














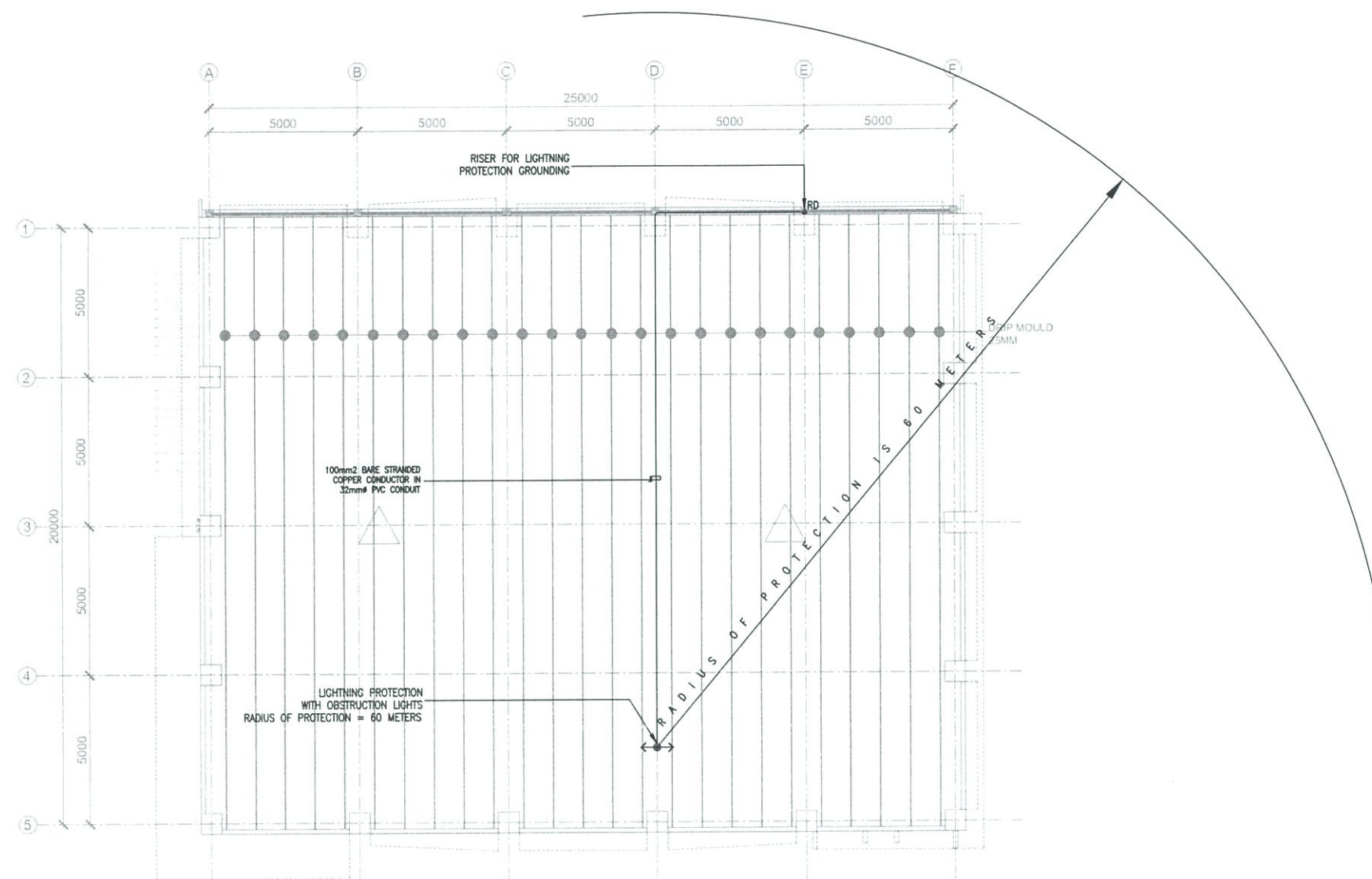
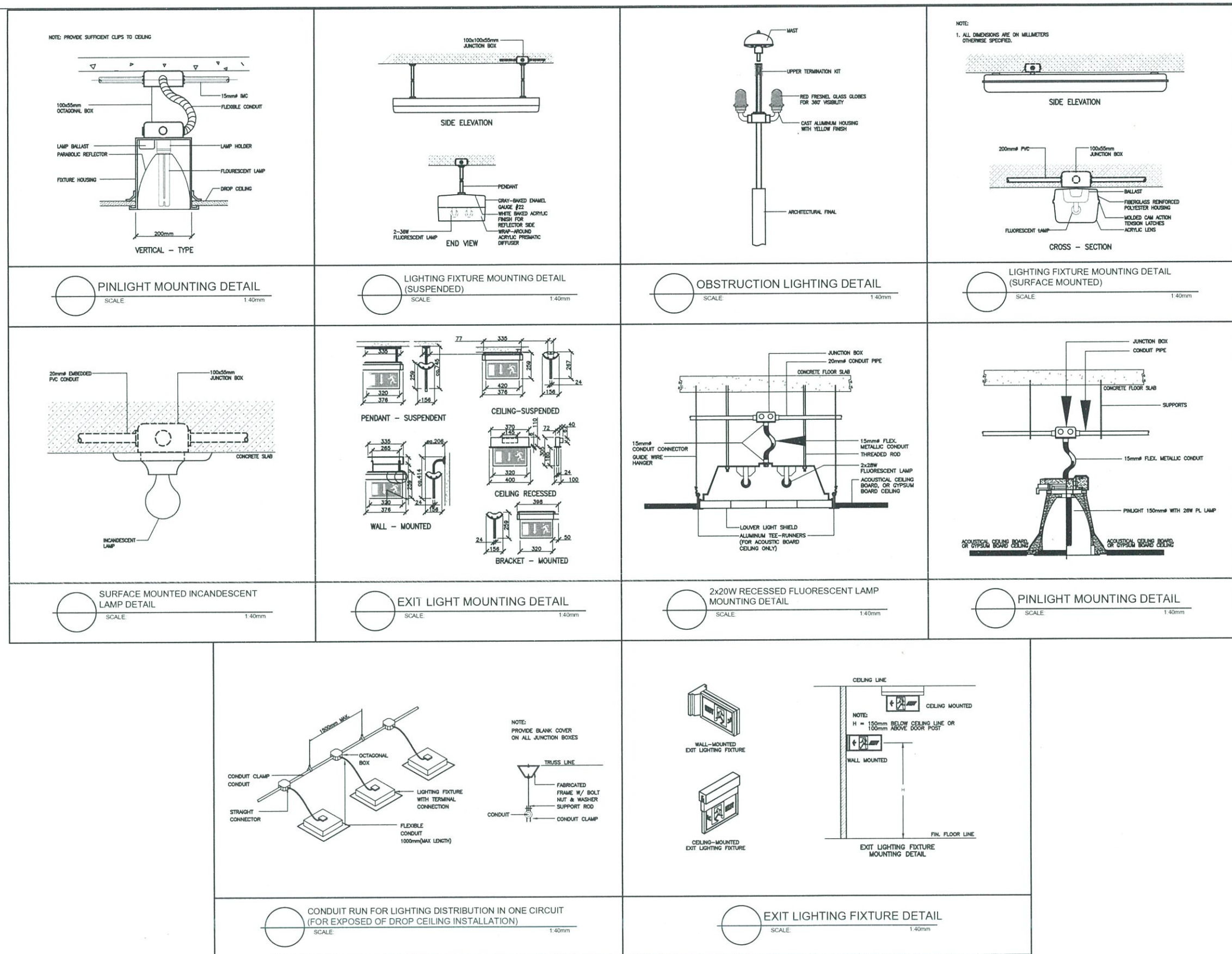


LEGENDS AND SYMBOLS	
	DUPLEX CONVENIENCE OUTLET
	FLOOR MOUNTED CONVENIENCE OUTLET
	SIMPLEX CONVENIENCE OUTLET
	HAND DRYER PROVISION
	SPECIAL PURPOSE OUTLET
	JUNCTION BOX
	DISCONNECT SWITCH
	ENCLOSED CIRCUIT BREAKER
	DISTRIBUTION PANEL
	PANELBOARD
	GROUND BAR
	GROUND ROD WITH TESTING PIT
	GROUND ROD
	RISER UP/DOWN
	EARLY STREAMER EMISSION LIGHTNING PROTECTION




TESDA INNOVATION CENTER - SFIST
ROOF LIGHTNING PROTECTION LAYOUT


SCALE: 1: 200 mm





**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER:

**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:
**PROPOSED TESDA SFIST
INNOVATION CENTER**
LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
SAN FRANCISCO, MALABON CITY

ELECTRICAL ENGINEER:

ENGR. JOHN ADRIAN S. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

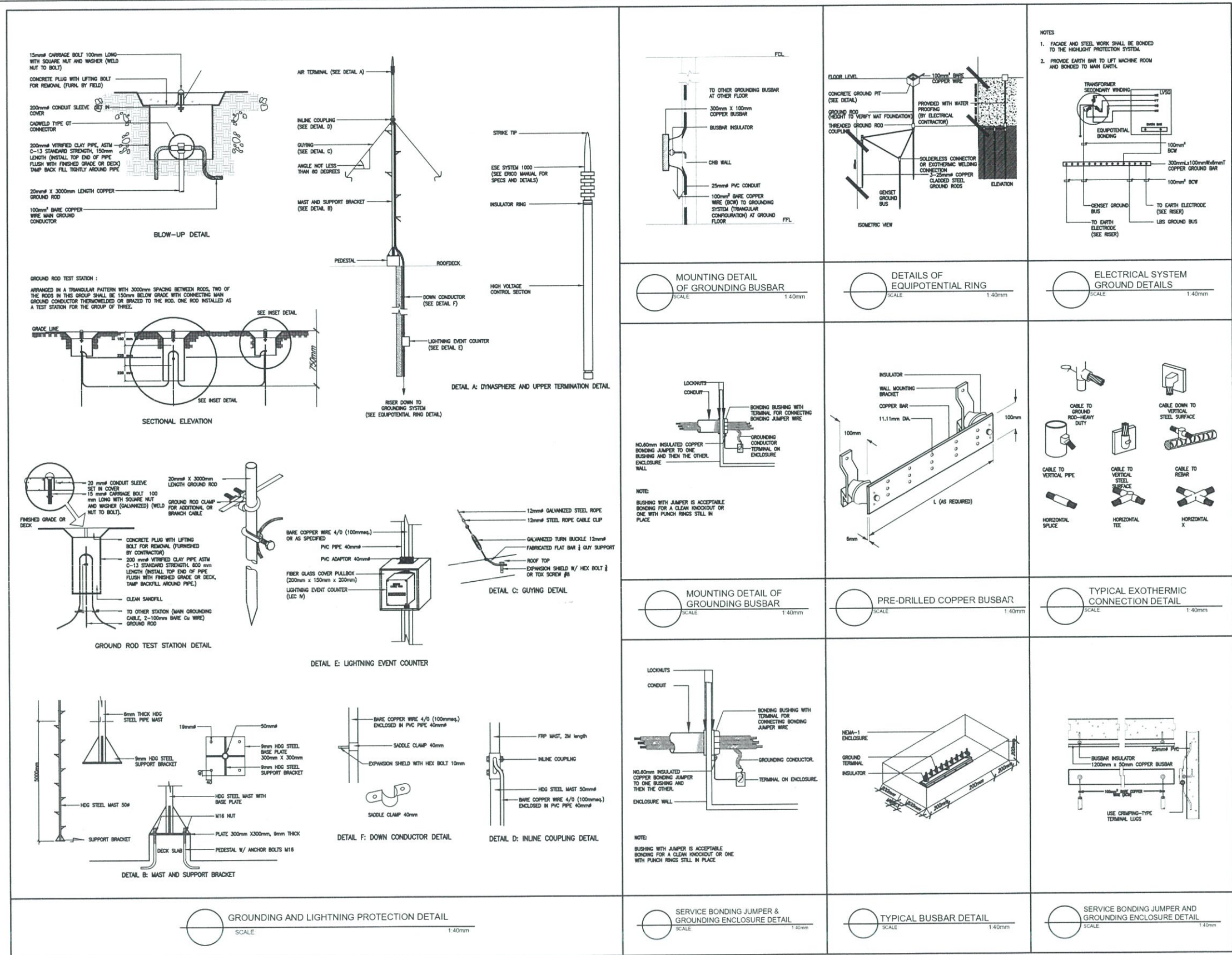
PROJECT MANAGER:

DIR. ENRIC C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDATU, Ph.D.
PMU-SIPTVETS


SHEET CONTENTS:
MISCELLANEOUS DETAILS -
TYPICAL LIGHTING
DETAILS

SHEET NO.


E-6




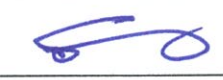
**FOR APPROVAL PLANS OF
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CENTERS (RTICs) 2023**

PROJECT OWNER:

**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX Taguig City

PROJECT TITLE:
**PROPOSED TESDA SFIST
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LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
SAN FRANCISCO MALLPOT ALBAY CITY

ELECTRICAL ENGINEER:

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PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
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SHEET CONTENTS:
MISCELLANEOUS DETAILS -
TYPICAL GROUNDING AND
LIGHTNING PROTECTION
DETAILS

SHEET NO.
E-7

GENERAL NOTES AND SPECIFICATIONS

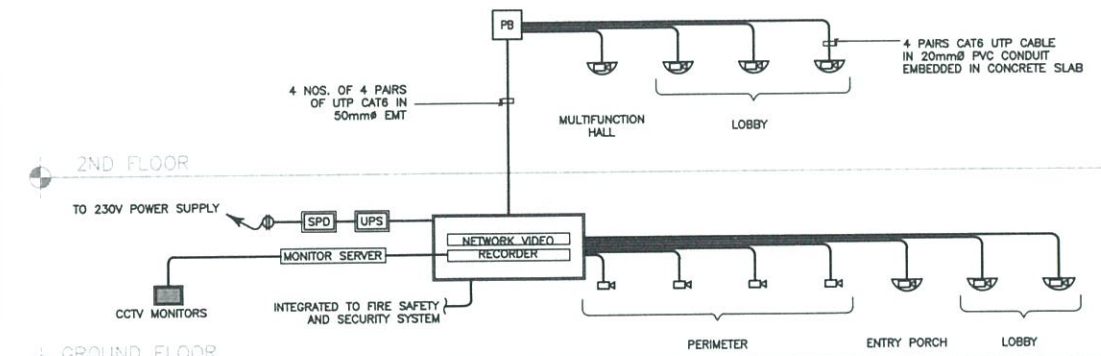
- ALL WORKS HEREIN INCLUDED SHALL BE EXECUTED IN ACCORDANCE WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE RULES AND REGULATIONS OF THE LOCALITY AND THE REQUIREMENTS OF THE CLIENT/OWNER.
- ALL WORKS HEREIN INCLUDED SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL TIME LICENSED ELECTRONICS AND COMMUNICATIONS ENGINEER (ECE). ALL WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
- MATERIALS SHALL BE NEW AND SHALL CONFORM WITH THE STANDARD AMERICAN UNDERWRITER'S LABORATORIES, INC., IN EVERY CASE WHERE SUCH A STANDARD HAS BEEN ESTABLISHED FOR THE PARTICULAR TYPE OF MATERIAL IN QUESTION. ALL EQUIPMENT SHALL BE PURCHASED ACCORDING TO SPECIFICATIONS.
- ALL EXPOSED & CEILING CONCEALED CONDUITS SHALL BE OF INTERMEDIATE METALLIC CONDUIT ON HIGH STRENGTH AND GALVANIZED WITH AN ADDITIONAL INTERIOR PROTECTIVE COATING SHALL BE USED OR AS INDICATED IN THE PLANS. ALL EMBEDDED CONDUITS SHALL BE OF POLYVINYL CHLORIDE. ALL EXPOSED AND NOT PRONE TO DAMAGE CONDUITS SHALL BE OF ELECTRICAL METALLIC TUBING.
- VOICE AND DATA WIRING SHALL BE SEPARATED FROM ANY OTHER BUILDING OR POWER WIRING, TO PREVENT HUMMING AND ELECTROMAGNETIC INTERFERENCE (EMI), TO MEET OR EXCEED THE EIA/TIA 568A CABLING STANDARD.
- ALL CONDUITS AND WIRE WAYS SHALL BE PROTECTED AGAINST DAMAGES BY THE ENTRANCE OF WATER AND FOREIGN MATTER DURING CONSTRUCTION. ALL ENDS OF CONDUITS SHALL BE PROPERLY PLUGGED TO EXCLUDE MOISTURE AND DUST IMMEDIATELY AFTER THE CONDUITS ARE PLACED.
- ALL CONDUIT BENDS SHALL BE FIELD-MADE USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS SHALL BE IN ACCORDANCE WITH THE CODE.
- ALL PIPES AND FITTINGS ON EXPOSED WORK SHALL BE SUPPORTED AND SECURED BY MEANS OF C-CHANNELS AND CLAMPS.
- THE POSITION OF ALL ELECTRONICS EQUIPMENT AS SHOWN IN THE DRAWINGS ARE APPROXIMATE ONLY. THE EXACT POSITIONS SHALL BE DETERMINED ON SITE.
- ALL MDF'S AND IDF'S SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF PHILIPPINE ELECTRICAL/ELECTRONICS, EIA AND BICSI CODE. THEY SHALL BE PAINTED WITH A COAT OF ANTI-RUST PAINT AND TWO COATS OF SEMI-GLASS TEAK PAINT OF BEST QUALITY TO THE APPROVAL OF THE CONSULTANT.
- ALL ELECTRONICS EQUIPMENT AND DEVICES LOCATIONS SHOWN ARE INDICATIVE ONLY AND THE ELECTRICAL CONTRACTOR MUST COORDINATE WITH THE ARCHITECT AND OR THE INTERIOR DESIGNER, AS WELL AS EQUIPMENT SUPPLIERS.
- ALL ELECTRONICS EQUIPMENT & ACCESSORIES THAT ARE EXPOSED OR LESS THAN 2.0m AWAY FROM WATER SOURCES SHALL BE OF WATERPROOF TYPE.
- COLOR FOR ALL TELECOMMUNICATION FACE PLATES SHALL BE AS PER ARCHITECT'S/INTERIOR DESIGNER'S SELECTION.
- SIZING OF ALL PULLBOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. LOCATION OF PULLBOXES SHALL BE AS APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE "AS-BUILT" PLANS.
- MOUNTING HEIGHTS OF DEVICES (RJ-45 JACKS) SHALL BE AS APPROVED BY THE ARCHITECT OR AS FOLLOWS:
TELECOM/DATA OUTLET0.30m ABOVE FINISHED FLOOR TO CENTER OF DEVICE
0.15m ABOVE WORKING COUNTER TO CENTER OF DEVICE
- ALL ITEMS OF MATERIAL NOT FURNISHED BY REQUESTION AND REQUIRED TO COMPLETE THE INSTALLATION IN A GOOD, WORKMANLIKE MANNER SHALL BE PROVIDED BY THE IT CABLING CONTRACTOR.
- THE PLANS AS DRAWN ARE BASED UPON THE ARCHITECTURAL PLANS AND THE DETAILS AND SHOWN CONDITIONS AS ACCURATELY AS IT IS POSSIBLE TO INDICATE THEM IN SCALE. THE PLANS ARE DIAGRAMMATICAL AND DO NOT NECESSARILY SHOW ALL FITTINGS NECESSARY TO FIT TO THE BUILDING CONDITIONS. THE LOCATIONS OF OUTLETS, APPARATUS AND APPLIANCE SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR PROPER LOCATION IN ORDER TO MAKE THEM FIT WITH THE ARCHITECTURAL DETAILS AND INSTRUCTIONS FROM THE ENGINEER'S REPRESENTATIVE AT THE SITE.
- UPON COMPLETION OF IT CABLING WORKS, THE FOLLOWING TESTS SHALL BE PERFORMED BY THE CONTRACTOR INCLUSIVE OF THE INSTALLATION TO BE REPORTED IN DETAILS AND IN FORMS APPROVED BY THE OWNERS REPRESENTATIVE:
A. SIGNAL ATTENUATION TEST
B. CONTINUITY TEST
C. NEAR-END CROSSTALK TEST
D. IMPEDANCE TEST
E. RESISTANCE TEST
F. WIRE MAP TEST

