# Intermountain Health **Riverton Hospital Radiology Room Remodel** 3741 West 12600 South Riverton, Utah 84065

# **Construction Documents**

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# NOTES ON VENDOR EQUIPMENT INSTALLATION

GE DRAWINGS FOR XRAY UNIT INSTALLATION HAVE BEEN INCLUDED AS PART OF THE CONSTRUCTION DOCUMENTS FOR COORDINATION PURPOSES. THE OWNER, INTERMOUNTAIN HEALTH, SHALL PAY GE DIRECTLY FOR THEIR CONSTRUCTION WORK. GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL COORDINATE WITH GE INSTALLATION DRAWINGS, AND PROVIDE REQUIRED WORK SCHEDULING DURING CONSTRUCTION, **ITEMS MENTIONED AS "PROVIDED BY OTHERS" IN THE GE DRAWINGS SHALL BE PROVIDED BY GENERAL CONTRACTOR AND THEIR SUB-CONTRACTORS.** IF THERE IS ANY CLARIFICATION REQUIRED, CONTRACTORS SHALL CHECK WITH THE A/E DESIGN TEAM DURING THE BIDDING PHASE.

**DESIGN TEAM** 

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IMPLEMENTATION OF	INTERIM LIFE SAFETY MEASURES (ILSM) IS REQUIRED IN OR	PROJEC			
EXISTING LSC DEFICIE CONSTRUCTION WOR AND CONTINUOUSLY INTENDED TO PROVID CHAPTERS 1 THROUG EACH ILSM ACTION N	ENSTRUCTION AREAS AND THROUGHOUT BUILDINGS WITH ENCIES. ILSM APPLY TO ALL PERSONNEL, INCLUDING RKERS, MUST BE IMPLEMENTED UPON PROJECT DEVELOPMENT, ENFORCED THROUGH PROJECT COMPLETION. ILSM ARE DE A LEVEL OF LIFE SAFETY COMPARABLE TO THAT DESCRIBED IN H 7, 31 AND THE APPLICABLE OCCUPANCY CHAPTERS OF THE LSC. AUST BE DOCUMENTED THROUGH WRITTEN POLICIES AND	IHIS PR EQUIPA UPGRA CABINI PROJEC ARCHI	CJECT INVOLVESTHE WORK REQUIRED MENT BY THIRD PARTY VENDOR. THE WO ADES, MINOR LIGHTING ADJUSTMENTS ET WILL ALSO BE RELOCATED. CT SCOPE TECTURAL AND ELECTRICAL UPGRADES	S AS OUTLINED IN TH	LUDES ELE DES. AN E IE CONSTR
<ul> <li>PROCEDURES. EXCEPTRAINING, AND ILSM</li> <li>1 ENSURING EXITS PRECEIVE TRAINING UNDER CONSTRUCT</li> </ul>	AS STATED BELOW, FREQUENCIES FOR INSPECTION, TESTING, CONSIST OF THE FOLLOWING ACTIONS: PROVIDE FREE AND UNOBSTRUCTED EGRESS. PERSONNEL SHALL G IF ALTERNATIVE EXITS MUST BE DESIGNATED. BUILDINGS OR AREAS CTION MUST MAINTAIN ESCAPE FACILITIES FOR CONSTRUCTION		ment'S.		
WORKERS AT ALL INSPECTED DAILY	TIMES. MEANS OF EGRESS IN CONSTRUCTION AREAS MUST BE				
2 ENSURING FREE A SERVICES AND FC	ND UNOBSTRUCTED ACCESS TO EMERGENCY DEPARTMENTS/ DR EMERGENCY FORCES.				
3 ENSURE FIRE ALAF TEMPORARY, BUT IMPAIRED. TEMPO	RM, DETECTION, AND SUPPRESSION SYSTEMS ARE NOT IMPAIRED. A EQUIVALENT, SYSTEM SHALL BE PROVIDED WHEN ANY FIRE SYSTEM IS ORARY SYSTEMS MUST BE INSPECTED AND TESTED MONTHLY.				
4 ENSURING TEMPO NONCOM OR LIN DEVELOPMENT O	DRARY CONSTRUCTION PARTITIONS ARE SMOKE TIGHT AND BUILT OF AITED COMBUSTIBLE MATERIALS THAT WILL NOT CONTRIBUTE TO THE R SPREAD OF FIRE.				
5 PROVIDING ADD PERSONNEL.	ITIONAL FIRE-FIGHTING EQUIPMENT AND USE TRAINING OF				
6 PROHIBITING SMO ALL CONSTRUCTION	OKING IN ACCORDANCE WITH MA.1.3.15 AND IN OR ADJACENT TO ON AREAS.		KOVALS		
7 DEVELOPING AN PRACTICES THAT BUILDING TO THE	d enforcing storage, housekeeping, and debris removal reduce the flammable and combustible fire load of the lowest level necessary for daily operations.				
8 CONDUCTING A	MINIMUM OF TWO FIRE DRILLS PER SHIFT PER QUARTER.	Approv	vers Name, Title		Date
9 INCREASING HAZ WITH SPECIAL ATT STORAGE, AND F	ARD SURVEILLANCE OF BUILDINGS, GROUNDS, AND EQUIPMENT TENTION TO EXCAVATIONS, CONSTRUCTION AREAS CONSTRUCTION IELD OFFICES.				
10 TRAINING PERSON SAFETY ARE COM	NNEL WHEN STRUCTURAL OR COMPARTMENT FEATURES OF FIRE	Approv	vers Name, Title		Date
11 CONDUCTING O AWARENESS OF A	RGANIZATION WIDE SAFETY EDUCATION PROGRAMS TO ENSURE ANY LSC DEFICIENCIES, CONSTRUCTION HAZARDS, AND THESE ILSM.				
		Approv	vers Name, Title		Date
		Approv	vers Name, Title		Date
INFECTION	I CONTROL RISK ASSESSMENT	ABE	BREVIATIONS		
CONSTRUCTION ACTI Type D: Maior demolition	VITY TYPE or construction that creates maior disruption, i.e. noise, dust,	&	AND	DWL. DN.	DOWEL DOWN
vibration, odor, or me includes, but • heavy de	echanical systems not limited to: emolition or removal of a complete cabling system	@ Ø (E), EXIST.	DIAMETER . EXISTING	D.S. D.W.V. DWG.	DOWN S DRAINA DRAWIN
new cons     INFECTION CONTROL     Highert*	struction or buildout of shelled space <u><b>RISK GROUP</b></u>	(N) d #	NEW PENNY POUND OR NUMBER	<b>E</b> EA.	EACH
Pharmacy     CONSTRUCTION CLASS	SS	A AC	ACOUSTIC	E.W.C. EL./ELEC ELEV.	ELEC. W . ELECTRIC ELEVATIO
Construction Activity		ADD A/C	ADDENDUM AIR CONDITIONING ALTERNATE	EQ. EQUIP.	EQUAL
Lowest Class Medium Class High Class	I Class II Class II Class III I Class II Class III Class IV I Class II Class IV Class IV	ALI. AL A.B.	ALUMINUM ANCHOR BOLT	exh. Exist. E.J.	eahaust Existing Expansi
Highest Class	II Class IV Class IV Class IV  PROTOCOLS  (Class IV)	ARCH ASP.	architeCt(URAL) ASPHALT	EXT. F	EXTERIO
Perform work     other areas.	using methods to minimize raising dust or tracking dust into	<b>B</b> BSMT. B.M.	BASEMENT BENCHMARK	FT. FV/F.V. FIN.	feet Field Ve Finish(ei
<ul> <li>Use active du</li> <li>Use water mis</li> <li>Seal doors du</li> </ul>	ucts, vents and HVAC units.	BLKG. BD. B.O	BLOCKING BOARD BOTTOM OF	F.E. F.E.C. FIXT	FIRE EXTI FIRE EXTI FIXTURE
<ul> <li>Place dust co effective.</li> <li>Remove deb</li> </ul>	ontrol mats at entries to work area; keep them clean and ris only in tightly covered containers.	BLDG.	BUILDING	FL.	FLASHING
<ul> <li>Construct ba beginning wa</li> <li>Maintain nea</li> </ul>	rriers to prevent dust and other contaminant migration prior to ork. jative air pressure in work space using HEPA filtration units.	CAB'T C.I.P.	CABINET CAST IN PLACE	G GALV. GA.	GALVAN GAUGE
<ul> <li>Seal all pipes</li> <li>Construct an personnel, or</li> </ul>	, conduits and penetrations. d use anteroom for all entry to work area; HEPA vacuum all have them change clothing before they leave the work area.	C.B. CLG. CI	CATCH BASIN CEILING CENTER LINE	G.C. G.S.N. Gl	GENERA GENERA GLASS
All personnel     before enteri	wear shoe covers while in the work area and remove then ng the hospital.	C.T. CH	CERAMIC TILE CHANNEL	GD. GRL.	GRADE
Upon Completion (C • Clean work c • Wipe all horiz	lass IV): irea. ontal surfaces with disinfectant.	C.O. CLR. CL.	CLEAN OUI CLEAR CLOSET	GRD. GYP.	GROUNE GYPSUM
<ul><li>Remove final</li><li>Vacuum usin</li><li>Remove all se</li></ul>	debris only in tightly covered containers. g HEPA filtered vacuum; mop with disinfectant as appropriate. eals from doors, ducts, vents and HVAC units.	COL. CONC.	COLUMN CONCRETE CONCRETE MASONRY LINIT	H HDW. HDWD	HARDWA
Remove cons and debris.	struction barriers in a manner that minimizes the spread of dust	COND. CONN.	CONDITION CONNECTION	HTR. HT.	HEATER
		CONST. CONT CJ	CONSTRUCTION CONTINUOUS CONTROL JOINT	H.P. H.M. HORIZ.	HIGH PC HOLLOW HORIZOM
		D		H.B. H.W.	HOSE BIE
		D.P. D.B. DIAG.	DAMP PROOFING DECK BEARING DIAGONAL	HR. I	hour
		DIA. DIM.	DIAMETER DIMENSION	IN. I.D.	INCH INSIDE D
		DISP.	DISPENSER	INSUL.	INSULATI
	EVIEWED AND PERMITTED IN ITS ENTIREDTY AT ITS ODICINAL	NONE.	ERRED SUBMITTALS		
CONSTRUCTION. THIS REPLACEMENT AND F SPACE FOR EQUIPME	PROJECT ONLY INVOLVES FINISH UPGRADES SUCH AS FLOOR PAINTING AND ELECTRICAL WORK REQUIRED TO PREPARE THE INT REPLACEMENT BY VENDOR AND DOES NOT CHANGE				
OCCUPANT TYPES OF	2021 I.B.C.				
LOCATION:	LEVEL 1, RIVERTON HOSPITAL				
OCCUPANCY:	LEVEL 1, IS A MIXED OCCUPANCY BUILDING THE AREA OF CONSTRUCTION IS '1-2' OCCUPANCY				
	:: I-A				
CONSTRUCTION TYPE	NO CHANGE				
CONSTRUCTION TYPE LEVEL 1 AREA: AREA OF REMODEL:	NO CHANGE 304 SF				

### VICINITY MAP



wn spout INAGE WASTE VENT WING C. WATER COOLER TRIC ATION PMENT AUST TING ansion joint RIOR

) VERIFY SH(ED) extinguisher EXTINGUISHER CABINET HING

/anized GE IERAL CONTRACTOR IERAL STRUCTURAL NOTES

E DIAMETER ATION

INT.	INTERIOR	P.S.F.	Pounds per square foot	V.C.P.	VITREOUS CLAY PIPE
INV.	INVERT				
		R		W	
J		RAD.	RADIUS	W.C.	WATER CLOSET
JAN.	JANITOR	REC.	RECOMMENDATION	W.H.	WATER HEATER
JT.	JOINT	REG.	REGISTER	W.R.	WATER RESISTANT
JST.	JOIST	REQ'D	REQUIRED	W.P.	WATERPROOF
		RA	RETURN AIR	WWF	WEI DED WIRE FABRIC
L		REV	REVISION	WF	WIDE FLANGE
- LAM		R D		WDW	WINDOW
LDG		REG	ROOFING	W/	WITH
LD C.		RM	ROOM	W/O	WITHOUT
L7 ( <b>1</b> .		RGH	ROUGH	WD	WOOD
		RON. RND	ROUND	ND.	WOOD
LVR.	LOUVER	KND.	KOUND		
		S			
Μ		SCR.	SCREW		
M.B.	MACHINE BOLT	SECT.	SECTION		
MFR.	MANUFACTURER	SEL.	SELECT		
M.O.	MASONRY OPENING	SHT.	SHEET		
MAT'L	MATERIAL	SIM.	SIMILAR		
MAX.	MAXIMUM	SLDG.	SLIDING		
MECH.	MECHANICAL	SM.	Smooth		
MTL.	METAL	SPEC.	Specification		
MIN.	MINIMUM	SPL.	SPLASH		
MLDG.	MOLDING	SQ.	SQUARE		
MULL.	MULLION	S.S.	STAINLESS STEEL		
		STD.	STANDARD		
Ν		struc.	STRUCTURE		
N.G.	NATURAL GRADE	S.A.	SUPPLY AIR		
NOM.	NOMINAL	SUSP.	SUSPENDED		
N/A	NOT APPLICABLE	SW.BD.	SWITCHBOARD		
, N.I.C.	NOT IN CONTRACT	0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
N.T.S.	NOT TO SCALE	т			
		TELCO	TELEPHONE COMPANY		
0		IG			
00	ON CENTER	T&G	TONGUE & GROOVE		
0 D		T& B			
ORD		TO			
O E S		1.0. TOC			
		1.0.C.			
0.1.0.1.	INSTALLED	Т.О.D. Т.О.Р			
0.F.O.I.	OWNER FURNISHED, OWNER INSTALLED	TYP.	TYPICAL		
_					
P		U			
PI.		U.N.O.	UNLESS NOTED OTHERWISE		
PID.					
PR.	PAIR	V			
PNL.	PANEL	V.	VENT		

VENT V.T.R. VENT THROUGH ROOF VERT. VERTICAL V.G. VERTICAL GRAIN VEST. VESTIBULE

V.C.T. VINYL COMPOSITION TILE

# DEFINITIONS

- . GENERAL: BASIC CONTRACT DEFINITIONS ARE INCLUDED IN THE CONDITIONS OF THE CONTRACT. 2. "APPROVED": WHEN USED TO CONVEY ARCHITECT'S ACTION ON CONTRACTOR'S
- SUBMITTALS, APPLICATIONS, AND REQUESTS, "APPROVED" IS LIMITED TO ARCHITECT'S DUTIES AND RESPONSIBILITIES AS STATED IN THE CONDITIONS OF THE CONTRACT. 3. "DIRECTED": A COMMAND OR INSTRUCTION BY ARCHITECT. OTHER TERMS INCLUDING "REQUESTED," "AUTHORIZED," "SELECTED," "REQUIRED," AND "PERMITTED" HAVE THE SAME MEANING AS "DIRECTED."
- 4. "INDICATED": REQUIREMENTS EXPRESSED BY GRAPHIC REPRESENTATIONS OR IN WRITTEN FORM ON DRAWINGS, IN SPECIFICATIONS, AND IN OTHER CONTRACT DOCUMENTS. OTHER TERMS INCLUDING "SHOWN," "NOTED," "SCHEDULED," AND "SPECIFIED" HAVE THE SAME MEANING AS "INDICATED."
- 5. "REGULATIONS": LAWS, ORDINANCES, STATUTES, AND LAWFUL ORDERS ISSUED BY AUTHORITIES HAVING JURISDICTION, AND RULES, CONVENTIONS, AND AGREEMENTS WITHIN THE CONSTRUCTION INDUSTRY THAT CONTROL PERFORMANCE OF THE WORK.
- 6. "FURNISH": SUPPLY AND DELIVER TO PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS. 7. "INSTALL": UNLOAD, TEMPORARILY STORE, UNPACK, ASSEMBLE, ERECT, PLACE,
- ANCHOR, APPLY, WORK TO DIMENSION, FINISH, CURE, PROTECT, CLEAN, AND SIMILAR OPERATIONS AT PROJECT SITE. 8. "PROVIDE": FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE.
- 9. "PROJECT SITE": SPACE AVAILABLE FOR PERFORMING CONSTRUCTION ACTIVITIES. THE EXTENT OF PROJECT SITE IS SHOWN ON DRAWINGS AND MAY OR MAY NOT BE IDENTICAL WITH THE DESCRIPTION OF THE LAND ON WHICH PROJECT IS TO BE BUILT.

# **SPECIAL INSPECTIONS**

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PL.

P.L.

SEE STRUCTURAL DRAWINGS FOR SPECIAL INSPECTIONS REQUIRED.

PENNY

PLATE

PLBG. PLUMBING

PLASTIC LAMINATE

P.S.I. POUND PER SQUARE INCH

### **DRAWING INDEX**

### GENERAL G001 Cover Sheet General Information G002 General Information G003 American National Standard Institute Requirements G004 G005 General Legend & Notes STRUCTURAL S100

### ARCHITECTURAL

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A502A	Wall Details

Structural Evaluation

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MECHANICAL M001 Mechanical Evaluation

### ELECTRICAL

EE001	Electrical Cover Sheet
EE003	Telecom Schedules and Notes
EE501	Electrical Details
EE701	Typical Mounting Details
ED101	Level 1 Electrical Demolition Plans
EP100	Level 1 Overall Power Plan
EP101	Level 1 Electrical Plans
EP501	GE Drawings
EP502	GE Drawings
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EP650	Telecom Risers & Details

### EQUIPMENT

Q100	Equipment Drawing
Q101	Equipment Drawing
Q102	Equipment Drawing
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Q109	Equipment Drawing
Q110	Equipment Drawing
Q111	Equipment Drawing
Q112	Equipment Drawing
Q113	Equipment Drawing
Q114	Equipment Drawing
Q115	Equipment Drawing







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# **LEGEND - DEMOLITION FLOOR PLAN** BUILDING COMPONENTS (DOORS, WALLS, ETC) INDICATED BELOW IN THIS LEGEND ARE DRAWN AT 1/4" = 1'-0" SCALE. COMPONENTS SHALL APPEAR HALF THE SIZE (SMALLER) ON PLANS DRAWN AT 1/8" = 1'-0" SCALE. EXISTING DOOR TO REMAIN EXISTING DOOR TO BE DEMOLISHED

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 $( \circ )$ 

EXISTING WINDOW TO BE

Demolished

EXISTING WALL TO REMAIN

EXISTING WALL TO BE DEMOLISHED.

