IMDOF2 9	c ABBRE\	/IATIONS				
SYMBOL	ABBREVIATION		SYMBOL	ABBREVIATION	DESCRIPTION	SYMBOL
	AD	ACCESS DOOR	→ M		GLOBE VALVE	\$1W28
	AFF	ABOVE FINISHED FLOOR	<del>-</del> -			
_	AHC	ABOVE HUNG CEILING	G—		TEE DOWN	
_ 				_	ELBOW DOWN	\$ 6x8
<u>-</u>	AP	ACCESS PANEL		_	TEE UP	CECT
	BDD	BACKDRAFT DAMPER	<u> </u>	_	ELBOW UP	SECT# DWG#
_	BMS	BUILDING MANAGEMENT SYSTEM	$\triangleright$	_	CONCENTRIC REDUCER	—— CD ·
_	ВНР	BRAKE HORSEPOWER	P	_	ECCENTRIC REDUCER	—— HWS -
_	BTU	BRITISH THERMAL UNIT	A	_	OS&Y GATE VALVE	HWR
_	CFM	CUBIC FEET PER MINUTE	=	_	PIPE GUIDE	—— RS ·
_	Q.	CENTERLINE	×	_	PIPE ANCHOR	—— RL
_	DB	DRY BULB TEMPERATURE	<del>                                      </del>	_	STRAINER	—— НG ·
_	DDC	DIRECT DIGITAL CONTROL	U	_	BASKET STRAINER	—— CW -
_	DIA. OR Ø	DIAMETER	Å	_	PRESSURE REDUCING	—— PD
_	DX	DIRECT EXPANSION	-	_	FLOW ARROW	
			<u>d</u>	_	BUTTERFLY	
	EA	EXHAUST AIR	101		BALANCING VALVE	
_	EAT	ENTERING AIR TEMPERATURE		_		
_	EL	ELEVATION	H	_	MANUAL AIR VENT	
_	ER	EXHAUST REGISTER	<u></u>	_	AUTO AIR VENT	
_	ESP	EXTERNAL STATIC PRESSURE	<b>\$</b>	_	SOLENOID VALVE	
_	EWT	ENTERING WATER TEMPERATURE	M ©1	_	MOTORIZED VALVE	
_	FPM	FEET PER MINUTE	N.	_	ANGLE GLOBE VALVE	
_	FPS	FEET PER SECOND	丛	_	ANGLE GATE VALVE	
_	FTR	FINNED TUBE RADIATION	Z.	_	T&P RELIEF VALVE	
_	GPM	GALLONS PER MINUTE		_	FILTER DRYER	
_	HP	HORSE POWER		_	FILTER	
_	LAT	LEAVING AIR TEMPERATURE	⊗	_	FLOAT AND THERMOSTATIC TRAP	
	LF	LINEAR FEET	F	_	FLOAT TRAP	
			•		BALL VALVE	
<del>-</del>	LWT	LEAVING WATER TEMPERATURE		_		
_	MBH	1000 BRITISH THERMAL UNITS PER HOUR	Ø +	_	PRESSURE GAGE	
_	MER	MECHANICAL EQUIPMENT ROOM		_	THERMOMETER	
_	NC	NORMALLY CLOSED	<u> </u>	_	CHECK VALVE	
_	NIC	NOT IN CONTRACT	ı ı	_	UNION	
_	NO	NORMALLY OPEN		EX.	EXISTING TO REMAIN	
_	OAI	OUTSIDE AIR INTAKE		REL.	REMOVE AND RELOCATE	
_	PSI	POUNDS PER SQUARE INCH		NEW	NEW WORK	
_	RA	RETURN AIR		DEM.	EXISTING TO BE REMOVED	
_	RPM	REVOLUTIONS PER MINUTE	(T)	_	TEMPERATURE SENSOR	
_	SA	SUPPLY AIR	$\oplus$	_	HUMIDISTAT	
	SP	STATIC PRESSURE	M	_	MOTORIZED DAMPER	
			(S)			
_	TD	TRANSFER DUCT		_	SMOKE DETECTOR	
_	TDH	TOTAL CTATIC PRESSURE	<b>→</b> √-	_	AIR INTO REGISTER	
_	TSP	TOTAL STATIC PRESSURE	<u>\$</u>	_	SPEED CONTROLLER	
_	TYP.	TYPICAL	•	_	POINT OF CONNECTION DISCONNECTION	
_	U.O.N.	UNLESS OTHERWISE NOTED	OR 🗵	SR	SUPPLY REGISTER	
_	WB	WET BULB TEMPERATURE	- <b>√-</b> OR	RR	RETURN REGISTER	
_	WG	INCHES OF WATER GAUGE		UH	UNIT HEATER	
_	WMS	WIRE MESH SCREEN		CUH	CABINET UNIT HEATER	
	_	3-WAY VALVE		_	PUMP	
	_	FLEXIBLE CONNECTION		CD	CEILING DIFFUSER	
S.	_	2-WAY VALVE		LD	LINEAR DIFFUSER	
	_	PLUG VALVE		RG	RETURN GRILLE	
	_	LOCK SHIELD VALVE		VAV	VAV BOX	
oxdot	_	GATE VALVE		VAV	VAV BOX WITH REHEAT	

#### DEMOLITION NOTES

ABBREVIATION DESCRIPTION

FIRE DAMPER W/ ACCESS DOOR

DUCT SIZE — 1ST FIGURE IS SIDE SHOWN

VOLUME DAMPER

SECTION CALLOUT

CONDENSATE DRAIN

HOT WATER SUPPLY

HOT WATER RETURN

REFRIGERANT SUCTION

COLD WATER MAKE UP

PUMP DISCHARGE

REFRIGERANT LIQUID

HOT GAS

- 1. THE SCOPE OF WORK SHALL INCLUDE A STEAM TO HOT WATER SYSTEM CONVERSION THEREFORE ALL EXPOSED STEAM AND CONDENSATE RETURN PIPING IN ANY SPACE, VERTICAL OR HORIZONTAL SHALL BE REMOVED.
- 2. REMOVE ALL STEAM AND CONDENSATE RETURN PIPING THAT IS CONCEALED IN WALLS, FLOORS, OR ATTICS AS REQUIRED FOR THE INSTALLATION OR ANY NEW WORK OF ANY TRADE.
- 3. REMOVE ALL STEAM RADIATORS, BRANCH PIPE, VALVES AND SPECIALTIES COMPLETE.
- 4. REMOVE ALL BOILER AND BOILER ROOM SPECIALTIES ASSOCIATED WITH STEAM CONTROLS, INCLUDING SITE GLASS, PRESSURE TANK AND PIPE, COLD WATER MAKE UP CONTROLS AND ALL TRIM.

### GENERAL NOTES

- 1. CONTRACT DRAWINGS, AS FAR AS THEY RELATE TO THE GENERAL ARRANGEMENT AND LOCATION OF EQUIPMENT, SHEET METAL, AND PIPING, SHALL BE UNDERSTOOD AS DIAGRAMMATIC. ANY CHANGES TO EQUIPMENT, SHEET METAL, AND PIPING LOCATIONS NECESSARY TO AVOID INTERFERENCE WITH OTHER TRADES SHALL BE MADE AT NO EXTRA COST, AND MUST BE APPROVED BY THE ENGINEER.
- 2. THE MECHANICAL CONTRACTOR SHALL INSTALL FIRE DAMPERS WITH ACCESS DOORS IN ALL DUCTS PENETRATING FIRE RATED WALLS, WHETHER SPECIFICALLY SHOWN ON THE DRAWINGS OR NOT.
- 3. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL VOLUME DAMPERS IN DUCTWORK AS REQUIRED TO BALANCE THE AIRFLOW AT ALL REGISTERS AND DIFFUSERS TO THE CFM'S INDICATED ON PLAN. WHETHER SPECIFICALLY SHOWN ON THE DRAWINGS OR NOT.
- 4. PROVIDE ALL PIPE OPENINGS THROUGH PARTITIONS WITH PIPE SLEEVES. FOR PIPES PENETRATING FIRE RATED PARTITIONS, THE SPACE BETWEEN THE PIPE AND THE SLEEVE SHALL BE SEALED WITH FIRE STOPPING MATERIAL. PENETRATIONS FOR PIPING SHALL BE MADE BY CORE DRILLING WHENEVER POSSIBLE.
- 5. ALL MOTOR STARTERS AND DISCONNECT SWITCHES FOR HVAC EQUIPMENT SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. UNLESS OTHERWISE NOTED. DISCONNECT SWITCHES FURNISHED BY THE MECHANICAL CONTRACTOR FOR HVAC EQUIPMENT SHALL BE HEAVY DUTY TYPE.
- 6. THE MECHANICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE BEGINNING OF WORK, AND SHALL COORDINATE ALL WORK WITH OTHER TRADES.
- 7. DUCT DIMENSIONS SHOWN ON MECHANICAL DRAWINGS REFER TO INSIDE CLEAR DUCT DIMENSIONS. WHERE DUCTWORK IS LINED, THE MECHANICAL CONTRACTOR SHALL INCREASE THE SIZE OF DUCT TO COMPENSATE FOR LINING.
- 8. LOCATE THERMOSTATS AND TEMPERATURE SENSORS 5'-6" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. COORDINATE LOCATION WITH FURNITURE, CABINETS, ETC. FURNISH LOCKING TAMPERPROOF COVER FOR ALL NEW THERMOSTATS IN PUBLIC AREAS.
- 9. COORDINATE DUCTWORK, GRILLE, DIFFUSER AND REGISTER LOCATIONS WITH LIGHTS, SMOKE DETECTORS, AND THE ARCHITECTURAL PLANS.
- 10. ALL WORK SHALL COMPLY WITH STATE BUILDING CODE, LOCAL BUILDING CODE, AND ENERGY CODE REQUIREMENTS. IF A CONFLICT EXISTS BETWEEN THE DRAWINGS, STATE CODE, OR LOCAL CODE, THE MOST STRINGENT REQUIREMENTS SHALL BE APPLIED.
- 11. DURING CONSTRUCTION, ALL OPEN OR INCOMPLETE DUCTWORK SHALL BE CAPPED AIRTIGHT WITH WITH HEAVY POLYETHYLENE PLASTIC. AFTER THE INSTALLATION OF DUCTWORK, REGISTERS, GRILLES, AND DIFFUSERS, THE CONTRACTOR SHALL BLANK OFF ALL REGISTERS, GRILLES, AND DIFFUSERS WITH HEAVY POLYETHYLENE PLASTIC AND TAPE AIR TIGHT, IN AREAS THAT ARE UNDER CONSTRUCTION, UNTIL WORK IS COMPLETE IN THOSE AREAS. FLOOR REGISTERS AND GRILLES SHALL ALSO BE COVERED WITH 1/8" MASONITE.
- 12. WHEN GENERAL CONSTRUCTION IS COMPLETE, VACUUM CLEAN ALL DIFFUSERS, REGISTERS, GRILLES, AND HVAC EQUIPMENT IN THE PROJECT AREA OR SERVING THE PROJECT AREA. REMOVE ANY CONSTRUCTION DEBRIS. REPLACE ALL AIR FILTERS WITH NEW.
- 13. THE OWNER'S PERMANENT HVAC EQUIPMENT (NEW AND EXISTING) SHALL NOT BE USED BY ANY CONTRACTOR DURING CONSTRUCTION FOR TEMPORARY HEATING, COOLING, OR VENTILATION. IF TEMPORARY HEATING, COOLING, OR VENTILATION IS REQUIRED AT ANY POINT DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE TEMPORARY HEATING, COOLING, OR VENTILATION EQUIPMENT, DUCTWORK, CONTROLS, AND POWER AT HIS OWN EXPENSE.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY VENTILATION AND EXHAUST AIR WHEN WELDING OR SOLDERING OPERATIONS ARE PERFORMED, AS REQUIRED BY OSHA.



