

URSULINE COLLEGE

BOILER & AIR HANDLING UNIT REPLACEMENT

CHATHAM

ONTARIO

C&B PROJECT NO. 6774

MARCH 14, 2011

ISSUED FOR TENDER



ST. CLAIR CATHOLIC
DISTRICT SCHOOL BOARD

Lighting the Way ~ Rejoicing in Our Journey



Chorley + Bisset

CONSULTING ENGINEERS

369 YORK ST., SUITE 2B, LONDON ON, CANADA N6B 3R4
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ARCHITECTURAL

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A1.2 DETAILS

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ELECTRICAL

E1.1 LEGEND, DRAWING LIST & SCHEDULES
E2.1 OVERALL PLANS
E2.2 PART PLANS DENOMY, XAVIER & MERICI

ROOF TOP HEATING AND AIR CONDITIONING UNITS														
DRAWING REFERENCE	MANUFACTURER	MODEL	SUPPLY FAN				COOLING CAPACITY*		HEATING CAPACITY			ELECTRICAL		REMARKS
			AIR QUANTITY [CFM]	EXT. STATIC PRESSURE [IN.WG.]	FRPM	HP	TOTAL [MBH]	SENSIBLE [MBH]	INPUT [MBH]	OUTPUT [MBH]	MIN. SEER	VOLTAGE	MCA	
RTU-501	CARRIER	48HCEA05	1600	0.75	1,131	1 1/2	50.6	38.1	82/115	93.0	15.6	575/3/60	8.8	-
RTU-502	CARRIER	48HCEA05	1600	0.75	1,131	1 1/2	50.6	38.1	82/115	93.0	15.6	575/3/60	23.4	-

*SELECTION BASED ON 67°F EWB, 80°F EDB AND 95° AMBIENT AIR TEMPERATURE

MAKE UP AIR UNITS															
DRAWING REFERENCE	MANUFACTURER	MODEL	SUPPLY FAN				RETURN FAN				HEATING CAPACITY		ELECTRICAL		REMARKS
			AIR QUANTITY [CFM]	EXT. STATIC PRESSURE [IN.WG.]	FRPM	HP	AIR QUANTITY [CFM]	EXT. STATIC PRESSURE [IN.WG.]	FRPM	HP	INPUT [MBH]	OUTPUT [MBH]	VOLTAGE	MCA	
MAU-510	ENGINEERED AIR	DJX100/0	7,000	1.0	-	7.5	-	-	-	750	675	575/3/60	13.0	-	
MAU-511	ENGINEERED AIR	DJS60	5,200	0.5	-	3.0	5,200	0.5	-	3.0	600	480	575/3/60	11.0	

EXPANSION TANKS							
DRAWING REFERENCE	SERVICE	MANUFACTURER	MODEL	TOTAL VOLUME [GAL]	ACCEPTANCE VOLUME [GAL]	FILL PRESSURE [PSI]	REMARKS
ET-1	DENOMY HEATING SYSTEM	AMTROL	AX-60V	33.6	11.3	12	-
ET-2	MERICI HEATING SYSTEM	AMTROL	AX-60V	33.6	11.3	30	-

BOILERS											
DRAWING REFERENCE	SERVICE	MANUFACTURER	MODEL	BURNER			INPUT [MBH]	OUTPUT [MBH]	VOLTAGE	BOILER HP	REMARKS
				MANUFACTURER	MODEL	HP					
BLR-501 A/B	DENOMY HEATING SYSTEM	BUDERUS	SB615/640	WEISHAUP	G5/1-D	-	2,228	2,104*	575/3/60	62.8	LOW NOx BURNER - MODULATING
BLR-502 A/B	XAVIER HEATING SYSTEM	LOCHINVAR	SBN 1500	-	-	-	1,500	1,443*	120/1/60	-	-
BLR-503	MERICI HEATING SYSTEM	LOCHINVAR	SBN 1300	-	-	-	1,300	1,078*	120/1/60	-	-

CIRCULATING PUMPS											
DRAWING REFERENCE	MANUFACTURER	MODEL	SERVICE	FLOW GPM	HEAD FT	EFFICIENCY %	RPM	HP	ELECTRICAL	REMARKS	
CP-302 A/B/C/D	ITT	60 - 2 x 5 1/4	XAVIER BOILER CIRCULATORS	73.5	15	62	1750	3/4	208/3/60	-	
CP-303 A/B	ITT	60 - 2 x 5 1/4	MERICI BOILER CIRCULATOR	62	15	60	1750	3/4	208/3/60	-	

MECHANICAL DRAWING LIST	
M1.1	LEGEND, DRAWING LIST, SCHEDULES & DETAILS
M2.1	DENOMY BOILER ROOM PLANS
M2.2	DENOMY HEATING SYSTEM SCHEMATICS
M2.3	XAVIER BOILER ROOM PLANS & SCHEMATICS
M2.4	MERICI BOILER ROOM PLANS & SCHEMATICS
M2.5	DETAILS
M3.1	ROOFTOP UNIT & MAKE-UP AIR UNIT REPLACEMENTS

MECHANICAL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DOMESTIC COLD WATER		UNION
	DOMESTIC HOT WATER		STRAINER
	DOMESTIC HOT WATER RETURN		CAP
	HOT WATER HEATING SUPPLY		AUTOMATIC AIR VENT (WITH BALL VALVE)
	HOT WATER HEATING RETURN		LOW WATER CUT OFF
	NATURAL GAS		FLOOR DRAIN
	INDIRECT DRAIN		COLD WATER MAKE-UP STATION
	EXISTING PIPING TO REMAIN		FLANGES
	EXISTING PIPING TO BE REMOVED		CHECK VALVE
	SHUT OFF VALVE		PUMP
	CHECK VALVE		THERMOMETER
	PRESSURE REDUCING VALVE		PRESSURE GAUGE (WITH BALL VALVE)
	THREE-WAY CONTROL VALVE		THERMOSTAT
	PRESSURE RELIEF VALVE		THERMOWELL
	BALL VALVE		EXISTING DUCTWORK TO BE REMOVED
	COMBINATION SHUT-OFF & BALANCING VALVE		NEW DUCTWORK
	PRESSURE GAUGE COCK		
	DRAIN WITH HOSE CONNECTION		

NATURAL GAS PRESSURE REDUCING VALVES								
DRAWING REFERENCE	MANUFACTURER	SERVICE	MODEL	SEAT RING	PRESSURE		CAPACITY MBH	REMARKS
					INLET	OUTLET		
PRV-1	FISHER	MERICI BLR-503	S402	1/2"	5.0 PSI	7" W.G.	1,400	CAST IRON BODY, INTERNAL RELIEF

UNIT HEATER									
DRAWING REFERENCE	MANUFACTURER	MODEL	CAPACITY MBH	WATER FLOW GPM	AIR FLOW CFM	HP	RPM	ELECTRICAL	
UH-401	ENGINEERED AIR	H2	34.9	2.4	620	1/20	1500	120/60/1	

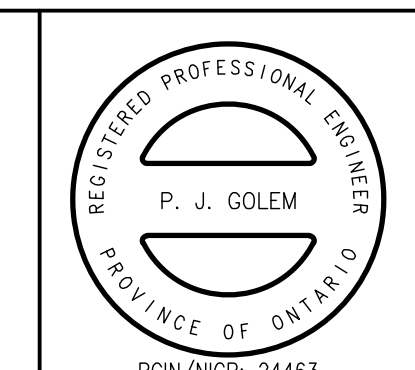
NOTE: HORIZONTAL THROW UNIT HEATER, CSA APPROVED WITH FINGER GUARD, UNIT MOUNTED STARTER, FIELD MOUNTED DIRECT ACTING THERMOSTAT

No.	By	Revisions	Date
1	PJG	ISSUED FOR BOARD REVIEW	FEB. 16, 2011
2	PJG	ISSUED FOR BOARD REVIEW	MAR. 02, 2011
3	PJG	ISSUED FOR TENDER	MAR. 14, 2011

	A	DETAIL NO.
	B	DWG. NO. - WHERE REQUIRED
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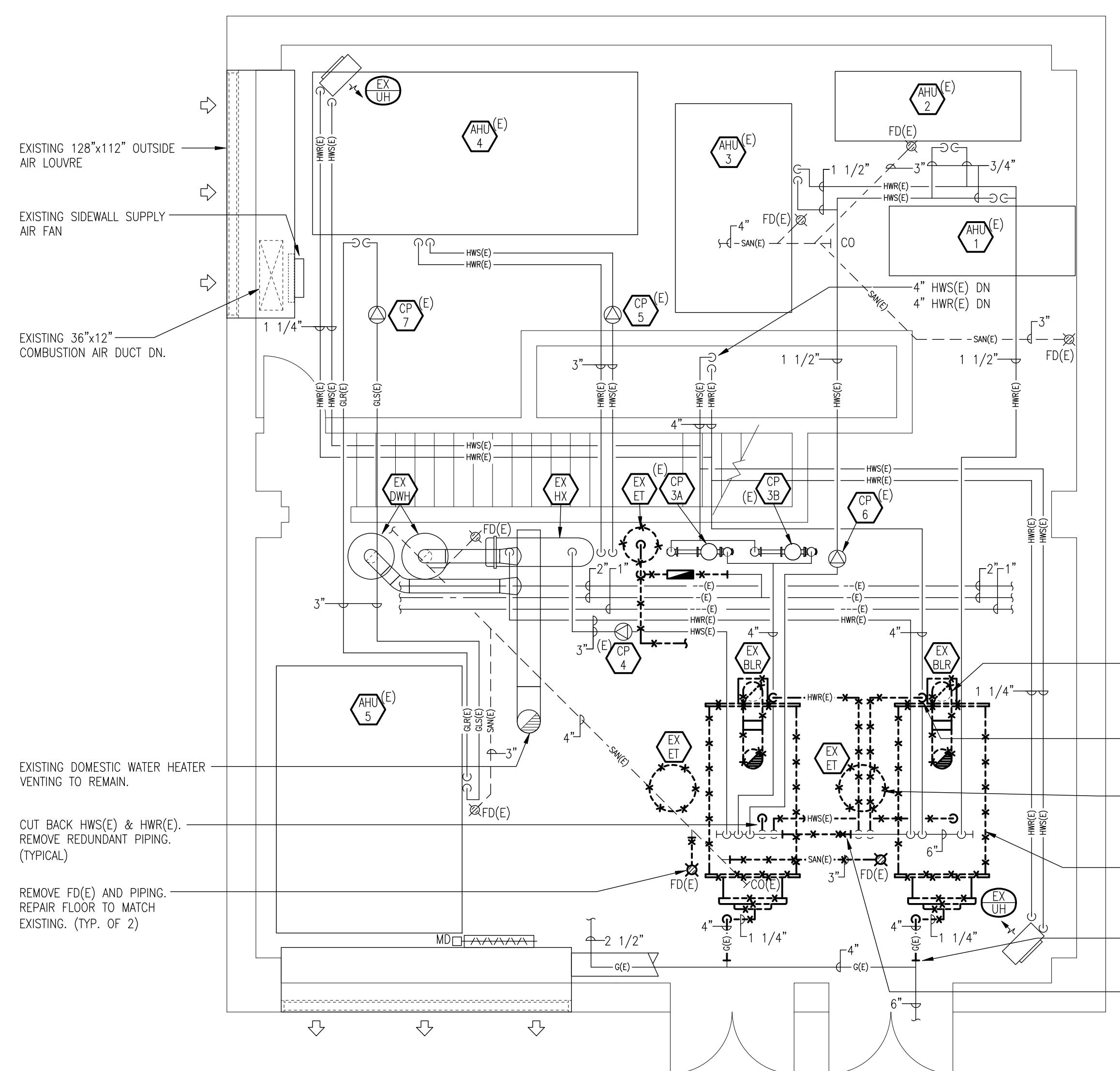
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SECONDARY SCHOOL

ST. CLAIR CATHOLIC
DISTRICT SCHOOL BOARD
CHATHAM, ONTARIO

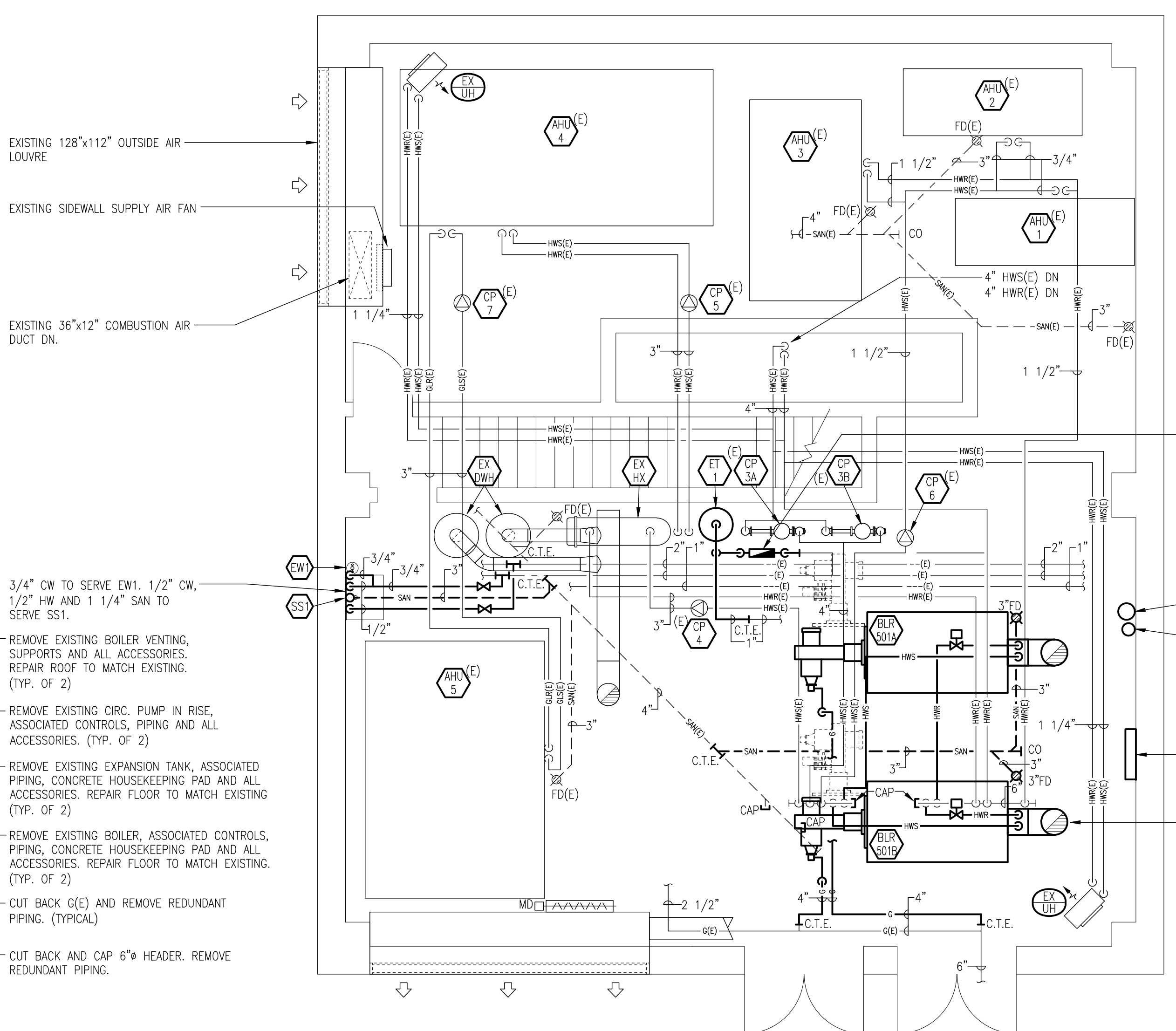
Drawing Title
LEGEND, DRAWING LIST,
SCHEDULES & DETAILS

Drawn DAC	Checked JDF	Approved PJG	Drawing No. M1.1
Scale AS NOTED	Date MAR. 11, 2011	Project No. 6774	Rev. No.



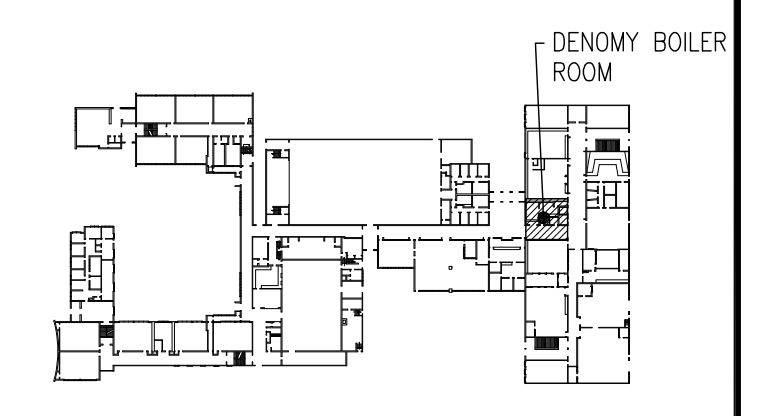
BOILER ROOM FLOOR PLAN DEMOLITION
SCALE: 1/4"=1'-0"

- NOTES:
1. REMOVE ALL REDUNDANT EQUIPMENT ASSOCIATED WITH EXISTING BOILERS.
 2. RESTORE ALL SURFACES WHERE SERVICES ARE REMOVED. REPAIR ALL WALL AND ROOF OPENINGS TO MATCH EXISTING.
 3. CUT BACK AND CAP ALL REDUNDANT PIPING IN BOILER ROOM.
 4. REMOVE REDUNDANT HOUSEKEEPING PADS.
 5. SEE HEATING SYSTEM SCHEMATIC FOR PIPE SIZES.
 6. REINSTALL ALL CONTROL SENSORS IN EXISTING PIPING BEING REMOVED. CONNECT ALL WIRING TO NEW CONTROL PANEL.



BOILER ROOM FLOOR PLAN
SCALE: 1/4"=1'-0"

- NOTES:
1. PROVIDE 4" HIGH HOUSEKEEPING PADS FOR ALL NEW FLOOR MOUNTED EQUIPMENT.
 2. RESERVED
 3. ALL BOILER DRAINAGE PIPING TO BE CPVC.
 4. REFER TO SCHEMATICS FOR PIPE SIZES, VALVES, FITTINGS, AND ACCESSORIES.
 5. PROVIDE AND INSTALL ALL THERMOWELLS.
 6. SHUT OFF VALVES MAY BE BALL STYLE FOR PIPES 2" AND SMALLER OR BUTTERFLY STYLE FOR PIPES OVER 2". DO NOT USE GATE VALVES.



KEY PLAN
N.T.S.

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INSTALL NEW CW MAKE-UP STATION AT 4'-6" A.F.F. ALONG SOUTH WEST WALL.

