

VA



U.S. Department
of Veterans Affairs

INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES

Department of Veterans Affairs Ambulatory Care Center
420 NORTH JAMES ROAD, COLUMBUS, OH 43219-1834

COLLABORATIVE DESIGN

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PROJECT SITE

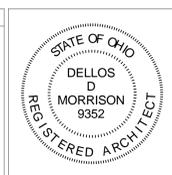
LOCATION MAP



Revisions	Date
95% REVIEW SUBMITTAL	07/21/2015
CONSTRUCTION DOCUMENT SUBMITTAL	10/30/2015

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CDL Project No. 15014

Drawing Title

COVER SHEET

Approved: Project Director

Project Title

**INSTALL WATER MONITORING
SYSTEM AND CORRECT
DEFICIENCIES**

Location **COLUMBUS, OH**

Date **10/30/15** Checked **DM** Drawn **MB**

VA Project No. **757-17-205**

Building Number **1A**

Drawing Number **1A-G-000**

Dwg. of



PLUMBING ABBREVIATIONS

A/E	ARCHITECT/ ENGINEER
AFF	ABOVE FINISH FLOOR
AG	AIR GAP
AP	ACCESS PANEL
ASR/HA/E	AMERICAN SOCIETY REFRIGERATION, HEATING, AIR CONDITIONING ENGINEERS
ASME	AMERICAN SOCIETY MECHANICAL ENGINEERS
ASPE	AMERICAN SOCIETY PLUMBING ENGINEERS
BSP	BLACK STEEL PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT (PER) HOUR
C	CELSIUS
CGA	COMPRESSED GAS ASSOCIATION
CI	CAST IRON
CS	CLINICAL SINK
CV	CONTROL VALVE
DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHW/R	DOMESTIC HOT WATER RETURN
DOE	DEPARTMENT OF ENERGY
DWG	DRAWING
DWV	DRAIN, WASTE, VENT
EL	ELEVATION
EPA	ENVIRONMENTAL PROTECTION AGENCY
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
EX	EXISTING
F	FAHRENHEIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FM	FLOW METER
FP	FIRE PROTECTION
FS	FLOW SWITCH
FU	FIXTURE UNIT
GAL	GALLON
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HD	HUB DRAIN
HP	HORSEPOWER
HS	HAND SINK
HYD	HYDRANT
INV	INVERT
IPC	INTERNATIONAL PLUMBING CODE
KW	KILOWATT
KWHR	KILOWATT-HOUR
LAV	LAVATORY
LBS/HR	POUNDS PER HOUR
M	METER
MAV	MANUAL AIR VENT
MBH	1000 BTU
MER	MECHANICAL EQUIPMENT ROOM
MH	MANHOLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NOM.	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPC	OHIO PLUMBING CODE
PDI	PLUMBING AND DRAINAGE INSTITUTE
PG	PRESSURE GAUGE
PPM	PARTS PER MILLION
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ATMOSPHERE
PSIG	POUNDS PER SQUARE INCH GAUGE
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
SAN	SANITARY
SMA/CNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SP	SUMP PUMP
SF	SQUARE FEET
SS	STAINLESS STEEL
TCV	TEMPERATURE CONTROL VALVE
TD	TRENCH DRAIN
TEMP	TEMPERATURE
TMV	THERMAL MIXING VALVE
TP	TRAP PRIMER
TYP	TYPICAL
UPC	UNIFORM PLUMBING CODE
V	VENT
VS	VENT STACK
VTR	VENT THROUGH ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WG	WATER GAUGE
WHA	WATER HAMMER ARRESTER
WM	WATER METER
WS	WASTE STACK

PLUMBING VALVE SYMBOLS

	VALVE (PER SPECIFICATIONS)
	GLOBE VALVE
	VALVE WITH 3/4" HOSE ADAPTER
	CHECK VALVE
	ANGLE GLOBE VALVE
	BUTTERFLY VALVE
	BALL VALVE (PER SPECIFICATIONS)
	MODULATING CONTROL VALVE
	TWO POSITION CONTROL VALVE
	THREE-WAY MODULATING CONTROL VALVE
	THREE-WAY TWO POSITION CONTROL VALVE
	PRESSURE REGULATING VALVE
	AUTOMATIC FLOW CONTROL VALVE
	PRESSURE RELIEF VALVE
	MANUAL AIR VENT
	TEST PLUG (PRESSURE/TEMPERATURE)
	AUTOMATIC AIR VENT
	TRAP PRIMER VALVE/ DISTRIBUTION BOX
	BALANCING VALVE

GENERAL PLUMBING SYMBOLS

	DIRECTION OF PIPE PITCH (DOWN)
	DIRECTION OF FLOW
	ANCHOR
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	TOP CONNECTION, 45° OR 90°
	BOTTOM CONNECTION, 45° OR 90°
	SIDE CONNECTION
	CAPPED OUTLET
	RISE OR DROP IN PIPE
	UNION
	PIPE UP
	PIPE DOWN
	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
	LIMIT OF DEMOLITION
	STRAINER
	THERMOMETER W/WELL
	PRESSURE GAGE
	FLOW ELEMENT
	CLEAN OUT (FLOOR/ WALL)
	HOSE BIB
	FLOOR DRAIN
	ROOF DRAIN
	PLAN NOTE
	TEMPERATURE SENSOR W/WELL

DRAWING SYMBOLS

	DETAIL NUMBER
	DRAWING SHEET NUMBER WHERE DRAWN
	SECTION LETTER
	DRAWING SHEET NUMBER WHERE SHOWN
	BUILDING NO. WHERE EQUIPMENT IS LOCATED.
	EQUIPMENT ABBREVIATION (PUMP)
	PUMP NO.3 IN BUILDING NO.26
	TYPICAL UNIT NO.
	NUMBER PAIRS OF CABLING, CONDUIT SIZE.
	TYPICAL SENSOR WIRING RACEWAY
	WORK DELETED BY ALTERNATE
	INDICATES ALTERNATE NUMBER

LINE TYPES

	WATER LINE REMOVED
	DOMESTIC COLD WATER, COLD WATER
	DOMESTIC HOT WATER, HOT WATER
	DOMESTIC HOT WATER RETURN, HOT WATER RETURN
	HIGH PRESSURE COLD WATER
	HIGH PRESSURE HOT WATER
	HIGH PRESSURE HOT WATER RETURN
	REMOTE SENSOR CABLING (18-2 TWISTED PAIR) AND CONDUIT. PROVIDE JUNCTION BOXES (NOT SHOWN) AS REQUIRED BY NFPA 70-2014
	DATA CABLING IN CONDUIT

CONSTRUCTION PHASING GENERAL NOTES (TYPICAL ALL SHEETS):

- THE FACILITY SHALL REMAIN IN FULL OPERATION DURING NORMAL BUSINESS HOURS AND WILL NOT HAVE ANY OUTAGES OR DISRUPTIONS THAT WILL REDUCE, OR PREVENT, THE USE OF THE FACILITY FOR EMPLOYEES AND PATIENTS - IN PART OR WHOLE.
- NIGHT AND WEEKEND WORK SHALL BE THE STANDARD CONSTRUCTION WORKING TIMES FOR DEMOLITIONS AND INSTALLATIONS THAT IMPACT UTILITIES AND AREAS SERVING PATIENTS.
- SOME INSTALLATIONS MAY OCCUR DURING WEEK DAY TIMES DEPENDING ON LOCATION AND HAVING NO IMPACT TO THE FACILITY SERVING PATIENTS.
- COORDINATION WITH THE COR FOR TIMES, LOCATIONS, OUTAGES, AND OTHER CONSTRUCTION SCHEDULING SHALL TAKE PLACE 14 DAYS MINIMUM BEFORE ACTUAL WORK TAKES PLACE.

CONSULTANTS:

M. W. E. MONKS & CO.
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ARCHITECT/ENGINEERS:



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Drawing Title: ABBREVIATIONS/SYMBOLS, ETC.

Approved: Project Director

Project Title: FULLY SPRINKLERED
INSTALL WATER MONITORING
SYSTEM AND CORRECT
DEFICIENCIES

Location: 420 North James Rd. Columbus, Ohio 43219

Date: 10-30-2015
Checked: TWM
Drawn: JRC

Project Number: 757-17-205
Building Number: 1A

Drawing Number: 1A-PL-001

Dwg. 2 of 15



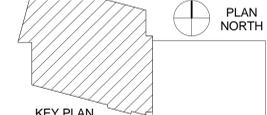
one eighth inch = one foot
 one quarter inch = one foot
 one half inch = one foot
 three quarters inch = one foot
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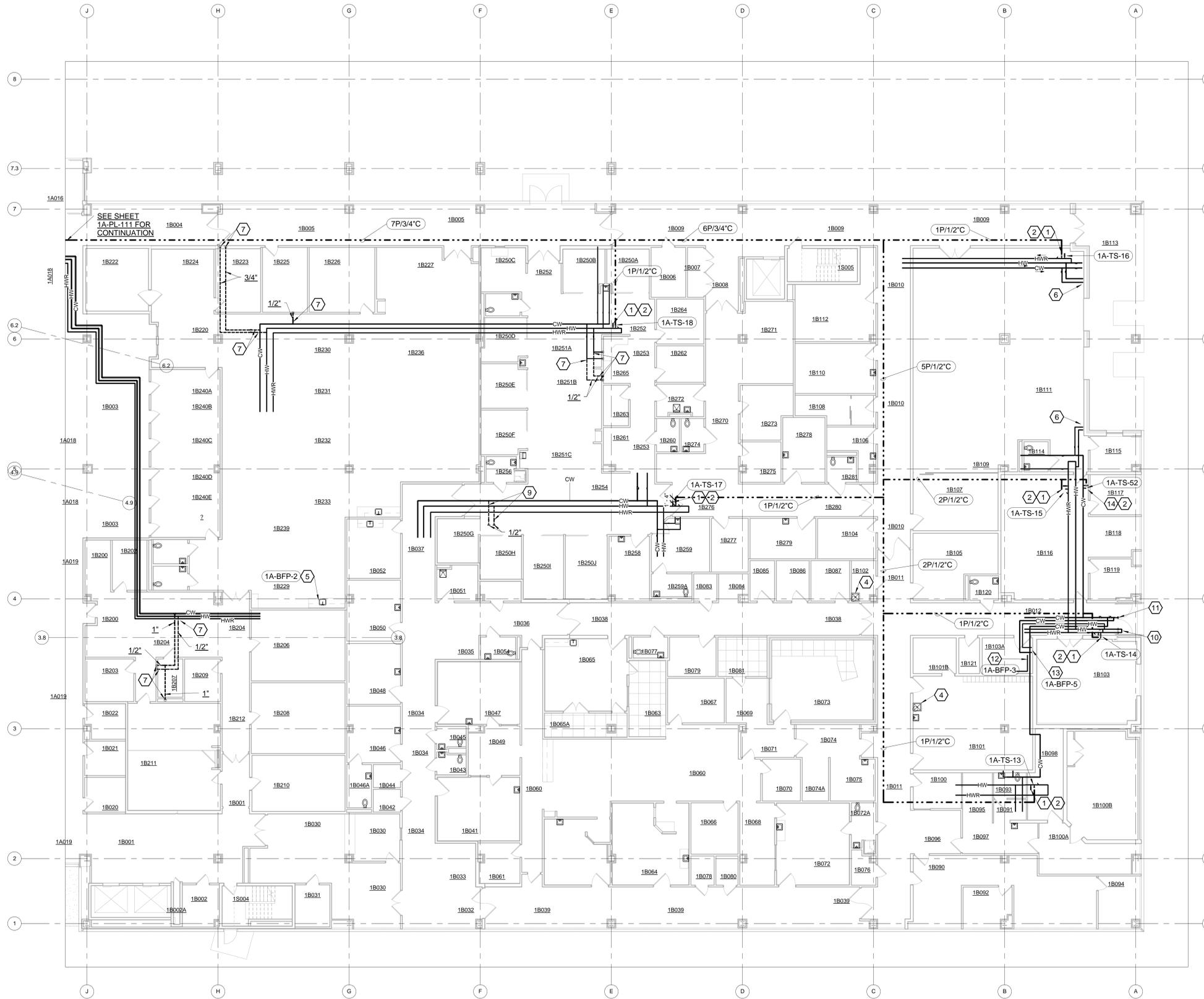
- GENERAL NOTES:**
- COORDINATE STAGING AREAS WITH THE COR.
 - PROVIDE BRANCH ISOLATION VALVE ON PIPING THAT IS LACKING BRANCH VALVE DURING MAJOR OUTAGES OF MULTIPLE BRANCHES.
 - TYPICAL HOT WATER TEMPERATURE SENSOR AND TEMPERATURE GAUGE INSTALLATION LOCATION SHALL BE UPSTREAM OF (BEFORE) DHWR BALANCE VALVE AND DOWNSTREAM OF (AFTER) DHW ISOLATION VALVE - TO ALLOW SHUT-DOWN OF LEAST AMOUNT OF PIPING SYSTEM POSSIBLE.
 - COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION #01 35 26.
 - PIPE SIZING IS FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT PIPING SIZING AND CONFIGURATIONS, AND WILL NOTIFY THE COR OF ANY DISCREPANCIES BEFORE CONTINUING WITH THE WORK.
 - CONDUIT ROUTING IS APPROXIMATE AND MUST BE COORDINATED WITH EXISTING CONDITIONS. MAKE ADJUSTMENTS TO LOCATIONS AS REQUIRED FOR PROPER ACCESS TO NEW JUNCTION BOXES AND TO ANY EXISTING ITEMS REQUIRING ACCESS.
 - CONTRACTOR SHALL REMOVE EXISTING LAY-IN CEILING TILES WHERE REQUIRED TO GAIN ACCESS FOR DEMOLITION AND NEW WORK. PROTECT TILES AND RE-INSTALL AT END OF WORK DAY. REPLACE ANY TILES DAMAGED DURING CONSTRUCTION.

