



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

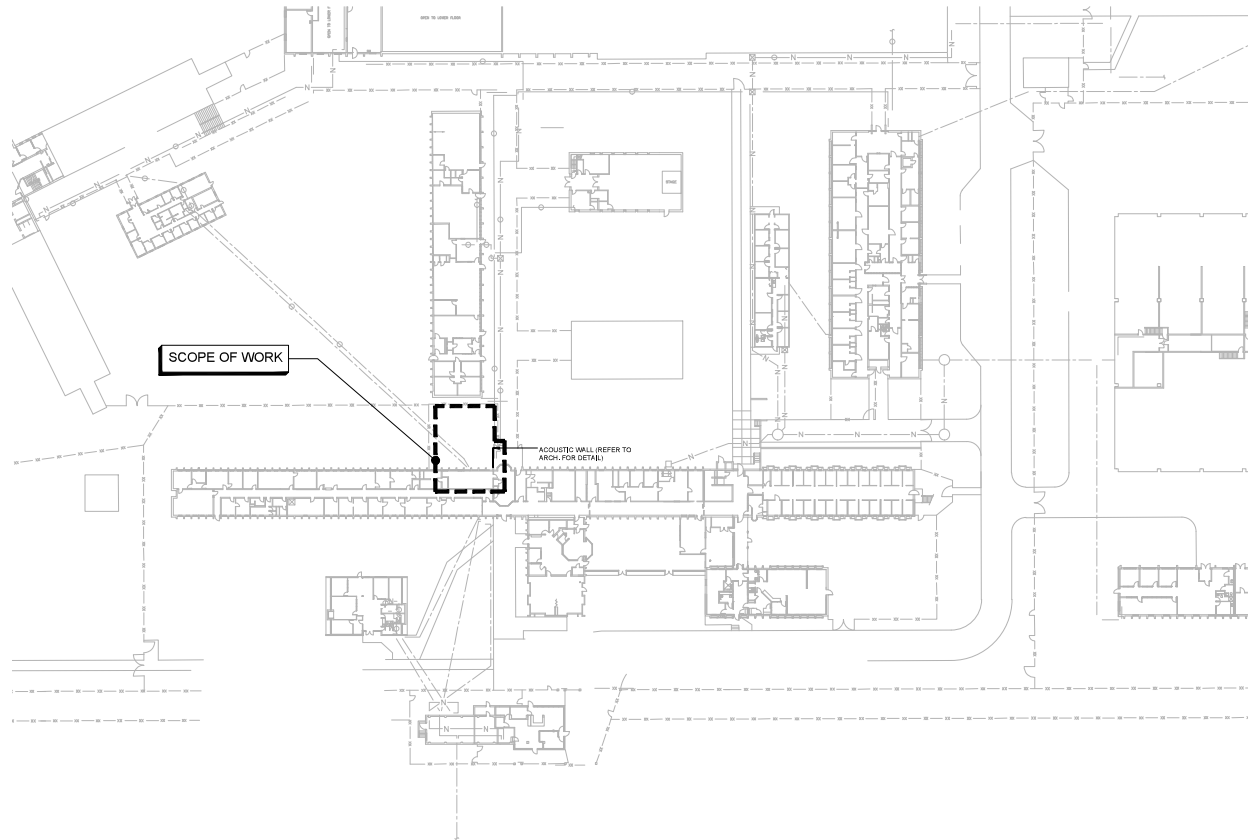
CONTRACT NUMBER: R.113047.001

M2A UPGRADE CER COOLING

MATSQUI INSTITUTION ABBOTSFORD, BC 33344 KING ROAD



ARCHITECTURE | 49



SITE PLAN
SCALE: 1:500

MECHANICAL DRAWING LIST	
SHEET NUMBER	SHEET TITLE
M100	COVER SHEET, SITE PLAN AND DRAWING LIST
M101	DEMOLITION AND NEW COURTYARD & ROOF PLAN
M201	CER HVAC AND PLUMBING PLANS
M301	MECHANICAL SCHEDULES + DETAILS

ELECTRICAL DRAWING LIST	
SHEET NUMBER	SHEET TITLE
E100	SITE PLAN, LEGEND AND DRAWING LIST
E101	ELECTRICAL DEMOLITION AND NEW PLAN
E200	ELECTRICAL PARTIAL, SINGLE LINE AND SCHEDULES

STRUCTURAL DRAWING LIST	
SHEET NUMBER	SHEET TITLE
S101	NOTES, PLAN AND DETAILS

ARCHITECTURAL DRAWING LIST	
SHEET NUMBER	SHEET TITLE
A101	PLAN AND DETAIL

Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS
Région de Paicifique



Revision/Date	Description/Description	Date/Date
C	ISSUED FOR TENDER	21-03-31
B	ISSUED FOR 90% CD	21-01-11
A	ISSUED FOR 60% CD	20-12-10

Client/Client
CORRECTIONAL SERVICE CANADA

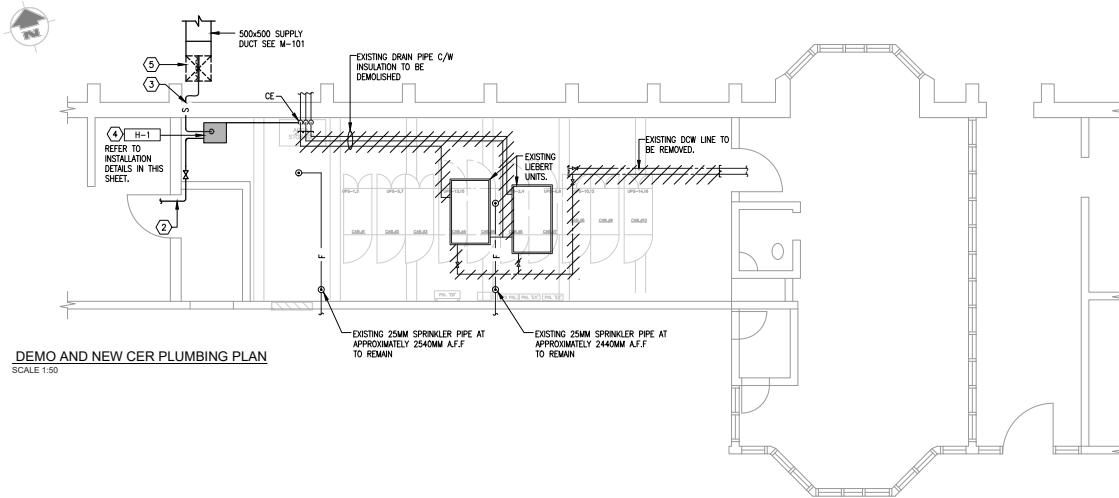
Project title/Titre du projet
**MATSQUI INSTITUTION
ABBOTSFORD, BC
33344 KING ROAD
M2A UPGRADE CER
COOLING**

Consultant Signature Only
Designed by/Concept per
F. HARRIS
Drawn by/Desiné par
RD/RP
PWSIC Project Manager/Administrateur de Projets 1950C
KEN MENDT
Regional Manager, Architectural and Engineering Services
Régionaliste responsable, Services d'architectural et de génie, 1950C
P. PAUL
Drawing title/Titre du dessin