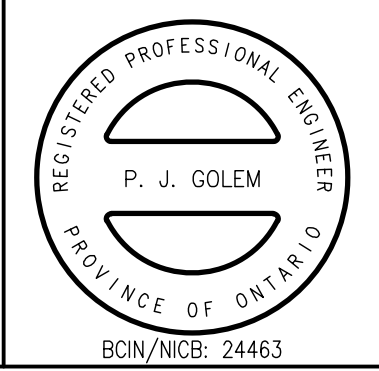
NEW BOILER CONTROL PANEL

14" BOILER VENT UP THRU' ROOF. (TYP. OF 2). SEE DETAIL ON DRAWING M2.5.

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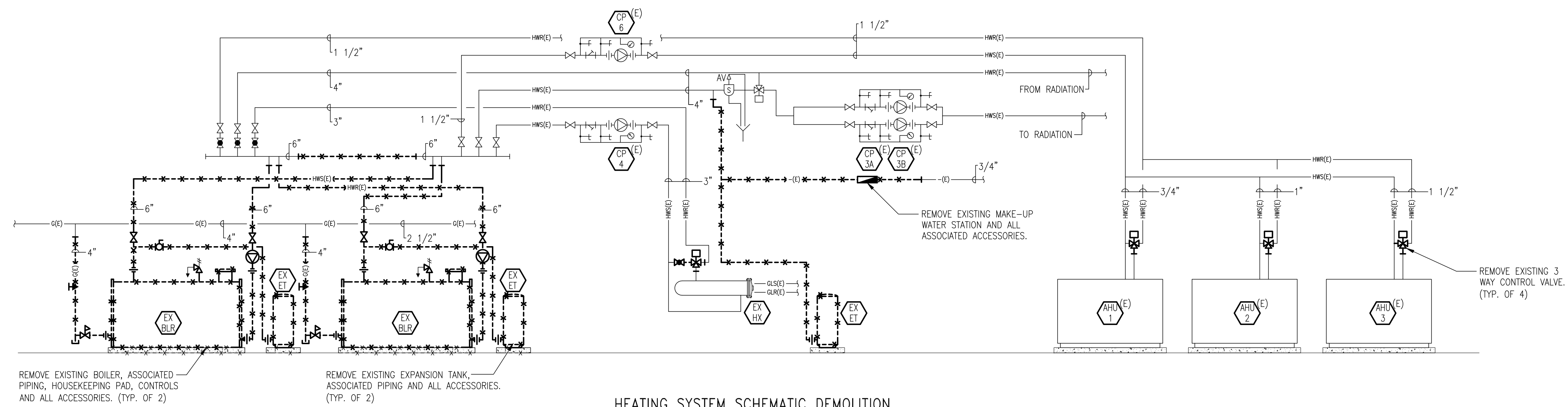
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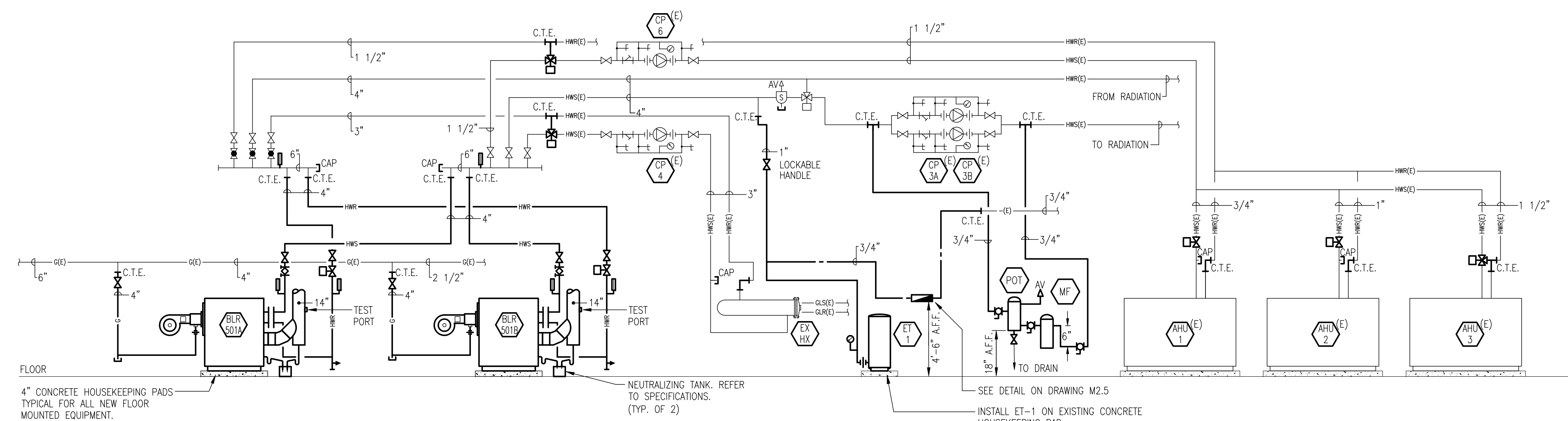
Drawing Title
DENOMY BOILER ROOM PLANS

Drawn DAC	Checked JDF	Approved PJG	Drawing No. M2.1
Scale AS NOTED	Date MAR. 11, 2011	Project No. 6774	Rev. No.



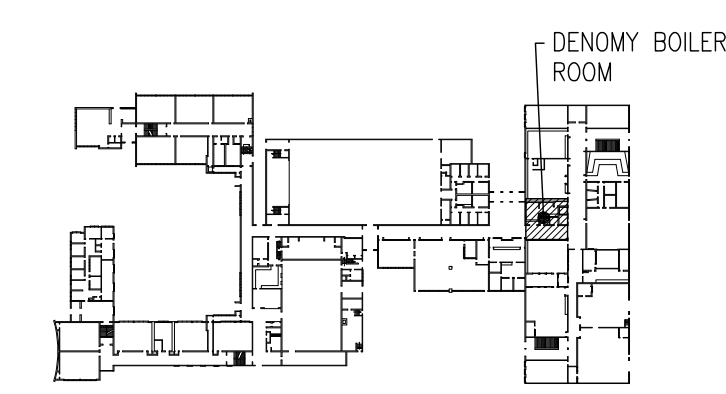
HEATING SYSTEM SCHEMATIC DEMOLITION

N.T.S.



HEATING SYSTEM SCHEMATIC

N.T.S.



KEY PLAN

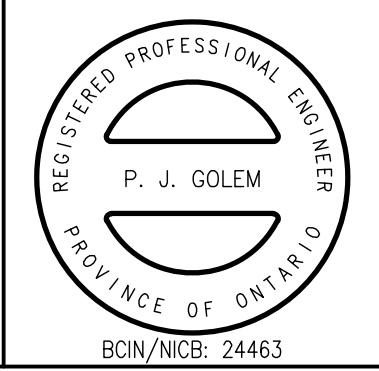
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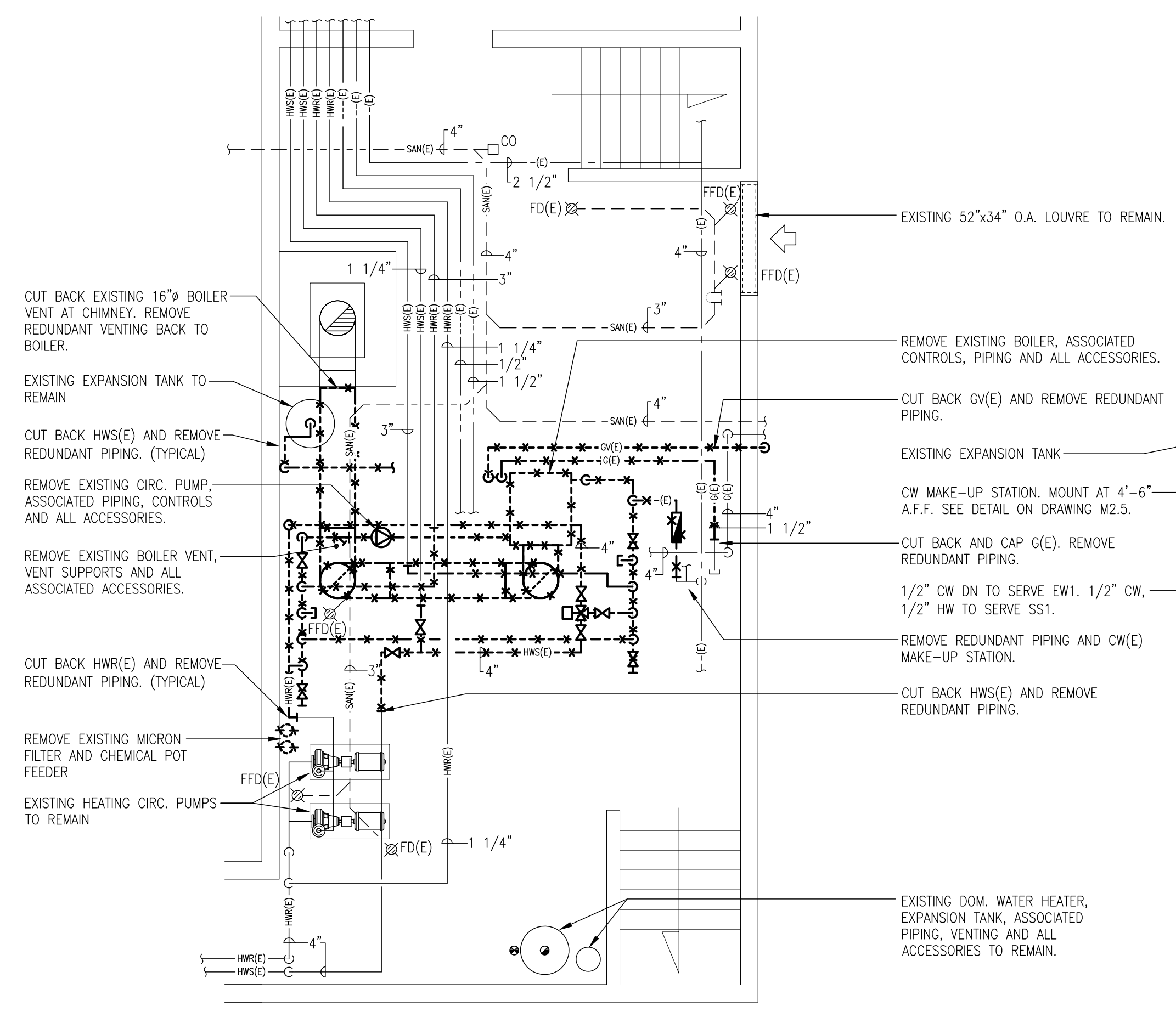
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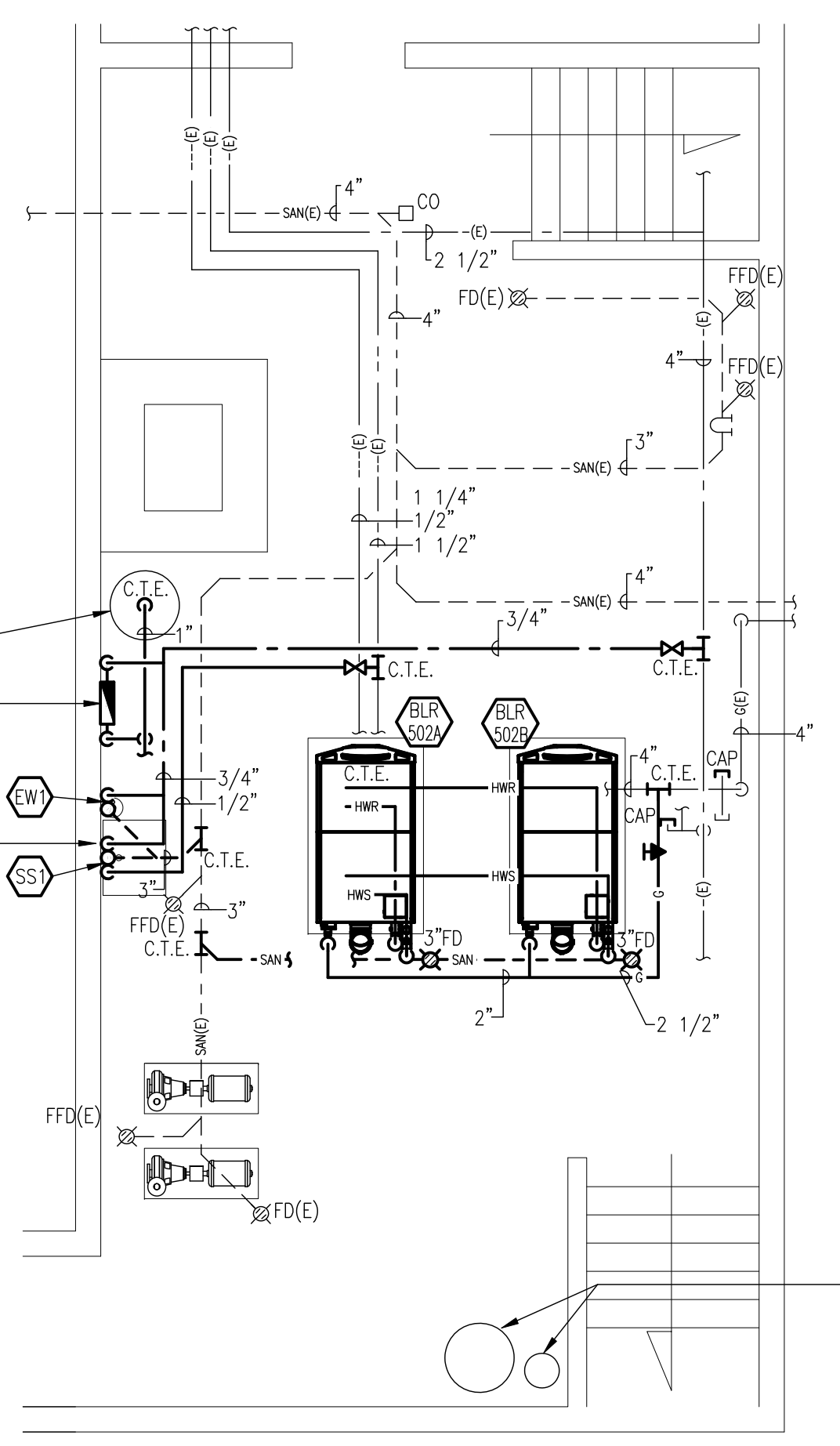
Drawing Title
DENOMY HEATING
SYSTEM SCHEMATICS

Drawn DAC	Checked JDF	Approved PJG	Drawing No. M2.2
Scale AS NOTED	Date MAR. 11, 2011	Project No. 6774	Rev. No.



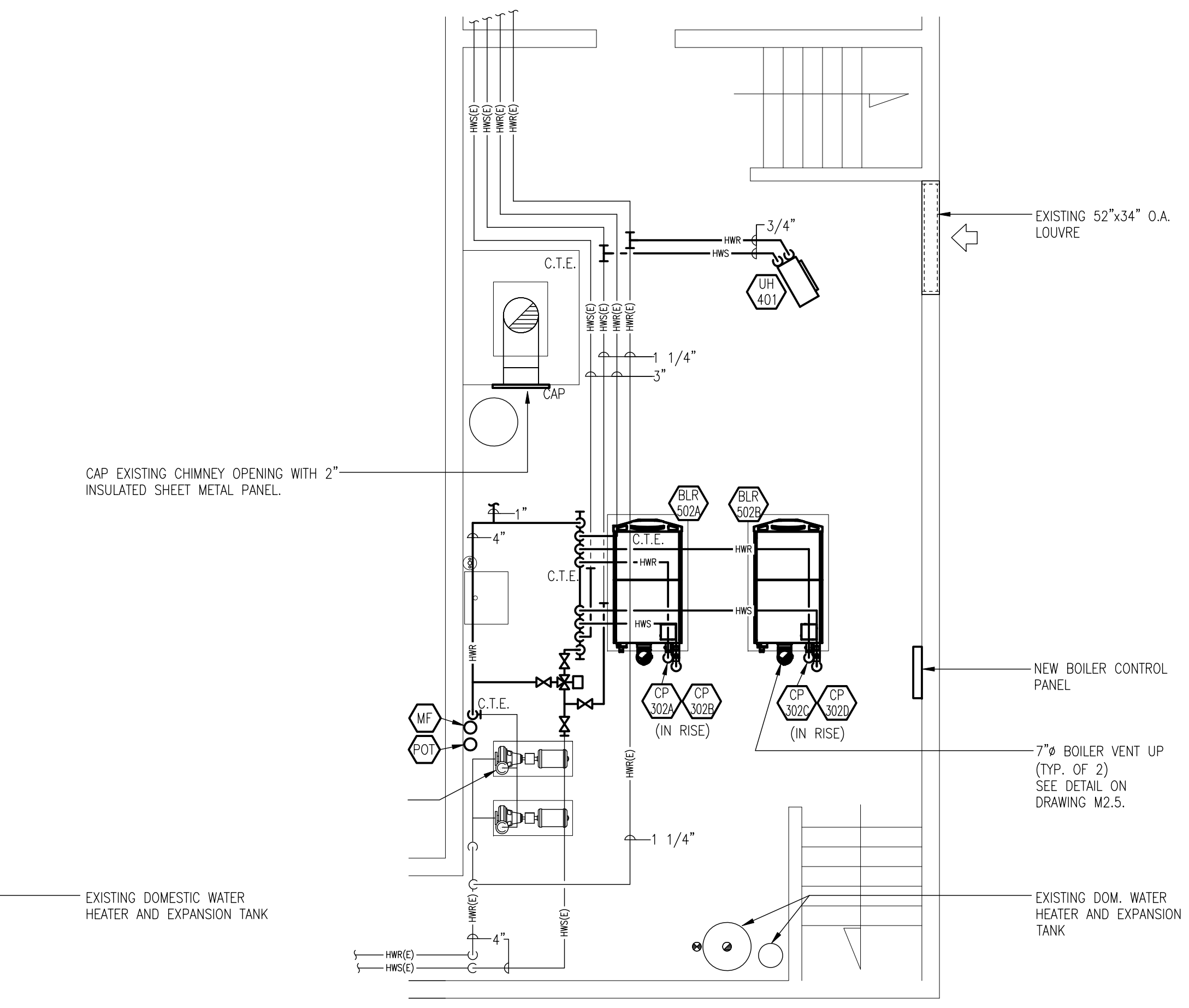
BOILER ROOM FLOOR PLAN DEMOLITION
 SCALE: 1/4"=1'-0"

- NOTES:
1. REMOVE ALL REDUNDANT EQUIPMENT ASSOCIATED WITH EXISTING BOILERS.
 2. RESTORE ALL SURFACES WHERE SERVICES ARE REMOVED. REPAIR ALL WALL AND ROOF OPENINGS TO MATCH EXISTING.
 3. CUT BACK AND CAP ALL REDUNDANT PIPING IN BOILER ROOM.
 4. REMOVE REDUNDANT HOUSEKEEPING PADS.
 5. SEE HEATING SYSTEM SCHEMATIC FOR PIPE SIZES.
 6. REINSTALL ALL CONTROL SENSORS IN EXISTING PIPING BEING REMOVED. CONNECT ALL WIRING TO NEW CONTROL PANEL.