- PLAN NOTES:**
- INSTALL NEW WATER QUALITY MONITORING SYSTEM ASSEMBLY ON FLOOR STAND. MAKE ALL FINAL CONNECTIONS PER MANUFACTURER'S WRITTEN INSTRUCTIONS. COORDINATE EXACT LOCATION WITH COR. SEE DETAILS 'E' & 'F' ON SHEET 1A-PL-502.
 - PROVIDE 1/2" TEE BRANCH CONNECTION ON EXISTING 6" DOMESTIC COLD WATER RISER AFTER THE EXISTING RPPB. EXTEND DCW PIPING TO WATER QUALITY MONITORING ASSEMBLY AND MAKE FINAL CONNECTION. INCLUDE ISOLATION BALL VALVE, UNION, BACKFLOW PREVENTOR (ASSE 1012), WATER HAMMER ARRESTOR, AND WATER PARTICLE FILTER ASSEMBLY. SEE DETAILS 'E' & 'F' ON SHEET 1A-PL-502.
 - INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HWR PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 2-GPM FOR THIS LOOP.
 - EXTEND LOW-VOLTAGE WIRING IN CONDUIT FROM REMOTE TEMPERATURE SENSOR TO WATER QUALITY MONITORING SYSTEM IN ROOM 1A350 PER MANUFACTURER'S WRITTEN INSTRUCTIONS. MAKE ALL FINAL CONNECTIONS.
 - EXISTING 6" RPPB TO REMAIN.
 - REPLACE THE EXISTING DOMESTIC HOT WATER RETURN PUMP WITH NEW PUMP. MAKE ALL FINAL CONNECTIONS. REBALANCE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM TO MAINTAIN ADEQUATE FLOW RATES TO MAINTAIN 2-GPM FLOW FOR EACH LOOP. SET PUMP OPERATION TO ACCOMMODATE THE TOTAL SYSTEM FLOW RATE OF 24 GPM MINIMUM - ADJUST AS NECESSARY. SEE DETAIL 'D' ON SHEET 1A-PL-502.
 - INSTALL A NEW REDUNDANT SECONDARY DOMESTIC HOT WATER RETURN PUMP TO SUPPLEMENT THE PRIMARY PUMP. COORDINATE EXACT LOCATION WITH THE COR. MAKE ALL FINAL CONNECTIONS. NEW CONTROLS SHALL RUN BOTH PUMPS ON A LEAD/LAG ALTERNATING METHOD. EACH PUMP SHALL OPERATE TO ACCOMMODATE THE TOTAL FLOW RATE OF 24 GPM MINIMUM - ADJUST AS NECESSARY. ONLY ONE PUMP WILL RUN AT A TIME - BOTH PUMPS SHALL NOT RUN SIMULTANEOUSLY. SHOULD ONE PUMP FAIL, THEN THE OTHER WILL OPERATE TO MAINTAIN THE SYSTEM AND AN ALARM SIGNAL SHALL BE SENT TO THE WATER QUALITY MONITORING SYSTEM. SEE DETAIL 'C' ON SHEET 1A-PL-502.
 - PROVIDE REMOTE TEMPERATURE SENSOR AT THE FOLLOWING LOCATIONS: WATER HEATING SOURCE OUTLET PIPING, MAIN THERMAL MIXING VALVE OUTLET (SERVING FACILITY), AND ON 120 DEGREE F. DHWR PIPING FROM FACILITY JUST BEFORE CIRCULATING PUMP. IN A TWO-PUMP SYSTEM, PLACE THE REMOTE TEMPERATURE SENSOR BEFORE THE TEE FITTING SERVING BOTH PUMPS. PROVIDE TEMPERATURE GAUGE NEXT TO EACH SENSOR.
 - PROVIDE 3/4" NON-SLAM SPRING-LOADED CHECK VALVES IN EACH OF THE DCW AND DHW PIPING LINES SERVING THE JANITOR SINK AFTER THE ISOLATION VALVES - TO PREVENT CROSSOVER OF THE HOT WATER AND THE COLD WATER. SEE DETAIL 'A' ON SHEET 1A-PL-502.
 - PROVIDE ASSE 1035 DEVICE ON SPRAYER PIPING AFTER FAUCET.
 - PROVIDE ASSE 1022 ON PIPING SERVING POP DISPENSERS AND COFFEE MAKER - TOTAL OF (3).
 - REMOVE EXISTING DCW DEAD END PIPE EXTENSION. REPLACE WITH NEW FITTINGS AS SHOWN IN DETAIL 'G' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'B' ON SHEET 1A-PL-504.
 - INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HW PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 2-GPM FOR THIS LOOP.
 - PROVIDE 15A, 120V CIRCUIT FROM PANEL C1N3, CIRCUIT #30, IN ROOM 1A015 FOR REDUNDANT DHWR CIRCULATION PUMP. PROVIDE 15A, 120V TOGGLE TYPE DISCONNECT AT PUMP TO MATCH EXISTING. MAKE ALL FINAL ELECTRICAL CONNECTIONS PER THE SPECIFICATIONS AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - MODIFY WATER METER ASSEMBLY BYPASS PIPING TO REMEDIATE DEAD END. SEE DETAIL 'E' ON SHEET A-PL-503.
 - REMOVE EXISTING DEAD END PIPING. SEE DETAIL 'D' ON SHEET 1A-PL-504 FOR NEW PIPING WORK. REMOVE ALL EXPOSED PIPING.
 - PROVIDE ASSE 1071 MIXING VALVE AND SHORTER HOSE (5'-0") ON EXISTING EMERGENCY EYE WASH STATION. MATCH EXISTING HOSE TYPE.
 - PROVIDE REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE WITH WELL IN COLD WATER PIPING. SEE DETAIL 'F' ON SHEET 1A-PL-503.
 - PROVIDE CAT6 CABLE IN 3/4" CONDUIT FROM NEW WATER QUALITY MONITORING ASSEMBLY TO EXISTING SPARE PORT IN PATCH PANEL IN ROOM 1A014. PROVIDE CAT6 PATCH CABLE FROM PATCH PANEL TO SPARE PORT IN NETWORK SWITCH. VA TO SET-UP VLAN FOR INTERNET ACCESS. COORDINATE WALL WORK IN ROOM 1A014 WITH COR AND VA O&T. SEE DETAIL 'E' ON SHEET 1A-PL-502 FOR FURTHER REQUIREMENTS.

FIRST FLOOR PLUMBING PLAN - WEST
 3/32" = 1'-0"
 NORTH



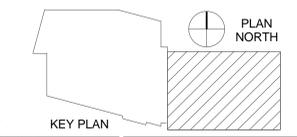
CONSULTANTS: W.E. MONKS & CO. ENGINEERS 3073 NORTH HIGH STREET COLUMBUS, OHIO 43202-1180 Phone: 614-267-4928 www.wemonks.com Fax: 614-267-5617		ARCHITECT/ENGINEERS: Collaborative Design, Ltd. 2727 Tuller Parkway, Suite 200 Dublin, Ohio 43017 Tel 614.798.1515		Drawing Title FIRST FLOOR PLUMBING PLAN - WEST		Project Title INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES		Project Number 757-17-205	
Approved: Project Director		Location 420 North James Rd. Columbus, Ohio 43219		Building Number 1A		Drawing Number 1A-PL-111		Date 10-30-2015	
Revisions:		Date		Checked TWM		Drawn JRC		Dwg. of 15	



- GENERAL NOTES:**
- COORDINATE STAGING AREAS WITH THE COR.
 - PROVIDE BRANCH ISOLATION VALVE ON PIPING THAT IS LACKING BRANCH VALVE DURING MAJOR OUTAGES OF MULTIPLE BRANCHES.
 - TYPICAL HOT WATER TEMPERATURE SENSOR AND TEMPERATURE GAUGE INSTALLATION LOCATION SHALL BE UPSTREAM OF (BEFORE) DHWR BALANCE VALVE AND DOWNSTREAM OF (AFTER) DHW ISOLATION VALVE - TO ALLOW SHUT-DOWN OF LEAST AMOUNT OF PIPING SYSTEM POSSIBLE.
 - COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION # 01 35 26.
 - PIPE SIZING IS FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT PIPING SIZING AND CONFIGURATIONS, AND WILL NOTIFY THE COR OF ANY DISCREPANCIES BEFORE CONTINUING WITH THE WORK.
 - CONDUIT ROUTING IS APPROXIMATE AND MUST BE COORDINATED WITH EXISTING CONDITIONS. MAKE ADJUSTMENTS TO LOCATIONS AS REQUIRED FOR PROPER ACCESS TO NEW JUNCTION BOXES AND TO ANY EXISTING ITEMS REQUIRING ACCESS.
 - CONTRACTOR SHALL REMOVE EXISTING LAY-IN CEILING TILES WHERE REQUIRED TO GAIN ACCESS FOR DEMOLITION AND NEW WORK. PROTECT TILES AND RE-INSTALL AT END OF WORK DAY. REPLACE ANY TILES DAMAGED DURING CONSTRUCTION.
 - WORKERS SHALL BE SCREENED BEFORE ACCESSING ROOM 1B798 AND THE MRI AREA. COORDINATE WITH THE COR.
 - WORKERS SHALL COORDINATE WITH THE COR FOR ACCESSING THE PHARMACY AREA.

- PLAN NOTES:**
- INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HWR PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 2-GPM FOR THIS LOOP.
 - EXTEND LOW-VOLTAGE WIRING IN CONDUIT FROM REMOTE TEMPERATURE SENSOR TO WATER QUALITY MONITORING SYSTEM IN ROOM 1A350 PER MANUFACTURER'S WRITTEN INSTRUCTIONS. MAKE ALL FINAL CONNECTIONS.
 - NOT USED.
 - PROVIDE 3/4" NON-SLAM SPRING-LOADED CHECK VALVES IN EACH OF THE CW AND DHW PIPING LINES SERVING THE JANITOR SINK AFTER THE ISOLATION VALVES - TO PREVENT CROSSOVER OF THE HOT WATER AND THE COLD WATER. SEE DETAIL 'A' ON SHEET 1A-PL-502.
 - PROVIDE ASSE 1022 DEVICE ON CW SUPPLY SERVING ICE MACHINE.
 - PROVIDE 3/4" NON-SLAM SPRING-LOADED CHECK VALVES IN EACH OF THE CW AND DHW PIPING LINES SERVING THE FROST-PROOF HOSE BIBB AFTER THE ISOLATION VALVES - TO PREVENT CROSSOVER OF THE HOT WATER AND THE COLD WATER. SEE DETAIL 'B' ON SHEET 1A-PL-502.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'B' ON SHEET 1A-PL-504.
 - NOT USED.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'E' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'F' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPE AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'G' ON SHEET 1A-PL-504.
 - PROVIDE ASSE 1012 BACKFLOW PREVENTER ON HOT WATER SUPPLY TO REVERSE OSMOSIS SYSTEM - AFTER TMV. RUN DISCHARGE PIPING TO FLOOR DRAIN BY INDIRECT WITH AIR GAP.
 - PROVIDE ASSE 1011 BACKFLOW PREVENTER ON HOSE BIBB ADJACENT TO TMV.
 - PROVIDE REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE WITH WELL IN COLD WATER PIPING. SEE DETAIL 'F' ON SHEET 1A-PL-503.

