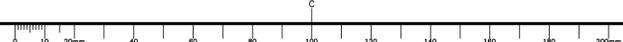
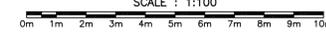
drawing no. **09-MDH-101** no. du dessin

DEMOLITION NOTES	
①	DISCONNECT AND REMOVE EXISTING HOT WATER SUPPLY AND RETURN PIPING, INSULATION, BASEBOARD RADIATION, HANGERS, VALVES, PIPE ANCHORS, GUIDES, CONTROLS, WIRING, TSTATS, 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



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

APPROX. NORTH

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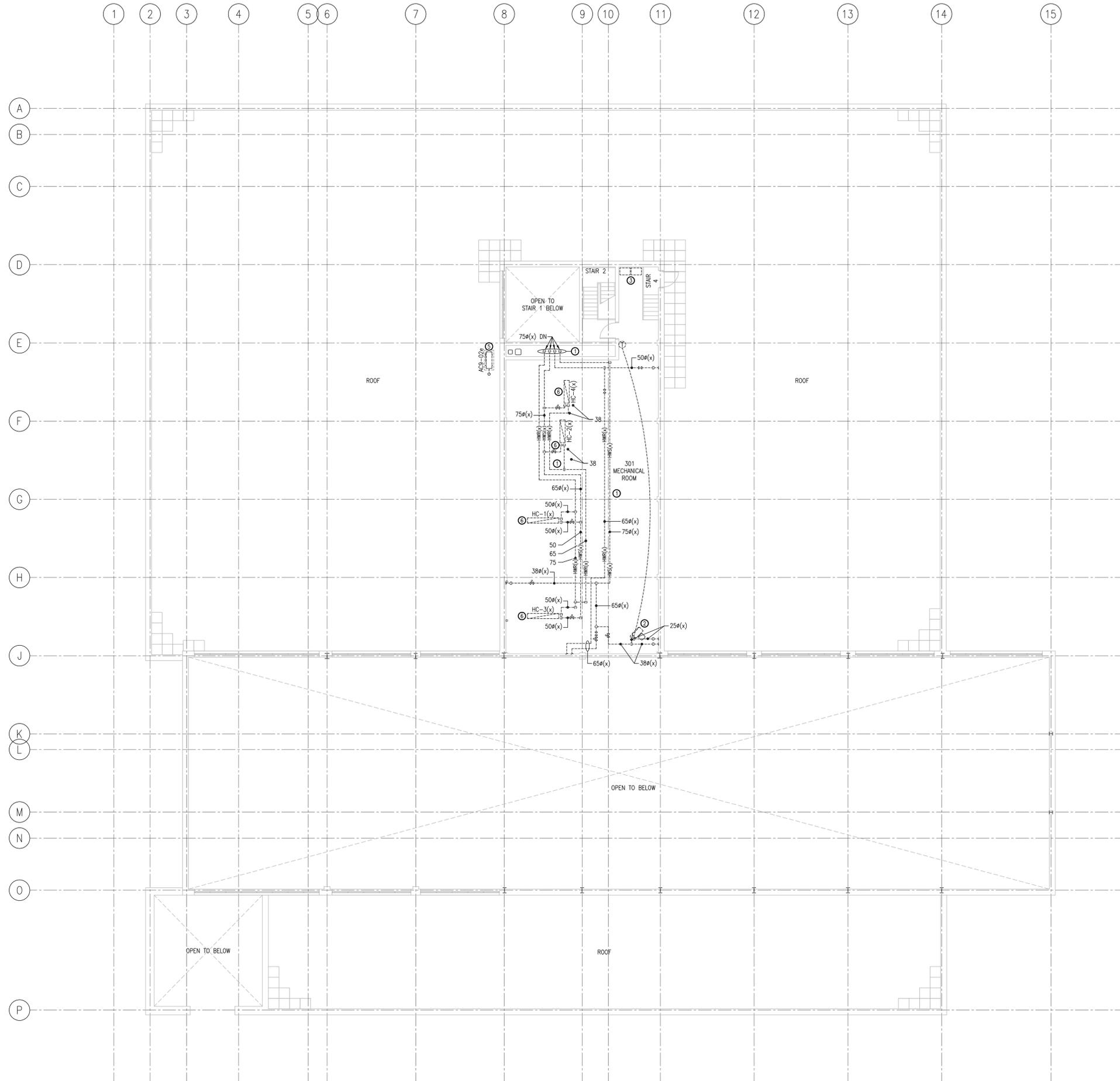
project **CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES** project

drawing **HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 DEMOLITION** dessin

designed MJM	conçu
date 07/06/18	
drawn MAC	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	

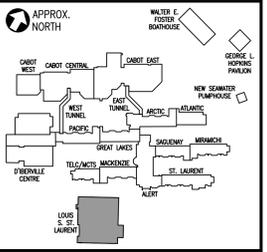
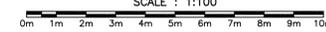
Tender / Soumission  
 Joan Muisse / Administrateur de projets TPSGC  
 project number / no. du projet **R.065476.710**  
 drawing no. / no. du dessin **09-MDH-102**

DEMOLITION NOTES	
①	DISCONNECT AND REMOVE EXISTING HOT WATER SUPPLY AND RETURN PIPING, INSULATION, BASEBOARD RADIATION, HANGERS, VALVES, PIPE ANCHORS, GUIDES, CONTROLS, WIRING, TSTATS, 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 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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project **CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES**

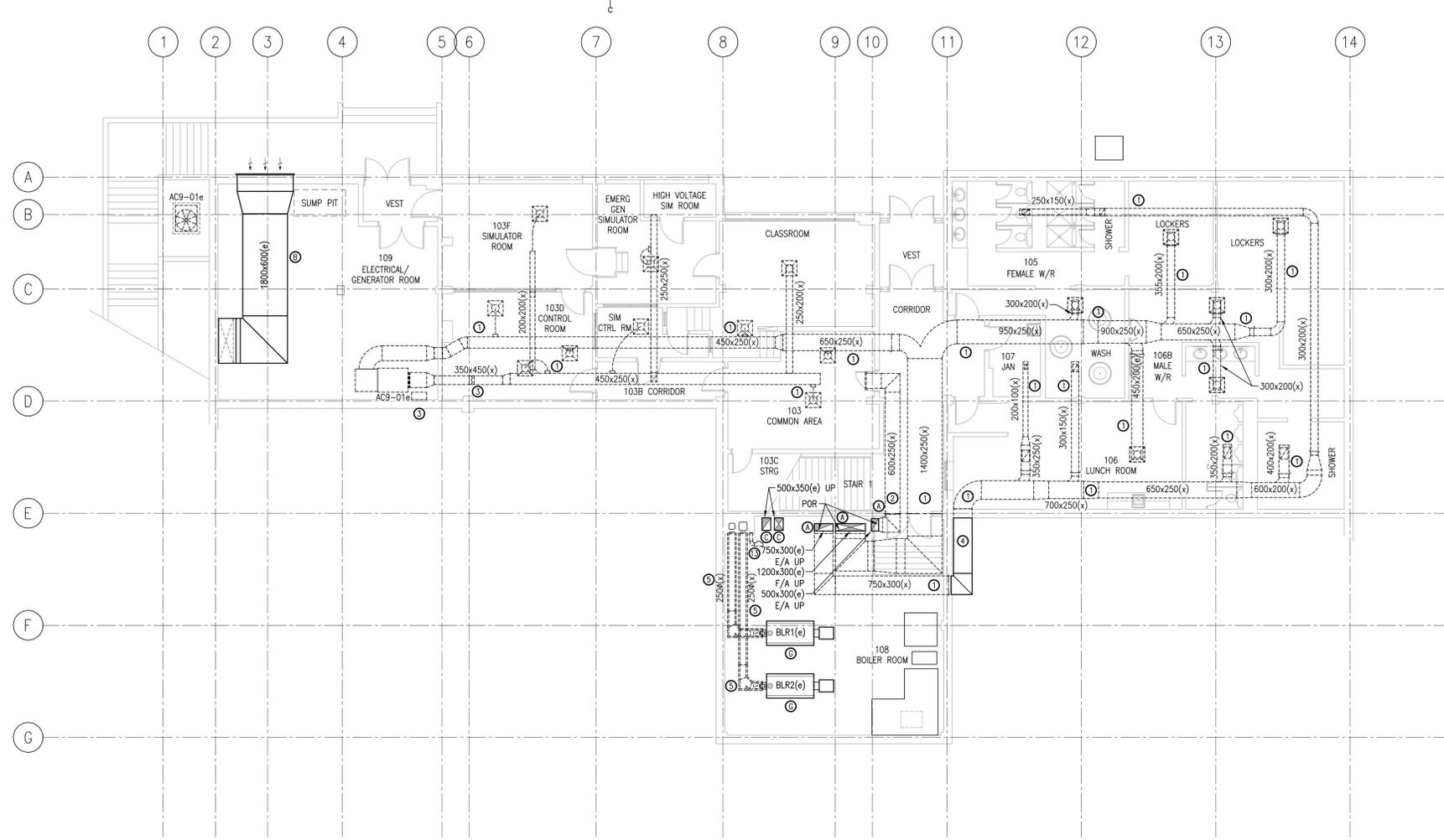
drawing **HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 DEMOLITION**

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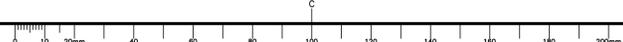
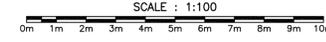
Tender **Joan Muise** / Soumission  
 PWGSC Project Manager / Administrateur de projets TPSGC  
 project number **R.065476.710** / no. du projet  
 drawing no. **09-MDH-103** / no. du dessin

VENTILATION LEGEND	
	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 LOUVRE, BUILDING X, NUMBER Y, 1000 L/s
	DEMOLITION/CONSTRUCTION NOTE
	POINT OF REMOVAL
	POINT OF CONNECTION

DEMOLITION NOTES	
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 LOUVRE AND REMOVED.
⑩	EXISTING ROOFTOP EXHAUST FAN AND ASSOCIATED CONTROLS TO BE DISCONNECTED FROM DUCTWORK AND REMOVED. ROOF CURB TO BE REMOVED.
⑪	EXISTING ROOFTOP EXHAUST FAN, ASSOCIATED DUCTWORK, GRILLES, CONTROLS, WIRING, DAMPERS, HANGERS, ROOF CURB, ETC. TO BE REMOVED. PENETRATION THROUGH ROOF TO BE PATCHED AND MADE WATERTIGHT.
⑫	EXISTING ROOFTOP GOOSENECK, ASSOCIATED EXHAUST FAN, DUCTWORK, GRILLES, CONTROLS, WIRING, DAMPERS, HANGERS, ETC. TO BE REMOVED. PENETRATION THROUGH ROOF TO BE PATCHED AND MADE WATERTIGHT.
⑬	EXISTING DUCT RISER TO REMAIN.
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⑰	EXISTING WELDING SHOP FUME/DUST COLLECTION SYSTEM TO REMAIN
⑱	EXISTING SOLAR WALL & ASSOCIATED DUCTWORK, FAN, GRILLE, HANGERS, ETC. TO REMAIN.
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VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100 DEMOLITION



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

APPROX. NORTH

**M&R ENGINEERING**  
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 www.mreng.ca

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

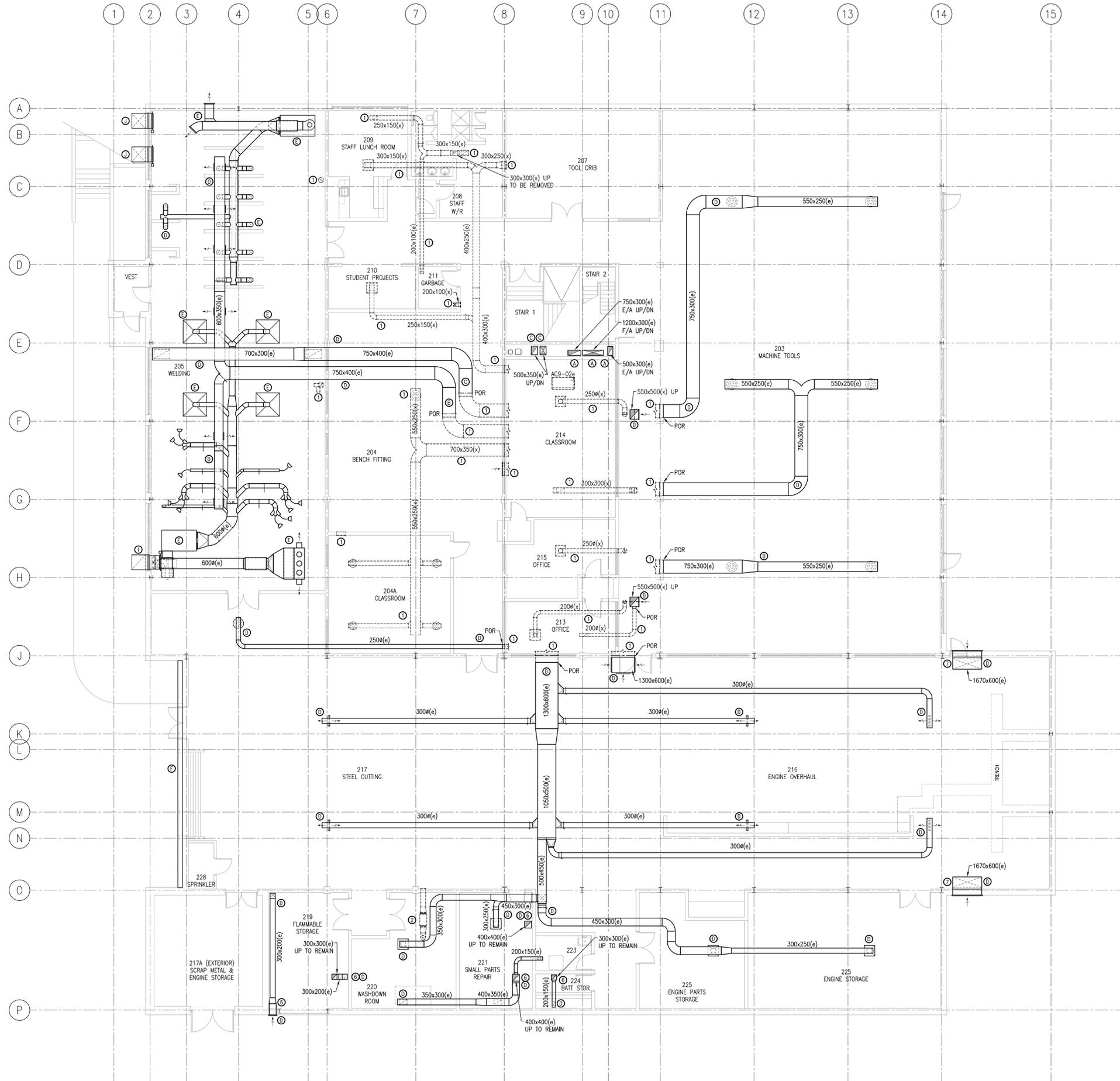
drawing

**VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 DEMOLITION**

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date 07/06/18	
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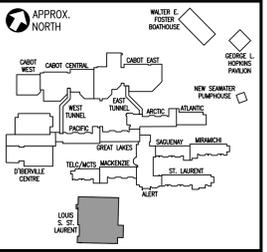
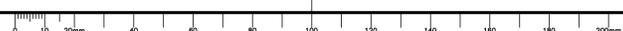
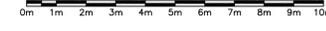
Tender	Submission
Joan Muisse	
PWSSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
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drawing no.	no. du dessin
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VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 200 DEMOLITION

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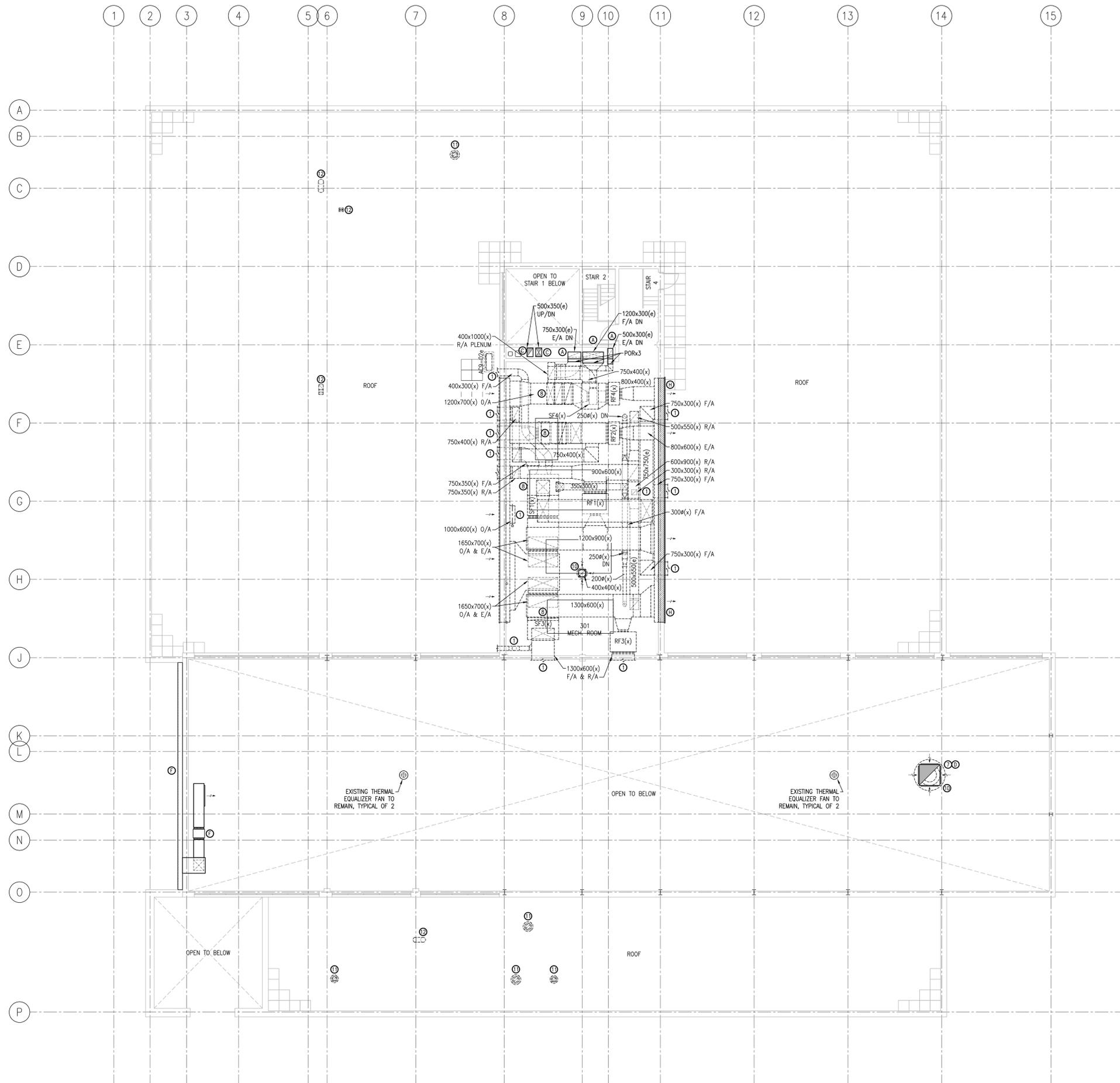


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drawing	design	

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

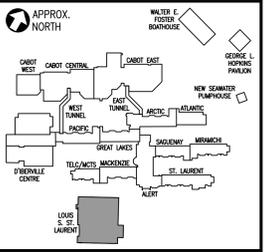
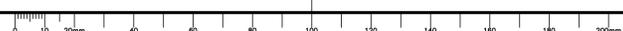
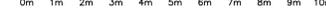
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Tender	Submission
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PWGS&C Project Manager	Administrateur de projets TPS&C
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VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 300 DEMOLITION

SCALE : 1:100



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project  
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drawing  
**VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 DEMOLITION**

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Tender  
 Joan Muise  
 PWGSC Project Manager / Administrateur de projets TPSGC

project number  
**R.065476.710**

drawing no.  
**09-MDV-103**

**FIRE PROTECTION GENERAL NOTES**

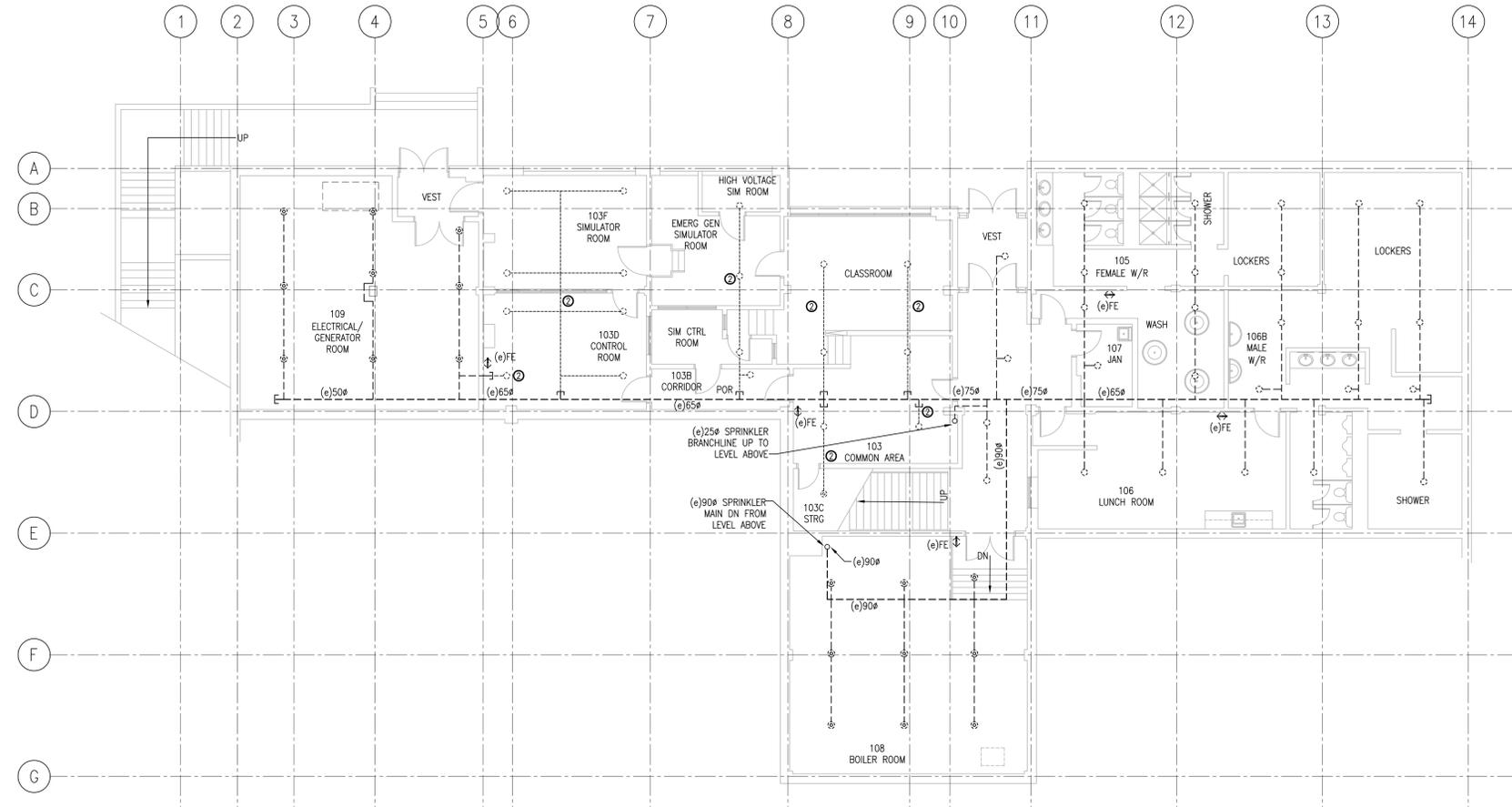
1. THE SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER SYSTEMS WITH THE STRUCTURAL, ELECTRICAL, MECHANICAL AND THE ARCHITECTURAL DRAWINGS.
2. CONTRACTOR TO PROVIDE ADDITIONAL HEADS AND PIPING, AS NOTED IN SPECIFICATIONS FOR CO-ORDINATION WITH DUCTWORK AND EQUIPMENT.
3. PROVIDE GUARDS ON ALL SPRINKLERS 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**

