

2 SITE PLAN
SCALE 1:100

1 KEY PLAN
SCALE 1:1000

DRAWING LIST

- ARCHITECTURAL**
- A-101 SITE PLANS
 - A-200 PLAN, ELEVATIONS, SCHEDULES
 - A-300 SECTION AND DETAILS
- MECHANICAL**
- M1.00 LEGEND, DRAWING LIST & SCHEDULES, PLUMBING AND MECHANICAL PLANS
- ELECTRICAL**
- E1.00 SITE PLAN, ELECTRICAL LAYOUT AND LEGEND
 - E2.00 SCHEDULES & DETAILS
- CIVIL**
- C1 GENERAL NOTES AND PROPOSED SERVICING

NOTES
1. RELOCATE EXISTING GATE SIGNAGE TO NEW ROLLING GATE.

FISHERIES AND OCEANS CANADA
REAL PROPERTY AND SAFETY AND SECURITY

CULTUS LAKE SALMON RESEARCH LABRATORY GUARD HOUSE

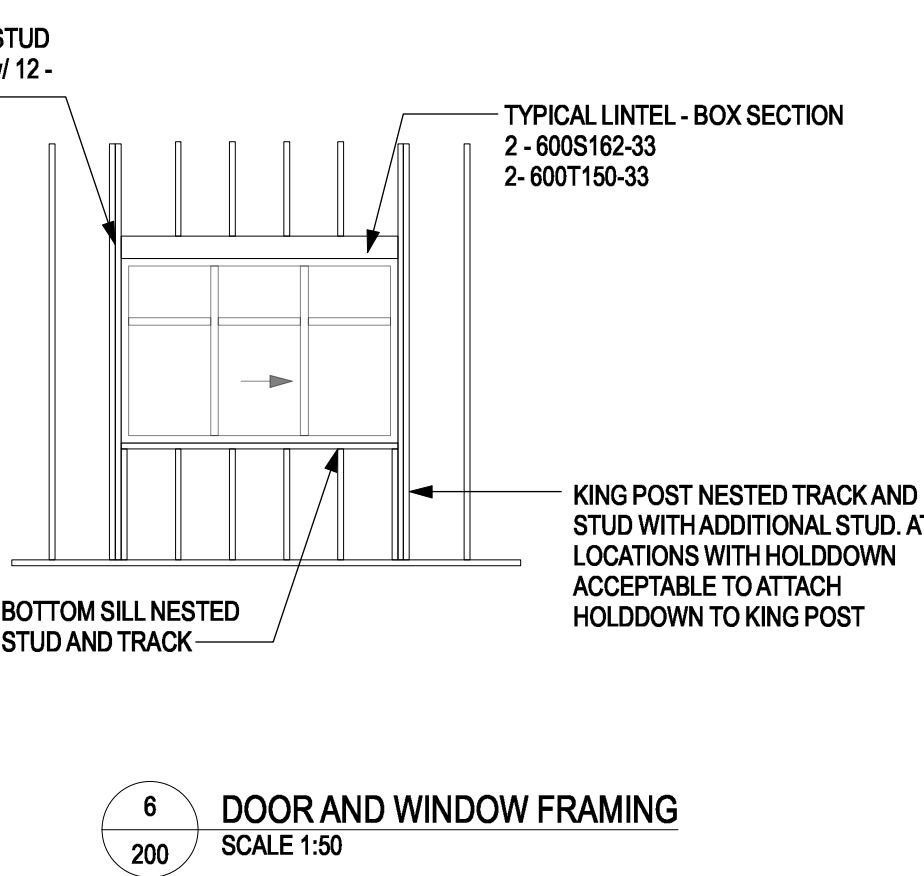
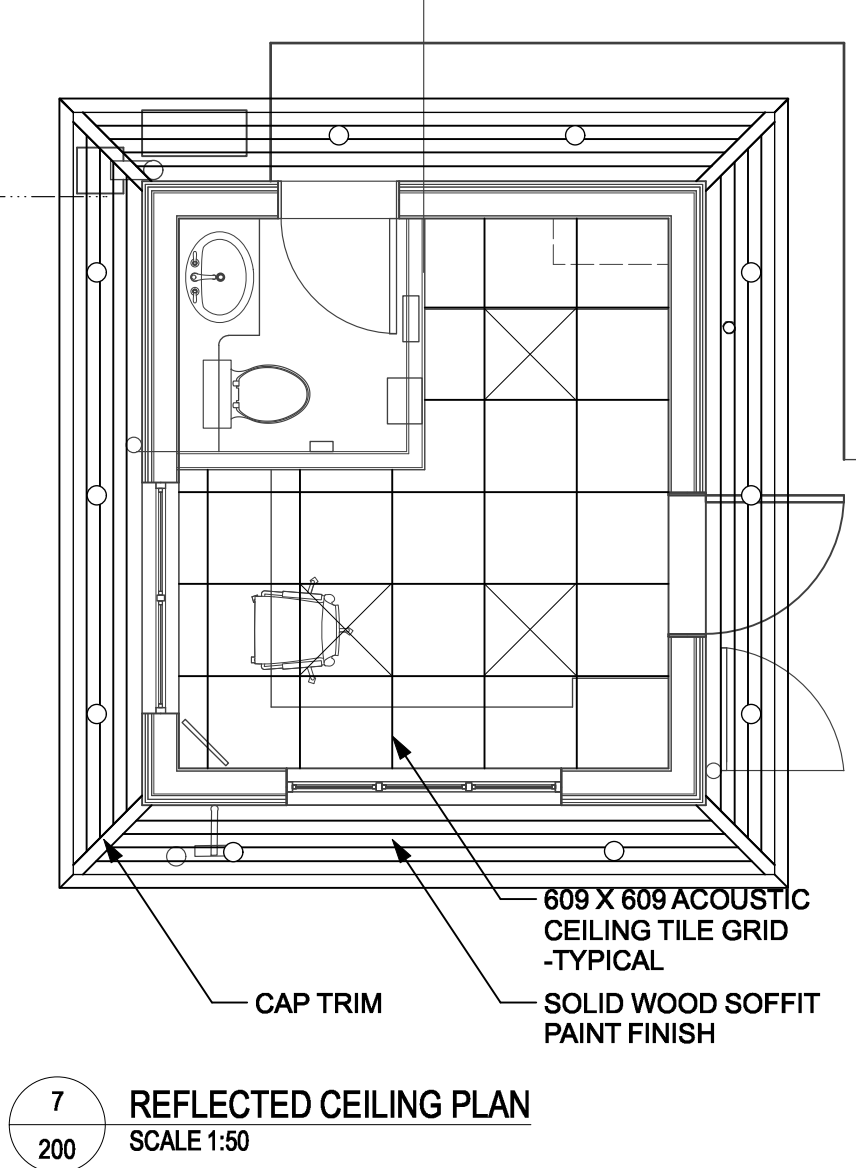
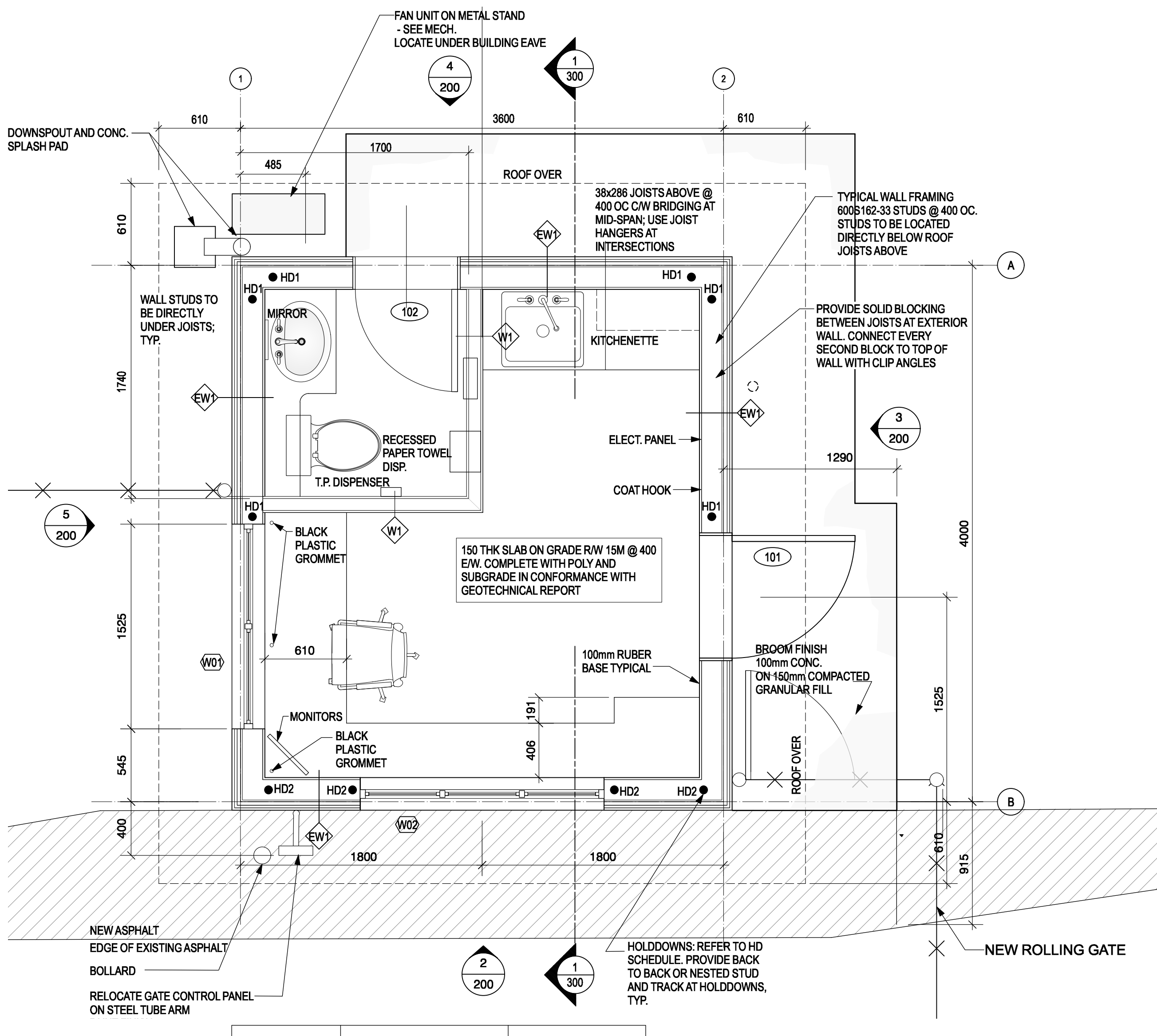
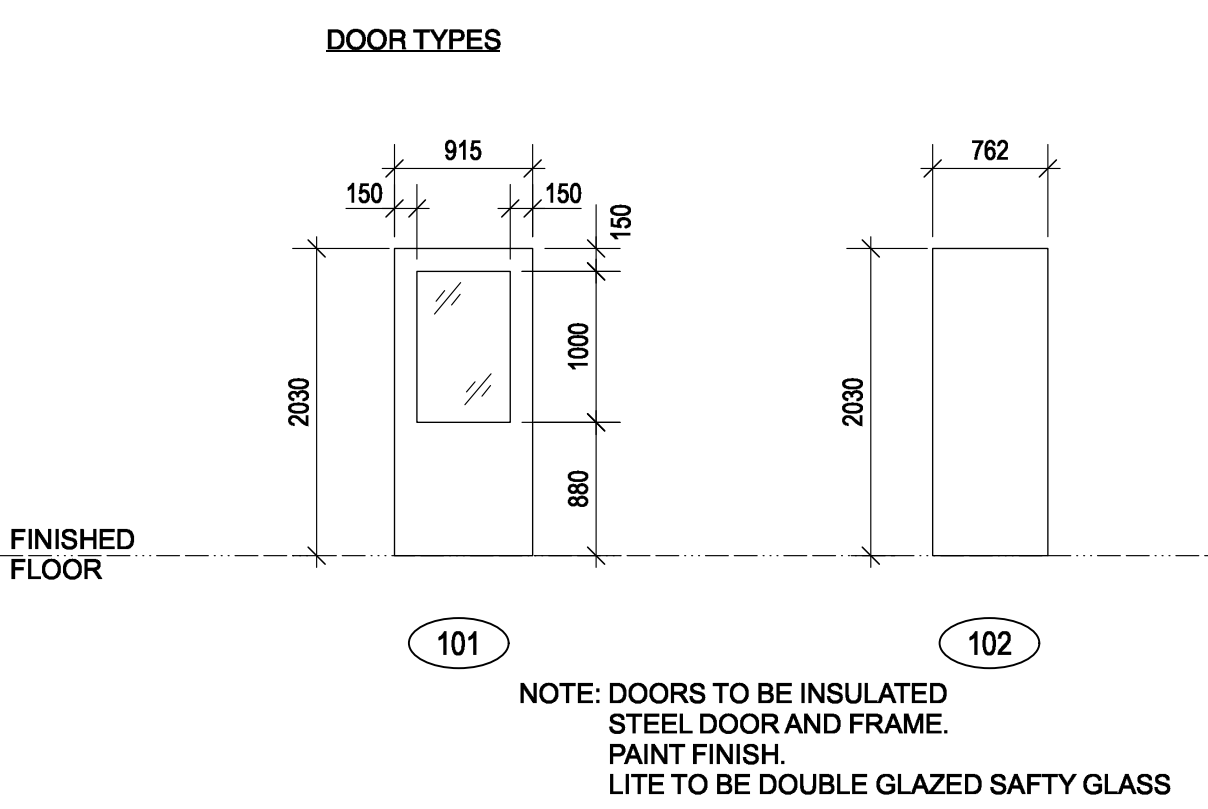
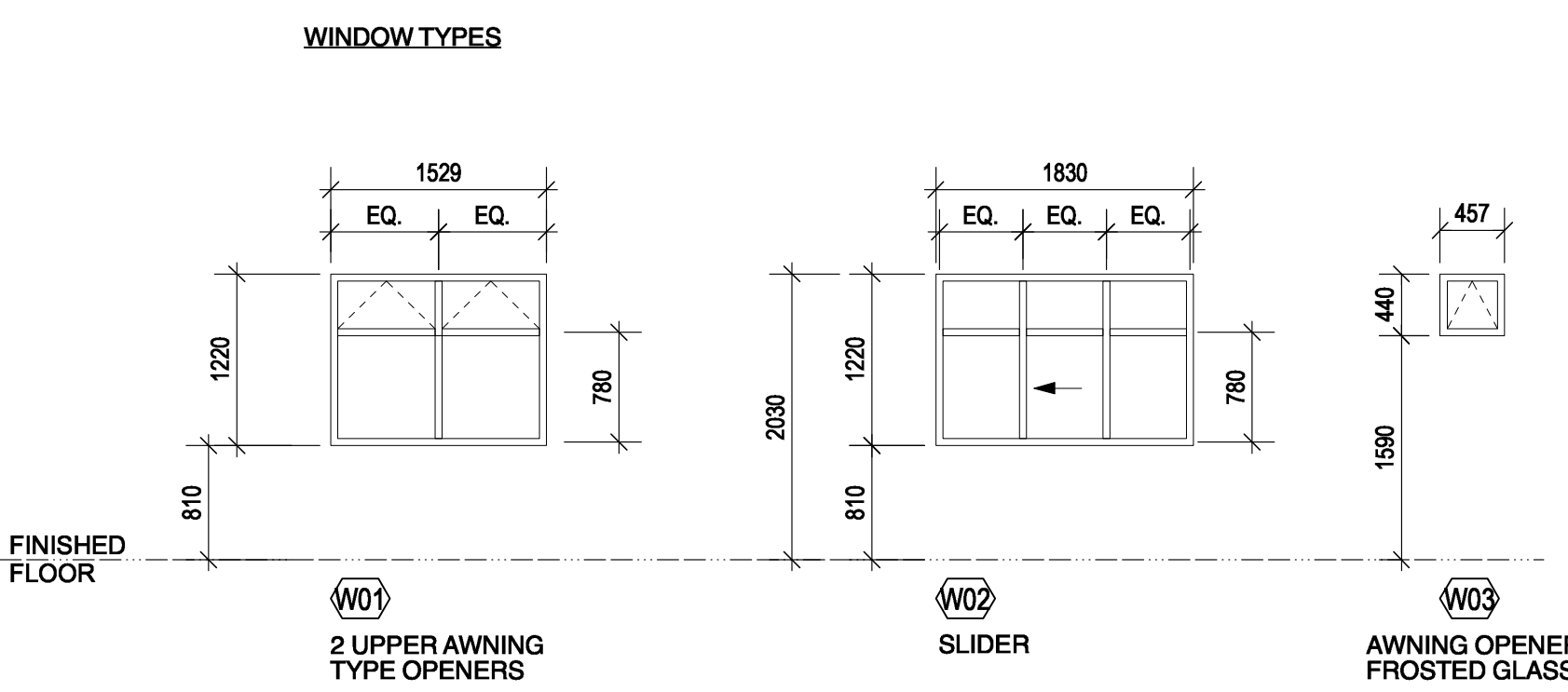
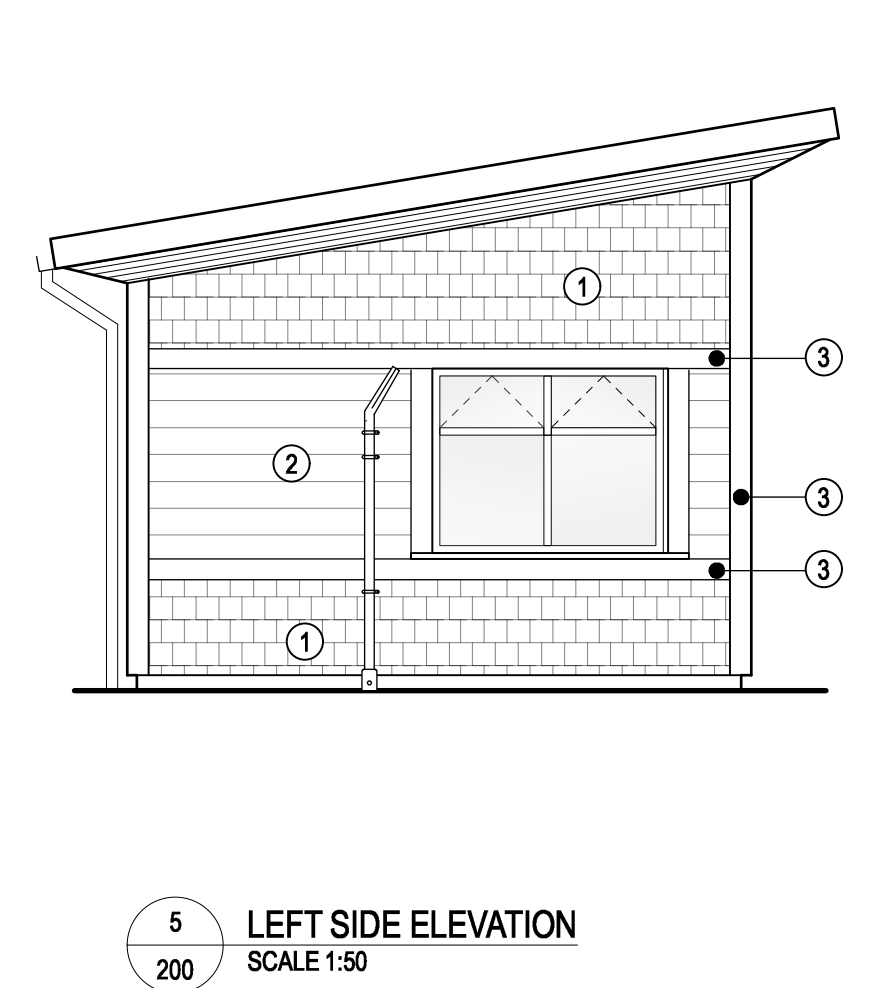
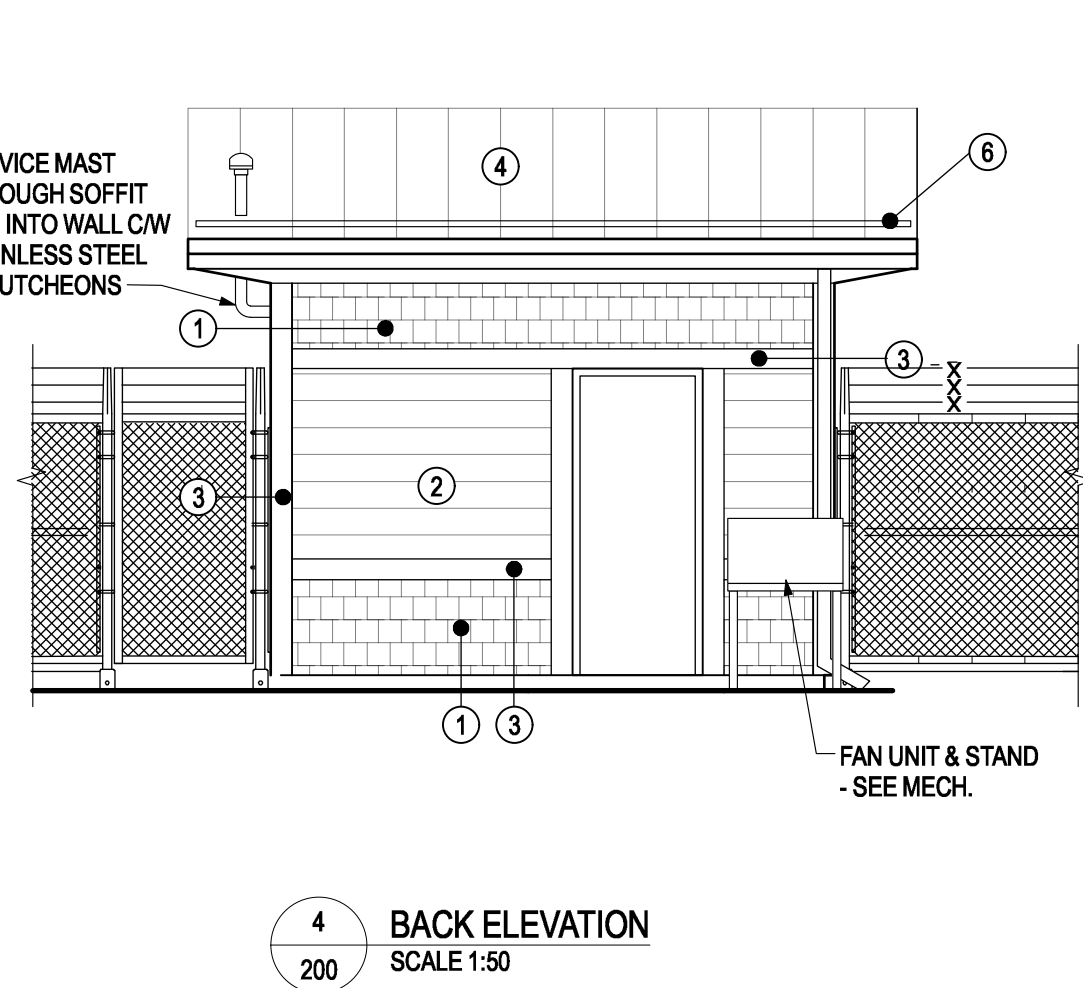
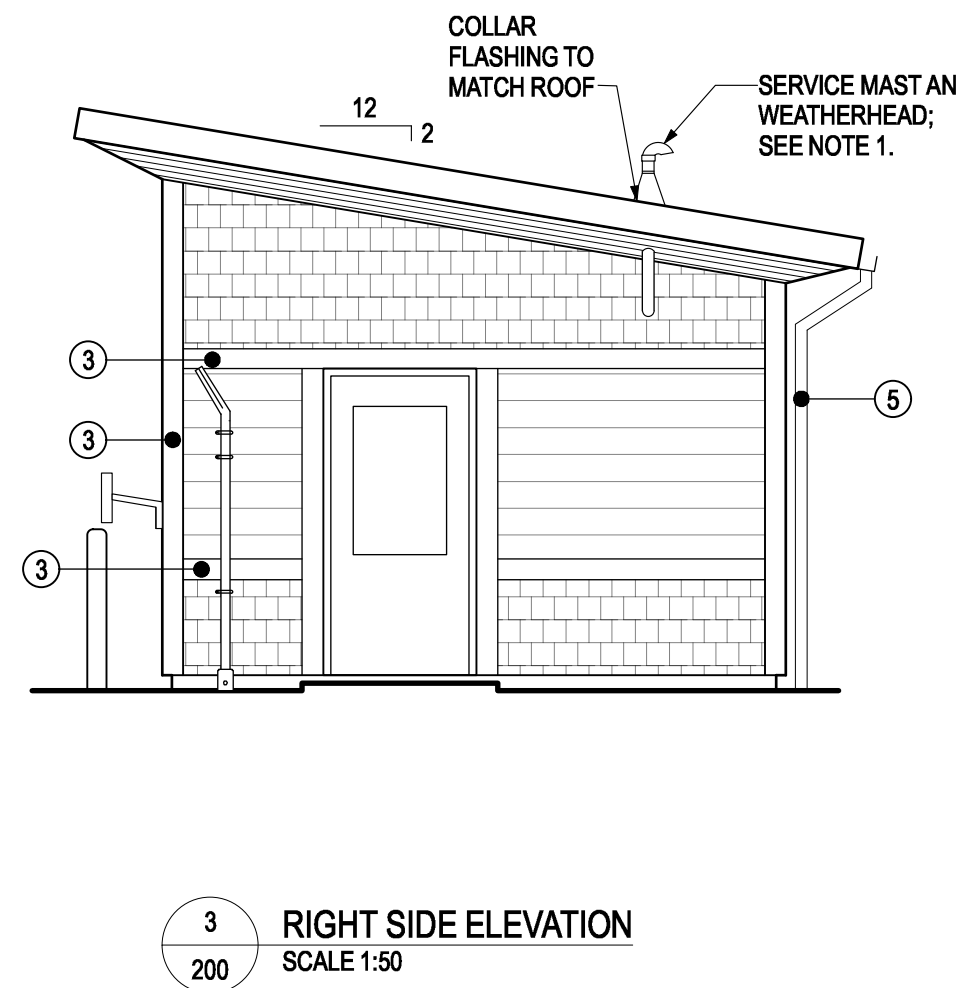
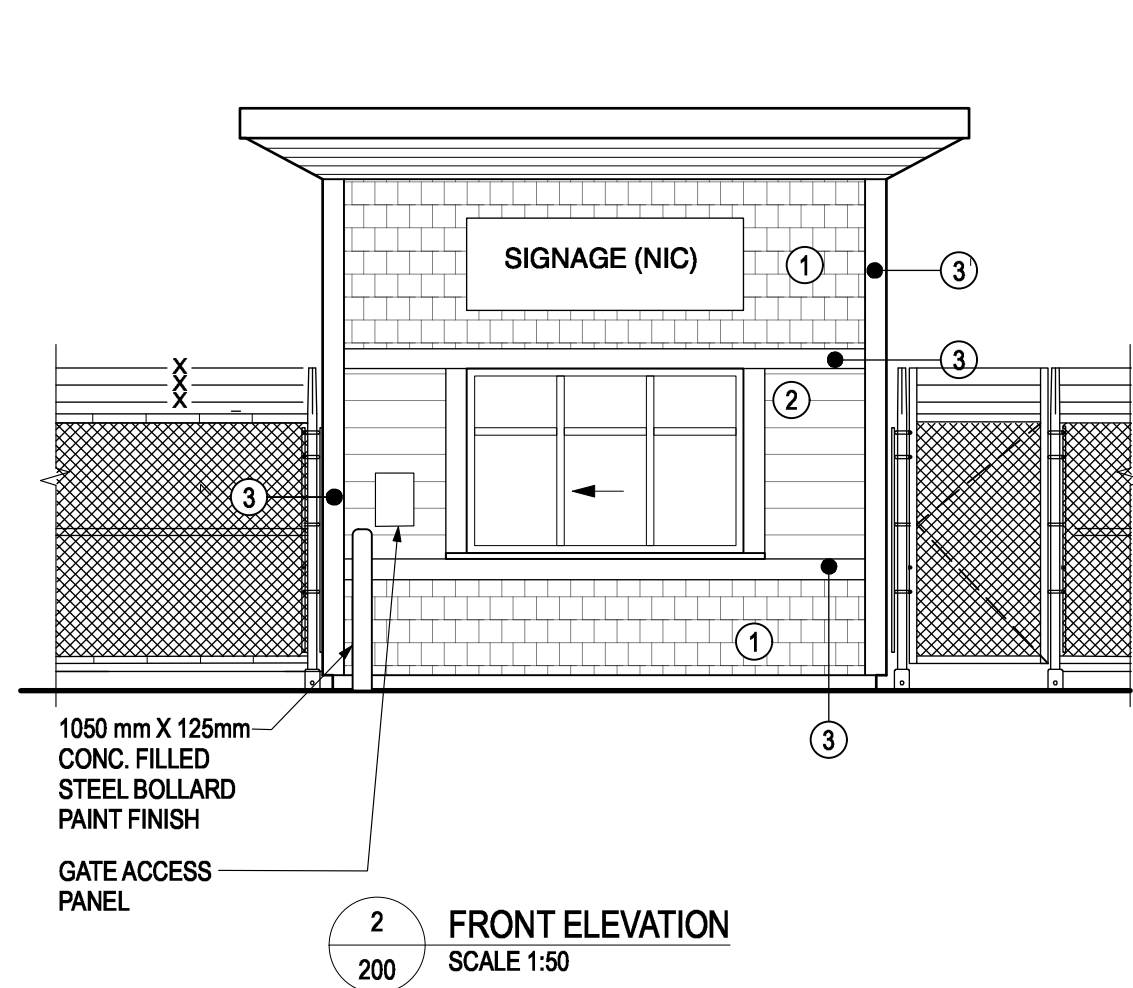
SITE PLANS

