Drawing Index

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

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

* REQUIRED REFERENCE *

INNOVA PLUS

Pre Installation Manual

5314528–4–1EN

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

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

www.gehealthcare.com/siteplanning

GE Healthcare

Cardio-Vascular Site Planning

CUSTOMER ACCEPTANCE

imagination at work

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.

GE Healthcare Site Readiness Checklist Rev 19

Before using this document ensure you have the latest Rev from MyWorkshop on DOC0422752

GEHC Global Order # : ____________ Customer: ____________

GEHC PMI : ____________ FE / Installer: ____________

The customer is responsible for proper site preparation regardless of any GEHC measurements/inspections/assessments.

	GEHC Minimum Requirements (Inspection Date:)	Storage Is item ready?	PMI Is item ready?	FE Is item ready?	Comments If "N", enter comments or action plan
1	**MR Magnet Delivery Requirements:** Ensure cryogen venting system is available for magnet connection as defined by GEHC Pre-Installation Manual (PIM) requirements, exhaust fan system is installed and operational, 480V power, and chilled water supply is available 24x7 that meets system cooling requirements. External connectivity is available for magnet monitoring and phone service is available during delivery. Surface mount vibromat installed where required. Magnet room final flooring is in place.				
2	**MR RF Screen Room Requirements:** RF Screen Room is tested with copy of Test Report, emailed to ISAdminCOEMB@ge.com, that it is compliant with GEHC specifications. Dock Bolt and magnet anchors (if applicable) installed using 2 part anchor. For HDx systems, blower box mount bolts installed by RF vendor using 2 part anchors				
3	**State Regulatory Requirements:** Facility registration number provided for states of Ill, KY, HI, RI, SC, TX. X-ray shielding plan and state acknowledgment letter provided to installer for AR, DC, NC, SC, CO & WA. **Site Drawing Requirements:** Final version of equipment network and antenna, installation drawings (including red lined versions) verified to match actual room and has been provided to installer.				
4	**Surface Penetration Requirements:** Customer/Contractor scheduled to provide required drilling or cutting into floors, ceilings, and walls; OR surface penetration permit available and posted in the room when GEHC will perform the work.				
5	**Pre-Delivery Route Requirements:** The equipment delivery route from the truck to the final destination within the facility has been reviewed with all key stakeholders to safely meet the minimum requirements for equipment access, and all communications/notifications have occurred. Arrangements have been made for special handling (elevator, rigging, floor protection, fork lift, rollback truck, etc).				
6	**Finished Room Requirements:** Rooms that will contain equipment, including storage areas not in scan suite, are dust free. Provisions taken to maintain a dust free room. Precautions must be taken to prevent dust from entering rooms containing equipment when construction is incomplete in adjacent areas. All walls primed (final coat not needed on Day 1). Shielding, doors, and windows are to be installed. No contractor work being done during or after the installation that will cause dust in the installation areas or potential equipment damage. Room security to prevent unauthorized access and theft has been discussed with customer. The customer is aware of these security issues, implications and responsibility. For Storage: Room must meet PIM requirements for storage.				
7	**Electrical Requirements:** Lockable (LOTO) Main Disconnect Panel (MDP) is installed per GE guidelines and system power is available. Conduits, electrical cable ducting/dividers/cable trays, and access flooring is installed in proper location and height. Surface floor duct and load-side wires can be installed at time of system installation. Validate outlet location and requirements meet specifications for device/equipment.				
8	**HVAC Requirements:** The HVAC/Chilled Water systems designed to maintain the environment per spec/PIM is at running state and appears to provide the desired environmental conditions including location of vents, temperature and humidity for system operation.				
9	**Flooring Requirements:** Floor is clean and prepared for final floor covering. Floor levelness/flatness is measured and within tolerance, and there are no visible defects per GEHC specifications. Confirm customer anchoring plan aligns with designed floor thickness. Final flooring installed where required for network racks.				
10	**Ceiling Requirements:** Unistrut (or equivalent) location, levelness and spacing is measured (or vendor confirmed) and consistent with the requirement of the installation drawings. Ensure unistrut and rails are not used as mounting surfaces. Ceiling grid is installed. Permanent lighting is installed and operational. HVAC diffusers are installed and connected to ductwork. Ceiling tiles installed per PMI discretion.				

GE Healthcare

Healthcare Services – Design Center
Milwaukee, Wisconsin

SHEET TITLE: SITE READINESS

MODALITY TYPE: INNOVA 2100/3100/4100

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO ACTUAL EQUIPMENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR ACTUAL CONSTRUCTION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE: HYBRID OR

TYPICAL FINAL LAYOUT

PROJECT	REVISION
5–94f	00

DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

REVISION HISTORY:

RQ – 140195 PIM R01

SHEET C1

GE EQUIPMENT LISTING

EQUIPMENT ON ORDER FROM GE HEALTHCARE, INSTALLED BY GE HEALTHCARE, PER

NOTE: LOCAL CONDITIONS MAY DICTATE THAT ITEMS IDENTIFIED IN THIS CATEGORY BE INSTALLED BY OTHERS.

EQUIPMENT CROSS REFERENCE CHART
SEISMIC STATUS: P = PREAPPROVAL; C = CALCULATIONS/ PENDING APPROVAL; S = SPECIFICATIONS ONLY

QUANTITY ORDERED — REFER TO SHEET "D"

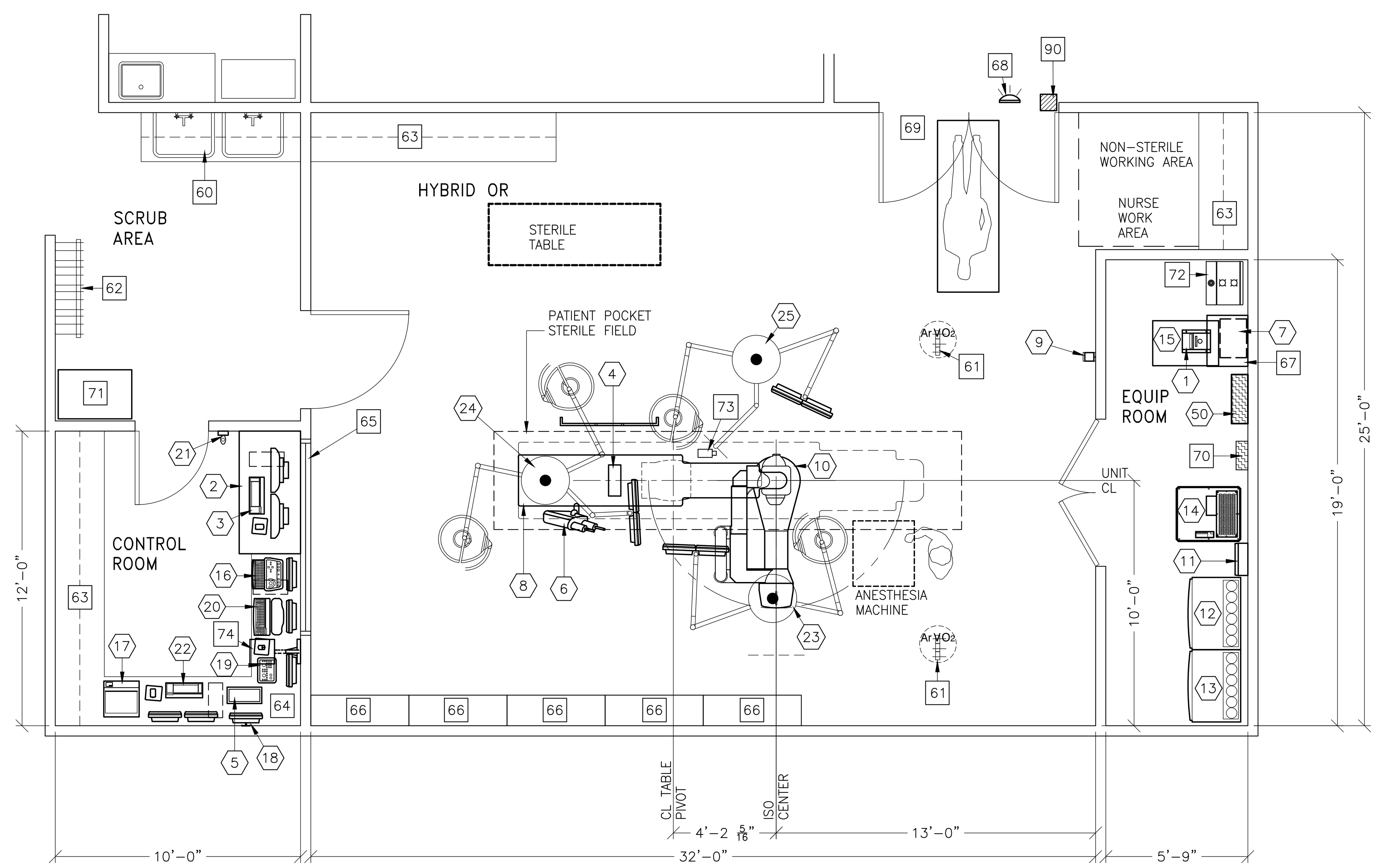
ITEM NO.	QTY	ITEM DESCRIPTION (* = EXISTING/REINSTALL)	WEIGHT	HEAT OUTPUT (PER HOUR)	DETAIL NO.	STRC PLAN	ELEC PLAN	SEISMIC STATUS
1	1	DETECTOR CHILLER	33 lbs	706 btu	B5049F	---	DC	S
2	1	WORKSTATION CART				---		-
3	1	MAC LAB CONSOLE, INCLUDES MONITORS AND KEYBOARD	181 lbs	2935 btu		---	PC	S
4	1	TRAM NET RACK	8 lbs		B5047	---	TRAM	S
5	1	REMOTE CONTROL FOR INJECTOR	4 lbs		B5028	.	IEC	S
6	1	INJECTOR HEAD ON TABLE RAIL	15 lbs		B5030A	---	IH	S
7	1	INJECTOR ELECTRONICS	37 lbs	320 btu	B5028	---	IE	S
8	1	OMEGA IV/V TABLE WITH ROTATING TOP	1750 lbs	614 btu		B50 49N	LU5	C
9	1	XR BUZZER (LOCATED ABOVE CEILING)	2 lbs		B5150H	-	XRB	-
10	1	INNOVA POSITIONER (REFERENCE TABLE BASE-PLATE DETAIL FOR FLOOR MOUNTING INFORMATION)	1653 lbs	2416 btu	B5050A B5050B B5050	---	LC1	C
11	1	UPS INTERFACE BOX			E4502IB	-	UIB	-
12	1	ATLAS CABINET (C2)	659 lbs	1825 btu	B0558C	S100	C2	C
13	1	ATLAS CABINET (C1)	1115 lbs	3389 btu	B0558C	S100	C1	C
14	1	UPS CABINET	1170 lbs	4061 btu	E4502SG	--	UPS	-
15	1	WATER CHILLER	449 lbs	18716 btu	M0917B	---	CHLR	C
16	1	IVUS VOLCANO S5i CONSOLE, INCLUDES FLAT PANEL MONITOR AND KEYBOARD (DESK MOUNTED)	68 lbs	1631 btu	BS5I	-	IVUS	-
17	1	IVUS VOLCANO COLOR PRINTER				.		-
18	1	18 in. MONITOR ON WALL SUPPORT	26 lbs	204 btu	C7617B	-	WBM4	C
19	1	CONTROL ROOM MONITOR WITH DL KEYPAD	22 lbs	204 btu	C7412H C7617	---		S
20	1	OPERATORS CONSOLE	22 lbs	546 btu	C7617 C7502 B5050C	-	WBC1	C
21	1	BOLUS CHASE HANDSWITCH	2 lbs			---	WBBC	-
22	1	AW WORKSTATION	81 lbs	1201 btu	M1013AW C7617	---		C
23	1	FOUR MONITORS & SURGICAL LAMP SUSPENDED FROM ARM/ CEILING SUPPORT				-	WBM1 LMP	-
24	1	TWO MONITORS & TWO SURGICAL LAMPS SUSPENDED FROM ARM/ CEILING SUPPORT				-	WBM2 LMP	-
25	1	TWO MONITORS, RADIATION SHIELD & SURGICAL LAMP, SUSPENDED FROM ARM/ CEILING SUPPORT			LMP	-	WBM3	-

THE FOLLOWING ITEMS, WHICH HAVE BEEN ORDERED FROM GE HEALTHCARE, ARE TO BE INSTALLED BY THE CUSTOMER OR HIS CONTRACTOR.

ITEM NO.	QTY	ITEM DESCRIPTION	WEIGHT	HEAT OUTPUT	DETAIL NO.	STRC PLAN	ELEC PLAN	SEISMIC STATUS
50	1	INNOVA MAIN DISCONNECT, REFERENCE JUNCTION POINT 'PDB' ON SHEET E1 FOR DETAILED DESCRIPTION.	326 lbs	1532 btu	E4502M	-	PDB	-

SCALE: 1/4" = 1'-0" EQUIPMENT LAYOUT RECOMMENDED CEILING HEIGHT = 9'-6"

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.



ANCILLARY ITEMS

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
60	COUNTER TOP WITH SINK, BASE AND WALL CABINETS
61	MED GASES IN CEILING
62	LEAD APRON RACK
63	COUNTER TOP WITH BASE AND WALL CABINETS
64	COUNTER TOP FOR EQUIPMENT- MINIMUM DEPTH 30 in. OR ADDITIONAL SHELVING MAY BE REQUIRED PROVIDE GROMMETED OPENINGS AS REQUIRED TO ROUTE INTERCONNECT CABLES TO RACEWAY BELOW COUNTERTOP.
65	CONTROL WALL TO CEILING WITH LEAD GLASS WINDOW
66	CATHETER CABINETS
67	SHELF - CUSTOMER TO PROVIDE ADEQUATE WALL SUPPORT
68	X-RAY ON WARNING LIGHT - AVAILABLE FROM GE SUPPLY CALL: 800-200-9760 GE CAT. NO. WXIABWW-OF-XIU
69	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
70	150-AMP DISCONNECT BREAKER (FOR LOCK-OUT/TAG-OUT CAPABILITY)
71	CUSTOMER SUPPLIED STORAGE CABINET
72	RACK FOR HYBRID NETWORK ITEMS
73	PROCEDURAL CAMERA
74	PROCEDURAL VIDEO MONITOR

THE FOLLOWING ITEMS ARE AVAILABLE FROM GE HEALTHCARE TECHNOLOGIES. CONTACT YOUR LOCAL GE HEALTHCARE SERVICE REPRESENTATIVE FOR PRICING AND AVAILABILITY.

ITEM NO.	ITEM DESCRIPTION
90	X-RAY ROOM WARNING LIGHT/ROOM LIGHTING CONTROL PANEL REFERENCE JUNCTION POINT 'XRLC' ON SHEET 'E1' FOR DETAILED DESCRIPTION -CAT. NO. E4502SS FOR WARNING LIGHT & ROOM LIGHT CONTROL.

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

SITE ENVIRONMENT SPECIFICATIONS

- AMBIENT OPERATING TEMPERATURE: EQUIPMENT ROOM WITH FLUORO UPS OPTION 68° TO 77° F, (20° TO 25° C)
- AMBIENT OPERATING TEMPERATURE: CONTROL ROOM 68° TO 77° F, (20° TO 25° C)
- AMBIENT OPERATING TEMPERATURE: EXAM ROOM-DESIGN FOR PATIENT/OPERATOR COMFORT TARGET TEMPERATURE 64° F (18° C)
- HUMIDITY: 30° TO 75° FOR EQUIPMENT AND CONTROL ROOMS AND 30° TO 70° FOR EXAM ROOM
- ALTITUDE: NOT TO EXCEED 9,842 FT. (3000M) ABOVE SEA LEVEL.
- THE ENVIRONMENT FOR THE ELECTRONICS CABINET MUST BE CONTROLLED SO THE ABOVE RESTRICTIONS ARE NOT EXCEEDED.
- DO NOT RESTRICT THE AIR INTAKE OR AIR EXHAUST OF THE SYSTEM COMPONENTS.
- ENVIRONMENTAL CONDITIONS LISTED ABOVE MUST BE MAINTAINED AT ALL TIMES INCLUDING FOR EXAMPLE OVERNIGHT, WEEKENDS, AND HOLIDAYS.

MAGNETIC INTERFERENCE SPECIFICATIONS

IMAGE INTENSIFIERS 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.

RQ - 140195 PIM R01

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

GE Healthcare
IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT LAYOUT
MODALITY TYPE: INNOVA 2100/3100/4100

PROJECT TITLE: HYBRID OR
TYPICAL FINAL LAYOUT

PROJECT	REVISION
5-94f	00

DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

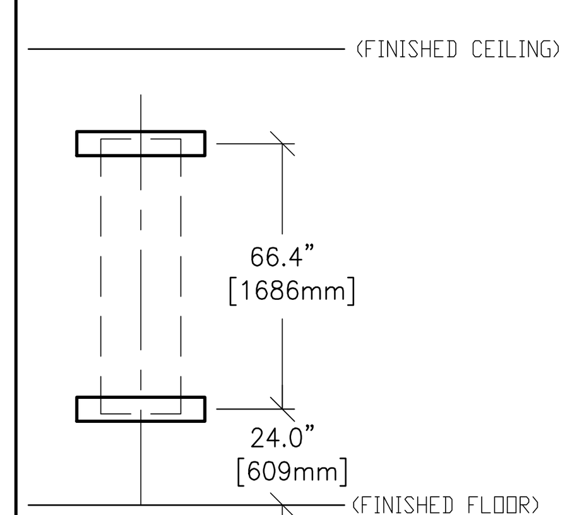
REVISION HISTORY:

SHEET
A1

NFSH-1002

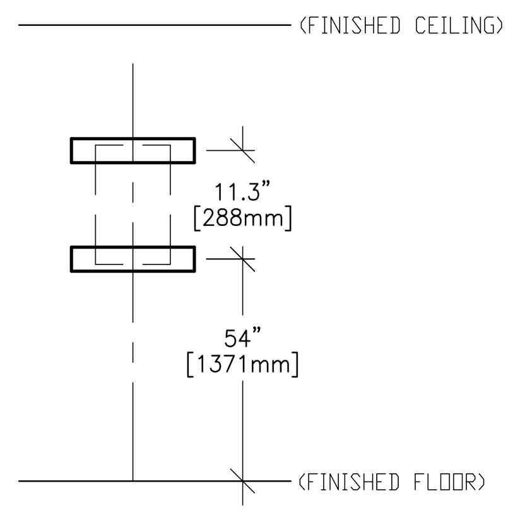
TYPICAL WALL SUPPORT ELEVATIONS

S107



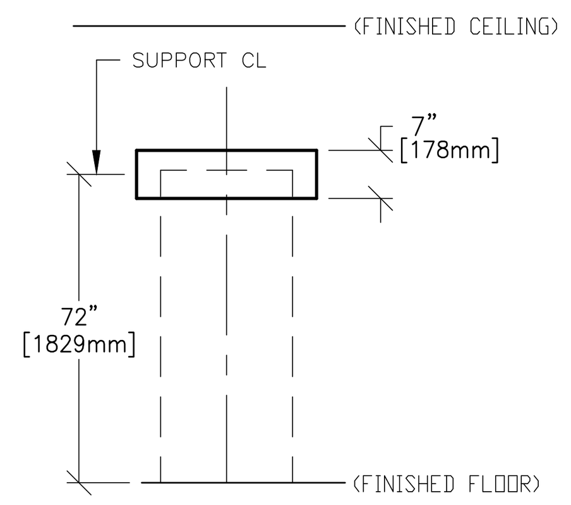
SUPPORT FOR
MAIN DISCONNECT CONTROL
(NOT TO SCALE)

S115



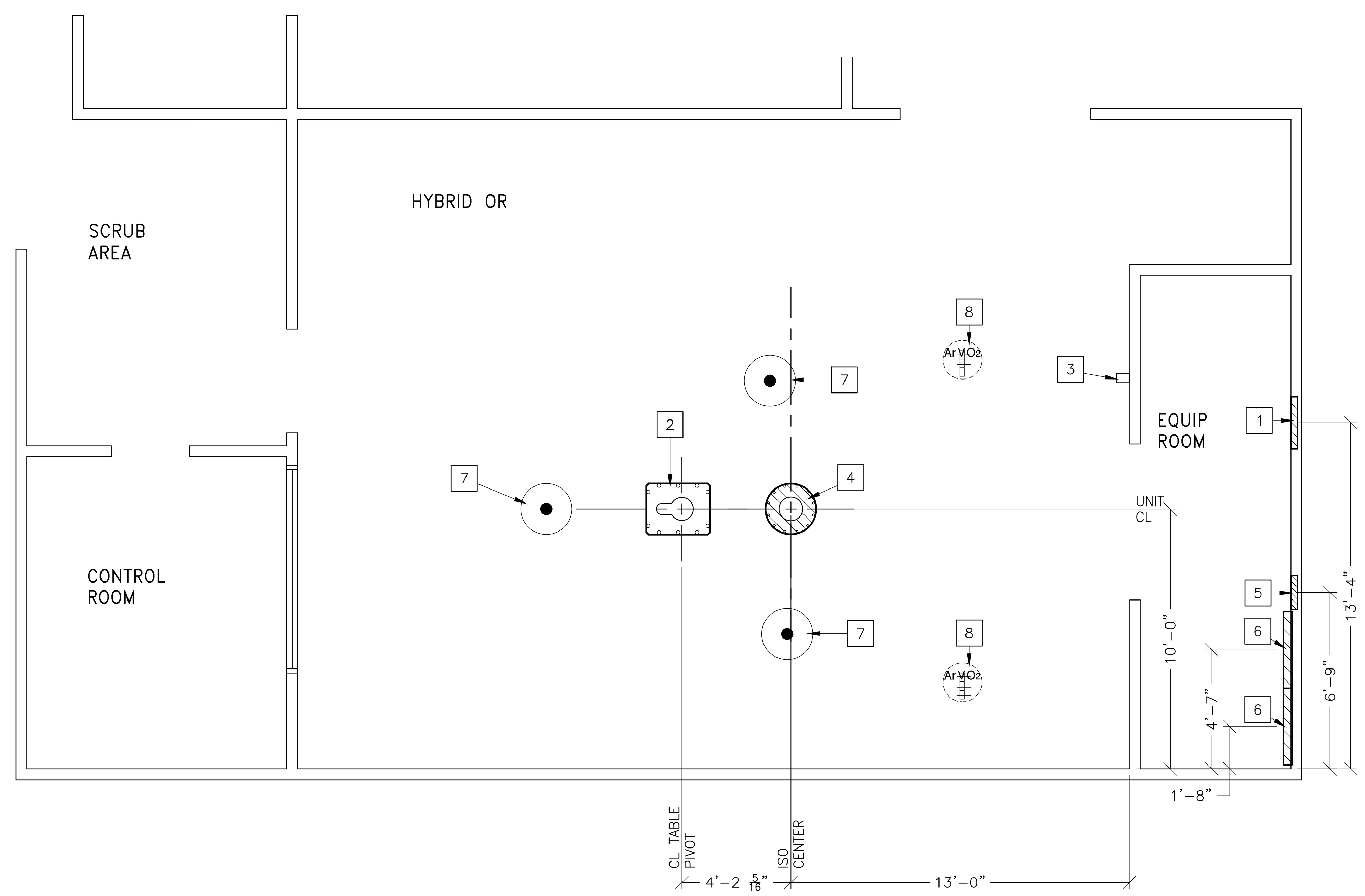
SUPPORT FOR
UPS INTERFACE BOX
(NOT TO SCALE)

S100



SUPPORT FOR
ATLAS/SYSTEMS CABINET
(NOT TO SCALE)

SCALE: 1/4" = 1'-0" — STRUCTURAL LAYOUT — RECOMMENDED CEILING HEIGHT = 9'-6"



STRUCTURAL SUPPORT METHODS

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO. ☐	ITEM DESCRIPTION (* INDICATES EXISTING)
1	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S107, FOR MAIN DISCONNECT CONTROL.
2	AREA OCCUPIED BY GE SUPPLIED TABLE BASEPLATE
3	MOUNT XR BUZZER BRACKET ON WALL. ABOVE CEILING
4	AREA OCCUPIED BY GE SUPPLIED POSITIONER BASEPLATE
5	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S115, FOR UPS INTERFACE BOX.
6	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S100, FOR ATLAS CABINET.
7	CEILING SUPPORT FOR SURGICAL LAMP/ MONITOR POST
8	AREA OF MED GASES IN CEILING

STRUCTURAL NOTES

- ALL STEEL WORK AND PARTS NECESSARY TO SUPPORT CEILING MOUNTED TUBE HANGER OR OTHER EQUIPMENT ARE TO BE SUPPLIED BY THE CUSTOMER OR HIS CONTRACTORS. THE UNISTRUT OR EQUIVALENT STRUCTURE SHOULD RUN CONTINUOUS WITH NO FITTINGS EXTENDING BELOW FACE OF UNISTRUT CHANNEL, RUN WALL TO WALL, BE PARALLEL, SQUARE AND IN THE SAME HORIZONTAL PLANE FLUSH WITH FINISHED CEILING. THE SYSTEM IS TO BE CROSS BRACED VERTICALLY, HORIZONTALLY AND DIAGONALLY TO ALLOW NO MOVEMENT AND A MAXIMUM OF 1,58mm(1/16") DEFLECTION.
  (10) 12,7mm (1/2") DIA. x 38,1mm (1 1/2") LONG BOLTS WITH UNISTRUT 12,7mm (1/2") NUTS WITH SPRINGS ARE TO BE PROVIDED BY CUSTOMER OR HIS CONTRACTORS FOR EACH STATIONARY AND AUXILLARY SUPPORT RAIL. CLOSURE STRIPS SHALL BE PROVIDED FOR AREAS OF UNISTRUT EXPOSED AND WITHOUT MOUNTING UNITS.
- METHODS OF SUPPORT FOR THE STEELWORK THAT WILL PERMIT ATTACHMENT TO STRUCTURAL STEEL OR THROUGH BOLTS IN CONCRETE CONSTRUCTION SHOULD BE FAVORED. DO NOT USE CONCRETE OR MASONRY ANCHORS IN DIRECT TENSION.
- ALL UNITS THAT ARE WALL MOUNTED OR WALL SUPPORTED ARE TO BE PROVIDED WITH SUPPORTS WHERE NECESSARY. WALL SUPPORTS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER OR HIS CONTRACTORS. SEE PLAN AND DETAIL SHEETS FOR SUGGESTED LOCATIONS AND MOUNTING HOLE LOCATIONS.
- ALL CEILING MOUNTED FIXTURES, AIR VENTS, SPRINKLERS, ETC. TO BE FLUSH MOUNTED, OR SHALL NOT EXTEND MORE THAN 6,35mm (1/4") BELOW THE FINISHED CEILING.
- CONTROL WALLS WITH TUBE HANGER PASSAGE ABOVE SHALL BE CONSTRUCTED TO 2130mm (7'-0") HIGH.
- FLOOR SLABS ON WHICH EQUIPMENT IS TO BE INSTALLED MUST BE LEVEL TO 3,17mm (1/8") in 3050mm (10'-0")
- DIMENSIONS ARE TO FINISHED SURFACES OF ROOM.
- CUSTOMERS CONTRACTOR MUST PROVIDE ALL PENETRATIONS IN POST TENSION FLOORS.
- CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL ANY NON-STANDARD ANCHORING. DOCUMENTS FOR STANDARD ANCHORING METHODS ARE INCLUDED WITH GE EQUIPMENT DRAWINGS FOR GEOGRAPHIC AREAS THAT REQUIRE SUCH DOCUMENTATION.
- CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL HARDWARE FOR "THROUGH THE FLOOR" ANCHORING AND/OR ANY BRACING UNDER ACCESS FLOORS. THIS CONTRACTOR MUST ALSO PROVIDE FLOOR DRILLING THAT CANNOT BE COMPLETED BECAUSE OF AN OBSTRUCTION ENCOUNTERED WHILE DRILLING BY THE GE INSTALLER SUCH AS REBAR ETC.
- IT IS THE CUSTOMER'S RESPONSIBILITY TO PERFORM ANY FLOOR OR WALL PENETRATIONS THAT MAY BE REQUIRED. THE CUSTOMER IS ALSO RESPONSIBLE FOR ENSURING THAT NO SUBSURFACE UTILITIES (E.G., ELECTRICAL OR ANY OTHER FORM OF WIRING, CONDUITS, PIPING, DUCT WORK OR STRUCTURAL SUPPORTS (I.E. POST TENSION CABLES OR REBAR)) WILL INTERFERE OR COME IN CONTACT WITH SUBSURFACE PENETRATION OPERATIONS (E.G. DRILLING AND INSTALLATION OF ANCHORS/SCREWS) PERFORMED DURING THE INSTALLATION PROCESS. TO ENSURE WORKER SAFETY, GE INSTALLERS WILL PERFORM SURFACE PENETRATION OPERATIONS ONLY AFTER THE CUSTOMER'S VALIDATION AND COMPLETION OF THE "GE SURFACE PENETRATION PERMIT"

RQ – 140195 PIM R01

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

GE Healthcare
IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: STRUCTURAL LAYOUT
MODALITY TYPE: INNOVA 2100/3100/4100

