

PUERTO RICO PORTS AUTHORITY

**X63 REGIONAL AIRPORT / HURRICANE MARIA DISASTER RELIEF (DR-4339-PR)
PROJECT #85447 / MPPA057 HUMACAO REGIONAL AIRPORT
DR. HERMENEGILDO ORTIZ QUIÑONEZ AIRPORT, HUMACAO, PR**

BID NO. 1-56

ADDENDUM NO. 2

TO ALL BIDDERS:

This addendum forms part of the Project Manual for Bid No. 1-56. Acknowledge receipt of this Addendum in the space provided on the bid proposal form. Failure to do so may subject Bidder to disqualification.

A. GENERAL

1. Enclosed find a copy of the Letter from LOA Ingenieros CSP, the architectural and engineering contractor for this project, with revisions to the bid drawings set (Bid 1-56). These revisions are dated October 10, 2025, for the Humacao Regional Airport project, Dr. Hermenegildo Ortiz Quiñonez (X63), Humacao, PR. See Attachment 1.
2. The above-mentioned letter includes six (6) drawing sheets that are part of this Addendum. See Attachment 2.

END OF ADDENDUM NO. 2



Romel Pedraza, PE
Assistant Executive Director
Planning, Engineering, Construction
& Environmental Affairs

October 15, 2025
San Juan, PR

ADDENDUM NO. 2

Attachment 1



October 10, 2025

Mr. Romel Pedraza-Claudio, PE
Assistant Executive Director for
Planning, Engineering and Construction
Attention: Mr. Roberto Rivera Medina
Engineering Bureau
Puerto Rico Ports Authority
64 Lindbergh Street
San Juan, Puerto Rico 00907

200400087

PUERTO RICO PORTS AUTHORITY (000-UEYUL-00)
ARCHITECTURAL AND ENGINEERING DESIGN SERVICES
HURRICANE MARÍA DISASTER RECOVERY-SECTOR 7

RE: PROJECT #85447/MPPA057-HUMACAO REGIONAL AIRPORT (HUC)
REVISION TO BID SET OF PLANS

Dear Mr. Rivera:

The plans in Attachment A have been revised as to October 10, 2025. Please download by clicking on the sheet name/number and forward to proposers as appropriate.

Should you have any questions or need further information, you may contact me at lortiz@loaingenieros.com or mobile 787-382-7782.

Cordially,

Ladislao Ortiz, Jr., PE
LOA Ingenieros, CSP

LO/JL

Enclosures (2)

c: E. Miranda-Gvelop
W. Amaro-Gvelop

PUERTO RICO PORTS AUTHORITY (000-UEYUL-00)
ARCHITECTURAL AND ENGINEERING DESIGN SERVICES
HURRICANE MARÍA DISASTER RECOVERY-SECTOR 7
PROJECT #85447/MPPA057-HUMACAO REGIONAL AIRPORT (HUC)
ATTACHMENT A-REVISION TO BID SET OF PLANS (10-OCT-2025)

SHEET TITLE	SHEET NO.
1. Index Sheet	GR-002
2. Demolition Plan	C-006
3. Site Plumbing Plan	C-010
4. Mechanical Floor Plan, Notes, Details and Schedules	M-1
5. Plumbing Floor Plan	P-1
6. Plumbing Notes, Details and Schedules	P-2



END OF DOCUMENT

Project #85447/MPPA057-Humacao Regional Airport (HUC)

ADDENDUM NO. 2

Attachment 2

\\EgnyDrive\bojingenieros\Share\Projects\002 - DWG\001 - SHEETS\002 - GR-002_INDEX_SHEET.dwg : October 10, 2025 : 3:49pm

SHEET No.			DESCRIPTION			SECTIONAL REFERENCE			SHEET No.			DESCRIPTION			SECTIONAL REFERENCE																				
SECTION "GR"-GENERAL																		SECTION "ES"-ELECTRICAL AND LIGHTING																	
1			TITLE SHEET			GR-001			55			GENERAL NOTES, LEGEND & TRENCH DETAILS			ES-0.0																				
2			INDEX SHEET			GR-002			56			EXISTING ELECTRICAL SITE PLAN			ES-1.0																				
3			GENERAL NOTES			GR-003			57			PROPOSED ELECTRICAL SITE PLAN			ES-1.1																				
4			GENERAL SITE PLAN			GR-004			58			POLE SCHEDULE			ES-2.0																				
5			AIRPORT LAYOUT PLAN			GR-005			59			TELECOMMUNICATIONS SYSTEM GENERAL NOTES & ABBREVIATIONS			TS-0.0																				
6			BORINGS LOG AND STRUCTURAL DESIGN PARAMETERS			GR-006			60			EXISTING TELECOMMUNICATION SYSTEM SITE PLAN			TS-1.0																				
SECTION "C"- CIVIL																		61 PROPOSED TELECOMMUNICATION SYSTEM SITE PLAN TS-1.1																	
7			CONSTRUCTION PHASING PLAN			C-001			62			TELECOMMUNICATION RISER DIAGRAM AND DETAILS			TS-2.0																				
8			STAKEOUT PLAN			C-002			63			GENERAL NOTES AND LEGEND			1E-0.0																				
9			SOIL EROSION AND SEDIMENT CONTROL PLAN			C-003			64			MAIN TERMINAL PROPOSED POWER PLAN			1E-1.1																				
10			SOIL EROSION AND SEDIMENT CONTROL PLAN			C-004			65			MAIN TERMINAL PROPOSED LIGHTING PLAN			1E-1.2																				
11			SITE DEMOLITION PLAN			C-005			66			MAIN TERMINAL PROPOSED TELECOMMUNICATION PLAN			1E-1.3																				
12			SITE DEMOLITION PLAN			C-006			67			MAIN TERMINAL PROPOSED FIRE ALARM SYSTEM PLAN			1E-1.4																				
13			CIVIL SITE PLAN			C-007			68			MAIN TERMINAL PROPOSED ROOF PLAN ELECTRICAL DISTRIBUTION			1E-1.5																				
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16			SITE PLUMBING PLAN WATER SERVICE AND SANITARY SEWER			C-010			71			H2 PROPOSED POWER & GROUNDING PLAN			2E-1.1																				
17			SITE PLUMBING DETAILS WATER SERVICE AND SANITARY SEWER			C-011			72			H2 PROPOSED LIGHTING PLAN			2E-1.2																				
18			PAVEMENT REHABILITATION PLAN			C-012			73			H2 SCHEDULES			2E-2.1																				
SECTION "A"- ARCHITECTURAL																		SECTION "M"-MECHANICAL																	
19			ABBREVIATION, GENERAL NOTES & LEGEND			G-002			74			MECHANICAL FLOOR PLAN, NOTES, DETAILS AND SCHEDULES			M-1																				
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21			PROJECT VIEWS			G-004			76			PLUMBING NOTES, DETAILS AND SCHEDULE			P-2																				
22			GENERAL DEMOLITION SITE PLAN			DS-101																													
23			GENERAL SITE			SP-101																													
24			MAIN TERMINAL DEMOLITION PLAN			1D-1.1																													
25			MAIN TERMINAL ARCHITECTURAL PARTIAL SITE PLAN			1A-1.0																													
26			MAIN TERMINAL FLOOR PLAN			1A-1.1																													
27			MAIN TERMINAL REFLECTED CEILING			1A-1.2																													
28			MAIN TERMINAL FINISH PLAN			1A-1.3																													
29			MAIN TERMINAL ROOF PLAN			1A-1.4																													
30			MAIN TERMINAL EXTERIOR ELEVATIONS			1A-2.1																													
31			MAIN TERMINAL EXTERIOR ELEVATIONS			1A-2.2																													
32			GENERAL SECTIONS			1A-3.1																													
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34			GENERAL SECTIONS			1A-3.3																													
35			STAIR AND RAMP ENLARGED PLAN			1A-4.1																													
36			BATHROOM ENLARGED PLANS			1A-4.2																													
37			FAMILY BATHROOM ENLARGED PLAN			1A-4.3																													
38			WALLSECTIONS			1A-5.1																													
39			STAIR TREAD & RAILINGS DETAILS			1A-5.2																													
40			GENERAL DETAILS			1A-5.3																													
41			TPO ROOFING SYSTEM DETAILS			1A-5.4																													
42			TPO ROOFING SYSTEM DETAILS			1A-5.5																													
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48			HANGAR 2 - ROOF PLAN			2A-1.2																													
49			HANGAR 2 - EXTERIOR ELEVATIONS			2A-2.1																													
50			HANGAR 2 - GENERAL SECTIONS AND DOOR & WINDOW TYPES & SCHEDULES			2A-3.1																													
51			HANGAR 3 - FLOOR PLAN			3A-1.1																													
52			HANGAR 3 - EXTERIOR ELEVATIONS			3A-2.1																													
53			HANGAR 4 - FLOOR PLAN			4A-1.1																													
54			HANGAR 4 - EXTERIOR ELEVATIONS			4A-2.1																													

ENGINEER:

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SBMT:
XXXXXXXXXX
CHIEF OF STUDIES AND DESIGNS

DATE

RCMD:
ROMEL PEDRAZA, PE
ASST. EXEC. DIR. ENG., CONST. & PLAN

DATE

APP'D:
NORBERTO J. NEGRÓN, ESQ.
EXECUTIVE DIRECTOR

DATE

NO.	DATE	ISSUE DESCRIPTION	BY
△	05-SEP-25	ISSUE FOR BID	L.O.
△	10-OCT-25	BID 1-56/REVISED AS SHOWN	L.O.