### **EXISTING PLUMBING** FIXTURES TO REMAIN

EXISTING PLUMBING FIXTURES TO BE DEMOLISHED

### **GENERAL NOTES**

- STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS (IF PRESENT) ARE SUPPLEMENTAL TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE THE INSTALLATION OF MECHANICAL OR ELECTRICAL CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND CONSULTING ENGINEERS' DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR CLARIFICATION. ANY CONSTRUCTION INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT HIS/HER OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
- 3. ALL WORK SHALL COMPLY WITH THE CURRENT ADA ACCESSIBILITY GUIDELINES (AMERICANS WITH DISABILITIES ACT). . REFER TO THE CODE COMPLIANCE PLAN FOR APPLICABLE CODES GOVERNING THIS WORK. CODE REQUIREMENTS AND REGULATIONS SHALL BE CONSIDERED AS MINIMUM. WHERE THE CONTRACT DOCUMENTS EXCEED (WITHOUT VIOLATING) CODE AND REGULATION REQUIREMENTS, CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE. IF CONFLICT EXIST, THE MORE STRINGENT SHALL APPLY. COMPLY WITH REQUIREMENTS OF THE ADOPTED EDITIONS OF THE INTERNATIONAL CODE COUNCIL CODES, THE CODES AND STANDARDS REFERENCED WITHIN THE ICC CODES AND THE AMERICANS WITH DISABILITIES ACT.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE BARRICADES AND PROTECTIVE DEVICES SEPARATING CONSTRUCTION AREAS. TEMPORARY PASSAGES SHALL BE PROVIDED AS REQUIRED. PRIOR TO DELIVERY OF MATERIALS TO CONSTRUCTION ZONE AND REMOVAL OF WASTE FROM SITE, THE CONTRACTOR SHALL CHECK WITH THE OWNER FOR AN ACCEPTABLE ROUTE AND TIME.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LOCATION AND SIZE OF OPENINGS FOR ALL TRADES AND SHALL COORDINATE ALL CONSTRUCTION AS INDICATED BY THE CONTRACT DOCUMENTS, INCLUDING SHOP DRAWINGS REVIEWED BY THE ARCHITECT.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK. . FOR ALL REMODEL WORK AS OCCURS, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER ALL MEASURES TO ACCOMPLISH THE WORK WITH THE MINIMUM OF INTERRUPTION TO NORMAL BUILDING PROCEDURES. SYSTEM SHUTDOWNS OF HVAC, PLUMBING, ELECTRICAL, AND NOISY CONSTRUCTION INCLUDING ROTO HAMMER, SAW CUTTING, CONCRETE ANCHORS, ETC. SHALL BE COORDINATED WITH THE
- OWNER AT LEAST 72 HOURS PRIOR TO COMMENCEMENT. ALL DIMENSIONS ARE SHOWN TO FACE OF GYPSUM BOARD OF NEW CONSTRUCTION OR STRUCTURAL WALL, UNLESS NOTED OTHERWISE.
- ALL DRAWINGS, THOUGH NOTED TO SCALE ARE FOR ILLUSTRATION ONLY. THE CONTRACTOR SHALL NOT SCALE DRAWINGS. WHEN A DETAIL IS IDENTIFIED AS TYPICAL, THE CONTRACTOR IS TO APPLY THIS DETAIL
- IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE. DRAWINGS HAVE BEEN DETAILED IN COMPLIANCE WITH U.L. LISTING REQUIREMENTS AND ICBO REPORTS FOR THE MATERIALS SPECIFIED. IF AN ALTERNATE OR SUBSTITUTED
- MATERIAL IS ACCEPTED AS AN EQUAL BY THE GENERAL CONTRACTOR, HE/SHE WILL ASSUME THE RESPONSIBILITY FOR WHATEVER CONSTRUCTION MODIFICATION AND/OR ADDITIONAL COSTS ARE REQUIRED. ALL TRASH SHALL BE REMOVED DAILY. BUILDING MATERIALS MAY NOT BE STORED IN THE CORRIDORS AT ANY TIME. BLOCKAGE OF ANY REQUIRED EXIT IS PROHIBITED.
- M. ALL PENETRATIONS INTO SOUND OR FIRE RATED PARTITIONS, FLOORS OR CEILING ASSEMBLIES SHALL BE SEALED WITH APPROVED PERMANENT RESILIENT SEALANT. REFER TO IBC CURRENT VERSION FOR REQUIREMENTS FOR OPENINGS IN FIRE RATED WALLS. FOR OPENINGS LESS THAN 16 SQUARE INCHES, THE SPACE BETWEEN THE WALL AND ALLOWED PENETRATIONS MUST BE SEALED TO PREVENT THE MOVEMENT OF HOT FLAME OR GASES. ELECTRICAL DEVICES, RECESSED CABINETS, ETC. SHALL BE SEALED, LINED, INSULATED OR OTHERWISE TREATED TO MAINTAIN THE INTEGRITY OF THE ASSEMBLY. SEE PENETRATION DETAILS.
- ABBREVIATIONS THROUGHOUT THE PLAN ARE THOSE IN COMMON USE. THE ARCHITECT SHALL DEFINE THE INTENT OF ANY IN QUESTION.
- ). THE CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF WATER AND DRAIN INSTALLATIONS AND OTHER REQUIRED SERVICES WITH EQUIPMENT MANUFACTURERS. MAINTAIN ALL EXISTING SPRAY-APPLIED FIRE PROOFING ON STEEL STRUCTURAL MEMBERS. WHERE EXISTING FIRE PROOFING IS REMOVED FOR INSTALLATION OF NEW BEAMS, UNISTRUTS, ETC. THE CONTRACTOR SHALL PATCH AGAIN WITH EQUIVALENT FIRE PROOFING MATERIAL TO MATCH ADJACENT EXISTING MATERIAL.
- Q. ALL WOOD CANTS, NAILERS, CURBS, ETC. THROUGHOUT JOB SHALL BE FIRE RETARDANT PRESSURE-TREATED, AS PER I.B.C. CURRENT VERSION. SEE RELEVANT DFTAILS
- R. CONTRACTOR SHALL REFER TO THE PROJECT MANUAL FOR A COMPLETE LIST OF GENERAL CONDITIONS, SPECIAL CONDITIONS AND OTHER NOTES.

### GENERAL NOTES - DEMOLITION FLOOR PLAN GENERAL NOTES - FLOOR & DIM. PLANS

- A. CONTRACTOR SHALL VERIFY ALL EXISTING SITE AND BUILDING CONDITIONS INCLUDING UNDERGROUND UTILITIES AND SERVICE LINES, IRRIGATION LINES AND SUB SURFACE STRUCTURES AND ALL OTHER EXISTING CONSTRUCTION BOTH ABOVE AND BELOW GRADE.
- PRIOR TO REMOVAL OF EXISTING BUILDING MATERIALS (INCLUDING WALLS, DOORS, WINDOWS, CEILING, ETC.) INDICATED IN THE DEMOLITION PLANS, CONTRACTOR SHALL THOROUGHLY COORDINATE ARCHITECTURAL FLOOR PLANS, CEILING PLANS, FINISH SCHEDULES AND ALL CONSULTANT DRAWINGS TO DETERMINE EXACT EXTENT OF REMOVAL.
- COORDINATE WITH OWNER'S REPRESENTATIVE REGARDING ITEMS SHOWN TO BE REMOVED THAT WILL BECOME PROPERTY OF THE OWNER. CAREFULLY REMOVE SUCH ITEMS SO AS NOT TO DAMAGE THEM. . IN EXISTING WALLS THAT ARE NOTED TO REMAIN, ANY NAILS, SCREWS, OR OPENINGS
- THAT REMAIN AS A RESULT OF EXISTING EQUIPMENT REMOVAL OR WALL REMOVAL SHALL BE PATCHED WITH SMOOTH, EVEN, INVISIBLE TRANSITION. IN PLACES WHERE THE EXISTING WALL IS CUT FOR INSTALLATION OF POWER OUTLETS, SWITCH, THERMOSTAT, ETC. PATCH OPENING IN WALL WITH GYPSUM BOARD. PROVIDE SMOOTH, EVEN, INVISIBLE TRANSITION BETWEEN NEW AND EXISTING WALL FINISH.
- THE OWNERS STAFF WILL CONTINUE TO OCCUPY AREAS DIRECTLY ADJACENT TO THE CONSTRUCTION AREA. THE CONTRACTOR AND SUB-CONTRACTORS SHALL TAKE ALL NECESSARY MEASURES TO MINIMIZE DISRUPTION ACTIVITIES CONDUCTED BY THE OWNERS STAFF. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF NOISY ACTIVITIES, SHUT-DOWNS, AND ANY OTHER ACTIVITIES WHICH MAY DISRUPT NORMAL OPERATIONS PRIOR TO PERFORMING THE WORK.
- ONCE FLOORING DEMOLITION HAS OCCURRED, CLEAN AND PREPARE FLOOR TO RECEIVE NEW FLOOR COVERINGS. THIS SHALL BE COORDINATED WITH THE FINISH SCHEDULE AND MANUFACTURER OF NEW PRODUCTS FOR FLOOR PREPARATION REQUIREMENTS.
- G. ITEMS SHOWN ON THESE FLOOR PLANS FOR REMOVAL ARE BUILT-IN ITEMS. EQUIPMENT, FURNITURE, & OTHER ITEMS EXISTING IN THE SPACE THAT ARE NOT BUILT-IN SHALL BE REMOVED OR CLEARED TEMPORARILY BY THE OWNER.



# **GENERAL NOTES - REFLECTED CEILING PLAN**

- A. SEE MECHANICAL DRAWINGS FOR DIFFUSER LOCATIONS IN CEILING. CONTRACTOR SHALL COORDINATE WITH LIGHT FIXTURES (AS INDICATED IN ELECTRICAL DRAWINGS) AND MOVE DIFFUSERS AROUND THE LIGHT FIXTURE IF THERE IS ANY CONFLICT BETWEEN THE TWO.
- 3. SOME OF THE ITEMS ON CEILING INDICATED IN MECHANICAL AND ELECTRICAL DRAWINGS, MAY OR MAY NOT BE INDICATED ON ARCHITECTURAL CEILING PLANS. SEE MECHANICAL AND ELECTRICAL DRAWINGS AND COORDINATE WITH ARCHITECT FOR ANY REQUIRED CLARIFICATIONS. C. CONTRACTOR SHALL NOT HANG CEILING TILES AND LIGHTS FROM DUCTS. FOR
- AREAS ABOVE THE CEILING WHERE OVERSIZE DUCTS OCCUR SEE DETAIL 11 / A503A D. PAINT ALL VISIBLE EXPOSED ITEMS LIKE METAL DECK, STEEL ANGLES, STEEL BEAMS, STEEL TRUSSES, MISCELLANEOUS EXPOSED STEEL STRUCTURAL COMPONENTS, HOLLOW METAL DOORS, DOOR FRAMES & WINDOW FRAMES. PAINT EXPOSED SURFACES (WITH COLORS AND ACCENT COLORS AS SELECTED BY ARCHITECT) EXCEPT WHERE NATURAL FINISH OR MATERIAL IS SPECIFICALLY NOTED AS A SURFACE NOT TO BE PAINTED. DO NOT PAINT CONCEALED SURFACES, FINISHED METAL

### **GENERAL NOTES - WALL SECTIONS**

SURFACES, OPERATING PARTS AND PRE FINISHED ITEMS.

- A. ALL EXTERIOR WALL FINISHES ARE TO BE 6" ABOVE FINISH GRADE, TYPICAL. B. SEE WINDOW SCHEDULE FOR WINDOW OPENINGS AND SILL HEIGHT (UNLESS NOTED ON THE EXTERIOR ELEVATIONS). SEE DOOR SCHEDULE FOR DOOR OPENING SIZES. . ALL FINISHES TO BE INSTALLED PER MANUFACTURER RECOMMENDATIONS AND PER
- SPECIFICATION SECTION IN THE PROJECT MANUAL. D. SEE FINISH FLOOR PLANS FOR AREAS WHERE HONED CMU BLOCKS ARE INDICATED.
- AT THESE AREAS, THE CONTRACTOR HAS THE OPTION OF USING REGULAR BLOCK IN CONCEALED AREAS AND CEILING SPACES THAT ARE NOT VISIBLE. SPACING BETWEEN STRUCTURAL MEMBERS SHALL FOLLOW INDICATIONS GIVEN ON STRUCTURAL PLANS (TYPICAL).
- FIRE PROTECTION ON ASSEMBLIES, ELEMENTS AND MEMBERS SHALL COMPLY WITH ALL THE CODE REQUIREMENTS, TYPICAL - REFER TO CODE COMPLIANCE PLANS. G. WOOD MATERIAL UNDER TYPE IIB CONSTRUCTION SHALL BE FIRE-RETARDANT,
- PRESSURE-TREATED, TYPICAL, U.N.O. H. ALL INTERIOR WALLS SHALL BE BUILT FOLLOWING WALL TYPE DETAILS, TYPICAL. IN ROOMS/AREAS WHERE HONED, SCORED OR COLORED C.M.U. BLOCKS ARE INDICATED FOR WALLS IN THE FINISH SCHEDULE, CONTRACTOR HAS THE OPTION OF USING REGULAR (LESS EXPENSIVE NATURAL GRAY COLOR) BLOCKS IN CONCEALED AREAS AND CEILING SPACES THAT ARE NOT VISIBLE. THIS DOES NOT APPLY TO AREAS THAT CAN CHANGE OVER THE LIFE OF THE BUILDING SUCH AS WALL LOCATED BEHIND CABINETS, ARTWORK, WHITE BOARD, TACK BOARD, ETC. WHEN OTHER BLOCKS ARE SUBSTITUTED, THE STRUCTURAL INTEGRITY OF THE BLOCK SHALL REMAIN THE SAME AS BLOCK INDICATED IN STRUCTURAL DRAWINGS AND SPECIFICATION SECTION IN THE PROJECT MANUAL
- AT INTERIOR MASONRY WALL OUTSIDE CORNERS, PROVIDE BULL NOSE BLOCK. K. CORE DRILLING WALLS AND SLABS: CONTRACTOR SHALL USE GROUND PENETRATING RADAR OR OTHER APPROVED METHOD TO SCAN CONCRETE OVER METAL DECK, CONCRETE SUSPENDED SLABS, MASONRY WALLS, AND CONCRETE WALLS TO LOCATE REBAR PRIOR TO CORE DRILLING ANY HOLES. HOLES SHALL BE LOCATED TO AVOID REBAR DETECTED. ALL OPENINGS AND GROUPS OF OPENINGS SHALL BE REINFORCED AS SHOWN ON THE STRUCTURAL DRAWINGS. OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER PRIOR TO DRILLING.

### REFER TO THE CODE COMPLIANCE PLANS FOR INDICATION OF FIRE RATED WALLS. AT LOCATIONS WITHOUT CEILINGS (ROOM IS OPEN TO STRUCTURE ABOVE), EXTEND ALL WALLS, SOFFITS, AND HEADERS (INCLUDING ALL STUD FRAMING, GYPSUM BOARD, INSULATION & CMU, WHERE APPLICABLE) TO THE METAL ROOF DECK ABOVE. WHEN FLOOR HEIGHT VARIES IN A ROOM, THE CEILING HEIGHT SHOWN IS THE HEIGHT ABOVE THE FLOOR AT THE ENTRY, UNO. SEE INTERIOR ELEVATIONS FOR TOILET AND BATHROOM ACCESSORIES (GRAB BARS, MIRRORS, DISPENSERS, ETC.). AT ALL VERTICAL EDGES OF INTERIOR CMU WALLS THAT ARE VISIBLE, USE BULLNOSE CMU BLOCKS FROM FINISHED FLOOR ELEVATION TO A HEIGHT OF 7'-4". FOR CLARITY SAKE, DIMENSIONS ARE NOT SHOWN AT THE FOLLOWING LOCATIONS: a. WHERE THE FACE OF WALL COINCIDES WITH THE MAIN GRID LINE OR 4'-0" X 4'-0" SUBGRID b. WHERE THE CENTER OF WALL COINCIDES WITH THE MAIN GRID LINE OR 4'-0" X 4'-0" subgrid. . VERIFY WITH ARCHITECT FOR DIMENSIONS NOT SHOWN.

- . SEE STRUCTURAL DRAWINGS FOR CMU WALLS, MASONRY COLUMNS, AND MASONRY BEAMS. SEE BUILDING EXTERIOR ELEVATIONS FOR VENEER TYPES. SEE FINISH SCHEDULE FOR CMU THAT IS HONED, SCORED, SEALED, PAINTED, ETC. SEE CIVIL, FOOD SERVICE, PLUMBING, AND MECHANICAL DRAWINGS FOR FLOOR
- SINKS, FLOOR DRAINS, AND OPENINGS IN FLOOR SLABS AND ROOFS FOR DUCTWORK, ETC. SEE DOOR AND WINDOW SCHEDULE FOR THE REQUIRED DOOR AND WINDOW OPENING SIZES
- SEE FINISH SCHEDULE AND STRUCTURAL DRAWINGS AND PROVIDE RECESS IN CONCRETE FLOOR SLAB AS REQUIRED TO ACCOMMODATE FLOOR FINISHES. CONCRETE FLOOR SLAB THAT IS ON GRADE, SHALL BE RECESSED AS REQUIRED, FOR A THICK SET MORTAR FOR CERAMIC TILE FINISH. SLOPE SHALL BE AT 1/8" PER FOOT TOWARDS THE FLOOR DRAIN. CONCRETE FLOOR SLAB, THAT IS NOT ON GRADE, NEED NOT BE RECESSED. IN SUCH LOCATION, USE THIN SET MORTAR FOR CERAMIC TILE FINISH WITH A GENTLE SLOPE TOWARDS DRAIN.
- ALL PENETRATIONS (PIPES, CONDUITS, JOISTS, ETC.) THROUGH FIRE RATED BARRIER WALLS SHALL BE SEALED COMPLETELY WITH FIRE RATED SEALANTS. FILL GAP BETWEEN FLUTES OF THE METAL DECK AND METAL TRACK TOP RUNNER WITH FIRE RATED SEALANTS. SEAL TIGHTLY AROUND PIPES, CONDUITS, DUCTS, ETC. THAT PENETRATES THE FIRE BARRIER WALL WITH FIRE RATED SEALANTS. APPLY SEALANT AS PER MANUFACTURERS RECOMMENDATIONS WITH ANY ADDITIONAL MATERIAL AS REQUIRED INSTALLED AROUND PENETRATIONS TO MAINTAIN THE INTEGRITY OF THE FIRE WALL. SEE MECHANICAL DRAWINGS FOR FIRE AND SMOKE DAMPERS.
- M. WALL CABINETS HAVE A DEPTH OF 1'-3" UNLESS NOTED OTHERWISE. N. ALL MASONRY MORTAR JOINTS LOCATED INSIDE THE BUILDING SHALL BE TOOLED JOINTS, UNLESS NOTED OTHERWISE. MASONRY JOINTS ON THE BUILDING EXTERIOR SIDE SHALL BE RAKED JOINTS AS INDICATED IN BUILDING EXTERIOR ELEVATIONS. D. SEE OVERALL FLOOR PLAN SHEETS FOR ANGLES, PIVOT POINT AND DIMENSIONS
- BETWEEN GRID LINES. P. SEE CODE COMPLIANCE FLOOR PLANS FOR LOCATION OF FIRE BARRIER, NON RATED WALLS, ETC. Q. SEE ENLARGED FLOOR PLANS FOR ADDITIONAL DIMENSIONS.
- R. IN SOME PROJECTS, DUE TO THE LARGE BUILDING FOOTPRINT SIZE, FLOOR PLANS ARE SPLIT AS AREAS A, B, C, ETC. AND EACH AREA IS INDICATED ON SEPARATE SHEETS. MATCH LINES INDICATE THE BOUNDARIES OF EACH AREA. WHEN CONTRACTORS ARE PREPARING BID FOR THE PROJECT, COST SHALL INCLUDE ONLY THE BUILDING ELEMENTS AND ASSOCIATED CONSTRUCTION WORK CALLED OUT WITH KEYED NOTES IN THE AREA INDICATED ON THE SHEET, KEYED NOTES INDICATED OUTSIDE THE MATCH LINE IN ADJACENT FLOOR AREAS SHALL NOT BE COUNTED FOR THAT AREA. THIS AVOIDS DUPLICATION OF BUILDING ELEMENTS AND CONSTRUCTION WORK.





2 Floor Plan Level 1 SCALE: 1/4" = 1'-0"

### KEYED NOTES 1. LINE OF WALL.

- 2. FASTENERS AS REQUIRED. ALIGN WITH STUDS WHERE POSSIBLE. 3. STEEL BACKING PLATE. PLATE SHALL BE 15 GAUGE, 6" WIDE WITH
- REQUIRED LENGTH TO COVER CABINETS. 4. SOLID WOOD BLOCKING, TYPICALLY ATTACHED TO CABINET BODY. 5. COUNTERTOP AND BACKSPLASH. SEE TYPICAL COUNTERTOP DETAIL -/---
- 6. CABINET BASE BOX. BOX SHALL BE BUILT WITH PLYWOOD, 3/4" THICK, PRESSURE TREATED. BASE BOX SHALL BE ANCHORED TO FLOOR WITH STEEL "L" CLIPS AND FASTENERS AS REQUIRED. BASE CABINET SHALL BE
- ATTACHED TO THE BASE BOX. 7. LINE OF FLOOR. 8. NEW WALL (OR EXISTING WALL WHERE OCCURS). SEE WALL TYPE FOR
- WALL CONSTRUCTION. NOTE: WHEN CABINETS ARE MOUNTED TO CONCRETE WALL OR MASONRY

(CMU BLOCKS) WALL, BACKING PLATES ARE NOT REQUIRED. PROVIDE COMPATIBLE MASONRY WALL ANCHORS AND FASTENERS TO ATTACH THE CABINETS.