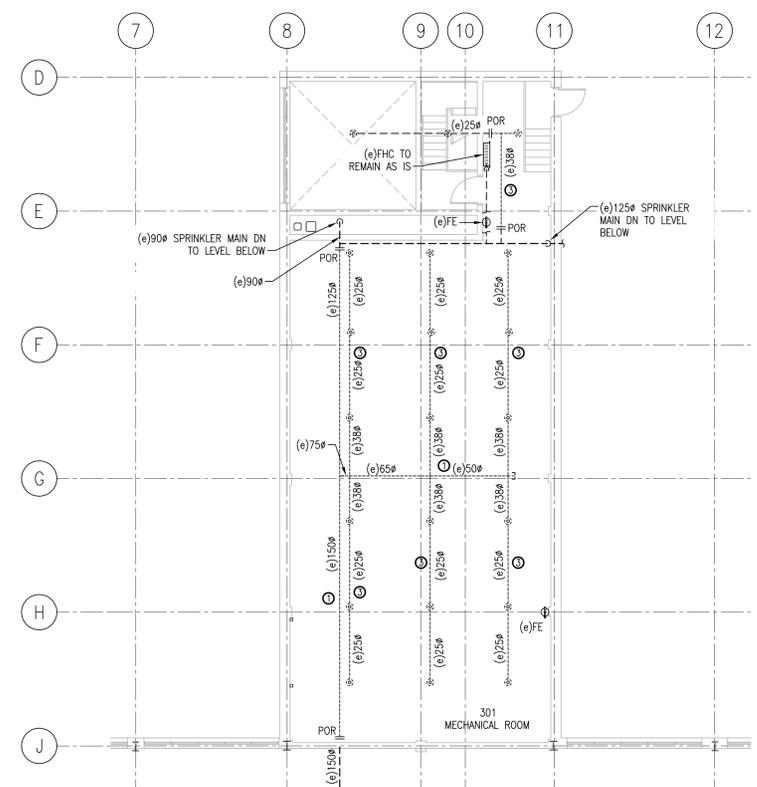
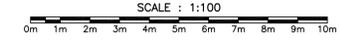
-----	EXISTING SPRINKLER MAIN
-----	EXISTING SPRINKLER BRANCHLINE
-----	NEW SPRINKLER MAIN
-----	NEW SPRINKLER BRANCHLINE
-----	SPRINKLER PIPING TO BE REMOVED
○	PIPE UP
○	PIPE DOWN
—	PIPE CONTINUATION
—	FLUSHING CONNECTION
POC	POINT OF CONNECTION
POR	POINT OF REMOVAL
●	NEW & EXISTING PENDANT C/W GUARD
○	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**

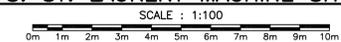
- |   |  |
|---|--|
| ① | DISCONNECT AND REMOVE EXISTING SPRINKLER MAIN, ALONG WITH ALL ASSOCIATED HANGERS, VALVES, ETC. TO POINTS INDICATED.  |
| ② | DISCONNECT AND REMOVE EXISTING BRANCHLINES ALONG WITH ALL ASSOCIATED HANGERS, VALVES, SPRINKLER HEADS, ETC. TO POINTS INDICATED AND CAP.                         |
| 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**



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



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

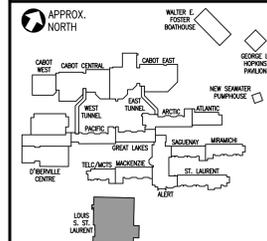
APPROX. NORTH

**M&R ENGINEERING**  
 5537 Cornwallis St. Halifax, NS, B3K 1E3  
 Tel: (902) 422-7293, Fax: (902) 423-4945  
 www.mrreng.ca

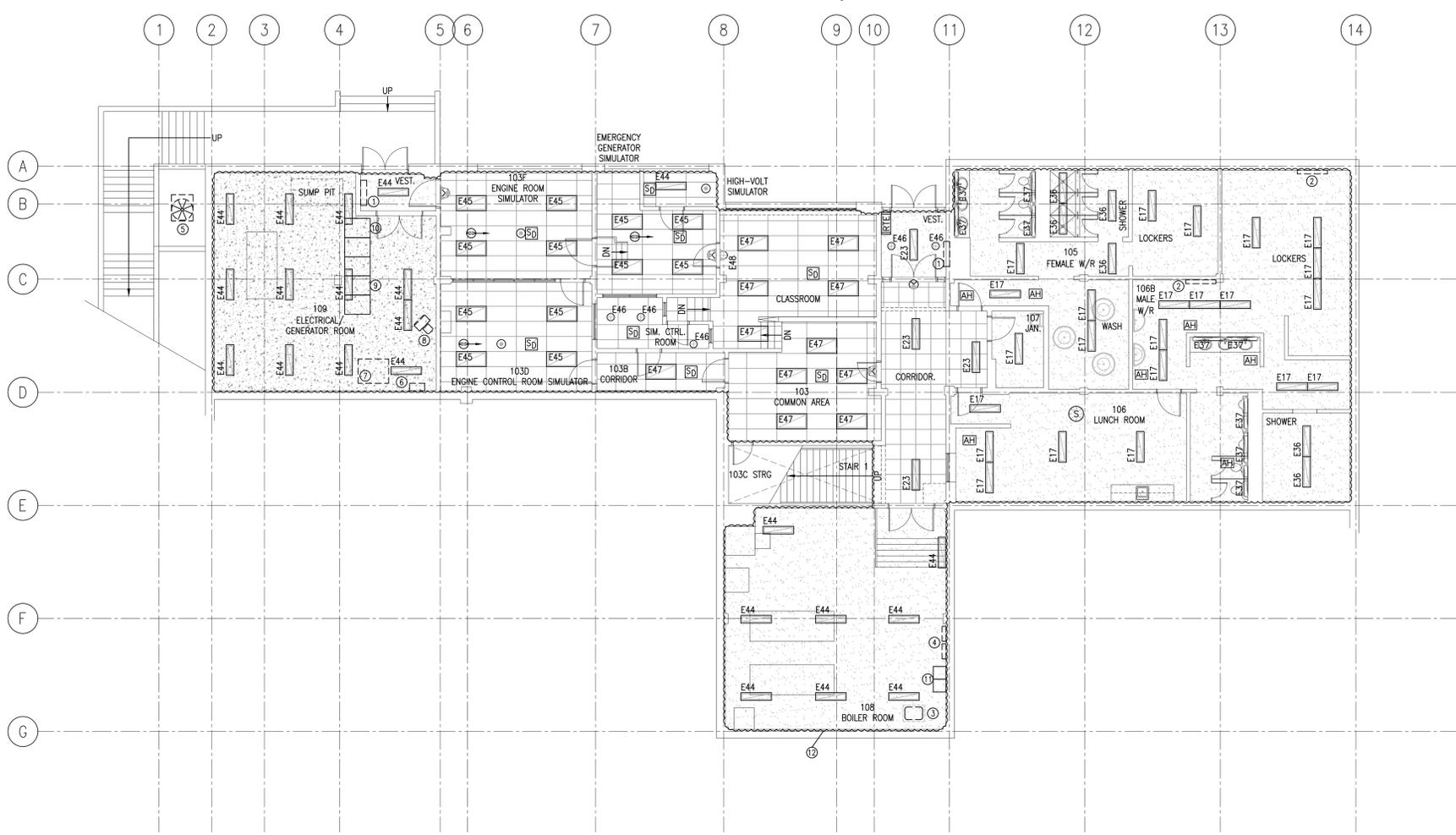
GENERAL NOTES:  
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	FIRE PROTECTION LOUIS S. ST. LAURENT MACHINE SHOP LEVELS 100 & 300 DEMOLITION	
designed	MJM	conçu
date	07/06/18	
drawn	CAB	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Joan Muise	
	PWGSC Project Manager / Administrateur de projets TPSGC	
project number	R.065476.710	
drawing no.	09-PPD-101	



**GENERAL NOTES :**  
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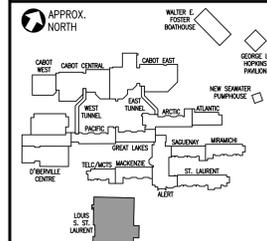


DEMOLITION NOTES	
①	EXISTING WALL MOUNTED CABINET HEATER TO BE REMOVED. DISCONNECT AND REMOVE 120VAC CONNECTION AND WALL MOUNTED TOL SWITCH.
②	EXISTING CEILING MOUNTED CABINET HEATER TO BE REMOVED. DISCONNECT AND REMOVE 120VAC CONNECTION AND WALL MOUNTED TOL SWITCH.
③	EXISTING AIR COMPRESSOR TO BE REMOVED. DISCONNECT AND REMOVE 600VAC CONNECTION.
④	EXISTING PNEUMATIC CONTROL PANELS TO BE REMOVED. DISCONNECT AND REMOVE 120VAC CONNECTION.
⑤	EXISTING EXTERIOR CONDENSING UNIT TO BE REMOVED. DISCONNECT 208VAC CONNECTION AND DISCONNECT SWITCH.
⑥	EXISTING HUMIDIFIER TO BE REMOVED. DISCONNECT 600VAC CONNECTION AND DISCONNECT SWITCH.
⑦	EXISTING EVAPORATOR UNIT TO BE REMOVED. DISCONNECT 208VAC CONNECTION AND DISCONNECT SWITCH.
⑧	EXISTING CEILING MOUNTED UNIT HEATER TO BE REMOVED. DISCONNECT 120VAC CONNECTION AND TOL SWITCH MOUNTED ADJACENT TO UNIT.
⑨	EXISTING 600A, 600V, 3-PHASE, 4-WIRE MAIN SWITCHBOARD TO REMAIN. SECTION SERVES EXISTING 'MCC-2', DRY-TYPE TRANSFORMER AND PANEL '107' LOCATED IN MECHANICAL PENTHOUSE.
⑩	EXISTING 600A, 600V, 3-PHASE, 4-WIRE MAIN SWITCHBOARD TO REMAIN. SECTION SERVES EXISTING 'MCC-1' LOCATED IN MECHANICAL BOILER ROOM 108.
⑪	EXISTING MOTOR CONTROL CENTRE 'MCC-1' TO BE REMOVED.
⑫	CEILING MOUNTED DEVICES HIGHLIGHTED BY CLOUDED AREAS SHALL BE DISCONNECTED, REMOVED AND RE-INSTALLED IN COORDINATION WITH CEILING REMOVALS AND INSTALLATIONS.

**ELECTRICAL LOUIS S. ST. LAURENT-LEVEL 100-DEMOLITION** 1  
 ED-101  
 SCALE : 1:100  
 0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m



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 100 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	
	PWGSC Project Manager / Administrateur de projets TPSGC	
project number	R.065476.710	
drawing no.	09-ED-101	



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.

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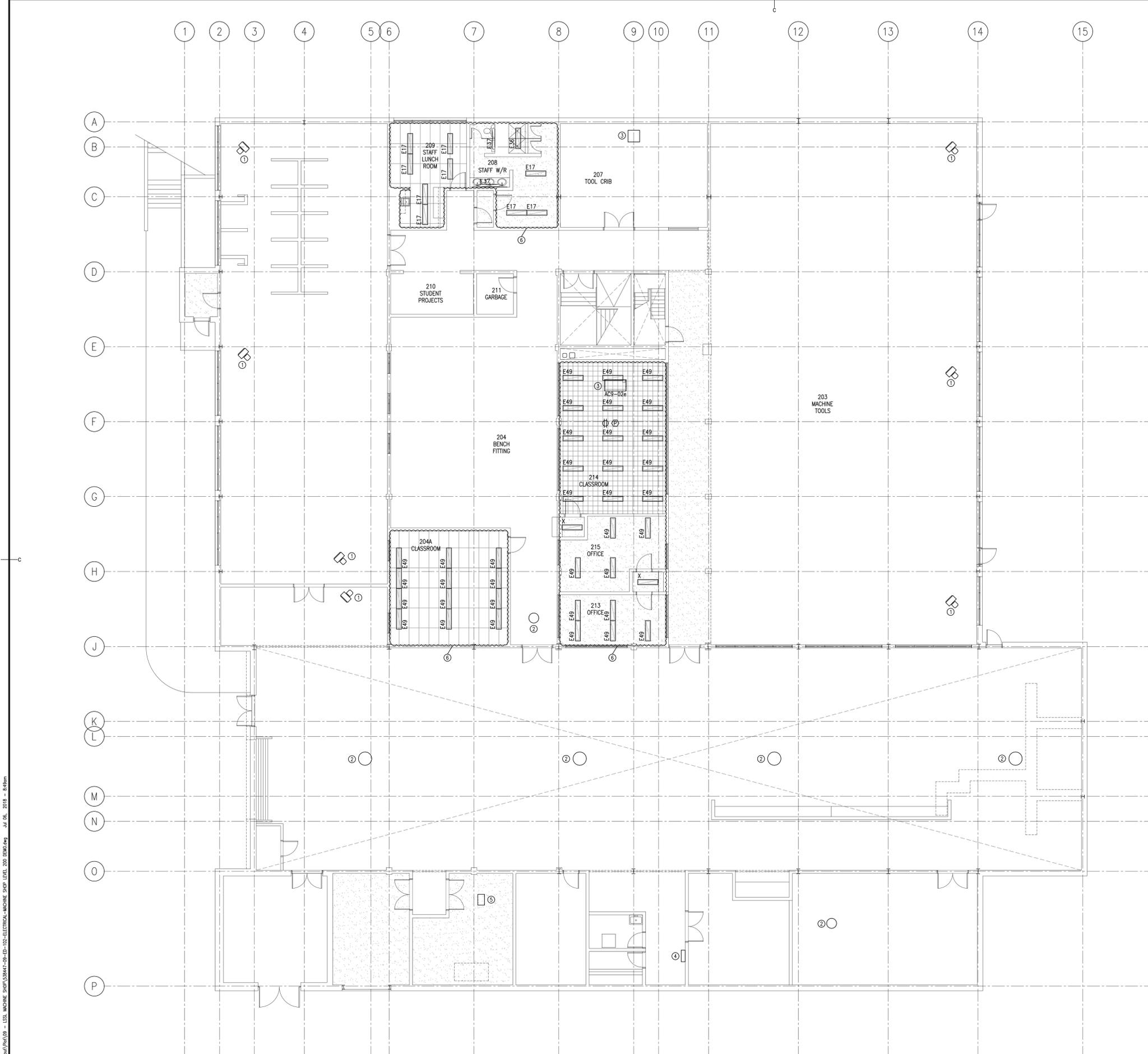
0	Issued for Tender	07/06/18
revisions		date

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

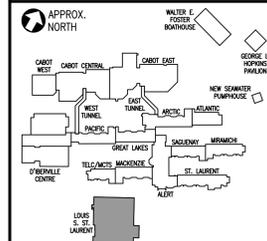
drawing no. **ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 DEMOLITION** dessin

designed CGN	conçu
date 07/06/18	
drawn MAS	dessiné
date 07/06/18	
approved DJM	approuvé
date 07/06/18	

Tender / Submission  
 Joan Muise / Administrateur de projets TPSSC  
 project number / no. du projet  
**R.065476.710**  
 drawing no. / no. du dessin  
**09-ED-102**

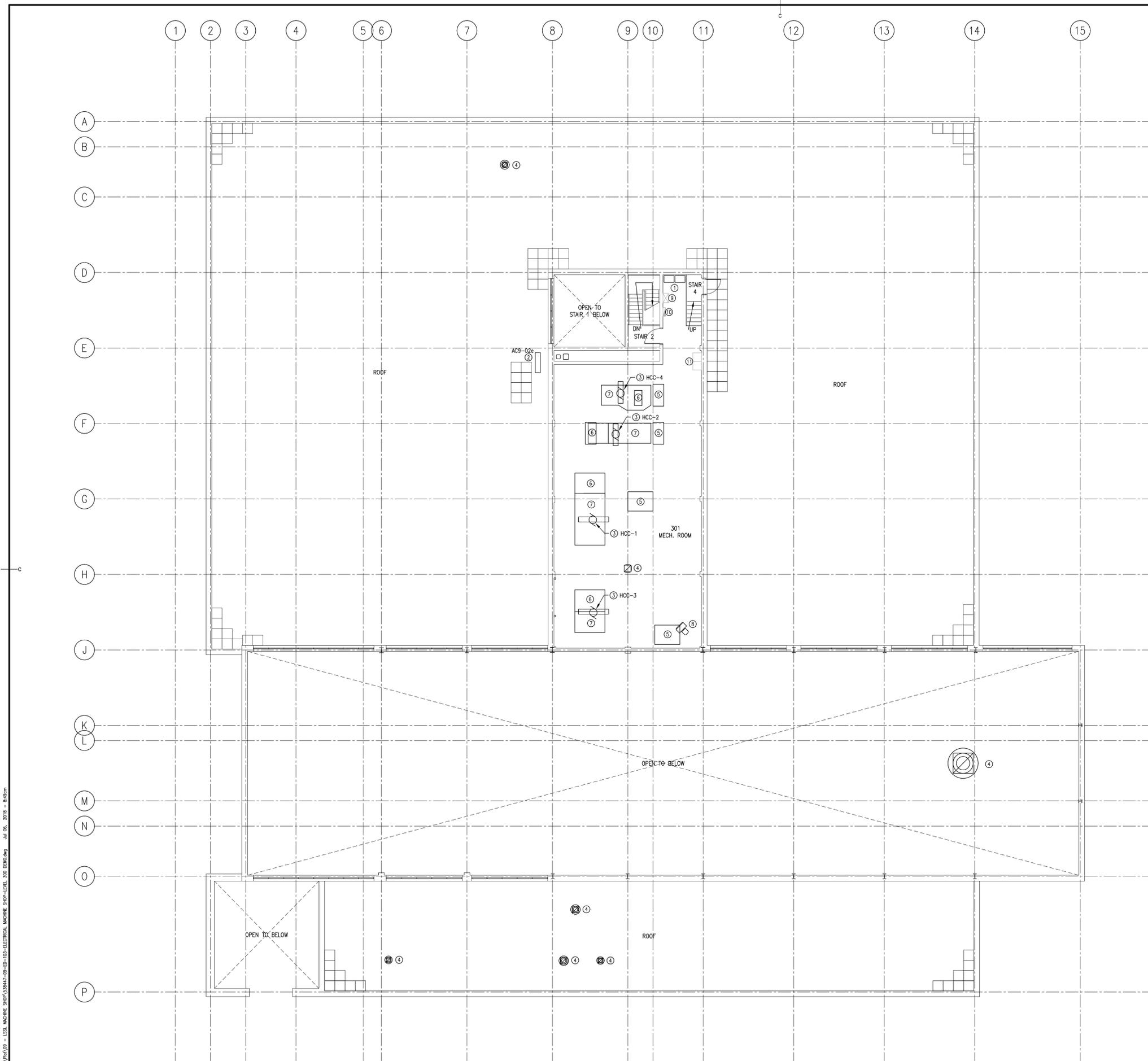


**ELECTRICAL LOUIS S. ST. LAURENT-LEVEL 200-DEMOLITION** 1  
 SCALE : 1:100  
 ED-102

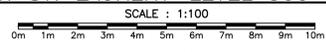


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DEMOLITION NOTES	
①	EXISTING PNEUMATIC CONTROL PANELS TO BE REMOVED. DISCONNECT 120VAC CONNECTION.
②	EXISTING ROOF MOUNTED CONDENSING UNIT TO BE REMOVED. DISCONNECT 208VAC CONNECTION AND DISCONNECT SWITCH.
③	EXISTING HEATING COIL CIRCULATOR PUMP TO 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.



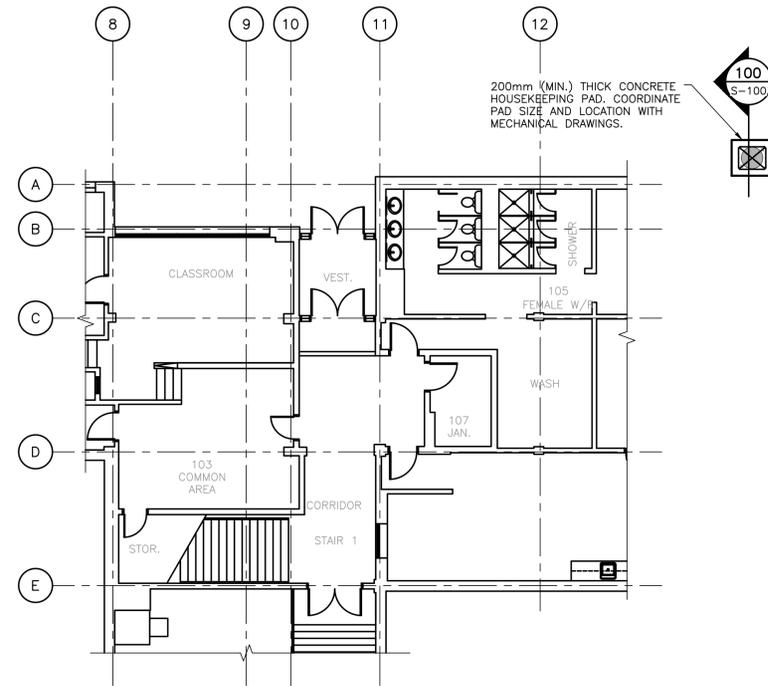
ELECTRICAL LOUIS S. ST. LAURENT-LEVEL 300-DEMOLITION 1



P:\10-16-17113 - LSS - BROWNSVILLE\10-16-17113-ELECTRICAL\_MACHINE SHOP-LOUIS\_300 DEMOL.DWG Jul 06, 2018 - 8:49am  
 PWGSC B1 (2004)

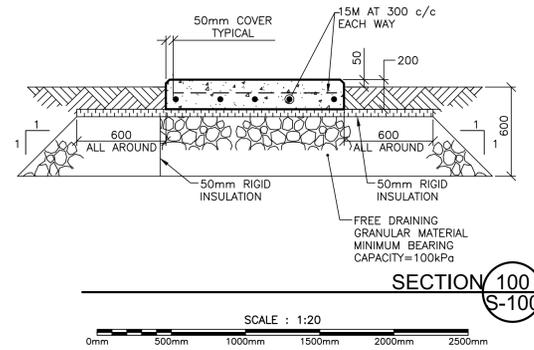


0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 DEMOLITION	
designed	CGN	conçu
date	07/06/18	
drawn	MAS	dessiné
date	07/06/18	
approved	DJM	approuvé
date	07/06/18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



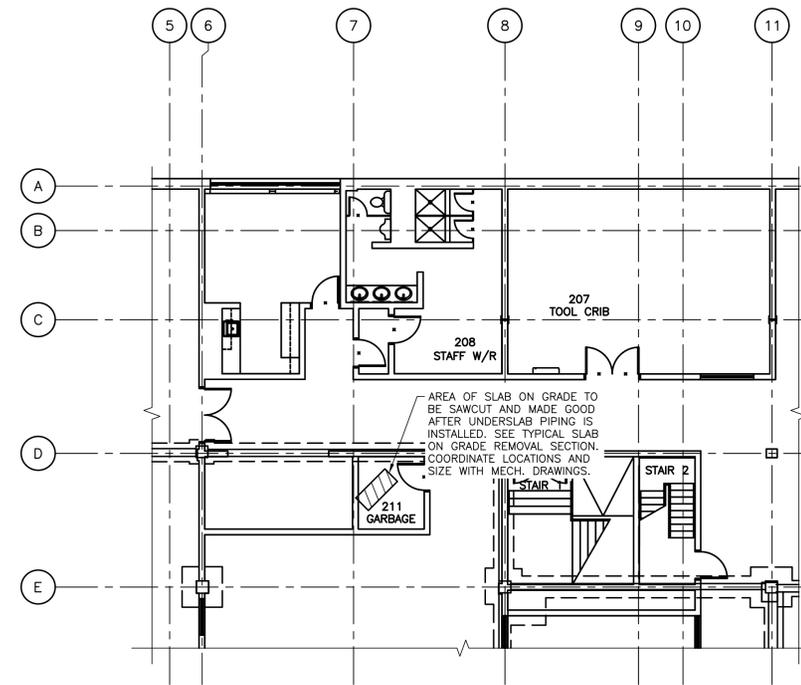
**PARTIAL PLAN – LOUIS S. ST. LAURENT MACHINE SHOP  
– LEVEL 100**

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



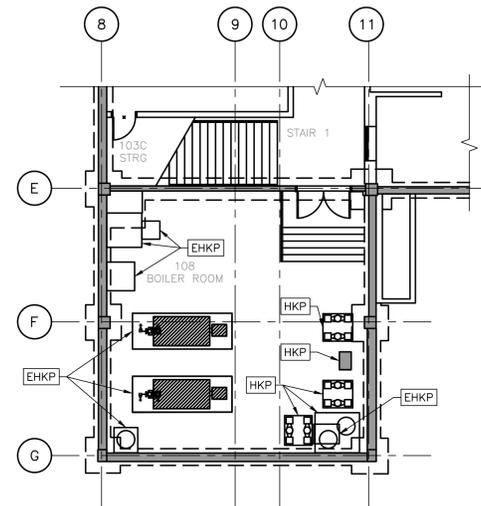
**SECTION 100  
S-100**

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



**PARTIAL PLAN – LOUIS S. ST. LAURENT MACHINE SHOP  
– LEVEL 200**

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

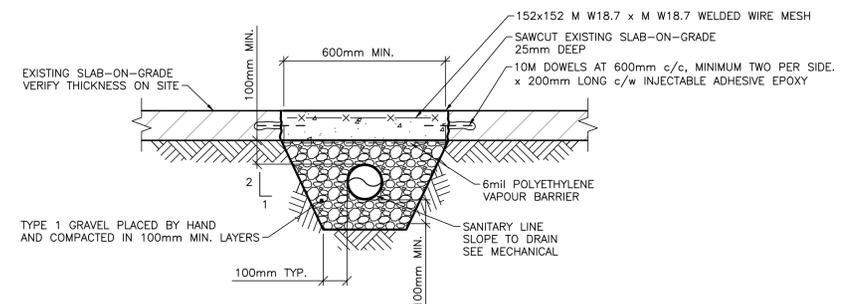


**PARTIAL PLAN – LOUIS S. ST. LAURENT MACHINE SHOP  
– LEVEL 100 – BOILER ROOM 108**

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

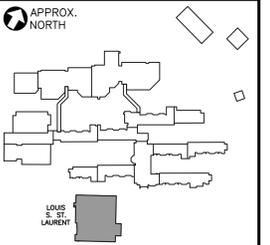
**[HKP]** :NEW 100mm THICK HOUSEKEEPING PAD REINFORCED WITH 152x152 MW18.7xMW18.7 WELDED WIRE MESH. COORDINATE PAD LOCATIONS AND SIZES WITH MECHANICAL DRAWINGS.