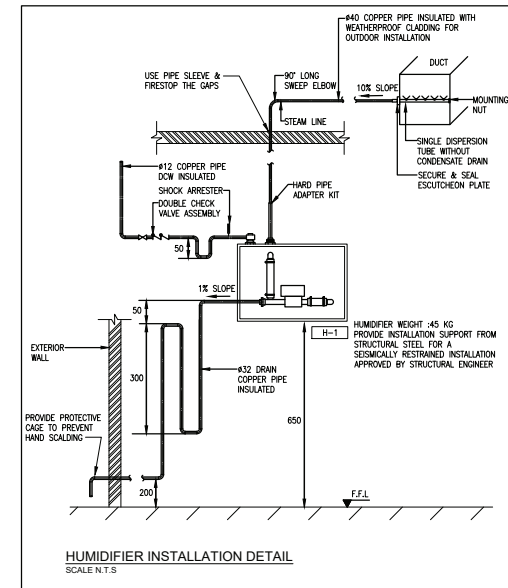
**COVER SHEET, SITE PLAN
AND DRAWING LIST**

Project No./No. du projet	Sheet/Feuille	Revision no./ de Révision
R.113047.001	M100	

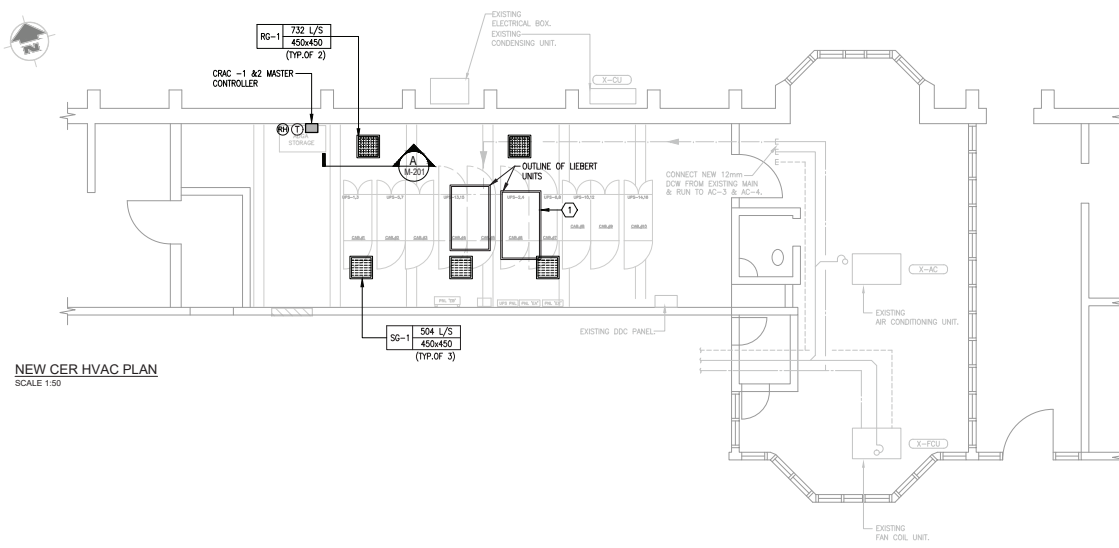




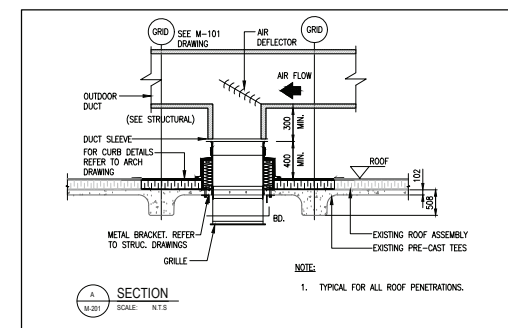
DEMO AND NEW CER PLUMBING PLAN
SCALE 1:50



HUMIDIFIER INSTALLATION DETAIL
SCALE N.T.S.



NEW CER HVAC PLAN
SCALE 1:50



SECTION
SCALE N.T.S.

- KEYED NOTES:
- DEMOLISH EXISTING LiBERT UNITS AFTER NEW SYSTEM HAS BEEN INSTALLED, AND COMMISSIONED.
 - 12 MM NEW DOW FOR HUMIDIFIER H-1, TAKEN FROM WATER SUPPLY TO LAVATORY IN WASHROOM #116.
 - 40MM COPPER STEAM PIPE WITH 50MM INSULATION, WITH WEATHER RESISTANT JACKET, 10% SLOPED TOWARD HUMIDIFIER.
 - INSTALL AND PROVIDE DRAIN PIPING PER MANUFACTURER REQUIREMENTS. PIPE DRAIN TO OUTSIDE OF ROOM.
 - INSTALL STEAM DISPERSION TUBE IN THE SPECIAL VERTICAL STAINLESS STEEL-LINED-DUCT AS LOW AS POSSIBLE TO ALLOW FOR 10% STEAM PIPE SLOPE TOWARDS THE HUMIDIFIER, AND A MINIMUM OF 1500MM DISPERSION LENGTH BEFORE THE DUCT ELBOW DOWNSTREAM OF THE DUCT.



Revision/Description	Description/Description	Date/Date
C	ISSUED FOR TENDER	21-03-31
B	ISSUED FOR 90% CD	21-01-11
A	ISSUED FOR 60% CD	20-12-10

Client/Client
CORRECTIONAL SERVICE CANADA

Project file/Titre du projet
MATSQUH INSTITUTION
ABBOTSFORD, BC
33844 KING ROAD
M2A UPGRADE CER COOLING

Consultant Signature Only
Designed by/Concept par
F. HARRIS
Drawn by/Designé par
RD/RP
PROJECT Project Manager/Administrateur de Projets TP500
KEN MENDOT
Registered Planner, Architectural and Engineering Services
Certificat de planification, Services d'architecture et de génie, TP500
P. PAUL
Drawing title/Titre du dessin

CER HVAC AND PLUMBING PLANS

Project No./No. du projet	Sheet/Feuille	Revision no./No. de Révision
R113047.001	M201	





SELF-CONTAINED PACKAGE UNIT								
Unit Tag	MANUFACTURER / MODEL NUMBER	UNIT LEVEL OPTIONS				CONTROLS AND VFD/STARTER		
		PRODUCT GROUP	ACTUAL AIRFLOW	UNIT SIZE	INTEGRAL BASE FRAME	FACTORY CONTROLS PACKAGE	CONTROLLER MOUNTING	CONTROLLER TYPE
			L/s	Tons				
CRAC-1	AAON/ RN 011 OR APPROVED EQUAL	OUTDOOR UNIT	1510	10	6IN. INTEGRAL BASE FRAME	VARIABLE VOLUME	UNIT MOUNTED	DDC WITH BACNET INTERFACE
CRAC-2	AAON/ RN 011 OR APPROVED EQUAL	OUTDOOR UNIT	1510	10	6IN. INTEGRAL BASE FRAME	VARIABLE VOLUME	UNIT MOUNTED	DDC WITH BACNET INTERFACE

