



ROGERS PASS WASHROOM FACILITY AND DAY USE AREA



ARCHITECTURAL	
 <p>riddell kurczaba architecture engineering interior design ltd. 1110 1st. St. SW, Calgary, Alberta, Canada T2R 0V1 phone: 403.266.2100 fax: 403.266.2170 info@riddell.ca www.riddell.ca</p>	
DRAWING LIST - ARCHITECTURAL	
SHEET NO:	SHEET NAME:
A0.00	COVER SHEET
A0.01	SYMBOL LEGEND, ABBREVIATIONS, CONSTRUCTION ASSEMBLIES, CODE REVIEW
A0.02	FIRE SEPARATION / TRAVEL DISTANCE
A0.03	LOCATION PLANS
A0.04	EXCAVATION PLAN AND DETAILS
A1.00	SITE PLAN
A2.00	MAIN FLOOR DIMENSION PLAN
A2.01	MAIN FLOOR REFERENCE PLAN
A2.02	REFLECTED CEILING PLAN
A2.03	ROOF PLAN
A2.04	ENLARGED PLAN SOUTH WING
A2.05	ENLARGED PLAN NORTH WING
A3.00	EXTERIOR ELEVATIONS
A3.01	EXTERIOR ELEVATIONS
A3.02	EXTERIOR ELEVATIONS
A4.00	BUILDING SECTIONS
A5.00	WALL SECTIONS
A5.01	WALL SECTIONS
A7.00	DETAILS
A7.01	DETAILS
A7.02	DETAILS
A7.03	DETAILS
A7.04	DETAILS
A7.05	DETAILS
A7.06	DETAILS
A7.07	DETAILS
A9.00	DOOR SCHEDULE
A9.11	WINDOW SCHEDULE

STRUCTURAL	
 <p>rjc Engineers Suite #204, 110 12 Ave SW Calgary, AB T2R 0G7</p>	
DRAWING LIST - STRUCTURAL	
SHEET NO:	SHEET NAME:
S-000	COVERSHEET
S-100	GENERAL NOTES AND TYPICAL DETAILS
S-101	GENERAL NOTES AND TYPICAL DETAILS
S-102	GENERAL NOTES AND TYPICAL DETAILS
S-103	GENERAL NOTES AND TYPICAL DETAILS
S-104	GENERAL NOTES AND TYPICAL DETAILS
S-201	FRAMING PLANS
S-202	ROOF FRAMING PLANS
S-301	SECTION AND DETAILS
SD	Unnamed presentation

MECHANICAL	
 <p>EMBE Innovative Sustainable Suite #204, 110 12 Ave SW Calgary, AB T2R 0G7</p>	
DRAWING LIST - MECHANICAL	
SHEET NO:	SHEET NAME:
M0	MECHANICAL LEGEND
M0S1	MECHANICAL SITE PLAN
M1	FLOOR PLAN - DRAINAGE LAYOUT
M2	FLOOR PLAN - PLUMBING LAYOUT
M3	FLOOR PLAN - H.V.A.C LAYOUT
M4	FLOOR PLAN - HYDRONIC LAYOUT
M5	MECHANICAL DETAILS
M6	MECHANICAL SCHEDULES

ELECTRICAL	
 <p>EMBE Innovative Sustainable Suite #204, 110 12 Ave SW Calgary, AB T2R 0G7</p>	
DRAWING LIST - ELECTRICAL	
SHEET NO:	SHEET NAME:
E0	ELECTRICAL LEGEND
E0S1	ELECTRICAL SITE PLAN
E1	FLOOR PLAN - LIGHTING
E2	FLOOR PLAN - POWER AND AUXILIARY
E3	ELECTRICAL SCHEDULES
E4	ELECTRICAL DETAILS

LANDSCAPE	
 <p>NAVAGRAH landscape architecture + urban design #204, 337 - 17th Avenue SW, Calgary, AB T2S 0A5</p>	
DRAWING LIST - LANDSCAPE	
SHEET NO:	SHEET NAME:
L-1	LAYOUT PLAN
L-2	PLANTING PLAN
L-3	SECTIONS

CIVIL	
 <p>CIVIL ENGINEERING SOLUTIONS INC. CIVIL Suite #204, 110 12 Ave SW Calgary, AB T2R 0G7</p>	
DRAWING LIST - CIVIL	
SHEET NO:	SHEET NAME:
C-1	SITE EX & POST SERVICING PLAN
C-2	SITE GRADING PLAN
C-3	SITE OVERLAND AND DRAINAGE PLAN
C-4	DETAILS

INDEX	
DRAWING LIST - INDEX	
SHEET NO:	SHEET NAME:
I-1	OVERALL UTILITIES PLAN

INTERIOR	
DRAWING LIST - INTERIOR	
SHEET NO:	SHEET NAME:
ID1.00	MAIN FLOOR FINISHES PLAN
ID1.01	ENLARGED WASHROOM PLAN AND ELEVATIONS
ID1.02	ENLARGED BARRIER FREE WASHROOM PLAN AND ELEVATIONS
ID1.03	INTERIOR ELEVATIONS
ID1.04	INTERIOR ELEVATIONS
ID1.05	INTERIOR ELEVATIONS

Revision / Révision	Description / Description	Date / Date
5	ISSUED FOR TENDER	12-14-18
4	ISSUED FOR 99%	10-26-18
3	ISSUED FOR 90%	08-29-18
2	ISSUED FOR 60%	05-31-18
1	ISSUED FOR 30%	03-28-18

Client / client



Project title/Titre du projet

ROGERS PASS WASHROOM FACILITY AND DAY USE AREA

Approved by/Approuvé par
AMINA OYAKHILOME

Designed by/Concepté par
PETER SCHULZ

Drawn by/Dessiné par
FOLA OLAWOYIN
Project Manager/Administrateur de Projets
ANDREW OOSTING

Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie

Client / client
Parks Canada

Drawing title / Titre du dessin

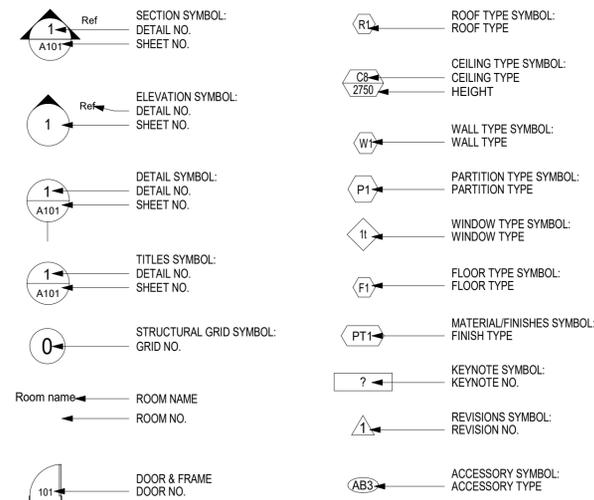
COVER SHEET

Project No. / No. du projet	Sheet / Feuille	Revision no. / La Révision no.
CAI 752	A0.00	5