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



**TYPICAL SLAB ON GRADE REMOVAL  
AND REINSTATEMENT SECTION**

SCALE : 1:10  
0mm 100 200 300 400 500 600 700 800 900 1000mm



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revisions		date

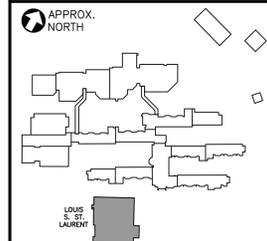
project  
**CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES**

drawing  
**STRUCTURAL LOUIS S. ST. LAURENT MACHINE SHOP 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	Submission
Joan Muise	
PWSSC Project Manager	Administrateur de projets TPSSC

project number  
**R.065476.710**

drawing no.  
**09-S-100**



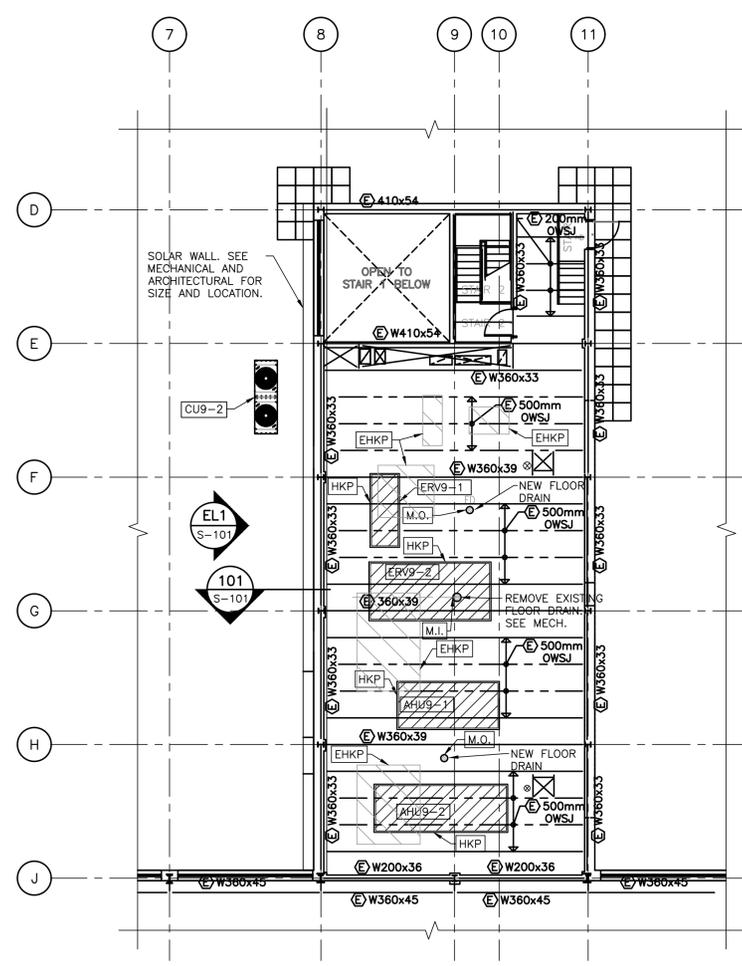
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	design	
designed M.F.	conçu	
date	07/06/18	
drawn	STAFF	dessiné
date	07/06/18	
approved M.C.	approuvé	
date	07/06/18	
Tender	Submission	
Joan Muise	no. du projet	
PWGS&C Project Manager	Administrateur de projets TP&SC	
project number	R.065476.710	
drawing no.	09-S-101	

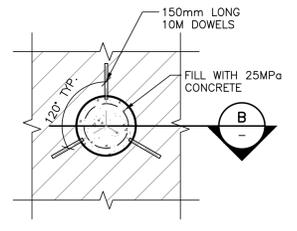
**STRUCTURAL LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 PLAN SECTIONS & DETAILS**

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

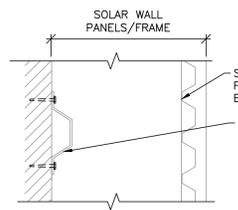
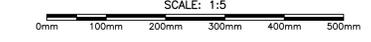


**PARTIAL PLAN - LOUIS S. ST. LAURENT MACHINE SHOP - LEVEL 300**  
 SCALE: 1:100

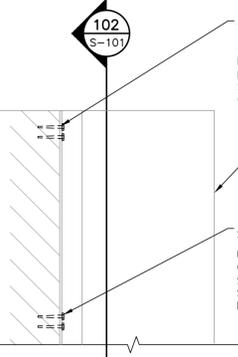
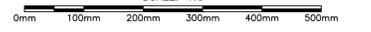
- M.I.:** MECHANICAL INFILLS IN EXISTING STEEL DECK WITH CONCRETE TOPPING. SEE MECHANICAL FOR SIZE AND LOCATION. SEE TYPICAL STEEL DECK WITH CONCRETE TOPPING INFILL DETAIL (CIRCULAR).
- M.O.:** MECHANICAL OPENING THROUGH EXISTING STEEL DECK WITH CONCRETE TOPPING. SEE MECHANICAL FOR SIZE AND LOCATION. SEE CORE DRILL CONCRETE AND CUT STEEL DECK AS REQUIRED.
- HKP:** NEW 100mm THICK HOUSEKEEPING PAD REINFORCED WITH 152x152 MW18.7MM18.7 WELDED WIRE MESH. COORDINATE WITH MECHANICAL DRAWINGS.
- EHPK:** 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/m<sup>2</sup>**



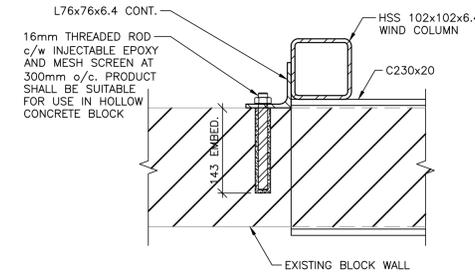
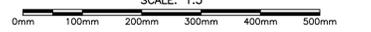
**TYPICAL STEEL DECK WITH CONCRETE TOPPING DETAIL (CIRCULAR)**  
 SCALE: 1:5



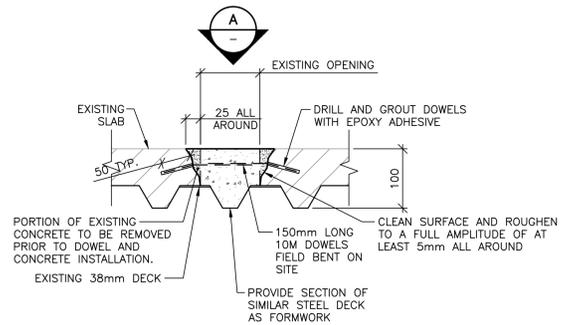
**SECTION 102**  
 SCALE: 1:5



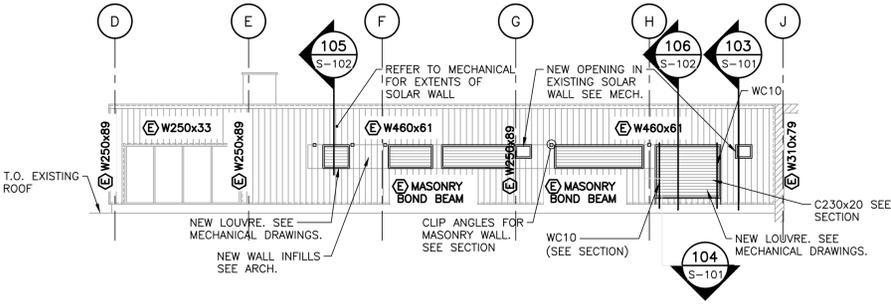
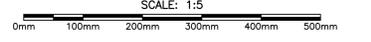
**SECTION 101**  
 SCALE: 1:5



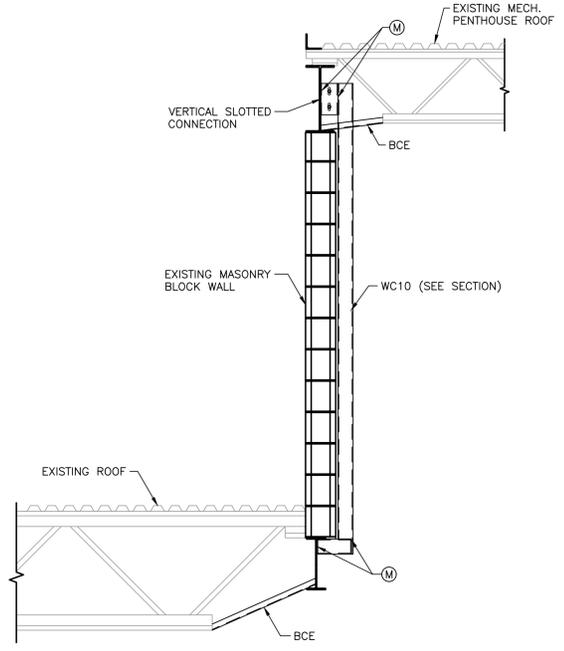
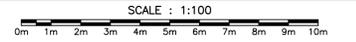
**SECTION 104**  
 SCALE: 1:5



**SECTION B**  
 SCALE: 1:5



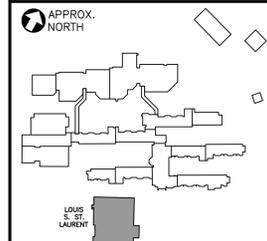
**ELEVATION EL1**  
 SCALE: 1:100



**WIND COLUMN SECTION 103**  
 SCALE: 1:20



BCE: BOTTOM CHORD EXTENSION  
 2-L38x38x4.8  
 Af = ±5kips  
 M: MOMENT CONNECTION M<sub>y</sub> = ±5kft



0	Issued for Tender	07/06/18
revisions		date

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

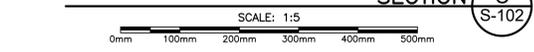
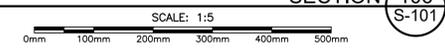
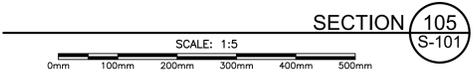
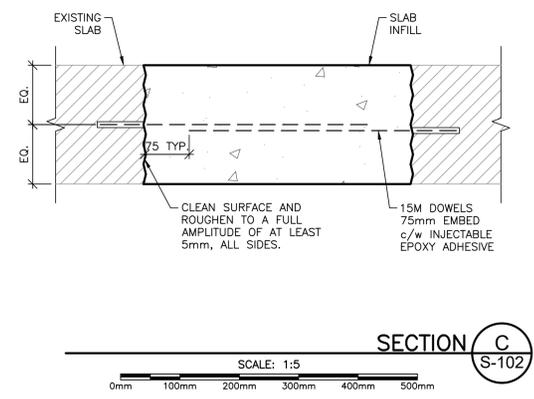
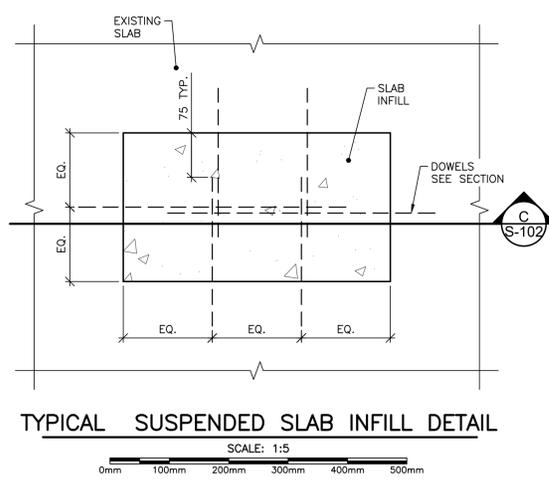
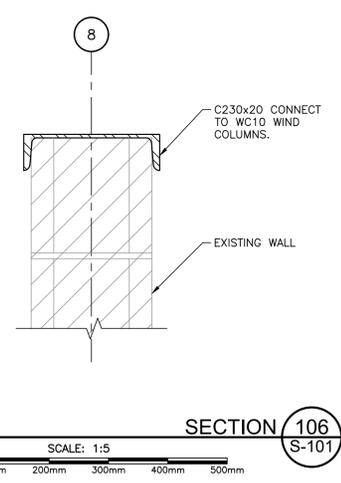
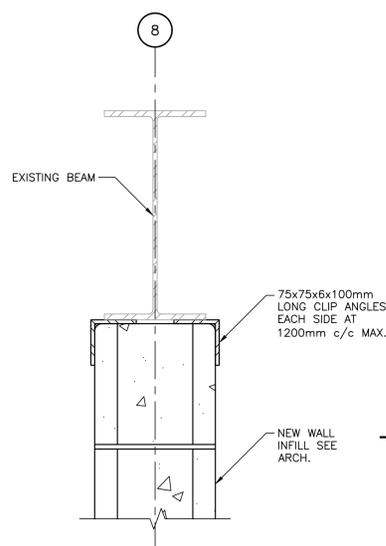
drawing **STRUCTURAL LOUIS S. ST. LAURENT MACHINE SHOP ROOF PLAN SECTIONS & DETAILS**

designed M.F. conq  
 date 07/06/18  
 drawn STAFF dessin  
 date 07/06/18

approved M.C. approuv  
 date 07/06/18

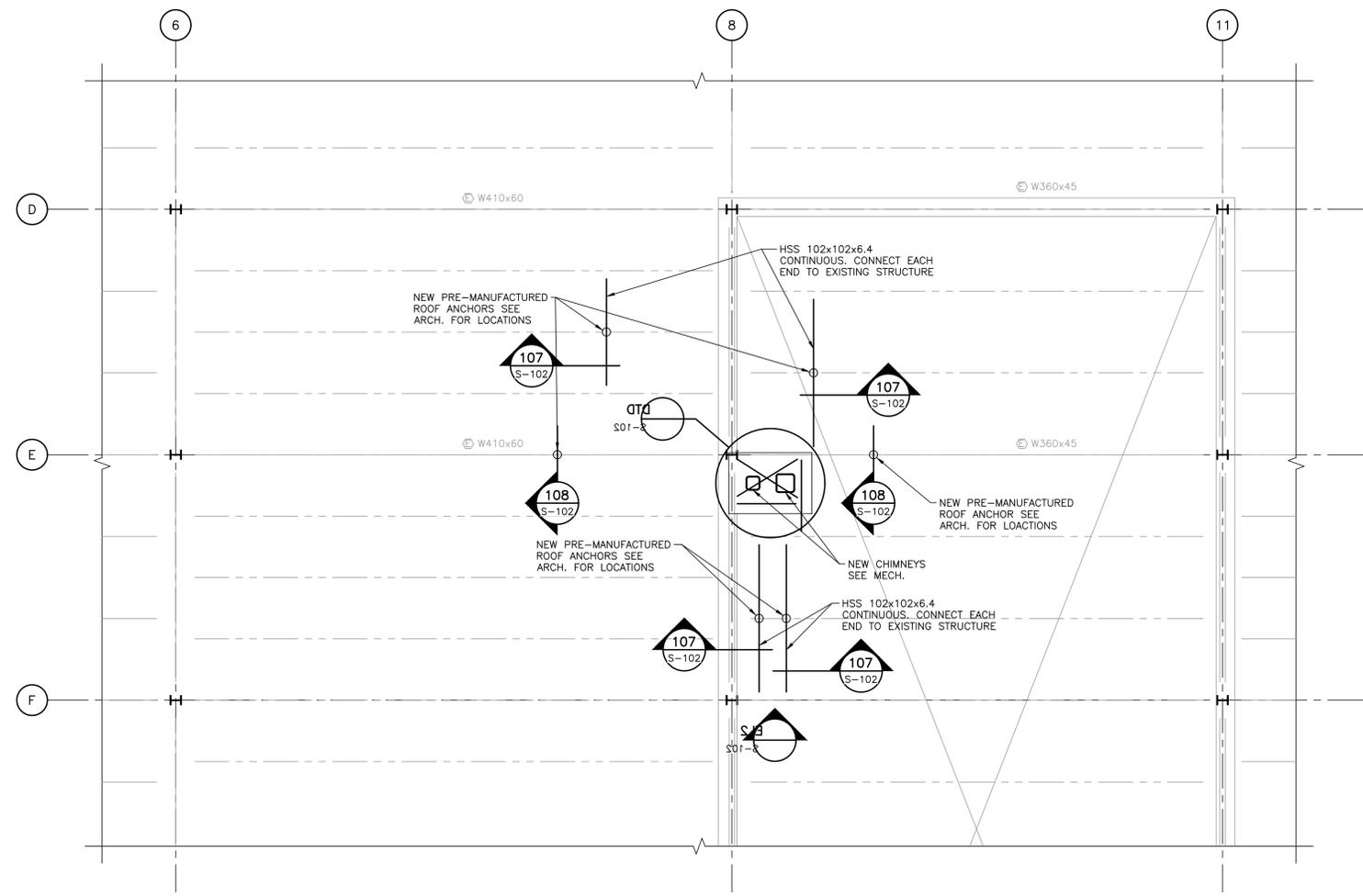
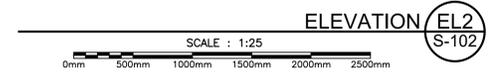
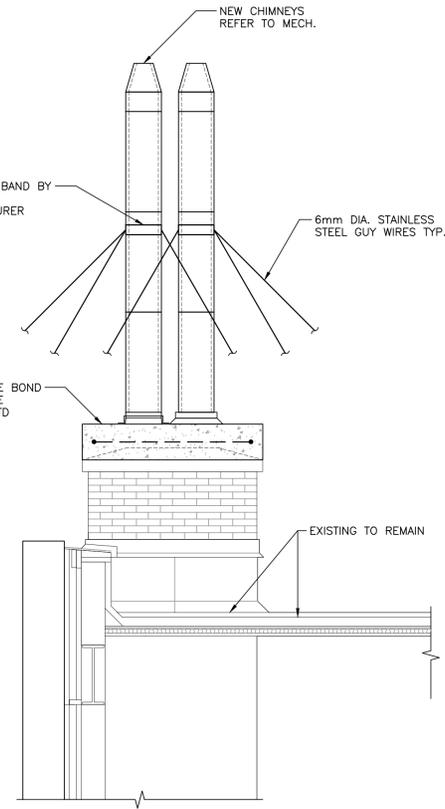
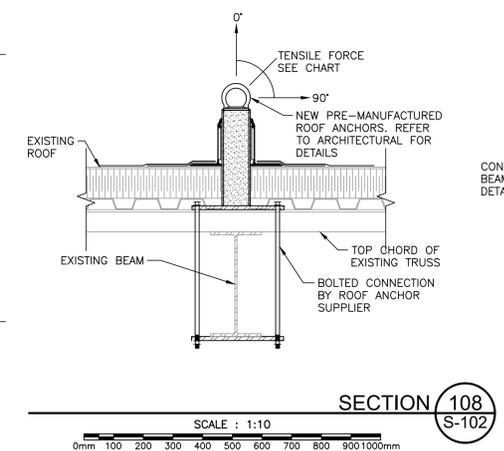
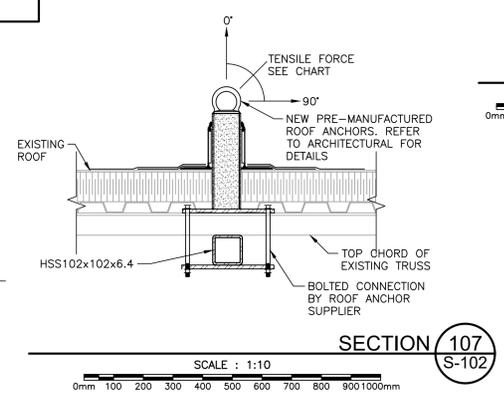
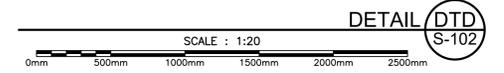
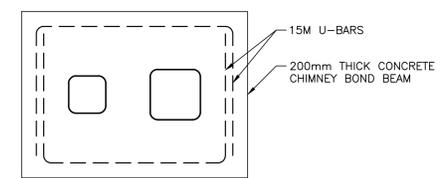
Tender Submission  
 Joan Muise  
 PWGSC Project Manager / Administrateur de projets TPWGC  
 project number no. du projet  
**R.065476.710**

drawing no. no. du dessin  
**09-S-102**

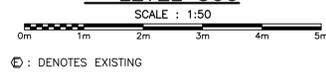


ALLOWABLE TENSILE FORCE (kN)					
0°	30°	45°	60°	90°	
23.1	9.8	6.9	6.5	5.8	

FOR USE IN PRE-MANUFACTURED ROOF ANCHOR SELECTION



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



⊙ : DENOTES EXISTING

7:\City-Drawing\Canadian Coast Guard College (138163)\09 - Louis S. Laurent Machine Shop\538447-09-S-102-STRUCTURAL-MACHINE SHOP-LEVEL ROOF PLAN SECTIONS & DETAILS.dwg Jul 06, 2018 - 11:56am PWGSC B1 (2004)

