## Drawing Index

These sheets are a document set and should not be separated. Electrical information and references are contained on all sheets.

SITE READINESS

C1

EQUIPMENT LAYOUT

۸ 1

(Equipment locations, heat loads, component weights, environmental specs)

STRUCTURAL LAYOUT

S1

(Structural support/mounting locations for floor/wall/ceiling, wall support elevations)

STRUCTURAL DETAILS

S2 THRU S3

(Floor and Ceiling loading information)

F1

ELECTRICAL LAYOUT E

(Contractor supplied wiring, interconnect methods, junction point locations and descriptions)

ELECTRICAL SPECIFICATIONS E2

(Maximum wiring run lengths, interconnect diagram, system power specifications)

in, system power specific

ELECTRICAL DETAILS

E3 THRU E4

EQUIPMENT DETAILS

D1 THRU D4

These drawings indicate the placement and interconnection of the listed equipment components. These drawings are not construction or site preparation drawings. Customer remains ultimately responsible for preparing the site to accommodate the operation of such equipment in compliance with GE Healthcare's written specifications and all applicable federal, state, and/or local requirements.

# \* REQUIRED REFERENCE \*

Innova IGS BiPlane
Pre Installation Manual
5435414-1-1EN

A mandatory component of this drawing set is the GE Healthcare Pre Installation manual. Failure to reference the preIS manual will result in incomplete documentation required for site design and preparation.

Pre Installation documents for GE Healthcare products can be accessed on the web at:

www.gehealthcare.com/siteplanning

# GE Healthcare



# Interventional Site Planning

CUSTOMER ACCEPTANCE

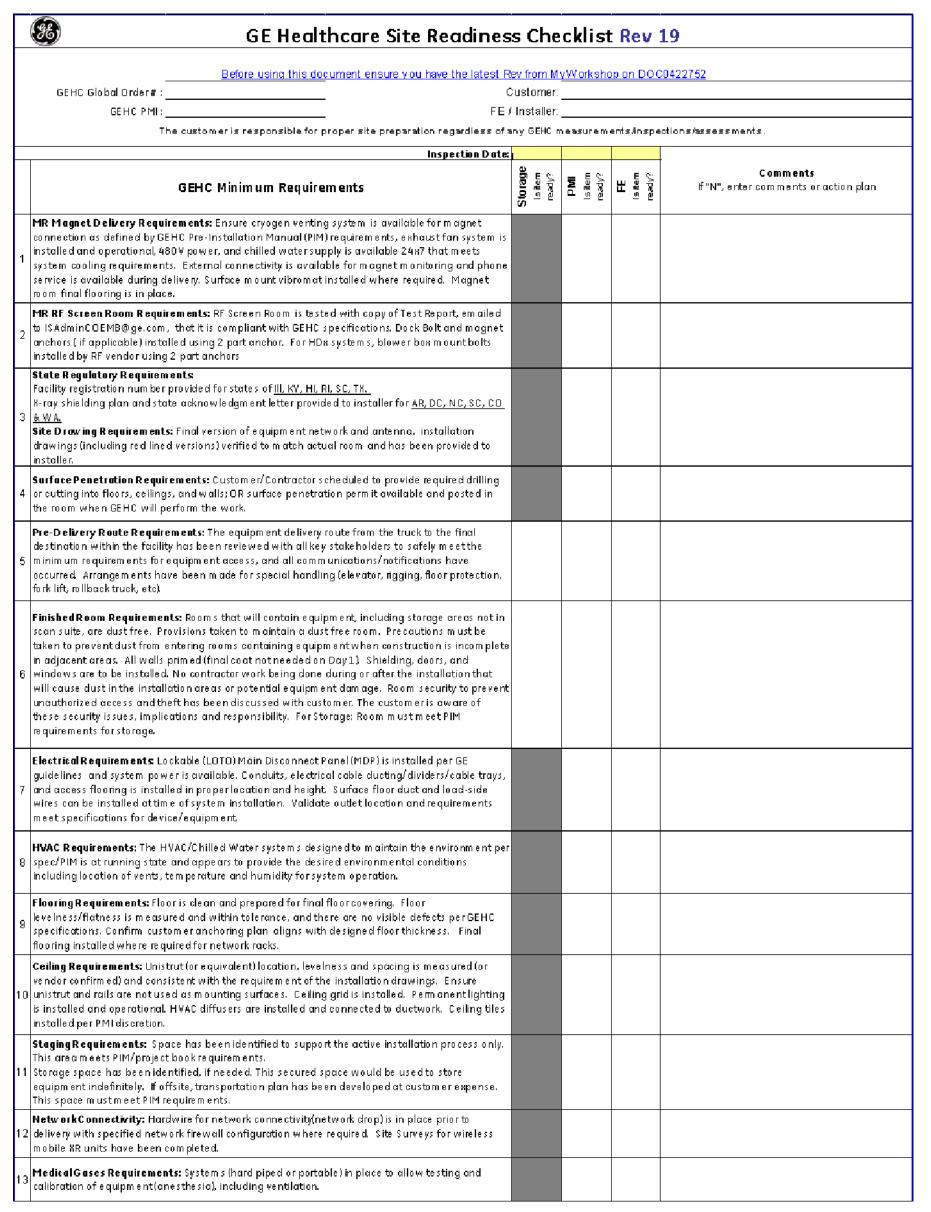


## Customer Site Readiness Requirements

- Any deviation from these drawings must be communicated in writing to and reviewed by your local GE Healthcare Installation Project Manager prior to making changes.
- Make arrangements for any rigging, special handling, or facility modifications that must be made to deliver the equipment to the installation site. If desired, your local GE Healthcare Installation Project Manager can supply a reference list of rigging contractors.
- New construction requires the following; 1. Secure area for equipment,
   2. Power for drills and other test equipment,
   3. Capability for image analysis,
   4. Restrooms.
- Provide for refuse removal and disposal (e.g. crates, cartons, packing)
- Contact a radiation physicist or consultant to specify radiation containment requirements.

## GE Equipment Delivery Requirements

The items on the GE Healthcare Site Readiness Checklist are REQUIRED to facilitate equipment delivery to the IS site. Equipment will not be delivered if these requirements are not satisfied.



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MITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPM PPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS AND TO BE USEN TO BE USEN

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SCALE: 1/4" = 1'-0'REQUIRED CEILING HEIGHT = 9'-4"+/-0.2"EQUIPMENT LAYOUT

This equipment layout indicates the placement and interconnection of the indicated equipment components. There may be federal, state, and/or local requirements that could impact the placement of these components. It remains the Customer's responsibility for ensuring the site and final equipment placement complies with all applicable federal, state, and/or local requirements

> —— 6'-11" —— OFFICE 207 64 - - - - - <del>- - - - - -</del> EQUIP. RM **OFFICE** 64 208 c.l. table pivot CONTROL ROOM 64

> > GE Project Manager: JEFF ELGIAR

Telephone: 9729834384 THE GE HPI TECHNICAL SUPPORT GROUP IS AN ADDITIONAL RESOURCE THAT CAN PROVIDE ANSWERS FOR GENERAL GE PRODUCT SITING QUESTIONS AND CAN BE REACHED AT (877)-305-9677

ANCILLARY ITEMS

#### CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

#### ITEM DESCRIPTION (\* INDICATES EXISTING)

BEARING BLOCK DUTLINE, SEE S1 FOR MORE INFORMATION.

CABLE DRAPE RAIL. CUSTOMER SUPPLIED SERVER RACK

SCRUB SINK SLIDING DOORS

COUNTER TOP WITH SINK, BASE AND WALL CABINETS COUNTER TOP WITH BASE CABINETS COUNTER TOP FOR EQUIPMENT- SHELVING MAY BE REQUIRED

PROVIDE GROMMETED OPENINGS AS REQUIRED TO ROUTE INTERCONNECT CABLES TO RACEWAY BELOW COUNTERTOP. CONTROL WALL TO CEIL. WITH LEAD GLASS VIEWING WINDOW. SHELF - CUSTOMER TO PROVIDE ADEQUATE WALL SUPPORT X-RAY ON WARNING LIGHT — AVAILABLE FROM GE SUPPLY Call, 800-200-9760 ge cat, no. wxiabww-of-xiu CUSTOMER SUPPLIED STORAGE CABINET

MINIMUM DOOR OPENING FOR EQUIPMENT DELIVERY IS 44 in. w x 83 in. h [1118mm x 2108mm], contingent on a 96 in. [2438mm] corridor width THE FOLLOWING ITEMS ARE AVAILABLE FROM GE HEALTHCARE

TECHNOLOGIES. CONTACT YOUR LOCAL GE HEALTHCARE SERVICE REPRESENTATIVE FOR PRICING AND AVAILABILITY.

150-AMP LOCAL SERVICE DISCONNECT FOR LOCK-OUT/ TAG-OUT CAPABILITY, (MAY BE A FUSED Disconnect, circuit breaker or safety switch.)

REFERENCE JUNCTION POINT 'XRLC' ON SHEET 'E1' FOR DETAILED DESCRIPTION - RW120-10-RL FOR WARNING LIGHT CONTROL ONLY (AVAILABLE FROM GEXPRO) 1-800-200-9760 (317-554-3805), EXTENSION 3825.

## GENERAL SPECIFICATIONS

- THE REQUIRED CEILING HEIGHT INDICATED ON THESE PLANS IS TO ENSURE EQUIPMENT FUNCTION IS NOT INHIBITED. CONSULT WITH YOUR LOCAL GEHC IS SPECIALIST REGARDING ACCEPTABILITY OF OTHER CEILING HEIGHTS.
- CHECK ALL DOOR OPENINGS AND HALLWAYS FROM DELIVERY LOCATION TO WHERE EQUIPMENT IS TO BE INSTALLED TO ENSURE THE ROUTE PHYSICALLY AND STRUCTURALLY WILL ACCOMODATE THE EQUIPMENT AS SHIPPED.
- RADIATION PROTECTION REQUIREMENTS ARE NOT INDICATED ON THIS PLAN. WHERE NEEDED PER NATIONAL OR LOCAL CODE THEY SHALL BE SPECIFIED BY A QUALIFIED RADIOLOGICAL PHYSICIST.
- THE DEVELOPMENT OF THE EQUIPMENT LAYOUT, ROOM DIMENSIONS, MECHANICAL AND ELECTRICAL SUGGESTIONS IS PREDICATED UPON THE BEST INFORMATION OBTAINABLE FROM THE SITE, COUPLED WITH THE CUSTOMER'S KNOWN DESIRES. ARCHITECTURAL OR ELECTRICAL CHANGES INCLUDING RELOCATION OF EQUIPMENT ILLUSTRATED ON THIS DRAWING IS ALLOWED ONLY WITH NOTIFICATION, IN WRITING, AND REVIEW BY GEHC SERVICE DEPARTMENT. EQUIPMENT OPERATION, SERVICEABILITY, AND RESTRICTING CABLE LENGTHS, ETC., MAKE THIS ESSENTIAL FOR A PROPER IS. GEHC RESERVES THE RIGHT TO MAKE ON THE JOB CHANGES BECAUSE OF CUSTOMER REQUIREMENTS AND/OR OBSTACLES IN CONSTRUCTION, ETC...
- ALL WORK TO BE IN COMPLIANCE WITH NATIONAL AND LOCAL BUILDING SAFETY CODES.
- DIMENSIONS ARE TO FINISHED SURFACES OF ROOM

HUMIDITY: 30% - 75%

### SITE ENVIRONMENT SPECIFICATIONS

- EQUIPMENT ROOM AMBIENT OPERATING TEMPERATURE: 50 TO 95 DEGREES (F), MAXIMIUM ALLOWABLE TEMPERATURE CHANGE OF 15 DEGREES (F)/HOUR, WITH 30% - 75% HUMIDITY. EXAM ROOM AMBIENT OPERATING TEMPERATURE: 50 TO 95 DEGREES (F), MAXIMIUM ALLOWABLE TEMPERATURE CHANGE OF 15 DEGREES (F)/HOUR,
- HUMIDITY: 30% 70% CONTROL ROOM AMBIENT OPERATING TEMPERATURE: 50 TO 75 DEGREES (F), MAXIMIUM ALLOWABLE TEMPERATURE CHANGE OF 15 DEGREES (F)/HOUR,
- ALTITUDE: NOT TO EXCEED 8,000 FT. ABOVE SEA LEVEL. DO NOT RESTRICT THE AIR INTAKE AT THE LOWER FRONT OR AIR EXHAUST AT THE TOP OF THE ELECTRONICS CABINETS.

### MAGNETIC INTERFERENCE SPECIFICATIONS

DIGITAL FLAT PANEL MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 1 GAUSS TO GUARANTEE SPECIFIED IMAGING PERFORMANCE. X-RAY TUBES MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE SPECIFIED PERFORMANCE.

SYSTEM ELECTRONICS MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE DATA INTEGRITY.

OPERATORS CONSOLE EQUIPMENT MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO OBTAIN SPECIFIED GEOMETRIC LINEARITY.

