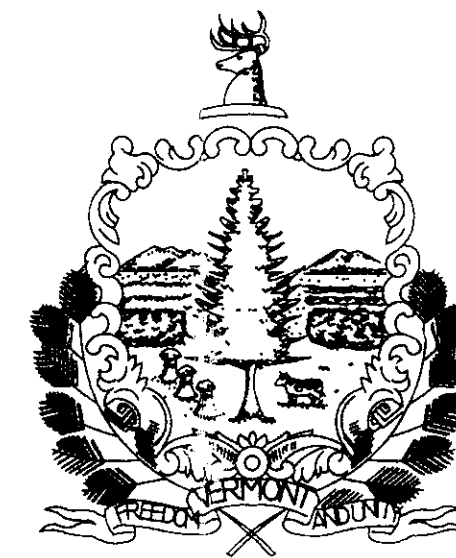


State of Vermont  
Department of Buildings & General Services  
NORTH HERO MAINTENANCE GARAGE  
RENOVATIONS  
North Hero, Vermont

AGENCY OF ADMINISTRATION  
DEPT. OF BUILDINGS & GENERAL SERVICES  
2 GOVERNOR AIKEN AVENUE  
MONTPELIER, VERMONT 05633-5801  
R. TASHA WALLIS, COMMISSIONER

AGENCY OF TRANSPORTATION  
NATIONAL LIFE BUILDING  
MONTPELIER, VERMONT 05633-5001  
PATRICIA MCDONALD, SECRETARY



James Douglas  
Governor

February 2005

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003	E2	ELECTRICAL WORK AND DETAILS
004	M1	MECHANICAL DEMOLITION
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006	M3	SCHEDULES AND DETAILS

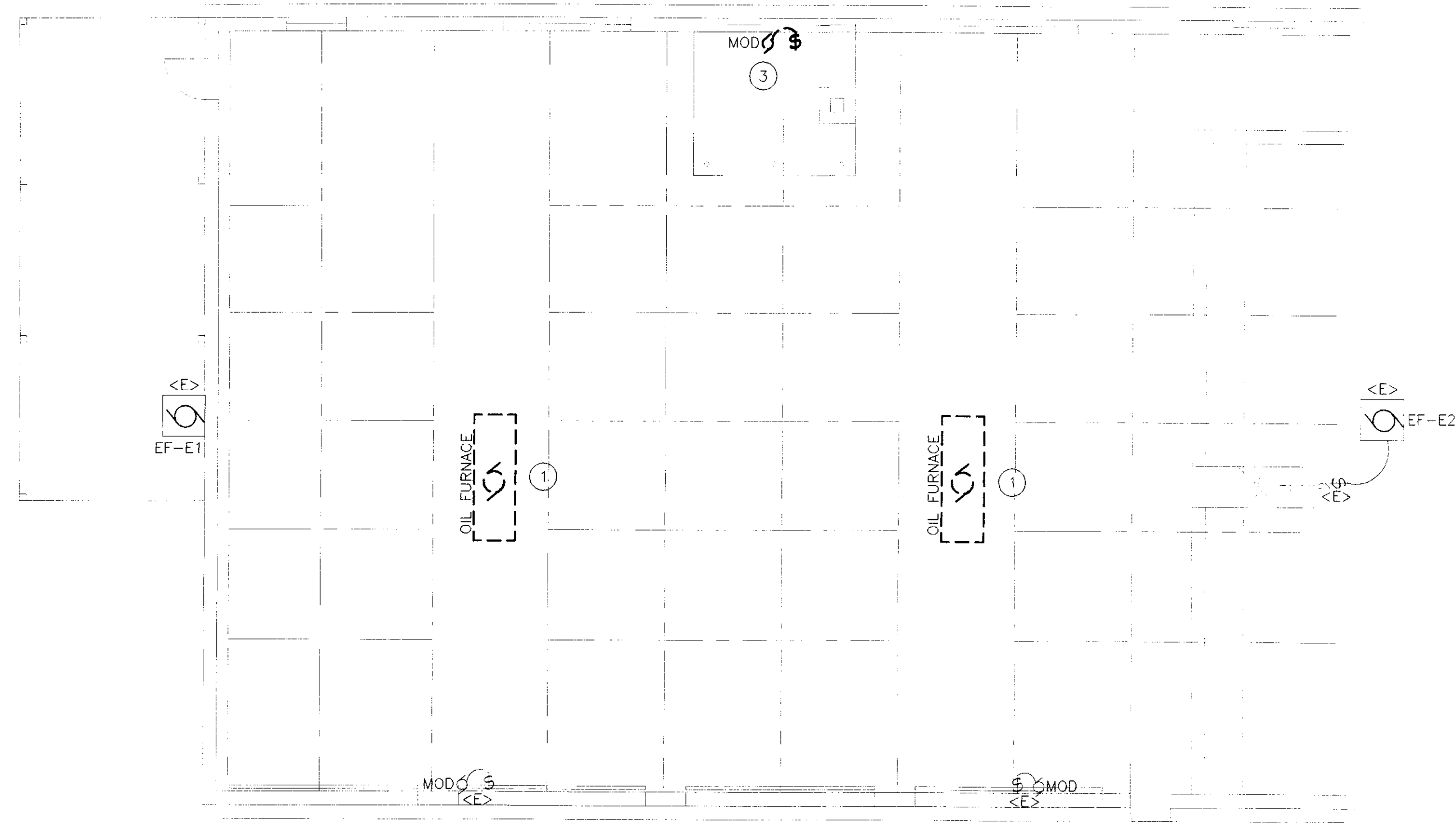
ELECTRICAL ENGINEER:

PEARSON & ASSOCIATES  
POST OFFICE BOX 610  
STOWE, VERMONT 05672

MECHANICAL ENGINEER:

LANE ASSOCIATES CONSULTING ENGINEERS  
51 KILLINGTON AVENUE  
RUTLAND, VERMONT 05701

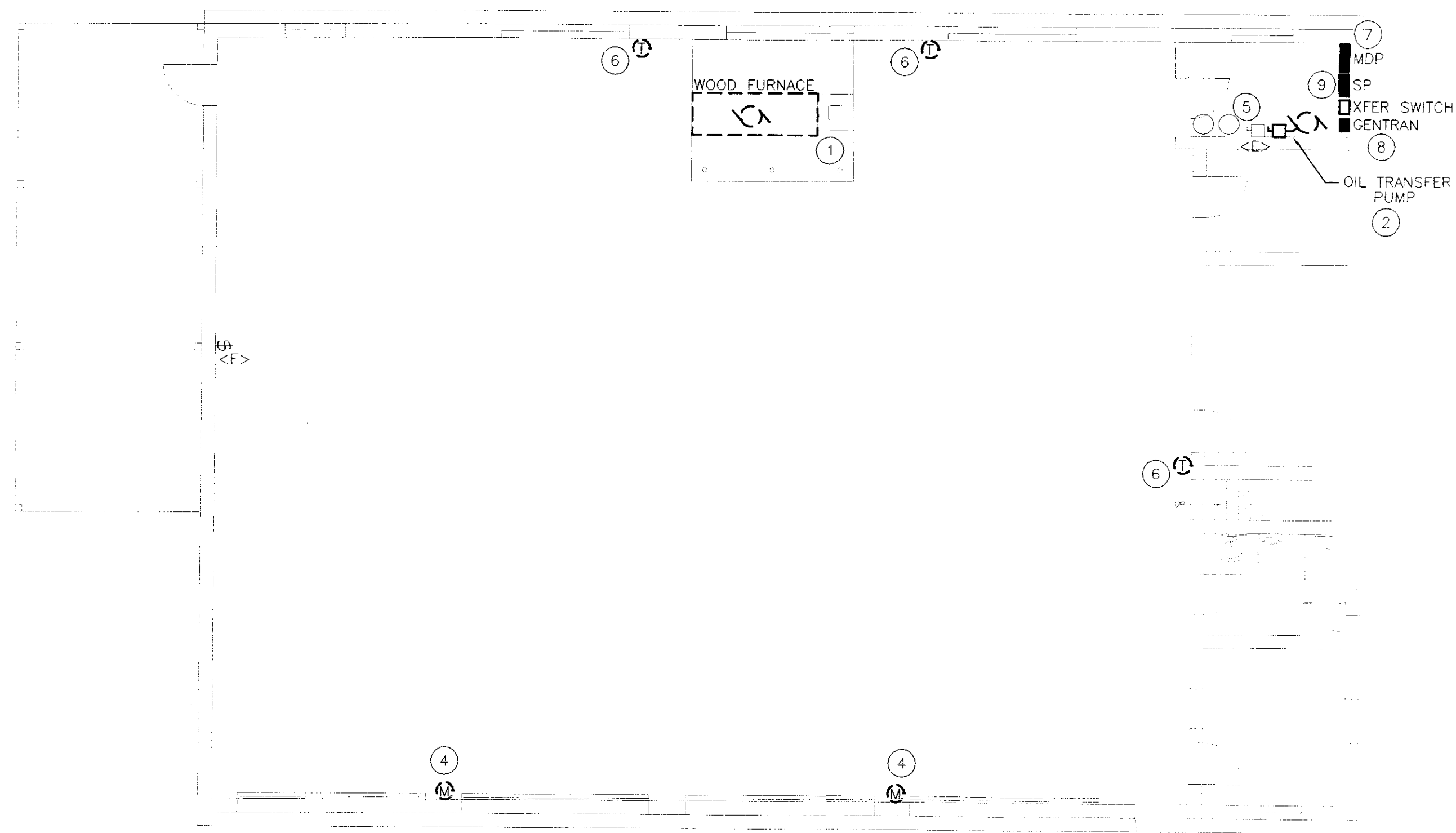
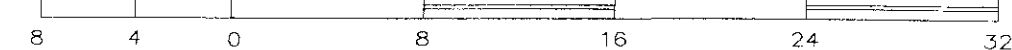
SET # 16  
DO NOT COPY