SCALE AS NOTED
START DATE
DRAWING NUMBER **A-100**

DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS
			2	2021-09-30	TENDER
			1	2021-05-28	REVIEW
			0	2020-09-08	BASE PLANS

DESIGNED	
DRAWN	MS
CHECKED	RH
RECOMMENDED	
APPROVED	

ELEVATION KEYNOTES	
①	FIBRE CEMENT SHINGLE SIDING
②	FIBRE CEMENT PLANK SIDING
③	WOOD TRIM
④	METAL ROOF
⑤	PRE-FINISHED ALUMINUM GUTTER AND DOWNSPOUT C/W SPLASH PAD
⑥	SNOW GUARD



HOLD-DOWN	ANCHOR	SIMPSON HOLD-DOWN
HD1	1/2" THREADED ROD EPOXY SET MIN 89 EDGE DISTANCE (EMBED 152)	HTT4
HD2	1/2" THREADED ROD EPOXY SET MIN 89 EDGE DISTANCE (EMBED 152)	S/DTT2E

ASSEMBLY SCHEDULES	
EW1	EW1 EXTERIOR WALL HARDI SHINGLE OR HARDI PLANK (SEE ELEVATIONS) 19mm P.T. STRAPPING AT 400 O.C. (ATTACHED TO STUDS) 25mm SEMI RIGID INSULATION BUILDING WRAP OVER 12mm PLY SHEATHING (FASTEN WITH #8 SMS @ 150 O.C. EDGES - 300 O.C. AT INTERMEDIATE SUPPORTS) 32 x 152 STEEL STUDS AT 400mm O.C. 150mm BATT INSULATION (R20 MIN.) 6 MIL POLY VAPOUR BARRIER 16mm TYPE X GWB - PAINT FINISH
W1	INTERIOR PARTITION 12mm GWB - PAINT FINISH 32 x 89 STEEL STUDS AT 400mm O.C. BATT INSULATION TO FILL CAVITY 16mm TYPE X - PAINT FINISH
R1	ROOF 1 METAL ROOF ACCEPTABLE FOR 2:12 PITCH SEEMS AT 400mm +/- O.C. (GALVALUME) HIGH TEMP WATERPROOF ROOFING MEMBRANE (AS RECOMMENDED BY METAL ROOFING MFG) 19mm PLYWOOD ROOF DECK (FASTEN WITH 64 LG NAILS @ 150 O.C. EDGES - 300 O.C. AT INTERMEDIATE SUPPORTS) 38mm x 286mm ROOF JOISTS @ 400 O.C. (REF TO STRUCT.) R32 (R28min) - 203mm SEMI RIGID INSULATION "ROXUL COMFORT BATT" 6mil POLY VAPOUR BARRIER 16mm TYPE X
F1	FLOOR 1 FLOOR ENAMEL PAINT 150mm CONCRETE SLAB 15 MIL POLY VAPOUR BARRIER 150mm COMPACTED SAND 150mm COMPACTED GRAVEL ACCEPTABLE UNDISTURBED BEARING (CONFIRM WITH GEOTECH)
NOTES	
1. WEATHER HEAD COLLAR FLASHING TO HAVE WATERTIGHT SEAL AT TOP OVER WEATHERHEAD MAST. EXTEND METAL ROOFING FROM ROOF EDGE AROUND AND 400mm PAST UPSLOPE OF COLLAR. COLLAR BASE FLANGE TO BE EMBED IN 3mm OF MASTIC OVER ROOFING AND DECK. OVERLAP ROOFING FROM ABOVE AND SEAL TO COLLAR BASE W/ REINFORCED PROPRIETARY ROOF SEALANT (ALL SIDES). SEAL ROOFING OVERLAP WITH 2 ROWS OF SEALANT. ENSURE SHINGLE LAPPING OF ALL ROOFING AND MEMBRANES.	

FISHERIES AND OCEANS CANADA
REAL PROPERTY AND SAFETY AND SECURITY

CULTUS LAKE SALMON RESEARCH LABORATORY GUARD HOUSE

PLAN, ELEVATIONS, SCHEDULES

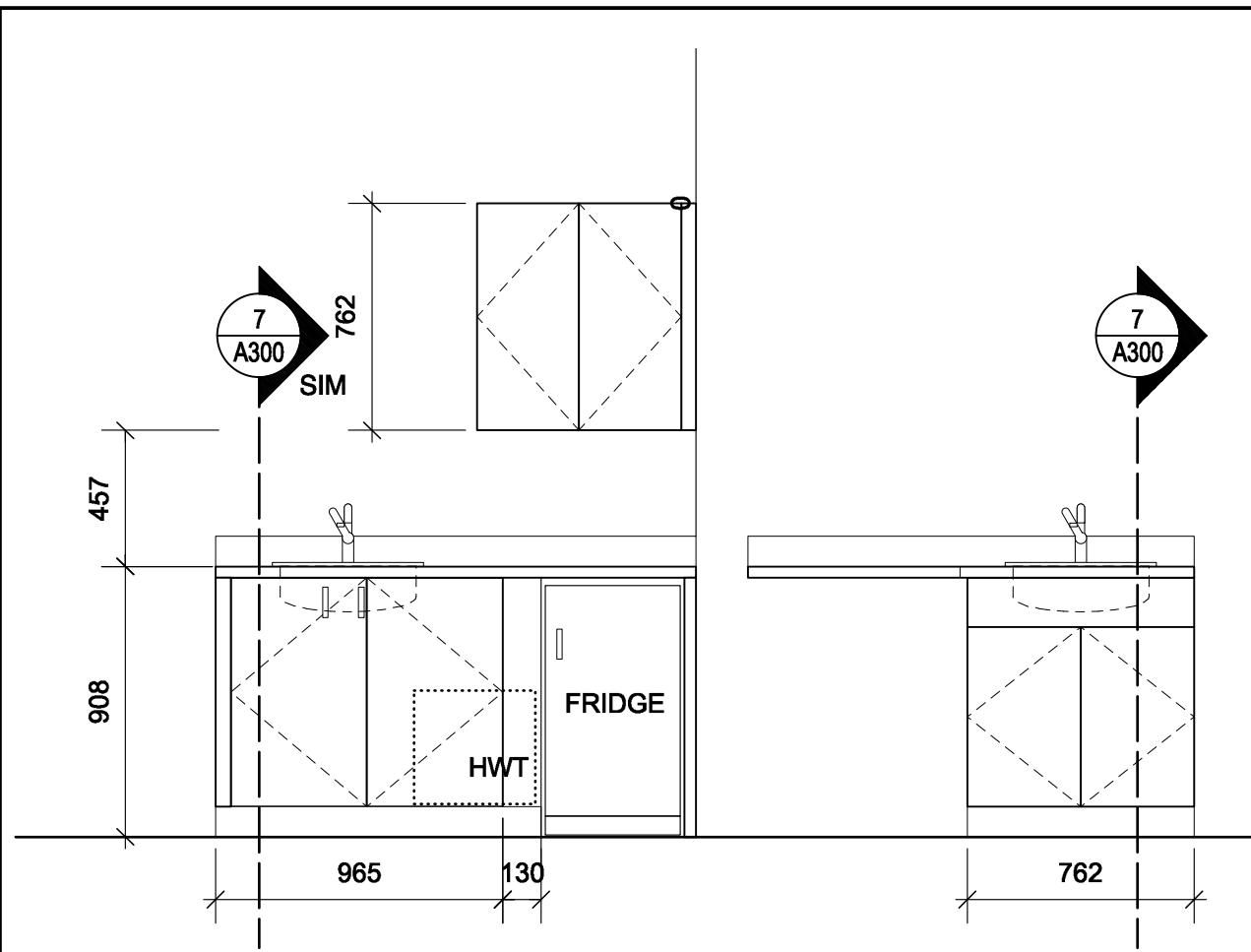
SCALE AS NOTED
START DATE
DRAWING NUMBER A-200