PROJECT TITLE: HYBRID OR
TYPICAL FINAL LAYOUT

PROJECT	REVISION
5-94f	00

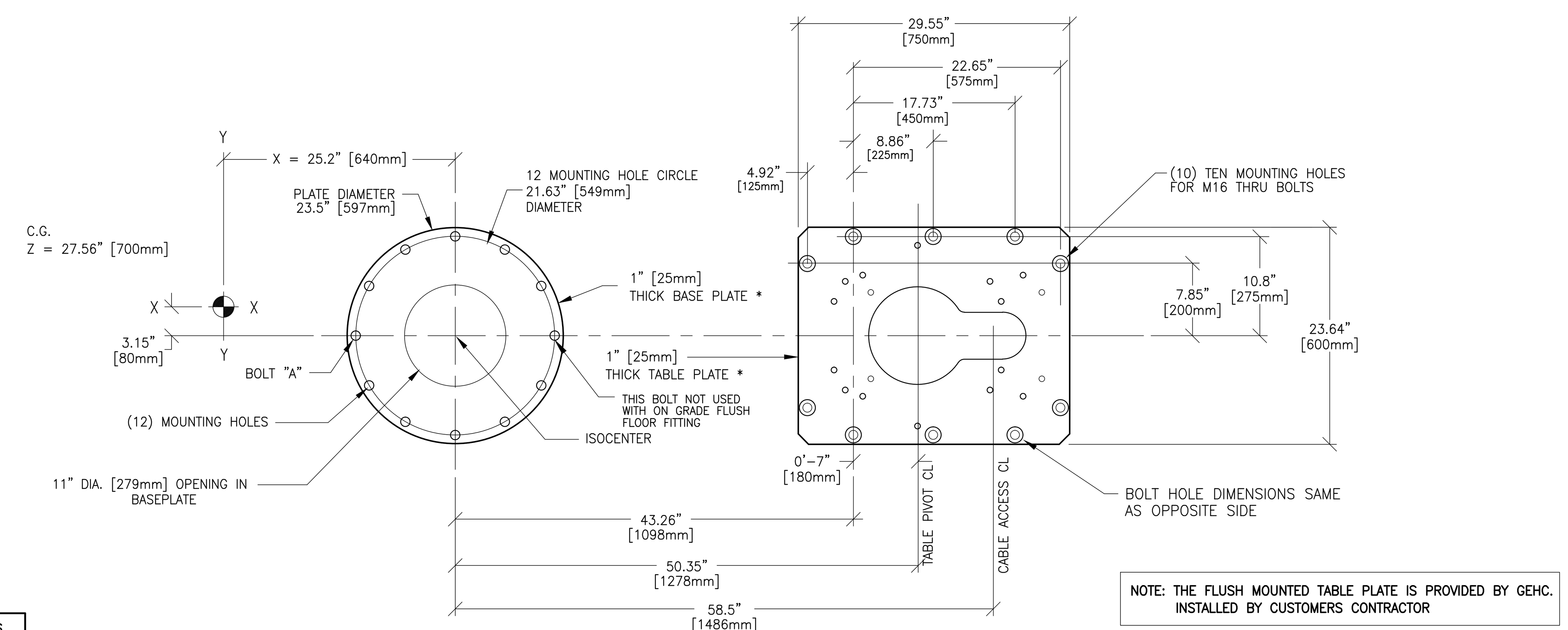
DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

REVISION HISTORY:

SHEET
S1

FLOOR MOUNTING : INNOVA 2100–3100–4100 (UNITY)/OMEGA V LONG TABLE (WITH IQ TILT TABLE BASEPLATE) INSTALLATION (TEMPLATE NO. 2360133)

B5049N
REV. DATE: 06/04/09



NOTE: THE FLUSH MOUNTED TABLE PLATE IS PROVIDED BY GEHC. INSTALLED BY CUSTOMERS CONTRACTOR

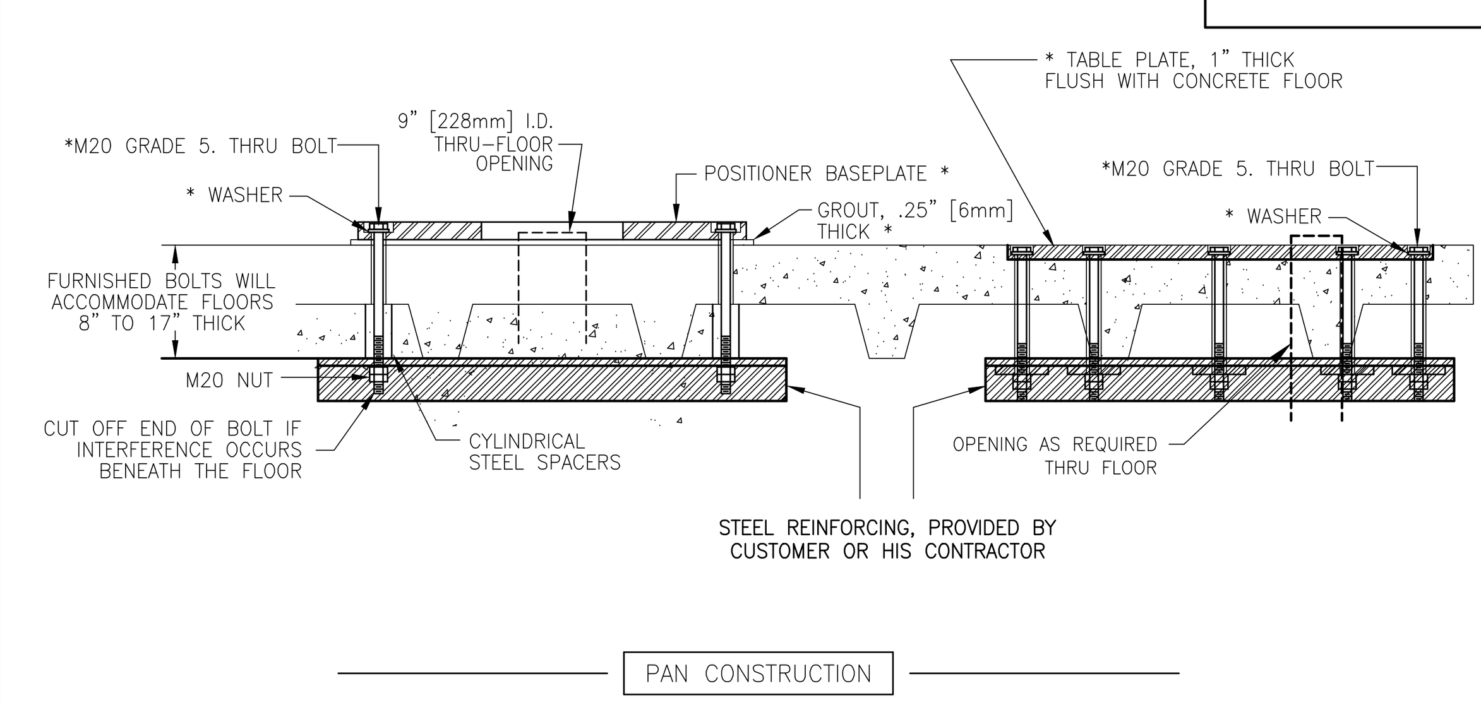
* FURNISHED BY GEHC AS PART OF INSTALLATION KIT

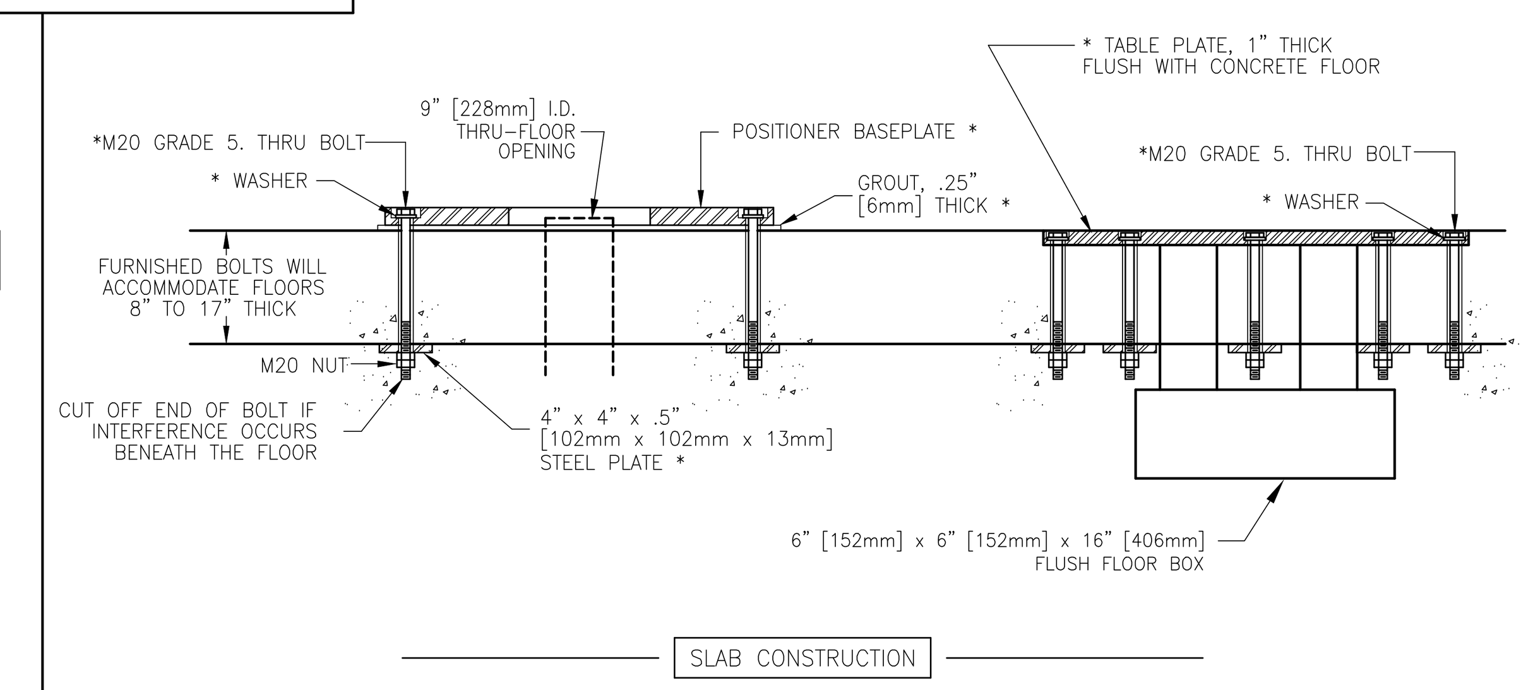
POSITIONER BASEPLATE — DETAIL NOT TO SCALE — TABLE PLATE

WARNING!! THE RELATIONSHIP BETWEEN THE TABLE BASE AND THE POSITIONER BASEPLATE IS CRITICAL.

PRIOR TO DRILLING MOUNTING HOLES CONTACT LOCAL GE HEALTHCARE INSTALLATION PROJECT MANAGER OR LEAD FIELD ENGINEER TO VERIFY THAT THE PROPER FULL SIZE FLOOR MOUNTING TEMPLATE IS USED.

THROUGH–BOLT MOUNTING OPTIONS

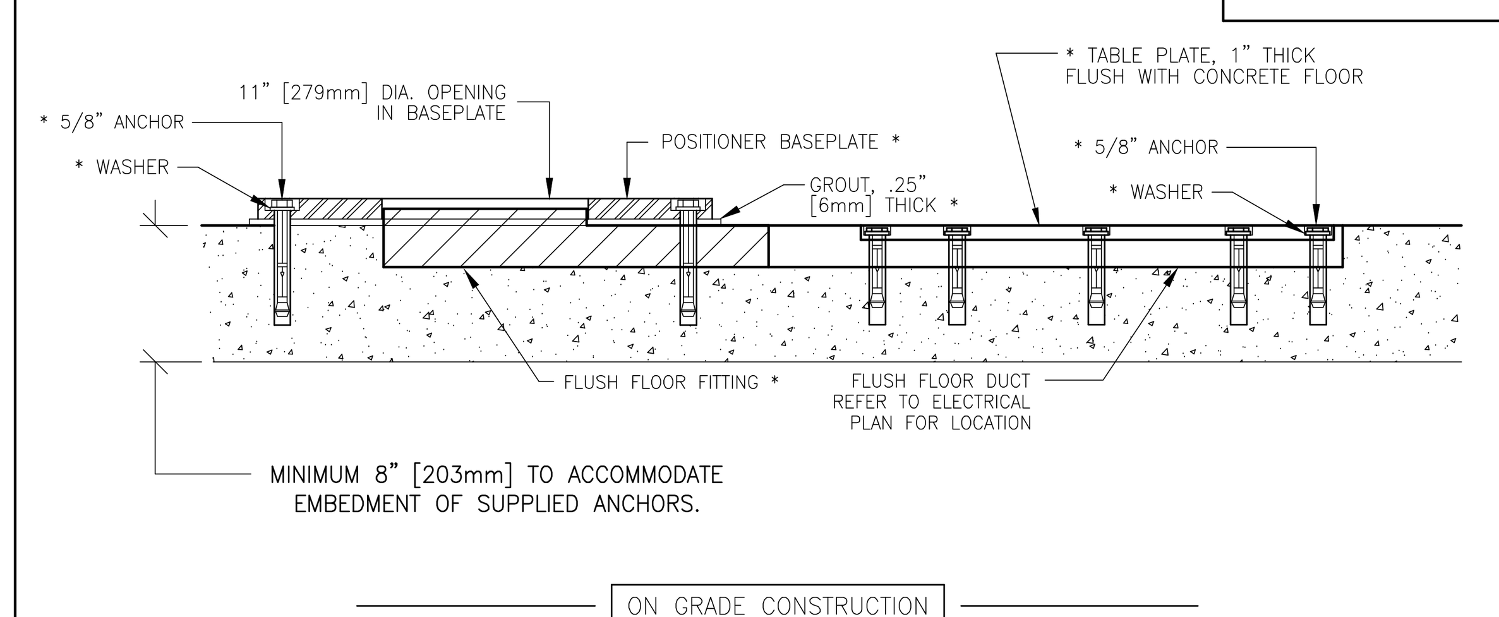


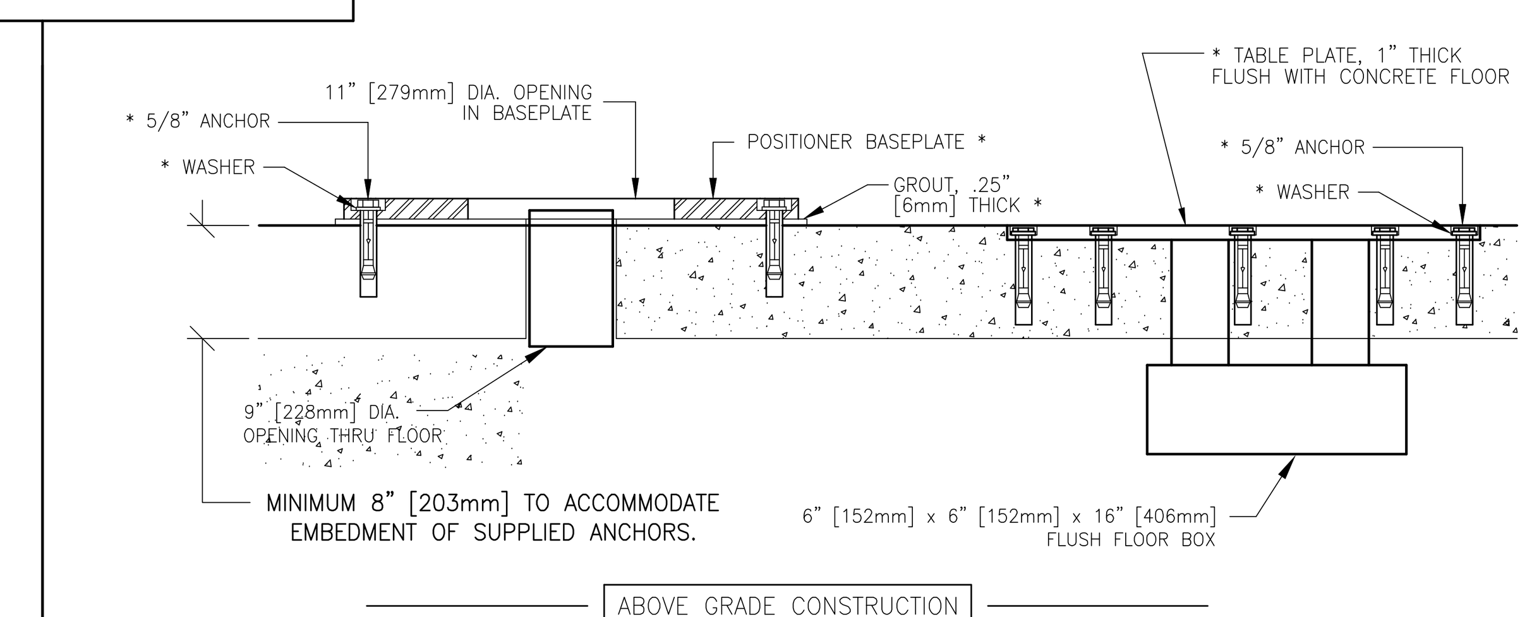


* FURNISHED BY GEHC AS PART OF INSTALLATION KIT

* FURNISHED BY GEHC AS PART OF INSTALLATION KIT

ANCHOR BOLT MOUNTING OPTIONS

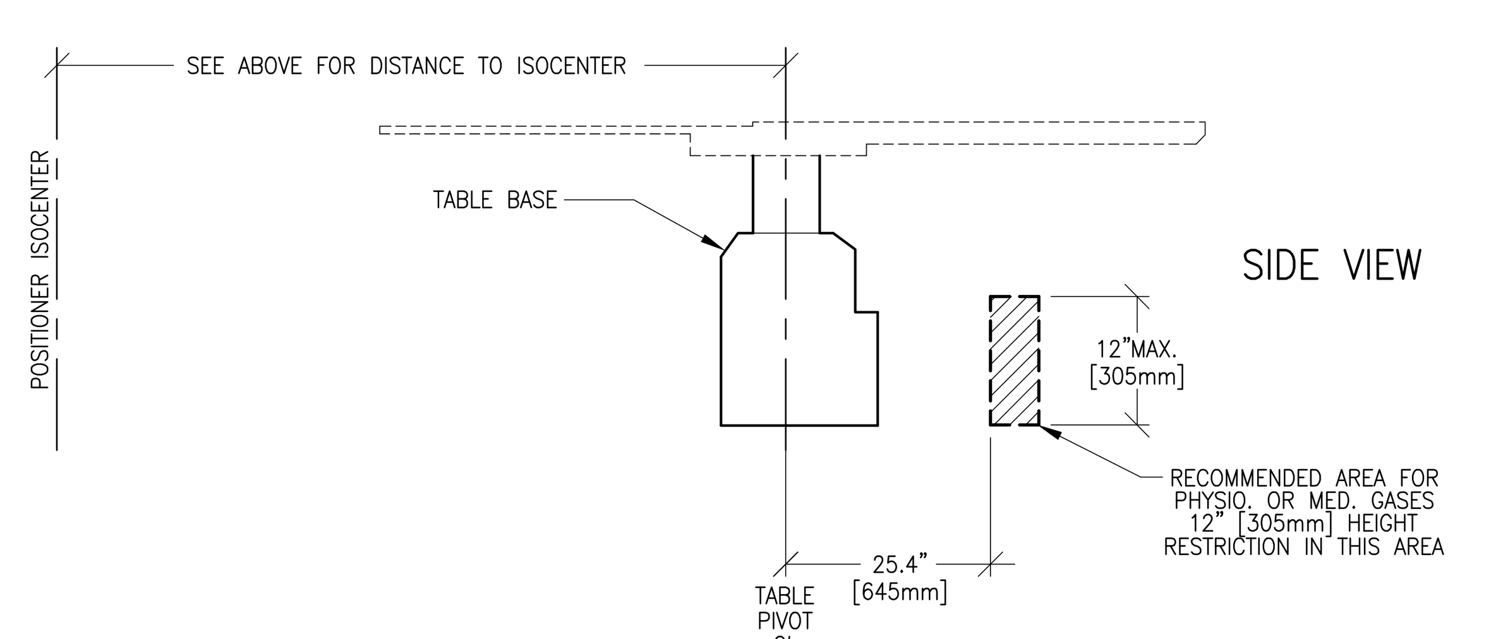


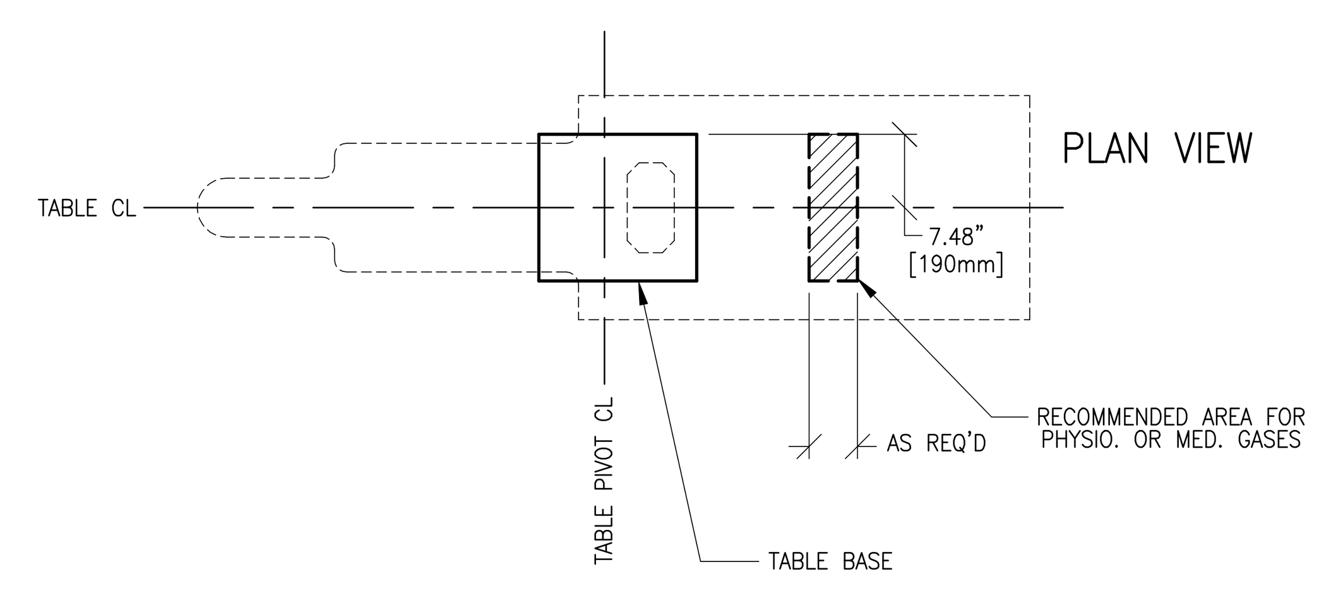


* FURNISHED BY GEHC AS PART OF INSTALLATION KIT

* FURNISHED BY GEHC AS PART OF INSTALLATION KIT

MEDICAL GAS FLOOR EXIT LOCATIONS





DETAIL NOT TO SCALE

Customer/Contractor Alert: It is the responsibility of the Customer or their Contractor to drill all anchor/thru–bolting holes for anchoring the positioner and table to the floor. Refer to GEHC document no. *2290880–2–100 for installation preparation and procedures.

NOTE: THRU BOLTING IS HIGHLY PREFERRED FOR THE INSTALLATION OF THE POSITIONER BASEPLATE AND OMEGA TABLE. HARDENED BOLTS AND 4" x 4" [102mm x 102mm] STEEL PLATES TO BE USED ARE SUPPLIED BY GE HEALTHCARE AS INDICATED ON THE ACTUAL DETAIL DRAWING. BE ADVISED, HOWEVER, THAT ADDITIONAL SUPPORT STRUCTURES: STEEL BEAMS, PLATES, CORE BORING OF MOUNTING HOLES, ETC., ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER OR HIS CONTRACTOR.

NOTE: IF THRU BOLTING IS NOT POSSIBLE, FLOOR ANCHORS CAN BE USED IF APPROVED BY CUSTOMERS STRUCTURAL ENGINEER. FOR ON GRADE INSTALLATIONS, MOUNTING KIT CAT. NO. **2286398** SHOULD BE ORDERED. ANCHORS INCLUDED IN KIT SHOULD BE APPROVED BY CUSTOMERS STRUCTURAL ENGINEER.

NOTE: BASEPLATES MUST BE LEVEL WITHIN 1/32" [0.79mm]

NOTE: JOISTS MUST BE SPANNED WITH STEEL REINFORCING. SIZE AND THICKNESS OF STEEL REINFORCING ARE DETERMINED BY THE ACTUAL PAN CONSTRUCTION ON SITE. STEEL PLATES, CHANNELS OR BEAMS MAY BE USED.

NOTE: DETERMINE THE POSITION OF THE "REBARS IN THE CONCRETE FLOOR SO ANCHOR HOLES WILL NOT RUN INTO THEM.

* DOCUMENT FURNISHED BY GEHC AS PART OF INSTALLATION KIT

POSITIONER BOLT FORCES FOR WORST CASE CONDITIONS

LOADS

HORIZONTAL ACCELERATION = 625 lbs. [284 Kg]
VERTICAL ACCELERATION = 209 lbs. [95 Kg]

BOLT TENSION (AT BOLT "A")
MAXIMUM TENSION = 881 lbs. [400 Kg]

BOLT SHEAR (U–ARM LOCKED)
MAXIMUM SHEAR = 120 lbs. [54 Kg]/BOLT

OMEGA TABLE BOLT FORCES FOR WORST CASE CONDITIONS

LOADS

BOLT TENSION
MAXIMUM TENSION = 1938 lbs. [880 Kg]/BOLT

BOLT SHEAR
MAXIMUM SHEAR = 407 lbs. [185 Kg]/BOLT

RQ – 140195 PIM R01

GE Healthcare
IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: STRUCTURAL DETAILS
MODALITY TYPE: INNOVA 2100/3100/4100

PROJECT TITLE: HYBRID OR
TYPICAL FINAL LAYOUT

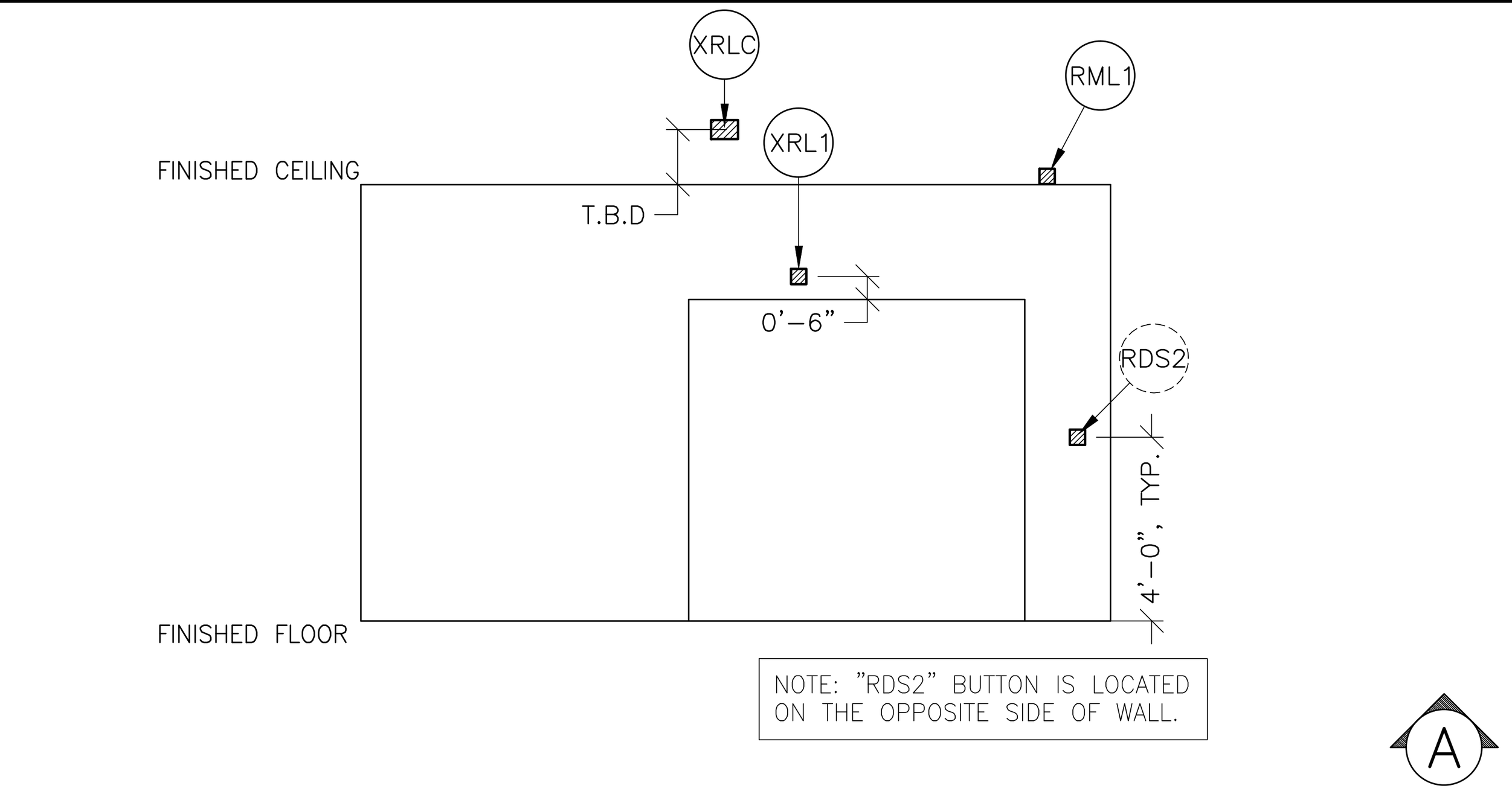
PROJECT	REVISION
5–94f	00

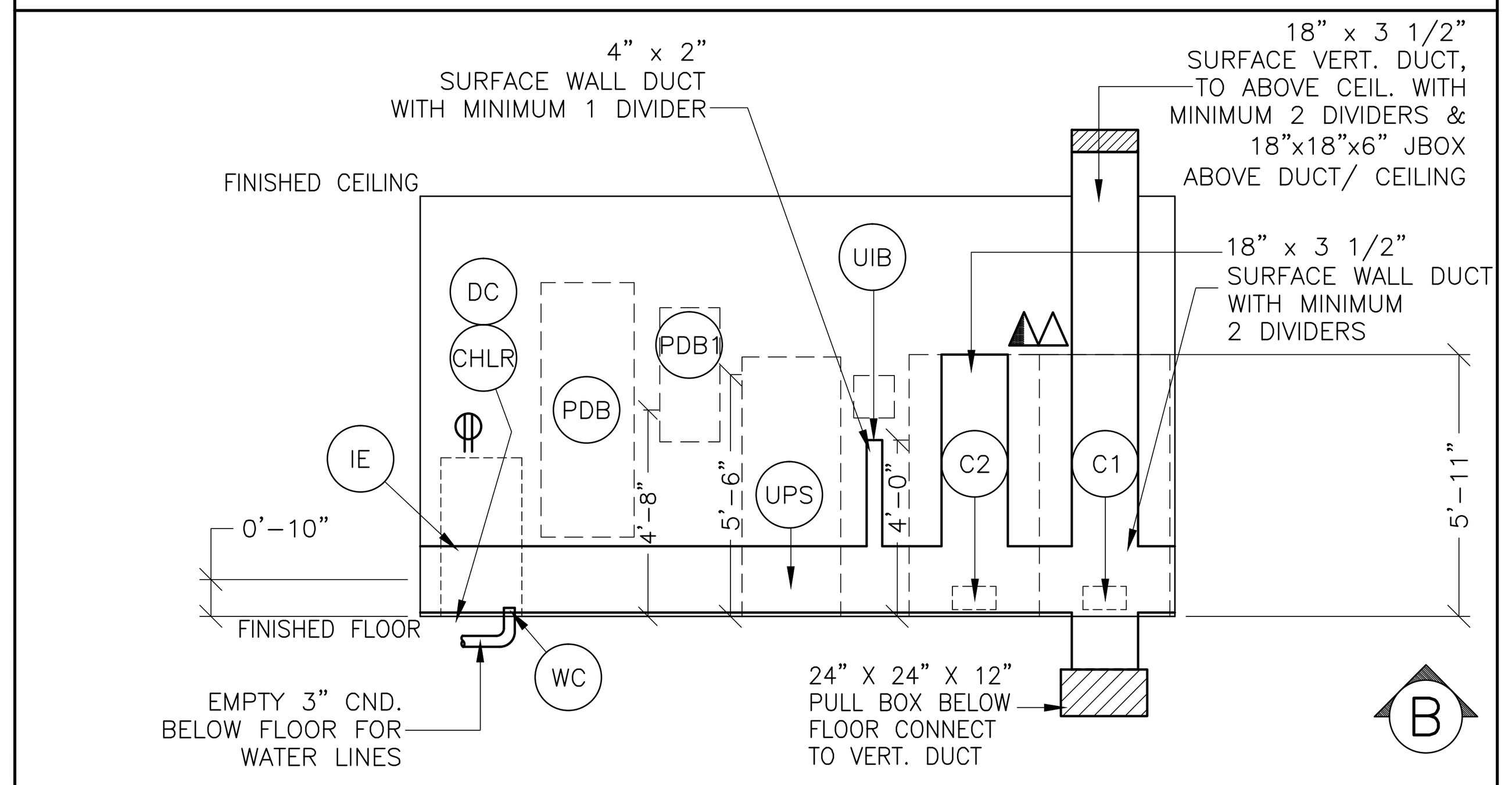
DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

