WATER CLOSET -

PIPE ACCESORY—

WALL HUNG - ADA WC-1A

1 WFU

* NOTE *
THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN

THIS SET OF DRAWINGS.

CARBON DIOXIDE SENSOR CO2 TH RTU-XX TEMPERATURE & HUMIDITY SENSOR

VAV-XX TEMPERATURE SENSOR

THERMOSTAT

SENSOR

MANUAL SWITCH

CARBON MONOXIDE SENSOR CO TS

NITROGEN DIOXIDE SENSOR NO2

HUMIDITY SENSOR

HUMIDISTAT

MANUAL BALANCING DAMPER

COMBINATION FIRE/SMOKE

SMOKE DAMPER S



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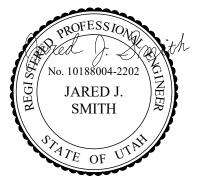
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Shop Healthca Hildre NJRA Project # Bid Set Jan. 18, 2023

MECHANICAL TITLE SHEET

22221.00



- 1. NO FIRE PROTECTION LINE SHALL BE DESIGNED OR INSTALLED PRIOR TO CLOSE COORDINATION WITH ALL OTHER DISCIPLINES. DUCTWORK, MECHANICAL PIPING AND PLUMBING TAKE SPACE PRECEDENCE OVER FIRE PROTECTION REMOVAL AND REINSTALLATION AT THE FIRE PROTECTION
- 2. ALL WORK DONE SHALL BE PERFORMED WITH WATER CONTROL IN MIND. CONTAINMENT OF WATER IS NECESSARY TO PREVENT WATER FROM DAMAGING SURROUNDING AREA.
- 3. COORDINATE EXACT LOCATION OF PIPING WITH STRUCTURAL MEMBERS, LIGHTS, REFLECTED CEILING PLANS, CABLE TRAY, ELECTRICAL CONDUITS, DUCTWORK, MECHANICAL AND PLUMBING PIPING, AND ALL OTHER TRADES AND ALL EXISTING CONDITIONS.
- 4. FIRE SUPPRESSION CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND/OR REROUTE ANY AND ALL FIRE PROTECTION PIPING, VALVING, SUPPORTS OR SYSTEMS, OTHERWISE WITHIN THE FIRE SUPPRESSION DISCIPLINE REGARDLESS OF WHO INSTALLED THEM OR WHEN THEY WERE INSTALLED, IN ORDER TO ACCOMMODATE MECHANICAL, PLUMBING, ELECTRICAL OR OTHER SYSTEMS. COORDINATE WORK WITH MECHANICAL, ELECTRICAL, PLUMBING OR OTHER CONTRACTORS UNTIL SUBSTANTIAL COMPLETION OF PROJECT.
- 5. PROVIDE ALTERATIONS TO THE EXISTING FIRE PROTECTION SYSTEM AS REQUIRED TO ACCOMMODATE THE NEW FLOOR PLAN AND NEW CEILING TYPES. PROVIDE A COMPLETE WET TYPE SYSTEM INCLUDING NEW MAINS, BRANCHES, HEADS, VALVES, AND ACCESSORIES AS REQUIRED. REUSE EXISTING SYSTEM EQUIPMENT WHERE APPLICABLE. THE SYSTEM SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS AND AS PER REQUIREMENTS OF THE STATE BUILDING CODE, LOCAL FIRE DEPARTMENT, AND ALL FEDERAL,
- STATE, AND LOCAL AUTHORITIES, AND NFPA. 6. THE BUILDINGS COMPLETE OPERATIONAL FIRE PROTECTION SYSTEMS SHALL REMAIN IN PLACE. THIS CONTRACTOR SHALL REPAIR ANY DAMAGE TO THIS SYSTEM CREATED BY THE REMOVAL OF
- 7. THIS CONTRACTOR SHALL COORDINATE PHASING OF SPRINKLER WORK WITH THE GENERAL CONTRACTOR PRIOR TO STARTING WORK.

ANY OTHER MECHANICAL SYSTEMS OR COMPONENTS.

- 8. REFER TO REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION REGARDING SPRINKLER HEAD LOCATION AND PIPE, UNLESS NOTED OTHERWISE.
- 9. DIVISION 21 CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR PROPER INSTALLATION OF THE FIRE PROTECTION SYSTEMS ALARM DEVICES INVOLVED WITH FIRE SPRINKLER SYSTEM.
- 10. ALL SPRINKLER SYSTEM PIPING SHALL BE CONCEALED ABOVE THE SUSPENDED CEILING SYSTEM, UNLESS NOTED OTHERWISE. WRITTEN AUTHORIZATION SHALL BE OBTAINED FROM THE ARCHITECT PRIOR TO EXPOSING ANY PIPING IN ANY ROOM WHICH HAS A SUSPENDED CEILING.
- 11. THIS CONTRACTOR SHALL PROVIDE ALL ADDITIONAL SPRINKLER HEADS AS REQUIRED TO ENSURE AN APPROVED FIRE PROTECTION SYSTEM AT NO ADDITIONAL COST TO THE OWNER.
- 12. AUXILIARY DRAINS SHALL BE EXPOSED WITH 1" DRAIN VALVES. WHEN 5 OR MORE GALLONS ARE TRAPPED, THIS CONTRACTOR SHALL PROVIDE FIXED PIPING TO AN ADEQUATELY SIZED RECEPTOR WHICH IS CAPABLE OF ACCEPTING THE FULL FLOW OF THE DRAIN. WHEN LESS THAN 5 GALLONS ARE TRAPPED, A HOSE BIB SHALL BE PROVIDED AT THE DRAIN VALVE.
- 13. AUXILIARY DRAINS SHALL NOT BE LOCATED ABOVE PLASTER OR GYPSUM BOARD CEILING SYSTEMS. ONLY BY A SPECIFIC WRITTEN INSTRUCTION FROM THE ENGINEER WILL A VARIANCE BE PROVIDED. 14. SHOW ALL ROOM NUMBERS ON SHOP DRAWING PLANS.
- 15. ROUTE SPRINKLER PIPING SUCH THAT IT DOES NOT RUN ABOVE ELECTRICAL PANELS, SWITCHGEAR, OR SIMILAR EQUIPMENT. SPRINKLER MAINS SHALL NOT RUN THROUGH ELECTRICAL OR COMMUNICATION ROOMS. SPRINKLER HEADS IN THESE ROOMS SHALL BE SERVED BY A DEDICATED BRANCH LINE FOR EACH ROOM, BRANCH LINE TO ENTER ROOM ABOVE DOOR.
- 16. THIS DRAWING INDICATES A GENERAL PIPING ARRANGEMENT AND SUGGESTED SIZING ONLY. THIS CONTRACTOR SHALL DETERMINE THE ACTUAL PIPE SIZING REQUIRED AND COORDINATE WORK WITH ALL OTHER TRADES TO AVOID CONFLICTS.

PLUMBING GENERAL NOTES

- 1. UNLESS OTHERWISE NOTED, SLOPE PIPE AS FOLLOWS: WASTE BRANCHES: 1/4" PER FOOT; WASTE MAINS: 1/4" PER FOOT; ROOF DRAIN/ROOF DRAIN OVERFLOW: 1/8" PER FOOT. VERIFY ALL SLOPING
- 2. ALL WORK DONE SHALL BE PERFORMED WITH WATER CONTROL IN MIND. CONTAINMENT OF WATER IS NECESSARY TO PREVENT WATER FROM DAMAGING AREAS ON FLOORS BELOW.
- 3. PLUMBING DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY EXACT PIPE ROUTING AND COORDINATE WITH ALL OTHER TRADES.
- 4. ALL PIPING IN PLUMBING CHASES SHALL BE ARRANGED TO ALLOW MAINTENANCE ACCESS.
- 5. NO PIPING TO RUN OVER ELECTRICAL PANELS, VFD'S OR MCC'S. PROTECT EQUIPMENT WITH A 42" DEEP ZONE IN FRONT OF PANELS, VFD'S, AND MCC'S.
- 6. COORDINATE FAN ROOM FLOOR DRAIN AND FLOOR SINK LOCATIONS WITH COOLING COIL,
- 7. CONTRACTOR TO PROVIDE VALVE IDENTIFICATION AND LOCATION ON ALL CEILING TILES WHERE VALVES ARE LOCATED.
- 8. PIPING AND ROUTING SHOWN, INCLUDING ALL BELOW FLOOR DECK PIPING IS APPROXIMATE. IT IS UP TO THE CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION AND SIZE OF ALL PIPING.
- 9. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING HEIGHTS, DIMENSIONS AND OTHER
- 10. CONTRACTOR TO VERIFY CONNECTION SIDE OF ADA FIXTURES AND ADJUST ACCORDINGLY. INSTALL FLUSH VALVES HANDLES ON WIDE SIDE OF ALL FIXTURES.
- 11. LOCATE ALL VENTS MINIMUM 25' AWAY FROM AIR INTAKES.

EVAPORATIVE SECTION, AND HEATING COIL LOCATIONS.

12. INSTALL ALL DOMESTIC WATER LINES BELOW DUCTWORK.

THE LAVATORY.

- 13. INSTALL A 24" X 24" ACCESS DOOR BELOW ALL ISOLATION VALVES, BALANCING VALVES AND WATER HAMMER ARRESTORS WHERE MOUNTED ABOVE HARD CEILINGS.
- 14. MOUNT ALL ISOLATION VALVES, CONTROL VALVES, BALANCING VALVES, ETC. NEAR CEILING HEIGHT
- 15. INSTALL ALL EQUIPMENT WITH SUFFICIENT CLEARANCE FOR MAINTENANCE PER MANUFACTURERS
- 16. COORDINATE ALL FLOOR PENETRATIONS WITH STRUCTURAL AND PROVIDE SLEEVES AS

17. COORDINATE THE LOCATION OF THE FLOOR DRAIN, SHOWER DRAIN, OR FLOOR SINK WITH

- ARCHITECTURAL AND STRUCTURAL, TYPICAL. 18. SEE PLUMBING FIXTURE SCHEDULE FOR PIPE SIZES OF WASTE, VENT AND DOMESTIC WATER
- TO/FROM SINGLE FIXTURE. 19. HOSE BIBBS SHOWN AT LAVATORIES ARE TO BE MOUNTED AT AN ACCESSIBLE LOCATION UNDER
- 20. LOCATE CIRCUIT SETTERS, VALVES, WATER HAMMER ARRESTORS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE 24" X 24" ACCESS PANEL WHERE ITEM IS LOCATED ABOVE A HARD CEILING. PROVIDE APPROPRIATELY SIZED ACCESS DOORS TO ANY OF THESE ITEMS INSTALLED IN A WALL.
- 21. FIELD VERIFY LOCATION AND INVERTS OF SITE UTILITIES PRIOR TO INSTALLATION.

COORDINATE ACCESS DOOR SIZE, LOCATION, AND STYLE WITH ARCHITECT.

- 22. FIELD VERIFY ALL NEW WATER, WASTE AND VENT PIPING CONNECTIONS AND PROVIDE NEW CONNECTIONS AS REQUIRED FOR PROPERLY OPERATING SYSTEMS.
- 23. WASTE AND VENT PIPING BELOW FLOOR AND THROUGH FLOOR TO BE 2" MINIMUM.
- 24. INSTALL CLEANOUTS IN DRAIN PIPING AS INDICATED, AND WHERE NOT INDICATED, ACCORDING TO THE FOLLOWING.
 - A. SIZE SAME AS DRAINAGE PIPING UP TO 4" NPS. USE 4" NPS FOR LARGER. DRAINAGE PIPING UNLESS LARGER CLEANOUT IS INDICATED.
 - B. LOCATE AT MINIMUM INTERVALS OF 50 FT FOR PIPING 4" NPS AND SMALLER AND 100 FT FOR LARGER PIPING.
 - C. LOCATE AT THE BASE OF EACH VERTICAL STACK.

MECHANICAL GENERAL NOTES

- 1. COORDINATE EXACT PLACEMENT OF DIFFUSERS, GRILLES AND REGISTERS WITH ARCHITECTURAL REFLECTED CEILING PLAN, TYPICAL.
- 2. SEE DETAIL FOR DIFFUSER CONNECTIONS TO DUCTWORK, TYPICAL.
- 3. BRANCH DUCTWORK SHALL BE SIZED TO MATCH THE NECK INLET SIZE OF THE DIFFUSERS, REGISTER OR GRILLE IT SERVES UNLESS NOTED OTHERWISE, TYPICAL.
- 4. COORDINATE EXACT MOUNTING LOCATION OF ALL THERMOSTATS WITH LATEST REVISION OF ARCHITECTURAL ELEVATION AND FURNISHINGS PLANS, TYPICAL.
- 5. THE MECHANICAL CONTRACTOR SHALL PROVIDE FIRE, SMOKE OR COMBINATION FIRE/SMOKE DAMPERS AT ALL LOCATIONS SHOWN ON THE CONTRACT DOCUMENTS AND AS REQUIRED TO MEET THE INTEGRITY OF ALL SMOKE AND FIRE PARTITIONS. THE CONTRACTOR SHALL REFER TO THE LATEST ARCHITECTURAL LIFE SAFETY PLANS FOR ALL FIRE AND SMOKE PARTITION LOCATIONS. DAMPERS ARE TO BE PROVIDED WITH SHUTOFF/TEST SWITCH AT EACH LOCATION.
- 6. PROVIDE AND INSTALL TURNING VANES IN ALL SQUARE LOW PRESSURE DUCTWORK AT ELBOWS OR
- 7. INSTALL ALL TERMINAL BOXES IN EASILY ACCESSIBLE AND SERVICEABLE LOCATIONS, MEETING ALL MANUFACTURERS REQUIRED CLEARANCES ON EACH SIDE, SEE DETAILS, TYPICAL.
- 8. DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. REFER TO MECHANICAL SPECIFICATIONS FOR EXTENT OF DUCT INSULATION AND LINER AND ADJUST SHEET METAL DIMENSION.
- 9. PROVIDE AND INSTALL REMOTE DAMPER OPERATORS FOR ALL DAMPERS INSTALLED ABOVE INACCESSIBLE CEILING, SEE MECHANICAL SPECIFICATIONS FOR EQUIPMENT REQUIREMENTS,
- 10. PROVIDE AND INSTALL HIGH EFFICIENCY TAKE-OFF FITTINGS AND BALANCING DAMPER AT ALL BRANCH CONNECTIONS TO LOW PRESSURE DUCTWORK. PROVIDE BALANCING DAMPERS AT EACH
- BRANCH TAKE OFF TO SERVE DIFFUSER OR GRILLE AS WELL AS WHERE INDICATED. 11. PROVIDE AND INSTALL HIGH EFFICIENCY OR CONICAL TAKE-OFFS AT ALL BRANCH CONNECTIONS TO
- 12. WHERE DUCTWORK CROSSES, SUPPLY DUCTWORK IS USUALLY BELOW RETURN AND EXHAUST DUCT. RETURN DUCTWORK IS USUALLY BELOW EXHAUST DUCTS.
- 13. AT LOCATIONS WHERE DIFFUSERS OR GRILLES ARE UNDER DUCTWORK, CONTRACTOR TO FABRICATE TRANSITION BOOT FROM FLEX CONNECTION TO DIFFUSER OR GRILLE WITH BALANCING DAMPER, TYPICAL.
- 14. THE MECHANICAL CONTRACTOR SHALL PROVIDE CEILING MOUNTED ACCESS DOORS FOR ALL FIRE, SMOKE AND COMBINATION FIRE/SMOKE DAMPERS INSTALLED ABOVE INACCESSIBLE CEILING. FIELD VERIFY EXACT INSTALLATION LOCATIONS PRIOR TO COMMENCING WORK AND COORDINATE INSTALLATIONS WITH LATEST ARCHITECTURAL REFLECTED CEILING PLANS.
- 15. ALL VAV BOXES TO HAVE REHEAT COILS, EXCEPT AS NOTED. PROVIDE EQUIPMENT TAG TO MATCH SCHEDULE. PROVIDE A MINIMUM OF TWO DUCT DIAMETERS OF STRAIGHT ROUND DUCT TO INLET OF
- VAV BOX. BOX SHALL BE HARD CONNECTED (CONICAL) TO MEDIUM PRESSURE DUCT, TYPICAL. 16. PROVIDE ACCESS DOORS TO ACCESS VAV BOX CONTROLS ABOVE HARD CEILINGS. PROVIDE
- 17. FLEX DUCT IS REQUIRED FOR ALL DIFFUSERS AND GRILLES INSTALLED IN LAY-IN CEILINGS, FOR DIFFUSERS AND GRILLES IN HARD LID CEILINGS, THE DUCTWORK SHALL BE EXTENDED ALL THE WAY TO THE DIFFUSER AND SHALL BE CONNECTED WITH A HARD CONNECTION OR A FLEX DUCT CONNECTION WITH A MUD RING AND LAY-IN DIFFUSER AS SHOWN ON PLANS.
- 18. THE CONTRACTOR SHALL INFORM THE DESIGNER OF ANY PROPOSED DEVIATIONS FROM THE CONTRACT DOCUMENTS.
- 19. PROVIDE ACCESS TO ALL TEMPERATURE CONTROLS ABOVE CEILING. LOCATE IN ACCESSIBLE LOCATION. WHERE THERE ARE HARD CEILINGS THE CONTRACTOR SHALL PROVIDE 24" X 24" ACCESS
- 20. SUPPLY AND RETURN PIPING TO COILS ARE THE SAME SIZE.
- 21. CONTRACTOR SHALL LOCATE THERMOSTATS AND TEMPERATURE SENSORS AT 5'-0" AFF, A MINIMUM OF 8" FROM LIGHT SWITCH, UNLESS OTHERWISE NOTED ON THE ARCHITECT'S ELEVATIONS. COORDINATE EXACT LOCATIONS WITH ARCHITECT.
- 22. REFER TO MECHANICAL PIPING OR ZONING DRAWINGS FOR THERMOSTAT AND TEMPERATURE SENSOR LOCATIONS.
- 23. CONDENSATE DRAINS SHALL BE SUPPLIED FOR ALL COOLING EQUIPMENT. CONTRACTOR SHALL ENSURE PROPER INSTALLATION AND DRAINAGE AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODES. CONDENSATE PIPINE SHALL BE TYPE "L" COPPER UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS.
- 24. PROVIDE A 4" HOUSEKEEPING PAD FOR EACH PIECE OF MECHANICAL EQUPMENT THAT IS FLOOR MOUNTED. COORDINATE SIZES WITH MECHANICAL EQUIPMENT SELECTED.
- 25. ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE RATED FOR PRESSURE CLASS OF 2" W.G. UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS.
- 26. THIS CONTRACTOR SHALL BE REQUIRED TO REPLACE FILTERS ON HVAC EQUIPMENT AFTER ALL DUST PRODUCING CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO THE FINAL PUNCH.

MECHANICAL PIPING GENERAL NOTES

- 1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PIPING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- 2. UNLESS OTHERWISE NOTED: ALL MECHANICAL PIPING IS OVERHEAD TO RUN ABOVE DUCTWORK AND TIGHT TO UNDERSIDE OF STRUCTURE.
- 3. INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHER APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE.
- 4. ALL VALVES SHALL BE INSTALLED SO THAT VALVES REMAINS IN SERVICE WHEN EQUIPMENT OR PIPING ON EQUIPMENT SIDE OF VALVE IS REMOVED.
- 5. PROVIDE AIR VENT AT HIGH POINT OF EACH DROP IN THE HEATING AND CHILLED WATER PIPING
- ALL VALVES SHALL BE ADJUSTED FOR SMOOTH AND EASY OPERATION AND TAGGED.
- 7. PROVIDE ISOLATION VALVES AT EACH EXIST/ENTRANCE INTO SHAFT WHETHER OR NOT SHOWN. 8. COORDINATE LOCATION OF THERMOSTAT WITH ARCHITECTURAL FURNISHING PLANS. MOUNT

THERMOSTAT AT HEIGHT AS SPECIFIED ON ARCHITECTURAL PLANS OR SPECIFICATIONS.

- PROJECT GENERAL NOTES
 - 1. THE PROJECT GENERAL NOTES APPLY TO ALL DISCIPLINES.
 - 2. REMOVE ALL UNUSED PIPING, DUCTWORK, EQUIPMENT, AND ACCESSORIES.
 - 3. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS FOR PLUMBING AND MECHANICAL SYSTEMS WITHIN THE TENANT SPACE AND WITHIN CLOSE PROXIMITY TO THE TENANT SPACE. THE CONTRACTOR WILL FIELD VERIFY AS MUCH AS IS REASONABLE BEFORE THE FINAL BID. AFTER THE FINAL BID THE CONTRACTOR WILL NOTIFY THE OWNER, ARCHITECT, AND MECHANICAL DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF
 - 4. THE MECHANICAL CONTRACTOR SHALL PERFORM SERVICE AND REPAIR ON THE EXISTING EQUIPMENT AND ITS ACCESSORIES AS FOLLOWS: CLEAN ALL COILS, REPLACE THE FILTERS AND BELTS, INSPECT, REPAIR, OR REPLACE THE ECONOMIZERS, DRIVERS AND FAN BEARINGS, MOTORS, CONTROL COMPONENTS, VALVES, AND ANY OTHER ITEM NECESSARY FOR A COMPLETE AND PROPER OPERATING SYSTEM. THIS CONTRACTOR SHALL ALSO VISIT THE SITE, PRIOR TO FINAL BIDDING, AND VERIFY ALL EXISTING SITE CONDITIONS. PROVIDE ALL MATERIAL AND COMPONENTS AS NEEDED TO BRING THE UNITS TO FULL COMPLIANCE OF THE LANDLORD'S CRITERIA AND LOCAL AUTHORITY HAVING JURISDICTION.
 - 5. WHERE FLOOR DRAINS OCCUR WITH THE LIMITS OF CONSTRUCTION, PREVENT CONSTRUCTION DEBRIS FROM ENTERING DRAIN BODY BY SEALING DRAIN OPENING PRIOR TO START OF WORK.
 - 6. COORDINATE INSTALLATION OF PIPING, DUCTWORK, CONDUIT, LIGHTS, CABLE TRAY, STRUCTURE, EQUIPMENT, CEILINGS, ARCHITECTURAL COMPONENTS, AND ANYTHING ELSE PERTAINING TO THE
 - 7. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL THE CONDITIONS BOTH EXISTING AND THOSE ILLUSTRATED BY THESE DOCUMENTS AND THOSE OF OTHER DISCIPLINES, INCLUDING, BUT NOT LIMITED TO ARCHITECTURAL, CIVIL, ELECTRICAL, VENTILATION, PLUMBING, AND OTHER SYSTEMS
 - REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO THE INTERNATION BUILDING CODE, INTERNATIONAL MECHANICAL CODE, AND INTERNATIONAL PLUMBING CODE

 - CLEARANCES INCLUDING THE SPACE ABOVE ELECTRICAL PANELS, TRANSFORMERS AND OTHER MCC'S. PROTECT EQUIPMENT WITH A 42" DEEP ZONE IN FRONT OF PANELS, VFD'S AND MCC'S.
 - 12. FIRE SEAL AROUND DUCT AND PIPING PENETRATIONS OF FIRE RATED WALLS. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CAULKING AND SEALING ALL PENETRATIONS IN FIRE
 - 13. PROVIDE SLEEVES AND/OR OPENINGS TO RUN PIPES AND DUCTS THROUGH FOUNDATIONS, FLOORS, WALLS, AND ROOF.
 - 14. TRANSITION PIPING AND DUCTWORK SIZES TO MATCH THE SIZE OF EQUIPMENT CONNECTION.

 - 17. FOR DETAILS, EQUIPMENT CONNECTIONS, AND PIPE SIZES NOT SHOWN ON THE SEGMENTS, REFER
 - 18. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AT A LEVEL OF WORKMANSHIP CONSISTENT WITH THE
 - SPECIFICATIONS.
 - WITH CLEARANCES PER MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL MAINTAIN PROPER SERVICE SPACE FOR COIL PULLS, BAS DEVICES, MAINTENANCE ACCESS, ETC.
 - 20. INSTALL EXPOSED PIPING AND DUCTWORK AS HIGH AS PRACTICAL IN ROOMS WITHOUT CEILINGS.
 - 22. THE CONTRACTOR SHALL INFORM THE DESIGNER OF ANY PROPOSED DEVIATIONS FROM THE

 - 25. INSTALL ALL PIPING AND DUCTWORK WITHOUT FORCING OR SPRINGING.
 - 27. LOCATE VALVING, ACCESSORIES, AND EQUIPMENT IN ACCESSIBLE LOCATIONS. WHERE LOCATED ABOVE HARD CEILING PROVIDE AN ACCESS DOOR IN CEILING. MINIMUM ACCESS DOOR SIZE OF 24" X 24". COORDINATE EXACT LOCATION AND STYLE WITH ARCHITECT. EQUIPMENT SHALL BE LOCATED IN THE CEILING CAVITY SO IT CAN BE SAFELY SERVICED FROM SOMEONE STAND ON A LADDER PLACED
 - APPROPRIATELY SIZED ACCESS DOOR. COORDINATE ACCESS DOOR SIZE, LOCATION, AND STYLE
 - 29. CONTRACTOR TO PROVIDE VALVE IDENTIFICATION AND LOCATION ON ALL CEILING TILES WHERE

- EXISTING CONDITIONS THAT MAY AFFECT THE DESIGN.
- UNSEAL DRAINS AT COMPLETION OF CONSTRUCTION.
- PROJECT TO PREVENT CONFLICTS.
- INVOLVED ON THIS PROJECT. 8. FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL
- 9. LOCATE EQUIPMENT REQUIRING ACCESS 2'-0" MAXIMUM ABOVE CEILING.
- 10. ALL ROOF MOUNTED EQUIPMENT SHALL BE A MINIMUM 10'-0" FROM EDGE OF ROOF.
- 11. COORDINATE INSTALLATION OF DUCTWORK, PIPING AND MECHANICAL EQUIPMENT WITH NEC ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK TO RUN OVER ELECTRICAL PANELS, VFD'S OR PROVIDE PANS IF REQUIRED UNDER PIPING.
- AND SMOKE RATED PARTITIONS TO MAINTAIN RATINGS. REFER TO SPECIFICATION.
- 15. REFER TO PLUMBING SERIES DRAWINGS FOR GAS PIPING
- 16. ALL PIPE AND DUCT SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN.
- TO DETAILS, SCHEDULES, AND SPECIFICATIONS.
- 19. MECHANICAL CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT IS PROVIDED AND INSTALLED
- 21. LOCATIONS OF PIPING, DUCTWORK AND EQUIPMENT AS INDICATED ON THE DRAWING. ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD, INCLUDING, BUT NOT LIMITED TO, OFFSETS AND TRANSITIONS. NEW DUCTWORK, PIPING AND EQUIPMENT SHALL BE COORDINATED WITH STRUCTURE, LIGHTS, REFLECTED CEILING PLANS, CABLE TRAY, ELECTRICAL CONDUIT, PLUMBING, MECHANICAL AND FIRE PROTECTION PIPING, MEDICAL GASES, ALL OTHER TRADES AND
- ALL OTHER EXISTING CONDITIONS TO AVOID INTERFERENCE IN THE FIELD.
- CONTRACT DOCUMENTS. 23. IF CONTRACTOR ENCOUNTERS MATERIAL WHICH MAY CONTAIN ASBESTOS, IMMEDIATELY STOP
- WORK IN THIS AREA AND NOTIFY THE OWNER. 24. DETAILS REFERENCE ALL SHEETS.

VALVES ARE LOCATED.

- 26. ROUTE DOMESTIC WATER, FIRE PROTECTION, SANITARY WASTE, ROOF DRAIN, CAMPUS CHILLED OR HOT WATER, AND ANY OTHER UTILITY SERVICES TO SITE UTILITIES 5'-0" FROM BUILDING UNLESS NOTED OTHERWISE. REFER TO CIVIL PLANS.
- BELOW THE CEILING ACCESS.
- 28. WHERE VALVING, ACCESSORIES, OR EQUIPMENT IS LOCATED IN A WALL, PROVIDE AN

ALL OF THE GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.

