# Volume 1 Architectural & Structural

**PROJECT** 

**New Police Building** 

Pelican Narrows, Saskatchewan

PROJECT No. 10/2017	SET No.
DATE <b>2018-10-19</b>	

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#### PART 1 General

#### 1.1 RELATED SECTIONS

- .1 Section 00 31 21.01 Existing Building Drawings 1980
- .2 Section 00 31 21.02 Building Addition Drawings 1991
- .3 Section 00 31 21.03 Phase I Environmental Site Assessments & Hazardous Materials Sampling at RCMP Properties at Various Locations within Northern Saskatchewan

#### 1.2 EXISTING BUILDING AND SITE INFORMATION

- .1 Copies of drawings of the existing police building are included as follows for information and use:
  - .1 Title: "Pelican Narrows, Sask. R.C.M.P. Detachment (DA-2, 4 cells)", Project Number 086108, prepared by Public Works Canada (Western), 28 drawings dated March 1980.
  - .2 Title: "Pelican Narrows, Sask. R.C.M.P. Detachment Addition & Renovation Project Number 623884", prepared by Public Works Canada (Western), 21 drawings dated June 1991.
  - .3 Title: "Phase I Environmental Site Assessments & Hazardous Materials Sampling at RCMP Properties at Various Locations within Northern Saskatchewan", Project No. 102051, prepared by Earth Tech (Canada) Inc., February 2008.
- .2 The drawings of the existing building attached were prepared primarily for the use of the Owner and may not be complete or show current conditions.
- .3 These drawings, by their nature, are provided for information to illustrate the type of construction and size and volume of the existing building but they cannot reveal all conditions that exist or can occur on the site.
- .4 If material resembling spray or trowel-applied asbestos or any other designated substance listed as hazardous be encountered, stop work, take preventative measures, and notify Departmental Representative immediately. Proceed only after receipt of written instructions has been received from Departmental Representative.
- .5 Direct all questions pertaining to the existing drawings to the Departmental Representative.

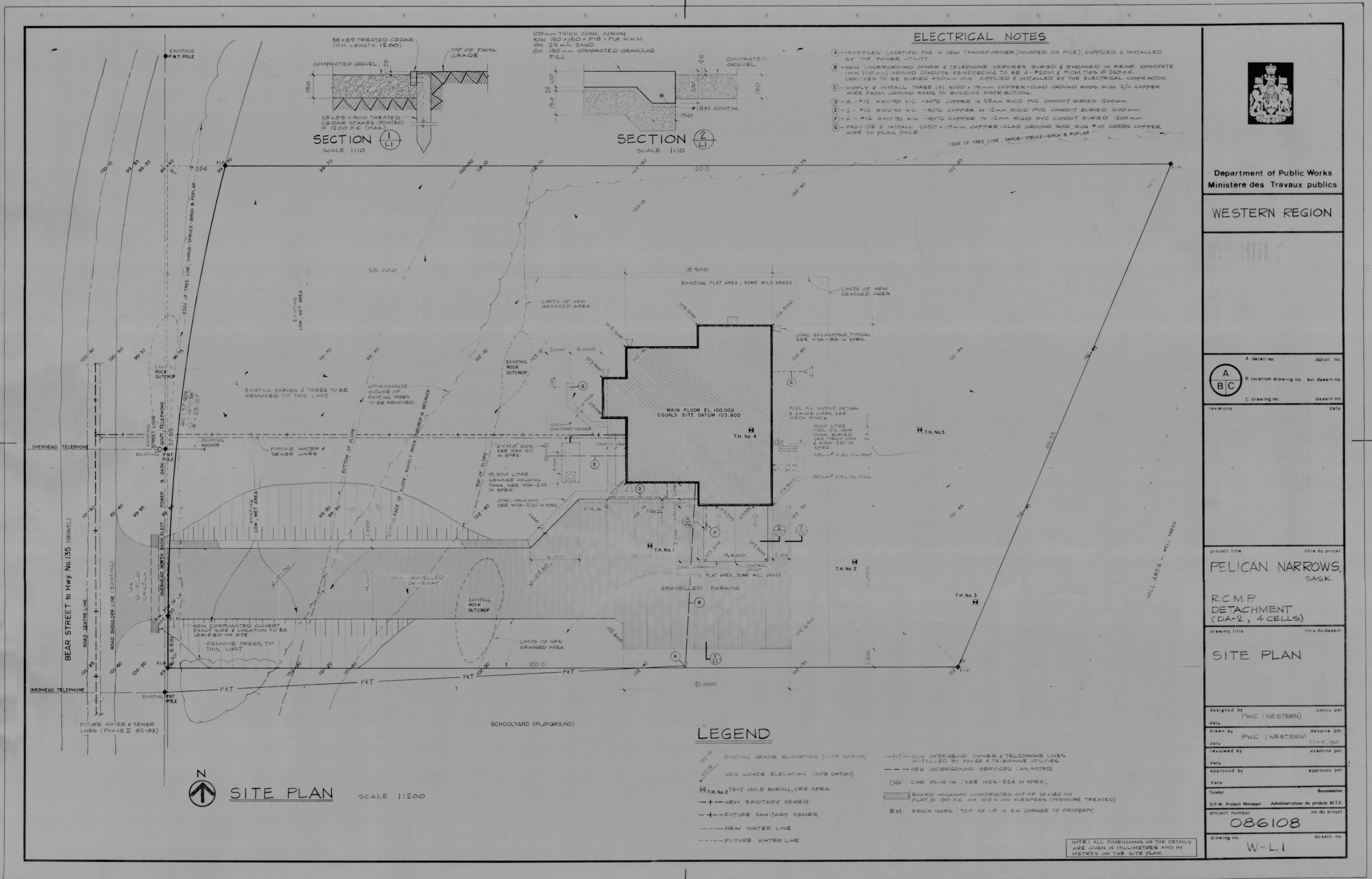
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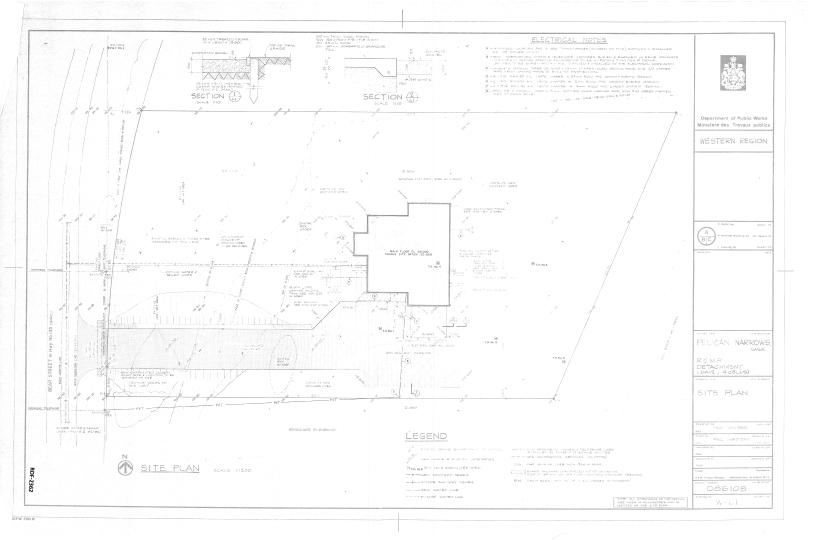
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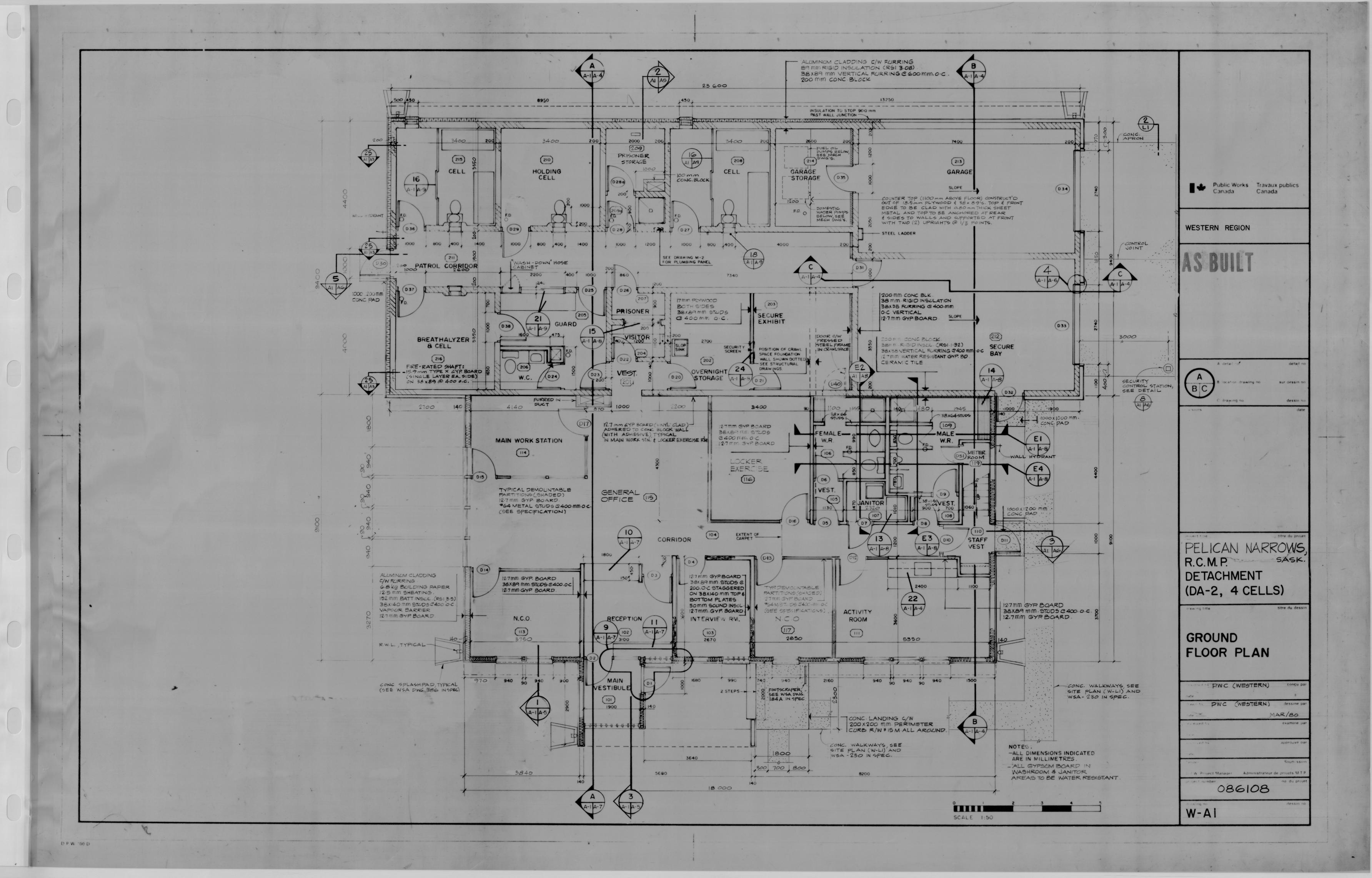
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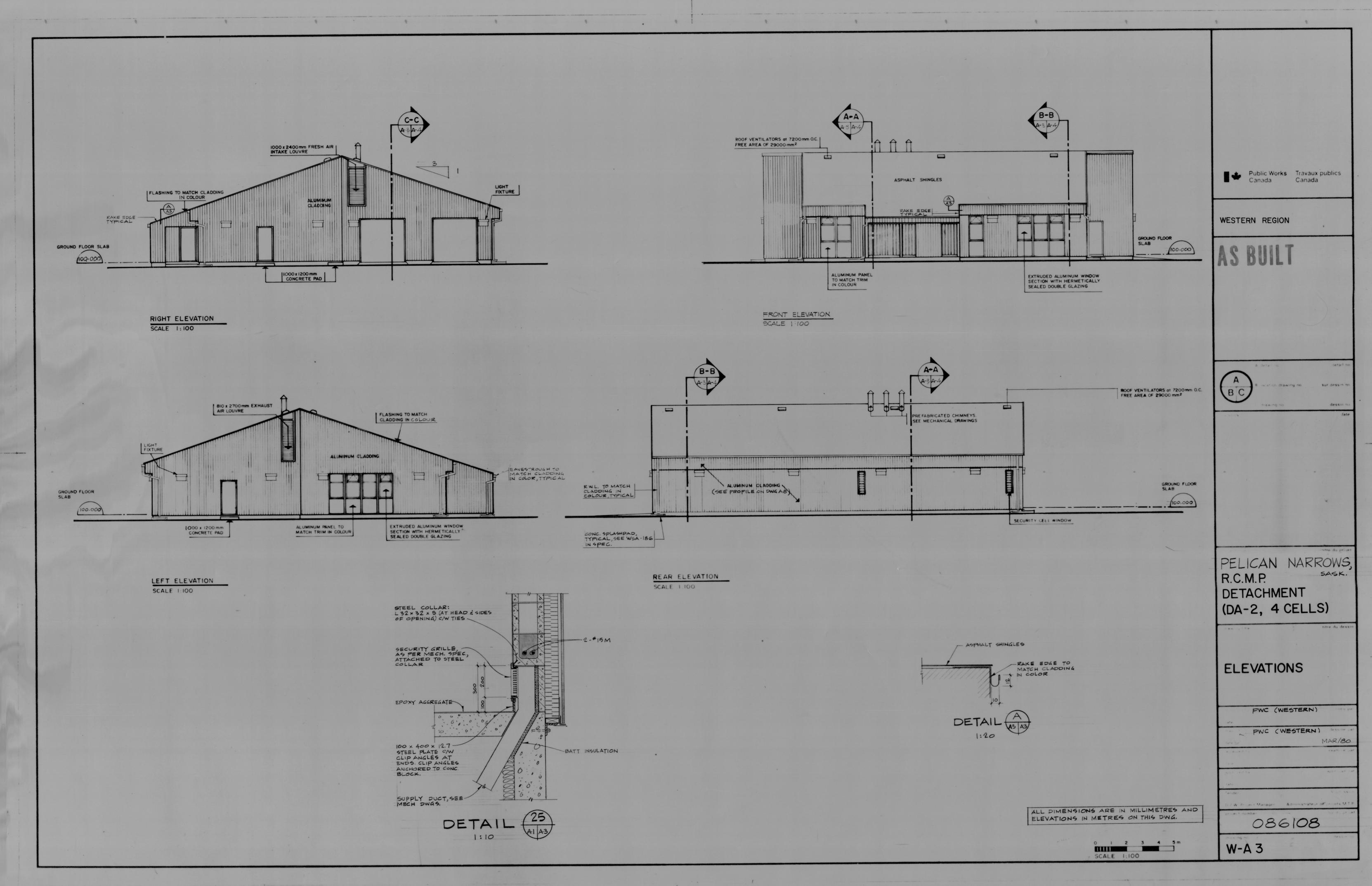
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## **END OF SECTION**

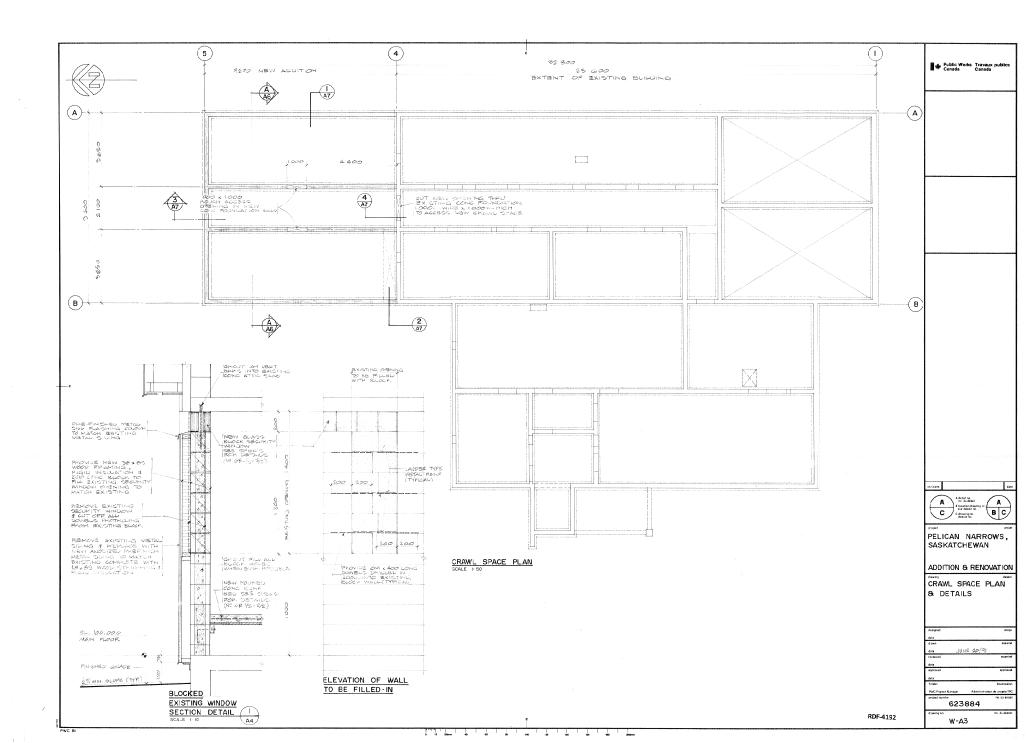


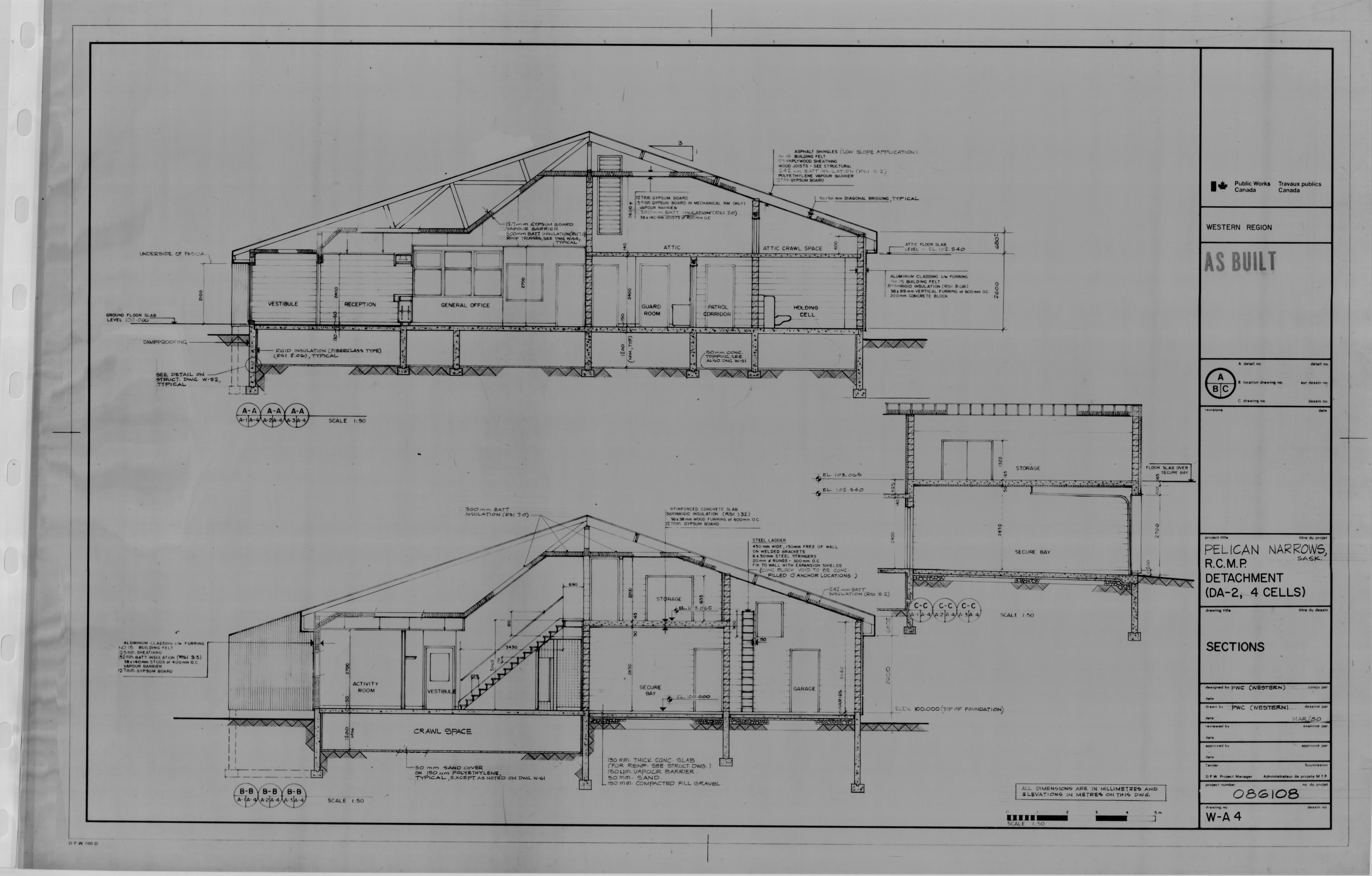


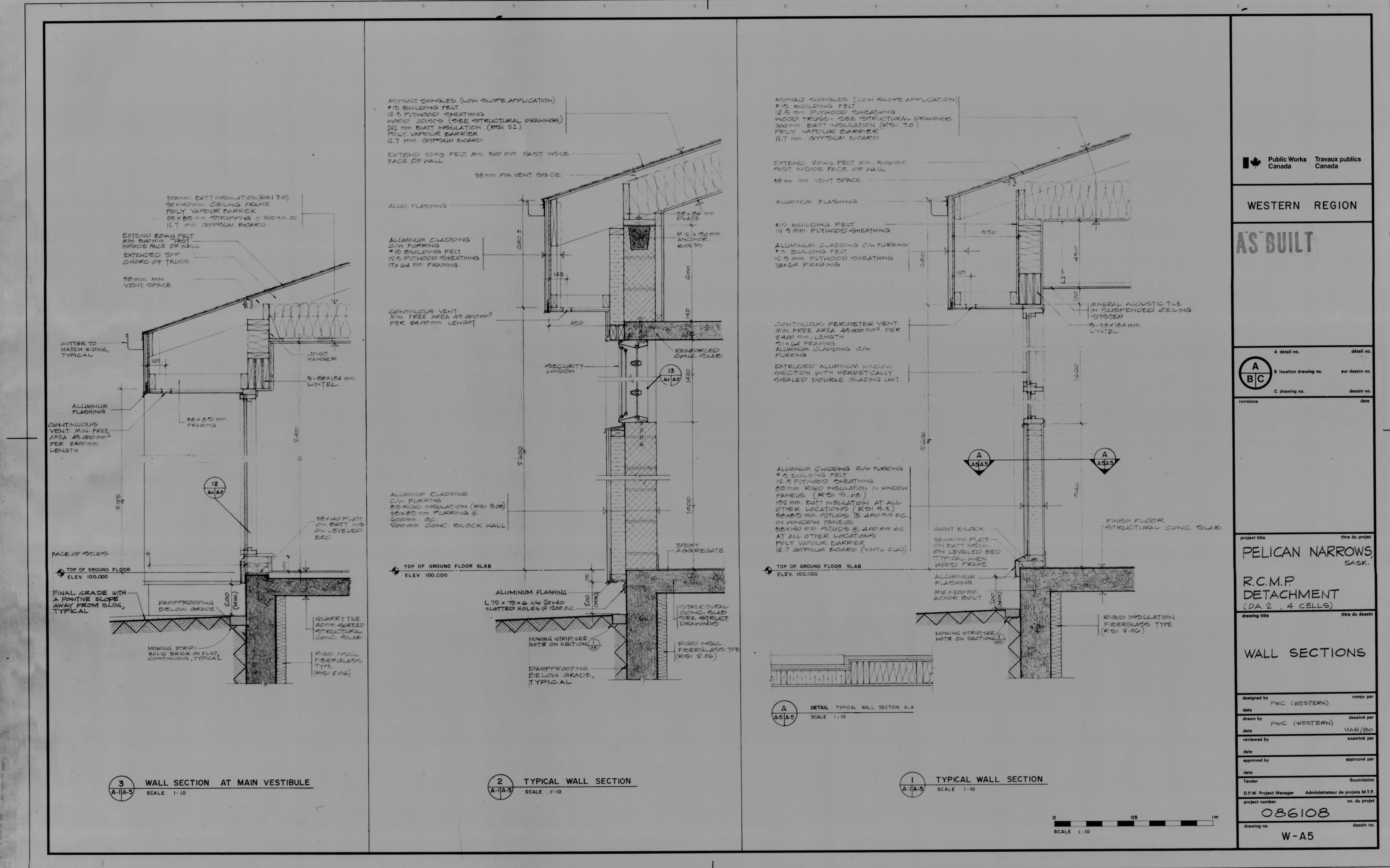




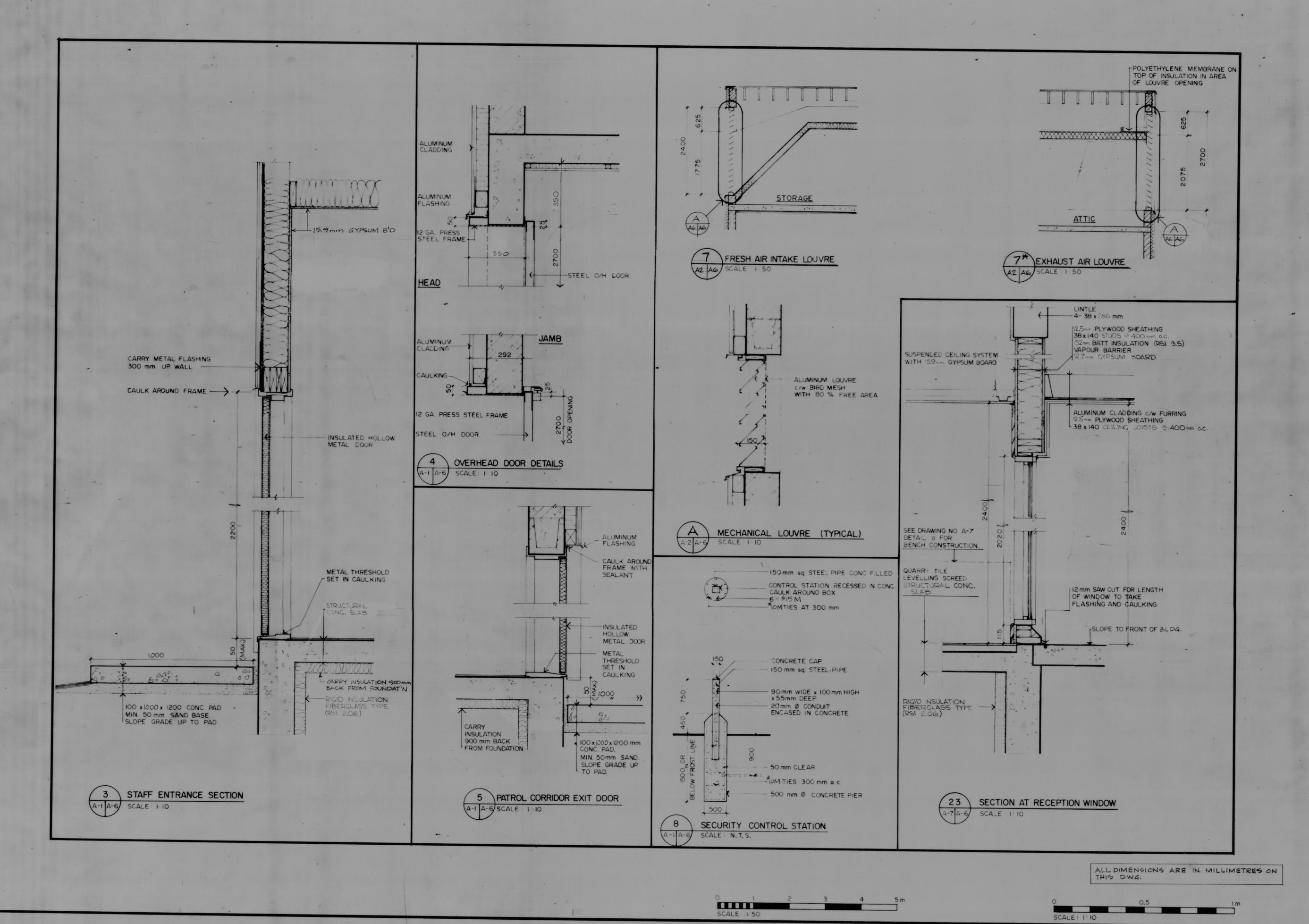
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Public Works Travaux publics Canada Canada

WESTERN REGION

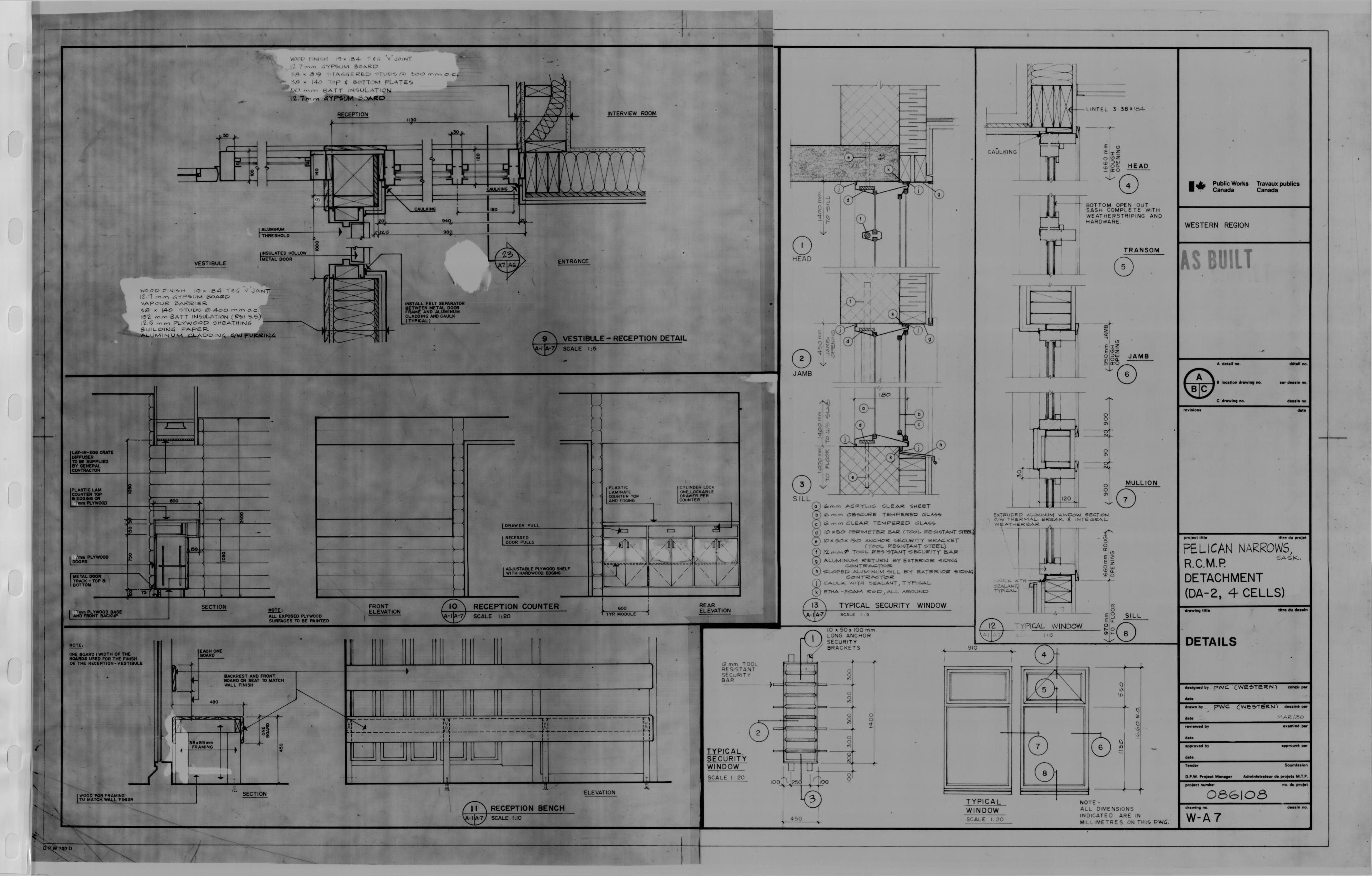
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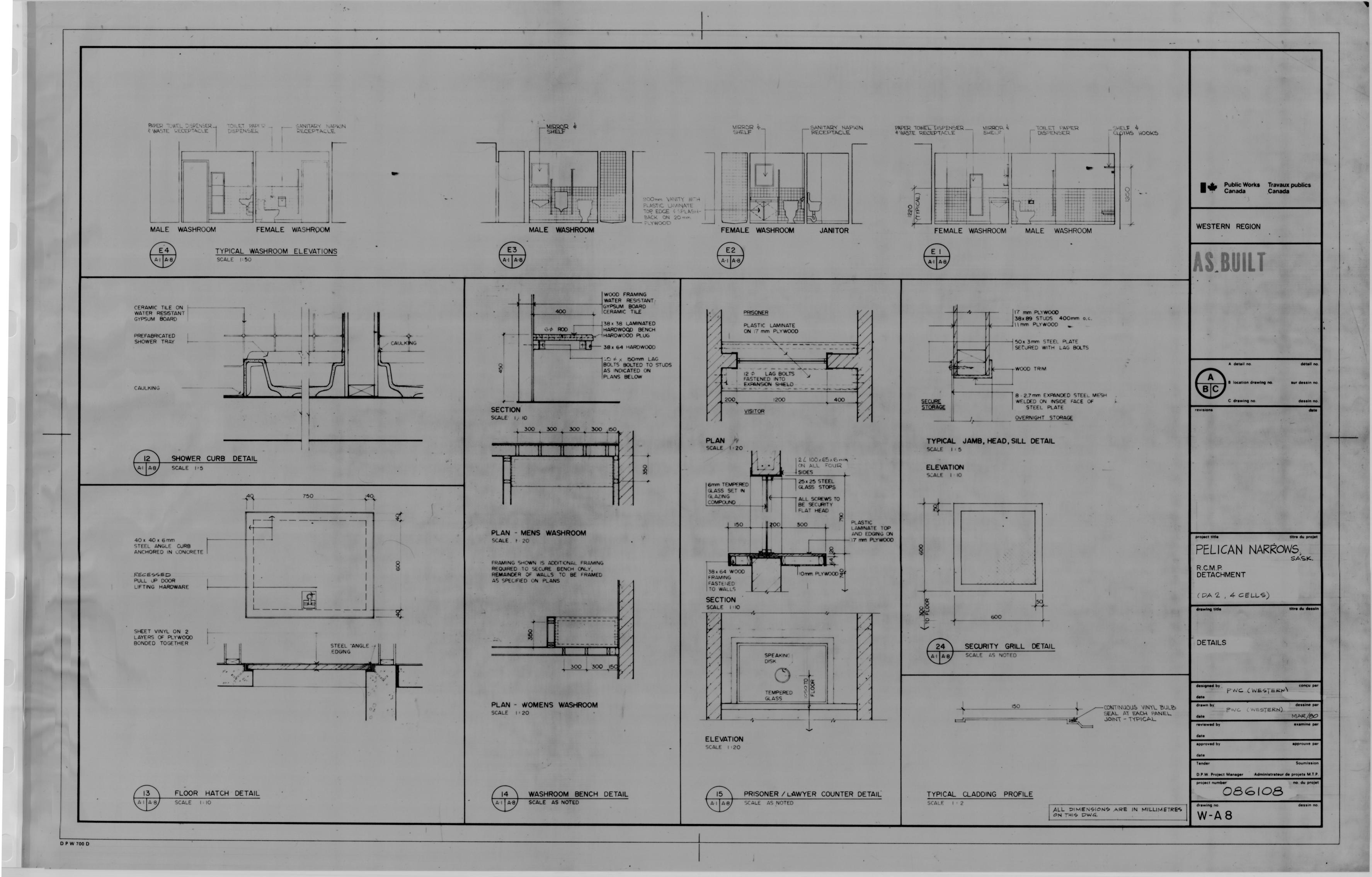
PELICAN NARROWS, R.C.M.P. DETACHMENT (DA-2, 4 CELLS)

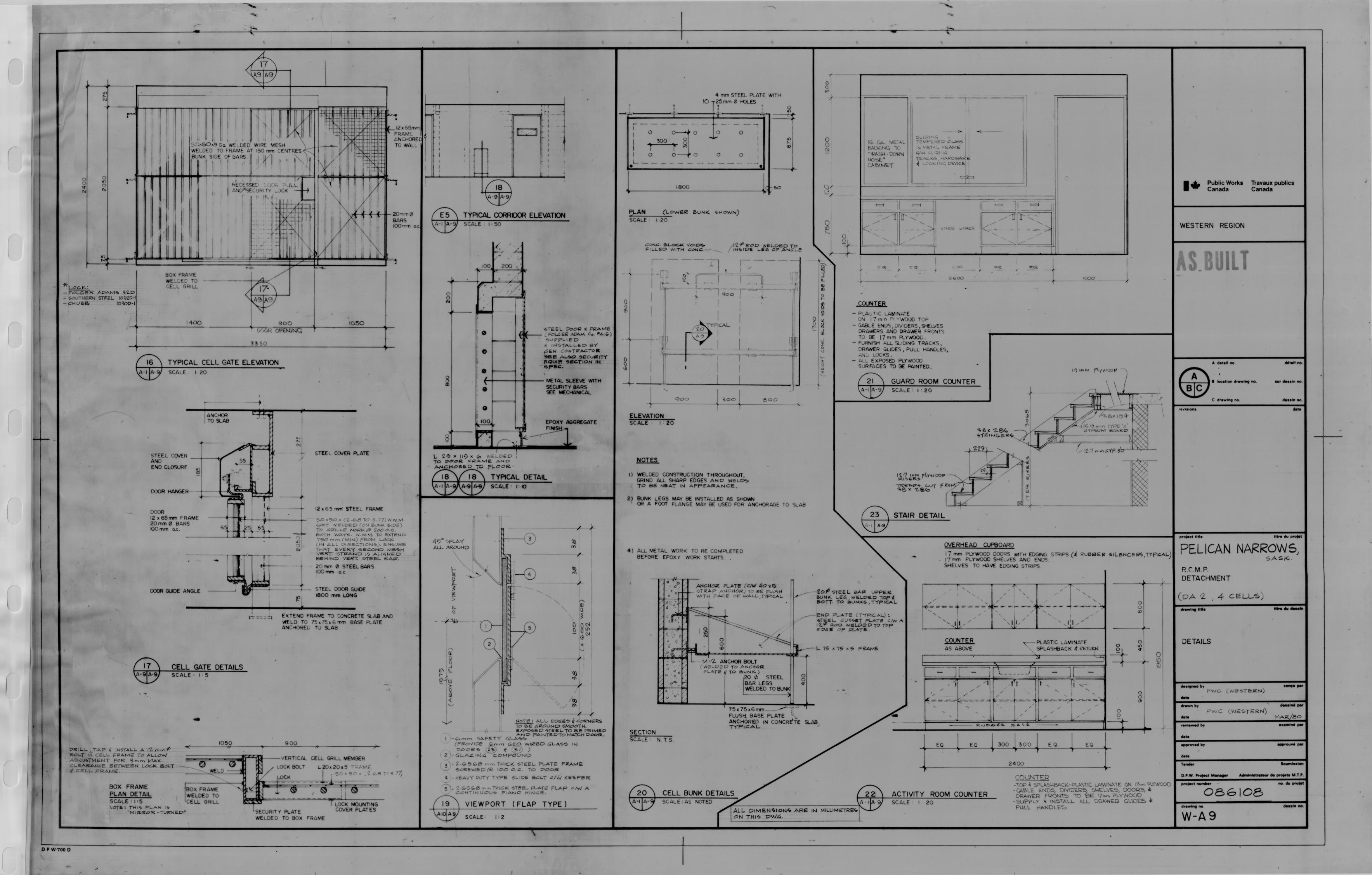
DETAILS

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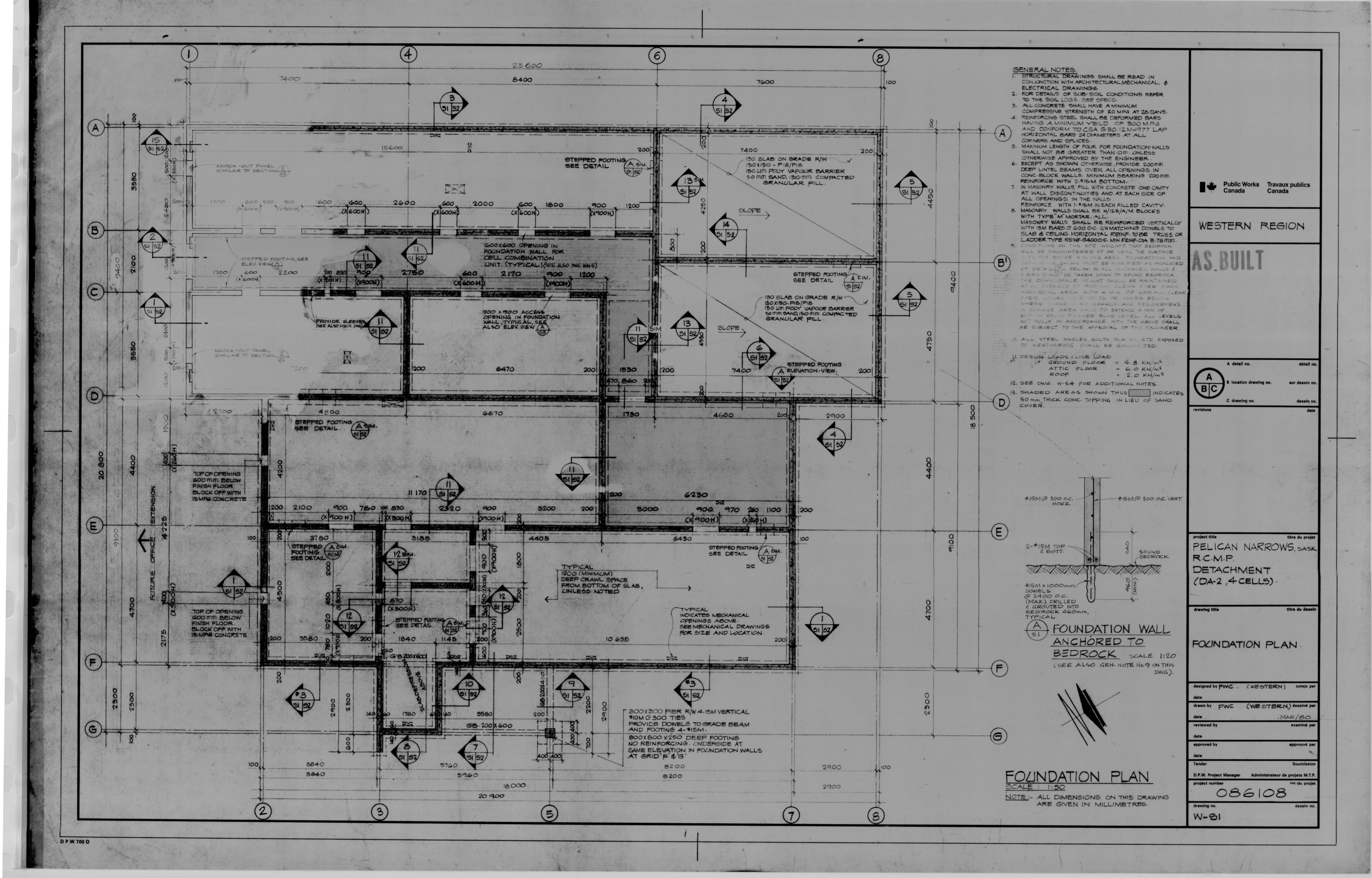
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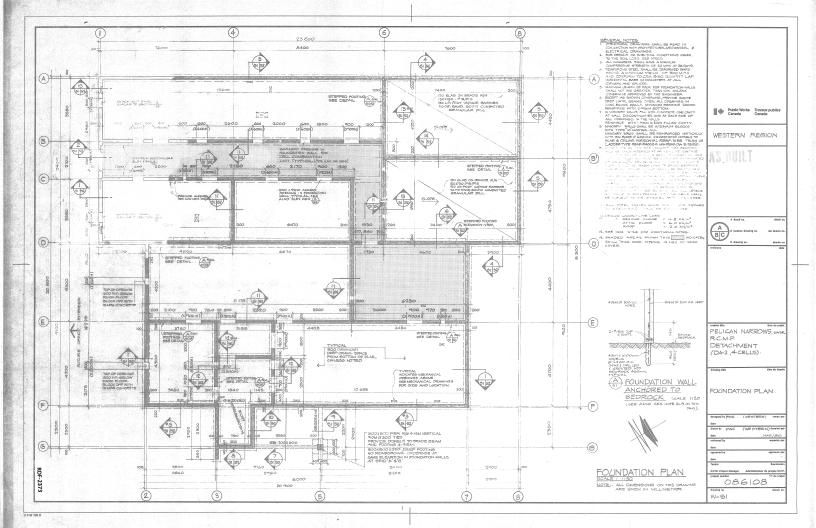


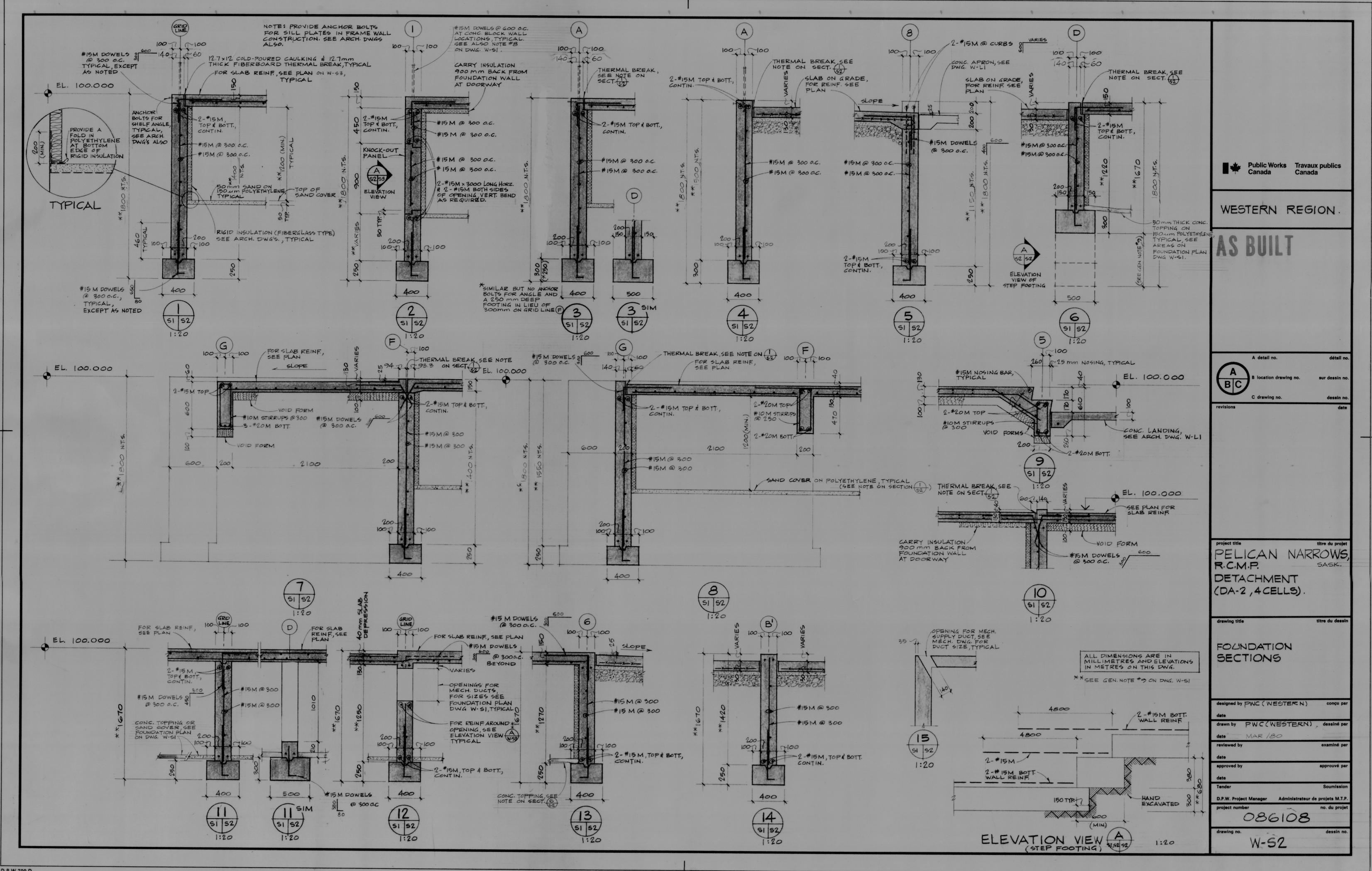


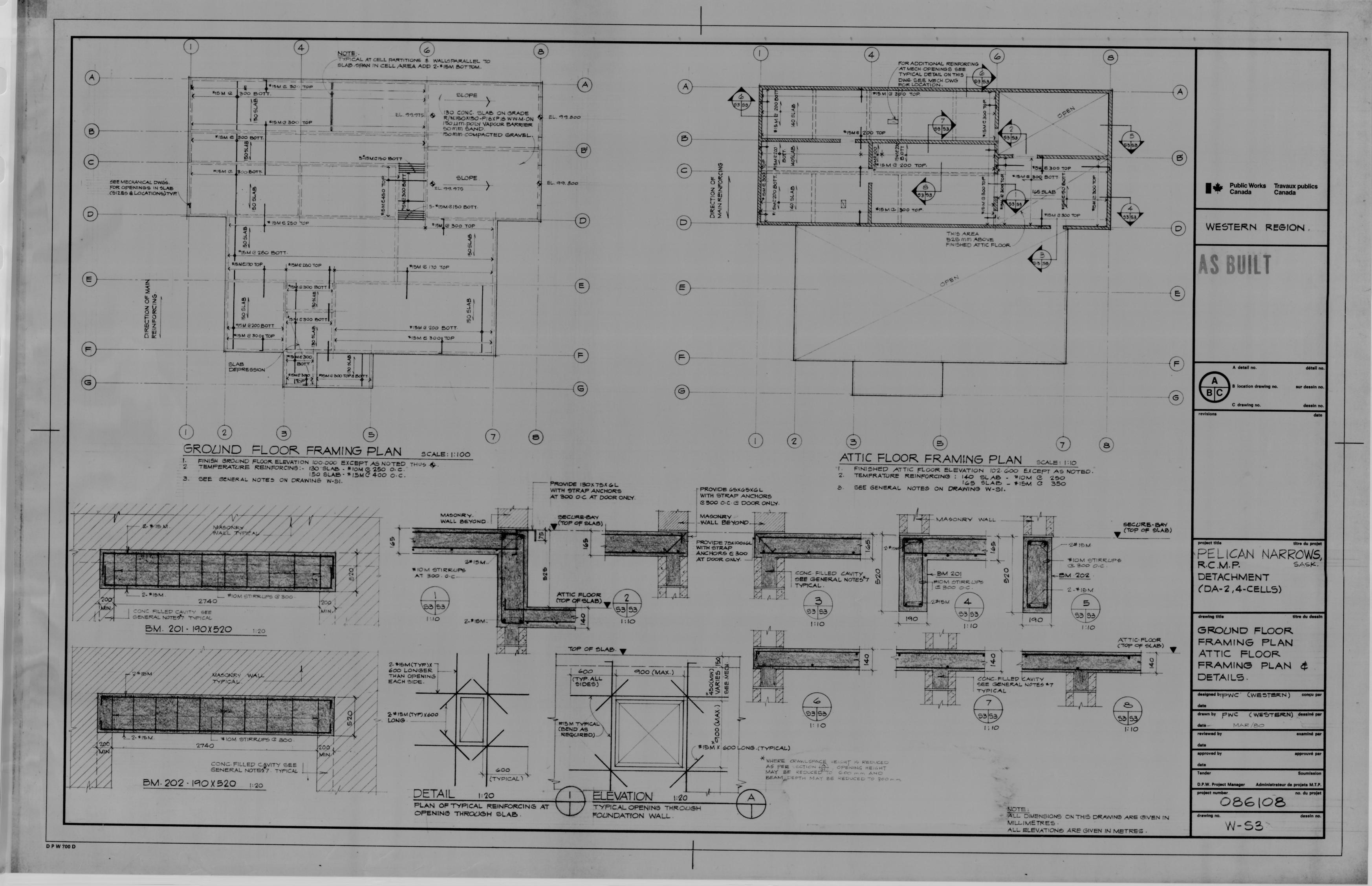


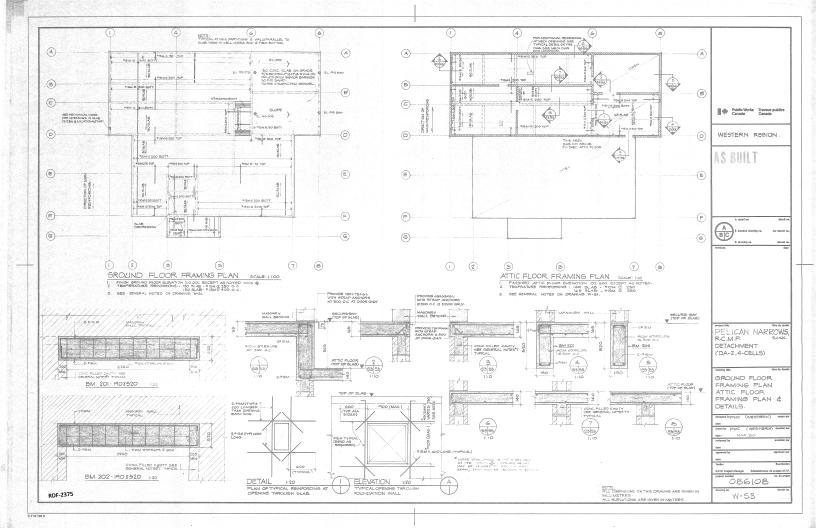
ROOM NO. FLOOR BASE		WALL CEI			THICK UNLESS AS NOTED OTHERWISE.			NO.	NO. FROM TO DOOR						FRAME REMARKS LOC				MADISON NO. 20 R 35 MOUNTED 1575 mm FROM FLOOR VIEWERS AND VIEWEDRIS TO BE			
	MATERIAL			MATERIAL	FINISH	MATERIAL	FINISH	HT.			RM. NO.	RM. NO.	TYPE	SIZE	MAT'L	FINISH	MAT'L.				VIEWERS AND VIEWPORTS TO BE VIEWED FROM GUARD SIDE ONLY	
VESTIBULE	101 Q. T.	NATURAL	100 Q.T.	HARDWOOD	VARNISH	GYPSUM BOARD	PAINT	2400	SEE (3)	DI	OUTSIDE	101	A	45×900×2100	IHM	PAINT	P6	PAINT	ALUMINUM THRESHOLD - WEATHERSTRIP SET IN CAULKING	LI	AIQA9	
PTION	102 Q.T.	NATURAL	100 Q.T.	HARDWOOD	VARNISH	AYPSUM BOARD	PAINT	2400 =	SEE 3	02	101	102	B	45×900×2100	AL	PACTORY	AL	FACTORY .		PS	VIEWPORT WHERE APLICABLE SEE DRAWING NO.A-9 DETAIL 19	
RVIEW ROOM	103 CARPET	NATURAL	100 R.	GYPSUM BOARD	VINYL FABRIC	MINERAL AC. TILE	NATURAL	2700 CE	TENUATED TO STC40	03	102	104	A	45×900×2100	нм	PAINT	P5	PAINT		LI		
RIDOR	104 CARPET SHEET VIN	YL POLISH	100 R	GYPSLM BOARD	VINYL FABRIC	MINERAL AC TILE	NATURAL		IC BASE AT MOUNTABLE PARTITION	04	104	103	A.	45×900×2100	IHM	PAINT	P6(W)	PAINT	WEATHERSTRIP - DROP SILL-INSULATE FRAME - SOUND-RATED DOOR (STC 40)		A FLUSH DOOR	
TIBULE	106 EPOXY AGGREGA	E NATURAL	100 E.A.	WATER RESIST.	PAINT	WATER RESIST GYPSUM BP	PAINT	2400		D8	104	105	D	45×810×2080	HCM	PAINT	P6	PAINT	500 × 250 mm METAL LOUVRE	-	150, 600, 150	
HROOM	106 EPOXY	E NATURAL	100 E.A.	CERAMIC TILE	GLAZED PAINT.	WATER REGIST GYPSUM BB.	PAINT	2400 CE	RAMIC TILE TO 1220 mm.	De	105	106	0	45×810×2080	HCW	PAINT	P6	PAINT	500 × 250 mm METAL LOUVRE	-	PG PG POLICHED O GEORGIAN	
TOR	107 EPOXY	E NATURAL	100 E.A.	WATER RESIST.	PAINT	WATER RESIST	PAINT	2400		D7	104	107	b	45×810×2080	HCW	PAINT	P6	PAINT	500×250 mm METAL LOUVRE	P.6.	PLATE O WIRE	Public Works Travaux
TIBULE	108 EPOXY AGGREGAT		100	WATER RESIGT.	PAINT	WATER RESIST	PAINT	2400		De	104	108	D	45×810×2080	HCW	PAINT	P6	PAINT	500 x 250 mm METAL LOUVRE	_	GWG GWG	Canada Canada
	109 EPOXY AGGREGA		100	CERAMIC TILE	GLAZED	WATER RESIET	PAINT	2400 CE	ERAMIC TILE TO 1220 mm SH EXCEPT SHOWER AREA	D9	108	100	0	45×810×2080	HCW	PAINT	PS	PAINT	500x 250 mm : METAL LOUVRE			
F VESTIBULE	110 SHEET VIN'		100	15.9 mm TYPE 'X' GYPSUM BOARD	PAINT	15.9 mm TYPE 'X'			BBER STAIR TREADS		104	110	c	45 x 900 x 2 100	нм	PAINT	P5	PAINT	3/4HR ULC LABELLED DOOR	P.6		WESTERN REG
/ITY / LOCKER / EXERCIS	ISE III CARPET	NATURAL	100	GYPSUM	VINYL	MINERAL	NATURAL	PV	C BASE AT			OUTSIDE	A	45×900×2100	THM	PAINT	P5(W)	PAINT	ALUMINUM THRESHOLD SET IN	-1	B C GLAZED DOOR FLUSH DOOR	Just my, at 500
ORK STATION	113 CARPET	11	IK.	BOARD	FAERIC	AC TILE	11	2700	MUONIACIE TAR III ION	D12	-	-		45×900×2100		PAINT	AL	FACTORY	CAULKING, WEATHERSTRIP - VIEWER	P.S.	WITH SIDELIGHT WITH LIGHT	AO DILLET
0.	114 CARPET	- 11	"	11	11	n .	11	2700		DIS	-			45×900×2100			-	FACTORY		P5.		V2 RAILI
										0.0	107	1	-	45/ 500 / 2100	FOR	ININI	AL	TACIONI		15.		
			100	GYPSUM	VINYL	MINERAL				3 9 3							-					
ERAL OFFICE	118 CARPET	NATURAL	P.V.C.	BOARD	FABRIC	AC TILE	NATURAL	2700	C BASE AT	9.919											EQ	
/ STORAGE	116 SHEET VINY		P.V.C.			AC. TILE MINERAL	HATURAL	12700 DE	MOUNTABLE PARTITION	DIE	104	116	A	45×900×2100	HCM	PAINT	AL	FACTORY	600 X 300 METAL LOUVRE	P.6	150	
/ STORAGE	117 CARPET	HATURAL	RV.C.	BOARD		AC. TILE	NATURAL	2700		1000	347.5										D E	
				150 Tueld		IEQ TOTAL			100		1000										FLUGH DOOR DOUBLE FLUGH WITH GRILL DOOR	
ER ROOM	119 COHCRETI	E STEEL TROW	EL IOOR	15.9mmTYPE'X' GYPSUM BOARD	PAINT	15.9 m TYPE'X' GYPSUM BOARD	PAINT	VARIES	*	01									2/			A 1
			-							D20	201	202	A	45×900×2100	НМ	PAINT	P6	PAINT	3/4HR LIC LABELLED DOOR C/W CLOSER, PROVIDE A 20 mm. UNDERCUT.	L2	SCALE I: 50	A detail no.
IBULE	201 EPOXY AGGREGAT	E NATURAL	E.A.	CONC. BLOCK	PAINT	CONCRETE	PAINT	2400		D21	202	203	A	45×900×2100	нм	PAINT	P5	PAINT		L2.		B location drawing no.
NIGHT STORAGE	202 EPOXY AGGREGAT	E NATURAL	100 E.A.	PLYWOOD .	PAINT	CONCRETE	PAINT	2400 AT	WOOD WALLS	D22	201	204	A	45 × 760 × 2100	-HM	PAINT	P6	PAINT	3/4HR LIC LABELLED DOOR C/W CLOSER PROVIDE A 20 mm. UNDERCLIT	L3.	50	C drawing no.
RE EXHIBIT	203 EPOXY AGGREGAT	E NATURAL	100 EA	PLYWOOD	PAINT	CONCRETE	PAINT	2400 AT	WOOD WALLS	D23	201	205	. A	45 × 200 × 2100	НМ	PAINT	P5	PAINT	3/4HR ULC LABELLED DOOR 4/W CLOSER AND VIEWPORT (VIEWPORT FROM GUARD 5106). PROVIDE A 20 mm UNDERCUT.	. L2		revisions
OR	204 EPOXY AGGREGAT	E NATURAL	100 E A.	CONC. BLOCK	PAINT	CONCRETE	PAINT	2400		D24	205	206	D	45×810×2080	HCW.	PAINT	P6	PAINT	500 × 250 METAL LOUVE (SECURITY	PRS.	3 5 7 7 1 5	
ID .	205 EPOXY AGGREGAT	E NATURAL		CONC. BLOCK GYPSUM BB.			HIGH BUILD		mm RUBBER BASE	025	211	205	A	45 × 900×2100	НМ	PAINT	PS	PAINT		LP		
	206 EPOXY AGGREGAT		100 E.A.	CONC. BLOCK GYPSUM BD.		CONCRETE		2400		D26	211	207	A	45×760×2100	НМ	PAINT	P5	PAINT	VIEWPORT	L-3		
ONER	207 EPOXY AGGREGAT	11/4/100A1	100 F.A.		HIGH BUILD GLAZED COATG	CONCRETE	HIGH BUILD	2400		D27	211	208	A	45 × 200×2100	нм	PAINT	P5	PAINT	VIEWPORT	L4		
	208 EPOXY AGGREGATI		100	CONC. BLOCK			HIGH BUILD	pin		D28	211	209 A	D	45×900×2100	. нм	PAINT	P5	PAINT	VIEWPORT-GRILL-500×250 (SECURITY TYPE)	L3		
ONER STORAGE	209 EPOXY	LIATION	100	NAME AND ADDRESS OF THE OWNER, WHEN PERSON ASSESSMENT OF THE PERSON ASS	HIGH BUILD		The second secon			D28A	209A	200	A	45×900×2100	HM.	PAINT	PS	PAINT	(SECURITY TYPE)	L3		
VER	THE POWER		100	CONC. BLOCK	CARP COMIC		HIGH BUILD	THE RESIDENCE AND ADDRESS OF THE PERSON.		3000		-		45×900×2100		PAINT	PS	PAINT	VIEWPORT	L4		
DING CELL	AGGREGAT	E NATURAL NATURAL		CONC. BLOCK		A STATE OF THE PARTY OF THE PAR	HIGH BUILD	0.155						45×900×2100		PAINT	-	PAINT	WEATHERSTRIP ALUMINUM	L2	TYPICAL FRAME DETAILS	
	AGGREGATI			CONC. BLOCK			GLAZED COAT'S	-									1		THRESHOLD SET IN CAULKING 3/4 HR ULG LABELLED DOOR O/WCLOSER		SCALE I: IO	
OL CORRIDOR	AGGREGATE		Part In	0,100%	Janeto Con a	The state of the s	Turnet con , c	3 2400		633		212		45×900×2100		PAINT	PS	PAINT	AND VIEWPORT. DOOR TO BE WEATHERSTRIPPED  ALUMINUM THRESHOLD -	L2		project title
	212 CONCRETE	HARDENE	UPS I	CONC. BLOCK		GYPSUM BOARD GYPSUM	PAINT	VARIES						45×900×2100		PAINT		PAINT	WEATHERSTRIP ELECTRONICALLY OPERATED	L2	LOCKS.	PELICAN NARRO
	213 CONCRETE	HARDENER	-	CONC. BLOCK		BOARD	PAINT	VARIES	Imm FIR PLYWOOD, G. 1.5.	100000		DUTSIDE		45×2740×2740	-	-	STEEL	PAINT	STEELT BAR AT BASE OF DOOR	KEYPOST	RUGWIN A2124 SARGENT 8-14-SP-151 (SPECIAL ORDER)	R.C.M.P.
	214 CONCRET	HARDENER	100	CONC. BLOCK	HIGH BUILD	CONCRETE	the state of the s	2400	IMM FIR PETWOOD, A. II.S.			DUTSIDE		45×2740×2740			STEEL	PAINT	STEEL "T"BAR AT BASE OF DOOR	ОН	LATCH BOLT BY KNOW EITHER SIDE. DEAD BOLT BY KEY OUTSIDE & THUMBTURN	DETACHMENT
	215 EPOXY AGGREGATI	E NATURAL	E.A.	CONC. BLOK	GLAZED COATG	CONCRETE	GLAZED COATO	G 2400	1 200	D35	213	214	A	45×900×2100	IHM	PAINT	P6	PAINT	3/4 HR ULC LABELLED DOOR OW  CLOSER DOOR TO BE WEATHERSTRIPPID	L3	INSIDE L2 CORBIN 7922	(DA 2, 4 CELLS)
THALYZER / CELL	216 EPOXY AGGREGA	E NATURAL	E.A.	CONC BLOCK	HIGH BUILD GLAZED COATE	CONCRETE	HIGH BUILD,	G 2400		D36	211	215	A	45×900×2100	НМ	PAINT	P5	PAINT	VIEWPORT	L-4	RUSWIN A 2124 1/2 SARGENT 8-14-7726	drawing title
	727				7	And the second s	1 22			D 37	211	216	A	45×200×2100	НМ	PAINT	P5	PAINT	VIEWPORT	14	LATCH BOLT BY KNOB EITHER SIDE DEADEOLT BY KEY EITHER SIDE	
									17.00	D38	216	205	A	45×200×2100	НМ	PAINT	P5	PAINT	VIEWPORT	L2	L3 CORBIN 7021 RUSWIN A 2124 1/4	ROOM & DOOR
					A ST TO A STATE OF THE STATE OF																SARGENT 8-14-5F-151 (SPECIAL ORDER) LATCHEDUT BY KNOB EITHER SIDE	SCHEDULES
						Andrew Control of the con-															DEAD BOLT BY KEY OUTSIDE ONLY	SCALDOLLS
			-		7.1.7000		14774			7.32											LA FOLGER ADAMS 62 K SOUTHERN STEEL 1062 K-1	
							-														P.S. PASSAGE SET: CORBIN 7010, RUSWIN A2025	designed by PWC (WESTERN)
																					SARGENT 8-7715	date drawn by
AGE	301 CONCRET	E SEALER A	ND 100	CONC. BLOCK GYPSUM BD.	PAINT	GYPSUM	PAINT	2100		D44	110	301	A	45 × 900 × 2100	HM	PAINT	P5	PAINT	S/4 HR. ULC. LABELLED C/W CLOSER	L1		PWC (WESTERN)
IDOR	302 SHEET VINYL	POLISH		CONC. BLOCK GYPSUM BD.		GYPSUM BOARD	PAINT	2100 57	AIRS TO MECH 303, UBBER RISERS & TREADS	D45	110	302	A	45 x 900 x 2100	НМ	PAINT	PS	PAINT	BIAHR. ULC. LABELLED C/W	LI	TYPE-RIM MOUNT, STRAIGHT-THROW	reviewed by
ANICAL ROOM	303 CONCRET	E SEALER A	10	CONC BLOCK		15.9 mm TYPE'X	A STATE OF THE PARTY OF THE PAR	VARIES	TOTAL INJERS & TREADS					45 x 1500 X 1585		PAINT	P5	PAINT	3/4 HR. ULC. LABELLED C/W	P.5.	SPRING BOLT RETRACTED	date approved by
SPACE	304 CONCRET	SEALERA	ND _	CONC. BLOCK		GYPSUM.		VARIES					1	45×1500×1270		PAINT	PS	PAINT	CLOSER & DEAD BOLT TO FLOOR  3/4 HR: ULC LABELLED C/W GLOSER, DEAD  3/4 HR: ULC LABELLED C/W GLOSER, DEAD	1	OUTSIDE CYLINDERS - BRASS WITH	date
	308 CONCRET			CONC. BLOCK		BOARD GYPSUM	7	Weire						45×300×2100		PAINT	P6	PAINT	BOLT TO FLOOR & GUARD RAIL AT MICHEIGHT	PS.	SIX (G) PINS	Tender
	CONCRE			Lene Block	MAIGRAL	BOARD		MULD					1	,			-		C/W CLOSER			D.P.W. Project Manager Administrateur of project number
		7	nen.		HM _ HOLLOW	METAL	NOTE :		100000000000000000000000000000000000000		304			45 × 900× 1200		PAINT	P6	PAINT	3/4HR ULC LABELLED DOOR C/W CLOSE	P5.		086108
EVIATIONS :	WI	_ WOOD VARNI	TEU		THE PARTY OF THE P	11110 17100				The second second	1 0 -	CIDICE	1 A	45×810×1165	1 ILLAA	PAINT	P5	PAINT	DOOR TO BE WEATHER STRIPPED	Y LI		

