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ADDENDUM # 3
Grass Valley School District
District Support Services Building
Gilmore Way, Grass Valley CA

Clarifications:

1. The Building Plumbing plan has been revised to reflect the changes to the Site Utilities drawings distributed with Addendum # 2 (location of waste lines exiting the building).

Additions:

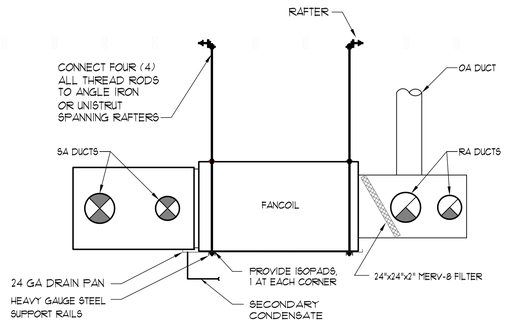
1. A small heat pump unit has been added to serve the "IT Storage Room", see attached sheets M0.1, M1.1.

Revisions:

1. Item # 4 in "Special Provisions" regarding "… Duration of Work" is revised to reflect 110 calendar days, rather than the 47 days listed there and amended to 80 calendar days in RFI # 4.

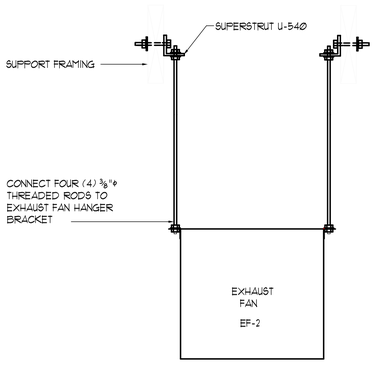
HVAC LEGEND

10x10 SG 330 CFM	CEILING SUPPLY DIFFUSER, SIZE AND FLOW RATE LISTED ARROWS INDICATE THROW PATTERN
12x12 RG 500 CFM	CEILING RETURN GRILLE, SIZE AND FLOW RATE LISTED
12x12" EG 330 CFM	CEILING EXHAUST GRILLE, SIZE AND FLOW RATE LISTED
	RECTANGULAR SUPPLY AIR CROSS SECTION
	RECTANGULAR RETURN AIR CROSS SECTION
T(M)	THERMOSTAT, NUMBER DENOTES UNIT SERVED, LETTER INDICATES ZONE DAMPER
10"ø	RIGID DUCT
10"ø	FLEXIBLE DUCT
FD	DUCT MOUNTED FUSIBLE LINK FIRE DAMPER
F 1	EQUIPMENT TAG
AC	GAS-ELECTRIC PACKAGE AIR CONDITIONER
CU	CONDENSING UNIT
F	FURNACE
CFM	CUBIC FEET PER MINUTE
EF	EXHAUST FAN
OA	OUTSIDE AIR
EA	EXHAUST AIR
C	CONDENSATE PIPING



FANCOIL INSTALLATION DETAIL

SCALE: NONE



NOTE:
BOLTS & ANCHORS TO BE SAME SIZE AS ROD

EXHAUST FAN MOUNTING DETAIL

N.T.S.