MECHANICAL GENERAL NOTES

22221.00

Jan. 18, 2023

NJRA Architects, Inc

Murray, Utah 84123

www.njraarchitects.com

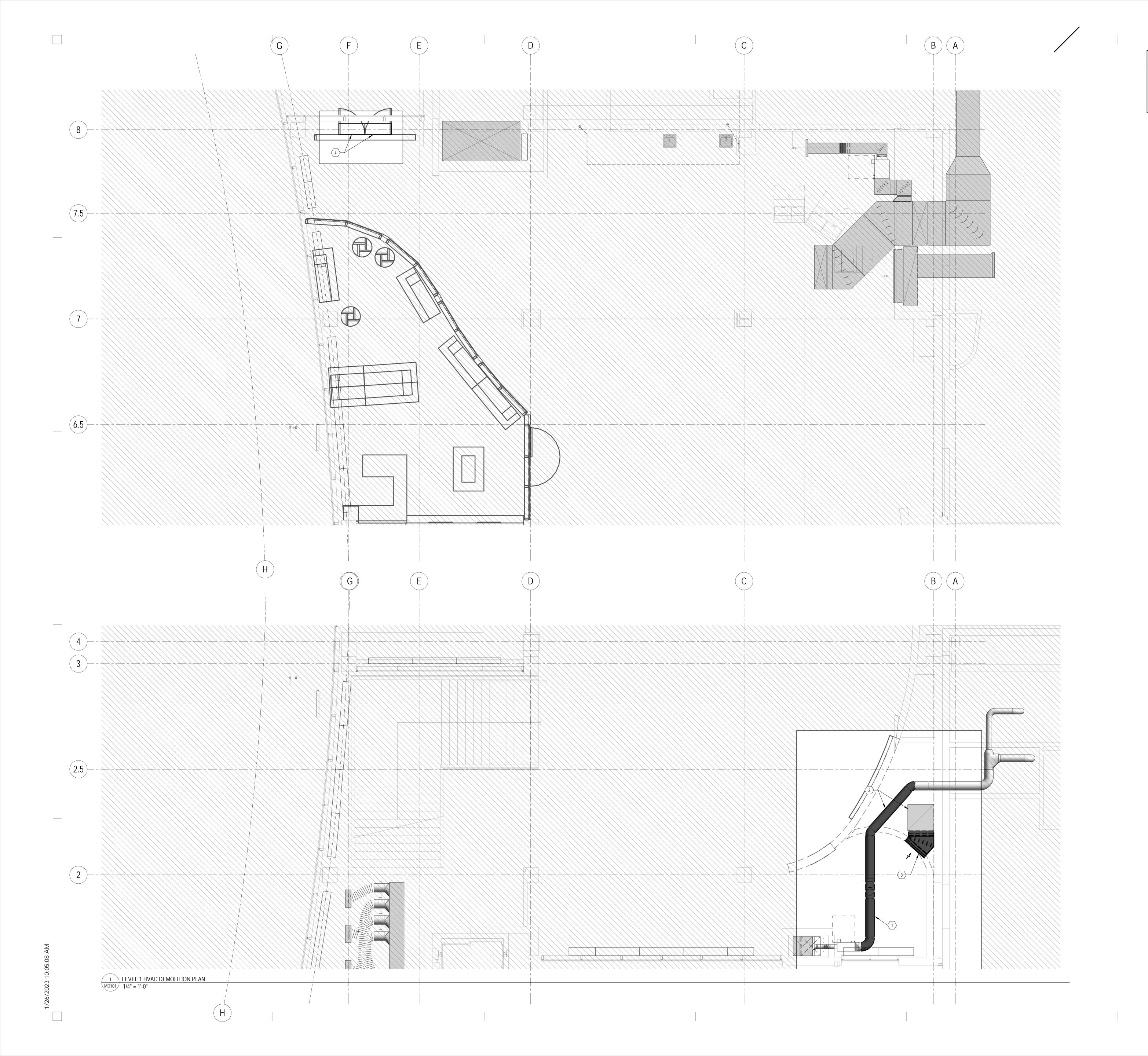
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NJRA Project #

Bid Set

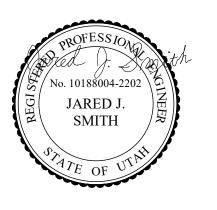


KEYNOTES

- LOW PRESSURE SUPPLY DUCT IS TO BE REMOVED AND RELOCATED. SEE SHEE 2 ELEMENTS SHOWN DARK ARE TO BE REMOVED. ELEMENTS SHOWN LIGHT ARE TO REMAIN, TYPICAL.
 3 EXISTING RETURN AIR GRILLES AND BRANCHES ARE TO BE REMOVED BACK TO RETURN MAIN. NEW RETURN AIR GRILLES ARE TO BE RECONNECTED. SEE SHEET M101.
 4 EXISTING ELECTRIC AIR CURTAINS IN VESTIBULE ARE TO BE REMOVED.



NJRA Architects, Inc. 5272 S. College Drive, Suite104 Murray, Utah 84123 801.364.9259 www.njraarchitects.com



NJRA Project #

LEVEL 1 MECHANICAL DEMOLITION PLAN

22221.00 Jan. 18, 2023



181 East 5600 South Murray, Utah 84107 O: (801)530-3148 www.vbfa.com VBFA Project #: 22658

EXISTING ACCESS PANEL IS TO BE REMOVED AND REPLACED WITH 24X18 ACCESS PANEL. SEE MECHANICAL DRAWINGS.
EXISTING DUCTWORK IS TO BE REMOVED AND RECONFIGURED. SEE SHEET M102.



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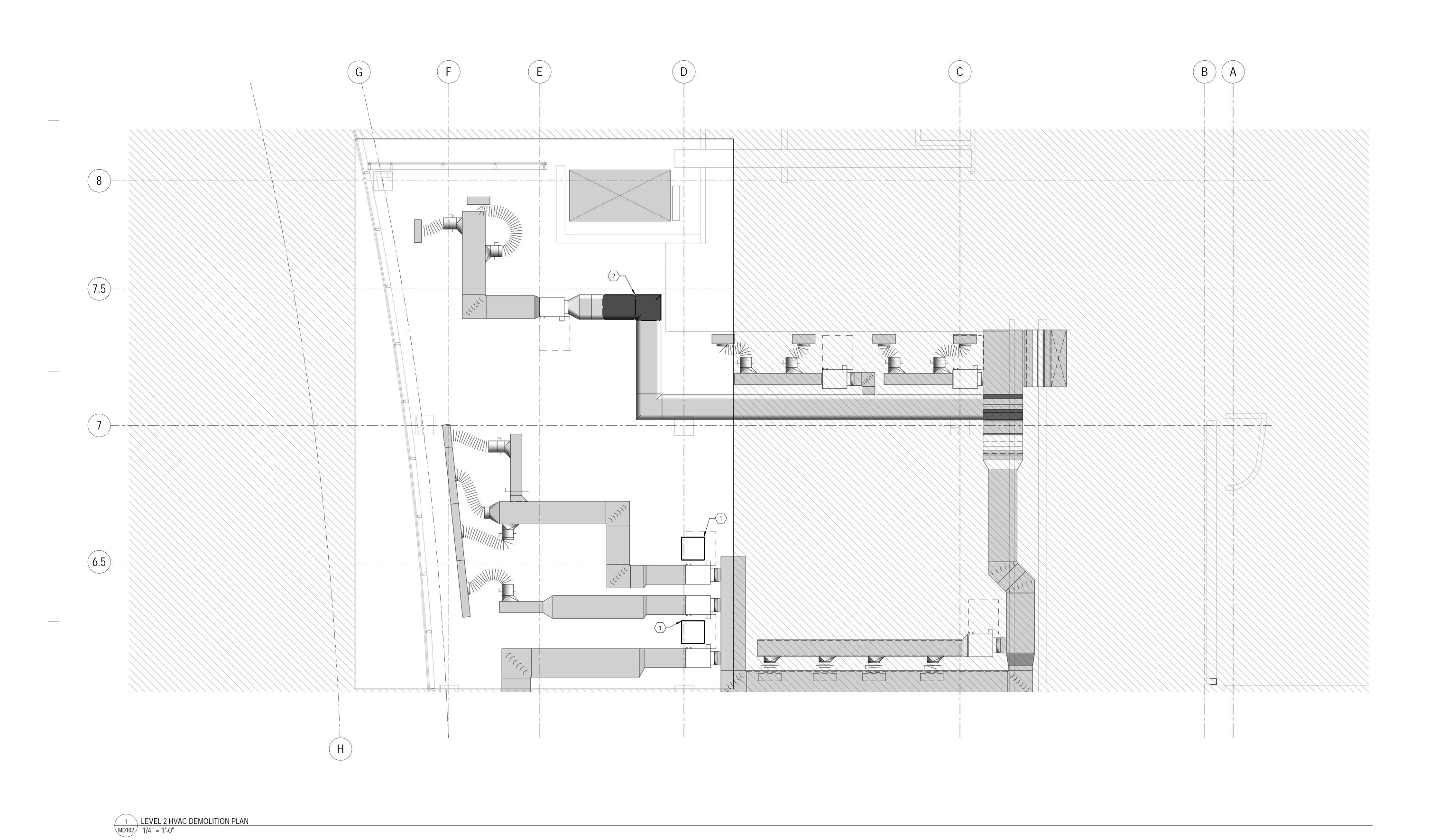


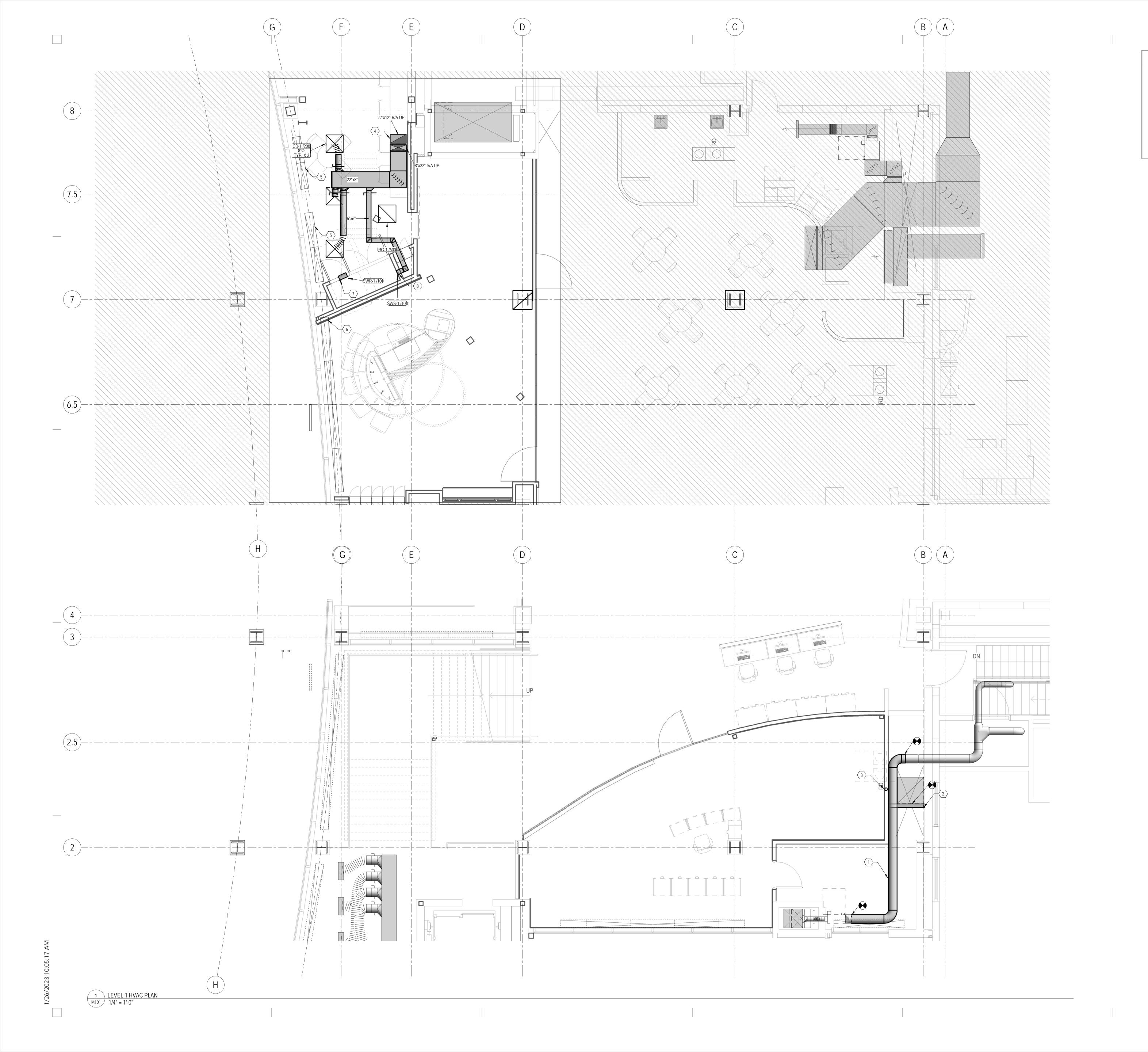
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LEVEL 2 MECHANICAL DEMO PLAN

22221.00







KEYNOTES

- PROVIDE AND INSTALL NEW PRESSURE DUCTWORK AS SHOWN. COORDINATE ROUTING OF DUCTWORK WITH NEW WALL AND EXISTING CONDITIONS.
- PROVIDE AND INSTALL TWO NEW SIDE WALL RETURN AIR GRILLES AND RECONNECT TO BOTH RETURN AIR BRANCHES. EXISTING 3" ROOF DRAIN DROPS BELOW FLOOR AT LOCATION SHOWN. ROUTE NEW SUPPLY AIR DUCT IN BETWEEN ROOF DRAIN PIPE AND RETURN AIR MAIN. RETURN AIR DUCT IS TO TERMINATE INTO OPEN CEILING CAVITY OF OFFICE SPACE.
- EXISTING RECESSED FINNED TUBE IN FLOOR. EXISTING BALANCING VALVE IS TO BE REPLACED WITH 1/2" BALANCING VALVE. EXISTING FINNED TUBE IS TO BE REBALANCED TO .25 GPM. EXISTING FLOOR REGISTER IS TO BE CUT AS NEEDED IN ORDER TO INSTALL WALL. REGISTER IS TO BE CUT AS NEEDED AND INSTALLED NEXT TO NEW WALL.
- PROVIDE AND INSTALL RETURN AIR GRILLE. GRILLE IS TO TERMINATE INTO CEILING
- 8 PROVIDE AND INSTALL LOW WALL SUPPLY AIR DIFFUSER. DIFFUSER IS TO BE MOUNTED 8" ABOVE FINISHED FLOOR.



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NJRA Project #

Jan. 18, 2023

LEVEL 1 MECHANICAL PLAN 181 East 5600 South Murray, Utah 84107 O: (801)530-3148 www.vbfa.com VBFA Project #: 22658

KEYNOTES

PROVIDE AND INSTALL 24X18 ACCESS PANEL AT VAV BOXES AS SHOWN.

NJRA Architects, Inc. 5272 S. College Drive, Suite104 Murray, Utah 84123 801.364.9259 www.njraarchitects.com



| Intermountain Healthcare | Primary Children's Hospital | Ryan Seacrest Studio and Gift Shop Relocation

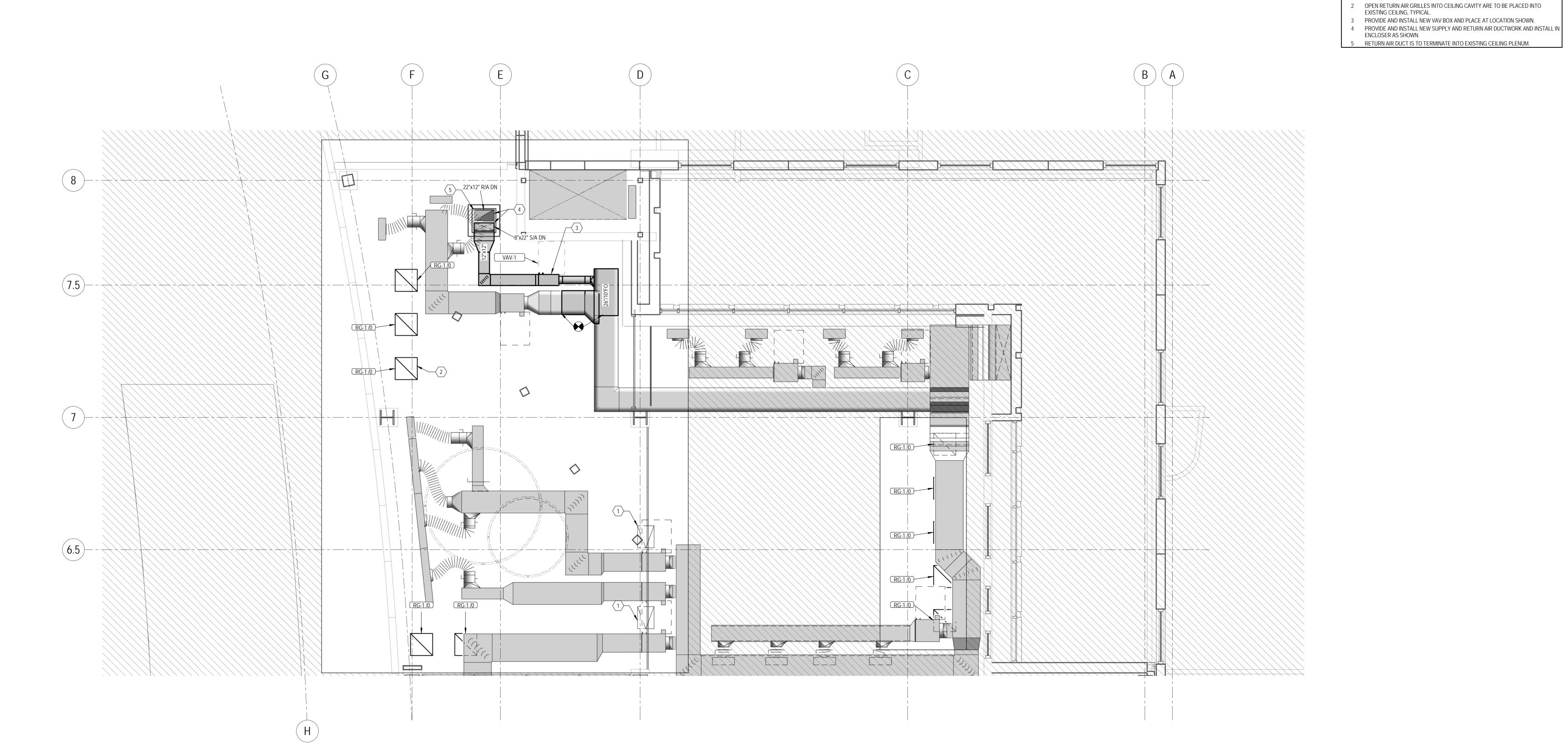
Salt Lake Toolect # 5255700

Jan. 18, 2023

LEVEL 2
MECHANICAL
PLAN

East 5600 South
ay, Utah 84107
001)530-3148





1 LEVEL 2 HVAC PLAN M102 1/4" = 1'-0"

/26/2023 10:05:21 AM

_ M102

Bid Set



KEYNOTES

PROVIDE AND INSTALL NEW THERMOSTAT. TIE THERMOSTAT TO ASSOCIATED VAV BOX SERVING OFFICE SPACE.

PROVIDE AND INSTALL NEW THERMOSTAT. TIE THERMOSTAT TO ASSOCIATED EXISTING VAV BOXES SERVING SEACREST STUIDO SPACE.



ermountain Healthcare mary Children's Hospital an Seacrest Studio and Gift Shop Relocation

22221.00 Jan. 18, 2023

LEVEL 1 MECHANICAL PIPING PLAN

NJRA Project #
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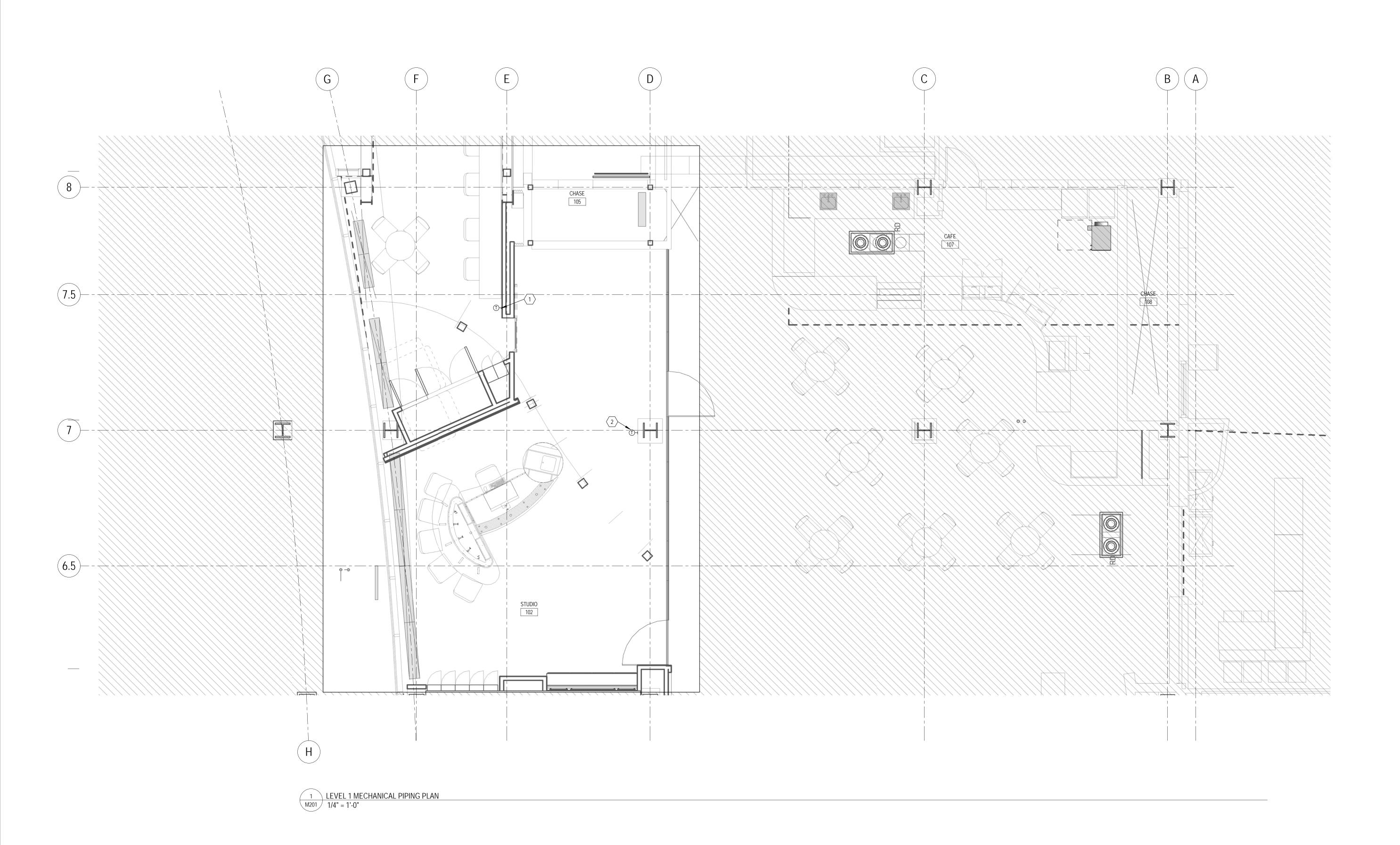


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//BFA Project #: 22658







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22221.00

LEVEL 2 MECHANICAL PIPING PLAN

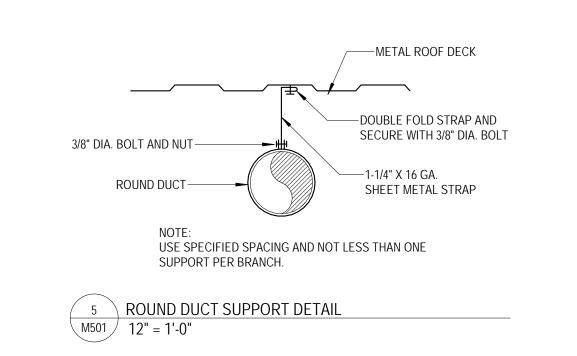
181 East 5600 South Murray, Utah 84107 O: (801)530-3148 www.vbfa.com VBFA Project #: 22658

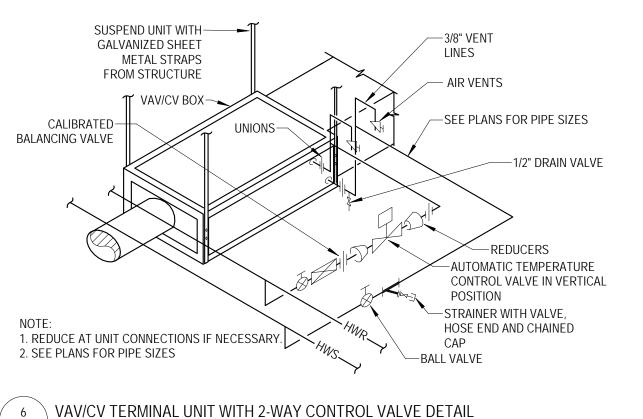
7.5

6.5

1 LEVEL 2 MECHANICAL PIPING PIPING PLAN
M202 1/4" = 1'-0"

8 DIFFUSER CONNECTION DETAIL
12" = 1'-0"

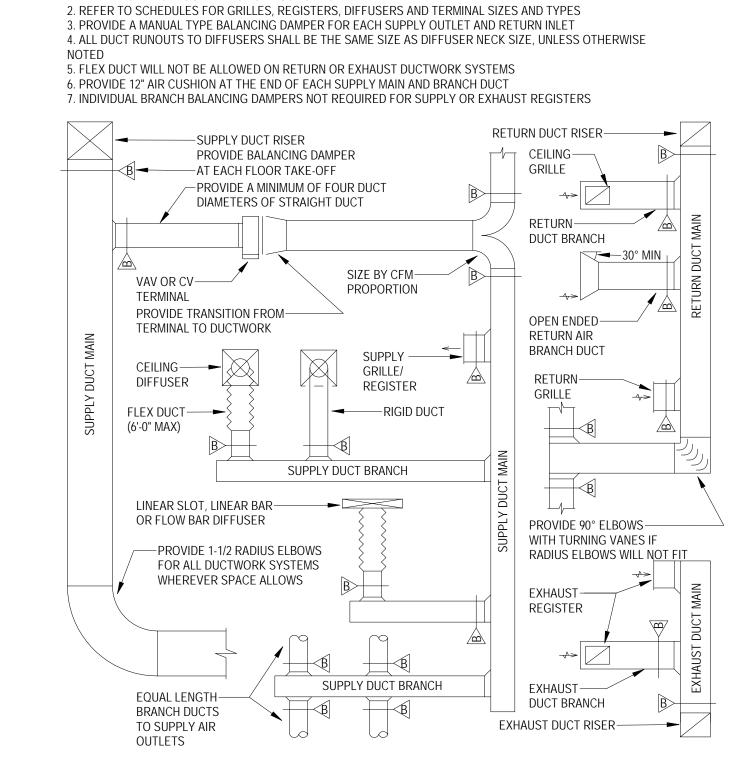




6 VAV/CV TERMINAL UNIT WITH 2-WAY CONTROL VALVE DETAIL
M501 12" = 1'-0"

NOTES:

1. REFER TO HVAC FLOOR PLANS FOR DUCT SIZES



7 DUCTWORK INSTALLATION DIAGRAM NO SCALE



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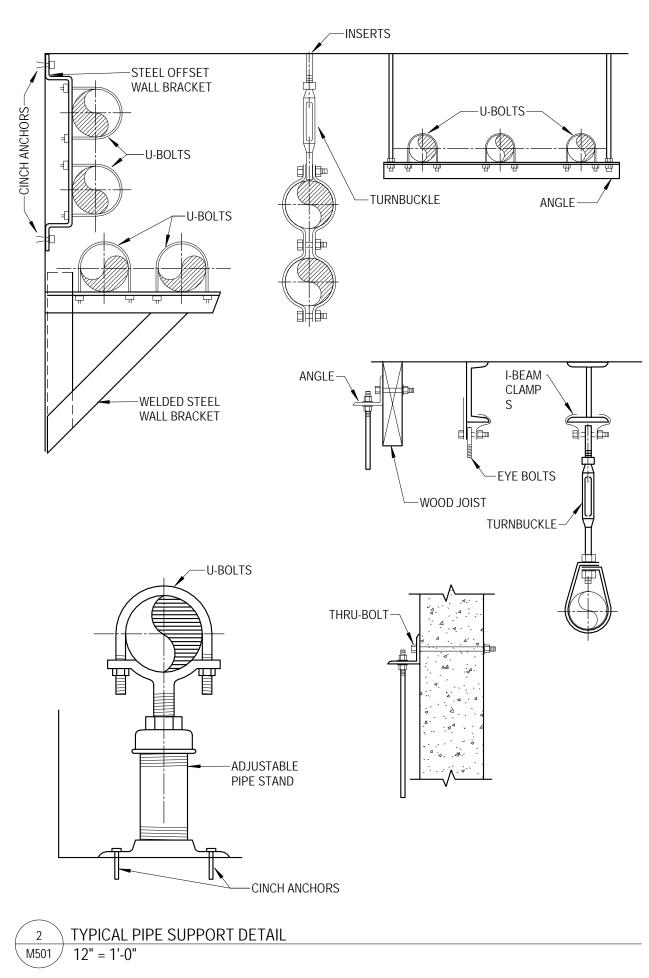


atior

Shop

22221.00

Jan. 18, 2023



ALL THREAD ROD

— CLEVIS HANGER

INSULATION

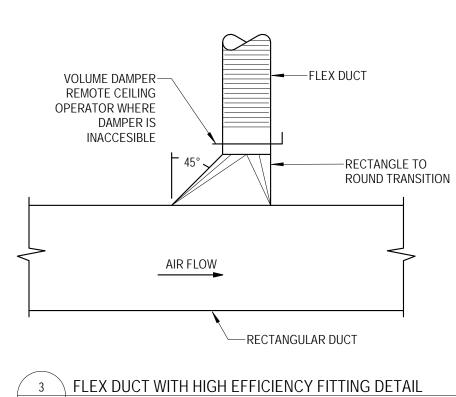
1 TYPICAL CLEVIS HANGER DETAIL
M501 12" = 1'-0"

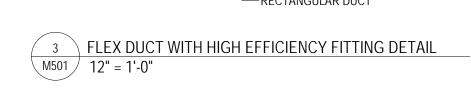
NUT (TOP & BOTTOM)

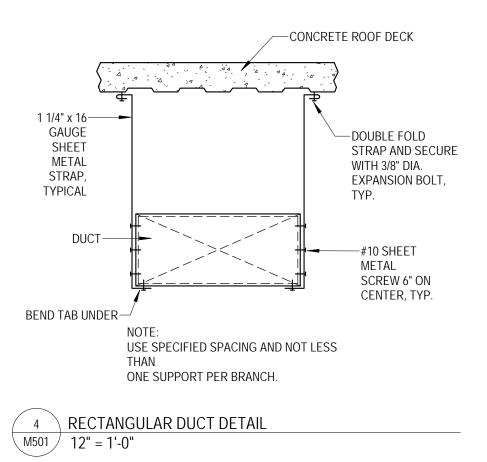
- WASHER (TOP & BOTTOM)

INSULATION PROTECTIVE

SHEETMETAL SHIELD





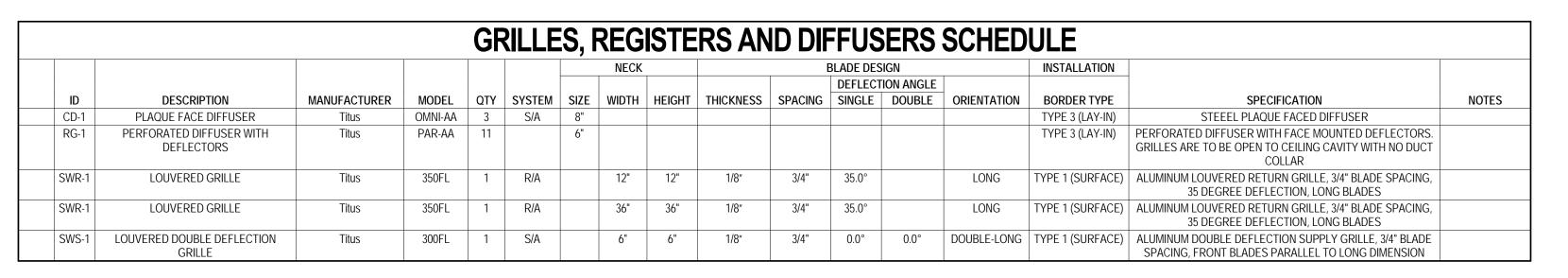


MECHANICAL DETAILS

181 East 5600 South Murray, Utah 84107 O: (801)530-3148 www.vbfa.com VBFA Project #: 22658

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	VAV BOX SCHEDULE															
Identity Mark	Inlet Size Text	Cooling Airflow	Heating Airflow	Min Airflow	Entering Air Temperature	Leaving Air Temperature	S.P. Loss at Max CFM	Flow Rate	Entering Water Temperature	Leaving Water Temperature	Working Fluid	Head Loss Feet	Min. Number of Rows/Fins Per Inch	Valve Type	Pipe Diameter	NOTE
VAV-1	8"	700 CFM	420 CFM	145 CFM	52.0 °F	92.2 °F	0.41	1.5 GPM	160.0 °F	139.2 °F	WATER	0.4775	2/10	2 Way Valve	0' - 0 3/4"	

SPLIT SYSTEM COOLING UNIT																			
INDOOR UNIT OUTDOOR UNIT REFRIG LINES																			
				COOLING															
				CAPACITY	CFM	DIMENSIO	WEIGHT	AMPS					DIMENSIO	WEIGHT	AMPS				
ID	MANUF.	MODEL	LOCATION	(BTU)	RANGE	W" x H" x D"	(LBS.)	(MCA)	VOLTS/P	ID	MANUF.	MODEL	W" x H" x D"	(LBS.)	(MCA)	VOLTS/P	LIQUID	GAS	COMMENTS
MSI-1	MITSUBISHI	PKA-A12LA	A/V CLOSET	12,000	265-455	36X11X12	28	1	208/1/60	MSO-1	MITSUBI	PUY-A12NKA7	32X12X25	92	11	208/1/60	3/8	5/8	1-5

CAPACITIES RATED AT THE FOLLOWING OUTDOOR CONDITIONS: COOLING - 95 DEG. F. D.B., 75 DEG. F. W.B.
 PROVIDE LOW AMBIENT CONTROL TO ALLOW COOLING OPERATION DOWN TO 0 DEG. F. D.B.