SELF-CONTAINED PACKAGE UNIT										
FAN SECTION										
FAN APPLICATION	MOTOR HORSEPOWER PER FAN	TOTAL BRAKE HORSEPOWER	MOTOR VOLTAGE	DRIVE SERVICE FACTOR	OVERALL ESP	FAN TYPE	FAN SIZE AND TYPE	FAN QUANTITY	MOTOR INTERFACE OPTIONS	FAN WHEEL BALANCE
		kW	V/ph/Hz		Pa					
SUPPLY FAN	5 HP	2	208/3/60	DIRECT DRIVE	400	PLENUM	27IN. DD PLENUM, FULL	1	FACTORY INSTALLED VFD	INVERTER BALANCE WITH SHAFT GROUNDING
SUPPLY FAN	5 HP	2	208/3/60	DIRECT DRIVE	400	PLENUM	27IN. DD PLENUM, FULL	1	FACTORY INSTALLED VFD	INVERTER BALANCE WITH SHAFT GROUNDING

SELF-CONTAINED PACKAGE UNIT											
SYSTEM TYPE	COIL SECTION					AIR-COOLED CONDENSING SECTION				AIR MIXING SECTION	
	ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	NET TOTAL CAPACITY	NET SENSIBLE CAPACITY	REFRIGERANT	NO. OF CIRCUITS	COMPRESSORS	CONDENSER FANS	FILTER 1	FILTER 2
	C	C	C	KW	KW					PLEATED MEDIA	PLEATED MEDIA
DX	24.1	19.4	9.6	33	23.5	R-410A	2	1 VARIABLE 1 ON/OFF	2 FANS WITH ECM	50 MM MERV 8	100 MM MERV 14
DX	24.1	19.4	9.6	33	23.5	R-410A	2	1 VARIABLE 1 ON/OFF	2 FANS WITH ECM	50 MM MERV 8	100 MM MERV 14

ACCESSORIES:
 1- ENTHALPHY CONTROLLED ECONOMIZER WITH MODULATING DAMPERS.
 2- 21 KW HOT GAS REHEAT COIL.
 3- CLOGGED FILTER SWITCH.
 4- SINGLE POINT POWER DISCONNECT SWITCH.
 5- ECM CONDENSER FAN HEAD PRESSURE CONTROL.
 6- END RETURN, END DISCHARGE.
 7- DOUBLE WALL CONSTRUCTION WITH R-13 FOAM INSULATION.

8-FULLY INTEGRAL CONTROLLER WITH BACNET INTERFACE.
 9-MASTER CONTROLLER WITH KEYPAD, REMOTELY INSTALLED.
 10-C/W ALL SENSORS.
 11-FACTORY WIRED.
 12-FACTORY PROGRAMMED CONTROL SYSTEM.

STEAM HUMIDIFIER SCHEDULE														
EQUIPMENT TAG	QTY	MODEL	CAPACITY	AIR VOLUME	POWER INPUT	VOLTS/ PHASE/ HZ	STEAM DISPERSION MODEL	NON WETTING DISTANCE/ THROW	ENTERING AIR CONDITIONS	LEAVING AIR CONDITIONS	DUCT DIMENSION W X H	HEAT GAIN FROM ASSEMBLY & STEAM	WEIGHT	REMARKS
			KG/HR (LBS/HR)	L/S (CFM)	KW			MM (INCHES)	°C/°RH (°F/°RH)	°C/°RH (°F/°RH)	MM (INCHES)	°C (°F)		
H-1	1	DRISTEEM VAPORMIST VM-12 OR APPROVED EQUAL	16.3 (36)	1510 (3200)	12	208/3/60	SINGLE DISPERSION TUBE-38MM (1.5") WITHOUT DRAIN	711 (28)	10.44/50% (50.8/50%)	10.80/73% (51.45/73%)	500 X 500 (20"X20")	0.36 (0.65)	63 (139)	C/W DISCONNECT SWITCH, INTEGRAL ELECTROIC CONTROLLER WITH REMOTE SET-POINTS INPUT, ALARM OUTPUT AND BACNET INTERFACE.

GRILLES, DIFFUSERS, & LOUVRES				
TAG No.	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES
SG	SUPPLY GRILLE	EH-PRICE	610	Aluminum, Adjustable 3/4" spacing single blades parallel to long dimension, duct mounted with flange
RG	RETURN GRILLE	EH-PRICE	80	Egg-Crate, Aluminum 0 degree 1/2" x1/2" x1/2" core, exposed duct boarder with duct mounting frame.

C	ISSUED FOR TENDER	21-03-31
B	ISSUED FOR 99% CD	21-01-11
A	ISSUED FOR 66% CD	20-12-10
Revision/Revisions	Description/Description	Date/Date
Client/Client		
CORRECTIONAL SERVICE CANADA		
Project file/Titre du projet		
MATSUHI INSTITUTION ABBOTSFORD, BC 33344 KING ROAD M2A UPGRADE CER COOLING		
Consultant Signature Only		
Designed by/Concepté par F. HARRIS		
Drawn by/Dessiné par RD/RP		
PWSGC Project Manager/Administrateur de Projets TPSSGC KEN MENDT		
Regional Manager, Architectural and Engineering Services Gestionnaire régional, Services d'architectural et de génie, TPSSGC P. PAUL		
Drawing file/Titre du dessin		
MECHANICAL SCHEDULES + DETAILS		
Project No./No. du projet R113047.001	Sheet/Feuille M301	Revision no./No. de la Revision ec.





PROJECT
NORTH

SCOPE OF WORK

EXISTING ELECTRICAL ROOM

1 SITE PLAN
E100 SCALE 1:500

DRAWING LIST

- E100 SITE PLAN, LEGEND & DRAWING LIST
- E101 ELECTRICAL FLOOR PLAN - DEMOLITION AND NEW
- E200 ELECTRICAL PARTIAL SINGLE LINE AND SCHEDULES