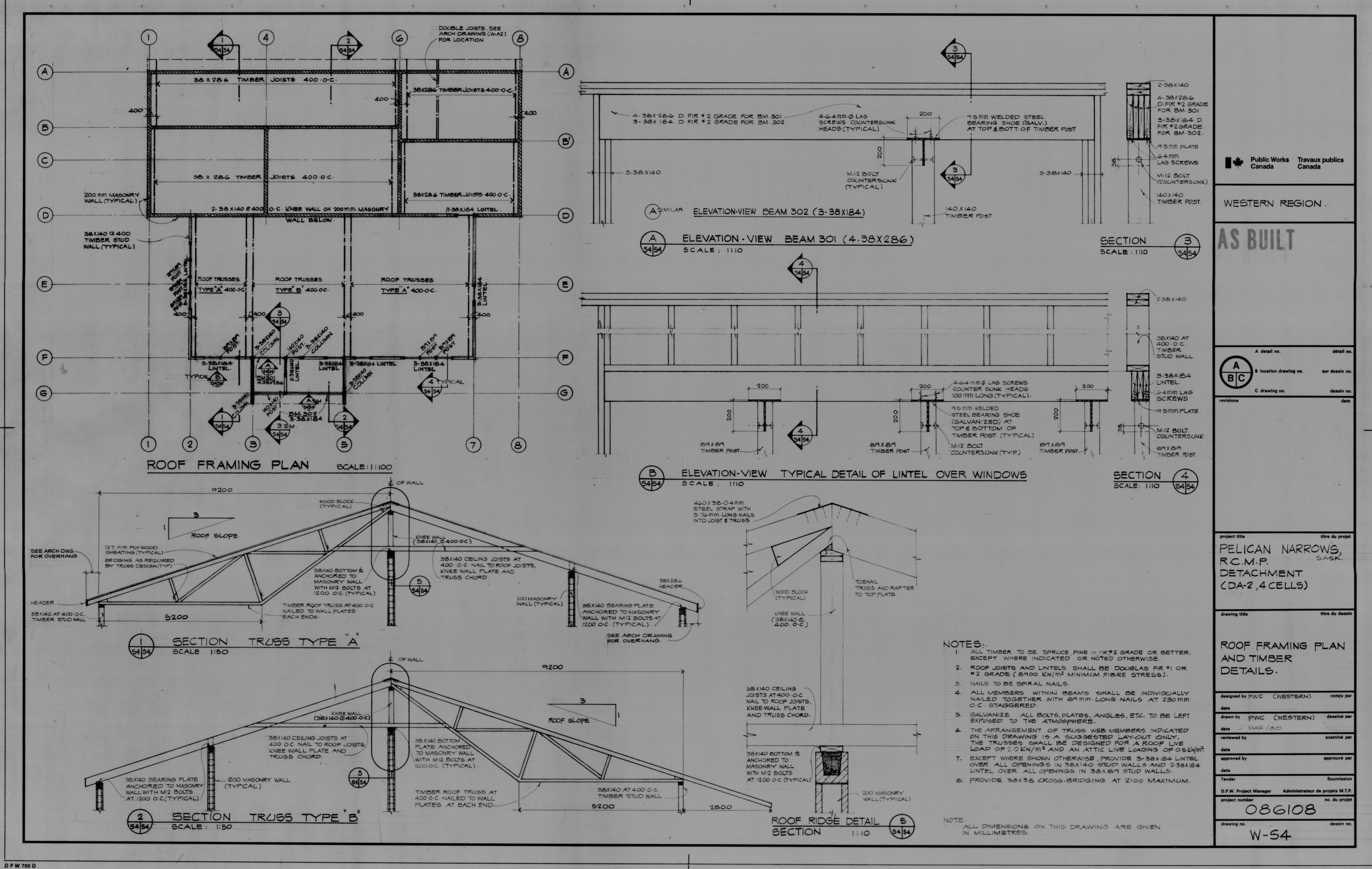


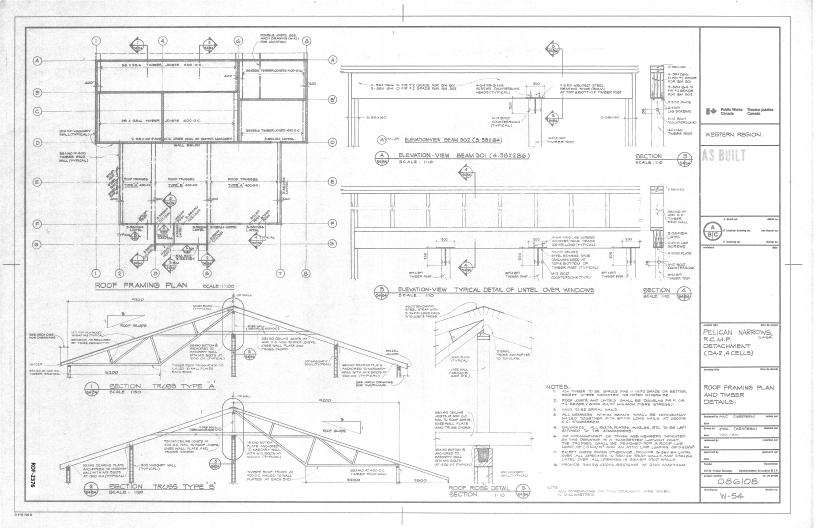


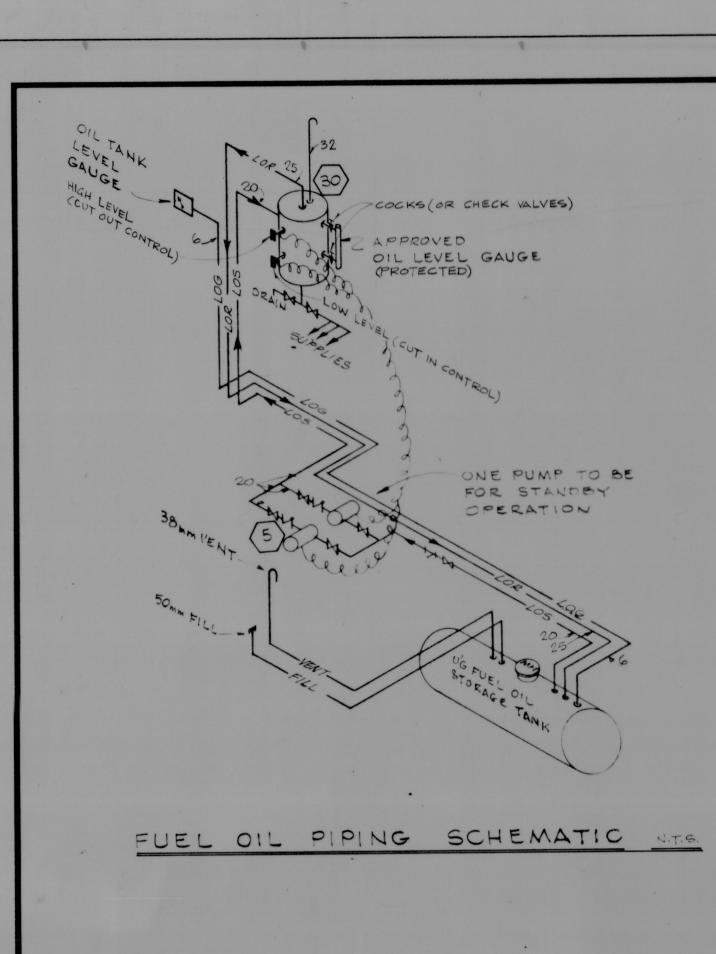


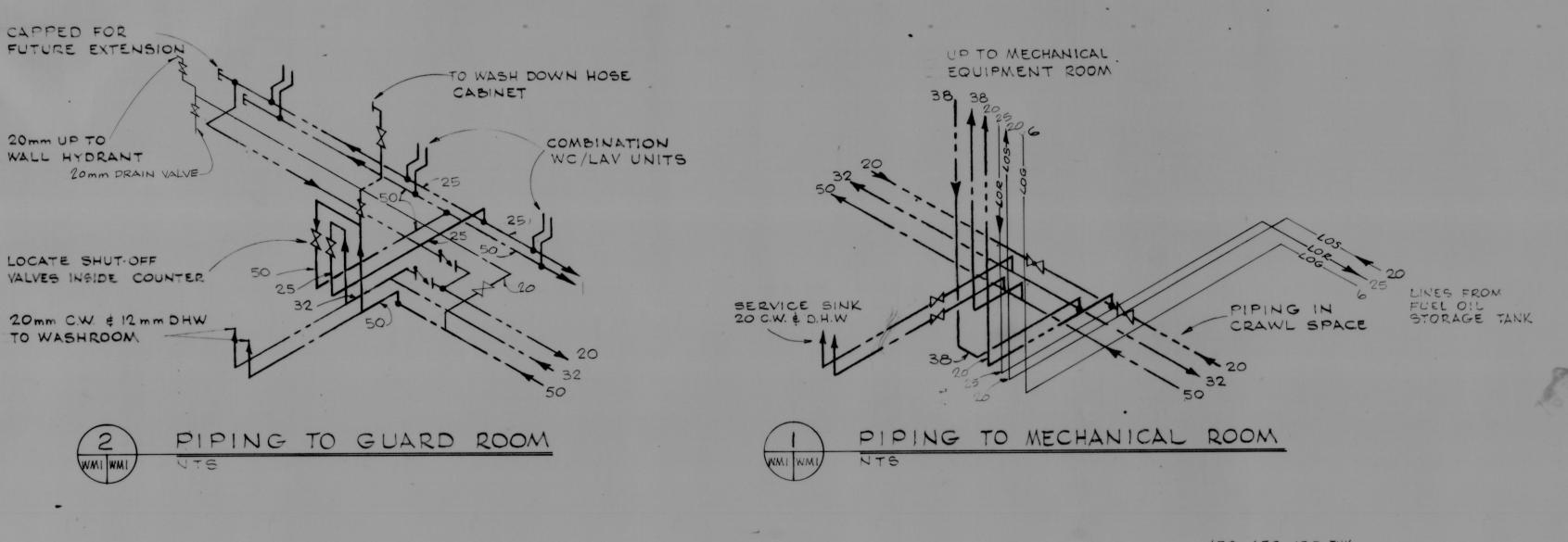


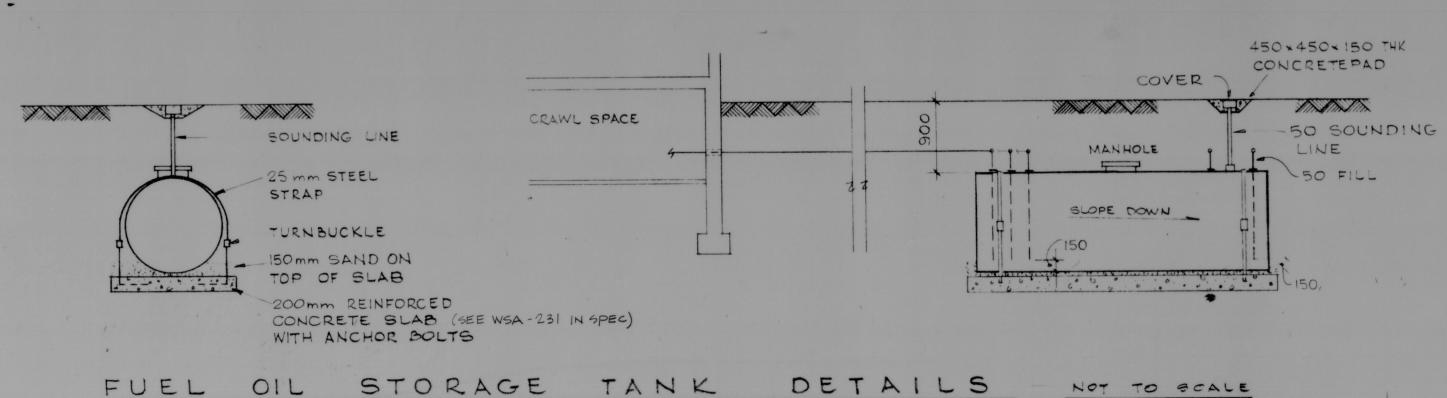












WATER STORAGE TANKS - 1220 mm DIA, EACH 4546 LITRES. TANKS TO BE BURIED 250 mm IN SAND FILL.

20 mm COLD AND HOT WATER PIPING UP TO SINK IN ACTIVITY ROOM.

INSULATE ALL WATER SUPPLY AND RECIRCULATING LINES IN CRAWLSPACE. (C.V. H.W., H.W. RECIRC)

CONNECT SANITARY SEWER-TO SEWAGE HOLDING TANK
(SEE WSA-235 IN SPEC).

SLOPE OF SEWER 1:100. PROVIDE BUILDING CLEAN-

OUTS AS REQUIRED.

NOTE: INCREASE LINE SIZE TO 150 mm, 1000 mm

OUTSIDE: BUILDING.

DUPLEX OIL PUMP SET - DUPLEX OIL PUMP SET

MOUNTED ON 6mm STEEL PLATE INSIDE A 3mm THICK

WELDED STEEL PAN (100 mm DEEP).

DRILL & TAP 6mm PLATE FOR PUMP HOLD - DOWN

BOLTS. STEEL PAN TO SIT ON A 100 mm HIGH CONC.

HOUGEKEEPING PAD.

LEGEND

--- COLD WATER LINE

---- HOT WATER RETURN

--- LOS-- LIGHT OIL SUPPLY

-LOG- LIGHT OIL GAUGE

-LOR- LIGHT OIL RETURN

- + - SANITARY SEWER LINE

---- HOT WATER LINE

300 x 200 WALL TYPE S/A GRILLE NEAR FLOOR

CONNECT TO 300 x 100 DUCT DOWN TO CRAWLSPACE.

NO DAMPER. RATING IN L/S PROVIDE SECURITY

GRILLE.

250 x 100 S/A FLOOR REGISTER WITH ADJUSTABLE

BLADES AND VOLUME DAMPER L/S RATING AND THROW

INDICATED ON PLAN.

8 150 × 100 S/A CEILING SECURITY TYPE GRILLE
C/W FIRE DAMPER ( L/S RATING & THROW
INDICATED ON PLAN

300 x 200 WALL TYPE S/A GRILLE NEAR FLOOR WITH

ADJUSTABLE BLADES AND VOLUME DAMPER(L/S RATING
AND THROW INDICATED ON PLAN). TO CONNECT TO 250

x 90 DUCT IN WALL.

(10) 600 x 600 R/A CEILING GRILLE.

200 x 100 E/A CEILING GRILLE (IN WASHROOMS).

450 x 380 TAMPERPROOF (SECURITY TYPE) E/A GRILLE

CONNECTED TO E/A FAN, C/W FIRE DAMPER. SEE

DETAIL ON WM5.

600 x 360 R/A GRILLE

C/W FIRE DAMPER.

E/A FAN SAME AS CELL E/A FAN. SURFACE

MOUNTED WITH ATTACHED GRILLE AND SIDE OUTLET.

C/W FIRE DAMPER.

NOTES CONTINUED ON WM4 & WM5

A detail no. dé
BC
B location drawing no. sur des
C drawing no. des

Public Works Travaux publics

WESTERN REGION

PELICAN NARROWS,
RCMP
DETACHMENT
(DA-2.4CELLS)

MECHANICAL .

CRAWL SPACE

PLAN & DETAILS

FIXTURE SCHEDULE

		CW	DHW	WASTE	VEN
		CW	DHW	WASIE	VEN
C/LAV	= COMBINATION UNIT	32	12	100	38
С	= (TANK TYPE)	12	-	75	38
AV	= LAVATORY	12	12	38	3 2
Н	= SHOWER	20	20	50	38
R	= URINÄL	12	-	50	3.8
/S SK	= STAINLESS STEEL SINK	20	20	38	3 2
S	= SLOP SINK	20	20	7.5	3.8
D	= FLOOR DRAIN (100 mm)	-	-	75	-
7	= TRAP PRIMER	12	-	-	-
Н	= WALL HYDRANT	20	-	-	
	(NON-FREEZE)				
Н		20	-		-

designed by

date

drawn by

PWC (WESTERN)

date

reviewed by

date

approved by

approve par

date

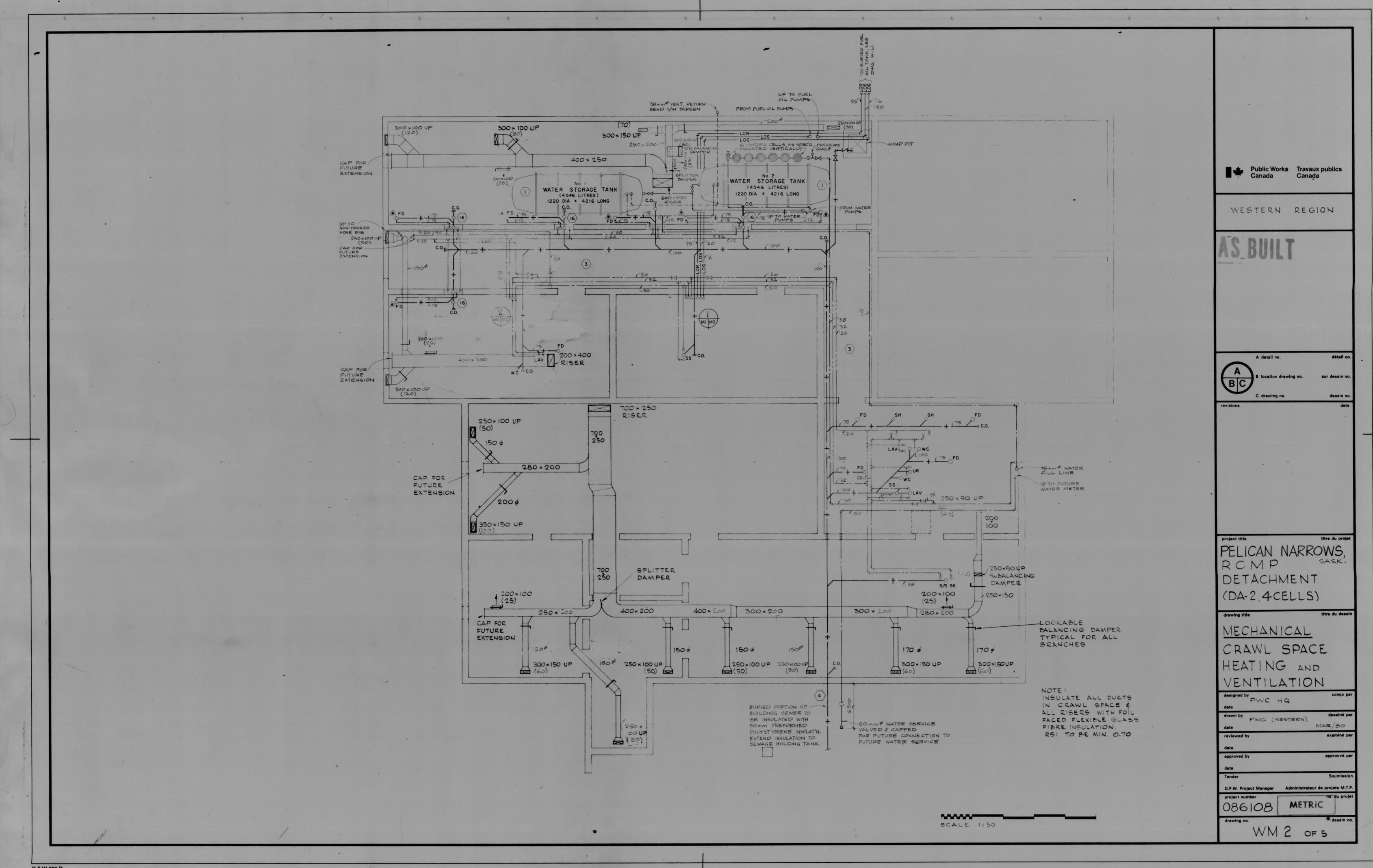
Tender

D.P.W. Project Manager

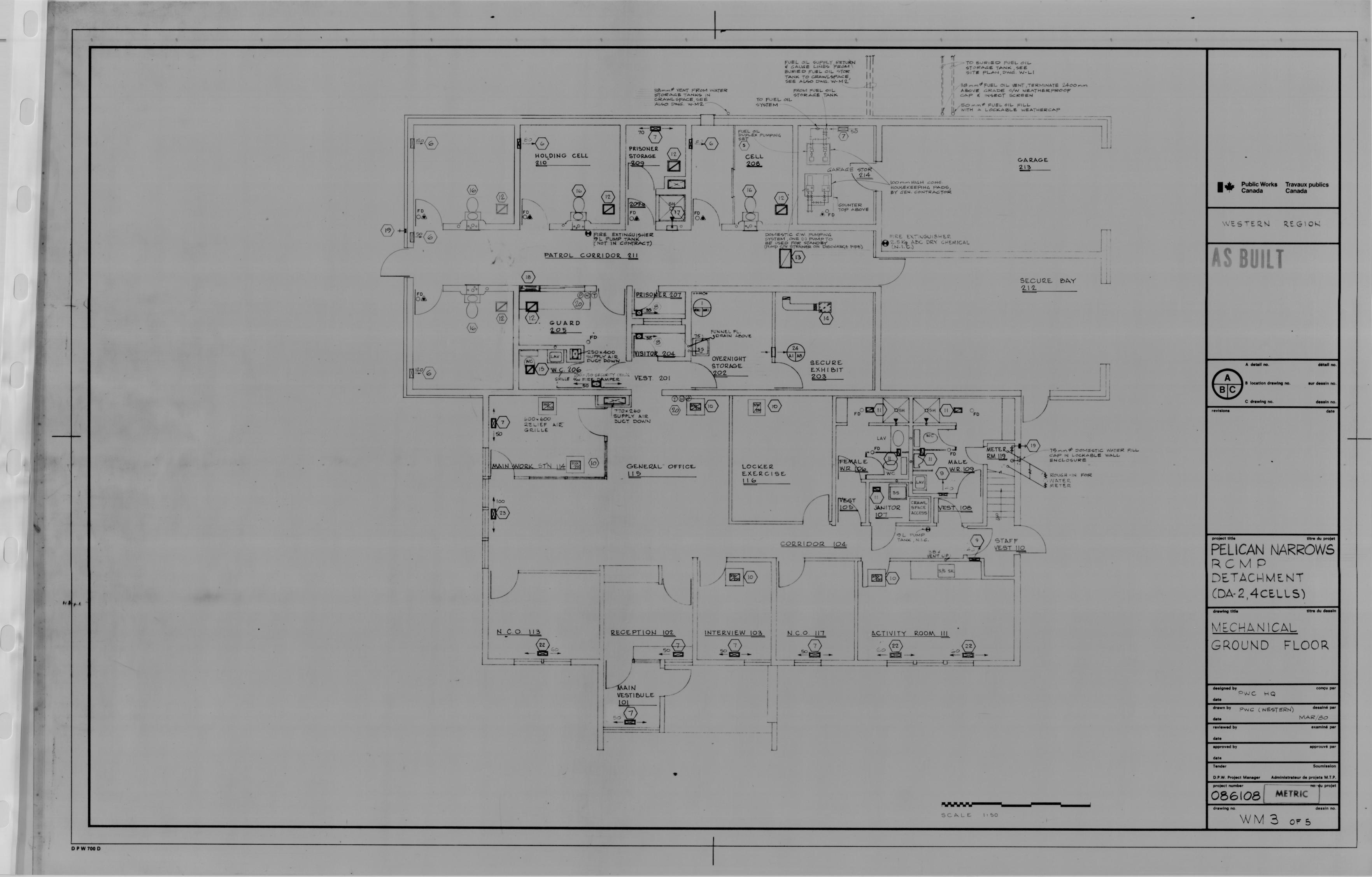
Administrateur de projets M.T.P.

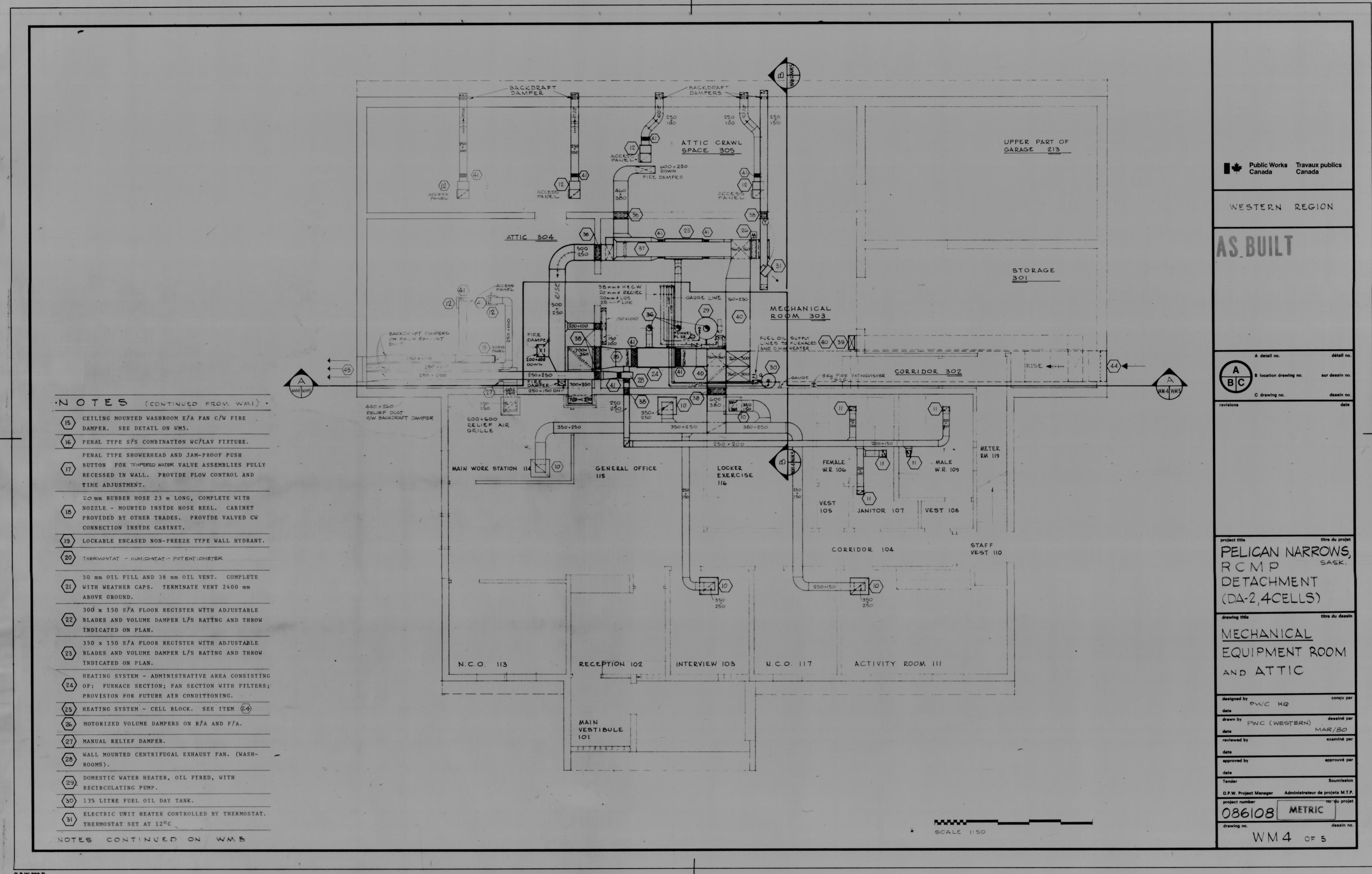
project number

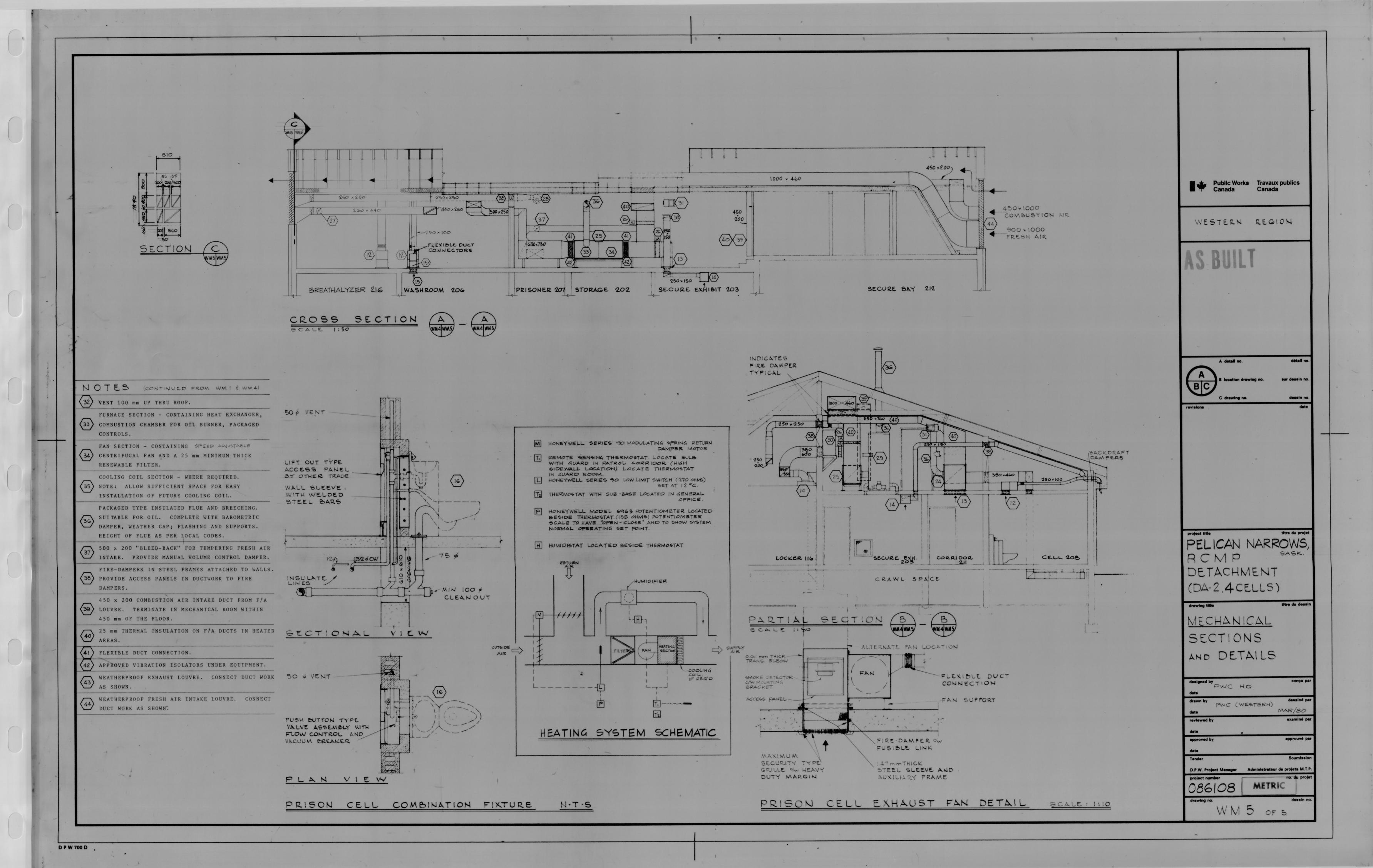
O86 | O8 | METRIC



D P W 700 D







#### SYMBOL SCHEDULE

\$ \$55 3 SWITCHES - SHIELE POLE, DOUBLE POLE, 3 MAY, 4 WAY & GARGES SPEED SWITCH OF MECHANICAL FIRE DWOKE DETECTOR - CHIZATION MOTOR - 1/4: H.P. 1 5, 120 V, PANEL 'S' GIR. 14 MOTOR - 2 M. P. 3 8, 200 - 240 V, PANEL B' CIR. 16, 16+20 CELL BLOCK ALARM SYSTEM PUSHBUTTON FIRE SMOKE DETECTOR - IONIZATION AIR MOVEMENT & m / MIN.

#### DISTRIBUTION PANEL # 1

PANEL A	125	3 5	4 6	] 125	PANEL 'C'	1
BLANK.		-	8 10 12		ELSNK	
FIRE ALLRY PANEL BLANK	]	15	14 16 18		BLANK	
ELANK		21	20 22 24		BLANK	

### PANEL A

EXIT & EMERGENCY - LIGHTS		2		RECEPTACLES - GARAGE GARAGE STOR
GARAGE & GARAGE STORAGE	3	4		RECEPTACLE - SECURE BAY
SECURE BAY, OVERNIGHT ST. & SEC. EXH. "	5	6		RECEPTACLES - MAIN WORK STATIC
PAT. CORR., PRISONER, VISITOR, W.C. 206 1 GUARD RM. & BREATHALYZER	7	8		II GUARD RM. & PAT. CAR
GENERAL OFFICE	9	10		PIPE TRACING CABLE (FUTURE)
MAIN WORK STATION & N.C.O. 113 "	11	12	GF.P.	RECEPTACLE - FEMALE WASAROOM
RECEPTION, VEST. IN, INT. RM. 103 & NC.O. 117 "	13	14	1	" ACTIVITY DAT COLUT
LOCKER RM., FEMALE & MALE W.R.'S "	15	16	J	ACTIVITY RM. SPLIT
CORR. 104, JAH., CORR. 302 4 STOR. 304 4	17	18		RECEPTACLES - ACTIVITY ROOR
ACTIVITY ROOM	19	20		11 RM. 102, 103, 104 & 117
MECH. RM., ATTIC 304 & 305 "	21	22		N RM 1/3 # 1/5
CRAWL SPACE "	23	24		" GENERAL OFFICE
" - RECEPTACLES	25	26		" LOCKER EXERCISE
DOOR BELL & ROT ALBERT	27	28		RELEPTACLE - RM. 114 TELECOM
EXHAUST RAN \$6, \$7 & \$8	29	30		n u u
CRAWLSPACE LIGHTS	31	32		RECEPTACLES - RM. 202 & 203
CELL-208, 210, 215, 216 EPRIS STOR- LIGHTS	33	34		. M. RM. 301, 303, 3044 30
. 11 - 208,210,815,216 & PILIS. STOR-EXH. FAN	35	36		RECEPTACLE - TEL. BALKBOARD
BREATHALYZER /CELL 216 - RECEPTACLES	37	38		BLANK
SPARE .	39	40		,
	AI	42		

#### PANEL 'B'

Ett 208, 210, . # PRIS. 570R1164/5	1	2	BLANK
CELL- 208, 200, EPRIS. ST EXH. FAN	3	4	"
SPARE	5	6	"
BLANK	1	8	
- TE	9	10	4
" ELE	111	12	4
Die			
MAINS: 100 A 120/298 1	1027	5 3	PHASE 4 WIRE
FLUSH MOUNTED			

NOTES :

15A SINGLE POLE CIRCUIT BREAKER, UNLESS OTHERWISE NOTED

\_ TWO OR THREE POLE CIRCUIT BREAKER

G.F. - GROUND FAULT PROTECTION

#### PANEL 'C'

FURNACE *1 3/4 H. P.		3 5			FURNACE #2 3/4 N.P.
GARAGE DOOR OPERATOR 1/2 M. P.		9	8 10 12		OIL BURNER 1/3 H.P FURH. #1.  " " " " " 2  CIRC. PUMP & HUMIDIFIER #1 # 2
UNIT HEATER 3KW ".				-	DERIMETER LIGHTING
HOT WATER TANK 1/3 N.P.		21	20	GAP.	CAR PLUG-145
OIL PUMP 1/4 H.P GARAGE STOR		-	<b></b>	-	OUTSIDE RECEPTACLE
" " " " " " " " " " " " " " " " " " "	-	-	1	GAP	
SUBMERSIBLE PUMP 250W	-	-	+	-	
SPARE		-	+-	G.F.P.	4. //
PRESSURE PUMP I H.P.		33	32 34 36		PRESSURE PUMP 14.P.
BLANK		-,-	38 40 42		BLANK

| 1 | 2 | 3 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 19 | 20 | 21 | 22 | 23 | 24 |

# ELECTRICAL EQUIPMENT SCHEDULE

			BY						DIS	SC.	SW.		S	TAR	TER			COL	NTR	OL				w	w	ABBREVIATIONS
2	DESCRIPTION	LOCATION	PLIED			VOLTS	PHASE	. A .	POLES	SE	SUPPLIED BY	WIRED BY	POLES	37	w	9	ED BY	<b>7</b>	SUPPLIED BY	WIRED BY	DIAGRAM	PANEL	WIRES	WIRE SIZE	DIND. SIZ	E - ELECTRICAL P - PRESSURE SWITCH M - MECHANICAL L - LIMIT SWITCH O - OTHERS SW - SWITCH
TEM			SUP	H	×	0 /	PH	n.	09	FUSE	SUP	*	0	SIZE	TYPE	SUPPLI	WIRED	TYPE	SUP	3	DIA	PA	No	3	ŏ	REMARKS
5	CELL BXH, FANS	ATTIC FLOOR	M	-	.15	120	1	-	2	-	E	E	1	-	MAG	M	Ε	-	-	-	1	8	2	12	12	2 SPEED STARTER
,7	EXH. FANS	ATTIG FLOOR	M	-	.15	120	1	-	2		E	E	1	-	MAN	M	5	-	-	-	1	A	2	12	12	2 SPEED STARTER
8	EXH FAN	ATTIC FLOOR	M	-	.09	120	1	-	-	-	-	-	1	-	su.	M	E	-	-	-	-	4	Z	12	12	
	HOT WATE HEATE	MECH. ROOM	M	1/3	-	120	1	-	1	-	E	E	1	-	MAN	M	£	-	-	-	-	C	2	12	12	PACKAGE WAIT
	FURN. #1	MECH. ROOM	M	34		208	3	-	SN SN	-	5	E	-		-	-	-	-	-	-	2					PACKAGE UNIT of 1907 ORIZED DAMPE
	FURN. \$2	MECH, ROOM	14	1/3	-	208	3	-	4P 5N	-	E	E	-		-	-	-	-	-	-	2	C	4	12	18	N N N N N N
	HUNTIDIFIER #1+2	MECH ROOM	M	1/12	-	20	1	-	-	-	-	-	1	-	MAN	M	E	-	-	-	-	C	2	12	12	
	WASARN GAN. FAN		-	1/4		120	1	_	1	-	E	E	1	-	sau	M	8	-	-	-	-	c	2	12	12	
	H.W. CIRC. PUMP	MECH, ROOM	M	1/12	-	120	1	-	1	-	E	E	1	-	MAN	M	£	-	-	-	-	C	2	12	12	
	DUPLEX DIL PUMA	GARAGE STOR.	M	2x 1/4	1 -	120	1		1	-	E	E	1	-	MG	M	E	4	14	M	4	C	2	12	12	
	UNIT HEATER	MECH ROOM	M	-	3	208	3	-	4.D 5.N	-	E	E	-	-	-	-	1	T	M	E	5	C	4	12	13	CONTACTOR SUPPLIED BY MECH.
	GARAGE DOOL OF			1/2		208			910 511	-	6	ε	3	-	M46.	0	E	4	0	E	6	C	4	12	18	
	PRESSURE PUMP		<del>                                     </del>	2×1	+	208	3		4.D 5N	-	E	E	3	THE OWNER OF THE OWNER,	M49		E	P	M	E		C	4	12	18	
	SUBMERSIBLE PUMA	CRAWL SPACE	M		0.25	120	1	-	1													C	2	12	12	
				1																						

Public Works Travaux publics Canada Canada

WESTERN REGION

SBUILT

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PELICAN NARROWS,

RCMP DETACHMENT (DA-2, 4-CELLS)

drawing title titre d

LEGEND & SCHEDULES

designed by

PWC (WESTERN)

dessiné par

PWC (WESTERN)

date

PWC (WESTERN)

MAR/80

reviewed by

examiné par

date

approved by

approuvé par

date

Tender

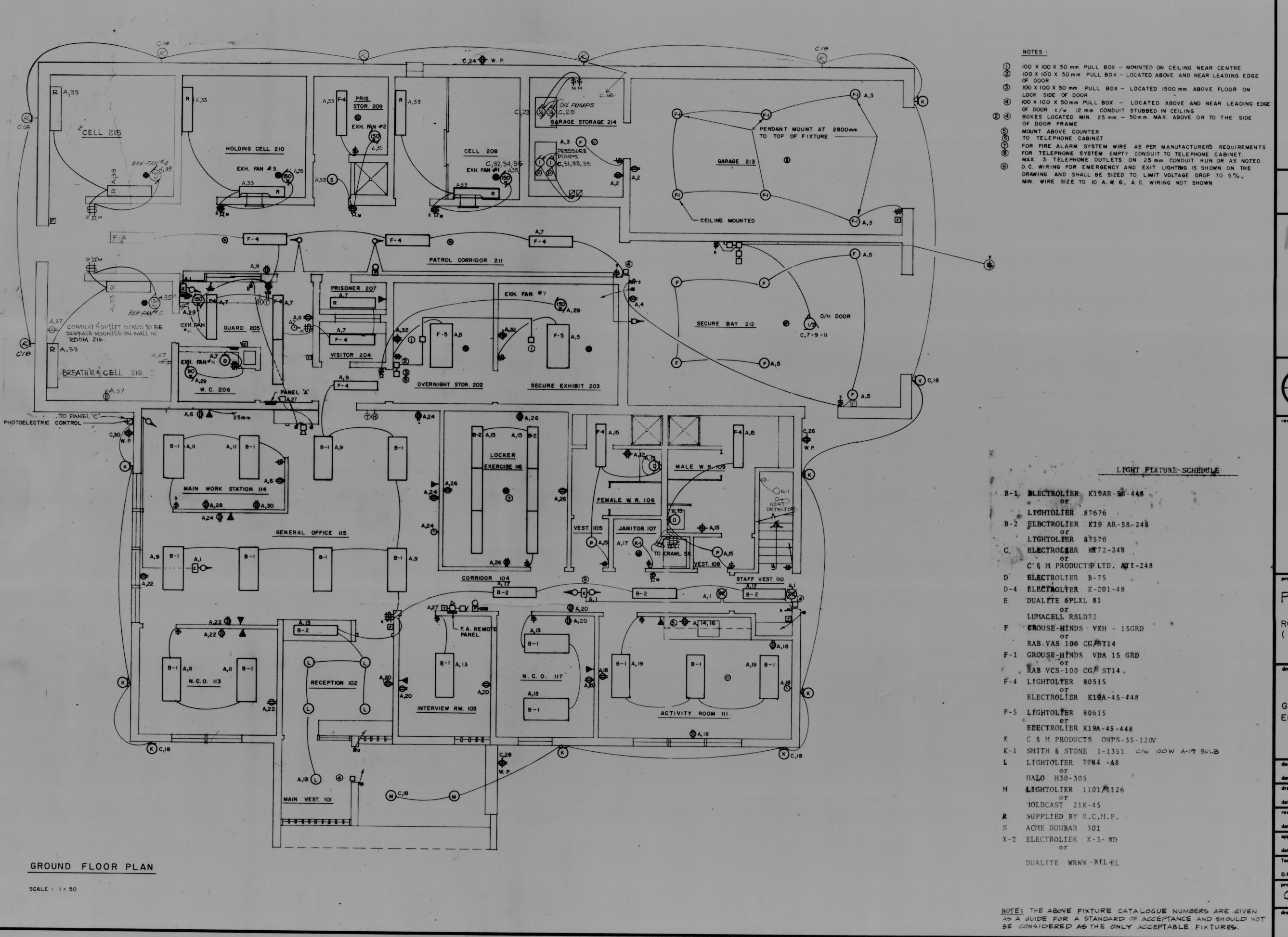
D.P.W. Project Manager

Administrateur de projets M.T.P.

086108 METRIC

W-EI

D P W 700 D



Public Works Travaux publics
Canada Canada

WESTERN REGION

PELICAN NARROWS, SASK.

titre du dessin

RCMP DETACHMENT ( DA-2, 4-CELLS)

GROUND FLOOR PLAN ELECTRICAL LAYOUT

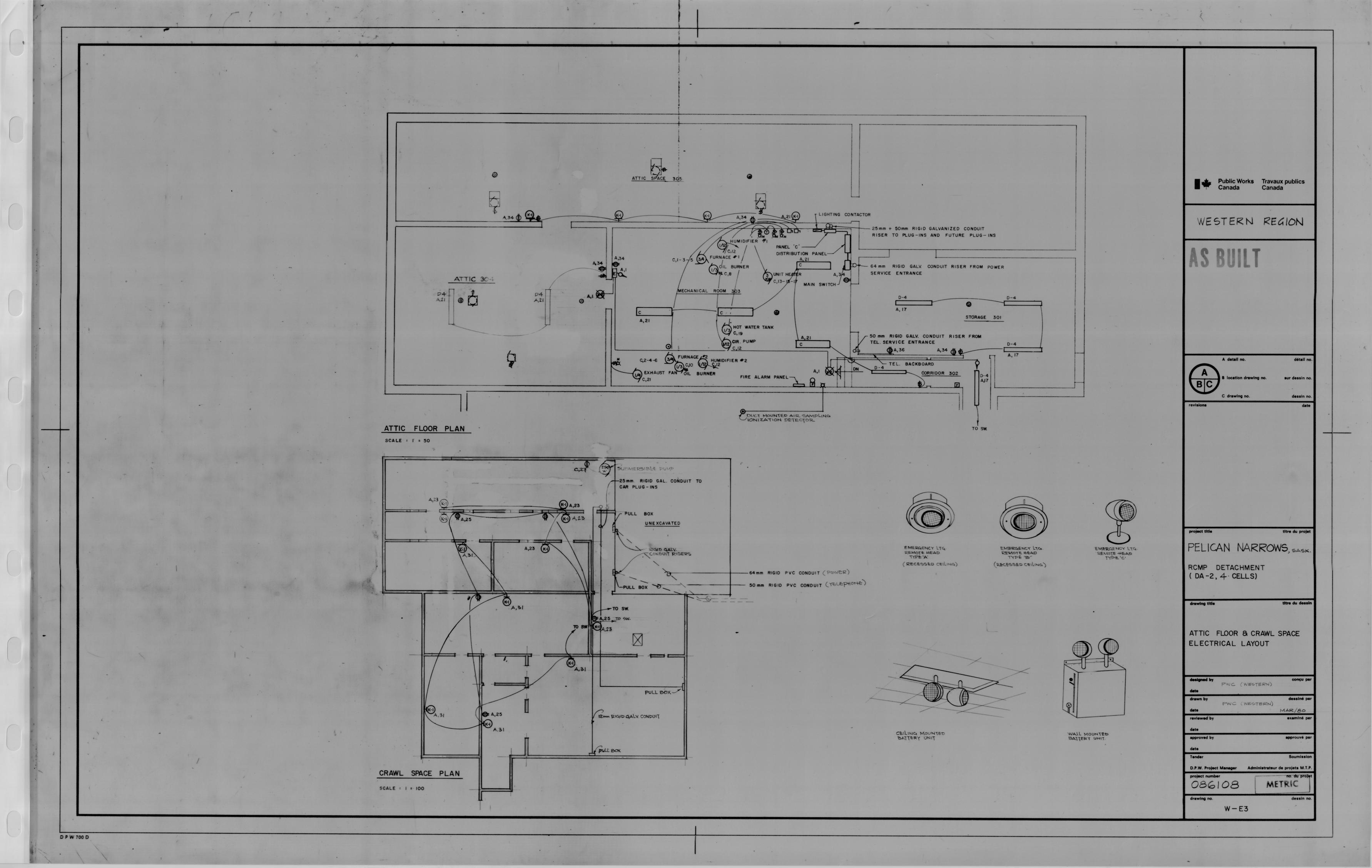
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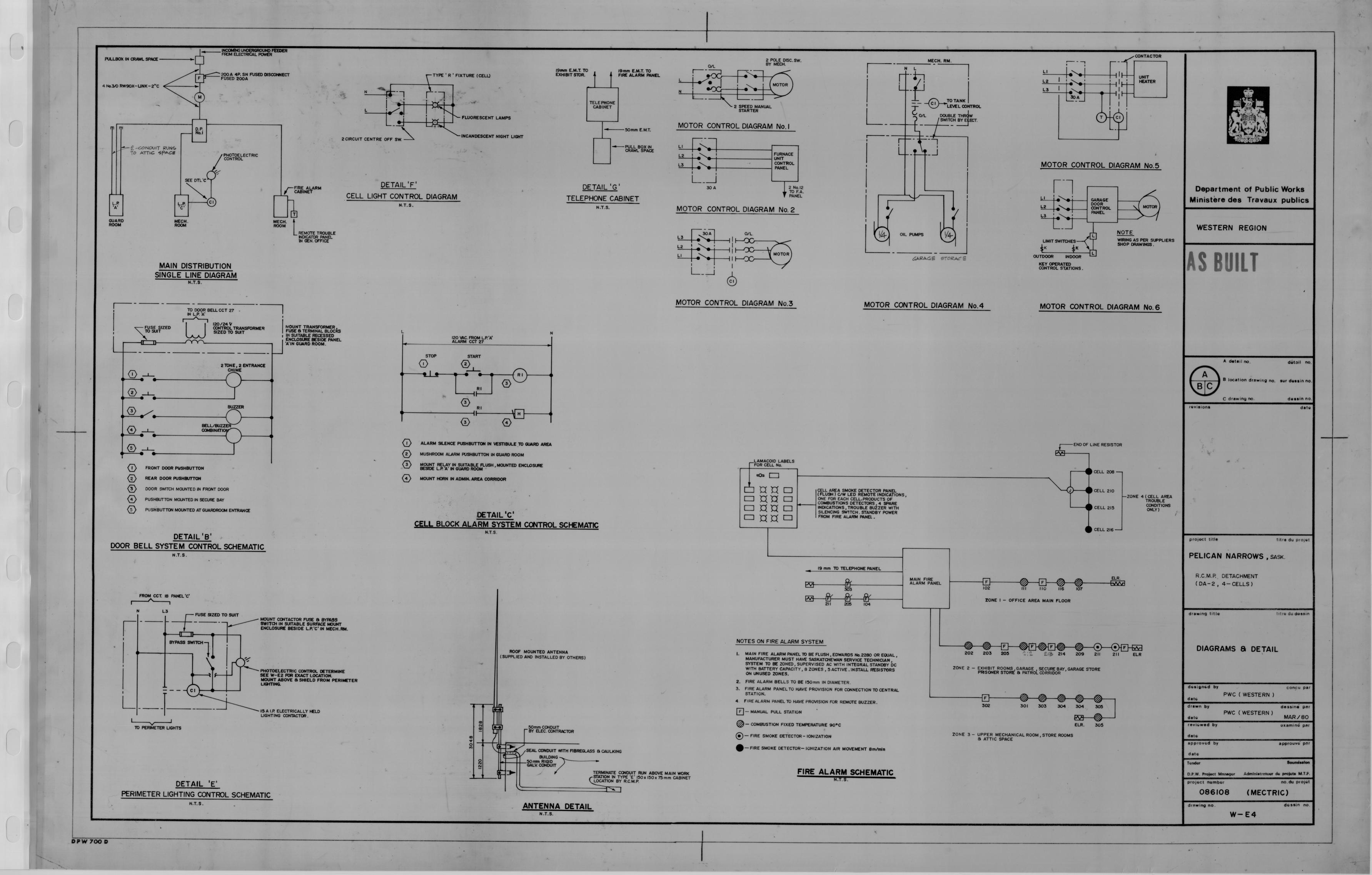
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086108 METRIC