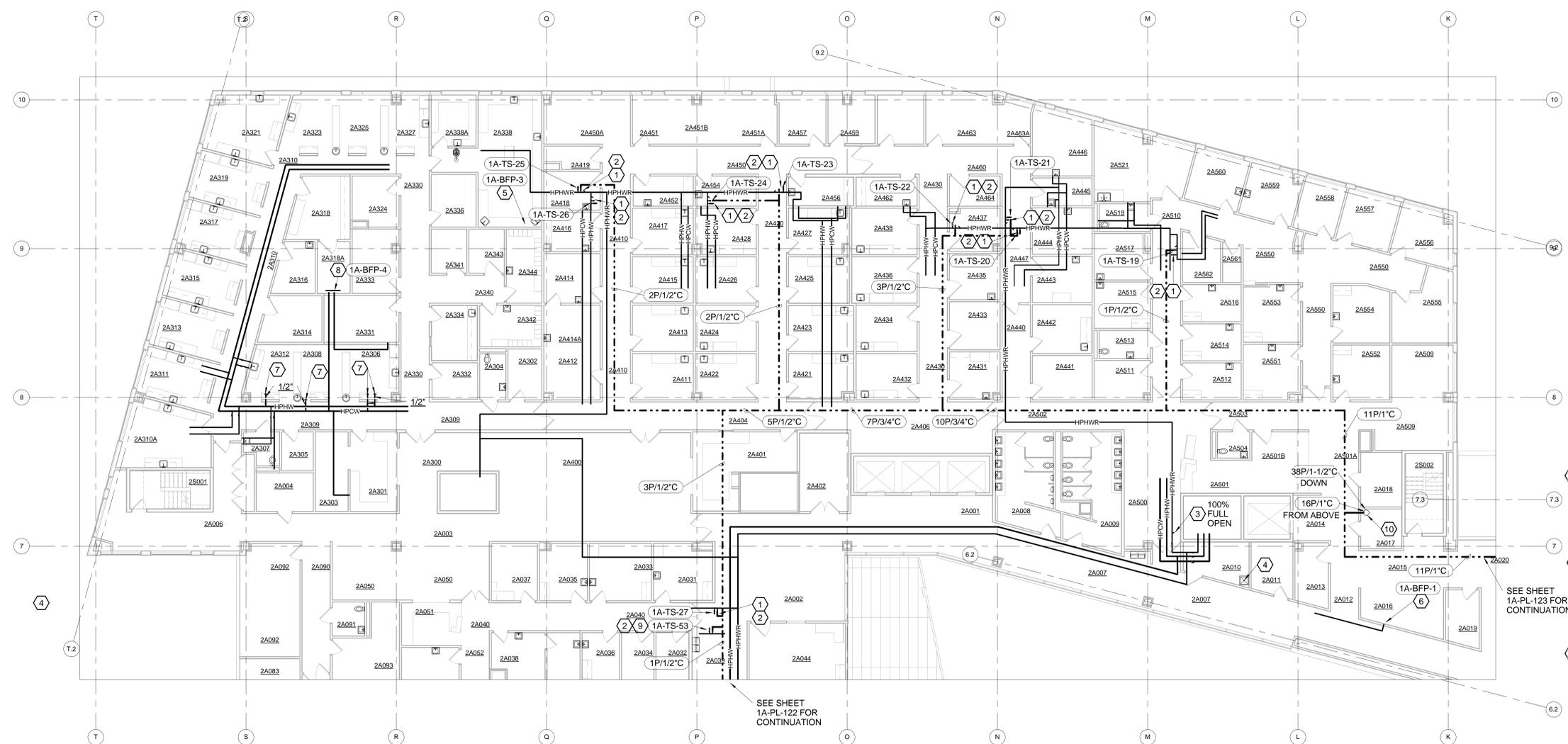
FIRST FLOOR PLUMBING PLAN - EAST
3/32" = 1'-0"



CONSULTANTS: 3073 NORTH HIGH STREET COLUMBUS, OHIO 43202-1180 Phone: 614-267-4928 www.wemonks.com Fax: 614-267-5617		ARCHITECT/ENGINEERS: Collaborative Design, Ltd. 2727 Tuller Parkway, Suite 200 Dublin, Ohio 43017 Tel 614.798.1515		Drawing Title: FIRST FLOOR PLUMBING PLAN - EAST Approved: Project Director		FULLY SPRINKLERED Project Title: INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES Project Number: 757-17-205 Building Number: 1A Drawing Number: 1A-PL-112 Date: 10-30-2015 Checked: TWM Drawn: JRC Dwg. 4 of 15		KEY PLAN Columbus VA Chalmers P. Wylie Ambulatory Care Center VA U.S. Department of Veterans Affairs	
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three eighths inch = one foot
 one quarter inch = one foot
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 one inch = one foot
 one and one half inches = one foot
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 eleven inches = one foot
 twelve inches = one foot



SECOND FLOOR PLUMBING PLAN - NORTHWEST
 3/32" = 1'-0"
 NORTH

- GENERAL NOTES:**
- COORDINATE STAGING AREAS WITH THE COR.
 - PROVIDE BRANCH ISOLATION VALVE ON PIPING THAT IS LACKING BRANCH VALVE DURING MAJOR OUTAGES OF MULTIPLE BRANCHES.
 - TYPICAL HOT WATER TEMPERATURE SENSOR AND TEMPERATURE GAUGE INSTALLATION LOCATION SHALL BE UPSTREAM OF (BEFORE) DHW BALANCE VALVE AND DOWNSTREAM OF (AFTER) DHW ISOLATION VALVE - TO ALLOW SHUT-DOWN OF LEAST AMOUNT OF PIPING SYSTEM POSSIBLE.
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- PLAN NOTES:**
- INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HPHWR PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 1-GPM FOR THIS LOOP.
 - EXTEND LOW-VOLTAGE WIRING IN CONDUIT FROM REMOTE TEMPERATURE SENSOR TO WATER QUALITY MONITORING SYSTEM IN ROOM 1A350 PER MANUFACTURER'S WRITTEN INSTRUCTIONS. MAKE ALL FINAL CONNECTIONS.
 - SET EXISTING BALANCE VALVE FOR GPM NOTED.
 - PROVIDE 3/4" NON-SLAM SPRING-LOADED CHECK VALVES IN EACH OF THE COW AND DHW PIPING LINES SERVING THE JANITOR SINK AFTER THE ISOLATION VALVES - TO PREVENT CROSSOVER OF THE HOT WATER AND THE COLD WATER. SEE DETAIL 'A' ON SHEET 1A-PL-502.
 - PROVIDE ASSE 1012 DEVICE ON HPCW SUPPLY SERVING DENTAL MACHINE ON TOP OF COUNTERTOP.
 - PROVIDE BALL VALVE AND ASSE 1022 DEVICE ON HPCW SUPPLY SERVING COFFEE MACHINE.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOW IN DETAIL 'E' ON SHEET 1A-PL-504.
 - PROVIDE ASSE 1012 BACKFLOW PREVENTER IN WATER SUPPLY SERVING DENTAL WATER FILTER AND DISTILLER SYSTEM. RUN DISCHARGE PIPING TO FLOOR DRAIN INDIRECTLY BY AIR GAP. REMOVE BYPASS PIPING ON WATER FILTER ASSEMBLY. SEE DETAILS A AND B ON 1A-PL-503.
 - PROVIDE REMOTE TEMPERATURE SENSOR AND THERMOMETER WITH WELL IN COLD WATER PIPING. SEE DETAIL 'F' ON SHEET 1A-PL-503.
 - EXTEND REMOTE SENSOR WIRING CONDUIT THROUGH SECOND FLOOR AND DOWN INTO ROOM 1A015 BELOW. PROVIDE SLEEVE, WATER AND FIRE PROOFING, AND REQUIRED SUPPORT. SEE SHEET 1A-PL-131 FOR CONTINUATION ABOVE AND SEE SHEET 1A-PL-111 FOR CONTINUATION BELOW.

Revisions:	Date

CONSULTANTS:

M.W.E. MONKS & CO.
 ENGINEERS
 3073 NORTH HIGH STREET COLUMBUS, OHIO 43202-1180
 Phone: 614-267-4928 www.wermonks.com Fax: 614-267-5617

ARCHITECT/ENGINEERS:

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 Collaborative Design, Ltd.
 2727 Tuller Parkway, Suite 200
 Dublin, Ohio 43017
 Tel 614.798.1515

Drawing Title: **SECOND FLOOR PLUMBING PLAN - NORTHWEST**

Approved: Project Director

FULLY SPRINKLERED

Project Title: **INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES**

Project Number: 757-17-205
 Building Number: 1A
 Drawing Number: 1A-PL-121
 Dwg. 5 of 15

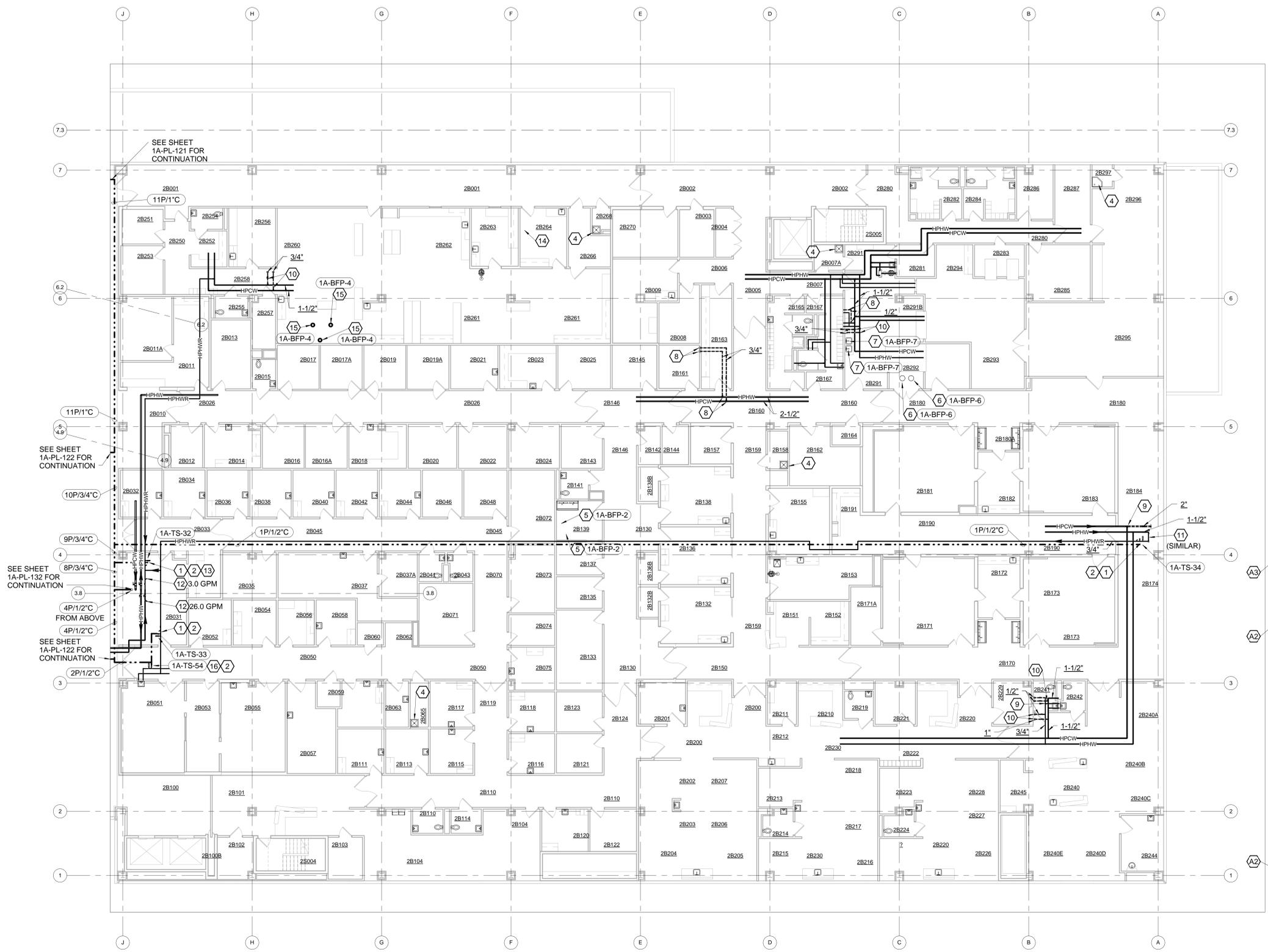
Location: 420 North James Rd. Columbus, Ohio 43219
 Date: 10-30-2015
 Checked: TWM
 Drawn: JRC

KEY PLAN

PLAN NORTH

Columbus VA
 Chalmers P. Wiley Ambulatory Care Center

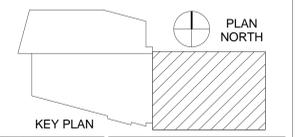
VA U.S. Department of Veterans Affairs



- GENERAL NOTES:**
- COORDINATE STAGING AREAS WITH THE COR.
 - PROVIDE BRANCH ISOLATION VALVE ON PIPING THAT IS LACKING.
 - TYPICAL HOT WATER TEMPERATURE SENSOR AND TEMPERATURE GAUGE INSTALLATION LOCATION SHALL BE UPSTREAM OF (BEFORE) DHWR BALANCE VALVE AND DOWNSTREAM OF (AFTER) DHW ISOLATION VALVE - TO ALLOW SHUT-DOWN OF LEAST AMOUNT OF PIPING SYSTEM POSSIBLE.
 - COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION # 01 35 26.
 - PIPE SIZING IS FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT PIPING SIZING AND CONFIGURATIONS, AND WILL NOTIFY THE COR OF ANY DISCREPANCIES BEFORE CONTINUING WITH THE WORK.
 - CONDUIT ROUTING IS APPROXIMATE AND MUST BE COORDINATED WITH EXISTING CONDITIONS. MAKE ADJUSTMENTS TO LOCATIONS AS REQUIRED FOR PROPER ACCESS TO NEW JUNCTION BOXES AND TO ANY EXISTING ITEMS REQUIRING ACCESS. CONTRACTOR SHALL REMOVE EXISTING LAY-IN CEILING TILES WHERE REQUIRED TO GAIN ACCESS FOR DEMOLITION AND NEW WORK. PROTECT TILES AND RE-INSTALL AT END OF WORK DAY. REPLACE ANY TILES DAMAGED DURING CONSTRUCTION.