HVAC NOTES

1. FURNISH AND INSTALL ALL MATERIALS AND PERFORM ALL LABOR NECESSARY FOR A COMPLETE INSTALLATION OF HVAC WORK INDICATED ON THE DRAWINGS. ALSO, PROVIDE ANY INCIDENTAL WORK NOT SHOWN OR SPECIFIED, WHICH CAN REASONABLY BE INFERRED OR TAKEN AS BELONGING TO THE WORK AND NECESSARY TO PROVIDE THE COMPLETE SYSTEM.
2. IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO ASSURE ALL MECHANICAL SYSTEMS FUNCTION PROPERLY, SAFELY, AND MEET ALL LOCAL, STATE AND REGIONAL CODES.
3. ALL WORK IS TO CONFORM TO THE ACCEPTED STANDARDS OF THE TRADE. THE ENGINEER IS TO BE NOTIFIED IF ANY SUBSTITUTIONS ARE SEEN TO BE NECESSARY.
4. CONTRACTOR SHALL VERIFY SITE DIMENSIONS. NO CHANGE ORDERS WILL BE ALLOWED FOR CONDITIONS WHICH COULD BE VERFIED BEFORE CONSTRUCTION.
8. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES. NO CHANGE ORDERS WILL BE ALLOWED FOR TIEMS THAT COULD HAVE BEEN COORDINATED IN THE FIELD.
9. RUN ALL DUCTWORK AS HIGH AS POSSIBLE IN GENERAL LOCATION SHOWN, BUT CONFORM TO ALL STRUCTURAL REQUIREMENTS,
10. CONTRACTOR SHALL CLEAN AWAY ALL DEBRIS, SURPLUS MATERIAL ETC. RESULTING FROM WORK DAILY, LEAVING THE JOB IN A CLEAN CONDITION.
11. SUBMITTALS SHALL BE DELIVERED TO ARCHITECT AT LEAST 30 CALENDAR PRIOR TO THE NEED FOR APPROVAL, AND BEFORE FABRICATION AND INSTALLATION OF EQUIPMENT. CONTRACTOR SHALL SUBMIT FOR APPROVAL A COMPLETE DESCRIPTIONS, INFORMATION, AND PERFORMANCE DATA ON PROPOSED EQUIPMENT IN ACCORDANCE WITH DIVISION 1. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE REQUIRED NUMBER OF EACH ITEM FOR PROPER DISTRIBUTION. SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT.
12. SUPPLY AIR DIFFUSERS AND RETURN/EXHAUST AIR GRILLES SHALL BE THE SIZE AND THROW PATTERN INDICATED, AND NECK VELOCITY SHALL NOT EXCEED AN NC CRITERIA CURVE OF 25. ALL DIFFUSERS SHALL BE MADE WITH SQUARE TO ROUND TRANSITIONS. INSTALL WITH METAL GROUNDS AND GASKETS TO PREVENT STREAKING.
13. SUPPLY AIR DIFFUSERS AND RETURN/EXHAUST GRILLES SHALL BE SHOEMAKER, OR EQUAL. PROPOSED MODEL NUMBERS FOR DIFFERENT APPLICATIONS ARE AS FOLLOWS:

	APPLICATION	MODEL #	REMARKS
CLG.	T-BAR SUPPLY	700 MA (W/ OBD)	MODULAR CORE WITH T-BAR PANEL THROW PATTERN INDICATED
CLG.	GYPSUM SUPPLY	MA (W/ OBD)	MODULAR CORE THROW PATTERN INDICATED
CLG.	T-BAR RETURN	105P	PERFORATED FACE WITH T-BAR PANEL
CLG.	T-BAR EXHAUST	700-600	EGGCRATE GRILLE WITH T-BAR PANEL
CLG.	GYPSUM EXHAUST	600	EGGCRATE GRILLE