W-E2

D P W 700 D





# PELICAN NARROWS, SASK. R.C.M.P. DETACHMENT ADDITION & RENOVATION PROJECT NO. 623884

# LIST OF DRAWINGS

# ARCHITECTURAL

W-AI SITE PLAN

W-A2 EXISTING MAIN FLOOR PLAN
DEMOLITION / ALTERATIONS

W-A3 CRAWL SPACE PLAN & DETAILS

W-A4 MAIN FLOOR PLAN

W-A5 ATTIC FLOOR PLAN

W-A6 BUILDING ELEVATIONS & BUILDING SECTION

W-A7 WALL SECTIONS

# STRUCTURAL

W-SI FOUNDATION PLAN AND SECTION
DETAILS

W-S2 MAIN FLOOR REINFORCING PLAN,
ROOF SLAB PLAN & SECTION DETAILS

W-S3 ROOF FRAMING PLAN , DETAILS & STRUCTURAL DESIGN NOTES

# MECHANICAL

W-MI MECHANICAL SITE PLAN

W-M2 MECHANICAL CRAWL SPACE PLANS

W-M3 MAIN FLOOR PLAN · PLUMBING

W-M4 MAIN FLOOR PLAN . HEATING

AND VENTILATING

W-M5 MECHANICAL · ATTIC SPACE PLANS

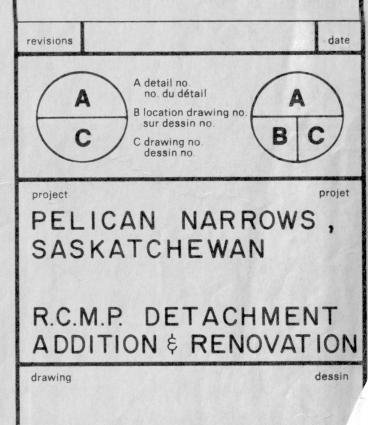
# ELECTRICAL

W-EI MAIN FLOOR PLAN AND DETAILS

W-E2 ATTIC FLOOR PLAN & CRAWL SPACE

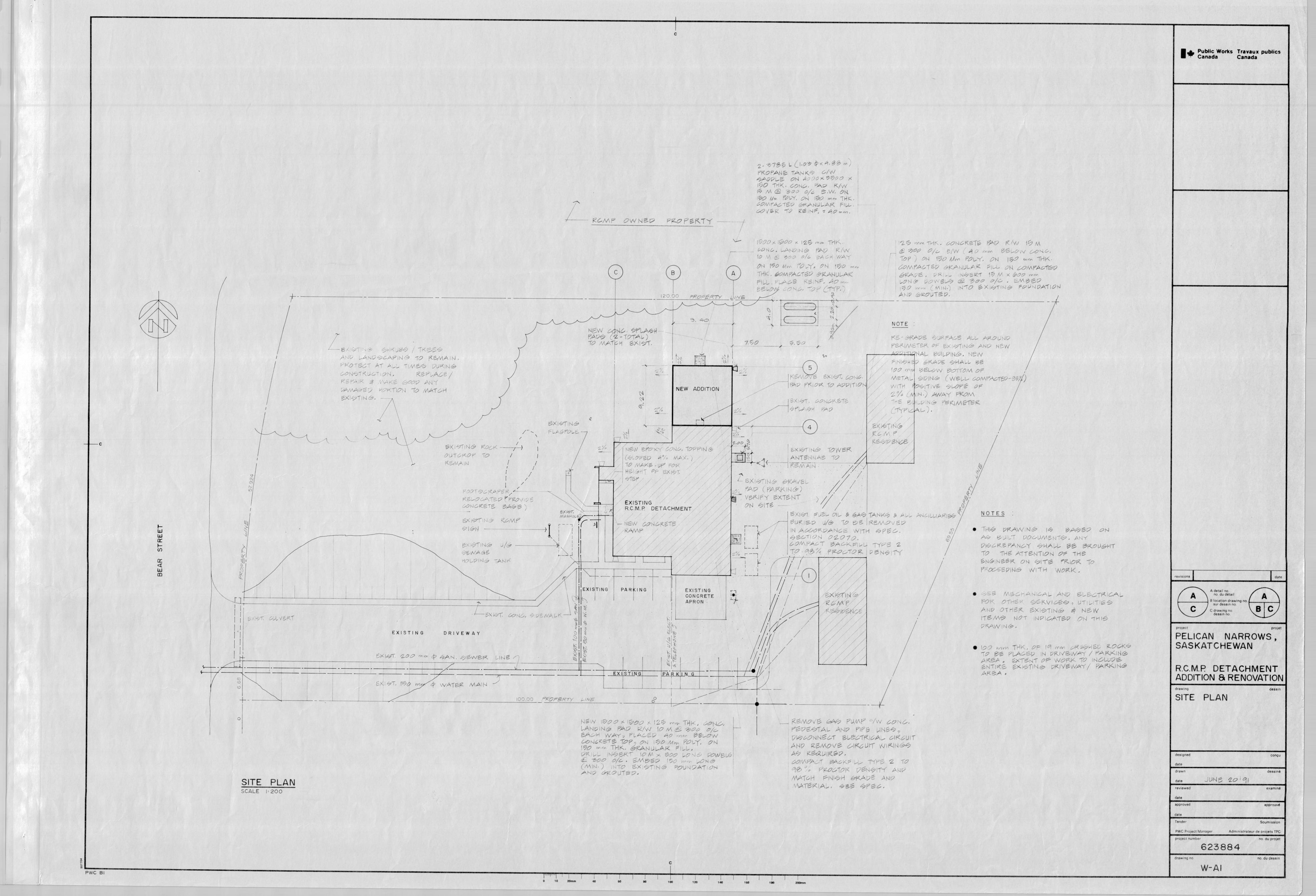
PLAN · ELECTRICAL

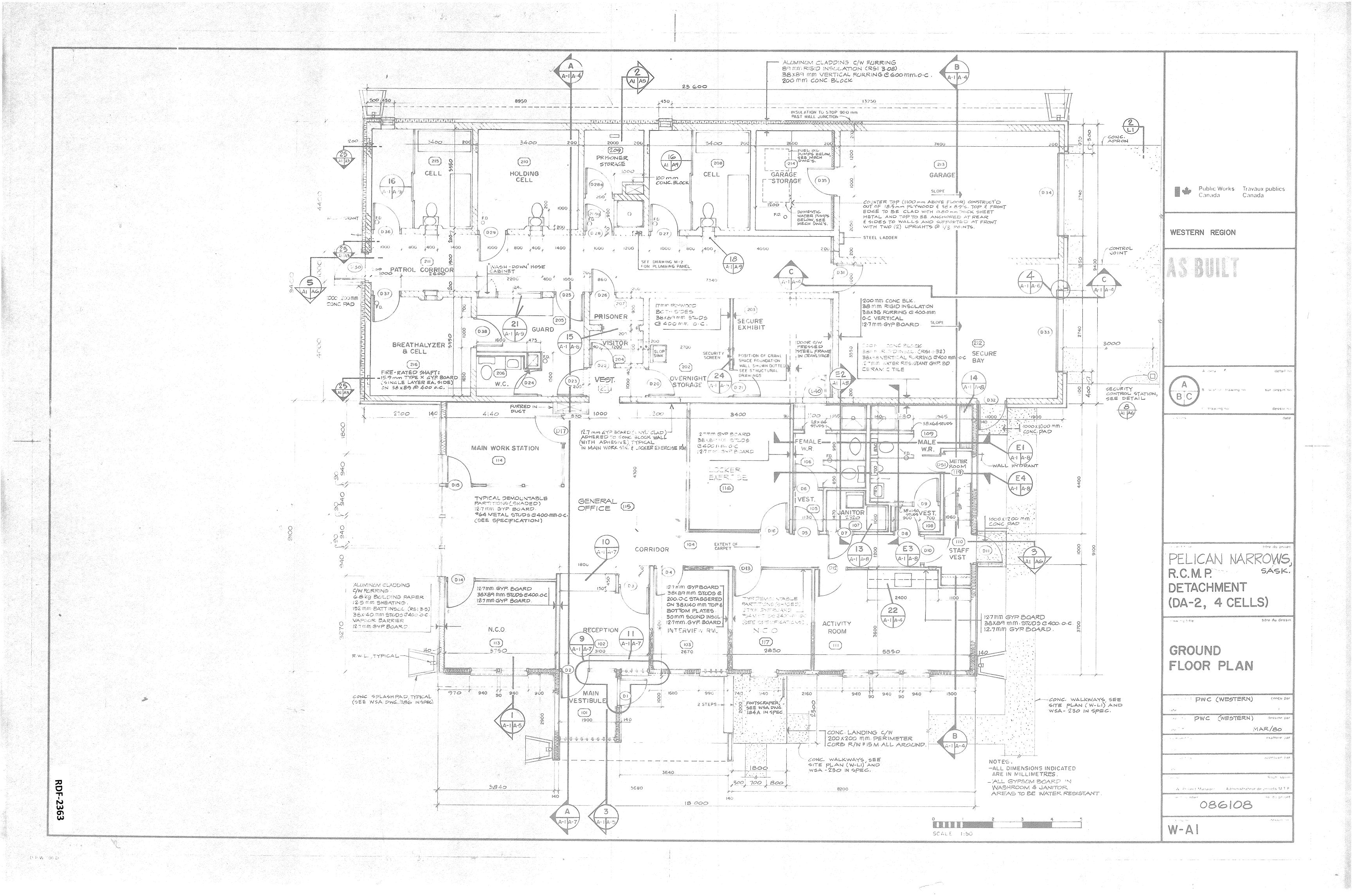
W-E3 ELECTRICAL DETAILS AND NOTES

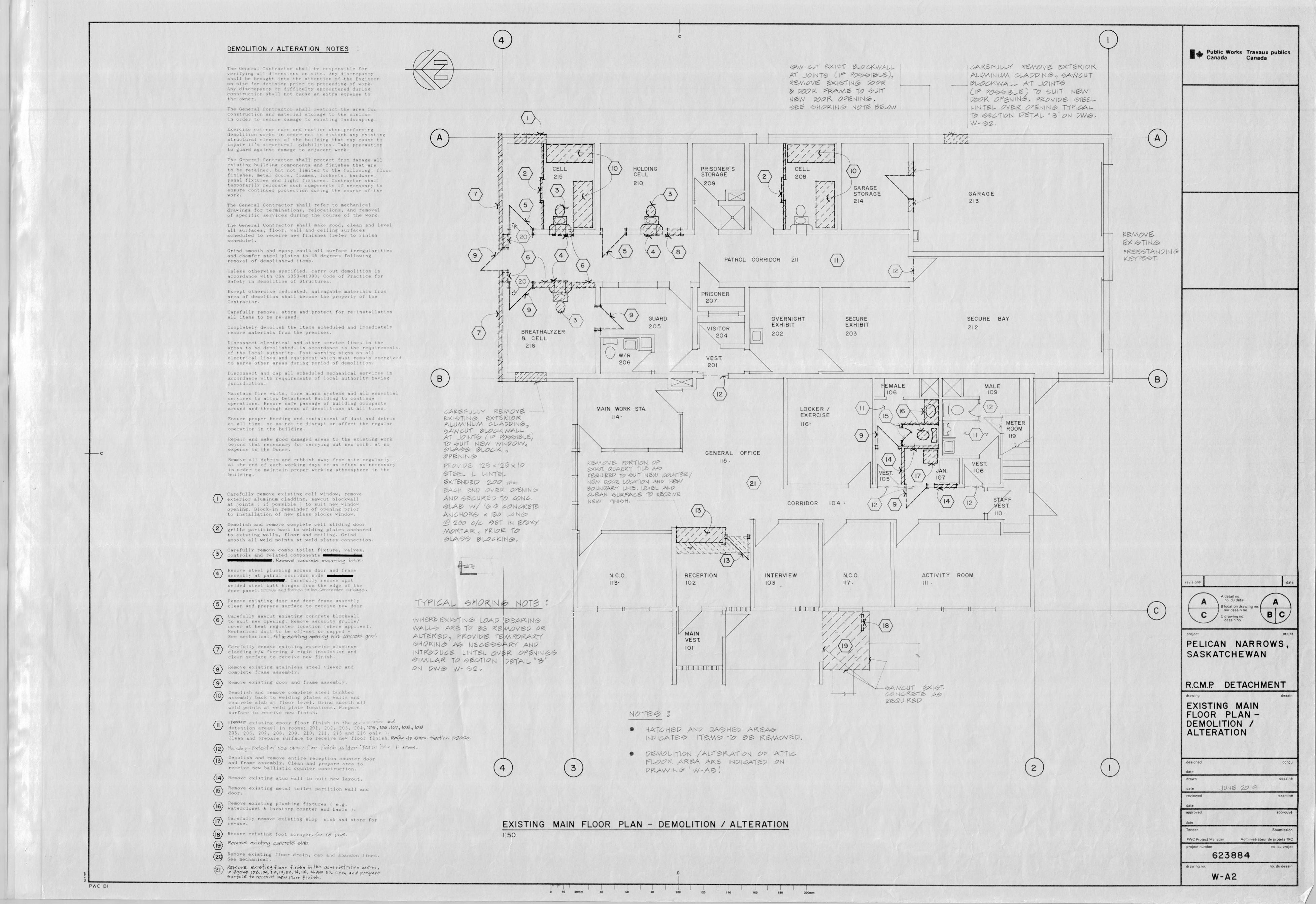


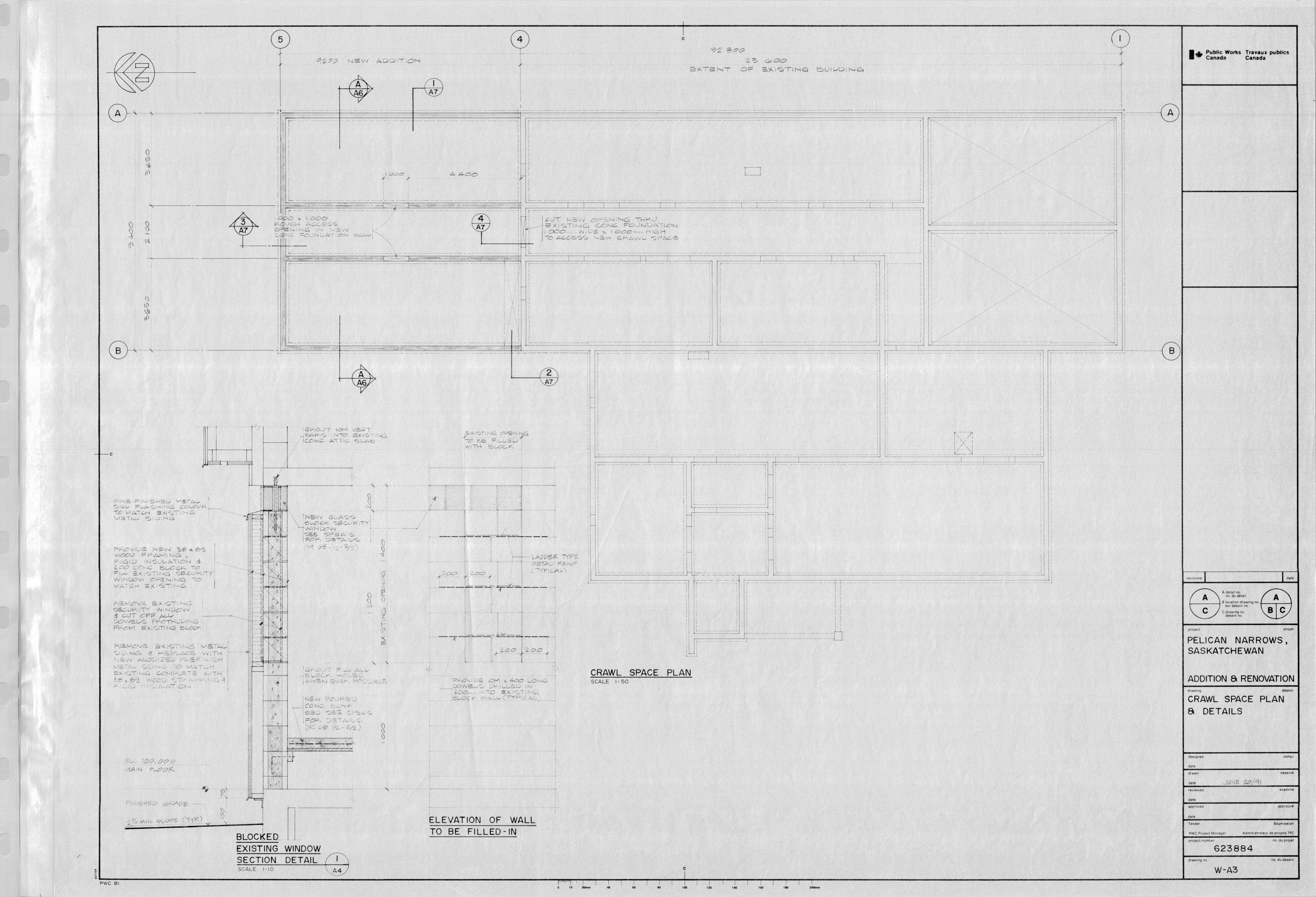
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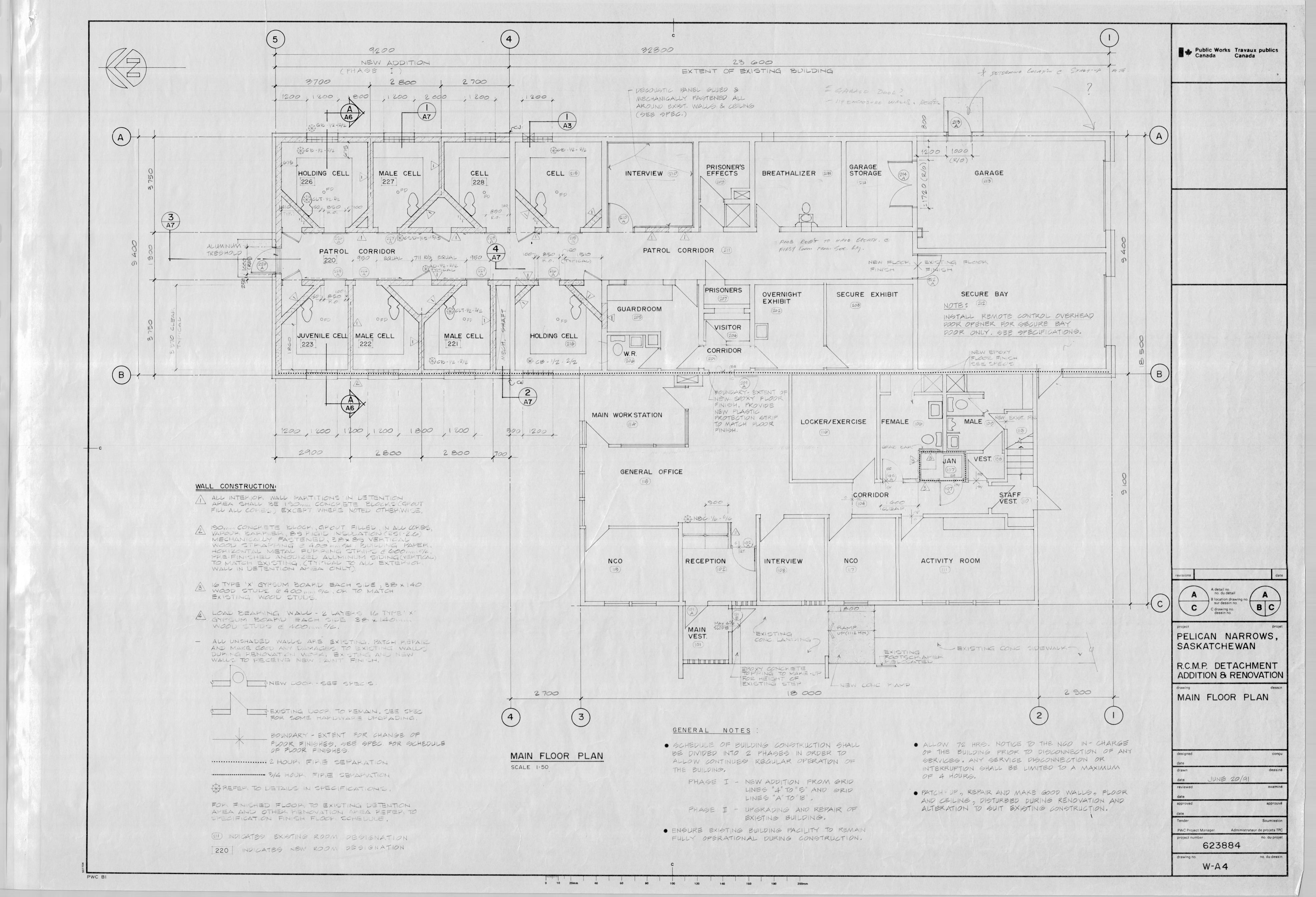
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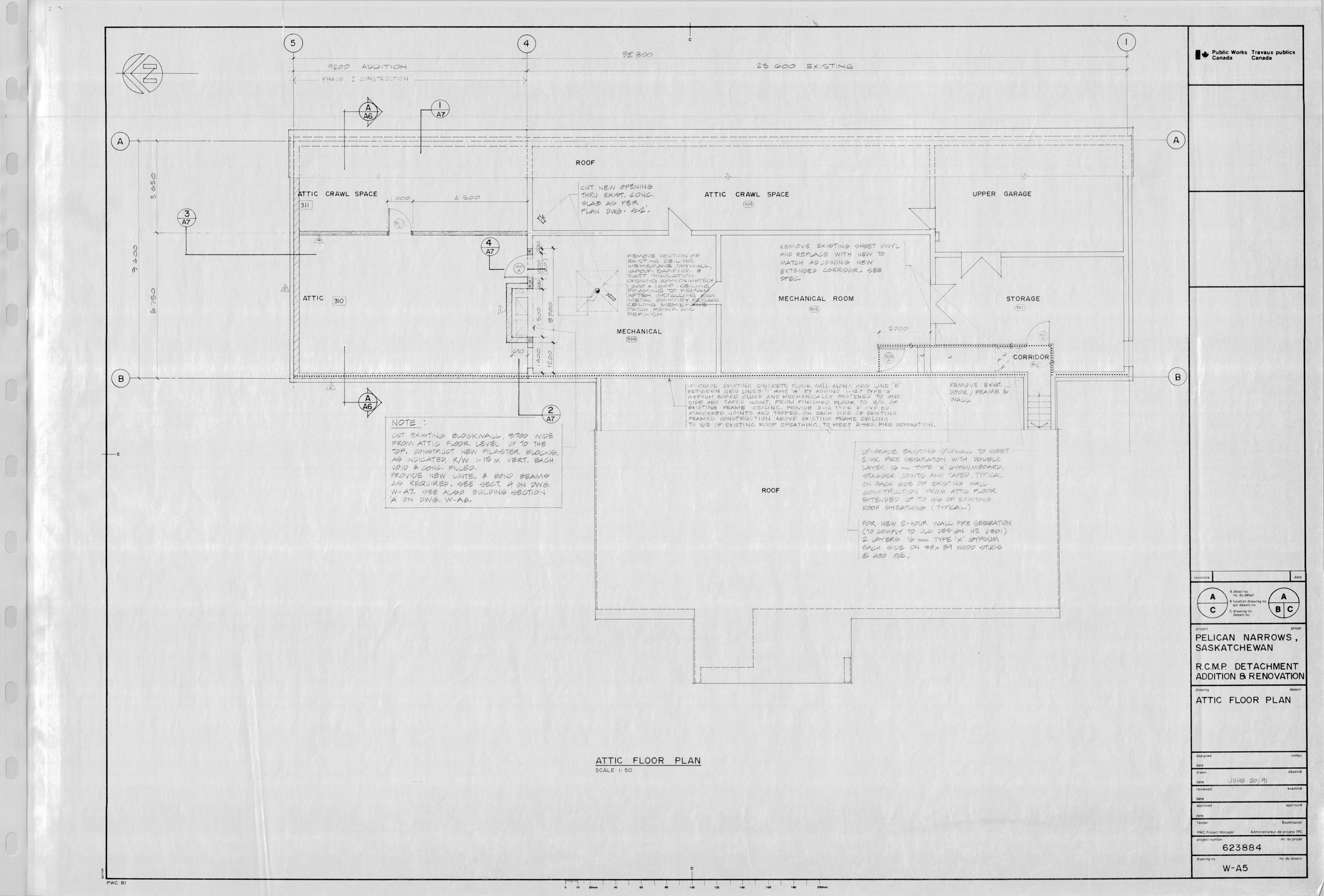


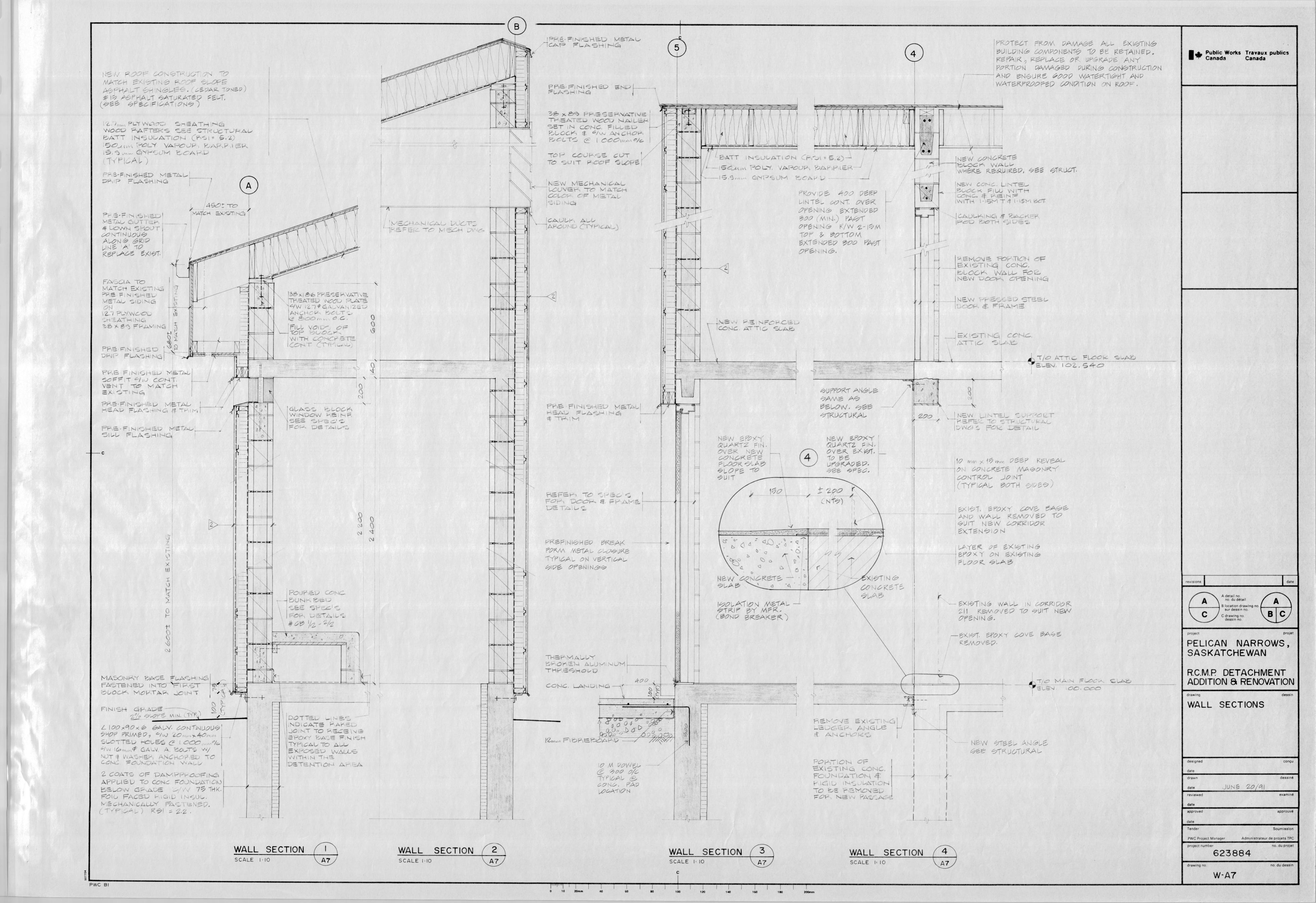


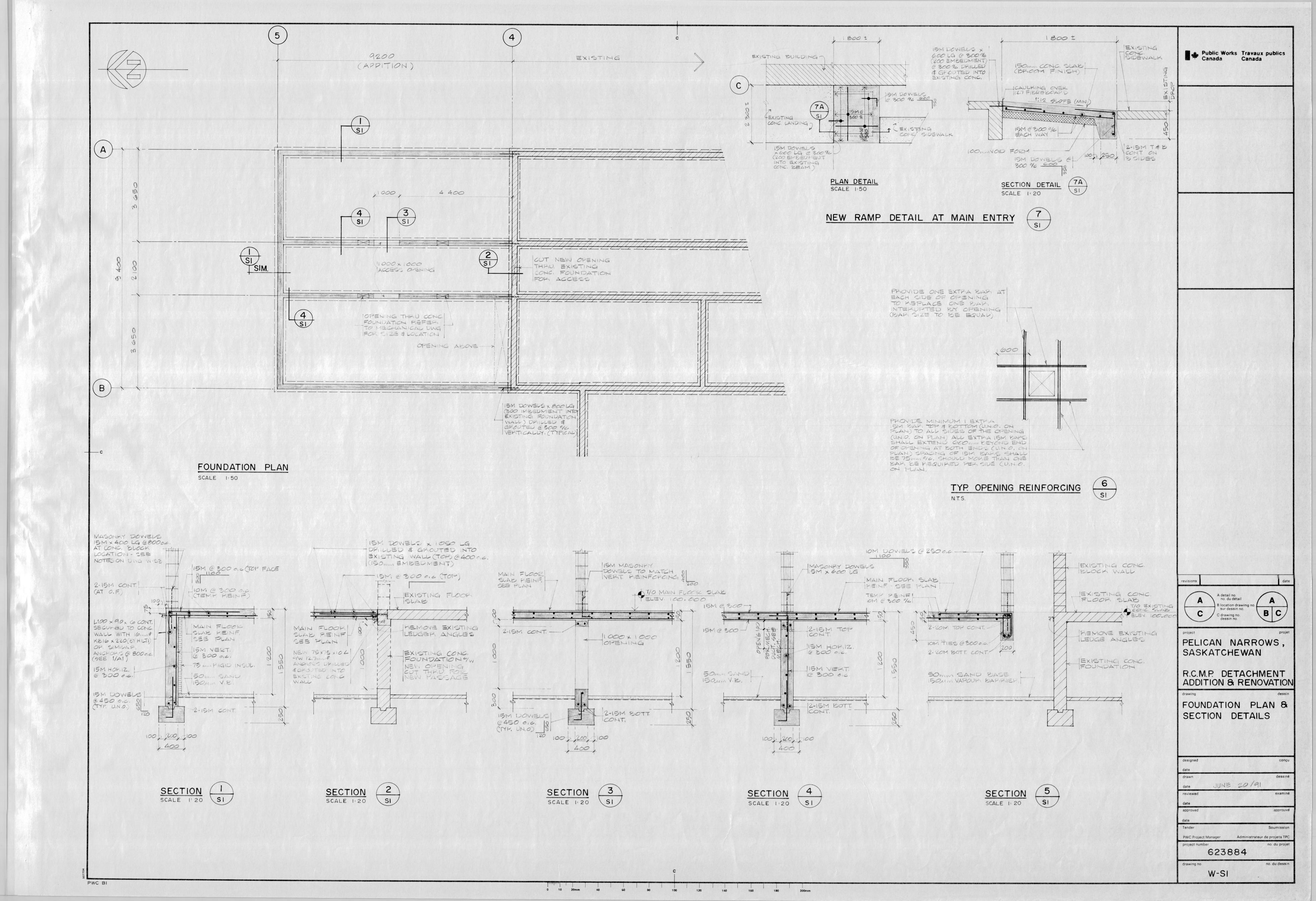


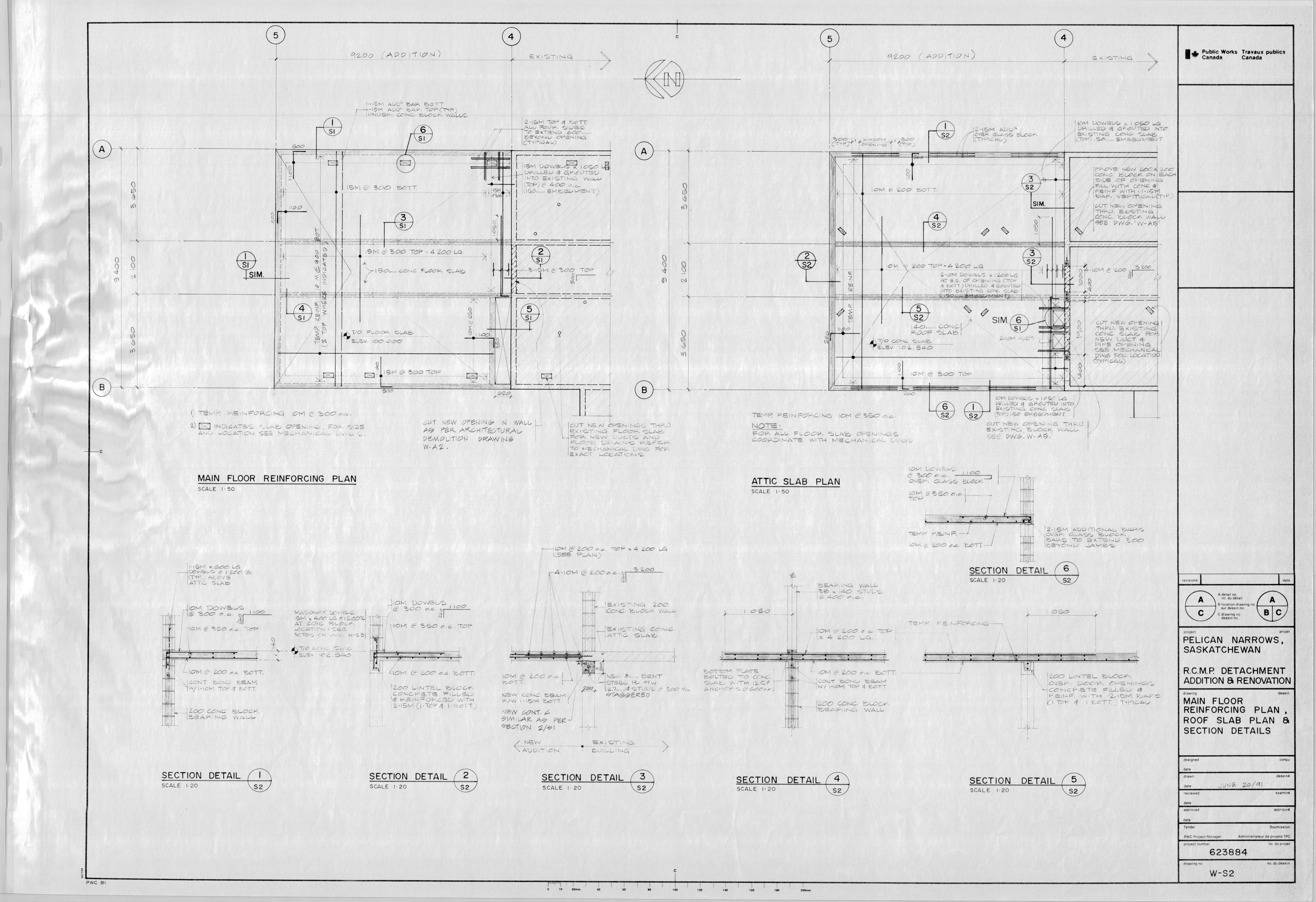


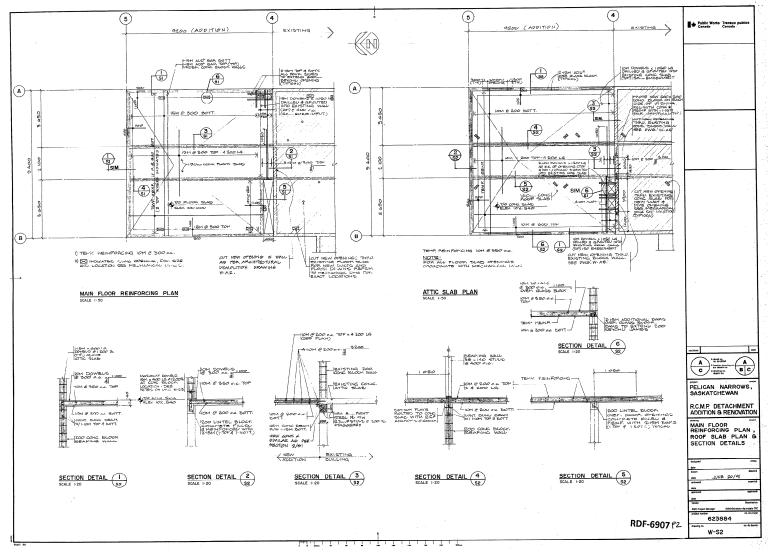


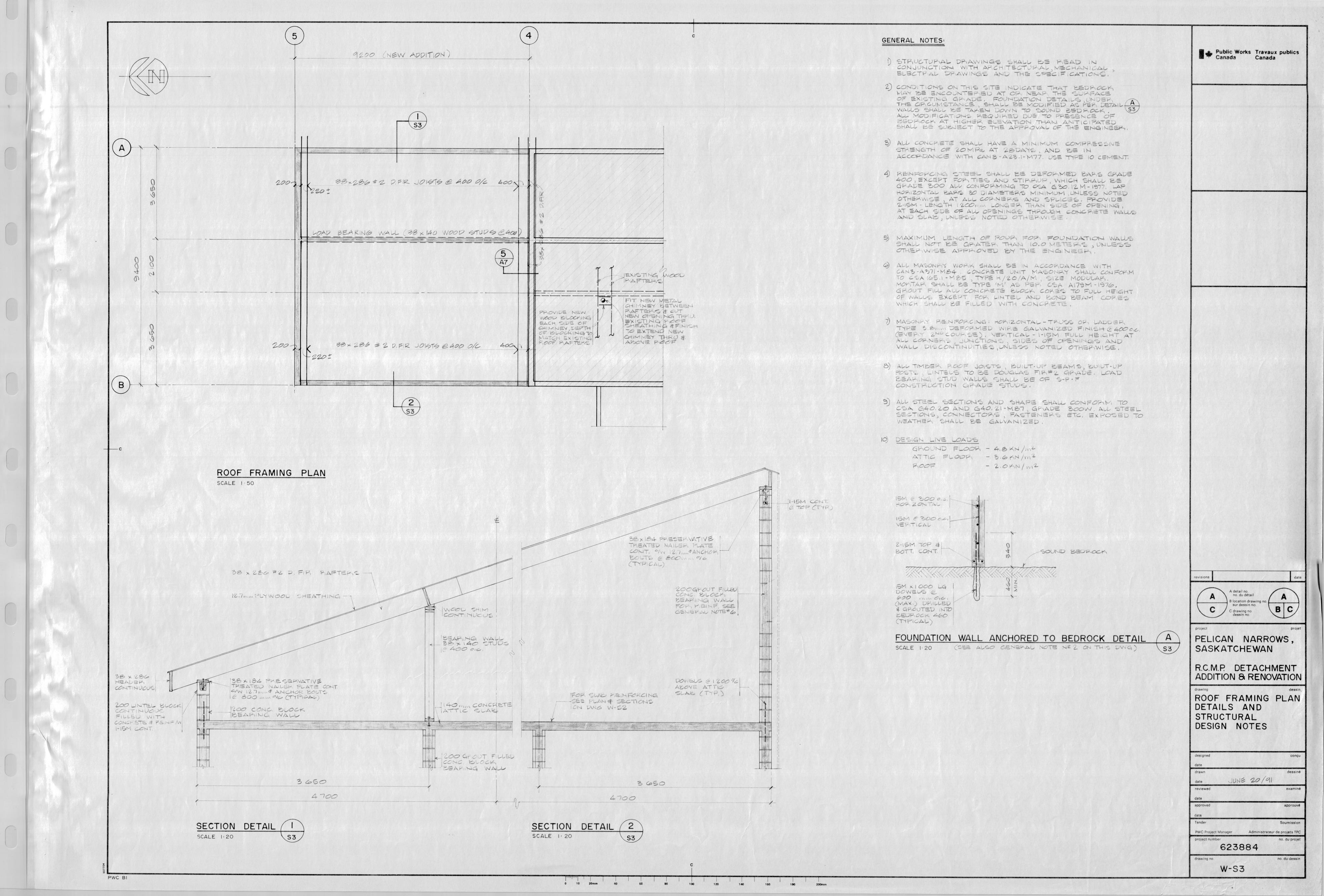


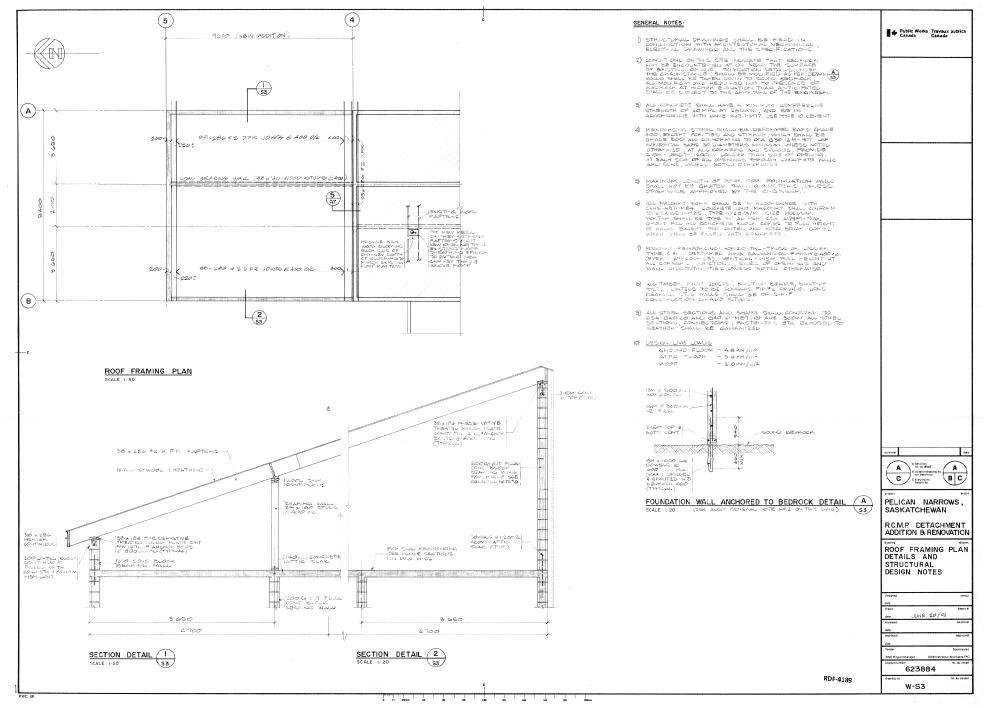


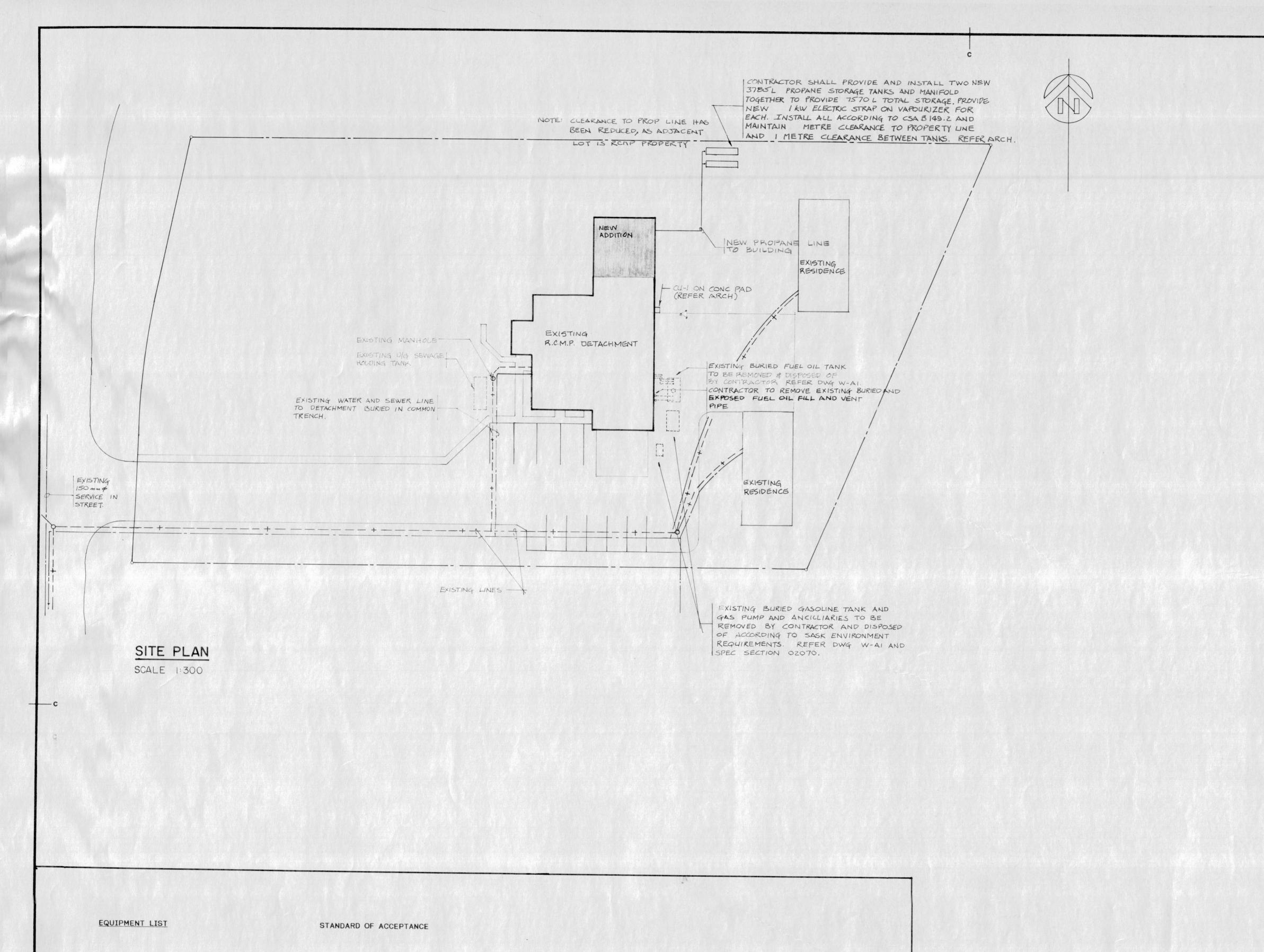












### S-1: Supply Air Grille

Supply air grille type 1, equal to Folger Adam 404V, fastened to wall with approved security screws, size as indicated.

# S-2: Supply Air Grille

Supply air grille type 2, equal to Hart and Cooley #411 Diffusair, size as indicated.

### R-1: Return or Exhaust Air Grille

Return/Exhaust air grille type 1, equal to Folger Adam 404V, fastened to wall with approved security screws, size as indicated.

### R-2: Return Air Grille

Return air grille type 2, equal to Hart and Cooley NT 110, size as indicated.

### E: Existing Grilles

Contractor shall re-balance all existing air grilles as indicated and provide a report. Refer to Specifications.

### FU-3: Furnace

Furnace No. 3, mid-efficiency propane gas fired furnace serving the north cell block and crawl space areas, equal to Carrier 58DHC model 110LC. 40.4 kW input, 33.1 kW output, 0.37 kW blower motor, 120V, 60Hz, 1ф.

### FU-2: Furnace

Furnace No. 2, mid-efficiency propane gas fired furnace serving the South cell block and crawl space areas, equal to Carrier 58DHC model 110LC. 40.4 kW input, 33.1 kW output, 0.37 kW blower motor, 120V, 60Hz, 14.

### FU-1: Furnace

Furnace No. 1, mid-efficiency propane gas fired furnace serving the administration and crawl space areas, equal to Carrier 58DHC model 110LC. 40.4 kW input, 33.1 kW output, 0.37 kW blower motor, 120V, 60 Hz, 14.

### HU-1: Humidifier

Humidifier No. 1, spray type equal to Carrier model 49BF018101, suitable for hard water use. Capacity of 55 litres per day. Install according to manufacturers recommendations at height and location suitable for servicing.

### WH-1: Hot Water Heater

Propane fired hot water heater equal to Jetglas MI 75T-75, 22 kW input,284 | capacity, 239 |/hr recovery at 56 °C.

### EF-1,2,3,4,5,6,7,8: Exhaust Fans

Exhaust fan Nos. 1 to 8 inclusive, equal to Greenheck model SP-8 complete with variable speed control and pilot light. Capacity of 42 1/s at 30 Pa, 115V, 1¢, 60 Hz, fractional HP. Plug-in electrical connection.

### EF-9,10: Exhaust Fans

Existing exhaust fan Nos. 9 and 10, to be relocated and reconnected to duct work.

### CU-1: Condensing Unit

Condensing Unit No. 1 for Administration area equal to Carrier 38 TG-042-5, with horizontal direct expansion valve, refrigerant line dryer, line kit and all accessories required for a complete installation. 12.3 kW cooling capacity at ARI standard 210. 208V, 3¢, 22.6 minimum circuit ampacity. Install according to manufacturers recommendations.

### UH-1,2: Unit Heaters

Propane fired unit heaters equal to Carrier model UFJ-60-P 18kW input, 14kW output, air volume 347 l/s, motor 25 watts, 115V, 1ø. CGA approved, aluminized steel heat exchanger, thermostat direct drive blower motor and all accessories. Install according to manufacturers recommendations and all applicable codes.

LEGEND

DESCRIPTION



SYMBOL

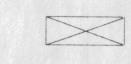
Equipment Schedule Reference No.

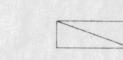


Size in mm



Capacity in L/s





Return/Exhaust Air Up

Supply Air Down



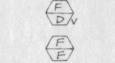
Return/Exhaust Air Down

Lockable Quadrant Volume Damper



Fire Damper in Horizontal Duct (rating as per NBC)

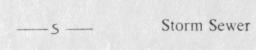
Fire Damper in Vertical Duct (rating as per NBC)



Sanitary Sewer - Buried

Sanitary Sewer - Not Buried

Fire Stop Flap



Vent Line

Cold Water

Recirculation Water

Hot Water

Propane Line

Gate Valve

Globe Valve Union

Direction of Flow (down) (% slope) 2% Floor Drain - trap primers required

Non-Freeze Hose Bib

Clean Out

Backwater Valve Pump

Water Meter

4.5 Kg Dry Chemical Fire Extinguisher and Cabinet

Thermostat Humidistat

Potentiometer

### CONTROLS DESCRIPTION

### New Controls for Cell Area Furnace FU-3

. DM-3F: Damper motor equal to Honeywell M-948 versa drive, modulating damper motor, driving damper located in fresh air duct to FU-3.

DM-3R: Damper motor equal to Honeywell M-948 versa drive, modulating damper motor, driving damper located in return air duct to FU-3.

MAT-3: Mixed air temperature sensor no. 1, equal to Honeywell T-991, adjustable set-point temperature controller acting as low-limit protection.

. P-3: Potentiometer located in Guard Room and labelled, "Fresh Air Volume - for North side cells", equal to Honeywell S-940 minimum position switch.

Wire damper motor such that DM-3F is fully open while DM-3R is fully closed. Adjust damper linkages such that minimum fresh air equals 15%.

P-3 controls % of fresh air volume to FU-3 by controlling damper

MAT-3 over-rides set point of P when air temperature drops below MAT-3 set point and then controls DM-3F and DM-3R to maintain low limit temperature.

Provide heating only thermostat for control of FU-3. Thermostat to be complete with sub-base for Fan On/Auto.

### Existing Systems

Relocate existing thermostat and humidistat control devices as shown

Contractor shall verify operation of all existing control devices and restore all devices to original working order.

Provide new adjustable high limit sensor on fresh air duct to unit FU-1. Wire to return existing dampers to minimum outdoor air position when high limit es exceeded. Lock out humidification on a call for cooling. Provide auto-reset freeze stat on furnace plenum to lock out condensing unit in event of coil freeze up. Provide new auto-change over heating/cooling thermostat complete with fan offauto switch.

A detail no. no. du détail B location drawing no. sur dessin no.

Public Works Travaux publics
Canada Canada

PELICAN NARROWS SASKATCHEWAN

R.C.M.P. DETACHMENT ADDITION & RENOVATION

MECHANICAL SITE PLAN

JUNE 20/91 approuvé

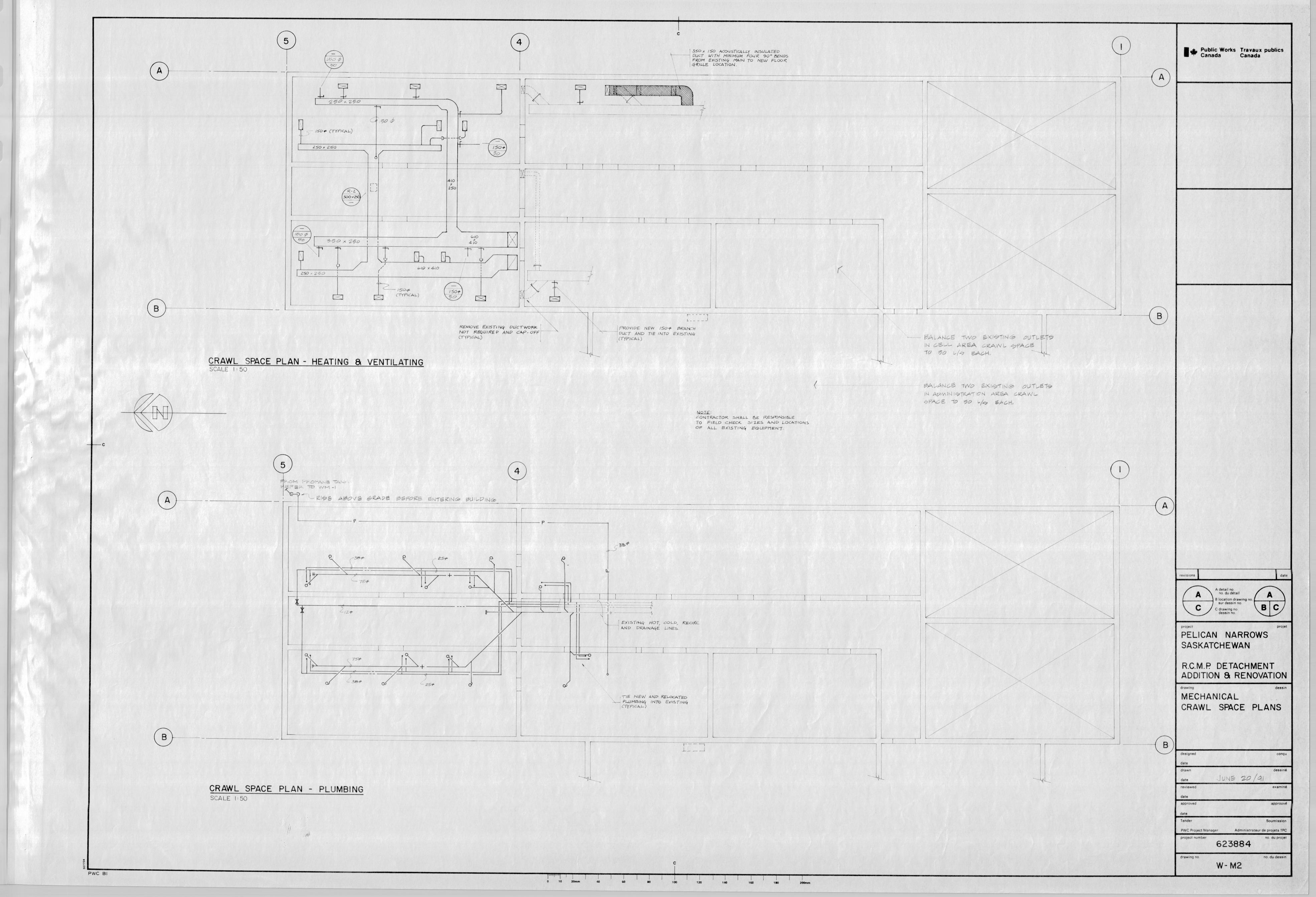
Soumission PWC Project Manager Administrateur de projets TPC

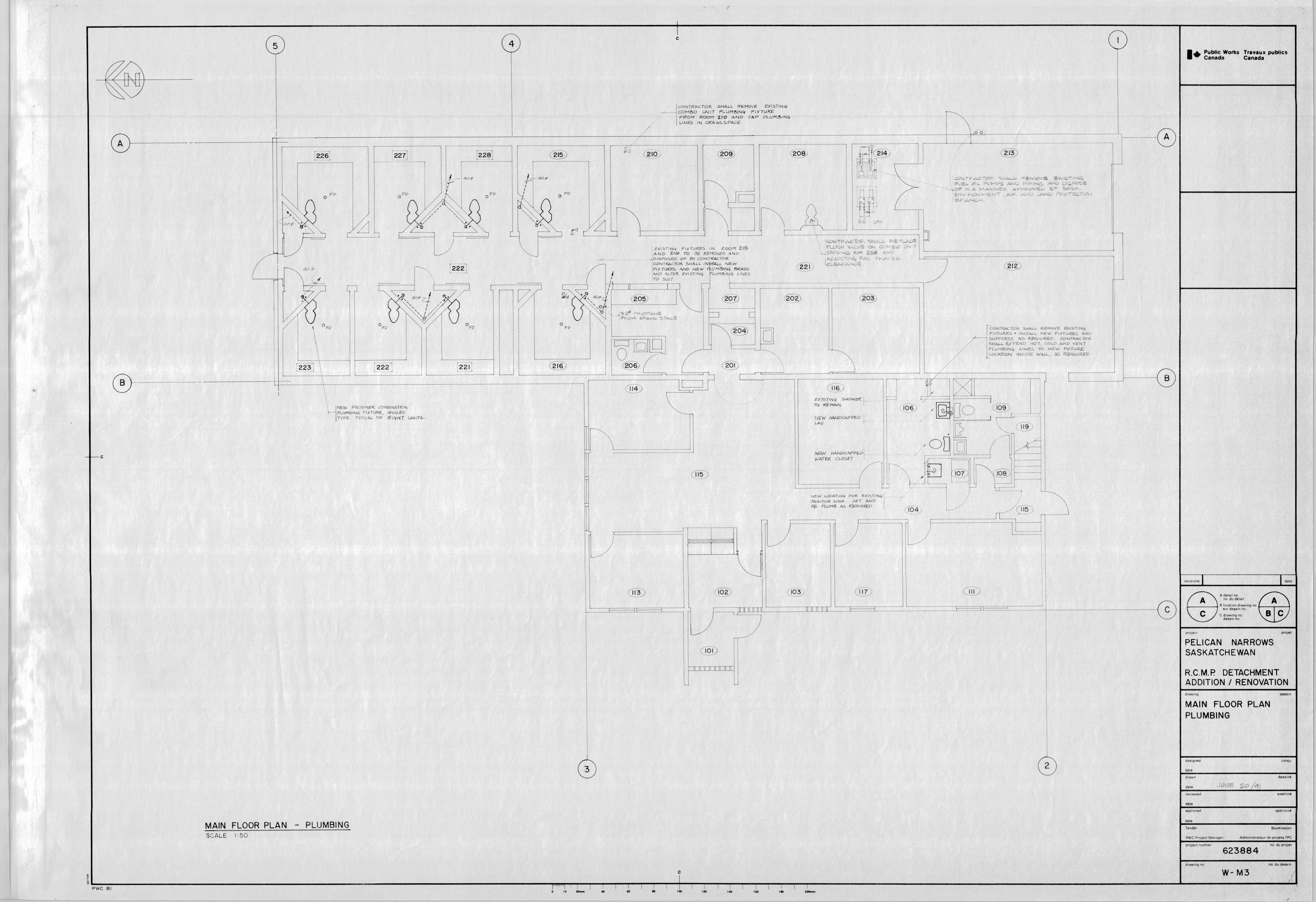
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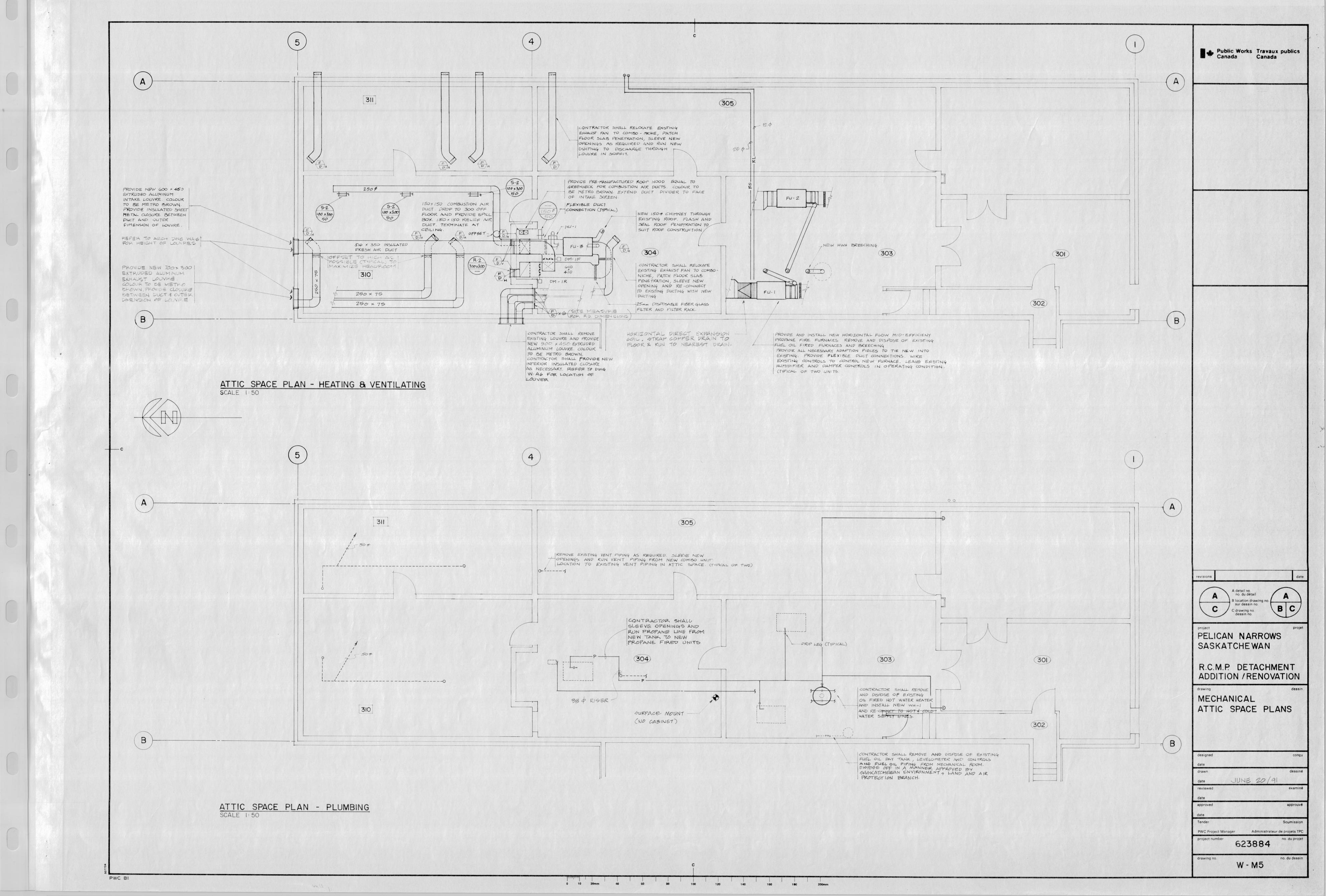
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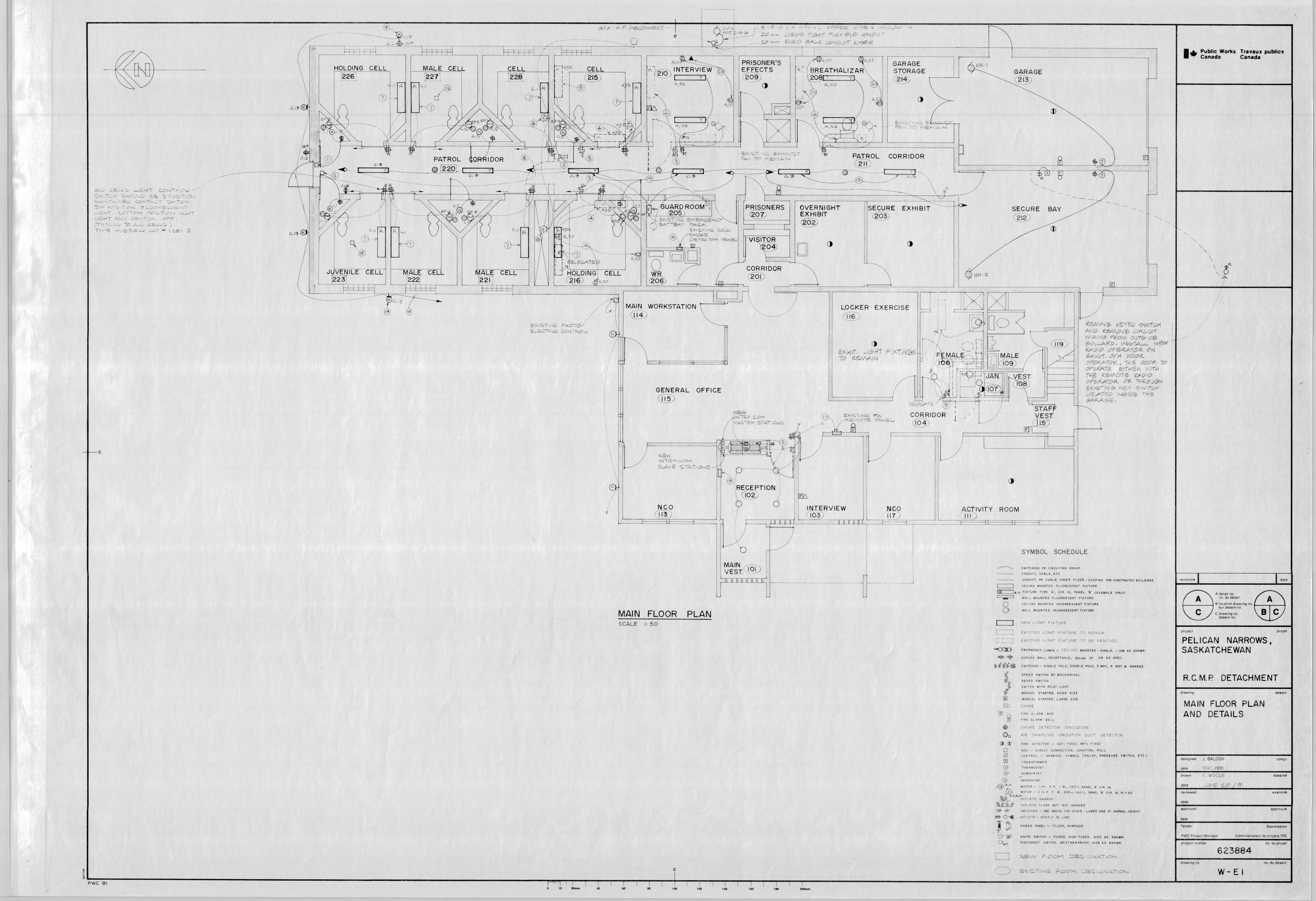
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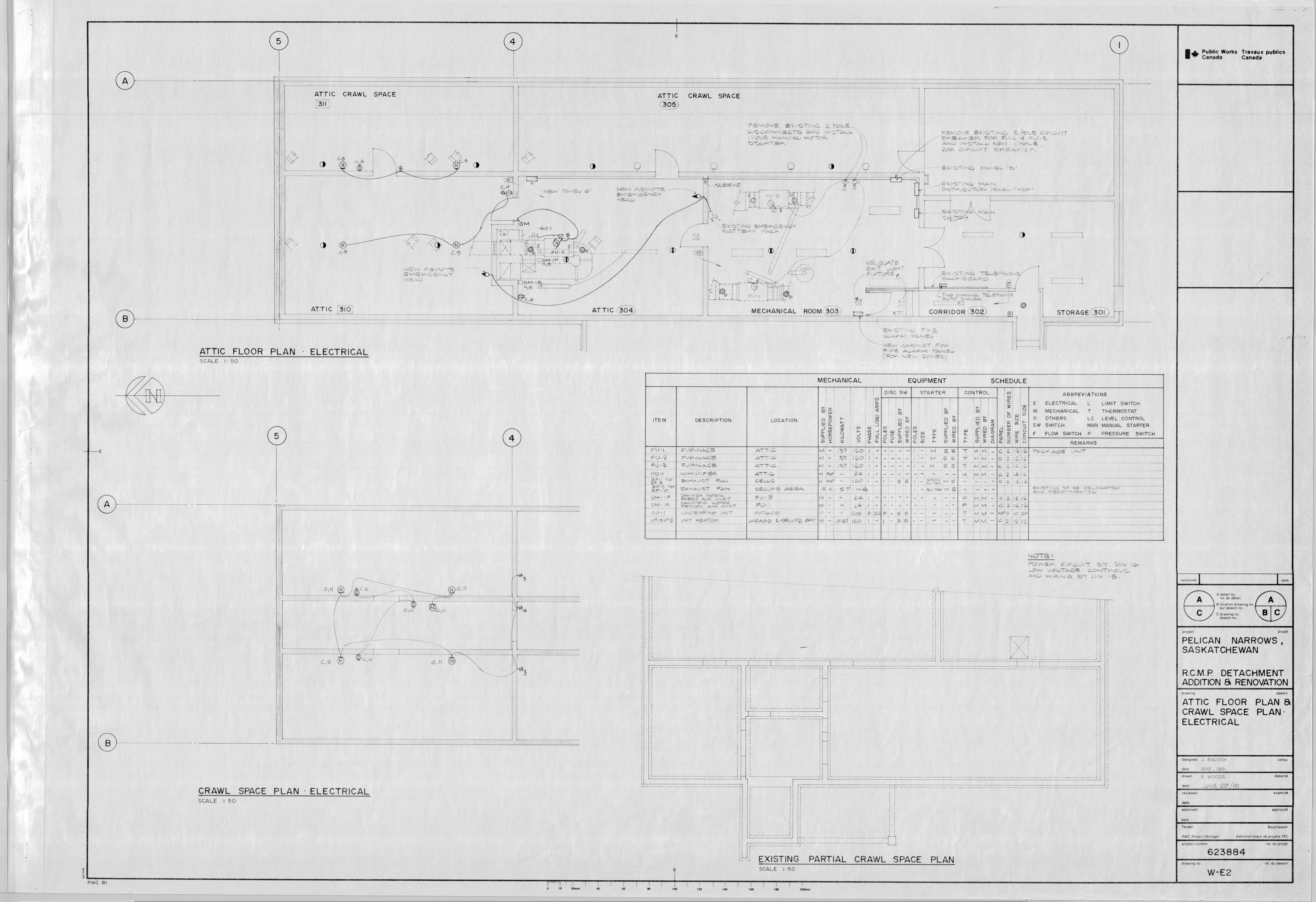












## NEW PANEL 'C' 225A 120/208 V 3 4 WIRE

CELL 108, 107, 103, 102, 105, 106 \$ 109 - L	LIGHTS	1	2	GFI	RECEPTACLES - EXTERIOR
PAT, COR.,	u	3	4		RECEPTACLES - ATTIC
MECHANICAL ENCLOSURES FANS		5	6		RECEPTACLES - CRAWL SPACE
MECHANICAL ENCLOSURES FANS +		7	8		DAMPERS - ATTIC
ATTIC	C)	9	10		HEATER UNIT HUY&HUZ, GARAGE & SECURE BAY
CPIAWL SPACE		111	12	20A	
OUTSIDE LIGHTS		13	-	T A C	
SPARE		15	16		RECEPTACLE - PATROL CORRIDOR BLANK
SPARE		17			
BLANK		19		+	н
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#### PANEL NOTES :

-15A SINGLE POLE CIRCUIT BREAKER UNLESS OTHERWISE NOTED -G.F.I. GROUND FAULT CIRCUIT BREAKER,

NOTE : INSTALL GOA 3 POLE CIRCUIT BREAKER IN MAIN DISTRIBUTION PANEL (MDP) FOR CONDENSING UNIT CIRCUIT 2-4-6.

#### LIGHT FIXTURE SCHEDULE

TYPE 'C'

- SYLVANIA SURFACE CEILING MOUNTED STRIP LIGHT #K-402.248 C/W 2/40W C.W. LAMPS .

REMOTE EM. HEAD - RECESSED EYEBALL TYPE TO MATCH EXISTING. ENCREAGE BATTERY CAPACITY FOR HOUR OPERATION.

TYPE 'K'

- C & M THOMAS SUPFACE WALL MOUNTED OWPS -35 LOW PRESSURE SODIUM 6/W 35W LPS LAMP AND COLD TEMPERATURE BALLAST. MATCH EXISTING.

TYPE 'N' - SMITH AND STONE SURFACE MOUNTED. #1-1351 9/W SCREW IN BASE BALLAST PL-13 LAMP AND WIFE GUAPID.

TYPE 'R'

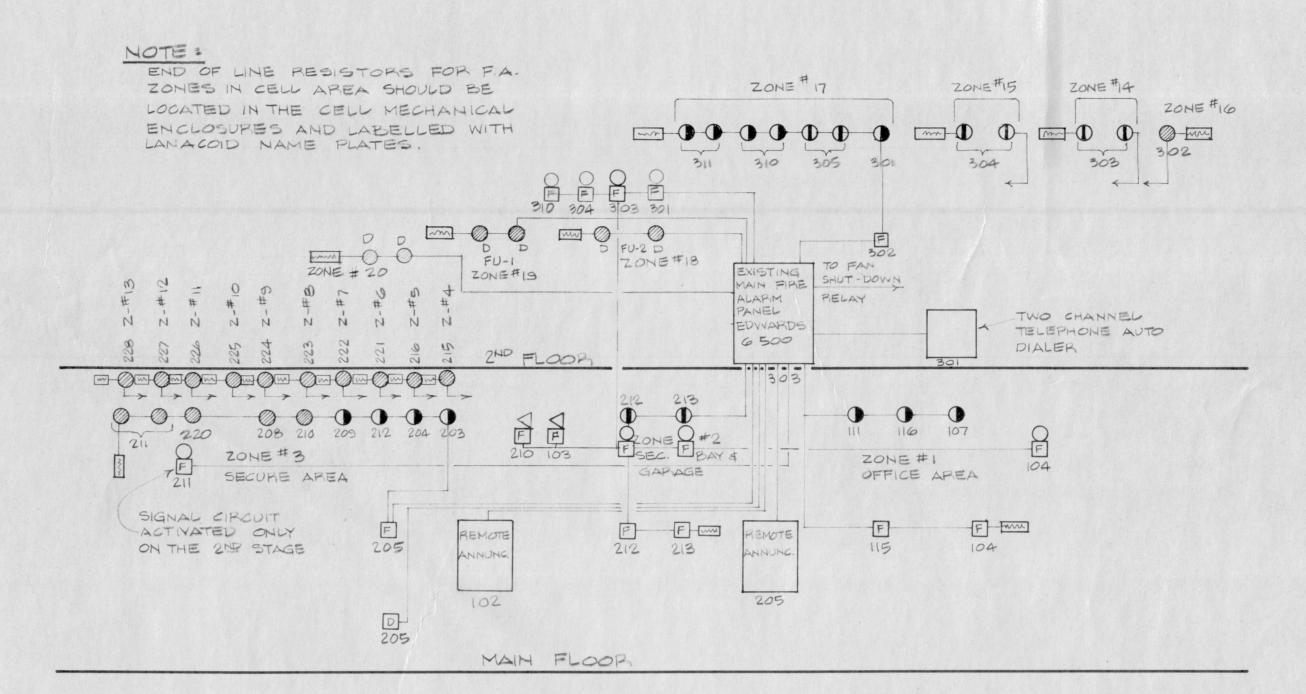
- SUPPLIED BY R.C.M.P. SURFACE CORNER CEILING MOUNTED CIW 2/40 W C.W. FLUORESCENT LAMPS AND 71/2 W INCANDESCENT NIGHT LIGHT, LAMPS SUPPLIED BY THE ELECTPICAL CONTRACTOR

TYPE 'T'

- ACME DUNBAR SURFACE CEILING MOUNTED #542 4W 2/40W C.W. LAMPS AND SECUPITY SCREWS AND SCREW DRIVER, THE FIXTURE TO BE C/W POLYCARBONATE LENSE.