DESIGNED	
DRAWN	MS
CHECKED	RH
RECOMMENDED	
APPROVED	

NO.	DATE	REVISIONS
2	2021-09-30	TENDER
1	2021-05-28	REVIEW
0	2020-08-06	BASE PLANS

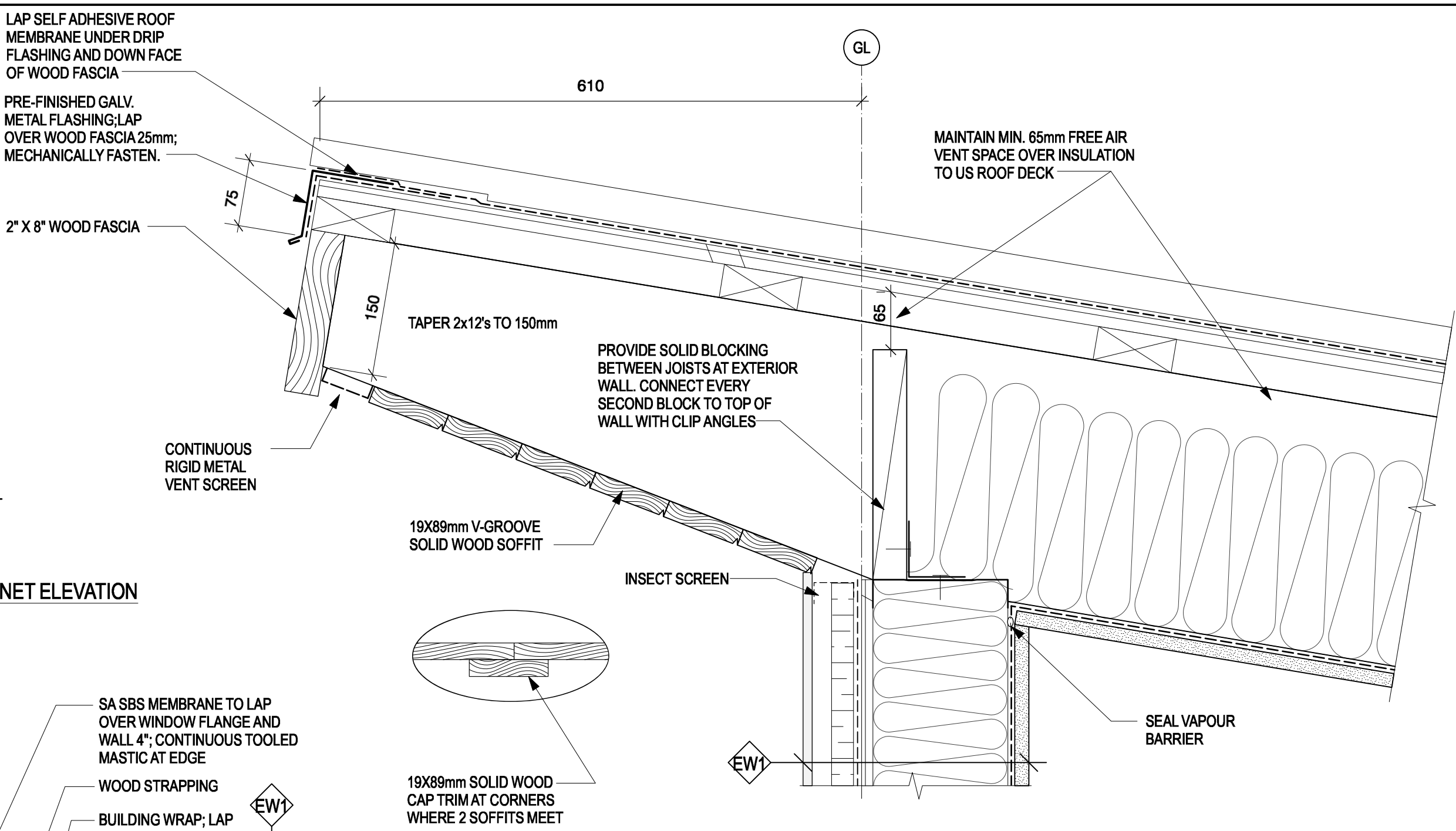
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DWG. NO.	DRAWING REFERENCES	NOTES

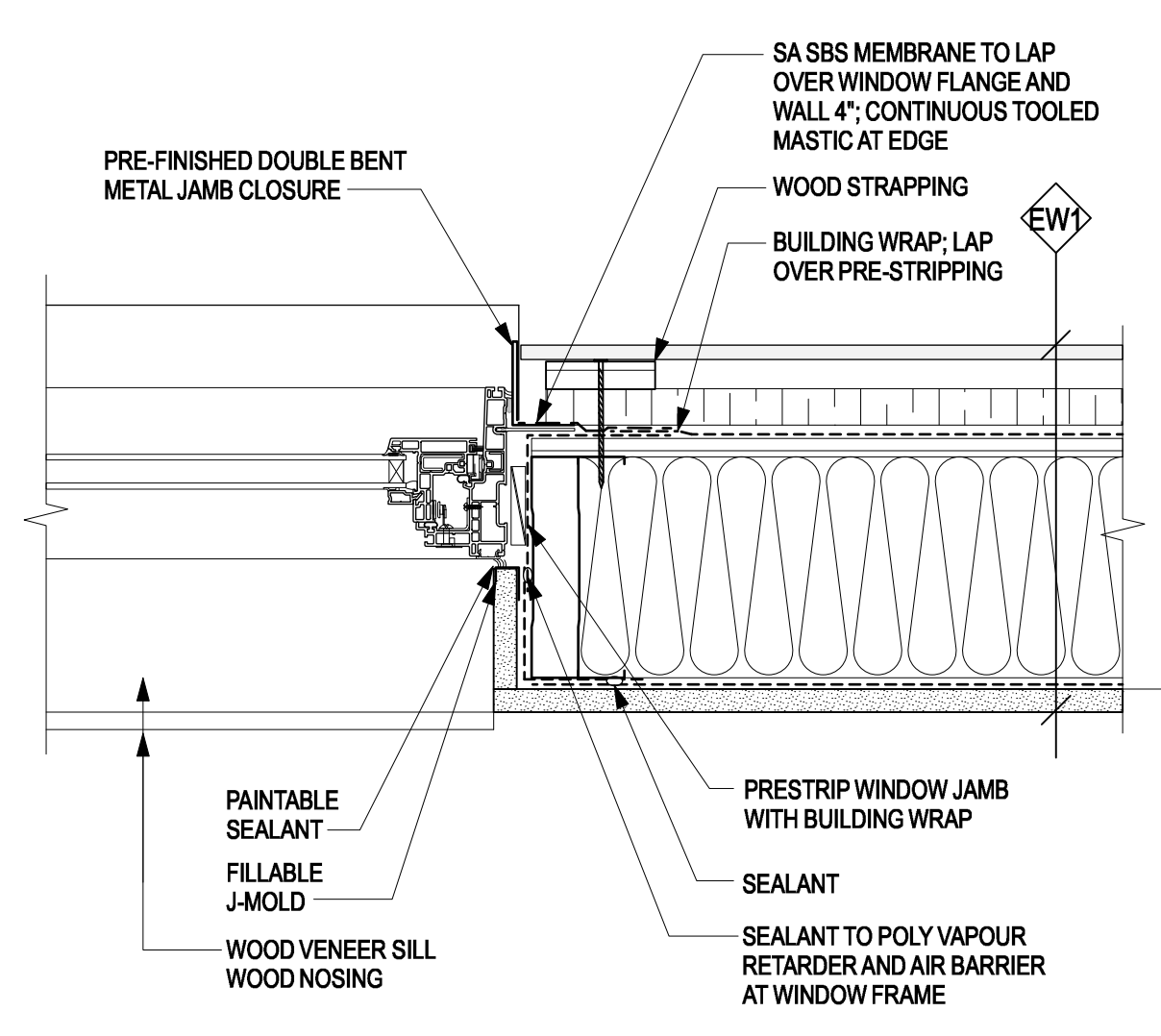


9 KITCHETTE ELEVATION
SCALE 1:10
A-300

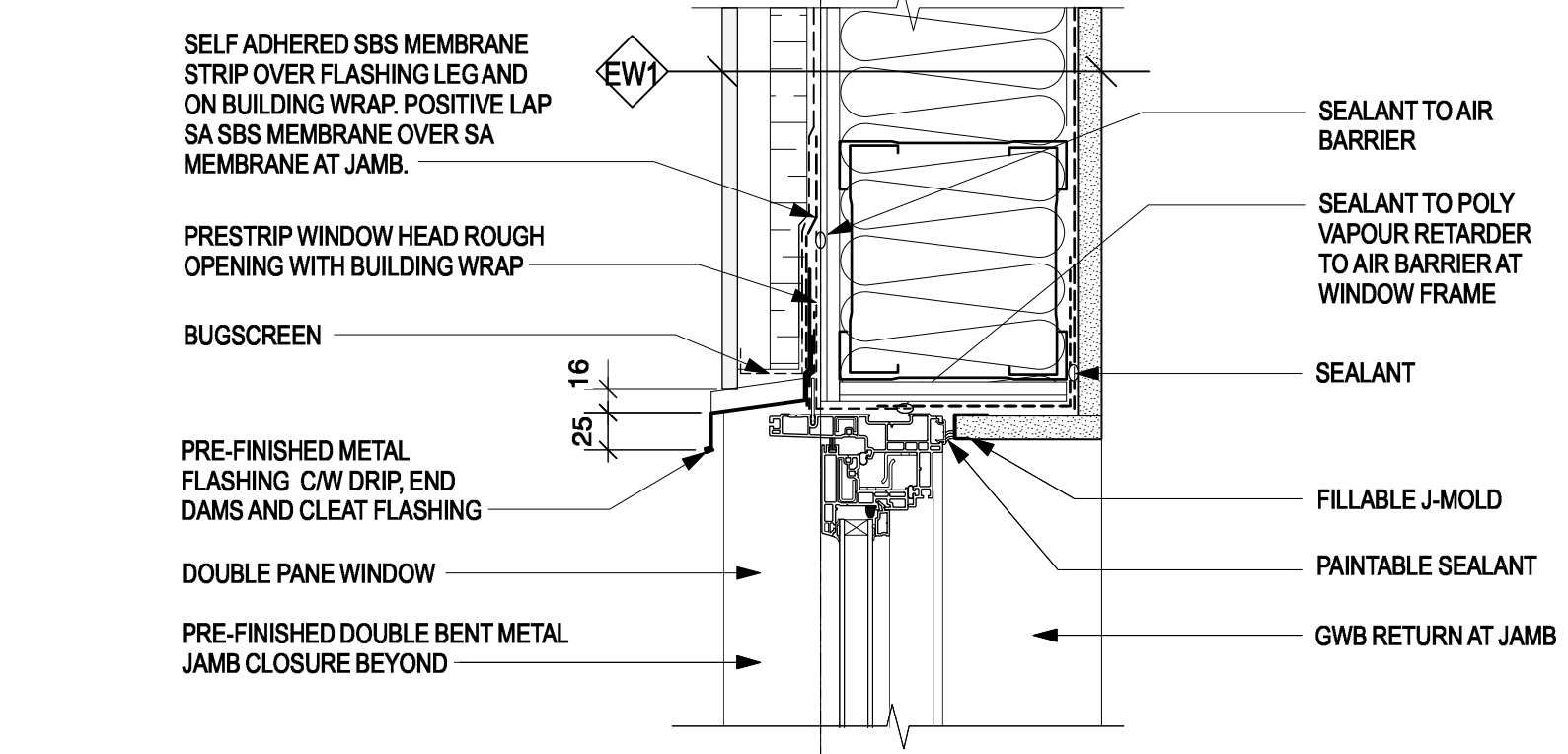
10 BATHROOM CABINET ELEVATION
SCALE 1:10
A-300