14. FOR EXACT LOCATION OF DIFFUSERS AND GRILLES REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
15. FIRE DAMPERS & ACCESS:
HORIZONTAL FIRE DAMPERS: C4S PRODUCTS®MODEL #FD4C FUSIBLE LINK 1-1/2 HR RATED FIRE DAMPER WITH OUT OF AIRSTREAM STYLE AND INTEGRAL "CR" STYLE SLEEVE, OR EQUAL. FRAME IS 22 GAUGE GALVANIZED STEEL, BLADES ARE 20 GAUGE.
DUCT ACCESS DOOR: C4S PRODUCTS®MODEL #RAD FOR ROUND DUCT, OR EQUAL. DOOR PANEL IS 20 GAUGE STEEL WITH CONTINUOUS ZINC PLATED STEEL HINGE.
16. CONTROLS
A. THE VENTILATION SYSTEM SHALL BE WIRED TO OPERATE CONTINUOUSLY DURING OCCUPIED HOURS. DURING UNOCCUPIED HOURS THE UNIT SHALL CYCLE ON AND OFF WITH A DEMAND FOR HEATING AND COOLING.
B. ROOM THERMOSTATS SHALL BE PROGRAMMABLE WITH 5-1-1 DAY
C. PROGRAMMING AND 24 HOUR HEATING AND COOLING SETBACK CAPABILITY.
D. PROVIDE TWO-STAGE THERMOSTATS FOR EQUIPMENT WITH TWO-STAGE HEATING AND/OR COOLING.
E. PROVIDE ROOM CO2 SENSOR FOR HP-1.
F. PROVIDE OWNERS WITH OPERATION AND MAINTENANCE MANUAL.
G. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF ALL COMPONENTS.
H. INSTALL THERMOSTATS IN A CENTRALLY LOCATED AREAS AT 60" ABOVE FLOOR LEVEL OUT OF DIRECT SUN AND DRAFTS WHERE INDICATED ON THE MECHANICAL PLANS.
I. ALL LOW VOLTAGE WIRING FOR CONTROLS AND SENSORS IS THE RESPONSIBILITY OF THE MECHANICAL/HVAC CONTRACTOR. ALL CONDUIT RUNS (AND LOW VOLTAGE WIRING INSTALLATION) IS TO BE COORDINATED WITH ELECTRICAL CONTRACTOR DURING CONSTRUCTION.
17. PROVIDE CAM-FARR, 2 INCH DEEP, 30% EFFICIENT FILTERS IN RETURN AIR PLENUM OF FURNACES. INSTALL DOWNSTREAM OF RETURN AIR AND FRESH AIR INTAKE.
18. FLUES AND COMBUSTION INLETS FOR FURNACES SHALL TERMINATE A MINIMUM OF THREE (3) FEET ABOVE ANY FRESH AIR INLET WITHIN TEN (10) FEET.
19. OUTSIDE AIR INTAKE SHALL BE A MINIMUM OF 10 FEET AWAY FROM OR 3 FEET BELOW EXHAUST AIR DISCHARGE OR PLUMBING VENTS. COVER AIR INTAKE WITH 1" MESH WIRE.
20. SLOPE ALL CONDENSATE LINES at 1/4" PER FOOT. CONDENSATE OUTLETS SHALL TERMINATE INDIRECTLY TO APPROVED APPLIANCE OR A MINIMUM OF 6 INCHES ABOVE GROUND LEVEL. CONDENSATE LINES SHALL BE 3/4" HARD-DRAWN COPPER UNLESS OTHERWISE NOTED.
21. SUPPORTS AND HANGERS FOR HVAC EQUIPMENT SHALL BE IN ACCORDANCE WITH THE 2013 CALIFORNIA MECHANICAL CODE. DUCT SUPPORTS AND BRACING SHALL BE IN ACCORDANCE WITH TABLE 6-5 OF THE 2013 CALIFORNIA MECHANICAL CODE AND SMACNA STANDARDS.
22. SUPPORTS AND HANGERS FOR HVAC EQUIPMENT SHALL BE IN ACCORDANCE WITH ANSI/SMACNA 006-2006 HVAC DUCT CONSTRUCTION STANDARDS AND THE 2013 CALIFORNIA MECHANICAL CODE. DUCTS SHALL BE SUPPORTED A 8' INTERVALS (MIN.).
23. AIR DISTRIBUTION SYSTEM SHALL BE BALANCED WITH AN APPROVED AND CALIBRATED AIR FLOW MEASURING DEVICE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB). PROVIDE INDICATED AIR FLOW RATES (WITHIN ±5%). PROVIDE OWNER WITH COMPLETE AIR BALANCE REPORT IN ACCORDANCE WITH THE SPECIFICATIONS. PRIOR TO BALANCING, INSTALL CLEAN FILTERS IN EACH UNIT HAVING FILTERS. LEAVE OWNER WITH ONE SET OF SPARE FILTERS.
24. DUCT BALANCING DAMPERS SHALL BE USED TO PROVIDE INDICATED AIRFLOW RATES.
25. DUCT MATERIAL AND SEALING:
A. DUCTING IN CONCEALED LOCATION SHALL BE GALVANIZED SHEET METAL OR PRE-INSULATED FLEX DUCT, AS INDICATED ON DRAWINGS. DUCT SHALL BE MANUFACTURED IN ACCORDANCE WITH CHAPT. 6 OF THE 2013 CMC AND SMACNA GUIDELINES.