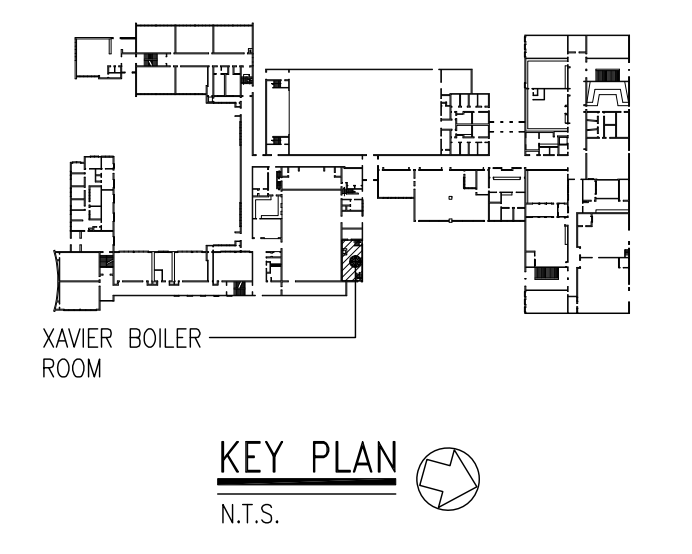
BOILER ROOM FLOOR PLAN - PLUMBING
 SCALE: 1/4"=1'-0"

- NOTES:
1. PROVIDE 4" HIGH HOUSEKEEPING PADS FOR ALL NEW FLOOR MOUNTED EQUIPMENT.
 2. BOILER RELIEF VALVE SUPPLIED BY BOILER MANUFACTURER.
 3. ALL BOILER DRAINAGE PIPING TO BE COPPER.
 4. REFER TO SCHEMATICS FOR PIPE SIZES, VALVES, FITTINGS, AND ACCESSORIES.
 5. PROVIDE AND INSTALL ALL THERMOWELLS.
 6. SHUT OFF VALVES MAY BE BALL STYLE FOR PIPES 2" AND SMALLER OR BUTTERFLY STYLE FOR PIPES OVER 2". DO NOT USE GATE VALVES.
 7. MINIMUM BELOW GRADE SANITARY PIPE SIZE IS 3".

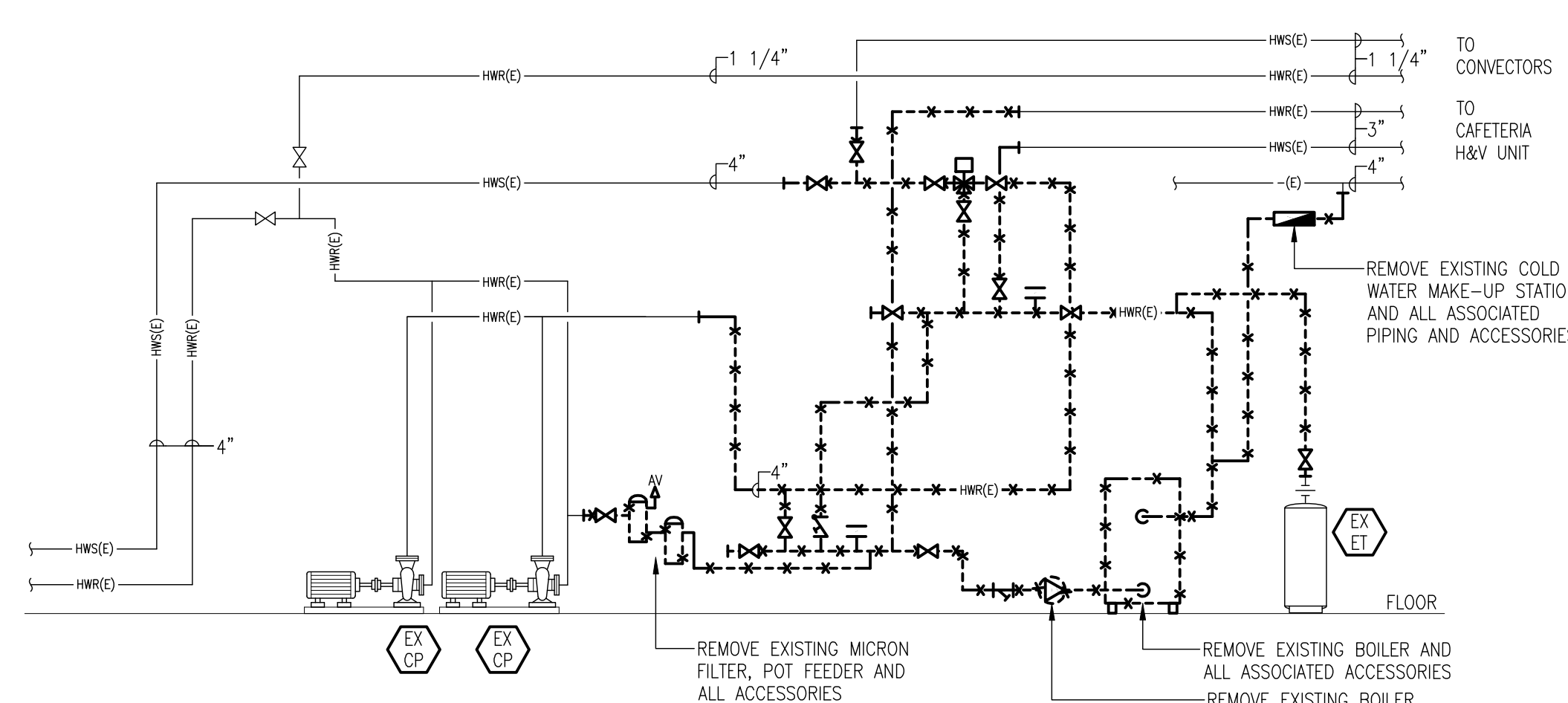


BOILER ROOM FLOOR PLAN - HVAC
 SCALE: 1/4"=1'-0"

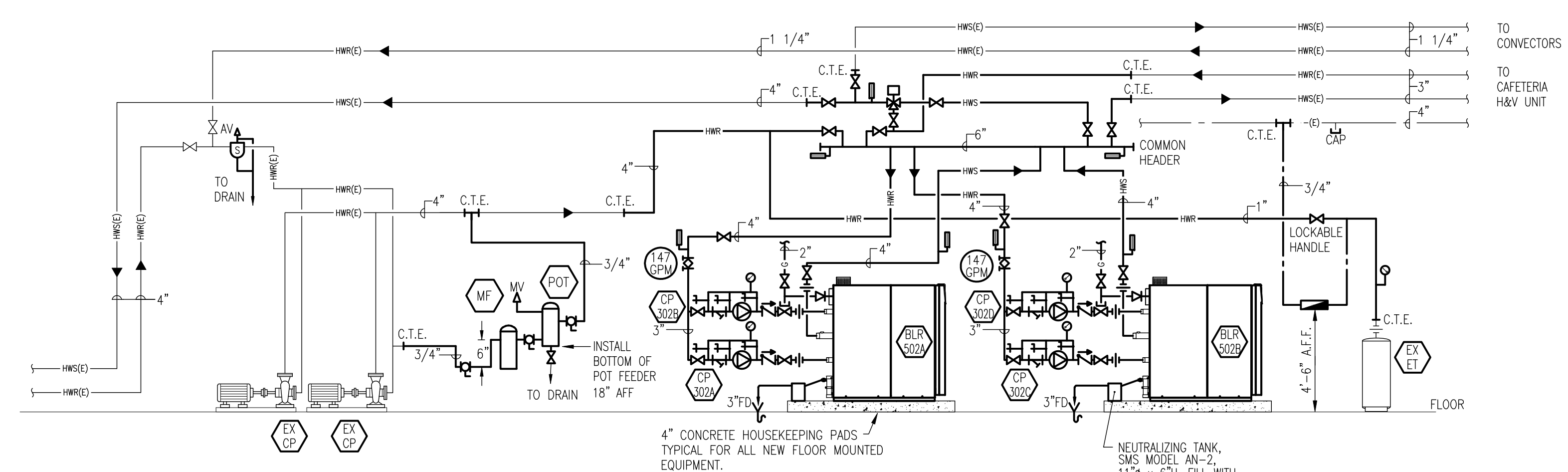
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HEATING SYSTEM SCHEMATIC DEMOLITION
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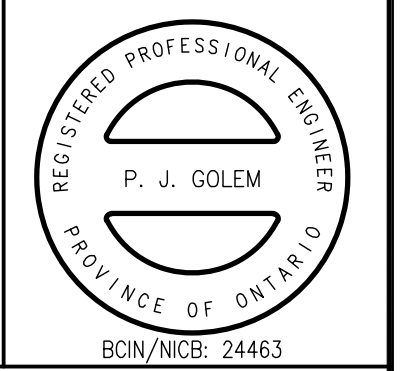


HEATING SYSTEM SCHEMATIC
 N.T.S.

A B C	A	DETAIL NO.
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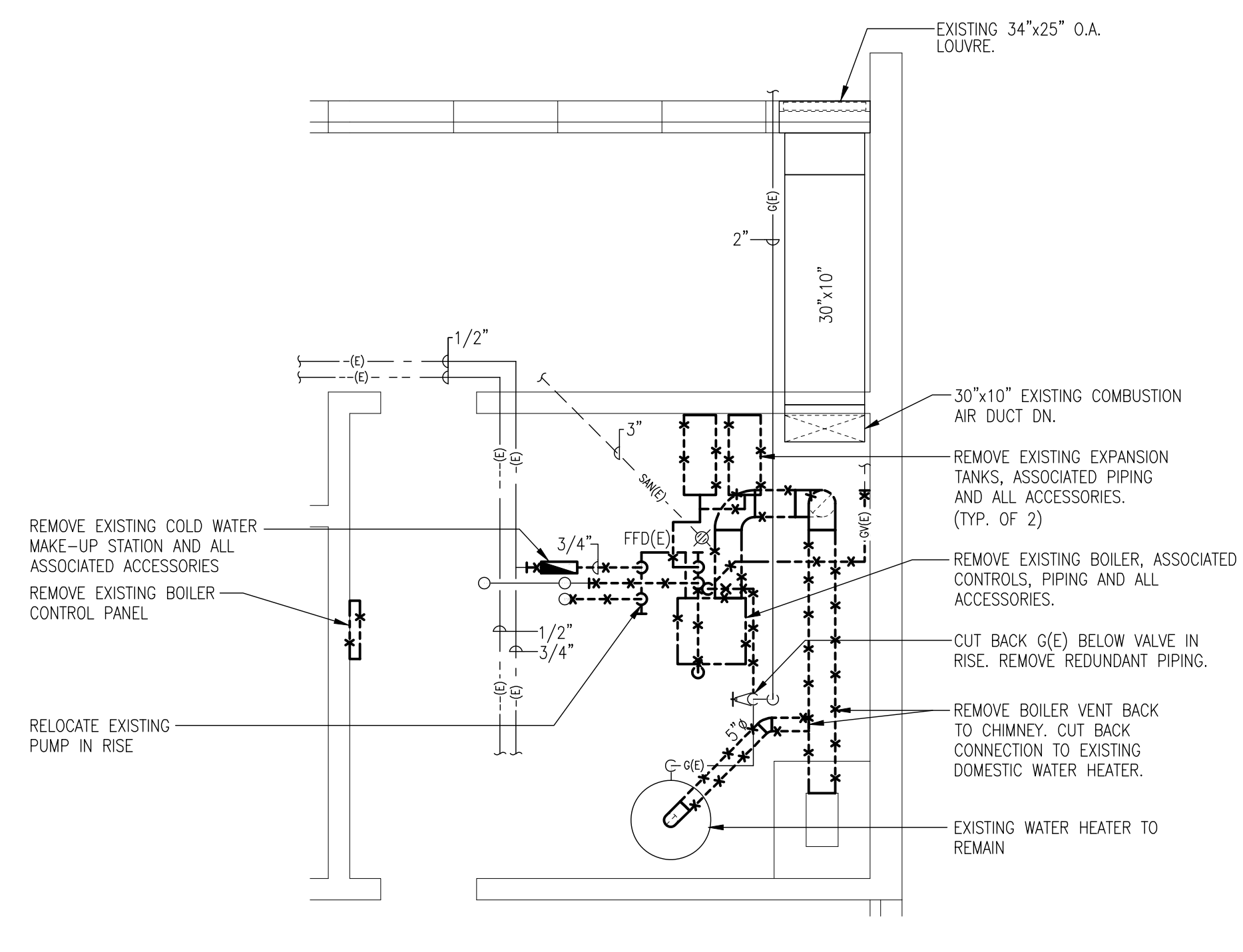
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Drawing Title
XAVIER BOILER ROOM PLANS
 & SCHEMATICS

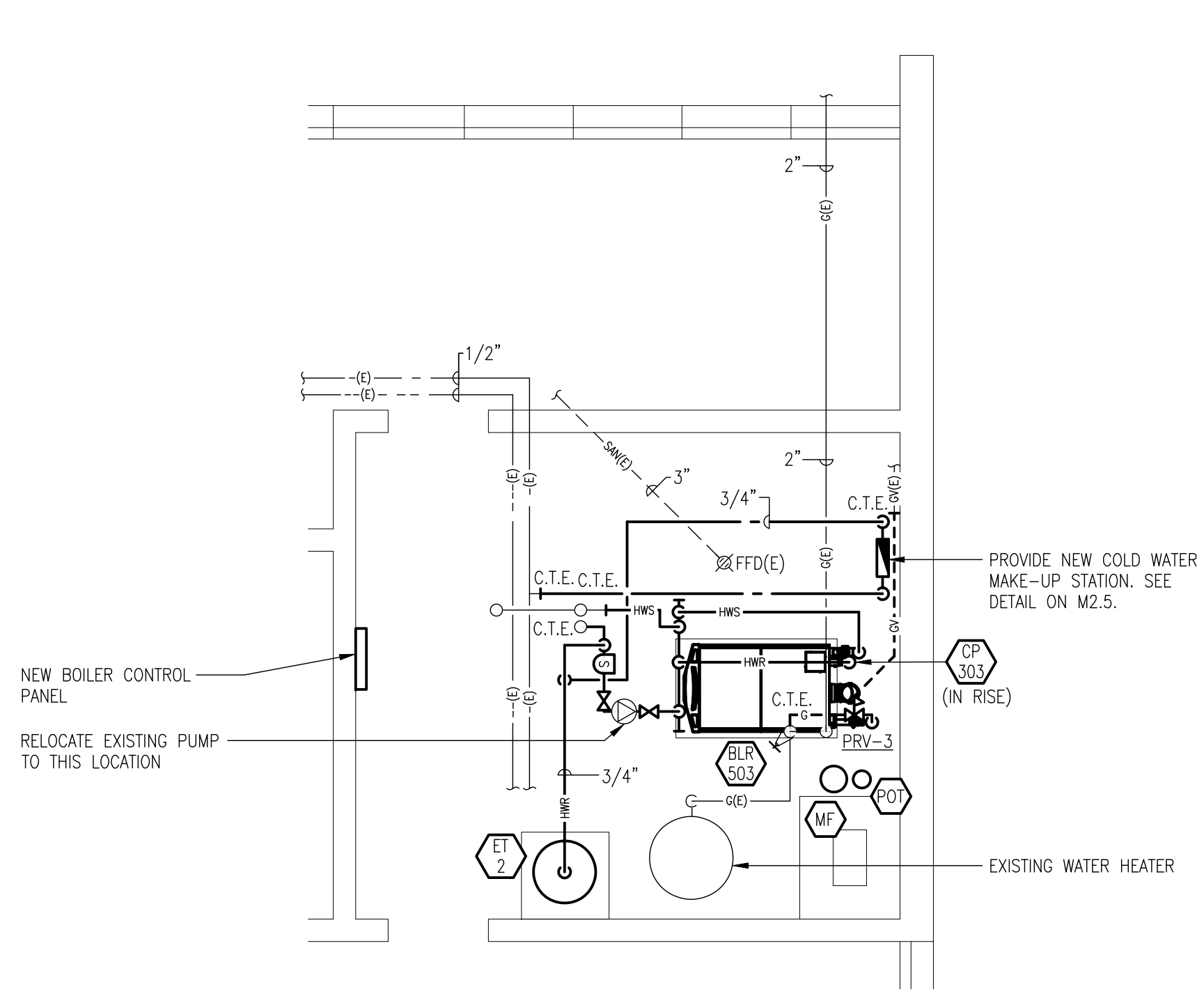
Drawn DAC	Checked JDF	Approved PJG	Drawing No. M2.3
Scale AS NOTED	Date MAR. 11, 2011	Project No. 6774	Rev. No.

