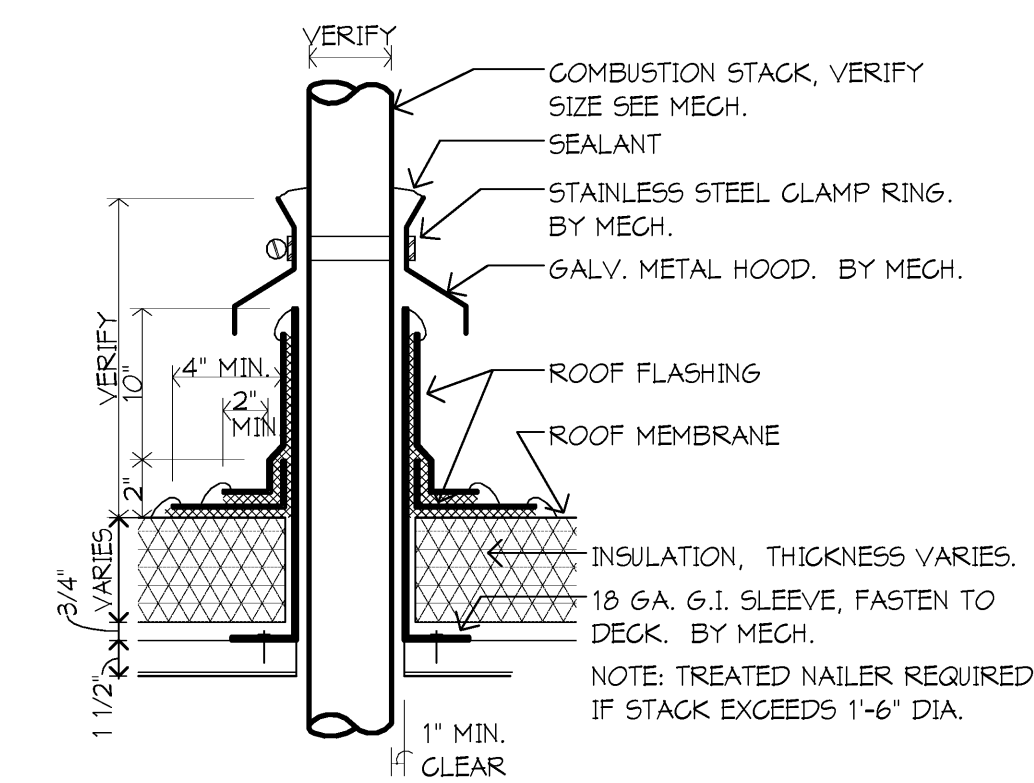


- NOTES:**
- FIELD VERIFY THE EXISTENCE OF AN EXISTING ROOF FRAME AT EACH LOCATION. IF NO ROOF FRAME IS FOUND, INSTALL NEW ROOF FRAME PER DETAIL B7/A1.11H.
  - FIELD VERIFY THAT A MINIMUM 1 1/2\"/>

**B8 ROOF INFILL**  
1\"/>



**D8 MEMBRANE ROOF COMBUSTION STACK**  
1 1/2\"/>



**MASONRY NOTES**

- Work shall be performed in accordance with ACI 530 specifications.
- Mortar: ASTM C270, Type M below grade, Type M or S above grade, Type N for non-load bearing above grade.
- Grout: ASTM C476, Fc=2000 psi, tested per ASTM C1014.
- Grout beneath beam bearing three courses.
- Provide lintels for openings in masonry walls over 8\"/>

**STRUCTURAL STEEL**

- Structural Steel: Fabricated and erected per the AISC Manual of Steel Construction.  
W-beams: ASTM A-992 gr. 50.  
Steel Tubes: ASTM A-500 grade B.  
Steel Pipe: ASTM A53, Type E, grade B.  
All other shapes: ASTM A-36.
- Anchor Rods: 36 ksi, ASTM F-1554.
- Welds: E70XX electrodes per AWS D1.1, Structural Welding Code.
- Bolted Connections: 3/4\"/>

**METAL DECK**

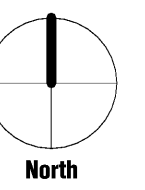
- Roof Deck: 15\"/>

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed ARCHITECT under the laws of the State of MICHIGAN

DANIEL KRITTA  
Registration Number 1301047892 Date 10/31/14

Description	Revisions	Date	Num

Comm: 12/02/11  
Date: 4/16/2013  
Drawn: BKY  
Check: JAL



**ROOF PLAN**

Scale: As indicated

**A1.11S**

**H1 ROOF PLAN**  
1/16\"/>

MI

A

**GENERAL DEMOLITION NOTES**

- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL CUTTING AND PATCHING OF EXISTING CONSTRUCTION NOT SHOWN ON THE ARCHITECTURAL PLANS. NO CUTTING OF STRUCTURAL MEMBERS OR STRUCTURE WHICH WILL DETERIORATE THE INTEGRITY AND STRENGTH OF THE BUILDING WILL BE ALLOWED WITH OUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
- ALL EXISTING SERVICES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE INDICATED ON THE PLANS. COORDINATE DISRUPTION OF SERVICES WITH OWNER TO PROVIDE AN ACCEPTABLE TIME FOR DOWN TIME.
- THE MECHANICAL CONTRACTOR SHALL REMOVE ALL EXISTING CEILING TILES AND GRIDS AS REQUIRED FOR INSTALLATION OF NEW WORK. ANY DAMAGED TILES AND OR GRIDS SHALL BE REPLACED WITH NEW TO MATCH AT THE CONTRACTORS EXPENSE.
- ALL EQUIPMENT AND PIPING SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.

**DEMOLITION KEYED NOTES:**

- REMOVE EXTENT OF EXISTING CH, HW, & REGRIP PIPING SHOWN, INCLUDING ALL HANGERS. PREP ROUTE FOR INSTALLATION OF NEW HW & REGRIP MAINS. SEE NEW WORK PLANS FOR REQUIREMENTS.
- REMOVE EXISTING WATER HEATER, PUMP AND HW & CH SERVICE PIPING COMPLETE. REMOVE EXISTING 4" EXHAUST STACK. EXISTING ROOF IS CURRENTLY UNDER WARRANTY, COORDINATE WITH ROOF MANUFACTURER TO SELECT AND HIRE AUTHORIZED CONTRACTOR TO PATCH AND REPAIR ROOF AT REMOVED VENT LOCATION. ELECTRICAL DISCONNECT OF PUMP AND WATER HEATER BY EC.

**REDFORD UNION MECHANICAL / ELECTRICAL IMPROVEMENTS**

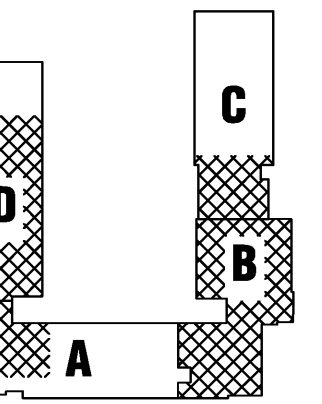
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**KEY PLAN**

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed ENGINEER under the laws of the State of MICHIGAN

Jonathan Loose  
Registration Number 622002908 Date 10/31/13

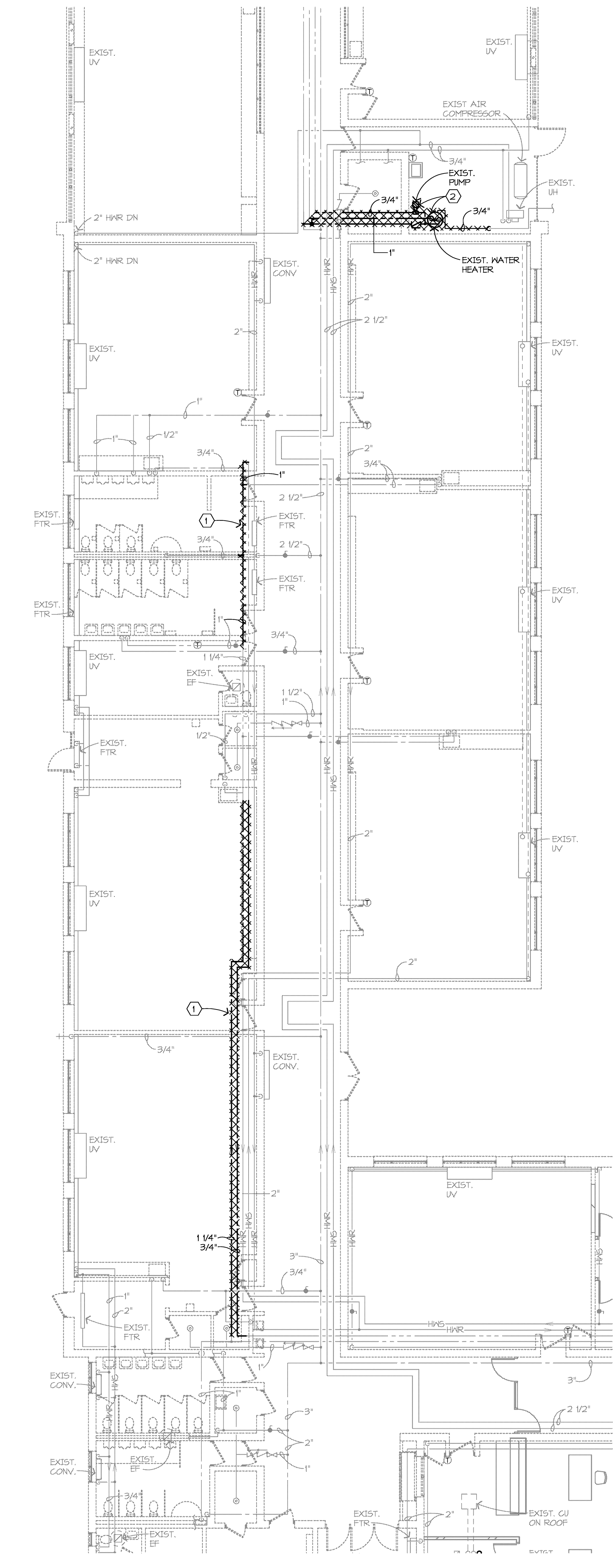
Revisions		
Description	Date	Num

Comm: 124021  
Date: 4/16/2013  
Drawn: JL  
Check: JL  
North

**PARTIAL MECHANICAL DEMOLITION PLANS**

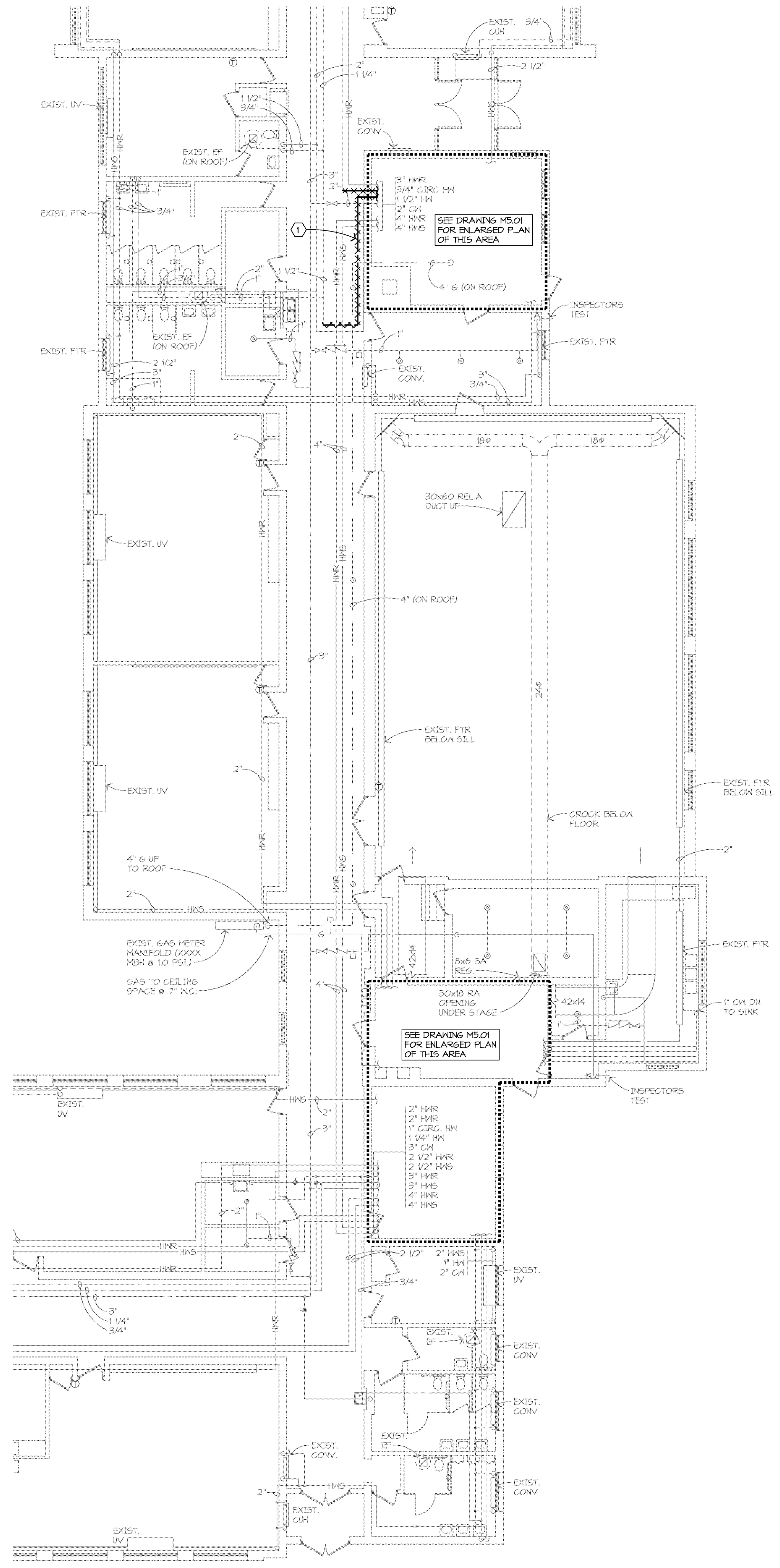
Scale: 1/8" = 1'-0"