B. PRE-INSULATED FLEX DUCT SHALL HAVE AN R-VALUE = 6.0
C. FACTORY-FABRICATED DUCT SYSTEMS SHALL COMPLY WITH UL181.
D. METAL TO METAL JOINTS SHALL BE SEALED WITH MASTIC SEALANT TO PROVIDE AIRTIGHT PROTECTION PRIOR TO INSULATION. APPLY SEALANT ACCORDING TO MANUFACTURER'S RECOMMENDATION.
E. INNER LINING OF FLEX DUCTING SHALL BE SEALED WITH MASITC SEALANT TO SHEET METAL FITTING. THE EXTERIOR LINING (INSULATION) SHALL BE SECURELY FASTENED WITH PANDUIT STRAP TO THE SHEET METAL FITTING.
F. WHERE TURNS AND/OR TRANSITIONS EXCEED 45 DEGREES USE SHEET METAL FITTINGS AND ELBOWS. PROVIDE SHEET METAL SLEEVES FOR ALL SPLICES.
G. CORRIGATED ALUMINUM FLEX DUCT SHALL NOT BE ALLOWED.
H. ALL TAPES AND MASTIC SEALANTS SHALL COMPLY WITH UL181, UL 181A, OR UL181B.
26. DUCT MATERIAL AND SEALING FOR DUCT EXPOSED TO WEATHER:
A. ALL DUCTING EXPOSED TO WEATHER SHALL BE 20 GA. GALVANIZED STEEL.
B. JOINTS SHALL BE SEALED WITH "ARABOL" AND MASTIC SEALANT, OR EQUAL, TO PROVIDE WEATHERTIGHT PROTECTION PRIOR TO INSULATION.
C. INSULATE DUCTING ON THE EXTERIOR WITH 1" AP ARMAFLEX®SA SELF-ADHERING SHEET INSULATION. THERMAL CONDUCTIVITY = Ø.23 (BTU-IN/HI-FT2-F) ASTM C 518, Ø1 (PERM®/IN.) ASTM E 96.
A. INSULATION AND SEAMS SHALL BE COATED WITH WB ARMAFLEX®FINISH FOR WEATHER PROTECTION.
27. WRAP ALL UNLINED CONCEALED SUPPLY AND RETURN DUCTS WITH 0.C. FIBERGLASS DUCT WRAP OR JM MICROLITE, 2" THICK AND 1" PER CUBIC FOOT DENSITY. WRAP INSULATION ENTIRELY AROUND DUCT AND WIRE SECURELY IN PLACE WITH #16 WIRE 12" O.C. ON EACH SIDE OF STANDING SEAM AND OVER INSULATION JOINT. LAP ALL INSULATION JOINTS 3" MIN. INSULATE DUCTS TIGHT AGAINST OTHER WORK BEFORE HANGING IN PLACE.
28. DUCT SYSTEM LEAKAGE TEST
A. PROVIDE DUCT TESTS FOR ALL SYSTEMS THAT HAVE ANY PORTION OF THE AIR DISTRIBUTION SYSTEM IN UNCONDITIONED SPACE (E.G. ATTICS & CRAWL SPACES)
B. PERFORM FINAL DUCT PRESSURE TEST AFTER THE DRY WALL HAS BEEN FINISHED. DUCTS SHALL BE PRESSURIZED TO 25 PASCAL AND THE AIR LEAKAGE SHALL NOT EXCEED 6% OF FAN FLOW. FINAL TEST SHALL BE PERFORMED BY INDEPENDENT CERTIFIED HERS. AT THE TESTERS DISCRETION ONE OUT OF SEVEN SYSTEMS SHALL BE TESTED.
C. DUCT LEAKAGE TEST SHALL BE PROVIDED BY HERS RATER.
29. INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15 DEGREES DIVERGENCE WHEREVER POSSIBLE. DIVERGENCE UPSTREAM OF EQUIPMENT SHALL NOT EXCEED 20 DEGREES & CONVERGENCE DOWNSTREAM SHALL NOT EXCEED 30 DEGREES.
30. DUCTS WITHIN 10 FEET OF AIR MOVING DEVICE SHALL BE LINED ON THE INTERIOR WITH 1" OWENS CORNING TYPE 150 AEROFLEX, OR EQUAL. MATERIAL HAS A 'K' OF Ø.28 (BTU/HR-FT-°F)
31. PAINT DUCTWORK VISIBLE BEHIND REGISTERS AND GRILLES MATTE BLACK WITH APPROPRIATE PAINT.
32. SELECT, SUPPLY AND INSTALL FLEXIBLE DUCT CONNECTIONS BETWEEN SUPPLY/RETURN PLENUMS AND MAIN DUCTS TO ELIMINATE VIBRATION.
33. NO DUCTED OR NON-DUCTED AIR MOVING DEVICE SHALL TERMINATE IN ATTIC.
34. INSULATE CONDENSATE LINE WITH ARMSTRONG®1/2" WALL THICKNESS "DG TUBO-SLIT", COND=Ø.29 (BTU-IN/HR-°F) at 75°F IN ACCORDANCE WITH ASTM C 177 OR C 518. WHERE PIPING IS EXPOSED TO WEATHER PROVIDE PVC JACKETING AROUND INSULATION.

