

# PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT

4200 97 HWY  
SOUTH SUMMERLAND BC

## PROJECT TEAM

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<b>ELECTRICAL</b>	STANTEC 111 DUNSMUIR STREET VANCOUVER, BC V6B 6A4 CONTACT: THYS FOURIE PH. 604 696-8000 E-MAIL: THYS.FOURIE@STANTEC.COM

## PROJECT DATA

AREA OF PROJECT: 200SQ. M APPROX.  
AREA OF THE CHAMBER OVERFLOW AREA: 50SQ. M APPROX.

## BUILDING CODE ANALYSIS

APPLICABLE BUILDING CODE: NATIONAL BUILDING CODE 2010 PART 3  
MAJOR OCCUPANCY: GROUP F2 (MEDIUM HAZARD INDUSTRIAL OCCUPANCY)  
NO. OF STREETS FACING: 1  
BUILDING AREA: 4118 SQ.M  
BUILDING HEIGHT: 4 STOREYS  
BUILDING CODE CLASSIFICATION: 3.2.2.68 (GROUP F2 UP TO 4 STOREYS, SPRINKLERED)  
CONSTRUCTION TYPE: NON-COMBUSTIBLE, 1 HR FRR FLOOR ASSEMBLY, LOADBEARING ELEMENTS SUPPORTING FLOOR TO HAVE SAME RATING  
SPRINKLER: PROVIDED ACCORDING TO NFPA-13 (EXISTING)  
FIRE ALARM SYSTEM: SINGLE STAGE, MONITORED (EXISTING)

## GENERAL DEMOLITION NOTES

- DEMOLITION DRAWING ONLY SHOWS THE GENERAL SCOPE OF DEMOLITION. ALSO REFER TO OTHER ARCHITECTURAL DETAIL DRAWINGS, MECHANICAL & ELECTRICAL DRAWINGS FOR FULL SCOPE OF DEMOLITION WORKS REQUIRED TO PRODUCE NEW LAYOUT. CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING AND CARRYING OUT ALL NECESSARY DEMOLITION NOT SHOWN IN THE DEMOLITION PACKAGE IN ORDER TO PRODUCE NEW LAYOUT.
- ALL DEMOLISHED MATERIAL AND DEBRIS TO BE REMOVED PROMPTLY FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
- SELLING OF ANY MATERIALS ON SITE IS NOT PERMITTED.
- MAKE GOOD DAMAGED AREA AND FIXTURES WHICH ARE TO BE RETAINED AS SHOWN IN DRAWING.
- COMPLY WITH ALL BYLAWS AND ACQUIRE ALL NECESSARY PERMIT.
- COMPLY WITH ALL WORKER'S COMPENSATION BOARD OF BC. ACCIDENT PREVENTION REGULATIONS.
- HAND OVER AND STORE THE SPECIFIED SALVAGED MATERIAL AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.
- DEMOLISH WALL, ELECTRICAL & MECHANICAL FIXTURES & OTHER ARCHITECTURAL FIXTURES ASSOCIATED WITH DEMOLITION OF WALLS.

## DRAWING LIST

<b>ARCHITECTURAL</b>	A-00 COVER SHEET A-01 PROJECT AREA PLAN A-02 EXISTING FLOOR PLAN DEMOLITION A-03 EXISTING REFLECTED CEILING PLAN DEMOLITION A-04 FLOOR PLAN NEW WORK A-05 REFLECTED CEILING PLAN NEW WORK A-06 SECTIONS DEMOLITION A-07 SECTIONS NEW WORK A-08 INTERIOR ELEVATIONS A-09 INTERIOR ELEVATIONS A-10 SLAB & FLOOR DRAIN PLAN A-11 HOARDING PLAN
<b>MECHANICAL</b>	M-001 LEGENDS, NOTES AND SCHEDULES AND DRAWING LIST M-200 LEVEL 2 DEMOLITION PLAN SOUTH WEST M-201 LEVEL 2 NEW HVAC PLAN SOUTH WEST M-202 LEVEL 2 HVAC FUTURE ROUGH-IN PLAN SOUTH WEST M-203 LEVEL 2 EXISTING HVAC PLAN SOUTH M-204 LEVEL 2 MECHANICAL PIPING DEMOLITION M-205 LEVEL 2 NEW MECHANICAL PIPING M-206 LEVEL 2 MECHANICAL PIPING FUTURE ROUGH-IN PLAN P-200 LEVEL 2 UNDERGROUND PLUMBING P-201 LEVEL 2 UNDERGROUND DEMOLITION P-202 LEVEL 2 CEILING PLUMBING PLAN F-200 LEVEL 2 NEW FLOOR PLAN FIRE SUPPRESSION
<b>ELECTRICAL</b>	E-1 ELECTRICAL LEGEND AND DRAWING LIST E-2 DEMOLITION PLAN E-3 ELECTRICAL AREA AND ELECTRICAL ROOM DETAILS E-4 POWER LAYOUT E-5 LIGHTING LAYOUT E-6 SINGLE LINE DIAGRAM FOR NEW ADDITION AND DEMOLITION E-7 COMMUNICATION LAYOUT E-8 NEW AND EXISTING PANEL SCHEDULES E-9 EXISTING SINGLE LINE DIAGRAM

## FOR REFERENCE DRAWINGS

A2.5	FLOOR PLAN_SECOND FLOOR WEST
A4.1	BUILDING SECTIONS AA, BB, CC.
A4.3	BUILDING SECTIONS FF, GG, HH.
E5	LIGHTING PLAN_SECOND FLOOR WEST
E15	POWER PLAN_SECOND FLOOR WEST
MHV 5	FLOOR PLAN_SECOND FLOOR WEST PIPING
MP-9	FOUNDATION PLAN_SECOND FLOOR WEST PLUMBING
MP-11	FLOOR PLAN_SECOND FLOOR WEST PLUMBING
S1.2	TYPICAL DETAILS
S2.1	FLOOR PLAN_FIRST FLOOR WEST
S2.3	FLOOR PLAN_SECOND FLOOR WEST
S2.5	FLOOR PLAN_THIRD FLOOR WEST

## GENERAL CONSTRUCTION NOTES:

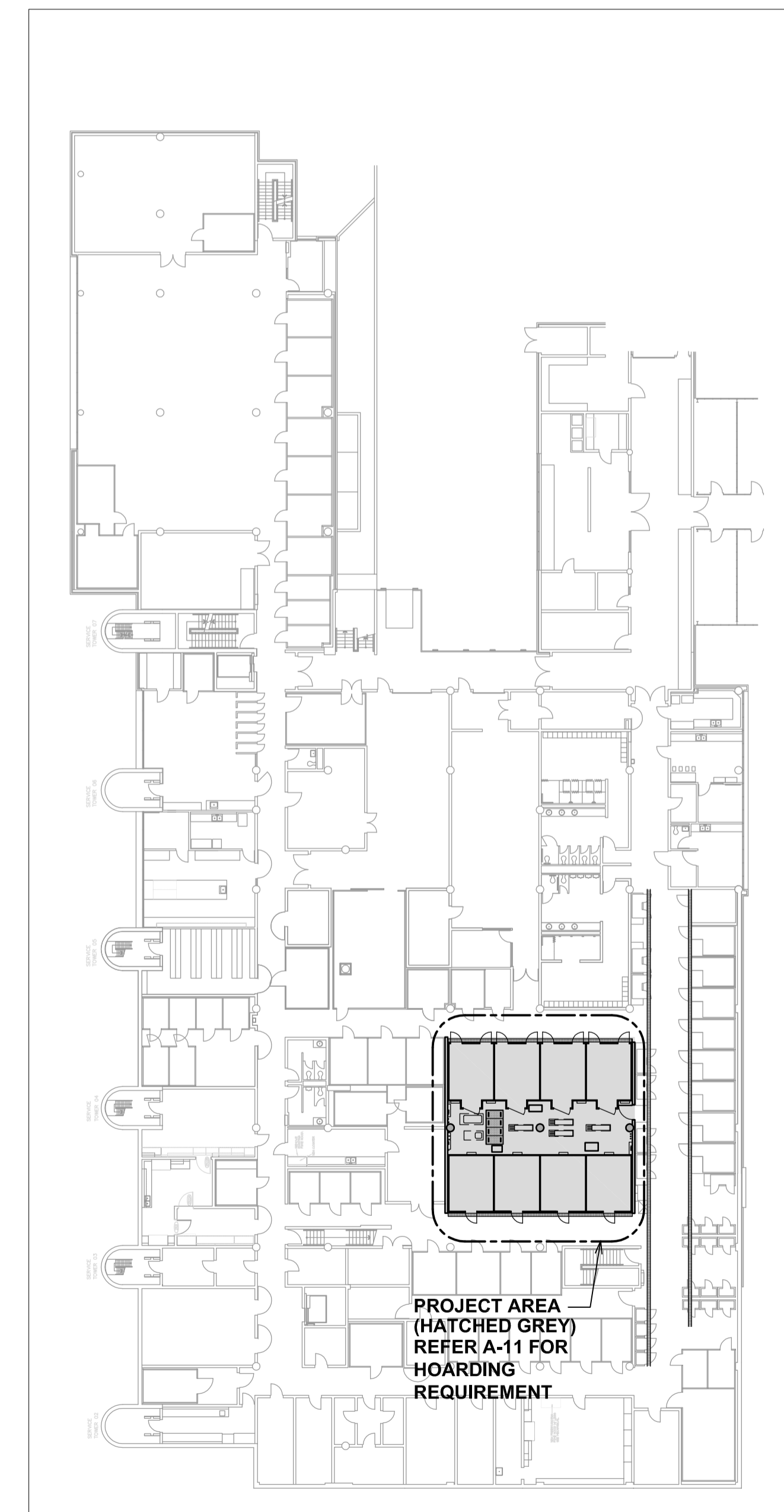
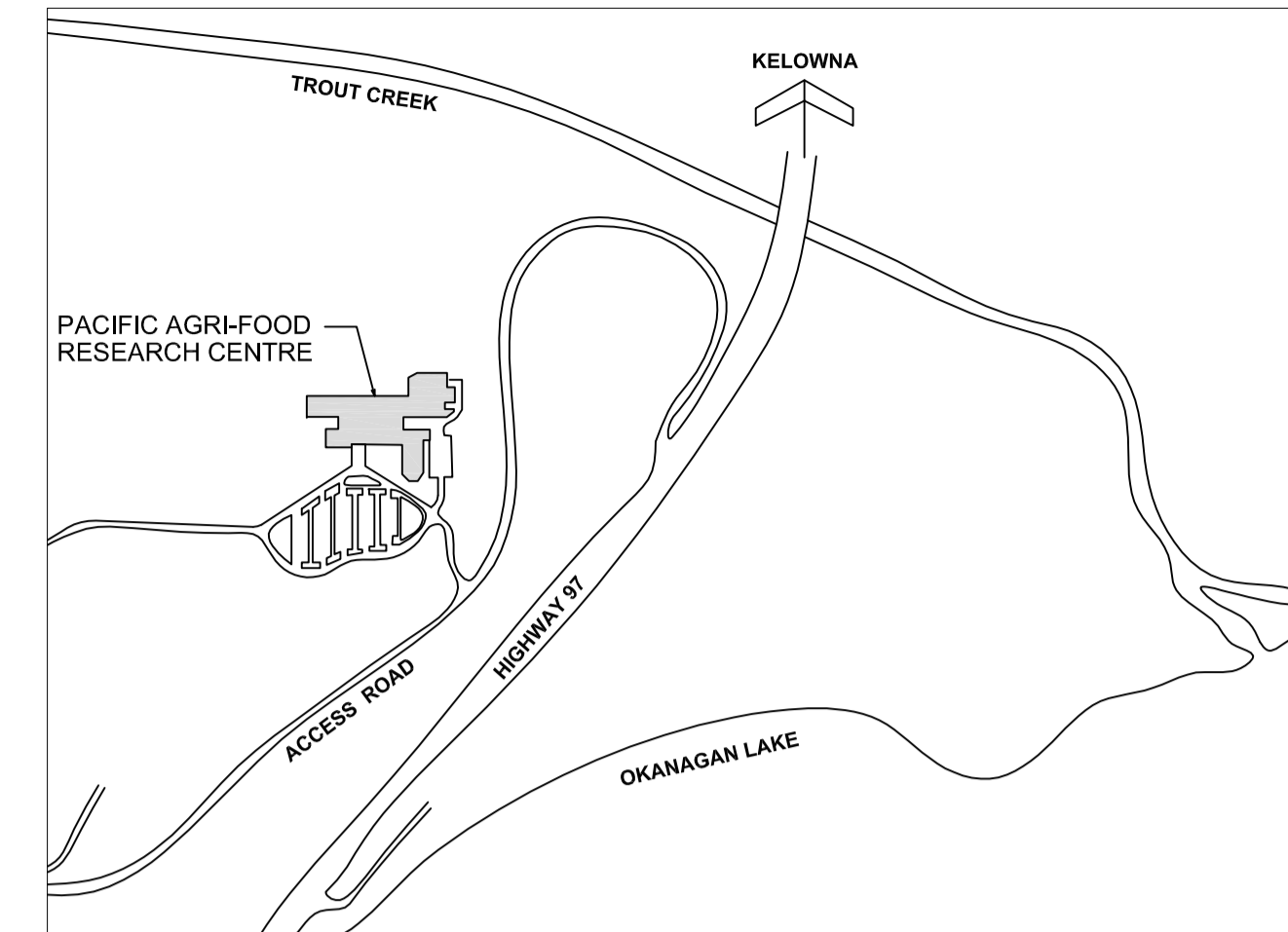
- ALL NEW GWB TO BE MOISTURE RESISTANT U.N.O
- WALL TYPES ARE TO BE CONTINUOUS ABOVE & BELOW WINDOWS AND DOORS U.N.O.
- ALL DOOR FRAMES TO BE 2" AWAY FROM FINISHED FACE OF WALL U.N.O.
- PROVIDE 100MM HIGH CONCRETE HOUSE KEEPING PAD TO ALL FLOOR MOUNTED EQUIPMENT. EXACT LOCATION & SIZE TO COORDINATE WITH MECHANICAL & ELECTRICAL
- ALL DIMENSIONS TO BE VERIFIED ON SITE.
- BRACE WALLS AS REQUIRED ABOVE CEILINGS.
- TOUCH UP ALL EXISTING INTERIOR WALLS AND EXTERIOR WALLS TO PAINTABLE CONDITION AS REQUIRED TO RECEIVE NEW PAINT.
- MAKE GOOD EX. MASONRY BLOCK WALL FROM REMOVAL OF UNUSED FIXTURES, OUTLETS, CONTROL, PIPES & CONDUITS, ETC. AND FINISH AS NEW.
- PAINT ALL EXISTING AND NEW WALLS, DOORS, FRAMES, AND COLUMNS.
- PROVIDE NEW FLOOR SLAB CONTROL JOINT TO MATCH EXISTING.
- PROVIDE NEW CONCRETE SEALER TO ALL NEW AND EXISTING FLOOR SLAB WITHIN THE PROJECT AREA.
- PATCH & MAKE GOOD ALL OPENINGS ON EXISTING SLAB FROM REMOVAL OF STUB UP ELECTRICAL & MECHANICAL SERVICES.

## ARCHITECTURAL SYMBOLS:

	<b>DRAWING TITLE</b> DRAWING IDENTIFICATION 1 : 100		NEW ELEV.
	GRID LINES		PLAN ELEVATION MARKERS
	ELEVATION/SECT. MARKERS		WALL TYPE IDENTIFICATION
	SECTION MARKERS		WINDOW TYPE IDENTIFICATION
	BUILDING SECTION		DOOR NUMBER IDENTIFICATION
	INTERIOR ELEVATION MARKERS		ROOM NAME & NUMBER IDENTIFICATION
	DETAIL REFERENCE		SCHEDULE REFERENCE
			CEILING HEIGHT IDENTIFICATION
			CONSTRUCTION NOTE REFERENCE

## LIST OF ABBREVIATIONS:

AC	ARCHITECTURAL CONCRETE	O.C.	ON CENTER
AW	ALUMINUM WINDOW	OS	OVERFLOW SCUPPER
A.F.F.	ABOVE FIXED FLOOR	P. LAM.	PLASTIC LAMINATE
AHU	AIR HANDLING UNIT	P.T.	PRESSURE TREATED
ASF	ALUMINUM STOREFRONT WINDOW	PLYWD.	PLYWOOD
B/O or B.O.	BOTTOM OF	R.A.G.	RETURN AIR GRILL
CG	CORNER GUARD	R1	ROOF TYPE 1 (SEE SHT. A102 & A202)
CMJ	CONTROL MOVEMENT JOINT	R2	ROOF TYPE 2 (SEE SHT. A102 & A202)
CLF	CHAIN LINK FENCE	RB	RUBBER BASE
CR	CONCRETE REVEAL, TYPICAL	RD	ROOF DRAIN
CT	CERAMIC WALL TILE	REV	REVERSE
CTB	CERAMIC TILE BASE	RWL	RAIN WATER LEADER
DC	DUST CONTROL	SC	STEEL COLUMN
DIA	DIAMETER	SIM.	SIMILAR
EP	ELECTRICAL PANEL	SS	STAINLESS STEEL
ERC	EPOXY RESIN COATING	SVB	SEAMLESS VINYL BASE
EXIST	EXISTING	T/O or T.O.	TOP OF
FD	FLOOR DRAIN	U.N.O.	UNLESS NOTED OTHERWISE
F/O or F.O.	FACE OF	UIS	UNDER SIDE
F.O.S.	FACE OF STUD	WB	WHITEBOARD, REFER TO SPEC.
FRP	FIBREGLASS REINFORCED PANEL	WCP	WOOD CEILING PANEL
GWB	GYPSUM WALL BOARD, PAINTED	WD	WOOD
HB	HOSE BIB	W.P.	WATER PROOFING
MGF	METAL GRATING FENCE	WS 1	CEDAR LAP SIDING 4"
NIC	NOT IN CONTRACT	WS 2	CEDAR LAP SIDING 8"
NTS	NOT TO SCALE		



**1 LEVEL 2 KEY PLAN**  
A-00 NTS  
PROJECT NORTH

5	ISSUED FOR TENDER	2015/08/18
4	ISSUED FOR 99% CD	2015/07/28
3	ISSUED FOR 66% CD	2015/06/17
2	ISSUED FOR 33% CD	2015/06/03
1	ISSUED FOR SCHEMATIC DESIGN	2015/05/27
0	DESCRIPTION	
Revision/	Description/Description	Date/Date

Client/client

**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**

**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only  
**CONSULTANT\_SIGNATURE\_ONLY**

Drawn by/Concept par  
**TY**

MW  
PWGSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin

**COVER SHEET**

Project No./No. du projet <b>R.075861.001</b>	Sheet/Fauille <b>A-00</b> OF XX	Revision no./La Révision no. <b>5</b>
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5	ISSUED FOR TENDER	2015/06/18
4	ISSUED FOR 90% CD	2015/07/29
3	ISSUED FOR 60% CD	2015/06/17
2	ISSUED FOR 30% CD	2015/06/03
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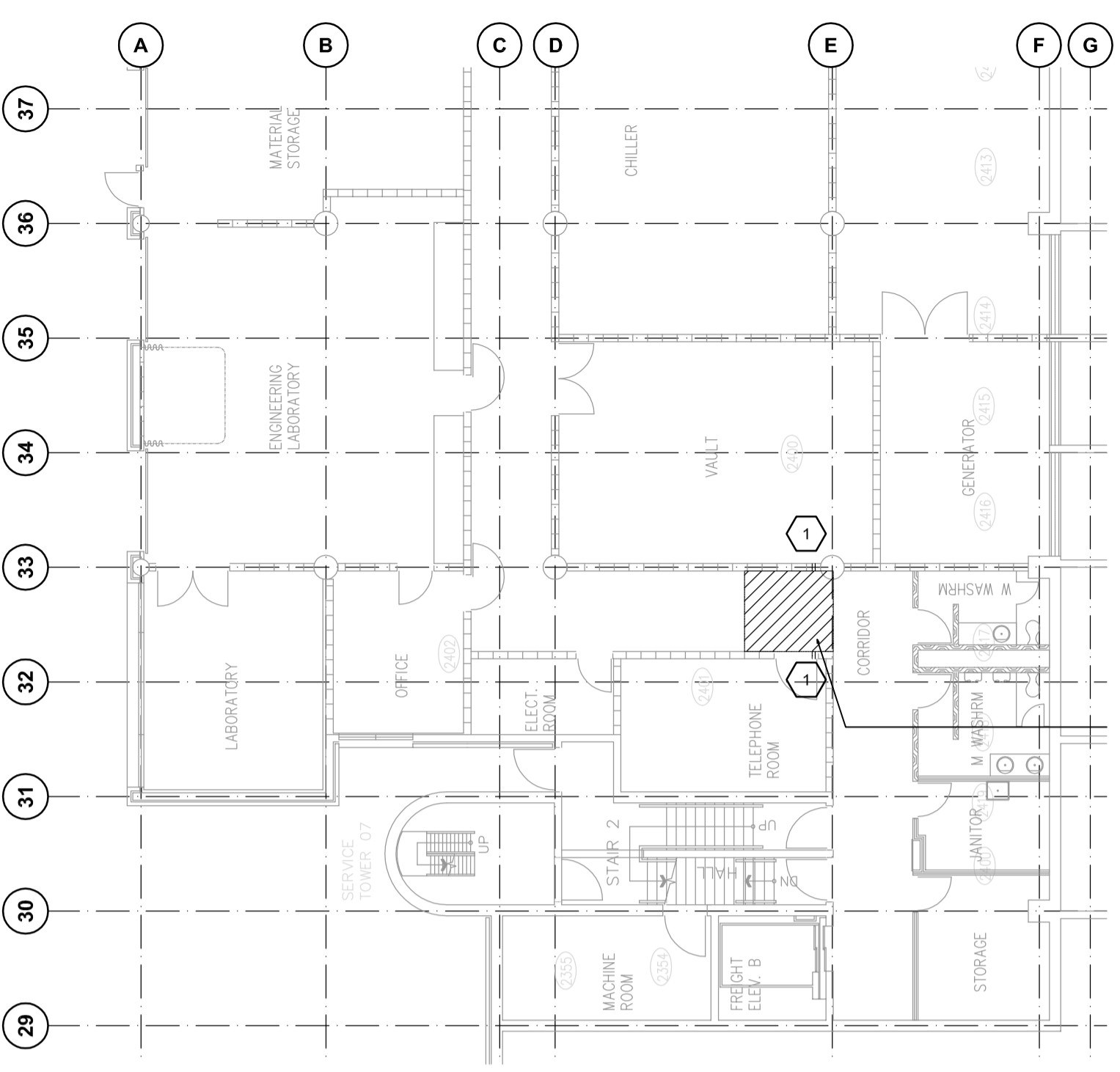
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**MW**

PWSCC Project Manager/Administrateur de Projets TPSGC  
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**PREETIPAL FAUL**

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**PROJECT AREA PLAN**

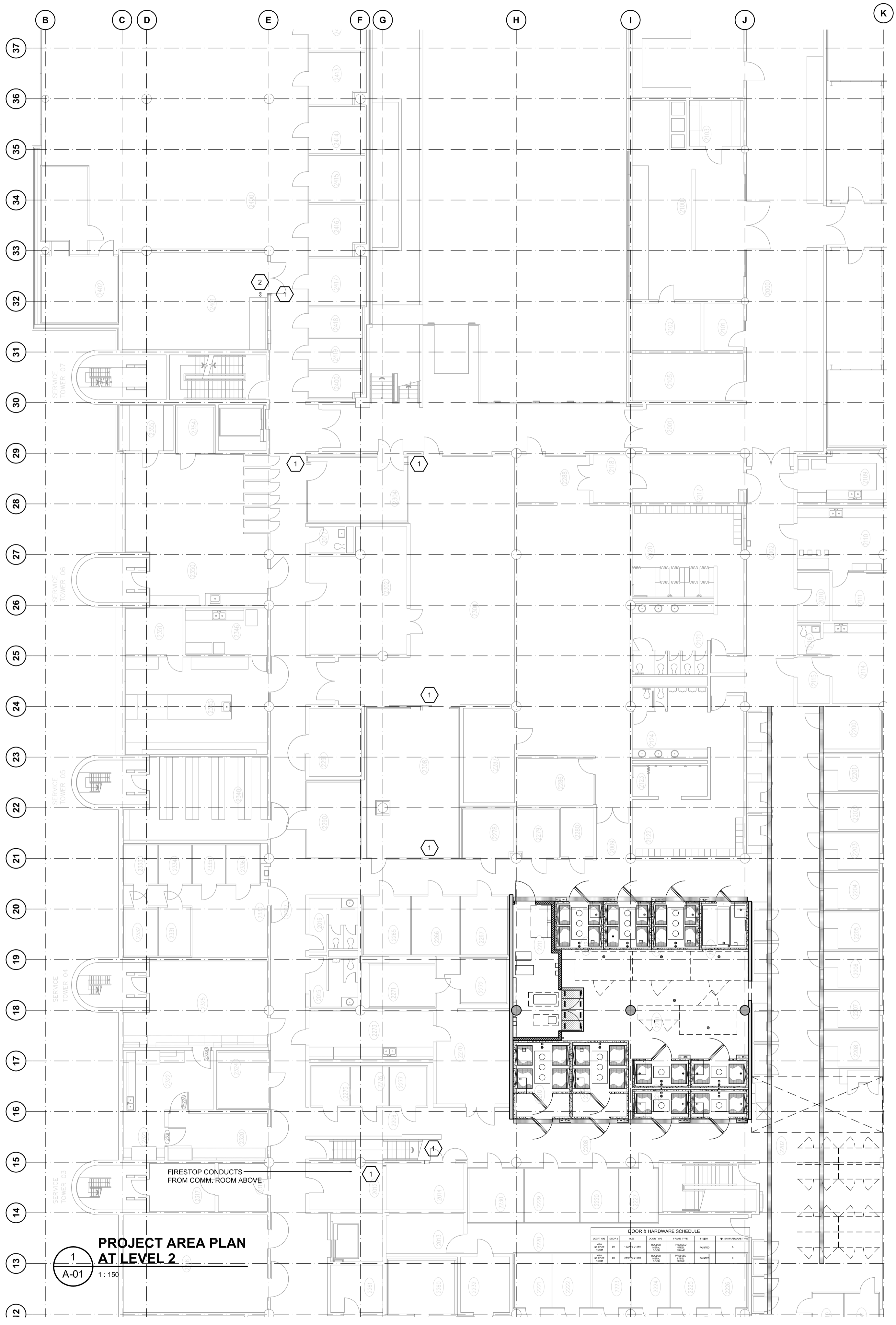
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HATCHED AREA DEMOTES TEMPORARILY REMOVE EXISTING T-BAR ACOUSTIC TILES AS REQUIRED FOR INSTALLATION OF NEW CONDUITS, RE-INSTALL T-BAR/ACOUSTIC TILES AFTER CONSTRUCTION, REPLACE NEW T-BAR AND CEILING TILES IF DAMAGED DURING CONSTRUCTION.

**PROJECT AREA PLAN AT LEVEL 1**  
A-01 1:150

- 1 PROVIDE OPENINGS AT HIGH LEVEL FOR ROUTING OF ELEC. CONDUITS (REFER ELEC.) PROVIDE 1HR FRR FIRE STOP AROUND PENETRATIONS
- 2 PROVIDE OPENINGS AT FLOOR SLAB FOR CONDUIT PENETRATION, PROVIDE 1HR FIRE STOP AT FLOOR PENETRATION.



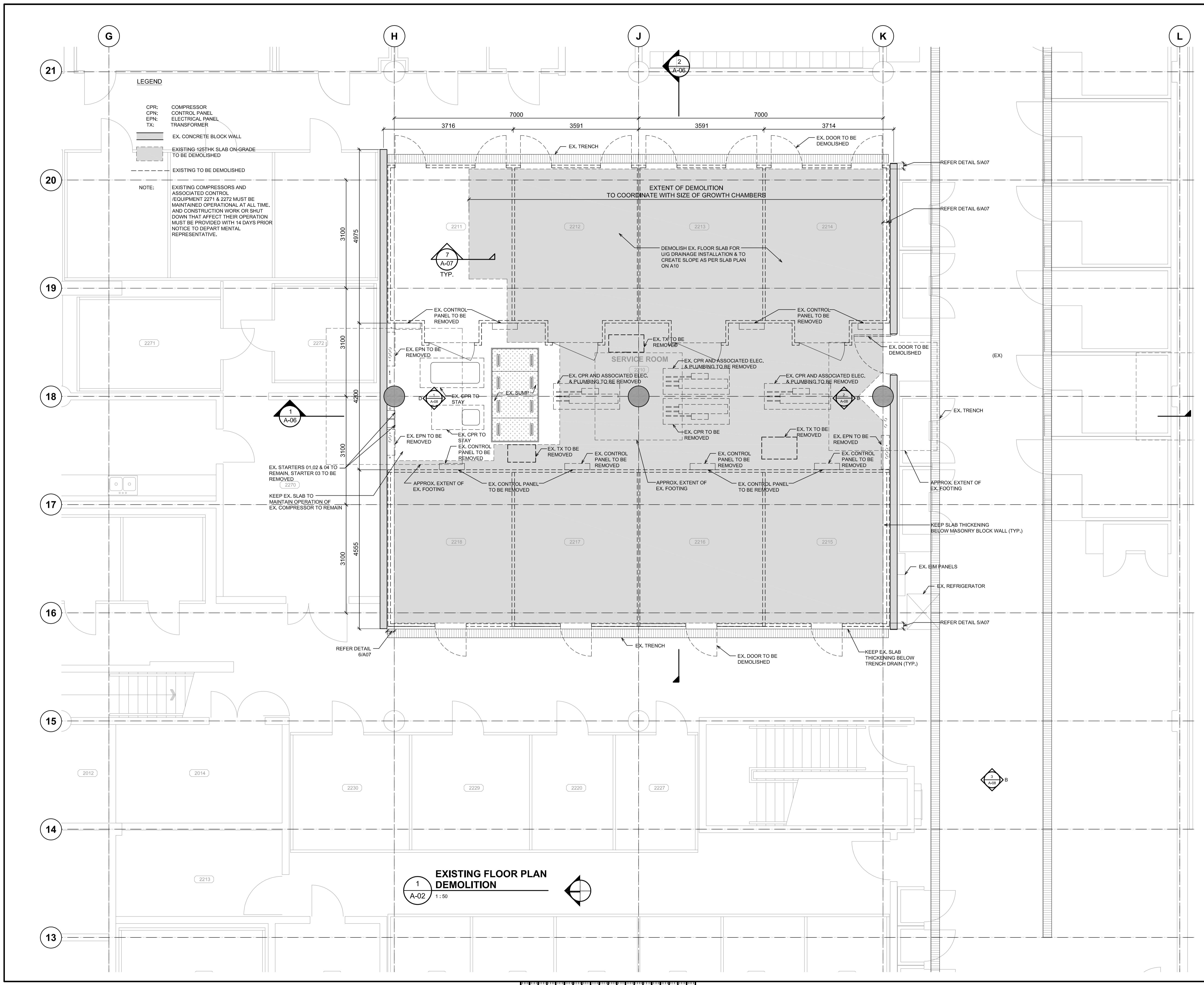
**PROJECT AREA PLAN AT LEVEL 2**  
A-01 1:150

DOOR & HARDWARE SCHEDULE

NO.	DOOR TYPE	FRAME	HANDLING
1	...	...	...
2	...	...	...
3	...	...	...
4	...	...	...
5	...	...	...
6	...	...	...
7	...	...	...
8	...	...	...
9	...	...	...
10	...	...	...
11	...	...	...
12	...	...	...
13	...	...	...
14	...	...	...
15	...	...	...
16	...	...	...
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31	...	...	...
32	...	...	...
33	...	...	...
34	...	...	...
35	...	...	...
36	...	...	...
37	...	...	...







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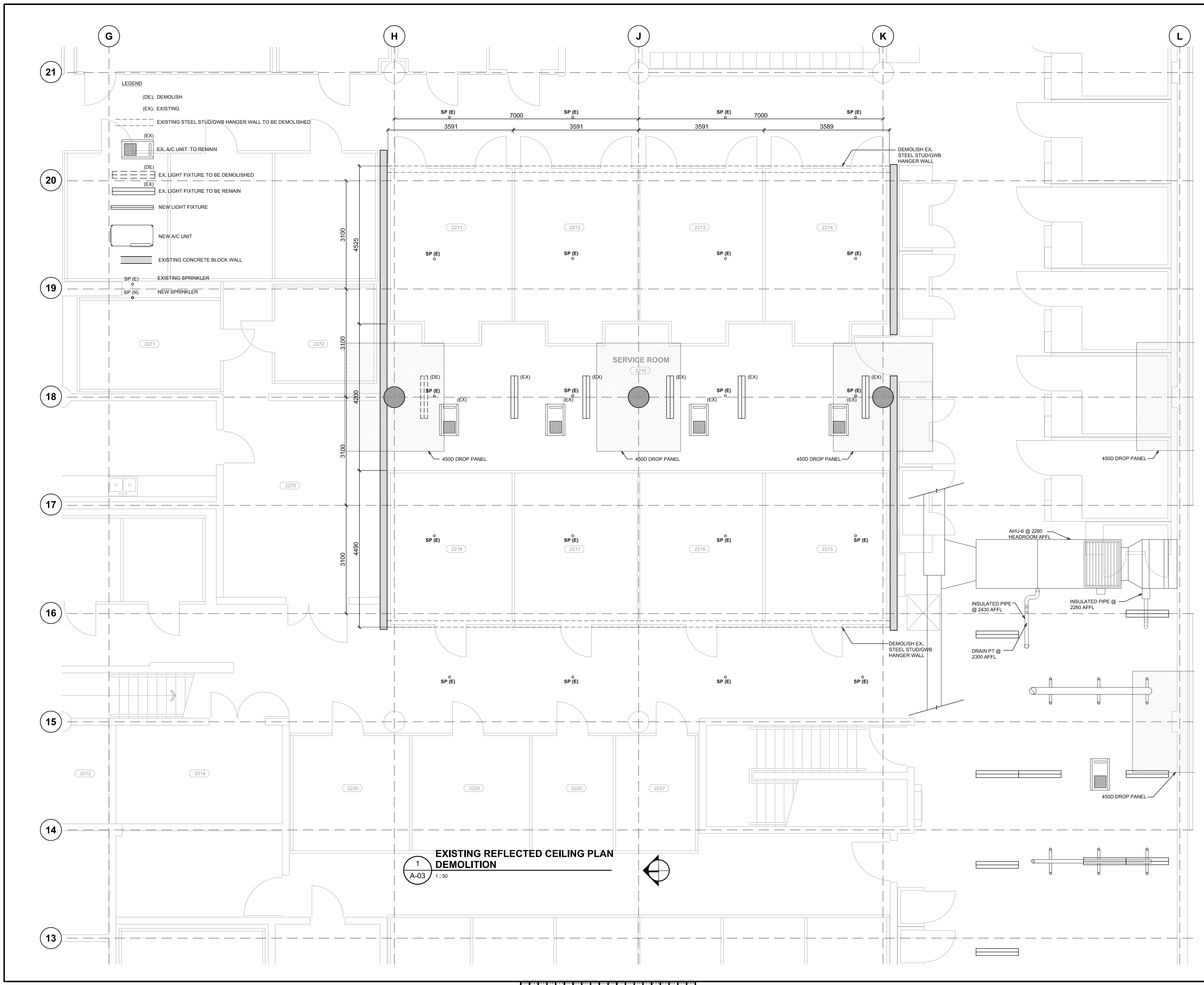
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**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

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**EXISTING FLOOR PLAN DEMOLITION**

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- LEGEND**
- (DE): DEMOLISH
  - (EX): EXISTING
  - EXISTING STEEL STUD/GWB HANGER WALL TO BE DEMOLISHED
  - (EX) EX. A/C UNIT TO REMAIN
  - (DE) EX. LIGHT FIXTURE TO BE DEMOLISHED
  - (EX) EX. LIGHT FIXTURE TO BE REMAIN
  - NEW LIGHT FIXTURE
  - NEW A/C UNIT
  - EXISTING CONCRETE BLOCK WALL
  - SP (E) EXISTING SPRINKLER
  - SP (N) NEW SPRINKLER

1  
A-03  
1:50  
**EXISTING REFLECTED CEILING PLAN  
DEMOLITION**

Revision/	Description/Description	Date/Date
5	ISSUED FOR TENDER	2015/06/18
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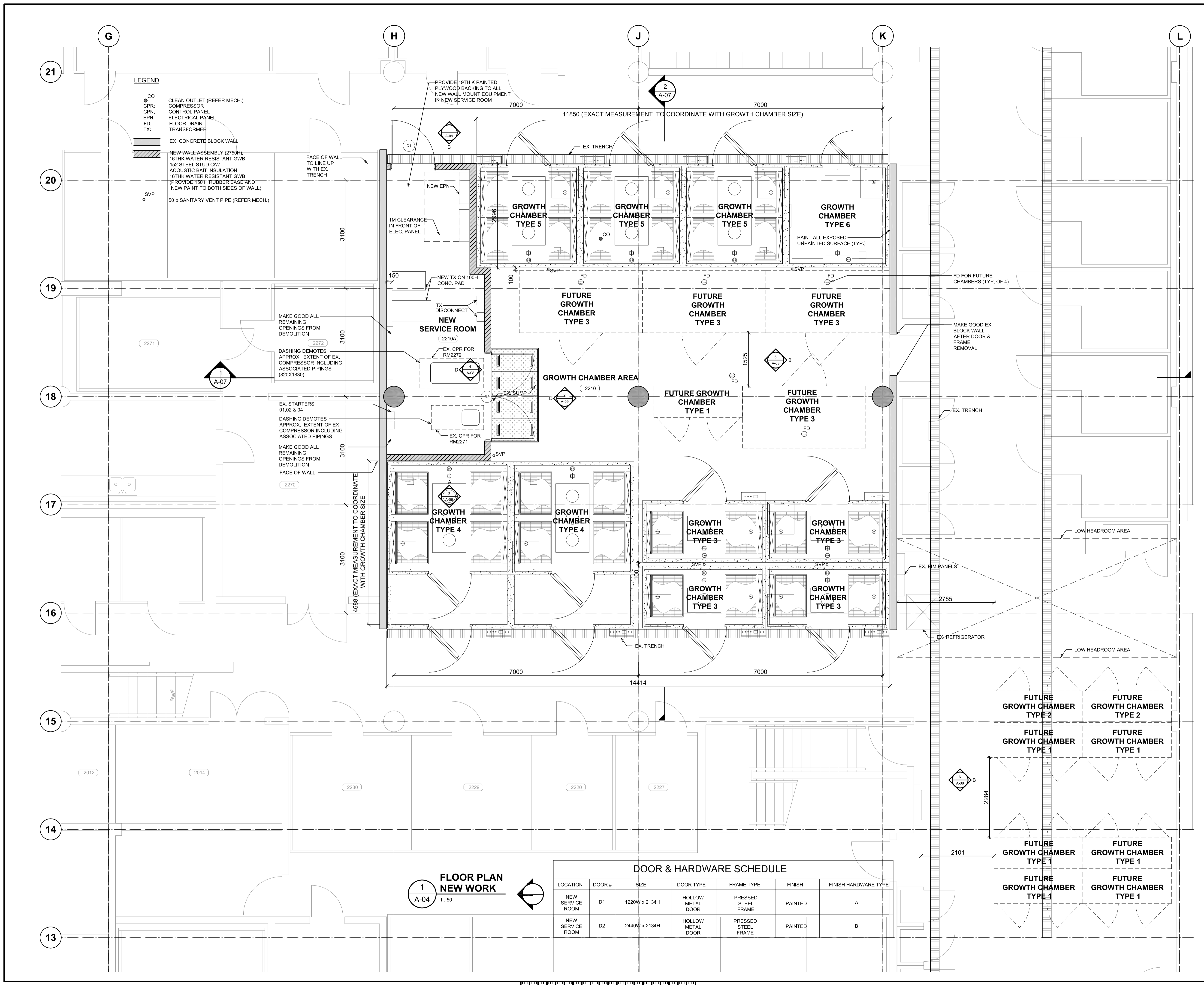
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AND  
AGRI-FOOD CANADA**

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**4200 97 HWY  
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**PACIFIC AGRI-FOOD  
RESEARCH CENTRE  
GROWTH CHAMBER  
REPLACEMENT**

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**EXISTING REFLECTED CEILING PLAN  
DEMOLITION**

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- LEGEND**
- CO CLEAN OUTLET (REFER MECH.)
  - CPR COMPRESSOR
  - CPN CONTROL PANEL
  - EPN ELECTRICAL PANEL
  - FD FLOOR DRAIN
  - TX FLOOR TRANSFORMER
  - EX. CONCRETE BLOCK WALL
  - NEW WALL ASSEMBLY (2750H):  
16THK WATER RESISTANT GWB  
152 STEEL STUD CW  
ACOUSTIC BAIT INSULATION  
16THK WATER RESISTANT GWB  
(PROVIDE 150 H RUBBER BASE AND  
NEW PAINT TO BOTH SIDES OF WALL)
  - 50 ø SANITARY VENT PIPE (REFER MECH.)

**DOOR & HARDWARE SCHEDULE**

LOCATION	DOOR #	SIZE	DOOR TYPE	FRAME TYPE	FINISH	FINISH HARDWARE TYPE
NEW SERVICE ROOM	D1	1220W x 2134H	HOLLOW METAL DOOR	PRESSED STEEL FRAME	PAINTED	A
NEW SERVICE ROOM	D2	2440W x 2134H	HOLLOW METAL DOOR	PRESSED STEEL FRAME	PAINTED	B

**FLOOR PLAN NEW WORK**  
1:50

Revision/	Description/Description	Date/Date
5	ISSUED FOR TENDER	2014/08/18
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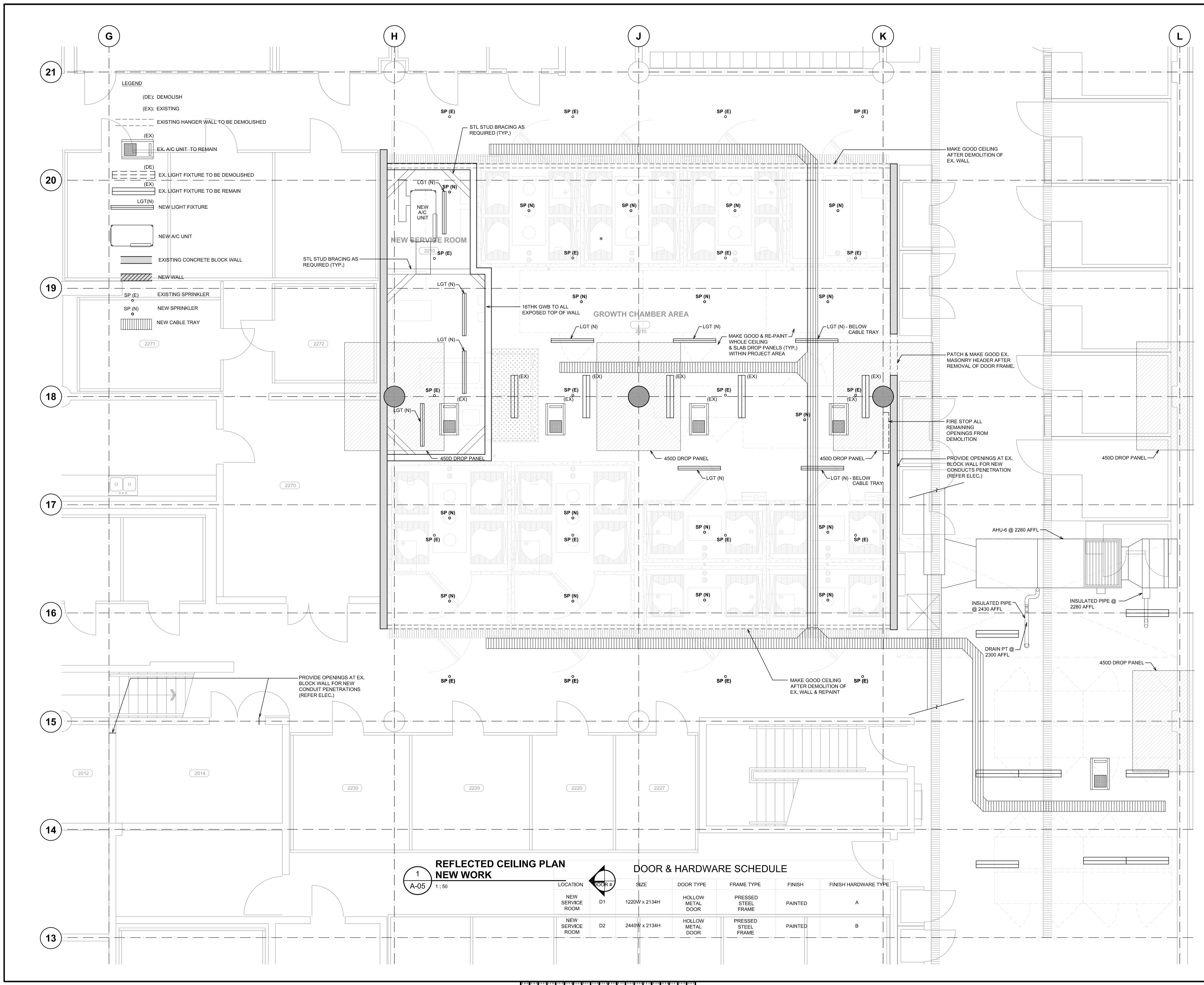
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**FLOOR PLAN NEW WORK**

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OF XX





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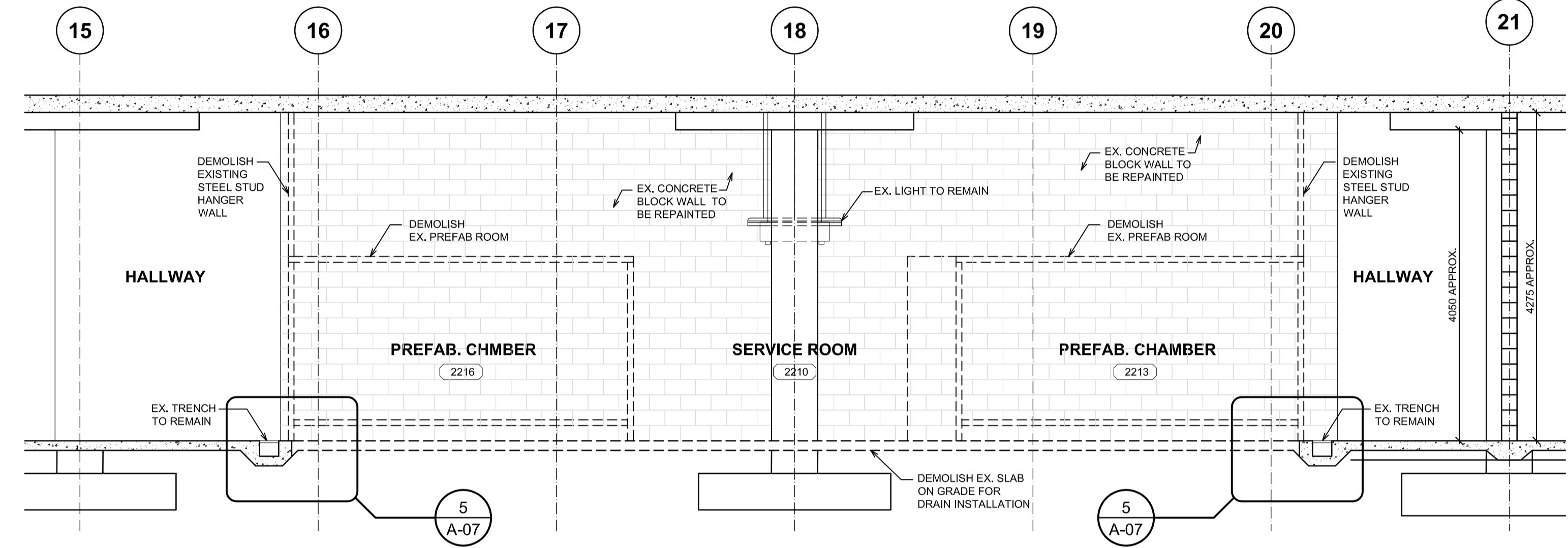
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**REFLECTED CEILING PLAN NEW WORK**

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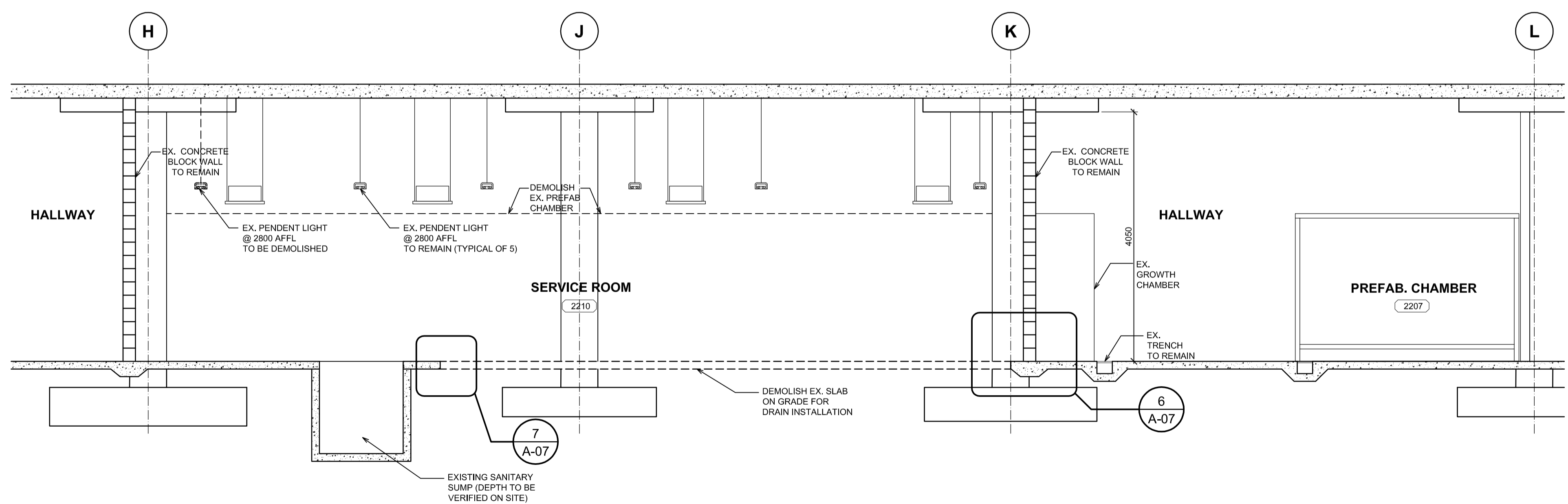
**1 REFLECTED CEILING PLAN NEW WORK**  
 A-05 1:50

**DOOR & HARDWARE SCHEDULE**

LOCATION	DOOR #	SIZE	DOOR TYPE	FRAME TYPE	FINISH	FINISH HARDWARE TYPE
NEW SERVICE ROOM	D1	1220W x 2134H	HOLLOW METAL DOOR	PRESSED STEEL FRAME	PAINTED	A
NEW SERVICE ROOM	D2	2440W x 2134H	HOLLOW METAL DOOR	PRESSED STEEL FRAME	PAINTED	B



**SECTION 2 (DEMOLITION WORK)**  
2  
A-06 1:50



**SECTION 1 (DEMOLITION WORK)**  
1  
A-06 1:50

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Drawing title/Titre du dessin

