NOT EVERY KEYNOTE IS APPLICABLE TO EVERY SHEET

## PLUMBING KEYNOTES

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| 221101 | MAKE-UP WATER LINE FOR CHILLED WATER SYSTEM. REFER TO MECHANICAL SHEETS FOR CONTINUATION. |
| 221102 | MAKE-UP WATER LINE FOR HOT WATER SYSTEM. REFER TO MECHANICAL SHEETS FOR CONTINUATION. |
| 221104 | PROVIDE BLIND PIPE CAP(S) AND SHUT-OFF VALVE(S) FOR FUTURE BUILD-OUT. |
| 221105 | PROVIDE SHUT-OFF VALVE, CHECK VALVE, AND SHUT-OFF VALVE IN THE DIRECTION OF WATER FLOW. BALANCE TO FLOW INDICATED. |
| 221106 | ALL PIPING LAYOUT TO BE COORDINATED WITH LADDER TO MEET REQUIRED CLEARANCES FOR PERSONNEL ACCESS. PIPPING IS TO BE LOCATED TIGHT TO THE CELL BEHIND THE LADDER. |
| 221107 | LOCATE DOMESTIC WATER PIPING RISERS WITH SHUT-OFF VALVES NEAR CHASE PANEL ACCESS. |
| 221108 | COORDINATE ROUTING OF PIPING WITH ELECTRICAL EQUIPMENT. |
| 221109 | 1-1/4" GAS TO DEDICATED OUTSIDE AIR UNIT. |
| 221110 | PROVIDE WATER SHUT-OFF VALVE FOR FUTURE WATER HEATER. |
| 221111 | PROVIDE EXPANSION ANCHOR IN HOT WATER PIPING AT LOCATION INDICATED. REFER TO SPECIFICATION 220516 FOR DELEGATED DESIGN REQUIREMENTS. PROVIDE ALL GUIDES AND ANCHORS PER MANUFACTURER RECOMENDATION. |
| 221112 | PROVIDE EXPANSION V-LOOP IN HOT WATER PIPING AT LOCATION INDICATED. REFER TO SPECIFICATION 220516 FOR DELEGATED DESIGN REQUIREMENTS. PROVIDE ALL GUIDES AND ANCHORS PER MANUFACTURER RECOMENDATION. |
| 221113 | PROVIDE 3/4" DCW WITH BACKFLOW PREVENTOR TO INTERNAL FIRE SUPPRESSION SYSTEM CONNECTION SERVING DRYER. |
| 221114 | 1/2" CW(R) DOWN FROM TRAP PRIMER TO SERVE FLOOR SINKS (TYP.) |
| 221116 | 1/2" CW(S) DOWN FROM TRAP PRIMER TO SERVE FLOOR SINKS (TYP.) |
| 221117 | PROVIDE 1" CW(S) FOR REMOTE FLUSH VALVE. 1" LINE TO BE ROUTED FROM REMOTE FLUSH VALVE TO DT-1. |
| 221118 | TRENCH DRAINS TO BE LOCATED CENTERED ON DOOR. TYPICAL ALL TD-4. |
| 221119 | PROVIDE PIPE IN 4" CONDUIT WITH LONG SWEEP BEND |
| 221120 | PIPING UP FROM BELOW GRADE SERVING SINK. |
| 221121 | 2" HW FROM TMV-1 IN MECHANICAL C1010. |
| 221122 | 2" HW FOR FUTURE EXPANSION. |
| 221124 | PROVIDE 3/4" DCW WITH BACKFLOW PREVENTER TO INTERNAL FIRE SUPPRESSION SYSTEM CONNECTION SERVING DRYER. |
| 221125 | SOLAR THERMAL HEAT EXCHANGER (ALTERNATE BID) SERVING DOMESTIC HOT WATER. REFER TO SHEET M4.4 FOR ADDITIONAL INFORMATION. PROVIDE PIPE BRANCHES WITH SHUTOFF VALVES (BASE-BID). |
| 221126 | PROVIDE 3/4" CW / HW PIPE AS SOFT COPPER TUBING IN 4" CONDUIT LOCATED BELOW FLOOR OVER TO FIXTURE (S). CONDUIT TO BE CAPPED 12" ABOVE CHASE FLOOR AND BENEATH FIXTURE (S). PROVIDE CONDUIT WITH LONG RADIUS ELBOW. |
| 221127 | 3/4" GAS (144 CFH) SERVING CONVECTION OVEN. REFER TO FOOD SERVICE DRAWINGS. |