GENERAL NOTES

- ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NATIONAL BUILDING CODE 2015, THE NATIONAL FIRE CODE 2015, THE OCCUPATIONAL HEALTH & SAFETY ACT, AND ANY OTHER AUTHORITIES HAVING JURISDICTION.
- THESE DRAWINGS & SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH THE NOTES ON THE DRAWINGS. ARCHITECTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH DRAWINGS BY ELECTRICAL, MECHANICAL AND STRUCTURAL ENGINEERING CONSULTANTS.
- REPORT ALL DISCREPANCIES BETWEEN MECHANICAL, ELECTRICAL, STRUCTURAL AND THE ARCHITECTS DRAWINGS TO THE OWNER PRIOR TO PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, EXISTING AND NEW CONDITIONS AND REPORT ALL NON - CONFORMANCE TO THE OWNER, PRIOR TO CONSTRUCTION.
- ALL SUBCONTRACTORS MUST FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING THEIR QUOTATION, AND OTHERWISE OBTAIN FOR THEMSELVES ANY INFORMATION REQUIRED TO SUBMIT A FIRM QUOTATION.
- THE GENERAL CONTRACTOR WILL BE RESPONSIBLE TO REGULATE AND ENFORCE LOCAL FIRE CODES AND BUILDING CODES AS SET FORTH BY LOCAL JURISDICTIONS FOR THE DURATION OF CONSTRUCTION.
- ALL ARCHITECTURAL COMPONENTS WILL BE ENGINEERED AND INSTALLED BY THE RESPECTIVE SUPPLIERS & TRADES SO AS TO CONFORM WITH REQUIRED ANCHORAGE AND SEISMIC RESTRAINT AS PER ALL LOCAL CODES.
- VERTICAL FACE OF HOUSEKEEPING PAD TO BE PAINTED YELLOW.
- ALL DIMENSIONS TO FACE OF STUD UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

DRAWING SYMBOLS LEGEND:



ABBREVIATIONS

ABOVE FINISHED FLOOR	ALBERTA BUILDING CODE 2006	ALUMINUM	ARCHITECTURAL	BARRIER FREE ACCESS BOTH WAYS	BOTTOM OF BUILDING	CARPET	CAST IN PLACE	CEILING	CENTRE LINE	CENTRE TO CENTRE	CERAMIC TILE	COLUMN	COMPLETE WITH CONCRETE	CONTINUOUS CORRIDOR	CURTAIN WALL	DETAIL(S)	DIMENSIONS	DIAMETER	DOWN DRAWING(S)	EACH	ELEVATION	ELECTRICAL	EQUAL	EXISTING	EXTERIOR	EXTERIOR INSULATION FINISH SYSTEM	FACE OF FINISH	FIRE RATED	FIRE RESISTANCE RATING	FLOOR	FLOOR DRAIN	FOOTING	GALVANIZED GAUGE	GLAZING	GRADE	GROUND FLOOR	GYPSUM WALL BOARD	GEODETIC	INTERIOR	JANITOR	LAVATORY	MAN HOLE	MASONRY OPENING	MAXIMUM	MECHANICAL	MEDIUM DENSITY FIBREBOARD	METAL	MISCELLANEOUS	MINIMUM	NATURAL	NOT APPLICABLE	NOT IN CONTRACT	NOT TO SCALE	NUMBER	ON CENTRE	ORIENTED STRAND BOARD	OUT TO OUT	OUTSIDE DIAMETER	OVERHEAD	PAINT	POLYETHYLENE	PRECAST CONCRETE	PREFINISHED	PROPERTY LINE	RAIN WATER LEADER	REINFORCING	REQUIRED	REVISION	RIGHT OF WAY	ROUGH OPENING	SIMILAR	SPECIFICATIONS	STAINLESS STEEL	STANDARD	STEEL	STEEL STUD	STORAGE	TEMPERED	TEMPERED LAMINATED GLASS	TOP OF TYPICAL	UNLESS OTHERWISE	UNDERSIDE	UNDERWRITERS LABORATORIES OF CANADA	VAPOUR BARRIER	VERTICAL	WATER CLOSET	WATERPROOF	WALL TILE	WOOD	MH	MO	MAX.	MECH.	MDF	MTL	MISC.	MIN.	NAT.	N/A	N.I.C.	N.T.S.	NO.	OC	OSB	O/O	O.D.	OH.	PT	PLY	POLY.	P.C./CONC.	PREFIN.	PL	R.W.L.	REIN.	REQ.	REV.	R/W	R.D.	R.O.	SIM.	SPEC.	S.S.	STD	ST	SS	STOR.	TEMP.	TLG.	T/O	TYP.	U/O	U/S	U.L.C.	V.B.	VERT.	WC	WP	WT	WD
----------------------	----------------------------	----------	---------------	-------------------------------	--------------------	--------	---------------	---------	-------------	------------------	--------------	--------	------------------------	---------------------	--------------	-----------	------------	----------	-----------------	------	-----------	------------	-------	----------	----------	-----------------------------------	----------------	------------	------------------------	-------	-------------	---------	------------------	---------	-------	--------------	-------------------	----------	----------	---------	----------	----------	-----------------	---------	------------	---------------------------	-------	---------------	---------	---------	----------------	-----------------	--------------	--------	-----------	-----------------------	------------	------------------	----------	-------	--------------	------------------	-------------	---------------	-------------------	-------------	----------	----------	--------------	---------------	---------	----------------	-----------------	----------	-------	------------	---------	----------	--------------------------	----------------	------------------	-----------	-------------------------------------	----------------	----------	--------------	------------	-----------	------	----	----	------	-------	-----	-----	-------	------	------	-----	--------	--------	-----	----	-----	-----	------	-----	----	-----	-------	------------	---------	----	--------	-------	------	------	-----	------	------	------	-------	------	-----	----	----	-------	-------	------	-----	------	-----	-----	--------	------	-------	----	----	----	----