**SECTIONS DEMOLITION**

Project No./No. du projet  
**R.075861.001**

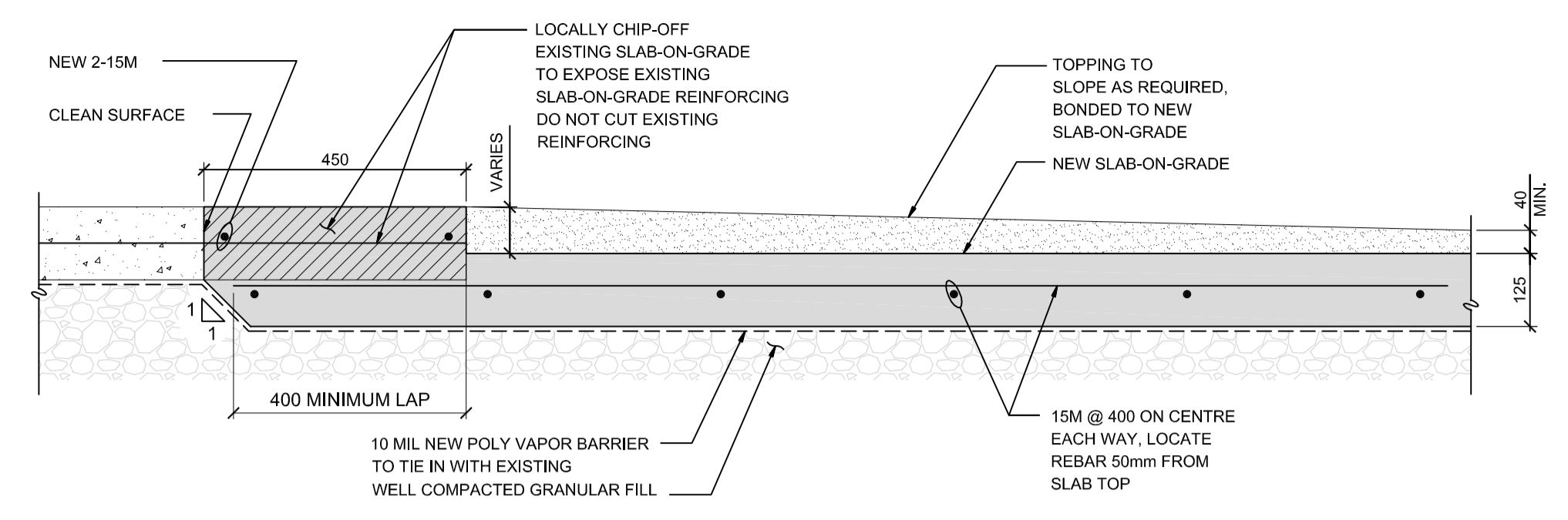
Sheet/Feuille  
**A-06**

Revision no./La Révision no.  
**5**

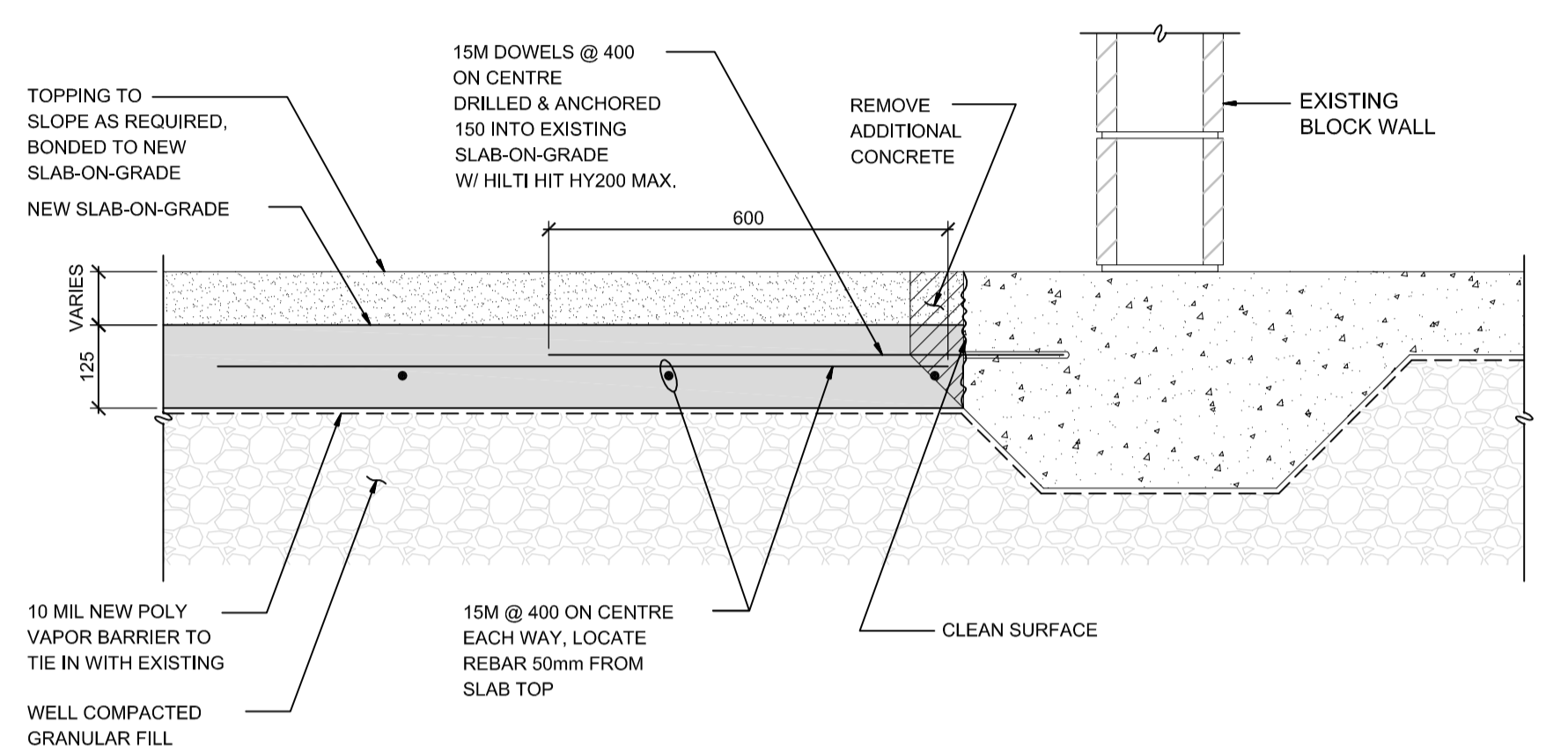
OF XX



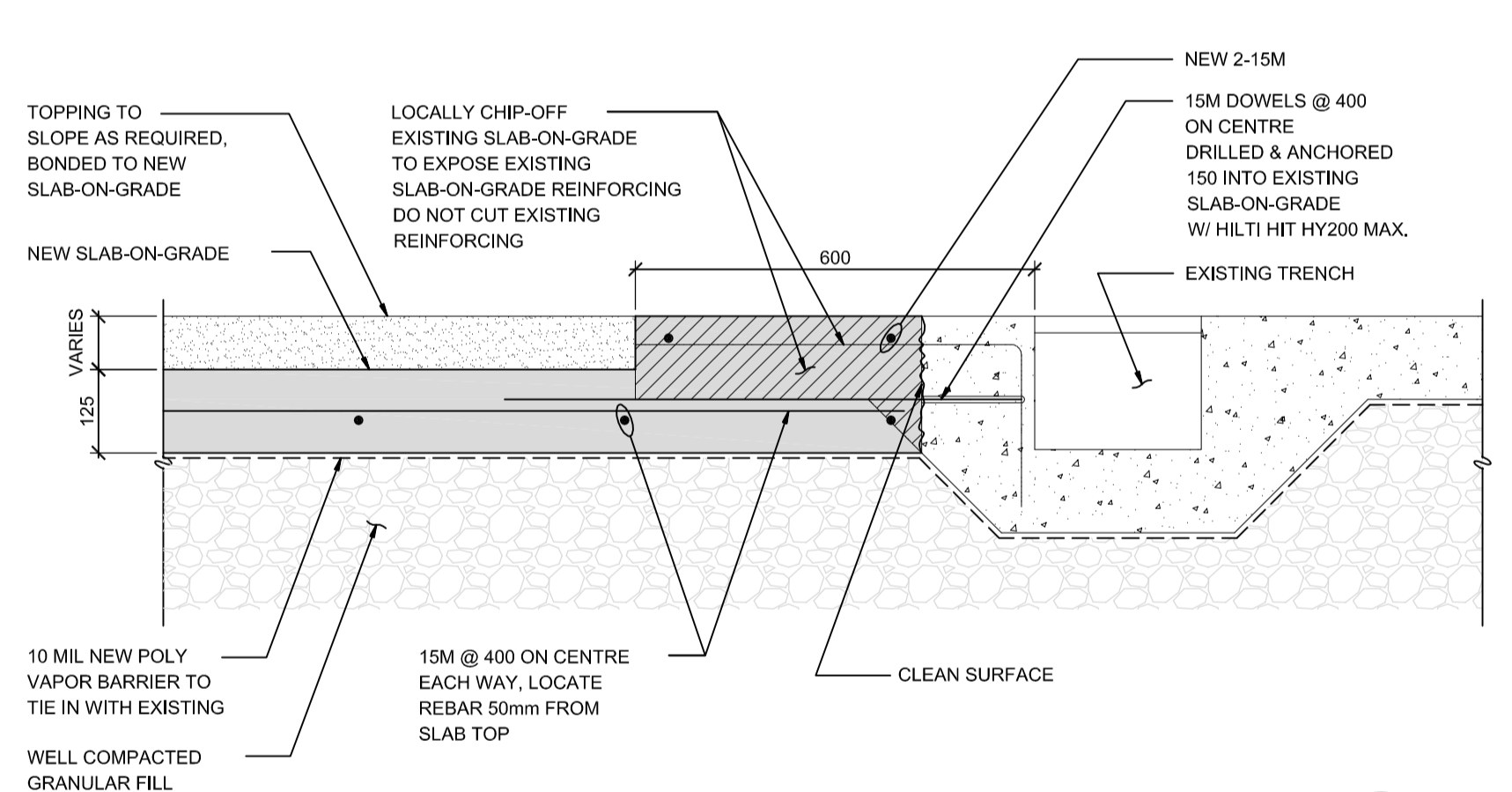
**LEGEND**  
DR: DUPLEX RECEPTACLE  
LGT: LIGHT FIXTURE  
PT: PAINT  
SW: LIGHT SWITCH  
RB: RUBBLE BASE (NEW)  
(E): EXISTING  
(N): NEW



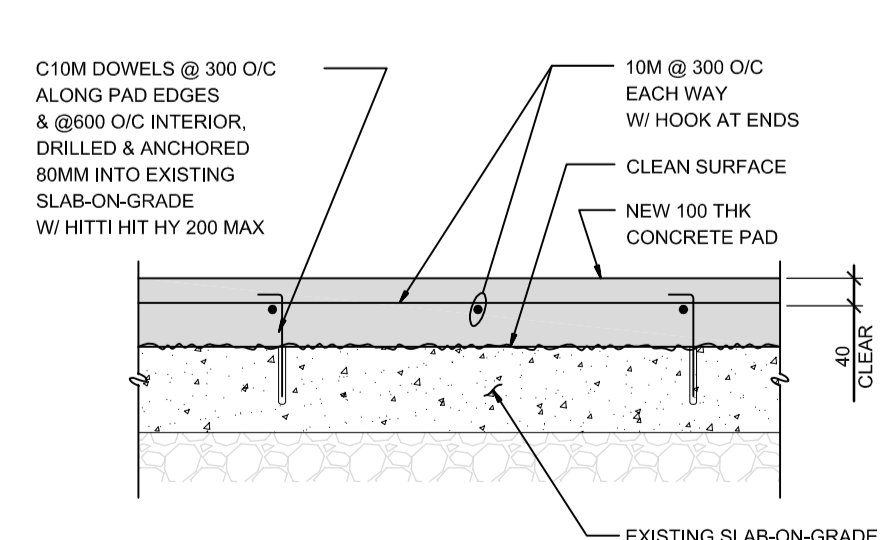
**TYPICAL INTERFACE DETAIL BETWEEN NEW SLAB-ON-GRADE & EXISTING SLAB-ON-GRADE**



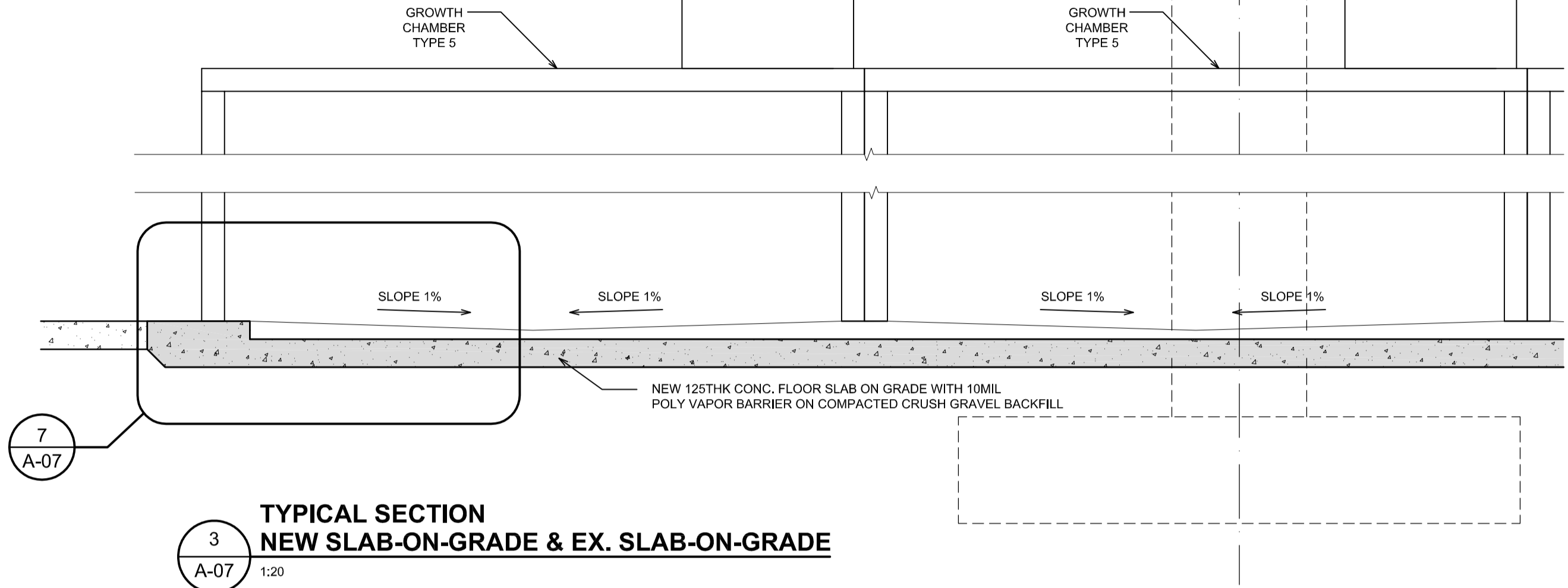
**TYPICAL NEW SLAB DETAIL ADJACENT TO EXISTING BLOCK WALLS**



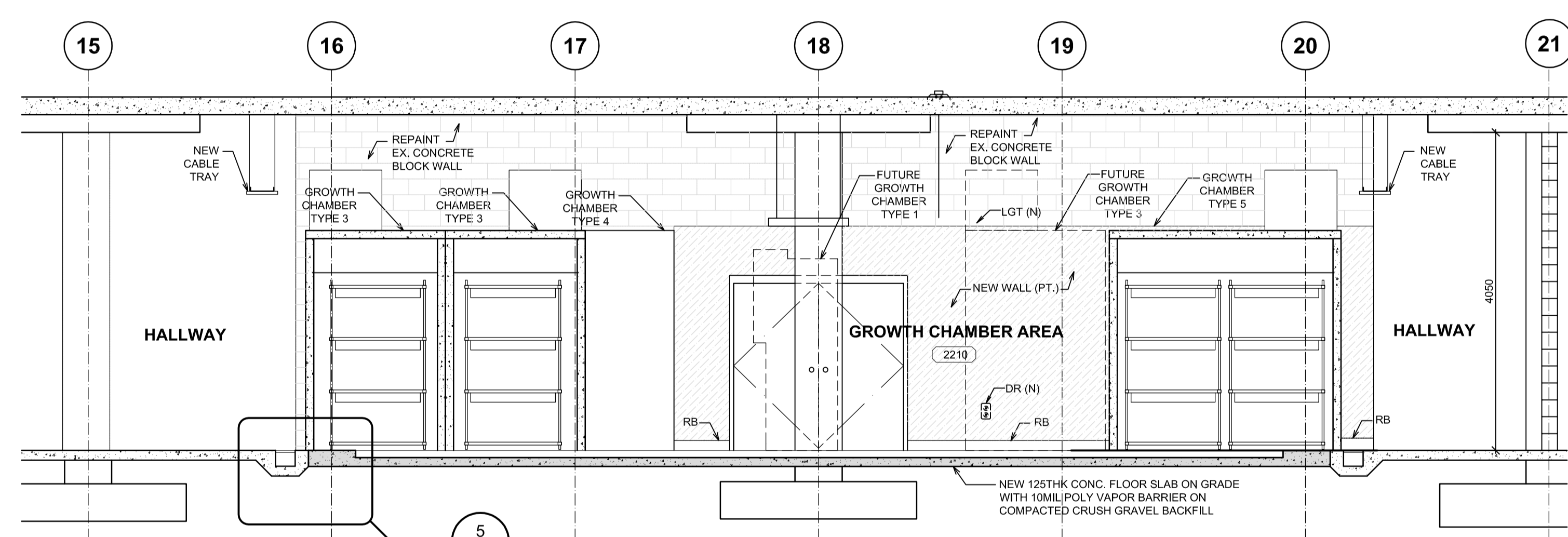
**TYPICAL NEW SLAB DETAIL ADJACENT TO TRENCH**



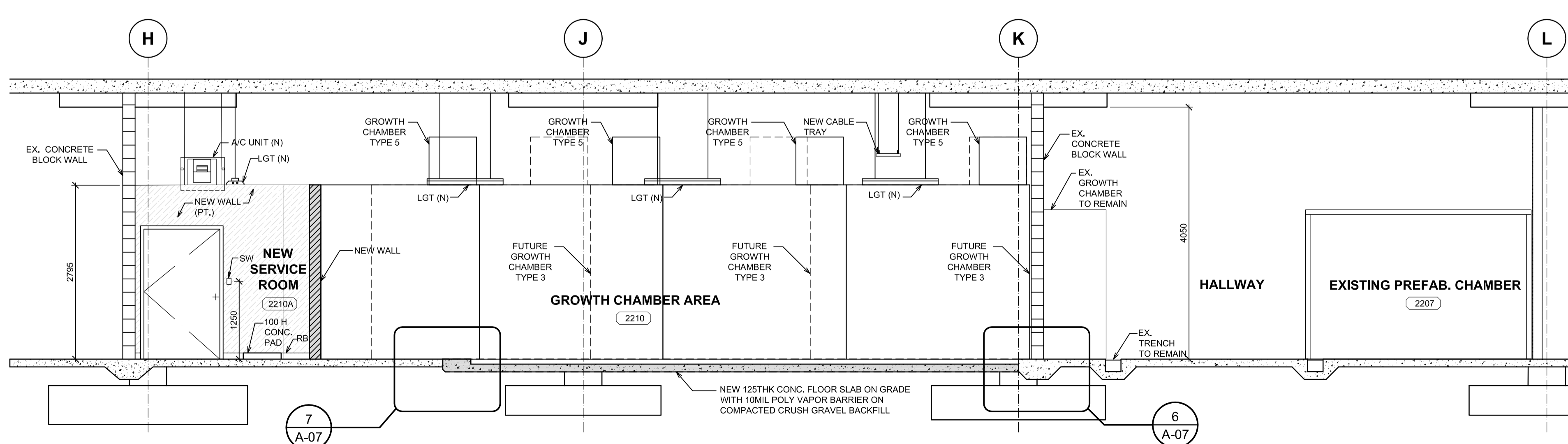
**TYPICAL DETAIL HOUSEKEEP PAD**



**TYPICAL SECTION NEW SLAB-ON-GRADE & EX. SLAB-ON-GRADE**



**SECTION NEW WORK**



**SECTION NEW WORK**

Revision/Revision	Description/Description	Date/Date
5	ISSUED FOR TENDER	2015/08/18
4	ISSUED FOR 99% CD	2015/07/29
3	ISSUED FOR 66% CD	2015/06/17
2	ISSUED FOR 33% CD	2015/06/03
1	ISSUED FOR SCHEMATIC DESIGN	2015/05/27
0	DESCRIPTION	

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**

**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only

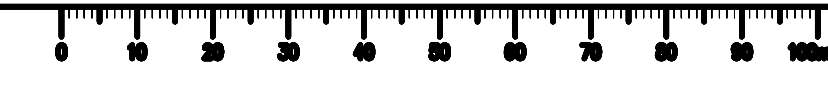
Designed by/Concept par  
**TY**

Drawn by/Dessine par  
**MW**  
PWSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSGC  
**PREETIPAL PAUL**

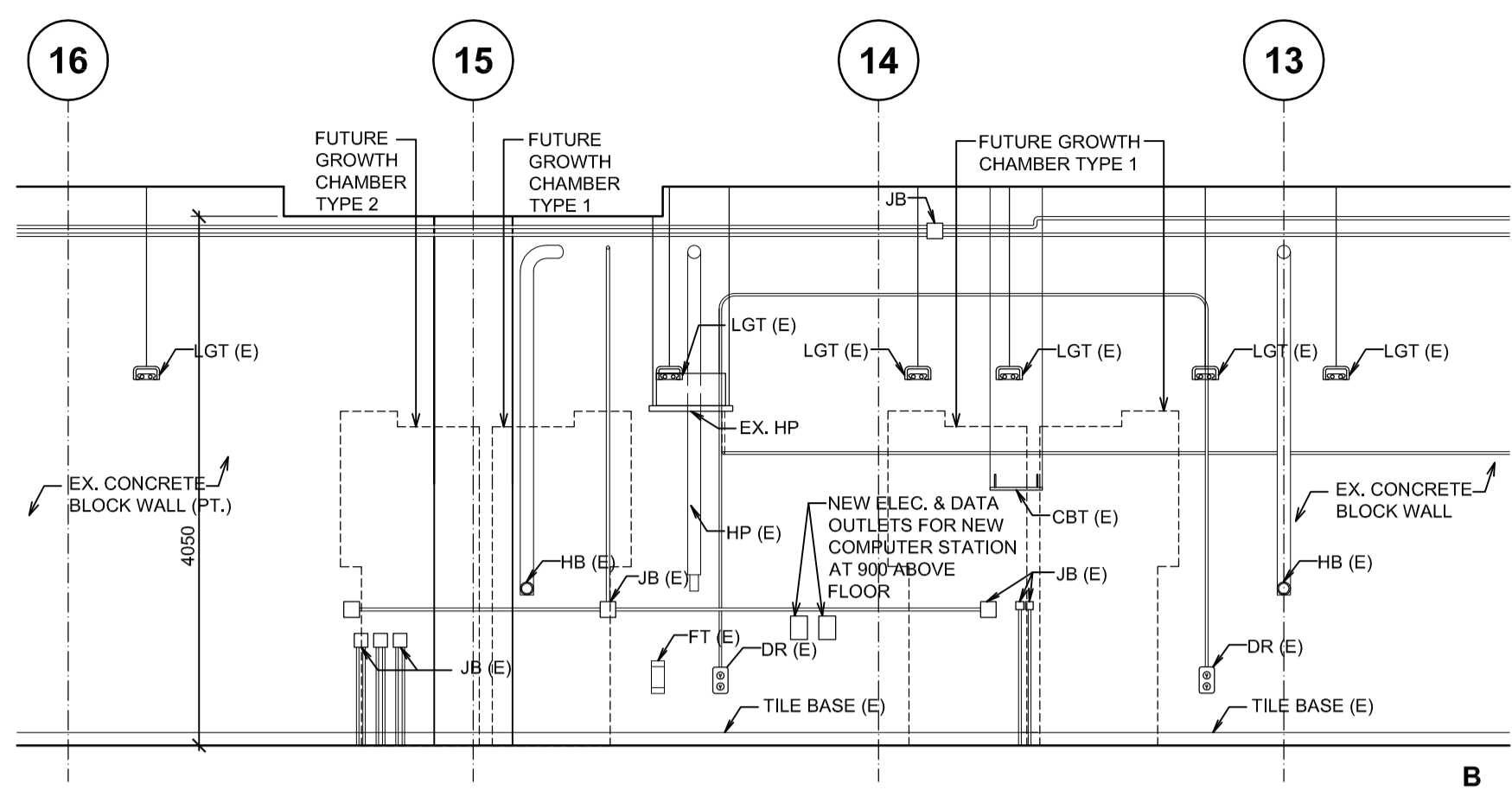
Drawing title/Titre du dessin  
**SECTIONS NEW WORK**

Project No./No. du projet <b>R.075861.001</b>	Sheet/Fauille <b>A-07</b> OF XX	Revision no./La Révision no. <b>5</b>
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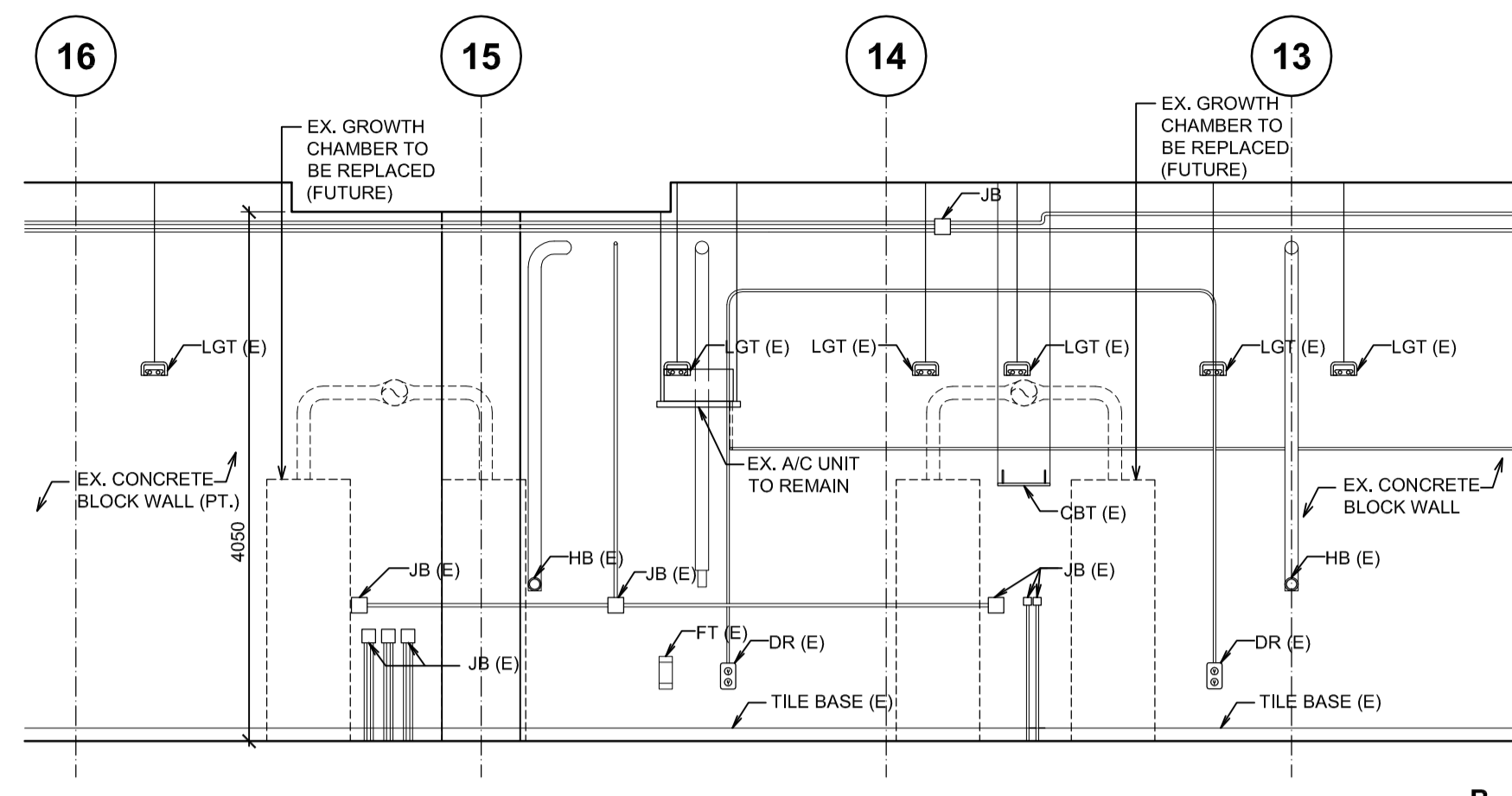




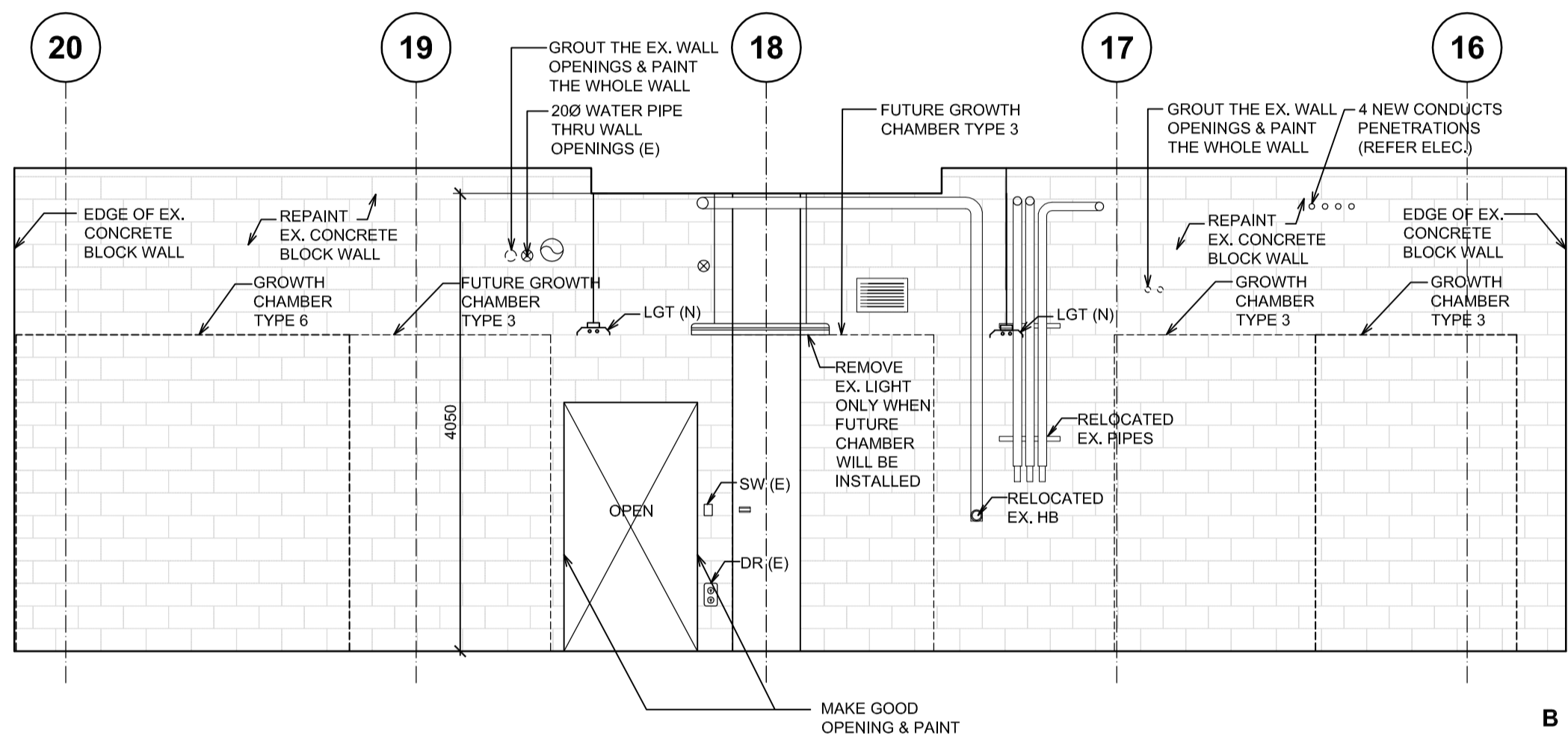
- LEGEND**
- CBT: CABLE TRAY
  - DR: DUPLEX RECEPTACLE
  - (E): EXISTING
  - EL: EMERGENCY LIGHT
  - EPN: ELECTRICAL PANEL
  - FS: FIRE ALARM STROKE LIGHT
  - FT: FILTER
  - HB: HORSE BIB
  - HP: HEAT PUMP
  - JB: JUNCTION BOX
  - LGT: LIGHT FIXTURE
  - (N): NEW
  - SW: LIGHT SWITCH
  - TO BE DEMOLISHED/RELOCATED



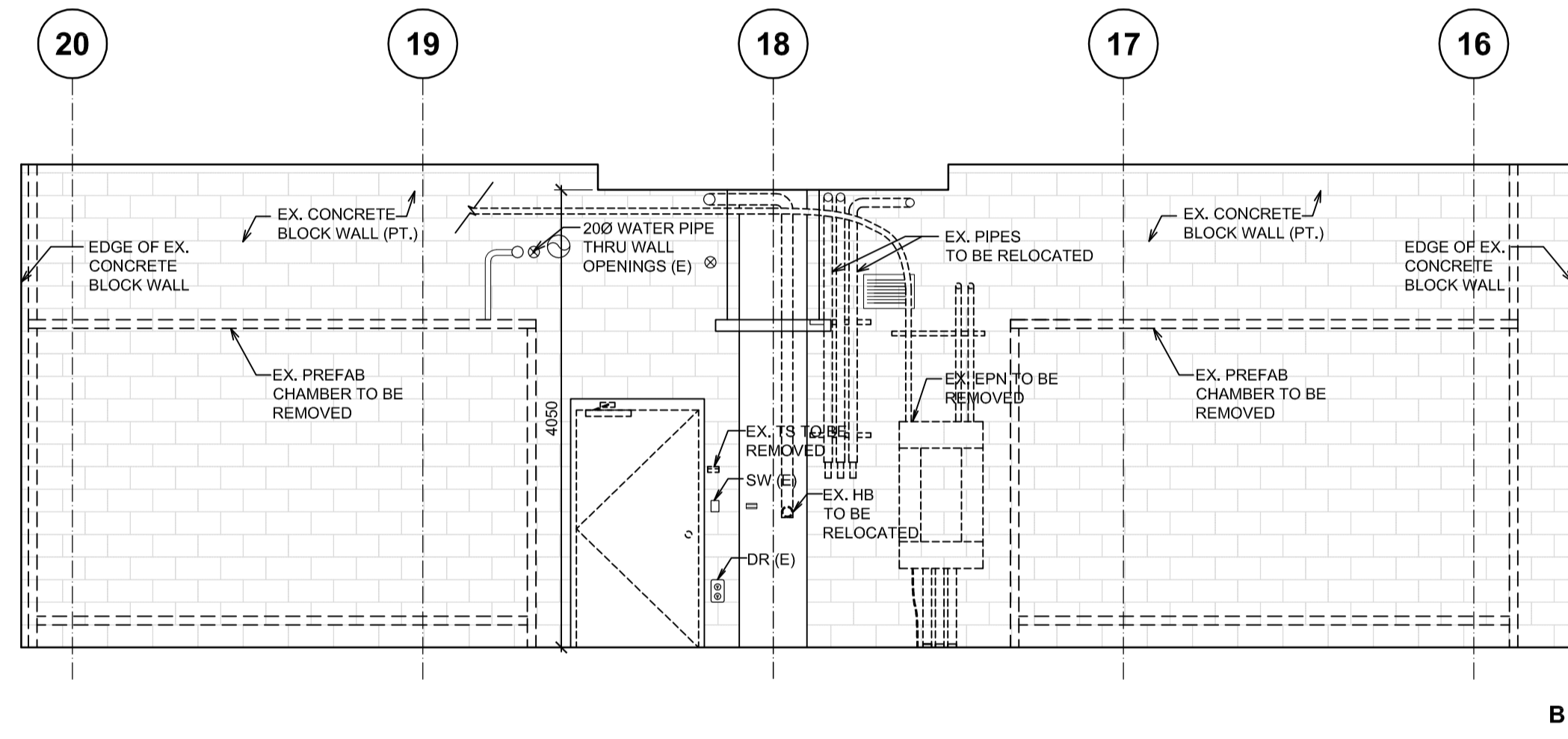
**6 FUTURE CHAMBER AREA SOUTH INTERIOR ELEVATION-NEW WORK**  
A-08 1:50



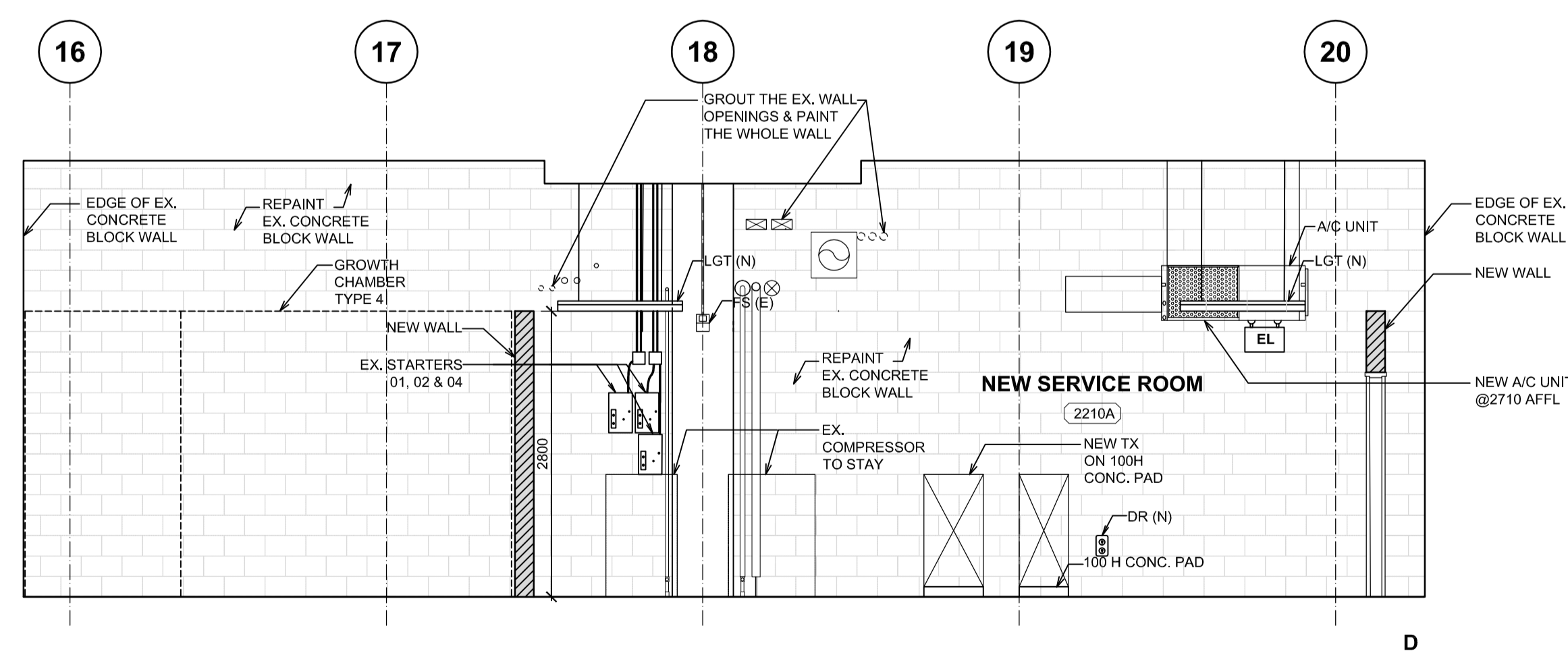
**3 FUTURE CHAMBER AREA SOUTH INTERIOR ELEVATION-EXISTING**  
A-08 1:50



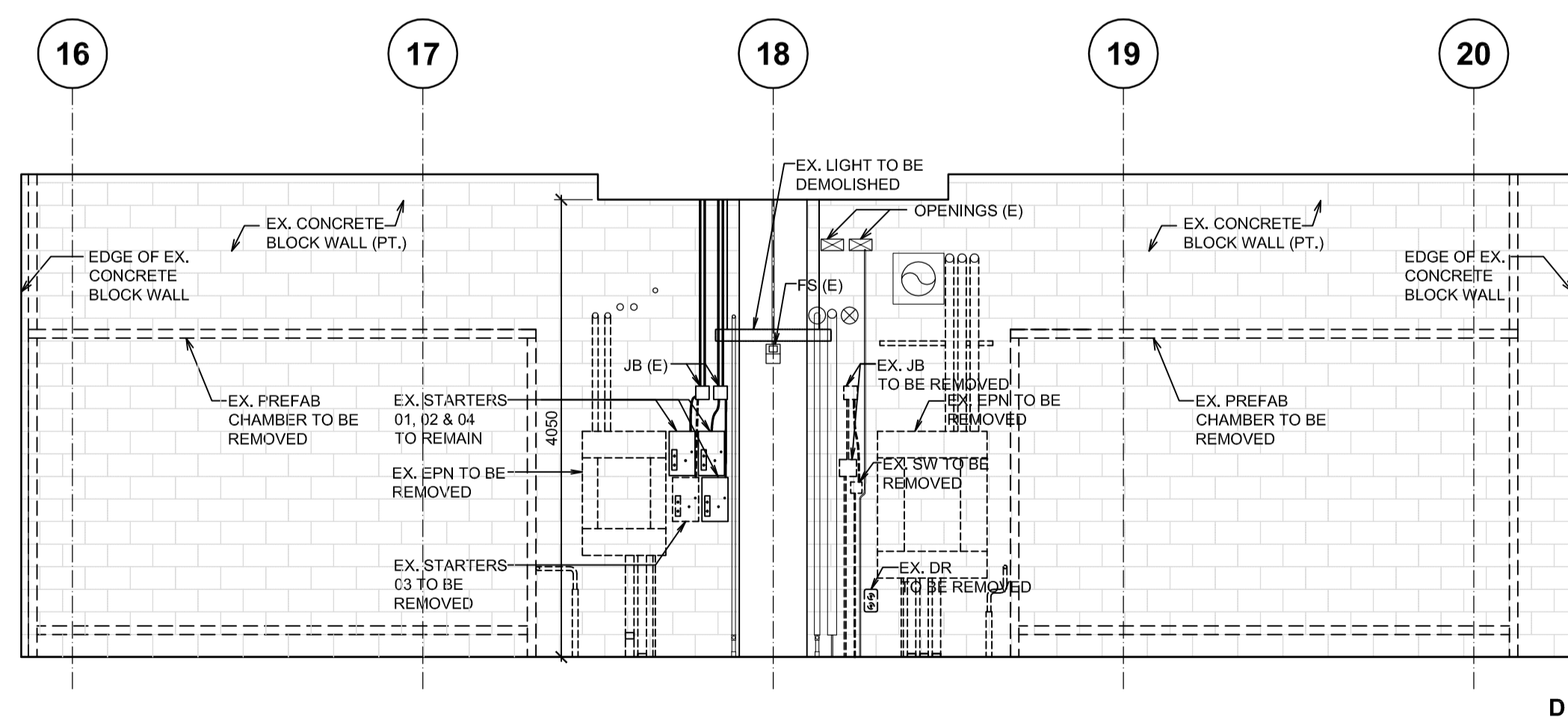
**5 CHAMBER AREA SOUTH INTERIOR ELEVATION-NEW WORK**  
A-08 1:50



**2 CHAMBER AREA SOUTH INTERIOR ELEVATION-DEMOLITION**  
A-08 1:50



**4 NEW SERVICE ROOM NORTH INTERIOR ELEVATION-NEW WORK**  
A-08 1:50



**1 CHAMBER AREA NORTH INTERIOR ELEVATION-DEMOLITION**  
A-08 1:50

Revision/	Description/Description	Date/Date
5	ISSUED FOR TENDER	2015/08/18
4	ISSUED FOR 99% CD	2015/07/29
3	ISSUED FOR 66% CD	2015/06/17
2	ISSUED FOR 33% CD	2015/06/03
1	ISSUED FOR SCHEMATIC DESIGN	2015/05/27
0	DESCRIPTION	

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**

**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

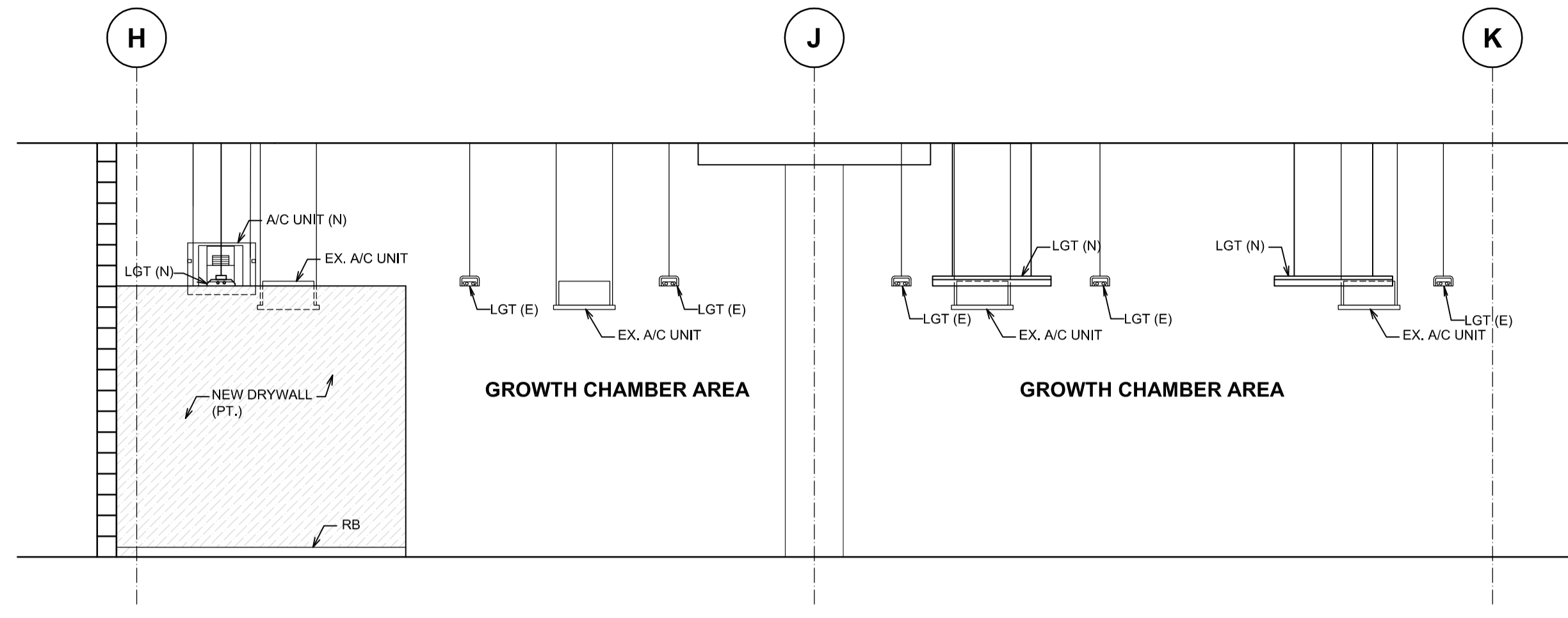
Consultant Signature Only  
Designed by/Concept par **TY**  
Drawn by/Dessiné par **MW**  
PWSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**  
Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architecture et de génie, TPSGC  
**PRETIPAL FAUL**

Drawing title/Titre du dessin  
**INTERIOR ELEVATIONS**

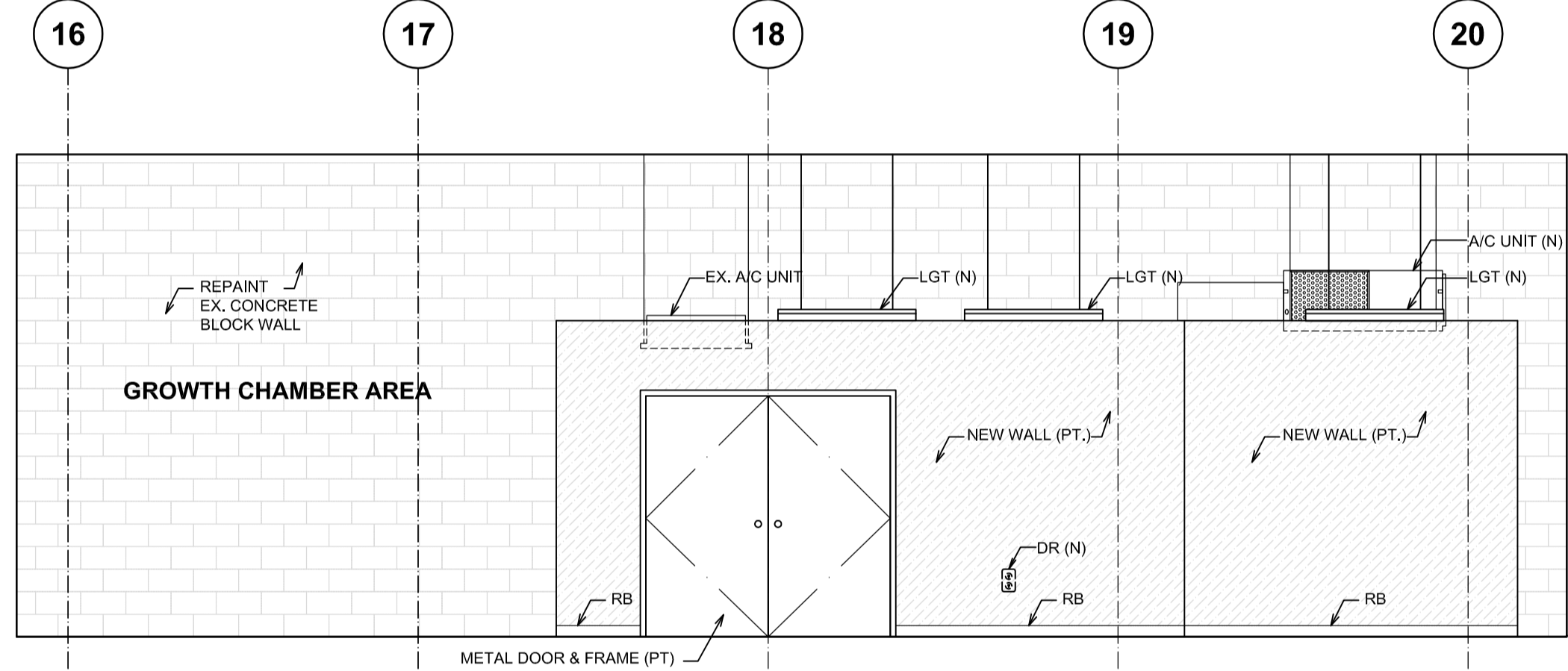
Project No./No. du projet <b>R.075861.001</b>	Sheet/Feuille <b>A-08</b> OF XX	Revision no./La Révision no. <b>5</b>
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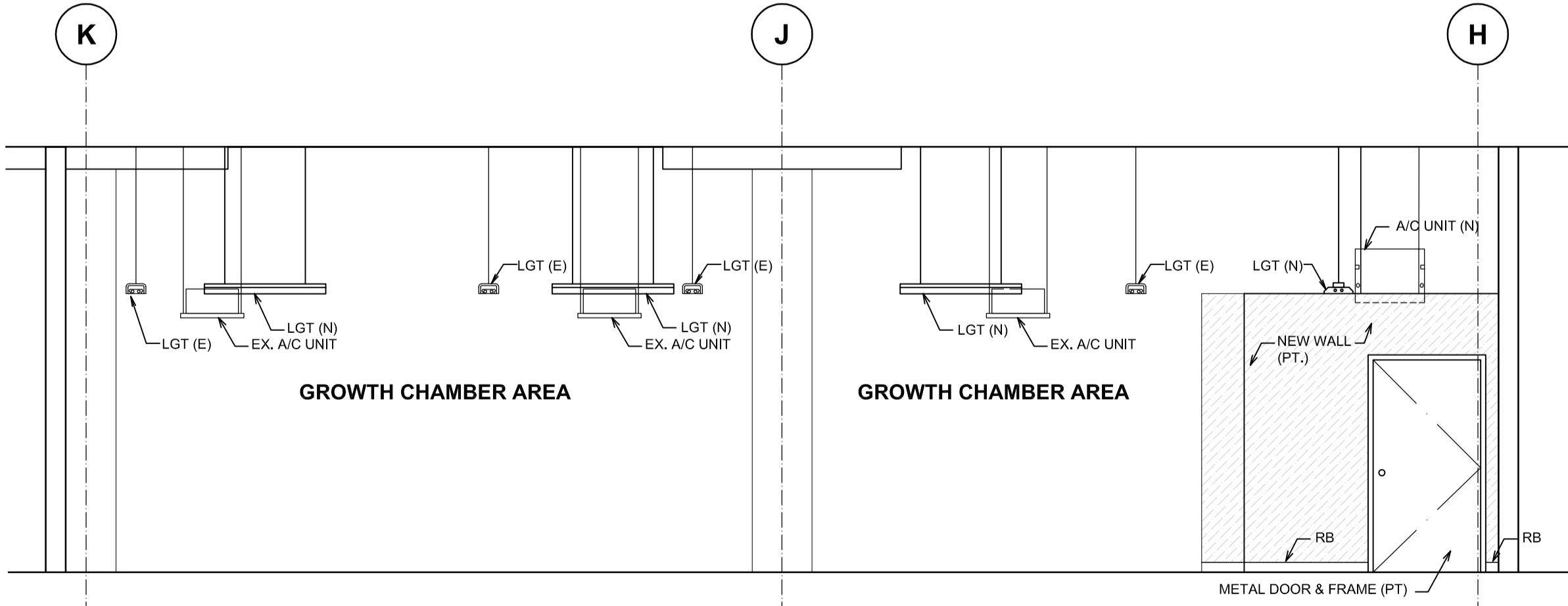
- LEGEND**
- CBT: CABLE TRAY
  - DR: DUPLEX RECEPTACLE
  - (E): EXISTING
  - EPN: ELECTRICAL PANEL
  - FS: FIRE ALARM STROKE LIGHT
  - FT: FILTER
  - HB: HORSE BIB
  - JB: JUNCTION BOX
  - LGT (E): EXISTING LIGHT
  - LGT (N): NEW 305 x 1220 LIGHT
  - (N): NEW
  - PT: PAINT
  - SW: LIGHT SWITCH



**3**  
**INTERIOR ELEVATION SERVICE ROOM SOUTH**  
 A-09 1:50



**2**  
**INTERIOR ELEVATION SERVICE ROOM EAST**  
 A-09 1:50



**1**  
**INTERIOR ELEVATION SERVICE ROOM NORTH**  
 A-09 1:50

Revision/	Description/	Date/Date
5	ISSUED FOR TENDER	2015/08/18
4	ISSUED FOR 90% CD	2015/07/29
3	ISSUED FOR 66% CD	2015/06/17
2	ISSUED FOR 33% CD	2015/06/03
1	ISSUED FOR SCHEMATIC DESIGN	2015/05/27
0	DESCRIPTION	

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**

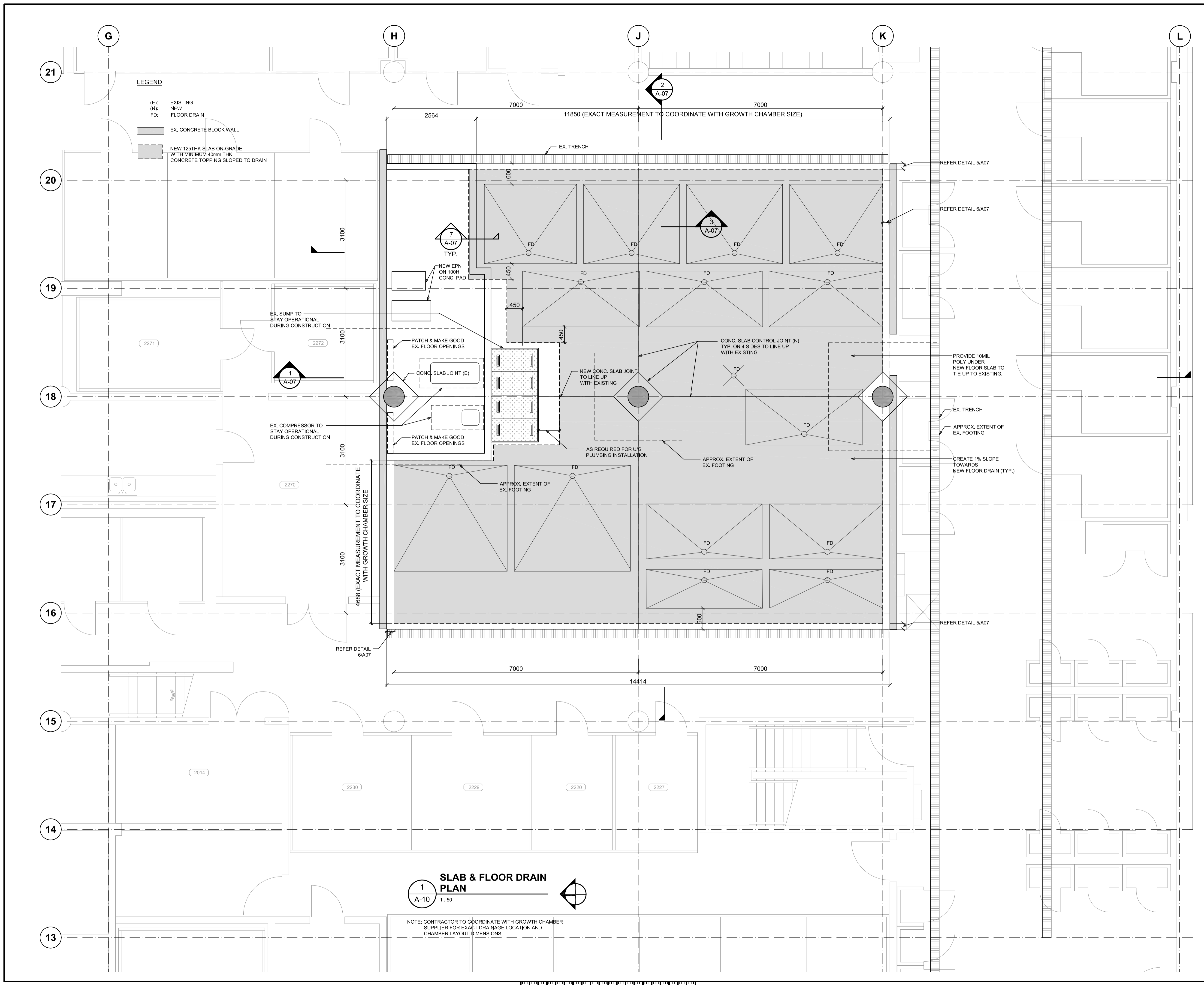
**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only  
 Designed by/Concept par  
**TY**  
 Drawn by/Dessiné par  
**MW**  
 PWGSC Project Manager/Administrateur de Projets TPSSC  
**TOM DUNPHY**  
 Regional Manager, Architectural and Engineering Services  
 Gestionnaire régionale, Services d'architecture et de génie, TPSSC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**INTERIOR ELEVATIONS**

Project No./No. du projet <b>R.075861.001</b>	Sheet/Feuille <b>A-09</b> OF XX	Revision no./La Révision no. <b>5</b>
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**LEGEND**  
 (E): EXISTING  
 (N): NEW  
 FD: FLOOR DRAIN  
 EX. CONCRETE BLOCK WALL  
 NEW 125THK SLAB ON-GRADE WITH MINIMUM 40mm THK CONCRETE TOPPING SLOPED TO DRAIN

**1 A-10**  
**SLAB & FLOOR DRAIN PLAN**  
 1:50

NOTE: CONTRACTOR TO COORDINATE WITH GROWTH CHAMBER SUPPLIER FOR EXACT DRAINAGE LOCATION AND CHAMBER LAYOUT DIMENSIONS.