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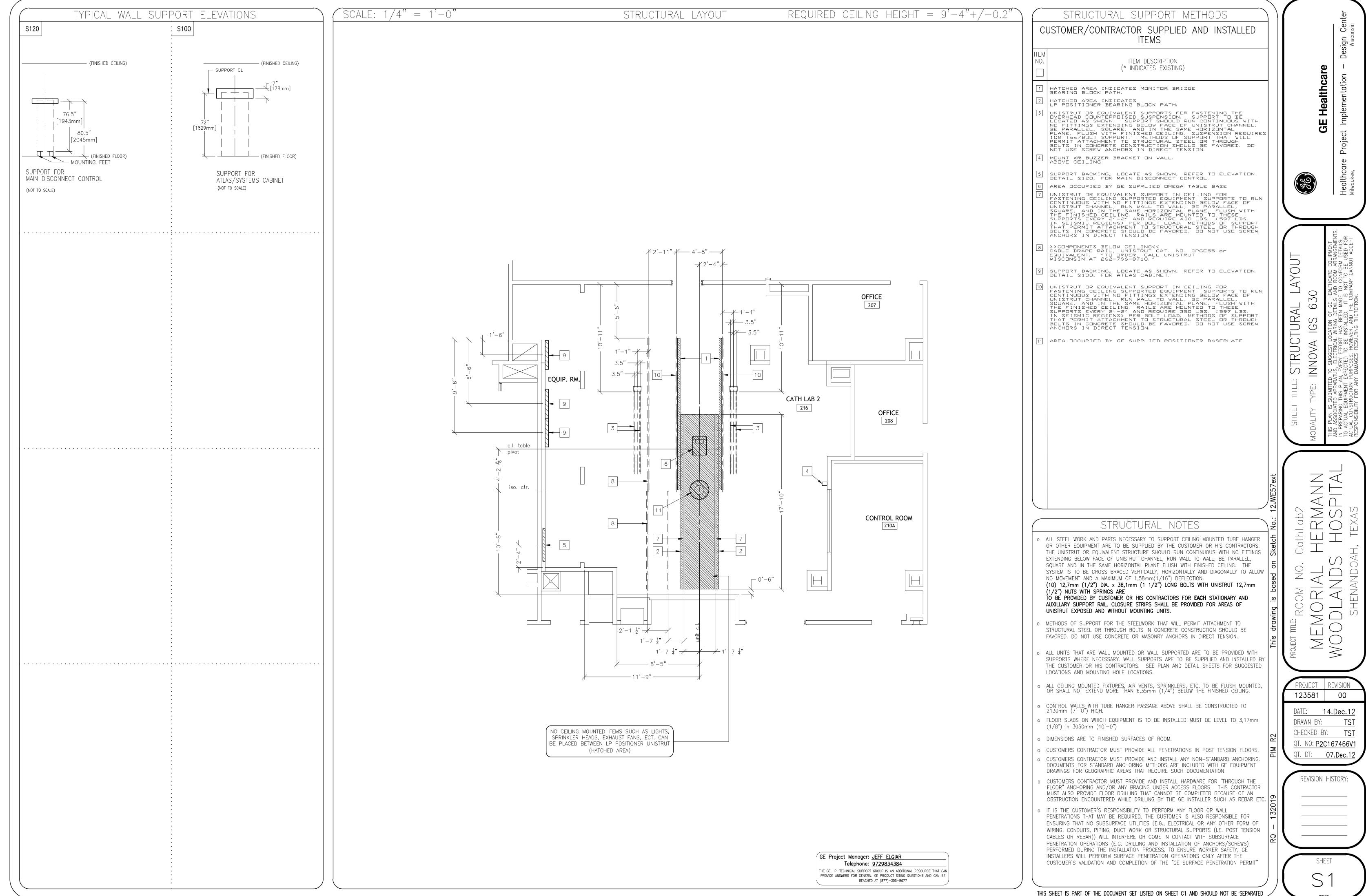
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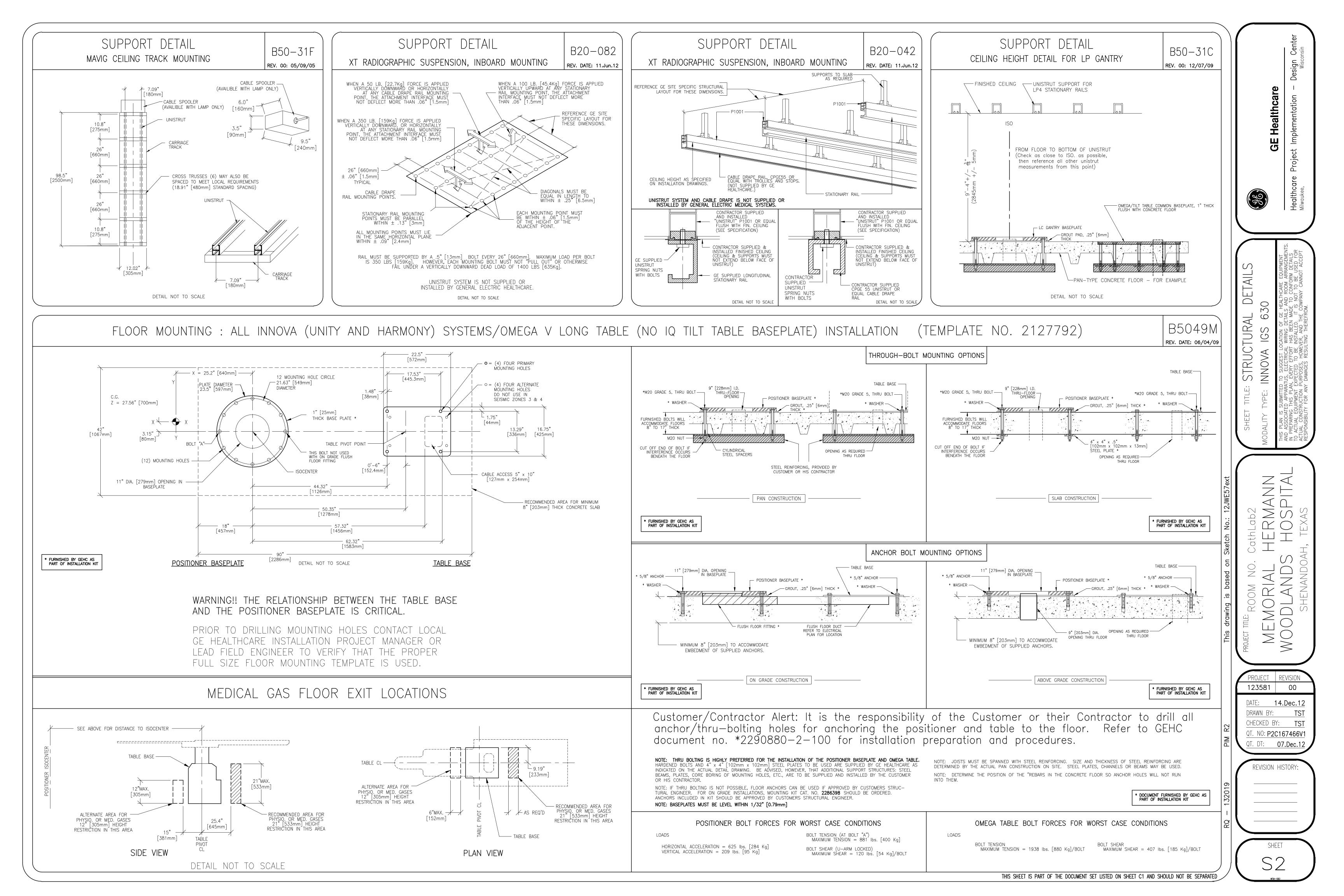
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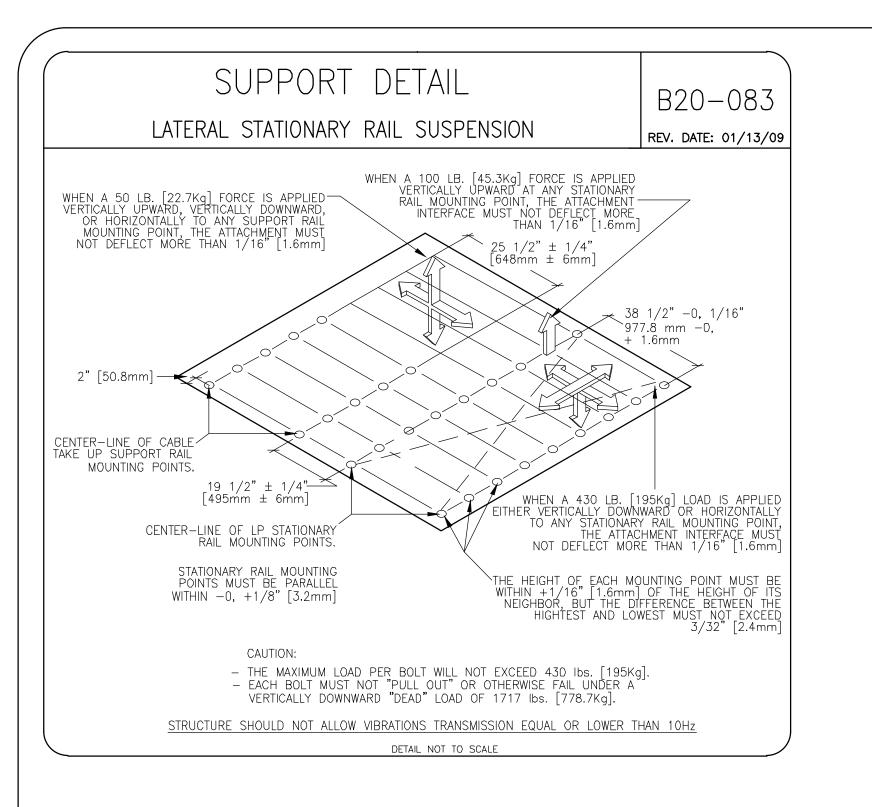
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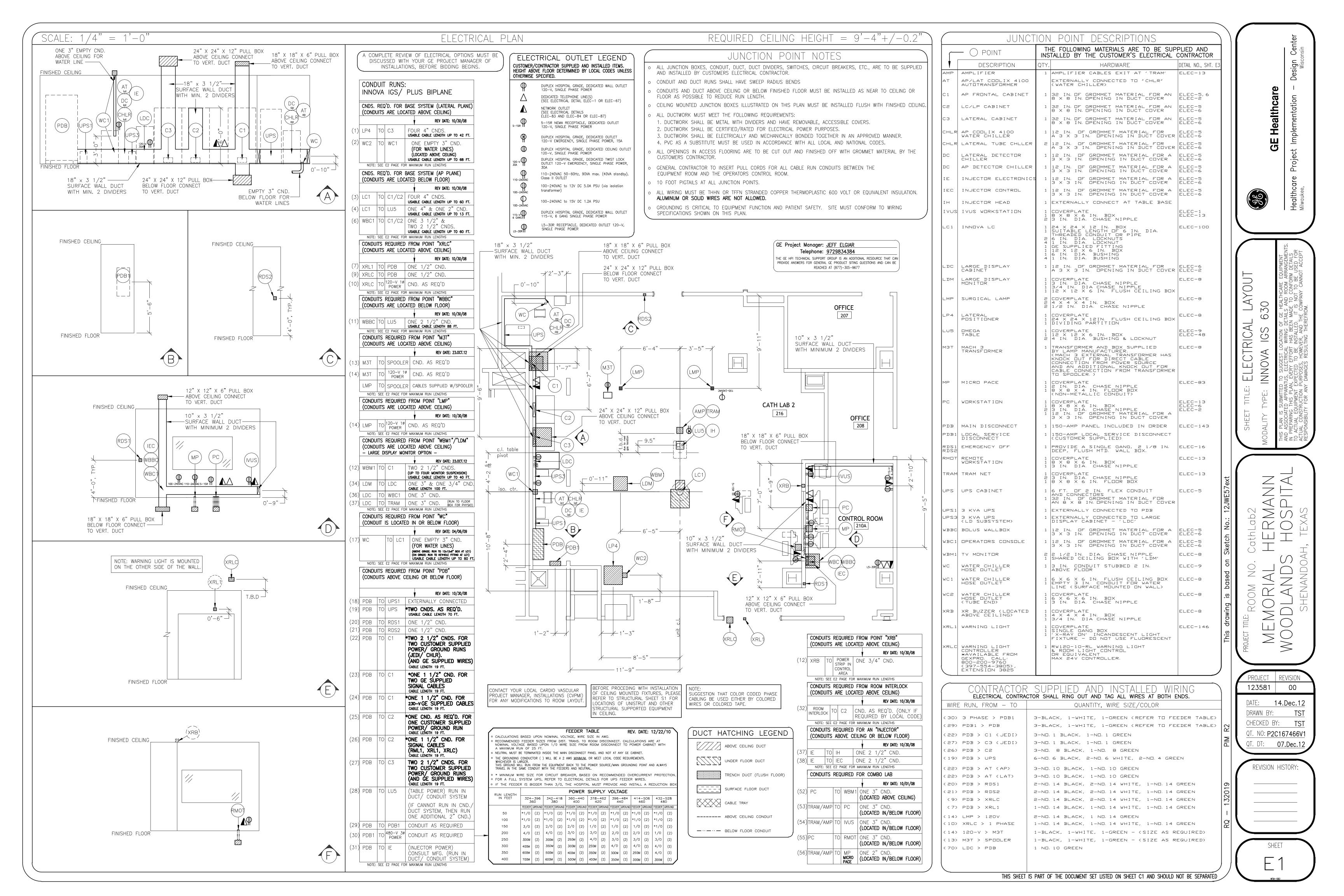
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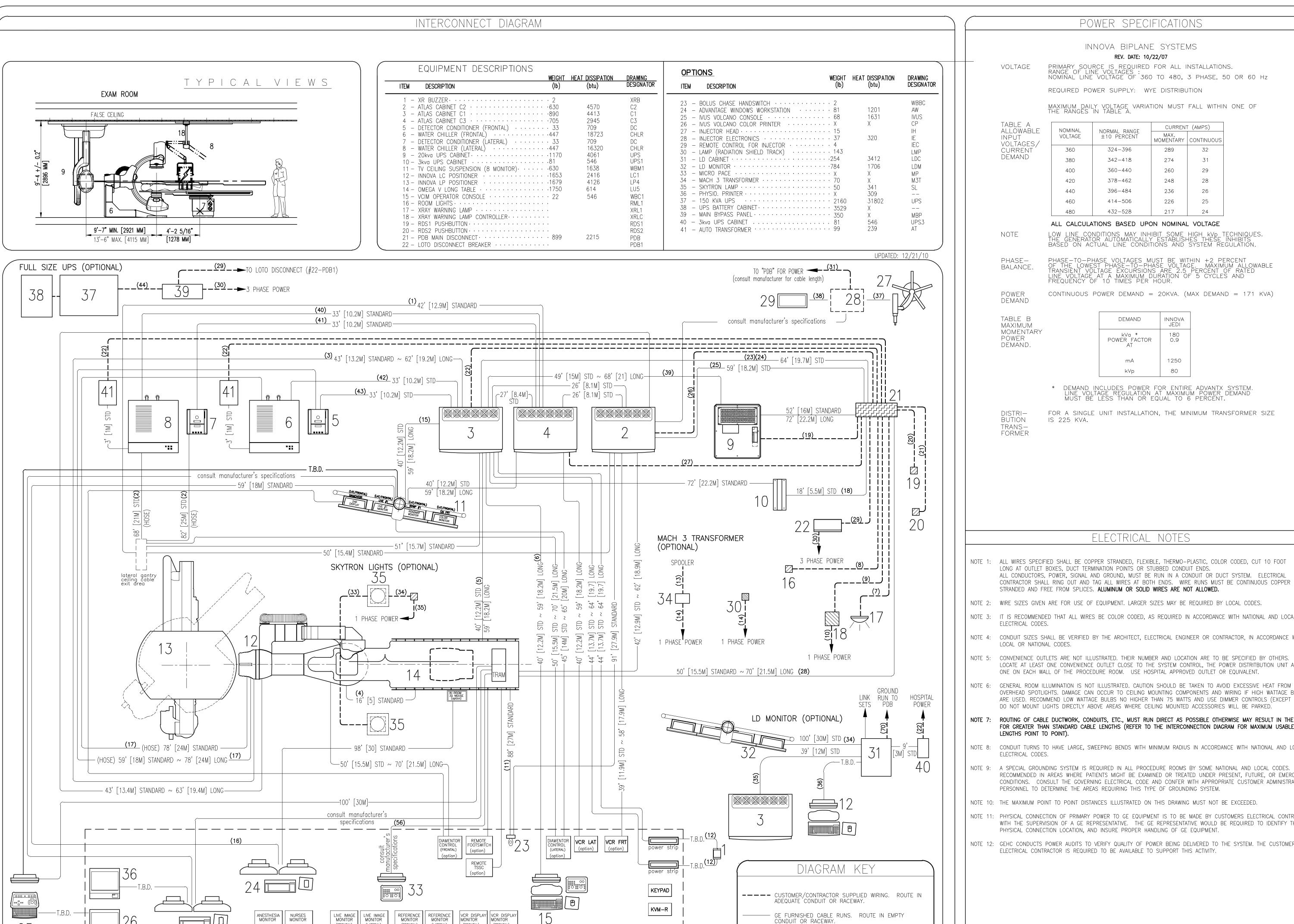
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MEMORIAL

WOODLANDS

123581 00 DATE: 14.Dec.12 CHECKED BY: TST QT. NO: **P2C167466V1** 





(FRONTAL)

CONTROL COMPONENTS

REV DATE: 15.MAR.12

(FRONTAL)

(LATERAL)

POWER SPECIFICATIONS

INNOVA BIPLANE SYSTEMS

REV. DATE: 10/22/07

PRIMARY SOURCE IS REQUIRED FOR ALL INSTALLATIONS. NOMINAL LINE VOLTAGE OF 360 TO 480, 3 PHASE, 50 OR 60 Hz

REQUIRED POWER SUPPLY: WYE DISTRIBUTION

MAXIMUM DAILY VOLTAGE VARIATION MUST FALL WITHIN ONE OF THE RANGES IN TABLE A.

