W Intermountain[®] Healthcare **RIVERTON HOSPITAL - FLUOROSCOPY REMODEL**

ABBREVIATIONS

A ABV AFF AC ADD AC ALT ALUM AB & ANOD ARCH ASPH @	ABOVE ABOVE FINISH FLOOR ACOUSTIC ADDENDUM AIR CONDITIONING ALTERNATE ALUMINUM ANCHOR BOLT AND ANODIZED ARCHITECT(URAL) ASPHALT AT
B BSMT BLW BM BLKG BD BO BLDG	BASEMENT BELOW BENCHMARK BLOCKING BOARD BOTTOM OF BUILDING
C CAB CPT CIP CB CLG CL CT CH CO CLR CL. COL CONC CMU COND COND CONST CONT CJ	CABINET CARPET CAST IN PLACE CATCH BASIN CEILING CENTER LINE CERAMIC TILE CHANNEL CLEAN OUT CLEAR CLOSET COLUMN CONCRETE CONCRETE CONCRETE MASONRY UNIT CONDITION CONNECTION CONSTRUCTION CONTRUCTION CONTINUOUS CONTROL JOINT
D DP DB DEMO DIAG DIA DIM DISP DWL DN DS DRN. BD. DWG	DAMP PROOFING DECK BEARING DEMOLISH(ED) DIAGONAL DIAMETER DIMENSION DISPENSER DOWEL DOWN DOWN SPOUT DRAINAGE BOARD DRAWING
E EA EWC ELEC EQ EQUIP EXH EXIST EJ EXT	EACH ELEC. WATER COOLER ELECTRIC ELEVATION EQUAL EQUIPMENT EXHAUST EXISTING EXPANSION JOINT EXTERIOR
F FT FIN FE FEC FIXT FL FLR FLR FTG FND	FEET FINISH(ED) FIRE EXTINGUISHER FIRE EXTINGUISHER & CABINET FIXTURE FLASHING FLOOR FOOTING FOUNDATION

G GALV GA GC GSN GL GD GRL GRD GYP	GALVANIZED GAUGE GENERAL CONTRACTOR GENERAL STRUCTURAL NOTES GLASS OR GLAZING GRADE GRILLE GROUND GYPSUM
H HDWD HTR HT HP HM HORIZ HB HW HR HSK	HARDWARE HARDWOOD HEATER HEIGHT HIGH POINT HOLLOW METAL HORIZONTAL HOSE BIB HOT WATER HOUR HOUSEKEEPING
I IN ID INSUL INT INV	INCH INSIDE DIAMETER INSULATION INTERIOR INVERT
J JAN JT JST	JANITOR JOINT JOIST
l Lam LNDG LAV LVR	LAMINATED LANDING LAVATORY LOUVER
M MFR. MO MATL MAX MECH MTL MEZZ MIN MULL	MANUFACTURER MASONRY OPENING MATERIAL MAXIMUM MECHANICAL METAL MEZZANINE MINIMUM MULLION
N NG NOM NA NIC NTS	NATURAL GRADE NOMINAL NOT APPLICABLE NOT IN CONTRACT NOT TO SCALE
O OC OPNG OPP OD ORD OFCI	ON CENTER OPENING OPPOSITE OUTSIDE DIAMETER OVERFLOW ROOF DRAIN OWNER FURNISHED, CONTRACTOR INSTALLED
P PNT PR. PNL PVMT d P-LAM PLAM PLBG PLYWD PSI	PAINT PAIR PANEL PAVEMENT PENNY PLASTIC LAMINATE PLATE PLUMBING PLYWOOD POUND PER SQUARE INCH

PSF

POUNDS PER SQUARE FOOT

[]	R RAD RCP REG REQD RA REV RD RFG RM RGH RND	RADIUS REFLECTED CEILING PLAN REGISTER REQUIRED RETURN AIR REVISION ROOF DRAIN ROOFING ROOM ROUGH ROUND
	S SECT SHT SIM SLDG SPEC SPL SQ SS STD STOR STRUC SA SUSP	SECTION SHEET SIMILAR SLIDING SPECIFICATION SPLASH SQUARE STAINLESS STEEL STANDARD STORAGE STRUCTURE OR STRUCTURAL SUPPLY AIR SUSPENDED
[T TELCO TG T&G T&B TO TOC TOC TOC TOD TOM TOP TOW TYP	TELEPHONE COMPANY TEMPERED GLASS TONGUE & GROOVE TOP & BOTTOM TOP OF TOP OF CURB TOP OF CURB TOP OF DECK TOP OF MASONRY TOP OF PARAPET TOP OF WALL TYPICAL
	U UNO	UNLESS NOTED OTHERWISE
	V V VTR VERT VEST VCT	VENT VENT THROUGH ROOF VERTICAL VESTIBULE VINYL COMPOSITION TILE
	W WC WH WP WR WWF WF WDW W/ W/O WD	WATER CLOSET WATER HEATER WATER PROOF WATER RESISTANT WELDED WIRE FABRIC WIDE FLANGE WINDOW WITH WITHOUT WOOD
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ı I		

ED CEILING PLAN IR ٨Ň ATION S STEEL

MATERIALS / SYMBOLS **DESIGN TEAM** GENERAL INFORMATION ARCHITECT CENTERLINE GI100 GENERAL INFORMATION GI101 CODE ANALYSIS JRCA, Architects GI111 PHASING PLAN BUILDING SECTION 577 South 200 East DEMOLITION FLAG Salt Lake City, Utah 84111 DP101 DEMO FLOOR PLAN SIM (801)533-2100 Ph. Contact: Tim Jessop TimJessop@gallowayus.com AE100 WALL SECTION / EXTERIOR ELEVATION AE101 STRUCTURAL ENGINEER SIM AE121 AE161 AE301 **BHB** Structural 1 AEXXX AF401 INTERIOR ELEVATION 2766 South Main Street AE402 AE403 Salt Lake City, Utah 84115 AE451 (801)355-5656 Ph. DETAIL Contact: Alex Piket SIM Alex.Piket@bhbengineers.com STRUCTURAL S-001 (\mathbf{A}) **ELECTRICAL ENGINEER** S-101 GRID HEAD S-501 ROCKY MOUNTAIN CONSULTING ENG. $\langle 1i \rangle$ MECHANICAL WINDOW TAG M000 2117 S 3600 W M001 Salt Lake City, Utah 84119 MD101 (101A) DOOR TAG (801)566-0503 Ph. M101 Contact: Dustin Hughes M501 ROOM dustin@rmceut.com NAME 101 ROOM TAG MG101 PD101 **MECHANICAL & PLUMBING ENGINEER** P101 A — WALL TYPE **VBFA** ELECTRICAL E000 330 South 300 East KEYNOTE TAG E101 Salt Lake City, Utah 84111 E201 (801)530-3148 Ph. E601 Contact: Jared Smith **REVISION TAG** jsmith@vbfa.com C1 C2 MEDICAL EQUIPMENT VENDOR WINDOW GLAZING TAG G3 A2 GE HEALTHCARE A3 A4 384 N Wright Brothers Dr ELEVATION, (DATUM) Salt Lake City, Utah 84116 S1 NAME S2 (801) 281-7545 Ph. S3 Contact: Wendel Larson M1 Wendel.Larson@med.ge.com VIEW NAME E1 DRAWING TITLE (AEXXX) SCALE SCALE E2 E3 E4 E5

	PLYWOOD (SECTION)	
	WOOD MOLDING	ſ
A A A A	CONCRETE (SECTION)	
	GYPSUM BOARD (SECTION)	
	TILE (PLAN)	
	COMPACTED GRAVEL (SECTION)	
	COMPACTED SUBGRADE	
	STEEL FRAMING (PLAN, SECTION)	
	CMU (PLAN, SECTION)	
	BRICK VENEER (PLAN, SECTION)	
	STONE VENEER (PLAN, SECTION)	
	RIGID INSULATION (SECTION)	
- + + + + + + + + + + + + +	LANDSCAPE - PLANTING	

3741 W 12600 S Riverton, UT 84065

CONSTRUCTION DOCUMENTS 11/03/2021

DP161 DEMO REFLECTED CEILING PLAN ARCHITECTURAL SLAB PLAN FLOOR PLAN FINISH PLAN REFLECTED CEILING PLAN BUILDING SECTIONS FLUORO 1 - EQUIPMENT PLAN & ELEVATIONS FLUORO 2 - EQUIPMENT PLAN & ELEVATIONS RAD - EQUIPMENT PLAN & ELEVATIONS CASEWORK SECTIONS AE511 DETAILS GENERAL STRUCTURAL NOTES FLOOR AND ROOF FRAMING PLAN DETAILS MECHANICAL TITLE SHEET MECHANICAL GENERAL NOTES MECHANICAL DEMOLITION PLAN HVAC PLAN MECHANICAL DETAILS AND SCHEDULES MGD101 LEVEL 1 MED GAS DEMOLITION PLAN LEVEL 1 MED GAS PLAN LEVEL 1 PLUMING DEMOLITION PLAN LEVEL 1 PLUMING PLAN ELECTRICAL GENERAL SHEET LIGHTING PLAN POWER PLAN ELECTRICAL SCHEDULES EQUIPMENT (FOR REFERENCE ONLY) GE - COVER SHEET GE - DISCLAIMER - SITE READINESS **GE - GENERAL NOTES** GE - EQUIPMENTLAYOUT **GE - SECTION VIEWS** GE - EQUIPMENT DETAILS GE - EQUIPMENT DETAILS & DELIVERY (2) GE - STRUCTURAL NOTES GE - STRUCTURAL LAYOUT GE - STRUCTURAL DETAILS (1 GE - HVAC **GE - ELECTRICAL NOTES** GE - ELECTRICAL LAYOUT GE - ELECTTRICAL ELEVATION GE - DETAILS-INTERCONNECTIONS GE - POWER REQUIRMENTS



DRAWING INDEX

VICINITY MAP

GENERAL NOTES:

- WHILE THE DOCUMENTS ARE SEPARATED BY SHEET NUMBERS FOR CONVENIENCE IN REFERENCING DOCUMENTATION, SHEET NAMES AND NUMBERS ARE NOT INTENDED TO DEFINE SCOPE. CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR ALL WORK DESCRIBED IN THE ENTIRE PACKAGE.
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		GENERAL NOTES:	
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Image: State of the state o			EMODEL
			<mark>n°Healthcare</mark> L - FLUOROSCOPY R
MAX.LENGTH 8/6* 10/0* 0.C			Intermountai RIVERTON HOSPITA 3741 W 12600 S Riverton, UT 84065
COMPRESSION STRUT AT INTERSECTION MUST BE FLACED AT INTERSECTION AT INT	MAX. LENGTH		PROJECT #: 21031 CONSTRUCTION DOCUMENTS 11/03/2021 DATE REVISION
DETAILS CROSS T MAIN RUNNER ACOUSTICAL LAY-IN PANEL CEILING DETAILS DETAILS DETAILS ACOUSTICAL LAY-IN PANEL CEILING ACOUSTICAL LAY-IN PANEL CEILING	0 -0 10'-0" 11'-6" AL 15'-0" O.C. COMPRESSION STRUT AT INTERSECTION MUST BE PLACED AT 12'-0" O.C. (MAX.) EACH WAY AND WITHIN 6'-0" OF PERIMETER WALLS (4) - 12 GA. SPLAY WIRES		JAMES R. CHILD No. 120681-0301
	CROSS T MAIN RUNNER ACOUSTICAL LAY-IN PANEL CEILING		DETAILS
	MPRESSION STRUT		AE511

3741 W 12600 S Riverton, UT 84065 21031 DOCUMENTS REVISION V CHITECT -0301 UTAT

GENERAL STRUCTURAL NOTES

GENERAL

- 1. The structural notes are intended to complement the project specifications. Specific notes and details in the drawings shall govern over the structural notes and typical details.
- 2. Typical details and sections shall apply where specific details are not shown.
- 3. The structural drawings are not all-inclusive and do not contain all dimensions, elevations, openings, mechanical shafts and penetrations needed to build the structure. The contractor shall coordinate these items with the Architectural, Mechanical and Electrical drawings.
- 4. Omissions or conflicts between the contract drawings and/or specifications shall be brought to the attention of the architect/engineer before proceeding with any work involved. In case of conflict, follow the most stringent requirement as directed by the architect/engineer at no additional cost to the owner
- 5. The contractor shall submit a written request to the architect/engineer before proceeding with any changes, substitutions or modifications. Any work done by the contractor before receiving written approval will be at the contractor's risk.
- 6. The contractor shall coordinate with all trades any items that are to be integrated into the structural system such as openings, penetrations, mechanical and electrical equipment, etc. Sizes and locations of mechanical and other equipment that differs from those shown on the contract drawings shall be reported to the architect/engineer.
- 7. The contractor shall provide adequate shoring and bracing as required for the chosen method of erection. Shoring and bracing shall remain in place until final connections for the permanent members are completed. The building shall not be considered stable until all connections are completed. Walls shall not be considered self-supporting and shall be braced until the floor/roof system is completed.
- 8. Site observations by BHB Consulting Engineers' field representative shall not be construed as approval of construction procedures nor special inspection.
- 9. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings. The structural drawings shall be used in conjunction with the architectural and other consultant's drawings. Some dimensions and elements such as elevations, depressions, slopes, mechanical housekeeping pads, etc. are not shown in the structural drawings. All dimensions shown on structural drawings shall be verified by contractor with architectural, mechanical and electrical drawings.
- 10. Contractor shall review shop drawings for compliance with contract documents, and stamp shop drawings with review stamp prior to submission to architect for review. Review of shop drawings by BHB Consulting Engineers is for general compliance only and is not intended for approval. The shop drawing review shall not relieve the contractor from the responsibility of completing the project according to the contract documents. Fabrication shall not begin until shop drawings review process is complete. Shop drawings made from reproductions of the contract drawings will be rejected unless the contractor signs a release agreement prior to the shop drawings being reviewed.
- 11. Only an authorized representative of BHB Consulting Engineers may make changes to these contract drawings. BHB Consulting Engineers shall not be held responsible or liable for any claims arising directly or indirectly from changes made without written authorization by an authorized representative of BHB Consulting Engineers.