#### NOTES:

- 100 x 100 x 50mm PULL BOX YW COVER PLATE, LOCATE ABOVE OR NEAR LEADING EDGE OF DOOP CIW 12mm CONDUIT TO TELEPHONE BACKBOARD, BOX TO BE LOCATED 25 mm MIN. AND 50 mm MAX. ABOVE OF TO THE SIDE OF DOOR FRAME. SEE DETAIL IN SPECIFICATION
- 2 DISCONNECT AND REMOVE FIRE ALARM PULL
  STATION END OF LINE RESISTOR AND INTERIOR STATION , END OF LINE RESISTOR, AND INTRUSION ALARM PULL BOX 9/W CONDUIT.
- 3 DISCONNECT CIRCUIT WIRING , PEMOVE LIGHT AND FAN CONTROL SWITCHES, REMOVE DEVICE BOX AND PATCH MAKE GOOD.
- 1 DISCONNECT LIGHT CIRCUIT WIRING, REMOVE TYPE 'R' LIGHT FIXTURE AND PIEUSE IN NEW CELLS PATCH JUNCTION BOX AND MAKE GOOD ,
- 5 DISCONNECT CIRCUIT WIRING REMOVE AND RELOCATE EXISTING TYPE 'R' LIGHT FIXTURE!
- (6) DISCONNECT CIRCUIT WIRING REMOVE LIGHT FIXTURE TYPE 'K' AND REUSE THEM FOR THE NEW ADDITION.
- PRELOCATED TYPE 'R' LIGHT FIXTURE.
- (8) CONNECT TWO NEW RECESSED EYEBALL EMERGENCY LIGHT HEAD TO THE EXISTING EMERGENCY BATTERY, BATTERY PACK SHOULD BE SIZED FOR ONE HOUR OPERATION . IF REQUIRED INSTALL ADDITIONAL BATTERIES.
- REMOVE EXISTING SWITCHES AND RELOCATE 9 SWITCH AND WIRING TO CONTROL EXISTING LIGHT FIXTURES IN ROOM 106.
- 10 RUN 2-#12, RUN 90-XL COPPER WIRE TO 12mm EMT CONDUIT TO PERIMETER LIGHT CONTROL CONTACTOR, CONNECT TO SPARE CONTACT
- MINSTALL 100 x 100 x 50 mm RECESSED PULL HOX 9/W COVER PLATE IN THE WALL, 150mm BELOW FINISHED CEILING, RUN 12mmEMT CONDUIT TO TELEPHONE BACKBOARD.
- (12) INSTALL 100 x 100 x 50mm RECESSED PULL BOX CIW COVER PLATE . BUN 12 mm EMT CONDUIT TO TELEPHONE BACKBOARD.
- B MOUNT NEW TYPE 'K' LIGHT FIXTURE SAME HEIGHT AS THE EXISTING TYPE 'K' LIGHT FIXTURES.
- 14 DISCONNECT RECEPTACLE CIRCUIT AND REMOVE SURFACE MOUNTED DEVICES, DEVICE BOX AND CONDUITS. PATCH CEILING WHERE CONDUITS PENETPATED, MAKE GOOD.
- (5) DISCONNECT CIRCUIT, REMOVE LIGHT FIXTURE ABOVE EXISTING COUNTER AND FEMOVE UNNECESSARY CIRCUIT WIRING.
- (6) DISCONNECT AND REMOVE EXISTING CELL SMOKE DETECTION PANEL, INSTALL NEW FIRE ALAPIM REMOTE ANNUNCIATOR PANEL AT SAME SPACE,
- 17 DISCONNECT AND REMOVE EXISTING FIRE ALARM REMOTE PANEL, PATCH WALL AND MAKE GOOD,
- (8) INSTALL NEW FIRE ALARM REMOTE ANNUNCIATOR PANEL,
- 19 DISCONNECT CIRCUIT AND REMOVE EXISTING SURFACE MOUNTED LIGHT FIXTURES, TURN THEM OVER TO RICIMIP! INSTALL NEW TYPE 'T' LIGHT FIXTURES AND ENERGIZE.
- 20 SURFACE MOUNTED CONDUITS, RECEPTACLES AND TELEPHONE OUTLETS SHOULD BE WIRE HOLD ONE-PIECE SURFACE METAL PLACE WAY CAT, Nº 200 SUPPORTED WITH 2 HOLE METAL STRAPS @ 750mm OIC, CENTRE WITH SECURITY SCREWS.

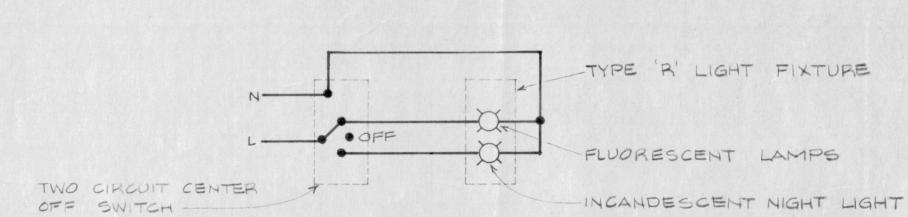


# FIRE ALARM RISER DIAGRAM

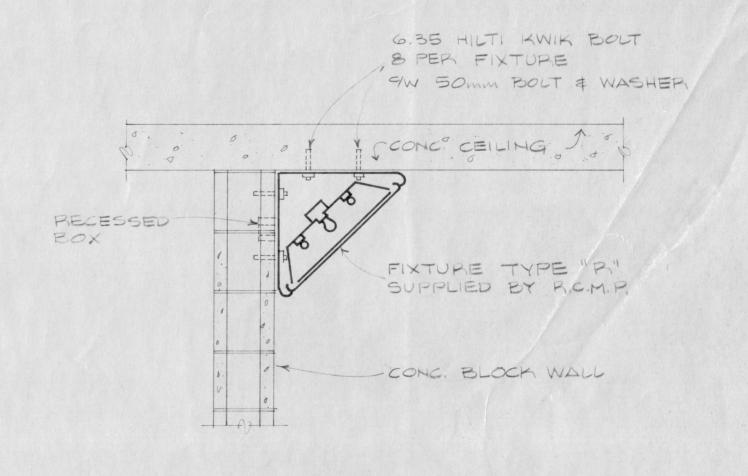
NOTES ON FIRE ALARM SYSTEM

- O IONIZATION SMOKE DETECTOR
- O IONIZATION AIR SAMPLING DUCT DETECTOR
- 1 FIXED TEMPERATURE HEAT DETECTOR 92°C
- FIXED TEMPERATURE HEAT DETECTOR 57%
- F MANUAL PULL STATION
- FIRE ALARM BELL
- MAGNETIC DOOR HOLDER

FIRE ALARM END OF LINE RESISTOR



#### CELL LIGHT CONTROL DIAGRAM N.T.S.



CELL FIXTURE MOUNTING DETAIL N.T.S.

A detail no. no. du détail B location drawing no. sur dessin no. PELICAN NARROWS. SASKATCHEWN R.C.M.P. DETACHMENT ADDITION & RENOVATION ELECTRICAL DETAILS AND NOTES designed J. BALOGH MAY. 1991 drawn E. WOODS JUNE 20/91 reviewed Administrateur de projets TP 623884 no. du dessin

W-E3

Public Works Travaux publics
Canada Canada

PWC BI

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

# Phase I Environmental Site Assessments & Hazardous Materials Sampling at RCMP Properties at Various Locations within Northern Saskatchewan

Prepared for:
Public Works and Government Services Canada
Environmental Services
100-167 Lombard Ave
Winnipeg MB R3C 2Z1

Prepared by: Earth Tech (Canada) Inc. 850 Pembina Highway Winnipeg, Manitoba R3M 2M7

February 2008

Project No. 102051

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# **Letter of Transmittal**



850 Pembina Highway Winnipeg, Manitoba R3M 2M7 Canada P204 477 5381 F204 284 2040 earthtech.com

Refer to File:

102051-03

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February 14, 2008

Public Works and Government Services Canada Office of Greening Government Operations 100-167 Lombard Avenue Winnipeg MB R3C 2Z1

Attention:

Ms. Tammy Burr, Environmental Specialist

Dear Ms. Burr:

Re:

Phase I ESA and Hazardous Materials Sampling – Final Report RCMP Properties in Pelican Narrows, Saskatchewan

Please find enclosed (3) hard copies and (3) digital copies of the above mentioned report. If you have any questions or concerns please feel free to contact us.

Sincerely,

EARTH TECH (CANADA) INC.

Per:

Scott Chapman, M.Sc., P.Eng. Environmental Engineer

SC:dt

Encls.



# **Executive Summary**

#### **EXECUTIVE SUMMARY**

Earth Tech (Canada) Inc. (ET) was retained by Public Works and Government Services Canada (PWGSC) – Office of Greening Government Operations to conduct work for the Royal Canadian Mounted Police (RCMP). This work included conducting a Phase I Environmental Site Assessment (ESA) and a Hazardous Materials Survey (HMS) on eight RCMP-operated properties in Pelican Narrows, Saskatchewan.

The purpose of the ESA is to identify any potential sources of environmental liability that may have resulted from past or present land use, construction activities and site management or operations at the detachment and employee housing. Discussed collectively, the properties will be referred to as the Site. The Phase I ESA and HMS consisted of five main activities including a review of historical and current documentation pertaining to the Site, interviews with personnel familiar with the Site, a visual inspection including the completion of halocarbon and storage tank inventories, and the collection of potential asbestos containing materials (ACMs), lead-based paint, and mould samples.

The Phase I ESA was researched and prepared in general accordance with the Canadian Standards Association document CSA Z768-01, *Phase I Environmental Site Assessment*, which sets standards for review of information pertaining to a site, completion of detailed checklists, site inspection procedures, and preparation of a final report.

#### **SUMMARY OF RESULTS**

The RCMP locations inspected included the RCMP Detachment building and seven employee housing units located in Pelican Narrows, Saskatchewan. A summary of results from the Phase I ESA and HMS are included in the following sub-sections.

#### RCMP Detachment

Propane aboveground storage tanks (ASTs) used for heating were observed on the property. One gasoline AST was also observed on the property. Four mercury thermostat switches were present in the building. No staining or urea formaldehyde foam insulation (UFFI) materials were observed during the site visit. Ozone depleting substances (ODSs) were observed on the property.

Fifteen samples were collected from the detachment for asbestos analysis. None of the samples contained asbestos. No lead-based paint samples were collected from the property due to the early 1980's date of construction (lead paint as no longer commonly used as a construction material). Mould was not observed on the property. During the site visit, 25 fluorescent light ballasts (FLBs) were observed throughout the detachment, including the entrance, offices, storage areas, and bathrooms. To check twenty percent of the ballasts, 5 FLBs were randomly selected for further inspection. Of the 5 FLBs inspected, none of them contained polychlorinated biphenyls (PCBs). One of the FLBs inspected in the mechanical room was observed to be leaking.

Executive Summary February 2008

#### Employee Housing 1

One propane AST used for heating was observed on the property. No staining, mercury or UFFI materials were observed during the site visit. ODSs were observed on the property.

Six samples were collected from the building for asbestos analysis. Of the six samples collected, two samples (PN-R1-A002 and PN-R1-A003) tested positive for asbestos (10-25% and 1-10%, respectively). Sample PN-R1-A002 was collected from sheet flooring (pattern of yellow circles and flowers) from the interior of the building. The total measured area of this flooring was approximately 9 m². Sample PN-R1-A003 was collected from sheet flooring (pattern of yellow octagons with stone grout) from the interior of the building. The total measured area of this flooring was approximately 13 m². No lead-based paint samples were collected from the property due to the date of construction (early 1980's). Mould was not observed on the property. No FLBs were observed at the property.

#### Employee Housing 2

One propane AST used for heating was observed on the property. No staining, mercury or UFFI materials were observed during the site visit. ODSs were observed on the property.

R2 was constructed in the early 1980's and major renovations were undertaken in 2006. During the site visit, all of the potential ACMs identified in R2, such as sheet flooring, appeared to be identical in pattern, age and quantity to those in R1. As such, no samples were collected from the building for asbestos. No lead-based paint samples were collected from the property due to the early 1980's date of construction (lead paint was no longer commonly used as a construction material). Mould was not observed on the property. No FLBs were observed at the property.

#### Employee Housing 3

No propane ASTs used for heating were observed on the property. A mercury thermostat switch was present in the building. No staining, ODSs or UFFI materials were observed during the site visit.

Five samples were collected from the building for asbestos analysis. None of the samples contained asbestos. No lead-based paint samples were collected from the property due to the 1988 date of construction (lead paint was no longer commonly used as a construction material). During the course of the inspection, one mould sample was collected from the interior of R3. The sample was collected from an affected area of the bathroom ceiling (0.5 m² in area). Laboratory analysis indicated that the ceiling sample contained a substantial number of colony forming units (31,900 CFU/g) completely attributable (100%) to *cladosporium*, a non-toxic form of mould typically found in the outdoor environment. No FLBs were observed at the property.

#### Employee Housing 4

No propane ASTs used for heating were observed on the property. No staining, mercury or UFFI materials were observed during the site visit. ODSs were observed on the property.

Earth Tech (Canada) Inc. Page 2

Executive Summary February 2008

One sample was collected from the building for asbestos analysis. The sample did not contain asbestos. No lead-based paint samples were collected from the property due to the 1988 date of construction (and lead paint was no longer commonly used as a construction material). During the course of the inspection, one mould sample was collected from the interior of R4. The sample was collected from an affected area of the bathroom ceiling (0.5 m² in area). Laboratory analysis indicated that the ceiling sample contained a substantial number of colony forming units (13,700 CFU/g) completely attributable (100%) to *cladosporium*, a non-toxic form of mould typically found in the outdoor environment. No FLBs were observed at the property.

#### Employee Housing 5

One propane AST used for heating was observed on the property. A mercury thermostat switch was present in the building. No staining or UFFI materials were observed during the site visit. ODSs were observed on the property.

Given the 1995 date of construction, no samples were collected for asbestos or lead-based paint analysis from the building (ACMs and lead paint were no longer commonly used as construction materials). No mould was observed on the property. No FLBs were observed during the site visit.

#### Employee Housing 6

One propane AST used for heating was observed on the property. A mercury thermostat switch was present in the building. No staining or UFFI materials were observed during the site visit. ODSs were observed on the property.

Given the 1995 date of construction, no samples were collected for asbestos or lead-based paint analysis from the building (ACMs and lead paint were no longer commonly used as construction materials). No mould was observed on the property. No FLBs were observed during the site visit.

#### Employee Housing 7

One propane AST used for heating was observed on the property. A mercury thermostat switch was present in the building. No staining or UFFI materials were observed during the site visit. ODSs were observed on the property.

Given the 1995 date of construction, no samples were collected for asbestos or lead-based paint analysis from the building (ACMs and lead paint were no longer commonly used as construction materials). No mould was observed on the property. No FLBs were observed during the site visit.

#### RECOMMENDATIONS

In conclusion, based upon observations made during the site investigation, the results of the historical investigation, and the results of the hazardous material surveys, there exists a relatively low risk for environmental concern at any of the RCMP properties in Pelican Narrows. The following actions are recommended:

1. Mould identified in R3 and R4 should be inspected and cleaned immediately. The source of the mould should be identified and repaired.

Earth Tech (Canada) Inc. Page 3

Executive Summary February 2008

2. Prior to any building demolition, mercury switches should be disposed of in a suitable manner.

- 3. The removal and disposal of the asbestos containing material located in the detachment, R2, and R5 prior to the demolition of the buildings. All relevant work place safety and occupational health and safety guidelines should be observed during the demolition and removal of the ACM.
- 4. Prior to any building demolition, all FLBs should be checked for PCB content and be disposed of appropriately. The fluorescent light tubes should also be removed from the property and be disposed of in a suitable manner since historically the fluorescent light tubes have been filled with mercury gas.
- 5. ODS containing equipment should be serviced by an accredited technician. In the event of disposal, the ODSs must be managed in accordance with federal regulations and replaced with a non-ODS product. If the ODS unit identification tag was missing or illegible, the unit should be assumed to contain ODS.

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#### PHASE I ENVIRONMENTAL SITE ASSESSMENTS & HAZARDOUS MATERIALS SAMPLING AT RCMP PROPERTIES AT VARIOUS LOCATIONS WITHIN NORTHERN

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## Section 1.0 Introduction

#### SECTION 1.0 INTRODUCTION

#### 1.1 OBJECTIVES

Earth Tech (Canada) Inc. (ET) was retained by Public Works and Government Services Canada (PWGSC) – Office of Greening Government Operations to conduct work for the Royal Canadian Mounted Police (RCMP). This work included conducting a Phase I Environmental Site Assessment (ESA) and a Hazardous Materials Survey (HMS) for eight RCMP operated properties located in Pelican Narrows, Saskatchewan.

The purpose of the ESA is to identify any potential sources of environmental liability that may have resulted from past or present land use, construction activities and site management or operations at the detachment, related facilities and employee housing. Discussed collectively, the facilities will be referred to as the Site.

#### 1.2 REGULATORY FRAMEWORK

The Phase I ESA was researched and prepared in general accordance with the Canadian Standards Association document CSA Z768-01, *Phase I Environmental Site Assessment*, which sets standards for review of information pertaining to a site, completion of detailed checklists, site inspection procedures and preparation of a final report.

#### 1.3 SCOPE OF WORK

The Phase I ESA and HMS consisted of five main activities including:

- a review of historical and current documentation pertaining to the Site
- interviews with personnel familiar with the Site
- a visual inspection of the Site, including completion of a halocarbon inventory and storage tank inventory
- collection of potential asbestos containing materials (ACMs), lead-based paint and mould samples
- a written report of the information obtained, including a Work Plan for future study, if required

Specific environmental issues that were to be addressed include:

- potential presence of hazardous materials, such as ACMs, lead-based paint, mould, and polychlorinated biphenyls (PCBs)
- storage, handling and disposal practices for dangerous goods, hazardous materials and waste, as well as non-hazardous wastes
- potential presence of storage tanks and transformers
- type of ground surface and condition of soil and vegetation
- topography and drainage of property

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• presence of industrial or commercial facilities at adjacent properties which could impact the subject property

While this report provides an overview of potential environmental concerns, both past and present, the environmental assessment is limited by the availability and accuracy of information at the time of the assessment.



### Section 2.0 Site Conditions

#### SECTION 2.0 SITE CONDITIONS

#### 2.1 SITE DESCRIPTION

#### 2.1.1 Site Location

For this Phase I ESA and HMS, the locations inspected included the RCMP detachment building and seven employee housing units located in Pelican Narrows, Saskatchewan. Table 2.1 summarizes the properties inspected, including the DFRP number, land use, and name of the property. Pelican Narrows is approximately 65 km west of the Saskatchewan-Manitoba border and 280 km northeast of Prince Albert, Saskatchewan. The main highway running through Pelican Narrows is Highway 135, which follows the coastline and enters Pelican Narrows on the east, becomes Bear Street as it turns from running east-west to north-south, then becomes Hwy 135 exiting towards the north. The nearest airport is located in Jan Lake, Saskatchewan approximately 40 km south of Pelican Narrows.

#### 2.1.1.1 RCMP Detachment

The detachment, and its attached garage, is approximately 279 m<sup>2</sup> (3,000 ft<sup>2</sup>) in size, covering approximately 10% of the property. Access to the detachment is granted from a gravel access road off of Bear Street, west of the detachment. It has a DFRP number of 36834, with a property object number of PR F/206. It was constructed in the early 1980's, with the cell block added in 1991. Highway 135 intersects Bear Street approximately 100 m northwest of the detachment. Pelican Lake surrounds most of Pelican Narrows. At the closest point, Pelican Lake is approximately 325 m west of the detachment.

The legal description of the detachment, as provided by an RCMP Environmental Manager, is Lot S, Plan 78PA25115. Municipally, it is #1 Bear Street, and has the approximate UTM coordinates of 13U 631294, 6115638, as recorded at the front door during the site visit.

The detachment and related property are owned by the RCMP.

#### 2.1.1.2 Employee Housing 1

The first employee housing unit, R1, is approximately  $93 \text{ m}^2$  (1,000 ft²) in size, and covers approximately 10% of the property, which is roughly 50 m by 100 m. Access is granted off of a gravel access road which runs east-west from Bear Street. It has a DFRP number of 36834, with a property object number of PR F/206. It was constructed in the early 1980's, and is a double wide trailer. Highway 135 intersects Bear Street approximately 100 m northwest of the house. At the closest point, Pelican Lake is approximately 350 m west of R1.

The legal description of the house, as provided by an RCMP Environmental Manager, is Lot S, Plan 78PA25115. Civically, the house is located on Bear Street, and has the approximate UTM coordinates of 13U 631349, 6115653, as recorded at the front door during the site visit.

The house and related property are owned by the RCMP.

#### 2.1.1.3 Employee Housing 2

The second employee housing unit, R2, is approximately 93 m<sup>2</sup> (1,000 ft<sup>2</sup>) in size, and covers approximately 10% of the property, which is roughly 50 m by 100 m. Access is granted off of a gravel access road which runs east-west from Bear Street. It has a DFRP number of 36834, with a property object number of PR F/206. It was constructed in the early 1980's with structural renovations in 2006. R2 is a double wide trailer. Highway 135 intersects Bear Street approximately 140 m northwest of the house. At the closest point, Pelican Lake is approximately 350 m west of R2.

The legal description of the house, as provided by an RCMP Environmental Manager, is Lot S, Plan 78PA25115. Civically, the house is located on Bear Street and has the approximate UTM coordinates of 13U 631336, 6115627, as recorded at the front door during the site visit.

The house and related property are owned by the RCMP.

#### 2.1.1.4 Employee Housing 3

The third employee housing unit, R3, is the southern portion of the duplex northwest of the detachment (shared duplex with R4). It is approximately 110 m² (1,200 ft²) in size, and covers approximately 20% of the property, which is roughly 40 m by 50 m. Access is granted off of a gravel driveway connected to Bear Street. It has a DFRP number of 36022, with a property object number of PR F/187. It was constructed in 1988. Highway 135 intersects Bear Street approximately 40 m northwest of the northeast corner of R3. At the closest point, Pelican Lake is approximately 280 m west of R3.

The legal description of the house, as provided by an RCMP Environmental Manager, is Parcel EE, Block 2, Plan 88PA01099, and has the approximate UTM coordinates of 13U 631260, 6115653, as recorded at the front door during the site visit. Civically, the house is located on Bear Street.

The house and related property are owned by the RCMP.

#### 2.1.1.5 Employee Housing 4

The fourth employee housing unit, R4, is the northern portion of the duplex northwest of the detachment (shared duplex with R3). It is approximately 110 m² (1,200 ft²) in size, and covers approximately 20% of the property, which is roughly 40 m by 50 m. Access is granted off of a gravel driveway connected to Bear Street. It has a DFRP number of 36022, with a property object number of PR F/187. It was constructed in 1988. Highway 135 intersects Bear Street approximately 40 m northwest of the northeast corner of R4. At the closest point, Pelican Lake is approximately 280 m west of R4.

The legal description of the house, as provided by an RCMP Environmental Manager, is Parcel EE, Block 2, Plan 88PA01099, and has the approximate UTM coordinates of 13U

631268, 6115677, as recorded at the front door during the site visit. Civically, the house is located on Bear Street.

The house and related property are owned by the RCMP.

#### 2.1.1.6 Employee Housing 5

The fifth employee housing unit, R5, is approximately 121 m<sup>2</sup> (1,300 ft<sup>2</sup>) in size, and covers approximately 20% of the property. Access is granted off of Muskeek Place. It has a DFRP number of 37014, with a property object number of PR F/261. It was constructed in the mid 1990's. Highway 135 runs northeast-southwest approximately 200 m northwest of R5. At the closest point, Pelican Lake is approximately 760 m west of R5.

The legal description of the house, as provided by an RCMP Environmental Manager, is Lots 4, 5, and 6, Township 71, Range 6 and 7, W2M, Plan 1873R and has the approximate UTM coordinates of 13U 631902, 6116904, as recorded at the front door during the site visit. Municipally, the address of the house is 2608 Muskeek Place.

The house and related property are owned by the RCMP.

#### 2.1.1.7 Employee Housing 6

The sixth employee housing unit, R6, is approximately 110 m² (1,200 ft²) in size, and covers approximately 20% of the property. Access is granted off of Muskeek Place. It has a DFRP number of 37014, with a property object number of PR F/261. It was constructed in the mid 1990's. Highway 135 runs northeast-southwest approximately 200 m northwest of R6. At the closest point, Pelican Lake is approximately 770 m west of R6.

The legal description of the house, as provided by an RCMP Environmental Manager, is Lots 4, 5, and 6, Township 71, Range 6 and 7, W2M, Plan 1873R and has the approximate UTM coordinates of 13U 631897, 6116921, as recorded at the front door during the site visit. Municipally, the address of the house is 2609 Muskeek Place.

The house and related property are owned by the RCMP.

#### 2.1.1.8 Employee Housing 7

The seventh employee housing unit, R7, is approximately 110 m<sup>2</sup> (1,200 ft<sup>2</sup>) in size, and covers approximately 20% of the property. Access is granted off of Muskeek Place. It has a DFRP number of 37014, with a property object number of PR F/261. It was constructed in the mid 1990's. Highway 135 runs northeast-southwest approximately 200 m northwest of R7. At the closest point, Pelican Lake is approximately 780 m west of R7.

The legal description of the house, as provided by an RCMP Environmental Manager, is Lots 4, 5, and 6, Township 71, Range 6 and 7, W2M, Plan 1873R and has the approximate UTM coordinates of 13U 631874, 6116930, as recorded at the front door during the site visit. Municipally, the address of the house is 2610 Muskeek Place.

The house and related property are owned by the RCMP.

#### 2.2 PHYSIOGRAPHY

#### 2.2.1 Soils, Geology, and Topography

Site topography is relatively flat with an elevation of approximately 320 m.a.s.l. with a general downward slope southwest towards Pelican Lake (Energy, Mines and Resources Canada, Pelican Narrows 63-M/2 Edition 2, 1991).

According to the Geological Map of Saskatchewan (1999), the bedrock surface geology of Pelican Narrows is covered by a combination of formations from both the Archean and Proterozoic eras. Formations from the Archean era included strongly deformed to mylonitic gneiss of the Pelican Decollement Zone and Guncoat gneiss, and strongly foliated leucogranodiority and tonalite. Formations from the Proterozoic era are from the Flin Flon-Hanson-Glennie-Attitti-Scimitar domain and were basite, amphibolite and other mafic gneisses, largely volcanogenic, and granite-granodiotite-tonalite.

Soil maps for Northern Saskatchewan show that the soils in the vicinity of Pelican Narrows are grey podzolic soils with rock outcrops, and are covered with coniferous forest. The grey podzolic soils potentially contain a thin organic layer,  $A_0$ , potentially followed by a thin dark brownish A1 layer. This layer is followed by a light brownish-grey to nearly white, highly leached, platy  $A_2$  layer. A brown to dark grey-brown, heavy textured, lime free  $B_1$  layer is beneath the  $A_2$  layer, and is above a lighter brown to yellowish brown  $B_2$  layer. Lime carbonate may be present above the upper parent material of the  $C_1$  horizon (Soil Survey of Saskatchewan Covering the Agriculturally Settled Areas North of Township 48, 1950).

#### 2.2.2 Drainage

Site drainage was approximated during the site visit, and is based on the slope of the properties, and the general elevation of the area.

#### 2.2.2.1 RCMP Detachment

The property appeared relatively flat, though drainage appeared to be away from the detachment and towards the access road. As the detachment property and access road is higher than the neighbouring property to the south, it appeared as though liquids run towards the southern neighbouring property, once on the access road.

#### 2.2.2.2 Employee Housing 1

Drainage on the property appeared to flow towards the south and east. It appeared that some drainage from the detachment property may flow onto this property.

#### 2.2.2.3 Employee Housing 2

Drainage appeared to be away from the house in all directions. A slope to the east, towards the rear of the property seemed to be the most prominent direction.

#### 2.2.2.4 Employee Housing 3

Drainage appeared to be away from the house in all directions, though the most prominent slope across the property is to the west. It also appears that runoff from the property can flow onto Bear Street, which causes the runoff to flow west towards Pelican Lake or northwest towards a creek, located approximately 150 m northwest of R3. A low spot southwest of the property was seen to have standing surface water at the time of the site visit.

#### 2.2.2.5 Employee Housing 4

Drainage appeared to be away from the house in all directions, though the most prominent slope across the property is to the west. It also appears that runoff from the property can flow onto Bear Street, which causes the runoff to flow west towards Pelican Lake or northwest towards a creek, located approximately 150 m northwest of R4.

#### 2.2.2.6 Employee Housing 5

Drainage appeared to be away from the house in all directions, with the most prominent direction towards the south. It also appeared that some drainage from the western portion of the property, as well as the properties to the north and Muskeek Place drain into a ditch that runs between the western property line and Muskeek Place.

#### 2.2.2.7 Employee Housing 6

Drainage appeared to be away from the house in all directions, with the most prominent direction towards the south. It also appeared that some drainage from the western portion of the property, as well as the properties to the north and Muskeek Place drain into a ditch that runs between the western property line and Muskeek Place.

#### 2.2.2.8 Employee Housing 7

Drainage appeared to be away from the house in all directions, with the most prominent direction towards the south. It appeared that the majority of the property drains from the northern portion onto the southern before entering a ditch that runs between the southern property line and Muskeek Place.

#### 2.2.3 Groundwater Wells

A search request was sent in to the Saskatchewan Watershed Authority for all water well and soil test hole logs available for the Site. In order to complete this search, the township-range system of Saskatchewan had to be extended and approximated for the Pelican Narrows area. To ensure that a 1.6 km radius was obtained for the Site, the search was performed for 71-6 W2M, and 71-7 W2M. Two records were produced for the area, both in township 71-7 W2M. Both of these wells are used as withdrawal for domestic use. One well was drilled to 0.91 m, the other was to 1.5 m. The 0.91 m well log was the only one with a soil lithology, which consisted of 0.61 m of sandy clay, followed by 0.3 m of gravely clay. No groundwater levels were recorded in the logs. The available well logs are included in Appendix A.

#### 2.2.4 On-site Facilities and Structures

#### 2.2.4.1 RCMP Detachment

As seen in Figure 2-1, there are two structures on the property. The predominant structure is the detachment which sites on approximately 10% of the property. The second is a 2 m by 3 m shed located to the east of the detachment. A gravel driveway on the east side of the property connects to a gravel access road south of the detachment which leads onto Bear Street. Two garbage bins are located on the eastern portion of the property at the fence separating R1 and R2. Two propane aboveground storage tanks (ASTs) are located near the northeast corner of the property. Near the northeast corner of the detachment, north of the shed, there is a pile of siding/lumber, an a/c unit, as well as a burn barrel that is no longer in use. West of the detachment, there are two septic tank covers and a gas AST that sits on a concrete pad. At the time of the site visit, water was standing on the pad.

Current utilities on the property include aboveground electrical and telecommunication cables, and underground water and sewer pipes. There is also the gas AST used to refuel vehicles, and two propane ASTs used to heat the detachment. Near the southeast property corner, there is a pole-mounted transformer. Additionally, in the past it appears that a septic system was used for the property, and though it is no longer in use, the tanks do not appear to have been removed.

#### 2.2.4.2 Employee Housing 1

As seen in Figure 2-1, the predominant structure on the property is the house, on the western portion of the property. A 2 m by 3 m shed is located northeast of the house. South of the house, near the fence, there is a propane AST. Two garbage bins are located near the fence dividing the property from R2. The property is mainly grass with trees scattered near the house and shed.

Current utilities on the property include aboveground electricity, and underground telecommunication cable and water and sewer pipes. There was also one propane AST used to heat the house.

#### 2.2.4.3 Employee Housing 2

As seen in Figure 2-1, the employee housing is the main structure on the property, accounting for approximately 10% of the property. A 2 m by 3 m shed is located near the southeast corner of the property, while a propane AST is located northeast of the house. Two garbage bins are located near the fence dividing the property from R1. The property is mainly grass.

Current utilities on the property include aboveground electrical and telecommunication cables, and underground water and sewer pipes. A propane AST is used to provide heat for the property.

#### 2.2.4.4 Employee Housing 3

As seen in Figure 2-1, there are two structures on the property. The main structure is the southern portion of the duplex, which occupies about 20% of the property. The second structure is a 2 m by 3 m shed, located east of the house near the fence line. West of the house, there is a "U" shaped gravel driveway that runs in front of R3 and its neighbouring property, R4. This driveway is connected to Bear Street at both ends. Between the driveway and Bear Street, there is a garbage bin and a utility pole. Southwest of the house there is another utility pole, though this pole has a transformer mounted on it. There is a pad-mounted transformer near the southwest corner of the property. The property has gravel on the west side and grass on the remaining sides. A few trees are located around the yard.

Current utilities include aboveground telecommunication cable, and underground electrical cable and water and sewer pipes.

#### 2.2.4.5 Employee Housing 4

As seen in Figure 2-1, there are two structures on the property. The main structure is the southern portion of the duplex, which occupies about 20% of the property. The second structure is a 2 m by 3 m shed, located east of the house near the fence line. West of the house, there is a "U" shaped gravel driveway that runs in front of R4 and its neighbouring property, R3. This driveway is connected to Bear Street at both ends. Between the driveway and Bear Street, there is a garbage bin and a utility pole. Southwest of the house there is another utility pole, though this pole has a transformer mounted on it. The property has gravel on the west side and grass on the remaining sides. A few trees are located around the perimeter of the fence.

Current utilities include aboveground electrical and telecommunication cables, and underground water and sewer pipes.

#### 2.2.4.6 Employee Housing 5

As seen in Figure 2-2, the main structure on the property is the house, which is approximately 20% of the property. East of the house, there is a 2 m by 3 m shed, and east of the shed there is a propane AST. Near the northwest corner of the property, there is a garbage bin. Along the northern property line there is a gravel driveway that extends from Muskeek Place to the rear of the house. Drain pipes are connected to the house downspouts and directs roof drainage to the southeast corner of the property. A shallow ditch is located between the property's northwest fence and Muskeek Place. The property is mainly grass with some trees and shrubs scattered through the yard.

Current utilities include underground electrical and telecommunication cables, and water and sewer pipes. A propane AST is used to provide heat to the house. There is also a pole-mounted transformer located near the southwest corner of the property.

#### 2.2.4.7 Employee Housing 6

As seen in Figure 2-2, the predominant structure on the property is the house which occupies approximately 20% of the property. A 2 m by 3 m shed is located northeast of the house near the fence. A propane AST is located northeast of the shed. Along the northern property fence there is a gravel driveway which extends from Muskeek Place to the back of the house. A garbage bin is located east of the house next to the driveway. A shallow ditch is located between the property's west fence and Muskeek Place. The property is mainly grass with an occasional tree or shrub.

Current utilities include underground electrical and telecommunication cables, and water and sewer pipes. A propane AST is used to provide heat to the house.

#### 2.2.4.8 Employee Housing 7

As seen in Figure 2-2, the house is the main structure on the property, occupying approximately 20% of the property. A second structure, the shed, is approximately 2 m by 3 m, and is located southeast of the house. A propane AST is located east of the shed. Along the southern property line there is a gravel driveway which extends from Muskeek Place to the rear of the house. North of where the driveway connects to Muskeek Place there is a garbage bin. A shallow ditch is located between the property's southwest fence and Muskeek Place. Near the northwest corner of the property fence, near Muskeek Place, there is a fire hydrant. The property is mainly grass with an occasional tree or shrub.

Current utilities include underground electrical and telecommunication cables, and water and sewer pipes. A propane AST is used to provide heat to the house.

#### 2.2.5 Adjoining Properties

#### 2.2.5.1 RCMP Detachment

Residential units are located east and northwest of the detachment. These residential units are owned by the RCMP, and they each have one propane AST. North and east of these residential units, and immediately west of the detachment, the land is covered in bush. Bear Street is west of the bush on the west side of the detachment, and a day care is west of Bear Street. There is also a pole-mounted transformer located near the residential units northwest of the detachment, between the bush and Bear Street. South of the detachment, there is a teacherage, the band office, and a health clinic. Along Bear Street, near the band office, there was a pole-mounted transformer.

#### 2.2.5.2 Employee Housing 1

Bush surrounds R1 to the east and north. South of R1, there is a residential unit that is owned by the RCMP, R2, which has a propane AST. West of the house, there is the detachment. On this neighbouring property, there is a pole-mounted transformer near the southeast corner, two propane ASTs near the northeast corner, an a/c unit and burn barrel east of the building, two garbage bins near the eastern border with R1 and R2, and a gas AST near the southwest

corner. This gas AST is double walled and mounted to a concrete platform. This neighbouring property potentially also has a septic system installed, though it is not in use.

#### 2.2.5.3 Employee Housing 2

Bush is located to the east of R2. North of R2, there is a residential unit that is owned by the RCMP, R1, which has a propane AST. South of R2, there is a teacherage, band office, and health clinic. Along Bear Street near the band office, there was a pole-mounted transformer. West of the house, there is the detachment. On the detachment property, there is a pole-mounted transformer near the southeast corner, two propane ASTs near the northeast corner, an a/c unit and burn barrel east of the building, two garbage bins near the eastern border with R1 and R2, and a gas AST near the southwest corner. This gas AST is double walled and mounted to a concrete platform. The detachment property potentially also has a septic system installed, though it is not in use.

#### 2.2.5.4 Employee Housing 3

Bush is located to the east of R3. North of R3, there is the northern part of the duplex, R4, which is also owned by the RCMP. North of the duplex, the land is covered in bush, and Hwy 135 is north of the bush. South and east of R3, there is the detachment. On the detachment property, there is a pole-mounted transformer near the southeast corner, two propane ASTs near the northeast corner, an a/c unit and burn barrel east of the building, two garbage bins near the eastern border with R1 and R2, and a gas AST near the southwest corner. This gas AST is double walled and mounted to a concrete platform. The detachment property potentially also has a septic system installed, though it is not in use. Bear Street is west of R3, and residential units and a day care are west of Bear Street. Southwest of R3, there is bush, and a pole-mounted transformer located between the bush and Bear Street.

#### 2.2.5.5 Employee Housing 4

Bush is located to the east of R4. North of R4, the land is covered in bush, and Hwy 135 is north of the bush. Immediately south of R4 is the southern part of the duplex, R3, which is also owned by the RCMP. South and east of R4, there is the detachment. On the detachment property, there is a pole-mounted transformer near the southeast corner, two propane ASTs near the northeast corner, an a/c unit and burn barrel east of the building, two garbage bins near the eastern border with R1 and R2, and a gas AST near the southwest corner. This gas AST is double walled and mounted to a concrete platform. The detachment property potentially also has a septic system installed, though it is not in use. Bear Street is west of R4, and residential units and a day care are west of Bear Street. Southwest of R4, there is bush, and a pole-mounted transformer located between the bush and Bear Street.

#### 2.2.5.6 Employee Housing 5

The property is predominately surrounded by residential units to the north, west, and south. The residential units to the north are owned by the RCMP and they each have one propane AST and a garbage bin. Between R5 and the residential units to the west is Muskeek Place. West of the grouping of residential units to the west is Hwy 135. Bush is located to the east of

R5, and around the back perimeter of the neighbouring north and south properties. A pole-mounted transformer is located near the southwest corner of R5.

#### 2.2.5.7 Employee Housing 6

The property is predominately surrounded by residential units to the north, west, and south. The immediate residential units to the north and south are owned by the RCMP and each has one propane AST and a garbage bin. Between R6 and the residential units to the west is Muskeek Place. West of the grouping of residential units to the west is Hwy 135. Bush is located to the east of R6, and around the back perimeter of the neighbouring north and south properties. A pole-mounted transformer is located southwest of R6, and a fire hydrant is located northwest of R6.

#### 2.2.5.8 Employee Housing 7

The property is predominately surrounded by residential units to the west and south. The residential units to the south are owned by the RCMP and they each have one propane AST and a garbage bin. West of the grouping of residential units to the west is Hwy 135. Bush is located to the north and east of R7, and around the back perimeter of the neighbouring west and south properties. A fire hydrant is located near the southwest corner of R7.



# Section 3.0 Phase I Environmental Site Assessment

#### SECTION 3.0 PHASE I ENVIRONMENTAL SITE ASSESSMENT

#### 3.1 METHODOLOGY

#### 3.1.1 Records Review

The Phase I ESA involved the examination of aerial photographs, provincial records, Fire Insurance Plan Maps, Henderson Directories, and review of any previous reports prepared for the Site. The record review addresses the potential for environmental impact from historical operations or activities to the Site and neighbouring properties. In addition, topographical maps, soil survey maps, groundwater well logs, and land use documents were examined to determine geotechnical information specific to the Site.

#### 3.1.2 Interviews

Interviews were conducted with relevant persons to gain and confirm information related to the current and/or historical usage of the Site and adjoining properties.

#### 3.1.3 Site Visit

The site visit provided an opportunity to visually observe the Site as it currently exists, including land use, physical condition of the property and observation of neighbouring properties.

#### 3.2 RECORDS REVIEW

The historical records review included the analysis of the following documents; as available:

- Aerial Photographs
- Fire Insurance Maps
- Business Directories
- Saskatchewan Environment File Search
- Saskatchewan Freedom of Information Search

Responses from available regulatory searches are included in Appendix A.

#### 3.2.1 Aerial Photograph Review

Aerial photographs were reviewed for the years 1995, 1983, 1971, and 1955. Based on the location of some of the properties and the photographs available, the 1971 aerial photographs do not capture R5, R6, and R7. Copies of select aerial photographs can be found in Appendix B.

#### 3.2.1.1 RCMP Detachment

In the 1955 aerial photograph, Figure B-1, the property, and surrounding areas appear undeveloped and covered in trees and grassland. Southeast of the property, the land does not appear to have trees, and appears to be covered in sand.

In the 1971 aerial photograph, Figure B-3, the property has been cleared of trees. Highway 135, Beaver Road, and Linklater Street are all visible west of the property. West of Beaver Road and Highway 135, as well as south of the property, several structures are visible. Properties to the south and southwest have cylindrical objects that resemble horizontal aboveground storage tanks (ASTs).

In the 1983 aerial photograph, Figure B-4, the detachment has been constructed. The southern portion of the property appears cleared of vegetation and covered in a road-material. A small structure is visible near the northeast corner of the detachment. East of the property, there are two residential structures that are owned and operated by the RCMP as residential units. The southern of the two units appears to have a large cylindrical object, resembling a horizontal AST, on the property. Several new structures are visible west, southwest, and south of the property. It also appears that some of the cylindrical shaped objects have been removed from the properties to the south and southwest. Some of the trees northwest of the property have been removed.

In the 1995 aerial photograph, Figure B-6, the detachment has had an extension built on the northeast portion. Two cylindrical objects that resemble horizontal ASTs are visible near the northeast corner of the property. These objects appear to be in the same location as the current propane ASTs at the detachment. Northeast of the property, a large structure, the RCMP housing duplex, has been constructed in the clearing visible in the 1983 photograph. The structures south of the property in the 1983 and 1971 photographs have been replaced by three larger structures, currently used as a teacherage, band office, and health centre. The cylindrical objects present in the older photographs have been removed and three cylindrical objects that resemble horizontal ASTs are located further north, near the band office.

#### 3.2.1.2 Employee Housing 1

In the 1955 aerial photograph, Figure B-1, the property, and surrounding areas appear undeveloped and covered in trees and grassland. Southeast of the property, the land does not appear to have trees, and appears to be covered in sand.

In the 1971 aerial photograph, Figure B-3, the property has been cleared of trees. Highway 135, Beaver Road, and Linklater Street are all visible west of the property. West of Beaver Road and Highway 135, as well as south of the property, several structures are visible. Properties to the south and southwest have cylindrical objects that resemble horizontal ASTs.

In the 1983 aerial photograph, Figure B-4, the house has been constructed. The southeast portion of the property appears cleared of vegetation and covered in a road-material. It appears that there is a small structure north of the house. South of the property, there is a

residential structure that is also owned and operated by the RCMP as a residential unit. This southern property appears to have a large cylindrical object, resembling a horizontal AST, on the property. West of the property, the detachment has been constructed. Several new structures are visible west, southwest, and south of the property. It also appears that some of the cylindrical shaped objects have been removed from the properties to the south and southwest. Some of the trees northwest of the property have been removed.

In the 1995 aerial photograph, Figure B-6, the property does not appear to have changed from the 1983 photograph. South of the property, the large cylindrical object is no longer visible. The detachment property to the west appears to have two horizontal ASTs near the northeast corner of its property. These objects appear to be in the same location as the current propane ASTs at the detachment. The detachment has also been expanded. Northeast of the property, a large structure, the RCMP housing duplex, has been constructed in the clearing visible in the 1983 photograph. The structures south of the property in the 1983 and 1971 photographs have been replaced by three larger structures, currently used as a teacherage, band office, and health centre. The cylindrical objects present in the older photographs have been removed and three cylindrical objects that resemble horizontal ASTs are located further north, near the band office.

#### 3.2.1.3 Employee Housing 2

In the 1955 aerial photograph, Figure B-1, the property, and surrounding areas appear undeveloped and covered in trees and grassland. Southeast of the property, the land does not appear to have trees, and appears to be covered in sand.

In the 1971 aerial photograph, Figure B-3, the property has been cleared of trees. Highway 135, Beaver Road, and Linklater Street are all visible west of the property. West of Beaver Road and Highway 135, as well as south of the property, several structures are visible. Properties to the south and southwest have cylindrical objects that resemble horizontal ASTs.

In the 1983 aerial photograph, Figure B-4, the house has been constructed. The southern portion of the property appears cleared of vegetation and covered in a road-material. It also appears that there is a large cylindrical object, resembling a horizontal AST, near the northeast corner of the property, and a small structure near the southeast corner of the house. North of the property, there is a residential structure that is also owned and operated by the RCMP as a residential unit. West of the property, the detachment has been constructed. Several new structures are visible west, southwest, and south of the property. It also appears that some of the cylindrical shaped objects have been removed from the properties to the south and southwest. Some of the trees northwest of the property have been removed.

In the 1995 aerial photograph, Figure B-6, other than the removal of the large cylindrical object, the property does not appear to have changed from the 1983 photograph. The detachment property to the west appears to have two horizontal ASTs near the northeast corner of its property. These objects appear to be in the same location as the current propane ASTs at the detachment. The detachment has also been expanded. Northeast of the property,

a large structure, the RCMP housing duplex, has been constructed in the clearing visible in the 1983 photograph. The structures south of the property in the 1983 and 1971 photographs have been replaced by three larger structures, currently used as a teacherage, band office, and health centre. The cylindrical objects present in the older photographs have been removed and three cylindrical objects that resemble horizontal ASTs are located further north, near the band office.

#### 3.2.1.4 Employee Housing 3

In the 1955 aerial photograph, Figure B-1, the property, and surrounding areas appear undeveloped and covered in trees and grassland. Southeast of the property, the land does not appear to have trees, and appears to be covered in sand.

In the 1971 aerial photograph, Figure B-3, there are no apparent changes to the property. Highway 135, Beaver Road, and Linklater Street are visible west and north of the property. West of Beaver Road and Highway 135, as well as south of the property, several structures are visible. Properties to the south and southwest have cylindrical objects that resemble horizontal ASTs.

In the 1983 aerial photograph, Figure B-4, trees on the property have been removed. Southeast of the property, the detachment and two employee houses are visible. Several new structures are visible west, southwest, and south of the property. It also appears that some of the cylindrical shaped objects have been removed from the properties to the south and southwest. Some of the trees northwest of the property have been removed. McKinley Street is also visible west of the property.

In the 1995 aerial photograph, Figure B-6, the employee house has been constructed. A small structure near northeast corner of the property is visible, along with a 'U-shaped" driveway extending from the house to Beaver Road. Southeast of the property, the detachment property appears to have two horizontal ASTs near the northeast corner of its property. These objects appear to be in the same location as the current propane ASTs at the detachment. The detachment has also been expanded. The structures south of the property in the 1983 and 1971 photographs have been replaced by three larger structures, currently used as a teacherage, band office, and health centre. The cylindrical objects present in the older photographs have been removed and three cylindrical objects that resemble horizontal ASTs are located further north, near the band office.

#### 3.2.1.5 Employee Housing 4

In the 1955 aerial photograph, Figure B-1, the property, and surrounding areas appear undeveloped and covered in trees and grassland. Southeast of the property, the land does not appear to have trees, and appears to be covered in sand.

In the 1971 aerial photograph, Figure B-3, there are no apparent changes to the property. Highway 135, Beaver Road, and Linklater Street are visible west and north of the property. West of Beaver Road and Highway 135, as well as south of the property, several structures are

visible. Properties to the south and southwest have cylindrical objects that resemble horizontal ASTs.

In the 1983 aerial photograph, Figure B-4, trees on the property have been removed. Southeast of the property, the detachment and two employee houses are visible. Several new structures are visible west, southwest, and south of the property. It also appears that some of the cylindrical shaped objects have been removed from the properties to the south and southwest. Some of the trees northwest of the property have been removed. McKinley Street is also visible west of the property.

In the 1995 aerial photograph, Figure B-6, the employee house has been constructed. A small structure near southeast corner of the property is visible, along with a 'U-shaped' driveway extending from the house to Beaver Road. Southeast of the property, the detachment property appears to have two horizontal ASTs near the northeast corner of its property. These objects appear to be in the same location as the current propane ASTs at the detachment. The detachment has also been expanded. The structures south of the property in the 1983 and 1971 photographs have been replaced by three larger structures, currently used as a teacherage, band office, and health centre. The cylindrical objects present in the older photographs have been removed and three cylindrical objects that resemble horizontal ASTs are located further north, near the band office.

#### 3.2.1.6 Employee Housing 5

In the 1955 aerial photograph, Figure B-2, the property, and surrounding areas appear undeveloped and covered in trees and grassland. South of the property, there appears to be a small stream, which appears dry in the photograph.

In the 1983 aerial photograph, Figure B-5, the property and surrounding areas are still relatively undeveloped. With a better photograph resolution, the area south of the property does not appear to have trees and sections of a stream are visible. Highway 135 is visible west of the property.

In the 1995 aerial photograph, Figure B-7, the property is undeveloped and appears partially cleared of trees. Muskeek Place is visible north and west of the property, Nesoteo Road East is visible west of the property, and McKay Road is visible north of the property. Three residential structures have been constructed west of the property, east of Nesoteo Road East. A few additional structures are visible between Nesoteo Road East and Highway 135.

#### 3.2.1.7 Employee Housing 6

In the 1955 aerial photograph, Figure B-2, the property, and surrounding areas appear undeveloped and covered in trees and grassland. South of the property, there appears to be a small stream, which appears dry in the photograph.

In the 1983 aerial photograph, Figure B-5, the property and surrounding areas are still relatively undeveloped. With a better photograph resolution, the area south of the property

does not appear to have trees and sections of a stream are visible. Highway 135 is visible west of the property.

In the 1995 aerial photograph, Figure B-7, the property is undeveloped and appears partially cleared of trees. Muskeek Place and Nesoteo Road East are visible west of the property, and McKay Road is visible north of the property. Three residential structures have been constructed southwest of the property, east of Nesoteo Road East. A few additional structures are visible between Nesoteo Road East and Highway 135.

#### 3.2.1.8 Employee Housing 7

In the 1955 aerial photograph, Figure B-2, the property, and surrounding areas appear undeveloped and covered in trees and grassland. South of the property, there appears to be a small stream, which appears dry in the photograph.

In the 1983 aerial photograph, Figure B-5, the property and surrounding areas are still relatively undeveloped. With a better photograph resolution, the area south of the property does not appear to have trees and sections of a stream are visible. Highway 135 is visible west of the property.

In the 1995 aerial photograph, Figure B-7, the property is undeveloped and appears partially cleared of trees. Muskeek Place is visible southwest of the property, Nesoteo Road East is visible west of the property, and McKay Road is visible north of the property. Three residential structures have been constructed southwest of the property, east of Nesoteo Road East. A few additional structures are visible between Nesoteo Road East and Highway 135.

A review of the aerial photographs confirm that the RCMP detachment, R1, and R2 were constructed between 1971 and 1983, R3 and R4 were constructed between 1983 and 1995, and R5, R6, and R7 were constructed after the photograph was taken in 1995. The photographs also confirm the presence of ASTs on several of the properties, dating back to at least 1971. The photographs also show that none of the properties are close to a large surface water source; however, R5, R6, and R7 are close to what appears to be a seasonal surface stream. The placement next to the stream is a potential concern if habitat was destroyed for development or if large spills cause contaminants to migrate towards the river.

#### 3.2.2 Fire Insurance Maps

Communication with the Saskatoon and Regina offices of the Saskatchewan Archives Board in August, 2007, and Janice Cole, CGI representative for HEIRS Fire Insurance Plans, in September, 2007, there are no Fire Insurance Maps available for Pelican Narrows, Saskatchewan.

#### 3.2.3 Business Directories

A review of Business Directories for Pelican Narrows, Saskatchewan was conducted through the Saskatchewan Archives Board. From this search, two directories were found to have information.

The Henderson's Western Canada Gazetteer had two people listed for Pelican Narrows in 1908. Both of these people were in charge of a business present in Pelican Narrows. Three businesses were listed and included Hudson's Bay Co., and the Revillon Bros Ltd. A Roman Catholic Mission was also listed on the directory.

For the years 1953-1954, the Overgard Directories – Northern Saskatchewan listed one person in Pelican Narrows. This person was listed the manager of the general store and the postmaster or the post office. The directory listed trapping and fishing as two resources for Pelican Narrows, which was described as a far northern settlement.

#### 3.2.4 Saskatchewan Environment File Search

As part of the Saskatchewan Environment File Search, two databases titled *Hazardous Substance Storage* and *Spills* were manually searched for records pertaining to the RCMP and Pelican Narrows, Saskatchewan. A total of 13 Hazardous Substance Storage records and one Spill record were found. One storage record was found to pertain to the RCMP. The remaining storage records and spill record did not appear to be on any of the RCMP properties investigated.

On September 19, 2007, a file search was submitted to Saskatchewan Environment. The file search requested any information regarding environmental spills or incidents, hazardous material storage or use, presence of PCBs, underground or aboveground storage tanks, contaminated sites, fuel safety, permits, environmental licences, and environmental enforcement within the vicinity of the properties.

A response was received on December 21, 2007 with the results of the search. Three items were found in the file including a registration form for existing storage facilities #OT-753, dated June 20, 1991, a copy of a fax requesting to remove 1-1000 underground gasoline tank and 1-2000 gallon underground heating oil tank, dated July 10, 1992, and a letter approving the removal and decommissioning of underground storage tanks at the RCMP, Pelican Narrows Facility #OT-75, dated July 14, 1992. The ministry was unable to further comment on the current environmental status of the Site. A copy of the response can be found in Appendix A.

#### 3.2.5 Saskatchewan Freedom of Information Search

A Freedom of Information (FOI) Search was requested to the Government of Saskatchewan on September 19, 2007. Conversations on September 21, 2007, with Shari Nicols, Executive Assistant of the Finance and Administration Branch of Saskatchewan Environment,

determined that the FOI is a repetitive search of the Saskatchewan Environment File Search and is not warranted unless further information is required based on the results of the Saskatchewan Environment File Search. In this case, a FOI search is not warranted as a summary of the entire Saskatchewan Environment file was provided for information.

#### 3.3 SITE VISIT AND EVALUATION OF FINDINGS

Visual inspections of the properties was needed to obtain and document information about topography, surface water and drainage, fill material and debris, surface staining, surface soil conditions, storage areas for solvents or other chemicals, and the location of wells and utilities. Adjacent properties were also observed to determine the presence of sources of potential contamination, which may have migrated onto the property. The visual inspections were conducted by Earth Tech in September 2007. Photographs were taken at the time of the site visit and are included in Appendix C. The RCMP Environmental Checklist is included as Appendix D.

#### 3.3.1 General Description

#### 3.3.1.1 RCMP Detachment

Topography is generally flat with drainage flowing away from the detachment and south towards the access road and neighbouring properties. At the time of the site visit, standing water was seen on the concrete pad under the gas AST.

Vegetation appeared to be in fair condition with no signs of stress or damage resulting from environmental impacts. The soil lithology appears to consist of a sandy clay followed by a gravely clay, though only one well log with soil lithology was found for the area. Based on the well logs, the groundwater elevation is unknown.

Groundwater is not used on the property. Sewer, solid waste disposal, and water are all supplied by Pelican Narrows. Bottled water is bought for consumption, and there is no water treatment on the property. Though no complaints have occurred in the past two years, there have been complaints of a change in water quality during spring and fall runoff events associated with the lake. The two propane ASTs provide the detachment with heat. There is the potential for an old septic system to be located on the property, though it is not in use.

#### 3.3.1.2 Employee Housing 1

Topography is generally flat with drainage flowing away from the house towards the south and east. At the time of the site visit, no standing water was seen on the property.

Vegetation appeared to be in fair condition with no signs of stress or damage resulting from environmental impacts. The soil lithology appears to consist of a sandy clay followed by a gravely clay, though only one well log with soil lithology was found for the area. Based on the well logs, the groundwater elevation is unknown.

Groundwater is not used on the property. Sewer, solid waste disposal, and water are all supplied by Pelican Narrows. Bottled water is bought for consumption, and there is no water treatment on the property. The propane AST provides the house with heat.

#### 3.3.1.3 Employee Housing 2

Topography is generally flat with drainage flowing away from the house towards the east. At the time of the site visit, no standing water was seen on the property.

Vegetation appeared to be in fair condition with no signs of stress or damage resulting from environmental impacts. The soil lithology appears to consist of a sandy clay followed by a gravely clay, though only one well log with soil lithology was found for the area. Based on the well logs, the groundwater elevation is unknown.

Groundwater is not used on the property. Sewer, solid waste disposal, and water are all supplied by Pelican Narrows. There is no water treatment on the property, and it is believed that bottled water is bought for consumption, though there was no evidence for it during the site visit. The propane AST provides the house with heat.

#### 3.3.1.4 Employee Housing 3

Topography is generally flat with drainage flowing away from the house towards the west and northwest. At the time of the site visit, no standing water was seen on the property.

Vegetation appeared to be in fair condition with no signs of stress or damage resulting from environmental impacts. The soil lithology appears to consist of a sandy clay followed by a gravely clay, though only one well log with soil lithology was found for the area. Based on the well logs, the groundwater elevation is unknown.

Groundwater is not used on the property. Sewer, solid waste disposal, and water are all supplied by Pelican Narrows. There is no water treatment on the property.

#### 3.3.1.5 Employee Housing 4

Topography is generally flat with drainage flowing away from the house towards the west and northwest. At the time of the site visit, no standing water was seen on the property, though during seasonal runoff, a small stream forms approximately 10 m southwest of the property.

Vegetation appeared to be in fair condition with no signs of stress or damage resulting from environmental impacts. The soil lithology appears to consist of a sandy clay followed by a gravely clay, though only one well log with soil lithology was found for the area. Based on the well logs, the groundwater elevation is unknown.

Groundwater is not used on the property. Sewer, solid waste disposal, and water are all supplied by Pelican Narrows. Bottled water was seen during the site visit, however it was mentioned during the interview that this bottled water is the municipal water run through a

distiller located in the basement. In the past, complaints that the municipal water smells like chlorine have been heard.

#### 3.3.1.6 Employee Housing 5

Topography is generally flat with drainage flowing away from the house towards the south and into a ditch alongside Muskeek Place. At the time of the site visit, no standing water was seen on the property.

Vegetation appeared to be in fair condition with no signs of stress or damage resulting from environmental impacts. The soil lithology appears to consist of a sandy clay followed by a gravely clay, though only one well log with soil lithology was found for the area. Based on the well logs, the groundwater elevation is unknown.

Groundwater is not used on the property. Sewer, solid waste disposal, and water are all supplied by Pelican Narrows. Prior to consumption, the municipal water is run through a reverse osmosis and 5 mm filter system located in the basement. A propane AST provides the house with heat.

#### 3.3.1.7 Employee Housing 6

Topography is generally flat with drainage flowing away from the house towards the south and into a ditch alongside Muskeek Place. At the time of the site visit, no standing water was seen on the property. There is also a surface runoff stream located east of the property.

Vegetation appeared to be in fair condition with no signs of stress or damage resulting from environmental impacts. The soil lithology appears to consist of a sandy clay followed by a gravely clay, though only one well log with soil lithology was found for the area. Based on the well logs, the groundwater elevation is unknown.

Groundwater is not used on the property. Sewer, solid waste disposal, and water are all supplied by Pelican Narrows. Prior to consumption, the municipal water is run through a Brita water filter located in the refrigerator. In the past, complaints that the water has a darker colour have been heard. A propane AST provides the house with heat.

#### 3.3.1.8 Employee Housing 7

Topography is generally flat with drainage flowing away from the house towards the south and into a ditch alongside Muskeek Place. At the time of the site visit, no standing water was seen on the property. There is also a surface runoff stream that runs parallel to the backyard.

Vegetation appeared to be in fair condition with no signs of stress or damage resulting from environmental impacts. The soil lithology appears to consist of a sandy clay followed by a gravely clay, though only one well log with soil lithology was found for the area. Based on the well logs, the groundwater elevation is unknown.

Groundwater is not used on the property. Sewer, solid waste disposal, and water are all supplied by Pelican Narrows. Bottled water is bought for consumption, and there is no water treatment on the property. A propane AST provides the house with heat.

#### 3.3.2 Aboveground and Underground Storage Tanks

#### 3.3.2.1 RCMP Detachment

A total of three ASTs were observed on the detachment property. There was one unleaded gasoline AST used for fuelling vehicles located in the front yard of the detachment. It was manufactured in 2005 by Northern Steel and has a capacity of 10,000 L. At the time of inspection, the gasoline AST appeared to be in good condition. It was reported to be less than 2 years old by on-site RCMP personnel. The gasoline tank is a low priority for further maintenance or replacement. Two propane ASTs used for heating the detachment were located in the northeast corner of the yard. Both were manufactured by Western Rock Bit Co. in 1991, each with a capacity of 3,785 L. At the time of the site visit, no leaks or spills were evident. The propane tanks are not currently a priority for further maintenance or replacement.

Three, 30 L gasoline jerry cans in the attached garage and two, 20 L gasoline jerry cans in the shed were found to be in good condition. As well, there were old septic tanks located on the front lawn and a burning barrel in the backyard which are both no longer in use.

#### 3.3.2.2 Employee Housing 1

One propane AST used for heating was found in the backyard of R1. It was manufactured by Westeel Rosco in 1973 with a capacity of 3,785 L. The tank is not currently a priority for further maintenance or replacement. One 40 L jerry can of gasoline was observed in the shed.

#### 3.3.2.3 Employee Housing 2

One 3,785 L propane AST used for heating was found in the backyard of R2. The tank is not currently a priority for further maintenance or replacement

#### 3.3.2.4 Employee Housing 3

No ASTs or USTs were found in the vicinity of R3.

#### 3.3.2.5 Employee Housing 4

No large ASTs or USTs were found in the vicinity of R4. Three 400 g canisters and one barbeque tank of propane were found in the basement and in the backyard respectively. In the shed there were three 30L and two 5 L gasoline jerry cans although they were all empty at the time of the site visit.

#### 3.3.2.6 Employee Housing 5

One propane AST used for heating was found in the backyard of R5. It was manufactured by Western Rock Bit Co. in 1995 with a capacity of 3,785 L. The tank is not currently a priority

for further maintenance or replacement. In the shed there were four 30 L jerry cans of gasoline and one 400 g canister of propane.

#### 3.3.2.7 Employee Housing 6

One propane AST used for heating was found in the backyard of R6. It was manufactured by Western Rock Bit Co. in 1995 with a capacity of 3,785 L. The tank is not currently a priority for further maintenance or replacement. In the shed there was a partially filled, 20 L jerry can of gasoline.

#### 3.3.2.8 Employee Housing 7

One propane AST used for heating was found in the backyard of R7. It was manufactured by Western Rock Bit Co. in 1995 with a capacity of 3,785 L. The tank is not currently a priority for further maintenance or replacement.