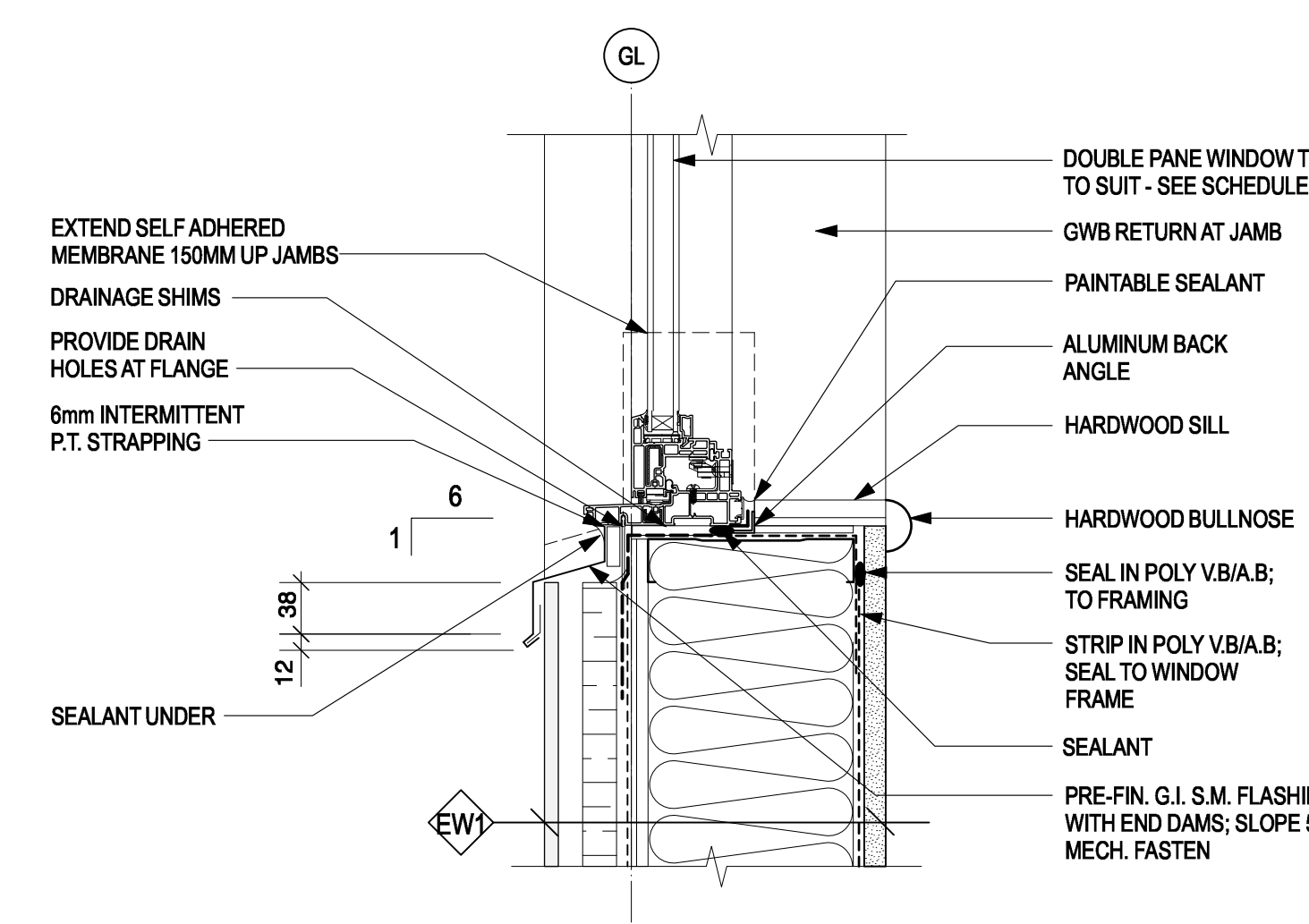
5 ROOF OVERHANG DETAIL
SCALE 1:5
A-300



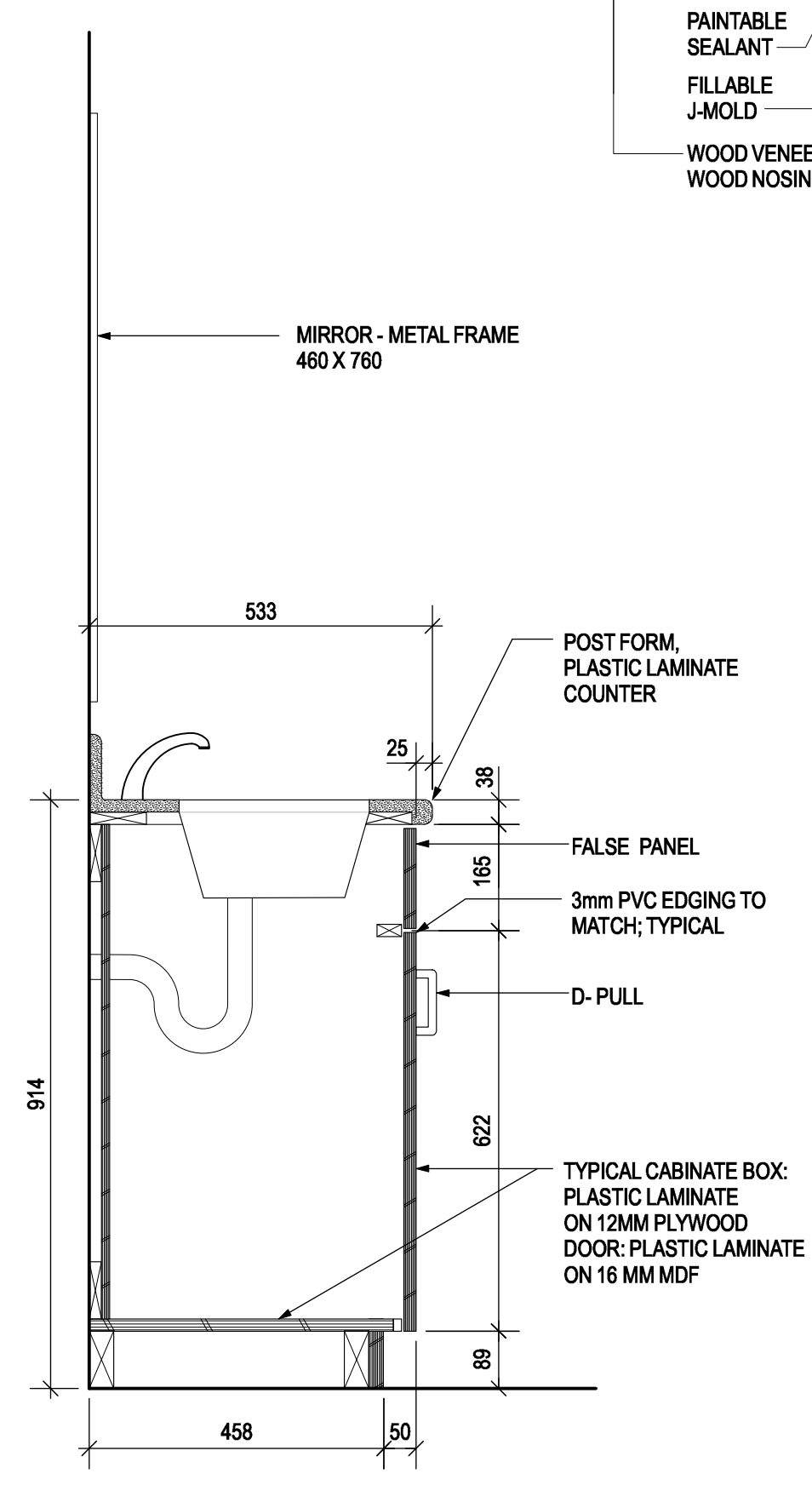
6 WINDOW JAMB
SCALE 1:5
A-300



4 WINDOW HEAD DETAIL
SCALE 1:5
A-300

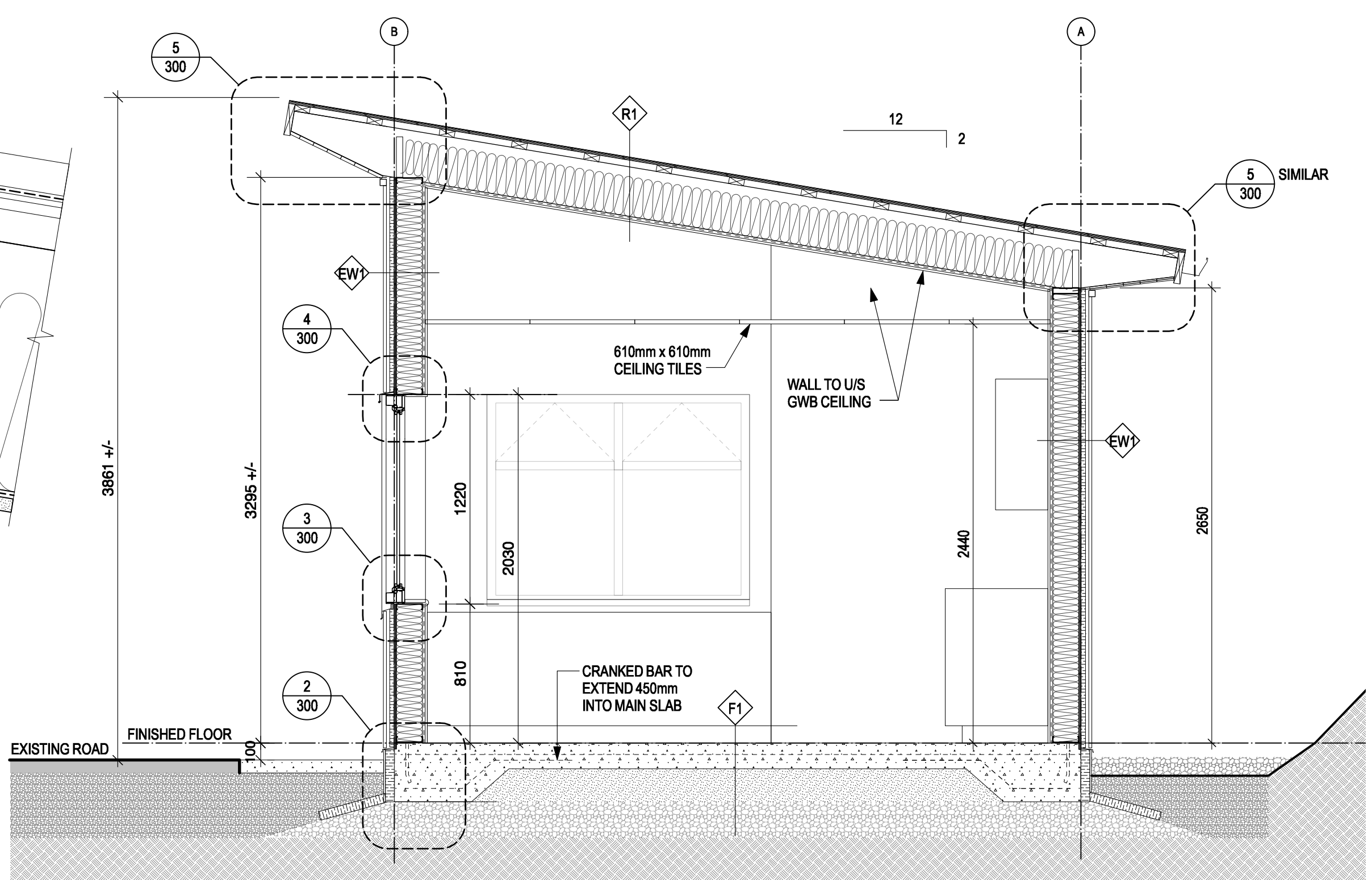


3 WINDOW SILL DETAIL
SCALE 1:5
A-300

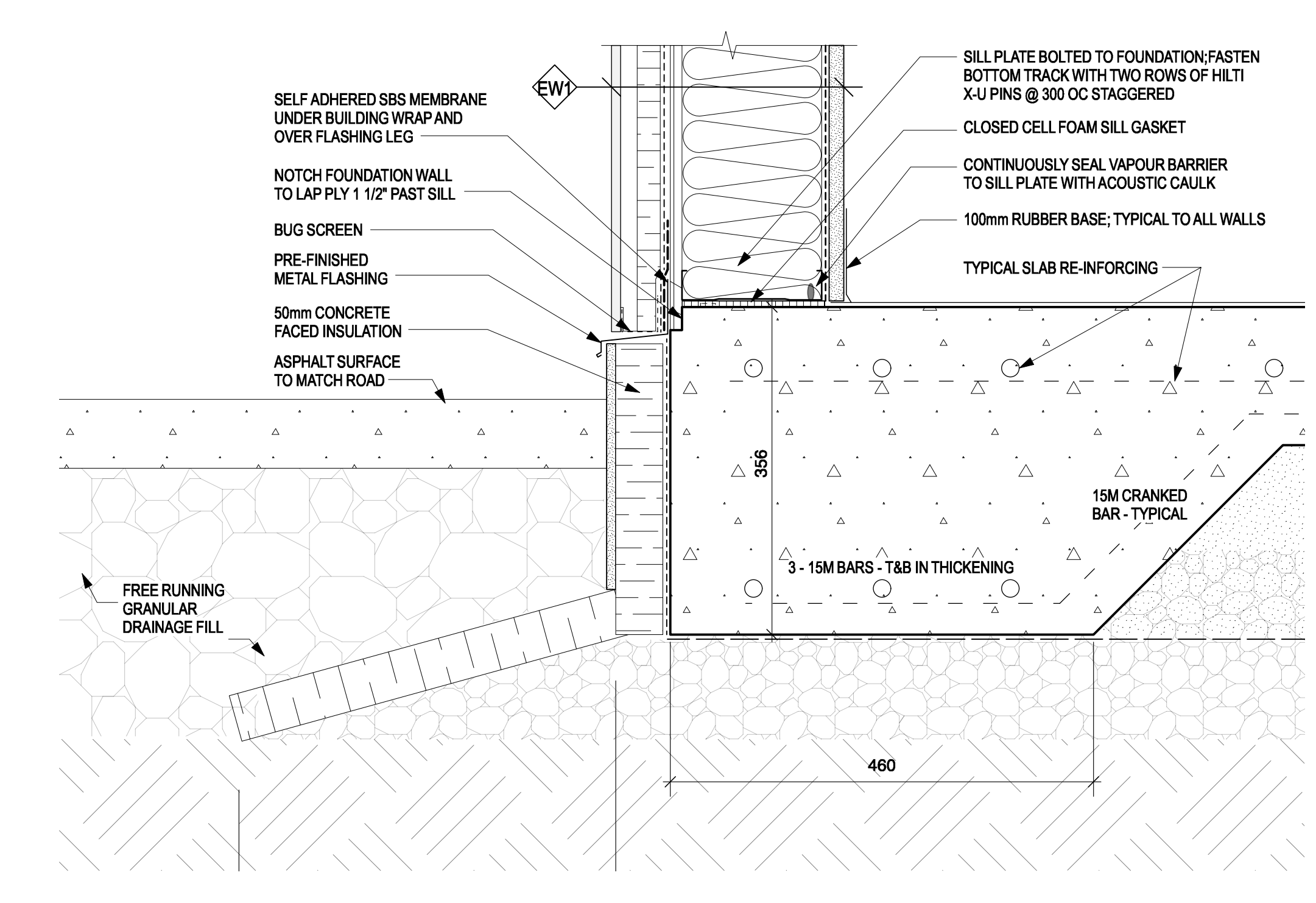


7 BATHROOM CABINET
SCALE 1:10
A-300

8 DESK
SCALE 1:10
A-300



1 SECTION
SCALE 1:25
A-300



2 FOUNDATION DETAIL
SCALE 1:5
A-300

FISHERIES AND OCEANS CANADA
REAL PROPERTY AND SAFETY AND SECURITY

**CULTUS LAKE
SALMON RESEARCH LABORATORY
GUARD HOUSE**

SECTION AND DETAILS

SCALE AS NOTED
START DATE
DRAWING NUMBER
A-300

DESIGNED	
DRAWN	MS
CHECKED	RH
RECOMMENDED	
APPROVED	

NO.	DATE	REVISIONS
2	2021-09-30	TENDER
1	2021-05-28	REVIEW
0	2020-08-08	BASE PLANS

DWG. NO.	DRAWING REFERENCES	NOTES

GENERAL NOTES:
 1. ALL SANITARY DRAIN PIPE TO BE SLOPED AT 2% UNLESS OTHERWISE NOTED.

MECHANICAL DRAWING LIST		
DRAWING NO.	DRAWING NAME	SCALE
M1.00	LEGEND, DRAWING LIST & SCHEDULES, PLUMBING AND HVAC PLANS	1:50

GENERAL SYMBOLS:

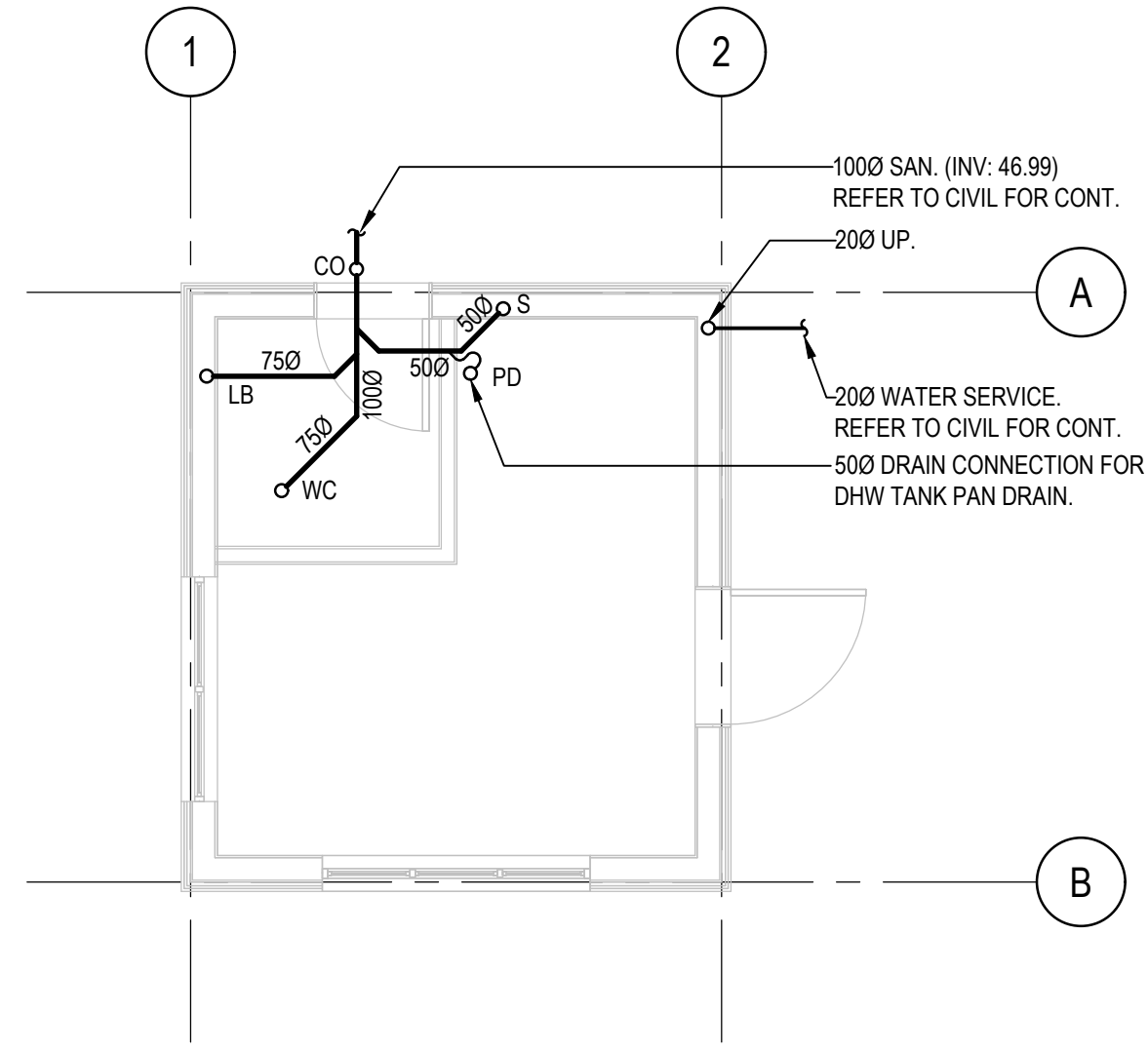
	PIPE OFFSET UP		UNION
	PIPE OFFSET DOWN		ISOLATION VALVE
	PIPE CAP		CHECK VALVE
	PIPE CONTINUES		STRAINER
	PRESSURE GAUGE		PRESSURE REGULATING VALVE
	THERMOMETER		EQUIPMENT TAG
	PRESSURE RELIEF VALVE		TYPE OF EQUIPMENT EQUIPMENT NUMBER

HVAC LEGEND

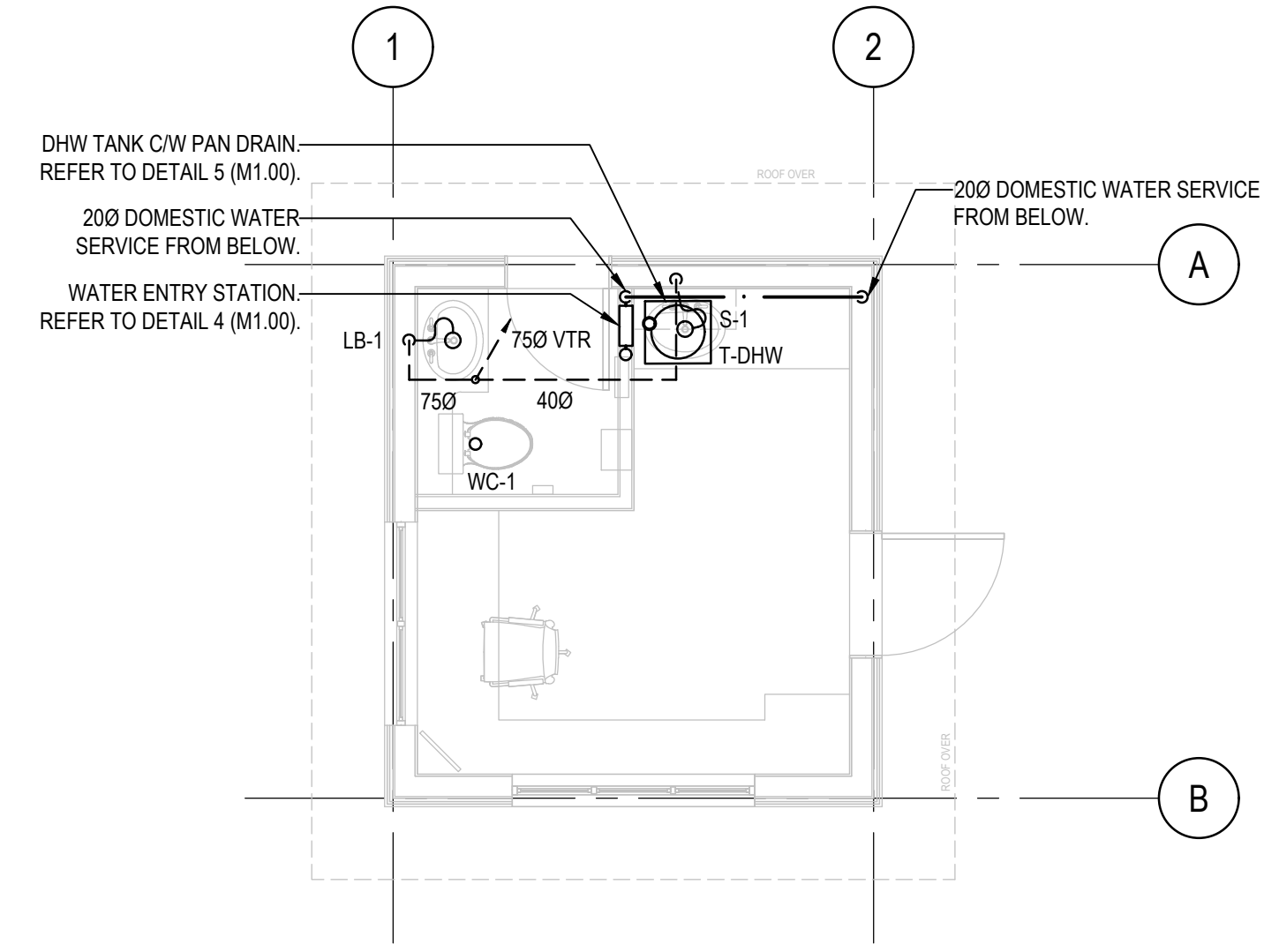
DRAWING SYMBOLS:	ABBREVIATIONS:
	AC AIR CONDITIONING UNIT
	CFM CUBIC FEET / MINUTE
	EF EXHAUST FAN
	FF FORCED FLOW HEATER
	L/s LITRES PER SECOND
	O/A OUTDOOR AIR