LEGEND

SYMBOL	DESCRIPTION
[Symbol]	LUMINAIRE - 1' x 4' (305mm x 1220mm)
[Symbol]	LUMINAIRE - 2' x 4' (610mm x 1220mm)
[Symbol]	LUMINAIRE - 2' x 2' (610mm x 610mm)
[Symbol]	LUMINAIRE - 1/2' x 4' (152mm x 1220mm)
[Symbol]	TRACK LIGHTING
[Symbol]	LUMINAIRE - CONNECTED TO EMERGENCY POWER CIRCUIT
[Symbol]	LUMINAIRE - UNWIRCHED
[Symbol]	CEILING OR PENDANT MOUNTED LUMINAIRE
[Symbol]	WALL MOUNTED LUMINAIRE
[Symbol]	WALL MOUNTED STEP LIGHT
[Symbol]	EXIT SIGN FIXTURE - WALL MOUNTED SINGLE FACE
[Symbol]	EXIT SIGN FIXTURE - WALL MOUNTED SINGLE FACE WITH DIRECTION AS INDICATED
[Symbol]	EXIT SIGN FIXTURE - WALL MOUNTED DOUBLE FACE WITH DIRECTION AS INDICATED
[Symbol]	EXIT SIGN FIXTURE - CEILING MOUNTED SINGLE FACE
[Symbol]	EXIT SIGN FIXTURE - CEILING MOUNTED SINGLE FACE WITH DIRECTION AS INDICATED
[Symbol]	EXIT SIGN FIXTURE - CEILING MOUNTED DOUBLE FACE WITH DIRECTION AS INDICATED
[Symbol]	EMERGENCY BATTERY PACK C/W RECEPTACLE
[Symbol]	EMERGENCY LIGHTING ESCAPE HEADS
[Symbol]	LIGHTING POLE C/W 1 HEADS
[Symbol]	LIGHTING POLE C/W 2 HEADS
[Symbol]	SINGLE POLE TOGGLE SWITCH
[Symbol]	SINGLE POLE TOGGLE SWITCH, KEY OPERATED
[Symbol]	SINGLE POLE TOGGLE SWITCH C/W PILOT LIGHT
[Symbol]	SINGLE POLE TOGGLE SWITCH, 3 WAY
[Symbol]	SINGLE POLE DIMMER SWITCH
[Symbol]	SINGLE POLE LOW VOLTAGE SWITCH
[Symbol]	SINGLE POLE SWITCH C/W MOTION DETECTOR
[Symbol]	SINGLE RECEPTACLE
[Symbol]	DUPLEX RECEPTACLE
[Symbol]	DOUBLE DUPLEX RECEPTACLE
[Symbol]	REFRIGERATOR RECEPTACLE
[Symbol]	RANGE RECEPTACLE
[Symbol]	15/20A RECEPTACLE
[Symbol]	DUPLEX RECEPTACLE SMOKE SUPPRESSION
[Symbol]	DUPLEX RECEPTACLE ISOLATED GROUND
[Symbol]	DUPLEX RECEPTACLE SPLIT CIRCUIT
[Symbol]	DUPLEX RECEPTACLE - FLOOR MOUNTED
[Symbol]	SPECIAL PURPOSE OUTLET (S) (WAS WIRED)
[Symbol]	TELEPHONE OUTLET
[Symbol]	COMPUTER / DATA OUTLET
[Symbol]	COMBINATION TELEPHONE & DATA OUTLET C/W 1 TELEPHONE AND 1 DATA DROP UNLESS NOTED OTHERWISE FOR EXAMPLE: 2D 2D = 2 DATA DROPS
[Symbol]	1T 1T = 1 TELEPHONE DROP
[Symbol]	WALL MOUNTED TELEPHONE HANGSET
[Symbol]	COZY OUTLET
[Symbol]	TELEPHONE OUTLET - MOUNTED IN FLOOR BOX ASSEMBLY
[Symbol]	FIRE ALARM BREAK GLASS STATION
[Symbol]	END OF LINE RESISTOR
[Symbol]	HEAT DETECTOR - RATE OF RISE AND FIXED TEMPERATURE
[Symbol]	HEAT DETECTOR - RATE OF RISE AND FIXED TEMPERATURE COMBIBLANCE OR CEILING PLUNGE SPACE
[Symbol]	FIRE ALARM ZONE
[Symbol]	FIRE ALARM VISUAL SIGNAL STROBE LIGHT
[Symbol]	FIRE ALARM VISUAL & AUDIO SIGNAL & STROBE LIGHT
[Symbol]	PUBLIC ADDRESS SPEAKER - CEILING MOUNTED
[Symbol]	PUBLIC ADDRESS SPEAKER - WALL MOUNTED
[Symbol]	SPEAKER VOLUME CONTROL
[Symbol]	SMOKE DETECTOR - IONIZATION TYPE
[Symbol]	SMOKE DETECTOR C/W RELAY CONTACT
[Symbol]	MOTOR SWITCHER - MAGNETIC
[Symbol]	MOTOR SWITCHER - MANUAL
[Symbol]	MOTOR
[Symbol]	FUSED DISCONNECT SWITCH UNLESS NOTED OTHERWISE
[Symbol]	MECHANICAL EQUIPMENT IDENTIFICATION TAG
[Symbol]	JUNCTION BOX
[Symbol]	CLOCK
[Symbol]	LUMINAIRE IDENTIFICATION TAG - LETTER DENOTES FIXTURE TYPE
[Symbol]	PHOTOCELL SENSOR (TYPE 1 OR AS INDICATED)
[Symbol]	PANELBOARD
[Symbol]	ELECTRIC RELAY PANEL
[Symbol]	FINISHCOAT
[Symbol]	BASEBOARD OR RADIANT HEATER
[Symbol]	MAGNETIC DOOR HOLDER - WALL / FLOOR MOUNTED
[Symbol]	SPRINKLER LOW PRESSURE SWITCH
[Symbol]	SPRINKLER FLOW SWITCH
[Symbol]	SPRINKLER TRIPPER SWITCH
[Symbol]	SPRINKLER ALARM HUE
[Symbol]	EXISTING DEVICE TO BE REPEACE
[Symbol]	CONDUIT ONLY
[Symbol]	INDICATES DEVICE IS ABOVE COUNTER
[Symbol]	INDICATES DEVICE IS WEATHER PROOF
[Symbol]	INDICATES DEVICE IS EXPLOSION PROOF
[Symbol]	EXISTING DEVICE TO REMAIN
[Symbol]	INDICATES DEVICE TO BE REMOVED
[Symbol]	EXISTING DEVICE TO BE RELOCATED

Public Works and Government Services
Canadian

Travaux publics et Services gouvernementaux
Canada

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS
Région de Pacifique



2021-113-11

Revision	Description/Description	Date/Date
C	ISSUED FOR TENDER	21-03-31
B	ISSUED FOR 99% CD	21-01-13
A	ISSUED FOR 60% CD	20-12-10

Client/Client
CORRECTIONAL SERVICE CANADA

Project title/Titre du projet
**MATSUJI INSTITUTION
ABBOTSFORD, BC
33344 KING ROAD
M2A UPGRADE CER
COOLING**

Consultant Signature Only
NOT APPLICABLE
Designed by/Concept par
SANJOT CHEEMA
Drawn by/Dessiné par
THANG CAO
PROJECT MANAGER/ADMINISTRATEUR DE PROJETS
KEN MENDY

Regional Manager, Architectural and Engineering Services
Gestionnaire régional, Services d'architecture et de génie, 19300
P. PAUL

Project No./No. du projet	Sheet/Feuille	Revision/rev. no.
R18047.001	E100	





- REFERENCED NOTES:**
1. DISCONNECT DEVICES INDICATED "RM" AND REMOVE ASSOCIATED RACKWAY, ALL ASSOCIATED CABLEING, WIRING, CONNECTORS, DEVICES, WIRMS, MOUNTING HARDWARE ETC. BACK TO SOURCE AND WIRE SAFE.
 2. DISCONNECT AND REMOVE EXISTING "PANEL EB" COMPLETE WITH FEEDER CABLE FROM PANEL EA.
 3. PROVIDE NEW "PANEL EB" 225A-120/209V, 3P/4, 4W, 400kV C/W WITH 150A MAIN BREAKER AND INSTALLED AT THE SAME LOCATION, SUPPLIED WITH A RATED FEEDER FROM THE MAIN DISTRIBUTION BOARD. RELOCATE EXISTING LOADS TO NEW REPLACED PANEL AS INDICATED IN PANEL SCHEDULE.
 4. DISCONNECT DEVICES INDICATED "RL" AND RELOCATE ASSOCIATED EXISTING LUMINAIRES ACCORDING TO NEW LOCATION TO ACCOMMODATE NEW MECHANICAL INSTALLATION AND TO MAINTAIN LIGHTING LEVEL (TYPICAL)