ASSEMBLIES

EXTERIOR WALL		EXTERIOR WALL
W1	UPPER WALL 700 LOWER WALL	<p>EXTERIOR WALL</p> <p>NOTE: EXTERIOR FINISHES - REFER TO ELEVATION FOR MATERIAL AND COLOUR SEE ELEVATION FOR HEIGHT VARIATION REFER TO DRAWING 1 & 2 ON A7.00 FOR SYSTEM ASSEMBLY</p> <p>UPPER WALL: BEVELED SIDING, SHIPLAP JOINT WOOD PLANKS BUILDING PAPER 15.5 mm THK EXTERIOR GRADE PLYWOOD SHEATHING 152 mm DEEP THERMAL SPACER VERTICAL APPLICATION c/w 25 mm DEEP VERTICAL Z-GIRT FASTENING TO LINE-UP W/ VERTICAL WOOD STUD 2 LAYERS OF 76 mm THK SEMI-RIGID MINERAL FIBRE INSULATION R-VALUE: 24.0 2-PLY BUILDING PAPER 15.5 mm THK EXTERIOR GRADE PLYWOOD SHEATHING 38 mm x 140 mm WOOD STUDS SPACED @ 400 mm O.C. BATT INSULATION IN STUDS CAVITY R-VALUE: 21.0 6mil POLYETHYLENE VAPOUR BARRIER 16 mm THK GYPSUM WALL BOARD</p> <p>LOWER WALL: ROCK VENEER MORTAR, BOND COAT MORTAR, SCRATCH COAT AIR BARRIER AS REQUIRED 16 mm THK EXTERIOR GRADE CEMENT BOARD 152 mm DEEP GALV. STEEL VERTICAL Z-GIRT SPACING TO LINE-UP w/ WOOD STUDS 2 LAYERS OF 76 mm THK SEMI-RIGID MINERAL FIBRE INSULATION R-VALUE: 24.0 2-PLY BUILDING PAPER 15.5 mm THK EXTERIOR GRADE PLYWOOD SHEATHING 38 mm x 140 mm WOOD STUDS SPACED @ 400 mm O.C. BATT INSULATION IN STUDS CAVITY R-VALUE: 21.0 6mil POLYETHYLENE VAPOUR BARRIER 16 mm THK GYPSUM WALL BOARD</p>
W2		<p>EXTERIOR WALL</p> <p>EXTERIOR FINISHES - REFER TO ELEVATION FOR MATERIAL AND COLOUR STANDING SEAM METAL WALL PANEL (24ga) 0.61 mm THK W/ GALVALUME COATING NON-PENETRATING THERMAL CLIPS w/ THERMAL PADS 2 LAYERS OF 76 mm THK SEMI-RIGID MINERAL FIBRE INSULATION R-VALUE: 24.0 2-PLY BUILDING PAPER 15.5 mm THK EXTERIOR GRADE PLYWOOD SHEATHING 38 mm x 140 mm WOOD STUDS SPACED @ 400 mm O.C. BATT INSULATION IN STUDS CAVITY R-VALUE: 21.0 6mil POLYETHYLENE VAPOUR BARRIER 16 mm THK GYPSUM WALL BOARD</p>
<p>NOTE: REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS ALONG EXTERIOR WALL.</p>		
PARTITION WALL		PARTITION WALL
GENERAL WALL	P1	<p>PARTITION WALL</p> <p>16 mm GYPSUM BOARD 38x89mm WOOD STUDS @ 400mm O.C. 16 mm GYPSUM BOARD</p>
	P2	<p>PARTITION WALL</p> <p>16 mm GYPSUM BOARD TWO ROWS 38x89mm WOOD STUDS STAGGERED @ 400mm O.C CLEAR WIDTH 241mm (OUT TO OUT OF STUDS) 16 mm GYPSUM BOARD</p>
PLUMBING WALL	P3	<p>PLUMBING WALL</p> <p>16 mm MILDEW RESISTANT GYPSUM BOARD (WASHROOM SIDE) 38x140mm WOOD STUDS @ 400mm O.C</p>
RATED WALL	P4	<p>1HR FRR-BASED ON UL U333</p> <p>16 mm TYPE X GYPSUM BOARD TO ACCEPT PAINT 38x140mm WOOD STUDS SPACED @ 400mm O.C 16 mm TYPE X GYPSUM BOARD TO ACCEPT PAINT</p>
	P4a	<p>1HR FRR-BASED ON UL U333</p> <p>16 mm TYPE X GYPSUM BOARD TO ACCEPT PAINT TWO ROWS 38x89mm WOOD STUDS STAGGERED @ 400mm O.C CLEAR WIDTH 241mm (OUT TO OUT OF STUDS) 16 mm TYPE X GYPSUM BOARD TO ACCEPT PAINT</p>
ROOF		R1
		<p>HYBRID ROOF SYSTEM: STANDING SEAM METAL ROOF PANEL (24ga) 0.61mm THK WITH GALVALUME COATING NON-PENETRATING THERMAL CLIPS INSTALLED ON NEOPRENE BEARING PLATES, SPACING AS DETERMINED BY ENGINEER SYNTHETIC NON-WOVEN GEOTEXTILE LAYER, DRAINAGE MAT 1 LAYER OF 127mm THK HIGH DENSITY UNCOATED MINERAL FIBRE INSULATION BOARD (R-VALUE: 21.5) 1 LAYER OF 102mm THK POLYISOCYANURATE RIGID FOAM INSULATION BOARD (R-VALUE: 22.8) 3mm P&S S&S AVIG MEMBRANE 89mm DEEP COMMERCIAL GRADE WOOD T&A PLANK DECKING 15.5mm DOUGLAS FIR PLYWOOD 203mm x 305mm SOLID WOOD RAFTER</p>
FLOOR		F1
		<p>250mm THK REINFORCED CONCRETE SLAB ON GRADE AS PER STRUCTURAL 10ml POLY VAPOUR BARRIER COMPACT GRANULAR FILL (THICKNESS AS PER STRUCTURAL) (SLOPE SLAB TOP TO TRENCHES / FLOOR DRAINS WHERE REQUIRED / INDICATED ALL FLOOR DRAIN COVERS TO FINISH SMOOTH TO ADJACENT FLOOR FINISHES)</p>
		<p>125mm THK REINFORCED CONCRETE SLAB ON GRADE AS PER STRUCTURAL INFILL SLAB ALONG MECHANICAL CHASE 10ml POLY VAPOUR BARRIER COMPACT GRANULAR FILL (THICKNESS AS PER STRUCTURAL) (SLOPE SLAB TOP TO TRENCHES / FLOOR DRAINS WHERE REQUIRED / INDICATED ALL FLOOR DRAIN COVERS TO FINISH SMOOTH TO ADJACENT FLOOR FINISHES)</p>
CEILING		C1
		<p>38mm THK x 89mm SOLID WOOD CEILING HANGERS 1 LAYER OF GYPSUM BOARD REFER TO RCP FOR HEIGHT VARIATIONS</p>
		<p>C2 OPEN TO U/S OF ROOF STRUCTURE</p>