PLUMBING LEGEND

DRAWING SYMBOLS:	ABBREVIATIONS:
	C COLD WATER
	CO CLEANOUT
	DHW DOMESTIC HOT WATER
	DCVA DOUBLE CHECK VALVE ASSEMBLY
	FD FLOOR DRAIN
	H HOT WATER
	HWT HOT WATER TANK
	LB LAVATORY BASIN
	S SINK
	SAN SANITARY PIPING
	VTR VENT TO ROOF
	WC WATER CLOSET



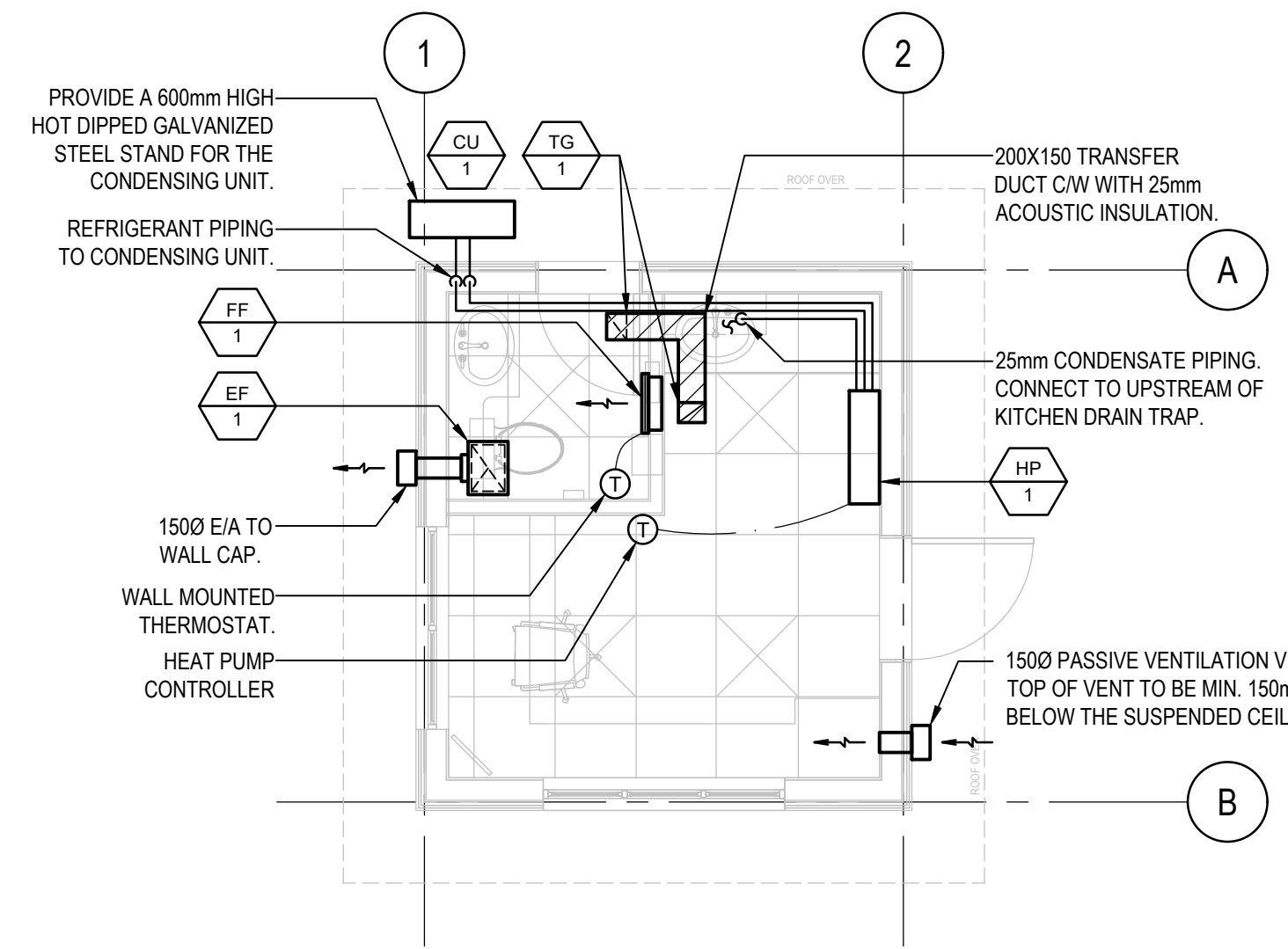
1 FOUNDATION PLUMBING PLAN
 M1.00 SCALE: 1:50



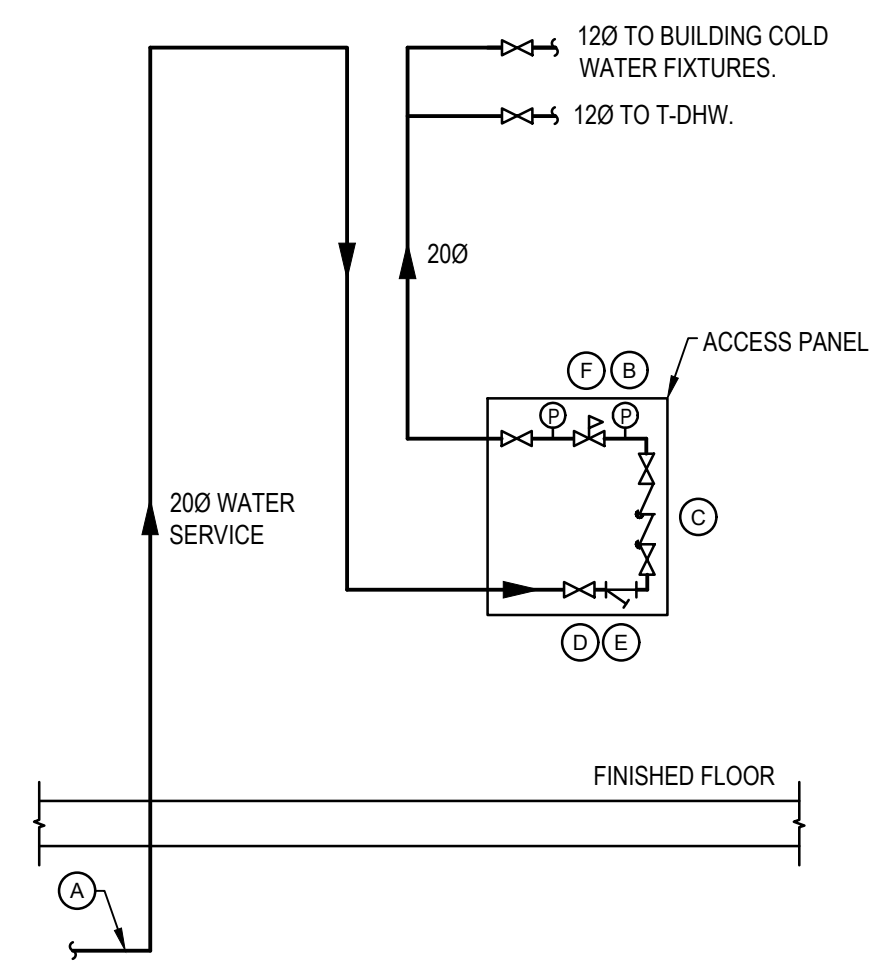
2 PLUMBING PLAN
 M1.00 SCALE: 1:50

- (A) 200 BUILDING WATER SERVICE
- (B) PRESSURE GAUGE TYP.
- (C) 200 PREMISE BACKFLOW PREVENTOR. (DCVA)
- (D) ISOLATION VALVE. TYP.
- (E) STRAINER
- (F) 20 PRV

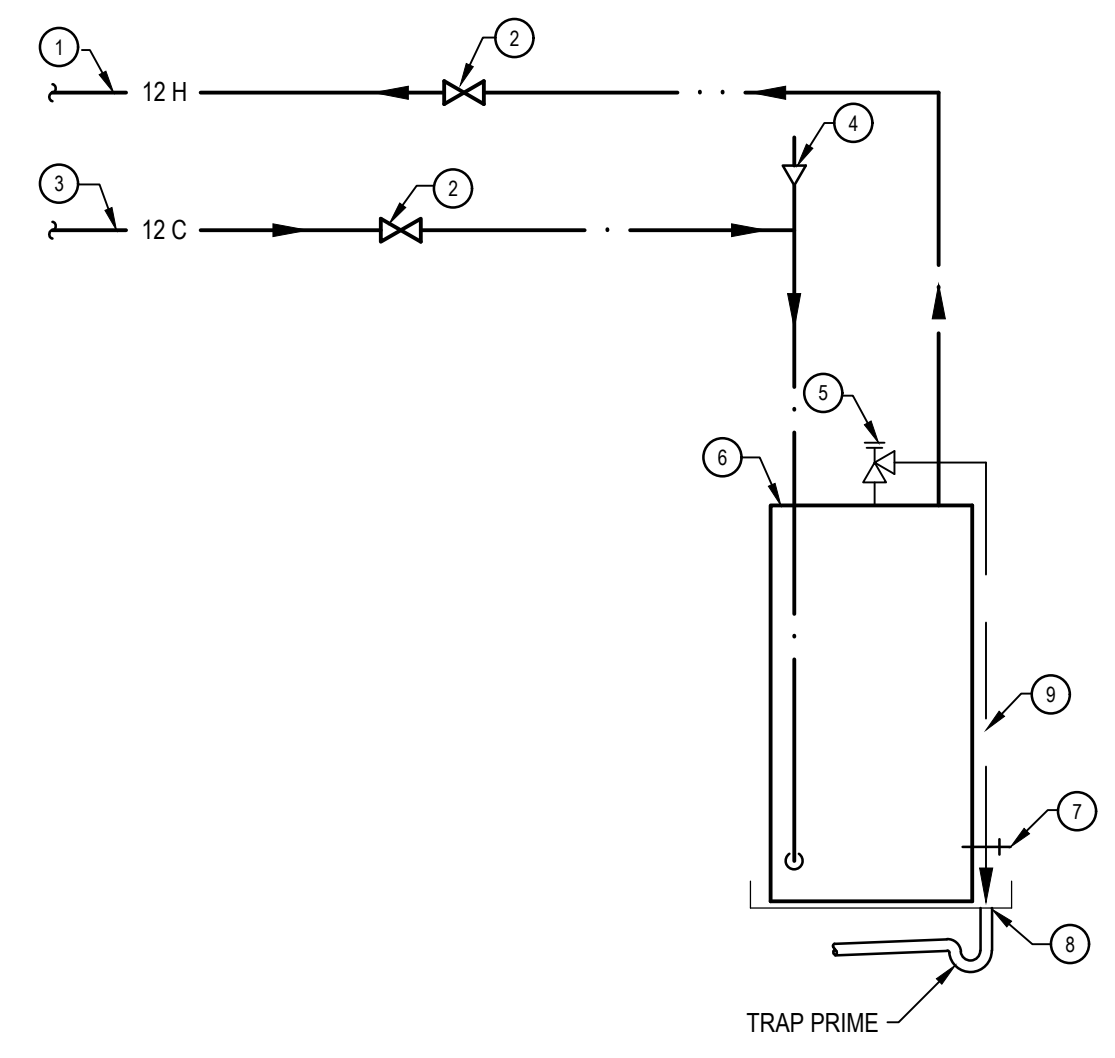
- (1) DOMESTIC HOT WATER SUPPLY
- (2) VALVE
- (3) COLD WATER SUPPLY
- (4) VACUUM RELIEF VALVE
- (5) TEMPERATURE & PRESSURE RELIEF VALVE
- (6) DOMESTIC HOT WATER TANK (T-DHW)
- (7) HOSE BIBB
- (8) 25mm DRAIN PAN. PIPED TO DRAIN
- (9) T & P RELIEF DISCHARGES DIRECTLY OVER DRAIN.



3 HVAC PLAN
 M1.00 SCALE: 1:50



4 WATER ENTRY SYSTEM SCHEMATIC
 M1.00 SCALE: NTS



5 DOMESTIC HOT WATER SCHEMATIC
 M1.00 SCALE: NTS

AIR TERMINAL SCHEDULE

ROOM NO.	GRILLES AND DIFFUSERS	TYPE	SIZE W x H	AIR FLOW l/s / cfm
TG-1	TRANSFER		200x150	70 / 150

HEATING UNIT SCHEDULE

TAG	SERVICE	HEATING CAPACITY kW	ELECT DATA VOLTS	PHASE
FF-1	ELECTRIC	1.5	208	1

NOTE:
 1. COMPLETE WITH RELAY FOR THERMOSTAT.

SPLIT HEAT PUMP SCHEDULE

TAG	SERVICE	TYPE	HEATING kW / MBH	COOLING SENSIBLE kW / MBH	ELECT DATA VOLTS	PHASE	NOTES
HP-1	SPACE HEAT PUMP	WALL HUNG	4.0 / 13.5	3.5 / 12	208	1	1, 2, 3

NOTE:
 1. SPLIT HEAT PUMP UNIT WITH DOUBLE CIRCUITED COIL SUITABLE FOR LOW AMBIENT OPERATION -17.8°C [0°F]. REFER TO SPECIFICATIONS.
 2. RATED AT -OAT: 35°C DB, IAT: 23.9°C DB, 16.9°C WB.
 3. MECHANICAL SHALL PROVIDE WIRING BETWEEN OUTDOOR UNIT AND INDOOR UNIT.

TANK SCHEDULE

TAG	SERVICE	TYPE	ORIENTATION	CAPACITY kW	VOLUME L / Us gal	ELECT DATA VOLTS	PHASE
T-DHW	DOMESTIC HOT WATER	ELECTRIC	VERTICAL	1.5	23 / 6	120	1

FAN SCHEDULE

TAG	SERVICE	AIR FLOW l/s / cfm	STATIC PRESSURE Pa / in	SONES	RPM	MOTOR HP	ELECT DATA VOLTS	PHASE	NOTES
EF-1	CEILING EXHAUST FAN	25 / 50	125 / 0.5	1.5	840	32 W	120	1	1

NOTE:
 1. COMPLETE WITH ALUMINUM GRILLE, VIBRATION ISOLATION, FLEXIBLE CONNECTIONS, SPEED CONTROLLER FOR BALANCING.

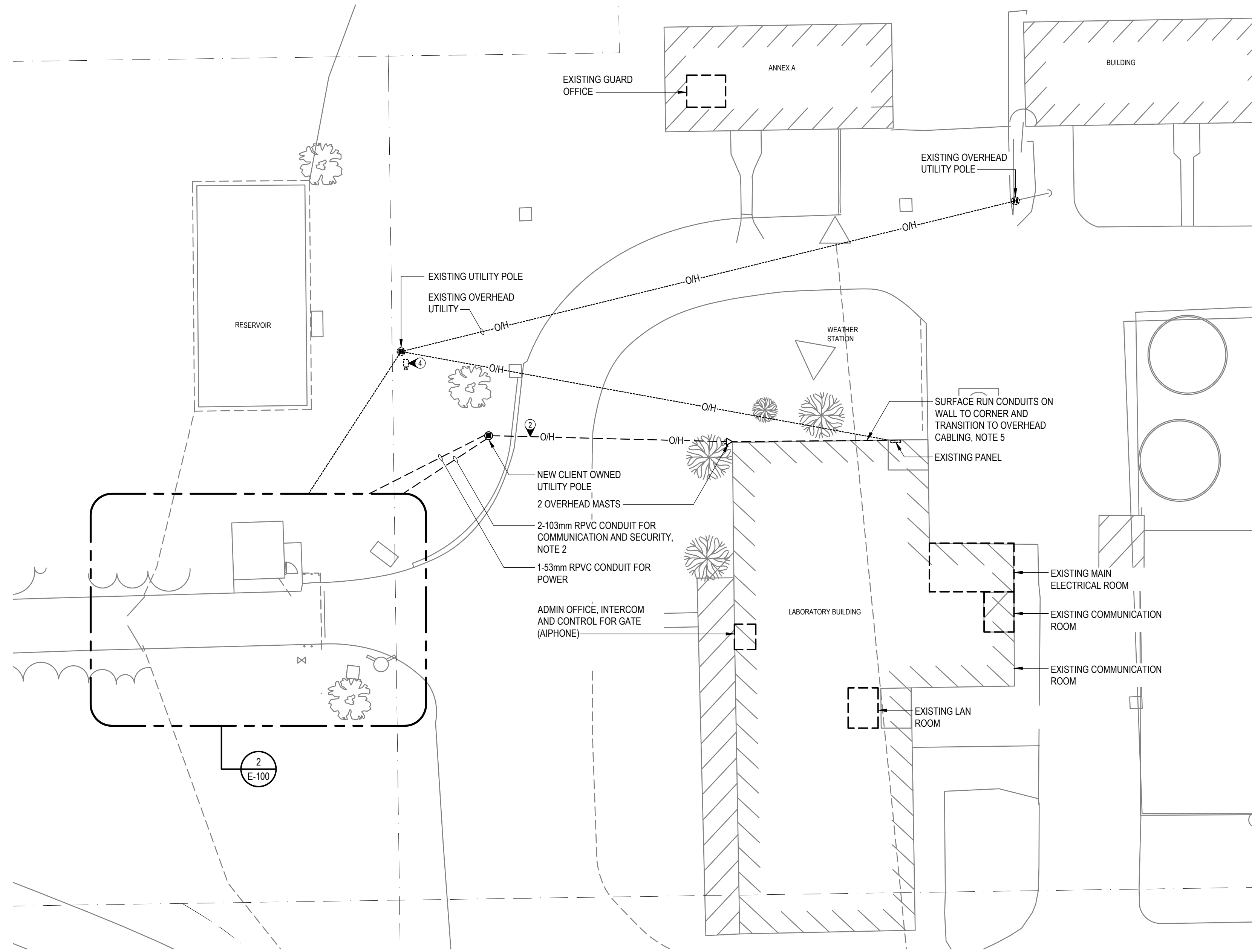
FISHERIES AND OCEANS CANADA
 REAL PROPERTY AND SAFETY AND SECURITY

CULTUS LAKE SALMON RESEARCH LABORATORY GUARD HOUSE

LEGEND, DRAWING LIST & SCHEDULES, PLUMBING AND HVAC PLANS

SCALE AS NOTED	START DATE SEPT 11, 2020
DRAWING NUMBER M1.00	

	DESIGNED GD/OU						
	DRAWN OU						
	CHECKED RG						
	RECOMMENDED						
	APPROVED						
DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS		