ABBREVIATIONS

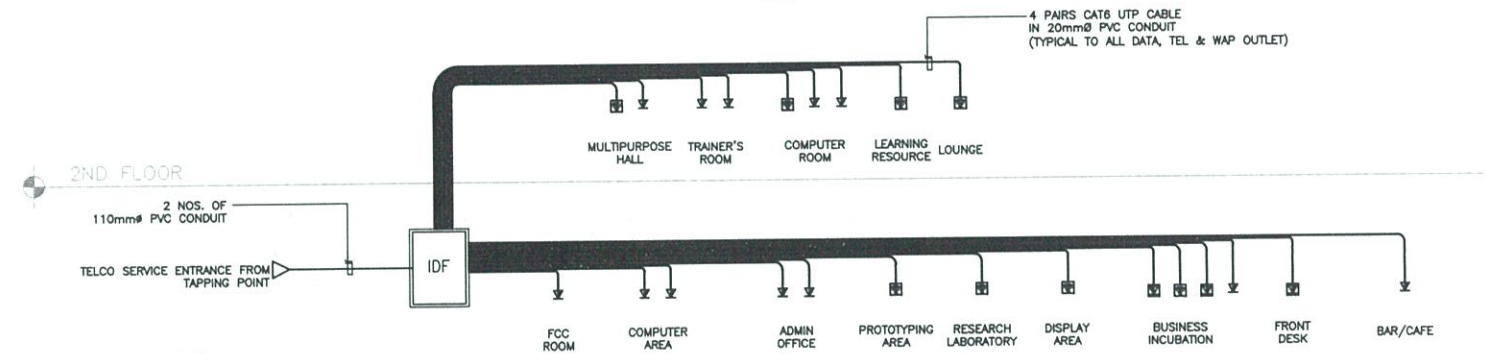
ACP	ACCESS CONTROL PANEL
ACS	ACCESS CONTROL SYSTEM
BGM	BACKGROUND MUSIC
C	CONDUIT
CAT	CATEGORY
CDP	COMMUNICATION DISTRIBUTION PANEL
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
DC	DOOR CONTACT
DOL	DIRECT ON LINE
EMT	ELECTROMETALLIC TUBING
ELV	EXTRA LOW VOLTAGE
EVAC	EMERGENCY VOICE ALARM COMMUNICATION
FA	FIRE ALARM
FR	FIRE RATED
NVR	NETWORK VIDEO RECORDER
PVC	POLYVINYL CHLORIDE
PATB	PUBLIC ADDRESS TERMINAL BOARD
TEL	TELEPHONE
TTC	TELEPHONE TERMINAL CABINET
THHN	THERMOPLASTIC HEAT RESISTANT (90°C) WITH NYLON JACKET
FCC	FIRE COMMAND CENTER
FACP	FIRE ALARM CONTROL PANEL
FATB	FIRE ALARM TERMINAL BOARD
FDAS	FIRE ALARM AND DETECTION SYSTEM
IDF	INTERMEDIATE DISTRIBUTION FRAME
IMC	INTERMEDIATE METALLIC CONDUIT
NAP	NETWORK ACCESS POINT
ODF	OPTICAL DISTRIBUTION FRAME
PA	PUBLIC ADDRESS
RD	RISER DOWN
RU	RISER UP
RSC	RIGID STEEL CONDUIT
SMS	SECURITY MANAGEMENT SYSTEM
TX	TRANSFORMER
THW	THERMOPLASTIC HEAT AND MOISTURE RESISTANT
TYP	TYPICAL
UPS	UNINTERRUPTIBLE POWER SUPPLY
WP	WEATHER PROOF
FDB	FIBER DISTRIBUTION BOARD

AUXILIARY SYSTEMS LEGEND AND SYMBOL

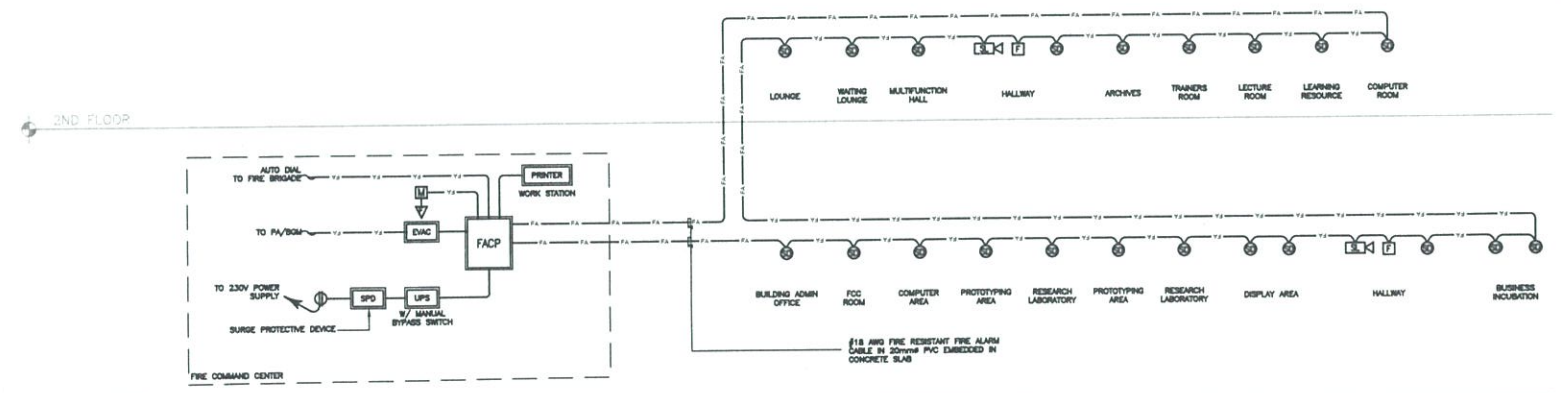
SYMBOLS	DESCRIPTION
	DOME-TYPE, IP-BASED CCTV CAMERA
	IP BASED CAMERA, FIXED TYPE, WEATHER PROOF
	VOICE/DATA OUTLET
	FLOOR MOUNTED VOICE/DATA OUTLET
	INPUT MODULE
	GROUND BAR
	SMOKE DETECTOR
	HEAT DETECTOR
	STROBE LIGHT WITH SOUNDER
	MANUAL PULL STATION
	FIREMAN'S TELEPHONE JACK
	HORN TYPE SPEAKER
	CEILING-MOUNTED SPEAKER
	INTERCOM UNIT
	FIRE ALARM CONTROL PANEL
	RISER UP/DOWN
	PA MICROPHONE



CCTV SINGLE LINE DIAGRAM
SCALE: NTS



VOICE/DATA SINGLE LINE DIAGRAM
SCALE: NTS



FDAS SINGLE LINE DIAGRAM
SCALE: NTS



LOCATION MAP
SCALE: NTS



VICINITY MAP
SCALE: NTS

FOR APPROVAL PLANS OF
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AUTHORITY

PROJECT TITLE:
PROPOSED TESDA SFIST
INNOVATION CENTER

ELECTRICAL ENGINEER:

ENGR. JOHN ADRIAN C. SANTOS
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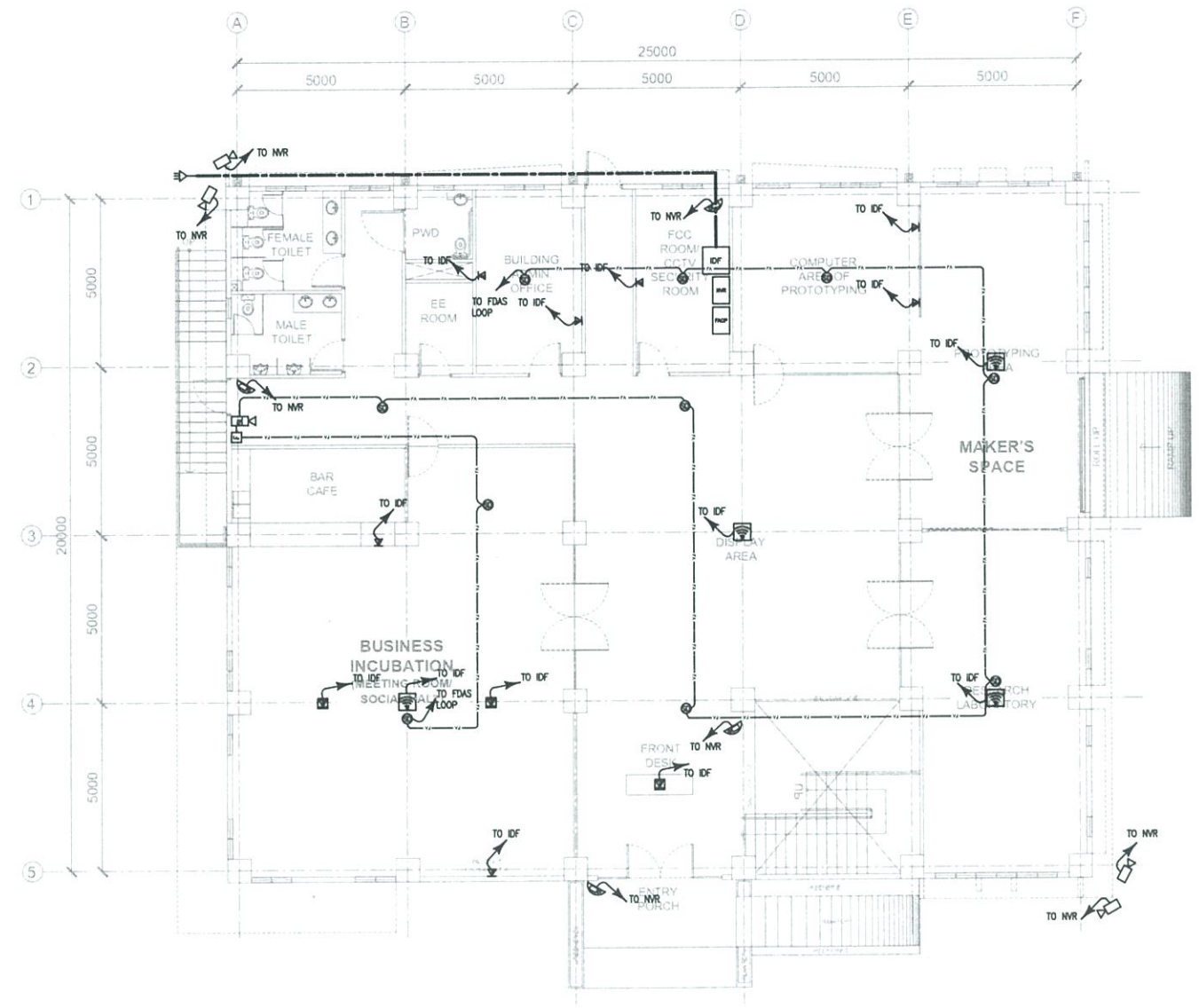
PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

SHEET CONTENTS:
GENERAL NOTES
ABBREVIATION
LOCATION & VICINITY MAP
CCTV SINGLE LINE DIAGRAM
VOICE/DATA SINGLE LINE DIAGRAM

SHEET NO.
EC-0

LEGENDS AND SYMBOLS	
	SMOKE DETECTOR
	MANUAL PULL STATION
	STROBE LIGHT
	FIREMAN'S TELEPHONE JACK
	INPUT MODULE
	OUTPUT MODULE
	CEILING MOUNTED SPEAKER
	PA MICROPHONE
	RISER UP/DOWN
	FIXED TYPE, IP-BASED CCTV CAMERA
	DOME TYPE, IP-BASED CCTV CAMERA
	WALL MOUNTED, VOICE/DATA OUTLET
	FLOOR MOUNTED, VOICE/DATA OUTLET
	WIRELESS ACCESS POINT




TESDA INNOVATION CENTER - SFIST
GROUND FLOOR AUXILIARY LAYOUT

SCALE: 1: 200 mm

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TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY


MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road 15/EX, Taguig City

PROJECT TITLE:

PROPOSED TESDA SFIST
INNOVATION CENTER


LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
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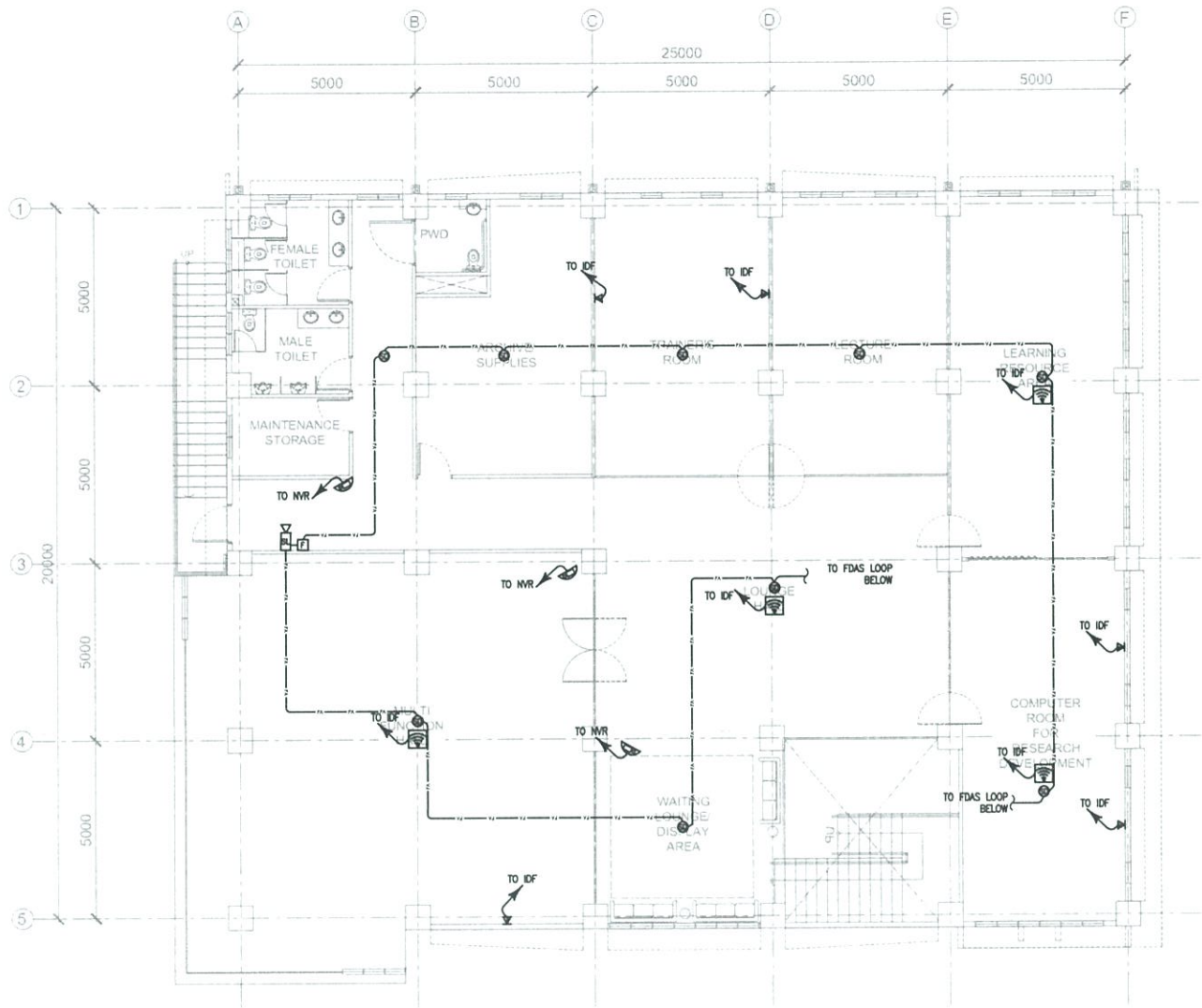
SHEET CONTENTS:

GROUND FLOOR AUXILIARY LAYOUT

SHEET NO.


