

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 (Equipment locations, heat loads, component weights, environmental specs)	A1
STRUCTURAL LAYOUT (Structural support/mounting locations for floor/wall/ceiling, wall support elevations)	S1
STRUCTURAL DETAILS (Floor and Ceiling loading information)	S2
ELECTRICAL LAYOUT (Contractor supplied wiring, interconnect methods, junction point locations and descriptions)	E1
ELECTRICAL SPECIFICATIONS (Maximum wiring run lengths, interconnect diagram, system power specifications)	E2
ELECTRICAL DETAILS	E3 THRU E4
EQUIPMENT DETAILS	D1 THRU D3

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 Optima
 CL320i/CL323i
 Pre Installation Manual
 5413977-1-1EN

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



Interventional 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 D0C0422752					
GEHC Global Order #:		Customer:			
GEHC PMI:		FE / Installer:			
The customer is responsible for proper site preparation regardless of any GEHC measurements/inspections/assessments.					
Inspection Date:	Storage is ready?	PHI is ready?	FE is 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 SAdmin@CEB@ge.com, that it is compliant with GEHC specifications. Dock box 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 IL, KY, HI, RI, SC, TX. X-ray shielding plan and state acknowledgment letter provided to installer for AR, DC, NC, SC, CO @ VLS.	
4				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.	
5				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.	
6				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).	
7				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.	
8				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.	
9				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.	
10				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.	
11				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 ties installed per PIM discretion.	
12				Staging Requirements: Space has been identified to support the active installation process only. This area meets PIM/project book requirements.	
13				Storage space has been identified, if needed. This secured space would be used to store equipment indefinitely. If affixite, transportation plan has been developed at customer expense. This space must meet PIM requirements.	
				Network Connectivity: Hardware for network connectivity (network drop) is in place prior to delivery with specified network firewall configuration where required. Site surveys for wireless mobile XR units have been completed.	
				Medical Gases Requirements: Systems (hard pipe or portable) in place to allow testing and calibration of equipment (anesthesia, including ventilation).	

GE Healthcare
 Healthcare Project Implementation - Design Center
 Milwaukee, Wisconsin
 Copyright 2009 General Electric Company - Proprietary to GE

SHEET TITLE: SITE READINESS
 MODALITY TYPE: OPTIMA CL323i
 THIS PLAN IS SUBMITTED TO SURVEY 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 TO DETAILS OF THE DRAWING. THE COMPANY ACCEPTS NO LIABILITY FOR ANY DAMAGES OR ACTUAL CONSTRUCTION DEFICIENCIES, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
INTERVENTIONAL RADIOLOGY - OPTIMA
 TYPICAL FINAL LAYOUT

PROJECT	REVISION
4-80F	00
DATE:	18.Dec.13
DRAWN BY:	JPH
CHECKED BY:	TST

REVISION HISTORY:

