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PROFESSIONAL SEAL

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COMM. # 4092

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
PUBLIC SAFETY,  
MISSOURI VETERANS  
COMMISSION

HVAC REPLACEMENT  
PROJECT

MISSOURI VETERANS  
HOME

620 N. JEFFERSON  
ST. JAMES, MO 65559

PROJECT # U1503-03  
FAI # 29-051  
SITE # 4700  
FACILITY # 55019

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 10-27-17

CAD DWG FILE: M-100.DWG  
DRAWN BY: JMO  
CHECKED BY: CKC  
DESIGNED BY: JMO

SHEET TITLE:  
**MECHANICAL  
DEMOLITION  
PLAN**

SHEET NUMBER:

**M-100**  
4 OF 41 SHEETS

10-27-17

Consulting Engineers  
3333 East Bethesda, Suite 1000  
Springfield, Missouri 65804  
Phone 417.881.0020  
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Michael J. Deard & Collins, Inc.

**NOTES:**

- 1 REMOVE EXISTING THERMOSTAT AND PREPARE WALL SURFACE FOR REPLACEMENT THERMOSTAT.
- 2 REMOVE ALL EXISTING FLUE PIPING UP THROUGH FLOOR AND ROOF. PATCH FLOOR AND ROOF PER ARCHITECT'S DIRECTION.
- 3 REMOVE EXISTING BOILER AND ALL ASSOCIATED FLUE PIPING, GAS PIPING, VALVES & HW PIPING, VALVES AND FITTINGS. ALL CONTROL WIRING AND ALL POWER NOT REUTILIZED IN THE COMPLETED PROJECT.
- 4 REMOVE EXISTING FURNACE AND ASSOCIATED CONDENSING UNIT, REFRIGERANT PIPING AND CONTROLS. REFER TO IMPROVEMENT PLANS FOR REPLACEMENT WORK.
- 5 EXISTING DOMESTIC WATER HEATER TO REMAIN.
- 6 UNDER ALTERNATE BID #1, REMOVE EXISTING DOMESTIC WATER HEATER AND ALL ASSOCIATED PIPING, FLUE, POWER AND CONTROLS NOT REUTILIZED IN THE COMPLETED PROJECT. REFER TO IMPROVEMENT PLANS FOR NEW DOMESTIC WATER HEATERS.
- 7 UNDER ALTERNATE BID #1, REMOVE EXISTING DOUBLE WALL FLUE UP THRU MAIN LEVEL AND REMOVE THE EXISTING FLUE CAP.
- 8 EXISTING FLUE FROM WATER HEATER TO REMAIN FOR CONNECTION TO NEW FLUE.
- 9 REMOVE EXISTING AIR HANDLING UNIT "AHU1" AND ALL ASSOCIATED SHEETMETAL WORK, PIPING, VALVING, POWER AND CONTROLS NOT REUTILIZED IN THE COMPLETED PROJECT. REFER TO IMPROVEMENT PLANS FOR NEW AIR HANDLING UNIT.
