

WHEELING NATIONAL GUARD

Wheeling, West Virginia

HELICOPTER HANGAR HEATING SYSTEM RENOVATIONS

NOVEMBER 20, 2013



Drawing List	
Sheet	Title
MEP	SYMBOLS/LEGENDS
MEP-1	DEMOLITION
MEP-2	NEW WORK



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WHEELING NATIONAL GUARD HELICOPTER HANGAR HEATING SYSTEM RENOVATION WEST VIRGINIA

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REVISED	
LEGEND/DETAILS	
DATE: 11/20/13	SCALE: AS SHOWN
DRAWN BY: STAFF	CHK. BY: T.L.C.
DRAWING NUMBER	
MEP	

SYMBOL	DESCRIPTION	MTG. HEIGHT UNO
GENERAL / RACEWAY SYSTEMS		
CLG. WALL	WIRING IN CONDUIT CONCEALED IN CEILING OR IN WALL CONDUIT AND WIRE AS REQUIRED BY CODE UNLESS OTHERWISE NOTED.	
JB	JUNCTION BOX, CEILING OR WALL MOUNTED	
CS	CONDUIT STUBBED OUT	
PLAN	PLAN NOTE	
DIRECT CONNECTION		
POWER AND LIGHTING SYSTEMS		
HA-1	BRANCH CIRCUIT, "HA" DESIGNATES PANEL "1" DESIGNATES CIRCUIT NUMBER	
5-15R	SINGLE RECEPTACLE, SINGLE PHASE, NEMA CONFIGURATION NUMBER DENOTES TYPE	
14-15R	SINGLE RECEPTACLE, THREE PHASE, NEMA CONFIGURATION NUMBER DENOTES TYPE	
EWC	DENOTES RECEPTACLE FOR ELECTRIC WATER COOLER MOUNT TO BE CONCEALED BY WATER COOLER	
GR	GROUNDING TYPE DUPLEX RECEPTACLE	18" AFF
W	DUPLEX RECEPTACLE WITH WEATHERPROOF COVER.	18" AFF
GF	DOUBLE DUPLEX RECEPTACLE MOUNTED IN TWO-GANG BOX	18" AFF
IG	GROUND FAULT INTERRUPTER TYPE DUPLEX RECEPTACLE	18" AFF
IGS	SINGLE RECEPTACLE W/CLOCK HANGER	90" AFF
IGS	DUPLEX RECEPTACLE SAFETY TAMPER RESISTANT TYPE.	18" AFF
IGS	DUPLEX RECEPTACLE WITH ISOLATED GROUND/SURGE SUPPRESSION.	18" AFF
IGS	DUPLEX RECEPTACLE WITH ISOLATED GROUND.	18" AFF
SR	WALL-MOUNTED SURFACE RACEWAY (WIREMOLD)	
W	SINGLE COMPARTMENT RACEWAY	
W2	TWO COMPARTMENT RACEWAY WIREMOLD	
PS	PLUG STRIP	
W	WALL SCONCE, HID, FLUORESCENT OR INCANDESCENT CEILING MOUNTED HID, FLUORESCENT OR INCANDESCENT LIGHT FIXTURE	
W	WALL MOUNTED HID, FLUORESCENT OR INCANDESCENT LIGHT FIXTURE	
W	SURFACE OR RECESSED FLUORESCENT LIGHT FIXTURE	
W	SURFACE OR RECESSED FLUORESCENT LIGHT FIXTURE W/EMERGENCY BATTERY BALLAST	
W	SURFACE FLUORESCENT STRIP LIGHT FIXTURE	
W	SURFACE FLUORESCENT STRIP LIGHT FIXTURE W/EMERGENCY BATTERY BALLAST	
W	WALL MOUNT FLUORESCENT LIGHT FIXTURE	
W	WALL MOUNT FLUORESCENT LIGHT FIXTURE W/EMERGENCY BATTERY PACK.	
W	WALL MOUNTED EMERGENCY LIGHTING UNIT	
W	CEILING OR WALL MOUNTED, SINGLE OR DOUBLE FACE, LIGHTED EXIT SIGN WITH DIRECTIONAL ARROWS AS INDICATED, SHADDED PORTION INDICATES POSITION OF FACE(S).	
W	CEILING OR WALL MOUNTED, SINGLE OR DOUBLE FACE, LIGHTED EXIT SIGN WITH DIRECTIONAL ARROWS AS INDICATED, AND REMOTE WEATHERPROOF HEAD. SHADDED AREA INDICATES POSITION OF FACE(S).	
S	TWO SINGLE POLE TOGGLE SWITCHES FOR DUAL LIGHTING CONTROL.	48" AFF
S	SINGLE POLE TOGGLE SWITCH	48" AFF
S	THREE-WAY TOGGLE SWITCH	48" AFF
S	FOUR-WAY TOGGLE SWITCH	48" AFF
S	WALL BOX INCANDESCENT SLIDE DIMMER	48" AFF
S	KEY OPERATED SINGLE POLE TOGGLE SWITCH	48" AFF
S	MANUAL MOTOR SWITCH WITHOUT THERMAL OVERLOAD PROTECTION	
S	MANUAL MOTOR SWITCH WITH THERMAL OVERLOAD PROTECTION	
S	COMBINATION TOGGLE LIGHT SWITCH AND FAN DELAY SWITCH	48" AFF
SV1	DIGITAL 1 BUTTON WALL SWITCH	
SV2	DIGITAL 2 BUTTON WALL SWITCH	
SV3	DIGITAL 3 BUTTON WALL SWITCH	
BS	CEILING MOUNTED OCCUPANCY SENSOR - SUBSCRIPT DENOTES TYPE	
RC1	SINGLE RELAY ROOM CONTROLLER	
RC2	DUAL RELAY ROOM CONTROLLER	
TSV	DIGITAL TIME SWITCH	
LI	LIGHTING INTEG. AUTO. LEVEL 24 RELAY PANEL IN ENCLOSURE	
JB	4 INCH SQUARE JUNCTION BOX	
JB1	4 INCH SQUARE JUNCTION BOX	
JB2	4 INCH SQUARE JUNCTION BOX	
P	PUSH-BUTTON SWITCH, SURFACE MOUNTED	
T	FLOOR MOUNTED DRY-TYPE TRANSFORMER	
H	WALL MOUNTED DRY-TYPE TRANSFORMER	
RP	RECESSED PANELBOARD, SEE PANEL SCHEDULES ON DRAWINGS FOR RATING AND SIZE	
SP	SURFACE PANELBOARD, SEE PANEL SCHEDULES ON DRAWINGS FOR RATING AND SIZE	
M	MOTOR CONNECTION	
MS	MAGNETIC MOTOR STARTER	72" AFF
MS	COMBINATION MAGNETIC MOTOR STARTER AND FUSIBLE DISCONNECT SWITCH	72" AFF
MS	FUSED SAFETY DISCONNECT SWITCH, HEAVY DUTY, "NESS" DENOTES NON-FUSED SAFETY SWITCH.	48" AFF
MS	MUSHROOM EMERGENCY BUTTON	
MS	OVERHEAD 125V, 3-WIRE, GROUNDING TWIST LOCK RECEPTACLE ON 50 COORD WITH KELLEM'S GRIP	
MS	FLOOR MOUNTED RECEPTACLE	
MS	FLUSH FLOOR MOUNTED DOUBLE DUPLEX (QUAD) RECEPTACLE AND DATA MULTI SERVICE OUTLET WITH 1 INCH EMPTY CONDUIT (FOR DATA) TO ABOVE ACCESSIBLE CEILING. "P" DENOTES PEDESTAL MOUNTED.	
MS	EQUIPMENT SYMBOL - SEE LIST ON DWGS.	
TELEPHONE / DATA SYSTEMS		
MS	TELEPHONE OUTLET, PUBLIC PAY STATION, WALL MOUNTED, SINGLE-GANG BOX W/ 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING, W/ ONE (1) RJ-11 JACK AND MATCHING COVER PLATE	54" AFF
MS	TELEPHONE AND DATA OUTLET, SINGLE-GANG BOX W/ 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING, NUMBER DENOTES QUANTITY OF RJ-45 JACKS.	18" AFF
MS	TELEPHONE AND/OR DATA OUTLET, SINGLE GANG BOX WITH 1 INCH EMPTY CONDUIT TO ABOVE ACCESSIBLE CEILING.	18" AFF
MS	TELEPHONE OUTLET W/RJ-11 JACK AND MATCHING COVER PLATE	18" AFF