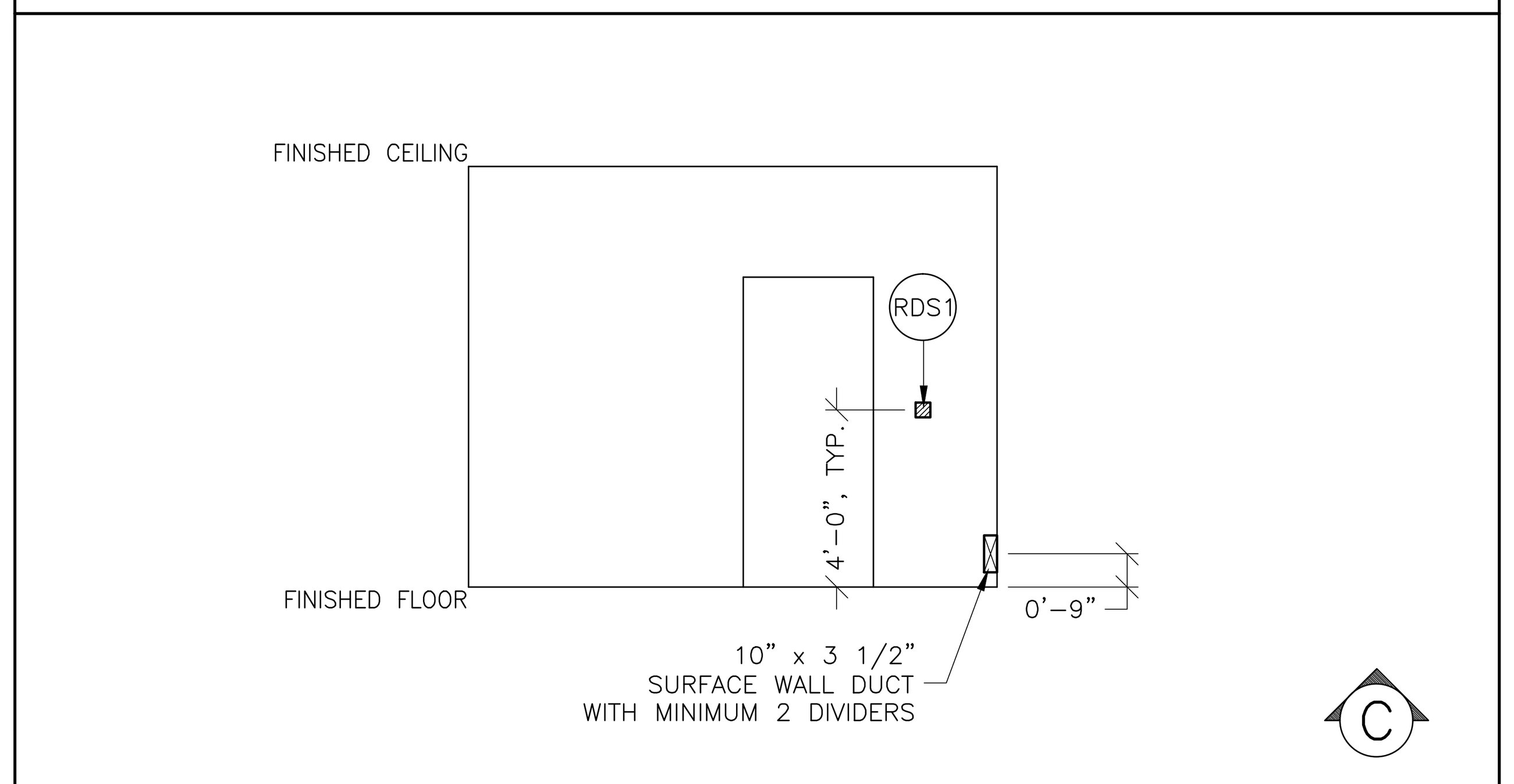
REVISION HISTORY:

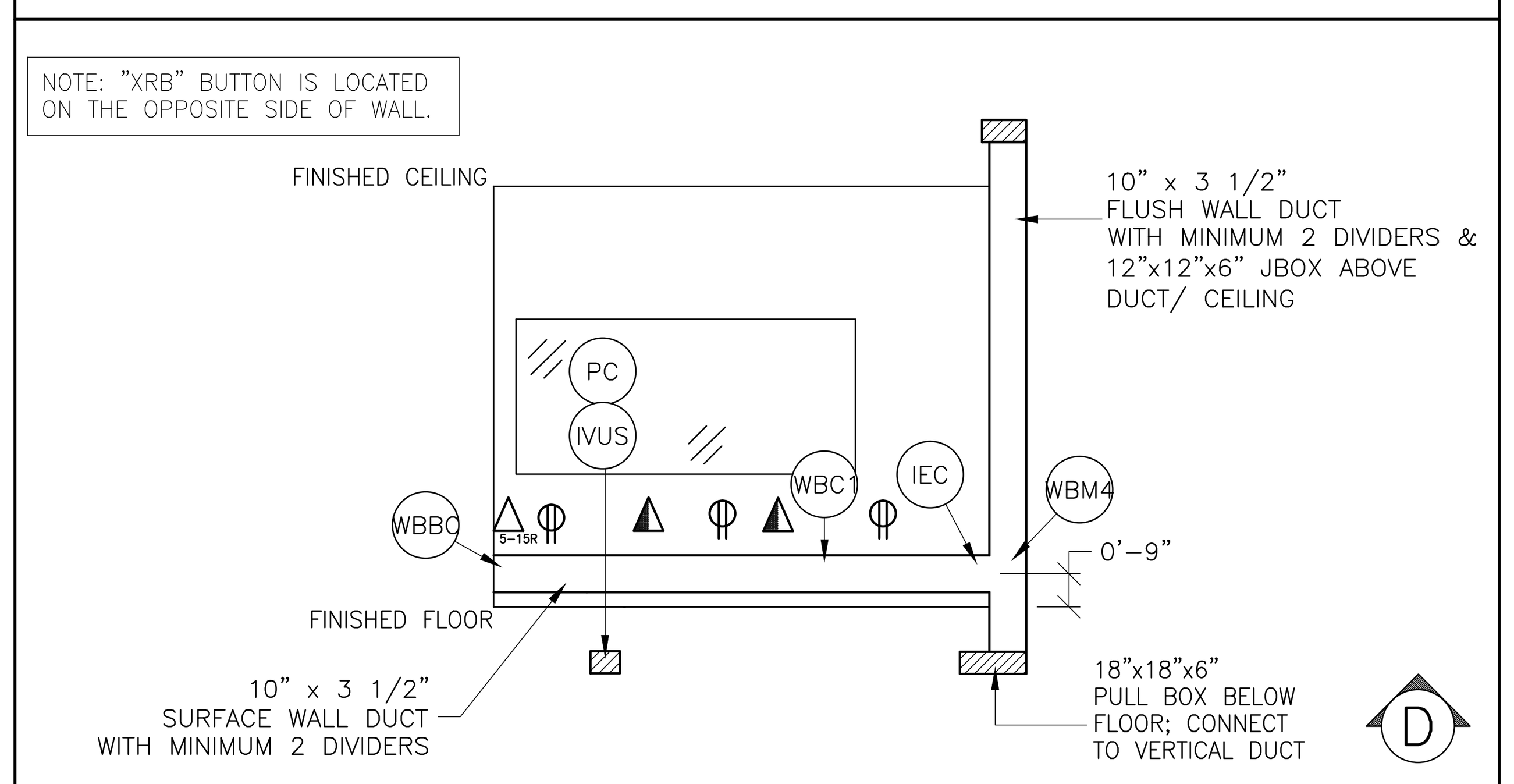
SHEET S2

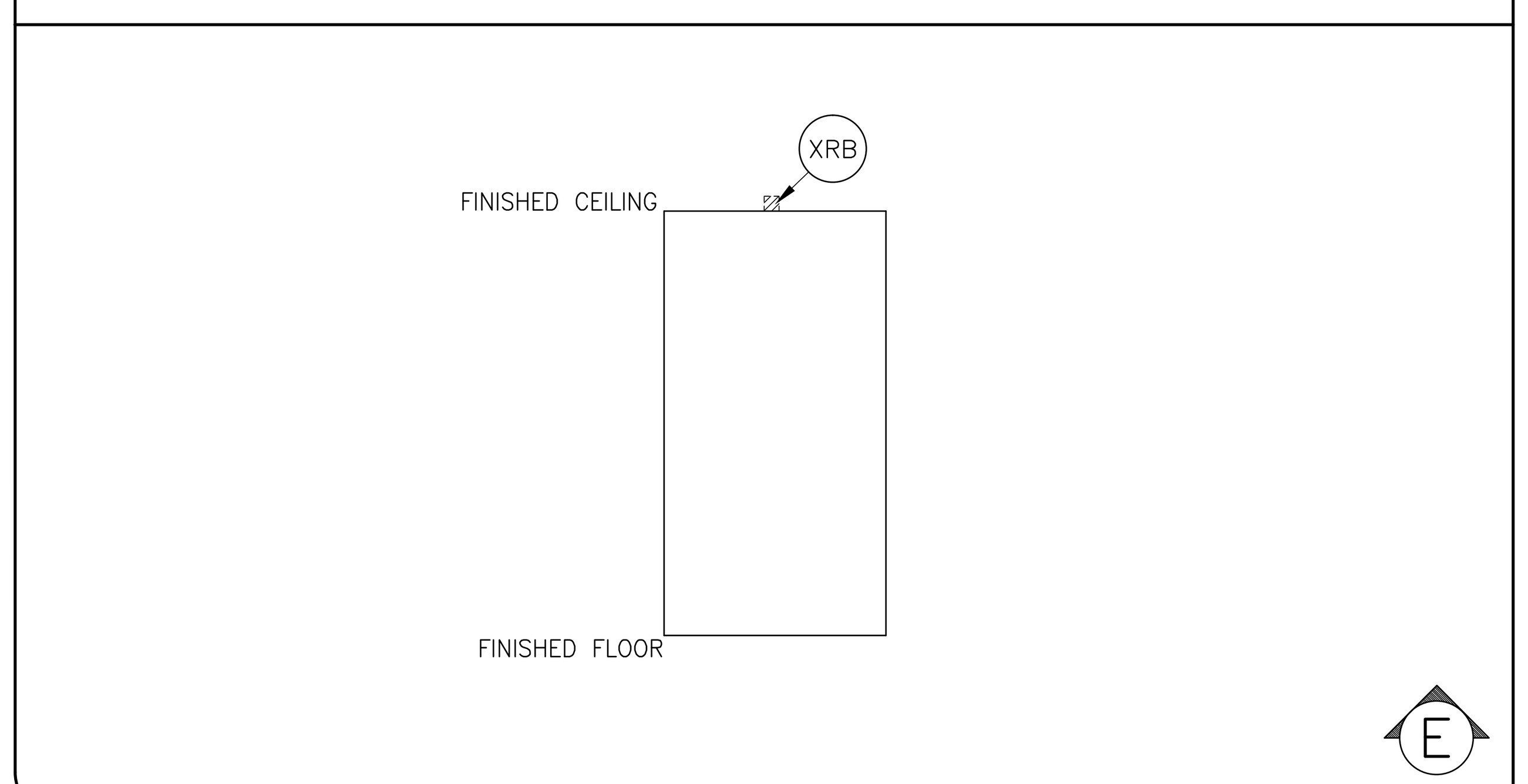
SCALE: 1/4" = 1'-0"











ELECTRICAL PLAN

RECOMMENDED CEILING HEIGHT = 9'-6"

ELECTRICAL OUTLET LEGEND

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS. HEIGHT ABOVE FLOOR DETERMINED BY LOCAL CODES UNLESS OTHERWISE SPECIFIED.

- DUPLEX HOSPITAL GRADE, DEDICATED WALL OUTLET 120-V, SINGLE PHASE POWER
- DEDICATED TELEPHONE LINE(S) (SEE ELECTRICAL DETAIL ELEC-1 OR ELEC-67)
- NETWORK OUTLET (SEE ELECTRICAL DETAILS ELEC-83 AND ELEC-84 OR ELEC-87)
- 5-15R NEMA RECEPTACLE, DEDICATED OUTLET 120-V, SINGLE PHASE POWER
- DUPLEX HOSPITAL GRADE, DEDICATED OUTLET 120-V EMERGENCY, SINGLE PHASE POWER, 15A

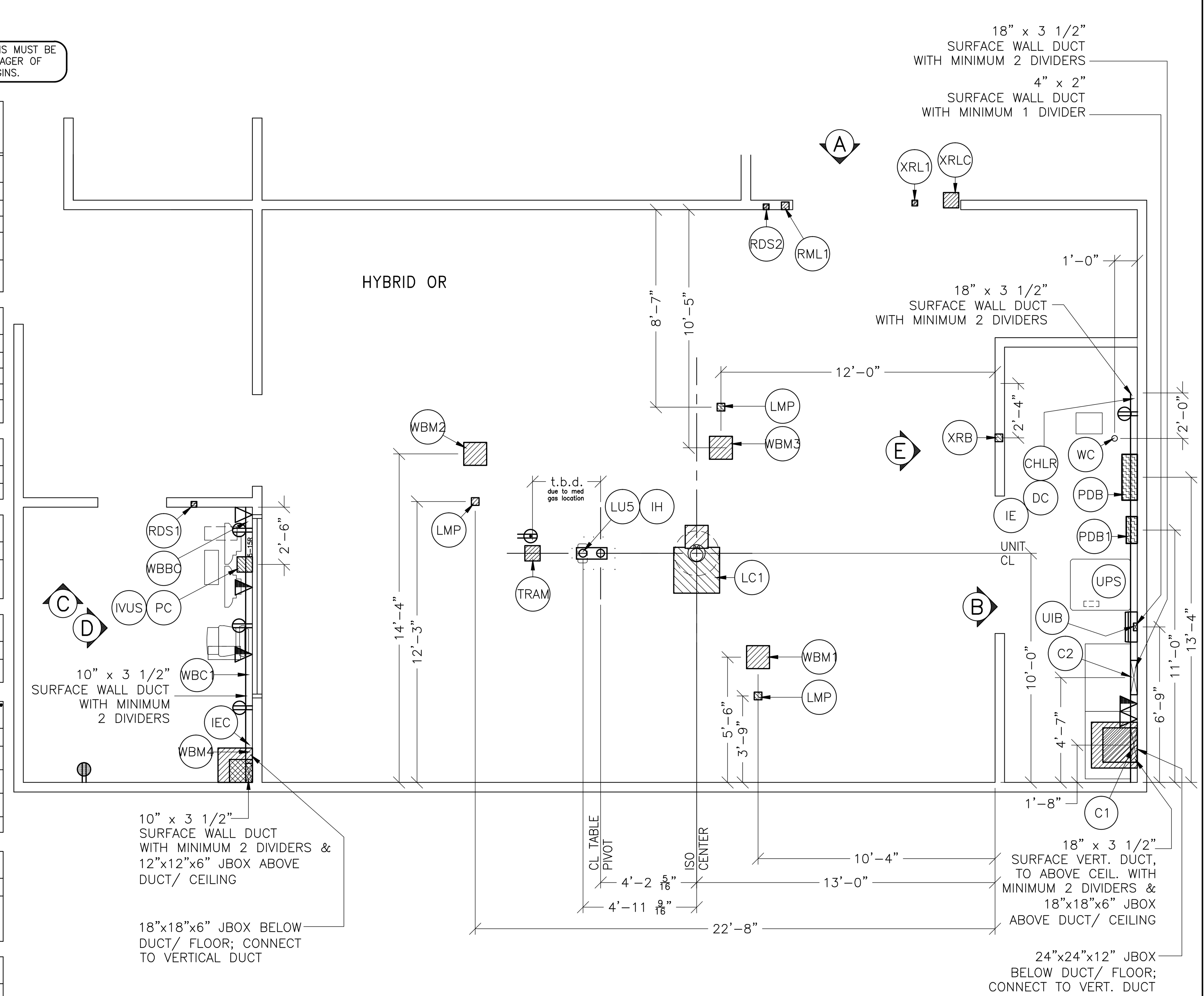
DUCT HATCHING LEGEND

- ABOVE CEILING DUCT
- UNDER FLOOR DUCT
- TRENCH DUCT (FLUSH FLOOR)
- SURFACE FLOOR DUCT
- CABLE TRAY
- ABOVE CEILING CONDUIT
- BELOW FLOOR CONDUIT

JUNCTION POINT NOTES

- ALL JUNCTION BOXES, CONDUIT, DUCT, DUCT DIVIDERS, SWITCHES, CIRCUIT BREAKERS, ETC., ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMERS ELECTRICAL CONTRACTOR.
- CONDUIT AND DUCT RUNS SHALL HAVE SWEEP RADIUS BENDS
- CONDUITS AND DUCT ABOVE CEILING OR BELOW FINISHED FLOOR MUST BE INSTALLED AS NEAR TO CEILING OR FLOOR AS POSSIBLE TO REDUCE RUN LENGTH.
- CEILING MOUNTED JUNCTION BOXES ILLUSTRATED ON THIS PLAN MUST BE INSTALLED FLUSH WITH FINISHED CEILING.
- ALL DUCTWORK MUST MEET THE FOLLOWING REQUIREMENTS:
  1. DUCTWORK SHALL BE METAL WITH DIVIDERS AND HAVE REMOVABLE, ACCESSIBLE COVERS.
  2. DUCTWORK SHALL BE CERTIFIED/RATED FOR ELECTRICAL POWER PURPOSES.
  3. DUCTWORK SHALL BE ELECTRICALLY AND MECHANICALLY BONDED TOGETHER IN AN APPROVED MANNER.
  4. PVC AS A SUBSTITUTE MUST BE USED IN ACCORDANCE WITH ALL LOCAL AND NATIONAL CODES.
- ALL OPENINGS IN ACCESS FLOORING ARE TO BE CUT OUT AND FINISHED OFF WITH GROMMET MATERIAL BY THE CUSTOMERS CONTRACTOR.
- GENERAL CONTRACTOR TO INSERT PULL CORDS FOR ALL CABLE RUN CONDUITS BETWEEN THE EQUIPMENT ROOM AND THE OPERATORS CONTROL ROOM.
- 10 FOOT PIGTAILS AT ALL JUNCTION POINTS.
- ALL WIRING MUST BE THHN OR TFFN STRANDED COPPER THERMOPLASTIC 600 VOLT OR EQUIVALENT INSULATION. **ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.**
- GROUNDING IS CRITICAL TO EQUIPMENT FUNCTION AND PATIENT SAFETY. SITE MUST CONFORM TO WIRING SPECIFICATIONS SHOWN ON THIS PLAN.

A COMPLETE REVIEW OF ELECTRICAL OPTIONS MUST BE DISCUSSED WITH YOUR GE PROJECT MANAGER OF INSTALLATIONS, BEFORE BIDDING BEGINS.



CONDUIT RUNS: INNOVA 2100/3100/4100 PLUS

CONDUITS REQUIRED FOR BASE SYSTEM (CONDUITS ARE LOCATED BELOW FLOOR) — REV DATE: 10/01/08

LC1	TO	C1/C2	FOUR 4" CNDS.
LC1	TO	LU5	ONE 4" & ONE 2" CND.
LU5	TO	C1/C2	ONE 4" & ONE 2" CND. **(FOR ACHA INSPECTION)**
WBC1	TO	C1/C2	ONE 3 1/2" & TWO 2 1/2" CNDS.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "XRLC" (CONDUITS ARE LOCATED ABOVE CEILING) — REV DATE: 10/01/08

XRLC	TO	XRL1	ONE 1/2" CND.
XRLC	TO	RML1	ONE 1/2" CND.
XRLC	TO	C2	ONE 1/2" CND.
XRLC	TO	120-V 1ø POWER	CND. AS REQ'D

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "WBBC" (CONDUITS ARE LOCATED BELOW FLOOR) — REV DATE: 10/01/08

WBBC	TO	LU5	ONE 2 1/2" CND.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "XRB" (CONDUITS ARE LOCATED ABOVE CEILING) — REV DATE: 10/01/08

XRB	TO	POWER STRIP IN CONTROL AREA	ONE 3/4" CND.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "LMP" (CONDUITS ARE LOCATED ABOVE CEILING) — REV DATE: 10/01/08

LMP	TO	120-V 1ø POWER	CND. AS REQ'D

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "WBM1 & WBM3" (CONDUITS ARE LOCATED ABOVE CEILING) — REV DATE: 04/06/09

WBM1	TO	C1	TWO 2 1/2" CNDS. **(FOUR MONITOR SUSPENSION)**
WBM2	TO	C1	ONE 2 1/2" CND. **(TWO MONITOR SUSPENSION)**
WBM3	TO	C1	ONE 2 1/2" CND. **(TWO MONITOR SUSPENSION)**
WBM4	TO	WBC1	ONE 2 1/2" CND.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "WC" (CONDUIT IS LOCATED IN OR BELOW FLOOR) — REV DATE: 04/06/09

WC	TO	LC1	ONE EMPTY 3" CND. **(FOR WATER LINES)** **(ABOVE GRADE: RUN TO 12x12x6" BOX AT LC1) (ON GRADE: RUN TO KEYHOLE FITTING AT LC1)**

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FOR AN "INJECTOR" (CONDUITS ABOVE CEILING OR BELOW FLOOR) — REV DATE: 10/01/08

IE	TO	IH	ONE 2 1/2" CND.
IE	TO	IEC	ONE 2 1/2" CND.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "PDB" (CONDUITS ARE LOCATED ABOVE CEILING — REV DATE: 04/06/09

PDB	TO	UPS	TWO CNDS. AS REQ'D.
PDB	TO	UIB	ONE 1 1/2" CND.
PDB	TO	RDS1	ONE 1/2" CND.
PDB	TO	RDS2	ONE 1/2" CND.
PDB	TO	C1	ONE CND. AS REQ'D. FOR FOUR CUSTOMER SUPPLIED POWER/ GROUND RUNS
PDB	TO	C1	ONE 1" CND. FOR TWO GE SUPPLIED SIGNAL CABLES
PDB	TO	PDB1	ONE CND. AS REQ'D.
PDB1	TO	480-V 3ø POWER	CND. AS REQ'D
PDB	TO	IE	(INJECTOR POWER) CONSULT MFG. (RUN IN DUCT/ CONDUIT SYSTEM)

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUIT RUNS: PHYSIO MONITORING/ IVUS

CONDUITS REQUIRED FOR MAC LAB — REV DATE: 10/01/08

PC/IVUS	TO	WBM1	ONE 3" CND. **(LOCATED ABOVE CEILING)**
PC/IVUS	TO	TRAM	ONE 3 1/2" CND. **(LOCATED IN/BELOW FLOOR)**

FEEDER TABLE

REV. DATE: 03/25/08

- CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.
- RECOMMENDED FEEDER SIZES FROM DIST. TRANS. TO ROOM DISCONNECT. CALCULATIONS ARE AT NOMINAL VOLTAGE BASED UPON 1/0 WIRE SIZE FROM ROOM DISCONNECT TO POWER CABINET WITH A MAXIMUM RUN OF 25 FT.
- NEUTRAL MUST BE TERMINATED INSIDE THE MAIN DISCONNECT PANEL AND NOT AT ANY GE CABINET.
- THE GROUNDING CONDUCTOR ( ) WILL BE A 2 AWG MINIMUM. 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 AND NEUTRAL.
- * MINIMUM WIRE SIZE FOR CIRCUIT BREAKER, BASED ON RECOMMENDED OVERCURRENT PROTECTION.
- FOR A FULL SYSTEM UPS, REFER TO ELECTRICAL DETAILS FOR UPS FEEDER WIRES.
- IF THE FEEDER IS BIGGER THAN 3/0, THE HOSPITAL MUST PROVIDE AND INSTALL A REDUCTION BOX.

RUN LENGTH IN FEET	POWER SUPPLY VOLTAGE 324-396 360		342-418 380		360-440 400		378-462 420		396-484 440		414-506 460		432-528 480	
	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND
50	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)
100	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)
150	3/0	(2)	2/0	(2)	2/0	(2)	1/0	(2)	1/0	(2)	1/0	(2)	*1/0	(2)
200	4/0	(2)	4/0	(2)	3/0	(2)	3/0	(2)	2/0	(2)	2/0	(2)	1/0	(2)
250	300M	(2)	300M	(2)	250M	(2)	4/0	(2)	3/0	(2)	3/0	(2)	3/0	(2)
300	400M	(2)	350M	(2)	300M	(2)	250M	(2)	4/0	(2)	4/0	(2)	4/0	(2)
350	600M	(2)	500M	(2)	400M	(2)	350M	(2)	300M	(2)	250M	(2)	4/0	(2)
400	700M	(2)	600M	(2)	500M	(2)	400M	(2)	350M	(2)	300M	(2)	300M	(2)

JUNCTION POINT DESCRIPTIONS

THE FOLLOWING MATERIALS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER'S ELECTRICAL CONTRACTOR

POINT	DESCRIPTION	QTY.	HARDWARE	DETAIL NO., SHT. E3
C1	ATLAS CABINET	1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6 ELEC-2
C2	ATLAS CABINET	1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
CHLR	RECIRCULATING WATER CHILLER	2	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
DC	DETECTOR CHILLER	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
IE	INJECTOR ELECTRONICS	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
IEC	INJECTOR CONTROL	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
IH	INJECTOR HEAD	1	EXTERNALLY CONNECTED AT TABLE BASE	
IVUS	IVUS WORKSTATION	1	SHARED CONNECTION WITH "PC"	
LC1	INNOVA LC	1 1 2 4 1 1 1 4	24 X 24 X 12 IN. BOX SUITABLE LENGTH OF 6 IN. DIA. THREADED CONDUIT OR PIPE 6 IN. DIA. LOCKNUTS 1 IN. DIA. LOCKNUT GE SUPPLIED FITTING 12 X 12 X 6 IN. BOX 6 IN. DIA. BUSHING 1 IN. DIA. BUSHING	ELEC-100
LMP	SURGICAL LAMP	1 1 1	COVERPLATE 4 X 4 X 4 IN. BOX 1/2 IN. DIA. CHASE NIPPLE	ELEC-8
LU5	OMEGA TABLE	1 2 1	COVERPLATE 4 IN. DIA. BUSHING & LOCKNUT 6 X 6 X 16 IN. BOX	ELEC-48 ELEC-134
PC	WORKSTATION	1 1 1 1	COVERPLATE 8 X 8 X 6 IN. FLOOR BOX 3 1/2 IN. DIA. CHASE NIPPLE 12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-1 ELEC-13 ELEC-6 ELEC-2
PDB	MAIN DISCONNECT	1	150-AMP PANEL INCLUDED IN ORDER	ELEC-161
PDB1	SYSTEM DISCONNECT	1	150-AMP DISCONNECT BREAKER (CUSTOMER SUPPLIED)	
RDS1	EMERGENCY OFF	1	PROVIDE A SINGLE GANG, 2 1/8 IN. DEEP, FLUSH MTD. WALL BOX.	ELEC-16
RDS2	EMERGENCY OFF	1	PROVIDE A SINGLE GANG, 2 1/8 IN. DEEP, FLUSH MTD. WALL BOX.	ELEC-16
RML1	ROOM LIGHTS *AVAILABLE FROM GE, CALL: 800-558-5102	1 1 1	COVERPLATE SINGLE GANG BOX *E4502SS 24V X-RAY ROOM WARNING LIGHT AND ROOM LIGHT CONTROLLER OR EQUIVALENT.	ELEC-157
TRAM	REMOTE ACQUISITION UNIT	1 1 1	COVERPLATE 3 1/2 IN. DIA. NIPPLE 8 X 8 X 6 IN. FLOOR BOX	ELEC-13
UIB	UPS INTERFACE BOX	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
UPS	UPS CABINET	1 1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER 6 FT. OF 2 IN. FLEX CONDUIT AND CONNECTORS	ELEC-5 ELEC-6
WBBC	BOLUS WALLBOX	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
WBC1	OPERATORS CONSOLE	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
WBM1	TV MONITOR	1 2 1	COVERPLATE 2 1/2 IN. DIA. CHASE NIPPLE 12 X 12 X 6 IN. FLUSH CEILING BOX	ELEC-8
WBM2	TV MONITOR	1 1 1	COVERPLATE 2 1/2 IN. DIA. CHASE NIPPLE 12 X 12 X 6 IN. FLUSH CEILING BOX	ELEC-8
WBM3	TV MONITOR	1 1 1	COVERPLATE 2 1/2 IN. DIA. CHASE NIPPLE 12 X 12 X 6 IN. FLUSH CEILING BOX	ELEC-8
WBM4	TV MONITOR	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
WC	WATER CHILLER HOSE OUTLET	1	3 IN. CONDUIT STUBBED 2 IN. ABOVE FLOOR	ELEC-9
XRB	XR BUZZER (LOCATED ABOVE CEILING)	1 1 1	COVERPLATE 4 X 4 X 4 IN. BOX 3/4 IN. DIA CHASE NIPPLE	ELEC-8
XRL1	WARNING LIGHT	1 1 1	COVERPLATE SINGLE GANG BOX 'X-RAY ON' INCANDESCENT LIGHT FIXTURE - DO NOT USE FLUORESCENT FIXTURES.	ELEC-157
XRLC	WARNING LIGHT CONTROLLER *AVAILABLE FROM GEHC, CALL: 800-558-5102 OR LOCAL GE INSTALLATION PROJECT MGR.	1	E4502SS WARNING LIGHT & ROOM LIGHT CONTROL OR EQUIVALENT MAX 24V CONTROLLER	ELEC-157

CONTACT YOUR LOCAL CARDIO VASCULAR PROJECT MANAGER, INSTALLATIONS (CVPMI) FOR ANY MODIFICATIONS TO ROOM LAYOUT.