## PLUMBING KEYNOTES

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| 221128 | 1/2" GAS (80 CFH) SERVING TITLING SKILLET. REFER TO FOOD SERVICE DRAWINGS. |
| 221129 | 3/4" GAS (94 CFH) SERVING CONVECTION GAS STEAMER. REFER TO FOOD SERVICE DRAWINGS. |
| 221130 | 1" GAS (225 CFH) SERVING RANGE. REFER TO FOOD SERVICE DRAWINGS. |
| 221131 | 1" GAS (112 CFH) SERVING FRYER. REFER TO KITCHEN DRAWINGS. |
| 221132 | 1/2" CW & HW SERVING SKILLET. REFER TO FOOD SERVICE DRAWINGS. |
| 221133 | 1/2" CW SERVING CONVECTION GAS STEAMER. REFER TO FOOD SERVICE DRAWINGS. |
| 221134 | 1" CW TO FLUSH VALVE SERVING DETOX TOILET. |
| 221135 | REVERSE OSMOSIS SYSTEM (ALTERNATE BID) SERVING KITCHEN B1070. PROVIDE 1" CW(S) PIPE BRANCHES WITH SHUTOFF VALVES (BASE-BID). |
| 221136 | 1" CW(S) DOWN TO REVERSE OSMOSIS SYSTEM (ALTERNATE BID) SERVING KITCHEN B1070. PROVIDE 1" PIPE BRANCHES WITH SHUTOFF VALVES (BASE-BID). |
| 221137 | MANUAL BYPASS VALVE. |
| 221138 | SOLAR INLINE PUMPS (ALTERNATE BID). REFER TO SHEET M4.4. |
| 221139 | 3/4" CW(S) TO CRAC-1. SEE SHEET M.2.2C. COORDINATE ROUTING OF PIPING WITH ELECTRICAL SO PIPING IS NOT ROUTED ABOVE ELECTRICAL EQUIPMENT. |
| 221140 | 4" SAN FROM FLOOR SINK ABOVE. |
| 221141 | WATER METER PROVIDED BY LOCAL WATER COMPANY. |
| 221142 | THREE WAY VALVE. |
| 221143 | CHECK VALVE. |
| 221144 | ROUTE 1/2" PIPE FROM SINK CW(S) PIPE BELOW COUNTER TO COFFEE MACHINE LOCATION. PROVIDE WATTS SD-2 BACKFLOW PREVENTER. COORDINATE EXACT LOCATION BEFORE INSTALL. |
| 221145 | 3/4" CW TO FILTER. SEE FOOD SERVICE DRAWINGS FS1.2. |
| 221146 | 3/4" HW AND 3/4" CW DOWN TO SINK. SEE FOOD SERVICE DRAWINGS FS1.2. |
| 221147 | 1" HW TO DISHWASHER. SEE FOOD SERVICE FS1.2. |
| 221301 | REFER TO SITE/CIVIL DRAWINGS FOR CONTINUTATION |
| 221302 | 4" SANITARY FROM FLOOR SINK ABOVE. |
| 221305 | PROVIDE OPEN HUB CONNECTION WITH TRAP SEAL. |
| 221702 | GAS METER PROVIDED BY LOCAL UTILITY COMPANY. |
| 221703 | PROVIDE EMERGENCY GAS SHUTOFF. |
| 221704 | PROVIDE GAS SHUT-OFF VALVE FOR FUTURE WATER HEATER. |
| 221705 | EMERGENCY GAS SHUTOFF VALVE. |
| 221706 | NATURAL GAS FOR FUTURE BOILER. |
| 221707 | 34" NATURAL GAS TO DOAS-1 |
| 221708 | REFER TO FOOD SERVICE DRAWINGS FS1.2 FOR GAS HEADER REQUIREMENTS SERVING KITCHEN EQUIPMENT. |