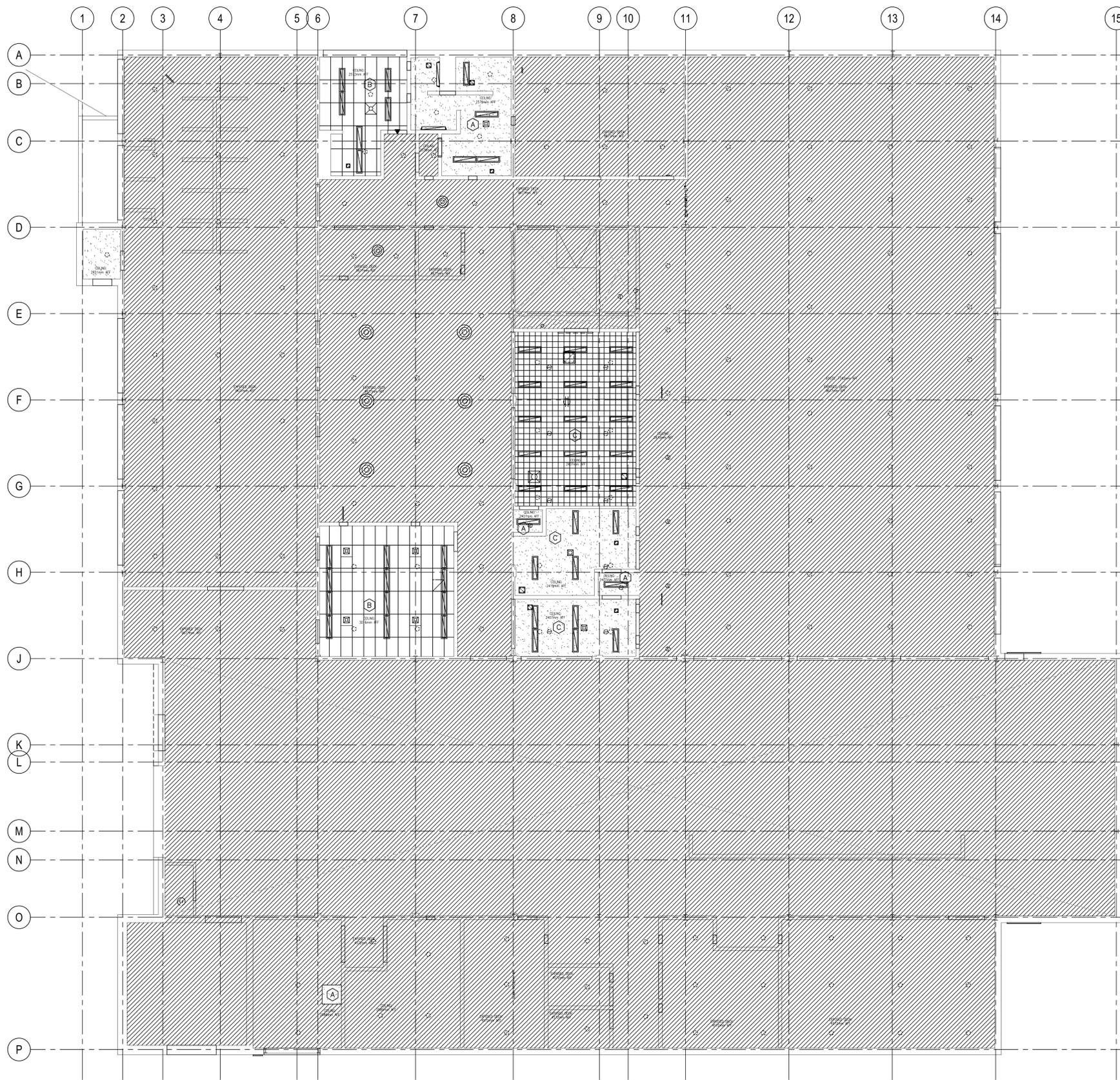












**LEGEND:**

- 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 AND 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.
- A** 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
  - B** NEW SUSPENDED T-BAR CEILING
    - EXISTING STRUCTURE TO REMAIN
    - NEW SUSPENSION SYSTEM
    - NEW 610 x 610 ACOUSTICAL PANEL CEILING TILES
  - C** 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 205 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

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

APPROX. NORTH

**M&R ENGINEERING**  
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 Tel: (902) 422-7263, Fax: (902) 422-4045  
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**LYDON LYNCH**  
 Lydon Lynch Architects Ltd.  
 1668 Barrington Street, 4th Floor  
 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.

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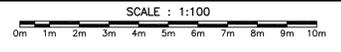
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revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES	

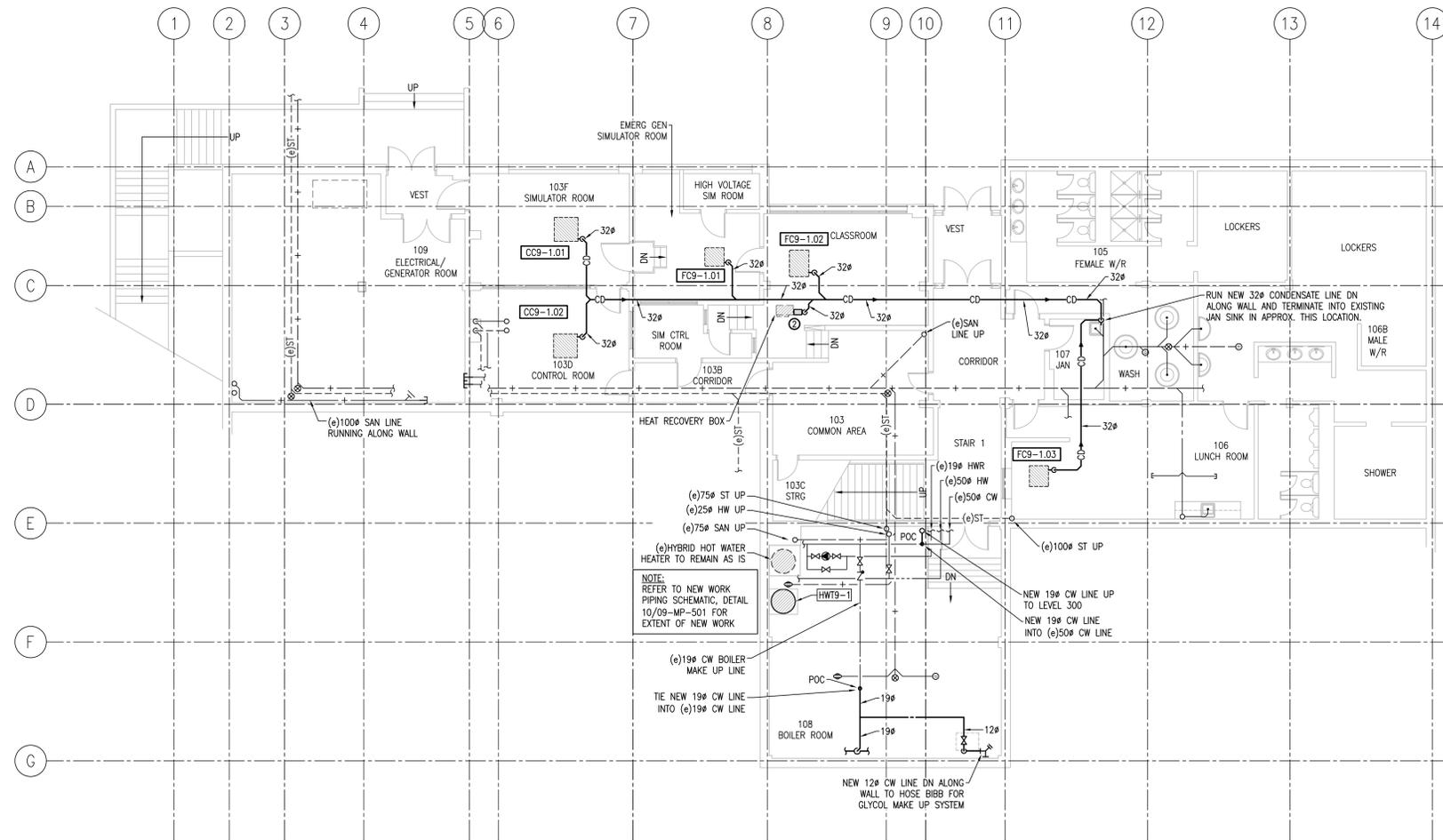
drawing no. 09-A-106  
 design  
 LOUIS S ST LAURENT MACHINE SHOP LEVEL 200  
 NEW REFLECTED CEILING PLAN

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

LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 200

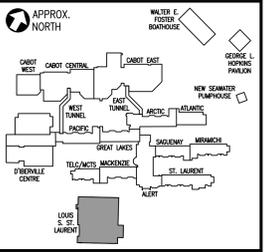


PLUMBING CONSTRUCTION NOTES	
①	PLUMBING CONTRACTOR TO INSTALL CONDENSATE PUMP, P-COND1, INSIDE THE WALL MOUNTED EVAPORATOR ENCLOSURE, COORDINATE INSTALLATION OF THE CONDENSATE PUMP WITH VENTILATION CONTRACTOR. SEE DETAIL FOR MORE INFO
②	PLUMBING CONTRACTOR TO INSTALL CONDENSATE PUMP, P-COND2, INSIDE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

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**

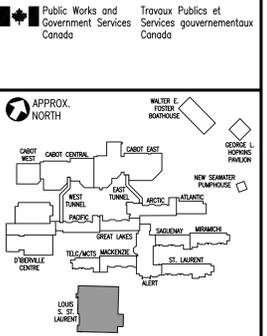
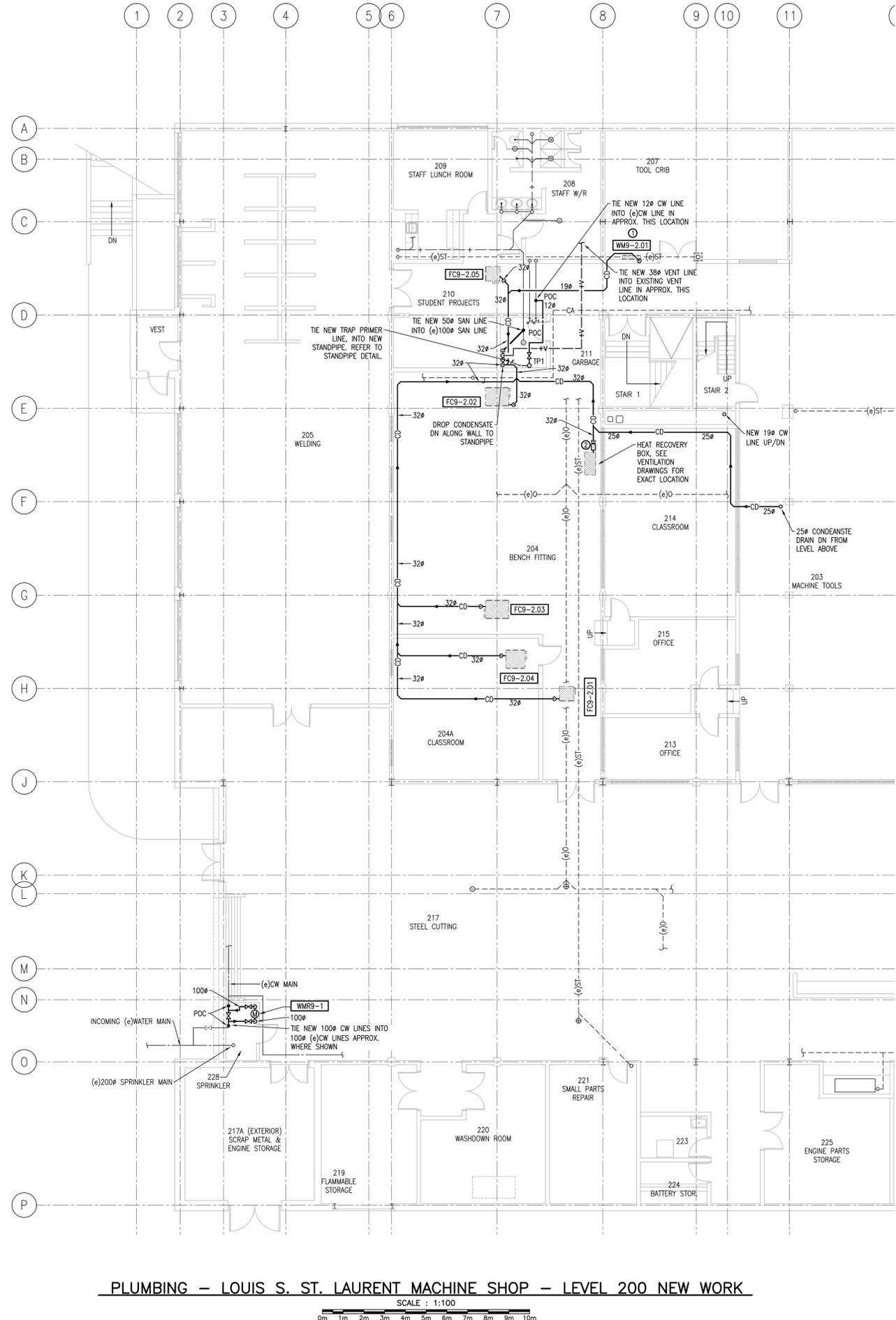
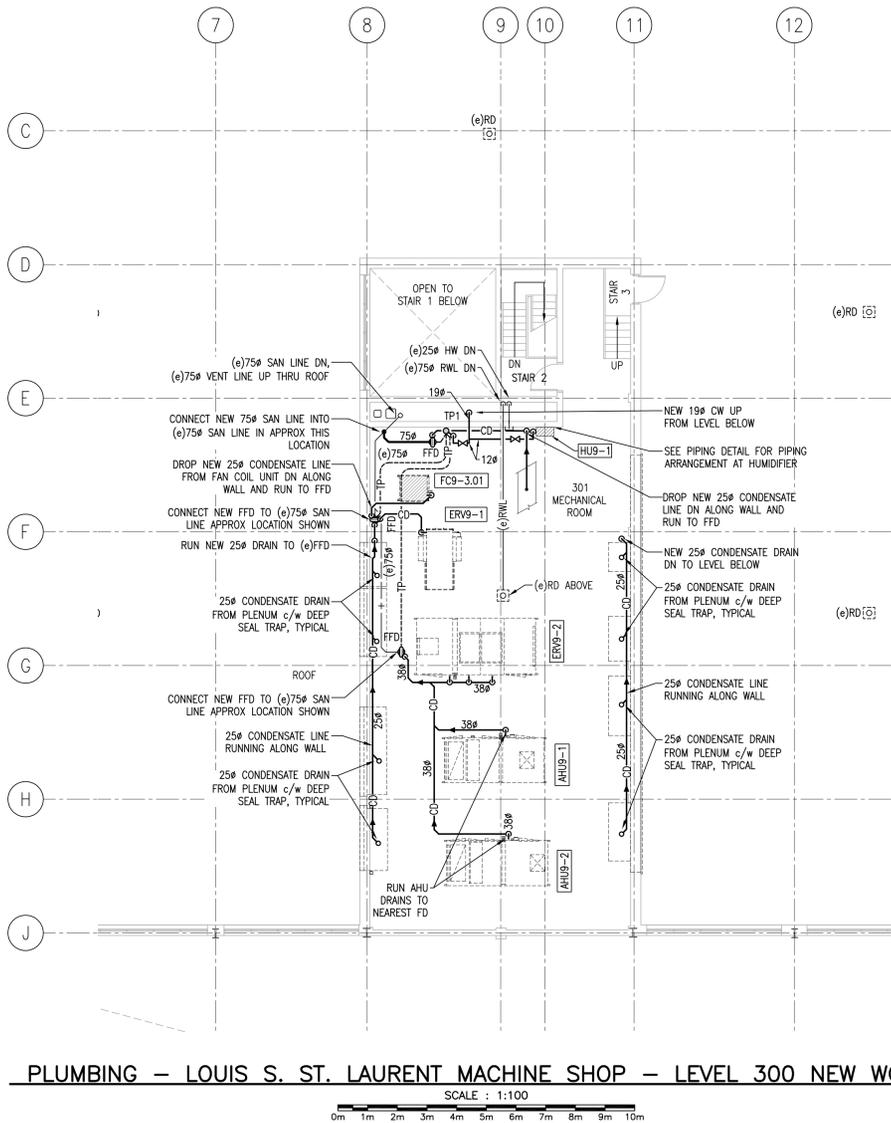
drawing  
**PLUMBING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 NEW WORK**

designed MJM	conçu
date 07/06/18	
drawn CAB	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	

Tender / Soumission  
Joan Muise / Administrateur de projets TPSGC  
project number / no. du projet  
**R.065476.710**

drawing no. / no. du dessin  
**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



**GENERAL NOTES :**  
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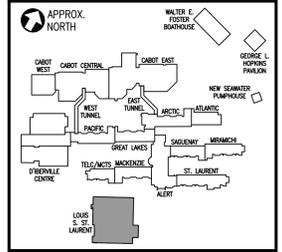


0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
project		

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

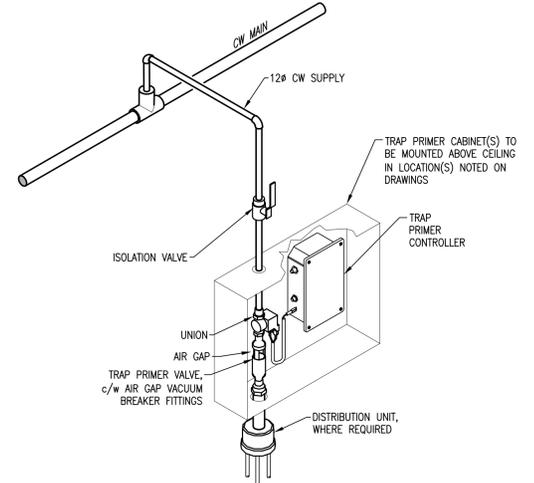
designed MJM	conçu
date 07/06/18	
drawn CAB	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	
Tender	Submission
Joan Muisie	
PWGSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-MP-102	

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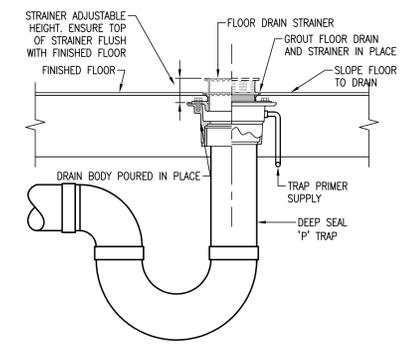


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 5531 Cornwallis St. Halifax, NS, B3K 1E3  
 Tel: (902) 422-7293, Fax: (902) 423-4945  
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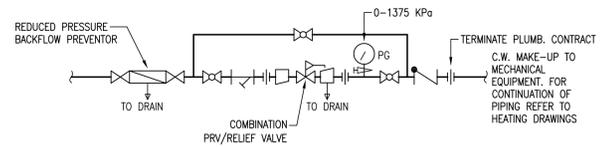
**GENERAL NOTES:**  
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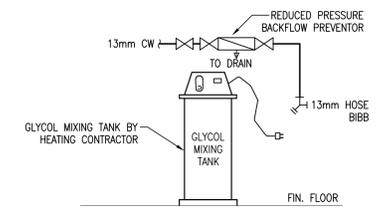
**TRAP PRIMER VALVE & PIPING DETAIL 1**  
 SCALE: N.T.S. MP501



**FLOOR DRAIN DETAIL 2**  
 SCALE: N.T.S. MP501

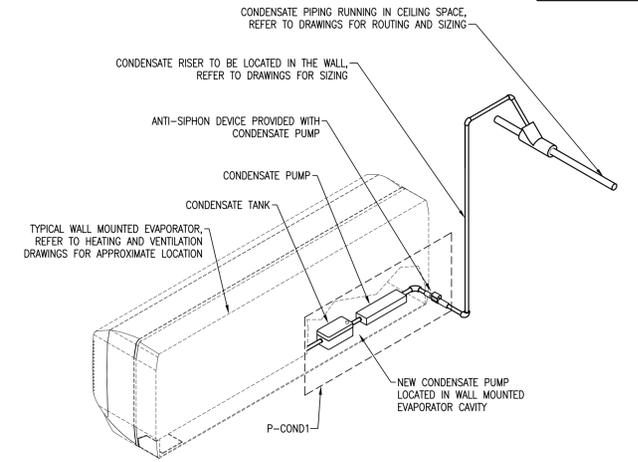


**COLD WATER MAKE-UP DETAIL 3**  
 SCALE: N.T.S. MP501

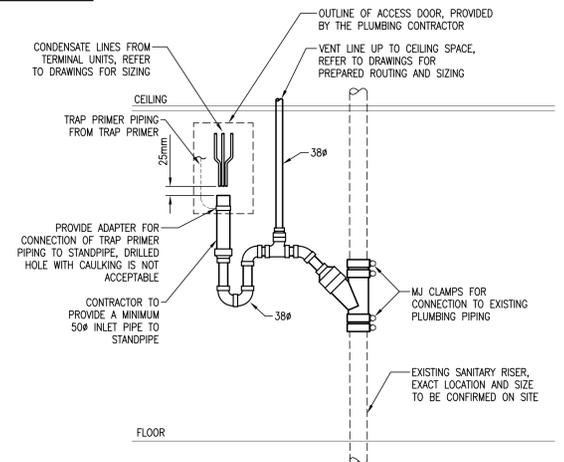


**GLYCOL MIXING TANK MAKEUP DETAIL 4**  
 SCALE: N.T.S. MP501

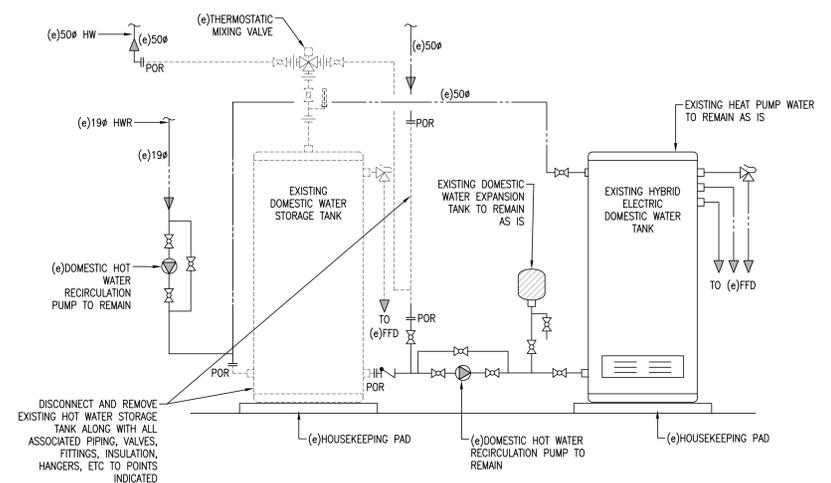
**NOTE:**  
 REFER TO DRAWING 09-MH-501 FOR DETAILS ON CONDENSATE CONNECTION REQUIREMENTS AT VRF FAN COILS.