BASIS OF DESIGN

International Building Code 2018 1. Governing Code a. Risk Category 2. Seismic Loads 1.5 a. Seismic Importance Factor, Ie b. Seismic Design Category D - default c. Site Specific Ground Motion Not Required per exceptions in section 11.4.8 of ASCE 7 Hazard Analysis d. Mapped Spectral Acceleration $S_{s} = 1.16g$ $S_1 = 0.416g$ e. Soil Site Class f. Soil Site Coefficients $F_a = 1.20$ $F_v = N/A$ g. 5% Damped Design Spectral Response Acceleration $S_{DS} = 2/3 * F_a * S_S = 0.928g$ $S_{D1} = 2/3 * F_v * S_1 = N/A$ h. Component Amplification Factor a_n = 1.0 Component Response Modification Factor $R_p = 1.5$ System Over-strength Factor $\Omega_0 = 1.5$ k. Heigh in structure of point of attachment z = 0 ft I. Average roof height of structure z = 45 ft +/-

EXISTING CONDITIONS

- 1. Structural connections and the framing systems shown in the structural drawings are based on a limited site survey. The contractor shall verify the existing conditions of exposed framing systems, connections, walls, and other structural elements within the project area. If existing conditions vary from the information in the contract documents, the contractor shall notify the architect/engineer prior to proceeding with the fabrication or construction of any affected elements.
- 2. Existing framing systems and foundations taking new loads are assumed to be in good condition, unless noted otherwise in the contract documents. The contractor shall immediately notify the architect/engineer of any deficiencies in the existing structure that are observed or revealed during construction (e.g. corrosion of steel members, cracking or crumbling of concrete, checking or splitting of wood members) prior to proceeding with the fabrication or construction of any affected elements.
- 3. The contractor shall use the foundation systems indicated on the plans for reference only, and shall field verify foundation sizes, locations, and thicknesses during construction. The contractor shall notify the architect/engineer if existing foundations vary from the information in the contract documents prior to proceeding with the fabrication or construction of any affected elements.
- 4. While performing work adjacent to existing structures, the contractor shall be responsible for adequate shoring and protection of all existing structures, utilities, and services which will be affected by the work in the contract documents.

POST-INSTALLED ANCHORS

- submitted to the structural engineer prior to use. c. Follow all the manufacturer's recommendations and certification testing reports for anchor installation. See specific anchors below for more information.
- d. No anchor shall be installed within 1.5 anchor rod diameters of an abandoned hole that has been filled with non-shrink grout; increase distance to 3 anchor rod diameters when the abandoned hole has not been filled.
- 2. Adhesive Anchors
 - 1. SET-3G (ICC-ES ESR-4057) by Simpson Strong-Tie 2. Pure 110+ (ICC-ES ESR-3298) by Dewalt 3. AC200+ (ICC-ES ESR-4027) by Dewalt
 - 4. HIT-RE 500-V3 (ICC-ES ESR-3814) by Hilti Inc.
 - 5. HIT-HY 200 (ICC-ES ESR-3187) by Hilti Inc.
- b. Adhesive shall be within the manufacturer's recommended lifetime and prior to expiration date. Do not use adhesive that has not been stored per manufacturer's recommendations or may have experienced freeze thaw cycles or extreme heat.
- c. Do not install adhesive anchor in wet or damp hole unless product is approved for such conditions without strength reduction. Do not install adhesive anchors if concrete temperature is below 50-degree F unless adhesive is approved for lower temperature without strength reduction. Refer to manufacturer's published installation instructions.
- d. Follow all the manufacturer's recommendations and certification testing reports regarding hole cleaning prior to adhesive installation. All holes shall be drilled with ANSI standard bits designed for concrete. Diamond core drilled holes are not allowed unless indicated in specific details or approved by the structural engineer prior to use.

REQUIREMENTS FOR SPECIAL INSPECTION, MATERIAL TESTING, AND STRUCTURAL OBSERVATION

General Post-Installed Anchor Notes

- a. Do not install adhesive anchors in concrete if less than 21 days old; do not install mechanical anchors, screw anchor or powder actuated anchors in concrete less than 7 days old. Contractor must obtain written approval from the engineer to install prior to these time periods. Do not apply full load to anchors until concrete has reached 28-day compression strength.
- b. Anchors or adhesives specified in details shall be provided; alternative anchors or adhesives may be used if the contractor provides calculations demonstrating that the alternative can achieve the performance values of the specified product. These calculations, along with an ICC-ES ESR or IAPMO-UES ER approval for use in cracked concrete and compliant with the specified codes herein, must be

3

a. For anchors in concrete, the adhesives shall be as follows:

STATEMENT OF SPECIAL INSPECTION AND QUALITY ASSURANCE Special inspection and quality assurance (including structural testing), as required by section 1704 and 1705 of the 2018 IBC, shall be provided by an independent agency employed by the owner for the items in this section and other areas of the approved construction documents, unless waived by the building official. The names and credentials of the Special **Responsibilities of the Special I Responsibilities of the Contracto** POST-INSTALLED ANCH **ITEM FOR VERIFICATION &** INSPECTION **Post-Installed Anchors and Rein** Adhesive Anchors and Reinforcing Bars Mechanical Anchors and Screw Anchors NON-STRUCTURAL COM Architectural Components locat 1705.12.5 and 1705.12.7) **ITEM FOR VERIFICATION &** INSPECTION Erection and fastening of interior and exterior nonbearing walls

Access floors

Storage racks

Mechanical and Electrical Comp Sections 1705.12.4 and 1705.12. **ITEM FOR VERIFICATION &**

INSPECTION Anchorage of emergency or standby

power systems Piping systems carrying flammable, combustible or highly toxic materials HVAC ductwork containing hazardous materials

Designated seismic systems

STRUCTURAL OBSERVA

If structural observations are require stages of construction listed in the Con the designated structural observer sh made and identify any reported deficie (See IBC 2018 1704.6).

STRUCTURAL OBSERVATION CODE

CONSTRUCTION MILEST CONTRACTOR TO NOTIFY ENGI

STEEL

2

Unistrut Framing DEFERRED SUBMITTALS For the purposes of this section, deferred submittals are defined as per section 107.3.4.1 of the IBC 2018. Submittal documents for deferred submittal items shall be submitted to the engineer, architect and building official for their review for general conformance with the design of the building. DEFERRED STRUCTURAL SUBMITTALS FOR THIS PROJECT ARE Unistrut Systems

l Ins	pectors to be use	d shall be su	omitted to the Building Of	ficial for approval.
nsp	ector			
	Special Inspecto	or shall reviev e with the ar	v all work listed in the spear proved construction plans	cial inspection schedules herein
	Testing and insp	pection repor	ts shall be sent on a week	ly basis to the architect,
	engineer, buildi be brought to tl uncorrected, to	ng official an he immediate the architec	d contractor for review. A a attention of the contract t, engineer and building of	II items not in compliance shall or for correction, and if ficial.
	Once correction a final signed re	ns have been port to the b	made by the contractor, the uilding official stating that	he special inspector shall submit the work requiring special
	inspection was, the approved co	to the best o onstruction p	f the special inspector's kr lans, specifications and 20	nowledge, in conformance with 18 IBC.
or	1			
	The contractor building official section 1704.4. cooperate with The contractor	shall submit a prior to the o This stateme the required shall notify th	a written statement of resp commencement of work in ent shall indicate that the inspections contained her ne designated special inspe	ponsibility to the owner and the accordance with 2018 IBC contractor will coordinate and rein. ector that work is ready for
	inspection at lea All work requiri	ast 24 hours ng special ins	before said inspection is re pection shall remain open	equired. and accessible until it has been
	observed by the	e special insp	ector and deemed accepta	able through inspection report.
	approved by the inspection. Upo certificate of co	e authority h on completio mpliance for	aving jurisdiction to perfor n of fabrication, the appro submittal to the building o	m such work without special ved fabricator shall submit a official.
	The contractor	shall be resp	onsible for their own quali	ty control including materials,
	Tabrication, ere	ction, etc.		
			cc	DMMENTS
ן וסו	rcing Bars (20	18 IBC Sec	tion 1705.1.1)	
			Special inspection	shall be performed per
			manufacturer's requir	ements and approved ICC-ES
			reports noted in POST-	INSTALLED ANCHOR section of
	x	_	epoxy and anchor rod	. If the anchor is not installed
	X		in a horizontal, upv	vardly inclined or overhead
			orientation meant to	resist sustained tension loads,
			special inspection ma	ay be reduced to a periodic
			Special inspection	shall be provided per
			manufacturer's requir	ements and approved ICC-ES
	-	X	reports noted in POST-	INSTALLED ANCHOR section of
			mechanical or screw a	nchor.
				TIONS
od	in Seismic De	sign Cate	vories C D E and E (2018 IBC Sections
cu		Sign cares		
	INSPECTION FRE	QUENCY	CC CC	
(CONTINUOUS	PERIODIC		
	-	х	attachment at comm completion. (Not requ walls < 15 psf.)	materials, fasteners and nencement of work and at lired if <30 feet or for interior
	-	x	Verify that anchorage construction document Anchors section of this the General Structural	ge complies with approved nts and the Post Installed s Special Inspection section of Notes.
			verify that anchorage construction docume	ge complies with approved nts and the Post Installed
	-	X	Anchors section of this	s Special Inspection section of
			the General Structural	Notes.
po רי	nents located	i in Seism	ic Design Categories	бс, D, E and F (2018 IBC
.0) 				
	CONTINUOUS	PERIODIC	CC	DMMENTS
	-	X	Verify that anchorage construction document	ge complies with approved ts.
	_	¥	Verify that installation	n and restraint comply with
-		~	approved construction	documents.
	-	X	approved construction	documents.
1			Verify that manufactur	rer's certificate of compliance
	-	x	conforms to the require 7-16. Verify that the	ements of Section 13.2 of ASCE label, anchorage or mounting
			conforms to the m	nanufacturer's certificate of
		D • • •	compliance.	
	ON PROG	RAM		
a, t nstr	ney shall be do	ne by the E ion Phases s	ngineer of Record or an ection of these notes - A	approved supordinate at the the conclusion of the project
nall	submit to the b	ouilding offici	cial a written statement	that the site visits have been
enc	ies that to the b	est of the st	ructural observer's knov	vledge have not been resolved
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JRCA ARCHITECTS ARCHITECTS AGallowayCo. 577 South 200 East SLC, Utah 84111 O: (801) 533-2100 GallowayUS.com jrcadesign.com
MINICATION HOSPITAL - FLUOROSCOPY RIVERTON HOSPITAL - FLUOROSCOPY 3741 W 12600 S 3741 W 12600 S 3741 W 12600 S Riverton, UT 84065
ALEXANDER PIKET
DETAILS
S-501

		GENERAL MECHANICAL SYMBOLS	
		REVISION NUMBER - SHOWN ON PLANS	18
		POINT WHERE NEW CONNECTS TO EXISTING	18
		POINT WHERE EXISTING IS TO BE DEMOLISHED	1
******	······	- NUMBER OF DETAIL ON SHEET	
		Room	
		ITEM TO BE DEMOLISHED	
		PIPE SIZE TAG (DIAMETER)	
		1/8" / 12" SLOPEBELOW GROUND PIPING	
		INVERT: -105' - 1" PIPE INVERT ELEVATION TAG	
		PIPING BEING DEMOLISHED	
			DROP
		ABBREVIATIONS	DROP
		Ø ROUND LVR LOUVER	DROP
		ABV ABOVE LWT LEAVING WATER TEMPERATURE AC AIR CONDITIONING M/A MIXED AIR	
		AD AREA DRAIN MAX MAXIMUM ADD ADDENDUM MBH ONE THOUSAND BTU PER HOUR AFE ABOVE FINISHED FLOOR MCE ONE THOUSAND CUBIC FEET	
		AFUE ANNUAL FUEL UTILIZATION EFFICIENCY MD MOTORIZED DAMPER ALT ALTERNATE MECH MECHANICAL	
		AP ACCESS PANEL MFR MANUFACTURER ARCH ARCHITECT/ARCHITECTURAL MIN MINIMUM BEE BELOW EINISHED ELOOP	
		BLW BELOW FINISHED FLOOK MISC MISCELLANEOUS BLW BELOW MTR MOTOR BTU BRITISH THERMAL UNITS MU/A MAKF-I IP/AIR	SQUARF
		BTUH BRITISH THERMAL UNITS PER HOUR NC NOISE CRITERIA CAP CAPACITY NC NORMALLY CLOSED	SUPPLY DIFF
		CB CATCH BASIN NIC NOT IN CONTRACT CFM CUBIC FEET PER MINUTE NO NUMBER CLG CEILING NO NUMBER	
		CO CLEAN OUT NO NORMALLY OPEN D DEGREE O OXYGEN	RECTANGULA SUPPLY DIFF
**************************************		DB DRY BULB O/A OUTSIDE AIR DCW DOMESTIC COLD WATER PD PRESSURE DROP	
		DHW DOMESTIC HOT WATER PIV POST INDICATOR VALVE DIA DIAMETER PLBG PLUMBING DN DOMAN PDEGG PDEGG	DIFFUSER
		DN DUWN PRESS PRESSURE DW DISTILLED WATER PRV PRESSURE REDUCING VALVE EA FACH PSI POLINIDS DER SOLIADE INCH	RG11 500
		EAT ENTERING AIR TEMPERATURE PSIG POUNDS PER SQUARE INCH GAUG ELEC ELECTRICAL PWR POWER	E RECT
		EQUIP EQUIPMENT R DUCT RISER EWC ELECTRIC WATER COOLER R/A RETURN AIR EWT ENTERNIC WATER TENDERATURE DOD DESTRUCTION OF TENDERATURE	
		EVEL ENTERING WATER LEWPERATURE ROP RADIANT CEILING PANEL E/A EXHAUST AIR RD ROOF DRAIN EXIST EXISTING RDO ROOF DRAIN OVERFLOW	LINEAK BAR GRI
		FDEGREES FAHRENHEITRECRECESSEDFCOFLOOR CLEAN OUTREDREDUCER	TYPE (SEE SC
		FD FLOOR DRAIN RH RELATIVE HUMIDITY FD FIRE DAMPER RL/A RELIEF AIR EDV EIDE DEPARTMENT VALUE DM DOOM	ſ
		FL FLOOR RPM REVOLUTIONS PER MINUTE FO FUEL OIL RW RAIN WATER	
		FOV FUEL OIL VENT SF SQUARE FOOT FOR FUEL OIL RETURN S/A SUPPLY AIR FOR FUEL OIL RETURN S/A SUPPLY AIR	DIFFUSE
		FUS FUEL UIL SUPPLY SAN SANITARY FPM FEET PER MINUTE SF SQUARE FOOT FS FLOOR SINK SD SMOKE DAMPER	HEATING
		FT FOOT/FEET SM SURFACE MOUNT FTR FIN TUBE RADIATION SP STANDPIPE	COIL FLOW
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		MGD101 LEVEL 1 MED GAS DEMOLITION PLAN	A Galloway Co.
		M001 MECHANICAL GENERAL NOTES	577 South 200 East
	1.1	MD101 MECHANICAL DEMOLITION PLAN	SLC, Utah 84111 O: (801) 533-2100
		M101 HVAC PLAN M501 MECHANICAL DETAILS AND SCHEDULES	GallowayUS.com jrcadesign.com
		PD101 LEVEL 1 PLUMBING DEMOLITION PLAN	
		P101 LEVEL 1 PLUMBING PLAN	
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FIRE PROTECTION GENERAL NOTES