SYMBOL	DESCRIPTION	MTG. HEIGHT UNO
TELEVISION AND SURVEILLANCE SYSTEM		
TV	TELEVISION OUTLET FOR CABLE SYSTEM, WALL MOUNTED. PROVIDE SINGLE GANG BOX WITH 3/4" CONDUIT AT +84" AFF. FOR POWER. PROVIDE SINGLE GANG BOX WITH 3/4" CONDUIT FOR COMMUNICATIONS AT +84" AFF. CONDUIT UP WALL AND TO CABLE TRAY. PROVIDE ETHERNET CABLE AND DATA WITH CABLE TO NEAREST FLOOR DATA ROOM. REFER TO TV DETAIL ON DRAWING "E-404".	
TV	CLOSED CIRCUIT TELEVISION SURVEILLANCE MONITOR OUTLET.	
TV	CLOSED CIRCUIT TELEVISION SURVEILLANCE CAMERA ARROWS INDICATE CAMERA WITH PAN-TILT-ZOOM FEATURE.	
TV	CLOSED CIRCUIT TELEVISION SURVEILLANCE CAMERA FIXED POSITION	
TV	CLOSED CIRCUIT TELEVISION HEAD END EQUIPMENT	
CM	CCTV MONITOR	
PUBLIC ADDRESS SYSTEM		
MS	CEILING SPEAKER, FLUSH MOUNTED IN CEILING. "M" DENOTES SPEAKER WITH PAGING AND MONITORING FUNCTION.	
MS	WALL MOUNTED SPEAKER	
MS	WALL MOUNTED AUXILIARY INPUT JACK SUB LETTER "T" DESIGNATES INPUT "O" DESIGNATES OUTPUT	
MS	WALL MOUNTED INTERCOM CALL-IN SWITCH	
MS	WALL MOUNTED VOLUME CONTROL	
MS	WALL MOUNTED MIC OUTLET	
MS	FLOOR MOUNTED MIC OUTLET	
MS	INTERCOM OUTLET	
MS	SOUND EQUIPMENT RACK	
MS	STAGE MONITOR SPEAKER JACK	
MS	WALL MOUNTED HEAD PHONE JACK	
MS	INTERCOM EQUIPMENT RACK	
MS	BELL	
FIRE ALARM SYSTEM/EMERGENCY GENERATOR		
MS	MANUAL FIRE ALARM PULL STATION	
MS	FIRE ALARM MANUAL PULL STATION, LOCKING TYPE	
MS	SMOKE DETECTOR, ASTERISK INDICATES PROTECTIVE COVER.	
MS	DUCT MOUNTED SMOKE DETECTOR WITH SAMPLING TUBE.	
MS	COMBINATION CHIME/VISUAL (STROBE) FIRE ALARM SIGNAL.	
MS	COMBINATION HORN/STROBE WITH CANDELA RATING TO COMPLY WITH NFPA 72. CANDELA RATING TO BE BY MFR/ CONTRACTOR FIELD ADJUSTED TO MEET NFPA-72.	
MS	VOICE SPEAKER AND STROBE BY MFR/ CONTRACTOR FIELD ADJUSTED TO MEET NFPA-72.	
MS	VISUAL STROBE WITH CANDELA RATING TO COMPLY WITH NFPA 72.	
MS	HORN	
MS	SPRINKLER WATER FLOW SWITCH, FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR	
MS	SPRINKLER VALVE TAMPER SWITCH, FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR	
ANN	FIRE ALARM SYSTEM REMOTE ANNUNCIATOR PANEL	
MS	RANGE HOOD FIRE SUPPRESSION CONNECTION	
GEN	REMOTE GENERATOR ANNUNCIATOR PANEL	
FP	REMOTE FIRE PUMP ANNUNCIATOR PANEL	
FACP	FIRE ALARM CONTROL PANEL	
FPCS	FIRE FIGHTER CONTROLS SHIELD W/ H-O-A SWITCHES FOR ALL HVAC EQUIPMENT.	
HD	HEAT DETECTOR	
MD	MAGNETIC DOOR HOLDER	
LL	LIQUID LEVEL GAUGE FOR DIESEL FUEL TANK	
LD	LEAK DETECTOR MONITOR FOR DIESEL FUEL TANK	
NURSE CALL SYSTEM/MONITORING SYSTEM		
MS	EMERGENCY PULL STATION	
MS	NURSE CALL LIGHT	
MS	NURSE CALL MASTER	
MS	DUTY STATION	
MS	PANIC SWITCH	
ACCESS CONTROL SYSTEM		
MS	LOCKING CONTROL PANEL. "LPC1" DENOTES PANEL DESIGNATION NUMBER	
MS	LOCKING CONTROL EQUIP. CABINET. CABINET CONTAINS PROGRAMMABLE CONTROLLER AND LOGIC/RELAY TERMINAL LOCKING CONTROL PANEL. "LCC1" DENOTES CABINET THAT IS ASSOCIATED WITH THE LOCKING CONTROL PANEL.	
MS	SECURITY INTERCOM STATION	
MS	ELECTRIC OPERATED SECURITY HARDWARE. HARDWARE INCLUDES POSITION AND/OR LIMIT SWITCHES PER SECURITY HARDWARE SCHEDULE.	
MS	DOOR POSITION AND/OR BOLT POSITION SWITCH	
MS	DOOR CONTACT	
MS	MOTION DETECTOR	
MS	PUSH BUTTON	
MS	KEY PAD	
MS	DOOR RELEASE MASTER CONTROL	
MS	DOOR STRIKE	
MS	ELECTRIC LOCK	72" AFF
MS	CARD READER	72" AFF
MS	DOOR CONTACT	

