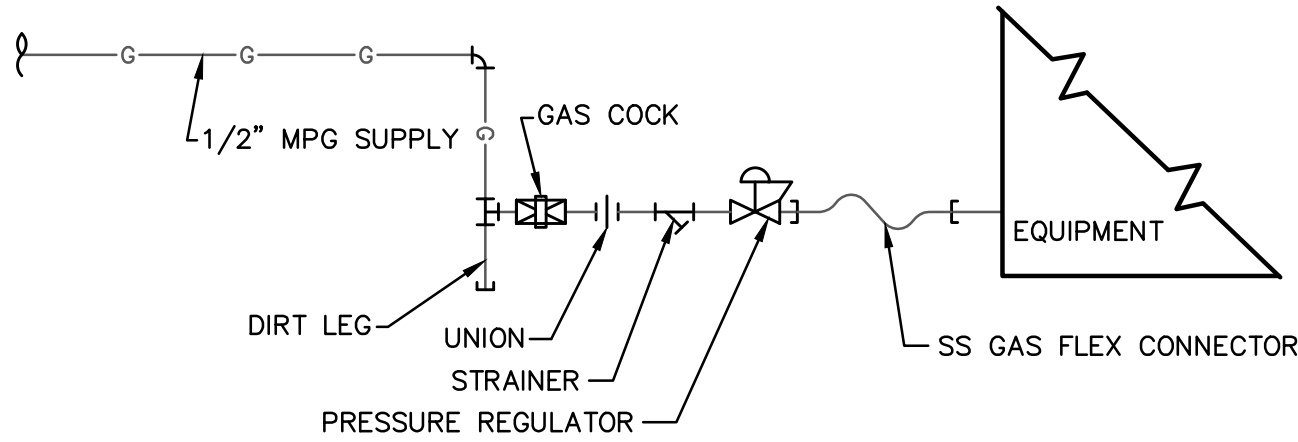
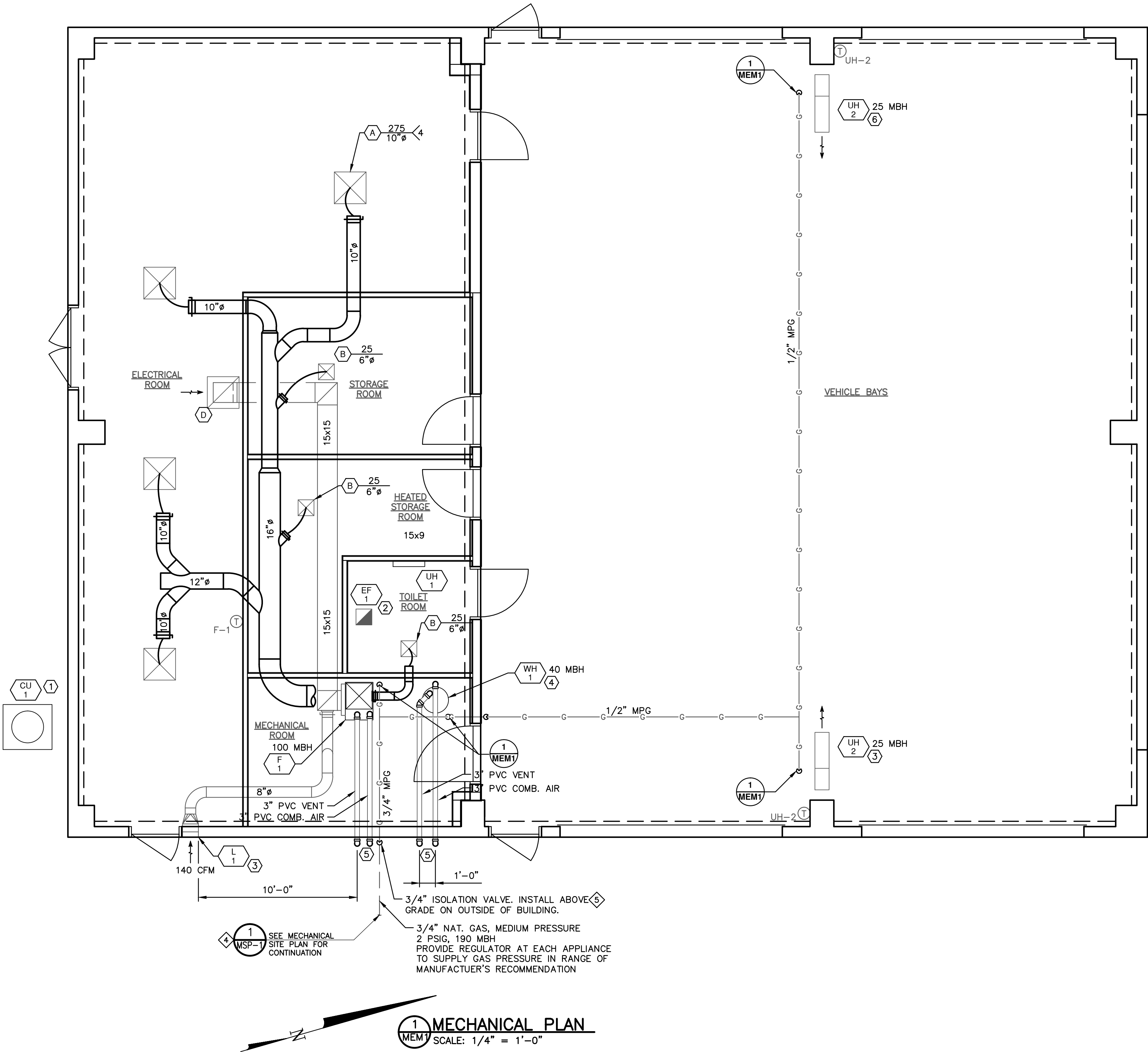


