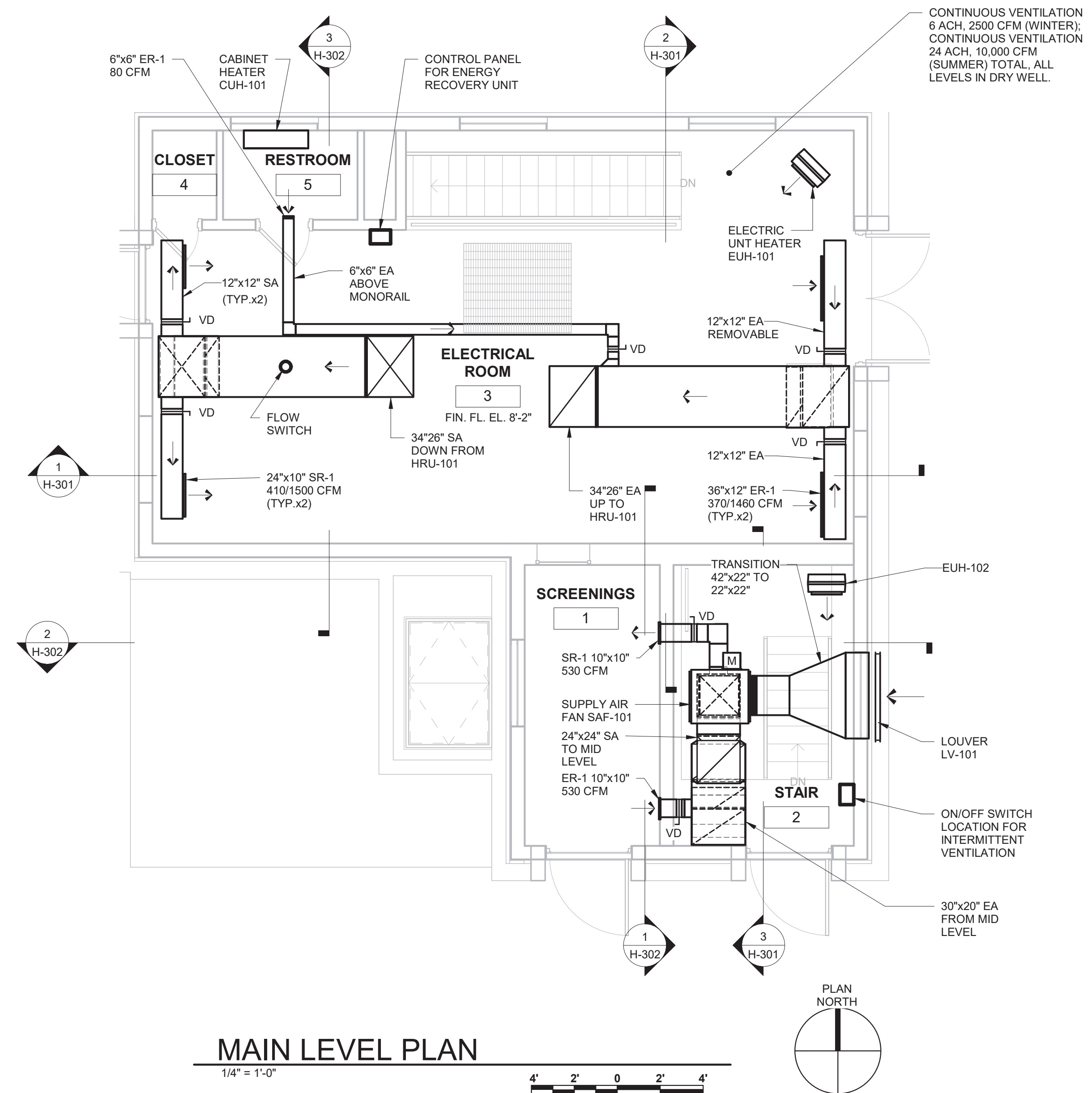
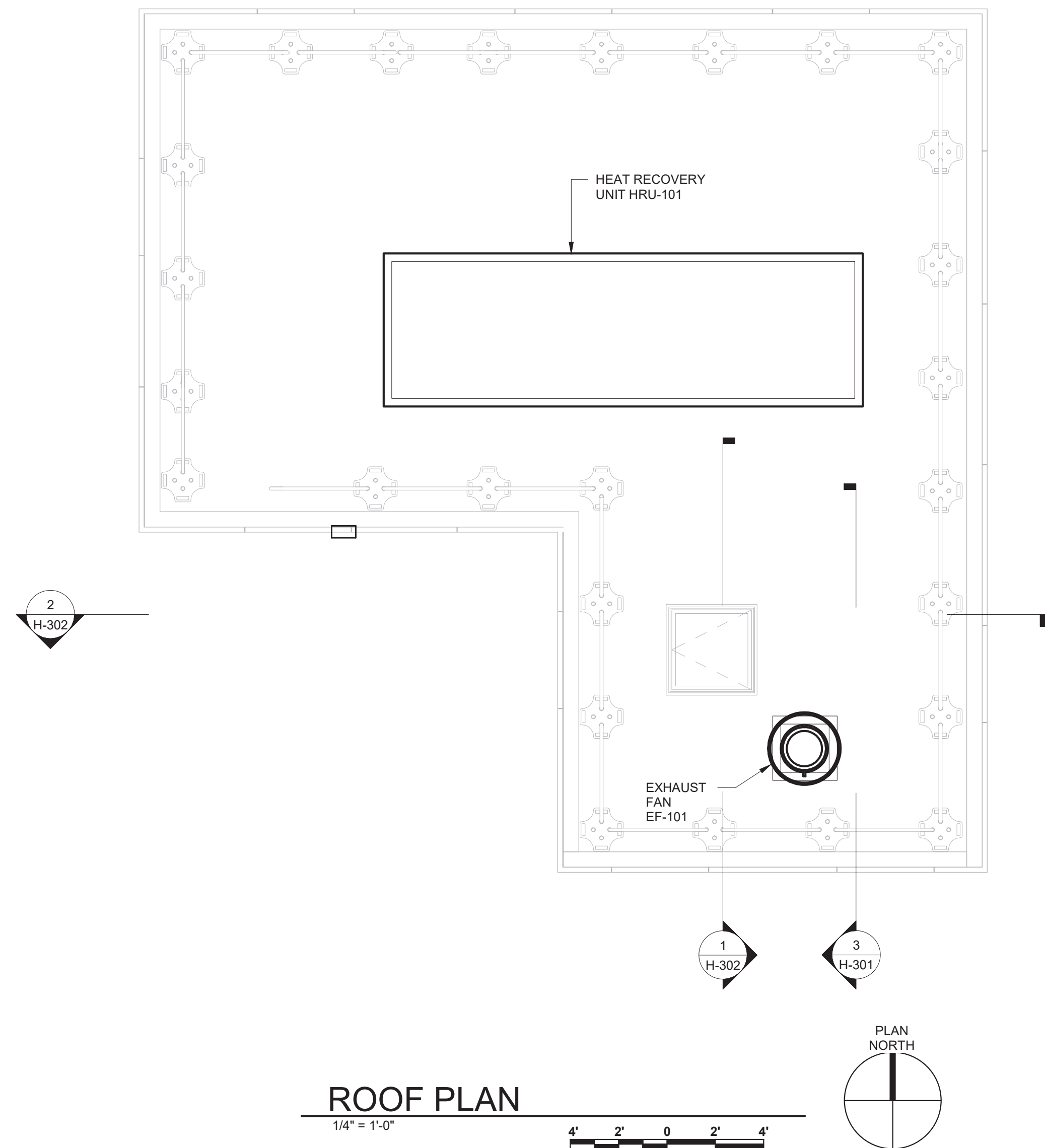