### **KEYED NOTES**

01.04 DUST PARTITION (FROM FLOOR TO CEILING) WITH DOORS AS REQUIRED TO ACCESS CONSTRUCTION ZONE. LOCATE AND ALIGN PARTITION WITH CEILING GRID (AND/OR) GYPSUM BOARD CEILING WHERE OCCURS) ABOVE AS MUCH AS POSSIBLE FOR TIGHT SEAL. IF THERE IS A CONFLICT, WHERE PARTITION ABUTS CEILING, MOVE ITEMS MOUNTED ON CEILING SUCH AS EXIT SIGN, FIRE/SMOKE ALARM, LIGHT FIXTURE, DIFFUSER, RETURN AIR GRILLE, SENSOR, ETC. TEMPORARILY AWAY FROM THE LOCATION. PROVIDE ANTE ROOM AS INDICATE. MAINTAIN NEGATIVE PRESSURE IN THE CONSTRUCTION ZONE WITH REQUIRED PORTABLE VACUUM MACHINE (OR EXHAUST FANS), WITH HEPA FILTERS, TEMPORARY FLEXIBLE HOSE TYPE DUCTS TO EXHAUST FILTERED AIR AS INDICATED. DUST PARTITION SHALL BE FIRE RATED, POLYCARBONATE, TRANSLUCENT, PLASTIC PANELS WITH METAL FRAMES ON ALL SIDES. INSTALL PARTITION PER MANUFACTURER'S RECOMMENDATIONS. PARTITION MANUFACTURER SHALL BE "EDGE-GUARD" OR EQUIVALENT. MOVE ACCESS DOOR TO THE CONSTRUCTION ZONE AS REQUIRED DURING THE CONSTRUCTION PHASE. SEE "ICRA" (INFECTION CONTROL RISK ASSESSMENT) REQUIREMENTS AND ICRA WORK PERMIT FORM IN THE PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS. 02.18 FLOOR COVERING EXISTING TO BE REMOVED. REMOVE FLOOR COVERING ONLY BENEATH EXISTING X-RAY TABLE. REMOVE COVERING TO EXISTING SEAM IN FLOOR. 02.34 X-RAY EQUIPMENT. EXISTING TO BE REMOVED BY OWNER'S VENDOR. NOT IN CONTRACT. 02.35 MILLWORK. EXISTING TO BE REMOVED AND RELOCATED. CAREFULLY REMOVE MILLWORK AND STORE DURING DEMOLITION PHASE TO BE USED IN NEW CONSTRUCTION PHASE. 05.02 X-RAY UNIT MOUNTING PLATE O.F.C.I. SEE VENDOR (G.E.) DRAWINGS FOR INSTALLATION REQUIREMENTS 09.02 PAINT. PAINT ENTIRE WALL FROM FLOOR TO CEILING TO MATCH EXISTING 09.03 FLOOR COVERING. PROVIDE NEW SHEET VINYL FLOOR COVERING TO MATCH ADJACENT SHEET VINYL. SHEET VINYL SHALL BE MANNINGTON BIOSPEC MD IN THE COLOR SANDRIFT 15203.

11.08 X-RAY EQUIPMENT. NOT IN CONTRACT. VENDOR INSTALLED. COORDINATE WITH EQUIPMENT VENDOR AS REQUIRED. SEE ELECTRICAL DRAWINGS, SEE VENDOR DRAWINGS.

### KEYED NOTES

- LINE OF WALL.
   DOOR PULL. SEE SPECIFICATIONS IN PROJECT MANUAL.
- PLASTIC LAMINATE CABINET DOOR.
   WALL BASE. SEE FINISH SCHEDULE.
- 5. CABINET BASE. COORDINATE WITH ELECTRICAL DRAWINGS FOR POWER AND DATA OUTLETS THAT ARE LOCATED HERE.
- 6. LINE OF FLOOR. 7. ADJUSTABLE SHELF. UNLESS NOTED OTHERWISE ON INTERIOR ELEVATIONS, PROVIDE A MINIMUM OF FIVE SHELVES. NOTCH SHELF 1/8" AT SUPPORT TO
- PREVENT SLIDE OUT. 8. FASCIA PANEL AS OCCURS.
- 9. CABINET BODY. ATTACH TO WALL PER TYPICAL DETAIL 3/A111 10. LINE OF CEILING. SEE REFLECTED CEILING PLAN.

### **GENERAL NOTES**

- A. SEE SHEET G003 AND G005 FOR SYMBOLS, GENERAL NOTES AND LEGEND. B. SEE SHEET A505A FOR CABINET LEGEND.
- C. SEE SHEET A601A FOR DOOR SCHEDULE. D. SEE SHEET A602A FOR WINDOW SCHEDULE.
- E. SEE SHEET A603A FOR FINISH SCHEDULE AND GENERAL NOTES.

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### **KEYED NOTES**

- 02.02 DRYWALL. EXISTING TO BE REMOVED AS REQUIRED.
- 02.21 ACCESS PANEL. EXISTING TO BE REMOVED AND RELOCATED. 02.25 UNISTRUT X-RAY TUBE MOUNTING ASSEMBLY. EXISTING TO REMAIN.
- 02.32 LIGHT FIXTURE. EXISTING TO BE REMOVED. 09.17 PAINT. PAINT ENTIRE CEILING TO MATCH EXISTING COLOR. 09.19 PATCH DRYWALL. RELOCATE LIGHT FIXTURE PENETRATION AS REQUIRED.
- COORDINATE WITH VENDOR EQUIPMENT. PATCH DRYWALL AS REQUIRED. SEE VENDOR DRAWINGS. SEE ELECTRICAL DRAWINGS. 10.25 ACCESS PANEL. REUSE FROM PREVIOUS DEMO PHASE. COORDINATE EXACT
- LOCATION WITH VENDOR EQUIPMENT. SEE VENDOR DRAWINGS. 26.03 LIGHT FIXTURE. REPLACE EXISTING LIGHT FIXTURES WITH NEW LED FIXTURES. SEE ELECTRICAL DRAWINGS.

# **GENERAL NOTES**

- A. SEE SHEET G003 AND G005 FOR SYMBOLS, GENERAL NOTES AND LEGEND. B. SEE SHEET A505A FOR CABINET LEGEND. C. SEE SHEET A601A FOR DOOR SCHEDULE.
- D. SEE SHEET A602A FOR WINDOW SCHEDULE.
- E. SEE SHEET A603A FOR FINISH SCHEDULE AND GENERAL NOTES.

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# 4 //8 5 1/4" 7 1/4" AND 8/A502B AND 13/A502A

5 1/4"

# **KEYED NOTE**

 $\langle 3 \rangle$ 

\A502B/

\_\_\_\_

WALL WIDTH

 $\langle 4 \rangle$ 

VARIES WITH STUD SIZ

- 1. LINE OF FLOOR OR ROOF DECK AS OCCURS.
- 2. TO ACCOMMODATE FOR STRUCTURE DEFLECTION, PROVIDE SLIP CONNECTION BETWEEN TOP RUNNER TRACK AND METAL STUD FRAMING. SEE DETAIL 9 / A502B 3. STUD FRAMING AROUND DUCT OPENINGS. SEE DETAIL 11/A502A
- 4. METAL STUDS, 20 GA STRUCTURAL (33 MILS) AT 16" O.C, U.N.O. BASED ON WALL TYPES INDICATED IN FLOOR PLAN, PROVIDE STUD SIZE AS INDICATED IN WALL TYPES WITH TRACK RUNNERS AT TOP AND BOTTOM. FOR STUD FRAMING AROUND DOOR AND WINDOW OPENINGS, SEE DETAIL 11/A502A
- 5. LINE OF CEILING AS OCCURS. SEE REFLECTED CEILING PLAN. 6. STEEL STUDS. "C-H' SHAPED, 20 GA STRUCTURAL AT 24" O.C.
- 7. PROVIDE ACOUSTIC INSULATION BLANKET FOR FULL DEPTH OF THE STUD CAVITY THROUGHOUT, UNO. FOR 4" & 3 5/8" STUDS PROVIDE R-13 UNFACED BATT INSULATION AND FOR 6" STUDS PROVIDE R-19 UNFACED BATT INSULATION. PROVIDE KRAFT FACED INSULATION FOR ALL APPLICATIONS AT EXTERIOR WALLS. 8. GYPSUM BOARD, 5/8" THICK, TYPE 'X', U.N.O, ATTACHED TO METAL STUD
- FRAMING. SEE GENERAL NOTE 'B' BELOW. 9. ANCHOR BASE TRACK TO CONCRETE FLOOR BELOW. SEE DETAIL 8/A502A
- 10. FILL GAP BETWEEN DECK AND METAL TRACK TOP RUNNER WITH FIRESTOP SEALANT. SEAL TIGHTLY AROUND ALL PIPES, CONDUITS, DUCTS, ETC. ON EACH SIDE OF THE FIRE BARRIER WALL (CONTINUOUS) WITH APPROVED FIRESTOP SEALANT INSTALLED AROUND ALL PENETRATIONS TO MAINTAIN THE INTEGRITY OF THE FIRE BARRIER.
- 11. FILL GAP BETWEEN DECK AND METAL TRACK TOP RUNNER WITH ACOUSTIC SEALANT. SEAL TIGHTLY AROUND ALL PIPES, CONDUITS, DUCTS, ETC. ON EACH SIDE OF THE WALL (CONTINUOUS) AND AROUND ALL PENETRATIONS TO MAINTAIN THE INTEGRITY OF THE WALL.
- 12. STOP GYPSUM BOARD 1/4" ABOVE THE FLOOR TYP. ON EACH SIDE OF WALL. PROVIDE ACOUSTIC SEALANT AT SOUND WALLS AND FIRESTOP SEALANT AT RATED WALLS ON EACH SIDE OF THE WALL (CONTINUOUS).
- 13. OUTLET BOX AS OCCURS. PROVIDE FIRE BARRIER MOLDABLE PUTTY PADS AND FIRESTOP SEALANT AROUND ELECTRICAL BOXES AT ALL RATED WALLS AND SOUND BARRIER WALLS AND AT BACK TO BACK ELECTRICAL BOXES AT SMOKE PARTITION WALLS, TYP.
- 14. PROVIDE STRAPPING AND BLOCKING AT FURRING WALL. SEE DETAIL 12/A502A 15. LINE INDICATES EXISTING WALL OR STRUCTURE. PROVIDE 1/4" AIR GAP.
- 16. GYPSUM BOARD SHAFT LINER PANEL, 1" THICK, TYPE 'X', ATTACHED TO C-H STUDS. 17. STEEL RUNNER, 'J' SHAPED WITH UNEQUAL LEGS OF 1" AND 2", 20 GA, ATTACHED TO FLOOR AND STRUCTURE ABOVE WITH FASTENERS LOCATED NO GREATER THAN 2" FROM ENDS AND NO MORE THAN 24" O.C. RUNNERS SHOULD BE
- POSITIONED WITH SHORT LEG TO FINISHED SIDE OF WALL. 18. STOP STUD RUNNER AT BASE PLATES. 19. STEEL PLATE, 3/8" THICK WITH 4-1/2" DIA. HILTI-HY200 EPOXY ANCHORS WITH
- 2-3/8" HILTI-HIT -2 ANCHORS. EMBED INTO CONCRETE 2-3/8". 20. TUBE STEEL 3" x 3" x 3/16" AT 6'- 0" O.C.
- 21. WALL CAP. SOLID SURFACE MATERIAL ATTACHED TO WALL BELOW. 22 PLYWOOD, 3/4" THICK, CONTINUOUS FIRE TREATED. ATTACH PLYWOOD TO
- VERTICAL STEEL TUBE POST WITH 'L' SHAPED METAL CLIPS AND FASTENERS. 23. PROVIDE 1/4" RADIUS ROUNDED EDGE, CONTINUOUS.
- 24. METAL STUDS 16 GA STRUCTURAL (35 MIL) AT 16" O.C. PROVIDE RUNNERS AT TOP AND BOTTOM. ATTACH TOP RUNNER TO PLYWOOD AND VERTICAL STEEL POST. 25. LINE OF FLOOR.
- 26. RESILIENT CHANNEL, 2" X 1/2", INSTALLED HORIZONTALLY AND SPACED AT 24" 27 WHERE CONDITIONS PROHIBIT EXTENDING STUDS TO DECK, PROVIDE CROSS
- BRACING FROM TOP RUNNER OF WALL TO STRUCTURE ABOVE WITH 3-5/8" 20 GA STUDS AT 4' - 0" O.C. ALTERNATE DIRECTION OF BRACING TO STRUCTURE EVERY 48" AS CONDITIONS ALLOW. 28 TOP TRACK. 18 GA. REQUIRED AT CROSS-BRACED WALLS.

# **GENERAL NOTES**

- A. CONTRACTOR SHALL VERIFY ITEMS LIKE SEMI OR FULLY RECESSED MISCELLANEOUS BOXES, PANELS, PLUMBING LINES, CONDUITS, PIPES, ETC. THAT ARE CONCEALED IN THE WALL. IF 3-5/8" METAL STUDS ARE INADEQUATE, CONTRACTOR SHALL NOTIFY THE ARCHITECT AND USE 6" STUDS. COORDINATE WITH ALL THE CONSULTANT DRAWINGS PRIOR TO WALL CONSTRUCTION AND USE 6" OR 8", 20 GAUGE METAL STUDS FOR FRAMING IN LIEU OF 3-5/8" METAL STUDS.
- USE 5/8" CEMENTITIOUS BOARD IF CERAMIC OR PORCELAIN WALL TILES ARE INDICATED IN THE FINISH SCHEDULE AS WALL FINISH. CEMENTITIOUS BOARD SHALL EXTEND FROM FINISHED FLOOR TO HEIGHT OF TILE. 5/8" WATER RESISTANT GYPSUM BOARD TO BE USED ABOVE TILE HEIGHT IN RESTROOMS. SEE FLOOR PLANS FOR CERTAIN UNIQUE LOCATIONS THAT REQUIRE LEAD LINED GYPSUM BOARD, IMPACT RESISTANT GYPSUM BOARD, SOUND ATTENUATION GYPSUM BOARD, ETC.
- PROVIDE CONTROL JOINT AS PER DETAIL 14/A502A WHEN LENGTH OF GYPSUM BOARD EXCEEDS 50' IN ONE DIRECTION OR AS DIRECTED BY ARCHITECT. COORDINATE WITH ARCHITECT FOR CONTROL JOINT LOCATIONS. WHEN GYPSUM BOARD OR CEMENTITIOUS BOARD IS ATTACHED VERTICALLY, USE 1" LONG #6 DRYWALL SCREWS TO EACH STUD. SCREWS ARE 8" O.C. AT PERIMETER AND 12" AT INTERMEDIATE STUD. WHEN GYPSUM BOARD IS ATTACHED HORIZONTALLY TO STUDS, HORIZONTAL JOINTS SHALL BE STAGGERED WITH THOSE ON THE OPPOSITE SIDE. SCREWS FOR HORIZONTAL APPLICATION SHALL BE 8" O.C. AT VERTICAL EDGES AND 12" O.C. AT INTERMEDIATE STUDS.
- D. FOR LOCATION OF FIRE RATED WALLS AND SMOKE PARTITION WALLS SEE CODE COMPLIANCE PLAN. E. SEE DIMENSION FLOOR PLANS FOR WALL TYPES USED IN THIS PROJECT. SOME WALL
- TYPES MAY NOT BE USED IN THIS PROJECT.
- WHERE LEAD LINED WALLS ARE INDICATED ON THE DRAWINGS, USE 16 GA STUDS IN LIEU OF THE GAUGE OF STUDS CALLED OUT IN THE WALL TYPES. IN PLACES WHERE MECHANICAL DUCTS ARE DESIGNED TO PENETRATE THE FLOOR, TO MEET THE REQUIREMENTS OF FIRE RATING, PROVIDE A TWO-HOUR FIRE RATED ENCLOSURE AT TOP AND BOTTOM OF SHAFT AS INDICATED IN DETAILS 5/A502B
- H. IN PLACES WHERE A TWO-HOUR HORIZONTAL ENCLOSURE IS REQUIRED TO
- SEPARATE THE DUCTS FROM THE SPACE BELOW, PROVIDE A TWO-HOUR FIRE RATED HORIZONTAL ASSEMBLY AS PER DETAILS 5/A502B AND 8/A502B IN PLACES WHERE BACKING IS REQUIRED IN WALLS TO SUPPORT WALL HUNG EQUIPMENT, CABINETS, ETC. PROVIDE BACKING IN WALL PER DETAILS 5/A502A

![](_page_7_Picture_39.jpeg)

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- AT 16'' O.C. 3. METAL STUD BLOCKING 6" X 16" GA. EXTEND BLOCKING TO NEXT STUD BEYOND
- EQUIPMENT -TYPICAL BOTH SIDES. 4. SHEET METAL BACKING 6" X 16" GA. EXTEND
- BLOCKING TO NEXT STUD BEYOND EQUIPMENT - TYPICAL BOTH SIDES. 5. SHEET METAL SCREW 3 #10 AT EACH STUD
- 6. WHERE WALL TYPE INCLUDES RESILIENT CHANNELS, USE ADDITIONAL CHANNELS AS FURRING FOR BACKING AS REQUIRED.

# **GENERAL NOTES**

1. EXTEND BACKING PLATE TO NEXT STUD BEYOND SIDE OF FIXTURE OR <u>TYPE '1'</u> ACCESSORIES - BOTH SIDES. BACKING 2. PROVIDE METAL SLEEVES THROUGH WALL FINISH AT FIXTURE AND EQUIPMENT FASTENING. 3. FOR MECHANICAL WORK ANCHORAGE SEE MECHANICAL DRAWINGS. <u>TYPE '2'</u> BACKING Backing Plate Schedule 5 SCALE: 3" = 1'-0" **KEYED NOTES** KEYED NOTES METAL STUDS. SEE WALL TYPES.
 POWDER DRIVEN PINS .014" METAL STUDS. SEE WALL TYPES.
 POWDER DRIVEN PINS .014" DIA. WITH DIA. WITH 1-1/4" MIN. EMBED 1-1/4" MIN. EMBED AT 2'-0" O.C. AND AT 2" FROM THE ENDS. AT 2" FROM THE ENDS. METAL TRACK - 18 GA MIN.
 SHEET METAL SCREWS #12 EA. SIDE. 3. METAL TRACK - 18 GA MIN. 4. SHEET METAL SCREWS #12 EA. 5. BENT TRACK - 18 GA MIN. SIDE. Base Track Detail ∧ 8 ) SCALE: 3" = 1'-0" BASE AT SPANS > 8'-0" **KEYED NOTES** 1. HANDRAIL OR CORNER guard as occurs. 2. SEE WALL TYPES FOR PARTITION TYPE. GYPSUM BOARD, 5/8" TYPE 'X', CONTINUOUS ON ALL SIDES BEHIND EQUIPMENT. 4. CLIP ANGLE 2" X 2" X 20" GA MIN. CONT. 5. RECESSED EQUIPMENT AS OCCURS. PLAN VIEW, 2" Section SHALL BE BASE AT SPANS < 8'-0" SIMILAR Detail at Recessed Equip. Framed Opening at Jamb 10) SCALE: 3" = 1'-0" 9 SCALE: 3" = 1'-0" **KEYED NOTES** KEYED NOTES 1. GYPSUM BOARD, ATTACHED TO METAL STUD FRAMING. SEE WALL TYPES AND WALL SECTIONS FOR GYPSUM BOARD TYPE. METAL STUDS, 3 5/8" THICK. 16 GA AS SHOWN. 2. EXPANSION JOINT ("E-Z STRIP, V-SHAPED VINYL EXPANSION JOINT BY NATIONAL 8" WIDE X (HEIGHT OF WALL BRACKET + 6") HIGH X 16 GYPSUM COMPANY OR EQUIVALENT) ATTACHED TO GYPSUM BOARD. GA BACKING PLATE. ANCHOR TO 16 GA STUDS. . METAL STUDS. SEE WALL TYPES AND WALL SECTIONS FOR STUD SIZE, THICKNESS, SHEET METAL SCREWS #10 THROUGHOUT 9/64" GAUGE, SPACING, ETC. DIAMETER HOLES AT 18" O.C. 4. TWO LAYERS OF TYPE 'X' GYPSUM BOARD, 5/8" THICK, ATTACHED TO STUDS WITH GYPSUM BOARD, 5/8" THICK, TYPE 'X', TYPICAL U.N.C DRYWALL SCREWS, 1-5/8" @ 24" O.C. USE NON FIRE RATED GYPSUM BOARD IF ERGOTRON LX WALL MOUNT BRACKET, TV BRACKET, PHYSIOLOGICAL MONITOR, ETC O.F.C.I. WALLS OR CEILING ARE NOT FIRE RATED. NOTE: PROVIDE JOINT AT EVERY 50'-0" OF WALL THAT RUNS IN THE SAME DIRECTION. PRIOR TO INSTALLATION OF JOINTS, GET APPROVAL FROM ARCHITECT FOR CONTROL JOINT LOCATIONS IN WALL. PLAN VIEW \_\_\_\_\_\_5 1/2"〜 Plan Detail at Bracket Control Joint - Gypsum Board (14) SCALE: 3" = 1'-0" 13) FIGHT DE SCALE: 3" = 1'-0"