SYMBOL	DESCRIPTION	MTG. HEIGHT UNO
DUCTWORK SYMBOL LEGEND		
90°	90° ELBOW DOWN	
90°	90° ELBOW UP	
IR	OFFSET TO CHANGE ELEVATION INCLINED RISE (R) OR DROP (D), ARROW IN DIRECTION OF AIR FLOW (AT 30° WHEN POSSIBLE)	
RE	ROUND RADIUS ELBOW	
90°	90° STRAIGHT TEE	
90°	90° CONICAL TEE W/BALANCING DAMPER	
90°	90° CONICAL TEE W/BALANCING DAMPER	
45°	45° CONICAL TEE W/BALANCING DAMPER	
45°	45° BRANCH W/BALANCING VALVE	
SIZE	SIZE OR SHAPE TRANSITION	
RF	ROUND FLEXIBLE DUCT (ONLY @ DIFFUSER CONNECTION)	
90°	90° ELBOW DOWN S.A.	
90°	90° ELBOW UP S.A.	
90°	90° ELBOW DOWN R.A.	
90°	90° ELBOW UP R.A.	
90°	90° ELBOW DOWN E.A.	
90°	90° ELBOW UP E.A.	
IR	OFFSET TO CHANGE ELEVATION INCLINED RISE (R) OR DROP (D), ARROW IN DIRECTION OF AIR FLOW (AT 30° WHEN POSSIBLE)	
RE	RECTANGULAR RADIUS ELBOW	
RE	RECTANGULAR ELBOW WITH TURNING VANES	
RE	SPLIT BRANCH TAKE-OFF WITH SQUARE ELBOW AND SPLITTER DAMPER	
RE	MAIN DUCT SPLIT WITH TURNING VANES	
RE	SPLIT BRANCH TAKE-OFF WITH RADIUS ELBOW AND SPLITTER DAMPER	
RE	SQUARE NECK CEILING DIFFUSER, 4-WAY DIRECTIONAL THROW UNLESS NOTED OTHERWISE	
RE	ROUND NECK CEILING DIFFUSER, 4-WAY DIRECTIONAL THROW UNLESS NOTED OTHERWISE	
RE	ROUND NECK CEILING DIFFUSER, 4-WAY DIRECTIONAL THROW W/ FLEX DUCT	
RE	SIDEWALL SUPPLY GRILLE OR REGISTER WITH AIR EXTRACTOR	
RE	SUPPLY DUCT RISER	
RE	RETURN OR OUTSIDE AIR DUCT RISER	
RE	EXHAUST AIR DUCT RISER	
RE	CEILING RETURN AIR GRILLE OR REGISTER	
RE	MOTORIZED SMOKE DAMPER	
RE	FIRE DAMPER	
RE	FIRE/SMOKE DAMPER	
RE	MANUAL BALANCING DAMPER	
RE	TRANSITION FLAT ON TOP OR BOTTOM	
RE	DUCT WITH 1/2" DUCT LINER FOR SOUND ATTENUATION	
RE	SECURITY BARS	
RE	DIFFUSER SYMBOL-SEE SCHEDULE NECK SIZE	
RE	DESIGN CUBIC FEET PER MINUTE OF AIR QUANTITY FOR ROOM OR SPACE	