CONTROL SEQUENCE FOR INTERMITTENT VENTILATION IN WET WELL, SCREEN ROOM, AND SCREENING ROOM (SAF-101, EF-101):

PROVIDE SIGNAGE ABOVE SWITCHES, "INTERMITTENT VENTILATION SWITCH".
INTERMITTENT VENTILATION WILL BE ACTIVATED WHEN SCREENING ROOM LIGHT IS
TURNED ON OR WHEN STAIR LIGHT IS TURNED ON.

OFF: SYSTEM IS DE-ENERGIZED, FAN DAMPERS ARE CLOSED.

ON: SYSTEM DAMPERS OPEN, SAF-101 AND EF-101 MOTORS ARE ENERGIZED.

CONTROL SEQUENCE FOR CONTINUOUS VENTILATION IN DRY WELL: (HRU-101, LOW AIRFLOW SWITCH, DISCHARGE AIR TEMPERATURE SENSOR, INTEGRAL DAMPERS, CONTROL PANEL WITH ON-OFF-HAND SWITCH AND VISUAL AND AUDIBLE ALARMS).

PROVIDE SIGNAGE ABOVE CONTROL PANEL, "HRU-101 VENTILATION CONTROL PANEL".

OFF: SYSTEM IS DE-ENERGIZED, HRU-101 DAMPERS ARE CLOSED.

ON-(WINTER): HRU-101 DAMPERS OPEN, HRU-101 OPERATES AT 2500 CFM SUPPLY AND 2500 CFM EXHAUST.

HAND-(SUMMER): HRU-101 DAMPERS OPEN, HRU-101 OPERATES AT 10000 CFM EXHAUST
MODULATE HEATING SECTION VIA SCR CONTROL TO 55F LEAVING AIR TEMPERATURE.

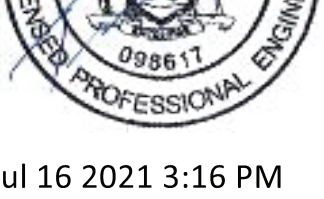
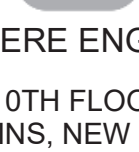
ALARMS (AUDIBLE AND VISUAL), SHOW AT PANEL ON WALL WITH SWITCH (ON-OFF-HAND SWITCH): LOW TEMPERATURE, LOW AIRFLOW SWITCH.