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Ceiling Details

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With a state of the radiology rooms at Riverton Hospital will be receiving a new X-ray machine and new equipment cabinets will also be routed with the equipment drawings also note that the HVAC system must be able to maintain a temperature of 72 degrees is needed for the comfort of the occupants.            We funct a state of the radiology room, the space is being provided with 700 CFM of S2-degrees air from a variable air volume box with a reheat heating coll.            We funct a state of the radiology room, the space is being provided with 700 CFM of S2-degrees air from a variable air volume box with a reheat heating coll.            We the radiology room, the space is being provided with 700 CFM of S2-degrees air from a variable air volume box with a reheat heating coll.            We the radiology room, the space is being provided with 700 CFM of S2-degrees air from a variable air volume box with a reheat heating coll.            We the space of the radiology room, the space is being provided with 700 CFM of S2-degrees air from a variable air volume box with a reheat heating coll.            We the space of the radiology room, the space is being provided with 700 CFM of S2-degrees air from a variable air volume box with a reheat heating coll.            We the space of the radiology room, the space is being provided with 700 CFM of S2-degrees air from a variable air volume box with a reheat heating coll.            We the space of the radiology room, the space is being provided with 700 CFM of S2-degrees air from a variable air volume box with a reheat heating coll.            We the space of the radiology room, the space is beating room the space with the equipment drawings abox to that the	porate Office
Image: Section	Lake City
Wirr       Mirr         VEBEA       Bit 0         MEMORANDUM       Bit 0         DATE:       October 14, 2024       Bit 3         TO:       Robert Howell       Bit 3         PROJECT:       Riverton Hospital X-Ray Room Heat Load Analysis       Bit 3         RE:       Equipment Head Load       Bit 3         Are:       Equipment In the center of the room. New workstations and new equipment cabinets will also be rovided in the existing rooms. The following table has been taken from the equipment drawings take has been taken from the equipment take has been taken from the equipment take take take take take take take tak	E. 5600 S. Suite 130
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WBFA       Feo         MEMORANDUM       Si G         DATE:       October 14, 2024       F43         TO:       Robert Howell       Image         FROM:       Jared Smith       Image         PROJECT:       Riverton Hospital X-Ray Room Heat Load Analysis       Image         RE:       Equipment Head Load       F43         Image       Image       Image         Provided in the existing rooms. The following table has been taken from the equipment drawings       Image         Image       Image       Image         Viristation       Top       Top         Kray Machine       Top       Top         Image       Top       Top       Top         Viristation       Top       Top       Top         Area       Top       Top       Top       Top         Viristation       Top	01 530 3148
MEMORANDUM       B.G. 220         DATE:       October 14, 2024       7.43         TO:       Robert Howell       Image: Comparison of the	01 530 3150
MEMORANDOM       220         Build       56         DATE:       October 14, 2024       7.43         TO:       Robert Howell       Log         FROM:       Jared Smith       40 W         PROJECT:       Riverton Hospital X-Ray Room Heat Load Analysis       7.43         RE:       Equipment Head Load       Ariza         RE:       Equipment Head Load       Ariza         ne of the radiology rooms at Riverton Hospital will be receiving a new X-ray machine and new quipment in the center of the room. New workstations and new equipment cabinets will also be ovided in the existing rooms. The following table has been taken from the equipment drawings hich depicts the amount of heat gain into the space from the equipment.         Workstation       1000         K-ray Machine       7507         Global G3 Standard Wall Stand       399         Access Point       58         Access Point       58         Access Point       58         Bod egnees and non-condensing relative humidity at 20% to 75%. However, we feel that the a aximum design space temperature of 72 degrees is needed for the comfort of the occupants.         er the record drawings of the radiology room, the space is being provided with 700 CFM of 2-degree air from a variable air volume box with a reheat heating coil.         via uhave any questions, please contact us. hank you         you have any questi	George
DATE: October 14, 2024 TO: Robert Howell FROM: Jared Smith PROJECT: Riverton Hospital X-Ray Room Heat Load Analysis RE: Equipment Head Load Arize RE: Equipment Head Load Arize 143 RE: Equipment Head Load Arize 144 153 RE: Equipment Head Load Arize 144 154 145 144 145 144 145 144 145 144 145 144 145 144 145 144 145 144 145 145	) N. 1680 E.
DATE: October 14, 2024 T0: Robert Howell FROM: Jared Smith PROJECT: Riverton Hospital X-Ray Room Heat Load Analysis RE: Equipment Head Load Ariz: RE: Equipment Head Load Ariz: 143 RE: Equipment Head Load Ariz: 140 144 145 146 146 146 146 146 146 146 146	ding V
Drift.       Couoda H, 2024       F43         TO:       Robert Howell       Iogn         FROM:       Jared Smith       Jared Smith         PROJECT:       Riverton Hospital X-Ray Room Heat Load Analysis       T43         RE:       Equipment Head Load       F43         Re:       Equipment Head Load       Arize         1602       Suite       F43         Image: Total Science Counce       F43       F43         RE:       Equipment Head Load       F43         Image: Total Science Counce       F43       F43         Image: Total Science Counce       F43       F43         Image: Total Science Counce       F43       F43         Image: Total Science Counce       Total Science Counce       F43         Image: Total Science Counce	Seorge, UT 84770
TO:       Robert Howell       Iogg         FROM:       Jared Smith       40 W         PROJECT:       Riverton Hospital X-Ray Room Heat Load Analysis       133         RE:       Equipment Head Load       414         RE:       Equipment Head Load       415         Head State       413       414         Image: Table State       413       414         Image: Table State       414       414         Image: Table State       4145       4145	35 674 9708
FROM:       Jared Smith       40 V         PROJECT:       Riverton Hospital X-Ray Room Heat Load Analysis       Ta3         RE:       Equipment Head Load       F43         Re:       Equipment Head Load       Ariza         1000       Sale       Ta3         14       F43       F43         14       F43       Ta3         14       F43       Ta3         15       Equipment Head Load       Ariza         1600       Sale       Ta3         16       F43       Ta3         17	10 07 4 27 00
FROM:       Jared Smith       40 M         PROJECT:       Riverton Hospital X-Ray Room Heat Load Analysis       143         RE:       Equipment Head Load       143         RE:       Equipment Head Load       143         Intervention       140 M       140 M         Intervention       100 M       140 M         Intervention       1000       140 M         Intervention       1000       1000       1000         Kray Machine       7507       100 M       1000         Cray Machine       7507       100 M       100 M       100 M         Access Point       5	an
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PROJECT:       Riverton Hospital X-Ray Room Heat Load Analysis       143         RE:       Equipment Head Load       143         Image: Provided In the existing rooms at Riverton Hospital will be receiving a new X-ray machine and new quipment in the center of the room. New workstations and new equipment cabinets will also be rovided in the existing rooms. The following table has been taken from the equipment drawings hick depicts the amount of heat gain into the space from the equipment:         Workstation       1000         X-ray Machine       7507         Global G3 Standard Wall Stand       399         Access Point       58         otal Heat Gain: 8,964 BTU/Hr         he equipment drawings also note that the HVAC system must be able to maintain a temperature aximum design space temperature of 72 degrees is needed for the comfort of the occupants.         er the record drawings of the radiology room, the space is being provided with 700 CFM of 2-degree air from a variable air volume box with a reheat heating coil.         wen this information, we are confident that the existing HVAC system will adequately cool the bace with the equipment.         you have any questions, please	ang 1, sure b
RE: Equipment Head Load       Arizi         Arizi       Arizi         Sale       T48         F43       F43         ne of the radiology rooms at Riverton Hospital will be receiving a new X-ray machine and new quipment in the center of the room. New workstations and new equipment cabinets will also be rovided in the existing rooms. The following table has been taken from the equipment drawings hich depicts the amount of heat gain into the space from the equipment:         Image: Text State	35752 5081
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Aria: 160:	
1400         Suite         T-48         7-48         Provided in the center of the room. New workstations and new equipment cabinets will also be rovided in the existing rooms. The following table has been taken from the equipment drawings thich depicts the amount of heat gain into the space from the equipment:         Equipment Description:       Heat Gain into Space (BTU/Hr:)         Workstation       1000         X-ray Machine       7507         Global G3 Standard Wall Stand       399         Access Point       58         otal Heat Gain: 8,964 BTU/Hr         he equipment drawings also note that the HVAC system must be able to maintain a temperature 189 degrees and non-condensing relative humidity at 20% to 75%. However, we feel that the a iaximum design space temperature of 72 degrees is needed for the comfort of the occupants.         er the record drawings of the radiology room, the space is being provided with 700 CFM of 2-degree air from a variable air volume box with a reheat heating coil.         iven this information, we are confident that the existing HVAC system will adequately cool the pace with the equipment.         you have any questions, please contact us. hank you         ared Smith, P.E.	puot
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ared Smith, P.E.	

![](_page_11_Picture_10.jpeg)

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NJRA Architects, Inc. 5223 S. Ascension Way, Suite 350 Murray, Utah 84123 801.364.9259 www.njraarchitects.com

![](_page_11_Picture_12.jpeg)

![](_page_11_Picture_13.jpeg)

![](_page_11_Picture_14.jpeg)

![](_page_11_Picture_15.jpeg)

A5	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E-501
E-501	INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
A5	ELEVATION OR SECTION INDICATOR, EXTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING
E-201	SHEET WHERE ELEVATION OR SECTION IS SHOWN.
A5	ELEVATION OR SECTION INDICATOR, INTERIOR: A5 INDICATES
E-201	SHEET WHERE ELEVATION OR SECTION IS SHOWN.
ROOM NAME	ROOM IDENTIFIER WITH ROOM NAME AND NUMBER.
$\underline{1}$	REVISION INDICATOR.
CU-1	EQUIPMENT INDICATOR.
	MECHANICAL EQUIPMENT INDICATOR. "X-X" INDICATES
	IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO
٨	
/	BREAK, STRAIGHT: TO BREAK PARTS OF DRAWING
$\sim$	BREAK, ROUND
MATCH LINE SEE XX/X-XXX	MATCH LINE INDICATOR: CENTER, EXTRA WIDE LINE.
	NEW LINE: MEDIUM LINE.
	HUDEN FEATURES LINE: HIDDEN, I HIN LINE
	EXISTING TO REMAIN LINE: THIN LINE.
	DEMOLITION LINE: DASHED, MEDIUM LINE
	PROPERTY LINE: DASHED, WIDE LINE.
	CONTRACT LIMIT LINE: DASHDOT, WIDF I INF
WIRING ME	
	WIRING.
	SINGLE BRANCH CIRCUIT HOME RUN TO PANELBOARD WITH
A-1	NOTATION IDENTIFY PANEL AND CIRCUIT NUMBER.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF
A-1,3,5	ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF
A-135	NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS.
A-1,0,0	SCHEDULE.
	LOW VOLTAGE WIRING: DIVIDE, MEDIUM LINE.
+	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.
	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER
<u> </u>	TO ONE-LINE DIAGRAM.
(нс)	ADA ACCESS PUSH PLATE
Ø	JUNCTION BOX.
۵.	JUNCTION BOX, CEILING.
—J—_J—	CABLE J-HOOKS ABOVE ACCESSIBLE CEILING.
•	MECHANICAL EQUIPMENT CONNECTION. REFER TO EQUIPMENT SCHEDULE FOR REQUIREMENTS.
LIGHTING	
(\V\-3)	
	FIXTURE IDENTIFICATION: (W-3) INDICATES FIXTURE TYPE AS SCHEDULED.
I	
(W-3E)	FIXTURE IDENTIFICATION: EMERGENCY LIGHTING FIXTURE WITH BATTERY PACK AND/ OR GENERATOR AND/ OR CENTRALIZED
	INVERTER AND/ OR CENTRALIZED UPS CONNECTION AS INDICAT IN PLANS. (W-3E) INDICATES FIXTURE TYPE AS SCHEDULED.
EM	EMERGENCY.
NII	
INL	
1	EGRESS DIRECTION ARROW (EXIT SIGNS).
$\bigcirc$	EXIT SIGN: SINGLE FACE; CEILING MOUNTED
$\bigotimes \bigotimes$	EXIT SIGN: SINGLE FACE; WALL MOUNTED
$ \rightarrow \pm $	EXIT SIGN: DOUBLE FACE: CEILING MOUNTED
<b>P</b>	EXIT SIGN: DOUBLE FACE; WALL MOUNTED
 >:<	OCCUPANCY SENSOR, DUAL TECHNOLOGY,
	OCCUPANCY SENSOR DUAL TECHNOLOGY WALL
<u>*</u>	
之 之 a,b 雨	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS,
a,b ≸	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION AND PROGRAMMING REQUIREMENTS)
a,b ≸	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION AND PROGRAMMING REQUIREMENTS) DIGITAL LIGHTING ROOM CONTROLLER
a,b \$	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION AND PROGRAMMING REQUIREMENTS) DIGITAL LIGHTING ROOM CONTROLLER
a,b S RC DC	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION AND PROGRAMMING REQUIREMENTS) DIGITAL LIGHTING ROOM CONTROLLER DIGITAL LIGHTING DIMMING CONTROLLER
a,b S RC DC ET	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION AND PROGRAMMING REQUIREMENTS) DIGITAL LIGHTING ROOM CONTROLLER DIGITAL LIGHTING DIMMING CONTROLLER
a,b S RC DC ET C X	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION AND PROGRAMMING REQUIREMENTS) DIGITAL LIGHTING ROOM CONTROLLER DIGITAL LIGHTING DIMMING CONTROLLER LIGHTING EMERGENCY TRANSFER DEVICE LIGHTING SPACE CONTROL TYPE. X INDICATES TYPE. SEE SCHEDULE / DIAGRAM

	SYMBOLS LEGEND
SYMBOL	DESCRIPTION
WIRING DE	VICES
Ф	RECEPTACLE, DUPLEX: NEMA 5-20R.
ф <sub>А</sub>	RECEPTACLE, DUPLEX, ABOVE COUNTER: NEMA 5-20R.
фс	RECEPTACLE, DUPLEX, CEILING: NEMA 5-20R.
фр	RECEPTACLE, DUPLEX, DEDICATED CIRCUIT: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, DRINKING FOUNTAIN: CONCEAL WATER COOLER
∯ DF	RECEPTACLE BEHIND WATER COOLER. SEE MECHANICAL/PLUMBING SHOP DRAWINGS FOR INSTALLATION
	REQUIREMENTS. RECEPTACLE, DUPLEX, ISOLATED GROUND: NEMA 5-20R.
⊌ig "	RECEPTACLE, DUPLEX, SWITCHED: NEMA 5-20R
Ψ'	
₩w	INTERRUPTER, WET LABEL, "WEATHERPROOF IN USE": NEMA 5-20R.
Ш	
	RECEPTACLE, DUPLEX, HUSPITAL GRADE. NEWA 5-20R.
<u> </u>	RECEPTACLE, DUPLEX ON EMERGENCY POWER: NEMA 5-20R.
<u> </u>	POWER: NEMA 5-20R.
	INTERRUPTER: NEMA 5-20R.
	INTERRUPTER, HOSPITAL GRADE: NEMA 5-20R.
Ш.	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE ON EMERGENCY POWER:
•	NEMA 5-20R.
₩P	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WEATHERPROOF: NEMA 5-20R.
Ð	RECEPTACLE, DUPLEX, RECESSED: NEMA 5-20R.
₫ s	RECEPTACLE, DUPLEX, SWITCHED, RECESSED: NEMA 5-20R.
₽	RECEPTACLE, QUADRAPLEX: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX ON EMERGENCY POWER: NEMA 5-20R.
#	RECEPTACLE, QUADRAPLEX, HOSPITAL GRADE: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX, HOSPITAL GRADE ON EMERGENCY
	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT
	RECEPTACLE, SPECIAL PURPOSE. PROVIDE RECEPTACLE TO
	MULTI-OUTLET ASSEMBLY: NEMA 5-20R.
	DROP CORD. SEE DETAIL.
$\bigcirc$	FLUSH FLOOR BOX "#" SHOWN ON DRAWINGS REFER TO
FB#	WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
PP#	POWER POLE. "#" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
PT#	FLUSH FIRE RATED POKE THRU. "#" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
Ф	SWITCH, DIMMER.
× \$	SWITCH, SINGLE POLE ("x" INDICATES FIXTURES CONTROLLED).
X \$2	SWITCH, DOUBLE POLE ("x" INDICATES FIXTURES CONTROLLED).
X \$3	SWITCH, THREE-WAY ("x" INDICATES FIXTURES CONTROLLED).
	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE ON EMERGENCY POWER: NEMA 5-20R.
Į.	RECEPTACLE, DUPLEX, WITH USB OUTLET
FIRE ALARI	M
FAA	FIRE ALARM ANNUNCIATOR PANEL.
FACP	FIRE ALARM CONTROL PANEL, SEMI-RECESSED.
С	AUTOMATIC DOOR CLOSERS: DOOR CLOSERS SHALL BE FURNISHED WITH DOOR HARDWARE AND CONNECTED BY FIRE ALARM INSTALLER.
СМ	
F	FIRE ALARM MANUAL PULL STATION.
R	SHUT DOWN RELAY: INSTALL RELAY IN CONTROL CIRCUIT OF EQUIPMENT TO BE CONTROLLED IN THE EVENT OF A FIRE.
<u>5</u>	MAGNETIC DOOR HOLDER.
2	DETECTOR, SMOKE.
HS	DETECTOR, SMOKE, WALL MOUNTED.
2	DETECTOR, SMOKE, DUCT WITH HOUSING AND SAMPLING TUBE.
_ SD	SMOKE DAMPER. 120V POWER FROM ELECTRICAL SYSTEM.
   @ FSD	COMBINATION FIRE/SMOKE DAMPER. 120V POWER FROM ELECTRICAL SYSTEM.
X	STROBE, WALL MOUNTED.
75	STROBE, WALL MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
$\boxtimes \triangleleft$	ALARM, HORN/STROBE, WALL MOUNTED, ONE ASSEMBLY.