Intermountain Healthcare Primary Children's Hospital Ryan Seacrest Studio and Gift Shop Relocation

MECHANICAL SCHEDULES

22221.00 Jan. 18, 2023

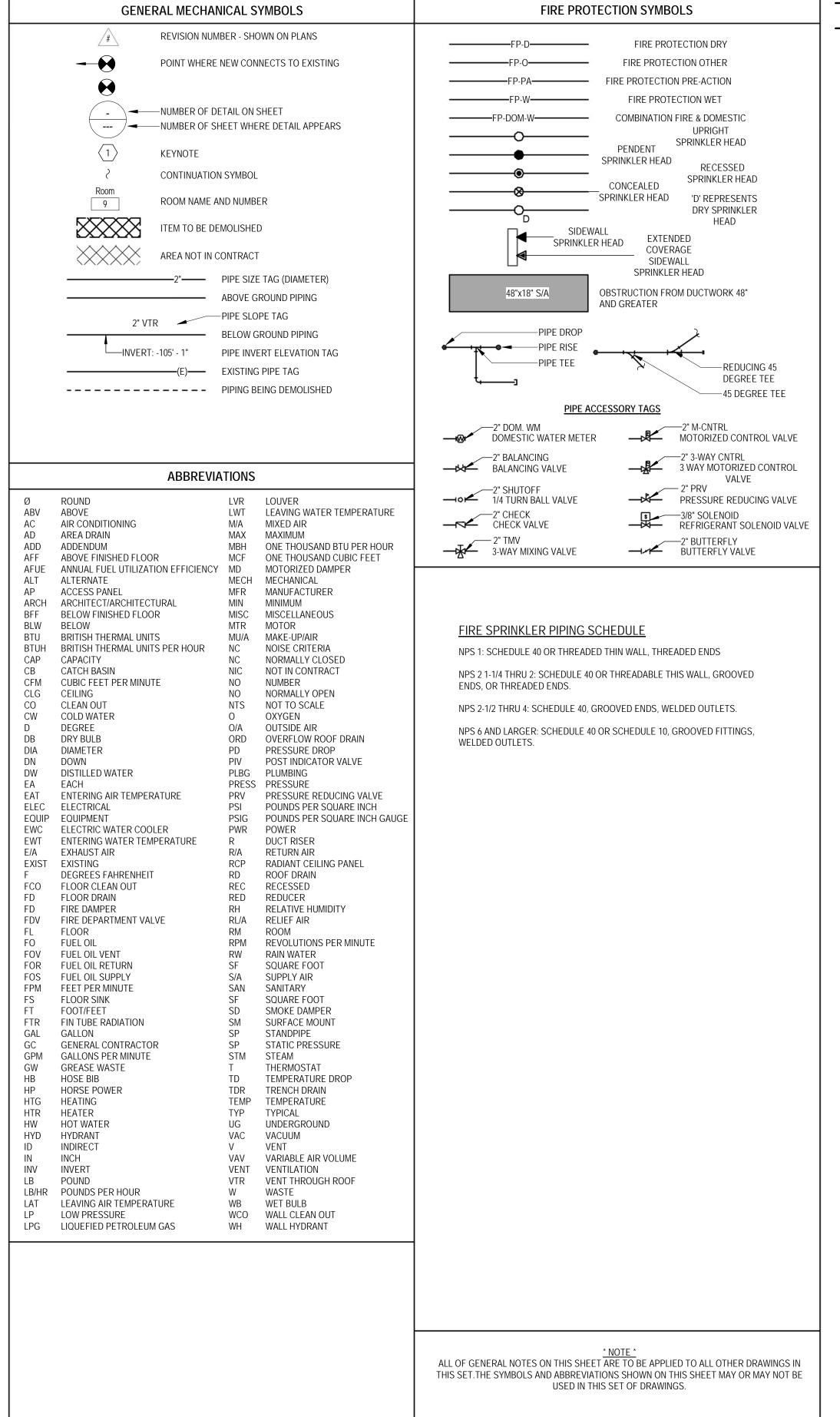
NJRA Project # Bid Set



^{3.} R410A REFRIGERANT.

^{4.} SEE DRAWINGS FOR QUANTITIES AND LOCATION

^{5.} PROVIDE, INSTALL AND ROUTE REFRIGERANT PIPES PER MANUFACTURERS RECOMMENDATIONS.





- NO FIRE PROTECTION LINE SHALL BE DESIGNED OR INSTALLED PRIOR TO CLOSE COORDINATION WITH ALL OTHER DISCIPLINES. DUCTWORK, MECHANICAL PIPING AND PLUMBING TAKE SPACE PRECEDENCE OVER FIRE PROTECTION REMOVAL AND REINSTALLATION AT THE FIRE PROTECTION CONTRACTORS EXPENSE.
- 2. ALL WORK DONE SHALL BE PERFORMED WITH WATER CONTROL IN MIND. CONTAINMENT OF WATER IS NECESSARY TO PREVENT WATER FROM DAMAGING SURROUNDING AREA.
- 3. COORDINATE EXACT LOCATION OF PIPING WITH STRUCTURAL MEMBERS, LIGHTS, REFLECTED CEILING PLANS, CABLE TRAY, ELECTRICAL CONDUITS, DUCTWORK, MECHANICAL AND PLUMBING PIPING, AND ALL OTHER TRADES AND ALL EXISTING CONDITIONS.
- 4. FIRE SUPPRESSION CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND/OR REROUTE ANY AND ALL FIRE PROTECTION PIPING, VALVING, SUPPORTS OR SYSTEMS, OTHERWISE WITHIN THE FIRE SUPPRESSION DISCIPLINE REGARDLESS OF WHO INSTALLED THEM OR WHEN THEY WERE INSTALLED, IN ORDER TO ACCOMMODATE MECHANICAL, PLUMBING, ELECTRICAL OR OTHER SYSTEMS. COORDINATE WORK WITH MECHANICAL, ELECTRICAL, PLUMBING OR OTHER CONTRACTORS UNTIL SUBSTANTIAL COMPLETION OF PROJECT.
- 5. PROVIDE ALTERATIONS TO THE EXISTING FIRE PROTECTION SYSTEM AS REQUIRED TO ACCOMMODATE THE NEW FLOOR PLAN AND NEW CEILING TYPES. PROVIDE A COMPLETE WET TYPE SYSTEM INCLUDING NEW MAINS, BRANCHES, HEADS, VALVES, AND ACCESSORIES AS REQUIRED. REUSE EXISTING SYSTEM EQUIPMENT WHERE APPLICABLE. THE SYSTEM SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS AND AS PER REQUIREMENTS OF THE STATE BUILDING CODE, LOCAL FIRE DEPARTMENT, AND ALL FEDERAL, STATE, AND LOCAL AUTHORITIES, AND NFPA.
- 5. THE BUILDINGS COMPLETE OPERATIONAL FIRE PROTECTION SYSTEMS SHALL REMAIN IN PLACE. THIS CONTRACTOR SHALL REPAIR ANY DAMAGE TO THIS SYSTEM CREATED BY THE REMOVAL OF ANY OTHER MECHANICAL SYSTEMS OR COMPONENTS.
- 7. THIS CONTRACTOR SHALL COORDINATE PHASING OF SPRINKLER WORK WITH THE GENERAL CONTRACTOR PRIOR TO STARTING WORK.
- 8. REFER TO REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION REGARDING SPRINKLER HEAD LOCATION AND PIPE, UNLESS NOTED OTHERWISE.
- 9. DIVISION 21 CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR PROPER INSTALLATION OF THE FIRE PROTECTION SYSTEMS ALARM DEVICES
- INVOLVED WITH FIRE SPRINKLER SYSTEM.
 10. ALL SPRINKLER SYSTEM PIPING SHALL BE CONCEALED ABOVE THE SUSPENDED CEILING SYSTEM, UNLESS NOTED OTHERWISE. WRITTEN AUTHORIZATION SHALL BE OBTAINED FROM THE ARCHITECT
- PRIOR TO EXPOSING ANY PIPING IN ANY ROOM WHICH HAS A SUSPENDED CEILING.

 11. THIS CONTRACTOR SHALL PROVIDE ALL ADDITIONAL SPRINKLER HEADS AS REQUIRED TO ENSURE
- AN APPROVED FIRE PROTECTION SYSTEM AT NO ADDITIONAL COST TO THE OWNER.

 12. AUXILIARY DRAINS SHALL BE EXPOSED WITH 1" DRAIN VALVES. WHEN 5 OR MORE GALLONS ARE TRAPPED, THIS CONTRACTOR SHALL PROVIDE FIXED PIPING TO AN ADEQUATELY SIZED RECEPTOR WHICH IS CAPABLE OF ACCEPTING THE FULL FLOW OF THE DRAIN. WHEN LESS THAN 5 GALLONS ARE
- 13. AUXILIARY DRAINS SHALL NOT BE LOCATED ABOVE PLASTER OR GYPSUM BOARD CEILING SYSTEMS. ONLY BY A SPECIFIC WRITTEN INSTRUCTION FROM THE ENGINEER WILL A VARIANCE BE PROVIDED.
- 14. SHOW ALL ROOM NUMBERS ON SHOP DRAWING PLANS.

TRAPPED, A HOSE BIB SHALL BE PROVIDED AT THE DRAIN VALVE.

- 15. ROUTE SPRINKLER PIPING SUCH THAT IT DOES NOT RUN ABOVE ELECTRICAL PANELS, SWITCHGEAR, OR SIMILAR EQUIPMENT. SPRINKLER MAINS SHALL NOT RUN THROUGH ELECTRICAL OR COMMUNICATION ROOMS. SPRINKLER HEADS IN THESE ROOMS SHALL BE SERVED BY A DEDICATED BRANCH LINE FOR EACH ROOM. BRANCH LINE TO ENTER ROOM ABOVE DOOR.
- 16. THIS DRAWING INDICATES A GENERAL PIPING ARRANGEMENT AND SUGGESTED SIZING ONLY. THIS CONTRACTOR SHALL DETERMINE THE ACTUAL PIPE SIZING REQUIRED AND COORDINATE WORK WITH ALL OTHER TRADES TO AVOID CONFLICTS.



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MECHANICAL SHEET INDEX



Hospital In and Cift Shon Pelocation

100 Mario Capecchi Dr, Salt Lake Citv, UT 84113

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22221.00 Jan. 18, 2023

FIRE PROTECTION TITLE SHEET



F001

1 LEVEL 1 FIRE PROTECTION PLAN F101 1/4" = 1'-0"

KEYNOTES

1 FIRE SPRINKLERS SHALL BE INSTALLED TO MEET NFPA 13-2016 REQUIREMENTS, TYPICAL. ALL SPRINKLERS IN THE OFFICE SPACE AREA SHALL BE PROVIDED WITH QUICK RESPONSE TYPE. SPRINKLERS SHALL EXTEND TO ALL WALLS OR SOFFIT BREAKS.
 FIRE SPRINKLERS SHALL BE INSTALLED TO MEET NFPA 13-2016 REQUIREMENTS, TYPICAL.



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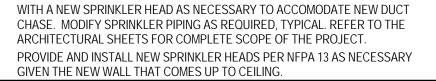
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LEVEL 1 FIRE PROTECTION PLAN

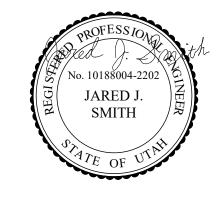


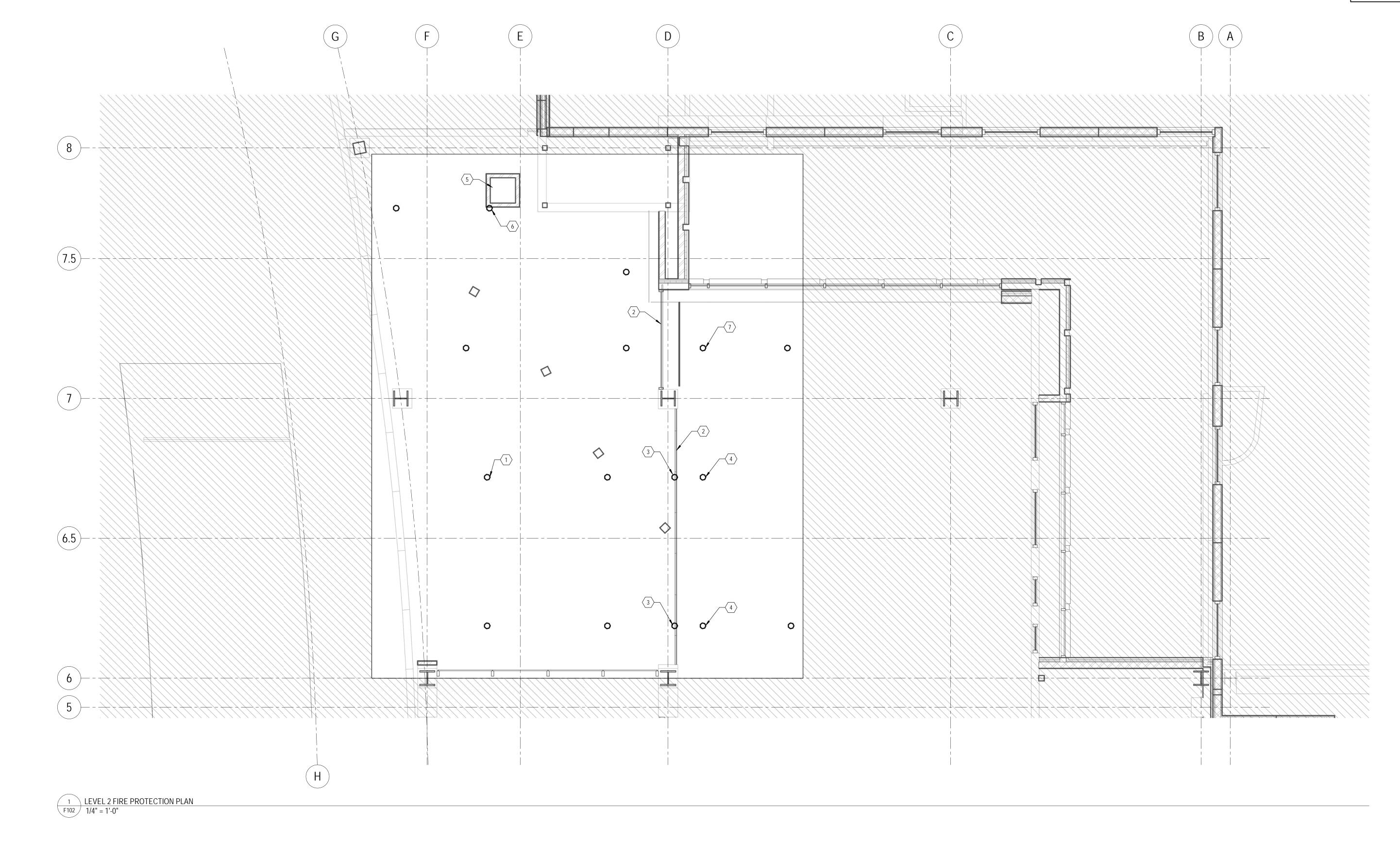
- APPROXIMATE EXISTING LOCATION OF EXISTING FLAT PLATE CONCEALED SPRINKLER HEAD, TYPICAL.
- NEW GLASS WALL THAT WILL RISE UP TO CEILIING. EXISTING SPRINKLER HEAD IS TO BE REMOVED AND RELOCATED WITH NEW HEAD.
- SEE KEYNOTE #4. APPROXIMATE LOCATION OF NEW FLAT PLATE CONCEALED SPRINKLER HEADS TO FILL SPRINKLER COVERAGE DEFFICIENCY CAUSED BY NEW GLASS WALL
- OBSTRUCTION. CONTRACTOR SHALL FIELD VERIFY BEST LOCATIONS AND CONNECTION POINTS. VICTAULIC MECHANICAL TEES MAY BE USED. NEW SPRINKLERS ARE INSTALLED IN WOOD STYLE CEILINGS, COVER PLATE COLOR SHALL MATCH EXISTING.
- FIRE SPRINKLER PIPING SERVING OFFICE SPACE BELOW IS TO BE INSTALLED IN DUCT CHASE.
- THE FIRE SPRINKLER CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING FIRE SPRINKLERS. ADD/REPOSITION EXISTING SPRINKLER LOCATION WITH A NEW SPRINKLER HEAD AS NECESSARY TO ACCOMODATE NEW DUCT CHASE. MODIFY SPRINKLER PIPING AS REQUIRED, TYPICAL. REFER TO THE ARCHITECTURAL SHEETS FOR COMPLETE SCOPE OF THE PROJECT.





ARCHITECTS





NJRA Project #

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22221.00 Jan. 18, 2023

LEVEL 2 FIRE PROTECTION PLAN



	SYMBOLS LEGEND		SYMBOLS LEGE
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
REFERENC	CE AND LINE SYMBOLS	WIRING DE	EVICES
A5	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E-501	b	RECEPTACLE, DUPLEX: NEMA 5-20R.
E-501	INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.	d _А	RECEPTACLE, DUPLEX, ABOVE COUNTER:
	ELEVATION OR SECTION INDICATOR, EXTERIOR: A5 INDICATES	 c	RECEPTACLE, DUPLEX, CEILING: NEMA 5-2
(A5) (E-201)	ELEVATION OR SECTION INDICATOR, EXTERIOR: AS INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.	₩ _{DF}	RECEPTACLE, DUPLEX WITH GROUND FAU INTERRUPTER, DRINKING FOUNTAIN: CON-RECEPTACLE BEHIND WATER COOLER. SE
$\overline{}$		₩ DF	MECHANICAL/PLUMBING SHOP DRAWINGS REQUIREMENTS.
A5	ELEVATION OR SECTION INDICATOR, INTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING	—	RECEPTACLE, DUPLEX, HOSPITAL GRADE (POWER: NEMA 5-20R.
E-201 ROOM NAME	SHEET WHERE ELEVATION OR SECTION IS SHOWN.	<u></u>	RECEPTACLE, DUPLEX WITH GROUND FAU INTERRUPTER: NEMA 5-20R.
100	ROOM IDENTIFIER WITH ROOM NAME AND NUMBER.	•	RECEPTACLE, DUPLEX WITH GROUND FAU INTERRUPTER, HOSPITAL GRADE: NEMA 5-
1	KEYNOTE INDICATOR.	<u> </u>	RECEPTACLE, DUPLEX WITH GROUND FAU INTERRUPTER, HOSPITAL GRADE ON EMER
	REVISION INDICATOR.		NEMA 5-20R. RECEPTACLE, DUPLEX WITH GROUND FAU
CU-1	EQUIPMENT INDICATOR.	₩P	INTERRUPTER, WEATHERPROOF: NEMA 5-
X-X XMDP	MECHANICAL EQUIPMENT INDICATOR. "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "XMDP" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO	#	RECEPTACLE, QUADRAPLEX: NEMA 5-20R. RECEPTACLE, QUADRAPLEX, HOSPITAL GR
	EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.	*	POWER: NEMA 5-20R. RECEPTACLE, QUADRAPLEX WITH GROUNI
	NEW LINE: MEDIUM LINE.	₩	INTERRUPTER: NEMA 5-20R. RECEPTACLE, SPECIAL PURPOSE. PROVID
	EXISTING TO REMAIN LINE: THIN LINE.	Φ	MATCH EQUIPMENT PLUG.
	DEMOLITION LINE: DASHED, MEDIUM LINE ELECTRICAL EQUIPMENT INDICATOR. "XXX" INDICATES TYPE OF	()	MULTI-OUTLET ASSEMBLY: NEMA 5-20R. FLUSH FLOOR BOX. "#" SHOWN ON DRAWI
XXX EF-X	EQUIPMENT OR EQUIPMENT ID. "EF-X" IDENTIFIES MECHANICAL EQUIPMENT BEING SERVED. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.	FB#	WIRING DEVICE SCHEDULE IN THE ELECTR SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
<u>X-X</u> 1LA-3	EQUIPMENT INDICATOR. "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "1LA-3" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO REFER TO EQUIPMENT SCHEDULE	PT#	FLUSH FIRE RATED POKE THRU. "#" SHOW REFER TO WIRING DEVICE SCHEDULE IN TI
	EQUIPMENT IS CIRCUITED TO. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.		SPECIFICATIONS FOR CONFIGURATION AN
VIRING ME	THODS	Ф	SWITCH, DIMMER.
	WIRING.	* *	SWITCH, SINGLE POLE ("x" INDICATES FIXTU
A-1	SINGLE BRANCH CIRCUIT HOME RUN TO PANELBOARD WITH DEDICATED NEUTRAL CONDUCTOR. LETTER AND NUMBER	\$2	SWITCH, DOUBLE POLE ("x" INDICATES FIXT
	NOTATION IDENTIFY PANEL AND CIRCUIT NUMBER.	\$3	SWITCH, THREE-WAY ("x" INDICATES FIXTU
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF		RECEPTACLE, DUPLEX, TAMPER RESISTAN RECEPTACLE, QUADRAPLEX WITH GROUNI
A-1,3,5	ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS.		INTERRUPTER, HOSPITAL GRADE: NEMA 5
		#	RECEPTACLE, QUADRAPLEX WITH GROUNI INTERRUPTER, HOSPITAL GRADE ON EMER NEMA 5-20R.
_	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF	l _e t •	
A-1,3,5	ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. NUMBER IN BOX REFERS TO THE CONDUCTOR AND CONDUIT	₩	RECEPTACLE, SINGLE PLEX, WITH USB OUT
7 (1,0,0	SCHEDULE.	黄	RECEPTACLE, DULEX, RECESSED, NEMA 5- CONTROLLED THROUGH TIME OR OCCUPA
			CONTROLS (REFER TO PLANS FOR CONTR
	LOW VOLTAGE WIRING: DIVIDE, MEDIUM LINE. CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.	#	RECEPTACLE, QUADRAPLEX, RECESSED, NATIONATICALLY CONTROLLED THROUGH BASED CONTROLS (REFER TO PLANS FOR
*	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER	FIRE ALAR	`
(HC)	TO ONE-LINE DIAGRAM. ADA ACCESS PUSH PLATE	FAA	FIRE ALARM ANNUNCIATOR PANEL.
•	JUNCTION BOX.	FACP	FIRE ALARM CONTROL PANEL, SEMI-RECES
 Ф _с	JUNCTION BOX, CEILING.	JPC	JOCKEY PUMP CONTROLLER.
Φ _{SC}	JUNCTION BOX, SYSTEMS FURNITURE COMMUNICATION		AUTOMATIC DOOR CLOSERS: DOOR CLOS
 Φ _{SP}	JUNCTION BOX, SYSTEMS FURNITURE POWER CONNECTION.	С	FURNISHED WITH DOOR HARDWARE AND OBY FIRE ALARM INSTALLER.
РВ	PULL BOX.	СМ	CONTROL MODULE.
•	MECHANICAL EQUIPMENT CONNECTION. REFER TO EQUIPMENT SCHEDULE FOR REQUIREMENTS.	ММ	MONITOR MODULE.
IGHTING	SCHEDULE FOR REQUIREMENTS.	F	FIRE ALARM MANUAL PULL STATION.
(W-3)			SHUT DOWN RELAY: INSTALL RELAY IN CO
	FIXTURE IDENTIFICATION: (W-3) INDICATES FIXTURE TYPE AS SCHEDULED.	R	OF EQUIPMENT TO BE CONTROLLED IN THE FIRE.
	FIXTURE IDENTIFICATION: EMERGENCY LIGHTING FIXTURE		WATER FLOW SWITCH. FLOW SWITCHES S
(W-3E)	WITH BATTERY PACK AND/ OR GENERATOR AND/ OR CENTRALIZED INVERTER AND/ OR CENTRALIZED UPS CONNECTION AS INDICATED IN PLANS. (W-3E) INDICATES	FS	PROVIDED AND INSTALLED BY FIRE SPRINK CONTRACTOR AND SHALL BE CONNECTED SHOWN ON THE FIRE SPRINKLER SHOP DR
	FIXTURE TYPE AS SCHEDULED.		VALVE SUPERVISORY SWITCH, TAMPER SV
EM	EMERGENCY.	vs	SWITCHES SHALL BE PROVIDED AND INSTA SPRINKLER CONTRACTOR AND SHALL BE O LOCATIONS SHOWN ON THE FIRE SPRINKL
NL	NIGHT LIGHT: DO NOT SWITCH.		PRESSURE SUPERVISORY SWITCH. PRESS
↑	EGRESS DIRECTION ARROW (EXIT SIGNS).	PS	BE PROVIDED AND INSTALLED BY FIRE SPE AND SHALL BE CONNECTED TO LOCATIONS SPRINKLER SHOP DRAWINGS
8	EXIT SIGN: SINGLE FACE; CEILING MOUNTED	<u>\$</u>	MAGNETIC DOOR HOLDER.
፟ 🌣 🔄	EXIT SIGN: SINGLE FACE; WALL MOUNTED	<u>s</u>	DETECTOR, SMOKE.
•	EXIT SIGN: DOUBLE FACE; CEILING MOUNTED	HS)	DETECTOR, SMOKE, WALL MOUNTED.
•	EXIT SIGN: DOUBLE FACE; WALL MOUNTED		DETECTOS CURVES SI
IGHTING (3	DETECTOR, SMOKE, DUCT WITH HOUSING
; <	OCCUPANCY SENSOR, DUAL TECHNOLOGY, OMNI-DIRECTIONAL, CEILING.		CMOVE DAMPED AND TO THE TOTAL OF THE TOTAL O
<u>*</u>	OCCUPANCY SENSOR, DUAL TECHNOLOGY, WALL.	L SD	SMOKE DAMPER. 120V POWER FROM ELEC
P	PHOTOCELL.		COMBINATION FIRE/SMOKE DAMPER. 120V
HP)	PHOTOCELL, WALL MOUNTED.	© FSD	FROM ELECTRICAL SYSTEM.
*	VACANCY SENSOR, DUAL TECHNOLOGY, OMNI-DIRECTIONAL, CEILING.		DETECTOR, HEAT.
‡	VACANCY SENSOR, DUAL TECHNOLOGY, WALL.	CO	DETECTOR, CARBON MONOXIDE.
a,b §	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION		STROBE, WALL MOUNTED.
	AND PROGRAMMING REQUIREMENTS)	75	STROBE, WALL MOUNTED. SUBSCRIPT IND CANDELA RATING.
RC	DIGITAL LIGHTING ROOM CONTROLLER		ALARM, HORN/STROBE, WALL MOUNTED, C
DC	DIGITAL LIGHTING DIMMING CONTROLLER	75	ALARM, HORN/STROBE, WALL MOUNTED, C SUBSCRIPT INDICATES CANDELA RATING.
ET	LIGHTING EMERGENCY TRANSFER DEVICE	⊠ <c< td=""><td>ALARM, CHIME/STROBE, WALL MOUNTED, O</td></c<>	ALARM, CHIME/STROBE, WALL MOUNTED, O
<u>X</u>	LIGHTING SPACE CONTROL TYPE. X INDICATES TYPE. SEE SCHEDULE / DIAGRAM.		SPEAKER, WALL MOUNTED, EVACUATION,
		75	SPEAKER, WALL MOUNTED, EVACUATION, STROBE. SUBSCRIPT INDICATES CANDELL
			TO THE PROPERTY OF THE PROPERT