**M0.11S**



ALL DEMOLITION SHOWN ON THIS SHEET IS PART OF ALTERNATE #2

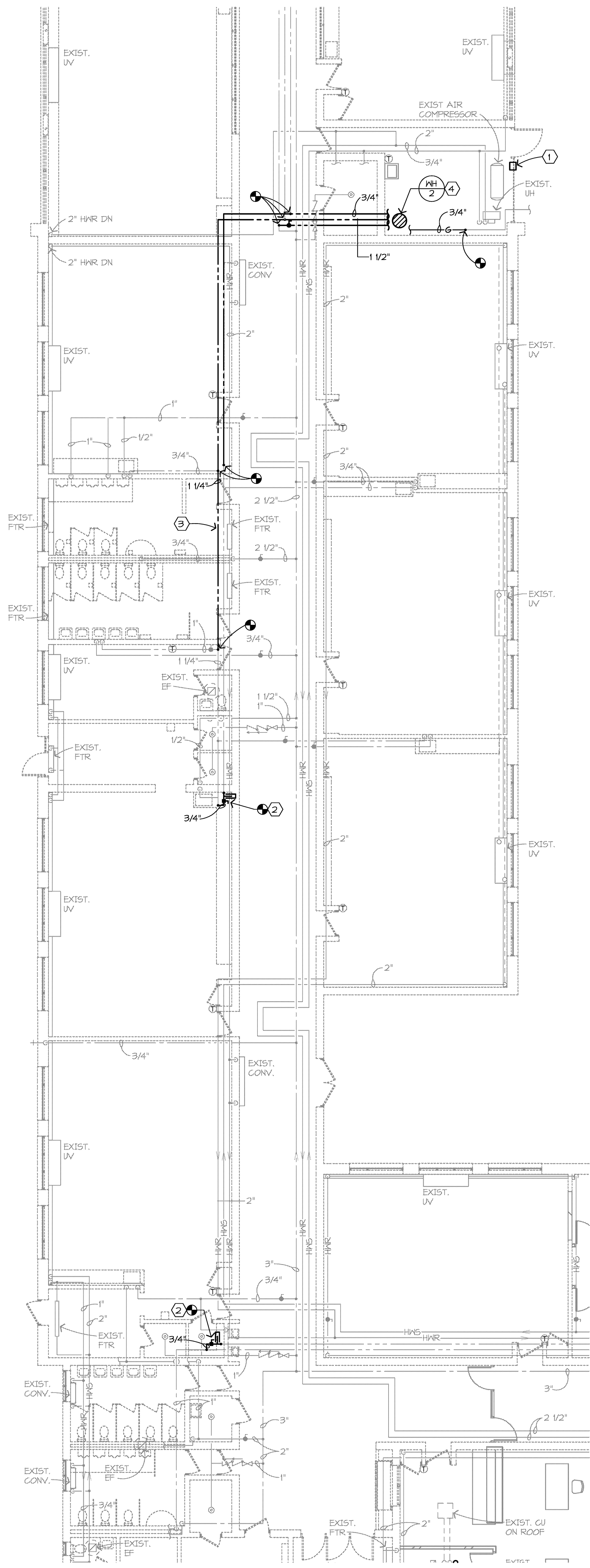
**ALTERNATE #2**  
**E2 PARTIAL MECHANICAL DEMOLITION PLAN AREAS 'A' AND 'D'**  
1/8" = 1'-0"



**ALTERNATE #2**  
**E2 PARTIAL MECHANICAL DEMOLITION PLAN AREAS 'B' AND 'C'**  
1/8" = 1'-0"

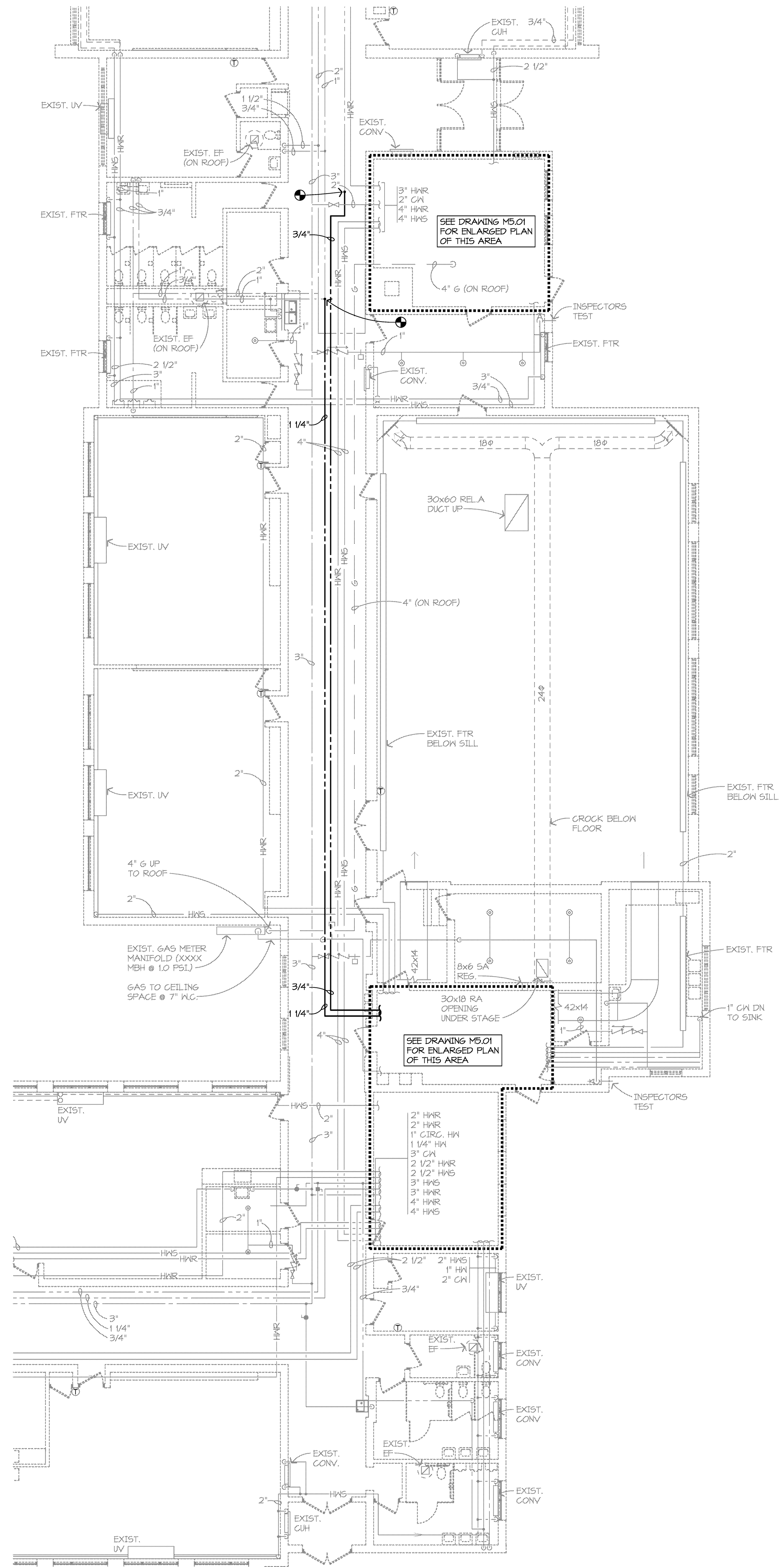


1 2 3 4 5 6 7 8 9 10  
 A B C D E F G H  
 BACHELOR MECHANICAL ENGINEERING  
 REGISTERED PROFESSIONAL ENGINEER  
 STATE OF MICHIGAN  
 LICENSE NO. 622025908  
 11/19/96



ALL NEW WORK SHOWN ON THIS SHEET IS PART OF ALTERNATE #2.

**ALTERNATE #2**  
**E2 PARTIAL MECHANICAL NEW WORK PLAN AREAS 'A' AND 'D'**  
 1/8" = 1'-0"



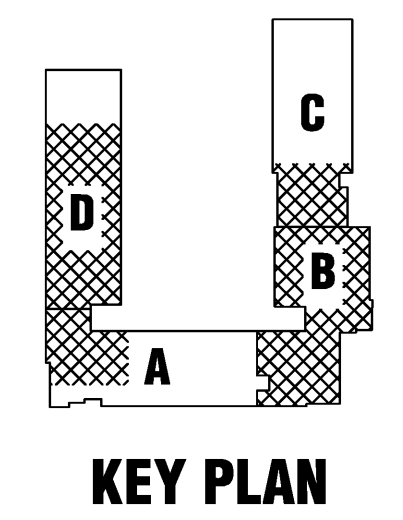
**ALTERNATE #2**  
**E2 PARTIAL MECHANICAL NEW WORK PLAN AREAS 'B' AND 'C'**  
 1/8" = 1'-0"

- GENERAL NEW WORK NOTES:**
- DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY SHOW ALL REQUIRED RISERS, DROPS, AND OFFSETS. LAYOUT PIPE ROUTING AND COORDINATE WORK WITH OTHER TRADES PRIOR TO STARTING CONSTRUCTION.
  - MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL CUTTING AND PATCHING OF EXISTING CONSTRUCTION NOT SHOWN ON THE ARCHITECTURAL PLANS. NO CUTTING OF STRUCTURAL MEMBERS OR STRUCTURE WHICH WILL DETERIORATE THE INTEGRITY AND STRENGTH OF THE BUILDING WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
  - ALL EXISTING SERVICES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE INDICATED ON THE PLANS. COORDINATE DISRUPTION OF SERVICES WITH OWNER TO PROVIDE AN ACCEPTABLE TIME FOR DOWN TIME.
  - THE MECHANICAL CONTRACTOR SHALL REMOVE ALL EXISTING CEILING TILES AND GRIDS AS REQUIRED FOR INSTALLATION OF NEW WORK. ANY DAMAGED TILES AND OR GRIDS SHALL BE REPLACED WITH NEW TO MATCH AT THE CONTRACTORS EXPENSE.
  - PROVIDE BRANCH SIZES TO PLUMBING FIXTURES AS SHOWN ON SHEET M6.04 PLUMBING FIXTURE SCHEDULE UNLESS OTHERWISE NOTED.
  - LOCATE ANY BALANCING DAMPERS OR FLEXIBLE DUCT CONNECTIONS ABOVE ACCESSIBLE CEILING.
  - ROUTE DUCTS BETWEEN JOISTS AND THROUGH JOIST NEBS WHERE REQUIRED TO COORDINATE WITH THE INSTALLATION OF OTHER TRADES AND TO MAINTAIN CEILING HEIGHTS. COORDINATE LOCATIONS PRIOR TO CROSS BRACING TO ENSURE THERE ARE NO CONFLICTS.
  - TRANSFER DUCTS AND UNIT VENTILATOR DUCT MAINS SHALL HAVE 1" THICK INTERNAL SOUND ATTENUATING LINER.
  - DIFFUSER DUCT RUNOUTS AND FLEXIBLE DUCT CONNECTIONS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.

- NEW WORK KEYED NOTES:**
- PROVIDE 12x12 COMBUSTION AIR DUCT SLEEVE & LOUVER.
  - PROVIDE NEW PIPING CONNECTION, THERMOMETER, AND BALANCE VALVE TO CLOSE DOMESTIC HOT WATER RECIRC LOOP.
  - PROVIDE NEW 1/2" DOMESTIC HW PIPE ALONG SAME ROUTE AS DEMOLISHED SMALLER SIZE PIPE.
  - SEE SCHEMATIC 69MS.02 FOR ALL CONNECTIONS AND PIPING COMPONENTS FOR NEW DOMESTIC HW SYSTEM. COORDINATE WITH ROOF MANUFACTURER TO SELECT AND HIRE AUTHORIZED CONTRACTOR TO PROVIDE NEW ROOF PENETRATIONS AND ALL REQUIRED FLASHING ETC. FOR EXHAUST VENT.

**REDFORD UNION MECHANICAL / ELECTRICAL IMPROVEMENTS**  
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 REDFORD, MI 48240  
**REDFORD UNION SCHOOL DISTRICT**  
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 Jonathan Loose  
 Registration Number 622025908 Date 10/31/13

Revisions		
Description	Date	Rev

Comm: 124021  
 Date: 4/16/2013  
 Drawn: JL  
 Check: JL  
 North

**PARTIAL MECHANICAL NEW WORK PLANS**

Scale: 1/8" = 1'-0"  
**M1.11S**



UNIT NO.	MANUFACTURER	MODEL NUMBER	NOMINAL HP	TYPE	BURNER MANUF.	FUEL	FIRING RATE MBTU/H	MIN. GROSS OUTPUT MBTU	BLOWER MOTOR HP	VOLTS	PHASE	FLA	REMARKS
B-1	AERCO	BMK-30LN	85	HOT WATER	AERCO	NAT. GAS	3,000	2,685	20 AMP	208	3	11.0	1

NOTES:  
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

UNIT NO.	SERVES	MANUFACTURER	SERIES	MODEL NUMBER	TYPE	DESIGN GPM	DESIGN HEAD	50% FLOW HEAD	SHUTOFF HEAD	IMP. SIZE	EFF. %	SIG. SIZE	DISCH. SIZE	MOTOR				REMARKS	
														RPM	HP	VOLTS	PHASE	FLA	
P-1	B-2 (EXIST. BOILER)	B & G																	5
P-2	B-1 (NEW BOILER)	B & G	80	505x7	IN-LINE	300	40	42	43	6.625"	70.9	5"	3"	1750	7.5	208	3	18.4	1.94
P-3	HEATING LOOP	B & G	150	3E	BASE MTD.	300	100	112	112	10.38"	73.4	4"	3"	1750	15	208	3	37	1.23
P-4	HEATING LOOP	B & G	150	3E	BASE MTD.	300	100	110	112	10.38"	73.4	4"	3"	1750	15	208	3	37	1.23
P-5	WH-1 (EAST)	B & G	PL	PL-36	IN-LINE	4.8	27	30	33	3.0"		1"	1"	3300	1/6	120	1	2.1	13.46
P-6	WH-2 (WEST)	B & G	PL	PL-30	IN-LINE	2.2	12	12	12	3.0"		3/4"	3/4"	2650	1/12	120	1	1.4	13.46

NOTES:  
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.  
2. PROVIDE VARIABLE FREQUENCY DRIVE, INSTALLATION BY ELECTRICAL CONTRACTOR.  
3. PROVIDE SUCTION DIFFUSER WITH START-UP STRAINER.  
4. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL MOTOR STARTER AND DISCONNECT.  
5. EXISTING TO REMAIN PUMP. PROVIDE NEW EQUIPMENT LABEL.  
6. PROVIDE PER ALTERNATE #2.

UNIT NO.	SERVES	MANUFACTURER	MODEL NUMBER	TANK TYPE	AVERAGE WATER TEMP.	MINIMUM RECHARGE PRESS. (PSIG)	MAXIMUM OPER. PRESSURE (PSIG)	TANK VOLUME (GALLONS)	ACCEPTANCE VOLUME (GALLONS)	TANK HEIGHT	TANK DIA.	REMARKS
ET-1	WH-1 (EAST)	B & G	PT-25V	DIAPHRAGM	90	40	80	10.3	10.3	20"	16"	1, 2
ET-2	WH-2 (WEST)	B & G	PT-12	DIAPHRAGM	90	40	80	4.4	3.2	15"	11"	1, 2

NOTES:  
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.  
2. SUSPEND TANK FROM CEILING OVER WATER HEATER.