- 10 REMOVE EXISTING MAKE-UP AIR UNIT "MAU2" AND ALL ASSOCIATED SHEETMETAL WORK, PIPING, VALVING, POWER AND CONTROLS NOT REUTILIZED IN THE COMPLETED PROJECT. REFER TO IMPROVEMENT PLANS FOR NEW MAKE-UP AIR UNIT.
- 11 UNDER ALTERNATE BID #3, REMOVE EXISTING BASE MOUNTED HOT WATER PUMP AND ALL ASSOCIATED PIPING, VALVING, POWER AND CONTROLS NOT REUTILIZED IN THE COMPLETED PROJECT. EXISTING CONCRETE INERTIA PAD SHALL BE REUTILIZED FOR THE NEW REPLACEMENT PUMP. REMOVE EXISTING SIDEARM WATER FILTER AND ALL ASSOCIATED PIPING AND VALVING.
- 12 UNDER ALTERNATE BID #2, REMOVE EXISTING BASE MOUNTED CHILLED WATER PUMP AND ALL ASSOCIATED PIPING, VALVING, POWER AND CONTROLS NOT REUTILIZED IN THE COMPLETED PROJECT. EXISTING CONCRETE INERTIA PAD SHALL BE REUTILIZED FOR THE NEW REPLACEMENT PUMP. REMOVE EXISTING SIDEARM WATER FILTER AND ALL ASSOCIATED PIPING AND VALVING.
- 13 EXISTING THERMOSTAT TO REMAIN.
- 14 REMOVE EXISTING THERMOSTAT AND CONTROL WIRING SERVING "AHU1" AND PROVIDE STAINLESS STEEL COVER PLATE OVER JUNCTION BOX.
- 15 REMOVE EXISTING REHEAT COIL AND ALL DUCTWORK AND DIFFUSERS DOWNSTREAM AND CAP DUCT BACK AT MAIN AIR DUCT.
- 16 EXISTING ELECTRICAL PANELS TO REMAIN.
- 17 CONTRACTOR SHALL REMOVE CEILING TILE, GRID, LIGHTS AND ALL CEILING DEVICES AS REQUIRED FOR DEMOLITION AND NEW WORK IN THIS ROOM. RE-INSTALL ALL TILE, GRID, LIGHT FIXTURES AND CEILING DEVICES. ANY DAMAGED CEILING GRID SHALL BE REPLACED TO MATCH EXISTING.
- 18 UNDER ALTERNATE BID #2, REMOVE EXISTING BASE MOUNTED CONDENSER WATER PUMP AND ALL ASSOCIATED PIPING, VALVING, POWER AND CONTROLS NOT REUTILIZED IN THE COMPLETED PROJECT. EXISTING CONCRETE INERTIA PAD SHALL BE REUTILIZED FOR THE NEW REPLACEMENT PUMP. REMOVE EXISTING SIDEARM WATER FILTER AND ALL ASSOCIATED PIPING AND VALVING.
- 19 UNDER ALTERNATE BID #2, REMOVE EXISTING CHILLED WATER AIR SEPARATOR AND PIPING TO ACCOMMODATE NEW AIR/OILT SEPARATOR. REFER TO 1/8-112 FOR IMPROVEMENT WORK REQUIRED.