2015 NATIONAL BUILDING CODE OVERVIEW

GENERAL DESCRIPTION & REQUIREMENTS		
MAJOR OCCUPANCIES	GROUP A DIVISION 2 (Part 3) 3.2.2.25	
OCCUPANCY CLASSIFICATIONS	ASSEMBLY	
BUILDING AREA	BUILDING AREA - 319m ² + COLUMNADE - 97.54m ² = 416.54 m ²	
NUMBER OF STOREYS	1	
CONSTRUCTION TYPE	COMBUSTIBLE	
STRUCTURAL FIRE-RESISTANCE REQUIREMENTS		
FLOOR ASSEMBLY	NO RATING REQUIRED	
LOADBEARING WALLS & COLUMNS	NO RATING REQUIRED	
ROOF ASSEMBLY	NO RATING REQUIRED	
FIRE ALARM & SUPPRESSION SYSTEMS		
AUTOMATIC SPRINKLER SYSTEM	NOT REQUIRED	
FIRE ALARM SYSTEM	NOT REQUIRED	
STANDPIPE SYSTEM	NOT REQUIRED	
EGRESS AND EXITING		
MAXIMUM TRAVEL DISTANCE	30 m	
NUMBER OF EXITS	AT LEAST 2 EXITS ARE REQUIRED (INDEPENDENT OF EACH OTHER)	
OCCUPANT LOAD		
	1 PER WASHROOM - TOTAL OF 17 PERSONS 44 m ² OF ASSEMBLY SPACE WITH FIXED SEATS - 0.75 m ² PER PERSON = 59 PERSONS MAXIMUM 76 PERSONS	
BARRIER-FREE DESIGN		
ENTRANCES	50% OF ALL ENTRANCES ARE REQUIRED TO BE BARRIER FREE.	
PATH OF TRAVEL	920 mm MINIMUM	
DOORS	POWER OPERATED DOORS ARE NOT REQUIRED BUT WILL BE PROVIDED CLEAR DOOR WIDTH OF 800 mm MINIMUM	
WASHROOMS	1500 MM DIAMETER TURNING CIRCLE INSIDE ROOM CLEAR DOOR WIDTH OF 850 MM DIMENSION FROM CENTERLINE OF WATER CLOSET TO SIDE WALL: BETWEEN 460 mm - 480 mm WATER CLOSET CLEARANCE: HAVE A CLEAR FLOOR SPACE AT LEAST 900 mm WIDE THAT IS PARALLEL AND ADJACENT TO THE OPEN SIDE OF THE WATER CLOSET GRAB BARS REQUIRED AS PER SENTENCE 3.8.3.8 (2)	
INTERIOR FIRE SEPARATIONS		
ROOM / SPACE	FIRE-RESISTANCE RATING OF FIRE SEPARATION	FIRE-PROTECTION RATING OF CLOSURE
ROOMS CONTAINING FUEL-FIRED APPLIANCES	1 HR	45 MIN
ELECTRICAL ROOMS	1 HR	45 MIN
JANITOR'S ROOM	45 MIN	45 MIN

riddell architect ltd.

1110 - 1st. Street SW. - Calgary, Alberta, Canada T2R 0V1
tele: 403.266.2100 | fax: 403.266.2170 | info@riddell.ca | www.riddell.ca

Revision /	Description / Description	Date / Date
5	ISSUED FOR TENDER	12-14-18
4	ISSUED FOR 99%	10-26-18
3	ISSUED FOR 90%	08-29-18
2	ISSUED FOR 60%	05-31-18
1	ISSUED FOR 30%	03-28-18

Client / client



Project title/Titre du projet

ROGERS PASS WASHROOM FACILITY AND DAY USE AREA

Approved by/Approuve par
AMINA OYAKHILOME

Designed by/Concept par
PETER SCHULZ

Drawn by/Dessiné par
PIO DAYAWON
Project Manager/Administrateur de Projets
ANDREW OOSTING

Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie
Parks Canada

Client / client

Drawing title / Titre du dessin

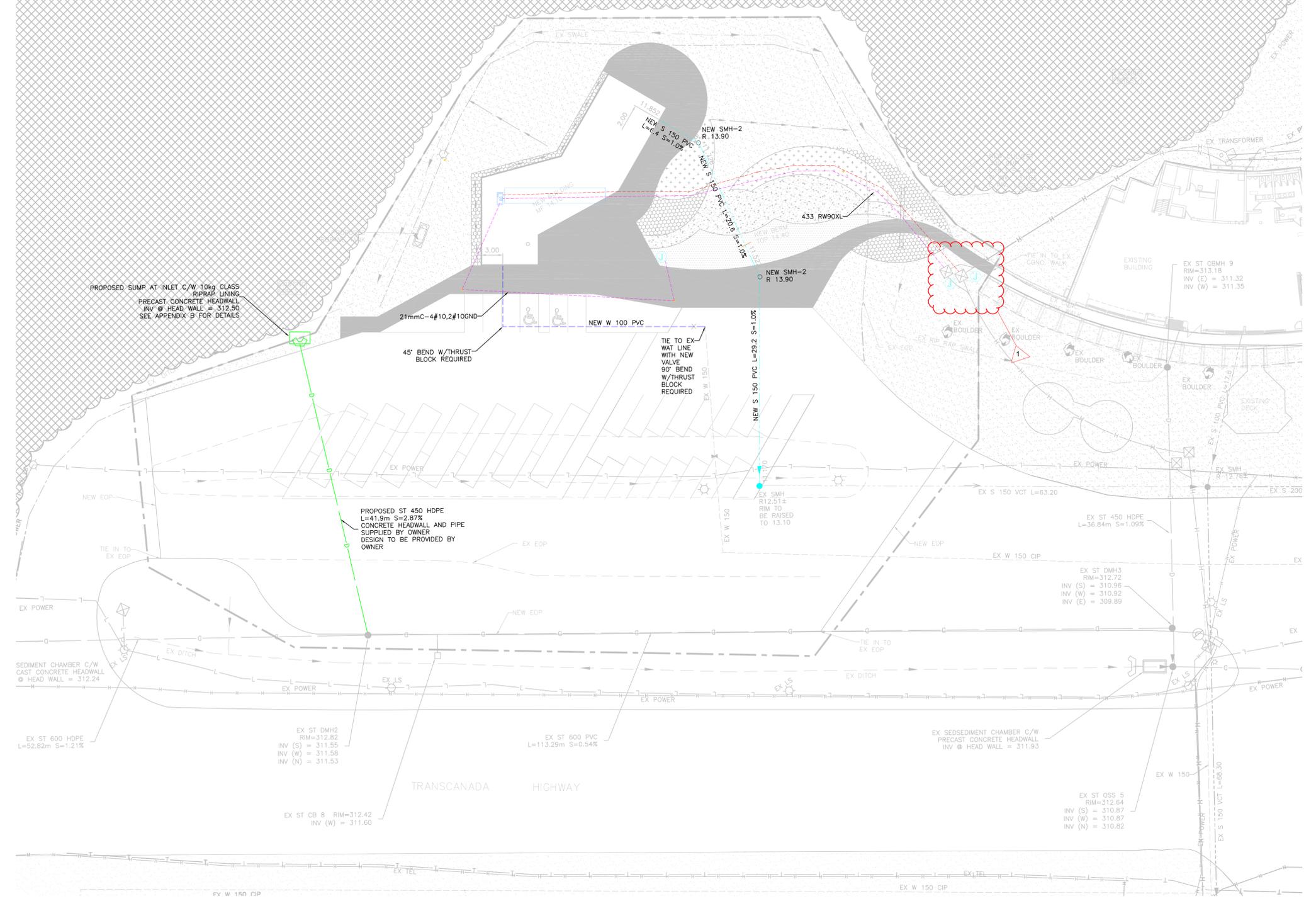
SYMBOL LEGEND, ABBREVIATIONS, CONSTRUCTION ASSEMBLIES, CODE REVIEW

Project No. / No. du projet
CAI 752

Sheet / Feuille
A0.01

Revision no. / La Révision no.
5





Legend:

- 13.50 FLOW DIRECTION
- EXISTING GRADE
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- EXISTING VALVE
- VALVE
- WATERMAIN
- SANITARY SEWER
- STORM SEWER DESIGN BY WEDLER ENGINEERING
- COMMUNICATION LINE
- POWER LINE
- EXISTING MANHOLE
- PROPOSED MANHOLE
- EX CATCH BASIN
- MF MAIN FLOOR
- PP POWER POLE
- CONSTRUCTION BOUNDARY
- EX HYDRO
- EX STREET LIGHT
- EX TELUS
- 110MM THICK LIGHT SANDBLAST FINISH CONCRETE WITH SAW CUT JOINTS.
- 110MM THICK HEAVY SANDBLAST FINISH CONCRETE WITH SAW CUT JOINTS.
- 110MM THICK BROOM FINISH CONCRETE WITH SAW CUT JOINTS.
- GRAVEL
- SHRUBS
- COMPACTED ROCK
- SOD
- SEEDED AREA

REVISION / Révision	Description / Description	Date / Date
1	ISSUED FOR TENDER	10-10-18

Client / client

Client / client

**ROGERS PASS
WASHROOM AND DAY
USE AREA**

Approved by/Approve par

Designed by/Concept par

Drawn by/Dessine par

Project Manager/Administrateur de Projets
Author
Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'Ingénierie

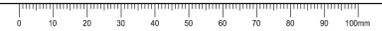
Client / client
Parks Canada

Drawing title / Titre du dessin

OVERALL UTILITIES PLAN

SCALE: 1:300

Project No. / No. du project	Sheet / Feuille	Revision no. / La Révision no.
CAI 752	I-1	1





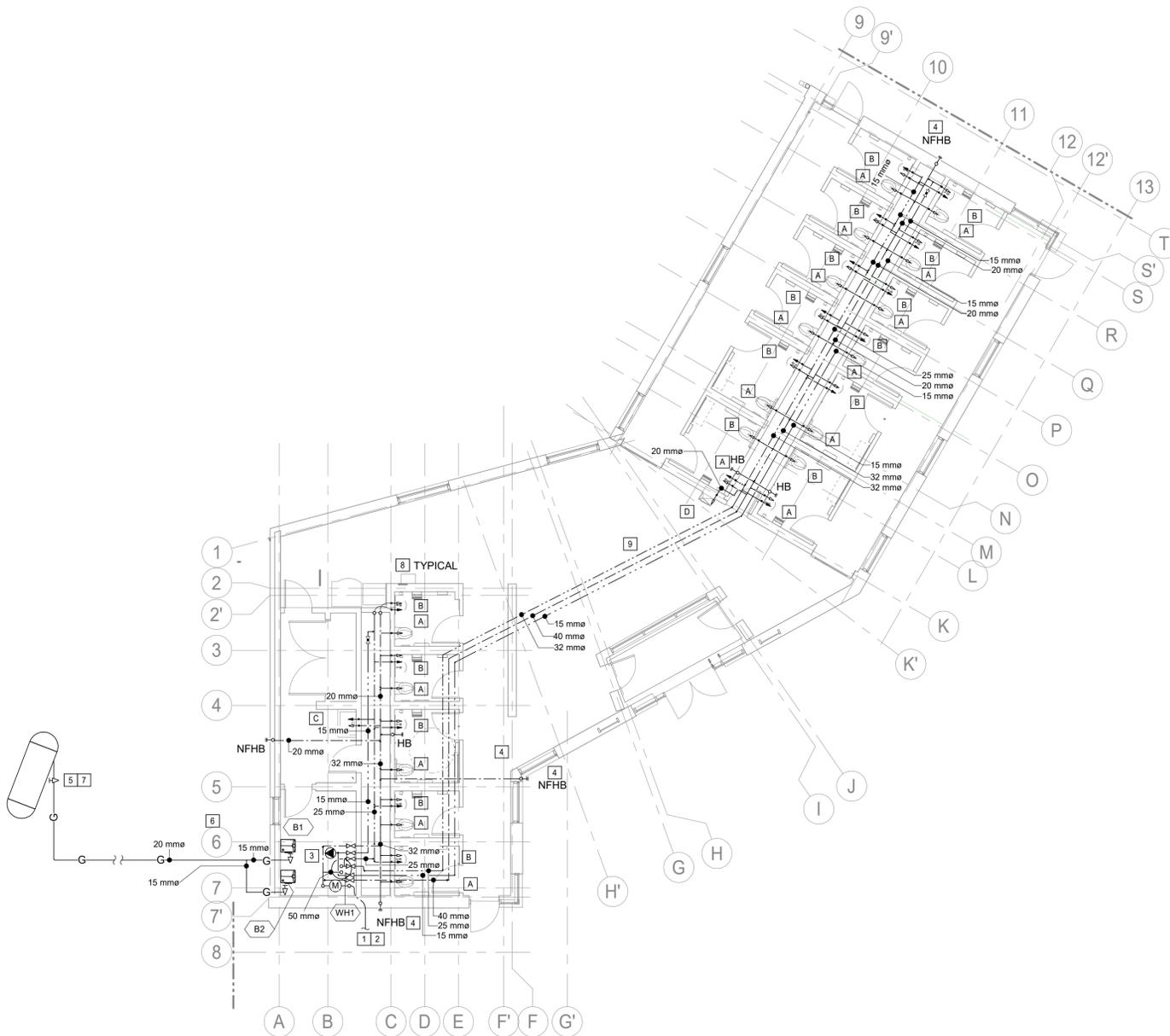
EMBE CONSULTING ENGINEERS
SUITE 204, 110 12th AVENUE, S.W.
CALGARY, AB, T2R 0G7
403-460-2277
info@embeconsulting.ca

GENERAL NOTES

- BIDDING CONTRACTORS ARE TO REVIEW ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL AND STRUCTURAL DRAWINGS PRIOR TO SUBMITTING TENDER PRICE.
- LOCATIONS OF EXISTING SERVICES ARE APPROXIMATE, VERIFY ON SITE.
- CONTRACTOR TO ENGAGE STRUCTURAL ENGINEER TO VERIFY ALL SEISMIC REQUIREMENTS FOR PIPE AND DUCT HANGING METHODS.
- WHERE DISCREPANCIES ARE FOUND, CONTACT ENGINEER IN WRITING PRIOR TO SUBMITTING PRICE.
- PLUMBING LINES ETC. ARE SHOWN DIAGRAMMATICALLY, FINAL LOCATIONS, ROUTING ETC. TO BE CO-ORDINATED ON SITE.
- PROVIDE TRAP SEALER FOR ALL FLOOR AND HUB DRAINS.
- EXTEND SANITARY VENT LINE FROM FIXTURES AS PER NATIONAL AND LOCAL PLUMBING CODES.
- ALL FLOOR MOUNTED MECHANICAL EQUIPMENT TO BE MOUNTED ON 100mm HOUSE KEEPING PAD.
- CONTRACTOR TO PROVIDE LAPTOP IN MECHANICAL ROOF TO FACILITATE COMMISSIONING/ MAINTENANCE.
- CONTRACTOR TO ENSURE ALL MECHANICAL EQUIPMENT SHALL BE RATED TO PERFORM AT HIGH ELEVATION.