KEYED NOTES

- 1 CONTRACTOR FURNISH AND INSTALL REFRIGERANT LINE SET PER MANUFACTURER'S REQUIREMENTS BETWEEN CU-1 AND F-1. ROUTE INTERIOR LINES UP INTERIOR SURFACE OF WALL AND ABOVE CEILING.
- 2 ROUTE 6" EXHAUST VENT FROM EF-1 TO EXTERIOR WALL AND TERMINATE WITH BACKDRAFT DAMPER AND 1/4" MESH SCREEN.
- 3 PROVIDE 8" DIA. DUCT AND INSULATE FOR OUTSIDE AIR. INCLUDE 1/4" MESH SCREEN AT LOUVER. MOUNT LOUVER AT 15'-6" ABOVE FINISHED FLOOR.
- 4 WATER HEATER WH-1 IS A RHEEM MODEL PDV40 RATED FOR 40 MBH INPUT AND 40 GALLONS. SEE PLUMBING SCHEDULE.
- 5 TERMINATE WITH ELBOW AND 1/4" MESH SCREEN AT 9' ABOVE FINISHED FLOOR.
- 6 SUSPEND UNIT HEATER FROM CEILING AND MOUNT WITH BOTTOM OF UNIT AT 9' ABOVE FINISHED FLOOR.