## GENERAL NOTES

1. INSTALLATION OF PLUMBING FIXTURES AND ACCESSORIES, INCLUDING FLUSH CONTROL VALVES INTENDED FOR PEOPLE WITH DISABILITIES, SHALL BE IN ACCORDANCE WITH ADA REQUIREMENTS.
2. INSTALLATION OF PLUMBING PIPING SHALL BE FULLY COORDINATED WITH STRUCTURAL, ARCHITECTURAL, ELECTRICAL, AND HVAC DRAWINGS TO AVOID CONFLICT.
3. NO PLUMBING (WATER, DRAINS, VENT, OR GAS PIPING) SHALL BE INSTALLED DIRECTLY ABOVE ANY ELECTRICAL PANELS. COORDINATE WITH OTHER DIVISIONS BEFORE PROCEEDING WITH INSTALLATION.
4. IF ***NON*** BASIS OF DESIGN EQUIPMENT IS SELECTED, CONTRACTOR SHALL BEAR ADDITIONAL COSTS FOR MODIFICATIONS TO THE ORIGINAL SYSTEM(S), INCLUDING COSTS FOR ARCHITECT/ENGINEER DESIGN REVIEW.
5. PROVIDE WATER HAMMER ARRESTERS AT PLUMBING FIXTURES AND GROUPS OF PLUMBING FIXTURES THAT ARE SUBJECT TO WATER HAMMER. SELECT ARRESTERS IN ACCORDANCE WITH THE PLUMBING AND DRAINAGE INSTITUTE STANDARD.
6. CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS, LABOR AND EQUIPMENT PERMIT FEES, REQUIRED FOR, OR INCIDENTAL TO THE INSTALLATION OF A COMPLETE AND OPERATIONAL PLUMBING SYSTEM AS INDICATED IN THE CONTRACT DOCUMENTS INCLUDING SPECIFICATIONS.
7. ALL PLUMBING SERVICES GOING INTO THE BUILDING AND LEAVING THE BUILDING SHALL BE CONNECTED TO THE SITE UTILITIES, COORDINATE WITH SITE UTILITIES DWGS. COORDINATE ALL EXTERIOR UNDERGROUND PLUMBING WORK WITH THE SITE UTILITIES BEFORE COMMENCING WORK. COORDINATE ALL UNDERGROUND PIPING WITH FOUNDATION DRAWINGS.
8. ALL PLUMBING WORK SHALL BE IN CONFORMANCE WITH THE INTERNATIONAL PLUMBING CODE, LATEST EDITION ADOPTED BY THE STATE OF INDIANA WITH INDIANA AMENDMENTS, MUNICIPAL OR CITY CODES, AND THE AUTHORITY HAVING JURISDICTION.
9. PLUMBING CONTRACTOR TO ACKNOWLEDGE AND REVIEW FOOD SERVICE DRAWINGS FOR PLUMBING CONNECTION REQUIREMENTS.
10. INSTALL BALL VALVE CLOSE TO WATER MAIN ON EACH BRANCH AND RISER SERVING PLUMBING EQUIPMENT AND FIXTURES.
11. ALL REQUIRED SHUT-OFF VALVES IN THE HOUSING UNITS SHALL BE CLEARLY MARKED, LOCATED IN THE SAME PLACE, AND ACCESSIBLE WITHOUT A LADDER. SHUT-OFF VALVES LOCATED ABOVE THE CEILING THROUGHOUT THE BUILDING SHALL BE WITHIN 24" OF THE CEILING.
12. REFERENCE SECTIONS AND RISER / ISOMETRICS FOR ADDITIONAL INFORMATION ON PIPE SIZES NOT SHOWN IN PLAN VIEWS.
13. PIPING SERVING DRINKING FOUNTAINS, ELECTRIC WATER COOLERS, AND LAVATORIES LOCATED BELOW GRADE OR BELOW THE SECOND FLOOR SHALL BE SOFT COPPER TUBE AND INSTALLED IN 4" PVC CONDUIT WITH LONG SWEEP BENDS. CONDUIT TO BE CAPPED 12" ABOVE CHASE FLOOR AND CONCEALED BEHIND FIXTURES. INSTALLATION REQUIRED FOR FUTURE SERVICABILITY OR PIPE REPLACEMENT.