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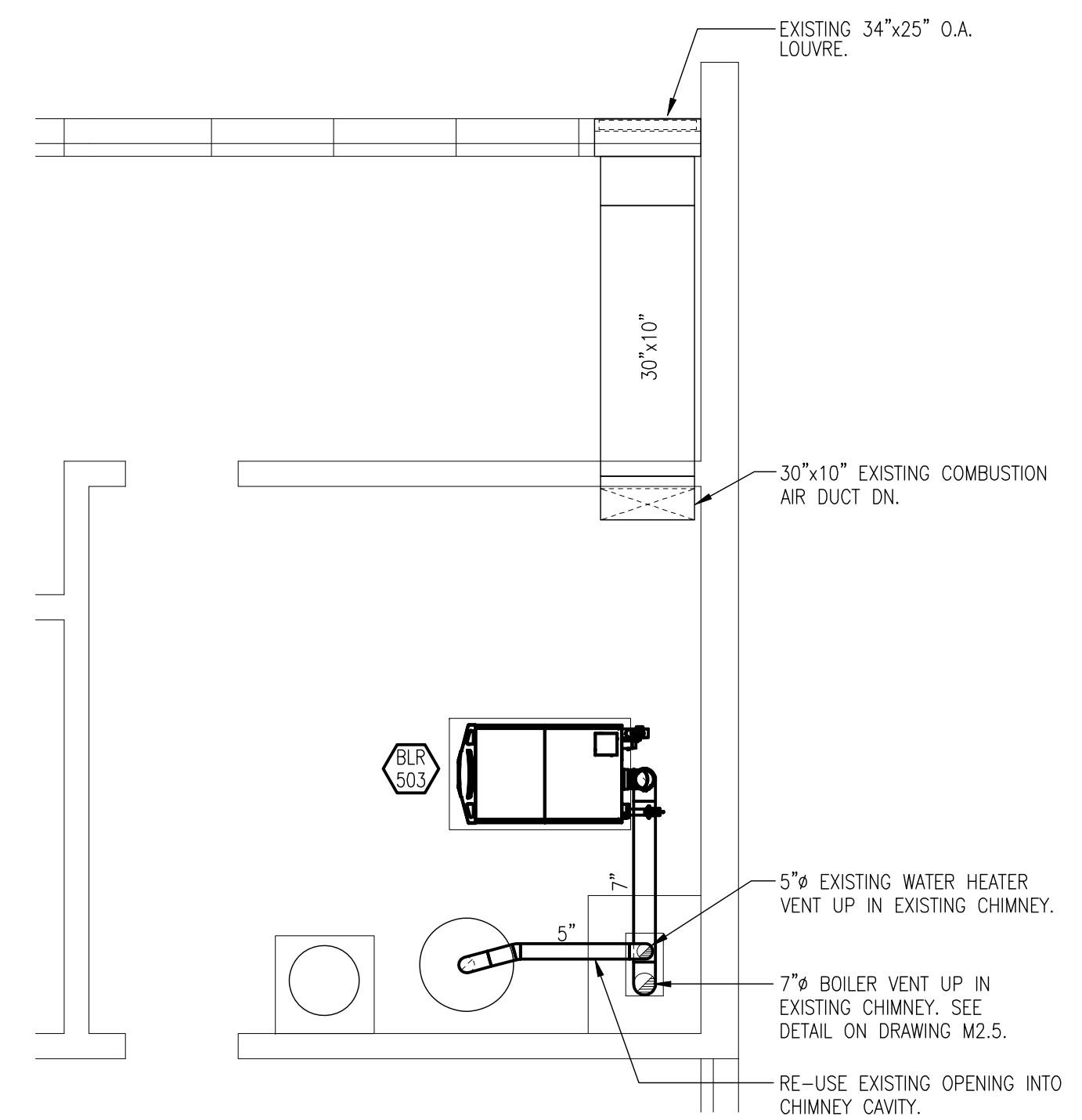
BOILER ROOM FLOOR PLAN DEMOLITION
SCALE: 1/4"=1'-0"

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 6. REINSTALL ALL CONTROL SENSORS IN EXISTING PIPING BEING REMOVED. CONNECT ALL WIRING TO NEW CONTROL PANEL.

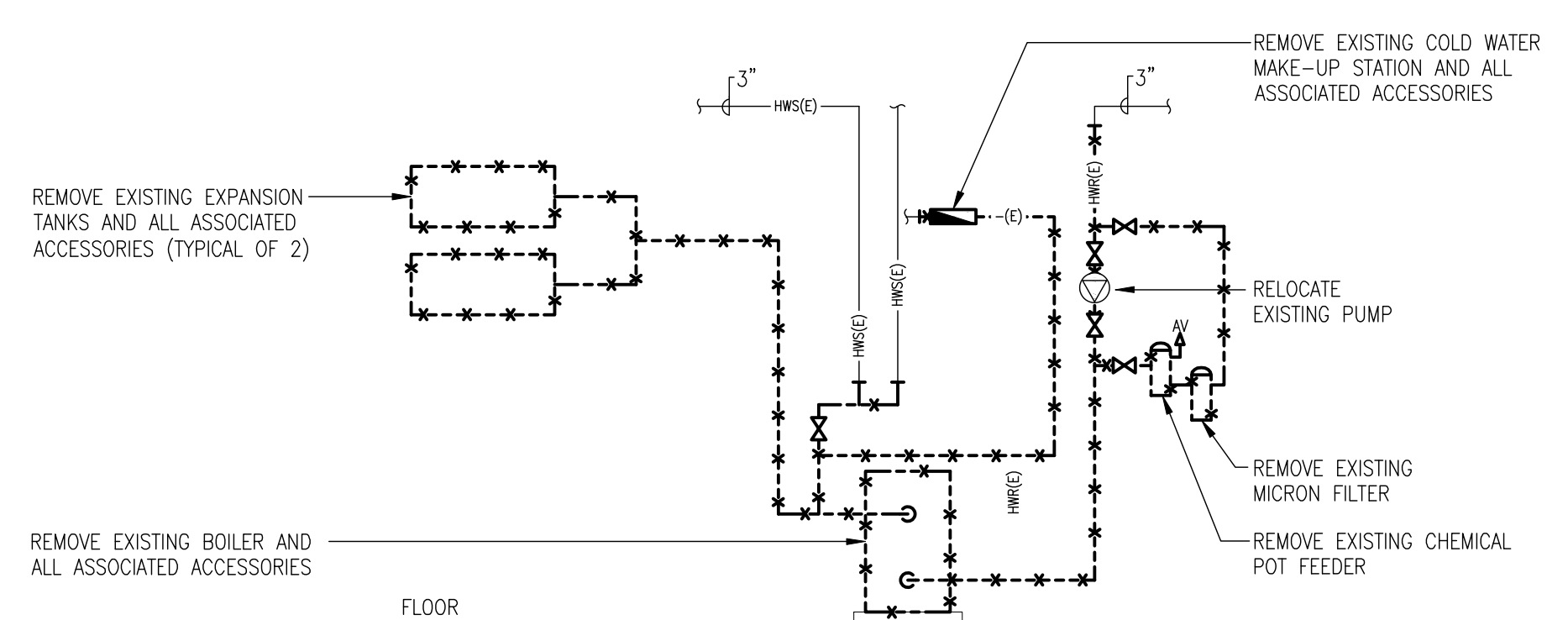


BOILER ROOM FLOOR PLAN PIPING
SCALE: 1/4"=1'-0"

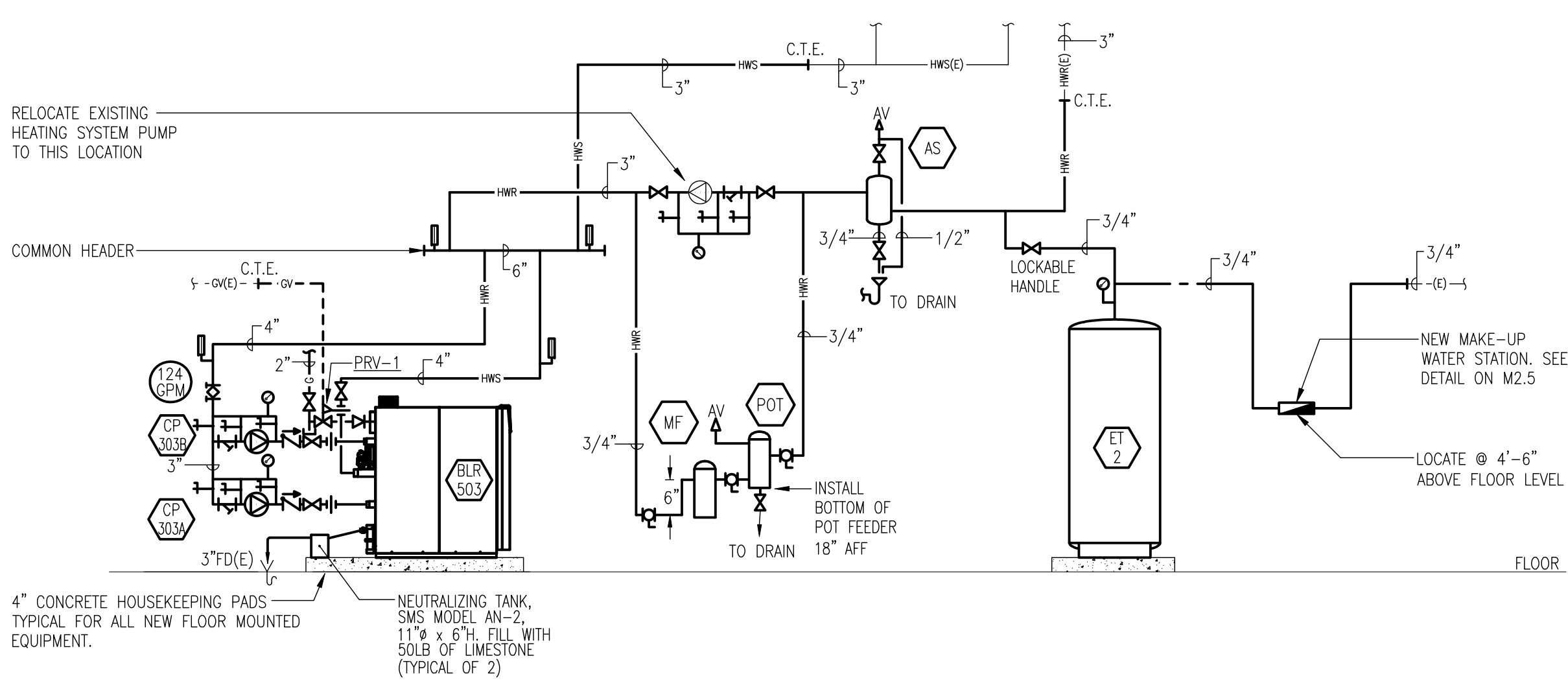
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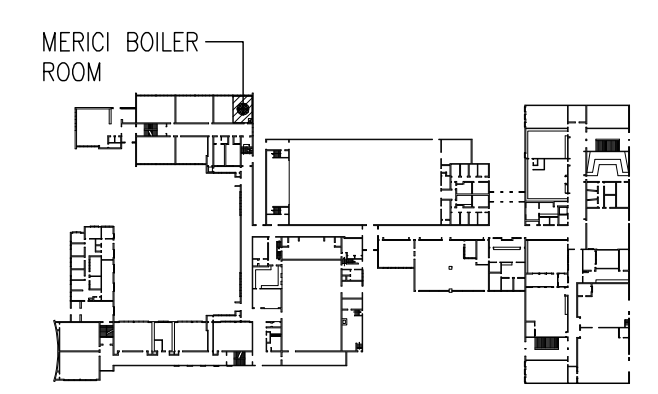
BOILER ROOM FLOOR PLAN VENTING
SCALE: 1/4"=1'-0"



HEATING SYSTEM SCHEMATIC DEMOLITION
N.T.S.



HEATING SYSTEM SCHEMATIC
N.T.S.



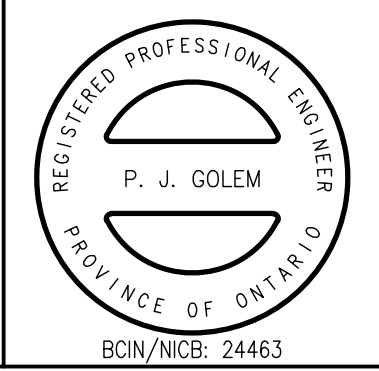
KEY PLAN
N.T.S.

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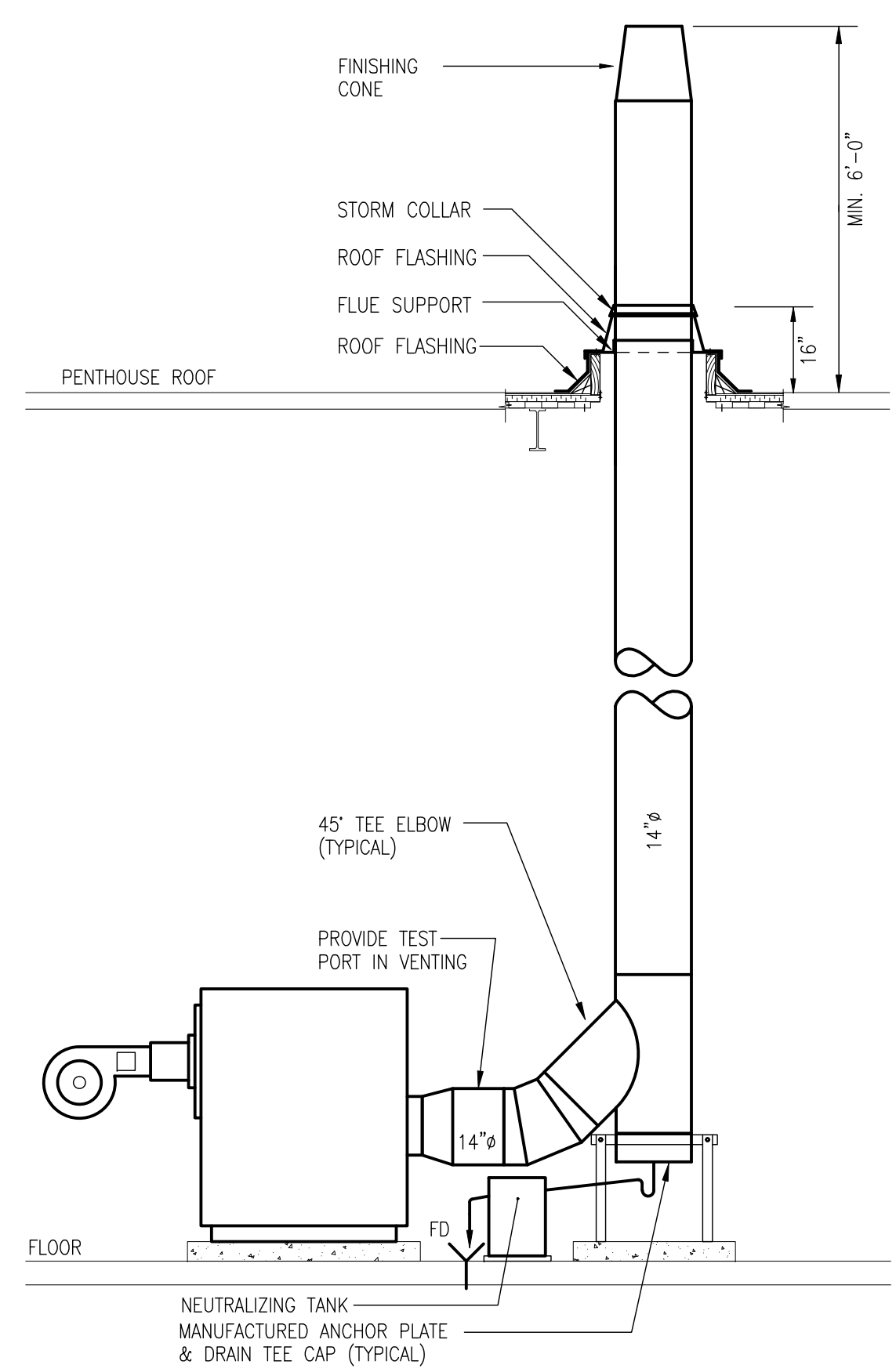
369 YORK ST., SUITE 2B, LONDON ON, CANADA N6B 3R4
P: 519-679-8660 F: 519-679-2145 chorley.com