Revision/Revisions	Description/Description	Date/Date
5	ISSUED FOR TENDER	2015/06/18
4	ISSUED FOR 99% CD	2015/07/29
3	ISSUED FOR 66% CD	2015/05/17
2	ISSUED FOR 33% CD	2015/06/03
1	ISSUED FOR SCHEMATIC DESIGN	2015/05/27
0	DESCRIPTION	

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

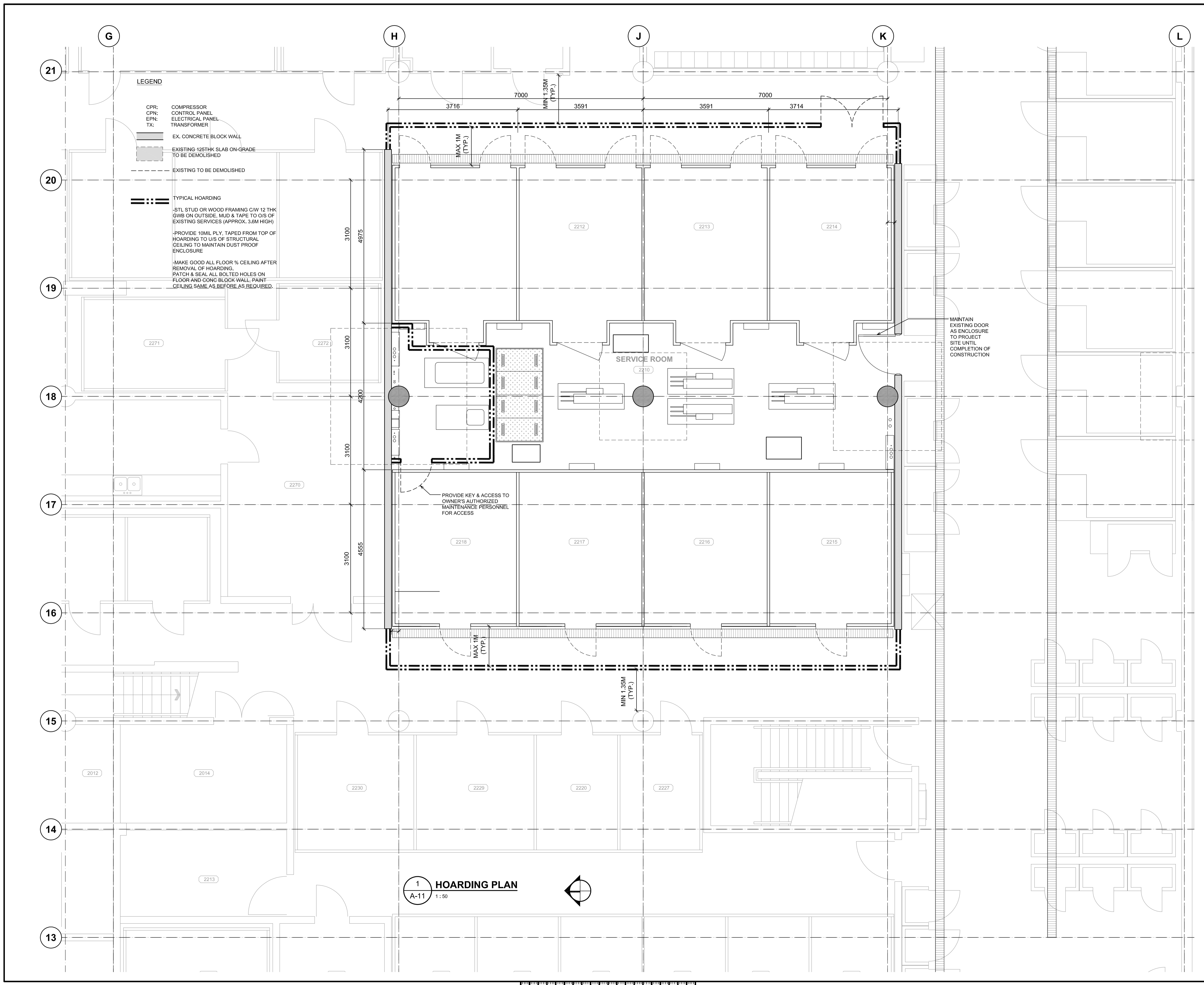
Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only  
 Designed by/Concept par  
**TY**  
 Drawn by/Dessiné par  
**MW**  
 PWSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**  
 Regional Manager, Architectural and Engineering Services  
 Gestionnaire régionale, Services d'architecture et de génie, TPSGC  
**PREETIPAL FAUL**

Drawing title/Titre du dessin  
**SLAB & FLOOR DRAIN PLAN**

Project No./No. du projet <b>R.075861.001</b>	Sheet/Feuille <b>A-10</b> OF XX	Revision no./La Révision no. <b>5</b>
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1 HOARDING PLAN  
A-11 1:50

Revision/	Description/Description	Date/Date
5	ISSUED FOR TENDER	2015/08/18
4	ISSUED FOR 99% CD	2015/07/29
3	ISSUED FOR 66% CD	2015/06/17
2	ISSUED FOR 33% CD	2015/06/03
1	ISSUED FOR SCHEMATIC DESIGN	2015/05/27
0	DESCRIPTION	

Client/client

**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**

**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only

Designed by/Concept par  
**TY**

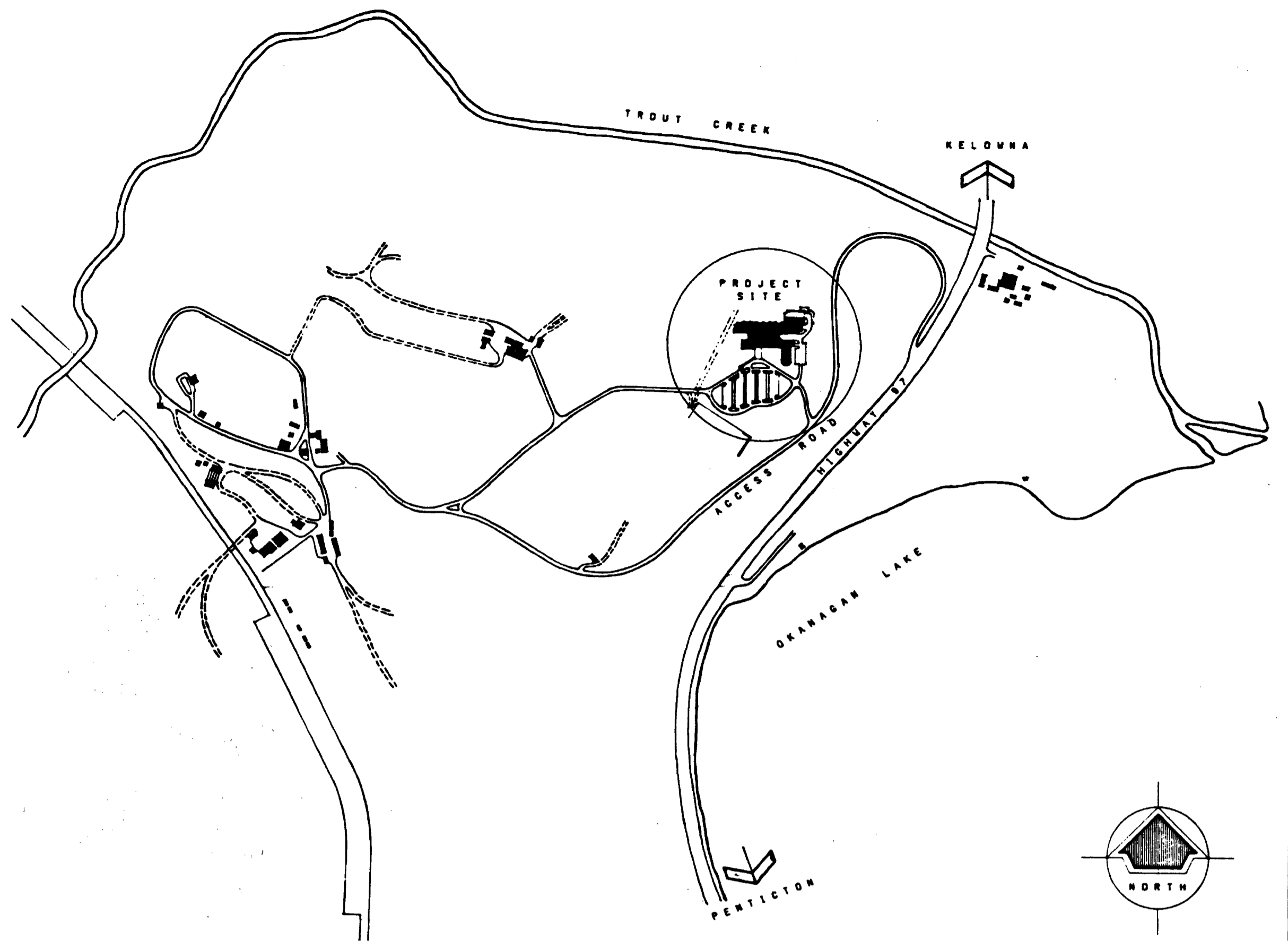
Drawn by/Dessiné par  
**MW**

PWSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architecture et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**HOARDING PLAN**

Project No./No. du projet <b>R.075861.001</b>	Sheet/Feuille <b>A-11</b> OF XX	Revision no./La Révision no. <b>5</b>
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1 SITE PLAN  
M-001 NTS

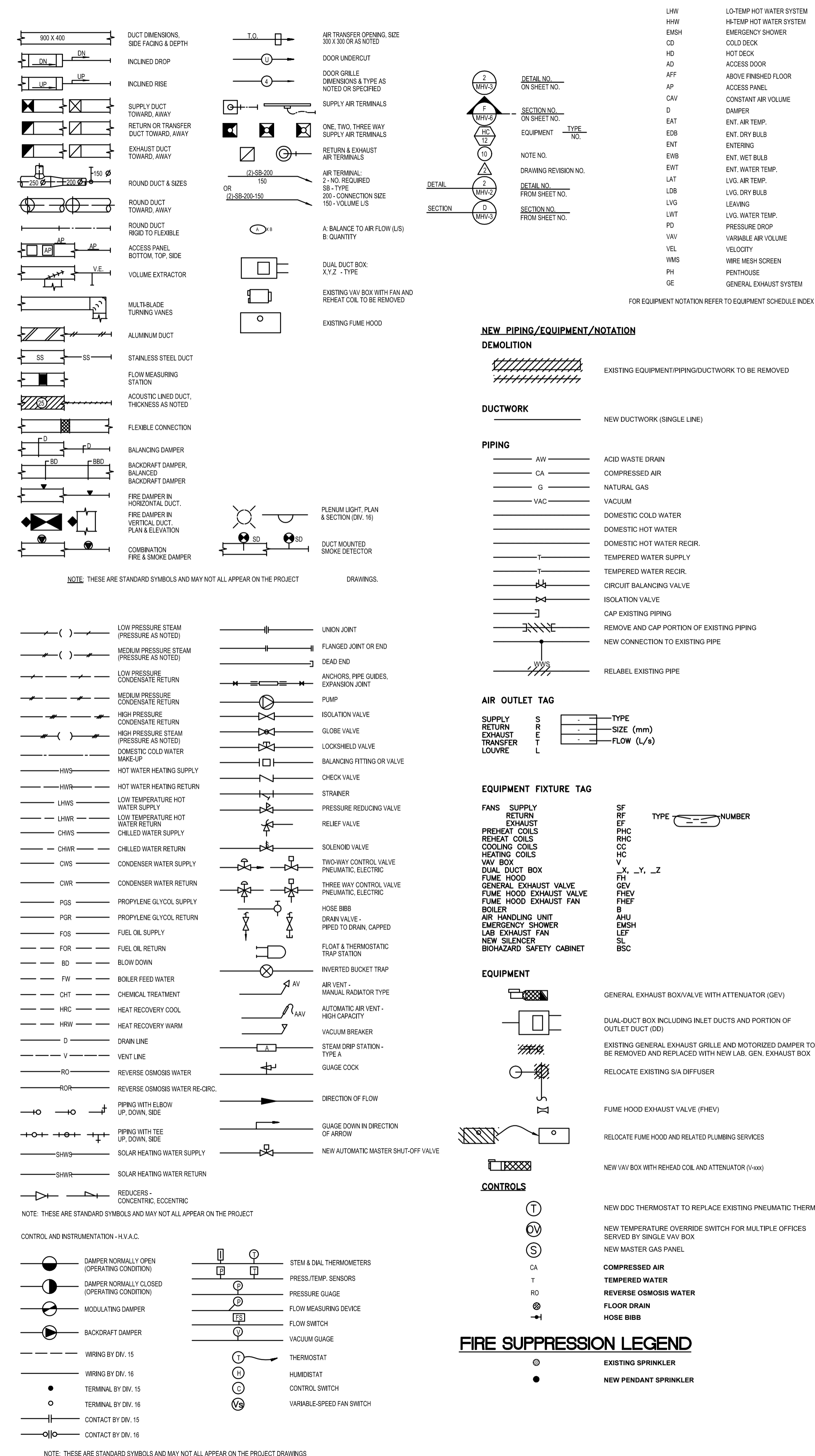
HEAT PUMP SCHEDULE (WATER TO AIR)																				
UNIT TAG	MANUF	MODEL	ROOM SERVED	CONFIG.	CAPACITY (kW) MIN. SENSIBLE	EVAPORATOR / AIR SIDE				CONDENSER / SOURCE WATER				COMPRESSOR	NOTE					
						MIN. TOTAL	EDB (°C)	EWB (°C)	LDB (°C)	LWB (°C)	AIRFLOW (L/S)	ESP (Pa)	FAN SPEED			FLOW (L/S)	P.D. KPA	EWI (°C)	LWT (°C)	ELGEHT.
AC-6	TRANE	GEH-048	2210	LRRS	11.2	14.4	27	19	12.8	--	755	62	MEDIUM	0.64	49	30	36.8	208/3/60	3.82	1-2

1. COOLING MODE PERFORMANCE  
2. REFER TO SPECIFICATIONS FOR ACCESSORIES

DIFFUSER, GRILLE AND REGISTER SCHEDULE						
UNIT #	TYPE	OVERALL DIMENSIONS	MODEL	EQUALS	REMARKS	NOTE
S-1	SUPPLY GRILLE	AS SHOWN	EH PRICE /520/F/A/B12	TITUS	-	-

MECHANICAL DRAWING LIST	
M-001	LEGENDS, NOTES, SCHEDULES, AND DRAWING LIST
M-200	LEVEL 2 DEMOLITION PLAN SOUTH WEST
M-201	LEVEL 2 NEW HVAC PLAN SOUTH WEST
M-202	LEVEL 2 HVAC FUTURE ROUGH-IN PLAN SOUTH WEST
M-203	LEVEL 2 EXISTING HVAC PLAN SOUTH
M-204	LEVEL 2 MECHANICAL PIPING DEMOLITION
M-205	LEVEL 2 NEW MECHANICAL PIPING
M-206	LEVEL 2 MECHANICAL PIPING FUTURE ROUGH-IN PLAN
P-200	LEVEL 2 UNDERGROUND PLUMBING
P-201	LEVEL 2 PLUMBING DEMOLITION
P-202	LEVEL 2 CEILING PLUMBING PLAN
F-200	LEVEL 2 NEW FLOOR PLAN FIRE SUPPRESSION

MECHANICAL LEGEND:



Revision	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.17
0	ISSUED FOR 30% REVIEW	2015.06.03

AGRICULTURE AND AGRI-FOOD CANADA

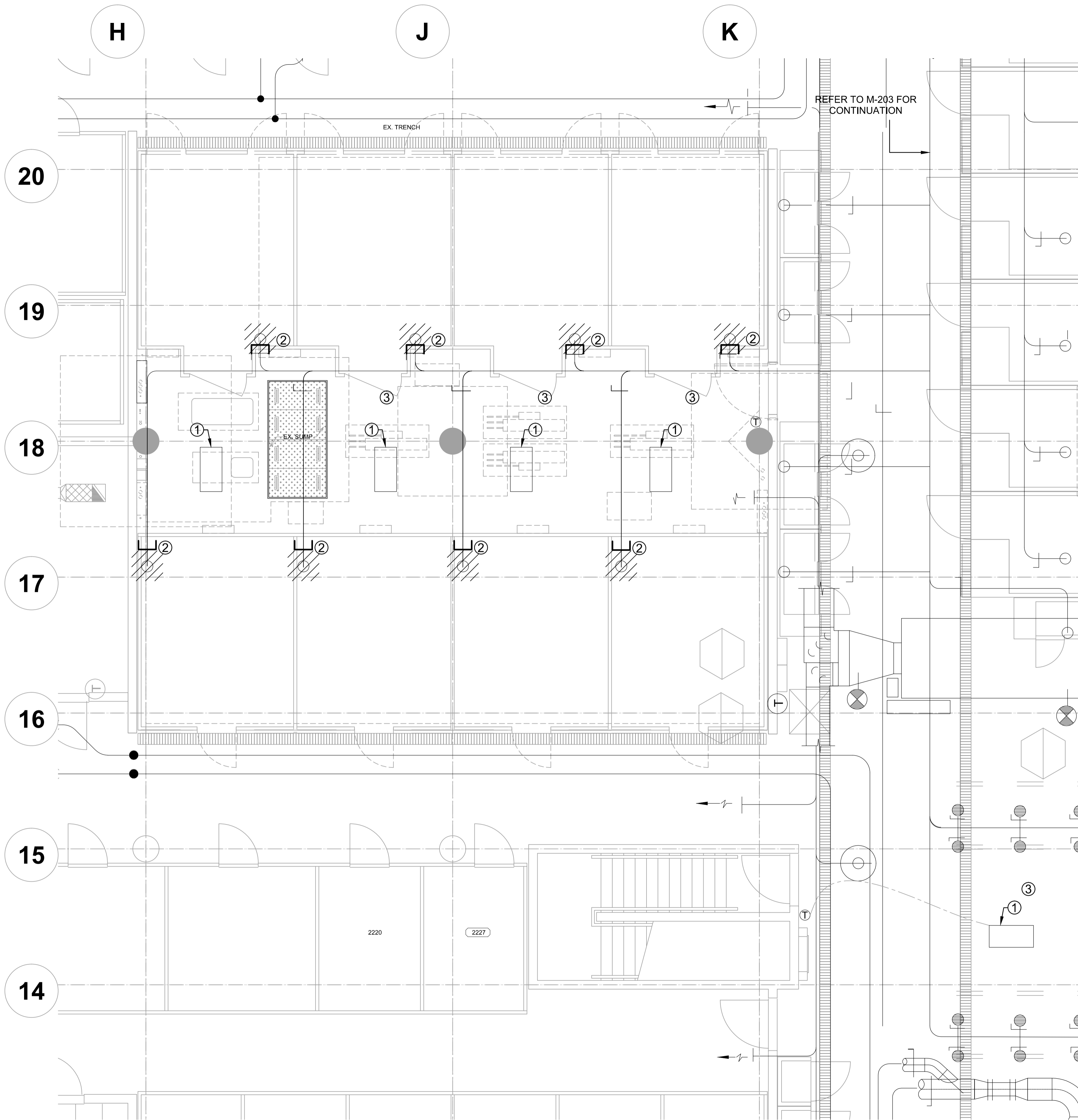
Project Title/Titre du projet  
4200 97 HWY SOUTH SUMMERLAND BC  
PACIFIC AGRI-FOOD GROWTH CHAMBER REPLACEMENT

Consultant Signature Only  
Designed by/Concept par DR  
Drawn by/Dessiné par VL  
PWGSC Project Manager/Administrateur de Projets TPSGC  
TOM DUNPHY  
Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSGC  
PREETIPAL PAUL

LEGENDS, NOTES, SCHEDULES AND DRAWING LIST

**DRAWING NOTES:**

- EXISTING A/C UNIT TO REMAIN. SEAL WITH POLY DURING DEMOLITION AND WORK.
- CAP OFF EXISTING EXHAUST. REMOVE REDUNDANT DUCTS AND CONNECTIONS. (NOTE: DUCTS WILL BE RE-USED - REFER TO NEW WORK)
- REMOVE EXISTING R22 BASED COOLING COMPRESSORS. SALVAGE CONTROL COMPONENTS AND HAND OVER TO THE DEPARTMENTAL REPRESENTATIVE.



**LEVEL 2 DEMOLITION PLAN SOUTH WEST**  
1 M-200 1:50

Revision/ Révision	Description/ Description	Date/ Date
5		
4		
3	ISSUED FOR TENDER	2015.06.19
2	ISSUED FOR 99% REVIEW	2015.06.07
1	ISSUED FOR 66% REVIEW	2015.06.17
0	ISSUED FOR 30% REVIEW	2015.06.03

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only  
Designed by/Concept par  
**DR**  
Drawn by/Dessiné par  
**VL**  
PWGSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**  
Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**LEVEL 2 DEMOLITION PLAN SOUTH WEST**

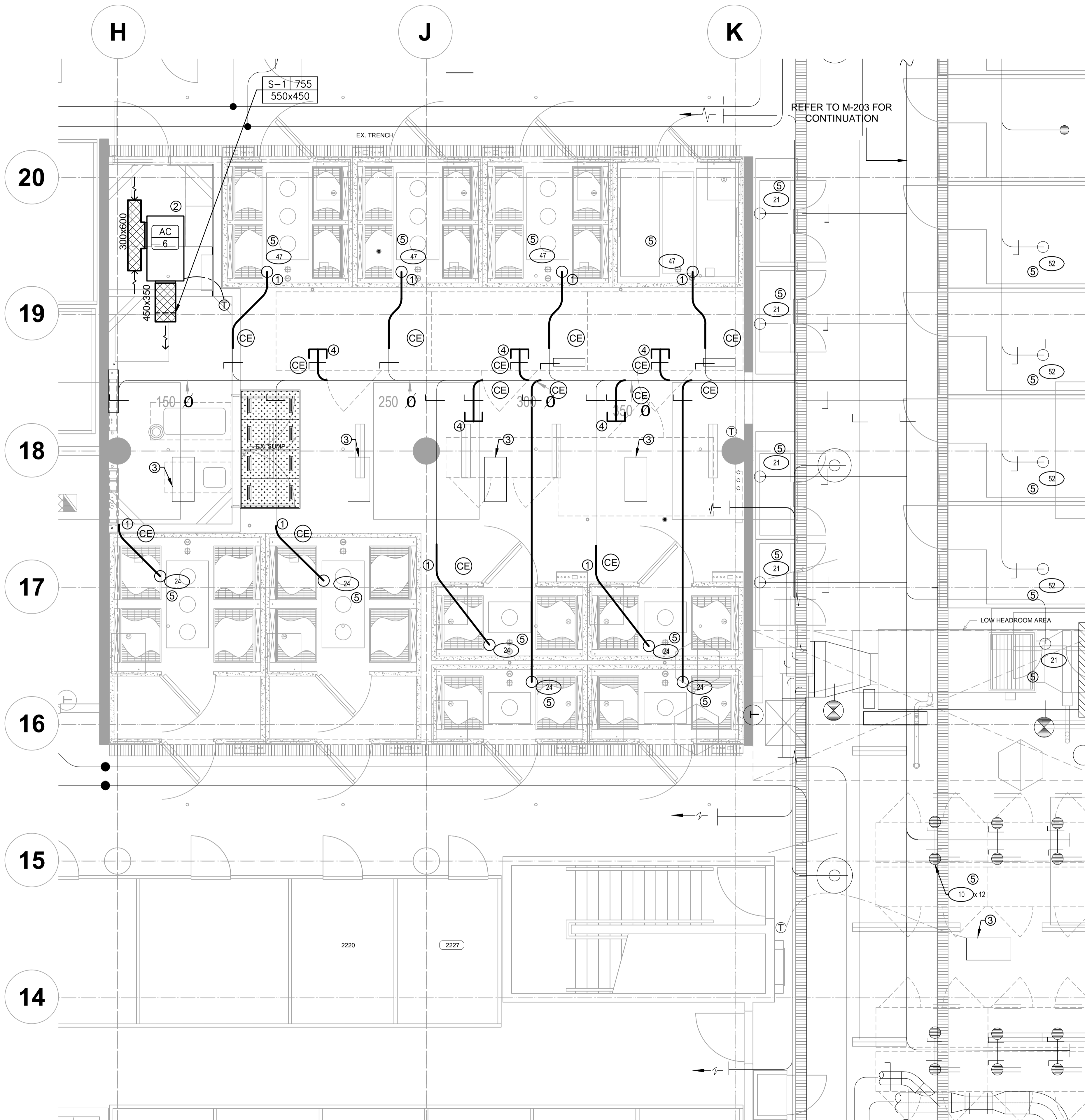
Project No./No. du projet <b>R.075861.001</b>	Sheet/Fauille <b>M-200</b> 2 OF 12	Revision no./La Révision no. <b>3</b>
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**DRAWING NOTES:**

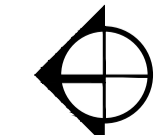
- ① EXTEND EXISTING 150Ø EXHAUST BRANCH TO NEW CHAMBER. TYP. OF ALL NEW CHAMBERS. PROVIDE BALANCE DAMPER
- ② NEW WATER COOLED A/C UNIT
- ③ EXISTING A/C UNIT TO REMAIN. SEAL WITH POLY DURING DEMOLITION AND WORK.
- ④ NEW 150Ø BRANCH FOR FUTURE CHAMBER WITH BALANCE DAMPER. CAP OFF FOR FUTURE
- ⑤ RE-BALANCE THE WHOLE EXHAUST SYSTEM FOR EF-13; AIR FLOW FOR EXISTING BRANCHES IS ALSO IDENTIFIED. ( SEE ALSO DRAWING M-203)

REFER TO M-203 FOR CONTINUATION



**LEVEL 2  
NEW HVAC PLAN SOUTH WEST**

1  
M-201 1:50



Revision/	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.17
0	ISSUED FOR 30% REVIEW	2015.06.03

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD GROWTH CHAMBER REPLACEMENT**

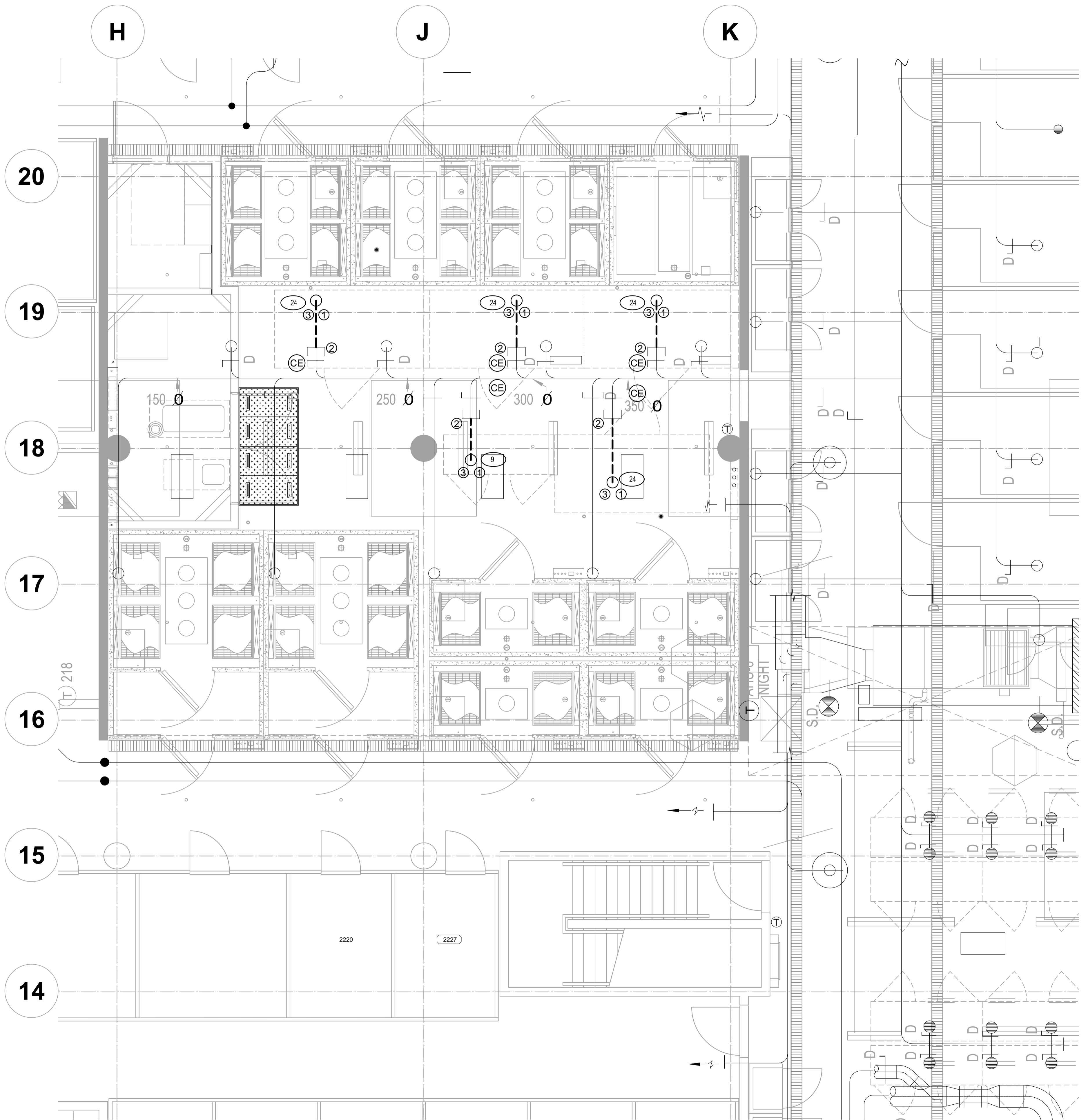
Consultant Signature Only  
Designed by/Concept par  
**DR**  
Drawn by/Dessine par  
**VL**  
PWGSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**  
Regional Manager, Architectural and Engineering Services  
Gestionnaire régional, Services d'architecture et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**LEVEL 2 NEW HVAC PLAN SOUTH WEST**

Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
<b>R.075861.001</b>	<b>M-201</b>	<b>3</b>
	3 OF 12	

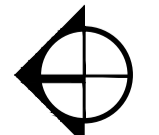
**DRAWING NOTES:**

- ROUGH IN NEW 150Ø EXHAUST BRANCH FOR FUTURE CHAMBER. TERMINATE WITHIN 300 ABOVE EXHAUST CONNECTION POINT. CAP OFF AND PROVIDE BALANCE DAMPERS.
- NEW 150Ø BRANCH FOR FUTURE CHAMBER WITH BALANCE DAMPER. CAP OFF FOR FUTURE
- FUTURE EXHAUST CONNECTION - CONNECT TO NEW GROWTH CHAMBERS IN FUTURE



**LEVEL 2  
1 HVAC FUTURE ROUGH-IN PLAN SOUTH WEST**

M-202 1:50



Revision/	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.17
0	ISSUED FOR 30% REVIEW	2015.06.03

Client/client

**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only

Designed by/Concept par  
**DR**

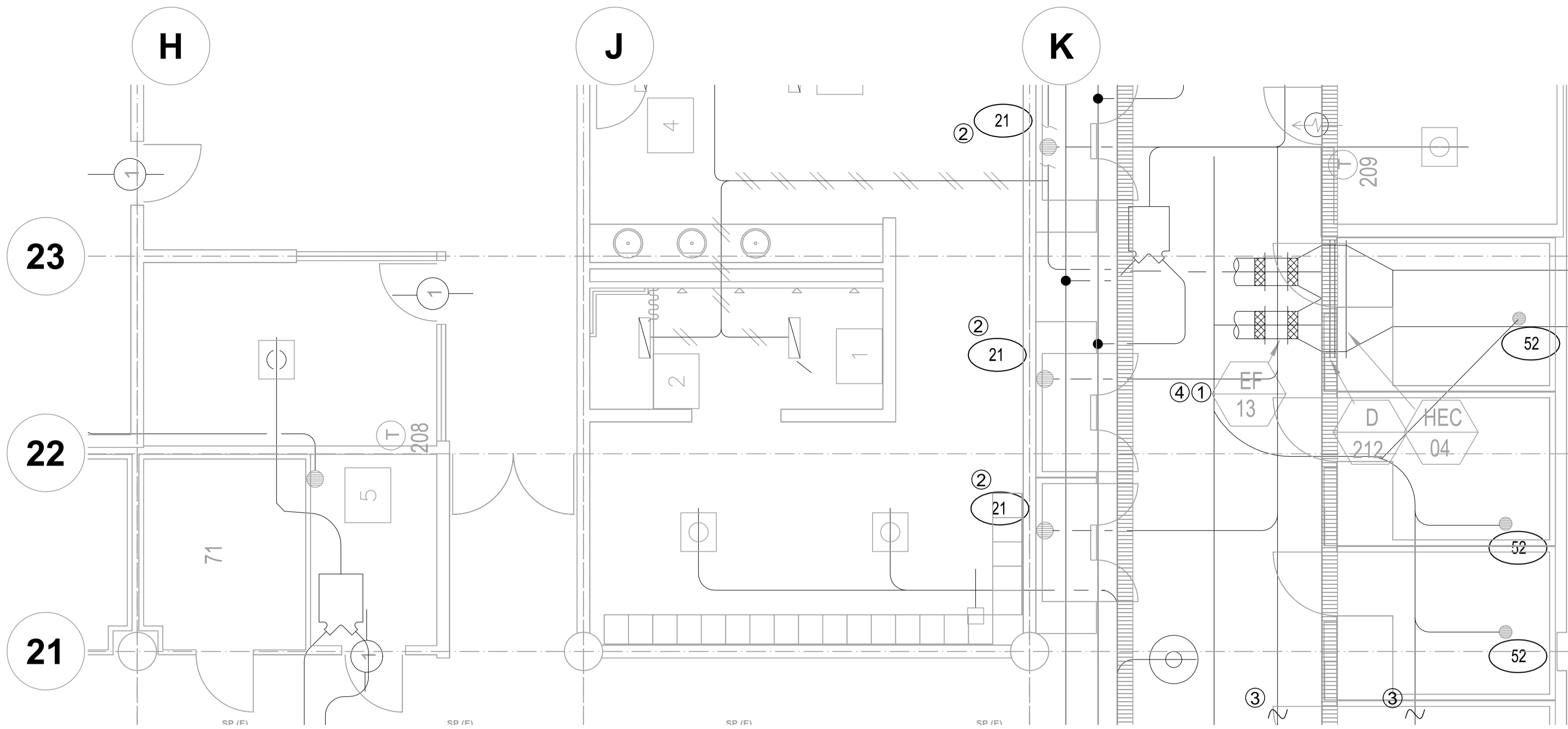
Drawn by/Dessine par  
**VL**

PWSSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architecture et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**LEVEL 2 HVAC FUTURE ROUGH-IN PLAN SOUTH WEST**

Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.075861.001	<b>M-202</b>	<b>3</b>



**DRAWING NOTES:**

- ① RE-BALANCE EXHAUST SYSTEM FOR FAN EF-13 & ALL DUCT BRANCHES
- ② RE-BALANCE ALL DUCT BRANCHES (TYPICAL)
- ③ FOR CONTINUATION SEE DRAWING M-201
- ④ REFURBISH EXISTING FAN. REPLACE & GREASE BEARINGS. REPLACE SHEAVE AND BELT.

1  
M-203 1:50  
**LEVEL 2  
EXISTING HVAC PLAN SOUTH**

Revision/Revisión	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.17
0	ISSUED FOR 30% REVIEW	2015.06.03

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC  
PACIFIC AGRI-FOOD GROWTH CHAMBER REPLACEMENT**

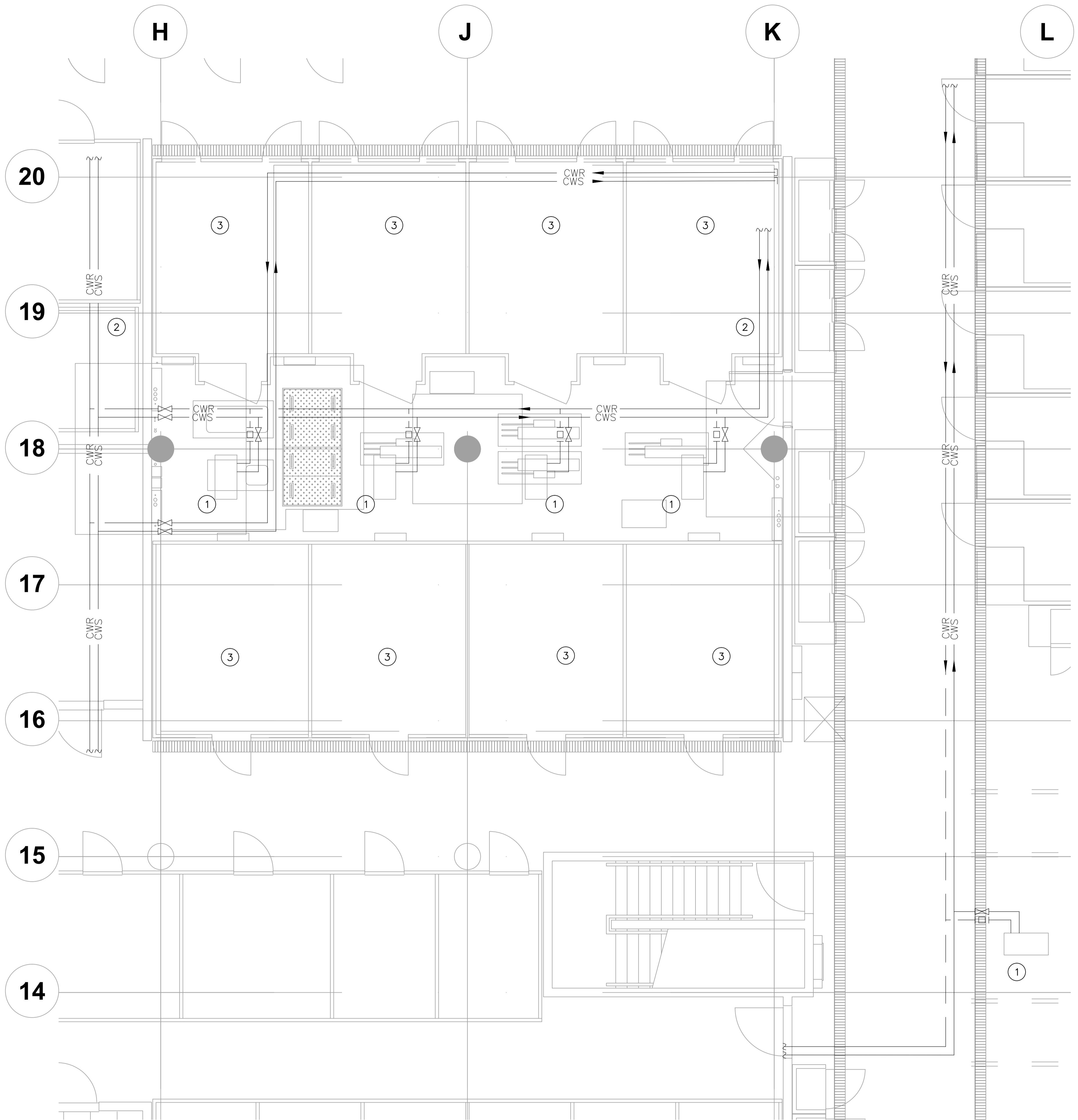
Consultant Signature Only  
Designed by/Concept par  
**DR**  
Drawn by/Dessiné par  
**VL**  
PWGSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**  
Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**LEVEL 2  
EXISTING HVAC PLAN SOUTH**

Project No./No. du projet <b>R.075861.001</b>	Sheet/Fauille <b>M-203</b>	Revision no./La Révision no. <b>3</b>
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**DRAWING NOTES:**

- EXISTING A/C UNIT TO REMAIN. SEAL WITH POLY DURING DEMOLITION AND WORK.
- CONDENSER WATER PIPING TO REMAIN. PROTECT DURING RENOVATION WORK.
- DISCONNECT CWS/R PIPES FROM 16 COMPRESSORS ABOVE EXISTING CHAMBERS (NOT SHOWN).



1  
M-204 1:50  
**LEVEL 2  
MECHANICAL PIPING DEMOLITION**

Revision/Revision	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.11
0	ISSUED FOR 33% REVIEW	2015.06.01

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only  
Designed by/Concept par  
**DR**  
Drawn by/Dessiné par  
**VL**  
PWGSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**  
Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architecture et de génie, TPSGC  
**PRETIPAL PAUL**

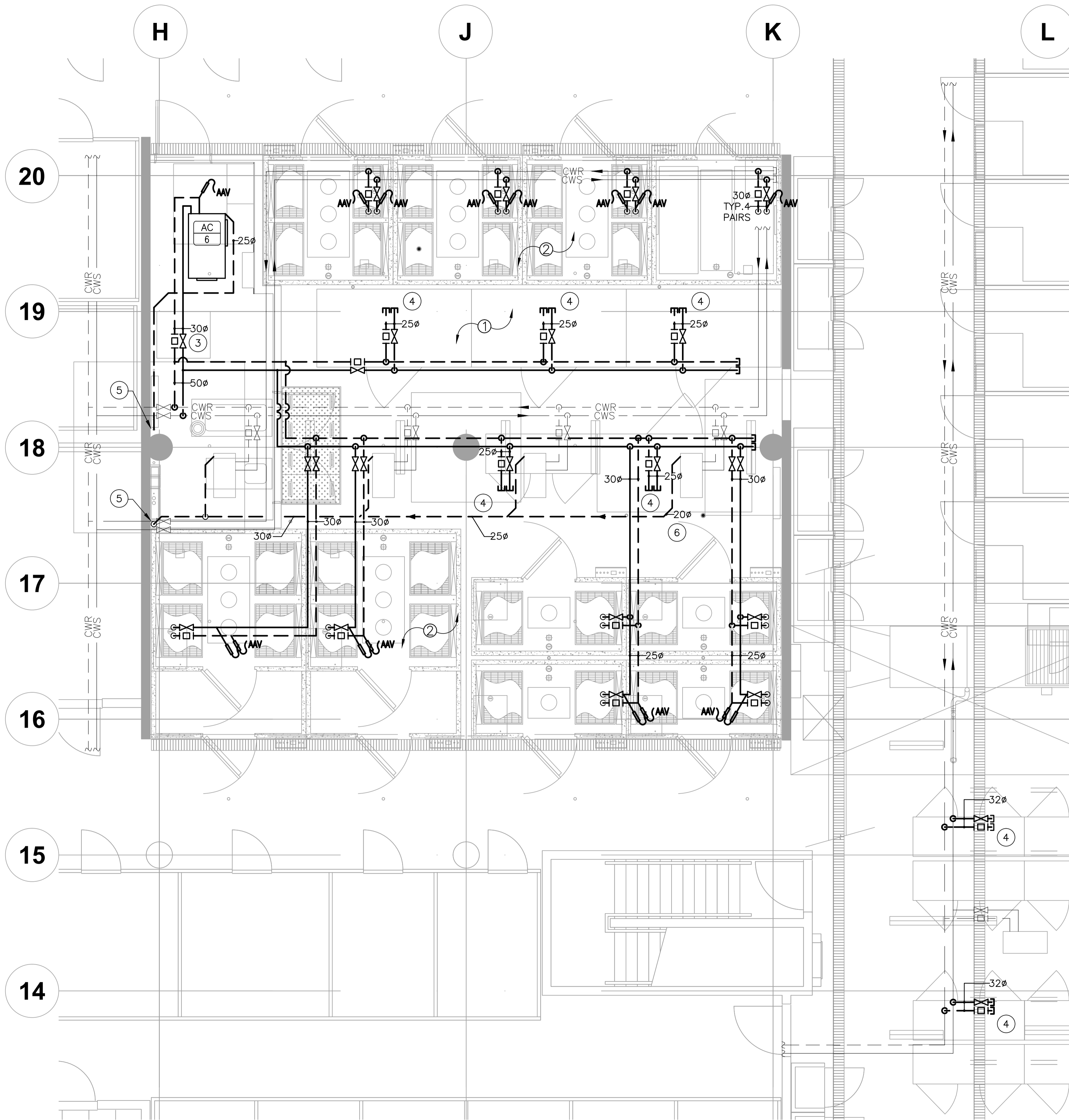
Drawing title/Titre du dessin  
**LEVEL 2 MECHANICAL PIPING DEMOLITION**

Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.075861.001	M-204	3



**DRAWING NOTES:**

- 1 DISCONNECT CWS/R PIPES FROM 4 FLOOR MOUNT COMPRESSORS (NOT SHOWN). STRIP BACK AND CAP BRANCHES AT MAINS.
- 2 CONNECT NEW CHAMBER COMPRESSORS ABOVE NEW CHAMBERS. REFER TO CHAMBER SUBMITTALS FOR EXACT CONNECTION LOCATIONS ABOVE CHAMBERS. PIPE 20# CONDENSATE DRAIN TO THE FLOOR DRAIN FOR EACH CHAMBER.
- 3 CONNECT CWS/R PIPES TO NEW A/C UNITS.
- 4 CONNECT NEW 50# CWS/R BRANCHES TO MAINS FOR FUTURE EXTENSION. ROUGH-IN NEW CONDENSER WATER BRANCHES FOR FUTURE CHAMBERS. TERMINATE WITHIN 300 ABOVE CHAMBER CONNECTION POINT. CAP OFF.
- 5 RUN NEW CONDENSATE DRAIN TO EXISTING 50# STANDING WASTE.
- 6 PROVIDE NEW CONDENSATE DRAINS FOR EXISTING A/C UNITS TYP.



