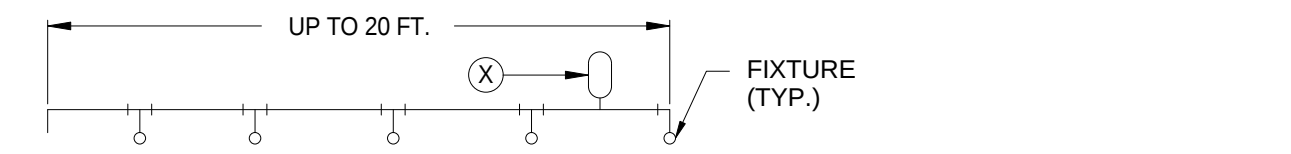
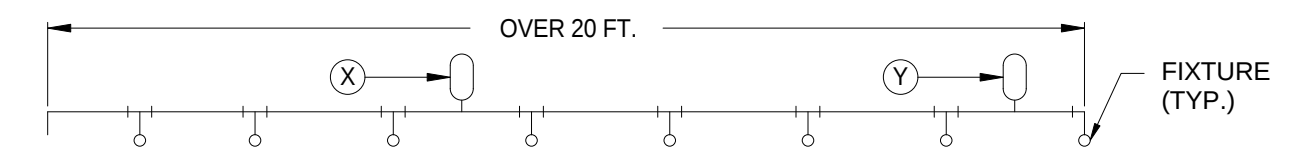