UNIT NO.	SERVES	MANUFACTURER	MODEL NUMBER	TYPE (GAS OR ELEC)	MBH INPUT	MINIMUM EFFICIENCY	STORAGE CAP. (GALLONS)	GPH RECOVERY @ 100° RISE	WATER TEMP.	VENT SIZE	INTAKE SIZE	VOLTS	PHASE	AMPS	NOTES
WH-1	BUILDING HW (EAST)	A.O. SMITH	XI BTH-199	GAS	199.9	95%	100	230	140°	3"	3"	120	1	6.2	1, 2, 3, 4
WH-2	BUILDING HW (WEST)	A.O. SMITH	BTH-80	GAS	76.0	90%	50	83	140°	2"	2"	120	1	5	1, 2, 3, 4

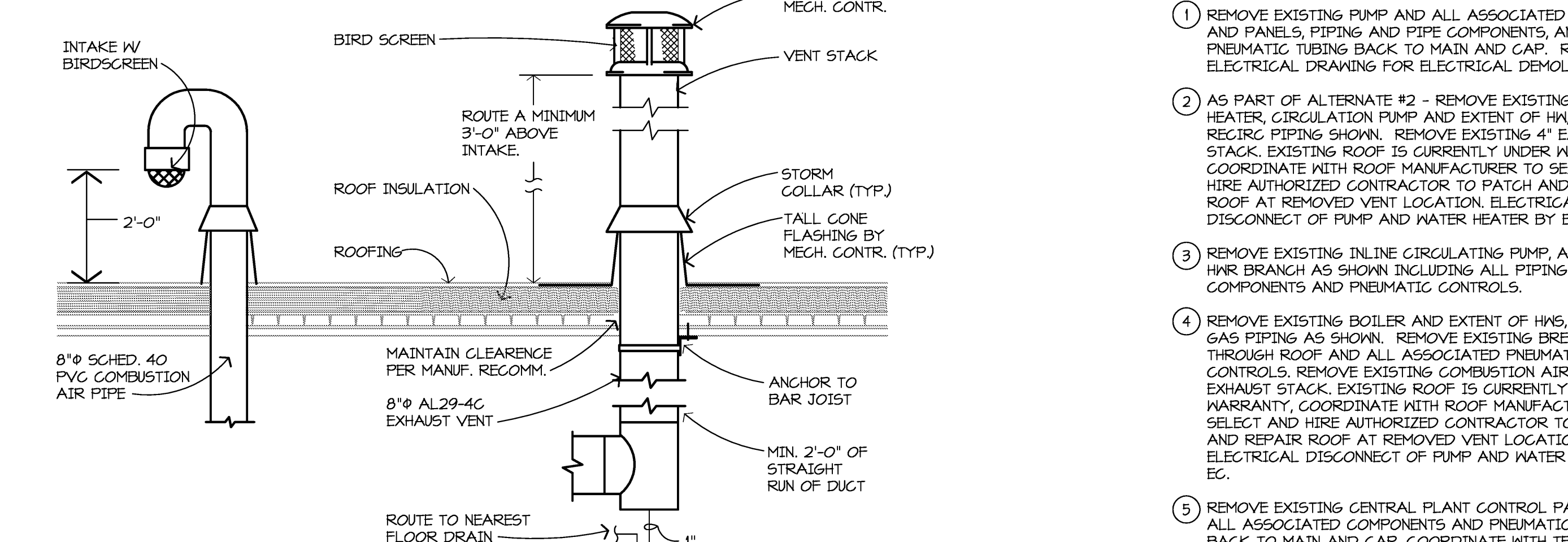
NOTES:  
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.  
2. PROVIDE WITH ASME RATED PRESSURE/TEMPERATURE RELIEF VALVE PIPED INDEPENDENTLY TO NEAREST FLOOR DRAIN.  
3. PROVIDE WITH SINGLE POINT ELECTRICAL CONNECTION.  
4. PROVIDE AND INSTALL VACUUM RELIEF VALVE PER THE AUTHORITY HAVING JURISDICTION.

UNIT NO.	SERVES	MANUFACTURER	MODEL NUMBER	MAX. GPM	INLET/OUTLET SIZE	BLOWDOWN SIZE	REMARKS
AS-1	BOILER	B&G	CRSN-6F	380	6"	1/2"	1, 2, 3

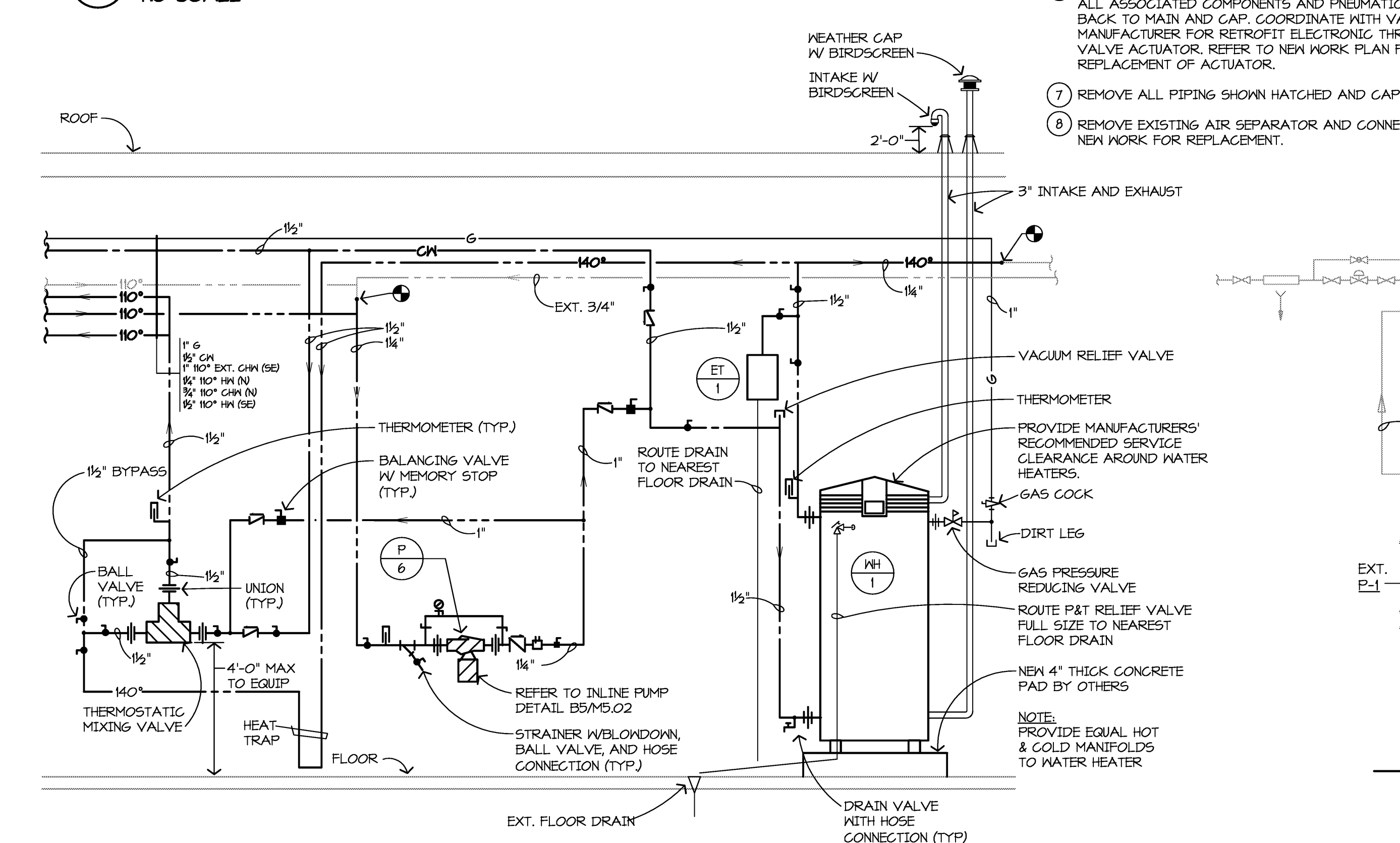
NOTES:  
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.  
2. PROVIDE AUTOMATIC AIR VENT PIPED TO NEAREST FLOOR DRAIN.  
3. PROVIDE 1" VALVE AND PIPE FROM BLOW-DOWN CONNECTION.

UNIT NO.	SERVES	MANUFACTURER	MODEL NUMBER	MAX. GPM	INLET/OUTLET SIZE	BLOWDOWN SIZE	REMARKS
AS-1	BOILER	B&G	CRSN-6F	380	6"	1/2"	1, 2, 3

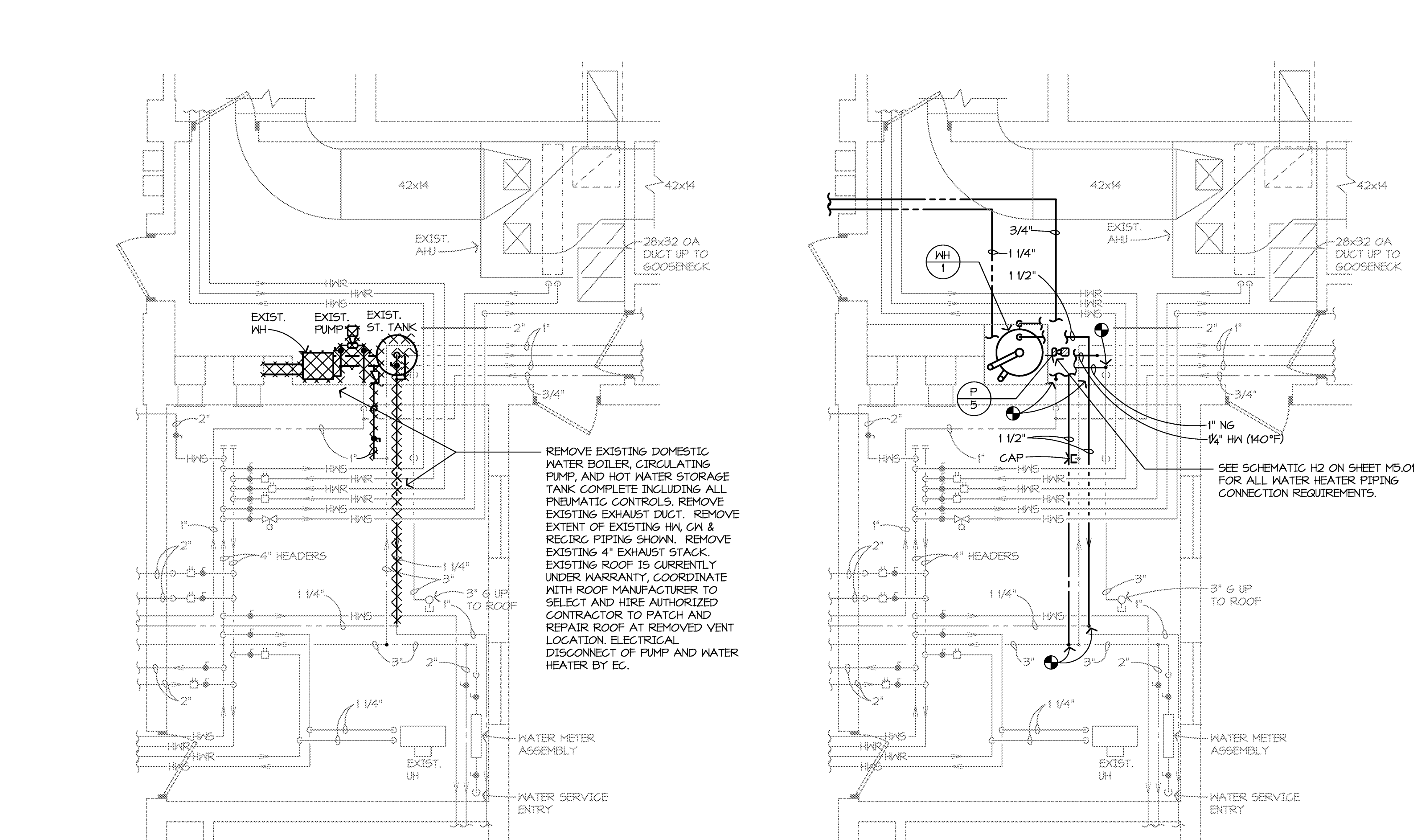
NOTES:  
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.  
2. PROVIDE AUTOMATIC AIR VENT PIPED TO NEAREST FLOOR DRAIN.  
3. PROVIDE 1" VALVE AND PIPE FROM BLOW-DOWN CONNECTION.