S	SYMBOLS LEGEND			SYMBOLS LEGEND
_ DE	SCRIPTION	SY	MBOL	DESCRIPTION
DEVIC	ES	ELE	CTRICA	L POWER AND DISTRIBUTION
REC	CEPTACLE, DUPLEX: NEMA 5-20R.			FUSE WITH RATING (ONE-LINE DIAGRAM).
REC	CEPTACLE, DUPLEX, ABOVE COUNTER: NEMA 5-20R.	,		DISCONNECT FUSED (ONE LINE DIACRAM)
REC	CEPTACLE, DUPLEX, CEILING: NEMA 5-20R.			DISCONNECT, FUSED (ONE-LINE DIAGRAM).
INTE	CEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT ERRUPTER, DRINKING FOUNTAIN: CONCEAL WATER COOLER	,	\	DISCONNECT, NONFUSED (ONE-LINE DIAGRAM).
MEC	CEPTACLE BEHIND WATER COOLER. SEE CHANICAL/PLUMBING SHOP DRAWINGS FOR INSTALLATION		<u> </u>	
REC	QUIREMENTS. CEPTACLE, DUPLEX, HOSPITAL GRADE ON EMERGENCY WER: NEMA 5-20R.			CIRCUIT BREAKER, MOLDED CASE (ONE-LINE DIAGRAM).
REC	CEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT ERRUPTER: NEMA 5-20R.		<u>, </u>	OIDOUIT DDEAKED, MOLDED OAGE WITH OURINT TOID
REC	CEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT ERRUPTER, HOSPITAL GRADE: NEMA 5-20R.			CIRCUIT BREAKER, MOLDED CASE WITH SHUNT TRIP (ONE-LINE DIAGRAM).
	CEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT		, MCP	
INTE	ERRUPTER, HOSPITAL GRADE ON EMERGENCY POWER: //A 5-20R.			CIRCUIT BREAKER, MOTOR CIRCUIT PROTECTION (ONE-LINE DIAGRAM).
	CEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT ERRUPTER, WEATHERPROOF: NEMA 5-20R.		#AF	CIRCUIT BREAKER, ADJUSTABLE TRIP. "225AF" REPRESENTS
	CEPTACLE, QUADRAPLEX: NEMA 5-20R.		#AT	THE RATING AND "150AT" REPRESENTS THE TRIP SETTING. (ONE-LINE DIAGRAM).
	CEPTACLE, QUADRAPLEX, HOSPITAL GRADE ON EMERGENCY		1	
REC	WER: NEMA 5-20R. CEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT	 		CIRCUIT BREAKER, SOLID STATE (ONE-LINE DIAGRAM).
REC	ERRUPTER: NEMA 5-20R. CEPTACLE, SPECIAL PURPOSE. PROVIDE RECEPTACLE TO			
	TCH EQUIPMENT PLUG. _TI-OUTLET ASSEMBLY: NEMA 5-20R.		\ ,	CIRCUIT BREAKER, SOLID STATE WITH GROUND FAULT PROTECTION (ONE-LINE DIAGRAM).
	SH FLOOR BOX. "#" SHOWN ON DRAWINGS. REFER TO			MOTOR.
WIR SPE	RING DEVICE SCHEDULE IN THE ELECTRICAL ECIFICATIONS			MOTOR.
	R CONFIGURATION AND DEVICES.	<u>U</u>	<u>₩</u>	TRANSFORMER (ONE-LINE DIAGRAM).
REF	SH FIRE RATED POKE THRU. "#" SHOWN ON DRAWINGS. FER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL ECIFICATIONS FOR CONFIGURATION AND DEVICES.			TRANSCORMED OURDENT (ONE LINE DIA COLLI)
			B	TRANSFORMER, CURRENT (ONE-LINE DIAGRAM).
	ITCH, DIMMER.			DISTRIBUTION PANELBOARD, MOTOR CONTROL CENTER,
	ITCH, SINGLE POLE ("x" INDICATES FIXTURES CONTROLLED).			PLUG-IN BUSWAY, MEDIUM VOLTAGE SWITCHBOARD (ONE-LINE DIAGRAM).
SWI	ITCH, DOUBLE POLE ("x" INDICATES FIXTURES CONTROLLED).			
SWI	ITCH, THREE-WAY ("x" INDICATES FIXTURES CONTROLLED).			
	CEPTACLE, DUPLEX, TAMPER RESISTANT: NEMA 5-20R.		1H"	PANELBOARD (ONE-LINE DIAGRAM).
	CEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT ERRUPTER, HOSPITAL GRADE: NEMA 5-20R.			
INTE	CEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT ERRUPTER, HOSPITAL GRADE ON EMERGENCY POWER:	22	5/3	
NEN	MA 5-20R.		'1H"	PANELBOARD WITH MAIN LUGS ONLY. BUS SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
REC	CEPTACLE, SINGLE PLEX, WITH USB OUTLET			
	CEPTACLE, DULEX, RECESSED, NEMA 5-20R, AUTOMATICALLY NTROLLED THROUGH TIME OR OCCUPANCY BASED)2	25/3	
	NTROLS (REFER TO PLANS FOR CONTROL METHOD)		'1H"	PANELBOARD WITH MAIN CIRCUIT BREAKER. SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
	CEPTACLE, QUADRAPLEX, RECESSED, NEMA 5-20R, COMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY			
	SED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)	<u> </u>	25/3	
RM			_{'1H"}	PANELBOARD WITH MAIN AND SUB FEED CIRCUIT BREAKER
FIRE	E ALARM ANNUNCIATOR PANEL.		<u>, </u>	(ONE-LINE DIAGRAM).
FIRE	E ALARM CONTROL PANEL, SEMI-RECESSED.	60	/3	
JOC	CKEY PUMP CONTROLLER.	SEC	URITY	
	OMATIC DOOR CLOSERS: DOOR CLOSERS SHALL BE	A	/CC	ACCESS CONTROL HEADEND EQUIPMENT.
	FIRE ALARM INSTALLER.		CTR	SECURITY CONTROL PANEL.
CON	NTROL MODULE.	S	SEC	INTRUSION DETECTION HEADEND EQUIPMENT.
MOI	NITOR MODULE.	#	1	CARD ACCESS DOOR TYPE #1 OR AS NOTED. SEE SCHEDULE.
FIRE	E ALARM MANUAL PULL STATION.		R	CARD READER.
	JT DOWN RELAY: INSTALL RELAY IN CONTROL CIRCUIT EQUIPMENT TO BE CONTROLLED IN THE EVENT OF A	K	CR	KEYPAD/CARD READER COMBINATION.
FIRE		(()	SENSOR, GLASS BREAK.
1	TER FLOW SWITCH. FLOW SWITCHES SHALL BE OVIDED AND INSTALLED BY FIRE SPRINKLER		CA	CONTROLLED ACCESS POINT.
CON	NTRACTOR AND SHALL BE CONNECTED TO LOCATIONS DWN ON THE FIRE SPRINKLER SHOP DRAWINGS.	((C)	INTERCOM STATION.
	VE SUPERVISORY SWITCH, TAMPER SWITCH. TAMPER ITCHES SHALL BE PROVIDED AND INSTALLED BY FIRE	(RU	DUAL TECHNOLOGY PASSIVE INFRARED SENSOR AND ULTRASONIC MOTION DETECTOR.
SPR	RINKLER CONTRACTOR AND SHALL BE CONNECTED TO CATIONS SHOWN ON THE FIRE SPRINKLER SHOP DRAWINGS.		IR)	PASSIVE INFRARED SENSOR.
	ESSURE SUPERVISORY SWITCH. PRESSURE SWITCHES SHALL PROVIDED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR		P	PANIC DURESS SWITCH.
AND	SHALL BE CONNECTED TO LOCATIONS SHOWN ON THE FIRE RINKLER SHOP DRAWINGS		AP	ANNUNCIATOR PANEL.
MAG	GNETIC DOOR HOLDER.		MSI	MASTER STATION, INTERCOM.
DET	ECTOR, SMOKE.	TV D)ISTRIB	UTION
DET	ECTOR, SMOKE, WALL MOUNTED.		-T_	TV DISTRIBUTION CABLE, INDIVIDUAL DROPS.
			TR	TV DISTRIBUTION CABLE, TRUNK.
DET	ECTOR, SMOKE, DUCT WITH HOUSING AND SAMPLING TUBE.		СР	HDMI CONNECTION
			DC	DIRECTIONAL COUPLER.
SMO	OKE DAMPER. 120V POWER FROM ELECTRICAL SYSTEM.			
000	MDINIATION EIDE/CMOVE DAMBED 400V DOWED		DA	DISTRIBUTION AMPLIFIER (ONE-LINE DIAGRAM).
	MBINATION FIRE/SMOKE DAMPER. 120V POWER DM ELECTRICAL SYSTEM.			
DFT	ECTOR, HEAT.		SPL	SPLITTER (ONE-LINE DIAGRAM).
	ECTOR, CARBON MONOXIDE.			TV OUTLET.
	ROBE, WALL MOUNTED.			SATELLITE ANTENNA.
STR	ROBE, WALL MOUNTED. SUBSCRIPT INDICATES	1		TV ANTENNA (ONE-LINE DIAGRAM).
	NDELA RATING. RM, HORN/STROBE, WALL MOUNTED, ONE ASSEMBLY.		<u> </u> W/-	TERMINATOR, 75 OHM (TV DISTRIBUTION).

ALARM, HORN/STROBE, WALL MOUNTED, ONE ASSEMBLY.

ALARM, CHIME/STROBE, WALL MOUNTED, ONE ASSEMBLY.

SPEAKER, WALL MOUNTED, EVACUATION, COMBINATION STROBE. SUBSCRIPT INDICATES CANDELLA RATING.

SPEAKER, WALL MOUNTED, EVACUATION, COMBINATION STROBE.

SYMBOL	DESCRIPTION
ELECTRICA	AL POWER AND DISTRIBUTION
225/3 "1H" 25/3	PANELBOARD WITH MAIN LUGS ONLY AND SURGE PROTECTION WITH CIRCUIT BREAKER (ONE-LINE DIAGRAM).
225/3 "1H" 225/3 "1H"	PANELBOARD WITH SUB FEED LUGS (ONE-LINE DIAGRAM).
)225/3 "1H" "1H"	PANELBOARD WITH CIRCUIT BREAKER AND SUB FEED LUGS (ONE-LINE DIAGRAM).
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM)
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM)
	TRANSFER SWITCH (ONE-LINE DIAGRAM).
JE DMM	DIGITAL MULTIMETER (ONE-LINE DIAGRAM).
<u></u>	EARTH GROUND (ONE-LINE DIAGRAM).
<u>-</u>	SERVICE ENTRANCE SURGE PROTECTION (ONE-LINE DIAGRAM).
→Ġ >	GENERATOR, ANNUNCIATOR (ONE-LINE DIAGRAM).
EPO EPO	PUSH BUTTON, REMOTE EMERGENCY STOP.
G	GENERATOR, POWER (ONE-LINE DIAGRAM).
M	METER.
BBF	BROAD BAND FILTER (ONE-LINE DIAGRAM).
VFC VFD	VARIABLE FREQUENCY MOTOR CONTROLLER (ONE-LINE DIAGRAM).
Ø-	DISCONNECT SWITCH, FUSED.
□-	DISCONNECT SWITCH, UNFUSED.
•	PUSHBUTTON.
:	PUSHBUTTONS, MOTOR CONTROL.
[77]	PANELBOARD CABINET, FLUSH MOUNTED.
<u> </u>	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.
7///	PANELBOARD CABINET, SURFACE MOUNTED, 2 SECTION.
DP#	DISTRIBUTION PANEL OR SWITCHBOARD.
LP	LIGHTING RELAY, CONTACTOR PANEL, OR DIMMING ENCLOSURE
\$ST	SWITCH, TOGGLE MOTOR STARTER WITH OVERLOAD PROTECTION.
	TRANSFORMER (SEE ONE-LINE FOR SIZE)
ВВ	BUSWAY.
_ \	RELAY CONTACT, NORMALLY CLOSED (ONE-LINE DIAGRAM).
$\dashv\vdash$	RELAY CONTACT, NORMALLY OPEN (ONE-LINE DIAGRAM).
	SPECIALIZED TRANSFER SWITCH (ONE-LINE DIAGRAM).
**	CIRCUIT BREAKER, DRAW OUT (ONE-LINE DIAGRAM).

	SYMBOLS LEGEND	
SYMBOL	DESCRIPTION	
ELECTRICA	AL POWER AND DISTRIBUTION	1P
225/3 "1H" 25/3	PANELBOARD WITH MAIN LUGS ONLY AND SURGE PROTECTION WITH CIRCUIT BREAKER (ONE-LINE DIAGRAM).	1W 2/C 2W 3/C 3W 4O
225/3 "1H" 225/3 "1H"	PANELBOARD WITH SUB FEED LUGS (ONE-LINE DIAGRAM).	4P 4P: 4W 4W
)225/3 "1H" "1H"	PANELBOARD WITH CIRCUIT BREAKER AND SUB FEED LUGS (ONE-LINE DIAGRAM).	A AC AD
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM).	AF AF AIC AL
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM).	AN AP AR AS AT
	TRANSFER SWITCH (ONE-LINE DIAGRAM).	AV AW BB XF BF
JE DMM	DIGITAL MULTIMETER (ONE-LINE DIAGRAM).	BF C CA
\perp	EARTH GROUND (ONE-LINE DIAGRAM).	CB
<u>=</u> •–•••••••••••••••••••••••••••••••••••	SERVICE ENTRANCE SURGE PROTECTION (ONE-LINE DIAGRAM).	cc
- G∕	GENERATOR, ANNUNCIATOR (ONE-LINE DIAGRAM).	CC CF
EPO EPO	PUSH BUTTON, REMOTE EMERGENCY STOP.	CF
(G)	GENERATOR, POWER (ONE-LINE DIAGRAM).	CF
$\overline{\mathbb{M}}$	METER.	. CK
BBF	BROAD BAND FILTER (ONE-LINE DIAGRAM).	CN CC
VFC VFD	VARIABLE FREQUENCY MOTOR CONTROLLER (ONE-LINE	CC
	DIAGRAM).	CP CT CT
	DISCONNECT SWITCH, FUSED.	CU dB
	DISCONNECT SWITCH, UNFUSED.	DP
<u>•</u>	PUSHBUTTON.	DS E
•	PUSHBUTTONS, MOTOR CONTROL.	EA EM
[77]	PANELBOARD CABINET, FLUSH MOUNTED.	EN EN
	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.	EP
7777	PANELBOARD CABINET, SURFACE MOUNTED, 2 SECTION.	EQ ER
 DP#	DISTRIBUTION PANEL OR SWITCHBOARD.	EX F FA FC
LP	LIGHTING RELAY, CONTACTOR PANEL, OR DIMMING ENCLOSURE.	FL/
\$ST	SWITCH, TOGGLE MOTOR STARTER WITH OVERLOAD PROTECTION.	FO FP
	TRANSFORMER (SEE ONE-LINE FOR SIZE)	. FV
ВВВ	BUSWAY.	FV GE
— 	RELAY CONTACT, NORMALLY CLOSED (ONE-LINE DIAGRAM).	GF GF
——————————————————————————————————————	RELAY CONTACT, NORMALLY OPEN (ONE-LINE DIAGRAM).	GIO GN HD
	TALLAT GONTAGE, NOTWIALLE OF EN (GINE-LINE DIAGRAM).	HIE HE
	SPECIALIZED TRANSFER SWITCH (ONE-LINE DIAGRAM).	HP HP HP
	CIRCUIT BREAKER, DRAW OUT (ONE-LINE DIAGRAM).	HV HW HZ I/O

	ABBREVIATIONS							
NOTE: ALL ABBREVIATIONS MAY NOT BE USED.								
1P	SINGLE POLE	kVA	KILOVOLT AMPERE					
1PH	SINGLE-PHASE	kVAR	KILOVOLT AMPERE REACTIVE					
1WAY	ONE-WAY	kW	KILOWATT					
2/C	TWO-CONDUCTOR	kWh	KILOWATT HOUR					
2WAY	TWO-WAY	LED	LIGHT EMITTING DIODE					
3/C 3WAY	THREE-CONDUCTOR THREE-WAY	LFMC	LIQUID TIGHT FLEXIBLE META CONDUIT					
40UT	QUADRUPLE RECEPTACLE	LFNC	LIQUID TIGHT FLEXIBLE					
4001	OUTLET		NONMETALLIC CONDUIT					
4PDT	FOUR-POLE DOUBLE THROW	LPS	LOW PRESSURE SODIUM					
4PST	FOUR-POLE SINGLE THROW	LRA	LOCKED ROTOR AMPS					
4W	FOUR-WIRE	LTG	LIGHTING					
4WAY	FOUR-WAY	LV	LOW VOLTAGE					
Α	ABOVE COUNTER	MATV	MASTER ANTENNA TELEVISIO					
AC	ARMORED CABLE		SYSTEM					
ADA	AMERICANS WITH DISABILITIES	MAX MC	MAXIMUM METAL CLAD					
45.1	ACT	MCA	MINIMUM CIRCUIT AMPS					
ADJ	ADJACENT	MCB	MAIN CIRCUIT BREAKER					
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER					
AFG AIC	ABOVE FINISHED GRADE AMPERE INTERRUPTING	MCP	MOTOR CIRCUIT PROTECTION					
AIC	CAPACITY	MDP	MAIN DISTRIBUTION PANEL					
ALUM	ALUMINUM	MG	MOTOR GENERATOR					
AMP	AMPERE	MH	MANHOLE					
ANN	ANNUNCIATOR	MIN	MINIMUM					
AP	ACCESS POINT (WIRELESS	MLO	MAIN LUGS ONLY					
	DATA)	MOCP	MAXIMUM OVERCURRENT					
AR	AS REQUIRED		PROTECTION					
ASC	AMPS SHORT CIRCUIT	MTS	MANUAL TRANSFER SWITCH					
ATS	AUTOMATIC TRANSFER SWITCH	NA	NOT APPLICABLE					
AV	AUDIO VISUAL	NC	NORMALLY CLOSED					
AWG	AMERICAN WIRE GAGE	NEC	NATIONAL ELECTRICAL CODE					
BB	BUCK-BOOST TRANSFORMER	NEMA	NATIONAL ELECTRICAL MANUFACTURERS					
XFMR	BOCK-BOOST TRANSFORMER		ASSOCIATION					
BFF	BELOW FINISHED FLOOR	NFC	NATIONAL FIRE CODE					
BFG	BELOW FINISHED GRADE	NFPA	NATIONAL FIRE PROTECTION					
С	CEILING MOUNTED		ASSOCIATION					
CAT	CATEGORY	NIC	NOT IN CONTRACT					
CATV	COMMUNITY ANTENNA	NL	NIGHT LIGHT					
	TELEVISION	NO	NORMALLY OPEN					
CB	CIRCUIT BREAKER	NTS	NOT TO SCALE					
CCBA	CUSTOM COLOR AS SELECTED BY ARCHITECT	OC	ON CENTER					
CCTV	CLOSED CIRCUIT TELEVISION	OCP OE	OVER CURRENT PROTECTION OWNER ELECTRONICS					
CF/CI	CONTRACTOR FURNISHED/	OF/CI	OWNER FURNISHED/					
0.70.	CONTRACTOR INSTALLED	01701	CONTRACTOR INSTALLED					
CF/OI	CONTRACTOR FURNISHED/	OF/OI	OWNER FURNISHED/ OWNER					
	OWNER INSTALLED		INSTALLED					
CFBA	CUSTOM FINISH AS SELECTED BY ARCHITECT	OFP	OBTAIN FROM PLANS					
CKT	CIRCUIT	OH DR	OVERHEAD (COILING) DOOR					
CM	CONSTRUCTION MANAGER	OL	OVERLOAD					
CND	CONDUIT	PAIR	PR					
CO	CONVENIENCE OUTLET	PB PF	PUSHBUTTON POWER FACTOR					
COR	CONTRACTING OFFICER'S	PH PH	PHASE					
	REPRESENTATIVE	PNL	PANEL					
CP	CONTROL PANEL	PNM	PLENUM					
CT	CURRENT TRANSFORMER	PS	POWER SUPPLY					
CTV	CABLE TELEVISION	PT	POTENTIAL TRANSFORMER					
CU	COPPER	PTZ	PAN/TILT/ZOOM					
dBA DPDT	UNIT OF SOUND LEVEL DOUBLE POLE, DOUBLE	QTY	QUANTITY					
חרחו	THROW	R	REMOVE					
DS	DISCONNECT SWITCH	RCP	REFLECTED CEILING PLAN					
E	ENHANCED	RMC	RIGID METAL CONDUIT					
EA	EACH	RNC	RIGID NONMETAL CONDUIT					
EM	EMERGENCY	RPM	REVOLUTIONS PER MINUTE					
EMT	ELECTRICAL METALLIC TUBING	RPP	RISER PATCH PANEL					
ENT	ELECTRIC NONMETALLIC	RR s/s	REMOVE AND RELOCATE					
ED.	TUBING	S/S SCA	START/STOP SHORT CIRCUIT AMPS					
EPO	EMERGENCY POWER OFF	SCA	STANDARD COLOR AS					
EQUIP	EQUIPMENT POOM	5004	SELECTED BY ARCHITECT					
ER	EQUIPMENT ROOM	SF	SQUARE FOOT (FEET)					
EX F	EXISTING	SFBA	STANDARD FINISH AS					
	FURNITURE MOUNTED		SELECTED BY ARCHITECT					
FA FCP	FIRE ALARM FIRE ALARM CONTROL PANEL	SPD	SURGE PROTECTIVE DEVICE					
FLA	FULL LOAD AMPS	SPDT	SINGLE POLE, DOUBLE THRO					
FMC	FLEXIBLE METAL CONDUIT	SPEC	SPECIFICATION					
FOB	FREIGHT ON BOARD	SPP	STATION PATCH PANEL					
FPP	FIBER PATCH PANEL	SPST	SINGLE POLE, SINGLE THROV					
FVNR	FULL VOLTAGE	ST	SINGLE THROW					
	NON-REVERSING	SWBD	SWITCHBOARD					
FVR	FULL VOLTAGE REVERSING	SWGR	SWITCHGEAR					
GEN	GENERATOR	TL	TWIST LOCK					
GFCI	GROUND FAULT INTERRUPTER	TP	TELEPHONE POLE					
GFP	GROUND FAULT PROTECTION	TP	TWISTED PAIR					
GIG	GIGA HERTZ	TR	TELECOMMUNICATIONS ROOF					
	ODOLIND	TTB	TELEPHONE TERMINAL BOAR					
GND	GROUND	l tv	TELEVISION					

GENERAL ELECTRICAL NOTES

CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR. THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.

OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.

A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.

B. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.

THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS

EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.

SUBMITTALS: PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.

REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.

ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND IFC. COMPLIANCE AND FINAL APPROVAL IS SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.

ELECTRICAL CHEET INDEV

	ELECTRICAL SHEET INDEX
EE001	SHEET INDEX, ABBREVIATIONS, AND GENERAL NOTES
EE002	TELECOM SCHEDULES AND NOTES
EE501	ELECTRICAL DETAILS
EE701	TYPICAL MOUNTING HEIGHT DETAILS
ED101	LEVEL 1 ELECTRICAL DEMOLITION PLAN - PHASE 1
ED102	LEVEL 1 ELECTRICAL DEMOLITION PLAN - PHASE 2
EP100	LEVEL 1 OVERALL POWER PLAN
EP101	LEVEL 1 POWER PLAN - PHASE 1
EP102	LEVEL 1 POWER PLAN - PHASE 2
EP601	ONE-LINE DIAGRAM
EL101	LEVEL 1 LIGHTING PLAN - PHASE 1
EL102	LEVEL 1 LIGHTING PLAN - PHASE 2
EL601	INTERIOR LIGHTING FIXTURE SCHEDULE
EL602	LIGHTING CONTROL SCHEDULES
ET501	TELECOM DETAILS
ET601	TELECOM RISER DIAGRAMS
EY101	LEVEL 1 AUXILIARY PLAN - PHASE 1
EY102	LEVEL 1 AUXILIARY PLAN - PHASE 2
EY601	SECURITY DIAGRAMS

EY602 SYSTEMS RISER DIAGRAMS

ARCHITECTS

Murray, Utah 84123

www.njraarchitects.com

801.364.9259

NJRA Architects, Inc.

5272 S. College Drive, Suite104

ě =

22221.00

NJRA Project # Construction Documents January 27, 2023

SHEET INDEX, ABBREVIATIONS,

GENERAL

DEFINITIONS

HORSE POWER

HIGH VOLTAGE

MANAGEMENT

INPUT/ OUTPUT

ISOLATED GROUND

INTERMEDIATE METAL

INSULATED/ ISOLATED

HERTZ

CONDUIT

INFRARED

J-BOX JUNCTION BOX

kV KILOVOLT

IMC

IN/IS

HORIZONTAL WIRE

HIGH INTENSITY DISCHARGE

HAND-OFF-AUTOMATIC

HIGH POWER FACTOR

HIGH PRESSURE SODIUM

NOTE: ALL DEFINITIONS MAY NOT BE USED.

UF UNDERFLOOR

UGND UNDERGROUND

SUPPLY

VA VOLT AMPERE

D CONTROLLER

WP WEATHERPROOF

XFMR TRANSFORMER

TYP TYPICAL

V VOLTS

W/ WITH

W/O WITHOUT

TVSS TRANSIENT VOLTAGE SURGE

UPS UNINTERRUPTIBLE POWER

VFC/VF VARIABLE FREQUENCY MOTOR

VWM VERTICAL WIRE MANAGEMENT

WPP WIRELESS PATCH PANEL

SUPPRESSER

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS. NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES. APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE." INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY

THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...

CLINIC/HOSPITAL - CABLE/OUTLET COLOR SCHEDULE							
COLOR	TYPE						
BLACK	TV COAX						
BLUE	ANALOG PHONE						
BLUE	DATA						
BLUE	IP SECURITY CAMERAS						
GREY	SECURITY CARD READERS						
ORANGE	CLINICAL ENGINEERING / NURSE CALL						
RED	FIRE SYSTEMS						
RED	FORESEER						
WHITE	PUBLIC ADDRESS						
YELLOW	WIRELESS						
GREEN	VENDOR NETWORK						

COPPER PATCH CORD SCHEDULE										
(CATEGORY 6A F/UTP CABLES W/RJ-45 CONNECTORS)										
LENGTH (FEET)	UNIT COST (EACH)									
5'	BLUE	20% OF TOTAL PORTS IN TDR'S								
7'	BLUE	60% OF TOTAL PORTS IN TDR'S								
10'	BLUE	20% OF TOTAL PORTS IN TDR'S								

COPPER PATCH CORD SCHEDULE											
(CATEGORY 5E CABLES W/RJ-45 CONNECTORS)											
LENGTH (FEET) COLOR QUANTITY UNIT COST (EACH											
5'	BLUE	560									
7'	BLUE	560									
10' BLUE 480											

FIBER PATCH CORD SCHEDULE										
(SINGLE-MODE W/LC CONNECTORS)										
LENGTH (METER) COLOR QUANTITY UNIT COST (E										
-	-	-	-							
3	YELLOW	250	-							
5 YELLOW 250 -										

WIRELESS PATCH CORD PATCH CORD SCHEDULE									
(CATEGORY 6A F/UTP W RJ/45 CONNECTORS									
LENGTH (METER)	COLOR	QUANTITY	UNIT COST (EACH)						
7'	YELLOW	100% OF TOTAL PORTS IN TDR'S							

CLINIC/HOSPITAL - EQUIPMENT/CABLE LIST

ACCEPTABLE TYPES

THE ITEMS INDICATED BELOW SHALL NOT BE CONSTRUED AS A "BILL OF MATERIALS". THIS LIST IDENTIFIES ITEMS OF SIGNIFICANCE USED DURING THE DESIGN OF THE CABLING INSTALLATION. WHERE THE ITEMS INDICATED ARE ONE PORTION OF AN ASSEMBLY, THE ENTIRE ASSEMBLY SHALL BE PROVIDED UNLESS SPECIFIED OTHERWISE. PROVIDE ALL MISCELLANEOUS HARDWARE AND SUPPORTS WHICH MAY NOT BE LISTED HERE, FOR A COMPLETE INSTALLATION. COMPARE CATALOG NUMBERS WITH DESCRIPTIONS AND NOTIFY ENGINEER OF DISCREPANCIES PRIOR TO BID. IF CATALOG NUMBERS DO NOT MATCH DESCRIPTIONS, THE DESCRIPTIONS TAKE PRECEDENCE. PROVIDE COMPLETE SUBMITTAL FOR APPROVAL PRIOR TO PURCHASING ANY EQUIPMENT OR CABLE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

SYMBOL ITEM DESCRIPTION

TELECOMMUNICATIONS GROUNDING BUS BAR

NOTE: ALL RACKS, LADDER, PATCH PANELS AND ACCESSORIES SHALL BE BLACK IN COLOR.