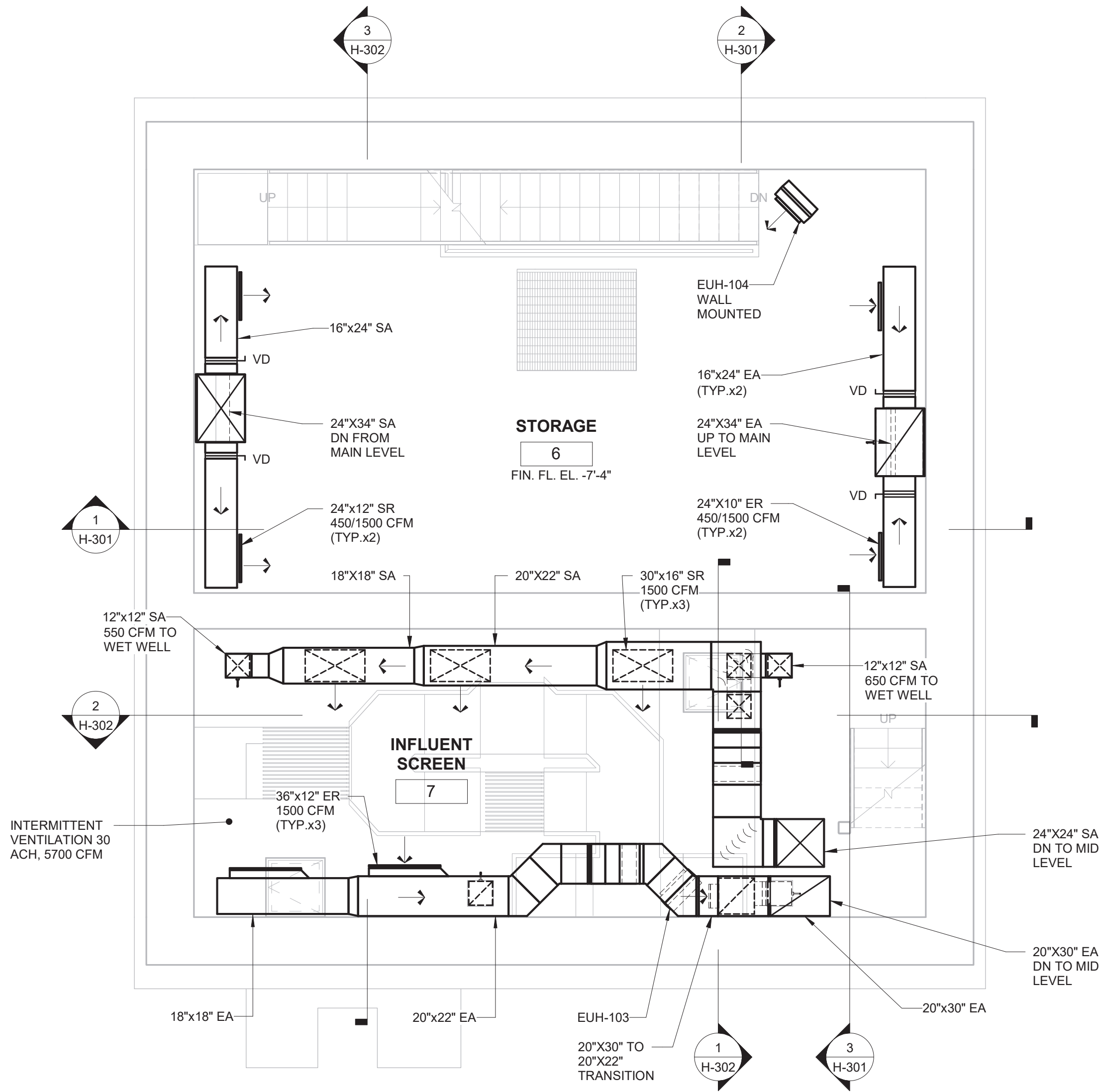
ABBREVIATIONS

AFF.	ABOVE FINISHED FLOOR
CUH	CABINET UNIT HEATER
EA	EXHAUST AIR
EF	EXHAUST FAN
ER	EXHAUST REGISTER
EUH	ELECTRIC UNIT HEATER
LV	LOUVER
ERU	ENERGY RECOVERY UNIT
SA	SUPPLY AIR
SAF	SUPPLY AIR FAN
SR	SUPPLY REGISTER
RA	RETURN AIR
VD	VOLUME DAMPER

GENERAL NOTES

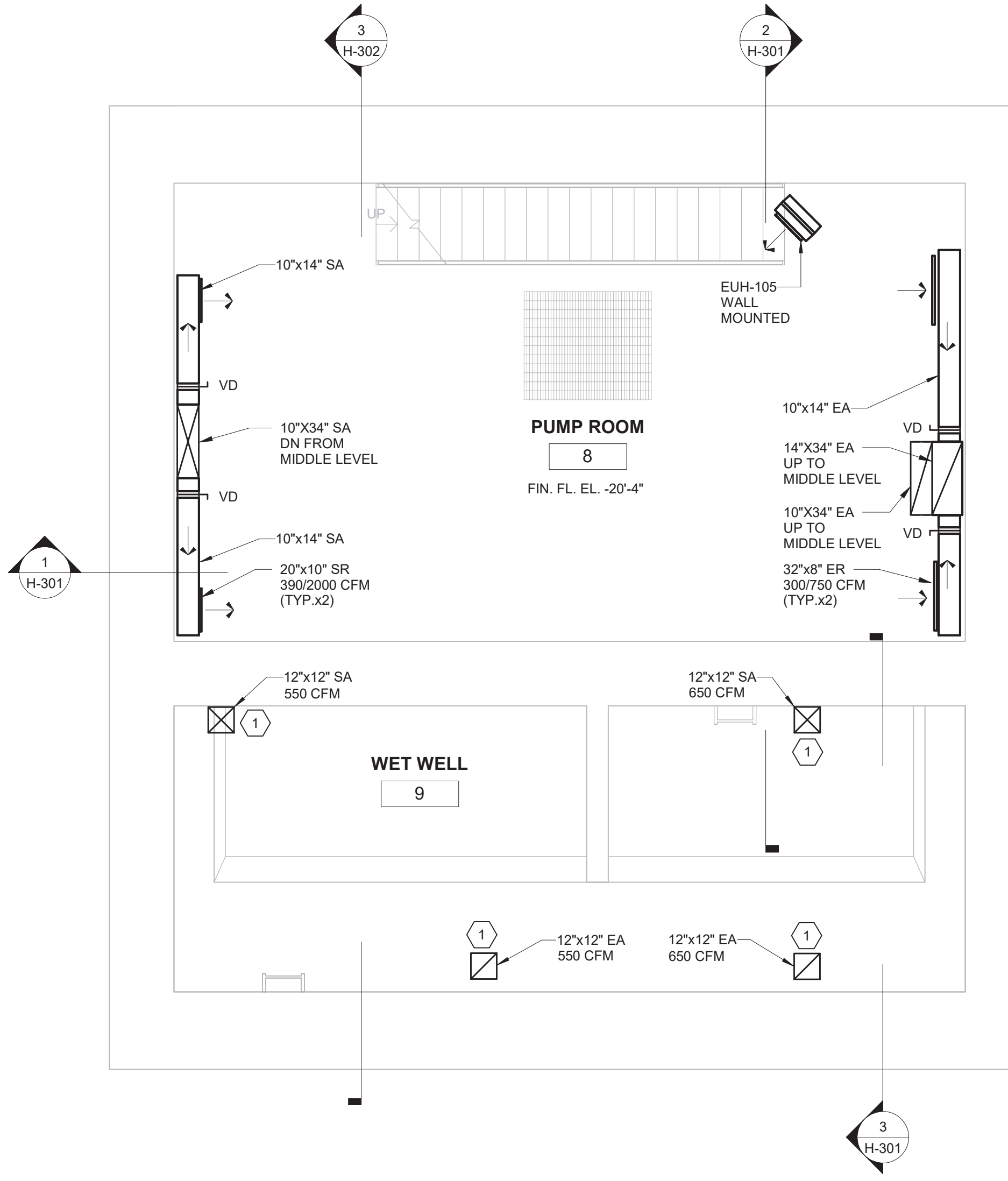
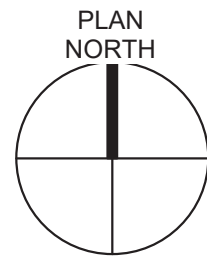
1. REFER TO SPECIFICATIONS FOR REGISTER SCHEDULE.