PLUMBING NOTES

- APPROXIMATE LOCATION OF INCOMING 100mmø DCW LINE. CONTRACTOR TO CONFIRM EXACT LOCATION ON SITE.
- EXTEND 100mmø JOINLESS PEX UNDER SLAB TO WATER METER IN MECHANICAL ROOM.
- EXTEND 40mmø CW, 25mmø HW AND 15mmø RECIRC LINE TO SOUTH WING WASHROOM AND EXTEND 40mmø CW, 32mmø HW AND 15mmø RECIRC LINE TO NORTH WING WASHROOM.
- EXTEND 20mmø CW TO NON-FREEZE HOSE BIBB. NFHB TO BE 914mm A.F.F. COORDINATE WITH ARCHITECT. NON-FREEZE HOSE BIBB TO BE JAY-R SMITH 55090QT OR EQUIVALENT.
- APPROXIMATE LOCATION OF 500 GALLON PROPANE GAS TANK C/W REGULATOR TO BE SUPPLIED AND INSTALLED BY CONTRACTOR AS PART OF THIS CONTRACT. ENSURE TANK HAS 10FT CLEARANCE FROM BUILDING AND PROPERTY LINE. CONTRACTOR TO CONFIRM EXACT REQUIRED EQUIPMENT WITH THE SUPPLIER BEFORE SUBMITTING BID. ENSURE TANK IS RATED FOR HIGH ALTITUDE OPERATION AS PER CSA B149.2-15.
- EXTEND 20mmø GAS LINE FROM PROPANE TANK TO BOILERS C/W GAS COCK. CONFIRM PIPE SIZE BASED ON THE EXACT LENGTH OF THE GAS PIPE ON SITE. GAS PIPE FROM PROPANE TANK TO THE BUILDING TO BE BURIED UNDERGROUND. CONFIRM UNDERGROUND DEPTH OF THE PIPE AND DETAIL WITH SUPPLIER.
- PROPANE TANK TO BE LOCATED 38FT (11582mm) FROM THE BUILDING. CONTRACTOR TO COORDINATE WITH LANDSCAPING FOR EXACT LOCATION OF THE TANK ON SITE.
- PROVIDE ZURN MODEL 1260XL, WADE 4481 OR APPROVED EQUIVALENT WATER HAMMER ARRESTOR AT CW AND HW BRANCHES SERVING THE FIXTURES.
- COORDINATE WITH PCA FOR PIPE INSULATION COLOR WHERE THE PIPE IS EXPOSED TO PUBLIC AREA.



01 FLOOR PLAN - PLUMBING LAYOUT
M2 1 : 100

8	ADDENDUM #1	19-01-24
7	ISSUED FOR TENDER	18-12-13
6	99% REVIEW	18-10-26
5	99% REVIEW	18-10-19
4	99% REVIEW	18-10-03
3	90% REVIEW	18 08 17
2	60% REVIEW	18 06 08
1	30% REVIEW	18 03 23

Revision /	Description / Description	Date / Date

Client / client

Parks Canada Parcs Canada

Project title/Titre du projet

ROGERS PASS WASHROOM FACILITY AND DAY USE AREA

Approved by/Approuvé par
MB

Designed by/Concept par
DL

Drawn by/Dessiné par
DL

Project Manager/Administrateur de Projets

Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie

Client / client
Parks Canada

Drawing title / Titre du dessin

FLOOR PLAN - PLUMBING LAYOUT

Project No. / No. du project CAI 752	Sheet / Feuille M2	Revision no. / La Révision no.
---	-----------------------	--------------------------------



EMBE CONSULTING ENGINEERS
SUITE 204, 110 12TH AVENUE, S.W.
CALGARY, AB, T2R 0G7
403-460-2277
info@embeconsulting.ca

MANIFOLD IN-FLOOR HEATING SCHEDULE	
AREA	273 m ²
TOTAL HEATING CAPACITY	107.7 MJ/Hr
TOTAL WATER FLOW	0.67 L/S
OUTPUT	89.31 MJ/Hr
NUMBER OF LOOPS	10
AVERAGE LENGTH OF LOOP	90.09 m
PIPE SIZE/LOOP	15 mm
AVERAGE WATER FLOW PER LOOP	0.06 L/S
PRESSURE DROP	21.82 kPa
PIPE SPACING	300 mm O.C.

GAS EQUIPMENT SCHEDULE	
EXTEND 2" GAS LINE FROM PROPANE TANK TO BOILERS. SIZING BASED ON 100FT LENGTH TO FURTHEST EQUIPMENT.	
GAS LOAD SIZE: 1,000 CFH GAS EQUIPMENT LOAD: 860 CFH	
BOILER B1	110 CFH
BOILER B2	110 CFH
TOTAL LOAD	220 CFH 220,000 BTU/H

EXPANSION TANK SCHEDULE				
TAG	MANUFACTURER	MODEL	VOLUME	REMARKS
EX1	AMTROL TACO OR APPROVED EQUIVALENT	AX-20V, CBX42-125 OR APPROVED EQUIVALENT	41.3 L	861 KPA OPERATING PRESSURE. ENSURE EQUIPMENT IS RATED FOR HIGH ALTITUDE OPERATION

HOT WATER HEATER UNIT SCHEDULE						
TAG	LOCATION	MANUFACTURER	MODEL	CAPACITY	BTU/HR INPUT	REMARKS
WH1	MECH ROOM	LOCHINVAR TRIANGLE TUBE OR APPROVED EQUIVALENT	SMART 80 OR APPROVED EQUIVALENT	253 LT	INDIRECT	INSTALL ON HOUSE KEEPING PADS. SEE BOILER SCHEMATIC FOR PIPING. ENSURE EQUIPMENT IS RATED FOR HIGH ALTITUDE OPERATION.

