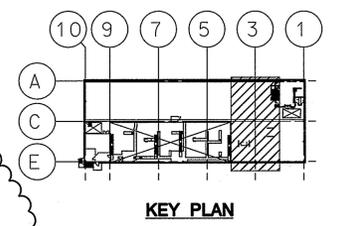


- GENERAL NOTES:**
- CONTRACTOR SHALL REPAIR AND PAINT ALL DISTURBED, DAMAGED, AND EXPOSED FLOOR SURFACES, EQUIPMENT SUPPORT STRUCTURES, AND GROUTED SURFACES ADJOINING FLOOR WITH NASH STANDARD FLOOR PAINT. SURFACES SHALL BE CLEANED, REPAIRED, SCRAPPED, AND SANDED SMOOTH PRIOR TO APPLICATION OF PAINT. SEE PAINT NOTES AND SPECIFICATIONS SHEET M-24-2.
- KEYED NOTES:**
- SIXTEEN INCH CONDENSER WATER PIPING. ROUTE DOWN THROUGH NEW FLOOR PENETRATION TO SURFACE CONDENSER SC-24-1. FILL AND REPAIR EXISTING PENETRATION. SEE STRUCTURAL DRAWINGS FOR DETAILS. PAINT TO MATCH EXISTING. SEE DETAIL 1, DRAWING M-24-239.
  - ONE AND ONE EIGHTH INCH REFRIGERATION STORAGE GAS LINE (ABOVE) AND ONE AND ONE EIGHTH REFRIGERATION STORAGE LIQUID LINE (BELOW), CONTRACTOR TO PROVIDE CONNECTION TO CORRESPONDING UNION ON REFRIGERATION STORAGE GAS LINE AND REFRIGERATION LIQUID LINE, AS INDICATED.
  - SIXTEEN INCH CONDENSER WATER PIPING. ROUTE UP THROUGH EXISTING FLOOR PENETRATION TO CHILLER C-24-1 CONDENSER.
  - ONE INCH LOW PRESSURE STEAM PIPING. ROUTE TO TURBINE GLAND SEALING STEAM CONNECTION CONTROL VALVE PCV-174. CONTROL VALVE PROVIDED BY CHILLER MANUFACTURER.
  - EXISTING FLOOR DRAIN TO REMAIN.
  - RELOCATE SIXTEEN INCH CHILLED WATER RETURN LINE TO ACCOMMODATE NEW CHILLER C-24-1 SERVICE PLATFORM. FILL AND REPAIR EXISTING PENETRATION. SEE STRUCTURAL DRAWINGS FOR DETAILS. PAINT TO MATCH EXISTING. SEE DETAIL 1, DRAWING M-24-239.
  - REFRIGERATION STORAGE GAS LINE CONNECTION.
  - REFRIGERATION STORAGE LIQUID LINE. ROUTE PIPING UNDER CONDENSER FROM EVAPORATOR LIQUID LINE SERVICE VALVES TO REFRIGERATION STORAGE LIQUID LINE.
  - NEW FOUR INCH REFRIGERATION VENT PIPING. ROUTE UP THROUGH ROOF SIMILAR TO CHILLER C-24-2 AND CHILLER C-24-3.
  - PROVIDE PIPE SUPPORT STATION. SEE STRUCTURAL DRAWING S-24-72 FOR DETAILS.
  - HIGH PRESSURE STEAM PIPING FROM BELOW THROUGH NEW FLOOR PENETRATION. FILL AND REPAIR EXISTING PENETRATION. SEE STRUCTURAL DRAWINGS FOR DETAILS. PAINT TO MATCH EXISTING. SEE DETAIL 1, DRAWING M-24-239.
  - TWENTY FOUR INCH TURBINE EXHAUST TRUNK. FILL AND REPAIR EXISTING PENETRATION. SEE STRUCTURAL DRAWINGS FOR DETAILS. PAINT TO MATCH EXISTING. SEE DETAIL 1, DRAWING M-24-239.
  - TWO INCH CHILLED WATER PIPING TO COMPRESSOR AND TURBINE OIL COOLERS.
  - CONDENSER REFRIGERANT RELIEF PIPING CONNECTIONS.
  - EVAPORATOR REFRIGERANT RELIEF PIPING CONNECTIONS.
  - SIXTEEN INCH CHILLED WATER PIPING. ROUTE DOWN THROUGH EXISTING FLOOR PENETRATION TO EXISTING CHILLED WATER SUPPLY HEADER ON GROUND FLOOR.
  - CHILLER C-24-1 CONTROL PANEL.
  - POTABLE WATER HEAT EXCHANGER PROVIDED BY CHILLER MANUFACTURER AND INSTALLED BY CONTRACTOR.
  - EXISTING REFRIGERATION STORAGE GAS LINE TO REMAIN.
  - EXISTING REFRIGERATION STORAGE LIQUID LINE TO REMAIN.
  - PROVIDE RTD TEMPERATURE SENSOR AND THERMOWELL FOR REMOTE TEMPERATURE TRANSMITTER. SEE WRITTEN SPECIFICATIONS FOR DETAILS.
  - PROVIDE FLOW TRANSMITTER WITH REMOTE INDICATOR. SEE WRITTEN SPECIFICATIONS FOR DETAILS. PROVIDE CABLE AND TRIM EXCESS CABLE, AS REQUIRED.