1  
M-205 1:50  
**LEVEL 2  
NEW MECHANICAL PIPING**

Revision/	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.11
0	ISSUED FOR 33% REVIEW	2015.06.01

Client/client

**AGRICULTURE  
AND  
AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY  
SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD  
GROWTH CHAMBER  
REPLACEMENT**

Consultant Signature Only

Designed by/Concept par  
**DR**

Drawn by/Dessine par  
**VL**

PWGS Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**

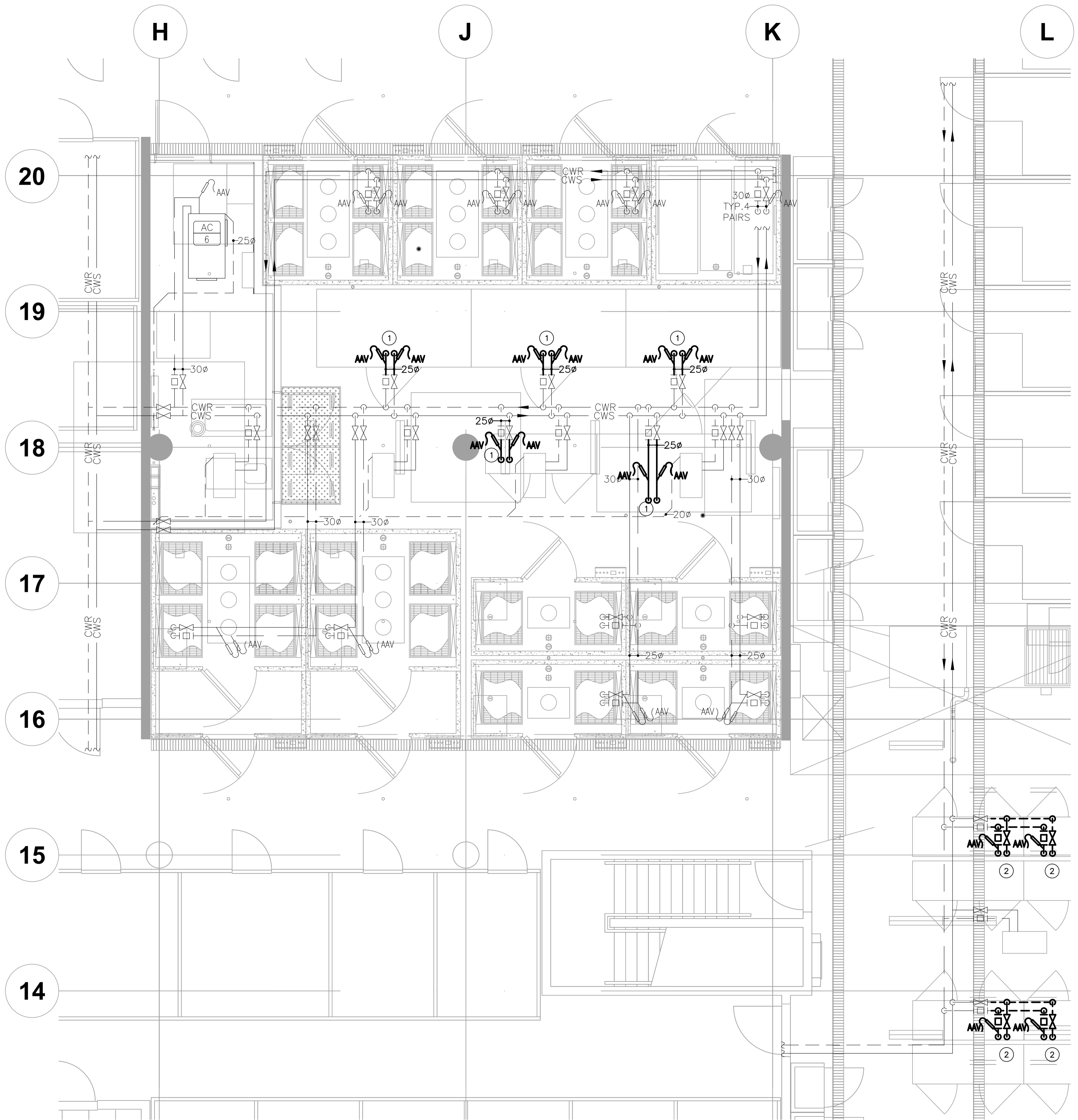
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**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**LEVEL 2  
NEW MECHANICAL PIPING**

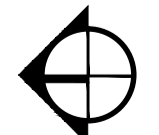
Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.075861.001	<b>M-205</b> 7 OF 12	<b>3</b>

**DRAWING NOTES:**

- ① CONNECT IN NEW CONDENSER WATER BRANCHES TO FUTURE CHAMBERS WITHIN 300 CHAMBER CONNECTION POINT.
- ② TYPICAL FUTURE CHAMBER CONNECTIONS



1  
M-206 1:50  
**LEVEL 2  
MECHANICAL PIPING FUTURE ROUGH-IN PLAN**



Revision/	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.11
0	ISSUED FOR 33% REVIEW	2015.06.01

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only  
Designed by/Concept par  
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Drawn by/Dessine par  
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PWGSC Project Manager/Administrateur de Projets TPSGC  
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Gestionnaire régionale, Services d'architecture et de génie, TPSGC  
**PRETIPAL PAUL**

Drawing title/Titre du dessin  
**LEVEL 2 MECHANICAL PIPING FUTURE ROUGH-IN PLAN**

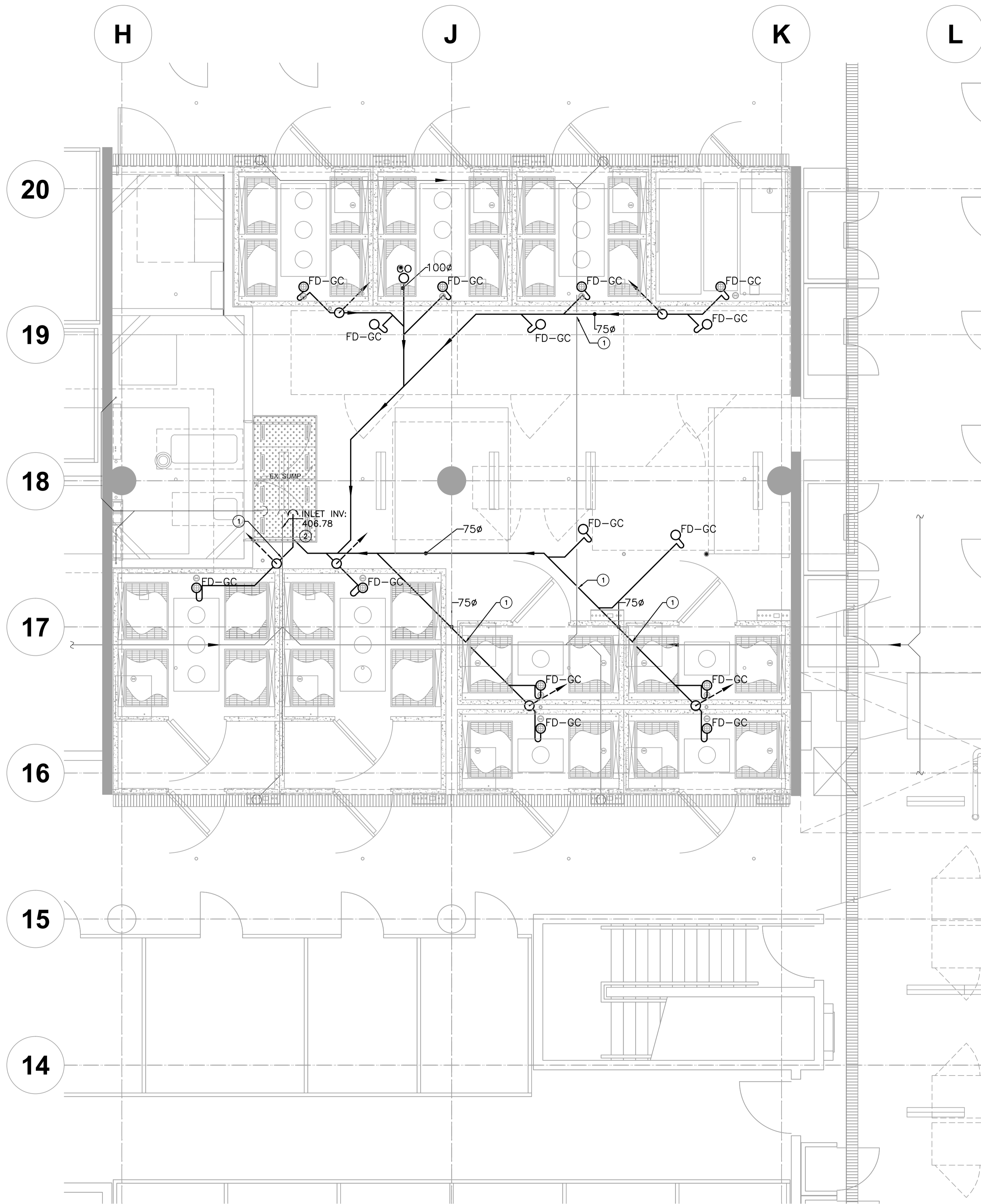
Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.075861.001	<b>M-206</b>	<b>3</b>
	8 OF 12	

**GENERAL NOTES:**

1. PROVIDE TRAP PRIMER FOR ALL NEW FLOOR DRAINS
2. ALL FLOOR DRAINS WITH SEDIMENT BUCKET

**DRAWING NOTES:**

- ① EXACT LOCATION AND DEPTH OF EXISTING DRAINS IS NOT KNOWN. ALLOW FOR INSTALLING NEW DRAIN BRANCHES DEEPER TO AVOID CONFLICT.
- ② RUN NEW SANITARY DRAIN TO EXISTING SUMP. REFER TO SPECIFICATIONS.



**LEVEL 2  
UNDERSLAB PLUMBING**

1  
P-200 1:50

Revision/Revision	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.17
0	ISSUE FOR 30% REVIEW	2015.06.03

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD GROWTH CHAMBER REPLACEMENT**

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**VL**

PWGS&C Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**

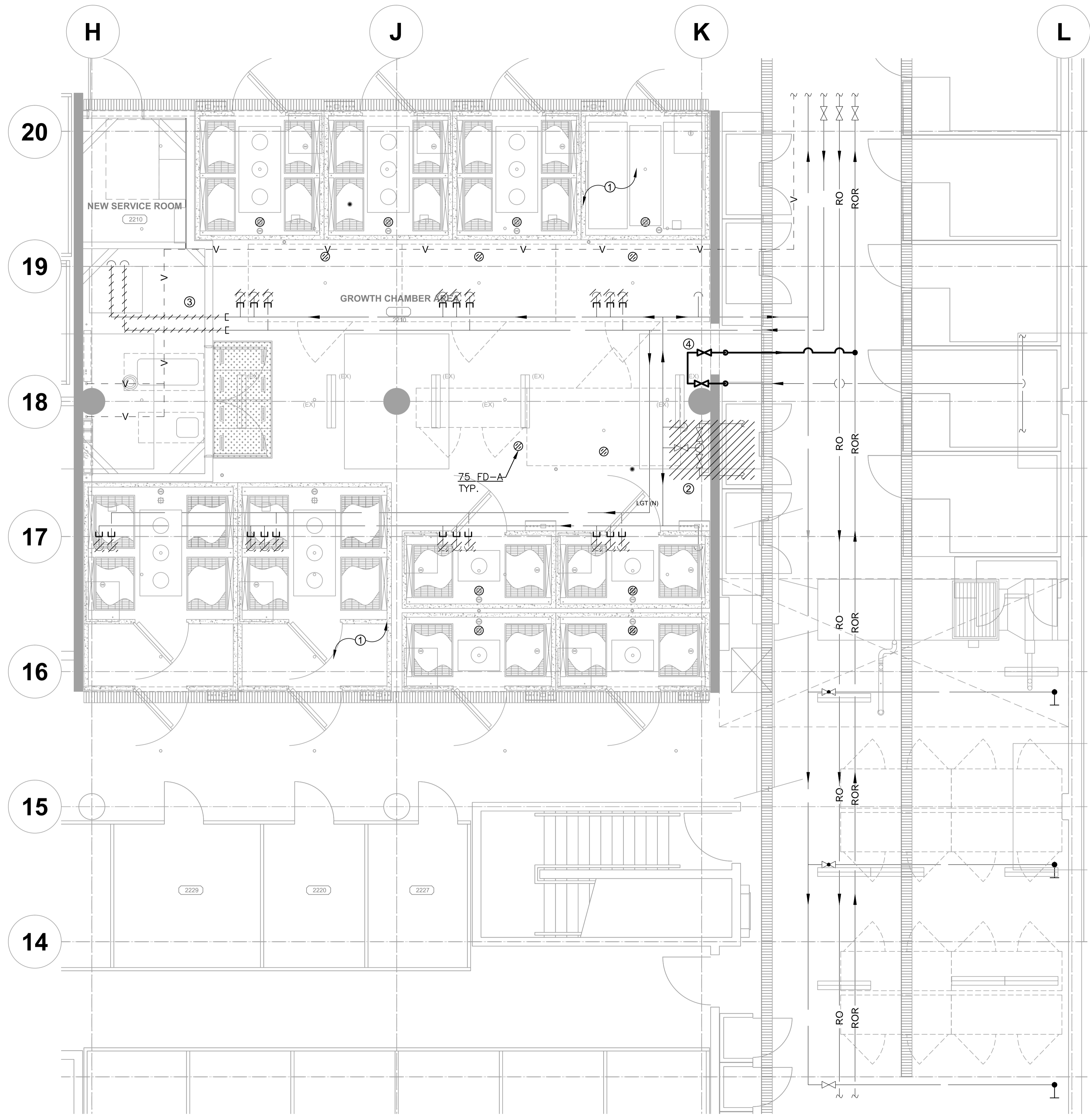
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Drawing title/Titre du dessin  
**LEVEL 2 UNDERGROUND PLUMBING**

Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
<b>R.075861.001</b>	<b>P-200</b>	<b>3</b>
	9 OF 12	

**DRAWING NOTES:**

- ① FOR THE 8 EXISTING CHAMBERS CUT BACK 1 COMPRESSED AIR LINE & 2 TEMPERED WATER LINES. CAP OFF ALL PIPES.
- ② REMOVE TEMPERING VALVE. (VALVE WILL BE RELOCATED)
- ③ REMOVE TEMPERED WATER AND COMPRESSED AIR LINE. (TYPICAL)
- ④ PROVIDE TEMPORARY BYPASS ON RO WATER SYSTEM. USE 8MM (3/8") TYGON TUBING BETWEEN THE VALVES.



**LEVEL 2  
PLUMBING DEMOLITION**

1  
P-201 1:50

5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 90% REVIEW	2015.08.07
1	ISSUED FOR 60% REVIEW	2015.06.17
0	ISSUE FOR 33% REVIEW	2015.06.03
Revision/ Revision	Description/Description	Date/Date

Client/client

**AGRICULTURE  
AND  
AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY  
SOUTH SUMMERLAND BC**

**PACIFIC AGRI-FOOD  
GROWTH CHAMBER  
REPLACEMENT**

Consultant Signature Only

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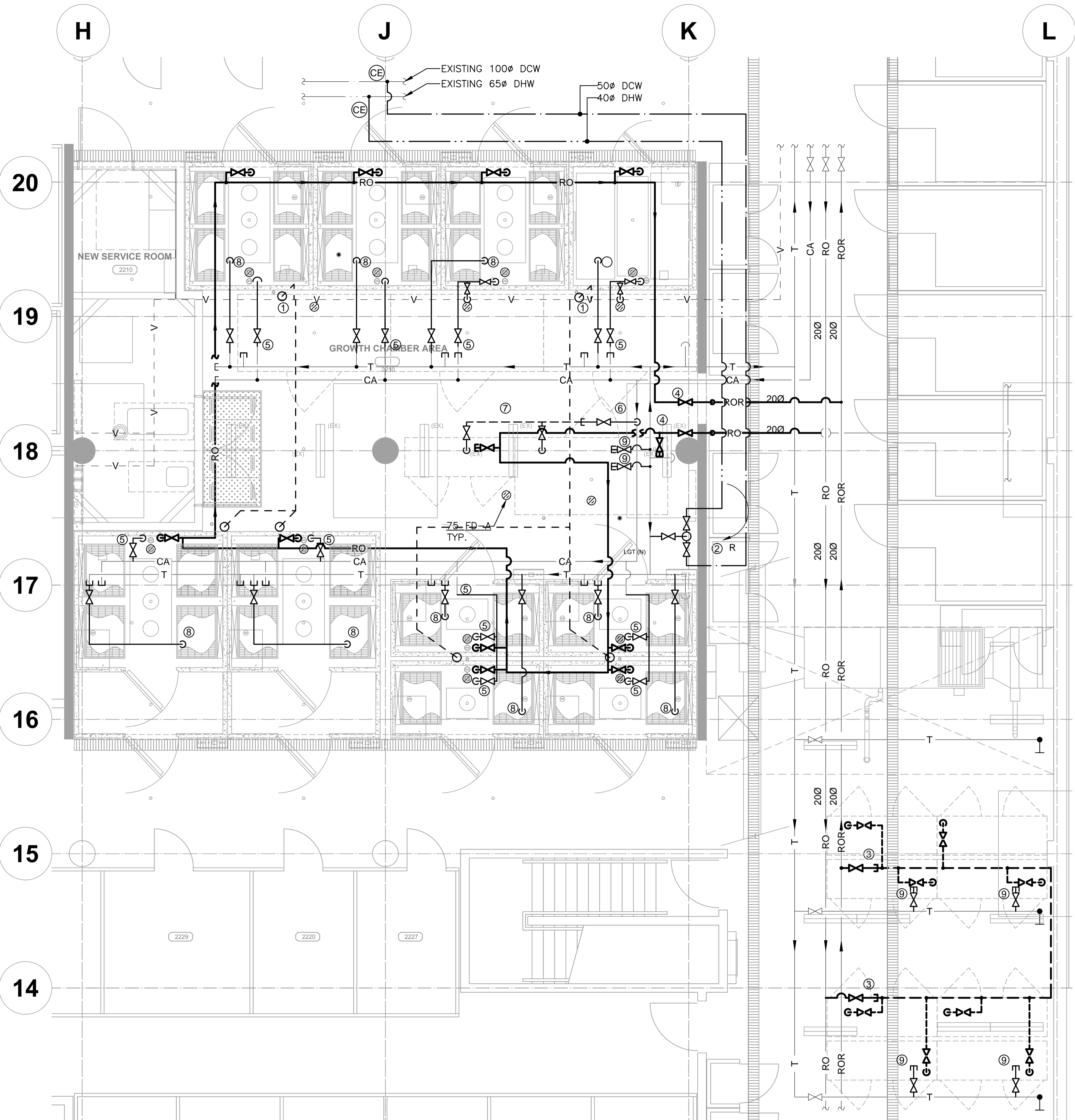
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**TOM DUNPHY**

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Gestionnaire Régionale, Services d'architectural et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**LEVEL 2  
PLUMBING DEMOLITION**

Project No./No. du projet <b>R.075861.001</b>	Sheet/Feuille <b>P-201</b> 10 OF 12	Revision no./ no. Révision <b>3</b>
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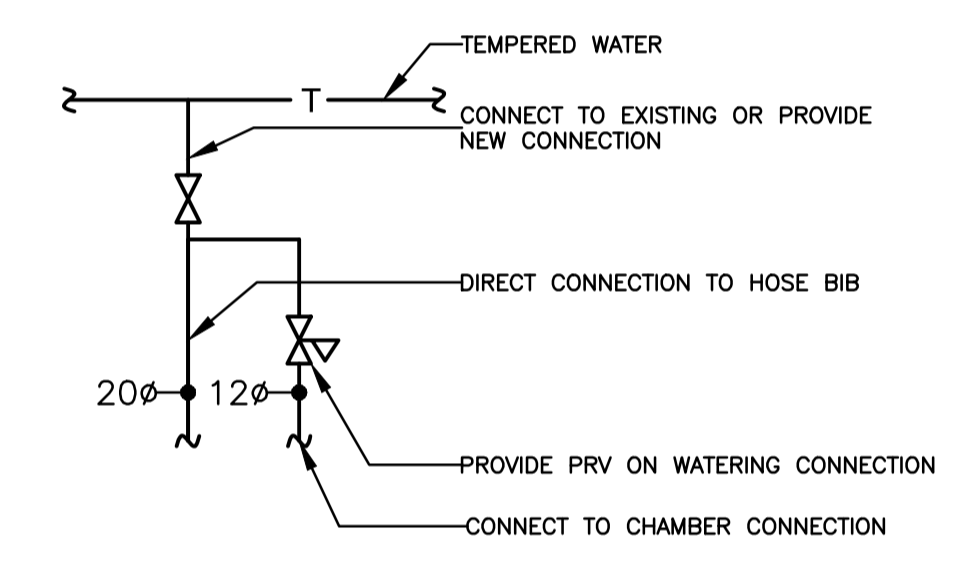




**DRAWING NOTES:**

- ① CONNECT TO EXISTING VENT
- ② RELOCATE MIXING VALVE
- ③ RO WATER CONNECTION FOR FUTURE EXTENSION
- ④ REMOVE TEMPORARY BYPASS. CONNECT NEW RO LOOP. MINIMIZE DEADLEGS.
- ⑤ EXTEND CA CONNECTION. CONNECT NEW GROWTH CHAMBER.
- ⑥ CAP OFF CA LINE FOR FUTURE
- ⑦ FUTURE CA LINE
- ⑧ TEMPERED WATER CONNECTION - SEE DETAIL ON THIS SHEET (TYPICAL)
- ⑨ FUTURE TEMPERED WATER CONNECTION

**TEMPERED WATER CONNECTION DETAIL**



**LEVEL 2  
CEILING PLUMBING PLAN**  
1  
P-202 1:50

Revision/Revision	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.17
0	ISSUE FOR 30% REVIEW	2015.06.03

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC  
PACIFIC AGRI-FOOD  
GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only  
Designed by/Concept par  
**DR**  
Drawn by/Dessine par  
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**TOM DUNPHY**  
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Gestionnaire régionale, Services d'architectural et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**LEVEL 2  
CEILING PLUMBING PLAN**

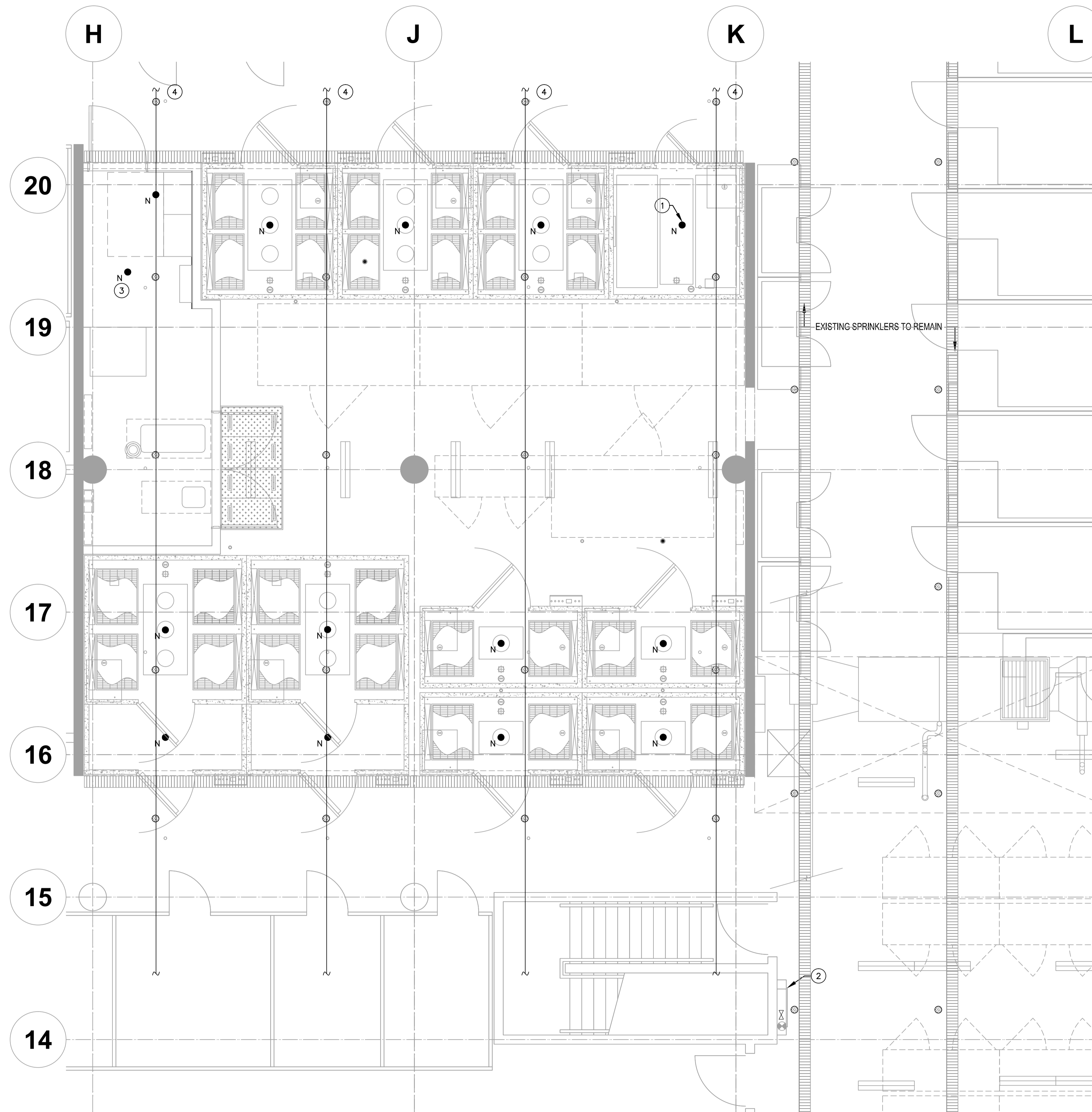
Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
<b>R.075861.001</b>	<b>P-202</b>	<b>3</b>

**GENERAL NOTES:**

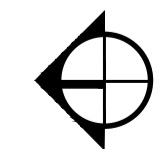
- ① PROTECT EXISTING PIPING AND SPRINKLER HEADS DURING DEMOLITION

**DRAWING NOTES:**

- ① PROVIDE NEW PENDANT SPRINKLER WITHIN GROWTH CHAMBER BELOW. TYPICAL OF ALL NEW GROWTH CHAMBERS. PIPE TO WET SPRINKLER BRANCHES ABOVE.
- ② FIRE HOSE VALVE & FIRE EXTINGUISHER TO REMAIN. PROTECT DURING DEMOLITION AND NEW WORK.
- ③ ADD SPRINKLER HEAD BELOW NEW AC UNIT
- ④ EXISTING SPRINKLER PIPING



**LEVEL 2  
FIRE SUPPRESSION**  
1  
F-200 1:50



Revision/	Description/Description	Date/Date
5		
4		
3	ISSUED FOR TENDER	2015.08.19
2	ISSUED FOR 99% REVIEW	2015.08.07
1	ISSUED FOR 66% REVIEW	2015.06.17
0	ISSUE FOR 30% REVIEW	2015.06.03

Client/client

**AGRICULTURE  
AND  
AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY  
SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD  
GROWTH CHAMBER  
REPLACEMENT**

Consultant Signature Only

Designed by/Concept par  
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Gestionnaire régional, Services d'architectural et de génie, TPSGC  
**PREETIPAL PAUL**

Drawing title/Titre du dessin

**LEVEL 2  
NEW FLOOR PLAN  
FIRE SUPPRESSION**

Project No./No. du projet

**R.075861.001**

Sheet/Fauille

**F-200**

Revision no./La Révision no.

**3**

12 OF 12

# ELECTRICAL DRAWINGS FOR PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT

LIGHTING PLAN SYMBOLS	
	SURFACE MOUNTED OR SUSPENDED FLUORESCENT LUMINAIRE, 1'x4'
	SURFACE MOUNTED OR SUSPENDED FLUORESCENT LUMINAIRE, 2'x4'
	SURFACE MOUNTED OR SUSPENDED FLUORESCENT LUMINAIRE, 2'x2'
	RECESSED FLUORESCENT LUMINAIRE, 1'x4'
	RECESSED FLUORESCENT LUMINAIRE, 2'x4'
	RECESSED FLUORESCENT LUMINAIRE, 2'x2'
	FLUORESCENT STRIP LUMINAIRE, 4'
	FLUORESCENT STRIP LUMINAIRE, 3'
	FLUORESCENT STRIP LUMINAIRE, 2'
	WALL MOUNTED LINEAR FLUORESCENT LUMINAIRE, 4'
	WALL MOUNTED LINEAR FLUORESCENT LUMINAIRE, 3'
	WALL MOUNTED LINEAR FLUORESCENT LUMINAIRE, 2'
	RECESSED LUMINAIRE / POT LIGHT, 6" DIAMETER OR LARGER
	RECESSED LUMINAIRE / POT LIGHT, LESS THAN 6" DIAMETER
	SURFACE MOUNTED OR SUSPENDED LUMINAIRE
	STEP OR WALL MOUNTED LUMINAIRE
	BOLLARD OR IN-GROUND LUMINAIRE
	RECESSED ADJUSTABLE LUMINAIRE ARRAY (# OF HEADS AS SHOWN)
	POLE MOUNTED LUMINAIRE (SINGLE HEAD)
	POLE MOUNTED LUMINAIRE (DOUBLE HEAD)
	LUMINAIRE ON EMERGENCY CIRCUIT (INDICATED BY HALF SHADING)
	DIRECTIONAL / AIMED LUMINAIRE (ARROW INDICATES DIRECTION)
	CEILING MOUNTED EXIT SIGN (TEXT ON SHADED SIDES, ARROWS AS INDICATED)
	WALL MOUNTED EXIT SIGN (TEXT ON SHADED SIDES, ARROWS AS INDICATED)
	TRACK LIGHT (# OF HEADS AS SHOWN, LENGTH AS INDICATED)
	LINE VOLTAGE SWITCH (120V TO 347V)
	LOW VOLTAGE SWITCH (30V OR LESS)
	MULTIPLE LOW VOLTAGE SWITCHES (QUANTITY AS INDICATED)
	LOW VOLTAGE DIMMER SWITCH
	LINE VOLTAGE DIMMER SWITCH
	LOW VOLTAGE SWITCH c/w OCCUPANCY SENSOR

LIGHTING ANNOTATION LEGEND	
	LUMINAIRE TYPE (SCHEDULE REFERENCE)
	SWITCH LEG
	PANEL AND CIRCUIT

POWER PLAN SYMBOLS	
	DUPLEX 5-15R RECEPTACLE
	DUPLEX 5-15R RECEPTACLE C/W INTEGRAL GFCI PROTECTION
	DUPLEX 5-20R RECEPTACLE, 1-SLOT
	SINGLE 5-15R RECEPTACLE
	SPLIT CIRCUIT DUPLEX 5-15R RECEPTACLE
	TWO DUPLEX 5-15R RECEPTACLES
	SPECIAL RECEPTACLE (TYPE AS INDICATED)
	REEL CORD RECEPTACLE (TYPE AS INDICATED)
	FLOOR MOUNTED DUPLEX 5-15R RECEPTACLE
	TWO FLOOR MOUNTED DUPLEX 5-15R RECEPTACLES
	CEILING MOUNTED DUPLEX 5-15R RECEPTACLE
	TWO CEILING MOUNTED DUPLEX 5-15R RECEPTACLES
	SERVICE COLUMN / PACK POLE (OUTLETS AS INDICATED)
	UTILITY POLE (TYPE AS INDICATED)
	CEILING MOUNTED JUNCTION BOX
	WALL MOUNTED JUNCTION BOX
	FLOOR MOUNTED JUNCTION BOX
	POWER PANELBOARD
	PANEL (TYPE AS INDICATED - SECURITY, LIGHTING RELAY, ETC.)
	SURFACE RACEWAY (TYPE AS INDICATED)
	PUSHBUTTON (TYPE AND WIRING AS INDICATED)
	GROUND BUS BAR
	ROOM REFERENCE GROUND BUS
	MOTOR
	MOTOR c/w DISCONNECT SWITCH
	COMBINATION DISCONNECT AND MAGNETIC MOTOR STARTER
	DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	MAGNETIC MOTOR STARTER
	THERMOSTAT
	MANUAL MOTOR STARTER c/w PILOT LIGHT
	CONDUIT STUB
	CONDUIT UP
	CONDUIT DOWN
	DEVICE MOUNTED ABOVE MILLWORK COUNTERTOP

SCHEMATIC SYMBOLS	
	DRAW OUT LOW VOLTAGE CIRCUIT BREAKER
	LOW VOLTAGE CIRCUIT BREAKER
	HIGH VOLTAGE CIRCUIT BREAKER
	DRAW OUT HIGH VOLTAGE CIRCUIT BREAKER
	LOAD BREAK SWITCH
	DISCONNECT SWITCH
	FUSE
	TRANSFORMER
	AUTOTRANSFORMER
	CURRENT TRANSFORMERS (# INDICATES NUMBER OF CTs IN GROUP)
	ZERO SEQUENCE CURRENT TRANSFORMER
	POTENTIAL TRANSFORMERS (# INDICATES NUMBER OF PTs IN GROUP)
	TRANSFER SWITCH
	AUTOMATIC TRANSFER SWITCH C/W SINGLE ISOLATION/BYPASS
	AUTOMATIC TRANSFER SWITCH C/W DUAL ISOLATION/BYPASS
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	GENERATOR
	REVENUE METER
	DIGITAL INFORMATION METER
	DELTA CONNECTION
	WYE CONNECTION
	GROUND CONNECTION
	HIGH VOLTAGE STRESS RELIEF CONE
	POTHEAD
	CAPACITOR
	SURGE PROTECTIVE DEVICE
	LIGHTNING ARRESTOR
	PANELBOARD

GENERAL SYMBOLS	
	NOTE REFERENCE
	EQUIPMENT REFERENCE
	REVISION NUMBER
	WIRING HOME RUN

FIRE ALARM SYMBOLS	
	FIRE ALARM MANUAL STATION
	FIRE ALARM BELL
	FIRE ALARM PIEZO (MINI) SOUNDER
	FIRE ALARM ELECTRONIC HORN/SOUNDER/CHIME
	FIRE ALARM ELECTRONIC HORN/SOUNDER/CHIME c/w STROBE
	FIRE ALARM HORN SPEAKER
	FIRE ALARM CONE SPEAKER
	FIRE ALARM CONE SPEAKER c/w STROBE

ABBREVIATIONS	
EX	EXISTING DEVICE TO REMAIN
RE	REMOVE EXISTING DEVICE
RP	REPLACE EXISTING DEVICE WITH NEW DEVICE
RL	RELOCATE EXISTING DEVICE

DRAWING LIST	
E-1	ELECTRICAL LEGEND AND DRAWING LIST
E-2	ELECTRICAL DEMOLITION PLAN
E-3	ELECTRICAL AREA AND ELECTRICAL ROOM DETAILS
E-4	POWER LAYOUT
E-5	LIGHTING LAYOUT
E-6	SINGLE LINE DIAGRAM FOR NEW ADDITION AND DEMOLITION
E-7	COMMUNICATION PLAN
E-8	PANEL SCHEDULE
E-9	EXISTING SINGLE LINE DIAGRAM

ISSUED FOR TENDER	17/08/15
99% REVIEW	29/07/15
66% REVIEW	17/06/15
33% REVIEW	03/05/15

Revision/Évaluation	Description/Description	Date/Date

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only

Designed by/Conçept par

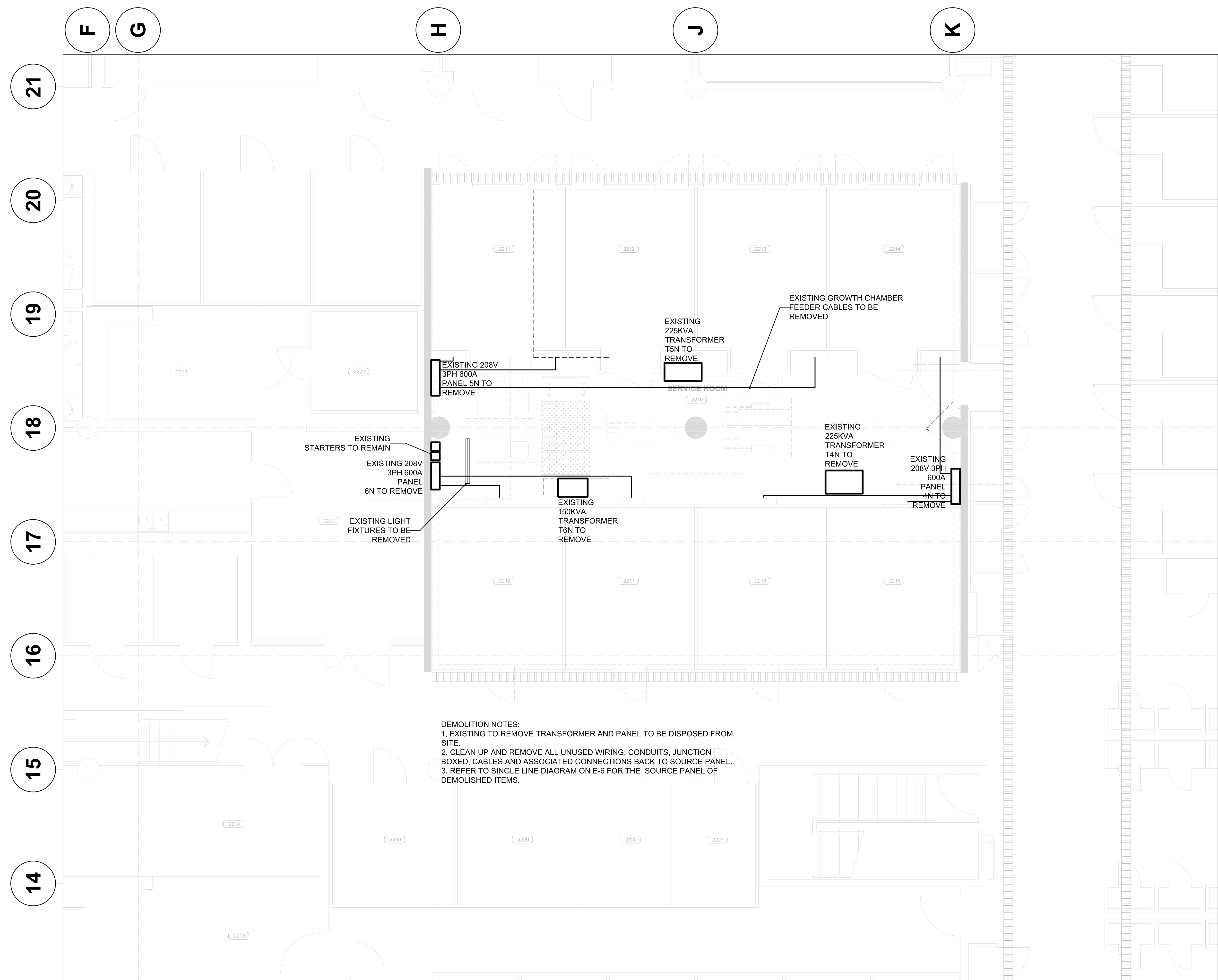
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PWGSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**

Regional Manager, Architectural and Engineering Services  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**ELECTRICAL LEGEND AND DRAWING LIST**





**DEMOLITION NOTES:**  
 1. EXISTING TO REMOVE TRANSFORMER AND PANEL TO BE DISPOSED FROM SITE.  
 2. CLEAN UP AND REMOVE ALL UNUSED WIRING, CONDUITS, JUNCTION BOXED, CABLES AND ASSOCIATED CONNECTIONS BACK TO SOURCE PANEL.  
 3. REFER TO SINGLE LINE DIAGRAM ON E-6 FOR THE SOURCE PANEL OF DEMOLISHED ITEMS.

ISSUED FOR TENDER	17/08/15
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66% REVIEW	17/06/15
33% REVIEW	03/05/15
Revision/Revisions	Description/Description Date/Date

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC  
 PACIFIC AGRI-FOOD RESEARCH CENTRE  
 GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only  
 Designed by/Concept par  
 Drawn by/Dessine par  
 PWGSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**  
 Regional Manager, Architectural and Engineering Services  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**DEMOLITION PLAN**

Project No./No. du projet <b>115615144 R.075861.001</b>	Sheet/Feuille <b>E-2</b> OF	Revision no./no. de révisión <b>0</b>
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**1 DEMOLITION PLAN**  
 E-2 1:50





ISSUED FOR TENDER	17/08/15
99% REVIEW	29/07/15
66% REVIEW	17/06/15
33% REVIEW	03/05/15

Revision/Modification	Description/Description	Date/Date
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Client/client

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**4200 97 HWY SOUTH SUMMERLAND BC  
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Drawn by/Dessiné par

PWGSC Project Manager/Administrateur de Projets TPSGC

**TOM DUNPHY**

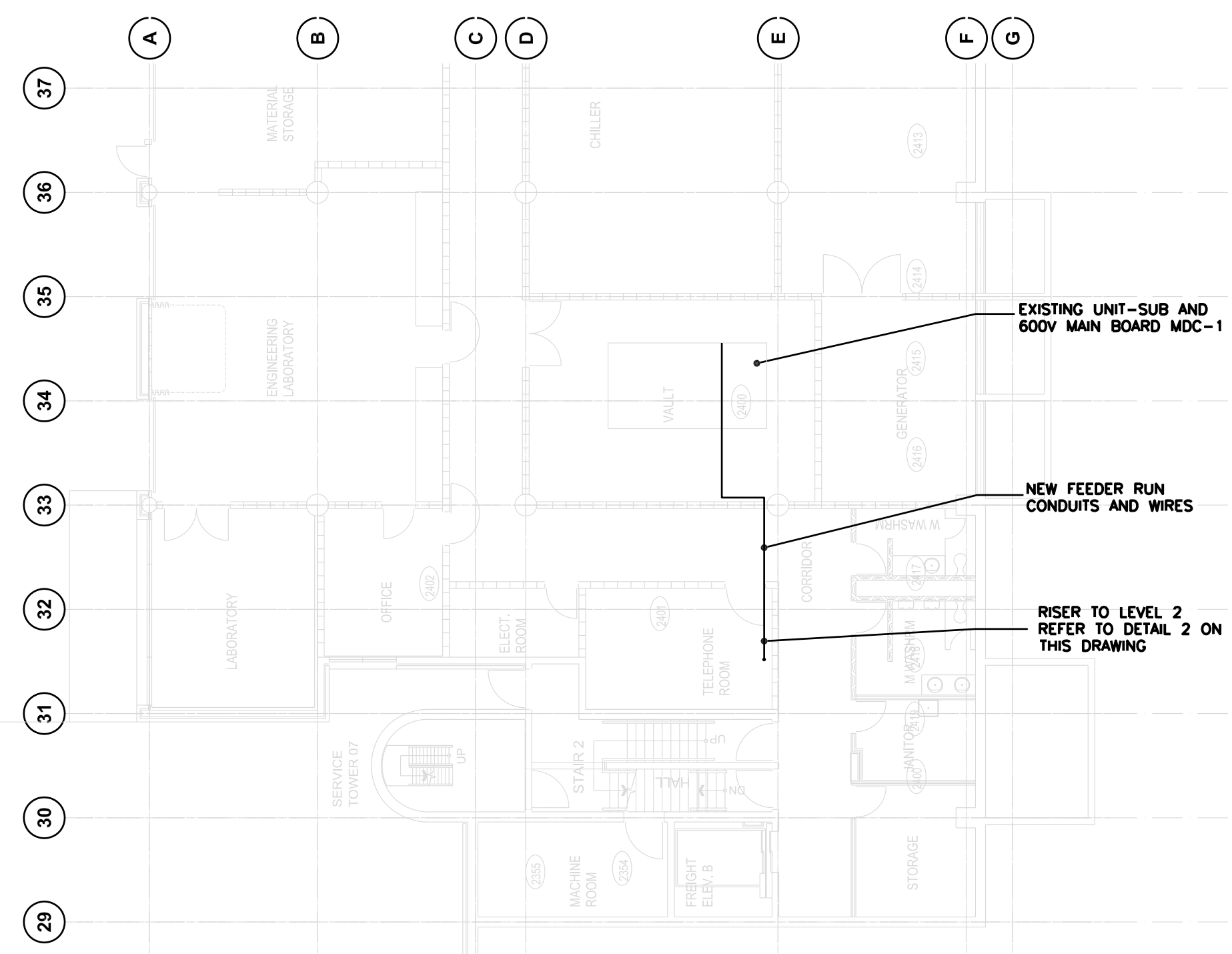
Regional Manager, Architectural and Engineering Services

**PREETIPAL PAUL**

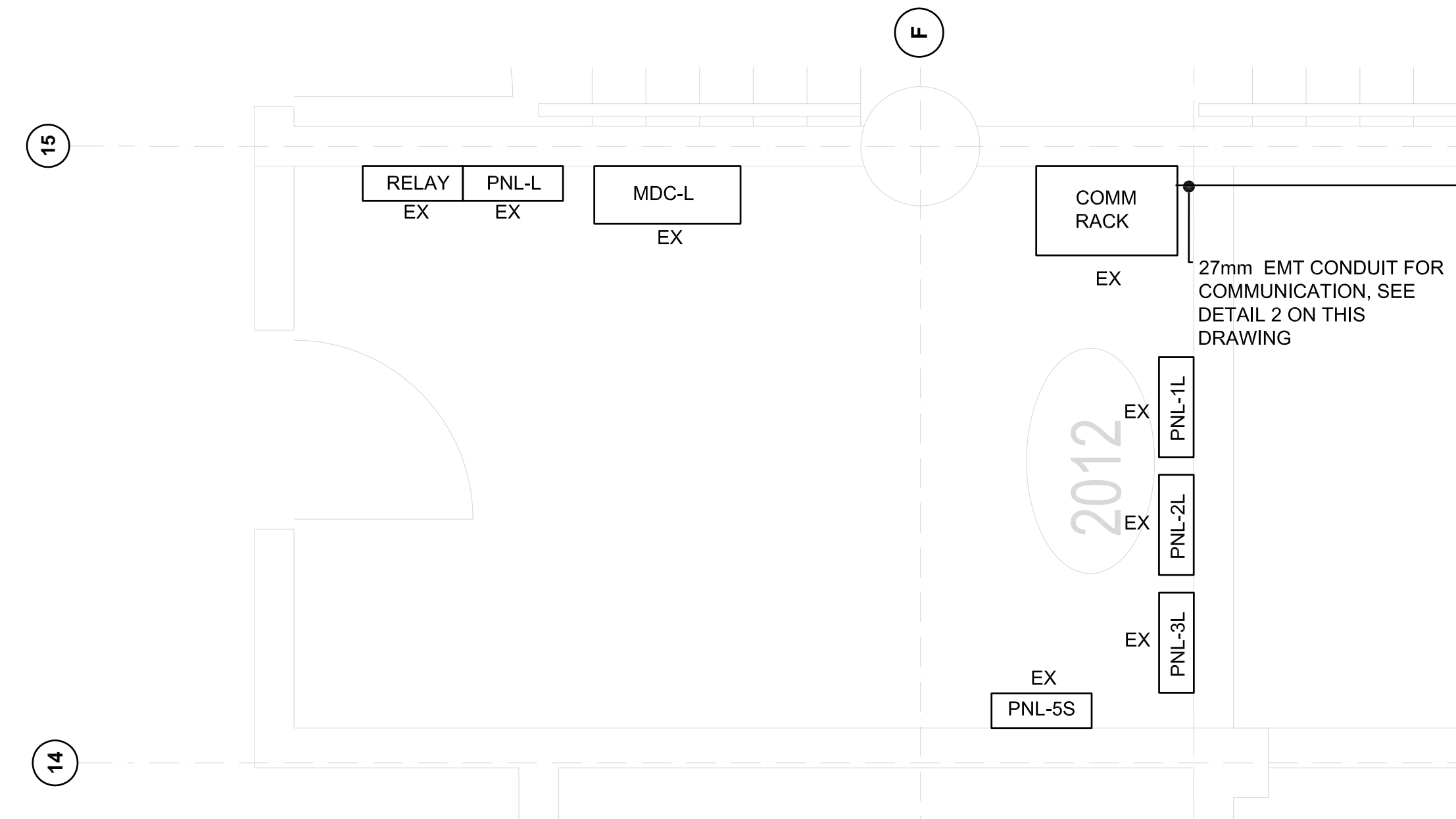
Drawing title/Titre du dessin

**ELECTRICAL AREA AND ELECTRICAL ROOM DETAILS**

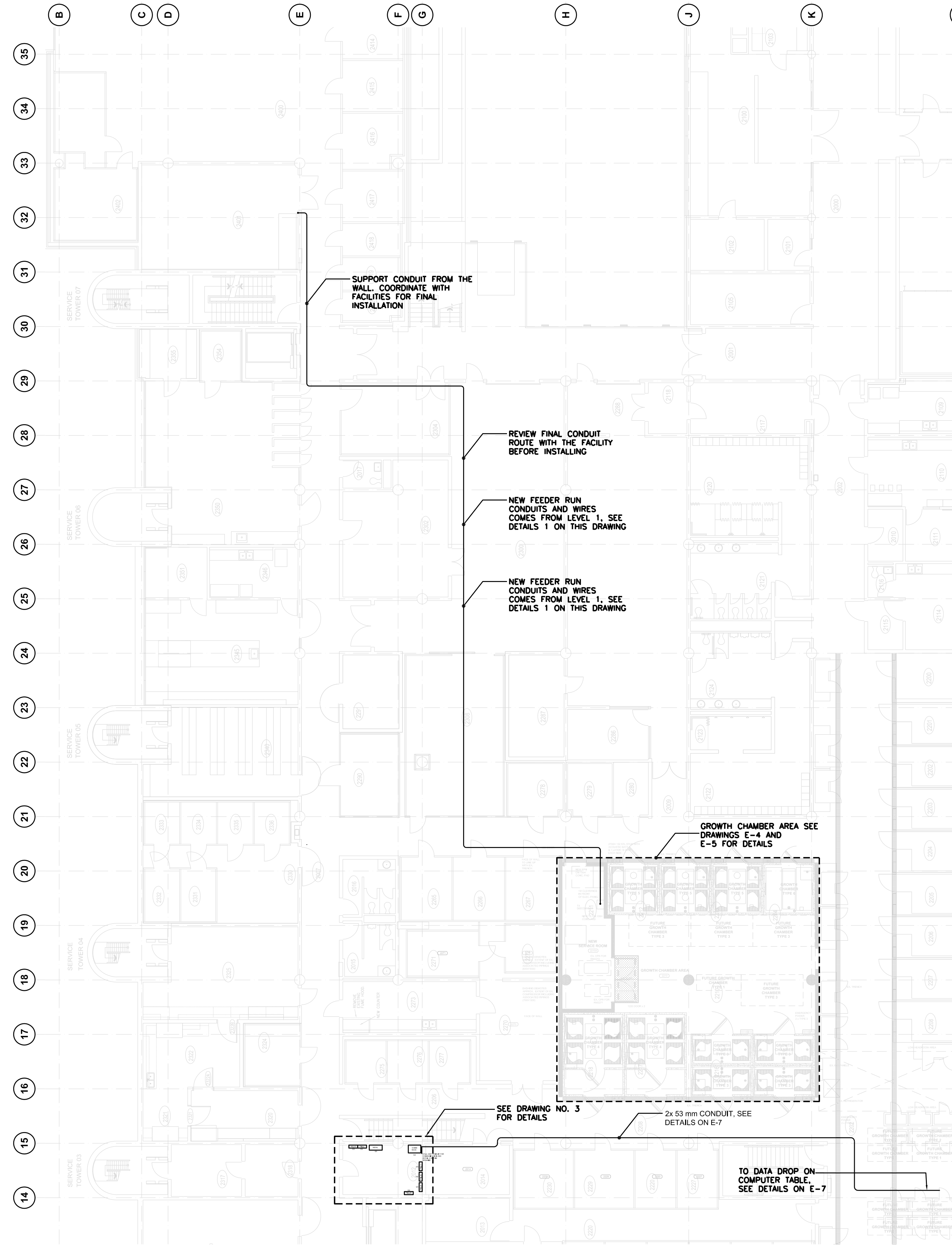
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**1 PROJECT AREA PLAN AT LEVEL 1**  
 E-3 1:150



**3 ENLARGED ELECTRICAL ROOM DETAIL**  
 E-3 1:25



**2 PROJECT AREA PLAN AT LEVEL 2**  
 E-3 1:150



ISSUED FOR TENDER	17/08/15
99% REVIEW	29/07/15
66% REVIEW	17/06/15
33% REVIEW	03/05/15

Revision/Évaluation	Description/Description	Date/Date
---------------------	-------------------------	-----------