TABLE A Allowarie	NOMINAL VOLTAGE	NORMAL RANGE ±10 PERCENT	CURRENT (AMPS)	
INPUT VOLTAGES/			MAX. MOMENTARY	CONTINUOUS
CURRENT	360	324-396	289	32
DEMAND	380	342-418	274	31
	400	360-440	260	29
	420	378-462	248	28
	440	396-484	236	26
	460	414-506	226	25
	480	432-528	217	24

ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE

PHASE—TO—PHASE VOLTAGES MUST BE WITHIN +2 PERCENT OF THE LOWEST PHASE—TO—PHASE VOLTAGE. MAXIMUM ALLOWABLE TRANSIENT VOLTAGE EXCURSIONS ARE 2.5 PERCENT OF RATED LINE VOLTAGE AT A MAXIMUM DURATION OF 5 CYCLES AND FREQUENCY OF 10 TIMES PER HOUR. PHASE-BALANCE.

CONTINUOUS POWER DEMAND = 20KVA. (MAX DEMAND = 171 KVA) DEMAND

TABLE B DEMAND MAXIMUM MOMENTARY POWER POWER FACTOR DEMAND. mΑ

DEMAND INCLUDES POWER FOR ENTIRE ADVANTX SYSTEM. LINE VOLTAGE REGULATION AT MAXIMUM POWER DEMAND MUST BE LESS THAN OR EQUAL TO 6 PERCENT.

kVp

FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE IS 225 KVA.

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ELECTRICAL NOTES

NOTE 1: ALL WIRES SPECIFIED SHALL BE COPPER STRANDED, FLEXIBLE, THERMO-PLASTIC, COLOR CODED, CUT 10 FOOT LONG AT OUTLET BOXES, DUCT TERMINATION POINTS OR STUBBED CONDUIT ENDS. ALL CONDUCTORS, POWER, SIGNAL AND GROUND, MUST BE RUN IN A CONDUIT OR DUCT SYSTEM. ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS. WIRE RUNS MUST BE CONTINUOUS COPPER STRANDED AND FREE FROM SPLICES. ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.

NOTE 2: WIRE SIZES GIVEN ARE FOR USE OF EQUIPMENT. LARGER SIZES MAY BE REQUIRED BY LOCAL CODES.

NOTE 3: IT IS RECOMMENDED THAT ALL WIRES BE COLOR CODED, AS REQUIRED IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.

NOTE 4: CONDUIT SIZES SHALL BE VERIFIED BY THE ARCHITECT, ELECTRICAL ENGINEER OR CONTRACTOR, IN ACCORDANCE WITH LOCAL OR NATIONAL CODES.

LOCATE AT LEAST ONE CONVENIENCE OUTLET CLOSE TO THE SYSTEM CONTROL, THE POWER DISTRITBUTION UNIT AND ONE ON EACH WALL OF THE PROCEDURE ROOM. USE HOSPITAL APPROVED OUTLET OR EQUIVALENT.

OVERHEAD SPOTLIGHTS. DAMAGE CAN OCCUR TO CEILING MOUNTING COMPONENTS AND WIRING IF HIGH WATTAGE BULBS ARE USED. RECOMMEND LOW WATTAGE BULBS NO HIGHER THAN 75 WATTS AND USE DIMMER CONTROLS (EXCEPT MR). DO NOT MOUNT LIGHTS DIRECTLY ABOVE AREAS WHERE CEILING MOUNTED ACCESSORIES WILL BE PARKED.

NOTE 7: ROUTING OF CABLE DUCTWORK, CONDUITS, ETC., MUST RUN DIRECT AS POSSIBLE OTHERWISE MAY RESULT IN THE NEED FOR GREATER THAN STANDARD CABLE LENGTHS (REFER TO THE INTERCONNECTION DIAGRAM FOR MAXIMUM USABLE LENGTHS POINT TO POINT).

NOTE 8: CONDUIT TURNS TO HAVE LARGE, SWEEPING BENDS WITH MINIMUM RADIUS IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.

NOTE 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 EMERGENCY CONDITIONS. CONSULT THE GOVERNING ELECTRICAL CODE AND CONFER WITH APPROPRIATE CUSTOMER ADMINISTRATIVE PERSONNEL TO DETERMINE THE AREAS REQUIRING THIS TYPE OF GROUNDING SYSTEM.

NOTE 10: THE MAXIMUM POINT TO POINT DISTANCES ILLUSTRATED ON THIS DRAWING MUST NOT BE EXCEEDED.

NOTE 11: PHYSICAL CONNECTION OF PRIMARY POWER TO GE EQUIPMENT IS TO BE MADE BY CUSTOMERS ELECTRICAL CONTRACTOR WITH THE SUPERVISION OF A GE REPRESENTATIVE. THE GE REPRESENTATIVE WOULD BE REQUIRED TO IDENTIFY THE PHYSICAL CONNECTION LOCATION, AND INSURE PROPER HANDLING OF GE EQUIPMENT.