YMBOL	ITEM DESCRIPTION	ACCEPTABLE TYPES
	STATION CABLE, DATA - CATEGORY 6A FUTP RISER, BLUE, DATA	SIEMON 9A6R4-A5-06-R1A
	STATION CABLE, DATA - CATEGORY 6A FUTP RISER, YELLOW, WIRELESS DATA	SIEMON 9A6R4-A5-05-R1A
	STATION CABLE, DATA - CATEGORY 6A FUTP RISER, ORANGE, CLINICAL ENGINEERING	SIEMON 9A6R4-A5-09-R1A
	STATION CABLE, DATA - CATEGORY 5E RISER, ORANGE, NURSE CALL	SIEMON 9CR4-E2-09-RXA
	STATION CABLE, DATA - CATEGORY 5E RISER, GREEN, VENDOR NETWORK	SIEMON 9C5R4-E2-07-R1A
	50 PAIR CATEGORY 3 RISER CABLE, GRAY	GENERAL CABLE 2133161.99 OR EQUAL
	25 PAIR CATEGORY 3 RISER CABLE, GRAY	GENERAL CABLE 2133033.99 OR EQUAL
	FORESEER CABLE, 2 PAIR	BELDEN 88723
	'	
	FIBER OPTIC CABLE, MULTIMODE, OM3, 12 STRAND, ARMORED, RISER CABLE, AQUA	SIEMON 9BC5R012G-T312A
	FIBER OPTIC CABLE, SINGLEMODE, 4 STRAND, 2 COND., 14 AWG, INDOOR/OUTDOOR CABLE, BLACK	CORNING 004ZDF-21X01M20
	FIBER OPTIC CABLE, SINGLEMODE, 6 STRAND, ARMORED, INDOOR/ OUTDOOR CABLE, BLACK	SIEMON 9BG8R006D-E201A
	FIBER OPTIC CABLE, SINGLEMODE, 12 STRAND, ARMORED, RISER CABLE, YELLOW	SIEMON 9BC8R012L-E205A
	FIBER OPTIC CABLE, SINGLEMODE, 24 STRAND, ARMORED, RISER CABLE, YELLOW	SIEMON 9BC8R024L-E205A
$\overline{\mathbb{W}}$	VOICE OUTLET, SINGLE GANG FACEPLATE, WHITE W/WALL HUNG	SIEMON MX-WP-Z6AS-SS
	PHONE	
E	MOUNTING STUDS, ONE POSITION W/CATEGORY 6A INSERT	VIKING ELECTRONICS E-1600-02A
V	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	DATA OUTLET, SINGLE GANG FACEPLATE, WHITE, 4 POSITION	SIEMON 10GMX-FPS04-02
∇	, , , , , , , , , , , , , , , , , , ,	
V	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	BLANK INSERT, WHITE	SIEMON MX-BL-02
	DATA OUTLET, SINGLE GANG FACEPLATE, WHITE, 4 POSITION	SIEMON 10GMX-FPS04-02
Δ	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	DATA OUTLET, FURNITURE FACEPLATE, BLACK	SIEMON MX-UMA-01
F		
Δ	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	BLANK MODULE, BLACK	SIEMON MX-BL-01
	DATA OUTLET, SINGLE GANG FACEPLATE, WHITE, 4 POSITION	SIEMON 10GMX-FPS04-02
▼	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
▼		
	BLANK INSERT, WHITE	SIEMON MX-BL-02
<u>4</u>	DATA OUTLET, SINGLE GANG FACEPLATE, WHITE, 4 POSITION	SIEMON 10GMX-FPS04-02
lacktriangle	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
(/ \)	DATA OUTLET, SURFACE MOUNT BOX, WHITE, 2 POSITION	SIEMON MX-SMZ2-02
(((•)))	DATA OUTLET, SURFACE MOUNT BOX, WHITE, 2 POSITION	
®C		SIEMON Z6A-S05
	DATA OUTLET, SURFACE MOUNT BOX, WHITE, 1 POSITION	SIEMON MX-SMZ1-02
	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	DATA OUTLET, SURFACE MOUNT BOX, WHITE, 2 POSITION	SIEMON MX-SMZ2-02
Δ_{c}		
	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	DATA OUTLET, SURFACE MOUNT BOX, WHITE, 1 POSITION	SIEMON MX-SMZ1-02
	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
SPP1	48 PORT, 1RU ANGLE PATCH PANEL WITH OUTLETS	SIEMON Z6AS-PA-48
RPP1	48 PORT, 2RU ANGLE PATCH PANEL, 110 STYLE	SIEMON HD5-48A
	FIBER PATCH PANEL, EXPANDED UNIT FOR FIBER SPLICE TRAY CAPACITY, 3RU	SIEMON RIC3-E-48-01
	SIX POSITION, 12 STRAND, FIBER SPLICE MODULE, LC	SIEMON FSM2-12-LCSM-01
FPP1	FIBER SPLICE TRAY	SIEMON TRAY-3
	BLANK ADAPTER PLATE, BLACK	SIEMON RIC-F-BLNK-01
11/0/044		
HWM1	HORIZONTAL WIRE MANAGERS, 4RU	PANDUIT NCMHAEF4
HWM2	HORIZONTAL WIRE MANAGERS, FRONT ONLY, 2RU, BLACK	PANDUIT NCNHAEF2
VWM	VERTICAL WIRE MANAGERS, 10" WIDTH, DOUBLE SIDED, BLACK, 8'	CHATSWORTH 40096-715
	POWER SUPPLY UNIT, 12 PORT, 1RU	CORNING PSU6-1U
PSU		
	MODULAR POWER SUPPLY, 57 VDC	CORNING PSM-I
	EQUIPMENT RACK 19" x 8', 52 RU, BLACK	CHATSWORTH 55053-715
<u> </u>		
	DATA CENTER CABINETS 23.6" x 47.3" x 7', 45RU x 600mm x 1200mm, BLACK, WITH 2 SIDES	DCE E4562121122001S
	DATA CENTER CABINET, 45RU x 600mm x 1200mm, BLACK, WITH 1 SIDE	DCE E4562122122001S
	DATA CENTER CABINET, 45RU x 600mm x 1200mm, BLACK	DCE E4562120122001S
	DATA CENTER CABINETS 27.6" x 47.3" x 7', 45RU x 700mm x 1200mm, BLACK, WITH 2 SIDES	DCE E4572121122001S
	DATA CENTER CABINET, 45RU x 700mm x 1200mm, BLACK, WITH 1 SIDE	DCE E4572122122001S
	DATA CENTER CABINET, 45RU x 700mm x 1200mm, BLACK	DCE E4572120122001S
	WALL MOUNTED CABINET, 48"(H) x 24"(D), 26RU, BLACK, SOLID METAL DOOR	CHATSWORTH 11840-748
Ш		
	WALL MOUNTED RACK, 53.6" H x 17" D, 26RU, BLACK	CHATSWORTH 11807-718
	HEAVY DUTY SWING GATE KIT	
		CHATSWORTH 12795-701
	CABLE RUNWAY - 24", BLACK WITH ALL REQUIRED MOUNTING ACCESSORIES	CHATSWORTH 10250-724
	CABLE RUNWAY - 18", BLACK WITH ALL REQUIRED MOUNTING ACCESSORIES	CHATSWORTH 10250-718
	BUTT SPLICE KIT, BLACK	CHATSWORTH 11301-701
	JUNCTION SPLICE KIT, BLACK	CHATSWORTH 11302-701
	FOOT KIT, BLACK	CHATSWORTH 11309-701
	6" CHANNEL RACK TO RUNWAY, BLACK	CHATSWORTH 12409-724
	TRIANGLE BRACKETS, BLACK	CHATSWORTH 11746-724
	· · · · · · · · · · · · · · · · · · ·	
	END CLOSING KIT, CABLE RUNWAY, BLACK	CHATSWORTH 11700-724
	WALL ANGLE SUPPORT KIT, CABLE RUNWAY, BLACK	CHATSWORTH 11421-724
	CABLE RUNWAY ELEVATION KIT, 6"	CHATSWORTH 10506-706
	CABLE RUNWAY RADIUS DROP	CHATSWORTH 12100-712
		O11/11 OVV O11111 12 100-7 12
	PLYWOOD BACKBOARD, 4' X 8', GRADE AC, FIRE TREATED & PAINTED	
	TELECOMMUNICATIONS MAIN GROUNDING BUS BAR	-
	TELECOMMUNICATIONS OF CUNIDING PUR PAR	

CLINIC/HOSPITAL -GENERAL PROJECT NOTES

- UNLESS OTHERWISE NOTED, INSTALL ALL CABLE INSIDE RACEWAY SYSTEMS.
 WHERE RACEWAY SYSTEMS HAVE NOT BEEN PROVIDED OR SPECIFIED,
 INSTALL CABLE THROUGH THE SPECIFIED "CADDY" CLIPS AT THE MINIMUM
 INTERVALS IDENTIFIED IN THE SPECIFICATIONS. SUPPORT "CADDY" CLIPS
 DIRECTLY FROM THE BUILDING STRUCTURE, NOT FROM OTHER BUILDING
 SYSTEM SUPPORT WIRES OR CABLE.
- 2. PROVIDE PLENUM RATED CABLE IN ALL AIR PLENUMS. IF A PLENUM RATED CABLE IS NOT SPECIFIED, PROVIDE THE PLENUM RATED EQUIVALENT TO THE SPECIFIED CABLE.
- 3. LABEL ALL CABLE INSTALLED UNDER THIS CONTRACT REGARDLESS OF LENGTH
- 4. THE EQUIPMENT LABELING IDENTIFIED ON DETAILS IN THESE DRAWINGS ARE EXAMPLES ONLY OF THE ACTUAL LABELING WHICH IS REQUIRED AS PART OF THIS CONTRACT. PRIOR TO FABRICATION, SUBMIT THE NOMENCLATURE FOR ALL LABELS TO THE OWNER FOR REVIEW. THIS REQUIREMENT INCLUDES BUT IS NOT LIMITED TO ALL CABLE LABELING, AND ALL EQUIPMENT LABELING.
- 5. IF OUTLET IS TERMINATED IN CEILING SPACE, LABEL THE T-BAR GRID WITH THE OUTLET NUMBER FOR EASY LOCATION AND IDENTIFICATION.
- 6. GROUND ALL EQUIPMENT RACKS INSTALLED UNDER THIS CONTRACT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- 7. FOR EVERY CABLE PULL SPECIFIED, COIL 15' OF EXCESS CABLE AT THE STATION END FOR FUTURE USE. NEATLY COIL 15' ABOVE THE CEILING OR BELOW FLOOR WHERE APPLICABLE.
- 8. PROVIDE THE QUANTITY OF PATCH PANELS REQUIRED +20% FOR THE TOTAL DATA OUTLETS SHOWN ON FLOOR PLANS FOR THE PARTICULAR LEVEL.
- 9. RACK SPACE ALLOCATION SHOULD BE FOLLOWED PER DRAWINGS. IF YOU HAVE A SYSTEM THAT HAS NOT RACK ALLOCATION PLEASE CALL BOE SAUSEDO AT 801-707-3805.
- 10. COORDINATE WITH ALL SUBS TO ENSURE THAT ALL CABLES ARE PROTECTED FROM ANY DIRECT PAINT, OR INCIDENTAL OVERSPRAY.

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED

	NOTE: ALL ABBREVIATIONS MAY NOT BE USED.
A CAT	AUGMENTED CATEGORY
Ε.	ENHANCED
EA	EACH
ER FPP	EQUIPMENT ROOM FIBER PATCH PANEL
GIG	GIGA HERTZ
HWM	HORIZONTAL WIRE
NIC	MANAGEMENT
OE	NOT IN CONTRACT
PNM	OWNER ELECTRONICS
PR	PLENUM
PS	PAIR
RPP	POWER SUPPLY
SPP TDR	RISER PATCH PANEL STATION PATCH PANEL
TYP	TELECOMMUNICATIONS ROOM
VWM	TYPICAL
	VERTICAL WIRE MANANGEMENT

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVE: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

ELECTRONIC SYSTEMS: THE TERM "ELECTRONIC SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...



NJRA Architects, Inc.
5272 S. College Drive, Suite104
Murray, Utah 84123
801.364.9259
www.njraarchitects.com



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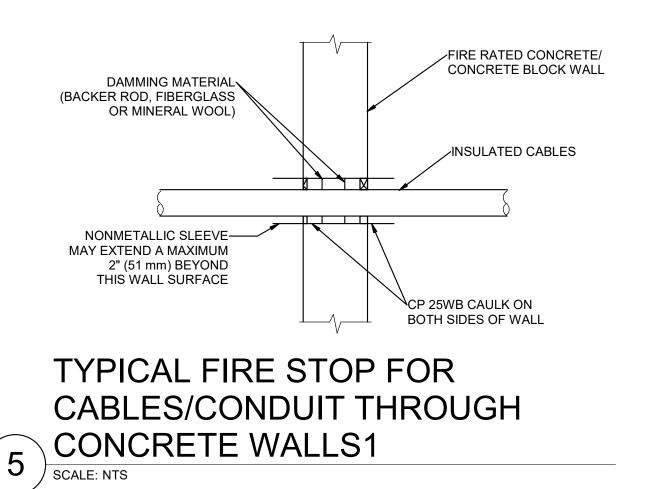
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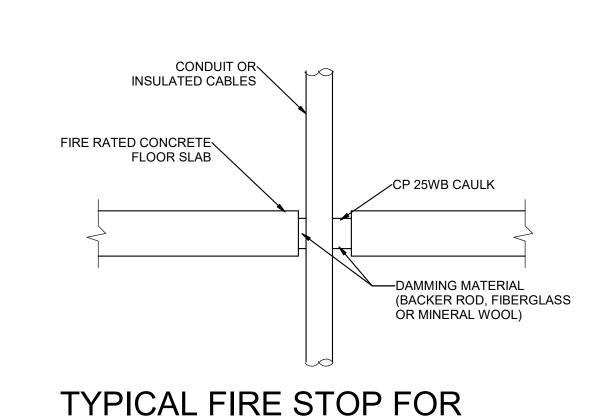
TELECOM SCHEDULES AND NOTES

EE002





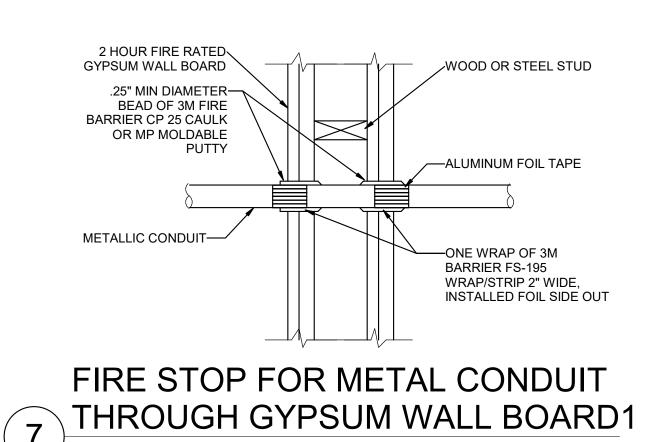


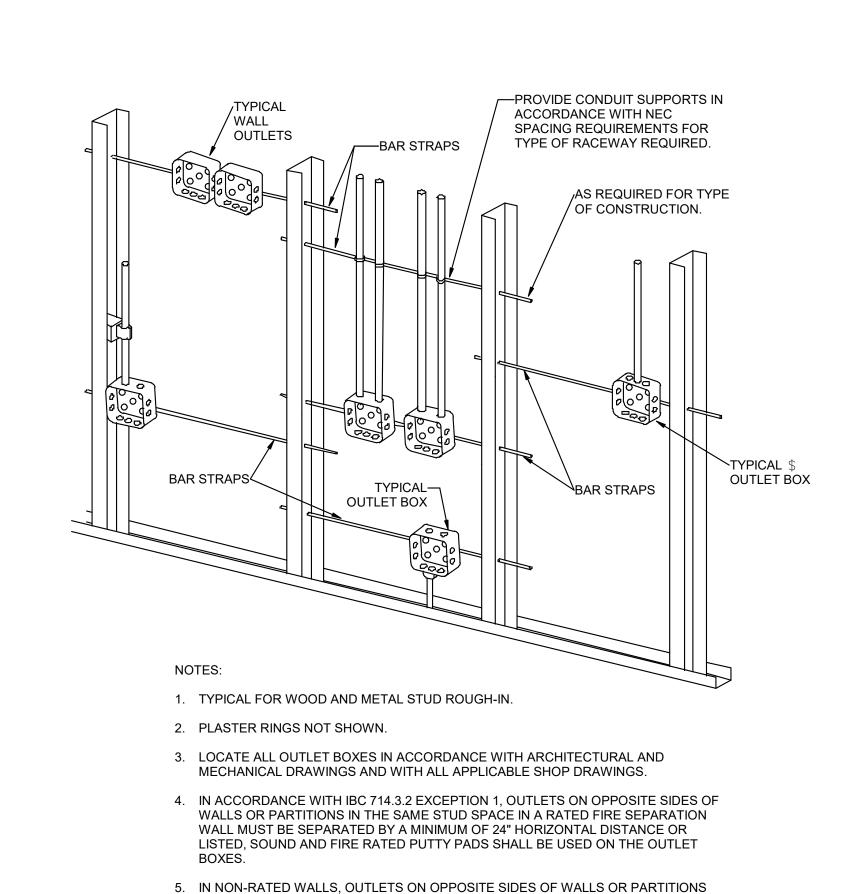


CABLES/CONDUIT THROUGH

CONCRETE FLOORING1

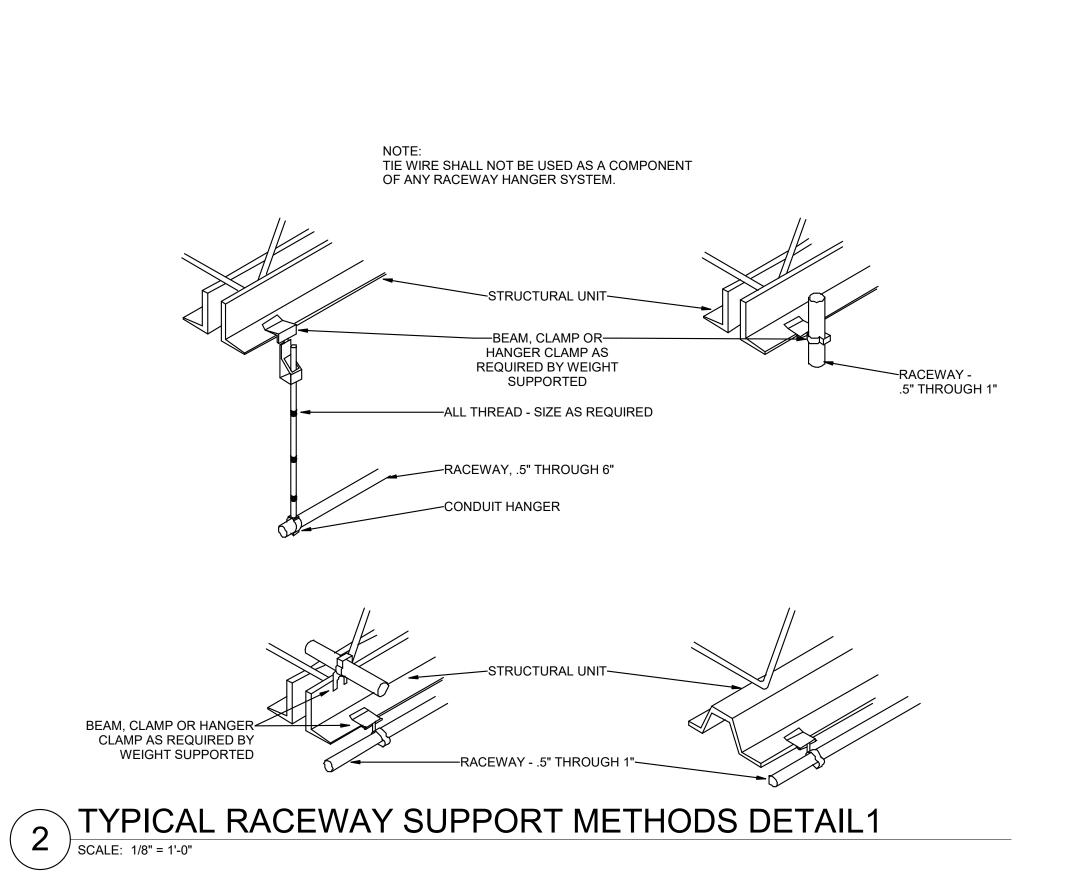
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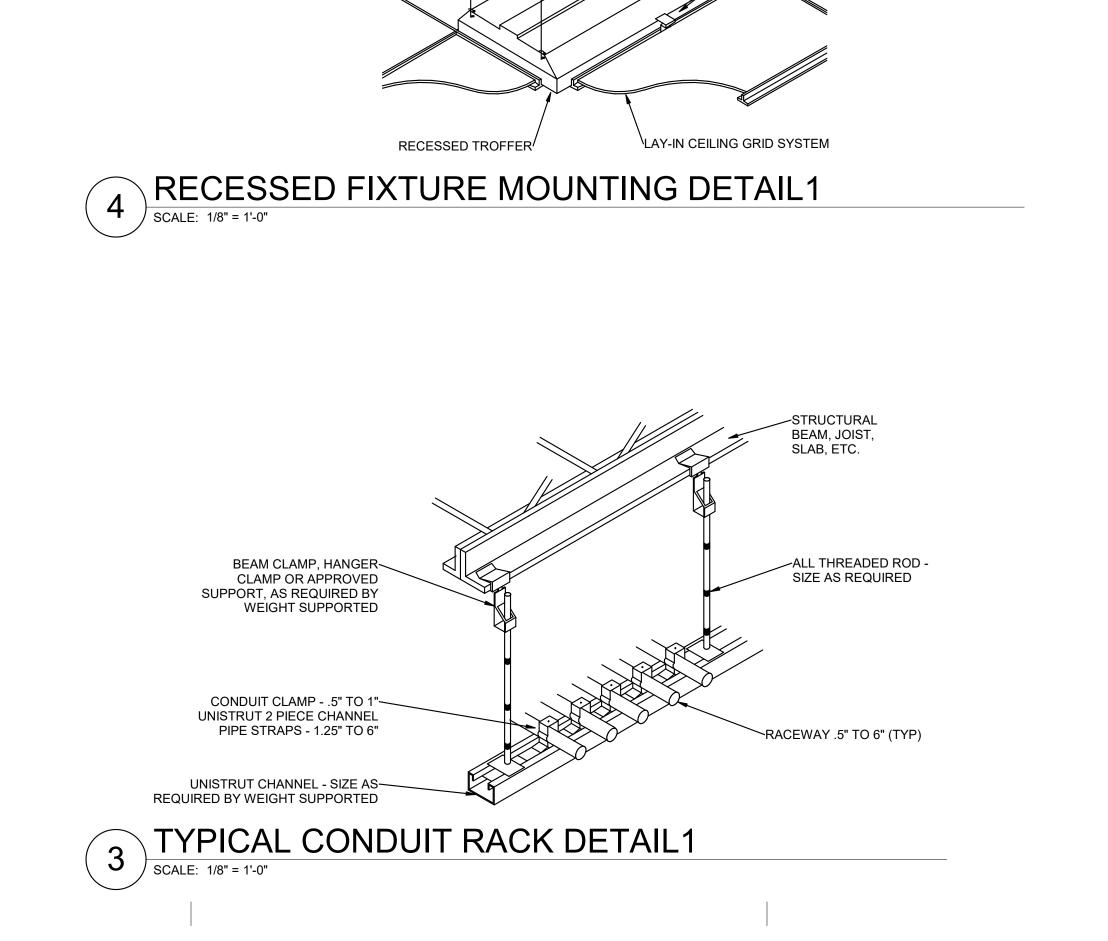




MUST BE SEPARATED BY 16" FOR SOUND ATTENUATION.

TYPICAL ROUGH-IN REQUIREMENTS DETAIL1





FIXTURE CLAMP - PROVIDE ONE PER SIDE OF FIXTURE.

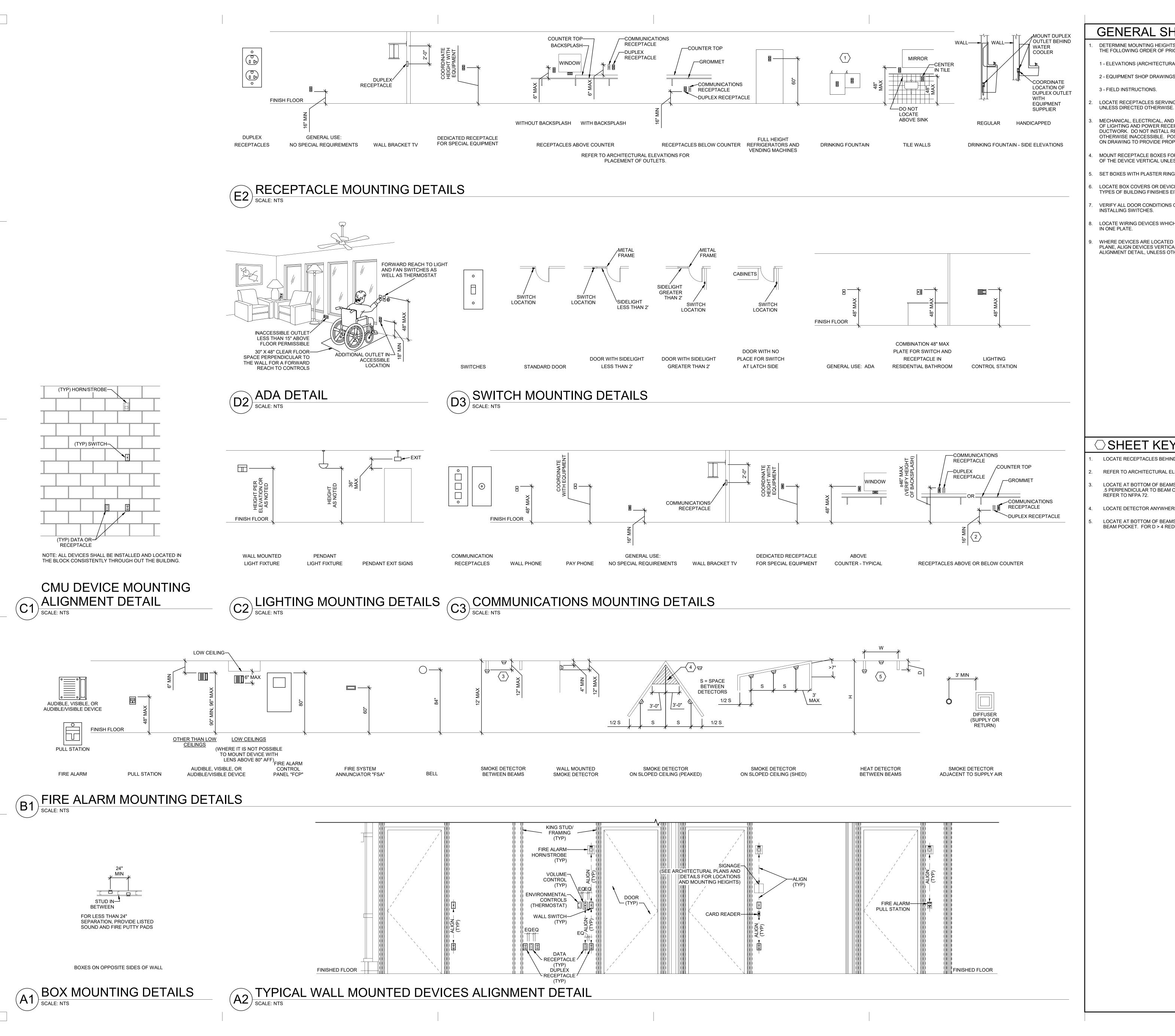
WIRE HANGER AT EACH CORNER OF FIXTURE (TYP)—INDEPENDENT OF CEILING SUPPORT SYSTEM.

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Gift Shop
Gift Shop

ELECTRICAL DETAILS

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EE501



GENERAL SHEET NOTES

- DETERMINE MOUNTING HEIGHTS OF ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE FOLLOWING ORDER OF PRIORITY:
- 1 ELEVATIONS (ARCHITECTURAL, ELECTRICAL, MECHANICAL, ETC).
- 2 EQUIPMENT SHOP DRAWINGS.
- 3 FIELD INSTRUCTIONS.
- LOCATE RECEPTACLES SERVING THE SAME TYPE OF USE AT A UNIFORM HEIGHT
- MECHANICAL, ELECTRICAL, AND COMMUNICATION ROOMS: COORDINATE LOCATION OF LIGHTING AND POWER RECEPTACLES WITH EQUIPMENT, PIPING, AND DUCTWORK. DO NOT INSTALL RECEPTACLES BEHIND EQUIPMENT OR WHERE OTHERWISE INACCESSIBLE. POSITION LIGHTING REGARDLESS OF WHERE SHOWN ON DRAWING TO PROVIDE PROPER ILLUMINATION.

MOUNT RECEPTACLE BOXES FOR SWITCHES AND RECEPTACLES WITH LONG AXIS OF THE DEVICE VERTICAL UNLESS OTHERWISE INDICATED.