- 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 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, NFPA, AND FACTORY MUTUAL.
- 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 ANY OTHER MECHANICAL SYSTEMS OR COMPONENTS.
- 7. THIS CONTRACTOR SHALL COORDINATE PHASING OF SPRINKLER WORK WITH THE GENERAL CONTRACTOR PRIOR TO STARTING WORK.
- 8. PROVIDE A COMPLETE WET TYPE FIRE PROTECTION SYSTEM AS REQUIRED TO ACCOMMODATE THE FLOOR PLAN AND CEILING TYPES INCLUDING MAINS, BRANCHES, HEADS, VALVES, AND ACCESSORIES AS REQUIRED. THE SYSTEM SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS OF THE STATE BUILDING CODE, LOCAL FIRE DEPARTMENT, AND ALL FEDERAL, STATE, AND LOCAL AUTHORITIES, NFPA, AND FACTORY MUTUAL.
- 9. THE SPRINKLER SYSTEM SHALL BE DESIGNED BASED UPON ACTUAL WATER FLOW TEST DATA OBTAINED AT OR NEAR THE JOB SITE.
- 10. REFER TO REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION REGARDING SPRINKLER HEAD LOCATION AND PIPE, UNLESS NOTED OTHERWISE.
- 11. DIVISION 21 CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR PROPER INSTALLATION OF THE FIRE PROTECTION SYSTEMS ALARM DEVICES INVOLVED WITH FIRE SPRINKLER SYSTEM.
- 12. 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.
- 13. THIS CONTRACTOR SHALL PROVIDE ALL ADDITIONAL SPRINKLER HEADS AS REQUIRED TO ENSURE AN APPROVED FIRE PROTECTION SYSTEM AT NO ADDITIONAL COST TO THE OWNER.
- 14. 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.
- 15. 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.
- 16. AN INSPECTOR'S TEST CONNECTION SHALL BE PROVIDED FOR EACH FIRE SPRINKLER ZONE. THIS CONTRACTOR SHALL PROVIDE FIXED PIPING FROM THE TEST CONNECTION TO AN ADEQUATELY SIZED RECEPTOR WHICH IS CAPABLE OF ACCEPTING THE FULL FLOW OF THE TEST. (EXTERIOR DISCHARGE OF THE TEST CONNECTION SHALL BE PERMITTED ONLY BY SPECIFIC WRITTEN INSTRUCTION FROM THE ENGINEER.)
- 17. SHOW ALL ROOM NUMBERS ON SHOP DRAWING PLANS.
- 18. FLOW TEST DATA FROM #/#/# INDICATES THE FOLLOWING: STATIC PRESSURE # PSI. RESIDUAL PRESSURE: # PSI AT ## GPM. THE HYDRANTS TESTED ARE APPROXIMATELY ### FEET AWAY FROM THE CENTER OF THE SITE LOCATED OFF THE ##"" WATER MAIN IN ## STREET AT AN ELEVATION OF ### FEET ABOVE SEA LEVEL. SEE CIVIL PLANS FOR HYDRANT LOCATION. THE CONTRACTOR SHALL PERFORM A FIRE FLOW TEST IN ACCORDANCE WITH NFPA 291 TO VERIFY THE FLOW TEST DATA GIVEN ABOVE. THE DATA GIVEN ABOVE SHALL BE THE BASIS OF DESIGN UNLESS THE AVAILABLE PRESSURE OR FLOW HAS DECREASED. NOTIFY OWNERS REPRESENTATIVE IF FLOW TEST DATA DIFFERS FROM THE DATA ABOVE. A FIRE PROTECTION ENGINEER OR AN ENGINEER EXPERIENCED IN WATER FLOW TESTING SHALL PERFORM OR WITNESS THE REQUIRED FLOW TESTING AND SIGN THE REPORT PRIOR TO THE FIRST SPRINKLER SYSTEM SUBMITTAL.
- 19. 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.
- 20. 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.
- 21. THIS CONTRACTOR SHALL PREPARE HYDRAULIC CALCULATIONS BASED UPON THE CONFIGURATION OF THE ACTUAL SYSTEM DESIGN AS SHOWN ON THIS CONTRACTOR'S SHOP DRAWINGS.

3

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 WITH LOCAL CODES.
	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, EVAPORATIVE SECTION, AND HEATING COIL LOCATIONS.
	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 REQUIREMENTS.
	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.

- 12. INSTALL ALL DOMESTIC WATER LINES BELOW DUCTWORK.
- 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 FOR ACCESSIBILITY.
- 15. INSTALL ALL EQUIPMENT WITH SUFFICIENT CLEARANCE FOR MAINTENANCE PER MANUFACTURERS RECOMMENDATION.
- 16. COORDINATE ALL FLOOR PENETRATIONS WITH STRUCTURAL AND PROVIDE SLEEVES AS NFCFSSARY. 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 THE LAVATORY.
- 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. COORDINATE ACCESS DOOR SIZE, LOCATION, AND STYLE WITH ARCHITECT.
- 21. FIELD VERIFY LOCATION AND INVERTS OF SITE UTILITIES PRIOR TO INSTALLATION.
- 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.

MEDICAL GAS GENERAL NOTES

- 1. MEDICAL GAS PIPING IS TO BE RUN ABOVE THE CEILING, UNLESS NOTED OTHERWISE.
- 2. MEDICAL GAS PIPING IS SCHEMATIC IN NATURE. FIELD VERIFY EXACT PIPE ROUTING AND COORDINATE WITH ALL OTHER TRADES.
- 3. MOUNT ALL SERVICE VALVES NEAR CEILING HEIGHT FOR ACCESSIBILITY.
- 4. ALL SERVICE VALVES SHALL BE LOCKABLE. PROVIDE FRANGIBLE LOCK FOR ALL SERVICE VALVES.
- 5. ALL ZONE VALVE BOXES REQUIRE SOURCE AIR FROM LEFT SIDE AND CONTROLLED AIR FROM RIGHT SIDF

MECHANICAL GENERAL NOTES

- 1. COORDINATE EXACT PLACEMENT OF DIFFUSERS, GRILLES AND REGISTERS WITH ARCHI 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 DIFFUSE REGISTER OR GRILLE IT SERVES UNLESS NOTED OTHERWISE, TYPICAL.
- 4. COORDINATE EXACT MOUNTING LOCATION OF ALL THERMOSTATS WITH LATEST REVISIO ARCHITECTURAL ELEVATION AND FURNISHINGS PLANS, TYPICAL.
- 5. THE MECHANICAL CONTRACTOR SHALL PROVIDE FIRE, SMOKE OR COMBINATION FIRE/S DAMPERS AT ALL LOCATIONS SHOWN ON THE CONTRACT DOCUMENTS AND AS REQUIRE THE INTEGRITY OF ALL SMOKE AND FIRE PARTITIONS. THE CONTRACTOR SHALL REFER LATEST ARCHITECTURAL LIFE SAFETY PLANS FOR ALL FIRE AND SMOKE PARTITION LOC 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 TEES, TYPICAL.
- 7. INSTALL ALL TERMINAL BOXES IN EASILY ACCESSIBLE AND SERVICEABLE LOCATIONS, M MANUFACTURERS REQUIRED CLEARANCES ON EACH SIDE, SEE DETAILS, TYPICAL.
- 8. DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. REFER TO MECHANICAL SPE FOR EXTENT OF DUCT INSULATION AND LINER AND ADJUST SHEET METAL DIMENSION.
- 9. PROVIDE AND INSTALL REMOTE DAMPER OPERATORS FOR ALL DAMPERS INSTALLED AB INACCESSIBLE CEILING, SEE MECHANICAL SPECIFICATIONS FOR EQUIPMENT REQUIREM TYPICAL
- 10. PROVIDE AND INSTALL HIGH EFFICIENCY TAKE-OFF FITTINGS AND BALANCING DAMPER / BRANCH CONNECTIONS TO LOW PRESSURE DUCTWORK. PROVIDE BALANCING DAMPERS 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 CONN MEDIUM PRESSURE DUCTWORK.
- 12. WHERE DUCTWORK CROSSES, SUPPLY DUCTWORK IS USUALLY BELOW RETURN AND EX DUCT. RETURN DUCTWORK IS USUALLY BELOW EXHAUST DUCTS.
- 13. AT LOCATIONS WHERE DIFFUSERS OR GRILLES ARE UNDER DUCTWORK, CONTRACTOR FABRICATE TRANSITION BOOT FROM FLEX CONNECTION TO DIFFUSER OR GRILLE WITH DAMPER, TYPICAL.
- 14. THE MECHANICAL CONTRACTOR SHALL PROVIDE CEILING MOUNTED ACCESS DOORS FO SMOKE AND COMBINATION FIRE/SMOKE DAMPERS INSTALLED ABOVE INACCESSIBLE CE VERIFY EXACT INSTALLATION LOCATIONS PRIOR TO COMMENCING WORK AND COORDIN INSTALLATIONS WITH LATEST ARCHITECTURAL REFLECTED CEILING PLANS.
- 15. ALL VAV BOXES TO HAVE REHEAT COILS, EXCEPT AS NOTED. PROVIDE EQUIPMENT TAG SCHEDULE. PROVIDE A MINIMUM OF TWO DUCT DIAMETERS OF STRAIGHT ROUND DUCT VAV BOX. BOX SHALL BE HARD CONNECTED (CONICAL) TO MEDIUM PRESSURE DUCT, TY
- 16. PROVIDE ACCESS DOORS TO ACCESS VAV BOX CONTROLS ABOVE HARD CEILINGS. PRO MINIMUM 24" X 24".
- 17. FLEX DUCT IS REQUIRED FOR ALL DIFFUSERS AND GRILLES INSTALLED IN LAY-IN CEILING DIFFUSERS AND GRILLES IN HARD LID CEILINGS, THE DUCTWORK SHALL BE EXTENDED A TO THE DIFFUSER AND SHALL BE CONNECTED WITH A HARD CONNECTION OR A FLEX DU 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 CONTRACT DOCUMENTS.
- 19. PROVIDE ACCESS TO ALL TEMPERATURE CONTROLS ABOVE CEILING, LOCATE IN ACCES LOCATION. WHERE THERE ARE HARD CEILINGS THE CONTRACTOR SHALL PROVIDE 24" DOOR.
- 20. SUPPLY AND RETURN PIPING TO COILS ARE THE SAME SIZE.
- 21. CONTRACTOR SHALL LOCATE THERMOSTATS AND TEMPERATURE SENSORS AT 5'-0" AFF OF 8" FROM LIGHT SWITCH, UNLESS OTHERWISE NOTED ON THE ARCHITECT'S ELEVATION COORDINATE EXACT LOCATIONS WITH ARCHITECT.
- 22. REFER TO MECHANICAL PIPING OR ZONING DRAWINGS FOR THERMOSTAT AND TEMPERA SENSOR LOCATIONS.
- 23. CONDENSATE DRAINS SHALL BE SUPPLIED FOR ALL COOLING EQUIPMENT. CONTRACTOR ENSURE PROPER INSTALLATION AND DRAINAGE AS REQUIRED BY FEDERAL, STATE, AND CODES. CONDENSATE PIPINE SHALL BE TYPE "L" COPPER UNLESS OTHERWISE NOTED IN SPECIFICATIONS.
- 24. PROVIDE A 4" HOUSEKEEPING PAD FOR EACH PIECE OF MECHANICAL EQUPMENT THAT I MOUNTED. COORDINATE SIZES WITH MECHANICAL EQUIPMENT SELECTED.
- 25. ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE RATED FOR PRESSURE CLAS UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS.
- 26. THIS CONTRACTOR SHALL BE REQUIRED TO REPLACE FILTERS ON HVAC EQUIPMENT AF DUST PRODUCING CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO THE FINAL PU

MECHANICAL PIPING GENERAL NOTES

- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INS COMPLETE AND OPERABLE PIPING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPEC AS REQUIRED BY CODE.
- 2. UNLESS OTHERWISE NOTED: ALL MECHANICAL PIPING IS OVERHEAD TO RUN ABOVE DU TIGHT TO UNDERSIDE OF STRUCTURE.
- 3. INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHE APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE.
- 4. ALL VALVES SHALL BE INSTALLED SO THAT VALVES REMAINS IN SERVICE WHEN EQUIPM PIPING ON EQUIPMENT SIDE OF VALVE IS REMOVED.
- 5. PROVIDE AIR VENT AT HIGH POINT OF EACH DROP IN THE HEATING AND CHILLED WATER SYSTEM.
- 6. 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
- 8. COORDINATE LOCATION OF THERMOSTAT WITH ARCHITECTURAL FURNISHING PLANS. MOU THERMOSTAT AT HEIGHT AS SPECIFIED ON ARCHITECTURAL PLANS OR SPECIFICATIONS.