- PLAN NOTES:**
- INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HPHWR PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 1-GPM FOR THIS LOOP.
 - EXTEND LOW-VOLTAGE WIRING IN CONDUIT FROM REMOTE TEMPERATURE SENSOR TO WATER QUALITY MONITORING SYSTEM IN ROOM 1A350 PER MANUFACTURER'S WRITTEN INSTRUCTIONS. MAKE ALL FINAL CONNECTIONS.
 - NOT USED.
 - PROVIDE 3/4" NON-SLAM SPRING-LOADED CHECK VALVES IN EACH OF THE HPCW AND HPHW PIPING LINES SERVING THE JANITOR SINK AFTER THE ISOLATION VALVES - TO PREVENT CROSSOVER OF THE HOT WATER AND THE COLD WATER. SEE DETAIL 'A' ON SHEET 1A-PL-502.
 - PROVIDE ASSE 1012 DEVICE ON HPCW SUPPLY SERVING SCOPE CLEANER #1 AND SCOPE CLEANER #2 (TOTAL OF 2).
 - PROVIDE ASSE 1013 DEVICE ON HPCW SUPPLY SERVING STERILIZER #1 AND STERILIZER #2 (TOTAL OF 2). SEE DETAIL 'G' ON SHEET 1A-PL-503.
 - PROVIDE ASSE 1035 DEVICE ON SPRAYER PIPING AFTER FAUCET ON EACH SINK (TOTAL OF 2).
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'B' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPE AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'D' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'E' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'F' ON SHEET 1A-PL-504.
 - SET EXISTING BALANCE VALVE FOR GPM NOTED.
 - PROVIDE BALANCING VALVE INCORPORATED WITH TEMPERATURE GAUGE AND SENSOR INSTALLATION.
 - PROVIDE ASSE 1012 BACKFLOW PREVENTER IN WATER SUPPLY SERVING PROCESS MACHINE ON TOP OF COUNTERTOP.
 - PROVIDE ASSE 1012 BACKFLOW PREVENTER IN WATER SUPPLY SERVING LAB EQUIPMENT.
 - PROVIDE REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE WITH WELL IN COLD WATER PIPING. SEE DETAIL 'F' ON SHEET 1A-PL-503.

SECOND FLOOR PLUMBING PLAN - EAST
3/32" = 1'-0"



CONSULTANTS: 3073 NORTH HIGH STREET COLUMBUS, OHIO 43202-1180 Phone: 614-267-4928 www.wemonks.com Fax: 614-267-5617		ARCHITECT/ENGINEERS: Collaborative Design, Ltd. 2727 Tuller Parkway, Suite 200 Dublin, Ohio 43017 Tel 614.798.1515		Drawing Title SECOND FLOOR PLUMBING PLAN - EAST		Project Title FULLY SPRINKLERED INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES		Project Number 757-17-205	
Approved: Project Director		Location 420 North James Rd. Columbus, Ohio 43219		Building Number 1A		Drawing Number 1A-PL-123		 Chalmers P. Wylie Ambulatory Care Center	
Date 10-30-2015		Checked TWM		Drawn JRC		Dwg. 7 of 15		 U.S. Department of Veterans Affairs	



- GENERAL NOTES:**
- COORDINATE STAGING AREAS WITH THE COR.
 - PROVIDE BRANCH ISOLATION VALVE ON PIPING THAT IS LACKING BRANCH VALVE DURING MAJOR OUTAGES OF MULTIPLE BRANCHES.
 - TYPICAL HOT WATER TEMPERATURE SENSOR AND TEMPERATURE GAUGE INSTALLATION LOCATION SHALL BE UPSTREAM OF (BEFORE) DHWR BALANCE VALVE AND DOWNSTREAM OF (AFTER) DHW ISOLATION VALVE - TO ALLOW SHUT-DOWN OF LEAST AMOUNT OF PIPING SYSTEM POSSIBLE.
 - COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION #01 35 28.
 - PIPE SIZING IS FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT PIPING SIZING AND CONFIGURATIONS, AND WILL NOTIFY THE COR OF ANY DISCREPANCIES BEFORE CONTINUING WITH THE WORK.
 - CONDUIT ROUTING IS APPROXIMATE AND MUST BE COORDINATED WITH EXISTING CONDITIONS. MAKE ADJUSTMENTS TO LOCATIONS AS REQUIRED FOR PROPER ACCESS TO NEW JUNCTION BOXES AND TO ANY EXISTING ITEMS REQUIRING ACCESS.
 - CONTRACTOR SHALL REMOVE EXISTING LAY-IN CEILING TILES WHERE REQUIRED TO GAIN ACCESS FOR DEMOLITION AND NEW WORK. PROTECT TILES AND RE-INSTALL AT END OF WORK DAY. REPLACE ANY TILES DAMAGED DURING CONSTRUCTION.

- PLAN NOTES:**
- INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HPHW PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 1-GPM FOR THIS LOOP.
 - EXTEND LOW-VOLTAGE WIRING IN CONDUIT FROM REMOTE TEMPERATURE SENSOR TO WATER QUALITY MONITORING SYSTEM IN ROOM 1A350 PER MANUFACTURER'S WRITTEN INSTRUCTIONS. MAKE ALL FINAL CONNECTIONS.
 - OPEN BALANCE VALVE FULL OPEN.
 - PROVIDE 3/4" NON-SLAM SPRING-LOADED CHECK VALVES IN EACH OF THE HPCW AND HPHW PIPING LINES SERVING THE JANITOR SINK AFTER THE ISOLATION VALVES - TO PREVENT CROSSOVER OF THE HOT WATER AND THE COLD WATER. SEE DETAIL 'A' ON SHEET 1A-PL-502.
 - PROVIDE ASSE 1022 DEVICE ON HPCW SUPPLY SERVING ICE MACHINE.
 - PROVIDE BALL VALVE AND ASSE 1022 DEVICE ON HPCW SUPPLY SERVING COFFEE MACHINE.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'B' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPE AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'C' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'D' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'E' ON SHEET 1A-PL-504.
 - INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HPHW PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 1-GPM FOR THIS LOOP.
 - SET EXISTING BALANCE VALVE FOR GPM NOTED.
 - PROVIDE REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE WITH WELL IN COLD WATER PIPING. SEE DETAIL 'F' ON SHEET 1A-PL-503.
 - EXTEND REMOTE SENSOR WIRING CONDUIT FROM FOURTH AND THIRD FLOORS THROUGH EXISTING SLEEVE IN NW CORNER OF ROOM 3A016 AND DOWN INTO ROOM 2A017 BELOW. SEE SHEET 1A-PL-141 FOR CONTINUATION ABOVE AND SEE SHEET 1A-PL-121 FOR CONTINUATION BELOW.

THIRD FLOOR PLUMBING PLAN - WEST



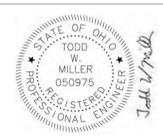
3/32" = 1'-0"

one eighth inch = one foot
 one quarter inch = one foot
 three eighths inch = one foot
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 three quarters inch = one foot
 one inch = one foot
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 two inches = one foot
 three inches = one foot
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CONSULTANTS:

M W.E. MONKS & CO.
ENGINEERS

3073 NORTH HIGH STREET COLUMBUS, OHIO 43202-1180
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ARCHITECT/ENGINEERS:

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Collaborative Design, Ltd.
2727 Tuller Parkway, Suite 200
Dublin, Ohio 43017
Tel 614.798.1515

Drawing Title: **THIRD FLOOR PLUMBING PLAN - WEST**

Approved: Project Director

FULLY SPRINKLERED

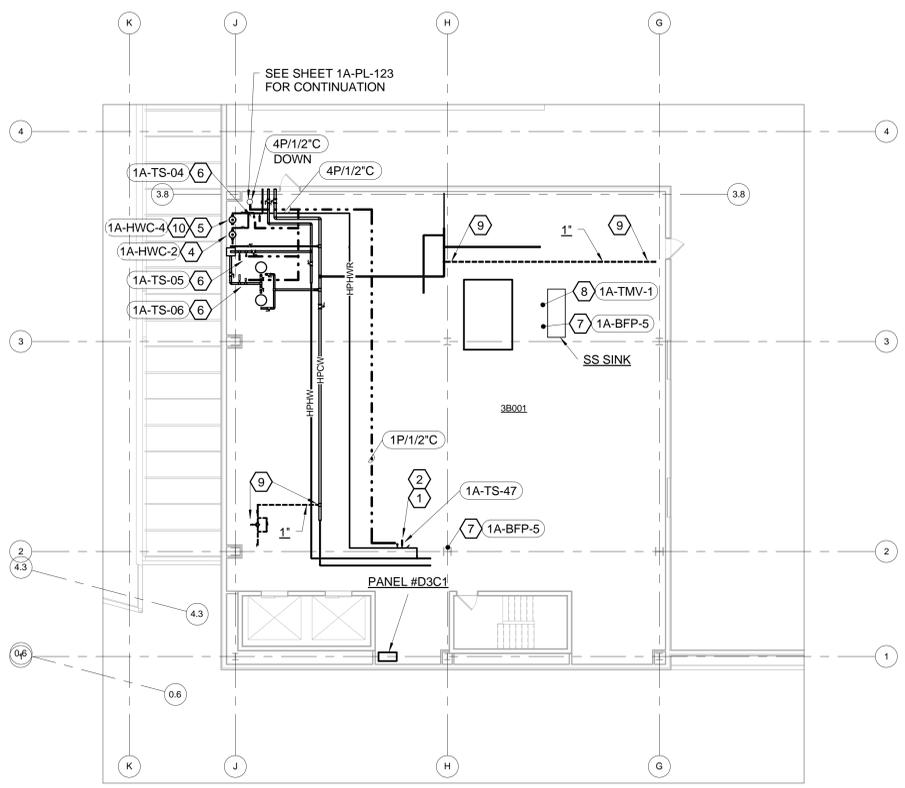
Project Title: **INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES**

Project Number: 757-17-205
Building Number: 1A
Drawing Number: 1A-PL-131
Date: 10-30-2015
Checked: TWM
Drawn: JRC
Dwg. 8 of 15

Location: 420 North James Rd. Columbus, Ohio 43219

Columbus VA
Chalmers P. Wiley Ambulatory Care Center
VA U.S. Department of Veterans Affairs

three inches = one foot
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 one inch = one foot
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 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



THIRD FLOOR PLUMBING PLAN - MECHANICAL ROOM EAST
 3/32" = 1'-0"



GENERAL NOTES:

- a. COORDINATE STAGING AREAS WITH THE COR.
- b. PROVIDE BRANCH ISOLATION VALVE ON PIPING THAT IS LACKING BRANCH VALVE DURING MAJOR OUTAGES OF MULTIPLE BRANCHES.
- c. TYPICAL HOT WATER TEMPERATURE SENSOR AND TEMPERATURE GAUGE INSTALLATION LOCATION SHALL BE UPSTREAM OF (BEFORE) DHWR BALANCE VALVE AND DOWNSTREAM OF (AFTER) DHW ISOLATION VALVE - TO ALLOW SHUT-DOWN OF LEAST AMOUNT OF PIPING SYSTEM POSSIBLE. COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION #01 35 26.
- e. PIPE SIZING IS FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT PIPING SIZING AND CONFIGURATIONS, AND WILL NOTIFY THE COR OF ANY DISCREPANCIES BEFORE CONTINUING WITH THE WORK.
- f. CONDUIT ROUTING IS APPROXIMATE AND MUST BE COORDINATED WITH EXISTING CONDITIONS. MAKE ADJUSTMENTS TO LOCATIONS AS REQUIRED FOR PROPER ACCESS TO NEW JUNCTION BOXES AND TO ANY EXISTING ITEMS REQUIRING ACCESS.
- g. CONTRACTOR SHALL REMOVE EXISTING LAY-IN CEILING TILES WHERE REQUIRED TO GAIN ACCESS FOR DEMOLITION AND NEW WORK. PROTECT TILES AND RE-INSTALL AT END OF WORK DAY. REPLACE ANY TILES DAMAGED DURING CONSTRUCTION.