HVAC EQUIPMENT SCHEDULE

SYMBOL	AREA SERVED	COOLING TOTAL (BTU/HR)	COOLING SENSIBLE (BTU/HR)	COOLING COIL EDB/EWB (°F)	HEATING HIGH INPUT/OUTPUT (BTU/HR)	HEATING DB (°F)	FAN CFM	FAN S.P. (WC)	FAN O.A. (CFM)(2) (MIN)	ELECT. VOLTAGE	ELECT. MCA	ELECT. COMP. LRA	ELECT. FUSE/MOCP	MFGR & MODEL NO.	WEIGHT (LBS)	EFFICIENCY	REMARKS
HP 1	TRANING	42,300	40,700	80/62	46000	47	1,400	0.76	150	208/230 V. 1 PHASE	26	93	30	CARRIER # 50HCQA05	580	HSPF = 8.1 SEER = 15.8 EER=12.8	ROOFTOP HYBRID HEAT DUAL-FUEL PACKAGE UNIT INSTALL PREFAB.MFG ROOF CURB ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF
FC 2	OFFICES	---	---	---	---	---	1,400	0-0.8	300	208/230 V. 1 PHASE	5.4	---	15	CARRIER # FV4CNG005	118		VARAIBLE SPEED FANCOIL MOUNTED IN HORIZONTAL POSITION NO STRIP HEAT L=53-7/16", W=22-1/16", H=21"
HP 2	OFFICES	43,310	32,780	80/63	47,000	47	---	---	---	208/230 V. 1 PHASE	34.9	96	50	CARRIER # 25HNB648	316	HSPF=9.0 SEER = 16 EER=12.5	GROUND MOUNT VARAIBLE SPEED HEAT PUMP W=35", D=35", H=44"
FC 3	CONFERENCE	---	---	---	---	---	542	---	(3)	(4)	(4)	(4)	(4)	FUJITSU # ASU15RLS3	31	---	INDOOR HEAT PUMP WALL UNIT
HP 3	CONFERENCE	---	---	---	---	---		---	---	208/230 V. 1 PHASE	17.2	---	20	FUJITSU # AOU15RLS3	86	HSPF=13.4 SEER = 25.3 EER=14	GROUND MOUNTED OUTDOOR HEAT PUMP WALL UNIT
FC 4	IT STORAGE	---	---	---	---	---	489	---	(5)	(4)	(4)	(4)	(4)	FUJITSU # ASU9RLS3	31	---	INDOOR HEAT PUMP WALL UNIT
HP 4	IT STORAGE	---	---	---	---	---		---	---	208/230 V. 1 PHASE	13.4	---	15	FUJITSU # AOU9RLS3	84	HSPF=14.2 SEER = 33 EER=18	GROUND MOUNTED OUTDOOR HEAT PUMP WALL UNIT

NOTES:
1. PROVIDE CO2 DEMAND VENTILATION CONTROLS FOR HP-1. INSTALL CO2 SENSOR ADJACENT TO THERMOSTAT.
2. OUTSIDE AIR LISTED IS WITH OA ECONOMIZER DAMPER IN MINIMUM POSITION.
3. CONFERENCE ROOM WILL BE PROVIDED BY NATURAL VENTILATION.
4. ELECTRICAL FOR INDOOR UNIT WILL BE PROVIDED BY OUTDOOR UNIT HP-9.
5. IT STORAGE ROOM WILL BE PROVIDED BY VENTILATION FROM FC-2.