	IN ACCORDANCE WITH TITLE VIII, ARTICLE 145, SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW, IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER TO ALTER THIS DOCUMENT.		
	IN CHARGE OF <u>T. ERWIN</u> CHECKED BY <u>K. RADEMACHER</u> MADE BY <u>K. LABENSKI</u>		
O'BRIEN & GERE ENGINEERS, INC. 50 MAIN ST., 10TH FLOOR, SUITE 1000 WHITE PLAINS, NEW YORK 10606			
Jul 16 2021 3:16 PM			
Drawing Area			
REVISION NUMBER	DATE	MADE BY	REVISION
RECORD DRAWING CERTIFICATION			
☐ AS BUILT - CHANGES AS NOTED ☐ AS BUILT - NO CHANGES			
CONTRACTOR NAME _____ SIGNATURE _____ TITLE _____ DATE _____		PROJECT COORDINATOR NAME _____ SIGNATURE _____ TITLE _____ DATE _____	
WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING		CONTRACT NUMBER 17-534	SHEET NUMBER H-101
CROTONVILLE PUMPING STATION REHABILITATION OSSINING SANITARY SEWER DISTRICT OSSINING, NEW YORK MAIN LEVEL & ROOF PLANS		SHEET NO. 51 OF 60 SCALE: 1/4"=1'-0" DATE: 12/21/2018 DPW FILE NO. 2008-03-H-75-0 REV. NO. 0	



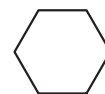
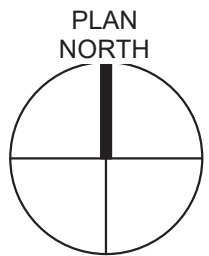
MIDDLE LEVEL FLOOR PLAN

1/4" = 1'-0"



LOWER LEVEL FLOOR PLAN

1/4" = 1'-0"



KEYED NOTES:

1. INSTALL WIRE MESH SCREEN AT TERMINATION OF DUCTWORK.



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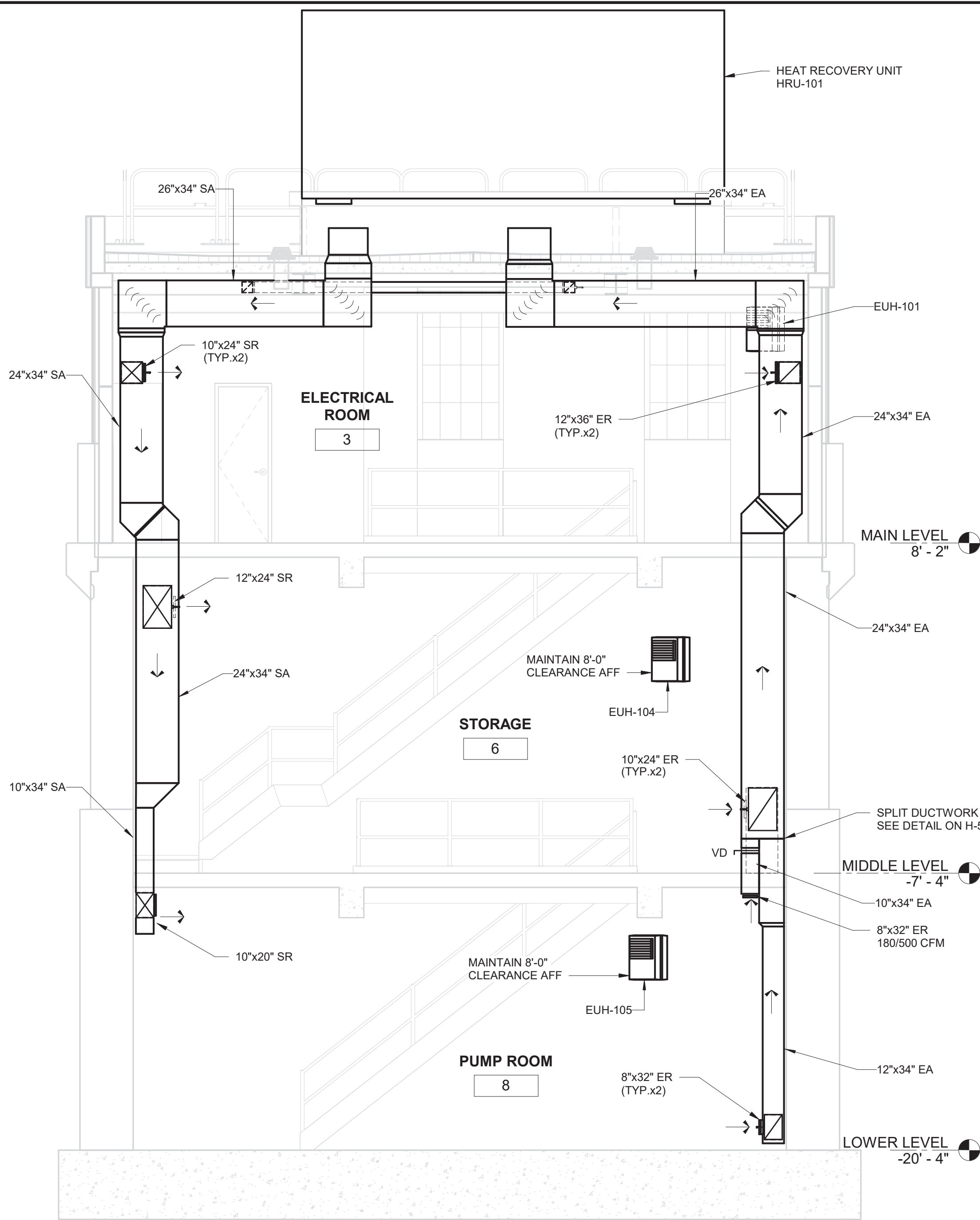
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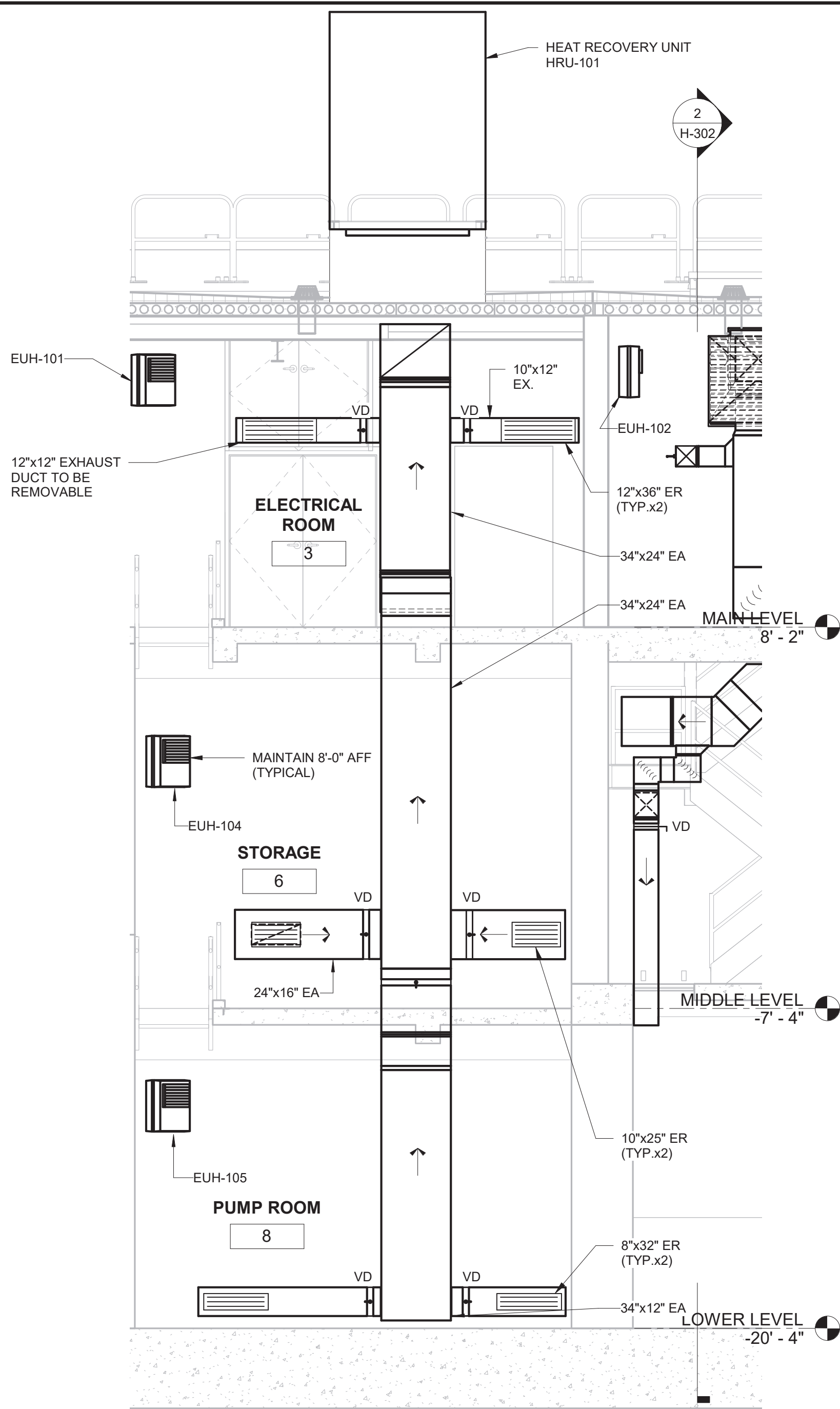