NOTE 12: GEHC CONDUCTS POWER AUDITS TO VERIFY QUALITY OF POWER BEING DELIVERED TO THE SYSTEM. THE CUSTOMER'S

SPECIFICATIONS 9 ELECTRICAL <u>6</u> INNOVA ign Wisc

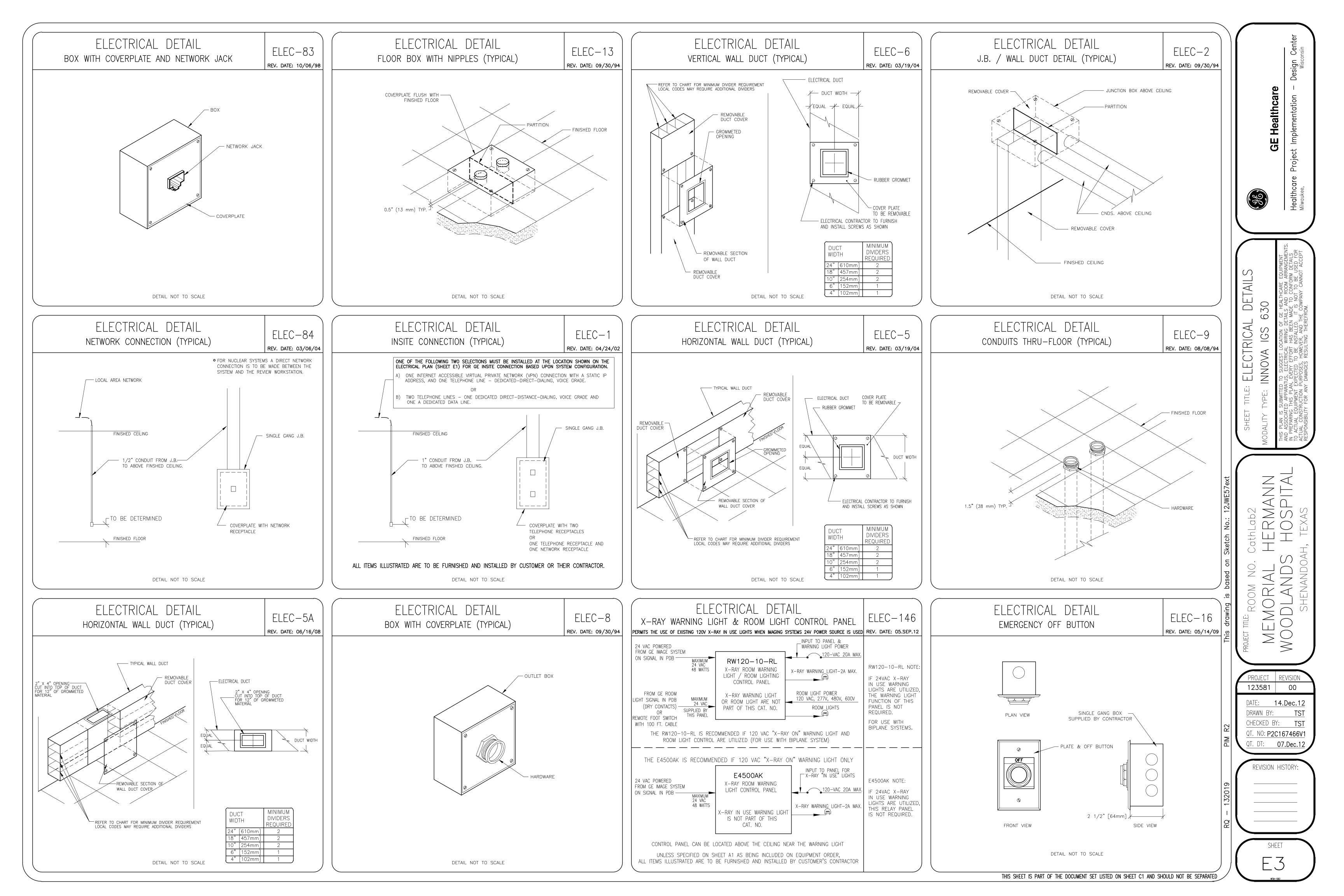
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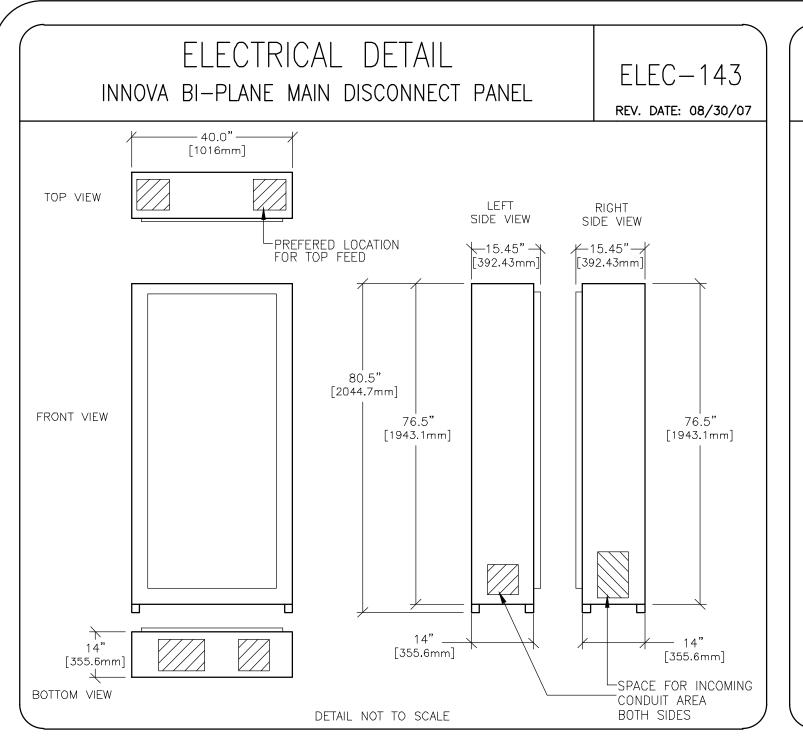
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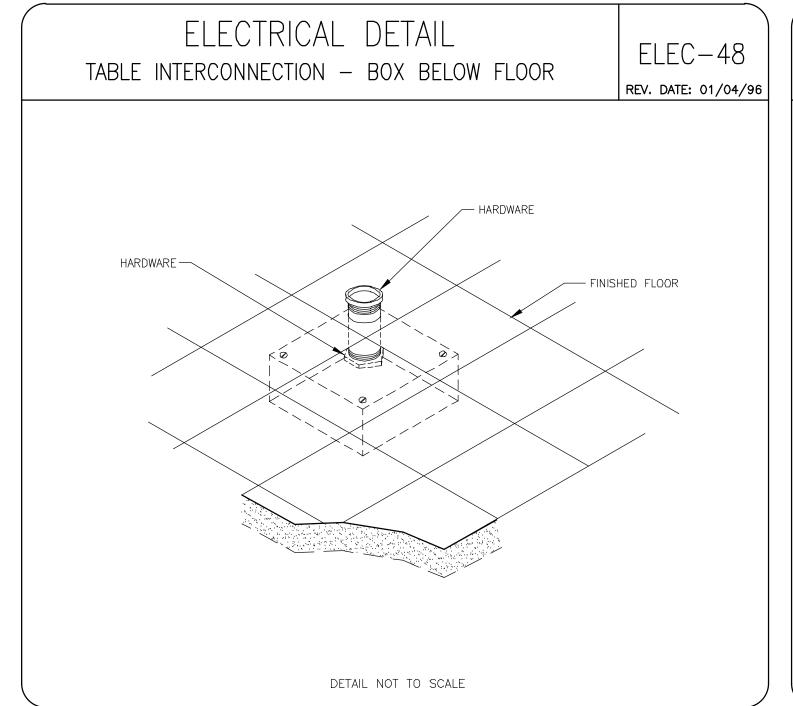
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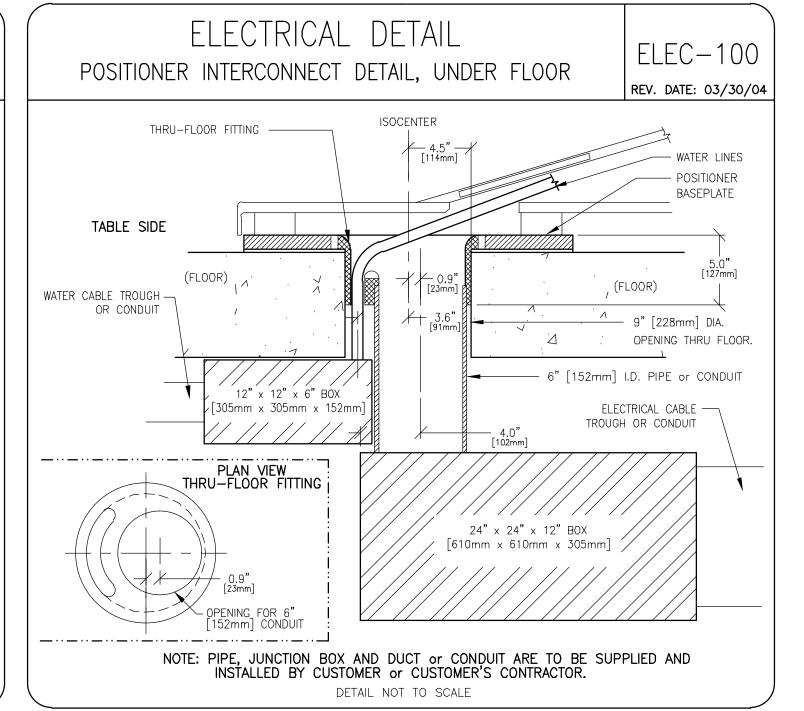
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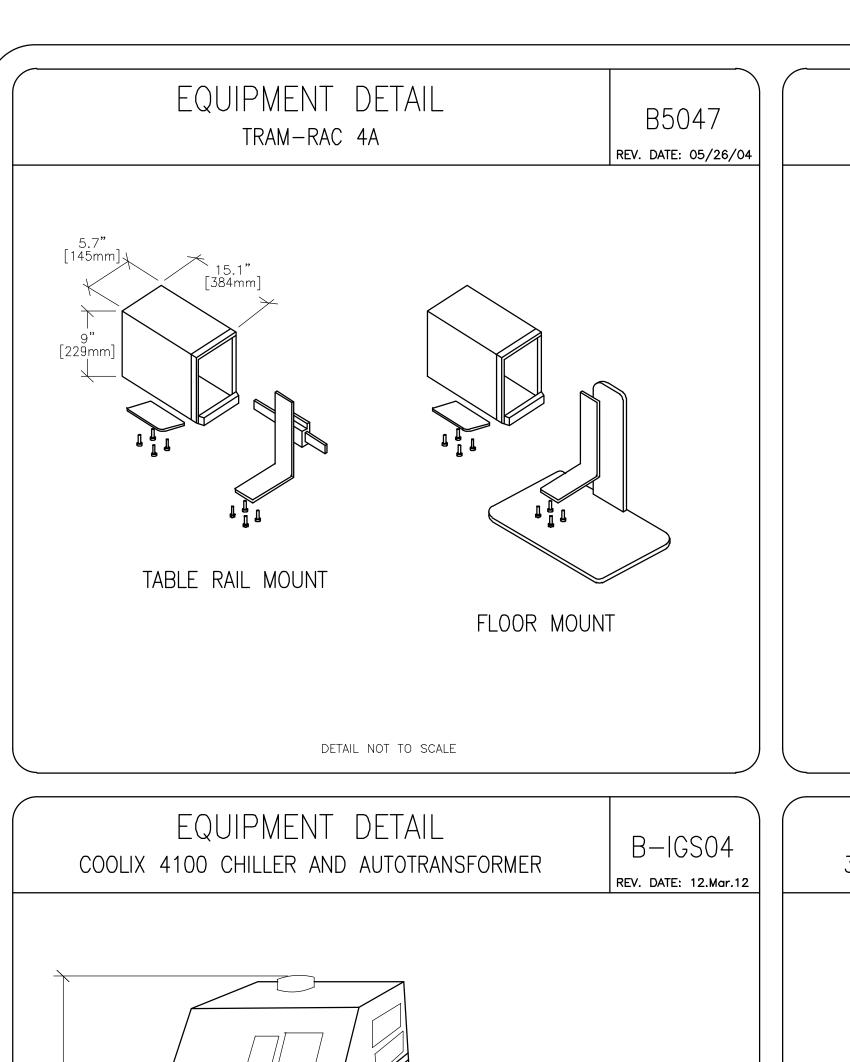
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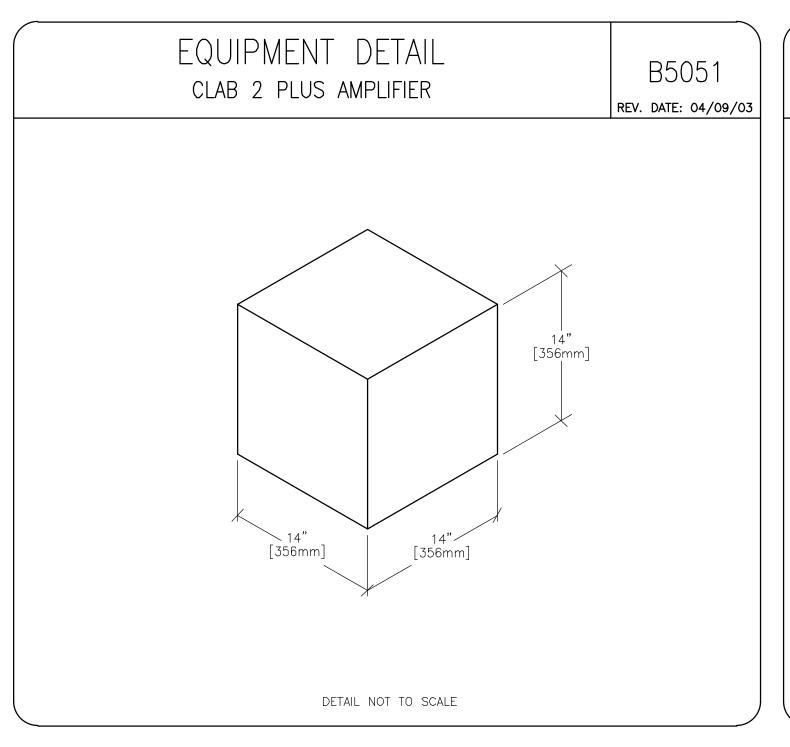
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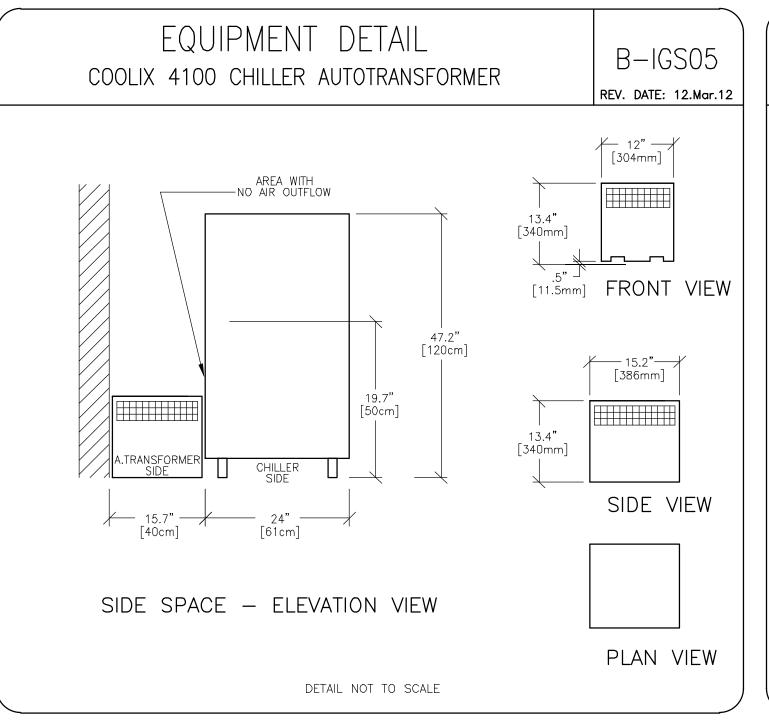
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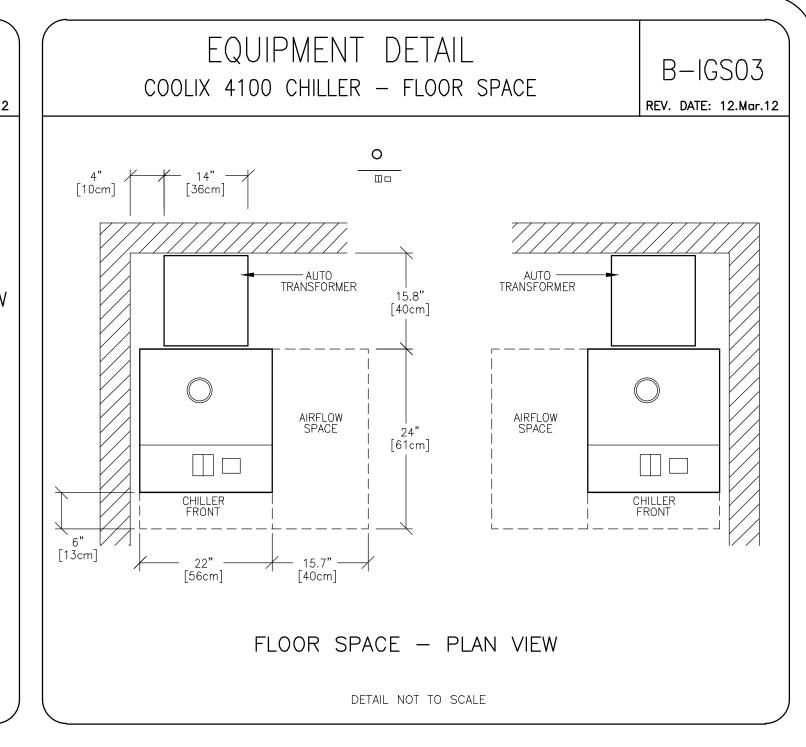
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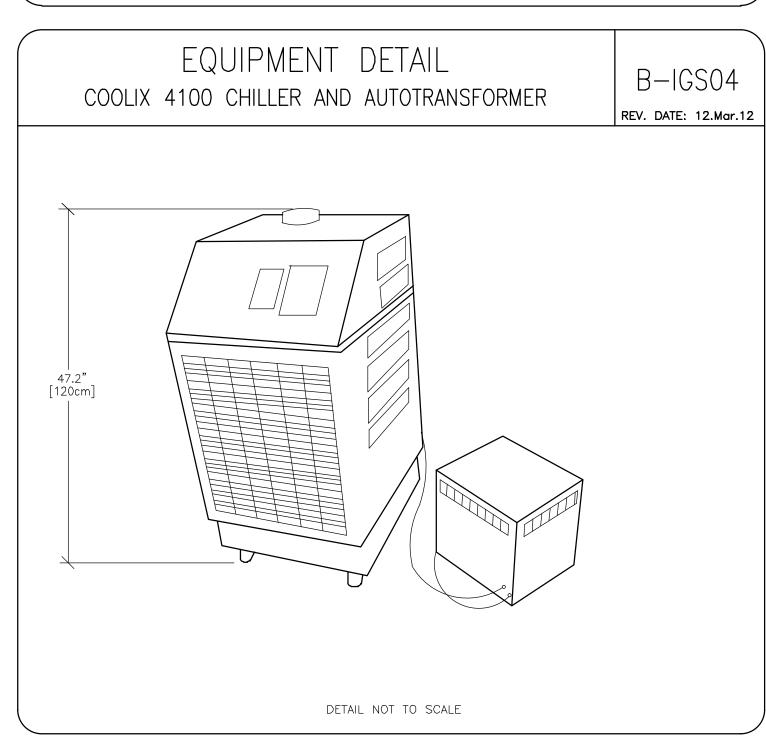
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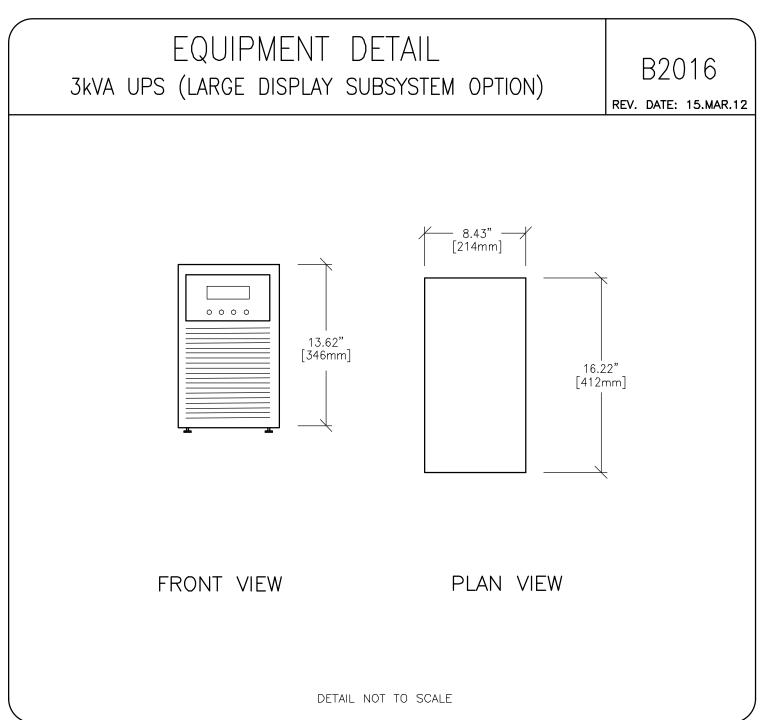