LA ROCCA GREENE ARCHITECTS, LLC 22 PURCHASE STREET RYE, NEW YORK 10580

50 BROADWAY 2ND FLOOR HAWTHORNE, NY 10532

ENVIRONMENTAL MAINTENANCE CONTRACTORS 5 ANDERSON LANE GOLDEN BRIDGE, NY 10526

WATSKY ASSOCIATES ROOF CONSULTANTS 20 MADISON AVENUE VALHALLA, NY 10595

OLA CONSULTING ENGINEERS

100% SUBMISSION 11/6/20 REVISION DATE BY MADE APP'D **REVISION** RECORD DRAWING CERTIFICATION

AS BUILT - CHANGES AS NOTED AS BUILT - NO CHANGES CONTRACTOR

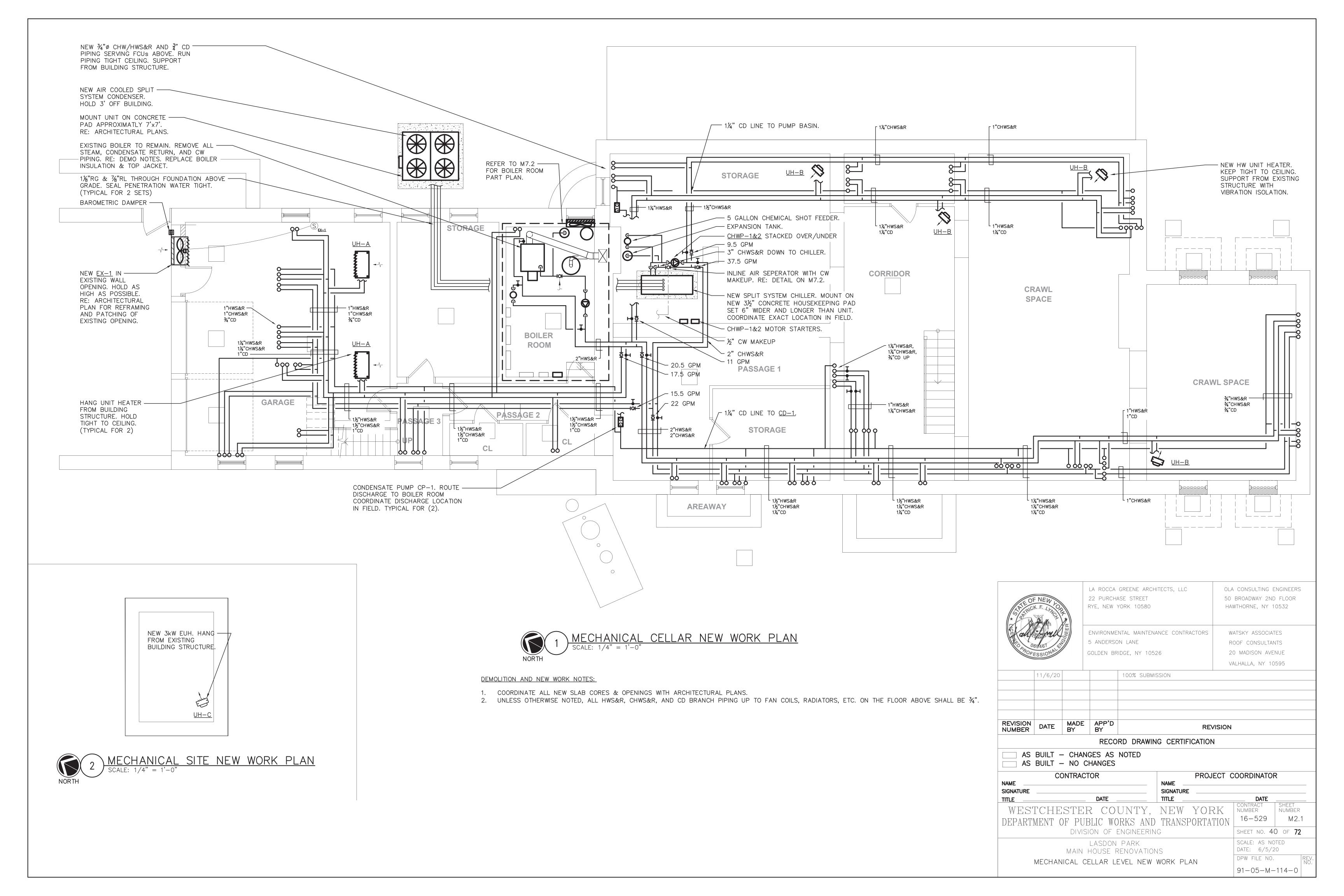
NAME \_\_\_\_ NAME SIGNATURE SIGNATURE TITLE SHEET NUMBER WESTCHESTER COUNTY, NEW YORK NUMBER 16-529 M0.1 DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING SHEET NO. 39 OF **72** 

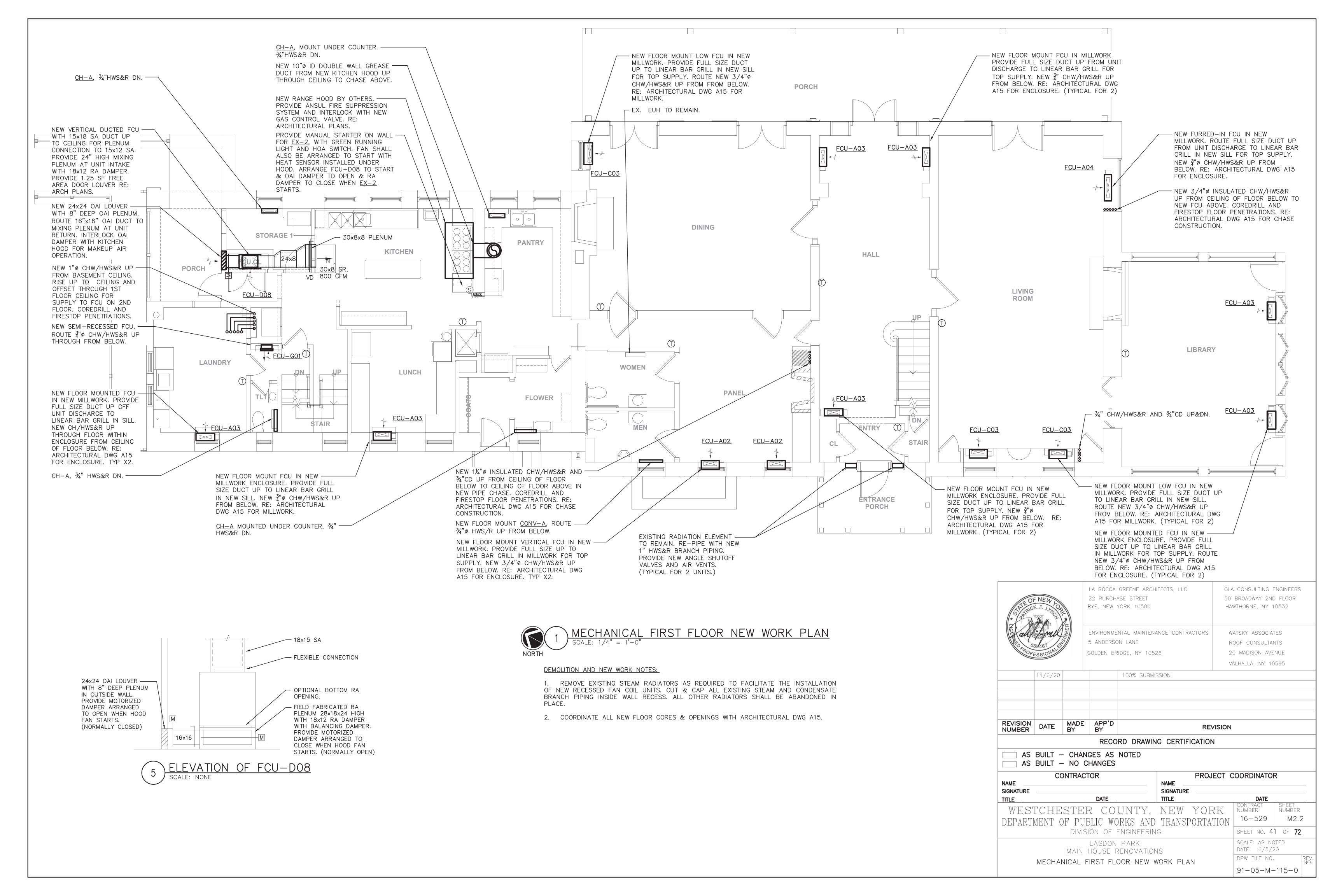
LASDON PARK MAIN HOUSE RENOVATIONS MECHANICAL SYMBOLS ABBREVIATIONS & GENERAL NOTES

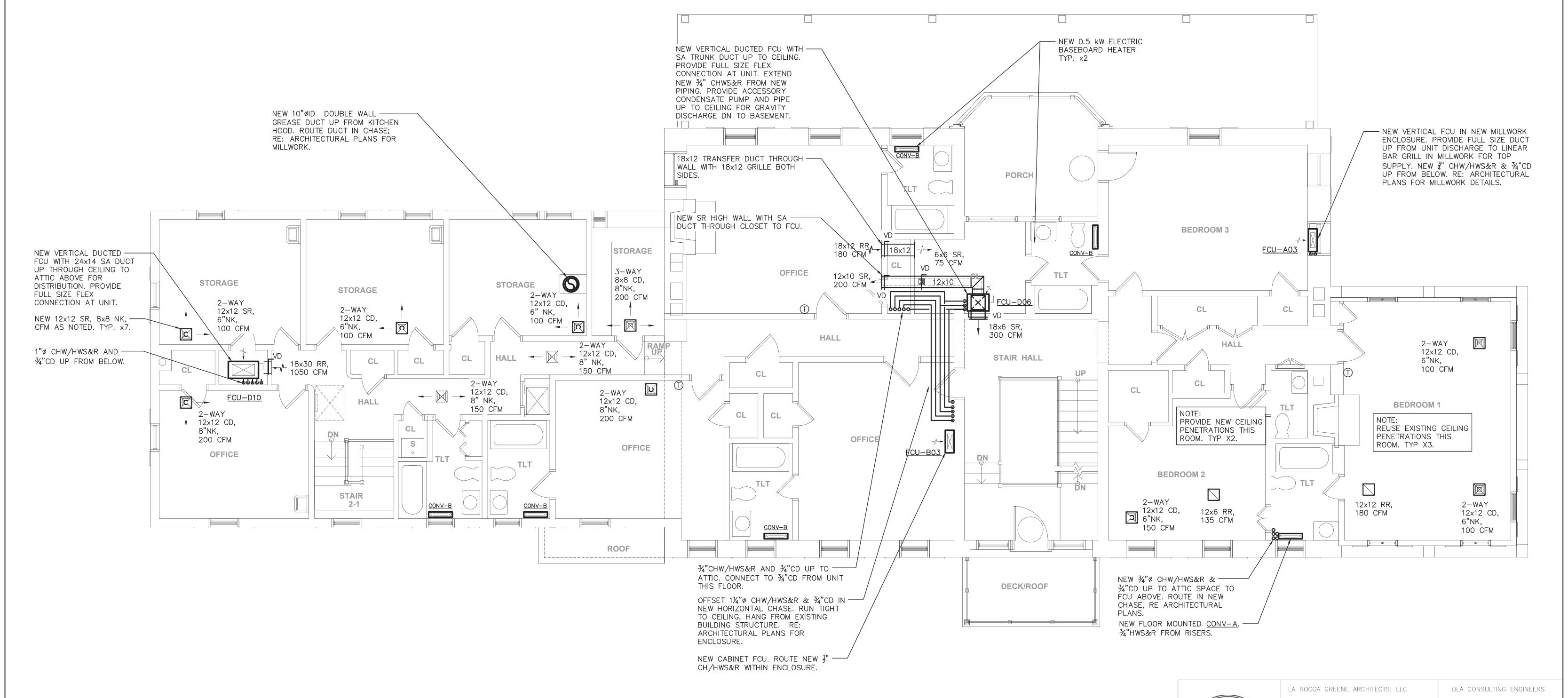
SCALE: AS NOTED DATE: 6/5/20 DPW FILE NO.