	PROJECT GENERAL NOTES	
IITECTURAL	1. THE PROJECT GENERAL NOTES APPLY TO ALL DISCIPLINES.	
	2. REMOVE ALL UNUSED PIPING, DUCTWORK, EQUIPMENT, AND ACCESSORIES.	A Refine Let 13
ERS,	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	577 South 200 East SLC, Utah 84111 O: (801) 533-2100
ION OF	REASONABLE BEFORE THE FINAL BID. AFTER THE FINAL BID THE CONTRACTOR WILL NOTIFY THE OWNER, ARCHITECT, AND MECHANICAL DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF EXISTING CONDITIONS THAT MAY AFFECT THE DESIGN.	GallowayUS.com jrcadesign.com
SMOKE ED TO MEET	 THE MECHANICAL CONTRACTOR SHALL PERFORM SERVICE AND REPAIR ON THE EXISTING EQUIPMENT AND ITS ACCESSORIES AS FOLLOWS: CLEAN ALL COILS, REPLACE THE FILTERS AND 	
R TO THE CATIONS.	BELTS, INSPECT, REPAIR, OR REPLACE THE ECONOMIZERS, DRIVERS AND FAN BEARINGS, MOTORS, CONTROL COMPONENTS, VALVES, AND ANY OTHER ITEM NECESSARY FOR A COMPLETE AND	
ELBOWS OR	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.	VBFA 181 East 5600 South Murray, Utah 84107 O: (801)530-3148
MEETING ALL	 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. UNSEAL DRAINS AT COMPLETION OF CONSTRUCTION. 	www.vbfa.com VBFA Project #: 21411
ECIFICATIONS	 COORDINATE INSTALLATION OF PIPING, DUCTWORK, CONDUIT, LIGHTS, CABLE TRAY, STRUCTURE, EQUIPMENT, CEILINGS, ARCHITECTURAL COMPONENTS, AND ANYTHING ELSE PERTAINING TO THE 	
BOVE MENTS,	PROJECT TO PREVENT CONFLICTS.	
AT ALL RS AT EACH	 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 INVOLVED ON THIS PROJECT. 	
	8. FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL	
NECTIONS TO	REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO THE INTERNATION BUILDING CODE, INTERNATIONAL MECHANICAL CODE, AND INTERNATIONAL PLUMBING CODE.	
	9. LOCATE EQUIPMENT REQUIRING ACCESS 2'-0" MAXIMUM ABOVE CEILING.	
to Balancing	10. ALL ROOF MOUNTED EQUIPMENT SHALL BE A MINIMUM 10'-0" FROM EDGE OF ROOF.	
or all fire, Eiling. Field Nate	11. COORDINATE INSTALLATION OF DUCTWORK, PIPING AND MECHANICAL EQUIPMENT WITH NEC CLEARANCES INCLUDING THE SPACE ABOVE ELECTRICAL PANELS, TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK 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. PROVIDE PANS IF REQUIRED UNDER PIPING.	
G TO MATCH	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 AND SMOKE RATED PARTITIONS TO MAINTAIN RATINGS. REFER TO SPECIFICATION.	
YPICAL. OVIDE	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.	
IGS. FOR ALL THE WAY	15. REFER TO PLUMBING SERIES DRAWINGS FOR GAS PIPING.	S S
	16. ALL PIPE AND DUCT SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN.	
	17. FOR DETAILS, EQUIPMENT CONNECTIONS, AND PIPE SIZES NOT SHOWN ON THE SEGMENTS, REFER TO DETAILS, SCHEDULES, AND SPECIFICATIONS.	
SSIBLE X 24" ACCESS	18. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AT A LEVEL OF WORKMANSHIP CONSISTENT WITH THE SPECIFICATIONS.	FLU
F, A MINIMUM ONS.	19. MECHANICAL CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT IS PROVIDED AND INSTALLED WITH CLEARANCES PER MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL MAINTAIN PROPER SERVICE SPACE FOR COIL PULLS, BAS DEVICES, MAINTENANCE ACCESS, ETC.	AL-
RATURE	20. INSTALL EXPOSED PIPING AND DUCTWORK AS HIGH AS PRACTICAL IN ROOMS WITHOUT CEILINGS.	
DR SHALL D LOCAL IN THE	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	HOSP DRESS
IS FLOOR	ALL OTHER EXISTING CONDITIONS TO AVOID INTERFERENCE IN THE FIELD. 22. THE CONTRACTOR SHALL INFORM THE DESIGNER OF ANY PROPOSED DEVIATIONS FROM THE CONTRACT DOCUMENTS	
ASS OF 2" W.G.	 IF CONTRACTOR ENCOUNTERS MATERIAL WHICH MAY CONTAIN ASBESTOS, IMMEDIATELY STOP WORK IN THIS AREA AND NOTIFY THE OWNER. 	
FTER ALL	24. DETAILS REFERENCE ALL SHEETS.	
JNCH.	25. INSTALL ALL PIPING AND DUCTWORK WITHOUT FORCING OR SPRINGING.	
	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.	
	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	21031
JCTWORK AND	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 BELOW THE CEILING ACCESS.	CONSTRUCTION DOCUMENTS 11/02/2021
IER	28. WHERE VALVING, ACCESSORIES, OR EQUIPMENT IS LOCATED IN A WALL, PROVIDE AN APPROPRIATELY SIZED ACCESS DOOR. COORDINATE ACCESS DOOR SIZE, LOCATION, AND STYLE WITH ARCHITECT.	
MENT OR	29. CONTRACTOR TO PROVIDE VALVE IDENTIFICATION AND LOCATION ON ALL CEILING TILES WHERE	
r Piping	VALVES ARE LUGATED.	
		ROFESS IO
SHOWN.	<u>* NOTE *</u> ALL OF THE GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.	Borred J. Scort
MOUNT		∑ / No. 10188004-2202

M00²

MECHANICAL

GENERAL

NOTES





	PLUIVIDING FIX I URE SCHEDULE									
ID	FIXTURE	CW	HW	W	V	NOTES	SPECIFICATION			
		(IN)	(IN)	(IN)	(IN)	NOTES	SFECIFICATION			
S-8	SINK	1/2	1/2	2	2	INTEGRAL BASIN, MANUAL FAUCET	SINK (BASIN INTEGRAL TO COUNTERTOP): CHICAGO 786-GN8FCXKABCP FAUCET, 4" WRIST BLADES, GN8 RIGID/SWING CONVERTIBLE GOOSE NECK SPOUT WITH 1.5 GPM FC LAMINAR FLOW CONTROL AND PLAIN END SPOUT AND RING. FLEXIBLE STAINLESS STEEL SUPPLIES WITH LOOSE KEY ANGLE STOPS; CHICAGO 327-XCP OPEN-GRID STRAINER AND CAST BRASS P-TRAP WITH CLEAN OUT PLUG. PROVIDE ADA COMPLIANT UNDER COUNTER PIPING WRAP BY TRUE-BRO, COLOR TO BE WHITE.			
1. ALL UND	ALL UNDER GROUND WASTE AND VENT SHALL BE 2" OR GREATER PER DRAWINGS.									

3

4



DI LIMPING EIVTUDE COLEDI II E

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE

	· · · · · · · · · · · · · · · · · · ·												
						FACE	NECK	INSTALLATION					
ID	DESCRIPTION	MANUFACTURER	MODEL	QTY	SYSTEM	SIZE	SIZE	BORDER TYPE	SPECIFICATION				
CD-1	3-CONE DIFFUSER	Titus	TMS	4	S/A	24x24	10"	TYPE 3 (LAY-IN)	HIGH PERFORMANCE 3-CONE DIFFUSER W/ 3 WAY BLOW				
									PATTERN				
RG-1	PERFORATED DIFFUSER WITH DEFLECTORS	Titus	PAR	2	R/A	24x24	16"	TYPE 3 (LAY-IN)	PERFORATED DIFFUSER				

MEDICAL GAS OUTLETS SCHEDULE												
		# OF OUTLI	PIPE DROP SIZE TO OUTLET(S)									
]				
SYMBOL	ROOM	02	MA	MV	02	MA	MV	REMARKS				
MO-1	SEE PLANS	1	-	-	1/2	-	-	1,2				

UNLESS NOTED OTHERWISE, ALL OUTLETS ARE CHEMETRON-STYLE QUICK-CONNECTS

REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS FOR EXACT LOCATION AND PLACEMENT OF ... 1. PIPE DROP SIZES ARE FOR ONE SET OF OUTLETS