BEFORE PROCEDING WITH INSTALLATION OF CEILING MOUNTED FIXTURES, PLEASE REFER TO STRUCTURAL SHEET S1 FOR LOCATIONS OF UNISTRUT AND OTHER STRUCTURAL SUPPORTED EQUIPMENT IN CEILING.

NOTE:
SUGGESTION THAT COLOR CODED PHASE CABLING BE USED EITHER BY COLORED WIRES OR COLORED TAPE.

CONTRACTOR SUPPLIED AND INSTALLED WIRING

ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS.

WIRE RUN, FROM - TO	QUANTITY, WIRE SIZE/COLOR
3 PHASE > PDB1	3-BLACK, 1-WHITE, 1-GREEN (REFER TO FEEDER TABLE)
PDB1 > PDB	3-BLACK, 1-WHITE, 1-GREEN (REFER TO FEEDER TABLE)
PDB > C1 (JEDI)	3-1/0 BLACK, 1-1/0 GREEN
PDB > C1 (PDU)	3-NO. 10 BLACK, 1-NO. 10 GREEN
PDB > C2	3-NO. 8 BLACK, 1-NO. 8 GREEN
PDB > CHLR	3-NO. 10 BLACK, 1-NO. 10 GREEN
PDB > UPS	6-NO. 6 BLACK, 1-NO. 6 WHITE, 2-NO. 6 GREEN
PDB > RDS1	2-NO. 14 BLACK, 2-NO. 14 WHITE, 1-NO. 14 GREEN
PDB > RDS2	2-NO. 14 BLACK, 2-NO. 14 WHITE, 1-NO. 14 GREEN
RML1 > XRLC	1-NO. 14 BLACK, 1-NO. 14 WHITE, 1-NO. 14 GREEN
XRLC > 1 PHASE	1-NO. 14 BLACK, 1-NO. 14 WHITE, 1-NO. 14 GREEN
XRLC > C2	1-NO. 14 BLACK, 1-NO. 14 WHITE, 1-NO. 14 GREEN
XRL1 > XRLC	1-NO. 14 BLACK, 1-NO. 14 WHITE, 1-NO. 14 GREEN
120-V > LMP	1-BLACK, 1-WHITE, 1-GREEN - (SIZE AS REQUIRED)

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

RQ - 140195 PIM R01

GE Healthcare
IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL LAYOUT

MODALITY TYPE: INNOVA 2100/3100/4100

PROJECT TITLE: HYBRID OR

TYPICAL FINAL LAYOUT

PROJECT	REVISION
5-94f	00

DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

REVISION HISTORY:

SHEET E1

INTERCONNECT DIAGRAM

DATED: 10/27/09

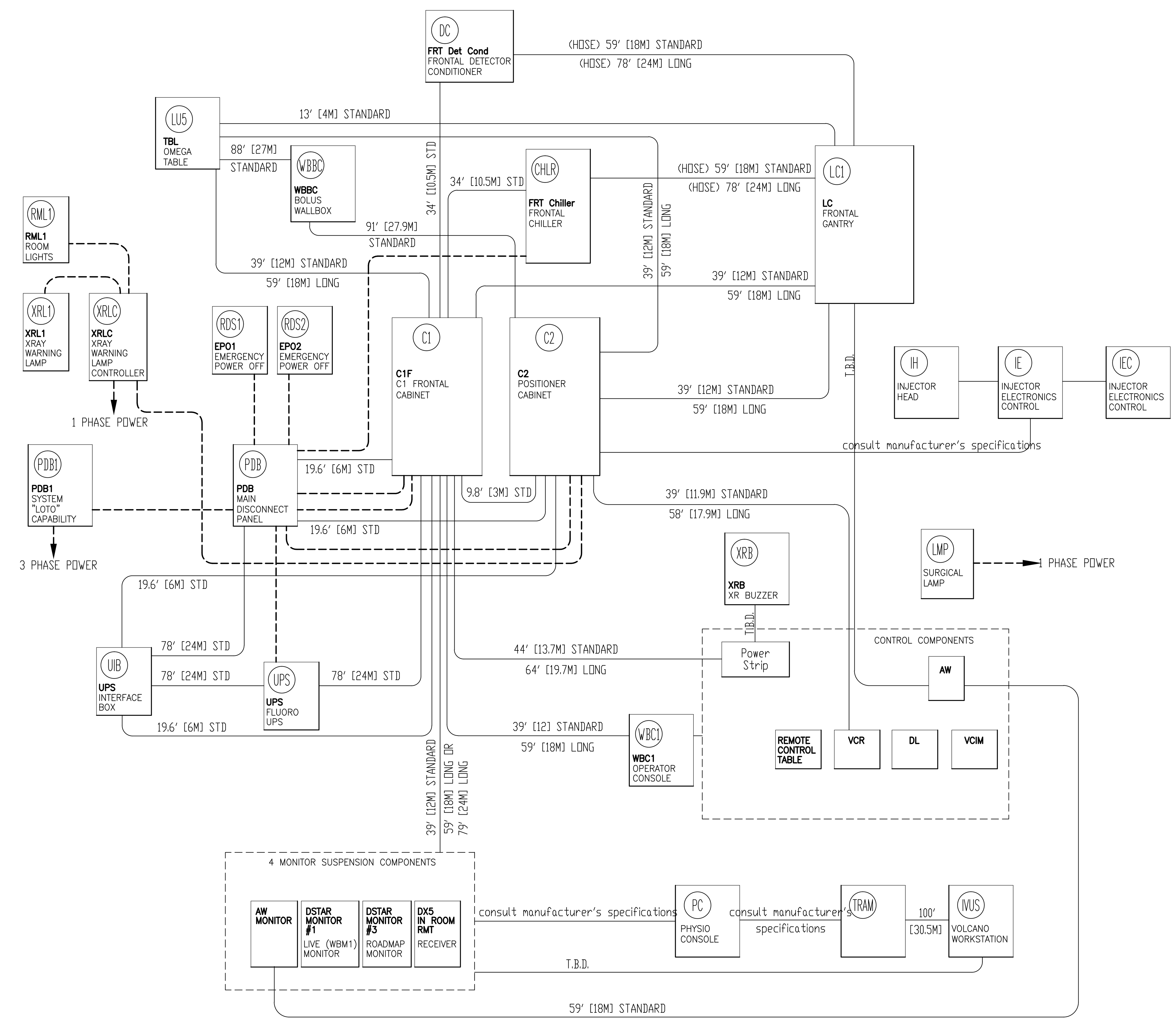


DIAGRAM KEY

- - - - CUSTOMER/CONTRACTOR SUPPLIED WIRING. ROUTE IN ADEQUATE CONDUIT OR RACEWAY.

——— GE FURNISHED CABLE RUNS. ROUTE IN EMPTY CONDUIT OR RACEWAY.

POWER SPECIFICATIONS

INNOVA SYSTEMS

REV. DATE: 01/04/07

VOLTAGE

PRIMARY SOURCE IS REQUIRED FOR ALL INSTALLATIONS.
RANGE OF LINE VOLTAGES :
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 ALLOWABLE INPUT VOLTAGES/ CURRENT DEMAND

NOMINAL VOLTAGE	NORMAL RANGE ±10 PERCENT	CURRENT (AMPS)	
		MAX. MOMENTARY	CONTINUOUS
360	324–396	304	32
380	342–418	289	31
400	360–440	274	29
420	378–462	264	28
440	396–484	249	26
460	414–506	238	25
480	432–528	228	24

ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE

NOTE

LOW LINE CONDITIONS MAY INHIBIT SOME HIGH kVp TECHNIQUES. THE GENERATOR AUTOMATICALLY ESTABLISHES THESE INHIBITS BASED ON ACTUAL LINE CONDITIONS AND SYSTEM REGULATION.

PHASE–BALANCE.

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.

POWER DEMAND

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

TABLE B MAXIMUM MOMENTARY POWER DEMAND.

DEMAND	ADVANTX 100
kVa * POWER FACTOR AT	171 0.9
mA	1250
kVp	80

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

DISTRI–BUTION TRANS–FORMER

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

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.

NOTE 5: CONVENIENCE OUTLETS ARE NOT ILLUSTRATED. THEIR NUMBER AND LOCATION ARE TO BE SPECIFIED BY OTHERS. 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.

NOTE 6: GENERAL ROOM ILLUMINATION IS NOT ILLUSTRATED. CAUTION SHOULD BE TAKEN TO AVOID EXCESSIVE HEAT FROM OVERHEAD SPOTLIGHTS. DAMAGE CAN OCCUR TO CEILING MOUNTING COMPONENTS AND WIRING IF HIGH WATTAGE BULBS ARE USED. RECOMMEND LOW WATTAGE BULBS NO HIGHER THAN 75 WATTS AND USE DIMMER CONTROLS (EXCEPT MR). DO NOT MOUNT LIGHTS DIRECTLY ABOVE AREAS WHERE CEILING MOUNTED ACCESSORIES WILL BE PARKED.

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.

RQ – 140195 PIM R01

GE Healthcare
IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL SPECIFICATIONS
MODALITY TYPE: INNOVA 2100/3100/4100

PROJECT TITLE: HYBRID OR
TYPICAL FINAL LAYOUT

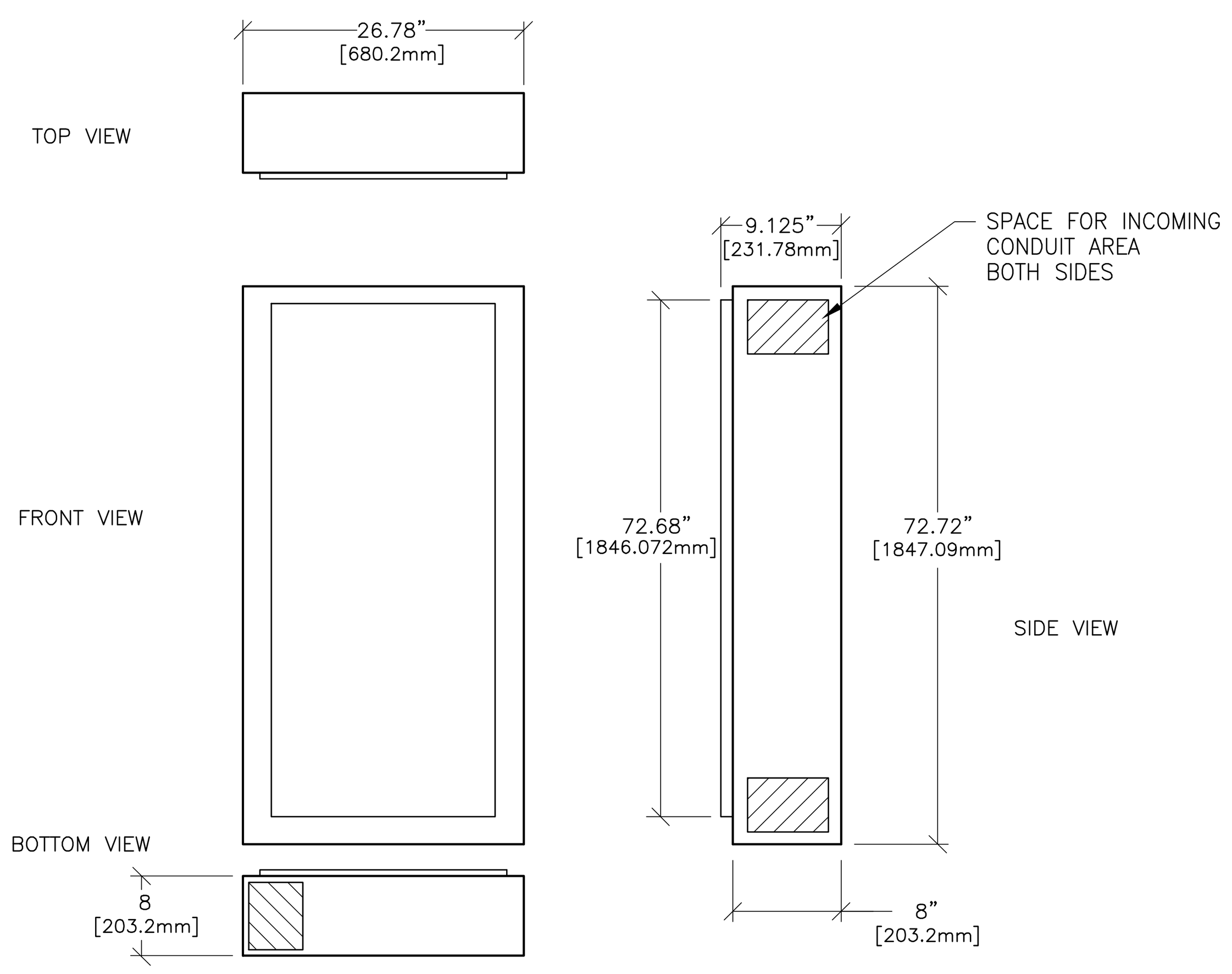
PROJECT	REVISION
5–94f	00

DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

REVISION HISTORY:

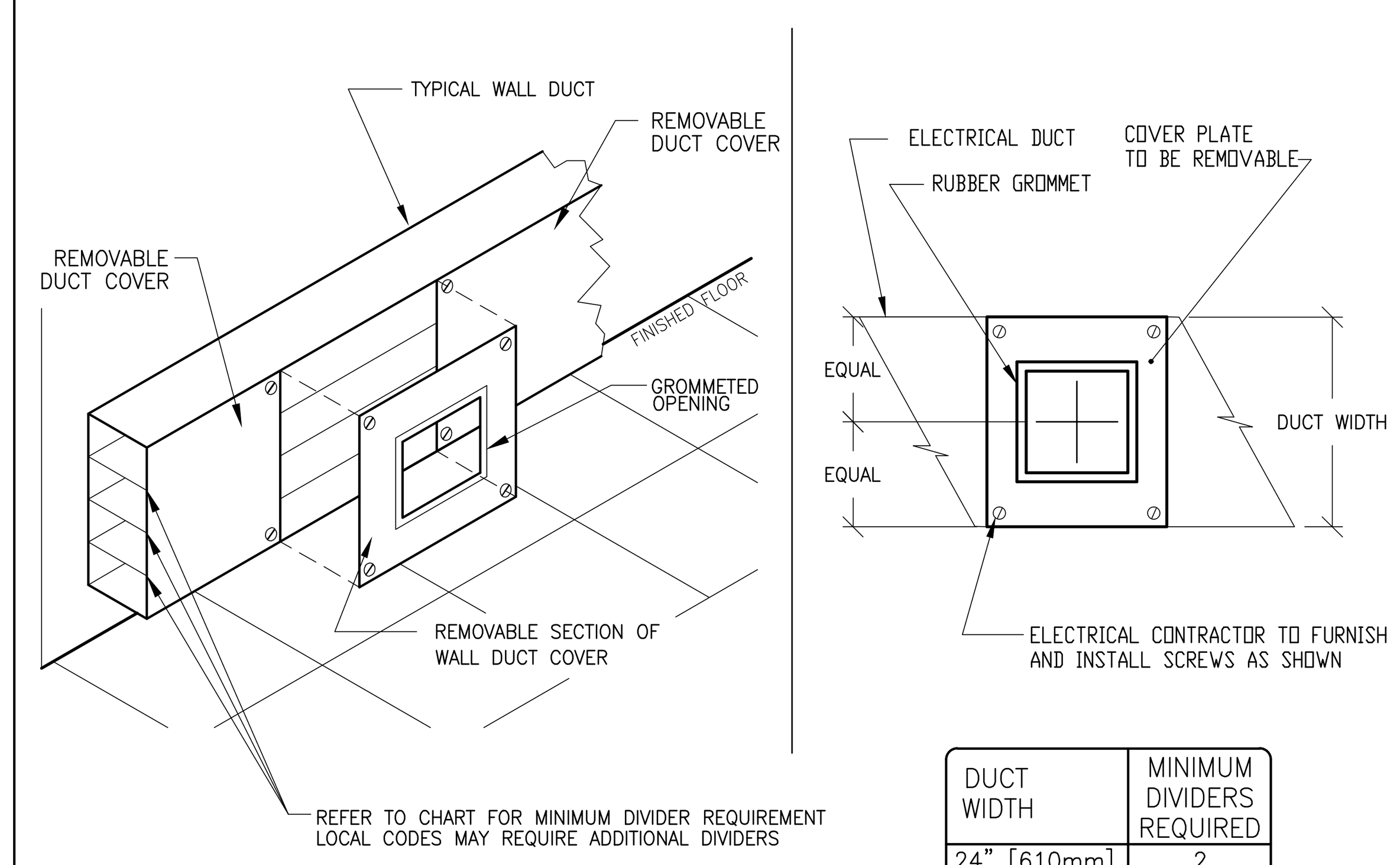
SHEET
E2

ELECTRICAL DETAIL
INNOVA PLUS MAIN DISCONNECT PANEL
ELEC-161
REV. DATE: 04/30/09



DETAIL NOT TO SCALE

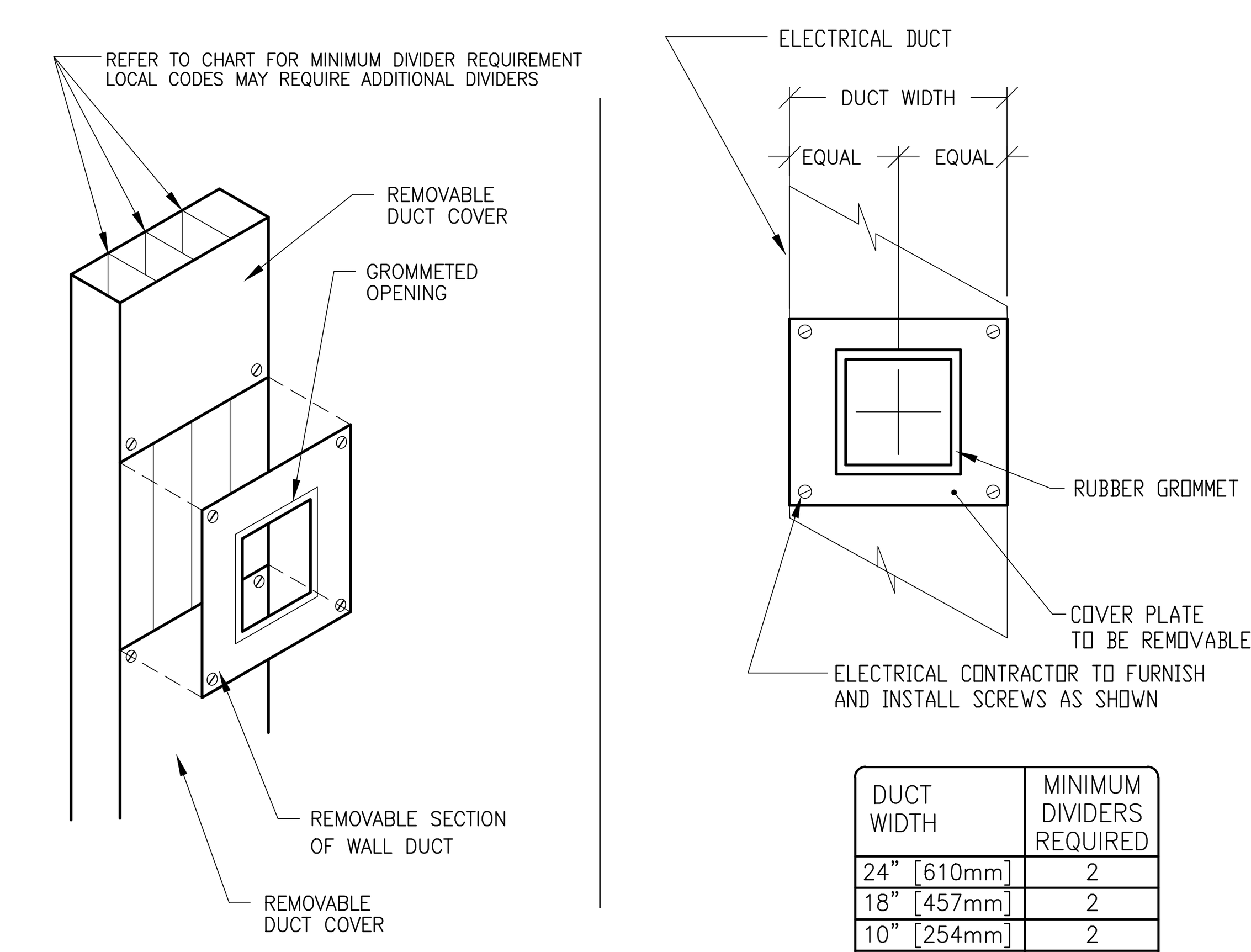
ELECTRICAL DETAIL
HORIZONTAL WALL DUCT (TYPICAL)
ELEC-5
REV. DATE: 03/19/04



DUCT WIDTH		MINIMUM DIVIDERS REQUIRED
24"	[610mm]	2
18"	[457mm]	2
10"	[254mm]	2
6"	[152mm]	1
4"	[102mm]	1

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
VERTICAL WALL DUCT (TYPICAL)
ELEC-6
REV. DATE: 03/19/04



DUCT WIDTH		MINIMUM DIVIDERS REQUIRED
24"	[610mm]	2
18"	[457mm]	2
10"	[254mm]	2
6"	[152mm]	1
4"	[102mm]	1

DETAIL NOT TO SCALE

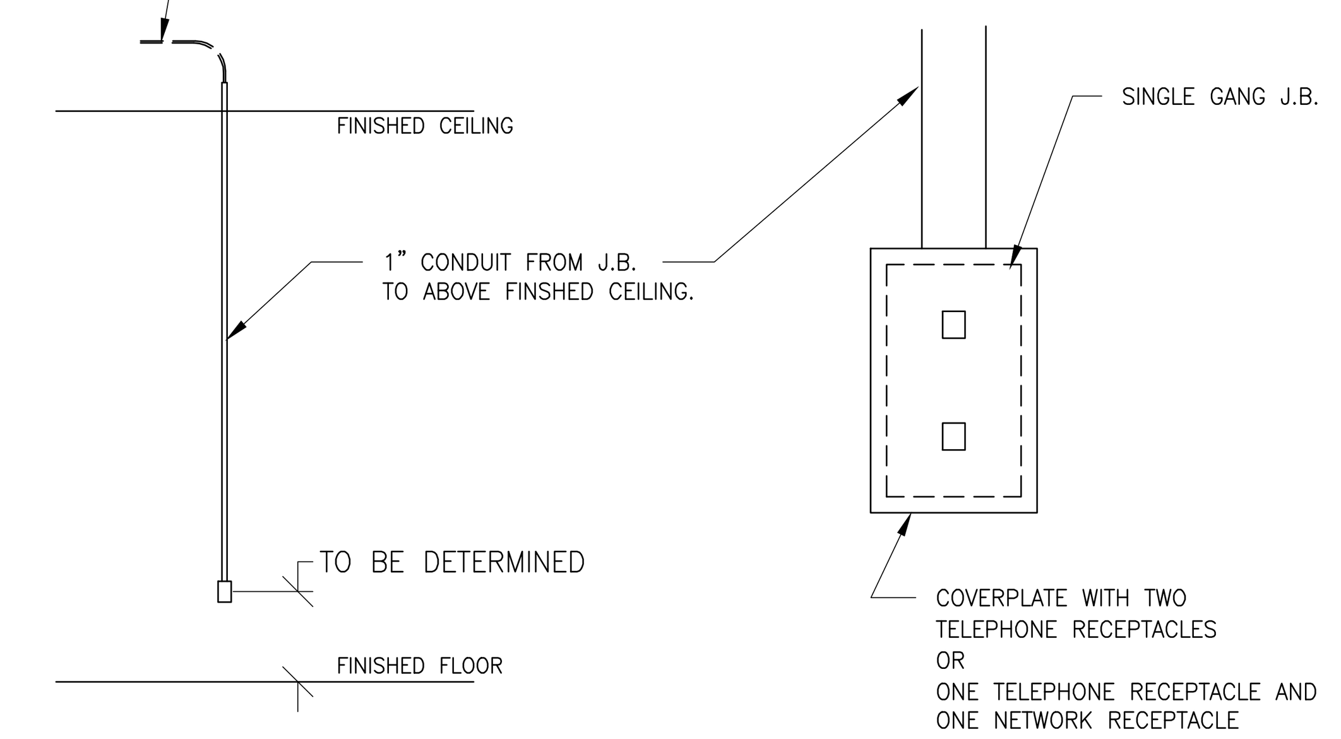
ELECTRICAL DETAIL
INSITE CONNECTION (TYPICAL)
ELEC-1
REV. DATE: 04/24/02

ONE OF THE FOLLOWING TWO SELECTIONS MUST BE INSTALLED AT THE LOCATION SHOWN ON THE ELECTRICAL PLAN (SHEET E1) FOR GE INSITE CONNECTION BASED UPON SYSTEM CONFIGURATION.

A) ONE INTERNET ACCESSIBLE VIRTUAL PRIVATE NETWORK (VPN) CONNECTION WITH A STATIC IP ADDRESS, AND ONE TELEPHONE LINE – DEDICATED-DIRECT-DIALING, VOICE GRADE.

OR

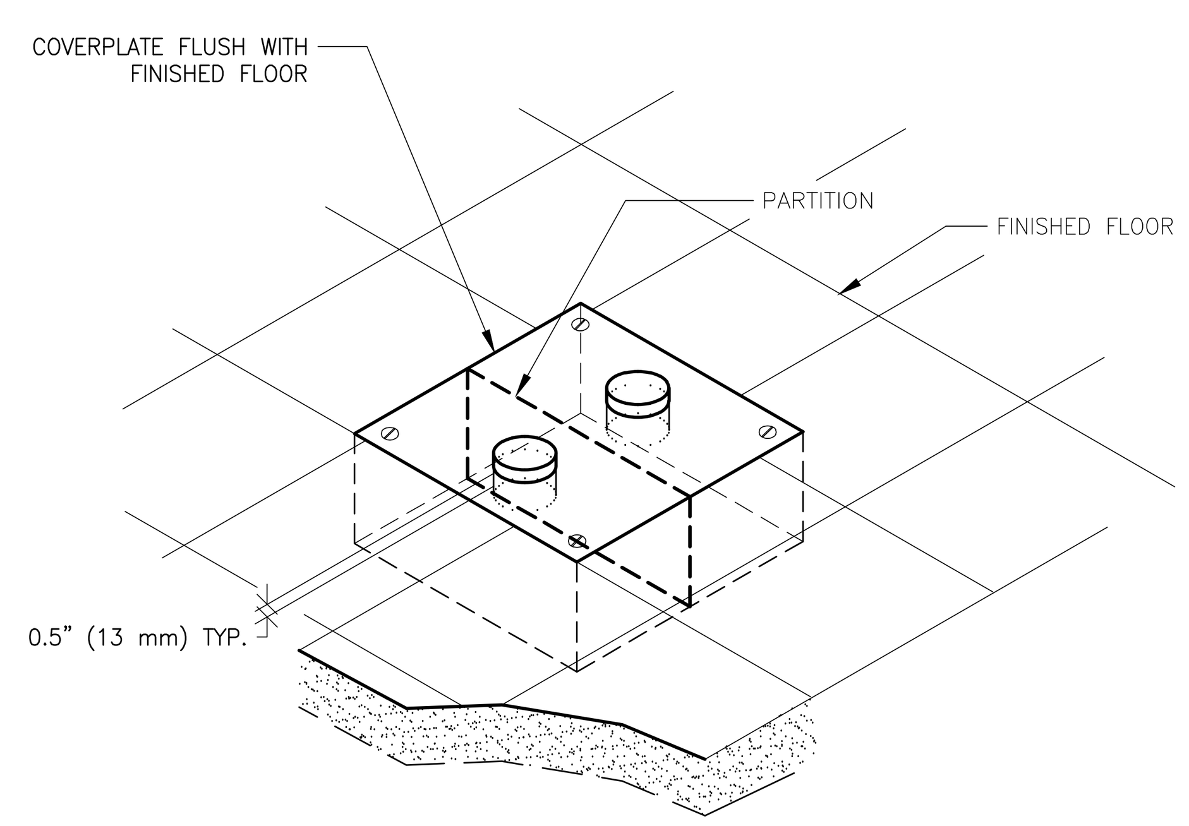
B) TWO TELEPHONE LINES – ONE DEDICATED DIRECT-DISTANCE-DIALING, VOICE GRADE AND ONE A DEDICATED DATA LINE.