**MEZZANINE LEVEL DEMOLITION PLAN**

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

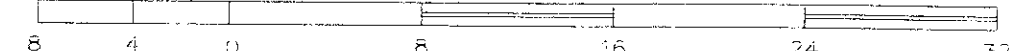
HORIZONTAL SCALE IN FEET



**FIRST FLOOR DEMOLITION PLAN**

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

HORIZONTAL SCALE IN FEET



**KEYED NOTES:**

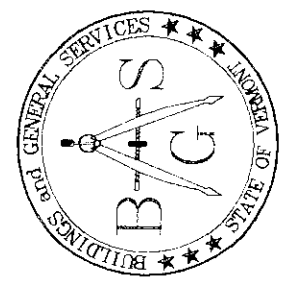
- 1 REMOVE ALL ELECTRICAL WIRING ASSOCIATED WITH FURNACE. LEAVE WIRING IN J-BOX. LABEL J-BOX WITH PANEL ORIGINATION. DISCONNECT WIRING IN PANEL. LABEL WIRING. REMOVE ALL CONTROL WIRING & ABANDONED EQUIPMENT BACK TO SOURCE.
- 2 REMOVE ALL ELECTRICAL WIRING ASSOCIATED WITH OIL PUMP BACK TO SOURCE. REMOVE ALL CONTROL WIRING & ABANDONED EQUIPMENT BACK TO SOURCE.
- 3 REMOVE EXISTING MOTORIZED DAMPER & WIRING BACK TO SOURCE.
- 4 DISCONNECT & REMOVE ALL WIRING FOR EXISTING HOUR-METERS FOR FURNACES BACK TO SOURCE.
- 5 EXISTING WELL PUMP CIRCUIT & PRESSURE TANK CURRENTLY FED FROM PANEL "SP" & GENTRAN. REMOVE CIRCUIT FROM GENTRAN & SPLICE THROUGH SO THAT IT WILL NOT OPERATE WITH THE GENERATOR. REFER TO NEW GENTRAN PANEL SCHEDULE ON SHEET E-2.
- 6 REMOVE ALL THERMOSTATS & ASSOCIATED WIRING BACK TO SOURCE.
- 7 EXISTING PANEL "MDP" IS A SQUARE D NOOB PANELBOARD. REMOVE THE DEFECTIVE 2-POLE 100 AMP BREAKER & DISCARD. THERE ARE (2) SPARE SINGLE-POLE 20 AMP BREAKERS & 1 SPACE. PROVIDE PANEL BLANKS AS REQUIRED.
- 8 THE EXISTING GENTRAN SWITCH WILL REMAIN TO SERVE THE EMERGENCY LOADS. AFTER REMOVAL OF THE TRANSFER SWITCH, REWIRE THE GENTRAN CIRCUITS PER GENTRAN PANEL SCHEDULE ON SHEET E-2.
- 9 THE EXISTING SUBPANEL "SP" IS CURRENTLY FED WITH A 2-POLE 100A BREAKER FROM PANEL MDP. THIS FEED FOR PANEL "SP" PASSES THRU THE XFER SWITCH. THE TRANSFER SWITCH IS NOT CONNECTED TO ANY OTHER SUPPLY. REMOVE THE XFER SWITCH, & REWIRE THE FEED TO PANEL "SP" FROM PANEL "MDP". REUSE THE EXISTING 100-AMP BREAKER & USE (3) #2 COPPER CONDUCTORS & A #4 GROUND. PROVIDE A NEUTRAL BAR IN PANEL "SP", & SEPARATE THE GROUNDS & NEUTRALS IN THIS PANEL. THE PANEL IS A 16-SPACE SQUARE D LOADCENTER.

**DEMOLITION NOTES:**

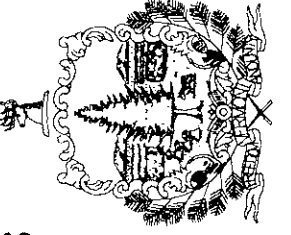
- A. EQUIPMENT AND MATERIALS REMOVED OR DEMOLISHED AND NOT TO BE REINSTALLED BY THE EC SHALL BE CLASSIFIED BY THE OWNER AS SALVAGE OR SCRAP. THOSE CLAIMED BY THE OWNER SHALL BE DELIVERED TO THE OWNER BY THE EC WHERE DIRECTED AT THE SITE. THOSE NOT CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE EC AND SHALL BE LEGALLY REMOVED FROM THE SITE AND PREMISES.
- B. ANY PLACE WHERE THE CONTRACTOR PENETRATES, CUTS AND/OR REMOVES WALLS, CONTRACTOR IS TO REPLACE, PATCH AND PAINT WALLS TO ORIGINAL FINISHES.
- C. FIELD VERIFY ALL DIMENSIONS BEFORE COMMENCEMENT OF WORK. NOTIFY ENGINEER OF ANY ERRORS.
- D. REFER TO THE MECHANICAL PLANS FOR EXTENT OF DEMOLITION WORK TO BE PERFORMED BY OTHER CONTRACTORS. ALL ITEMS THAT NEED TO BE REMOVED, SHALL HAVE THE POWER DISCONNECTED BY THE EC.
- E. NOT ALL DEVICES TO BE REMOVED OR DISCONNECTED ARE SHOWN. REFER TO MECH. PLANS FOR TOTAL EXTENT OF DEMOLITION WORK.
- F. BUILDING IS EXISTING. WIRING IN EXTERIOR WALLS SHALL BE FISHED OR SURFACE-MOUNTED AS NECESSARY. INTERIOR PARTITIONS ARE EXISTING. WIRING IN THESE WALLS MAY NEED TO BE FISHED. VISIT THE SITE FOR FULL EXTENT OF EXISTING CONDITIONS. NO SURFACE RACEWAY TO BE INSTALLED WITHOUT WRITTEN AUTHORIZATION FROM ARCHITECT.

**ELECTRICAL LEGEND**

☒	MOTOR STARTER PROV. BY MC, INSTALLED BY EC	AFG	ABOVE FINISH GRADE
☐	DISCONNECT PROV. BY MC, INSTALLED BY EC.	AFF	ABOVE FINISH FLOOR
⚡	SWITCH - SINGLE POLE	EC	ELECTRICAL CONTRACTOR (DIVISION 16)
▨	ELECTRICAL PANEL	MC	MECHANICAL CONTRACTOR (DIVISION 15)
→	BRANCH CIRCUIT	GC	GENERAL CONTRACTOR
Ⓣ	24V THERMOSTAT PROV. & INSTALLED BY MC	ES	EQUIPMENT SUPPLIER
⚡	SWITCH - FIREMATIC	TYP.	TYPICAL OF ALL
⚡	EMERGENCY SHUT-OFF SWITCH WITH RED PLATE	GEN	GENERATOR
		⊙	MOTOR



STATE OF VERMONT  
Department of Buildings  
and General Services  
Agency of Administration  
Montpelier, Vermont