14. PIPING SERVING FIXTURES IN WALK-IN CHASES SHALL EXTEND ***NO MORE THAN*** 18" FROM THE CELL / HOUSING WALL. COORDINATE SLEEVING REQUIREMENTS WITH STRUCTURAL DRAWINGS.
15. REFER TO ARCHITECTURAL ROOF DRAWINGS FOR DIMENSIONS.
16. CONTRACTOR SHALL PROVIDE ACCESS DOORS, WHETHER SPECIFICALLY IDENTIFIED ON THE SHEETS OR NOT, IN ALL WALL AND CEILINGS WHERE SERVICE OR ADJUSTMENT TO PLUMBING ITEMS MAY BE REQUIRED. ACCESS DOORS SHALL BE OF AN APPROPRIATE SIZE REQUIRED FOR EACH APPLICATION. WHERE APPLICABLE, ACCESS DOORS SHALL MATCH THE FIRE / SECURITY RATING OF THE WALL / CEILING ASSEMBLY.
17. ELECTRONIC WATER MANAGEMENT SYSTEM TO BE PROVIDED PER SPECIFICATION SECTION 22 46 00. COMPONENTS SUCH AS CELL CONTROL VALVES (CVC) HAVE BEEN SHOWN ON DRAWINGS AND ARE BASED ON THE WILLOUGHBY WMSI SYSTEM. COMPONENTS ARE TO BE LOCATED PER SYSTEM MANUFACTURER RECOMMENDATIONS. COMPONENTS ASSOCIATED WITH SECURITY PLUMBING FIXTURES (ELECTRONIC FLUSH VALVES AND SOLENOID VALVES) SHALL BE COORDINATED WITH PROVIDED SYSTEM. WIRING TO BE INSTALLED IN A CLEAN, WORKMANLIKE MANNER.
18. PROVIDE SIZES TO FIXTURES AS INDICATED ON PLANS, RISERS, AND SECTIONS. IF SIZE IS NOT INDICATED, PROVIDE SIZE SHOWN ON PLUMBING FIXTURE SCHEDULE.
19. CONTRACTOR TO COORDINATE WITH DIVISION 13 SPECIFICATION FOR PREFABRICATION CELLS. LOCATIONS AND CONNECTION SIZES PROVIDED AS PART OF CELLS TO BE COORDINATED WITH PREFABRICATED CELL PROVIDER.
20. PROVIDE HOUSEKEEPING PAD FOR EQUIPMENT. PAD SIZES SHOWN ARE APPROXIMATE AND ARE BASED ON BASIS OF DESIGN EQUIPMENT. PROPER EQUIPMENT OPERATION AND MAINTENANCE REQUIRES EQUIPMENT PADS SIZED TO SPECIFIC EQUIPMENT FURNISHED. PROVIDE EQUIPMENT PAD SIZES BASED ON ACTUAL SIZE OF FURNISHED EQUIPMENT. SUBMIT COORDINATION DRAWINGS ILLUSTRATING PROPOSED PAD DIMENSIONS BASED ON APPROVED EQUIPMENT. DO NOT PERFORM LAYOUT WORK OR BEGIN FORM WORK FOR PADS PRIOR TO APPROVAL OF COORDINATION DRAWINGS.
21. A3 CONTRACTOR TO COORDINATE COLD-FORMED STEEL TRUSSES WITH THE ROUTING AND HANGER/SUPPORTS OF ALL MECHANICAL, ELECTRICAL, PLUMBING, SECURITY ELECTRONICS AND FIRE PROTECTION THROUGH BIM COORDINATION MODELING PRIOR TO ANY FABRICATION. ROUTING OF TRADES ELEMENTS SHOWN ON PLANS AND ANY TRUSS WEBS SHOWN IN BUILDING SECTIONS ARE DIAGRAMMATIC AND MUST BE COORDINATED WITH COLD-FORMED STEEL TRUSS SUPPLIER AND THEIR STRUCTURAL TRUSS ELEMENT REQUIREMENTS. TRADES TO PROVIDE HANGING LOADS TO TRUSS DELEGATED DESIGNER, MODIFICATION OF HANGER/SUPPORTS FOR TRADES INCLUDE BUT IS NOT LIMITED TO ADJUSTING SPACING OF HANGERS/SUPPORTS AND/OR ADJUSTING SUPPORTS TO EXTEND TO ADJACENT WALL SURFACES. THIS SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.