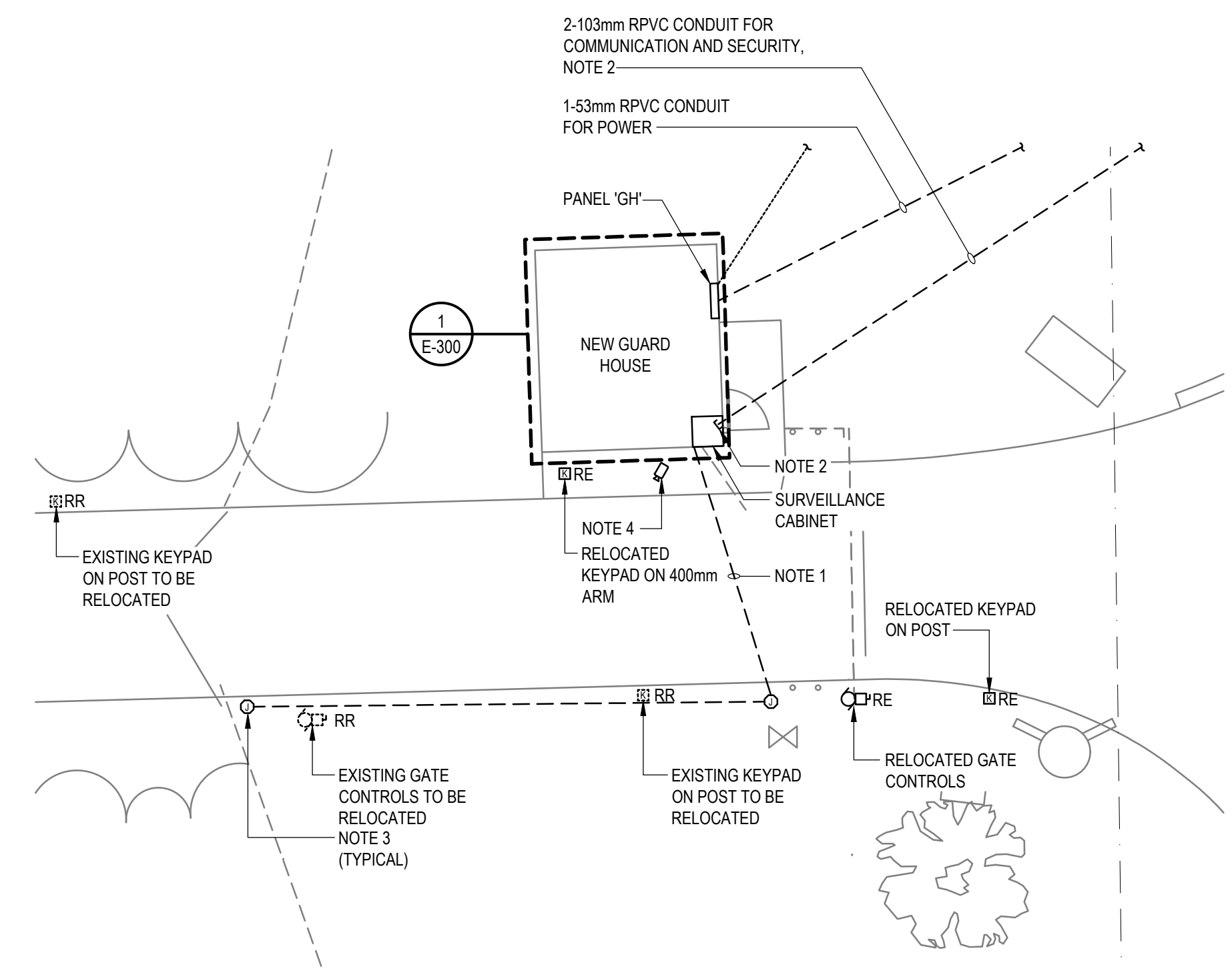


1 SITE ELECTRICAL LAYOUT
E-100



- NOTES:**
- UNDERGROUND POWER FROM GUARD HOUSE TO MOTORIZED GAT. CIRCUIT GH15.
 - OVERHEAD POWER AND COMMUNICATIONS CABLING. REFER TO DETAIL 3/E-200 AND 2/E-200.
 - NEW IN-GROUND JUNCTION BOX. EXTEND MOTORIZED GATE CABLING TO NEW LOCATION. REMOVE POWER CABLING.
 - RELOCATED CCTV CAMERA. EXACT LOCATION TO BE DETERMINED ON-SITE WITH OWNER. ROUTE NEW CABLES FROM MULTIPLEXER IN LAB BUILDING TO RELOCATED CAMERA. REMOVE OLD CABLING FROM OLD LOCATION.
 - NEW POWER (1 x 53mm) AND COMMUNICATION AND SECURITY (2 x 103mm) CONDUITS TO BE STUBBED ALONG FACE OF THE EXTERIOR WALL AND PROVIDE/INSTALL:
 - EXTERIOR WEATHERPROOF RATED PULL BOX C/W PADLOCK ON THE WALL FOR RUNNING COMMUNICATION AND SECURITY CONDUITS INSIDE THE BUILDING. CONDUITS TO BE COMPLETED WITH PULL STRINGS AND END CAPS FOR OWNER TO RUN WIRING IN FUTURE.
 - LB FITTING FOR POWER CONDUIT TO RUN POWER CONDUIT INTO THE BUILDING TO RUN WIRING FROM MAIN BUILDING EXISTING ELECTRICAL PANEL TO NEW PANEL 'GH' IN GUARD HOUSE.

ABBREVIATIONS		COMMUNICATIONS	
WP	DENOTES WEATHER PROOF DEVICE	▽	COMBINATION TELEPHONE AND DATA OUTLET
RR	EXISTING DEVICE TO BE REMOVED AND RELOCATED	●	WIRELESS ACCESS POINT
RE	EXISTING DEVICE IN NEW RELOCATED POSITION		
LIGHTING		POWER	
☐	CEILING RECESSED LUMINAIRE	⊕	DUPLEX RECEPTACLE
○	RECESSED DOWN LIGHT	⊕	FOUR PLEX RECEPTACLE
⊞	LOW VOLTAGE DIMMER SWITCH	⊕	5-20R DUPLEX RECEPTACLE (T-SLOT)
☐	PHOTOCELL	⊕	5-20R DUPLEX RECEPTACLE (T-SLOT) GROUND FAULT CIRCUIT INTERRUPTER (GFCI)
⌚	TIME CLOCK	⊕	ABOVE COUNTER 5-20R DUPLEX RECEPT. (T-SLOT) GROUND FAULT CIRCUIT INTERRUPTER (GFCI)
⚡	SINGLE POLE TOGGLE SWITCH	⊕F	FRIDGE RECEPTACLE
⊕	DUAL TECHNOLOGY SENSOR C/W OCCUPANCY/VACANCY MODES, WALL MOUNTED	—	PANEL BOARD
⊕	DUAL TECHNOLOGY SENSOR C/W OCCUPANCY/VACANCY MODES, CEILING MOUNTED	⊕	JUNCTION BOX
⚡	DUAL HEAD EMERGENCY LIGHTING COMPLETE WITH SELF-CONTAINED BATTERY PACK, WALL MOUNTED	⊕	MECHANICAL EQUIPMENT CONNECTION
		—	BASEBOARD HEATER, WATTAGE AS NOTED ON PLANS
		⊕	MECHANICAL MOTOR CONNECTION
		⊕	DISCONNECT SWITCH
		—	CONDUIT RUN UP



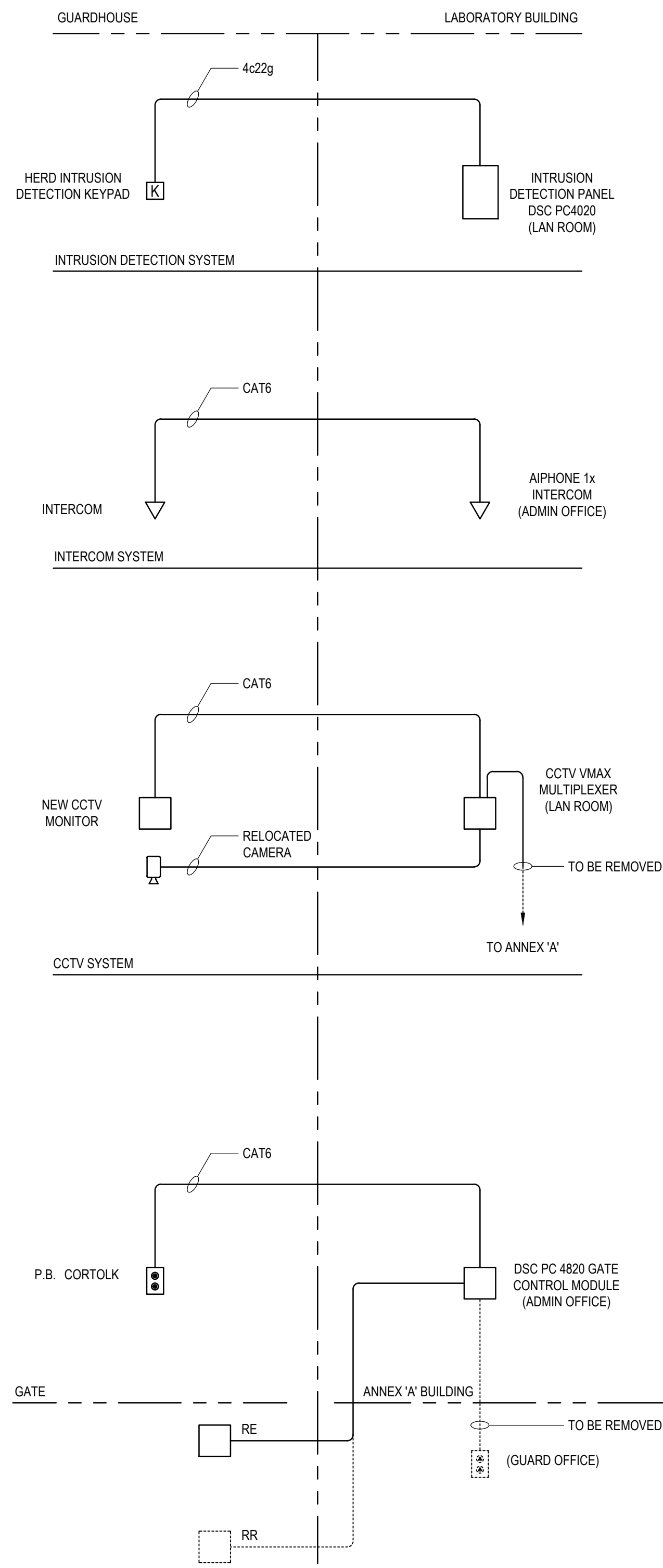
2 PARTIAL SITE ELECTRICAL LAYOUT
E-100



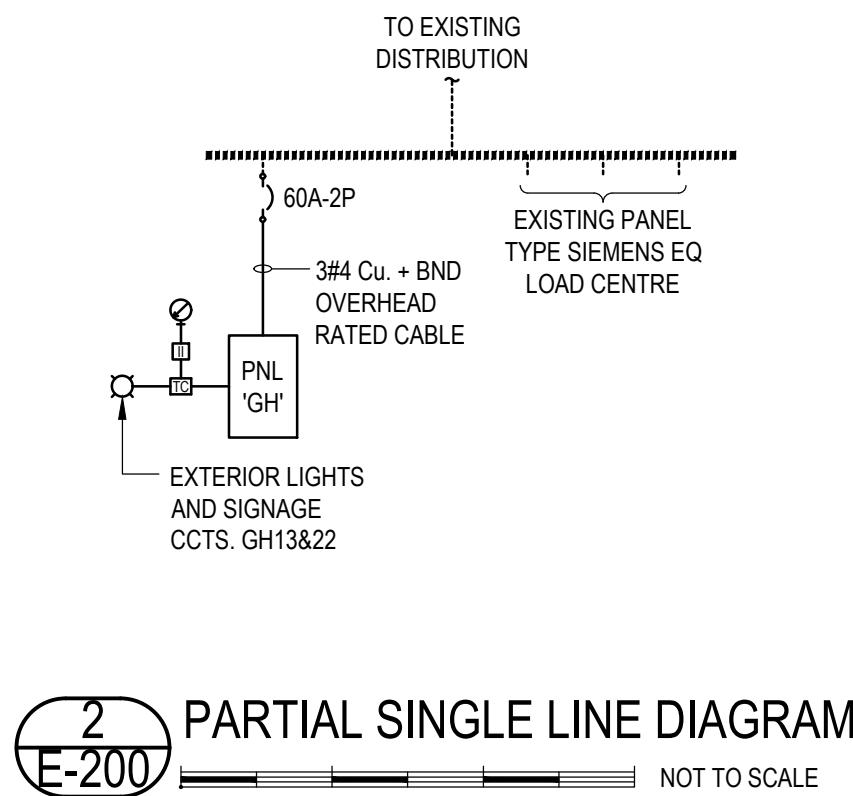
FISHERIES AND OCEANS CANADA
REAL PROPERTY, SAFETY AND SECURITY

<p>AES Designing A Better Tomorrow CALGARY VANCOUVER VICTORIA AES PROJECT #1-20-316</p>	<table border="1"> <tr> <td>DESIGNED</td> <td>JM</td> </tr> <tr> <td>DRAWN</td> <td>RS</td> </tr> <tr> <td>CHECKED</td> <td>JM</td> </tr> <tr> <td>RECOMMENDED</td> <td></td> </tr> <tr> <td>APPROVED</td> <td></td> </tr> <tr> <td>APPROVED</td> <td></td> </tr> </table>	DESIGNED	JM	DRAWN	RS	CHECKED	JM	RECOMMENDED		APPROVED		APPROVED		<p>CULTUS LAKE SALMON RESEARCH LABORATORY GUARD HOUSE</p> <p>SITE PLAN AND LEGEND</p>	SCALE	AS NOTED
		DESIGNED	JM													
DRAWN	RS															
CHECKED	JM															
RECOMMENDED																
APPROVED																
APPROVED																
DATE	OCTOBER 2021															
DRAWING NUMBER	E-100															
REVISION	4															

DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS
			4	2021-10-08	ISSUED FOR BUILDING PERMIT
			3	2020-10-30	ISSUED FOR TENDER
			2	2020-10-20	ISSUED FOR 95% REVIEW
			1	2020-09-09	ISSUED FOR REVIEW



1
E-200 SYSTEM WIRING DETAIL NOT TO SCALE



2
E-200 PARTIAL SINGLE LINE DIAGRAM NOT TO SCALE

LIGHTING COMPLIANCE DOCUMENTATION

CODE	YES	NO	N/A
ASHRAE 90.1-2016	X		
NECB-2015			X
COMPLIANCE PATH			
PRESCRIPTIVE			
SPACE BY SPACE	X		
BUILDING AREA			X
PERFORMANCE			X
INDEPENDENT PROVISIONS CHECKLIST			
LIGHTING CONTROLS			
AUTOMATIC LIGHTING SHUTOFF CONTROLS ARE PROVIDED BASED ON EITHER A SCHEDULING DEVICE OR AN OCCUPANT SENSOR	X		
EACH ENCLOSED SPACE HAS ITS OWN CONTROL INCLUDING BI-LEVEL OR OCCUPANCY BASED WHERE REQUIRED.	X		
CONTROLS FOR PARKING GARAGES, INCLUDING BI-LEVEL, TRANSITION AND PERIMETER CONTROL AS REQUIRED.			X
AUTOMATIC DAYLIGHTING CONTROLS FOR PRIMARY SIDELIGHTED AREAS			X
AUTOMATIC DAYLIGHTING CONTROLS FOR TOPLIGHTING.			X
ADDITIONAL CONTROLS FOR DISPLAY/ACCENT, CASE, GUEST ROOM, TASK, NONVISUAL AND DEMONSTRATION LIGHTING APPLICATIONS.			X
EXTERIOR LIGHTING CONTROLS INCLUDING AUTOMATIC SHUTOFF AND BI-LEVEL AS REQUIRED.	X		
EXIT SIGNS DO NOT EXCEED 5W PER FACE			X
INTERIOR LIGHTING POWER BELOW ALLOWABLE LPD			X
EXTERIOR LIGHTING POWER BELOW ALLOWABLE LPD			X
FUNCTIONAL TESTING TO BE PERFORMED BY FACTORY CERTIFIED TECHNICIAN	X		

PANELBOARD SCHEDULE

DESCRIPTION	BRK	POLE	CCT	POLE	BRK	DESCRIPTION
T-DHW	20	1	01	02	1	15 LIGHTS
			03	04	1	15 FRIDGE
HPICU-1	20	2	05	06	1	20 COUNTER RECEPTACLE
			07	08	1	20 COUNTER RECEPTACLE
FF-1	*	15	1	09	10	1 20 COUNTER RECEPTACLE
EF-1		15	1	11	12	1 20 WASHROOM RECEPT.
SIGNAGE		15	1	13	14	1 20 RECEPTACLE
POWERED GATE	15	1	15	16	1	15 RECEPTACLE
			17	18	1	15 RECEPTACLE
			19	20	1	15 RECEPTACLE
			21	22	1	20 RECEPTACLE
			23	24	1	20 RECEPTACLE
			25	26	1	20 RECEPTACLE
			27	28		
			29	30		

* PROVIDE GFI TYPE BREAKER PANEL C/W 60A - 2P MAIN BREAKER

ASHRAE LIGHTING POWER DENSITY CALCULATION

AREA TYPE:
 GUARD HOUSE (100sq ft) + WASHROOM (25sq ft)
 REQUIRED LPD = (100 x 1.33) + (25 x 0.85) = 154.25W
 DESIGN LPD = 145W

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	CAT. No.	LAMPS	DRIVER	REMARKS
AA	LITHONIA	CPANL 2X2 44LM 35K M4 (CI-250E4S)	39W LED, 4400lm, 3500K	120V	2 x 2 RECESSED LED FLAT PANEL C/W T-BAR INSTALL
AB	LITHONIA	CPANL 2X2 33LM 35K M4 (CI-250E4S)	28W LED, 4400lm, 3500K	120V	2 x 2 RECESSED LED FLAT PANEL C/W T-BAR INSTALL
B	LITHONIA	LDN4 30/07 L04AR LSS MVOLT CSA4	8 6W LED, 750lm, 3000K	120V	4" RECESSED DOWN LIGHTS. FIXTURES TO BE C/W SLOPPED CEILING ADAPTERS.