SYMBOL	DESCRIPTION
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
RS	REFRIGERANT SUCTION
RL	REFRIGERANT LIQUID
CWS	CHILLED WATER SUPPLY PIPING
CWR	CHILLED WATER RETURN PIPING
CD	CONDENSATE DRAIN PIPING
CS	CONDENSER WATER SUPPLY
CR	CONDENSER WATER RETURN
LS	LOW PRESSURE STEAM
LCR	LOW PRESSURE CONDENSATE RETURN
HS	HIGH PRESSURE STEAM
HCR	HIGH PRESSURE CONDENSATE RETURN
BF	BOILER FEEDWATER
HRR	HEAT RECOVERY RETURN
HRS	HEAT RECOVERY SUPPLY
X	PIPING ANCHOR
PG	PIPE GUIDE
PH	VALVE IN HORIZONTAL RUN
CS	CIRCUIT SETTER (GPM INDICATED ON PLANS)
24"x10"	DUCT SIZE - 24"W x 10"D
10"	DUCT SIZE - 10" DIAMETER
T	THERMOSTAT (PROGRAMMABLE)
T	THERMOSTAT 2 STAGE
T	THERMOSTAT/SPEED SWITCH ASSEMBLY
H	HUMIDISTAT
MS	HUMIDITY SENSOR (WALL MOUNTED)
MS	TEMPERATURE SENSOR (WALL MOUNTED)
MA	MEDICAL COMPRESSED AIR
V	VACUUM
N	NITROGEN
N2O	NITROUS OXIDE
CO2	CARBON DIOXIDE
3" A	"A" DESIGNATES ABOVE CEILING
4" B	"B" DESIGNATES BELOW FLOOR
6" C	"C" DESIGNATES AS HIGH AS POSSIBLE, COORDINATE W/ DUCT WORK & OTHER TRADES
FS	FLOW SWITCH
P	PRESSURE SWITCH
NR	NATURAL GAS REGULATOR
FD	FIRE DEPARTMENT CONNECTION
PS	PENDANT SPRINKLER HEAD
SP	SIDEWALL SPRINKLER HEAD
LPG	LIQUID PROPANE GAS
CON	CONNECT TO EXISTING
CO2	CARBONDIOXIDE SENSOR/CONTROLLER
RH	RELATIVE HUMIDITY SENSOR
CON	CONNECT TO EXISTING