1

2. WALL MOUNTED OUTLETS

2











	ELECTRICAL G	ENF	KAL NUTES
1.	<u>GENERAL NOTES:</u> THE ELECTRICAL SYSTEMS DEFINED BY THESE PLANS AND THE SPECIFICATIONS ARE TO BE CONSTRUCTED AS COMPLETE AND OPERABLE SYSTEMS AND SHALL BE BID WITH THIS INTENT. THE CONTRACTOR SHALL VISIT	24.	IT IS THE RESPONS INSTALLED WITHIN ETC. ANY EXISTING CONSTRUCTION/R
	THE SITE, READ ALL THE RELEVANT DOCUMENTS, AND BECOME FAMILIAR WITH THE TYPE OF CONSTRUCTION AND WORK TO BE ACCOMPLISHED. SHOULD ANY ERROR, OMISSION, OR CONFLICT EXIST IN EITHER THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING BEFORE SUBMITTING THEIR BID PRICE SO A CHANGE CAN BE ISSUED IN A PRE-BID ADDENDUM. OTHERWISE, THE CONTRACTOR AND/OR		ROUGH-IN FOR RE
	EQUIPMENT SUPPLIERS SHALL SUPPLY THE PROPER MATERIALS AND LABOR TO INSTALL COMPLETE AND OPERABLE SYSTEMS INCLUSIVE OF THE ORIGINAL BID. WHEN EACH ELECTRICAL SYSTEM IS COMPLETE, THE CONTRACTOR SHALL TEST AND CONFIRM ITS PROPER OPERATION. ANY INCOMPLETE SYSTEM SHALL BE MADE COMPLETE AND OPERABLE PRIOR TO PROJECT CLOSEOUT.	25.	THE EC SHALL CO WHICH NEW CIRCU BRANCH CIRCUIT I THE EC SHALL CO TELE/DATA OUTLE
2.	THE ARCHITECTURAL AND MECHANICAL PLANS ARE CONSIDERED A PART OF THE ELECTRICAL DOCUMENTS SO FAR AS ANY ELECTRICAL ITEMS THEY MAY CONTAIN. THE ELECTRICAL CONTRACTOR SHALL REFER TO AND COORDINATE WITH THEM. NO EXTRA COST SHALL BE ALLOWED FOR FAILURE TO COORDINATE THE CONTRACT DOCUMENTS WITH OTHER TRADES AND/OR IF EQUIPMENT DIMENSIONS ARE GREATER THAN SPECIFIED AND/OR DIMENSIONED ON THE PLANS.	26.	AS NECESSARY TO ALL DEVICES NOT WIRING TO AN EXI OPERATION.
3.	THE ELECTRICAL CONTRACTOR SHALL PROVIDE EQUIPMENT, MATERIALS, AND LABOR FOR THE CONNECTIONS		LIGHTING NOTES:
4.	THIS PROJECT IS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MOST RECENT LOCAL, STATE, AND NATIONAL CODES. IF AT ANY TIME DURING OR AFTER CONSTRUCTION SOMETHING IS FOUND TO BE INSTALLED IN VIOLATION OF THESE CODES LISTED ABOVE. IT SHALL BE CORRECTED BY THE CONTRACTOR	27.	ALL BATTERY POW NIGHT LIGHTS, OR CIRCUIT FEEDING
5.	WHERE A RACEWAY ENTERS A BUILDING OR STRUCTURE FROM THE OUTSIDE, IT SHALL BE SEALED AS PER	28.	LUMINAIRES INSTA
6.	ALL ELECTRICAL EQUIPMENT THAT IS LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING OR	- 29.	ALL LUMINAIRES S NONSTRUCTURAL
	MAINTENANCE WHILE ENERGIZED SHALL BE FIELD OR FACTORY LABELED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS PER NEC 110.16. THE LABEL SHALL ALSO CONTAIN THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE FAULT CURRENT CALCULATIONS WERE PERFORMED AS PER NEC 110.24.	30.	TO MAINTAIN CON MANUFACTURER, STARTING CHARAG
7.	ALL PANELBOARDS AND SWITCHBOARDS SHALL BE PERMANENTLY MARKED TO INDICATED EACH DEVICE OR EQUIPMENT WHERE THEIR POWER ORIGINATES AS PER NEC 408.4B.	31.	LIGHT FIXTURES IN PROPER ENVIRON APPROPRIATE FOR
8.	ALL EQUIPMENT PROVIDED BY THE EC SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, AND BE PROPERLY INSTALLED FOR THE CONDITIONS AND SPACE THAT EQUIPMENT IS BEING INSTALLED WITHIN.	32.	EXPOSURE TO UV
9.	THE EC SHALL INSTALL A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN EACH CONDUIT RUN. CONDUIT SHALL NOT BE USED AS AN EQUIPMENT GROUNDING CONDUCTOR. THE EC SHALL GROUND THE ELECTRICAL SYSTEM IN ACCORDANCE WITH LOCAL AND NATIONAL CODES. CROUNDING IN BATIENT CARE AREAS TO MEET		FOR REVIEW. POWER NOTES:
10.	NEC 517.13 REQUIREMENTS. CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMMATIC, NOT INDICATING THE ROUTING REQUIRED.	33.	ELECTRICAL CONT ANY ELECTRICAL F CLEARANCE IS NO
	THE EC SHALL ROUTE THE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE INSTALLATION AND SHALL COORDINATE WITH DUCTWORK, PIPING, EQUIPMENT, BUILDING STRUCTURE, AND OTHER POTENTIAL OPSTRUCTIONS	34.	WIRING DEVICES S
11.	THE CONTRACTOR SHALL ALLOW THE MOVEMENT, BEFORE ROUGH-IN, OF ANY ELECTRICAL PANEL, DEVICE,	35.	THE EC SHALL MAI EQUIPMENT IS REM
12.	THE EC SHALL SECURE ALL CONDUIT TO THE STRUCTURE AS IT IS SET IN PLACE USING INDUSTRY STANDARD METHODS AND PRACTICES. TO ASSURE ALL DEVICES ARE RIGIDLY SET, THE ELECTRICAL CONTRACTOR SHALL SECURE ALL DEVICE BOXES WITH BRACKETS, HANGERS, ETC. DESIGNED FOR THE APPLICATION.	36.	EC SHALL COORDI ELECTRICAL CONN EQUIPMENT UNLES WIRING DIAGRAMS
13.	MINIMUM SIZE CONDUIT SHALL BE 3/4" UNO. CONDUIT INSTALLED WITHIN THE BUILDING IN DRY LOCATIONS WITHIN WALL, CEILINGS, OR EXPOSED NOT SUBJECT TO PHYSICAL DAMAGE SHALL BE EMT WITH STEEL SET SCREW FITTINGS. IN EXTERIOR LOCATIONS THE CONDUIT SHALL BE EMT WITH COMPRESSION GLAND TYPE		ARE PROVIDED, AN SHALL BE CORREC EQUIPMENT AND A
14.	FITTINGS. FLEXIBLE CONDUIT SHALL BE LIMITED TO CONNECTIONS TO LIGHT FIXTURES AND FINAL CONNECTIONS TO MOTORS OR OTHER EQUIPMENT SUBJECT TO VIBRATION. LENGTHS OF FLEXIBLE OR SEAL-TITE CONDUIT	37.	EC SHALL COORDI BOXES FOR THERI LOCATION OF THE
15.	SHALL NOT BE GREATER THAN 72 INCHES.	- 38.	PROVIDE A 20AMP HEATING, AIR CON GROUND FAULT CI
16.	BEFORE ANY ELECTRICAL CONDUIT, BOXES, ETC. ARE COVERED (FLOOR, CEILINGS, WALLS, ETC.), THEY SHALL		
17.	WHERE WIRE SIZE IS NOT SHOWN ON THE DRAWINGS FOR 20A, 120VAC BRANCH CIRCUITS, THE CIRCUIT SHALL	39.	THE ELECTRICAL C
	CONSIST OF 2#12 (CU,THHN) + 1#12 (CU,THHN) GND IN 3/4" EMT CONDUIT. THIS WIRE SIZE SHALL BE INCREASED TO #10 (CU,THHN) FOR BRANCH CIRCUITS WITH OVERALL LENGTHS EXCEEDING 125' TO ACCOMMODATE FOR VOLTAGE DROP. REFER TO EQUIPMENT SCHEDULES, FEEDER SCHEDULES, AND NOTES ON DRAWINGS FOR ALL OTHER BRANCH CIRCUIT AND FEEDER WIRE/CONDUIT SIZING. ALL WIRING SHALL BE		SHALL CONSIST OI SPACE OR TO THE SHALL BE PROVIDI
19		40	
19.	SHALL BE SOLID AND CONDUCTORS #8AWG OR LARGER SHALL BE STRANDED. METAL CLAD CABLING MAY BE USED BETWEEN DEVICES SUCH AS LIGHTING, RECEPTACLES, SWITCHES, ETC.	40.	ROOF. ALL ROOF COMPLETELY SEA CONDUIT.
	UNLESS OTHERWISE REQUIRED BY THE NEC. HOME RUNS SHALL BE INSTALLED IN CONDUIT. MC CABLE SHALL NOT BE INSTALLED EXPOSED. HOSPITAL GRADE MC CABLE SHALL BE USED AS REQUIRED BY NEC ART 517.		1
20.	EC SHALL CLEAN THE ENTIRE ELECTRICAL SYSTEM AFTER COMPLETION OF THE INSTALLATION. REMOVE ALL FINGER PRINTS, FOREIGN MATTER, PAINT, DIRT, GREASE, AND UN-NEEDED LABELS OR STICKERS FROM FIXTURES AND EQUIPMENT. REMOVE ALL RUBBISH AND DEBRIS ACCUMULATED DURING INSTALLATION FROM THE PREMISES.		
21.	IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS FOR ALL DEVICES TO BE FLUSH MOUNTED AND CONDUIT/CABLING INSTALLED CONCEALED WITHIN WALLS/CEILINGS. IN AREAS WHERE CONDUIT MUST BE INSTALLED EXPOSED IT SHALL BE COORDINATED WITH THE ARCHITECT AND/OR ENGINEER. ALL EFFORTS SHALL BE MADE TO CONCEAL WIRING METHODS.		
22.	ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE SEALED WITH FIRE STOPPING, IE. 3M BRAND CAULK, PUTTY, STRIP AND SHEET FORMS, DOW CORNING 3-6548 SILICONE RTV FOAM.		
23.	COORDINATE LOCATION OF WALL MOUNTED DEVICES WITH CABINETRY AND OTHER WALL OBSTRUCTIONS. COORDINATE CEILING MOUNTED DEVICES WITH CEILING OBSTRUCTIONS. ANY DEVICES THAT NEED TO BE RELOCATED MUST BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER PRIOR TO ROUGH-IN FOR NEW LOCATION.		

ISIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE PLACEMENT OF ALL DEVICES N THE CEILING SUCH AS LIGHTING, SPEAKERS, FIRE SPRINKLERS, SMOKE/HEAT DETECTORS, G DEVICES THAT NEED TO BE RELOCATED IN ORDER TO ACCOMMODATE NEW REMODEL MUST BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER PRIOR TO ESOLUTION AND FURTHER DIRECTION.

ORDINATE AND CONFIRM THE EXACT LOCATION OF THE EXISTING POWER PANELS FROM CUITS ARE BEING FED. VERIFY EXISTING BRANCH CIRCUIT BREAKERS AND PROVIDE NEW BREAKERS AS NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM. OORDINATE AND CONFIRM THE EXACT LOCATION OF THE TELECOM ROOM FROM WHICH NEW ETS WILL BE FED. VERIFY EXISTING PATCH PANEL SPACES AND PROVIDE NEW PATCH PANELS TO LAND/TERMINATE NEW TELECOM CABLING.

F SHOWN ON PLANS ARE EXISTING TO REMAIN IN PLACE AND FUNCTIONAL. IN THE EVENT THAT (ISTING DEVICE IS DAMAGED, WIRING MUST BE REPLACED AND DEVICE BROUGHT BACK TO FULL

WERED OR CONTINUOUS BURN LUMINAIRES SHOWN ON THE PLANS, SUCH AS EXIT LIGHTS, R EMERGENCY LIGHTS, SHALL BE CONNECTED TO THE UN-SWITCHED LEG OF THE LIGHTING G THAT AREA.

FALLED IN THE MECHANICAL ROOM SHALL BE PLACED SO THAT ALL EQUIPMENT IS ADEQUATELY FER THE MECHANICAL EQUIPMENT IS IN PLACE.

SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND NOT THE CEILING GRID OR OTHER L MEMBERS.

NSISTENT LIGHT QUALITY, FOR ANY ONE LAMP TYPE SUPPLIED, LAMPS SHALL BE OF THE SAME , SURFACE TEMPERATURE, COLOR RENDERING INDEX, LAMP EFFICACY, LUMEN OUTPUT, AND ACTERISTICS FOR ALL INSTALLED.

INSTALLED IN DAMP OR WET LOCATIONS SHALL BE UL LISTED FOR INSTALLATION IN THE NMENT. CARE SHOULD BE TAKEN TO ENSURE THAT DIFFUSERS AND LENSES ARE OR THEIR INSTALLED USE AND PREMATURE DISCOLORATION WILL NOT RESULT DUE TO V LIGHT, CHEMICALS, OR OTHER CONDITIONS.

NTRACTOR SHALL PROVIDE LIGHTING CONTROL SHOP DRAWINGS WITH ELECTRICAL SUBMITTAL

ITRACTOR SHALL CONFIRM MINIMUM CODE (NEC) WORKING CLEARANCE BEFORE INSTALLING PANELS OR CABINETS AND SHALL MOVE THE PANELS IF REJECTED BY AN INSPECTOR. IF OT POSSIBLE, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IN WRITING.

SHALL MATCH EXSTING AND SHALL BE COORDINATED WITH ARCHITECT.

AINTAIN ELECTRICAL CONTINUITY TO REMAINING EQUIPMENT WHEN ANY EXISTING ELECTRICAL EMOVED.

DINATE WITH EQUIPMENT SUPPLIERS ON THE EXACT LOCATIONS OF ALL EQUIPMENT AND INECTIONS PRIOR TO ROUGH-IN. THE EC SHALL MAKE THE FINAL CONNECTION TO ALL ESS OTHERWISE DIRECTED BY THE EQUIPMENT SUPPLIER. OBTAIN FROM SUPPLIERS ALL IS FOR EQUIPMENT PRIOR TO ANY ROUGH-IN. TO ASSURE THAT PROPER CHARACTERISTICS ANY INCORRECT WIRING OR DEVICES INSTALLED BY THE EC WITHOUT THE WIRING DIAGRAM ECTED AT THE EC'S EXPENSE. PROVIDE COPIES OF WIRING DIAGRAMS WITHIN EACH PIECE OF ADDITIONAL COPIES WITH THE OPERATION AND MAINTENANCE MANUALS.

DINATE WITH THE MECHANICAL CONTRACTOR TO PROVIDE CONDUIT AND DEVICE MOUNTING RMOSTATS AND OTHER MECHANICAL CONTROLS. REFER TO MECHANICAL DRAWINGS FOR THE ERMOSTATS.

P, 120VAC RECEPTACLE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF NDITIONING, AND REFRIGERATION EQUIPMENT PER NEC 210.63. RECEPTACLE SHALL BE OF THE CIRCUIT INTERRUPTING TYPE, INSTALLED WITHIN A CAST METAL BOX, AND WITHIN 25' OF ALL MENT.

NOTES:

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CONTRACTOR SHALL PROVIDE ROUGH-IN ONLY FOR THE TELECOM/CATV SYSTEMS. THIS DF A FOUR SQUARE DEVICE MOUNTING BOX WITH CONDUIT TO ABOVE ACCESSIBLE CEILING E CEILING SPACE ABOVE IF OPEN. CABLING, JACKS, FACEPLATES, TESTING AND TERMINATIONS DED AND INSTALLED BY OTHERS.