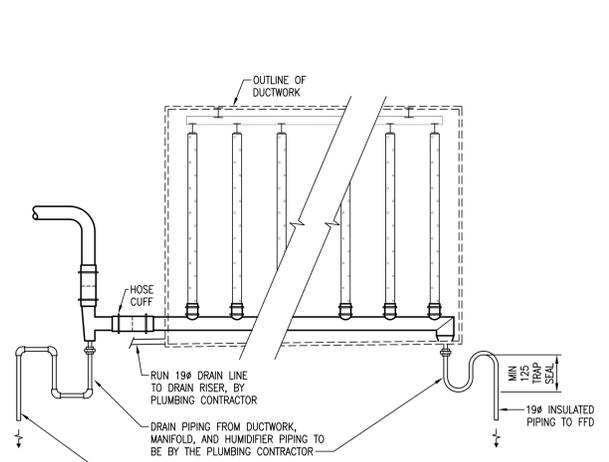
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 SCALE: N.T.S. MP501



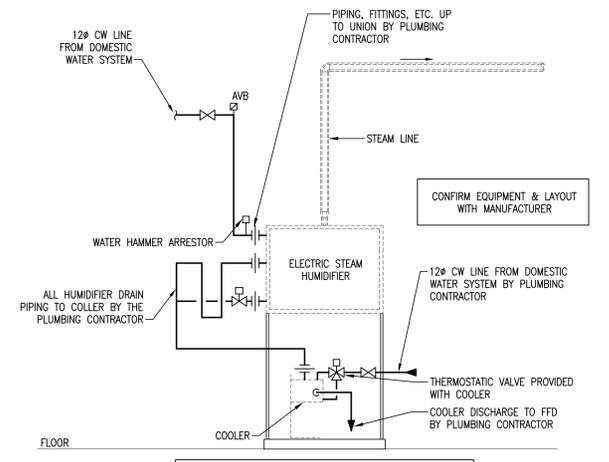
**CONDENSATE STANDPIPE DETAIL 6**  
 SCALE: N.T.S. MP501



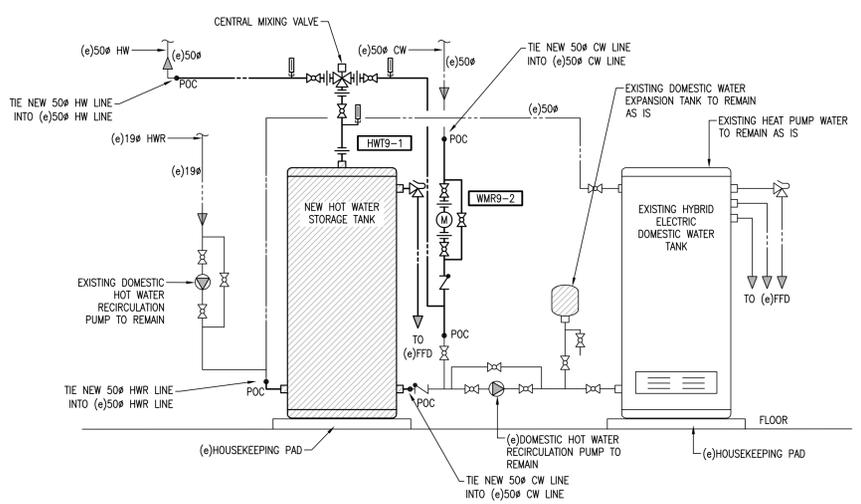
**DOMESTIC WATER DEMOLITION PIPING SCHEMATIC 7**  
 SCALE: N.T.S. MP501



**HUMIDIFIER MANIFOLD DRAINAGE PIPING DETAIL 8**  
 SCALE: N.T.S. MP501



**HUMIDIFIER PLUMBING DETAIL 9**  
 SCALE: N.T.S. MP501

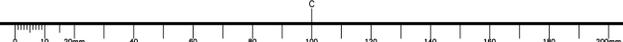


**DOMESTIC WATER HEATER PIPING NEW WORK SCHEMATIC 10**  
 SCALE: N.T.S. MP501

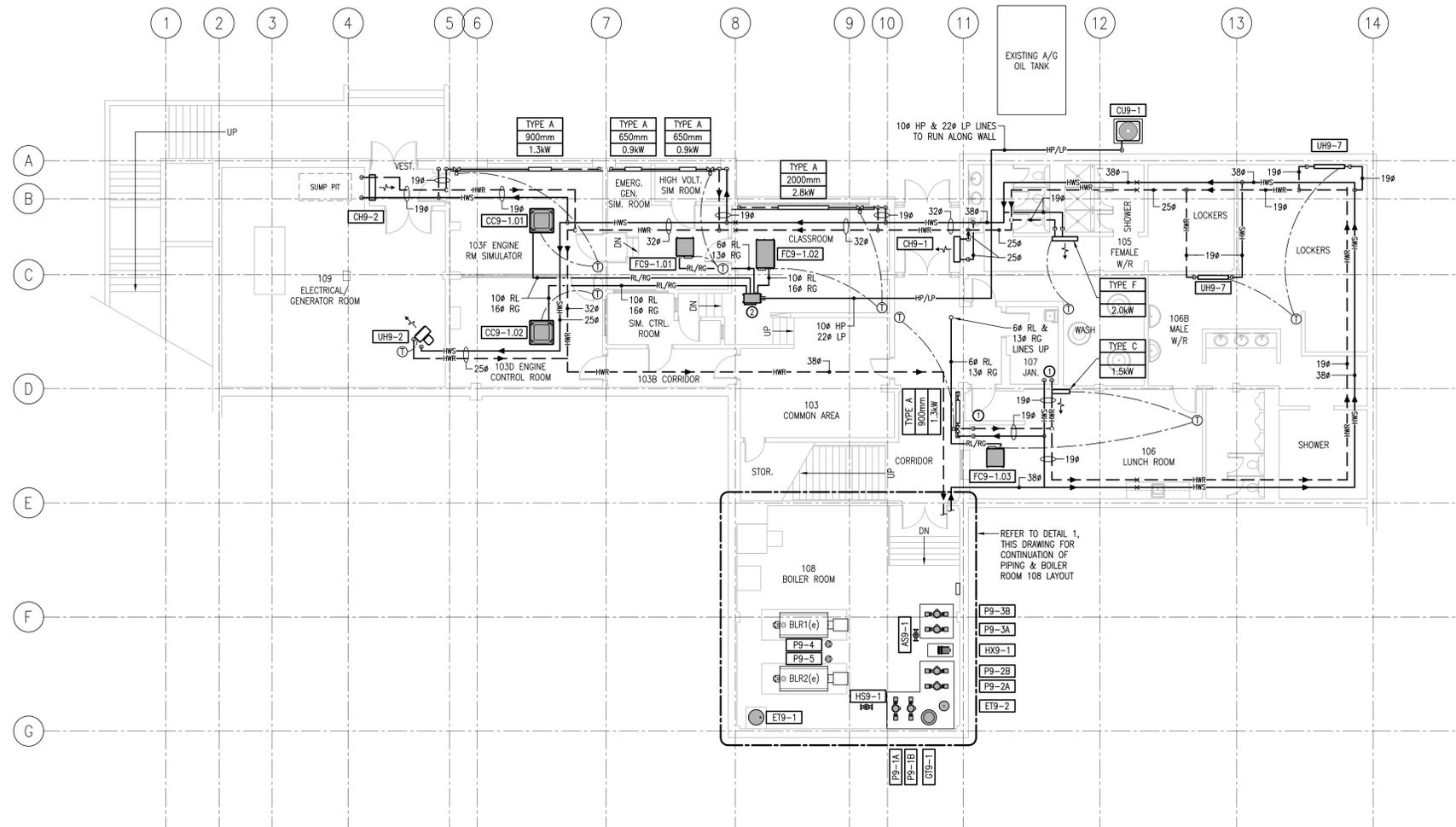


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revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	PLUMBING LOUIS S. ST. LAURENT MACHINE SHOP DETAILS AND SCHEMATICS	
designed MJJM	conçu	
date 07/06/18		
drawn CAB	dessiné	
date 07/06/18		
approved ACJC	approuvé	
date 07/06/18		
Tender	Submission	
Joan Muiise	Administrateur de projets IPSCG	
project number	no. du projet	
R.065476.710		
drawing no.	no. du dessin	
09-MP-501		

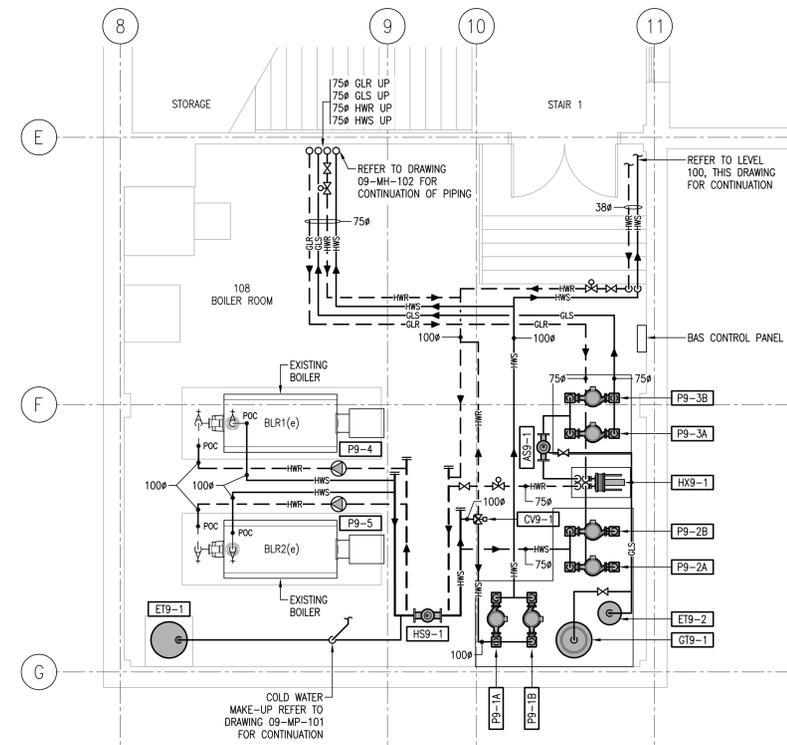
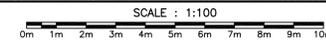
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 PWSC B1 (2004)



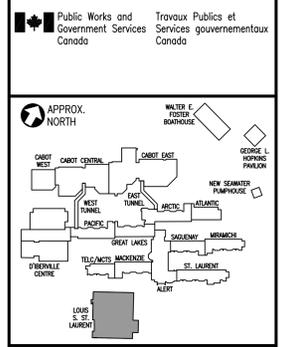
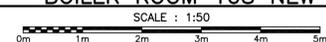
CONSTRUCTION NOTES	
①	NEW HOT WATER SUPPLY AND HOT WATER RETURN LINES TO RUN DOWN EXTERIOR OF EXISTING WALL IN THIS AREA.
②	NEW HEAT RECOVERY BRANCH BOX MOUNTED FROM CEILING STRUCTURE c/w BALL VALVES ON REFRIGERANT LIQUID & REFRIGERANT GAS LINE CONNECTIONS.
③	NEW HWS & HWR PIPES TO BE INSTALLED CLEAR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



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



HVAC PIPING – BOILER ROOM 108 NEW WORK LAYOUT 1



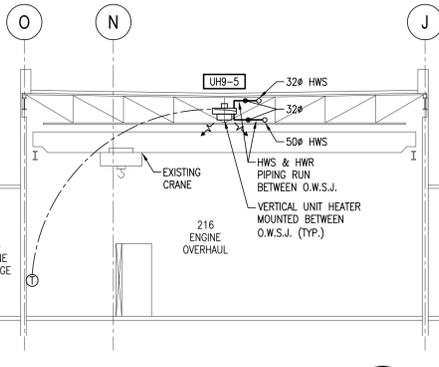
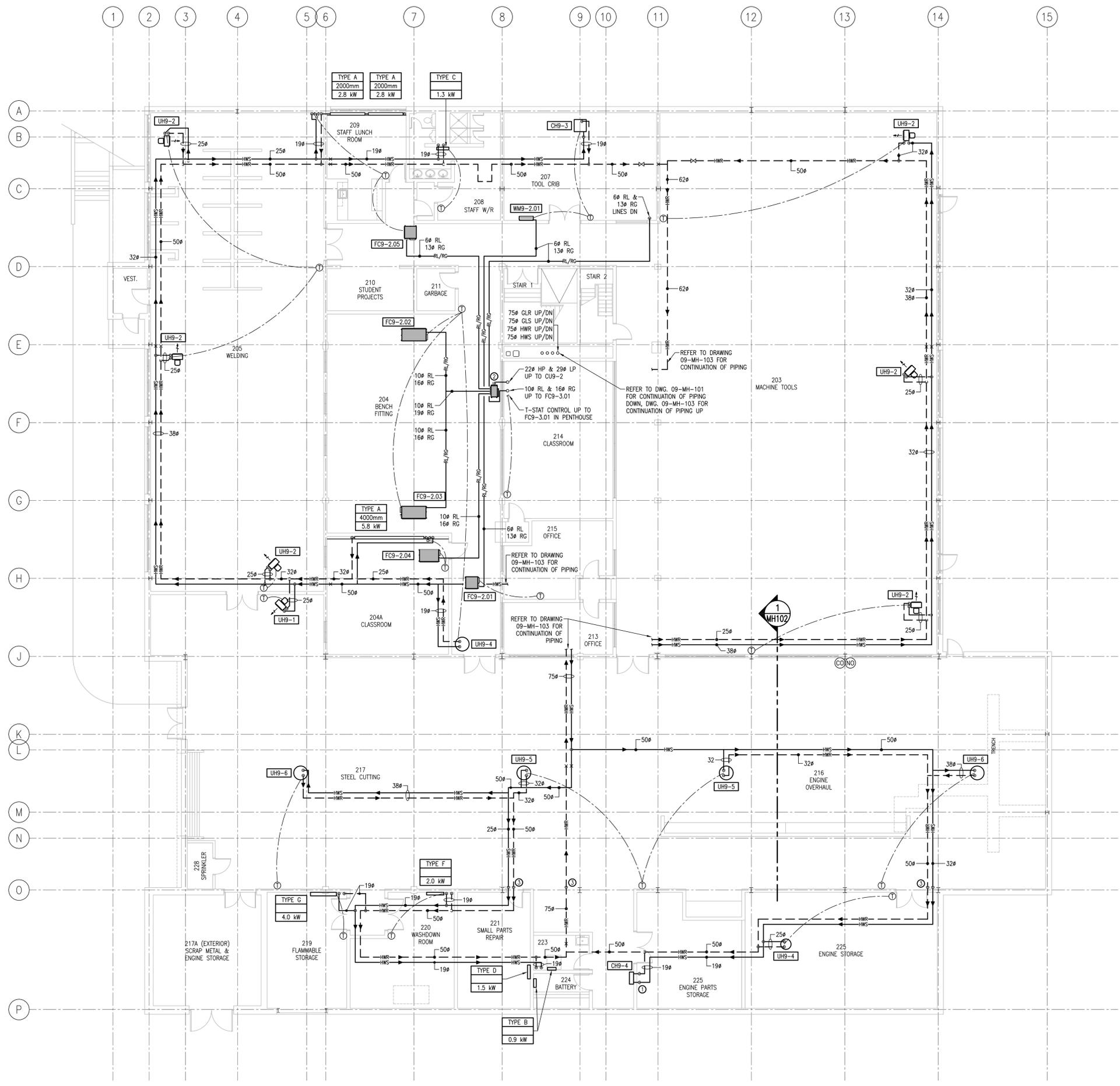
GENERAL NOTES:  
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0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	project
drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 NEW WORK	design
designed	MJM	conçu
date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

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 PWOSC B1 (2004)

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**  
SCALE: 1:100  
MH102

**HVAC PIPING - LOUIS S. ST. LAURENT MACHINE SHOP - LEVEL 200 NEW WORK**  
SCALE: 1:100

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**M&R ENGINEERING**  
5531 Cornwallis St. Halifax, NS, B3K 1E3  
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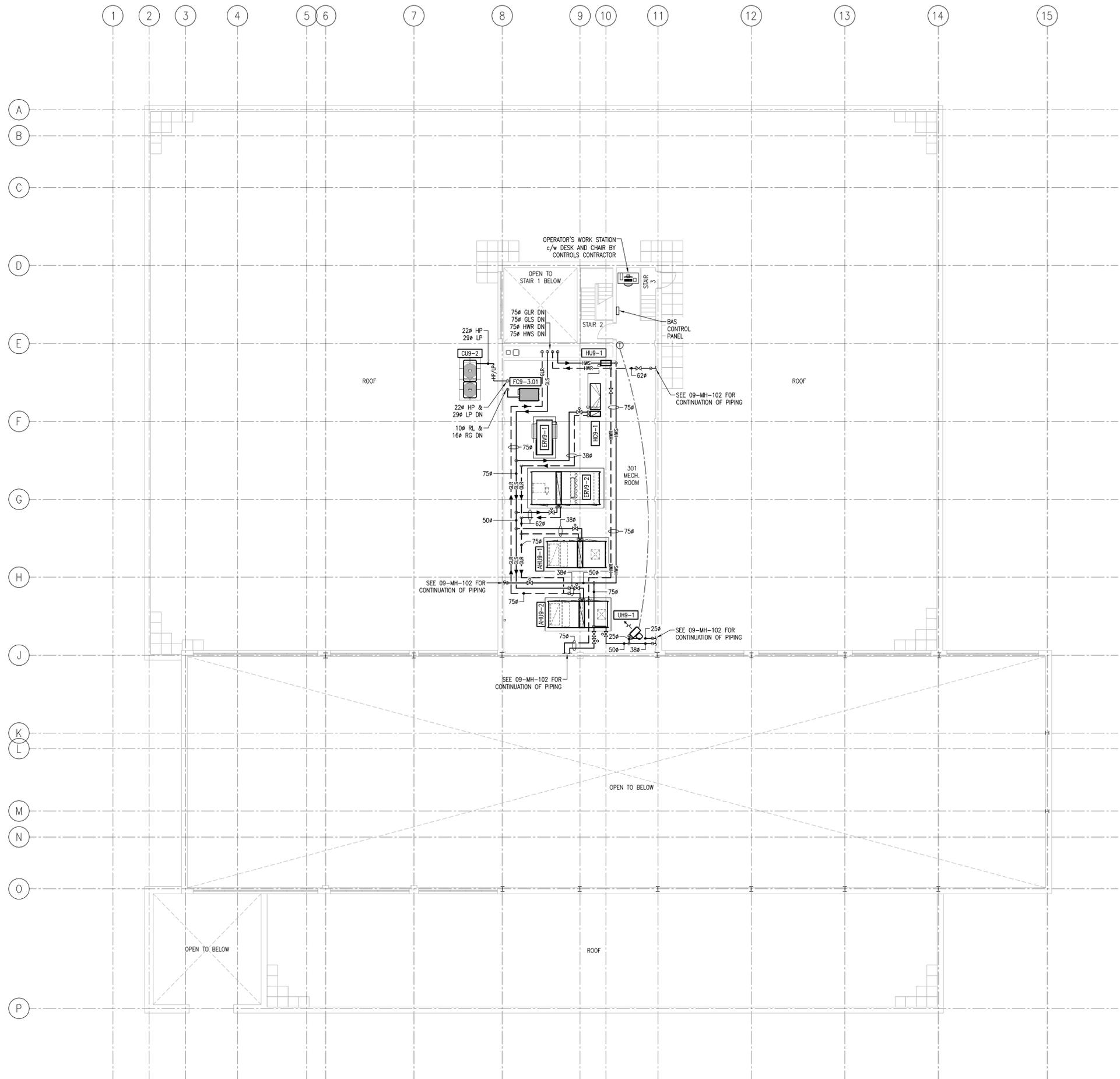
0	Issued for Tender	07/06/18
revisions		date
project	<b>CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES</b>	
drawing	design	

**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	Submission
Joan Muise	
PWSC Project Manager	Administrateur de projets TPSGC
project number	no. du projet

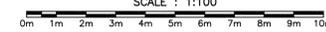
**R.065476.710**  
drawing no. no. du dessin  
**09-MH-102**

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



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

APPROX. NORTH

**M&R ENGINEERING**  
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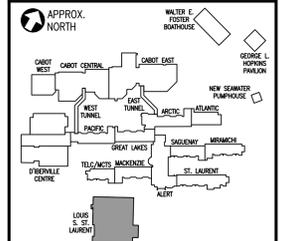


0	Issued for Tender	07/06/18
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drawing	HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 NEW WORK	
designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
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date	07/06/18	
Tender	Submission	
Joan Muise	Administrateur de projets TPSGC	
project number	no. du projet	
	R.065476.710	
drawing no.	no. du dessin	
	09-MH-103	

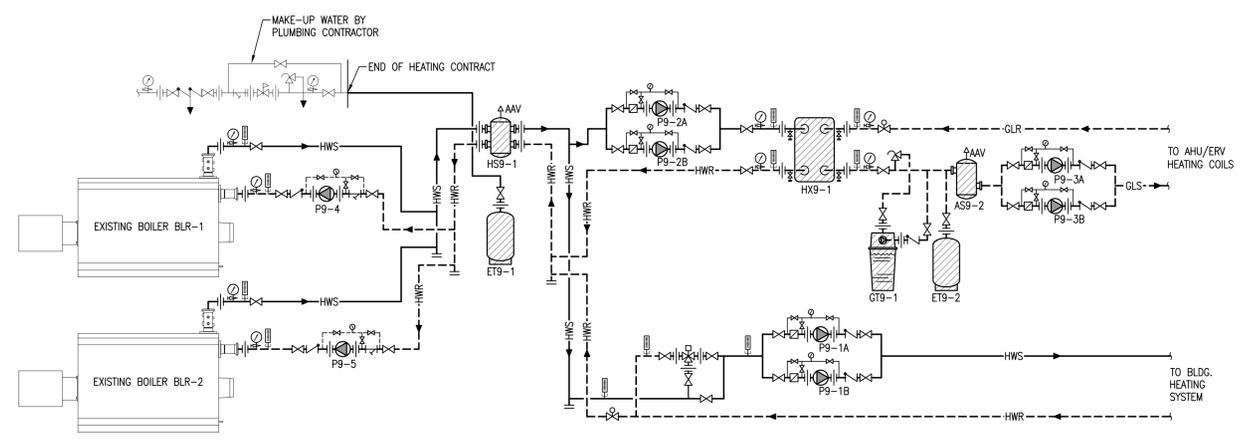
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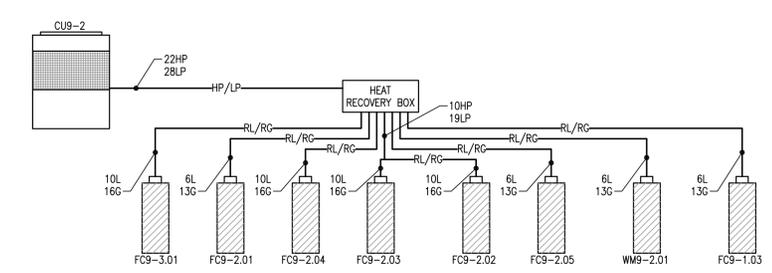




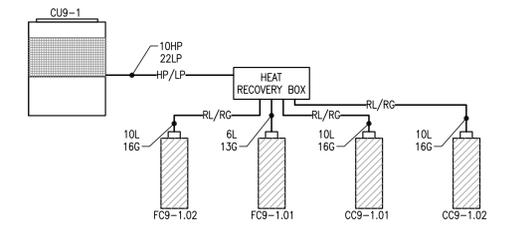
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**HEATING SYSTEM SCHEMATIC - BOILER ROOM 108** (1) **MH601**  
 SCALE : N.T.S.



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

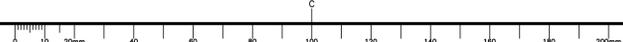


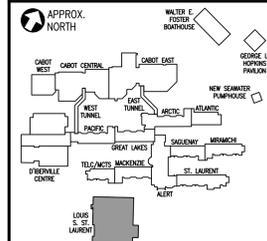
**VRF SYSTEM PIPING SCHEMATIC (CU9-1)** (3) **MH601**  
 SCALE : N.T.S.



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designed	MJM	conçu
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drawn	MAC	dessiné
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Tender	Submission	
Joan Muisse	Administrateur de projets TPSGC	
project number	no. du projet	
	<b>R.065476.710</b>	
drawing no.	no. du dessin	
	<b>09-MH-601</b>	

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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			PIPE HT. (mm)	MAX SOUND LEVEL (dBA)	COMMENTS
								TOTAL CAP. (kW)	SENS. CAP. (kW)	EER	TOTAL CAP. (kW)	COP	MCA	MOCP	VOLT/PH	LIQUID (mm)	DRAIN (mm)	PIPE LENGTH (mm)				
CO9-1.01	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	-	-	34	c/w BUILT-IN CONDENSATE LIFT PUMP AND FRESH AIR DUCT FLANGE
CO9-1.02	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	-	-	35	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	-	-	34	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	-	-	39	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	-	-	28	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	-	-	35	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	-	-	41	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	-	-	41	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	-	-	39	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	-	-	34	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	-	-	39	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	-	-	36	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		TWINNING 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)	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	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.