**E2 BOILER / VENT STACK DETAIL**  
NO SCALE

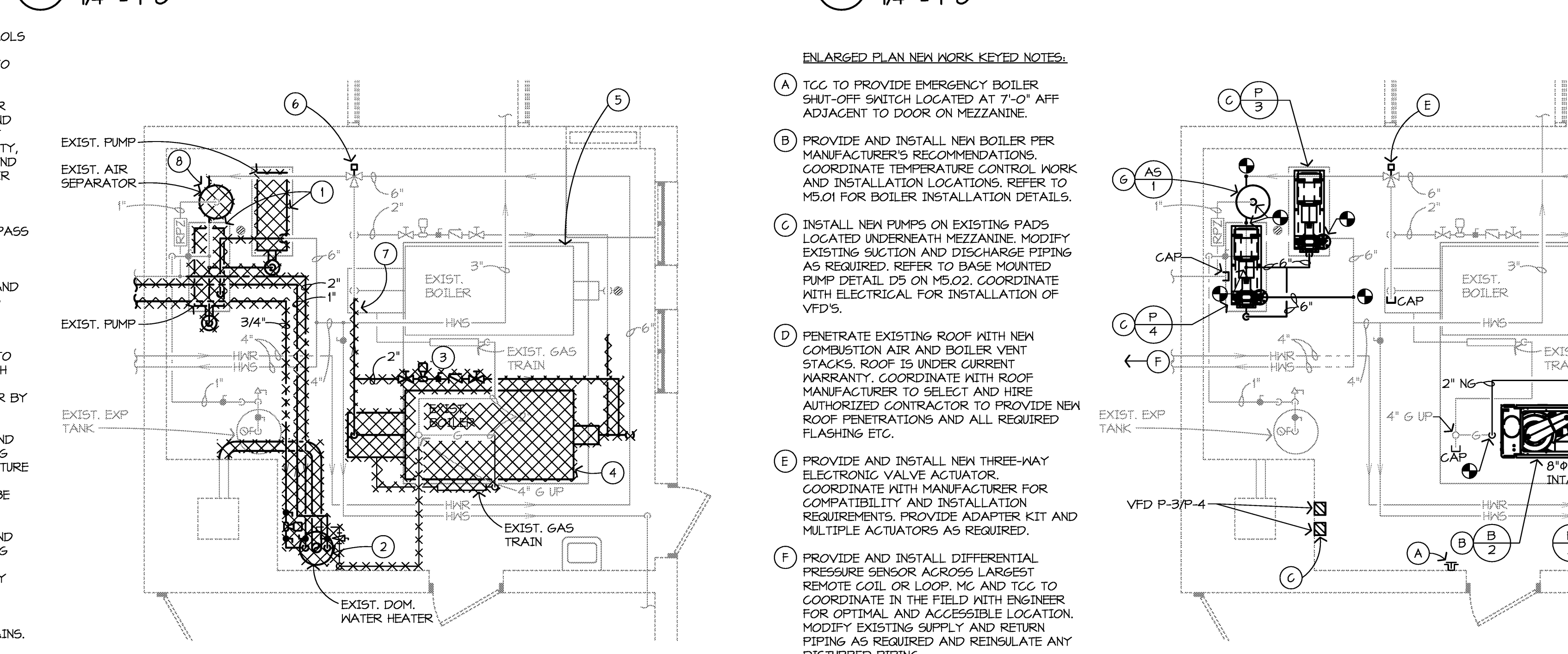


**H2 DOMESTIC WATER HEATER PIPING SCHEMATIC - WH-1**  
NO SCALE



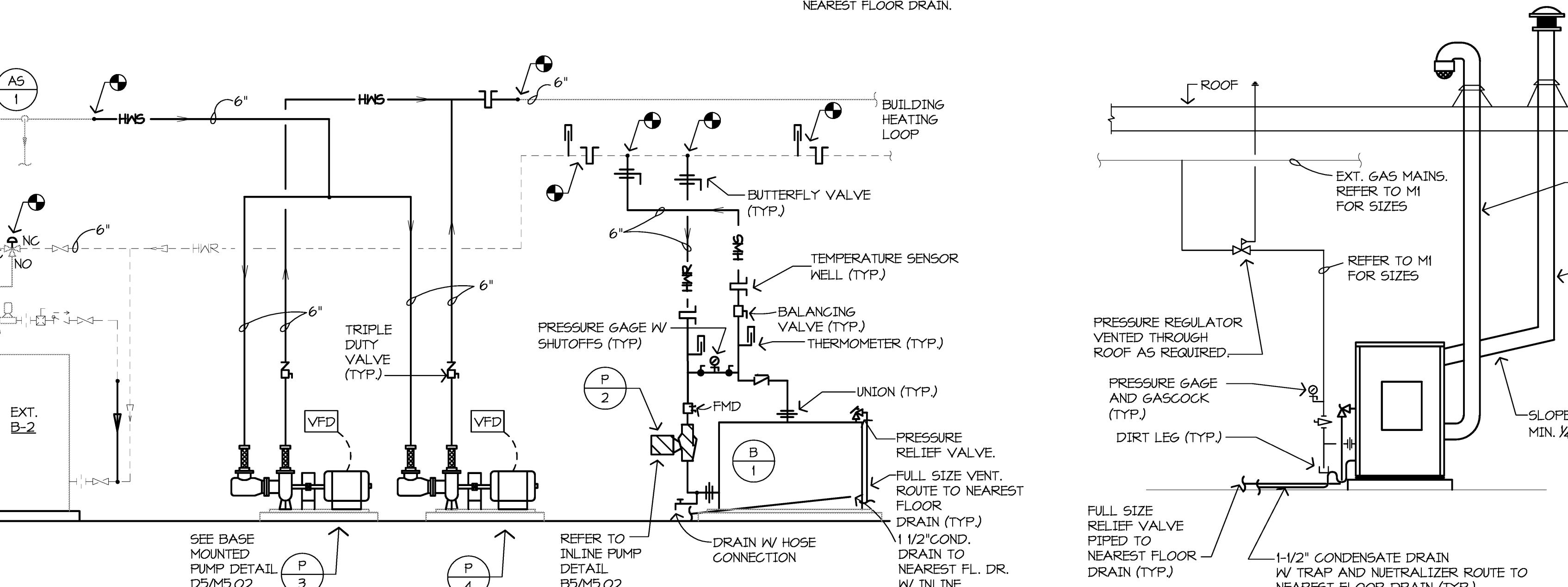
**D6 ENLARGED MECHANICAL ROOM DEMOLITION PLAN**  
1/4" = 1'-0"

**D9 ENLARGED MECHANICAL ROOM NEW WORK PLAN**  
1/4" = 1'-0"



**E6 BOILER ROOM DEMOLITION PLAN**  
1/4" = 1'-0"

**E9 BOILER ROOM NEW WORK PLAN**  
1/4" = 1'-0"



**H6 BOILER PIPING SCHEMATIC**  
NO SCALE

**H9 BOILER INSTALLATION DETAILS**  
NO SCALE

**GENERAL NEW WORK NOTES:**

- DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY SHOW ALL REQUIRED RISERS, DROPS, AND OFFSETS. LAYOUT DUCT AND PIPE ROUTING AND COORDINATE WORK WITH OTHER TRADES PRIOR TO STARTING CONSTRUCTION.
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**REDFORD UNION MECHANICAL / ELECTRICAL IMPROVEMENTS**

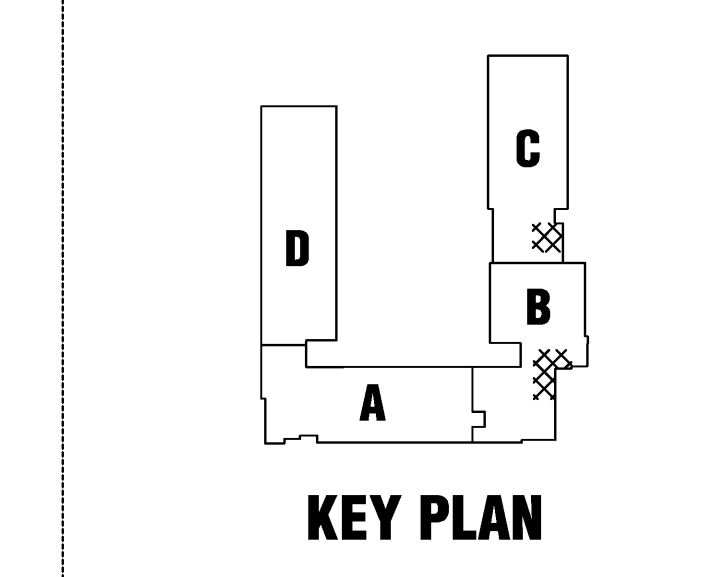
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**KEY PLAN**

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed ENGINEER under the laws of the State of MICHIGAN.

Jonathan Loose  
622022908 Date 10/31/13

Description	Date	Num

Comm: 124021  
Date: 4/16/2013  
Drawn: JL  
Check: JL

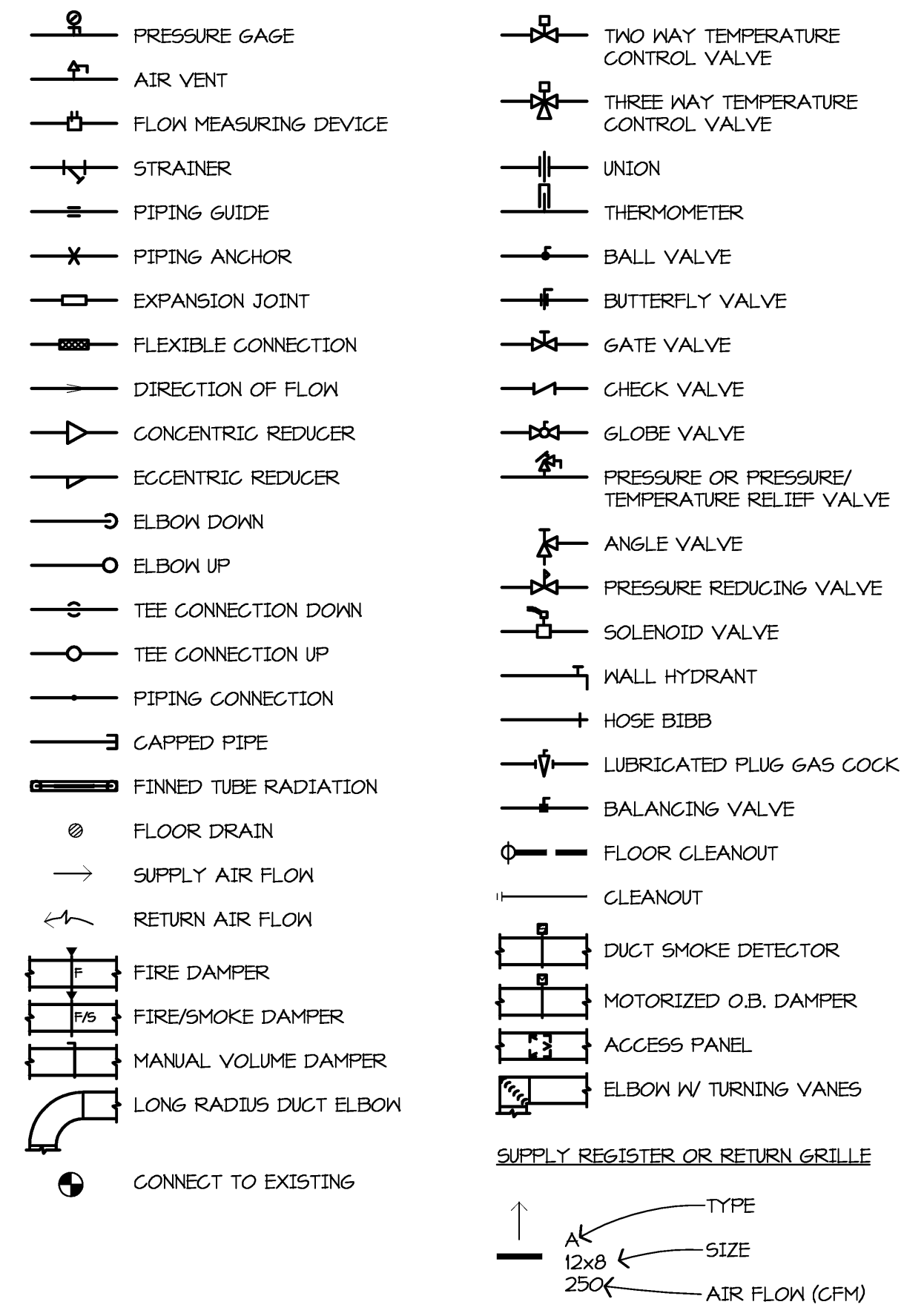
**MECHANICAL ENLARGED PLAN SCHEDULES AND DETAILS**

Scale: AS NOTED

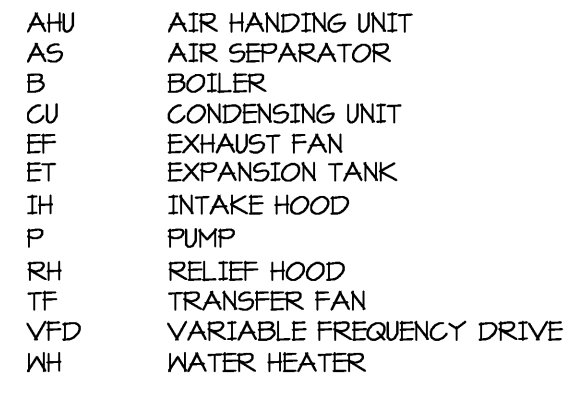
**M5.01S**



**MECHANICAL SYMBOLS**



**SCHEDULED EQUIPMENT/NUMBER**



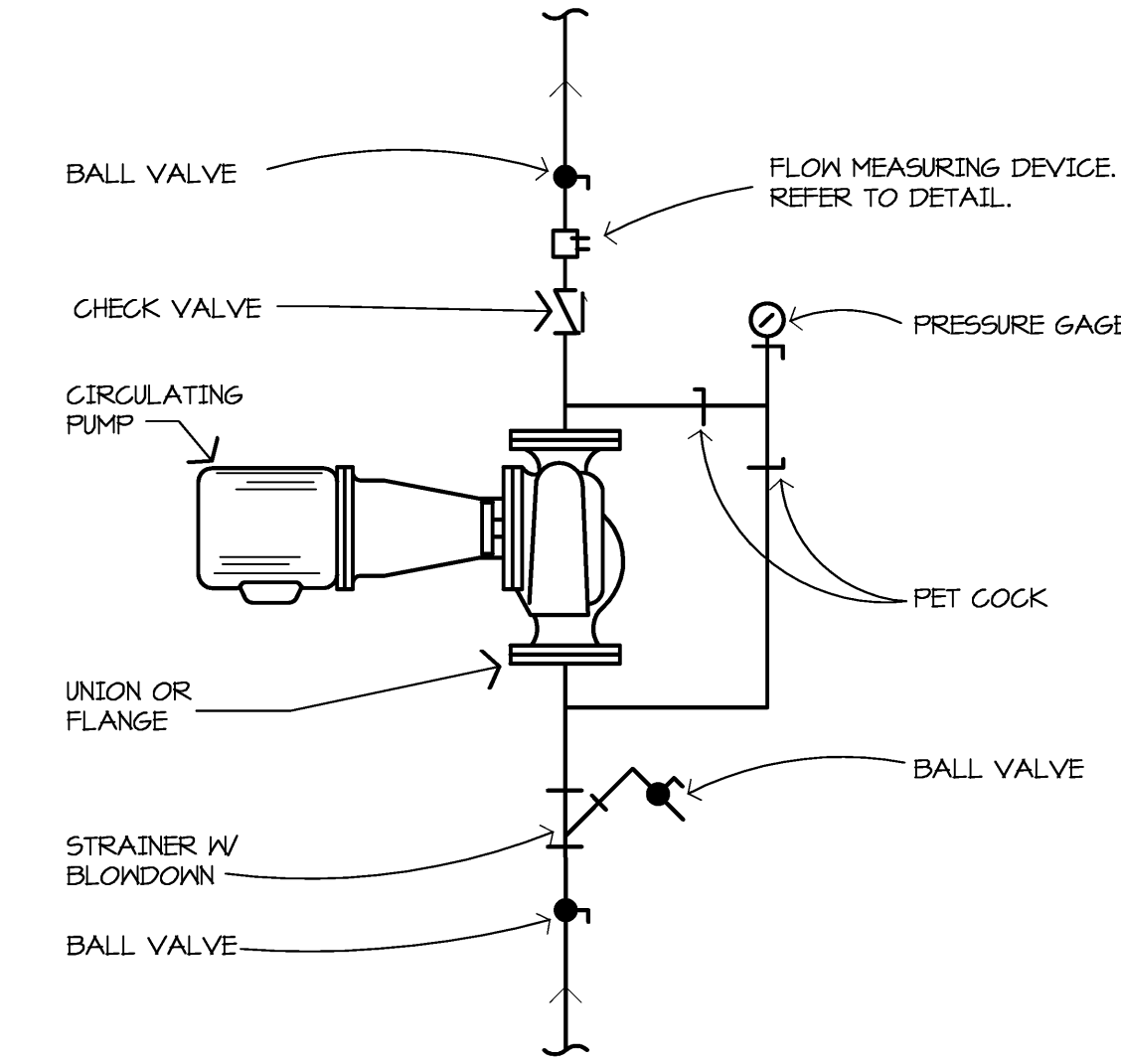
**MECHANICAL ABBREVIATIONS**

AD	AREA DRAIN	GR	GRILLE
AFF	ABOVE FINISHED FLOOR	HB	HOSE BIBB
AHAP	AS HIGH AS POSSIBLE	HCM	HARD COLD WATER
BFF	BELOW FINISHED FLOOR	HP	HORSE POWER
BLDG	BUILDING	HM	HOT WATER
BMFT	BASEMENT	INV	INVERT
BTWN	BETWEEN	KA	KILOWATT
CB	CATCH BASIN	LAT	LEAVING AIR TEMPERATURE
CFM	CUBIC FEET/MINUTE	LWT	LEAVING WATER TEMPERATURE
CHN	CIRCULATING HOT WATER	MAX	MAXIMUM
CLG	CEILING	MBH	1000 BTU
CO	CLEANOUT	MECH	MECHANICAL
CONCR	CONCRETE	MANH	MANHOLE
CONTR	CONTRACTOR	MIN	MINIMUM
CM	COLD WATER	NTS	NOT TO SCALE
DB	DRY BULB	OA	OUTSIDE AIR
DEG	DEGREE	OB	OPPOSED BLADE DAMPER
DIA	DIAMETER	ORD	OVERFLOW ROOF DRAIN
DIFF	DIFFUSER	P#	PLUMBING FIXTURE NUMBER
EAT	ENTERING AIR TEMPERATURE	P & T	PRESSURE AND THERMOSTATIC
EDR	SQUARE FEET RADIATION	PD	PRESSURE DROP
EFF	EFFICIENCY	PLBG	PLUMBING
EL	ELBOW	QUAN	QUANTITY
ELEC	ELECTRICAL	RA	RETURN AIR
ELEV	ELEVATION	RD	ROOF DRAIN
ENT	ENTERING WATER TEMPERATURE	RES	REGISTER
EXH	EXHAUST	REQD	REQUIRED
EXIST	EXISTING	RPM	REVOLUTIONS/MINUTE
F	DEGREES FAHRENHEIT	SA	SUPPLY AIR
F & T	FLOAT AND THERMOSTATIC	SCN	SOFT COLD WATER
FD	FLOOR DRAIN	SHT	SHEET
FH	FIRE HYDRANT	SP	STATIC PRESSURE
FLA	FULL LOAD AMPS	TD	TEMPERATURE DIFFERENCE
FLR	FLOOR	VTR	VENT THROUGH ROOF
FTR	FINNED TUBE RADIATION	W	WITH
GEN	GENERAL	WB	WET BULB
GPM	GALLONS/MINUTE	WH	WALL HYDRANT