SYMBOL	DESCRIPTION
---	COLD WATER PIPE (CW)
---	HOT WATER PIPE 110°F (HW)
---	HOT WATER RECR. 110°F (HWC)
---	HOT WATER HW(140 DEGREE) (SUPPLY)
---	HOT WATER RECR. (140 DEGREE)
---	BELOW GRADE STORM DRAIN
---	SANITARY SEWER
---	SANITARY SEWER BELOW GRADE
---	GREASE WASTE
---	ABOVE GRADE RAINWATER CONDUCTOR
---	VENT
---	ACID WASTE
---	ACID VENT
---	INDIRECT DRAIN
---	DISTILLED WATER
---	DEIONIZED WATER
---	LAWN SPRINKLER SUPPLY
---	FIRE PROTECTION WATER SUPPLY
---	AUTOMATIC FIRE SPRINKLER
---	GAS - LOW PRESSURE
---	GAS - MEDIUM PRESSURE
---	GAS - HIGH PRESSURE
---	GAS - VENT
---	PROPANE LINE
---	DIESEL FUEL
---	LUBRICATING OIL
---	LUBRICATING OIL VENT
---	WASTE OIL
---	WASTE OIL VENT
---	OXYGEN
---	COMPRESSED AIR
---	VACUUM ASSIST ASSEMBLY
---	NITROUS OXIDE
---	CARBON DIOXIDE
---	"A" DESIGNATES ABOVE CEILING
---	"B" DESIGNATES BELOW FLOOR
---	"C" DESIGNATES AS HIGH AS POSSIBLE, COORDINATE W/ DUCT WORK & OTHER TRADES
---	WALL HYDRANT
---	CONNECT TO EXISTING
---	TURN UP OR FROM BELOW
---	TURN DOWN
---	DOWN SPOUT
---	VENT THRU ROOF
---	HOSE BIBB
---	BALL VALVE
---	GATE VALVE
---	GATE VALVE IN VERTICAL
---	CHECK VALVE
---	UNION
---	GAS COOK
---	GAS COOK IN VERTICAL
---	SOLENOID VALVE
---	BUTTERFLY VALVE
---	MANUAL AIR VENT
---	STRAINER
---	P & T PLUG
---	FLOAT VALVE
---	SHOCK ABSORBER, LETTER DESIGNATES SIZE
---	PRESSURE REGULATING VALVE
---	CALIBRATED BALANCING VALVE OR AUTO BALANCING VALVE
---	GATE VALVE IN VALVE BOX
---	CLEANOUT
---	FLOOR CLEANOUT
---	SURFACE CLEANOUT
---	FLOOR DRAIN
---	ROOF DRAIN
---	FIXTURE DESIGNATION
---	KITCHEN EQUIPMENT NUMBER
---	PLAN NOTE
---	INVERT ELEVATION
---	ISOLATED GROUND
---	ISOLATED GROUND W/SURGE SUPPRESSION
---	INSIDE PIPE THREAD
---	KILOWATTS
---	LOUVER
---	LEAVING AIR TEMPERATURE
---	LEAVING FLUID TEMPERATURE
---	LEAVING WATER TEMPERATURE
---	MOUNTING HEIGHT
---	THOUSAND BTU/HR
---	MOTORIZED DAMPER
---	NOT INCLUDED IN CONTRACT
---	NOT TO SCALE
---	OUTSIDE AIR
---	PUMP
---	PLUMBING CONTRACTOR
---	PRESSURE DROP
---	RETURN AIR
---	RACK INTERCONNECT PANEL
---	REPLACE EXISTING
---	RETURN FAN
---	REHEAT COIL
---	SUPPLY AIR
---	RAIN LEADER
---	REVOLUTIONS PER MINUTE
---	SMOKE DAMPER
---	SUPPLY FAN
---	SHEET METAL
---	STORAGE TANK (WATER HEATER)
---	STARTER (MOTOR)
---	SAFE WASTE
---	TEMPERATURE & TEST PLUG
---	TELEPHONE CONNECTION BOARD
---	TIP SPEED
---	TOTAL STATIC PRESSURE
---	TYPICAL
---	UNLESS NOTED OTHERWISE
---	UNIT HEATER
---	VARIABLE FREQUENCY DRIVE
---	VENT THRU ROOF
---	WITH
---	WET BULB
---	WALL HEATER
---	WALL INTERCONNECT PANEL
---	WITHOUT
---	WEATHER PROOF
---	WATER PRESSURE DROP
---	WATER HAMMER ARRESTOR