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### 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	
HU9-1	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 LOUVRE CONE DIFFUSER
UH9-6	VERTICAL UNIT HEATER	42.5	1086	-	0.95	6.1	0.124	1075	C/W LOUVRE 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 - CONVECTOR RADIATOR SCHEDULE

TYPE	STYLE	HEATING CAPACITY (kW)	DIMENSIONS			EWT (°C)	LWT (°C)	FLOW (L/s)	PRESSURE DROP (kPa)	COMMENTS
			LENGTH (mm)	HEIGHT (mm)	DEPTH (mm)					
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 - WALL FIN RADIATION SCHEDULE

TYPE	STYLE	HEATING CAPACITY (W/m)	DIMENSIONS		NO. OF ROWS	CENTRE SPACING (mm)	TUBE SIZE (mm)	FINS/m	EWT (°C)	LWT (°C)	COMMENTS
			HEIGHT (mm)	DEPTH (mm)							
A	SLOPED TOP	1440	457	127	1	-	32	164	87	76	-

### 09 - LOUIS S. ST. LAURENT - RUN OUT SIZE FOR WALL FIN RADIATION SCHEDULE

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 SCHEDULE

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 <sub>2</sub> 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)	CONNECTIONS	REMARKS
				HEIGHT	DIA.	
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) ≤ 2 (50)	1-1/4 (32 TO 50)	2 (50 TO 100)	2-1/2 (63 TO 100)	4 (≥ 125)
<b>HEATING SYSTEMS (HOT WATER)</b>						
> 177	0.046-0.049	121	38	114	127	127
122-177	0.042-0.045	93	38	76	101	114
94-121	0.039-0.043	65	38	63	63	76
61-93	0.036-0.042	52	25	38	50	50
41-60	0.035-0.040	38	25	25	38	38
<b>COOLING SYSTEMS (CHILLED WATER)</b>						
5-13	0.030-0.039	24	25	25	25	25
< 5	0.030-0.039	24	25	25	38	38



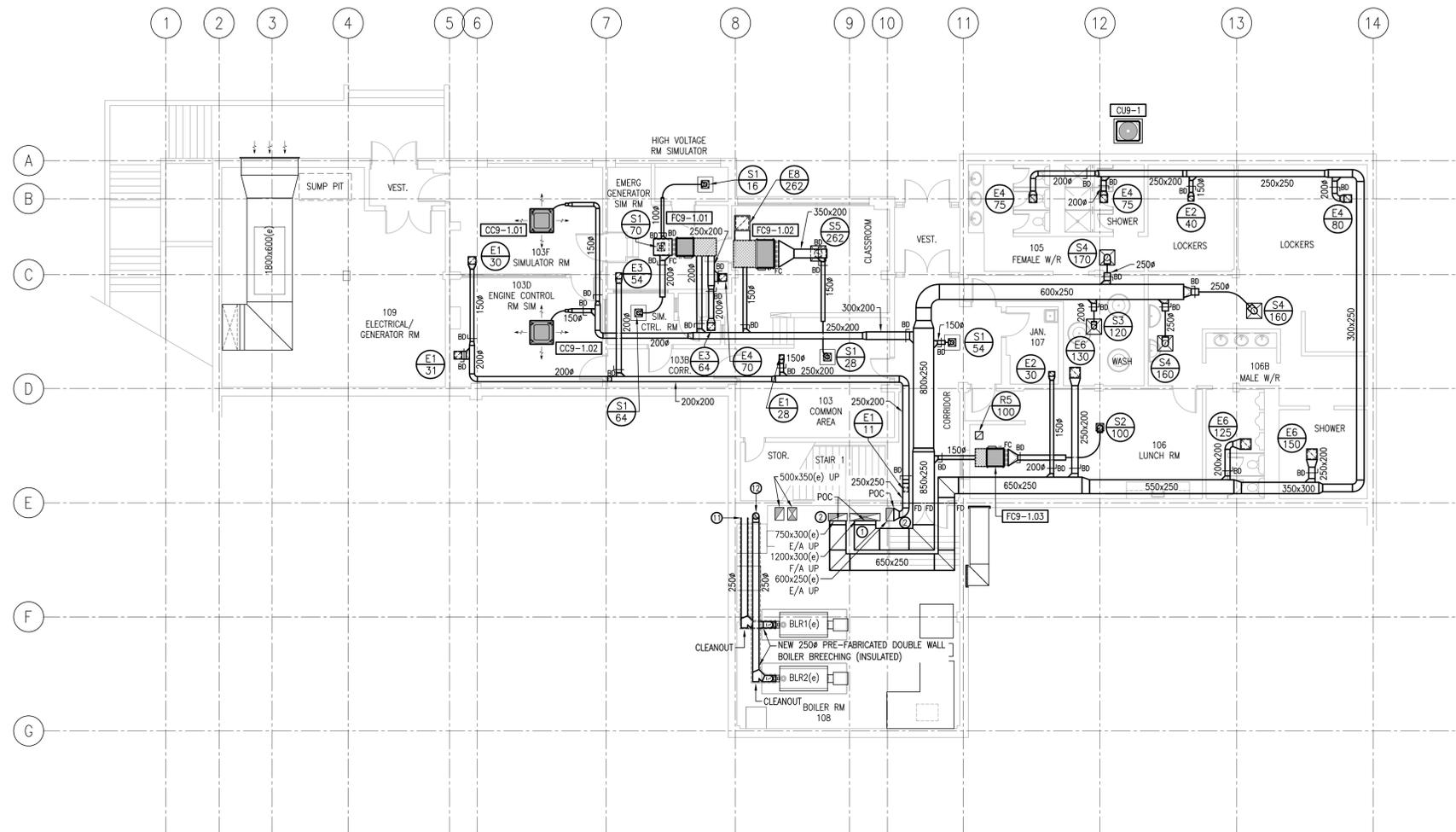
0	Issued for Tender	07/06/18
revisions		date

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

drawing **HVAC PIPING LOUIS S. ST. LAURENT MACHINE SHOP SCHEDULES** dessin

designed MJJM conçu  
date 07/06/18  
drawn MAC dessiné  
date 07/06/18  
approved ACJC approuvé  
date 07/06/18  
Tender Submission  
Joan Muiise  
PWGSC Project Manager / Administrateur de projets TPSCG  
project number no. du projet  
**R.065476.710**  
drawing no. no. du dessin  
**09-MH-602**

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 100 NEW WORK**



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

APPROX. NORTH

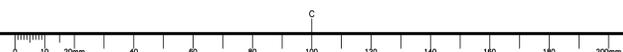
**M&R ENGINEERING**  
 5531 Cornwallis St. Halifax, NS, B3K 1E3  
 Tel: (902) 422-7293, Fax: (902) 423-4945  
 www.mreng.ca

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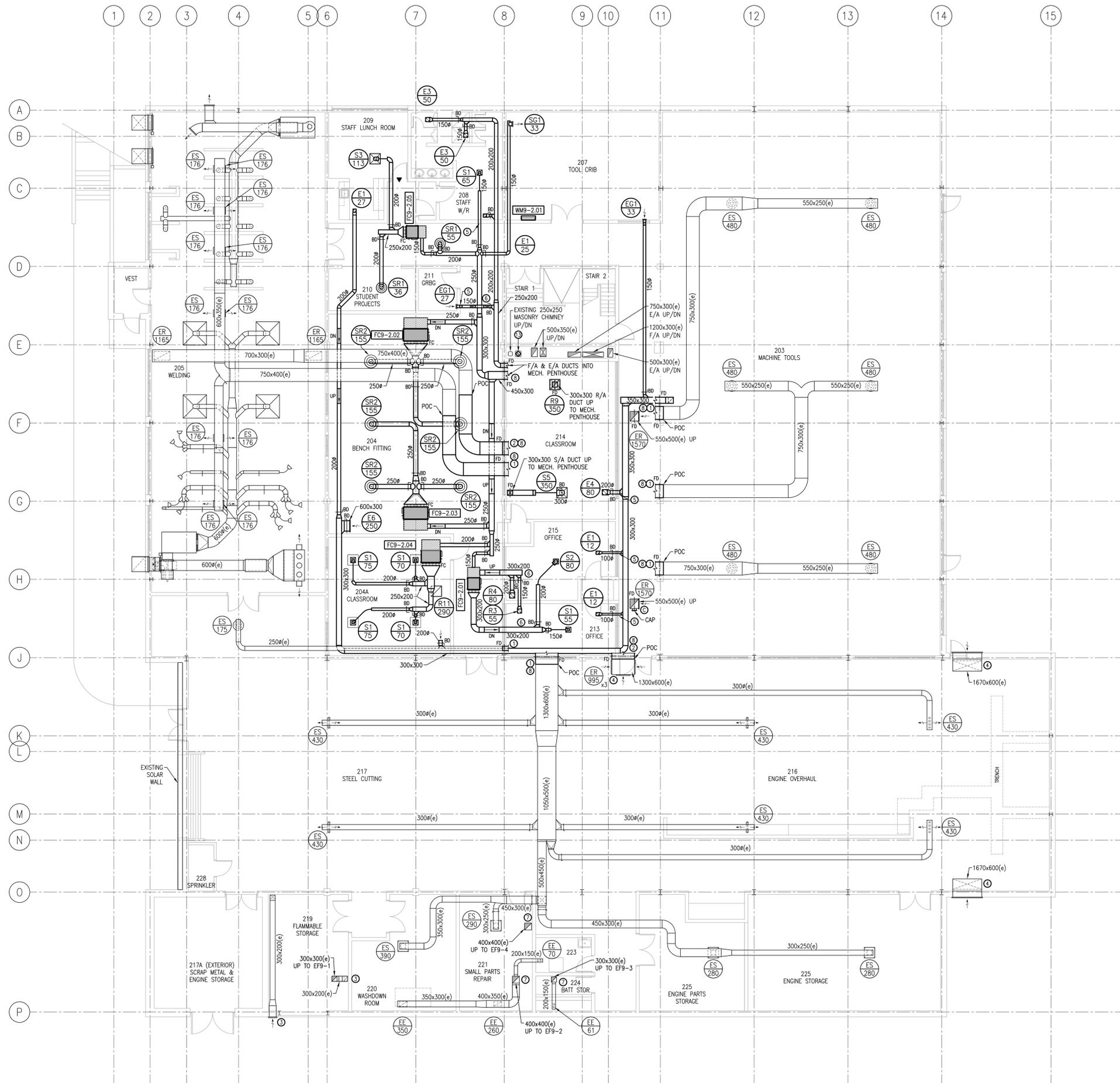


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revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
drawing	VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 NEW WORK	
designed	MJM	conçu
date	07/06/18	
drawn	MAC	dessiné
date	07/06/18	
approved	ACJC	approuvé
date	07/06/18	
Tender	Submission	
Joan Muiise	Administrateur de projets TPSGC	
project number	no. du projet	
	R.065476.710	
drawing no.	no. du dessin	
	09-MV-101	

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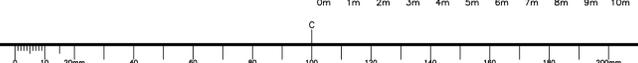


CONSTRUCTION NOTES	
1	NEW FRESH AIR DUCTWORK TO TIE INTO EXISTING FRESH AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
2	NEW EXHAUST AIR DUCTWORK TO TIE INTO EXISTING EXHAUST AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
3	PROVIDE NEW EXPLOSION-PROOF MOTORIZED DAMPER IN DUCT.
4	PROVIDE NEW ACTUATOR FOR EXISTING 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 200 NEW WORK

SCALE: 1:100



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

APPROX. NORTH

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

drawing  
**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  
 Joan Muiise  
 PWGSC Project Manager / Administrateur de projets TPSGC

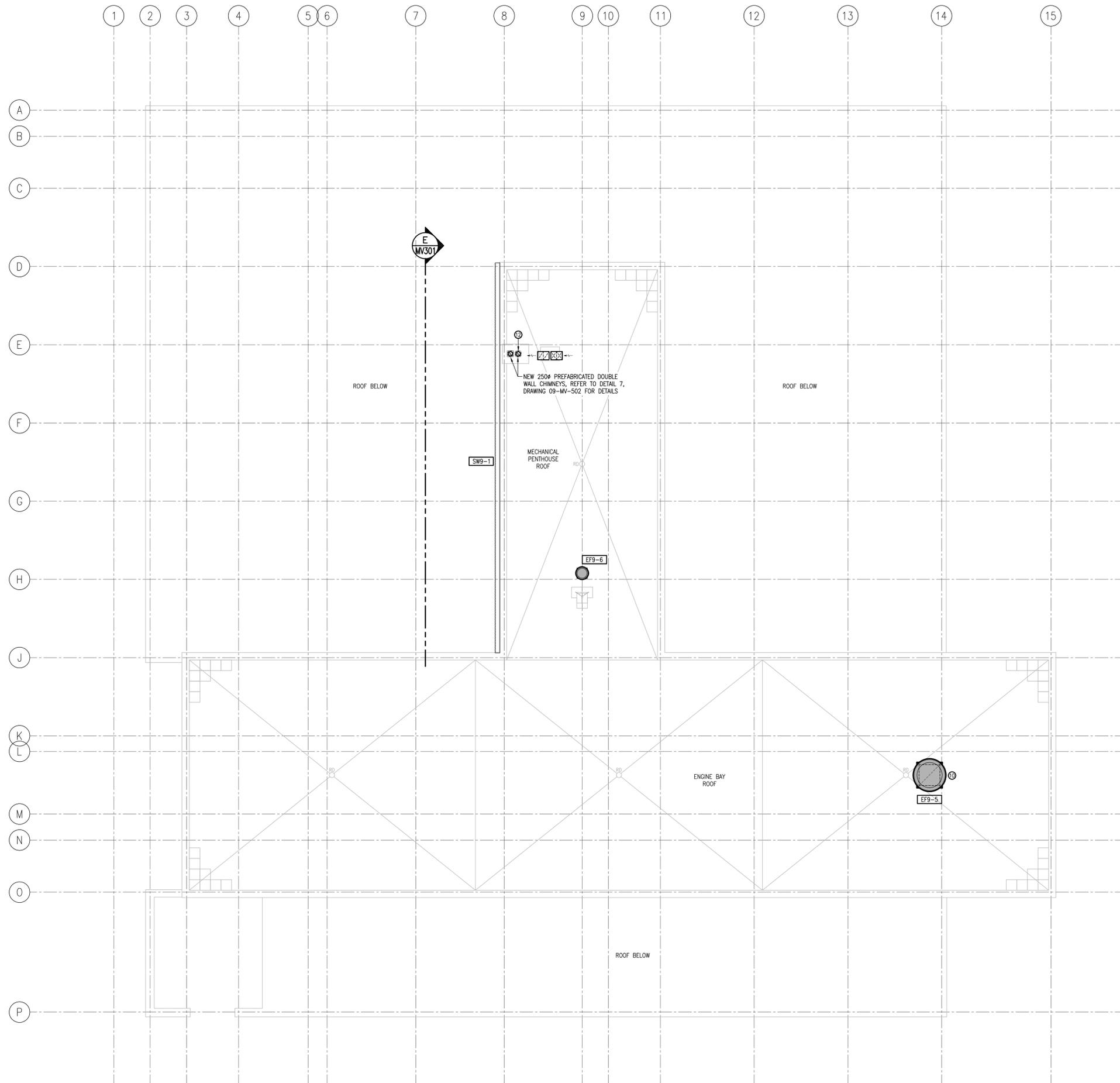
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drawing no. no. du dessin  
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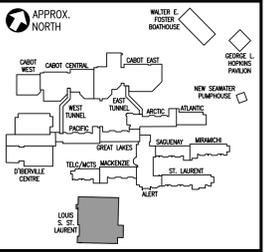
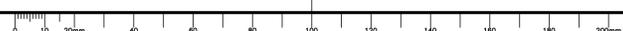
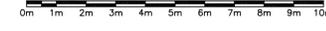


CONSTRUCTION NOTES	
①	NEW FRESH AIR DUCTWORK TO TIE INTO EXISTING FRESH AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
②	NEW EXHAUST AIR DUCTWORK TO TIE INTO EXISTING EXHAUST AIR DUCT RISER APPROXIMATELY WHERE SHOWN.
③	PROVIDE NEW EXPLOSION-PROOF MOTORIZED DAMPER IN DUCT.
④	PROVIDE NEW ACTUATOR FOR EXISTING 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.
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VENTILATION – LOUIS S. ST. LAURENT MACHINE SHOP – ROOF NEW WORK

SCALE : 1:100



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

drawing  
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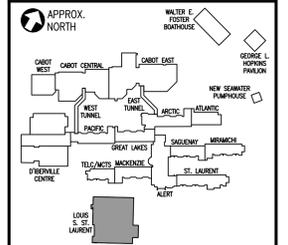
designed MJM	conçu
date 07/06/18	
drawn MAC	dessiné
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approved ACJC	approuvé
date 07/06/18	

Tender  
 Joan Muisse  
 PWGSC Project Manager / Administrateur de projets TPSGC

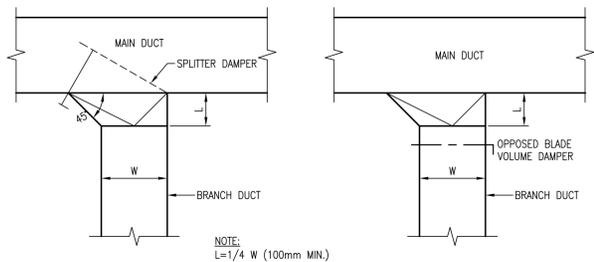
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**R.065476.710**

drawing no.  
**09-MV-104**

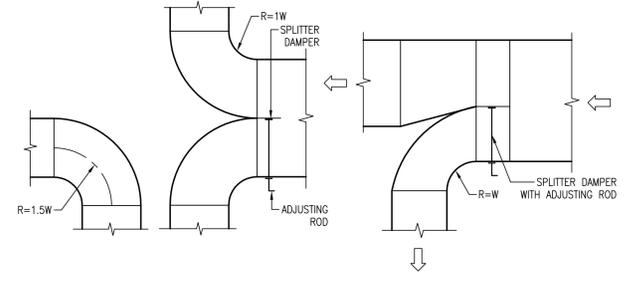




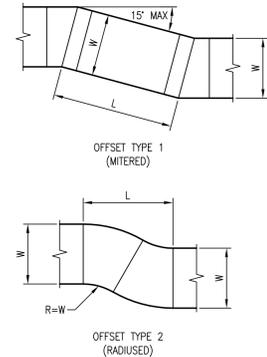
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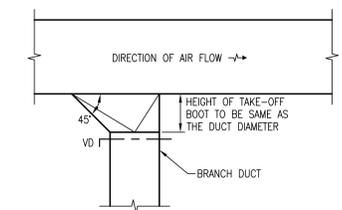
**LOW VELOCITY BRANCH TAKE-OFF DETAIL** 1  
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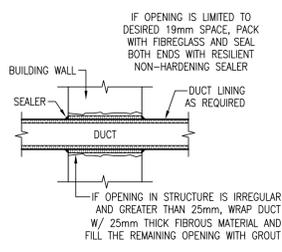
**DUCTWORK DETAILS** 2  
 SCALE : N.T.S. MV501



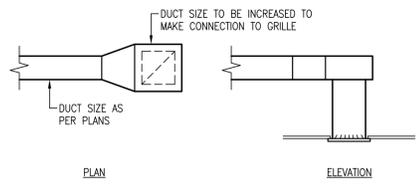
**DUCTWORK DETAILS** 3  
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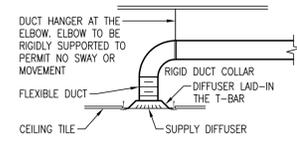
**TAKE-OFF BOOT ON SUPPLY DETAIL** 4  
 SCALE : N.T.S. MV501



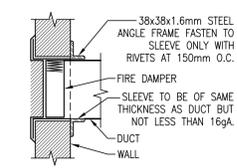
**WALL PENETRATION - DUCTWORK** 5  
 SCALE : N.T.S. MV501



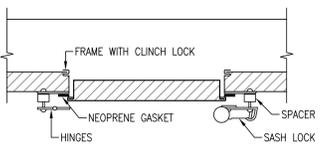
**RETURN/EXHAUST GRILLE CONNECTION DETAIL** 6  
 SCALE : N.T.S. MV501



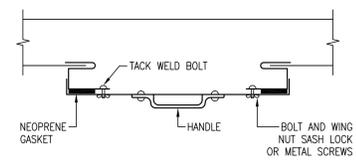
**LAY-IN TYPE DIFFUSER DETAIL** 7  
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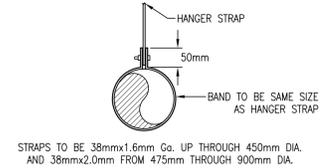
**SIDEWALL GRILLE WITH FIRE DAMPER** 8  
 SCALE : N.T.S. MV501



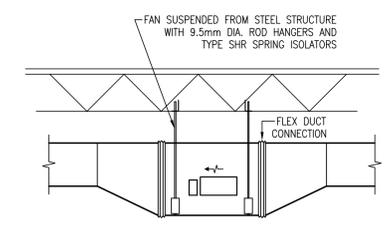
**TYPICAL INSULATED ACCESS DOOR DETAIL** 9  
 SCALE : N.T.S. MV501



**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



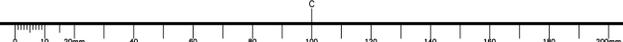
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revisions		date

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

drawing  
**VENTILATION LOUIS S. ST. LAURENT MACHINE SHOP DETAILS**

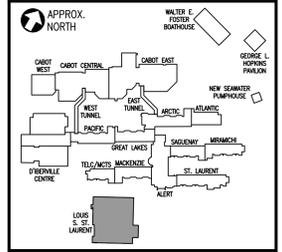
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date 07/06/18	
drawn MAC	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	
Tender	Submission
Joan Muiise	
PWGC Project Manager	Administrateur de projets TPSCG
project number	no. du projet
<b>R.065476.710</b>	
drawing no.	no. du dessin
<b>09-MV-501</b>	

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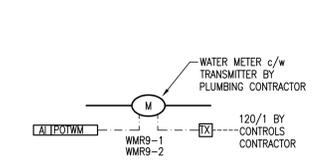




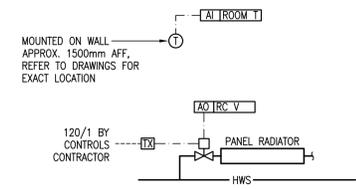




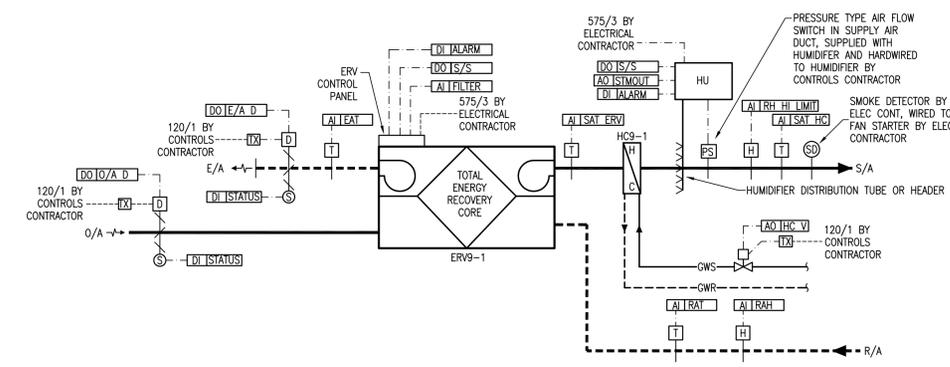
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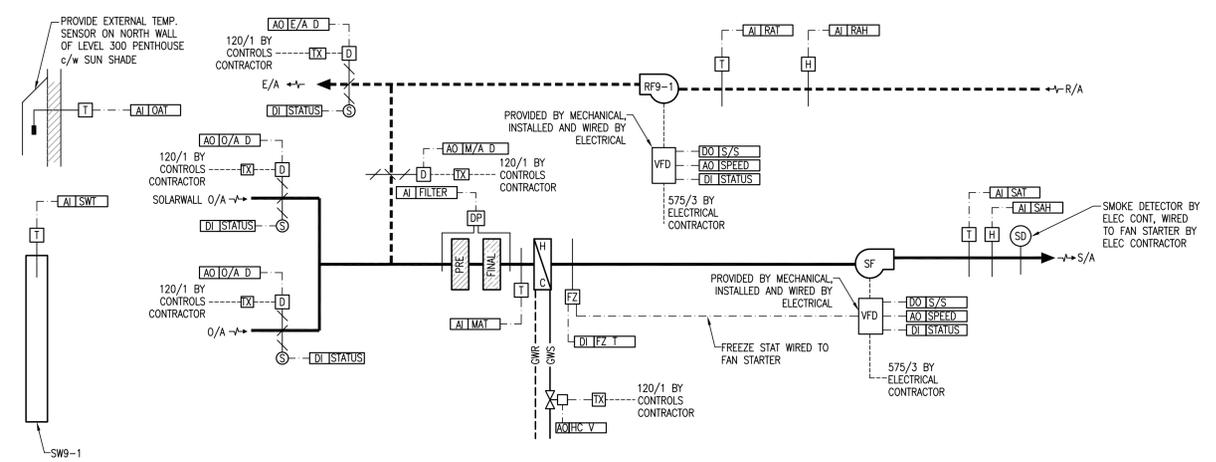
**POTABLE WATER CONTROL** 1  
 N.T.S. MC101



