

MECHANICAL NOTES:

- ALL WORKS SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF THE PHILIPPINES.
- ALL WORKS SHALL BE IN ACCORDANCE WITH THE FIRE CODE OF THE PHILIPPINES.
- ALL WORKS SHALL BE IN ACCORDANCE WITH THE PHILIPPINE MECHANICAL ENGINEERING CODE 2012.
- REFER TO TECHNICAL SPECIFICATIONS FOR DETAILED MATERIALS AND EQUIPMENT SPECIFICATION.
- AIR CONDITIONED AREA SHALL BE MAINTAINED AT 24°C (+/-) 2°C AND 55% RH.
- COORDINATE WITH ARCHITECTURAL PLAN REGARDING THE EXACT LOCATION OF REGISTERS AND GRILLES.
- REGISTER OR GRILLE DIMENSIONS INDICATED REPRESENT NECJ SIZE.
- REGISTER SHALL MEAN GRILLES OR DIFFUSERS WITH OPPOSED BLADE VOLUME DAMPER.
- ALL DUCT DIMENSIONS INDICATED REFERS TO INSIDE DIMENSION.
- ALL DIMENSIONS ARE IN MILLIMETER.
- INSTALL ALL DUCT CLOSE TO BEAM. PROVIDE CLEARANCE BETWEEN DUCT AND CEILING, UNLESS OTHERWISE NOTED.
- DUCTWORK CONNECTED TO AIR HANDLING UNITS / FAN SHALL BE SIZED TO SUIT THE EQUIPMENT AND SHALL BE PROVIDED WITH FLEXIBLE CONNECTOR.
- ALL DUCTWORK SHALL BE CONSTRUCTED IN CCORDANCE WITH THE LATEST EDITION OF SMACNA LOW PRESSURE DUCTWORK MANUAL.
- DUCTWORK SHALL BE SEALED TO LESS THAN 1% LEAKAGE BY VOL. AT 125 MM S.P.W.G.
- ALL EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATORS.
- ALL EQUIPMENT SHALL BE PAINTED WITH GALVANIZING PAINT MATERIAL FOR EXTRA PROTECTION AGAINST CORROSSION.
- COIL OF ACU/ACCU SHALL BE BLUE FINNED COATED FOR EXTRA PROTECTION AGAINST CORROSSION.
- STEEL SUPPORT OF THE EQUIPMENT SHALL BE APPLIED WITH GALVANIZING PAINT MATERIAL FOR EXTRA PROTECTION AGAINST CORROSION.
- ALL TOILET DOORS SHALL BE PROVIDED WITH LOUVERS.
- ALL DOORS OF THE AREAS WITH TRANSFER GRILLES SHALL BE PROVIDE WITH LOUVER.
- HEPA FILETER SHALL BE PROVIDED TO ALL DISCHARGE AIR DUCTWORK OF THE FRESH AIR FAN.
- WASHABLE PLEATED FILTER SHALL BE PROVIDED TO INTAKE AIR DUCTWORK OF THE FRESH AIR FAN.
- PIPE ALL EQUIPMENT DRAIN TO THE NEAREST FLOOE DRAIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE EQUIPMENT FOUNDATIONS AND SUPPORTS.
- SHOP DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR TO BE SUBMITTED FOR CONSULTANTS/CLIENTS REPRESENTATIVE APPROVAL PRIOR TO IMPLEMENTATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE TESTING, BALANCING AND COMMISSIONING OF THE WHOLE AIR CONDITIONING AND VENTILATION SYSTEM. WRITTEN DATA OF THE RESULT SHALL BE SUBMITTED PRIOR TO TURN OVER.
- WORKMANSHIP: THE WORK THROUGHOUT SHALL BE EXECUTED IN THE BEST & MOST THROUGH MANNER KNOWN TO TRADE AND TO THE SATISFACTION OF THE ARCHITECTS, ENGINEERS AND CLIENTS.
- THE EQUIPMENT SCHEDULE SHALL BE READ IN CONJUNCTION WITH THE GENERAL MECHANICAL LAYOUT AND SCHEMATIC DIAGRAM. ANY DESCRIPANCIES SHALL BE BROUGHT TO THE ATTENTION OF MECHANICAL CONSULTANT FOR VERIFICATION.
- THE CONTRACTOR SHALL FOLLOW THE PARAMETERS OF THE EQUIPMENT SCHEDULE WITH APPROVAL FROM MECHANICAL CONSULTANT PRIOR TO PURCHASE OF THE EQUIPMENT.

