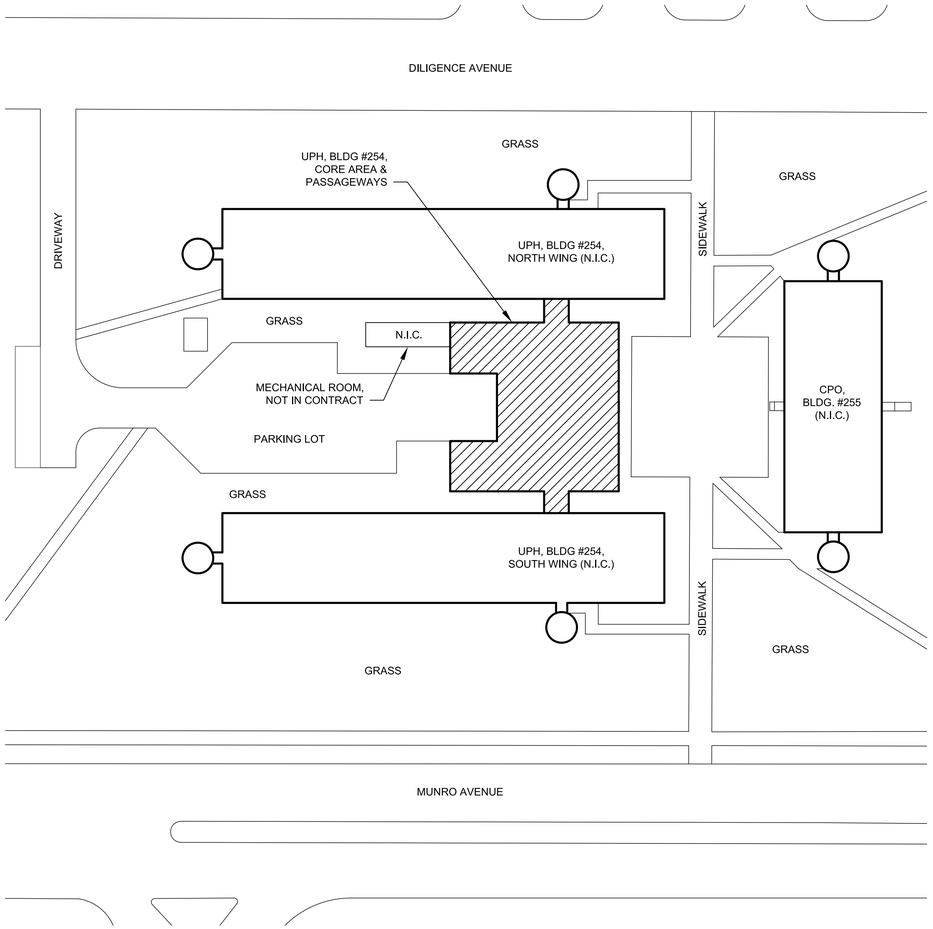
REPLACE UPH CORE ROOF AND HVAC UNITS



BUILDING #254, SITE PLAN

SCALE: 1/32" = 1'-0"

GENERAL NOTES:

1. THE INFORMATION PROVIDED ON THE CONTRACT DRAWINGS IS BELIEVED TO BE CORRECT. HOWEVER, THE CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION.
2. TWO PRE-BID SITE VISITS WILL BE SCHEDULED BY THE OWNER. THE FIRST PRE-BID SITE VISIT WILL BE HELD APPROXIMATELY TWO WEEKS AFTER THE RELEASE OF THE SOLICITATION. THE SECOND PRE-BID SITE VISIT WILL BE HELD APPROXIMATELY THREE WEEKS AFTER THE RELEASE OF THE SOLICITATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE PROJECT ENGINEER, STEVEN MCKAIG, FACILITIES ENGINEERING, DESIGN SECTION, AT 609-898-6408 OR STEVEN.C.MCKAIG@USCG.MIL TO OBTAIN THE SPECIFIC DATES, AS NO OTHER SITE VISITS WILL BE SCHEDULED.
3. CONTRACTOR SHALL PROVIDE A COMPLETE EPDM ROOF SYSTEM. ALL WORK SHALL COMPLY WITH THE ROOFING MANUFACTURER'S INSTALLATION REQUIREMENTS. IF MANUFACTURER DETAILS DIFFER FROM CONTRACT DRAWING DETAILS, FOLLOW MANUFACTURER DETAILS. ALL DEVIATIONS FROM THE MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS SHALL BE PRE-APPROVED BY THE MANUFACTURER AND SHALL NOT AFFECT THE ROOF WARRANTY.
4. NEW ROOF SYSTEM SHALL BE COVERED BY A MANUFACTURER 20-YEAR WARRANTY.
5. GOVERNMENT RESERVES THE RIGHT TO SALVAGE DEMOLISHED EXHAUST FANS DEPENDING ON CONDITION.
6. RESTORE ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION. BROKEN SECTIONS OF CONCRETE SIDEWALK SHALL BE REPLACED IN THEIR ENTIRETY (BETWEEN EXPANSION JOINTS). SIMPLY PATCHING SIDEWALK SECTIONS IS NOT ACCEPTABLE. RUTS LEFT BY TRUCKS OR EQUIPMENT SHALL BE GRADED SMOOTH. TOPSOIL SHALL BE ADDED AS NECESSARY TO BRING THE AFFECTED AREAS BACK TO THE ORIGINAL GRADE. PLANT PERENNIAL GRASS SEED IN ALL DISTURBED GRASS AREAS.

LEGEND

	EXHAUST FAN
RD	ROOF DRAIN, 3" CAST IRON
3" VENT	ROOF VENT, CAST IRON, SIZE INDICATED
	ROOF SLOPE DIRECTION
N.I.C.	NOT IN CONTRACT

DRAWING INDEX

SHEET NO.	DESCRIPTION
A/1	SITE PLAN
A/2	ROOF PLAN
A/3	ORIGINAL CONSTRUCTION ROOF SECTIONS
A/4	NEW ROOF SECTIONS
A/5	ROOF DETAILS
M/1	MECHANICAL WORK PLANS
M/2	MECHANICAL EQUIPMENT SCHEDULES
E/1	ELECTRICAL WORK PLANS

GRAPHICAL SCALE: 1/32" = 1'

0 8' 16' 24' 32' 48' 64' 96'

CONSULTANTS

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CAPE MAY

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1 MUNRO AVE.
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A/E PROJECT NO: CMS–1573
CAD FILE NAME:
DESIGNED BY: SCM
DRAWN BY: SCM
EDITED BY:
CHECKED BY:

SCALE: AS SHOWN PLOT SCALE:

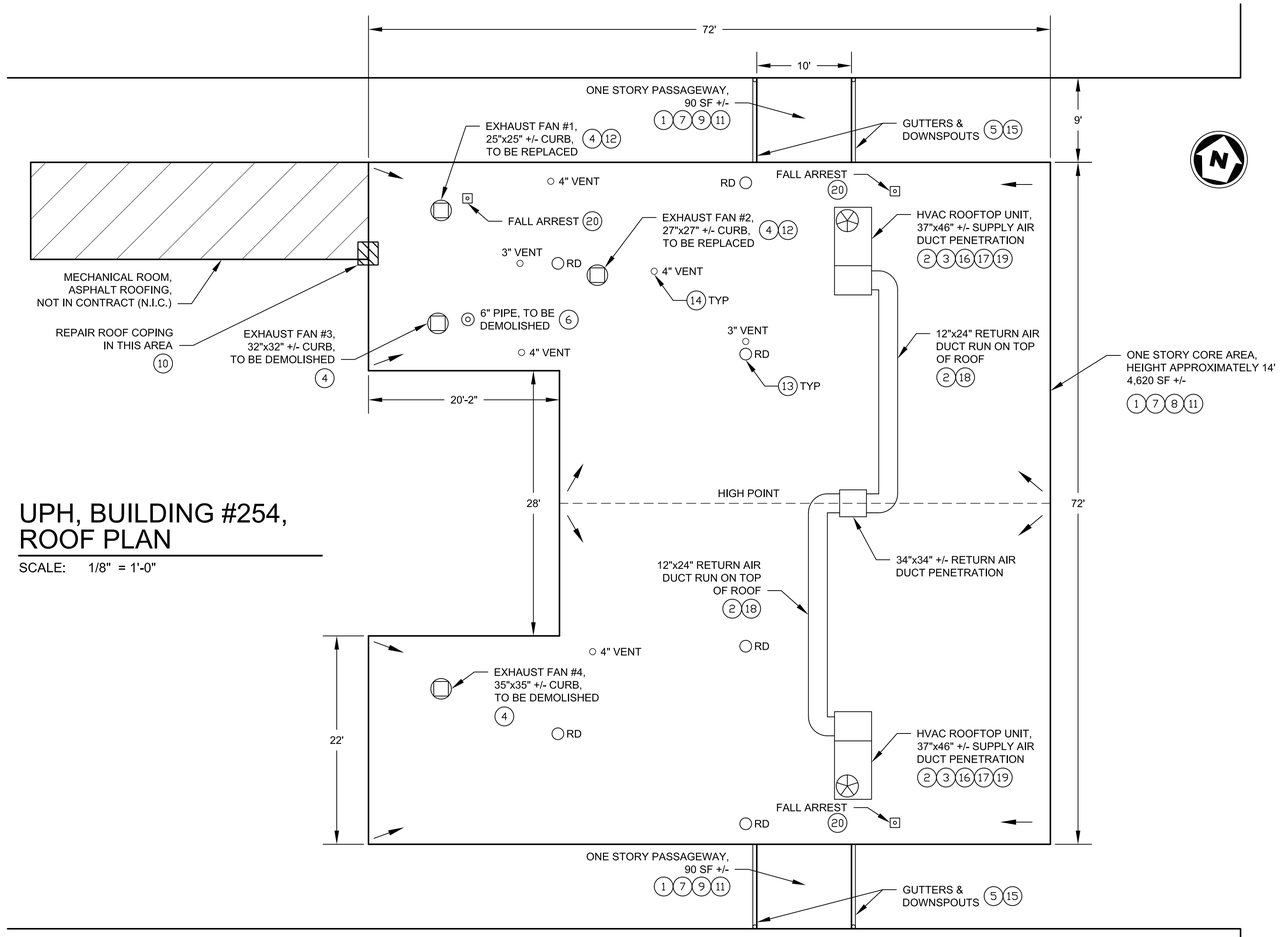
SHEET TITLE

REPLACE UPH CORE ROOF & HVAC
TRACEN
CAPE MAY NEW JERSEY
UPH, BUILDING #254
ARCHITECTURAL
SITE PLAN

PROJECT ENG. BRANCH CHIEF

APPROVING OFFICER 8/2/19 DATE

PROJECT NUMBER	DRAWING NUMBER
11368923	T–7102–AD
DISCIPLINE/SHT NO	SHEET 1 OF 8
A/1	



UPH, BUILDING #254, ROOF PLAN

SCALE: 1/8" = 1'-0"

CONSTRUCTION NOTES (#)

1. DEMOLISH EXISTING ROOFING DOWN TO CONCRETE STRUCTURAL DECK. EXISTING ROOFING CONSISTS OF SPRAY-ON URETHANE FOAM OVER BUILT-UP ROOFING OVER RIGID INSULATION. THE BUILT-UP ROOFING MATERIAL HAS BEEN TESTED AND DOES NOT CONTAIN ASBESTOS. REFER TO DETAILS.
2. DEMOLISH TWO EXISTING 5 TON ROOFTOP HVAC UNITS INCLUDING SUPPORTS AND CURBS. DEMOLISH ROOF MOUNTED RETURN AIR DUCTWORK AND ASSOCIATED CURBS.
3. THE EXISTING ELECTRIC FEEDERS AND FIRE ALARM CONTROL WIRING FOR THE ROOFTOP HVAC UNITS ARE RUN ON THE ROOF, BUT ARE NOT SHOWN ON THIS DRAWING. DEMOLISH EXISTING ELECTRIC FEEDERS AND CONTROL WIRING. PROVIDE NEW FEEDERS AND CONTROL WIRING RUN INSIDE THE BUILDING. PATCH HOLES IN ROOF AND SIDE WALL. REFER TO ELECTRICAL DRAWINGS FOR DETAILS.
4. DEMOLISH ALL FOUR EXISTING EXHAUST FANS. COVER ROOF OPENING WITH 1/4 INCH THICK GALVANIZED STEEL PLATE AT EXHAUST FAN LOCATIONS #3 & #4, ANCHOR PLATE TO CONCRETE DECK. REFER TO ELECTRICAL DRAWINGS FOR CIRCUIT DEMOLITION.
5. DEMOLISH EXISTING GUTTERS AND DOWNSPOUTS ON CORE PASSAGEWAYS. EXISTING GUTTERS ARE ONLY INSTALLED ON THE WEST SIDE OF THE PASSAGEWAYS. DEMOLISH ALUMINUM FASCIA / DRIP EDGE ON BOTH SIDES. THE TWO EXISTING CONCRETE SPLASH BLOCKS MAY BE REUSED.
6. DEMOLISH ONE ABANDONED 6" CAST IRON VENT PIPE. EXISTING PIPE IS CUT OFF JUST UNDER STRUCTURAL ROOF. PATCH HOLE IN ROOF.
7. PROVIDE A NEW FULLY ADHERED, ETHYLENE PROPYLENE DIENE MONOMER (EPDM) ROOF SYSTEM INCLUDING EPDM MEMBRANE, COVER BOARD, RIGID INSULATION, CANT STRIPS, CRICKETS, WOOD NAILERS, ETC. REFER TO DETAILS.
8. FOR CORE AREA, ROOF SYSTEM MANUFACTURER SHALL SUBMIT SHOP DRAWINGS SHOWING TAPERED INSULATION LAYOUT TO CREATE 1/8 INCH PER FOOT SLOPE (MINIMUM) TO ROOF DRAINS. RIGID INSULATION ON CORE AREA ROOF SHALL HAVE A MINIMUM THICKNESS OF TWO (2) INCHES. THE CORE AREA STRUCTURAL ROOF WAS BUILT WITH NO SLOPE.
9. THE STRUCTURAL CONCRETE DECK ON THE PASSAGEWAYS IS SLOPED AS SHOWN. THERE IS NO NEED TO CREATE ADDITIONAL PITCH USING TAPERED INSULATION. RIGID INSULATION ON THE PASSAGEWAYS SHALL BE ONE (1) INCH THICK.
10. THE EXISTING ASPHALT ROOFING MATERIAL AND ALUMINUM WALL CAP ON THE MECHANICAL ROOM ROOF OVERLAPS THE CORE ROOF PARAPET WALL. REMOVE EXISTING CAULK / PATCH IN AREA SHOWN AND REPAIR INTERFACE AT PARAPET WALL. IF NECESSARY, PROVIDE NEW FLASHING AND/OR ASPHALT ROOFING MATERIAL ALONG REMAINDER OF COMMON WALL FOR WEATHERPROOF INTERFACE BETWEEN EXISTING MECHANICAL ROOM ROOF AND NEW ROOF.
11. REPLACE EXISTING CAULK, FLASHING, COUNTER FLASHING, TERMINATION BARS, ETC. AROUND ENTIRE PERIMETER.
12. REPLACE EXISTING CURBS AND ALUMINUM FLASHING AT EXHAUST FAN LOCATIONS #1 & #2. PROVIDE GRAVITY DAMPERS MOUNTED IN CURBS. PROVIDE TWO NEW EXHAUST FANS AND CONNECT TO EXISTING ELECTRIC CIRCUITS. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS.
13. REPLACE EXISTING CAST IRON ROOF DRAIN BASKET STRAINERS AND EXTENSIONS. REPLACE ANY BROKEN ROOF DRAIN DECK CLAMPS. PROVIDE NEW MORTAR IN GAP BETWEEN CONCRETE ROOF AND DRAIN BASKET.
14. EXTEND ALL CAST IRON VENT PIPING AS NECESSARY SUCH THAT TOP OF VENT IS 12 INCHES ABOVE THE NEW FINISHED ROOF. SOME OF THE VENTS ALREADY HAVE EXTENSIONS WHICH MAY NEED TO BE REPLACED. PROVIDE NEW PREFORMED EPDM BOOTS.
15. PROVIDE NEW DARK BRONZE, SEAMLESS, 5" K, ALUMINUM GUTTERS AND 2"x3" DOWNSPOUTS. PROVIDE GUTTERS ON BOTH THE EAST AND WEST SIDES OF EACH PASSAGEWAY. PROVIDE NEW CONCRETE SPLASH BLOCKS. REFER TO DETAILS.
16. PROVIDE TWO NEW ROOFTOP HVAC UNITS. PROVIDE NEW CURBS CAPABLE OF SUPPORTING THE ROOFTOP UNITS. THE NEW CURB SHALL ENCOMPASS THE SUPPLY AIR DUCT. THE NEW CURB HEIGHT SHALL BE A MINIMUM OF 24" ABOVE THE NEW FINISHED ROOF. PROVIDE NEW AIR SUPPLY DUCT TO NEW ROOFTOP UNIT. PROVIDE NEW PVC CONDENSATE PIPING WITH TRAP AND RUN PIPING TO NEAREST ROOF DRAIN. PROVIDE RUBBER PIPING SUPPORTS SPECIFICALLY DESIGNED FOR THIS PURPOSE SPACED FOUR FEET O.C. REFER TO MECHANICAL DRAWINGS.
17. PROVIDE 4'x4' EPDM MATS / PADS IN FRONT OF EACH ACCESS PANEL(S) FOR EACH ROOFTOP UNIT FOR ADDED PROTECTION.
18. PROVIDE NEW ROOF MOUNTED RETURN AIR DUCTWORK AND CURB AT ROOF PENETRATION. PROVIDE DUCT SUPPORT SYSTEM THAT IS ACCEPTABLE TO THE EPDM ROOF MANUFACTURER. PROVIDE EPDM MATS / PADS UNDER DUCT SUPPORTS FOR ADDED PROTECTION.
19. PROVIDE NEW ELECTRICAL BRANCH CIRCUIT TO EACH ROOFTOP UNIT. PROVIDE NEW FIRE ALARM CONTROL WIRING TO EACH ROOFTOP UNIT. RUN NEW POWER AND FIRE ALARM WIRING INSIDE BUILDING. REFER TO ELECTRICAL DRAWINGS.
20. PROVIDE THREE NEW SAFETY FALL ARREST TIE-OFF POINTS. MOUNT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. THE TIE-OFF POINTS WILL BE MOUNTED TO A PARTIALLY HOLLOW CORE CONCRETE ROOF SLAB (SEE DRAWING A5). COORDINATE EXACT LOCATIONS WITH THE CONTRACTING OFFICER'S REPRESENTATIVE.