#### 3.3.3 Hazardous Materials or Waste and Chemicals

#### 3.3.3.1 RCMP Detachment

Several hazardous materials and chemicals were found during the site visit. Ammunition is stored in a locked room, pepper spray and drugs are locked in the exhibit room, and flares are stored in the garage. Sharps are stored in a biohazard container which is then taken for disposal at the local clinic. Sometimes blood samples are taken and are also disposed of at the clinic.

Various containers of motor oil, antifreeze, windshield washer fluid, and other lubricants and petroleum products were found in the garage, along with two 400 g propane canisters. Various small quantities of general cleaning products such as Windex and Pinesol were found in the janitor's closet.

As the items were found in a contained environment, and did not appear to be leaking or in poor condition, they pose a low environmental concern, provided the items are stored, handled, and disposed of properly.

#### 3.3.3.2 Employee Housing 1

Hazardous materials and chemicals such as general cleaning products and antifreeze were observed during the site visit in small quantities.

#### 3.3.3.3 Employee Housing 2

Hazardous materials and chemicals in small quantities were observed during the site visit. A 1L bottle of Roundup and a 500 g can of tire foam were observed in the furnace room, while a 1L can of Drano and other various general cleaning products were observed in the bathroom.

#### 3.3.3.4 Employee Housing 3

During the site visit, a 5 kg container of liquid lawn fertilizer was observed in the shed.

#### 3.3.3.5 Employee Housing 4

Hazardous materials and chemicals in small quantities were observed during the site visit. In the basement there were boxes of ammunition, 4 L of bleach, a 4 gallon pail of Miracle Grow fertilizer, 4 kg of rifle powder, 1 L of gear oil, three cans of rust enamel, a can of truck paint, and a 300 g can of E710 germicidal cleaner. In the basement there were various small quantities of car polish, wood oil finish, WD-40, and general household cleaners. In the shed there was 4 L of plumbing antifreeze and 4 L of motor oil.

#### 3.3.3.6 Employee Housing 5

Hazardous materials and chemicals in small quantities were observed during the site visit. In the shed there were various cans, all less than 600 g, of engine degreaser, WD-40, and lubricants, 4 L of windshield washer fluid, and 500 mL each of Tolual solvent, fuel stabilizer, and power steering fluid. Also found in the shed were 350 mL of brake fluid, approximately 20 L of motor oil, and various small quantities of general cleaning products. A 1 L container of Liquid Plummer and 5 L of bleach were found in the basement.

#### 3.3.3.7 Employee Housing 6

Hazardous materials and chemicals in small quantities were observed during the site visit. In the shed there was a 4 L container of liquid fertilizer and a 5 L container of Killex herbicide. In the basement there was a 2 L container of bleach and other various general household cleaners in small quantities.

#### 3.3.3.8 Employee Housing 7

Hazardous materials and chemicals in small quantities were observed during the site visit. Various general household cleaners were observed in small quantities. At the time of the site visit the shed was locked, so its contents could not be determined.

#### 3.3.4 Solid Waste Material

Typically, solid waste is collected a few times per week by the Reserve, and is placed in bins until it is removed. There is currently no recycling program available.

#### 3.3.5 Wastewater Management

All of the RCMP properties visited are currently connected to the Reserve's municipal sewer system.

#### 3.3.6 Liquid Effluents and Site Runoff

No liquid effluents were observed to be generated on any of the investigated RCMP properties at the time of the site visit. Typically, it appeared that sources of surface runoff would include roof drains, vehicle parking, and natural drainage.

#### 3.3.7 Spill and Stain Areas

During the site visit, no stains or spill areas were observed on any of the inspected properties.

#### 3.3.8 Stockpile Areas

During the site visit, there were no stockpile areas observed on any of the inspected properties.

#### 3.3.9 Mercury

#### 3.3.9.1 RCMP Detachment

Four mercury thermostats were discovered on the main floor of the detachment. This is a potential concern if the mercury capsule is broken or the thermostat is disposed of inappropriately. In the detachment, 25 fluorescent light ballasts (FLBs) were recorded. Historically, the fluorescent light tubes may have contained mercury gas.

#### 3.3.9.2 Employee Housing 1

No mercury thermostats were found at the property at the time of the site visit.

#### 3.3.9.3 Employee Housing 2

No mercury thermostats were found at the property at the time of the site visit.

#### 3.3.9.4 Employee Housing 3

One mercury thermostat was discovered on the main floor of the housing unit. This is a potential concern if the mercury capsule is broken or the thermostat is disposed of inappropriately.

#### 3.3.9.5 Employee Housing 4

One mercury thermostat was discovered on the main floor of the housing unit. This is a potential concern if the mercury capsule is broken or the thermostat is disposed of inappropriately.

#### 3.3.9.6 Employee Housing 5

One mercury thermostat was discovered on the main floor of the housing unit. This is a potential concern if the mercury capsule is broken or the thermostat is disposed of inappropriately.

#### 3.3.9.7 Employee Housing 6

One mercury thermostat was discovered on the main floor of the housing unit. This is a potential concern if the mercury capsule is broken or the thermostat is disposed of inappropriately.

#### 3.3.9.8 Employee Housing 7

One mercury thermostat was discovered on the main floor of the housing unit. This is a potential concern if the mercury capsule is broken or the thermostat is disposed of inappropriately.

#### 3.3.10 Urea Formaldehyde Foam Insulation (UFFI)

At the time of the site visit, the detachment and all seven employee housing units did not have any visible UFFI materials.

#### **3.3.11** Ozone Depleting Substances (ODSs)

ODSs are characterized by their potential ability to deplete the ozone. Refrigerants are a common source of ODSs. Some of the most common refrigerant types encountered include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs). Between CFCs, HCFCs, and HFCs, CFCs typically have the largest ozone depleting potential, followed by HCFCs. Although HFCs do not have an ozone depleting potential, they contribute equally to greenhouse gases. One commonly encountered CFC is R12, one commonly encountered HCFC is R22, and one common HFC is R134a. Over the years, regulations have reduced the use of ODSs in refrigerants by phasing out CFCs with HCFCs, and HCFCs with HFCs (US EPA, Ozone Layer Depletion, updated online Oct. 4, 2007).

During the site visit, the presence of potential ODS containing equipment (refrigerators, water coolers, etc.) was recorded on a halocarbon inventory form. Information from the manufacturer's tag, such as quantity and type of ODS, was noted whenever possible. If the manufacturer's tag was missing, illegible or inaccessible, it should be assumed that the equipment contains ODSs. If available, photos of the ODS containing equipment and manufacturer's tags have been included in Appendix C.

#### 3.3.11.1 RCMP Detachment

During the site visit, several areas of the detachment had equipment containing ODSs. In the lunch room there was a water cooler manufactured by Glacial Crest with an unknown quantity of R134a, a pop machine manufactured by Dixie-Narco with an unknown quantity of R12, and a refrigerator manufactured in 2005 by Wood's WC Wood Co. reported to contain 110 g of R134a. In the docking bay there was a chest freezer with no visible identification tag and in the intoxilizer room there was a 2005 refrigerator reported to contain 145 g of R134a, both manufactured by Wood's. Outside of the detachment was a central a/c unit manufactured by Olsen; which appeared to contain R22 as a refrigerant. The RCMP vehicles likely had operational a/c units, though it is uncertain the type of refrigerant they use.

#### 3.3.11.2 Employee Housing 1

During the site visit, two appliances containing ODS were observed, both located in the kitchen. There was a refrigerator manufactured by Kenmore reported to contain 121 g of R134a and a Greenway water cooler reported to contain 33 g of R134a.

#### 3.3.11.3 Employee Housing 2

During the site visit, two appliances containing ODS were observed. In the kitchen there was a refrigerator manufactured by Westinghouse reported to contain 128 g of R134a. Located in storage was a portable a/c unit manufactured by Fedders reported to contain 22 oz. of R22.

#### 3.3.11.4 Employee Housing 3

During the site visit, no ODS containing materials were found at the R3 property. The property was vacant at the time of the investigation, and there were no appliances on the property.

#### 3.3.11.5 Employee Housing 4

During the site visit, equipment containing ODSs were observed. In the kitchen there was a 1994 refrigerator manufactured by Admiral reported to contain 8.5 oz. of R12. In the basement there was an Admiral Deluxe refrigerator and a Westinghouse chest freezer, both without visible identification tags. Also found in the basement was a Kenmore chest freezer reported to contain 246 g of R12 and a window a/c unit with no visible identification tag. Outside there was a Viking refrigerator with no visible identification tag, but the unit was not in use at the time of the site visit.

#### 3.3.11.6 Employee Housing 5

During the site visit, three appliances containing ODS were observed. In the kitchen there was a 1996 Kitchen Aid refrigerator reported to contain 156g. of R134a. In the basement there was a Zenith chest freezer with inaccessible identification tags and a Maytag portable a/c unit reported to contain 300 g of R22.

#### 3.3.11.7 Employee Housing 6

During the site visit, equipment containing ODSs were observed. In the kitchen there was a Kenmore refrigerator reported to contain 4.25 oz of R12. A Danby freezer and a Hoolatron portable cooler, both in the kitchen, and a basement freezer all had no identification tags.

#### 3.3.11.8 Employee Housing 7

During the site visit, three appliances containing ODS were observed in the kitchen. There was a Moffat refrigerator reported to contain 120 g. of R12, as well as a Greenway water cooler and a Hotpoint chest freezer, both with unidentifiable tags.

#### 3.3.12 Air Emissions and Noise

At the time of the site visit, there were no known complaints of air or noise emissions, other than some minimal noise concerns regarding the sirens at the Detachment. Air emission and noise sources for the properties include exhaust fans and HVAC units from the propane or electric heating systems. Unless complaints occur or the equipment breaks, air and noise emissions are of minimal environmental concern.

#### 3.3.13 Neighbouring Properties

#### 3.3.13.1 RCMP Detachment

To the north of the detachment are residences, vacant lots and natural bush. West of the detachment is Bear Street, a day care and an old garage. East of the detachment is residential land use and natural bush. Teacherages, the band office and the health clinic are located south of the detachment. The nearest surface water is greater than 30 m from the property.

#### 3.3.13.2 Employee Housing 1

To the north of R1 are vacant lots and natural bush. Situated west of R1 is the detachment; farther west are Bear Street, a day care, and an old garage. Natural bush is situated to the east while teacherages, the band office and the health clinic are located south of R1. The nearest surface water is greater than 30 m from the property.

#### 3.3.13.3 Employee Housing 2

To the north of R2 are vacant lots and natural bush. Situated west of R2 is the RCMP detachment; farther west are Bear Street, a day care, and an old garage. Natural bush is situated to the east while teacherages, the band office and the health clinic are located south of R2. The nearest surface water is greater than 30 m from the property.

#### 3.3.13.4 Employee Housing 3

To the north of R3 are a vacant lot and a gravel highway. Situated west of R3 are Bear Street and residential land use. Natural bush is situated to the east while the detachment and R1 are located to the south. The nearest surface water is greater than 30 m from the property.

#### 3.3.13.5 Employee Housing 4

To the north of R4 are a vacant lot and a gravel highway. Situated west of R4 are Bear Street and residential land use. Natural bush is situated to the east while the detachment and R1 are located to the south. The nearest surface water is greater than 30 m from the property.

#### 3.3.13.6 Employee Housing 5

To the north of R5 is residential land use. Situated west of R5 are Muskeek Place and residential land use. Natural bush is situated to the east while residential land use is located to the south. The nearest surface water is greater than 30 m from the property.

#### 3.3.13.7 Employee Housing 6

To the north of R6 is residential land use. Situated west of R6 are Muskeek Place and residential land use. Natural bush is situated to the east while residential land use is located to the south. The nearest surface water is greater than 30 m from the property.

#### 3.3.13.8 Employee Housing 7

To the north of R7 is residential land use. Situated west of R7 are Muskeek Place and residential land use. Natural bush is situated to the east while residential land use is located to the south. The nearest surface water is greater than 30 m from the property.

#### 3.3.14 Interviews

Interviews were conducted to gain and confirm information related to the current and/or historical use of the proposed project areas and adjoining properties, as well as address any concerns which arose during the site visit. There were no concerns noted during the site visit.

#### 3.3.14.1 RCMP Detachment

Interviews with Staff Sergeant Joe Milburn and Sergeant Lorne Thomas were conducted during the site visit. Neither was aware of any USTs at the property, but indicated that there were old septic tanks and an old drum formerly used as a burn barrel the property; none of which are currently used. Two propane ASTs and one gasoline AST were noted during the interview. There has been no evidence of current or historical environmental concerns regarding the property or neighbouring properties. It was also mentioned that the detachment is supplied by the Reserve's municipal water, sewer and solid waste disposal services and that there are no recycling services. A bottled water cooler is used for potable water.

It was reported that additional cell blocks were added in approximately 1991.

#### 3.3.14.2 Employee Housing 1

Interviews with Sergeant Lorne Thomas and the current tenant were conducted during the site visit. Neither was aware of any USTs, barrels or drums at the property, but indicated that there is one propane AST that is very new and has no known leaks. There has been no evidence of current or historical environmental concerns regarding the property or neighbouring properties. It was also mentioned that the property is supplied by the Reserve's municipal water, sewer and solid waste disposal services and there are no groundwater wells on the property. There are no recycling services and a bottled water cooler is used for potable water.

#### 3.3.14.3 Employee Housing 2

Interviews with Sergeant Lorne Thomas and an RCMP member were conducted during the site visit. Neither was aware of any USTs, barrels or drums at the property, but indicated that there is one propane AST in the backyard. There has been no evidence of current or historical environmental concerns regarding the property or neighbouring properties. It was also mentioned that the property is supplied by the Reserve's municipal water, sewer and solid waste disposal services and there are no recycling services. There are no groundwater wells on the property and bottled water is purchased for potable water.

It was reported that R2 had undergone plumbing and structural renovations in 2006.

#### 3.3.14.4 Employee Housing 3

An interview with Sergeant Lorne Thomas was conducted during the site visit. There are no USTs, ASTs, barrels or drums at the property. There has been no evidence of current or historical environmental concerns regarding the property or neighbouring properties. It was also mentioned that the property is currently vacant, but would be supplied by the Reserve's municipal water, sewer and solid waste disposal services. There are no groundwater wells on the property and there are no recycling services.

#### 3.3.14.5 Employee Housing 4

Interviews with Sergeant Lorne Thomas and the current tenant were conducted during the site visit. Neither was aware of any USTs, ASTs, barrels or drums at the property. There has been no evidence of current or historical environmental concerns regarding the property or neighbouring properties. It was also mentioned that the property is supplied by the Reserve's municipal water, sewer and solid waste disposal services and there are no recycling services. There are no groundwater wells on the property and potable water is obtained by distilling municipal water and storing it in a bottled water cooler in the kitchen. It was also noted that the Reserve's municipal water has a chlorine odour at times.

#### 3.3.14.6 Employee Housing 5

Interviews with Staff Sergeant Joe Milburn, Sergeant Lorne Thomas and the current tenant were conducted during the site visit. There are no USTs or drums at the property, but it was noted that there is one propane AST and a rain barrel. There has been no evidence of current or historical environmental concerns regarding the property or neighbouring properties. It was also mentioned that the property is supplied by the Reserve's municipal water, sewer and solid waste disposal services, and there are no recycling services. For potable water, the Reserve's municipal water is treated through reverse osmosis and a 5  $\mu$ m filter system located in the basement.

#### 3.3.14.7 Employee Housing 6

Interviews with Sergeant Lorne Thomas, a RCMP member and the current tenant, were conducted during the site visit. None were aware of any USTs, barrels or drums at the property, but indicated that there is one propane AST. There has been no evidence of current or historical environmental concerns regarding the property or neighbouring properties. It was also mentioned that the property is supplied by the Reserve's municipal water, sewer and solid waste disposal services, and there are no recycling services. For potable water, the Reserve's municipal water is treated using a Brita water filter prior to drinking. It was noted that sometimes the municipal water is sometimes darker in colour.

#### 3.3.14.8 Employee Housing 7

An interview with Sergeant Lorne Thomas was conducted during the site visit. There are no USTs, barrels or drums at the property, but there is one propane AST. There has been no evidence of current or historical environmental concerns regarding the property or neighbouring properties. It was also mentioned that the property is supplied by the Reserve's

municipal water, sewer and solid waste disposal services, and there are no recycling services. There are no groundwater wells on the property and a bottled water cooler is used for potable water.



## Section 4.0 Hazardous Materials Survey

#### SECTION 4.0 HAZARDOUS MATERIALS SURVEY

#### 4.1 METHODOLOGY

During the Phase I ESA site visit, each building was inspected by the Earth Tech field team to inventory the suspected hazardous building materials. Based on Earth Tech's experience with similar projects and the project scope, the hazardous materials of concern targeted during this survey included:

- Asbestos Containing Materials (ACMs)
- Lead containing materials and equipment
- Mould
- Polychlorinated biphenyls (PCBs)

The survey included the interior and exterior of the buildings, as well as all accessible ceiling areas, crawl spaces, pipe chases/service tunnels, and mechanical systems. Fluorescent lights, attics, or ceiling surfaces that were in excess of 2.5 m (8 ft) of the floor surface were not investigated.

#### **4.1.1 Asbestos Containing Materials (ACMs)**

All identified potential ACMs located on a property were collected and documented in terms of location and quantity. To collect the ACM samples, a small part of the potential ACM was removed using a utility knife (or similar instrument), placed in a plastic bag, sealed and labelled. Surfaces that were visually similar were noted and only one sample per property was collected using non-destructive sampling procedures, which included collecting samples from hidden areas such as behind outlets, around forced air registers, and beneath edge trim at flooring transitions. Where non-destructive sampling was not possible the field team repaired the aesthetic damage caused by the sampling.

#### 4.1.2 Lead-based Paint

Due to the dates of construction of the detachment and the housing units (after 1980), there were no lead-based paint samples collected from the Site.

#### **4.1.3** Mould

All identified potential mould located on a property was collected and documented in terms of location and quantity. To collect a mould sample, both destructive and non-destructive techniques were used. With the destructive method, a small piece of the mould surface was removed with a utility knife (or similar instrument), placed in a plastic bag, sealed, and labelled. Where possible, samples were collected using non-destructive sampling procedures, which included using a swab matrix. Where non-destructive sampling was not possible and

bulk sample collection was possible, the field team repaired the aesthetic damage caused from the sampling.

#### 4.1.4 Polychlorinated Biphenyls (PCBs)

The total number of identified potential PCB containing fluorescent light ballasts (FLBs) was noted. From the total amount, at least twenty percent were randomly screened to determine if they contained PCBs. To screen the FLBs, the labels were checked to see if they contained the "Non PCB" sticker. If this information was absent from the label, the manufacturing code was recorded and compared to the information in the Environment Canada document *Identification of Lamp Ballasts Containing PCBs*, Report EPS 2/CC/2 (revised), August 1991.

#### 4.1.5 Laboratory Analytical Program

Selected ACM, lead-based paint, and mould samples were analyzed. The ACM samples were analyzed for asbestos, other fibres, and other non fibrous materials, the lead-based paint was analyzed for the amount of lead, and the mould samples were analyzed for count and genera.

Selection of samples submitted for analysis was undertaken by Earth Tech with approval by PWGSC. The chain of custody and the laboratory certificates of analysis supplied by ALS Laboratory can be found in Appendix E.

#### 4.1.6 Quality Assurance/Quality Control Program

Earth Tech field personnel followed predefined field procedures for quality control. These procedures ensured that representative samples were collected and that the risk of cross contamination was minimized.

#### 4.1.7 Selection of Applicable Environmental Quality Guidelines/Standards

The Saskatchewan Occupational Health and Safety Regulations (OHS), 1996, were used for asbestos, lead, and PCBs. In the 2007 addendum to the OHS, asbestos, lead, and PCBs are listed as designated chemical substances.

Though there are several varieties of asbestos, the OHS defines asbestos as being the fibrous form of crocidolite, amosite, chrysotile, anthophyllite, actinolite, tremolite, or the combination of them. The OHS does not quantify a minimum amount of asbestos that needs to be present for a material to be an ACM, it classifies any material with any amount of asbestos as an ACM.

There is currently no environmental guideline specifically derived for lead paint on buildings. The federal Hazardous Products Act (R.S., 1985, c. H-3) includes guidelines for lead in paint for articles such as furniture and children's toys. The document prohibits "surface coating material that contains lead compounds of which the total lead content is more than 600 mg/kg". In addition, as paint may chip and come to rest on soil at the base of site buildings (exterior) or the floor of site buildings (interior), the concentration of lead in paint is can also

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be compared to the CCME Soil Quality Guideline for lead. Also, as disposal of lead paint must at some point be considered when buildings are decommissioned, disposal guidelines for landfills must be considered. If a material is to be disposed of at a licensed or permitted landfill site, Saskatchewan Environment does not have a regulation or guideline to meet in this regard. However, landfill disposal does require that the concentration of lead shall not exceed the limit provided for the Industrial land use category in the CCME Canadian Environmental Quality Guidelines (also 600 mg/kg). This is similar to the guidelines in Manitoba where Manitoba Conservation Guideline 2002-02E requires that the concentration of lead shall not exceed the limit provided for the Industrial land use category in the CCME Canadian Environmental Quality Guidelines. Thus, both the CCME Industrial Land Use guideline and the Hazardous Products Act guideline for lead of 600 mg/kg is presented as the comparison guidelines for this site as summarized in Table 4.2.

Naturally occurring substances produced by mould (fungi) that bring about a toxic response are called mycotoxins, and are usually contained within the spores. Toxicity can arise from inhalation or skin contact with toxigenic moulds. In contaminated situations within a workplace or residence, the risk from exposure to mould is dependent on human factors such as personal susceptibility, route of exposure, age and health. Mould related factors include amount and length of time of exposure, virility and viability of the organism, and whether the effect is infection, allergenic, toxigenic or some combination of these. Indoor air contains spores and filaments of many different moulds but the most common are likely to be species of *Cladosporium alternaria* and other moulds typically found in the normal outdoor environment. However, in affected buildings toxigenic or allergenic mould can be found, including species of *Penicillium*, some *Aspergillus*, *Stachybotrys*, and *Fusarium*.

As a regulation for mould, a publication entitled *Residential Indoor Air Quality* Guidelines produced by Health Canada in 2007 was used. In this publication, causes for growth and ways to remove and reduce growth are listed. A section of the publication also mentions that an exposure limit has yet to be defined as the type and strain of the growth and the individual human response to exposure are variable factors for the level of health risks. Instead, Health Canada recommends to control humidity and diligently repair any water damage in buildings to prevent mould growth and to clean thoroughly any mould growing in buildings. These recommendations apply regardless of the mould species found to be growing in the building.

#### 4.2 FIELD AND LABORATORY RESULTS

#### **4.2.1** Asbestos Containing Materials (ACMs)

Asbestos materials were commonly used as a construction material until the late 1970's, early 1980's. The detachment, R1, R2, R3, and R4 were constructed while ACMs were widely used. Due to the mid 1990's dates of construction of R5, R6 and R7, asbestos samples were not collected from these units.

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#### 4.2.1.1 RCMP Detachment

During the course of the inspection, 15 asbestos samples were collected from the interior of the Detachment. None of the samples contained asbestos. Table 4.1 summarizes the sample locations and the laboratory results for the property. A copy of the analytical results is located in Appendix E.

#### 4.2.1.2 Employee Housing 1

During the course of the inspection, six asbestos samples were collected from the interior and exterior of the building. Out of the six samples, only two samples (PN-R1-A002 and PN-R1-A004) tested positive for asbestos (10-25% and 1-10%, respectively). Sample PN-R1-A002 was collected from interior sheet flooring (yellow circles with flower pattern) from the building. Sample PN-R1-A004 was collected from interior sheet flooring in the basement (yellow octagons with stone grout) of the building. The total measured area of the two flooring types were approximately 9 m<sup>2</sup> and 13 m<sup>2</sup>, respectively. Table 4.1 summarizes the sample locations and the laboratory results for the property. A copy of the analytical results is located in Appendix E.

#### 4.2.1.3 Employee Housing 2

R2 was constructed in the early 1980's and major renovations were undertaken in 2006. During the site visit, all of the potential ACMs identified in R2, such as sheet flooring, appeared to be identical in pattern, age and quantity to those in R1. As such, no samples were collected for asbestos analysis from R2.

#### Employee Housing 3 4.2.1.4

During the course of the inspection, five asbestos samples were collected from the interior and exterior of the building. None of the samples contained asbestos. Table 4.1 summarizes the sample locations and the laboratory results for the property. A copy of the analytical results is located in Appendix E.

#### 4.2.1.5 Employee Housing 4

During the course of the inspection, one asbestos sample was collected from the interior of the building. The sample did not contain asbestos. Table 4.1 summarizes the sample location and the laboratory result for the property. A copy of the analytical results is located in Appendix E.

#### 4.2.1.6 Employee Housing 5

No samples were collected for asbestos analysis from R5.

#### 4.2.1.7 Employee Housing 6

No samples were collected for asbestos analysis from R6.

#### 4.2.1.8 Employee Housing 7

No samples were collected for asbestos analysis from R7.

#### 4.2.2 Lead-based Paint

Lead-based paint was commonly used in construction in the mid 1970's. The RCMP properties inspected, including the detachment and the seven residential units, were constructed after 1980. As a result of the dates of construction, none of the RCMP properties in Pelican Narrows are likely to have used lead-based paint.

#### **4.2.3** Mould

During the course of the inspection, one mould sample was collected from the interior of R3. The sample was collected from an affected area of the bathroom ceiling (0.5 m² in area). Laboratory analysis indicated that the ceiling sample contained a substantial number of colony forming units (31,900 CFU/g) completely attributable (100%) to *cladosprium*, a non-toxic form of mould typically found in the outdoor environment. Table 4.2 summarizes the samples and the laboratory results for the property. A copy of the analytical results is located in Appendix E.

During the course of the inspection, one mould sample was collected from the interior of R4. The sample was collected from an affected area of the bathroom ceiling (0.5 m² in area). Laboratory analysis indicated that the ceiling sample contained a substantial number of colony forming units (13,700 CFU/g) completely attributable (100%) to *cladosprium*, a non-toxic form of mould typically found in the outdoor environment. Table 4.2 summarizes the samples and the laboratory results for the property. A copy of the analytical results is located in Appendix E.

#### 4.2.4 Polychlorinated Biphenyls (PCBs)

During the site visit, the total number of identified FLBs was counted, with at least twenty percent of the total checked for PCBs by examining their label.

#### 4.2.4.1 RCMP Detachment

During the site visit, 25 FLBs were observed throughout the detachment, including the entrance, offices, storage areas, and bathrooms. To check twenty percent of the ballasts, 5 FLBs were randomly selected for further inspection. Of the 5 FLBs inspected, none of them contained PCBs. One of the FLBs inspected in the mechanical room was observed to be leaking.

#### 4.2.4.2 Employee Housing 1

No FLBs were observed during the site visit.

#### 4.2.4.3 Employee Housing 2

No FLBs were observed during the site visit.

#### 4.2.4.4 Employee Housing 3

No FLBs were observed during the site visit.

#### 4.2.4.5 Employee Housing 4

No FLBs were observed during the site visit.

#### 4.2.4.6 Employee Housing 5

No FLBs were observed during the site visit.

#### 4.2.4.7 Employee Housing 6

No FLBs were observed during the site visit.

#### 4.2.4.8 Employee Housing 7

No FLBs were observed during the site visit.

#### 4.3 DISCUSSION

ACM materials were confirmed within R1. Generally, ACM materials are safe unless they are disturbed. Care should be taken when removing them. The OHS states that known ACMs should be marked or recorded that they contain asbestos.

No samples were submitted for lead analysis from any of the RCMP properties in Pelican Narrows, due to the post-1980's dates of construction (lead-based paint was commonly used in construction in the mid 1970's but not in the 1980's).

Mould was present in one location in R3 and one location in R4. For R3, the area covered by the mould was small (0.5 m²). The mould/fungi was identified as non-toxic. For R4, the area covered by the mould was also small (0.5 m²). The mould/fungi in R4 was identified as non-toxic. As substantial numbers of colonies were detected in each location, it is recommended that the mould source and the affected areas in R3 and R4 be investigated and mitigated by controlling humidity, diligently repairing any water damage and cleaning thoroughly according to Health Canada guidelines.

The FLBs known to contain PCBs, the ones that cannot be determined, and any leaking FLBs should be removed from the properties and disposed of according to regulations.

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# Section 5.0 Conclusions

# SECTION 5.0 CONCLUSIONS

#### 5.1 SUMMARY

The following summarizes the results of the Phase I Environmental Site Assessment:

- 1. Results of the Saskatchewan Environment File Search indicated a total of 13 Hazardous Substance Storage records and one Spill record. One storage record was found to pertain to the RCMP. The remaining storage records and spill record did not appear to be on any of the RCMP properties investigated. Saskatchewan Environment provided a copy of a fax requesting to remove one 1000 underground gasoline tank and one 2000 gallon underground heating oil tank, dated July 10, 1992, and a letter approving the removal and decommissioning of underground storage tanks at the RCMP, Pelican Narrows Facility #OT-75, dated July 14, 1992. The ministry was unable to further comment on the current environmental status of the Site.
- 2. Two water well records were produced for the area, both in township 71-7 W2M. Both of these wells are used as withdrawal for domestic use.
- 3. Propane ASTs were observed at the detachment, R1, R2, R5, R6, and R7. One gasoline AST was observed at the detachment. At the time of the site visit, no leaks or spills were evident from the ASTs.
- 4. General cleaning products and assorted hazardous chemicals were found in each of the buildings inspected. Product quantities in each building were less than 50 L.
- 5. No staining was observed on any of the properties during the site visits.
- 6. Mercury thermostat switches were present in the detachment (4), R3, R5, R6, and R7. Historically, fluorescent light tubes may have contained mercury gas. Fluorescent light tubes were noted in the RCMP detachment.
- 7. No UFFI was observed during the site visits.
- 8. ODS were observed in the Detachment, R1, R2, R4, R5, R6, and R7.

The following summarizes the results of the Hazardous Material Survey:

- 1. Of the 27 samples submitted to the laboratory for asbestos analysis, two materials contained asbestos (Sample PN-R1-A002, collected from the yellow circles/flower pattern interior sheet flooring in R1, and Sample PN-R1-A004 collected from the yellow octagons/stone grout interior sheet flooring in R1).
- 2. Given the dates of construction (after 1980), no paint samples were collected from any of the RCMP properties in Pelican Narrows. The construction dates could not be accurately specified by the RCMP.
- 3. During the course of the inspection, one mould sample was collected from the interior of R3. The sample was collected from an affected area of the bathroom ceiling (0.5 m<sup>2</sup> in area). Laboratory analysis indicated that the ceiling sample contained a substantial number of colony forming units (31,900 CFU/g) completely attributable (100%) to *cladosprium*, a non-toxic form of mould typically found in the outdoor

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environment. Table 4.2 summarizes the samples and the laboratory results for the property. A copy of the analytical results is located in Appendix E.

- 4. During the course of the inspection, one mould sample was collected from the interior of R4. The sample was collected from an affected area of the bathroom ceiling (0.5 m² in area). Laboratory analysis indicated that the ceiling sample contained a substantial number of colony forming units (13,700 CFU/g) completely attributable (100%) to *cladosprium*, a non-toxic form of mould typically found in the outdoor environment. Table 4.2 summarizes the samples and the laboratory results for the property. A copy of the analytical results is located in Appendix E.
- 5. During the site visit, 25 FLBs were observed throughout the detachment. Of the 5 FLBs inspected, none of them contained PCBs. One of the FLBs inspected in the mechanical room was observed to be leaking.

#### 5.2 **RECOMMENDATIONS**

Based upon the results of the Phase I ESA and the Hazardous Materials Survey the following actions are recommended:

- 1. Mould identified in R3 and R4 should be inspected and cleaned. The source of the mould should be identified and repaired.
- 2. Prior to any building demolition, mercury switches should be disposed of in a suitable manner.
- The removal and disposal of the asbestos containing material located in R1 prior to the demolition of the building. All relevant work place safety and occupational health and safety guidelines should be observed during the demolition and removal of the ACM.
- 4. Prior to any building demolition, all FLBs should be checked for PCB content and be disposed of appropriately. The fluorescent light tubes should also be removed from the property and be disposed of in a suitable manner since historically the fluorescent light tubes have been filled with mercury gas.
- 5. ODS containing equipment should be serviced by an accredited technician. In the event of disposal, the ODSs must be managed in accordance with federal regulations and replaced with a non-ODS product. If the ODS unit identification tag was missing or illegible, the unit should be assumed to contain an ODS.

In conclusion, based upon observations made during the site investigation, the results of the historical investigation, and the results of the hazardous material surveys, there exists a relatively low risk for environmental concern at any of the RCMP properties in Pelican Narrows.

This study has been conducted following methods generally accepted within the industry and in accordance with the CSA Standard Z768-01. The evaluation and conclusion do not preclude the existence of chemical or hazardous substances other than those identified herein, or the possibility that conditions vary throughout the area of investigation. Hence, this report should be used for informational purposes only and not regarded as a certification of the actual composition of the site.

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# **Section 6.0 Statement of Limitations**

#### SECTION 6.0 STATEMENT OF LIMITATIONS

This Phase I Environmental Site Assessment (ESA) report was prepared based on historical documents reviewed, review of regulatory records and observations made during the inspection. Only those items, which are capable of being observed and are reasonably obvious to Earth Tech personnel, or have been identified to Earth Tech by other parties, can be reported.

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# **Tables**

Table 2.1 Summary of RCMP Properties in Pelican Narrows, Saskatchewan

Earth Tech Name	Address	DFRP	Property Number	Building Number	Land Use
RCMP Detachment	1 Bear Street	36834	PR F/206	BU F/371	Detachment
Employee Housing 1 (R1)	Lot S, Plan 78PA25115	36834	PR F/206	BU F/373 or F/375	Housing
Employee Housing 2 (R2)	Lot S, Plan 78PA25115	36834	PR F/206	BU F/373 or F/375	Housing
Employee Housing 3 (R3)	Parcel EE, Block 2, Plan 88PA01099	36022	PR F/187	BU F/353	Housing
Employee Housing 4 (R4)	Parcel EE, Block 2, Plan 88PA01099	36022	PR F/187	BU F/353	Housing
Employee Housing 5 (R5)	2608 Muskeek Place	37014	PR F/261	BU F/158 or F/160	Housing
Employee Housing 6 (R6)	2609 Muskeek Place	37014	PR F/261	BU F/159	Housing
Employee Housing 7 (R7)	2610 Muskeek Place	37014	PR F/261	BU F/158 or F/160	Housing

**Table 4.1 Asbestos Laboratory Analysis Results** 

PN-D-A001 PN-D-A002 PN-D-A004 PN-D-A005	Vinyl covered drywall (interior).  Acoustical tile - 24" x 24" (interior).	<1 <1	
PN-D-A004		<1	
	T 11 1 2 1 1 2 1 1 2	``	
PN-D-A005	Leveling compound - vestibule (interior).	<1	
	Ceramic floor tile - red floor tile (interior).	<1	
PN-D-A006	Drywall filler compound - white (interior).	<1	
PN-D-A007	Ceramic tile - yellow (interior).	<1	
PN-D-A008	Grout (interior).	<1	
PN-D-A009	Acoustical tile - 24" x 24", white (interior).	<1	
PN-D-A010	Mortar (interior).	<1	
PN-D-A011	Sheet flooring - white with beige/grey dots (interior).	<1	
PN-D-A012	Stair tread - red (interior).	<1	
PN-D-A013	Stair tread &/or riser - brown vinyl (interior).	<1	
PN-D-A014	Insulated - fibreglass paper rapped (interior).	<1	
PN-D-A015	Straight run - fibreglass (interior).	<1	
PN-D-A016	Fittings - insulated (elbow) (interior).	<1	
PN-R1-A001		<1	
PN-R1-A002		10-25%	9
PN-R1-A004		1-10%	13.25
PN-R1-A006		<1	
PN-R1-A007	Textured coat (bedroom #1) (interior).	<1	
PN-R1-A008	Siding - metal (backing meterial) (exterior).	<1	
	No Samples Collected		
PN-R3-A001	Sheet flooring (interior).	<1	
PN-R3-A002	Drywall filler compound (interior).	<1	
PN-R3-A005	Baseboard - composite - black/dark brown (interior).	<1	
PN-R3-A006	Stair tread - brown (interior).	<1	
PN-R3-A007	Siding - wood (pressed wood) (exterior).	<1	
PN-R4-A001	Sheet flooring (interior).	<1	
	No Samples Collected		
	No Samples Collected		
	No Samples Collected		
	PN-D-A010 PN-D-A011 PN-D-A012 PN-D-A013 PN-D-A014 PN-D-A015 PN-D-A016 PN-R1-A001 PN-R1-A002 PN-R1-A004 PN-R1-A006 PN-R1-A007 PN-R1-A008 PN-R3-A001 PN-R3-A001 PN-R3-A005 PN-R3-A006 PN-R3-A007	PN-D-A010 Mortar (interior).  PN-D-A011 Sheet flooring - white with beige/grey dots (interior).  PN-D-A012 Stair tread - red (interior).  PN-D-A013 Stair tread &/or riser - brown vinyl (interior).  PN-D-A014 Insulated - fibreglass paper rapped (interior).  PN-D-A015 Straight run - fibreglass (interior).  PN-D-A016 Fittings - insulated (elbow) (interior).  PN-R1-A001 Sheet flooring - beige squares with light brown grout (interior).  PN-R1-A002 Sheet flooring - yellow circles with flower pattern (interior).  PN-R1-A004 Sheet flooring - yellow octagons with stone grout (interior).  PN-R1-A006 Drywall filler compound (bedroom #1) (interior).  PN-R1-A007 Textured coat (bedroom #1) (interior).  PN-R1-A008 Siding - metal (backing meterial) (exterior).  No Samples Collected  PN-R3-A001 Sheet flooring (interior).  PN-R3-A002 Drywall filler compound (interior).  PN-R3-A005 Baseboard - composite - black/dark brown (interior).  PN-R3-A006 Stair tread - brown (interior).  PN-R3-A007 Siding - wood (pressed wood) (exterior).  No Samples Collected  No Samples Collected	PN-D-A010   Mortar (interior).   < 1

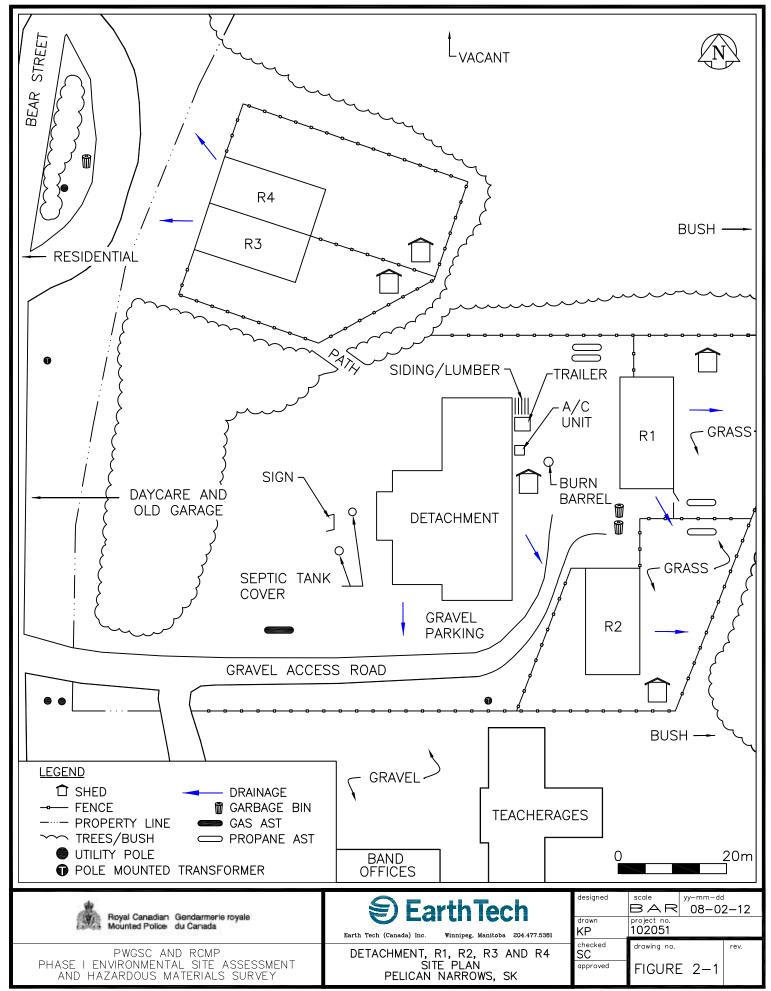
1. All results indicate percentage of asbestos in sample material.

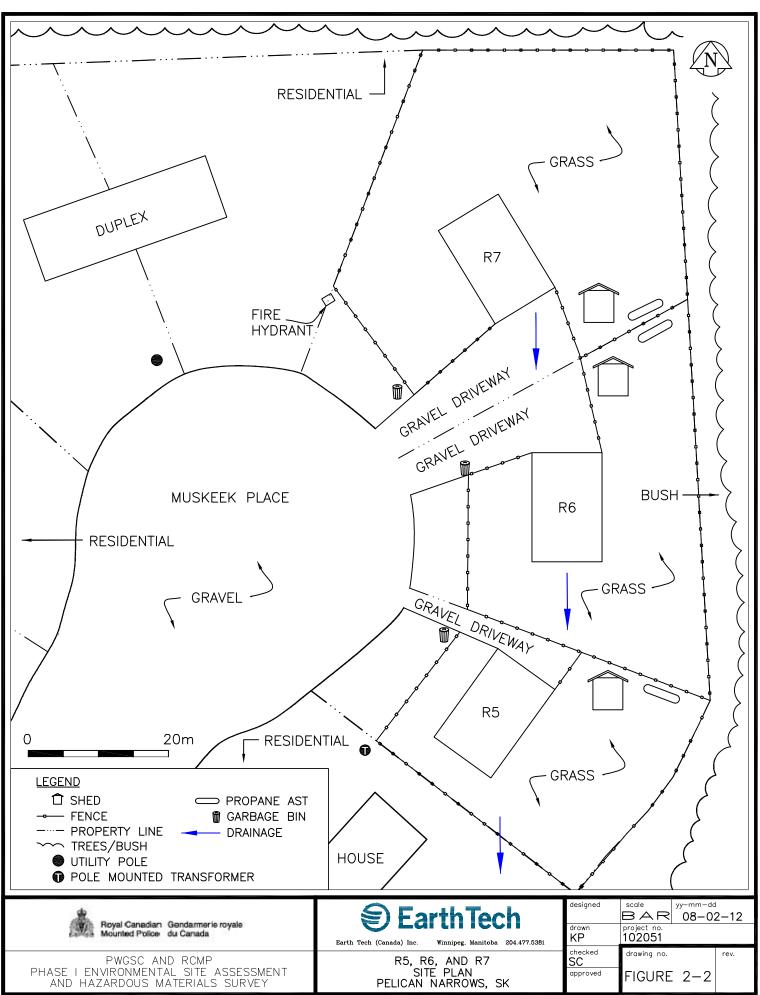
**Table 4.2 Mould Laboratory Analysis Results** 

Building	Sample ID	Sample Type	Location	Fungi/Mould ID	Result	Units	Area (m <sup>2</sup> )
Residence 3	PN-R3-M001	Bulk	Bathroom ceiling.	Total Colonies	5	Colonies	0.5
				Colony Forming Units	31,900	CFU/g	
				Cladosporium	100	%	
Residence 4	PN-R4-M001	Bulk	Bathroom ceiling.	Total Colonies	2	Colonies	0.5
				Colony Forming Units	13,700	CFU/g	
				Cladosporium	100	%	



# **Figures**







# Appendix A Search Responses



### **One Well Per Page**

Page -1 of 1 9/21/2007 (AAAAWE19)

(c) Saskatchewan Watershed Authority

Land Location 2-07-71--

WWDR# **026357** 

<u>Licensed Ground Water</u> Water Rights # Sub File #

Water Quality 026357 Acquistion #

Completion 07/20/1954 RM MB 07 SB 29 NTSMAP 63M00

**Well Location** 

Quarter Section Township Range Meridian Reserve Riverlot Location of Well (in Quarter)

71 07 2 ft from N/S Boundary

ZONE EASTING NORTHING SOURCE ACCURACY ft from E/W Boundary

**Well Information** 

Driller # 000000 UNKNOWN

Water Use Domestic Well Casings

Hole # Length (ft) Btm (ft) Dia (in) Description Well Use Withdrawal

Installation Method Unknown

Depth 3 ft

Water Level ft Screens

 $Bit \hspace{1cm} In ches \hspace{1cm} Length \ (ft) \hspace{1cm} Btm \ (ft) \hspace{1cm} Dia \ (in) \hspace{1cm} Slot \ (in) \hspace{1cm} Description$ 

Struck ft Flowing Head ft

Completion Method Unknown

Pump Test

Draw Down ft Rec Pumping Rate

Duration hrs Intake

Pumping RateigpmAquiferGlacTempdeg. FE-LogNo

Elevation 1,040 ft Phys A00

**Lithology List** 

Depth (ft) Material Colour Description
2 Sandy Clay Unknown
3 Gravelly Clay Unknown Unknown



### **One Well Per Page**

Page -1 of 1 9/21/2007 (AAAAWE19)

(c) Saskatchewan Watershed Authority

WWDR# 026358

<u>Licensed Ground Water</u> Water Rights # Sub File #

Water Quality Acquistion #

Completion 07/01/1951 RMMB **07** SB 29 NTSMAP 63M00

**Well Location** 

Range Quarter Section Township Meridian Location of Well (in Quarter) Reserve Riverlot ft from N/S Boundary

07

**ZONE** EASTING NORTHING **SOURCE ACCURACY** ft from E/W Boundary

**Well Information** 

000000 Driller# UNKNOWN

Domestic Well Casings Water Use

Hole# Length (ft) Btm (ft) Dia (in) Description

Well Use Withdrawal Installation Method Unknown

Depth 5

Water Level ft Screens

Length (ft) Bit Slot (in) Description inches Btm (ft) Dia (in)

Struck ft Flowing Head ft

Completion Method Unknown

Pump Test

Draw Down ft Rec Pumping Rate

Intake Duration hrs **Pumping Rate** Aquifer igpm

Temp E-Log No deg. F

Elevation 1,040 ft Phys A00

**Lithology List** 

Depth (ft) Material Colour Description

## **HEIRS**<sup>TM</sup> Fire Insurance Plan Index

Available for the following communities in Alberta, Saskatchewan & Manitoba, Canada

Please contact a CGI representative if you have any questions regarding this list.

We can be reached in Calgary, AB at 1-800-465-4264 / 403-296-6454 or janice.cole@cgi.com

Alberta	Saskatchewan	Manitoba
D#	Fataura	Danadan
Banff	Estevan	Brandon
Calgary	Humboldt	Carberry
Camrose	Indian Head	Dauphin
Cardston	Kamsack	East Kildonan
Didsbury	Meadow Lake	Flin Flon
Drumheller	Melfort	Fort Garry
Edmonton	Melville	Morden
Fort MacLeod	Moose Jaw	Neepawa
Grande Prairie	Moosomin	Portage La Prairie
High River	Nipawin	Souris
Lacombe	North Battleford	St. Boniface
Lethbridge	Prince Albert	St. Vital
Lloydminster	Regina	St. James
Medicine Hat	Saskatoon	The Pas
Olds	Swift Current	Thompson
Ponoka	Weyburn	Transcona
Red Deer	Yorkton	Virden
Stettler		West Kildonan
Vegreville		Winnipeg
Wainwright		
Wetaskiwin		



Environmental Protection Branch Industrial, Uranium, and Hardrock Saskatchewan

P.O. Box 3003 PRINCE ALBERT, SK S6G 6G1

Fax: (306) 953-2502 Phone: (306) 953-3669

Email: george.bihun@gov.sk.ca

File:PA27050HSWDG/01 Gen RCMP Pelican Narrows

December 17, 2007

Amber Zilinsky
Earth Tech (Canada) Inc.
1000 Waverly Street
WINNIPEG, MB R3T OP3

Dear Ms. Zilinsky:

Re: Environmental File Search Request for "RCMP, Pelican Narrows (Lot S Plan 78PA25115; Lots 4, 5 & 6 Township 71, Range 6&7, W2M Plan No. 1873R; and Parcel EE Block 2, Plan 88-PA-01099)

We performed a file search on the above. Below is a summary of information extracted from the file pertaining to your request.

- Registration Form for Existing Storage Facilities #OT-753 dated June 20, 1991.
- A copy of a fax dated July 10, 1992 from Sawchuk Mechanical Services of Prince Albert briefly out lining their request to remove 1-1000 underground gasoline tank and 1-2000 gallon underground heating oil tank.
- There is a letter dated July 14, 1992 from the ministry to Sawchuk Mechanical Services of Prince Albert approving the removal and decommissioning of underground storage tanks at the RCMP, Pelican Narrows Facility #OT-753 Lot S Plan #78PA-2515.

That is all that is in the file. To date no further reports were submitted to the ministry, therefore the ministry cannot comment anymore on the current environmental status of these properties.

Should you need further clarification, please do not hesitate to call.

Sincerely,

George Bihun

**Environmental Project Officer** 

Ministry of Environment

George



### FAX TRANSMITTAL SHEET



Date:F	665-03			526
T0:	Amter Z	Zilinsk	<u></u>	
			<u> </u>	
			·	
	PHONE:	FAX:_	204-47	3-7356
SUBJECT:				
FROM:	George B	hun		
	- <u>Fax (306) 953-2502</u> Ministry of Environm			
	P.O. Box 3003, 6th Floor Prince Albert, Saskat Canada S6V 661		<u>.</u>	
DUONE		er	1	
PHUNE:_	953-366	(		, .,
COMMEN	ITS: Here	ave t	he pape	v5 0 n
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Number of	pages including Cover Pa	ge 8		603
	1 953-2896 if you do not re		Thanks	

	7.96	: JUNE	20191	
	Saskatchewan Decommission Environment and Public Safety UST's were-	to trave by Sawkuk	Registration Existing Sto	rage Facilities
during ,	the week of 12/07/15	: UST info.	Registration No. C	data files 92/08/12.
In accor	rdance with the Hazardous Substanc			
A. Ge	eneral Information			
1.	Date of Application 91			
2.	Business Name: R.C.	m.f. 2	Detachment (business name or individue.!)	
3.	Address of Stcrage Facility	Box 4	LO, Bear St.	
	Pelican Ravo-us City, Town, Village/Provin		Sop O E D Postal Code	(366) 632 - 2112 Telephone (Office)
4.	Owner or Corporate Owner Name: <b>Federal</b>		n' オ	
	- Justice		s (if different from 3 above)	
	City, Town, Village/Proving	nce	Postal Code	() Telephone
5.	Storage Facility Operator or Manag	jer Name (if diffe	erent from 4 above):	
		Stree	t Address (Home)	
	Other Town Williams/Descript		Postal Code	()
6.	City, Town, Village/Proving Name of person completing form:		EX. PARTICULAR PROGRAMMENT	relephone
7.	If this storage 'acility is located wit	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		No
	Legal Land Description LSD/QRT	Sec	Twp F	Rge W Mer.
8.	Type of Business (check most app	ropriate area(s))		
	Service Station		ural Industry	Distributing
	☐ Bulk Plant ☐ Cardlock	☐ Mining	Industry $\square$	Manufacturing Industry Chemical Industry
	☐ Warehousing	_/	please specify)	Chemical meastly
9.	Is this storage facility part of or aff	liated with gover		
10	Attach a copy of a preliminary eme	11 km (19 1)		prage facility. A
			plant to the	74
B. 511	te Sensitivity Information	1		
11	Distance to nearest well 0-20m No. Well 20-200m 200m-1km Over 1km Unknown	1 2 3 4 5 5	14. Depth from surf groundwater tak 0-3m 3-10m Over 10m Unknown	
12	. Distance to n∋arest surface water (stream, lake) 0-20m 20-200m Over 200m Unknown		15. Surrounding un- permeability (ric High (sand, g Medium (till) Low (clay) Bedrock Unknown	t backfill)
13	. Distance to nearest residence 0-20m 20-200m Over 200m Unknown	1 2 3 4	Uriknown	<u></u>

### C. Underground Storage \* ak Information

Note: If the storage 'acility is equipped with more than 5 underground tanks please copy and complete additional pages as necessary.

Assign an identificat on number (ID) to each tank whether currently in use or not.

16.	Assigned tank ID number		2			
17.	Manufacturer Name	?	?			
18.	Date of Manu acture (yy-mm-dd)	?	?			
19.	Serial Numbe	?	?			- 4
20.	Contents (present or last stored) Diesel Gasoline (motor) Aviation gasoline Jet fuel/kerosene Heating oil/"urnace oil Used waste oil Alcohol blends (gasohol) Unknown Chemical/other — specify type	1 2 2 3 4 5 5 5 6 7 7 8 8 9 9	1 2 3 4 5 5 6 7 7 8 8 9 9	1 2 3 4 5 6 7 7 8 8 9 9	1 2 3 4 5 6 6 7 7 8 8 0 0 0 10	1 2 3 4 5 6 6 7 7 8 6 9 9
21.	Product Grade or Type (eg. unleaded gas) — if applicable		heating oil			
22.	Status of tank Currently in use Temporarily out of use Permanently out of use If tank(s) are not currently	2 3	2 0 3	1 2 3	1 2 2 3	1   2   3
	in use then: Date last used (yy-mm-dd) Was tank emptied Yes No Unknown	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6
23.	Tank used seasonally Yes (e.g. product used in winter) No			1   e	1 2	
24.	Year of installation Year Known Estimated	1 2	1 2	1 2	1 2	
25.	Nominal tank capacity (in litres, 1 gal. = 4.5L)	4500	9092			
26.	Tank material Steel Fiberglass reinforced plastic (FRP) Unknown Other, please specify	2 3	2 3	1 2 	1 	
27.	Internal protection Yes (e.g. interior lining) No (Includes paint) Unknown		1     2   3	1 2 3	2 3	1 2 3
28.	None (includes paint)		E,	□ 1		□ ,
	Cathodic protection Sacrificia anode (e.g. zinc, magnesium) Impressed current External coating	☐ 2 ☐ 3	2 3	2 3	2 3	2 3
	(e.g. tar, epoxy - excluding paint) Secondary containment	4	☐ 4	□ 4	□ 4	☐ 4
	(e.g. double wall, plastic liner) Unknown	5 6	5 6	□ 5 □ 6	□ 5 □ 6	5 6

	gned tank IID number n question 16)	2				
29.	Piping Bare or painted steel Galvanized steel Plastic covered steel (e.g. yəllow jacket) Cathodically protected by ancide Fiberglasis reinforced plastic (FRP) Copper Double Wall Unknown Other, please specify	1 2 2 3 4 4 5 5 6 7 7 8 8 9	1 2 0 0 4 5 G G G G G G G G G G G G G G G G G G	1 2 3 4 4 5 6 7 6 9 9	1 2 3 4 4 5 6 7 7 8 8 9	1   2   3   4     5   6   7   8   9
30.	Pumping System Suction Submersible, with leak detector Submersible, without leak detector Unknown	□ 1 □ 2 □ 3 □ 4	□ 1 □ 2 □ 3 □ 4	1 	1 2 3 4	
31.	ls output measured by a meter Yes No	[2] 1 □ 2		1   2	1   2	1 2
32.	Can the product level be checked with a dipstick Yes No (eg. fill tube not straight) Frequency of dipping (never, daily, weekly, monthly, occasionally)	1 2	[☑ 1 □ 2	1 2	1 2	1 2
	Or is the tankage equipped with electronic tank gauging systems Yes No	1		1 2	1 2	□ 1 □ 2
33.	Inventory reconciliation Frequency (never, daily, weekly, occasionally)	OCCASIONAL	-y			
34.	Date of last leak test yy-mm-dd or never Method Result: leak no leak inconclusive	1 2 3		1 2 3		
35.	Are underground tank(s) equipped with a release detection system.  Yes No		□ , ☑ 2			
36.	Are underground tank(s) equipped with a transfer spill prevention system. Yes			1 2	1 2	1 2
37.	Are underground tank(s) equipped with an overfill protection system. Yes	[]; [];	□ <sub>1</sub> □ <sub>2</sub>	1 2		1 2
38.	Are any tanks commonly conne If yes, specify tank ID number	ected: Y	{	o 2 Unkr andand		are connected
39.						

### E. Warehouse and Yard S rage Information Warehouse Storage 62. Storage Area (metre2) \_\_\_ Year Constructed 63. No 🗀 Yes 🗌 64. Heated: No 🗀 Ventilation: Yes 65. **Outdoor Storage** 66. Storage Area (metre²) \_\_ 67. Year Constructed Yes 🗆 No 🗌 68. Fenced: 69. 70. Location Stored Maximum Number Container Type & Substance Stored (Warehouse - Outdoors) of Containers Stored **Product Name** Size (wt-vol) Note: If above space is insufficient copy and complete additional listings as necessary. I hereby certify that the information provided on this application is complete and accurate. Forward completed form to: Air and Land Protection Branch Saskatchevan Environment and Public Safety 3085 Albert Street Regina, Saskatchewan S4S 0B1

ALP4 — February, 1989 800/900 ②

For further information please call (306) 787-6193.



BOX 2346 - PRINCE ALBERT, SASK S6V 621 763-2600 763-2601 FAX 763-0880



FAX TRANSMITTAL	
Duter Quely 10/93	*
ATTENTION SCOTT	
coour. Rubic Safety	Free Doney S.
rocylidas	Project Room RC Pro P
MX NUMBER: 787-0197	Project 19-1 Palle one Naugus.
TOTAL NO. PACES SENT INCLUDING THES PAGE	CC: ORIGINATOR ( ) FILE [ ]
RE-Legal description	
LUT S PLANT 78PA	9515
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desiled will in distre	C. C
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	al site and handled
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413/92 ( ph)	
he had some some	*



BOX 2346 - PRINCE ALBERT, SASH., S6V 6Z1 763-2600 763-2601 FAX 7-53-0880



### FAX TRANSMITTAL

Dates S	July 10/92				
ATTENTION:	Scott				
COMPANY:	white Safety	-	100 5 Jel	su &	
rocytion:	707 5107		Project News R	CMP	
FAX WARER: ***	1.017		Project By.t	allein N	aucus.
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## Saskatchewan

Natter Scott Building 3085 Albert Street Regina, Canada 345 081 July 14, 1992

W8-6 RCMP #OT753

Sawchuk Mechanical Services c/o Darlene P. O. Box 2343 Prince Albert, Sask. S6V 6Z1

Darlene:

FACILITY #OT 753 LOT S Plan #78PA-2515

I am writing to give approval to proceed with the removal and decommissioning of the underground storage tanks at the above location as per your recent fax and telephone

As I indicated in the material sent previously, the tanks and lines have to be removed from the ground, the site cleaned up to the standards that are outlined in the interim decommissioning guidelines that were provided, and the tanks destroyed to prevent any further use.

Any contaminated soils encountered during the removal of the tanks are to be disposed of in an acceptable manner. The most appropriate disposal option at this location would be to find a suitable piece of level and dry land and spread the soils thinly on the surface to promote degradation of the contaminants. The local garbage dump may be considered with the permission of the local administration. If the quantity of soils is greater than of the quantity and the disposal location will be required.

If you have any questions or comments or wish to discuss any of this further, please do not hesitate to contact me.