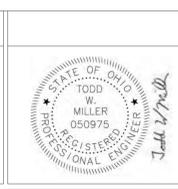
PLAN NOTES:

- ① INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HPHWR PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 1-GPM FOR THIS LOOP.
- ② EXTEND LOW-VOLTAGE WIRING IN CONDUIT FROM REMOTE TEMPERATURE SENSOR TO WATER QUALITY MONITORING SYSTEM IN ROOM 1A350 PER MANUFACTURER'S WRITTEN INSTRUCTIONS. MAKE ALL FINAL CONNECTIONS.
- ③ NOT USED.
- ④ REPLACE THE EXISTING DOMESTIC HOT WATER RETURN PUMP WITH NEW PUMP. MAKE ALL FINAL CONNECTIONS. REBALANCE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM TO MAINTAIN ADEQUATE FLOW RATES TO MAINTAIN 1-GPM FLOW FOR EACH LOOP. SET PUMP OPERATION TO 30-GPM FLOW RATE. SEE DETAIL 'D' ON SHEET 1A-PL-502.
- ⑤ INSTALL A NEW REDUNDANT/ SECONDARY DOMESTIC HOT WATER RETURN PUMP TO BACK UP THE PRIMARY PUMP. COORDINATE EXACT LOCATION WITH THE COR. MAKE ALL FINAL CONNECTIONS. NEW CONTROLS SHALL RUN BOTH PUMPS ON A LEAD/ LAG ALTERNATING METHOD. EACH PUMP SHALL BE CAPABLE TO PROVIDE 30-GPM FLOW RATE FOR ENTIRE SYSTEM AND ONLY ONE WILL RUN AT A TIME - BOTH PUMPS SHALL NOT RUN SIMULTANEOUSLY. SHOULD ONE PUMP FAIL, THEN THE OTHER WILL OPERATE TO MAINTAIN THE SYSTEM AND AN ALARM SIGNAL SHALL BE SENT TO THE WATER QUALITY MONITORING SYSTEM. SEE DIAGRAM 'C' ON SHEET 1A-PL-502.
- ⑥ PROVIDE REMOTE TEMPERATURE SENSOR AT THE FOLLOWING LOCATIONS: WATER HEATING SOURCE OUTLET PIPING, MAIN THERMAL MIXING VALVE OUTLET (SERVING FACILITY), AND ON 120 DEGREE F. HPHWR PIPING FROM FACILITY JUST BEFORE PUMP. PLACE THE REMOTE TEMPERATURE SENSOR BEFORE THE TEE FITTING SERVING BOTH PUMPS. PROVIDE TEMPERATURE GAUGE NEXT TO EACH SENSOR.
- ⑦ PROVIDE ASSE 1011 DEVICE ON HOSE BIBB (AT SS SINK).
- ⑧ REMOVE EXISTING ASSE 1070 DEVICE AND PROVIDE ASSE 1071 THERMAL MIXING VALVE FOR EMERGENCY EYE/FACE WASH. MAKE ALL FINAL CONNECTIONS. CONFIRM PROPER OPERATION AND TEMPERATURE PER ANSI #Z358.1-2009. [AT S.S. SINK]
- ⑨ REMOVE EXISTING DEAD END PIPING BACK TO MAIN. REMOVE BRANCH TEE AND REPLACE WITH STRAIGHT LENGTH OF PIPE TO MATCH MAIN SIZE.
- ⑩ PROVIDE 15A, 120V CIRCUIT FROM PANEL D3C1, CIRCUIT BREAKER #7, IN ROOM 3B001 FOR REDUNDANT DHWR CIRCULATION PUMP. PROVIDE 15A, 120V TOGGLE TYPE DISCONNECT AT PUMP TO MATCH EXISTING. MAKE ALL FINAL ELECTRICAL CONNECTIONS PER SPECIFICATIONS AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

Revisions:	Date

CONSULTANTS:


W.E. MONKS & CO.
 ENGINEERS
 3073 NORTH HIGH STREET COLUMBUS, OHIO 43202-1180
 Phone: 614-267-4928 www.wemonks.com Fax: 614-267-5617



ARCHITECT/ENGINEERS:


COL
 Collaborative Design, Ltd.
 2727 Tuller Parkway, Suite 200
 Dublin, Ohio 43017
 Tel 614.798.1515

Drawing Title	THIRD FLOOR PLUMBING PLAN - MECHANICAL ROOM EAST
Approved: Project Director	

Project Title	FULLY SPRINKLERED INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES	
Project Number	757-17-205	
Building Number	1A	
Location	420 North James Rd. Columbus, Ohio 43219	
Date	Checked	Drawn
10-30-2015	TWM	JRC
Drawing Number	1A-PL-132	
Dwg. 9 of 15		

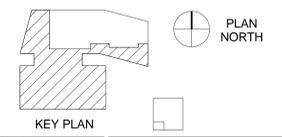




- GENERAL NOTES:**
- COORDINATE STAGING AREAS WITH THE COR.
 - PROVIDE BRANCH ISOLATION VALVE ON PIPING THAT IS LACKING BRANCH VALVE DURING MAJOR OUTAGES OF MULTIPLE BRANCHES.
 - TYPICAL HOT WATER TEMPERATURE SENSOR AND TEMPERATURE GAUGE INSTALLATION LOCATION SHALL BE UPSTREAM OF (BEFORE) DHWR BALANCE VALVE AND DOWNSTREAM OF (AFTER) DHW ISOLATION VALVE - TO ALLOW SHUT-DOWN OF LEAST AMOUNT OF PIPING SYSTEM POSSIBLE.
 - COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION #01 35 26.
 - PIPE SIZING IS FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT PIPING SIZING AND CONFIGURATIONS, AND WILL NOTIFY THE COR OF ANY DISCREPANCIES BEFORE CONTINUING WITH THE WORK.
 - CONDUIT ROUTING IS APPROXIMATE AND MUST BE COORDINATED WITH EXISTING CONDITIONS. MAKE ADJUSTMENTS TO LOCATIONS AS REQUIRED FOR PROPER ACCESS TO NEW JUNCTION BOXES AND TO ANY EXISTING ITEMS REQUIRING ACCESS.
 - CONTRACTOR SHALL REMOVE EXISTING LAY-IN CEILING TILES WHERE REQUIRED TO GAIN ACCESS FOR DEMOLITION AND NEW WORK. PROTECT TILES AND RE-INSTALL AT END OF WORK DAY. REPLACE ANY TILES DAMAGED DURING CONSTRUCTION.

- PLAN NOTES:**
- INSTALL NEW REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE ON THE HPHWR PIPING AT THIS LOCATION. SEE DETAIL 'F' ON SHEET 1A-PL-503. REBALANCING OF THE ENTIRE DOMESTIC HOT WATER RETURN SYSTEM WILL INCLUDE A FLOW RATE OF 1-GPM FOR THIS LOOP.
 - EXTEND LOW-VOLTAGE WIRING IN CONDUIT FROM REMOTE TEMPERATURE SENSOR TO WATER QUALITY MONITORING SYSTEM IN ROOM 1A350 PER MANUFACTURER'S WRITTEN INSTRUCTIONS. MAKE ALL FINAL CONNECTIONS.
 - NOT USED.
 - PROVIDE 3/4" NON-SLAM SPRING-LOADED CHECK VALVES IN EACH OF THE HPCW AND HPHWR PIPING LINES SERVING THE JANITOR SINK AFTER THE ISOLATION VALVES - TO PREVENT CROSSOVER OF THE HOT WATER AND THE COLD WATER. SEE DETAIL 'A' ON SHEET 1A-PL-502.
 - NOT USED.
 - REMOVE EXISTING DEAD END PIPING AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'A' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPE AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'B' ON SHEET 1A-PL-504.
 - REMOVE EXISTING DEAD END PIPE AND FITTINGS AND REPLACE WITH NEW PIPING AND FITTINGS AS SHOWN IN DETAIL 'D' ON SHEET 1A-PL-504.
 - REMOVE BYPASS PIPING AS SHOWN IN DETAILS 'C' AND 'D' ON SHEET 1A-PL-503.
 - PROVIDE REMOTE TEMPERATURE SENSOR AND TEMPERATURE GAUGE WITH WELL IN COLD WATER PIPING. SEE DETAIL 'F' ON SHEET 1A-PL-503.
 - REMOTE SENSOR WIRING CONDUIT ABOVE CEILING, THROUGH WALL, AND DOWN TO EXISTING PLUGGED FLOOR SLEEVE. EXTEND CONDUIT INTO ROOM 3A016 BELOW. SEE SHEET 1A-PL-131 FOR CONTINUATION.

FOURTH FLOOR PLUMBING PLAN
3/32" = 1'-0"



three eighths inch = one foot
 one eighth inch = one foot
 one quarter inch = one foot
 one half inch = one foot
 three quarters inch = one foot
 one inch = one foot
 one and one half inches = one foot
 two inches = one foot
 three inches = one foot
 four inches = one foot
 five inches = one foot
 six inches = one foot
 seven inches = one foot
 eight inches = one foot
 nine inches = one foot
 ten inches = one foot
 eleven inches = one foot
 twelve inches = one foot
 thirteen inches = one foot
 fourteen inches = one foot
 fifteen inches = one foot
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 ninety inches = one foot
 ninety one inches = one foot
 ninety two inches = one foot
 ninety three inches = one foot
 ninety four inches = one foot
 ninety five inches = one foot
 ninety six inches = one foot
 ninety seven inches = one foot
 ninety eight inches = one foot
 ninety nine inches = one foot
 one hundred inches = one foot

Revisions:	Date:

CONSULTANTS:

M. W. E. MONKS & CO.
ENGINEERS

3073 NORTH HIGH STREET COLUMBUS, OHIO 43202-1180
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ARCHITECT/ENGINEERS:

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Collaborative Design, Ltd.
2727 Tuller Parkway, Suite 200
Dublin, Ohio 43017
Tel 614.798.1515

Drawing Title	FOURTH FLOOR PLUMBING PLAN
Approved: Project Director	

Project Title	INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES
Project Number	757-17-205
Building Number	1A
Drawing Number	1A-PL-141
Date	10-30-2015
Checked	TWM
Drawn	JRC
Dwg. 10 of 15	



PUMP SCHEDULE

MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SEERVICE	TYPE	CIRCULATING FLUID										ELECTRICAL MOTOR					REMARKS		
					FLUID	FLOW		HEAD		NPSH AVAILABLE		TEMPERATURE		SP. GR.	MIN. % EFF	NOMINAL POWER		PHASE	VOLT		MAX RPM	SPEED CONTROL
						GPM	[L/s]	FT	[kPa]	FT	[kPa]	°F	[°C]			HP	[kW]					
HWC-1	1A350	MECHANICAL ROOM	DHWR	CLOSED COUPLING	DOMESTIC HOT WATER RETURN	30	2.00	26	[78]	--	--	125	51.7	1	85	0.4	0.30	1	115	3250	CONSTANT	REPLACEMENT
HWC-2	3B001	MECHANICAL ROOM	DHWR	CLOSED COUPLING	DOMESTIC HOT WATER RETURN	30	2.00	26	[78]	--	--	125	51.7	1	85	0.4	0.30	1	115	3250	CONSTANT	REPLACEMENT
HWC-3	1A350	MECHANICAL ROOM	DHWR	CLOSED COUPLING	DOMESTIC HOT WATER RETURN	30	2.00	26	[78]	--	--	125	51.7	1	85	0.4	0.30	1	115	3250	CONSTANT	REDUNDANT
HWC-4	3B001	MECHANICAL ROOM	DHWR	CLOSED COUPLING	DOMESTIC HOT WATER RETURN	30	2.00	26	[78]	--	--	125	51.7	1	85	0.4	0.30	1	115	3250	CONSTANT	REDUNDANT

BASIS OF DESIGN (BOD) = BELL & GOSSETT SERIES #PL-55B OR EQUAL, BRONZE BODY, 4.7 AMPS, WITH COMPANION FLANGE. PROVIDE COMPLETE SYSTEM WATER BALANCING.