O'BRIEN & GERE ENGINEERS, INC.
50 MAIN ST., 10TH FLOOR, SUITE 1000
WHITE PLAINS, NEW YORK 10606

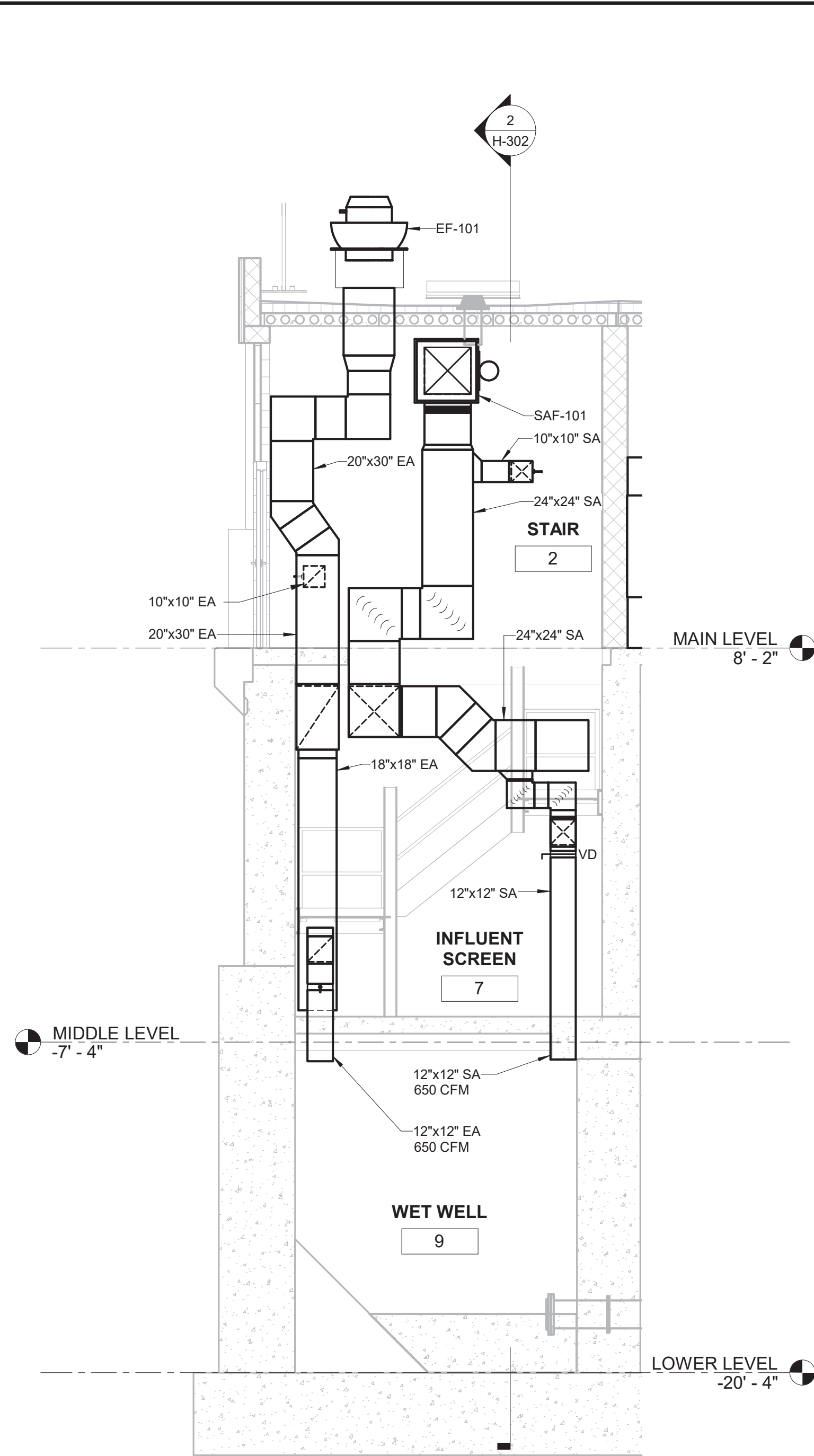
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CONTRACTOR		PROJECT COORDINATOR		
NAME	SIGNATURE	NAME	SIGNATURE	DATE
TITLE		TITLE		
WESTCHESTER COUNTY, NEW YORK		CONTRACT NUMBER 17-534		
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION		SHEET NUMBER H-102		
DIVISION OF ENGINEERING		SHEET NO. 52 OF 60		
CROTONVILLE PUMPING STATION REHABILITATION		SCALE: 1/4"=1'-0"		
OSSINING SANITARY SEWER DISTRICT		DATE: 12/21/2018		
OSSINING, NEW YORK		DPW FILE NO.		
MIDDLE LEVEL & LOWER LEVEL PLANS		208-03-H-76-0		
		REV. NO. 0		



1 SECTION
1/4" = 1'-0"



2 SECTION
1/4" = 1'-0"



3 SECTION
1/4" = 1'-0"



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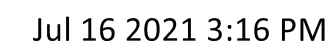
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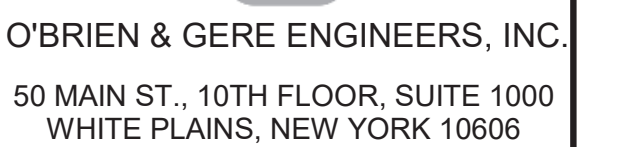