NTRACTOR TO INSTALL A ROOF JACK (BOOT) FOR ALL CONDUIT PENETRATIONS THROUGH THE F PENETRATION SEALS SHALL BE IN ACCORDANCE WITH THE ROOF WARRANTY AND BE ALED WITH ROOF ADHESIVE. UTILIZE PROPER CLAMPING METHODS TO SEAL BOOT AROUND

ELECTRICAL SYMBOL SCHEDULE							
SYMBOL	DESCRIPTION	MOUNTI					
	LIGHT FIXTURE - SURFACE OR RECESSED	SEE DRAW					
	EMERGENCY LIGHT FIXTURE - SURFACE OR RECESSED	SEE DRAW					
	LIGHT FIXTURE - OPEN STRIP	SEE DRAW					
	EMERGENCY LIGHT FIXTURE - OPEN STRIP	SEE DRAW					
Ю	LIGHT FIXTURE - WALL MOUNTED	WALL					
H	EMERGENCY LIGHT FIXTURE - WALL MOUNTED	WALL					
\square	LIGHT FIXTURE - DOWNLIGHT	CEILING					
	EMERGENCY LIGHT FIXTURE - DOWNLIGHT	CEILING					
\diamond	LIGHT FIXTURE - WALL WASH DOWNLIGHT	CEILING					
$\bigcirc \bigcirc$	LIGHT FIXTURE - CEILING MOUNTED	CEILING					
\bigcirc	LIGHT FIXTURE - PENDANT/CHANDELIER	CEILING					
	LIGHT FIXTURE - WALL BRACKET	WALL					
	EMERGENCY LIGHT FIXTURE - WALL BRACKET	WALL					
000	LIGHT TRACK WITH FIXTURES	SURFAC					
×H	EXIT FIXTURE - WALL MOUNT	WALL					
\otimes	EXIT FIXTURE - CEILING MOUNT	CEILING					
080	EXIT FIXTURE W/ EMERGENCY HEADS - WALL MOUNT	WALL					
080	EXIT FIXTURE W/ EMERGENCY HEADS - CEILING MOUNT	CEILING					
Ø <u>em</u> Ø	DUAL HEAD EMERGENCY LIGHT FIXTURE	WALL					
	AREA LIGHT FIXTURE - POLE MOUNTED	POLE					
H	OCCUPANCY SENSOR - CEILING MOUNT	CEILING					
PO	PHOTO-ELECTRIC CELL WITH RELAY	SURFAC					
PP	LIGHTING RELAY/POWER PACK	SURFAC					
TC	TIME CLOCK - 7 DAY	5' - 0"					
\$os	WALL OCCUPANCY SENSOR SWITCH	4' - 0"					
\$	SINGLE POLE SWITCH	4' - 0"					
\$2	DOUBLE POLE SWITCH	4' - 0"					
\$3	THREE WAY SWITCH	4' - 0"					
\$4	FOUR WAY SWITCH	4' - 0"					
\$D	DIMMER SWITCH	4' - 0"					
\$LV	LOW VOLTAGE SWITCH	4' - 0"					
\$тн	THERMAL OVERLOAD SWITCH	4' - 0" UN					
\$P	PILOT LIGHT SWITCH	4' - 0"					
\ominus	DUPLEX OUTLET, 20A, 120VAC	1' - 6" UN					
e	DUPLEX OUTLET, 20A, 120VAC - GFCI	1' - 6" UN					
\ominus	DUPLEX OUTLET - SPLIT WIRED	1' - 6" UN					
	DUPLEX OUTLET - ISOLATED GROUND	1' - 6" UN					
	DUPLEX OUTLET WITH USB PORTS	1' - 6" UN					
OS⊖	DUPLEX OUTLET - OCCUPANCY SENSOR CONTROLLED	1' - 6" UN					
	DUPLEX OUTLET, 20A, 120VAC - CEILING	CEILING					
	DUPLEX OUTLET, 20A, 120VAC - FLOOR	- FLOOR					
₩	FOURPLEX OUTLET, 20A, 120VAC	1' - 6" UN					
₩	FOURPLEX OUTLET, 20A, 120VAC - GFCI	1' - 6" UN					
		1 - 6" UN					
	FOURPLEX OUTLET, 20A, 120VAC - CEILING	CEILING					
	ADDITANCE OUTLET, 208/240V/SINCLE DUASE						
¥							
		1' - 6" 11					
▼		1' - 6" 11N					
		1' - 6" 1 1					
▼	DATA OUTLET - FLOOR						
	CEILING DATA OUTLET/ WIRFLESS ACCESS POINT						
$\overline{\mathbf{v}}$	CABLE TELEVISION OUTLET	1' - 6" UN					
¥							

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		J	JUNCTION BOX			SURFACE	
	NOTEC	- U	WALL JUNCTION BOX			1' - 6" UNO	
	NUTES		FLOOR JUNCTION BOX	FLOOR			
GS	1		DISCONNECT SWITCH - NON-FUSE	D		5' - 0" UNO	4
68	1, 2	L F	DISCONNECT SWITCH - FUSED	5' - 0" UNO	4		
65 65	1	42	DISCONNECT SWITCH - SHUNT TRI	5' - 0" UNO	4		
50	1, 2	<u> </u>	COMBINATION MAGNETIC STARTER	5' - 0" UNO			
	1.2		MOTOR STARTER			5' - 0" UNO	
	1, 2		CONTACTOR			5' - 0" UNO	
_	1		MOTOR			SURFACE	
_	1, 2		METER - PLAN VIEW			WALL	
_	1	•	PUSH BUTTON SWITCH			4' - 0"	
_	1		EMERGENCY POWER SHUTOFF SV	/ITCH		4' - 0"	
_	1		PANELBOARD - SURFACE MOUNTE	D		6' - 6" TO TOP	
+	1.2		PANELBOARD - RECESSED			6' - 6" TO TOP	
+	1, 2		TRANSFORMER - PLAN VIEW			PAD/FLOOR	
+	1 0 0		TELEPHONE TERMINAL BOARD		1	WALL	
_	1, 2, 3	\circ	CIRCUIT BREAKER	M	METER	R - ONE-LINE	
_	1, 2, 3	P			TRANG		
-	1, 2, 3		MLO PANEL - ONE-LINE		TRANS	FORMER - ONE-LI	NE
_	1, 2, 3	<u>ا</u>					
_	1, 2		MCB PANEL - ONE-LINE		PAD M	OUNT XFMR - ONE	-LINE
_	1						
-	1		AUTOMATIC TRANSFER SWITCH		GROUN	ND SLEEVE - ONE-	LINE
_	1	• •					
	1			°/ XXXA XP			
_			CTENCLOSORE - ONE-LINE	LPNR	FUSED	DISCONNECT - O	NE-LINE
				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	FUSED	SWITCH	
			CURRENT TRANSFORMER		GRUIN		
				-			
						VVIKE SIZE TAG	
			KEYED NOTE TAG		- DETA	AIL/VIEW NUMBER	
			MECH/ELEC. EQUIPMENT TAG		DETA	AIL/VIEW REFEREN	NCE TAG
		(X)	OTHER EQUIPMENT TAG			ET NUMBER	
			WIRING / CONDUIT		- UNI	DERGROUND/FLO	OR WIRING
			CONDUIT TURNED UP		- COI	NDUIT TURNED DO	OWN
			CIRCUIT HOME RUN TO PAN	EL RAI & FOLIIDI		ROUNDI	
		1. SFF		PE, MOUNTING	G, AND C	THER SPECIFICS	
		2. CO	NNECT EMERGENCY AND/OR EXIT LIC	GHTS TO THE	UNSWIT	CHED SIDE OF TH	IE AREA
		LIG 3. ARF	HTING BRANCH CIRCUIT. ROW DENOTES EXIT DIRECTION				
		4. USI	E HEAVY DUTY FOR 480 VOLT.				
		5. MO 6. PRO	OVIDE UL LISTED DEVICE TO BE USEI	OFACTORER	S INSTR IRE ALAI	RM PANEL/SYSTE	MOR
-			OVIDE A MONITOR MODULE TO CONN			M SYSTEM.	
				MCC N			2
		AFF - AB	OVE FINISHED FLOOR	MDP - N	AIN DIS	TRIBUTION PANEL	-
		AFG - AE AIC - AM	BOVE FINISHED GRADE	MLO - M MOCP -	IAIN LUC MAX. O	S ONLY VERCURRENT	
		AL - ALU		PROTE			
		BC - BAF	RE COPPER	(N) - NE NIC - N(	.vv DT IN CC	NTRACT	
		BFC - BE	ELOW FINISHED CEILING	NEC - N		L ELECTRICAL CO	DE SN
		CKT - CI		NL - NIG			
		CND. OF CLG - IN	K C CONDUIT STALLED IN CEILING	NR - NC NTS - N	01 REQU OT TO S	IRED CALE	
		C.R CC		PC - PL		CONTRACTOR	
			NTENT I KANODUCEK PPER	PH - PH PNL - PA	ASE ANEL		
			STING TO REMAIN	POC - P		CONNECTION	
		EM - EM	ERGENCY	(R) - RE	LOCATE		
		(F) - FUT	URE	REC - R RMC - F	ECEPTA	CLES	
		FLA - FU	LL LOAD AMPS	SCA - S	HORT C	IRCUIT AMPERES	
		GC - GE	ULL VULTAGE NUN REVERSING NERAL CONTRACTOR	SES - S SWITCH	⊏RVICE IGEAR	ENIKANCE	
		GFCI - G		SPD - S		ROTECTIVE DEVIC	E
		GND - G	ROUND	TTB - TE	IST LOC	NE TERMINAL BOA	ARD
				TR - TA		ESISTANT	
		KW - KIL	OWATTS	UNO - U	INLESS	NOTED OTHERWIS	SE
			GHTING CONTROL PANEL	VA - VO		S FIFI D	
		LV - LOV	V VOLTAGE	VR - VA		ESISTANT	
		MC - ME	CHANICAL CONTRACTOR	WP - WI WI - FI	EATHER JRNISHE	PROOF/NEMA 3R	
		MCB - M	AIN CIRCUIT BREAKER	XFMR -	TRANSF	ORMER	
			1				
			CUEE		(		
			JILL		<b>\</b>		
			E000 ELECTRICA	L GENERAL	SHEE	Г	

E101 LIGHTING PLAN

xx E601 ELECTRICAL SCHEDULES

E201 POWER PLAN



E000

GENERAL

SHEET



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			10								
	1 LEVE E101 SCALE:	L 1 LIGH	ITING PLAN	]			<u> </u>				
		LIGH	FIXTURE SCHE	DULE							
AE COOPER	CATALOG NO. LD6B30D010IEM14 EU6B30509040 6LBW0LI	VOLTAGE 	LAMPING LED 3000 LUMENS 4000K	0-10V	MOUNTING LC RECESSED	27.6	DESCRIPTION 6" LED DOWNLIGHT. PROVIDE EMERGENCY TRANSFER DEVICE FOR EMERGENCY LIGHT FIXTURES AS				
UC COOPER	UCL-4-LD4-40-89AM-EDD1-UNV- SCBA	UNV	LED 4183 LUMENS	0-10V	SURFACE	49	4' UNDERCABINET LIGHTING. COORDINATE INSTALLATION WITH ARCHITECTUAL.				
NOTES: 1. ALL LIGHT FIXTURES SHOWN HALF	OR PRE-APPROVED EQUAL SHADED SHALL BE PROVIDED WITH AN EMERG	GENCY BATTERY P	4000K	NG 90 MIN. OF EGRESS	ILLUMINATION.	1 1 1	PARTS, INSTALL IN CONCEAL FROM VIEW LOCATION.				
2. ALL LIGHTING VALUE ENGINEERING FOR VE SHALL INCLUDE TIME TO COM WITHOUT THIS PROCESS IN PLACE. V 3. PRIOR APPROVALS SHALL BE SUBM CONSIDERED NON-APPROVED FOR B	PROVIDED FOR THIS PROJECT SHALL BE SUE IPENSATE OUR OFFICE FOR ENGINEERING RE E SUBMITTALS SHALL INCLUDE PHOTOMETRIC MITTED TO OUR OFFICE NO LESS THAN 5 BUSIN DDING PURPOSES. ALL LIABILITY ASSOCIATED	BMITTED TO THE EL VIEW AND VERIFIC CANALYSIS TO ENS NESS DAYS OF THE DWITH NON-APPRO	ECTRICAL ENGINEER FOR ATION OF BRANCH CIRCUI URE NEW LIGHT FIXTURE PROJECT BID DATE. ANY VED FIXTURES THAT DO N	REVIEW AND APPROVA T LOADING AND/OR ENE S PROVIDE COMPARABL THING SUBMITTED AFTE IOT MEET THE PROJECT	AL AFTER THE PROJECT RGY CODE COMPLIANC LE LIGHT LEVELS TO TH ER THIS TIME FRAME WI T REQUIREMENTS WILI	T HAS BEEN CE. NO VE SI IOSE ORIGIN LL NOT BE F REST SOLF	BID AND AWARDED. ANY CREDITS JBMITTALS WILL BE APPROVED IALLY DESIGNED. REVIEWED AND WILL BE ELY WITH THE CONTRACTOR.				
	4				   	3			2		[ ] ]     1

1.	KEYED NOTES	JRCA ARCHITECTS ARCHITECTS ACCHITECTS ACCHITECTS ACCHITECTS S77 South 200 East SLC, Utah 84111 O: (801) 533-2100 GallowayUS.com jrcadesign.com
	GENERAL NOTES	
A. B. C. D. E. E. PER I FROM ALL Z	IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS THAT CONDUIT IS TO BE INSTALLED WITHIN WALLS AND ABOVE CEILINGS CONCEALED WHERE POSSIBLE. COORDINATE MOUNTING HEIGHTS OF ALL PENDANT AND WALL MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL ELEVATIONS. ELECTRICIAN TO VERIFY FIXTURE DIMMING CONTROLS AND TO PROVIDE THE NECESSARY WIRING AND DEVICES REQUIRED FOR DIMMING OPERATION. EC TO COORDINATE ALL FINISHES WITH ARCITECT PRIOR TO PURCHANSING. EC TO FIELD VERIFY AND MATCH EXISTING FOR NEW LIGHT SWITCHES. PROVIDE WITH 0-10V DIMMING.	CH
		MINITER MONTAIN Healthc RIVERTON HOSPITAL - P( RAD ROOM REMODEL 1234 STREET ADDRESS SALT LAKE CITY, UTAH 84
		PROJECT STATUS 00/00/2020
		$\frac{11/02/21}{5}$ No. 7945859-2202 DAVID W. STEWARD $\frac{1}{5}$ $1$
		LIGHTING PLAN
		E101



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(OTS (3)		
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(11)		
	2	1

	KEYED NOTES
1.	10" X 3.5" SURFACE WALL DUCT WITH MINIMUM 2 DIVIDERS
2.	3 1/2" CONDUIT BELOW GRADE FROM TABLE TO LOCATION SHOWN.
3.	BOX LOCATED ABOVE CEILING.
4.	BOX FLUSH IN FLOOR FOR TABLE.
5.	USE SUITABLE CHASE NIPPLES FOR TABLE.
6.	BOX ATTACHED TO DUCT (TIMS READYNESS KIT)
7.	GROMMETED OPENING IN DUCT COVER FOR GENERATOR CABINET.
8.	10" X 3.5" SURFACE WALL DUCT TO BOTTOM OF PDU WITH MINUMUM 2 DIVIDERS.
9.	POWER DISTRIBUTION BOX.
10.	BOX FLUSH IN CEILING FOR OTS.
11.	3 1/2" CONDUIT
12.	2 1/2" CONDUIT
13.	GROMMETED OPENING IN DUCT COVER FOR TRANSFORMER
14.	GROMMETED OPENING IN DUCT COVER FOR DIGITAL SYSTEMS CABINET
15.	BOX FLUSH MOUNT IN WALL FOR STAND PROVIDE
	STAND
16.	BOX FLUSH MOUNT IN WALL FOR CONSOLE PROVIDE GROMMETED OPENING IN BOX COVER FOR CONSOLE
17.	1.5" CONDUIT
18.	EXISTING 100 AMP ELECTRICAL DISCONNECT. EXTEND NEW STRANDED COPPER CABLING AS REQUIRED TO
19.	NEW EQUIPMENT LOCATION. LOCATION OF X-RAY WARNING LIGHT CONTROL PANEL AND X-RAY ON LAMP.
	GENERAL NOTES
Α.	EC TO COORDINATE ALL MATERIALS AND ROUTING FOR EQUIPMENT REQUIREMENTS WITH GE ELECTRICAL DRAWINGS PRIOR TO CONSTRUCTION. PROVIDE
В.	CONDUITS AND BOXES AS REQUIRED. BOTH ROOMS SCOPE OF WORK IS TO BE PHASED TO OFFER ONE COMPLETED ROOM FOR USE PRIOR TO CONSTRUCTION OF THE SECOND ROOM. SEE
C.	ARCHITECTURAL PLANS FOR PHASING INFORMATION. REUSE EXISTING 100A FEED AND BREAKER THAT IS EXISTING IN THE SPACE. EXTEND NEW STRANDED CONDUCTOR AS REQUIRED. SEE MEDICAL EQUIPMENT
D.	EC TO PROTECT AND MAINTAIN EXISTING ELECTRICAL
E.	EC TO COORDINATE ALL FINISHES WITH ARCHITECT PRIOR TO PURCHASING.



