

**PACIFIC COMMUNITY**  
**PROPOSED EXTENSION TO EXISTING BUILDING-CYRO LAB**  
**FNTC ROAD 2, NASINU.**  
**MECHANICAL SERVICES**

CLIENT:



ARCHITECT:



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SHEET NO.	SHEET TITLE	REVISION NUMBER	DATE	STATUS / COMMENTS
M1	DRAWING INDEX	T3	2023.04.17	REVISED TENDER
M2	GENERAL NOTES, LEGEND OF SYMBOLS & ABBREVIATIONS	T1	2023.01.18	TENDER ISSUE
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M201	PROPOSED MECHANICAL SECTION X	T1	2023.01.18	TENDER ISSUE
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M300	PROPOSED MECHANICAL DETAILS	T1	2023.01.18	TENDER ISSUE

	SHEET NUMBER:	M1
	ISSUED FOR:	REVISED TENDER
	ISSUED DATE:	2023/04/17
	QA CHECKED DATE:	2023/04/17
	APPROVED BY:	SATISH PATEL

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**TENDER ISSUE**  
**NOT FOR CONSTRUCTION**

**GENERAL NOTES**

1. ALL MECHANICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH GENERAL NOTES, SPECIFICATIONS, MISCELLANEOUS DETAILS AND ARCHITECTURAL, STRUCTURAL AND ELECTRICAL FINAL DESIGN DRAWINGS.
2. UNLESS OTHERWISE SPECIFIED, ALL OUTDOOR LOUVERS AND OTHER DIMENSIONS ARE IN MILLIMETERS.
3. COORDINATE ALL PENETRATIONS, PARTICULARLY LARGER PENETRATIONS FOR OUTDOOR AIR LOUVERS AND ROOF VENTILATORS WITH BOTH ARCHITECTURAL DRAWINGS AND STRUCTURAL DRAWINGS AND ON SITE.
4. OUTDOOR AIR LOUVER SHALL BE SELECTED BASED ON MANUFACTURER'S RECOMMENDATION.
5. ALL VENTILATION EQUIPMENT SHALL BE SELECTED TO MEET THE REQUIRED CAPACITIES AND DATA INDICATED BELOW EQUIPMENT SCHEDULES.
6. ALL WALL PENETRATIONS , ROOF PENETRATIONS , SEALING OF PENETRATIONS AND ROOF FLASHING SHALL BE DONE BY THE BUILDER . COST TO BE INCLUDED BY THE MECHANICAL CONTRACTOR.
7. FAN SYSTEM RESISTANCE AND ELECTRIC MOTOR RATING STATED IN THE SCHEDULES ARE DESIGN APPROXIMATIONS ONLY AND SHALL BE CHECKED AND REVISED BY THE MECHANICAL SERVICES CONTRACTOR PRIOR TO THE FINAL ORDERING OF EQUIPMENT WITH NO ADDITIONAL COST TO THE CONTRACT.
8. PROVIDE SLEEVES WHERE PIPES/DUCTS PENETRATE BEAMS, WALLS AND SLABS.
9. WHERE SHOWN ON PLANS, ROOM THERMOSTATS SHALL BE MOUNTED ON THE WALL AT 1.5 METERS FROM FINISHED FLOOR OR TEMPERATURE SENSOR (DUCT-MOUNTED THERMOSTAT) SHALL BE LOCATED IN THE MAIN RETURN AIR DUCT AND TEMPERATURE SET POINT/CONTROLLER SHALL BE GROUPED TOGETHER IN ELECTRICAL ROOM UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
10. CONDENSATE DRAIN LINES FROM UNITS TO TUNDISH SHALL BE BY MECHANICAL CONTRACTOR.TUNDISH TO DRAIN POINT SHALL BE BY HYDRAULICS CONTRACTOR.
11. EXTERNAL EQUIPMENT TO BE TROPICALIZED AND WEATHERPROOFED. CONTRACTOR SHALL COORDINATE WITH ARCHITECTS TO MAKE SURE THAT EQUIPMENTS AND DUCTWORKS ARE CONCEALED BEHIND PARAPET WALLS.
12. ROTATING EQUIPMENTS SHALL BE PROVIDED WITH VIBRATION ISOLATORS TO PREVENT VIBRATION TRANSMISSION AS SPECIFIED IN THE SPECIFICATIONS.\
13. INSTALL ALL EQUIPMENT AS PER MANUFACTURER'S RECOMMENDATIONS.
14. ALL SPLIT TYPE AIR-CONDITIONER'S REFRIGERANT PIPE SIZES SHALL BE IN ACCORDANCE WITH A/C MANUFACTURER'S RECOMMENDATION.
15. ALL CONDENSATE DRAIN PIPES SHALL BE INSULATED AS PER SPECIFICATIONS.
16. THE ELECTRICAL CONTRACTOR SHALL ONLY SUPPLY SUBMAINS TO THE DISTRIBUTION BOARDS FOR EQUIPMENT AND WIRING THERE AFTER SHALL BE IN THE MECHANICAL CONTRACTORS SCOPE. POWER FOR AIR CONDITIONING UNITS AND VENTILATION FANS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.
17. ALL INTERLOCKING & CONTROL WIRING BY MECHANICAL CONTRACTOR

**LEGEND OF SYMBOLS**

	CEILING CASSETTE UNIT
	WALL MOUNTED UNIT
	OUTDOOR UNIT
	ELECTRICAL ISOLATOR
	WALL MOUNTED EXHAUST FAN
	DOOR GRILLE DOOR UNDERCUT
	WIRED AC CONTROLLER
	OXYGEN SENSOR
	AUTOMATIC CHANGE OVER PANEL (12HR)
	ACCESS CEILING PANEL

**LINE TYPES**

	REFRIGERANT LINE
	CONDENSATE LINE
	CONTROL CABLING

**ABBREVIATIONS**

C/W	COMPLETE WITH
D	DEPTH
DG	DOOR GRILLE
DU	DOOR UNDERCUT
EG	EXHAUST GRILLE
IDU	INDOOR UNIT
HF	HEPA FILTER
OAL	OUTDOOR AIR LOUVER
ODU	OUTDOOR UNIT
RV	ROOF VENTILATOR
DIA	DIAMETER
DN	DIAMETER NOMINAL
KGS	KILOGRAMS
kW	KILOWATT
LD	LINEAR SLOT DIFFUSER
mm	MILLIMETRE
MSB	MAIN SWITCHBOARD
No.	NUMBER / NORMALLY OPEN
PH	PHASE
QTY	QUANTITY
T	THERMOSTAT / THERMOMETER
TW	TUNDISH WASTE
TYP	TYPICAL
V	VOLT
VCD	VOLUME CONTROL DAMPER
W	WATT / WIDTH

**1 GENERAL NOTES, LEGEND OF SYMBOLS & ABBREVIATIONS**  
SCALE: N/A

**TENDER ISSUE**

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NO.	DATE:	REVISION:
P1	180123	TENDER ISSUE

PROJECT TITLE: **PACIFIC COMMUNITY PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB FNTC ROAD 2, NASINU.**

DRAWING TITLE: **GENERAL NOTES, LEGEND OF SYMBOLS & ABBREVIATIONS**

DESIGN:	KB
DRAWN:	ST
QA:	KB/NP
SCALE:	N/A
DATE:	180123
STATUS:	TENDER ISSUE

PROJECT NO:	3885
AUTOCAD FILE NO:	3885-M2-T1
SHEET NO:	M2
SIZE:	A3
REVISION:	T1

SPLIT TYPE DX SCHEDULE																	
UNIT NO.	UNIT TYPE	QUANTITY	AREA SERVED	REQUIRED TOTAL COOLING CAPACITY (kW)	AVAILABLE COOLING CAPACITY (kW)	SUPPLY AIR FLOW (L/s)	OUTDOOR AIR FLOW(L/s)	STATIC PRESSURE (Pa)	ELECTRICAL DATA kW / PH / V/ Hz)	SOUND (dBA)	PHYSICAL DIMENSION (mm) WxDxH	WEIGHT (kg)	REFRIGERANT	REF PIPE SIZES	MAKE	MODEL	REMARKS
IDU-G.1/ IDU-G.2	WALL MOUNTED UNIT	2	GROWTH ROOM	4.50	6.00	310	-	-	1.64 / 1 / 240 / 50	48	990x263x295	13	R32	GAS:Ø12.7 LIQUID:Ø6.4	DAIKIN FOR ALL CASSETTES AND WALL MOUNTED. NOVAIR FOR FCU	FTX60UVMA	DUTY/ STANDBY
ODU-G.1/ ODU-G.2	OUTDOOR UNIT	2				-	-	-		52	930x350x695	54				RXV60UVMA	
IDU-G.3/ IDU-G.4	CEILING CASSETTE	2	LAB	4.60	6.00	383	-	-	1.3 / 1 / 240 / 50	37	840x840x256	22	R32	GAS:Ø12.7 LIQUID:Ø9.5	DAIKIN FOR ALL CASSETTES AND WALL MOUNTED. NOVAIR FOR FCU	FCA60CAVMA	DUTY/ STANDBY
ODU-G.3/ ODU-G.4	OUTDOOR UNIT	2				-	-	-		68	845x300x595	45				RZAV60CV1	
IDU-G.5/ IDU-G.6	CEILING CASSETTE	2	STORAGE	3.70	5.00	383	-	-	1.3 / 1 / 240 / 50	37	840x840x256	22	R32	GAS:Ø12.7 LIQUID:Ø6.4	DAIKIN FOR ALL CASSETTES AND WALL MOUNTED. NOVAIR FOR FCU	FCA50CAVMA	DUTY/ STANDBY
ODU-G.5/ ODU-G.5	OUTDOOR UNIT	2	STORAGE			-	-	-		68	845x300x595	45				RZAV50CV1	
IDU-G.7/ IDU-G.8	CEILING CASSETTE	2	LIQUID NITROGEN STORAGE	3.70	5.00	383	-	-	1.3 / 1 / 240 / 50	37	840x840x256	22	R32	GAS:Ø12.7 LIQUID:Ø6.4	DAIKIN FOR ALL CASSETTES AND WALL MOUNTED. NOVAIR FOR FCU	FCA50CAVMA	DUTY/ STANDBY
ODU-G.7/ ODU-G.8	OUTDOOR UNIT	2	LIQUID NITROGEN STORAGE			-	-	-		68	845x300x595	45				RZAV50CV1	
IDU -G.9	CONCEALED DUCTED UNIT	1	LIQUID NITROGEN STORAGE ,LAB, STORAGE & GROWTH ROOM	21.50	24.60	610	610	250	0.5 / 1 / 240 / 50	76	1370x894x410	162	R410a	GAS:Ø52 LIQUID:Ø28	DAIKIN FOR ALL CASSETTES AND WALL MOUNTED. NOVAIR FOR FCU	CTA 15 SL NS	TO BE INTERLOCKED WITH SAF -G.1
ODU -G.9	OUTDOOR UNIT	1	LIQUID NITROGEN STORAGE ,LAB, STORAGE & GROWTH ROOM		24.60	-	-	-	15.7 / 3 / 415 / 50	75	1850x1000x1300	221				MHA/K 91	