EC-1

LEGENDS AND SYMBOLS	
	SMOKE DETECTOR
	MANUAL PULL STATION
	STROBE LIGHT
	FIREMAN'S TELEPHONE JACK
	INPUT MODULE
	OUTPUT MODULE
	CEILING MOUNTED SPEAKER
	PA MICROPHONE
	RISER UP/DOWN
	FIXED TYPE, IP-BASED CCTV CAMERA
	DOMED TYPE, IP-BASED CCTV CAMERA
	WALL MOUNTED, VOICE/DATA OUTLET
	FLOOR MOUNTED, VOICE/DATA OUTLET
	WIRELESS ACCESS POINT



TESDA INNOVATION CENTER - ASSAT
SECOND FLOOR AUXILIARY LAYOUT
 SCALE: 1: 200 mm

FOR APPROVAL PLANS OF
 REGIONAL TVET INNOVATION
 CENTERS (RTICs) 2023




PROJECT OWNER:
 TECHNICAL EDUCATION
 AND
 SKILLS DEVELOPMENT
 AUTHORITY


PROJECT TITLE:
 PROPOSED TESDA SFIST
 INNOVATION CENTER

PROJECT OWNER ADDRESS: TESDA COMPLEX, East Service Road 5/EX, Taguig City


LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
 SAN FRANCISCO, MALIBU, ALABAY CITY



ELECTRICAL ENGINEER:
 ENGR. JOHN ADRIAN C. SANTOS
 PMU-SIPTVETS
 ENGINEERING SECTION



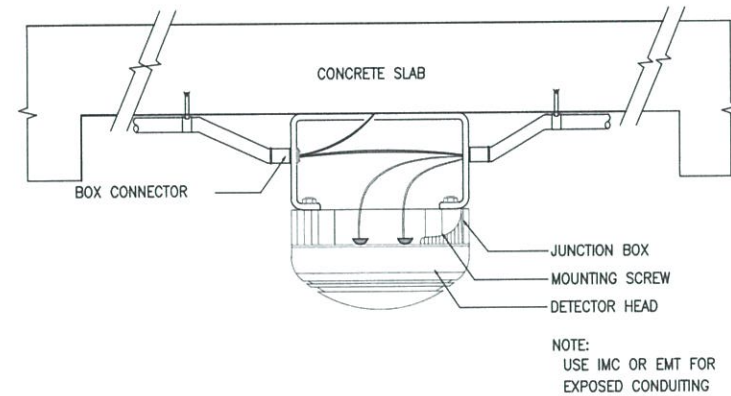
PROJECT MANAGER:
 DIR. ENRICO C. BANARIO
 PMU-SIPTVETS



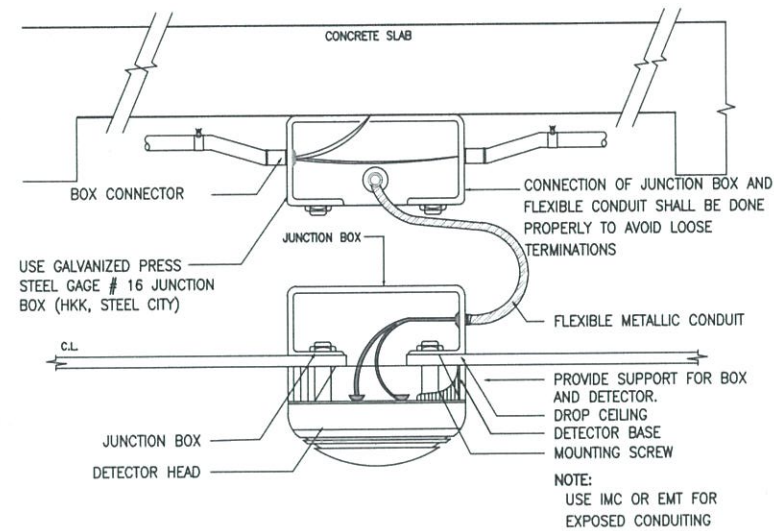
PROJECT DIRECTOR:
 SEC. SUHARTO T. MANGUDADATU, Ph.D.
 PMU-SIPTVETS

SHEET CONTENTS:
 SECOND FLOOR AUXILIARY LAYOUT

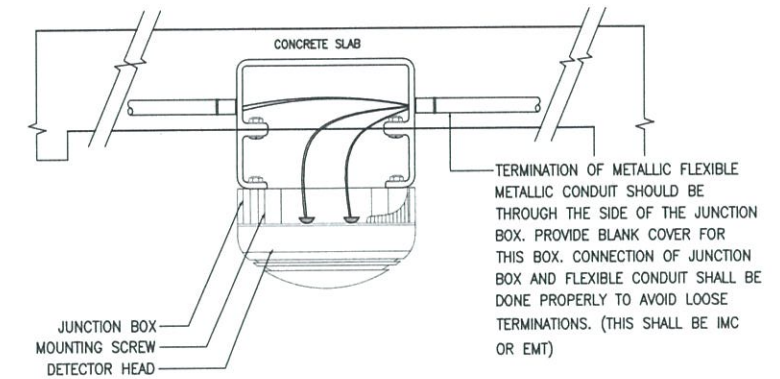
SHEET NO.
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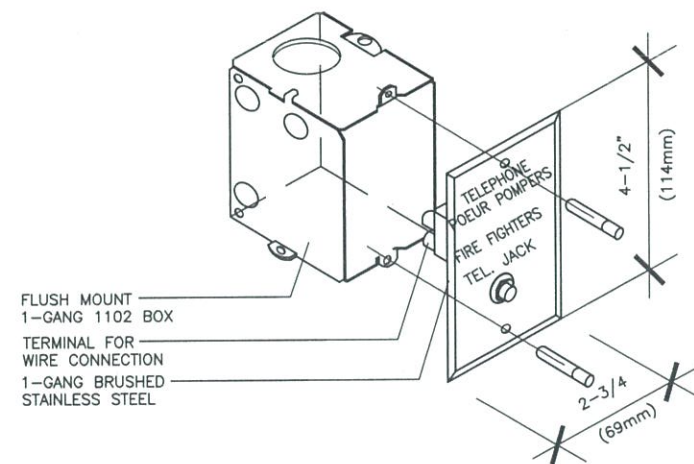
SMOKE DETECTOR MOUNTING DETAIL ON CONCRETE WITH EXPOSED CONDUITS
SCALE: _____ NTS



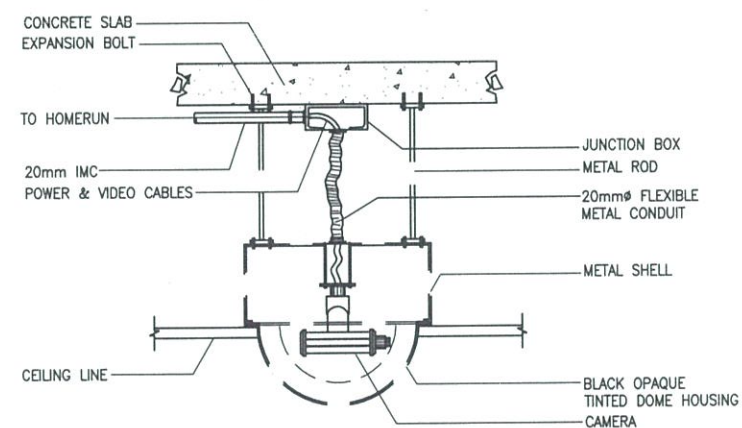
SMOKE DETECTOR MOUNTING DETAIL ON DROP CEILING WITH EXPOSED CONDUITS
SCALE: _____ NTS



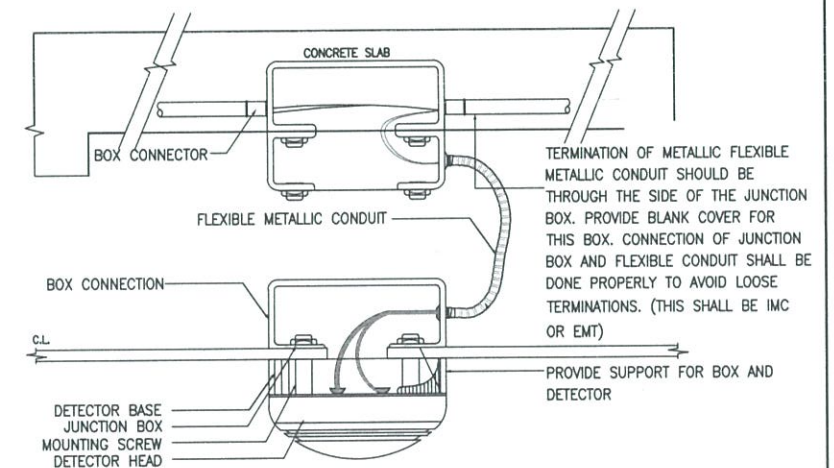
SMOKE DETECTOR MOUNTING DETAIL ON CONCRETE WITH EMBEDDED CONDUITS
SCALE: _____ NTS



FIREMAN'S TELEPHONE JACK MOUNTING DETAIL
SCALE: _____ NTS




TYPICAL CAMERA MOUNTING DETAIL
SCALE: _____ NTS




SMOKE DETECTOR MOUNTING DETAIL ON DROP CEILING WITH EMBEDDED CONDUITS
SCALE: _____ NTS


FOR APPROVAL PLANS OF
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CENTERS (RTICs) 2023


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LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY,
SAN FRANCISCO, MALUPOT, ALBAY CITY

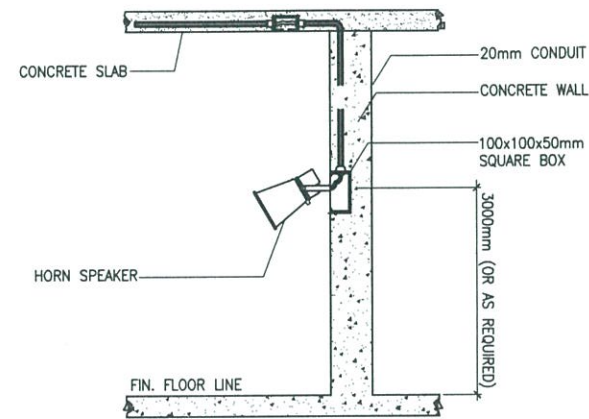
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ENGR. JOHN KORIAN C. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

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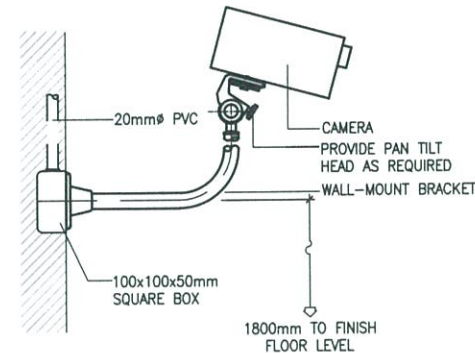
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PMU-SIPTVETS

SHEET CONTENTS:
MISCELLANEOUS DETAILS

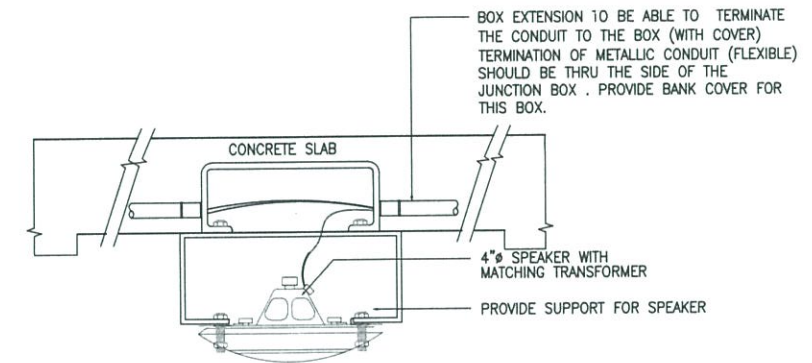
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EC-3



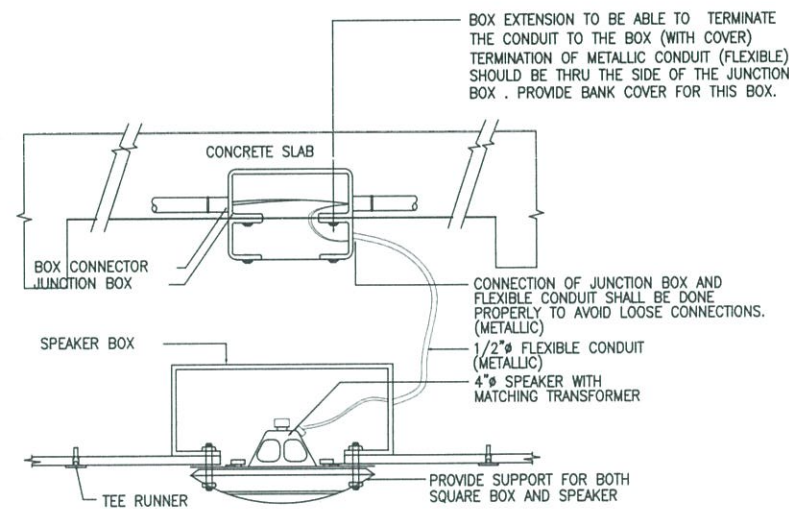
WALL MOUNTED HORN SPEAKER
MOUNTING DETAIL
SCALE: _____ NTS



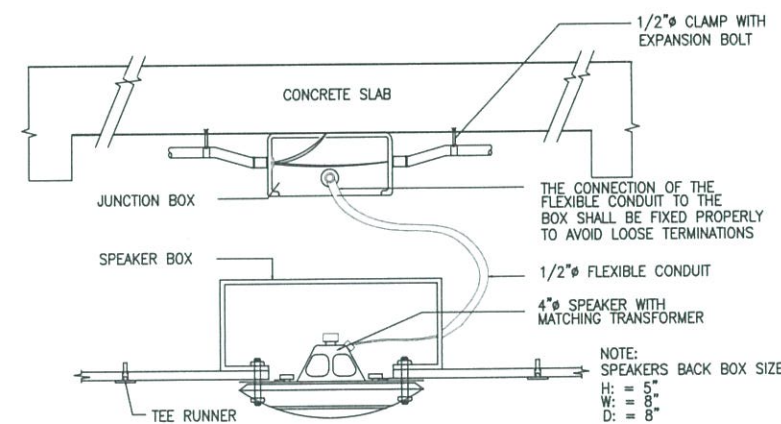
WALL MOUNTED CCTV MOUNTING DETAIL
SCALE: _____ NTS



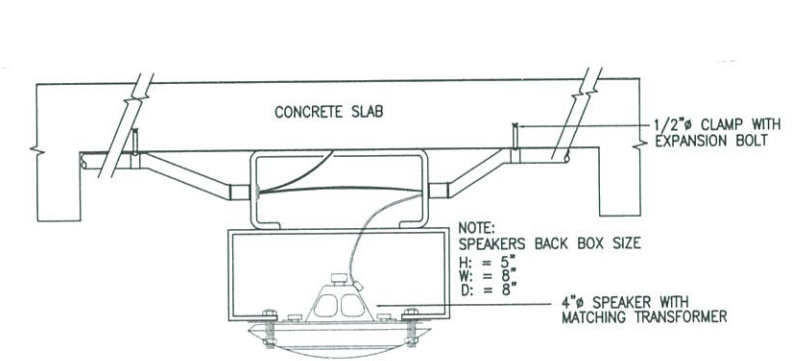
SPEAKER MOUNTING DETAIL ON
CONCRETE WITH EMBEDDED CONDUITS
SCALE: _____ NTS



SPEAKER MOUNTING DETAIL ON DROP
CEILING WITH EMBEDDED CONDUITS
SCALE: _____ NTS




SPEAKER MOUNTING DETAIL ON DROP
CEILING WITH EXPOSED CONDUITS
SCALE: _____ NTS





SPEAKER MOUNTING DETAIL ON
CONCRETE WITH EXPOSED CONDUITS
SCALE: _____ NTS


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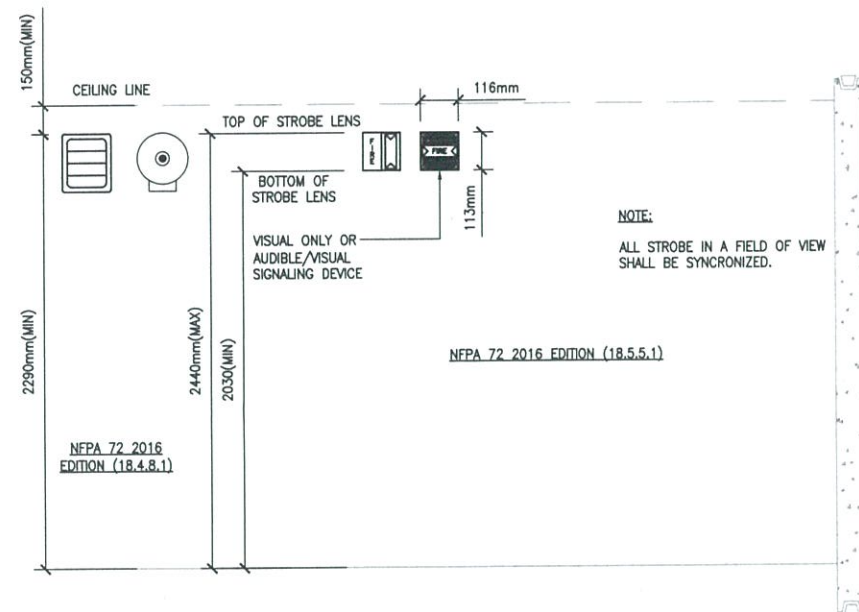
PROJECT MANAGER:

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

SHEET CONTENTS:
MISCELLANEOUS DETAILS

SHEET NO.