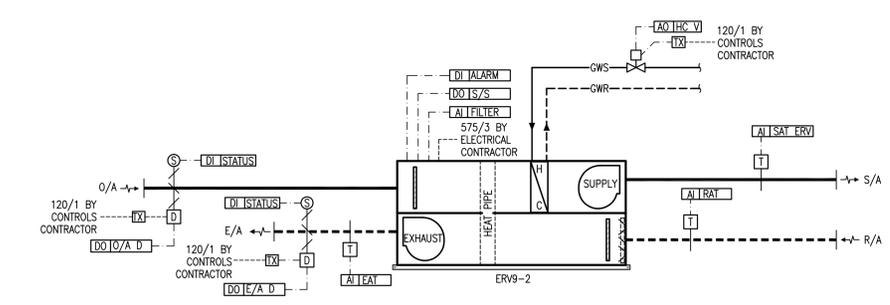
**PANEL RADIATOR CONTROL** 2  
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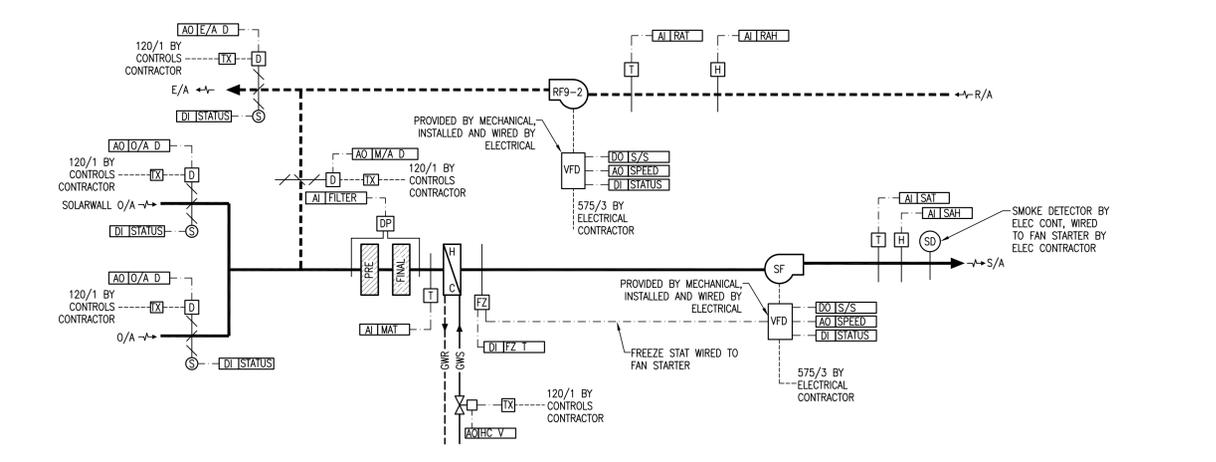
**ERV9-1 CONTROL** 3  
 N.T.S. MC101



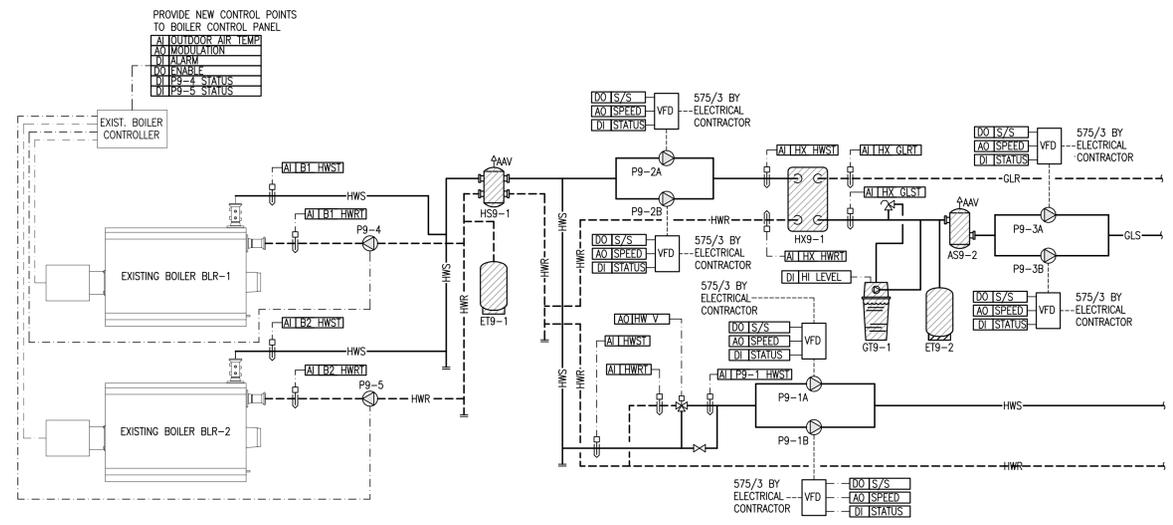
**AHU9-1 CONTROL** 4  
 N.T.S. MC101



**ERV9-2 CONTROL** 5  
 N.T.S. MC101



**AHU9-2 CONTROL** 6  
 N.T.S. MC101



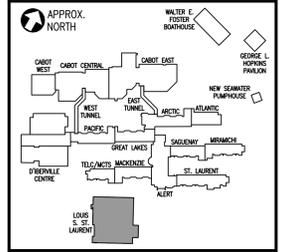
**HEATING SYSTEM CONTROL - BOILER ROOM 108** 7  
 N.T.S. MC101



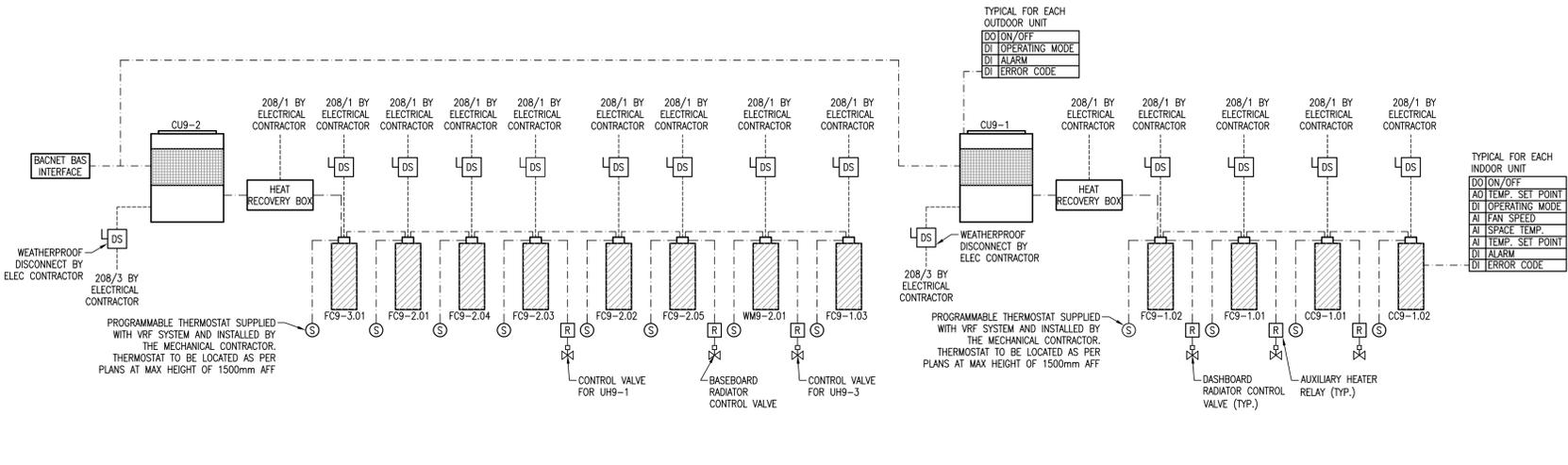
0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
project		

designer  
**CONTROLS**  
 LOUIS S. ST. LAURENT  
 MACHINE SHOP  
 SCHEMATICS

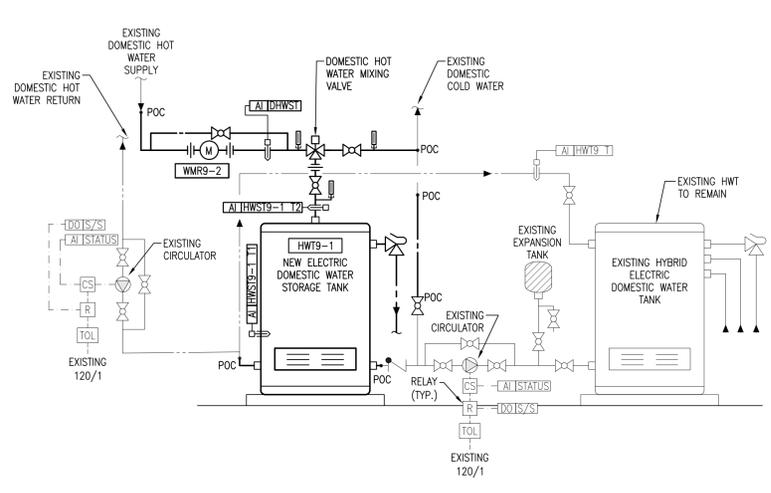
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Tender	Submission
Joan Muise	
PWGC Project Manager	Administrateur de projets TPSCG
project number	no. du projet
R.065476.710	
drawing no.	no. du dessin
09-MC-101	



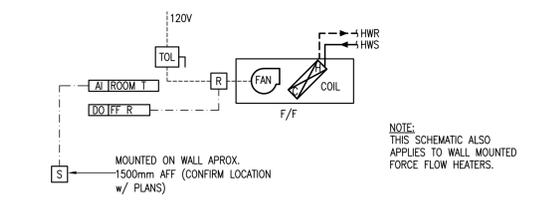
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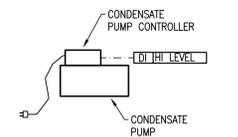
**VRF SYSTEM CONTROL (CU9-1, CU9-2)** 1  
N.T.S. MC102



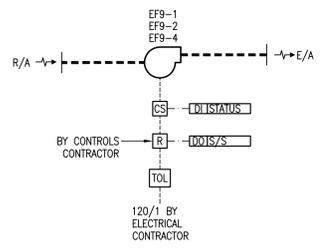
**DOMESTIC HOT WATER CONTROLS** 2  
N.T.S. MC102



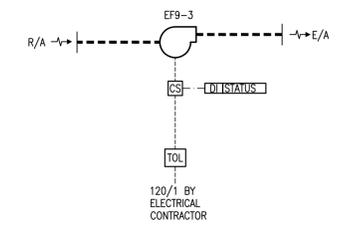
**FORCE FLOW HEATER CONTROL** 3  
N.T.S. MC102



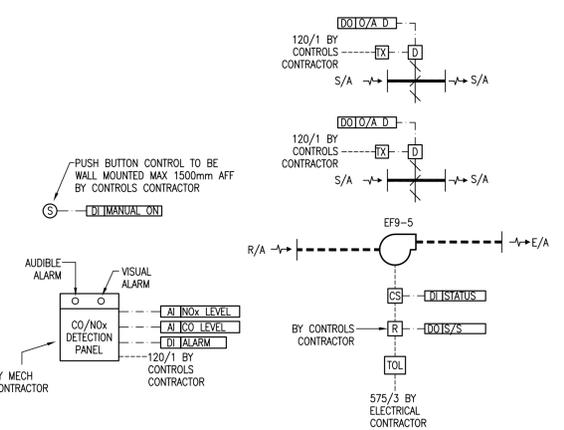
**CONDENSATE PUMP CONTROL** 4  
N.T.S. MC102



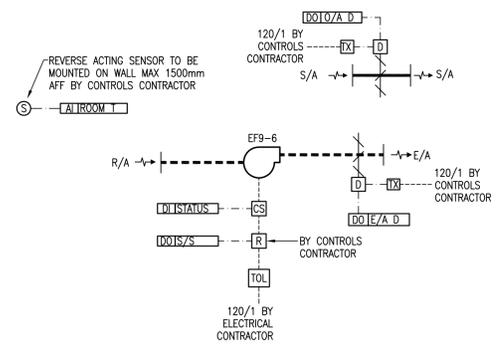
**EF9-1 FLAMMABLE STORAGE EXHAUST** 5  
**EF9-2 WASHDOWN, JANITOR, & PARTS REPAIR** MC102  
**EF9-4 SMALL PARTS REPAIR EXHAUST FAN CONTROL**  
N.T.S.



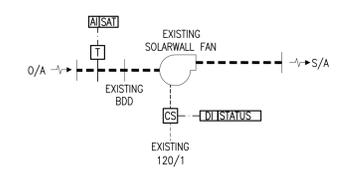
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N.T.S. MC102



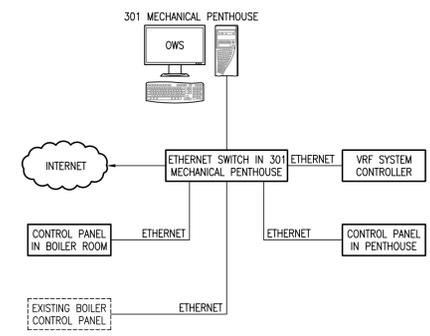
**EF9-5 ENGINE BAY EXHAUST FAN CONTROL** 7  
N.T.S. MC102



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



**EXISTING SOLARWALL CONTROL** 9  
N.T.S. MC102



**LSL SYSTEM ARCHITECTURE** 10  
N.T.S. MC102

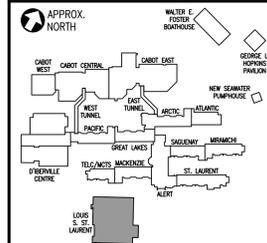


0	Issued for Tender	07/06/18
revisions		date

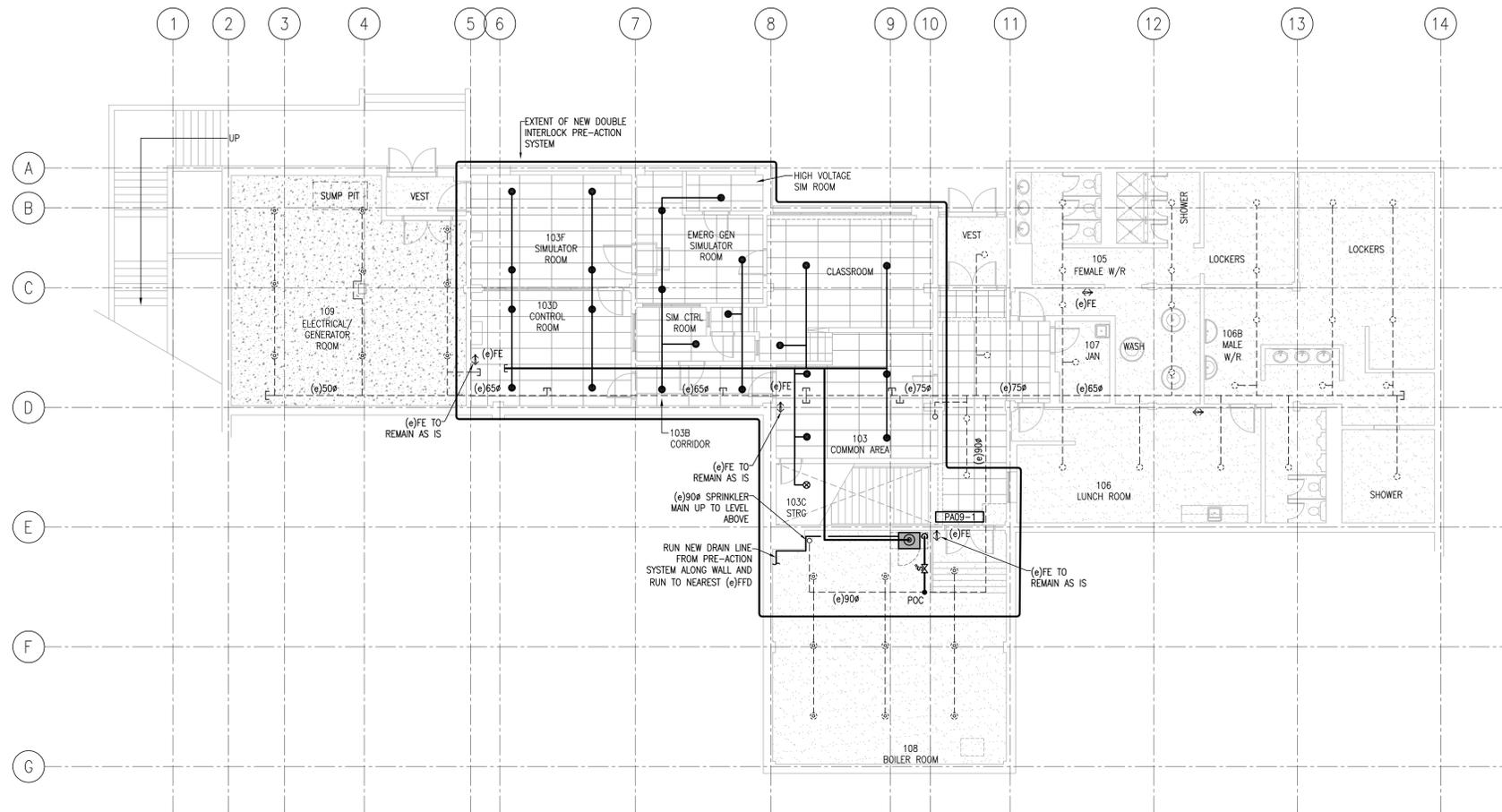
project **CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES** project

drawing **CONTROLS LOUIS S. ST. LAURENT MACHINE SHOP SCHEMATICS** design

designed MJJM	conçu
date 07/06/18	
drawn CAB	dessiné
date 07/06/18	
approved ACJC	approuvé
date 07/06/18	
Tender	Submission
Joan Muiise	
PWGSC Project Manager	Administrateur de projets TPSCG
project number	no. du projet
<b>R.065476.710</b>	
drawing no.	no. du dessin
<b>09-MC-102</b>	

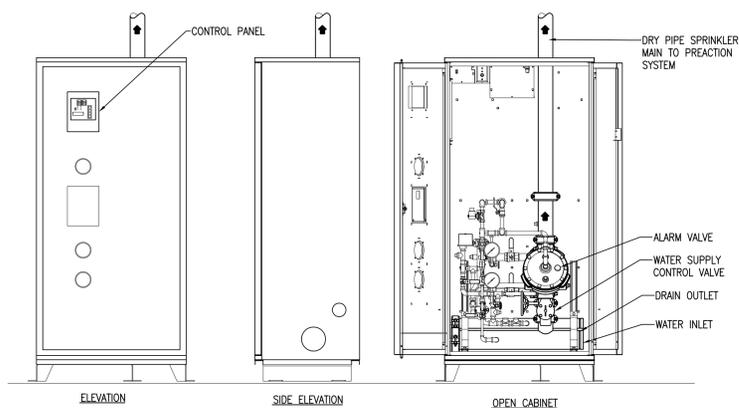


**GENERAL NOTES :**  
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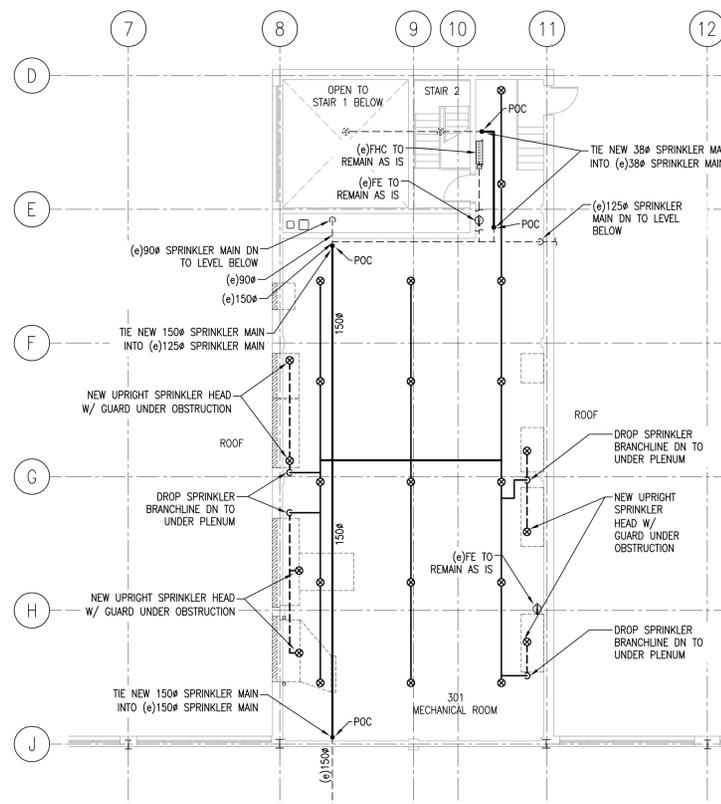


**FIRE PROTECTION – LOUIS S. ST. LAURENT MACHINE SHOP – LEVEL 100 NEW WORK**

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



**DOUBLE INTERLOCK PRE-ACTION SYSTEM DETAIL**  
 SCALE : N.T.S. **1**  
**FP101**



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

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



0	Issued for Tender	07/06/18
revisions		date

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

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

designed MJJM conçu

date 07/06/18

drawn CAB dessiné

date 07/06/18

approved ACJC approuvé

date 07/06/18

Tender Joan Muisse Submission

PWGSC Project Manager Administrateur de projets TPSGC

project number **R.065476.710** no. du projet

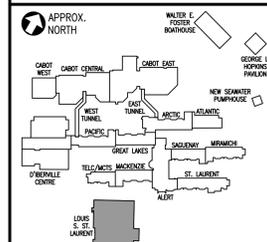
drawing no. **09-FP-101** no. du dessin

09 - LOUIS S. ST. LAURENT MACHINE SHOP - ELECTRICAL DRAWING LIST:

- 538477 - 09 - E-001 - ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEGEND
- 538477 - 09 - ED-101 - ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 100 DEMOLITION
- 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.
	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.
	COMMUNICATIONS OUTLET, 1 DATA, 1 VOICE, MOUNTED 460mm A.F.F., CONSISTING OF 200mm SQ x 53mmDIP BOX, TILE RING, 21mmC 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.
POWER	
	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.
FIRE ALARM AND EMERGENCY/EXIT LIGHTING	



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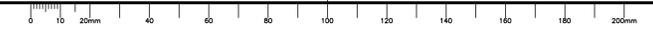
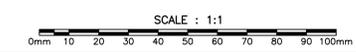


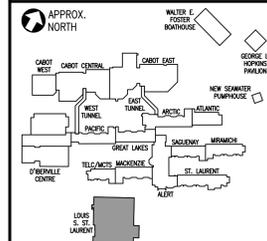
0	Issued for Tender	07/06/18
revisions		date