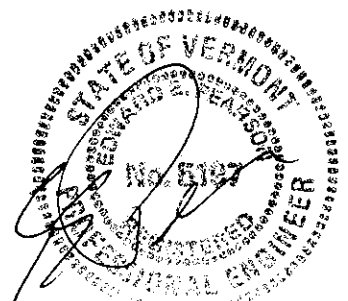


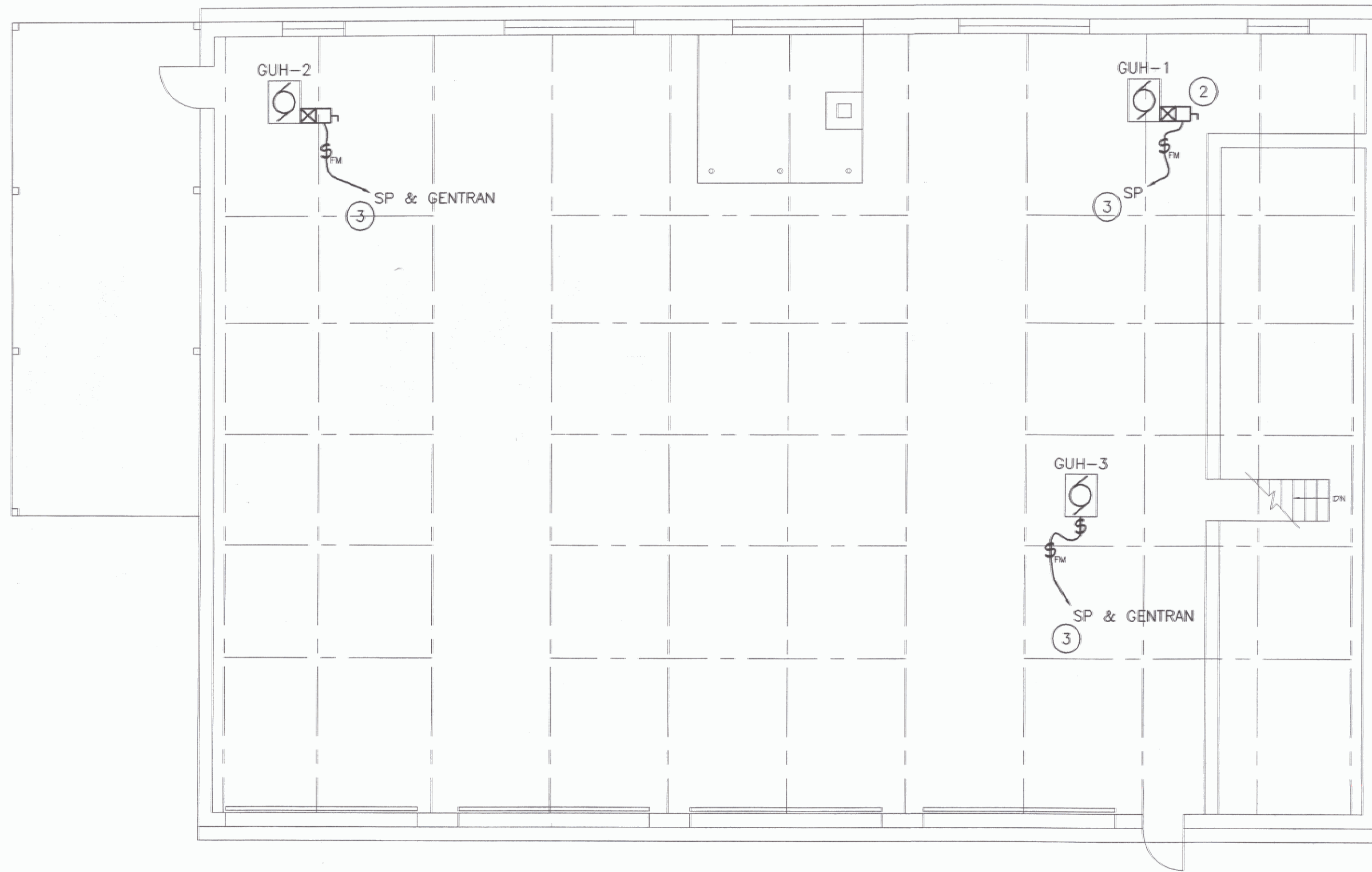
**Pearson & Associates**  
MECHANICAL & ELECTRICAL ENGINEERS  
P.O. BOX 610 STOWE, VERMONT 05672  
TEL. (802) 253-9607 FAX. (802) 253-9290  
EMAIL: pearson@stowervt.net

AGENCY OF TRANSPORTATION  
NORTH HERO MAINTENANCE  
GARAGE & OFFICE RENOVATIONS  
NORTH HERO VERMONT

REVISIONS
SCALE: AS SHOWN
DATE: DEC. 2004
DRAWN BY: ASG
APPR. BY: FEP

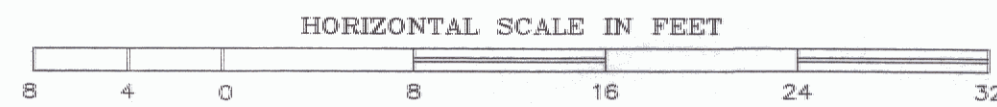
AGENCY OF TRANSPORTATION  
GARAGE & OFFICES  
ELECTRICAL DEMO PLAN





**MEZZANINE LEVEL NEW WORK PLAN**

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



**KEYED NOTES:**

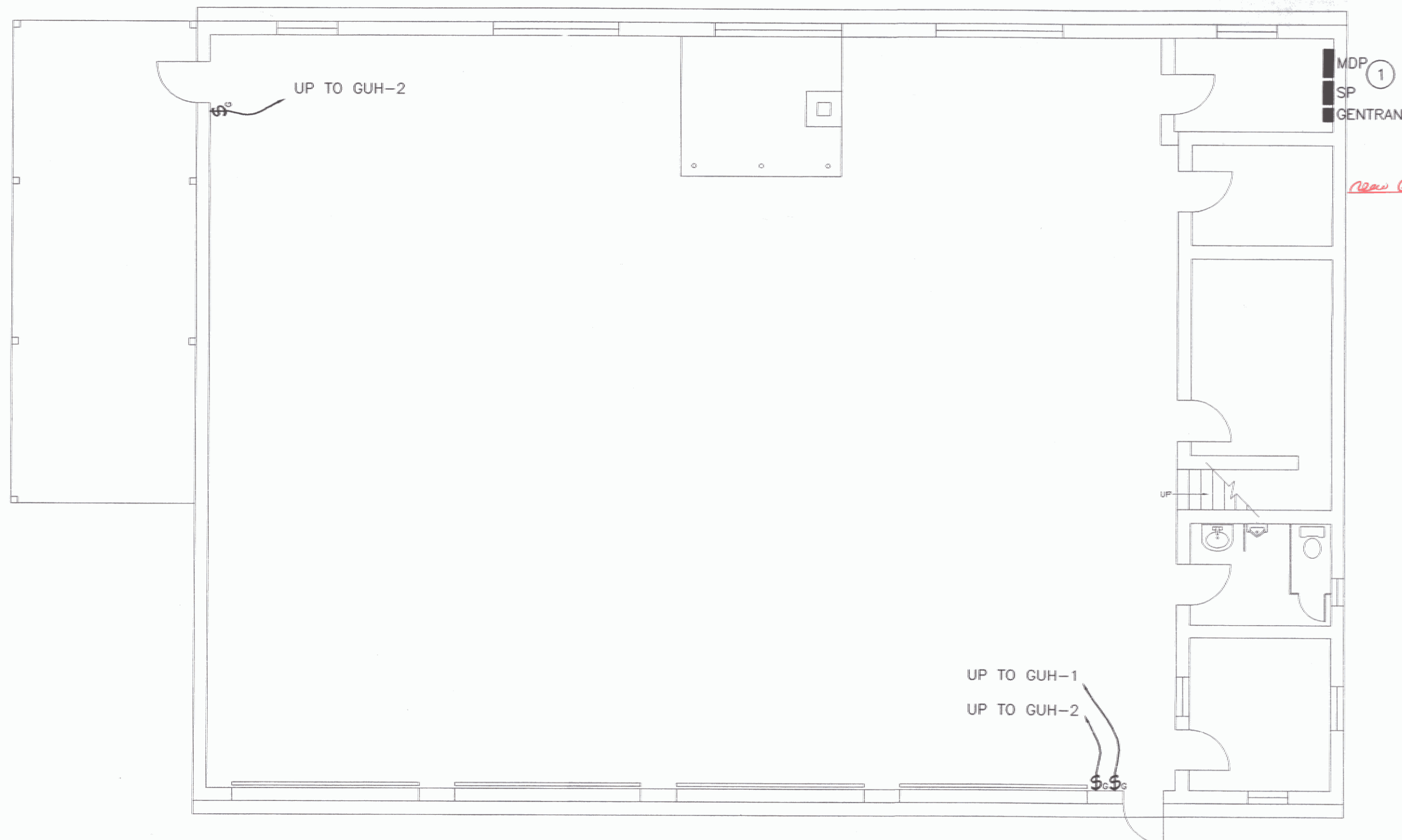
- ① THE EXISTING SUBPANEL "SP" IS CURRENTLY FED WITH A 2-POLE 100A BREAKER FROM PANEL MDP. THIS FEED FOR PANEL "SP" PASSES THRU THE XFER SWITCH. THE TRANSFER SWITCH IS NOT CONNECTED TO ANY OTHER SUPPLY. REMOVE THE XFER SWITCH, & REWIRE THE FEED TO PANEL "SP" FROM PANEL "MDP". REUSE THE EXISTING 100-AMP BREAKER & USE (3) #2 COPPER CONDUCTORS & A #4 GROUND. PROVIDE A NEUTRAL BAR IN PANEL "SP", & SEPARATE THE GROUNDS & NEUTRALS IN THIS PANEL. THE PANEL IS A 16-SPACE SQUARE D LOADCENTER.
- ② PROVIDE NEW 20A, 240V CIRCUIT & CIRCUIT BREAKER FROM PANEL SP FOR NEW GAS UNIT HEATER.
- ③ PROVIDE EMERGENCY SHUT-OFF SWITCHES FOR EACH GAS HEATER, SWITCH SHALL HAVE RED "GAS" PLATE. USE 2-POLE SWITCHES FOR 240V UNITS.

