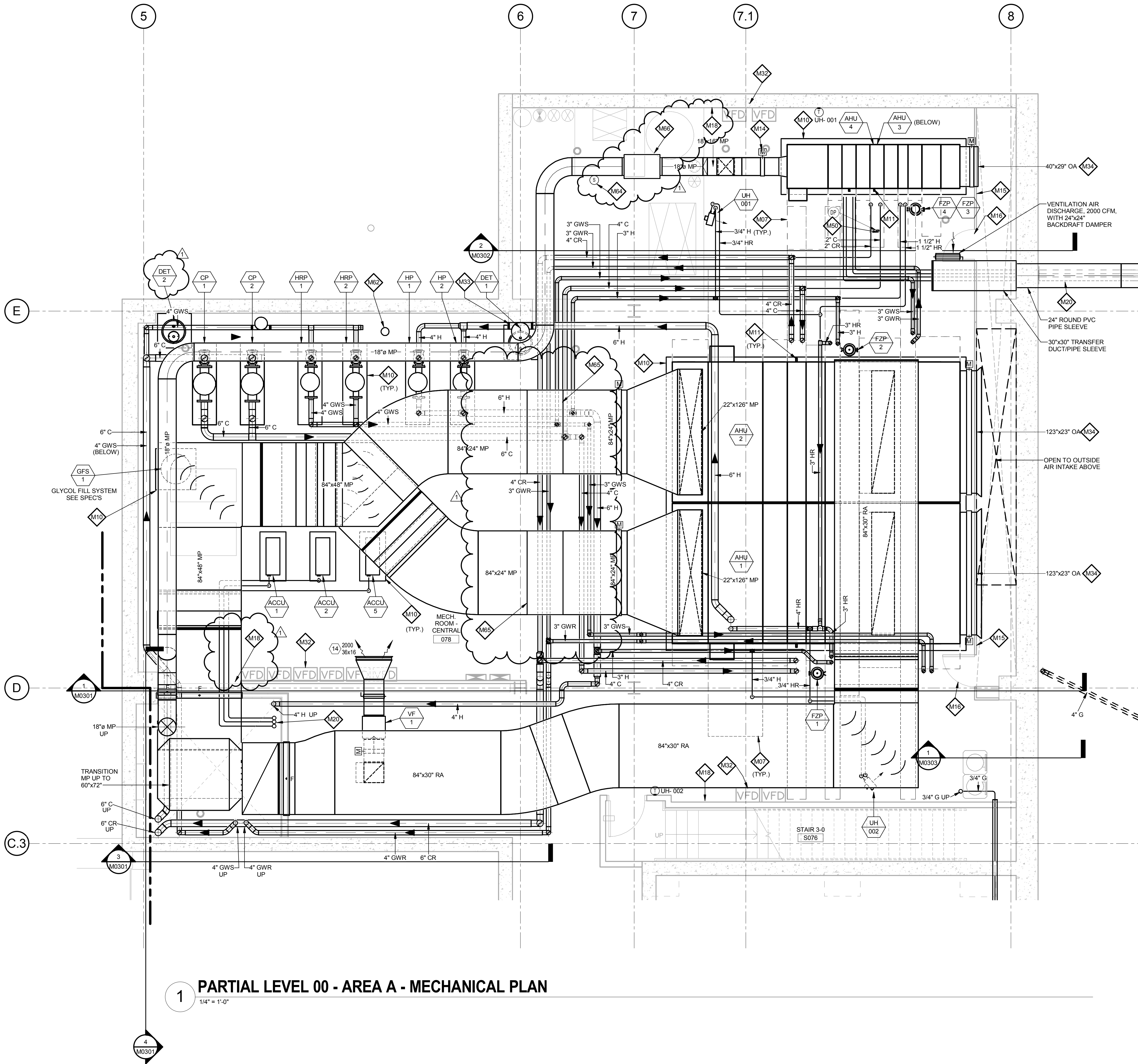


© Cannon Design 2015
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written authorization by The Cannon Corporation.
3/17/2016 4:11:28 PM

3/17/2016 4:11:28 PM WTA 14127.01 D:\Autodesk\Revit 2015 Local\14127.01.WU_WTA-ME_MWS.rvt



GENERAL NOTES:

- Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work.
- Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
- All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum $c = 0.12$. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
- Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- Refer to piping details for final connections to equipment.
- Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing: A & B.