A     06/Aug/2021       Final drawing based on DC-309388       REV     DATE		Riverton Hospital Riverton, Utah USA						
01 - C1 - Cover Sheet 02 - C2 - Disclaimer - Site Readiness 03 - A1 - General Notes 04 - A2 - Equipment Layout 05 - A3 - Section Views	10 - S3 - Structural Details (1) 11 - M1 - HVAC 12 - E1 - Electrical Notes 13 - E2 - Electrical Layout 14 - E3 - Electrical Elevations 15 - E4 - Details-Interconnections 16 - E5 - Power Requirements	(eg	G	E Health	care	۷ ٤ Wend	Vendel Larson 801-891-9934 lel.larson@ge.com	
06 - A4 - Equipment Details 07 - A5 - Equipment Details & Delivery (2) 08 - S1 - Structural Notes 09 - S2 - Structural Layout		DISCOVERY RF180 FINAL STUDY						
A mandatory component of this drawing set is the GE Healthcare Pre Installation manual. Failure to reference the Pre Installation manual will result in incomplete documentation required for site design and preparation. Pre Installation documents for GE Healthcare products can be accessed on the web at: www.gehealthcare.com/siteplanning		Drav	wn by GJP	Verified by GJP	Concession -	S.O. (GON) 5065561	PIM Manual 5793724-1EN	Rev 6
GE does not take responsibility for any damages resulting from changes on drawings made by others. Errors may occur by not referring to the complete set of final issue drawing. GE cannot accept responsibility for any damage due to the partial use of GE final issue drawings, however caused. All dimensions are in millimeters unless otherwise specified. Do not scale from printed pdf files. GE accepts no responsibility or liability for defective work due to scaling from these drawings.		Format	Scale		File Name		Date	Sheet
		A3	1/4"=1'-0	)" RF-M2	RF-M246605-FIN-00-A.DWG 06/A		06/Aug/2021	01/16

### DISCLAIMER

### **GLOBAL SITE READINESS CHECKLIST (DI)**

### DOC1809666 Rev. 7

**GENERAL SPECIFICATIONS** 

- GE is not responsible for the installation of developers and associated equipment, lighting, cassette trays and protective screens or derivatives not mentioned in the order.
- The final study contains recommendations for the location of GE equipment and associated devices, electrical wiring and room arrangements. When preparing the study, every effort has been made to consider every aspect of the actual equipment expected to be installed.
- The layout of the equipment offered by GE, the dimensions given for the premises, the details provided for the pre-installation work and electrical power supply are given according to the information noted during on-site study and the wishes expressed by the customer.
- The room dimensions used to create the equipment layout may originate from a previous layout and may not be accurate as they may not have been verified on site. GE cannot take any responsibility for errors due to lack of information.
- Dimensions apply to finished surfaces of the room.
- Actual configuration may differ from options presented in some typical views or tables.
- If this set of final drawings has been approved by the customer, any subsequent modification of the site must be subject to further investigation by GE about the feasibility of installing the equipment. Any reservations must be noted.
- The equipment layout indicates the placement and interconnection of the indicated equipment components. There may be local requirements that could impact the placement of these components. It remains the customer's responsibility to ensure that the site and final equipment placement complies with all applicable local requirements.
- All work required to install GE equipment must be carried out in compliance with the building regulations and the safety standards of legal force in the country concerned.
- These drawings are not to be used for actual construction purposes. The company cannot take responsibility for any damage resulting therefrom.

### CUSTOMER RESPONSIBILITIES

- It is the responsibility of the customer to prepare the site in accordance with the specifications stated in the final study. A detailed site readiness checklist is provided by GE. It is the responsibility of the customer to ensure all requirements are fulfilled and that the site conforms to all specifications defined in the checklist and final study. The GE Project Manager of Installation (PMI) will work in cooperation with the customer to follow up and ensure that actions in the checklist are complete, and if necessary, will aid in the rescheduling of the delivery and installation date.
- Prior to installation, a structrual engineer of record must ensure that the floor and ceiling is designed in such a way that the loads of the installed system can be securely borne and transferred. The layout of additional structural elements, dimensioning and the selection of appropriate installation methods are the sole responsibility of the structural engineer. Execution of load bearing structures supporting equipment on the ceiling, floor or walls are the customer's responsibility.

### **RADIO-PROTECTION**

Suitable radiological protection must be determined by a qualified radiological physicist in conformation with local regulations. GE does not take responsibility for the specification or provision of radio-protection.

THE UNDERSIGNED, HEREBY CERTIFIES THAT I HAVE READ AND APPROVED THE PLANS IN THIS DOCUMENT.						
DATE NAME SIGNATURE						

Site Ready Checks a
EHS Site Requi
Overall access route to the scan room free from obstruction / high hazard
Enough space to store tools, equipment, parts, install waste and the gener
Enough necessary facilities for the GE employees available.
No 3rd parties working in the area that may affect the safety of the installa
Area free from any chemical, gas, dust, welding fume exposure and has pa
All emergency routes identified, signed and clear from obstruction.
Accessible single source lockable panel that LOTO can be applied to for GH
There are no other conditions or hazards that you have observed or have
Required for Mechan
Room dimensions, including ceiling height, for all Exam, Equipment/Techn
Ceiling support structure, if indicated on the GE drawing, is in the correct Equipment Manufacturer specifications.
Levelness and spacing has been measured, and is ready for the installation
Overhead support Structure (unistrut) has been confirmed with customer.
Finished ceiling is installed. If applicable ceiling tiles installed per PMI discr
Floor levelness/flatness is measured and within tolerance, and there are n
Entry door threshold meets PIM requirement.
Rooms that will contain equipment, including staging areas if applicable, a debris from entering rooms containing equipment.
Cable ways (floor/wall/ceiling/Access Flooring) are available for installatio
Cable ways routes per GE Final drawings and cable access openings areas be installed at time of system installation.
Adequate room illumination installed and working.
Customer supplied countertops where GE equipment will be installed are
Required for Calib
HVAC systems Installed, and the site meets minimum environmental oper
System power & grounding (PDB/MDP) is available as per GE specification
System power & grounding (PDB/MDP) is installed at point of final connect
PMI to confirm all feeder wires and breaker are size appropriately. EPO inst
PMI to confirm with electrician all power and signal cables are well termin
Network outlets installed.

Computer network available and working.

Lead doors and windows complete or scheduled to be installed. If applicable, radiation protection (shielding) finished & radioprotection regulatory approval for installation obtained.

Note: The details shown here are only an extract from DOC1809666. For the complete document please contact your PMI.

Installation

ments

al area free from obstruction and trip hazards.

tion activity.

inting been completed and dry.

equipment installation (MDP and/or PDU).

been made aware of by the customer or contractors on site.

al Install start

ical & Control rooms meets GE specifications.

ocation and at the correct height according to the Original

of any GE supplied components.

contractor to meet required GE provided criteria.

etion.

o visible defects per GEHC specifications.

re construction debris free. Precautions must be taken to prevent

n of GE cables are of correct length and diameter.

installed at a time determined by GEHC PM. Surface floor duct can

n place.

tion Start

tional system requirements.

tion and ready to use. Lock Out Tag Out is available. talled if needed.

ated ensuring there are no loose connections.

### CUSTOMER SITE READINESS REQUIREMENTS

- Any deviation from these drawings must be communicated in writing to and reviewed by your local GE healthcare installation project manager prior to making changes.
- Make arrangements for any rigging, special handling, or facility modifications that must be made to deliver the equipment to the installation site. If desired, your local GE healthcare installation project manager can supply a reference list of rigging contractors.
- New construction requires the following;
  - 1. Secure area for equipment,
  - 2. Power for drills and other test equipment,
  - 3. Capability for image analysis,
  - 4. Restrooms.
- Provide for refuse removal and disposal (e.g. crates, cartons, packing)
- It is the customer's responsibility to contract a vibration consultant/engineer to implement site design modifications to meet the GE vibration specification. Refer to the system preinstallation manual for the vibration specification.

### **ENVIRONMENTAL SPECIFICATIONS**

### MAGNETIC INTERFERENCE

To guarantee specified imaging performance : X-ray tubes and control console equipment must be located in ambient static field of less than 10 gauss.

### LIGHT REQUIREMENTS

For the electronic ballast of fluorescent lamp in exam room, the operating frequency should be above 42KHz.

### ACOUSTIC OUTPUT

Measured 1 m from any point in system.In-use:less than 65 dBAStand-by:less than 45 dBA



LEGENI	)						
	D	Availa	ble from GE	]			
nstalled	Е	Equip	ment existin	g in room			
plied and installed	*	Item to be reinstalled from another site					
RIPTION	MAX OUI (b	HEAT TPUT tu)	WEIGHT (lbs)	MAX HEAT OUTPUT (W)	WEIGHT (kg)		
loor plate)	23	88	3060	700	1388		
	3500		200	1026	91		
binet	1092		242	320	110		
er	-		210	-	95		
5	149		17	57	8		
rt	149		42	57	19		
n Box (PDB)		-	175	-	80		
		-	-	-	-		
ge	1190		1190		833	350	378
and	-		376	-	171		
		-	77	-	35		
rt (TPC)		-	200	-	25		
e		-	110	-	50		

Minimum opening for equipment delivery is 47 in. w x 73 in. h, contingent on a 102 in.

Counter top for equipment- provide grommeted openings as required to route cables Control wall, 7'-0" with lead glass viewing window

Exam room height	
	TBD
	9'-6"

Please note that your Discovery RF180 installation in the selected room does not meet the following

- 530 mm required distance between the Tube Head and any stationary object.

Therefore we must apply a warning label on both Tube Head sides to remind the Operator about entrapment hazard during Gantry motions.

### EXAM ROOM CEILING HEIGHTS

### FRONT VIEW A-A'



Note : Minimum room height for the table must take into consideration the most protruding object from the ceiling that is in the system area (for example the rails for OTS).

*Not available in USA



### SIDE VIEW B-B'



IUM ROOM HEIGHTS							
CEILING HEIGHT							
mm	ft						
2600	8'-6"						
3000	9'-10"						
2600	8'-6"						
2920	9'-7"						
2600	8'-6"						
2600	8'-6"						
2650	8'-8"						
2400	7'-8"						
2800	9'-2"						
	A HEIGHTS CEILING 2600 3000 2600 2920 2600 2600 2650 2400 2800						



### **GENERATOR**



### THE CUSTOMER/CONTRACTOR SHOULD:

- Provide an area adjacent to the installation site for delivery and unloading of the GE equipment.
- Ensure that the dimensions of all doors, corridors, ceiling heights are sufficient to accommodate the movement of GE equipment from the delivery area into the definitive installation room.
- Ensure that access routes for equipment will accommodate the weights of the equipment and any transportation, lifting and rigging equipment.
- Ensure that all necessary arrangements for stopping and unloading on public or private property not belonging to the customer have been made.

The unit (table main frame and body) can be shipped through a 1200 mm [47 in] door width and 1200 mm [47 in] minimum hallway width. The unit can be divided and the major assemblies can be maneuvered through a 1020 mm [40 in] doorway and 1300 mm [51 in] hallway width (Order has to be placed accordingly, table is shipped in one piece by default). The OTS can be shipped through a 900 mm [35 in] door width and 2600 mm [102.4 in] minimum hallway width or through a 1400 mm [55 in] door width and 1800 mm [71 in] minimum hallway width.