GENERAL NOTE:

CURB DIMENSIONS SHOWN ARE THE APPROXIMATE MEASUREMENTS FOR THE EXISTING BASE CURBS. SEVERAL EXISTING CURBS USE CURB ADAPTORS FOR THE ACTUAL EQUIPMENT. CONTRACTOR SHALL FIELD MEASURE ALL BASE CURBS AND CURB ADAPTORS AND PROVIDE PROPERLY SIZED BASE CURBS AND ADAPTORS AS REQUIRED.

GRAPHICAL SCALE: 1/8" = 1'

0 2" 4" 6" 8" 12" 16" 24"

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A/E PROJECT NO:	CMS-1573
CAD FILE NAME:	
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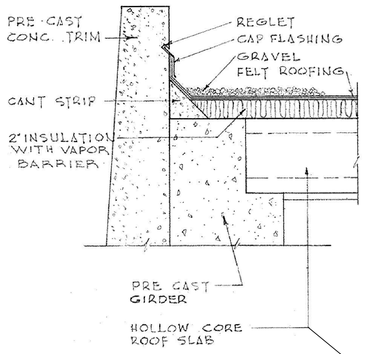
SCALE:	AS SHOWN PLOT SCALE:

SHEET TITLE

REPLACE UPH CORE ROOF & HVAC
TRACEN
CAPE MAY NEW JERSEY
UPH, BUILDING #254
ARCHITECTURAL
ROOF PLAN

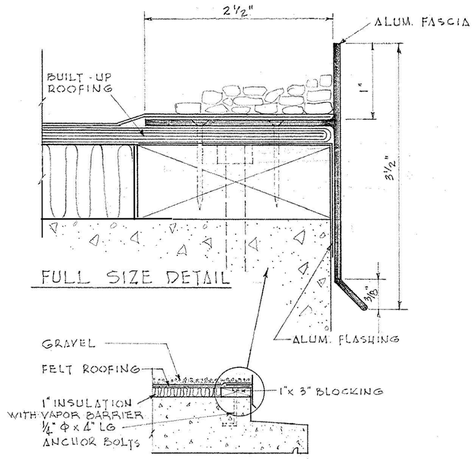
PROJECT ENG.	BRANCH CHIEF
APPROVING OFFICER	8/2/19 DATE

PROJECT NUMBER	DRAWING NUMBER
11368923	T-7103-AD
DISCIPLINE/SHT NO	SHEET 2 OF 8
A/2	



ORIGINAL UPH CORE ROOF SECTION

SCALE: NONE



PASSAGEWAY SECTION

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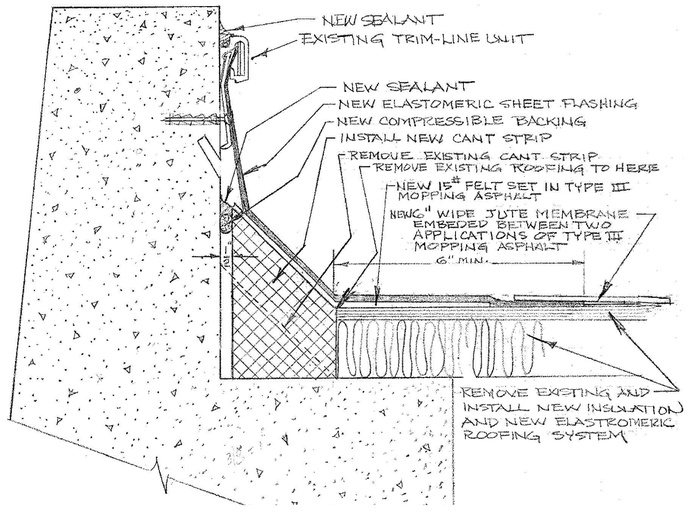

REVISED UPH CORE ROOF SECTION

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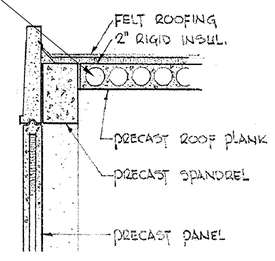
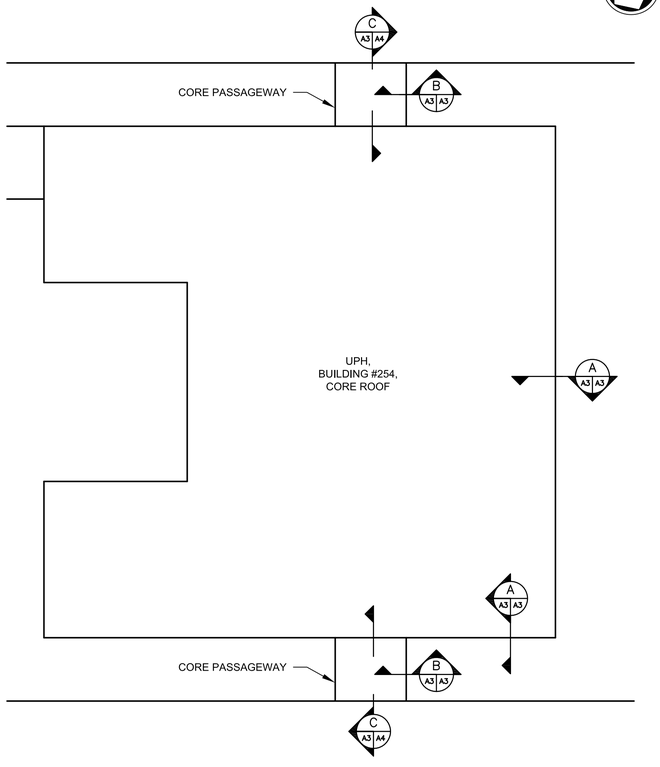


HOLLOW CORE ROOF

SCALE: NONE

GENERAL NOTES:

1. THE ROOF SECTIONS PROVIDED HERE ARE FOR INFORMATIONAL PURPOSES ONLY. THEY REPRESENT ORIGINAL CONSTRUCTIONS DETAILS AND SOME MINOR MODIFICATIONS. NONE OF THE SECTIONS SHOW THE EXISTING SPRAYED ON FOAM INSULATION THAT HAS BEEN APPLIED OVER THE BUILT-UP ROOFING. THESE SECTIONS DO NOT SHOW ALL THE DIFFERENT ROOF CONDITIONS. CONTRACTOR SHALL FIELD INVESTIGATE ALL EXISTING CONDITIONS.
2. WORK UNDER THIS CONTRACT WILL SUBSTANTIALLY CHANGE SECTIONS "A" AND "B". REFER TO DRAWING A4.



