

ARCHITECTURE

15225 Broadmoor Street
Overland Park, KS 66223
h | d Architecture, LLC

State Certificate of Authority Number:
A-1234



Name - Gregory D. Highbarger License -Missouri - 007530

akewood Local
Lakewood Blvd.
ee's Summit, MO 64064

Date 1/25/2021
Job Number 20-020.1
Drawn By
Checked By

Revisions
Number Date Description

A1.0

2021 h|d Architecture, LLC
FLOOR PLAN & ELEVATIONS

PLUMBING GENERAL NOTES:

- DRAWINGS ARE SCHEMATIC IN NATURE AND BASED ON PRELIMINARY SITE OBSERVATION AND ORIGINAL DESIGN DRAWINGS (WHEN AVAILABLE). PRIOR TO BID, CONTRACTOR SHALL INVESTIGATE THE PROJECT SITE AND BECOME FULLY AWARE OF ALL FIELD CONDITIONS, CURRENT SYSTEM OPERATION AS WELL AS COORDINATION REQUIREMENTS. COORDINATE ALL MECHANICAL WORK WITH ARCHITECTURAL DRAWINGS, EXISTING CONDITIONS AND OTHER TRADES PRIOR TO BID OR START OF WORK.
- PLUMBING WORK SHALL CONFORM TO APPLICABLE CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION. REFER TO ARCHITECTURAL CODE PLANS FOR SPECIFIC CODE REFERENCES.
- PRIOR TO START OF WORK. CONTRACTOR SHALL CAMERA ALL EXISTING UNDERGROUND SANITARY SEWER LINES. VERIFY UNDERGROUND PIPING LOCATION, DEPTH AND FLOW DIRECTION. REPORT ANY PIPING DAMAGE OR LOCATION DISCREPANCIES TO ENGINEER AND/OR OWNER PRIOR TO START OF WORK.
- PLUMBING WORK SHALL BE COORDINATED WITH ALL OTHER PROJECT TRADES (E.G. ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, AND FIRE SPRINKLER).
- EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO ANY INSTALLATION OF CONNECTIONS THEREOF. ALL CONNECTIONS TO EXISTING UTILITIES (E.G. DOMESTIC WATER, SEWER, VENT, AND NATURAL GAS) SHALL BE MADE WITH APPROVAL OF THE ADMINISTRATIVE AUTHORITY AND THE RESPECTIVE UTILITY COMPANIES.
- SANITARY WASTE, VENT, AND STORM PIPING BELOW GRADE SHALL BE SCHEDULE 40 PVC WITH SOLVENT-WELDED
- SANITARY WASTE, VENT, AND STORM PIPING ABOVE GRADE SHALL BE NO-HUB CAST IRON IN RETURN AIR PLENUM APPLICATIONS. PVC OR ABS PIPING CAN BE USED IN AREAS OTHER THAN RETURN AIR PLENUMS AS ALLOWED BY CODE.
- SLOPE SANITARY PIPING AS FOLLOWS: 1/4" PER FOOT FOR PIPE SIZES 2-1/2" AND SMALLER, AND 1/8" PER FOOT FOR PIPE SIZES 3" AND LARGER.
- SLOPE CONDENSATE DRAIN PIPING AS FOLLOWS: 1/8" PER FOOT FOR ALL PIPE SIZES.
- PROVIDE WATER SUPPLY SHUT-OFF VALVES ON EACH TOILET ROOM GROUP AND TO MISCELLANEOUS EQUIPMENT.
- PROVIDE SIZE "A" WATER HAMMER ARRESTORS ON
- SUPPLY TO ALL PLUMBING FIXTURES. PROVIDE STOP VALVES ON ALL INDIVIDUAL PLUMBING
- FIXTURE SUPPLIES. COORDINATE SELECTION OF ALL PLUMBING FIXTURES WITH ARCHITECT AND OWNER, ALL HANDICAPPED FIXTURES

(WHERE REQUIRED) SHALL COMPLY WITH A.D.A.

REQUIREMENTS.