Project Title
**BOILER & AIR HANDLING UNIT REPLACEMENT
URSULINE COLLEGE CHATHAM CATHOLIC
SECONDARY SCHOOL**

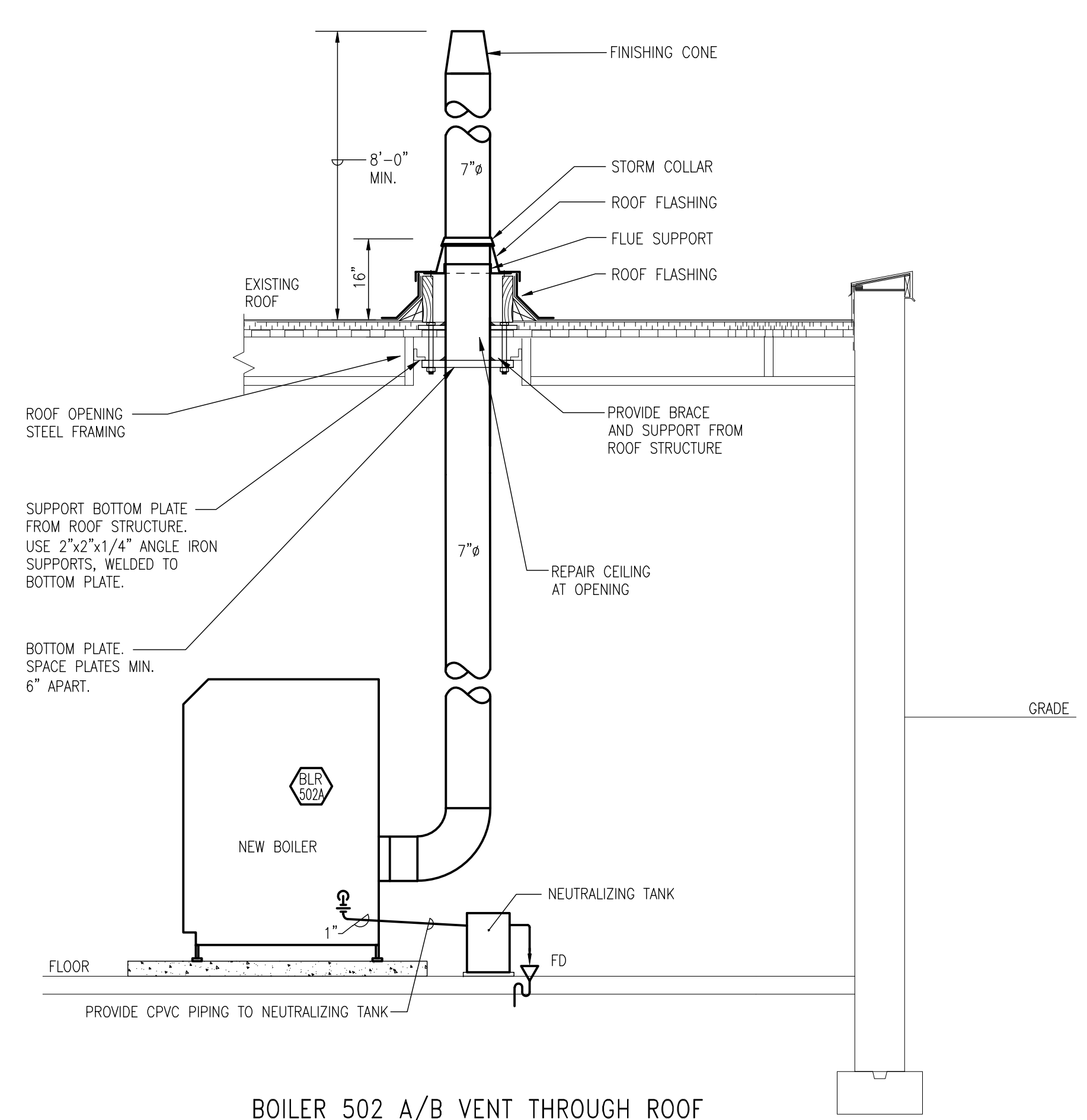
**ST. CLAIR CATHOLIC
DISTRICT SCHOOL BOARD**
CHATHAM, ONTARIO

Drawing Title
**MERICI BOILER ROOM PLANS
& SCHEMATICS**

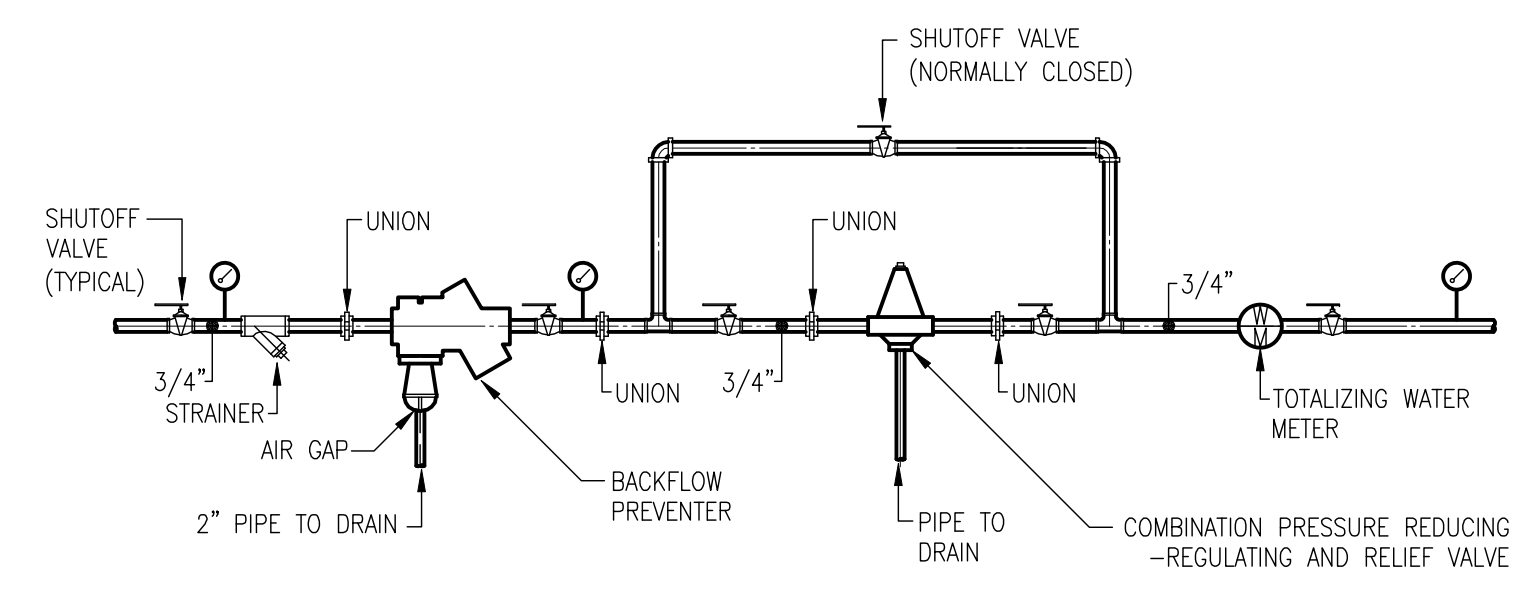
Drawn DAC	Checked JDF	Approved PJG	Drawing No. M2.4
Scale AS NOTED	Date MAR. 11, 2011	Project No. 6774	Rev. No.



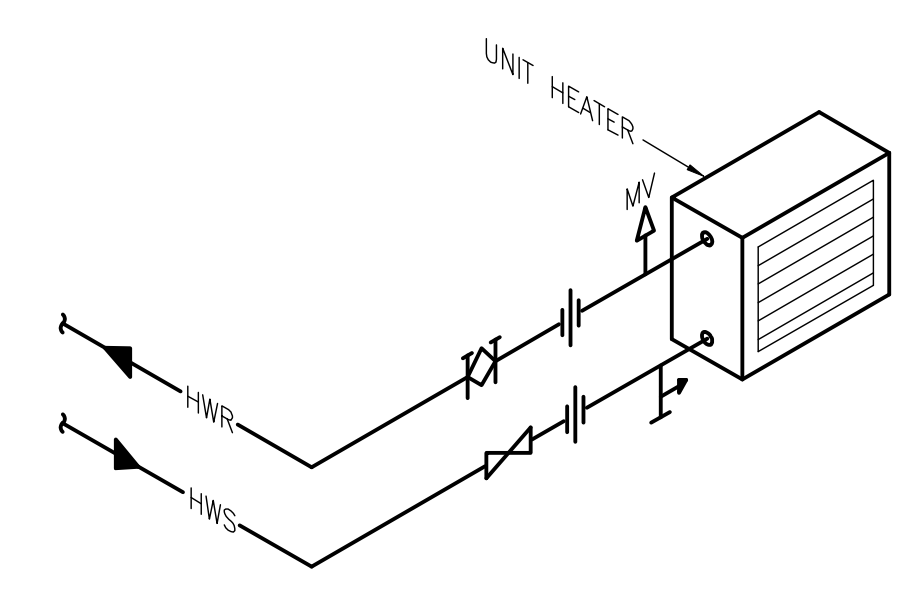
BOILER 501 A/B VENT THROUGH ROOF
N.T.S.



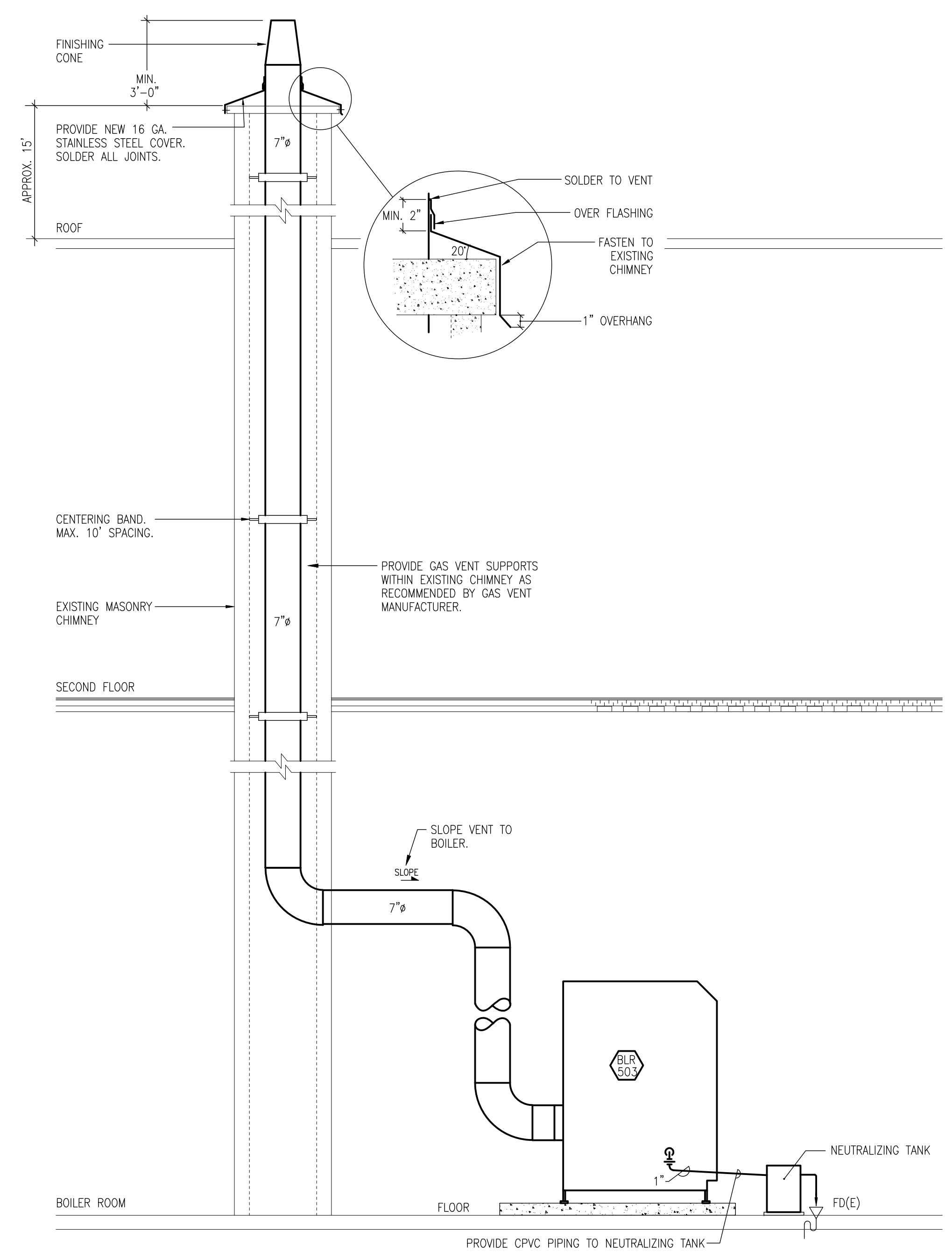
BOILER 502 A/B VENT THROUGH ROOF
N.T.S.



MAKE-UP WATER CONNECTION DETAIL
N.T.S.
NOTE:
INSTALL 4'-6" ABOVE FINISHED FLOOR.



TYPICAL PIPING ARRANGEMENT FOR HORIZONTAL UNIT HEATER
N.T.S.



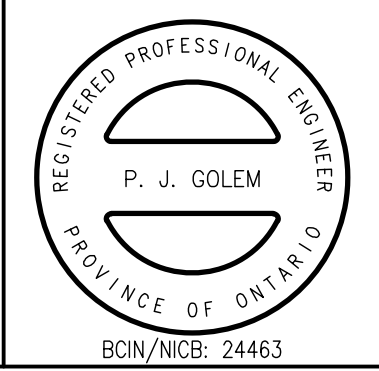
BOILER 503 VENT THROUGH CHIMNEY
N.T.S.

No.	By	Revisions	Date
1	PJG	ISSUED FOR BOARD REVIEW	FEB. 16, 2011
2	PJG	ISSUED FOR BOARD REVIEW	MAR. 02, 2011
3	PJG	ISSUED FOR TENDER	MAR. 14, 2011

A B C	A	DETAIL NO.
	B	DWG. NO. - WHERE REQUIRED
	C	DWG. NO. - WHERE DETAILED

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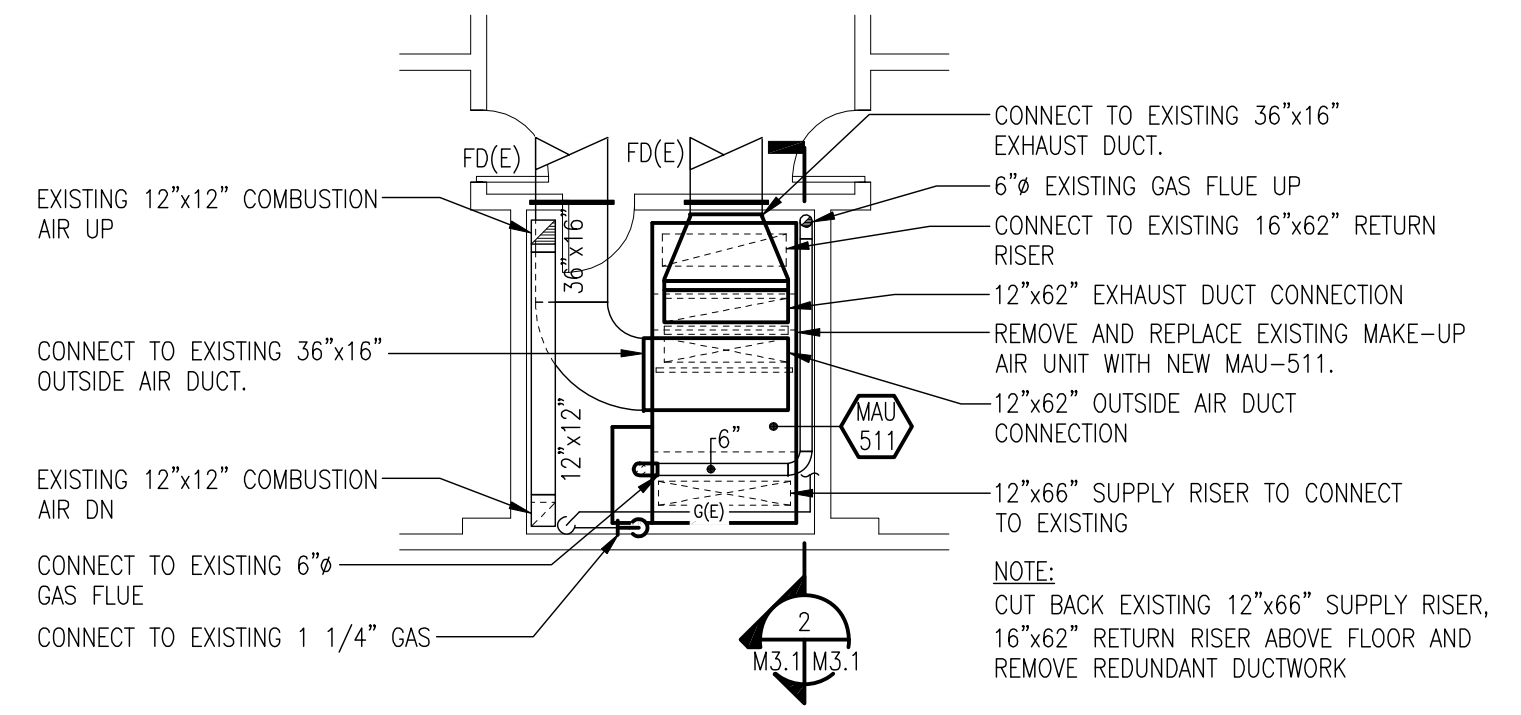
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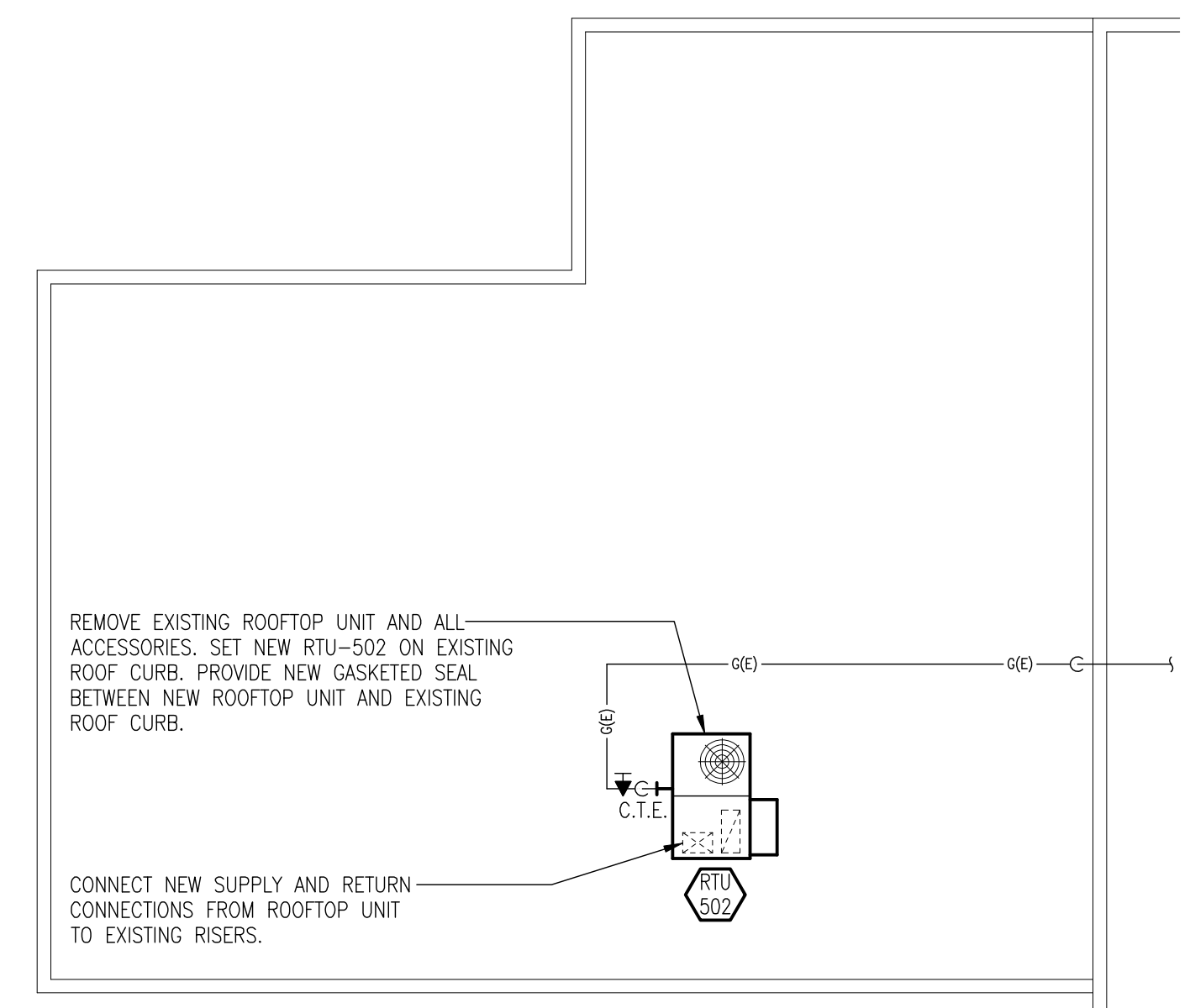
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URSULINE COLLEGE CHATHAM CATHOLIC
SECONDARY SCHOOL
ST. CLAIR CATHOLIC
DISTRICT SCHOOL BOARD
CHATHAM, ONTARIO

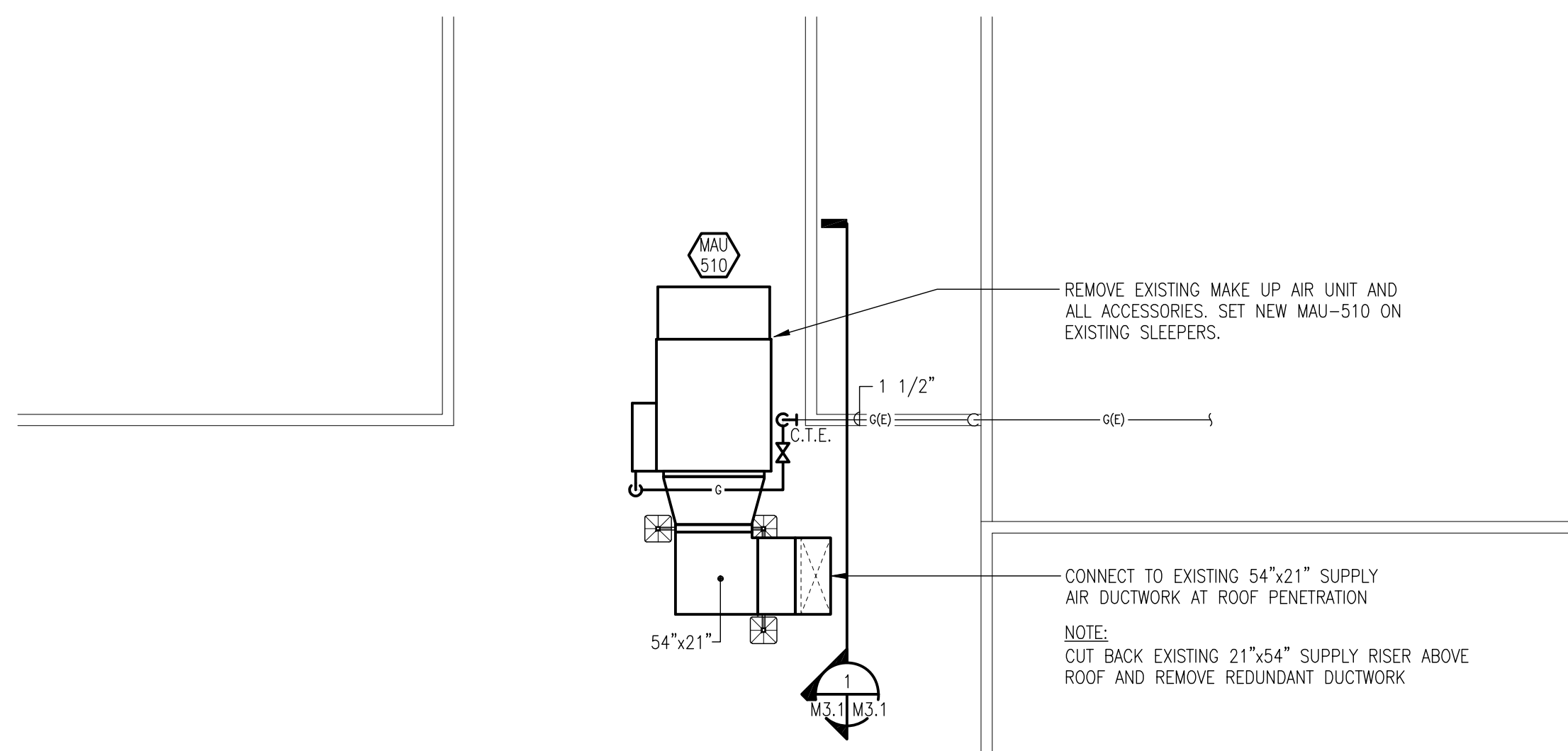
Drawing Title DETAILS			
Drawn DAC	Checked JDF	Approved PJG	Drawing No. M2.5
Scale AS NOTED	Date MAR. 11, 2011	Project No. 6774	Rev. No.