**GENERAL NOTES:**

- A. ANY PLACE WHERE THE CONTRACTOR PENETRATES, CUTS AND/OR REMOVES WALLS, CEILINGS, OR WOODWORK, CONTRACTOR IS TO REPLACE, PATCH AND PAINT FINISH SURFACES TO ORIGINAL FINISHES.
- B. FIELD VERIFY ALL DIMENSIONS BEFORE COMMENCEMENT OF WORK IS TO BEGIN. NOTIFY ENGINEER OF ANY ERRORS.
- C. REFER TO THE MECHANICAL PLANS FOR FINAL LOCATIONS OF EQUIPMENT. COORDINATE LOCATIONS OF ALL THE ELECTRICAL CONNECTIONS WITH MC PRIOR TO ELECTRICAL ROUGH-IN WIRING.
- D. EC TO PROVIDE AND INSTALL ALL DISCONNECT SWITCHES, MC TO PROVIDE ALL MOTOR STARTERS, EC TO INSTALL.

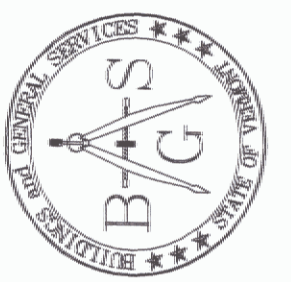
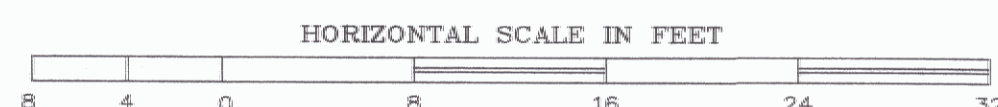
**GENTRAN PANEL SCHEDULE**

PANEL: GENTRAN		LOCATION: ELECTRICAL ROOM					
FED FROM PANEL SP & PORTABLE GENERATOR		MOUNTING: SURFACE					
CKT NO.	KW LOAD	DESCRIPTION	BREAKER		DESCRIPTION	KW LOAD	CKT NO.
			P	AMP			
1	<E>	FUEL PUMP	1	15	15	1	2
3	<E>	OVERHEAD DOOR	1	15	15	1	4
5	0.7	GUH-3	1	15	15	1	6
7	2.4	GUH-2	2	20	15	1	8
9		(OLD WATER PUMP CKT)			15	1	10

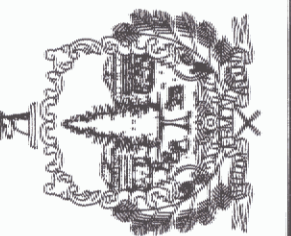


**FIRST FLOOR NEW WORK PLAN**

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



STATE OF VERMONT  
 Department of Buildings  
 and General Services  
 Agency of Administration  
 Montpelier, Vermont

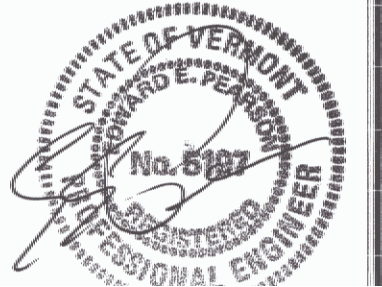


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 P.O. BOX 610 STOWE, VERMONT 05672  
 TEL. (802) 253-9607 FAX. (802) 253-9290  
 EMAIL: pearson@stowevt.net

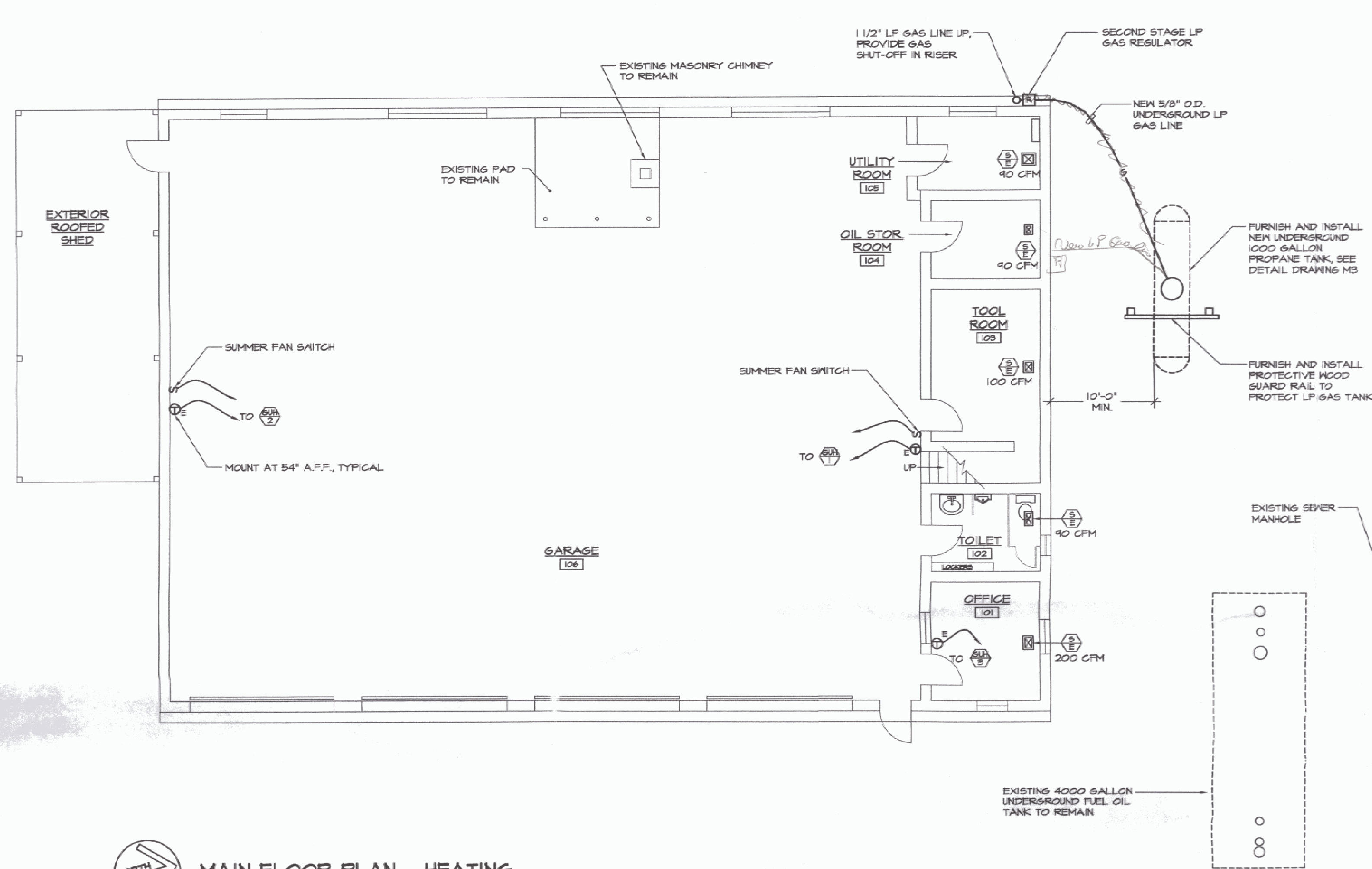
AGENCY OF TRANSPORTATION  
 NORTH HERO MAINTENANCE  
 GARAGE & OFFICE RENOVATIONS  
 NORTH HERO  
 VERMONT