**NOTES:**

- AIR CONDITIONING UNITS SHALL BE INSTALLED ACCORDING TO MANUFACTURERS RECOMMENDATION AND TECHNICAL SPECIFICATION.
- MECHANICAL CONTRACTOR SHALL PROVIDE CLIPSAL WEATHER -PROOF ISOLATORS FOR ALL OUTDOOR UNITS.
- POWER FOR ALL THE AIR CONDITIONING INDOOR UNITS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.
- CONDENSER FINS SHALL BE COATED WITH ANTI - CORROSION COATING.
- REFRIGERANT PIPEWORK TO BE INSULATED WITH 19mm ARMAFLEX INSULATION.ALL REFRIGERANT PIPEWORK EXTERNAL TO BE BUILDING SHALL BE COVERED WITH SHEETMETAL FLASHING OVER TOPS AND SIDES TO PREVENT PREMATURE DETERIORATION.
- ALL DUCT PENETRATIONS , WALL PENETRATIONS AND SEALING OF PENETRATIONS SHALL BE DONE BY THE BUILDER.COST TO BE INCLUDED BY THE MECHANICAL CONTRACTOR.
- THE WALL MOUNTED UNIT TO BE COMPLETE WITH CONDENSATE PUMP, FACTORY INSTALLED.



1  
M3

## PROPOSED EQUIPMENT SCHEDULES

SCALE: N/A

REVISION	
T2	REVISION OF SCHEDULE
T1	TENDER ISSUE

TENDER ISSUE

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P1	170423	REVISED TENDER
NO.	DATE:	REVISION:

PROJECT TITLE:  
**PACIFIC COMMUNITY  
PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB  
FNTC ROAD 2, NASINU.**

DRAWING TITLE:  
**PROPOSED EQUIPMENT SCHEDULES**

DESIGN:	KB
DRAWN:	ST
QA:	KB/NP
SCALE:	N/A
DATE:	170423
STATUS:	REVISED TENDER

PROJECT NO:  
**3885**

AUTOCAD FILE NO:  
**3885-M3-T2**

SHEET NO:  
**M3**

SIZE:  
**A3**

REVISION:  
**T2**

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FANS SCHEDULE													
UNIT NO.	DESCRIPTION	AREA SERVED	AIR FLOW (L/S)	TOTAL STATIC PRESSURE (Pa)	DRIVE	FAN SPEED (RPM)	ELECTRICAL DATA (Kw / V / PH / Hz)	NOMINAL DIAMETER(mm)	WEIGHT (kg)	SOUND DATA@3m	MAKE	MODEL	REMARKS
SAF-G.1	INLINE SUPPLY AIR FAN	LIQUID NITROGEN , STORAGE , GROWTH ROOM & LAB	610	140	DIRECT	2880	0.23/415/3/50	315	22	54	FANTECH	AP0312JP3/16	TO BE INTERLOCKED WITH IDUG.9& RUN ON VSD
EAF-G.1	INLINE DUCT MOUNTED EXHAUST FAN	LIQUID NITROGEN , STORAGE , GROWTH ROOM & LAB"	760	150	DIRECT	2880	0.33/415/3/50	315	22	57	FANTECH	AP0312JP6/18	TO BE INTERLOCKED WITH SAF-G.1 & RUN ON VSD
EAF-G.2	INLINE DUCT MOUNTED EXHAUST FAN	ALCOHOL STORAGE	70	100	DIRECT	1950	0.04/240/1/50	150	2	40	FANTECH	TD-500/150 (LO SPEED)	ON / OFF VIA FAN CONTROLLER

**NOTES:**

- EXHAUST FAN SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATION AND TECHNICAL SPECIFICATIONS.
- MECHANICAL CONTRACTOR SHALL PROVIDE CLIPSAL WEATHER PROOF ISOLATOR FOR THE FANS.
- DUCT PENETRATION,WALL PENETRATIONS , ROOF PENETRATION & SEALING OF THE PENETRATION TO BE DONE BY THE BUILDER. COST TO BE INCLUDED BY THE MECHANICAL CONTRACTOR
- INTERLOCKING AND CONTROL WIRING OF FANS AND AIR CONDITIONING UNITS TO BE DONE BY MECHANICAL CONTRACTOR.
- MECHANICAL CONTRACTOR TO PROGRAM FOR AUTOMATIC SWITCHOVER TO STANDBY FAN OPERATION IF DUTY FAN FAILS.

AIR DISTRIBUTION DEVICE SCHEDULE					
UNIT NO.	AREA SERVED	NOMINAL SIZE (W x H) mm	FACE SIZE (W x H) mm	MODEL	MAKE
OAL -G.1	LIQUID NITROGEN & STORAGE	1250x500	1294x544	OHL -F-D	HOLYOAKE
SD1	LIQUID NITROGEN , STORAGE , GROWTH ROOM & LAB	450x125	500x150	SDL20/OBD	HOLYOAKE
EG1	LIQUID NITROGEN , STORAGE , GROWTH ROOM & LAB	450x125	498x173	EC-125/OBD	HOLYOAKE
EG2	ALCOHOL STORAGE	150x150	198x198	EC-125	HOLYOAKE
DG1	ALCOHOL STORAGE	250x250	300x300	DG-52	HOLYOAKE

**NOTES:**

- AIR DISTRIBUTION DEVICES SHALL BE INSTALLED ACCORDING TO MANUFACTURES RECOMMENDATION AS PER DIFFUSER MODEL.
- SQUARE TO ROUND ADAPTOR SHALL BE USED TO CONNECT FLEXIBLE DUCT TO RIGID DUCT.
- ACCESS PANELS TO BE SUPPLIED AND INSTALLED BY BUILDER.
- ALL DISTRIBUTION DEVICES SHALL BE POWDER COATED.
- DUCT ,WALL PENETRATIONS & SEALING OF THE PENETRATION TO BE DONE BY THE BUILDER. COST TO BE INCLUDED BY THE MECHANICAL CONTRACTOR.
- THE DOOR GRILLE IS TO BE INSTALLED BY THE BUILDER BUT SUPPLIED BY MECHANICAL CONTRACTOR.

FIRE DAMPER SCHEDULE						
UNIT NO.	AREA SERVED	DUCT DIMENSION (W x H)	LOCATION	MODEL	FIRE DAMPER INSTALLATION	MAKE
FD1	STORAGE, LAB	250 x 150	SUPPLY AIR DUCT	IBD-FS-B-V	VERTICAL	HOLYOAKE
<del>FD2</del>	<del>LIQUID NITROGEN STORAGE, STORAGE, LAB &amp; GROWTH ROOM</del>	<del>500 x 200</del>	<del>EXHAUST AIR DUCT</del>	<del>IBD-FS-B-V</del>	<del>VERTICAL</del>	<del>HOLYOAKE</del>
<del>FD3</del>	<del>LIQUID NITROGEN STORAGE, STORAGE, LAB &amp; GROWTH ROOM</del>	<del>500 x 500</del>	<del>EXHAUST AIR DUCT</del>	<del>IBD-FS-B-V</del>	<del>HORIZONTAL</del>	<del>HOLYOAKE</del>
<del>FD4</del>	<del>STORAGE, LAB, GROWTH ROOM</del>	<del>1500 x 450</del>	<del>OUTDOOR AIR LOUVRE</del>	<del>IBD-FS-B-V (Multi-section 1 sleeve)</del>	<del>VERTICAL</del>	<del>HOLYOAKE</del>

**NOTES:**

- FIRE DAMPER SHALL BE INSTALLED ACCORDING TO MANUFACTURERS RECOMMENDATION AND TECHNICAL SPECIFICATION.
- MECHANICAL CONTRACTOR SHALL ALLOW DUCT ACCESS DOORS FOR ALL FIRE DAMPERS.

AIR FILTER SCHEDULE				
UNIT REF.	QUANTITY	TYPE	MAKE	REMARKS
AF-1	1	G4	AIREPURE	SEE NOTES
AF-2	1	G4	AIREPURE	SEE NOTES
HF1	1	HEPA FILTER	AMERICAN AIR FILTER	--
HF2	1	HEPA FILTER	AMERICAN AIR FILTER	SEE NOTES
UF2	2	ULPA FILTER	AMERICAN AIR FILTER	SEE NOTES

**NOTES:**

- AIR FILTER SHALL BE INSTALLED ACCORDING TO MANUFACTURERS RECOMMENDATION AND TECHNICAL SPECIFICATION.
- MECHANICAL CONTRACTOR SHALL ALLOW DUCT ACCESS DOORS FOR AIR FILTERS.