| PLUMBING FIXTURE CONNECTION SCHEDULE                                                                                                                                |                                |              |             |        |          |      |                                                                         |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------|-------------|--------|----------|------|-------------------------------------------------------------------------|--|--|
| ITEM NO.                                                                                                                                                            | EQUIPMENT DESCRIPTION          | WATER SUPPLY |             | WASTE  |          | VENT | REMARKS                                                                 |  |  |
|                                                                                                                                                                     |                                | HW           | CW          | DIRECT | INDIRECT |      |                                                                         |  |  |
| WC-1                                                                                                                                                                | WATER CLOSET                   | -            | 1-1/4"      | 4"     | -        | 2"   | WALL HUNG, BACK OUTLET STANDARD MOUNTING HEIGHT                         |  |  |
| WC-2                                                                                                                                                                | WATER CLOSET (ADA)             | -            | 1-1/4"      | 4"     | -        | 2"   | WALL HUNG, BACK OUTLET STANDARD ADA MOUNTING HEIGHT                     |  |  |
| U-1                                                                                                                                                                 | URINAL                         | -            | 1"          | 2"     | -        | 2"   | WALL HUNG, BACK OUTLET STANDARD MOUNTING HEIGHT                         |  |  |
| LAV-1                                                                                                                                                               | LAVATORY                       | 1/2"         | 1/2"        | 2"     | -        | 2"   | COUNTERTOP MOUNTED WITH UNDER-COUNTER ADA INSULATION KIT                |  |  |
| LAV-2                                                                                                                                                               | LAVATORY                       | 1/2"         | 1/2"        | 2"     | -        | 2"   | WALL HUNG, ADA MOUNTING HEIGHT WITH UNDER-COUNTER ADA INSULATION KIT    |  |  |
| CSS-1                                                                                                                                                               | CLINICAL SERVICE SINK          | 1/2"         | 1-1/4"/1/2" | 4"     | -        | 2"   | FLUSH VALVE, CW & HW FAUCET, HOSE SPRAY                                 |  |  |
| SS-1                                                                                                                                                                | SURGICAL SCRUB SINK            | 1/2"         | 1/2"        | 2"     | -        | 2"   | WALL HUNG, AUTOMATIC SENSOR DECK MOUNTED FAUCET                         |  |  |
| SK-1                                                                                                                                                                | SINGLE COMPARTMENT SINK        | 1/2"         | 1/2"        | 2"     | -        | 2"   | STAFF BREAK ROOM - COUNTERTOP MOUNTED, TO INCLUDE FIXTURE TYPE 'GD-1'.  |  |  |
| SK-2                                                                                                                                                                | SINGLE COMPARTMENT SINK        | 1/2"         | 1/2"        | 2"     | -        | 2"   | NURSING MOCK EXAM ROOM - COUNTERTOP MOUNTED                             |  |  |
| SK-3                                                                                                                                                                | SINGLE COMPARTMENT SINK        | 1/2"         | 1/2"        | 2"     | -        | 2"   | NURSING CLASSROOM / LAB - COUNTERTOP MOUNTED                            |  |  |
| MS-1                                                                                                                                                                | MOP SINK                       | 1/2"         | 1/2"        | 3"     | -        | 2"   | -                                                                       |  |  |
| EW-C-1                                                                                                                                                              | BI-LEVEL ELECTRIC WATER COOLER | -            | 1/2"        | 2"     | -        | 2"   | WALL HUNG, WITH MANUFACTURERS WALL BRACKETS                             |  |  |
| SP-1                                                                                                                                                                | DUPLEX SUMP PUMP               | -            | -           | -      | 3"       | -    | DUPLEX SUMP PUMP - SUB-SURFACE DRAIN AND DRAIN TILE                     |  |  |
| SP-1                                                                                                                                                                | ELEVATOR SUMP PUMP             | -            | -           | -      | 2"       | -    | ELEVATOR SUMP PUMP - EXTEND PIPING AND DISCHARGE INTO FD-3 ON SUB-LEVEL |  |  |
| SP-2                                                                                                                                                                | ELEVATOR SUMP PUMP             | -            | -           | -      | 2"       | -    | ELEVATOR SUMP PUMP - EXTEND PIPING AND DISCHARGE INTO FD-3 ON SUB-LEVEL |  |  |
| EW-1                                                                                                                                                                | EMERGENCY EYEWASH              | 1/2"         | 1/2"        | -      | -        | -    | COUNTERTOP MOUNTED, WITH TMV-3 BELOW IN BASE CABINET                    |  |  |
| ES-1                                                                                                                                                                | EMERGENCY SHOWER               | 3/4"         | 3/4"        | -      | -        | -    | WALL RECESSED, WITH TMV-2 ABOVE THE CEILING                             |  |  |
| WH-1                                                                                                                                                                | WALL HYDRANT, FREEZE PROOF     | -            | 3/4"        | -      | -        | -    | TO INCLUDE WALL CLAMP AND BACKFLOW DEVICE, SLEEVE TO SUIT WALL DEPTH    |  |  |
| CM-1                                                                                                                                                                | COFFEE MAKER OUTLET BOX        | -            | 1/2"        | -      | -        | -    | -                                                                       |  |  |
| IM-1                                                                                                                                                                | ICE MAKER OUTLET BOX           | -            | 1/2"        | -      | -        | -    | -                                                                       |  |  |
| LF-1                                                                                                                                                                | LABORATORY FAUCET              | 1/2"         | 1/2"        | -      | -        | -    | -                                                                       |  |  |
| LF-2                                                                                                                                                                | LABORATORY FAUCET              | -            | 1/2"        | -      | -        | -    | -                                                                       |  |  |
| DF-1                                                                                                                                                                | DEIONIZED WATER FAUCET         | -            | -           | -      | -        | -    | DECK MOUNTED FAUCET, SERVED FROM THE DEIONIZED WATER SYSTEM ONLY        |  |  |
| DW-1                                                                                                                                                                | UNDER COUNTER DISHWASHER       | 1/2"         | -           | -      | -        | -    |                                                                         |  |  |
| REFER TO PLUMBING FIXTURES SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. VERIFY FINAL EQUIPMENT SELECTION REQUIREMENTS PRIOR TO ROUGH-IN AND CONNECTIONS. |                                |              |             |        |          |      |                                                                         |  |  |

| KITCHEN FIXTURE CONNECTION SCHEDULE                                                                           |                                  |              |      |        |          |      |   |                                                             |
|---------------------------------------------------------------------------------------------------------------|----------------------------------|--------------|------|--------|----------|------|---|-------------------------------------------------------------|
| ITEM                                                                                                          | EQUIPMENT DESCRIPTION            | WATER SUPPLY |      | WASTE  |          | VENT |   | REMARKS                                                     |
|                                                                                                               |                                  | HW           | CW   | DIRECT | INDIRECT |      |   |                                                             |
| KS-1                                                                                                          | SINGLE BOWL STAINLESS STEEL SINK | 1/2"         | 1/2" | 2"     | -        | 2"   | - |                                                             |
| KS-2                                                                                                          | DOUBLE BOWL STAINLESS STEEL SINK | 1/2"         | 1/2" | 2"     | -        | 2"   |   | WITH GARBAGE DISPOSER                                       |
| KS-3                                                                                                          | SINGLE BOWL STAINLESS STEEL      | 1/2"         | 1/2" | 2"     | -        | 2"   |   |                                                             |
| DW-1                                                                                                          | UNDERCOUNTER DISHWASHER          | 3/4"         | -    | -      | -        | -    |   | EXTEND MANUFACTURERS FURNISHED FLEXIBLE HOSE TO FLOOR SINK. |
| IM-1                                                                                                          | UNDERCOUNTER ICE MAKER           | -            | 1/2" | -      | 3/4"     | -    |   | WITH WATER FILTER                                           |
| IM-1                                                                                                          | REFRIGERATOR ICE MAKER           | -            | 1/2" | -      | -        | -    |   | EXTEND DRAIN TO FLOOR SINK                                  |
| <u>NOTES:</u>                                                                                                 |                                  |              |      |        |          |      |   |                                                             |
| 1. REFER TO FOOD SERVICE CONSULTANTS DRAWINGS AND SPECIFICATIONS FOR ROUGH-IN INFORMATION AND EQUIPMENT DATA. |                                  |              |      |        |          |      |   |                                                             |