REVISIONS  
 SCALE: AS SHOWN  
 DATE: DEC. 2004  
 DRAWN BY: ASG  
 APPR. BY: EEP

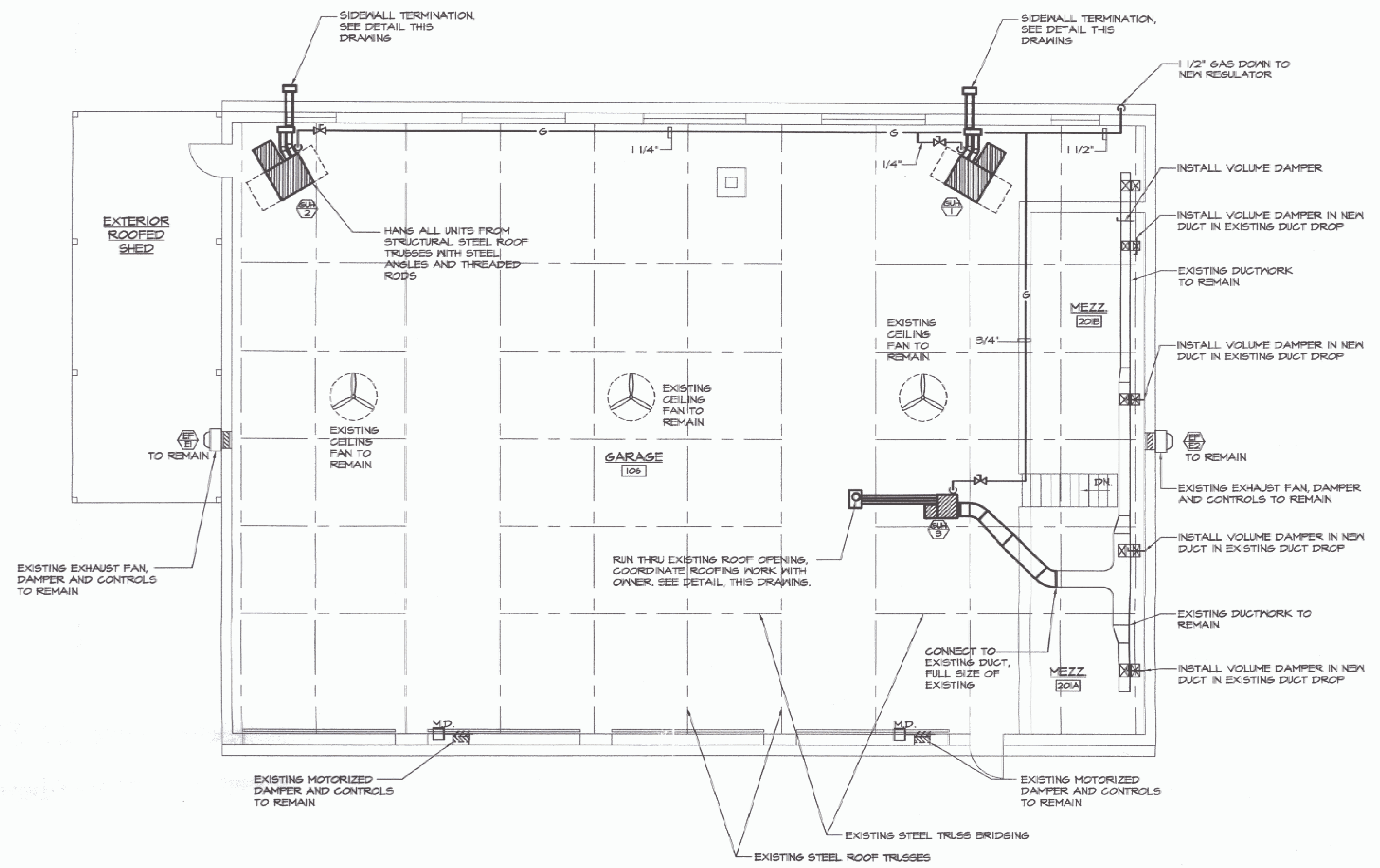
AGENCY OF TRANSPORTATION  
 GARAGE & OFFICES  
 ELECTRICAL NEW WORK & DETAILS



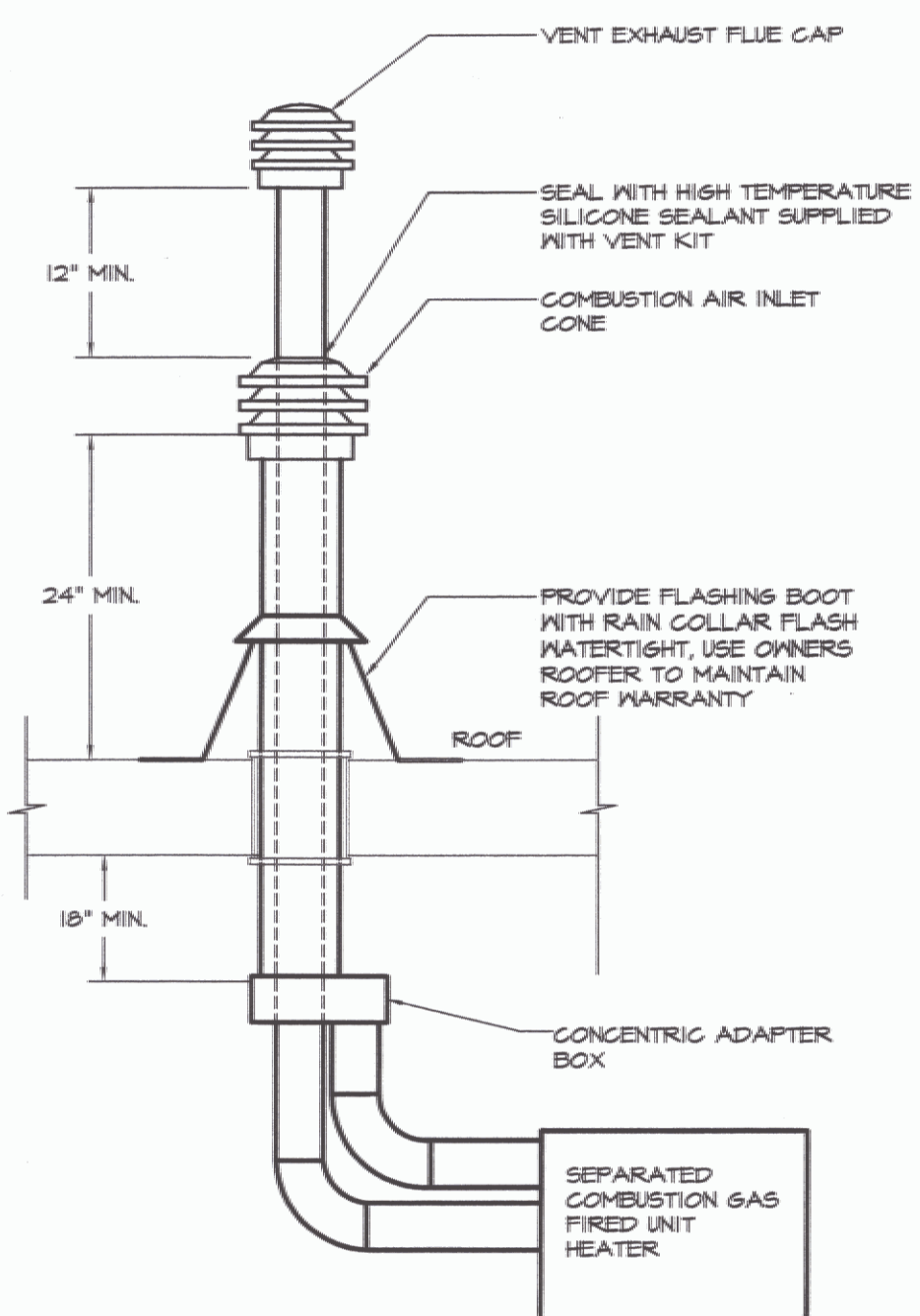




**MAIN FLOOR PLAN - HEATING**  
SCALE: 1/8"=1'-0"

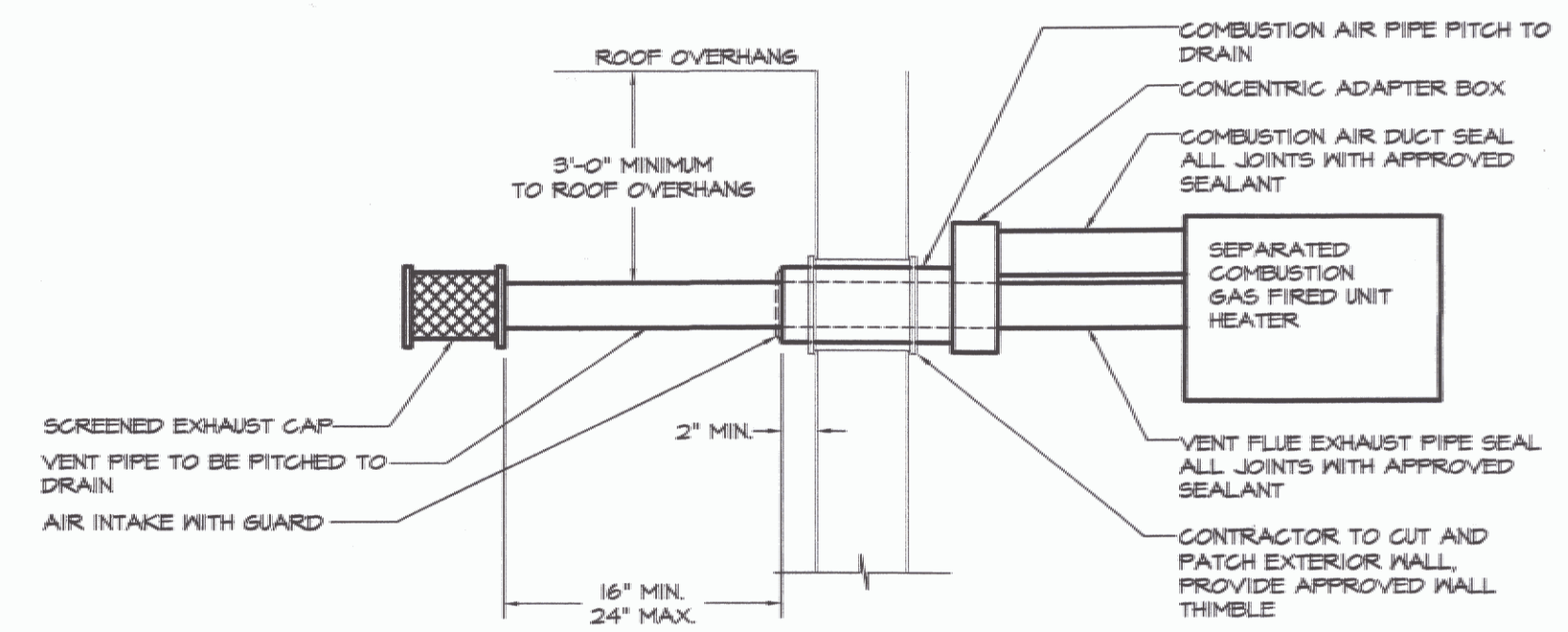


**MEZZANINE FLOOR PLAN - HEATING**  
SCALE: 1/8"=1'-0"



**VERTICAL SEPARATED COMBUSTION / VENT DETAIL**  
NOT TO SCALE

NOTE:  
SIZE VENT PIPE AND COMBUSTION AIR PIPE PER MANUFACTURER'S RECOMMENDATIONS. SUBMIT FOR REVIEW AND APPROVAL. INSTALL ALL COMPONENTS PER MANUFACTURER'S LATEST PUBLISHED INSTALLATION MANUAL AND IN ACCORDANCE WITH ALL STATE CODES.



**SIDEWALL SEPARATED COMBUSTION / VENT DETAIL**  
NOT TO SCALE

NOTE:  