BOILER UNIT SCHEDULE							
TAG	LOCATION	MANUFACTURER	MODEL	GAS (kJ/Hr)	HEATING CAPACITY (kJ/Hr)	ELECTRICAL (V/PHHZ)	REMARKS
B1	MECH ROOM	LOCHINVAR, VISSMAN OR APPROVED EQUIVALENT	WHL111, B2HB 35-125 OR APPROVED EQUIVALENT	116056.143	107615.69	120/1/60	WALL MOUNTED CW LP GAS KIT. PROVIDE LOW WATER CUT-OFF SWITCH AND FLOW SWITCH. COORDINATE WITH STRUCTURAL FOR HANGING BOILERS TO THE WALL. ENSURE EQUIPMENT IS RATED FOR HIGH ALTITUDE OPERATION.
B2	MECH ROOM	LOCHINVAR, VISSMAN OR APPROVED EQUIVALENT	WHL111, B2HB 35-125 OR APPROVED EQUIVALENT	116056.143	107615.69	120/1/60	WALL MOUNTED CW LP GAS KIT. PROVIDE LOW WATER CUT-OFF SWITCH AND FLOW SWITCH. COORDINATE WITH STRUCTURAL FOR HANGING BOILERS TO THE WALL. ENSURE EQUIPMENT IS RATED FOR HIGH ALTITUDE OPERATION.

HRV SCHEDULE							
TAG	LOCATION	MANUFACTURER	MODEL	SUPPLY AIR FLOW (L/S)	SUPPLY E.S.P. (Pa)	ELECTRICAL (V/PHHZ)	REMARKS
HRV1	CEILING SPACE	VANEE, ALDES OR APPROVED EQUIVALENT	6LC, H650-FI-EC OR APPROVED EQUIVALENT	283.0 L/s	124	115/1/60, 5.7A, 640W	PROVIDE 7 DAY PROGRAMMABLE THERMOSTAT. MOUNT HORIZONTAL IN CEILING SPACE. PROVIDE ALUMINIUM CORE CW AUTOMATIC RECIRC DEFROST CYCLE. DRAIN CONDENSATE TO NEAREST DRAIN. PROVIDE ACCESS AS PER MANUFACTURER'S RECOMMENDATION. PROVIDE HRV CONTROLLER. HRV TO RUN CONTINUOUSLY.
HRV2	CEILING SPACE	VANEE, ALDES OR APPROVED EQUIVALENT	6LC, H650-FI-EC OR APPROVED EQUIVALENT	283.0 L/s	124	115/1/60, 5.7A, 640W	PROVIDE 7 DAY PROGRAMMABLE THERMOSTAT. MOUNT HORIZONTAL IN CEILING SPACE. PROVIDE ALUMINIUM CORE CW AUTOMATIC RECIRC DEFROST CYCLE. DRAIN CONDENSATE TO NEAREST DRAIN. PROVIDE ACCESS AS PER MANUFACTURER'S RECOMMENDATION. PROVIDE HRV CONTROLLER. HRV TO RUN CONTINUOUSLY.

PUMP SCHEDULE								
TAG	SERVICE	MANUFACTURER	MODEL	FLOW (L/S)	HEAD (kPa)	MOTOR POWER	ELECTRICAL (V/PHHZ)	REMARKS
P1	BOILER INJECTION PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-40 F, 2400-40 OR APPROVED EQUIVALENT	1.021	29.98	102W	115/1/60	3 SPEED, INLINE, WET ROTOR CIRCULATOR. CONTROLLED BY BOILER CONTROLLER. SET PUMP ON MEDIUM SPEED.
P2	BOILER INJECTION PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-40 F, 2400-40 OR APPROVED EQUIVALENT	1.021	29.98	102W	115/1/60	3 SPEED, INLINE, WET ROTOR CIRCULATOR. CONTROLLED BY BOILER CONTROLLER. SET PUMP ON MEDIUM SPEED.
P3	IN-FLOOR HEATING PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-80 F, 2400-10 OR APPROVED EQUIVALENT	0.67	45	160W	115/1/60	MAINTAIN CONSTANT PRESSURE. SET PRESSURE SETPOINT TO 15FT OF HEAD FOR COMMISSIONING.
P4	IN-FLOOR HEATING STANDBY PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-80 F, 2400-10 OR APPROVED EQUIVALENT	0.67	45	160W	115/1/60	MAINTAIN CONSTANT PRESSURE. SET PRESSURE SETPOINT TO 15FT OF HEAD FOR COMMISSIONING.
P5	DOMESTIC WATER HEATER INJECTION PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-80 F, 2400-10 OR APPROVED EQUIVALENT	0.30	45	152W	115/1/60	INLINE WET ROTOR CIRCULATOR. PROVIDE TEKMAR 150 CONTROLLER TO MAINTAIN DISCHARGE TEMPERATURE SETPOINT ON WATER HEATER. SET AT MEDIUM SPEED.
P6	DOMESTIC WATER HEATER STANDBY PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-80 F, 2400-10 OR APPROVED EQUIVALENT	0.30	45	152W	115/1/60	INLINE WET ROTOR CIRCULATOR. PROVIDE TEKMAR 150 CONTROLLER TO MAINTAIN DISCHARGE TEMPERATURE SETPOINT ON WATER HEATER. SET AT MEDIUM SPEED.
P7	DOMESTIC WATER RECIRC PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UP 15-18B5, 006-BC4 OR APPROVED EQUIVALENT	0.18	29.98	85W	115/1/60	INLINE CIRCULATOR CW TIMER AND AQUASTAT. SET AT MEDIUM SPEED

GRILLE/ DIFFUSER SCHEDULE	
GRILLE/DIFFUSER TYPE	NECK SIZE OR GRILLE SIZE AIR FLOW (L/S)
TYPE S1	- EH PRICE MODEL 520/FI/A/B12 (FINISH: ALUMINUM)
TYPE R1	- EH PRICE MODEL 510D/FI/A/B12 (FINISH: WHITE)
TYPE L1	- WESTVENT SF-430W, STEEL, 100mm WEATHER PROOF BLADE (FINISH: BY ARCHITECT)
PROVIDE DAMPERS FOR EXHAUST GRILLES PROVIDE ALL DIFFUSERS AND GRILLES WITH INSECT SCREEN THAT CAN BE EASILY CLEANED AND REPLACED. PROVIDE MOUNTING KITS FOR T-BAR AND DRYWALL WHERE REQUIRED CONTRACTOR TO PROVIDE ACCESS PANELS WHERE BALANCING DAMPERS ARE INACCESSIBLE. CONTRACTOR TO CONFIRM LOCATION OF ACCESS PANEL WITH GC PRIOR TO INSTALLATION. CONFIRM WITH ARCHITECT.	