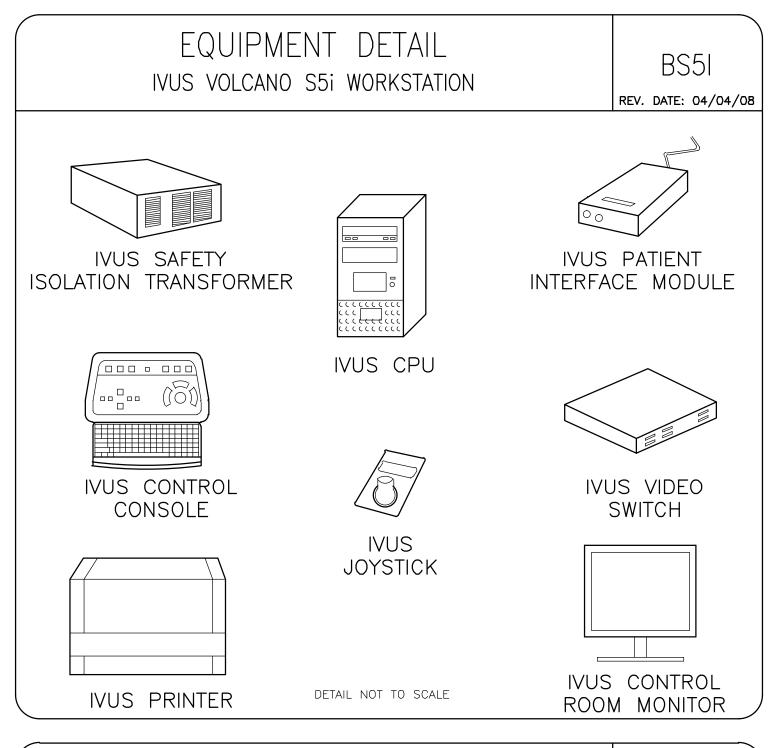




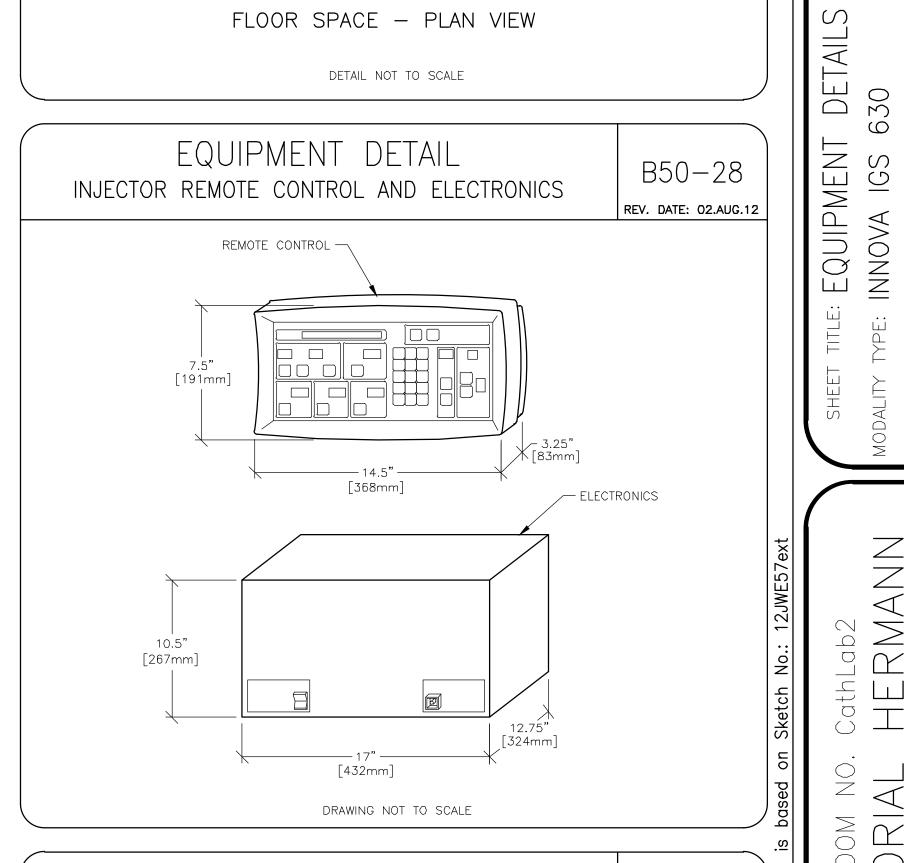


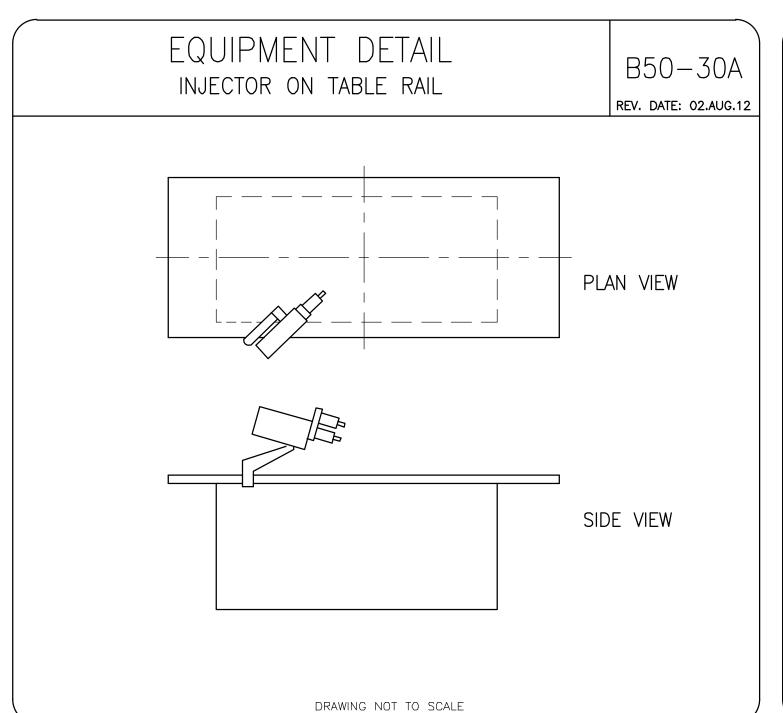


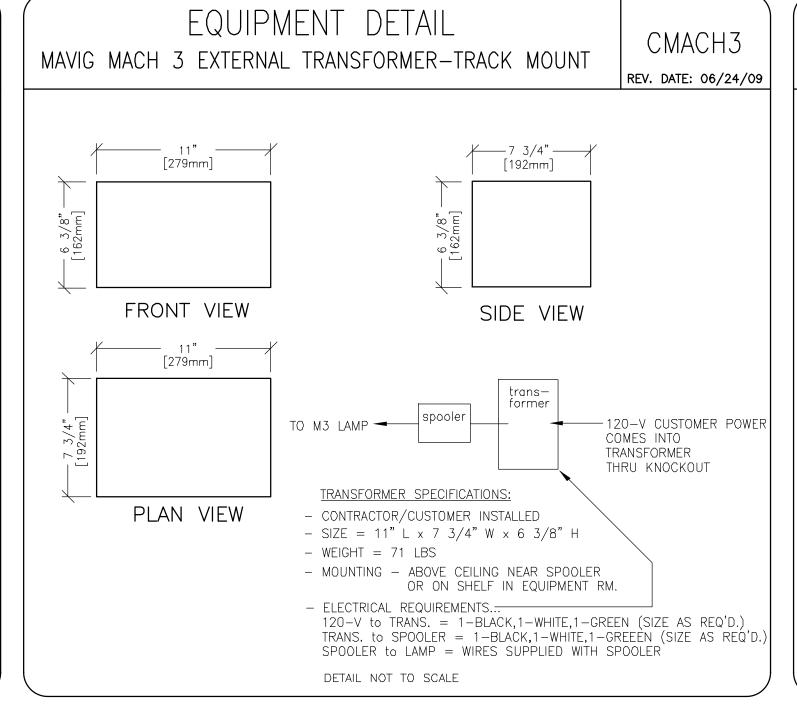


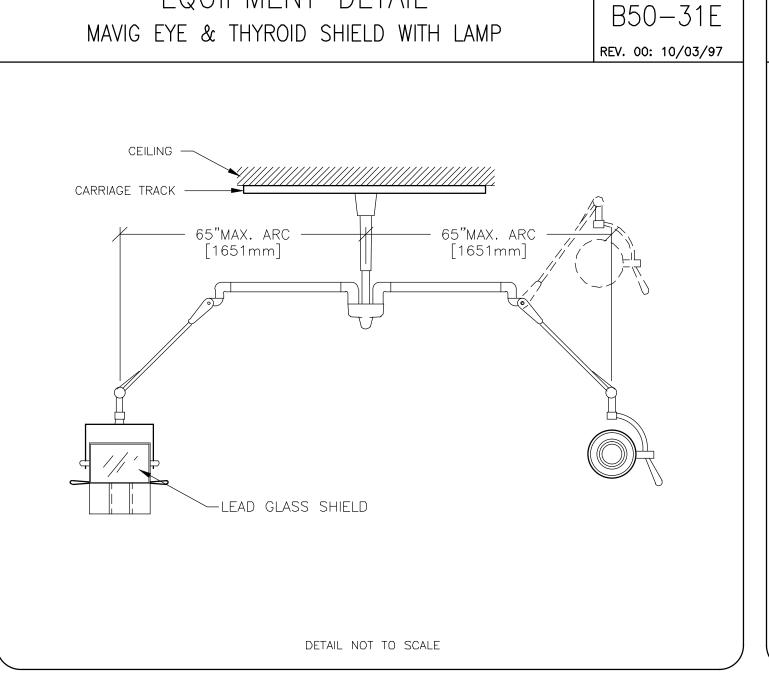


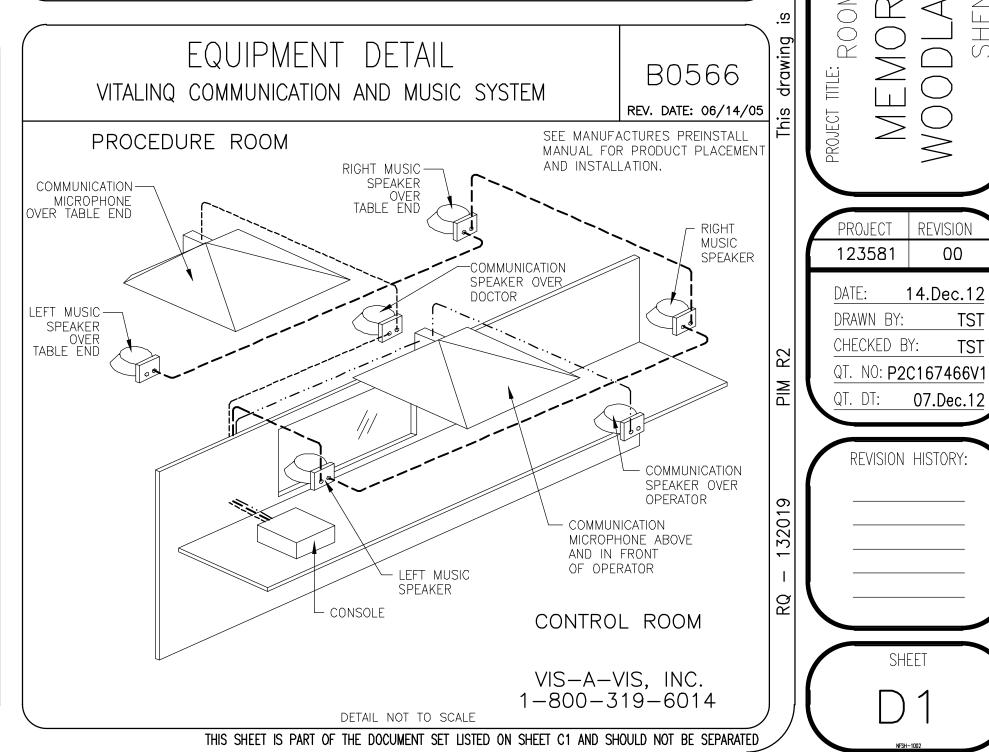
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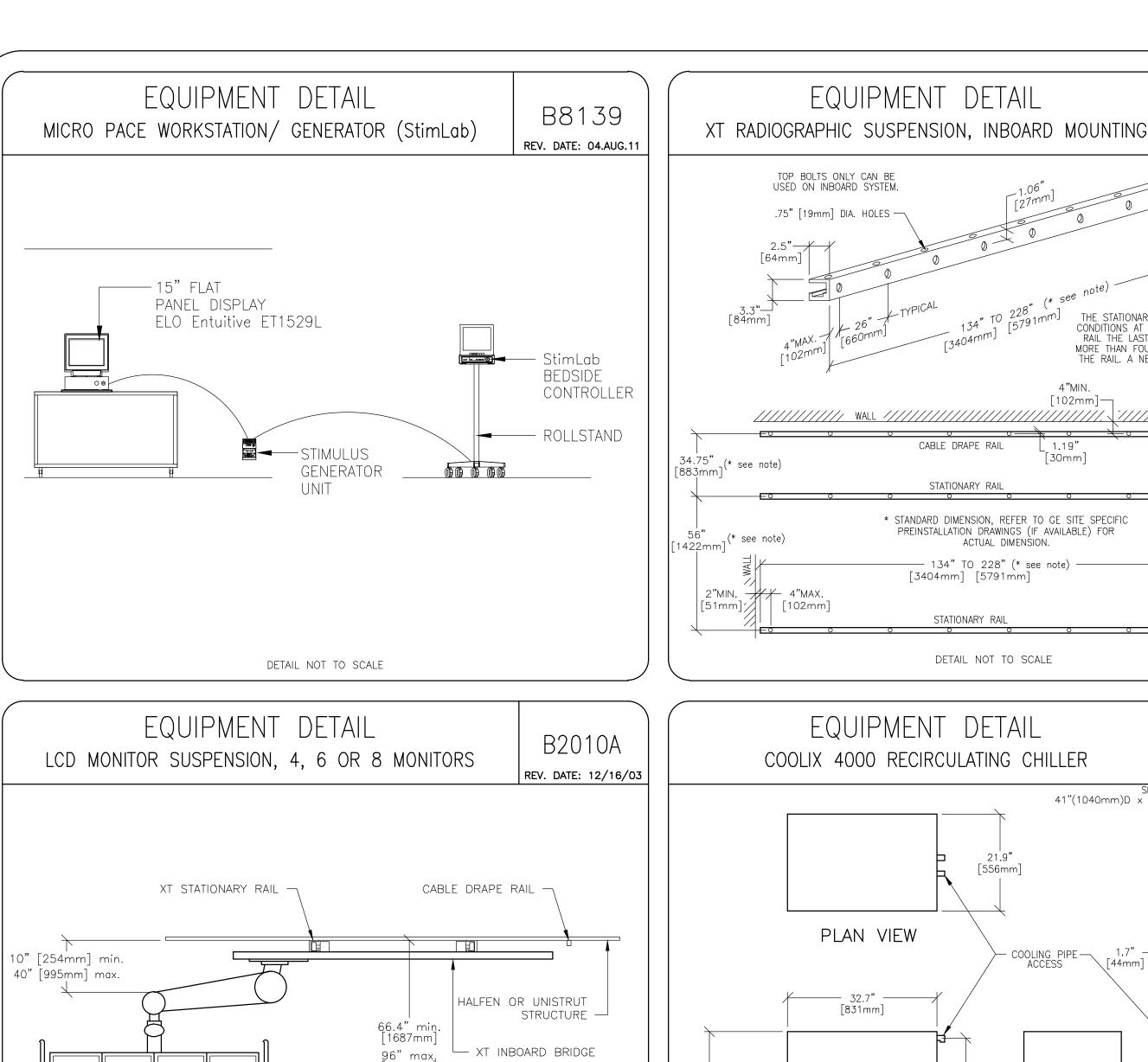
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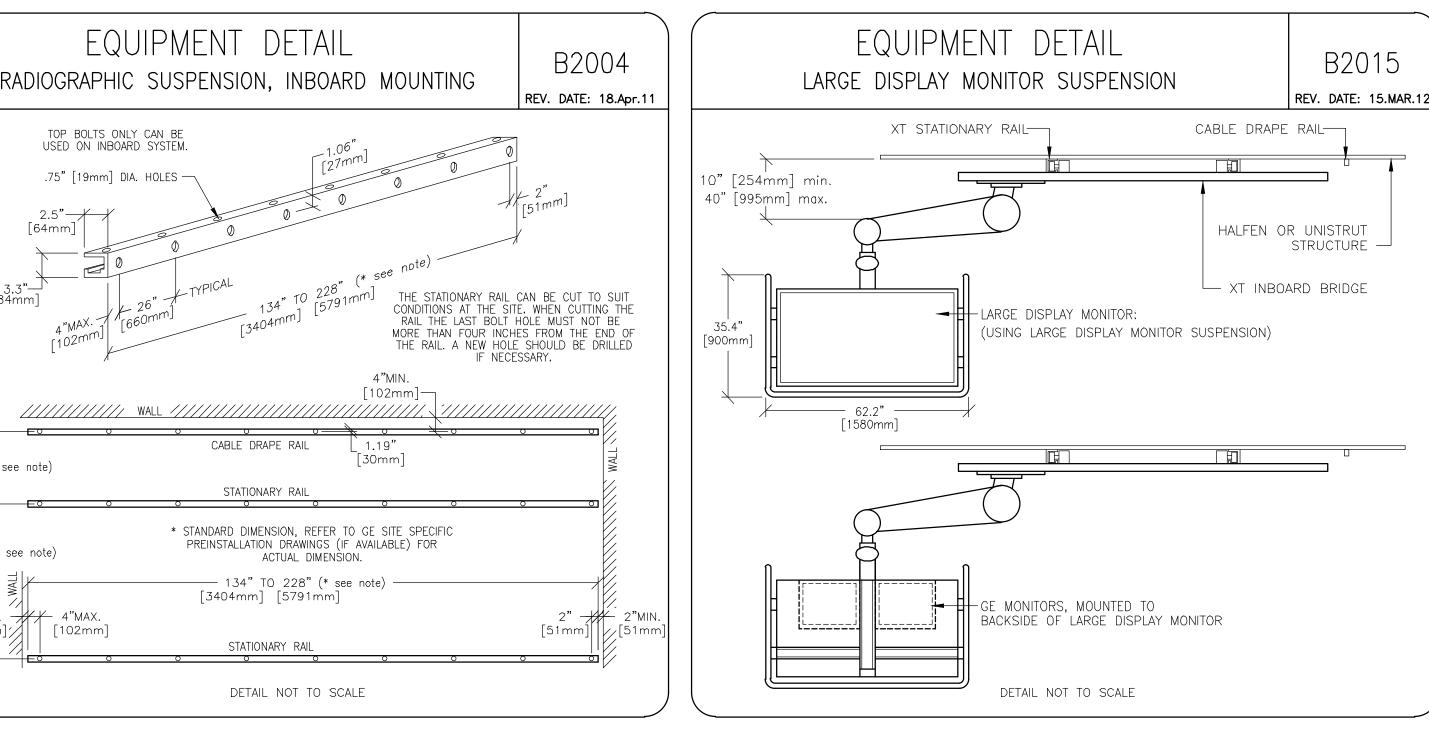