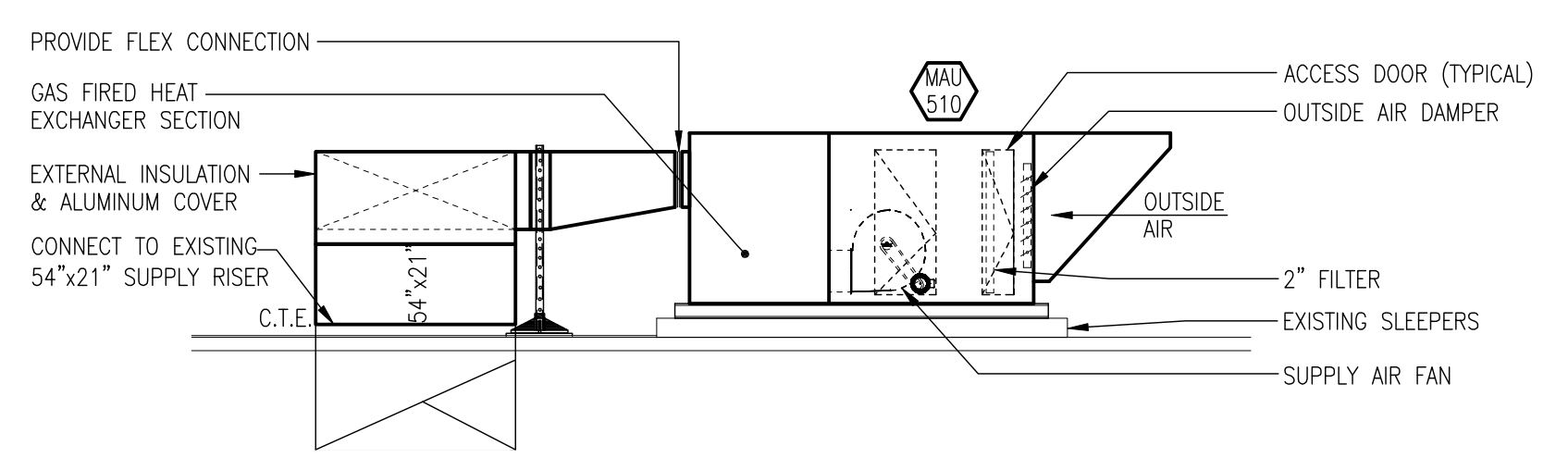
PART DENOMY SECOND FLOOR MECHANICAL ROOM
 SCALE: 1/8"=1'-0"



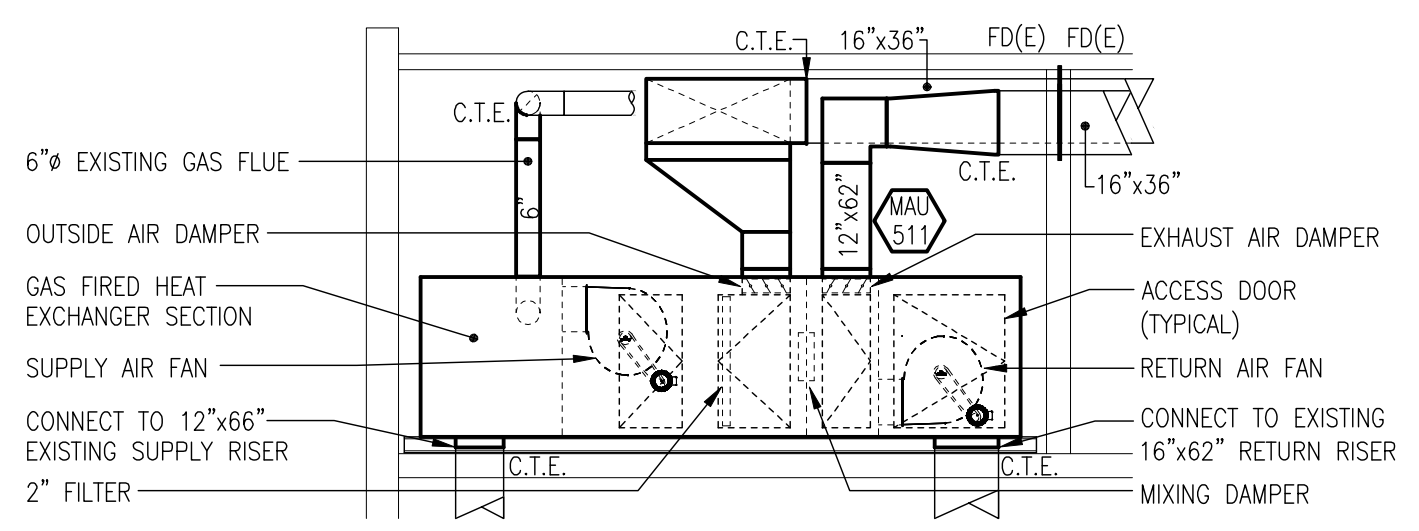
PART MERICI ROOF PLAN
 SCALE: 1/8"=1'-0"



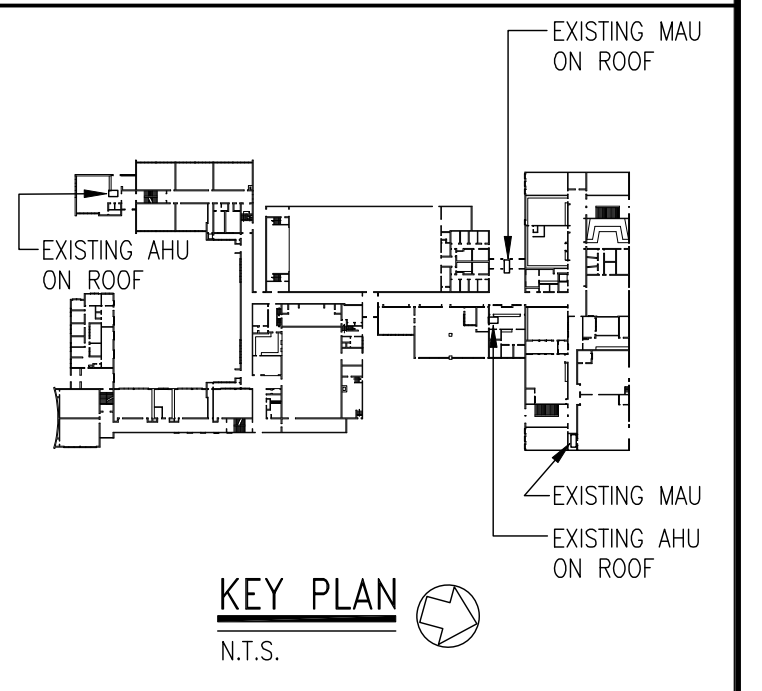
PART DENOMY ROOF PLAN
 SCALE: 1/8"=1'-0"



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



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



No.	By	Revisions	Date
1	PJG	ISSUED FOR BOARD REVIEW	FEB. 16, 2011
2	PJG	ISSUED FOR BOARD REVIEW	MAR. 02, 2011
3	PJG	ISSUED FOR TENDER	MAR. 14, 2011

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Project Title
**BOILER & AIR HANDLING UNIT REPLACEMENT
 URSULINE COLLEGE CHATHAM CATHOLIC
 SECONDARY SCHOOL**

**ST. CLAIR CATHOLIC
 DISTRICT SCHOOL BOARD**
 CHATHAM, ONTARIO

Drawing Title
**ROOFTOP UNIT &
 MAKE-UP AIR UNIT
 REPLACEMENTS**

Drawn DAC	Checked JDF	Approved PJG	Drawing No. M3.1
Scale AS NOTED	Date MAR. 11, 2011	Project No. 6774	Rev. No.

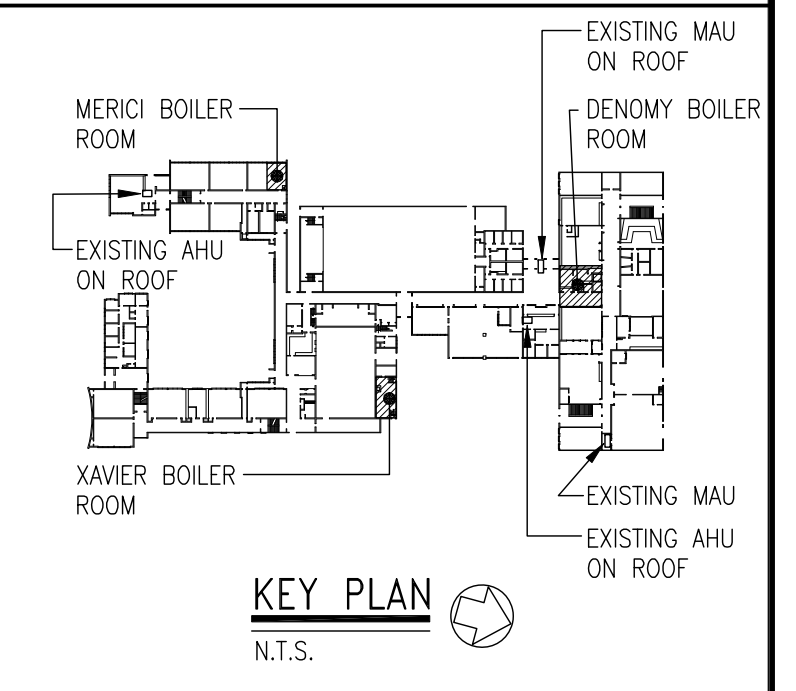
ELECTRICAL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	COMBINATION STARTER		ELECTRICAL PANEL
	NON-FUSED DISCONNECT SWITCH	EX	EXISTING DEVICE TO REMAIN
	MANUAL STARTER	REM	EXISTING DEVICE TO BE REMOVED
	MOTOR		

ELECTRICAL DRAWING LIST	
E1.1	LEGEND, DRAWING LIST, SCHEDULES & DETAILS
E2.1	OVERALL PLANS - ELECTRICAL
E2.2	DENOMY, XAVIER AND MERICI PART PLANS - ELECTRICAL

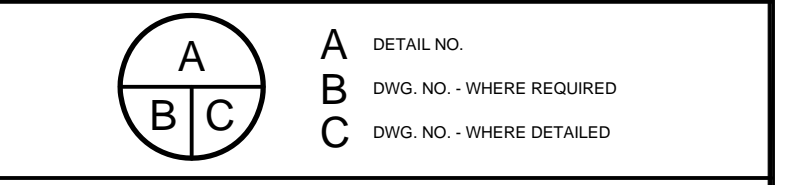
MECHANICAL EQUIPMENT SCHEDULE														
EQUIPMENT SUPPLIED AND INSTALLED BY OTHERS WIRED BY DIV. 16								CONTROL EQUIPMENT SUPPLIED AND INSTALLED BY DIV. 16					REMARKS/NOTES	
ITEM	DESCRIPTION	LOCATION	hp	MCA	PHASE	VOLTS	STARTER/CONTROL TYPE	FEED FROM	BREAKER SIZE	FUSE SIZE	PIPES	CONDUCTOR SIZE		
MAU-501	MAKE UP AIR UNIT	ABOVE CHANGE ROOM 1010 (ON ROOF)		13	3	575	DS, WP	EX. PANEL 'H1'	15		3	3#12	3/4	PROVIDE A NEW BREAKER IN EXISTING FPE 600/347V PANEL
MAU-502	MAKE UP AIR UNIT	IN MECHANICAL ROOM 2022		11	3	575	DS, WP	EX. PANEL '2F2'	15		3	3#12	3/4	REPLACE EXISTING MAU. PROVIDE NEW FEEDER
RTU-501	ROOF TOP UNIT	ABOVE MAIN LOBBY 1002 (ON ROOF)		9	3	575	DS, WP	EX. PANEL 'H1'	15		3	3#12	3/4	REUSE FEEDER AND CIRCUIT
RTU-502	ROOF TOP UNIT	ABOVE STAFF ROOM 1265 (ON ROOF)			3	208	DS, WP	EX. PANEL 'DPM'	30		3	3#12	3/4	EXISTING PANEL 'DPM'. RE-USE FEEDER AND CIRCUIT
BLR-501 A,B	BOILER	DENOMY PENTHOUSE MECH. ROOM	FHP		3	575	MAN, PL	EX. PANEL '3A1'	15		3	3#12	3/4	REUSE BREAKERS SERVING EX. BOILERS TO BE REMOVED
BLR-502 A,B	BOILER	XAVIER BOILER ROOM	FHP		1	120	MAN	EX. PANEL 'CBC'	15		1	2#12	3/4	PROVIDE NEW BREAKERS IN PANEL 'CBC' - ONE PER BOILER
BLR-503	BOILER	MERICI BOILER ROOM	FHP		1	120	MAN	EX. PANEL 'DPM'	15		1	2#12	3/4	PROVIDE NEW BREAKER IN PANEL 'DPM'
CP-302 A,B,C,D	CIRCULATION PUMPS	XAVIER BOILER ROOM	3/4		3	208	FVNR	EX. PANEL 'CBC'	15		3	3#12	3/4	PROVIDE NEW BREAKERS IN PANEL 'CBC' - ONE PER PUMP
CP-303 A,B	CIRCULATION PUMPS	MERICI BOILER ROOM	3/4		3	208	FVNR	EX. PANEL 'DPM'	15		3	3#12	3/4	PROVIDE NEW BREAKERS IN PANEL 'DPM'

NOTES:
 1. DIVISION 16 TO OBTAIN COPIES OF MECHANICAL EQUIPMENT SHOP DRAWINGS AND COORDINATE ELECTRICAL SERVICES.
 2. PROVIDE LOCAL NON-FUSED DISCONNECT SWITCHES AT MOTORS IN ACCORDANCE WITH SECTION 28-604 OF THE ONTARIO ELECTRICAL SAFETY CODE.
 3. UNLESS INDICATED OTHERWISE ALL CONTROL WIRING IS BY DIVISION 15.
 4. ALL VFD'S SHALL BE INSTALLED NEAR THE MOTORS CONTROLLED ON INDEPENDENT UNISTRUT SUPPORT AND OUTSIDE OF MCC'S UNLESS OTHERWISE NOTED.