SHEET
C1

R0 - 140193 PIM R3

GE EQUIPMENT LISTING

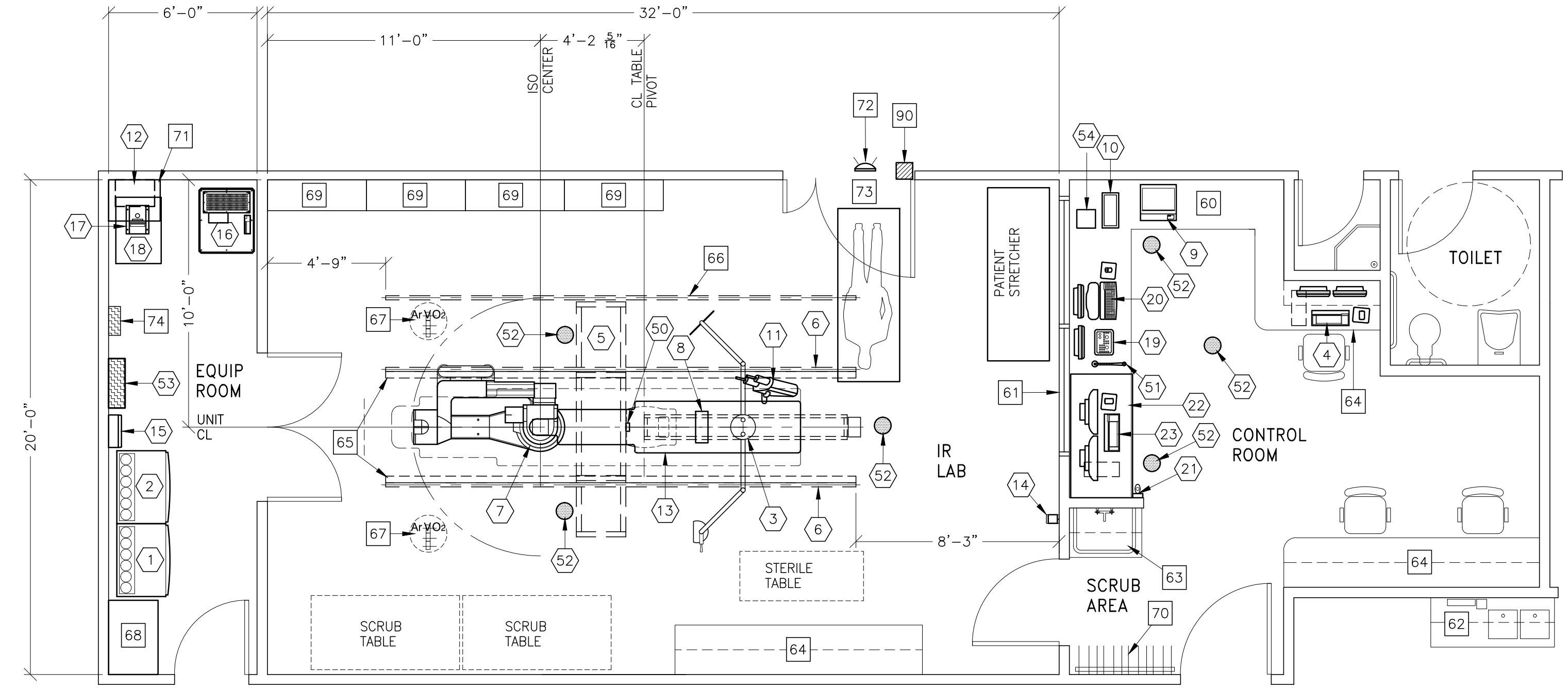
EQUIPMENT ON ORDER FROM GE HEALTHCARE, INSTALLED BY GE HEALTHCARE, PER : NEITHER A QUOTE OR GON WAS ISSUED AT THE DATE OF THESE DRAWINGS		EQUIPMENT CROSS REFERENCE CHART		SEISMIC STATUS		P = PREAPPROVAL C = CALCULATIONS/ PENDING APPROVAL S = SPECIFICATIONS ONLY		
ITEM NO.	QUANTITY ORDERED	REFER TO SHEET "D"	ITEM DESCRIPTION (* = EXISTING/REINSTALL)	WEIGHT	HEAT OUTPUT (PER HOUR)	DETAIL NO.	STRC PLAN	ELEC PLAN
1	1		ATLAS CABINET (C2)	659 lbs	1825 btu	B0558C	S100	C2
2	1		ATLAS CABINET (C1)	1115 lbs	3389 btu	B0558C	S100	C1
3	1		COUNTERBALANCED EYE AND THYROID SHIELD WITH P96 LAMP	143 lbs		B5031E	B5031F	LMP
4	1		AW WORKSTATION	81 lbs	1201 btu	H1013AV C7619D		
5	1		FOUR LCD MONITOR SUSPENSION ON 9 FT. 6 IN. XT INBOARD BRIDGE	485 lbs	1157 btu	B2004 B2010A		WBM1
6	2		LONGITUDINAL STATIONARY RAIL FOR XT SUSPENSION	68 lbs			B20076	
7	1		INNOVA POSITIONER (REFERENCE TABLE BASE-PLATE DETAIL FOR FLOOR MOUNTING INFORMATION)	1653 lbs	2416 btu	B5050A B5050B B5050 B5050E B5050F B5050H B5050J B5050P B5050R		LC1
8	1		TRAM NET RACK	8 lbs		B5047		TRAM
9	1		COLOR PRINTER		1054 btu			
10	1		REMOTE CTRL FOR INJECTOR	4 lbs		B5028		IEC
11	1		INJECTOR HEAD ON TABLE RAIL	15 lbs		B5030A		IH
12	1		INJECTOR ELECTRONICS ON SHELF	37 lbs	320 btu	B5028		IE
13	1		OMEGA V TABLE	1300 lbs	614 btu	B5061	B5049M	LUS
14	1		XR BUZZER (LOCATED ABOVE CEILING)	2 lbs		B5150H		XRB
15	1		UPS INTERFACE BOX			E4502IB		UIB
16	1		UPS CABINET	1170 lbs	4061 btu	E4502SC		UPS
17	1		DETECTOR CHILLER	33 lbs	706 btu	B5049F		DC
18	1		WATER CHILLER	449 lbs	18716 btu	M0917B		CHLR
19	1		CONTROL ROOM MONITOR WITH DL KEYPAD	22 lbs	204 btu	C7412H C7619D		
20	1		OPERATORS CONSOLE	22 lbs	546 btu	C7502 B5050C C7619D		WBC1
21	1		BOLUS CHASE HANDSWITCH	2 lbs				WBBC
22	1		WORKSTATION CART					
23	1		MAC-LAB CONSOLE, INCLUDES MONITORS AND KEYBOARD	566 lbs	2935 btu			PC