DR-4339-PR HURRICANE MARIA DISASTER RECOVERY

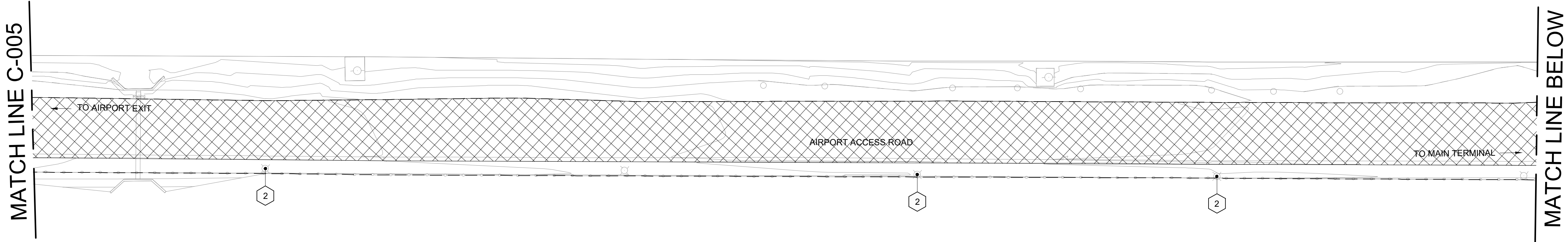
MPPA057 HUMACAO REGIONAL AIRPORT (HUC)
HUMACAO, PUERTO RICO

INDEX SHEET

PRPA PROJ NO:	XXXXXXX
DRAWN BY:	J. LOPEZ
DESIGNED BY:	L. ORTIZ
CHECKED BY:	L. ORTIZ
DATE:	October 10, 2025
SCALE:	NTS H V
SHEET NO.	GR-002

C:\Users\ladis\AppData\Local\Temp\AcPublish_67672\009 C-005 TO C-006 DEMOLITION PLAN.dwg - October 10, 2025 : 3:45pm

MANSIONES DEL CARIBE

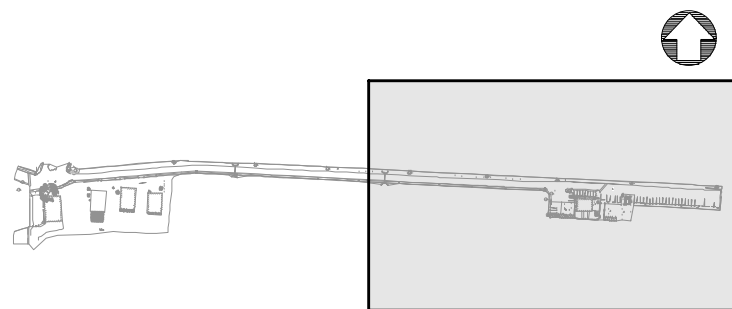
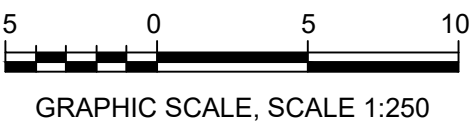


LEGEND:

- 2" COLD MILLING OF BITUMINOUS CONCRETE PAVEMENT, SPEC. 403
- EXIST. CONC. SLAB TO BE REMOVED (APPROX. THICKNESS=6 INCHES)
- EXIST. BUILDING TO BE REMOVED
- EXIST. PLANTER TO BE REMOVED
- FULL DEPTH REMOVAL OF BITUMINOUS CONCRETE, SPEC. 402
- EXIST. CONC. CURB TO BE REMOVED
- PROPERTY LINE
- LIMIT OF PROJECT
- LIMIT OF PAVEMENT REHABILITATION
- EXIST. SHALLOW CONC. GUTTER TO BE RECONSTRUCTED.

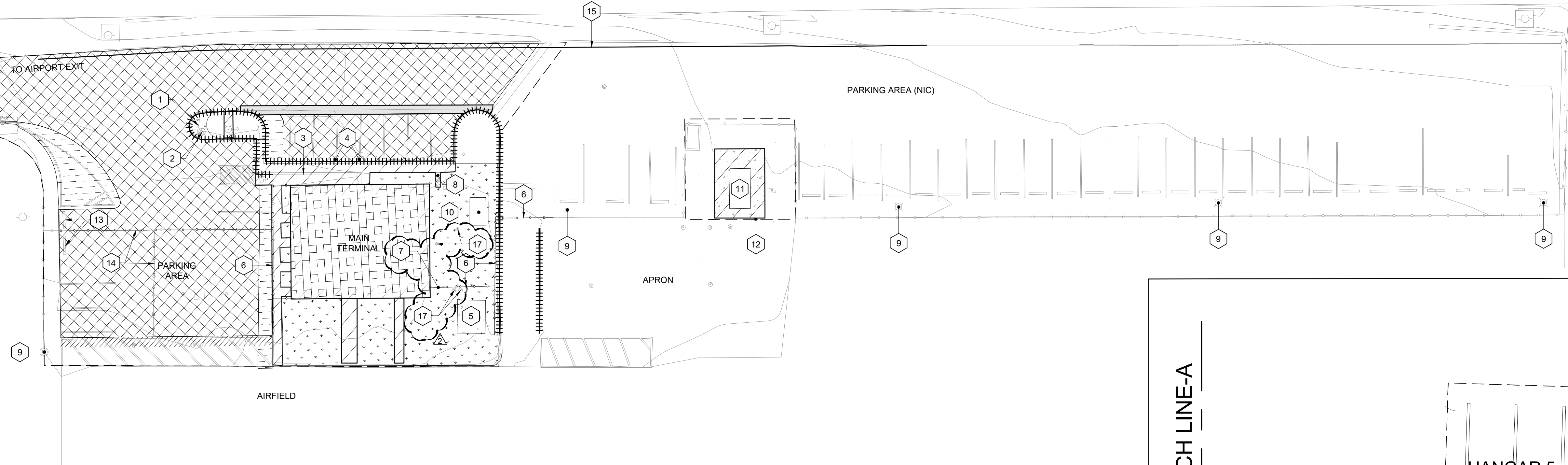
SCOPE OF WORK:

- AIRPORT SIGN TO BE REMOVED.
- POWER / LIGHT POLE TO BE REMOVED (SEE ELECTRICAL AND LIGHT PLANS).
- ALUMINUM RAILING TO BE REMOVED.
- FLAG POLES AND BASE TO BE REMOVED.
- WATER CISTERN AND REMAINING EQUIPMENT TO BE REMOVED.
- CHAIN LINK FENCE TO BE REMOVED (SEE CONSTRUCTION PHASING PLAN FOR TEMPORARY FENCE).
- SQUARE GALV. STEEL POLE AND BASE TO BE REMOVED. COORDINATE REMOVAL WITH PRPA.
- WATER METER SLAB TO REMAIN. PROTECT BOX DURING DEMOLITION.
- EXIST. LIGHT POLE TO BE REPLACED WITH NEW. (SEE LIGHTING PLAN).
- REMOVE AIRFIELD LIGHTS VOLTAGE REGULATOR AND RELOCATED TEMPORARILY. REFER TO AIRFIELD ELECTRICAL DWGS.
- EXIST. STANDBY GENERATOR TO BE REMOVED AND DISPOSED OF.
- REMOVE EXIST. WIND CONE, MAST AND BASE.
- REMOVE CONC. WHEEL STOP.
- EXIST. CHAIN LINK FENCE TO BE REMOVED AND RELOCATED (SEE CONSTRUCTION PHASING PLAN).
- EXIST. GUARDRAIL TO BE REMOVED.
- REMOVE SEPTIC TANK SYSTEM AND FILL. SEE NOTE 10.
- EXIST. CLEAN OUTS TO BE REMOVED.