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PROJECT COORDINATOR





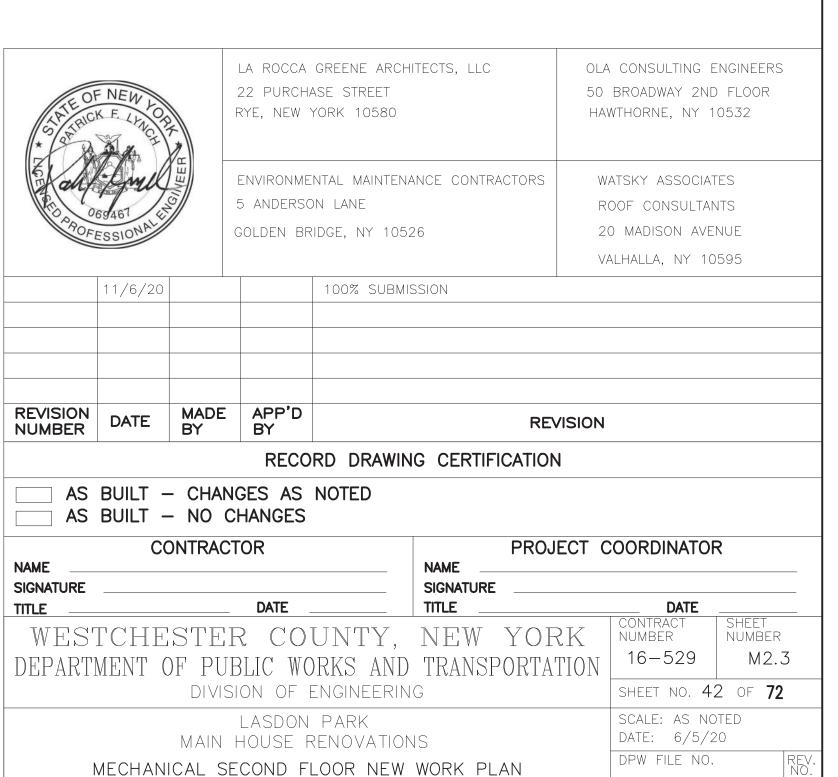




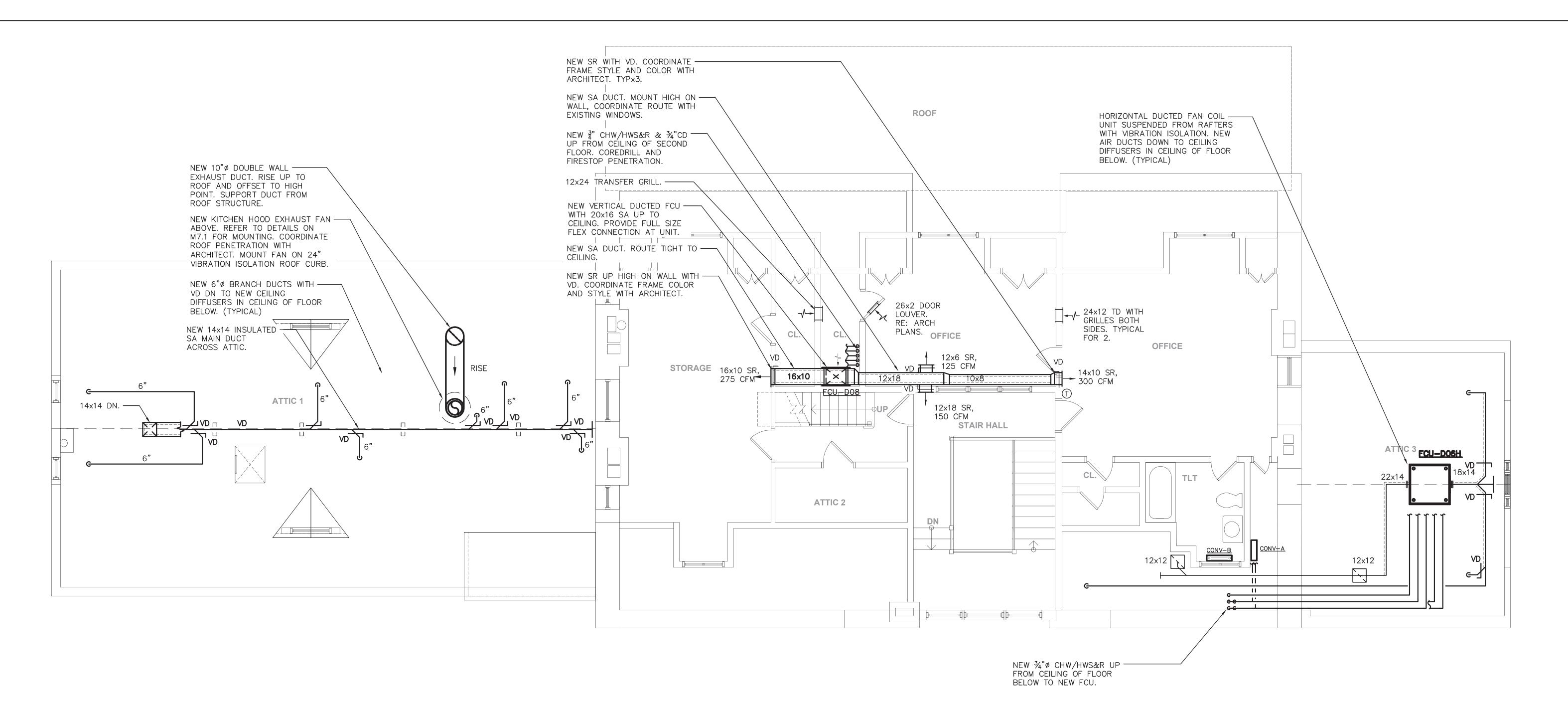
#### DEMOLITION AND NEW WORK NOTES:

1. REMOVE EXISTING STEAM RADIATORS AS REQUIRED TO FACILITATE THE INSTALLATION OF NEW RECESSED FAN COIL UNITS. CUT & CAP ALL EXISTING STEAM AND CONDENSATE BRANCH PIPING INSIDE WALL RECESS. ALL OTHER RADIATORS SHALL BE ABANDONED IN PLACE. RISERS SHALL BE ABANDONED IN PLACE.

2. COORDINATE ALL NEW FLOOR CORES & OPENINGS WITH ARCHITECTURAL PLANS.



91-05-M-116-0

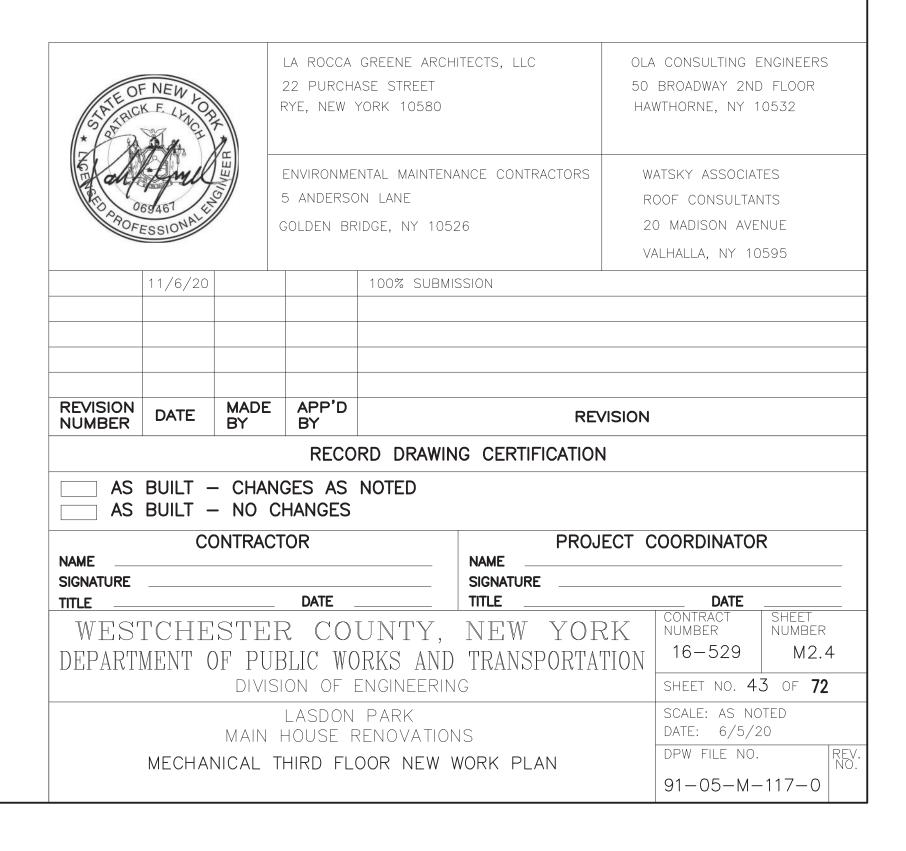




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2. COORDINATE ALL NEW FLOOR CORES & OPENINGS WITH ARCHITECTURAL PLANS.



#### EQUIPMENT NOTES

- 20) <u>RETURN GRILLES</u>: TITUS MODEL 275RS, ALUMINUM CONSTRUCTION, FIXED BLADE. SIZE AND CFM AS INDICATED ON PLAN. 30° DEFLECTION. FRAME SUITABLE FOR LAY IN OR SURFACE MOUNT AS REQUIRED. COLOR SHALL BE WHITE BAKED ENAMEL.
- 21) CONDENSATE PUMP (CP-1): SHALL BE LITTLE GIANT MODEL VCM-45ULS, RATED AT 380 GPH @ 15' HEAD, WITH 1 GALLON TANK, 3/8" DISCHARGE CONNECTION, & SHUT-OFF AT 45' HEAD. MOTOR SHALL 1/5 HP. 185 WATTS.  $115V/1\phi/60Hz$ , 3.5 AMPS. INCLUDE THE FOLLOWING OPTIONS: SAFETY SWITCH, 6' POWER CORD, THERMAL OVERLOAD PROTECTOR, NYLON SUMP PAN, POLYPROPYLENE CONTROL FLOAT, BUILT-IN CHECK VALVE, FILTER SCREEN, STAINLESS STEEL SHAFT.
- 22) BAR GRILLES: SHALL BE TITUS MODEL CT-PP-0, ALUMINUM CONSTRUCTION, WITH 7/32" THICK FIXED BARS, 7/16" SPACING, O' FIXED DEFLECTION, SIZE AND CFM AS NOTED ON PLANS. FINISH SHALL BE ANODIZED. SUBMIT COLOR CHART FOR ARCHITECTURAL APPROVAL. COORDINATE BORDER AND FRAMING REQUIREMENTS WITH ARCH PLANS.

FCU-D06H

SEE PLAN

SEE PLAN

FCU-D06

SEE PLAN

SEE PLAN

FCU-D08

SEE PLAN

SEE PLAN

15

FCU-D10

SEE PLAN

FCU-G01

SEE PLAN

#### EQUIPMENT NOTES

- 14) SQUARE CEILING DIFFUSERS: SHALL BE TITUS MODEL TDC, STEEL CONSTRUCTION, WITH ROUND NECK, OPPOSED BLADE VOLUME DAMPER IN NECK, MODULE SIZE, NECK SIZE, AND CFM AS NOTED ON PLANS. FINISH SHALL BE BAKED ON ENAMEL. SUBMIT COLOR CHART FOR APPROVAL. FRAME SHALL BE SUITABLE FOR LAY-IN OR SURFACE MOUNTING AS REQUIRED. COORDINATE WITH ARCH PLANS.
- 15) CEILING AND SIDEWALL SUPPLY AIR REGISTERS: SHALL BE TITUS MODEL 300FL, ALUMINUM CONSTRUCTION, WITH 3/4" SPACING, DOUBLE DEFLECTION AIRFOIL BLADES, OPPOSED BLADE VOLUME DAMPER IN NECK, SIZE AND CFM AS NOTED ON PLANS. FINISH SHALL BE BAKED ON ENAMEL. SUBMIT COLOR CHART FOR APPROVAL. FRAME SHALL BE SUITABLE FOR LAY-IN OR SURFACE MOUNTING AS REQUIRED. COORDINATE WITH ARCH PLANS.
- 16) AIR SEPARATOR: SHALL BE ARMNSTRONG SERIES VA, 375°F MAXIMUM WORKING TEMPERATURE, 160 PSIG MAXIMUM WORKING PRESSURE, LINE SIZE INLET & OUTLET CONNECTIONS. 3/4" NPT AIR OUTLET, 3/4" NPT DRAIN. UNIT SHALL BE MANUFACTURED IN ACCORDANCE WITH ASME CODE.
- 17) CHILLED WATER EXPANSION TANK: SHALL BE ARMSTRONG MODEL AX-15, 12" DIAMETER, 19"HIGH, 7.2 GALLONS TOTAL, WITH ½" SYSTEM CONNECTION. UNIT SHALL BE MANUFACTURED IN ACCORDANCE WITH ASME CODE. FURNISH GAGE GLASS AND TMA TANK FITTING.
- 18) HOT WATER EXPANSION TANK: SHALL BE ARMSTRONG MODEL AX-80, 16" DIAMETER, 55" HIGH, 44.4 GALLONS TOTAL, 22.2 GALLON ACCEPTANCE, WITH 1/2" SYSTEM CONNECTION. UNIT SHALL BE MANUFACTURED IN ACCORDANCE WITH ASME CODE. FURNISH GAGE GLASS AND TMA TANK FITTING.
- 19) VARIABLE FREQUENCY DRIVES: SHALL BE GRAHAM SERIES VLT 6000C17, NEMA 1 ENCLOSURE, WITH H-O-A, FACTORY START-UP, PRESSURE TO ELECTRICAL TRANSDUCERS, OUTPUT LOAD REACTORS, INPUT LOAD REACTORS.