**1**  
M4 **PROPOSED EQUIPMENT SCHEDULES**  
SCALE: N/A

REVISION	
T2	ADDITION OF FILTERS & DELETION OF FIRE DAMPERS
T1	TENDER ISSUE

**TENDER ISSUE**

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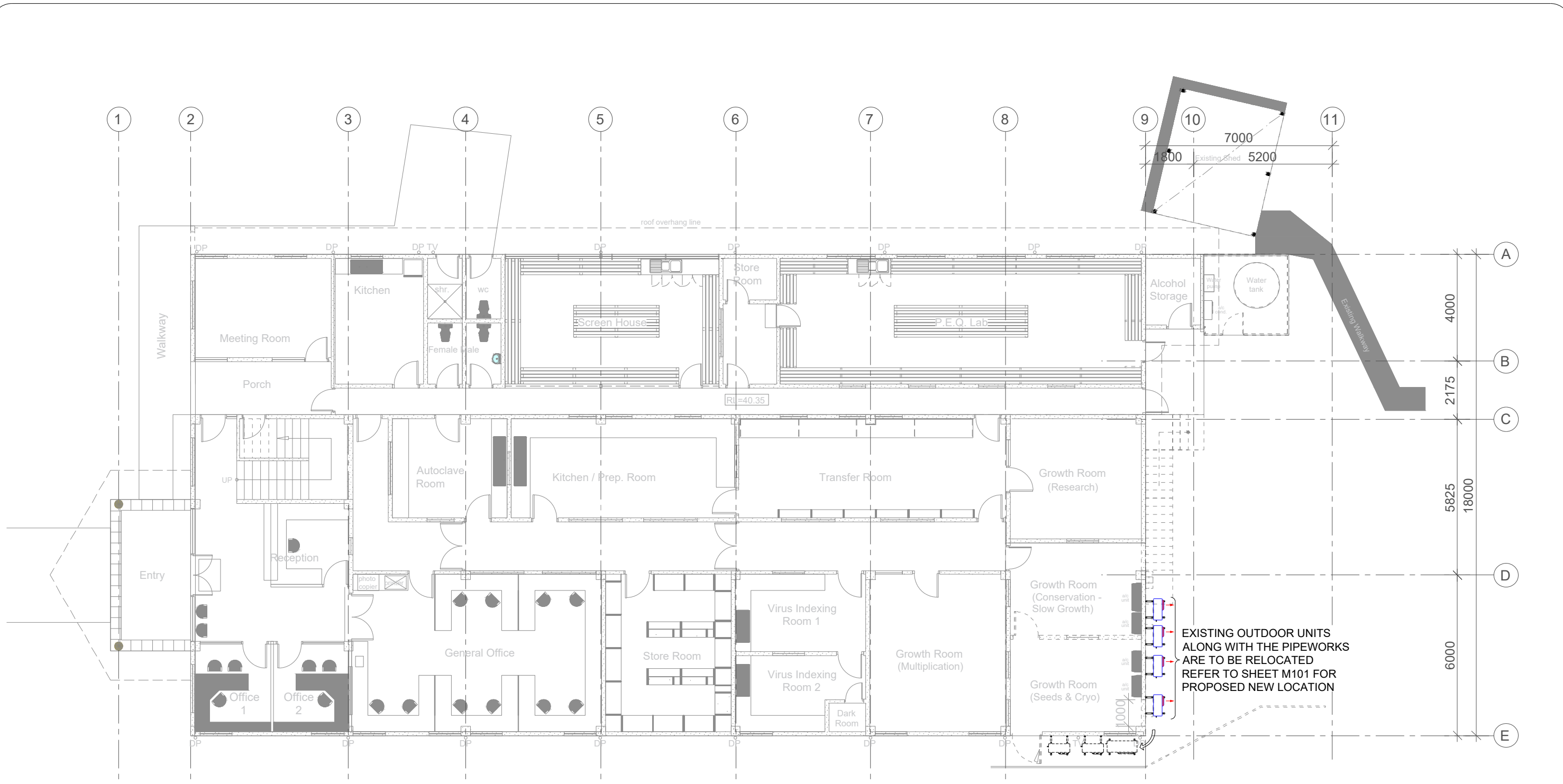
CLIENT: **Pacific Community**  
Communauté du Pacifique

T2	170423	REVISED TENDER
T1	180123	TENDER ISSUE
NO.	DATE:	REVISION:

PROJECT TITLE: **PACIFIC COMMUNITY PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB FNTC ROAD 2, NASINU.**

DRAWING TITLE: **PROPOSED EQUIPMENT SCHEDULES**

DESIGN: KB	PROJECT NO: 3885
DRAWN: ST	AUTOCAD FILE NO: 3885-M4-T2
QA: KB/NP	SHEET NO: M4
SCALE: N/A	SIZE: A3
DATE: 170423	REVISION: T2
STATUS: REVISED TENDER	



**1** EXISTING SITE LAYOUT  
 M10 SCALE: 1:150

EXISTING OUTDOOR UNITS  
 ALONG WITH THE PIPEWORKS  
 ARE TO BE RELOCATED  
 REFER TO SHEET M101 FOR  
 PROPOSED NEW LOCATION

**TENDER ISSUE**

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T1	180123	TENDER ISSUE
P1	071222	PRELIMINARY ISSUE
NO.	DATE:	REVISION:

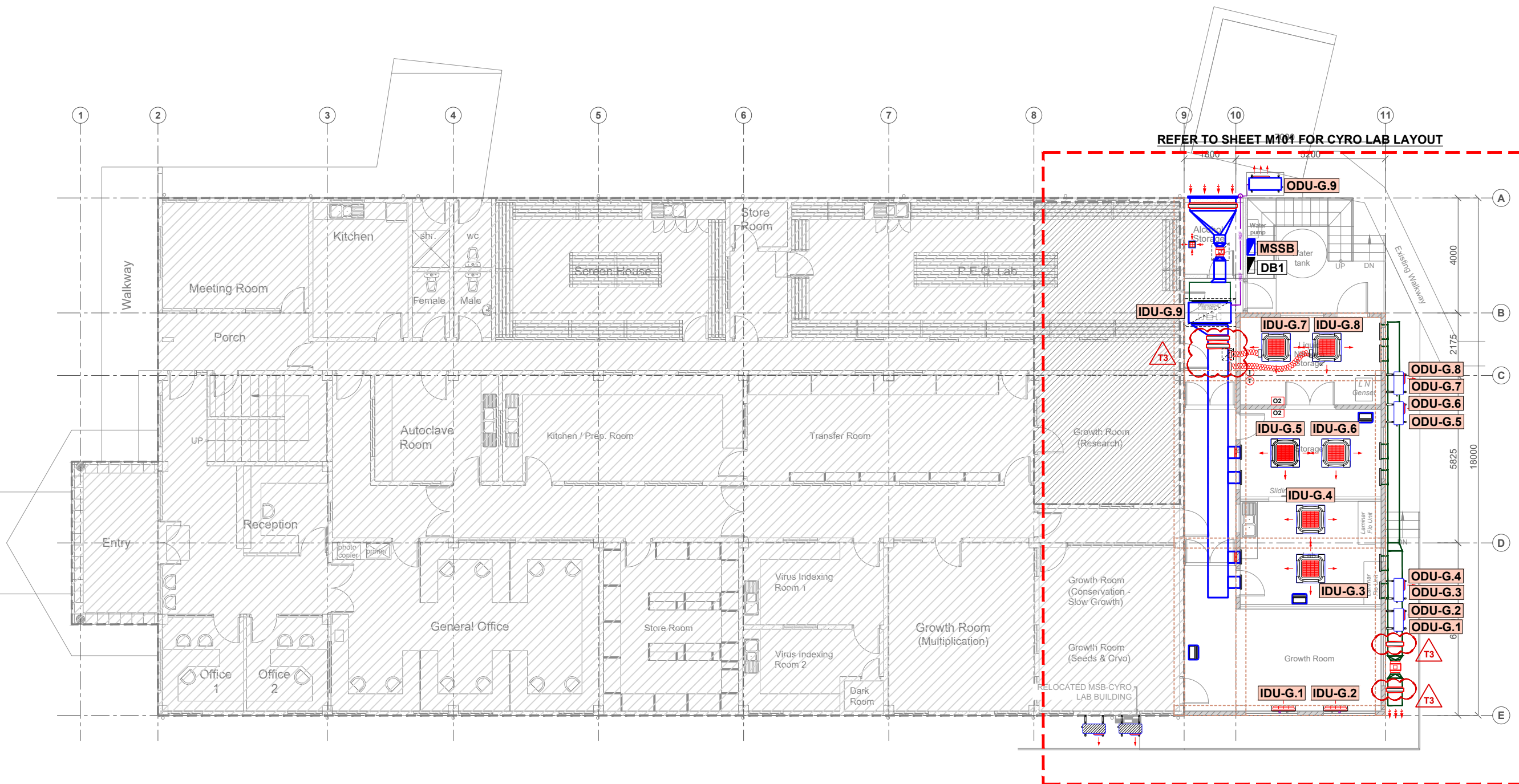
PROJECT TITLE: **PACIFIC COMMUNITY**  
**PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB**  
**FNTC ROAD 2, NASINU.**

DRAWING TITLE:  
 EXISTING SITE LAYOUT

DESIGN:	KB
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QA:	KB/NP
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DATE:	180123
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PROJECT NO:	3885				
AUTOCAD FILE NO:	3885-M10-T1				
SHEET NO:	M10	SIZE:	A3	REVISION:	T1

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**1** PROPOSED SITE LAYOUT  
M100 SCALE: 1:150

REVISION	
T3	REVISION OF FILTER LOCATION ON THE EXHAUST AIR DUCTWORK LAYOUT AND FILTER LOCATIONS
T2	REMOVAL OF SUPPLY AIR AND EXHAUST FANS FROM GROWTH ROOM
T1	TENDER ISSUE