EC-4



NFPA 72 2016 EDITION (18.4): AUDIBLE CHARACTERISTICS

NFPA 72 2016 EDITION (18.4.8): LOCATION OF AUDIBLE NOTIFICATION APPLIANCES FOR BUILDING OR STRUCTURES.

NFPA 72 2016 EDITION (18.4.8.1): IF CEILING HEIGHTS ALLOW, AND UNLESS OTHERWISE PERMITTED BY 18.4.8.2 THROUGH 18.4.8.5, WALL-MOUNTED APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 2290mm(90in.) AND BELOW THE FINISHED CEILING AT DISTANCES OF NOT LESS THAN 150mm(6in.)

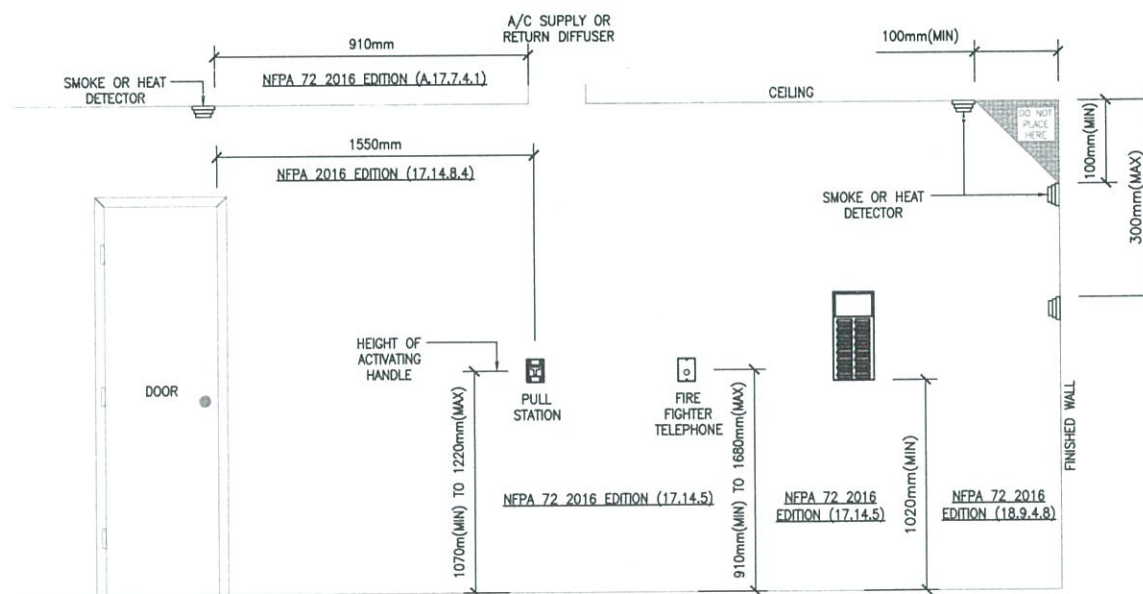
NFPA 72 2016 EDITION (18.4.8.3): IF COMBINATION AUDIBLE/VISIBLE APPLIANCES ARE INSTALLED, THE LOCATION OF THE APPLIANCE SHALL BE DETERMINED BY THE REQUIREMENTS OF 18.5.5

NFPA 72 2016 EDITION (18.5): VISIBLE CHARACTERISTICS PUBLIC MODE.

NFPA 72 2016 EDITION (18.5.5): APPLIANCES LOCATION.

NFPA 72 2016 EDITION (18.5.5.1): WALL MOUNTED APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 2030mm (80in) AND NOT GREATER THAN 2440mm (96in.) ABOVE THE FINISHED FLOOR OR AT THE MOUNTING HEIGHT SPECIFIED USING THE PERFORMANCE BASED ALTERNATIVE. AT NFPA 2016 EDITION (A7.5.4.5).

NFPA 72 2016 EDITION (18.5.5.5.5): VISIBLE NOTIFICATION APPLIANCES SHALL BE LOCATED NOT MORE THAN 4570mm(15ft.) FROM THE END OF THE CORRIDOR WITH A SEPARATION NOT GREATER THAN 30500mm(100ft) BETWEEN APPLIANCES.



NFPA 72 2016 EDITION 17.6.3.1.3.1 HEAT - UNLESS OTHERWISE MODIFIED BY 17.6.3.2.2 OR 17.6.3.3.2 OR 17.6.3.7 SPOT-TYPE HEAT-SENSING FIRE DETECTORS SHALL BE LOCATED ON THE CEILING NOT LESS THAN 100mm (4in) FROM THE SIDEWALL OR ON THE SIDEWALLS BETWEEN 100mm AND 300mm (4in. AND 12 in.) FROM THE CEILING.

NFPA 72 2016 EDITION (A.17.7.4.1): DETECTORS SHOULD NOT BE LOCATED IN A DIRECT AIRFLOW OR CLOSER THAN 910mm(36in.) FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING. SUPPLY OR RETURN SOURCES LARGER THAN THOSE COMMONLY FOUND IN RESIDENTIAL AND SMALL COMMERCIAL ESTABLISHMENT CAN BE REQUIRE GREATER CLEARANCE TO SMOKE DETECTORS.

NFPA 72 2016 EDITION (17.14.8.4): MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 1.5m (5ft.) OF EACH EXIT DOORWAY ON EACH FLOOR.

NFPA 72 2016 EDITION (17.14.5): THE OPERABLE PART OF A MANUALLY ACTIVATED ALARM INITIATING DEVICE SHALL BE NOT LESS THAN 42in. (1070mm) AND NOT MORE THAN 48in. (1220mm) FROM THE FINISHED FLOOR.

NFPA 72 2016 EDITION (17.7.3.2.1): SPOT-TYPE SMOKE DETECTORS SHALL BE LOCATED ON THE CEILING OR, IF ON A SIDEWALL, BETWEEN THE CEILING AND 12in. (300mm) DOWN FROM THE CEILING TO THE TOP OF DETECTOR.


NFPA 72 2016 EDITION (24.8.17): WALL MOUNTED TELEPHONE APPLIANCES OR RELATED JACKS SHALL BE NOT LESS THAN 910mm(36in.) AND NOT MORE THAN 1680mm(66in.) ABOVE FLOOR LEVEL WITH CLEAR ACCESS TO THE APPLIANCE THAT IS AT LEAST 760mm(30in.) WIDE.

NFPA 72 2016 EDITION (18.9.4.8*): ALL CHARACTERS AND GRAPHICAL VISIBLE NOTIFICATION APPLIANCES SHALL BE A MINIMUM OF 1020mm(40in.) ABOVE THE GROUND OR FINISHED FLOOR.


NFPA 72 2016 EDITION (18.11): STANDARD EMERGENCY SERVICE INTERFACE, WHERE REQUIRED BY THE ENFORCING AUTHORITY; GOVERNING LAWS, CODES, OR STANDARDS; OR OTHER PARTS OF THIS CODE, ANNUNCIATORS, INFORMATION DISPLAY SYSTEMS, AND CONTROL FOR PORTIONS OF A SYSTEM PROVIDED FOR USE BY EMERGENCY SERVICE PERSONNEL SHALL BE DESIGNED, ARRANGED, AND LOCATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ORGANIZATIONS INTENDED TO USE THE EQUIPMENT.

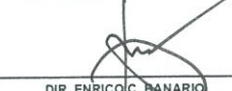
FIRE ALARM SYSTEM DEVICE MOUNTING HEIGHTS AND LIMITATIONS
SCALE: NTS

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:
 TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY

PROJECT TITLE:
PROPOSED TESDA SFIST
INNOVATION CENTER

ELECTRICAL ENGINEER:

ENGR. JOHN ADRIAN C. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDATU, Ph.D.
PMU-SIPTVETS

SHEET CONTENTS:
FIRE ALARM SYSTEM DEVICE
MOUNTING HEIGHTS AND
LIMITATIONS

SHEET NO.

EC-5

GENERAL PLUMBING NOTES:

1. GENERAL NOTES ARE APPLICABLE TO ALL PLUMBING WORKING DRAWINGS
2. THE WORK SHALL BE EXECUTED IN STRICT CONFORMITY WITH BASE BUILDING SPECIFICATION AND WITH THE LATEST EDITION OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND COVERING CODE OR ORDINANCE THE MORE STRINGENT STANDARD SHALL APPLY.
3. ALL PLUMBING WORK SHALL BE COORDINATED WITH ALL OTHER TRADES BEFORE PROCEEDING WITH INSTALLATION.
4. NO CHARGES ARE TO BE MADE IN PLUMBING LAYOUT WITHOUT WRITTEN PERMISSION BY THE ENGINEER OR RECORDS/MASTER PLUMBER.
5. NO PIPING SHALL RUN EXPOSED IN SALES OR FINISHED AREA.
6. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR PAYING RELATED FEES.
7. ROUGH-IN DIMENSIONS OF TOILET FIXTURES MUST BE COORDINATED WITH GENERAL CONTRACTOR AND FIELD SUPERVISOR.
8. INSTALL GATE VALVES/ BALL VALVES ON ALL BRANCH SUPPLY LINES.
9. PROVIDE ACCESS PANELS ON ALL INACCESSIBLE VALVES AND CLEANOUTS. ACCESS PANELS SHALL BE PROVIDED BY GENERAL CONTRACTOR. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR LOCATION.
10. ALL WORK SHALL BE PROPERLY TESTED, BALANCED AND CLEANED. PROVIDE ONE YEAR WARRANTY FROM DATE OF FINAL INSPECTION ON ALL PARTS AND LABOR.
11. ALL FIXTURES TO BE SUPPLIED & INSTALLED BY PLUMBING CONTRACTOR.
12. GENERAL CONTRACTOR SHALL COORDINATE WATER METER LOCATION AND INSTALLATION WITH LOCAL AUTHORITIES AND CIVIL DRAWINGS.
13. TRAP SEAL PRIMERS ARE TO BE PROVIDED AT NO ADDITIONAL COST TO OWNER/ CLIENT , IF REQUIRED BY LOCAL BUILDING CODE OFFICIALS.
14. ALL VENT PIPE SHALL BE EXHAUST OVER THE CEILING OF ROOF OVERHANG. NO VENT SHALL EXTENDED THRU ROOF.
15. APPLY A BEAD OF SEALANT AROUND ALL FIXTURES WHERE THEY MEET FLOORS, WALLS, ETC. PROVIDE PIPE SLEEVES AT ANY WALL/ FLOOR PENETRATION.
16. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND REPRESENT ONLY THE GENERAL AND APPROXIMATE LOCATIONS OF FIXTURES, PIPING, ETC. REFER TO THE ARCHITECTURAL PLANS AND ACTUAL CONDITIONS FOR LOCATING FIXTURES, ETC.
17. THAT ALL WATER SUPPLIES TO FIXTURES ARE ANCHORED TO PREVENT ANY LATERAL MOVEMENT.
18. SUPPORT ALL PIPING EQUIPMENT , ETC. AS PER CODE REQUIREMENTS.
19. REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS OF PLUMBING.
20. FURNISH AS REQUIRED FOR ALL FIXTURES, INCLUDING ONES FURNISHED BY OTHERS, P-TRAPS, ANGLE STOPS, RISERS, ESCUTCHEONS, ETC.
21. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE PRIOR TO BIDDING IN ORDER TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING RIGHT OR LEFT HAND OR FIXTURES.
23. ALL PENETRATIONS OF CONCRETE FOUNDATIONS & FOOTINGS SHALL BE MINIMUM OF 50MM DIAMETER.
24. ALL SANITARY SEWER PIPING UNDER CONCRETE SLAB SHALL BE MINIMUM OF 50MM DIAMETER.
25. REFER TO ARCHITECTURAL SPECIFICATIONS FOR SOIL COMPACTING, CONCRETE AND ASPHALT REPAIR.
26. SUBMIT SHOP DRAWINGS ON ALL PLUMBING FIXTURES. SEE ARCHITECTURAL FOR QUANTITY.
27. USE POLYPROPYLENE FOR ALL WATER SUPPLY LINES.
28. USE, POLYVINYL CHLORIDE (PVC) SERIES 1000 FOR ALL DRAINAGE LINE, OBSERVE SLOPE OF 1% FOR LONG RUNNING DRAINAGE LINE AND SLOPE OF 2% FOR SHORT RUN DRAINAGE LINE, VERIFY.

GENERAL PLUMBING NOTES:

1. ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE REQUIREMENTS OF THE PHILIPPINE PLUMBING CODE AND RULES AND REGULATIONS OF THE GOVERNMENT.
2. COORDINATE DRAWINGS WITH OTHER RELATED DRAWINGS AND SPECIFICATIONS.
3. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN
4. PIPES SHALL BE INSTALLED AS INDICATED, ANY RELOCATION REQUIRED FOR PROPER EXECUTION OF OTHER TRADES SHALL BE PIPE STRUCTURE.
5. ALL HORIZONTAL BRANCHES SHALL MAINTAIN 1% AS MINIMUM UNLESS NOTED OTHERWISE.
6. ALL FIXTURES SHALL VENTED, UNLESS INDICATED.
7. ALL INDIVIDUAL BRANCHES TO FIXTURES OR GROUP OF FIXTURES OR EQUIPMENT SHALL BE PROVIDED WITH AIR CHAMBER.

MATERIAL SPECIFICATIONS:

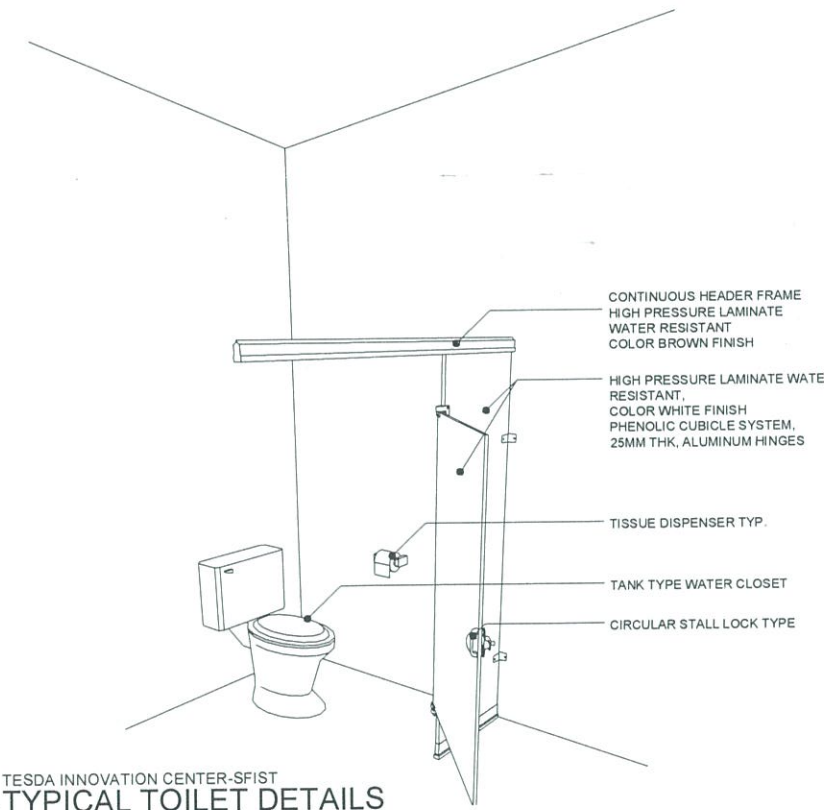
COLD WATER LINE (INTERIOR) - SHALL BE POLYPROPYLENE RANDOM (TYPE 3), HIGH RESISTANCE TO PRESSURE AND TEMPERATURE, CONFORMING TO EN ISO 15874, SIMILAR TO GEORGE FISCHER PP-R PIPE, UNITEC PP-R PIPE OR APPROVED EQUAL.