- NOTES:**
- PROVIDE ALTERNATE LIGHTING PACKAGE WITH STIPULATED COST SAVING FROM BASE SPECIFICATION IN LUMINAIRE SCHEDULE THE ALTERNATE PACKAGE TO MEET MINIMUM.
 - ALL APPROVED ALTERNATES ARE TO MATCH THE SPECIFIED LUMINAIRES WATTAGE, LUMEN OUTPUT, CORRELATED COLOR TEMPERATURE, FINISH AND ANY OPTIONAL ACCESSORIES.
 - ALL REQUESTS FOR ALTERNATES MUST MEET OR EXCEED THE PERFORMANCE, MATERIALS, ESTHETICS, GEOMETRY, WARRANTIES AND CONSTRUCTION OF THE SPECIFIED LUMINAIRE.

LOAD CALCULATION

BASIC OFFICE = 12 x 50 = 0.6kW
 MECHANICAL EQUIPMENT = 6.0kW
 TOTAL = 3.0kW
 TOTAL = 9.6kW

AMPS = 46.15A x 1.25 = 57.69A
 THEREFORE, 60A, 120/208V, 1 PHASE SERVICE IS SUFFICIENT

MECHANICAL EQUIPMENT SCHEDULE

Q#	DESCRIPTION	EQUIPMENT LOCATION	LOAD			PHASE	UNIT	STARTER		DISC.		CONTROL		SUPPLY PANEL				WIRE & CONDUIT		NOTE									
			MCA	KW	HP			VOLTS	SUPPLY	CONNECT	SUPPLY	CONNECT	SUPPLY	CONNECT	SUPPLY	CONNECT	TYPE	FIRE ALARM	PANEL #		PANEL LOCATION	AMPS	P	CCT NO'S	WIRE SIZE	CONDUIT SIZE (mm)	TOTAL AMPS		
EF-1	EXHAUST FAN	GUARD HOUSE	0.032			120	1	M	M	E	E	E	E	E	E	TC	-	GH	GUARD HOUSE	15	1	11	12	2	21	3.4			
BB-1	ELECTRIC BASE BOARD	GUARD HOUSE	1.5			208	1	M	M	E	M	M	INT	-	-	M	M	T	-	GH	GUARD HOUSE	15	2	09	12	2	21	3.4	
HP-1	SPLIT HEAT PUMP (INDOOR UNIT)	GUARD HOUSE				208	1	M	M	E	E	E	E	-	-	M	M	T	-	GH	GUARD HOUSE	-	-	-	12	2	21	2.4	
CU-1	CONDENSING UNIT (OUTDOOR UNIT)	GUARD HOUSE	12.5			208	1	M	M	E	E	E	E	-	-	M	M	T	-	GH	GUARD HOUSE	20	2	5.7	12	2	21	3.4	
T-DHW	DOMESTIC HOT WATER TANK	GUARD HOUSE	1.5			120	1	M	M	E	M	M	INT	E	E	E	M	M	INT	-	GH	GUARD HOUSE	20	1	1	12	2	21	3.4

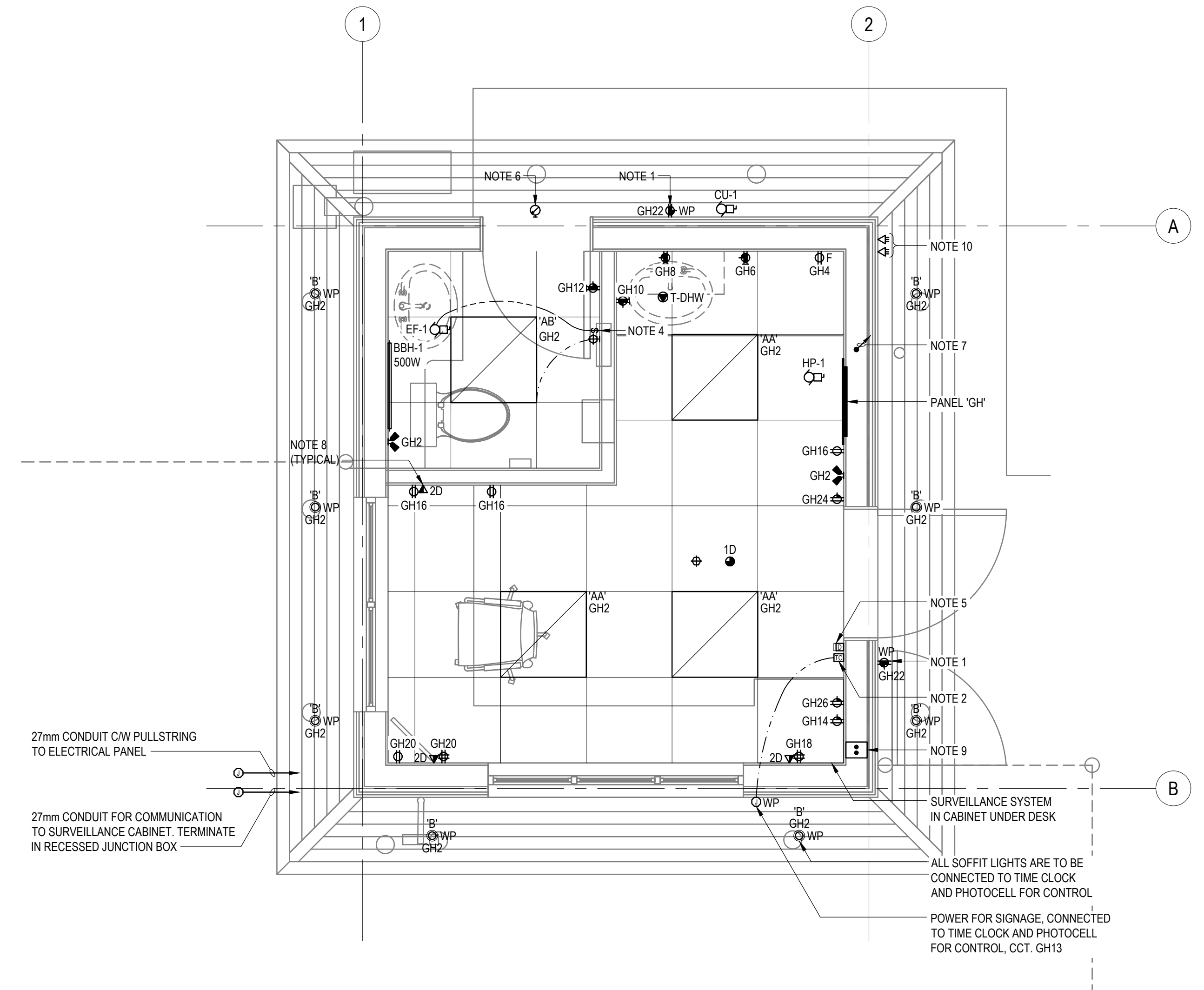
LEGEND
 M = DENOTES BY MECHANICAL CONTRACTOR
 E = DENOTES BY ELECTRICAL CONTRACTOR
 TC = TIME CLOCK
 INT = INTEGRAL TO UNIT
 T = THERMOSTAT

- NOTES**
- ALL VARIABLE SPEED DRIVES TO HAVE A DEDICATED COPPER GROUND CONDUCTOR SIZED TO MATCH PHASE CONDUCTOR.
 - PROVIDE POWER TO OUTDOOR UNITS. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL LINE VOLTAGE WIRING FOR POWERING INDOOR UNIT THROUGH OUTDOOR UNIT.
 - CONFIRM FINAL MECHANICAL EQUIPMENT REQUIREMENTS WITH MECHANICAL CONTRACTOR'S SHOP DRAWINGS AND ADJUST CIRCUIT WIRING AND BREAKER RATING IF REQUIRED AT NO ADDITIONAL COST. EXACT LOCATION OF EQUIPMENT TO BE CONFIRMED WITH MECHANICAL ON SITE PRIOR TO ROUGH IN.
 - ALL LINE VOLTAGE CONNECTIONS TO BE PERFORMED BY ELECTRICAL CONTRACTOR. ALL LOW VOLTAGE CONNECTIONS BY OTHERS.

	<p>Designing A Better Tomorrow CALGARY VANCOUVER VICTORIA AES PROJECT #1-20-316</p>	4 2021-10-08 ISSUED FOR BUILDING PERMIT 3 2020-10-30 ISSUED FOR TENDER 2 2020-10-20 ISSUED FOR 95% REVIEW 1 2020-09-09 ISSUED FOR REVIEW	DESIGNED JM DRAWN RS CHECKED JM RECOMMENDED APPROVED APPROVED	FISHERIES AND OCEANS CANADA REAL PROPERTY, SAFETY AND SECURITY CULTUS LAKE SALMON RESEARCH LABORATORY GUARD HOUSE SCHEDULES AND DETAILS	SCALE AS NOTED	
					DATE OCTOBER 2021	
DWG. NO.	DRAWING REFERENCES	NOTES	N.O.	DATE	REVISIONS	DRAWING NUMBER E-200
						REVISION 4

NOTES:

1. PROVIDE AND INSTALL 5-20R GFCI TYPE RECEPTACLE IN EXTRA HEAVY DUTY IN-USE COVER.
2. PROVIDE AND INSTALL TIME CLOCK SUITABLE FOR CONTROLLING TWO SEPARATE LOADS ON INDIVIDUAL TWO SEPARATE CIRCUITS STANDARD OF ACCEPTANCE IS INTERMATIC ET2125C OR APPROVED EQUIVALENT. ELECTRICAL CONTRACTOR TO ALLOW PROGRAMMING OF TIME CLOCK AS REQUIRED. COORDINATE TIME SCHEDULING FOR EXTERIOR LIGHT CONTROL AND SIGNAGE WITH THE OWNER.
3. ALL POWER AND DATA WIRING INSIDE BUILDING TO BE IN CONDUIT.
4. PROVIDE AND INSTALL LINE VOLTAGE WALL SWITCH TO CONTROL EXHAUST FAN EF-1 CONTROL.
5. LOW VOLTAGE DIMMER SWITCH FOR CEILING MOUNTED VACANCY SENSOR. DIMMER SWITCH TO HAVE SEPARATE TOGGLE SWITCH AND DIMMER CONTROL.
6. PROVIDE AND INSTALL PHOTOCELL MOUNTED ON ROOF ON NORTH SIDE OF BUILDING TO CONTROL EXTERIOR LIGHTS AND SIGNAGE. PHOTOCELL TO WORK WITH THE CLOCK.
7. SUPPLY AND INSTALL 27mm EMPTY CONDUIT C/W PULLSTRINGS CONCEALED INSIDE WALL FROM PANEL 'GH' TO CEILING SPACE TO FACILITATE FUTURE POWER WIRING.
8. ALL DATA OUTLETS TO BE COMPLETE WITH OUTLET BOX C/W BLANK COVER PLATE AND EMPTY CONDUIT (27mm) C/W PULLSTRINGS TO SURVEILLANCE CABINET FOR FUTURE DATA WIRING TO BE SUPPLIED AND INSTALLED BY OWNER. ALL DATA CONDUITS BY SURVEILLANCE CABINET SHALL BE TERMINATED JUNCTION BOX RECESSED IN WALL FOR FUTURE ACCESS TO RUN DATA CABLE RUNS BY OWNER.
9. 2 x 103mm COMMUNICATION CONDUITS TO MAIN BUILDING. CONDUITS TO BE CONCEALED INSIDE WALLS AND TERMINATED IN RECESSED JUNCTION BOX BY SURVEILLANCE CABINET FOR FUTURE ACCESS TO RUN DATA CABLE RUNS.
10. COMMUNICATION CONDUITS TO BE STUBBED INSIDE GUARD HOUSE ALONGSIDE THE INTERIOR WALL AT SURVEILLANCE CABINET LOCATION C/W PULL STRINGS AND END CAPS.



1 GUARD HOUSE ELECTRICAL LAYOUT
E-300 0 250 500 750 1000 1250 1500 1:25

<p>FISHERIES AND OCEANS CANADA REAL PROPERTY, SAFETY AND SECURITY</p>		<p>SCALE AS NOTED</p> <p>DATE OCTOBER 2021</p> <p>DRAWING NUMBER E-300</p> <p>REVISION 4</p>
<p>CULTUS LAKE SALMON RESEARCH LABORATORY GUARD HOUSE</p> <p>SITE PLAN, ELECTRICAL LAYOUT AND LEGEND</p>		

	<p>Designing A Better Tomorrow CALGARY VANCOUVER VICTORIA AES PROJECT #1-20-316</p>	<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>REVISIONS</th> </tr> <tr> <td>4</td> <td>2021-10-08</td> <td>ISSUED FOR BUILDING PERMIT</td> </tr> <tr> <td>3</td> <td>2020-10-30</td> <td>ISSUED FOR TENDER</td> </tr> <tr> <td>2</td> <td>2020-10-20</td> <td>ISSUED FOR 95% REVIEW</td> </tr> <tr> <td>1</td> <td>2020-09-09</td> <td>ISSUED FOR REVIEW</td> </tr> </table>	NO.	DATE	REVISIONS	4	2021-10-08	ISSUED FOR BUILDING PERMIT	3	2020-10-30	ISSUED FOR TENDER	2	2020-10-20	ISSUED FOR 95% REVIEW	1	2020-09-09	ISSUED FOR REVIEW	<table border="1"> <tr> <td>DESIGNED</td> <td>JM</td> </tr> <tr> <td>DRAWN</td> <td>RS</td> </tr> <tr> <td>CHECKED</td> <td>JM</td> </tr> <tr> <td>RECOMMENDED</td> <td></td> </tr> <tr> <td>APPROVED</td> <td></td> </tr> <tr> <td>APPROVED</td> <td></td> </tr> </table>	DESIGNED	JM	DRAWN	RS	CHECKED	JM	RECOMMENDED		APPROVED		APPROVED	
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GENERAL NOTES:

1. ALL CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE WITH MMCD PLATINUM EDITION (2009) SPECIFICATIONS, AND THESE DRAWINGS, WHICHEVER IS MOST STRINGENT.
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING THE VARIOUS PARTS OF THE WORK.
3. EXISTING SERVICES SHOWN ON DRAWINGS ARE APPROXIMATE ONLY AND CANNOT BE GUARANTEED FOR ACCURACY. CONTRACTOR TO EXPOSE CROSSINGS AND CONFIRM LOCATION OF ALL EXISTING SERVICES IN THE FIELD PRIOR TO CONSTRUCTION.
4. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF AS-CONSTRUCTED RECORDS, WHICH ARE TO BE HANDED OVER TO ENGINEER UPON COMPLETION OF CONSTRUCTION.
5. CAREFULLY RELOCATE EXISTING LANDSCAPE FEATURES, TRAFFIC SIGNS AND SITE FEATURES TO ACCOMMODATE CONSTRUCTION WORK. ALL EXISTING WORKS AFFECTED BY CONSTRUCTION TO BE RETURNED TO AS FOUND OR BETTER CONDITION.
6. DISPOSE OF ALL EXCAVATED MATERIAL UNSUITABLE FOR REUSE AT A SUITABLE OFF-SITE DISPOSAL AREA, IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
7. ALL SIDEWALKS, CURBS, ROADS, BOULEVARDS ETC. DISTURBED DURING CONSTRUCTION, ARE TO BE REPAIRED TO AS-FOUND OR BETTER CONDITION.
8. ALL ASPHALT AND CONCRETE TO BE SAW CUT.
9. ANY CHANCE FIND OF ARCHEOLOGICAL MATERIAL SHALL RESULT IN AN IMMEDIATE WORK STOPPAGE TO ALLOW FOR FURTHER ANALYSIS. STOP ALL ACTIVITY AND IMMEDIATELY NOTIFY ENGINEER OR DEPARTMENTAL REPRESENTATIVE IF ANY ARCHEOLOGICAL MATERIAL IS ENCOUNTERED.

SANITARY AND STORM NOTES:

1. CONSTRUCTION TO BE UNDERTAKEN USING BEST MANAGEMENT PRACTICES FOR STORMWATER TREATMENT.
2. FOR TYPICAL TRENCH SECTION DETAILS SEE MMCD STANDARD DETAIL DRAWING G4.
3. PIPE BEDDING TO BE MMCD TYPE 1 GRANULAR PIPE BEDDING COMPACTED TO 95% MOD. PROCTOR DENSITY. BACKFILL TO BE IMPORTED 75mm MINUS PIT RUN GRAVEL COMPACTED TO 95% MOD PROCTOR DENSITY.
4. SANITARY SEWERS ARE TO BE CONSTRUCTED WITH GASKETED JOINTS UNLESS OTHERWISE SPECIFIED ON THE DESIGN DRAWINGS.
5. ALL SANITARY AND STORM SERVICES TO BE SDR28 PVC.
6. SANITARY MAIN TO BE FLUSHED, AIR TESTED AND VIDEO INSPECTED BY CONTRACTOR.
7. CONTRACTOR TO CONFIRM LOCATION AND INVERTS OF EXISTING SANITARY SEWER AND STORM DRAIN CONNECTIONS PRIOR TO CONSTRUCTION.
8. NOTIFY ENGINEER OF ANY UNKNOWN UTILITIES ENCOUNTERED. DO NOT REMOVE OR ABANDON UNTIL THE UTILITY IS CONFIRMED BY PROPERTY OWNER AND ENGINEER.