MOTOR CONTROL ABBREVIATIONS			
ALST	ALTERNATOR STARTER	HOA	HAND-OFF-AUTO SELECTOR SWITCH
COMB	COMBINATION DISCONNECT SWITCH & STARTER ON WALL ADJACENT MOTOR	MAN	MANUAL STARTER
CON	CONTACTOR	MCA	MINIMUM CIRCUIT AMPACITY
DS	UN-FUSED DISCONNECT SWITCH	MCC	MOTOR CONTROL CENTRE
FDS	FUSED DISCONNECT SWITCH	PL	PILOT LIGHT
FVNR	FULL LOAD AMPS		



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3	PJG	ISSUED FOR TENDER	MAR. 14, 2011



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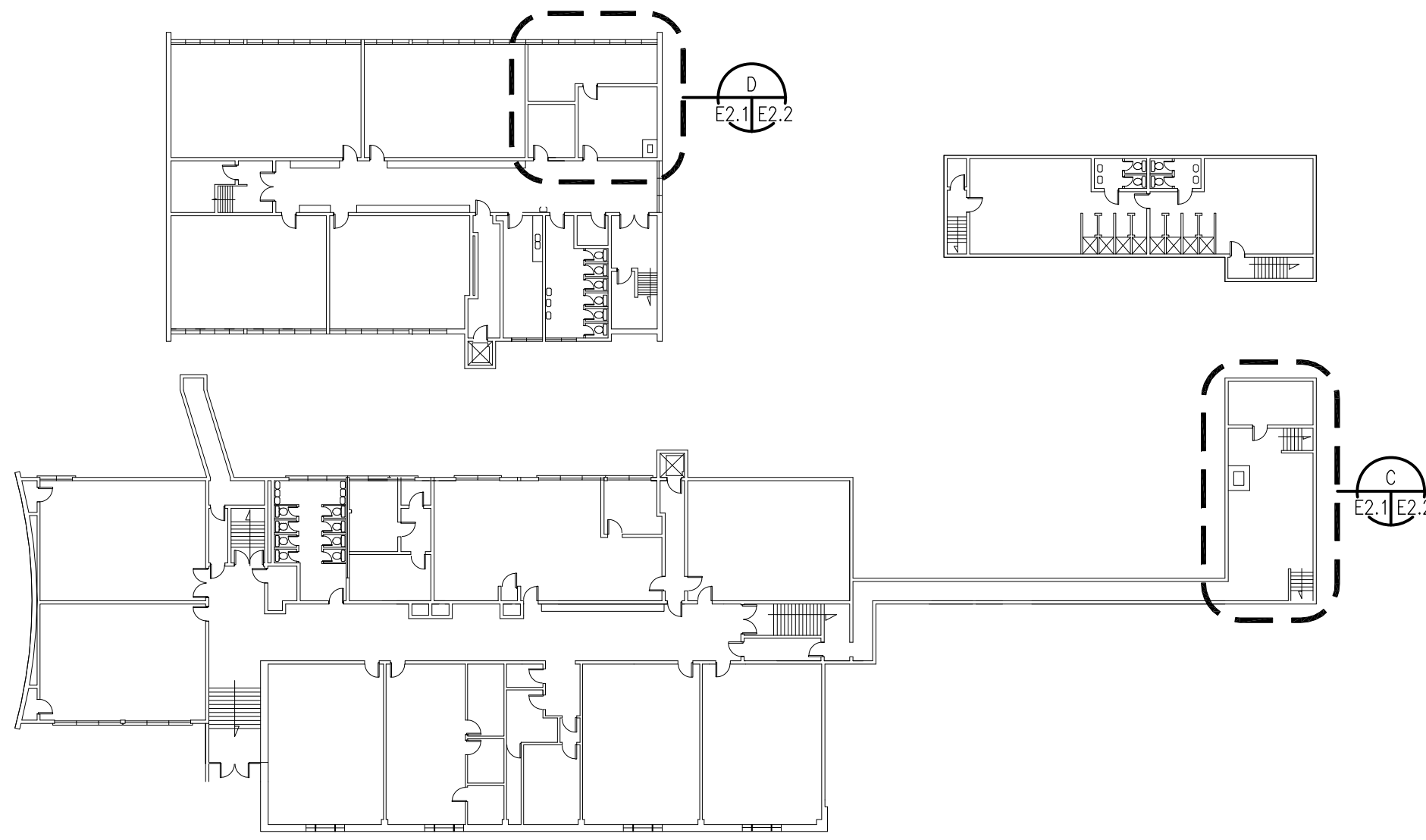


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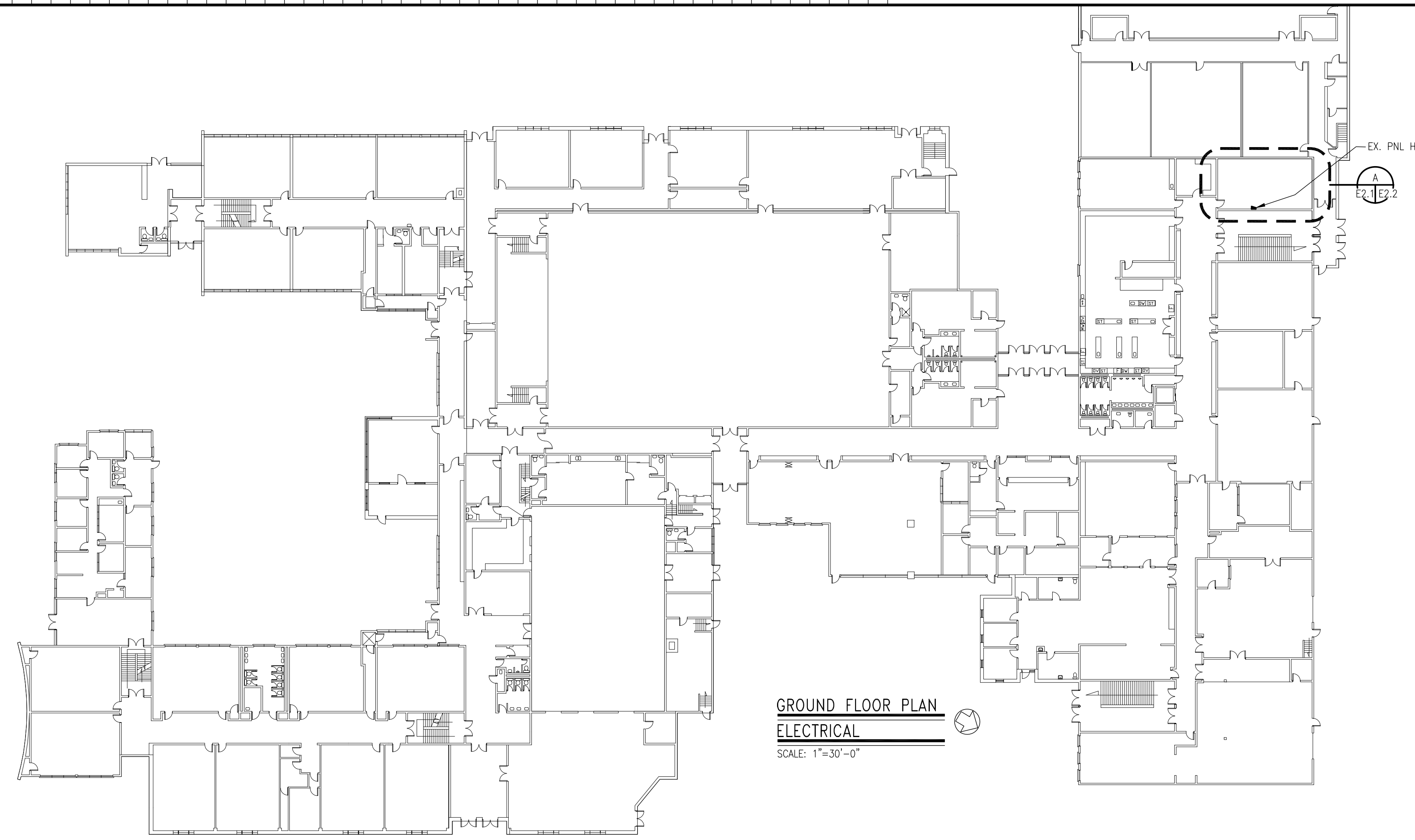
Project Title
BOILER & AIR HANDLING UNIT REPLACEMENT
 URSULINE COLLEGE CHATHAM CATHOLIC SECONDARY SCHOOL
ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD
 CHATHAM, ONTARIO

Drawing Title
LEGEND, DRAWING LIST & SCHEDULES

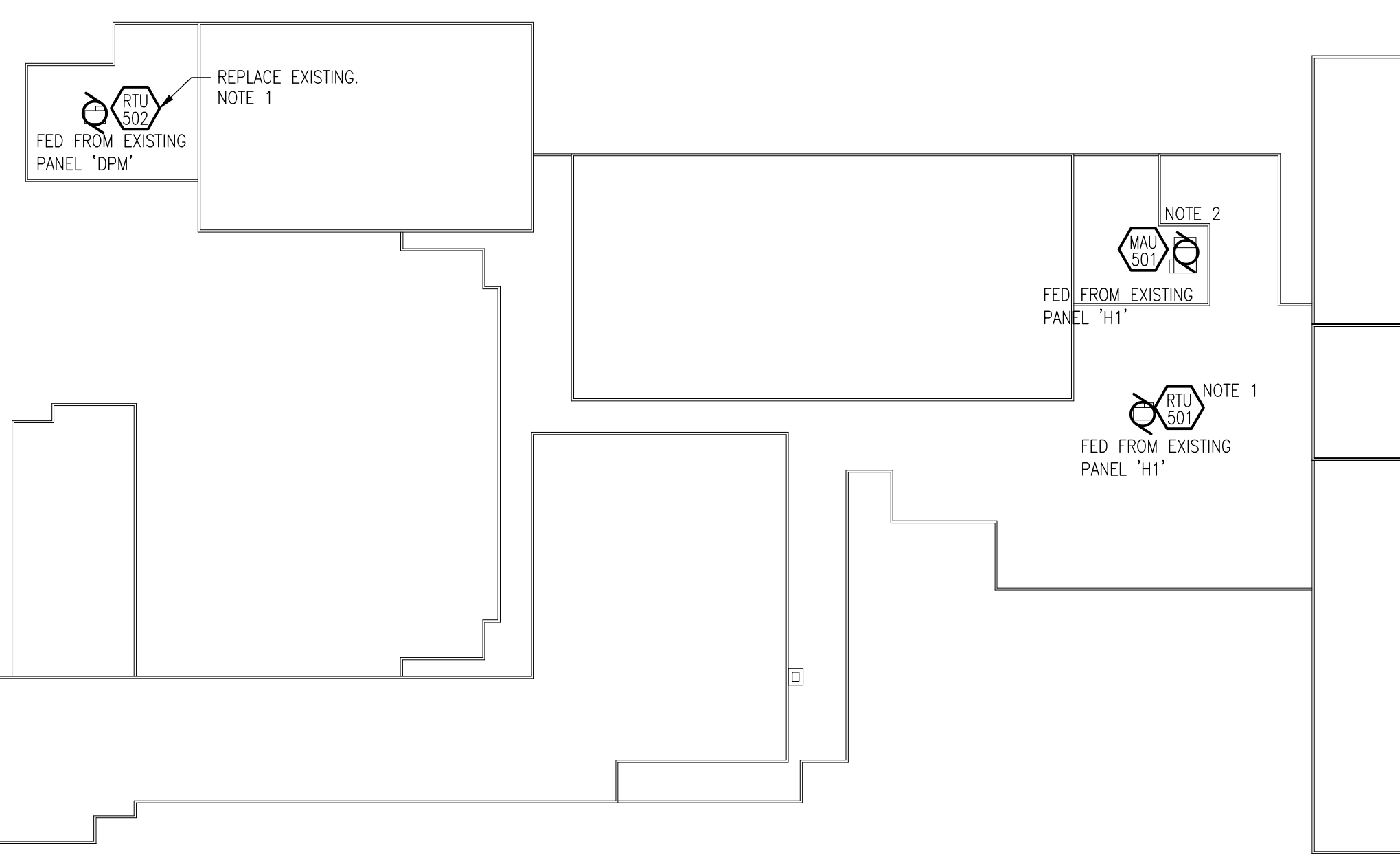
Drawn	Checked	Approved	Drawing No.
JSG	MFM	MFM	E1.1
Scale	Date	Project No.	Rev. No.
AS NOTED	MAR. 11, 2011	6774	



BASMENT FLOOR PLAN
ELECTRICAL
 SCALE: 1"=30'-0"



GROUND FLOOR PLAN
ELECTRICAL
 SCALE: 1"=30'-0"

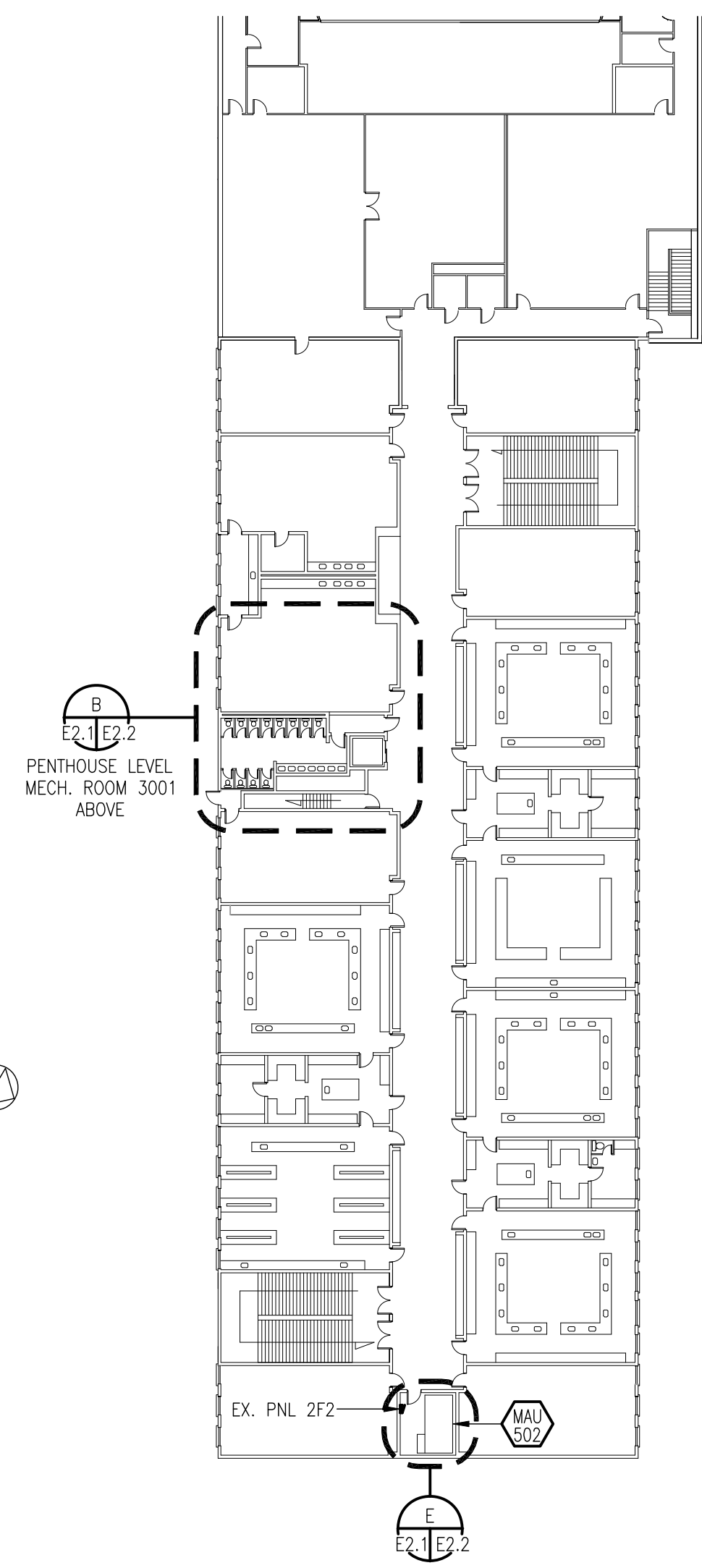


PART ROOF PLAN
ELECTRICAL
 SCALE: 1"=40'-0"

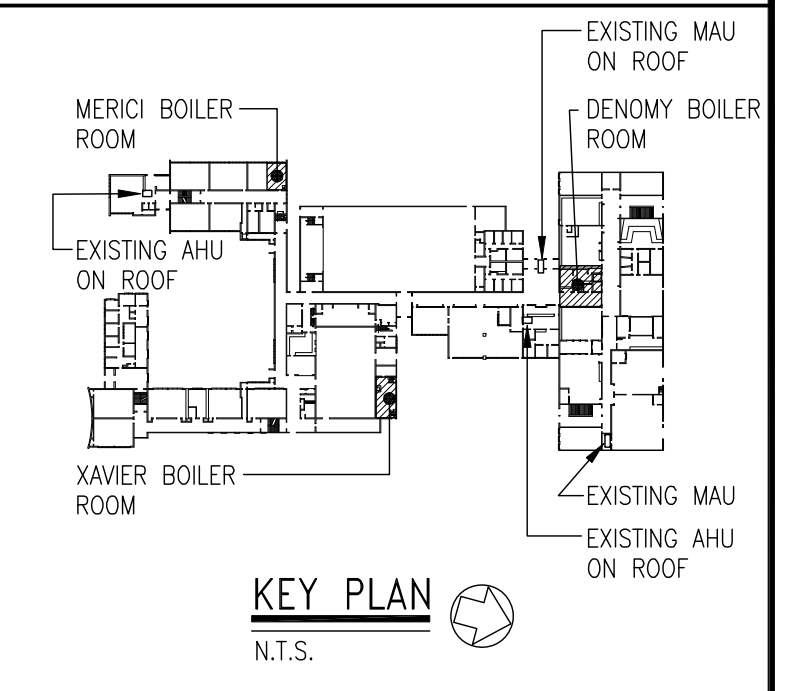
- NOTES:
1. DISCONNECT EXISTING ROOF TOP AND CONNECT NEW TO EXISTING FEEDER. PROVIDE NEW WEATHERPROOF DISCONNECT SWITCH.
 2. DISCONNECT EXISTING UNIT AND COMPLETELY REMOVE EXISTING FEEDER BACK TO SOURCE. PROVIDE NEW FEEDER TO PANEL 'H1' AS SHOWN.



SECOND FLOOR PLAN
ELECTRICAL
 SCALE: 1"=30'-0"



PENTHOUSE LEVEL MECH. ROOM 3001 ABOVE



KEY PLAN
 N.T.S.