COLD WATER LINE (EXPOSED) - SHALL BE GALVANIZED STEEL PIPE, SCHEDULE 40, CONFORMING TO ASTM A 53 A 120. SIMILAR TO APO PIPE SCHEDULE 40 OR APPROVED EQUAL.

SOIL, WASTE AND VENT LINES- SHALL BE UNPLASTICIZED POLYVINYL CHLORIDE (UPVC) PIPE CONFIRMING TO ASTM D2729, SIMILAR TO NELTEX SERIES 100 UPVC PIPE OR APPROVED EQUAL.

DOWNSPOUTS- SHALL BE UNPLASTICIZED POLYVINYL, CHLORIDE (UPVC) PIPE CONFIRMING TO ASTM D2729. SIMILAR TO NELTEX/ EMERALD/ MOLDEX SERIES 100 UPVC PIPE OR APPROVED EQUAL.

DRAINAGE LINE- SHALL BE UNPLASTICIZED POLYVINYL CHLORIDE (UPVC) PIPE CONFIRMING TO ASTM D2729, SIMILAR TO NELTEX/EMERALD/ MOLDEX SERIES 1000 UPVC PIPE OR APPROVED EQUAL.



TESDA INNOVATION CENTER-SFIST
TYPICAL TOILET DETAILS
SCALE: 1:200mm

LEGEND		ABBREVIATION	
-----	SANITARY LINE	LAV	LAVATORY
-----	WATER LINE	KS	KITCHEN SINK
-----	DRAINAGE LINE	VAC	VENT ABOVE CEILING
-----	VENT PIPE	VP	VENT PIPE
-----	GATE VALVE	VTR/VTC	VENT THRU ROOF/VENT THRU CEILING
-----	CHECK VALVE	SS	SOIL STACK/ WASTE PIPE
-----	WATER METER	AAV	AIR ADMITTANCE VALVE
-----	FLOOR CLEANOUT	PVC	POLYVINYL CHLORIDE
-----	DIAMETER	CWL	COLD WATER LINE
-----		FD	FLOOR DRAIN
-----		SH	SHOWER HEAD
-----		DD	DECK DRAIN
-----		BD	BALCONY DRAIN
-----		mm	MILLIMETER

PLUMBING FIXTURES CONNECTION SIZE SCHEDULE						
LEGEND	SYMBOL	MIN. PIPE CONNECTION SIZE MM DIAMETER				REMARKS
		WASTE/ SOIL	VENT	STORM	COLD WATER	
WC	WATER CLOSET	100	50	-	20	TANK TYPE
LAV	LAVATORY	50	50	-	20	-
KS	KITCHEN SINK	50	50	-	20	-
SHO/ SD	SHOWER/ SHOWER DRAIN	50	50	-	20	-
FD	FLOOR DRAIN	50	50	-	-	WITH P-TRAP
HB	HOSE BIBB	-	-	-	20	-

SPECIFICATION		
ITEMS	MATERIAL	THICKNESS
WASTE/ SEWAGE LINE	POLYVINYL CHLORIDE (PVC)	SERIES 1000
VENT PIPES	POLYVINYL CHLORIDE (PVC)	SERIES 1000
STORM DRAINAGE LINE (DS)	POLYVINYL CHLORIDE (PVC)	SERIES 1000
RAINWATER COLLECTOR	POLYVINYL CHLORIDE (PVC)	SERIES 1000
WATERLINE (HOT/COLD)	PPR-C	PN 10

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

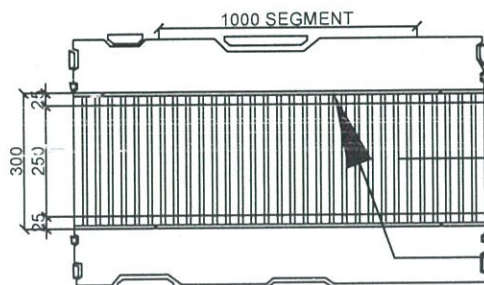
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		PROPOSED TESDA SFIST INNOVATION CENTER	AR. RUIEL A. MENDOZA HEAD, PMU-SIPTVETS ENGINEERING SECTION	ENGR. FRANCISCO B. NARAG ASSISTANT PROFESSOR IV TESDA ISAT	DIR. ENRICO C. BANARIO PMU-SIPTVETS	SEC. SUHARTO T. MANGUDADATU, Ph.D. PMU-SIPTVETS SECRETARY, TESDA		

PIPE SIZE (MM)	FLAT BAR		ROUND BAR (MM)
	LOWER (MM)	UPPER (MM)	
65	4.8 x 32	4.8 x 32	12.7
80	4.8 x 32	4.8 x 32	12.7
100	4.8 x 32	6.4 x 32	15.9
150	4.8 x 32	6.4 x 32	19
200	4.8 x 32	6.4 x 32	25.4

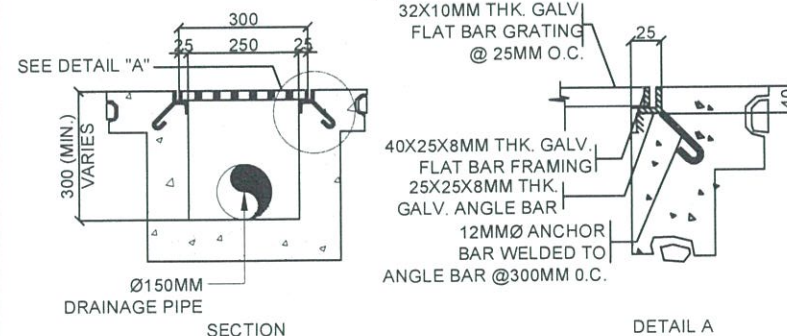
PIPE SIZE (MM)	ROD SIZE (MM)	SIZE OF STEEL FLAT BAR (MM)	PIPE SIZE (MM)	ROD SIZE (MM)	SIZE OF STEEL FLAT BAR (MM)
15	10	3.2x25	65	12	5x32
20	10	3.2x25	80	12	5x32
25	10	3.2x25	100	16	5x32
32	10	3.2x25	125	16	5x32
40	10	3.2x25	150	20	5x40
50	10	3.2x25	200	22	5x50

TESDA INNOVATION CENTER-SFIST
DETAIL OF HANGERS

SCALE: 1:20mm



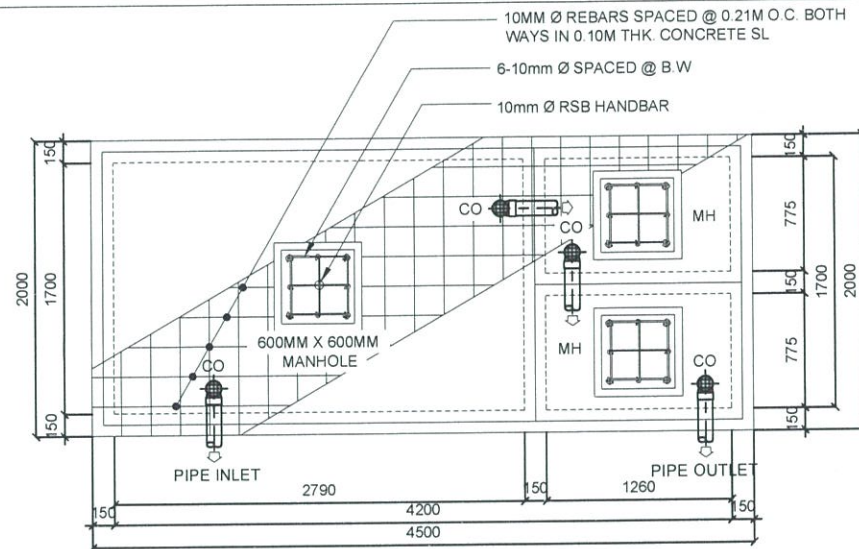
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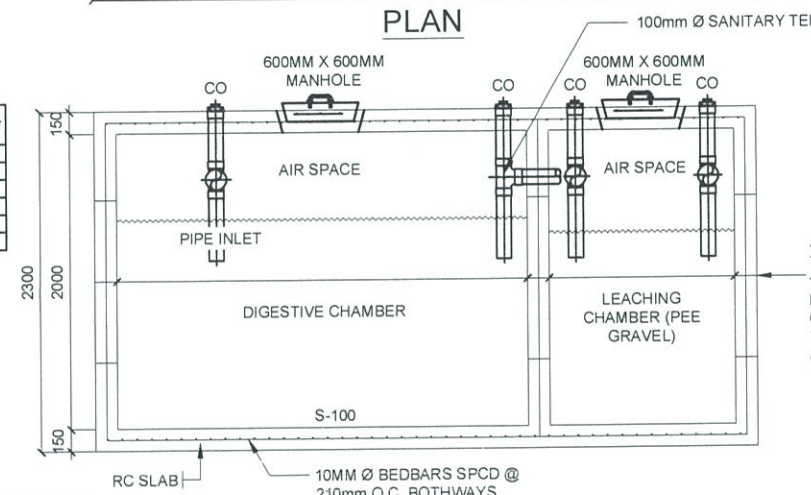
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TESDA INNOVATION CENTER-SFIST
CANAL DETAIL

SCALE: 1:20mm



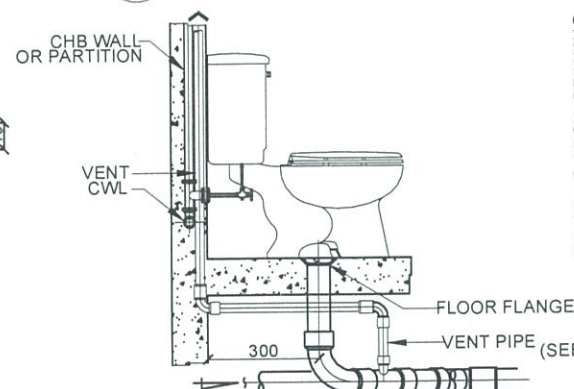
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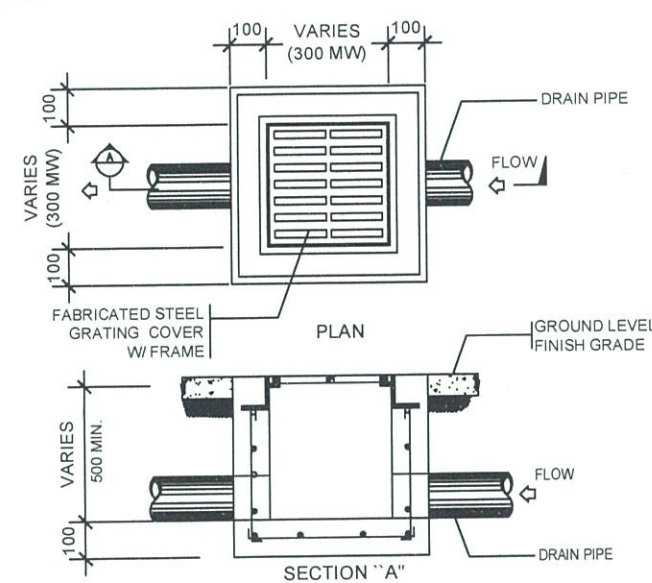
TESDA INNOVATION CENTER-SFIST
SEPTIC TANK DETAILS

SCALE: 1:60mm



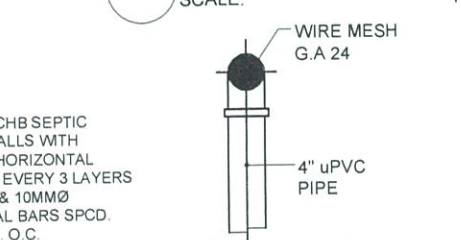
TESDA INNOVATION CENTER-SFIST
CONNECTION DETAIL OF FIXTURES

SCALE: 1:20mm



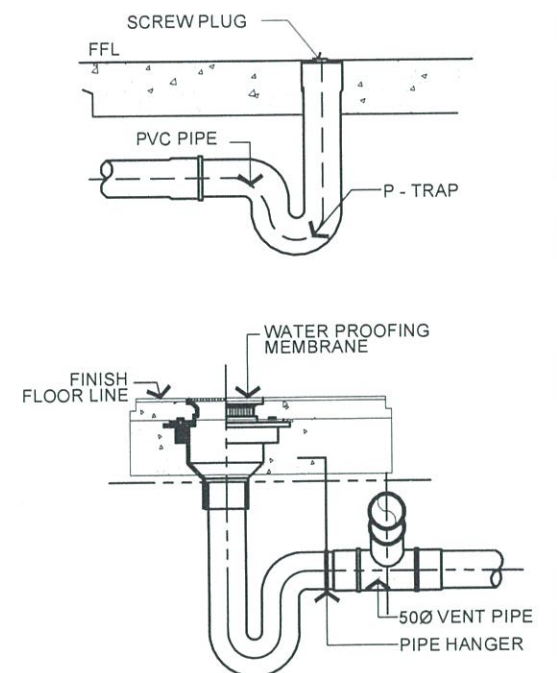
TESDA INNOVATION CENTER-SFIST
CATCH BASIN DETAILS

SCALE: 1:30mm



TESDA INNOVATION CENTER-SFIST
VENT THRU ROOF DETAIL

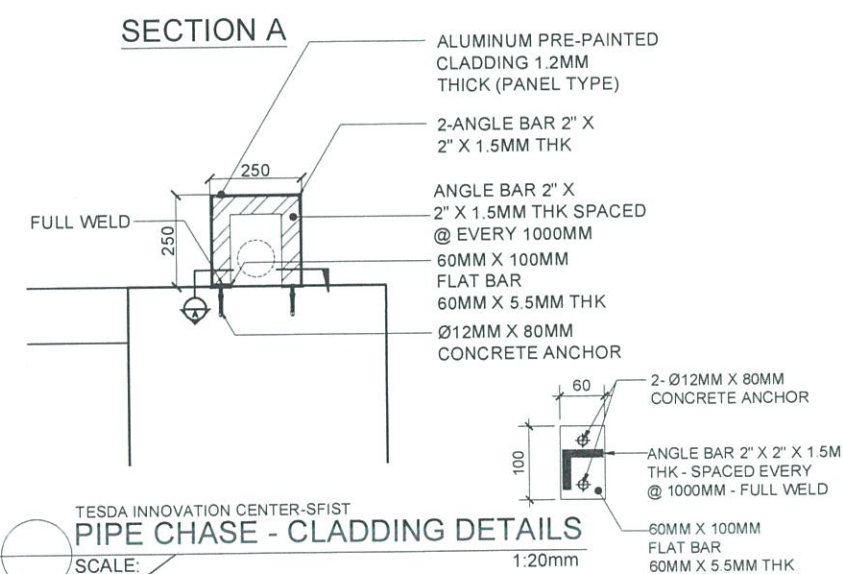
SCALE: 1:30mm



TESDA INNOVATION CENTER-SFIST
DETAIL OF CLEAN OUT AND DRAIN

SCALE: 1:30mm

SECTION A



TESDA INNOVATION CENTER-SFIST
PIPE CHASE - CLADDING DETAILS

SCALE: 1:20mm

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:
**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**

PROJECT TITLE:
**PROPOSED TESDA SFIST
INNOVATION CENTER**

PREPARED & CADD BY:
**AR/RUMEL A. MENDOZA
HEAD, PMU-SIPTVETS
ENGINEERING SECTION**

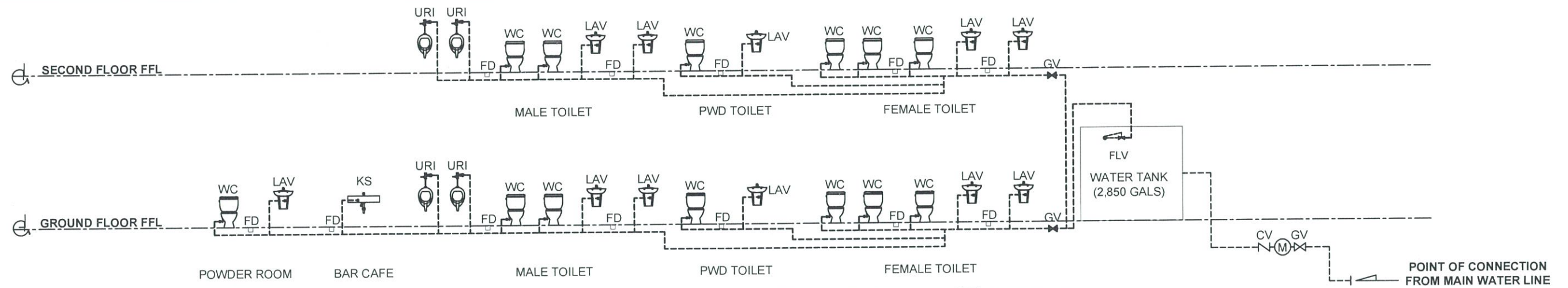
MASTER PLUMBER:
**ENGR. FRANCISCO B. NARAG
ASSISTANT PROFESSOR IV
TESDA ISAT**

PROJECT MANAGER:
**DIR. ENRICO C. BANARIO
PMU-SIPTVETS**

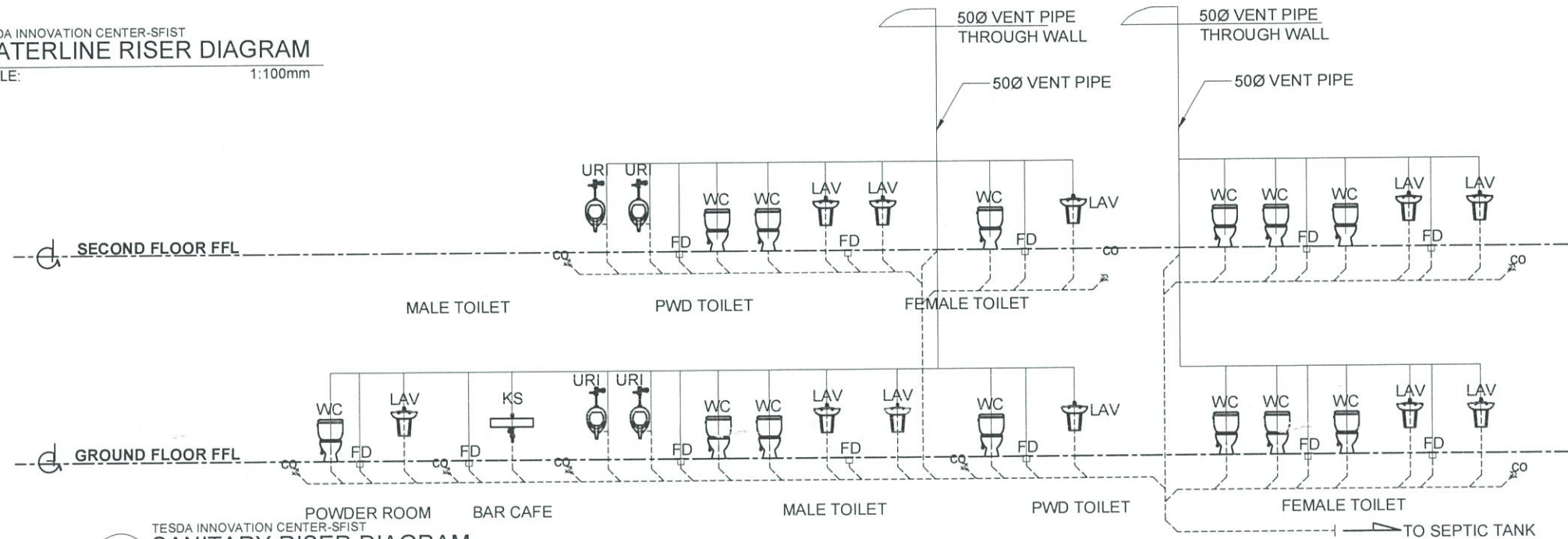
PROJECT DIRECTOR:
**SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA**