O'BRIEN & GERE ENGINEERS, INC.
50 MAIN ST., 10TH FLOOR, SUITE 1000
WHITE PLAINS, NEW YORK 10606

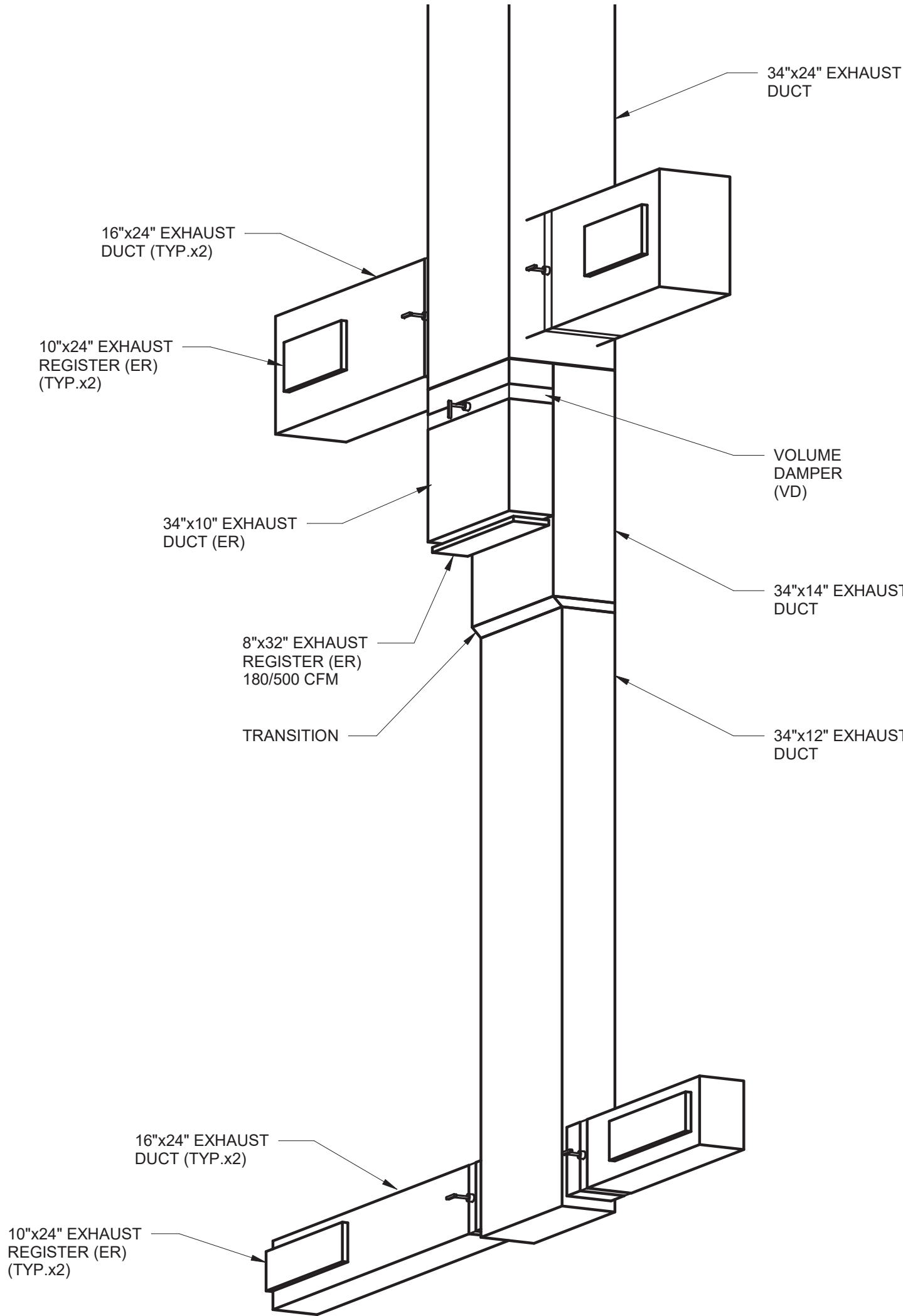
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NAME	SIGNATURE	NAME	SIGNATURE	DATE
TITLE	DATE	TITLE	DATE	DATE
WESTCHESTER COUNTY, NEW YORK		CONTRACT NUMBER	SHEET NUMBER	
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION		17-534	H-301	
DIVISION OF ENGINEERING		SHEET NO. 53	OF 60	
CROTONVILLE PUMPING STATION REHABILITATION		SCALE: 1/4"=1'-0"	DATE: 12/21/2018	
OSSINING SANITARY SEWER DISTRICT		DPW FILE NO.	REV. NO.	
OSSINING, NEW YORK		208-03-H-77-0	0	
SECTIONS				



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NAME _____			NAME _____	
SIGNATURE _____			SIGNATURE _____	
TITLE _____ DATE _____			TITLE _____	
WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING			DATE CONTRACT NUMBER 17-534	SHEET NUMBER H-302
CROTONVILLE PUMPING STATION REHABILITATION OSSINGEN SANITARY SEWER DISTRICT OSSINGEN, NEW YORK SECTIONS			SCALE: 1/4"=1'-0" DATE: 12/21/2018 DPW FILE NO. 208-03-H-78-0	
			REV. NO. 0	



SPLIT DUCTWORK DETAIL
NOT TO SCALE

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	IN CHARGE OF <u>T. ERWIN</u>			
	CHECKED BY <u>K. RADEMACHER</u>			
	MADE BY <u>K. LABENSKI</u>			
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CONTRACTOR			PROJECT COORDINATOR	
NAME _____			NAME _____	
SIGNATURE _____			SIGNATURE _____	
TITLE _____ DATE _____			TITLE _____ DATE _____	
WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING				CONTRACT NUMBER 17-534
				SHEET NUMBER H-501
CROTONVILLE PUMPING STATION REHABILITATION OSSINING SANITARY SEWER DISTRICT OSSINING, NEW YORK DETAILS				SHEET NO. 55 OF 60 SCALE: N.T.S. DATE: 12/21/2018 DPW FILE NO. 208-03-H-79-0
				REV. NO. 0