ROOF SECTION KEY

SCALE: NONE

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REPLACE UPH CORE ROOF & HVAC
TRACEN
CAPE MAY NEW JERSEY
UPH, BUILDING #254
ARCHITECTURAL
ORIGINAL ROOF SECTIONS

PROJECT ENG.	BRANCH CHIEF
APPROVING OFFICER	8/2/19 DATE

PROJECT NUMBER	DRAWING NUMBER
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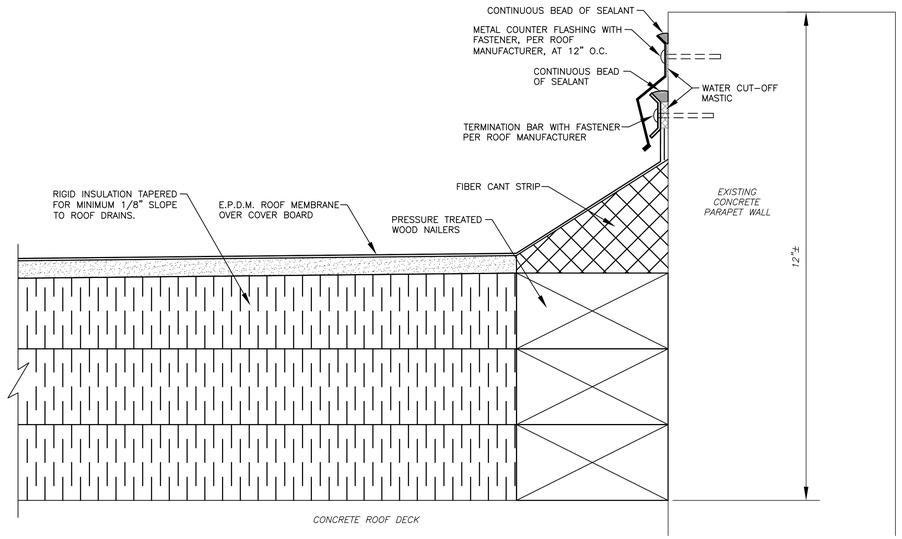
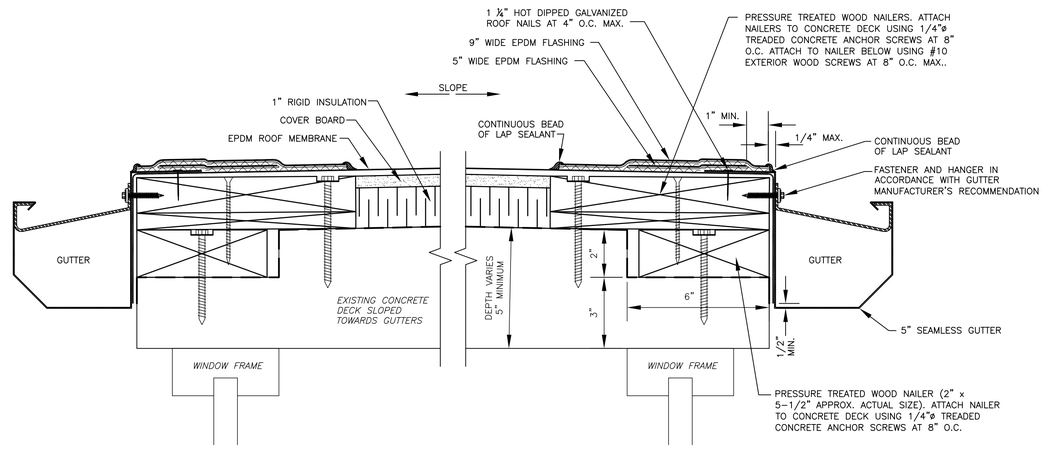
DISCIPLINE/SHT NO	SHEET 3 OF 8
A/3	



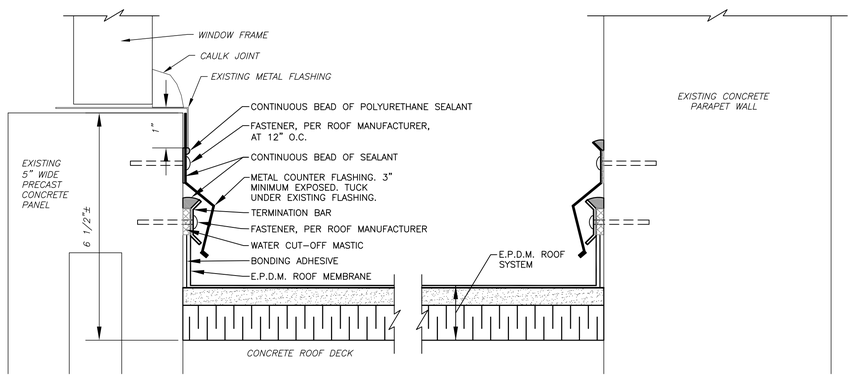
CORE ROOF AREA WITH TAPERED INSULATION

SCALE: NONE



CORE PASSAGEWAY EAST / WEST ROOF SECTION

SCALE: NONE



CORE PASSAGEWAY NORTH / SOUTH ROOF SECTION

C
A3 | A4

SCALE: NONE

GENERAL NOTES:

1. SEALANT SHALL BE AS RECOMMENDED BY ROOFING MANUFACTURER.
2. METAL COUNTER FLASHING SHALL BE 0.032" MIN. ALUMINUM, FORMED WITH HEMMED LOWER EDGE.
3. WATER CUT-OFF MASTIC SHALL BE HELD UNDER CONSTANT COMPRESSION.
4. TERMINATION BARS SHALL BE CUT AT THE INSIDE & OUTSIDE CORNERS. DO NOT BEND TERMINATION BARS AROUND CORNERS.
5. INSTALL TERMINATION BARS WITH 1/4" GAP BETWEEN SECTIONS.
6. TERMINATION BARS SHALL BE FASTENED WITHIN 1" MAX AT ALL SECTION ENDS.
7. ALL METAL SHALL BE IN ACCORDANCE WITH THE LATEST S.M.A.C.N.A. RECOMMENDATIONS.
8. REMOVE EXISTING WALL COATINGS AS REQUIRED TO PROVIDE AN ADEQUATE SURFACE FOR ADHESIVE.
9. ANCHOR GUTTER IN ACCORDANCE WITH SMACNA RECOMMENDATIONS AND GUTTER MANUFACTURER'S REQUIREMENTS.
10. GUTTERS SHOWN WITH INTEGRAL FLANGE. IF INTEGRAL FLANGE IS NOT PROVIDED, PROVIDE ALUMINUM DRIP EDGE THAT EXTENDS INTO GUTTER.
11. WOOD NAILERS SHALL BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LBS PER LINEAL FOOT MINIMUM IN ANY DIRECTION.

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SCALE: AS SHOWN	PLOT SCALE:

SHEET TITLE

REPLACE UPH CORE ROOF & HVAC TRACEN

CAPE MAY NEW JERSEY
UPH, BUILDING #254
ARCHITECTURAL
NEW ROOF SECTIONS

PROJECT ENG.	BRANCH CHIEF
APPROVING OFFICER	8/2/19 DATE

PROJECT NUMBER	DRAWING NUMBER
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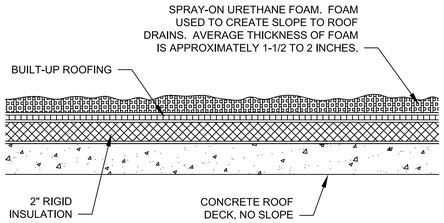
DISCIPLINE/SHT NO	
A/4	SHEET 4 OF 8



UPH CORE ROOF, EXISTING ROOF DETAIL

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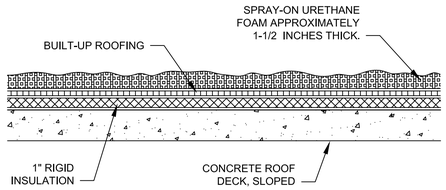

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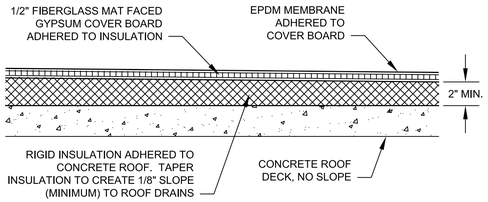

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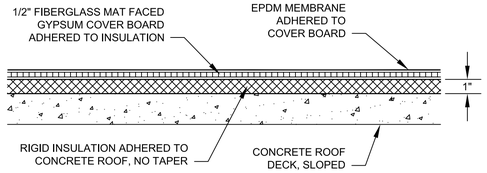

PASSAGEWAY ROOF, NEW ROOF DETAIL

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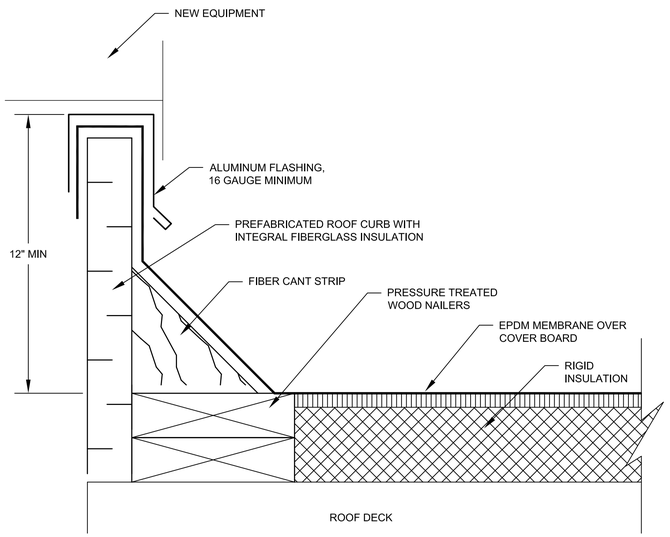