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AS SHOWN

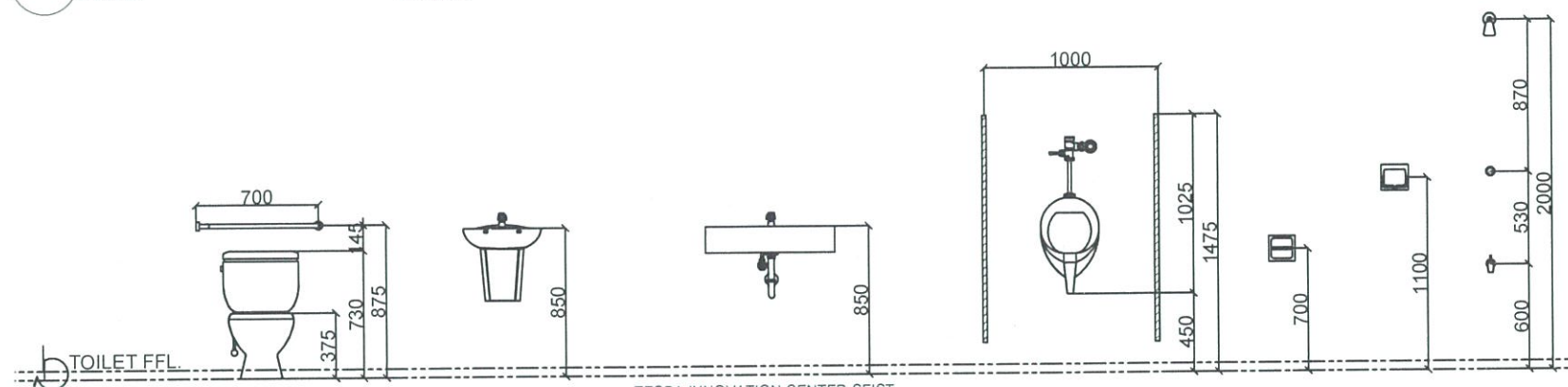
SHEET NO.
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TESDA INNOVATION CENTER-SFIST
WATERLINE RISER DIAGRAM
 SCALE: 1:100mm




TESDA INNOVATION CENTER-SFIST
SANITARY RISER DIAGRAM
 SCALE: 1:100mm



TESDA INNOVATION CENTER-SFIST
PLUMBING FIXTURES HEIGHT
 SCALE: 1:40mm

**FOR APPROVAL PLANS OF
 REGIONAL TVET INNOVATION
 CENTERS (RTICs) 2023**

PROJECT OWNER

**TECHNICAL EDUCATION
 AND
 SKILLS DEVELOPMENT
 AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road, Bldg. 515, Taguig City


PROJECT TITLE
**PROPOSED TESDA SFIST
 INNOVATION CENTER**
LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
 SAN FRANCISCO, MALIBUPT, ALBAY CITY


PREPARED & CADD BY

AR RUMEL A. MENDOZA
 HEAD, PMU-SIPTVETS
 ENGINEERING SECTION

MASTER PLUMBER

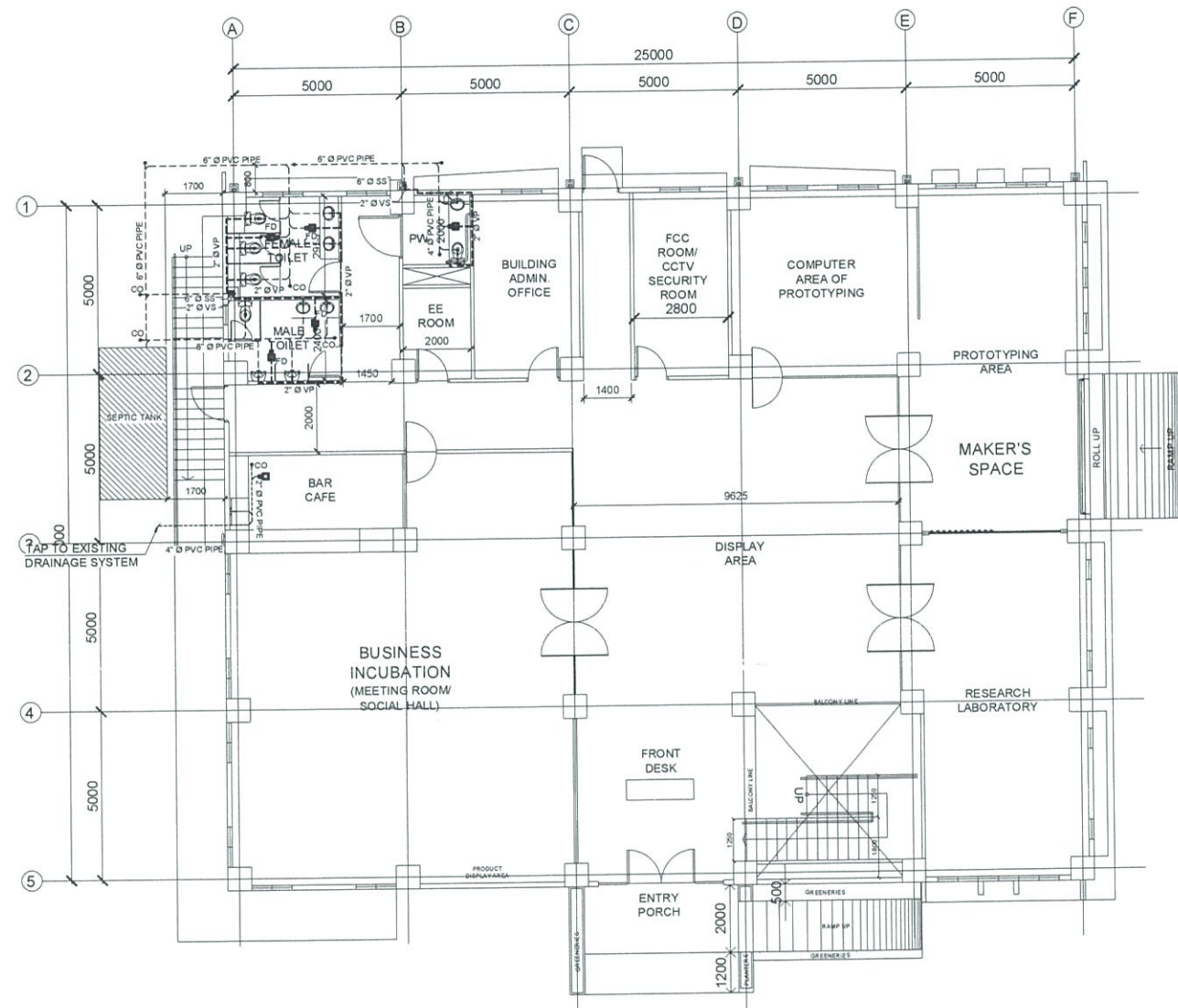
ENGR. FRANCISCO B. NARAG
 ASSISTANT PROFESSOR IV
 TESDA ISAT

PROJECT MANAGER

DIR. ENRICO C. BANARIO
 PMU-SIPTVETS

PROJECT DIRECTOR

SEC. SUHARTO T. MANGUDADATU, Ph.D.
 PMU-SIPTVETS
 SECRETARY, TESDA


SHEET CONTENTS
 AS SHOWN

SHEET NO
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P
 TESDA INNOVATION CENTER-SFIST
GROUND FLOOR SANITARY LAYOUT
 SCALE 1:200MTS

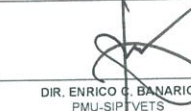
**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**


PROJECT OWNER
 **TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE
**PROPOSED TESDA SFIST
INNOVATION CENTER**
LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
SAN FRANCISCO, MALABON CITY

PREPARED & CADD BY

AR/RUMEL A. MENDOZA
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ENGINEERING SECTION

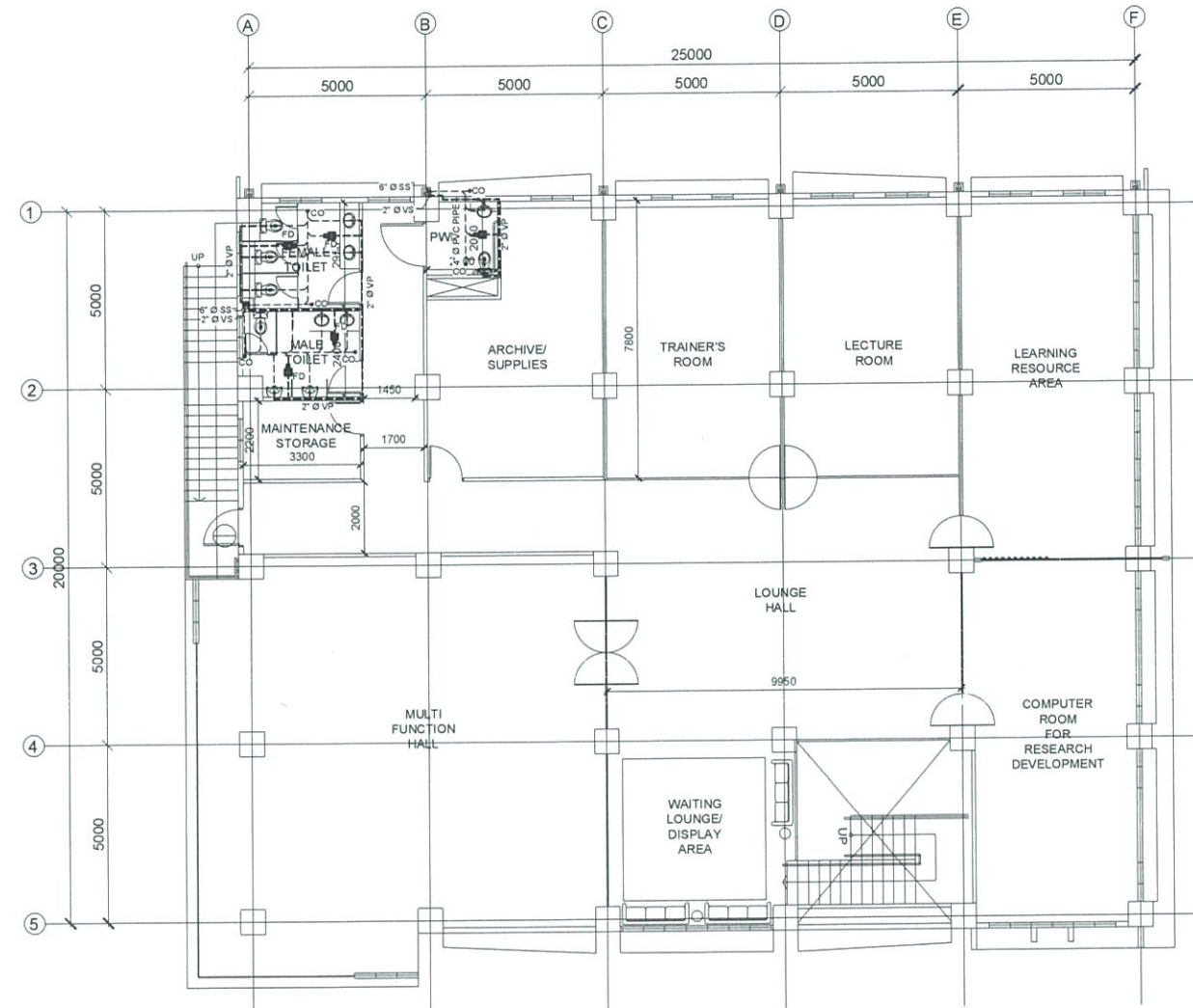
MASTER PLUMBER

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DIR. ENRICO G. BANARIO
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PROJECT DIRECTOR

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PMU-SIPTVETS
SECRETARY, TESDA






SHEET CONTENTS
 AS SHOWN

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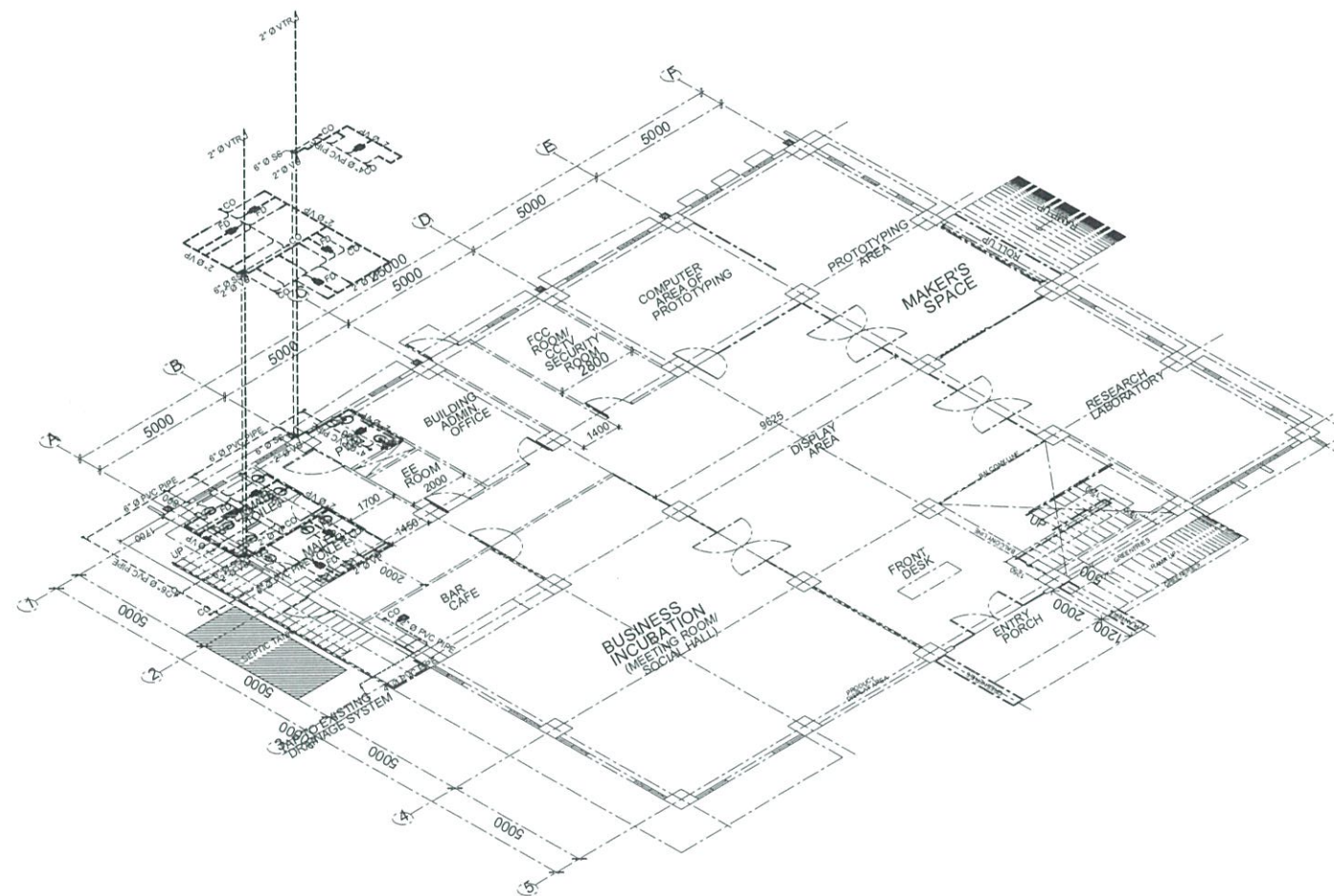
P
**TESDA INNOVATION CENTER-SFIST
SECOND FLOOR SANITARY LAYOUT**
 SCALE 1:200MTS