### DIMENSIONS OF DELIVERY WITH DOLLY TRANSPORT EQUIPMENT

MAJOR ASSEMBLIES	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	WEIGHT (kg)
Table main frame and body	2460 [97 in]	1000 [39 in]	1630 [64 in]	TBD
Table main frame	2460 [97 in]	680 [27 in]	1535 [60 in]	300 [661 lb]
Table body	1268 [50 in]	1000 [39 in]	1630 [64 in]	680 [1499 lb]
OTS (Optional)	3010 [118.5 in]	798.2 [31.5 in]	-	378 [833 lb]
Monitor Suspension (Optional)	3010 [118.5 in]	798.2 [31.5 in]	-	382 [842 lb]

### FOCAL SPOT TRAVEL



### **KALOS SUSPENSION**

Rev A Date 06/Aug/2021

### DELIVERY

A5 - Equipment Details & Delivery (2)

07/16

### STRUCTURAL NOTES

- Methods of support for the steelwork that will permit attachment to structural steel or through bolts in concrete construction should be favored. Do not use concrete or masonry anchors in direct tension.
- All units that are wall mounted or wall supported are to be provided with supports where necessary. Wall supports are to be supplied and installed by the customer or his contractors. See plan for suggested locations.
- Control walls shall be constructed to minimum 2130mm (7'-0") high.
- Dimensions are to finished surfaces of room.
- Customers contractor must provide all penetrations in post tension floors.
- Customers contractor must provide and install any non-standard anchoring. Documents for standard anchoring methods are included with GE equipment drawings for geographic areas that require such documentation.
- Customers contractor must provide and install hardware for "through the floor" anchoring and/or any bracing under access floors. This contractor must also provide floor drilling that cannot be completed because of an obstruction encountered while drilling by the GE installer such as rebar etc.
- It is the customer's responsibility to perform any floor or wall penetrations that may be required. The customer is also responsible for ensuring that no subsurface utilities (e.g., electrical or any other form of wiring, conduits, piping, duct work or structural supports (i.e. post tension cables or rebar)) will interfere or come in contact with subsurface penetration operations (e.g. drilling and installation of anchors/screws) performed during the installation process. To ensure worker safety, GE installers will perform surface penetration operations only after the customer's validation and completion of the "GE surface penetration permit".
- Different anchor types are used to install the components of the system. Refer to Structural Requirements Section(s) of the Pre-Installation Manual for each anchor requirement.
- Refer to the Structural Requirements Section for the required minimum embedment.
- The ground surface must be flat and leveled, maximum tolerance for leveling is ±1.5 mm per 1 m (0.2 in per 10 feet). A grout pad provided by the contractor is required to meet this specification. The maximum pad thickness is 6.3 mm (0.25 in).

### **CEILING REQUIREMENTS**

To allow installation of the stationary rail cross-members, clearance is required between the ends of the stationary rails and the walls.

It is recommended that sprinkler heads not be placed between the stationary rails. All sprinkler heads should be mounted so they do not extend downward more than 6.35 mm from the ceiling while in the 'resting' position.

In addition, there should not be anything mounted in the ceiling (i.e. lights, A/C returns, etc) between the stationary rails. This is because the OTS longitudinal drive belt assembly is located on the movable bridge, approximately centered between the two stationary rails, and may come into contact with those ceiling-mounted items during normal use.

ITEM	
	(G
1	Area occupied by GE sup
2	Area occupied by GE sup
3	Area occupied by GE sup
	(
4	Support backing, locate a
5	Structural support in ceil continuous with no fittin square, and in the same these supports every 26. support that permit atta



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- D	ESI	CR.	IP'I	. 1	( )	N
· •		010.		•••	~	

GE SUPPLIED / CONTRACTOR INSTALLED)

pplied table baseplate

pplied wall stand baseplate

pplied transformer

(CONTRACTOR SUPPLIED & INSTALLED)

as shown.

Structural support in ceiling for fastening ceiling supported equipment. Supports to run continuous with no fittings extending below face of channel, run wall to wall, be parallel, square, and in the same horizontal plane, flush with the finished ceiling. Rails are mounted to these supports every 26.0" (660mm) and require 452 lbs. (205 kg) per bolt load. Methods of support that permit attachment to structural steel or through bolts in concrete should be favored. Do not use screw anchors in direct tension.

### **TABLE FLOOR MOUNTING**

### **OVERFLOOR PLATE**



-Floor plate, M10 screws and washers are delivered with the system. -The floor thickness must be at least 200 mm [7.9 in].

-Critical flatness region must be flat and level, with deviations of no more than 1.5mm [1/16 in] • shims may be used along perimeter of baseplate to improve surface contact

### **SCALE 1:20**

### WALL STAND FLOOR MOUNTING







0.6 in

Unit weight:

NOT TO SCALE

### SUSPENSION RAILS MOUNTING SPECIFICATIONS

### STRUCTURAL RAILS PERPENDICULAR TO SUSPENSION RAILS



660mm [26 in] steps are also possible **SCALE 1:50** 



### **TEMPERATURE AND HUMIDITY SPECIFICATIONS**

### **IN-USE CONDITIONS**

	EXAM ROOM			CONTROL ROOM			
	Min	Recommended	Max	Min	Recommended	Max	
Temperature	15°C [59°F]	23°C [73°F]	35°C [95°F]	15°C [59°F]	23°C [73°F]	35°C [95°F]	
Relative humidity (1)	75%			75%			
Heat dissipation	max 2.5 kW [8490 BTU/hr]			0.41 kW [1399 BTU/hr]			

### STORAGE CONDITIONS

Temperature	-10°C [14°F] to 50°C [122°F]
Relative humidity (1)	10% to 80%

Material should not be stored for more than 90 days. (1) non-condensing

### AIR RENEWAL

According to local standards.

### NOTE

In case of using air conditioning systems that have a risk of water leakage it is recommended not to install it above electric equipment or to take measures to protect the equipment from dropping water.

### HEAT DISSIPATION DETAILS

ROOM	DESCRIPTION	STANDBY (kW)	IN-USE (kW)	STANDBY (BTU/hr)	IN-USE (BTU/hr)
	Table	0.700	0.700	2388	2388
Exam Room	Generator	0.022	1.026	75	3500
	Digital Systems Cabinet	0.320	0.320	1092	1092
	Partial UPS	0.050	0.050	N/A	N/A
	Monitor (single)	0.057	0.057	149	149
	Advantech Monitor (single)	0.065	0.065	222	222
	OTS	0.350	0.350	1190	1190

M1 - HVAC

| 11/16

### **CONNECTIVITY REQUIREMENTS**

### **ELECTRICAL NOTES**

All Digital systems are equipped with Broadband fast Ethernet hardware for Service Diagnostics. The systems equipped with Digital Imaging are capable of placing electronic images on the Hospital image Ethernet Network (DICOM).

The Digital PC (part of the Digital subsystem) is the connectivity point between the system and the hospital. For a Broadband connection, it is the purchaser's responsibility to provide the connection at the Ethernet port on the Digital PC via a Cat 5 Ethernet cable and the hospital Ethernet connection.

Note: System hardware is rated at 100/1000Mbs transfer rate. Hospital connections must be rated for 100/1000Mbs for optimal performance. One RJ45 Ethernet plus should be present in the room.

- 1. All wires specified shall be copper stranded, flexible, thermo-plastic, color coded, cut 10 foot long at outlet boxes, duct termination points or stubbed conduit ends. All conductors, power, signal and ground, must be run in a conduit or duct system. Electrical contractor shall ring out and tag all wires at both ends. Wire runs must be continuous copper stranded and free from splices.
- 1.1. Aluminum or solid wires are not allowed.
- Wire sizes given are for use of equipment. Larger sizes may be required by local codes. 2.
- It is recommended that all wires be color coded, as required in accordance with national and local electrical 3. codes.
- Conduit sizes shall be verified by the architect, electrical engineer or contractor, in accordance with local or 4. national codes.
- Convenience outlets are not illustrated. Their number and location are to be specified by others. Locate at 5. least one convenience outlet close to the system control, the power distribution unit and one on each wall of the procedure room. Use hospital approved outlet or equivalent.
- General room illumination is not illustrated. Caution should be taken to avoid excessive heat from overhead spotlights. Damage can occur to ceiling mounting components and wiring if high wattage bulbs are used. Recommend low wattage bulbs no higher than 75 watts and use dimmer controls (except MR). Do not mount lights directly above areas where ceiling mounted accessories will be parked.
- 7. Routing of cable ductwork, conduits, etc., must run direct as possible otherwise may result in the need for greater than standard cable lengths (refer to the interconnection diagram for maximum usable lengths point to point).
- Conduit turns to have large, sweeping bends with minimum radius in accordance with national and local electrical codes.
- A special grounding system is required in all procedure rooms by some national and local codes. It is 9. recommended in areas where patients might be examined or treated under present, future, or emergency conditions. Consult the governing electrical code and confer with appropriate customer administrative personnel to determine the areas requiring this type of grounding system.
- 10. The maximum point to point distances illustrated on this drawing must not be exceeded.
- 11. Physical connection of primary power to GE equipment is to be made by customers electrical contractor with the supervision of a GE representative. The GE representative would be required to identify the physical connection location, and insure proper handling of GE equipment.
- 12. GEHC conducts power audits to verify quality of power being delivered to the system. The customer's electrical contractor is required to be available to support this activity.
- All junction boxes, conduit, duct, duct dividers, switches, circuit breakers, cable tray, etc., are to be supplied and installed by customers electrical contractor.
- Conduit and duct runs shall have sweep radius bends
- Conduits and duct above ceiling or below finished floor must be installed as near to ceiling or floor as possible to reduce run length.
- Ceiling mounted junction boxes illustrated on this plan must be installed flush with finished ceiling.
- All ductwork must meet the following requirements: 1. Ductwork shall be metal with dividers and have removable, accessible covers. 2.Ductwork shall be certified/rated for electrical power purposes. 3.Ductwork shall be electrically and mechanically bonded together in an approved manner. 4.PVC as a substitute must be used in accordance with all local and national codes.
- All openings in raceway and access flooring are to be cut out and finished off with grommet material by the customers contractor.
- General contractor to insert pull cords for all cable run conduits between the equipment room and the operators control room.
- 10 foot pigtails at all junction points.
- Grounding is critical to equipment function and patient safety. Site must conform to wiring specifications shown on this plan.

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### ELECTRCAL LAYOUT ITEM LIST

10" x 3 1/2" [250mm x 100mm] Flush wall duct with minimum 2 dividers

10" x 3 1/2" [250mm x 100mm] Surface wall duct with minimum 2 dividers

10" x 3 1/2" [250mm x 100mm] Surface wall duct to bottom of PDU with minimum 2 dividers

Box flush in wall for Wall Stand - size per local code

Grommeted opening in duct cover for Digital Systems Cabinet

Grommeted opening in duct cover for Generator Cabinet

### **Outlet Legend for GE Equipment**

System emergency off (SEO), (recommended height 1.2m [48"] above floor)

Door interlock switch (needed only if required by state/local codes)

Duplex hospital grade, dedicated wall outlet 120-v, single phase power

### OTS on/off switch, (recommended height 1.2m [48"] above floor)

Conduit	Legend
	Above Ceiling
	Below Floor

### Size То Qty (Bubble # / Item) In. mm As req'd As req'd 1 1 Power Distribution Box 1 As req'd As req'd Emergency off 1 1/216 OTS On/off switch 1/216 1 15 Generator 1 As req'd As req'd As req'd 19 Transformer 1 As req'd 1 1/216 Warning light control 1 As req'd As req'd 1 1/216 Door Switch 1 1/216 E2 - Electrical Layout | 13/16

### Additional Conduit Runs (Contractor Supplied and Installed)







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### POWER REQUIREMENTS

GENERATOR TYPE	65 kW	80 kW
POWER SUPPLY	3 PHASES+N+	·G 48 †
MAINS FREQUENCY		= • •
LINE INPUT REACTIVE POWER (PEAK)	95 kVA	115 kVA
LINE INPUT ACTIVE POWER	65 kW	80 kW

- Line supply should come into a power distribution box (PDB) containing the protective units and controls.
- The section of the supply cable should be calculated in accordance with its length and the maximum permissible voltage drops.
- There must be discrimination between supply cable protective device at the beginning of the installation (main low-voltage transformer side) and the protective devices in the PDB.

### SUPPLY CHARACTERISTICS

- Power input must be separated from any others which may generate transients (elevators, air conditioning, radiology rooms equipped with high speed film changers...)
- All equipment (lighting, power outlets, etc...) installed with GE system components must be powered separately.

### **GROUND SYSTEM**

Equipotential: the equipotential link will be by means of an equipotential bar. This equipotential bar should be connected to the protective earth conductors in the ducts of the non GE cableways and to additional equipotential connections linking up all the conducting units in the rooms where GE units are located.

### CABLES

- Power and cable installation must comply with the distribution diagram below.
- All cables must be isolated and flexible, cable color codes must comply with standards for electrical installation.
- Case PDB furnished by GE: The cables for signals and remote control (Y, SEO, L...) will go to PDB with a pigtail length of 1.5m, and will be connected during installation. Each conductor will be identified and isolated (screw connector).

### **CABLEWAYS**

The general rules for laying cableways should meet the conditions laid down in current standards and regulations, with regard to:

- Protecting cables against water (cableways should be waterproof)
- Protecting cables against abnormal temperatures (proximity to heating pipes or ducts)
- Protecting cables against temperature shocks
- Replacing cables (cableways should be large enough for cables to be replaced)
- Metal cableways should be grounded.



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### POWER DISTRIBUTION

E				
Nm	m ² AND (AWG)			
EEDI	ER WIRE LENGT	H		
)')	77m (250')	92m (300')	107m (350')	122m (400')
	35 (2)	50 (1)	70 (1/0)	70 (1/0)
RECO	OMMENDED OV	ERCURRENT PE	ROTECTION	L
ES				
of tal 1 the	ke-off) and the PIM.	run to the Radio	ology system me	eet all the
nthe m du	esized power fe uration of 5 cycl	ed is not accept les and frequen	table. Maximun cy of 10 times p	ı allowable ber hour.
quipi t be	ment back to th terminated insid	e power source de the main dis	e/main groundir connect panel a	ng point and and not at any

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