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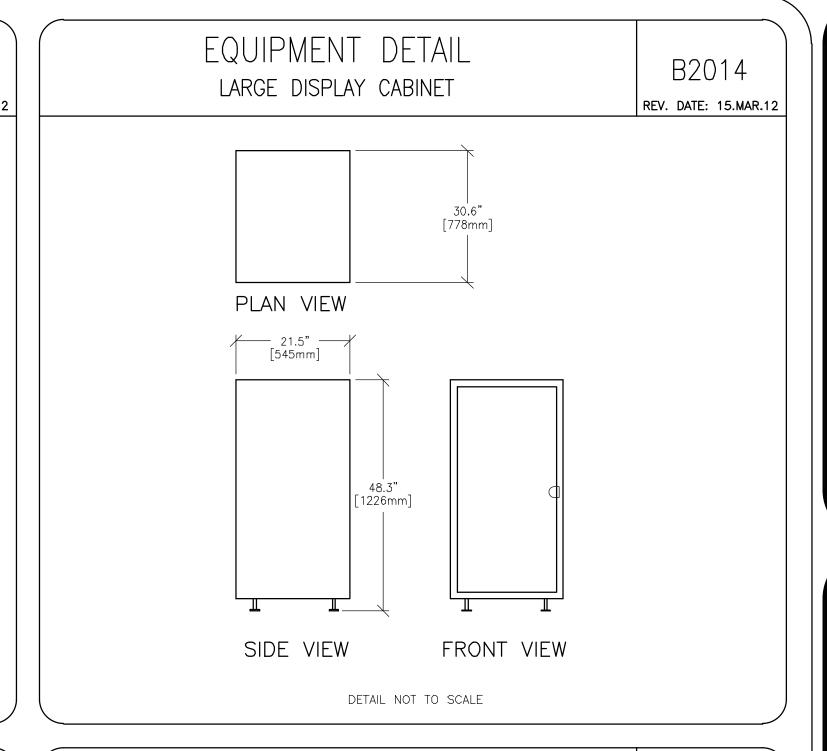
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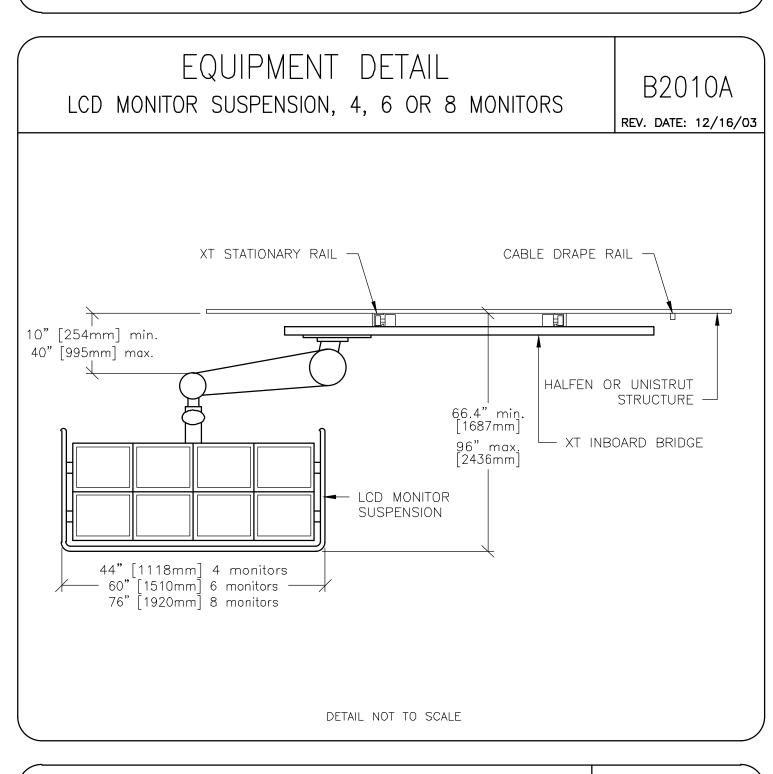
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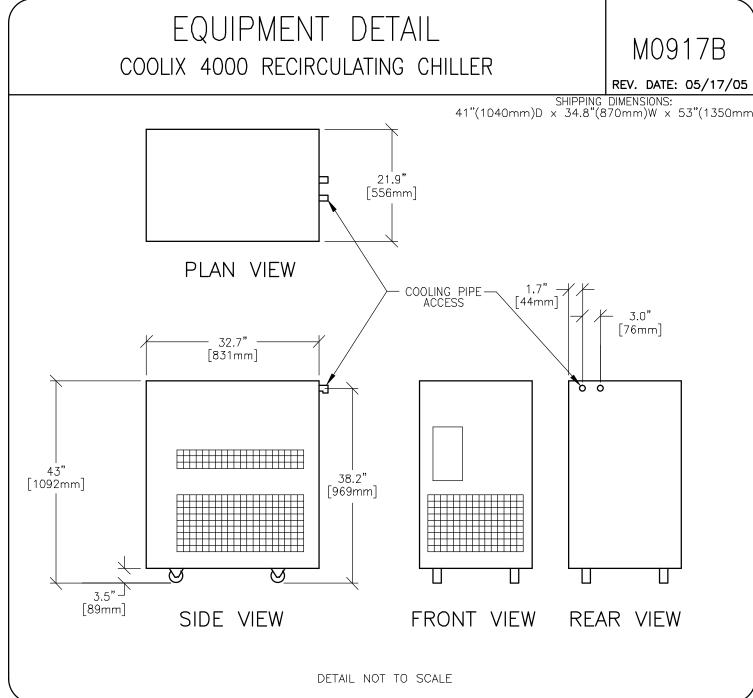
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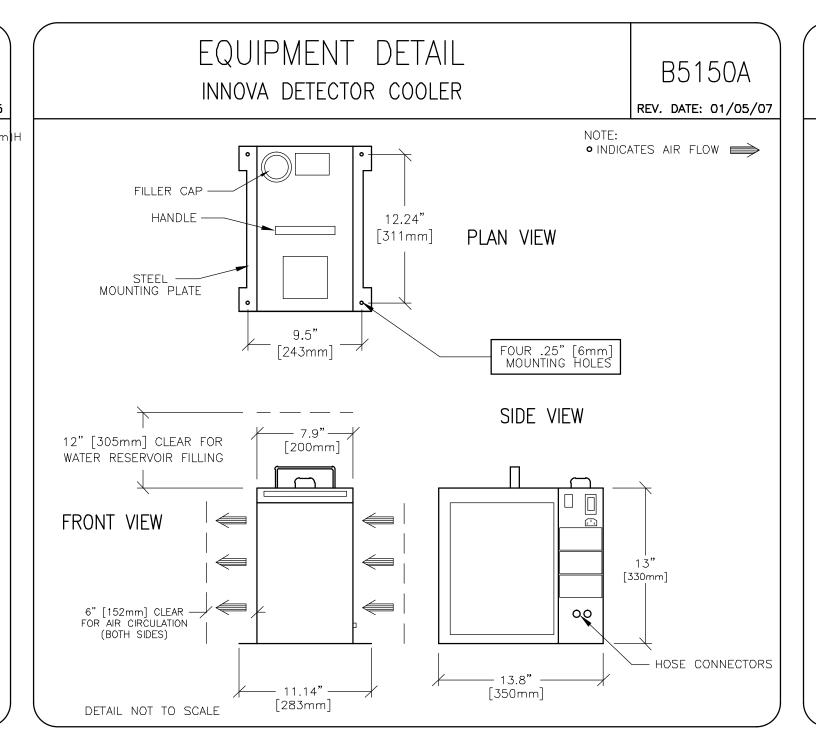