MECHANICAL GENERAL NOTES

- A NOT ALL EXISTING DUCTWORK, PIPING, AND ACCESSORIES ARE NECESSARILY SHOWN ON THIS DRAWING, BUT WHAT IS DEEMED NECESSARY TO SHOW INTENT OF WORK INVOLVED IN THIS PROJECT. REFER TO ALL PLANS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS FOR COMPLETE SYSTEM REQUIREMENTS.
- B CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO ORDERING OR FABRICATION OF MATERIAL OR PERFORMING ANY NEW WORK. DEVIATIONS FROM CONDITIONS SHOWN IN THESE PLANS SHALL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY AND NO WORK SHALL BE PERFORMED IN THIS AREA UNTIL A RESOLUTION HAS BEEN ESTABLISHED. SITE CONDITIONS DIFFERING FROM THOSE SHOWN ON THESE PLANS WILL NOT BE GENERALLY CONSIDERED A BASIS FOR CONTRACT MODIFICATION AS THE CONTRACTOR SHALL TAKE INTO ACCOUNT WORST CASE SITE CONDITIONS WHEREVER POSSIBLE.
- C COORDINATE ALL PENETRATIONS OF FLOOR, ROOF, WALLS, ETC. WITH GENERAL CONTRACTOR. ALL PENETRATIONS THROUGH FIRE/SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH A FIRE RATED CAULK EQUAL TO OR EXCEEDING THE CONSTRUCTION FIRE RATING.
- D ALL NEW MATERIALS IN THE RETURN AIR PLENUM SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 50 IN ACCORDANCE WITH SECTION 602.2.1 OF THE 2009 INTERNATIONAL MECHANICAL CODE.
- E FLEXIBLE AIR DUCTS SHALL CONFORM TO UL181 IN ACCORDANCE WITH SECTION 603.6 OF THE 2009 INTERNATIONAL MECHANICAL CODE. LENGTH OF FLEX DUCT SHALL NOT EXCEED 6 FT.
- F ALL MECHANICAL EQUIPMENT SHALL BE LABELED AS TO THE AREA(S) SERVED IN ACCORDANCE WITH SECTION 304.12 OF THE 2009 INTERNATIONAL MECHANICAL CODE.
- G PROVIDE ACCESS DOORS OR OTHER MEANS OF APPROVED ACCESS TO ALL FIRE AND FIRE/SMOKE DAMPERS. ACCESS DOORS SHALL BE LABELED ON THE ACCESS DOOR AND ON THE CEILING BELOW.
- H PROVIDE AND INSTALL A BALANCING DAMPER AT EACH BRANCH TAKEOFF FOR THE SUPPLY AND EXHAUST AIR SYSTEMS. PROVIDE AND INSTALL A BALANCING DAMPER AT EACH BRANCH TAKEOFF FOR THE RETURN AIR SYSTEM WHERE INDICATED. BALANCING DAMPERS LOCATED ABOVE GYPSUM BOARD OR OTHER INACCESSIBLE CEILINGS SHALL BE INSTALLED WITH A CONCEALED DAMPER REGULATOR AND COVER PLATE, PAINTED TO MATCH CEILING COLOR.
- I MOUNT SPACE TEMPERATURE SENSORS, THERMOSTATS, AND REMOTE CONTROL DEVICES WITH CENTERLINE AT 54" A.F.F. UNLESS OTHERWISE INDICATED.
- J PROVIDE BALANCE REPORT TO INSPECTOR AT TIME OF HEATING FINAL IN ACCORDANCE WITH 2009 INTERNATIONAL MECHANICAL CODE. SUBMIT TO ARCHITECT FOR FINAL APPROVAL.
- K DUCTWORK SHALL BE SEALED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE 2009 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE, SECTION 503.2.7.
- L DUCT SIZES SHOWN REPRESENT CLEAR INSIDE DIMENSIONS.
- M ALL RECTANGULAR DUCT ELBOWS OR CHANGES IN DIRECTION OF 45 DEGREES OR GREATER, OTHER THAN BRANCH CONNECTIONS SHALL INCLUDE DOUBLE THICKNESS AIRFOIL SHAPED TURNING VANES.
- N UNLESS NOTED OTHERWISE, DIFFUSER/GRILLE/REGISTER NECK SIZE SHOWN ON DRAWINGS INDICATES SIZE OF DUCT TO DIFFUSER/GRILLE/REGISTER.
- O COORDINATE FINAL LOCATION OF DUCTWORK, PIPING, DIFFUSERS, ETC. WITH ALL OTHER TRADES BEFORE FABRICATION OR INSTALLATION.
- P CONTRACTOR SHALL PROVIDE ALL REQUIRED OFFSETS, TRANSITIONS AND FITTINGS FOR DUCTWORK AND PIPING FOR COMPLETE SYSTEM.
- Q UNLESS NOTED OTHERWISE, PROVIDE BELL MOUTH SPIN-IN FITTING WITH A 2" STAND-OFF BRACKET AND LOCKING QUADRANT VOLUME DAMPER FOR ALL DIFFUSER CONNECTIONS.
- R COORDINATE LOCATION OF ALL WALL/CEILING MOUNTED DIFFUSERS AND GRILLES WITH ALL TRADES AND GENERAL CONTRACTOR.
- S PROVIDE AND INSTALL 1/4" BIRDSCREEN ON OPENINGS FREELY COMMUNICATING WITH THE OUTDOORS.
- T FOR AIR HANDLING EQUIPMENT WITH A CAPACITY OF 2,000 CFM OR GREATER, A SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN AIR STREAM, UNLESS INDICATED OTHERWISE.
- U BUILDING EXHAUST AND VENTS SHALL BE INSTALLED A MINIMUM OF 10'-0" FROM VENTILATION INTAKES.
- V SEE BUILDING SECTIONS FOR LOCATION OF CEILING CONSTRUCTION WITH SUSPENDED GRID AND GYP BOARD.



REVISIONS		
NO.	DATE	DESCRIPTION
1	10/28/2011	ISSUED FOR DESIGN TEAM MEETING
2	11/11/2011	ISSUED FOR REVIEW
3	11/23/2011	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (EQUIP. MAINT. & STOR. BLDG.)
4	11/23/2011	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (EQUIP. MAINT. & STOR. BLDG.)
5	01/09/2012	ISSUED FOR CONSTRUCTION PER PPRBD BUILDING PERMIT #H93022 (EQUIP. MAINT. & STOR. BLDG.)

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**MECHANICAL PLAN**

HAROLD D. THOMPSON REGIONAL WATER RECLAMATION FACILITY  
LOWER FOUNTAIN METROPOLITAN SEWAGE DISPOSAL DISTRICT

DRAWN: DRS  
DESIGNED: DRS  
CHECKED: CF  
DATE: NOV 2011  
PROJECT NO.: 20166.415  
GMS FILE NO.: 2599

**GMS, INC.**  
CONSULTING ENGINEERS  
611 N. WEBER, SUITE 300  
COLORADO SPRINGS, COLORADO 80903

SHEET  
**MEM-1**  
OF  
—

XREF FILENAME: G:\JFM500\20166\415\MEM\EM6  
BASE DWG: G:\JFM500\20166\415\MEM\EM6  
PLOT STYLE FILE: 1000C.DTG  
FILENAME: G:\JFM500\20166\310\MEM1\MEM1.DWG