PLUMBING DEVICE SCHEDULE

MARK	DISCRIPTION	INDIRECT WASTE PIPE TO FLOOR DRAIN		TEMPERED WATER		COLD WATER		HOT WATER		NSF 61-G (LEAD-FREE) COMPLIANT	ASSE # STANDARD-COMPLIANT	SERVICE (FIXTURE)	LOCATION	REMARKS
		IN	[mm]	IN	[mm]	IN	[mm]	IN	[mm]					
NOT USED	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BFP-1	BACKFLOW PREVENTER - BEVERAGE	0	[0]	0	[0]	0.375	[9]	0	[0]	YES	1022	POPICE/COFFEE DISPENSER	UNDER CABINET	PROVIDE ADAPTERS AND TRANSITION FITTINGS FOR FINAL CONNECTIONS.
BFP-2	BACKFLOW PREVENTER - MACHINE	0	[0]	0	[0]	0.375	[9]	0	[0]	YES	1022	PROCESS MACHINE	UNDER CABINET; INLINE	PROVIDE ADAPTERS AND TRANSITION FITTINGS FOR FINAL CONNECTIONS.
BFP-3	BACKFLOW PREVENTER - SYSTEM	0	[0]	0	[0]	0.75	[19]	0.75	[19]	YES	1012	REV. OSMOSIS/ DISINFECTION SYSTEM	INLINE	FOR DCW AND DHW SERVING DISINFECTION SYSTEM. PROVIDE ADAPTERS AND TRANSITION FITTINGS FOR FINAL CONNECTIONS.
BFP-4	BACKFLOW PREVENTER - EQUIPMENT	0	[0]	0.0	[0]	0.5	[13]	0	[0]	YES	1012	FILTER/SCOPE CLEANER/DISTILLER	INLINE	PROVIDE ADAPTERS AND TRANSITION FITTINGS FOR FINAL CONNECTIONS.
BFP-5	BACKFLOW PREVENTER - HOSE BIBB	0	[0]	0.0	[0]	0.75	[19]	0	[0]	YES	1011	HOSE BIBB	OUTLET - HOSE CONNECTION	PROVIDE NON-REMOVABLE TYPE WITH OPTION FOR DRAINING HOSE BIBB.
BFP-6	BACKFLOW PREVENTER - RPBP	1	[25]	0.0	[0]	1	[25]	0	[0]	YES	1013	STERILIZER	INLINE	PROVIDE PIPING, VALVES, STRAINER, ETC. FOR COMPLETE OPERATIONAL SYSTEM.
BFP-7	BACKFLOW PREVENTER - SPRAYERS	0	[0]	0.375	[9]	0	[0]	0	[0]	YES	1035	SINK SPRAYER	INLINE	PROVIDE SIZING AND PIPE THREAD TYPES TO MATCH EXISTING PIPING
BFP-8	BACKFLOW PREVENTER - RPBP	0.5	[13]	0	[0]	0.5	[13]	0	[0]	YES	1013	WATER QUALITY MONITORING SYSTEM	INLINE	PROVIDE PIPING, VALVES, STRAINER, ETC. FOR COMPLETE OPERATIONAL SYSTEM.
TH-1	THERMOMETER	0	[0]	0	[0]	0	[0]	0.75	[19]	YES	--	DHW AND DHWR SYSTEMS	INSERTION	PROVIDE THERMOMETER WELL. INSTALL INTO PIPING SO THERMOMETER CAN PROPERLY SENSE WATER TEMPERATURE. ADJUST TH-1 TO BE IN BEST LINE OF SIGHT.
CV-1	CHECK VALVE	0	[0]	0	[0]	0.75	[19]	0.75	[19]	YES	--	DCW AND DHW SYSTEMS	INLINE	NON-SLAM (SOFT-SEAT) SPRING-LOADED CHECK VALVES. INSTALL AT OPTIMUM LOCATION CLOSEST TO FIXTURE/DEVICE
CV-2	CHECK VALVE - ENG. BLDG.	0	[0]	0	[0]	1.5	[38]	0	[0]	YES	--	DCW	INLINE	NON-SLAM (SOFT-SEAT) SPRING-LOADED CHECK VALVE. INSTALL AHEAD OF RPBP, AS CLOSE AS POSSIBLE.
VRV-1	VACUUM RELIEF VALVE - ENG. BLDG.	0	[0]	0	[0]	0.75	[19]	0	[0]	YES	--	DCW SUPPLY TO WATER HEATER	BRANCH	ANSIZ21.22 CERTIFIED. PROVIDE FULL SIZE PIPING ETC. PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND PER OPC.
TMV-1	THERMAL MIXING VALVE	0	[0]	0	[0]	0.5	[13]	0.5	[13]	YES	1071	EMERGENCY EYE/FACE WASH	INLINE	MEET ANSI #Z358.1 - 2009 STANDARDS.
TS-01	REMOTE TEMPERATURE SENSOR	0	[0]	0	[0]	0	[0]	0.5	[13]	YES	--	DHWR	INSERTION	INTEGRATED WITH WATER QUALITY MONITORING SYSTEM. INSTALL PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND PER OPC.
ET-1	EXPANSION TANK - ENG. BLDG.	0	[0]	0	[0]	0.75	[19]	0	[0]	YES	--	WATER HEATER	BRANCH	ASME RATED; (2)-GALLON CAPACITY; 150 PSIG WORKING PRESSURE.

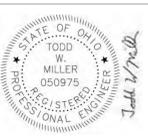
Revisions:	Date

CONSULTANTS:

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ARCHITECT/ENGINEERS:



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Dublin, Ohio 43017
Tel 614.798.1515

Drawing Title: **SCHEDULES**

Approved: Project Director

FULLY SPRINKLERED

INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES

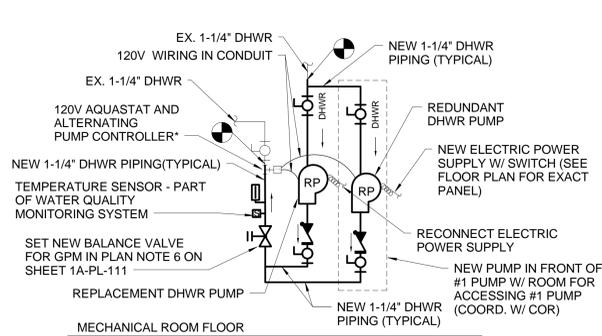
Project Title	Project Number
420 North James Rd. Columbus, Ohio 43219	757-17-205
Date	Building Number
10-30-2015	1A
Checked	Drawing Number
TWM	1A-PL-501
Drawn	Dwg. 11 of 15
JRC	



Columbus VA
Chalmers P. Wiley Ambulatory Care Center



U.S. Department of Veterans Affairs



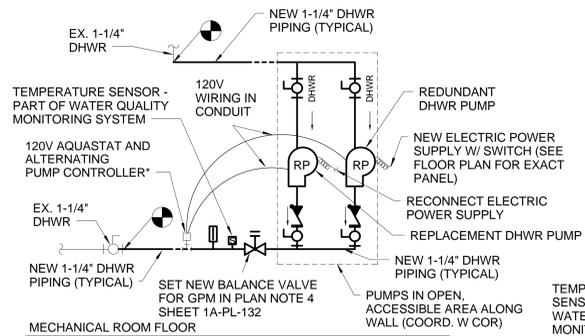
*SET AQUASTAT/ CONTROLLER TO HAVE PUMP ON AT 125°F (LOW), AND OFF AT 130°F (HIGH), BASED ON LEAD/ LAG OPERATION. CONTROLLER TO HAVE ALARM CONTACT WHICH SHALL BE WIRED TO THE WATER QUALITY MONITORING SYSTEM PANEL.

MECHANICAL RM. 1A350

DHWR REPLACEMENT AND REDUNDANT CIRCULATING PUMPS

N. T. S.

BASE BID ONLY



*SET AQUASTAT/ CONTROLLER TO HAVE PUMP ON AT 125°F (LOW), AND OFF AT 130°F (HIGH), BASED ON LEAD/ LAG OPERATION. CONTROLLER TO HAVE ALARM CONTACT WHICH SHALL BE WIRED TO THE WATER QUALITY MONITORING SYSTEM PANEL.

MECHANICAL RM. 3B001

DHWR REPLACEMENT (ONLY) CIRCULATING PUMP

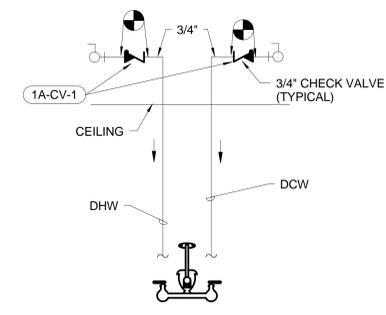
N. T. S.

ALTERNATES #1, #2, AND #3 ONLY



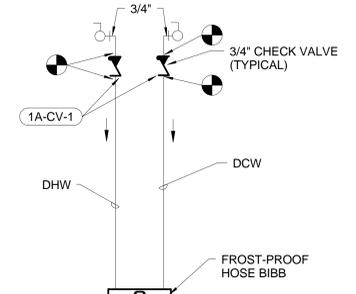
N. T. S.

ALTERNATES #1, #2, AND #3 ONLY



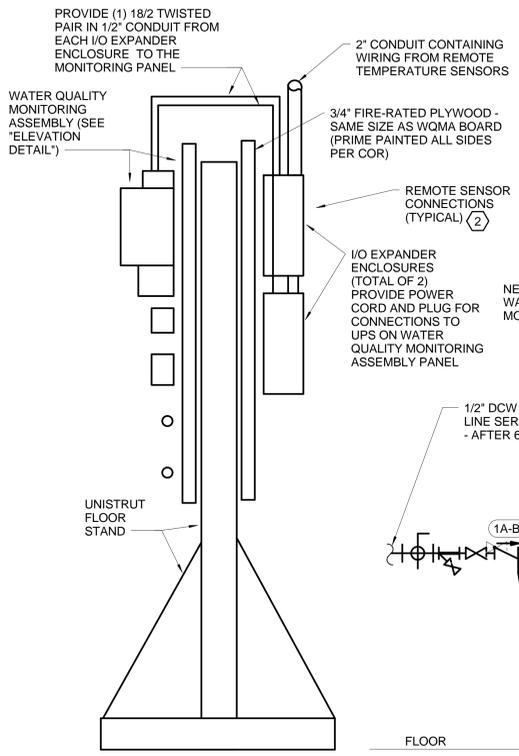
CHECK VALVE PIPING DETAIL #1

N. T. S. DELETE THIS WORK IF ALTERNATE #3 IS ACCEPTED

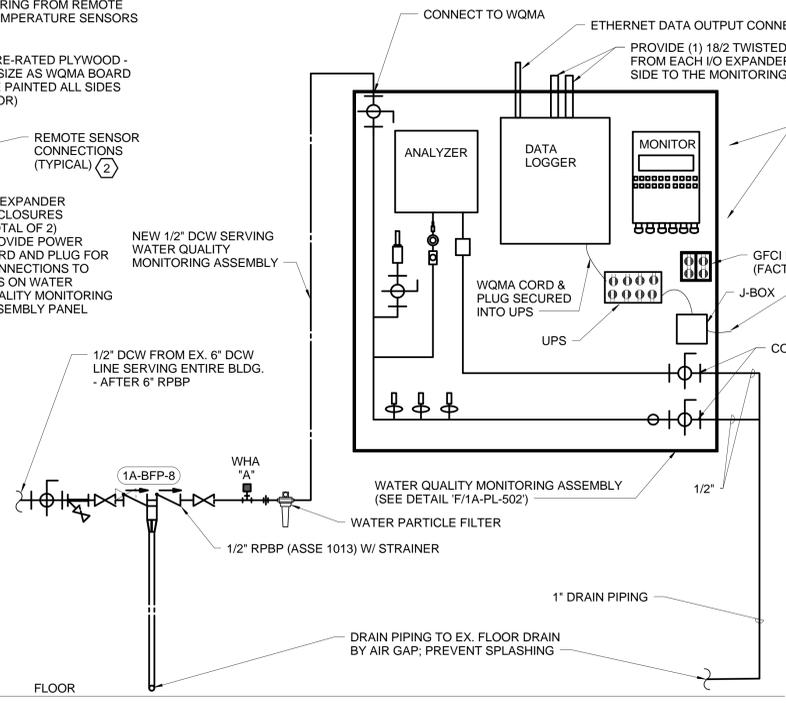


CHECK VALVE PIPING DETAIL #2

N. T. S. DELETE THIS WORK IF ALTERNATE #3 IS ACCEPTED

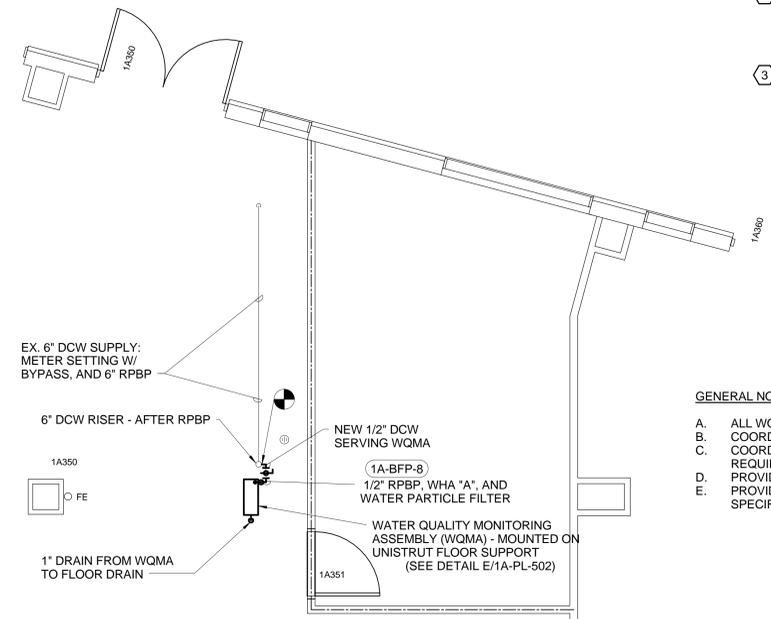


SIDE VIEW



WATER QUALITY MONITORING SYSTEM - ELEVATION DETAIL

N. T. S.



WATER QUALITY MONITORING SYSTEM - FLOOR PLAN DETAIL

N. T. S.

PLAN NOTES:

- 1 PROVIDE 20A, 120V CIRCUIT FROM PANEL C1N3, CIRCUIT BREAKER #29, IN ROOM 1A015 FOR WATER QUALITY MONITORING ASSEMBLY UNIT. MAKE ALL FINAL ELECTRICAL CONNECTIONS PER SPECIFICATIONS AND MANUFACTURER'S WRITTEN INSTRUCTION.
- 2 WATER QUALITY MONITORING SYSTEM TO RECEIVE UP TO 56 ACTIVE AND 8 FUTURE SETS OF CONDUCTORS FROM REMOTE SENSORS FOR STORING, REPORTING, AND TRANSFERRING OF DATA. FOLLOW SPECIFICATIONS AND MANUFACTURER'S REQUIREMENTS FOR ALL ASSOCIATED INSTALLATIONS. SEE COMMISSIONING SPECIFICATIONS FOR MORE DETAILS AND INSTRUCTIONS.
- 3 PROVIDE CAT-6 CABLE IN 3/4\"/>

GENERAL NOTES:

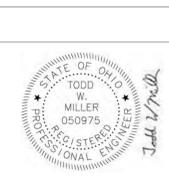
- A. ALL WORK SHALL FOLLOW CONTRACT DOCUMENTS.
- B. COORDINATE ALL WORK WITH COR.
- C. COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION #01 35 26.
- D. PROVIDE PIPING INSULATION AND PIPING IDENTIFICATION PER SPECIFICATIONS.
- E. PROVIDE FLUSHING OF NEW PIPING TO CLEAR DEBRIS AND SANITIZE - PER SPECIFICATIONS.