Yours fingerely,

R. Scott Robinson, Supervisor, Fuels & Industrial Chemicals Air & Land Protection Branch

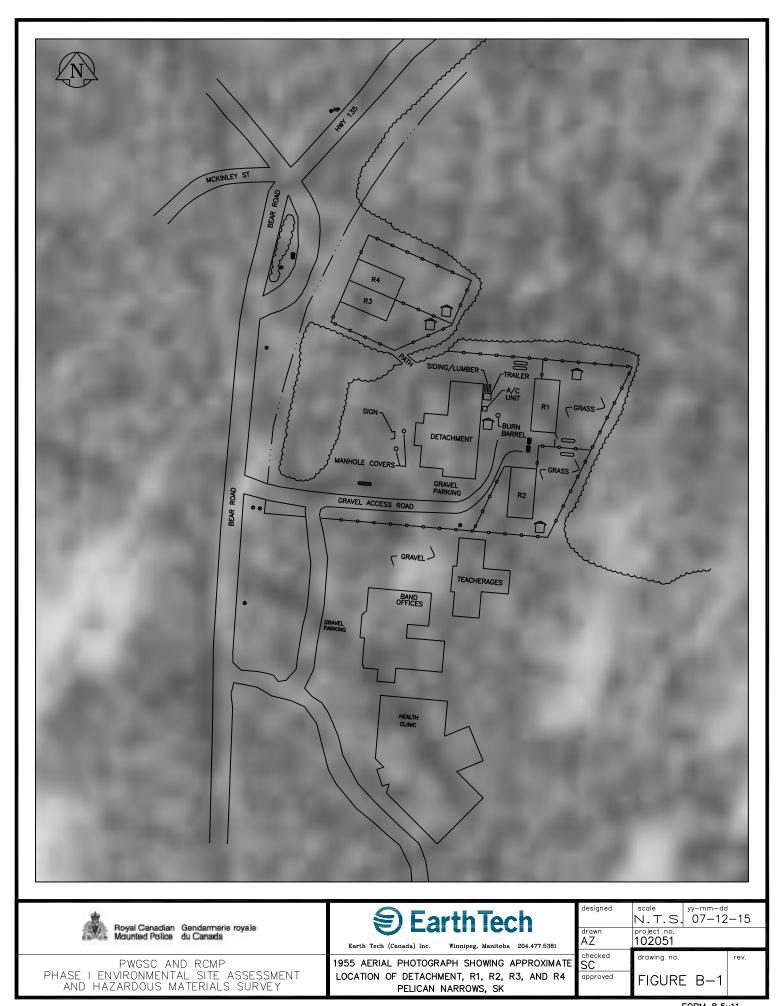
Phore 787-0463 Sent by Fax 1145 July 14, 1992, original mailed



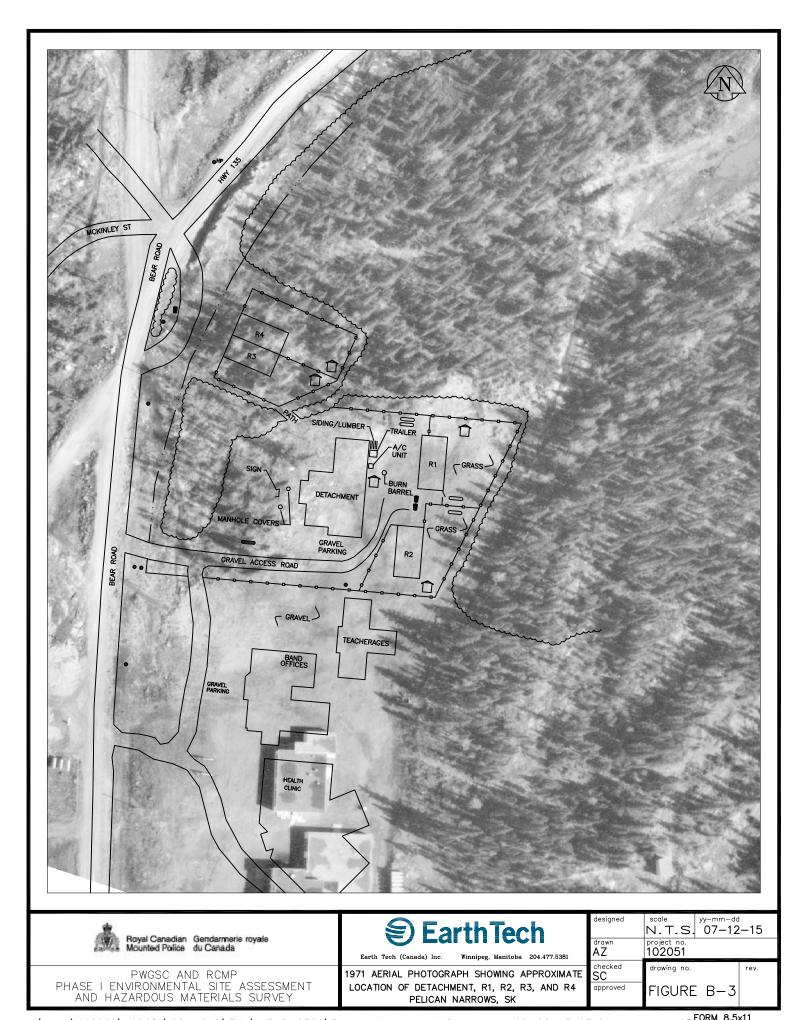


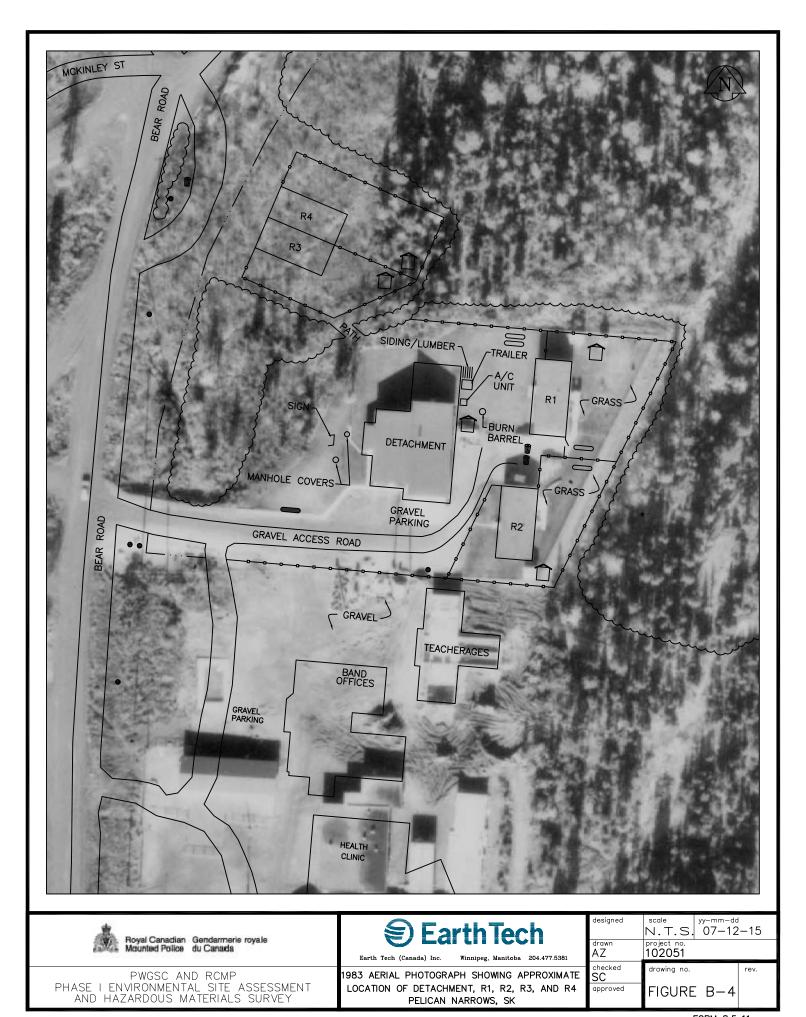


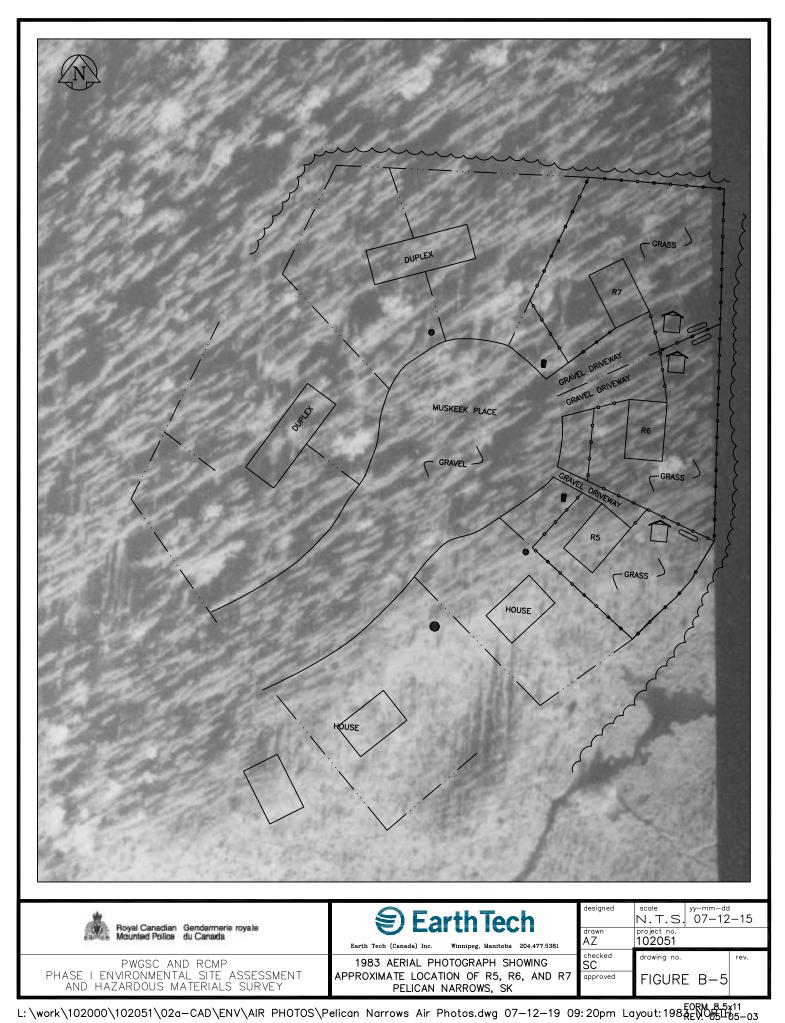
# Appendix B Aerial Photographs

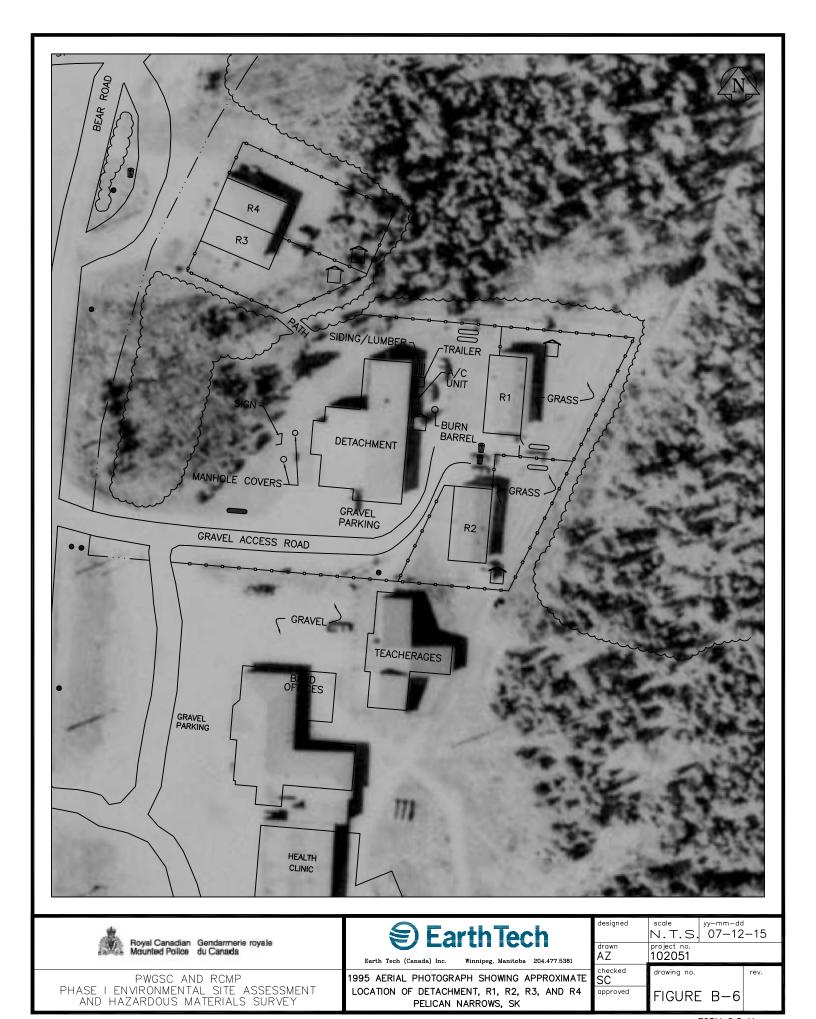
















## Appendix C Site Photographs

### HALOCARBON CONTAINING EQUIPMENT PHOTOGRAPHS



Photograph ODS 1: Refrigerator/freezer and pop machine - RCMP Detachment (BU F/371) lunch room.



Photograph ODS 2: Water cooler - R CMP Detachment (BU F/371) lunch room.



Photograph ODS 3: Refrigerator/freezer - RCMP Detachment (BU F/371) docking bay.



Photograph ODS 4: Chest freezer - RCMP Detachment (BU F/371) docking bay.



Photograph ODS 5: Air conditioning unit - RCMP Detachment (BU F/371) exterior.



Photograph ODS 6: Refrigerator/freezer – Residence 1 (BU F/373 or F/375) kitchen.



Photograph ODS 7: Water cooler – Residence 1 (BU F/373 or F/375) kitchen.



Photograph ODS 8: Refrigerator/freezer – Residence 2 (BU F/373 or F/375) kitchen.



Photograph ODS 9: Air conditioning unit – Residence 2 (BU F/373 or F/375) storage room.



Photograph ODS 10: Refrigerator/freezer – Residence 4 (BU F/353) kitchen.



Photograph ODS 11: Refrigerator/freezer – Residence 4 (BU F/353) basement.



Photograph ODS 12: Chest freezer #1 – Residence 4 (BU F/353) basement.



Photograph ODS 13: Chest freezer #2 – Residence 4 (BU F/353) basement.



Photograph ODS 14: Air conditioning unit – Residence 4 (BU F/353) basement.



Photograph ODS 15: Refrigerator/freezer – Residence 4 (BU F/353) exterior.



Photograph ODS 16: Refrigerator/freezer – Residence 5 (BU F/158 or F/160) kitchen.



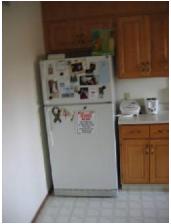
Photograph ODS 17: Chest freezer - Residence 5 (BU F/158 or F/160) basement



Photograph ODS 18: Air conditioning unit - Residence 5 (BU F/158 or F/160) basement.



Photograph ODS 19: Air conditioning unit tag - Residence 5 (BU F/158 or F/160) basement.



Photograph ODS 20: Refrigerator/freezer – Residence 6 (BU F/159) kitchen.



Photograph ODS 21: Freezer – Residence 6 (BU F/159) kitchen.



Photograph ODS 22: Portable cooler – Residence 6 (BU F/159) kitchen.



Photograph ODS 23: Chest freezer - Residence 6 (BU F/159) basement.



Photograph ODS 24: Refrigerator/freezer – Residence 7 (BU F/158 or F/160) kitchen.



Photograph ODS 25: Water cooler – Residence 7 (BU F/158 or F/160) kitchen.



Photograph ODS 26: Chest freezer - Residence 7 (BU F/158 or F/160) kitchen.

#### SAMPLE PHOTOGRAPHS



Photograph HMS 1: Asbestos Sample PN-R1-A002. Sheet flooring in Residence 1 (BU F/373 or F/375).



Photograph HMS 2: Close-up of asbestos Sample PN-R1-A002. Sheet flooring in Residence 1 (BU F/373 or F/375).



Photograph HMS 3: Asbestos Sample PN-R1-A004. Sheet flooring in Residence 1 (BU F/373 or F/375).



Photograph HMS 4: Close-up of asbestos Sample PN-R1-A004. Sheet flooring in Residence 1 (BU F/373 or F/375).



Photograph HMS 5: Mould Sample PN-R3-M001. Bathroom ceiling in Residence 3 (BU F/353).



Photograph HMS 6: Close-up of mould Sample PN-R3-M001. Bathroom ceiling in Residence 3 (BU F/353).



Photograph HMS 7: Mould Sample PN-R4-M001. Bathroom ceiling in Residence 4 (BU F/158 or F/160).

#### SITE PHOTOGRAPHS



Photograph ESA 1: Front of Detachment (BU F/371).



Photograph ESA 2: North of Detachment (BU F/371).



Photograph ESA 3: East of Detachment (BU F/371) (Residence 1).



Photograph ESA 4: East of Detachment (BU F/371) (Residence 2).



Photograph ESA 5: South of Detachment (BU F/371).



Photograph ESA 6: West of Detachment (BU F/371).



Photograph ESA 7: Gasoline AST on Detachment property (BU F/371).



Photograph ESA 8: Two propane ASTs on Detachment property (BU F/371).



Photograph ESA 9: Front of Residence 1 (BU F/373 or F/375).



Photograph ESA 10: North of Residence 1 (BU F/373 or F/375).



Photograph ESA 11: East of Residence 1 (BU F/373 or F/375).



Photograph ESA 12: South of Residence 1 (BU F/373 or F/375).



Photograph ESA 13: West of Residence 1 (BU F/373 or F/375).



Photograph ESA 14: AST on Residence 1 (BU F/373 or F/375) property.



Photograph ESA 15: Front of Residence 2 (BU F/373 or F/375).



Photograph ESA 16: AST on Residence 2 (BU F/373 or F/375).



Photograph ESA 17: Front of Residence 3 (right)/Residence 4 (left) duplex (BU F/353).



Photograph ESA 18: North of Residence 3/Residence 4 duplex (BU F/353).



Photograph ESA 19: East of Residence 3/Residence 4 duplex (BU F/353).



Photograph ESA 20: South of Residence 3/Residence 4 duplex (BU F/353).



Photograph ESA 21: West of Residence 3/Residence 4 duplex (BU F/353).



Photograph ESA 22: Front of Residence 5 (BU F/158 or F/160).



Photograph ESA 23: North of Residence 5 (BU F/158 or F/160).



Photograph ESA 24: East of Residence 5 (BU F/158 or F/160).



Photograph ESA 25: South of Residence 5 (BU F/158 or F/160).



Photograph ESA 26: West of Residence 5 (BU F/158 or F/160).



Photograph ESA 27: AST on Residence 5 (BU F/158 or F/160) property.



Photograph ESA 28: Front of Residence 6 (BU F/159).



Photograph ESA 29: North of Residence 6 (BU F/159).



Photograph ESA 30: East of Residence 6 (BU F/159).



Photograph ESA 31: South of Residence 6 (BU F/159).



Photograph ESA 32: West of Residence 6 (BU F/159).



Photograph ESA 33: AST on Residence 6 (BU F/159) property.



Photograph ESA 34: Front of Residence 7 (BU F/158 or F/160).



Photograph ESA 35: Northwest of Residence 7 (BU F/158 or F/160).



Photograph ESA 36: East of Residence 7 (BU F/158 or F/160).



Photograph ESA 37: South of Residence 7 (BU F/158 or F/160).



Photograph ESA 38: Southwest of Residence 7 (BU F/158 or F/160).



Photograph ESA 39: AST on Residence 7 (BU F/158 or F/160) property.



# Appendix D RCMP Environmental Checklists

RCMP Environmental	I Inventory Checklist		
1. General			
Property Manager: LCM ( ?			
Site Name: PCMP Pelican Nacions	Petachnest 10 F0846	DFRP	36834
Detachment Assistant: No admin state	P		
Telephone: 306 632 3300			
Detachment Commander: Staff Surgican	Joe Milburn		
2. Photo Checklist			
A. Outside of Detachment Front of Detachment Well Cover Burn Barrel / Incinerator Septic System Old Storage Tanks and Piping AC Units [manufacturer tags] Adjacent properties	B. Inside of Detachment Halocarbon System(s) Water Treatment System Storage Tanks and Piping Floor Drains A/C Units [manufacturer tags]		
3. Site Visit Inventory			
A1. Adjacent Properties: Current Use of Properties: Current Use of Properties: 2. Recreation 4. Industrial 5. Agricultura	nal 3. Vacant/Open		
(Circle Land Use)	Description (Attach a site sketch that indicates general drainage)		
North 1 2 3 4 5 6 REMP housi	3 & umply lots		
East: 1 2 3 4 5 6 Bush		-	
South, 1 2 3 4 5 (6) Leastern		-	
West: 1 2 3 4 5 6 Bror St,	Day care, garages, houses	-	
B. Buildings and Works On-Site: Number of buildings on-site: 4 \ - details	hmid Date of Construction: ~19805		
Notes: 2 - had		that ~ 1	991

ltem	Storage	Material Safety Data Sheet	Disposal Method	
√Ammunition	locked room			
□ Tear Gas No				
√Pepper Spray	locked in whilet	V 0000		
√Flares	stand in garage			
□ Explosives \\o -	<i>y</i>			
√ Gasoline -	( AST. on front	laun. some jury	cans in garage.	
↓-Burn Barrel Incinerator	burning barrel	out back - no	longer in use (	for burning
<ul> <li>Storage Drums</li> </ul>				for burning exhibit t can + 50
√Z Propane Tanks	2 AST propare	for heating for	Wachnent.	(Mn+52
V. Fuel Storage Tanks	1 AST gasolie	e for vehicle		landfill,
∴ Breathalyzer Ampoules	The state of the s			
∴ Data Master Ethyl Alcohol				
t√Blood Samples	Sometime		- inclinated? -	formough of
t√Sharps	Yes - bishazan	container	- irlinuated? -> - disposed @ Clinic	have du
= Liquid fertilizer No				
Large Quantily of Alcohol	Sonotino		- disposed in sink	
√Drugs	locad in while	it room	- inclineration	
Glycol			100	
CPCBs(transformers/ capacitors/ light ballasts)				
□ Asbestos	potential			4
□ Urea Formaldehyde				-
□ Lead(paint/pipes)	potent a).			_
⊇ Radon Testing No.				-
. Other				

JOL Milburn, RCMP Commards, P.N Sept 24/07

D. Interviews Lorre Thomas, ECMP Sargint, P.N	1 Scr+24107
Is there evidence of underground storage tanks (USTs) on-site?	old suptic tank
Were the UST's removed? 5th or site - no longer used	
When?	
Was there a report? N. A.	
Was there any spill/leak evidence? not VISIDV	
Have the tanks ever been tested for leaks? Un Wour	
2. Is there evidence of aboveground storage tanks (ASTs) on-site?	
When were the ASTs removed? a chic gasoline.	x57
Was there a report? NIA 2 - proport	TZK
Was there any split/leak evidence?	
Have the tanks ever been tested for leaks? gasol n AST W/ tha	n Zyrs old.
3. Is there evidence of barrels or drums on-site?	formuly used
How long has the barrel been in use?	
What items are stored in the drum? The for inclined to no	no longer used.
4. Is there other evidence in records or other materials collected that o	cause concern?
No	
5. Is there evidence of environmental hazards on adjacent sites?	Vo-
Describe:	
Locate the hazard on the site sketch.	
is the hazard up slope or down slope of the detachment?	

. Is there a history of environmental proble	ems in the area? No flooding
.g. Flooding?	0
What is the source of Potable Water?	Drinking water - bottled eater
Municipal	VINCING WATER BOTTLE CO
Orilled Well - what type   Bottled Water (Store bought / Filled from other source)	Coolers
	00000
Dug Wall Other:	
Method of Payment for Bottled water	
ocation of well:	on site
Description of water treatment on site. No V	wall triatment on site
Complaints from occupants (aesthetic, odour, fixtures, etc	ic): Spring +fall runost from lake
Date 3 result of last water test: 10+ 10	past 2 years
8. What is the system of Domestic Waste?	
D Septic - Old siphic tanks in	tront
Location of Septic Bed: \amma_m \cap \int 0	lorger in use
Date of last pumping:	U.
Other notes:	
9. What current options are available for So	Solid Waste?
J. Times Satisfies Springer	Municipality (FUXIII)
Detachment	Municipality
VRegular Waste	
☐ Refundable Recycling ☐ Recycling (plastics, paper_cardboard, etc.)	- no reageling service
El Compost (organics)	U
© Batteries	

E.	Storage Tanks
1.	Is there an Emergency Generator on-site?  YES: NO: G  Fuel Battery Operated
Wh ii It Ind	nere a Maintenance or Test Log?  A 2  at is the last log date and result?  W A  uel generated  Graph to the generator  mplete a Storage Tank Data Sheet and take photos.
۴.	ENVIRONMENTAL ASSESSMENT INFORMATION
ادر ۱۱۱ ســــ	Is the property located on or close to any ecologically sensitive areas (ie: wetlands, flood lains, scenic areas, National or Provincial Parks, etc.)?  YES: UND YES: NO YES: UND YES:
SI	Does the site have storm sewers to handle drainage or does it rely on surface run-off?  term sewers YES: NO: V Surface run-off YES: NO: 0  Paved surfaces  Ditches (direction of drainage)  storm water drains and manholes
	. Is there visual evidence of vegetative stress on-site? YES: □ NO: ▼ YES, describe:
5	5. Is there visual evidence of local fauna on-site? YES, describe (ie: nests, feeding routes, etc.):

G. ADDITIONAL COMMENTS / POTENTIAL ENVIRONMENTAL CONCERNS:

ANK INVENTORY INFORM	Tank 1	Tank 2	Tank 3	Tank 4
ank Information	Tellik 1			
LC NO.				
Pi Standard Number				
Description (i.e. Main heating oil tank, teating oil day tank. Main fiesell tank, Generator day ank, Regulated gasoline ank, Non-regulated gasoline tank)	Gasoline AST (velvicle fee) smal No 100 H20	propore AST sunal# 30096A (D fant)	evopare AST.  Senial #  30000A  (1) fant	
Location	front lown	back laur		□ Yes
is Tank Reportable (AST >= 2500 L or UST)?	GYes 72500L	⊒ Yes ⊒ No	□ Yes □ No	□ No
EC Tag ID (if Tank is reportable)				V
Is Tank located within 350 in preperty line?	t/Yes □ No	of Yes □ No	ØYes □ No	G No
is Tank Reportable (E2) (Propane Tank Size greater or equal to 9200 L)?	a Yes ⊈No	© Yes IVNo	€ No ⊐ Yes	∃ Yes ∋ No
E2 Plan available?	□ Yes □ No	□ Yes □ No	© Yes © No	a Yes a No
Has the E2 plan Tested/Exercised annually? (If applicable)	on: (Date)	□ Yes - last done on: (Date)	D Yes - last done on:(Date) D No	☐ Yes - last done on: (Date) ☐ No
Status		s∕Active □ Inactive □ Disposed □ Unknown	☑ Active ☐ Inactive ☐ Disposed ☐ Unknown	□ Active □ Inactive □ Disposed □ Unknown
is a site visit required to further inspect the tank?	by:(Date)	☐ Yes by: (Date) by No	O Yes by: (Date)	□ Yes by: (Date) □ No
is the lank part of a lank system?	□ Yes √No		g/Yes D No	a Yes a No
Year of Installation	Co yes old	unlinour	J. Brown	
Year of Disposal	active	activi	a chiu	
Manufacturer	Northern Stell	WWHITH FALB		
Manufacture Date	2005	1191	1991	
Tank Size (L)	\$ 650ma	Ø 40.5°	\$ 40.5"	
Capacity (L)	100001	134 43/3.8	V3 137 643.	

Sural # 100420. 37652

uel Type	n Aviation Fuel o Bitumen □ Bunker-C □ Diesel □ Ethanol □ Glycol □ Heating Oil □ Korosene □ Natural Gas □ Organic Chemicals □ Other □ Propane Q/Unleaded Gasoline □ Waste Oil	n Aviation Fuel D Bitumen D Bunker-C D Diesel D Ethanol D Heating Oil D Kerosene D Natural Gas D Organic Chemicals D Other: D Propane D Unleaded Gasoline D Waste Oil	□ Aviation Fuel □ Bilumen □ Bunker-C □ Diesel □ Ethanol □ Glycol □ Heating Oil □ Kerosene □ Natural Gas □ Organic Chemicals □ Other: □ Propane □ Unleaded Gasoline □ Waste Oil	D Aviation Fuel D Bitumen D Bunker-C Diesel E thanol D Glycol D Heating Oil D Kerosone L Natural Gas D Organic Chemicals Other: D Propane D Unleaded Gasoline D Waste Oil
Fank Construction				
Construction	D Single Wall  ✓ Double Wall  □ Unknown	ซ์ Single Wall อ Double Wall อ Unknown	ാ gingle Wall ാ Double Wall ാ Unknown	□ Single Wall □ Double Wall □ Unknown
Material	☐ Aluminum ☐ Concrete ☐ Composite ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass Reinforced Plastic (FRP) ☐ Rubber ☑ Steel ☐ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner and steel outer ☐ Stainless Steel ☐ Other	☐ Aluminum ☐ Concrete ☐ Concrete ☐ Composite ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass Reinforced Plastic (FRP) ☐ Rubber ৺ Steel ☐ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner and steel outer ☐ Stainless Steel	□ Aluminum □ Concrete □ Concrete □ Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	G Aluminum G Concrete Goncrete-Steel Composite Fiberglass Fiberglass Fiberglass Ginforced Plastic (FRP) Rubber Gistel Gunknown Gistel Fiberglass Ginforced Plastic (FRP) Rubber Gistel Gunknown Gistel Ginforced Gistel
Placement	□ Aboveground- Verlical V Aboveground- Horizontal □ Underground □ Other:	□ Aboveground- Vertical ☑ Aboveground- Horizontal □ Underground □ Other:	□ Aboveground- Vertical ☑ Aboveground- Horizontal □ Underground □ Other:	⊕ Aboveground- Vertical ⊕ Aboveground- Horizontal ⊕ Underground ⊕ Other:
Tank Cathodic Protection				
Tank Corrosion Protection	Paint Coating None Other	sy∕Paint □ Coating □ None □ Other:	☑ Paint □ Coating □ None □ Other:	D Paint D Coating D None D Other:
Tank Platform	√ Concrete Pad □ Earth/Soil □ Gravet (raised or levet) □ Inside building □ Wood □ Other:	□ Concrete Pad. □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	er∕Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:
Traffic Protection  Stell Politics	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reintorced fence ☐ Guardrail ☐ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☑ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:

to several water bodayard

Leak/Spill Evidence	None Unknown Staining Spill report Interview Odour Other:	None Unknown Staining Spill report Interview Odour Other:		D None Unknown D Staining C Spill report Interview D Odour D Other:
Tank Secondary Containment	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault ▼ Double-walled tank □ Steel tray □ Other:	yNone □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	☐ Unknown ☐ Steel Reservoir ☐ Soil embankment ☐ Concrete embankment ☐ Steel embankment ☐ Soil embankment ☐ Soil embankment with impermeable liner ☐ Concrete embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Vauit ☐ Double-walled tank ☐ Steel tray ☐ Other: ☐ Unknown	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:
Tank Leak Detection	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass ▼ Unknown □ Vacuum Floor □ Other:	Mone/Visual inspection Dispection	byNone/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:
Tank Overfill Protection	D.None Unknown D.Alarm only Alarm only Alarm with pump interlock D. Level gauge D. Mechanical Shut-off D. Vent float shut-off Audible alarm Including vent D. Audible and visual alarm D. Level gauge with audible alarm D. Spill box D. Vent Float Shut-off(audible) D. Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible)	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent float □ Vent float Shyt-off(audible)	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:

premur ganges

ast Tank Leak Test Date				- 0.5
ent Pipe Diameter	0.5 0.75 0.75 0.1 0.1.25 0.1.5 1.75 0.2 (gullo) 0.2.5 0.3 0.4 Assorted sizes	□ 0.5 □ 0.75 □ 1 □ 1.25 □ 1.5 □ 1.75 □ 2 □ 2.5 □ 3 □ Assorted sizes	0.5 0.75 51 0.1.25 0.1.75 0.2 0.2.5 0.3 0.2.5 0.3 0.3 Assorted sizes	□ 0.5 □ 0.75 □ 1 □ 1.25 □ 1.5 □ 1.75 □ 2 □ 2.5 □ 3 □ Assorted sizes
VOC Control	□ None □ Unknown □ Vapour Return Line □ Other:	□ None _erUnknown □ Vapour Relurn Line □ Other:	☐ None  ☐ Unknown  ☐ Vapour Return  Line  ☐ Other:	□ None □ Unknown □ Vapour Return Line □ Other:
PIPING				
Description				
Matenal	□ Unknown  Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper tubing □ Steel (pare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Envirollex/Bufflex □ Galvanized steel  □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper c Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, lar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black fron □ Rubber □ Enviroftex/Bufflex □ Steel and copper tubing □ Steel (painted, wrapped, tar coated) □ Other:
Secondary Containment	D N/A D None Unknown D Drip tray D Sump Other:	□ N/A None □ Unknown □ Drip Iray □ Sump □ Other:	D N/A None Unknown Drip tray Sump Other:	C N/A  None  Unknown  Drip tray  Sump  Other:
Placement	□ N/A  □ Aboveground □ Underground □ Aboveground and Underground □ Underground □ Unknown	☐ N/A ☐ Aboveground ☐ Underground ☐ Aboveground and Underground ☐ Unknown	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	☐ N/A ☐ Aboveground ☐ Underground ☐ Aboveground ☐ Aboveground Underground ☐ Unknown
Piping Corrosion Protection	Paint Coaling None Other:	© Paint □ Coating  Vione □ Other:	☐ Paint☐ Coating☐ None☐ Other:	G Paint G Coating G None C Other:
Promy Cathodic Protection				
Manufacturer	7. same?			1

unknown

		_		
Piping Leak Detection	□ None/Visual Inspection  ∪ Unknown  □ N/A  □ Interstitial Leak Detection  □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ Mone/Visual Inspection □ Unknown ↑ MOM □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	Inspection  Unknown  N/A  Inspection  N/A  Inspection  Monitoring Wells  Sump Alarm  Sump Visual  Other:	□ Nonc/Visual Inspection □ Unknown □ N/A □ Interctitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:
ast Piping Leak Test Date	Nort			
Pump(s)				ļ
Эшпр Туре	C None C Unknown C Transfer Delivery Dispenser Heating Oil Suction Pump Dispenser system Suction Pump Aboveground Tank Pressure Pump Suction type Other: A Grant	☐ None ☐ Unknown ☐ Transfer ☐ Delivery ☐ Dispenser ☐ Heating Oil ─ Suction Pump ☐ Dispenser system ─ Suction Pump ☐ Aboveground ☐ Tank Pressure Pump ☐ Suction type ☐ Other:	Unknown Unknown Transfer Delivery Dispenser Heating Oil - Suction Pump Dispenser system Suction Pump Aboveground Tank Pressure Pump Suction type Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil Suction Pump □ Dispenser system □ Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:
Pump Secondary Containment				□ None/Visual
Pump Leak Detection	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ W/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	Inspection  Unknown  N/A  Drip Tray  Alarm  Monitoring Wells  Sump Alarm  Sump Visual
Pump Manufacturer	Tut - Hill Transfe	//		
Other	Systems.			
Potential Site Sensitivities				-
Proximity of Site Sensitivities				
If of Monitor wells (total)	None visible			
Number of monitoring wells within 3m of Tank	More visible		>	
SECURITY				
Tank Enclosure	None	None -		
Enclosure Locked	NIA			
Fili Pipe Locked	VV).	No		

b pad lock on pump laispensir system.

Compliance				
	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ Tank least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from building	□ Piping not equipped with flexible compection  ☑ No protection from physical damage  □ Tank not labelled  □ No ULC tag  □ At least one fire extinguisher not located in vicinity of pump  □ No posted safety signs  □ Hose/connectors not ULC approved  □ Vent less than 3.5 m above adjacent ground level  □ Vent less than 1.5 m from any building openings  □ Tank less than 3m from overhead power lines  □ Tank less than 3m from property line  □ Tank less than 3m from property line  □ Tank less than 3m from property line  □ Tank less than 3m from building	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from building	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3. m above adjacent ground level □ Vent less than 1. m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property lin

The second secon
is Spacing between
tanks less than 1m
a Tank located less
than 6m from
liquefied petroleum
gas cylinders
c Inadequate fire
department access
Tank supports no
on firm foundations
□ Tank not
equipped with
nominal and
emergency venting
□ Valves not made
of steel
Di Secondary
containment less
than 110% of tank
capacity
© Secondary
containment wall les
than 1.5m from
storage lank shell
© Pump less than
3m from property lin
C Pump less than
1.5m from building
openings
□ No anti-siphon
device
a Piping not
adequately support
Incorrect piping
for application
<ul> <li>Not tagged with</li> </ul>
CPPI colour code
system
No shut-off valv
a No level gauge
tank
Ulnadequate
access to tank or
piping
Dangerous
objects/debris near
□ Signs of
material/paint
deterioration
U U
Dyke/embankmeni
design is incorrect
application
□ Piping not
properly labelled
a No fire valve(s)
andiana

appliance

1	<ul> <li>Spacing between</li> </ul>
	tanks less than 1m
s	Tank located less
	than 6m from
	liquefied petroleum
	gas cylinders
	ು Inadequate fire
55	department access
ot	on firm foundations
	© Tank not
	equipped with
1	nominal and
	emergency venting
3	Valves not made
	of steel
	io Secondary
	containment less
	than 110% of tank
	capacity
	<ul> <li>Secondary containment wall less</li> </ul>
SS	than 1.5m from
	storage tank shell
	☐ Pump less than
ne	3m from property line
	□ Pump less than
	1.5m from building
	openings
	□ No anti-siphon
	device
ed	a Piping not adequately supported
eu	☐ Incorrect piping
	for application
	D Not tagged with
	CPPI colour code
	system
es	☐ No shut-off valves
on	n No level gauge on
	tank
	n Inadequate access to tank or
	piping
	n Dangerous
by	objects/debris nearby
16	□ Signs of
	material/paint
	deterioration
	_ 0
t,	Dyke/embankment
for	design is incorrect for
	application  B Piping not
	properly labelled
at	□ No fire valve(s) at
	appliance

acing between □ Spacing between tanks less than 1m less than 1m nk located less □ Tank located less than 6m from im from ed petroleum liquefied petroleum gas cylinders dinders idequate fire ☐ Inadequate fire department access ment access □ Tank supports not nk supports not on firm foundations m foundations □ Tank not ank not equipped with ped with al and nominal and emergency venting gency venting □ Valves not made lves not made of steel condary n Secondary containment less inment less 10% of lank capacity city ri Secondary condary inment wall less than 1.5m from 1.5m from ge tank shell ımp less than om property line ump less than frem building openings ings o anti-siphon device Piping not iping not uately supported correct piping pplication for application ot tagged with colour code system lo shut-off valves lo level gauge on tank adequate ss to tank or piping angerous cts/debris nearby

than 110% of tank than 110% of tank capacity □ Secondary containment wall less containment wall less than 1.5m from storage tank shell storage tank shell a Pump less than ☐ Pump less than 3m from property line 3m from property line a Pump less than d Pump less than 1.5m from building 1.5m from building openings □ No anti-siphon □ No anti-siphon device a Piping not adequately supported adequately supported a Incorrect piping a Incorrect piping for application a Not tagged with ☐ Not tagged with CPPI colour code CPPI colour code system ☐ No shut-off valves □ No shut-off valves D No level gauge on o No level gauge on tank □ Inadequate □ Inadequate access to tank or access to tank or piping O Dangerous □ Dangerous objects/debris nearby objects/debris nearby □ Signs of □ Signs of material/paint material/paint deterioration deterioration Dyke/embankment Dyke/embankment design is incorrect for design is incorrect for application application D Piping not a Piping not properly labelled properly labelled □ No fire valve(s) at U No fire valve(s) at appliance appliance

☐ Spacing between

a Tank located less

tanks less than 1m

liquefied petroleum

c Inadequate fire

department access

on firm foundations

emergency venting

a Valves not made

Tank supports not

than 6m from

gas cylinders

C Tank not

equipped with

o Secondary

containment less

nominal and

of steel

peratornament.

Halocarbo	in Inventory (TAK	Halocarbon Inventory (TAKE PHOTO OF A/C TAG)	TAG)						
Room	Equipment	Equipment Description	Manufacturer & Date	Installation Date	Model / Senal #	Capacity (btu/hr. tonnes, kW/)	ODS Type	Leg Book Present?	Total Ouantity ODS
lanch	W.000.12		Glacing	Chaman	m. (11/ C1	namon	87212	No	Unthrow
Jund	ferdae		or boods	Manon	conditions thouse to	Carporday.	61340	2	60
bodoing som	deve Seeze		5,0000	2001 -	o logs visible	MANGO		~	- moranger
thror	Kridg.		11/2000 J.	Unhinos	M. VIZ UPE	Mosey W.	K1349	2	1758
Lundh	rochin.		Piret - Narso	un lugar	m: Duce 108M/99-6	(1987/s)	5	2 -	Monda
oution	contral A (C		01564	Jaken	tag not accessible.	unlandura	227	200	Leberar

Determine if A/C units are greater than 19kW (5.5 tonnes or 65,000 btu/hr)

Record all tag information from refrigerators, freezers and water coolers Note if coolant system is in good shape (lines not rusted or leaking)

Who services this equipment(conted number)?

Have there been disposals?

Are there service/tes/disposal files(get copies)? Y/N

RCMP Environments	al Inventory Checklist	-
1. General		-
Property Manager: CCMP Housing ?		
Sile Name: RCMP Pelican Marrows	Residence D - Bot detachment.	Oof RZ
Detachment Assistant: No admin staft		DFRP 36834
Telephone: 300 632 3300		
Detachment Commander: Staff Sergea	nt Joe Milburn	
2. Photo Checklist		_
A. Outside of Detachment Front of Detachment Well Cover Burn Barrel / Incinerator Septic System Storage Tanks and Piping AvC Units (manufacturer tags) Adjacent properties	B. Inside of Detachment Halocarbon System(s) Water Treatment System Storage Tanks and Piping Floor Drains NC Units [manufacturer tags] N 140	
3. Site Visit Inventory		_
A1. Adjacent Properties: Current Use of Properties: Current Use of Properties: 2. Recreation 4. Industrial 5. Agricultum	Ulidi 6. Palama a pam	
(Circle Land Use)	Description (Attach a site sketch that indicates general drainage)	
North: 1 2 3 4 5 6		_
East: 1 2 3 4 5 6	ce detachment	_
South: 1 2 3 4 5 6		
West:: 1 2 3 4 5 6		
B. Buildings and Works On-Site: Number of buildings on-site:	Date of Construction: ~ \991	
Notes: 1- sh		

Item	Storage	Material Safety Data Sheet	Disposal Method
Ammunition			
Tear Gas			
Pepper Spray			
Flures			
Explosives			
Gasoline	sury can - sh	1 X HOL	
Burn Barrel Incinerator	, ,		
Storage Drums			
Propane Tanks	1 AST propa	we for heat.	
: Fuel Storage Tanks			
Breathalyzer Ampoules			
: Data Master Ethyl Icohol			and the second s
Blood Samples			
⊒ Sharps			
: Liquid fertilizer			
E Large Quantity of Icohol			
_ Drugs			
ਤ Glycol			
⊏PCBs(transformers/ capacitors/ light ballasts)			
:: Asbestos	(potential)		
□ Urea Formaldehyde	(potential)		The second secon
□ Lead(paint/pipes)	(potential)		
⊒ Radon Testing			
. Other:			

Const Ryan Burns RCMP member, PN. Sept 24/07

D. Interviews Lorne Thomas, RCMP Sargint, F.	N. Sept 24 107
I. Is there evidence of underground storage tanks (USTs) on-site?  Vere the USTs removed?	No
When?  Was there a report?  Was there any spill/leak evidence?  Have the tanks ever been tested for leaks?	
P. Is there evidence of aboveground storage tanks (ASTs) on-site? When were the ASTs removed?  Was there a report?  Was there any spill/leak evidence?  Here the tanks ever been tested for leaks?	propane AST
3. Is there evidence of barrels or drums on-site?  How long has the barrel been in use?  What items are stored in the drum?	
4. Is there other evidence in records or other materials collected th	hat cause concern?
5. Is there evidence of environmental hazards on adjacent sites?  Describe:  Locate the hazard on the site sketch.	ful AST- Detacho Very new, no bake.
Is the hazard up slope or down slope of the detachment?  down slope of house K1	

. Is there a history of environmental problems	in the area?	
.g. Flooding?	No.	
What is the source of Potable Water? Municipal Orilled Well - what type Bottled Water (Store bought / Filled from other source) Oug Well Other:	Driving water both	led water
viethod of Payment for Bottled water:		
Description of water treatment on site:		
Complaints from occupants (aesthetic, odour, fixtures, etc.):	Ns.	
8. What is the system of Domestic Waste?  What is the System of Domestic Waste?  Septic	perenne some s	ystan
Location of Septic Bed:		
Date of last pumping:		
Other notes:		
9. What current options are available for Solid	Waste?	arbaar
Detachment	Municipality Reserve of Collection	portough
**Regular Waste	a collection.	
☐ Refundable Recycling ☐ Recycling (plastics, paper, cardboard, etc.)		
Recycling (plastics, paper cardiboard, etc.)     Compost (organics)	ho recyc	(ing
D Batteries	n // // //	0

. Storage Tanks	
. Is there an Emergency Gen	erator on-site? YES: 3 NO: V
	Fuel / Battery Operated
s there a Maintenance or Test I ng? What is the last log date and result? I fuel generated Indicate if the tank is connected to the g	
F. ENVIRONMENTAL ASSESS	
Is the property located on oplains, scenic areas, National (LYES, describe and provide location:	or close to any ecologically sensitive areas (ie: wetlands, flood or Provincial Parks, etc.)? YES: O NO: 📝
2. Is surface water located will YES, describe (le: welland, pond, rive	ithin 30m of the project site: YES: U NO: V
2. Is surface water located will YES, describe (ie: welland, pend, rive)  3. Does the site have storm some storm sewers YES; NO: Locate.  Paved surfaces  Ditches (direction of drainage)	sewers to handle drainage or does it rely on surface run-off?  Surface run-off YES: V NO: 0
2. Is surface water located will YES, describe (ie: wetland, pond, rive)  3. Does the site have storm some storm sewers YES; C NO: Locate.  Paved surfaces  Ditches (direction of drainage)	sewers to handle drainage or does it rely on surface run-off?  Surface run-off YES: V NO: 0

8 5

G. ADDITIONAL COMMENTS / POTENTIAL ENVIRONMENTAL CONCERNS: NO

ANK INVENTORY INFORM	Tank 1	Tank 2	Tank 3	Tank 4
ank Information	i dilk i			
LC NO.				
Pi Standard Number				
Description (i.e. Main heating oil tank, teating oil day tank. Main feesel tank, Generator day ferk, Regulated gasoline ank, Non-regulated pasoline tank)	erral & N4152			
Location				
is Tank Reportable (AST >= 2500 L or UST)?	⊂ Yes ▼No	a Yes a No	□ Yes □ No	□ Yes □ No
EC Tag ID (if Tank is reportable)			Security and the land of the l	
Is Tank located within 350 m property line?	√. Yes ∴ No	o Yes J No	a Yes a No	⊔ Yes □ No
is Tank Reportable (E2) (Propane Tank Size greater or equal to 9200 U/7	⊒ Yes ⊽/No	∟ Yes □ No	⊃ Yes □ No	⊃ Yes ⊃ No
E2 Plan available?	□ Yes □ No	□ Yes □ No	© Yes	D Yes D No
Has the E2 plan Tested/Exercised annually? (If applicable)	c Yes - last done on:	□ Yes - last done on: (Date) □ No	□ Yes - last done on: (Date) □ No	☐ Yes - last done on: (Date) ☐ No
Stalus	Active Ginactive Disposed Ginknown	D Active D Inactive D Disposed D Unknown	a Active a Inactive a Disposed a Unknown	□ Active □ Inactive □ Disposed □ Unknown
Is a site visit required to further inspect the tank?	by: (Date)	□ Yes by: (Date) □ No	□ Yes by: (Date) □ No	o Yes by: (Date) □ No
is the tank part of a tank system?	a Yes	G Yes □ No	a Yes a No	□ Yes □ No
Year of Installation	nowalnu			
Year of Disposal	active			
Manufacturer	pristere posto			
Manufacture Date	1973			
Tank Size (U)				
Capacity (L)	1000 USG	545-20-40-40-40-40-40-40-40-40-40-40-40-40-40		

uel Type	☐ Aviation Fuel ☐ Bilumen ☐ Bunker-C ☐ Diesel ☐ Ethanol ☐ Glycol ☐ Heating Oil ☐ Kerosene ☐ Natural Gas ☐ Organic Chemicals ☐ Other: ☑ Propane ☐ Unleaded Gasoline ☐ Waste Oil	B Aviation Fuel Bitumen Bunker-C Diesel Clipical	□ Aviation Fuel □ Bitumen □ Bunker-C □ Diesel □ Ethanol □ Glycol □ Heating Oil □ Kerosene □ Natural Gas □ Organic Chemicals □ Other: □ Propane □ Unleaded Gasoline □ Waste Oil	Distriction Fuel Distriction D
Fank Construction		er Cincle Mall	□ Single Wall	☐ Single Wall
Construction	≅ Single Wall □ Double Wall □ Unknown	☐ Single Wall ☐ Double Wall ☐ Unknown	□ Double Wall □ Unknown	☐ Double Wall ☐ Unknown
Material	□ Aluminum □ Concrete □ Composite □ Fiburglass □ Fiburglass □ Fiburglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubbel □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete-Steel Composite □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete □ Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other
Placement	□ Aboveground- Vertical	a Aboveground- Vertical a Aboveground- Horizontal a Underground a Other:	□ Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:	□ Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:
Tank Cathodic Protection				e Datal
Tank Corresion Protection	Paint Disconting Disco	□ Paint □ Coating □ None □ Other:	□ Paint □ Coating □ None □ Other:	☐ Paint ☐ Coating ☐ None ☐ Other:
Tank Platform Concrule blocks for 1195-	© Concrete Pad  © Earth/Soil  © Gravel (reised or level)  □ Inside building  □ Wood  □ Other:	☐ Concrete Pad. ☐ Earth/Soil ☐ Gravet (raised or level) ☐ Inside building ☐ Wood ☐ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:
Frallic Protection Fraud with with with with with with with with	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	D None D Unknown Steel bollards L 100 mm curb Reinforced fence G Guardrail Other:

Leak/Spill Evidence	DNone D Unknown Staining Spill report Interview Odour Other:	a None b Unknown Staining c Spill report d Interview d Odour D Other:	□ None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	D None D Unknown D Staining D Spill report D Interview D Odour D Other:
Tank Secondary Containment	☐ Vinknown ☐ Steel Reservoir ☐ Soil embankment ☐ Concrete embankment ☐ Steel embankment ☐ Soil embankment with impermeable liner ☐ Concrete embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Vault ☐ Double-walled tank ☐ Steel tray ☐ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel concrete embankment with impermeable liner □ Steel □ Vault □ Double-walled lank □ Steel tray □ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel Embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment vith impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Yault □ Double-walled tank □ Steel tray □ Other:
Tank Leak Detection  Prins Art  gaugh	None/Visual Inspection  Automatic Tank Gauge Interstitial Leak Detection Monitoring Wells Portable Detector Precision Leak Test Site glass Unknown Vacuum Floor	D None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:
Tank Overfill Protection	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:

ISI Tarik Leak Test Duto			□ 0.5	□ 0.5
OC Control	E 0.5 D 0.75 U 1 U 1.25 E 1.5 D 1.75 U 2.5 D 3 D Assorted sizes	0.5 0.75 0.1 0.1.25 0.1.5 0.1.75 0.2 0.2.5 0.3 0.Assorted sizes	0.75 0.1 0.1.25 0.1.5 0.1.75 0.2 0.2.5 0.3 0.1.75	© 0,75 ☐ 1 ☐ 1.25 ☐ 1.5 ☐ 1.75 ☐ 2 ☐ 2.5 ☐ 3 ☐ Assorted sizes ☐ None ☐ Unknown
OC Control	Unknown  Vapour Return Line Other:	u Unknown u Vapour Relum Line u Other:	© Unknown © Vapour Return Line © Other:	© Vapour Return Line © Other:
PIPING			-	- Company of the Comp
Description Malenal	2 Unknown 2 Steel 5 Fiberglass	a Unknown a Steel a Fiberglass a Fiberglass	□ Unknown □ Steel □ Fiberglass □ Fiberglass	to Unknown to Steel to Fiberglass to Fiberglass
	□ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubling □ Steet (bare) □ Steet (painted, wrapped, tar coated) □ Other:	reinforces plastic (FRP)  Copper Brass Black Iron Rubber Calvanized steel Steel and copper tubing Steel (bare) Steel (painted, wrapped, tar coated) Other:	reinforces plastic (FRP)  Copper Brass Black Iron Rubber Enviroflex/Bufflex Galyanized steel Steel and copper Steel with copper tubing Steel (bare) Steel (painted, wrapped, tar coaled)	reinforces plastic (FRP)  □ Copper  □ Brass  □ Black fron  □ Rubber  □ Enviroffex/Bufflex  □ Galvanized steel  □ Steel and copper  □ Steel with copper tubing  □ Steel (bare)  □ Steel (painted, wrapped, tar coated)  □ Other:
Secondary Containment	D N/A None Unknown Dorip tray Sump Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	O N/A O None O Unknown O Drip tray Sump O Other:	E N/A E None E Unknown Drip tray Sump Other:
Placement	☐ N/A ☐ Aboveground ☐ Underground ☐ Aboveground and Underground ☐ Underground ☐ Unknown	E N/A  Discrepance Discrepance Aboveground and Underground Underground Underground	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	E N/A  B Aboveground  B Underground  K Aboveground and  Underground  Underground
Piping Corrosion Protection	D Paint Coating D None D Other:	© Paint ☐ Coaling ☐ None ☐ Other:	□ Paint □ Coating □ None □ Other:	© Paint © Coating © None © Other:
Promy Cathedic Protection				
Manufacturer	) <sub>.</sub>		İ	1

Piping Leak Detection	√None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	☐ None/Visual Inspection ☐ Unknown ☐ N/A ☐ Interstitial Leak Detection ☐ Monitoring Wells ☐ Sump Alarm ☐ Sump Visual ☐ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	G None/Visual Inspection G Unknown D N/A Interstitial Leak Detection G Monitoring Wells G Sump Alarm G Sump Visual G Other:
ast Piping Leak Test Date	unknown			
ump(s)				□ None
Pump Type	☐ None ☐ Unknown ☐ Transfer ☐ Delivery ☐ Dispenser ☐ Heating Oil - Suction Pump ☐ Dispenser system - Suction Pump ☐ Aboveground Tank Pressure Pump ☐ Suction type ☐ Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	n Unknown U Transfer Delivery Dispenser Heating Oil Suction Pump Dispenser system Suction Pump Aboveground Tank Pressure Pump U Suction lype Other:
Pump Secondary Containment				
Pump Leak Detection	☐ None/Visual Inspection ☐ Unknown ☐ N/A ☐ Drip Tray ☐ Alarm ☐ Monitoring Wells ☐ Sump Alarm ☐ Sump Visual ☐ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Orip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:
Pump Manufacturer				
Other				
Potential Site Sensitivities				
Proximity of Site Sensitivities				
# of Monitor wells (total)				
Number of monitoring wells within 3m of Tank				
SECURITY				
Tank Enclosure	fenual within			
Enclosure Locked	backeyard			
Fill Pipe Locked		The state of the s		

electric heath under north.

Compliance	☐ Piping not equipped with flexible connection ☐ No protection from physical	☐ Piping not equipped with flexible connection ☐ No protection from physical	☐ Piping not equipped with flexible connection ☐ No protection from physical	□ Piping not     aquipped with flexible     connection     □ No protection     from physical
	damage  □ Tank not labelled  □ No ULC tag  □ At least one fire extinguisher not located in vicinity of pump  □ No posted safety signs  □ Hose/connectors not ULC approved  □ Vent less than 3.5 m above adjacent ground level  □ Vent less than 1.5 m from any building openings  □ Tank less than 3m from overhead power lines  ▼ Tank less than 3m from property line  □ Tank less than 3m from building	damage  Tank not labelled  No ULC tag  At least one fire extinguisher not located in vicinity of pump  No posted safety signs  Hose/connectors not ULC approved  Vent less than 3.5 m above adjacent ground level  Vent less than 1.5 m from any building openings  Tank less than 3m from overhead power lines  Tank less than 3m from property line  Tank less than 3m from property line  Tank less than 3m from property line	damage  Tank not labelled  No ULC tag  At least one fire extinguisher not located in vicinity of pump  No posted safety signs  Hose/connectors not ULC approved  Vent less than 3.5 m above adjacent ground level  Vent less than 1.5 m from any building openings  Tank less than 3m from overhead power lines  Tank less than 3m from property line Tank less than 3m from property line Tank less than 3m from building	damage  Tank not labelled  No ULC tag  At least one fire extinguisher not located in vicinity of pump  No posted safety signs  Hose/connectors not ULC approved  Vent less than 3.5 m above adjacent ground level  Vent less than 1.5 m from any building openings  Tank less than 3m from overhead power lines  Tank less than 3m from property line  Tank less than 3m from property line  Tank less than 3m from building

1	D Spacing between
ta	inks less than 1m
	Tank located less
l ti	nan 6m from
	quefied petroleum
	as cylinders
9	□ Inadequate fire
	epartment access
G	Tank supports no
-	n firm foundations
C.	
	E Tank not
	equipped with
	nominal and
€	emergency venting
	□ Valves not made
(	of steel
	<ul> <li>Secondary</li> </ul>
(	containment less
	han 110% of tank
	capacity
1	☐ Secondary
1	containment wall le
	than 1.5m from
	storage tank shell
	□ Pump less than
	3m from property li
	□ Pump less than
	1.5m from building
	openings
	⇒ No anti-siphon
	device
	a Piping not
	adequately support
1	☐ Incorrect piping
1	for application
	○ Not tagged with
1	CPPI colour code
	system
-	□ No shut-off valv
1	
1	☐ No level gauge
1	tank
1	□ Inadequate
1	access to tank or
1	piping
	Dangerous
1	objects/debris nea
	⇒ Signs of
	material/paint
ļ	deterioration
i	O
1	Dyke/embankmen
-	decien in incorrect

a Spacing between inks less than 1m at Tank located less than 1m and 6m from quefied petroleum as cylinders a that county in the transports not a firm foundations are tank not quipped with cominal and amergency venting	○ Spacing between tanks tess than 1m □ Tank located less than 6m from liquefied petroleum gas cylinders □ Inadequate fire department access □ Tank supports not on tirm foundations □ Tank not equipped with nominal and emergency venting
□ Valves not made	□ Valves not made
of steel	of steel  D Secondary
Secondary containment less	containment less
han 110% of tank	than 110% of lank
capacity	capacity
□ Secondary	: Secondary
containment wall less	containment wall less
han 1.5m from	than 1.5m from
storage tank shell	storage tank shell Pump less than
© Pump less than 3m from property line	3m from property line
□ Pump less than	□ Pump less than
1.5m from building	1.5m from building
openings	openings
⊃ No anti-siphon	☐ No anti-siphon
device	device © Piping not
a Piping not adequately supported	adequately supported
□ Incorrect piping	□ Incorrect piping
for application	for application
<ul> <li>Not tagged with</li> </ul>	<ul> <li>Not tagged with</li> </ul>
CPPI colour code	CPPI colour code
system	system  No shut-off valves
☐ No shut-off valves ☐ No level gauge on	© No level gauge on
tank	tank
□ Inadequate	n Inadequate
access to tank or	access to tank or
piping	piping
:: Dangerous	objects/debris nearby
objects/debris nearby ⇒ Signs of	D Signs of
material/paint	material/paint
deterioration	deterioration
	D to tomber the series
Dyke/embankment	Dyke/embankment
design is incorrect for	design is incorrect for application
application Diping not	□ Piping not
properly labelled	properly labelled
a No fire valve(s) at	□ No fire valve(s) at
appliance	appliance

Spacing between	□ Spacing betw
ks less than 1m	tanks less than 1
Tank located less	☐ Tank located
n 6m from	than 6m from
refied petroleum	liquefied petroleu
s cylinders	gas cylinders
Inadequate fire	□ Inadequate fi
partment access	department acce
Tank supports not	☐ Tank support
firm foundations	on firm foundation
Tank not	□ Tank not
uipped with	equipped with
minal and	nominal and
nergency venting	emergency vent
Valves not made	□ Valves not m
steei	of steel
Secondary	□ Secondary
ntainment less	containment les
an 110% of lank	than 110% of ta
pacity	capacity
Secondary	□ Secondary
intainment wall less	containment wo
an 1.5m from	than 1.5m from
orage tank shell	storage tank sh
Pump less than	a Pump less t
n from property line	3m from proper
7 Pump less than	Pump less t
5m from building	1.5m from build
penings	openings
■ No anti-siphon	□ No anti-siph
evice	device
Piping not	<ul> <li>Piping not</li> </ul>
dequately supported	adequately sup
<ul> <li>Incorrect piping</li> </ul>	☐ Incorrect pip
or application	for application
<ul> <li>Not tagged with</li> </ul>	□ Not tagged
PPI colour code	CPPI colour co
ystem	system
☐ No shut-off valves	□ No shut-off
<ul> <li>No level gauge on</li> </ul>	□ No level ga
ank -	lank
n Inadequate	□ Inadequate
ccess to tank or	access to tank
iping	piping
□ Dangerous	□ Dangerous
bjects/debris nearby	objects/debris
- Cione of	I in Sinns of

□ Signs of

deterioration

application

appliance

Spacing between between tanks less than 1m han 1m ☐ Tank located less cated less than 6m from liquefied petroleum troleum gas cylinders ate fire ☐ Inadequate fire department access access a Tank supports not ipports not on firm foundations ndations d Tank not equipped with nominal and emergency venting venting a Valves not made not made of steel a Secondary containment less nt less than 110% of tank of tank capacity a Secondary nt wall less containment wall less than 1.5m from from storage tank shell nk shell less than □ Pump less than 3m from property line roperty line a Pump less than less than building 1.5m from building openings □ No anti-siphon i-siphon device □ Piping not adequately supported y supported a Incorrect piping ct piping for application a Not tagged with gged with CPPI colour code ur code system ☐ No shut-off valves ut-off valves a No level gauge on el gauge on tank quate □ Inadequate access to tank or tank or piping Dangerous erous objects/debris nearby objects/debris nearby □ Signs of material/paint material/paint deterioration Dyke/embankment Dyke/embankment design is incorrect for application design is incorrect for a Piping not a Piping not properly labelled © No fire valve(s) at properly labelled u No fire valve(s) at

appliance

arboi	1 Inventory (TAKI	Halocarbon Inventory (TAKE PHOTO OF A/C TAG)	'AG)						
Room	Equipment	Equipment Description	Manufacturer & Date	Installation Date	Model / Senal #	Capacity (blu/hr (onnes, kW)	ODS Type	Log Book Present?	Total. Ouantity ODS
5	Kitchin Fridge		Vermore	o manyor	m. 970-408020 S BA 70415530	orthour plays	plyta	2	1219
patcher	water		Greenvan	Jahrens	M: 6405 Sq60W S: 0907 0431 01964	OMONNO	PC134a		(L) (A) (A)
								->	

Determine if A/C units are greater than 19kW (5.5 tonnes or 65,000 btu/hr)

Record all tag information from refrigerators, freezers and water coolers Note if coolant system is in good shape (fines not rusted or leaking)

Who services this equipment(contact number)?
Have there been disposals?
Are there service/tex/disposal files(get copies)? Y/N

RCMP Environmental Ir	nventory Checklist
1. General	
Property Manager: LCMY Housing?	
Site Name: RCMY Pelican Namas	residence 2 3 of Detachment, 3 of FD
Detachment Assistant: No admin Stall	OFRP 36834
Telephone: 300 632 3300	
Detachment Commander: Staff Sergeart	Joe Milburn.
2. Photo Checklist	
Front of Detachment  Well Cover Burn Barrel / Incinerator Septic System	A. Inside of Detachment Ialocarbon System(s) Vater Treatment System N/A G Idorage Tanks and Piping R Idor Drains VC Units [manufacturer tags] N/AG
3. Site Visit Inventory	
A1. Adjacent Properties: Current Use of Properti 1. Commercial 2. Recreational 4. Industrial 5. Agricultural	3. Vacant/Open 6. Other:
	Description (Attach a site sketch that indicates eneral drainage)
North: 1 2 3 4 5 6	
East: 1 2 3 4 5 6	detachment
South. 1 2 3 4 5 6	
West: 1 2 3 4 5 6	
B. Buildings and Works On-Site: Number of buildings on-site: 2 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Date of Construction: / \@3\
	stid (locked - no access)  e traille  in a 2006 as pur PCMP member.

Item	Storage	Material Safety Data Sheet	Disposal Method
* Ammunition			
Tear Gas			
2 Pepper Spray			
1 Flares			
Explosives			A STATE OF THE STA
⊒ Gasoline			
E Burn Barrel fincinerator			
Storage Drums			
€/Propane Tanks	1 AST 01	rogane in backyard.	
Fuel Storage Tanks	1		ensemble to the second
☐ Breathalyzer Ampoules			
ದ Data Master Ethyl Mcohol		and the same of th	
○ Blood Samples			
□ Sharps			
□ Liquid fertilizer			
□ Large Quantity of Alcohol			
_ Drugs			
∴ Glycol			
⊏PCBs(transformers/ capacitors/ light ballasts)			
Asbestos	(potential)		
© Urea Formaldehyde			
r/Lead(painVpipes)	(potential)		
∃ Radon Testing	The state of the s		A CONTRACTOR OF THE CONTRACTOR
. Other:			

Ryon \_\_\_\_, RCNP manber, P.N Sept 24107

D. Interviews Lorne thomas, RCA	1P Sargint PN. Sept24/07
. Is there evidence of underground storage tan	ks (USTs) on-site?
Vere the USTs removed?	No
When?	
Vas there a report?	
Was there any spill/leak evidence?	
Have the tanks ever been tested for leaks?	
Have the tanks ever been tested to read	
2. Is there evidence of aboveground storage tar	nks (ASTs) on-site?
When were the ASTs removed? Active	1 propale AST
Was there a report?	propale AST in back yard
11.37	
Have the tanks ever been tested for leaks? $\sqrt{\kappa} \sqrt{\epsilon} \gamma \delta M$	/v ,
3. Is there evidence of barrels or drums on-site	? 41
How long has the barrel been in use?	, N.
How long has the barrer been in disc.	
What items are stored in the drum?	
4. Is there other evidence in records or other m	naterials collected that cause concern?
	No
	11-
5. Is there evidence of environmental hazards of	on adjacent sites?
Describe:	ECMP gasolini AST.
Locate the hazard on the site sketch.	
is the hazard up slope or down slope of the detachment	?
dan slope of ho	

5. Is there a history of environmental problems	0.004		
E.g. Flooding?	No		
7. What is the source of Potable Water?  1. Municipal  1. Drilled Well - what type  1. Av Bottled Water (Store bought / Filled from other source)	Drinking a	water - bottled water?	Cas pir Lorno
1 Dug Well 1 Other:		in residence	
Method of Payment for Bottled water: UNCHOWN Location of well: No WW on site			
Description of water treatment on site: WOW			
Complaints from occupants (aesthetic, odour, fixtures, etc.):	un (noun-		
Date & result of last water test:			
8. What is the system of Domestic Waste? Municipal Sewer Septic	EBRIVE	sever system	
Location of Septic Bed:			
Date of last pumping:			
Other notes:			
9. What current options are available for Solid	l Waste?	V. 02.010 2.10.02.	
Detachment VRegular Waste	Municipality	pide up	
Refundable Recycling     Recycling (plastics, paper_cardboard, etc.)     Compost (organics)	0	No recyclis services	
□ Batteries	u u		i

	0
. Is there an Emergency Generator	on-site? YES: NO: 10
	Fuel / Battery Operated
s there a Maintenance or Test Log?	
What is the last log date and result?	NIA
fuel generated	
ndicate if the tank is connected to the generator.	
Complete a Storage Tank Data Sheet and take ρ	photos.
F. ENVIRONMENTAL ASSESSMENT	INFORMATION
plains, scenic areas, National or Pro	vincial Parks, etc.)? YES: a NO: D
2. Is surface water located within 30	Om of the project site: YES: II NO: 😾
If YES, describe (ie: wetland, pond, river, stream	of the project site.
3. Does the site have storm sewers Storm sewers YES: E NO: V Locate: Paved surfaces Others (direction of drainage)	to handle drainage or does it rely on surface run-off?  Surface run-off YES: G/ NO: 0

G. ADDITIONAL COMMENTS / POTENTIAL ENVIRONMENTAL CONGERNS:NO

\*\* \* \* \*\*\* \*\*\* \*\*\*\*\*\*

ank Information	Tank 1	Tank 2	Tank 3	Tank 4
JLC NO.				
(P) Standard Number				
Description (i.e. Main heating oil tank, teating oil day tank, Main dieset tank, Generator day lank, Regulated gasoline lank, Non-regulated gasoline tank)	(cannot rud plates)			
Location				ļ
is Tank Reportable (AST >= 2500 L or UST)?	C Yes ☑No	a Yes a No	a Yes a No	□ Yes □ No
EC Tag ID (if Tank is reportable)				
Is Tank located within 350 in property line?	V. Yes	a Yes a No	□ Yes □ No	□ Yes □ No
is Tank Reportable (E2) (Propane Tank Size greater or equal to 9200 L)?	□ Yes ♥No	∟ Yes □ No	□ Yes □ No	⊃ Yes ⊃ No
E2 Plan available?	□ Yes □ No	□ Yes □ No	□ Yes □ No	a Yes a No
Has the E2 plan Tested/Exercised annually? (If applicable)	D Yes - last done on: (Date)	□ Yes - last done on: (Date) □ No	□ Yes - last done on: (Date) □ No	□ Yes - last done on: (Date) □ No
Status	✓ Active □ Inactive □ Disposed □ Unknown	D Active D Inactive D Disposed D Unknown	□ Active □ Inactive □ Disposed □ Unknown	□ Active □ Inactive □ Disposed □ Unknown
is a site visit required to further inspect the tank?	□ Yes by: (Date) √No	□ Yes by: (Date) □ No	□ Yes by: (Date) □ No	⊖ Yes by: (Date) ⊝ No
is the tank part of a tank system?	a Yes UNo	G Yes D No	□ Yes □ No	D Yes
Year of Installation	unknown			_
Year of Disposal				
Manufacturer				
Manufacture Date				
Tank Size (L)	V			
Capacity (L)	~ 4000L			

same as RD, but cannot read tags.