- GENERAL NOTES:**
1. EXTEND THE EXISTING CIRCUITS OVER TO THE NEW LOCATION.
 2. PROTECT ALL EXISTING FIRE ALARM, POWER AND LIGHTING DEVICES TO REMAIN. BAG ALL SMOKE DETECTORS IN CEILING. PROVIDE ZONE ISOLATION FOR WORK DURING THE CONSTRUCTION PERIOD. DO NOT LOSE AREA UNPROTECTED AND RESET BYPASS EACH AND EVERY NIGHT.
 3. ALL SHUT DOWNS SHALL BE COORDINATED WITH DEPARTMENTAL REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.
 4. ITEMS REMOVED SHALL BE TAKEN DOWN, IMPOUNDED AND STORED WITH ALL COMPONENTS ON SITE IN SPACE TO BE IDENTIFIED BY THE DEPARTMENTAL REPRESENTATIVE. OPENING ELECTRICAL CONTINUOUS SHALL DISPOSE OF THE MATERIAL FROM THE SITE IN ACCORDANCE WITH EPA REGULATIONS.
 5. PROVIDE APPROPRIATELY RATED FIRESTOP AT ANY LOCATIONS WHERE CABLES PASS THROUGH FIRE RATED STRUCTURES. PROVIDE THE MANUFACTURER'S INFORMATION ON THE FIRESTOPPING MATERIAL, BEING USED AND THE APPROPRIATE O/L/A INSTALLATION DRAWING USED FOR THE INSTALLATION. PROVIDE FIRESTOPPING INFORMATION LABEL NEAR FIRESTOPPED OPENING.
 6. ALL INSTALLATIONS SHALL CONFORM TO THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE, B.C. BUILDING CODE.
 7. COORDINATE LUMINAIRE INSTALLATION WITH MECHANICAL DRAWINGS. REFER TO MECHANICAL DRAWINGS FOR ELEVATION AND SECTION DETAILS.
 8. COORDINATE LUMINAIRE INSTALLATION WITH THE INSTALLATIONS OF OTHER DISCIPLINES (ARCHITECTURAL, MECHANICAL, ETC.) ON SITE.
 9. PROVIDE NEW PRINTED PANEL SCHEDULE WITH NEW ADDITIONS AS REQUIRED ON EXISTING PANELS.
 10. PROVIDE ALL EXTERIOR ELECTRICAL DEVICES DISCONNECT SWITCHES, ETC SHALL BE RATED AS NEW AC.

Revision/	Description/Description	Date/Date
C	ISSUED FOR TENDER	21-03-31
B	ISSUED FOR 90% CD	21-01-13
A	ISSUED FOR 60% CD	20-12-10

Client/Client: **CORRECTIONAL SERVICE CANADA**

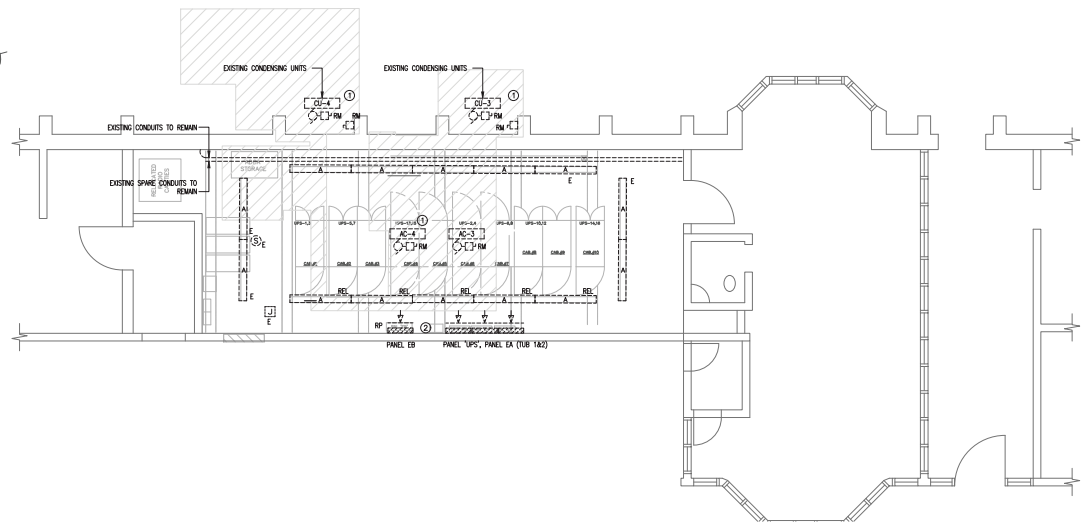
Project title/Titre du projet:
**MATSCHI INSTITUTION
 ABBOTSFORD, BC
 33344 KING ROAD
 M2A UPGRADE CER
 COOLING**

Consultant Signature Only
 NOT APPLICABLE
 Designed by/Conçue par: SANJOT CHEEMA
 Drawn by/Dessiné par: THANG CAO
 Project Manager/Administrateur de Projets: KEN MENDY
 Regional Manager, Architectural and Engineering Services: P. PAUL

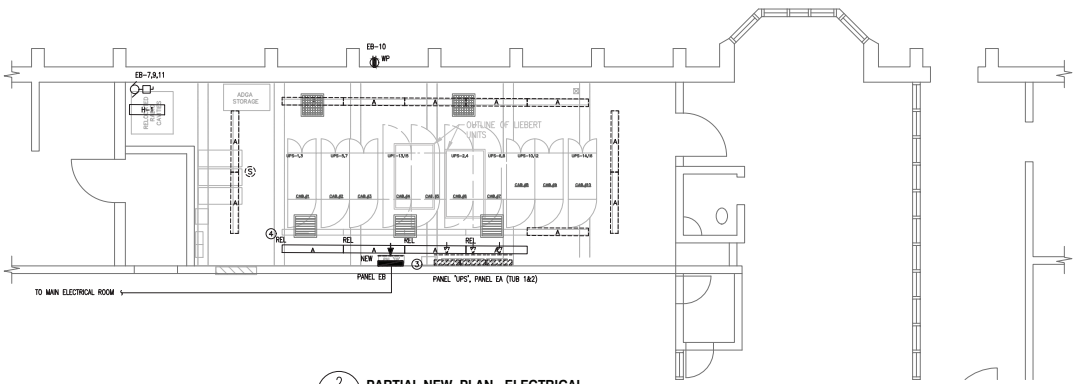
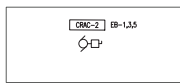
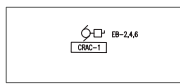
Drawing title/Titre du dessin:
**ELECTRICAL
 DEMOLITION AND NEW
 PLAN**

Project No./No. du projet: R19047.001	Sheet/Feuille: E101	Revision/
---	-------------------------------	-----------

811-0691-06-E101 / 3110201 10-447-A6



1 PARTIAL DEMOLITION PLAN - ELECTRICAL
 SCALE 1:50

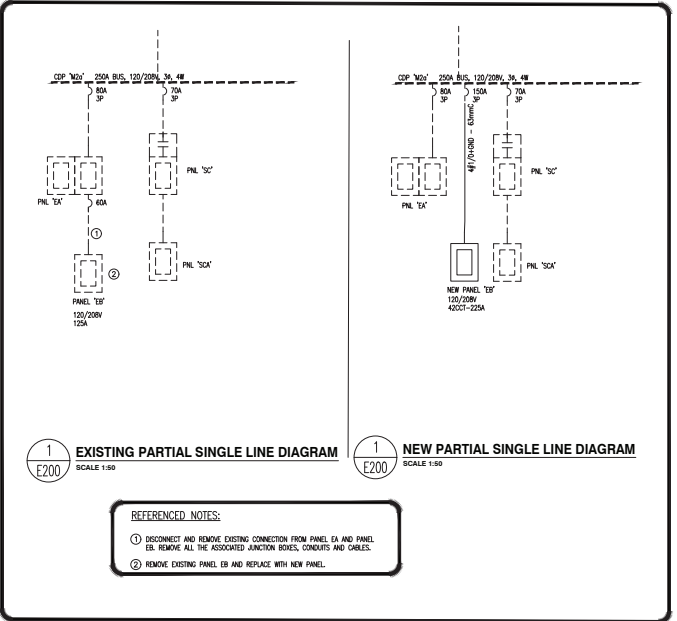


2 PARTIAL NEW PLAN - ELECTRICAL
 SCALE 1:50





2021-03-31



REFERENCED NOTES:

- ① DISCONNECT AND REMOVE EXISTING CONNECTION FROM PANEL '3A' AND PANEL '3B'. REMOVE ALL THE ASSOCIATED JUNCTION BOXES, CONDUITS AND CABLES.
- ② REMOVE EXISTING PANEL '3B' AND REPLACE WITH NEW PANEL.