		SYMBOLS LEGEND
	SYMBOL	DESCRIPTION
	ELECTRICA	AL POWER AND DISTRIBUTION
		FUSE WITH RATING (ONE-LINE DIAGRAM).
DR.		DISCONNECT, FUSED (ONE-LINE DIAGRAM).
5 20P		
Б-20К. Г		DISCONNECT, NONFUSED (ONE-LINE DIAGRAM).
ALLATION		
-20R.		DISCONNECT WITH FUSE AND MOTOR STARTER COMBINATION
	Ϋ́ς	(ONE-LINE DIAGRAM).
Г		
::	$\square$	
DR.	5	OVERLOAD RELAY (ONE-LINE DIAGRAM).
MA 5-20R.		
ENCY	L L	STARTER (ONE-LINE DIAGRAM).
Г		
г		CIRCUIT BREAKER, MOLDED CASE (ONE-LINE DIAGRAM).
I OWER:	,	CIRCUIT BREAKER, MOLDED CASE WITH SHUNT TRIP (ONE-LINE DIAGRAM).
Г		CIRCUIT BREAKER, MOTOR CIRCUIT PROTECTION (ONE-LINE DIAGRAM).
IA 5-20R.		CIRCUIT BREAKER, ADJUSTABLE TRIP. "225AF" REPRESENTS THE RATING AND "150AT" REPRESENTS THE TRIP SETTING. (ONE-LINE DIAGRAM).
1A 5-20R.		CIRCUIT BREAKER, SOLID STATE (ONE-LINE DIAGRAM).
MERGENCY		CIRCUIT BREAKER, SOLID STATE WITH GROUND FAULT PROTECTION (ONE-LINE DIAGRAM).
ACLE TO	$\wedge$	MOTOR.
		TRANSFORMER (ONE-LINE DIAGRAM).
ER TO	36	TRANSFORMER, CURRENT (ONE-LINE DIAGRAM).
S.		BATTERY (ONE-LINE DIAGRAM).
	)[	CAPACITOR (ONE-LINE DIAGRAM).
ONS FOR		DELTA CONNECTION (ONE-LINE DIAGRAM).
RICAL S.		WYE CONNECTION (ONE-LINE DIAGRAM).
	"1DPHA"	
TROLLED).		DISTRIBUTION PANELBOARD, MOTOR CONTROL CENTER, PLUG-IN BUSWAY, MEDIUM VOLTAGE SWITCHBOARD
NTROLLED).		
ROLLED).		
IRCUIT	"1H"	PANELBOARD (ONE-LINE DIAGRAM).
IRCUIT		
OWER:	225/3	
	"1H"	SHOWN (ONE-LINE DIAGRAM).
	225/3 "1H"	PANELBOARD WITH MAIN CIRCUIT BREAKER. SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
L BE		
	•)225/3 "1H"	PANELBOARD WITH MAIN AND SUB FEED CIRCUIT BREAKER (ONE-LINE DIAGRAM).
	60/3	
RCUIT IF A		

	SYMBOLS LEGEND
SYMBOL	DESCRIPTION
ELECTRICA	AL POWER AND DISTRIBUTION
225/3 "1H" ••••••••••••••••••••••••••••••••••	PANELBOARD WITH MAIN LUGS ONLY AND SURGE PROTECTIC WITH CIRCUIT BREAKER (ONE-LINE DIAGRAM).
225/3 "1H" "1H"	PANELBOARD WITH SUB FEED LUGS (ONE-LINE DIAGRAM).
)225/3 "1H" "1H"	PANELBOARD WITH CIRCUIT BREAKER AND SUB FEED LUGS (ONE-LINE DIAGRAM).
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRA
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRA
	TRANSFER SWITCH (ONE-LINE DIAGRAM).
	DIGITAL MULTIMETER (ONE-LINE DIAGRAM).
<u> </u>	EARTH GROUND (ONE-LINE DIAGRAM).
•	SERVICE ENTRANCE SURGE PROTECTION (ONE-LINE DIAGRAM
ANN	GENERATOR, ANNUNCIATOR (ONE-LINE DIAGRAM).
EPO	PUSH BUTTON, REMOTE EMERGENCY STOP.
G	GENERATOR, POWER (ONE-LINE DIAGRAM).
K	KIRK-KEY MECHANICAL INTERLOCK (ONE-LINE DIAGRAM)
M	METER.
BBF	BROAD BAND FILTER (ONE-LINE DIAGRAM).
VFC VFD	VARIABLE FREQUENCY MOTOR CONTROLLER (ONE-LINE DIAGRAM).
*	DIODE (ONE-LINE DIAGRAM).
	DISCONNECT SWITCH, FUSED.
	DISCONNECT SWITCH, UNFUSED.
Ζη	STARTER. COMBINATION WITH DISCONNECT SWITCH.
	STARTER OR MOTOR CONTROLLER.
•	
• <u></u>	
	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.
 DP#	DISTRIBUTION PANEL OR SWITCHBOARD.
	LIGHTING RELAY, CONTACTOR PANEL, OR DIMMING ENCLOSU
LP ¢st	SWITCH, TOGGLE MOTOR STARTER WITH OVERLOAD
	PROTECTION.
	BUSWAY
	SPECIALIZED TRANSFER SWITCH (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, DRAW OUT (ONE-LINE DIAGRAM).
NURSE CAI	LL
Ø	JUNCTION BOX.
$\bigcirc$	CORRIDOR LIGHT.
B	BATHROOM PULL CORD STATION.
	DUTY STATION.
 	EMERGENCY ASSISTANCE CALL STATION.
	EMERGENCY ASSISTANCE CODE BLUE CALL STATION
	PATIENT STATION.
	STAFF STATION.
	TOUCH SCREEN NURSE CALL MASTER STATION
00	

# ABBREVIATIONS

	NOTE: ALL ABBREVIAT	IONS MA	Y NOT BE USED.
1P	SINGLE POLE	kVAR	KILOVOLT AMPERE REAC
1PH	SINGLE-PHASE	kW	KILOWATT
1WAY	ONE-WAY	kWh	KILOWATT HOUR
2/C >\\/\ A V			
3/C	THREE-CONDUCTOR		CONDUIT
3WAY	THREE-WAY	LFNC	LIQUID TIGHT FLEXIBLE
OUT	QUADRUPLE RECEPTACLE	LPS	LOW PRESSURE SODIUM
PDT	FOUR-POLE DOUBLE THROW	LRA	LOCKED ROTOR AMPS
PST	FOUR-POLE SINGLE THROW	LTG	
V			LOW VOLTAGE MASTER ANTENNA TELEV
IVAT	ABOVE COUNTER		SYSTEM
С	ARMORED CABLE	MAX	MAXIMUM
CS	ACCESS CONTROL SYSTEM		METAL CLAD
DA	AMERICANS WITH DISABILITIES	MCB	MAIN CIRCUIT BREAKER
DJ	ADJACENT	MCC	MOTOR CONTROL CENTE
FF	ABOVE FINISHED FLOOR	MCP	MOTOR CIRCUIT PROTEC
FG		MG	MOTOR GENERATOR
0	CAPACITY	MH	MANHOLE
LUM	ALUMINUM	MIN	MINIMUM
MP NN		MOCP	MAIN LUGS ONLY
P	ACCESS POINT (WIRELESS	WOOI	PROTECTION
_	DATA)	MTS	MANUAL TRANSFER SWI
R		NA NC	NOT APPLICABLE
TS	AUTOMATIC TRANSFER	NEC	NATIONAL ELECTRICAL
.,	SWITCH	NEMA	NATIONAL ELECTRICAL
V WC			MANUFACTURERS ASSOCIATION
B	BUCK-BOOST TRANSFORMER	NFC	NATIONAL FIRE CODE
FMR		NFPA	NATIONAL FIRE PROTEC
FF	BELOW FINISHED FLOOR	NIC	ASSUCIATION NOT IN CONTRACT
- <b>G</b>		NL	NIGHT LIGHT
AT	CATEGORY	NO	NORMALLY OPEN
;ATV		NTS	NOT TO SCALE
B		OCP	
CBA	CUSTOM COLOR AS SELECTED	OE	OWNER ELECTRONICS
<b></b>	BY ARCHITECT	OF/CI	OWNER FURNISHED/
E/CI	CLOSED CIRCUIT TELEVISION		OWNER FURNISHED/ OW
1701	CONTRACTOR INSTALLED		INSTALLED
F/OI	CONTRACTOR FURNISHED/	OFP	OBTAIN FROM PLANS
FBA	CUSTOM FINISH AS SELECTED		
	BY ARCHITECT	PB	PUSHBUTTON
l vt		PF	POWER FACTOR
M	CONSTRUCTION MANAGER	PH	PHASE
ND	CONDUIT		PANEL PI FNUM
;O		PR	PAIR
OR	CONTRACTING OFFICER'S REPRESENTATIVE	PS	POWER SUPPLY
P	CONTROL PANEL	PT	POTENTIAL TRANSFORM
R	CARD READER	PV	PHOTO VOLTAIC
		QTY	QUANTITY
U	COPPER	R	
BA	UNIT OF SOUND LEVEL	RMC	RIGID METAL CONDUIT
PDT	DOUBLE POLE, DOUBLE THROW	RNC	RIGID NONMETAL CONDU
s	DISCONNECT SWITCH	RO	REMOTE DOOR OPEN
	ENHANCED	RPM RPP	REVOLUTIONS PER MINU
A M		RR	REMOVE AND RELOCATE
MT	ELECTRICAL METALLIC TUBING	S/S	START/STOP
NT	ELECTRIC NONMETALLIC	SCA	SHORT CIRCUIT AMPS
DO		JODA	SELECTED BY ARCHITEC
	EQUIPMENT	SEC	SECURITY
R	EQUIPMENT ROOM	SF SFRA	SQUARE FOOT (FEET)
X			SELECTED BY ARCHITEC
A	FIRE ALARM	SPD	SURGE PROTECTIVE DE
CP	FIRE ALARM CONTROL PANEL	SPDT	SINGLE POLE, DOUBLE T
LA		SPP	STATION PATCH PANEL
-MC FOR	FLEXIBLE METAL CONDUIT	SPST	SINGLE POLE, SINGLE TH
20		ST	SINGLE THROW
-PP	FIBER PATCH PANEL		SWITCHBUARD
PP VNR	FIBER PATCH PANEL FULL VOLTAGE	SWBD	SWITCHGFAR
PP VNR	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING	SWBD SWGR TL	SWITCHGEAR TWIST LOCK
PP VNR VR GEN	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR	SWBD SWGR TL TP	SWITCHGEAR TWIST LOCK TELEPHONE POLE
PP VNR VR EN EN	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER	SWBD SWGR TL TP TP	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR
PP VNR VR SEN SFCI SFP	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION	SWBD SWGR TL TP TP TR	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM
PP VNR VR SEN SFCI SFP SIG SND	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND	SWBD SWGR TL TP TP TR TR	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E
PP VNR VR SEN SFCI SFP SIG SND ID	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY	SWBD SWGR TL TP TP TR TTB TV	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION
PP VNR VR GEN GFCI GFP GIG GND ID ID	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE	SWBD SWGR TL TP TP TR TR TTB TV TVSS	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER
FPP FVNR FVR SEN SFCI SFP SIG SND ID ID ID ID	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC	SWBD SWGR TL TP TP TR TTB TV TVSS TYP	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL
PP VNR VR GEN GFCI GFP GIG GND HD HD HOA HP HPF	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR	SWBD SWGR TL TP TP TR TR TVB TVSS TYP UF	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR
FPP FVNR FVR GEN GFCI GFP GIG GND HD HD HD HD HPF HPF HPS	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM	SWBD SWGR TL TP TP TR TTB TV TVSS TYP UF UGND UPS	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POWA
FPP FVNR FVR GEN GFCI GFP GIG GND HD HD HD HD HPF HPS HV	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE	SWBD SWGR TL TP TP TR TV TVSS TYP UF UGND UPS	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POW SUPPLY
PP VNR VR SEN SFCI SFP GG SND HD HD HPF HPS HV HWM	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT	SWBD SWGR TL TP TP TR TTB TV TVSS TYP UF UF UGND UPS	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POW SUPPLY VOLTS
PP VNR VR SEN SFCI SFP SIG SND ID ID ID ID ID ID IPF IPS IV IWM IZ	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT HERTZ	SWBD SWGR TL TP TP TR TR TV TVSS TYP UF UGND UPS V VA	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POW SUPPLY VOLTS VOLT AMPERE
PP VNR VR BEN FCI FP JG JD ID ID ID ID IPF IPS IV IWM IZ O	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT HERTZ INPUT/ OUTPUT	SWBD SWGR TL TP TP TR TTB TV TVSS TYP UF UGND UPS V VA VFC/VF D	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POW SUPPLY VOLTS VOLT AMPERE VARIABLE FREQUENCY M CONTROLLER
FPP FVNR FVR FVR FVR FVR FVR FVR FVR FVR FVR FV	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT HERTZ INPUT/ OUTPUT ISOLATED GROUND INTERMENT	SWBD SWGR TL TP TP TR TV TVSS TYP UF UGND UPS V VA VFC/VF D VIC	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POWN SUPPLY VOLTS VOLT AMPERE VARIABLE FREQUENCY IN CONTROLLER
FPP FVNR GEN GFCI GFP GIG GND HD HD HOA HPF HV HWM HZ /O G MC	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT HERTZ INPUT/ OUTPUT ISOLATED GROUND INTERMEDIATE METAL CONDUIT	SWBD SWGR TL TP TP TR TTB TV TVSS TYP UF UGND UPS V VA VFC/VF D VIC VSS	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POW SUPPLY VOLTS VOLT AMPERE VARIABLE FREQUENCY M CONTROLLER VIDEO INTERCOM SYSTE VIDEO SURVEILLANCE S
FPP FVNR FVR FVR FVR FVR FVR FVR FVR FVR FVR FV	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT HERTZ INPUT/ OUTPUT ISOLATED GROUND INTERMEDIATE METAL CONDUIT INSULATED/ ISOLATED	SWBD SWGR TL TP TP TR TV TVSS TYP UF UGND UPS V VA VFC/VF D VIC VSS VWM W/	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POW SUPPLY VOLTS VOLT AMPERE VARIABLE FREQUENCY M CONTROLLER VIDEO INTERCOM SYSTE VIDEO SURVEILLANCE ST VERTICAL WIRE MANAGE WITH
PP         VNR         VR         VR         SFP         ID         ID <td>FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT HERTZ INPUT/ OUTPUT ISOLATED GROUND INTERMEDIATE METAL CONDUIT INSULATED/ ISOLATED INFRARED</td> <td>SWBD SWGR TL TP TP TR TV TVSS TYP UF UGND UPS V VA VFC/VF D VIC VSS VWM W/ W/O</td> <td>SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POW SUPPLY VOLTS VOLT AMPERE VARIABLE FREQUENCY M CONTROLLER VIDEO INTERCOM SYSTE VIDEO SURVEILLANCE S VERTICAL WIRE MANAGE WITH WITHOUT</td>	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT HERTZ INPUT/ OUTPUT ISOLATED GROUND INTERMEDIATE METAL CONDUIT INSULATED/ ISOLATED INFRARED	SWBD SWGR TL TP TP TR TV TVSS TYP UF UGND UPS V VA VFC/VF D VIC VSS VWM W/ W/O	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SU SUPPRESSER TYPICAL UNDERFLOOR UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POW SUPPLY VOLTS VOLT AMPERE VARIABLE FREQUENCY M CONTROLLER VIDEO INTERCOM SYSTE VIDEO SURVEILLANCE S VERTICAL WIRE MANAGE WITH WITHOUT
FPP FVNR FVR GEN GFP GGP GGP GGD HD HD HD HPF HV HWM HZ /O G MC N/IS R I-BOX	FIBER PATCH PANEL FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GENERATOR GROUND FAULT INTERRUPTER GROUND FAULT PROTECTION GIGA HERTZ GROUND HEAVY DUTY HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER HIGH POWER FACTOR HIGH PRESSURE SODIUM HIGH VOLTAGE HORIZONTAL WIRE MANAGEMENT HERTZ INPUT/ OUTPUT ISOLATED GROUND INTERMEDIATE METAL CONDUIT INSULATED/ ISOLATED INFRARED JUNCTION BOX KILOVOLT	SWBD SWGR TL TP TP TR TV TVSS TYP UF UGND UPS V VA VFC/VF D VIC VSS VWM W/ W/O WP	SWITCHGEAR TWIST LOCK TELEPHONE POLE TWISTED PAIR TELECOMMMUNICATION ROOM TELEPHONE TERMINAL E TELEVISION TRANSIENT VOLTAGE SL SUPPRESSER TYPICAL UNDERFLOOR UNDERGROUND UNINTERRUPTIBLE POWN SUPPLY VOLTS VOLT AMPERE VARIABLE FREQUENCY M CONTROLLER VIDEO INTERCOM SYSTE VIDEO SURVEILLANCE S' VERTICAL WIRE MANAGE WITH WITHOUT WEATHERPROOF

4Y	
	NOT BE USED.
	KILOVOLT AMPERE REACTIVE
	KILOWATT
	KILOWATT HOUR
	LIGHT EMITTING DIODE
	LIQUID TIGHT FLEXIBLE METAL
	NONMETALLIC CONDUIT
	LOW PRESSURE SODIUM
	LOCKED ROTOR AMPS
	LIGHTING
	SYSTEM
	MAXIMUM
	METAL CLAD
	MINIMUM CIRCUIT AMPS
	MAIN CIRCUIT BREAKER
	MOTOR CONTROL CENTER
	MOTOR GENERATOR
	MANHOLE
	MINIMUM
	MAIN LUGS ONLY
	MAXIMUM OVERCURRENT
	MANUAL TRANSFER SWITCH
	NOT APPLICABLE
	NORMALLY CLOSED
	NATIONAL ELECTRICAL CODE
	NATIONAL ELECTRICAL
	ASSOCIATION
	NATIONAL FIRE CODE
	NATIONAL FIRE PROTECTION
	ASSOCIATION
	NOT TO SCALE
	ON CENTER
	OVER CURRENT PROTECTION
	OWNER ELECTRONICS
	OWNER FURNISHED/
	OWNER FURNISHED/ OWNER
	INSTALLED
	OBTAIN FROM PLANS
	PUSHBUTTON
	POWER FACTOR
	PHASE
	PAIR
	POWER SUPPLY
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN PEVOLUTIONS DED MINUTE
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN REVOLUTIONS PER MINUTE RISER PATCH PANEI
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN REVOLUTIONS PER MINUTE RISER PATCH PANEL REMOVE AND RELOCATF
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN REVOLUTIONS PER MINUTE RISER PATCH PANEL REMOVE AND RELOCATE START/STOP
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN REVOLUTIONS PER MINUTE RISER PATCH PANEL REMOVE AND RELOCATE START/STOP SHORT CIRCUIT AMPS
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN REVOLUTIONS PER MINUTE RISER PATCH PANEL REMOVE AND RELOCATE START/STOP SHORT CIRCUIT AMPS STANDARD COLOR AS
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN REVOLUTIONS PER MINUTE RISER PATCH PANEL REMOVE AND RELOCATE START/STOP SHORT CIRCUIT AMPS STANDARD COLOR AS SELECTED BY ARCHITECT SECURITY
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN REVOLUTIONS PER MINUTE RISER PATCH PANEL REMOVE AND RELOCATE START/STOP SHORT CIRCUIT AMPS STANDARD COLOR AS SELECTED BY ARCHITECT SECURITY SQUARE FOOT (FFFT)
	POTENTIAL TRANSFORMER PAN/TILT/ZOOM PHOTO VOLTAIC QUANTITY REMOVE REFLECTED CEILING PLAN RIGID METAL CONDUIT RIGID NONMETAL CONDUIT REMOTE DOOR OPEN REVOLUTIONS PER MINUTE RISER PATCH PANEL REMOVE AND RELOCATE START/STOP SHORT CIRCUIT AMPS STANDARD COLOR AS SELECTED BY ARCHITECT SECURITY SQUARE FOOT (FEET) STANDARD FINISH AS
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### DEFINITIONS NOTE: ALL DEFINITIONS MAY NOT BE USED.

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

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

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

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

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

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

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

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

# GENERAL ELECTRICAL NOTES

- CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.
- OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.
- A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.
- B. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.
- C. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.
- EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.
- SUBMITTALS: PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.
- REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.
- ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND IFC. COMPLIANCE AND FINAL APPROVAL IS SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.

# ELECTRICAL SHEET INDEX

EE001	ELECTRICAL COVER SHEET
EE003	TELECOM SCHEDULES AND NOTES
EE501	ELECTRICAL DETAILS
EE701	TYPICAL MOUNTING DETAILS
ED101	LEVEL 1 ELECTRICAL DEMOLITION PLANS
EP100	LEVEL 1 OVERALL POWER PLAN
EP101	LEVEL 1 ELECTRICAL PLANS
EP501	GE DRAWINGS
EP502	GE DRAWINGS
EP601	ONE-LINE DIAGRAM
EP650	TELECOM RISERS & DETAILS

![](_page_12_Picture_34.jpeg)

ELECTRICAL COVER SHEET

![](_page_12_Picture_36.jpeg)

C	CATEGORY INSERT COLOR SCHEDULE					
INSERT COLOR	TYPE/ APPLICATION					
BLACK	TV COAX		(CAIL			
BLUE	ANALOG PHONE					
BLUE	DATA					
BLUE	SECURITY CAMERAS		3			
ORANGE	CLINICAL ENGINEERING / NURSE CALL		5			
RED	FORESEER					
YELLOW	WIRELESS		7			

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# DATA PATCH CORD SCHEDULE

20

(CATEGORY 6A F/UTP CABLES W/ RJ-45 CONNECTORS)

COLOR	QUANTITY
BLUE	10% OF TOTAL PORTS IN TDR'S
BLUE	30% OF TOTAL PORTS IN TDR'S
BLUE	45% OF TOTAL PORTS IN TDR'S
BLUE	10% OF TOTAL PORTS IN TDR'S
BLUE	5% OF TOTAL PORTS IN TDR'S

## EQUIPMENT/CABLE LIST

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

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SYMBOL	ITEM DESCRIPTION	ACCEPTABLE TYPES
	STATION CABLE, DATA - CATEGORY 6A F/UTP, RISER RATED, BLUE, DATA	SIEMON 9A6R4-A5-06-R1A
	STATION CABLE, DATA - CATEGORY 6A F/UTP PLENUM RATED, BLUE, DATA	SIEMON 9A6P4-A5-06-R1A
$\mathbb{W}$	VOICE OUTLET, SINGLE GANG FACEPLATE, WHITE W/ WALL HUNG PHONE MOUNTING STUDS, ONE POSITION W/ CATEGORY 6A INSERT	SIEMON MX-WP-Z6AS-SS
	DATA OUTLET, SINGLE GANG FACEPLATE, WHITE, 4 POSITION	SIEMON 10GMX-FPS04-02
$\mathbf{\nabla}$	NOTE: FOR FLOOR BOX APPLICATIONS ONLY, USE DECORA FRAME	SIEMON MX-D4Z-02
v	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	BLANK INSERT, WHITE	SIEMON MX-BL-02
SPP1	48 PORT, 1RU ANGLED PATCH PANEL W/ OUTLETS - DETACHABLE REAR MANAGER	SIEMON Z6AS-PA-48

# GENERAL PROJECT NOTES

1. UNLESS OTHERWISE NOTED, INSTALL ALL CABLE INSIDE RACEWAY SYSTEMS. WHERE RACEWAY SYSTEMS HAVE NOT BEEN PROVIDED OR SPECIFIED, INSTALL CABLE THROUGH THE SPECIFIED "CADDY" CLIPS AT THE MINIMUM INTERVALS IDENTIFIED IN THE SPECIFICATIONS. SUPPORT "CADDY" CLIPS DIRECTLY FROM THE BUILDING STRUCTURE, NOT FROM OTHER BUILDING SYSTEM SUPPORT WIRES OR CABLE.