Fuel Type	n Aviation Fuel D Bitumen D Bunker-C D Diesel D Ethanol D Heating Oil Natural Gas D Organic Chemicals D Other: Propane Unleaded Gasoline D Waste Oil	n Aviation Fuel D Bitumen D Bunker-C D Diesel D Ethanol D Heating Oil D Kerosene D Natural Gas D Organic Chemicals D Other: D Propane D Unleaded Gasoline D Waste Oil	☐ Aviation Fuel ☐ Bitumen ☐ Bunker-C ☐ Diesel ☐ Ethanol ☐ Glycol ☐ Heating Oil ☐ Kerosene ☐ Natural Gas ☐ Organic Chemicals ☐ Other: ☐ Propane ☐ Unleaded Gasoline ☐ Waste Oil	□ Aviation Fuel □ Bitumen □ Bunker-C □ Diesel □ Ethanol □ Glycol □ Heating Oil □ Kerosene □ Natural Gas □ Organic Chemicals □ Other: □ Propane □ Unleaded Gasoline □ Waste Oil
Tank Construction			- 0: 1- 14/-11	ri Cingle Milill
Construction	Single Wall Double Wall Unknown	a Single Wall □ Double Wall □ Unknown	□ Single Wall □ Double Wall □ Unknown	□ Single Wall □ Double Wall □ Unknown
Material	☐ Aluminum ☐ Concrete ☐ Composite ☐ Fiberglass ☐ Fiberglass Reinforced Plastic (FRP) ☐ Rubber ✔ Steel ☐ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner and steel outer ☐ Stainless Steel ☐ Other	☐ Aluminum ☐ Concrete ☐ Concrete-Steel Composite ☐ Fiberglass ☐ Fiberglass Reinforced Plastic (FRP) ☐ Rubber ☐ Steel ☐ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner and steel outer ☐ Stainless Steel ☐ Other	□ Aluminum □ Concrete □ Concrete □ Fiberglass □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	B Aluminum Concrete Concrete Composite Fiberglass Fiberglass Fiberglass Fiberglass Unknown Steel Unknown BMI-FRP Plastic Polyethylene inner and steel outer Stainless Steel
Placement	○ Aboveground- Vertical	□ Aboveground- Vertical □ Abovegraund- Horizontal □ Underground □ O(her:	□ Aboveground- Vertical     □ Aboveground- Horizontal     □ Underground     □ Other:	□ Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:
Tank Cathodic Protection				
Tank Corrosion Protection	✓ Paint ☐ Coating ☐ None ☐ Other:	ច Paint ច Coating ច None ច Other:	© Paint © Coating © None © Other:	© Paint © Coating © None © Other:
Tank Platform Convicte blocks for Ugs	□ Concrete Pad  MEarth/Soil □ Gravet (raised or level) □ Inside building □ Wood □ Other:	☐ Concrete Pad. ☐ Earth/Soil ☐ Gravel (raised or level) ☐ Inside building ☐ Wood ☐ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:
Frallic Protection  Smed wither  backgood	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:

Leak/Spill Evidence	√None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	☐ None ☐ Unknown ☐ Staining ☐ Spill report ☐ Interview ☐ Odour ☐ Other:	□ None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	D None D Unknown D Staining D Spill report U Interview D Odour D Other:
Tank Secondary Containment	☐ VNone ☐ Unknown ☐ Steel Reservoir ☐ Soil embankment ☐ Concrete embankment ☐ Soil embankment ☐ Soil embankment with impermeable finer ☐ Concrete embankment with impermeable liner ☐ Steel Embankment ☐ Steel Embankment ☐ Ouble-walled tank ☐ Steel tray ☐ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Steel embankment □ Steel embankment □ Steel embankment u Soll embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	© None  ☐ Unknown  ☐ Steel Reservoir  ☐ Soil embankment  ☐ Concrete embankment  ☐ Steel embankment  ☐ Soil embankment  ☐ Soil embankment  ☐ With impermeable liner  ☐ Concrete embankment with impermeable liner  ☐ Steel embankment with impermeable liner  ☐ Vault  ☐ Double-walled tank  ☐ Steel tray  ☐ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel o Ouble-walled tank □ Steel tray □ Other:
Fank Leak Detection  Pales Mre  gamgle	Display Site glass  □ Site glass □ Unknown □ Storm Uniterstitial Leak □ Interstitial Leak □ Interstitial Leak □ Portable Detector □ Precision Leak □ Site glass □ Unknown □ Vacuum Floor	D None/Visual Inspection D Automatic Tank Gauge O Interstitial Leak Detection D Monitoring Wells D Portable Detector D Precision Leak Test D Site glass Unknown D Vacuum Floor D Other:	O None/Visual Inspection D Automatic Tank Gauge Interstitial Leak Detection D Monitoring Wells Portable Detector Precision Leak Test Site glass Unknown D Vacuum Floor Olher:	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:
Tank Overfill Projection	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Snut-off(audible) ▼ Other:	D None  D Unknown  Alarm only  Alarm with pump interlock  E Level gauge  Mechanical shut-off  Vent float shut-off  Audible alarm including vent  Audible and visual alarm  Level gauge with audible alarm  Spill box  Vent Float Shut-off(audible)  D Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other.

...

usi Tank Leak Test Date				0.5
ent Pipe Diameter	© 0.5 © 0.75 © 1.25 © 1.5 © 1.75 © 2 © 2.5 © 3 © Assorted sizes	B 0.5 0 0.75 D 1.25 D 1.75 D 2 D 2.5 D 3 D Assorted sizes	© 0.5 © 0.75 © 1 © 1.25 © 1.5 © 1.75 © 2 © 2.5 © 3 © Assorted sizes	□ 0.5 □ 0.75 □ 1 □ 1.25 □ 1.5 □ 1.75 □ 2 □ 2.5 □ 3 □ Assorted sizes
/OC Control	□ Nane □ Unknown □ Vapour Return Line □ Other:	Unknown Unknown Vapour Return Line Other:	ນ Unknown ນ Vapour Return Line ກ Other:	C Unknown □ Vapour Return Line □ Other:
PIPING		(opensys a second		
Description			= Uslama	:= Hokoows
vlatenal	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroffex/Bufflex □ Galvanized steel  ✓ Steel and copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper tubing □ Steel (bare) □ Steel (painted, wrapped, (ar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black fron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:
Secondary Containment	© N/A None G Unknown D Drip tray G Sump G Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	E N/A  None  Unknown  Drip tray  Sump  Other:
Placement	□ N/A □ Aboveground □ Underground  √Aboveground and Underground □ Unknown	☐ N/A ☐ Aboveground ☐ Underground ☐ Aboveground and Underground ☐ Unknown	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown
Piping Corrosion Protection	□ Paint  > Coating □ None □ Other:	D Paint D Coating D None D Other	□ Paint □ Coating □ None □ Other:	© Paint © Coating © None © Other
Piping Cathodic Protection				
Manufacturer	unymoun		1	İ

Piping Leak Detection	Inspection  Unknown  N/A  Interstitial Leak  Detection  Monitoring Wells  Sump Alarm  Sump Visual  Other:	© None/Visual Inspection © Unknown © N/A ☐ Interstitial Leak Detection © Monitoring Wells © Sump Alarm © Sump Visual © Other:	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	G None/Visual Inspection G Unknown N/A G Interstitial Leak Detection G Monitoring Wells Sump Alarm Sump Visual G Other:
ast Piping Leak Test Date	unknown.			
Pump(s)				<u> </u>
Puma Type	C None C Unknown C Transfer Delivery Dispenser Heating Oil - Suction Pump Dispenser system - Suction Pump Aboveground Tank Pressure Pump Suction type Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system □ Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:
Pump Secondary Containment				a Maria Official
Pump Leak Detection	□ None/Visual Inspection □ Unknown □ N/A □ Drip I ray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:
Pump Manufacturer				-
Other		1		
Potential Site Sensitivities				
Proximity of Site Sensitivities				
ir of Monitor wells (total)				
Number of monitoring wells within 3m of Tank				
SECURITY				
Tank Enclosure	found within			
Enclosure Locked	back yourd			
Fili Pipe Locked				

alectric heater underneath

Compliance			
eonnectic  No pr from phy damage  Tank  No U  At lea extingus located i pump No p signs Vent m above ground I  Vent m from opening or Tank 3m from povyer li  Tank 3m from	with flexible consection rotection r	connection  No protection from physical damage Tank not labelled No ULC tag At least one fire extinguisher not located in vicinity of pump No posted safety signs Hose/connectors not ULC approved Vent less than 3.5 m above adjacent ground level Vent less than 1.5 m from any building openings Tank less than m from overhead power lines Tank less than	E Piping not equipped with flexible connection □ No protection from physical damage □ Tank not tabelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line

1		
	D Spacing between	
	tanks less than 1m	
1	Tank located less	
1	than 6m from	
1	liquefled petroleum	
1	gas cylinders	
1	Inadequate fire department access	
1	: Tank supports not	
1	on firm foundations	
1	C Tank not	
1	equipped with	
	nominal and	
1	emergency venting	
1	□ Valves not made	
-	of steel	
1	□ Secondary	
	containment less	
	than 110% of tank	
-	capacity	
1	C Secondary	
	containment wall less	
	than 1.5m from	
	storage tank shell	
	□ Pump less than	
	3m from property line	
	□ Pump less than	l
	1.5m from building	ı
	openings	١
	□ No anti-siphon	ļ
	device	١
	☐ Piping not	l
	adequately supported	l
	□ Incorrect piping	İ
	for application	l
	c. Not tagged with	١
	CPPI colour code	į
	system	1
	□ No shut-off valves	١
	□ No level gauge on	١
	tank	١
	fi Inadequate	
	access to tank or	
	piping	١
	:: Dangerous	
	objects/debris nearby	
	⇒ Signs of	
	material/paint	
	deterioration	
	Duly de submadum and	
	Dyke/embankment	
	design is incorrect for	
	application	
	☐ Piping not	
	properly labelled	
	□ No fire valve(s) at	

appliance

o Spacing between ⇒ Spacing between tanks less than 1m lanks less than 1m D Tank located less a Tank located less than 6m from than 6m from liquefied petroleum liquefied petroleum gas cylinders gas cylinders □ Inadequate fire □ Inadequate fire department access department access ☐ Tank supports not ii Tank supports not on firm foundations on firm foundations c Tank not □ Tank not equipped with equipped with nominal and nominal and emergency venting emergency venting @ Valves not made D Valves not made of steel of steel © Secondary □ Secondary containment less containment less than 110% of tank than 110% of lank capacity capacity E Secondary o Secondary containment wall less containment wall less than 1.5m from than 1.5m from storage tank shell storage tank shelf a Pump less than ☐ Pump less than 3m from property line 3m from property line n Pump less than Pump less than 1.5m from building 1.5m from building openings openings □ No anti-siphon □ No anti-siphon device device a Piping not © Piping not adequately supported adequately supported ☐ Incorrect piping □ Incorrect piping for application for application D Not tagged with Not tagged with CPPI colour code CPPI colour cade system system ○ No shut-off valves ☐ No shut-off valves ic No level gauge on 5 No level gauge on tank tank □ Inadequate n Inadequate access to tank or access to tank or piping piping n Dangerous Dangerous objects/debris nearby objects/debris nearby □ Signs of O Signs of material/paint material/paint deterioration deterioration Dyke/embankment Dyke/embankment design is incorrect for design is incorrect for application application Diping not properly labelled to No fire valve(s) at □ Piping not properly labelled □ No fire valve(s) at appliance appliance

n Spacing between tanks less than 1m a Tank located less than 6m from liquefied petroleum gas cylinders □ Inadequate fire department access n Tank supports not on firm foundations C Tank not equipped with nominal and emergency venting

O Valves not made of steel a Secondary containment less than 110% of tank capacity □ Secondary containment wall less than 1.5m from storage tank shell D Pump less than 3m from property line d Pump less than 1.5m from building openings □ No anti-siphon device ☐ Piping not adequately supported a Incorrect piping for application ☐ Not tagged with CPPI colour code system D No shut-off valves D No level gauge on tank □ Inadequate access to tank or piping o Dangerous objects/debris nearby □ Signs of material/paint deterioration Dyke/embankment design is incorrect for application is Piping not properly labelled □ No fire valve(s) at appliance

	Halocarbon Inventory (1986 PHOLO OF 2019)		of Lance Of Stoth Con	Canadiv	soc	Log Sook	Total
Equipment Description	Manufacturer & Date	Installation Date	Model / Senal #	Capacity (blu/hr. tonnes, kw/	Type	Present	Ouantity
	white - west reproduction becomes	Colheban	5: BAZIO3971	unhoran R134a	R1349	0	B 22
* Toot being	Feddles	Johnow	N: A6010F0A-S S: DT 358 138	(000) Phylm	P22	Ž	22
1							
1.0							

Determine if A/C units are greater than 19kW (5.5 tonnes or 65,000 btu/hr)

Record all tag information from refrigerators, freezers and water coolers Note if coolant system is in good shape (lines not rusted or leaking)

Who services this equipment(contact number)?
Have there been disposals?
Are there service/test/disposal files(get copies)? Y/N

RCMP Environmental Inventory Checklist	
1. General	
Property Manager: PCMP Hausing	
Site Name: RCMP Pelican Monors Peritunc 3 Spart of duplus	NW of detachin
Detachment Assistant: No admin Staff	DFPP 36022
Telephone: 306 632 3300	
Detachment Commander: Staff Surgeapt Joe Millarn	
2. Photo Checklist	
A. Outside of Detachment Front of Detachment Weil Cover Burn Barrel / Incinerator Septic System Storage Tanks and Piping AC Units [manufacturer tags] N KC Adjacent properties  B. Inside of Detachment Halocarbon System(s) Water Treatment System Storage Tanks and Piping Floor Drains A/C Units [manufacturer tags] N KC Adjacent properties	
3. Site Visit Inventory	
A1. Adjacent Properties: Current Use of Properties 1. Commercial 2. Recreational 3. Vacant/Open 4. Industrial 5. Agricultural 6. Other:	
(Circle Land Use)  Description (Attach a site sketch that indicates general drainage)	
North: 1 2 3 4 5 6 bush, grave highway	
East: 1 2 (3) 4 5 6 hush.	
South: 1 2 3 4 5 6 bush, RCMP het achaint	
West: 1 2 3 4 5 @ Begy Pd, roiderup, day care	
B. Buildings and Works On-Site: Number of buildings on-site: 2 \ - bugVr Date of Construction: ~ \988	
Notes: 1- shed.  R 3 has been vacant sine August 1,2007	

Nw of detachnest

ltem	Stora	ge	Material Saf	ety Data Sheet	Dispos	al Method	
: Ammunition							1
" Tear Gas							4
- Pepper Spray							4
1 Flares							-
□ Explosives							4
a Gasoline							4
☐ Burn Barrel findinerator							4
Storage Druins							-
= Propane Tanks							4
Fuel Storage Tanks					****		_
Breathalyzer Ampoules							4
ः Data Master Ethyl Alcohol							1
□ Blood Samples							_
□ Sharps							4
✓ Liquid fertilizer	good	1 x 5 kg	lawn	futilizar	lawid	12-6-6	-
□ Large Quantity of Alcohol							
_ Drugs							4
∴ Glycot							
::PCBs(transformers/ capacitors/ light ballasts)							
□ Asbestos	(potentia	U)					4
□ Urea Formaldehyde							4
□ Lead(paint/pipes)							_
⊒ Radon Testing							
. Other:							

shod.

D. Interviews Lorne Thomas PCMP Sargint	P.N. Sept 24 102
1. Is there evidence of underground storage tanks (USTs) on-site?	N.º
Were the USTs removed? N A	
When?	
Was there a report?	
Was there any spill/leak evidence?	
Have the tanks ever been tested for leaks?	
2. Is there evidence of aboveground storage tanks (ASTs) on-site?	No
When were the ASTs removed? N/A (electric wat)	
Was there a report?	
Was there any spill/leak evidence?	
Have the tanks ever been tested for leaks?	
3. Is there evidence of barrels or drums on-site?	
How long has the barrel been in use?	No
now long has the banch occurring	
What items are stored in the drum?	
4. Is there other evidence in records or other materials collected that cal	use concern?
	No
5. Is there evidence of environmental hazards on adjacent sites?	No.
Describe:	13
Locate the hazard on the site sketch	
Is the hazard up slope or down slope of the detachment?	
2 - December 1980 1980 1980 1980 1980 1980 1980 1980	

. Is there a history of environmental problems .g. Flooding?	in the area?	No	
Minat is the source of Potable Water?  Municipal Dulled Well - what type Bottled Water (Store bought / Filled from other source) Dug Well Other:  Method of Payment for Bottled water:  Location of well: No will on clife	vacant	nouse.	NA
Description of water treatment on site: $N^{+}A$			
Complaints from occupants (aesthetic, odour, fixtures, etc.):	NIA		
Date 3 result of last water test:			
8. What is the system of Domestic Waste? Municipal Sewer C Septic Location of Septic Bed: NOVE Date of last pumping:     A			
Other notes:			
9. What current options are available for Solid	l Waste?	valant	house -
Detachment  © Regular Waste  © Refundable Recycling  © Recycling (plastics, paper, cardboard, etc.)  © Compost (organics)  © Batteries	Municipality  G G G	vacant	waste-

...

Storage Tanks	
. Is there an Emergency Generator o	n-site? YES: □ NO: ♥
	Fuel / Battery Operated
s inere a Maintenance or Teat Log? What is the last log date and result?	N/A
fuel generated	
ndicate if the tank is connected to the generator.	
Complete a Storage Tank Data Sheet and take pho	otos
	UFO DIJATION
F. ENVIRONMENTAL ASSESSMENT IN	to any ecologically sensitive areas (ie: wetlands, flood
plains, scenic areas, National or Prov If YES, describe and provide location:	**************************************
If YES, describe and provide location:  2. Is surface water located within 30n	n of the project site: YES: □ NO: □
2. Is surface water located within 30n If YES, describe (let wetland, pond, river, stream,  3. Does the site have storm sewers to Storm sewers YES: FI NO: STORM Paved surfaces  Paved surfaces  Ditches (direction of drainage)	n of the project site: YES: □ NO: □
2. Is surface water located within 30n If YES, describe (let welland, pond, river, stream,  3. Does the site have storm sewers to Sterm sewers YES: CL NO: STORM Paved surfaces	n of the project site: YES: B NO: B etc.)  To handle drainage or does it rely on surface run-off?  Surface run-off YES: Y NO: B

G. ADDITIONAL COMMENTS / POTENTIAL ENVIRONMENTAL CONCERNS:

ANK INVENTORY INFORM	Tank 1	Tank 2	Tank 3	Tank 4
LC NO.				
Pi Standard Number				
Description i.e. Main heating oil tank leating oil day tank Main leating oil day tank Main leasel tank. Generator day lank, Regulated gasolline lank, Non-regulated lasolline tank)				
Location				in Vac
is Tank Reportable (AST >= 2500 L or UST)?	⊏ Yes ⊂ No	□ Yes □ No	□ Yes □ No	□ Yes □ No
EC Tag ID (if Tank is reportable)				
Is Tank located within 350 m property line?	t: Yes € No	⊴ Yes ⊴ No	□ Yes □ No	⊔ Yes □ No
is Tank Reportable (E2) (Propane Tank Size greater or equal to 9200 L)?	ਹ Yes ਹ No	⊑ Yes □ No	⊃ Yes ⊃ No	a Yes
E2 Plan available?	□ Yes □ No	☐ Yes ☐ No	G Yes E No	□ No
Has the E2 plan Tested/Exercised annually? (If applicable)	O Yes - last done on:(Date)	□ Yes - last done on: (Date) □ No	on:(Date)	☐ Yes - last done on: (Date) ☐ No
Status	☐ Active ☐ Inactive ☐ Disposed ☐ Upknown	D Active D Inactive Disposed DUnknown	Active     Inactive     Disposed     Unknown	□ Active □ Inactive □ Disposed □ Unknown
Is a site visit required to further inspect the tank?	by(Date)	© Yes by: (Date) © No	□ Yes by: (Date) □ No	□ Yes by: (Date) □ No
is the tank part of a tank system?	a Yes a No	□ Yes □ No	□ Yes □ No	□ Yes □ No
Year of Installation				
Year of Disposal				
Manufacturer				
Manufacture Date				
Tank Size (L)				
Capacity (L)				

No AST or UST

iuel Type	District Fuel District Blunker-C Diesel Diesel District Blunker-C Diesel	n Aviation Fuel D Bitumen Bunker-C Diesel Ethanol U Glycol Heating Oil Kerosene D Natural Gas C Organic Chemicals D Other: Propane Unleaded Gasoline D Waste Oil	□ Aviation Fuel □ Bitumen □ Bunker-C □ Diesel □ Ethanol □ Glycol □ Heating Oil □ Kerosene □ Natural Gas □ Organic Chemicals □ Other: □ Propane □ Unleaded Gasoline □ Waste Oil	□ Aviation Fuel □ Bitumen □ Bunker-C □ Diesel □ Ethanol □ Glycol □ Heating Oil □ Kerosene □ Natural Gas □ Organic Chemicals □ Other: □ Propane □ Unleaded Gasoline □ Waste Oil
Fank Construction				
Construction	© Single Wall © Double Wall © Unknown	☐ Single Wall ☐ Double Wall ☐ Unknown	☐ Single Wall ☐ Double Wall ☐ Unknown	⊔ Single Wall ⊇ Double Wall ⊐ Unknown
Material	□ Aluminum □ Concrete □ Concrete □ Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete-Steel Composite □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	☐ Aluminum ☐ Concrete ☐ Composite ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Unknown ☐ Steel ☐ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner ☐ Stainless Steel ☐ Other ☐ Aboveground-
Placement	D Aboyeground- Vertical D Aboyeground- Horizontal D Underground D Other:	O Aboveground- Vertical  D Aboveground- Horizontal  D Underground  D Other:	Vertical	Vertical      Aboveground- Horizontal     Underground     Other:
Tank Cathodic Protection				
Tank Corrosion Protection	Description Paint Description Coating Description None Description Other:	a Paint a Coating a None a Other:	□ Paint □ Coating □ None □ Other:	☐ Paint ☐ Coating ☐ None ☐ Other:
Tank Platform	c: Concrete Pad c: Earth/Soil c: Gravel (raised or level) c: Inside building c: Wood c: Other:	□ Concrete Pad- □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:
Traffic Protection	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	D None Unknown Steel bollards 100 mm curb Reinforced fence Guardrail

Leak/Spill Evidence	Di None Di Unknown Staining Di Spill report Interview Di Odour Other:	D None Unknown D Staining D Spill report Interview D Odour D Other:	n None D Unknown Staining D Spill report Interview Odour Other:	□ None □ Unknown □ Steining □ Spill report □ Interview □ Odour □ Other:
Tank Secondary Containment	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel o Ouber-walled	© None □ Unknown □ Steel Reservoir □ Soil embankment □ Steel embankment □ Soil embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Vautt □ Double-walled tank □ Steel tray □ Other:	© None ☐ Unknown ☐ Steel Reservoir ☐ Soil embankment ☐ Concrete embankment ☐ Steel embankment ☐ Soil embankment ☐ Steel embankment ☐ Soil embankment ☐ Steel embankment with impermeable liner ☐ Concrete embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Vault ☐ Double-walled tank ☐ Steel tray ☐ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Steel embankment □ Steel embankment □ Steel embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:
Tank Leak Detection	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	n None/Visual Inspection n Automatic Tank Gauge n Interstitial Leak Detection n Monitoring Wells protable Detector precision Leak Test Site glass Unknown Vacuum Floor	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Porable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:
Task Overfill Protection	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Nudible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	D None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Vent float □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	☐ None ☐ Unknown ☐ Alarm only ☐ Alarm with pump interlock ☐ Level gauge ☐ Mechanical shut-off ☐ Vent float shut-off ☐ Audible alarm ☐ Level gauge with audible alarm ☐ Level gauge with audible alarm ☐ Spill box ☐ Vent Float Shut-off(audible) ☐ Other. ☐ Other. ☐ Unknown ☐ Unk

ŧ

ast Tank Leak Test Date				
fent Pipe Diameter	© 0.5 © 0.75 © 1.25 © 1.5 © 1.75 © 2 © 2.5 © 3 © Assorted sizes	© 0.5 © 0.75 © 1.25 © 1.5 © 1.75 © 2 © 2.5 © 3 © Assorted sizes	0 0.5 0 0.75 1 1 0 1.25 0 1.5 0 1.75 0 2 0 2.5 1 3 1 Assorted sizes	□ 0.5 □ 0.75 □ 1 □ 1.25 □ 1.75 □ 2 □ 2.5 □ 3 □ Assorted sizes
VOC Control	© None © Unknown © Vapour Return Line © Other:	© None ☐ Unknown ☐ Vapour Return Line ☐ Other:	D None Unknown Unknown Unout Return Line D Other:	☐ None ☐ Unknown ☐ Vapour Return Line ☐ Other:
PIPING				
Description				
Material	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black fron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroftex/Bufflex □ Galvanized steel □ Steel with copper tubling □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:
Secondary Containment	© N/A © None © Uŋśnown © Orip tray 3/Sump 3 Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	C N/A None Unknown Drip tray Sump Other:
Placement	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	ಬ N/A ದ Aboveground ದ Underground ದ Aboveground and Underground ದ Unknown	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	<ul> <li>≅ N/A</li> <li>⇒ Aboveground</li> <li>□ Underground</li> <li>□ Aboveground and</li> <li>Underground</li> <li>□ Unknown</li> </ul>
Piping Corrosion Protection	□ Paint □ Coating □ None □ Other:	© Paint © Coating © None © Other:	© Paint © Coating © None © Other:	© Paint © Coating © None © Other:
Promg Cathedic Protection				
Manufacturer				1

Piping Leak Detection	□ Noner/Visual Inspection □ Unknown □ N/A □ Interstitle! Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	© None/Vieual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	G None/Visual Inspection  ☐ Unknown  ☐ N/A  ☐ Interstitial Leak Detection  ☐ Monitoring Wells  ☐ Sump Alarm  ☐ Sump Visual  ☐ Other:
ast Piping Leak Test Date				
Pump(s)				O Mana
Эыпо Туре	© None © Unknown © Transfer □ Delivery □ Dispenser □ Heatling Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Healing Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:
Pump Secondary Containment			11 02	□ None/Visual
Pump Leak Detection	U Noge/Visual Inspection Unknown N/A Drip Tray Alarm Monitoring Wells Sump Alarm Sump Visual Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	Inspection Unknown N/A Drip Tray Alarm Monitoring Wells Sump Alarm Sump Visual Other:
Pump Manufacturer		1		
Other		1		
Potential Site Sensitivities				
Proximity of Site Sensitivities				
# of Monitor wells (total)				
Number of monitoring wells within 3m of Tank				
SECURITY				
Tank Enclosure				
Enclosure Locked				
Fill Pipe Locked		and here		

Compliance		- Distance	a Piping not	⊏ Piping not
	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line	□ Piping not equipped with flexible econnection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line	aquipped with flexible connection  No protection from physical damage  Tank not labelled  No ULC lag  At least one fire extinguisher not located in vicinity of pump  No posted safety signs  Hose/connectors not ULC approved  Vent less than 3.5 m above adjacent ground level  Vent less than 1.5 m from any building openings  Tank less than 3m from overhead power lines  Tank less than 3m from property line  Tank less than 3m from property line  Tank less than 3m from property line	equipped with flexible connection  In No protection from physical damage  In Tank not labelled  No ULC tag  At least one fire extinguisher not located in vicinity of pump  No posted safety signs  Hose/connectors not ULC approved  Vent less than 3.5 m above adjacent ground level  Vent less than 1.5 m from any building openings  Tank less than 3 m from overhead power lines  Tank less than 3 m from property line  Tank less than 3 m from property line  Tank less than 3 m from property line  Tank less than 3 m from property line

	n Spacing between	1
j	tanks less than 1m	
	a Tank located less	
	than 6m from	
	liquefied petroleum	
	gas cylinders	
	<ul> <li>Inadequate fire</li> </ul>	
	department access	
	Tank supports not	
	on firm foundations	
	□ Tank not	
	equipped with	
	nominal and	
	emergency venting	
	□ Valves not made	
	of steel	
	□ Secondary	
	containment less	
	than 110% of tank	
	capacity	
	© Secondary	
	containment wall less than 1.5m from	
	storage tank shell	
	○ Pump less than 3m from property line	
	□ Pump less than	
	1.5m from building	
	openings	
	☐ No anti-siphon  ☐ No anti-siphon	
	device	
	□ Piping not	
	adequately supported	
	□ Incorrect piping	
	for application	
	C Not tagged with	
	CPPI colour code	
	system	
ĺ	O No shut-off valves	
۱	No level gauge on	
١	tank	
1	□ Inadequate	
1	access to tank or	
	piping	
١	□ Dangerous	
	objects/debris nearby	
1	□ Signs of	
J	material/paint	
	deterioration	
١	П	

	<ul> <li>Spacing between</li> </ul>	□ Spacing
- 1	tanks less than 1m	tanks less ti
	☐ Tank located less	☐ Tank loc
	than 6m from	than 6m fro
- 1	liquefied petroleum	liquefied pe
	gas cylinders	gas cylinde
	⊔ Inadequate fire	□ Inadequ
	department access	department
1	© Tank supports not	D Tank su
"	on firm foundations	on firm four
	□ Tank not	□ Tank no
	equipped with	equipped w
	nominal and	nominal an
	emergency venting	emergency
	□ Valves not made	r: Valves
- 8	of steel	of steel
	⊕ Secondary	□ Second
3	containment less	containmen
- 7	than 110% of tank	than 110%
- 8		capacity
- 8	capacity	□ Second
	1) Secondary	containmen
S	containment wall less	than 1.5m
	than 1:5m from	
	storage tank shell	storage tar
	d Pump less than	a Pump le
9	3m from property line	3m from pr
/	Pump less than	□ Pump le
/	1.5m from building	1.5m from
	openings	openings
	□ No anti-siphon	E No anti
	device	device
	a Piping not	D Piping
bs	adequately supported	adequately
	□ Incorrect piping	□ Incorre
	for application	for applica
	<ul> <li>Not tagged with</li> </ul>	□ Not tag
	CPPI colour code	CPPI color
	system	system
es	n No shut-off valves	□ No shu
on	u No level gauge on	5 No leve
	tank -	lank
	The state of the s	The second second second

n Inadequate

piping

Dyke/embankment

design is incorrect for application

t: Piping not properly labelled

Tild No fire valve(s) at appliance.

appliance

access to tank or

Dangerous

□ Signs of

material/paint

deterioration

D Piping not

appliance

properly labelled

objects/debris nearby

Dyke/embankment

design is incorrect for application

□ No fire valve(s) at

a Piping not

appliance

properly labelled

□ No fire valve(s) at

□ Spacing between	□ Spacing between
tanks less than 1m	tanks less than 1m
☐ Tank located less	u Tank located less
than 6m from	than 6m from
liquefied petroleum	liquefied petroleum
gas cylinders	gas cylinders
□ Inadequate fire	Inadequate fire
department access	department access
Tank supports not	<ul> <li>Tank supports not</li> </ul>
on firm foundations	on firm foundations
□ Tank not	□ Tank not
equipped with	equipped with
nominal and	nominal and
emergency venting	emergency venting
c: Valves not made	Valves not made
of steel	of steel
□ Secondary	a Secondary
containment less	containment less
than 110% of tank	than 110% of tank
capacity	capacity
□ Secondary	□ Secondary
containment wall less	containment wall less
than 1.5m from	than 1.5m from
storage tank shell	storage tank shell
a Pump less than	☐ Pump less than
3m from property line	3m from property line
Pump less than	c: Pump less than
1.5m from building	1.5m from building
openings	openings
No anti-siphon	□ No anti-siphon
device	device
□ Piping not	☐ Piping not
adequately supported	adequately supported
☐ Incorrect piping	c) Incorrect piping
for application	for application
Not tagged with	☐ Not tagged with
CPPI colour code	CPPI colour code
system	system
No shut-off valves	☐ No shut-off valves
5 No level gauge on	No level gauge on
lank	lank
□ Inadequate	□ Inadequate
access to tank or	access to tank or
piping	piping
□ Dangerous	Dangerous
objects/debris nearby	objects/debris nearby
□ Signs of	□ Signs of
material/paint	material/paint
deterioration	deterioration
C	D
Dyke/embankment	Dyke/embankment
design is incorrect for	design is incorrect for
application	application
a Dining pot	73 Diging not

a Piping not properly labelled

appliance

□ No fire valve(s) at

No Alc unit or appliance bouse vacant

				-	000	ACCEPTOR	To:ol
Equipment Description	Manufacturer & Date	Installation Date	Model / Serial #	Capacity (btu/hr. tonnes, kVV)	Type	Present?	Ouantity ODS

Determine if A/C units are greater than 19kW (5.5 tonnes or 65,000 btu/hr)

Record all tag information from refrigerators, freezers and water coolers Note if coolant system is in good shape (lines not rusted or leaking)

Who services this equipment(contact number)?
Have there been disposals?
Are there service/tes/disposal files(get copies)? Y/N

RCMP Environmenta	l Inventory Checklist	
1. General		
Property Manager: PCMP Housing?		
Site Name: PCMP Pelicar Navious	peridence @ @ part of dupler	
Detachment Assistant: No admin staff	1	detachnist.
Telephone: 306 632 3300		DERP
Delachment Commander: Stack Surge	ant Joe Millaurn	36022
2. Photo Checklist		
A. Outside of Detachment Front of Detachment Well Cover Nowth E Burn Barrel / Incinerator NIA Septic System Storage Tanks and Piping NIA AC Units [manufacturer lags]	B. Inside of Detachment Halocarbon System(s) Water Treatment System Storage Tanks and Piping Floor Drains WC Units [manufacturer tags]	9
3. Site Visit Inventory		
A1. Adjacent Properties: Current Use of Properties: Current Use of Properties: 2. Recreation 4. Industrial 5. Agricultura	nal 3. VacanvOpen	
(Circle Land Use)	Description (Attach a site sketch that indicates general drainage)	
North: 1 2 3 4 5 6		
East: 1 2 3 4 5 6	Su R (3):	-
South: 1 2 3 4 5 6		
West:: 1 2 3 4 5 6		-
B. Buildings and Works On-Site: Number of buildings on-site: 2	My Date of Construction: ~  988	
Notes: 1 - Shu		

Item	Storage	Material Safety Data Sheet	Disposal Method
Ammunition	how in basen	ent	
Tear Gas			
Pepper Spray			
1 Flares			
: Explosives			
√Gasoline	jerry cans in	shed.	
: Burn Barrel findinerator	J J		
Storage Drums			
a Propane Tanks			
I. Fuel Storage Tanks			and the second second
≘ Breathalyzer Ampoules	de (V		- Secretarities of the secreta
to Data Master Ethyl Vicohol			
ා Blood Samples			
⊒ Sharps			
□ Liquid fertilizer			
□ Large Quantily of Ncohol			
_ Drugs			
: Glycol			
::PCBs(transformersi ::capacitors/ light ballasts)			
G Asbestos	(potential)		01000
∪ Urea Formaldehyde			
□ Lead(painVpipes)			
∋ Radon Testing			
. Other			

D. Interviews Lord Thomas RCMP Sarget P.N. Sept 24 107  1. Is there evidence of underground storage tanks (USTs) on-site?
Is there evidence of underground storage tanks (USTs) on-site?
When? Was there a report? Was there any spill/leak evidence? Have the tanks ever been tested for leaks?
2. Is there evidence of aboveground storage tanks (ASTs) on-site?  When were the ASTs removed?  Was there a report?  NA  NA
Was there any spill/leak evidence?  Have the tanks ever been tested for leaks?
3. Is there evidence of barrels or drums on-site?  How long has the barrel been in use?
What items are stored in the drum?
4. Is there other evidence in records or other materials collected that cause concern?
No
5. Is there evidence of environmental hazards on adjacent sites?  Describe:  Locate the hazard on the site sketch.  Is the hazard up slope or down slope of the detachment?
is the hazard up slope of down slope of the obtainment

6. Is there a history of environmental proble E.g. Flooding?	MILLE 111 NICE -11 WILL	No		
7. What is the source of Potable Water?  Municipal  Dailed Well - what 1722  Bottled Water Store bought / Filled from other source)  Dug Well  Other:  Method of Payment for Bottled water:  Location of well:  Description of water treatment on site:  Complaints from occupants (aesthetic, odour, fixtures, etc.)  Date & result of last water test:	ish in in	erserive the dis	water is water run	the through the pareme
8. What is the system of Domestic Waste?  Municipal Sewer  Septic  Location of Septic Bed:		Peoure !	iwu sy.	Hen
Date of last pumping: Other notes:				
9. What current options are available for S  Detachment  ✓ Regular Waste □ Refundable Recycling	Municipality	BUSUNA	garbage	collection
Recycling (plastics, paper_cardboard, etc.) Compost (organics) Batteries  Are there blue and green bins in the detachment?	0			

E. Storage Tanks	
1. Is there an Emergency Generator on-site? YES: □ NO: ₩	
Fuel / Battery Operated	
What is the last log date and result?	
Indicate if the tank is connected to the generator.	
Complete a Storage Tank Data Sheet and take photos.	
F. ENVIRONMENTAL ASSESSMENT INFORMATION	1
1. Is the property located on or close to any ecologically sensitive areas (ie: wetlands, flood plains, scenic areas, National or Provincial Parks, etc.)?  YES:  NO:  NO:  NO:  NO:  NO:  NO:  NO:  NO	(Small)
11 YES, describe (ie: welland, pond, river, stream, etc.)  - SUMPRAD (Uncle flow - 10 m SW of prop.	(small)  (small)  satur  puddle)
3. Does the site have storm sewers to handle drainage or does it rely on surface run-off?  Storm sewers YES: INO: Surface run-off YES: NO: INO: INO: INO: INO: INO: INO: INO:	
4. Is there visual evidence of vegetative stress on-site? YES: □ NO: ▼ II YES. describe:	
5. Is there visual evidence of local fauna on-site?  If YES, describe (ie: nests, feeding routes, etc.):  NO:   VES:   NO:  VES:   NO:  VES:   NO:  VES:	
	<del></del>

G. ADDITIONAL COMMENTS / POTENTIAL ENVIRONMENTAL CONCERNS:

ANK INVENTORY INFORM	Tank 1	Tank 2	Tank 3	Tank 4
ank Information	Tellin i			
LC NO.				
P: Standard Number				-
Description (i.e. Main heating oil tank, leating oil day tank. Main leasel tank, Generator day lank, Regulated gasoline lank, Non-regulated jasoline tank)				
Location				ļ
is Tank Reportable (AST >= 2500 L or UST)?	c Yes c No	a Yes B No	a Yes a No	G Yes G No
EC Tag ID (if Tank is reportable)				⊔ Yes
Is Tank located within 350 in property line?	∷ Yes ⊾ No	□ Yes □ No	□ Yes □ No	□ No
is Tank Reportable (E2) (Propane Tank Size greater or equal to 9200 L <sub>1</sub> ?	ਹ Yes ਹ No	⊏ Yes	⊃ Yes □ No	□ Yes □ No
E2 Plan available?	n Yes n No	□ Yes □ No	□ Yes □ No	D Yes
Has the E2 plan Tested/Exercised unnually? (If applicable)	O Yes - last done on:(Date)	□ Yes - last done on: (Date) □ No	□ Yes - last done on: (Date) □ No	□ Yes - last done on: (Date) □ No
Status	□ Active □ Inactive □ Disposed □ Unknown	□ Active □ Inactive □ Disposed □ Unknown	□ Active □ Inactive □ Disposed □ Unknown	□ Active □ Inactive □ Disposed □ Unknown
is a site visit required to further inspect the tank?	⊕ Yes by: (Date) ⊕ No	© Yes by: (Date) © No	□ Yes by: (Date) □ No	o Yes by: (Date) d No
is the tank part of a tank system?	⊖ Yes □ No	□ Yes □ No	□ Yes □ No	D Yes
Year of Installation				
Year of Disposal				
Manufacturer				
Manufacture Date				
Tank Size (L)				
Capacity (L)				

No AST or UST'S

iel Туре	n Aviation Fuel  Distribution Bunker-C  Diesel  Ethanol  Glycol  Heating Oil  Kerosene  Natural Gas  Organic  Chemicals  Other:  Propane  Unleaded  Gasoline  Waste Oil	n Aviation Fuel  Distumen  Bunker-C  Diesel  Ethanol  Glycol  Heating Oil  Kerosene  Natural Gas  Organic  Chemicals  Other:  Propane  Unleaded  Gasoline  D Waste Oil	□ Aviation Fuel □ Bitumen □ Bunker-C □ Diesel □ Ethanoi □ Ethanoi □ Glycol □ Heating Oil □ Kerosene □ Natural Gas □ Organic Chemicals □ Other: □ Propane □ Unleaded Gasoline □ Waste Oil	D Aviation Fuel D Bitumen Diesel C C Diesel C C C C C C C C C C C C C C C C C C C
ank Construction				
Construction	□ Single Wall □ Double Wall □ Unknown	□ Single Wall □ Double Wall □ Unknown	□ Single Wall □ Double Wall □ Unknown	☐ Single Wall ☐ Double Wall ☐ Unknown
vlaterial	□ Aluminum □ Concrete □ Concrete □ Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	☐ Aluminum ☐ Concrete ☐ Composite ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Reinforced Plastic (FRP) ☐ Rubber ☐ Steel ☐ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner and steel outer ☐ Stainless Steel ☐ Other	□ Aluminum □ Concrete □ Concrete-Steel Composite □ Fiberglass □ Fiberglass Reinforced Plaslic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outcr □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete □ Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other
Placement	□ Aboveground- Vertical     □ Aboveground- Horizontal     □ Underground     □ Ojher:	a Aboveground- Vertical a Aboveground- Horizontal a Underground a Other:	☐ Aboveground- Vertical ☐ Aboveground- Horizontal ☐ Underground ☐ Other:	□ Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:
Tank Cathodic Protection				
Tank Corrosion Protection	☐ Paint☐ Coating☐ None☐ Other:	☐ Paint☐☐ Coating☐☐ None☐☐ Other:	□ Paint □ Coating □ None □ Other:	☐ Paint ☐ Coating ☐ None ☐ Other:
Tank Platform	☐ Concrete Pad ☐ Earth/Soil ☐ Gravet (raised or fevet) ☐ Inside building ☐ Wood ☐ Other:	☐ Concrete Pad. ☐ Earth/Soil ☐ Gravel (raised or level) ☐ Unside building ☐ Wood ☐ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:
Traffic Protection	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Roinforced fence □ Guardrail □ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:

Leak/Spill Evidence	☐ None ☐ Unknown ☐ Staining ☐ Spill report ☐ Interview ☐ Odour ☐ Other:	□ None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	□ None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	D None D Unknown D Staining D Spill report O Interview D Odour D Other:
Tank Secondary Containment	☐ None ☐ Unknown ☐ Steel Reservoir ☐ Soil embankment ☐ Concrete embankment ☐ Soil embankment with impermeable finer ☐ Concrete embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Steel embankment with impermeable liner ☐ Vault ☐ Double-walled tank ☐ Steel tray ☐ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Steel embankment □ Steel embankment □ Soil cmbankment vith impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Steel embankment □ Steel embankment □ Soil embankment □ Soil embankment vith impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:
Tank Leak Detection	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	n None/Visual Inspection Dispection In Automatic Tank Gauge Interstitial Leak Detection Dispersion Detector Precision Leak Test Unknown Vacuum Floor Other:	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	© None/Visual Inspection ☐ Automatic Tank Gauge ☐ Interstitial Leak Detection ☐ Monitoring Wells ☐ Portable Detector ☐ Precision Leak Test ☐ Site glass ☐ Unknown ☐ Vacuum Floor ☐ Other:
Tank Overfill Protection	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:

asi Tank Leak Test Date				5 O E
ent Pipe Diameter	n 0.5 n 0.75 n 1 n 1.25 n 1.5 n 1.75 n 2 n 2.5 n 3 n Assorted sizes	5 0.5 0.75 1 1 1.25 1.5 1.75 2 2.5 3 Assorted sizes	© 0.5 © 0.75 © 1.25 © 1.5 © 1.75 © 2 © 2.5 © 3 © Assorted sizes	0.5 0.75 0.1.25 0.1.25 0.1.75 0.2 0.2.5 0.3 0.3 0.3 0.5 0.5 0.3 0.5
/OC Control	© Nane © Unknown © Vapour Return Line © Other:	□ None □ Unknown □ Vapour Return Line □ Other:	⊕ None □ Unknown □ Vapour Return Line □ Other:	□ None □ Unknown □ Vapour Return Line □ Other:
PIPING			- Non-state particular to the state of the s	
Description				
Material	☐ Unknown ☐ Steel ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Rober ☐ Brass ☐ Black Iron ☐ Rubber ☐ Enviroflex/Bufflex ☐ Galvanized steel ☐ Steel and copper ☐ Steel with copper tubing ☐ Steel (bare) ☐ Steel (painted, wrapped, far coated) ☐ Other:	D Unknown Steel Fiberglass Fiberg	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coaled) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper tubing □ Steel (bare) □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:
Secondary Containment	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	□ N/A □ None □ Unknown □ Drip Iray □ Sump □ Other:	D NVA D None U Unknown D Drip tray Sump U Other:	□ None □ Unknown □ Drip tray □ Sump □ Other:
Placement	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	☐ N/A ☐ Aboveground ☐ Underground ☐ Aboveground and Underground ☐ Underground	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	© N/A  □ Aboveground  □ Underground  □ Aboveground an  Underground  □ Unknown
Piping Corrosion Protection	© Paint © Coating © None ○ Other:	© Paint  © Coating  © None  © Other	□ Paint □ Coating □ None □ Other:	© Paint © Coating © None © Other
Piping Cathodic Protection				
Manufacturer			1	1

Piping Leak Detection	☐ None/Visual Inspection ☐ Unknown ☐ N/A ☐ Interstitial Leak Detection ☐ Monitoring Wells ☐ Sump Alarm ☐ Sump Visual ☐ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other'	C None/Visual Inspection C Unknown C N/A In Interstitial Leak Detection C Monitoring Wells C Sump Alarm C Sump Visual C Other:	
ast Piping Leak Test Date				PONS AST GUD.	
rump(s)					
Эшпо Туре	C None C Unknown C Transfer Delivery Dispenser Heating Oil - Suction Pump Dispenser system - Suction Pump Aboveground Tank Pressure Pump Suction type Other:	™ None  □ Unknown  □ Transfer  □ Delivery  □ Dispenser  □ Heating Oil - Suction Pump  □ Dispenser system  - Suction Pump  □ Aboveground  Tank Pressure Pump  □ Suction type  □ Other:	Unknown Unknown Unknown Transfer Delivery Dispenser Heating Oil - Suction Pump Dispenser system Suction Pump Aboveground Tank Pressure Pump Country Co	□ None  n Unknown  □ Transfer  □ Delivery  ▷ Dispenser  □ Heating Oil -  Suction Pump  □ Dispenser system  - Suction Pump  □ Aboveground  Tank Pressure Pump  □ Suction type  □ Vother:	ch disp +,
Pump Secondary Containment				The second	
Pump Leak Detection	☐ None/Visual Inspection ☐ Unknown ☐ N/A ☐ Drip Tray ☐ Alarm ☐ Monitoring Wells / ☐ Sump Alarm ☐ Sump Visual ☐ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection  ✓ Unknown □ N/A □ Orip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	
Pump Manufacturer				Jul - HIII 1700	1140x 202+-
Other					-
Potential Site Sensitivities	5,405,550				-
Proximity of Site Sensitivities				15 1.7	
# of Monitor wells (total)				none visible	-
Number of monitoring wells within 3m of Tank	S			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
SECURITY					-
Tank Enclosure					-
Enclosure Locked					_
Fili Pipe Locked					

pool lock on yump I disperser system

Compliance	F 6:	n Biolog ant	c Piping not	
□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line/□ Tank less than 3m from property line/□ Tank less than 3m from building	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not incated in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from building	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from building	equipped with flexible connection  D No protection from physical damage  D Tank not labelled to No ULC tag  D At least one fire extinguisher not located in vicinity of pump  No posted safety signs  Hose/connectors not ULC approved  Vent less than 3.5 m above adjacent ground level  Vent less than 3.5 m from any building openings  Tank less than 3m from overnead power lines  Tank less than 3m from property line  Tank less than 3m from property line  Tank less than 3m from property line  Tank less than 3m from property line	No No No No No No No

in Spacing between	□ Spacing between	n Spacing between	D Spacing between	NIA
tanks less than 1m	tanks less than 1m	tanks less than 1m	tanks less than 1m	1.1.121
n Tank located less	Tank located less	☐ Tank located less	Tank located less	
than 6m from	than 6m from	than 6m from	than 6m from	No
liquefied petrolcum	liquefied patroleum	liquefied petroleum	liquefied petroleum	
gas cylinders	gas cylinders	gas cylinders	gas cylinders c Inadequate fire	7
🗆 Inadequate fire	ਹ Inadequate fire	□ Inadequate fire	department access	- (
department access	department access	department access  in Tank supports not	Tank supports not	
Tank supports not	o Tank supports not on firm foundations	on firm foundations	on firm foundations	KI.
on firm foundations	© Tank not	☐ Tank not	© Tank not	
E Tank not	equipped with	equipped with	equipped with	
equipped with	nominal and	nominal and	nominal and	1/1-
nominal and	emergency venting	emergency venting	emergency venting	
emergency venting	□ Valves not made	: Valves not made	a Valves not made	
of steel	of steel	of steel	of steel	No
D Secondary	n Secondary	□ Secondary	Secondary	1000
containment less	containment less	containment less	containment less	
than 110% of tank	than 110% of tank	than 110% of tank	than 110% of tank	No
capacity	capacity	capacity /	capacity	
□ Secondary	ri Secondary	□ Secondary	☐ Secondary	
containment wall less	containment wall less	containment wall less	containment wall less	
than 1.5m from	than 1.5m from	than 1.5m from	than 1.5m from	V 3
storage tank shell	storage tank shell	storage tank shell	storage tank shell	
© Pump less than	a Pump less than	/o Pump less than	@ Pump less than	. 1
3m from property line	3m from property line	3m from property line	3m from property line	613
C Pump less than	Pump less than	□ Pump less than	© Pump less than	
1.5m from building	1.5m from building /	1.5m from building	1.5m from building	110
openings	openings	openings	openings	1
☐ No anti-siphon	□ No anti-siphon	□ No anti-siphon	□ No anti-siphon	İ
device	device /	device	device	
a Piping not	□ Piping not/	□ Piping not	a Piping not	000E0
adequately supported	adequately supported	adequately supported	adequately supported	No
□ Incorrect piping	a Incorrect piping	u Incorrect piping	G Incorrect piping	
for application	for application	for application	for application	1
C Not tagged with	<ul> <li>Not lagged with</li> </ul>	□ Not tagged with	n Not tagged with	3270
CPPI colour code	CPPI colour code	CPPI colour code	CPPI colour code	
system	system	system	system	7
No shut-off valves	a No shut-off valves	□ No shut-off valves	☐ No shul-off valves	
No level gauge on	o No level gauge on	□ No level gauge on	o No level gauge on	
tank	tank	lank	tank	7
k: Inadequate	n Inadequate	□ Inadequate	□ Inadequate	
access to tank or	access to tank or	access to tank or	access to tank or	No
piping	piping	piping	piping  Dangerous	18.3
□ Dangerous	n Dangerous	□ Dangerous	objects/debris nearby	Nie
objects/debris nearby	objects/debris nearby	objects/debris nearby	□ Signs of	121.2
□ Signs of	□ Signs of	☐ Signs of material/paint	material/paint	
material/paint	material/paint	deterioration	deterioration	No
deterioration	deterioration	detenoration	detendration	1.8
Dul - Is wheel most	Dykolombankmont	Dyke/embankment	Dyke/embankment	
Dyke/embankment	Dyke/embankment	design is incorrect for	design is incorrect for	2
design is incorrect for	design is incorrect for	application	application	- 0
application	application  Diping not	application a Piping not	5 Piping not	1
L: Piping not	properly labelled	properly labelled	properly labelled	Labelle
properly labelled	□ No fire valve(s) at	□ No fire valve(s) at	© No fire valve(s) at	
a No fire valve(s) at appliance	appliance	appliance	appliance	

Halocarbor	Hatocarbon Inventory (TAKE PHOTO	E PHOTO OF A/C TAG)	16)						
Room	Equipment	Equipment Description	Manufacturer & Date	Installation	Model / Seral #	Capacity (blu/hr. tonnes, kW)	ODS Type	Lag Book Present?	Total Ouantity ODS
atcher	latcher Andop		paming you	2005	M. AHT182300 5° E02816002	rworhur.	R12	No	8.5
Maurent	Stidest		hdmindl behave	7005 7005	Looks - 20 yes old	mount musinter	unduran	_	Julynon
raunt	dur Sarzeo	Junt French	weeking house	310	start addisive out	us than	uplander		untercoun
SAS(PRE	School doug truck	(N. 1)	kennore	2002	M: 30120-08	VALLERON	717	>	2463
00,1.13	Fredal	- 5 2N	Sincy		No tags visibility	worth	mounder	2	undersa
bassonma	wind on A (c unit	any Nothors	00-1-20	1095-	looks of bost 25 yes of	1 Julynown	MITTERN	No	grinda.

Determine if A/C units are greater than 19kW (5.5 tonnes or 65,000 btu/hr)

Record all lag information from refrigerators, freezers and water coolers Note if coolant system is in good shape (lines not rusted or leaking)

Who services this equipment(contact number)?
Have there been disposals?
Are there service/tes/disposal files(get copies)? Y/N

7000 0000

RCMP Environmenta	l Inventory Checklist	
1. General		
Property Manager: RCMP Housing		
Site Name: RCMP Pelvan Narious	perduru (5) 2000 Musicutsi	DFRP 37014
Detachment Assistant: No admo state		•
Telephone: 306 632 3700		
Detachment Commander: Staff Serggar	+ Joe Milburn	
2. Photo Checklist		_
A. Outside of Detachment Front of Detachment Well Cover Burn Barrel / Incinerator Septic System Storage Tanks and Piping AC Units [manufacturer tags] NAC Adjacent properties	B. Inside of Detachment Halocarbon System(s) Water Treatment System Storage Tanks and Piping Floor Drains VC Units [manufacturer tags]	
3. Site Visit Inventory		1
A1. Adjacent Properties: Current Use of Properties: Current Use of Properties: Current Use of Properties: 2. Recreation 4. Industrial 5. Agricultura	nal 3. VacanvOpen	
(Circle Land Use)	Description (Attach a site sketch that indicates general drainage)	
North: 1 2 3 4 5 6 @ @ dyn (4)		
East: 1 2 3 4 5 6 Bush		_
South: 1 2 3 4 5 6 evidence		_
West:: 1 2 3 4 5 6 Residen	Up.	
B. Buildings and Works On-Site: Number of buildings on-site:	Date of Construction: ~ (995	
Notes:	nut	

Item	Storage	Material Safety Data Sheet	Disposal Method
Ammunition			
Tear Gas			
. Pepper Spray			
Flares			
: Explosives			
Z Gasoline	Joing ars in	shid.	
: Burn Barrel findinerator			
Storage Drums			
Propane Tanks	1 AST propare	for hat	
: Fuel Storage Tanks	6 (		
Breathalyzer Ampoules			
:: Data Master Ethyl Icohol			
ା Blood Samples			
□ Sharps			
Liquid fertilizer			
□ Large Quantity of Ncohol			
□ Drugs			
Glycol			
©PCBs(transformers/ capacitors/ light ballasts)			
□ Asbestos			
○ Urea Formaldehyde			
n Lead(painVpipes)			
⊇ Radon Testing			
.: Other:	744001.00 (10000000000000000000000000000000		

D. Interviews Lorne Thomas, RCMP Sarght P.N. Sept 25/07  1. Is there evidence of underground storage tanks (USTs) on-site?  Were the USTs removed?
JOR Milburn, FLMP Staff Sargent PN. Sept 25/07
1. Is there evidence of underground storage tanks (USTs) on-site?  Were the USTs removed?  When?  Was there a report?
Was there any spill/leak evidence?  Have the tanks ever been tested for leaks?
2. Is there evidence of aboveground storage tanks (ASTs) on-site?  When were the ASTs removed?  Was there a report?  Was there any spill/leak evidence?  Have the tanks ever been tested for leaks?  Unlinear.
3. Is there evidence of barrels or drums on-site? Tour water barrel barrel have barrels or drums on-site?
What items are stored in the drum?
4. Is there other evidence in records or other materials collected that cause concern?
5. Is there evidence of environmental hazards on adjacent sites?  Describe:  Locate the hazard on the site sketch.  Is the hazard up slope or down slope of the detachment?

. Is there a history of environmental problems	in the area ?	N 2.
.g. Flooding?		
Mhat is the source of Potable Water?  Municipal  Drilled Well - what type  Bottled Water (Store bought / Filled from other source)	Drinking	) water reverse osm
Bottled Water (Store bodgit / Filled from other source)     Dug Well	( )/	nm iii
Other:	lotat	d baserer
Method of Payment for Bottled water:	•	people water treated
ocation of well: No will s on site.		before driving.
Complaints from occupants (aesthetic, odour, fixtures, etc.):	unmoun	
Date & result of last water test:	7	
8. What is the system of Domestic Waste? Municipal Sewer	Plarive	summ system
Location of Septic Bed: NIA		
Date of last pumping:		
Office of fact parrying.		
Other notes:		
9. What current options are available for Solid	Waste?	eisure garbage
Detachment	Municipality	collection
Regular Waste	ve	Collection
G Refundable Recycling	0	
☐ Recycling (plastics, paper_cardboard, etc.)	U.	
(I Compost (organics)	a	
□ Batteries		

E. Storage Tanks	
I. Is there an Emergency Generat	ror on-site? YES: □ NO: ₩
	Fuel / Battery Operated
s there a Maintenance or Test Log? What is the last log date and result?	N/A
i fuel generated	alor
Indicate if the tank is connected to the general	
Complete a Storage Tank Data Sheet and tal	ke phonos.
F. ENVIRONMENTAL ASSESSMEN	NT INFORMATION
If YES, describe and provide location:	
Is surface water located within it YES, describe (ie: wetland, pond, river, str.)	n 30m of the project site: YES: D NO: S
2. Is surface water located within it YES, describe (ie: welland, pond, river, str	1 3011 Of the project site.
2. Is surface water located within it YES, describe (ie: welland, pond, river, str	ers to handle drainage or does it rely on surface run-off? Surface run-off YES: Y NO: 0

G. ADDITIONAL COMMENTS / POTENTIAL ENVIRONMENTAL CONCERNS:

ank Information	Tank 1	Tank 2	Tank 3	Tank 4
JLC NO.				
API Standard Number				
Description (i.e. Main heating oil tank, teating oil day tank. Main ficsel tank, Generator day ank, Regulated gasoline ank, Non-regulated gasoline tank)	SURAL # 32454 A			
Location	Grengerd			
is Tank Reportable (AST >= 2500 L or UST)?	⊏ Yes ✓ No	☐ Yes ☐ No	□ Yes □ No	□ Yes □ No
EC Tag ID (if Tank is reportable)			The state of the s	
Is Tank located within 350 m preperty line?	∀Yes ∴ No	o Yes o No	O Yes O No	□ Yes □ No
is Tank Reportable (E2) (Propane Tank Size greater or equal to 9200 L) <sup>2</sup>	∃ Yes ▼ No	D Yes D No	⊐ Yes □ No	∃ Yes ∃ No
E2 Plan available?	g Yes g No	□ Yes □ No	□ Yes □ No	□ Yes □ No
Has the E2 plan Tested/Exercised annually? (If applicable)	o Yes - last done on:(Date)	□ Yes - last done on:(Date) □ No	□ Yes - last done on: (Date) □ No	☐ Yes - last done on:(Date) ☐ No
Status	☑ Active □ Inactive □ Disposed □ Unknown	□ Active □ Inactive □ Disposed □ Unknown	☐ Active☐ Inactive☐ Disposed☐ Unknown	□ Active □ Inactive □ Disposed □ Unknown
Is a site visit required to further inspect the tank?	by: (Date) √No	© Yes by: (Date) © No	□ Yes by: (Date) □ No	© Yes by: (Date) © No
is the tank part of a tank system?	□ Yes ♥No	□ Yes □ No	□ Yes □ No	□ Yes □ No
Year of Installation	unknown			
Year of Disposal	active			
Manufacturer	Willstern York Rich	,		
Manufacture Date	1995			
Tank Size (L)	040.5"			
Capacity (L)	1000 USWG			

uel Type	n Aviation Fuel o Bilumen □ Bunker-C □ Diesel □ Ethanol □ Glycol □ Heating Oil □ Kerosene □ Natural Gas □ Organic Chemicals □ Other:  ✓ Propane □ Unleaded Gasoline □ Waste Oil	a Aviation Fuel b Bitumen b Bunker-C b Diesel b Ethanol b Glycol b Heating Oil c Kerosene c Natural Gas c Organic Chemicals b Other: b Propane b Unleaded Gasoline c Waste Oil	□ Aviation Fuel □ Bitumen □ Bunker-C □ Diesel □ Ethanol □ Glycol □ Heating Oil □ Kerosene □ Netural Gos □ Organic Chemicals □ Other: □ Propune □ Unleaded Gasoline □ Waste Oil	Distriction Fuel Distriction Diesel Ethanol Gilycol Diesel Heating Oil Kerosene Natural Gas Organic Chemicals Other: Diropane Unleaded Gasoline Waste Oil
Tank Construction	,			
Construction	Single Wall  Double Wall  Unknown	☐ Single Wall ☐ Double Wall ☐ Unknown	☐ Single Wall ☐ Double Wall ☐ Unknown	☐ Single Wall ☐ Double Wall ☐ Unknown
Material	□ Aluminum □ Concrete □ Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete □ Fiberglass □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete-Steel Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete □ Conposite □ Fiberglass □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other
Placement	☐ Aboveground- Vertical	a Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:	☐ Aboveground- Vertical ☐ Aboveground- Horizontal ☐ Underground ☐ Other:	□ Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:
Tank Cathodic Protection				
Tank Corrosion Protection	Paint Coating None Other:	D Paint D Coating None D Other:	☐ Paint☐ Coating☐ None☐ Other:	© Paint © Coating © None © Other:
Concrete stando wedlind	☐ Concrete Pad ☐ Earth/Soil ☐ Gravel (raised or level) ☐ Inside building ☐ Wood ⑤/Other:	© Concrete Pad  □ Earth/Soil  □ Gravel (raised or level)  □ Inside building  □ Wood  □ Other:	☐ Concrete Pad ☐ Earth/Soil ☐ Gravel (raised or level) ☐ Inside building ☐ Wood ☐ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:
Frallic Protection Fraud within packagand	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:

Leak/Spill Evidence	∀None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	B None D Unknown Staining Spill report D Interview D Gour D Other:	D None D Unknown D Staining D Spill report Interview D Odour D Other:	D None D Unknown D Staining D Spill report D Interview D Odour D Other:	
Tank Secondary Containment	□ None  MUnknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Soil embankment vith impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel concrete embankment with impermeable liner □ Steel concrete	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel sout	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Soil embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	
Tank Leak Detection	None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □,Other:	D None/Visual Inspection D Automatic Tank Gauge Interstitial Leak Detection D Monitoring Wells D Portable Detector D Precision Leak Test D Site glass D Unknown D Vacuum Floor	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	
Tank Overfill Protection	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	☐ None ☐ Unknown ☐ Alarm only ☐ Alarm with pump interlock ☐ Level gauge ☐ Mechanical shut-off ☐ Vent float shut-off ☐ Audible alarm including vent ☐ Audible and visual alarm ☐ Level gauge with audible afarm ☐ Spill box ☐ Vent Float Shut-off(audible) ☐ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audibte and visual alarm □ Level gauge with audibte alarm □ Spill box □ Vent Float Shut-off(audibte) □ Other.	

STORE DESCRIPTION OF THE PROPERTY OF THE PROPE

ist Fank Leak Test Date				- 0.5
ent Pipe Diameter  No von 15	© 0.5 © 0.75 © 1.25 © 1.5 © 1.75 © 2 © 2.5 © 3 © Assorted sizes	□ 0.5 □ 0.75 □ 1 □ 1.25 □ 1.5 □ 1.75 □ 2 □ 2.5 □ 3 □ Assorted sizes	© 0.5 © 0.75 © 1.25 © 1.5 © 1.75 © 2 © 2.5 © 3 © Assorted sizes	0.5 0.75 0.1.25 0.1.5 0.1.75 0.2 0.2.5 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3
OC Control	□ None □ Unknown □ Vapour Return Line □ Other:	□ None □ Unknown □ Vapour Return Line □ Other:	a None a Unknown a Vapour Return Line a Other	ii None ii Unknown ii Vapour Return Line ii Other:
PIPING				
Description				
vlatenal	☐ Unknown ☐ Steel ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Gopper ☐ Brass ☐ Black Iron ☐ Rubber ☐ Enviroflex/Bufflex ☐ Galvanized steel ☐ Steel and copper ☐ Steel with copper tubing ☐ Steel (bare) ☐ Steel (painted, wrapped, tar coated) ☐ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:
Secondary Containment	t/N/A D None D Unknown D Drip tray Sump O Other:	☐ N/A ☐ None ☐ Unknown ☐ Orip tray ☐ Sump ☐ Other:	D N/A  None Unknown Drip tray Sump Other:	□ None □ Unknown □ Drip tray □ Sump □ Other:
Placement	□ N/A □ Aboveground □ Underground  (y/Aboveground and Underground □ Unknown	G N/A  D Aboveground Underground Aboveground and Underground Underground	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	E N/A  D Aboveground  Underground  Aboveground and Underground  Underground
Piping Corrosion Protection	© Paint ✓ Coating © None □ Other:	© Paint © Coaling © None © Other:	□ Paint □ Coaling □ None □ Other:	© Paint © Coating © None © Other:
Piping Cathodic Protection				
Manufacturer	unknown		<u>i</u>	1

Piping Leak Detection	brNone/Visual Inspection  Unknown  N/A  Interstitial Leak Detection  Monitoring Wells  Sump Alarin  Sump Visual  Other:	© None/Visual Inspection  □ Unknown  □ N/A  □ Interstitial Leak Detection  □ Monitoring Wells  □ Sump Alarm  □ Sump Visual  □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	G None/Visual Inspection  Unknown  N/A  Interstitial Leak Detection  Monitoring Wells  Sump Alarm  Sump Visual  Other:
ast Piping Leak Test Date	unknown			
ump(s)	And the second s	,		□ None
Pump Type  No Pumps	C None C Unknown C Transfer Delivery Dispenser Heating Oil - Suction Pump Dispenser system - Suction Pump Aboveground Tank Pressure Pump Suction type Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system □ Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	Dispenser Dispenser Dispenser Dispenser Dispenser Dispenser Suction Pump Dispenser system Suction Pump Aboveground Tank Pressure Pump Dispenser Suction Pump
Pump Secondary Containment				□ None/Visual
Pump Leak Detection	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	Inspection  Dinknown  N/A  Dirip Tray  Alarm  Monitoring Wells  Sump Alarm  Sump Visual  Other:
Pump Manufacturer				
Other			-	
Potential Site Sensitivities				
Proximity of Site Sensitivities				
# of Monitor wells (total)				
Number of monitoring wells within 3m of Tank				
SECURITY				
Tank Enclosure	Smud mid	h: backgard		
Enclosure Locked				
Fili Pipe Locked				

electric hoster under north.