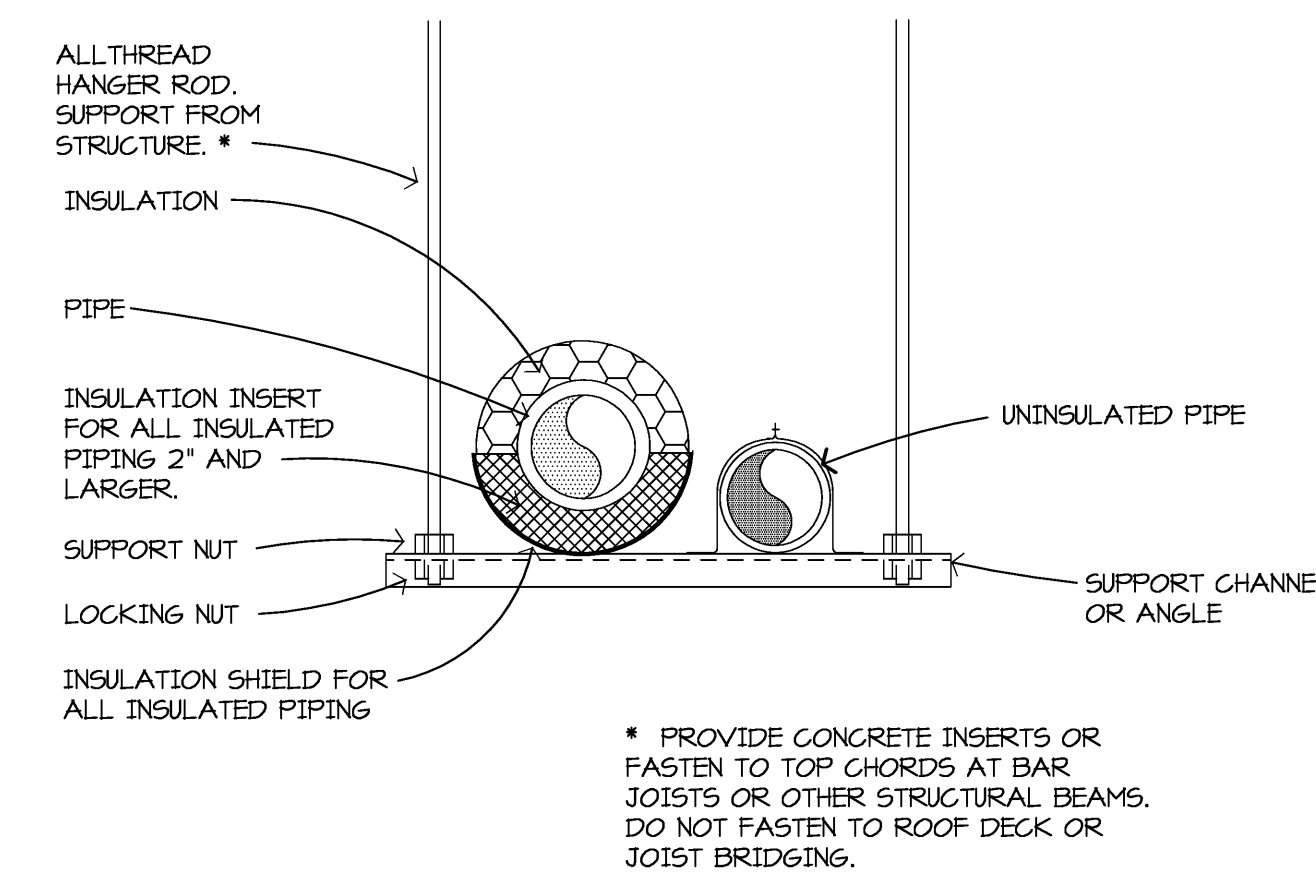
**MECHANICAL LINETYPES**

——	DOMESTIC COLD WATER PIPING
----	DOMESTIC HOT WATER PIPING
----	DOMESTIC CIRCULATING HOT WATER PIPING
----	VENT PIPING
----	SANITARY WASTE ABOVE GROUND PIPING
----	SANITARY WASTE BELOW GROUND PIPING
----	STORM DRAIN ABOVE GROUND PIPING
----	STORM DRAIN BELOW GROUND PIPING
----	CONDENSATE DRAIN PIPING
----	NATURAL GAS PIPING
----	BUILDING HEATING WATER SUPPLY PIPING
----	BUILDING HEATING WATER RETURN PIPING

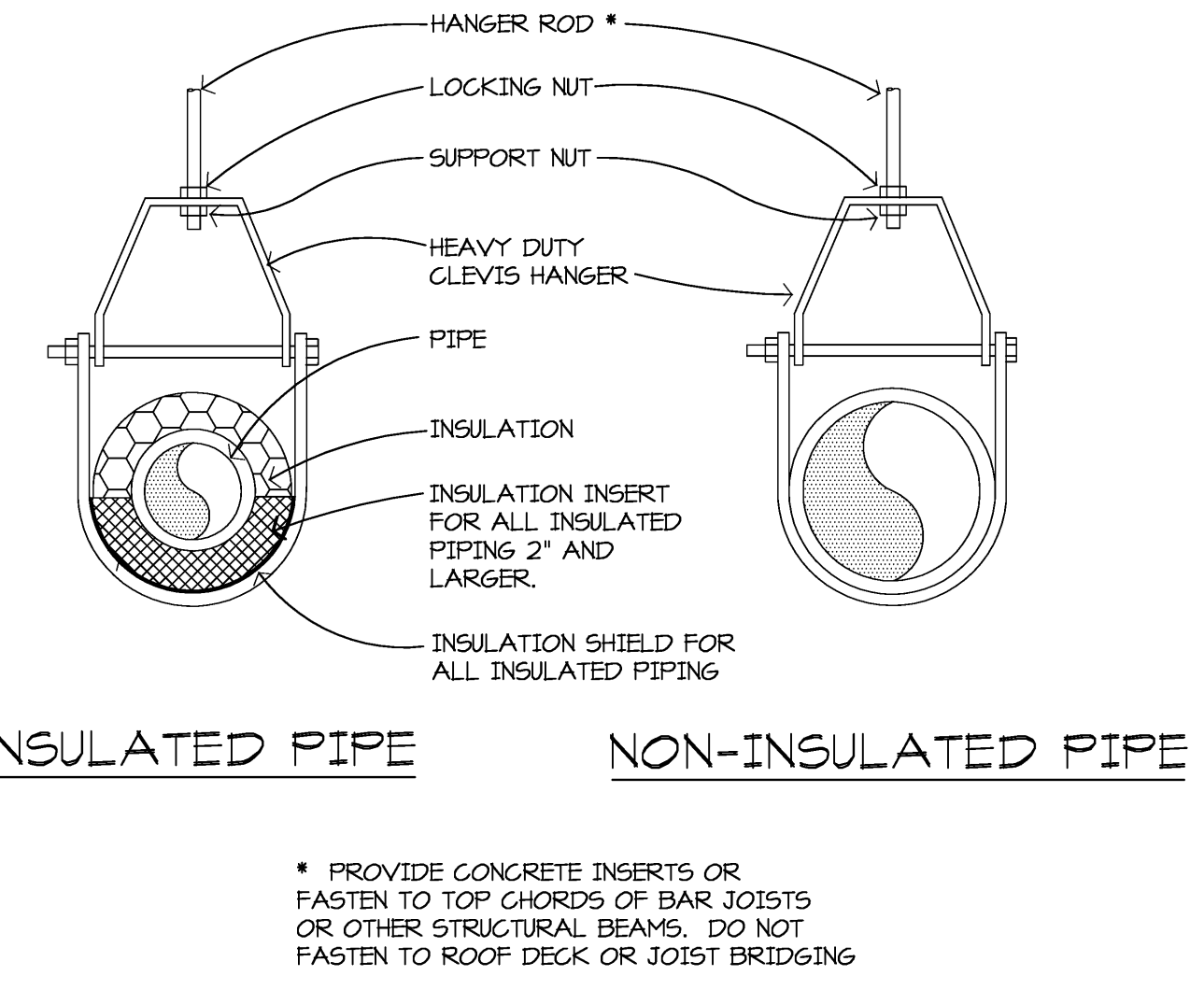
**B5 INLINE CIRCULATING PUMP DETAIL**  
NO SCALE



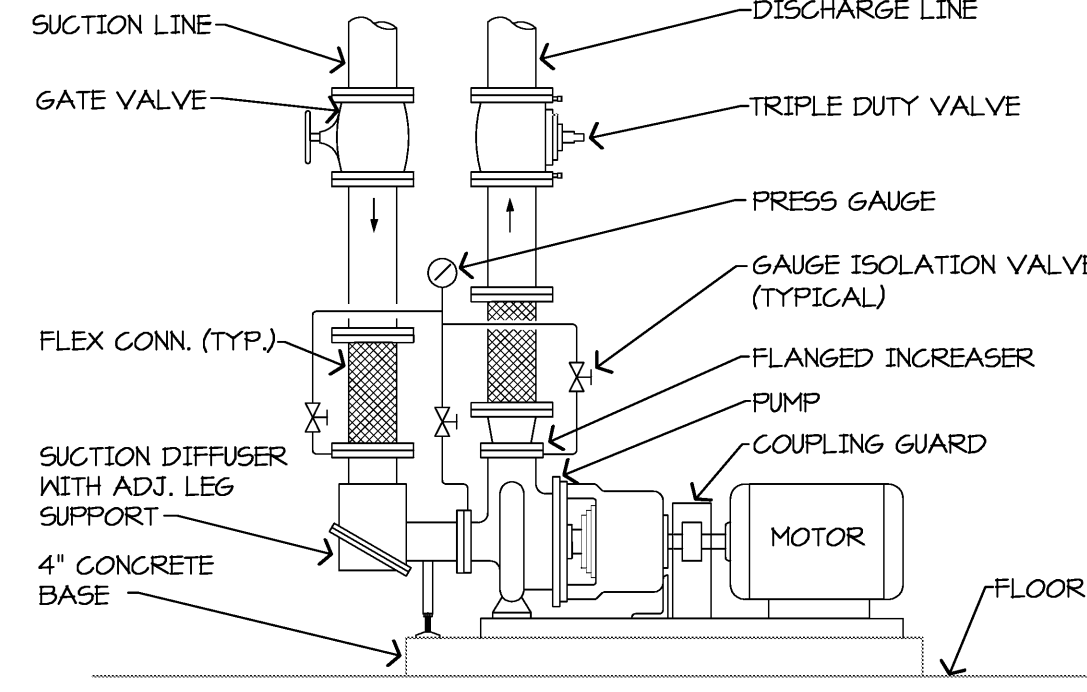
**B7 TRAPEZE PIPE HANGER DETAIL**  
NO SCALE



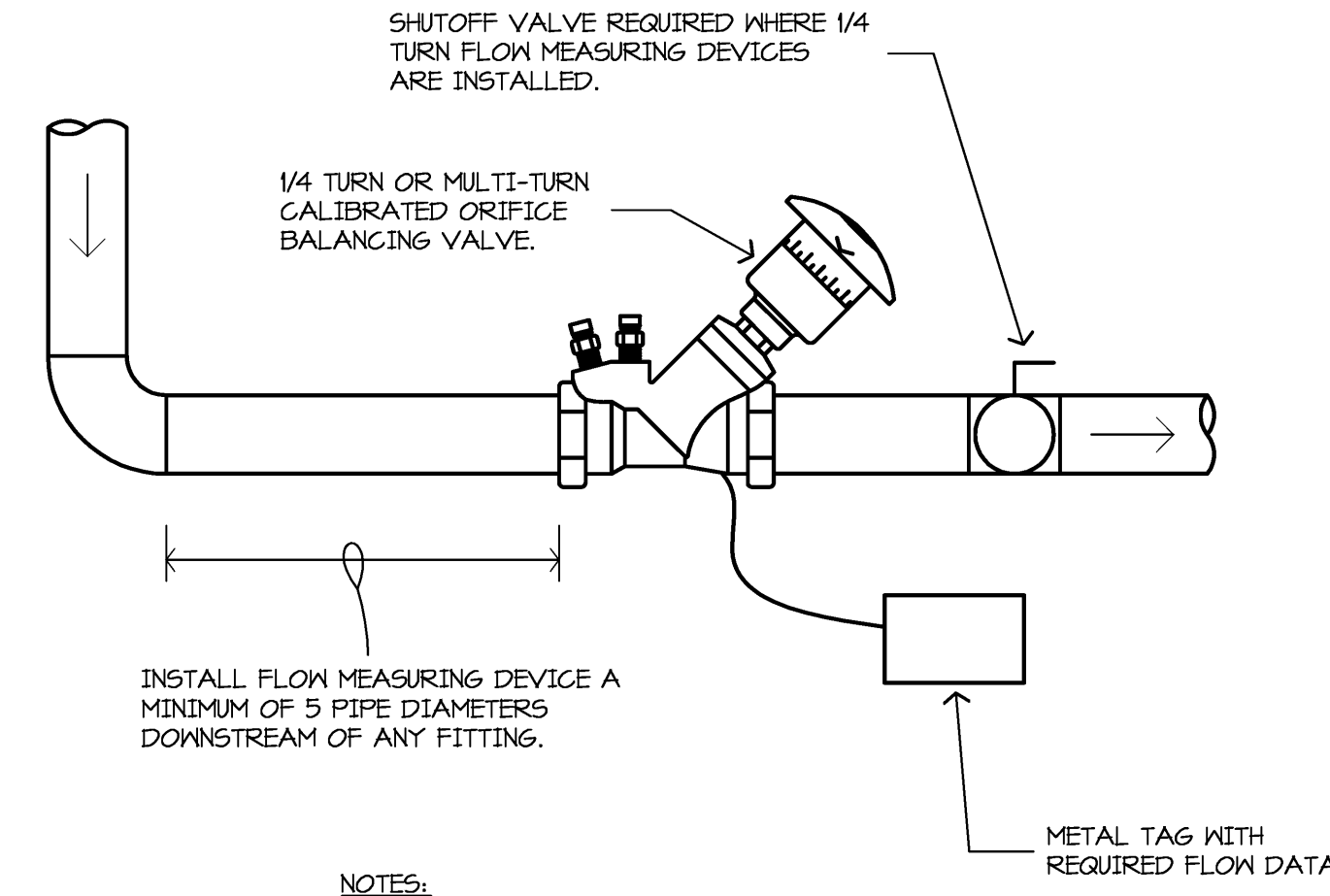
**B9 CLEVIS PIPE HANGER DETAIL**  
NO SCALE