Client/client

**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only

Designed by/Conçue par

Drawn by/Dessiné par

PWGC Project Manager/Administrateur de Projets TPSGC

**TOM DUNPHY**

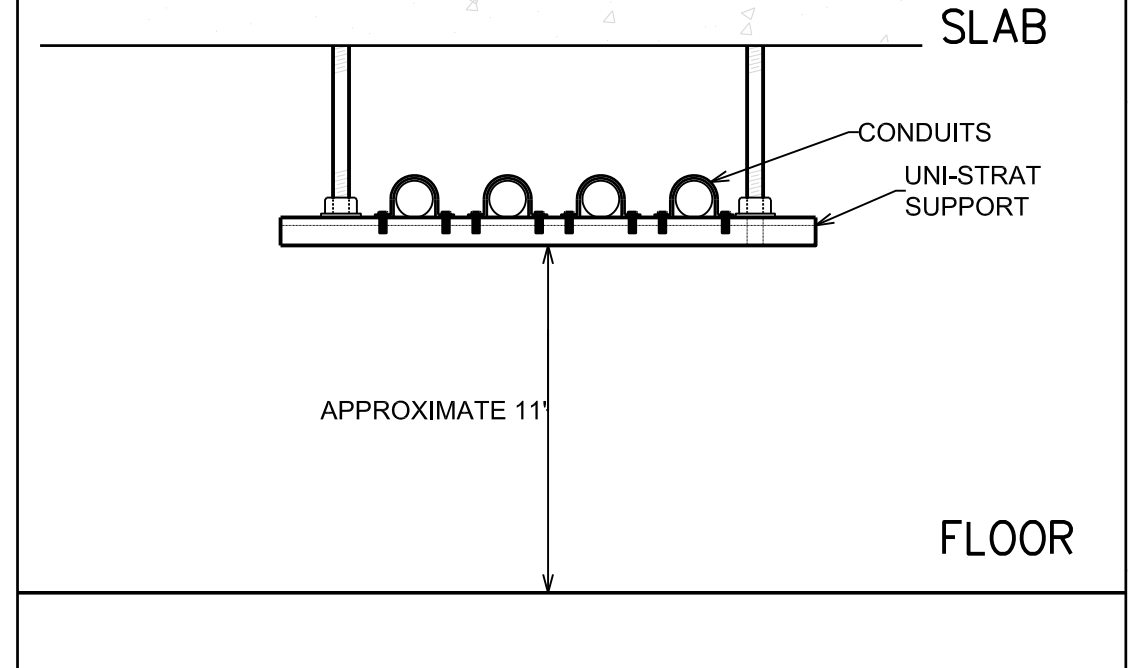
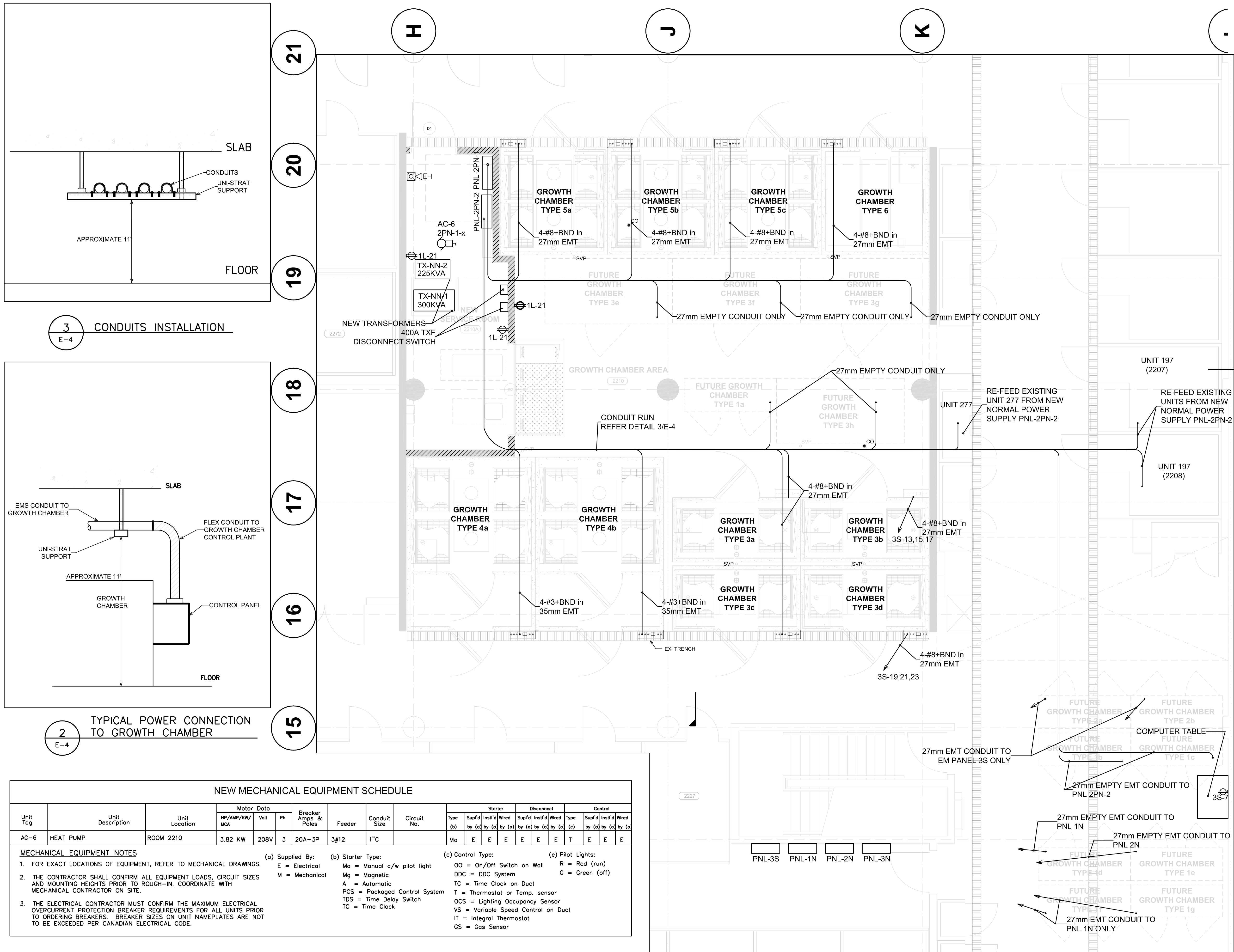
Regional Manager, Architectural and Engineering Services

**PREETIPAL PAUL**

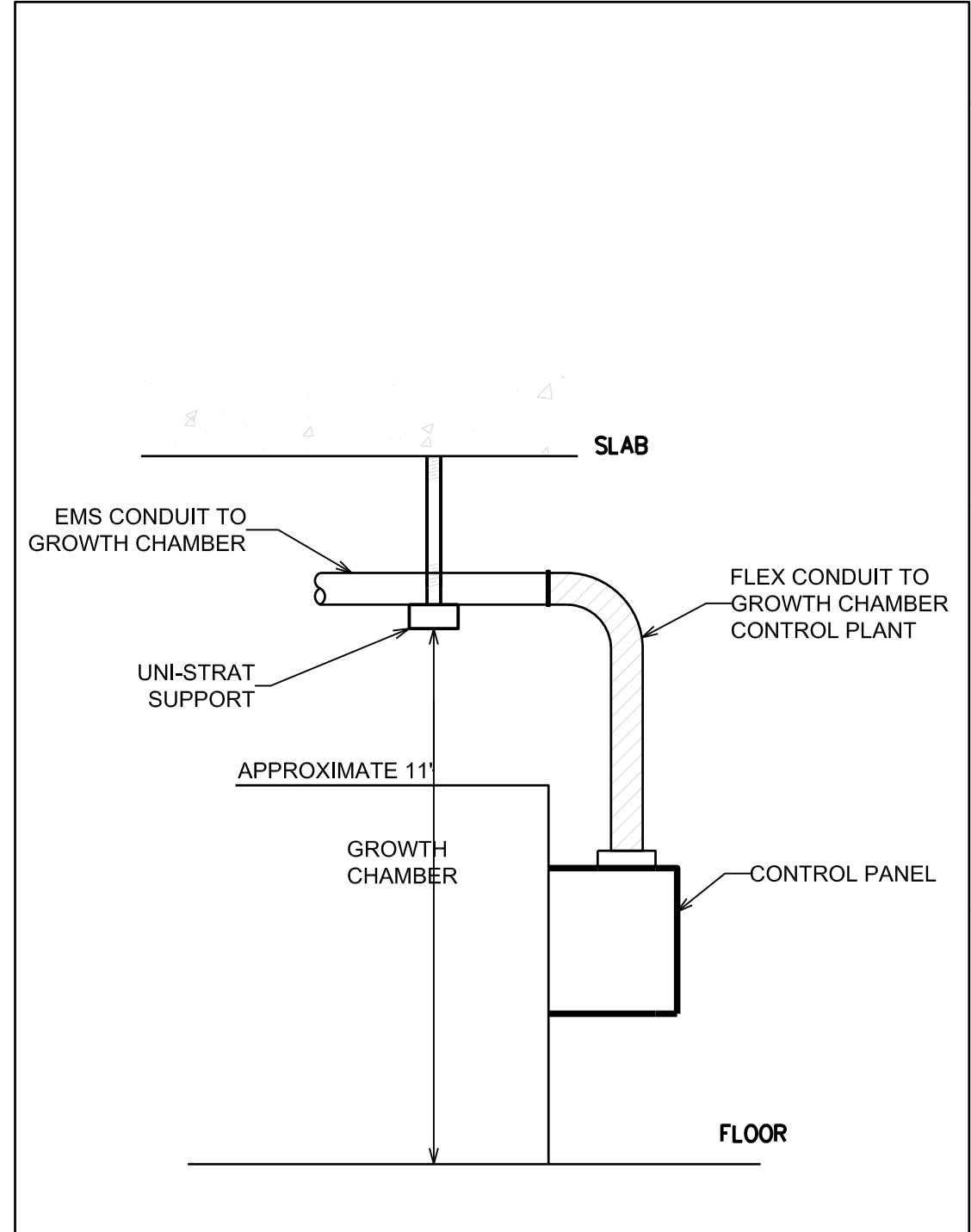
Drawing title/Titre du dessin

**POWER LAYOUT**

Project No./No. du projet <b>115615144</b> <b>R.075861.001</b>	Sheet/Feuille <b>E-4</b> OF	Revision no./Révision no. <b>0</b>
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**3 CONDUITS INSTALLATION**  
E-4



**2 TYPICAL POWER CONNECTION TO GROWTH CHAMBER**  
E-4

NEW MECHANICAL EQUIPMENT SCHEDULE																				
Unit Tag	Unit Description	Unit Location	Motor Data			Breaker Amps & Poles	Feeder	Conduit Size	Circuit No.	Starter			Disconnect			Control				
			HP/AMP/KW/MCA	Volt	Ph					Type	Sup'd	Inst'd	Wired	Type	Sup'd	Inst'd	Wired	Type	Sup'd	Inst'd
AC-6	HEAT PUMP	ROOM 2210	3.82 KW	208V	3	20A-3P	3#12	1" C		Mo	E	E	E	E	E	E	T	E	E	E

**MECHANICAL EQUIPMENT NOTES**

- FOR EXACT LOCATIONS OF EQUIPMENT, REFER TO MECHANICAL DRAWINGS.
- THE CONTRACTOR SHALL CONFIRM ALL EQUIPMENT LOADS, CIRCUIT SIZES AND MOUNTING HEIGHTS PRIOR TO ROUGH-IN. COORDINATE WITH MECHANICAL CONTRACTOR ON SITE.
- THE ELECTRICAL CONTRACTOR MUST CONFIRM THE MAXIMUM ELECTRICAL OVERCURRENT PROTECTION BREAKER REQUIREMENTS FOR ALL UNITS PRIOR TO ORDERING BREAKERS. BREAKER SIZES ON UNIT NAMEPLATES ARE NOT TO BE EXCEEDED PER CANADIAN ELECTRICAL CODE.

(a) Supplied By:  
 E = Electrical  
 M = Mechanical

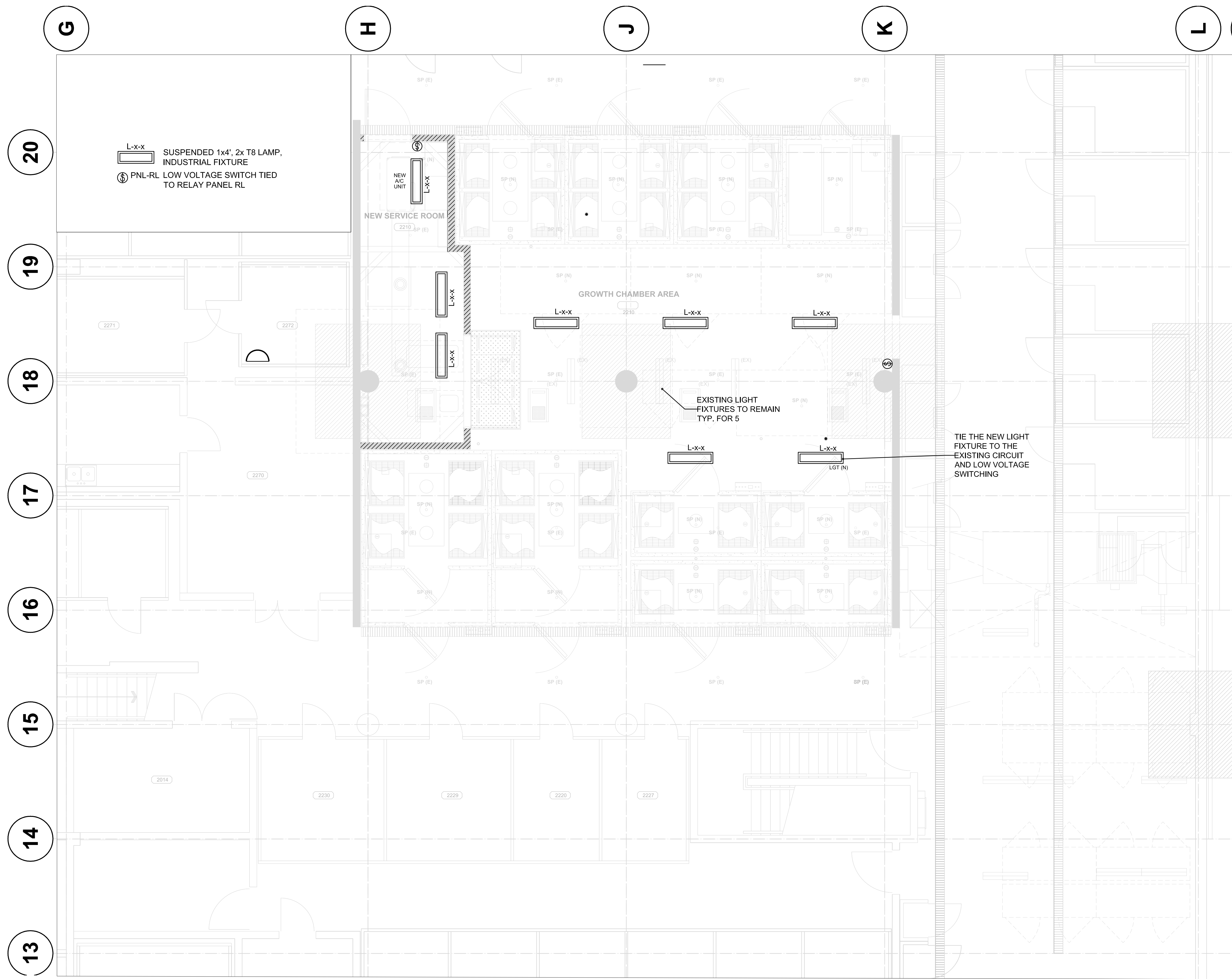
(b) Starter Type:  
 Mo = Manual c/w pilot light  
 Mg = Magnetic  
 A = Automatic  
 PCS = Packaged Control System  
 TDS = Time Delay Switch  
 TC = Time Clock

(c) Control Type:  
 OO = On/Off Switch on Wall  
 DDC = DDC System  
 TC = Time Clock on Duct  
 T = Thermostat or Temp. sensor  
 OCS = Lighting Occupancy Sensor  
 VS = Variable Speed Control on Duct  
 IT = Integral Thermostat  
 GS = Gas Sensor

(e) Pilot Lights:  
 R = Red (run)  
 G = Green (off)

**1 POWER LAYOUT**  
E-4 1:50





L-x-x SUSPENDED 1x4', 2x T8 LAMP, INDUSTRIAL FIXTURE  
 PNL-RL LOW VOLTAGE SWITCH TIED TO RELAY PANEL RL

NEW SERVICE ROOM  
 2210 SP (E)

GROWTH CHAMBER AREA  
 2210

EXISTING LIGHT FIXTURES TO REMAIN TYP. FOR 5

TIE THE NEW LIGHT FIXTURE TO THE EXISTING CIRCUIT AND LOW VOLTAGE SWITCHING

**1 LIGHTING LAYOUT**  
 E-5 1:50

ISSUED FOR TENDER	17/08/15
99% REVIEW	29/07/15
66% REVIEW	17/06/15
33% REVIEW	03/05/15
Revision/Revisions	Description/Description Date/Date

Client/client  
**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC  
 PACIFIC AGRI-FOOD RESEARCH CENTRE  
 GROWTH CHAMBER REPLACEMENT**

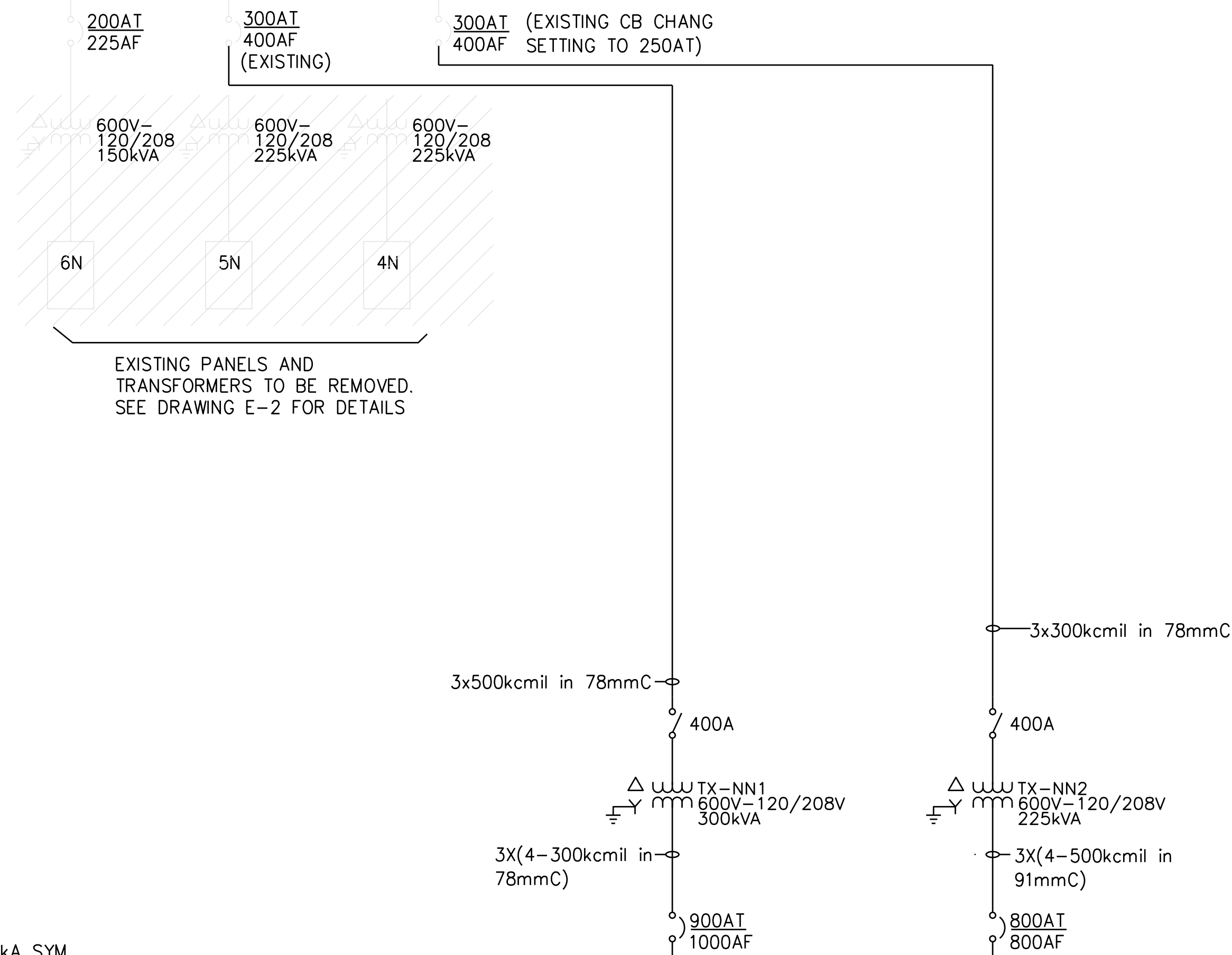
Consultant Signature Only  
 Designed by/Concept par  
 Drawn by/Dessine par  
 PWGSC Project Manager/Administrateur de Projets TPSGC  
**TOM DUNPHY**  
 Regional Manager, Architectural and Engineering Services  
**PREETIPAL PAUL**

Drawing title/Titre du dessin  
**LIGHTING LAYOUT**

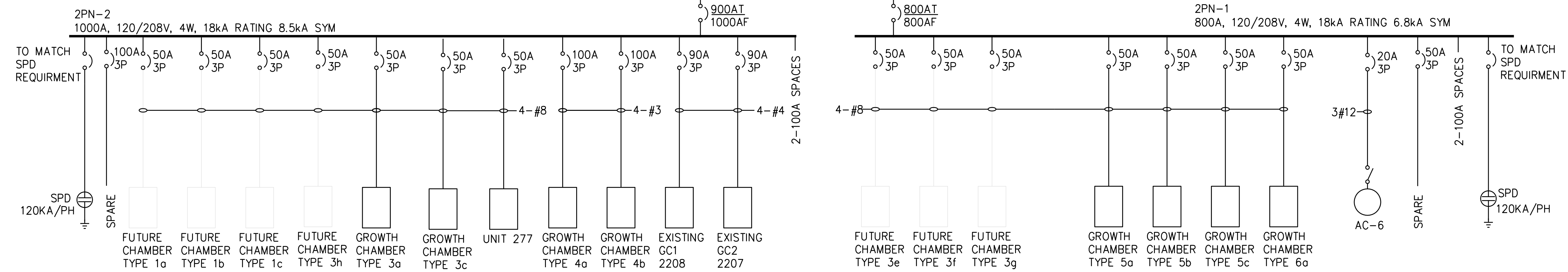
Project No./No. du projet <b>115615144</b> <b>R.075861.001</b>	Sheet/Feuille <b>E-5</b> OF	Revision no./no. de révisión <b>0</b>
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EXISTING MAIN DISTRIBUTION PANEL MDC\_1,  
 600V, 40KA RATING, 20.5kA SYM



EXISTING PANELS AND TRANSFORMERS TO BE REMOVED. SEE DRAWING E-2 FOR DETAILS



\* REFER TO DRAWING E-9 FOR FULL SINGLE LINE DIAGRAM

1 SINGLE LINE DIAGRAM  
 E-6 NO SCALE

ISSUED FOR TENDER	17/08/15
99% REVIEW	29/07/15
66% REVIEW	17/06/15
33% REVIEW	03/05/15

Revision/Revisions	Description/Description	Date/Date
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Client/client

**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC  
 PACIFIC AGRI-FOOD RESEARCH CENTRE  
 GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only

Designed by/Conçu par

Drawn by/Dessiné par

PWGSC Project Manager/Administrateur de Projets TPSGC

TOM DUNPHY

Regional Manager, Architectural and Engineering Services

PREETIPAL PAUL

Drawing title/Titre du dessin

**SINGLE LINE DIAGRAM FOR NEW ADDITION AND DEMOLITION**

Project No./No. du projet <b>115615144</b> R.075861.001	Sheet/Feuille <b>E-6</b> OF	Revision no./no. de révisions <b>0</b>
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ISSUED FOR TENDER	17/08/15
99% REVIEW	29/07/15
66% REVIEW	17/06/15
33% REVIEW	03/05/15
Revision/Modification	Description/Description
	Date/Date

Client/client

**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only

Designed by/Concept par

Drawn by/Dessiné par

PWSC Project Manager/Administrateur de Projets TPSGC

**TOM DUNPHY**

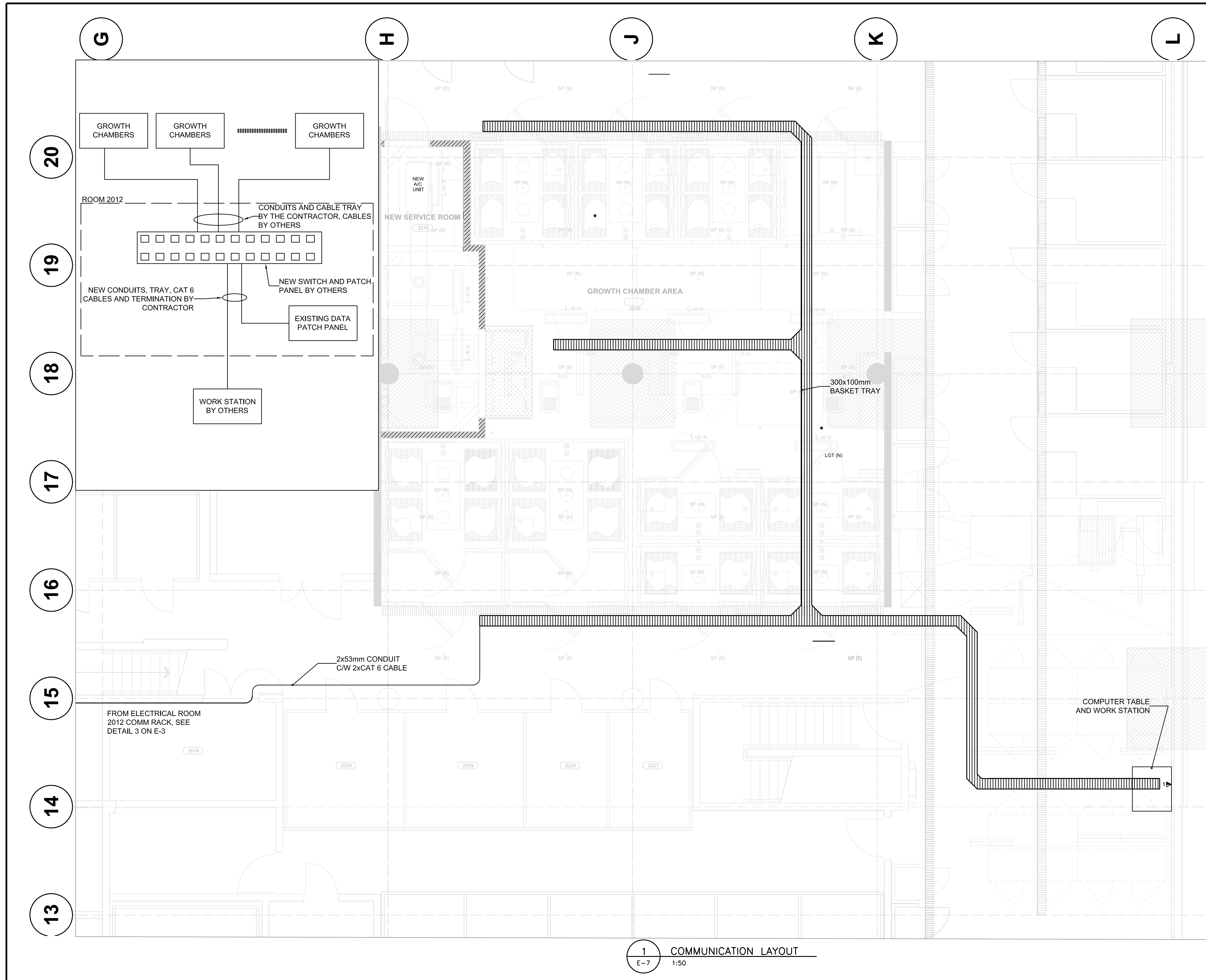
Regional Manager, Architectural and Engineering Services

**PREETIPAL PAUL**

Drawing title/Titre du dessin

**COMMUNICATION LAYOUT**

Project No./No. du projet <b>115615144</b> <b>R.075861.001</b>	Sheet/Feuille <b>E-7</b> OF	Revision no./no. de révisión <b>0</b>
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**1** COMMUNICATION LAYOUT  
 E-7 1:50





ISSUED FOR TENDER	17/08/15
99% REVIEW	29/07/15
66% REVIEW	17/06/15
33% REVIEW	03/05/15

Revision/	Description/Description	Date/Date
Client/client		

**AGRICULTURE AND AGRI-FOOD CANADA**

Project title/Titre du projet  
**4200 97 HWY SOUTH SUMMERLAND BC**  
**PACIFIC AGRI-FOOD RESEARCH CENTRE GROWTH CHAMBER REPLACEMENT**

Consultant Signature Only

Designed by/Conçepé par

Drawn by/Dessiné par

PWGSC Project Manager/Administrateur de Projets TPSGC

TOM DUNPHY

Regional Manager, Architectural and Engineering Services

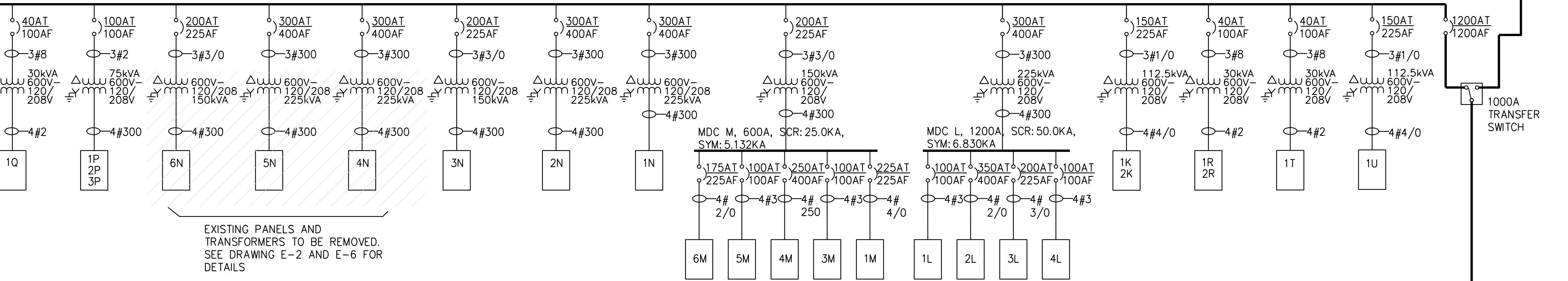
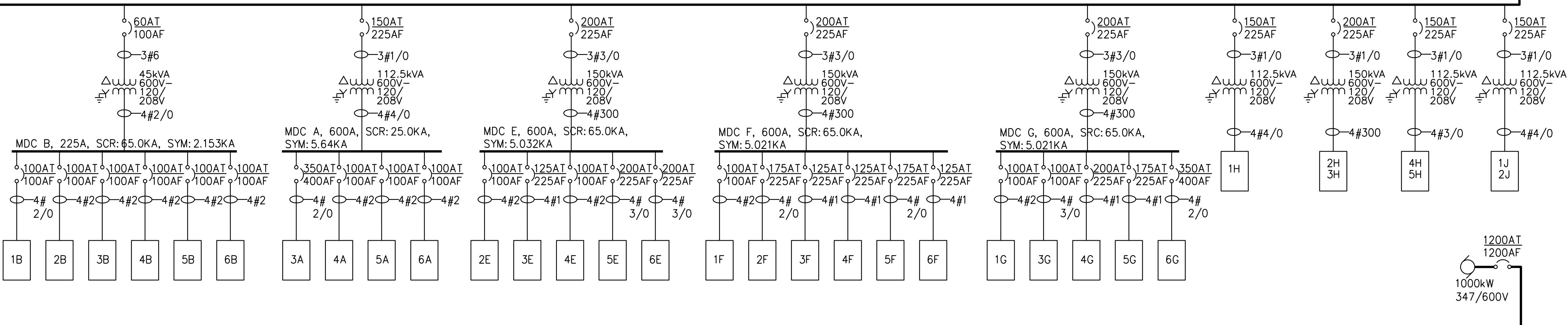
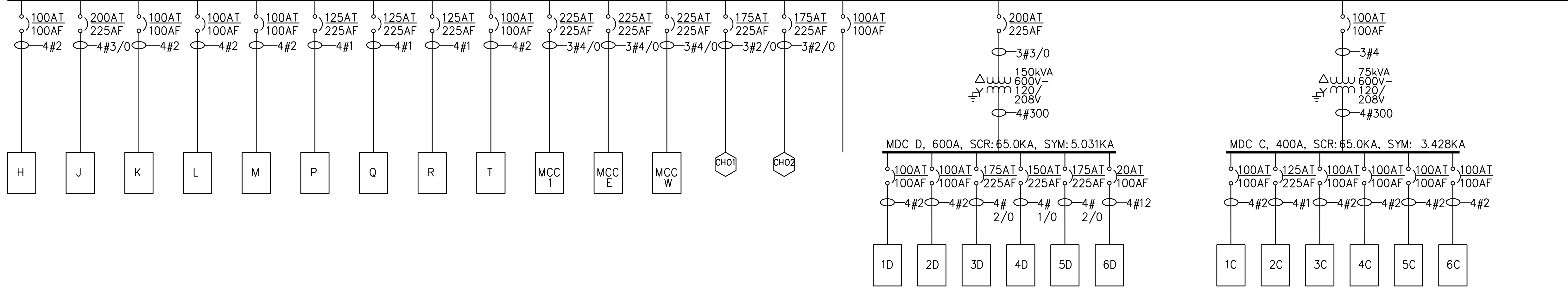
PREETIPAL PAUL

Drawing title/Titre du dessin

**EXISTING SINGLE LINE DIAGRAM**

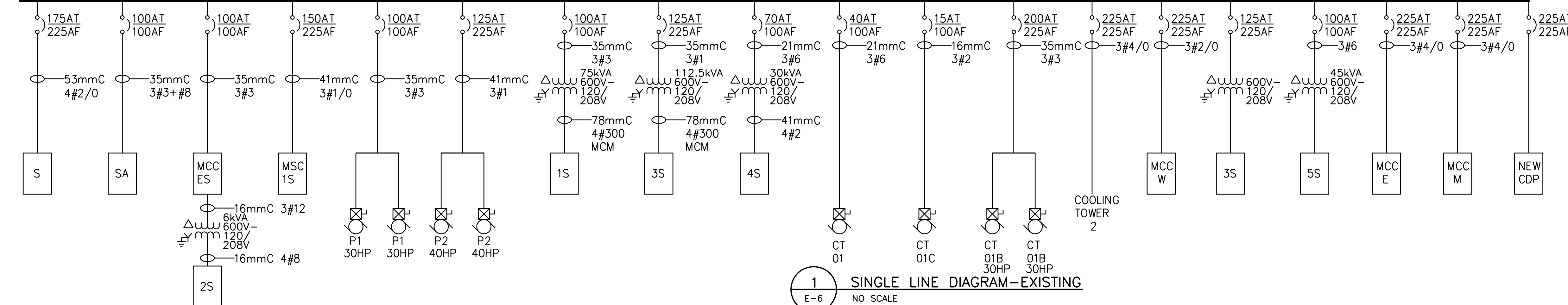
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<b>115615144</b>	<b>E-9</b>	<b>0</b>
<b>R.075861.001</b>	OF	

MDC1, 600V, SHORT CIRCUIT RATING: 40.0KA, ASNI SYM 3P LV: 20.512KA



EXISTING PANELS AND TRANSFORMERS TO BE REMOVED. SEE DRAWING E-2 AND E-6 FOR DETAILS

MDC-S, 1200A, 347/600V, 3φ, 4W, SHORT CIRCUIT RATING: 50.0KA, ANSI SYM 3P LV: 20.123KA

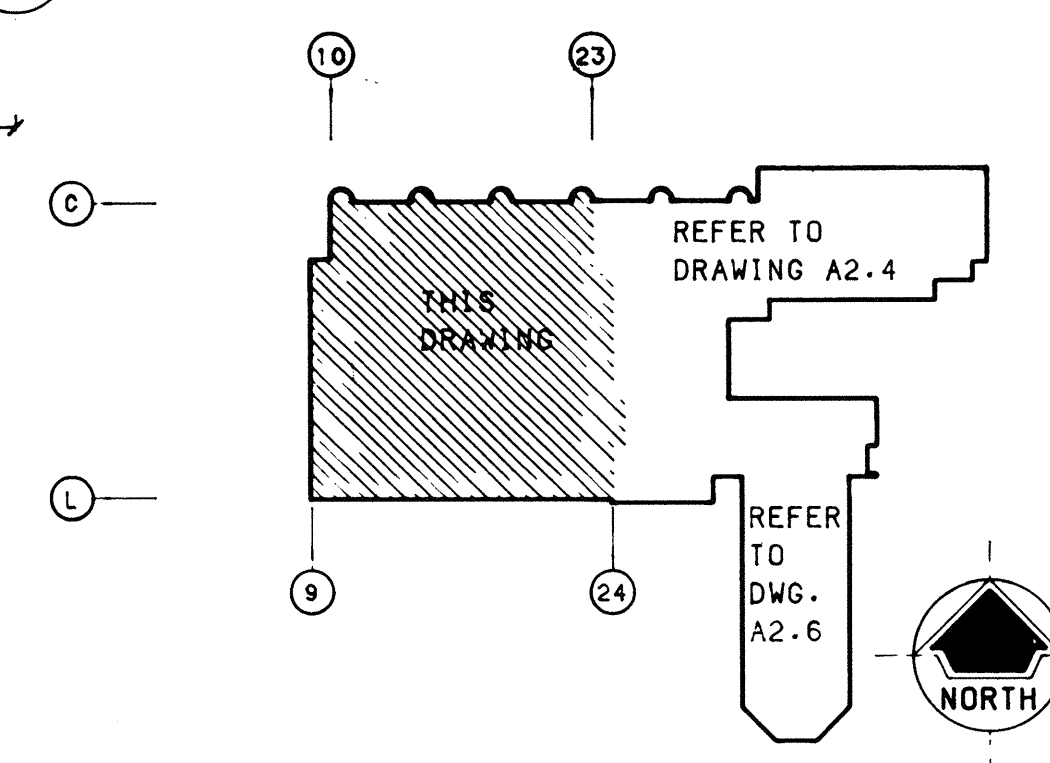


**1 SINGLE LINE DIAGRAM-EXISTING**  
 E-6 NO SCALE



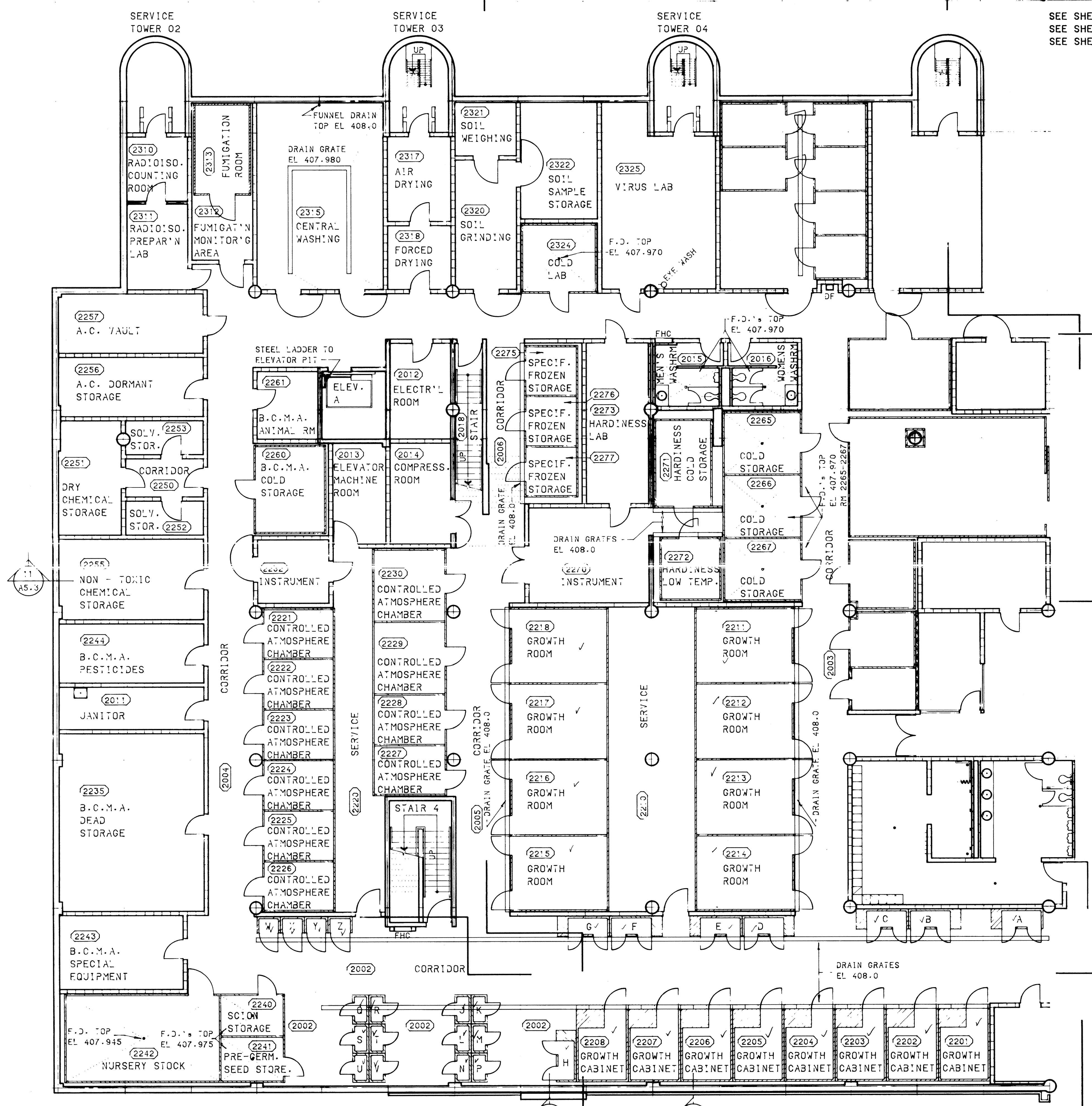


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NOTE  
SEE SHEET A2-5D FOR DIMENSIONS  
SEE SHEET A6-3 FOR CEILING PLANS  
SEE SHEET A7-4 FOR LAYOUT PLANS  
SEE SHEET A7-7 FOR LAYOUT PLANS  
SEE SHEET A8-1 FOR PREFABRICATED ROOMS  
SEE SHEET A8-2 FOR PREFABRICATED ROOMS  
SEE SHEET A8-3 FOR PREFABRICATED ROOMS

A 5000  
B 4700  
C 1500  
D 7500  
E 5600  
F 1375  
G 8175  
H 7000  
J 7000  
K 8500  
L 1500  
M



NOTE  
REFER TO STRUCTURAL  
DRAWINGS FOR SLAB  
DEPRESSIONS  
FLOOR ELEVATION  
408.0 metres  
SCALE 1 : 100  
1000 3000 5000 7000 9000

approved  
date  
Regional Fire Commissioner

revision	date
A	A detail no. of detail
B	B location drawing no. or design no.
C	C drawing no. design no.

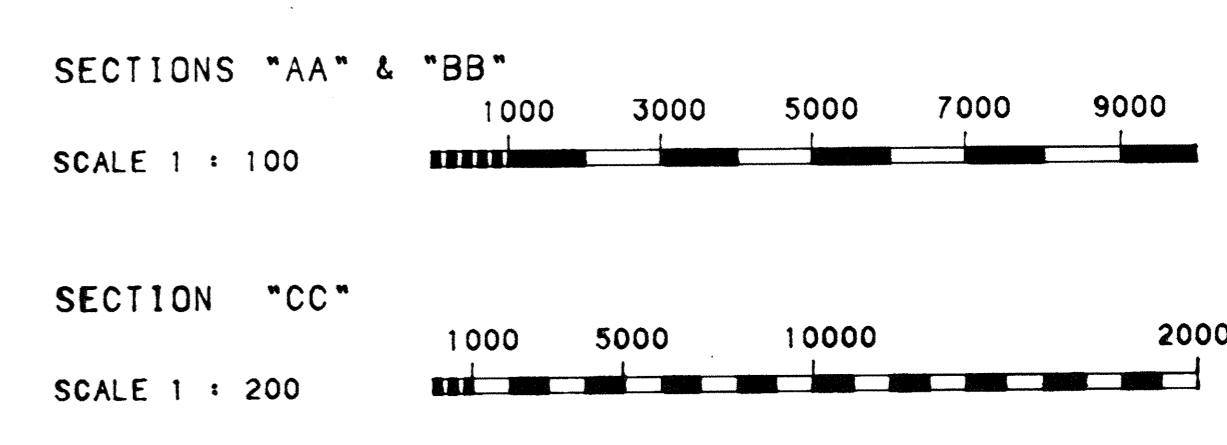
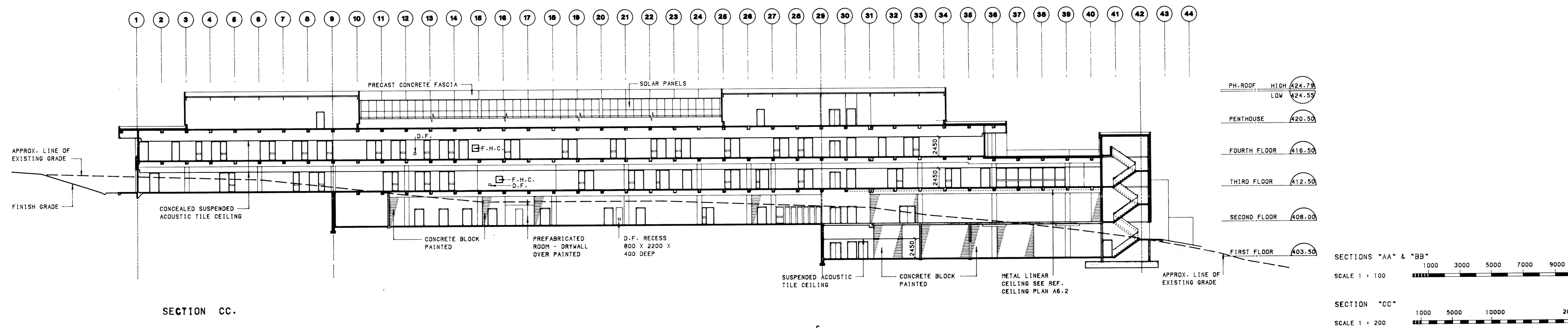
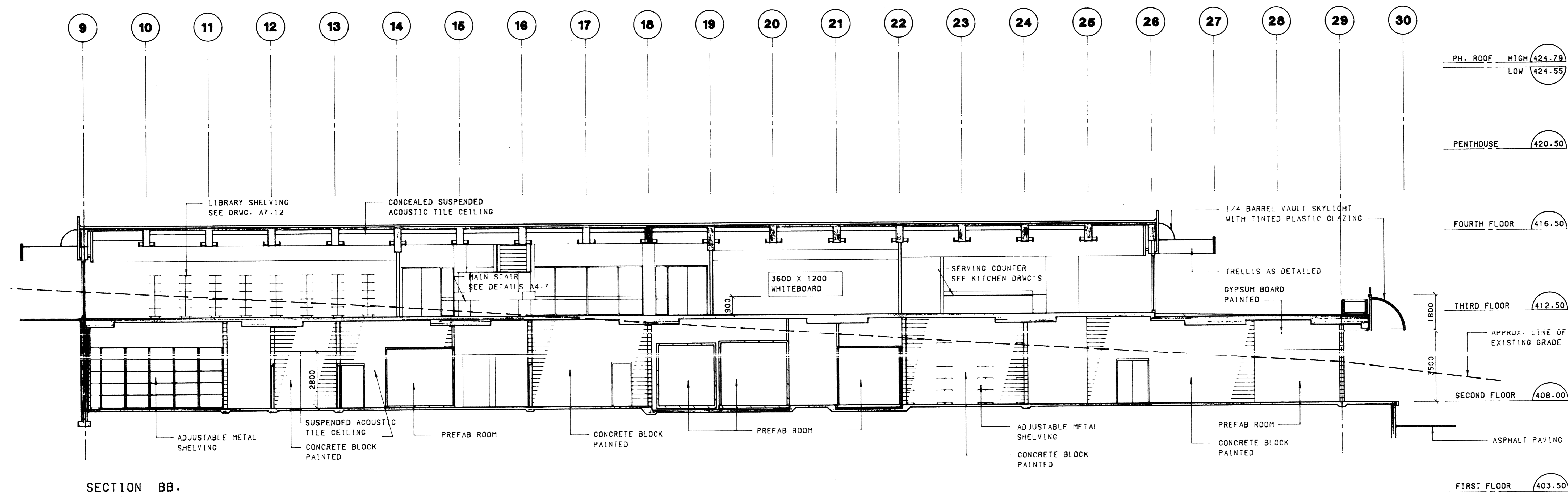
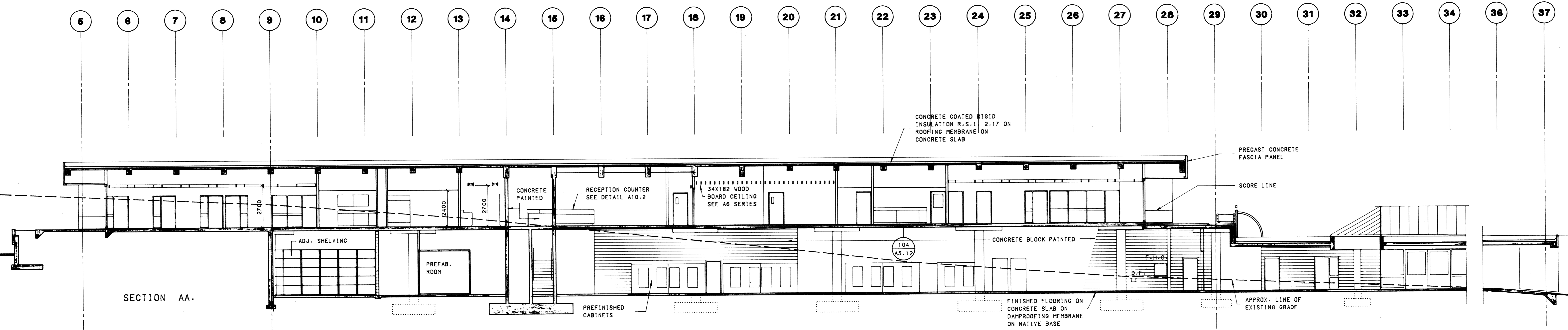
project  
**AGRICULTURAL RESEARCH CENTRE**  
SUMMERLAND B.C.

drawing  
FLOOR PLAN  
SECOND FLOOR WEST

**AS BUILT**

designed	P.C. RAYNER	Y. KANEKAE	comp
date			
drawn	A.R. CAMPBELL		desain
date	JANUARY 10, 1984		
revised	B.E. NULME		examined
date	JANUARY 10, 1984		
approved			approved
date			
Tender			Scoutstation
PWC Project Manager	Administrateur de projet	TPC	
project no.	035253		
drawing no.	A2-5		no. du dessin





revisions	date
A	A detail no. no. de detail
B	B location drawing no. no. de dessin
C	C drawing no. dessin no.

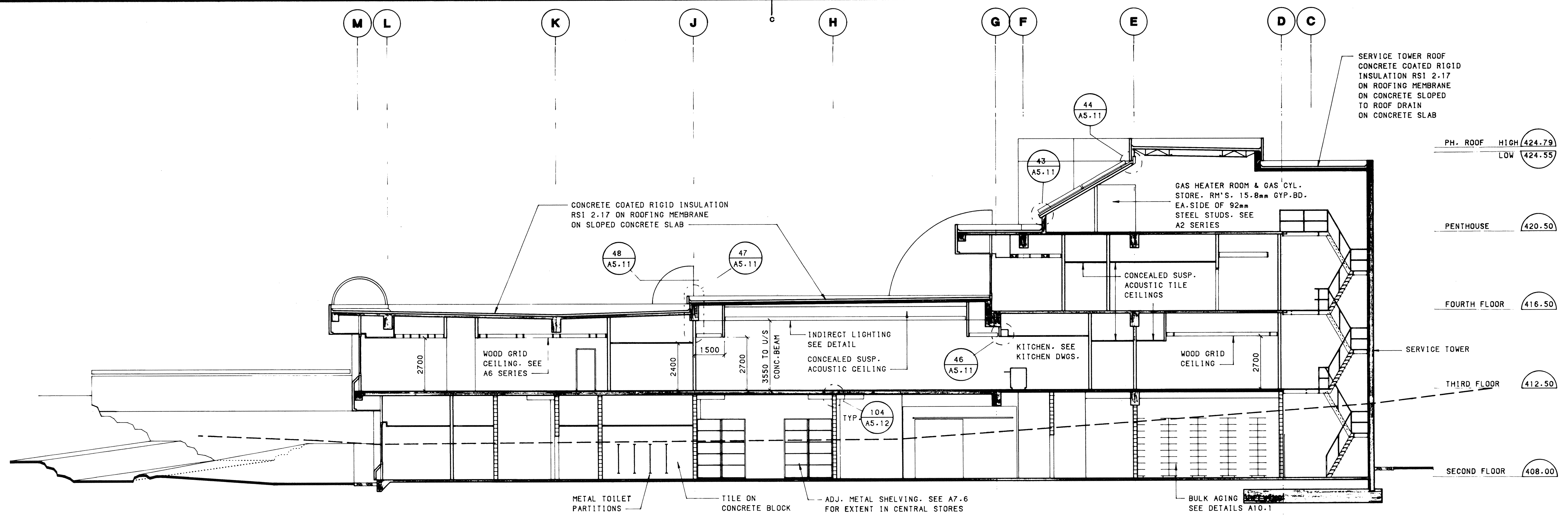
project  
**AGRICULTURAL RESEARCH CENTRE**  
SUMMERLAND B.C.

drawing  
BUILDING SECTIONS AA, BB, CC.