Compliance				□ Piping not   □
	☐ Piping not equipped with flexible connection ☐ No protection from physical damage ☐ Tank not labelled ☐ No ULC tag ☐ At least one fire extinguisher not located in vicinity of pump ☐ No posted safety signs ☐ Hose/connectors not ULC approved ☐ Vent less than 3.5 m above adjacent ground level ☐ Vent less than 1.5 m from any building openings ☐ Tank less than	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not iocated in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from building	equipped with flexible connection on No protection from physical damage of Tank not labelled to No ULC tag of At least one fire extinguisher not located in vicinity of pump of No posted safety signs of ULC approved of Vent less than 3 m above adjacent ground level of Vent less than 1 m from any building openings of Tank less than 3 m from overhead power lines of Tank less than 3 m from property line of Tank less than 3 m from property line of Tank less than 3 m from property line of Tank less than 3 m from property line of Tank less than 3 m from property line of Tank less than 3 m from property line of Tank less than 3 m from property line of Tank less than 3 m from building

in Consine hotungs	7
n Spacing between tanks less than 1m	tai
n Tank located less	C
than 6m from	th
liquelied petroleum	tiq
gas cylinders	qa
□ Inadequate fire	3.
department access	de
□ Tank supports not	1
on firm foundations	01
C Tank not	-
equipped with	e
nominal and	no
emergency venting	er
□ Valves not made	
of steel	0
to Secondary	1
containment less	C
than 110% of tank	th
capacity	C
c Secondary	
containment wall less	C
than 1.5m from	II
storage tank shell	S
c Pump less than	
3m from property line	3
□ Pump less than	
1.5m from building	1
openings	0
□ No anti-siphon	0
device	0
adequately supported	2
□ Incorrect piping	1 0
for application	l f
© Not tagged with	1 "
CPPI colour code	1
system	1 5
© No shut-off valves	1
No level gauge on	
tank	1
c: Inadequate	1
access to tank or	1
piping	1
:: Dangerous	1
objects/debris nearby	1
Signs of	
material/paint	1
deterioration	
0	
Dyke/embankment	1
design is incorrect for	
application	1
D Piping not	
properly labelled	

	n Causina bahusaa
Spacing between	n Spacing between
nks less than 1m	tanks less than 1m
Tank located less	Tank located less
an 6m from	than 6m from
uclied petroleum	tiquefied petroleum
is cylinders	gas cylinders
Inadequate fire	☐ Inadequate fire
epartment access	department access
Tank supports not	n Tank supports not
n firm foundations	on firm foundations
: Tank not	⊖ Tank not
guipped with	equipped with
ominal and	nominal and
mergency venting	emergency venting
□ Valves not made	Valves not made
f steel	of steel
Secondary	□ Secondary
ontainment less	containment less
nan 110% of tank	than 110% of lank
apacity	capacity
c Secondary	El Secondary
ontainment wall less	containment wall less
nan 1,5m from	than 1.5m from
	storage tank shell
torage tank shell	□ Pump less than
c Pump less than	3m from property line
m from property line	□ Pump less than
⊆ Pump less than	1.5m from building
.5m from building	0.000 mm m 10.000 mm 10.000 mm 10.000 mm 10.000 mm 10.000 mm 10.000 mm 10.000 mm 10.000 mm 10.000 mm 10.000 mm
penings	openings
⇒ No anti-siphon	□ No anti-siphon
levice	device
☐ Piping not	© Piping not
idequately supported	adequately supported
□ Incorrect piping	□ Incorrect piping
or application	for application
Not tagged with	a Not tagged with
CPPI colour code	CPPI colour code
system	system
<ul> <li>No shut-off valves</li> </ul>	☐ No shut-off valves
No level gauge on	i: No level gauge on
ank	tank
c: Inadequate	□ Inadequate
access to tank or	access to tank or
piping	piping
Dangerous	Dangerous
objects/debris nearby	objects/debris nearby
Signs of	□ Signs of
material/paint	material/paint
deterioration	deterioration
D.	0
Dyke/embankment	Dyke/embankment
design is incorrect for	design is incorrect for
application	application
	□ Piping not
□ Piping not	properly labelled
properly labelled	□ No fire valve(s) at
a No fire valve(s) at	appliance
appliance	ahiname

☐ Spacing between □ Spacing between tanks less than 1m tanks less than 1m u Tank located less ☐ Tank located less than 6m from than 6m from liquefied petroleum liquefied petroleum gas cylinders gas cylinders a Inadequate fire □ Inadequate fire department access department access a Tank supports not □ Tank supports not on firm foundations on firm foundations G Tank not ☐ Tank not equipped with equipped with nominal and nominal and emergency venting emergency venting □ Valves not made □ Valves not made of steel of steel © Secondary containment less □ Secondary containment less than 110% of tank than 110% of tank capacity capacity □ Secondary □ Secondary containment wall less containment wall less than 1.5m from than 1.5m from storage tank shell storage tank shell □ Pump less than a Pump less than 3m from property line 3m from property line d Pump less than D Pump less than 1.5m from building 1.5m from building openings openings □ No anti-siphon □ No anti-siphon device device © Piping not ☐ Piping not adequately supported is incorrect piping adequately supported a Incorrect piping for application for application □ Not tagged with ☐ Not tagged with CPPI colour code CPPI colour code system system .
□ No shut-off valves ☐ No shut-off valves D No level gauge on a No level gauge on lank tank □ Inadequate □ Inadequate access to tank or access to lank or piping piping n Dangerous □ Dangerous objects/debris nearby objects/debris nearby □ Signs of □ Signs of material/paint material/paint deterioration deterioration Dyke/embankment Dyke/embankment design is incorrect for design is incorrect for application application a Piping not D Piping not

properly labelled

appliance

u No fire valve(s) at

properly labelled

appliance

□ No fire valve(s) at

	Total Ouantity ODS	2056	3008	mbrown		
		N,	~	3		
	Lag Book Present?	2		>		
	Type	R 134a	R22	Control of		
	Capacity (blu/hr, tonnes, kW)	Ly Mach	induces R22	- Chaphra		
	Model / Serial #	M: KSRSOD ODUHO! S. SFDON TSP	2. CT 703 195 0630	record tags		
	Installation Date	undanna	1+00	Canno		
AG)	Manufacturer & Date	12 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	haylas	Zenill		
Halocarbon Inventory (TAKE PHOTO DF A/C TAG)	Equipment Description					
Inventory (TAKE	Equipment	Friday	portable A(Cunit	Deep		
Halocarbon	Room	Jatche	Ba somme	BASIMANT		

Determine if A/C units are greater than 19kW (5.5 tonnes or 65,000 btu/hr)

Record all tag information from refrigerators, freezers and water coolers. Note if coolant system is in good shape (lines not rusted or leaking)

Who services this equipment(contact number)?

Have there been disposals?

Are there service:test/disposal files(ge: copies)? Y/N

RCMP Environmenta	I Inventory Checklist	
1. General		
Property Manager: PCMP Housing		
Site Name: REMP PALICON NOVIONS	en dence @ 2600 Musker	the (middle
Detachment Assistant: No admin Stat	f	house)
Telephone: 306 630 3300		DERP
Detachment Commander: Staff Serrea	nt Joe Milburn	39014
2. Photo Checklist		
A. Outside of Detachment Front of Detachment Well Cover Burn Barrel / Incinerator Septic System Storage Tanks and Piping AC Units [manufacturer tags] Adjacent properties	B. Inside of Detachment Hatocarbon System(s) Water Treatment System Storage Tanks and Piping Floor Drains A/C Units [manufacturer tags]	
3. Site Visit Inventory		
A1. Adjacent Properties: Current Use of Properties: Current Use of Properties: 2. Recreation 4. Industrial 5. Agricultura	nal 3. Vacani/Open	
(Circle Land Use)	Description (Attach a site sketch that indicates general drainage)	
North: 1 2 3 4 5 6		
East: 1 2 3 4 5 6	su R(s)	_
South: 1 2 3 4 5 6		_
West:: 1 2 3 4 5 6		
B. Buildings and Works On-Site: Number of buildings on-site:	Nouse Date of Construction: ~\ \ 995.	
Notes:	shid	

Item	Storage	Material Safety Data Sheet	Disposal Method
Ammunition			
Tear Gas			
Pepper Spray			
Flares			
Explosives			
/Gasoline	yerry Can in	shid	
Burn Barrel findinerator	J		
Storage Drums			
Propane Tanks	1 AST propo	the for heet	
. Fuel Storage Tanks	1 1		And the second s
Breathalyzer Ampoules			
Data Master Ethyl cohol			
Blood Samples			
3 Sharps			
Liquid fertilizer			
Carge Quantity of Icohol			
_ Drugs			
: Glycol			
::PCBs(transformers/ capacitors/ light ballasts)	And the second s		
ti Asbestos			
u Urea Formaldehyde	20 CO CO CO CO CO CO CO CO CO CO CO CO CO		
□ Lead(paint/pipes)			
∋ Radon Testing			14.12.14.24.24.24.24.24.24.24.24.24.24.24.24.24
.: Other:	9300 C		

Thomas, PCMP Sargent PN. Sept 25/09

Ind storage tanks (USTs) on sing D. Interviews 1. Is there evidence of underground storage tanks (USTs) on-site? Were the USTs removed? When? NIA Was there a report? Was there any spill/leak evidence? Have the tanks ever been tested for leaks? 2. Is there evidence of aboveground storage tanks (ASTs) on-site? AST propane active When were the ASTs removed? Was there a report? NIA Was there any spill/leak evidence? No Have the tanks ever been tested for leaks? unknown. 3. Is there evidence of barrels or drums on-site? No How long has the barrel been in use? What items are stored in the drum? 4. Is there other evidence in records or other materials collected that cause concern? 112 5. Is there evidence of environmental hazards on adjacent sites? 1/2 Locate the hazard on the site sketch. Is the hazard up slope or down slope of the detachment?

Anne

6. Is there a history of environmental problem E.g. Flooding?	s in the area ?	lo
7. What is the source of Potable Water?  Municipal Drilled Well - what type Bottled Water Store bought / Filled from other source) Dug Well Other:  Method of Payment for Bottled water: Location of well: Location of well:  Description of water treatment on site:  Complaints from occupants (aesthetic, odour, fixtures, etc.):  Date & result of last water test:	vir B prio ge water f	water treated  ita water fitter  to denoting  iten  a double colour,
8. What is the system of Domestic Waste?  Location of Septic Bed:  Oate of last pumping:  Other notes:		Rusere suna system
9. What current options are available for Soli  Detachment  VRegular Waste  E Rehindable Recycling  D Recycling (plastics, paper cardboard, etc.)  Li Compost (organics)  E Batteries  Are there blue and green bins in the detachment?	Municipality  Municipality	Reserve gention

E. Storage Tanks
1. Is there an Emergency Generator on-site? YES: UND. V
Fuel / Battery Operated
What is the last log date and result?  What is the last log date and result?  If fuel generated  Indicate if the tank is connected to the generator.  Complete a Storage Tank Data Sheet and take photos.  F. ENVIRONMENTAL ASSESSMENT INFORMATION
Is the property located on or close to any ecologically sensitive areas (ie: wetlands, flood      Is the property located on or close to any ecologically sensitive areas (ie: wetlands, flood
plains, scenic areas, National or Provincial Parks, etc.)?  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  NO:  YES:  YES:  NO:  YES:
surface runoff striain behind house
3. Does the site have storm sewers to handle drainage or does it rely on surface run-off?  Storm sewers YES: □ NO: ♥ Surface run-off YES: ♥ NO: □  Locate:  Paved surfaces  Ditches (direction of drainage)  storm water drains and manholes
4. Is there visual evidence of vegetative stress on-site? YES: □ NO: ✓ If YES, describe:
5. Is there visual evidence of local fauna on-site?  YES: □ NO: ゼ  NO: ゼ

G. ADDITIONAL COMMENTS / POTENTIAL ENVIRONMENTAL CONCERNS:

ANK INVENTORY INFORM		Tank 2	Tank 3	Tank 4
ank Information	Tank 1	I din 2		
LC NO.				
Pt Standard Number				
Description (i.e. Main heating oil tank, ieating oil day tank. Main iesel tank, Generator day ank, Regulated gasoline ank, Non-regulated jasoline tank)	propare AST Sural# 32653A			
Location	cyes			□ Yes
is Tank Reportable (AST >= 2500 L or UST)?	c Yes	a Yes a No	□ Yes □ No	U No
EC Tag ID (If Tank is eportable)				
Is Tank located within 350 in property line?	V. Yes □ No	⊃ Yes ⊇ No	□ Yes □ No	□ Yes □ No
is Tank Reportable (E2) (Propane Tank Size greater or equal to 9200 Lj?	⊙ Yes √No	© Yes □ No	⊕ Yes ∋ No	□ Yes □ No
E2 Plan available?	⊖ Yes □ No	□ Yes □ No	a Yes a No	□ Yes □ No
Has the E2 plan Tested/Exercised annually? (If applicable)	□ Yes - last done on: (Date) □ No	□ Yes - last done on: (Date) □ No	or:(Date)	□ Yes - last done on:
Status	Ç'Active □ Inactive □ Disposed □ Unknown	D Active D Inactive Disposed D Unknown	D Active D Inactive D Disposed D Unknown	□ Active □ Inactive □ Disposed □ Unknown
ts a site visit required to further inspect the tank?	by:(Date)	⊕ Yes by: (Date) ⊕ No	□ Yes by: (Date) □ No	□ Yes by: (Date) □ No
is the tank part of a tank system?	□ Yes yrNo	G Yes D No	o Yes o No	□ Yes □ No
Year of Installation	1			
Year of Disposal	active			
Manufacturer	Leoner Rock B.	1(2		
Manufacture Date	1995			
Tank Size (L)	\$ 40.5"			
Capacity (L)	1000 05000			

uel Type	n Aviation Fuel o Biltumen D Bunker-C Diesel D Ethanol D Glycol Heating Oil Kerosene Natural Gas D Organic Chemicals Other VPropane Unleaded Gasoline Waste Oil	n Aviation Fuel o Bilumen o Bunker-C o Diesel o Ethanol o Glycol o Heating Oil o Kerosene o Natural Gas o Organic Chemicals o Other: o Propane o Unleaded Gasoline o Waste Oil	☐ Aviation Fuel ☐ Bilumen ☐ Bunker-C ☐ Diesel ☐ Ethanol ☐ Glycol ☐ Heating Oil ☐ Kerosene ☐ Natural Gas ☐ Organic Chemicals ☐ Other: ☐ Propane ☐ Unleaded ☐ Gasoline ☐ Waste Oil	D Aviation Fuel D Bitumen D Bunker-C Diesel E Ethanol D Glycol Heating Oil Kerosene Natural Gas Organic Chemicals Other: Propane Unleaded Gasoline Waste Oil
Tank Construction				
Construction	Single Wall Double Wall Unknown	☐ Single Wall ☐ Double Wall ☐ Unknown	⊖ Single Wall ⊝ Double Wall ⊝ Unknown	□ Single Wall □ Double Wall □ Unknown
Material	□ Aluminum □ Concrete □ Composite □ Fiberglass ○ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete-Steel Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	□ Aluminum □ Concrete □ Concrete-Steel Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	☐ Aluminum ☐ Concrete ☐ Concrete ☐ Composite ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Fiberglass ☐ Unknown ☐ BMI-FRP ☐ Plastic ☐ Polyethylene inner ☐ Stainless Steel ☐ Other
Placement	□ Aboveground- Vertical ✓ Aboveground- Horizontal □ Underground □ Other:	a Aboveground- Vertical a Aboveground- Horizontal a Underground b Other:	□ Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:	□ Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:
Tank Cathodic Protection				
Tank Corrosion Protection	Paint Coating None Other:	a Paint a Coating a None a Other:	☐ Paint ☐ Coating ☐ None ☐ Other:	☐ Paint ☐ Coating ☐ None ☐ Other:
Tank Platform Concrete stonia	☐ Concrete Pad ☐ Earth/Soil ☐ Gravel (raised or level) ☐ Inside building ☐ Wood ☑ Other:	□ Concrete Pad. □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:
Frallic Protection  Fund within  backing and	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail ☑ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:

Leak/Spill Evidence	None Unknown Staining Spill report Interview Odour Other:	D None D Unknown D Staining D Spill report D Interview D Odour D Other:	□ None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	Di None Di Unknown Di Staining Di Spill report Di Interview Di Odour Di Other:
Tank Secondary Containment	✓ None  □ Unknown  □ Steel Reservoir  □ Soil embankment  □ Concrete embankment  □ Steel embankment  □ Soil embankment with impermeable liner  □ Concrete embankment with impermeable liner  □ Steel embankment with impermeable liner  □ Steel embankment with impermeable liner  □ Steel embankment with impermeable liner  □ Steel embankment with impermeable liner  □ Steel embankment with impermeable liner  □ Vault  □ Double-walled tank  □ Steel tray  □ Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	a None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:	o None o Unknown o Steel Reservoir o Soil embankment o Concrete embankment o Steel embankment do Soil embankment with impermeable liner o Concrete embankment with impermeable liner o Steel embankment with impermeable liner o Steel embankment with impermeable liner o Steel embankment with impermeable liner o Steel soult o Double-walled tank o Steel tray o Other:
Tank Leak Detection	☐ Mone/Visual Inspection ☐ Automatic Tank Gauge ☐ Interstitial Leak Detection ☐ Monitoring Wells ☐ Portable Detector ☐ Precision Leak Test ☐ Site glass ☐ Unknown ☐ Vacuum Floor ☐ Other	c) None/Visual Inspection D Automatic Tank Gauge D Interstitial Leak Detection Monitoring Wells D Portable Detector Precision Leak Test Site glass Unknown D Vacuum Floor D Other:	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:
Tank Overfill Protection	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) y/ Other:	☐ None ☐ Unknown ☐ Alarm only ☐ Alarm with pump interlock ☐ Level gauge ☐ Mechanical shut-off ☐ Vent float shut-off ☐ Audible alarm including vent ☐ Audible and visual alarm ☐ Level gauge with audible alarm ☐ Spill box ☐ Vent Float Shut-off(audible) ☐ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:

To a Local Total Onlin				
est Tank Leak Test Date  Cent Pipe Diameter  No. VVV	0.5 0.75 0.1.25 0.1.5 0.1.75 0.2.5 0.3 0.Assorted sizes	0.5 0.75 1 1.25 1.5 1.75 2 2 2.5 3 Assorted sizes	0 0.5 0 0.75 n 1 0 1.25 0 1.5 0 1.75 n 2 0 2.5 0 3 0 Assorled sizes	0 0.5 0 0.75 0 1 0 1.25 0 1.5 0 1.75 0 2.5 0 3 0 Assorted sizes
/OC Control	D Minknown D Vapour Return Line D Other:	D Unknown D Vapour Return Line D Other:	B Unknown B Vapour Return Line B Other:	C: Unknown  C: Vapour Return  Line  C: Other:
PIPING				
Description				
Matenal	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Envirollex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper tubing □ Steel (bare) □ Steel (painted, wrapped, lar coated) □ Other:	□ Unknown □ Steel □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (painted, wrapped, tar coated) □ Other:
Secondary Containment	D N/A None Unknown Drip tray Sump Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	© N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:
Placement	☐ N/A ☐ Aboveground ☐ Underground of Aboveground and Underground ☐ Unknown	☐ N/A ☐ Aboveground ☐ Underground ☐ Aboveground and Underground ☐ Underground	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	☐ N/A ☐ Aboveground ☐ Underground ☐ Aboveground and Underground ☐ Unknown
Piping Corrosion Protection	a Paint Coaling None Other:	© Paint © Coaling © None □ Other:	G Paint G Coating D None G Other:	© Paint © Coating © None © Other:
Piping Cathodic Protection				
Manufacturer	7.			

Piping Leak Detection	Inspection Unknown Unknown Interstitial Leak Detection Monitoring Wells Sump Alarm Sump Visual Other:	☐ NonerVisual Inspection ☐ Unknown ☐ N/A ☐ Interstitial Leak Detection ☐ Monitoring Wells ☐ Sump Alarm ☐ Sump Visual ☐ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	© None/Visual Inspection □ Unknown □ N/A © Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:
ast Piping Leak Test Date				
Pump(s)	т		□ None	⊃ None
No Prul	☐ None ☐ Unknown ☐ Transfer ☐ Delivery ☐ Dispenser ☐ Heating Oil - Suction Pump ☐ Dispenser system - Suction Pump ☐ Aboveground Tank Pressure Pump ☐ Suction type ☐ Other:	□ None □ Unknown □ Iransfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	□ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction type □ Other:	☐ Unknown ☐ Transfer ☐ Delivery ☐ Dispenser ☐ Heating Oil - Suction Pump ☐ Dispenser system - Suction Pump ☐ Aboveground Tank Pressure Pump ☐ Suction type ☐ Other:
Pump Secondary Containment				- North Control
Pump Leak Detection	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Orip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:
Pump Manufacturer				-
Other				
Potential Site Sensitivities				
Proximity of Site Sensitivities				
# of Monitor wells (total)				
Number of monitoring wells within 3m of Tank	5			
SECURITY				
Tank Enclosure	Smud within			
Englosure Locked	gard.	The state of the s		
Fill Pipe Locked		- American Control of the Control of		1

Compliance				
	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines  ▼Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from building	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in weinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m Irom any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from propenty line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from building

T	D Spacing between
	tanks less than 1m
1	a Tank located less
	than 6m from
	liquefied petroleum
	gas cylinders
1	© Inadequate fire
1	department access
1	E Tank supports not
	on firm foundations
1	C Tank not
1	equipped with
1	nominal and
1	emergency venting
1	Valves not made
1	of steel
1	□ Secondary
1	containment less
1	than 110% of tank
1	capacity
	☐ Secondary
	containment wall less
1	than 1.5m from
	storage tank shell
1	⊆ Pump less than
1	3m from property line
	□ Pump less than
-	1.5m from building
-	openings
	□ No anti-siphon
	device
	☐ Piping not
H	adequately supported
-	□ Incorrect piping
1	for application
1	<ul> <li>Not tagged with</li> </ul>
	CPPI colour code
	system
	a No shut-off valves
	□ No level gauge on
	tank
	□ Inadequate
9	access to tank or
1	piping
	= Dangerous
	objects/debris nearby
	≥ Signs of
	material/paint
	deterioration
	D
	Dyke/embankment
	design is incorrect for
	application
	U Piping not
	properly labelled
	n No fire valve(s) at
	nneliance

appliance

o Spacing between	□ Spacing between
tanks less than 1m	tanks less than 1m
Tank located less	Tank located less
	than 6m from
than 6m from	
liquefied petroleum	liquelied patrolaum
gas cylinders	gas cylinders
□ Inadequate fire	□ Inadequate fire
department access	department access
□ Tank supports not	□ Tank supports not
on firm foundations	on firm foundations
□ Tank not	□ Tank not
equipped with	equipped with
nominal and	nominal and
emergency venting	emergency venting
□ Valves not made	D Valves not made
of steel	of steel
□ Secondary	□ Secondary
containment less	containment less
than 110% of tank	than 110% of tank
capacity	capacity
D Secondary	□ Secondary
containment wall less	containment wall less
than 1.5m from	than 1.5m from
storage tank shell	storage tank shell
□ Pump less than	a Pump less than
3m from property line	3m from property line
□ Pump less than	© Pump less than
1.5m from building	1.5m from building
openings	openings
□ No anti-siphon	□ No anti-siphon
device	device
© Piping not	© Piping not
adequately supported	adequately supported
☐ Incorrect piping	☐ Incorrect piping
	for application
for application	Not tagged with
Not tagged with	CPPI colour code
CPPI colour code	system
system	□ No shut-off valves
☐ No shut-off valves	☐ No level gauge on
E No level gauge on	lank
tank -	□ Inadequate
n Inadequate	access to tank or
access to tank or	
piping	piping
□ Dangerous	□ Dangerous
objects/debris nearby	objects/debris nearby
□ Signs of	□ Signs of
material/paint	material/paint
deterioration	deterioration
8	C Dute lember lembat
Dyke/embankment	Dyke/embankment
design is incorrect for	design is incorrect for
application	application
□ Piping not	a Piping not
properly labelled	properly labelled
<ul> <li>No fire valve(s) at appliance</li> </ul>	u No fire valve(s) at appliance

□ Spacing between tanks less than 1m □ Tank located less than 6m from liquefied petroleum gas cylinders

I Inadequate fire
department access
II Tank supports not on firm foundations equipped with nominal and emergency venting a Valves not made of steel n Secondary containment less than 110% of tank capacity n Secondary containment wall less than 1.5m from storage tank shell Pump less than 3m from property line Pump less than 1.5m from building openings ☐ No anti-siphon device a Piping not adequately supported a Incorrect piping for application
n Not tagged with
CPPI colour code system ☐ No shut-off valves □ No level gauge on tank □ Inadequate access to tank or piping d Dangerous objects/debris nearby □ Signs of material/paint deterioration Dyke/embankment appliance

Halocarbo	Halocarbon Inventory (TAKE PHOTO OF	(E PHOTO OF ACTAS)	AG)						
Room	Equipment Type	Equipment Description	Manufacturer & Date	Installation Date	Model / Senal #	Capacity (btu/hr. lonnes, kW)	ODS	Log Book Present?	Total Quantity ODS
Libra	Rehigand From	Fring	Kenmar	unkrown	Nut. C478-537824 115V Ser RH 384 315 60H7	1154 R12 10 60H7 358mp -> 651 KW/YV	R12 10	20 m	4.2503
Liteban Rehings	Rehign	Freeze	Danby	mannu mannu	New unknown	wenther menther	un knam	2 -	mound
Ritchen	Litera Return	Portubu	Hoolatron	on known	いいのいりい	nhrown			
Busenel	Relings. Freder	Freezer	2 rwornou	unknown ald	del innoun	השפרולת	$\rightarrow$	_)	<del>\</del>

Determine if A/C units are greater than 19k/W (5.5 tonnes or 65,000 btu/hr)

Record all tag information from refrigerators, freezers and water coolers Note if coolant system is in good shape (lines not rusted or leaking)

Who services this equipment(contact number)?
Have there been d'sposals?
Are there service/tes/d:sposal files(get copies)? Y/N

RCMP Environmental	I Inventory Checklist	
1. General		
Property Manager: PCM ( Housing?		
Sile Name: LCMP Pelican Namas	s evoiding @ house on Mu	iskert DFRI
Detachment Assistant: No adm. Staff		37014
Telephone: 306 632 3300		
Detachment Commander: Staff Surgean	Joe Milburn	
2. Photo Checklist		
A. Outside of Detachment Front of Detachment  Well Cover Burn Barrel / Incinerator Septic System Storage Tanks and Piping AC Units [manufacturer tags]	B. Inside of Detachment Halocarbon System(s) Water Treatment System Storage Tanks and Piping Floor Drains A/C Units (manufacturer tags)	
A1. Adjacent Properties: Current Use of Properties: Current Use of Properties: 1, Commercial 2. Recreation 2. Industrial 5. Agricultura	al 3. VacanvOpen	
(Circle Land Use)	general drainage)	
North: 1 2 3 4 5 6		
East: 1 2 3 4 5 6 / SU	P (5)	
South 1 2 3 4 5 6		
West:: 1 2 3 4 5 6		1
B. Buildings and Works On-Site: Number of buildings on-site:	Date of Construction: ~\995	-
Notes: Sh	id -	

Item	Storage	Material Safety Data Sheet	Disposal Method
Ammunition			
Tear Gas			
Pepper Spray			
Flares			
Explosives			Marie Marie Committee Comm
: Gasoline			
: Burn Barrel (Incinerator			
Storage Drums			
√Propane Tanks	1 AST pr	opine for heat	***************************************
Fuel Storage Tanks		\	
- Breathalyzer Ampoules			
□ Data Master Ethyl Icohol			
⊕ Blood Samples			
□ Sharps			
= Liquid fertilizer			
□ Large Quantily of			
© Drugs	Octobrill		
:= Glycol			
=PCBs(transformers/ capacitors/ light ballasts)	St. A. Reference and persons of reset M. A.		
: Asbestos			
∪rea Formaldehyde			
□ Lead(painVpipes)			
⊒ Radon Testing			
Other			

No accept to shed

	P sargut PN- Supt 25(08
1. Is there evidence of underground storage tanks (UST	s) on-site?
Were the USTs removed?	No
When?	
Was there a report?	
Was there any spill/leak evidence?	
Have the tanks ever been tested for leaks?	
2. Is there evidence of aboveground storage tanks (AS	Ts) on-site?
When were the ASTs removed? A Chick	propare XST
Was there a report? N A	
Was there any splittleak evidence? No	
Have the tanks ever been tested for leaks?	
3. Is there evidence of barrels or drums on-site?	0
How long has the barrel been in use?	
What items are stored in the drum?	
What heris dre stored with a second s	
4. Is there other evidence in records or other materials	collected that cause concern?
XIa	
5. Is there evidence of environmental hazards on adja-	cent sites?
Describe:	7
Locate the hazard on the site sketch	
is the hazard up slope or down slope of the detachment?	

	ns in the area ?	
g. Flooding?	No	
What is the source of Potable Water?	. alla	woolv (bottled) tchen st same as detachment.
Municipal	On No. A.	1 , 21
nation well - what type	in W	tchen so same or
Bottled Water (Store bought / Filled from other source)		1 Jachment
Oug Well		gran
Other:		
Neihod of Payment for Bottled water: provott		
, re		
ocation of well: No will en site		
Description of water treatment on site North		
Complaints from occupants (aesthetic, odour, fixtures, etc.):	un known	
compiaints from occupants (aestrietic, odotir, induies, etc.).	1977	
Date & result of last water test:		
8. What is the system of Domestic Waste?	( 0.1-	MACO (P)
Municipal Sewer	( EU	xuve)
C Septic	7	- <u>- (</u>
Location of Septic Bed:		
Date of last pumping:		
Other notes:		
9. What current options are available for Soli	id Waste?	
		(Reserve)
9. What current options are available for don	Municipality	(00)
9. What current options are available to: Detachment		
Detachment ARegular Waste	1	
Detachment ARegular Waste C Rejundable Recycling	D/	
Detachment  ARegular Waste C Refundable Recycling C Recycling (plastics, paper cardboard, etc.)	1	
Detachment  ARegular Waste  C Refundable Recycling  C Recycling (plastics, paper cardboard, etc.)  C Compost (organics)	0	
Detachment ARegular Waste C Refundable Recycling G Recycling (plastics, paper cardboard, etc.)	0	

E. Storage Tanks	
. Is there an Emer	gency Generator on-site?  YES: □ NO: 🎷
	Fuel / Battery Operated
s there a Maintenance or Vhat is the last log date a rituel generated	nd result? N A
ndicale if the tank is conr Complete a Storage Tank	Data Sheet and take pholos.
	L ASSESSMENT INFORMATION
plains scenic area	ocated on or close to any ecologically sensitive areas (ie: wetlands, flood s, National or Provincial Parks, etc.)?
2. is surface water	ride location:  Flocated within 30m of the project site: YES: V NO:   and pond river stream, etc.)
2. Is surface water If YES, describe (ie: well If YES, describe (ie: well  3. Does the site ho Storm sewers YES: Locate: Paved surfaces Ditrips (directi	I located within 30m of the project site: YES: V NO: = and, pond, river, stream, etc.)  Whole string   + a Ukyand    ave storm sewers to handle drainage or does it rely on surface run-off?  NO: V Surface run-off YES: V NO: G
2. Is surface water If YES, describe (ie: well If YES, describe (ie: well If YES, describe (ie: well If YES, describe (ie: well If YES, describe (ie: well If YES, describe (ie: well If YES, describe (ie: well If YES, describe (ie: well If YES, describe and provided to the storm saver and provided to the storm water draws and provided	I located within 30m of the project site: YES: V NO: 1 and, pond, river, stream, etc.)  Whoff string   to La Ucyand    ave storm sewers to handle drainage or does it rely on surface run-off?  NO: V Surface run-off YES: V NO: 9

G. ADDITIONAL COMMENTS / POTENTIAL ENVIRONMENTAL CONCERNS:

ANK INVENTORY INFORM		Tank 2	Tank 3	Tank 4
ank Information	Tank 1	101111 2		
ILC NO.				-
AP) Standard Number				-
Description i.e. Main heating oil tank, teating oil day tank. Main tiesel tank, Generator day ank, Regulated gasolline ank, Non-regulated gasoline tank)	l AST propara sural \$32655A			
Location	bachyord		-	
is Tank Reportable (AST >= 2500 L or UST)?	⊂ Yes ⊋No	a Yes a No	□ Yes □ No	□ Yes □ No
EC Tag ID (if Tank is reportable)				
Is Tank located within 350 in property line?	t/Yes © No	⊃ Yes ⊃ No	O Yes	⊔ Yes □ No
is Tank Reportable (E2) (Propane Tank Size greater or equal to 9200 L)?	⊒ Yes ⊈No	© Yes	a Yes ∋ No	∷ Yes □ No
E2 Plan available?	□ Yes □ No	□ Yes □ No	□ Yes □ No	a Yes a No
Has the E2 plan Tested/Exercised annually? (If applicable)	U Yes - last done on: (Date)	© Yes - last done on: (Date)	□ Yes - last done on: (Date) □ No	☐ Yes - last done on: (Date) ☐ No
Status	✓ Active □ Inactive □ Disposed □ Unknown	□ Active □ Inactive □ Disposed □ Unknown	☐ Active ☐ Inactive ☐ Disposed ☐ Unknown	☐ Active ☐ Inactive ☐ Disposed ☐ Unknown
is a site visit required to further inspect the tank?	ii Yes by: (Date) ✓ No	© Yes by: (Date) © No	□ Yes by: (Date) □ No	□ Yes by: (Date) □ No
is the tank part of a tank system?	a Yes VNo	□ Yes □ No	ti Yes ti No	D Yes D No
Year of Installation	٥.			
Year of Disposal	active			
Manufacturer	Westin			
Manufacture Date	1995			
Tank Size (L)	10 40.51			
Capacity (L)	1000 USWG			

uel Type	a Aviation Fuel a Bitumen a Bunker-C b Diesel a Ethanol a Glycol b Heating Oil b Kerosene a Natural Gas a Organic Chemicals b Other V Propane b Unleaded Gasoline b Waste Oil	n Aviation Fuel o Bitumen o Bursker-C o Diesel o Ethanol o Glycol o Heating Oil o Kerosene o Natural Gas o Organic Chemicals o Other: o Propane o Unleaded Gasoline o Waste Oil	☐ Aviation Fuel ☐ Bitumen ☐ Bunker-C ☐ Diesel ☐ Ethanol ☐ Glycol ☐ Heating Oil ☐ Kerosene ☐ Natural Gas ☐ Organic Chemicals ☐ Other: ☐ Propane ☐ Unleaded Gasoline ☐ Waste Oil	☐ Aviation Fuel ☐ Bitumen ☐ Bunker-C ☐ Diesel ☐ Ethanol ☐ Glycol ☐ Heating Oil ☐ Kerosene ☐ Natural Gas ☐ Organic Chemicals ☐ Other ☐ Propane ☐ Unleaded Gasoline ☐ Waste Oil
ank Construction				
Construction	© Single Wall □ Double Wall □ Unknown	□ Single Wall □ Double Wall □ Unknown	ລ Single Wall ສ Double Wall ສ Unknown	ପ Single Wall © Double Wall ⊡ Unknown
Material	☐ Aluminum ☐ Concrete ☐ Concrete ☐ Composite ☐ Fiberglass ☐ Fiberglass Reinforced Plastic (FRP) ☐ Rubber ☑ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner and steel outer ☐ Stainless Steel ☐ Other	☐ Aluminum ☐ Concrete ☐ Concrete-Steel Composite ☐ Fiberglass ☐ Fiberglass Reinforced Plastic (FRP) ☐ Rubber ☐ Steel ☐ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner and steel outer ☐ Stainless Steel ☐ Other	□ Aluminum □ Concrete □ Concrete-Steel Composite □ Fiberglass □ Fiberglass Reinforced Plastic (FRP) □ Rubber □ Steel □ Unknown □ BMI-FRP □ Plastic Polyethylene inner and steel outer □ Stainless Steel □ Other	☐ Aluminum ☐ Concrete ☐ Concrete-Steel ☐ Composite ☐ Fiberglass ☐ Fiberglass ☐ Reinforced Plastic (FRP) ☐ Rubber ☐ Steel ☐ Unknown ☐ BMI-FRP ☐ Plastic Polyethylene inner and steel outer ☐ Stainless Steel ☐ Other
Placement	□ Aboveground- Vertical VAboveground- Horizontal □ Underground □ Other:	o Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:	☐ Aboveground- Vertical ☐ Aboveground- Horizontal ☐ Underground ☐ Other:	□ Aboveground- Vertical □ Aboveground- Horizontal □ Underground □ Other:
Tank Cathodic Protection				
Tank Corrosion Protection	Paint Coaling None Dither	D Paint D Coating D None D Other:	☐ Paint ☐ Coating ☐ None ☐ Other:	© Paint  □ Coating  □ None  □ Other:
Tank Platform  Concrete Story	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	© Concrete Pad. © Earth/Soil © Gravet (raised or level) © Inside building © Wood © Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:	□ Concrete Pad □ Earth/Soil □ Gravel (raised or level) □ Inside building □ Wood □ Other:
Frathic Protection with the Land with the La	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	☐ None ☐ Unknown ☐ Steel bollards ☐ 100 mm curb ☐ Reinforced fence ☐ Guardrail ☐ Other:	□ None □ Unknown □ Steel bollards □ 100 mm curb □ Reinforced fence □ Guardrail □ Other:

Leak/Spill Evidence	✓ None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	□ None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	□ None □ Unknown □ Staining □ Spill report □ Interview □ Odour □ Other:	☐ None ☐ Unknown ☐ Staining ☐ Spill report ☐ Interview ☐ Odour ☐ Other:
Tank Secondary Containment	None Unknown U	© None © Unknown © Steel Reservoir © Soil embankment © Concrete embankment © Steel embankment © Soil embankment with impermeable liner © Concrete embankment with impermeable liner © Steel embankment with impermeable liner © Steel impermeable liner © Steel Embankment with impermeable liner © Steel Embankment with impermeable liner © Steel Soulter © Steel tray © Others	o None Unknown Steel Reservoir Soil embankment Concrete embankment Steel embankment Soil embankment Soil embankment Soil embankment with impermeable liner Concrete embankment with impermeable liner Steel embankment with impermeable liner Usteel Embankment with impermeable liner Steel Steel Steel tray Other:	□ None □ Unknown □ Steel Reservoir □ Soil embankment □ Concrete embankment □ Steel embankment □ Soil embankment with impermeable liner □ Concrete embankment with impermeable liner □ Steel embankment with impermeable liner □ Steel embankment with impermeable liner □ Vault □ Double-walled tank □ Steel tray □ Other:
Tank Leak Detection	None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor □ Other:	n None/Visual Inspection n Automatic Tank Gauge o Interstitial Leak Detection n Monitoring Wells prortable Detector precision Leak Test Site glass Unknown Vacuum Floor	□ None/Visual Inspection □ Automatic Tank Gauge □ Interstitial Leak Detection □ Monitoring Wells □ Portable Detector □ Precision Leak Test □ Site glass □ Unknown □ Vacuum Floor	☐ None/Visual Inspection ☐ Automatic Tank Gauge ☐ Interstitial Leak Detection ☐ Monitoring Wells ☐ Portable Detector ☐ Precision Leak Test ☐ Site glass ☐ Unknown ☐ Vacuum Floor ☐ Other:
Tank Overfill Protection	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) rv. Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other:	□ None □ Unknown □ Alarm only □ Alarm with pump interlock □ Level gauge □ Mechanical shut-off □ Vent float shut-off □ Audible alarm including vent □ Audible and visual alarm □ Level gauge with audible alarm □ Spill box □ Vent Float Shut-off(audible) □ Other.

41.74

Took Look Tool Oale				
ent Pipe Diameter  No VIMO  VOC Control	© 0.5 © 0.75 © 1.25 © 1.5 © 1.75 © 2 © 2.5 © 3 © Assorted sizes © Unknown © Vapour Return	□ 0.5 □ 0.75 □ 1 □ 1.25 □ 1.5 □ 1.75 □ 2 □ 2.5 □ 3 □ Assorted sizes □ None □ Unknown □ Vapour Return	© 0.5 © 0.75 © 1 © 1.25 © 1.5 © 1.75 © 2.5 © 2.5 © 3 © Assorted sizes	0 0.5 0 0.75 0 1 0 1.25 0 1.75 0 2.5 0 3 n Assorted sizes E None 0 Unknown 0 Vapour Return Line
	Line II Other:	Line  Other:	Line a Other:	5 Other:
PIPING				
Description				□ Unknown
Material	Unknown  Steel Fiberglass Fiberglass reinforces plastic (FRP) Copper Brass Black Iron Rubber Enviroflex/Bufflex Gafvanized steel Steel and copper tubing Steel (bare) Steel (painted, wrapped, tar coated) Other:	D Unknown  Steel  Fiberglass Fib	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:	□ Unknown □ Steel □ Fiberglass □ Fiberglass reinforces plastic (FRP) □ Copper □ Brass □ Black Iron □ Rubber □ Enviroflex/Bufflex □ Galvanized steel □ Steel and copper □ Steel with copper tubing □ Steel (bare) □ Steel (painted, wrapped, tar coated) □ Other:
Secondary Containment	□ N/A  VNone □ Unknown □ Drip tray □ Sump □ Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	□ N/A □ None □ Unknown □ Drip tray □ Sump □ Other:	E N/A  E None  C Unknown  Drip tray  Sump  Other:
Placement	☐ N/A ☐ Aboveground ☐ Underground ☐ Aboveground and Underground ☐ Unknown	□ N/A □ Aboveground □ Underground □ Aboveground and Underground □ Unknown	□ N/A     □ Aboveground     □ Underground     □ Aboveground and     Underground     □ Unknown	© N/A  Discreption Above ground  Discreption Above ground and Underground  Underground  Unknown
Piping Corrosion Protection	☐ Paint  Coating ☐ None ☐ Other:	c Paint c Coaling c None c Other:	☐ Paint☐ Coaling☐ None☐ Other:	□ Paint □ Coating □ None □ Other:
Piping Cathodic Protection	7			
Manufacturer	7.			

	/			
Piping Leak Detection	None/Visual Inspection  Unknown  N/A  Interstitial Leak Detection  Somp Alarm Sump Visual  Other:	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	Di None/Visual Inspection  □ Unknown  □ N/A  □ Interstitial Leak Detection  □ Monitoring Wells  □ Sump Alarm  □ Sump Visual  □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Interstitial Leak Detection □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:
ast Piping Leak Test Date				
ump(s)				
M. ATULY	☐ None ☐ Unknown ☐ Transfer ☐ Delivery ☐ Dispenser ☐ Heating Oil - Suction Pump ☐ Dispenser system - Suction Pump ☐ Aboveground Tank Pressure Pump ☐ Suction type	☐ None ☐ Unknown ☐ Transfer ☐ Delivery ☐ Dispenser ☐ Healing Oil Suction Pump ☐ Dispenser system - Suction Pump ☐ Aboveground Tank Pressure Pump ☐ Suction type	□ None □ Unknown □ Transfor □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump	□ None □ Unknown □ Transfer □ Delivery □ Dispenser □ Heating Oil - Suction Pump □ Dispenser system - Suction Pump □ Aboveground Tank Pressure Pump □ Suction lype
	Other:	ti Other:	☐ Other:	a Other:
Pump Secondary Containment				
Pump Leak Detection	☐ None/Visual Inspection ☐ Upknown ☐ N/A ☐ Drip Tray ☐ Alarm ☐ Monitoring Wells ☐ Sump Alarm ☐ Sump Visual ☐ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:	□ None/Visual Inspection □ Unknown □ N/A □ Drip Tray □ Alarm □ Monitoring Wells □ Sump Alarm □ Sump Visual □ Other:
Pump Manufacturer				
Other				
Potential Site Sensitivities				
Proximity of Site Sensitivities				
ii of Monitor wells (total)				
Number of monitoring wells within 3m of Tank				
SECURITY				
Tank Enclosure	arud wi	Mon		
Enclosure Locked	boule	iald.		
Fill Pipe Locked				

electric heater undernooth

Compliance			I - Biston ant
□ Piping not equipped with flex connection □ No protection from physical damage □ Tank not label □ No ULC tag □ At least one file extinguisher not tocated in vicinity pump □ No posted salsigns □ Hose/connection ULC approve □ Vent less that in above adjacer ground level □ Vent less that in from any build openings □ Tank less that move the power lines □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert □ Tank less that move proven the same from propert	connection  In No protection from physical damage Ited In Tank not labelled In No ULC tag In At least one fire extinguisher not located in vicinity of pump In No posted safety signs In Hose/connectors not ULC approved In 1.5 In In In In In In In In In In In In In I	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent tess than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line	□ Piping not equipped with flexible connection □ No protection from physical damage □ Tank not labelled □ No ULC tag □ At least one fire extinguisher not located in vicinity of pump □ No posted safety signs □ Hose/connectors not ULC approved □ Vent less than 3.5 m above adjacent ground level □ Vent less than 1.5 m from any building openings □ Tank less than 3m from overhead power lines □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from property line □ Tank less than 3m from building

.....

is Spacing between
tanks less than 1m
D Tank located less
than 6m from
liquefied petrofeum gas cylinders
☐ Inadequate fire
department access
☐ Tank supports not
on firm foundations
□ Tank not
equipped with
nominal and
emergency venting
□ Valves not made
of steel
a Secondary
containment less
than 110% of tank
capacity
© Secondary
containment wall less
than 1.5m from
storage tank shell
C Pump less than
3m from property line E Pump less than
1.5m from building
openings
☐ No anti-siphon
device
D Piping not
adequately supported
☐ Incorrect piping
for application
<ul> <li>Not tagged with</li> </ul>
CPPI colour code
system
☐ No shut-off valves
<ul> <li>No level gauge on</li> </ul>
tank
#I Inadequate
access to tank or
piping
□ Dangerous
objects/debris nearby
Z Signs of
material/paint
deterioration
Dyke/embankment
design is incorrect for
application
□ Piping not
properly labelled
in No fire valve(s) at
appliance

□ Spacing between	□ Spacing between	d Spacing between
lanks less than 1m	tanks less than 1m	tanks less than 1m
Tank located less	☐ Tank located less	Tank located less
than 6m from	than 6m from	than 6m from
liquefied petroleum	liquefied petrolcum	liquefied petroleum
gas cylinders	gas cylinders	gas cylinders
u Inadequate fire	□ Inadequate fire	c Inadequate fire
department access	department access	department access
☐ Tank supports not	U Tank supports not	Tank supports not
on firm foundations	on firm foundations	on firm foundations
•	☐ Tank not	G Tank not
© Tank not	equipped with	equipped with
equipped with nominal and	nominal and	nominal and
emergency venting	emergency venting	emergency venting
☐ Valves not made  ☐ Valves not made	© Valves not made	□ Valves not made
of steel	of steel	of steel
or Secondary	© Secondary	□ Secondary
containment less	containment less	containment less
than 110% of tank	than 110% of tank	than 110% of tank
	capacity	capacity
capacity to Secondary	□ Secondary	□ Secondary
containment wall less	containment wall less	containment wall less
than 1.5m from	than 1.5m from	than 1.5m from
storage tank shell	storage tank shell	storage tank shell
is Pump less than	a Pump less than	D Pump less than
3m from property line	3m from property line	3m from property line
□ Pump less than	to Pump less than	a Pump less than
1.5m from building	1.5m from building	1,5m from building
openings	openings	openings
☐ No anti-siphon	□ No anti-siphon	☐ No anti-siphon
device	device	device
© Piping not	☐ Piping not	© Piping not
adequately supported	adequately supported	adequately supported
☐ Incorrect piping	☐ Incorrect piping	ti Incorrect piping
for application	for application	for application
Not tagged with	☐ Not tagged with	☐ Not tagged with
CPPI colour code	CPPI colour code	CPPI colour code
system	system	system
n No shut-off valves	□ No shut-off valves	☐ No shut-off valves
u No level gauge on	□ No level gauge on	D No level gauge on
tank	tank	tank
□ Inadequate	□ Inadequate	□ Inadequate
access to tank or	access to tank or	access to tank or
piping	piping	piping
n Dangerous	□ Dangerous	Dangerous
objects/debris nearby	objects/debris nearby	objects/debris nearby
□ Signs of	□ Signs of	□ Signs of
material/paint	material/paint	material/paint
deterioration	deterioration	deterioration
a	0	O.
Dyke/embankment	Dyke/embankment	Dyke/embankment
design is incorrect for	design is incorrect for	design is incorrect for
application	application	application
□ Piping not	☐ Piping not	☐ Piping not
properly labelled	properly labelled	properly labelled
<ul> <li>No fire valve(s) at</li> </ul>	□ No fire valve(s) at	☐ No fire valve(s) at
appliance	appliance	appliance

Halocarbo	in Inventory (TAK	Halocarbon Inventory (TAKE PHOTO OF ACTAG)	7AG)		and the second s				
Room	Equipment	Equipment Description	Manufacturer & Date	Installation Date	Model / Serial #	Capacity (btu/hr tonnes, kW/)	ODS Type	Log Book Present?	Total Ouantity ODS
Wicher			Mostar	mhnown	M. MLF WIGZIW- 15 5- MF11 60to	Unlander	4-7	2-	1327
Witcher	Without widying		Greenway 00/03		M. GWD 30f CW 5: 0603 13 115213		un brow		introm
Weine	Sur		Hot point	Conne	connot not togs - 1 - 1 - 1 - 1	7 60 87	) (%)	)	->

Determine if A/C units are greater than 19kW (5.5 tonnes or 65,000 btu/hr)

Record all lag information from refrigerators, freezers and water coolers Note if coolant system is in good shape (lines not rusted or leaking)

Who services this equipment(contact number)?
Have there been disposals?
Are there service/tes/disposal files(get copies)? Y/N



# Appendix E Laboratory Reports

### ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

#### RECEIVED

DEC 2 1 2007 RECEIVE

DEL 21



#### **Environmental Division**

ANA	YT	CAL	REP	ORT

EARTH TECH CANADA ATTN: AMBER ZILINSKY

Reported On: 17-DEC-07 10:21 AM

1000 WAVERLEY

WINNIPEG MB R3T 0P3

Lab Work Order #:

L582490

Date Received: 29-NOV-07

Project P.O. #:

Job Reference:

PROJECT NO. 102051

Legal Site Desc: CofC Numbers:

Other Information:

Comments:

APPROVED BY: Paul Necolas

PAUL NICOLAS **Project Manager** 

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Phone: +1 204 255 9720 Fax: +1 204 255 9721 www.alsglobal.com A Campbell Brothers Limited Company

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Ву	Batch
L582490-1 PN-D-A001								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos Other Fibres: Cellulose	<1 75-99		1	% %		14-DEC-07 14-DEC-07	JPZ JPZ	R613027
Other Non Fibrous: Filler and Paint	1-10		1	%		14-DEC-07	JPZ	R613027
Note: No asbestos fibres were observed.	1-10			70		14-020-07	JIZ	101002
L582490-2 PN-D-A002								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Cellulose	25-50		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Glass	50-75		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	10-25		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.								
L582490-3 PN-D-A004 Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Cellulose	1-10		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	75-99		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.								-
L582490-4 PN-D-A005								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content				0/		14 DEC 07	וחס	DC4200
Asbestos Other Non Fibrous: Filler	<1 100		1	%		14-DEC-07 14-DEC-07	JPZ JPZ	R61302
Note: No asbestos fibres were observed.	100		'	70		14 020 01	012	1101002
L582490-5 PN-D-A006								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	75-99		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler and Paint	1-10		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.  L582490-6 PN-D-A007								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	100		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.								

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Ву	Batch
_582490-7 PN-D-A008								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Cellulose	1-10		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	75-99		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.								
-582490-8 PN-D-A009								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Cellulose	10-25		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Glass	50-75		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler and Paint	10-25		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.								
582490-9 PN-D-A010								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Cellulose	1-10		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	75-99		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.								-
L582490-10 PN-D-A011								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content					i			
Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Cellulose	25-50		1	%		14-DEC-07	JPZ	R61302
Other Fibres: Glass	25-50		1	%	i	14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	25-50	1	1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.		1						ļ
L582490-11 PN-D-A012								1
Sampled By: CB/AEW on 24-SEP-07	1				1			
Matrix: BULK								
Bulk Asbestos Content				0/		14.050.07	107	DC4000
Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	100		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.		-			+			-
L582490-12 PN-D-A013								
Sampled By: CB/AEW on 24-SEP-07  Matrix: BULK								
Bulk Asbestos Content Asbestos	<1		1	%		14-DEC-07	JPZ	R61302
Other Non Fibrous: Filler	100		1	%		14-DEC-07	JPZ	R61302
Note: No asbestos fibres were observed.	100			7.0				

Sample Details/Parameters	Result	Qualifier* D.L.	Units	Extracted	Analyzed	Ву	Batch
_582490-13 PN-D-A014							
Sampled By: CB/AEW on 24-SEP-07							
Matrix: BULK							
VIGITIA.							
Bulk Asbestos Content			%		14-DEC-07	JPZ	R613027
Asbestos	<1 10-25		%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose Other Fibres: Glass	50-75	1	%		14-DEC-07	JPZ	R613027
Other Non Fibrous: Filler	10-25	1	%		14 DEC 07	JPZ	R613027
Note: No asbestos fibres were observed.	10-20						
L582490-14 PN-D-A015				1			
Sampled By: CB/AEW on 24-SEP-07							
Matrix: BULK							
Bulk Asbestos Content					44 050 05	107	DOLOGO
Asbestos	<1	1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose	10-25	1	%		14-DEC-07	JPZ	R613027 R613027
Other Fibres: Glass	50-75		%		14-DEC-07	JPZ JPZ	R613027
Other Non Fibrous: Filler	10-25	1	%		14-DEC-07	JFZ	1013021
Note: No asbestos fibres were observed.			-	-	-		-
L582490-15 PN-D-A016							
Sampled By: CB/AEW on 24-SEP-07							
Matrix: BULK					1		
Bulk Asbestos Content							
Asbestos	<1	1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose	10-25	1	%		14-DEC-07	JPZ	R613027
Other Fibres: Glass	25-50	1	%		14-DEC-07	JPZ JPZ	R613027
Other Non Fibrous: Filler	50-75	1	9/0		14 DEC-07	JPZ	R613027
Note: No asbestos fibres were observed.						-	-
L582490-16 PN-R1-001							
Sampled By: CB/AEW on 24-SEP-07							
Matrix: BULK				i			
Bulk Asbestos Content							
Asbestos	<1	1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose	25-50	1	%		14-DEC-07	JPZ	0.0807040.000000000
Other Fibres: Glass	10-25	1	%		14-DEC-07	JPZ	R613027
Other Fibres: Synthetic	1-5	1 1	%		14-DEC-07	JPZ JPZ	R613027
Other Non Fibrous: Filler	25-50	1	%		14-DEC-07	JFZ	K013021
Note: No asbestos fibres were observed.			-		-	-	-
L582490-17 PN-R1-A002							
Sampled By: CB/AEW on 24-SEP-07							
Matrix: BULK						•	1
Bulk Asbestos Content			15926		P 110 12 C C C C C C C C C C C C C C C C C C	150.800.00	120020000000000000000000000000000000000
Asbestos: Chrysotile (Serpentine)	10-25	1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose	25-50	1	%		14-DEC-07	JPZ	R613027
Other Non Fibrous: Filler	25-50	1	%		14-DEC-07	JPZ	R613027
L582490-18 PN-R1-A004							
Sampled By: CB/AEW on 24-SEP-07							1
Matrix: BULK							1
Bulk Asbestos Content							

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Ву	Batch
L582490-18 PN-R1-A004								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos: Chrysotile (Serpentine)	1-10		1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose	25-50		1	%		14-DEC-07	JPZ	R613027
Other Fibres: Glass	10-25		1	%		14-DEC-07	JPZ JPZ	R613027 R613027
Other Non Fibrous, Filler	50-75	ļ	1	%		14-DEC-07	JPZ	R613027
L582490-19 PN-R1-A006								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content				0/		14-DEC-07	JPZ	R613027
Asbestos	<1		1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose Other Non Fibrous: Filler	25-50 50-75		1	%		14-DEC-07	JPZ	R613027
Note: No asbestos fibres were observed.	50-75		1	70		140001	012	11010027
L582490-20 PN-R1-A007		1		-				
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Ashastas Content								
Bulk Asbestos Content Asbestos	<1		1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose	10-25	I	1	%		14-DEC-07	JPZ	R613027
Other Non Fibrous: Filler	75-99		1	%		14-DEC-07	JPZ	R613027
Note: No asbestos fibres were observed.								-
L582490-21 PN-R1-A008								
Sampled By: CB/AEW on 24-SEP-07								
Matrix: BULK								
Bulk Asbestos Content								
Asbestos	<1	i	1	%		14-DEC-07	JPZ	R613027 R613027
Other Fibres: Cellulose Other Fibres: Glass	75-99 1-5		1	%		14-DEC-07 14-DEC-07	JPZ JPZ	R613027
Note: No asbestos fibres were observed.	1-3			,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	01 1	1101002
L582490-22 PN-R3-A001		-	-		1			
Sampled By: CB/AEW on 25-SEP-07								
Matrix: BULK		İ						
Bulk Asbestos Content								
Asbestos	<1		1	%		14-DEC-07	JPZ	R613027
Other Fibres: Glass	25-50		1	%		14-DEC-07	JPZ	R613027
Other Non Fibrous: Filler	50-75		1	%		14-DEC-07	JPZ	R613027
Note: No asbestos fibres were observed.			-		-	-		1
L582490-23 PN-R3-A002		1						
Sampled By: CB/AEW on 25-SEP-07		1						
Matrix: BULK								
Bulk Asbestos Content			1.			14 DEC 67	107	R613027
Asbestos	<1		1	% %		14-DEC-07	JPZ JPZ	R613027
Other Fibres: Cellulose Other Non Fibrous: Filler	1-10 75-99		1	%		14-DEC-07		R613027
Other Morr Fibrous, Filler	10-33			1	İ	1		100000000000000000000000000000000000000

Sample Details/Parameters	Result Qualifier	D.L.	Units	Extracted	Analyzed	Ву	Batch
.582490-24 PN-R3-A005							
Sampled By: CB/AEW on 25-SEP-07							
Matrix: BULK							
Bulk Asbestos Content							
Asbestos	<1	1	%		14-DEC-07	JPZ	R613027
Other Non Fibrous: Filler	100	1	%		14-DEC-07	JPZ	R613027
Note: No asbestos fibres were observed.							
L582490-25 PN-R3-A006							
Sampled By: CB/AEW on 25-SEP-07							
Matrix: BULK							
Bulk Asbestos Content							Danie de Charles de Charles
Asbestos	<1	1	%		14-DEC-07	JPZ	R613027
Other Non Fibrous: Filler	100	1	%		14-DEC-07	JPZ	R613027
Note: No asbestos fibres were observed.			-		***************************************		
L582490-26 PN-R3-A007							
Sampled By: CB/AEW on 25-SEP-07							
Matrix: BULK							
<b>Bulk Asbestos Content</b>							
Asbestos	<1	1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose	100	1	%		14-DEC-07	JPZ	R613027
Note: No asbestos fibres were observed.							
L582490-27 PN-R3-M001							
Sampled By: CB/AEW on 25-SEP-07		1					
Matrix: BULK							
Fungi/Mould ID (Genera)							
Total Colonies	5	1	Colonies		07-DEC-07	BMG	R610449
Colony Forming Units	31900	1	CFU/g		07-DEC-07	BMG	R610449
Cladosporium	100	1	%		07-DEC-07	BMG	R610449
L582490-28 PN-R4-A001							Ì
Sampled By: CB/AEW on 25-SEP-07							
Matrix: BULK							
Bulk Asbestos Content					COMPONENCIA COMPONENCIA DE ANTIGOCO		
Asbestos	<1	1	%		14-DEC-07	JPZ	R613027
Other Fibres: Cellulose Other Non Fibrous: Filler	50-75 25-50	1 1	%		14-DEC-07	JPZ JPZ	R613027
Note: No asbestos fibres were observed.	26-50		70		T4-DEC-07	JFZ	1013027
L582490-29 PN-R4-M001		+	-		-	-	
Sampled By: CB/AEW on 25-SEP-07							
Matrix: BULK							
Fungi/Mould ID (Genera)					07.050.05	D1/2	DOLOTE
Total Colonies	2	1	Colonies		07-DEC-07	BMG	R610449
Colony Forming Units Cladosporium	13700 100	1	CFU/g %		07-DEC-07 07-DEC-07	BMG BMG	R610449
		+					
* Refer to Referenced Information for Qu	ualifiers (if any) and Methodology						
	l		٠				

#### **Reference Information**

Methods Listed (if applicable):

ALS Test Code

Matrix **Test Description**  Preparation Method Reference(Based On)

Analytical Method Reference(Based On)

ASBESTOS-WP

Bulk

**Bulk Asbestos Content** 

NIOSH 9002-Polarized Light

Microscopy.

Bulk samples are examined under a stereoscopic microscope. Individual fibers or fibre bundles are mounted in refractive index liquids and are observed under a polarized light microscope with a special dispersion staining objective. The dispersion staining colours are compared to reference samples of known

Polarized microscopy is not a definitive technique for negative results for non-friable organically bound material (i.e.floor tiles).

Fungi/Mould ID (Genera)

Intro. to food-borne Fungi, R.A. Samson

The sample was weighed and blended with 10 mL of sterile water. Serial dilutions were prepared and inoculated onto 2% malt extract agar.

Samples are innoculated onto 2% Malt Extract Agar and incubated at 25 degrees Celcius for seven days. The total CFU (colony forming units) are cou and the fungal colonies are identified. Bacterial colonies and yeast are specified but are not reported to genus

> \*\* Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code

Laboratory Location

Laboratory Definition Code

Laboratory Location

WP

ALS LABORATORY GROUP -WINNIPEG, MANITOBA, CANADA

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under

mg/kg (units) - unit of concentration based on mass, parts per million. mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory. UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION. UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS. Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



#### Environmental Division

### **ALS Laboratory Group Quality Control Report**

Workorder: L582490

Report Date: 17-DEC-07

Page 1 of 2

Client:

EARTH TECH CANADA

1000 WAVERLEY

WINNIPEG MB R3T 0P3

Contact:

AMBER ZILINSKY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed	

### **ALS Laboratory Group Quality Control Report**

Workorder: L582490

Report Date: 17-DEC-07

Page 2 of 2

#### Legend:

99% Confidence Interval (Laboratory Control Limits) Limit Duplicate DUP Relative Percent Difference RPD Not Available N/A Laboratory Control Sample LCS Standard Reference Material SRM Matrix Spike MS Matrix Spike Duplicate MSD Average Desorption Efficiency ADE Method Blank MB Internal Reference Material IRM Certified Reference Material CRM

Continuing Calibration Verification

Calibration Verification Standard

LCSD Laboratory Control Sample Duplicate

#### Qualifier:

CCV

CVS

RPD-NA Relative Percent Difference Not Available due to result(s) being less than detection limit.

A Method blank exceeds acceptance limit. Blank correction not applied, unless the qualifier "RAMB" (result adjusted for method blank) appears in the Analytical Report.

B Method blank result exceeds acceptance limit, however, it is less than 5% of sample concentration. Blank correction not applied.

E Matrix spike recovery may fall outside the acceptance limits due to high sample background.

F Silver recovery low, likely due to elevated chloride levels in sample.
G Outlier - No assignable cause for nonconformity has been determined.

J Duplicate results and limit(s) are expressed in terms of absolute difference.

K The sample referenced above is of a non-standard matrix type; standard QC acceptance criteria may not be achievable.

Low matrix spike recovery due to instability of spiked analyte in the sample matrix.