SYMBOL	DESCRIPTION
---	TURN UP OR FROM BELOW
---	TURN DOWN
---	DOWN SPOUT
---	VENT THRU ROOF
---	HOSE BIBB
---	BALL VALVE
---	GATE VALVE
---	GATE VALVE IN VERTICAL
---	CHECK VALVE
---	UNION
---	GAS COOK
---	GAS COOK IN VERTICAL
---	SOLENOID VALVE
---	BUTTERFLY VALVE
---	MANUAL AIR VENT
---	STRAINER
---	P & T PLUG
---	FLOAT VALVE



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**CMA
ENGINEERING**

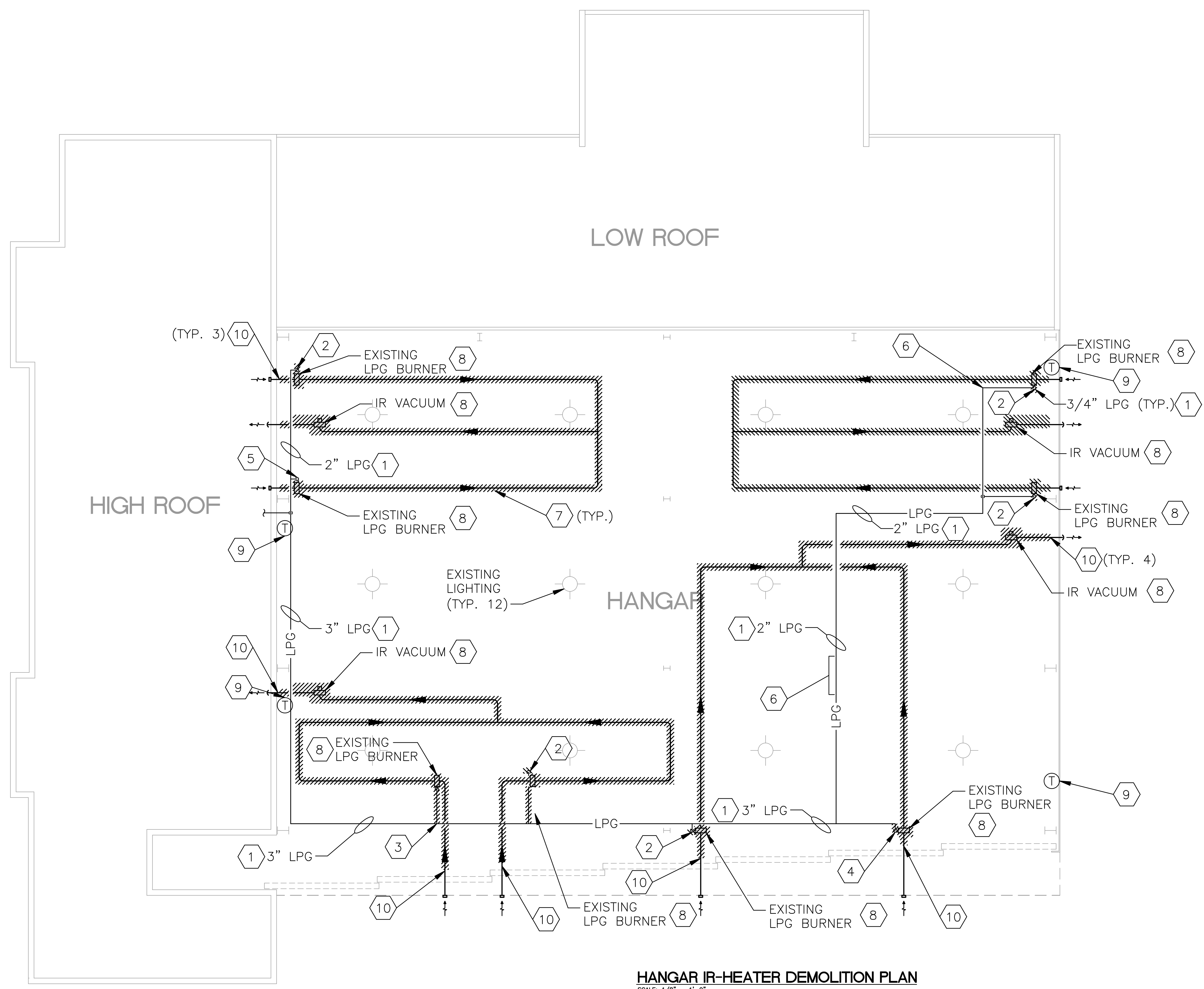
REVISED	
DEMOLITION	
DATE 11/20/13	SCALE AS SHOWN
DRAWN BY STAFF	CHK. BY TLC
DRAWING NUMBER	
MEP-1	