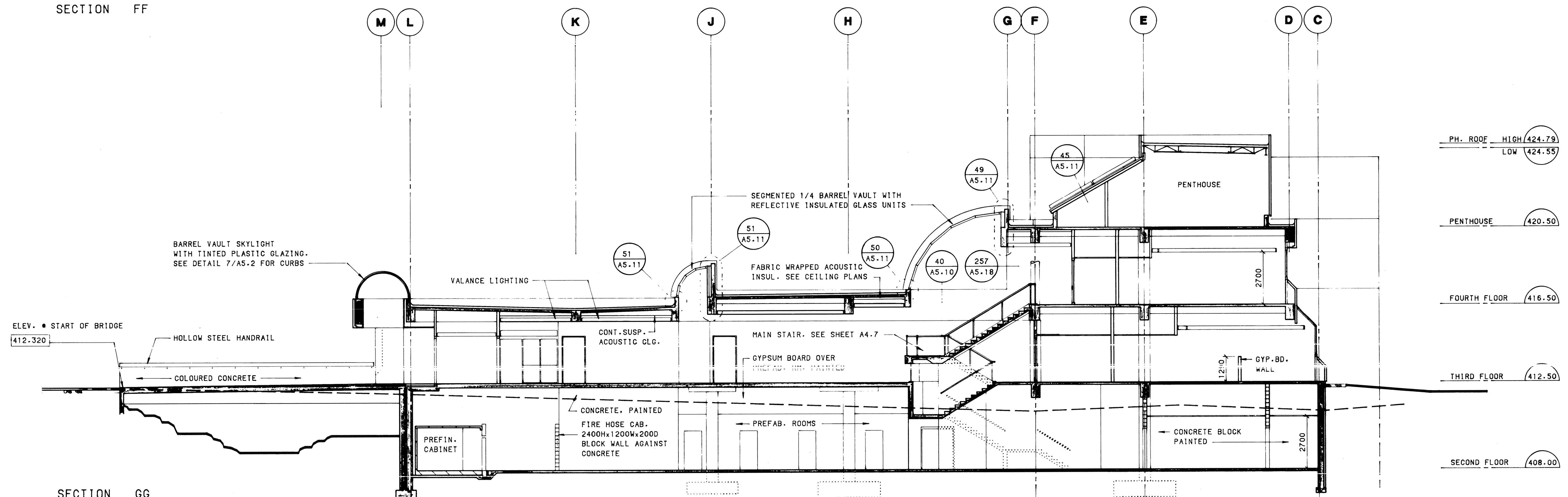
AS BUILT

designed	Y. KANEKAE	conçu
drawn	J. D. HASTINGS	dessiné
date	JANUARY 10, 1984	
reviewed	B. E. HULME	examiné
date	JANUARY 10, 1984	
approved	<i>[Signature]</i>	approuvé
date		
Tender		Soumission
PWC Project Manager	Administrateur de projet TPC	
project no.	035253	
drawing no.	A4.1	no. du dessin

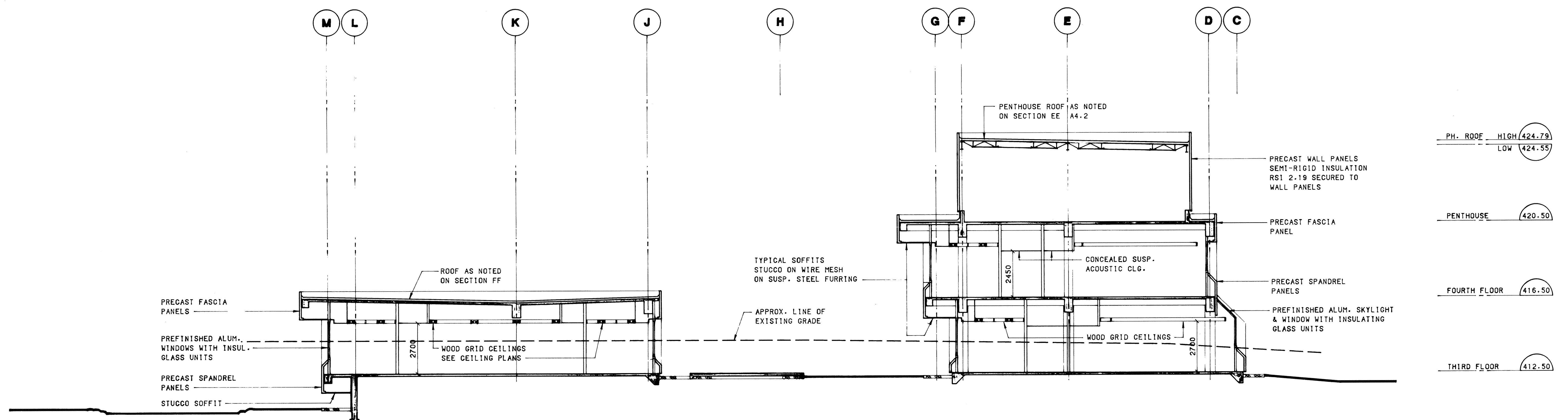




SECTION FF



SECTION GG



SECTION HH

approved  
date  
Regional Fire Commissioner

revisions	date
A	A detail no. no. de detail
B	B location drawing no. no. de dessin
C	C drawing no. dessin no.

project  
**AGRICULTURAL RESEARCH CENTRE**  
SUMMERLAND B.C.

drawing  
drawing  
drawing  
drawing  
**AS BUILT**

designed	Y. KANEKAE	conçu
drawn	J. D. HASTINGS	dessiné
date	JANUARY 10, 1984	
reviewed	B. E. HULME	examiné
date	JANUARY 10, 1984	
approved	<i>[Signature]</i>	approuvé
date		
Tender	Submission	
PWC Project Manager	Administrateur de projets TPC	
project no.	035253	no. du projet
drawing no.	A4.3	no. de dessin

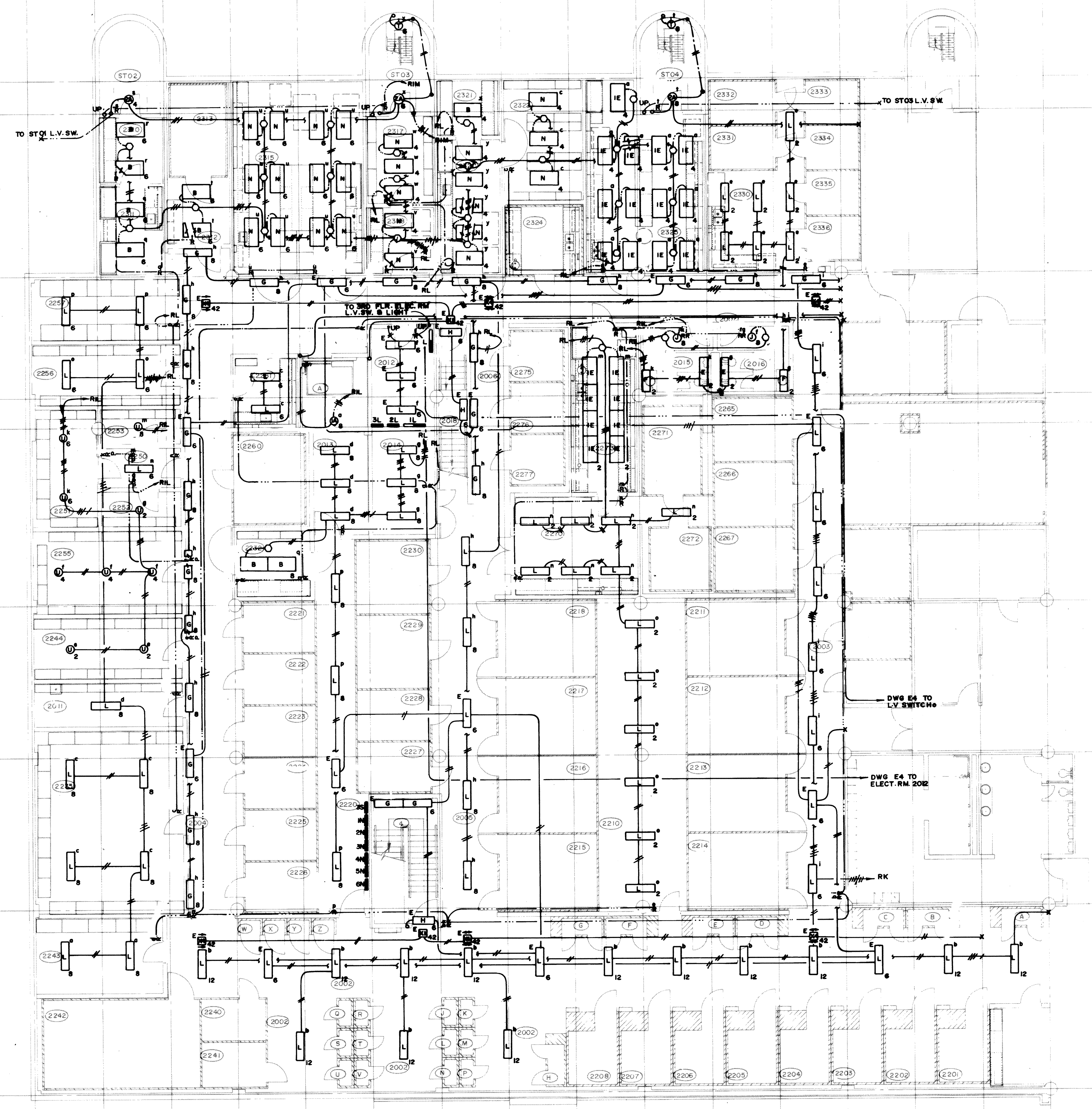
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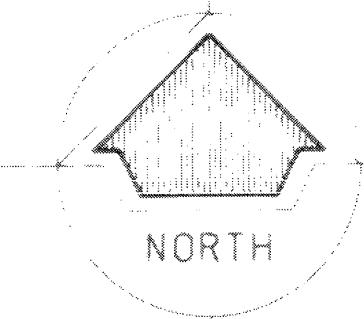
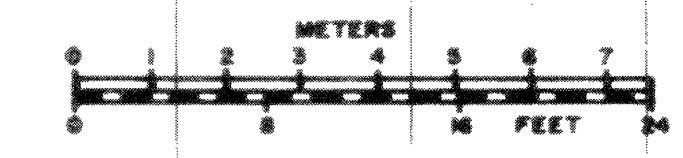
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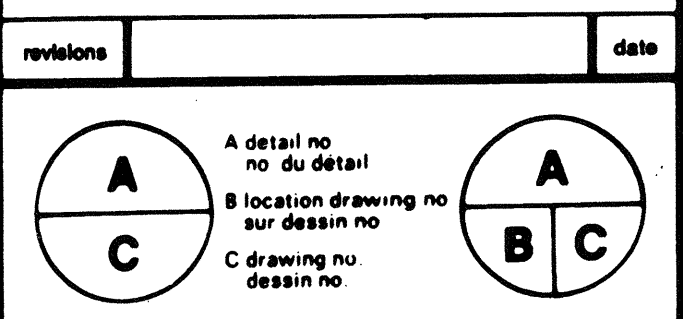
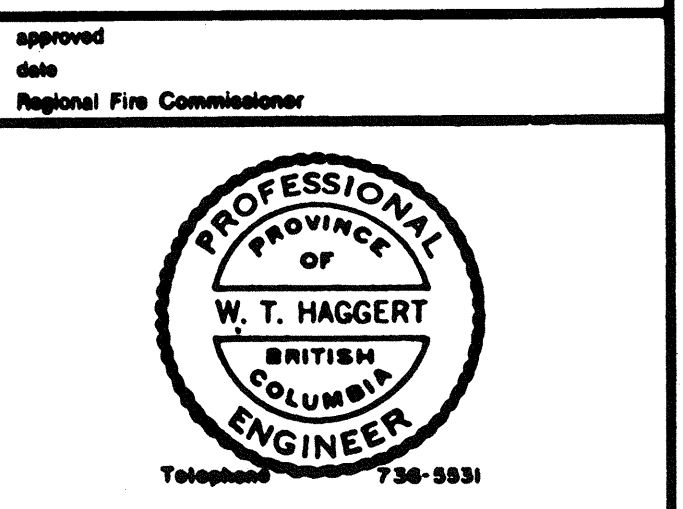


ROOM NO.	ROOM NAME
4	STAIR A
A	ELEVATOR A
ST02	SERVICE TOWER 02
ST03	SERVICE TOWER 03
ST04	SERVICE TOWER 04
2002	CORRIDOR
2002-A	GROWTH CABINET
2002-B	GROWTH CABINET
2002-C	GROWTH CABINET
2002-D	GROWTH CABINET
2002-E	GROWTH CABINET
2002-F	GROWTH CABINET
2002-G	GROWTH CABINET
2002-H	GROWTH CABINET
2002-J	GROWTH CABINET
2002-K	GROWTH CABINET
2002-L	GROWTH CABINET
2002-M	GROWTH CABINET
2002-N	GROWTH CABINET
2002-P	GROWTH CABINET
2002-Q	GROWTH CABINET
2002-R	GROWTH CABINET
2002-S	GROWTH CABINET
2002-T	GROWTH CABINET
2002-U	GROWTH CABINET
2002-V	GROWTH CABINET
2002-W	INCUBATION CABINET
2002-X	INCUBATION CABINET
2002-Y	INCUBATION CABINET
2002-Z	INCUBATION CABINET
2003	CORRIDOR
2004	CORRIDOR
2005	CORRIDOR
2006	CORRIDOR
2007	CORRIDOR
2011	JANITOR
2012	ELECTRICAL ROOM
2013	MACHINE ROOM
2014	COMPRESSOR ROOM
2015	MEN'S WASHROOM
2016	WOMEN'S WASHROOM
2018	STAIR
2201	GROWTH CABINET
2202	GROWTH CABINET
2203	GROWTH CABINET
2204	GROWTH CABINET
2205	GROWTH CABINET
2206	GROWTH CABINET
2207	GROWTH CABINET
2208	GROWTH CABINET
2210	GROWTH ROOM
2211	GROWTH ROOM
2212	GROWTH ROOM
2213	GROWTH ROOM
2214	GROWTH ROOM
2215	GROWTH ROOM
2216	GROWTH ROOM
2217	GROWTH ROOM
2218	GROWTH ROOM
2220	SERVICE
2221	C.A. CHAMBER
2222	C.A. CHAMBER
2223	C.A. CHAMBER
2224	C.A. CHAMBER
2225	C.A. CHAMBER
2226	C.A. CHAMBER
2227	C.A. CHAMBER
2228	C.A. CHAMBER
2229	C.A. CHAMBER
2230	C.A. CHAMBER
2232	INSTRUMENT
2235	B.C.M.A. DEAD STORAGE
2240	SECTION STORAGE
2241	PRE-DECONTAMINATION SEED STORAGE
2242	NURSERY STOCK
2243	B.C.M.A. SPECIAL EQUIPMENT
2244	B.C.M.A. PESTICIDE
2250	CORRIDOR
2251	DRY CHEMICAL STORAGE
2252	SOLVENT STORAGE
2253	SOLVENT STORAGE
2255	NON-TOXIC CHEMICAL STORAGE
2256	A.C. DORMANT STORAGE
2257	A.C. HULL
2260	B.C.M.A. COLD STORAGE
2261	B.C.M.A. ANIMAL ROOM
2265	COLD STORAGE
2266	COLD STORAGE
2270	INSTRUMENT
2271	HARDNESS COLD STORAGE
2272	HARDNESS LOW TEMPERATURE
2273	HARDNESS LABORATORY
2275	SPECIFIC FROZEN STORAGE
2276	SPECIFIC FROZEN STORAGE
2277	SPECIFIC FROZEN STORAGE
2310	RADIOISOTOPE COUNTING ROOM
2311	RADIOISOTOPE PREPARATION LABORATORY
2312	FUMIGATION MONITORING AREA
2313	FUMIGATION ROOM
2315	CENTRAL WASH
2317	AIR DRY
2318	FORCED DRYING
2320	SOIL GRINDING
2321	SOIL WEIGHING
2322	SOIL SAMPLE STORAGE
2324	COLD LABORATORY
2325	VIRUS LABORATORY
2330	REARING PREPARATION AREA
2331	REARING ROOM
2332	REARING ROOM
2333	REARING ROOM
2334	REARING ROOM
2335	REARING ROOM
2336	REARING ROOM



Public Works Travaux publics  
Canada Canada

W. T. HAGGERT  
AND COMPANY LIMITED  
ELECTRICAL CONSULTING ENGINEERS  
Telephone 604-736-5531  
1445 West 7th Ave., Vancouver, B.C.  
V6H 1C2



project  
**AGRICULTURAL RESEARCH CENTRE**  
SUMMERLAND B.C.

LIGHTING PLAN  
SECOND FLOOR WEST

AS BUILT STATE CONTRACTORS INC.  
7885 LOWLAND DRIVE  
SURREY, B.C.  
V3J 5A8 (604) 434-8872

designed by C. J. P. ARCHITECTS  
JANUARY 10, 1984  
checked by VC, RPH  
date JANUARY 10, 1984  
approved by W. T. HAGGERT & CO. LTD.  
date JANUARY 10, 1984

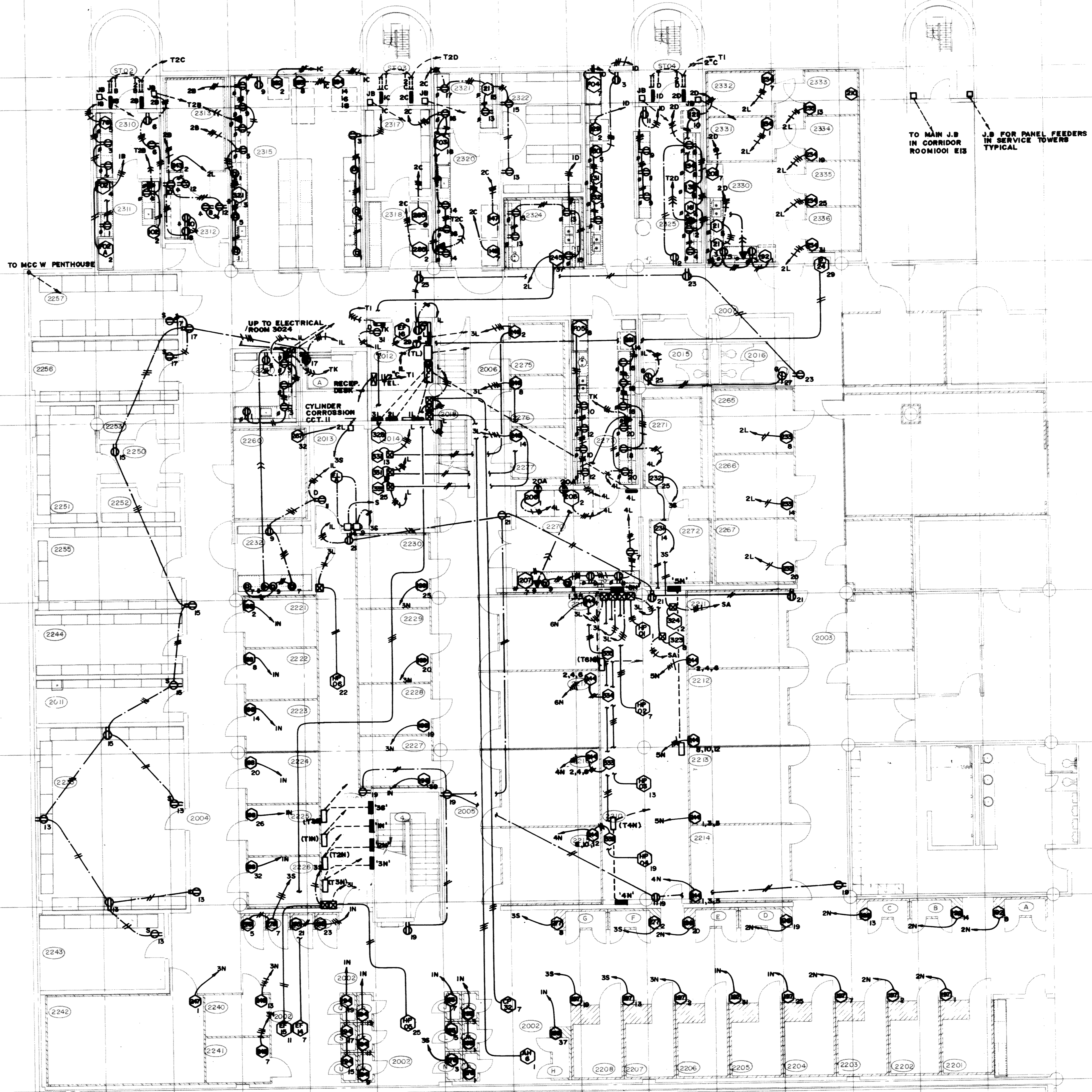
approved by Regional P.M. Commissioner  
drawing no. 6232  
no. du dessin  
E5



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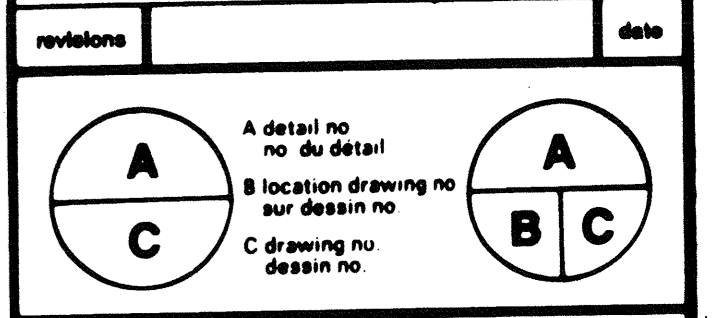
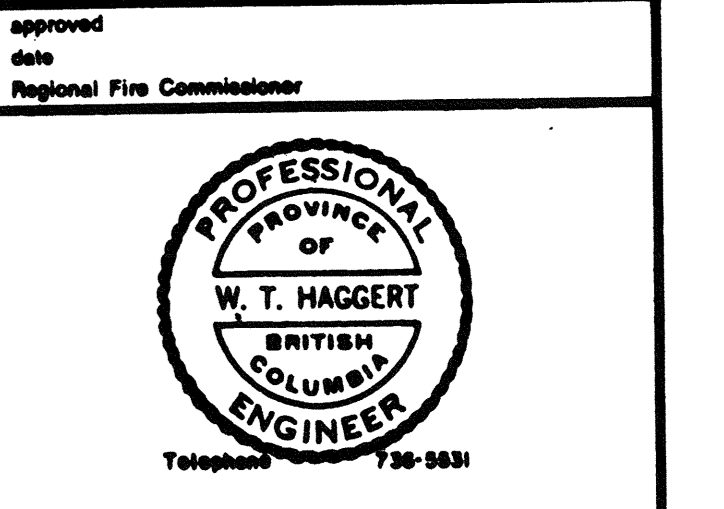


- NOTES:
1. ⚡ WITH LOW AXIS HORIZONTAL, CENTER OUTLET IN UPSTAND.
  2. ⚡ WITH LOW AXIS HORIZONTAL, MOUNT AT +150 ABOVE COUNTER OR SIMILAR SURFACE.
  3. NOT USED.
  4. ⚡ PEDESTAL TYPE OUTLET MOUNTED ON DESK OR BENCH SURFACE.

ROOM NO.	ROOM NAME
4	STAIR 4
A	ELEVATOR A
ST02	SERVICE TOWER 02
ST03	SERVICE TOWER 03
ST04	SERVICE TOWER 04
2002	CORRIDOR
2002-A	GROWTH CABINET
2002-B	GROWTH CABINET
2002-C	GROWTH CABINET
2002-D	GROWTH CABINET
2002-E	GROWTH CABINET
2002-F	GROWTH CABINET
2002-G	GROWTH CABINET
2002-H	GROWTH CABINET
2002-I	GROWTH CABINET
2002-K	GROWTH CABINET
2002-L	GROWTH CABINET
2002-M	GROWTH CABINET
2002-N	GROWTH CABINET
2002-P	GROWTH CABINET
2002-Q	GROWTH CABINET
2002-R	GROWTH CABINET
2002-S	GROWTH CABINET
2002-T	GROWTH CABINET
2002-U	GROWTH CABINET
2002-V	GROWTH CABINET
2002-W	INCUBATION CABINET
2002-X	INCUBATION CABINET
2002-Y	INCUBATION CABINET
2002-Z	INCUBATION CABINET
2003	CORRIDOR
2004	CORRIDOR
2005	CORRIDOR
2006	CORRIDOR
2007	CORRIDOR
2011	JANITOR
2012	ELECTRICAL ROOM
2013	MACHINE ROOM
2014	COMPRESSOR ROOM
2015	MEN'S WASHROOM
2016	WOMEN'S WASHROOM
2018	STAIR
2201	GROWTH ROOM
2202	GROWTH ROOM
2203	GROWTH ROOM
2204	GROWTH ROOM
2205	GROWTH ROOM
2206	GROWTH ROOM
2207	GROWTH ROOM
2208	GROWTH ROOM
2210	SERVICE
2211	GROWTH ROOM
2212	GROWTH ROOM
2213	GROWTH ROOM
2214	GROWTH ROOM
2215	GROWTH ROOM
2216	GROWTH ROOM
2217	GROWTH ROOM
2218	GROWTH ROOM
2220	SERVICE
2221	C.A. CHAMBER
2222	C.A. CHAMBER
2223	C.A. CHAMBER
2224	C.A. CHAMBER
2225	C.A. CHAMBER
2226	C.A. CHAMBER
2227	C.A. CHAMBER
2228	C.A. CHAMBER
2229	C.A. CHAMBER
2230	C.A. CHAMBER
2232	INSTRUMENT
2235	B.C.M.A. DEAD STORAGE
2240	SEED STORAGE
2241	PRE-DERMINATION SEED STORAGE
2242	NURSERY STOCK
2243	B.C.M.A. SPECIAL EQUIPMENT
2244	B.C.M.A. PESTICIDES
2250	CORRIDOR
2251	DRY CHEMICAL STORAGE
2252	SOLVENT STORAGE
2253	SOLVENT STORAGE
2255	NON-TOXIC CHEMICAL STORAGE
2256	A.C. DORMANT STORAGE
2257	A.C. VAULT
2260	B.C.M.A. COLD STORAGE
2261	B.C.M.A. ANIMAL ROOM
2265	COLD STORAGE
2266	COLD STORAGE
2267	COLD STORAGE
2270	INSTRUMENT
2271	HARDINESS COLD STORAGE
2272	HARDINESS LOW TEMPERATURE
2273	HARDINESS LABORATORY
2275	SPECIFIC FROZEN STORAGE
2276	SPECIFIC FROZEN STORAGE
2277	SPECIFIC FROZEN STORAGE
2310	RADIOISOTOPE COUNTING ROOM
2311	RADIOISOTOPE PREPARATION LABORATORY
2312	FUMIGATION MONITORING AREA
2313	FUMIGATION ROOM
2315	CENTRAL WASH
2317	AIR DRYING
2318	FORCED DRYING
2320	SOIL GRINDING
2321	SOIL WEIGHING
2322	SOIL SAMPLE STORAGE
2324	COLD LABORATORY
2325	VIRUS LABORATORY
2330	REARING PREPARATION AREA
2331	REARING ROOM
2332	REARING ROOM
2333	OVIPOSITION ROOM
2334	REARING ROOM
2335	REARING ROOM
2336	REARING ROOM

Public Works Travaux publics  
Canada Canada

W. T. HAGGERT  
AND COMPANY LIMITED  
ELECTRICAL CONSULTING ENGINEERS  
Telephone 8041730-1531  
1443 West 7th Ave., Vancouver - B.C.  
V6L 1C2

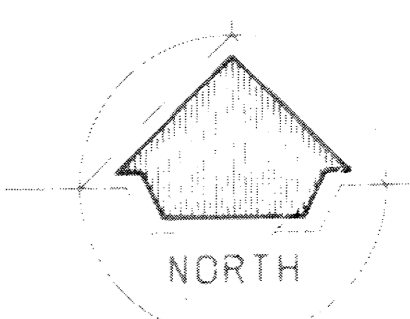


project  
**AGRICULTURAL RESEARCH CENTRE**  
SUMMERLAND B.C.

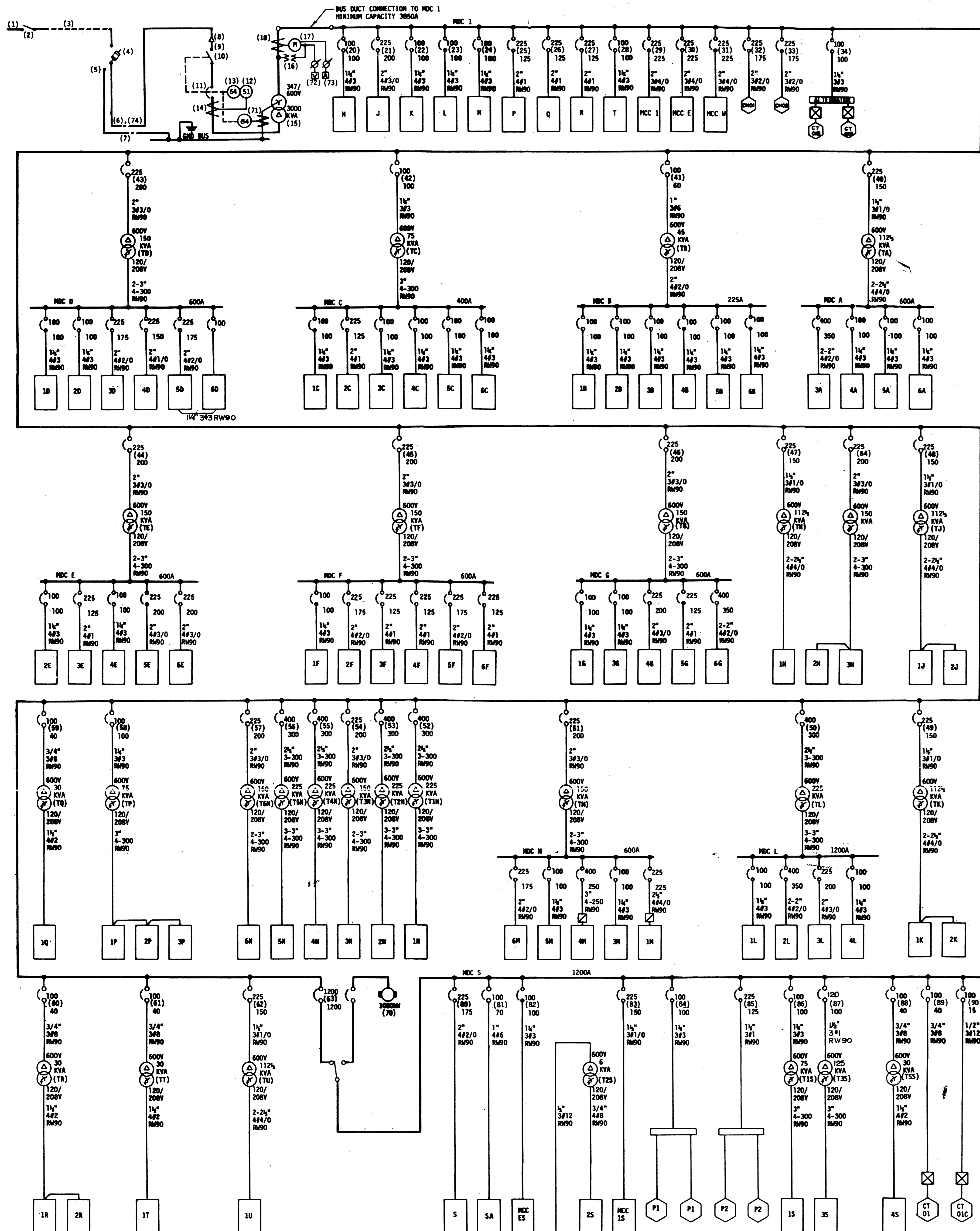
drawing  
**POWER PLAN**  
SECOND FLOOR WEST

AS BUILT STATE CONTRACTORS INC.  
7405 LOWLAND DRIVE  
BURNABY, B.C.  
(604) 436-8872

designed C. J. ARCHITECTS  
date JANUARY 10, 1984  
drawn VC, RPH  
checked W. T. HAGGERT & CO. LTD.  
date JANUARY 10, 1984  
approved  
date  
Tender Submission  
PMC Project Manager Administrateur de projet TPC  
project no. 8232  
drawing no. E15

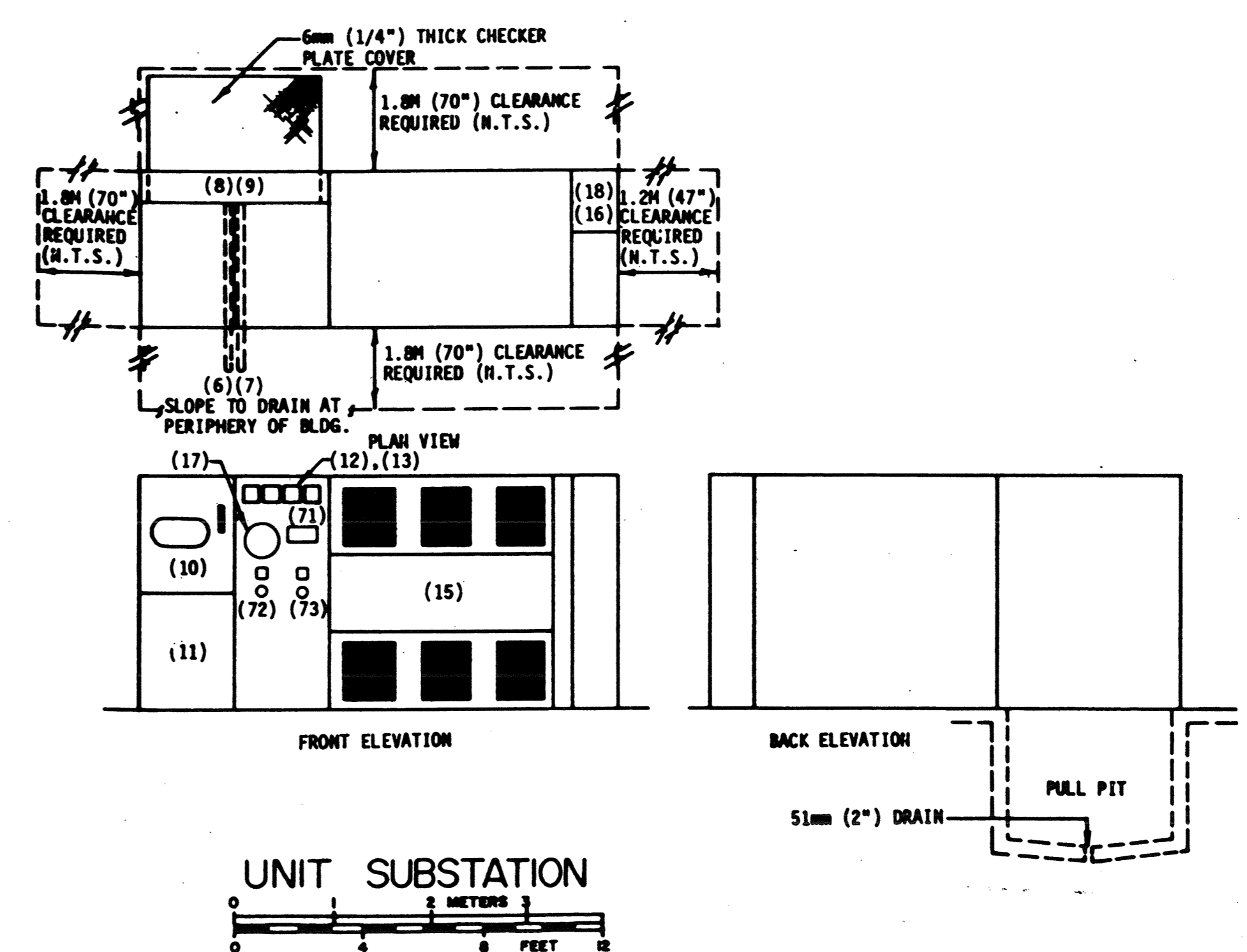






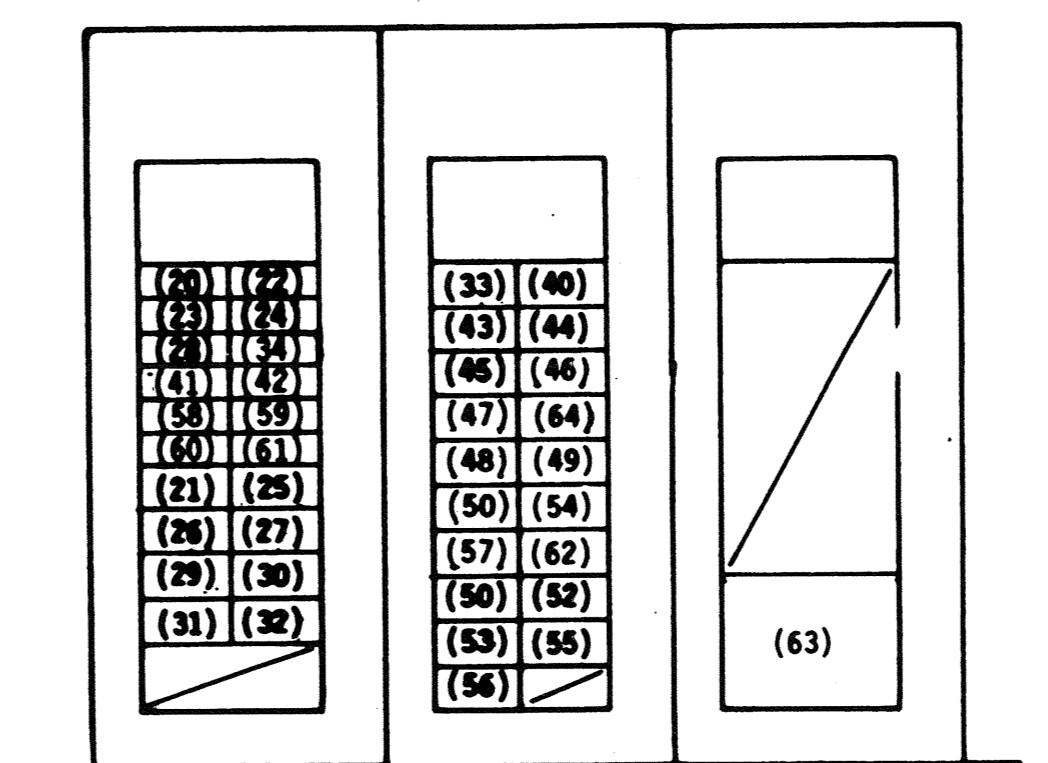
ONE LINE DIAGRAM

- BUS RATING
- BREAKER FRAME SIZE
- TRIP SETTING
- CONDUIT
- WIRES
- INSULATION
- PANELS & OTHER LOADS



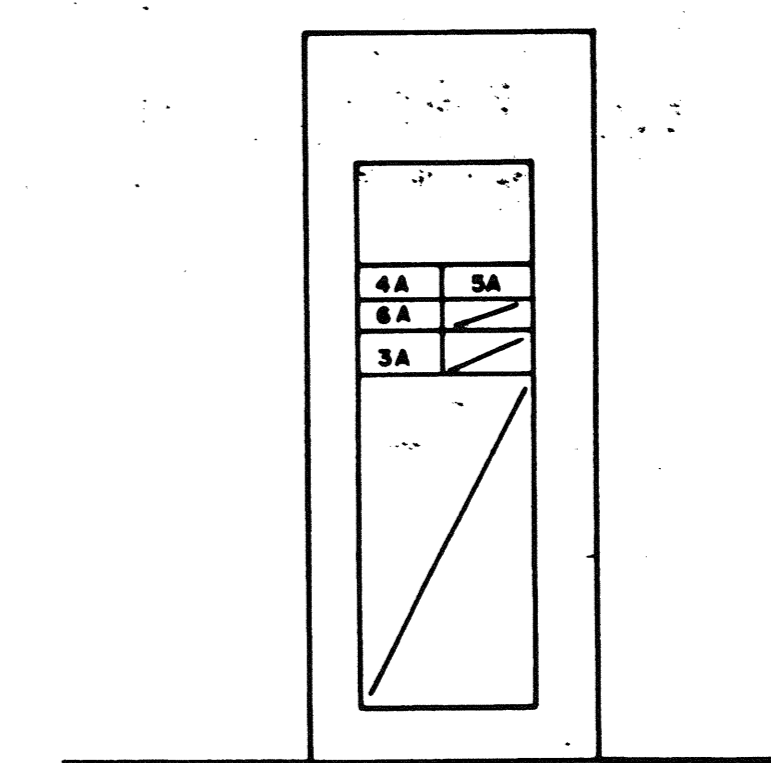
UNIT SUBSTATION

- (1) EXISTING CONNECTION TO MDC 1
- (2) NEW OVERHEAD LINE - #1/0 BARE COPPER
- (3) FUSED CUTOUTS
- (4) CONNECTION TO NEUTRAL
- (5) 4" PVC DUCT TO POLE - SEE SITE PLAN
- (6) 4" 1/2" CONDUIT
- (7) CABLE TERMINATIONS
- (8) 4.0/0.3KV SERVICE CONNECTION
- (9) 15KV 600V ISOLATING SWITCH
- (10) 15KV 600V MINIMUM OIL CIRCUIT BREAKER, USING STORED ENERGY FOR TRIPPING CIRCUIT
- (11) THREE OVERCURRENT RELAYS
- (12) ONE GROUND RELAY
- (13) THREE INSTRUMENT CT'S, RATIO 300:5A
- (14) DRY TYPE TRANSFORMER
- (15) METERING PT'S
- (16) COMBINATION kWh/DEMAND METER
- (17) METERING CT'S
- (18) AUTOMATIC TRANSFER SWITCH
- (19) STANDBY GENERATOR
- (20) SECONDARY GROUND FAULT DETECTOR AND CT
- (21) VOLTETER & TRANSFER SWITCH
- (22) AMPMETER & TRANSFER SWITCH
- (23) 3-1/2" 300MM 15KV XLPE

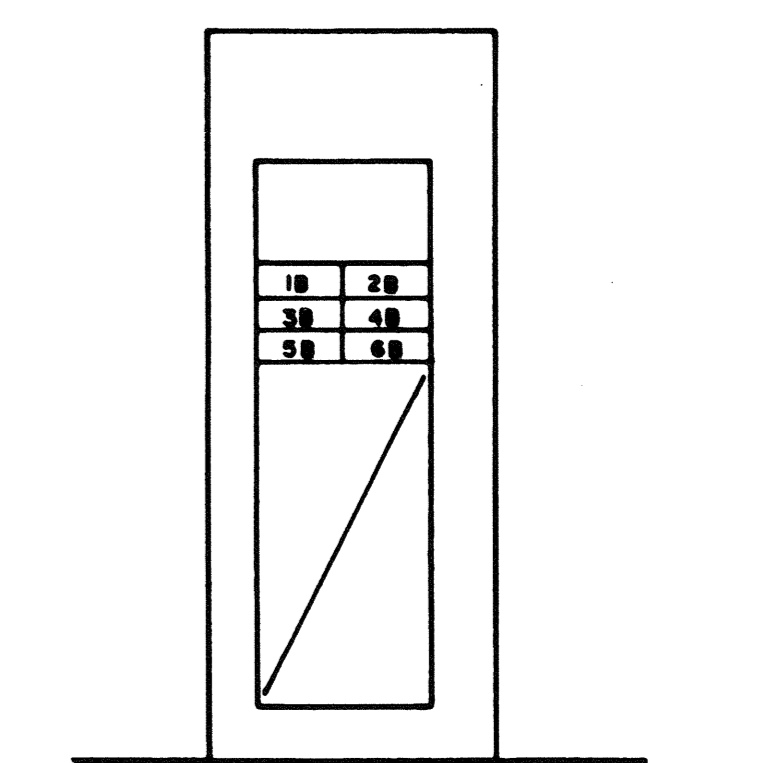


MDC I

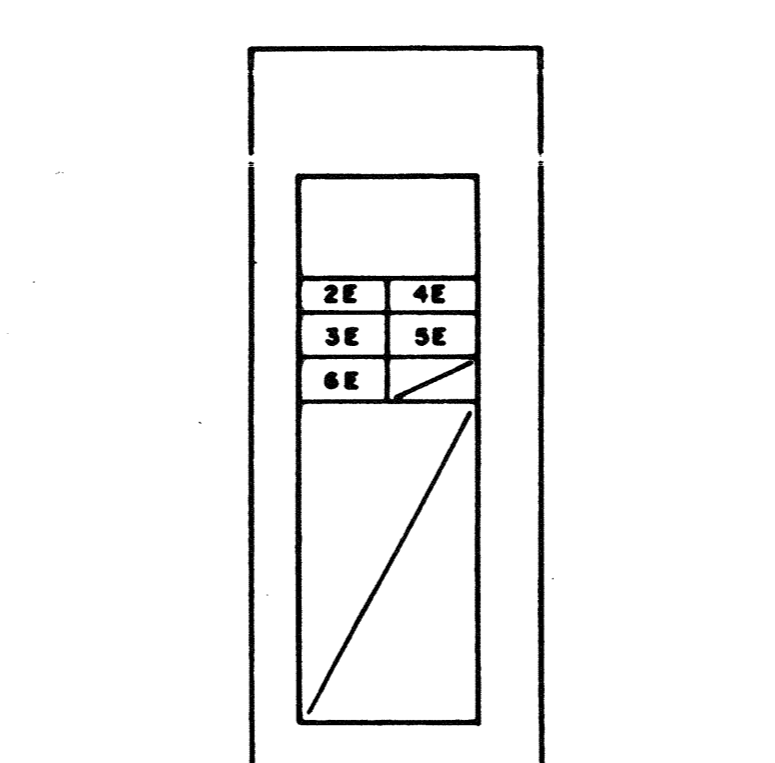
NOTE: ALL BREAKERS IN MDC I SHALL HAVE BUILT-IN IRLC FUSES OR CURRENT LIMITERS. CAPACITY OF VERTICAL BUSWORK IN EACH SECTION NOT LESS THAN 1300A.



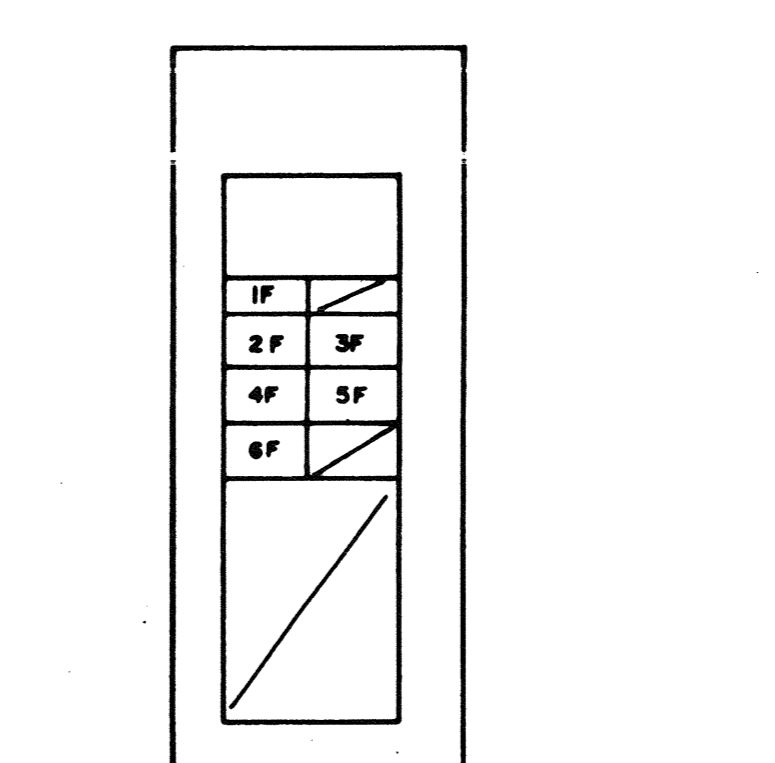
MDC A



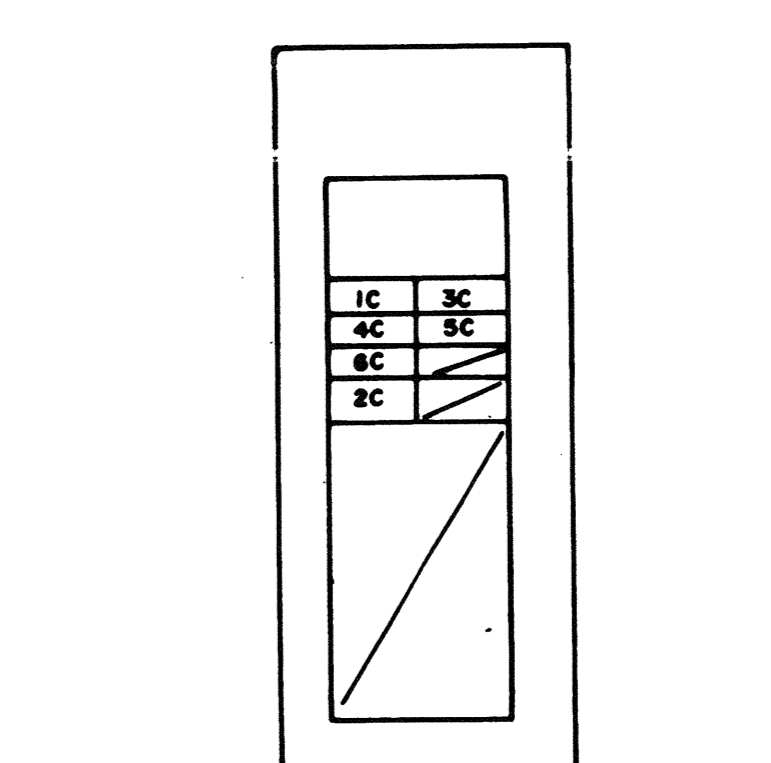
MDC B



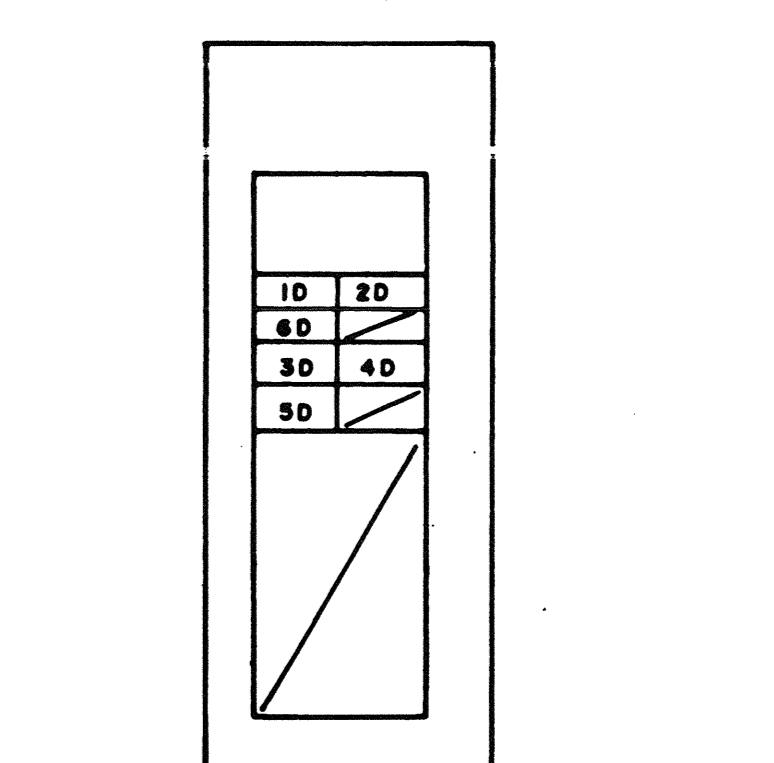
MDC E



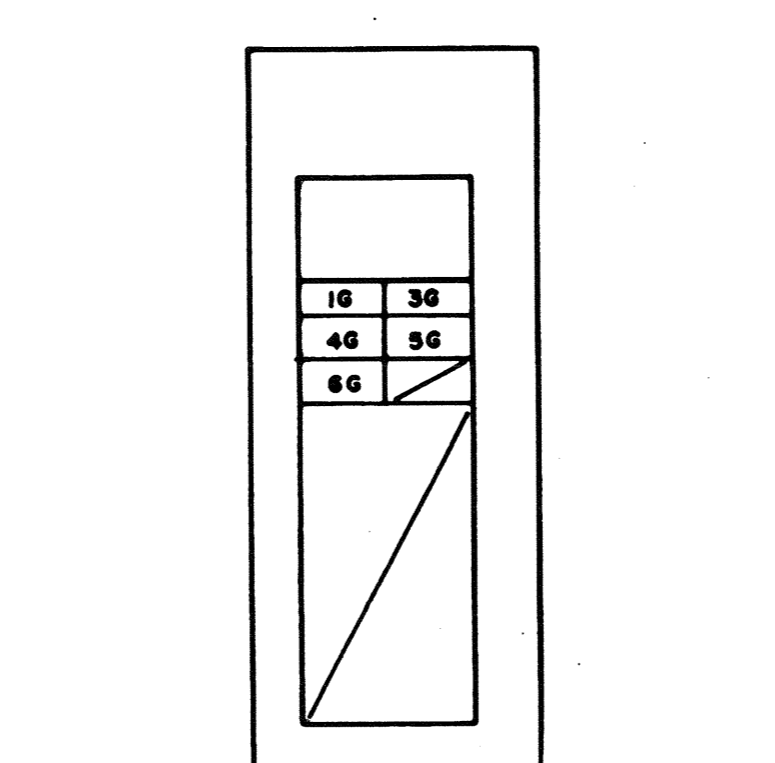
MDC F



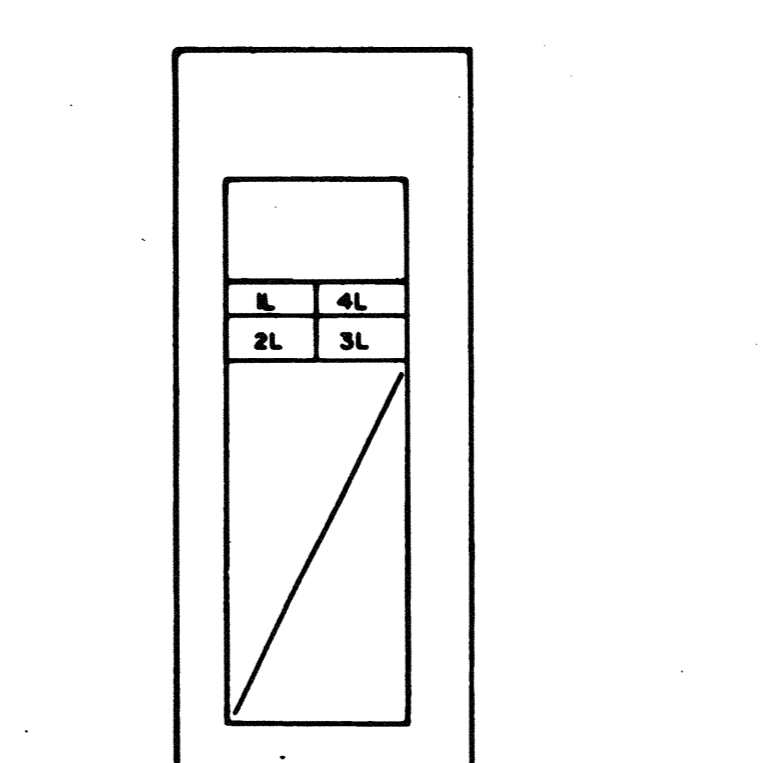
MDC C



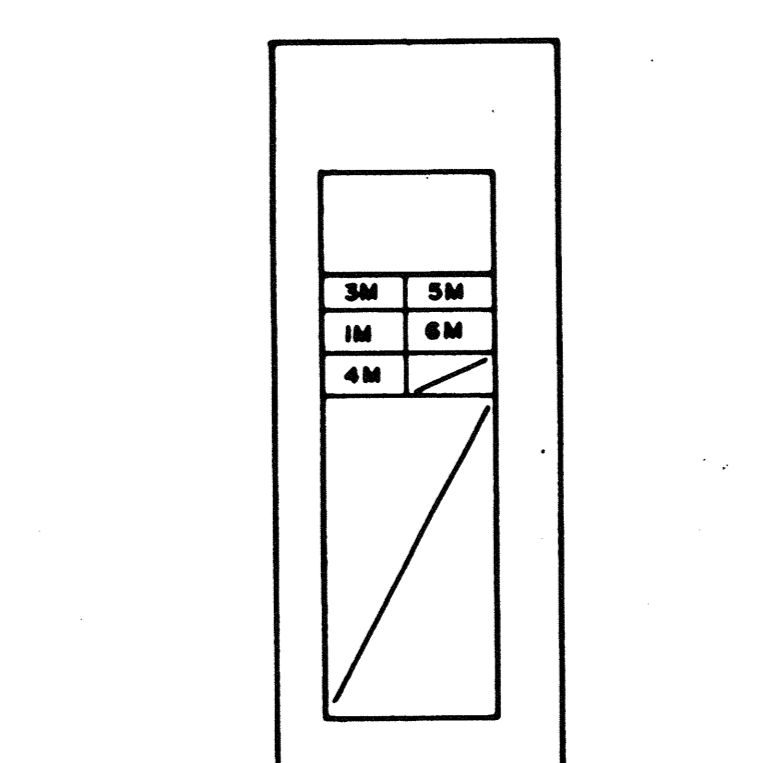
MDC D



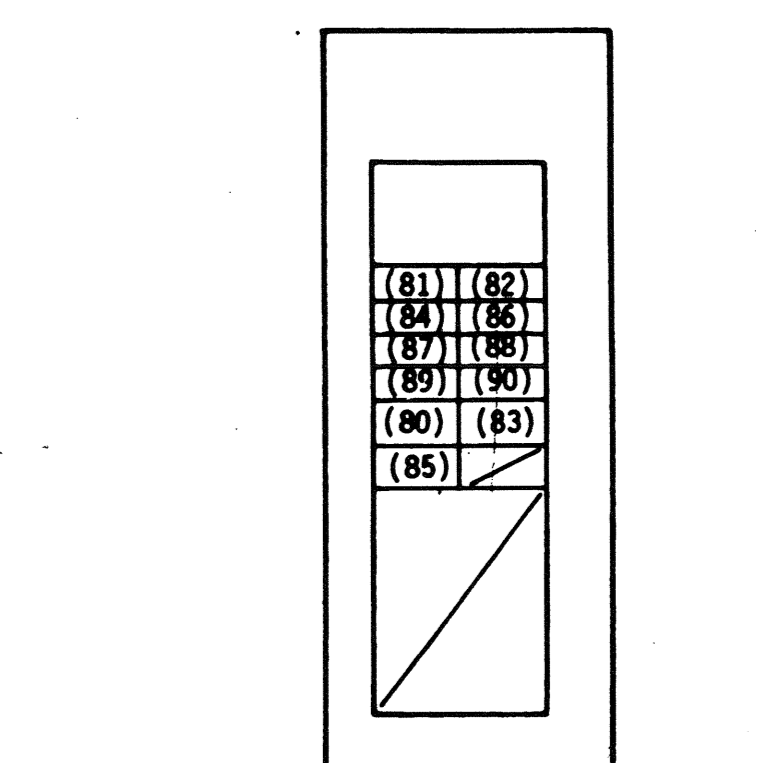
MDC G



MDC L



MDC M



MDC S

Public Works / Travaux publics  
Canada / Canada

W. T. HAGGERT AND COMPANY LIMITED  
ELECTRICAL CONSULTING ENGINEERS  
Telephone: (604) 738-1531  
1445 West 7th Ave., Vancouver, B.C. V6H 1C2