KEYED NOTES

- M03** 2-INCH NATURAL GAS LINE BELOW WALKWAY WITH VENTED SLEEVE AROUND PIPING.
- M07** DASHED LINES INDICATE RECOMMENDED SERVICE, COIL PULLING SPACE, FILTER REMOVAL SPACE, AND/OR AIRFLOW CLEARANCES.
- M08** 3/4-INCH NATURAL GAS LINE BELOW SLAB WITHIN VENTED SLEEVE. SEE LOWER LEVEL FLOOR PLAN FOR CONTINUATION. PROVIDE GAS SHUT-OFF VALVE AND FLEXIBLE HOSE ADAPTER. FINAL CONNECTION TO COOK TOP BY KITCHEN EQUIPMENT INSTALLER.
- M10** 4-INCH HIGH CONCRETE HOUSEKEEPING PAD BELOW EQUIPMENT. PAD SIZE SHALL BE COORDINATED WITH APPROVED SHOP DRAWING AND SHALL BE A MINIMUM OF 6-INCHES LARGER ON ALL SIDES.
- M11** TERMINATE COOLING COIL DRAIN LINE OVER NEAREST FLOOR DRAIN OR INDIRECT WASTE. PROVIDE TRAP AS INDICATED ON PIPING DETAIL.
- M14** MOTORIZED CONTROL DAMPER, COORDINATE WITH TEMPERATURE CONTROL DAMPER.
- M15** 2-INCH THICK DOUBLE-WALL SHEET METAL OUTSIDE AIR INTAKE PLENUM WALLS ENCLOSURE. PROVIDE 4-INCH HIGH CONCRETE CURB AT PLENUM WALL BASE AND SEAL BOTTOM. PROVIDE PLENUM WALLS AROUND LEVEL 01 FLOOR SLAB OPENING AND SEAL TO BOTTOM OF LEVEL 01 SLAB. PROVIDE PLENUM TOP BEYOND FLOOR OPENING.
- M16** 24x48, 2-INCH THICK DOUBLE-WALL ACCESS DOOR WITH CONTINUOUS HINGE, EDGE SEALS, AND DOOR HARDWARE FOR ACCESS TO OUTSIDE AIR PLENUM.
- M18** SPACE AVAILABLE FOR BAS TEMPERATURE CONTROL PANELS, (2) 24x36 PANELS.
- M19** H & HR PIPING UP THROUGH FLOOR.
- M20** REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER.
- M32** VARIABLE FREQUENCY DRIVES FOR MECHANICAL EQUIPMENT.
- M33** SEE PLUMBING DRAWINGS FOR 1-1/4-INCH BACKFLOW DEVICE. CONNECT TO HEATING WATER SYSTEM AS SHOWN ON PIPING DETAILS.
- M34** OUTSIDE AIR INTAKE WITH MOTORIZED ISOLATION DAMPER.
- M50** PIPING DIFFERENTIAL PRESSURE SENSOR.
- M62** FRESH WATER MECHANICAL FILL FEEDER.
- M64** DUCT SMOKE DETECTOR BY ELECTRICAL CONTRACTOR.
- M65** PROVIDE RECTANGULAR DUCT SOUND ATTENUATOR BY KINETICS OR EQUAL FOR 32,000-CFM, 84" WIDE BY 24" HIGH BY 36" LONG, MAX 0.25" PD, DYNAMIC INSERTION LOSS (Hz/dB): 63/4, 125/6, 250/11, 500/13, 1000/14, 2000/12, 4000/11, 8000/8.
- M66** PROVIDE ROUND DUCT SOUND ATTENUATOR BY KINETICS OR EQUAL FOR 2,800-CFM, 18"-ROUND BY 36" LONG, MAX 0.25" PD, DYNAMIC INSERTION LOSS (Hz/dB): 63/4, 125/6, 250/11, 500/13, 1000/14, 2000/12, 4000/11, 8000/8.

THE SEAL(S) AND SIGNATURE(S) APPLY ONLY TO THE DOCUMENT TO WHICH THEY ARE AFFIXED, AND EXPRESSLY DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT.

Webster
UNIVERSITY

Webster University
Interdisciplinary Science
Building

CANNONDESIGN

1100 Clark Avenue
St. Louis, Missouri 63102
T: 314.241.6250
F: 314.241.2570

William Tao & Associates, Inc.
MEP/FP Engineer
7955 Manchester Road, Suite 125
St. Louis, MO 63143
314-884-7600

David Mason & Associates, Inc.
Structural & Civil Engineer
800 South Vandeventer Avenue
St. Louis, MO 63110
314.534.1053

Faith Group
Technology
3101 S. Hanley Rd., Suite 100
St. Louis, MO 63143
314.591.2229

Kuhlmann Leavitt, Inc.
Environmental Graphics & Signage
7400 Pershing Ave.
St. Louis, MO 63130
314.725.6616

KWA Architects
Architecture
8721 Litzinger Road
St. Louis, MO 63124
314.962.2560

Spellman Brady & Company
Interior Designer
8251 Maryland Avenue, Suite 300
St. Louis, MO 63105
314.862.0070

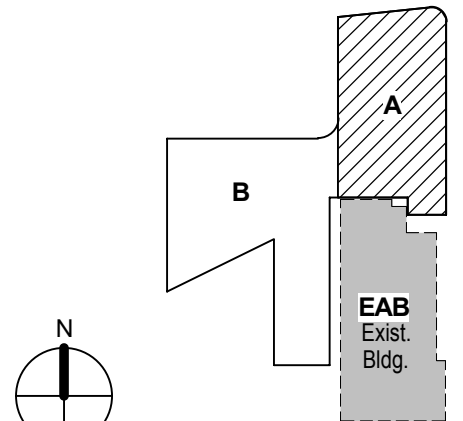
SWT Design
Landscape Architect
7722 Big Bend Blvd.
St. Louis, MO 63119
314.644.5700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.588.0600

CONFORMED SET

01 JUL 2016

No.	Description	Date
1	ADDENDUM 2-1	17 MAR 2016
2	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



KEY PLAN

**ENLARGED PLANS -
MECHANICAL**

Project No.: 04561.01

Checked by:

M0201

© Cannon Design 2015