Revisions:	Date:

CONSULTANTS:

M.W.E. MONKS & CO.
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ARCHITECT/ENGINEERS:

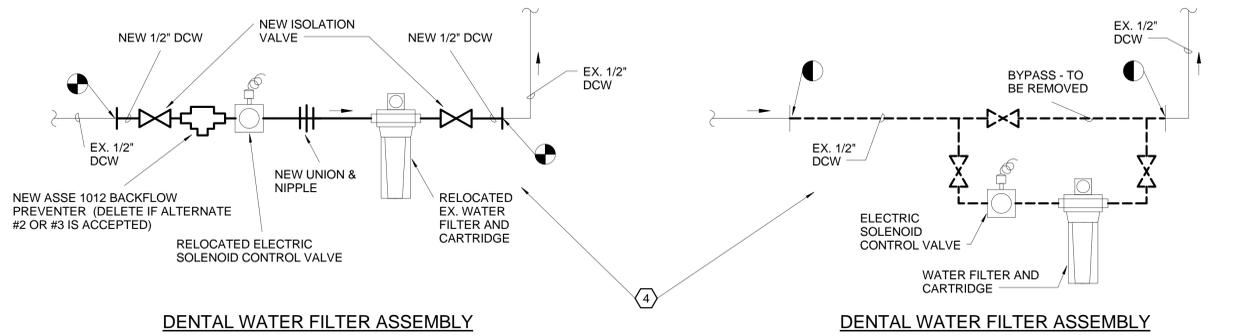
CDL

Collaborative Design, Ltd.
2727 Tuller Parkway, Suite 200
Dublin, Ohio 43017
Tel 614.798.1515

Drawing Title	DETAILS
Approved: Project Director	

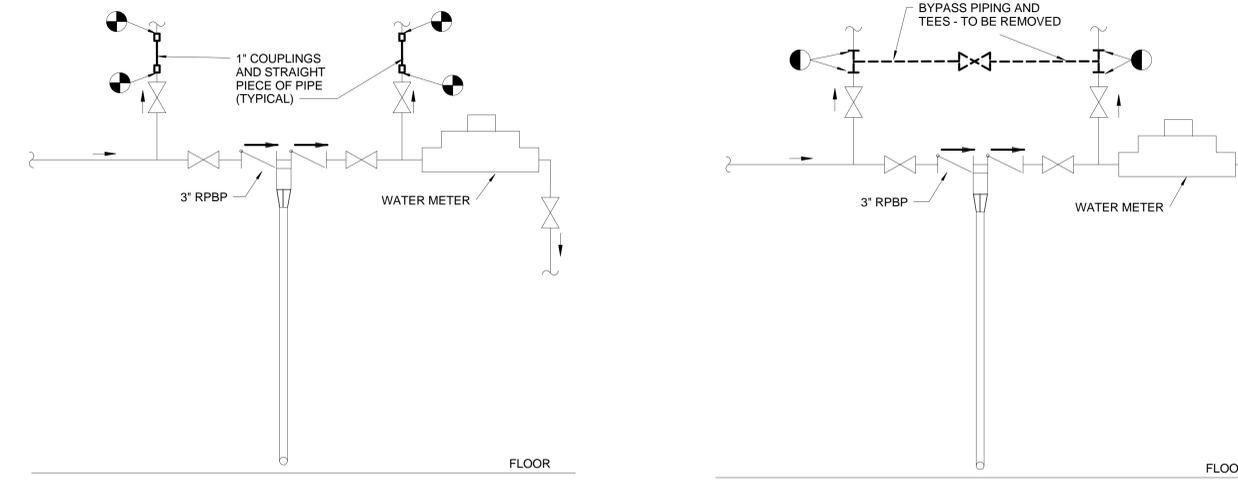
Project Title	INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES
Project Number	757-17-205
Building Number	1A
Drawing Number	1A-PL-502
Date	10-30-2015
Checked	TWM
Drawn	JRC
Dwg. 12 of 15	





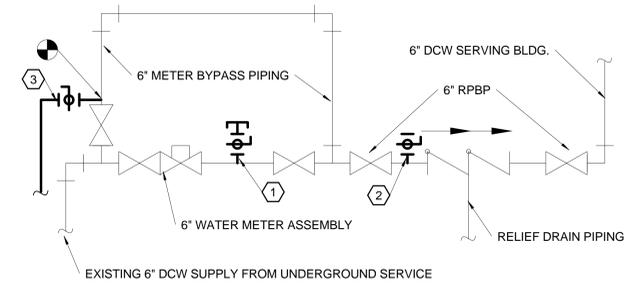
RM. 2A318A BYPASS PIPING - MODIFICATION
N. T. S. (A) 1A-PL-503

RM. 2A318A BYPASS PIPING - EXISTING
N. T. S. (B) 1A-PL-503

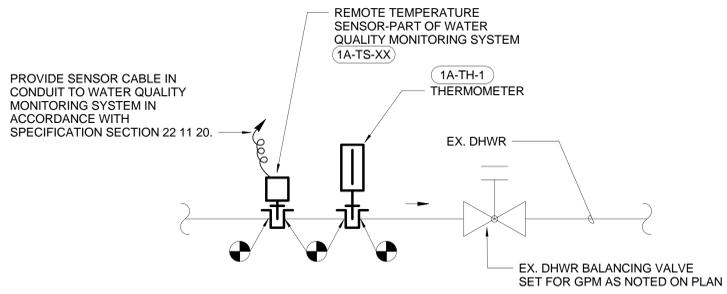


RM. 4A011 BYPASS PIPING - MODIFICATION
N. T. S. (C) 1A-PL-503

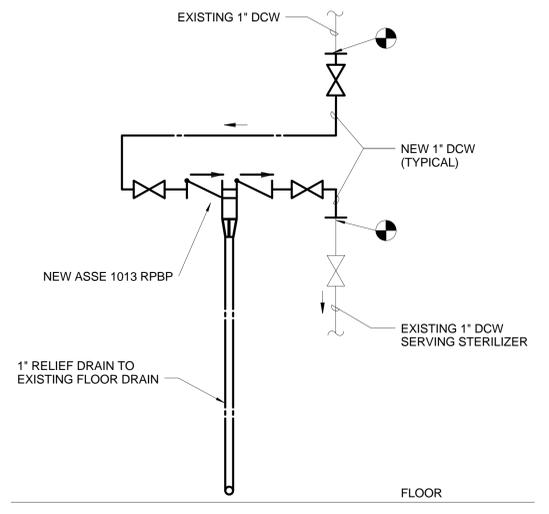
RM. 4A011 BYPASS PIPING - EXISTING
N. T. S. (D) 1A-PL-503



RM. 1A350 WATER METER/RBPB PIPING
N. T. S. (E) 1A-PL-503



DHWR TEMPERATURE SENSOR AND GAUGE PIPING DIAGRAM
N. T. S. (F) 1A-PL-503



ASSE 1013 PIPING DIAGRAM - STERILIZER
RM. 2B292 (TYPICAL OF 2)
N. T. S. (G) 1A-PL-503
DELETE THIS WORK IF ALTERNATE #2 OR #3 IS ACCEPTED

- GENERAL NOTES:**
- ALL WORK SHALL FOLLOW CONTRACT DOCUMENTS.
 - COORDINATE ALL WORK WITH COR.
 - COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION #01 35 26.
 - PROVIDE INSULATION ON PIPING AND PIPING IDENTIFICATION PER SPECIFICATIONS.
 - PROVIDE FLUSHING OF NEW PIPING TO CLEAR OF DEBRIS AND SANITIZE - PER SPECIFICATIONS.

- PLAN NOTES:**
- REMOVE EXISTING 2" NIPPLES AND VALVE. REPLACE EXISTING BRASS NIPPLES WITH BRASS SHOULDER NIPPLES TO ELIMINATE DEAD-END PIPING. RE-INSTALL EXISTING VALVE AND BRASS CAP.
 - REMOVE EXISTING 3/4" BRASS NIPPLES AND VALVE. REPLACE WITH BRASS SHOULDER NIPPLE TO ELIMINATE DEAD-END PIPING. RE-INSTALL MANUFACTURER'S TEST BALL VALVE.
 - PROVIDE NEW 1" FLUSHING VALVE AND PIPING: INSTALL 1" BRANCH ON EXISTING 6" METER BYPASS PIPING (AS SHOWN) WITH BALL VALVE. EXTEND 1" PIPING TO FLOOR DRAIN AND DISCHARGE INTO FLOOR DRAIN BY AIR GAP. ARRANGE PIPING TO PREVENT EXCESSIVE SPLASHING. FACILITY MAINTENANCE PERSONNEL TO FLUSH STAGNANT WATER OUT OF BYPASS PIPING REGULARLY TO PREVENT DEAD END.
 - REMOVE BYPASS PIPING ON DENTAL WATER FILTER ASSEMBLY TO ELIMINATE DEAD END PIPING.

- DEAD END REMOVAL:**
- DEAD END (NO-FLOW/LOW-FLOW) PIPING CONTAINS STAGNANT WATER AND COULD BE CONTAMINATED. CONTRACTOR TO PROVIDE NECESSARY MEANS AND METHODS TO DRAIN THIS WATER OUT OF THE PIPING AND DISPOSE OF PROPERLY DOWN THE SANITARY DRAIN AT A FIXTURE.
 - CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT STAGNANT WATER FROM CIRCULATING IN POTABLE WATER SYSTEMS. PIPING THAT REMAINS IN PLACE THAT HAS STAGNANT WATER SHALL BE DRAINED OF ALL STAGNANT WATER (SEE ITEM "a"), FLUSHED AND SANITIZED (PER ITEM "c").
 - FOLLOW REQUIRED/ SPECIFIED FLUSHING AND SANITIZING METHODS TO MAINTAIN QUALITY OF POTABLE WATER SYSTEMS.
 - FOLLOW OSHA STANDARDS TO CONTAIN AND PREVENT FROM SPREADING ANY CONTAMINATION FROM THE EXISTING WATER SYSTEMS.

Revisions:	Date:

CONSULTANTS:

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ENGINEERS

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ARCHITECT/ENGINEERS:

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Drawing Title	DETAILS
Approved: Project Director	

FULLY SPRINKLERED

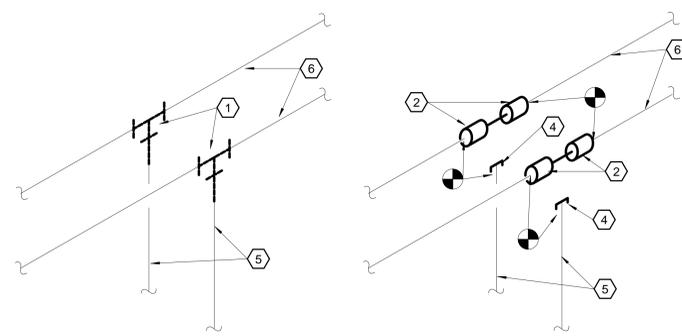
INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES

Project Title	Project Number
Building Number	757-17-205
Location	1A
Date	1A-PL-503
Checked	Dwg. 13 of 15
Drawn	
TWM	JRC

Columbus VA
Chalmers P. Wylie Ambulatory Care Center

VA U.S. Department of Veterans Affairs

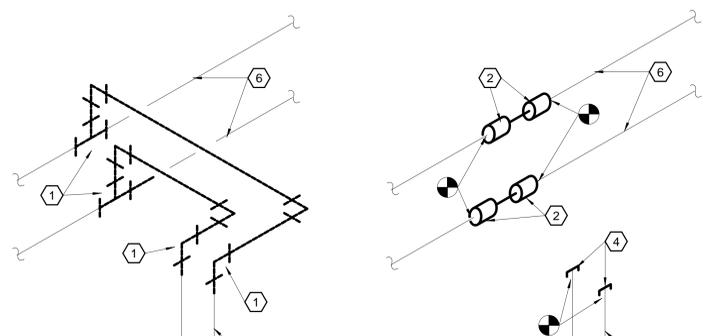
three inches = one foot
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 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



DEMOLITION

NEW WORK

DETAIL A
 N. T. S. 1A-PL-504



DEMOLITION

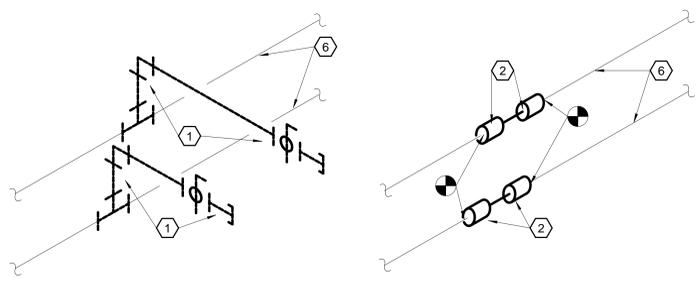
NEW WORK

DETAIL B
 N. T. S. 1A-PL-504

- GENERAL NOTES:**
- A. ALL WORK SHALL FOLLOW CONTRACT DOCUMENTS.
 - B. COORDINATE ALL WORK WITH COR.
 - C. COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION #01 35 26.
 - D. PROVIDE INSULATION ON PIPING AND PIPING IDENTIFICATION PER SPECIFICATIONS.
 - E. PROVIDE FLUSHING OF NEW PIPING TO CLEAR OF DEBRIS AND SANITIZE - PER SPECIFICATIONS.