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

50	1		VITALING MICROPHONE (ONE ON MONITOR BRIDGE IN EXAM ROOM)			B0573		
51	1		VITALING MICROPHONE (ONE ON COUNTERTOP IN CONTROL ROOM)					
52	6		VITALING SPEAKER					
53	1		INNOVA MAIN DISCONNECT, REFERENCE JUNCTION POINT "PDB" ON SHEET E1 FOR DETAILED DESCRIPTION.	326 lbs	1532 btu	E4502M		PDB
54	1		VITALING CONSOLE			B0566		

EQUIPMENT LAYOUT SCALE: 1/4" = 1'-0" 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 FOR EQUIPMENT-SHELVING MAY BE REQUIRED PROVIDE GROMMETED OPENINGS AS REQUIRED TO ROUTE INTERCONNECT CABLES TO RACEWAY BELOW COUNTERTOP.
61	CONTROL WALL TO CEIL WITH LEAD GLASS VIEWING WINDOW.
62	COUNTER TOP WITH SINK, BASE AND WALL CABINETS
63	SCRUB SINK
64	COUNTER TOP WITH BASE AND WALL CABINETS
65	BEARING BLOCK OUTLINE, SEE S1 FOR MORE INFORMATION.
66	CABLE DRAPE RAIL.
67	MED GASES IN CEILING
68	CUSTOMER SUPPLIED STORAGE CABINET
69	CATHETER CABINETS
70	LEAD APRON RACK
71	SHELF - CUSTOMER TO PROVIDE ADEQUATE WALL SUPPORT
72	X-RAY ON WARNING LIGHT - AVAILABLE FROM GE SUPPLY CALL: 800-200-9760 GE CAT. NO. WX1ABWW-DF-XIU
73	MINIMUM DOOR OPENING FOR EQUIPMENT DELIVERY IS 44 IN. W X 82 IN. H (1118mm X 2108mm). CONTINGENT ON A 96 IN. (2438mm) CORRIDOR WIDTH
74	150-AMP LOCAL SERVICE DISCONNECT FOR LOCK-OUT/TAG-OUT CAPABILITY (MAY BE A FUSED DISCONNECT, CIRCUIT BREAKER OR SAFETY SWITCH.)

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

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 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 ACCOMMODATE 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.

GE Healthcare
Healthcare Project Implementation - Design Center
Minneapolis, MN

SHEET TITLE: **EQUIPMENT LAYOUT**
MODALITY TYPE: **OPTIMA CL323i**
THIS PLAN IS SUBMITTED TO ASSIST IN THE 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 TO THE ACTUAL CONSTRUCTION DRAWINGS AND THE USER CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