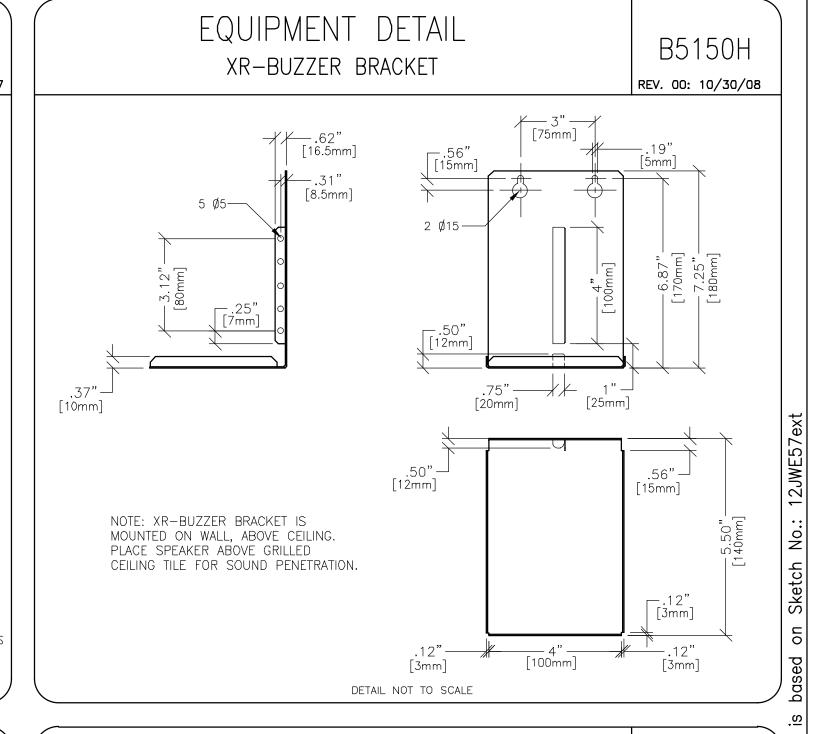


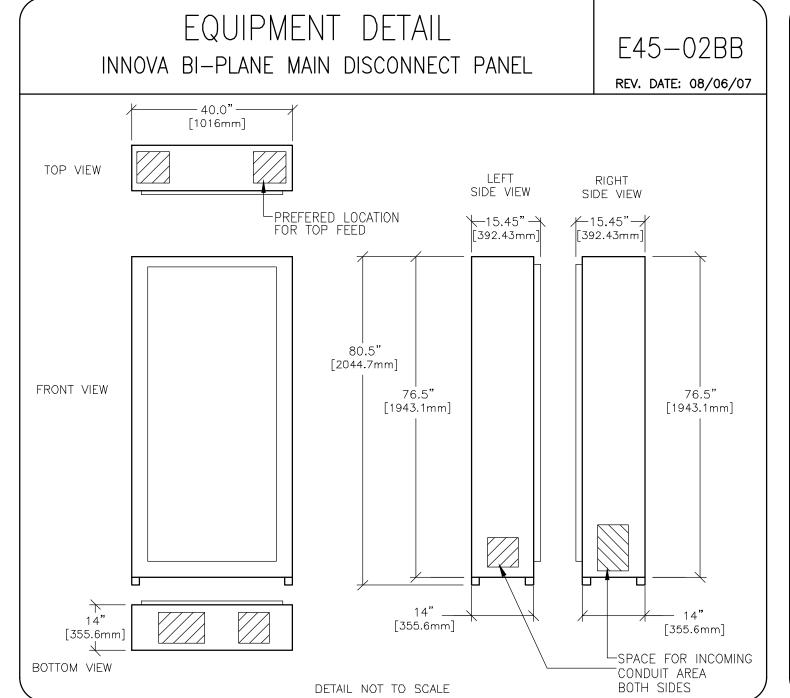


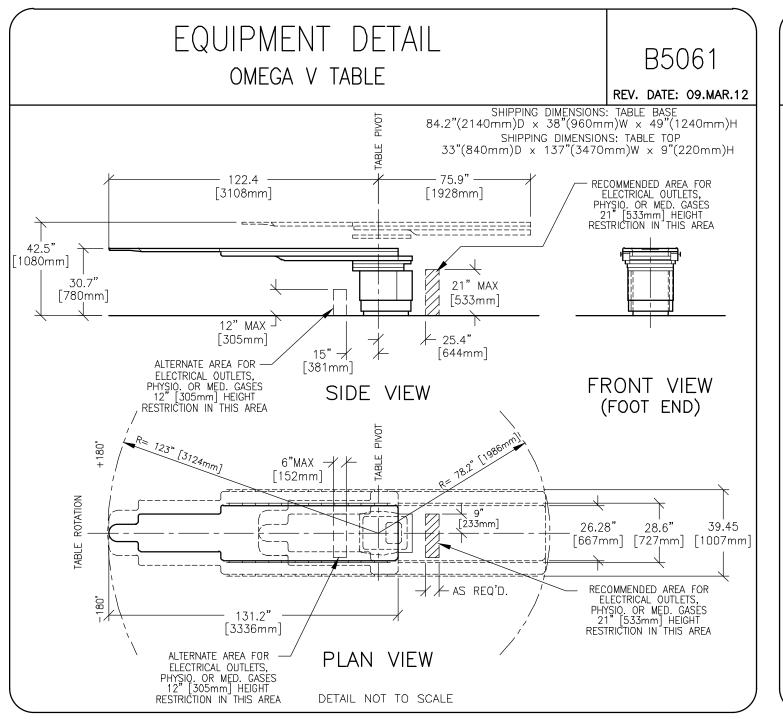


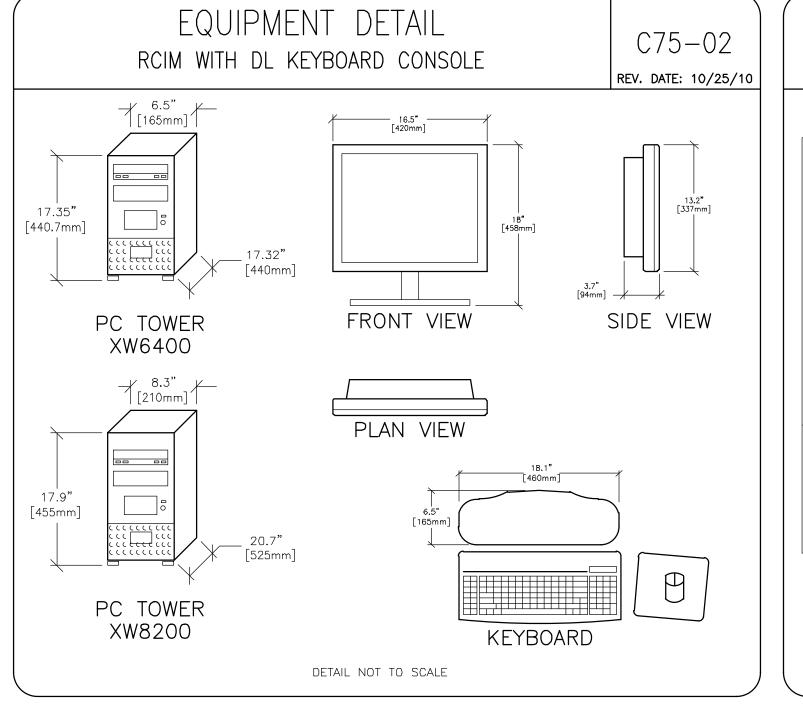


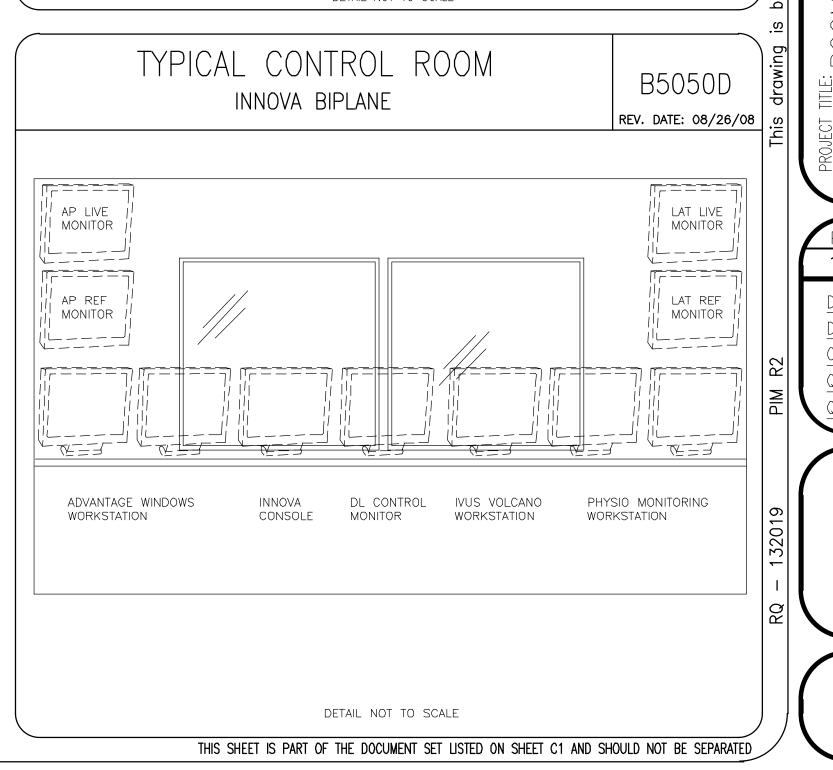












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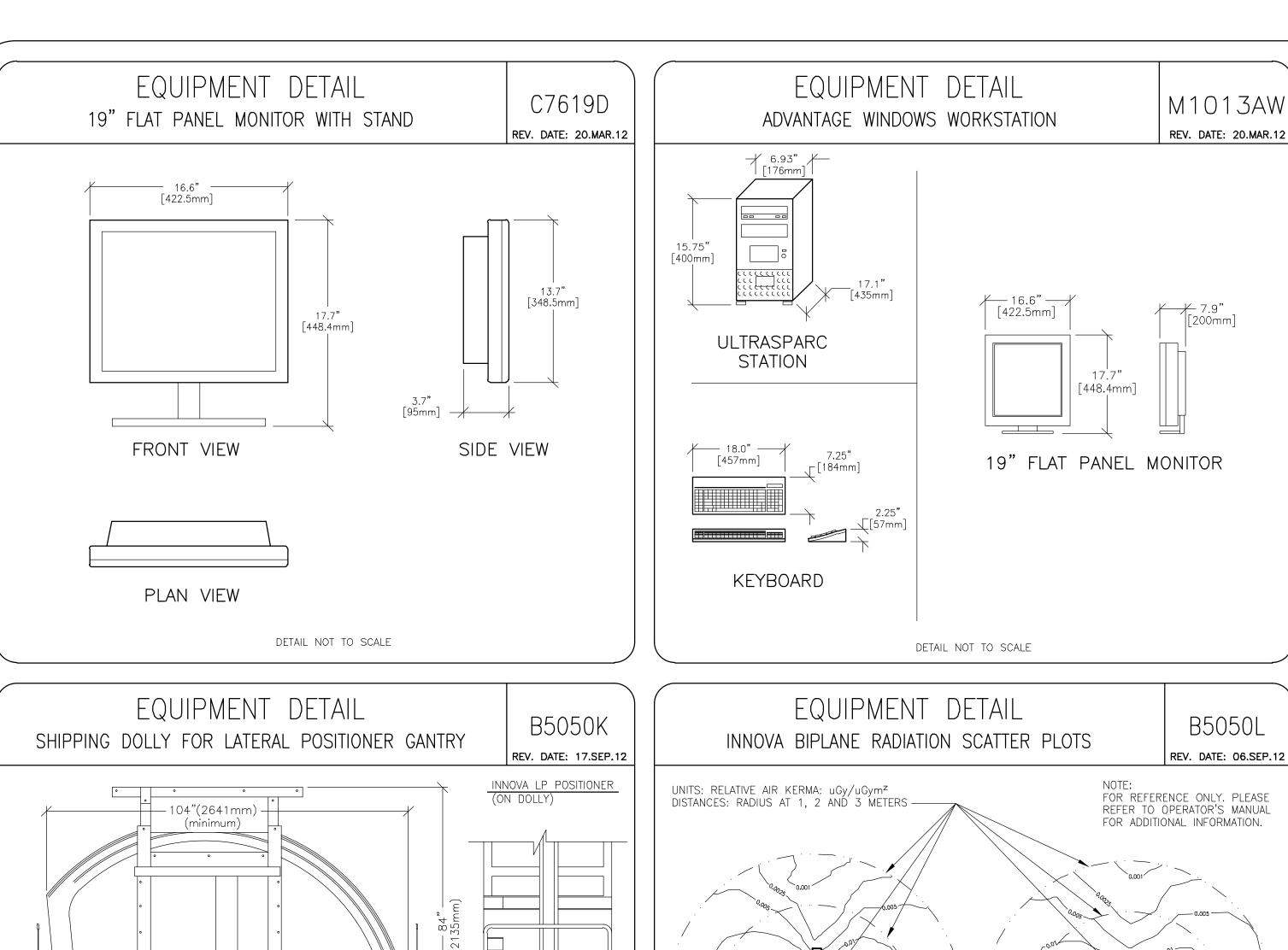
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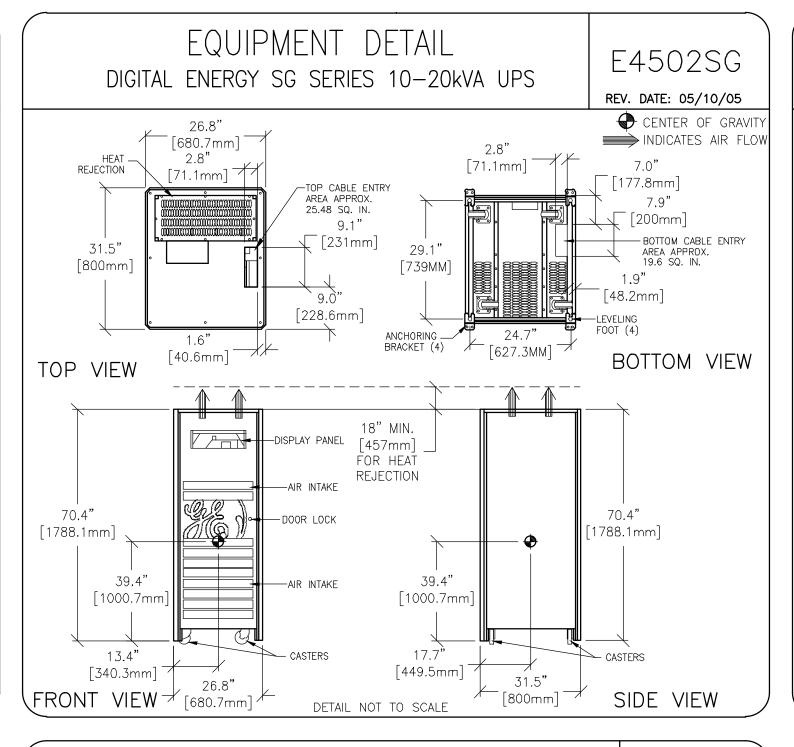
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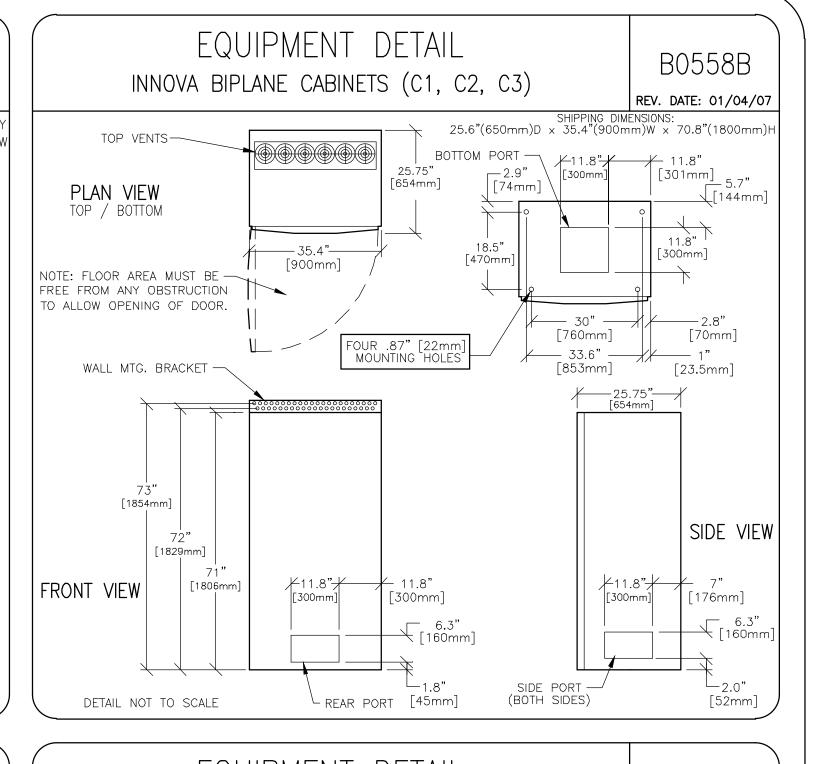
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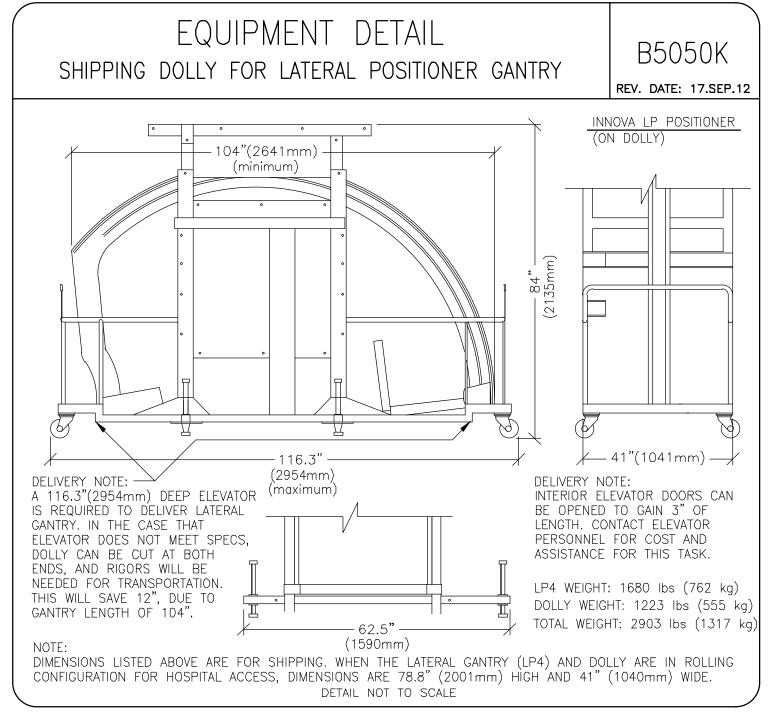
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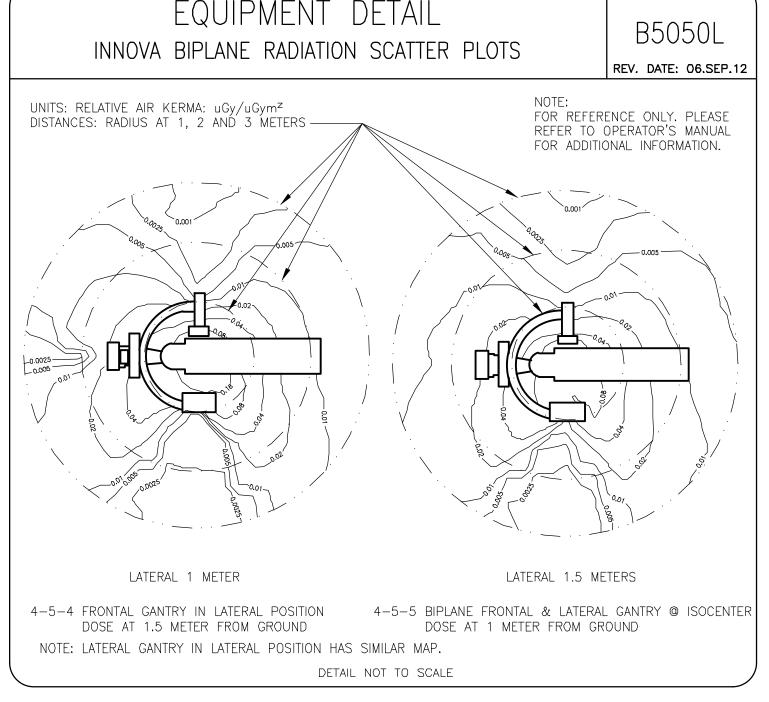
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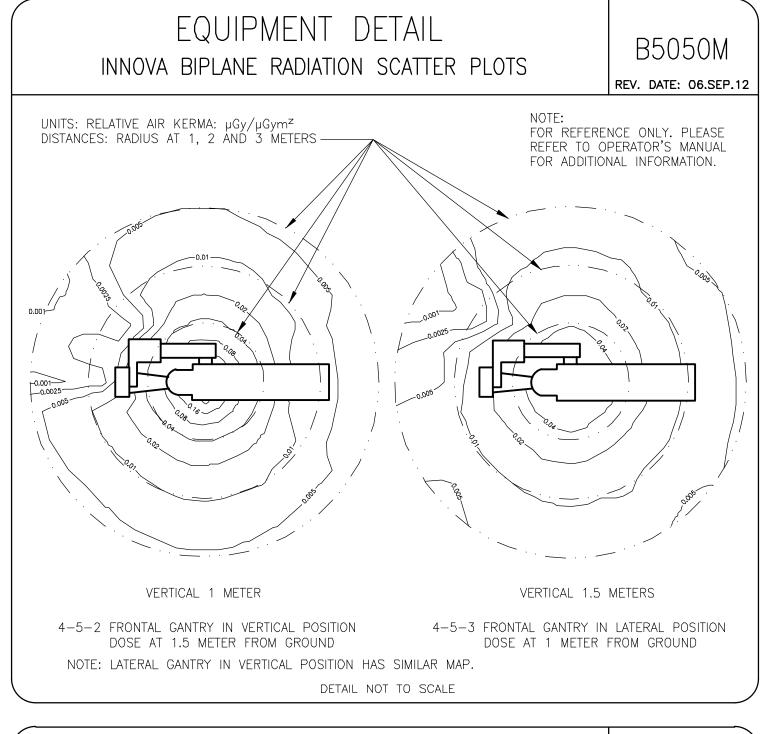