PLUMBING FIXTURE SCHEDULE											
TAG	FIXTURE	MANUFACTURER	CAT. #	MODEL	ACCESSORIES	TRIM/SUPPLIES	TRAP	DRAIN	VENT	CW	HW
A	WALL HUNG WATER CLOSET (ADA)	AMERICAN STANDARD, TOTO OR APPROVED...	2856.128	AFWALL MILLENIUM FLOWISE, 381mm HEIGHT, 1.28 Gpl, ELONGATED SEAT, FLUSHOMETER MANUAL FLUSH VALVE, ADA COMPLIANT, MODEL 3461.001	SOLID PLASTIC, OPEN FRONT, WHITE SEAT, BOLTS, NUTS AND CAPS, FLEXIBLE HOSE C/W STOPS ON SUPPLIES	MANUAL FLUSH VALVE AMERICAN STANDARD MODEL 6047.121	INTEGRAL	75	38	25	-
B	WALL HUNG LAVATORY	AMERICAN STANDARD, TOTO OR APPROVED EQUIVALENT	0955.000	MURRO UNIVERSAL DESIGN WALL-HUNG LAVATORY, HOLES ON 102mm CENTERS, ADA COMPLIANT	KNEE GUARD 0059 020, STOPS ON ALL SUPPLIES	TOTO TEL105 SERIES C/W ECOPOWER, CONTROL MODULE AND MIXING VALVE. ENSURE CONTROL MODULE IS INSTALLED RECESSED.	P-TRAP	40	32	15	15
C	MOP SINK	FIAT, KINDRED OR APPROVED EQUIVALENT	MSB-2424	MOLDED-STONE MOP SERVICE BASSIN	STAINLESS STEEL DRAIN, STAINLESS STEEL BUMPER GUARDS	CRANE 830AA WALL MOUNTED C/W PAIL HOOK, VACUUM BRAKER, HOSE CONNECTION, 1200mm HOSE	P-TRAP	75	40	15	15
D	WATER FOUNTAIN	ELKAY, HAWKS OR APPROVED EQUIVALENT	E2S8WSSK	115/1/60, 5A FLA, 370W, c/w bottle filling station. Stops on supplies	STOPS ON SUPPLIES	N/A	P-TRAP	40	32	20	20
CONFIRM ALL PLUMBING FIXTURES WITH ARCHITECT, OWNER AND INTERIOR DESIGNER.											

Revision / Revision	Description / Description	Date / Date
8	ADDENDUM #1	19-01-24
7	ISSUED FOR TENDER	18-12-13
6	99% REVIEW	18-10-26
5	99% REVIEW	18-10-19
4	99% REVIEW	18-10-03
3	90% REVIEW	18 08 17
2	60% REVIEW	18 06 08
1	30% REVIEW	18 03 23

Client / client



Project title/Titre du projet

ROGERS PASS WASHROOM FACILITY AND DAY USE AREA

Approved by/Approve par MB

Designed by/Concept par DL

Drawn by/Dessine par DL

Project Manager/Administrateur de Projets

Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'ingénierie

Client / client Parks Canada

Drawing title / Titre du dessin

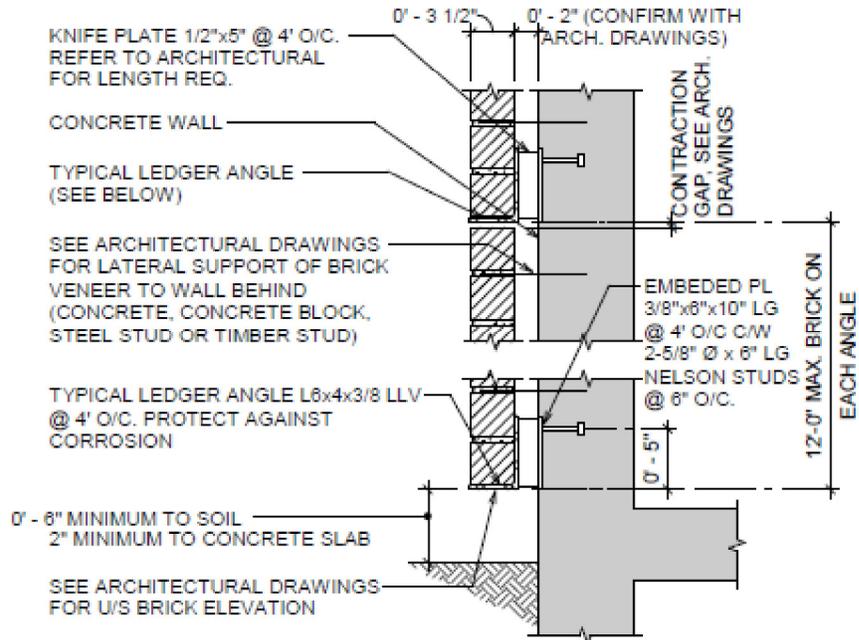
MECHANICAL SCHEDULES

Project No. / No. du project	Sheet / Feuille	Revision no. / La Révision no.
CAI 752	M6	

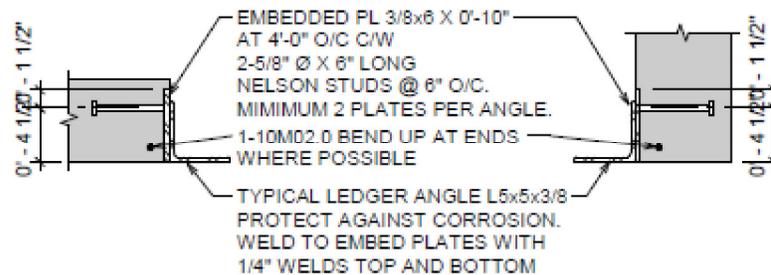


ARCHITECTURAL BRICK VENEER (U.N.O.)

- SEE ARCHITECTURAL DRAWINGS FOR BRICK VENEERS. UNLESS NOTED OTHERWISE 3 1/2" BRICK VENEERS SHALL BE SUPPORTED AT BOTTOM BY DIRECT BEARING ON CONCRETE SLAB OR CORBEL (IF SHOWN ON STRUCTURAL DRAWINGS) OR ON A STEEL LEDGER ANGLE (SEE BELOW).

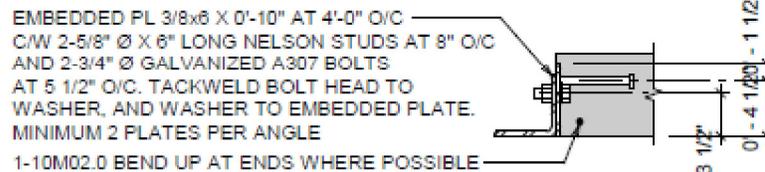


AT WALLS



AT SLABS

AT BEAMS



ALTERNATE DETAIL AT SLABS AND BEAMS

- CORROSION PROTECTION OF LEDGER ANGLES SHALL BE HOT-DIP GALVANIZING. AFTER WELDING GRIND SMOOTH ALL WELDS. AFTER WELDING OR BOLTING THE ANGLE IN PLACE, COAT ALL NON-GALVANIZED STEEL (EXPOSED PORTION OF EMBED PLATES, WELDS AND BOLT HEADS) WITH GALVAON.
- SEE ARCHITECTURAL DRAWINGS FOR BRICK SUPPORTS IN CASES DIFFERENT THAN THE GENERIC EXAMPLES SHOWN ABOVE. SHOP DRAWINGS SHOWING ALL STEEL SUPPORTS FOR BRICK VENEER SHALL BE SUBMITTED FOR REVIEW.