CURB DETAIL

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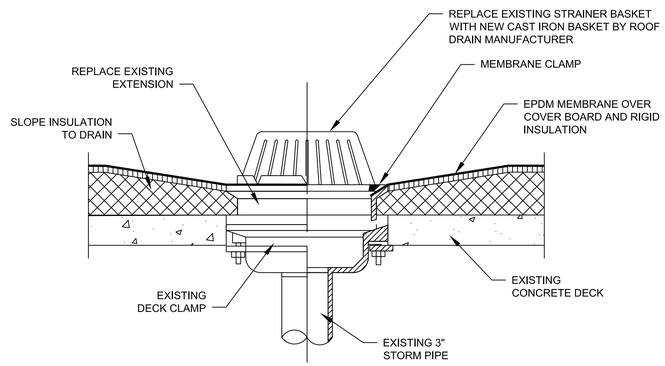

ROOF DRAIN DETAIL

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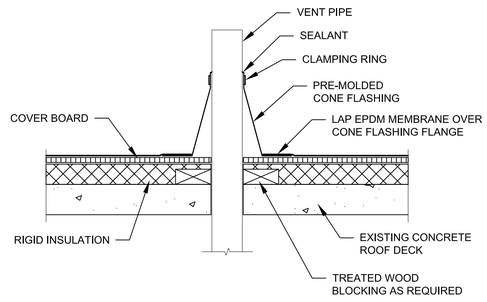

VENT PIPE DETAIL

SCALE: NONE

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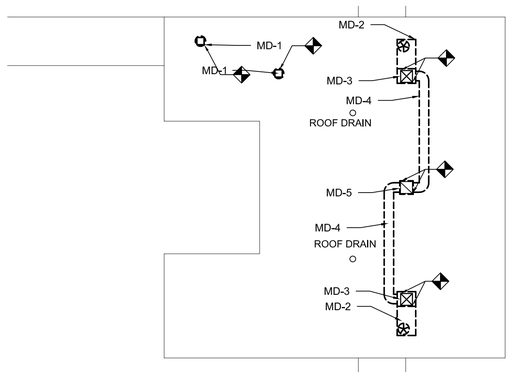
REPLACE UPH CORE ROOF & HVAC
TRACEN
CAPE MAY NEW JERSEY
UPH, BUILDING #254
ARCHITECTURAL
ROOF DETAILS

PROJECT ENG. | BRANCH CHIEF

APPROVING OFFICER | 8/2/19 DATE

PROJECT NUMBER	DRAWING NUMBER
11368923	T–7106–AD
DISCIPLINE/SHT NO	
A/5	SHEET 5 OF 8

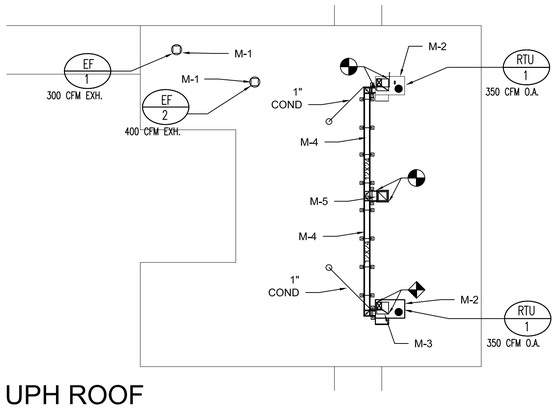


UPH ROOF DEMO PLAN

SCALE: 1/16"=1'-0"

MECHANICAL DEMOLITION NOTES-MD-#:

1. DEMOLISH EXISTING FAN AND ASSOCIATED ORIGINAL CURB (AND ADAPTERS) AND PREPARE OPENING FOR NEW CURB/FAN INSTALLATION. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL WORK REQUIRED AND PROPOSED DRAWINGS AND SCHEDULES FOR NEW WORK REQUIRED.
2. DEMOLISH EXISTING ROOF TOP UNIT (RTU) WITH HORIZONTAL DISCHARGE AND RETURN (ROOF / CURB MOUNTED SUPPLY AND RETURN PLENUM BOX), AND PREPARE ROOF FOR NEW RTU INSTALLATION. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL WORK REQUIRED AND PROPOSED DRAWINGS AND SCHEDULES FOR NEW WORK REQUIRED.
3. DEMOLISH EXISTING SUPPLY/RETURN PLENUM BOX AND CONNECTING DUCT BETWEEN EXISTING SUPPLY BOX AND DUCT DROP THROUGH 30 X 30 CORE OPENING THAT IS CONNECTED TO A 30X30 SUPPLY PLENUM BOX AND PREPARE PLENUM FOR NEW DUCT CONNECTION. FAN DOWN TO A SUPPLY BOX BELLOW ROOF IN THE AMOUNT NEEDED FOR SAFE INSTALLATION OF NEW CURB AND NEW DUCT CONNECTION. SEE PROPOSED DRAWINGS AND SCHEDULES FOR NEW WORK REQUIRED.
4. DEMOLISH EXISTING 24 X 12 ROOF SUPPORTED RETURN DUCT THAT CONNECTS TO A DUCT FROM OTHER RTU TO A COMMON PLENUM BOX THAT DROPS THROUGH EXISTING CURB WITH A 30X30 CORE ROOF OPENING. SEE ROOF DRAWINGS AND PROPOSED DRAWINGS FOR MORE INFO.
5. DEMOLISH EXISTING 30X30 RETURN VERTICAL DUCT SECTION FROM A 32 X 32, 6" DEEP RETURN PLENUM BOX AND CURB BELLOW ROOF IN THE AMOUNT NEEDED FOR NEW DUCT CONNECTION.
6. EXISTING 32X32, 12" HIGH SUPPLY PLENUM BOX WITH 32X32 SUPPLY DIFFUSER AND SUPPLY REGISTER ROUND TAKE-OFFS IS TO REMAIN AND TO BE PREPARED FOR NEW DUCT CONNECTION. SEE PROPOSED DRAWINGS FOR MORE INFO.
7. MAKE AN ADEQUATELY SIZED OPENING IN AN EXISTING BATHROOM DOOR IN ORDER TO INSTALL A PROPOSED METAL DOOR LOUVER. SEE PROPOSED DRAWINGS FOR MORE INFO.
8. DEMOLISH AN EXISTING RTU THERMOSTAT AND EXISTING THERMOSTAT BATHROOM DOOR ROVIDE A NEW FULLY ADHERED, ETHYLENE PROPYLENE DIENE MONOMER (EPDM) ROOF SYSTEM INCLUDING EPDM MEMBRANE, COVER BOARD, RIGID INSULATION, CANT STRIPS, CRICKETS, WOOD NAILERS, ETC. REFER TO DETAILS.

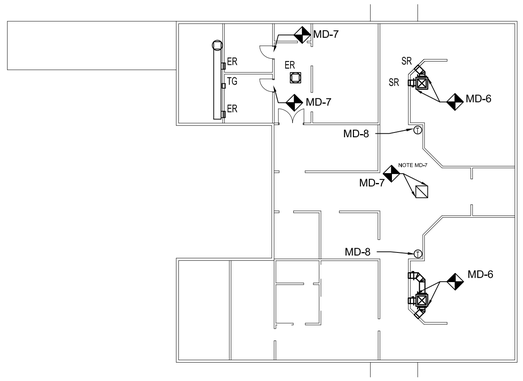


UPH ROOF NEW WORK PLAN

SCALE: 1/16"=1'-0"

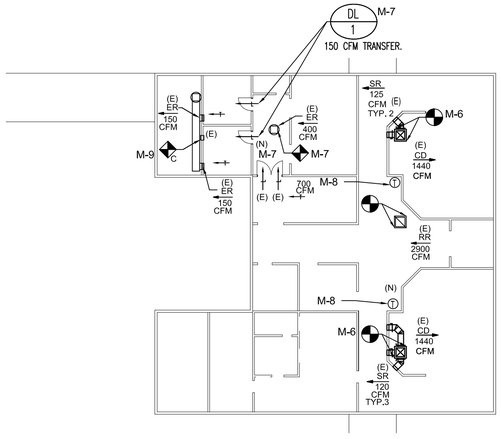
NEW WORK MECHANICAL NOTES-M-#:

1. PROVIDE NEW EXHAUST FAN AND NEW CUSTOM BUILT 12" HIGH ROOF CURB WITH INTERNAL BACKDRAFT DAMPER, WHICH BASE IS SIZED TO OVERLAP EXISTING ROOF OPENING AND CORE OPENING. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL WORK REQUIRED AND AND SCHEDULES FOR WORK REQUIRED.
2. PROVIDE NEW CONVERTIBLE ROOF TOP UNIT (RTU) WITH 24" HIGH INSULATED ROOF CURB THAT IS TO BE INSTALLED ATOP EXISTING 30X30 OPENING. UNIT IS TO HAVE A DOWNWARD SUPPLY DISCHARGE AND HORIZONTAL RETURN. PROVIDE A TRAP AND RUN 1" CONDENSATE DISCHARGE SLOPED TO ROOF DRAIN. INSULATE, PROTECT RETURN DUCTWORK TO THE UNIT. PROVIDE SUPPORT AS REQUIRED, SPECIFIED. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL WORK REQUIRED AND PROPOSED DRAWINGS AND SCHEDULES FOR NEW WORK REQUIRED.
3. PROVIDE A 20 X 13 $\frac{1}{2}$ TO 30 X 30 INSULATED TRANSITION FITTING AND CONNECT TO EXISTING SUPPLY DUCT BELLOW ROOF. RE-INSULATE ALL DUCTWORK CONNECTIONS BELLOW ROOF. PROVIDE DUCT BETWEEN RTU AND AN EXISTING DROP THROUGH 30 X 30 CORE ROOF CURB FAN DOWN TO A SUPPLY DUCT BELLOW ROOF.
4. PROVIDE NEW 12 X 24 RETURN DUCT AND CONNECT TO CUSTOM BUILT 22"X 22" INSULATED CURB EXTENSION BOX WHICH IS TO BE SET ATOP NEW CUSTOM BUILT 12" HIGH INSULATED, LINED ROOF CURB SIZED TO OVERLAP EXISTING 30X30 ROOF OPENING.
5. PROVIDE NEW 30X30 DUCT DROP THROUGH EXISTIBG 30X30 MASONRY OPENING AND CONNNECT TO EXISTING RETURN PLENUM.
6. CONNECT NEW 30 X30 INSULATED SUPPLY DUCT TO EXISTING 32X32, 12" HIGH SUPPLY PLENUM BOX AND 32X32 SUPPLY DIFFUSER .
7. INSTALL NEW 16X16 DOOR LOUVER WITH FRAME INTO EXISTING BATHROOM DOOR.
8. INSTALL NEW RTU PROGRAMMABLE THERMOSTATIC SENSOR AND INTERLOCK WITH NEW EF-1 AND EF-2.L PASSAGEWAYS IS SLOPED AS SHOWN. THERE IS NO NEED TO CREATE ADDITIONAL PITCH USING TAPERED INSULATION. RIGID INSULATION ON THE STAIRWELLS AND PASSAGEWAYS SHALL BE ONE (1) INCH THICK.
9. CAP (CLOSE) EXISTING TRANSFER GRILLE FROM MECHANICAL ROOM.



UPH DEMO PLAN

SCALE: 1/16"=1'-0"



UPH NEW WORK PLAN

SCALE: 1/16"=1'-0"

LEGEND

- POINT OF CONNECTION
- POINT IF DEMOLITION
- POINT IF DEMOLITION (CAP)
- IN DOOR LOUVER
- AIR TRANSFER
- CLEANOUT
- TO BE DEMOLISHED
- EQUIPMENT TAG WITH BALANCING INFO (RTU 1 — 300 CFM O.A.)

CONSULTANTS

U. S. COAST GUARD TRAINING CENTER CAPE MAY

USCG, TRACEN CAPE MAY
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ISSUE

MARK	DATE	DESCRIPTION

A/E PROJECT NO: CMS-1573
CAD FILE NAME:
DESIGNED BY:
DRAWN BY:
EDITED BY:
CHECKED BY:

SCALE: AS SHOWN PLOT SCALE:

SHEET TITLE

REPLACE UPH CORE ROOF & HVAC TRACEN
CAPE MAY NEW JERSEY
BUILDING #254
MECHANICAL
ROOF AND FLOOR PLANS

PROJECT ENG. | BRANCH CHIEF
APPROVING OFFICER | 8/2/19 DATE

PROJECT NUMBER: 11368923
DRAWING NUMBER: T-7107-MD
DISCIPLINE/SHT NO: M/1
SHEET 6 OF 8

ROOF TOP UNIT (HEAT PUMP) SCHEDULE

NO.	SERVICE	TYPE	TOTAL SUPPLY CFM	TOTAL RETURN CFM	MIN. O.A. CFM	HP COOLING DATA		HP HEATING DATA	SUPPLY FAN DATA *				EM. EL. HEAT	ELECTRICAL SERVICE					DIMENSIONAL DATA			REMARKS
						TOTAL MBH (MIN.)	SENSIBLE MBH	MBH (MIN.)	TYPE	E.S.P. (IN. W.G.)	HP	RPM	KW	VOLT	PHASE	Hz	MCA AMPS	BREAKER SIZE	L X W X H (INCHES)	UNIT WEIGHT (LBS)	CURB (INCHES)	
RTU-1	SEE DRAWINGS	DIRECT DRIVEN DX PACKAGED	1800	1450	350	60	38	60.0	FC	0.4	3/4	757	5.0	208	3	60	53	60	74+ X 46+ X 41+	850+CURB	24	PACKAGED HIGH EFFICIENCY HEAT PUMP ROOFTOP UNIT WITH EMERGENCY EL. HEATER 1,2,3

1. PROVIDE SINGLE POINT DISCONNECT SWITCH (KIT) WITH THROUGH THE CURB ELECTRICAL CONNECTIONS AND POWERED CONVENIENCE OUTLET, UNIT WITH HORIZONTAL DUCTED RETURN, ENTHALPY ECONOMIZER W/ BAROMETRIC RELIEF .
2. PROVIDE INTERNALY LINKED 24 V ELECTRONIC ACTUATED DAMPERS. PROVIDE NECESSARY TRANSFORMERS, CONDUIT AND INTERLOCK UNIT WITH ASSOCIATED FANS , P'ROVIDE STANDALONE VENTILATION PROGRAMMABLE THERMOSTATIC CONTROLLER COMPATIBLE WITH BACNET PROTOCOL..
3. COORDINATE UNIT INSTALLATION WITH EXISTING FIRST FLOOR CEILING CLEARANCES.

DOOR LOUVER SCHEDULE

DL #

NO.	SERVICE	DOOR TYPE	CFM	NOMINAL SIZE	MAX P. D. ("W G.)	PERFORMANCE		REMARKS
						FRAME	COLOR	
1	BATHROOM	FIELD VERIFY	150	16" x 16"	0. 06	YES	BROWN/ / BRONZE	1

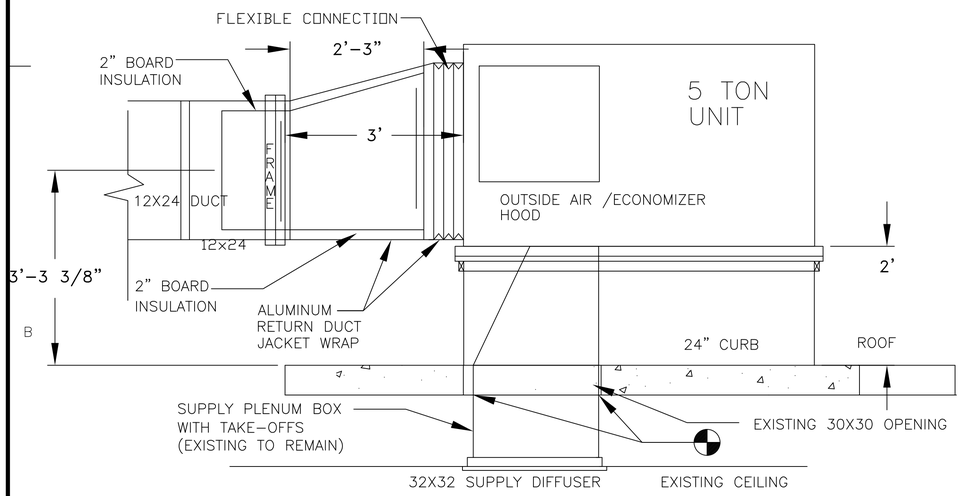
1. COORDINATE DRILLING, LOUVER DEPTH, FRAME, CAULKING AND SUPPORT WITH DOOR WIDTH.