  - FLAT GLASS WATER GAGE LG-1, CLARK-RELIANCE F4000 SERIES MODEL A-193-87 STUDS, A-194-24 NUTS, C.S. BODY, SIDE BOSS & COVER PLATE, BOROSILICATE GLASS, VISIBLE TANK MIDPOINT WATER HEIGHT.
  - CAST IRON CHAMBER LEVEL SWITCH HLS-24-1 AND LLS-24-1, MERCURIO SERIES MODEL 123, 3/4 STAINLESS STEEL FLOAT AND TRIM, SPDT, MERCURY SWITCH, RATED 4 AMPS, 120 VOLT AC/DC.
  - BOURDON TUBE HIGH PRESSURE SWITCH, MERCURIO SERIES D-900, MODEL DS-9221, 3/16 STAINLESS STEEL CASING AND DIAPHRAM, OVER-PRESSURE SEAL PROTECTION, NORMALLY OPEN (CLOSE ON PRESSURE RISE), ONE INCH CONNECTION TO PROCESS.
  - NOT USED.
  - FLASH TANK STEAM RECOVERY CONNECTION LOCATION. ROUTE TO FLASHTANK OUTLET.
  - DIFFERENTIAL PRESSURE LEVEL TRANSMITTER WITH REMOTE INDICATOR. SEE WRITTEN SPECIFICATIONS FOR DETAILS. SEE DETAIL 4 AND DETAIL 5, DRAWING M-24-237 FOR TYPICAL MOUNTING DETAIL.
  - PROVIDE AUTOMATIC AIR VENT. PROVIDE PIPING TO FLOOR DRAIN. SEE DETAIL 2, SHEET M-24-237.
  - PROVIDE ONE INCH STEAM RELIEF PIPING. ROUTE FROM FLASHTANK BDFT-24-1 RELIEF TO EXISTING RELIEF PIPING OF DEAERATOR DA-24-1.
  - PROVIDE TWO INCH VENT PIPING. ROUTE FROM SURGTANK ST-24-1 UP THROUGH NEW ROOF PENETRATION. SEE DETAIL 1, DRAWING M-24-237.
  - NEMA 12 CONTROL ENCLOSURES FOR PUMP MOTOR STARTERS, DISCONNECTS, ADJUSTABLE OVERLOADS, CIRCUIT BREAKERS, 120 VOLT CONTROL POWER TRANSFORMER, AND HAND-OFF-AUTO SWITCHES.
  - PROVIDE DIFFERENTIAL PRESSURE FLOW SWITCHES DPFS-24-1. SEE DETAIL 4 AND DETAIL 5, DRAWING M-24-237.
  - ONE AND ONE HALF INCH CONTINUOUS BLOWDOWN PIPING. ROUTE UP THROUGH NEW FLOOR PENETRATION TO BLOWDOWN FLASH TANK, BDFT-24-1. SEE STRUCTURAL DRAWINGS FOR DETAILS. PAINT TO MATCH EXISTING. SEE DETAIL 1, DRAWING M-24-239.
  - ONE AND ONE HALF INCH CONTINUOUS BLOWDOWN DISCHARGE PIPING FROM HEAT EXCHANGER. ROUTE DOWN THROUGH NEW FLOOR PENETRATION TO BLOWDOWN SEPARATOR TANKS, BOST-24-1, BOST-24-2, AND BOILER B-24-2 BLOWDOWN PIT. SEE STRUCTURAL DRAWINGS FOR DETAILS. PAINT TO MATCH EXISTING. SEE DETAIL 1, DRAWING M-24-239.
  - PROVIDE INSTRUMENT STAND. SEE DETAIL 4 AND DETAIL 5, DRAWING M-24-237.
  - FOR CONNECTION BELOW, SEE SECTION F, DRAWING M-24-241.
  - CHILLER SERVICE PLATFORMS. SEE STRUCTURAL DRAWINGS.



SECOND FLOOR EQUIPMENT NEW WORK PLAN  
SCALE: 1/4"=1'-0"  
OPTION #1



Engineering License No. F-845  
**Burns & McDonnell**  
THE REGISTRANT OF THE NEWLY APPLIED SEAL, DATED 02/10/11 ONLY ASSUMES RESPONSIBILITY FOR THE CHANGES AS INDICATED BY THE FOLLOWING REVISION(S) 0 & 1.

<b>ISSUED FOR CONSTRUCTION</b>		
1	02-10-11	ADDED PLATFORMS
0	09-24-10	ISSUED FOR CONSTRUCTION
REVISION	DATE	DESCRIPTION
SIGNATURES DATE NATIONAL AERONAUTICS & SPACE ADMINISTRATION		
DR. DC	ENG RG	1-28-10
CH JA	APPR JC	09-24-10
BUILDING 24 CENTRAL HEATING AND COOLING PLANT		
<b>NEW WORK PARTIAL SECOND FLOOR PLAN</b>		
REV	PROJECT NO.	SHEET NO.
DISCP	PROJECT TITLE	OF
PE	DATE	DWG NO.
APPR	SCALE	M-24-233

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