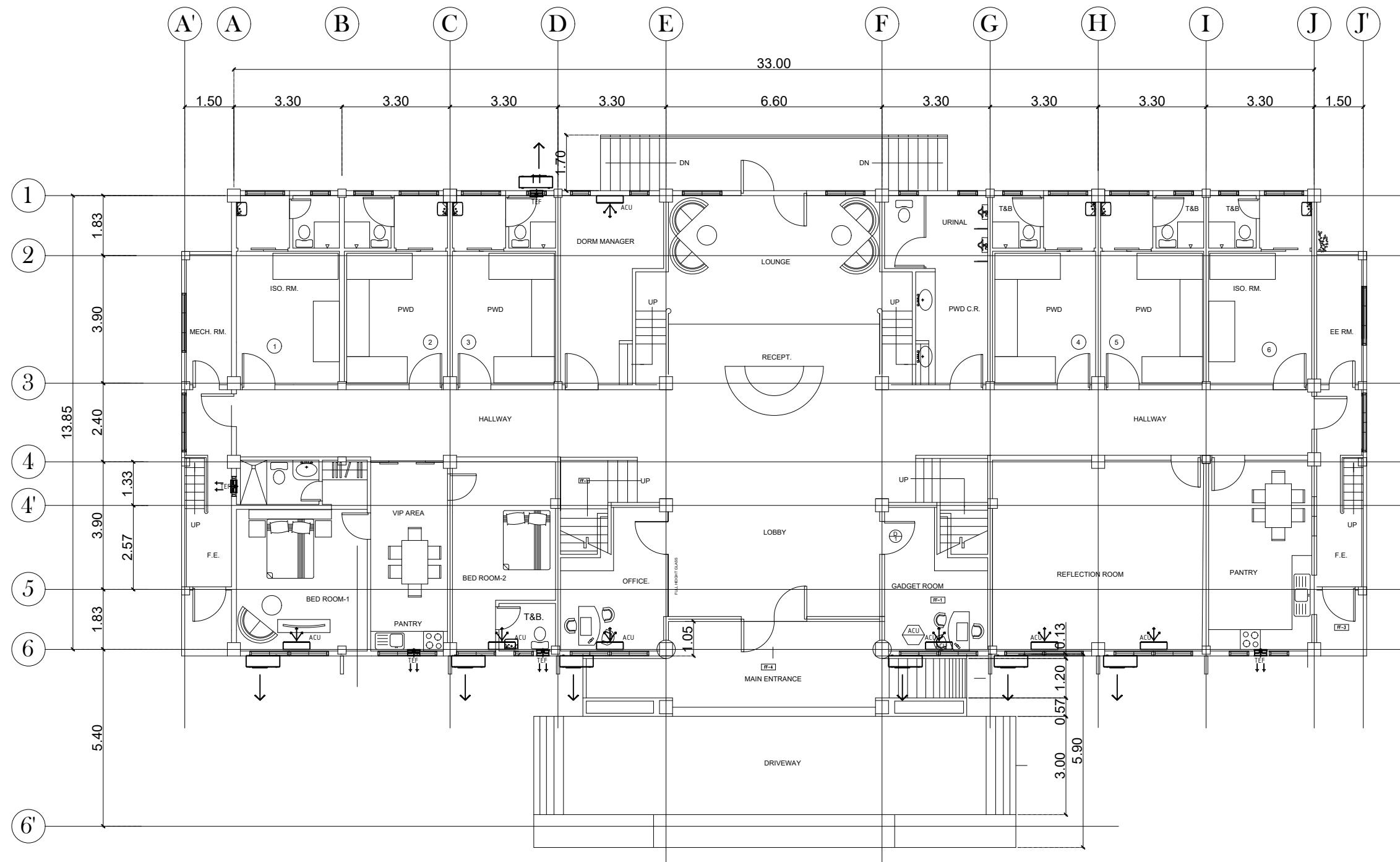
NOTES ON PIPING INSTALLATION:

- REFRIGERANT PIPES SHALL BE INTERNALLY CLEANED BY SWABBING WITH CLEAN COTTON CLOTH TO REMOVE ALL DUST, BURRS, AND OTHER MISCELLANEOUS DIRT.
- WHILE SOLDERING JOINTS, A SWEEP OF INERT NITROGEN GAS SHOULD BE PASSED THROUGH PIPES TO PREVENT OXIDATION DEPOSITS INSIDE.
- FITTINGS:
 - USE STANDARD LONG RADIUS COPPER ELBOWS, REDUCERS, ETC. DO NOT USE FIELD-FORMED ELBOWS, REDUCERS, ETC.
 - JOINTS BETWEEN PIPES SHOULD BE THROUGH STANDARD COPPER COUPLING FORMED FITTING MADE BY SWAGING OR ENLARGING ONE PIPE END TO BE ABLE TO RECEIVE THE OTHER PIPE SECTION WOULD NOT BE ALLOWED.
 - JOINTS TO SCREWED ACCESSORIES SUCH AS EXPANSION VALVES, FILTER DRIER, ETC. SHALL BE MADE WITH STANDARD FLARED FITTINGS.
- THE COMPLETED PIPING INSTALLATION SHOULD BE LEAK TESTED BY SUBJECTING THE SAME (BOTH LIQUID AND SUCTION LINE) TO A PRESSURE OF 3100 Pa USING DRY NITROGEN GAS. THIS PRESSURE SHOULD BE LEFT FOR 24 HOURS AND IF THERE IS NO NOTICEABLE REDUCTION IN PRESSURE WITHIN THE PERIOD, THE NITROGEN CHARGE SHALL BE RELIEVED DOWN TO 140KPa. TO SERVE AS HOLDING CHARGE WHILE WAITING FOR THE EQUIPMENT CONNECTION. IF THERE IS NOTICEABLE REDUCTION IN THE TEST PRESSURE, LEAK SHOULD BE LOCATED AND REPAIRED.
- PROPERLY TESTED PIPING SHOULD BE SECURELY CAPPED AT BOTH ENDS AND WITH HOLDING CHARGED AS STATED IN ITEM 4 ABOVE WHILE WAITING FOR FINAL CONNECTION TO EQUIPMENT. INSULATE SUCTION PIPING ONLY AFTER PROPER LEAK TESTING.

LEGEND & SYMBOLS			
SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	KITCHEN EXHAUST DUCT		WALL MOUNTED ACU
	FLEXIBLE DUCT		CEILING SUSPENDED ACU
	4-WAY DIFFUSER		4-WAY CEILING CASSETTE ACU
	BRANCH DUCT W/ VCD		1-WAY CEILING CASSETTE ACU
	SQUARE TO ROUND BRANCH DUCT		VRV OUTDOOR UNIT
	DUCT REDUCER		SPLIT-TYPE OUTDOOR UNIT
	DUCT W/ VOLUME CONTROL DAMPER		AIR HANDLING UNIT/FAHU
	FIRE DAMPER WITH ACCESS PANEL		AIR-COOLED CONDENSING UNIT
	DUCT WITH ACOUSTIC LINING		CENTRIFUGAL IN-LINE FAN (TUBULAR)
	STANDARD DUCT ELBOW		CENTRIFUGAL IN-LINE FAN (CABINET)
	SUPPLY DUCT DOWN		CEILING MOUNTED FAN
	RETURN DUCT DOWN		VENT CAP
	EQUIPMENT IDENTIFICATION		WALL MOUNTED FAN W/ RAIN HOOD
	LOCAL THERMOSTAT		VRV SPECIAL PIPE CONNECTOR
	VRV CENTRAL CONTROL		EXHAUST AIR GRILLE