**TENDER ISSUE**

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NO.	DATE:	REVISION:
T3	170423	REVISED TENDER
T2	060323	REVISED TENDER
T1	180123	TENDER ISSUE
P2	071222	PRELIMINARY ISSUE
P1	041122	PRELIMINARY ISSUE

PROJECT TITLE: **PACIFIC COMMUNITY PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB FNTC ROAD 2, NASINU.**

DRAWING TITLE: **PROPOSED SITE LAYOUT**

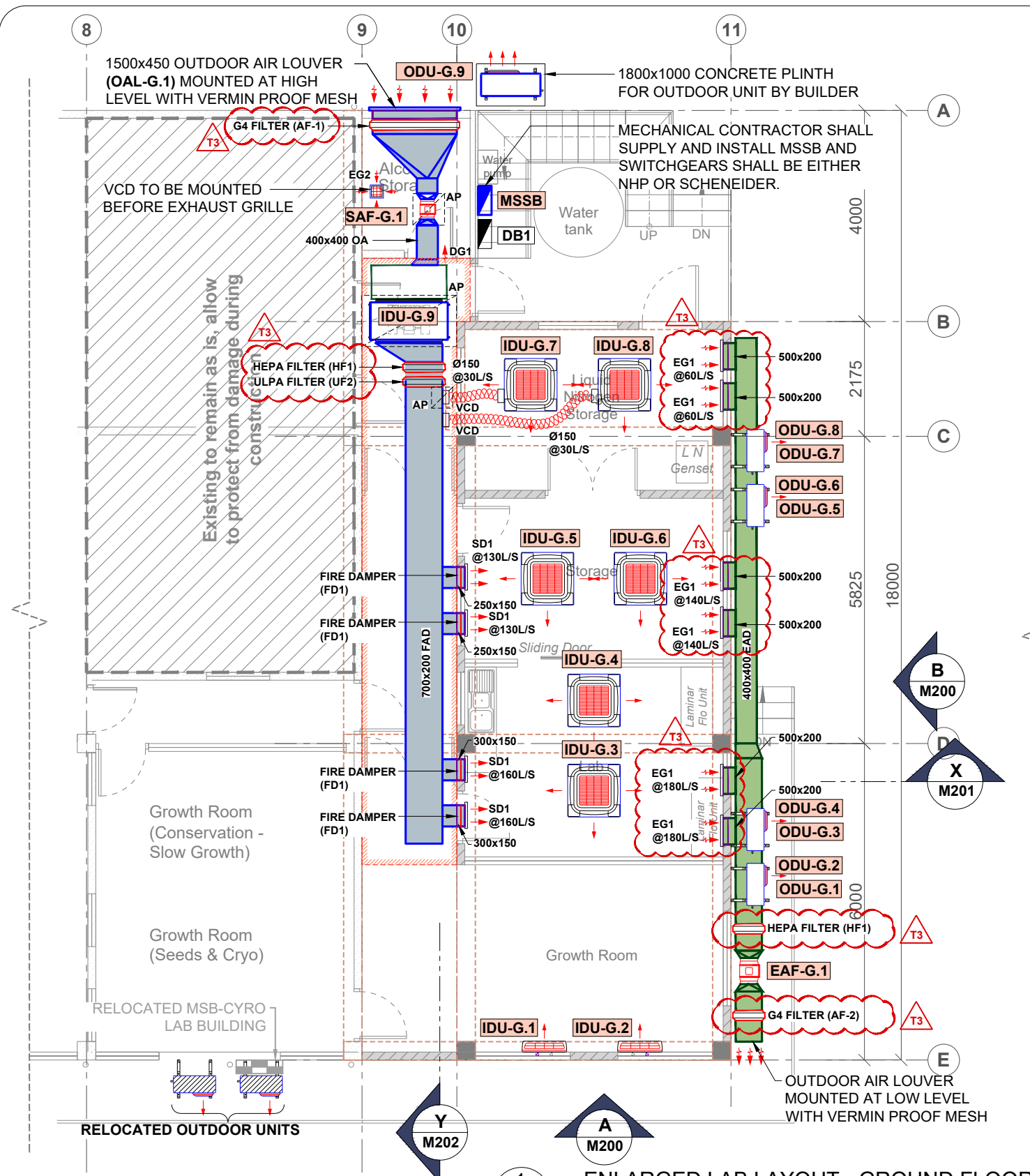
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QA:	KB/NP
SCALE:	1:150
DATE:	170423
STATUS:	REVISED TENDER

PROJECT NO: **3885**

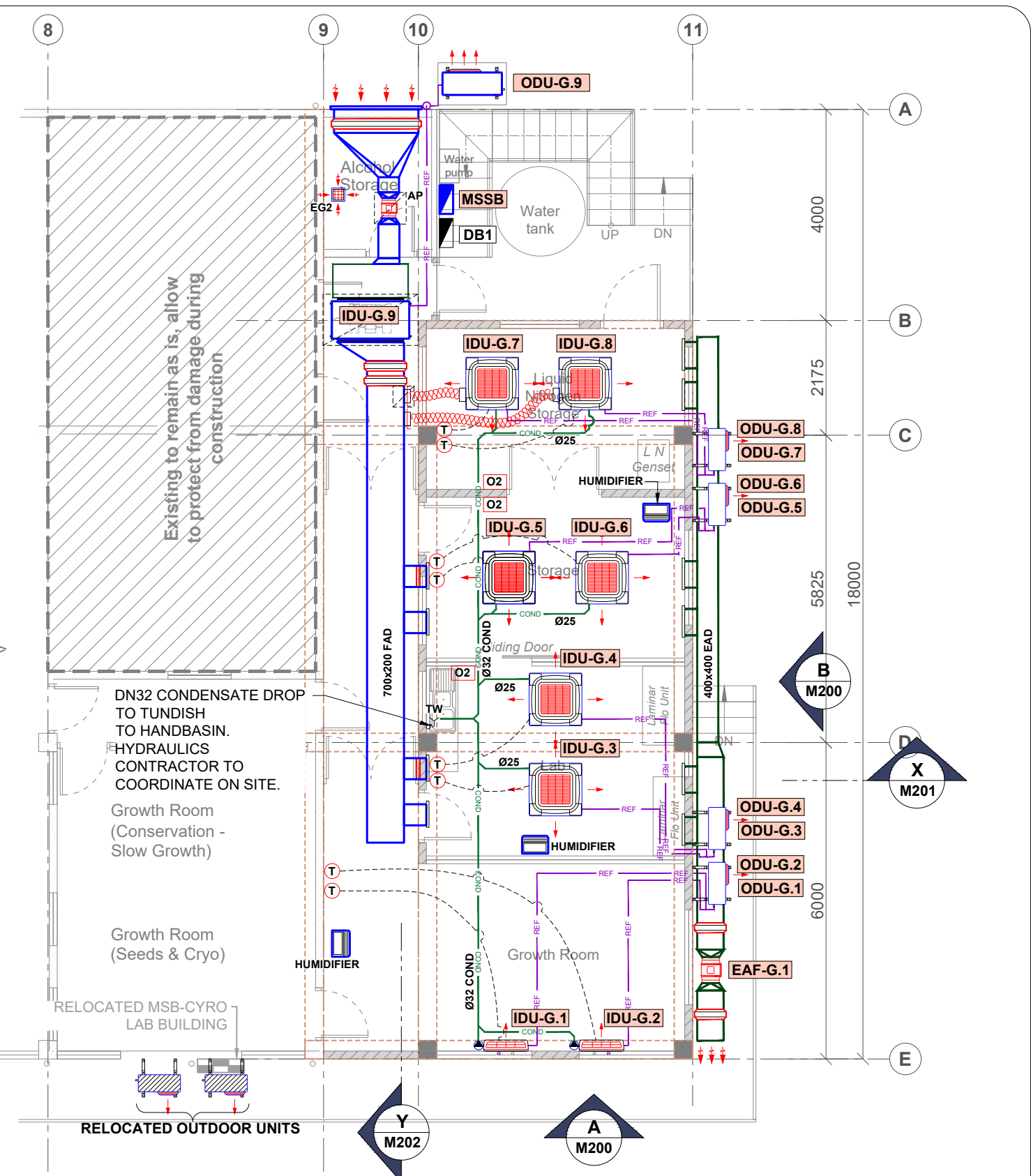
AUTOCAD FILE NO: **3885-M100-T3**

SHEET NO: **M100** SIZE: **A3** REVISION: **T3**

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1 ENLARGED LAB LAYOUT - GROUND FLOOR  
SCALE: 1:100



2 ENLARGED LAB REF & COND LAYOUT - GROUND FLOOR  
SCALE: 1:100

**NOTES:**

1. AIR CONDITIONING FAN COIL UNIT IDU-G.9 WILL RUN FOR 12 HRS ONLY AND TO BE INTERLOCKED WITH THE 12 HR AUTOMATIC CHANGE OVER SWITCH.
2. ALL AIR CONDITIONING UNITS WILL RUN FOR 12HRS ONLY AND TO BE INTERLOCKED WITH THE 12HR AUTOMATIC CHANGE OVER SWITCH.
3. AN ALARM WILL BE ACTIVATED WHEN TEMPERATURE RISES ABOVE THE SET POINT TEMPERATURE, THEN THE REDUNDANCY CASSETTE UNIT WILL BE MANUALLY TURNED ON. WHEN THE OXYGEN CONCENTRATION REACHES 20%, THE REDUNDANCY UNIT WILL BE TURNED ON UNTIL THE OXYGEN CONCENTRATION IS GREATER THAN 20% THE UNIT WILL BE SWITCHED OFF.
4. A LOW OXYGEN SENSOR WILL ALERT THE PERSON. WHEN THERE IS AN OXYGEN DEFICIENCY IN THE ROOM. IF THE LOW OXYGEN ALARM IS ACTIVATED THE ROOM SHOULD BE EVACUATED.
5. LOW OXYGEN ALARM SHOULD BE INTERLOCKED TO THE DOOR TO PREVENT ACCESS BY ANY UNAUTHORIZED PERSON.
6. ELECTRICAL CONTRACTOR TO PROVIDE SUB-MAINS FROM MSB-CYRO LAB BUILDING TO DB-1 ONLY. MECHANICAL CONTRACTOR TO PROVIDE MSSB AND ALL CIRCUIT BREAKERS, FITTINGS, WIRING FROM THIS POINT ONWARDS TO MECHANICAL SERVICES EQUIPMENTS.