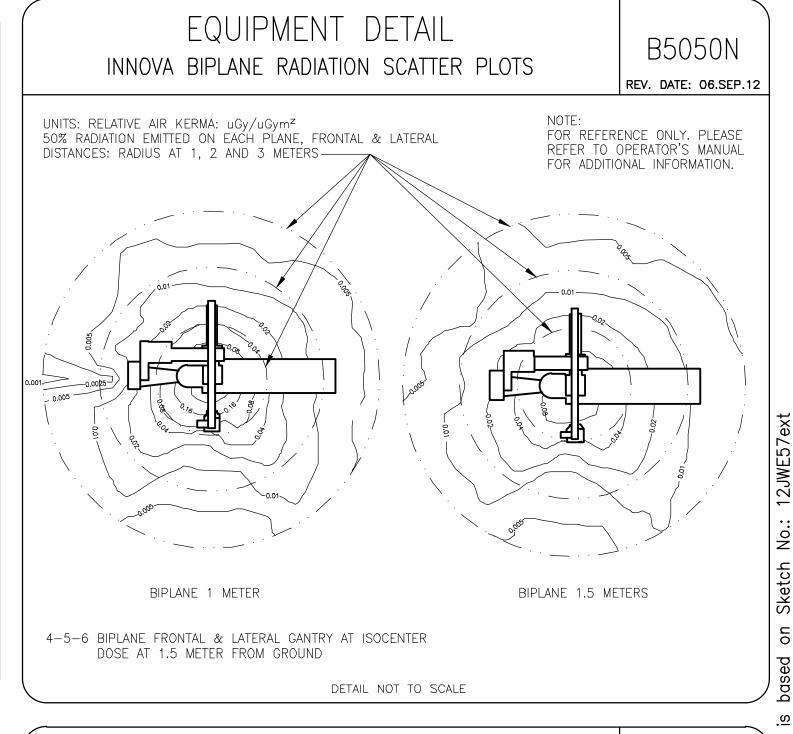


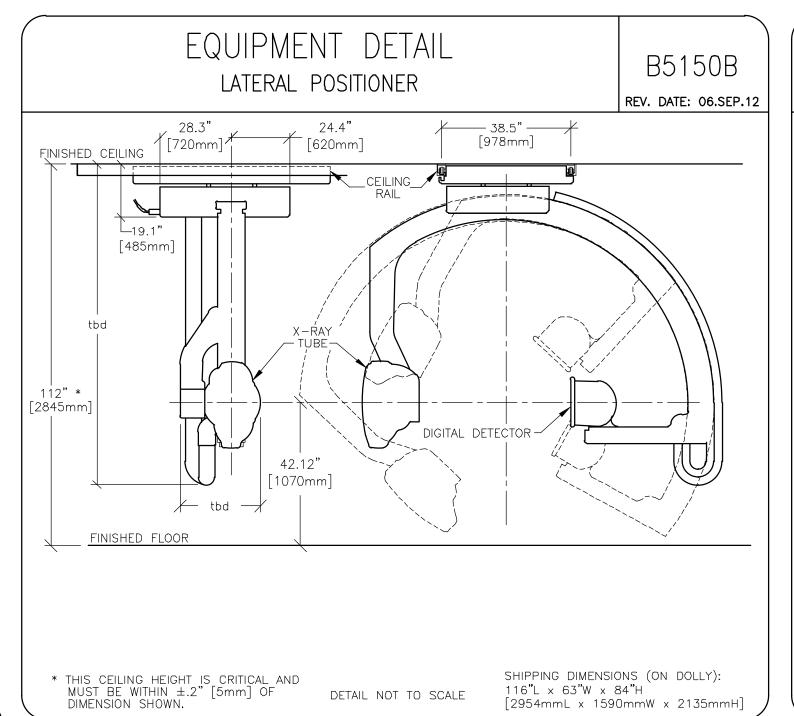


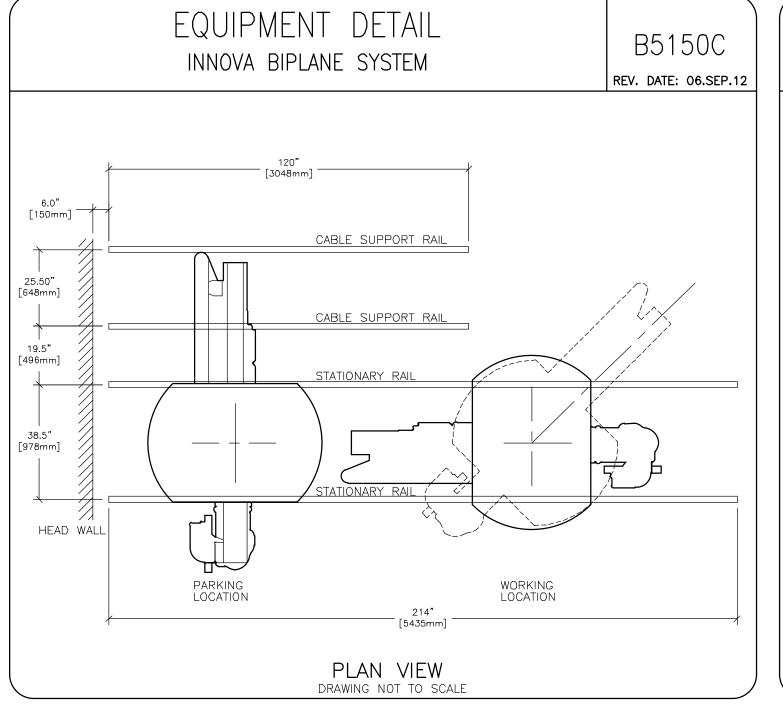


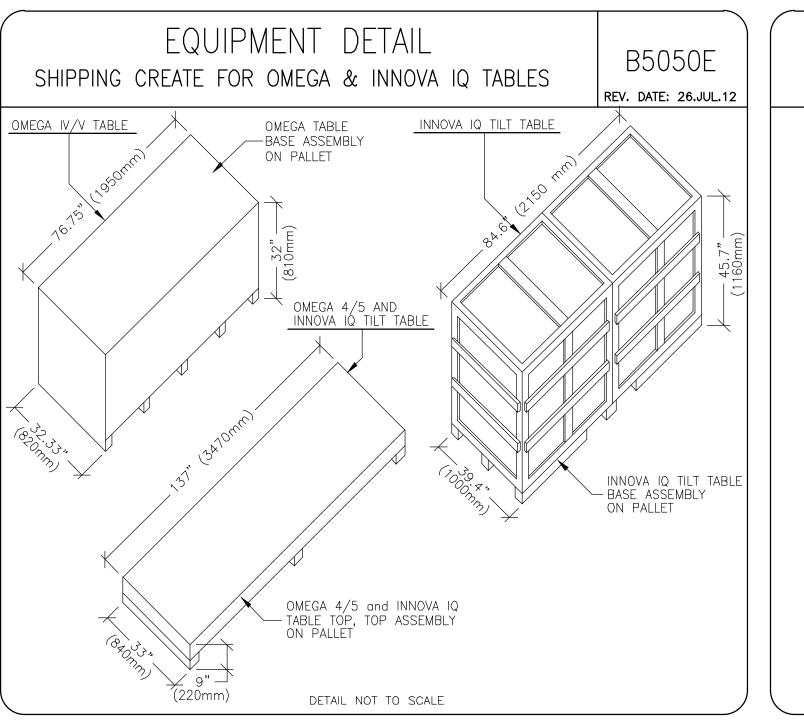


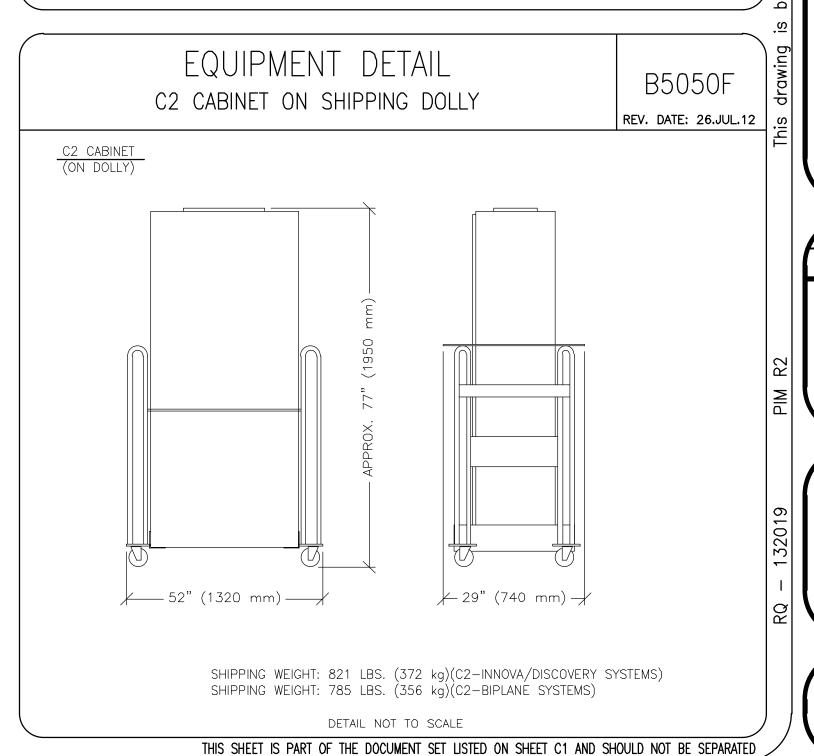


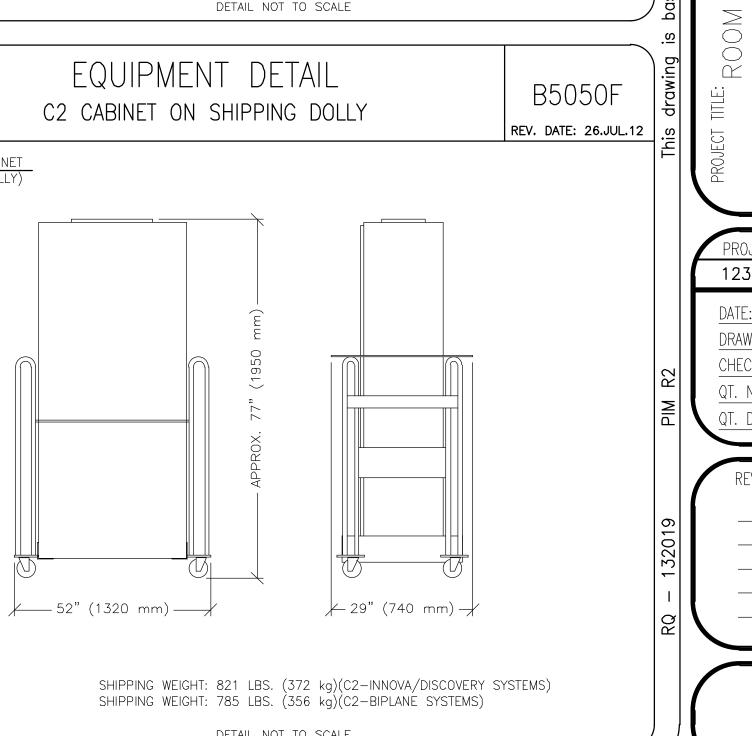












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