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER:  TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY	PROJECT TITLE: PROPOSED TESDA SFIST INNOVATION CENTER	PREPARED & CADD BY:  AB. RUMEL A. MENDOZA HEAD, PMU-SIPTVETS ENGINEERING SECTION	MASTER PLUMBER:  ENGR. FRANCISCO B. NARAG ASSISTANT PROFESSOR IV TESDA ISAT	PROJECT MANAGER:  DIR. ENRICO C. BANARIO PMU-SIPTVETS	PROJECT DIRECTOR:  SEC. SUHARTO T. MANGUDADATU, Ph.D. PMU-SIPTVETS SECRETARY, TESDA	SHEET CONTENTS: AS SHOWN	SHEET NO. P- 5
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MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road, BLEX, Taguig City

LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
SAN FRANCISCO, MALIBUOT, ALSAY CITY



P
**TESDA INNOVATION CENTER-SFIST
SANITARY ISOMETRIC LAYOUT**
 SCALE 1:200MTS

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER

**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road, Taguig City


PROJECT TITLE
**PROPOSED TESDA SFIST
INNOVATION CENTER**
LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
SAN FRANCISCO, MALIBUOT, ALBAY CITY


PREPARED & CADD BY

 AR/RUNIEL A. MENDOZA
 HEAD, PMU-SIPTVETS
 ENGINEERING SECTION

MASTER PLUMBER

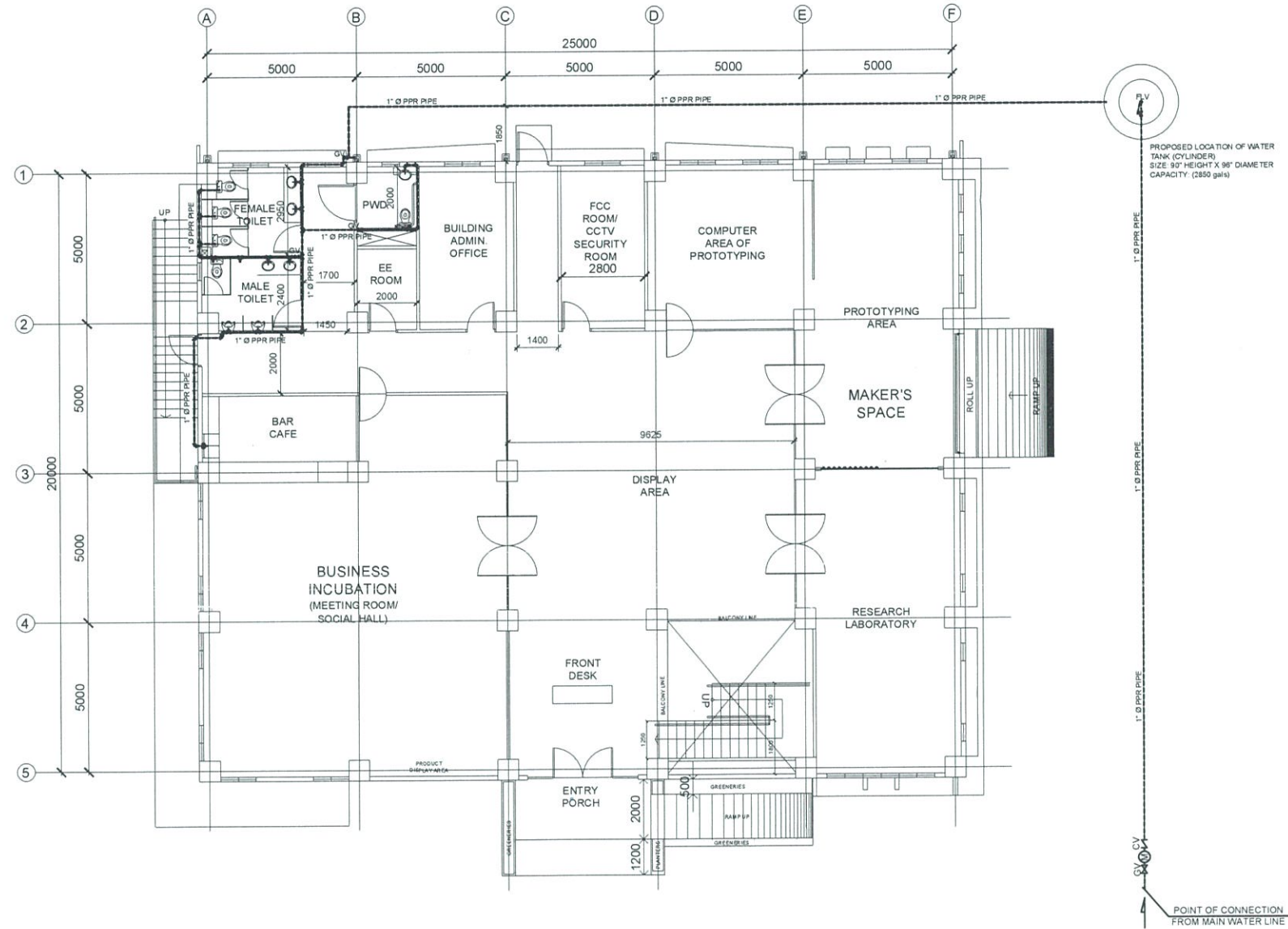
 ENGR. FRANCISCO B. NARAG
 ASSISTANT PROFESSOR IV
 TESDA ISAT

PROJECT MANAGER

 DIR. ENRICO C. BANARIO
 PMU-SIPTVETS

PROJECT DIRECTOR

 SEC. SUHARTO T. MANGUDADATU, Ph.D.
 PMU-SIPTVETS
 SECRETARY, TESDA





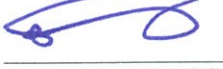
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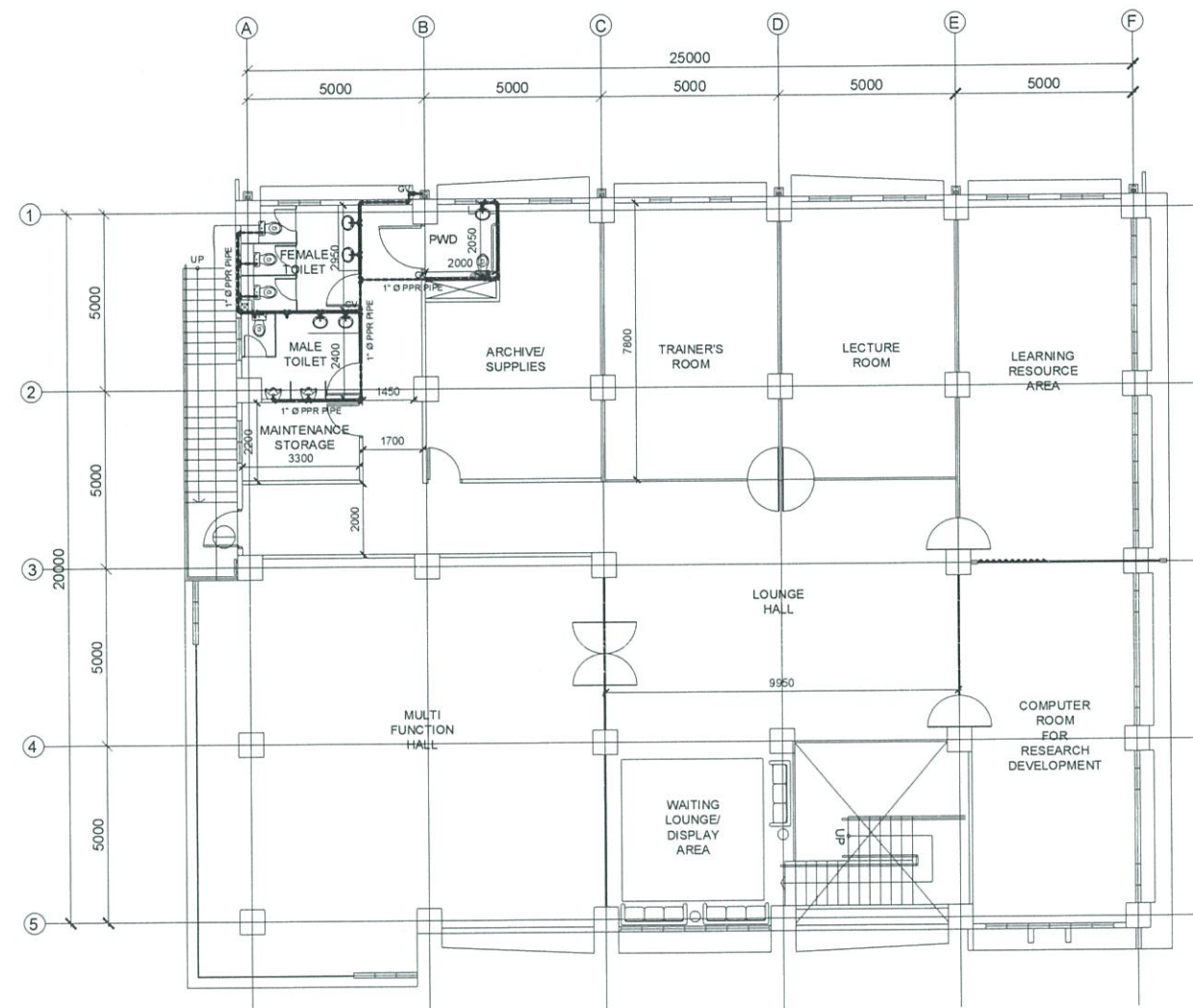
SHEET NO.
P- 6



P
TESDA INNOVATION CENTER-SFIST
GROUND FLOOR WATER LINE LAYOUT
 SCALE 1:200MTS


**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER  TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY <small>MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road, BLEX, Taguig City</small>	PROJECT TITLE PROPOSED TESDA SFIST INNOVATION CENTER <small>LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY SAN FRANCISCO, MALIBU, ALABAY CITY</small>	PREPARED & CADD BY:  AR. RUEL A. MENDOZA <small>HEAD, PMU-SIPTVETS ENGINEERING SECTION</small>	MASTER PLUMBER  ENGR. FRANCISCO B. NARAG <small>ASSISTANT PROFESSOR IV TESDA ISAT</small>	PROJECT MANAGER  DIR. ENRICO C. BANTARIO <small>PMU-SIPTVETS</small>	PROJECT DIRECTOR  SEC. SUHARTO T. MANGUDADATU, Ph.D. <small>PMU-SIPTVETS SECRETARY, TESDA</small>	SHEET CONTENTS AS SHOWN	SHEET NO. P-7
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P
 TESDA INNOVATION CENTER-SFIST
SECOND FLOOR WATER LINE LAYOUT
 SCALE 1:200MTS

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER:

**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road, BUEX, Taguig City


PROJECT TITLE:
**PROPOSED TESDA SFIST
INNOVATION CENTER**
LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
SAN FRANCISCO, MALIBU, ALABAY CITY


PREPARED & CADD BY:

AR. RUNIEL A. MENDOZA
HEAD, PMU-SIPTVETS
ENGINEERING SECTION

MASTER PLUMBER

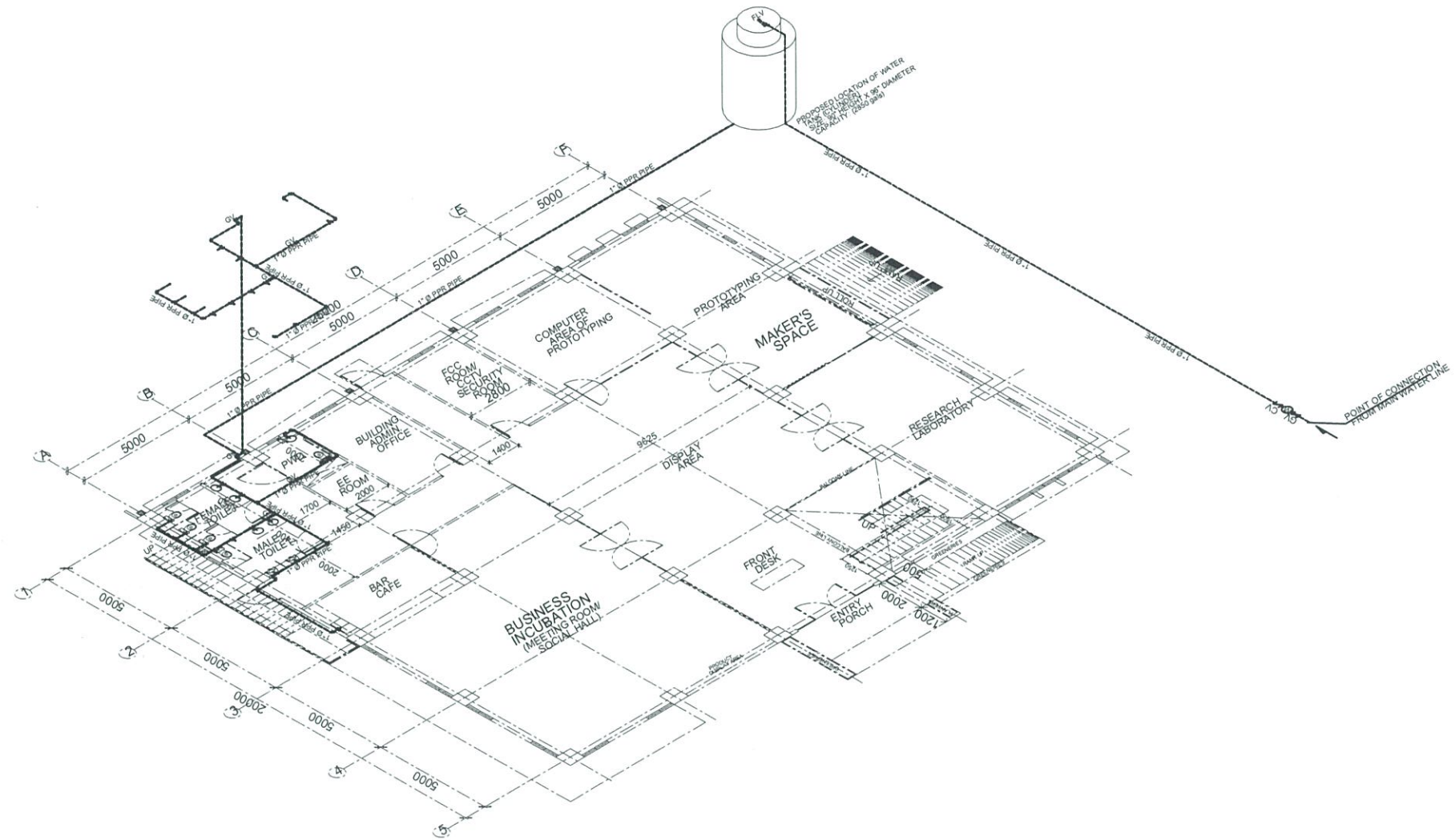
ENGR. FRANCISCO B. NARAG
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TESDA ISAT