REVISION	
T3	RELOCATION OF FILTERS, REVISION OF FILTER LOCATION ON THE EXHAUST DUCTING LAYOUT & DELETION OF FIRE DAMPERS
T2	REMOVAL OF SUPPLY, EXHAUST GRILLES & OXYGEN SENSOR FROM THE GROWTH ROOM. ADDITION OF HEPA FILTERS TO EXHAUST GRILLES
T1	TENDER ISSUE

**TENDER ISSUE**

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NO.	DATE	REVISION
T3	170423	REVISED TENDER
T2	060323	REVISED TENDER
T1	180123	TENDER ISSUE
P2	071222	PRELIMINARY ISSUE
P1	041122	PRELIMINARY ISSUE

PROJECT TITLE:  
**PACIFIC COMMUNITY**  
PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB  
FNTC ROAD 2, NASINU.

DRAWING TITLE:  
ENLARGED LAB LAYOUT - GROUND FLOOR

DESIGN: KB  
DRAWN: ST  
QA: KB/NP  
SCALE: 1:100  
DATE: 170423  
STATUS: REVISED TENDER

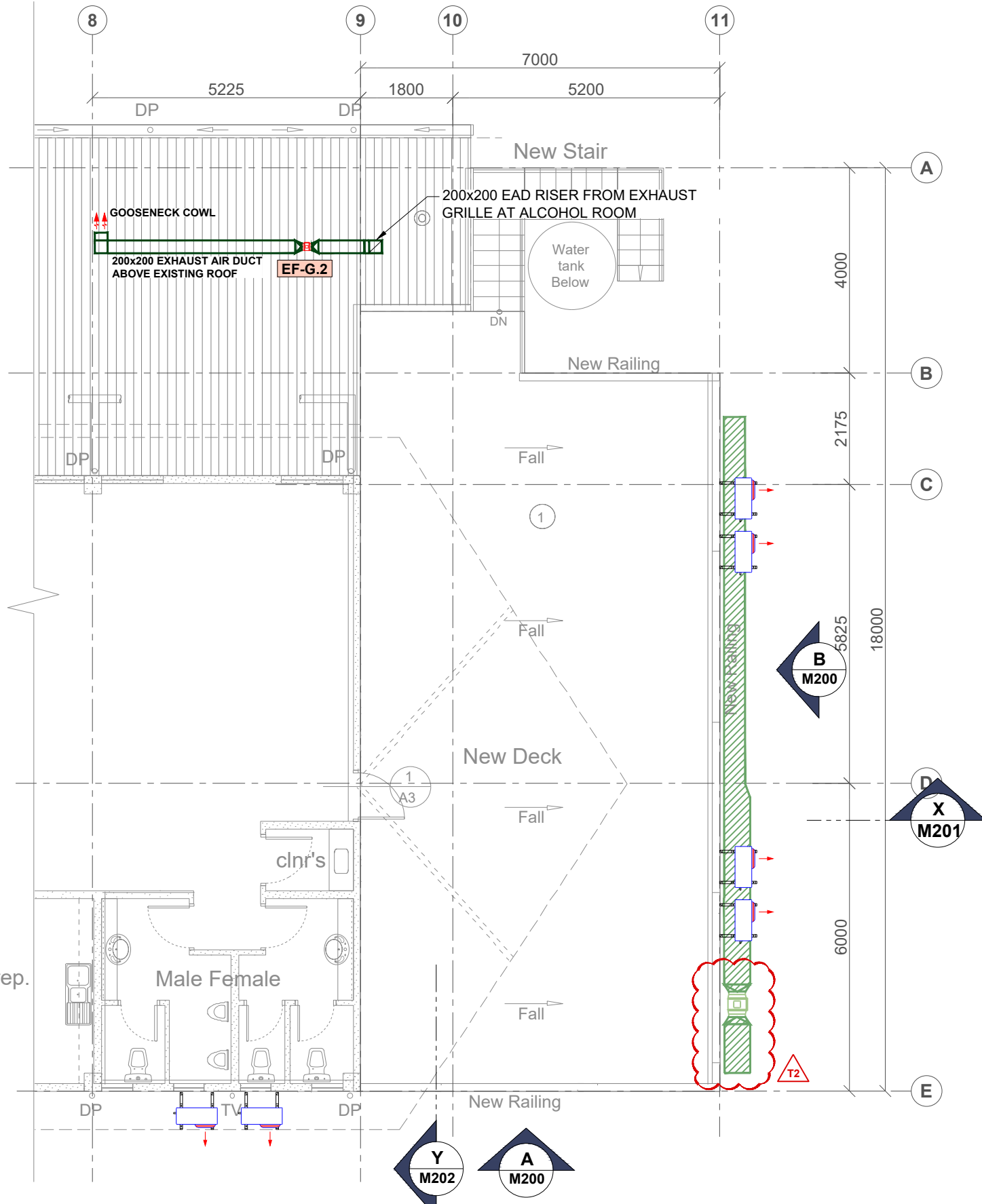
PROJECT NO:  
3885

AUTOCAD FILE NO:  
3885-M101-T3

SHEET NO:  
M101

SIZE:  
A3

REVISION:  
T3



1 ENLARGED LAB LAYOUT - FIRST FLOOR  
M102 SCALE: 1:100

REVISION	
T2	REVISION OF EXHAUST AIR DUCTWORK LAYOUT TO DISCHARGE AT LOW LEVEL
T1	TENDER ISSUE

**TENDER ISSUE**

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NO.	DATE	REVISION:
T2	170423	REVISED TENDER
T1	180123	TENDER ISSUE
P2	071222	PRELIMINARY ISSUE
P1	041122	PRELIMINARY ISSUE

PROJECT TITLE: **PACIFIC COMMUNITY PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB FNTC ROAD 2, NASINU.**

DRAWING TITLE: **ENLARGED LAB LAYOUT - FIRST FLOOR**

DESIGN:	KB
DRAWN:	ST
QA:	KB/NP
SCALE:	1:100
DATE:	170423
STATUS:	REVISED TENDER

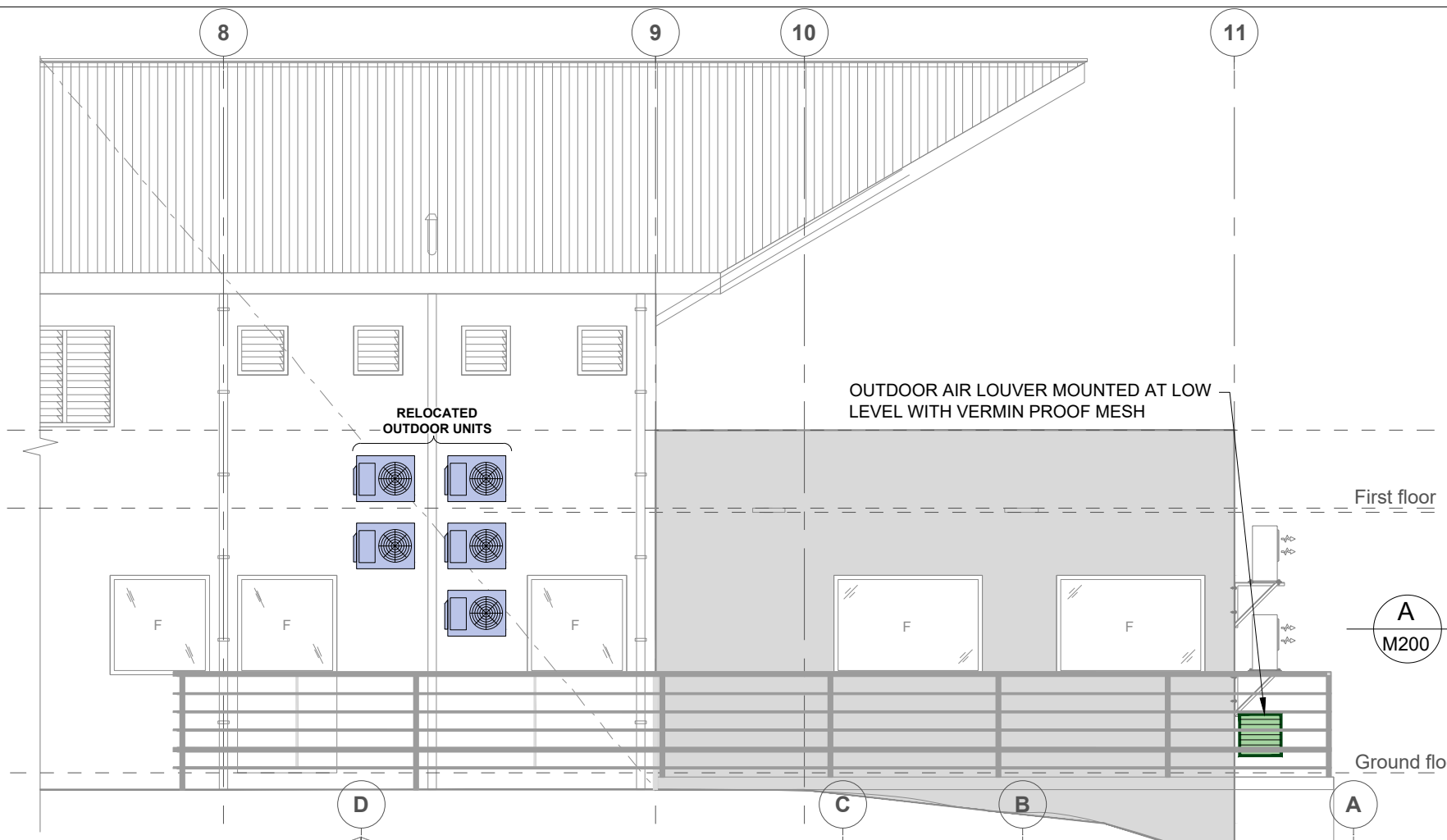
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AUTOCAD FILE NO: **3885-M102-T2**