- DOMESTIC WATER PIPING ABOVE GRADE SHALL BE TYPE L COPPER WITH WROUGHT FITTINGS AND SOLDERED JOINTS.
- WHERE ALLOWED BY CODE, CROSS-LINKED POLYETHYLENE (PEX) PIPING MAY BE USED IN LIEU OF COPPER PIPING. ADJUST SIZING OF PIPING FOR REDUCED FREE AREA OF PEX PIPING. ALL PEX PIPE ROUTED IN RETURN AIR PLENUMS MUST MEET THE FLAME SPREAD RATING AND SMOKE DEVELOPED RATING FOR SUCH APPLICATIONS.
- ALL NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH MALLEABLE FITTINGS. SUPPORT PIPING AT INTERVALS NOT TO EXCEED THOSE LISTED IN TABLE 415.1 OF THE INTERNATIONAL FUEL GAS CODE.
- PAINT ALL NATURAL GAS PIPING LOCATED EXTERIOR TO THE BUILDING AS REQUIRED BY CODE.
- PROVIDE A.G.A. APPROVED GAS COCKS AND DIRT LEGS AT CONNECTIONS TO ALL GAS-FIRED EQUIPMENT.
- INSTALL ALL PLUMBING EQUIPMENT, FIXTURES, VALVES, ETC. PER MANUFACTURER'S INSTALLATION REQUIREMENTS. PROVIDE ADDITIONAL APPURTENANCES PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- INSTALL CLEANOUTS AT EVERY END OF SANITARY PIPING RUNS, AT MINIMUM OF EVERY 100'-0" OF SANITARY PIPING, AND AT EVERY CHANGE IN DIRECTION GREATER THAN 45°. REFER TO SECTION 708 OF THE INTERNATIONAL PLUMBING CODE FOR ADDITIONAL REQUIREMENTS.

INFORMATION BELOW IS FOR GENERAL FIXTURE REQUIREMENTS ONLY. PLUMBING CONTRACTOR SHALL COORDINATE WITH OWNER

FIXTURES IN THIS SCHEDULE, OR THE APPROVED EQUIVALENT, SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR UNLESS

MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR FURTHER

 PVC FLOOR DRAIN: FLOOR DRAIN WITH ADJUSTABLE SIX AND ONE-HALF INCH ROUND MEDIUM DUTY CAST NICKEL

STRAINER, WITH FLANGED PVC ADAPTER AND TRAP PRIMER

PORT. CLEAN AND POLISH STRAINER AFTER INSTALLATION, PROVIDE A DEEP SEAL TRAP AND FLANGED PVC ADAPTER WITH BLANK TRAP PRIMER PORT IF NO TRAP PRIMER IS

 TRIM: GRID DRAIN WITH TAILPIECE, QUARTER-TURN BALL TYPE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, 1-1/4" 17-GAUGE TUBULAR CHROME PLATED BRASS

ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, AND INSULATION KIT FOR WATER AND

MAXIMUM TEMPERATURE STOP SET FOR 110 DEGREES. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON PLANS.

 HANDWASH SINK: SINK TO BE SELECTED BY OWNER. FAUCET: 4" CENTERSET, VANDAL RESISTANT FAUCET WITH

THERMOSTATIC MIXING VALVE: SOLID BRASS BODY,

THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 2.2 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.5 GPM.

LEVEL HANDLES AND 0.5 GPM AERATOR.

NOTED OTHERWISE. REFER TO SPECIFICATIONS AND

PROVIDED ON THE DRAWINGS.

AND ARCHITECT FOR EXACT FIXTURE REQUIRED FOR THE PROJECT. COORDINATE WITH OWNER FOR INFORMATION ON PROCURING FIXTURES AND ASSOCIATED COSTS. CONTRACTOR SHALL BE CLEAR AS TO WHAT FIXTURES ARE INCLUDED IN THEIR

 ALL FLOOR DRAINS SHALL HAVE A 2" THROAT AND P-TRAP UNLESS NOTED OTHERWISE.

PLUMBING FIXTURE SCHEDULE:

PROPOSED COSTS.