EXHAUST FAN SCHEDULE

SYMBOL	QTY.	DESCRIPTION	COOLING CFM	FAN S.P. (WC)	FAN RPM	ELECT. VOLTAGE	ELECT. BHP	ELECT. WATTS	MFGR & MODEL NO.	WEIGHT (LBS)	SONES	REMARKS
EF-1	2	CEILING CABINET FAN	90	0.25	---	115 V. 1 PHASE	---	24.3	PANASONIC WHISPERSENSE™ FV-11VQC5	12.6	0.4	UNIT HAS BUILT-IN BACKDRAFT DAMPER FAN SHALL HAS BUILT-IN HUMIDITY SENSOR FAN SHALL HAVE 6" DIA. DUCT CONNECTION
EF-2	1	IN-LINE EXHAUST FAN	240	0.2	---	115 V. 1 PHASE	---	55	PANASONIC WHISPERLINE™ FV-20-NLF1	24	1.7	UNIT HAS BUILT-IN BACKDRAFT DAMPER FAN SHALL BE ENERGIZED BY FAN IN FC-2 SUSPEND FAN FROM ROOF FRAMING

NOTES:
1. INSTALL/MOUNT EXHAUST FANS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
2. EF-1 SHALL BE ENERGIZED BY ROOM LIGHT SWITCH.
3. EF-2 SHALL OPERATE SIMULTANEOUSLY WITH SUPPLY FAN IN FC-2.

HVAC NOTES AND SCHEDULES

SCALE: 1/4 = 1'-0"

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Project Title: DISTRICT SUPPORT SERVICE BLDG. for GRASS VALLEY SCHOOL DISTRICT

Project Location: 10840 GILMORE WAY GRASS VALLEY, CA 95945

Sheet Title: HVAC NOTES AND SCHEDULES

Revisions:

No.	Date:	By:	Description:
	-	-	-

Plot Date: 7/27/2016

Job #	16-041
Scale	as noted
Date 1st Issued	N/A
Sheet Number	M0.1

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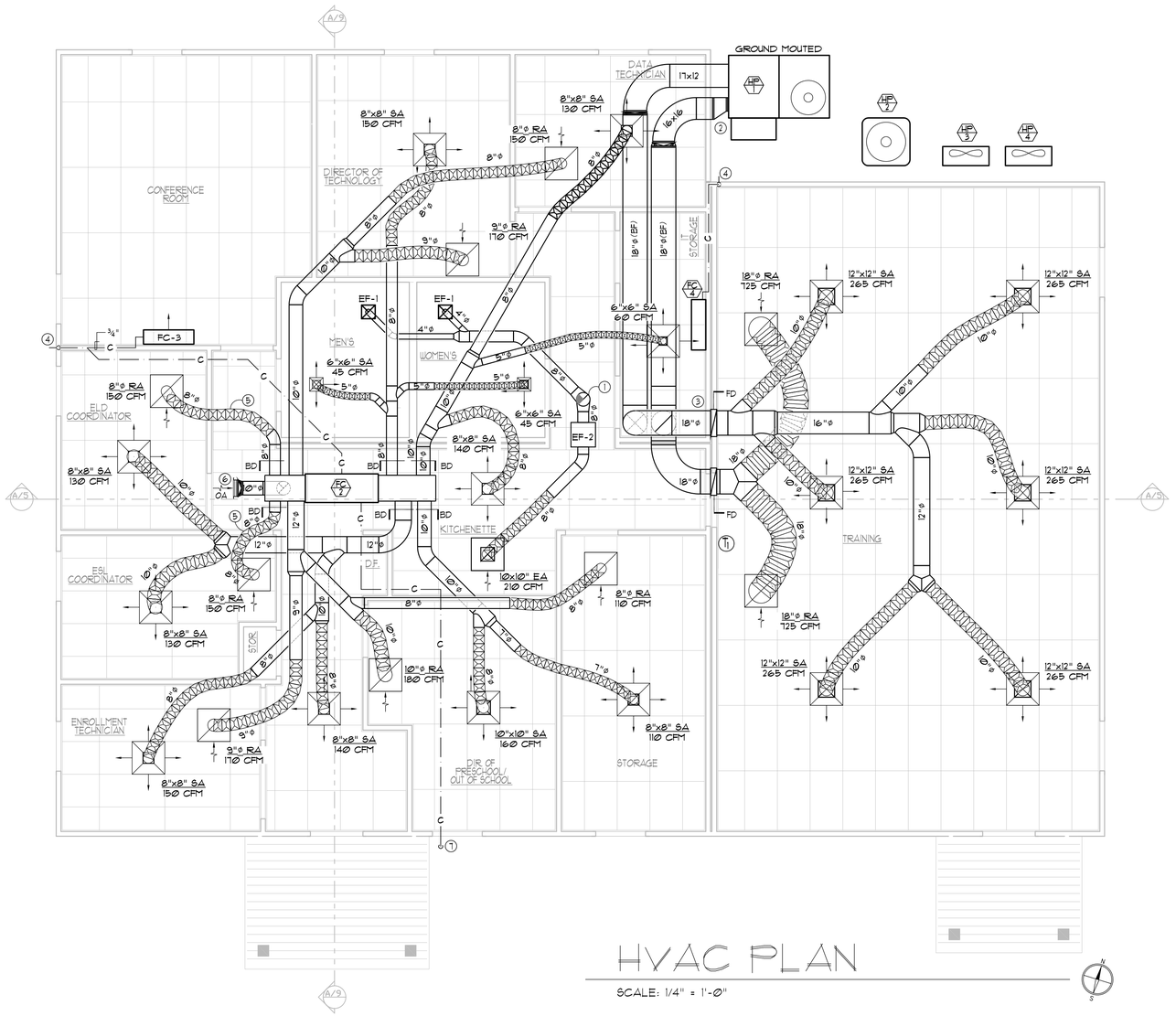