- SET BOXES WITH PLASTER RINGS FLUSH WITH FINISHED SURFACE.
- LOCATE BOX COVERS OR DEVICE PLATES SO THEY WILL NOT SPAN DIFFERENT TYPES OF BUILDING FINISHES EITHER VERTICALLY OR HORIZONTALLY.
- VERIFY ALL DOOR CONDITIONS ON ARCHITECTURAL DRAWINGS PRIOR TO INSTALLING SWITCHES.
- LOCATE WIRING DEVICES WHICH ARE ADJACENT AND ARE COMPATIBLE VOLTAGES IN ONE PLATE.
- WHERE DEVICES ARE LOCATED IN CLOSE PROXIMITY OF THE SAME VERTICAL PLANE, ALIGN DEVICES VERTICALLY PER THE TYPICAL WALL MOUNTED DEVICES ALIGNMENT DETAIL, UNLESS OTHERWISE INDICATED.

SHEET KEYNOTES

- LOCATE RECEPTACLES BEHIND DRINKING FOUNTAINS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR PLACEMENT OF OUTLETS. LOCATE AT BOTTOM OF BEAMS (OR JOISTS) OR AT CEILING. (REDUCE SPACING BY
- .5 PERPENDICULAR TO BEAM OR JOIST DIRECTION.) FOR OTHER CONDITIONS, REFER TO NFPA 72.
- LOCATE DETECTOR ANYWHERE IN SHADED AREA BUT NOT IN TOP 4" OF PEAK.

LOCATE AT BOTTOM OF BEAMS IF D/H < .1 OR W/H < .4; OTHERWISE, LOCATE IN BEAM POCKET. FOR D > 4 REDUCE SPACING .33 PERPENDICULAR TO BEAMS.

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ARCHITECTS

Murray, Utah 84123

www.njraarchitects.com

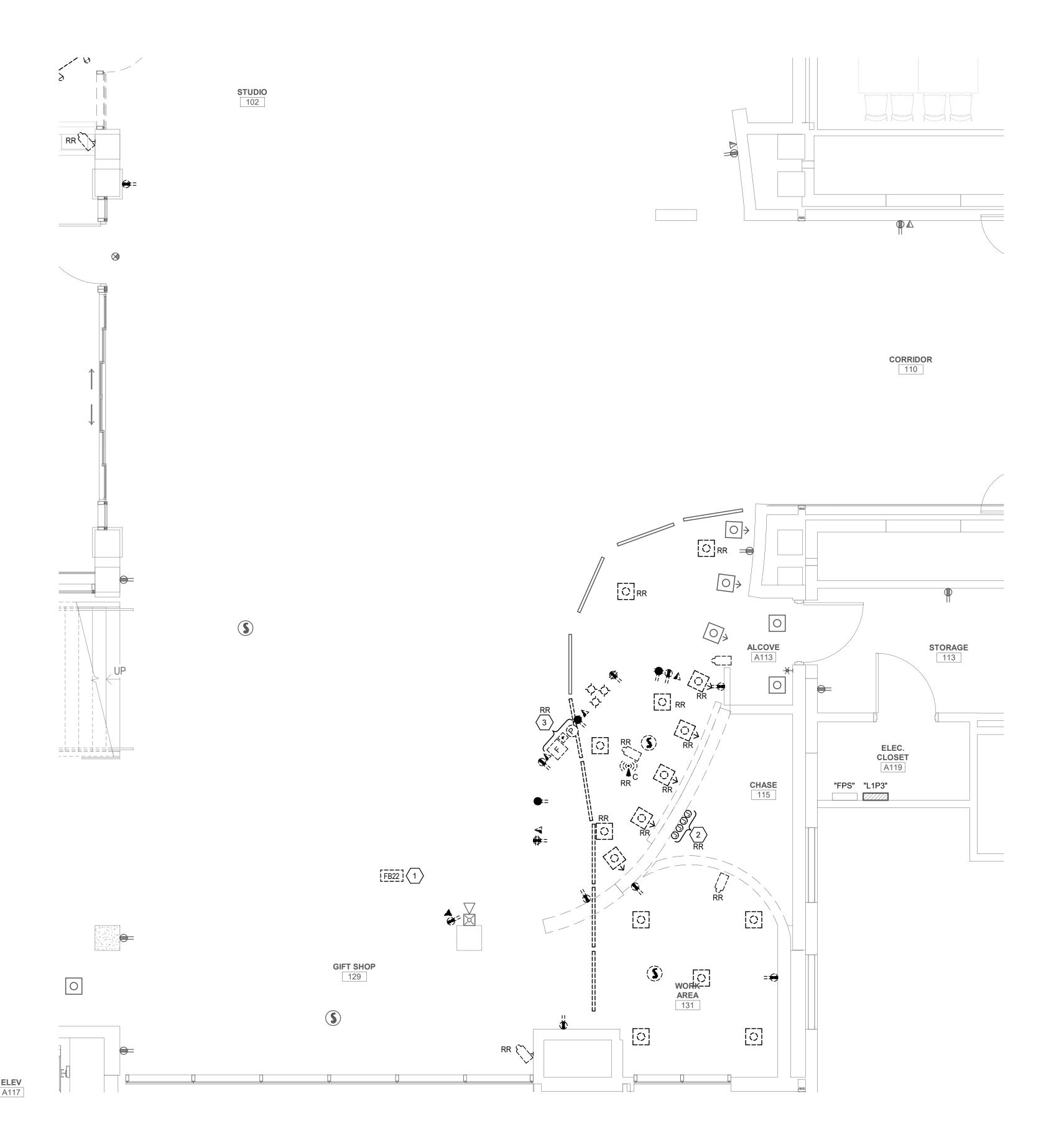
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TYPICAL MOUNTING HEIGHT DETAILS

EE701



1 LEVEL 1 ELECTRICAL DEMOLITION PLAN - GIFT SHOP

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

GENERAL SHEET NOTES

1 UNLESS NOTED OTHERWISE REMOVE ALL LIGHTING FIXTURES DEVICES AND EQUIPMENT SHOWN DASHED. REMOVE CONDUIT AND WIRING BACK TO PANELBOARD OF ORIGIN OR TO FIRST ACTIVE DEVICE THAT REMAINS.

2 SALVAGE ALL LIGHT FIXTURES, TWIST-LOCK RECEPTACLES AND WALLPLATES, CEILING SPEAKERS AND SECURITY AND FIRE ALARM DEVICES TO OWNER. PROTECT SALVAGED EQUIPMENT FROM DAMAGE.

3 PRIOR TO SUBMITTING BID, VISIT THE SITE AND FIELD VERIFY THE EXTENT OF ELECTRICAL DEMOLITION WORK TO MEET THE INTENT OF THE BID DOCUMENTS AND INCLUDE ALL COSTS IN BID.

PRIOR TO REMOVAL OF ANY ELECTRICAL EQUIPMENT OR WIRING, FIELD VERIFY THAT THE EQUIPMENT OR WIRING IS INACTIVE OR NO LONGER IN USE.

5 REMOVE ALL DEVICES, RACEWAYS AND WIRING FROM WALLS TO BE REMOVED. WHERE ACTIVE RACEWAYS OCCUR IN WALLS TO BE REMOVED, RE-ROUTE THE RACEWAY WITH ASSOCIATED WIRING TO KEEP THE CIRCUIT OPERATIONAL.

6 REMOVE ALL FIRE ALARM DEVICES WHERE EXISTING WALLS AND CEILINGS ARE BEING REMOVED, WITH ASSOCIATED CONDUIT AND WIRING. EXISTING FIRE ALARM DEVICES AND SYSTEM NOT INDICATED FOR REMOVAL SHALL REMAIN ACTIVE THROUGHOUT DEMOLITION AND CONSTRUCTION UNTIL THE NEW SYSTEM IS TESTED AND OPERATIONAL. MAINTAIN ALL CLASS A FIRE ALARM INITIATING AND INDICATING LOOPS WHERE EXISTING DEVICES ARE REMOVED.

REMOVE ALL ABANDONED RACEWAY, CONDUIT, WIRING AND CABLING WHETHER ABANDONED PREVIOUS TO THIS PROJECT OR AS A RESULT OF THIS PROJECT. NOT ALL ABANDONED ITEMS ARE SHOWN ON THESE PLANS AND FIELD VERIFICATION OF DEMOLITION SCOPE EXTENT IS REQUIRED.

DEVICES MARKED "RR" ARE TO BE REMOVED AND RELOCATED PER NEW PLANS. EXTEND CIRCUITING AS REQUIRED FOR RELOCATION.

9 REFER TO ARCHITECTURAL DRAWINGS FOR REMOVAL OF MOTORS, CONDUIT, CONDUCTOR AND CONTROL WIRING ASSOCIATED WITH EXISTING MOTORIZED DOORS, PARTITIONS AND LIGHTING.

SCOPE OF WORK AREA.

11 REMOVE FEEDERS FOR ALL DEMOLISHED PANELS, DISCONNETS, ETC. BACK TO SOURCE

10 DEMOLISH ALL WI-FI ACCESS POINTS WHETHER SHOWN ON DRAWINGS OR NOT WITHIN

12 ALL ITEMS INDICATED TO REMAIN SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION.

13 CONTRACTOR TO TRACE AND LABEL ALL EXISTING LOADS TO REMAIN, THAT ARE CURRENTLY FED FROM PANELS THAT ARE BEING DEMOLISHED IN THIS PHASE. THESE LOADS TO BE RE-FED FROM NEW PANELS IN NEXT PHASE.

14 ALL HVAC UNITS TO BE REMOVED BY MECHANICAL CONTRACTOR UNLESS NOTED OTHERWISE. REMOVE ALL ASSOCIATED RACEWAYS AND CONDUCTORS BACK TO SOURCE

○ SHEET KEYNOTES

DEMOLISH FLOOR BOX AND EXTEND CIRCUITING TO NEW GIFT SHOP FLOOR BOX LOCATION.

2 REMOVE AND RELOCATE CONDUITS AND JBOXES AS NEEDED TO NEW CHASE LOCATION. FIELD VERIFY PRIOR TO BID.

3 EXTEND THE SYSTEMS WIRING FOR THE FIRE ALARM PULL STATION, DOOR RELEASE, AND PANIC HARDWARE TO THE NEW RECEPTION DESK.

JRCHITECTS

NJRA Architects, Inc.
5272 S. College Drive, Suite104
Murray, Utah 84123
801.364.9259
www.njraarchitects.com



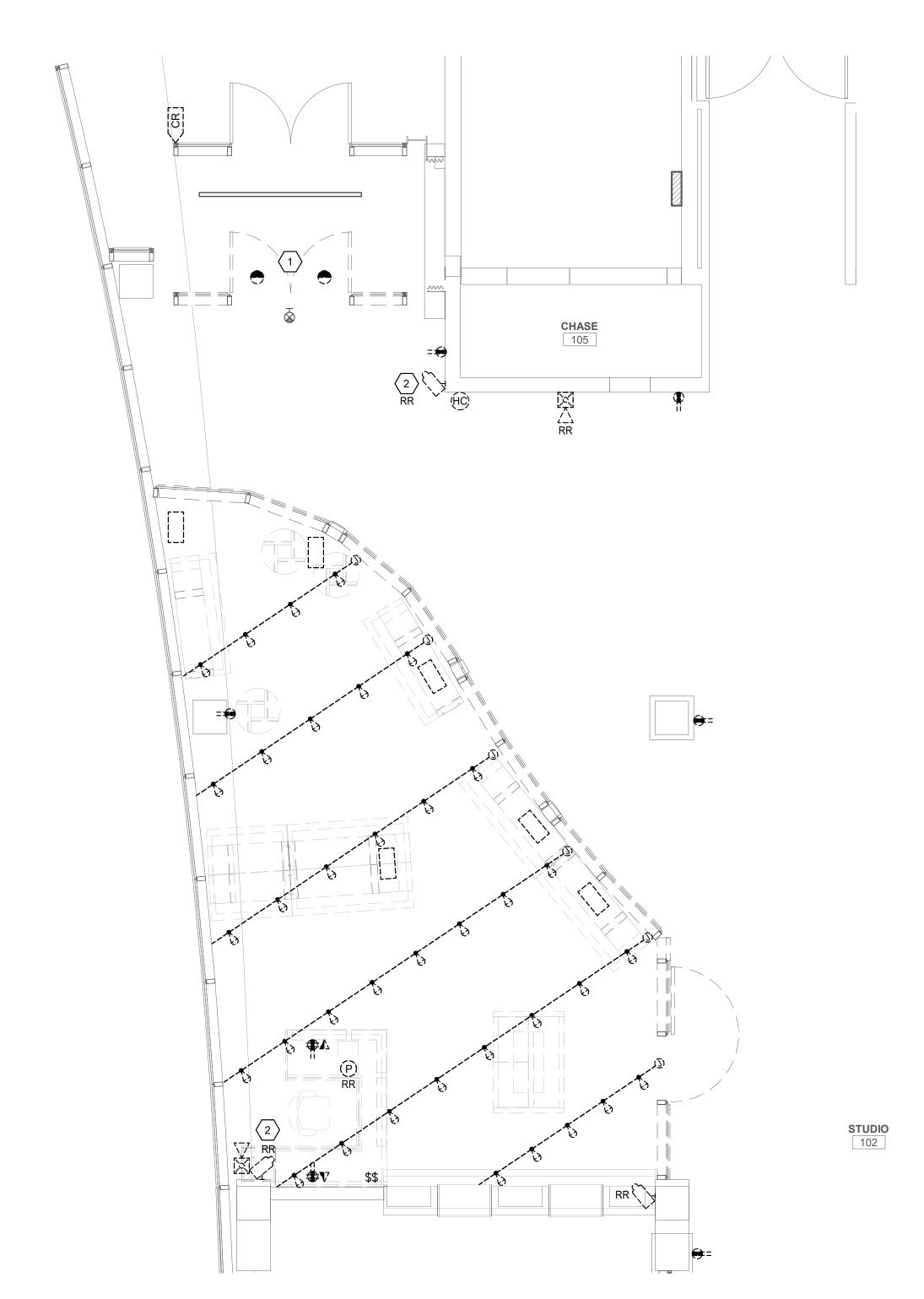
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LEVEL 1
ELECTRICAL
DEMOLITION
PLAN - PHASE
1

Construction Documents January 27, 2023

ED101



1 LEVEL 1 ELECTRICAL DEMOLITION PLAN - STUDIO

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

GENERAL SHEET NOTES

UNLESS NOTED OTHERWISE REMOVE ALL LIGHTING FIXTURES DEVICES AND EQUIPMENT SHOWN DASHED. REMOVE CONDUIT AND WIRING BACK TO PANELBOARD OF ORIGIN OR TO FIRST ACTIVE DEVICE THAT REMAINS.

2 SALVAGE ALL LIGHT FIXTURES, TWIST-LOCK RECEPTACLES AND WALLPLATES, CEILING SPEAKERS AND SECURITY AND FIRE ALARM DEVICES TO OWNER. PROTECT SALVAGED EQUIPMENT FROM DAMAGE.

3 PRIOR TO SUBMITTING BID, VISIT THE SITE AND FIELD VERIFY THE EXTENT OF ELECTRICAL DEMOLITION WORK TO MEET THE INTENT OF THE BID DOCUMENTS AND INCLUDE ALL COSTS IN BID.

PRIOR TO REMOVAL OF ANY ELECTRICAL EQUIPMENT OR WIRING, FIELD VERIFY THAT THE EQUIPMENT OR WIRING IS INACTIVE OR NO LONGER IN USE.

5 REMOVE ALL DEVICES, RACEWAYS AND WIRING FROM WALLS TO BE REMOVED. WHERE ACTIVE RACEWAYS OCCUR IN WALLS TO BE REMOVED, RE-ROUTE THE RACEWAY WITH ASSOCIATED WIRING TO KEEP THE CIRCUIT OPERATIONAL.

6 REMOVE ALL FIRE ALARM DEVICES WHERE EXISTING WALLS AND CEILINGS ARE BEING REMOVED, WITH ASSOCIATED CONDUIT AND WIRING. EXISTING FIRE ALARM DEVICES AND SYSTEM NOT INDICATED FOR REMOVAL SHALL REMAIN ACTIVE THROUGHOUT DEMOLITION AND CONSTRUCTION UNTIL THE NEW SYSTEM IS TESTED AND OPERATIONAL. MAINTAIN ALL CLASS A FIRE ALARM INITIATING AND INDICATING LOOPS WHERE EXISTING DEVICES ARE REMOVED.

7 REMOVE ALL ABANDONED RACEWAY, CONDUIT, WIRING AND CABLING WHETHER ABANDONED PREVIOUS TO THIS PROJECT OR AS A RESULT OF THIS PROJECT. NOT ALL ABANDONED ITEMS ARE SHOWN ON THESE PLANS AND FIELD VERIFICATION OF DEMOLITION SCOPE EXTENT IS REQUIRED.

DEVICES MARKED "RR" ARE TO BE REMOVED AND RELOCATED PER NEW PLANS. EXTEND CIRCUITING AS REQUIRED FOR RELOCATION.

9 REFER TO ARCHITECTURAL DRAWINGS FOR REMOVAL OF MOTORS, CONDUIT, CONDUCTOR AND CONTROL WIRING ASSOCIATED WITH EXISTING MOTORIZED DOORS, PARTITIONS AND LIGHTING.

10 DEMOLISH ALL WI-FI ACCESS POINTS WHETHER SHOWN ON DRAWINGS OR NOT WITHIN SCOPE OF WORK AREA.
 11 REMOVE FEEDERS FOR ALL DEMOLISHED PANELS, DISCONNETS, ETC. BACK TO SOURCE

12 ALL ITEMS INDICATED TO REMAIN SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION.

13 CONTRACTOR TO TRACE AND LABEL ALL EXISTING LOADS TO REMAIN, THAT ARE CURRENTLY FED FROM PANELS THAT ARE BEING DEMOLISHED IN THIS PHASE. THESE LOADS TO BE RE-FED FROM NEW PANELS IN NEXT PHASE.

14 ALL HVAC UNITS TO BE REMOVED BY MECHANICAL CONTRACTOR UNLESS NOTED OTHERWISE. REMOVE ALL ASSOCIATED RACEWAYS AND CONDUCTORS BACK TO SOURCE

○SHEET KEYNOTES

ELECTRIC UNIT HEATERS IN VESTIBULE TO BE DEMOLISHED.

2 REMOVE AND RELOCATE CAMERA. EXTEND SYSTEMS WIRING AS NEEDED.

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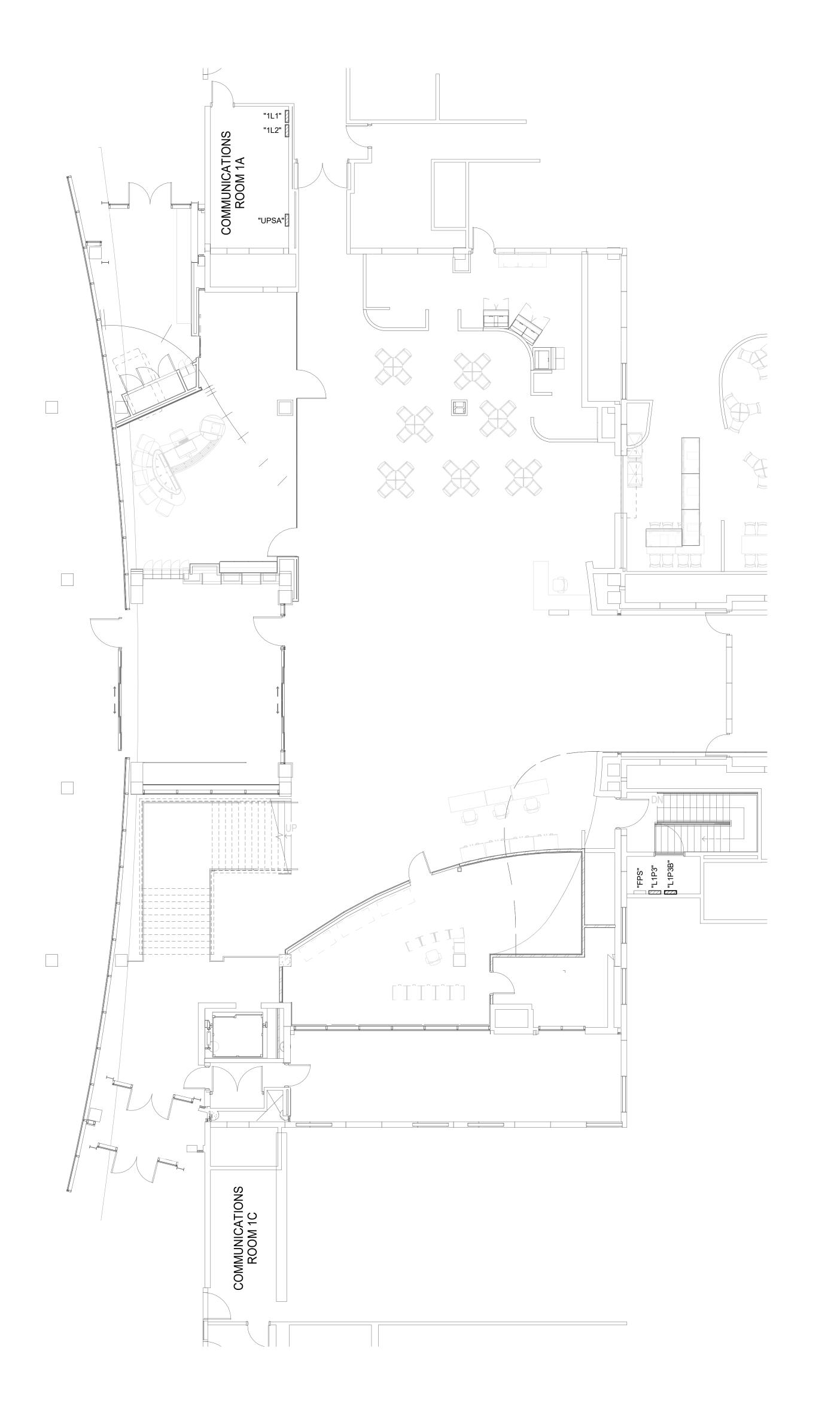
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LEVEL 1
ELECTRICAL
DEMOLITION
PLAN - PHASE

ED102



1 LEVEL 1 OVERALL POWER PLAN

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

GENERAL SHEET NOTES

PROVIDE UPDATED TYPED PANEL SCHEDULES FOR ALL PANELS AFFECTED BY PROJECT SCOPE.

2 ALL POWER RECEPTACLES TO BE TAMPER RESISTANT.

THE GIFT SHOP AND SEACREST STUDIO HAVE DIFFERENT TELECOM REQUIREMNTS. REFER TO THE APPROPRIATE TELECOM RISER ON ET601 FOR TELECOM REQUIREMTNS.



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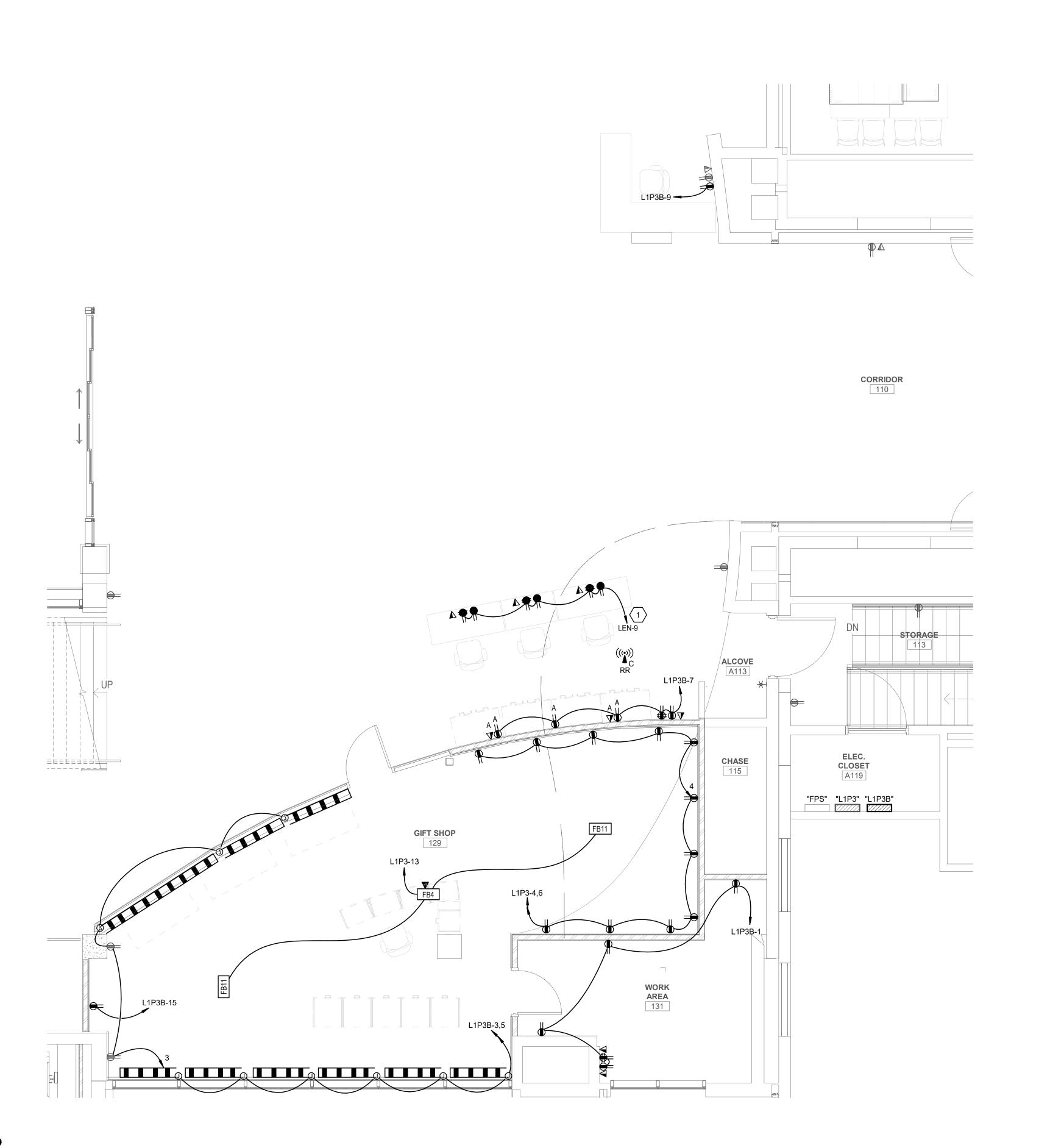


○SHEET KEYNOTES

Intermountain Healthcare
Primary Children's Hospital
Gift Shop

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LEVEL 1 OVERALL POWER PLAN



GENERAL SHEET NOTES

PROVIDE UPDATED TYPED PANEL SCHEDULES FOR ALL PANELS AFFECTED BY PROJECT SCOPE.

2 ALL POWER RECEPTACLES TO BE TAMPER RESISTANT.

THE GIFT SHOP AND SEACREST STUDIO HAVE DIFFERENT TELECOM REQUIREMNTS. REFER TO THE APPROPRIATE TELECOM RISER ON ET601 FOR TELECOM REQUIREMTNS.



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○ SHEET KEYNOTES

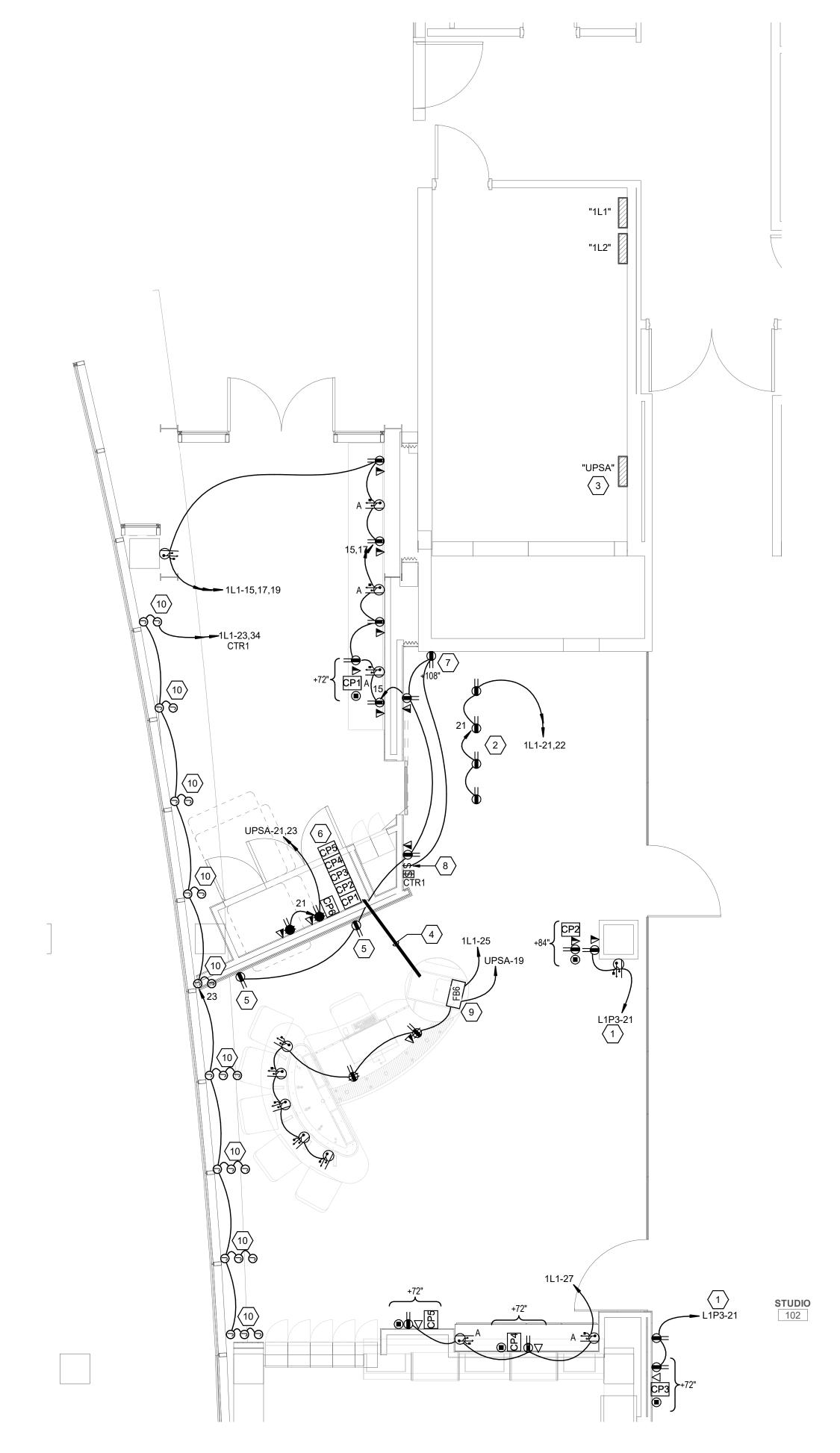
EXTEND EXISTING CIRCUITING PREVIOUSLY USED FOR RECEPTION DESK TO NEW DESK LOCATION.

rimary Children's Hospital

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LEVEL 1 POWER PLAN - PHASE 1



1 LEVEL 1 POWER PLAN - STUDIO

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

GENERAL SHEET NOTES

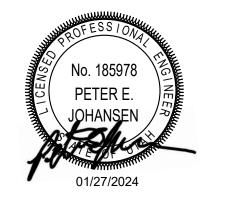
1 PROVIDE UPDATED TYPED PANEL SCHEDULES FOR ALL PANELS AFFECTED BY PROJECT SCOPE.