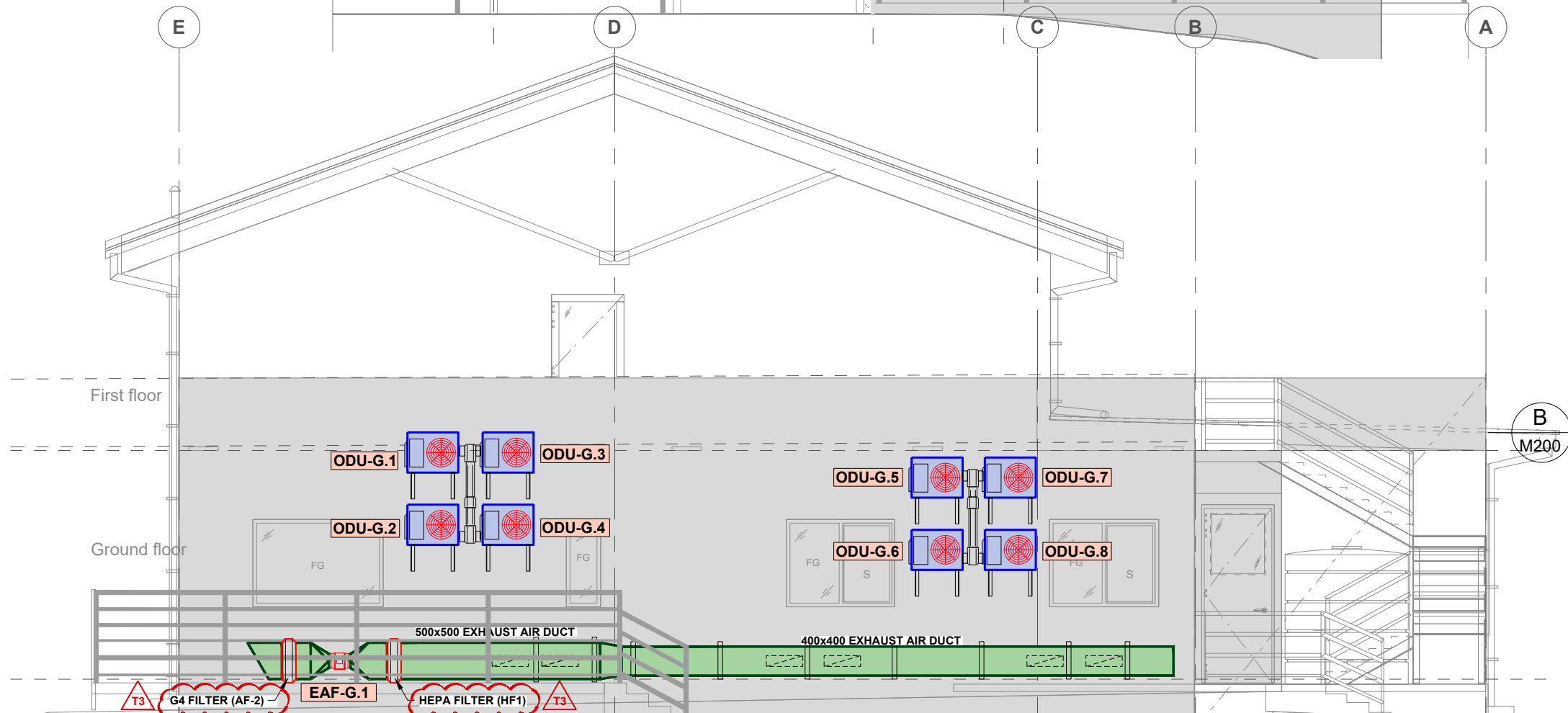
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**A** PROPOSED MECHANICAL ELEVATION A  
M200 SCALE: 1:75



**B** PROPOSED MECHANICAL ELEVATION B  
M200 SCALE: 1:75

REVISION	
T3	REVISION OF FILTER LOCATIONS
T2	REMOVAL OF SUPPLY AIR AND EXHAUST FANS FROM GROWTH ROOM AND ADDITION OF HEPA FILTERS
T1	TENDER ISSUE

**TENDER ISSUE**

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NO.	DATE	REVISION:
T3	170423	REVISED TENDER
T2	060323	REVISED TENDER
T1	180123	TRENDER ISSUE
P2	071222	PRELIMINARY ISSUE
P1	041122	PRELIMINARY ISSUE

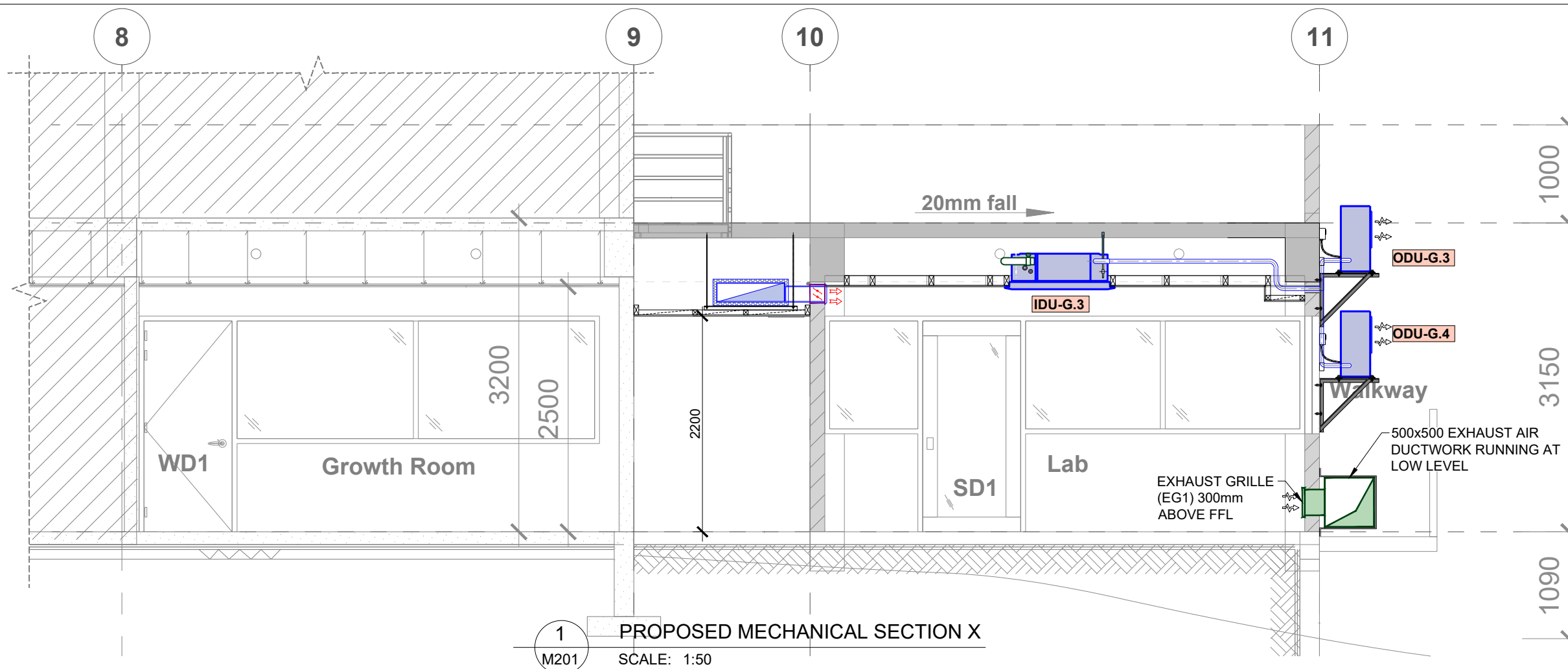
PROJECT TITLE: **PACIFIC COMMUNITY PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB FNTC ROAD 2, NASINU.**

