
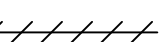




MECHANICAL SYMBOL LIST









GENERAL

- Connect new work to existing 
 Demolition of work 
 Thermostat/Temperature Sensor 
 Humidistat/Humidity Sensor 

PIPING

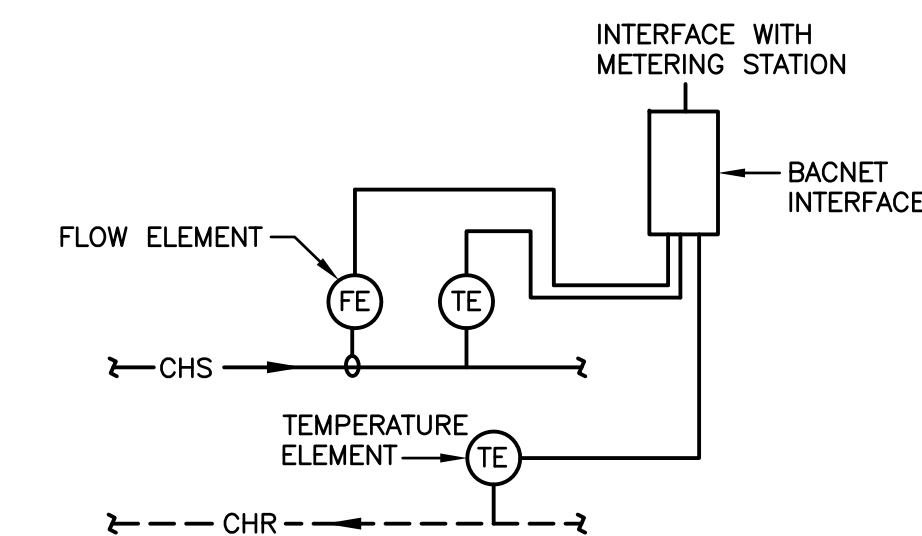
- Existing Chilled Water Return --- ECHR ---
 Existing Chilled Water Supply --- ECHS ---
 Existing Hot Water Return --- EHWR ---
 Existing Hot Water Supply --- EHWS ---
 Chilled Water Return --- CHR ---
 Chilled Water Supply --- CHS ---
 Hot Water Return --- HWR ---
 Hot Water Supply --- HWS ---

VALVES AND PIPING ACCESSORIES

- Direction of fluid flow 
 Drain Valve  DV
 Pipe down 
 Pipe up 
 Pipe takeoff from bottom 
 Pipe Anchor Point 
 Pipe Guide 
 Union 

GENERAL ABBREVIATIONS

- Above Finished Floor --- AFF ---
 Ceiling --- CLG ---
 Diameter --- DIA ---
 Down --- DN ---
 Drawing --- DWG ---
 Existing --- EXIST ---
 Maximum --- MAX ---
 Minimum --- MIN ---
 Typical --- TYP ---

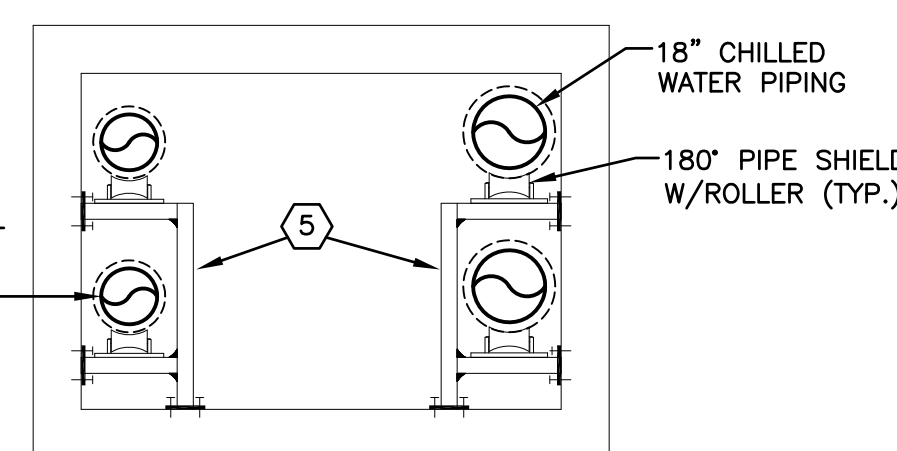


NOTE:

1. MAINTAIN UPSTREAM AND DOWN STREAM DISTANCES RECOMMENDED BY METER MANUFACTURER

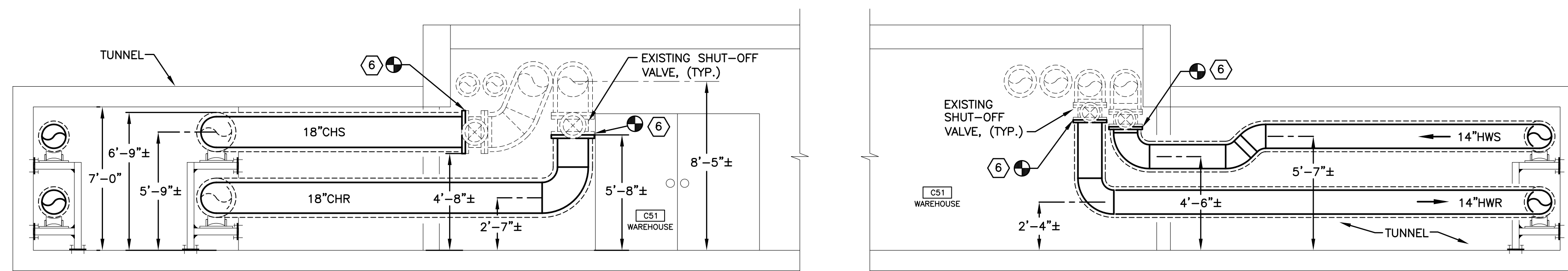
WATERFLOW MEASURING STATION

NO SCALE



SECTION A-A

SCALE: 1/4" = 1'-0"



SECTION B-B

SCALE: 1/4" = 1'-0"

SECTION C-C

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- ALL MECHANICAL WORK UNDER "M" DRAWINGS SHALL BE COMPLETE WORKING SYSTEMS, WHETHER SHOWN OR NOT IN THEIR ENTIRETY.
- WHEN PIPING SYSTEMS ARE COMPLETE, CONTRACTOR SHALL BE RESPONSIBLE FOR ENTIRE COMMISSIONING OF CHILLED WATER AND HOT WATER SYSTEMS FROM CONNECTIONS AT EXISTING CHILLER BUILDING TO CONNECTION POINTS IN WAREHOUSE OF EXISTING HOSPITAL, PER THE COMMISSIONING SPECIFICATIONS.
- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND CONNECTION POINTS PRIOR TO ANY DEMOLITION AND IN COORDINATION WITH FACILITY PERSONNEL.
- INSTALL ALL EXPANSION JOINT EQUIPMENT INCLUDING EXPANSION DEVICE, PIPE GUIDES, PIPE ANCHORS, AND SPACING REQUIREMENTS, PER MANUFACTURER'S RECOMMENDATIONS. EXPANSION JOINTS TO BE METAFLEX INC. MODEL "METRAGATOR", OR EQUAL. SEE SPECIFICATIONS. COORDINATE WITH STRUCTURAL DRAWINGS.

PARTIAL SITE PLAN

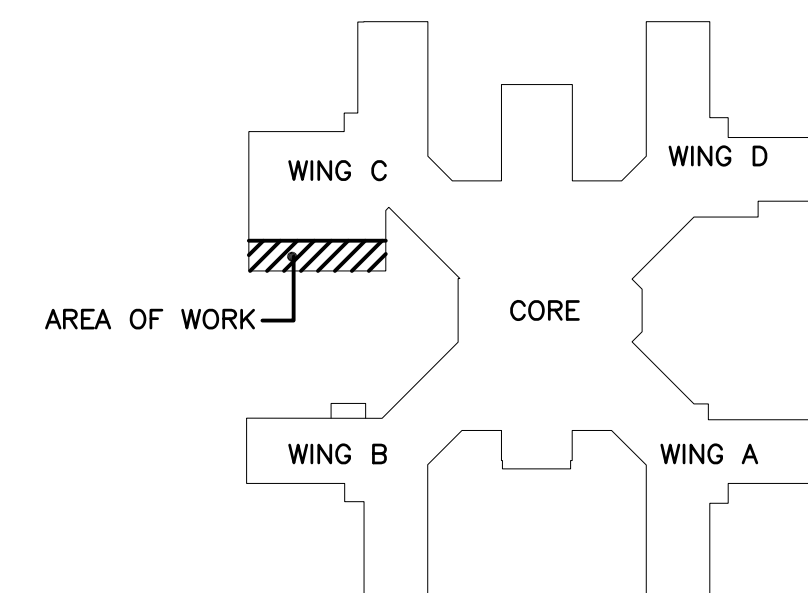
SCALE: 1/8" = 1'-0"