| WATER HAMMER ARRESTER SCHEDULE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |              |                 |                     |                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|-----------------|---------------------|----------------------------|
| ITEM NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | MANUFACTURER | MODEL NUMBER | CONNECTION SIZE | FIXTURE UNIT RATING | REMARKS                    |
| "A"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | J.R. SMITH   | 5005         | 3/4"            | 1-11                | THREADED NIPPLE CONNECTION |
| "B"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | J.R. SMITH   | 5010         | 1"              | 12-32               | THREADED NIPPLE CONNECTION |
| "C"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | J.R. SMITH   | 5020         | 1"              | 33-60               | THREADED NIPPLE CONNECTION |
| "D"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | J.R. SMITH   | 5030         | 1"              | 61-113              | THREADED NIPPLE CONNECTION |
| "E"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | J.R. SMITH   | 5040         | 1"              | 114-154             | THREADED NIPPLE CONNECTION |
| "F"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | J.R. SMITH   | 5050         | 1"              | 155-330             | THREADED NIPPLE CONNECTION |
| RULE 1:<br>THE PREFERRED PLACEMENT LOCATION IS AT THE END OF THE BRANCH LINE BETWEEN THE LAST TWO FIXTURES IN A BRANCH LESS THEN 20 FEET.                                                                                                                                                                                                                                                                                                                                                                                                                            |              |              |                 |                     |                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |              |                 |                     |                            |
| RULE 2:<br>IN BRANCHES THAT EXCEED 20 FEET IN LENGTH THE SUM OF THE FIXTURE UNIT RATINGS OF UNITS (X) & (Y) SHALL BE EQUAL TO OR GREATER THAN THE DEMAND OF BRANCH.                                                                                                                                                                                                                                                                                                                                                                                                  |              |              |                 |                     |                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |              |                 |                     |                            |
| NOTES:<br>A. INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. PROVIDE WATER HAMMER ARRESTERS AT ALL QUICK CLOSING VALVES.<br>B. ALL ARRESTERS MUST BE INSTALLED IN A VERTICAL (UPRIGHT) POSITION TO INSURE PROPER OPERATION OF THE INTERNAL BELLOW.<br>C. WHEN INSTALLING, PLACE WRENCH ON NIPPLE ONLY. NEVER TIGHTEN BY GRIPPING THE SHELL.<br>D. SHOCK ABSORBERS MUST BE STAINLESS STEEL, PRE-CHARGED AND PERMANENTLY SEALED AT THE FACTORY. ALL SHOCK ABSORBERS SHELL MEET ASSE 1010 AND FDI-WH201 STANDARDS. SIOUX ABSORBERS ARE NOT TO BE INSTALLED. |              |              |                 |                     |                            |