DRAWING TITLE: **PROPOSED MECHANICAL ELEVATIONS**

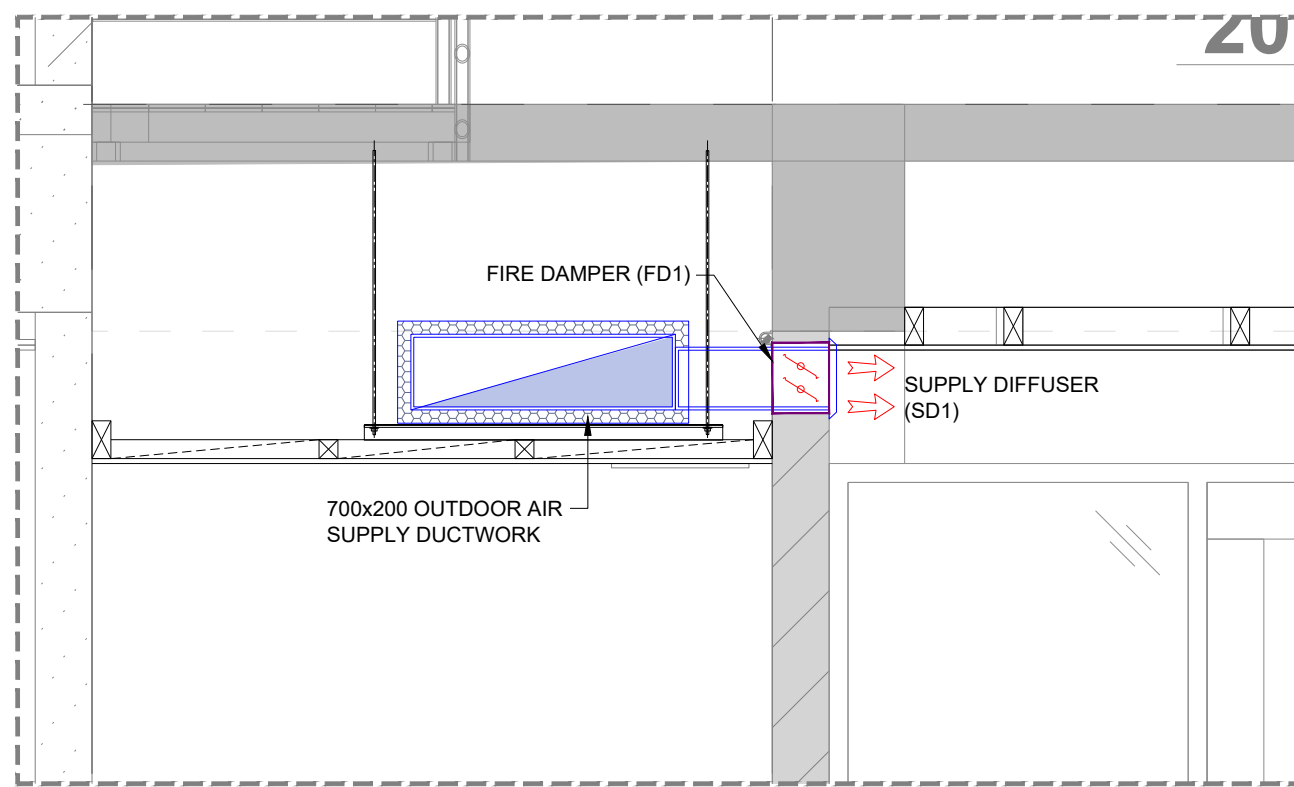
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DRAWN:	ST
QA:	KB/NP
SCALE:	N/A
DATE:	170423
STATUS:	REVISED TENDER

PROJECT NO:	3885
AUTOCAD FILE NO:	3885-M200-T3
SHEET NO:	M200
SIZE:	A3
REVISION:	T3

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1 PROPOSED MECHANICAL SECTION X  
M201 SCALE: 1:50



2 ENLARGED BULKHEAD DETAIL  
M201 SCALE: 1:40

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T1	180123	TENDER ISSUE
P2	071222	PRELIMINARY ISSUE
P1	041122	PRELIMINARY ISSUE
NO.	DATE:	REVISION:

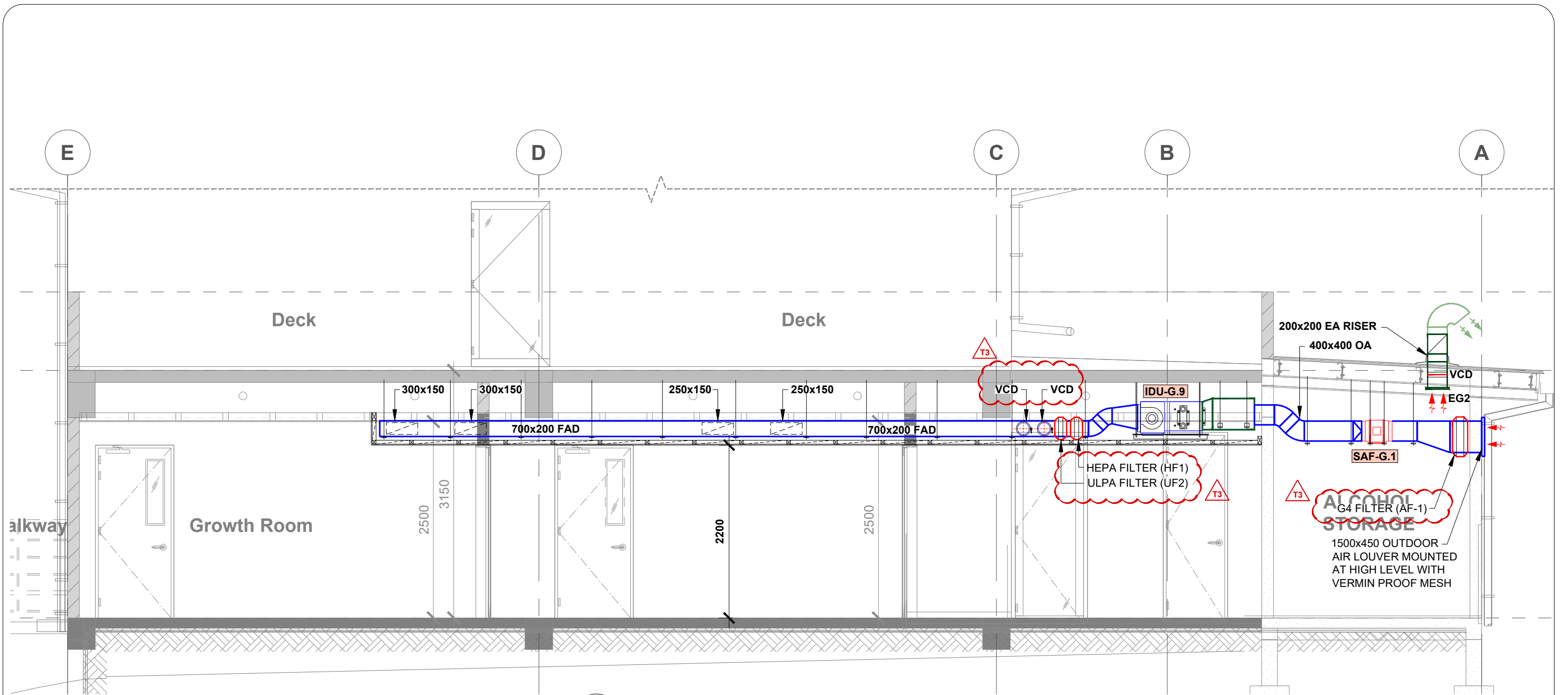
PROJECT TITLE:  
**PACIFIC COMMUNITY  
PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB  
FNTC ROAD 2, NASINU.**

DRAWING TITLE:  
PROPOSED MECHANICAL SECTION X

DESIGN:	KB
DRAWN:	ST
QA:	KB/NP
SCALE:	AS SHOWN
DATE:	180123
STATUS:	TENDER ISSUE

PROJECT NO:	3885				
AUTOCAD FILE NO:	3885-M201-T1				
SHEET NO:	M201	SIZE:	A3	REVISION:	T1

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1 PROPOSED MECHANICAL SECTION Y  
M202 SCALE: 1:50

REVISION	
T3	RELOCATION OF FILTER LOCATIONS & ADDITION OF VCD LOCATIONS
T2	REMOVAL OF SUPPLY AIR TO THE GROWTH ROOM
T1	TENDER ISSUE

**TENDER ISSUE**

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NO.	DATE	REVISION:
T3	170423	REVISED TENDER
T2	060323	REVISED TENDER
T1	180123	TENDER ISSUE
P2	071222	PRELIMINARY ISSUE
P1	041122	PRELIMINARY ISSUE

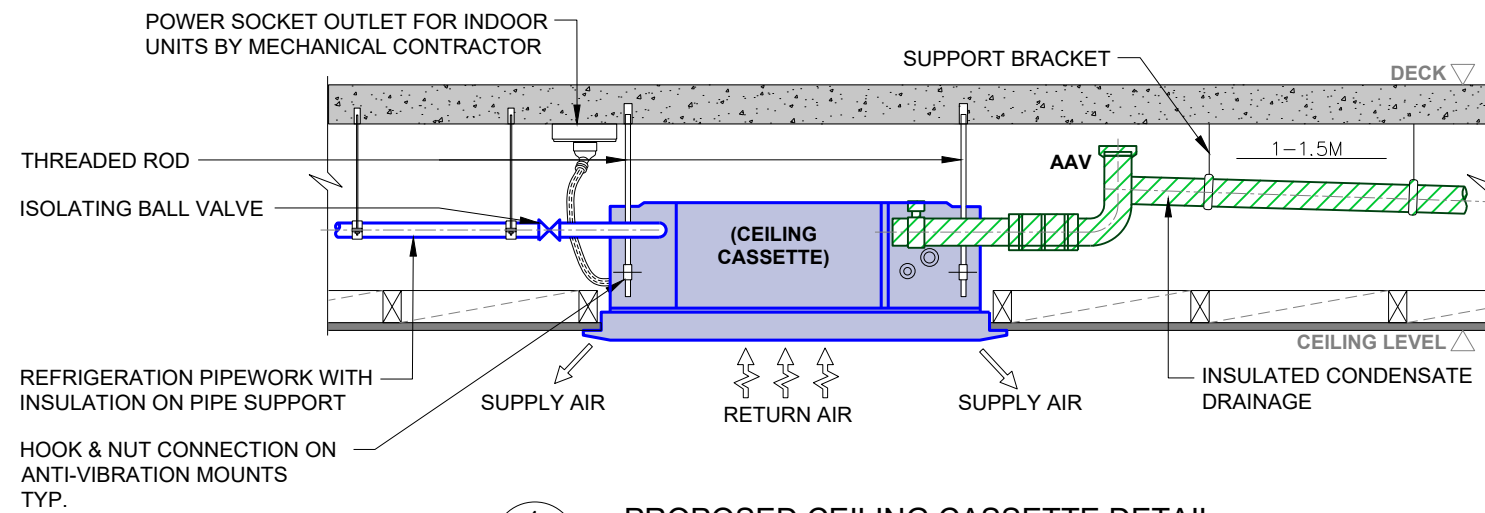
PROJECT TITLE: **PACIFIC COMMUNITY PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB FNTC ROAD 2, NASINU.**