HEAT RECOVERY UNIT (HRU) SCHEDULE												
NO.	LOCATION	HEATING DATA			EXTERNAL STATIC (IN WC)	TOTAL STATIC (IN WC)	SUPPLY FAN		EXHAUST FAN		VOLTS/ PHASE	REMARKS
		ELECTRIC COIL					CFM	HP	CFM	HP		
		MN FACE AREA FT SQ	NOMINAL CAP (KW)	V/M/PH								
HRU-101	ROOF	6.43	55	460/60/3	0.75	1.5	SEE REMARK 1, 2	(2) 5	SEE REMARK 1, 2	(2) 5	460/3	1, 2, 3, 4, 5

REMARKS:

1. HRU TO SUPPLY 10,000 CFM IN SUMMER.
2. HRU TO SUPPLY 2,500 CFM IN WINTER.
3. SINGLE POINT OF ELECTRICAL CONNECTION.
4. PROVIDE WITH DISCHARGE AIR TEMPERATURE SENSORS, INTEGRAL DAMPERS, CONTROL PANEL FOR CONTROLS INCLUDING VISUAL AND AUDIBLE ALARMING IN ACCORDANCE WITH SEQUENCE OF OPERATION. ON-AUTO-OFF SWITCH FOR SUMMER, WINTER, OFF OPERATION.
5. PROVIDE WITH MANUFACTURER SUPPLIED VFDFOR SUPPLY AND EXHAUST FANS, INTEGRAL TO HRU CABINET WITH SINGLE POINT CONNECTION .

SUPPLY AIR FAN (SAF) SCHEDULE							
NO.	BUILDING	LOCATION	AIR FLOW (CFM)	S.P. (IN WC)	FAN MOTOR		REMARKS
					HP	VOLTS/PHASE	
SAF-101	WET WELL	ROOF	6,230	1.0	3	460/3	1,2,3

REMARKS:

1. NEMA 7 EXPLOSION PROOF MOTOR.
2. ALUMINUM CONSTRUCTION.
3. PROVIDE WITH INTEGRAL NEMA 7 EXPLOSION PROOF DAMPER. DAMPER SHALL BE 120V, POWER OPEN / SPRING CLOSE, AND INCLUDE AN END SWITCH.

EXHAUST FAN (EF) SCHEDULE							
NO.	LOCATION	AIR FLOW (CFM)	S.P. (IN WC)	HP	VOLTS/PHASE	DRIVE	REMARKS
EF-101	ROOF, WET WELL	6,230	1.0	2	460/3	BELT	1,2,3

REMARKS:

1. NEMA 7 EXPLOSION PROOF MOTOR.
2. TYPE B SPARK RESISTANT PER AMCA STANDARD 99-0401.
3. PROVIDE WITH INTEGRAL NEMA 7 EXPLOSION PROOF DAMPER. DAMPER SHALL BE 120V, POWER OPEN / SPRING CLOSE, AND INCLUDE AN END SWITCH.

FACILITY VENTILATION RATE SCHEDULE		
ROOM OR AREA	VENTILATION TYPE	MINIMUM AIR CHANGES PER HOUR (ACH)
WET WELL	INTERMITTENT	30
SCREENINGS ROOM	INTERMITTENT	30
INFLUENT SCREENINGS ROOM	INTERMITTENT	30
STAIR	INTERMITTENT	30
DRY WELL	CONTINUOUS	6
ELECTRIC ROOM	CONTINUOUS	6

LOUVER (LV) SCHEDULE									
NO.	DIMENSIONS		TYPE	DUTY	MAKE	MODEL	FREE AREA	SCREEN TYPE	REMARKS
	WIDTH	HEIGHT							
LV-101	4'-0"	3'-6"	INTAKE	FIXED	CONSTRUCTION SPECIALTIES	A6177	57.6%	BIRDSCREEN	1

REMARKS:

1. PROVIDE WITH PHENOLIC HERESITE COATING.

ELECTRIC UNIT HEATER (EUH) SCHEDULE					
NO.	LOCATION	MINIMUM HEATING CAPACITY (KW)	VOLTS/PHASE	MOUNTING HEIGHT	REMARKS
EUH-101	ELECTRICAL ROOM, MAIN LEVEL	5	460/3	9'-0"	1,4,5,6
EUH-102	STAIR, MAIN LEVEL	5	460/3	9'-4"	1,2,3,4,5,6
EUH-103	INFLUENT SCREEN, MIDDLE LEVEL	5	460/3	8'-0"	1,2,3,4,5,6
EUH-104	STORAGE, MIDDLE LEVEL	3	460/3	9'-0"	1,4,5,6
EUH-105	PUMP ROOM, LOWER LEVEL	3	460/3	8'-0"	1,4,5,6
CUH-101	REST ROOM, MAIN LEVEL	2	120/1	0'-2"	4,5,7

REMARKS:

1. INSTALL WITH HORIZONTAL DISCHARGE.
2. NEMA 7 EXPLOSION PROOF MOTOR.
3. TYPE B SPARK RESISTANT PER AMCA 99-0401 STD.
4. INTEGRAL THERMOSTAT.
5. ELEVATION FROM THE FINISHED FLOOR TO THE BOTTOM OF THE UNIT.
6. WALL MOUNTED.
7. SEMI-RECESSED, WALL MOUNTED.

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WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING		CONTRACT NUMBER 17-534	SHEET NUMBER H-601	
CROTONVILLE PUMPING STATION REHABILITATION OSSINING SANITARY SEWER DISTRICT OSSINING, NEW YORK SCHEDULES		SCALE: N.T.S. DATE: 12/21/2018 DPW FILE NO. 208-03-H-80-0		
		SHEET NO. 56 OF 60		REV. NO. 0