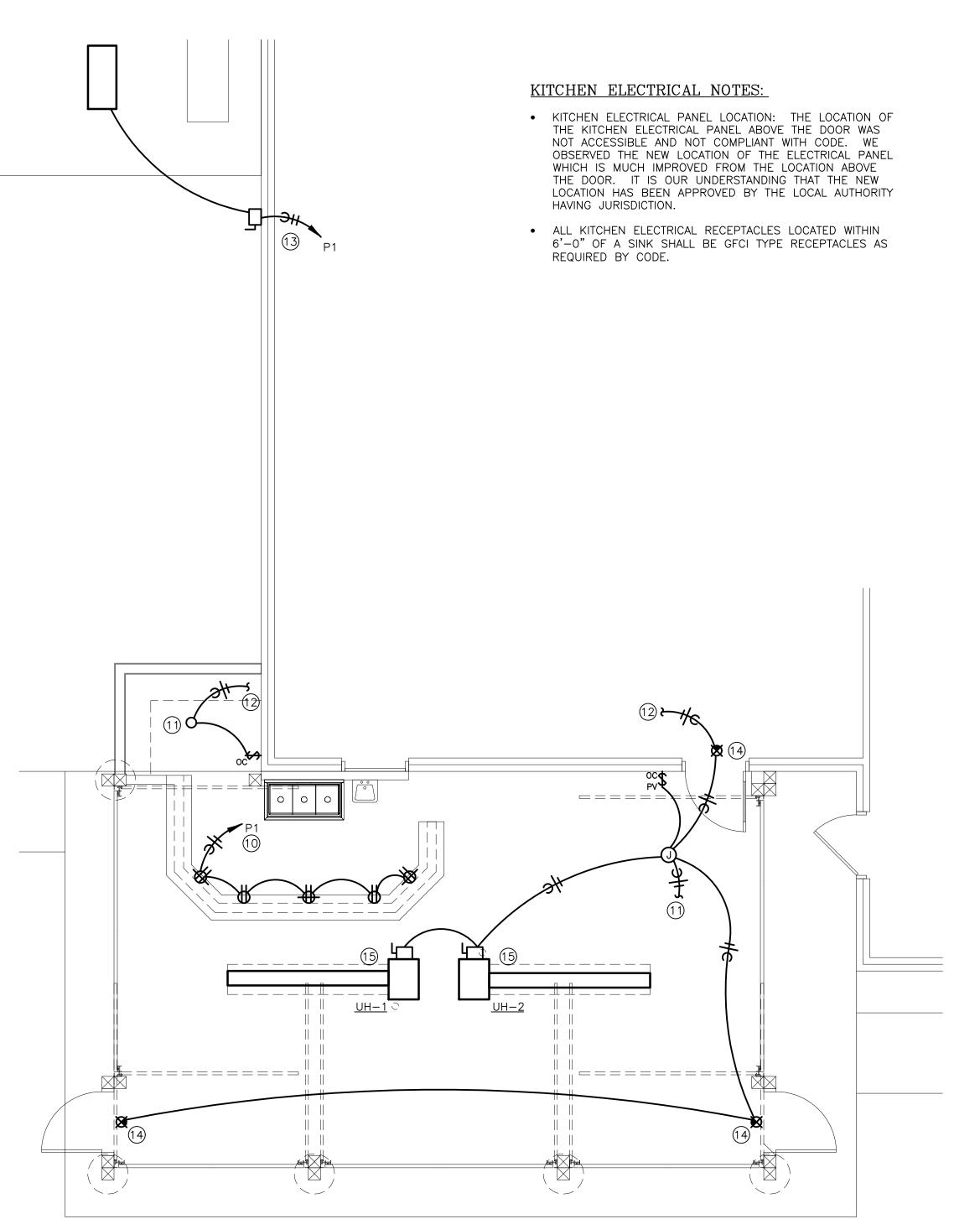
REQUIREMENTS.

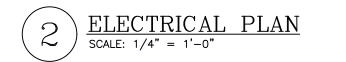
WASTE PIPES.

ELECTRICAL GENERAL NOTES:

- DRAWINGS ARE SCHEMATIC IN NATURE AND BASED ON PRELIMINARY SITE OBSERVATION AND ORIGINAL DESIGN DRAWINGS (WHEN AVAILABLE). PRIOR TO BID, CONTRACTOR SHALL INVESTIGATE THE PROJECT SITE AND BECOME FULLY AWARE OF ALL FIELD CONDITIONS, CURRENT SYSTEM OPERATION AS WELL AS COORDINATION REQUIREMENTS. COORDINATE ALL MECHANICAL WORK WITH ARCHITECTURAL DRAWINGS, EXISTING CONDITIONS AND OTHER TRADES PRIOR TO BID OR START OF WORK.
- ELECTRICAL WORK SHALL CONFORM TO APPLICABLE CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION. REFER TO ARCHITECTURAL CODE PLANS FOR SPECIFIC CODE REFERENCES.
- COORDINATE ELECTRICAL WORK WITH ALL OTHER PROJECT TRADES (E.G. ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING, FIRE SPRINKLER, ETC.).
- COORDINATE EXACT LOCATIONS OF ALL LIGHT FIXTURES AND ELECTRICAL DEVICES WITH ARCHITECTURAL DRAWING AND OTHER TRADES PRIOR TO ROUGH-IN. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRE TO PROPERLY INSTALL ALL SYSTEMS.
- COLOR FOR RECEPTACLES, SWITCHES, NETWORK DEVICES AND COVER PLATES SHALL MATCH. COLOR SHALL MATCH AND BE SELECTED AS BRIGHT WHITE UNLESS NOTED OTHERWISE. CONFIRM EXACT COLOR WITH ARCHITECT PRIOR TO ORDER.
- ELECTRICAL CONTRACTOR SHALL INSPECT ALL ELECTRICAL EQUIPMENT TO REMAIN. REPORT ANY DEFICIENCIES TO OWNER PRIOR TO START OF WORK.
- ALL CONDUCTORS SHALL BE INSTALLED IN RIGID METAL CONDUIT (RMC) AS REQUIRED BY THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (NEC). ALL INSTALLATIONS SHALL BE PER NEC REQUIREMENTS.
- AT CONTRACTOR'S OPTION, MC CABLE CAN BE USED FOR CIRCUITING CONNECTIONS TO RECEPTACLES AND LIGHTING. ALL INSTALLATIONS SHALL BE PER NEC REQUIREMENTS.
- CONTRACTOR SHALL VERIFY ALL ROUGH—IN LOCATIONS AND QUANTITIES FOR GENERAL USE POWER AND DATA WITH OWNER AND/OR ARCHITECT PRIOR TO INSTALLATION.
- CIRCUITS FOR GENERAL USE POWER SHALL HAVE A
- MAXIMUM OF 8 RECEPTACLES ON A CIRCUIT (A SINGLE 4-PLEX RECEPTACLE COUNTS FOR 2 OF THE ALLOWED 8 RECEPTACLES).
- ALL WIRE SIZES LISTED ON PLANS ASSUME COPPER CONDUCTORS ARE USED (UNLESS NOTED OTHERWISE).
- CONTRACTOR SHALL LABEL ALL RECEPTACLES, BOXES, PANELBOARDS, ETC. WITH PANEL, CIRCUIT NUMBER, ETC. PER INDUSTRY STANDARDS. COORDINATE WITH OWNER FOR FINAL PANEL AND EQUIPMENT DESIGNATIONS.