## PLUMBING BASIS OF DESIGN

| | BASE BID | ALTERNATE BID | |
|---|---|---|---|
| SANITARY | 766 | 798 | DFU'S |
| COLD WATER | 960 | 1,032 | WSFU'S |
| HOT WATER | 297 | 309 | WSFU'S |
| GAS | 9110 | 9110 | CFH |

## EQUIPMENT ABBREVIATIONS

| | |
|---|---|
| AD | AREA DRAIN |
| CB | CATCH BASIN |
| CU | COMBINATION UNIT |
| DF | DRINKING FOUNTAIN |
| EWC | ELECTRIC WATER COOLER |
| FC | FLOOR CLEAN OUT |
| FD | FLOOR DRAIN |
| GD | GARBAGE DISPOSAL |
| GI | GREASE INTERCEPTOR |
| HB | HOSE BIBB |
| IMB | ICE MACHINE BOX |
| LAV | LAVATORY |
| LI | LINT INTERCEPTOR |
| MB | MOP BASIN |
| OI | OIL INTERCEPTOR |
| RD | ROOF DRAIN |
| RP | RECIRCULATING PUMP |
| SH | SHOWER |
| SK | SINK |
| TD | TRENCH DRAIN |
| TP | TRAP PRIMER |
| TV | TEMPERING VALVE |
| UR | URINAL |
| WH | WALL HYDRANT |
| WC | WATER CLOSET |
| WCO | WALL CLEAN OUT |
| WH | WATER HEATER |
| WHA | WATER HAMMER ARRESTOR |
| WS | WATER SOFTENER |

## PLUMBING ABBREVIATIONS

| | |
|---|---|
| AFF | ABOVE FINISHED FLOOR |
| AFG | ABOVE FINISHED GRADE |
| BT | BRINE TANK |
| BV | BALANCING VALVE |
| CFH | CUBIC FEET PER HOUR |
| CONT | CONTINUATION |
| CW | COLD WATER |
| CW(S) | SOFTENED COLD WATER |
| DFU | DRAINAGE FIXTURE UNITS |
| DN | DOWN |
| DWG. | DRAWING |
| ELEV. | ELEVATION |
| FBG | FROM BELOW GRADE |
| FFA | FROM FLOOR ABOVE |
| FFB | FROM FLOOR BELOW |
| G | NATURAL GAS |
| GPM | GALLONS PER MINUTE |
| HW | HOT WATER |
| HWR | HOT WATER RETURN |
| I.E. | INVERT ELEVATION |
| LKW | LAVATORY KITCHEN |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| OS&Y | OUTSIDE SCREW & YOKE |
| PHE | PLATE HEAT EXCHANGER |
| SAN | SANITARY |
| ST | STORM |
| SQFT | SQUARE FEET |
| TBG | TO BELOW GRADE |
| TFA | TO FLOOR BELOW |
| TFB | TO FLOOR ABOVE |
| TS | TEMPERATURE SENSOR |
| TYP | TYPICAL |
| V | VENT |
| VTR | VENT THROUGH ROOF |
| W | WASTE |
| WSFU | WATER SUPPLY FIXTURE UNITS |

## PLUMBING SYMBOLS

| | |
|---|---|
| A | COMPRESSED AIR |
| CW(R) | DOMESTIC COLD WATER |
| CW(RO) | REVERSE OSMOSIS |
| CW(S) | DOMESTIC SOFT COLD WATER |
| G | NATURAL GAS |
| HW | DOMESTIC HOT WATER |
| HWR | HOT WATER RETURN |
| GW | GREASE WASTE |
| SAN | SANITARY ABOVE GROUND |
| SAN | SANITARY BELOW GROUND |
| ST | STORM ABOVE GROUND |
| ST | STORM BELOW GROUND |
| V | ABOVE GROUND VENT |
| V | BELOW GROUND VENT |
| | BALL VALVE |
| | BUTTERFLY VALVE |
| | GATE VALVE |
| | CALIBRATED BALANCING VALVE |
| | CHECK VALVE |
| | SINGLE LINE - PIPE DROP |
| | SINGLE LINE - PIPE RISE |
| | SINGLE LINE - PIPE RISE TEE |
| | SINGLE LINE - PIPE DROP TEE |
| | TWO LINE - PIPE DROP |
| | TWO LINE - PIPE RISE |
| G | GAS SOLENOID SHUTOFF VALVE |

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DLZ INDIANA, LLC

JOSHUA R. APLING REGISTERED PE 10100074 STATE OF INDIANA PROFESSIONAL ENGINEER
2/16/22

| NO. | REVISION | DATE |
|---|---|---|
| A3 | ADDENDUM 3 | 02/16/22 |

DRAWN: DVB CHK'D: ESA
DESIGNED: SJS
APPRV'D: JRA
DATE: DECEMBER 20, 2021
PROJECT NUMBER 2063-1048-90

SULLIVAN COUNTY SHERIFF'S OFFICE AND CORRECTIONAL FACILITY
2357 NORTH SECTION STREET SULLIVAN, INDIANA 47882

GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS

DRAWING NUMBER
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