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## DOMESTIC GAS FIRED HOT WATER HEATER SCHEDULE

| PLAN<br>MARK                                 | MANUFACTURER | MODEL NUMBER     | LOCATION   | FUEL        | INPUT<br>(BTU/H) | REQ'D. GAS PRESSURE |             | THERMAL<br>EFFICIENCY | STORAGE<br>CAPACITY/GALS. | RECOVERY<br>RATE GALS. @100' | PIPING CONNECTIONS |        |      | VENT,<br>INCHES | ASME<br>RATED<br>TANK | WORKING<br>PRESSURE<br>LBS. | ASME<br>T&P<br>VALVE | OPERATING<br>VOLTAGE | SHIPPING<br>WEIGHT,<br>LBS. | REMARKS |
|----------------------------------------------|--------------|------------------|------------|-------------|------------------|---------------------|-------------|-----------------------|---------------------------|------------------------------|--------------------|--------|------|-----------------|-----------------------|-----------------------------|----------------------|----------------------|-----------------------------|---------|
|                                              |              |                  |            |             |                  | MIN. " W.C.         | MAX. " W.C. |                       |                           |                              | WATER              |        | GAS  |                 |                       |                             |                      |                      |                             |         |
|                                              |              |                  |            |             |                  |                     |             |                       |                           |                              | INLET              | OUTLET |      |                 |                       |                             |                      |                      |                             |         |
| DWH-1                                        | RHEEM        | GHE 100ES-400(A) | MECH. ROOM | NATURAL GAS | 400,000          | 5.3                 | 10.5        | 94%                   | 100                       | 445                          | 2"                 | 2"     | 3/4" | XX              | YES                   | 160                         | YES                  | 120                  | 835                         | -       |
| DWH-2                                        | RHEEM        | GHE 100ES-400(A) | MECH. ROOM | NATURAL GAS | 400,000          | 5.3                 | 10.5        | 94%                   | 100                       | 445                          | 2"                 | 2"     | 3/4" | XX              | YES                   | 160                         | YES                  | 120                  | 835                         | -       |
| DWH-2                                        | RHEEM        | GHE 100ES-400(A) | MECH. ROOM | NATURAL GAS | 400,000          | 5.3                 | 10.5        | 94%                   | 100                       | 445                          | 2"                 | 2"     | 3/4" | XX              | YES                   | 160                         | YES                  | 120                  | 835                         | -       |
| NOTES:                                       |              |                  |            |             |                  |                     |             |                       |                           |                              |                    |        |      |                 |                       |                             |                      |                      |                             |         |
| 1. SET ON 4" HIGH CONCRETE HOUSEKEEPING PAD. |              |                  |            |             |                  |                     |             |                       |                           |                              |                    |        |      |                 |                       |                             |                      |                      |                             |         |

## DOMESTIC WATER BACKFLOW PREVENTER SCHEDULE

| PLAN MARK                                                                                                                                                                                                                                         | MANUFACTURER    | SERIES | MODEL NUMBER       | LOCATION         | USE              | TYPE/STYLE | SIZE   | SHUT-OFF/SERVICE VALVES | MAXIMUM WORKING PRESSURE, PSI | WATER PIPING CONNECTIONS, INCHES |          | LEAD FREE | STRAINER | AIR GAP FITTING | DRAIN SIZE | SHIPPING WEIGHT, LBS. | REMARKS           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------|--------------------|------------------|------------------|------------|--------|-------------------------|-------------------------------|----------------------------------|----------|-----------|----------|-----------------|------------|-----------------------|-------------------|
|                                                                                                                                                                                                                                                   |                 |        |                    |                  |                  |            |        |                         |                               | INLET                            | OUTLET   |           |          |                 |            |                       |                   |
| BF-P-1                                                                                                                                                                                                                                            | WATTS REGULATOR | LF909  | LF909-QT-FAD-NRS-S | MECH. ROOM       | DOMESTIC SERVICE | RPZA       | 4"     | NON-RISING STEM         | 175                           | FLANGED                          | FLANGED  | YES       | YES      | 909AG-K         | 3" IPS     | 418                   | NOTE 1 AND NOTE 2 |
| BF-P-2                                                                                                                                                                                                                                            | WATTS REGULATOR | LF909  | LF909-QT-S         | LEVEL 3 (RM 375) | MAKE-UP WATER    | RPZA       | 3/4"   | QUARTER TURN BALL       | 175                           | THREADED                         | THREADED | YES       | YES      | 909AG-C         | 1" IPS     | 18.0                  | NOTE 2 AND NOTE 3 |
| BF-P-3                                                                                                                                                                                                                                            | WATTS REGULATOR | LF909  | LF909-QT-S         | LEVEL 0          | DEIONIZED WATER  | RPZA       | 1"     | QUARTER TURN BALL       | 175                           | THREADED                         | THREADED | YES       | YES      | 909AG-C         | 1" IPS     | 19.0                  | NOTE 2 AND NOTE 3 |
| BF-P-4                                                                                                                                                                                                                                            | WATTS REGULATOR | LF909  | LF909-QT-S         | LEVEL 0          | MAKE-UP WATER    | RPZA       | 1-1/4" | QUARTER TURN BALL       | 175                           | THREADED                         | THREADED | YES       | YES      | 909AG-F         | 2" IPS     | 46.0                  | NOTE 2 AND NOTE 3 |
| NOTES:<br>1. SET ON 4" HIGH CONCRETE HOUSEKEEPING PAD - PROVIDE PIPE STANDS AS REQUIRED TO SUPPORT ASSEMBLY.<br>2. EXTEND DISCHARGE PIPE TO RECEPTOR - TERMINATE WITH AIR-GAP.<br>3. SUPPORT ASSEMBLY FROM STRUCTURE, DO NOT SUPPORT FROM PIPING. |                 |        |                    |                  |                  |            |        |                         |                               |                                  |          |           |          |                 |            |                       |                   |