approved  
Regional Fire Commissioner

PROFESSIONAL ENGINEER  
W. T. HAGGERT  
BRITISH COLUMBIA  
Telephone: 750-8831

revisions / date

A	Detail no. 01	A
C	Location drawing no. 02	B/C
	C Drawing no. 03	

project  
**AGRICULTURAL RESEARCH CENTRE SUMMERLAND B.C.**

drawing  
ONE LINE DIAGRAM & MDC's

AS BUILT STATE CONTRACTORS INC.  
2405 COWLAND DRIVE  
SURREY, B.C. V4A 4S8 (604) 434-8877

designed  
C. J. P. ARCHITECTS  
JANUARY 10, 1984

drawn  
VC, RPJ  
JANUARY 10, 1984

reviewed  
W. T. HAGGERT & CO. LTD.  
JANUARY 10, 1984

approved

Tender

PWC Project Manager / Administrateur du projet PWC

project no. 8252

drawing no. 02

E38



cjp architects

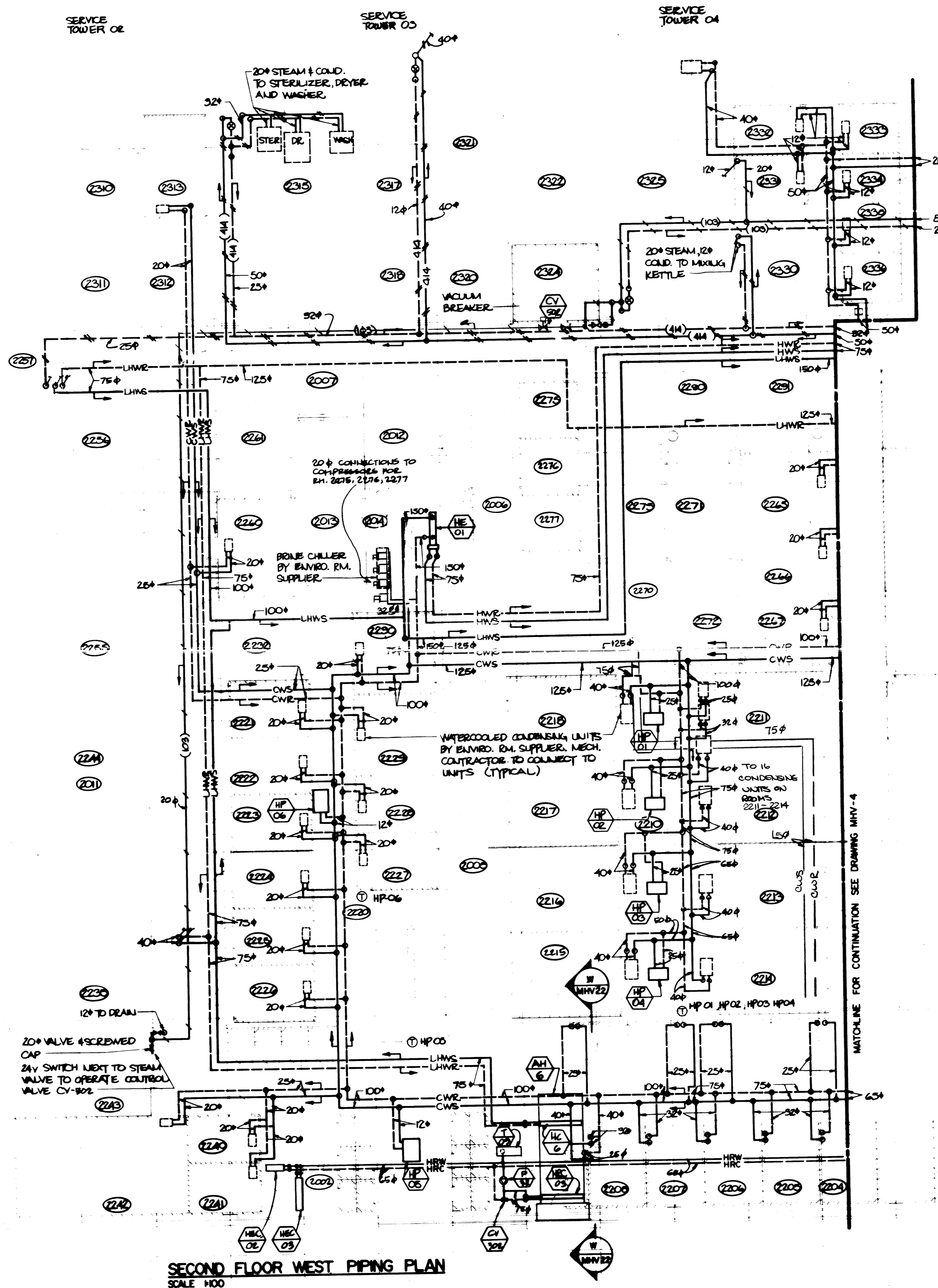
CARLBERG JACKSON PARTNERS

301 - 6th Street new westminster bc  
V3L5A7 phone (604) 526-2764

D. W. THOMSON  
CONSULTANTS LTD.  
mechanical - electrical - civil  
Kamloops  
Vancouver  
Victoria

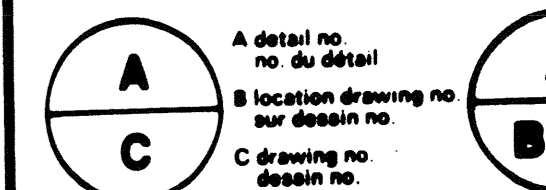
DWT JOB NO. 82-7014

approved  
date  
Regional P.E. Commissioner



SECOND FLOOR WEST PIPING PLAN  
SCALE 1/8"

CERTIFIED AS BUILT DRAWINGS  
BY W. MOORE  
KEITH PIPING & HEATING LTD.



**AGRICULTURAL RESEARCH CENTRE**  
SUMMERLAND B.C.

FLOOR PLAN  
SECOND FLOOR WEST  
PIPING

Designed	Z. H.	Comp.	
Date	10 JAN. 1984		
Drawn	C. W. T. T.	Checked	
Date	10 JAN. 1984		
Reviewed	D. G. S.	Accepted	
Date	10 JAN. 1984		

approved  
date  
10 JAN. 1984  
PWC Project Manager  
Administrative de gestion PWC  
project no.  
**036253**  
drawing no.  
**MHV 5**

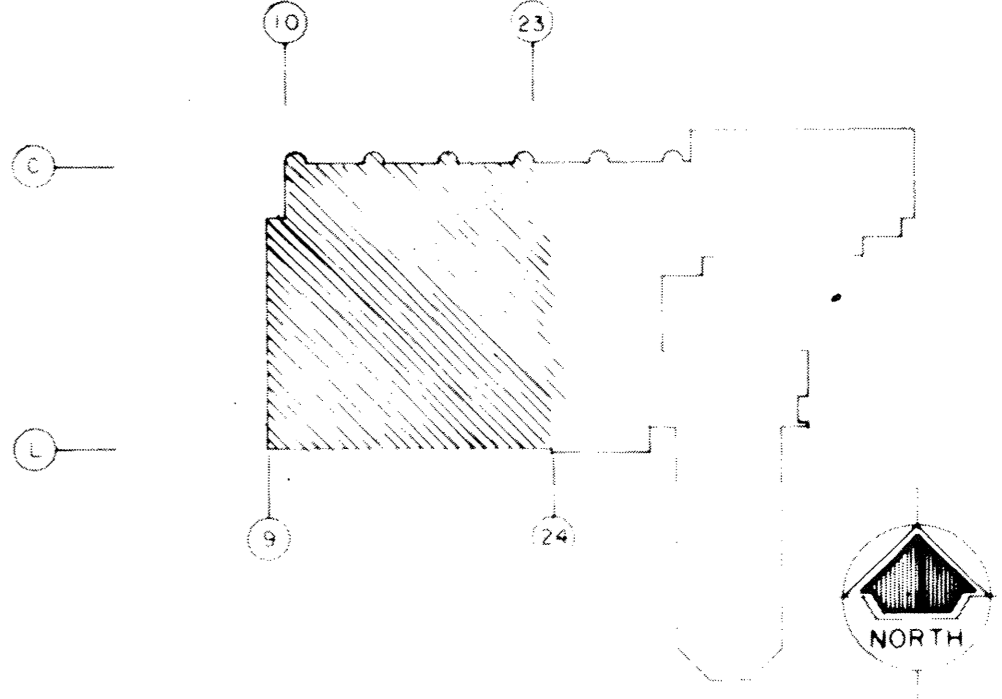
PRINTING INSTRUCTIONS MHV-5	
DWT #	DWG #
704	MHV-5
704	MHV-3
704	MHV-2
704	MHV-1



SECOND FLOOR WEST PIPING

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

A  
B  
C  
D  
E  
F  
G  
H  
J  
K  
L  
M



Public Works  
Counsell  
Thomson public  
Counsell

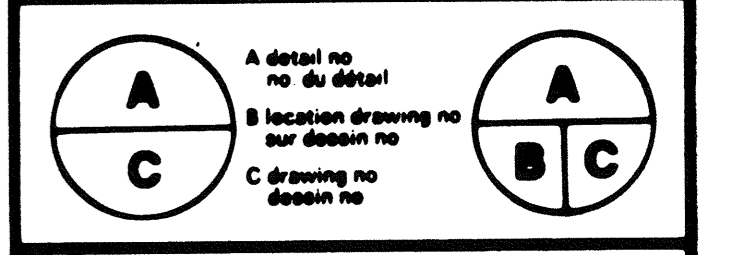
**c j p architects**  
CARLBERG JACKSON PARTNERS

301 - 6th street ne, westminster bc  
V3L3A7 phone (604) 526-2764

**D. W. THOMSON CONSULTANTS LTD.**  
mechanical - electrical - civil  
Kingsway  
Vancouver  
Victoria

D.W.T. JOB NO. 82-7014  
Approved  
Date  
Project File Classification

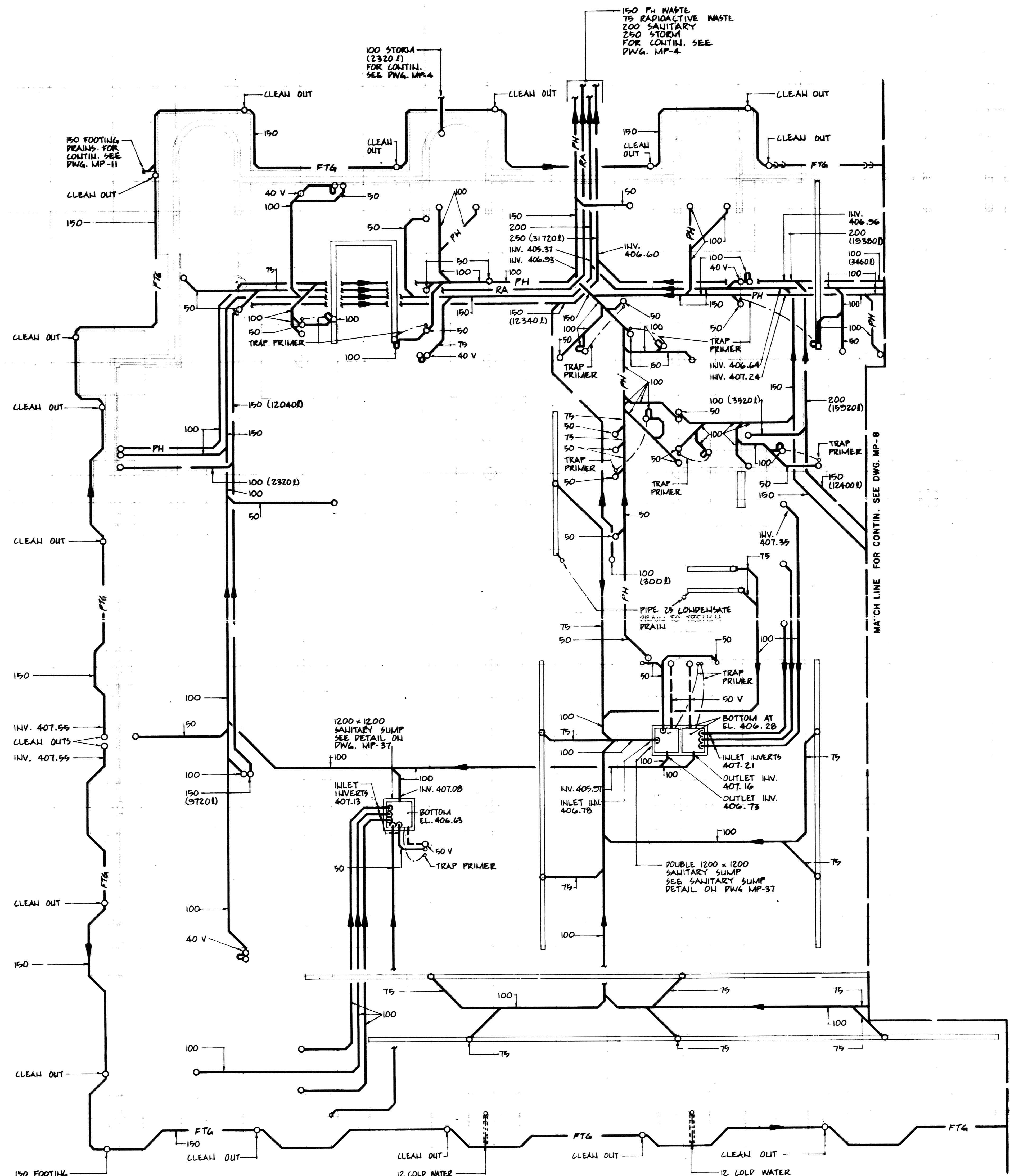
**CERTIFIED AS BUILT DRAWINGS**  
FOR BUILT DRAWINGS  
KEITH PLUMBING & HEATING LTD.  
KEITH PLUMBING & HEATING LTD.



**AGRICULTURAL RESEARCH CENTRE**  
SUMMERLAND B.C.

**FOUNDATION PLAN**  
SECOND FLOOR WEST  
PLUMBING

designed	for	date	JANUARY 10 1984
drawn	for	date	JANUARY 10 1984
checked	R.F.D.	date	JANUARY 10 1984
approved		date	
Project Manager	Administrative & Project Mgr.	Project No.	036253
Drawing No.	MP-9	No. of sheets	



PRINTING INSTRUCTIONS

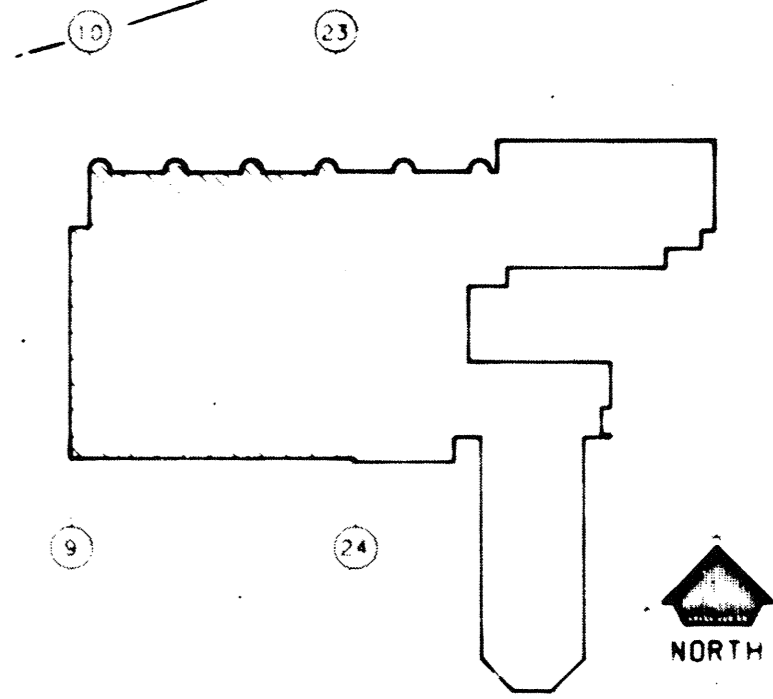
DWT. M.	DWG. M.	SC SHEET NAME	MP-9
7014		BORDER TITLE SHEET	
7014	MP-9	SEC. FLOOR PLAN	

PWC AD

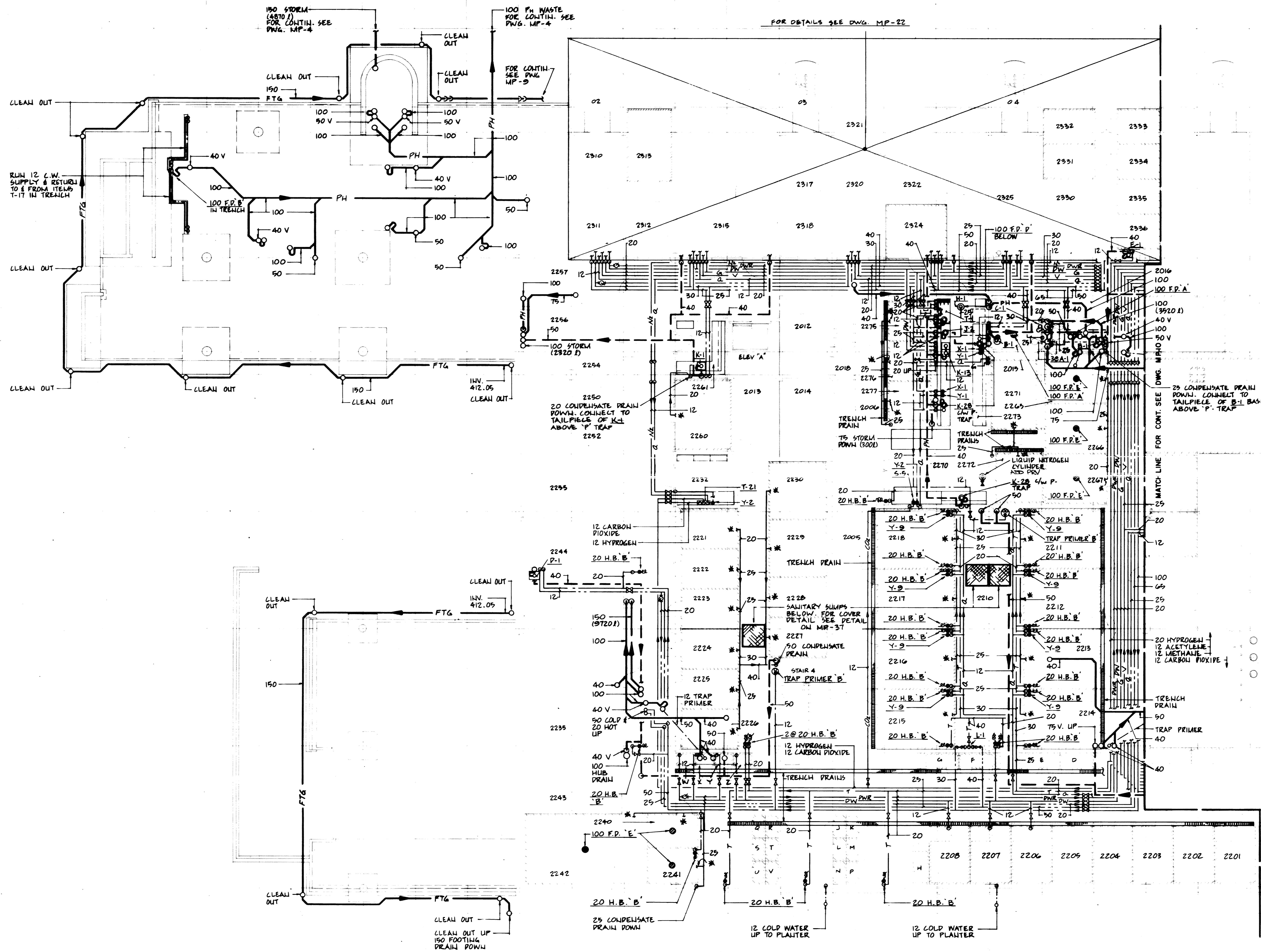
NOTE:-  
FOR TRENCH DRAINS SEE ARCH. DWGS.  
ALL TRAP PRIMERS BELOW SLAB ON GRADE AREAS TO BE ENCASED IN POLY. PIPE

SCALE - 1:100





A  
B  
C  
D  
E  
F  
G  
H  
J  
K  
I  
M



PRINTING INSTRUCTIONS		MP-11
DWT #	DWG #	SC SHEET NAME
7014	MP-11	BORDER TITLE SHEET
7014	MP-11	SECOND FL. WEST ARCH
7014	MP-11	SECOND FL. WEST PLBG

NOTE: FOR TRENCH DRAIN GRATES SEE ARCH. DWG. 7014

\* CONSULT 20 CONDENSATE DRAIN PIPING TO PIPING FROM DRAIN PANS.

SCALE: 1:100  
1 2 3 4 5 6 7m

CERTIFIED AS-BUILT DRAWINGS  
PER W. MOOREHEAD  
WEST KENT PIPING AND HEATING LTD.

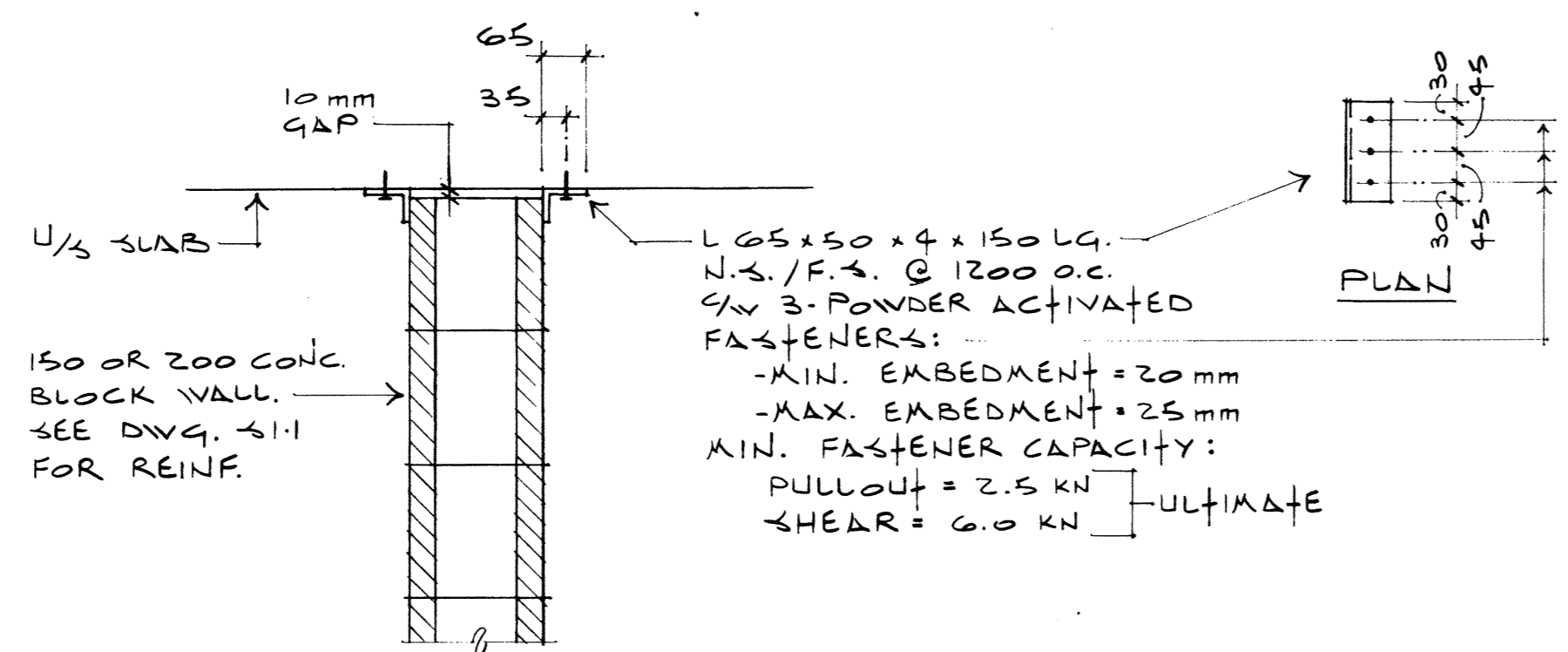
revision	date
A	
B	
C	

**AGRICULTURAL RESEARCH CENTRE  
SUMMERLAND B.C.**

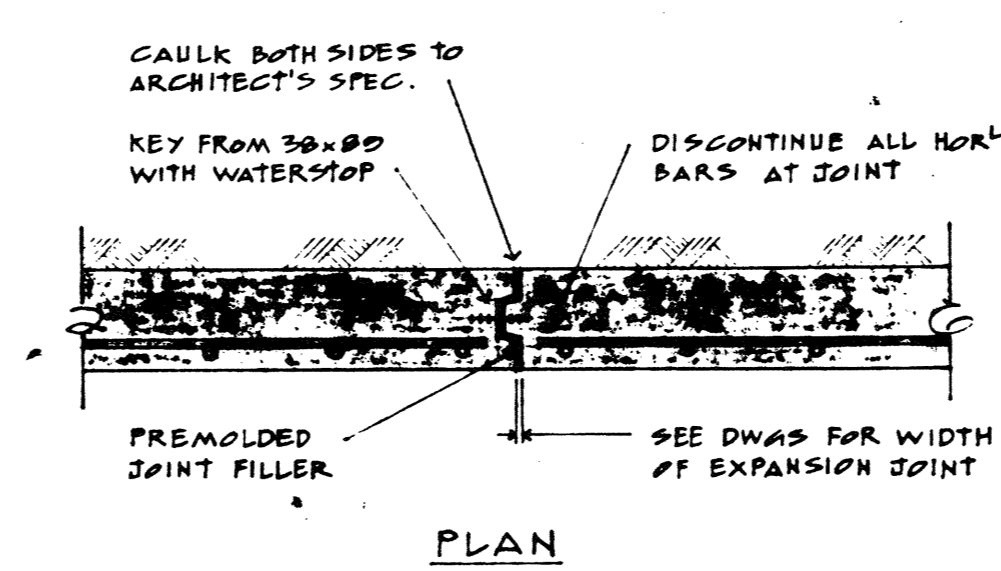
**FLOOR PLAN  
SECOND FLOOR WEST  
PLUMBING**

designed by	DATE	check
drawn by	JANUARY 10 1984	
checked by	JANUARY 10 1984	
approved by	R. F. D.	
approved by	JANUARY 10 1984	
Project Manager	Administrative by	Project
Project No.	035253	No. of sheets
Sheet No.	MP-11	

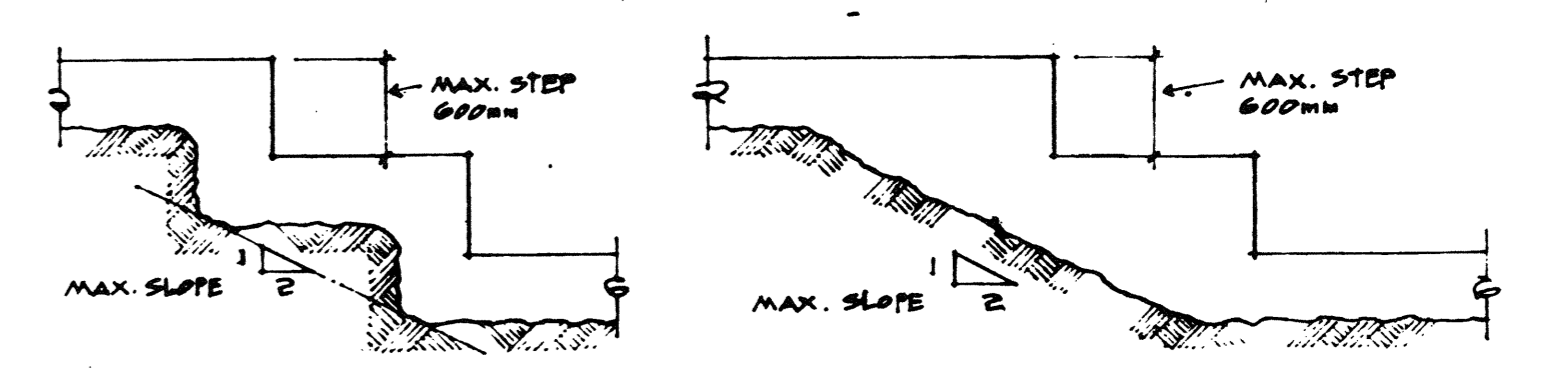




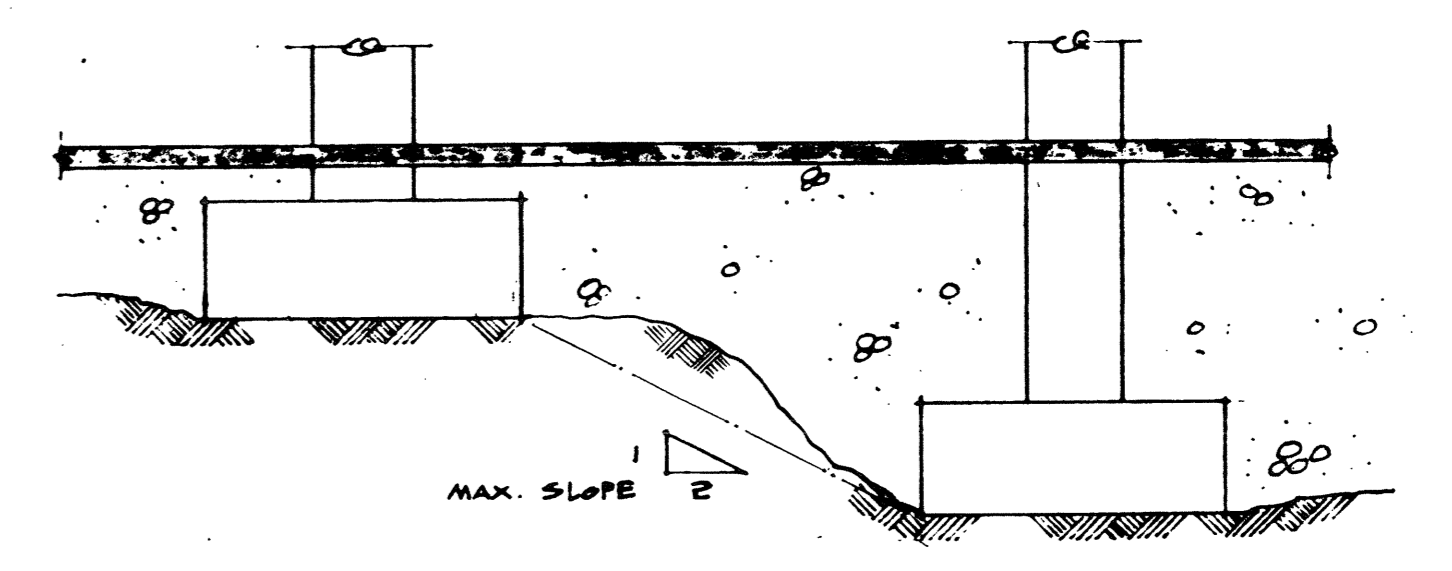
SUPPORT DETAIL AT TOP OF CONCRETE BLOCK PARTITION WALLS U.N.O.



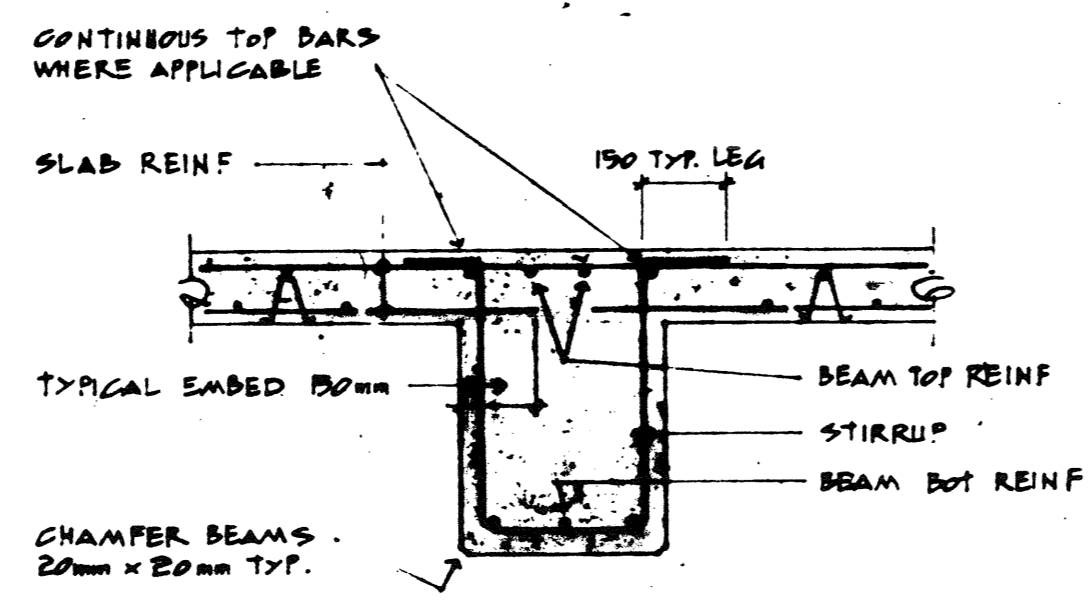
WALL EXPANSION JOINT



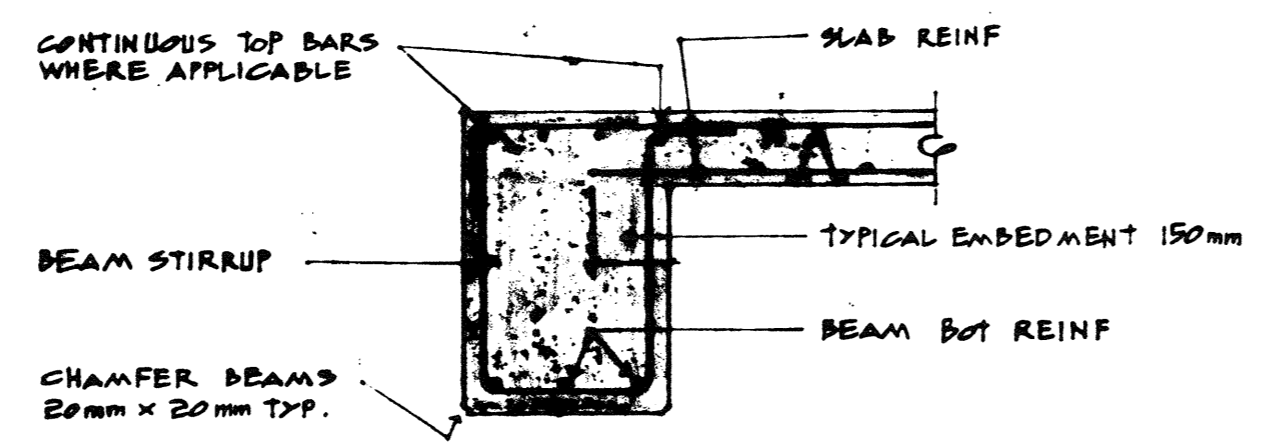
TYPICAL STEPPED FOOTINGS (WALLS)



TYPICAL ADJACENT SPREAD FOOTINGS (COLS)

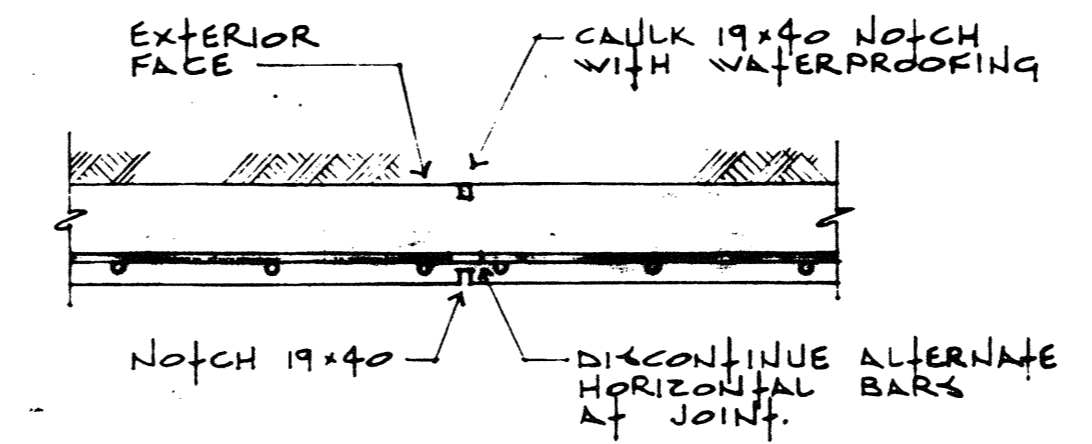


INTERIOR

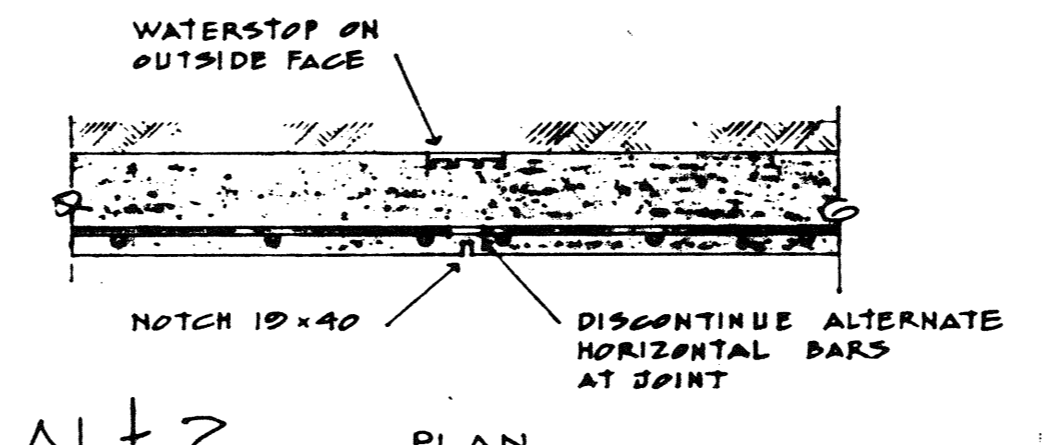


EXTERIOR

TYPICAL BEAM



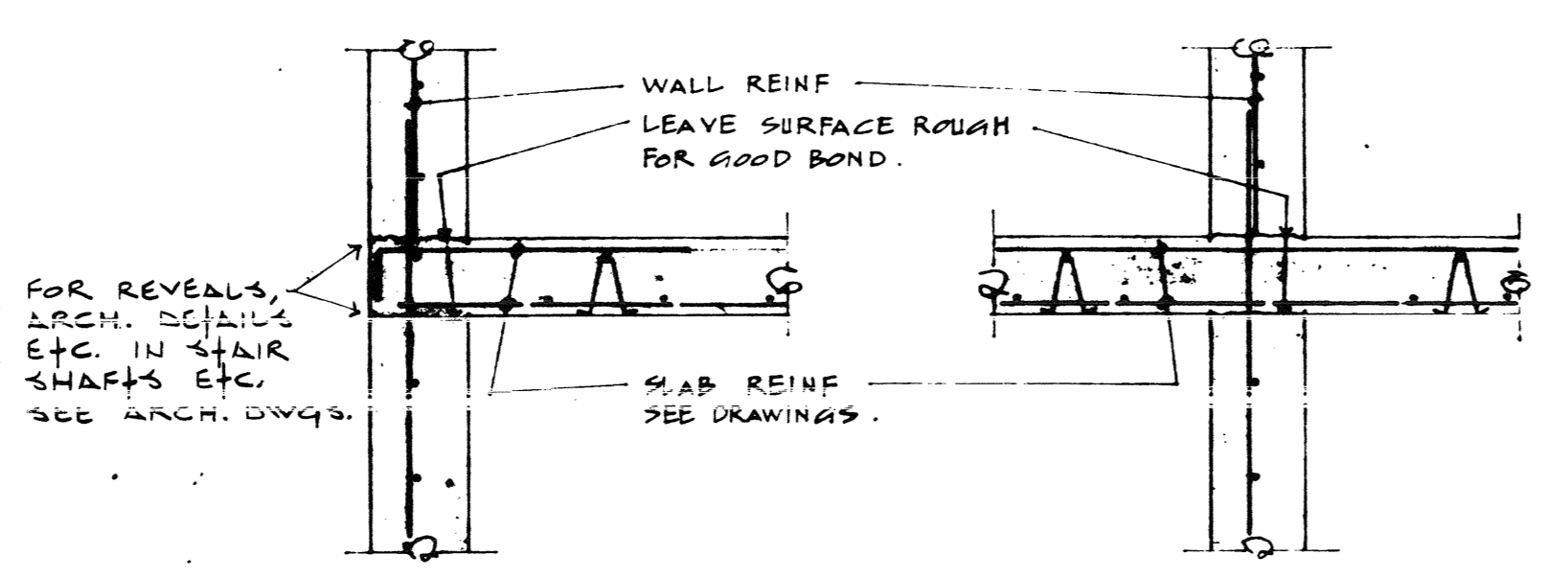
ALT. 1 PLAN



ALT. 2 PLAN

WALL CONTROL JOINT

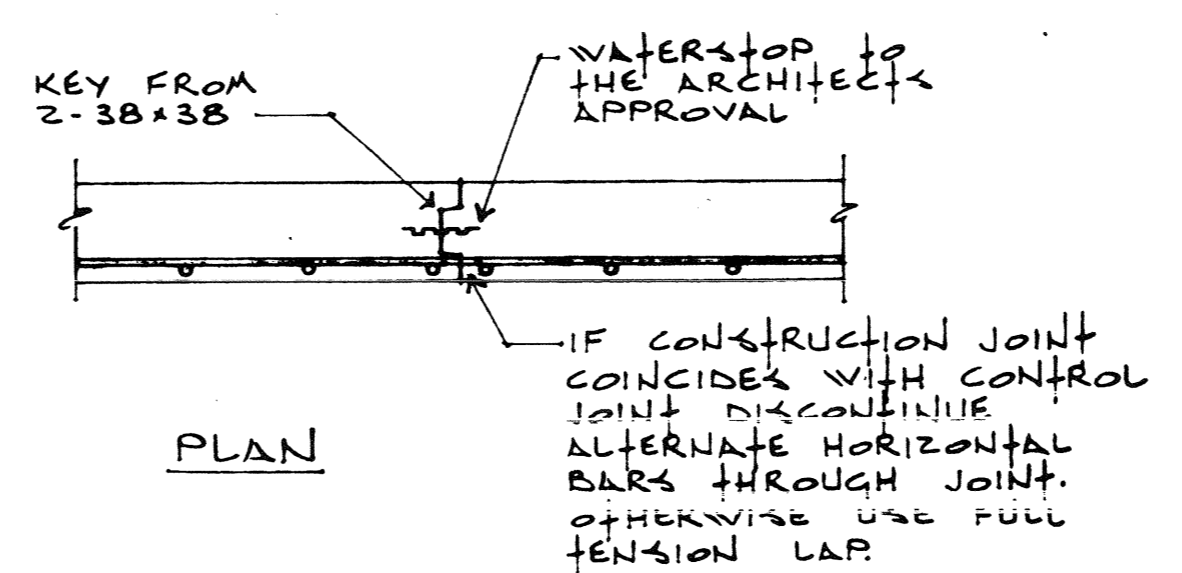
SPACE AT 10000 O.C. MAX.



EDGE

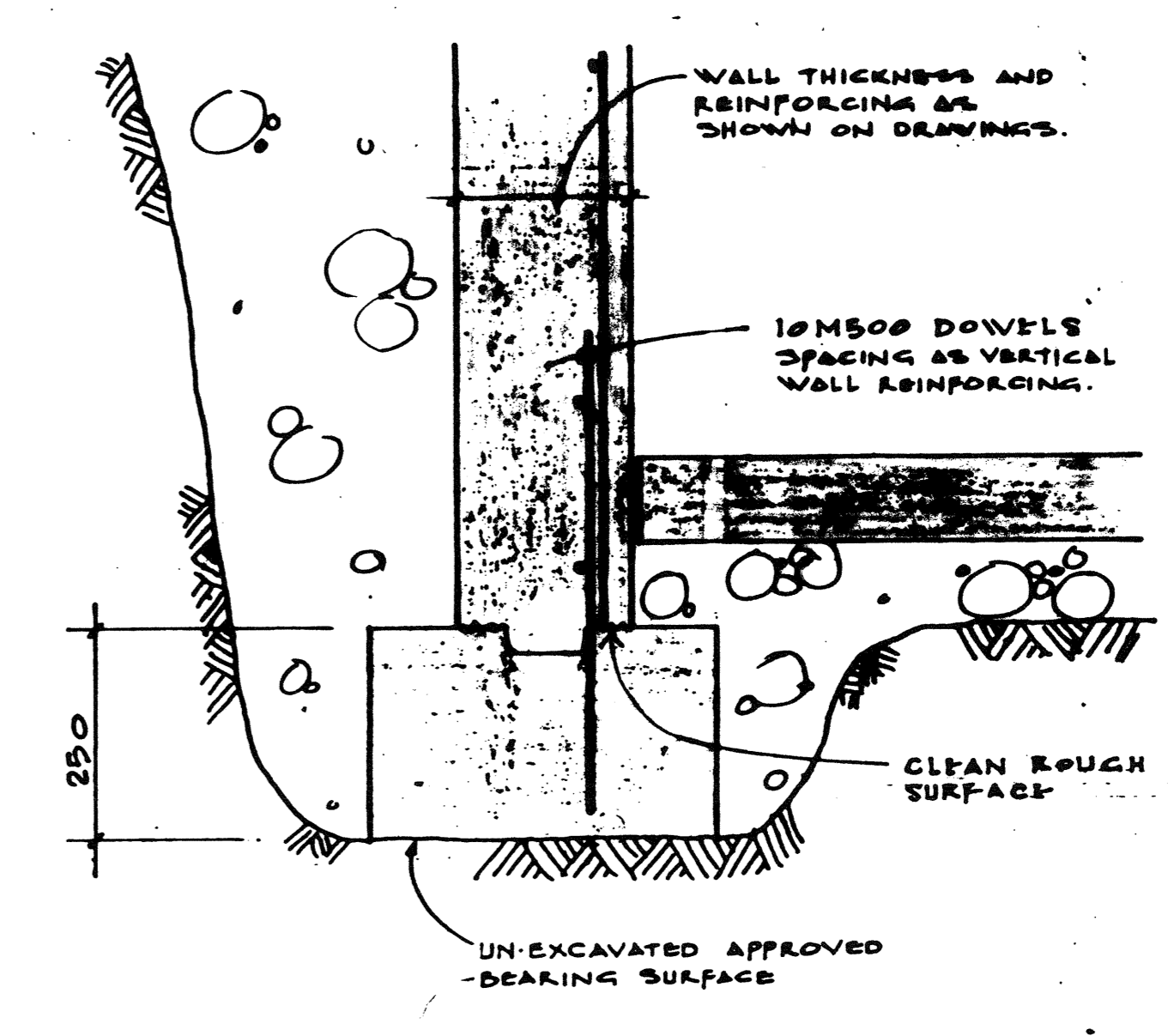
INTERIOR

SLAB POUR JOINTS



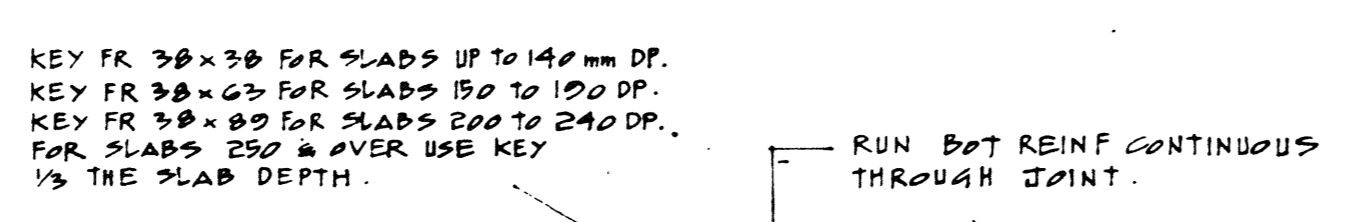
PLAN

WALL CONSTRUCTION JOINT

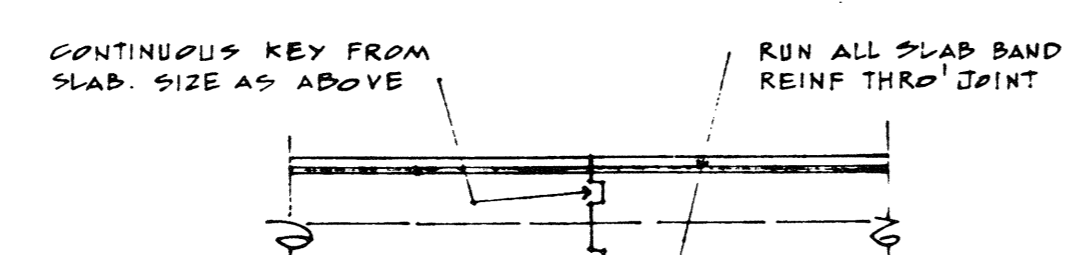


TYPICAL WALL STRIP FOOTING

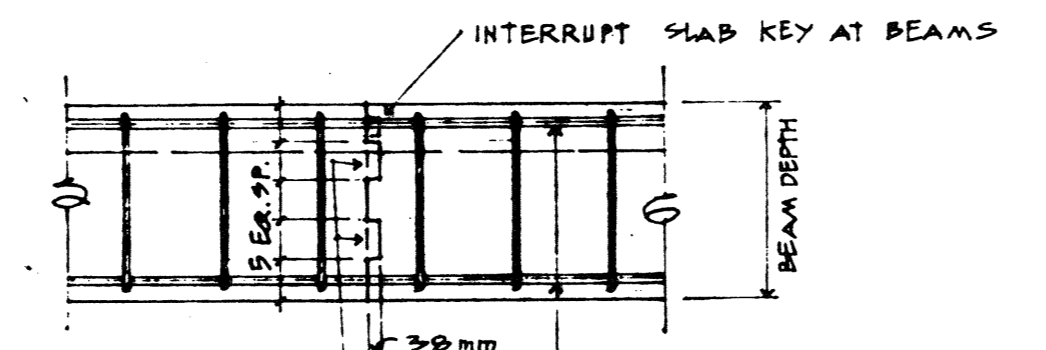
NOTE! CENTER STRIP FOOTING UNDER WALL U.N.O. ON PLAN.