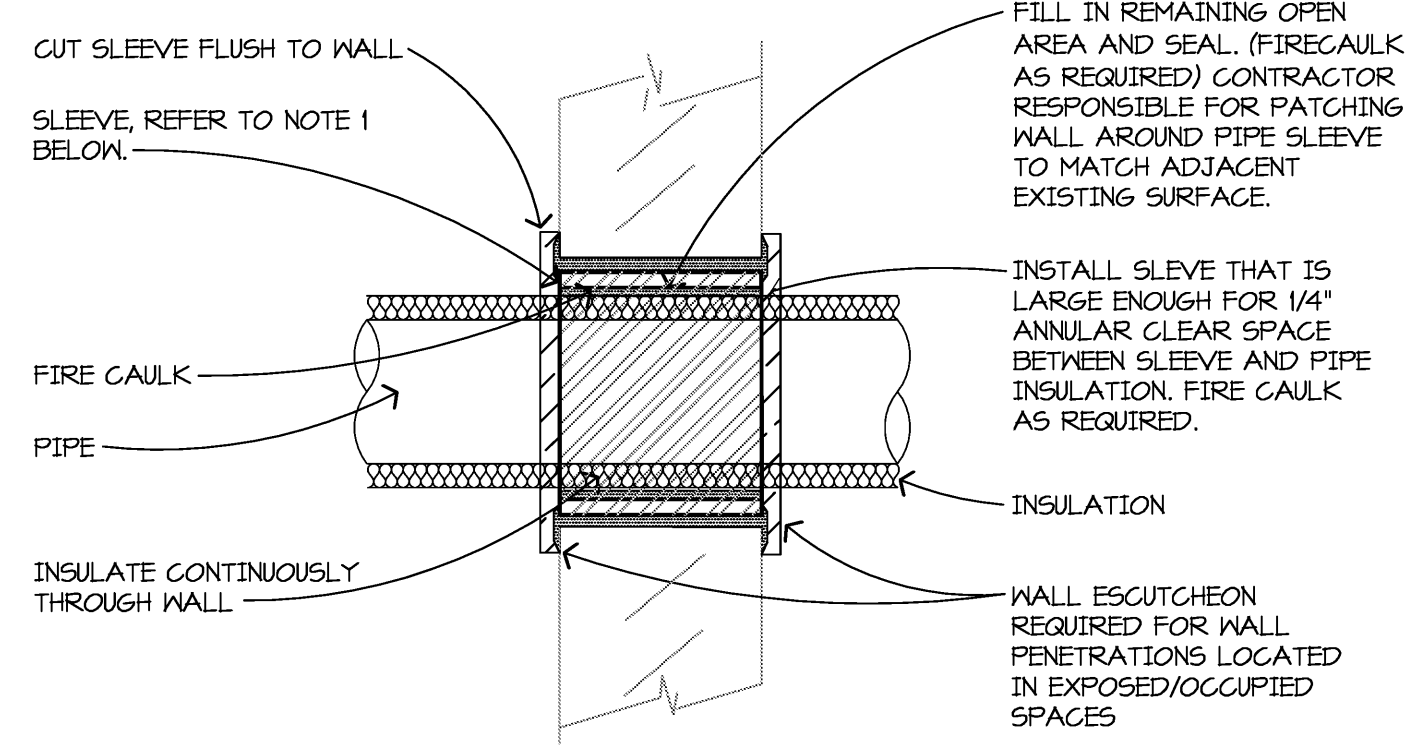
**D5 BASE MOUNTED PUMP PIPING DETAIL**  
NO SCALE



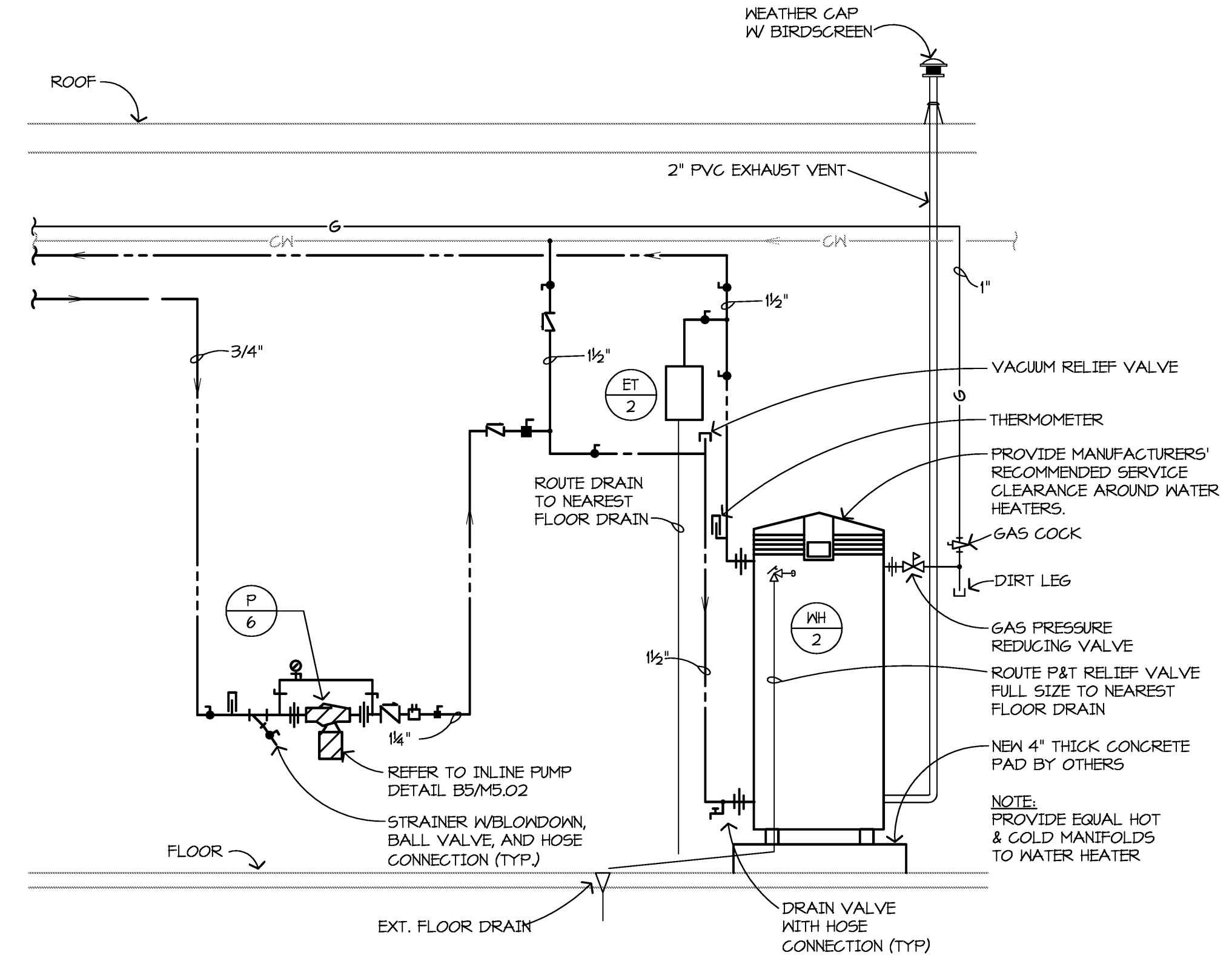
**D7 FLOW MEASURING DEVICE DETAIL**  
NO SCALE



**H8 PIPE PENETRATION THROUGH INTERIOR WALL**  
NO SCALE



**G9 ALTERNATE #2 DOMESTIC WATER HEATER PIPING SCHEMATIC - WH-2**  
NO SCALE



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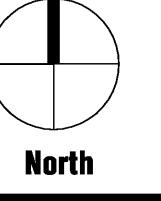
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Jonathan Loose  
Registration Number 622062908 Date 10/31/13

Revisions		
Description	Date	Num

Comm: 124021  
Date: 4/16/2013  
Drawn: JL  
Check: JL

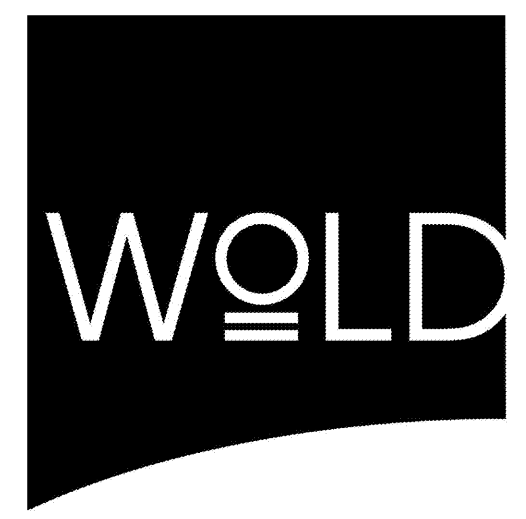


**MECHANICAL ABBREVIATIONS SYMBOLS AND DETAILS**

Scale: NONE  
**M5.02S**

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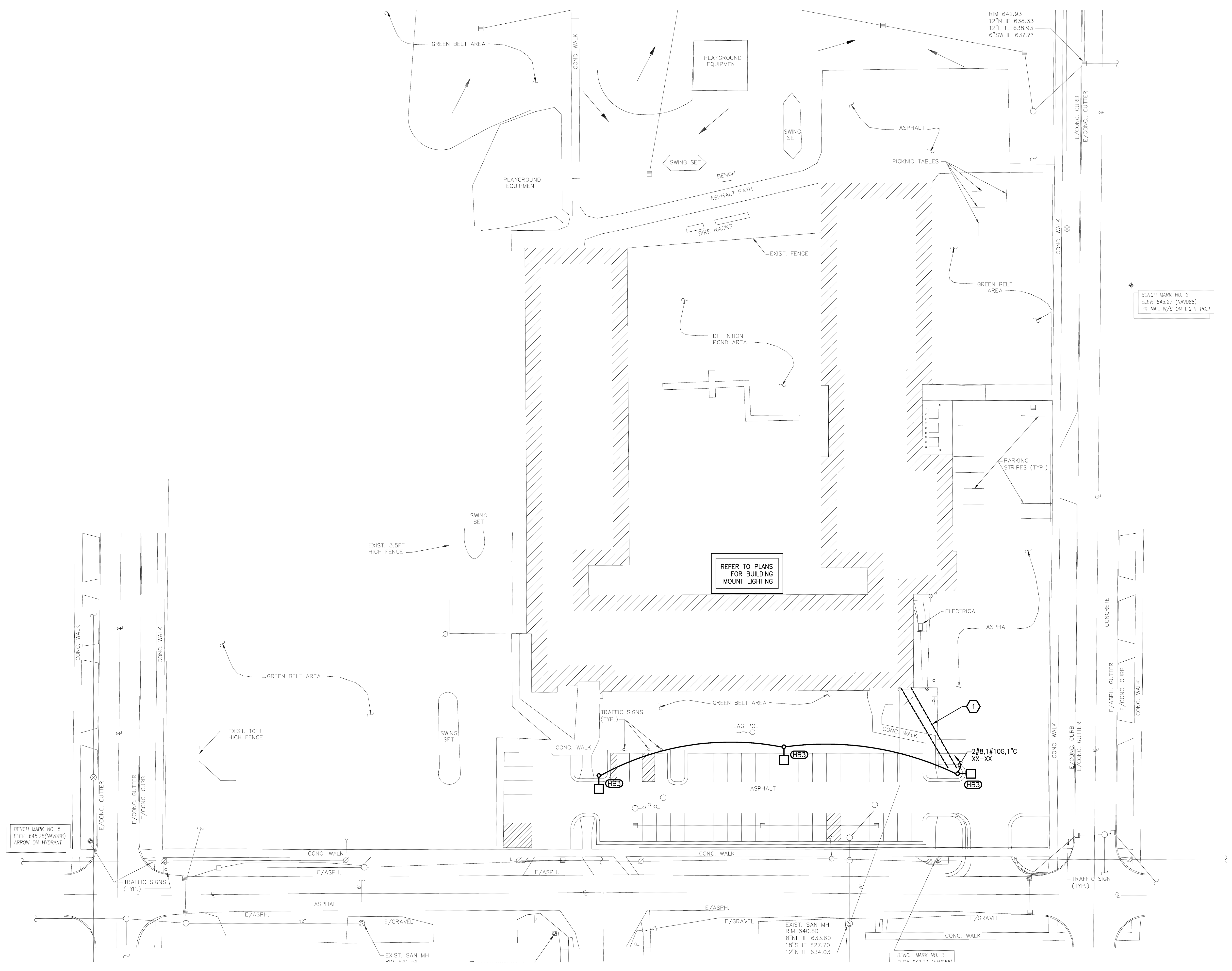
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Phone 248.399.1900 Fax 248.399.1901  
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SES Project # 2012.093.05

**SITE PLAN GENERAL NOTES**

1. FIELD VERIFY LOCATIONS OF EXISTING UNDERGROUND SERVICES TO COORDINATE ALL POLE BASE LOCATIONS AND UNDERGROUND SERVICES BEING INSTALLED UNDER THIS CONTRACT WITH CIVIL DRAWINGS PRIOR TO INSTALLATION OF POLE BASES AND CONDUIT.
2. ALL THREE PHASE WIRES, NEUTRAL, AND GROUND SHALL BE RUN TO LAST LIGHTING FIXTURE AND CAPPED FOR FUTURE EXPANSION.
3. ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD VERIFY ALL LENGTHS OF FEEDERS.
4. SEE LUMINAIRE SCHEDULE ON ELECTRICAL GENERAL INFORMATION SHEET.
5. ALL ELECTRICAL DEVICES ON THIS SHEET SHALL BE NEW UNLESS OTHERWISE NOTED.
6. EXIT LIGHTS AND EMERGENCY BATTERY UNITS SHALL BE UNCONTROLLED AND TIED AHEAD OF LOCAL AREA LIGHTING SWITCH, UNLESS CIRCUITED OTHERWISE.