THE GIFT SHOP AND SEACREST STUDIO HAVE DIFFERENT TELECOM REQUIREMNTS. REFER TO THE APPROPRIATE TELECOM RISER ON ET601 FOR TELECOM REQUIREMTNS.



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○SHEET KEYNOTES

CONNECT TO THE EXISTING 120V CIRCUIT FEEDING RECEPTACLES IN THIS SPACE.

- 2 RECEPTACLES TO BE LOCATED ON BEAM. SURFACE MOUNT CONDUITS AND RECEPTACLES, COORDINATE EXACT LOCATIONS WITH SPOT LIGHTING.
- 3 PROVIDE (2) NEW 20A/1P BREAKERS IN EXISTING SQUARE D PANEL UPSA.
- 4 PROVIDE (4) 3" CONDUITS FROM SEACREST TELECOM CLOSET TO CIRCULAR RACK.
- T INIOTI.

MOUNT POWER RECEPTACLE HORIZONTALLY AND PROVIDE A MATCHING WOOD

- 6 HDMI CONNECTIONS FOR EACH MONITOR TO TERMINATE AT THIS LOCATION.
 7 POWER FOR RETRACTABLE GREEN SCREEN. COORDINATE WITH GREEN SCREEN LOCATION.
- 8 GREEN SCREEN CONTROLLER, OWNER FURNISHED CONTRACTOR INSTALLED.
- 9 PROVIDE ONE COMPARTMENT FOR UPS POWER, ONE COMPARTMENT FOR NORMAL POWER, AND ONE FOR ETHERNET. ONLY THE CIRCULAR RACK WILL BE ON UPS
- 10 PROVIDE 120V CIRCUIT TO EACH SHADE MOTOR. RUN A CAT6A CABLE FROM EACH MOTOR TO THE IQ2 DUAL SPLITTER/MECHONET NODE. ALSO RUN A CAT6A CABLE FROM THE IQ GATEWAY TO THE FIRST IQ2 SPLITTER AND DAISY CHAIN TO CONNECT TO THE OTHER SPLITTERS. EACH JBOX REPRESENTS A TIER OF WINDOW.

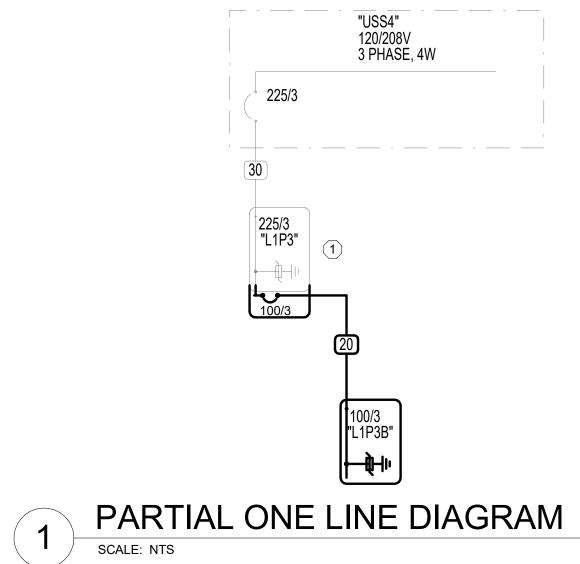
ermountain Healthcare Imary Children's Hospita

NJRA Project # 22221.00 Construction Documents January 27, 2023

LEVEL 1 POWER PLAN - PHASE 2

CKT OCP NO AMP POLE E 1 20 1 3 3 20 1 5 5 20 1 1 7 20 1 1 9 20 1 1 11 20 1 1 15 20 1 1 17 20 1 1 21 20 1 2 23 20 1 2 25 20 1 2 27 20 1 2 31 20 1 3 33 20 1 3 35 20 1 3 37 20 1 3 39 20 1 3 41 20 1 3	D	L	PA OAD (PWI 0 0.0 0 0.0	NEL DIF	·	ΓΙΓΙCATION, GROU		BAR	<u> </u>			CLIDEACE	ELEC CLOSET A11	19						
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13 20 1 15 20 1 17 20 1 19 20 1 21 20 1 23 20 1 25 20 1 27 20 1 29 20 1 31 20 1 33 20 1 35 20 1 37 20 1 39 20 1 41 20 1		0.0	0.0	0.2	CO ST	UDIO 102			0.2 0.)		SP	ARE					1	20	10
15 20 1 17 20 1 19 20 1 21 20 1 23 20 1 25 20 1 27 20 1 29 20 1 31 20 1 33 20 1 33 20 1 35 20 1 37 20 1 39 20 1 41 20 1	_	0.0	0.0	0.0	LIGHTING (GIFT SHOP 129				0.0	0.0	SP	ARE					1	20	12
17 20 1 19 20 1 21 20 1 23 20 1 25 20 1 27 20 1 29 20 1 31 20 1 33 20 1 35 20 1 37 20 1 39 20 1 41 20 1		0.3	0.0	0.0	LIGHTING W	ORK AREA 131	0.3	0.0				SP	ARE					1	20	14
19 20 1 21 20 1 23 20 1 25 20 1 27 20 1 29 20 1 31 20 1 33 20 1 35 20 1 37 20 1 39 20 1 41 20 1		0.0	0.0	0.2	CO GIFT	Γ SHOP 129			0.2 0.)		SP	ARE					1	20	16
21 20 1 23 20 1 25 20 1 27 20 1 29 20 1 31 20 1 33 20 1 35 20 1 37 20 1 39 20 1 41 20 1					SF	PARE				0.0	0.0	SP	ARE					1	20	18
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29 20 1 31 20 1 33 20 1 35 20 1 37 20 1 39 20 1 41 20 1					SF	PARE	0.0	0.0				SP	ARE					1	20	26
31 20 1 33 20 1 35 20 1 37 20 1 39 20 1 41 20 1					SF	PARE			0.0 0.)		SP	ARE					1	20	28
33 20 1 35 20 1 37 20 1 39 20 1 41 20 1					SF	PARE				0.0	0.0		ARE					1	20	30
35 20 1 37 20 1 39 20 1 41 20 1						PARE	0.0	0.0					ARE					1	20	32
37 20 1 39 20 1 41 20 1						PARE			0.0 0.)			ARE					1	20	34
39 20 1 41 20 1					SF	PARE				0.0	0.0	SP	ARE					1	20	36
						PARE	0.0	0.0					ARE					1	20	38
						PARE			0.0 0.				ARE					1	20	40
TOTAL C.						PARE				0.0	0.0	SP	ARE					1	20	42
IOIALS.						ED kVA PER PHASE		2	6	•	10		CONNEC					18		
CONNECTED AMPS PER PHASE 20 50 84 AVERAGE CONNECTED AMPS PER PHASE = 49																				
NEC DIVERSIFIED L	D LOA	OAD CAL	CULA	TIONS																
LIGHTING & CONTINUOUS LOADS: 0.3 kVA @ 125% = 0.4 kVA - 100% CONNECTED LOAD PLUS 25% DIVERSIFIED TOTAL kVA = 14																				
	RECEPTACLES: 17.3 kVA @ 79% = 13.6 kVA - FIRST 10kVA @ 100%, REMAINDER @ 50% AVERAGE AMPS PER PHASE = 39											@ 50%	AVERAGE	E AMP	S PER	PHAS	SE = 39	9		

BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI

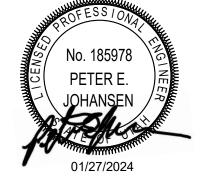


SHEET KEYNOTES

PROVIDE A 100A/3P BREAKER IN EXISTING SQUARE D PANEL L1P3.
RELOCATE 3 20A/1P CIRCUITS ONTO L1P3B TO MAKE ROOM FOR THE NEW BREAKER.



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CONDUCTOR AND CONDUIT SCHEDULE

SCHEDULE NUMBER

0)/1/4	AND	CONDUIT 0175	CONDU	JCTOR(N	NOTE 1)	10	05	NOTEO
SYM	AMP	CONDUIT SIZE	QTY	SIZE	G	IG	SE	NOTES
1	20	.75	2	12	12	12	8	2
2	20	.75	3	12	12	12	8	2,3
3	20	.75	4	12	12	12	8	2,3
4	30	.75	2	10	10	10	8	2
5	30	.75	3	10	10	10	8	2
6	30	.75	4	10	10	10	8	2
7	40	1	2	8	10	8	6	2
8	40	1	3	8	10	8	6	2
9	40	1	4	8	10	8	6	2
<u></u>	55	1	2	6	10	8	4	2
<u></u>	55	1	3	6	10	8	4	2
<u></u>	55	1.25	4	6	10	8	4	2
13	70	1	2	4	8	4	2	2
14	70	1.25	3	4	8	4	2	2
15	70	1.25	4	4	8	4	2	2
16	85	1.25	2	3	8	3	2	2
17	85	1.25	3	3	8	3	2	2
18	85	1.25	4	3	8	3	2	2
19	95	1.25	3	2	8	2	2	2
20	95	1.50	4	2	8	2	2	2
21	130	1.50	3	1	6	2	2	2
22	130	1.50	4	1	6	2	2	2
23	150	2	3	1/0	6	2	1/0	2
24	150	2	4	1/0	6	2	1/0	2
25	175	2	3	2/0	6	2	2/0	2
26	175	2	4	2/0	6	2	2/0	2
27	200	2	3	3/0	6	2	2/0	2
28	200	2.50	4	3/0	6	2	2/0	2
29	230	2.50	3	4/0	4	2	2/0	2
(30)	230	2.50	4	4/0	4	2	2/0	2
31)	255	2.50	3	250	4	1	2/0	2
(32)	255	2.50	4	250	4	1	2/0	2
33	310	3	3	350	3	1/0	3/0	2
34	310	3	4	350	3	1/0	3/0	2
35	380	3.50	3	500	3	3/0	3/0	2
36	380	4	4	500	3	3/0	3/0	2
37	400	2 EA 2	3	3/0	3	3/0	3/0	2
38	400	2 EA 2.50	4	3/0	3	3/0	3/0	2
39	510	2 EA 2.50	3	250	1	4/0	3/0	2
40	510	2 EA 3	4	250	1 1/0	4/0	3/0	2
41	620	2 EA 3	3	350	1/0	4/0	3/0	2,4
42	620	2 EA 3	4	350	1/0	4/0	3/0	2,4
43	760	2 EA 3.50	3	500	1/0	4/0	3/0	2,4
44	760	2 EA 4	4	500	1/0	4/0	3/0	2,4
45	855	3 EA 3	3	300	2/0	4/0	3/0	2,4
46	855	3 EA 3	4	300	2/0	4/0	3/0	2,4
47	1000	3 EA 3.50	3	400	2/0	4/0	3/0	4
48	1000	3 EA 3.50	4	400	2/0	4/0	3/0	4
<u>49</u>	1140	3 EA 4	3	500	3/0	4/0	3/0	4
50	1140	3 EA 4	4	500	3/0	4/0	3/0	4
<u>(51)</u>	1240	4 EA 3	3	350	3/0	4/0	3/0	4
[52]	1240	4 EA 3	4	350	3/0	4/0	3/0	4
53	1675	5 EA 4	4	400	4/0	4/0	4/0	4
54	2010	6 EA 4	4	400	250	250	250	4
[55]	2660	7 EA 4	4	500	350	350	350	4
<u>[56]</u>	3040	8 EA 4	4	500	500	500	500	4
[57]	4180	11 EA 4	4	500	500	500	500	4
<u>[58]</u>		5 EA 4						6
59		5		I	I		1	6

- CONDUCTOR AND CONDUIT SCHEDULE NOTES
- 1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.
- 2. PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122
 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
- 3. PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.

5. SYMBOL SUBSCRIPTS:

4. GROUND CONDUCTOR SHALL BE OMITTED BETWEEN THE UTILITY TRANSFORMER AND THE FIRST OVERCURRENT PROTECTIVE DEVICE.

"2N": INCLUDE TWO NEUTRAL CONDUCTORS, SIZED AS SCHEDULED FOR PHASED AND NEUTRAL CONDUCTORS.

"FG": FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING CONDUCTOR TO BE THE SAME SIZE AS THE PHASE CONDUCTORS. "HH": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC "NONLINEAR" LOADS. CURRENT CARRYING CONDUCTORS DERATED ACCORDINGLY. PROVIDE THE IG/HH SIZE FOR THE EQUIPMENT GROUNDING CONDUCTOR.

"IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH GROUND OF EQUIPMENT GROUND CONDUCTOR.

"SBJ": SUBSTITUTE "SBJ" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE SYSTEM BONDING JUMPER OF THE SEPARATELY DERIVED SYSTEM.

6. RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

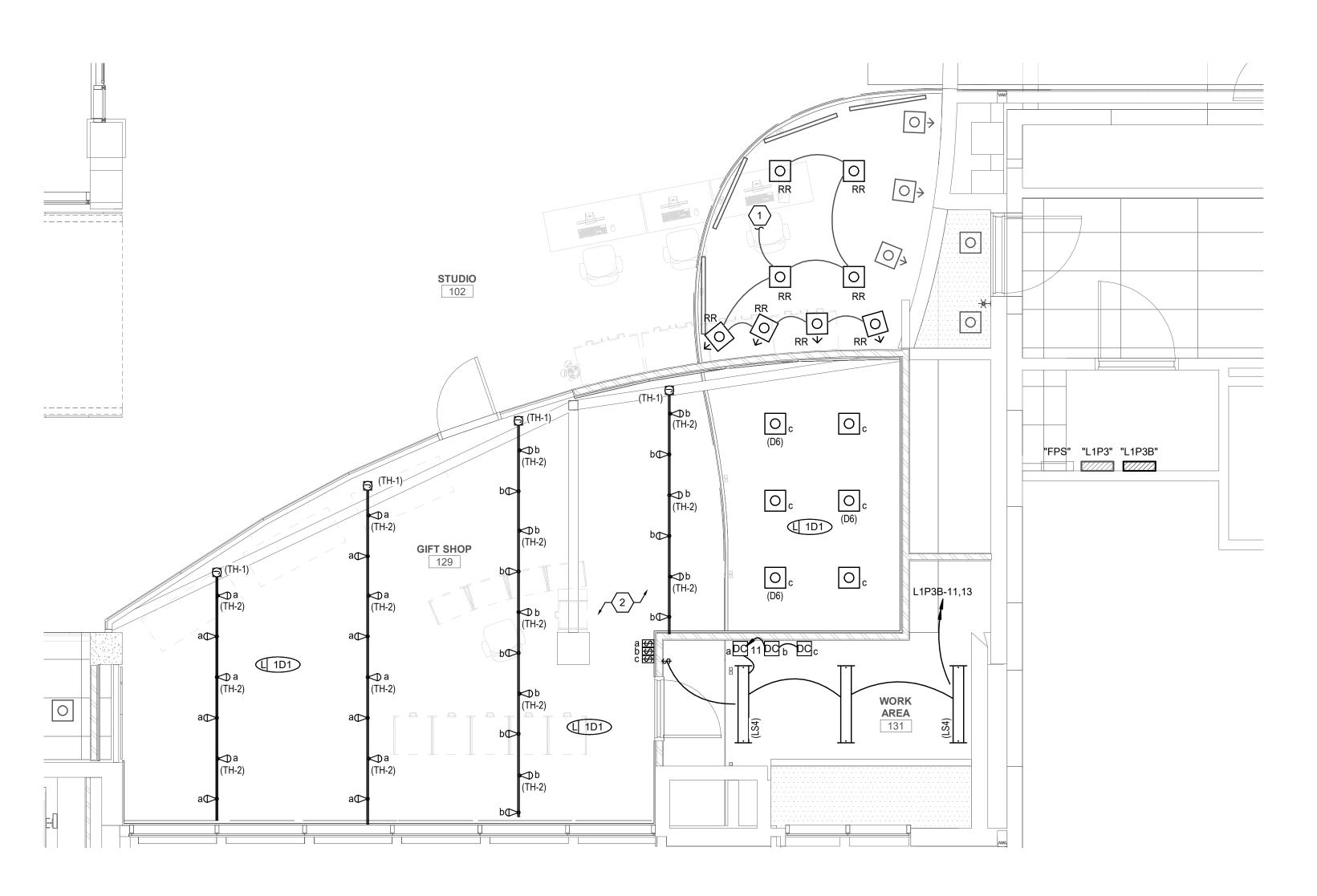
Healthcare Thildren's

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ONE-LINE DIAGRAM



1 LEVEL 1 LIGHTING PLAN - GIFT SHOP

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

GENERAL SHEET NOTES



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○ SHEET KEYNOTES

CONNECT TO THE EXISTING CIRCUIT AND CONTROLS THAT PREVIOUSLY FED THIS CEILING.

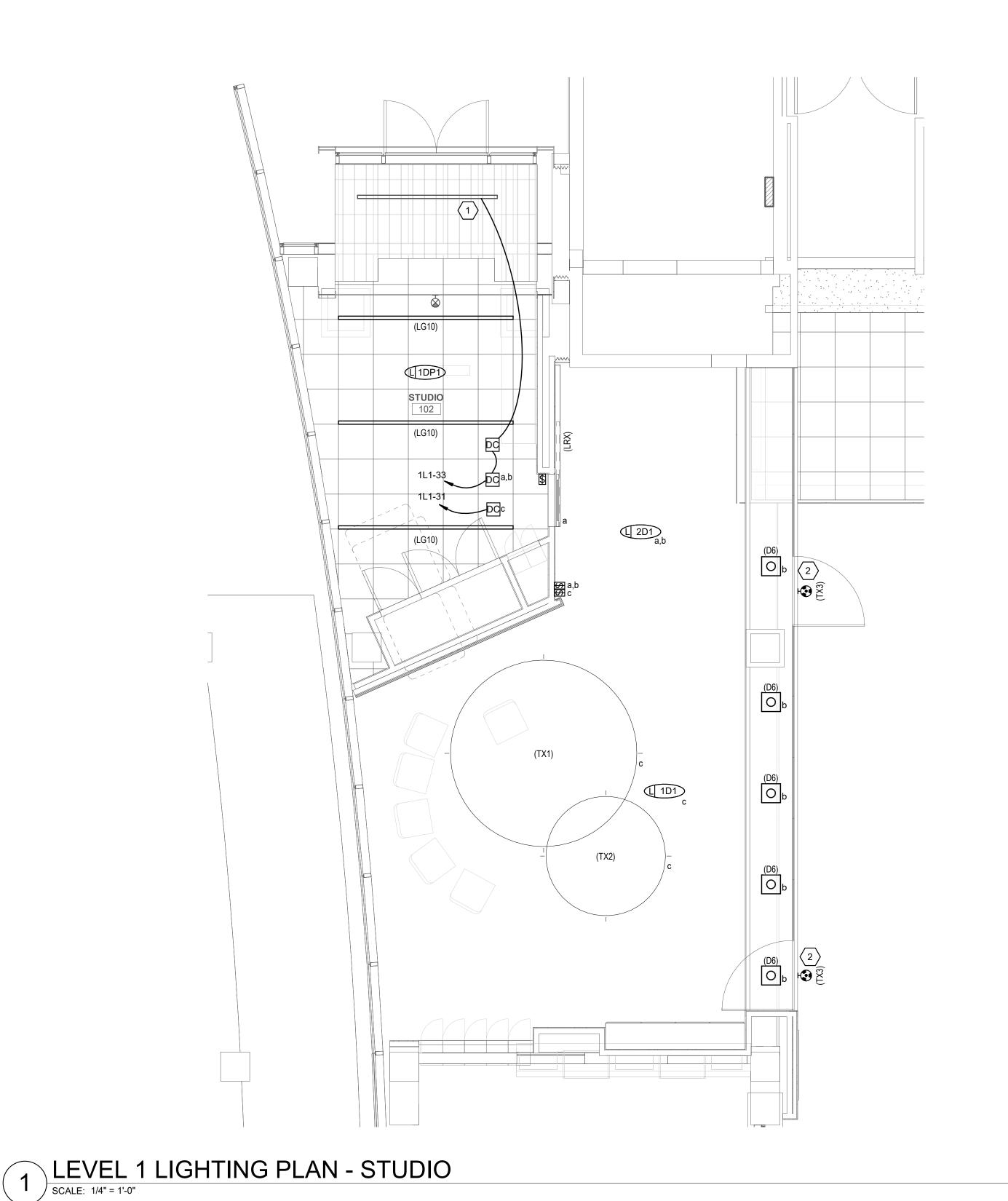
2 CONTRACTOR TO INSTALL ROOM CONTROLLERS AND POWER SUPPLIES ABOVE CEILING IN WORK ROOM.

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LEVEL 1 LIGHTING PLAN - PHASE



GENERAL SHEET NOTES

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○SHEET KEYNOTES

CONNECT THE EXISTING FIXTURE TO THE NEW CIRCUIT AND CONTROLS FEEDING THE STUDIO OFFICE.

2 PROVIDE CONTROL CABLING FOR IN-USE FIXTURES TO THE AV CLOSET. CONNECT TO THE NEAREST 120V CIRCUIT.

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LEVEL 1

LIGHTING

PLAN - PHASE

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INTERIOR LIGHTING FIXTURE SCHEDULE

OFNEDAL MOTEO



1. SUBSTITUTIONS AND/OR EQUAL FIXTURES MUST RECEIVE APPROVAL PRIOR TO BIDDING, THEY MUST BE SUBMITTED TO THE ENGINEER NO LESS THAN 2 WEEKS PRIOR TO BID OPENING.

- 2. SAMPLES MUST BE PROVIDED FOR ANY AND ALL FIXTURES UPON A/E REQUEST PRIOR TO RELEASING FIXTURES.
- 3. ALL FIXTURES SHALL BE LISTED AND APPROVED FOR THEIR INTENDED USE AND LOCATION.
- 4. VERIFY THE PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS.
- 5. COMPLY WITH THE "INTERIOR LIGHTING" SECTION OF THE SPECIFICATIONS.
- 6. ALL LIGHT FIXTURES TO BE EITHER "DLC" OR "LIGHTING FACTS" LISTED OR TO BE APPROVED BY ARCHITECT/ENGINEER AND OWNER.
- 7. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES.

			LU	JMINAIRE		D	RIVER		
ID	DESCRIPTION	SIZE (NOMINAL)	LUMENS	COLOR TEMP	CRI	TYPE	VOLTAGE	WATTS	MANUFACTURER (CATALOG SERIES)
(D6)	DESCRIPTION: 6" ROUND, RECESSED LED DOWNLIGHT, SEMI-SPECULAR REFLECTOR MOUNTING: CEILING, RECESSED FINISH: WHITE TRIM FINISH OPTICS: - OPTIONS: - EM: -	LENGTH: - WIDTH: - DEPTH: - DIAMETER: 0' - 6"	1,500	3500K		0-10V DIMMING (1%)	120/277	19	GOTHAM (EVO 35/15 AR LSS MWD MVOLT GZ1 TRW) HALO (HC615D010HM612835 61MDHWF) LIGHTOLIER (6RNP6RDL15835CCZ10U)
(LG10)	DESCRIPTION: 4" X 10' LINEAR RECESSED SLOT, GRID MOUNT MOUNTING: CEILING, RECESSED FINISH: SCBA OPTICS: - OPTIONS: - EM: -	LENGTH: 10' - 0" WIDTH: 0' - 4" DEPTH: -	5,000	3500K		0-10V DIMMING (1%)	120/277	60	PINNACLE (E4A-835-10'-GX-U-OL1-1-W) NEORAY (S124DR) MARK LIGHTING (SL4L)
(LRX)	DESCRIPTION: LINEAR LED, WALL RECESSED, VERIFY LENGTH ON DRAWINGS, WHITE TRIM FINISH, 375 LUMENS/FT MOUNTING: CEILING, RECESSED FINISH: SCBA OPTICS: - OPTIONS: - EM: -	LENGTH: VAR WIDTH: 0' - 5" DEPTH: -	375	3500K		0-10V DIMMING (1%)	120/277	6	PINNACLE (E4A-835-XX-U) LEDALITE (TRUGROVE-39-0-8-L-935-15Q-2-XX)
(LS4)	DESCRIPTION: 4' LED STRIP LIGHT MOUNTING: CEILING, SURFACE FINISH: WHITE FINISH OPTICS: - OPTIONS: - EM: -	LENGTH: 4' - 0" WIDTH: - DEPTH: -	3,000	3500K		NO DIMMING	120/277	42	LITHONIA (ZL1D) DAYBRITE (FSS 4 30L 835 UNV DIM) METALUX (4SNLED-LD4-30SL-LW-UNV-L840-CD1-U)
(TH-1)	DESCRIPTION: WIRE TRACK LIGHTING, CONTRACTOR TO PROVIDE LED LAMPS, DRIVERS, ANCHORS AND ALL NECESSARY COMPONENTS TO COMLPLETE LIGHTING INSTALL MOUNTING: SURFACE FINISH: SCBA OPTIONS:	LENGTH: VAR WIDTH: 1.5" DEPTH: 3/4"		-		-	120/277	0	CABLE: PRIMA LIGHTING (SKU 31-88812) ANCHORS: PRIMA LIGHTING (31-88831/I) POWER FEED: PRIMA LIGHTING (SKU 31-JBP) DRIVER: PRIMA LIGHTING(39-CV100D-24) LAMPS: MR16 LED BULBS 3500K
(TH-2)	DESCRIPTION: DUAL AXIS CABLE FIXTURE MOUNTING: TRACK AND CABLE FINISH: SCBA OPTICS: - OPTIONS: - EM: -	LENGTH: - WIDTH: - DEPTH: 2.28" DIAMETER: 7.48"	525	3000K		0-10V DIMMING (10%)	120/277V	8	PRIMA LIGHTING (44360-41-LD-PC)
(TX1)	DESCRIPTION: 10' LED HALO RING PENDANT, COORDINATE SUSPENSION HEIGHT WITH ARCHITECT DURING CONSTRUCTION, IF THE FIXTURE IS SUSPENDED OVER 48" PROVIDE SEISMIC BRACING MOUNTING: CEILING PENDANT FINISH: SCBA OPTICS: - OPTIONS: - EM: -	DIAMETER: 120"	16,900	3500K		0-10V DIMMING (1%)	120/277V	305	OCL (TW1-P1EM-120-MW-BAL-LED2-35K-UNV-144-DM1) STRUCTURA (AURA-RNG-D/I-10'-L35-HO-SXX-CE/I-STD) LIGHTART (LA2-CON-RING-10D-4H-STD-STM-WPC-BK)
(TX2)	DESCRIPTION: 8' LED HALO RING PENDANT, COORDINATE SUSPENSION HEIGHT WITH ARCHITECT DURING CONSTRUCTION, IF THE FIXTURE IS SUSPENDED OVER 48" PROVIDE SEISMIC BRACING MOUNTING: CEILING PENDANT FINISH: SCBA OPTICS: - OPTIONS: - EM: -	DIAMETER: 96"	13,400	3500K		0-10V DIMMING (1%)	120/277V	245	OCL (TW1-P1EM-96-MW-BAL-LED2-35K-UNV-144-DM1) STRUCTURA (AURA-RNG-D/I-8'-L35-HO-SXX-CE/I-STD) LIGHTART (LA2-CON-RING-8D-4H-STD-STM-WPC-BK)
(TX3)	DESCRIPTION: BROADCASTING ON-AIR LIGHT, OWNER FURNISHED CONRACTOR INSTALLED MOUNTING: WALL FINISH: SCBA OPTICS: - OPTIONS: - EM:-	LENGTH: - WIDTH: - DEPTH: -		-		NO DIMMING	120/277	3	OWNER FURNISHED



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5272 S. College Drive, Suite104
Murray, Utah 84123
801.364.9259
www.njraarchitects.com



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> INTERIOR LIGHTING FIXTURE SCHEDULE

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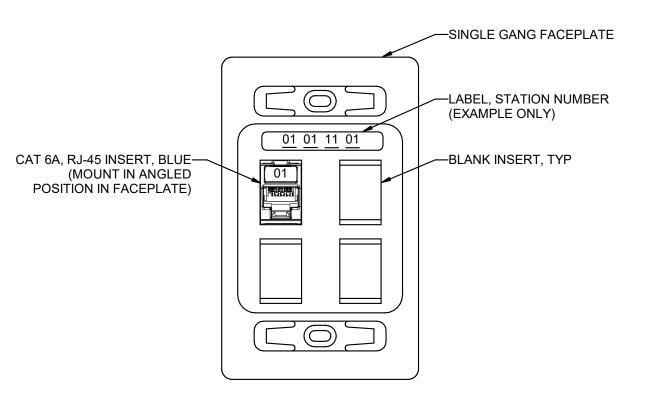
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LIGHTING CONTROL SCHEDULES