#### EQUIPMENT NOTES

- 11) <u>CONV-B</u>: SHALL BE VULCAN ELECTRIC PEDESTAL MOUNTED RADIATOR MODEL COVP WITH 2" PEDESTAL, 8" HIGH ENCLOSURE, EXTRUDED ALUMINUM DISCHARGE GRILLE, 16 GAGE PANELS, ZINC PLATED STEEL POWDER COATED. RATED AT 150W/LF (512 BTU/LF) - 3'-0" LF. VERIFY EXACT LENGTH IN FIELD.FURNISH ALL REQUIRED ENCLOSURE SUPPORTS, BRACKETS, FASTENERS, END CAPS, ETC. SUBMIT CUSTOM COLOR CHART FOR APPROVAL.
- 12) HOT WATER PUMPS: (HWP-1 & 2): SHALL BE ARMSTRONG SERIES 4380, MOTOR MOUNTED SIZE 11/2x11/2x8, RATED FOR 45 GPM, 55' TDH, 1% HP, 1800 RPM, 230V/1/60. PUMPS SHALL BE CAST IRON BODY, BRONZE FITTED, BRONZE IMPELLER. REFER TO SPECIFICATION FOR PUMP CONSTRUCTION. PREMIUM EFFICIENCY MOTORS. MOTOR STARTERS AND DISCONNECT SWITCHES SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. FURNISH COMBINATION STARTER DISCONNECT WITH HOA.
- 13) CHILLED WATER PUMPS: (CHWP-1 & 2): SHALL BE ARMSTRONG SERIES 4380, MOTOR MOUNTED SIZE 11/2×11/2×8. RATED FOR 36 GPM, 50' TDH, 1  $\frac{1}{2}$  HP, 1800 RPM, 230V/1/60 WITH VFD. PUMPS SHALL BE CAST IRON BODY, BRONZE FITTED, BRONZE IMPELLER, REFER TO SPECIFICATION FOR PUMP CONSTRUCTION. PREMIUM EFFICIENCY MOTORS. MOTOR STARTERS AND DISCONNECT SWITCHES SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

CAF-1

BOILER ROOM

BOILER ROOM

GREENHECK

SE1-12-432-VG

20

18x18

PROPELLER

DIRECT

450

0.14

1/4

1405

0.5

120/1/60

HOA

BOILER ROOM

YES

BOILER

#### EQUIPMENT NOTES

- 1) HOT WATER UNIT HEATER (UH-A): SHALL BE MODINE HOTDAWG LOW PROFILE MODEL HHD-30, RATED AT 405 CFM, 2 GPM 180°F EWT. 150°F LWT. 30.9 MBH. 2.2' WPD. 115V/1PH/60Hz,  $\frac{1}{1}$ 0 HP, 2.1 AMPS.
- 2) HOT WATER UNIT HEATER (UH-B): SHALL BE VULCAN MODEL HV-108A, HORIZONTAL DISCHARGE CONFIGURATION. RATED AT 6.8 MBH, 1 GPM, 180°F EWT, 160°F LWT, 2.2' WPD (FT H<sub>2</sub>O), 210 CFM. MOTOR SHALL BE RATED AT 16 WATTS, 1350 RPM, 0.8 AMPS, 115V/16/60HZ. PROVIDE WALL THERMOSTAT, FAN GUARD, AND AIR DEFLECTION LOUVER HANG UNIT FROM BUILDING STRUCTURE WITH VIBRATION ISOLATORS. FURNISH DISCONNECT SWITCH.
- 3) <u>ELECTRIC UNIT HEATER (UH-C)</u>: SHALL BE REZNOR ELECTRIC UNIT HEATER MODEL EGEB-3, RATED AT 310 CFM, 10 MBH, 240V/1PH/60Hz, 1/50 HP.
- 4) CABINET HEATER (CH-A): SHALL BE VULCAN, MODEL SF-A-424, 24" HIGH, 28" LONG, 4" DEEP. RATED AT 2.5 MBH WITH 65°F EAT, 180°F AVERAGE WATER TEMPERATURE. CABIN TYPE SFA FREE STANFING SLOPE TOP ENCLOSURE WITH KNOB DAMPER AND LOUVERED INLET.
- 5) <u>AUTOMATIC AIR VENTS:</u> SHALL BE ARMSTRONG MODEL AAE750, WITH 250°F MAXIMUM OPERATING TEMPERATURE. 2-133 PSIG AIR PRESSURE OPERATING RANGE, 100% SPRING ACTION POSITIVE SHUTOFF, 3/4" NPT SYSTEM CONNECTION.
- 6) MOTORIZED DAMPERS: SHALL BE RUSKIN MODEL CD40, 4" DEEP EXTRUDED ALUMINUM AIRFOIL DAMPER. DAMPER SHALL HAVE OPPOSED BLADES, MOTOR AND LINKAGE. DAMPERS SHALL BE 120V/16/60Hz, 3 AMPS MAX. FURNISH DISCONNECT SWITCH.
- 7) FIRE DAMPERS: SHALL BE RUSKIN MODEL DIBD-2, 1-1/2 HOUR UL555 RATED, SUITABLE FOR INSTALLATION IN WALL AND FLOOR PARTITIONS WITH FIRE RATINGS OF LESS THAN 3 HOURS. DAMPER SHALL BE A COMPLETE FACTORY PACKAGE INCLUDING U.L. APPROVED ANGLES, WALL SLEEVE, AND BREAKAWAY CONNECTIONS. DAMPER SHALL BE RATED FOR DYNAMIC AIRFLOW CONDITIONS OF 2,000 FPM AND 4.0" SP.
- 8) <u>LOUVERS:</u> SHALL BE RUSKIN MODEL ELF375DX, 4" DEEP, WITH 54% FREE AREA, 6063T5 EXTRUDED ALUMINUM DRAINABLE BLADES AT  $37.5^{\circ}$  AND  $5-3/32^{\circ}$  SPACING,  $4^{\circ}$ DEEP 6063T5 EXTRUDED ALUMINUM FRAME. AND 1/2" GALVANIZED STEEL BIRD SCREEN. MINIMUM LOUVER SIZE 12"x12". ANODIZED CUSTOM COLOR TO BE SELECTED BY ARCHITECT. COORDINATE WITH ARCHITECTURAL PLANS.
- 9) VOLUME CONTROL DAMPERS: FOR ALL ROUND & RECTANGULAR VOLUME CONTROL DAMPERS THAT ARE LOCATED ABOVE INACCESSIBLE CEILINGS, PROVIDE CABLE OPERATED DAMPERS. ROUND DAMPERS SHALL BE YOUNG BOWDEN MODEL 5020-CC. RECTANGULAR DAMPERS SHALL BE MODEL 830-CC2. CABLE CONTROLS SHALL BE MODEL 270-275 FOR CONCEALED LOCATIONS & MODEL 270-896C FOR LOCATIONS WHERE CABLES TERMINATE IN FINISHED SPACES. COORDINATE LOCATIONS IN THE FIELD.
- 10) CONV-A: SHALL BE PANEL RADIATOR INC MODEL PRZF-3, 3 TUBES, 8.5" HIGH X 2" DEEP X 30" LONG @ 1463 BTU/LF, 3657 BTU TOTAL, 0.5 GPM @ 180°F WATER WITH 20°ΔT. PROVIDE ANGLE THERMOSTATIC VALVES WITH MATCHING SHUTOFFS FOR SELF-REGULATION OF ROOM TEMPERATURE, CHROME FINISH (COORDINATE WITH ARCHITECT). MOUNT ON WALL - COORDINATE MOUNTING HEIGHT WITH ARCHITECT AND MANUFACTURER'S RECOMMENDATIONS. PROVIDE END CAP TRIM AT BOTH ENDS OF RADIATOR. COORDINATE COLOR AND FINISH WITH ARCHITECT. VERIFY EXACT LENGTH IN FIELD.

#### CARRIER CARRIEF MANUFACTURER CARRIE CARRIER CARRIER CARRIEF CARRIER CARRIER Carrier 42VCA03 42DE06 42DD08 ODEL 42VACO 42VACO3 42VA04 42VBC03 42DD06 42DD10 OMINAL CAP. (TONS) 1.5 .75 .75 1.5 2.5 47 57 135 150 40 EIGHT (LBS.) 42 68 145 155 UPPLY FAN: 192 273 390 273 285 648 350 874 997 N/A N/A N/A N/A N/A N/A N/A N/A N/A MIN OA CFM SP/TSP (IN H<sub>2</sub>0) .25 .25 .25 .25 N/A ITERLOCKED HILLED WATER COIL o. OF ROWS/F.P.I. <u>80</u> 67 A.T. (°F) DB/WB .A.T. (℉) DB/WB 60<sub>/58</sub> 61/60 61/60 61/60 66<sub>/62</sub> 6½ 60 61/60 6½<sub>60</sub> AIR P.D. (IN H<sub>2</sub>O) .W.T./L.W.T. (°F) 3.2 1.6 1.6 3.2 4.8 0.5 /.P.D. (FT H<sub>2</sub>0) 9.27 1.25 1.25 0.44 3.27 3.0 4.04 4.6 6.1 4.8 13.5 SENSIBLE CAPACITY 4.6 8.5 5.9 13.5 19.0 2.2 22.4 10.9 16.3 2.3 OTAL CAPACITY 8.1 16.3 24.0 29.1 W COIL: o. OF ROWS. .A.T./L.A.T. (°F) 6%104 60/<sub>125</sub> apacity (mbh) 10.3 18.7 15.9 24.9 34.1 39.9 10.4 14.6 14.6 24.9 ILTERS DATA: UANTITY MERV 1 MERV 1 MERV 1 MERV 11 MERV 1 MERV 11 MERV 11 MERV 11 MERV 11 9x61x29 9x61x29 9x61x29 9x61x29 9x61x29 9x61x29 9x61x29 9x61x29 9x61x29 ECTRICAL DATA: OLTS/ø/Hz 115/1/60 115/1/60 115/1/60 115/1/60 115/1/60 115/1/60 115/1/60 | 115/1/60 115/1/60 OWER (WATTS/AMPS) -/.38-/1.4-/.83-/2.4-/3.5-/2.4

15

• N.C. 2 WAY MODULATING CONTROL VALVE FOR EACH COIL, WITH PIPING PACKAGE AS PER DETAIL ON DRAWING M7.2. 5 PSI MAX AT CONTROL VALVE

• TITUS MODEL CT-PP-0, ALUMINUM PENCIL PROOF LINEAR BAR DIFFUSER AT AIR OUTLET IN TOP OF MILLWORK. COORDINATE EXACT SIZE WITH EXISTING

15

15

FAN COIL UNIT SCHEDULE

SEE PLAN

SEE PLAN

FCU-A02

SEE PLAN

SEE PLAN

PROVIDE THE FOLLOWING FEATURES & OPTIONS FOR EACH UNIT:

PROVIDE THE FOLLOWING FOR UNIT CONCEALED WITHIN MILLWORK:

• FACTORY FURNISHED LOCAL DISCONNECT SWITCH.

ert ullet (2) sets of spare filters for each unit.

• COORDINATE RIGHT-HAND/LEFT-HAND COIL CONNECTIONS IN THE FIELD.

• DELUXE PIPING PACKAGE WITH BALL VALVE SHUT OFFS AND CIRCUIT SETTER.

• FINISH ON EXPOSED UNITS SHALL BE CUSTOM ENAMEL — SUBMIT COLOR CHART FOR APPROVAL.

-CU-A03

SEE PLAN

SEE PLAN

FCU-A04

SEE PLAN

SEE PLAN

15

FCU-B03 FCU-C03

SEE PLAN

SEE PLAN

PROVIDE THE FOLLOWING OPTIONS: •LOW SOUND ACOUSTICALLY LINED COMPRESSOR ENCLOSURE.

•WIRE MESH SECURITY GRILLES ON CONDENSER.  $\bullet 1-1/2$ " MIN. INSULATION ON EVAPORATOR.

AIR-COOLED SPLIT

CH-1

BASEMENT

ARCTICHILL

PACRMV0150D-

MM

2,000

SPLIT DX

10.3/3.01

15

36.57

55/45

1.76

2

R-410A

240/1/60

69.2

74

90

ACC-1

REAR YARD

ARCTICHILL

PACVC00150D2

320

95

240/1/60

\_

16.8

18

20

MAX FUSE SIZE

• COIL AIR VENT.

• KEY LOCK ACCESS DOORS.

• WALL MOUNTED THERMOSTAT.