ABBREVIATIONS			
ACC	AIR CONDITIONING CENTRAL CONTROL	l/s / LPS	LITERS PER SECOND
ACCU	AIR-COOLED CONDENSING UNIT	NRD	NON-RETURN DAMPER
ACU	AIR CONDITIONING UNIT	NTS	NOT TO SCALE
ACCU-V	AIR-COOLED CONDENSING UNIT FOR VRF SYSTEM	OBD	OPPOSED BLADED DAMPER
ACU-V	AIR CONDITIONING UNIT FOR VRF SYSTEM	PA	PASCAL
AHU	AIR HANDLING UNIT	POC	POINT OF CONNECTION
CDP	CONDENSATE DRAIN PIPE	RA	RETURN AIR
EA	EXHAUST AIR	RAD	RETURN AIR DUCT
EAG	EXHAUST AIR GRILLE	RAG	RETURN AIR GRILLE
EAR	EXHAUST AIR REGISTER	SAG	SUPPLY AIR GRILLE
EAL	EXHAUST AIR LOUVER	SAD	SUPPLY AIR DUCT
ESP	EXTERNAL STATIC PRESSURE	SED	SMOKE EXHAUST DUCT
FAF	FRESH AIR FAN	SEF	SMOKE EXHAUST FAN
F/A	FROM ABOVE	SPF	STAIRWELL PRESSURIZATION FAN
F/B	FROM BELOW	SAF	SUPPLY AIR FAN
FD	FIRE DAMPER	TR	TERMINAL ELECTRIC RE-HEAT
FAD	FRESH AIR DUCT	T/A	TO ABOVE
FAHU	FRESH AIR HANDLING UNIT	T/B	TO BELOW
H/L	HIGH LEVEL	TEF	TOILET EXHAUST FAN
KED	KITCHEN EXHAUST DUCT	VCD	VOLUME CONTROL DAMPER
KEF	KITCHEN EXHAUST FAN	VRV	VARIABLE REFRIGERANT VOLUME
KW	KILOWATT		

OWNER:	Project Title:	Prepared by:	Recommending approval by:	Approved by:	Sheet Content:	Sheet No.
	CONSTRUCTION OF DORMITORY BUILDING I Location: Brgy. Rizal, Odiongan Romblon 5505	PLANNING TEAM Date Prepared:	Meriam F. Fallar FAD Chief	Edward C. Albaracin Campus Director	As Shown	M
						1