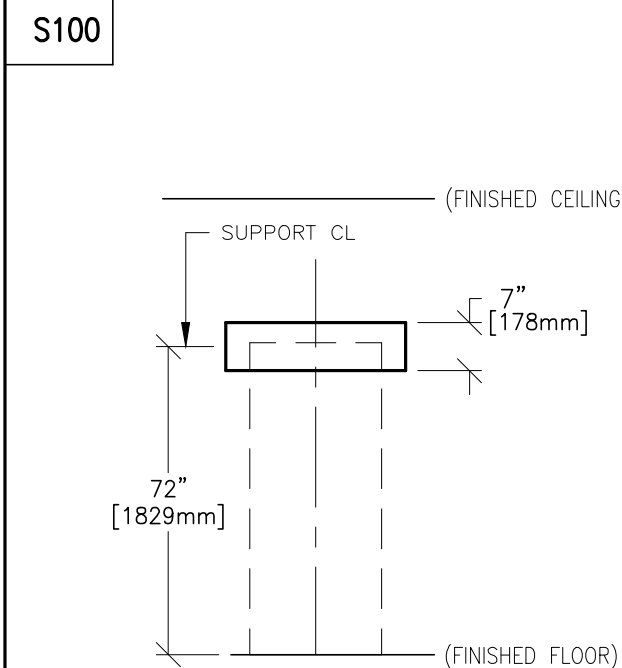
PROJECT TITLE:
INTERVENTIONAL RADIOLOGY - OPTIMA
TYPICAL FINAL LAYOUT

PROJECT	REVISION
4-80F	00
DATE:	18.Dec.13
DRAWN BY:	JPH
CHECKED BY:	TST

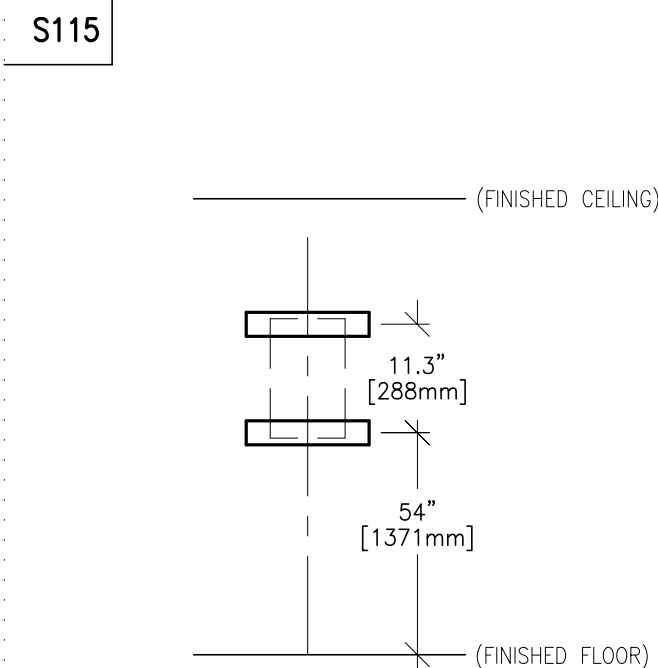
REVISION HISTORY:

SHEET
A1

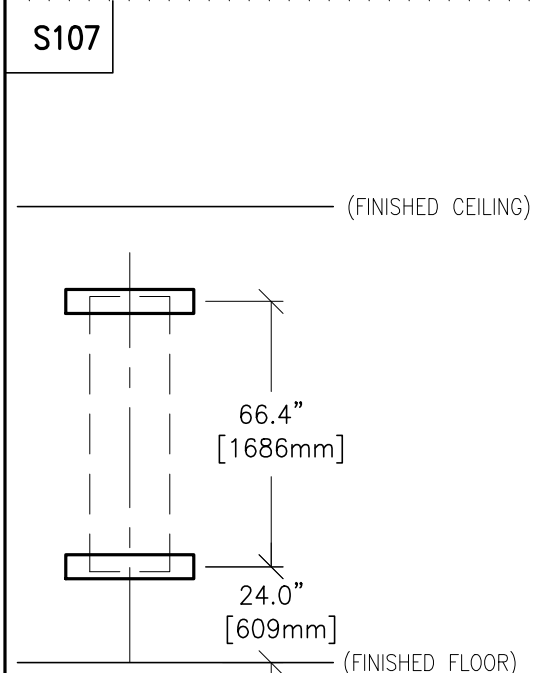
TYPICAL WALL SUPPORT ELEVATIONS



SUPPORT FOR ATLAS/SYSTEMS CABINET (NOT TO SCALE)