KEY MAP

MATCH LINE ABOVE



MATCH LINE-A

MATCH LINE-A

HANGAR 5

ENGINEER:



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SBMT:
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CHIEF OF STUDIES AND DESIGNS
DATE
RCMD:
ROMEL PEDRAZA, PE
ACTING ASST. EXEC. DIR. ENG., CONST. & PLAN
DATE
APP'D:
NORBERTO J. NEGRÓN, ESQ.
EXECUTIVE DIRECTOR
DATE

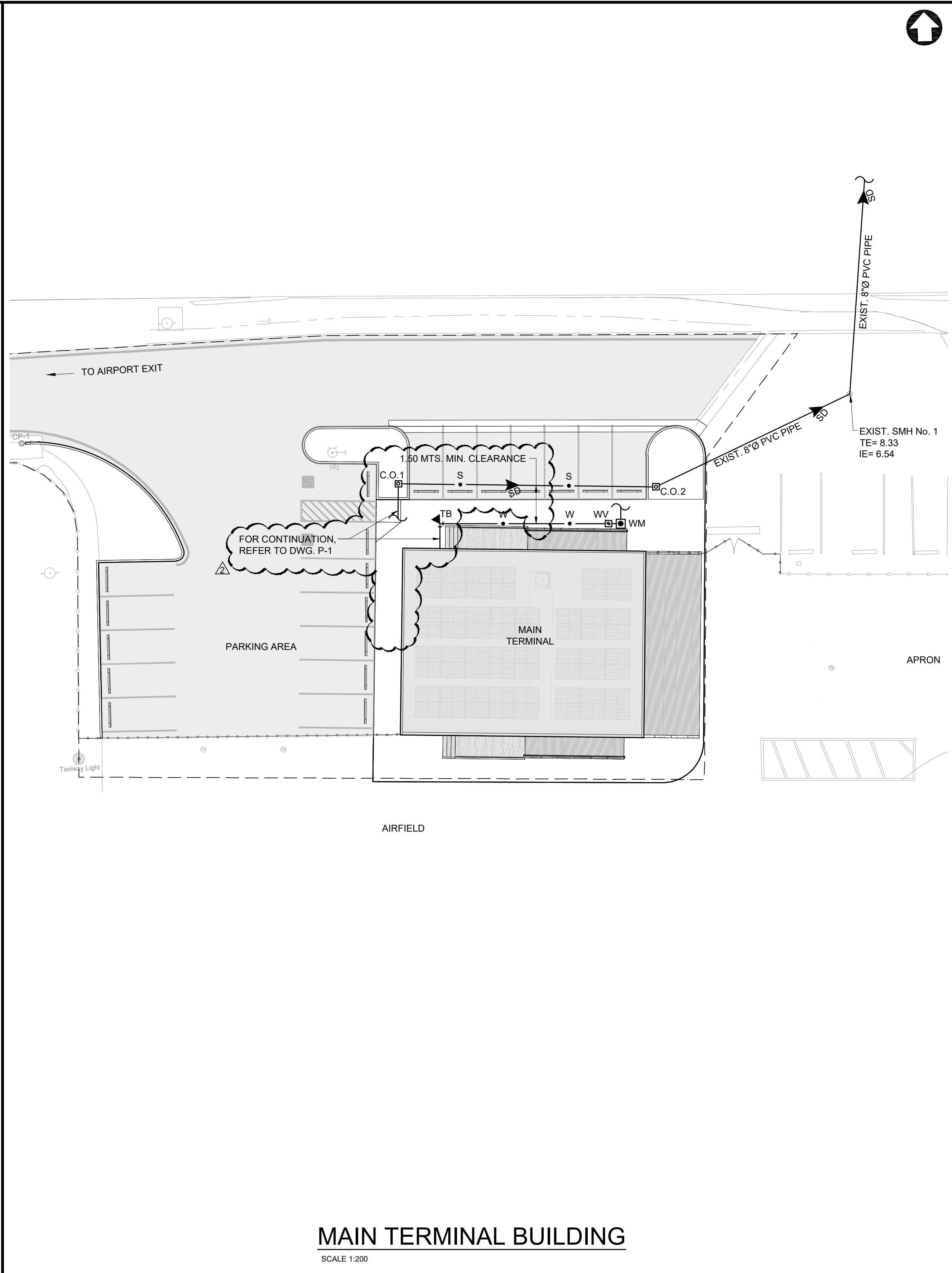
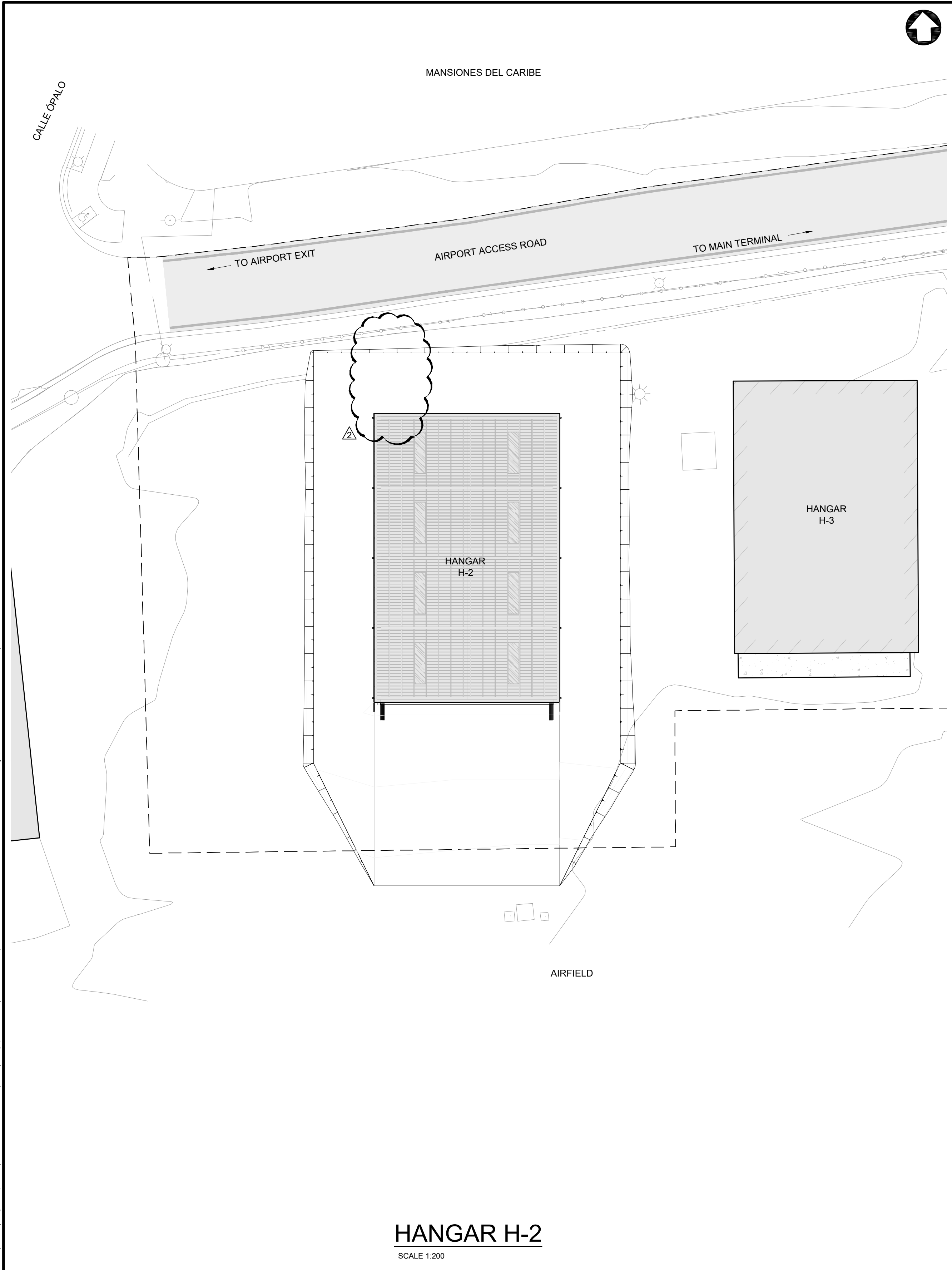
NO.	DATE	ISSUE DESCRIPTION	BY
1	05-SEP-25	ISSUE FOR BID	L.O.
2	10-OCT-25	BID 1-56/DWG REVISED	L.O.

DR-4339-PR HURRICANE MARIA DISASTER RECOVERY
MPPA057 HUMACAO REGIONAL AIRPORT (HUC)
HUMACAO, PUERTO RICO
SITE DEMOLITION PLAN

PRPA PROJ NO: XXXXXXXX
DRAWN BY: JL
DESIGNED BY: LO/JL
CHECKED BY: LO
DATE: October 10, 2025
SCALE: 1:250 H V
SHEET NO.