SIZE VENT PIPE AND COMBUSTION AIR PIPE PER MANUFACTURER'S RECOMMENDATIONS. SUBMIT FOR REVIEW AND APPROVAL. INSTALL ALL COMPONENTS PER MANUFACTURER'S LATEST PUBLISHED INSTALLATION MANUAL AND IN ACCORDANCE WITH ALL STATE CODES.



NO.	ISSUED FOR	DATE
2	REISSUED FOR BIDDING	09/2004
1	ISSUED FOR BIDDING	1/19/04



HEATING, VENTILATION, & AIR CONDITIONING,  
PLUMBING, FIRE PROTECTION, & ELECTRICAL

CHARLES F. LANE, P.E.  
DANIEL W. DUPRAS, P.E.

51 KILLINGTON AVENUE,  
RUTLAND, VERMONT 05701  
TELEPHONE: (802)747-3346  
FAX/MODEM: (802)747-3356

MAIN FLOOR PLAN & MEZZ. FLOOR PLAN HEATING				M 2
HEATING SYSTEM REPLACEMENT NORTH HERO AOT GARAGE NORTH HERO, VERMONT				
APPR.	DVD	DRAWN:	KFC	SCALE: AS NOTED
PROJ. NO. 0312-03				

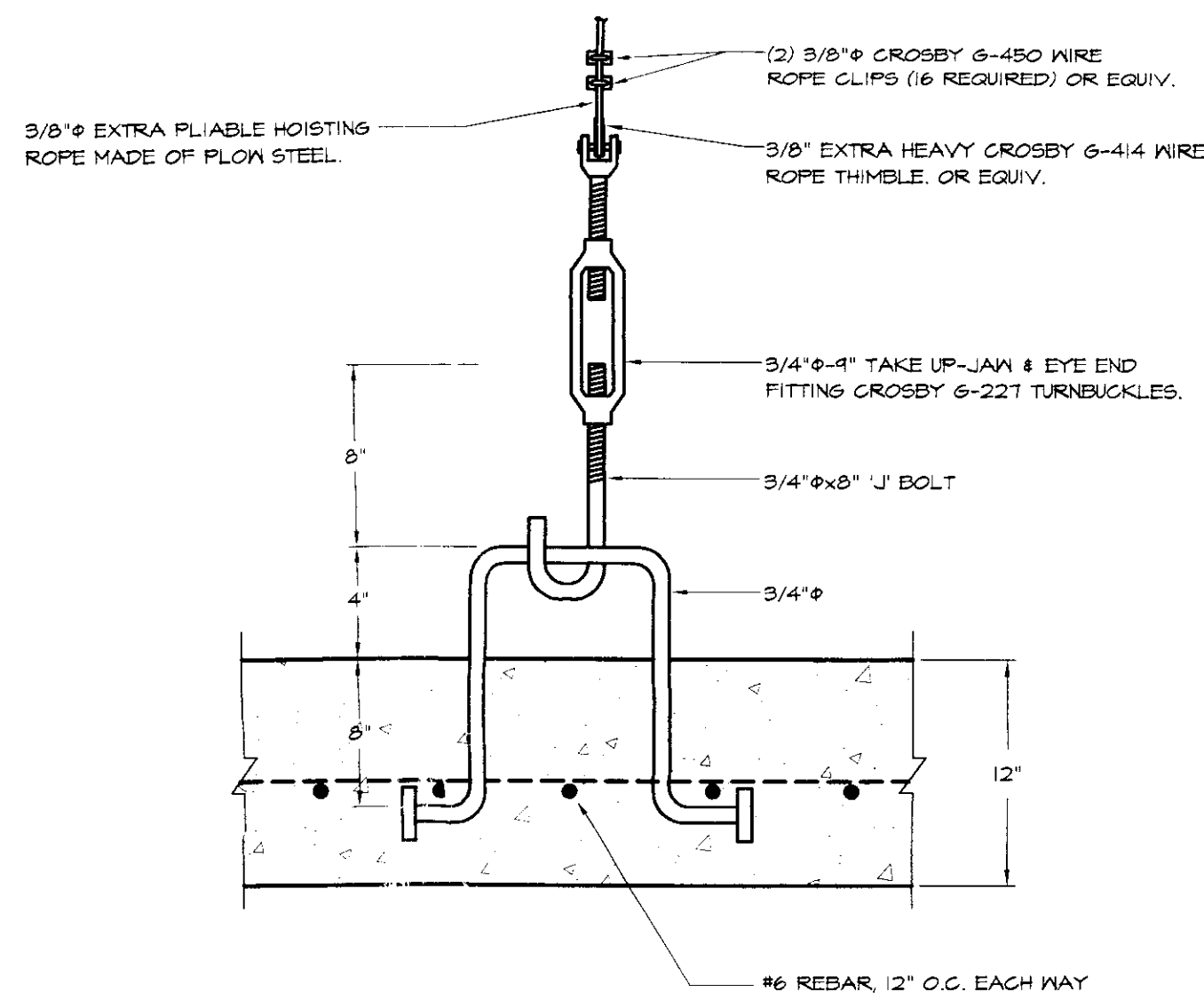
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**GAS FIRED UNIT HEATER SCHEDULE**