HVAC PLAN

SCALE: 1/4" = 1'-0"

KEYED NOTES

1. 10"ø EXHAUST DUCT THROUGH ROOF TO ROOF CAP
2. TRANSITION 10"x25" DUCT AT UNIT TO 16"x16"
3. 18"ø RA AND SA DUCT RISERS
4. TERMINATE PRIMARY CONDENSATE 6" MIN. ABOVE GRADE WITH DOWNWARD ELBOW
5. PROVIDE A MINIMUM OF 10' OF FLEX DUCT BETWEEN PLENUM AND GRILL
6. 14"x14" OA LOUVER AT GABLE END
7. TERMINATE SECONDARY CONDENSATE FLUSH WITH SOFFIT, OVER WINDOW

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Project Location: 10840 GILMORE WAY GRASS VALLEY, CA 95945

Sheet Title: HVAC FLOOR PLAN

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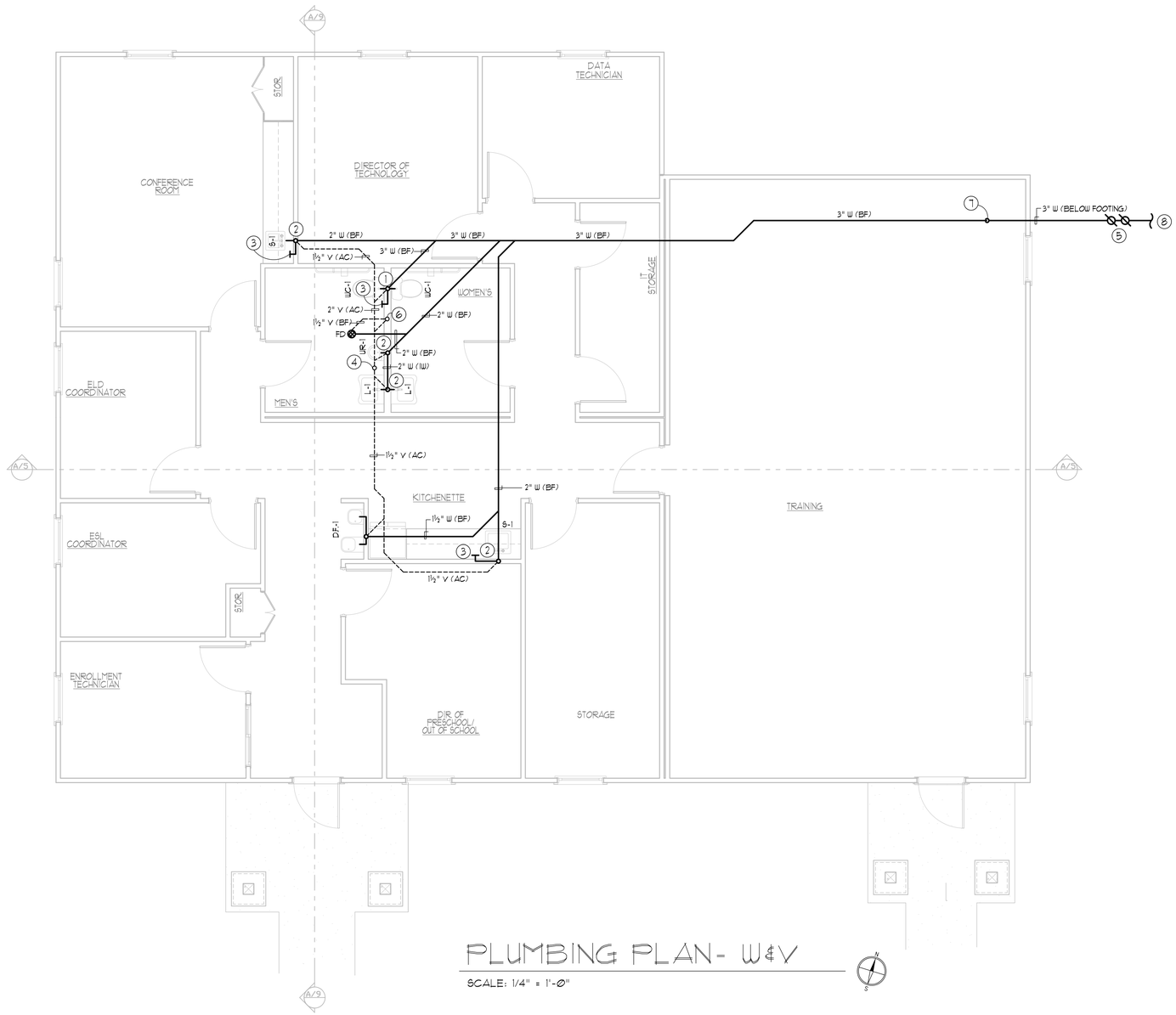
PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	MFGR & MODEL #	ACCESSORIES
WC-1	WATER CLOSET	PROFLO 9403/9412	1.28 GPF, ADA COMPLIANT, WHITE VITREOUS CHINA ELONGATED BOWL
L-1	WALL HUNG LAVATORY	PROFLO PF551WH SLOAN ETF-600	20"X18" ADA COMPLIANT WHITE, VITREOUS CHINA WALL HUNG LAV BATTERY OPERATED ELECTRONIC FAUCET, Ø.5 G.P.H.