C-006

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LEGEND:

- EXIST. SANITARY SEWER LINE
- - - PROPERTY LINE
- - - LIMIT OF PROJECT
- W — NEW 1-1/4"Ø Cu TYPE K WATER LINE
- S — NEW 4"Ø PVC SDR 35 SEWER LINE
- TB THRUST BLOCK
- WM EXIST. WATER METER
- WV NEW BALL VALVE
- C.O.# NEW CLEAN OUT
- FLOW DIRECTION

PROJECT NOTES:

- FITTINGS FOR COPPER TUBING SHALL BE ACCORDING TO SPECIFICATION 221113, NSF CERTIFIED. PROVIDE NPT UNIONS AT VALVE ENDS.
- USE HDPE OR PLASTIC MATERIAL FOR VALVE BOX. BOX SIZE TO BE SELECTED AS REQUIRED PER PIPE FITTINGS SIZE AND CONFIGURATION.
- EXISTING WATER METER TO REMAIN IN PLACE. PROTECT METER BOX FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
- WHEN DISCONNECTING WATER AND SANITARY SEWER SERVICES, CAP IMMEDIATELY TO AVOID DEBRIS CLOGGING THE LINES.
- NEW WATER LINE TO MATCH SIZE OF MAIN TERMINAL WATER METER SIZE.
- PROTECT EXISTING SANITARY SEWER CLEAN OUT (CO 4) FROM DAMAGE DURING CONSTRUCTION ACTIVITIES. RESET TOP TO 6 INCHES (0.15 MTS) ABOVE FINISHED GRADE WITH NEW MATERIALS.

5 0 5 10
GRAPHIC SCALE, SCALE 1:200

KEY MAP

ENGINEER:

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AUTORIDAD DE LOS PUERTOS
GOBIERNO DE PUERTO RICO

SBMT:
XXXXXXXXXX
CHIEF OF STUDIES AND DESIGNS
DATE

RCMD:
ROMEL PEDRAZA, PE
ACTING ASST. EXEC. DIR. ENG., CONST. & PLAN
DATE

APP'D:
NORBERTO J. NEGRÓN, ESQ.
EXECUTIVE DIRECTOR
DATE

NO.	DATE	ISSUE DESCRIPTION	BY
1	05-SEP-25	ISSUE FOR BID	L.O.
2	10-OCT-25	BID 1-56/REVISED PER PLUMBING PLANS	L.O.

DR-4339-PR HURRICANE MARIA DISASTER RECOVERY
MPPA057 HUMACAO REGIONAL AIRPORT (HUC)
HUMACAO, PUERTO RICO

SITE PLUMBING PLAN
WATER SERVICE AND SANITARY SEWER

PRPA PROJ NO: XXXXXXX

DRAWN BY: JL

DESIGNED BY: LO/JL

CHECKED BY: LO

DATE: October 10, 2025

SCALE: 1:200 H V

SHEET NO.

C-010

SAN JUAN, PUERTO RICO

DIRECTORATE OF PLANNING ENGINEERING AND CONSTRUCTION

PUERTO RICO PORTS AUTHORITY

FJM Engineering, psc

Consulting Engineers

352 San Claudio St., STE 1, PMB 367, San Juan, PR 00926-4144

Tel: (787) 722-6643 / Cell: (787) 632-1694

E-mail: FJMatc@fjm-eng.com

Yo, Francisco J. Mate, ingeniero, licencia #13947, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias, también certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del reglamento conjunto y las disposiciones aplicables de los reglamentos y códigos de las agencias, juntas reglamentadoras o corporaciones públicas con jurisdicción, certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la ley num. 14 de 2 de enero de 2004, según enmendada, conocida como la "Ley para la inversión por la industria puertorriqueña" y con la ley num. 319 de 15 de mayo de 1938, según enmendada; ley num. 86 de 6 de julio de 1978, según enmendada; según aplicas, reconozco que cualquier declaración falsa o falsificación en los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OPR.

LA PRESENTE CERTIFICACIÓN NO CONSTITUYE UNA RENUNCIA A CUALQUIER DERECHO, ACCIÓN O DEFENSA LEGAL QUE ME ASISTA*

LOA

LADISLAO ORTIZ & ASOCIADOS INGENIEROS, CSP

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PORTS
AUTHORITY

GOVERNMENT OF PUERTO RICO

SBMT:

XXXXXXXXX

CHIEF OF STUDIES AND DESIGNS

DATE

RCMD:

ROMEL PEDRAZA, PE

ASST. EXEC. DIR. ENG., CONST. & PLAN

DATE

APP'D:

NORBERTO J. NEGRÓN DÍAZ, ESQ.

EXECUTIVE DIRECTOR

DATE

FRANCISCO J. MATE

INGENIERO

LICENCIADO

LIC. #13947

PUERTO RICO

NO.	DATE	ISSUE DESCRIPTION	BY
1	10/10/2025	BID 1-56/DRAWING ADDED TO SET	

DR-4339-PR HURRICANE MARIA DISASTER RECOVERY
MPPA057 HUMACAO REGIONAL AIRPORT (HUC)
HUMACAO, PUERTO RICO

MECHANICAL FLOOR PLAN, NOTES DETAILS AND SCHEDULES

PRPA PROJ NO:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
DATE:
SCALE: H V
SHEET NO.

M-1

1
M-1
AIR CONDITIONING - FLOOR PLAN
SCALE: 1/4" = 1'-0"

MIN-SPLIT UNIT SCHEDULE											
DESIG.	LOCATION	CAPACITY BTU/H	INDOOR MODEL	OUTDOOR MODEL	MIN. SEER	MCA	FUSE SIZE	REFRIGERANT	ELECTRICAL	MANUFACTURER	REMARKS
MSU-1 & MSCU-1	STAF LOUNGE	12,000	AR15D0XFAMWKNVCV	AR15D0XFAMWKNVCV	21.5	16	25	R-32	208-230/1/60	SAMSUNG	NOTE 1
1. APPLY COMPRESSORS, CONDENSER COILS WITH CORROSION PROTECTION.											

REFRIGERANT LINES CONNECTION DETAIL
NOT TO SCALE

CONDENSING UNIT ANCHORAGE DETAIL
N.T.S.

1
M-1
AIR CONDITIONING - DETAILS & SCHEDULES
SCALE: NTS

AIR CONDITIONING SYSTEM NOTES:

GENERAL:

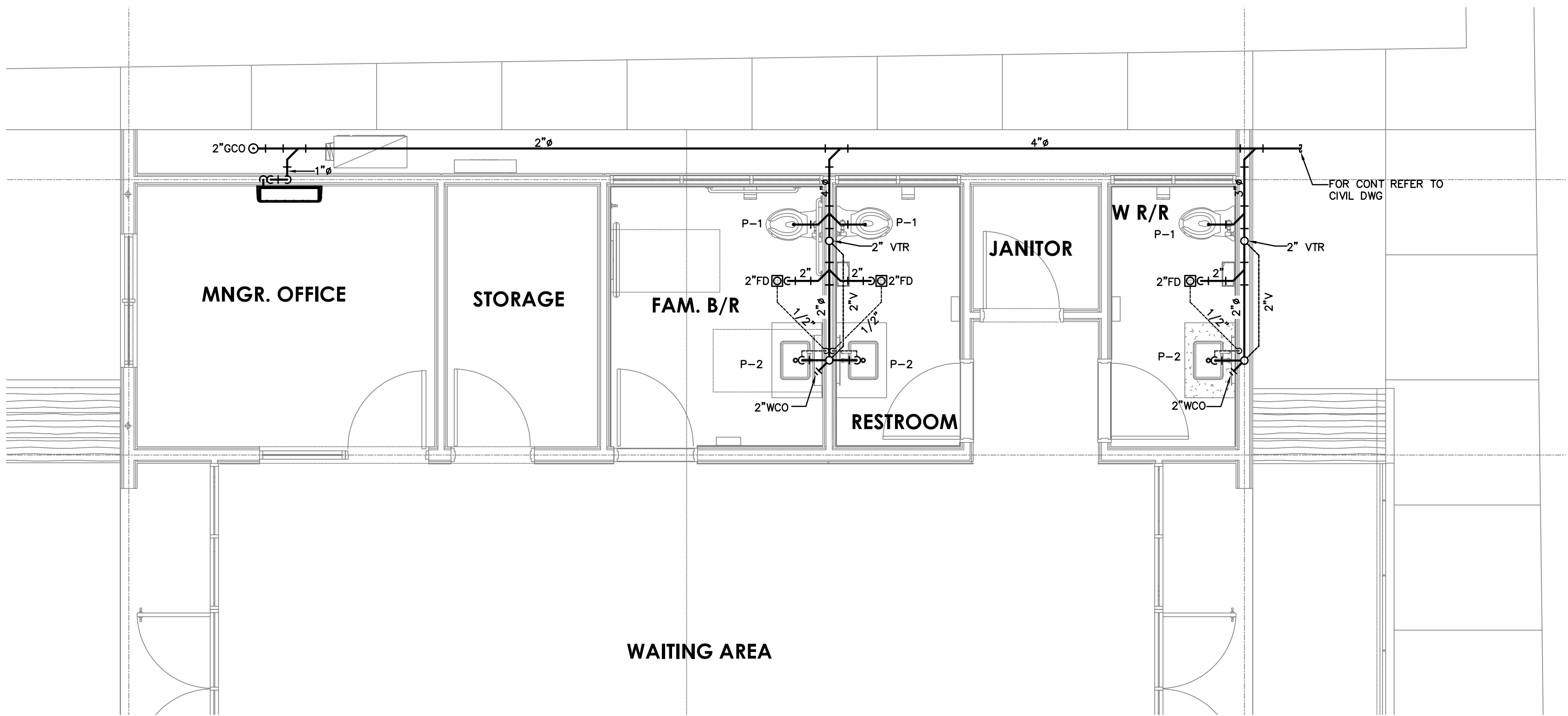
- IT IS THE INTENTION OF DRAWINGS TO CALL FOR FINISHED WORK, COMPLETED, TESTED AND READY FOR OPERATION. MINOR DETAILS NOT SHOWN OR SPECIFIED, BUT NECESSARY FOR THE PROPER INSTALLATION AND FOR FUNCTIONING AND OPERATION OF THE SYSTEM SHALL FORM PART OF THE WORK TO BE DONE BY THE CONTRACTOR.
- MECHANICAL PLANS SHALL BE COORDINATED WITH THE STRUCTURAL PLANS AND ALL OTHER PERTINENT DATA.
- ALL HVAC DUCTWORK TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE DUCT CONSTRUCTION STANDARDS OF THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONALS ASSOCIATION, INC. (SMACNA) FOR THE APPLICABLE PRESSURE CLASS.
- DUCTWORK MATERIAL, PRESSURE CLASS AND INSULATION AS PER DUCT CONSTRUCTION AND INSULATION SCHEDULE IN THIS DRAWING.
- DUCTWORK LEAKAGE TEST TO BE PERFORMED AS PER SMACNA STANDARDS AND TEST RESULTS TO MEET ALLOWED LEAKAGE LEVELS FOR THE APPLICABLE PRESSURE CLASS.
- DUCTS SHALL BE SEALED BY MEANS OF AN APPROVED DUCT SYSTEM SEALANT AS MANUFACTURED BY UNITED ME GILL CORP. THE CONTRACTOR SHALL SUBMIT SEALANT FOR APPROVAL.
- DUCT HANGERS AND SUPPORTS TO BE MADE AS PER SMACNA RECOMMENDATIONS. FOR TYPE OF DUCT CONSTRUCTION.
- ALL SQUARE ELBOWS TO BE FITTED WITH DOUBLE THICKNESS MULTIPLE VANES.
- COOLING COIL CONDENSATE DRIP PIPING MATERIAL: SHALL BE TYPE "M" COPPER OR SCH. 40 PVC.
- CONTRACTOR TO PROVIDE SUITABLE VIBRATION ISOLATORS FOR THE SYSTEM AS REQUIRED OR AS RECOMMENDED BY THE MANUFACTURER OF THE EQUIPMENT. PRECAUTIONS MUST BE TAKEN IN ORDER TO MINIMIZE EQUIPMENT NOISE TRANSMISSION.
- CANVAS FLEXIBLE CONNECTIONS SHALL BE SECURELY FASTENED TO DUCTS AND EQUIPMENT. CANVAS CONNECTIONS SHALL BE AIRTIGHT AT INDICATED PRESSURE CLASS.
- EXACT AHU'S OPENINGS SHALL BE VERIFIED WITH MANUFACTURER SHOP DRAWINGS PRIOR TO DUCTWORK INSTALLATION.
- FLEXIBLE METALLIC DUCT TO BE RUGGED ALL METAL CONSTRUCTION, SEMI-RIGID, MUST COMPLY WITH NFPA 90A & 90B AND MUST BE RATED TO A MINIMUM OF -75°F. THE DUCT SECTION ABOVE HUNG CEILING MUST BE INSULATED ACCORDING TO THE DUCT SCHEDULE.
- CONTINUE REFRIGERANT LINES UP TO CONDENSING UNIT AT ROOF. PASS REFRIGERANT LINES THROUGH PIPE SLEEVE OPENING. SEAL OUTSIDE OPENING WITH URETHANE FOAM CAP.

INSULATION:

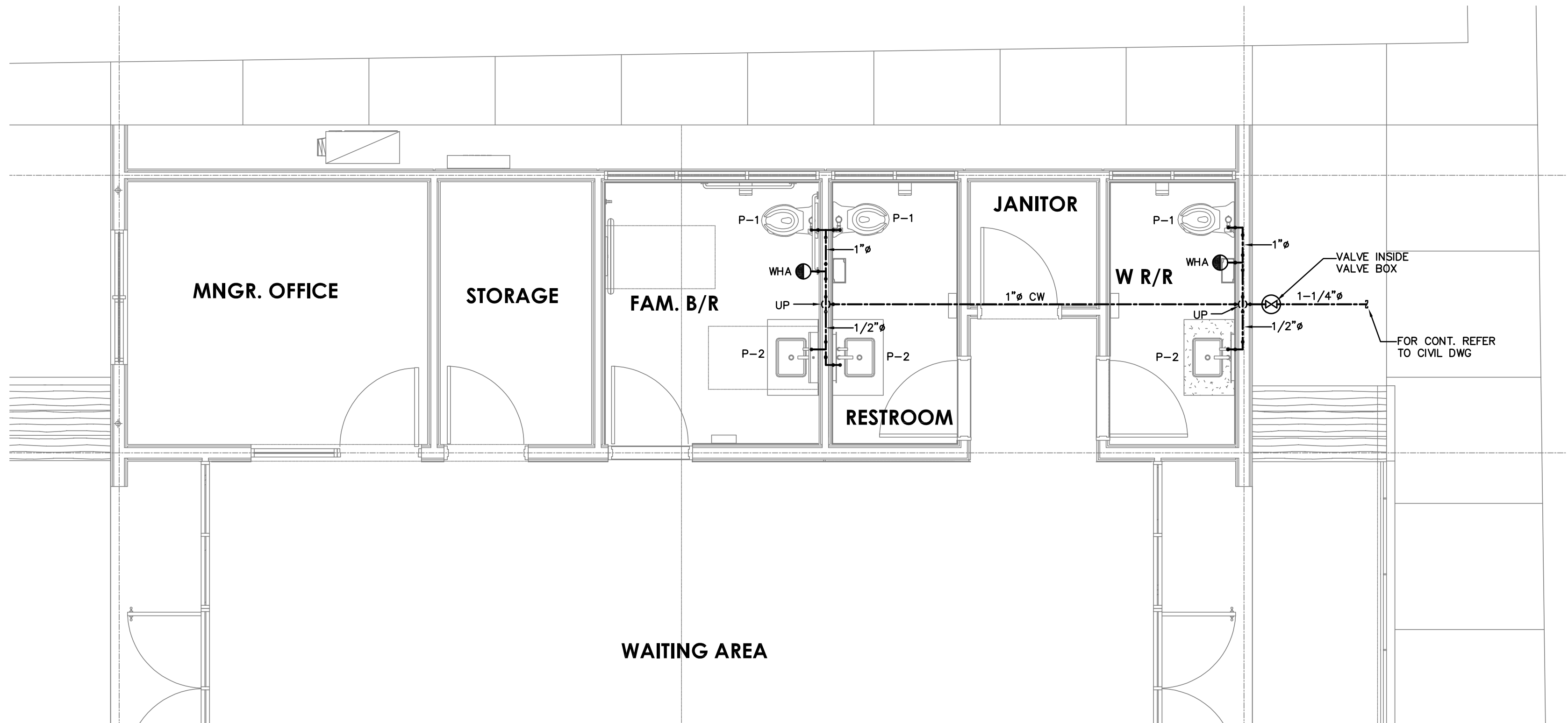
- ALL INSULATION REQUIRED FOR THE WORK TO BE NEW, OF THE FIRST - CLASS QUALITY AND SHALL BE, DELIVERED ERECTED AND FINISHED IN EVERY DETAIL.
- ALL INSULATION AND SUPPLEMENTARY MATERIAL TO HAVE A COMPOSITE FIRE HAZARD RATING, AS TESTED BY ASTM E-84, NFPA 255, OR UL 723, OF A MAXIMUM FLAME SPREAD INDEX OF 25 AND A MAXIMUM SMOKE DEVELOPED INDEX OF 50.
- INSTALL DUCT INSULATION WITH TYPE OF MATERIAL AND THICKNESS AS SHOWN ON THE DUCT CONSTRUCTION AND INSULATION SCHEDULE ON THIS DRAWING.
- INSULATION SHALL NOT BE APPLIED UNTIL ALL SURFACES ARE CLEAN AND DRY.
- COOLING COIL DRIP PIPING INSULATION MATERIAL SHALL BE 1/2" THICK FLEXIBLE ELASTOMERIC CELLULAR INSULATION (K MAX @ 75°F = 0.30 BTU * INCH/H * SQ. FT * F).