6 <u>HB1</u> 1/2"CW/HW . _ _ _ _ _ _ _ _ _ _ _ - - - - - - - - - - -







(-) MECHANICAL/PLUMBING PLAN NOTES:

- 1. CONNECT 3"S TO EXISTING BUILDING SANITARY SYSTEM (MIN 4"S). FIELD VERIFY EXACT LOCATION AND FLOW DIRECTION.
- 2. CONNECT 2"V TO EXISTING BUILDING SANITARY VENT SYSTEM (MIN 2"V). FIELD VERIFY EXACT LOCATION.

REFER TO HEATER INSTALLATION INSTRUCTIONS FOR

- 3. EXTEND NATURAL GAS TO HEATER/FURNACE AS SHOWN. PROVIDE DIRT LEG AND GAS COCK AT HEATER CONNECTION.
- 4. ROUTE HEATER VENT PIPING THROUGH ROOF AS SHOWN. SIZE AND ROUTE ALL PIPING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

ADDITIONAL REQUIREMENTS.

- 5. CONNECT NEW 1/2' CW/HW TO EXISTING CW/HW SYSTEM (MIN 3/4" SUPPLY PIPES). FIELD VERIFY EXACT LOCATION.
- 6. RELOCATE EXISTING HOSE BIB TO NEW EXTERIOR WALL WHERE SHOWN. EXTEND SUPPLY PIPE AS REQUIRED. COORDINATE WITH EXISTING CONDITIONS AND OTHER TRADES.

LICENSE #: PE-2014007261 BROCK CENTLIVRE, LICENSED ENGINEER

ARCHITECTURE

State Certificate of Authority Number:

15225 Broadmoor Street

Overland Park, KS 66223

h|d Architecture, LLC

ELECTRICAL PLAN NOTES:

- 10. ROUTE NEW CIRCUIT BACK TO EXISTING PANEL AS INDICATED. PROVIDE NEW BREAKER AND INSTALL PER NATIONAL ELECTRICAL CODE REQUIREMENTS.
- 11. PROVIDE NEW LED LIGHT(S) TO BE SELECTED AND INDICATED FOR CONTROL OF LIGHTING.
- 12. CONNECT TO EXISTING LIGHTING CIRCUIT. FULLY CONNECTED CIRCUIT SELECTED SHALL HAVE NO MORE
- 13. PROVIDE POWER CONNECTION TO WALK-IN COOLER CONDENSING UNIT AND EVAPORATOR. COORDINATE EXACT CIRCUIT SIZE AND ADDITIONAL REQUIREMENTS WITH EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE EXACT LOCATION WITH EXISTING CONDITIONS
- 14. INSTALL LED-STYLE EMERGENCY EGRESS LIGHTING WITH BATTERY BACK-UP WHERE SHOWN. FIELD VERIFY EXACT LOCATION WITH LOCAL CODES.
- 15. CONNECT TO MECHANICAL HEATER AS INDICATED. MAKE

- LOCATED BY THE OWNER. INSTALL SWITCH WHERE
- THAN A TOTAL OF 1,500 WATTS CONNECTED TO IT AFTER INSTALLATION.
- AND OTHER TRADES.
- ALL CONNECTIONS AND PROVIDE DISCONNECT SWITCH PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND LOCAL

a)

Date Job Number Drawn By Checked By		1/25/2021 20-020.1
Revisions		
Number	Date	Description
	*	*

ENGINEERS contact@5by5eng.com
5by5eng.com

MEP 1.0

© 2021 h|d Architecture, LLC MECH, PLUM AND ELEC PLAN