UR-1	VITREOUS CHINA, WALL HUNG URINAL W/ FLUSH VALVE	PROFLO PF1815, ADA SLOAN ROYAL 186-Ø.125 FLUSH VALVE	WHITE VITREOUS CHINA, WALL HUNG, ADA HEIGHT, Ø.125 GPF, FLUSH VALVE, ¾" TOP INLET SPUD
S-1	STAINLESS STEEL SINGLE BOWL SINK	PROFLO PFSR25226-4 OPTION 1: PROFLO PFXC411 OPTION 2: PROFLO PFXC3101	25"x22" STAINLESS STEEL, SINGLE BOWL SINK, ADA COMPLIANT 1.5 GPM SINGLE LEVER FAUCET WITH PULL OUT SPRAY
DF-1	WALL MOUNTED DUAL LEVEL DRINKING FOUNTAIN	ELKAY LZSTLDDW55K	ADA COMPLIANT 18ga TYPE 304 STAINLESS STEEL DRINKING FOUNTAIN WITH BOTTLE FILLER
FD	FLOOR DRAIN	JR SMITH 2Ø05Y02A05NB	5"ø ADJ. STRAINER, NICKEL BRONZE TOP, 2" OUTLET
TP	TRAP PRIMER	PROFLO PFPR500	FLOOR DRAIN TRAP PRIMER



KEYED NOTES

1. 3" WD, 2" VR
2. 2" WD, 1 ½" VR
3. LINE-SIZED WALL CLEAN-OUT
4. 2" VTR
5. 2-WAY CLEAN OUT & BACK-FLOW PREVENTER
6. 1½" VR
7. DROP TO BELOW GRADE
8. FOR CONTINUATION REFER TO CIVIL PLANS

PLUMBING PLAN- W&V

SCALE: 1/4" = 1'-Ø"

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Sheet Title: PLUMBING PLAN W&V

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