PLAN SYMBOL 

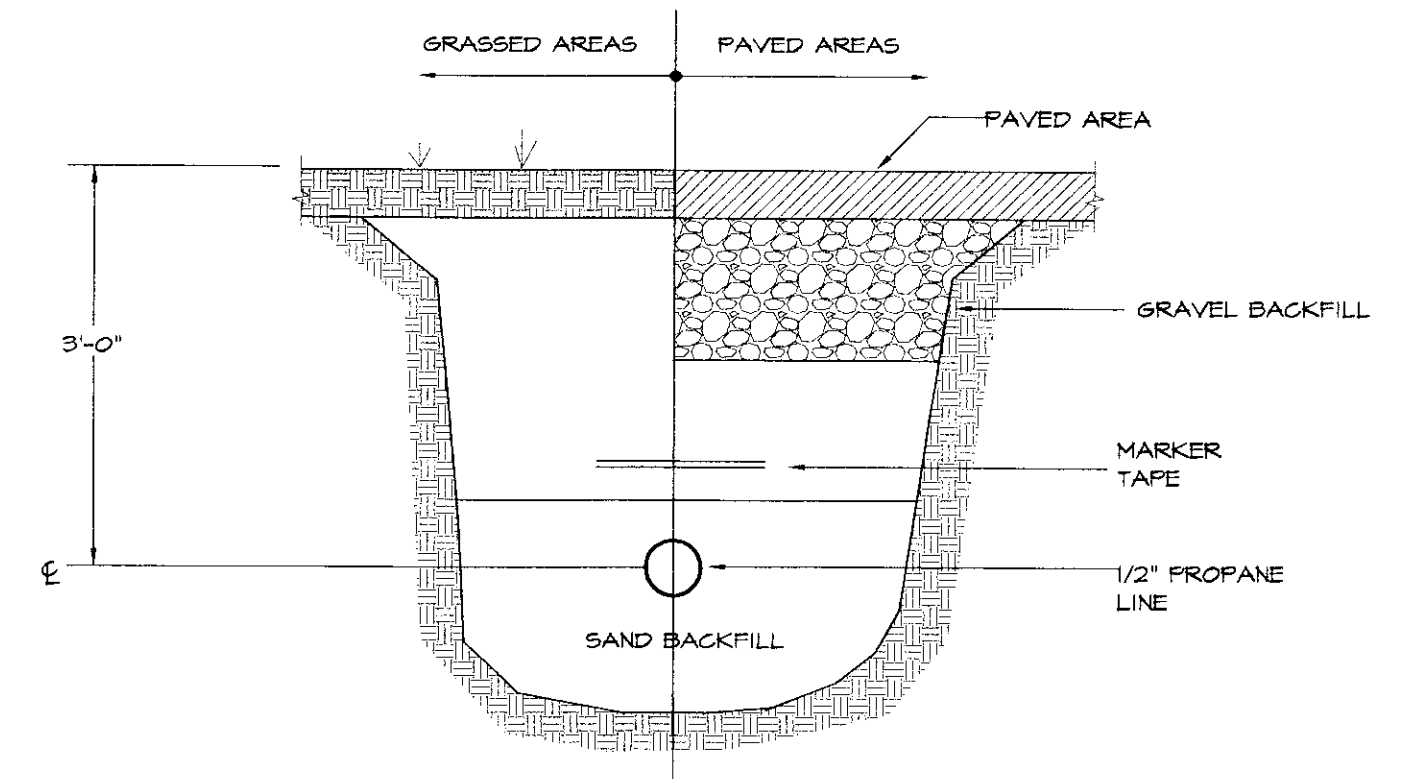
No.	MANUFACTURER	MODEL	CFM AT 0' E.S.P.	MBH LP GAS INPUT	MBH LP GAS OUTPUT	FAN DRIVE	MODEL			REMARKS
							H.P.	VOLT	PH	
GUH-1	REZNOR	UDBS-300	3074	300	241	BELT	1 1/2	240	1	NOTE 1
GUH-2	REZNOR	UDBS-300	3074	300	241	BELT	1 1/2	240	1	NOTE 1
GUH-3	REZNOR	UDBS-45	456	45	36.4	BELT	1/6	115	1	NOTE 2

NOTES:  
 1) PROVIDE ALL STANDARD FEATURES INCLUDING THE FOLLOWING FACTORY INSTALLED OPTIONS: PROPANE SERVICE, TWO STAGE CONTROL, 409 STAINLESS STEEL HEAT EXCHANGER, ADJUSTABLE BELT DRIVE MOTOR, TOTALLY ENCLOSED MOTOR, BLOWER AND BELT GUARDS. PROVIDE THE FOLLOWING FIELD INSTALLED ACCESSORIES: COMBUSTION AND VENT KIT, TWO STAGE THERMOSTAT.  
 2) PROVIDE ALL STANDARD FEATURES INCLUDING THE FOLLOWING FACTORY INSTALLED OPTIONS: PROPANE SERVICE, TWO STAGE CONTROL, 409 STAINLESS STEEL HEAT EXCHANGER, ADJUSTABLE MULTI-TAP DIRECT DRIVE MOTOR, DUCT FLANGE, TOTALLY ENCLOSED MOTOR, BLOWER GUARD. PROVIDE THE FOLLOWING FIELD INSTALLED ACCESSORIES: COMBUSTION AND VENT KIT, TWO STAGE HEATING THERMOSTAT.