SILL AND ARCHITECTURAL PLANS.

SIGNATION

REA SERVED

OCATION

SYSTEM CHILLER

SCHEDULE

DESIGNATION

MANUFACTURE

WEIGHT (LBS.)

EER / COP

VAPORATOR

E.W.T./L.W.T. (°F)

REFRIGERANT TYPE

/OLTS/ø/Hz

FLA (AMPS)

MCA (AMPS)

MOCP (AMPS)

ESIGNATION

MANUFACTURE

WEIGHT (LBS.)

YTIT NAU(

H.P. (EA.)

VOLTS/Ø/Hz

FLA (AMPS)

MCA (AMPS)

MOCP (AMPS)

AMBIENT TEMP. (°F)

LECTRICAL DATA:

INPUT POWER (kW)

OCATION.

W.P.D. (FT H<sub>2</sub>O)

ESIGN CAPACITY (TONS)

DESIGN FLOWRATE (GPM)

REFRIGERATION SYSTEM:

o. OF REFRIGERANT CIRCUIT

No. OF COMPRESSORS ON

No. OF COMPRESSORS ON

LECTRICAL DATA (INDOOR)

ONDENSER (OUTDOOR UNIT)

OCATION

MODEL

I•FLOW SWITCH. •BUILDING AUTOMATION SYSTEM INTERFACE. • SERVICE SUCTION ISOLATION VALVE FOR EACH

REFRIGERANT CIRCUIT •PRESSURE RELIEF SERVICE VALVE KIT.

• MOUNT CHILLER ON HEAVY DUTY NEOPRENE

VIBRATION ISOLATION PADS • MICROPROCESSOR CONTROLS.

PROVIDE THE FOLLOWING OPTIONS:

• SINGLE POINT EXTERNAL POWER CONNECTION AT UNIT, WITH FACTORY INSTALLED,

UNIT-MOUNTED, NON-FUSED DISCONNECT SWITCH.

# SEE PLAN SEE PLAN CARRIER 42VGA01 ESIGNATION REA SERVED MANUFACTURER MODEL WEIGHT (LBS) DAMPER SIZE (IN) FAN TYPE DRIVE TYPE $SP (IN H_2O)$ /OLTS/ø/Hz STARTER TYPE TARTER LOCATION SCONNECT SWITCH MOUNTED AT UNIT? INTERLOCK MERV 11 9x61x29 115/1/60 - /1.6 -/6 15 15

ALL MOTORS 1 HP OR GREATER SHALL BE PREMIUM EFFICIENCY. ALL MOTORS FURNISHED WITH VARIABLE FREQUENCY DRIVES SHALL BE INVERTER DUTY RATED & APPROVED FOR VARIABLE SPEED AND TORQUE APPLICATIONS.

**FAN SCHEDULE** 

GARAGE

GARAGE

GREENHECK

S2-16-430-A5

40

22×22

PROPELLER

DIRECT

2303

0.56

1750

0.5

120/1/60

HOA

GARAGE

YES

EX-2

ROOF

KITCHEN HOOD

GREENHECK

CUBE-140HP-7

60

16x16

UPBLAST

BELT

900

0.69

2035

2.25

120/1/60

HOA

KITCHEN

YES

FCU-D08, HOOD

HEAT SENSOR

- FURNISH RUBBER IN SHEAR OR SPRING VIBRATION ISOLATORS AS PER THE SPECIFICATION.
- . FURNISH WALL MOUNTED SPEED CONTROLLER OR THERMOSTAT AS INDICATED ON PLAN.
- FURNISH MOTOR AND BELT GUARDS FOR ALL EXTERNAL MOTOR DRIVES. FURNISH 12" HIGH ROOF CURB FOR ALL ROOFTOP FANS
- FURNISH BAROMETRIC BACKDRAFT DAMPER FOR FANS EX-1 AND CAF-1. MOTOR STARTER AND DISCONNECT SWITCH FOR EACH FAN SHALL BE
- FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. EACH ROOFTOP FAN SHALL BE FURNISHED WITH WEATHERPROOF UNIT-MOUNTED LOCAL DISCONNECT SWITCH. FAN EX-2 SERVING KITCHEN EXHAUST HOOD:
- PROVIDE WIRE MESH BIRD GUARD, INSULATED HEAT BAFFLE, NEMA 3R DISCONNECT SWITCH
- CUSTOM VENTED ROOF CURB. COORDINATEHEIGHT SO FAN DISCHARGE IS 40" ABOVE ROOF. CURB SHALL BE CUSTOM FOR ROOF PITCH.
- SHALL BE UL 705 AND 762 LISTED & LABLED. SHALL MEET ALL THE REQUIREMENTS OF NFPA 96 FOR KITCHEN EXHAUST APPLICATION, INCLUDING HINGED ACCESS DOOR. DRAIN CONNECTION WITH STAINLESS STEEL GREASE CUP, WEATHER HOOD, MOTOR AND WIRING OUT OF AIRSTEAM, AND UPBLAST DISCHARGE.

SHALL BE INTERLOCKED TO RUN WHEN THE KITCHEN EXHAUST HOOD IS

ACTIVATED, IN CONJUNCTION WITH FCU-DO8. • DO NOT FURNISH A BACKDRAFT DAMPER IN THE ROOF CURB.

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22 PURCHASE STREET RYE, NEW YORK 10580 ENVIRONMENTAL MAINTENANCE CONTRACTORS 5 ANDERSON LANE

GOLDEN BRIDGE, NY 10526

LA ROCCA GREENE ARCHITECTS, LLC

HAWTHORNE, NY 10532 WATSKY ASSOCIATES

OLA CONSULTING ENGINEERS

50 BROADWAY 2ND FLOOR

ROOF CONSULTANTS 20 MADISON AVENUE VALHALLA, NY 10595

	11/6/20			100% SUBMISSION
EVISION IUMBER	DATE	MADE BY	APP'D BY	REVISION
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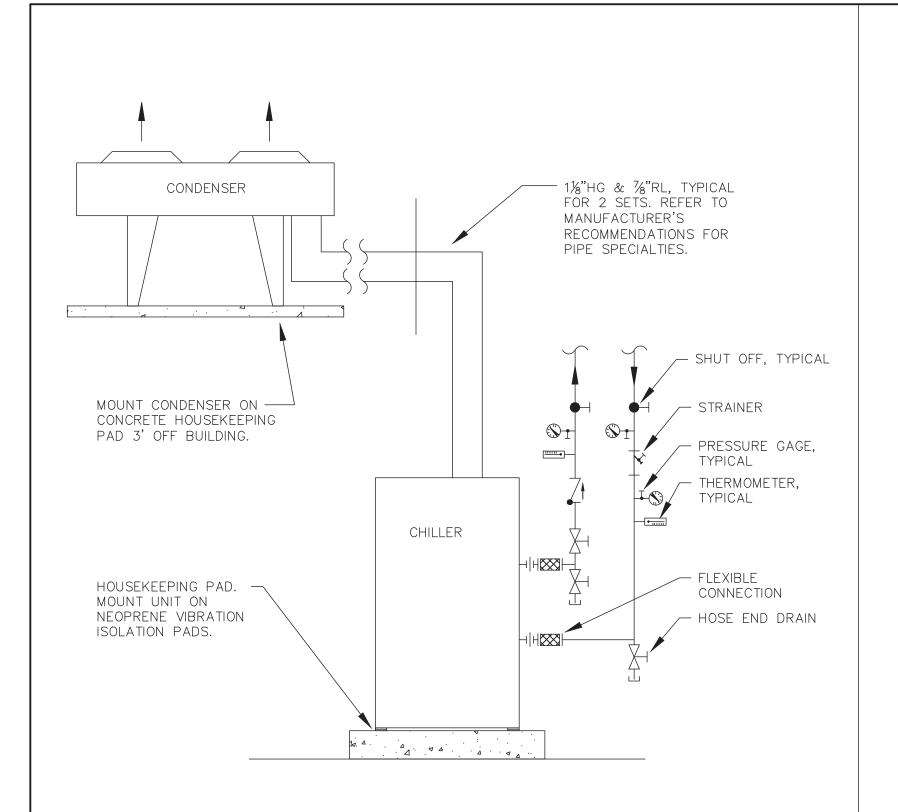
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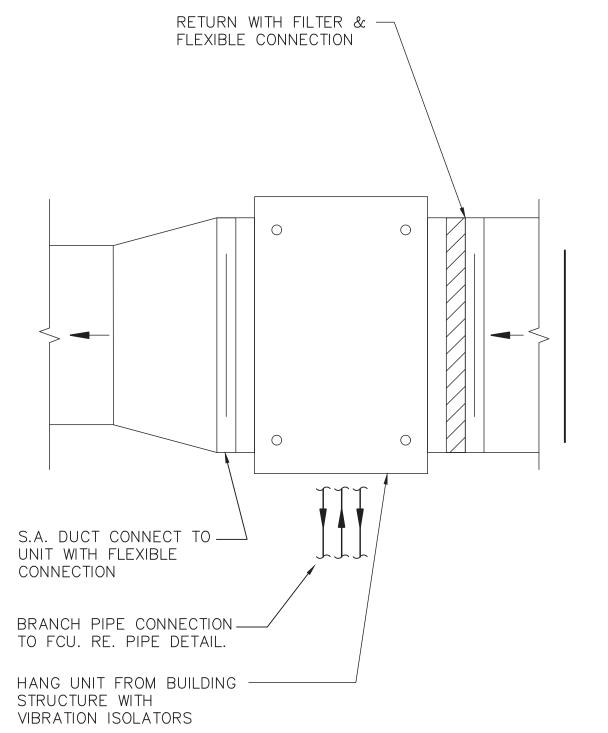
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CONTRACTOR PROJECT COORDINATOR NAME NAME SIGNATURE SIGNATURE DATE TITLE WESTCHESTER COUNTY, NEW YORK NUMBER NUMBER 16 - 529M6.1 DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

DIVISION OF ENGINEERING

LASDON PARK MAIN HOUSE RENOVATIONS MECHANICAL SCHEDULES AND EQUIPMENT NOTES SHEET NO. 44 OF **72** SCALE: AS NOTED DATE: 6/5/20 DPW FILE NO. 91-05-M-118-0





# SPLIT SYSTEM CHILLER PIPING SCHEMATIC

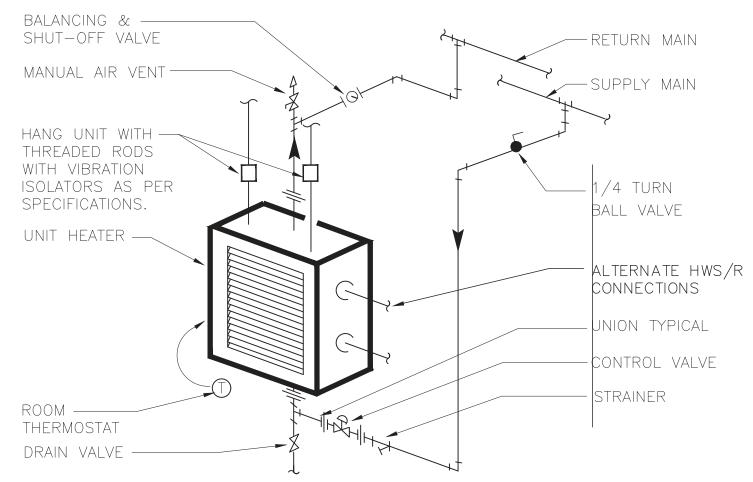
TYPICAL FOR

MOUNTED OR

RECESSED.