KEYED NOTES:

- MAINTAIN ADEQUATE ACCESS AT THIS LOCATION FOR ENTRY BETWEEN PIPING RACKS FOR A PALLET JACK AND PALLET FOR MAINTENANCE OF PIPING TUNNEL, MINIMUM OF 48". COORDINATE WITH FACILITY PERSONNEL. SEE SECTION A-A.
- EXISTING PIPING TO REMAIN AS IS.
- EXISTING CHILLED WATER AND HOT WATER PIPING.
- NEW PIPING TUNNEL, SEE STRUCTURAL DRAWINGS.
- SEE STRUCTURAL DRAWINGS FOR PIPE SUPPORT INFORMATION.
- CONNECT NEW PIPING AT LOCATION INDICATED, COORDINATE WITH FACILITY PERSONNEL.
- DISCONNECT & REMOVE EXISTING RADIATOR. CUT BACK PIPING TO BELOW FLOOR AND CAP. PATCH FLOOR TO MATCH ADJACENT SURFACES. SEE ARCHITECTURAL DRAWINGS FOR ASBESTOS REMOVAL.
- SEE SECTIONS B-B AND C-C FOR WORK IN THE AREA.
- PROVIDE GAS DETECTION MONITORING AND CONTROL UNIT AS SHOWN. COORDINATE LOCATION OF UNIT WITH FACILITY PERSONNEL. THE UNIT INTO TRANE TRACE CONTROL SYSTEM AS REQUIRED FOR FACILITY WIDE MONITORING AND ALARM INDICATION. UNIT TO BE HONEYWELL ANALYTICS, MODEL NO. VA301C; OR EQUAL.
- PROVIDE REMOTE OXYGEN AND CARBON MONOXIDE GAS SENSORS AS SHOWN. MOUNT EACH TYPE SENSOR ON PIPE STANCHIONS ENDS, (NOT SHOWN), FOR ACCESSIBILITY. SENSORS TO BE HONEYWELL ANALYTICS MODEL NO. E3SM POINT; OR EQUAL. PROVIDE (3) OF EACH TYPE SENSOR FOR INSTALLATION IN PHASE 2 AREA. SPACE ALL SENSORS A MAXIMUM OF 100' (50'-0" RADIUS) APART. PROVIDE PROTECTIVE GUARD OVER EACH SENSOR. INSTALL SENSORS PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE COMBINATION TEMPERATURE/HUMIDITY SENSOR AS SHOWN. MOUNT SENSOR ON PIPE STANCHIONS END (NOT SHOWN), FOR ACCESSIBILITY. SENSOR IS TO CONTROL EXHAUST FAN INSTALLED IN PHASE 2.
- PROVIDE HIGH ACCURACY FLOW METER FOR CHILLED WATER LINE. EXACT LOCATION TO BE DETERMINED IN FIELD. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. THE METER INTO TEMPERATURE CONTROL SYSTEM FOR MONITORING, ETC. SEE WATER FLOW MEASURING STATION DETAIL.
- EXISTING HOT WATER PIPING TO BE DISCONNECTED AND RELOCATED, TO MAKE ROOM FOR NEW PIPING CONNECTIONS. WORK TO BE PERFORMED BY FACILITY PERSONNEL AND ONLY SHOWN FOR DRAWING CLARITY.
- NEW TAPS TO BE CONNECTED TO EXISTING HOT WATER PIPING MAINS, AND EXTENDED TO EXISTING PIPING, AS SHOWN. PIPING TO BE RECONNECTED AT LOCATIONS INDICATED. WORK TO BE PERFORMED BY FACILITY PERSONNEL AND ONLY SHOWN FOR DRAWING CLARITY.