THRO' SLABS

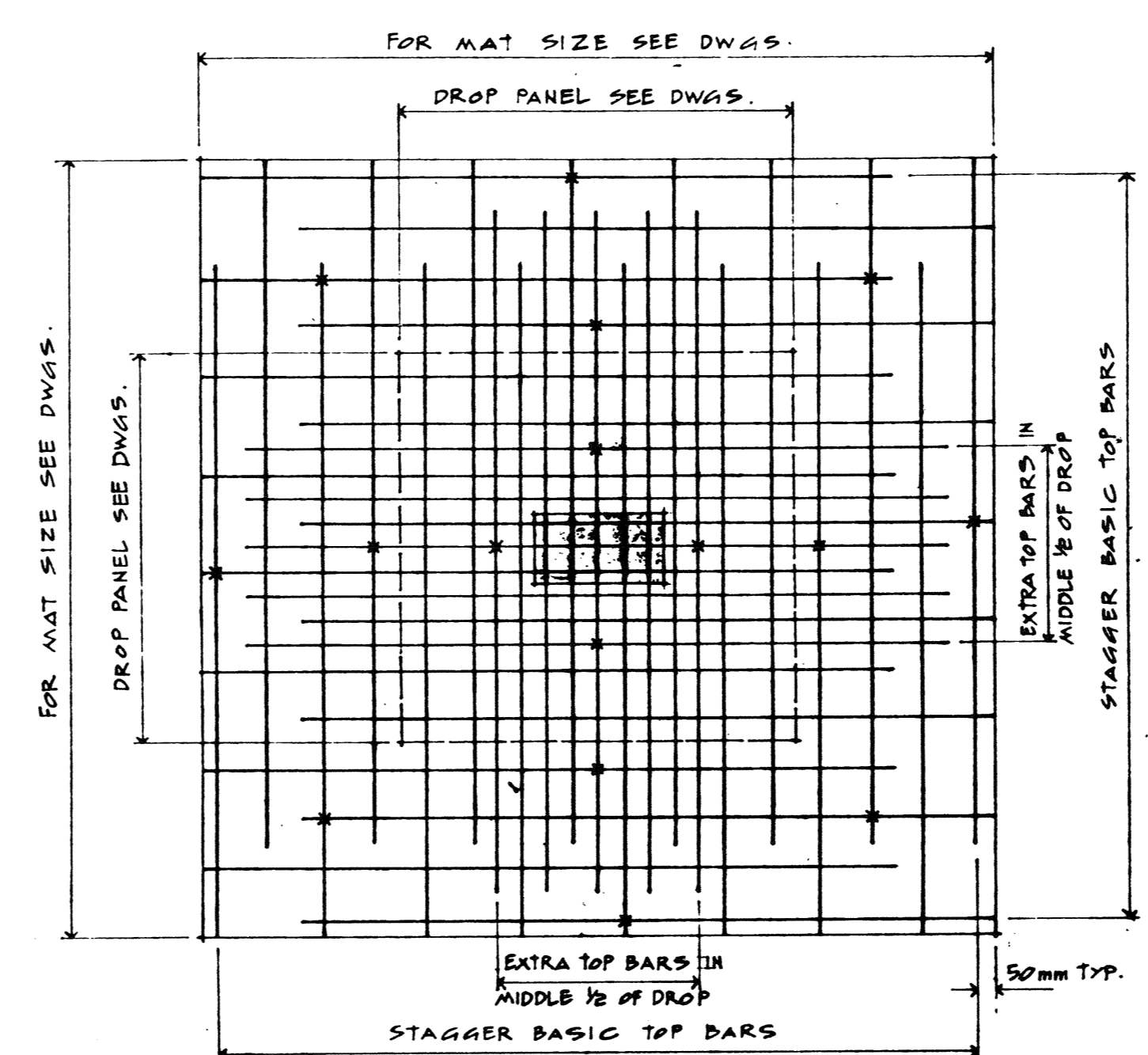


THRO' SLAB BANDS



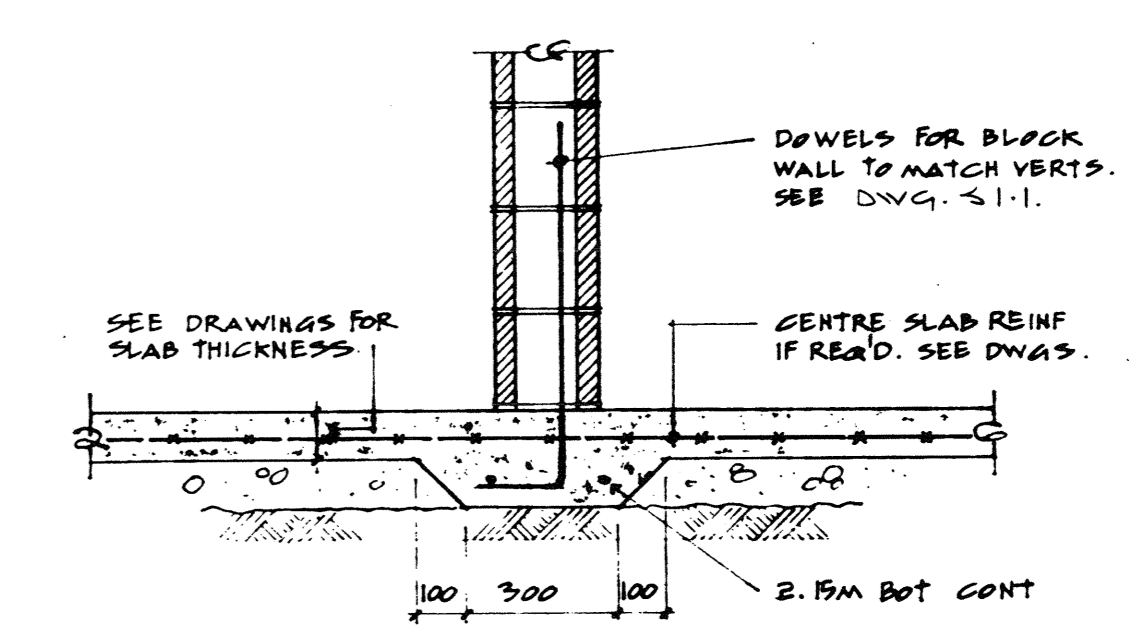
THRO' BEAMS

CONSTRUCTION JOINTS THROUGH SLABS, SLAB BANDS & BEAMS



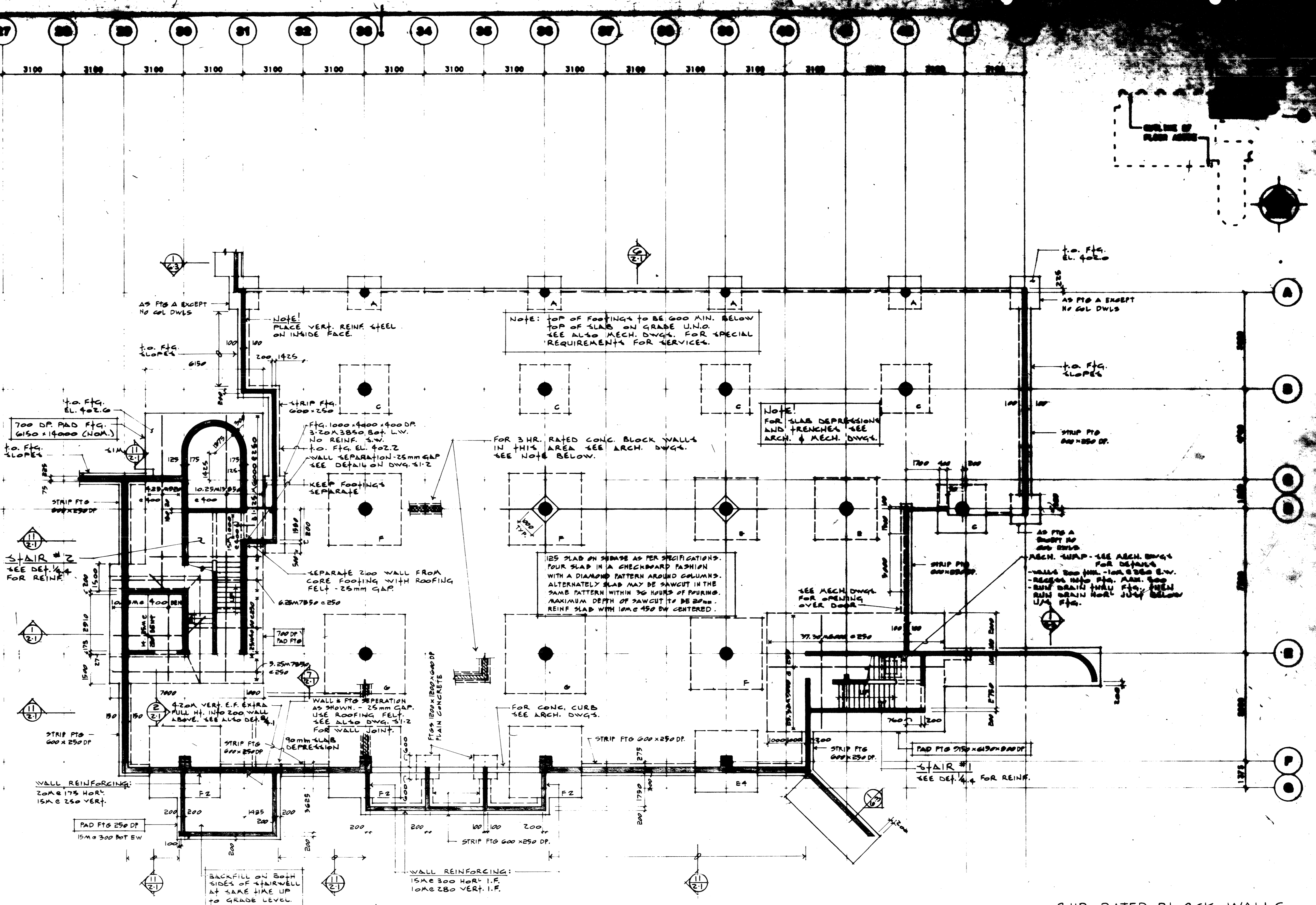
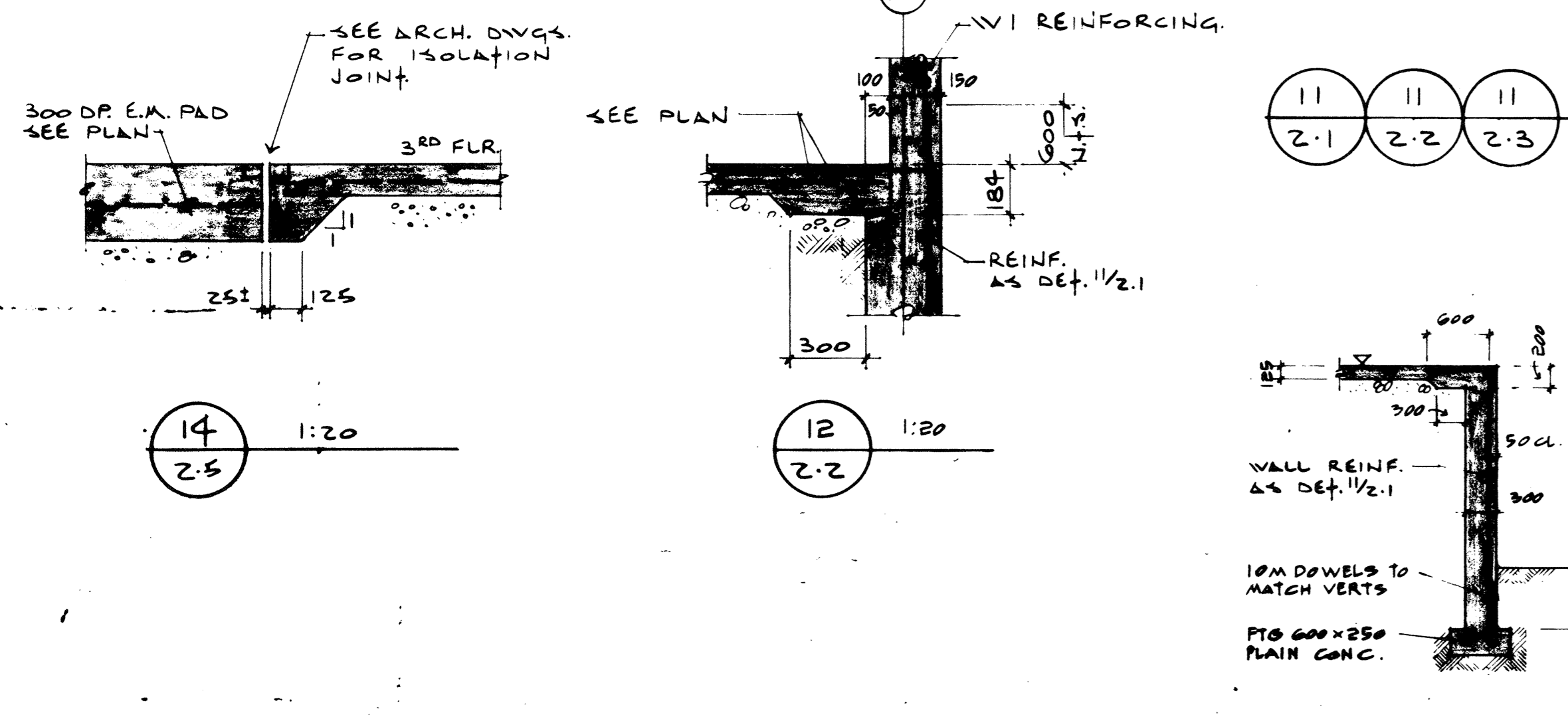
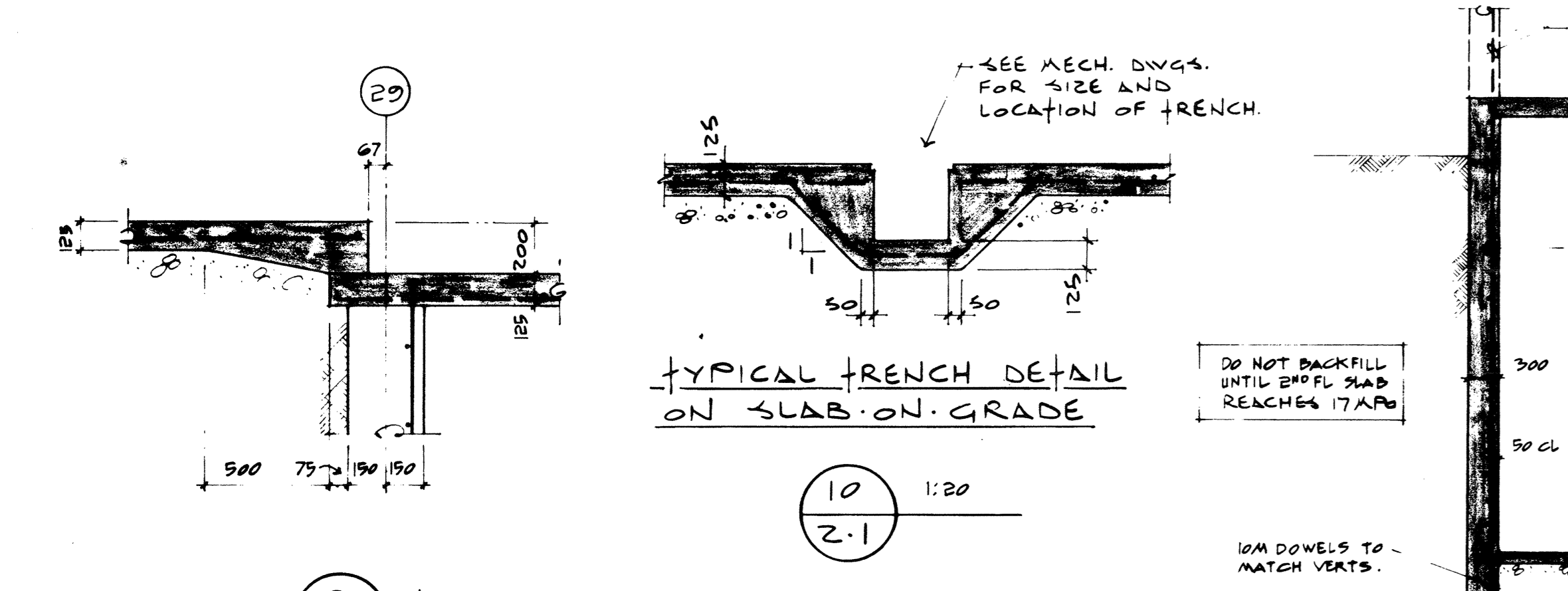
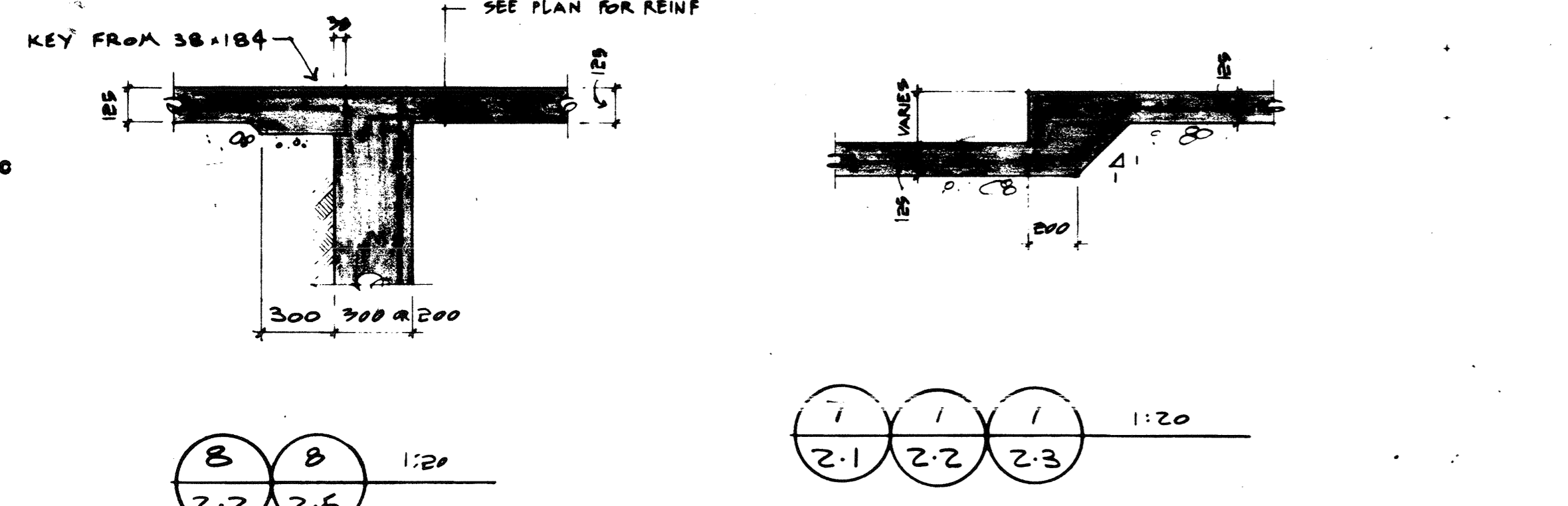
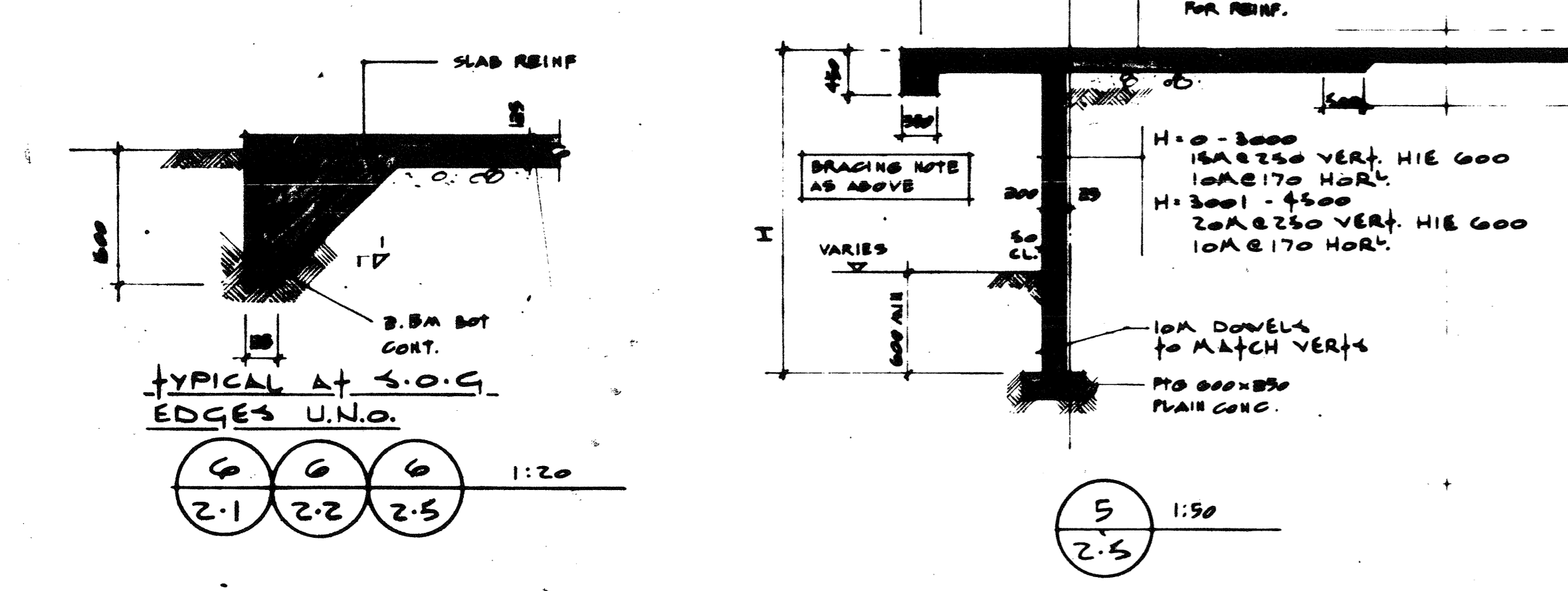
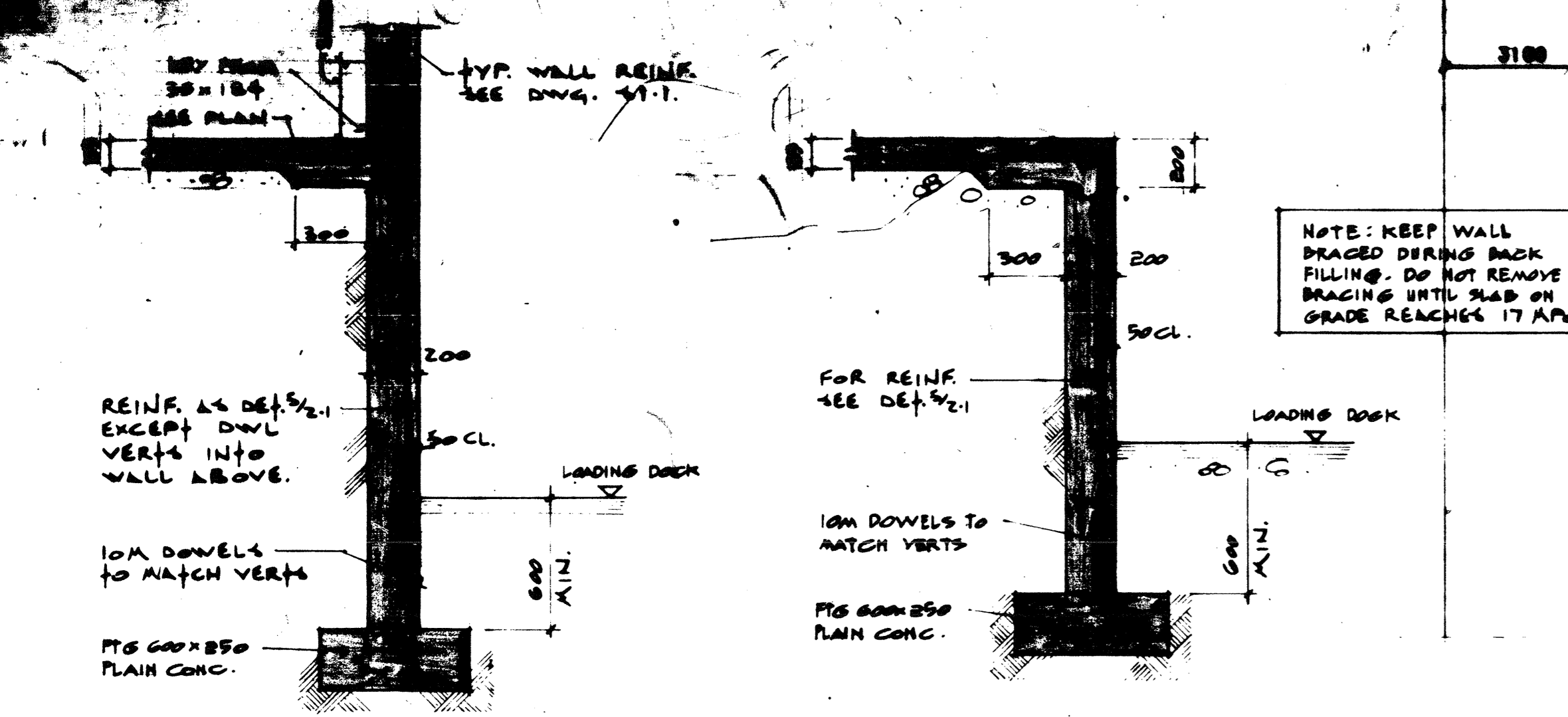
NOTE  
DO NOT STAGGER EXTRA TOP BARS, CENTER OVER COLS.  
W INDICATES POSITION & MINIMUM NUMBER OF HIGH CHAIRS TO BE PLACED PER MAT.

TYPICAL MAT LAYOUT WITH DROP PANELS



TYPICAL THICKENED SLAB UNDER BLOCK WALLS





#### FOOTING SCHEDULE

TYPE	SIZE	REINFORCING	DOWELS	PROJ.	COLUMN	SERVICE LOADS (kN)	
						D.L.	L.L.
A	1700 x 1700 x 500 DP.	6.20M1850 S.V. BOT.	6.20M1850	570	450+	579	67
A1	AS TYPE A	AS TYPE A	12.25M1250	740	600.450 PL.	560	74
B	2000 x 2000 x 500 DP.	10.20M1850 S.V. BOT.	6.25M1250	740	600+	502	403
C	2500 x 2500 x 600 DP.	7.25M2350 S.V. BOT.	7.25M1250	740	650+	1005	404
C1	AS TYPE C	AS TYPE C	6.25M1250	740	600+	1154	502
C2	AS TYPE C	AS TYPE C	6.20M1850	970	450+	705	309
C3	AS TYPE C	AS TYPE C	10.25M1250	740	600 x 450 PL.	1195	302
C4	AS TYPE C	AS TYPE C	6.25M1250	740	600 x 450 PL.	1195	302
C5	AS TYPE C	AS TYPE C	4.25M1250	740	450 x 450 PL.	1195	302
D	2800 x 2800 x 675 DP.	9.25M2650 S.V. BOT.	8.20M1850	970	950+	1105	602
D1	AS TYPE D	AS TYPE D	6.25M1250	740	600+	1250	522
E	3200 x 3200 x 750 DP.	12.25M3050 S.V. BOT.	7.25M1250	740	650+	1505	604
E1	AS TYPE E	AS TYPE E	8.20M1850	970	950+	1521	526
E2	AS TYPE E	AS TYPE E	6.25M1250	740	600+	1414	712
E3	AS TYPE E	AS TYPE E	8.25M1250	740	450 x 450 PL.	1580	750
E4	AS TYPE E	AS TYPE E	10.25M1250	740	600.875 PL.	1581	940
F	3700 x 3700 x 900 DP.	12.30M3350 S.V. BOT.	7.25M1250	740	650+	2107	1076
F1	AS TYPE F	AS TYPE F	6.25M1250	740	600+	2089	1095
F2	AS TYPE F	AS TYPE F	10.25M1250	740	600.875 PL.	2079	984
G	4100 x 4100 x 1000 DP.	14.30M3750 S.V. BOT.	7.25M1250	740	650+	2765	1462

#### 3HR RATED BLOCK WALLS

- 200 BLOCK - EITHER KNOCK OUT BOND BEAM OR H-BLOCK SUCH THAT ENTIRE WALL CAN BE FILLED WITH GROUT.
- MORTAR BLOCKS SNUG TO SLAB ABOVE.
- REINFORCE AS PER MASONRY NOTES ON S1.1 PLANS:
  - 15M @ 1200 VERTS C/M SLAB DOWELS. EXTEND 150 INTO GROUT SLEEVES IN SLAB ABOVE.
  - 15M HORIZONTAL CONTINUOUS AT TOP COURSE.
- FILL WALL SOLID WITH GROUT THROUGH 100 DIA-METER SLEEVES @ 1200 O.C. THROUGH SLAB ABOVE.
- PROVIDE CLEANOUTS @ 400 O.C. AT BASE OF WALL. ENSURE BOTTOM COURSE IS FREE OF DEBRIS BEFORE GROUTING.

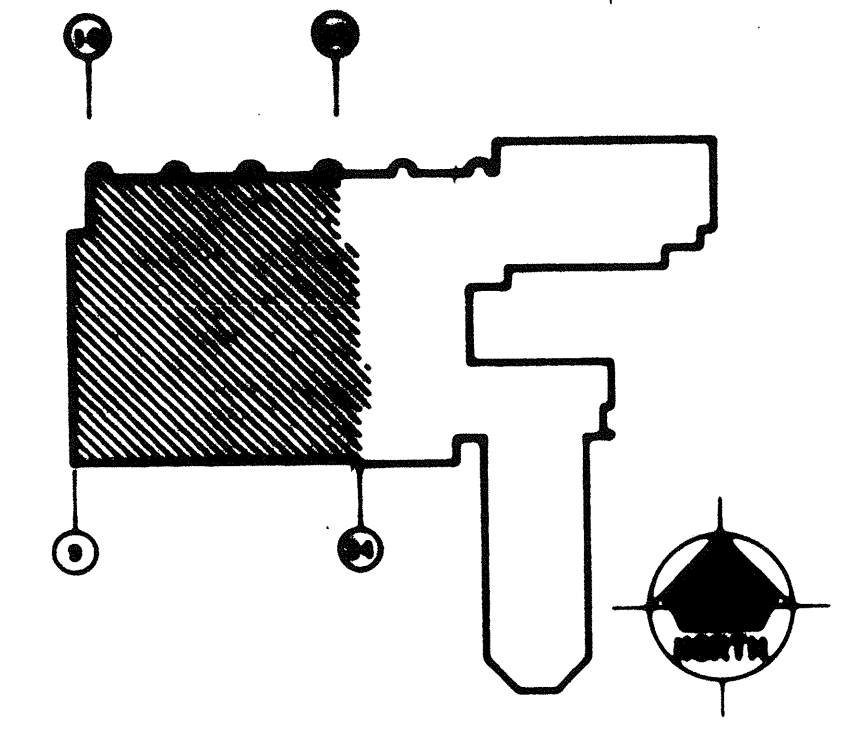
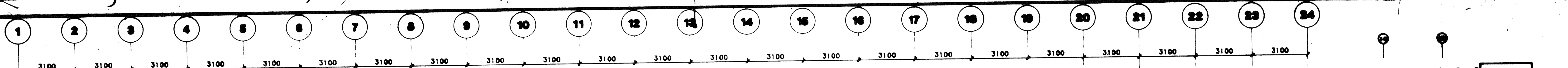
#### Notes

- FOR SHEAR WALL REINFORCING SEE DWG. S4.3.
- FOR TYPICAL TRENCH DETAIL SEE DET. 10/2.1.

NOTE - TOP OF ALL FOOTINGS TO BE 600 MIN. BELOW TOP OF SLAB ON GRADE UNLESS NOTED OTHERWISE. SEE ALSO MECH. DWGS. FOR SPECIAL REQUIREMENTS FOR SERVICES. - FOR COLUMN SCHEDULE SEE DWG. S3.1.

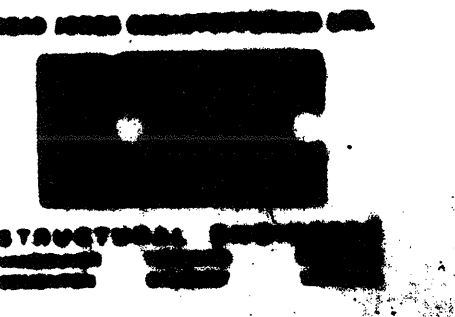
**A.G. HOLDEN**  
REGISTERED CIVIL ENGINEER  
No. 10545  
Ontario  
**FLOOR PLAN FIRST FLOOR**



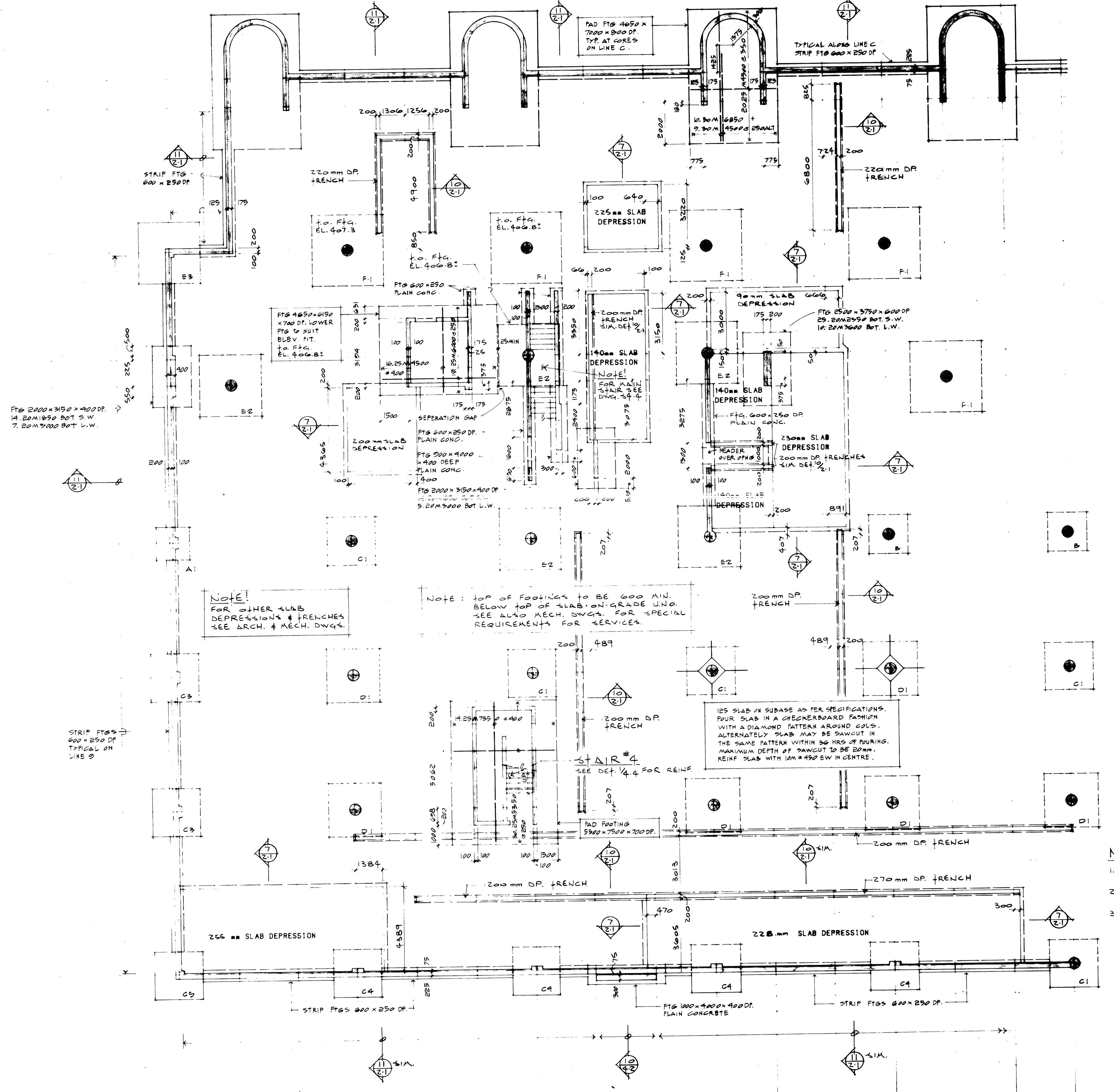
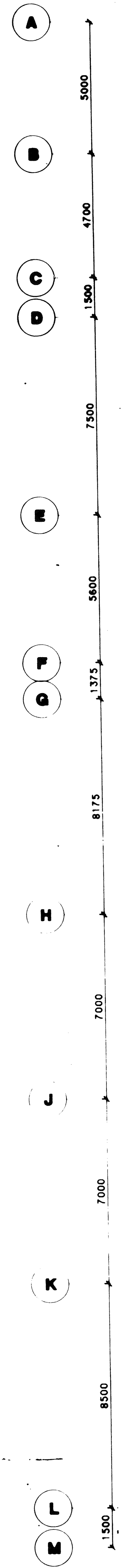


cjp architects

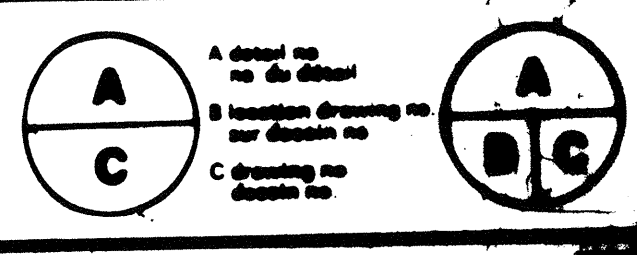
301 - 8th Street New Westminster B.C.  
V3L 3A7 phone (604) 893-8764



Job No. 3052-01



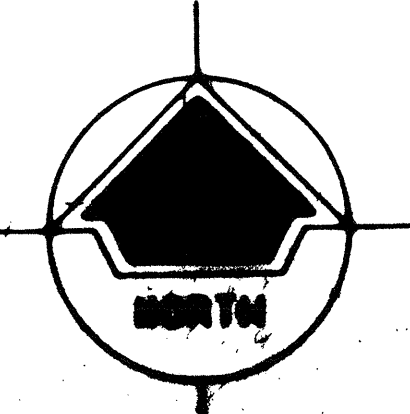
- NOTES**
- FOR FOOTING SCHEDULE SEE DWG. 2-1
  - FOR SHEAR WALL REINFORCING SEE DWG. 3-3
  - FOR TYPICAL TRENCH DETAIL SEE DET. 10-1



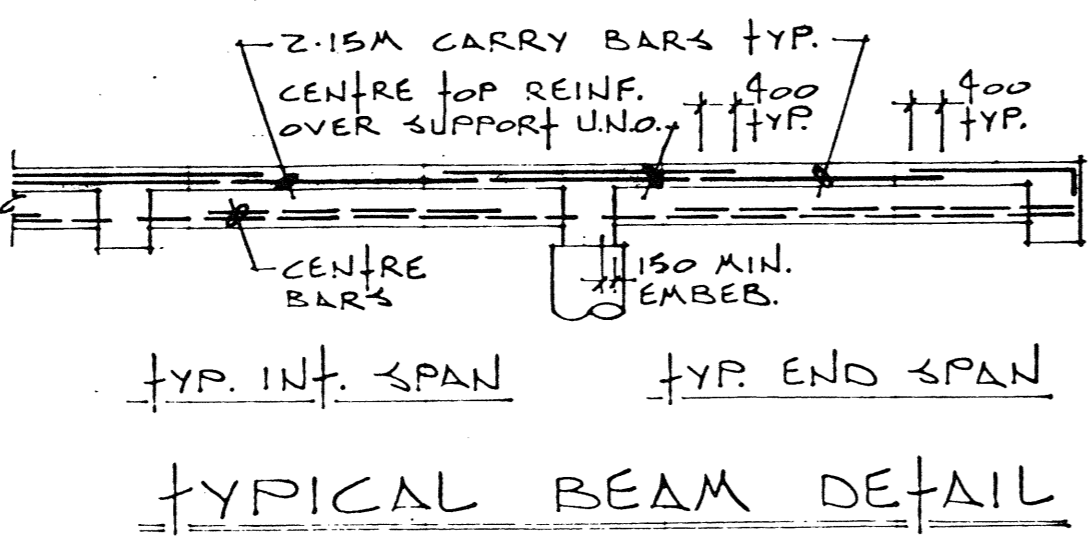
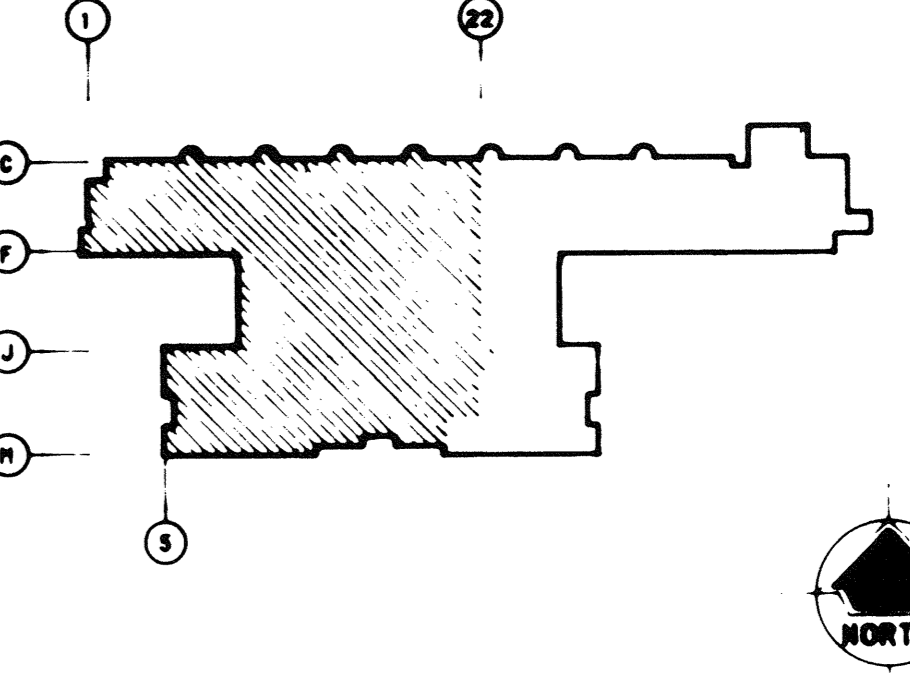
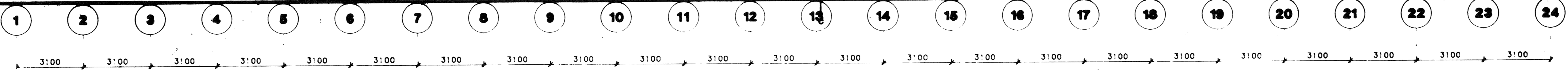
**AGRICULTURAL RESEARCH CENTRE SUMNERLAND B.C.**

**FLOOR PLAN SECOND FLOOR WEST**

DESIGNED BY: A. WILLIAMS, R. DEVALL  
 CHECKED BY: C. JUNG, H. HARRIS  
 DRAWN BY: B. EDWARDS  
 DATE: JANUARY 1984  
 SCALE: 1/8" = 1'-0"







**NOTES**  
 1. FOR FOOTING SCHEDULE SEE DWG. S-2.1  
 2. FOR SHEAR WALL REINFORCING SEE DWG. S-4.3  
 3. FOR TYPICAL TRENCH DETAIL SEE DET. 19/2.1  
 4. FOR GIRDER REINFORCING SEE DWG. S-5.1

BEAM REINFORCING SCHEDULE			
(S)	BOTTOM REINFORCING	(T)	TOP REINFORCING
B1	4 25A7000	T1	3 20A4000
B2	2 20A6000 + 2 20A7500 E.S.	T2	3 20A4000 EMBED 500 INTO WALL
B3	2 30A7500 + 2 20A10500 E.S.	T3	2 30A4500 + 2 25A5400
B4	2 20A5400 EMBED 1200 INTO WALL	T4	3 30A5400 + 2 25A6700 ONE LAYER
B5	1 20A4800 + 2 20A6000 E.S.	T5	2 20A2400
B6	1 25A6000 + 2 25A7500 E.S.	T6	1 20A7500 + 1 30A8500 + 3 30A5400 ONE LAYER
B7	2 30A8000 + 2 25A7500 E.S.	T7	2 25A4500 + 2 20A6700
		T8	2 25A4500 + 2 20A5400
		T9	3 20A5400
		T10	2 30A4800 + 2 30A6000

**NOTE!** THIS SCHEDULE APPLIES TO THIS DWG. ONLY.

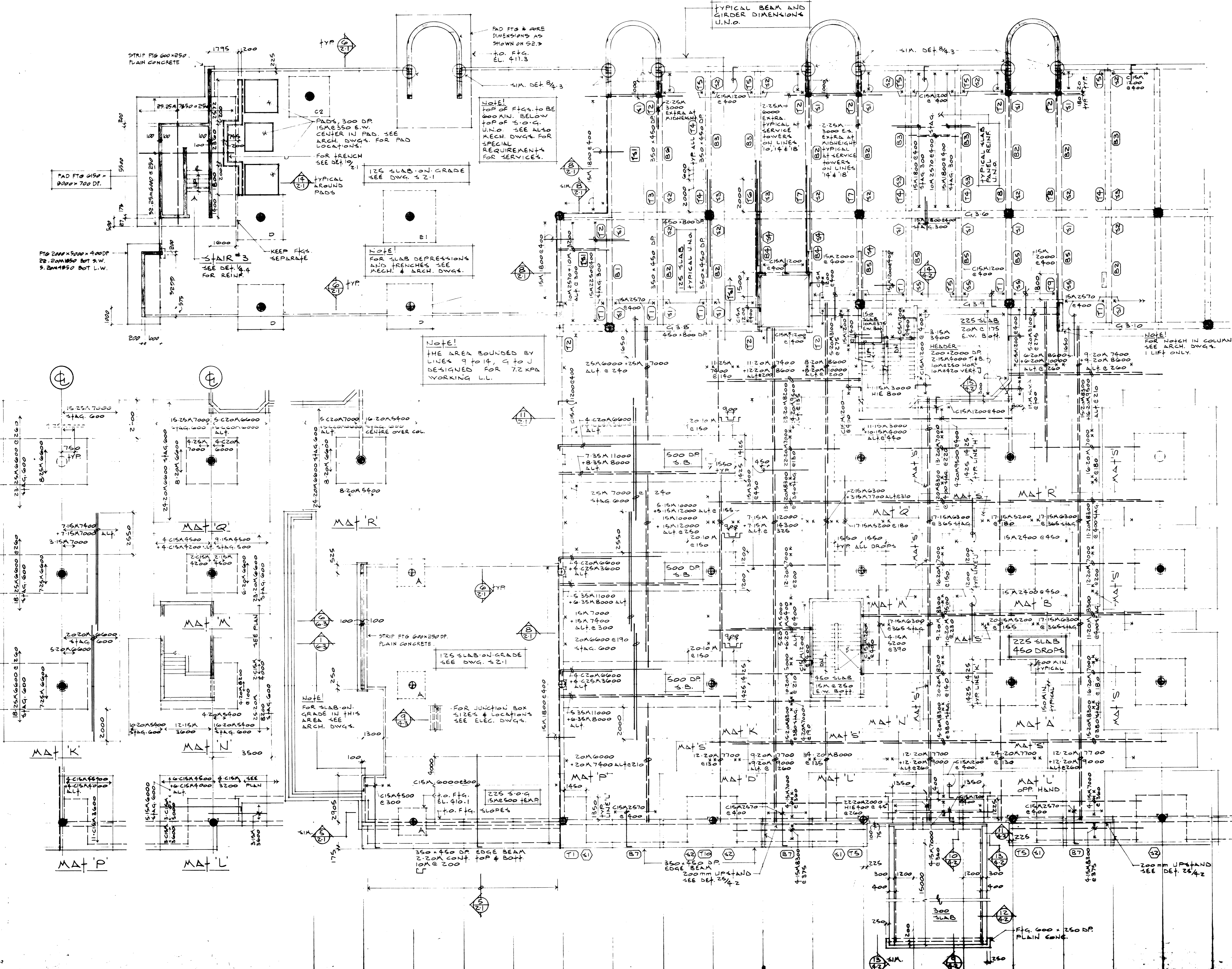
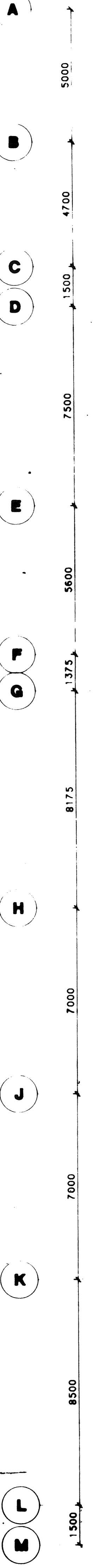
**NOTE!** E.S. DENOTES END SPAN.

**NOTE!** EXCEPT AS NOTED ON PLAN CENTER ALL TOP BARS OVER SUPPORT.

**NOTE!** ALL STIRRUPS START 1/2 SPACE FROM FACE OF SUPPORT.

**NOTE!** ALL STIRRUPS FULL BM HEIGHT.

**STIRR ARRANGEMENTS**



FOR CONTINUATION SEE THIRD FLOOR EAST DWG. S-2.4

PARTIAL STAIR PLAN AT EL. 413.833

**BAR PLACING ORDER**  
 FROM LINES 9 TO 21, G TO M  
 UPPER LAYER TOP  
 LOWER LAYER TOP  
 UPPER LAYER BOT.  
 LOWER LAYER BOT.

**NOTE!** FOR MATS NOT DETAILED IN THIS DWG. SEE DWG. S-2.4

**cjp architects**  
 CARLERS JACOB PARTNERS  
 301 - 6th street new westminster b.c.  
 V3L 3A7 phone (604) 538-3784

108 No. 3852-01

**AGRICULTURAL RESEARCH CENTRE**  
 SUMNERLAND B.C.

FLOOR PLAN  
 THIRD FLOOR WEST

DESIGNED BY WILLIAM R. SEVALL  
 CHECKED BY H. MARCH  
 DRAWN BY C. J. JONES  
 DATE 10/10/83  
 PROJECT NO. 108  
 SHEET NO. 035