ALL ITEMS ILLUSTRATED ARE TO BE FURNISHED AND INSTALLED BY CUSTOMER OR THEIR CONTRACTOR.

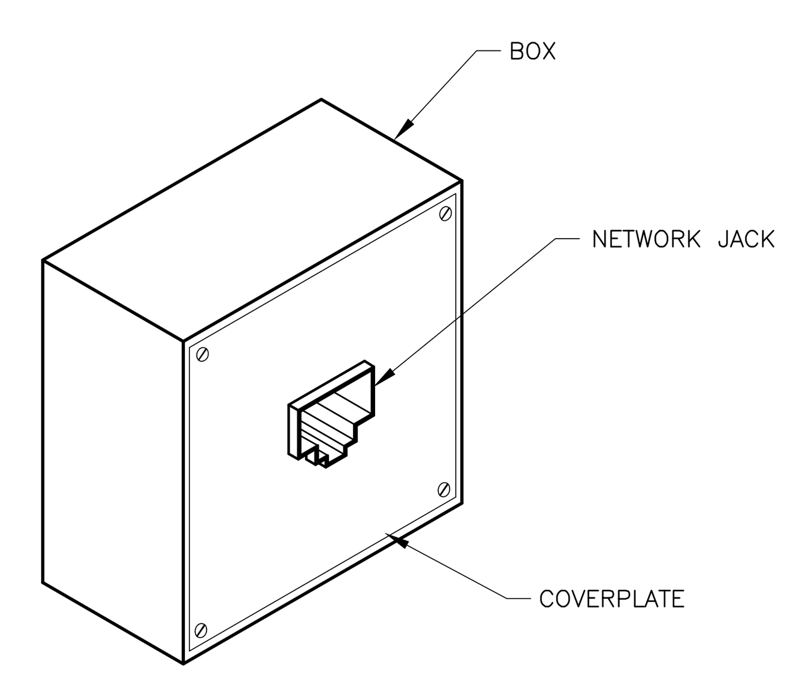
DETAIL NOT TO SCALE

ELECTRICAL DETAIL
FLOOR BOX WITH NIPPLES (TYPICAL)
ELEC-13
REV. DATE: 09/30/94



DETAIL NOT TO SCALE

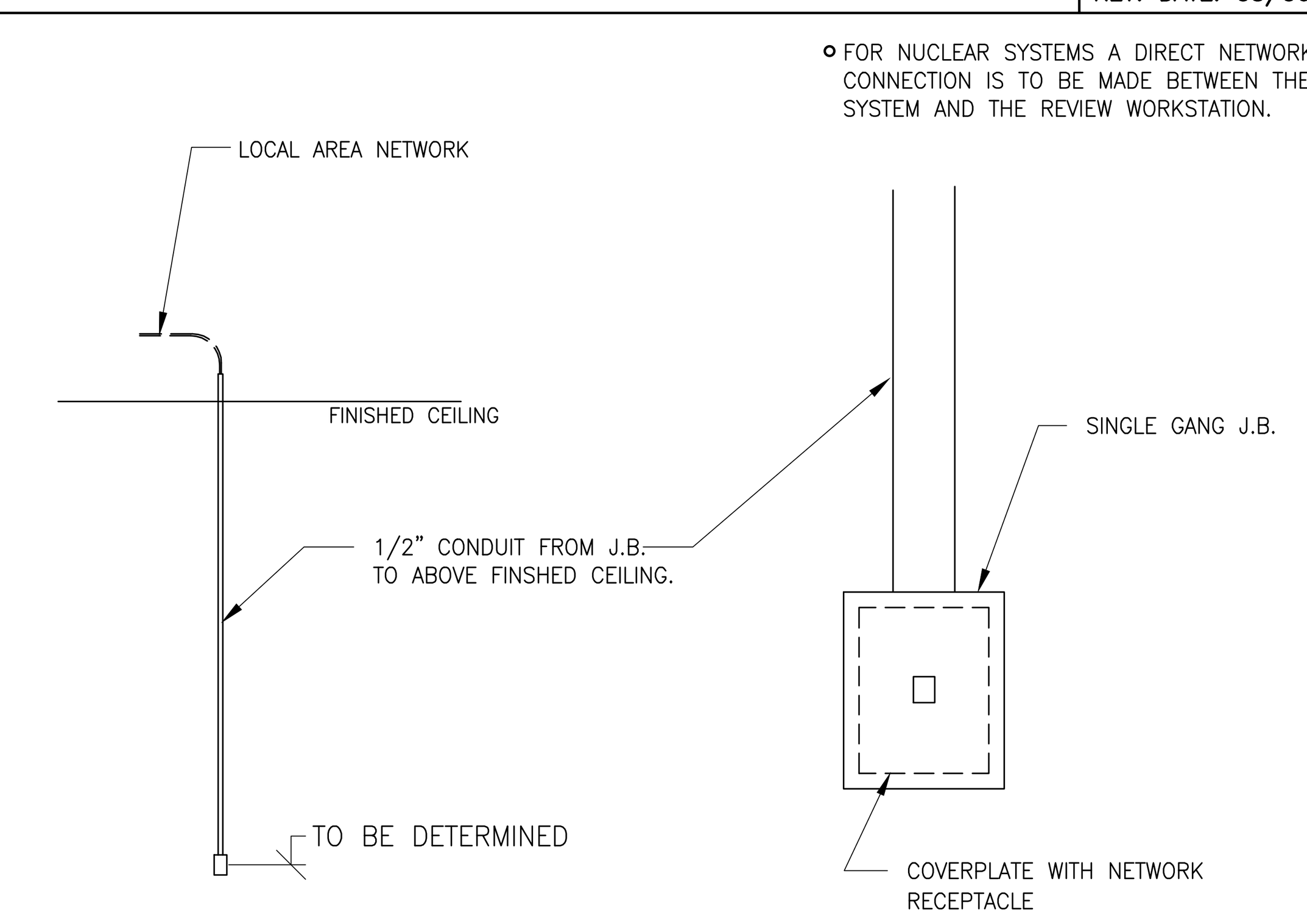
ELECTRICAL DETAIL
BOX WITH COVERPLATE AND NETWORK JACK
ELEC-83
REV. DATE: 10/06/98



DETAIL NOT TO SCALE

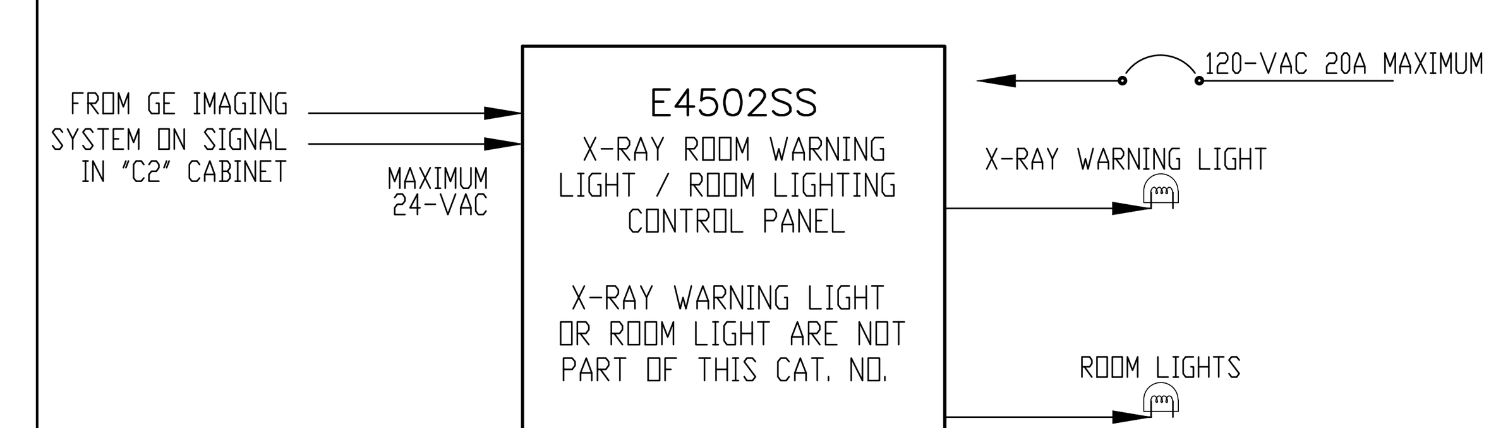
ELECTRICAL DETAIL
NETWORK CONNECTION (TYPICAL)
ELEC-84
REV. DATE: 03/06/04

* FOR NUCLEAR SYSTEMS A DIRECT NETWORK CONNECTION IS TO BE MADE BETWEEN THE SYSTEM AND THE REVIEW WORKSTATION.



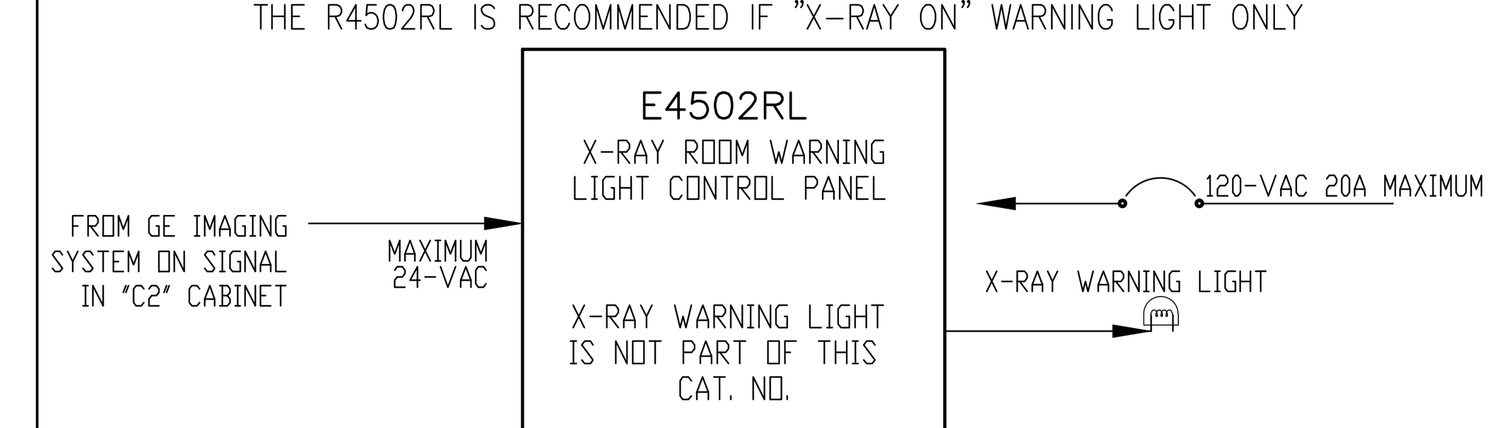
DETAIL NOT TO SCALE

ELECTRICAL DETAIL
X-RAY WARNING LIGHT & ROOM LIGHT CONTROL PANEL
ELEC-157
REV. DATE: 04/23/09



THE E4502SS IS RECOMMENDED IF "X-RAY ON" WARNING LIGHT AND ROOM LIGHT CONTROL ARE UTILIZED

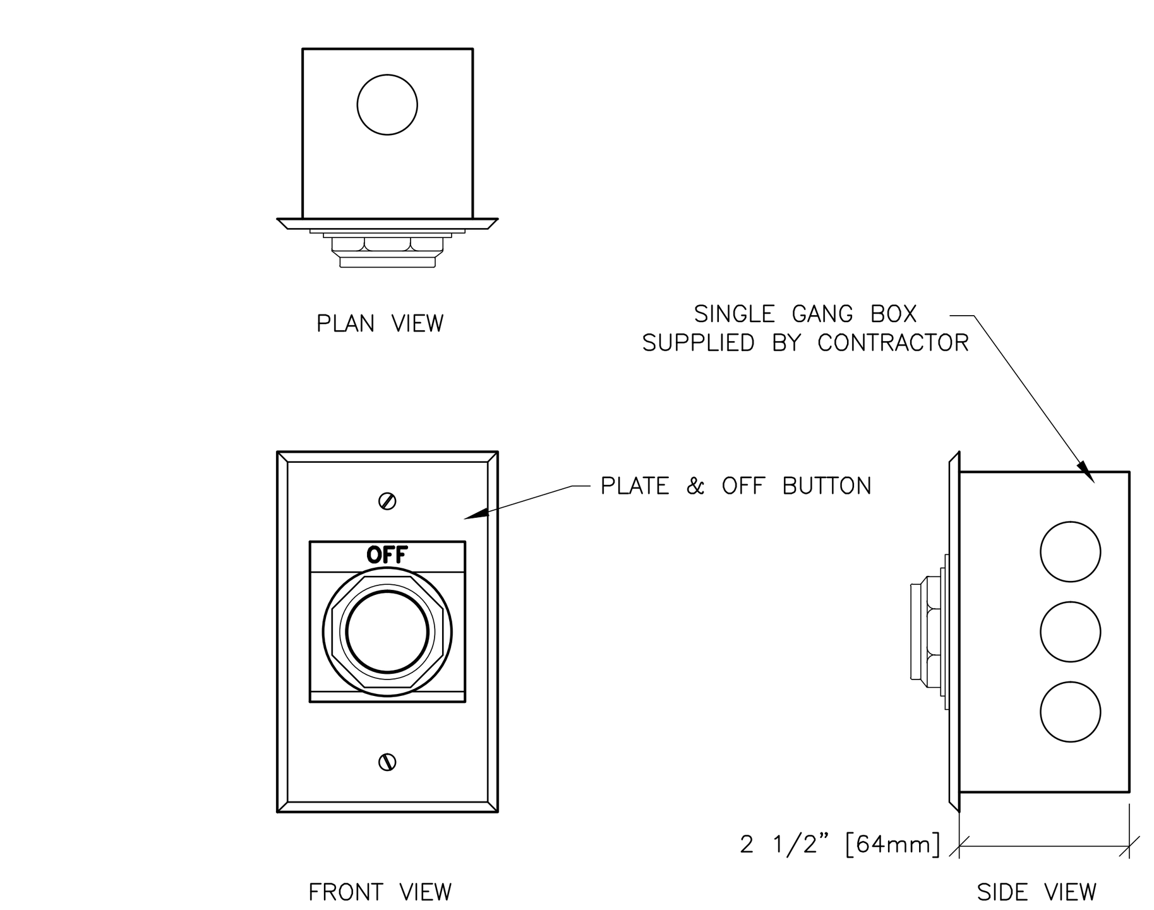
THE R4502RL IS RECOMMENDED IF "X-RAY ON" WARNING LIGHT ONLY



CONTROL PANEL CAN BE LOCATED ABOVE THE CEILING NEAR THE WARNING LIGHT

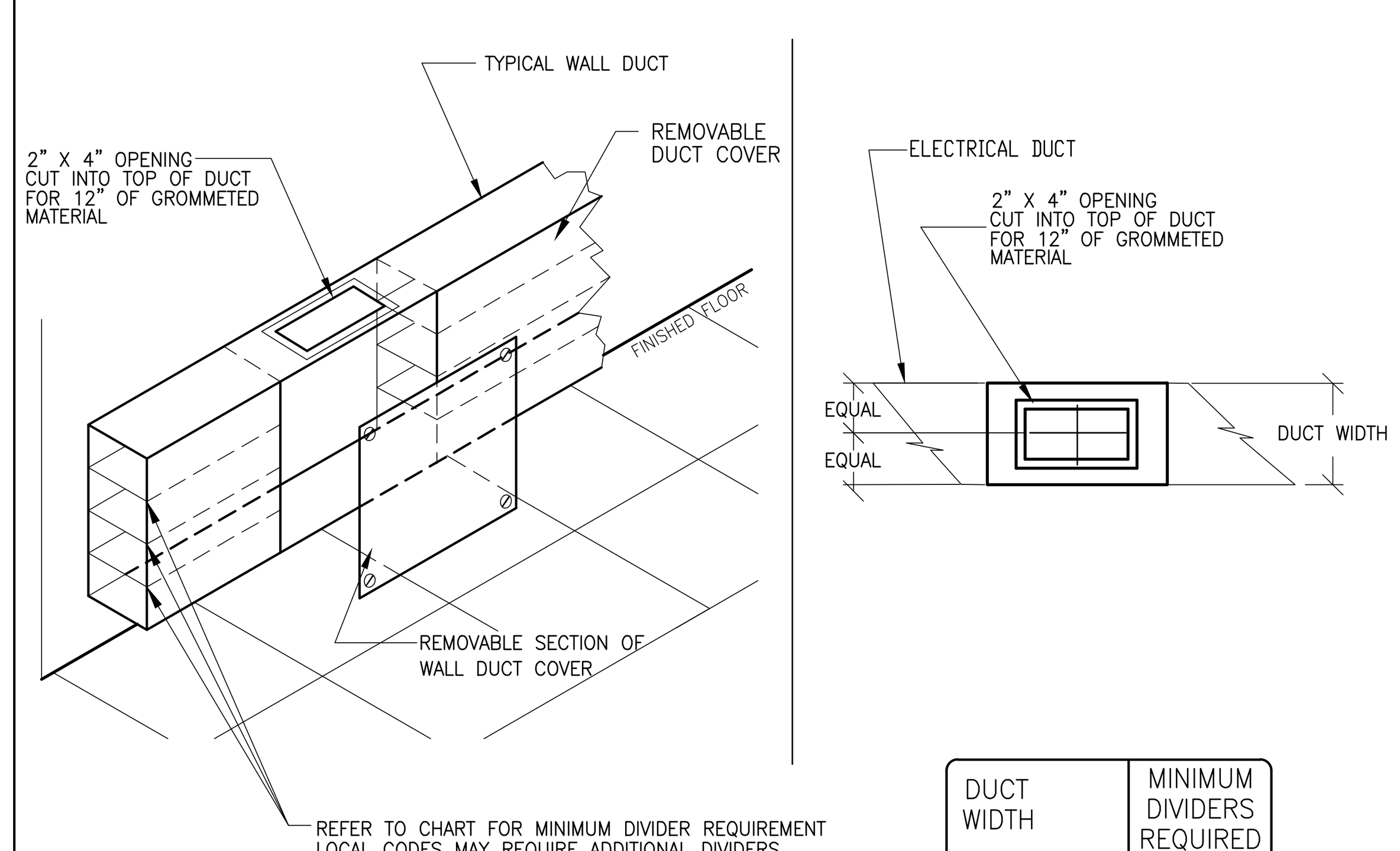
UNLESS SPECIFIED ON SHEET A1 AS BEING INCLUDED ON EQUIPMENT ORDER, ALL ITEMS ILLUSTRATED ARE TO BE FURNISHED AND INSTALLED BY CUSTOMER'S CONTRACTOR

ELECTRICAL DETAIL
EMERGENCY OFF BUTTON
ELEC-16
REV. DATE: 05/14/09



DETAIL NOT TO SCALE

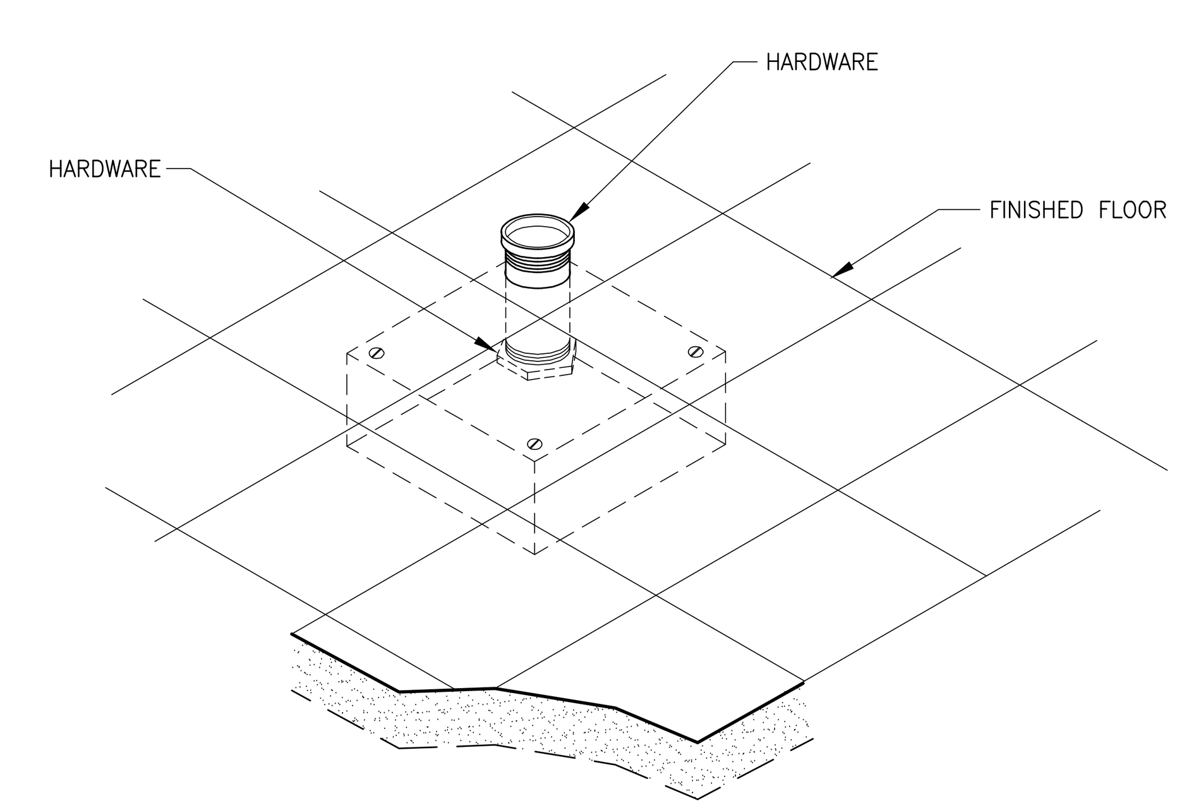
ELECTRICAL DETAIL
HORIZONTAL WALL DUCT (TYPICAL)
ELEC-5A
REV. DATE: 06/16/08



DUCT WIDTH		MINIMUM DIVIDERS REQUIRED
24"	[610mm]	2
18"	[457mm]	2
10"	[254mm]	2
6"	[152mm]	1
4"	[102mm]	1

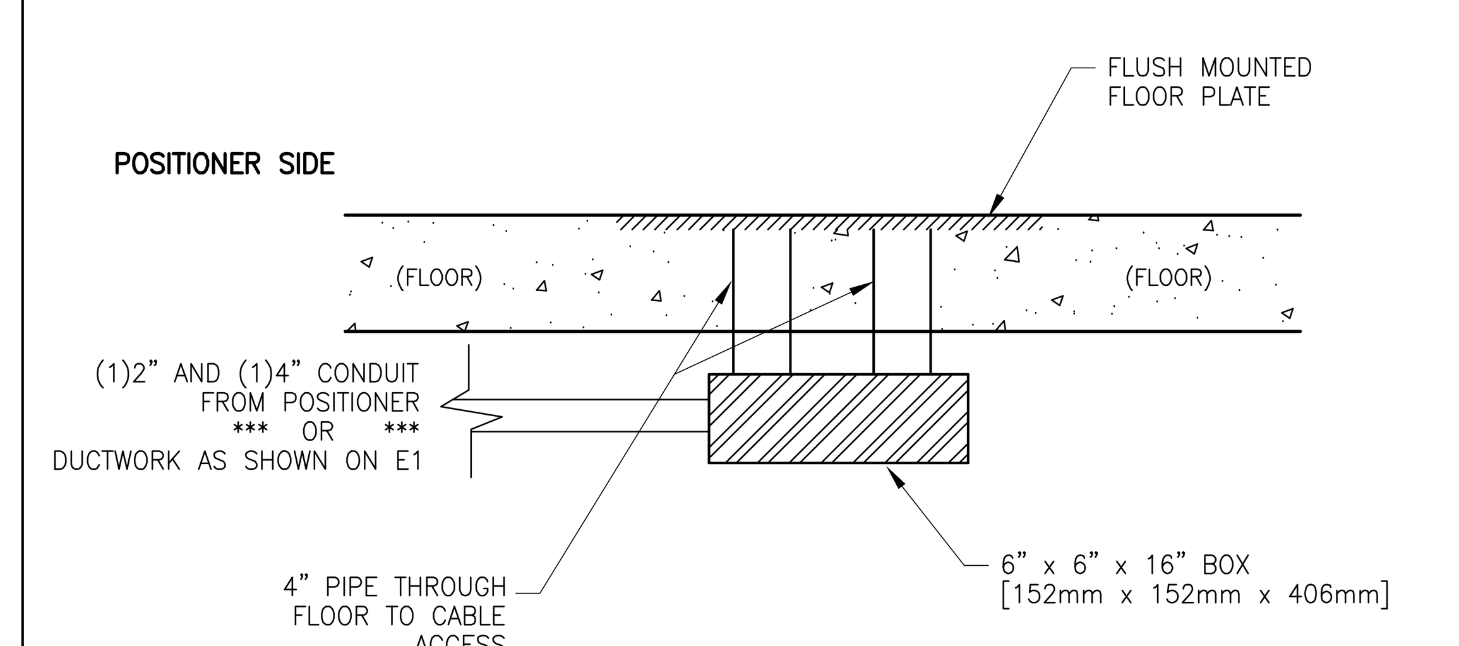
DETAIL NOT TO SCALE

ELECTRICAL DETAIL
TABLE INTERCONNECTION - BOX BELOW FLOOR
ELEC-48
REV. DATE: 01/04/96



DETAIL NOT TO SCALE

ELECTRICAL DETAIL
TABLE INTERCONNECT DETAIL, UNDER FLOOR
ELEC-134
REV. DATE: 05/10/04



NOTE: PIPE, JUNCTION BOX AND DUCT or CONDUIT ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMER or CUSTOMER'S CONTRACTOR.