EXHAUST FAN SCHEDULE

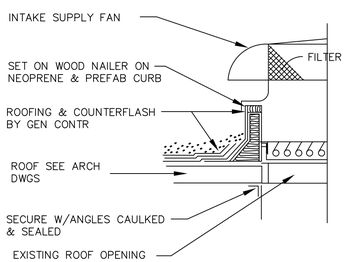
EF #

TAG	LOCATION	TYPE	FAN				MOTOR (PREMIUM EFFICIENCY W/ TEFC FOR OVER 1 HP)					FACTORY MOUNTED DISCONNECT	TYPE	CURB	DIMENSIONS (WXLXH)	REMARKS:
			CFM	E.S.P.	RPM	SONES	BHP	MHP	FLA	VOLTAGE	ENERGY STAR					
EF - 1	SEE PLANS	ROOF CENTRIFUGAL EXHAUST	300	0 .25"	1100	2.5	0 . 15	1/8	.43	120/1Ø/60	YES	YES	DIRECT DRIVE	CUSTOM	28 X 18 X 14	1
EF - 2	SEE PLANS	ROOF CENTRIFUGAL EXHAUST	400	0 .1"	900	2.5	0 . 15	1/8	.43	120/1Ø/60	YES	YES	DIRECT DRIVE	CUSTOM	28 X 18 X 14	1

1. PROVIDE CUSTOM MADE ROOF 12" HIGH CURB/ADAPTER THAT WILL OVERLAP EXISTING 30X24 ROOF OPENING AND TRANSIT TO ROOF FAN OPENING. PROVIDE VARIABLE SPEED CONTROLLER.
2. PROVIDE DISCONNECT & MOTOR STARTER, GRAVITY BACKDRAFT DAMPER, DUCT ADAPTER AND INTERLOCK WITH ASSOCIATED FCU AND THERMOSTATIC CONTOLLER. PROVIDE VARIABLE SPEED CONTROLLER,

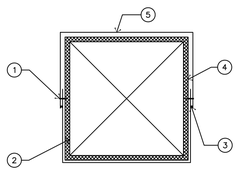


ROOF TOP UNIT INSTALLATION DETAIL



DUCT ROOF TERMINAL

NOT TO SCALE

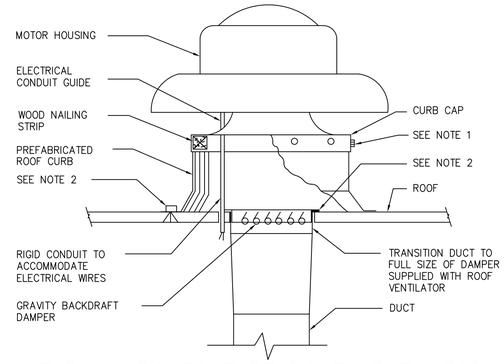


LEGEND:
1. 1-1/2" SHEETMETAL SCREWS @ 6" O.C.
2. SHEETMETAL DUCTWORK PER SPECIFICATIONS.
3. SEAL WATERTIGHT WITH WATERPROOF SILICONE.
4. 2" DUCTBOARD.
5. 26 GAUGE GALVANIZEDOR ALUMINUM WRAP

NOTES:
1. COORDINATE ROOF CURB SIZING WITH INSULATION ROOF DUCT DROPS THROUGH EXISTING ROOF OPENINGS.
2. CAULK AND SEAL ALL SHEETMETAL CONNECTION S AND DROPS THROUGH SHEETMETAL DUCTWORK PER SPECIFICATIONS.
3.

ROOF MOUNTED DUCTWORK

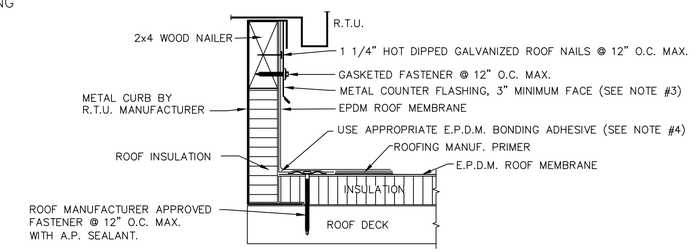
NOT TO SCALE



TYPICAL POWER TYPE ROOF VENTILATOR

NOT TO SCALE

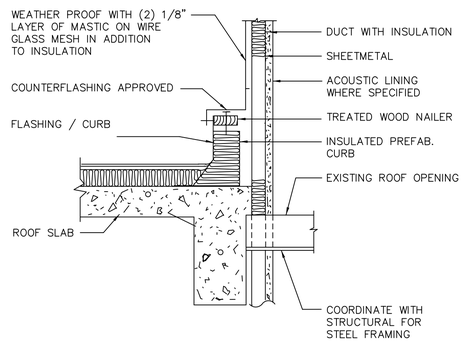
NOTES:
1. SECURE CURB CAP TO WOOD NAILING STRIP WITH 3/8" (10 MM) CADMIUM PLATED LAG BOLTS NOT OVER 12" (300 MM) ON CENTER.
2. SECURE ROOF CURB, DUCTWORK AND DAMPER TO ROOF WITH EXPANSION BOLTS (CONCRETE ROOF) OR RUST RESISTANT BOLTS (METAL DECK AND BAR JOIST ROOF).
3. SIZE OF DUCT THROUGH ROOF SHALL NOT BE LARGER THAN CURB SUPPLIED WITH ROOF VENTILATOR.
4. RUN ELECTRICAL LINES THROUGH CLEARANCE HOLE PROVIDED IN GRAVITY DAMPER,



NOTES:
1. ALL MATERIALS SHALL COMPATIBLE WITH ROOF MANUFACTURER'S ROOFING PRODUCTS. MATERIALS AND CONSTRUCTION METHODS USED SHALL NOT VOID ROOFING MANUFACTURER'S WARRANTY. REFER TO MANUFACTURER'S APPLICATION MANUAL FOR MOST CURRENT INFORMATION.
2. NAILING AND METAL COUNTER FLASHING ARE NOT REQUIRED IF MEMBRANE IS RUN UP AND COVER CURB WALL PRIOR TO INSTALLATION OF ROOFTOP UNIT (R.T.U.).
3. METAL COUNTER FLASHING SHALL BE 24 GAUGE PRE-FINISHED STEEL OR .032" MIN. ALUMINUM FORMED WITH HEMMED LOWER EDGE MOUNTED TIGHTLY TO UNDERSIDE OF MECHANICAL UNIT.
4. BONDING ADHESIVE REQUIRED BETWEEN MEMBRANE AND INSULATIONS FOR FULLY ADHERED SYSTEMS. USE APPROPRIATE E.P.D.M. BONDING ADHESIVE
5. INSTALL METAL WORK IN ACCORDANCE WITH CURRENT SMACNA RECOMMENDATIONS.

ROOFING TERMINATION AT ROOFTOP UNIT

NOT TO SCALE



DUCT PENETRATION THRU ROOF

NOT TO SCALE

CONSULTANTS

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MARK	DATE	DESCRIPTION

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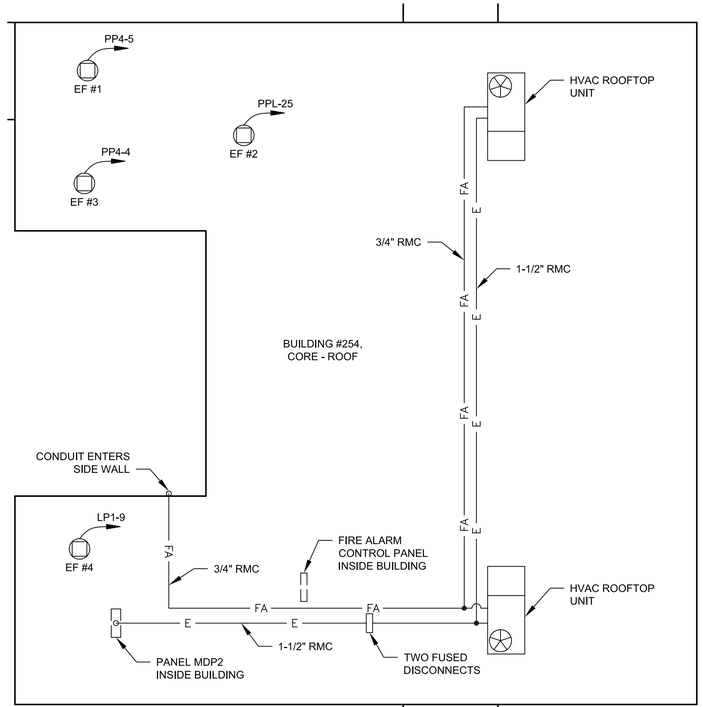
SHEET TITLE

REPLACE UPH CORE ROOF & HVAC
TRACEN
CAPE MAY NEW JERSEY
BUILDING #254
MECHANICAL
SCHEDULES & DETAILS

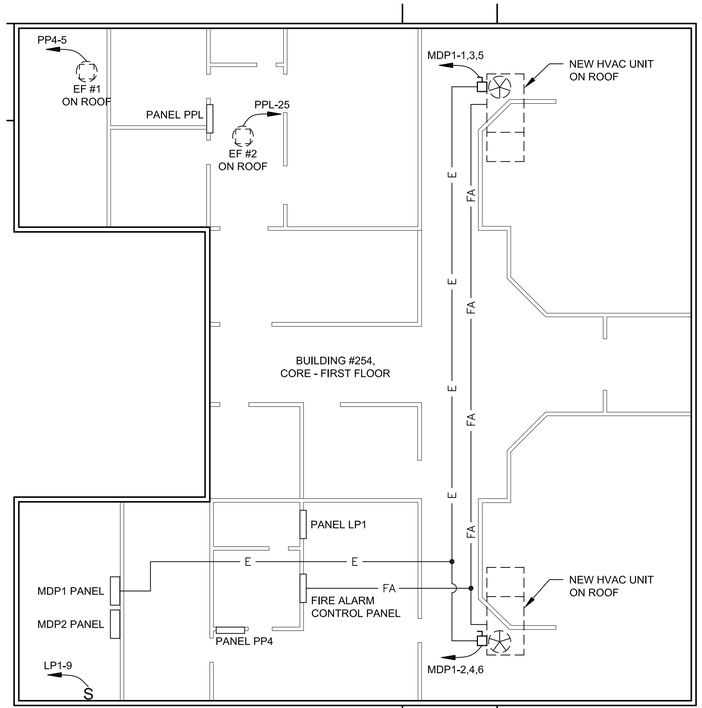
PROJECT ENG.	BRANCH CHIEF
APPROVING OFFICER	8/2/19 DATE