NEW SURFACE MOUNTED PANEL EB

MOUNTING SURFACE DESCRIPTION	C/W BRK #	120/208V 3PH 4 W			LOAD #	BRK	DESCRIPTION
		150A MAIN BREAKER					
		A	B	C			
CRAC-1	70A	1 6605			6605	2	CRAC-2
		3 6605			6605	4	
		5 6605			6605	6	
H-1	40A	7 4000			1000	8	HEAT TARGE
		9 4000			500	10	20A MAINT. REC
		11 4000				12	20A SPARE
SPARE	15A	13				14	15A SPARE
SPARE	15A	15				16	15A SPARE
SPARE	15A	17				18	15A SPARE
SPARE	15A	19				20	15A SPARE
SPACE	15A	21				22	15A SPARE
SPACE	15A	23				24	15A SPARE
SPACE	15A	25				26	15A SPARE
SPACE	15A	27				28	15A SPARE
SPACE	15A	29				30	15A SPARE
SPACE	15A	31				32	15A SPARE
SPACE	15A	33				34	15A SPARE
SPACE	15A	35				36	15A SPARE
SPACE	15A	37				38	15A SPARE
SPACE	15A	39				40	15A SPARE
SPACE	15A	41				42	15A SPARE
TOTAL LOAD-WATT			31815			20815	TOTAL LOAD

MECHANICAL MOTOR SCHEDULE

EQUIPMENT ID#	DESCRIPTION	LOCATION	LOAD										SERVICE	STARTER	DISC. BR.	CONTROL	
			HP	AM	VOLTS	PHASE	FLA	FLA	FLA	FLA	FLA	FLA					FLA
SPARE MOTOR SCHEDULE																	
CRAC-1	CRAC UNIT	OUTSIDE	1.5	30	208	3	30	30	30	30	30	30	30	30	30	30	30
CRAC-2	CRAC UNIT	OUTSIDE	1.5	30	208	3	30	30	30	30	30	30	30	30	30	30	30
HEATING UNIT																	
HT-1	HEAT TARGE	OUTSIDE	1.5	30	208	3	30	30	30	30	30	30	30	30	30	30	30

DEFINITIONS:
 3-PHASE MOTOR
 300V SINGLE PHASE MOTOR
 300V SINGLE PHASE MOTOR ON A 208V CONTRACT
 300V SINGLE PHASE MOTOR ON A 240V CONTRACT
 300V SINGLE PHASE MOTOR ON A 277V CONTRACT
 300V SINGLE PHASE MOTOR ON A 480V CONTRACT
 300V SINGLE PHASE MOTOR ON A 600V CONTRACT
 300V SINGLE PHASE MOTOR ON A 720V CONTRACT
 300V SINGLE PHASE MOTOR ON A 840V CONTRACT
 300V SINGLE PHASE MOTOR ON A 960V CONTRACT
 300V SINGLE PHASE MOTOR ON A 1080V CONTRACT
 300V SINGLE PHASE MOTOR ON A 1200V CONTRACT

2 MECHANICAL SCHEDULE
 E200 SCALE N.T.S.

Revision/Particular	Description/Description	Date/Date
C	ISSUED FOR TENDER	21-03-31
B	ISSUED FOR 99% CD	21-01-13
A	ISSUED FOR 60% CD	20-12-10

Client/Client
CORRECTIONAL SERVICE CANADA

Project title/Titre du projet
**MATSCHI INSTITUTION
 ABBOTSFORD, BC
 33344 KING ROAD
 M2A UPGRADE CER
 COOLING**

Consultant Signature Only
 NOT APPLICABLE
 Designed by/Concept par
 SANJOT CHEEMA
 Drawn by/Dessiné par
 THANG CAO
 Project Manager/Administrateur de Projets
 KEN MENDY
 Regional Manager, Architectural and Engineering Services
 Directeur régional, Services d'architecture et de génie, IMSC
 P. PAUL
 Drawing title/Titre du dessin

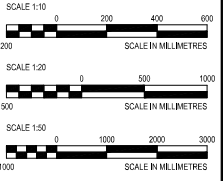
**ELECTRICAL PARTIAL
 SINGLE LINE AND
 SCHEDULES**

Project No./No. du projet
R18047.001

Sheet/Feuille
E200

Revision/Revision
 no.





C	ISSUED FOR TENDER	21-03-31
B	ISSUED FOR 99% CD	21-01-11
A	ISSUED FOR 66% CD	20-12-10
Revision/	Description/Description	Date/Date

Client/Client
**CORRECTIONAL SERVICE
CANADA**

Project title/Titre du projet
**MATSON INSTITUTION
ABBOTSFORD, BC
33944 KING ROAD
M2A UPGRADE CER
COOLING**