**KEYED NOTES**

- ① BELOW GRADE CONDUITS SHALL BE SCHEDULE 40 PVC. ALL CONDUIT IN LIGHTING FIXTURE OR POLE CONCRETE BASE SHALL BE RIGID STEEL. CONDUIT USED INDOORS SHALL BE E.M.T. IN GENERAL, CONDUIT BELOW GRADE SHALL BE INSTALLED IN AN EXCAVATED TRENCH. UTILIZE DIRECTIONAL BORE WHERE APPROPRIATE TO AVOID SURFACE CUTTING AND REPAIR. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



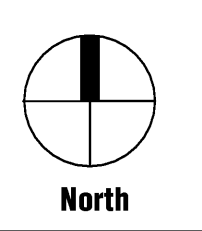
**STUCKEY ELEMENTARY ELECTRICAL SITE PLAN**  
SCALE: 1" = 30'

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Forces Abdallah  
Registration Number 6201049879 Date 10/31/13

Revisions		
Description	Date	Num

Comm: 12/02/11  
Date: 4/16/2013  
Drawn: DAD  
Check: RSA



**STUCKEY ELEM.  
ELECTRICAL  
SITE PLAN**

Scale: 1" = 30'

**E0.03s**

**GENERAL LIGHTING NOTES**

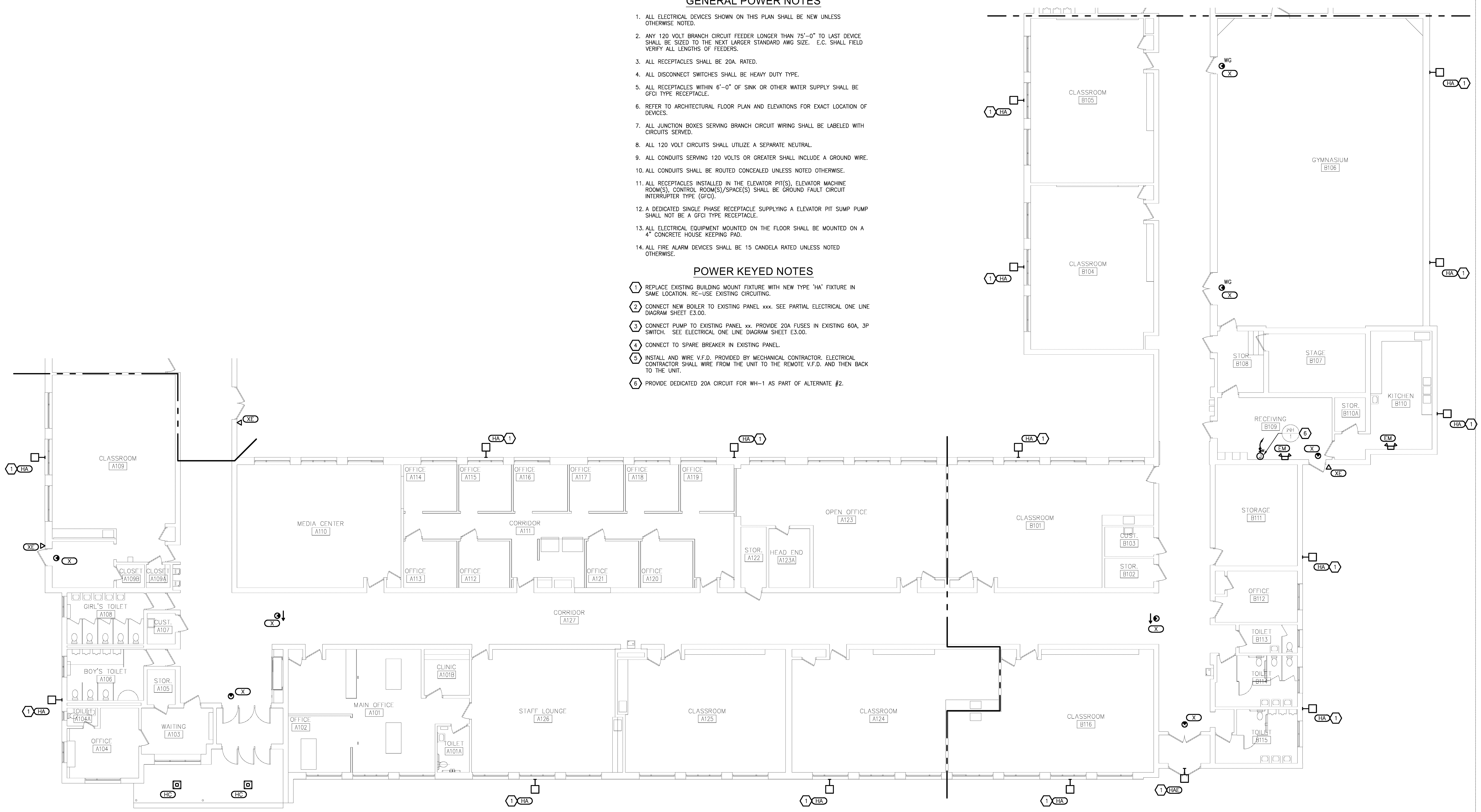
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3. SEE LUMINAIRE SCHEDULE ON SHEET ELECTRICAL GENERAL INFORMATION SHEET.
4. ALL ELECTRICAL DEVICES ON THIS SHEET SHALL BE NEW UNLESS OTHERWISE NOTED.
5. EXIT LIGHTS AND EMERGENCY BATTERY UNITS SHALL BE UNCONTROLLED AND TIED AHEAD OF LOCAL AREA LIGHTING SWITCH, UNLESS CIRCUITED OTHERWISE.
6. WHERE MORE THAN ONE LIGHT SWITCH IS INDICATED TO BE INSTALLED AT THE SAME LOCATION, THEY SHALL BE GROUPED UNDER ONE COMMON FACEPLATE.

**GENERAL POWER NOTES**

1. ALL ELECTRICAL DEVICES SHOWN ON THIS PLAN SHALL BE NEW UNLESS OTHERWISE NOTED.
2. ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD VERIFY ALL LENGTHS OF FEEDERS.
3. ALL RECEPTACLES SHALL BE 20A. RATED.
4. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE.
5. ALL RECEPTACLES WITHIN 6'-0" OF SINK OR OTHER WATER SUPPLY SHALL BE GFCI TYPE RECEPTACLE.
6. REFER TO ARCHITECTURAL FLOOR PLAN AND ELEVATIONS FOR EXACT LOCATION OF DEVICES.
7. ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELED WITH CIRCUITS SERVED.
8. ALL 120 VOLT CIRCUITS SHALL UTILIZE A SEPARATE NEUTRAL.
9. ALL CONDUITS SERVING 120 VOLTS OR GREATER SHALL INCLUDE A GROUND WIRE.
10. ALL CONDUITS SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE.
11. ALL RECEPTACLES INSTALLED IN THE ELEVATOR PIT(S), ELEVATOR MACHINE ROOM(S), CONTROL ROOM(S)/SPACE(S) SHALL BE GROUND FAULT CIRCUIT INTERRUPTER TYPE (GFCI).
12. A DEDICATED SINGLE PHASE RECEPTACLE SUPPLYING A ELEVATOR PIT SUMP PUMP SHALL NOT BE A GFCI TYPE RECEPTACLE.
13. ALL ELECTRICAL EQUIPMENT MOUNTED ON THE FLOOR SHALL BE MOUNTED ON A 4" CONCRETE HOUSE KEEPING PAD.
14. ALL FIRE ALARM DEVICES SHALL BE 15 CANDELA RATED UNLESS NOTED OTHERWISE.

**POWER KEYED NOTES**

1. REPLACE EXISTING BUILDING MOUNT FIXTURE WITH NEW TYPE 'HA' FIXTURE IN SAME LOCATION. RE-USE EXISTING CIRCUITING.
2. CONNECT NEW BOILER TO EXISTING PANEL xxx. SEE PARTIAL ELECTRICAL ONE LINE DIAGRAM SHEET E3.00.
3. CONNECT PUMP TO EXISTING PANEL xx. PROVIDE 20A FUSES IN EXISTING 60A, 3P SWITCH. SEE ELECTRICAL ONE LINE DIAGRAM SHEET E3.00.
4. CONNECT TO SPARE BREAKER IN EXISTING PANEL.
5. INSTALL AND WIRE V.F.D. PROVIDED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL WIRE FROM THE UNIT TO THE REMOTE V.F.D. AND THEN BACK TO THE UNIT.
6. PROVIDE DEDICATED 20A CIRCUIT FOR WH-1 AS PART OF ALTERNATE #2.



**A1** STUCKEY CENTER ELECTRICAL NEW WORK PLAN - AREA 'A' & 'B'  
1/8" = 1'-0"

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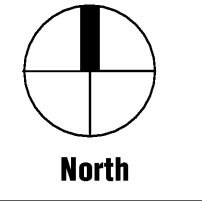


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Revisions		
Description	Date	Num

Comm: 12/02/21  
Date: 4/16/2019  
Drawn: DAD  
Check: RSA

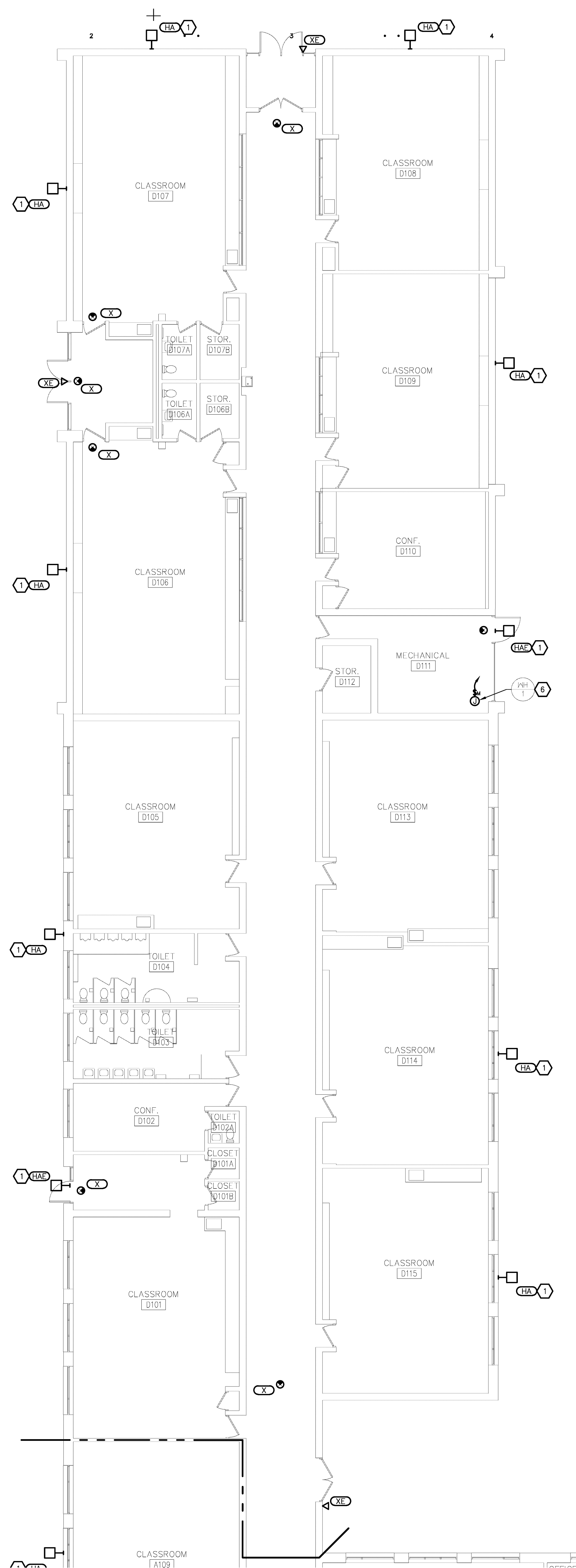


**STUCKEY CENTER  
ELECTRICAL  
NEW WORK PLANS  
- AREA 'A' & 'B'**

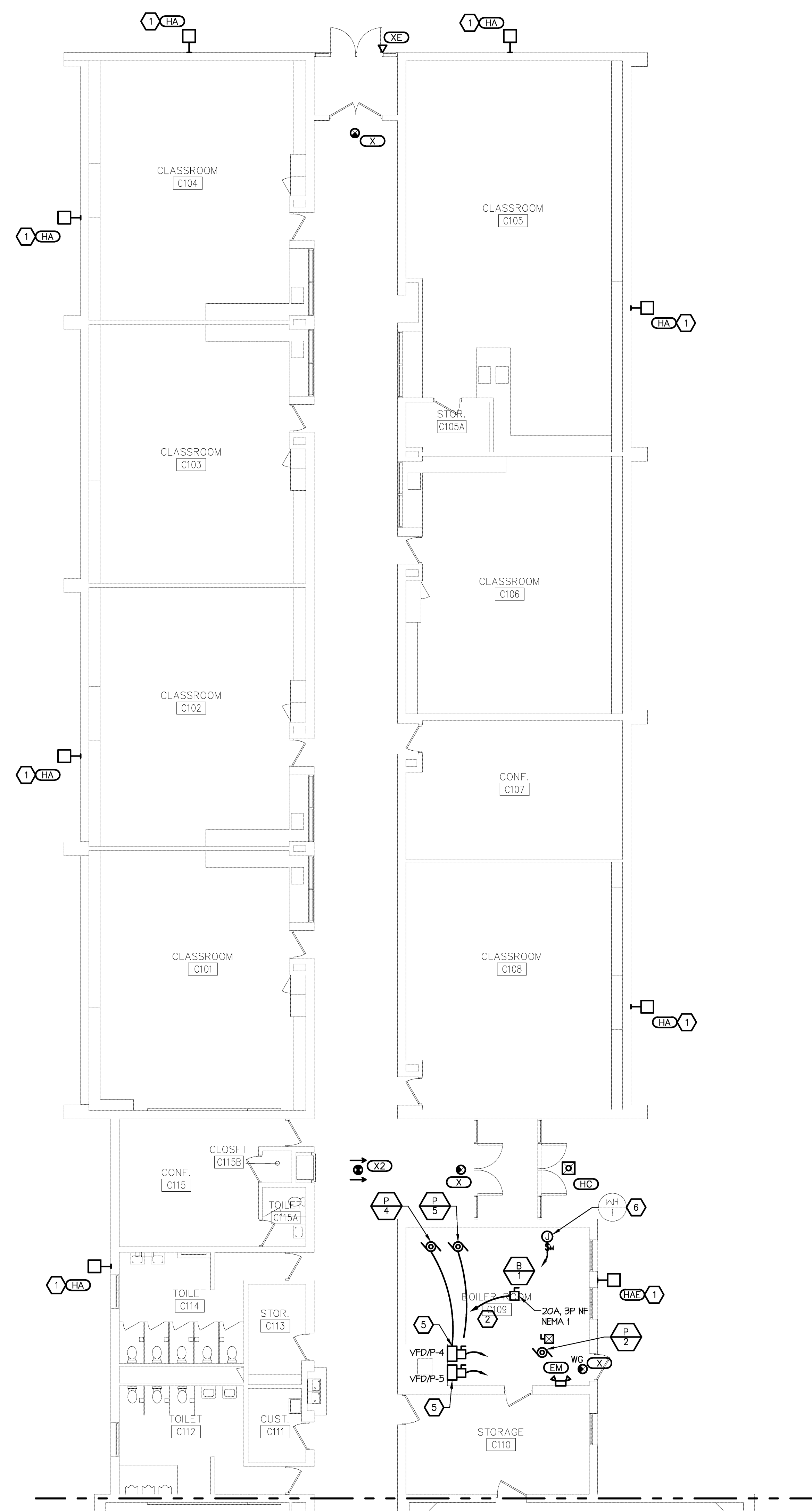
Scale:

**E3.11s**





**A2** STUCKEY CENTER ELECTRICAL NEW WORK PLAN - AREA 'D'  
1/8" = 1'-0"



**A5** STUCKEY CENTER ELECTRICAL NEW WORK PLAN - AREA 'C'  
1/8" = 1'-0"

**GENERAL LIGHTING NOTES**

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES UNLESS OTHERWISE NOTED.
2. ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD VERIFY ALL LENGTHS OF FEEDERS.
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1. ALL ELECTRICAL DEVICES SHOWN ON THIS PLAN SHALL BE NEW UNLESS OTHERWISE NOTED.
2. ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD VERIFY ALL LENGTHS OF FEEDERS.
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Francis Abdallah  
Registration Number 6201049879 Date 10/31/13

Revisions		
Description	Date	Num

Comm: 12/20/21  
Date: 4/16/2019  
Drawn: DAD  
Check: RSA  
North

**STUCKEY CENTER ELECTRICAL NEW WORK PLANS - AREA 'C' & 'D'**

Scale:

**E3.12s**

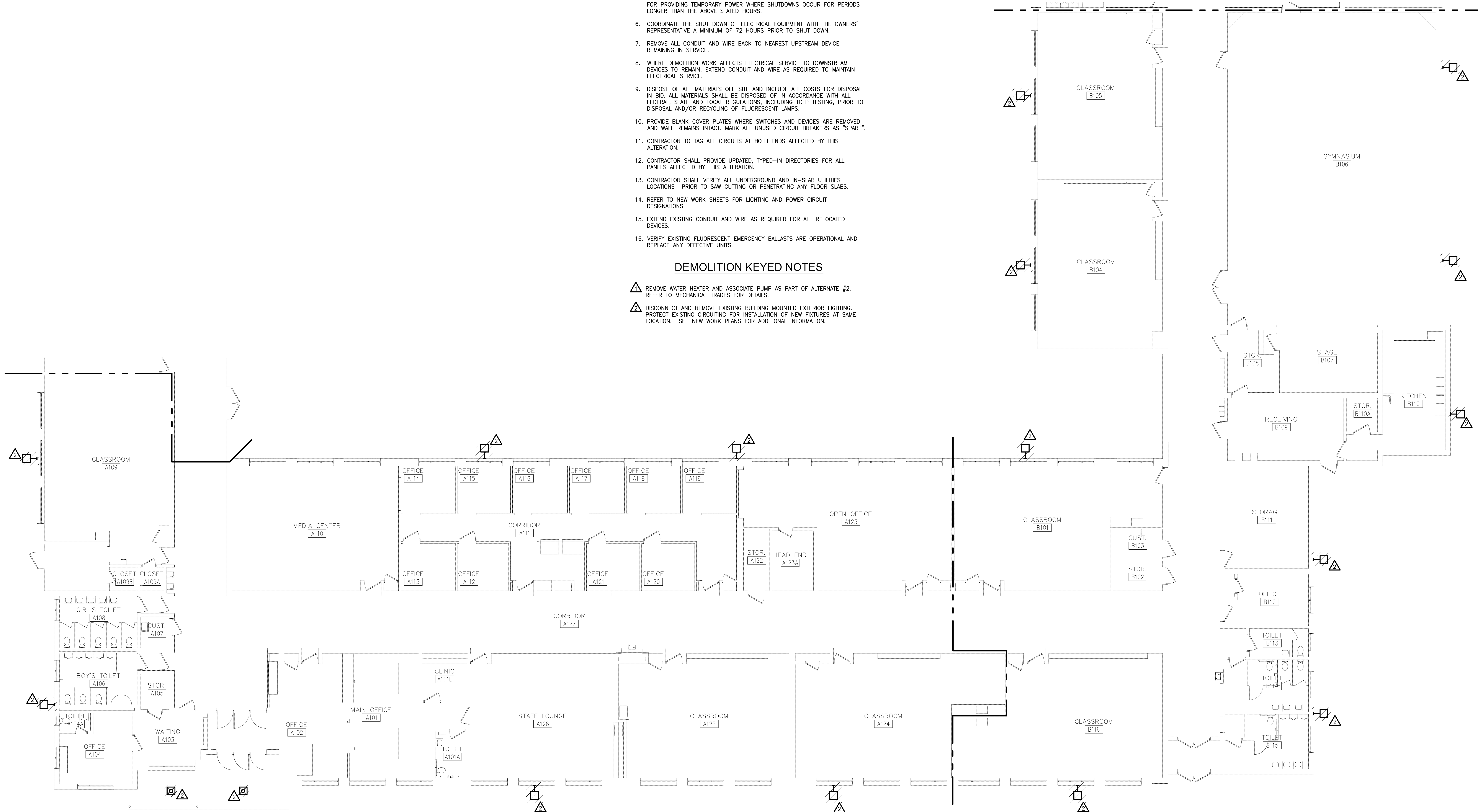


**GENERAL DEMOLITION NOTES**

1. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION WORK.
2. EXAMINE THE DRAWINGS OF OTHER TRADES. BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION OF DEVICES AND EQUIPMENT REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES.
3. REMOVE LIGHTING FIXTURES AND ELECTRICAL DEVICES AS INDICATED ON PLAN. DEMOLITION SHALL INCLUDE, BUT NOT BE LIMITED TO THOSE DEVICES SHOWN.
4. COORDINATE WITH NEW WORK PLANS, ONE LINE AND RISER DIAGRAMS FOR EXTENT OF DEMOLITION WORK.
5. COORDINATE ANY SHUTDOWN OF EXISTING SERVICES AND EQUIPMENT REMAINING IN USE WITH OWNERS' REPRESENTATIVE. WHERE EXISTING BUILDING SERVICE IS REQUIRED TO BE SHUT DOWN, INCLUDE ALL ASSOCIATED OVERTIME COST TO PERFORM THIS WORK DURING EVENINGS AND WEEKENDS. INCLUDE ALL COSTS FOR PROVIDING TEMPORARY POWER WHERE SHUTDOWNS OCCUR FOR PERIODS LONGER THAN THE ABOVE STATED HOURS.
6. COORDINATE THE SHUT DOWN OF ELECTRICAL EQUIPMENT WITH THE OWNERS' REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR TO SHUT DOWN.
7. REMOVE ALL CONDUIT AND WIRE BACK TO NEAREST UPSTREAM DEVICE REMAINING IN SERVICE.
8. WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM DEVICES TO REMAIN, EXTEND CONDUIT AND WIRE AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE.
9. DISPOSE OF ALL MATERIALS OFF SITE AND INCLUDE ALL COSTS FOR DISPOSAL IN BID. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, INCLUDING TCLP TESTING, PRIOR TO DISPOSAL AND/OR RECYCLING OF FLUORESCENT LAMPS.
10. PROVIDE BLANK COVER PLATES WHERE SWITCHES AND DEVICES ARE REMOVED AND WALL REMAINS INTACT. MARK ALL UNUSED CIRCUIT BREAKERS AS "SPARE".
11. CONTRACTOR TO TAG ALL CIRCUITS AT BOTH ENDS AFFECTED BY THIS ALTERATION.
12. CONTRACTOR SHALL PROVIDE UPDATED, TYPED-IN DIRECTORIES FOR ALL PANELS AFFECTED BY THIS ALTERATION.
13. CONTRACTOR SHALL VERIFY ALL UNDERGROUND AND IN-SLAB UTILITIES LOCATIONS PRIOR TO SAW CUTTING OR PENETRATING ANY FLOOR SLABS.
14. REFER TO NEW WORK SHEETS FOR LIGHTING AND POWER CIRCUIT DESIGNATIONS.
15. EXTEND EXISTING CONDUIT AND WIRE AS REQUIRED FOR ALL RELOCATED DEVICES.
16. VERIFY EXISTING FLUORESCENT EMERGENCY BALLASTS ARE OPERATIONAL AND REPLACE ANY DEFECTIVE UNITS.

**DEMOLITION KEYED NOTES**

- △ REMOVE WATER HEATER AND ASSOCIATE PUMP AS PART OF ALTERNATE #2. REFER TO MECHANICAL TRADES FOR DETAILS.
- △ DISCONNECT AND REMOVE EXISTING BUILDING MOUNTED EXTERIOR LIGHTING. PROTECT EXISTING CIRCUITING FOR INSTALLATION OF NEW FIXTURES AT SAME LOCATION. SEE NEW WORK PLANS FOR ADDITIONAL INFORMATION.



(A1) STUCKEY CENTER ELECTRICAL DEMOLITION PLAN - AREA 'A' & 'B'  
1/8" = 1'-0"

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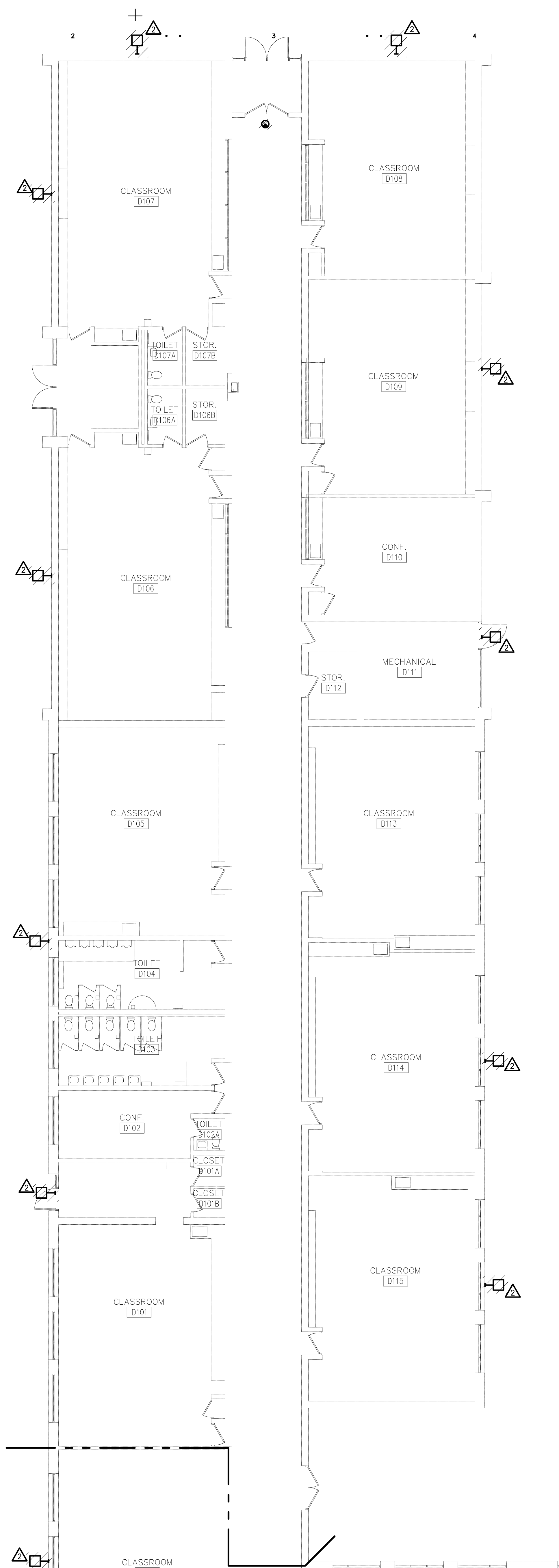
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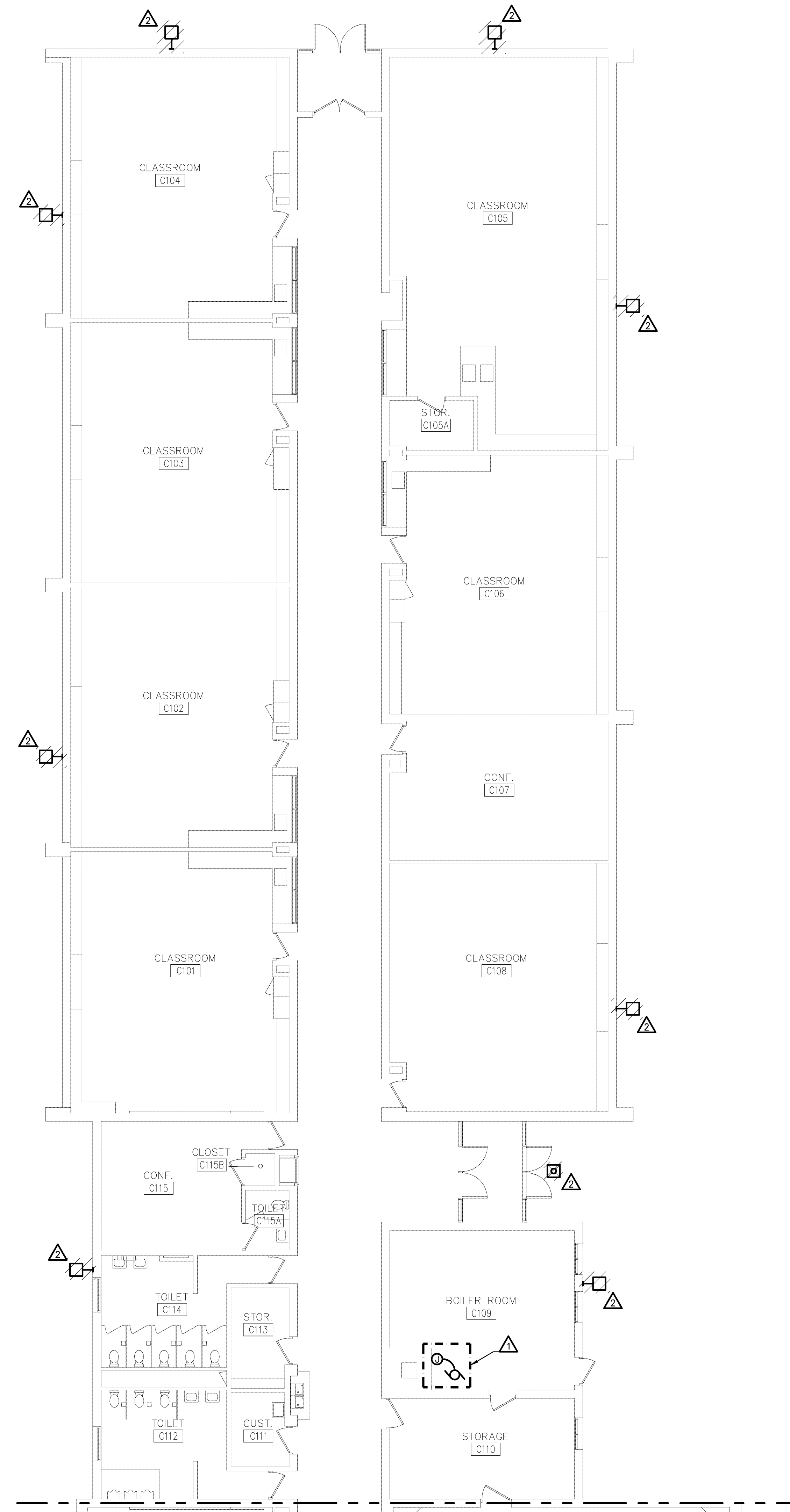
**STUCKEY CENTER  
ELECTRICAL  
DEMOLITION PLANS  
- AREA 'A' & 'B'**

Scale:

**ED3.11s**



**A2** STUCKEY CENTER ELECTRICAL DEMOLITION PLAN - AREA 'D'  
1/8" = 1'-0"



**A5** STUCKEY CENTER ELECTRICAL DEMOLITION PLAN - AREA 'C'  
1/8" = 1'-0"

**GENERAL DEMOLITION NOTES**

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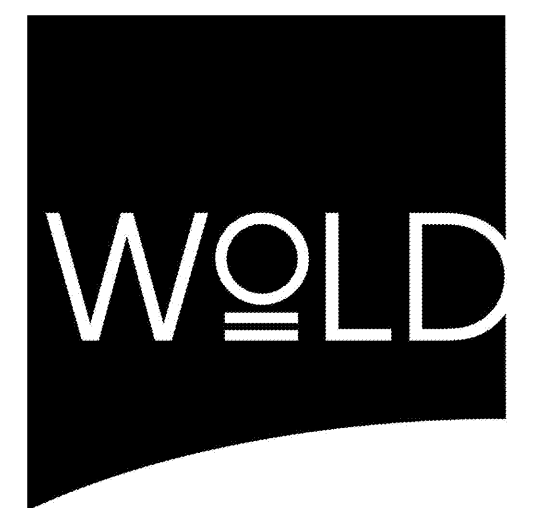
**DEMOLITION KEYED NOTES**

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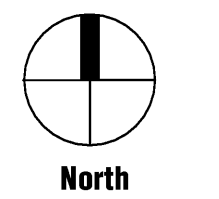
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Fares Abdallah  
Registration Number 6201049879 Date 10/31/13

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**STUCKEY CENTER  
ELECTRICAL  
DEMOLITION PLANS  
- AREA 'C' & 'D'**

Scale:

**ED3.12s**