DRAWING TITLE: **PROPOSED MECHANICAL SECTION Y**

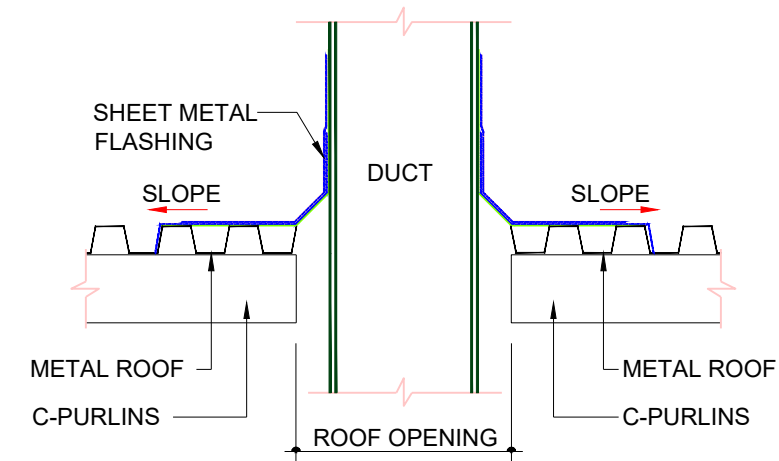
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DRAWN: ST  
QA: KB/NP  
SCALE: AS SHOWN  
DATE: 170423  
STATUS: REVISED TENDER

PROJECT NO: **3885**  
AUTOCAD FILE NO: **3885-M202-T3**  
SHEET NO: **M202** SIZE: **A3** REVISION: **T3**

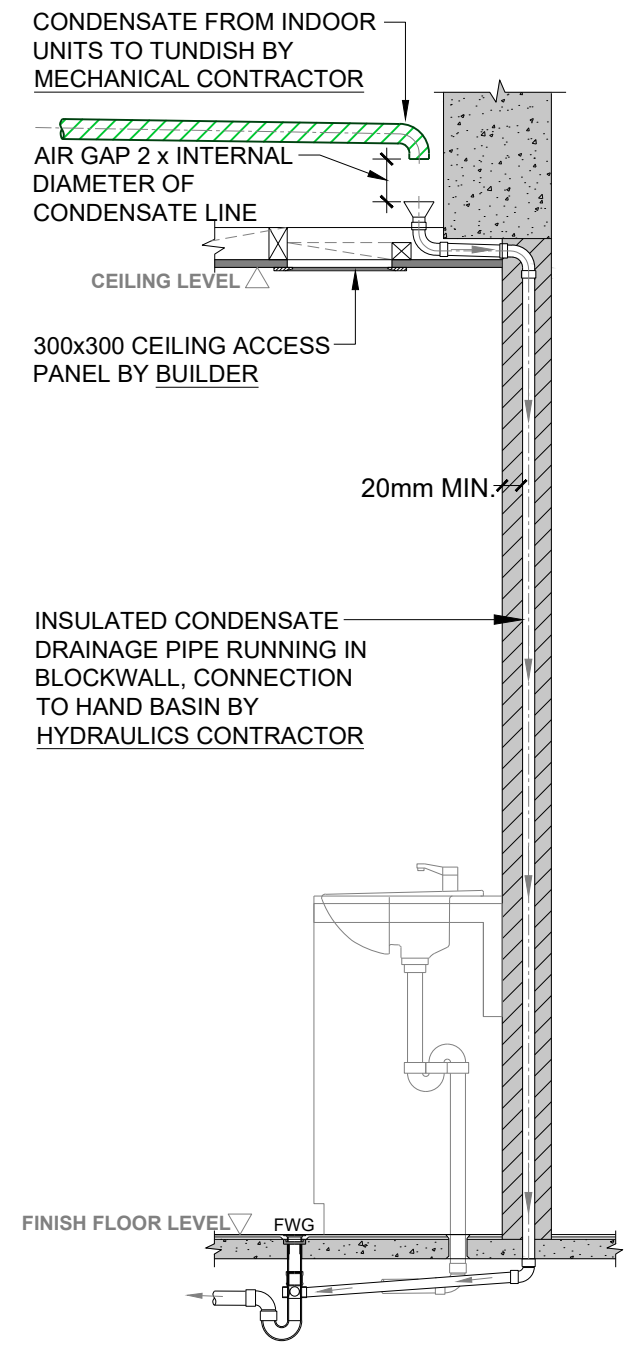
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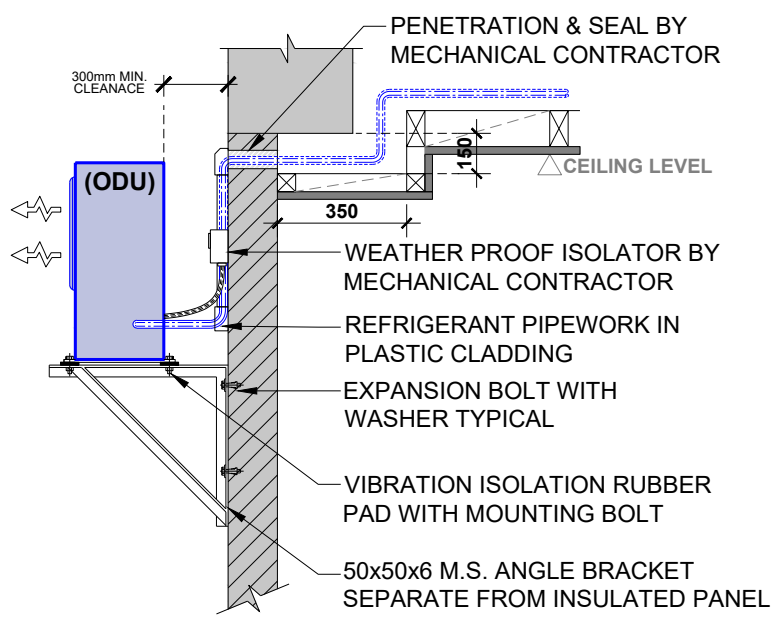
1 PROPOSED CEILING CASSETTE DETAIL  
M300 SCALE: NTS



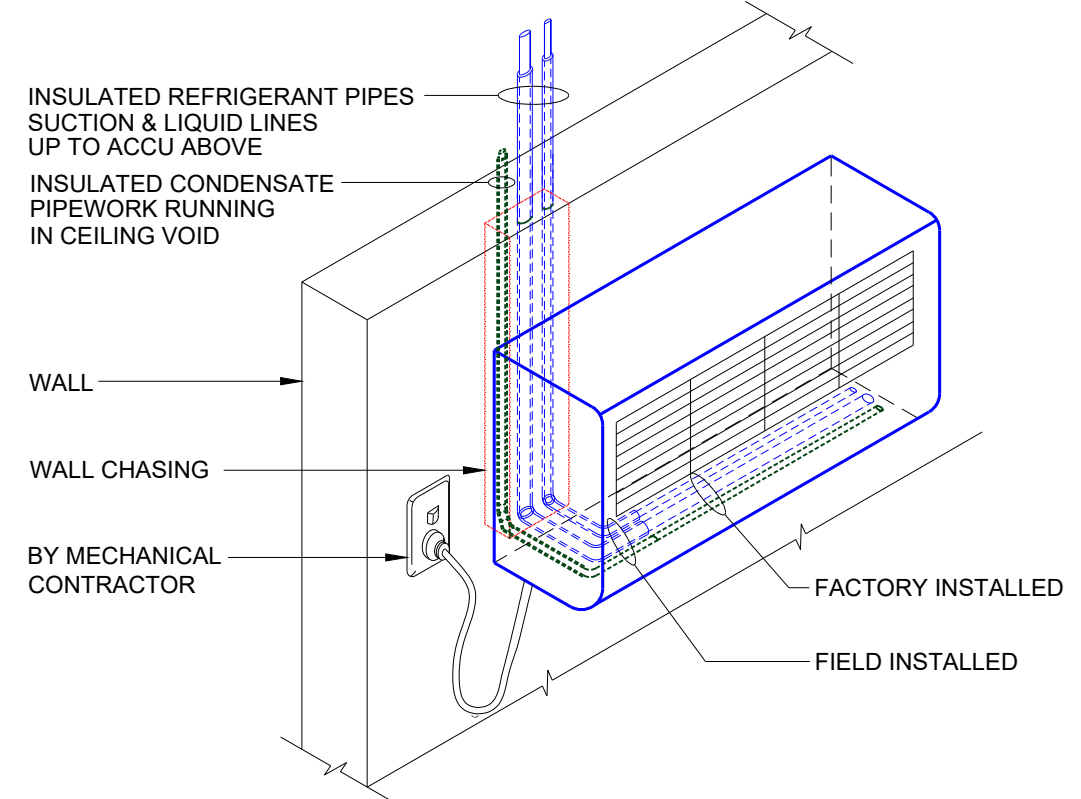
2 DUCT PENETRATION DETAIL  
M300 SCALE: NTS



5 PROPOSED TUNDISH DETAIL  
M300 SCALE: NTS



3 PROPOSED OUTDOOR UNIT INSTALLATION DETAIL  
M300 SCALE: NTS



4 PROPOSED INDOOR UNIT INSTALLATION DETAIL  
M300 SCALE: NTS

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T1	180123	TENDER ISSUE
P1	071222	PRELIMINARY ISSUE
NO.	DATE:	REVISION:

PROJECT TITLE: **PACIFIC COMMUNITY**  
**PROPOSED EXTENSION TO EXISTING BUILDING-CRYO LAB**  
**FNTC ROAD 2, NASINU.**

DRAWING TITLE: **PROPOSED MECHANICAL DETAILS**

DESIGN:	KB
DRAWN:	ST
QA:	KB/NP
SCALE:	NTS
DATE:	180123
STATUS:	TENDER ISSUE

PROJECT NO:	3885
AUTOCAD FILE NO:	3885-M300-T1
SHEET NO:	M300
SIZE:	A3
REVISION:	T1

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