No.	By	Revisions	Date
1	PJG	ISSUED FOR BOARD REVIEW	FEB. 16, 2011
2	PJG	ISSUED FOR BOARD REVIEW	MAR. 02, 2011
3	PJG	ISSUED FOR TENDER	MAR. 14, 2011

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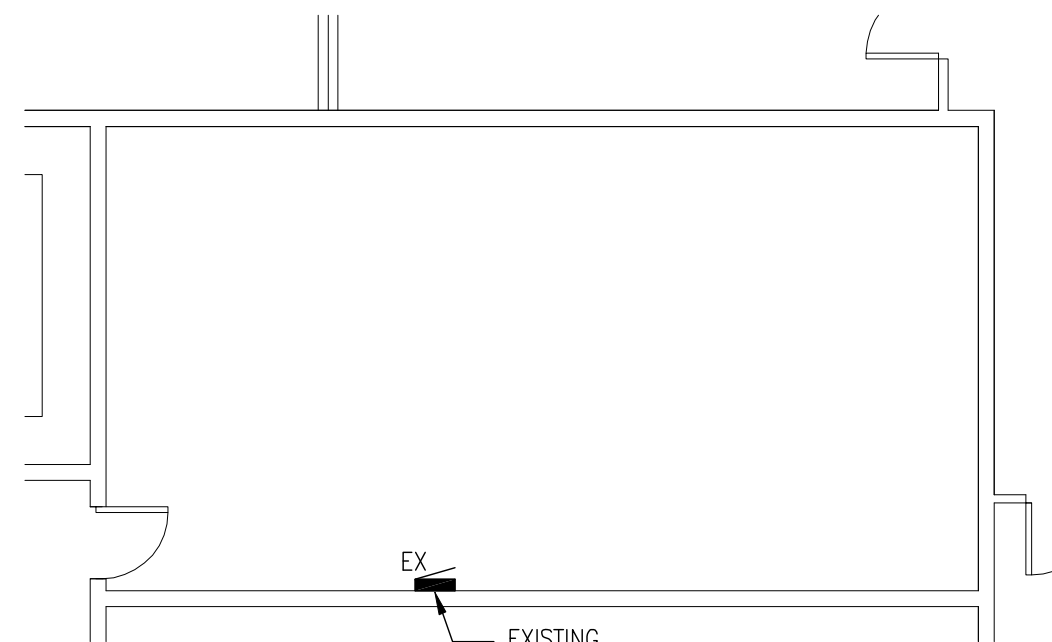


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Project Title
BOILER & AIR HANDLING UNIT REPLACEMENT
URSULINE COLLEGE CHATHAM CATHOLIC
SECONDARY SCHOOL
ST. CLAIR CATHOLIC
DISTRICT SCHOOL BOARD
 CHATHAM, ONTARIO

Drawing Title
OVERALL PLANS

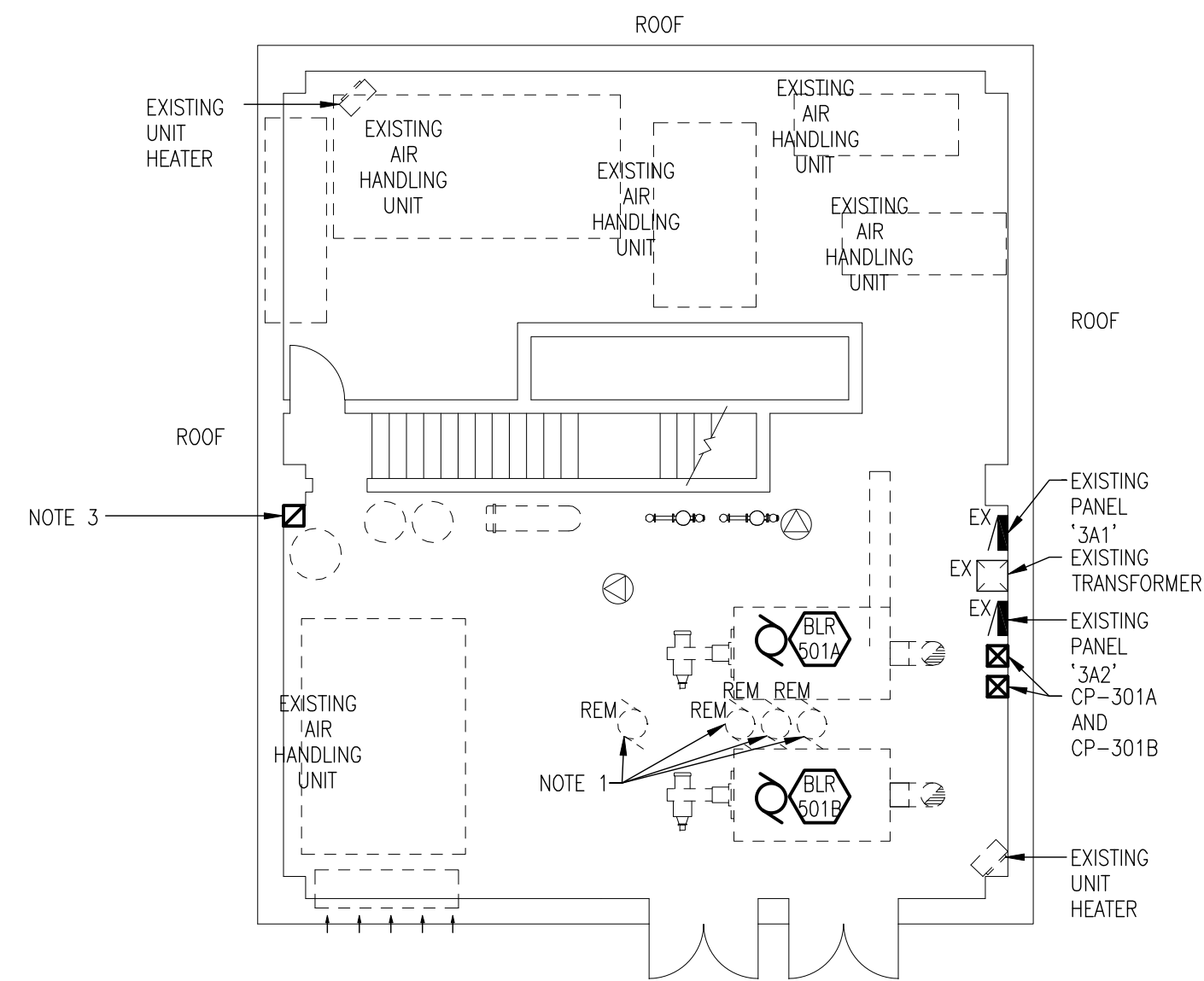
Drawn JSG	Checked MFM	Approved MFM	Drawing No. E2.1
Scale AS NOTED	Date MAR. 11, 2011	Project No. 6774	Rev. No.



ELECTRICAL ROOM 1058
ELECTRICAL - DENOMY
 SCALE: 1/8"=1'-0"

NOTES:

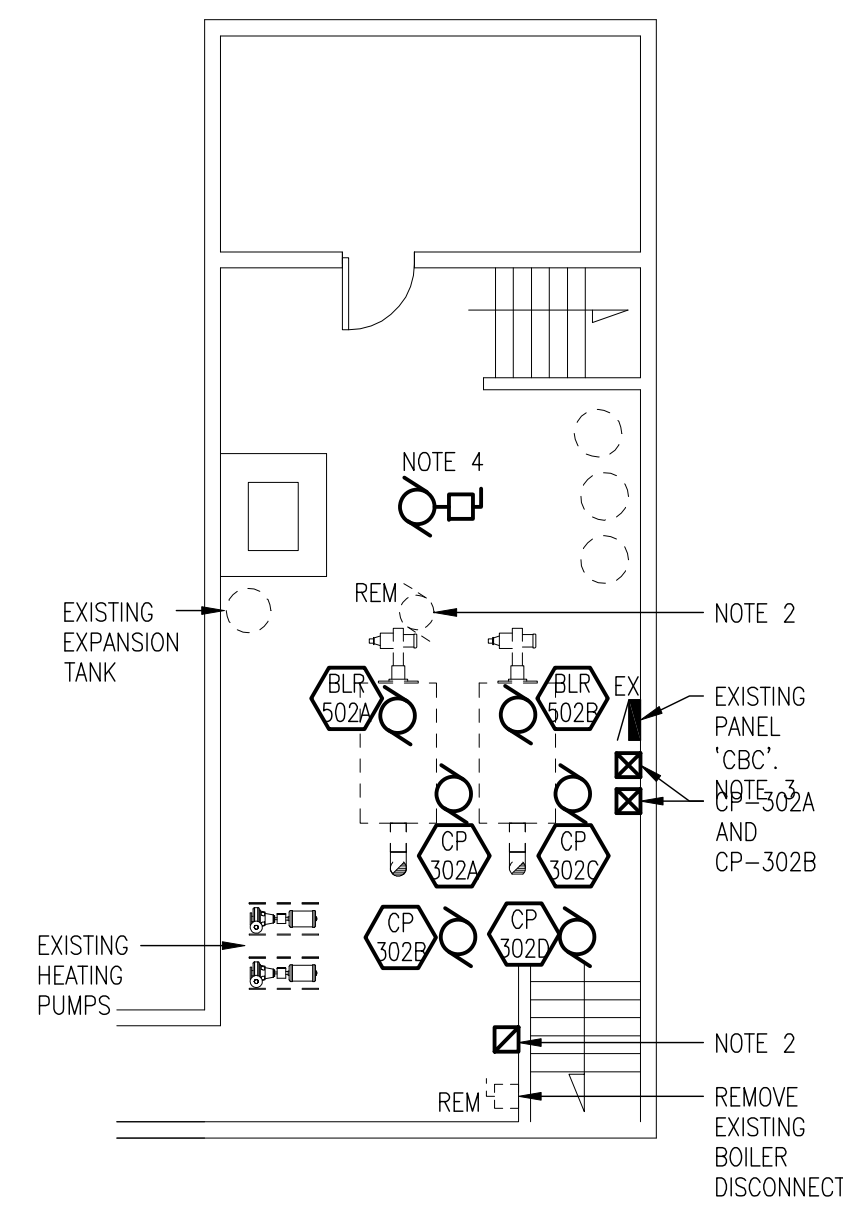
1. PROVIDE A NEW BREAKER IN EXISTING PANEL 'H1' TO SERVE MAU-501. EXISTING PANEL IS FPE 600/347V 3PH 4W 100A.



MECHANICAL ROOM PLAN
ELECTRICAL - DENOMY
 SCALE: 1/8"=1'-0"

NOTES:

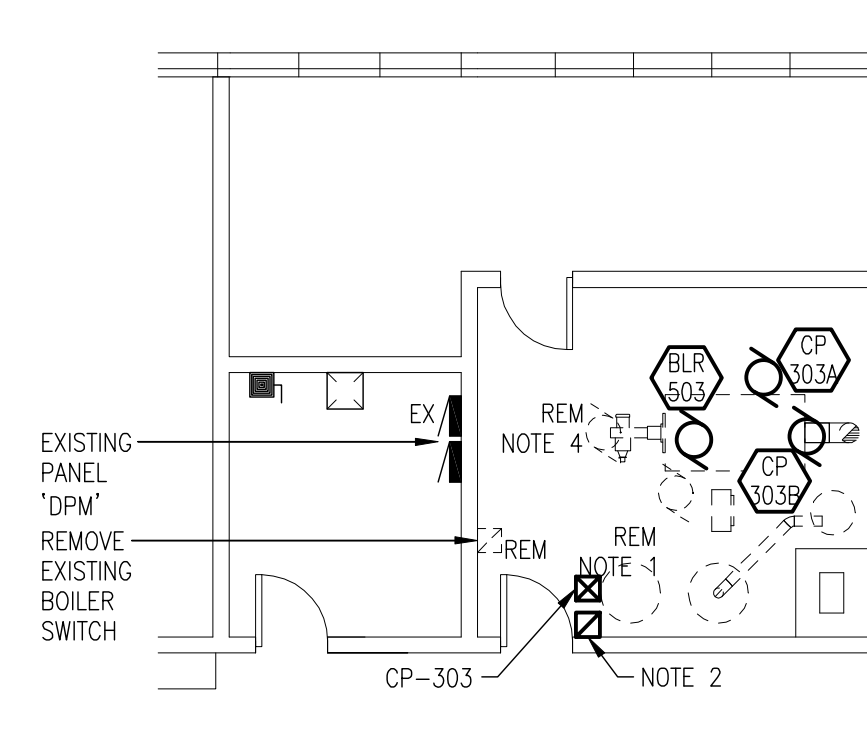
1. MAKE PROVISIONS TO REMOVE CONDUIT AND CABLE BACK TO SOURCE SERVING 2 PUMPS AND 2 BOILERS. FED FROM EXISTING PANEL '3A1'. REMOVE ALL ASSOCIATED STARTERS, ACCESSORIES AND CONTROLS.
2. CONNECT NEW BOILERS BLR-501A AND 501B AND PUMPS CP-301 AND CP-301B TO EXISTING 15A-3P CIRCUITS IN PANEL '3A1'.
3. PROVIDE NEW 600V 3PH MANUAL STARTER C/W PILOT LIGHT AND LOCKABLE TOGGLE SWITCH ATTACHMENT (ONE FOR EACH BOILER).



BOILER ROOM PLAN
ELECTRICAL - XAVIER
 SCALE: 1/8"=1'-0"

NOTES:

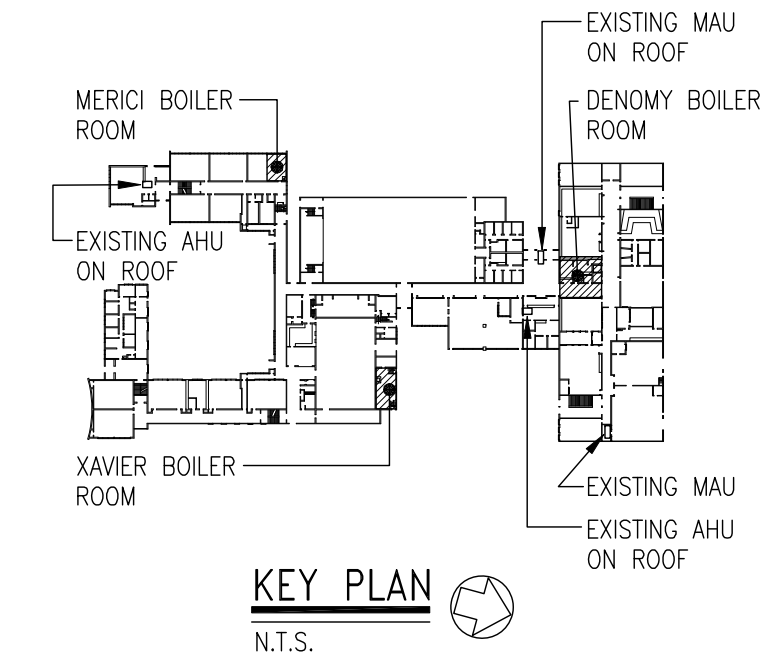
1. REMOVE EXISTING BOILER AND ALL ASSOCIATED CONTROLS, CONDUIT, CABLES AND ACCESSORIES BACK TO SOURCE.
2. PROVIDE A SINGLE PHASE MANUAL STARTER C/W LOCKABLE TOGGLE SWITCH ATTACHMENT AND PILOT LIGHT TO BE ALLEN-BRADLEY CAT# 600-TAX216/600-W1 OR APPROVED EQUAL. PROVIDE A SUITABLE ENCLOSURE. PROVIDE ONE FOR EACH BOILER.
3. EXISTING PANEL 'CBC' IS SQUARE D 120/208V 3PH 4W 225A.
4. DISCONNECT AND REMOVE EXISTING ELECTRIC UNIT HEATER. PROVIDE A NEW 15A 1P BREAKER IN PANEL 'CBC' TO SERVE NEW UNIT HEATER.



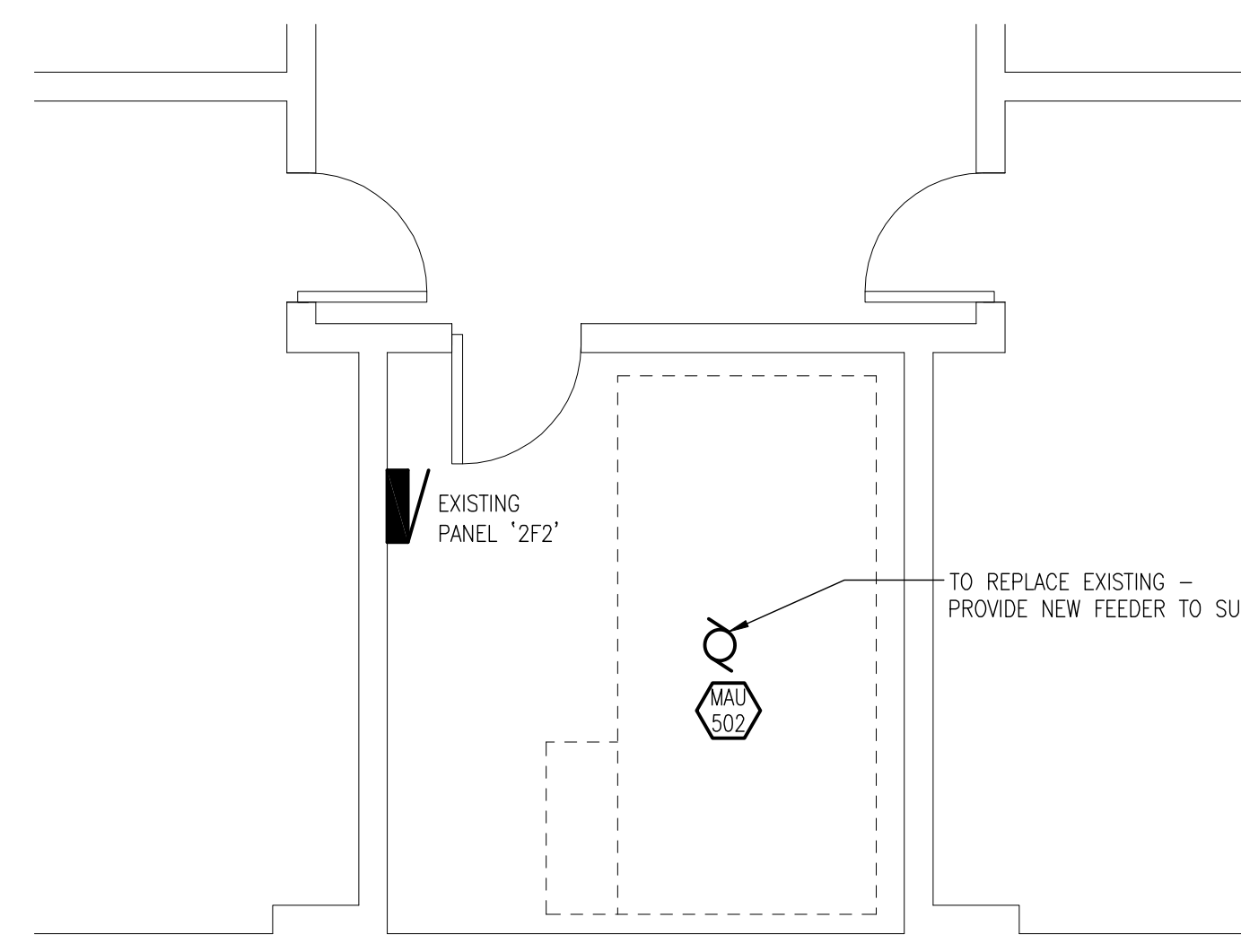
BOILER ROOM PLAN
ELECTRICAL - MERICI
 SCALE: 1/8"=1'-0"

NOTES:

1. REMOVE EXISTING BOILER AND ALL ASSOCIATED CONTROLS, CONDUIT, CABLES AND ACCESSORIES BACK TO SOURCE.
2. PROVIDE A SINGLE PHASE MANUAL STARTER C/W LOCKABLE TOGGLE SWITCH ATTACHMENT AND PILOT LIGHT TO BE ALLEN-BRADLEY CAT# 600-TAX216/600-W1 OR APPROVED EQUAL. PROVIDE A SUITABLE ENCLOSURE. PROVIDE ONE FOR EACH BOILER.
3. EXISTING PANEL 'DPM' IS SQUARE D 120/208V 3PH 4W 400A.
4. ALLOW FOR REWORKING FEEDER TO EXISTING PUMP.



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MECHANICAL ROOM PLAN
ELECTRICAL - DENOMY
 SCALE: 1/4"=1'-0"

A	DETAIL NO.
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 SECONDARY SCHOOL

ST. CLAIR CATHOLIC
 DISTRICT SCHOOL BOARD
 CHATHAM, ONTARIO

Drawing Title
PART PLANS
 DENOMY, XAVIER & MERICI

Drawn	Checked	Approved	Drawing No.
JSG	MFM	MFM	E2.2
Scale	Date	Project No.	Rev. No.
AS NOTED	MAR. 11, 2011	6774	