- 2. PROVIDE PLENUM RATED CABLE IN ALL AIR PLENUMS. IF A PLENUM RATED CABLE IS NOT SPECIFIED, PROVIDE THE PLENUM RATED EQUIVALENT TO THE SPECIFIED CABLE. 3. LABEL ALL CABLE INSTALLED UNDER THIS CONTRACT REGARDLESS OF LENGTH. 4. THE EQUIPMENT LABELING IDENTIFIED ON DETAILS IN THESE DRAWINGS ARE EXAMPLES ONLY OF THE ACTUAL LABELING, WHICH IS REQUIRED AS PART OF THIS CONTRACT. PRIOR TO FABRICATION, SUBMIT THE NOMENCLATURE FOR ALL LABELS TO THE OWNER FOR REVIEW. THIS REQUIREMENT INCLUDES, BUT IS NOT LIMITED TO, ALL CABLE LABELING AND ALL EQUIPMENT LABELING.
- 5. IF OUTLET IS TERMINATED IN CEILING SPACE, LABEL THE T-BAR GRID WITH THE OUTLET NUMBER FOR EASY LOCATION AND IDENTIFICATION. 6. GROUND ALL EQUIPMENT RACKS INSTALLED UNDER THIS CONTRACT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS. 7. FOR EVERY PULL SPECIFIED, COIL 15 FEET OF EXCESS CABLE AT THE STATION END FOR FUTURE
- USE. NEATLY COIL 15 FEET ABOVE THE CEILING OR BELOW THE FLOOR, WHERE APPLICABLE. 8. PROVIDE THE QUANTITY OF PATCH PANELS REQUIRED +20% FOR THE TOTAL DATA OUTLETS SHOWN ON FLOOR PLANS FOR THE PARTICULAR LEVEL. 9. RACK SPACE ALLOCATION SHOULD BE FOLLOWED PER DRAWINGS. IF THERE IS A SYSTEM THAT
- HAS NO RACK SPACE AVAILABLE, PLEASE CALL BOE SAUSEDO AT 801-707-3805. 10. COORDINATE WITH ALL SUB-CONTRACTORS TO ENSURE THAT ALL CABLES ARE PROTECTED FROM ANY DIRECT PAINT OR INCIDENTAL OVERSPRAY. 11. CONTRACTOR TO PROVIDE FIRE-RATED SLEEVES THROUGH 1-HOUR RATED WALLS AND HIGHER. NUMBER OF SLEEVES TO BE DETERMINED AND CALCULATED BY MAXIMUM CABLE TRAY CAPACITY AT WALL PENETRATION. FINAL QUANTITY OF SLEEVES TO BE DETERMINED BY CONTRACTOR.
- 12. CONTRACTOR TO PROVIDE SMOKE AND ACOUSTICAL-RATED SLEEVES THROUGH SMOKE WALLS AND ALL OTHER NON-RATED PENETRATIONS. (2) 4" SLEEVES PER ROOM FOR CABLE CAPACITY AND SERVICE SEPARATION. FINAL QUANTITY OF SLEEVES TO BE DETERMINED BY CONTRACTOR. 13. CONTRACTOR TO PROVIDE FIRE-RATED SLEEVES THROUGH 1-HOUR RATED WALLS AND HIGHER. (1) SLEEVE PER J-HOOK PATHWAY FOR CABLE CAPACITY AND SERVICE SEPARATION. 14. CONTRACTOR TO PROVIDE SMOKE AND ACOUSTICAL-RATED SLEEVES THROUGH SMOKE WALLS
- AND ALL OTHER NON-RATED PENETRATIONS. (1) SLEEVE PER J-HOOK PATHWAY FOR CABLE CAPACITY AND SERVICE SEPARATION. 15. THE USE OF CABLE TIES IS NOT ALLOWED TO BUNDLE CABLES (LACE OR TRAIN) IN LADDER RACK, CABLE TRAY, OR TO FINAL TERMINATION POINT. CONTRACTOR SHOULD UTILIZE "HOOK AND LOOP"
- FOR BUNDLING OF ALL CABLES. 16. THE USE OF CABLE TIES IS NOT ALLOWED FOR THE SUPPORT OF CABLE, OR THE ATTACHMENT OF CABLES IN ANY CEILING SPACE. THE USE OF J-HOOKS IS REQUIRED FOR NON-CONTINUOUS PATHWAYS IN CEILINGS. CONTRACTORS SHOULD UTILIZE "HOOK AND LOOP" FOR BUNDLING OF ALL CABLES.

![](_page_13_Picture_24.jpeg)

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![](_page_13_Figure_25.jpeg)

Construction Docuements Oct. 31, 2024

![](_page_13_Picture_27.jpeg)

![](_page_13_Picture_28.jpeg)

![](_page_14_Figure_0.jpeg)

![](_page_14_Figure_1.jpeg)

/TYPICAL /WALL OUTLETS

![](_page_14_Figure_2.jpeg)

—BAR STRAPS

![](_page_14_Figure_3.jpeg)

![](_page_14_Figure_4.jpeg)

![](_page_14_Figure_5.jpeg)

SPACING REQUIREMENTS FOR TYPE OF RACEWAY REQUIRED.

AS REQUIRED FOR TYPE

ACCORDANCE WITH NEC

\_\_\_\_\_

![](_page_14_Figure_7.jpeg)

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DAMMING MATERIAL (BACKER ROD, FIBERGLASS

FIRE RATED CONCRETE/ CONCRETE BLOCK WALL

CONDUIT OR

INSULATED CABLES

![](_page_14_Picture_10.jpeg)

\_\_\_\_\_

![](_page_14_Picture_12.jpeg)

![](_page_14_Picture_13.jpeg)

![](_page_14_Figure_14.jpeg)

![](_page_14_Picture_15.jpeg)

![](_page_14_Picture_16.jpeg)

![](_page_15_Figure_0.jpeg)

![](_page_15_Figure_2.jpeg)

![](_page_15_Figure_3.jpeg)

![](_page_15_Figure_4.jpeg)

![](_page_15_Picture_5.jpeg)

![](_page_15_Figure_6.jpeg)

WALL MOUNTED LIGHT FIXTURE LIGHT FIXTURE

![](_page_15_Picture_8.jpeg)

\_\_\_\_\_

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![](_page_15_Picture_16.jpeg)

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![](_page_15_Figure_17.jpeg)

![](_page_15_Picture_18.jpeg)

![](_page_15_Picture_19.jpeg)

![](_page_16_Figure_0.jpeg)

# C1 LEVEL 1 ELECTRICAL DEMOLITION PLAN SCALE: 1/4" = 1'-0"

![](_page_16_Figure_2.jpeg)

![](_page_16_Picture_3.jpeg)

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\_\_\_\_\_

A1 LEVEL 1 CEILING DEMOLITION PLAN SCALE: 1/4" = 1'-0"

# GENERAL SHEET NOTES 1 PRIOR TO SUBMITTING BID, VISIT THE SITE AND FIELD VERIFY THE EXTENT OF ELECTRICAL DEMOLITION WORK TO MEET THE INTENT OF THE BID DOCUMENTS AND INCLUDE ALL COSTS IN BID. PRIOR TO REMOVAL OF ANY ELECTRICAL EQUIPMENT OR WIRING, FIELD VERIFY THAT THE EQUIPMENT OR WIRING IS INACTIVE OR NO LONGER IN USE. REMOVE ALL DEVICES, RACEWAYS AND WIRING FROM WALLS TO BE REMOVED. WHERE ACTIVE RACEWAYS OCCUR IN WALLS TO BE REMOVED, RE-ROUTE THE RACEWAY WITH ASSOCIATED WIRING TO KEEP THE CIRCUIT OPERATIONAL. REMOVE ALL ABANDONED RACEWAY, CONDUIT, WIRING AND CABLING WHETHER ABANDONED PREVIOUS TO THIS PROJECT OR AS A RESULT OF THIS PROJECT. NOT ALL ABANDONED ITEMS ARE SHOWN ON THESE PLANS AND FIELD VERIFICATION OF DEMOLITION SCOPE EXTENT IS REQUIRED. DEVICES MARKED "RR" ARE TO BE REMOVED AND RELOCATED PER NEW PLANS. EXTEND CIRCUITING AS REQUIRED FOR RELOCATION. REMOVE FEEDERS FOR ALL DEMOLISHED PANELS, DISCONNETS, ETC. BACK TO SOURCE ALL ITEMS INDICATED TO REMAIN SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION. CONTRACTOR TO TRACE AND LABEL ALL EXISTING LOADS TO REMAIN, THAT ARE CURRENTLY FED FROM PANELS THAT ARE BEING DEMOLISHED IN THIS PHASE. THESE LOADS TO BE RE-FED FROM NEW PANELS IN NEXT PHASE. SHEET KEYNOTES REMOVE AND RELOCATE THE EXISTING CAN LIGHTS AS NEEDED TO AVOID CONFLICT WITH THE NEW UNISTRUT LAYOUT.

![](_page_16_Picture_9.jpeg)

![](_page_17_Figure_0.jpeg)

![](_page_17_Figure_1.jpeg)

\_\_\_\_\_

# GENERAL SHEET NOTES

ALL WIRING IN PATIENT CARE AREAS SHALL MEET THE REQUIRMENTS OF NEC 517.13.

2 CONTRACTOR TO REFER TO IMAGING VENDOR DRAWINGS FOR ADDITIONAL RESPONSIBILITIES.

⊖ SHEET KEYNOTES

![](_page_17_Picture_11.jpeg)

![](_page_18_Figure_0.jpeg)

# GENERAL SHEET NOTES

- ALL WIRING IN PATIENT CARE AREAS SHALL MEET THE REQUIRMENTS OF NEC 517.13.
- CONTRACTOR TO REFER TO IMAGING VENDOR DRAWINGS FOR ADDITIONAL RESPONSIBILITIES.

# ⊖SHEET KEYNOTES

REMOVE AND RELOCATE THE EXISTING CAN LIGHTS AS NEEDED TO AVOID CONFLICT WITH THE NEW UNISTRUT LAYOUT.

2 CONNECT EXISTING IN-USE LIGHT TO THE NEW EQUIPMENT/CONTROLLER.

![](_page_18_Picture_11.jpeg)

CONNECTIVITY REQUIREMENTS	
Your new GE Healthcare imaging modality will require local and remote connectivity to enable our full range of digital support: • Local connectivity - This allows your system to connect to local devices such as PACS and modality worklist. We will require network information to configure the system(s), and a live ethernet port(s) prior to the delivery of the system(s). • Remote connectivity - Your GE Healthcare service warranty includes InSite™ (applicable to InSite capable products), a powerful broadband-based service which enables digital tools that can help guard your hospital against equipment downtime and revenue loss by quickly connecting you to a GE Healthcare expert. Depending on product family and software version, imaging systems can be connected in one of the following methods: 1. TLS over TCP Port 443 (Preferred method for new products) via: a. DNS resolution b. Customer-provided Proxy or	<ol> <li>All wires sy boxes, duc run in a co must be co 1.1. Aluminui 2. Wire sizes</li> <li>It is recom codes.</li> <li>Conduit siz national co</li> <li>Convenien least one c the proceo</li> <li>General ro spotlights. Recommen</li> </ol>
<ul> <li>c. GE Proxy (Available in some regions)</li> <li>2. Site-to-Site IPsec VPN tunnel</li> </ul> Please provide the GE project manager with the contact information for the resource that can provide information required to set up these connections. GEHC will send out communication to these contacts, which will include the project's Connectivity requirements, and a Connectivity form. This form will need to be completed and returned to GEHC prior to delivery of the system to ensure the system is tested and connectivity is enabled prior to the completion of the installation.	lights direc 7. Routing of greater tha to point). 8. Conduit tu electrical c 9. A special g recommer
	personnel 10. The maxim 11. Physical co the superv connection 12. GEHC conc electrical c
	<ul> <li>All junction and installe</li> <li>Conduit an</li> <li>Conduits a to reduce</li> <li>Ceiling mo</li> <li>All ductwor</li> <li>1.Ductwork s</li> <li>2.Ductwork s</li> <li>3.Ductwork s</li> <li>4.PVC as a su</li> <li>All opening</li> </ul>
Riverton Hospital   DEFINIUM XR656 HD   RAD-M34	customers General co operators 10 foot pig Grounding shown on

### **ELECTRICAL NOTES**

ecified shall be copper stranded, flexible, thermo-plastic, color coded, cut 10 foot long at outlet termination points or stubbed conduit ends. All conductors, power, signal and ground, must be duit or duct system. Electrical contractor shall ring out and tag all wires at both ends. Wire runs ntinuous copper stranded and free from splices. or solid wires are not allowed.

given are for use of equipment. Larger sizes may be required by local codes. Inended that all wires be color coded, as required in accordance with national and local electrical

es shall be verified by the architect, electrical engineer or contractor, in accordance with local or des. The outlets are not illustrated. Their number and location are to be specified by others. Locate at

onvenience outlet close to the system control, the power distritbution unit and one on each wall of ure room. Use hospital approved outlet or equivalent. Om illumination is not illustrated. Caution should be taken to avoid excessive heat from overhead Damage can occur to ceiling mounting components and wiring if high wattage bulbs are used.

d low wattage bulbs no higher than 75 watts and use dimmer controls (except MR). Do not mount ly above areas where ceiling mounted accessories will be parked. cable ductwork, conduits, etc., must run direct as possible otherwise may result in the need for n standard cable lengths (refer to the interconnection diagram for maximum usable lengths point

s to have large, sweeping bends with minimum radius in accordance with national and local

ounding system is required in all procedure rooms by some national and local codes. It is ded in areas where patients might be examined or treated under present, future, or emergency Consult the governing electrical code and confer with appropriate customer administrative o determine the areas requiring this type of grounding system.

um point to point distances illustrated on this drawing must not be exceeded.

nnection of primary power to GE equipment is to be made by customers electrical contractor with sion of a GE representative. The GE representative would be required to identify the physical location, and insure proper handling of GE equipment.

ucts power audits to verify quality of power being delivered to the system. The customer's ontractor is required to be available to support this activity.

boxes, conduit, duct, duct dividers, switches, circuit breakers, cable tray, etc., are to be supplied d by customers electrical contractor.

d duct runs shall have sweep radius bends ad duct above ceiling or below finished floor must be installed as near to ceiling or floor as possible un length.

nted junction boxes illustrated on this plan must be installed flush with finished ceiling. must meet the following requirements:

Il be metal with dividers and have removable, accessible covers.

Il be certified/rated for electrical power purposes. Il be electrically and mechanically bonded together in an approved manner.

stitute must be used in accordance with all local and national codes.

s in raceway and access flooring are to be cut out and finished off with grommet material by the contractor.

ntractor to insert pull cords for all cable run conduits between the equipment room and the ontrol room. ails at all junction points. is critical to equipment function and patient safety. Site must conform to wiring specifications

 Image: Image: Image: Rev AlDate 25/Oct/2024 |
 E1 - Electrical Notes
 I 12/16

![](_page_19_Figure_24.jpeg)

![](_page_19_Figure_25.jpeg)

![](_page_19_Picture_30.jpeg)

NJRA Architects, Inc. 5223 S. Ascension Way, Suite 350 Murray, Utah 84123 801.364.9259 www.njraarchitects.com

![](_page_19_Picture_32.jpeg)

![](_page_19_Picture_33.jpeg)

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![](_page_19_Figure_34.jpeg)

![](_page_19_Picture_35.jpeg)

![](_page_19_Picture_36.jpeg)

![](_page_20_Figure_0.jpeg)

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	P	
PC	OWER SUPPLY	380/400/415/44
FR	REQUENCIES	50/60Hz ± 3Hz
PC	OWER DEMAND	97kVA
M. PE	AXIMUM LINE RESISTANCE ER 2 PHASES (Ohm)	380V : 0.118 / 40 440V : 0.154 / 48
	Power supply should come into a r The section of the supply cable permissible voltage drops. There must be discrimination betw (main low-voltage transformer side	nain disconnect panel (MDP) should be calculated in ac ween supply cable protective e) and the protective devices
U	PPLY CHARACTERISTICS Power input must be separated fr radiology rooms equipped with hig All equipment (lighting, power of separately.	om any others which may ge h speed film changers) putlets, etc) installed with
SR	<b>COUND SYSTEM</b> Equipotential : the equipotential li be connected to the protective e equipotential connections linking u	ink will be by means of an eo arth conductors in the duct up all the conducting units in t
GR	COUND SYSTEM Equipotential : the equipotential li be connected to the protective e equipotential connections linking u	ink will be by means of an ec arth conductors in the ducts up all the conducting units in t
R A	COUND SYSTEM Equipotential : the equipotential is be connected to the protective e equipotential connections linking to BLES Power and cable installation must	ink will be by means of an eq arth conductors in the ducts up all the conducting units in t comply with the distribution o
GR CA Cas en; scr	<b>COUND SYSTEM</b> Equipotential : the equipotential libe connected to the protective equipotential connections linking of <b>BLES</b> Power and cable installation must All cables must be isolated and flex Cable color codes must comply with the MDP furnished by GE : The cables gth of 1.5 m (4.9 ft), and will be contended of the connector).	ink will be by means of an ed arth conductors in the ducts up all the conducting units in t comply with the distribution of kible. In standards for electrical inst of or signals and remote cont onnected during installation.
GR CA Cas en scr CA	<b>COUND SYSTEM</b> Equipotential : the equipotential lib be connected to the protective e equipotential connections linking u <b>BLES</b> Power and cable installation must All cables must be isolated and flex Cable color codes must comply wit se MDP furnished by GE : The cables gth of 1.5 m (4.9 ft), and will be co rew connector). <b>BLEWAYS</b> e general rules for laying cableways	ink will be by means of an ed arth conductors in the ducts up all the conducting units in t comply with the distribution of kible. In standards for electrical inst s for signals and remote cont innected during installation.