**GENERAL NOTES:**

1. ALL PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE 2015 EDITION OF THE INTERNATIONAL PLUMBING CODE.
2. ALL MECHANICAL WORK SHALL BE IN ACCORDANCE WITH THE 2015 EDITION OF THE INTERNATIONAL MECHANICAL CODE.
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONSTRUCTION PRIOR TO SUBMITTING HIS BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS.
4. CONTRACTOR SHALL SCHEDULE AND EXECUTE ALL WORK WITH REGARD TO THE OWNER'S USE OF THE BUILDING.
5. PLANS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
6. FOR ALL PLUMBING OR HVAC QUESTIONS DURING BIDDING OR DURING CONSTRUCTION, CONTACT SCOTT WANDEREN. (417-881-0020)

**GENERAL DEMOLITION NOTES:**

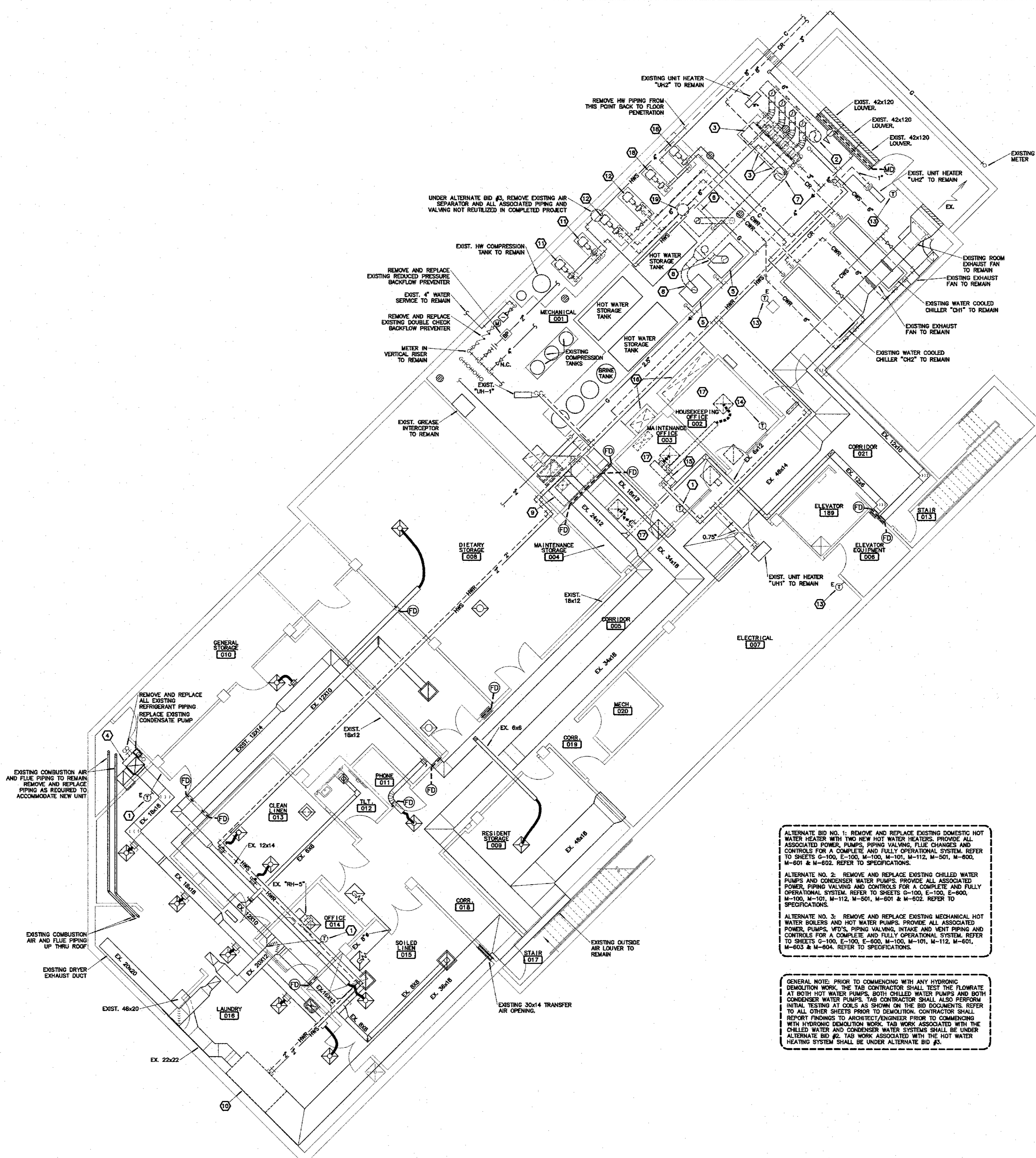
1. THIS DRAWING IS A REPRODUCTION OF EXISTING RECORD DRAWINGS. CONTENTS OF THIS DRAWING MAY OR MAY NOT SHOW THE ACTUAL EQUIPMENT, DUCTS, PIPING, ETC. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.

ALTERNATE BID NO. 1: REMOVE AND REPLACE EXISTING DOMESTIC HOT WATER HEATER WITH TWO NEW HOT WATER HEATERS. PROVIDE ALL ASSOCIATED POWER, PUMPS, PIPING VALVING, FLUE CHANGES AND CONTROLS FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM. REFER TO SHEETS C-100, E-100, M-100, M-101, M-112, M-501, M-600, M-601 & M-602. REFER TO SPECIFICATIONS.