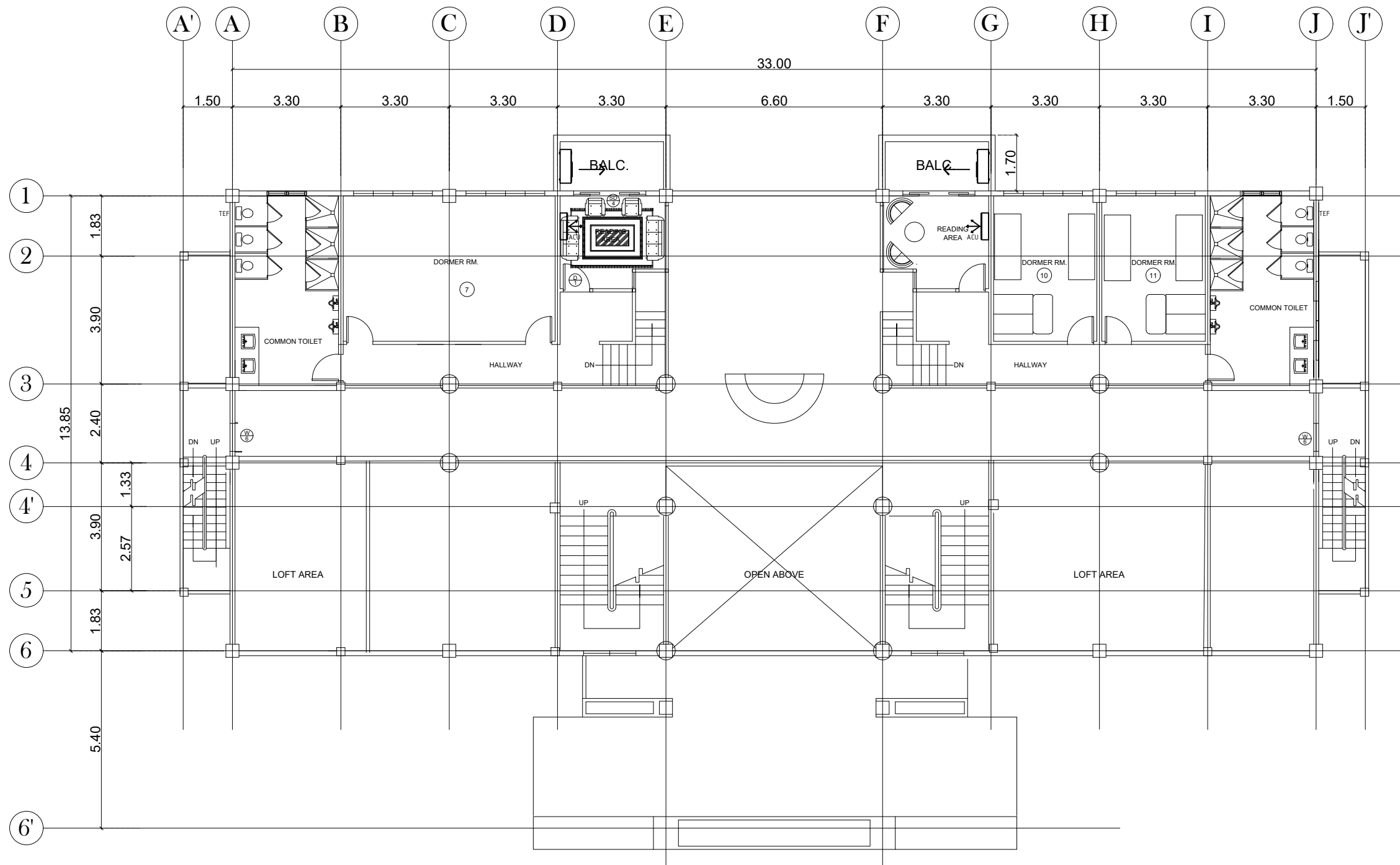
1
M-2

GROUND FLOOR
A/C AND VENTILATION LAYOUT

SCALE

1:150m

OWNER:	Project Title:	Prepared by:	Recommending approval by:	Approved by:	Sheet Content:	Sheet No.
 Republic of the Philippines DEPARTMENT OF SCIENCE AND TECHNOLOGY Philippine Science High School MIMAROPA Region Campus Brgy. Rizal, Odiongan, Romblon 5505	CONSTRUCTION OF DORMITORY BUILDING I	PLANNING TEAM	Meriam F. Fallar FAD Chief	Edward C. Albaracin Campus Director	As Shown	M
	Location: Brgy. Rizal, Odiongan Romblon 5505	Date Prepared:	Date:	Date:		2 5