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

drawing: ELECTRICAL LOUIS S. ST. LAURENT MACHINE SHOP LEGEND

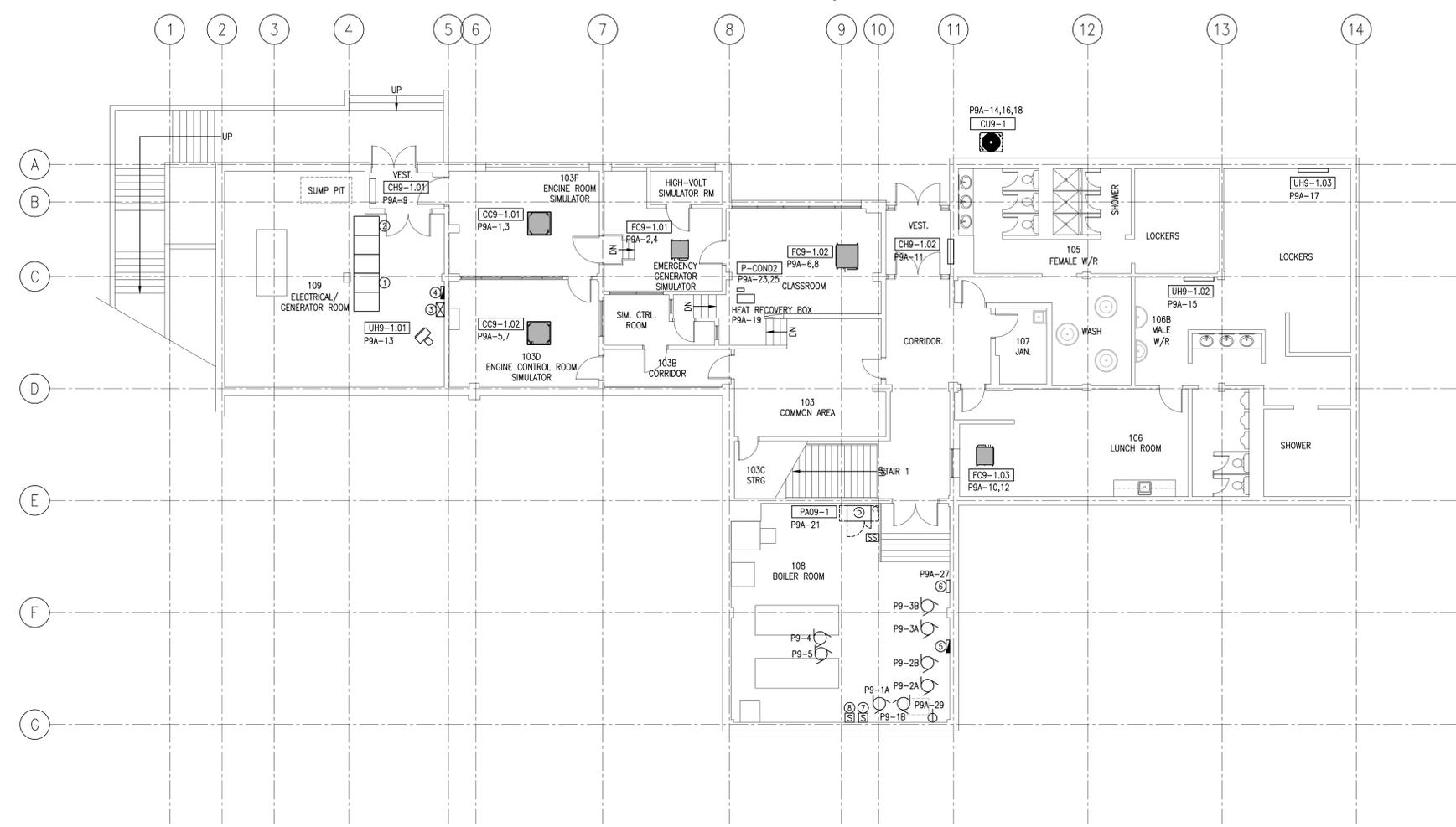
designed CGN	conçu
date 07/06/18	
drawn MAS	dessiné
date 07/06/18	
approved DJM	approuvé
date 07/06/18	
Tender Joan Muise	Submission
PWGSOC Project Manager	Administrateur de projets TPSOC
project number R.065476.710	no. du projet
drawing no. 09-E-001	no. du dessin



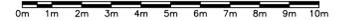


DEMOLITION NOTES	
①	EXISTING 600A, 600V, 3-PHASE, 4-WIRE MAIN SWITCHBOARD TO REMAIN. REVISE BREAKER AS INDICATED ON NEW SINGLE LINE DIAGRAM, DRAWING 09-E-602.
②	EXISTING 600A, 600V, 3-PHASE, 4-WIRE MAIN SWITCHBOARD TO REMAIN. REVISE BREAKER AS INDICATED ON NEW SINGLE LINE DIAGRAM, DRAWING 09-E-602.
③	NEW 30KVA, 600-120/208V, DRY-TYPE TRANSFORMER.
④	NEW 225A, 120/208V, 3-PHASE, 4-WIRE 42 CCT PANELBOARD 'P9A'.
⑤	NEW 100A, 347/600V, 3-PHASE, 4-WIRE PANELBOARD 'CDP-9A'.
⑥	NEW EMCS CONTROL PANEL.
⑦	COMBINATION MAGNETIC STARTER FOR P9-4.
⑧	COMBINATION MAGNETIC STARTER FOR P9-5.

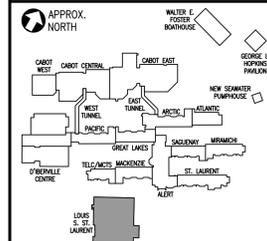
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ELECTRICAL POWER LOUIS S. ST. LAURENT-LEVEL 100-NEW WORK 1  
 SCALE : 1:100



0	Issued for Tender	07/06/18
revisions		date
project	CANADIAN COAST GUARD COLLEGE, SYDNEY, NS LSSL MET MECHANICAL UPGRADES	
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	Submission	
Joan Muisse	Administrateur de projets TPSGC	
project number	no. du projet	
	R.065476.710	
drawing no.	no. du dessin	
	09-EP-101	



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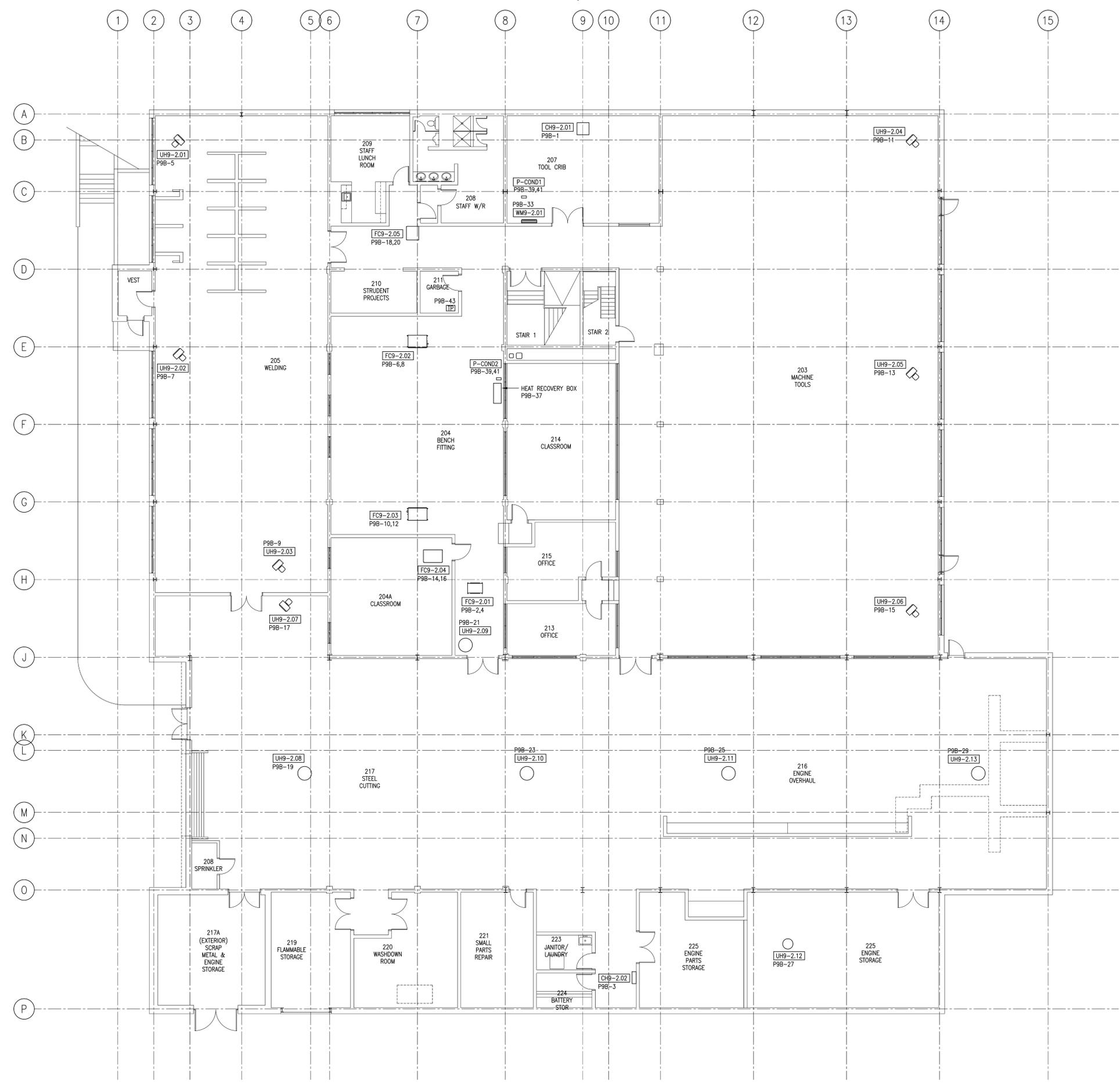
0	Issued for Tender	07/06/18
revisions		date

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

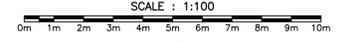
drawing  
**ELECTRICAL POWER LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 200 NEW WORK**

designed	CGN	conçu
date	07/06/18	
drawn	MAS	dessiné
date	07/06/18	
approved	DJM	approuvé
date	07/06/18	

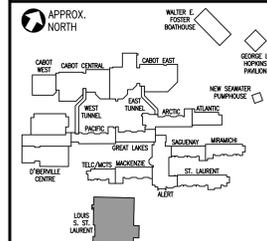
Tender  
 Joan Muise  
 PWGSC Project Manager / Administrateur de projets TPSGC  
 project number / no. du projet  
**R.065476.710**  
 drawing no. / no. du dessin  
**09-EP-102**



**ELECTRICAL POWER LOUIS S. ST. LAURENT-LEVEL 200-NEW WORK** 1  
 SCALE : 1:100  
 EP-102

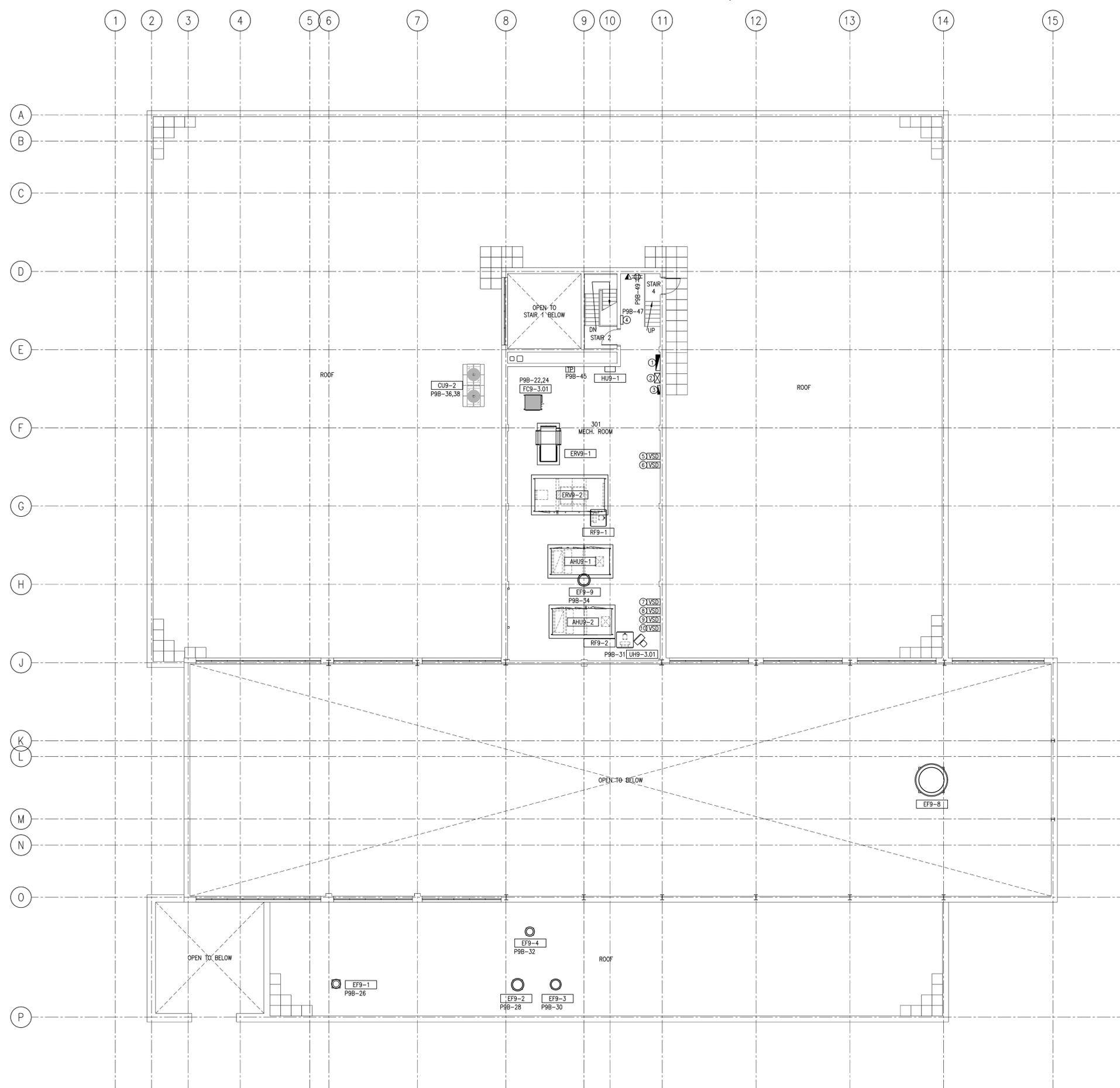


P:\10-15-17-18 - LSSL - Machine Shop\3142-20-EP-102-ELECTRICAL POWER-MACHINE SHOP LEVEL 200 NEW WORK.dwg Jul 05, 2018 - 8:48am  
 PWGSC B1 (2004) E-DRM/GDD-E: 538447



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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 AHU9-1.
⑧	VARIABLE SPEED DRIVE FOR RF9-1.
⑨	VARIABLE SPEED DRIVE FOR AHU9-2.
⑩	VARIABLE SPEED DRIVE FOR RF9-2.



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

SCALE : 1:100



P:\10-15-17171 - LSS - BROWNSVILLE - LSS - MACHINE SHOP - LSS - 10-15-17171 - ELECTRICAL - POWER - MACHINE SHOP - LSS - 300 - NEW WORK - Jul 06, 2018 - 8:45am  
 PWGSC B1 (2004)



0	Issued for Tender	07/06/18
revisions		date

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

drawing  
**ELECTRICAL POWER LOUIS S. ST. LAURENT MACHINE SHOP LEVEL 300 NEW WORK**

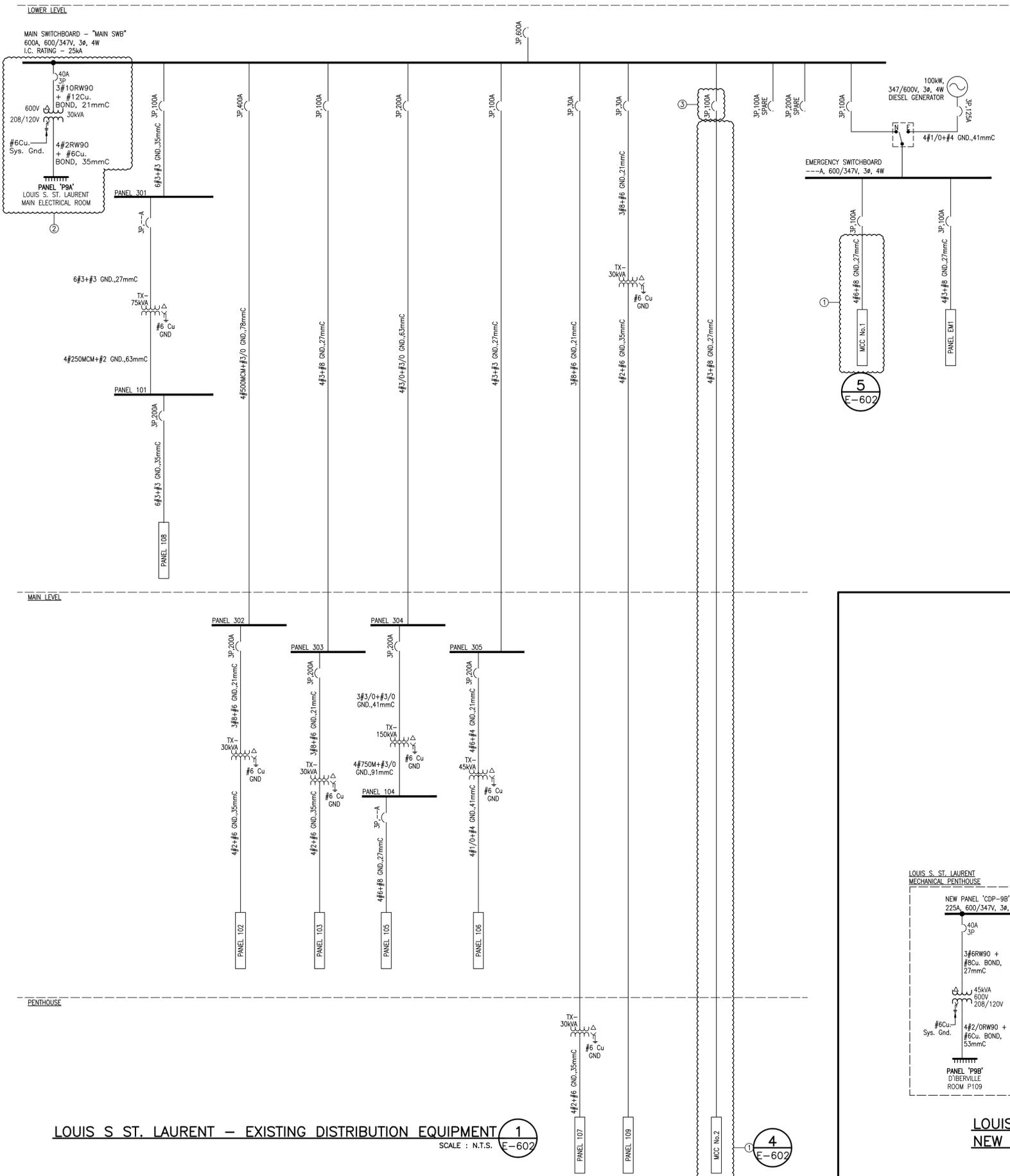
designed CGN	conçu
date 07/06/18	
drawn MAS	dessiné
date 07/06/18	
approved DJM	approuvé
date 07/06/18	

Tender  
 Joan Muisse  
 PWGSC Project Manager / Administrateur de projets TPSGC  
 project number R.065476.710  
 no. du projet

drawing no.  
**09-EP-103**  
 no. du dessin



- 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.



**LOUIS S ST. LAURENT – EXISTING DISTRIBUTION EQUIPMENT** 1  
SCALE : N.T.S. E-602

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

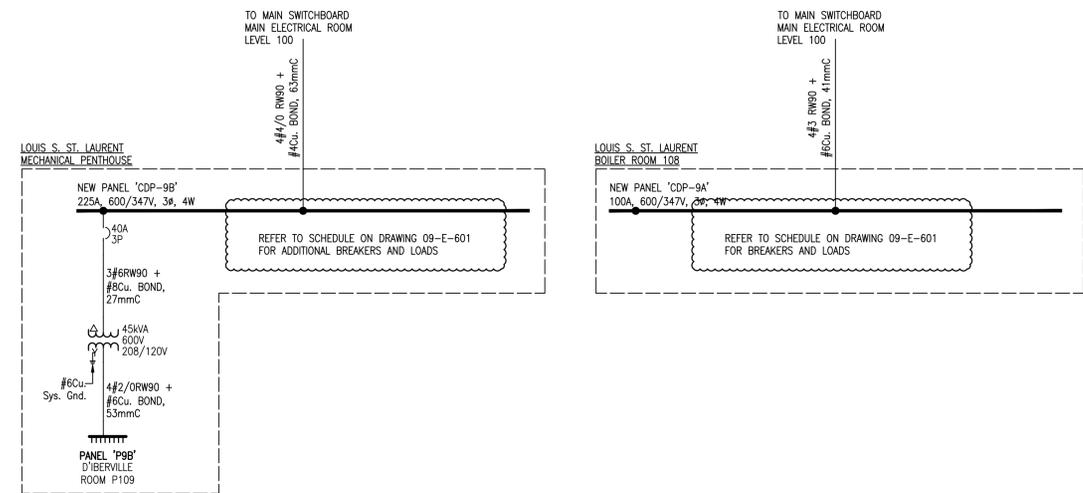
**LOUIS S ST. LAURENT – NEW DISTRIBUTION EQUIPMENT** 5  
SCALE : N.T.S. E-602

NOTES	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	56		1	2P	-0-	2P	2	125			FC9-1.01	
	CC9-1.02			59	5	2P	-0-	2P	6		284		FC9-1.02	
	CH9-1.01		30		9	15A	-0-	2P	10		52		FC9-1.03	
	CH9-1.02			37	11	15A	-0-	15A	12					
	UH9-1.01		62		13	15A	-0-	3P	14	4083				
	UH9-1.02			9	15	15A	-0-	35A	18		4083		CU09-1	
	UH9-1.03				9	17	15A	-0-	15A	20	100		WATER METER	
	HEAT RECOVERY BOX		250		19	15A	-0-	15A	22					
	PA09-1		500		21	15A	-0-	2P	22					
	P-COND2		100		23	2P	-0-	2P	24					
	EMCS PANEL		250		25	15A	-0-	2P	26					
	GLYCOL MIXING TANK			250	29	20A	-0-	2P	28					
					31		-0-	2P	30					
					33		-0-	2P	32					
					35		-0-	2P	34					
					37	20A	-0-	15A	38					
	SPARE				39	20A	-0-	15A	40					SPARE
	SPARE				41	20A	-0-	15A	42					SPARE
	⊕ "A" TOTAL				5119	TOTAL LOAD:								
	⊕ "B" TOTAL				5105	15098 W								
	⊕ "C" TOTAL				4874	41.96 AMPS								

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

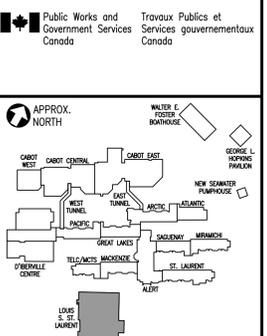
NOTES	DESIGNATION	WATTAGE			CIR NO.	BKR	Ø	BKR	CIR NO.	WATTAGE			DESIGNATION	NOTES
		PH A	PH B	PH C						PH A	PH B	PH C		
	CH9-2.01		30		1	15A	-0-	2P	2	71			FC9-2.01	
	CH9-2.02		30		3	15A	-0-	15A	4		71			
	UH9-2.01			62	5	15A	-0-	2P	6		345		FC9-2.02	
	UH9-2.02		62		7	15A	-0-	15A	8	345				
	UH9-2.03		62		9	15A	-0-	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	-0-	15A	16		247			
	UH9-2.07			37	17	15A	-0-	2P	18			125	FC9-2.05	
	UH9-2.08		124		19	15A	-0-	15A	20	125				
	UH9-2.09		37		21	15A	-0-	2P	22		284		FC9-3.01	
	UH9-2.10			62	23	15A	-0-	15A	24			284		
	UH9-2.11		62		25	15A	-0-	15A	26	37			EF9-1	
	UH9-2.12		37		27	15A	-0-	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	-0-	15A	34		370		EF9-6	
	WM9-2.01		20		35	15A	-0-	2P	36			3536	CU09-2	
	HEAT RECOVERY BOX		250		37	15A	-0-	35A	38	3536				
	P-COND1 & P-COND2		200		39	2P	-0-	15A	40		250		DAMPERS	
				200	41	15A	-0-	15A	42			250	BACNET INTERFACE CONTROLS	
	TRAP PRIMERS		250		43	15A	-0-		44					
	EMCS PANEL		250		45	15A	-0-		46					
	EMCS WORKSTATION			500	47	15A	-0-		48					
					49		-0-		50					
					51		-0-		52					
					53		-0-		54					
	SPARE				55	20A	-0-	15A	56					SPARE
	SPARE				57	20A	-0-	15A	58					SPARE
	SPARE				59	20A	-0-	15A	60					SPARE
	⊕ "A" TOTAL				5358	TOTAL LOAD:								
	⊕ "B" TOTAL				2635	14135 W								
	⊕ "C" TOTAL				6142	39.29 AMPS								

**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.



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