DETAIL NOT TO SCALE

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

RQ – 140195 PIM R01

GE Healthcare
IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL DETAILS
MODALITY TYPE: INNOVA 2100/3100/4100

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO ACTUAL EQUIPMENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR ACTUAL CONSTRUCTION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE: HYBRID OR
TYPICAL FINAL LAYOUT

PROJECT	REVISION
5-94f	00

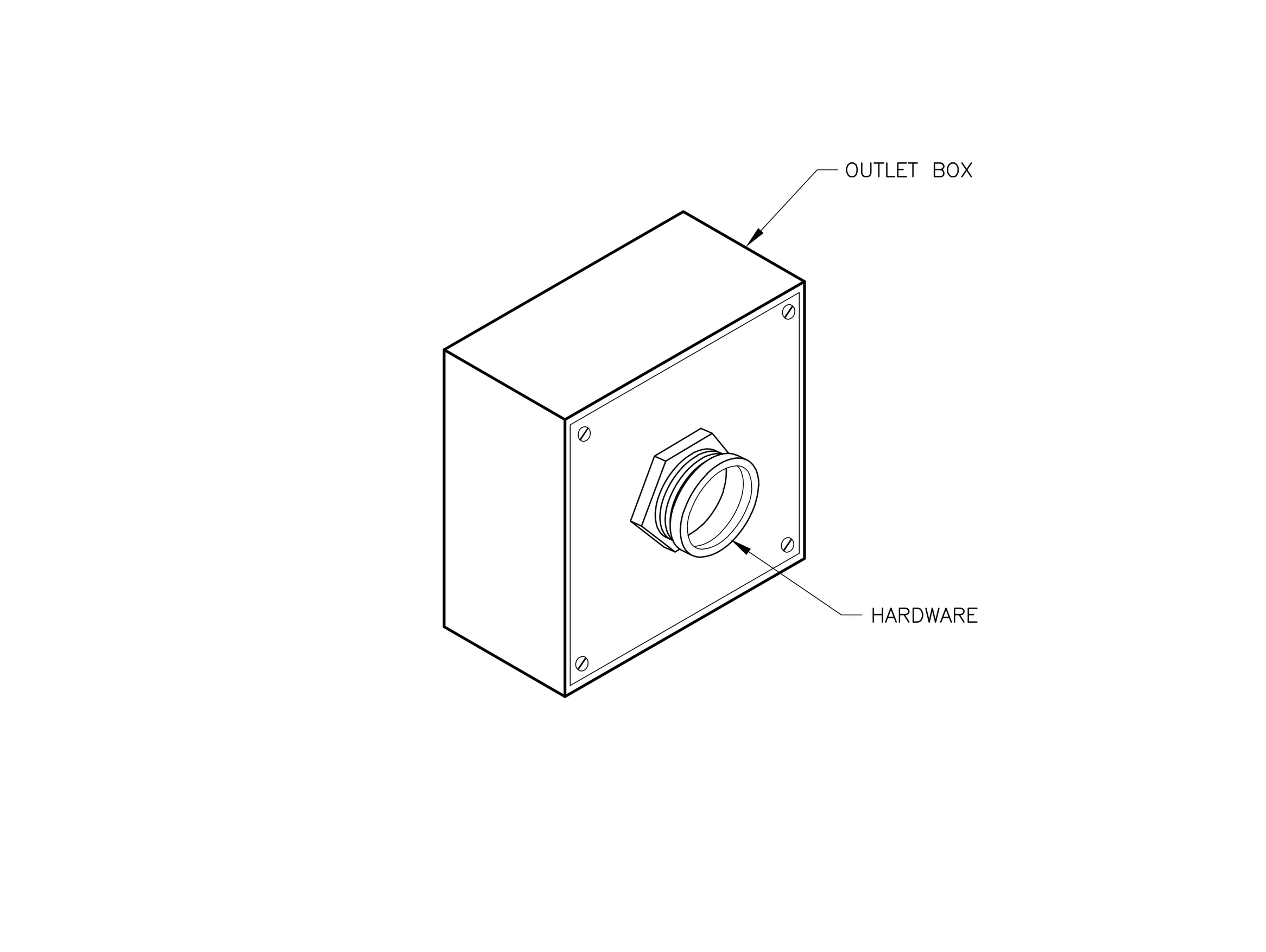
DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

REVISION HISTORY:

SHEET
E3

ELECTRICAL DETAIL
BOX WITH COVERPLATE (TYPICAL)

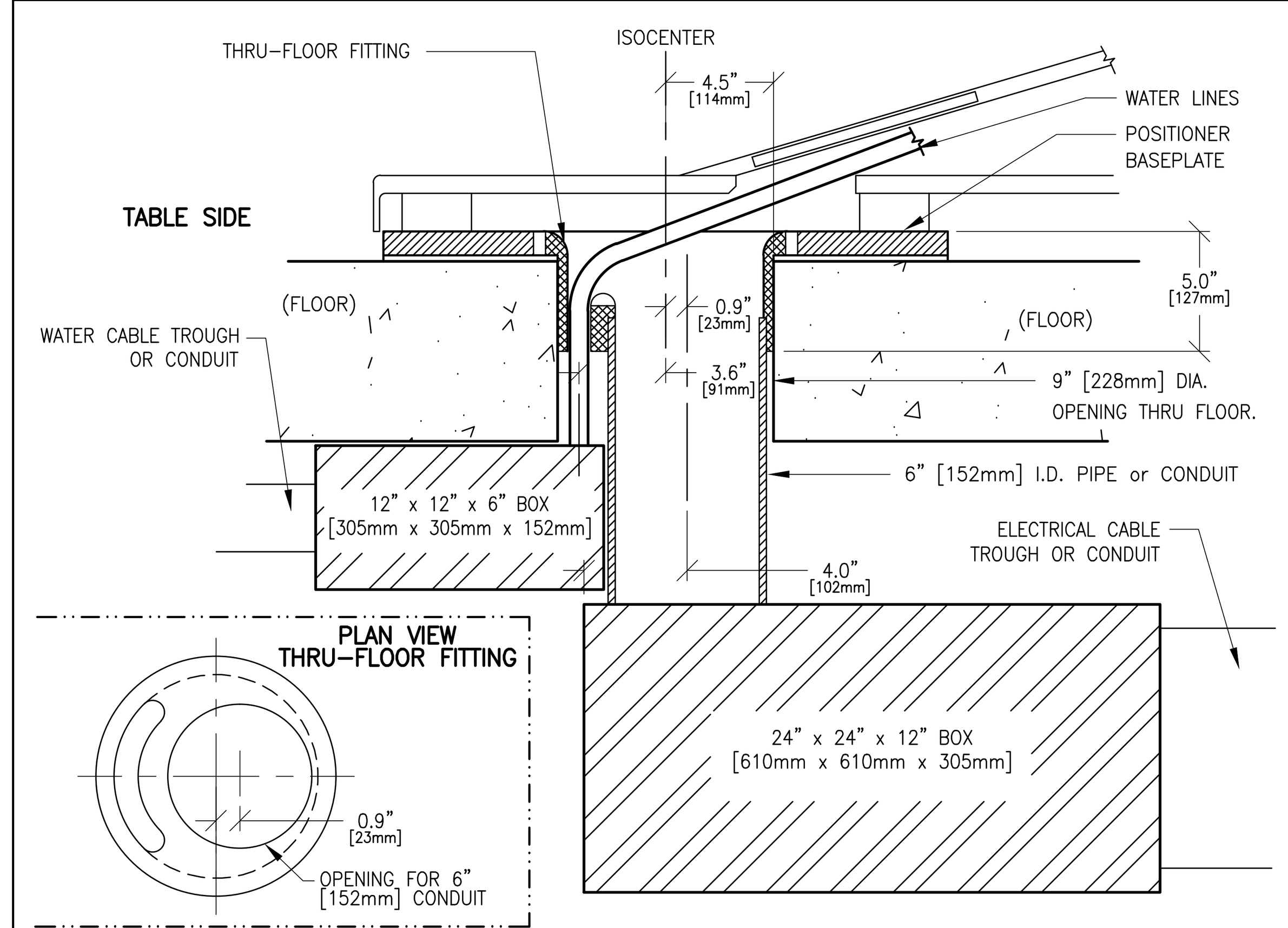
ELEC-8
REV. DATE: 09/30/94



DETAIL NOT TO SCALE

ELECTRICAL DETAIL
POSITIONER INTERCONNECT DETAIL, UNDER FLOOR

ELEC-100
REV. DATE: 03/30/04

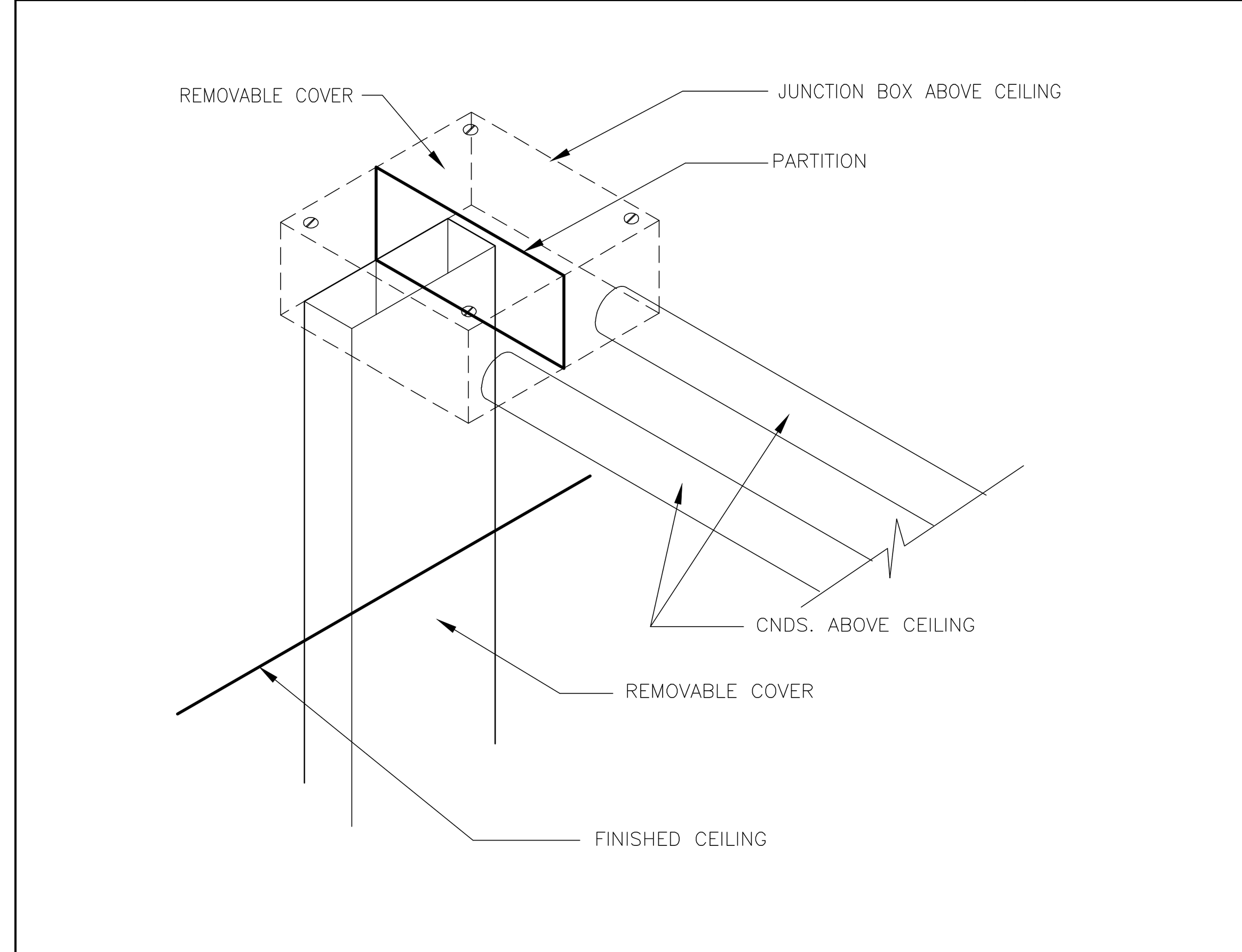


NOTE: PIPE, JUNCTION BOX AND DUCT or CONDUIT ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMER or CUSTOMER'S CONTRACTOR.

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
J.B. / WALL DUCT DETAIL (TYPICAL)

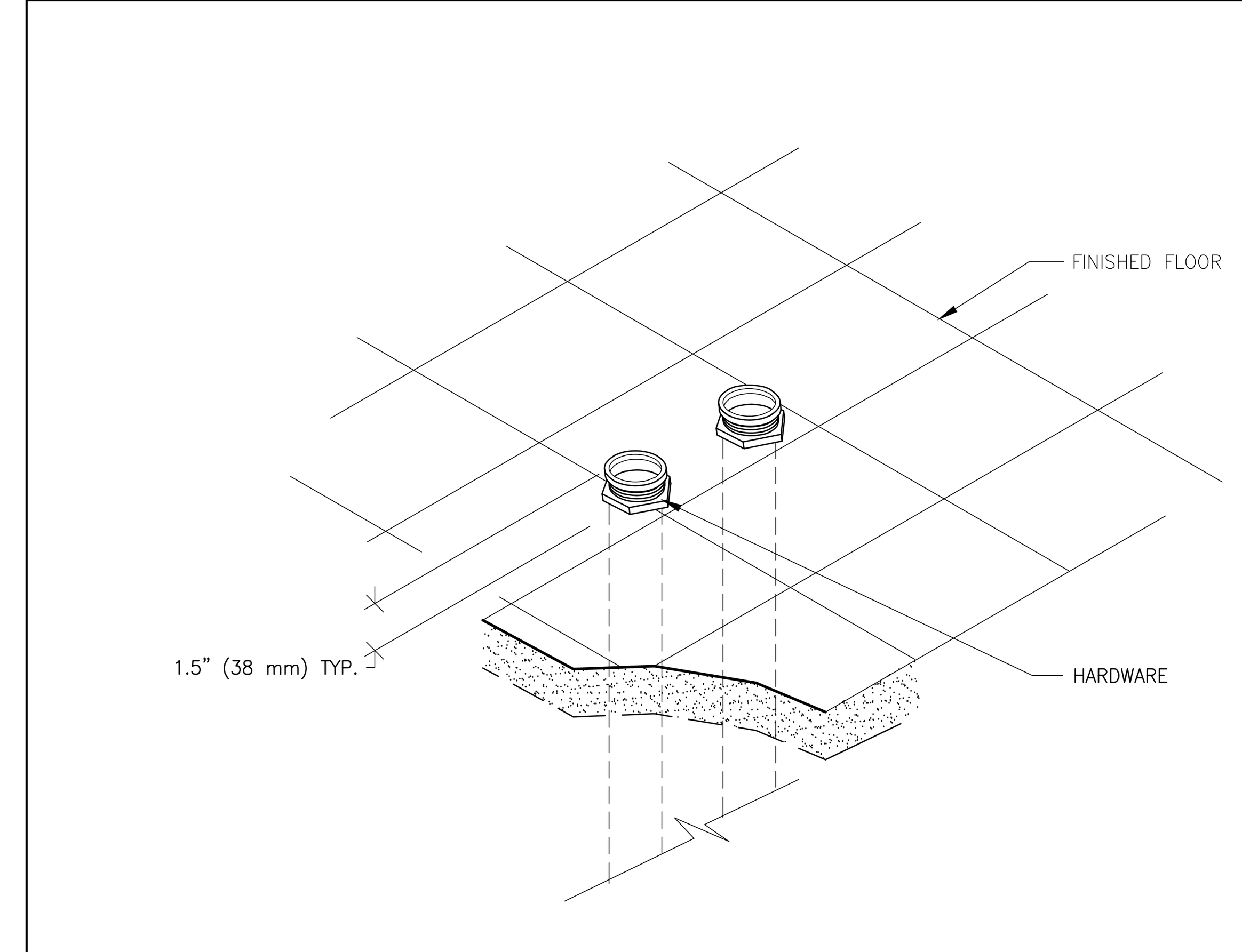
ELEC-2
REV. DATE: 09/30/94



DETAIL NOT TO SCALE

ELECTRICAL DETAIL
CONDUITS THRU-FLOOR (TYPICAL)

ELEC-9
REV. DATE: 08/08/94



DETAIL NOT TO SCALE

RQ – 140195 PIM R01

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

GE Healthcare
IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL DETAILS
MODALITY TYPE: INNOVA 2100/3100/4100

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO ACTUAL EQUIPMENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR ACTUAL CONSTRUCTION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
HYBRID OR
TYPICAL FINAL LAYOUT

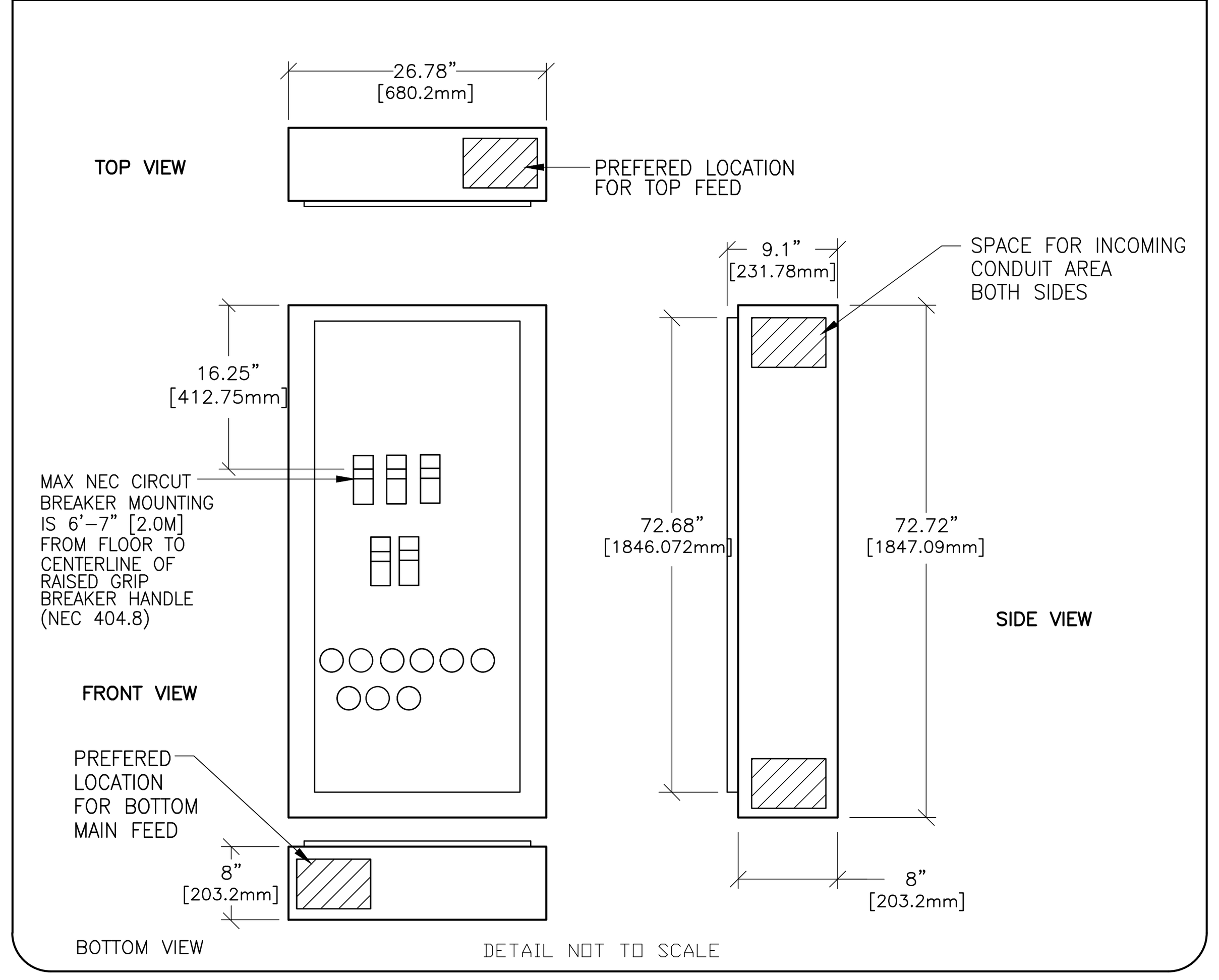
PROJECT	REVISION
5–94f	00

DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

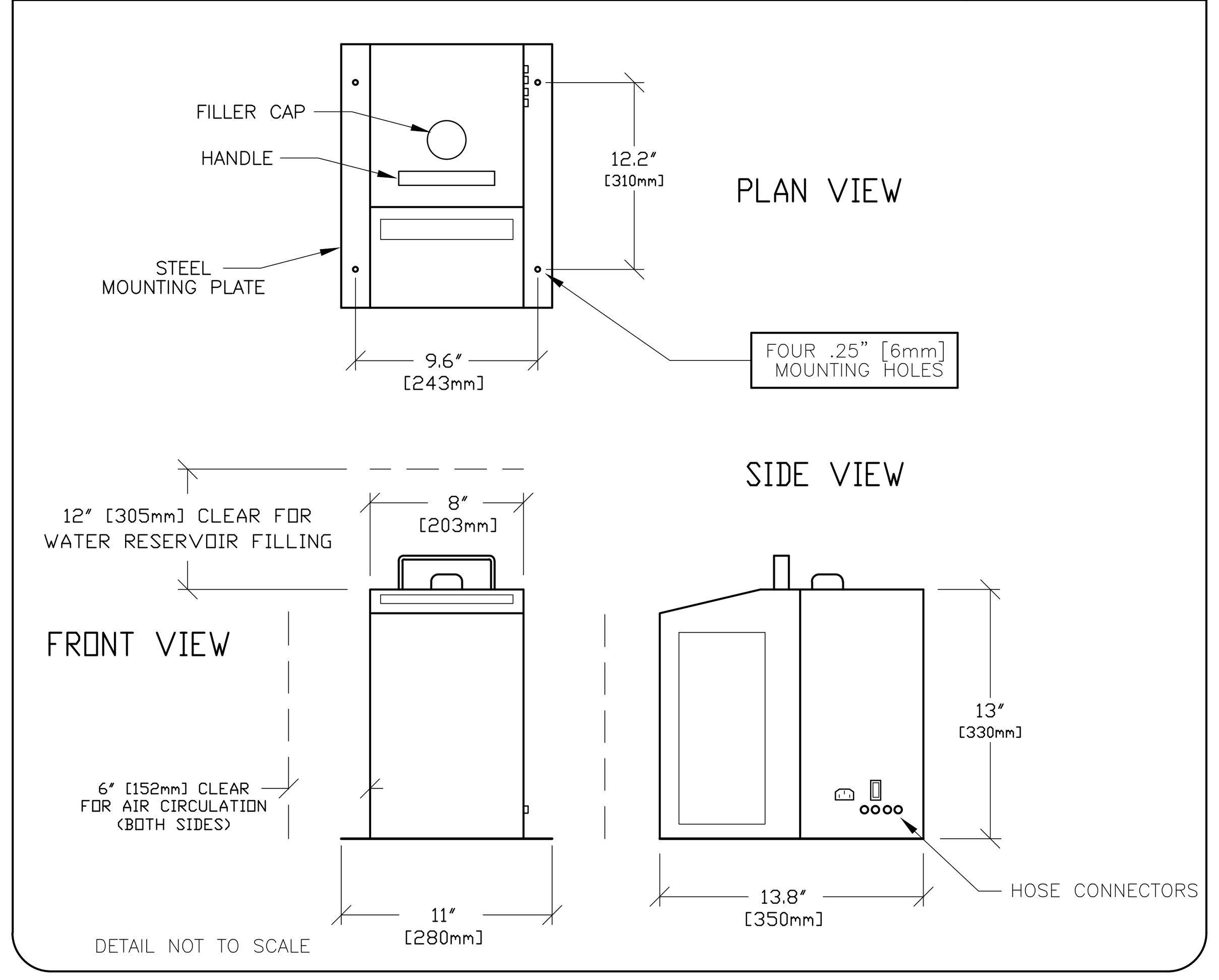
REVISION HISTORY:

SHEET
E4

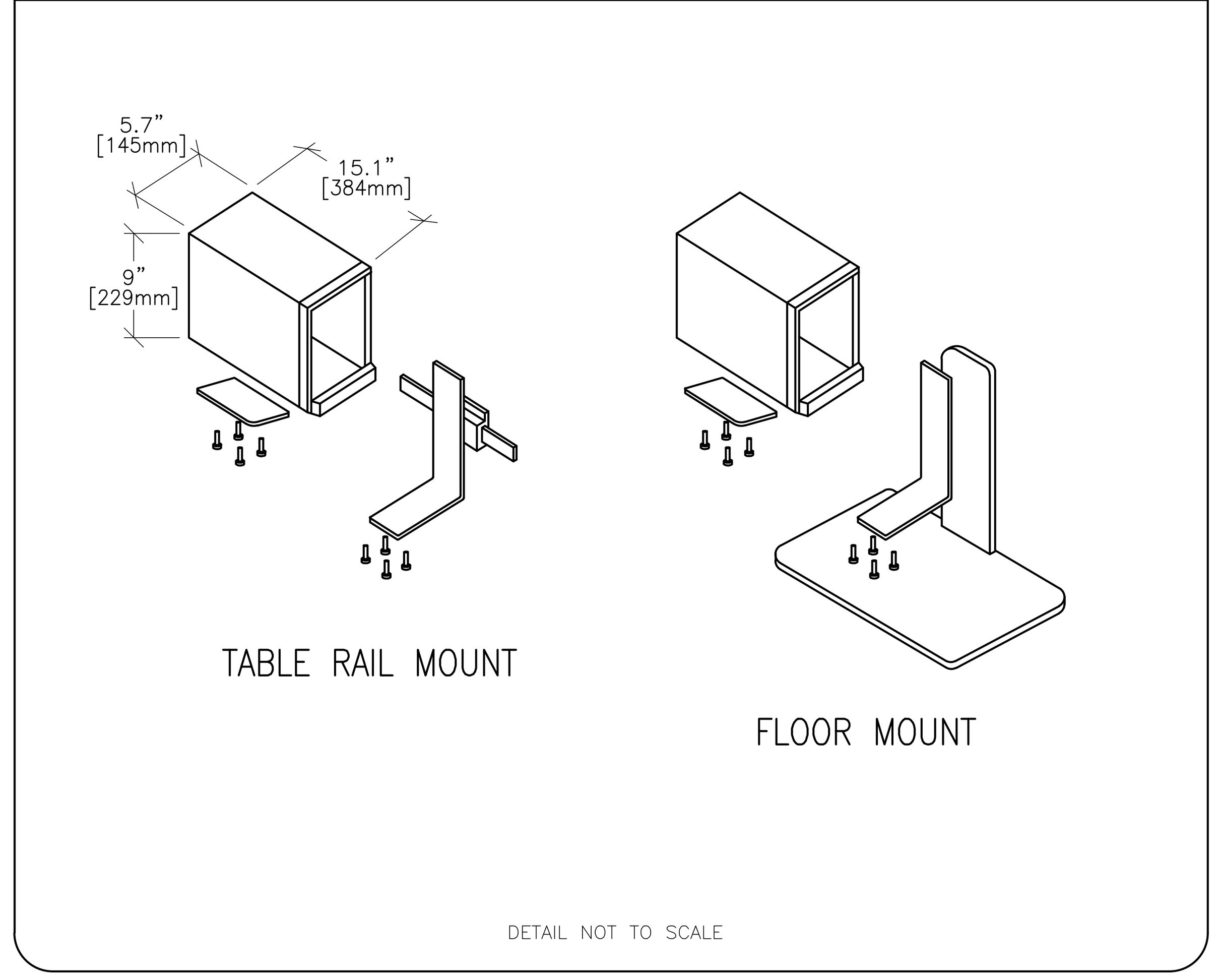
EQUIPMENT DETAIL — INNOVA PLUS MAIN DISCONNECT PANEL
E4502M
REV. DATE: 04/30/09



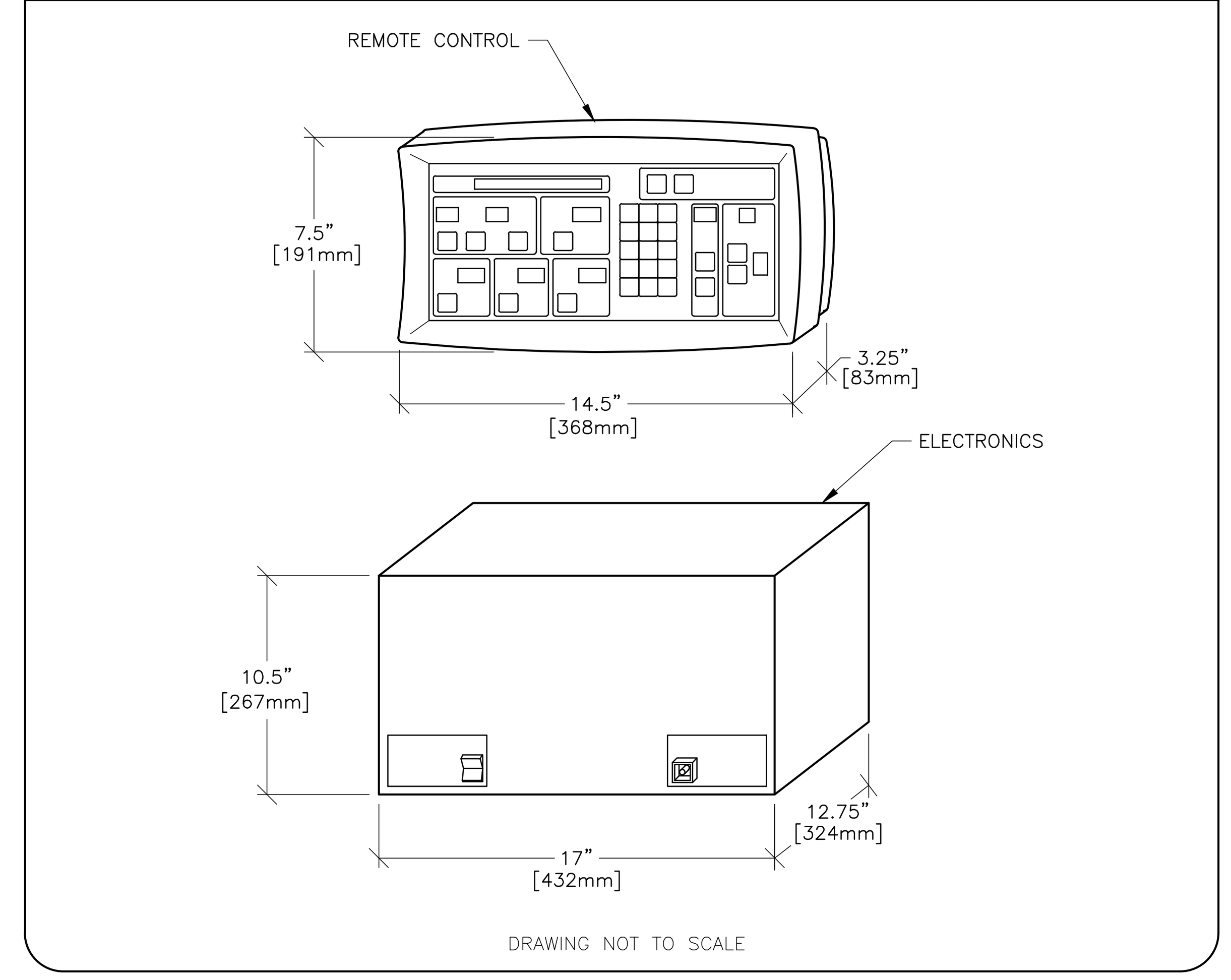
EQUIPMENT DETAIL — INNOVA DETECTOR COOLER
B5049F
REV. DATE: 8/01/00



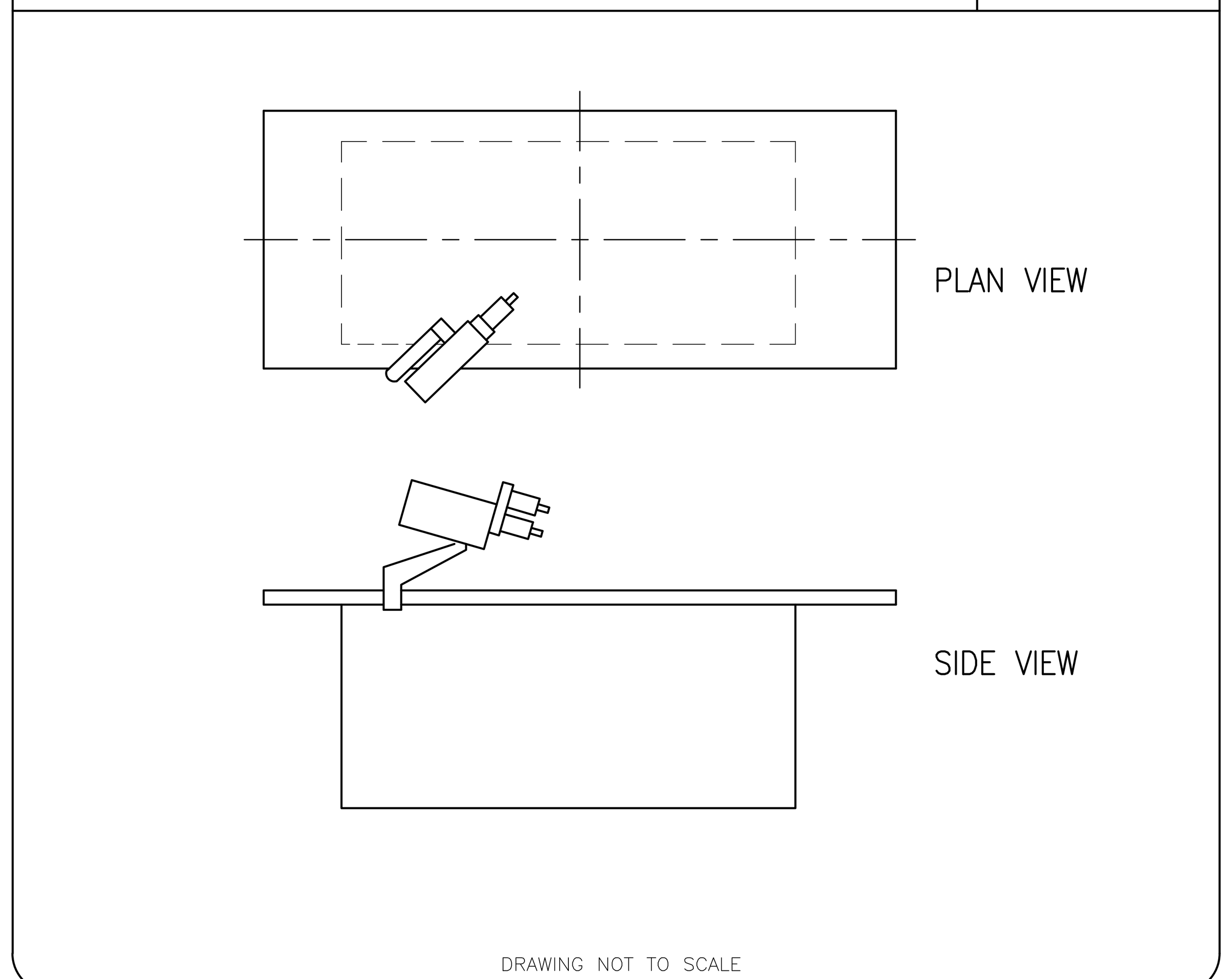
EQUIPMENT DETAIL — TRAM-RAC 4A
B5047
REV. DATE: 05/26/04