PROJECT NUMBER	DRAWING NUMBER
11368923	T-7108-MD
DISCIPLINE/SHT NO	
M/2	SHEET 7 OF 8



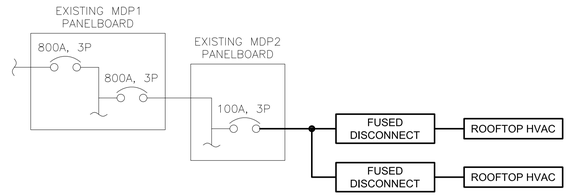
ELECTRICAL DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



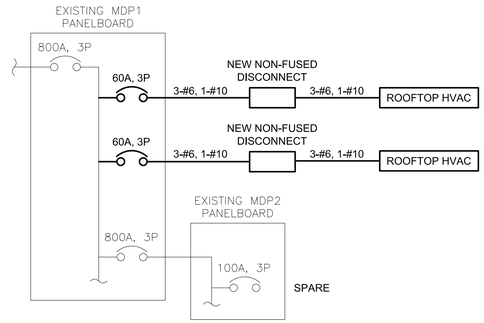
ELECTRICAL NEW WORK PLAN

SCALE: 1/8" = 1'-0"



EXISTING ONE-LINE

SCALE: NONE



NEW ONE-LINE

SCALE: NONE

DEMOLITION NOTES:

1. DEMOLISH TWO EXISTING ROOF MOUNTED, FUSED DISCONNECTS AND STRUT BASED SUPPORTS.
2. DEMOLISH ELECTRICAL RIGID METAL CONDUIT (RMC) AND WIRE BACK TO PANEL MDP-2. PATCH HOLE IN ROOF AND PROVIDE CAP FOR HOLE IN PANEL.
3. DEMOLISH FIRE ALARM RIGID METAL CONDUIT AND CONTROL WIRING BACK TO FIRE ALARM CONTROL PANEL. PATCH HOLE IN SIDE WALL TO MATCH EXISTING.
4. FOR EXHAUST FAN #3, DEMOLISH MC CABLE & WIRE BACK TO PANEL. ABANDONED EMT CONDUIT MAY REMAIN. DEMOLISH FAN SWITCH AND THERMOSTAT. PROVIDE BLANK COVER PLATE ON SWITCH BOX.
5. FOR EXHAUST FAN #4, DEMOLISH MC CABLE & WIRE BACK TO EXISTING LIGHT SWITCH. ABANDONED EMT CONDUIT MAY REMAIN. DEMOLISH FAN SWITCH AND THERMOSTAT. PROVIDE NEW COVER PLATE FOR LIGHT SWITCH.

POWER OUTAGE NOTE:

COORDINATE BUILDING POWER OUTAGE WITH THE CONTRACTING OFFICER'S REPRESENTATIVE (COR). POWER OUTAGE SHALL BE LIMITED TO TWO (2) HOURS AND MAY BE CONDUCTED DURING NORMAL WORKING HOURS.

GENERAL NOTES:

1. REFER TO MECHANICAL DRAWINGS FOR ALL CONTROL WIRING.
2. CIRCUIT BREAKER AND WIRE SIZES GIVEN ON THE ELECTRICAL DRAWINGS ARE COORDINATED WITH THE BASIS OF DESIGN HVAC EQUIPMENT. IF THE ACTUAL INSTALLED HVAC EQUIPMENT DIFFERS FROM THE BASIS OF DESIGN EQUIPMENT, THE CONTRACTOR SHALL INSTALL THE CORRECT SIZE CIRCUIT BREAKERS AND WIRE AS NECESSARY TO MEET THE LATEST NEC REQUIREMENTS AT NO ADDITIONAL COST TO THE GOVERNMENT. COORDINATE FINAL POWER REQUIREMENTS WITH MECHANICAL CONTRACTOR.
3. THE BASIS OF DESIGN HVAC EQUIPMENT INCLUDES MANUFACTURER PROVIDED DISCONNECT SWITCHES, THERMAL OVERLOADS, AND CONVENIENCE OUTLETS AS PART OF A PACKAGED UNIT. THEREFORE, THIS EQUIPMENT IS NOT SPECIFICALLY CALLED OUT ON THESE DRAWINGS. IF THE ACTUAL INSTALLED HVAC EQUIPMENT DOES NOT INCLUDE THESE FEATURES, THE CONTRACTOR SHALL PROVIDE THEM AT NO ADDITIONAL COST TO THE GOVERNMENT.
4. POWER TO THE BUILDING IS 3 PHASE, 4 WIRE, 208/120V.
5. PROVIDE SHORT SECTIONS OF LIQUIDTIGHT FLEXIBLE METAL CONDUIT FOR FINAL CONNECTIONS TO ALL MOTOR LOADS.

NEW WORK NOTES:

1. THE EXISTING CUTLER-HAMMER POW-R-LINE C, TYPE PRL4, "MDP1" PANELBOARD HAS SPACE FOR ADDITIONAL CIRCUIT BREAKERS, BUT IT DOES NOT HAVE THE BUS CONNECTIONS IN PLACE. PROVIDE TWO NEW 240V, 60A, 22 KAIC, 3-POLE, CIRCUIT BREAKERS AND BUS CONNECTOR KITS. REPLACE EXISTING BLANK BUS COVER WITH WITH ONE FOR TWO CIRCUIT BREAKERS.
2. NON-FUSED DISCONNECTS ARE SPECIFIED TO BE PROVIDED WITH THE ROOFTOP HVAC UNITS DIRECTLY FROM THE MANUFACTURER. IF NOT PROVIDED, ELECTRICAL CONTRACTOR SHALL PROVIDE NEMA 4X, NON-METALIC, 60A, 3-POLE, NON-FUSED DISCONNECTS MOUNTED ON HVAC UNITS.
3. PROVIDE NEW EMT CONDUIT AND POWER WIRE FROM NEW CIRCUIT BREAKERS TO ROOFTOP HVAC UNITS. PROVIDE NEW EMT CONDUIT AND CONTROL WIRE FROM FIRE ALARM CONTROL PANEL RELAY TO ROOFTOP HVAC UNITS. RUN NEW CONDUIT INSIDE BUILDING ABOVE SUSPENDED ACOUSTICAL TILE CEILING. THERE IS A 6 INCH HORIZONTAL GAP BETWEEN ALL WALLS AND THE EDGE OF THE EXISTING SUSPENDED CEILING. PAINT ALL EXPOSED CONDUIT AND HANGERS BLACK. ROUTE NEW CONDUIT THROUGH VOIDS IN NEW ROOF CURBS. IF THIS IS NOT POSSIBLE, CORE BORE STRUCTURAL ROOF FOR POWER AND CONTROL WIRING.
4. CONNECT CONTROL WIRING SUCH THAT FIRE ALARM CONTROL PANEL SHUTS DOWN BOTH ROOFTOP HVAC UNITS UPON ACTIVATION OF ONE RELAY. ROOFTOP HVAC UNITS SHALL AUTOMATICALLY RE-ENERGIZE UPON DEACTIVATION OF RELAY.
5. FOR EXHAUST FANS #1 & #2, CONNECT NEW EXHAUST FANS TO EXISTING CIRCUITS. IF NECESSARY, EXTEND EXISTING CIRCUIT FROM JUNCTION BOX INSIDE BUILDING USING LIQUIDTIGHT FLEXIBLE METAL CONDUIT AND THHN/THWN WIRE.

LEGEND

MDP1–1,3,5	HOMERUN, PANEL AND CIRCUIT # INDICATED
	DISCONNECT SWITCH, NON–FUSED
EF#2	EXHAUST FAN, # INDICATED
S	TOGGLE SWITCH
E	ELECTRIC LINE
FA	FIRE ALARM LINE

GRAPHICAL SCALE: 1/8" = 1'

0 2' 4' 6' 8' 12' 16' 24'

CONSULTANTS

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CAPE MAY

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REPLACE UPH CORE ROOF & HVAC TRACEN
CAPE MAY NEW JERSEY
UPH, BUILDING #254
ELECTRICAL
DEMO & NEW WORK PLANS

PROJECT ENG. BRANCH CHIEF

APPROVING OFFICER 8/2/19 DATE

PROJECT NUMBER 11368923
DRAWING NUMBER T–7109–ED
DISCIPLINE/SHT NO E/1
SHEET 8 OF 8