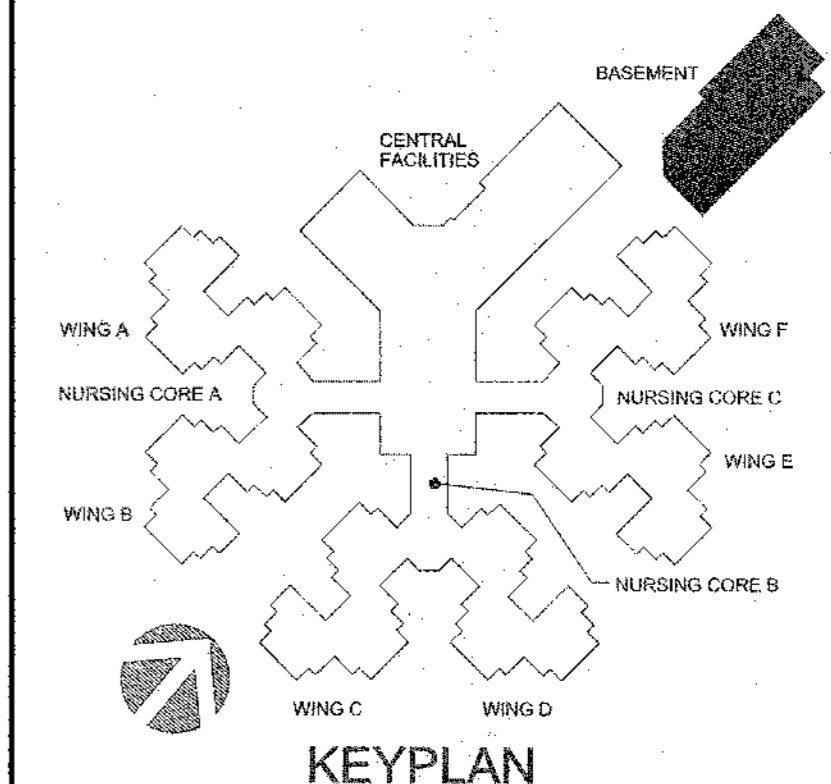
ALTERNATE BID NO. 2: REMOVE AND REPLACE EXISTING CHILLED WATER PUMPS AND CONDENSER WATER PUMPS. PROVIDE ALL ASSOCIATED POWER, PIPING VALVING AND CONTROLS FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM. REFER TO SHEETS C-100, E-100, E-600, M-100, M-101, M-112, M-501, M-601 & M-602. REFER TO SPECIFICATIONS.

ALTERNATE BID NO. 3: REMOVE AND REPLACE EXISTING MECHANICAL HOT WATER BOILERS AND HOT WATER PUMPS. PROVIDE ALL ASSOCIATED POWER, PUMPS, PIPING VALVING, INTAKE AND VENT PIPING AND CONTROLS FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM. REFER TO SHEETS C-100, E-100, E-600, M-100, M-101, M-112, M-601, M-602 & M-604. REFER TO SPECIFICATIONS.

GENERAL NOTE: PRIOR TO COMMENCING WITH ANY HYDRONIC DEMOLITION WORK, THE TAB CONTRACTOR SHALL TEST THE FLOWRATE AT BOTH HOT WATER PUMPS, BOTH CHILLED WATER PUMPS AND BOTH CONDENSER WATER PUMPS. TAB CONTRACTOR SHALL ALSO PERFORM INITIAL TESTING AT COILS AS SHOWN ON THE BID DOCUMENTS. REFER TO ALL OTHER SHEETS PRIOR TO DEMOLITION. CONTRACTOR SHALL REPORT FINDINGS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WITH HYDRONIC DEMOLITION WORK. TAB WORK ASSOCIATED WITH THE CHILLED WATER AND CONDENSER WATER SYSTEMS SHALL BE UNDER ALTERNATE BID #2. TAB WORK ASSOCIATED WITH THE HOT WATER HEATING SYSTEM SHALL BE UNDER ALTERNATE BID #3.



**BASEMENT LEVEL  
MECHANICAL DEMOLITION PLAN**  
SCALE: 1/8"=1'-0"  
NORTH



P:\BAS\SP\100\SP\M-100 23 Oct 2017 10:32:48 am