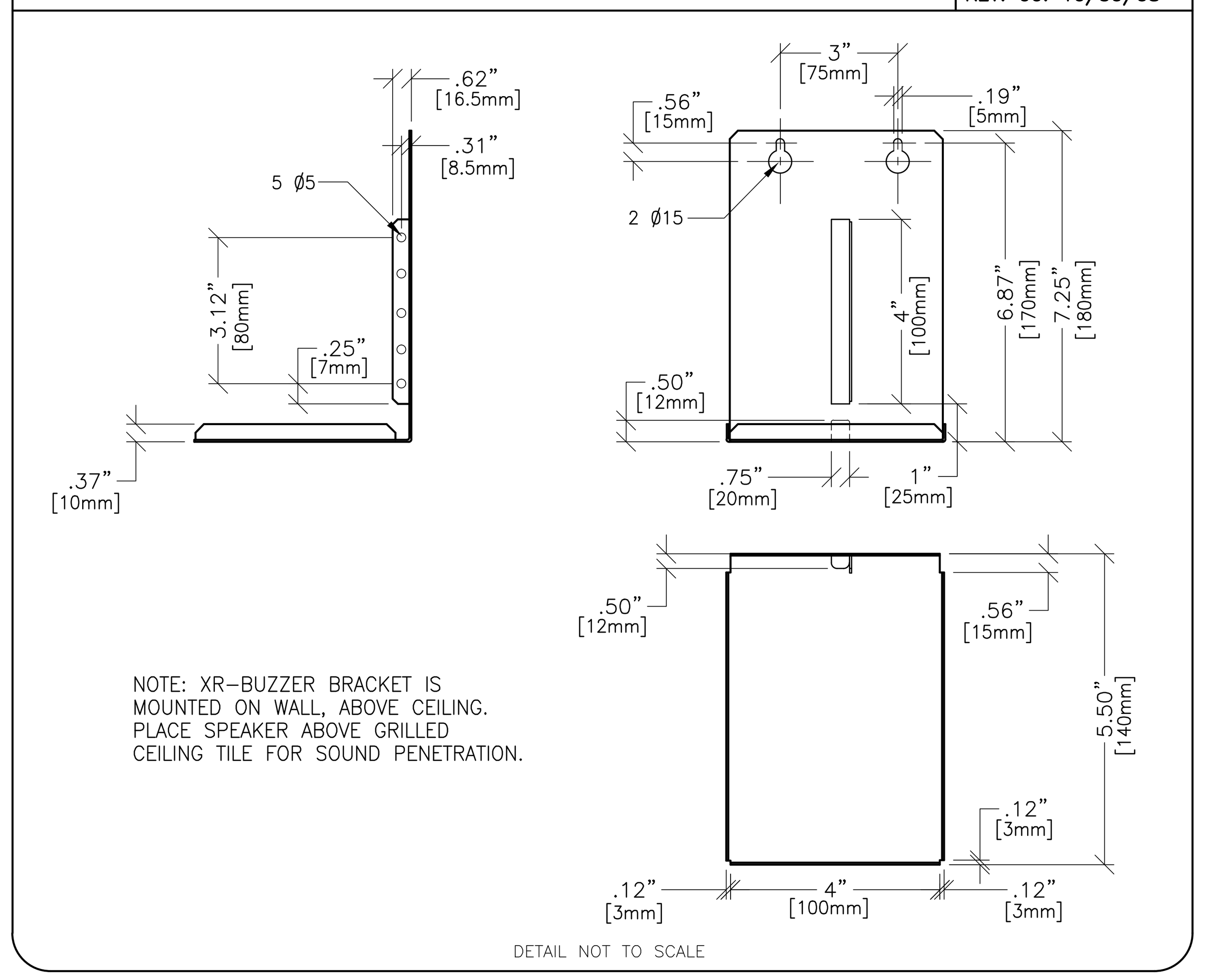
EQUIPMENT DETAIL — INJECTOR REMOTE CONTROL AND ELECTRONICS
B50-28



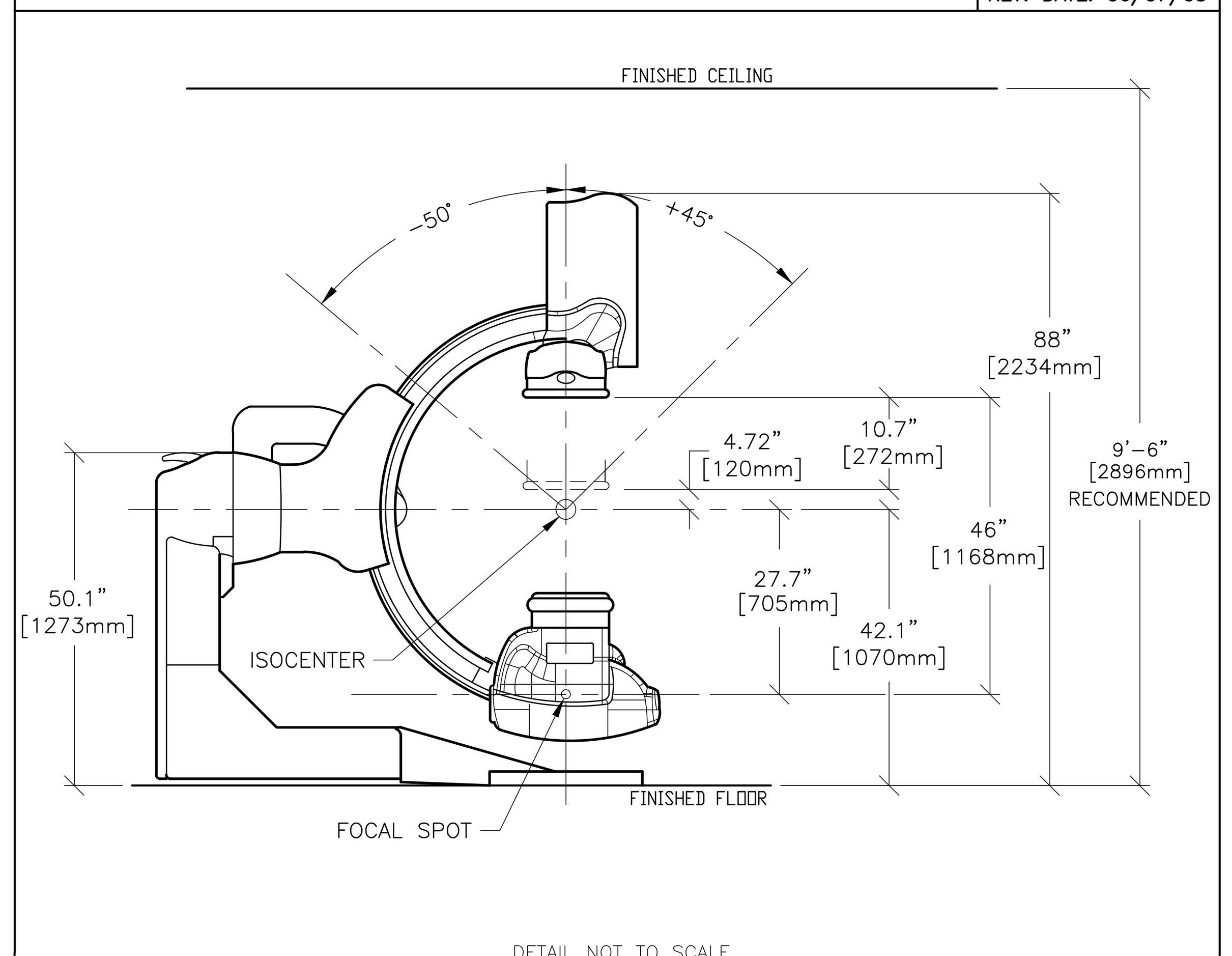
EQUIPMENT DETAIL — INJECTOR ON TABLE RAIL
B50-30A



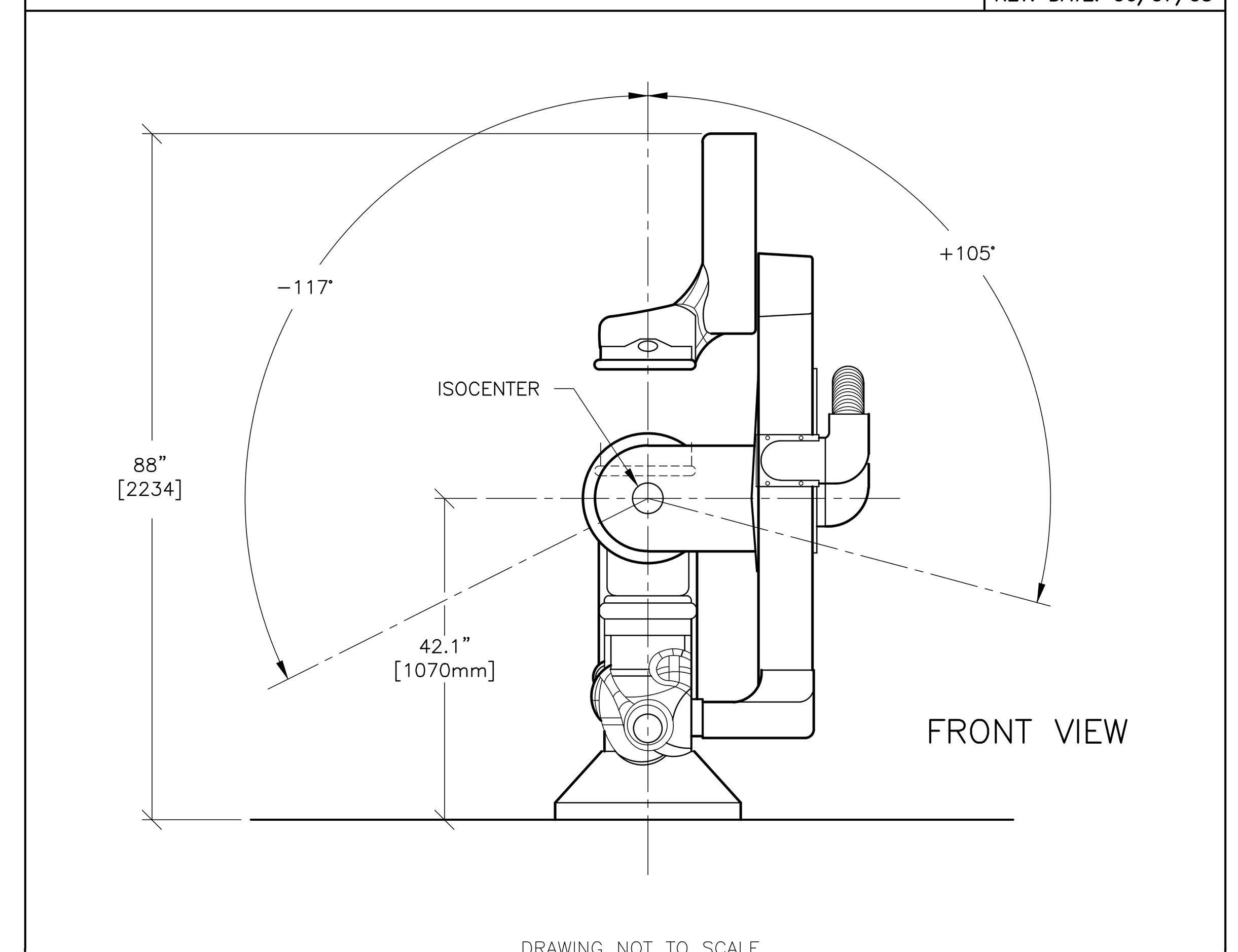
EQUIPMENT DETAIL — XR-BUZZER BRACKET
B5150H
REV. 00: 10/30/08



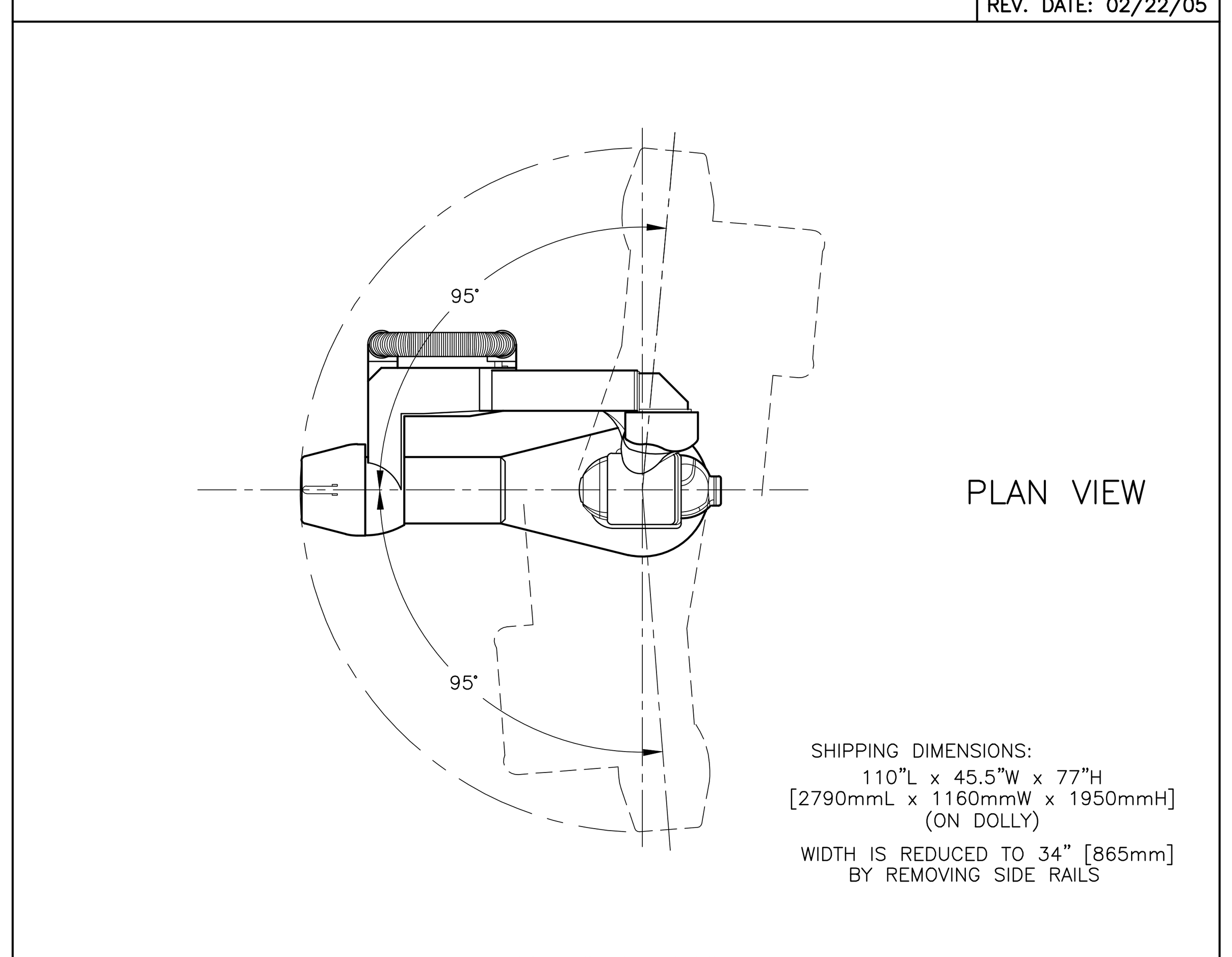
EQUIPMENT DETAIL — INNOVA 2100/3100/4100 VASCULAR SYSTEM
B5050A
REV. DATE: 06/07/05



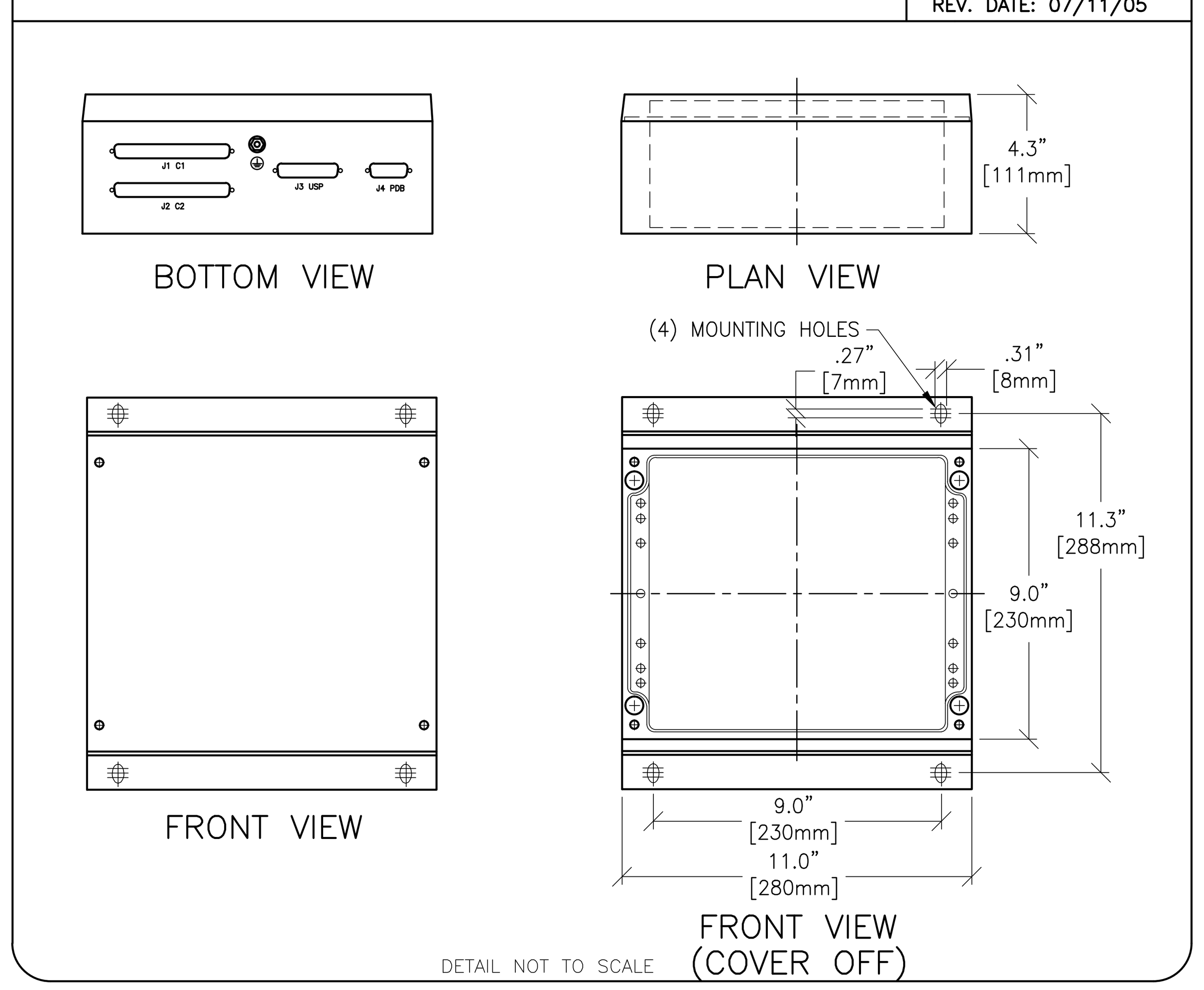
EQUIPMENT DETAIL — INNOVA 2100/3100/4100 VASCULAR SYSTEM
B5050B
REV. DATE: 06/07/05



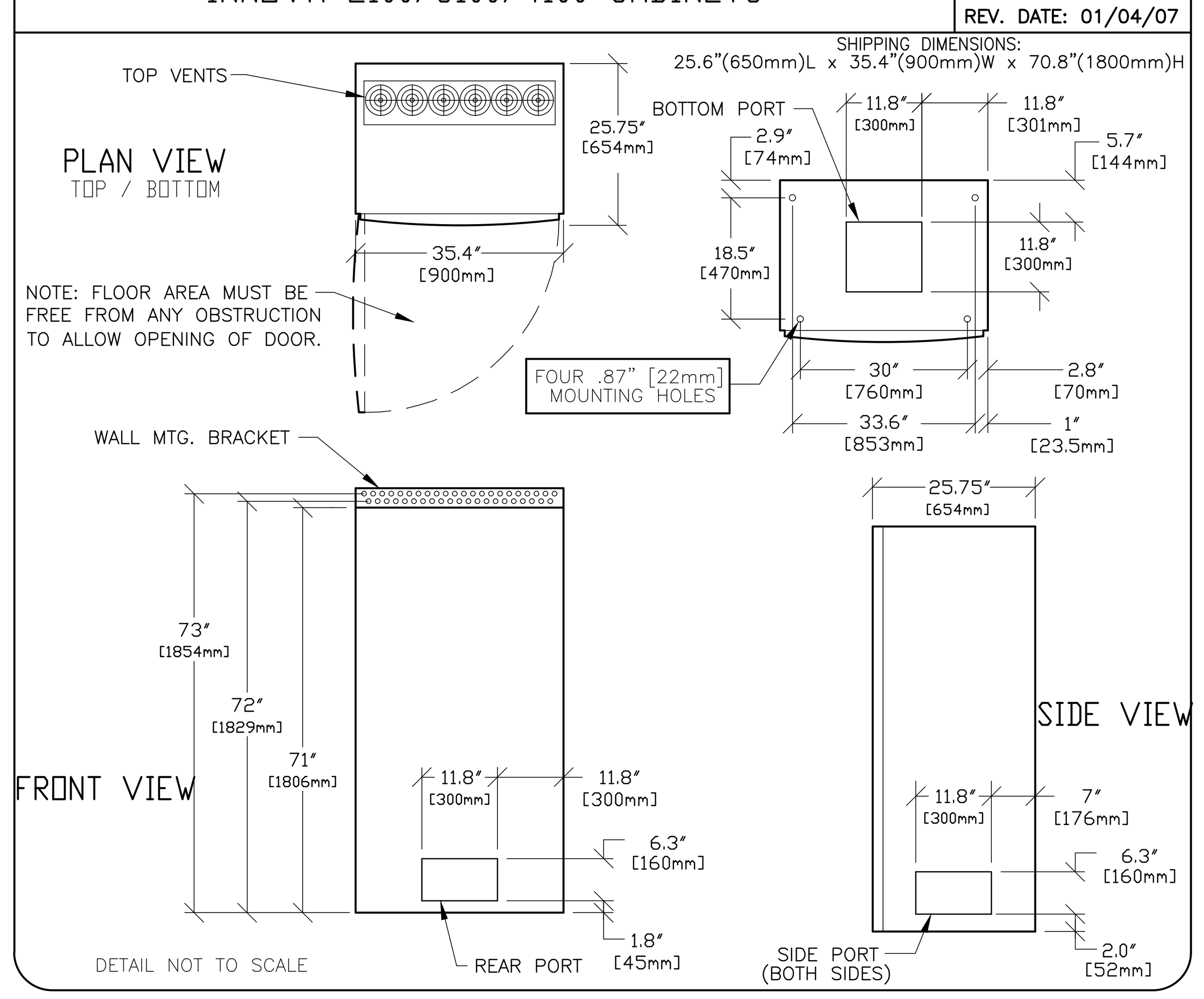
EQUIPMENT DETAIL — INNOVA 3100/4100 VASCULAR SYSTEM
B5050
REV. DATE: 02/22/05



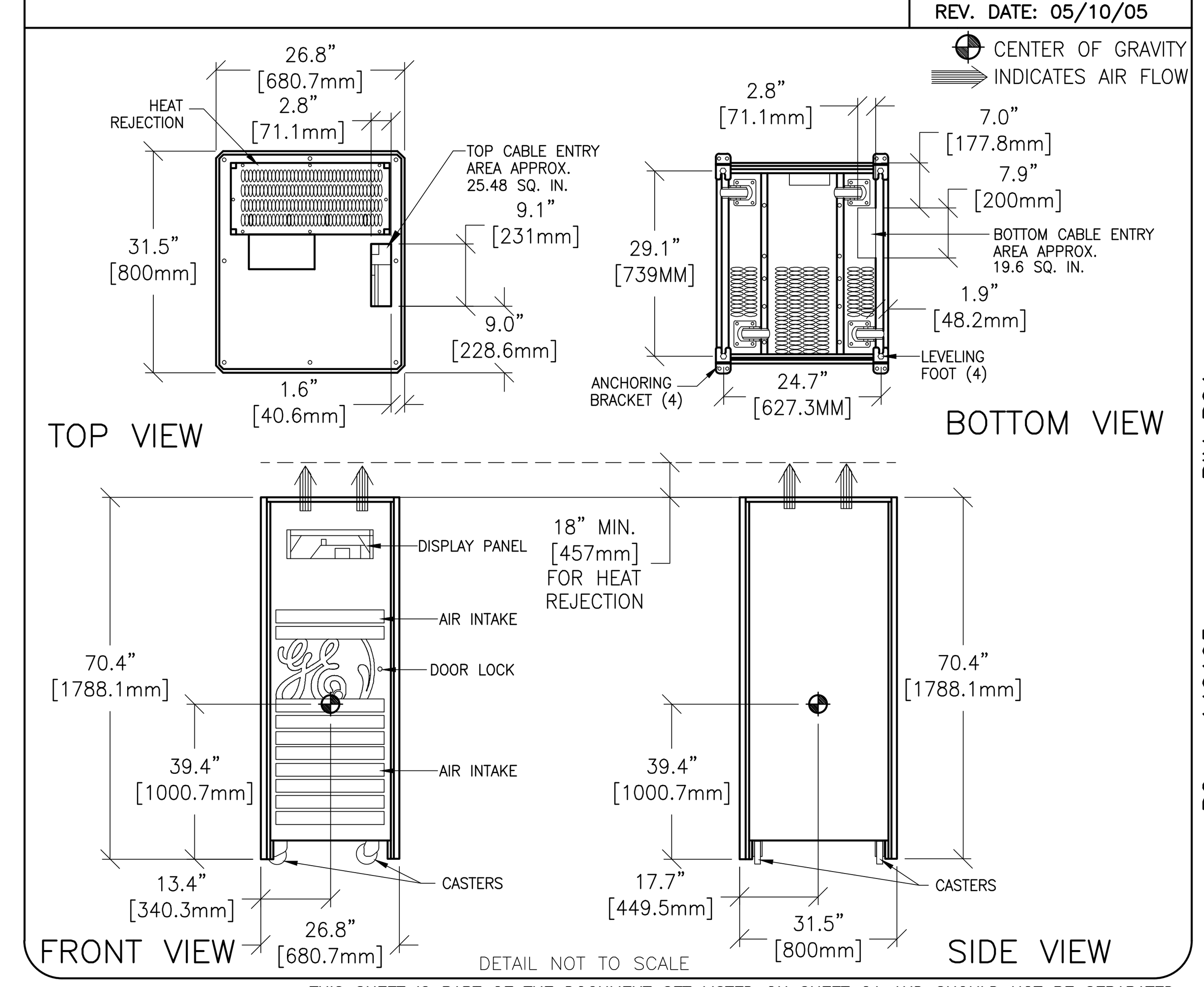
EQUIPMENT DETAIL — UPS INTERFACE BOX
E4502IB
REV. DATE: 07/11/05



EQUIPMENT DETAIL — INNOVA 2100/3100/4100 CABINETS
B0558C
REV. DATE: 01/04/07



EQUIPMENT DETAIL — DIGITAL ENERGY SG SERIES 10-20kVA UPS
E4502SG
REV. DATE: 05/10/05



GE Healthcare
IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT DETAILS
MODALITY TYPE: INNOVA 2100/3100/4100

PROJECT TITLE: HYBRID OR
TYPICAL FINAL LAYOUT

PROJECT	REVISION
5-94f	00

DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

REVISION HISTORY:

RQ - 140195
PIM R01

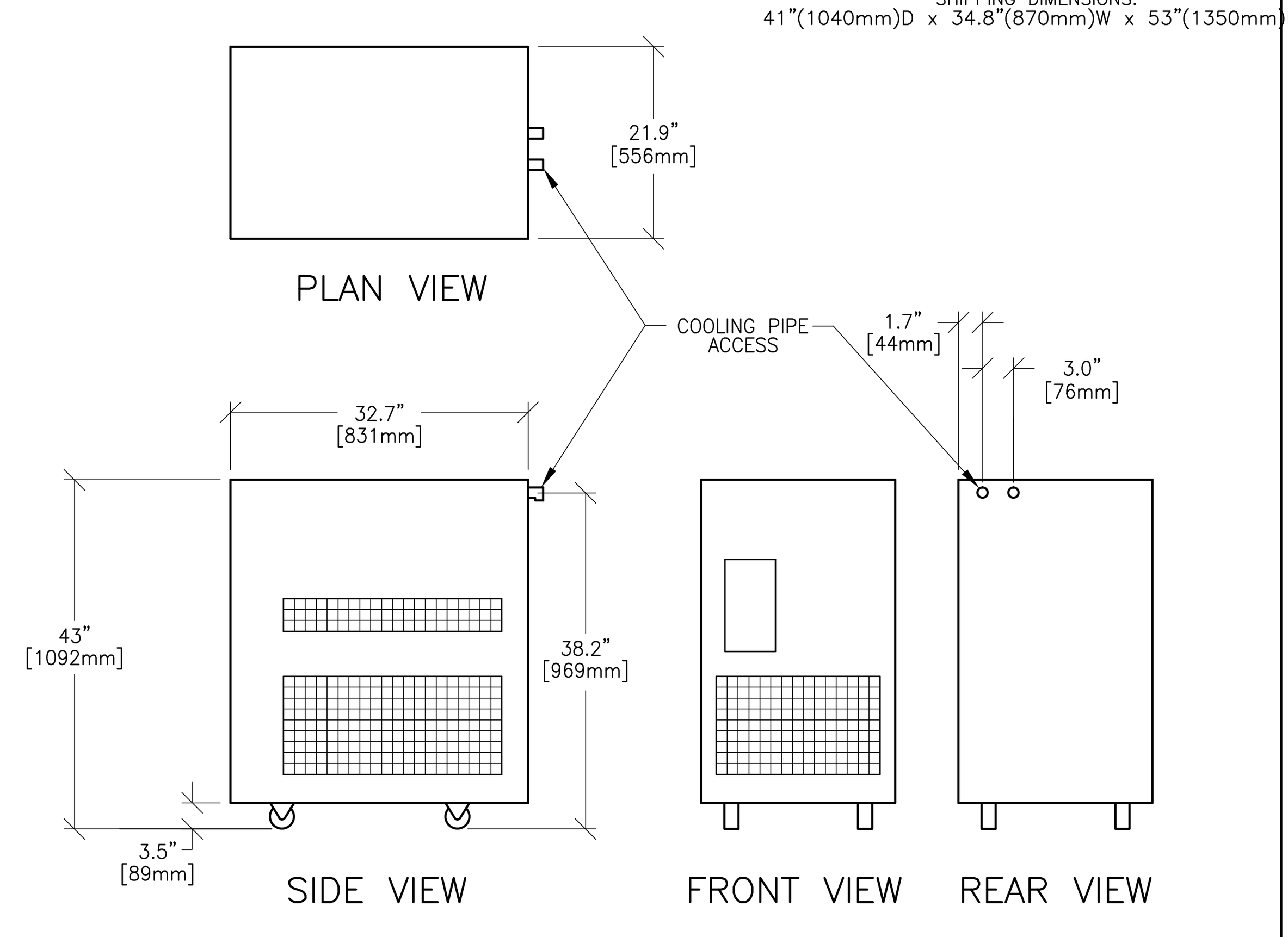
SHEET
D1

EQUIPMENT DETAIL
COOLIX 4000 RECIRCULATING CHILLER

M0917B

REV. DATE: 05/17/05

SHIPPING DIMENSIONS:
41"(1040mm)D x 34.8"(870mm)W x 53"(1350mm)H

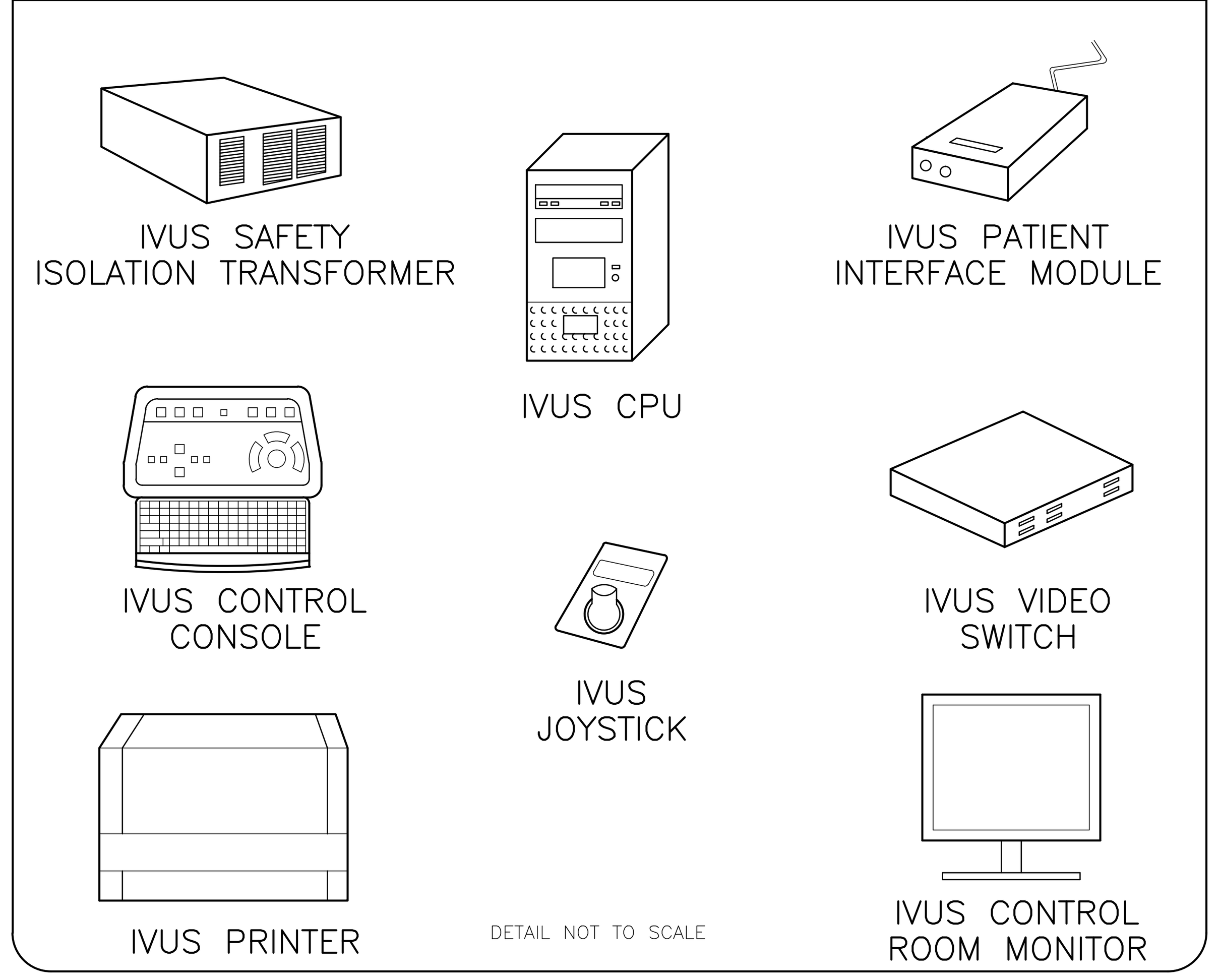


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
IVUS VOLCANO S5i WORKSTATION

BS5I

REV. DATE: 04/04/08

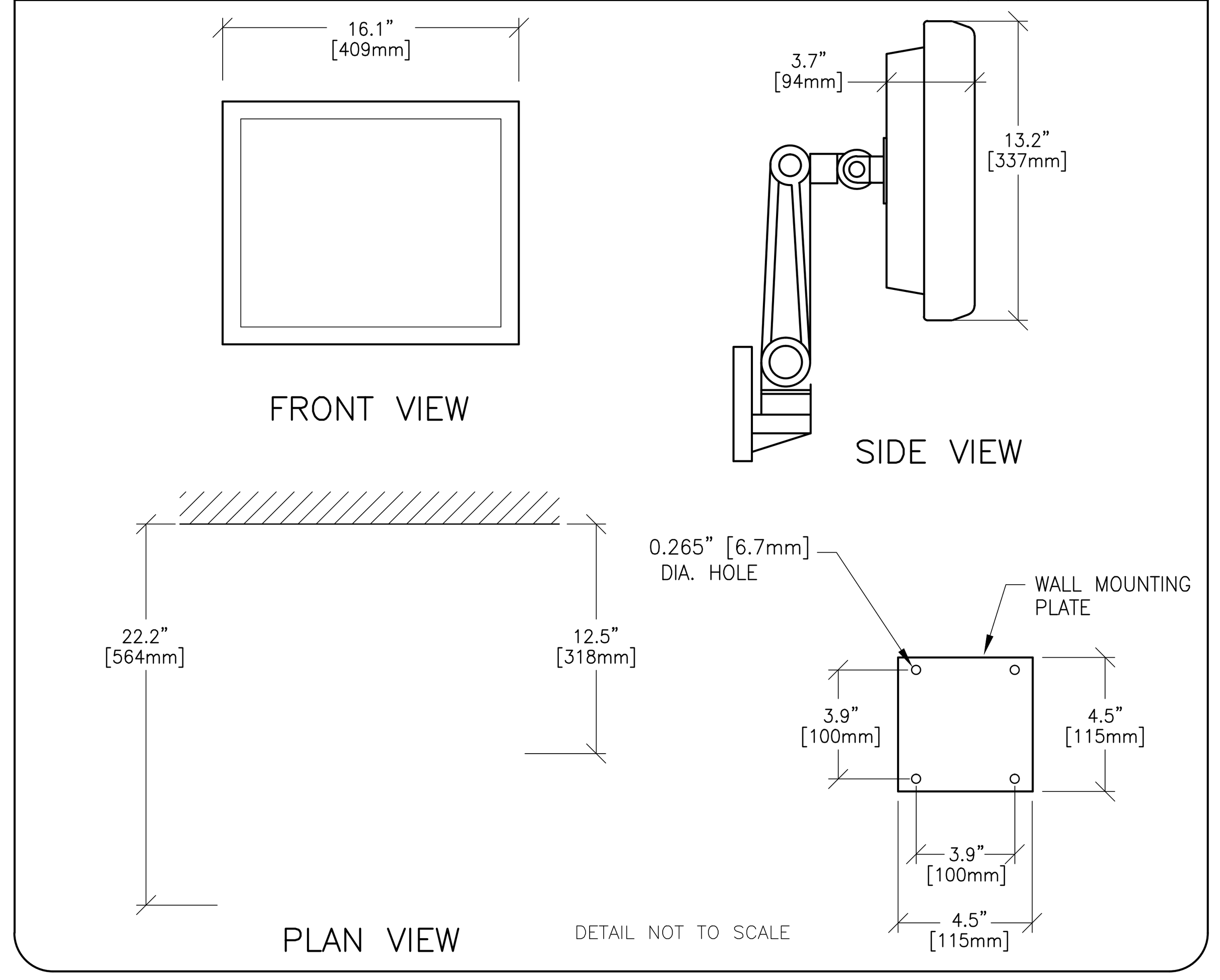


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
18" FLAT PANEL MONITOR ON WALL SUPPORT

C76-17B

REV. DATE: 04/29/04

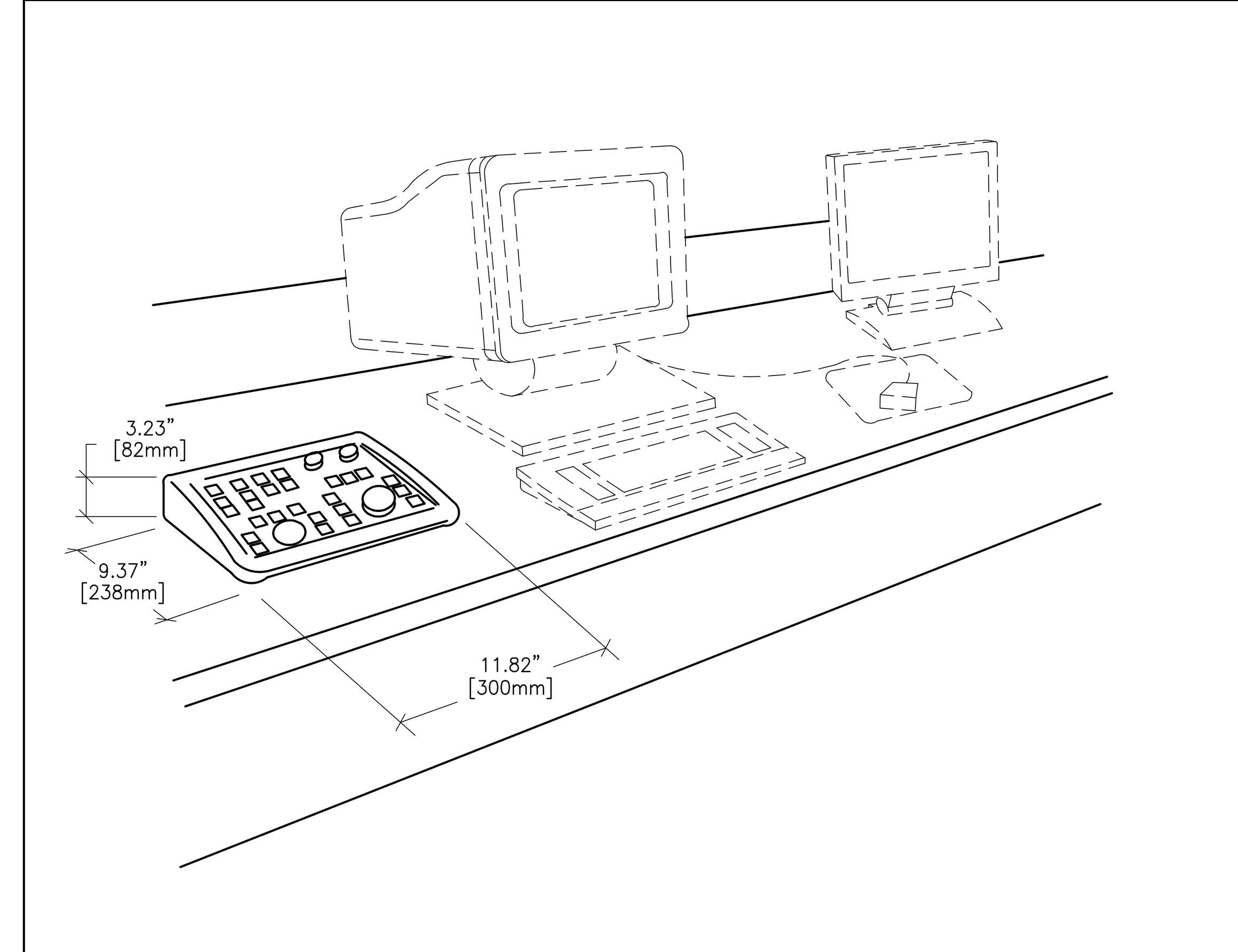


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
DLX or DL KEYPAD

C7412H

REV. DATE: 09/03/03

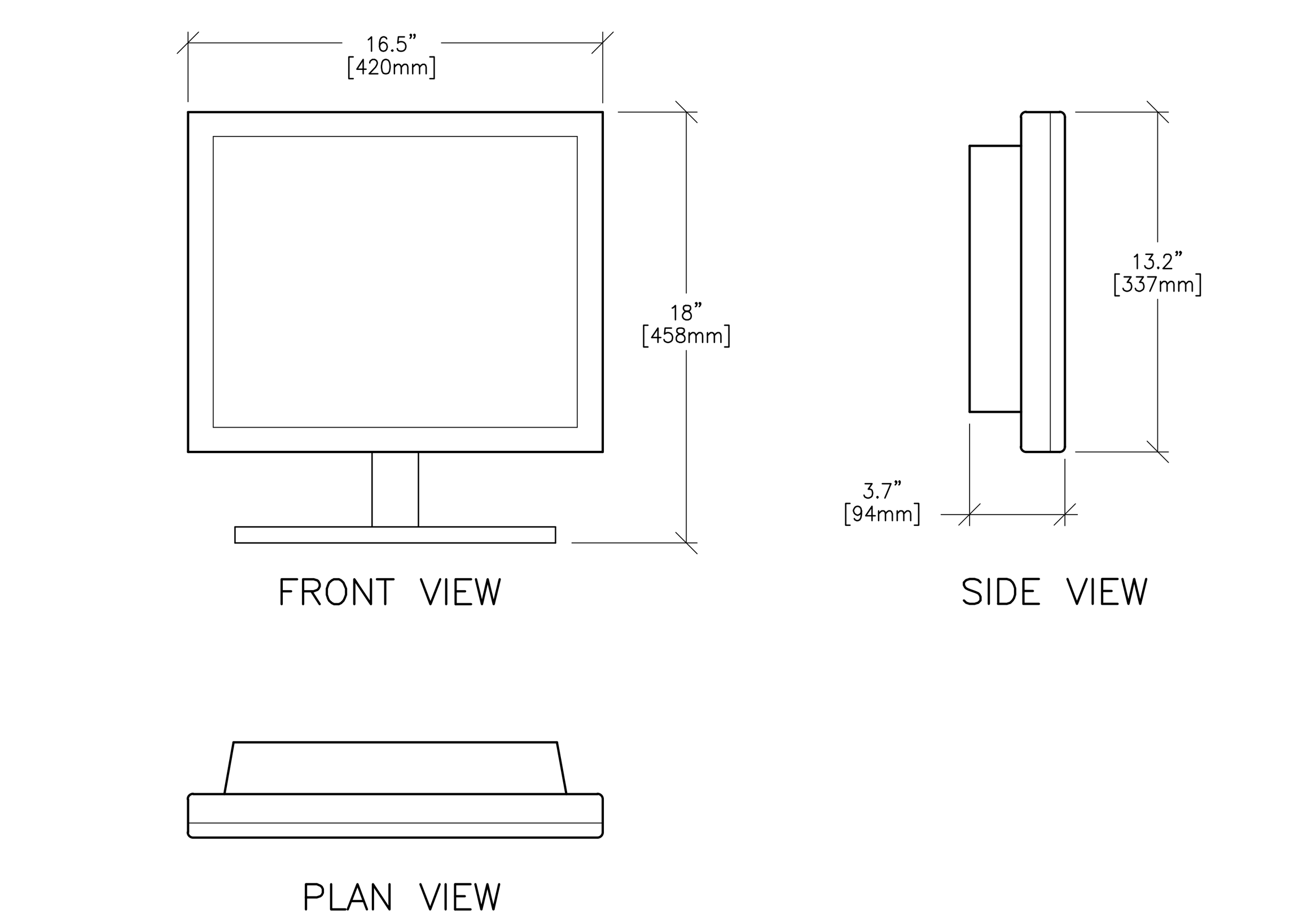


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
18" FLAT PANEL MONITOR

C76-17

REV. DATE: 08/28/09

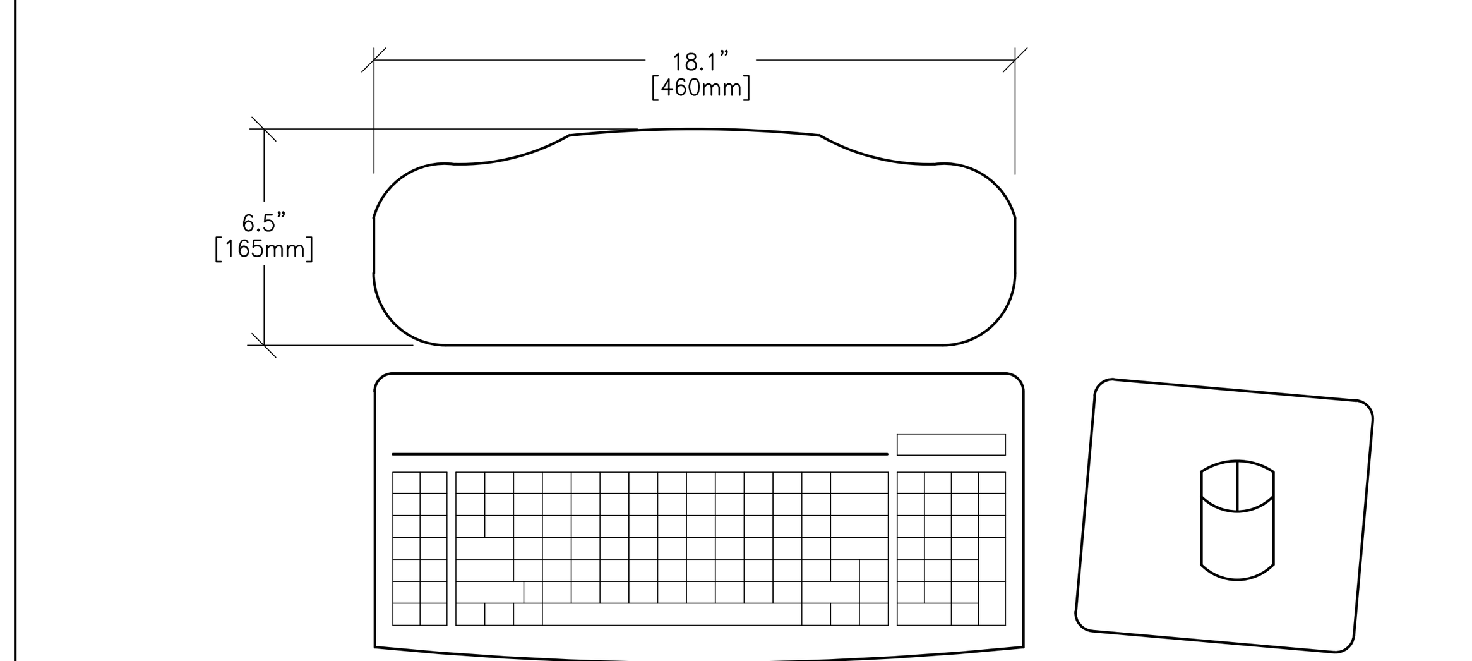


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
RCIM WITH DL KEYBOARD CONSOLE

C75-02

REV. DATE: 08/28/09

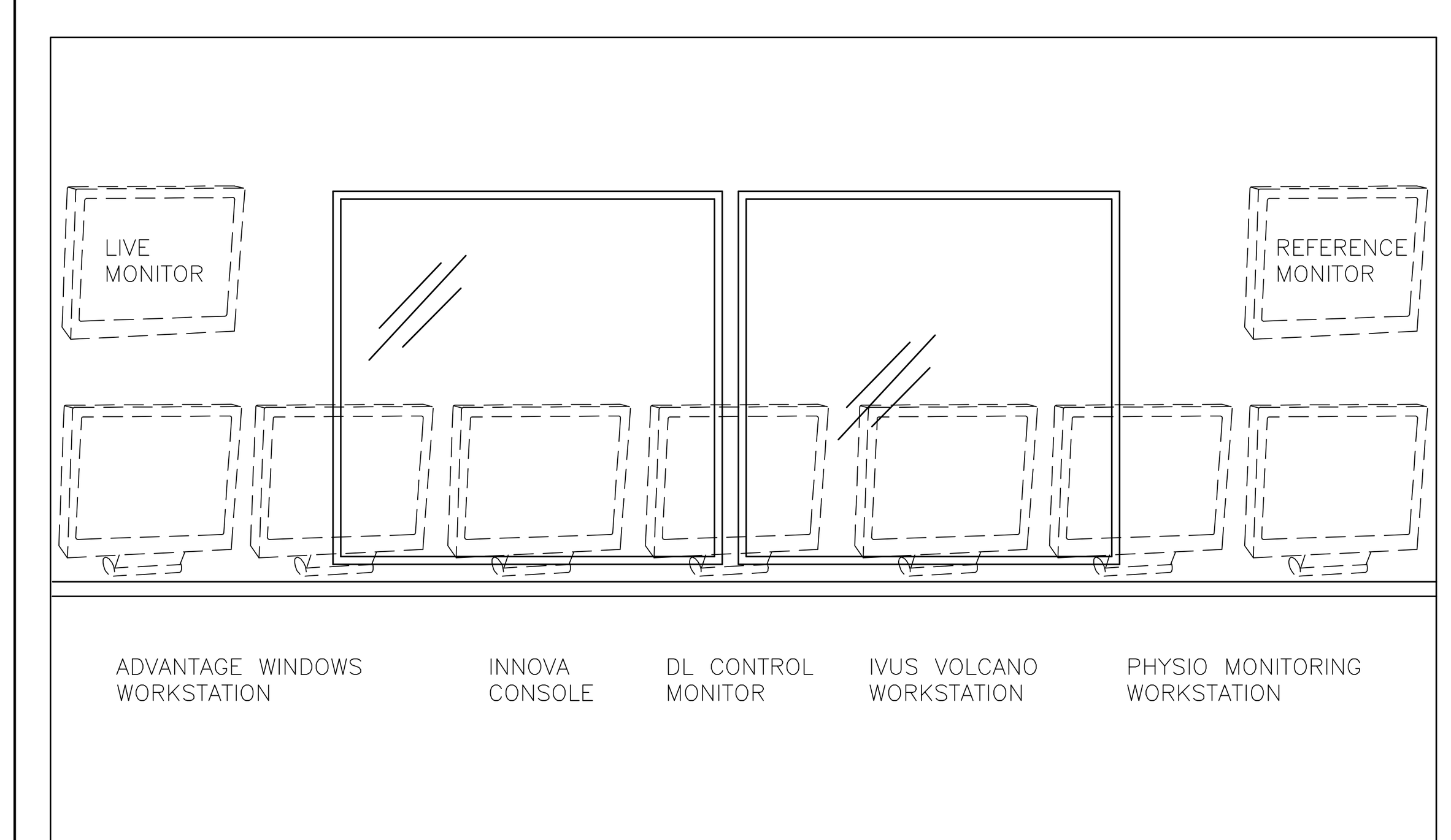


DETAIL NOT TO SCALE

TYPICAL CONTROL ROOM
INNOVA SINGLE PLANE

B5050C

REV. DATE: 08/26/08

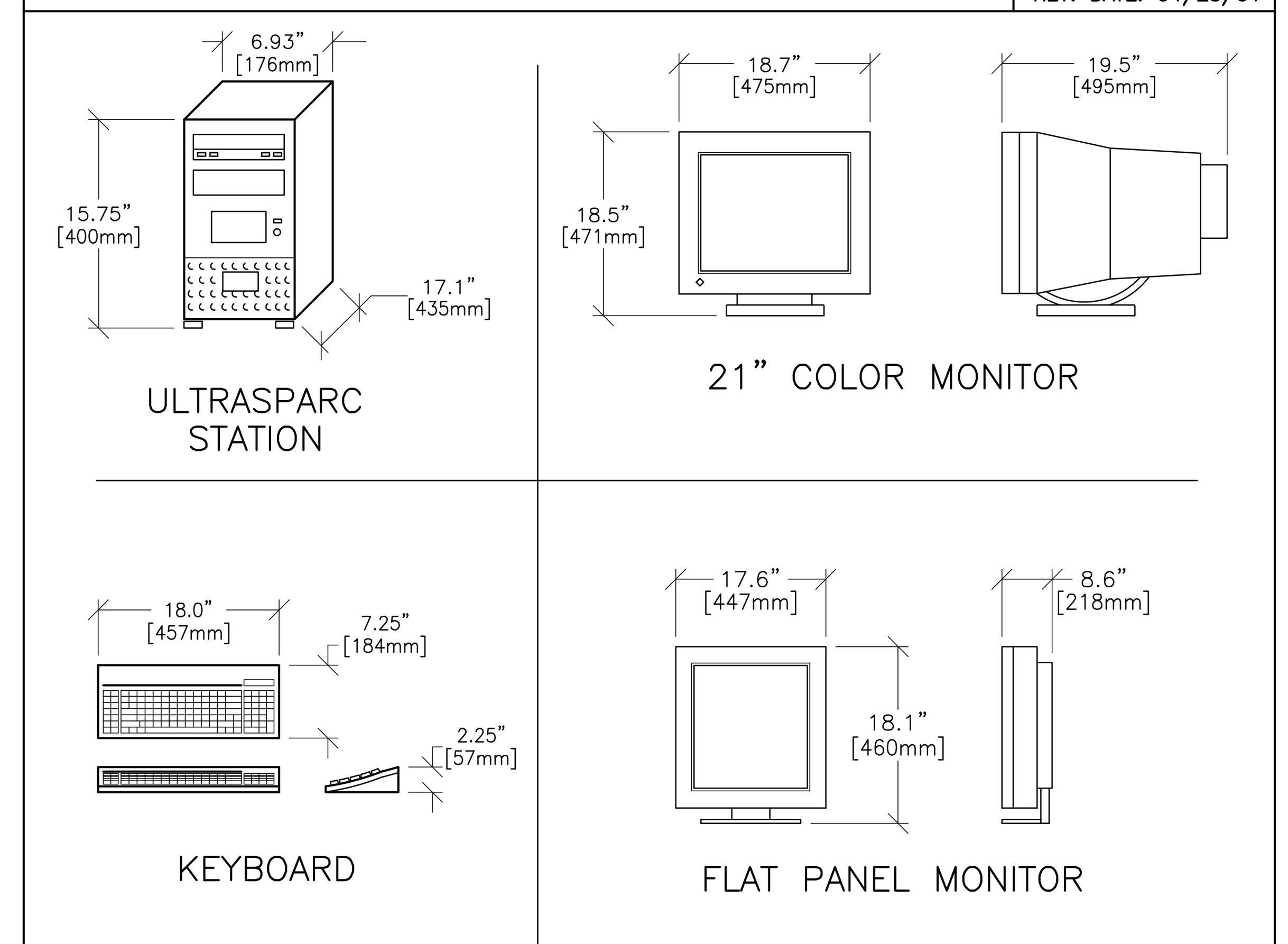


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
WORKSTATION

M1013AW

REV. DATE: 04/25/01



DETAIL NOT TO SCALE

RQ – 140195 PIM R01

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

GE Healthcare

IS Services Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT DETAILS

MODALITY TYPE: INNOVA 2100/3100/4100

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO ACTUAL EQUIPMENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR ACTUAL CONSTRUCTION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE: HYBRID OR

TYPICAL FINAL LAYOUT

PROJECT	REVISION
5–94f	00

DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

REVISION HISTORY:

SHEET
D2