TRAFFIC CONTROL NOTES:

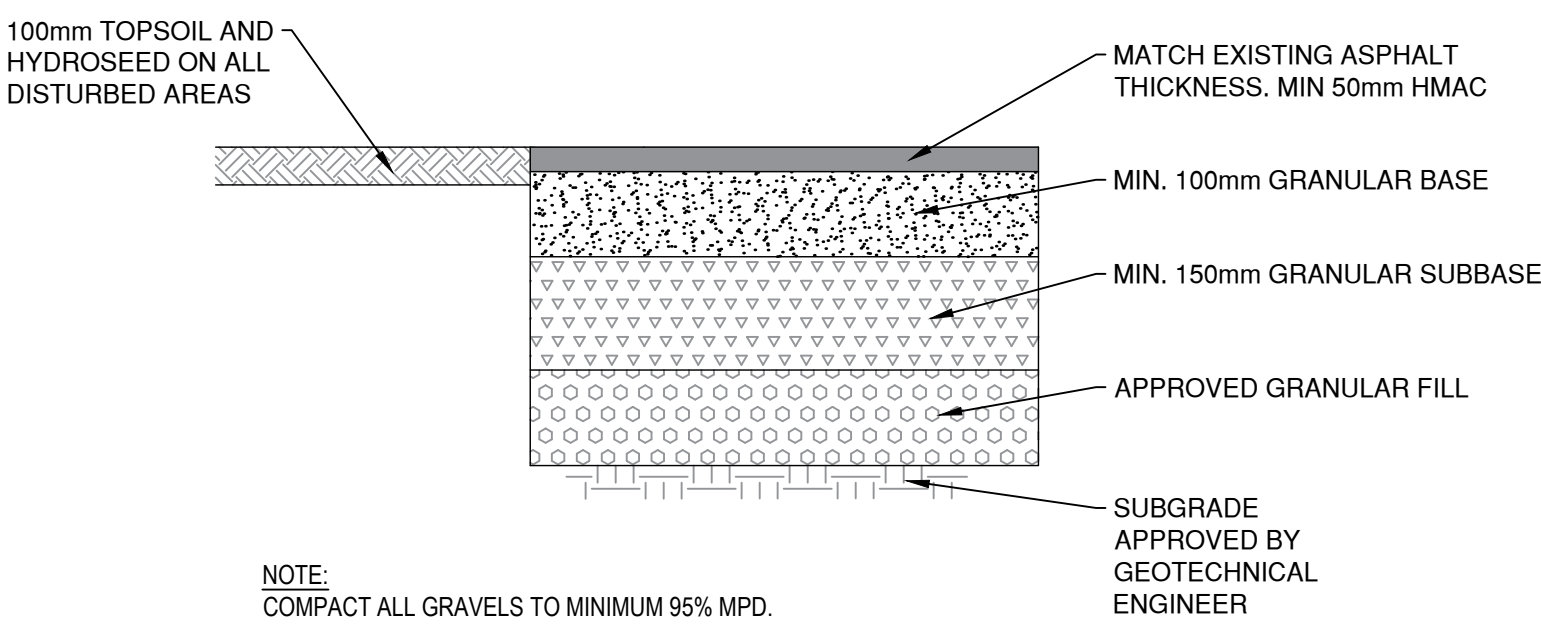
1. PRIOR TO CONSTRUCTION, CONTRACTOR TO PREPARE AND SUBMIT TO ENGINEER AND DFO A TRAFFIC MANAGEMENT PLAN FOR ACCEPTANCE. DOCUMENT TO INCLUDE DETAILS OF ALL WORK SITES AND ROAD CLOSURE REQUIREMENTS AND PROPOSED ALTERNATE ROUTING.
2. PROVIDE TRAFFIC CONTROL, SIGNAGE, BARRICADES AND ILLUMINATION, AND DETOUR ROUTING AS REQUIRED TO MAINTAIN TRAFFIC FLOW FOR EMERGENCY VEHICLE ACCESS AND DELIVERIES.
3. AT THE END OF EVERY DAY, EXCAVATIONS SHALL BE BACKFILLED OR COVERED WITH STEEL TRAFFIC PLATES SUITABLE FOR VEHICULAR TRAFFIC (MINIMUM H20 LOADING) WHEREVER POSSIBLE.
4. 24 HOUR EMERGENCY CONTACT INFORMATION FOR CONTRACTOR REPRESENTATIVE TO BE PROVIDED TO DEPARTMENTAL REPRESENTATIVE.

GEOTECHNICAL TESTING FOR SITE WORKS:

THE CONTRACTOR WILL BE REQUIRED TO RETAIN AND PAY FOR THE SERVICES OF A QUALIFIED INDEPENDENT GEOTECHNICAL TESTING AGENCY UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER, AND PAY THE COST OF TESTING SERVICES FOR QUALITY CONTROL INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

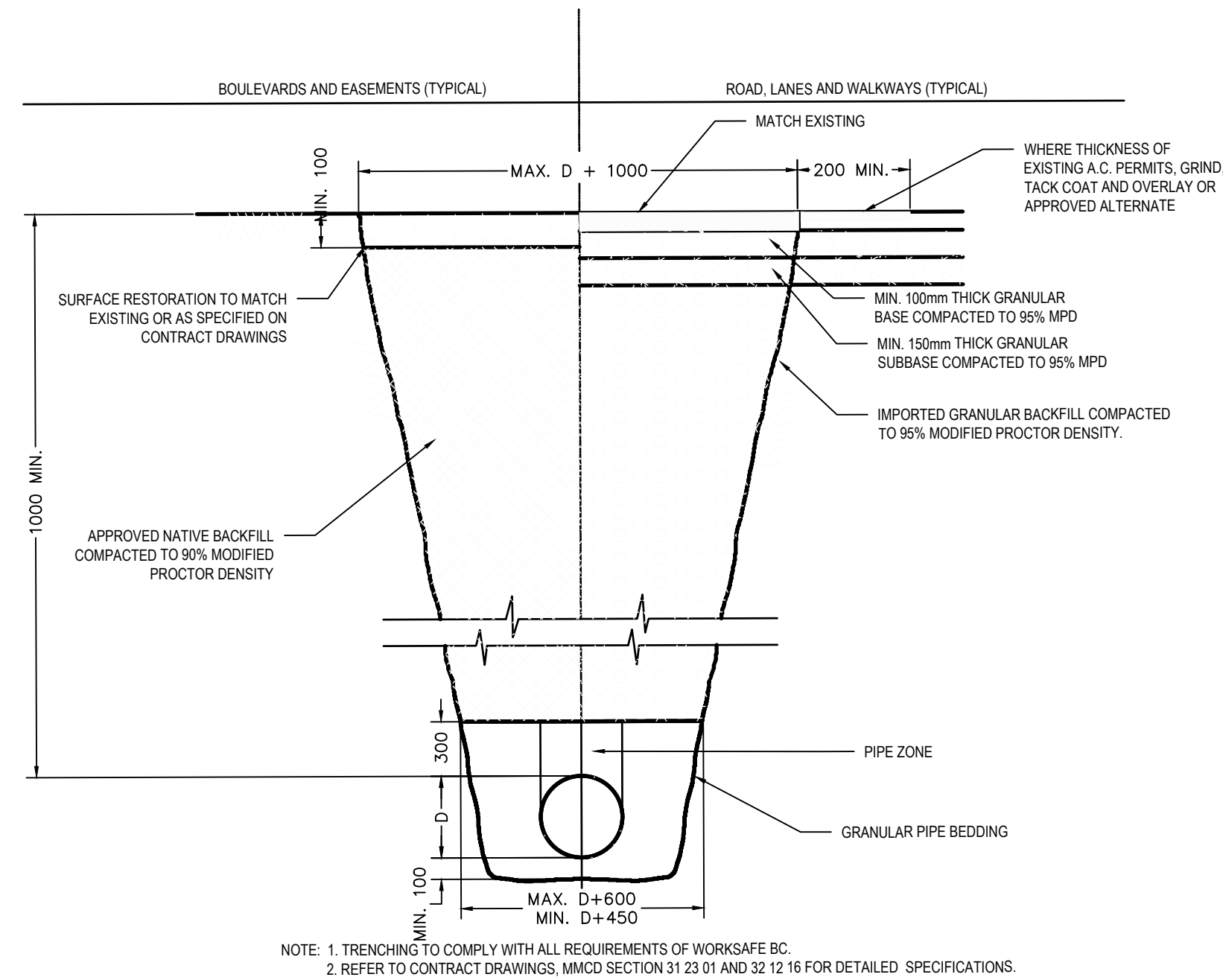
1. SIEVE ANALYSIS OF SANDS AND AGGREGATES TO BE SUPPLIED, OR AS PROVIDED BY MATERIAL SUPPLIER
2. STANDARD PROCTOR DENSITY CURVES FOR BACKFILL MATERIALS
3. REVIEW AND APPROVAL OF ROAD SUBGRADE
4. COMPACTION CONTROL TESTS FOR BACKFILL AND EMBANKMENT MATERIAL INCLUDING THE FOLLOWING:
 - a. TRENCH BACKFILL
 - b. GRANULAR BASE
 - c. GRANULAR SUB-BASE
5. CONCRETE STRENGTH TESTS (MINIMUM THREE SPECIMEN CYLINDERS IN ACCORDANCE WITH CSA A23.1) FOR THE FOLLOWING:
 - a. SIDEWALK

THE CONTRACTOR IS TO COORDINATE DIRECTLY WITH THE GEOTECHNICAL ENGINEER AND PROVIDE ALL SUPPORTING DOCUMENTATION TO DEPARTMENTAL REPRESENTATIVE AND ENGINEER FOR REVIEW AND ACCEPTANCE.



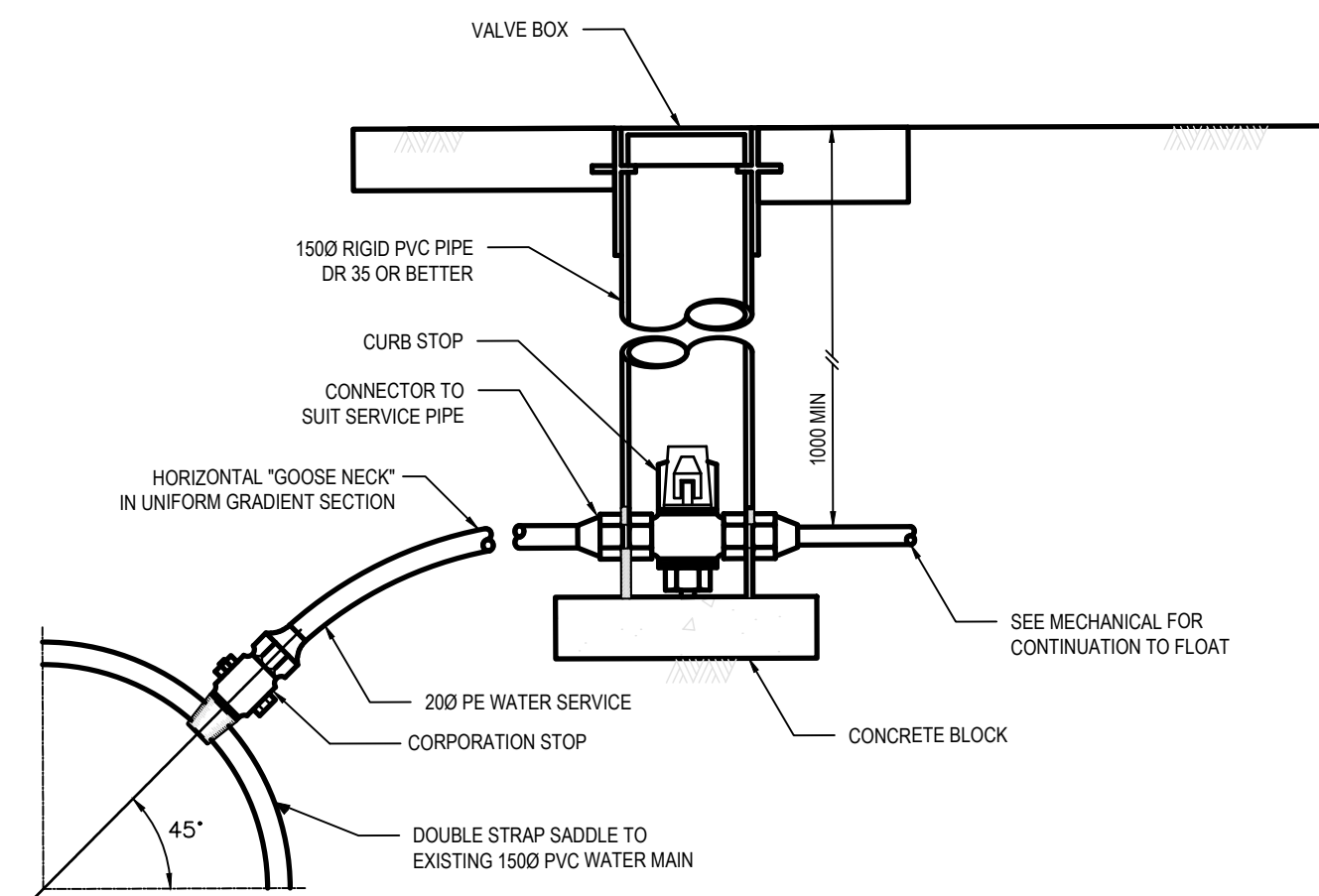
NOTE: COMPACT ALL GRAVELS TO MINIMUM 95% MPD.

2 DRIVEWAY PAVEMENT STRUCTURE
SCALE: NTS



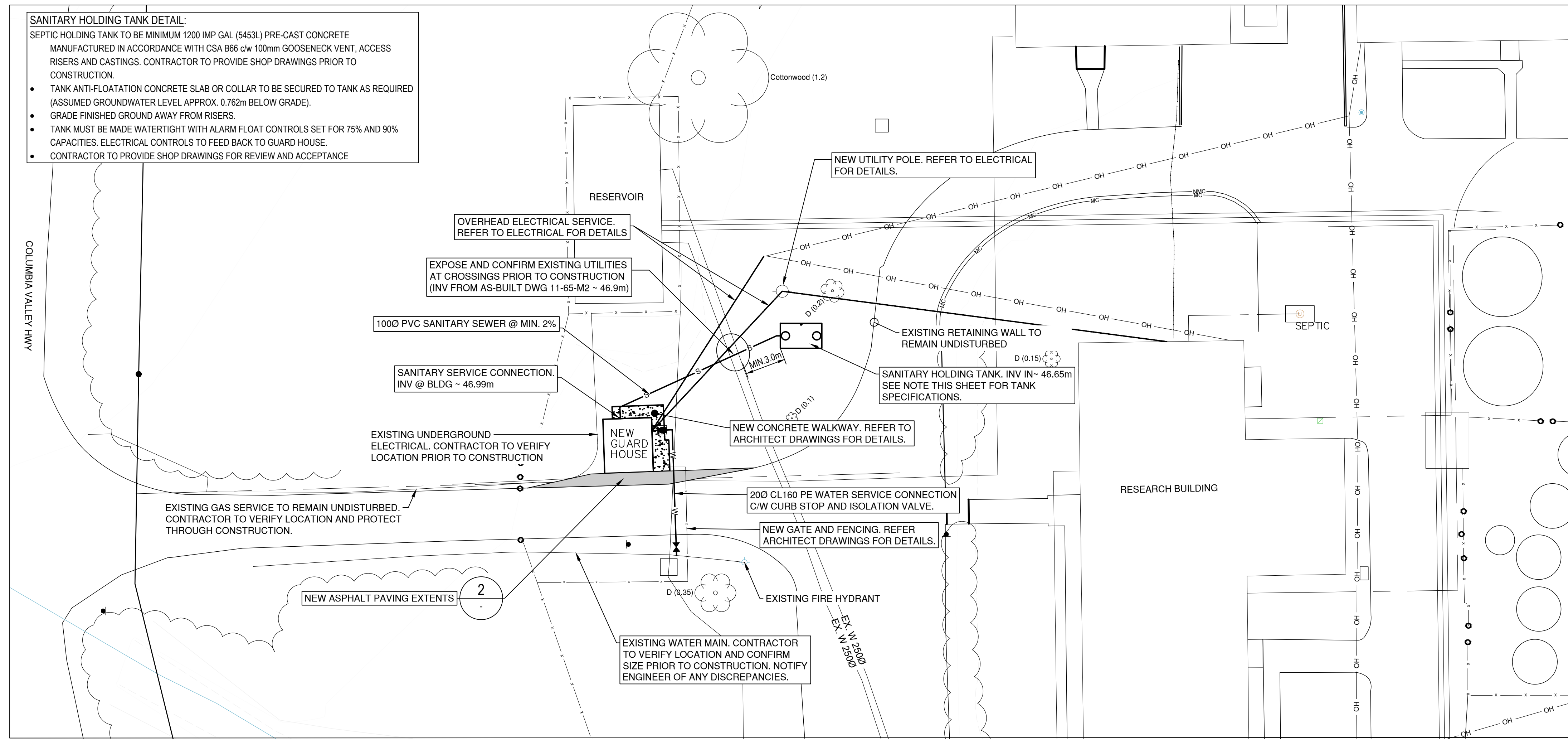
NOTE: 1. TRENCHING TO COMPLY WITH ALL REQUIREMENTS OF WORKSAFE BC.
2. REFER TO CONTRACT DRAWINGS, MMCD SECTION 31 23 01 AND 32 12 16 FOR DETAILED SPECIFICATIONS.

3 TYPICAL TRENCH AND PAVEMENT RESTORATION DETAIL
SCALE: NTS



NOTE: 1. PVC SADDLES TO MMCD SECTION 33 11 01
2. INSTALL SERVICE PIPE WITH "GOOSE NECK" IN HORIZONTAL POSITION.
3. REFER TO CONTRACT DRAWINGS AND MMCD SECTION 33 11 01 FOR DETAILED SPECIFICATIONS

4 WATERMAIN TIE-IN DETAIL
SCALE: NTS



1:200

1 SITE PLAN SCALE 1:200

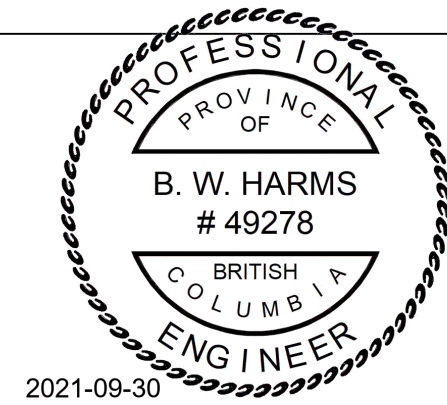
FISHERIES AND OCEANS CANADA
REAL PROPERTY AND SAFETY AND SECURITY

CULTUS LAKE SALMON RESEARCH LABORATORY GUARD HOUSE

SITE SERVICING PLAN

SCALE AS NOTED
START DATE
DRAWING NUMBER C-100

10:46:22 AM



NO.	DATE	REVISIONS
2	2021-09-30	ISSUED FOR TENDER
1	2021-05-28	ISSUED FOR REVIEW
0	2020-10-20	ISSUED FOR 95% REVIEW

DWG. NO.	DRAWING REFERENCES	NOTES