ENVELOPE CONSTRUCTION PROPERTIES	
INTERNATIONAL ENERGY CONSERVATION CODE (IECC-2018)	
DESCRIPTION	VALUES
WALLS - MASONRY (ALL)	U = 0.58 / R = N.R.
WALLS - METAL BLDG. (ALL)	U = 0.078 / R = 13 Min.
WALLS - STEEL FRAME (ALL)	U = 0.078 / R = 13 Min.
ROOF	U = 0.048 / R = 20 Min.
WINDOWS	
WALLS - NONMETAL FRAME	U = 1.20 Max. SC = 0.29 / SGHF = 0.25 Max.
WALLS - METAL FRAME	U = 1.20 Max. SC = 0.29 / SGHF = 0.25 Max.
U = HEAT TRANSFER COEFFICIENT SC = SHADING COEFFICIENT SGHF = SOLAR HEAT GAIN FACTOR	R = INSULATION VALUE N/A = NOT APPLICABLE N.R. = NOT REQUIRED
NOTES: 1. VALUES DIFFERING FROM SHOWN WILL REQUIRE REVISION OF AIR CONDITIONING LOADS.	

PUERTO RICO PORTS AUTHORITY - DIRECTORATE OF PLANNING ENGINEERING AND CONSTRUCTION - SAN JUAN, PUERTO RICO



1
P-1
SANITARY - FLOOR PLAN
SCALE: 1/4" = 1'-0"



2
P-1
WATER DISTRIBUTION - FLOOR PLAN
SCALE: 1/4" = 1'-0"

FJM Engineering, psc
Consulting Engineers

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Yo, Francisco J. Mate, ingeniero, licencia #13947, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias, también certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del reglamento conjunto y las disposiciones aplicables de los reglamentos y códigos de las agencias, juntas reglamentadoras o corporaciones públicas con jurisdicción; certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la ley num. 14 de 2 de enero de 2004, según enmendada, conocida como la "Ley para la inversión por la industria puertorriqueña" y con la ley num. 319 de 15 de mayo de 1938, según enmendada; ley num. 86 de 6 de julio de 1978, según enmendada; según aplicables, reconozco que cualquier declaración falsa o falsificación en los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OPR.

LA PRESENTE CERTIFICACION NO CONSTITUYE UNA RENUNCIA A CUALQUIER DERECHO ACCION O DEFENSA LEGAL QUE ME ASISTA

ENGINEER:

LOA

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SBMT:
XXXXXXXXX
CHIEF OF STUDIES AND DESIGNS
DATE
RCMD:
ROMEL PEDRAZA, PE
ASST. EXEC. DIR. ENG., CONST. & PLAN
DATE
APP'D:
NORBERTO J. NEGRÓN DÍAZ, ESQ.
EXECUTIVE DIRECTOR
DATE



NO.	DATE	ISSUE DESCRIPTION	BY
1	10/10/2025	BID 1-56/DRAWING ADDED TO SET	

DR-4339-PR HURRICANE MARIA DISASTER RECOVERY
MPPA057 HUMACAO REGIONAL AIRPORT (HUC)
HUMACAO, PUERTO RICO
PLUMBING FLOOR PLAN

PRPA PROJ. NO.:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
DATE:
SCALE: H V
SHEET NO.

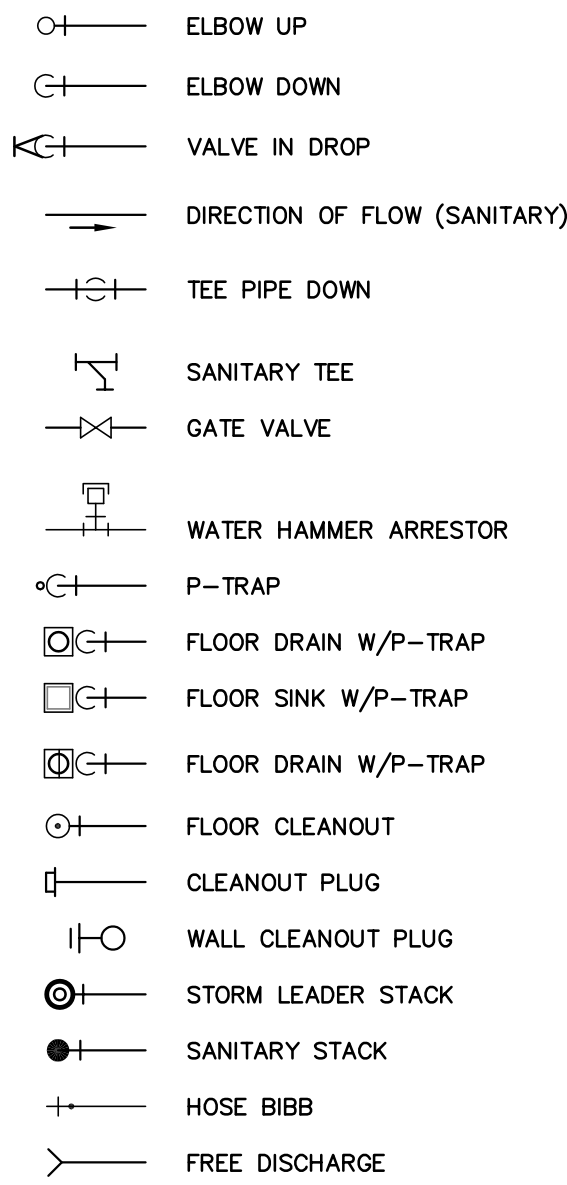
P-1

8-OCT-2025

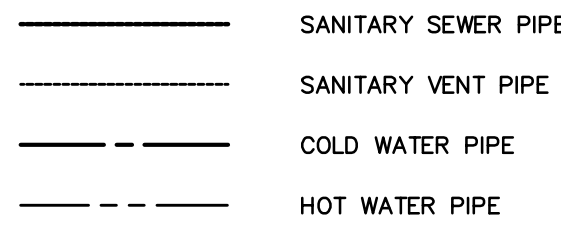
PLUMBING NOTES:

- THESE NOTES AS WELL AS THE LEGEND AND DETAILS APPLIES TO ALL PLUMBING WORK.
- WATER PIPING BELOW GRADE TO BE TYPE "K" COPPER AND WATER PIPING ABOVE GRADE TO BE TYPE "L" HARD DRAWN COPPER. SIZE IS 1/2" OR AS INDICATED DRAWINGS.
- SOLDER USED IN ANY POTABE OR DOMESTIC WATER SYSTEM MUST BE LEAD-FREE.
- ALL WATER SUPPLY LINES ARE TO BE SEPARATED A MINIMUM OF 1'-0" FROM SANITARY LINES.
- ALL WASTE, SANITARY AND STORM DRAINAGE LINES 4" IN DIAMETER AND LARGER SHALL BE PVC SDR 35 AND SCHEDULE 40 FOR 3" AND SMALLER.
- TRENCHES FOR ALL UNDERGROUND PIPES ARE TO BE EXCAVATED TO REQUIRED DEPTHS. AFTER THE PIPES HAVE BEEN TESTED, INSPECTED AND APPROVED BY THE ARCHITECT/ENGINEER, THE TRENCHES MUST BE FILLED WITH APPROVED FILL COMPACTED TO A MINIMUM OF 95% OF THE SOIL, MAX. DRY UNIT WEIGHT.
- ALL PIPING SHALL BE CONCEALED IN FLOOR TOPPINGS, WALL OR CHASES UNLESS OTHERWISE NOTED.
- LONG SWEEP BENDS OR LONG SWEEP FITTINGS SHALL BE PROVIDED AT THE BASE OF ALL STACKS.
- CLEANOUTS IN HORIZONTAL DRAINAGE LINES SHALL BE SPACED AT INTERVALS NOT EXCEEDING 75 FEET FOR PIPES 4" AND SMALLER, AND 100 FEET FOR PIPES THROUGH 10" IN DIAMETER.
- HORIZONTAL DRAINAGE PIPES SHAL BE INSTALLED ALIGNED AT UNIFORM SLOPES NOT LESS THAN 1/4" INCH PER FEET FOR 2-1/2-INCH DIAMETER AND LESS, AND NOT LESS THAN 1/8 INCH PER FEET FOR DIAMETERS OF 3 INCHES OR MORE.
- CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS PIPES UP TO 4" DIAMETER AND NOT LESS THAN 4" FOR LARGER DIAMETERS.
- FIXTURES, FITTINGS, ACCESSORIES, MATERIALS AND ALL PLUMBING PRODUCTS SHALL BE AS PER SPECIFICATIONS ON THESE DRAWINGS. EQUAL OR SIMILAR SHALL BE ONLY ACCEPTED IF PREVIOUSLY APPROVED BY THE ARCHITECT/ENGINEER.
- ALL FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER SPECIFICATIONS.
- THE PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE LATEST LOCAL BUILDING CODE, THE NATIONAL STANDARD PLUMBING CODE, THE HEALTH DEPARTMENT AND THE SPECIFICATIONS ISSUED FOR THE PROJECT.
- SIZES SHOWN IN FIXTURE SCHEDULE ARE MINIMUM AND SHALL BE INCREASED AS NECESSARY TO COMPLY WITH CODE REQUIREMENTS OR AS SHOWN ON DRAWINGS.
- BEFORE STARTING CONSTRUCTION, THE PLUMBING CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATIONS OF EXISTING PIPE LINES TO REMAIN IN USE. ANY SIGNIFICANT DISCREPANCY WITH THE INFORMATION SHOWN ON THESE DRAWINGS SHALL BE NOTIFIED TO THE ARCHITECT/ENGINEER FOR REVISION.
- PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY SERVICES AND/OR CONNECTIONS REQUIRED FOR THE PLUMBING FIXTURES AND EQUIPMENT SHOWN ON PLANS AND FIXTURES SCHEDULE.
- PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY ROUGHING-IN AND INSTALL THE PLUMBING FIXTURES AS INDICATED ON THESE DRAWINGS.
- THE PROPOSED WATER DISTRIBUTION SYSTEM MUST BE TESTED TO A HYDROSTATIC PRESSURE OF 125 PSI AND PROVED TIGHT AT THIS PRESSURE FOR FOUR CONSECUTIVE HOURS BEFORE PIPES ARE CONCEALED AND PRIOR TO ANY FIXTURE INSTALLATION.
- ALL WASTE AND DRAIN PIPES ARE TO BE TESTED USING WATER AND PROVED TIGHT TO THE ARCHITECT/ENGINEER BEFORE TRENCHES ARE BACKFILLED, PIPES CONCEALED OR FIXTURE INSTALLATION.
- OTHER QUALIFIED MANUFACTURERS' PRODUCTS CAN BE SUBMITTED FOR APPROVAL TO THE ARCHITECT OR ENGINEER ALONG WITH A COMPARATIVE TABLE SHOWING CHARACTERISTICS OF THE SPECIFIED AND PROPOSED PRODUCT.
- ALL HOT WATER PIPING SHALL BE INSULATION SHALL BE 1/2" THICK CLOSED CELL FLEXIBLE ELASTOMERIC THERMAL INSULATION (K=0.25 BTU*in/h*ft*2°F @ 75F MAX). PROVIDE WEATHER-RESISTANT PROTECTIVE FINISH FOR OUTDOOR USE.

PIPING SYMBOLS

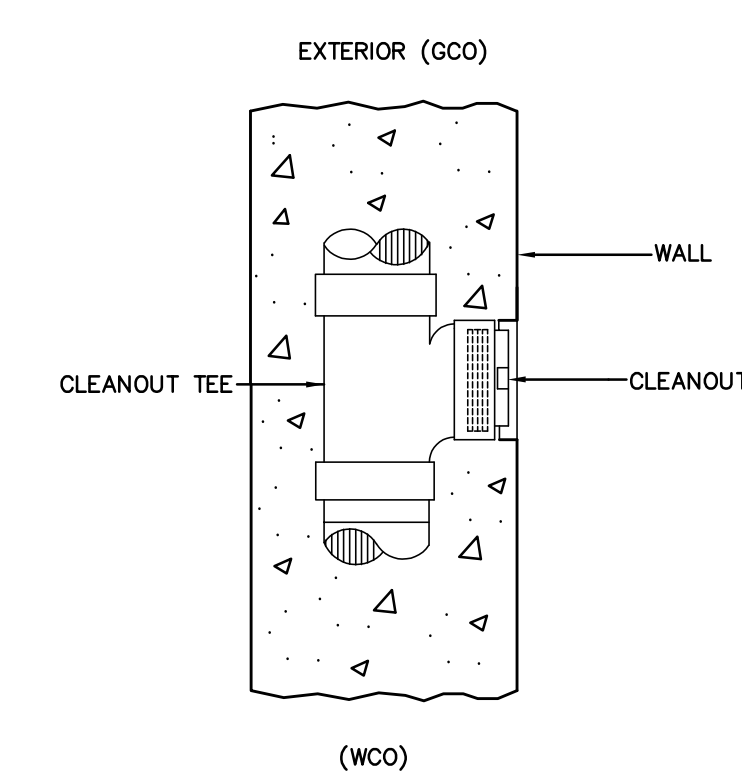
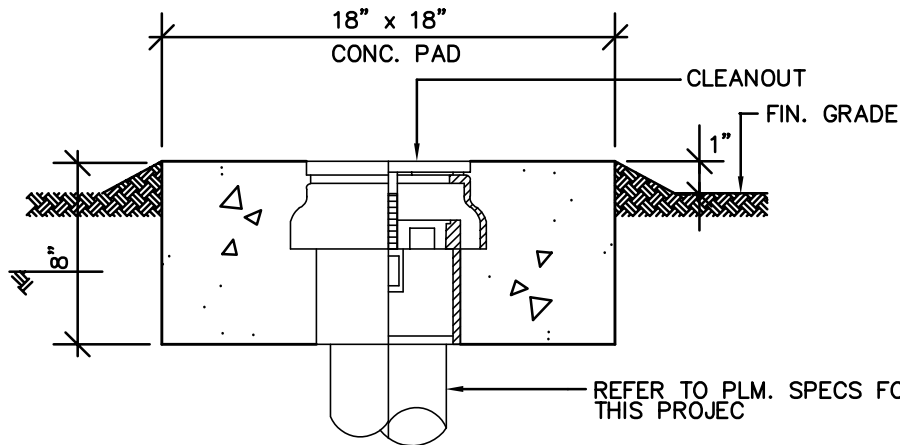
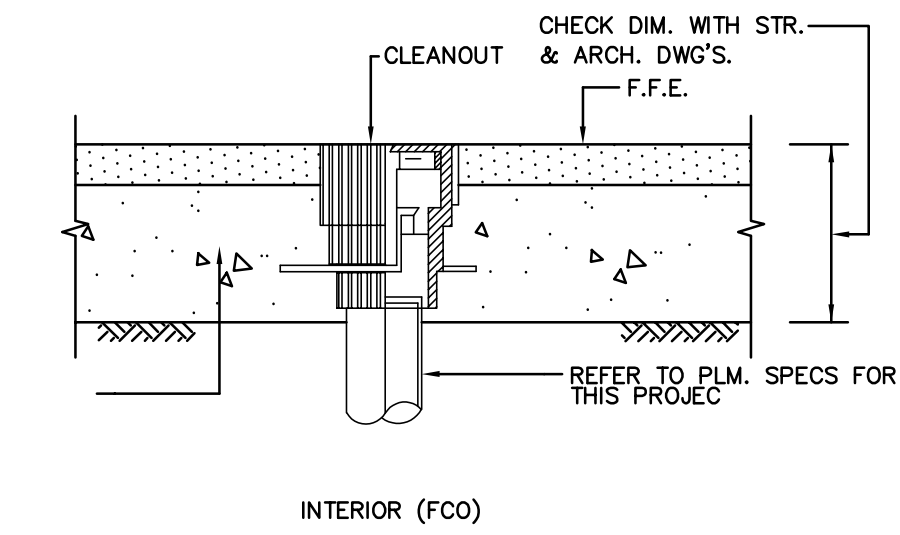