Consultant Signature Only

Designed by/Concept par
F. HARRIS

Drawn by/Designé par
RD/RP/LU

Project Manager/Administrateur de Projets TPSC
KEN MENDT

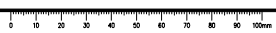
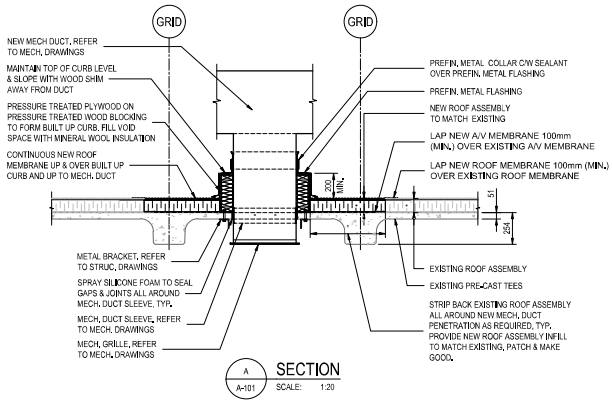
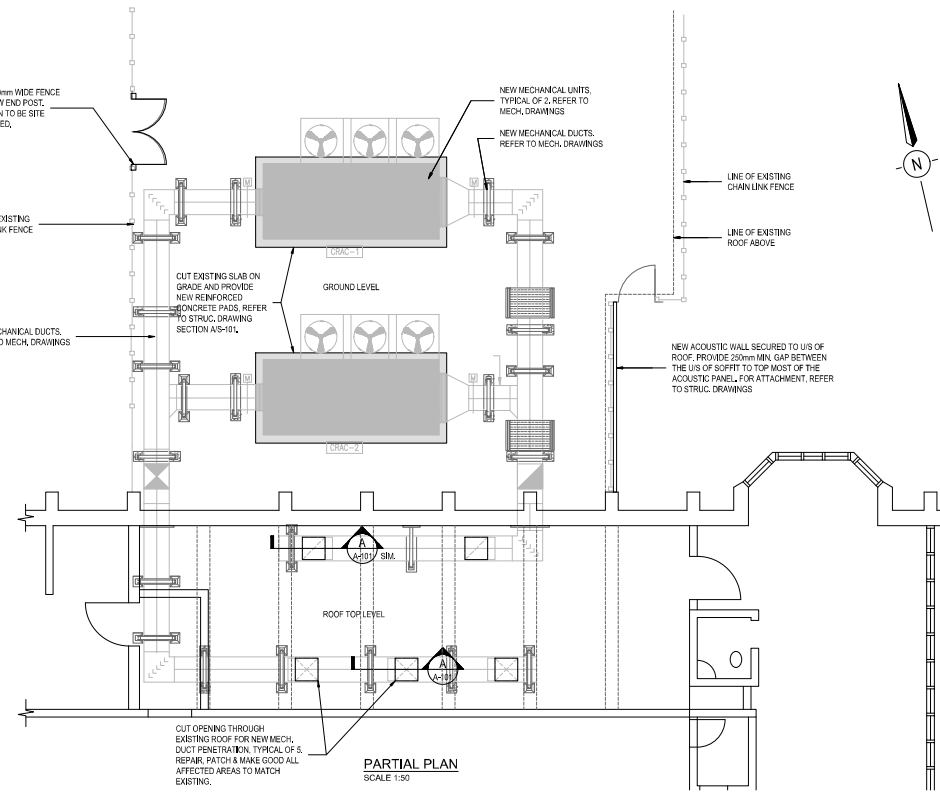
Project Manager, Architectural and Engineering Services
Administrateur régional, Services d'ingénierie et de plans, Water
P. PAUL

Drawing title/Titre du dessin
PLAN AND DETAIL

Project No./No. de projet
R113047.001

Sheet/Feuille
A101

Revision no./



GENERAL

1. THIS IS A METRIC PROJECT. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN MILLIMETERS.
2. PROVIDE ALL MATERIAL AND LABOUR REQUIRED FOR COMPLETION OF THE WORK.
3. PRIOR TO CONSTRUCTION, REVIEW STRUCTURAL DRAWINGS IN CONJUNCTION WITH DRAWINGS PROVIDED BY ALL OTHER CONSULTANTS, AND WITH EXISTING CONDITIONS.
4. REPORT DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK.
5. VERIFY EXISTING DIMENSIONS AND CONDITIONS ON SITE PRIOR TO CONSTRUCTION.
6. DO NOT USE INFORMATION ON THESE DRAWINGS FOR ANY OTHER PROJECT OR WORKS.
7. DO NOT SCALE THESE DRAWINGS.
8. ALL SECTION, DETAILS AND STATEMENTS NOTED AS "TYPICAL" APPLY TO UNSIMILAR CONDITIONS IN THE STRUCTURE.
9. DRAWINGS SHOW COMPLETED STRUCTURE ONLY. THEY DO NOT SHOW TEMPORARY WORKS FOR WHICH THE CONTRACTOR IS RESPONSIBLE, AND WHICH MAY BE REQUIRED FOR EXECUTION OF THE PROJECT. THE CONTRACTOR TO ESTABLISH CONSTRUCTION PROCEDURE AND SEQUENCE TO ENSURE SAFETY OF THE WHOLE STRUCTURE AND ALL ITS COMPONENTS DURING ERECTION.
10. MAKE ADEQUATE PROVISIONS FOR ALL LOADS ACTING ON THE STRUCTURE DURING ERECTION. PROVIDE TEMPORARY SHORING AND BRACING TO KEEP THE STRUCTURE PLUMB AND IN TRUE ALIGNMENT DURING CONSTRUCTION.
11. DESIGN OF ALL TEMPORARY WORKS TO BE CARRIED OUT BY A PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR, LICENSED IN THE PLACE WHERE THE PROJECT IS LOCATED.
12. DESIGN OF NON-STRUCTURAL AND SECONDARY STRUCTURAL ELEMENTS (SUCH AS MISCELLANEOUS STEEL STAIRS, RAILINGS AND GUARDRAILS ETC.) IS THE RESPONSIBILITY OF SPECIALTY PROFESSIONAL ENGINEERS ENGAGED BY THE CONTRACTOR OR THE SUPPLIER. IT IS NOT WITHIN THE SCOPE OF SERVICES PROVIDED BY DEPARTMENTAL REPRESENTATIVE AND WILL NOT BE REVIEWED BY DEPARTMENTAL REPRESENTATIVE.
13. CONSTRUCTION LOADS ON COMPLETED STRUCTURE NOT TO EXCEED DESIGN LOADS INDICATED ON DRAWINGS. FULL DESIGN LOADS MAY ONLY BE APPLIED AFTER THE CONCRETE REACHES ITS DESIGN STRENGTH.
14. STRUCTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH OTHER CONTRACT DOCUMENTS INCLUDING SPECIFICATIONS.

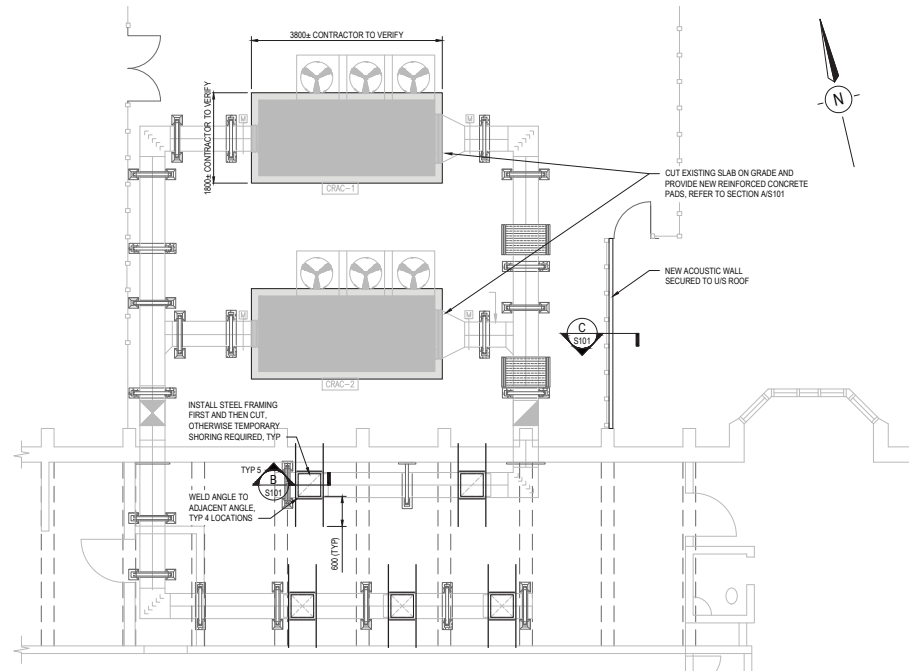
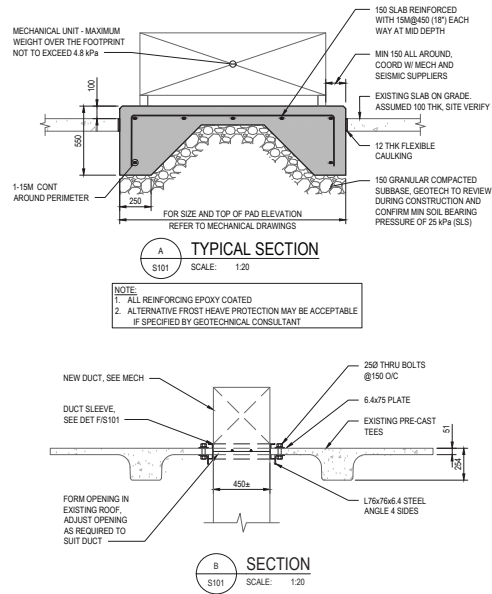
DESIGN CRITERIA

1. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE 2018 BRITISH COLUMBIA BUILDING CODE (BCBC) AND 2015 NATIONAL BUILDING CODE, SUPPLEMENTED BY THE 2015 NATIONAL BUILDING CODE OF CANADA STRUCTURAL COMMENTARY.
2. ALL REFERENCED STANDARDS SHALL BE THE CURRENT EDITION UNLESS DIFFERENT EDITION IS REFERENCED BY THE APPLICABLE BUILDING CODE NOTED ABOVE.
3. THE VALUES FOR CLIMATIC DATA USED IN THE DETERMINATION OF DESIGN LOADS HAVE BEEN OBTAINED FROM THE 2018 BCBC AND THE 2015 NATIONAL BUILDING CODE FOR THE SPECIFIC LOCATION OR ADJACENT TO.
4. BASED ON THE USE AND OCCUPANCY, THE BUILDING IS DESIGNED TO THE REQUIREMENTS OF A NORMAL IMPORTANCE CATEGORY.
5. SELF WEIGHT (SW) IS DUE TO THE WEIGHT OF THE STRUCTURE ITSELF.
6. SUPERIMPOSED DEAD LOADS (SD) ARE NON-STRUCTURAL DEAD LOADS DUE TO NON-STRUCTURAL TOPPING, FINISHES, SUSPENDED EQUIPMENT, PAVERS, SOIL, ETC.
7. DEAD LOAD (DL) IS THE SELF WEIGHT OF THE STRUCTURE PLUS THE SUPERIMPOSED DEAD LOAD.
8. UNLESS OTHERWISE NOTED, DESIGN LOADS SHOWN ON DRAWINGS ARE SPECIFIED (UNFACTORED) LOADS. TO BE USED FOR ULS DESIGN. FOR SLS DESIGN, THESE LOADS CAN BE REDUCED BY MULTIPLYING WITH THE RATIO OF APPROPRIATE IMPORTANCE FACTORS (MULS) (MULS) GIVEN BELOW.
9. IF ONLY ONE VALUE IS GIVEN FOR A LOAD, CONSIDER IT LIVE LOAD.
10. SNOW: $S_s = 2.0 \text{ kPa}$; $S_r = 0.3 \text{ kPa}$; $W (MULS) = 1.0$; $W (SLS) = 0.9$
11. MINIMUM UNFACTORED SNOW LOAD = 1.9 kPa
12. LATERAL LOADS IN THIS STRUCTURE DETERMINED BASED ON THE WIND AND SEISMIC DATA BELOW.
13. WIND: $q_{50} = 0.44 \text{ kPa}$; $W (MULS) = 1.0$; $W (SLS) = 0.75$
14. TERRAIN TYPE: ROUGH
15. SEISMIC (PARTS LOADING ONLY)

$S_s (0.3) = 0.101$	$C_1 = 1.0$	$W (MULS) = 0.71$
$S_s (0.5) = 0.597$	$A_1 = 2.5$	
$S_s (1.0) = 3.330$	$R_1 = 2.5$	
$S_s (2.0) = 2.215$	$W = 1.0$	
$P_0 = 0.306$	SITE CLASSIFICATION = D (ASSUMED)	

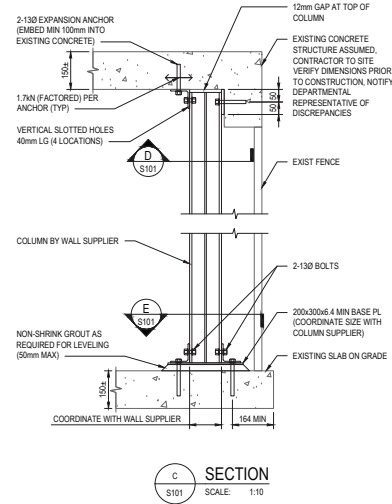
FOUNDATIONS

1. FOUNDATION DESIGN BASED ON ASSUMED BEARING PRESSURE OF 38 kPa AT ULS AND 25 kPa AT SLS.
2. GEOTECHNICAL ENGINEER TO BE RETAINED BY THE CONTRACTOR TO REVIEW GROUND CONDITIONS AND CONFIRM BEARING CAPACITY AND FROST PROTECTION.



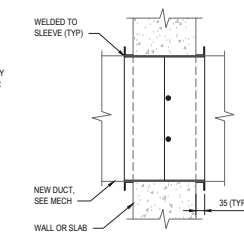
PARTIAL PLAN
SCALE: 1:50

NOTE:
ALL EXPOSED STEEL TO BE GALVANIZED,
INCLUDING FASTENERS

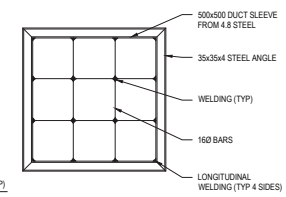


SECTION
SCALE: 1:10

NOTE:
ALL EXTERIOR STEEL TO BE GALVANIZED OR
STAINLESS STEEL, INCLUDING FASTENERS



SECTION
SCALE: 1:10



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

REAL PROPERTY SERVICES Pacific Region SERVICES IMMOBILIERS Région de Pacifique

wsp

REGISTERED ENGINEER 2018 BCBC
VANCOUVER BRITISH COLUMBIA CANADA V6Z 2M9
TEL: 604-954-1111 FAX: 604-954-1100

PROFESSIONNEL
R. MASTROSCUCCHI
INGÉNIEUR EN GÉNÉRAL
22118
11111
2024.03.14

SCALE 1:10
0 200 400 600
SCALE IN MILLIMETRES

SCALE 1:20
0 500 1000
SCALE IN MILLIMETRES

SCALE 1:50
0 1000 2000 3000
SCALE IN MILLIMETRES

C	ISSUED FOR TENDER	21-03-31
B	ISSUED FOR 90% CD	21-01-11
A	ISSUED FOR 66% CD	20-12-11

Client/Client: **CORRECTIONAL SERVICE CANADA**

Project file/Titre du projet: **MATSON INSTITUTION ABBOTSFORD, BC 33344 KING ROAD M2A UPGRADE CER CER COOLING**

Consultant Signature Only: NOT APPLICABLE

Designed by/Concept par: RM

Drawn by/Dessiné par: PB

PEBC Project Manager/Administrateur de Projets TPSC: KEN MENDT

Regional Manager, Architectural and Engineering Services / Directeur régional, Services d'architecture et de génie, TPSC:

Drawing file/Titre de dessin: **NOTES, PLAN, AND DETAILS**

Project No./No. du projet: R113047.001	Sheet/Feuille: S101	Revision no./Révision no.:
---	----------------------------	----------------------------