		FEE	DER TAE	3L			
MIN. FEEDER WIRE SIZE, AWG OR MCM				мι			
(sq. mm)/VAC	50 (15)	100 (30)	150 (46)				
480 VAC	4 (21)	4 (21)	4 (21)				
GENERAL NOTES							
In all cases qualified personnel must verify that the feeder (at the point of take stated in the PIM							
For a single unit installation, the minimum transformer size is 112.							
Grounding conductor will be of the same size as the feeder. This ground w grounding point and always travel in the sar							

![](_page_20_Figure_9.jpeg)

![](_page_20_Picture_12.jpeg)

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![](_page_20_Picture_14.jpeg)

![](_page_20_Picture_15.jpeg)

![](_page_20_Figure_16.jpeg)

![](_page_20_Picture_17.jpeg)

![](_page_20_Picture_18.jpeg)

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![](_page_21_Figure_2.jpeg)

![](_page_21_Picture_3.jpeg)

1 DEMOLITION PHASE ONE-LINE DIAGRAM SCALE: NTS

![](_page_21_Picture_5.jpeg)

# GENERAL SHEET NOTES

⊖ SHEET KEYNOTES

		SCHEE		BER					
**	).	SUBSC	RIPT (NOT	TE 5)		(E.G	6.)5 IG		
		НН	CONDUIT	COND	UCTOR (I	NOTE 1)			
SYM	AMP	AMPS	SIZE	QTY 2	SIZE	G 12	IG/HH	SE 8	N(
2	20	-	.75	3	12	12	12	8	2,3
3	20	24	.75	4	12	12	12 10	8	2,3
<u>4</u> 5	30	-	.75	3	10	10	10	8	2
6	30	32	.75	4	10	10	10	8	2
8	40	-	1	2	8	10	8	6	2
9	40	44	1	4	8	10	8	6	2
(10)	55 55	-	1	2	6 6	10 10	8 8	4	2
12	55	60	1.25	4	6	10	8	4	2
(13)	70	-	1 1.25	2	4	8 8	4	2	2
15	70	76	1.25	4	4	8	4	2	2
<u>(16)</u> (17)	85 85	-	1.25 1.25	2	3	8 8	3	2	2
18	85	92	1.25	4	3	8	3	2	2
(19) (20)	95 95	- 104	1.25	3	2	8 8	2	2	2
21	130	-	1.50	3	1	6	2	2	2
22 23	130	116	1.50	4	1	6	2	2	2
24	150	136	2	4	1/0	6	2	1/0	2
25 08	175	-	2	3 ⊿	2/0	6	2	2/0 2/0	2
27	200	-	2	3	3/0	6	2	2/0	2
28	200	180	2.50	4	3/0 4/0	6 4	2	2/0 2/0	2
30	230	208	2.50	4	4/0	4	2	2/0	2
31 32	255	- 222	2.50	3 ⊿	250	4 	1	2/0	2
33	310	-	3	3	350	4 3	1/0	3/0	2
34	310	280	3	4	350	3	1/0	3/0	2
36	380	- 344	4	4	500	3	3/0	3/0	2
37	400	-	2 EA 2	3	3/0	3	3/0	3/0	2
<u>39</u>	510	-	2 EA 2.50 2 EA 2.50	4	250	3 1	4/0	3/0	2
40	510	464	2 EA 3	4	250	1	4/0	3/0	2
42	620	- 560	2 EA 3 2 EA 3	4	350	1/0	4/0	3/0	2,4
43	760	-	2 EA 3.50	3	500	1/0	4/0	3/0	2,4
<u>44</u> 45	760 855	688	2 EA 4 3 EA 3	4	500 300	1/0 2/0	4/0 4/0	3/0 3/0	2,4
46	855	768	3 EA 3	4	300	2/0	4/0	3/0	2,4
<u>47</u> 48	1000	- 912	3 EA 3.50 3 EA 3.50	3	400	2/0 2/0	4/0 4/0	3/0 3/0	4
49	1140	-	3 EA 4	3	500	3/0	4/0	3/0	4
<u>50</u> 51	1140	1032	3 EA 4 4 FA 3	4	500 350	3/0 3/0	4/0 4/0	3/0 3/0	4
52	1240	1120	4 EA 3	4	350	3/0	4/0	3/0	4
<u>53</u>	2010	1520	5 EA 4 6 FA 4	4	400	4/0 250	4/0 250	4/0 250	4
55	2660	2408	7 EA 4	4	500	350	350	350	4
<u>56</u> 57)	3040 4180	2752 3784	8 EA 4 11 EA 4	4	500 500	500 500	500 500	500 500	4
58	1200	-	5 EA 4	-	-	-	-	-	6
<u>59</u> 60	3000	-	10 EA 6 10 EA 4	-	-	-	-	-	6
1. 2. 3. 4. 5.	CONDU AS NOT OTHER' PROVIE CIRCUI' TABLE. PROVIE COMPU GROUN CONDU SYMBO "2N":	CTORS ED IN N WISE N DE EQUI T BREA DE #10 N TERS. D (G) C CTORS L SUBS INCLUI PHASE OR LAI TWICE	SHOWN A IOTE 5. AL OTED. IPMENT GF KERS ARE NEUTRALS ONDUCTO CRIPTS: DE TWO NE AND NEU RGER. INC THE AMP	RE SHO L CONE SIZED FOR MI R MAY I EUTRAL TRAL CO LUDE A	OWN FOR DUCTORS CONDUC GREATER JLTIWIRE BE DELE CONDUCTO SINGLE E THE SC	EACH C SHOWN TORS PE THAN A E BRANC E BRANC TED ON S TED ON S ORS WHI 200% RA	ONDUIT V I ARE THV ER TABLE MPERE F H CIRCUI SERVICE IZED AS S ERE THE TED CON	VITH MO WN UNLE 250-122 RATING S TS SERV ENTRAN SCHEDUI CONDUC IDUCTOF	DIFICA ESS WHEN HOWI ING CE LED F( CTOR I R THAT
	"CI":	PROVI RESIS <sup>®</sup>	DE CIRCUI TIVE CABLI RETE.	T INTEG	IE COND RITY CA	JCTOR IS BLE; TYP DR PROV	S BELOW E TWO-H IDE FEED	#1/0 IN S OUR FIR	E ASED
	"FG"	FULL S BE SAN	IZE GROU ME SIZE AS	ND, SIZ S THE P	E EQUIPI HASE CC	/ENT GR NDUCTC	OUNDING DRS.	G CONDL	ICTOR
	"HH":	NEUTR LOADS ACCOF GROUI	AL CURRE CURREN DINGLY. I NDING COM	IT CARF PROVID	kist due Rying CC E the Ig Dr.	TO HIGH NDUCTO /HH SIZE	I HARMON DRS DERA FOR THE	NIC "NON ATED E EQUIPI	ILINEA ⁄IENT
	"IG":	INCLUI SCHEE CONDU	DE IG (INSU DULED ALC JCTOR.	JLATED NG WIT	/ISOLATE TH THE G	D GROU ROUND (	ND CONE OF EQUIP	DUCTOR) MENT GI	ROUNI
	"MC":	PROVI SINGLI	DE FEEDEI E CONDUC	R IN ME TORS II	TAL-CLAI N CONDU	D CABLE IIT.	; TYPE MO	C IN PLA	CE OF
	"SE":	SUBST	ITUTE "SE' D FOR THI	' CONDI E GROL	JCTOR F	OR "G" C F THE SI	ONDUCT( ECONDAF	OR SHOV RY OF TH	VN, W IE

![](_page_21_Figure_10.jpeg)

![](_page_21_Picture_14.jpeg)

![](_page_21_Picture_15.jpeg)

![](_page_21_Picture_16.jpeg)

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![](_page_21_Figure_17.jpeg)

Construction Docuements Oct. 31, 2024

![](_page_21_Picture_19.jpeg)

![](_page_21_Picture_20.jpeg)

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![](_page_22_Picture_1.jpeg)

![](_page_22_Figure_2.jpeg)

![](_page_22_Figure_3.jpeg)

![](_page_22_Figure_4.jpeg)

![](_page_22_Figure_5.jpeg)

![](_page_22_Picture_6.jpeg)

# **TYPICAL 1-PORT WALL PHONE** 5 OUTLET SCALE: NTS

TYPICAL 2-PORT WALL DATA

7 OUTLET SCALE: NTS

![](_page_22_Figure_13.jpeg)

![](_page_22_Figure_14.jpeg)

![](_page_22_Figure_15.jpeg)

![](_page_22_Picture_18.jpeg)

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![](_page_22_Picture_20.jpeg)

![](_page_22_Picture_21.jpeg)

![](_page_22_Figure_22.jpeg)

![](_page_22_Picture_23.jpeg)

EP650

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							<b>Riverton</b> H	lospital		
							Riverto	n. UT		
	A 25/Oct/2024		Final (DC-452196)				USA	4		
_ [	REVDATEMODIFICATIONS $01 - C1 - Cover Sheet$ $10 - S4 - Structural Details (2)$ $02 - C2 - Disclaimer - Site Readiness11 - M1 - HVAC03 - A1 - General Notes12 - E1 - Electrical Notes04 - A2 - Equipment Layout13 - E2 - Electrical Layout05 - A3 - Section Views14 - E3 - Electrical Elevations06 - A4 - Equipment Details & Delivery15 - E4 - Details-Interconnections07 - S1 - Structural Notes16 - E5 - Power Requirements08 - S2 - Structural Layout11 - M1 - HVAC$		MODIFICATIONS 10 - S4 - Structural Details (2) 11 - M1 - HVAC 12 - E1 - Electrical Notes 13 - E2 - Electrical Layout 14 - 52 - Electrical Elevations	G	<b>GE</b>	HealthCa	<b>916</b>	M 80 Michael.hat	ichael Hatch 01-599-6221 ch@gehealthcare.co	m
					DE	FINIUM ) FINAL S	KR656 HD TUDY			
	A mandatory component of thi	s drawing set is the GF HealthCare Pre Inst	allation manual. Failure to reference the Pre Installation manual will result in	Dra	wn by	Verified by	Concession	GON/Quote	PIM Manual	Rev
	Pre Installation documer	incomplete documentation requ ts for GE HealthCare products can be acce	ired for site design and preparation. essed on the web at: https://www.gehealthcare.com/support/manuals		JJL	JJL	-	2009662846.5	5643942-1EN	10
e t	E HealthCare does not take res	ponsibility for any damages resulting from awings. GE HealthCare cannot accept res	n changes on drawings made by others. Errors may occur by not referring to sponsibility for any damage due to the partial use of GE HealthCare final issue	Format	Scale		File Name		Date	Sheet
d	rawings, nowever caused. All d	responsibility or liability for defective	wise specified. Do not scale from printed pdf files. GE HealthCare accepts no work due to scaling from these drawings.	A3	1/4"=1'-0"	RAD-N	/345013-FIN-00-	A.DWG	25/Oct/2024	01/16

![](_page_23_Picture_6.jpeg)

![](_page_23_Picture_11.jpeg)

\_\_\_\_\_

![](_page_23_Picture_13.jpeg)

![](_page_23_Picture_14.jpeg)

![](_page_23_Picture_15.jpeg)

![](_page_23_Picture_16.jpeg)

# DISCLAIMER

![](_page_24_Figure_1.jpeg)

- 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 structural 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 C	ERTIFIES THAT I HAVE READ AND APPROVED
	DATE	NAME
-		

**Riverton Hospita** 

# **CUSTOMER SITE READINESS REQUIREMENTS**

# **REQUIRED MANUALS FOR SYSTEM PRE-INSTALLATION**

Description

Product specific Pre-installation Manual \*documents can be accessed in multip

# **REQUIRED SITE-READINESS CHECKLISTS FOR SYSTEM PRE-INSTALLATION**

### Modality

Computerized Tomography Radiology, Radiology and Fluouroscopy, Mammography,

Densitometry

All modality Customer/Contractor Worksheet

- HealthCare installation project manager prior to making changes.
- manager can supply a reference list of rigging contractors.
- New construction requires the following;
  - Secure area for equipment,
  - Power for drills and other test equipment,
  - 3. Restrooms.
- Provide for refuse removal and disposal (e.g. crates, cartons, packing)
- specifications.

THE PLANS IN THIS DOCUMENT. SIGNATURE

**DEFINIUM XR656 HD** 

RAD-M345013-FIN-00-A.DWG

	Document Number*	
	Refer to cover page	
le languages a	at https://www.gehealthcare.com/support/manuals	

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.

The items on the GE HealthCare Site Readiness Checklists listed below are REQUIRED to facilitate equipment delivery to the site. Equipment will not be delivered if these requirements are not satisfied.

Modality	Document Number*		
Computerized Tomography	DOC2949059		
logy and Fluouroscopy, Mammography, Bone Mass Densitometry	DOC2949063		
dality Customer/Contractor Worksheet DOC2949068			
*documents can be accessed in multiple languages a	at https://www.gehealthcare.com/support/manuals		

Any deviation from these drawings must be communicated in writing to and reviewed by your local GE

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

• For CT systems it is required to minimize vibrations within the scan room. 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 Pre-installation manual for vibration

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C2 - Disclaimer - Site Readiness

| 02/16

![](_page_24_Picture_59.jpeg)

![](_page_24_Picture_61.jpeg)

![](_page_24_Picture_62.jpeg)

![](_page_24_Picture_63.jpeg)

![](_page_24_Picture_64.jpeg)

# **ENVIRONMENTAL SPECIFICATIONS**

# MAGNETIC INTERFERENCE

\_\_\_\_\_

In order to avoid interference on the system, static field limits from the surrounding environment must be less than <1 Gauss around the unit.

# LIGHT REQUIREMENTS

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

# ACOUSTIC OUTPUT

Measured 1 m [3.28 ft] from any point in system. less than 55 dBA In-use: Stand-by: less than 55 dBA

**Riverton Hospital** 

DEFINIUM XR656 HD	RAD-M345013-FIN-00-A.DWG	

Rev A Date 25/Oct/2024	A1 - General Notes	03/16

![](_page_25_Picture_19.jpeg)

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![](_page_25_Picture_21.jpeg)

![](_page_25_Picture_22.jpeg)

![](_page_25_Picture_23.jpeg)

![](_page_25_Picture_24.jpeg)

![](_page_26_Figure_0.jpeg)

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E * MA HEA OUTI (BTU 39 - - -	EQU ITEN ANO X T PUT (/h) 9	IPMENT EXIS 1 TO BE REIN THER SITE WEIGHT (lbs) 626 838	TING IN RO STALLED FR MAX HEAT OUTPUT (W) 117	OM OM WEIGHT (kg)
* MA HEA OUTI (BTU 39 - - -	ITEM ANO X T PUT I/h) 9	1 TO BE REIN THER SITE WEIGHT (lbs) 626 838	STALLED FR MAX HEAT OUTPUT (W) 117	OM WEIGHT (kg)
MA HEA OUTI (BTU 39 - - -	X AT PUT I/h) 9	WEIGHT (lbs) 626 838	MAX HEAT OUTPUT (W) 117	WEIGHT (kg)
39 - - -	9	626 838	117	
		838		284
			-	380
-		437	_	198
-		79	_	36
		30	-	13.8
58	3	1	17	0.6
-		1219	-	552.7
-		-	-	-
-		-	-	-
-		-	-	-
-		38	_	17.3
_		25	_	11.5
-		120	_	54.4
ELIVER RIDOR x 82 ii E GRO	Y IS 95 WIDT n] OPE MME <sup>-</sup>	50 mm x 1900 TH (NOTE: IM ENING) TED OPENING	0 mm [37.5 AGE PASTE GS AS REQU	in x 75 in], OPTION JIRED TO
ASS V	IFWIN			
IGHT				
				14'-0"
				9'-0"
vailable	e in th	is layout		
table sł	not			
NS				
e preser	nt equi	pment positio	ning, howev	er the sales
				YES
				YES
				NO
				YES
				YES
				YES
	- - - - - - - - - - - - - - - - - - -	- - - - LIVERY IS 95 RIDOR WIDT x 82 in] OPE GROMME GROMME IGHT iGHT vailable in th table shot NS present equi	38 - 25 - 120 LIVERY IS 950 mm x 1900 RIDOR WIDTH (NOTE: IM x 82 in] OPENING) E GROMMETED OPENING ASS VIEWING WINDOW ASS VIEWING WINDOW IGHT vailable in this layout table shot NS present equipment position	-       -       -         -       -       -         -       38       -         -       25       -         -       120       -         LIVERY IS 950 mm x 1900 mm [37.5       RIDOR WIDTH (NOTE: IMAGE PASTE x 82 in] OPENING)       E         E GROMMETED OPENINGS AS REQU

essory Sales: (866) 281-754	5 Options 1, 2, 1, 2 or mail to: gehcaccessorysa	ales@ge.com
25/Oct/2024	A2 - Equipment Layout	04/1

![](_page_26_Picture_9.jpeg)

\_\_\_\_\_

![](_page_26_Picture_11.jpeg)

![](_page_26_Picture_12.jpeg)

![](_page_26_Picture_13.jpeg)

![](_page_26_Picture_14.jpeg)

![](_page_27_Figure_0.jpeg)

AND MINIMUM ROOM HEIGHTS					
	SPECIFICATION	<b>CEILING HEIGHT</b>	<b>CEILING HEIGHT</b>		
	Recommended	2895 mm	114 in		
	Minimum	2883 mm	113.5 in		
	Minimum	2890 mm	113.75 in		
е	Minimum	2616 mm	103 in		
	Minimum	2622.5 mm	103.25 in		
9	Minimum	2692.4 mm	106 in		
	Minimum	2697 mm	106.25 in		
	Minimum	2616 mm	103 in		
	Minimum	2622.5 mm	103.25 in		
9	Minimum	2718 mm	107 in		
	Minimum	2718 mm	107 in		
	Minimum	2724 mm	107.25 in		

![](_page_27_Picture_10.jpeg)

\_\_\_\_\_

NJRA Architects, Inc. 5223 S. Ascension Way, Suite 350 Murray, Utah 84123 801.364.9259 www.njraarchitects.com

![](_page_27_Picture_12.jpeg)

![](_page_27_Picture_13.jpeg)

![](_page_27_Picture_14.jpeg)

![](_page_27_Picture_15.jpeg)

![](_page_28_Figure_0.jpeg)

# THE CUSTOMER/CONTRACTOR SHOULD:

- •
- transportation, lifting and rigging equipment.
- belonging to the customer have been made.

# DIMENSIONS OF DELIVERY WITH DOLLY TRANSPORT EQUIPMENT

EQUIPMENT	DIMENSIONS LxWxH mm (in)	WEIGHT kg (lb)
STANDARD WALLSTAND	2111x911x1860 (83.1x35.9x73.2)	284 kg (626 lbs) + dolly
EXTENDED WALLSTAND	2340x911x1860 (92.1x35.9x73.2)	292 kg (644 lbs) + dolly
BAMBOO TABLE	2600x1240x925 (102x48.8x36.4)	482.5 kg (1064 lbs)
GLOBAL G3 TABLE	2350x940x800 (93x37x31.5)	380 kg (838 lbs) + dolly
STATIONARY RAILS (5.79 m (19 ft)) (set of 2 rails)	5920x62.5x84.3 (233.1x2.5x3.3)	63 kg (138 lbs)
OTS	1190x1040x1640 (46.8x41x64.5)	419 kg (924 lbs)
BAMBOO OTS	1200x1100x1900 (47.2x43.3x74.8)	356 kg (785 lbs)
2M or 3M BRIDGE	3254x794x500 (128.1x31x19.7)	172 kg (380 lbs)
4M BRIDGE	4554x794x500 (4547x31x19.7)	246 kg (542 lbs)
Refer to Equipment Layout for site	-specific equipment configuration.	

**GRID HOLDER** Front view:

![](_page_28_Figure_16.jpeg)

The bottom edge of the Grid Holder must be < 300 mm [11.8 in] from the bottom of the Holder to the floor.