PIPING TYPES

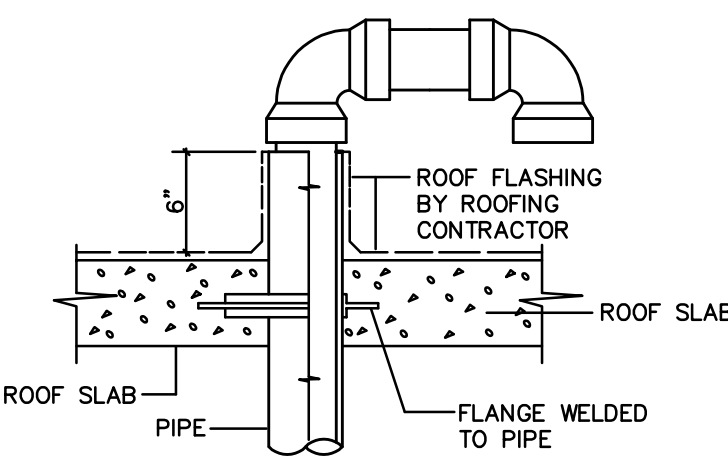


ABBREVIATIONS

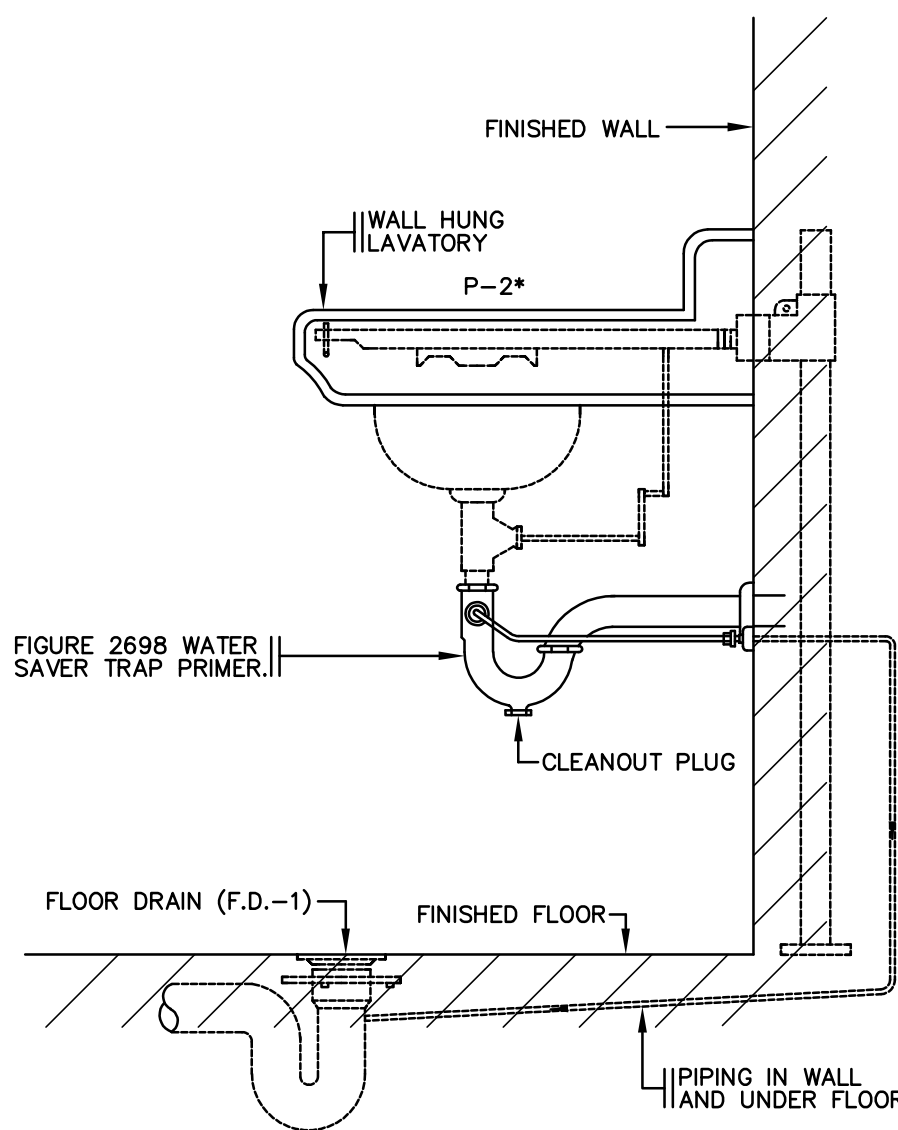
(H.F.C.)	HUNG FROM CEILING
CLG	CEILING
(UG)	UNDERGROUND
W.H.	WATER HEATER
(DN.)	DOWN
CWR	COLD WATER RISER
CW	COLD WATER
HW	HOT WATER
S.S.	SANITARY STACK
V.S.	VENT STACK
CD	CONDENSATE DRAIN
R.L.	RAIN LEADER
R.D.	ROOF DRAIN
FL	FLOOR
FPR	FIRE PROTECTION RISER
H.B.	HOSE BIBB
V.T.R.	VENT THRU ROOF
V	VENT
C.O.P.	CLEANOUT PLUG
FCU	FAN COIL UNIT
F.D.	FLOOR DRAIN
C.O.	CLEANOUT
W.H.A.	WATER HAMMER ARRESTOR
DWG.	DRAWING
TYP.	TYPICAL
CONC.	CONCRETE



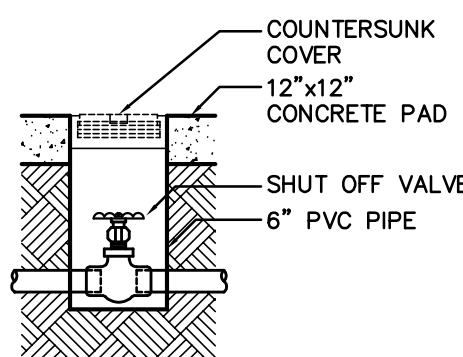
CLEANOUT DETAILS
NOT TO SCALE



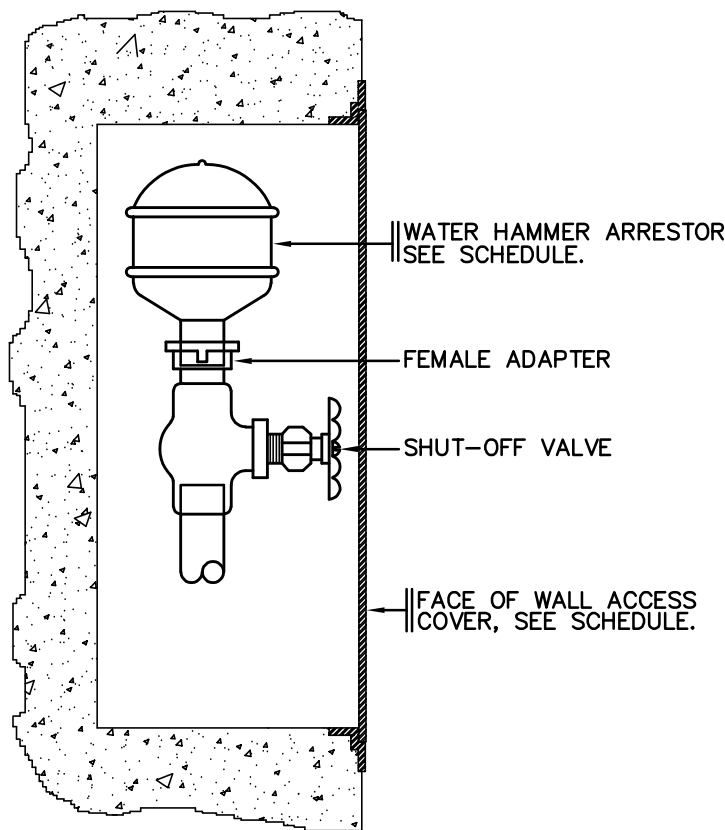
STACK VENT TERMINAL
INSTALLATION DETAIL
NOT TO SCALE



FLOOR TRAP PRIMING DETAIL
NOT TO SCALE



TYPICAL PVC VALVE BOX
NOT TO SCALE



WATER HAMMER ARRESTOR
NOT TO SCALE

PLUMBING FIXTURE SCHEDULE

DESIG-NATION	DESCRIPTIONS	UNIT WASTE OR SOIL	VENT SIZE	WATER SUPPLY COLD	HOT	REMARKS
P-1	WATER CLOSET	3"	2"	1/2"	-	SEE ARCHITECTURAL DWG'S FOR SPEC'S
P-2	LAVATORY	1-1/2"	1-1/4"	1/2"	-	SEE ARCHITECTURAL DWG'S FOR SPEC'S
FD	FLOOR DRAIN	AS INDICATED	-	-	-	SIMILAR TO JAY R. SMITH Fig. 2005

CLEANOUT SPECIFICATIONS

C.O. NO.	CATALOG NO.	MANUFACTURER	REMARKS
GCO	4020	J. R. SMITH	POLISHED BRONZE TOP
FCO	4031	J. R. SMITH	FACE-OF-WALL COVER
WCO	4472	J. R. SMITH	LESS COVER AND SCREW
PCO	4472	J. R. SMITH	LESS COVER AND SCREW

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E-mail: FJMac@fjm-eng.com

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LA PRESENTE CERTIFICACIÓN NO CONSTITUYE UNA RENUNCIA A CUALQUIER DERECHO ACCIÓN O DEFENSA LEGAL QUE ME ASISTA*

LOA

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T: 787.767.7337 F: 787.767.7636



SBMT:
XXXXXXXXX
CHIEF OF STUDIES AND DESIGNS
DATE
RCMD:
ROMEL PEDRAZA, PE
ASST. EXEC. DIR. ENG., CONST. & PLAN
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APP'D:
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EXECUTIVE DIRECTOR
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MPPA057 HUMACAO REGIONAL AIRPORT (HUC)
HUMACAO, PUERTO RICO

PLUMBING NOTES, DETAILS AND SCHEDULES

PRPA PROJ NO:
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P-2