SURFACE

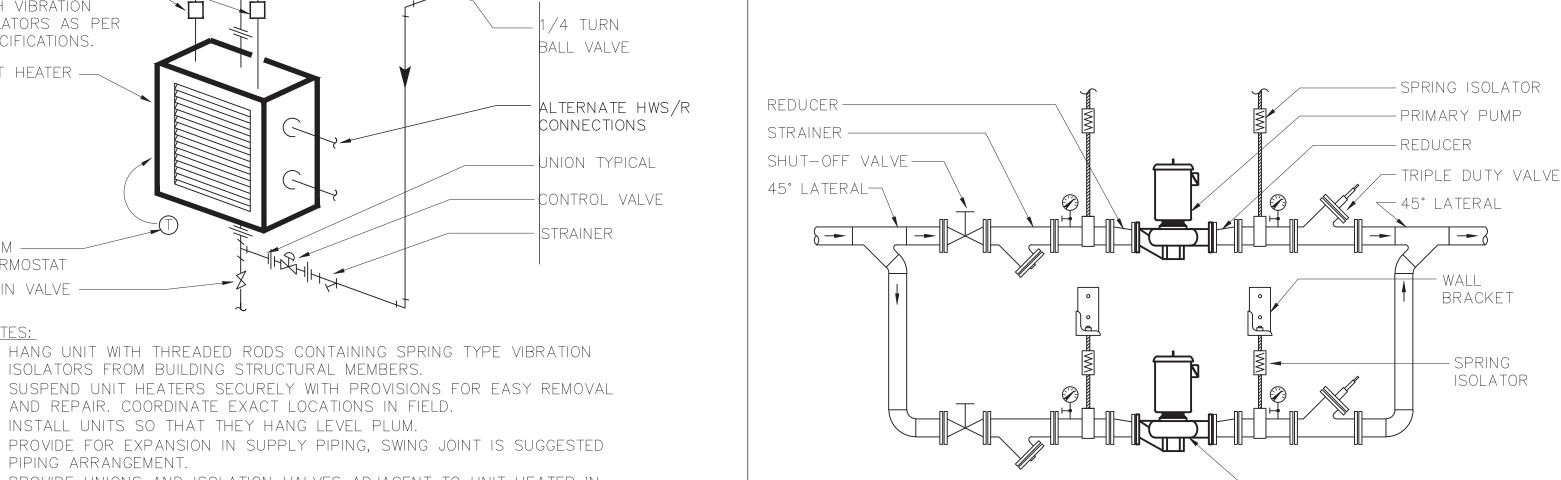
## HORIZONTAL FAN COIL UNIT SCHEMATIC



- 1.) HANG UNIT WITH THREADED RODS CONTAINING SPRING TYPE VIBRATION
- 2.) SUSPEND UNIT HEATERS SECURELY WITH PROVISIONS FOR EASY REMOVAL AND REPAIR. COORDINATE EXACT LOCATIONS IN FIELD.
- 3.) INSTALL UNITS SO THAT THEY HANG LEVEL PLUM.
- 4.) PROVIDE FOR EXPANSION IN SUPPLY PIPING, SWING JOINT IS SUGGESTED PIPING ARRANGEMENT.
- 5.) PROVIDE UNIONS AND ISOLATION VALVES ADJACENT TO UNIT HEATER IN
- BOTH THE SUPPLY AND RETURN LATERALS.
- 6.) USE 45 DEGREE ANGLE RUN OUTS FROM ALL SUPPLY AND RETURN MAINS. 7.) PROVIDE A ROOM THERMOSTAT ARRANGED TO OPEN CONTROL VALVE AND CYCLE THE FAN ON A CALL FOR HEAT, FURNISH AN AQUASTAT ARRANGED TO PREVENT FAN START UP IF HWS IS NOT ENABLED AND RUNNING.

PIPE SIZE SCHEDULE												
PIPE S	SIZE	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6
MAX. G	3PM	2	3.5	7	13	22	45	70	130	260	480	750

VERTICAL HOT WATER UNIT HEATER PIPING DETAIL



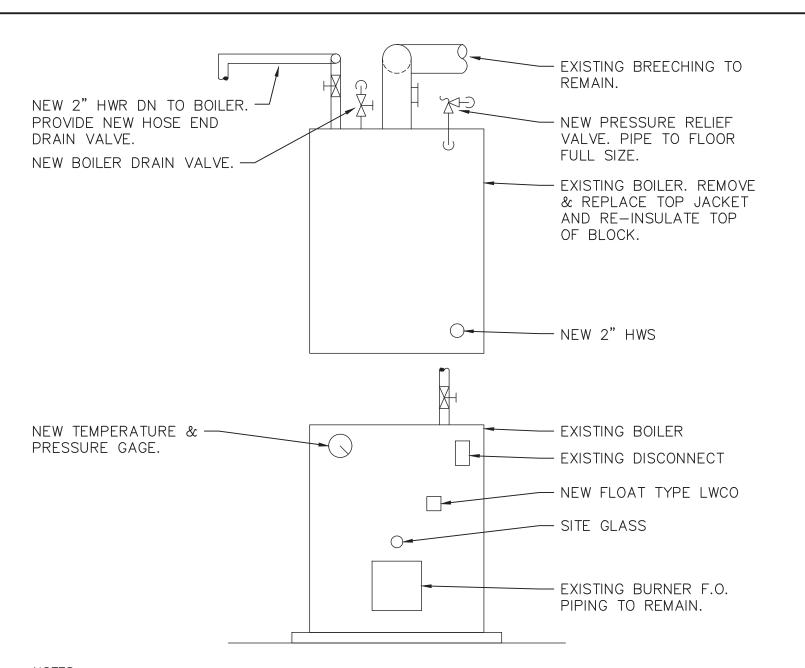
1.) HANG PRIMARY PUMP FROM BUILDING STRUCTURE WITH SPRING-TYPE VIBRATION ISOLATORS.

2.) HANG STAND-BY PUMP FROM BUILDING STRUCTURE OR SUPPORT FROM WALL BRACKETS SIMILAR TO F&M FIGURE #151.

-STAND-BY PUMP

IN-LINE PUMP SCHEMATIC

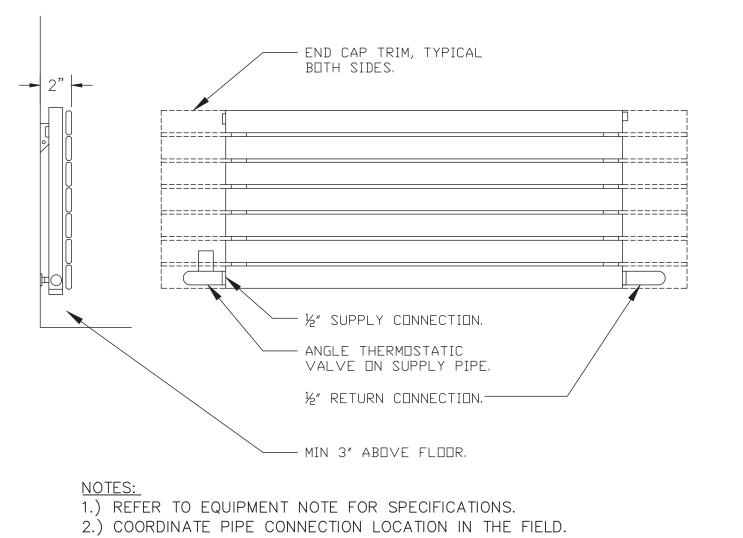
SCALE: NONE



1) REMOVE ALL STEAM AND CONDENSATE PIPING FROM BOILER INCLUDING VALVES, FITTINGS AND SPECIALTIES

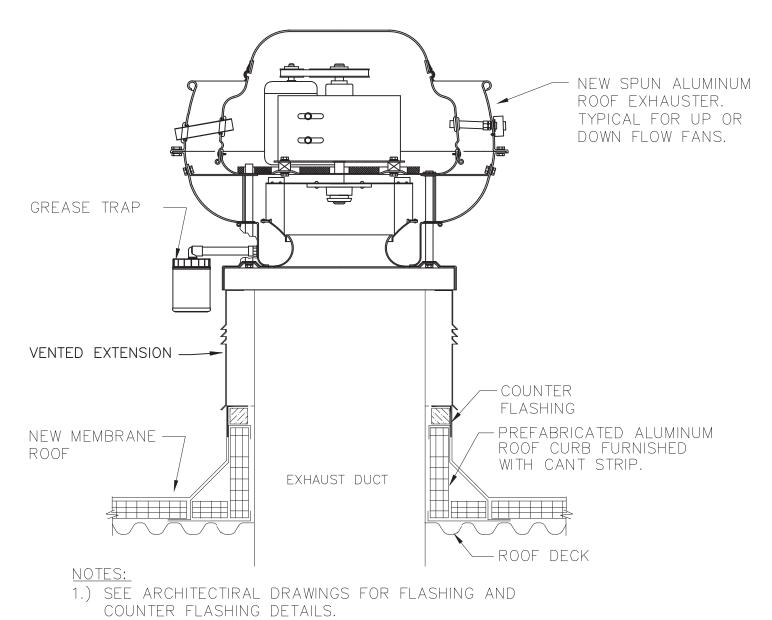
- 2) REMOVE ALL CW PIPING VALVES, FITTINGS AND SPECIALTIES COMPLETE.
- 3) EXISTING BURNER F.O. PIPING AND EQUIPMENT SHALL REMAIN. 4) CONVERT EXISTING STEAM BOILER TO HW. PROVIDE ALL TRIM AND SPECIALTIES AS REQUIRED BY MANUFACTURER, INCLUDING PRIMARY & SECONDARY LOW WATER CUT OFF, TEMP/PRESSURE GAGE,
- PRESSURE RELIEF, AND DRAIN VALVES. 5) PROVIDE ALL NEW HES & RETURN PIPING VALVES AND SPECIALTIES.
- 6) PROVIDE NEW HEAT TIMER BOILER CONTROLLER.
- 7) INTERLOCK NEW CAF-1 TO START WHEN THE BOILER OR DOMESTIC HW HTR IS ENERGIZED TO RUN. 8) CONTRACTOR SHALL PERFORM A CHIMNEY PRESSURE TEST BY SEALING OFF THE BREECHING & THE TOP OF
- THE CHIMNEY. SMOKE TEST TO 0.5" SP FOR 30 MINUTES. REPORT RESULTS TO ENGINEER. 9) PROVIDE (2) NEW LOW WATER CUT OFFS IN THE EXISTING BOILER. (1) SHALL BE FLOAT TYPE AND (1) SHALL BE ELECTRIC PROBE TYPE.





WALL PANEL RADIATOR DETAIL

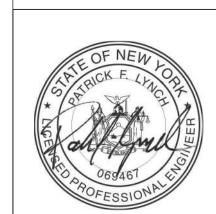




ROOF PITCH. KITCHEN EXHAUST FAN DETAIL

2.) ARRANGEMENT IS TYPICAL FOR FLAT AND SLOPED

ROOF CONSTRUCTION. COORDINATE FAN CURB WITH



LA ROCCA GREENE ARCHITECTS, LLC OLA CONSULTING ENGINEERS 22 PURCHASE STREET 50 BROADWAY 2ND FLOOR RYE, NEW YORK 10580 HAWTHORNE, NY 10532 ENVIRONMENTAL MAINTENANCE CONTRACTORS WATSKY ASSOCIATES 5 ANDERSON LANE ROOF CONSULTANTS

GOLDEN BRIDGE, NY 10526 20 MADISON AVENUE VALHALLA, NY 10595 100% SUBMISSION

11/6/20 MADE APP'D BY BY DATE **REVISION** NUMBER

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CONTRACTOR PROJECT COORDINATOR NAME NAME SIGNATURE SIGNATURE TITLE WESTCHESTER COUNTY, NEW YORK NUMBER NUMBER 16-529 M7.1 DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING SHEET NO. 45 OF **72** 

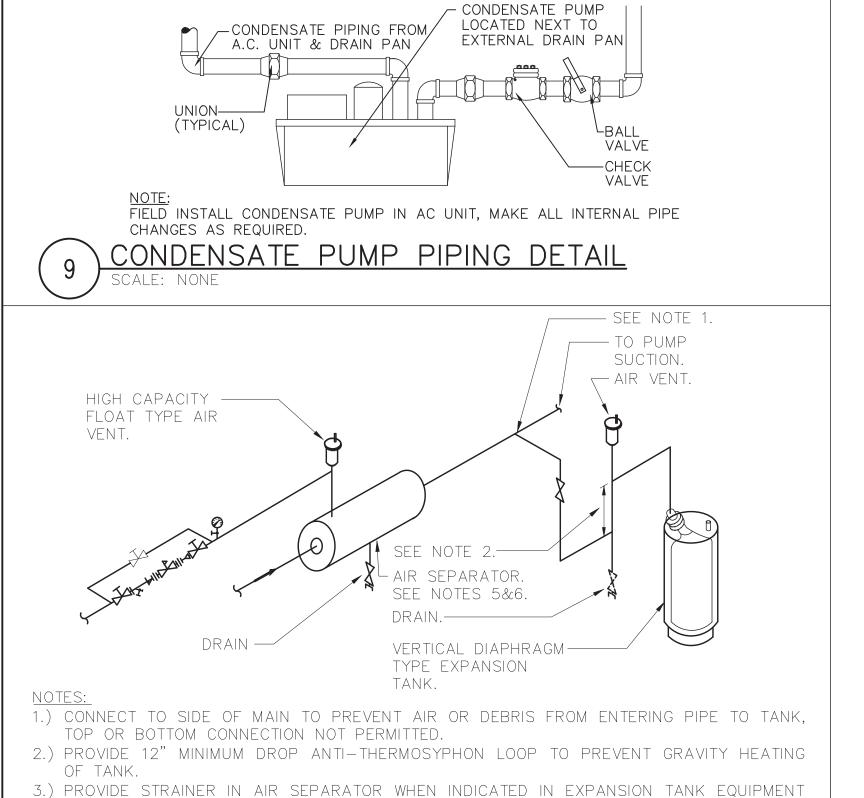
LASDON PARK MAIN HOUSE RENOVATIONS MECHANICAL DETAILS

SCALE: AS NOTED DATE: 6/5/20 DPW FILE NO. 91-05-M-119-0

# HEATING ELEMENT. — AIR VENT. -BALANCE AND CONTROL VALVE-SHUT-OFF VALVE. PIPE SLEEVE -FLOOR SLAB

PIPE SIZE SCHEDULE PIPE SIZE 1/2 3/4 1 1-1/4 1-1/2 2 2-1/2 3 4 5 6 2 | 3.5 | 7 | 13 | 22 | 45 | 70 | 130 | 260 | 480 | 750

HOT WATER CABINET CONVECTOR PIPING SCHEMATIC



4.) AIR SEPARATOR BELL & GOSSET MODEL IAS-2 WITH AUTOMATIC AIR VENT.