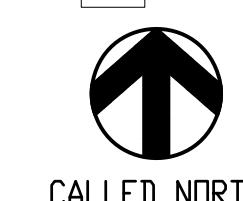
SEQUENCE OF OPERATIONS:

- EXHAUST FAN (EF1), (INSTALLED IN PHASE 2)
 UPON A RISE IN TEMPERATURE AND/OR HUMIDITY ABOVE SETPOINTS, AS SENSED BY COMBINATION THERMOSTAT/HUMIDISTAT, EXHAUST FAN SHALL TURN ON. UPON A LOWERING OF TEMPERATURE AND/OR HUMIDITY BELOW SETPOINTS, AS SENSED BY COMBINATION THERMOSTAT/HUMIDISTAT, EXHAUST FAN SHALL TURN ON.
- EMERGENCY VALVES AND PUMP SHUTOFF SEQUENCE
 UPON A SUDDEN LOSS OF WATER PRESSURE, (DUE TO CATASTROPHIC PIPE FAILURE, ETC.), AS SENSED BY PRESSURE SENSORS, ISOLATION VALVES SHALL AUTOMATICALLY SHUT AND SECONDARY CHILLED WATER PUMPS AT CHILLER PLANT SHALL TURN OFF.



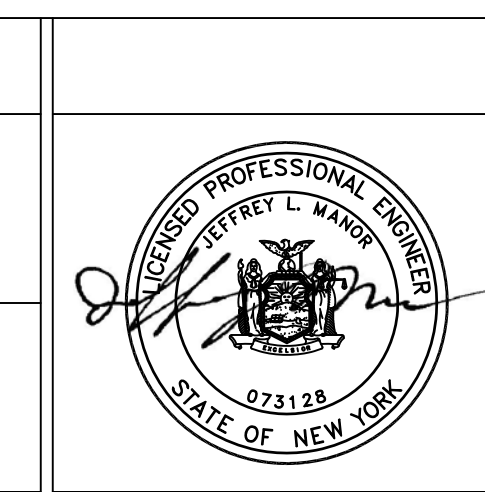
KEY PLAN

NO SCALE



UNREVIEWED FINAL DESIGN (100%)
 NOT FOR CONSTRUCTION

FFA #7574

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| <p>Revisions</p> | <p>CONSULTANTS:</p> <p>Quality Service Since 1944 FRIEDMAN FISHER ASSOCIATES, P.C. CONSULTING ENGINEERS 22 AVENUE ROAD, ALBANY, NEW YORK 12206 TEL (518) 458-7040 FAX (518) 458-7043 info@friedmanfisher.com</p> <p>EBERLIN AND EBERLIN, P.C. 31 SODOM ROAD, BREWSTER, NEW YORK 13509 CONSULTING ENGINEERS, PLANNERS, LANDSCAPE ARCHITECTS 845.562.0359 PHONE 845.279.2062 FAX</p> | <p>RYAN-BIGGS ASSOCIATES, P.C. 257 UPHERS ROAD, 218 408.5506 CLIFTON PARK, NY 12828 408.5514 www.ryanbiggs.com</p> |  | <p>ARCHITECT/ENGINEERS:</p> <p>Hyman Hayes ASSOCIATES 6 WEMBLEY COURT, ALBANY, NEW YORK 12205 (518) 452-3470 (518) 452-3763 fax HHA Proj 12072</p> | <p>Drawing Title MECHANICAL: PARTIAL SITE PLAN, SECTIONS, AND SYMBOL LIST</p> <p>Approved Project Director</p> | <p>Project Title REPAIR HOT WATER LINES PHASE III Stratton VA Medical Center</p> <p>Location Albany, New York</p> <p>Date MARCH 20, 2013</p> <p>Checked BJF</p> <p>Drawn PBL</p> | <p>Project Number VA 528A8-10-814</p> <p>Building Number -</p> <p>Drawing Number M1.1 Dwg. 16 of 18</p> | <p>Office of Construction and Facilities Management</p> <p>Department of Veterans Affairs</p> |
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