![](_page_28_Figure_18.jpeg)

RAD-M345013-FIN-00-A.DWG

# DELIVERY

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

Ensure that all necessary arrangements for stopping and unloading on public or private property not

# **GRID HOLDER**

Side view:

![](_page_28_Picture_27.jpeg)

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A4 - Equipment Details & Delivery

| 06/16

![](_page_28_Picture_33.jpeg)

![](_page_28_Picture_35.jpeg)

![](_page_28_Picture_36.jpeg)

![](_page_28_Picture_37.jpeg)

![](_page_28_Picture_38.jpeg)

STRUC	TURAL NOTES	CEI	ILI
<ul> <li>Methods of support for the steelwork that will concrete construction should be favored. Do not all units that are wall mounted or wall support supports are to be supplied and installed by the Control walls shall be constructed to minimum Dimensions are to finished surfaces of room.</li> <li>Customers contractor must provide all penetration.</li> </ul>	permit attachment to structural steel or through b ot use concrete or masonry anchors in direct tensic ed are to be provided with supports where necessa e customer or his contractors. See plan for suggest 2130mm (7'-0") high. ations in post tension floors. any non-standard anchoring. Documents for stand	olts in n. To allow installation of the stationary rail rails and the walls. It is recommended that sprinkler heads n mounted so they do not extend downwa position.	cros Iot b ard
<ul> <li>anchoring methods are included with GE equip documentation.</li> <li>Customers contractor must provide and install under access floors. This contractor must also obstruction encountered while drilling by the G</li> <li>It is the customer's responsibility to perform ar customer is also responsible for ensuring that r wiring, conduits, piping, duct work or structura come in contact with subsurface penetration o performed during the installation process. To e penetration operations only after the customer permit".</li> <li>Different anchor types are used to install the consection(s) of the Pre-Installation Manual for ea Refer to the Structural Requirements Section for The ground surface must be flat and leveled, m feet). A grout pad provided by the contractor in thickness is 6.3 mm (0.25 in).</li> </ul>	ment drawings for geographic areas that require so hardware for "through the floor" anchoring and/or provide floor drilling that cannot be completed be GE installer such as rebar etc. my floor or wall penetrations that may be required. no subsurface utilities (e.g., electrical or any other f al supports (i.e. post tension cables or rebar)) will in perations (e.g. drilling and installation of anchors/s ensure worker safety, GE installers will perform surf r's validation and completion of the "GE surface pe omponents of the system. Refer to Structural Required anchor requirement. or the required minimum embedment. haximum tolerance for leveling is ±1.5 mm per 1 m is required to meet this specification. The maximum	In addition, there should not be anything stationary rails. This is because the OT approximately centered between the two items during normal use. The orm of terfere or Stationary rails are designed for top (ceiling crews) - 4115 mm [13 ft 6 in] - 4420 mm [14 ft 6 in] - 4724 mm [15 ft 6 in] - 4724 mm [15 ft 6 in] - 5030 mm [16 ft 6 in] The choice of length depends on room size of pad	ng r S loi stat stat - 5 - 5 e, co
Riverton Hospital	DEFINIUM XR656 HD	RAD-M345013-FIN-00-A.DWG	Date

# **NG REQUIREMENTS**

ss-members, clearance is required between the ends of the stationary

be placed between the stationary rails. All sprinkler heads should be more than 6.35 mm [1/4 in] from the ceiling while in the 'resting'

mounted in the ceiling (i.e. lights, A/C returns, etc) between the ongitudinal drive belt assembly is located on the movable bridge, ationary rails, and may come into contact with those ceiling-mounted

mounting. Rails can be ordered and are supplied in the following sizes: 5334 mm [17 ft 6 in] 5640 mm [18 ft 6 in] 5791 mm [19 ft]

onfiguration and the possible presence of obstructions.

Rev AlDate 25/Oct/2024

S1 - Structural Notes

| 07/16

![](_page_29_Picture_16.jpeg)

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![](_page_29_Picture_18.jpeg)

![](_page_29_Picture_19.jpeg)

![](_page_29_Picture_20.jpeg)

![](_page_29_Picture_21.jpeg)

![](_page_30_Figure_0.jpeg)

ITEM	
1	Area o
2	Area o
3	Image
4	Suppo
5	Existin Struct contin squar these Metho should
6	Locati
7	Locati

# RAD-M345013-FIN-00-A.DWG

|1/4"=1'-0"|Rev A|Date 25/Oct/2024|

DESCRIPTION
(GE SUPPLIED / CONTRACTOR INSTALLED)
occupied by GE supplied table baseplate
occupied by GE supplied wall stand baseplate
e paste barrier floor puck locations, template provided by GE
(CONTRACTOR SUPPLIED & INSTALLED)
ort backing, locate as shown.
ng Re-Use if adequate tural support in ceiling for fastening ceiling supported equipment. Supports to run nuous with no fittings extending below face of channel, run wall to wall, be parallel, re, and in the same horizontal plane, flush with the finished ceiling. Rails are mounted to e supports every 2'-2" and require 350 lbs. (597 lbs. In seismic regions) per bolt load. ods of support that permit attachment to structural steel or through bolts in concrete ld be favored. Do not use screw anchors in direct tension.
ion of stationary rail mounted to existing grid

cation of drape rail mounted to existing grid

S2 - Structural Layout

| 08/16

![](_page_30_Picture_14.jpeg)

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![](_page_30_Picture_16.jpeg)

![](_page_30_Picture_17.jpeg)

![](_page_30_Picture_18.jpeg)

![](_page_30_Picture_19.jpeg)

![](_page_31_Figure_0.jpeg)

![](_page_31_Figure_3.jpeg)

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# 4 m BRIDGE

When a 22.7 kg [50 lb] force is applied vertically upward, downward or horizontally at any support rail mounting point, the attachment interface must not deflect more than 1.5 mm [1/16 in]

When a 136 kg [300 lb] load is applied vertically downward or horizontally at any stationary rail mounting point, the attachment interface must not deflect more than 1.5 mm [1/16 in]

Rec: 660.4 ±1.5 mm [26 ±1/16 in]. Max: 1320 mm [52 in] with universal rail option.

The bottom surface of stationary rail and cable support rail must be flat, no obvious protrusions larger than 1mm. (only applicable for non-Unistrut construction) Stationary rail mounting

points must be parallel within ±3 mm [±1/8 in]

# ADDITIONAL RAIL REQUIREMENTS

direction must less than 2°).

![](_page_31_Figure_20.jpeg)

![](_page_31_Picture_23.jpeg)

![](_page_31_Picture_25.jpeg)

![](_page_31_Figure_26.jpeg)

![](_page_31_Picture_27.jpeg)

![](_page_31_Picture_28.jpeg)

![](_page_32_Figure_0.jpeg)

RAD-M345013-FIN-00-A.DWG

# Contractor supplied and installed structural supports

Contractor supplied and installed finished ceiling (ceiling & supports must not extend below face of structural supports)

GEHC supplied spring nuts with bolts

S4 - Structural Details (2)

| 10/16

![](_page_32_Picture_13.jpeg)

![](_page_32_Picture_15.jpeg)

![](_page_32_Picture_16.jpeg)

![](_page_32_Picture_17.jpeg)

![](_page_32_Picture_18.jpeg)

# **TEMPERATURE AND HUMIDITY SPECIFICATIONS**

# **IN-USE CONDITIONS**

\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

	EXAM ROOM		CONTROL ROOM	
Tomporatura	Min	Max	Min	Max
remperature	15°C [59°F]	32°C [89.6°F]	15°C [59°F]	32°C [89.6°F]
Temperature gradient	< 10°C/h [< 50°F/h]		< 10°C/h	[< 50°F/h]
Relative humidity (1)	20% to 75%		20% t	o 75%
Humidity gradient	< 30%/h		< 30	%/h

# **STORAGE CONDITIONS**

Temperature	-5°C [23°F] to +50°C [122°F]
Temperature gradient	< 20°C/h [< 68°F/h]
Relative humidity (1)	10% to 85%
Humidity gradient	< 30%/h

Storage longer than 90 days is not recommended.

(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**

SYSTEM DOWER CONSUMPTION	HEAT OUTPUT						
STSTEIVI POVVER CONSOIVIPTION	STANDBY		IN-USE				
Standby Power	1.0 kW	3412 BTU/hr					
Standby Current	2.0 A						
Continuous Power			2.2 kW	7507 BTU/hr			
Continuous Current			4.5 A				

**Riverton Hospital** 

DEFINIUM XR656 HD	RAD-M345013-FIN-00-A.DWG	Rev A Date 25/Oct/2024

M1 - HVAC

| 11/16

![](_page_33_Picture_22.jpeg)

\_\_\_\_\_

![](_page_33_Picture_24.jpeg)

![](_page_33_Picture_25.jpeg)

![](_page_33_Picture_26.jpeg)

![](_page_33_Picture_27.jpeg)

# **CONNECTIVITY REQUIREMENTS**

Your new GE Healthcare imaging modality will require local and remote connectivity to enable our full range of digital support:

- Local connectivity This allows your system to connect to local device We will require network information to configure the system(s), and delivery of the system(s).
- Remote connectivity Your GE Healthcare service warranty includes products), a powerful broadband-based service which enables digit hospital against equipment downtime and revenue loss by quickly c expert.

Depending on product family and software version, imaging systems can be methods:

- 1. TLS over TCP Port 443 (Preferred method for new products) via:
  - a. DNS resolution

\_\_\_\_\_

- b. Customer-provided Proxy or
- c. GE Proxy (Available in some regions)
- 2. Site-to-Site IPsec VPN tunnel

Please provide the GE project manager with the contact information for the required to set up these connections. GEHC will send out communication to project's Connectivity requirements, and a Connectivity form. This form will GEHC prior to delivery of the system to ensure the system is tested and con completion of the installation.

**Riverton Hospital** 

DEF

C	NI	т	C	

# **ELECTRICAL NOTES**

ices such as PACS and modality worklist. In a live ethernet port(s) prior to the s InSite™ (applicable to InSite capable cal tools that can help guard your connecting you to a GE Healthcare e connected in one of the following	<ul> <li>run in a conduit or duct system. Electrical contractor shall ring out and tag all wires at both ends. Wirmust be continuous copper stranded and free from splices.</li> <li>1.1. Aluminum or solid wires are not allowed.</li> <li>2. Wire sizes given are for use of equipment. Larger sizes may be required by local codes.</li> <li>3. It is recommended that all wires be color coded, as required in accordance with national and local elecodes.</li> <li>4. Conduit sizes shall be verified by the architect, electrical engineer or contractor, in accordance with local codes.</li> <li>5. Convenience outlets are not illustrated. Their number and location are to be specified by others. Local least one convenience outlet close to the system control, the power distribution unit and one on each the procedure room. Use hospital approved outlet or equivalent.</li> <li>6. General room illumination is not illustrated. Caution should be taken to avoid excessive heat from ov spotlights. Damage can occur to ceiling mounting components and wiring if high wattage bulbs are us Recommend low wattage bulbs no higher than 75 watts and use dimmer controls (except MR). Do not lights directly above areas where ceiling mounted accessories will be parked.</li> <li>7. Routing of cable ductwork, conduits, etc., must run direct as possible otherwise may result in the need greater than standard cable lengths (refer to the interconnection diagram for maximum usable length)</li> </ul>
e resource that can provide information o these contacts, which will include the I need to be completed and returned to inectivity is enabled prior to the	<ul> <li>to point).</li> <li>8. Conduit turns to have large, sweeping bends with minimum radius in accordance with national and locelectrical codes.</li> <li>9. A special grounding system is required in all procedure rooms by some national and local codes. It is recommended in areas where patients might be examined or treated under present, future, or emery conditions. Consult the governing electrical code and confer with appropriate customer administrative personnel to determine the areas requiring this type of grounding system.</li> <li>10. The maximum point to point distances illustrated on this drawing must not be exceeded.</li> <li>11. Physical connection of primary power to GE equipment is to be made by customers electrical contract the supervision of a GE representative. The GE representative would be required to identify the phys connection location, and insure proper handling of GE equipment.</li> <li>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.</li> </ul>
	<ul> <li>All junction boxes, conduit, duct, duct dividers, switches, circuit breakers, cable tray, etc., are to be su and installed by customers electrical contractor.</li> <li>Conduit and duct runs shall have sweep radius bends</li> <li>Conduits and duct above ceiling or below finished floor must be installed as near to ceiling or floor as to reduce run length.</li> <li>Ceiling mounted junction boxes illustrated on this plan must be installed flush with finished ceiling.</li> <li>All ductwork must meet the following requirements:</li> <li>1.Ductwork shall be metal with dividers and have removable, accessible covers.</li> <li>2.Ductwork shall be certified/rated for electrical power purposes.</li> <li>3.Ductwork shall be electrically and mechanically bonded together in an approved manner.</li> <li>4.PVC as a substitute must be used in accordance with all local and national codes.</li> <li>All openings in raceway and access flooring are to be cut out and finished off with grommet material customers contractor.</li> <li>General contractor to insert pull cords for all cable run conduits between the equipment room and th operators control room.</li> <li>10 foot pigtails at all junction points.</li> <li>Grounding is critical to equipment function and patient safety. Site must conform to wiring specificat shown on this plan.</li> </ul>
INIUM XR656 HD   RAD-M34	  5013-FIN-00-A.DWG    Rev A Date 25/Oct/2024   E1 - Electrical Notes

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 I contractor shall ring out and tag all wires at both ends. Wire runs free from splices.

> t. Larger sizes may be required by local codes. coded, as required in accordance with national and local electrical

> itect, electrical engineer or contractor, in accordance with local or

heir number and location are to be specified by others. Locate at system control, the power distritbution unit and one on each wall of ved outlet or equivalent.

ed. Caution should be taken to avoid excessive heat from overhead nounting components and wiring if high wattage bulbs are used. r than 75 watts and use dimmer controls (except MR). Do not mount mounted accessories will be parked.

, must run direct as possible otherwise may result in the need for r to the interconnection diagram for maximum usable lengths point

nds with minimum radius in accordance with national and local

ght be examined or treated under present, future, or emergency al code and confer with appropriate customer administrative g this type of grounding system. strated on this drawing must not be exceeded. E equipment is to be made by customers electrical contractor with e GE representative would be required to identify the physical ndling of GE equipment. lity of power being delivered to the system. The customer's able to support this activity.	
ders, switches, circuit breakers, cable tray, etc., are to be supplied actor. dius bends	
finished floor must be installed as near to ceiling or floor as possible	
on this plan must be installed flush with finished ceiling. uirements: have removable, accessible covers. ical power purposes. cally bonded together in an approved manner. ance with all local and national codes.	
g are to be cut out and finished off with grommet material by the	
all cable run conduits between the equipment room and the	
n and patient safety. Site must conform to wiring specifications	

E1 - Electrical Notes

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![](_page_34_Picture_27.jpeg)

![](_page_34_Picture_29.jpeg)

![](_page_34_Picture_30.jpeg)

![](_page_34_Picture_31.jpeg)

![](_page_34_Picture_32.jpeg)

![](_page_35_Figure_0.jpeg)

Item	Electrical Layout Item List
1	Main Disconnect Panel
2	Box below floor size per local code, with 3" [75] conduit cut flush with floor
3	Flush 12"x6"x4" [300 x 150 x 100] box (Control)
4	Flush box - size per local code (Chest Unit)
5	Flush box - size per local code (Generator)
6	Grommeted opening (Access Point)
7	Flush box in ceiling size per local code
8	18" x 3 1/2" [450 x 100] Flush vertical wall duct with minimum 2 dividers
9	Box above ceiling size per local code
10	One 1" [25] conduit above ceiling
11	One 1 1/2" [38] conduit above ceiling
12	One 2" [50] conduit above ceiling
13	One 2 1/2" [64] conduit above ceiling
14	One 3 1/2" [89] conduit above ceiling
15	One 2" [50] conduit below floor
16	One 2 1/2" [64] conduit below floor

ITEM	
1	System ei
$\otimes$	X-Ray roc
	X-Ray ON
$\Diamond$	Door inte
Φ	Duplex ho
$\triangle$	Dedicated
	Network

Routing	of	ca
for gr	eat	ter
U		

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	1 Phas
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0'-10"

3

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B

CONTROL

1-

13

(10)

111

 $\langle C \rangle$ 

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3 Opera 1/4"=1'-0" Rev A Date

9

	El	ectr	ical	Lay	/out	ltem	List
--	----	------	------	-----	------	------	------

# **Electrical Outlet Legend** Customer/contractor supplied and installed items unless otherwise specified. Height above floor determined by local codes unless otherwise specified.

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

ay room warning light control panel

ay ON lamp (L1) - 24V

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

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

licated telephone line(s)

work outlet

Cable Length Note: cable ductwork, conduits, etc., **must run direct as possible** otherwise may result in the need ter than standard cable lengths (refer to the interconnection diagram for maximum usable lengths point to point).

Additional Conduit Runs (Contractor Supplied and Installed)								
From	То			Size				
(Bubble # / Item)	(Bubble # / Item)			In.	mm			
3 Phase Power	1	Main Disconnect	1	As req'd	As req'd			
Main Disconnect		Emergency Off	1	1/2	13			
Main Disconnect	9	Systems Cabinet	1	As req'd	As req'd			
Warning Light			1	1/2	13			
1 Phase Power	Warning Light Control			As req'd	As req'd			
Systems Cabinat			1	1/2	13			
Systems Cabinet		Door Switch	1	1/2	16			
Operators Console	9	Access Point	1	2	53			
Date 25/Oct/2024		E2 - Electrical Layou	ut		13/16			

![](_page_35_Picture_27.jpeg)

NJRA Architects, Inc. 5223 S. Ascension Way, Suite 350 Murray, Utah 84123 801.364.9259 www.njraarchitects.com

![](_page_35_Picture_29.jpeg)

![](_page_35_Picture_30.jpeg)

![](_page_35_Picture_31.jpeg)

Equipment Drawing

![](_page_36_Figure_0.jpeg)

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![](_page_36_Picture_7.jpeg)

\_\_\_\_

![](_page_36_Picture_9.jpeg)

![](_page_36_Picture_10.jpeg)

![](_page_36_Picture_11.jpeg)

![](_page_36_Picture_12.jpeg)

![](_page_37_Figure_0.jpeg)

![](_page_37_Figure_1.jpeg)

![](_page_37_Picture_7.jpeg)

\_\_\_\_\_

NJRA Architects, Inc. 5223 S. Ascension Way, Suite 350 Murray, Utah 84123 801.364.9259 www.njraarchitects.com

![](_page_37_Picture_9.jpeg)

![](_page_37_Figure_10.jpeg)

![](_page_37_Picture_11.jpeg)

![](_page_37_Picture_12.jpeg)

# **POWER REQUIREMEN**

POWER SUPPLY	380/400/415/440/460/			
FREQUENCIES	50/60Hz ± 3Hz			
POWER DEMAND	97kVA			
MAXIMUM LINE RESISTANCE PER 2 PHASES (Ohm)	380V : 0.118 / 400V : 0. 440V : 0.154 / 480V : 0.			

- Power supply should come into a main disconnect panel (MDP) contain
- The section of the supply cable should be calculated in accordan permissible voltage drops.
- There must be discrimination between supply cable protective mater (main low-voltage transformer side) and the protective devices in the I

# **SUPPLY CHARACTERISTICS**

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

# **GROUND SYSTEM**

Equipotential : the equipotential link will be by means of an equipote • be connected to the protective earth conductors in the ducts of th equipotential connections linking up all the conducting units in the roc

### CABLES

\_\_\_\_\_

\_\_\_\_\_

- Power and cable installation must comply with the distribution diagram •
- All cables must be isolated and flexible.

Cable color codes must comply with standards for electrical installation Case MDP furnished by GE : The cables for signals and remote control (SEO, XRL1...) will go to MDP with a pigtail length of 1.5 m (4.9 ft), 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.

FEEDER TABLE									
MIN. FEEDER WIRE SIZE, AWG OR MCM (sq. mm)/VAC	MINIMUM FEEDER WIRE LENGTH - ft (m)								
	50 (15)	100 (30)	150 (46)	200 (61)	250 (76)	300 (91)	350 (107)	400 (122)	450 (137)
480 VAC	4 (21)	4 (21)	4 (21)	2 (34	1 (45)	1/0 (54)	1/0 (54)	2/0 (68)	3/0 (85)
GENERAL NOTES									
In all cases qualified personnel must verif	all cases qualified personnel must verify that the feeder (at the point of take-off) and the run to the GE system meet all the requirements stated in the PIM								
For a single unit installation, the minimum transformer size is 112.5 kVA, Synthesized power feed is not acceptable									
Grounding conductor will be of the same size as the feeder. This ground will run from the equipment back to the power source/main grounding point and always travel in the same conduit with the feeders									
Riverton Hospital   DEFINIUM XR656 HD   RAD-									

۲S				PO
/480V ±10%, Wye THREE-PHASE + G				
.131 / 415V : 0.138 .185		SEO	14 Black 14 White 14 Green	-
ning the protective units and controls. nce with its length and the maximum	1 phase power	14 Black 14 White 14 Green	4	
MDP.		XRLC		2 - N 14 V
e transients (elevators, air conditioning,		$\bigotimes$		14 F
system components must be powered				
ontial har. This equinotential har should		XRL1	14 Black 14 Green 14 White	
ne non GE cableways and to additional one of the second seco			[	14
m below.				14 \ 14 (
n.	MDP	Main Disconne	ect Panel	
EO, XRL1) will go to MDP with a pigtail	SKL SEO	Generator (Sys Emergency OF	stem Cabine F button (Co	et/V ontr

XRLC

XRL1

DLK1

Warning Light Control

Warning Light

**DEFINIUM XR656 HD** 

RAD-M345013-FIN-00-A.DWG

![](_page_38_Figure_32.jpeg)

Rev A Date 25/Oct/2024

**E5 - Power Requirements** 

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![](_page_38_Picture_37.jpeg)

![](_page_38_Picture_39.jpeg)

![](_page_38_Picture_40.jpeg)

![](_page_38_Picture_41.jpeg)

![](_page_38_Picture_42.jpeg)