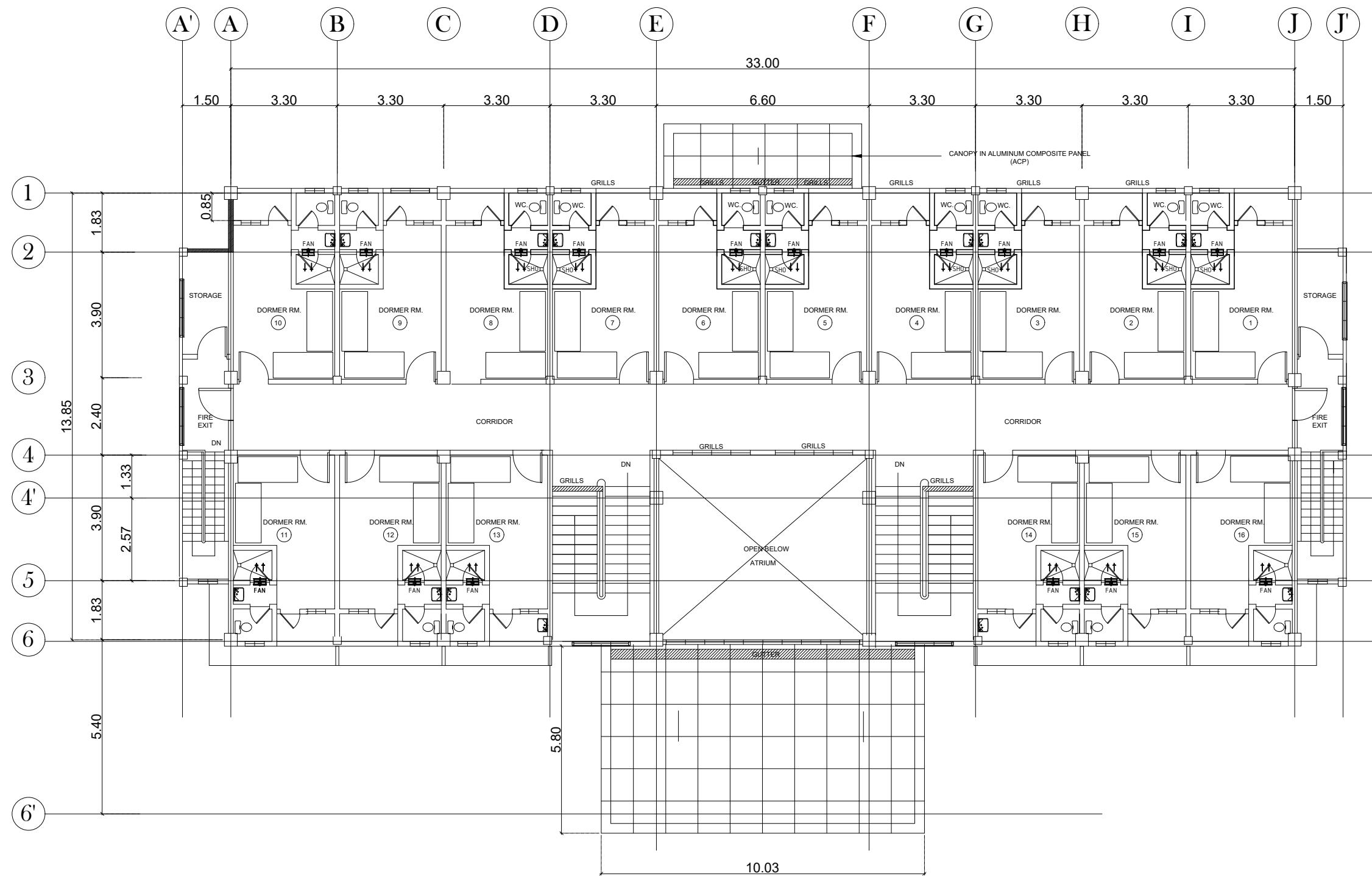
1
M-3

MEZZANINE FLOOR
A/C AND VENTILATION LAYOUT

SCALE

1:150m

OWNER:	Project Title:	Prepared by:	Recommending approval by:	Approved by:	Sheet Content:	Sheet No.
 Republic of the Philippines DEPARTMENT OF SCIENCE AND TECHNOLOGY Philippine Science High School MIMAROPA Region Campus Brgy. Rizal, Odiongan, Romblon 5505	CONSTRUCTION OF DORMITORY BUILDING I Location: Brgy. Rizal, Odiongan Romblon 5505	PLANNING TEAM Date Prepared:	Meriam F. Fallar FAD Chief Date:	Edward C. Albaracin Campus Director Date:	As Shown	M 3 5