MINIMUM OF 5 PSIG.

6.) CHARGE EXPANSION TANK TO 12 PSI.

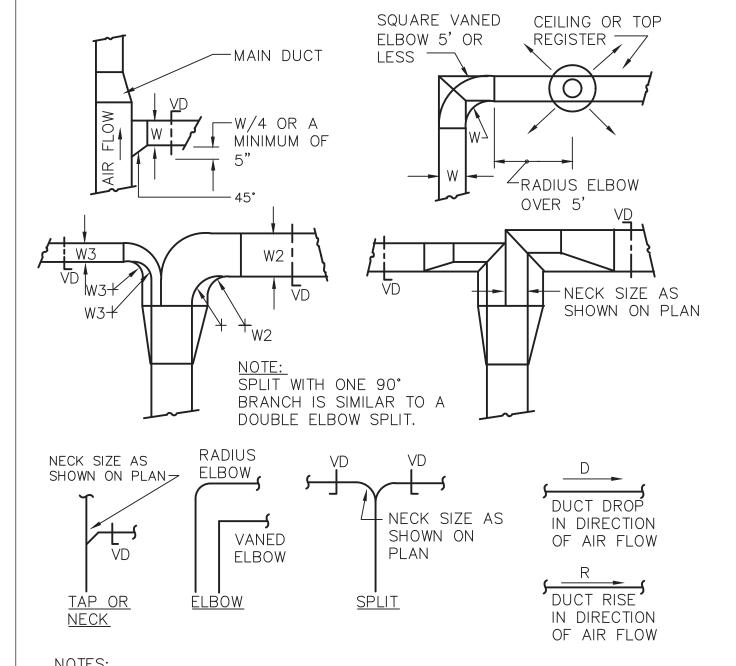
5.) SET PRESSURE REDUCING VALVE SO PRESSURE AT HIGHEST POINT IN SYSTEM HAS A

EXPANSION TANK CONNECTION DETAIL

-CLINCH LOCK CONNECTION CORNER FILLER OR GASKET L= 1/4 W, 4" MINIMUM ACOUSTIC LINING TYPICAL CLINCH LOCK TYPICAL FOR LINED OR UNLINED DUCT -CONNECTIONS USE BULL NOSE ON ALL EXPOSED LINING EDGES. CLOSE ALL OPENINGS AT CORNERS WITH FILLER PIECE OR GASKET. CUT OPENING SIZE, AND SHAPE ACCURATELY

BELL MOUTH <u>SPIN IN</u>

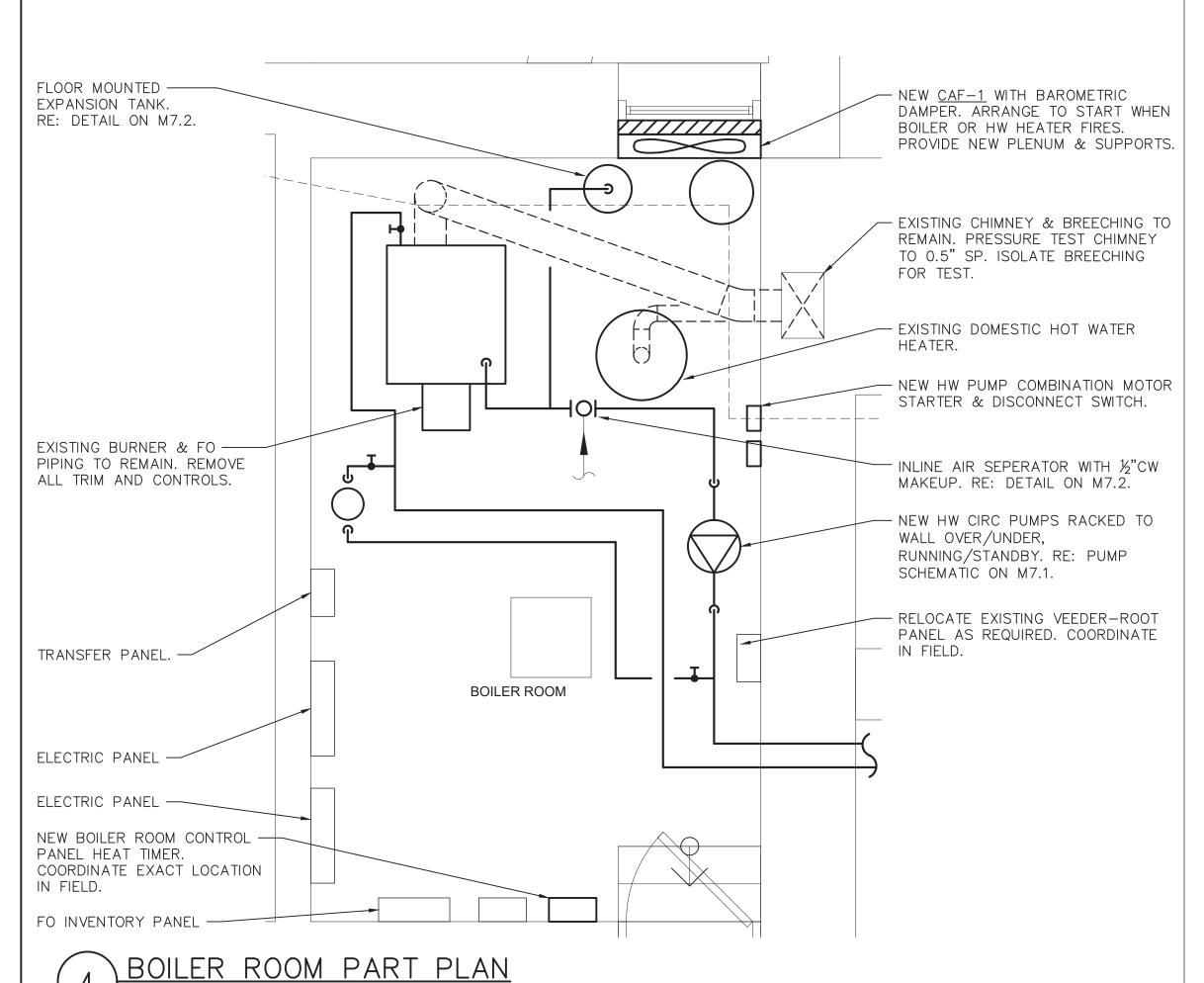
DUCT BRANCH CONNECTION DETAIL

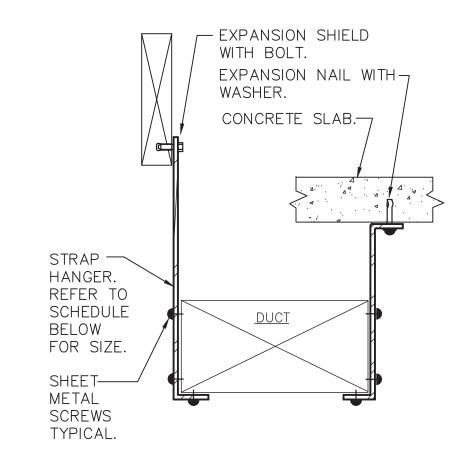


NOTES:

- 1.) SINGLE LINE REPRESENTATIONS REFER TO DOUBLE LINE DETAILS. 2.) USE RADIUS OR SQUARE VANED BENDS FOR BOTH ELBOWS AND SPLITS AS DETERMINED BY SPACE LIMITATIONS, AND THE DISTANCE FROM AIR OUTLETS.
- 3.) ALL SQUARE ELBOWS SHALL HAVE FACTORY TURNING VANES, AND MAINTAIN A CONSTANT WIDTH.
- 4.) WHERE DUCTS SPLIT, THE SOLID LINE REPRESENTATION IS PREFERRED,
- UNLESS PRECLUDED BY SPACE, OR OTHERWISE INDICATED.
- 5.) USE ELBOW SPLIT FOR BRANCH CONNECTIONS ONLY WHERE NECK SIZE IS



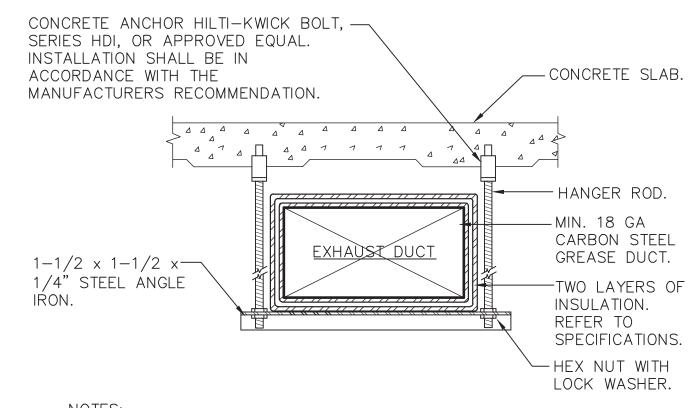




- 1.) FOR DUCTS OVER 49" WIDE, THE STRAP HANGER SHALL BE TURNED UNDER THE BOTTOM OF THE DUCT.
- 2.) WHERE EXISTING BUILDING STRUCTURAL COMPONENTS HAVE FIREPROOF MATERIAL, ANY AREA THAT IS DISTURBED OR DAMAGED AS A RESULT OF HANGER INSTALLATION SHALL BE PATCHED WITH UL AND FM APPROVED FIREPROOFING TO MATCH EXISTING.
- 3.) ALL ANCHORS AND INSERTS SHALL HAVE NEW YORK CITY BOARD OF STANDARD AND APPEALS, (BSA) APPROVAL.