PLAN NOTES:

- 1 CONTRACTOR TO VERIFY EXISTING GAS PIPING SIZE AND REPLACE AS NECESSARY PRIOR TO CONNECTING BURNER.
- 2 DISCONNECT EXISTING LPG LINE AND REMOVE FROM IR HEATER UP TO NEAREST ELBOW/TEE. CAP EXISTING PIPE BRANCH AS INDICATED ON DRAWING MEP-2.
- 3 DISCONNECT EXISTING LPG LINE AND REMOVE FROM IR HEATER UP TO LOCATION SHOWN. CONNECT NEW BRANCH PIPE AT THIS LOCATION, PROVIDE NEW TEE CONNECTION AS REQUIRED. SEE DRAWING MEP-2 FOR ADDITIONAL INFORMATION.
- 4 DISCONNECT EXISTING LPG LINE AND REMOVE FROM IR HEATER UP TO LOCATION SHOWN. CAP EXISTING PIPE BRANCH, SEE DRAWING MEP-2 FOR ADDITIONAL INFORMATION.
- 5 DISCONNECT EXISTING LPG LINE AT BURNER AND REMOVE IR HEATER. LPG LINE TO REMAIN FOR CONNECTION TO NEW UNIT, PROVIDE ALL HARDWARE, REDUCERS, PIPE, ETC. FOR CONNECTION TO NEW UNIT. SEE DRAWING MEP-2 FOR ADDITIONAL INFORMATION.
- 6 MODIFY EXISTING SECTIONS OF PIPE AS NECESSARY TO CONNECT TO NEW WORK. SEE DRAWING MEP-2 FOR LOCATION OF NEW CONNECTION/TEE.
- 7 REMOVE EXISTING IR HEATER SYSTEM (BURNERS, COMBUSTION PIPE, REFLECTOR, VACUUM, HANGERS, ETC.) WITHIN 6" OF WALL. CAP/SEAL/INSULATE ABANDONED PIPE AND PENETRATION EXCEPT AS NOTED ON MEP-2. SEE DETAILS, SHEET MEP.
- 8 REMOVE EXISTING VACUUM PUMP/COMPRESSOR FAN ASSEMBLIES (WITH ASSOCIATED POWER/CONTROL WIRING, HANGERS, ETC.) REMOVE CONDUIT, WIRE, CIRCUIT BREAKERS, AND CONTROLS.
- 9 REMOVE EXISTING IR HEATER THERMOSTATS.
- 10 SEE DETAILS, SHEET MEP.

GENERAL NOTES:

1. ALL GAS PIPING ON THIS PROJECT IS PROPANE GAS PIPING (LPG).



HANGAR IR-HEATER DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

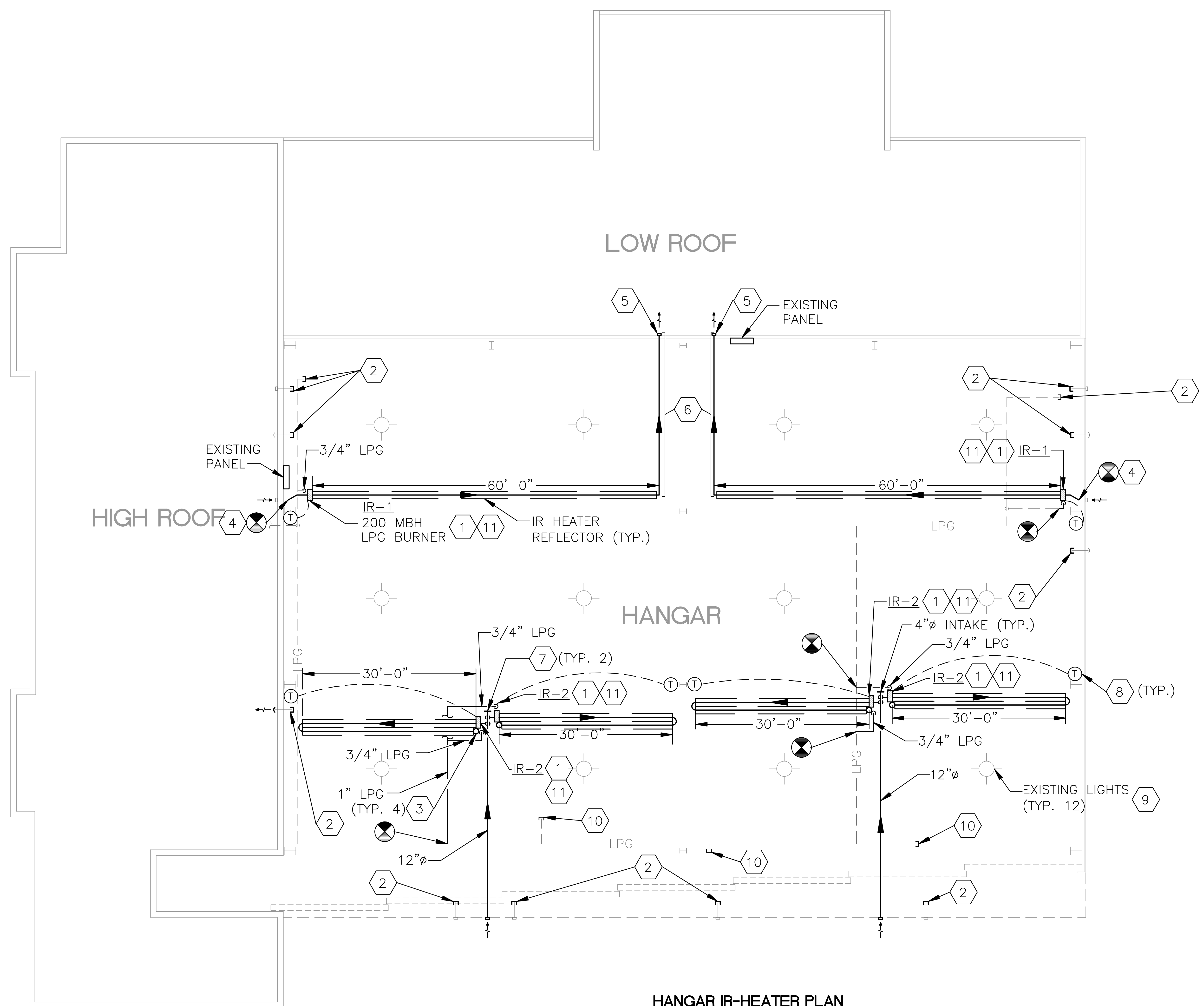


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REVISED	
NEW WORK	
DATE 11/20/13	SCALE AS SHOWN
DRAWN BY STAFF	CHK. BY TLC
DRAWING NUMBER MEP-2	



HANGAR IR-HEATER PLAN
SCALE: 1/8" = 1'-0"

PLAN NOTES:

- 1 CONTRACTOR TO VERIFY EXISTING GAS PIPING SIZE AND REPLACE AS NECESSARY PRIOR TO CONNECTING BURNER.
- 2 CAP AND SEAL EXISTING VENT/PIPE. INSULATE ALL PIPES/VENTS PENETRATING BUILDING EXTERIOR. SEE DETAILS SHEET MEP.
- 3 EXHAUST FLUE UP THROUGH ROOF. SEAL ROOF PENETRATION AND INSULATE. SEE DETAILS SHEET MEP.
- 4 CONNECT NEW INTAKE/EXHAUST VENT PIPING TO EXISTING. SEE DETAILS SHEET MEP.
- 5 NEW EXHAUST VENT PIPE THROUGH BLOCK WALL, SEAL BUILDING PENETRATION. SEE DETAILS SHEET MEP.
- 6 MAXIMUM EXHAUST VENT LENGTH PER MANUFACTURER RECOMMENDATION.
- 7 ROUTE INTAKE VENT BETWEEN TRUSS WEBS. PIPE DOWN TO BURNERS AS SHOWN.
- 8 NEW THERMOSTAT WITH LOCKABLE VENTED COVER ASSEMBLY, MOUNT 54" AFF.
- 9 CONTRACTOR TO MOUNT NEW IR HEATERS AND ASSOCIATED PIPING TO SUIT EXISTING LIGHTING AND OTHER SYSTEMS IN CEILING AREA. COORDINATE FOR FINAL PLACEMENT TO PROVIDE CLEARANCES PER MANUFACTURER REQUIREMENTS.
- 10 CAP & SEAL PIPING SHOWN.
- 11 FURNISH AND INSTALL NEW 3/4" CONDUIT AND (3)#12 THWN WIRE BACK TO EXISTING ELECTRICAL PANEL. PROVIDE NEW 20A, 120V, 1 ϕ CIRCUIT BREAKER TO SUIT EXISTING PANEL.

GENERAL NOTES:

1. ALL GAS PIPING ON THIS PROJECT IS PROPANE GAS PIPING (LPG).
2. COORDINATE FINAL EQUIPMENT/PIPE LOCATIONS WITH EXISTING LIGHTING.