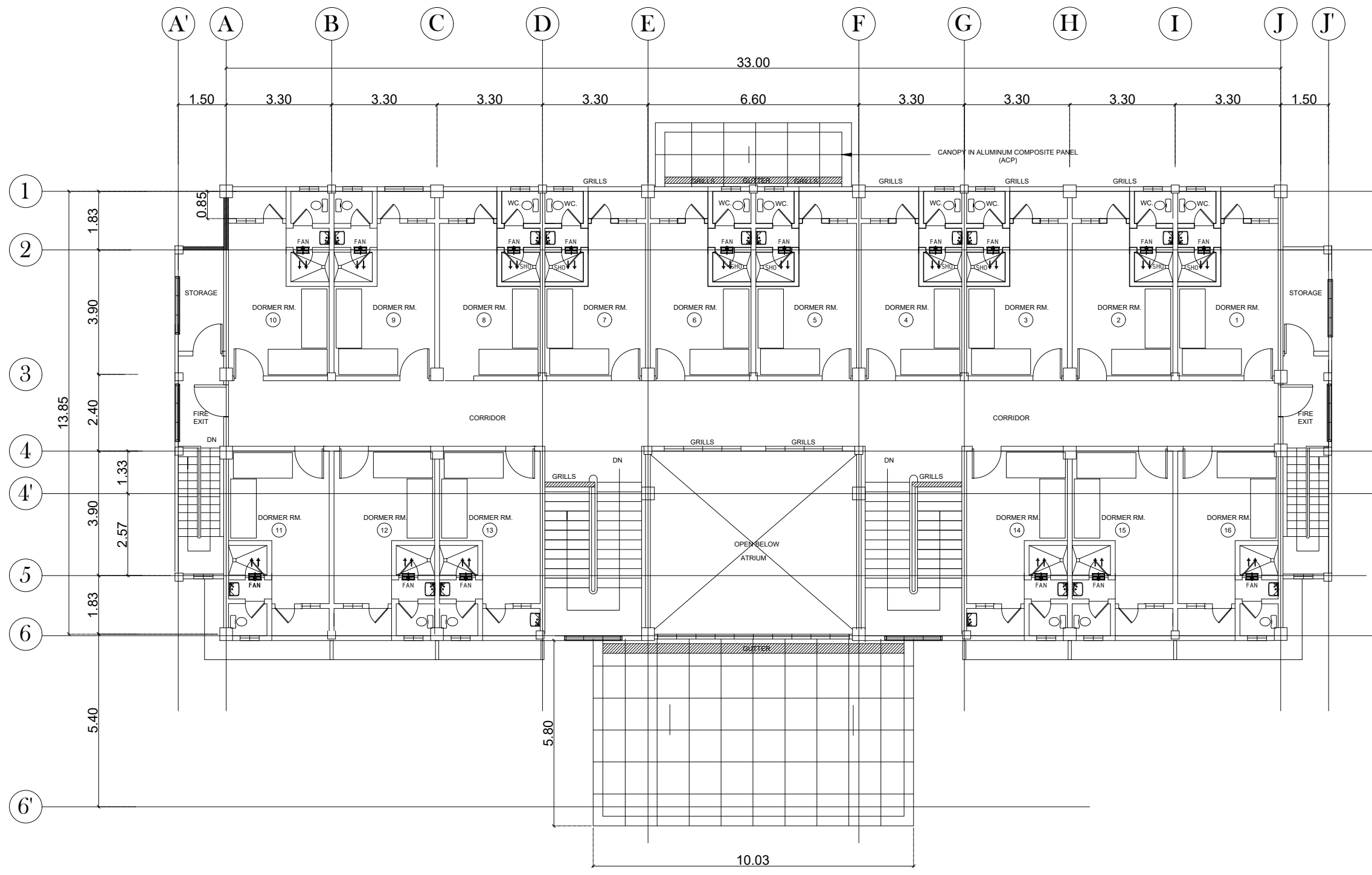
1
M-4

SECOND FLOOR
A/C AND VENTILATION LAYOUT

SCALE


1:150m

OWNER:	Project Title:	Prepared by:	Recommending approval by:	Approved by:	Sheet Content:	Sheet No.
 Republic of the Philippines DEPARTMENT OF SCIENCE AND TECHNOLOGY Philippine Science High School MIMAROPA Region Campus Brgy. Rizal, Odiongan, Romblon 5505	CONSTRUCTION OF DORMITORY BUILDING I	<u>PLANNING TEAM</u>	<u>Meriam F. Fallar</u> FAD Chief	<u>Edward C. Albaracin</u> Campus Director	As Shown	M
	Location: Brgy. Rizal, Odiongan Romblon 5505	Date Prepared:	Date:	Date:	4	5



1

THIRD FLOOR
A/C AND VENTILATION LAYOUT
 SCALE 1:150m

OWNER:	Project Title:	Prepared by:	Recommending approval by:	Approved by:	Sheet Content:	Sheet No.
	CONSTRUCTION OF DORMITORY BUILDING I	PLANNING TEAM	Meriam F. Fallar FAD Chief	Edward C. Albaracin Campus Director	As Shown	M
	Location: Brgy. Rizal, Odiongan Romblon 5505	Date Prepared:	Date:	Date:		5 5