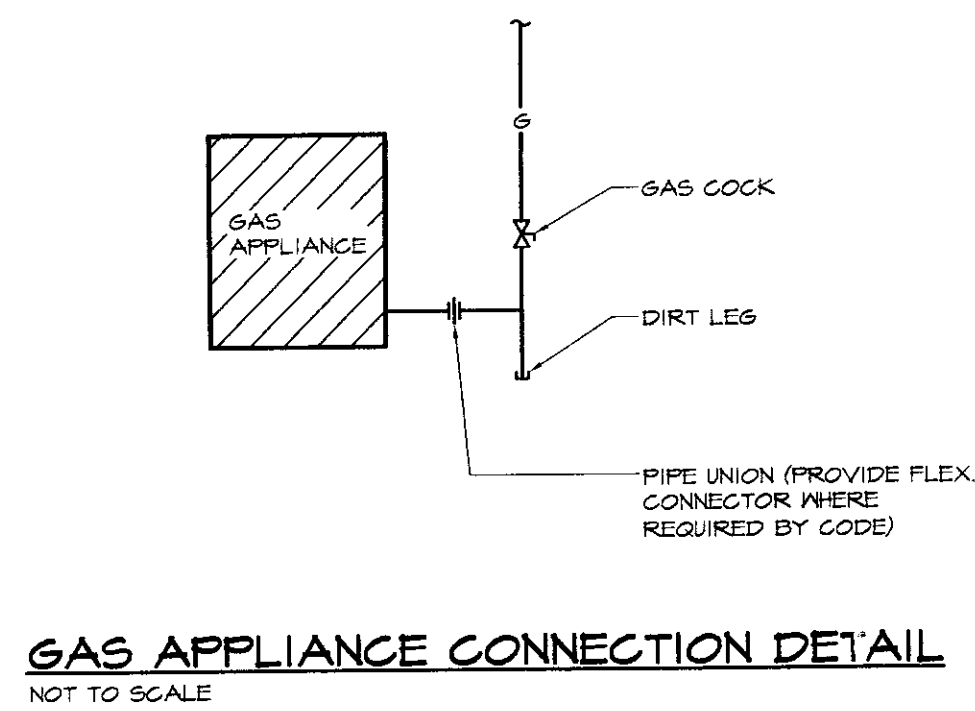


**TANK ANCHOR BOLT DETAIL**  
NOT TO SCALE

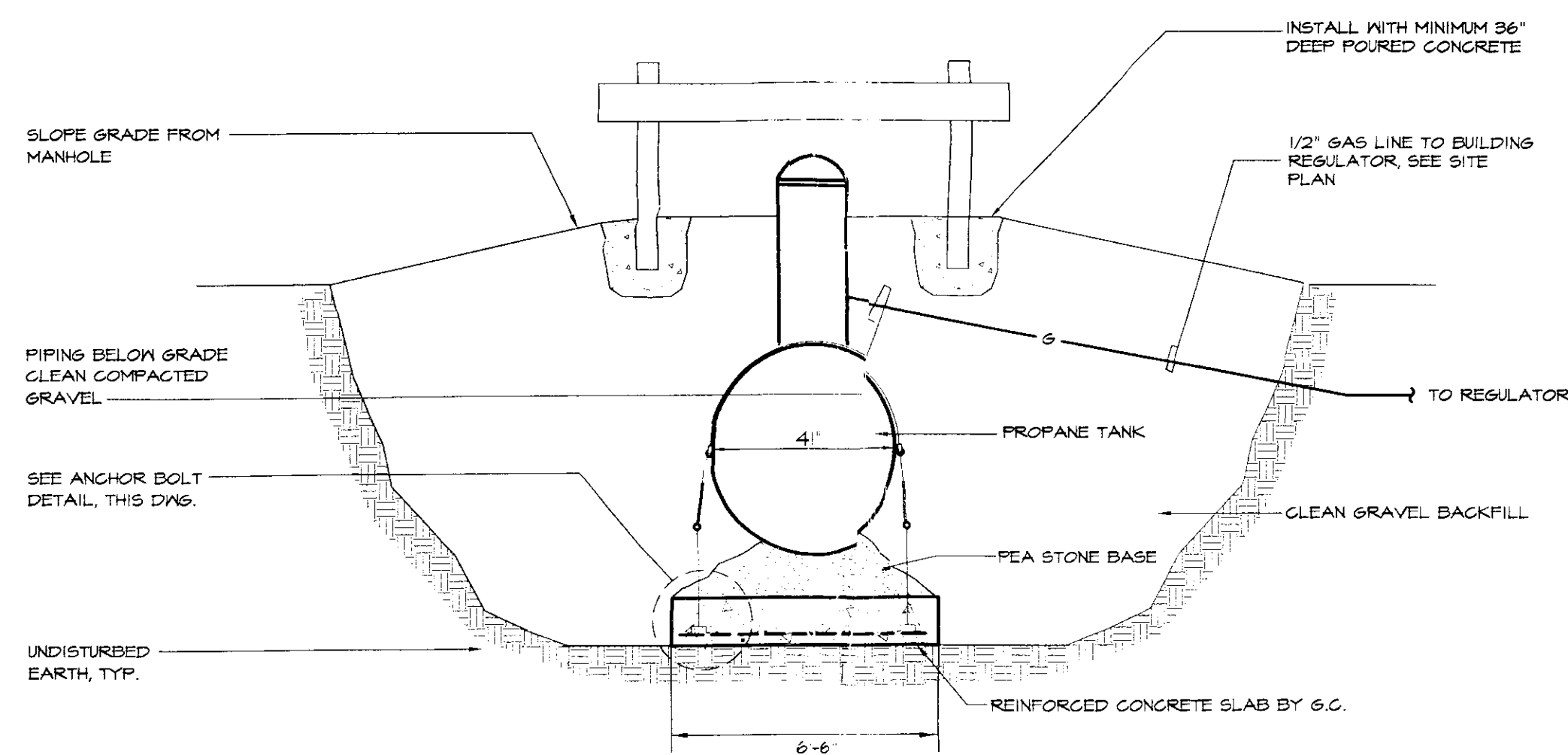
NOTE:  
TANK, REGULATORS, PIPING AND ACCESSORIES INCLUDING 1ST AND 2ND STAGE REGULATORS TO BE FURNISHED AND INSTALLED BY CONTRACTOR



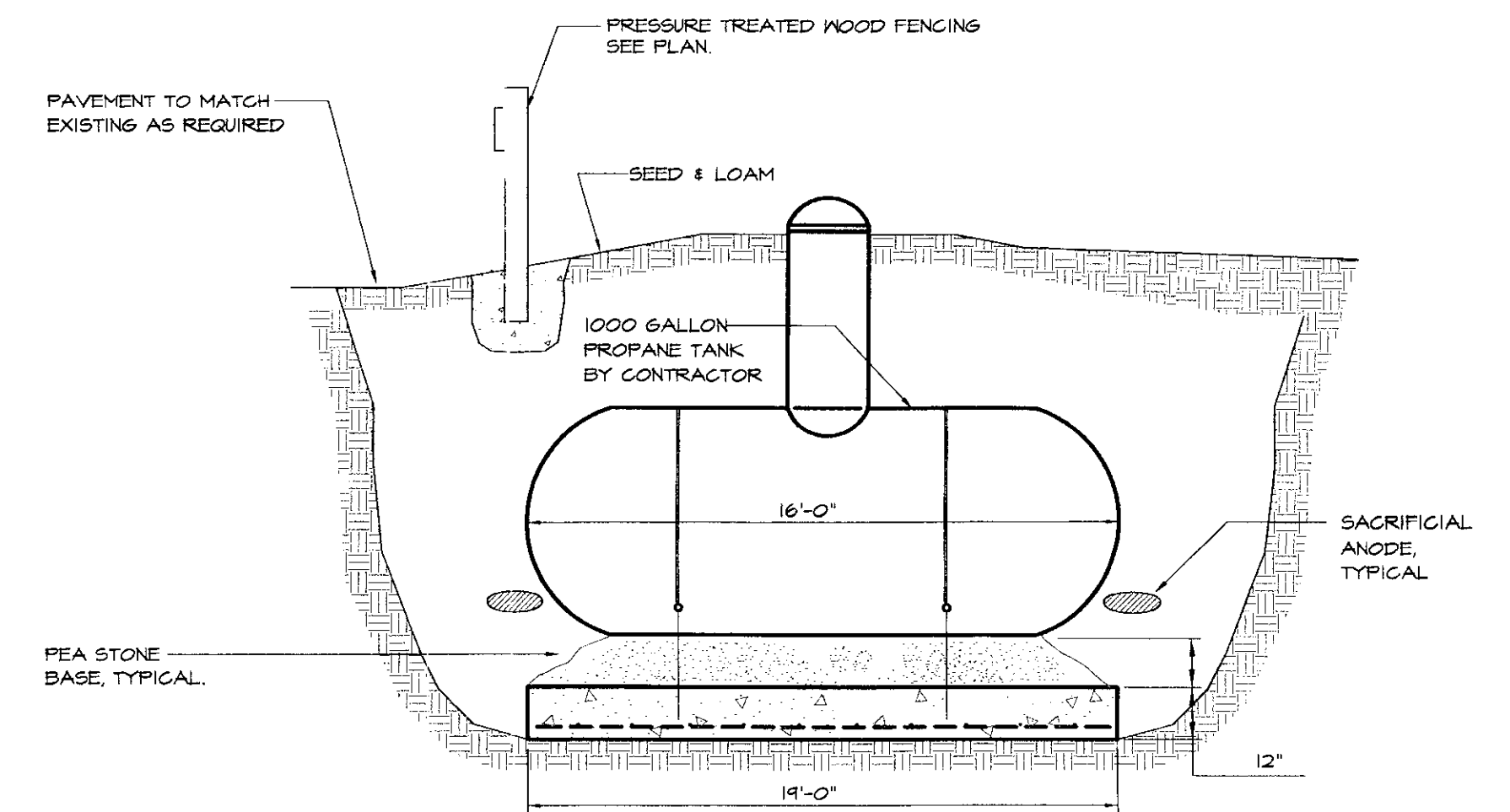
**PROPANE SUPPLY PIPE TRENCHING DETAIL**  
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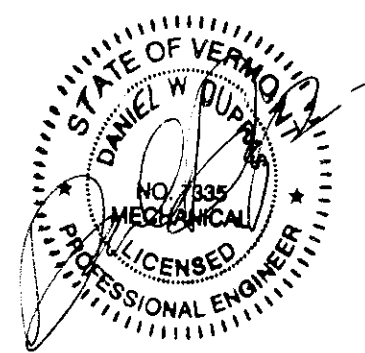
**GAS APPLIANCE CONNECTION DETAIL**  
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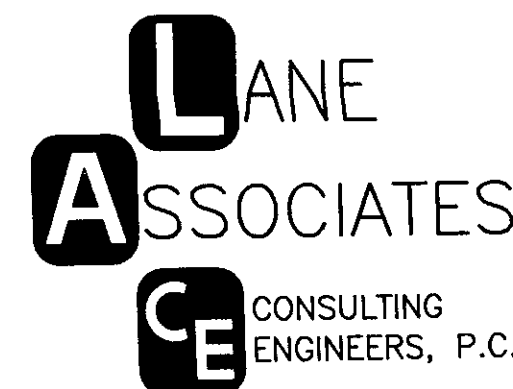
**UNDERGROUND PROPANE TANK DETAILS**  
NOT TO SCALE



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NO.	ISSUED FOR	DATE
2	ISSUED FOR BIDDING	09/2004
1	ISSUED FOR BIDDING	1/19/04
NO.	ISSUED FOR	DATE



HEATING, VENTILATION, & AIR CONDITIONING, PLUMBING, FIRE PROTECTION, & ELECTRICAL  
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 TELEPHONE: (802)747-3346  
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MECHANICAL SCHEDULES AND DETAILS					M 3
HEATING SYSTEM REPLACEMENT NORTH HERO AOT GARAGE NORTH HERO, VERMONT					
APPR.	DWD	DRAWN:	KPC	SCALE: AS NOTED	PROJ. NO. 0312-03