PROJECT MANAGER

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA






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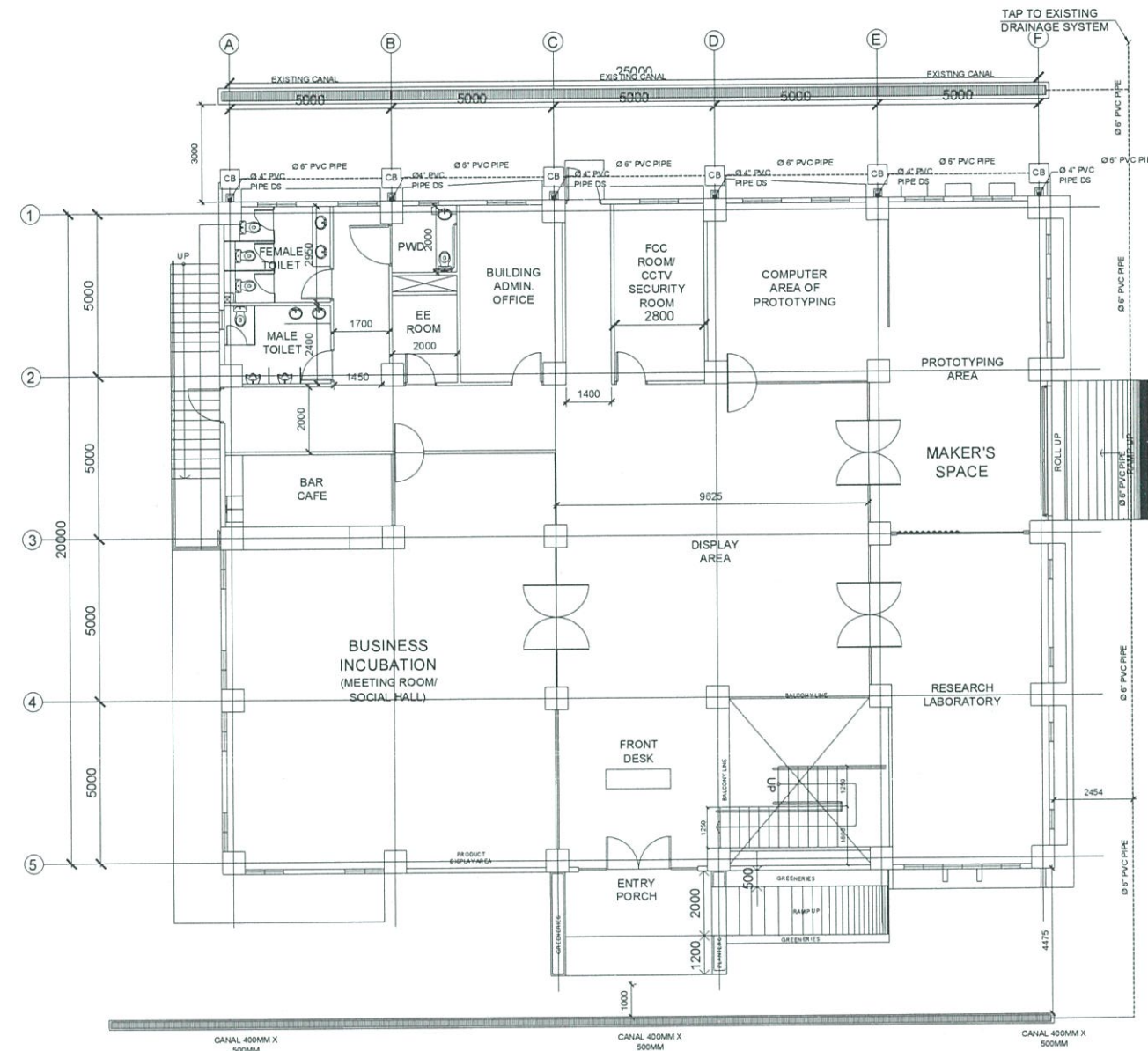
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P TESDA INNOVATION CENTER-SFIST
WATER LINE ISOMETRIC LAYOUT
 SCALE 1:200MTS


**FOR APPROVAL PLANS OF
 REGIONAL TVET INNOVATION
 CENTERS (RTICs) 2023**

PROJECT OWNER:  TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY <small>MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City</small>	PROJECT TITLE PROPOSED TESDA SFIST INNOVATION CENTER <small>LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY SAN FRANCISCO, MALIBUOT, ALBAY CITY</small>	PREPARED & CADD BY:  AR. RUIB A. MENDOZA <small>H/AD, PMU-SIPTVETS ENGINEERING SECTION</small>	MASTER PLUMBER  ENGR. FRANCISCO B. NARAG <small>ASSISTANT PROFESSOR IV TESDA ISAT</small>	PROJECT MANAGER  DIR. ENRICO C. BARRIO <small>PMU-SIPTVETS</small>	PROJECT DIRECTOR  SEC. SUHARTO T. MANGUDADATU, Ph.D. <small>PMU-SIPTVETS SECRETARY, TESDA</small>	SHEET CONTENTS AS SHOWN	SHEET NO. P- 9
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P TESDA INNOVATION CENTER-SFIST
GROUND FLOOR STORM WATER DRAINAGE LAYOUT
 SCALE 1:200MTS

**FOR APPROVAL PLANS OF
 REGIONAL TVET INNOVATION
 CENTERS (RTICs) 2023**

PROJECT OWNER

**TECHNICAL EDUCATION
 AND
 SKILLS DEVELOPMENT
 AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road, Taguig City


PROJECT TITLE
**PROPOSED TESDA SFIST
 INNOVATION CENTER**


LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
 SAN FRANCISCO, MALIBU, ALABY CITY

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HEAD, MU-SIPTVETS
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MASTER PLUMBER

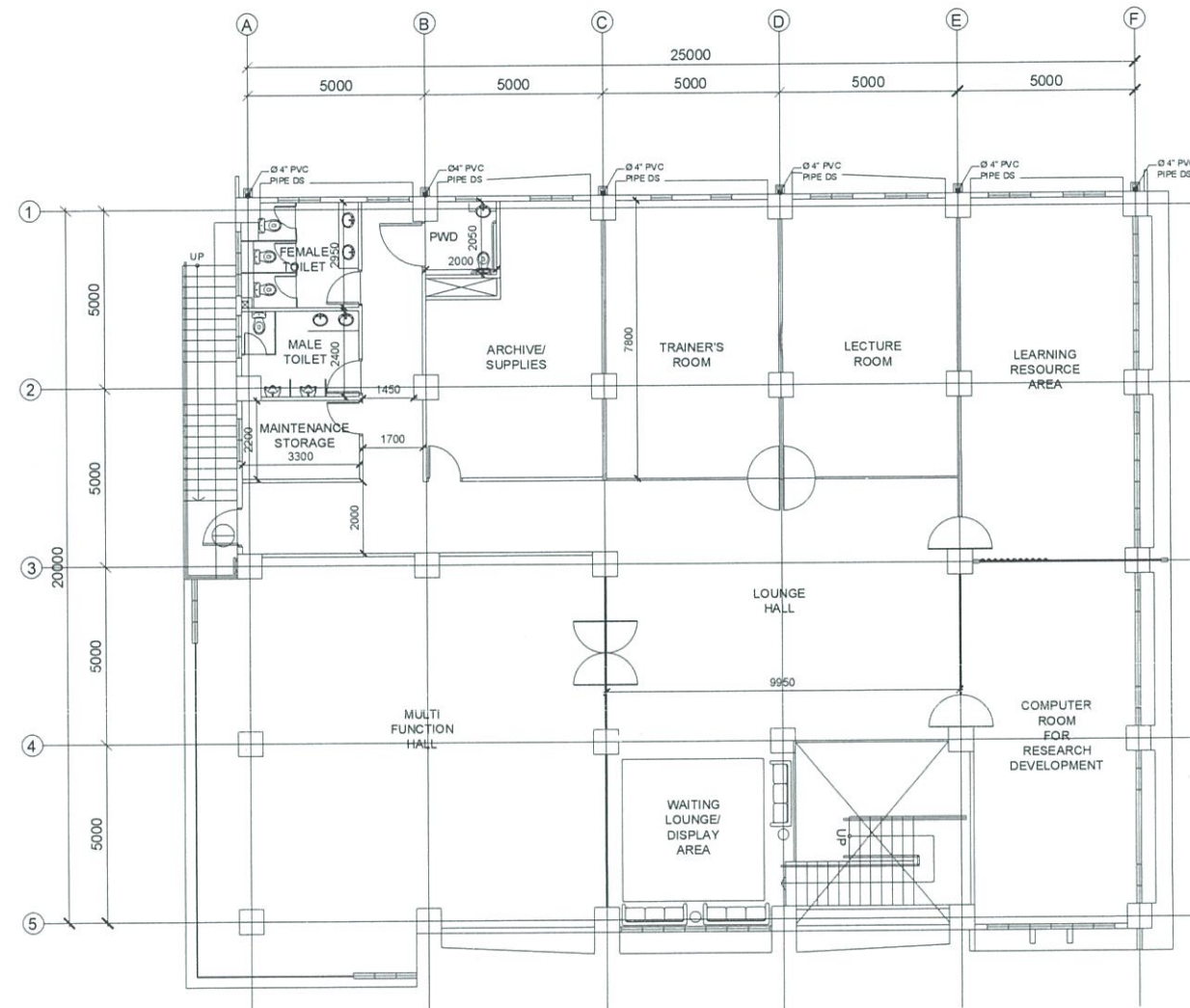
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DIR. ENRICO C. BANABAO
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 SECRETARY, TESDA


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P TESDA INNOVATION CENTER-SFIST
SECOND FLOOR STORM WATER DRAINAGE LAYOUT
 SCALE 1:200MTS

**FOR APPROVAL PLANS OF
 REGIONAL TVET INNOVATION
 CENTERS (RTICs) 2023**

PROJECT OWNER

**TECHNICAL EDUCATION
 AND
 SKILLS DEVELOPMENT
 AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:
**PROPOSED TESDA SFIST
 INNOVATION CENTER**
LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
 SAN FRANCISCO, MALABON, ALABAY CITY


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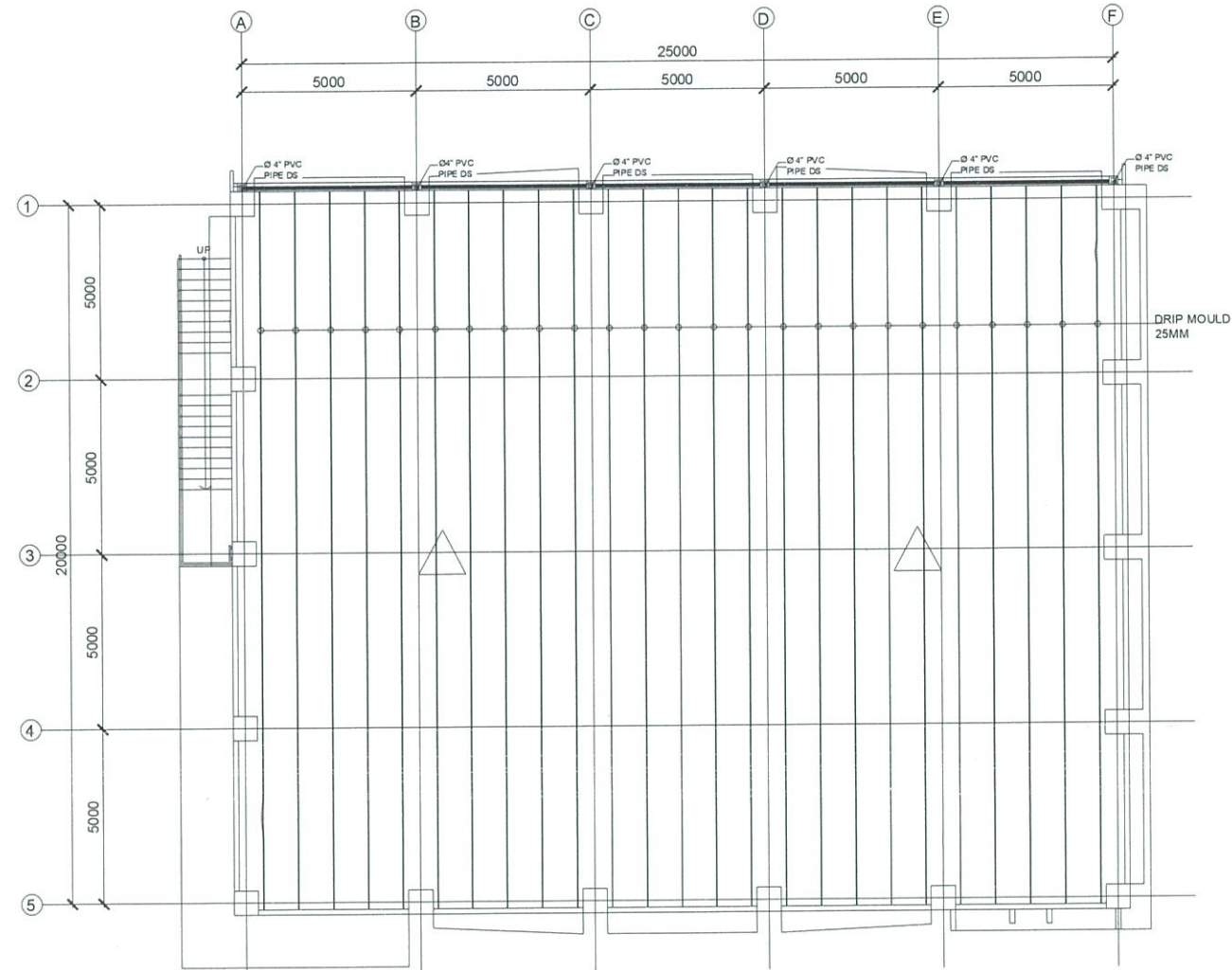
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PROJECT DIRECTOR

SEC. SUHARTO T. MANGUDADATU, Ph.D.
 PMU-SIPTVETS
 SECRETARY, TESDA

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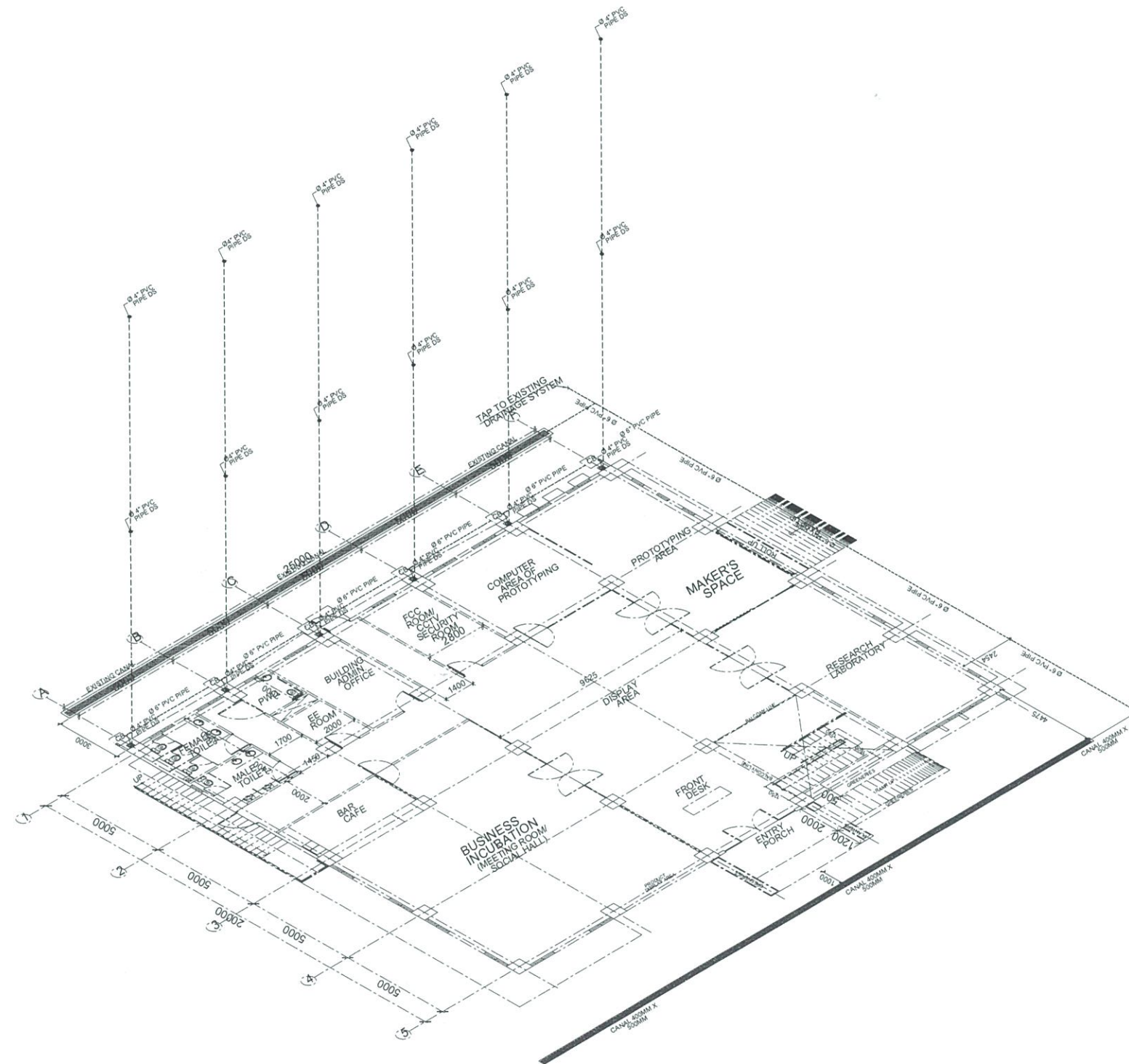
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P TESDA INNOVATION CENTER-SFIST
ROOF DECK STORM WATER DRAINAGE LAYOUT
 SCALE 1:200MTS

**FOR APPROVAL PLANS OF
 REGIONAL TVET INNOVATION
 CENTERS (RTICs) 2023**

PROJECT OWNER  TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY <small>MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road BLEX, Taguig City</small>	PROJECT TITLE: PROPOSED TESDA SFIST INNOVATION CENTER <small>LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY SAN FRANCISCO, MALLUPOT, ALAY CITY</small>	PREPARED & CADD BY:  <small>AR. RUIEL A. MENDOZA HEAD, PMU-SIPTVETS ENGINEERING SECTION</small>	MASTER PLUMBER  <small>ENGR. FRANCISCO B. NARAG ASSISTANT PROFESSOR IV TESDA ISAT</small>	PROJECT MANAGER  <small>DIR. ENRICO C. BANABO PMU-SIPTVETS</small>	PROJECT DIRECTOR  <small>SEC. SUHARTO T. MANGUDADATU, Ph.D. PMU-SIPTVETS SECRETARY, TESDA</small>	SHEET CONTENTS AS SHOWN	SHEET NO P- 12
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**TESDA INNOVATION CENTER-SFIST
STORM WATER DRAINAGE ISOMETRIC LAYOUT**
 SCALE 1:200MTS

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**



**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**

MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE

**PROPOSED TESDA SFIST
INNOVATION CENTER**

LOCATION: SAN FRANCISCO INSTITUTE OF SCIENCE AND TECHNOLOGY
SAN FRANCISCO, MALIBUOT, ALBAY CITY

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