## LABORATORY CENTRAL AIR COMPRESSOR

| PLAN MARK                                                                                                                                                                                                        | MANUFACTURER  | SYSTEM MODEL NUMBER | LOCATION   | USE        | HP        | SYSTEM CAPACITY 145 PSIG | SYSTEM BTU/Hr | RECEIVER GALLONS | NOISE LEVEL db (A) | ELECTRICAL DATA |       |      | SYSTEM WEIGHT LBS. | DIMSIONS (INCHES) |       |      | REMARKS   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|------------|------------|-----------|--------------------------|---------------|------------------|--------------------|-----------------|-------|------|--------------------|-------------------|-------|------|-----------|
|                                                                                                                                                                                                                  |               |                     |            |            |           |                          |               |                  |                    | VOLTS           | PHASE | FLA  |                    | LENGTH            | WIDTH | HGT. |           |
| AC-1                                                                                                                                                                                                             | BEACON MEDAES | LA507T-120V-T       | MECH. ROOM | LABORATORY | (3) @ 7.5 | 51.0                     | 51,536        | 120              | 77                 | 480             | 3     | 30.9 | 1997               | 62.00             | 66.00 | 81.9 | SEE NOTES |
| NOTES:<br>1. SET UNIT ON 4" HIGH CONCRETE HOUSEKEEPING PAD.<br>2. REFER TO SPECIFICATION SECTION 226113 - 'COMPRESSED-AIR EQUIPMENT FOR LABORATORY FACILITIES'.<br>3. EXTEND COPPER DRAIN FULL SIZE TO RECEPTOR. |               |                     |            |            |           |                          |               |                  |                    |                 |       |      |                    |                   |       |      |           |

## LABORATORY CENTRAL VACUUM

| PLAN MARK                                                                                                                                                                                                                                                          | MANUFACTURER  | SYSTEM MODEL NUMBER | LOCATION   | USE        | HP      | NOMINAL PUMPING SPEED (ACFM/PUMP) | CAPACITY 20" Hg (SCFM/SYSTEM) | CAPACITY 25" Hg (SCFM/SYSTEM) | END PRESSURE "Hg (TORR) | NOISE LEVEL db (A) | RECEIVER GALLONS | ELECTRICAL DATA |       |      | DIMSIONS (INCHES) |       |       | CONNECTIONS (INCHES) |               |                  |                 | SYSTEM WEIGHT LBS. | REMARKS   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|------------|------------|---------|-----------------------------------|-------------------------------|-------------------------------|-------------------------|--------------------|------------------|-----------------|-------|------|-------------------|-------|-------|----------------------|---------------|------------------|-----------------|--------------------|-----------|
|                                                                                                                                                                                                                                                                    |               |                     |            |            |         |                                   |                               |                               |                         |                    |                  | VOLTS           | PHASE | FLA  | LENGTH            | WIDTH | HGT.  | INLET (FNPT)         | OUTLET (FNPT) | TANK DRAIN (NPT) | AIR CONN. (NPT) |                    |           |
| VU-1                                                                                                                                                                                                                                                               | BEACON MEDAES | LVHT04D-200H-D      | MECH. ROOM | LABORATORY | (2) @ 5 | 79.0                              | 52.0                          | 26.6                          | 28.4                    | 79                 | 200              | 480             | 3     | 14.5 | 73.00             | 45.5  | 67.00 | 1.50                 | 2.00          | 1/4              | 1/4             | 1809               | SEE NOTES |
| NOTES:<br>1. SET UNIT ON 4" HIGH CONCRETE HOUSEKEEPING PAD.<br>2. REFER TO SPECIFICATION SECTION 226219 - 'VACUUM EQUIPMENT FOR LABORATORY FACILITIES'.<br>3. EXTEND COPPER DRAIN FULL SIZE TO RECEPTOR.<br>4. PROVIDE MUFFLER AS RECOMMENDED BY THE MANUFACTURER. |               |                     |            |            |         |                                   |                               |                               |                         |                    |                  |                 |       |      |                   |       |       |                      |               |                  |                 |                    |           |

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

Drawing Title:

SCHEDULES - PLUMBING

Project No.: 04561.01      Checked by:

P0602