HANGER S	TRAP SCH	EDULE
DUCT SIZE	HANGER SIZE	MAXIMUM SPACING
UP TO 2 SQ.FT.	1" X 1/16"	8'-0"
2 SQ.FT. TO 4 SQ.FT.	1" X 1/8"	8'-0"
4 SQ.FT. TO 10 SQ.FT.	1" X 1/8"	6'-0"
OVER 10 SQ.FT.	1" X 1/8"	4'-0"

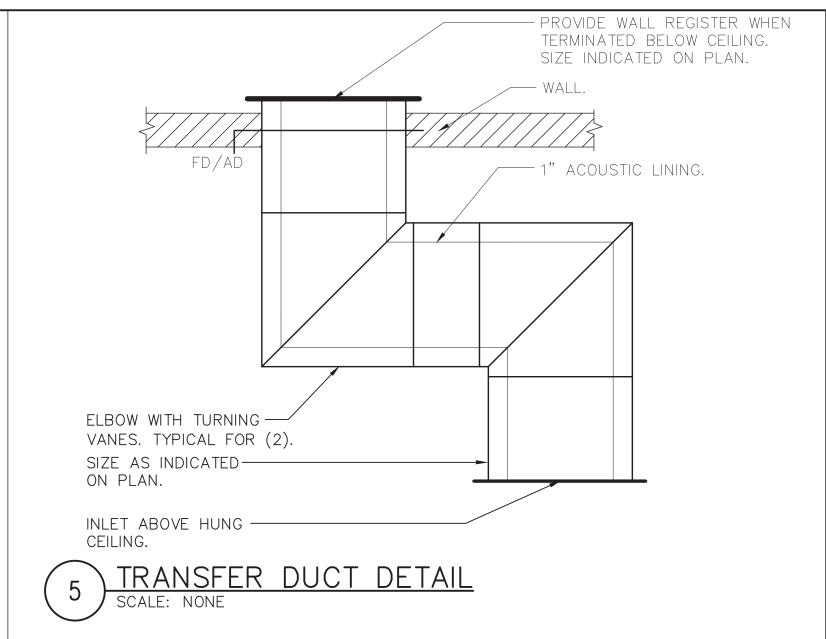
**DUCT HANGER DETAIL** 

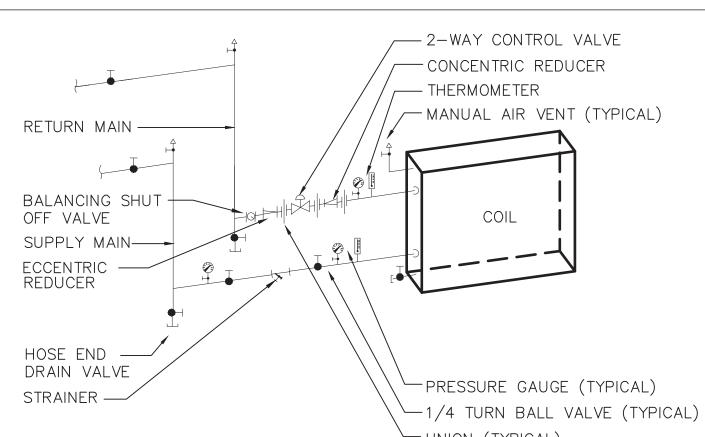


- 1.) FASTENERS USED TO SECURE THE HANGER STRAPS MUST BE CARBON STEEL OR STAINLESS STEEL AND SHALL NOT PENETRATE DUCT WALLS. 2.) INSULATION SHALL BE 3 M FIRE MASTER UL RATED, DUCT WRAP WITH
- TEMPERATURE RATING OF 300° F, FOIL ENCAPSULATED SYSTEM RATED FOR 2 HOURS. 2 LAYERS, 3" THICK. 3.) WHERE EXISTING BUILDING STRUCTURAL COMPONENTS HAVE FIREPROOF MATERIAL. ANY AREA THAT IS DISTURBED OR DAMAGED AS A RESULT
- OF HANGER INSTALLATION SHALL BE PATCHED WITH UL AND FM APPROVED FIREPROOFING TO MATCH EXISTING.
- 4.) ALL ANCHORS TO BE REVIEWED AND APPROVED BY ARCHITECT.
- 5.) DETAIL IS SIMILAR FOR ROUND DUCTWORK.

HANGER I	ROD SCHEDULE	
DUCT SIZE	HANGER DIA	MAXIMUM SPACING
UP TO 2 SQ. FT.	16 GAUGE - 3"	8'-0"
2 SQ FTTO 4 SQ FT	11 GAUGE - ½"	8'-0"
4 SQ FTTO 10 SQ FT	11 GAUGE - ½"	6'-0"
OVER 10 SQ FT.	11 GAUGE - ½"	4'-0"

KITCHEN EXHAUST DUCT HANGER DETAIL



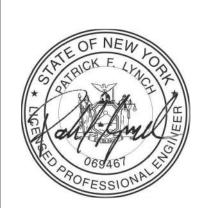


-UNION (TYPICAL) 1.) LOCATE ALL COIL UNIONS CLOSE TO, AND CLEAR OF, COIL. ARRANGE

- PIPING SO AS NOT TO NOT INTERFERE WITH COIL REMOVAL.
- 2.) DETAIL IS TYPICAL FOR UNIT VENTILATORS, CABINET UNIT HEATERS, FAN
- COIL UNITS, AND AIR HANDLING UNITS. 3.) PROVIDE FLEXIBLE CONNECTION FOR THOSE COILS MOUNTED IN UNITS ON VIBRATION ISOLATORS.

PIPE SIZE SCHEDULE											
PIPE SIZE	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6
MAX. GPM	2	3.5	7	13	22	45	70	130	260	480	750





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11/6/20	·		100% SUBMISSION	
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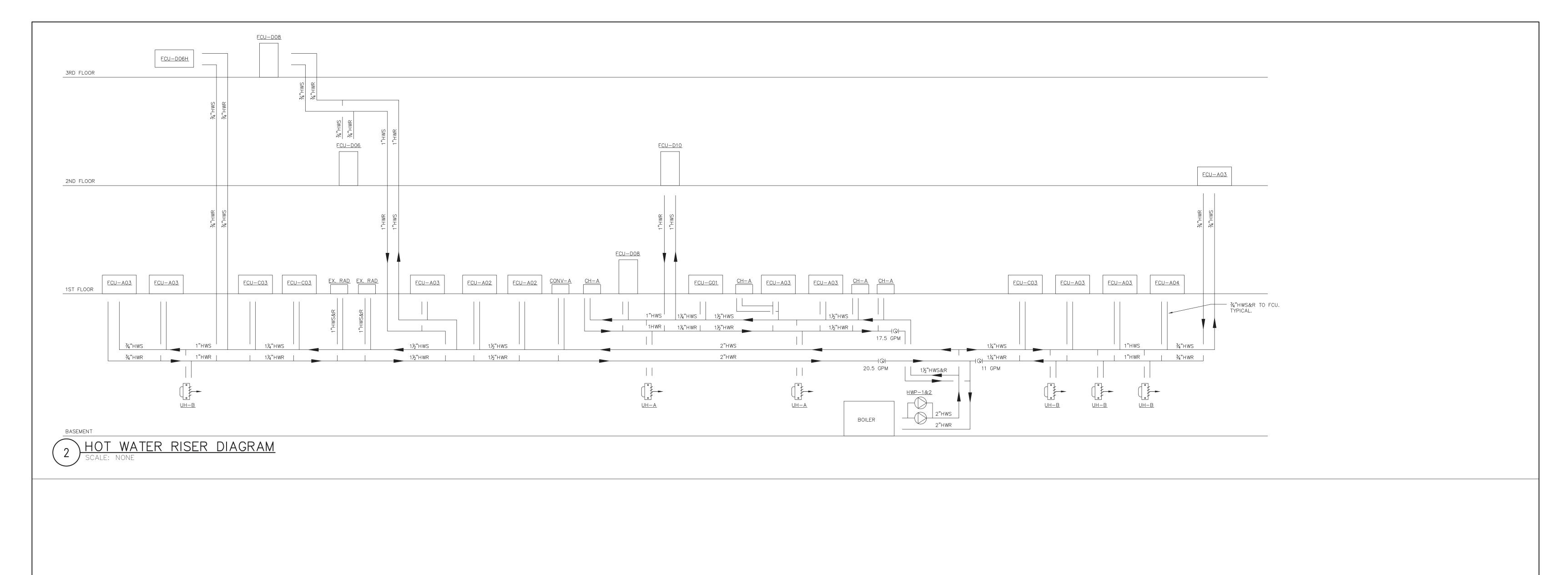
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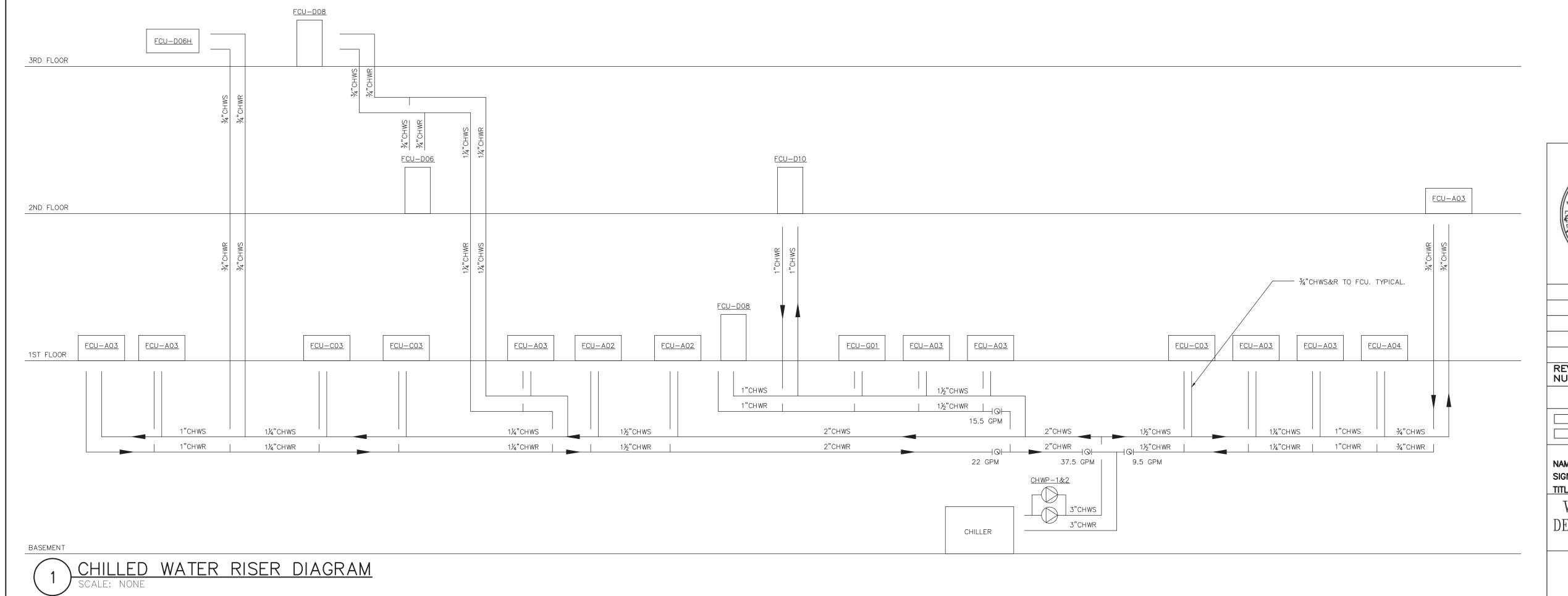
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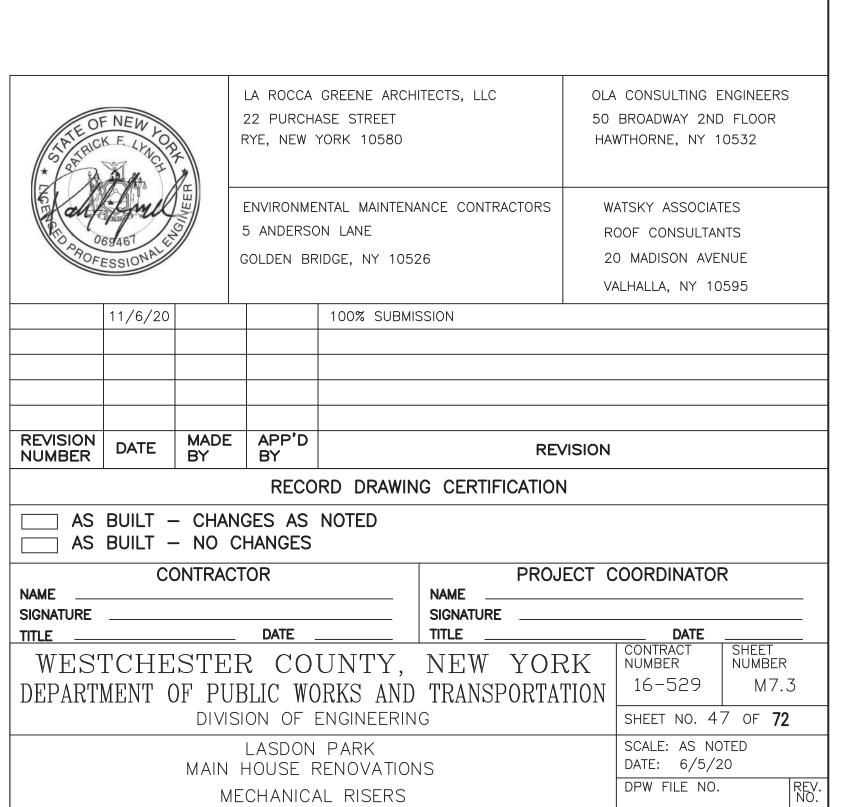
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CONTRACTOR	PROJECT COORDINATOR
NAMESIGNATURE	NAME SIGNATURE
TITLE DATE	TITLE DATE
WESTCHESTER COUN'	TY, NEW YORK CONTRACT SHEET NUMBER
DEPARTMENT OF PUBLIC WORKS	1.0 E00   M7.0
DIVISION OF ENGIN	EERING SHEET NO. 46 OF 72

LASDON PARK MAIN HOUSE RENOVATIONS MECHANICAL DETAILS

SCALE: AS NOTED DATE: 6/5/20 DPW FILE NO. 91-05-M-120-0







91-05-M-121-0