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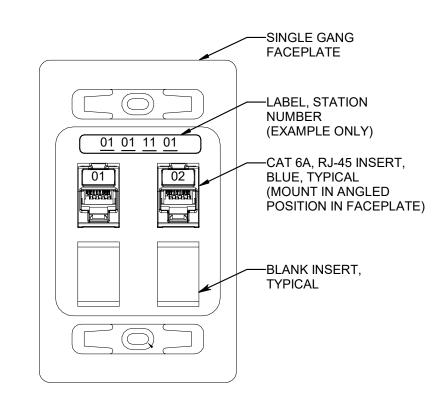
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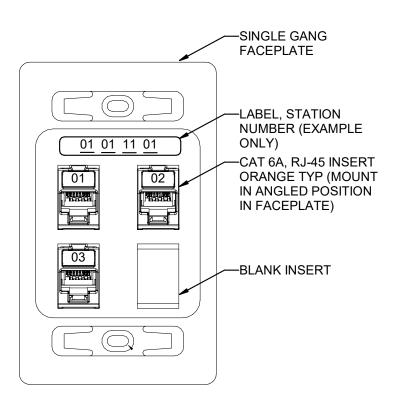




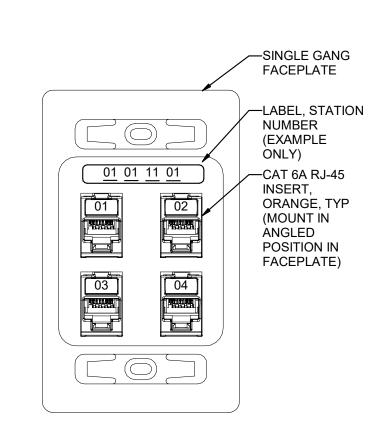
SCALE: NTS



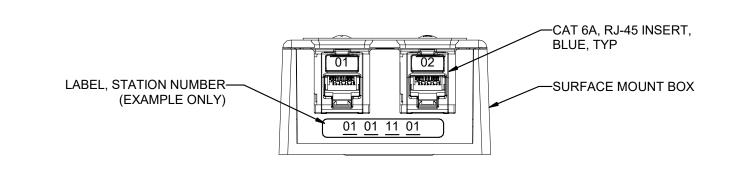
TYPICAL 2-PORT WALL DATA OUTLET SCALE: NTS



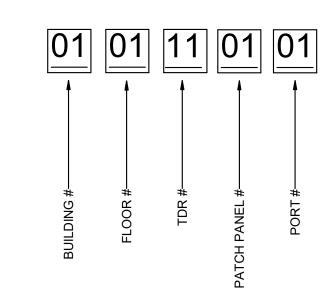
TYPICAL 3-PORT PHYS MON WALL DATA OUTLET SCALE: NTS



TYPICAL 4-PORT PHYS MON WALL 10 DATA OUTLET
SCALE: NTS

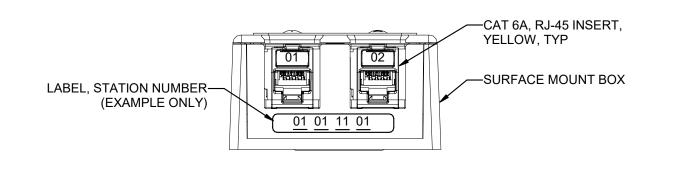


TYPICAL 2-PORT CEILING DATA SCALE: 1/8" = 1'-0"

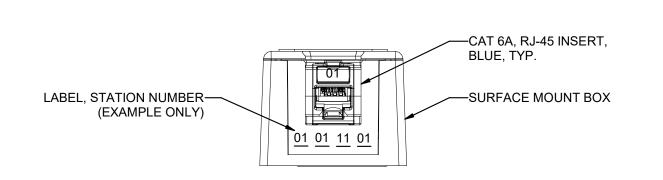


TYPICAL CABLE ID EXAMPLE DETAIL

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

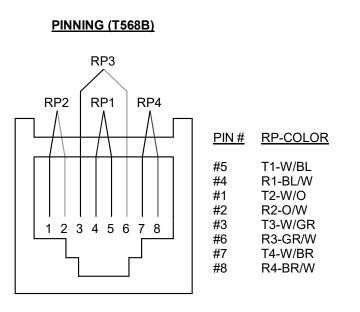


TYPICAL 2-PORT WIRELESS ACCESS POINT SCALE: 1/8" = 1'-0"



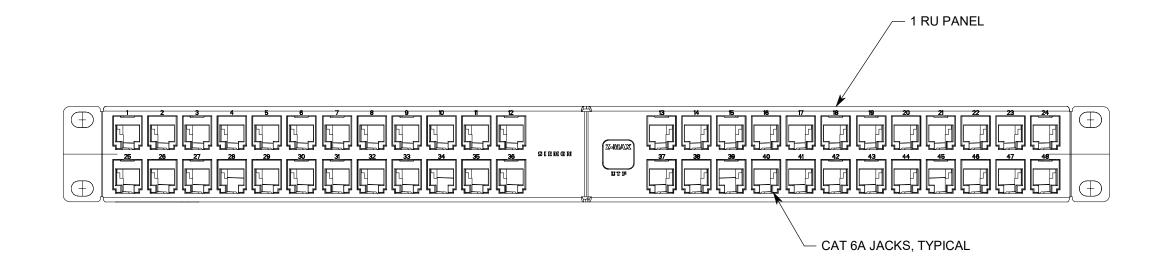
1 TYPICAL 1-PORT POE & CAMERA DATA OUTLET

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



TYPICAL VOICE/DATA OUTLET PINNING DETAIL

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



3 STATION PATCH PANEL (SPP1) DETAIL, TDR

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

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spital

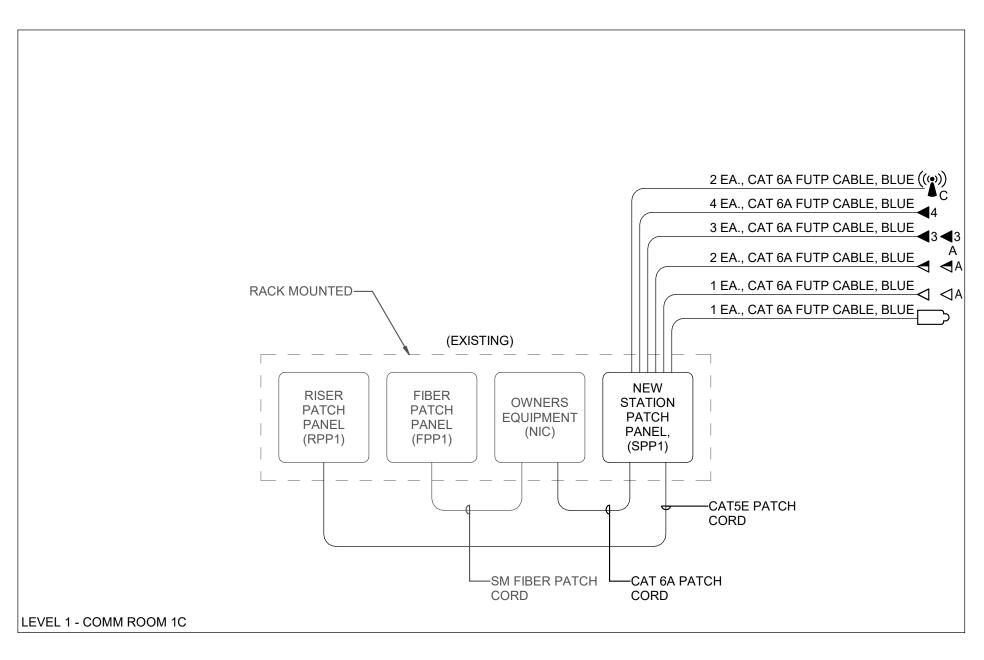
TELECOM DETAILS

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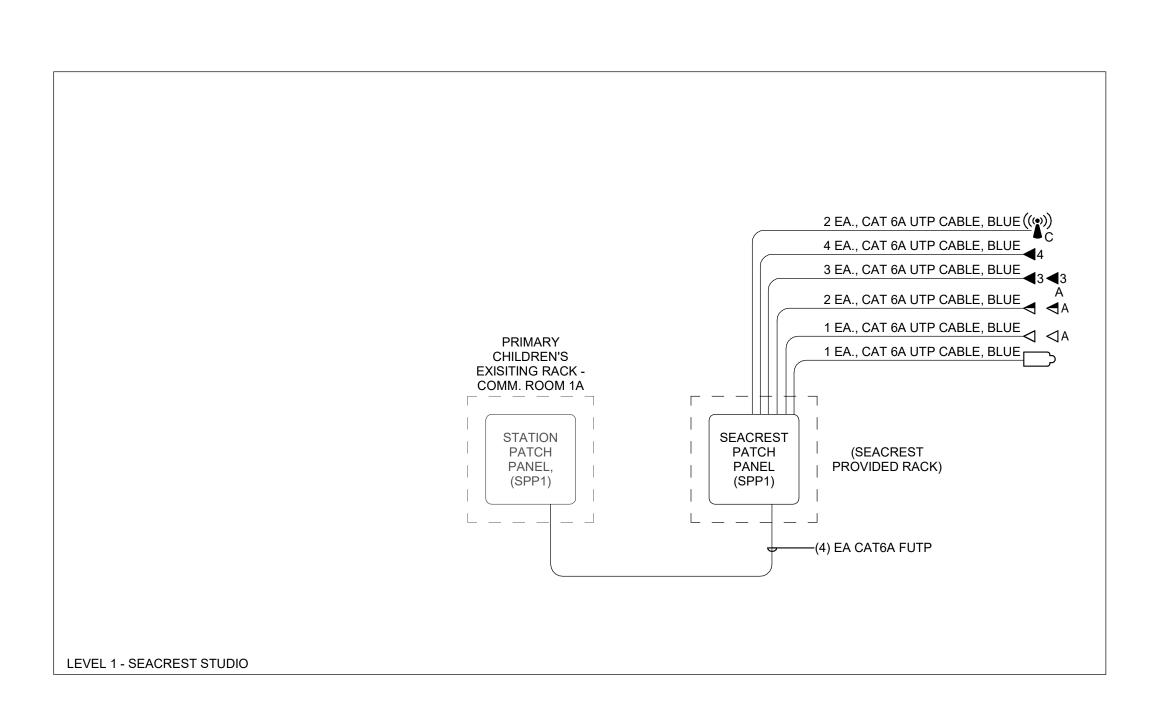






GIFTSHOP TELECOM CABLE RISER DIAGRAM

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



SEACREST STUDIO TELECOM CABLE RISER DIAGRAM

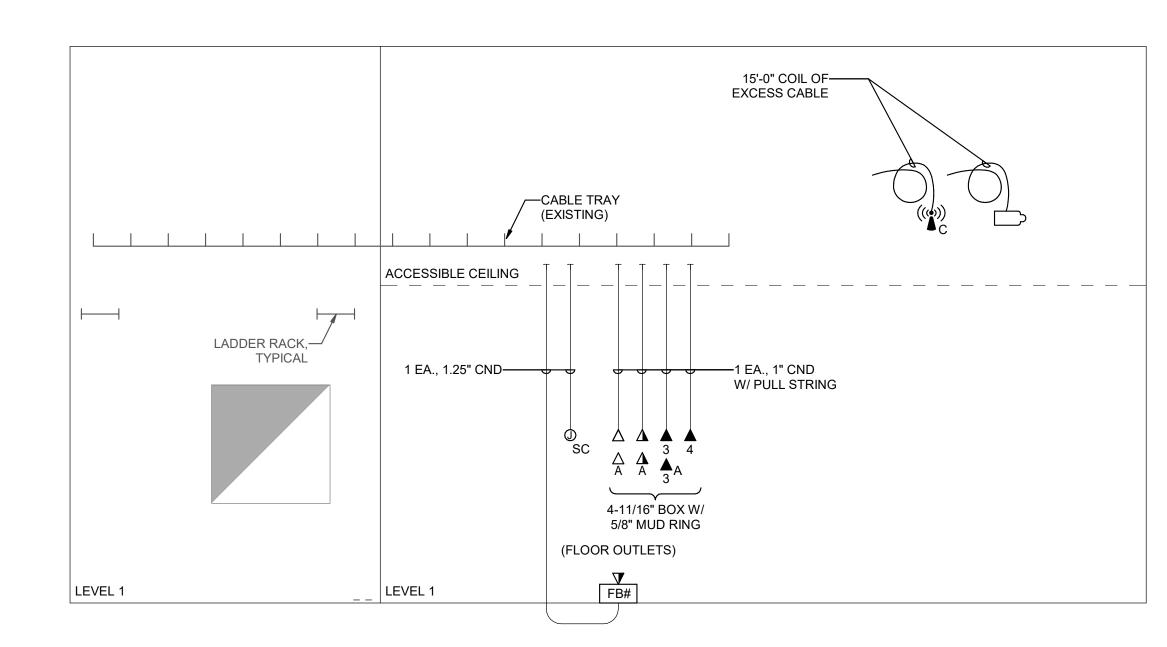
SCALE: 1/8" = 1'-0"

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> TELECOM RISER DIAGRAMS

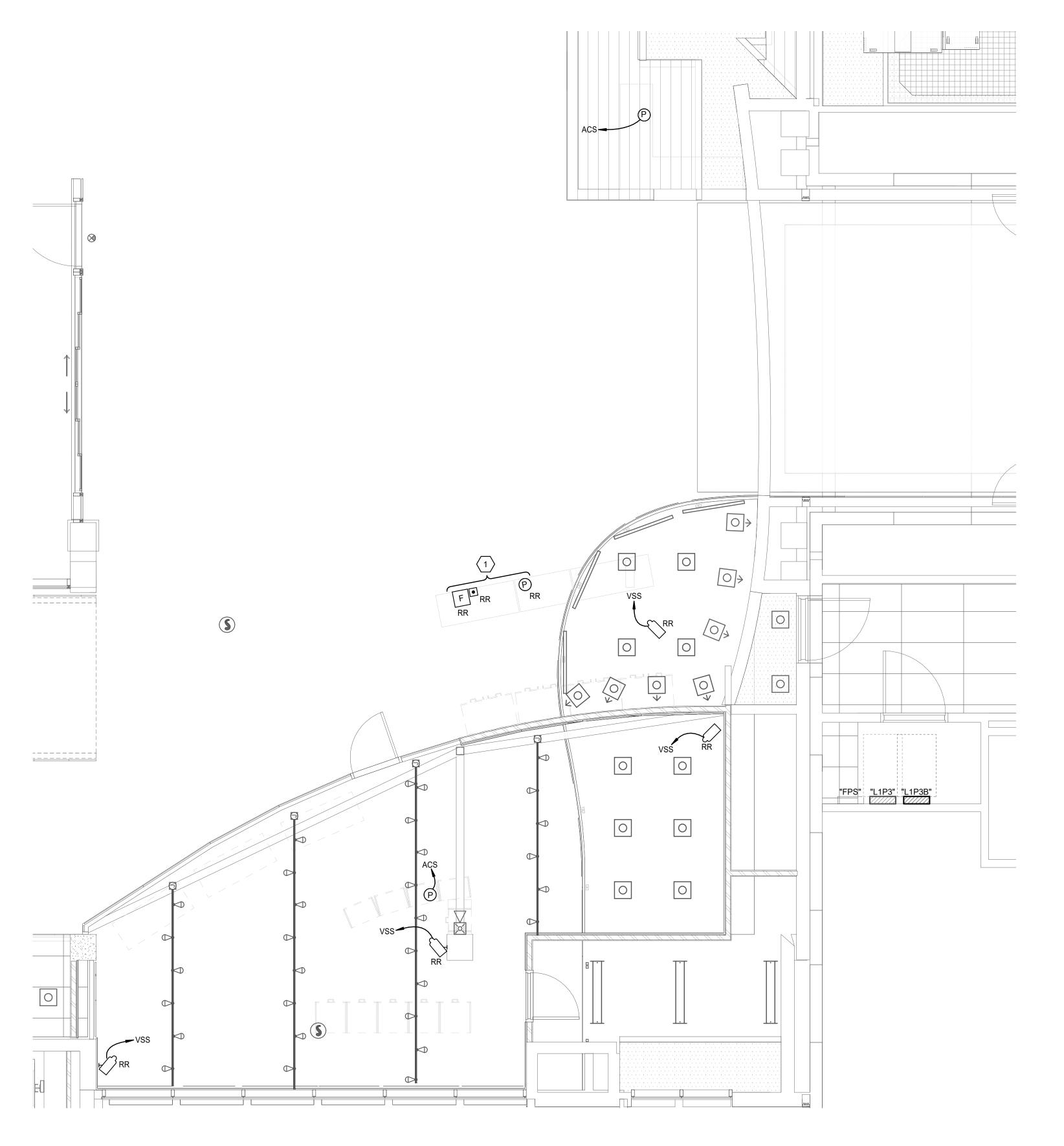
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1 TELECOM CONDUIT RISER DIAGRAM

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



1 LEVEL 1 AUXILIARY PLAN - GIFT SHOP

GENERAL SHEET NOTES

1 ALL CAMERAS WILL BE OWNER FURNISHED CONSTRACTOR INSTALLED.



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○ SHEET KEYNOTES

1 EXTEND THE SYSTEMS WIRING FOR THE FIRE ALARM PULL STATION, DOOR RELEASE, AND PANIC HARDWARE TO THE NEW RECEPTION DESK.

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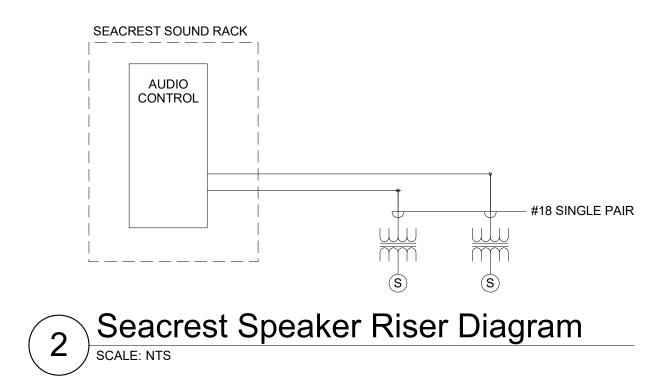
LEVEL 1

AUXILIARY

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PLAN - PHASE 1



GENERAL SHEET NOTES

1 ALL CAMERAS WILL BE OWNER FURNISHED CONSTRACTOR INSTALLED.

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○SHEET KEYNOTES

CAMERA LOCATED IN DESK.

2 REMOVE AND RELOCATE CAMERA. EXTEND SYSTEMS WIRING AS NEEDED.

1 LEVEL 1 AUXILIARY PLAN - STUDIO

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

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LEVEL 1 AUXILIARY PLAN - PHASE

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ELECTRIFIED HARDWARE DOOR TYPE SCHEDULE							
OR SYMBOL	DESCRIPTION	PROTECTED SIDE ELEVATION	UNPROTECTED SIDE ELEVATION	LOCK TYPE(S)	DIVISION OF WORK AND COMMENTS		
PE 1 CR TO ACS	SINGLE DOOR W/ CARD READER, FREE EGRESS	EXIT DEVICE	4SQ J-BOX ABOVE ACC CEILING .75" C (TYP) CARD READER 4SQ BOX W/ 1G RING	ELECTRIC STRIKE	SECURITY CONTRACTOR PROVIDES: CR HARDWARE CONTRACTOR PROVIDES: ES, FH LOCK CONTROLLED BY: CR, ED		

NOTES

1. PROVIDE RACEWAY AND EQUIPMENT AS INDICATED FOR CARD ACCESS DOOR TYPE INDICATED. REFER TO SECTION 281300 AND CARD ACCESS LOCK CONTROL DETAILS FOR ADDITIONAL REQUIREMENTS.

2. PROVIDE CONCEALED .75" C TYPICAL FOR LINES SHOWN TO DEVICE BOXES ON PROTECTED SIDE AND UNPROTECTED SIDE ELEVATIONS.

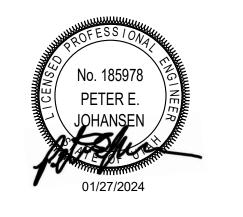
3. CONFIRM CORRECT CARD ACCESS DOOR RACEWAY, LOCK VOLTAGE, AND EXIT SWITCH CURRENT RATING (2 AMPS MIN.) WITH DIV. 8 FURNISHED CARD ACCESS DOOR HARDWARE PER DIV. 8 DOOR HARDWARE SPECIFICATIONS. 4. LOCATE CARD READER BOX AS INDICATED ON FLOOR PLANS. RACEWAY AND BOXES BY DIV. 26. REFER TO 281300 FOR CARD ACCESS SYSTEM REQUIREMENTS.

5. DOUBLE 4SQ J-BOX ON PROTECTED SIDE OF DOORWAY (SIDE OPPOSITE OF CARD READER) ABOVE ACCESSIBLE CEILING OR IN OTHER ACCESSIBLE LOCATION. PROVIDE COVER FOR J-BOX.

6. ELECTRIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, POWER TRANSFER HINGES, ETC.) BY DIV 8. REVIEW DOOR HARDWARE FURNISHED AND VERIFY LOCK VOLTAGES AND OPERATIONAL FUNCTIONALITY OF LOCKS. CONTACT ENGINEER WITH QUESTIONS OR CONCERNS.

ARCHITECTS

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ABBREVIATIONS

- = 1-GANG OR SINGLE GANG = FOUR SQUARE JUNCTION BOX
- = AUTO OPENER AO A/R = AS REQUIRED
 - = ACCESSIBLE
 - = ACCESS CONTROL SYSTEM CONTROLLER
- ADA = ASSISTED DISABILITY OPENER AED = ELECTRIC EXIT DEVICE/CR COMBO ON DOOR AEL = ELECTRIC LOCK/CR COMBO ON DOOR
- = CONDUIT DOOR CONTACT INDICATOR SWITCH
- = CARD READER
- = DOOR HARNESS DBL = DOUBLE
- DED = DELAYED EXIT DEVICE DIR = DIRECTION

ACC

ACS

- = EXIT DEVICE = ELECTRIC HINGE
- = ELECTRIC LOCKSET = ELECTRIC STRIKE
- = ELECTRIC DEADLATCH EED = ELECTRIFIED EXIT DEVICE ELC = EMERGENCY LOCK CONTROL
- EPT = ELECTRIC POWER TRANSFER = FIRE ALARM SYSTEM
- FH = FRAME HARNESS HDWR = HARDWARE
- IDS = INTRUSION DETECTION SYSTEM = KEY SWITCH
- LOCK INDICATOR SWITCH IN HARDWARE = PANIC HARDWARE LATCH POSITION SWITCH
- = LOCK POWER SUPPLY L/PS
- = MOTION DETECTOR = ELECTROMAGNETIC LOCK = OCCUPANCY
- = OBTAIN FROM PLANS
- = PUSH BUTTON RELEASE
- = PANIC HARDWARE PP = PUSH PAD ACTUATOR
- = POWER SUPPLY = POE EXIT DEVICE = POE ELECTRIC LOCKSET
- PIB = INTERFACE BOARD FOR COMBO LOCKING HARDWARE PWR = POWER
- QTY = QUANTITY
- RS = REMOTE OPEN SWITCH
 REX = REQUEST TO EXIT SWITCH/FUNCTION
 TLC = TIME/SYSTEM LOCK CONTROL
 TYP = TYPICAL
 W/ = WITH

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SECURITY DIAGRAMS

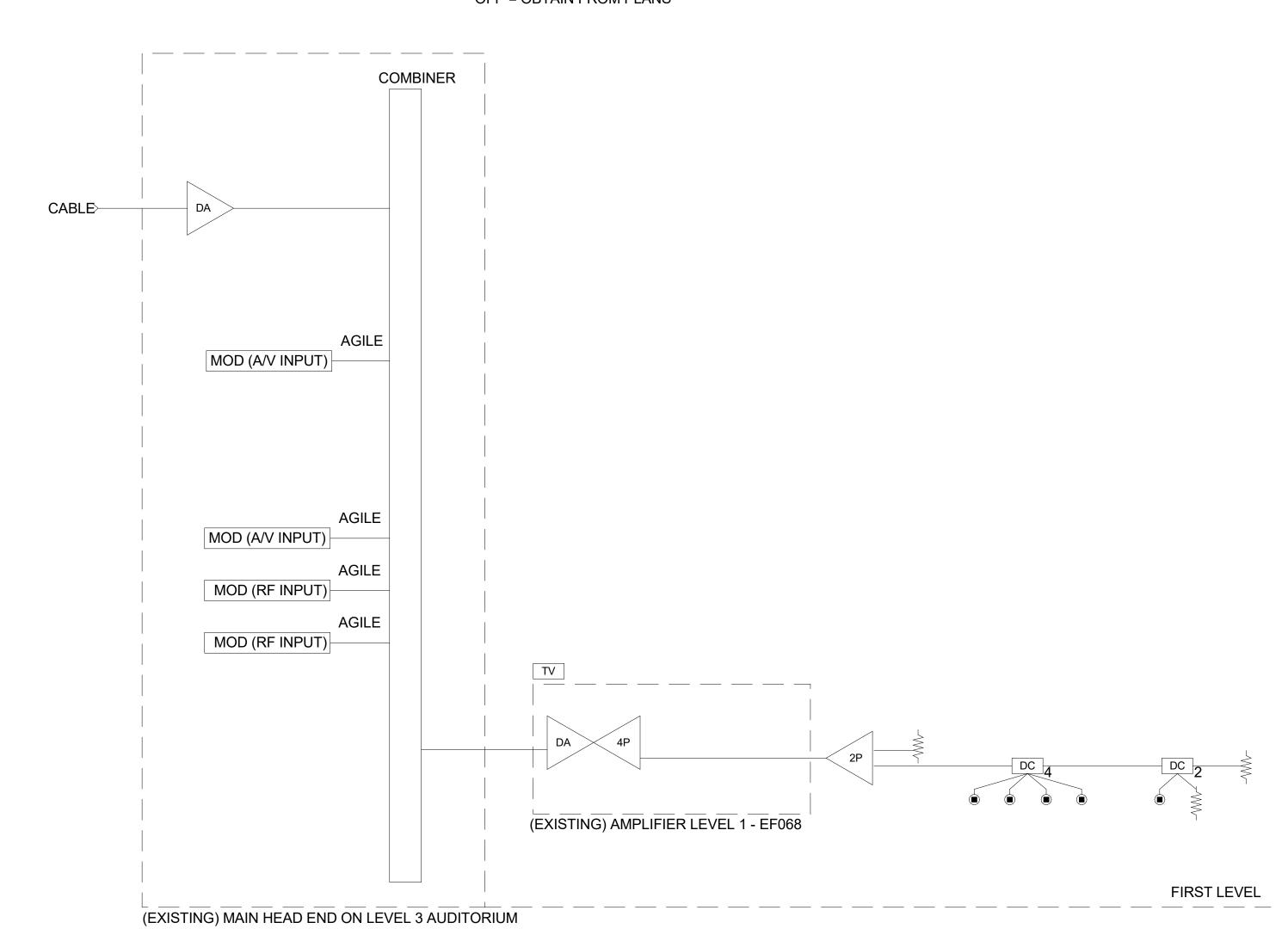
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	SYMBOL SCHEDULE									
TV REFER TO SECTION 16780 FOR DEVICE SELECTION AND INSTALLATION REQUIREMENTS IF NOT OTHERWISE NOTED. REFER TO RELATED SPECIFICATIONS, AND ARCHITECTURAL ELEVATIONS, FOR ACTUAL LOCATIONS.										
SYMBOL	BOL DESCRIPTION QTY ACCEPTABLE TYPES									
TV	EQUIPMENT RACK SYSTEMS TV - TV DISTRIBUTION	OFP	BLONDER TONGUE RACK - RR2180							
2P 4P	MULTI PORT SPLITTER 2 PORT, 4 PORT	OFP	BLONDER TONGUE XRS SERIES							
DA	BROADBAND DISTRIBUTION AMPLIFIER	OFP	BLONDER TONGUE BIDA 75A-43							
DC (X)	DIRECTIONAL COUPLER (MULTI PORT)	OFP	BLONDER TONGUE SRT, SRT-2A, SRT-4A, SRT-8A							
	TV OUTLET	OFP	SEE DETAIL							
-\\\\-	RF TERMINATOR	OFP	75 OHM TERMINATOR							
MOD	MODULATOR (RF INPUT)	OFP	BLONDER TONGUE AP 60-860A							
MOD	MODULATOR (A/V INPUT)	OFP	BLONDER TONGUE AM-60-550							
PAD	ATTENUATOR	OFP	BLONDER TONGUE FAF/FAM SERIES							
COMBINER	CHANNEL COMBINER	OFP	BLONDER TONGUE OC SERIES (PASSIVE)							
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER	OFP	EFI PT-2000							

A/R = AS REQUIRED OFP = OBTAIN FROM PLANS



1 TV DISTRIBUTION SINGLE LINE DIAGRAM
NO SCALE

OWNER EQUIPMENT (EXISTING) MAIN HEAD END ON LVL 3
AUDITORIUM

THIRD LEVEL

1" CONDUIT
4-STRAND
SINGLE MODE
FIBER

OWNER
PROVIDED
HDMI
1.25" CONDUIT
1.25" CONDUIT
1.25" CONDUIT
RECESSED
RECEPTACIE
IN AV CLOSET
FIRST LEVEL

2 SYTSEMS RISER DIAGRAM
NO SCALE

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SYSTEMS RISER DIAGRAMS

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