- PLAN NOTES:**
- 1 REMOVE EXISTING DOMESTIC WATER SYSTEM FITTINGS AND PIPING AS SHOWN AND AS NECESSARY TO REMOVE DEAD-END PIPING.
 - 2 INSTALL NEW FITTINGS AND PIPING AS SHOWN AND AS NECESSARY TO PROVIDE CONTINUATION OF DOMESTIC WATER PIPING SYSTEM. REMOVAL OF BRANCH PIPING AND FITTINGS ELIMINATES DEAD-END PIPING. RE-INSULATE PIPING PER SPECIFICATIONS COMPLETE AND PROVIDE PIPE IDENTIFICATION PER SPECIFICATIONS.
 - 3 REMOVE EXISTING CAPS AND PREPARE PIPING FOR NEW WORK - TO ELIMINATE DEAD-END PIPING.
 - 4 CUT PIPING TO JUST ABOVE WALL AND PROVIDE PERMANENT HARD CAP WITH WATER- AND AIR-TIGHT JOINT ; ABANDON PIPING IN WALL.
 - 5 EXISTING PIPING IN WALL.
 - 6 EXISTING PIPING ABOVE CEILING.

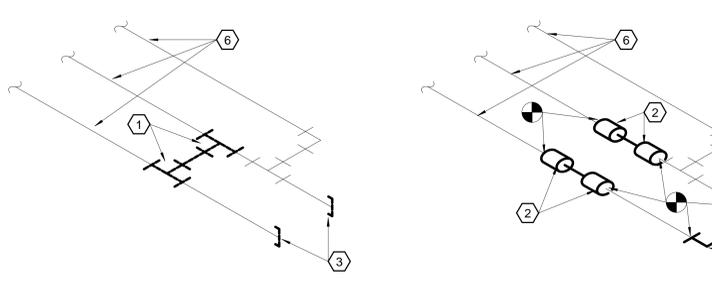
- DEAD END REMOVAL:**
- a. DEAD END (NO-FLOW/LOW-FLOW) PIPING CONTAINS STAGNANT WATER AND COULD BE CONTAMINATED. CONTRACTOR TO PROVIDE NECESSARY MEANS AND METHODS TO DRAIN THIS WATER OUT OF THE PIPING AND DISPOSE OF PROPERLY DOWN THE SANITARY DRAIN AT A FIXTURE.
 - b. CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT STAGNANT WATER FROM CIRCULATING IN POTABLE WATER SYSTEMS. PIPING THAT REMAINS IN PLACE THAT HAS STAGNANT WATER SHALL BE DRAINED OF ALL STAGNANT WATER (SEE ITEM "a"), FLUSHED AND SANITIZED (PER ITEM "c").
 - c. FOLLOW REQUIRED/ SPECIFIED FLUSHING AND SANITIZING METHODS TO MAINTAIN QUALITY OF POTABLE WATER SYSTEMS.
 - d. FOLLOW OSHA STANDARDS TO CONTAIN AND PREVENT FROM SPREADING ANY CONTAMINATION FROM THE EXISTING WATER SYSTEMS.



DEMOLITION

NEW WORK

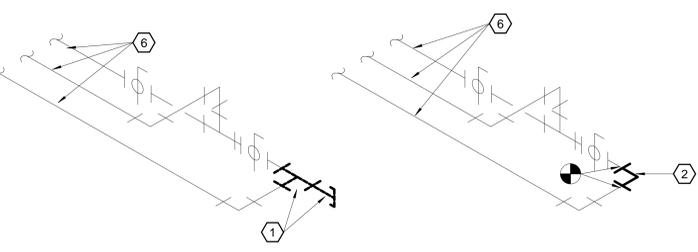
DETAIL E
 N. T. S. 1A-PL-504



DEMOLITION

NEW WORK

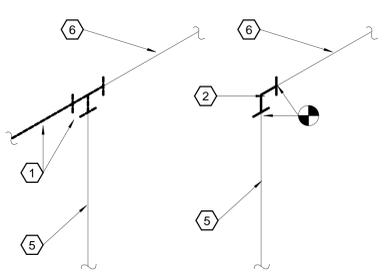
DETAIL F
 N. T. S. 1A-PL-504



DEMOLITION

NEW WORK

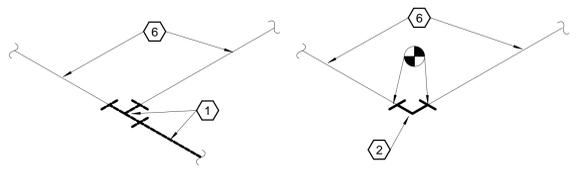
DETAIL G
 N. T. S. 1A-PL-504



DEMOLITION

NEW WORK

DETAIL C
 N. T. S. 1A-PL-504



DEMOLITION

NEW WORK

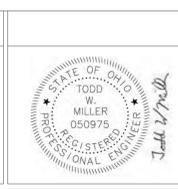
DETAIL D
 N. T. S. 1A-PL-504

Revisions:	Date

CONSULTANTS:

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ARCHITECT/ENGINEERS:

CDL

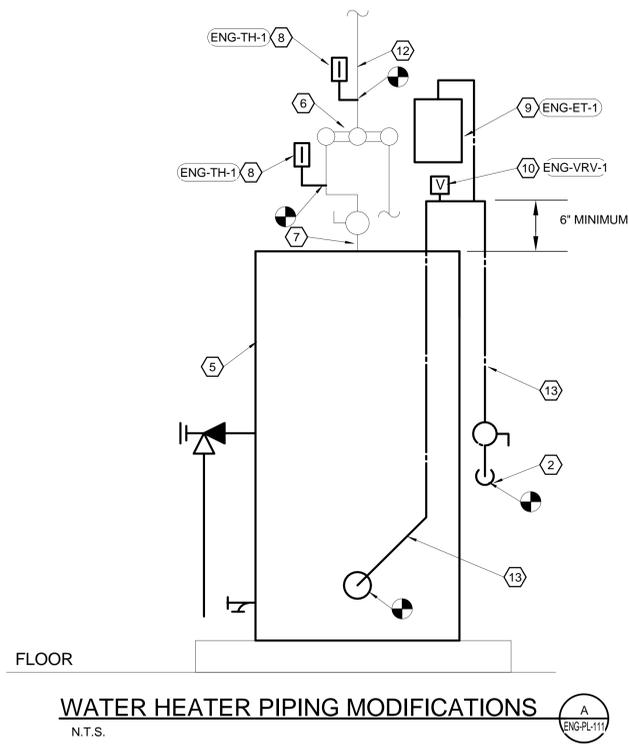
Collaborative Design, Ltd.
 2727 Tuller Parkway, Suite 200
 Dublin, Ohio 43017
 Tel 614.798.1515

Drawing Title	DETAILS
Approved: Project Director	

Project Title FULLY SPRINKLERED INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES		
Project Number	757-17-205	
Building Number	1A	
Location	420 North James Rd. Columbus, Ohio 43219	
Date	Checked	Drawn
10-30-2015	TWM	JRC
Drawing Number	1A-PL-504	
Dwg.	14 of	15



three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



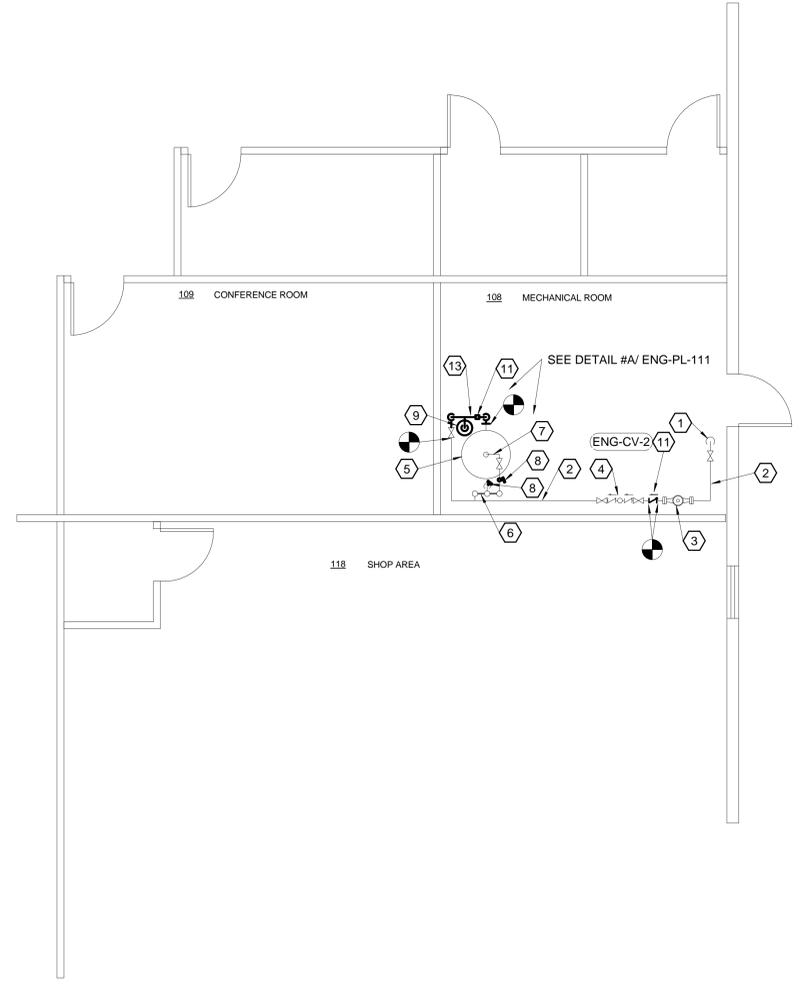
WATER HEATER PIPING MODIFICATIONS
N.T.S. A
ENG-PL-111

GENERAL NOTES:

- A. ALL WORK SHALL FOLLOW CONTRACT DOCUMENTS.
- B. COORDINATE ALL WORK WITH COR.
- C. COORDINATE ALL WORK WITH AND COMPLY WITH INFECTIOUS DISEASE PREVENTION REQUIREMENTS AS STATED IN SPECIFICATION #01 35 26.
- D. PROVIDE INSULATION ON PIPING AND PIPING IDENTIFICATION PER SPECIFICATIONS.
- E. PROVIDE FLUSHING OF NEW PIPING TO CLEAR OF DEBRIS AND SANITIZE - PER SPECIFICATIONS.

PLAN NOTES:

- ① EXISTING 1-1/2" DCW SUPPLY SERVING ENGINEERING BUILDING (FROM UNDERGROUND).
- ② EXISTING 1-1/2" DCW.
- ③ EXISTING 1-1/2" WATER METER.
- ④ EXISTING 1-1/2" REDUCED PRESSURE BACKFLOW PREVENTER.
- ⑤ EXISTING ELECTRIC WATER HEATER.
- ⑥ EXISTING THERMAL MIXING VALVE.
- ⑦ EXISTING 1-1/2" DHW.
- ⑧ NEW THERMOMETER.
- ⑨ NEW THERMAL EXPANSION TANK. SUPPORT INDEPENDENTLY OF PIPE FROM WALL STRUCTURE.
- ⑩ NEW VACUUM RELIEF VALVE.
- ⑪ NEW 1-1/2" SOFT SEAT SPRING LOADED CHECK VALVE.
- ⑫ EXISTING 1" DHW.
- ⑬ NEW 1-1/2" DCW PIPING.



ENGINEERING BUILDING MECHANICAL ROOM #108
N.T.S.



Revisions:	Date

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Collaborative Design, Ltd.
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Dublin, Ohio 43017
Tel 614.798.1515

Drawing Title	ENGINEERING BUILDING
Approved: Project Director	

Project Title			Project Number		
FULLY SPRINKLERED INSTALL WATER MONITORING SYSTEM AND CORRECT DEFICIENCIES			757-17-205		
Location			Building Number		
420 North James Rd. Columbus, Ohio 43219			1A		
Date	Checked	Drawn	Drawing Number		
10-30-2015	TWM	JRC	ENG-PL-111		
			Dwg. 15 of 15		

Columbus VA
Chalmers P. Wylie Ambulatory Care Center

U.S. Department of Veterans Affairs