SUPPORT FOR UPS INTERFACE BOX (NOT TO SCALE)

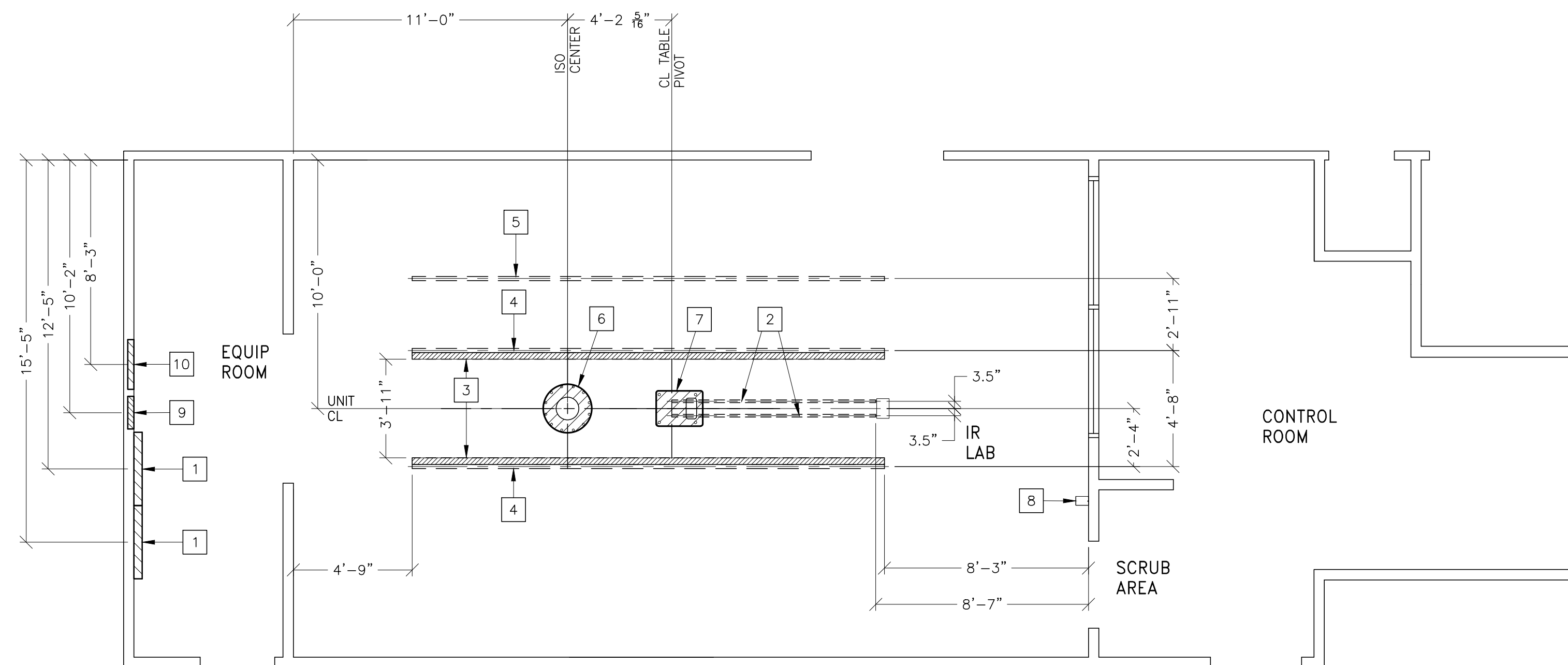


SUPPORT FOR MAIN DISCONNECT CONTROL (NOT TO SCALE)

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 S100, FOR ATLAS CABINET.
2	UNISTRUT OR EQUIVALENT SUPPORTS FOR FASTENING THE OVERHEAD COUNTERPOISED SUSPENSION. SUPPORT TO BE LOCATED AS SHOWN. SUPPORT SHOULD RUN CONTINUOUS WITH NO FITTINGS EXTENDING BELOW FACE OF UNISTRUT CHANNEL. BE PARALLEL, SQUARE, AND IN THE SAME HORIZONTAL PLANE. FLUSH WITH FINISHED CEILING. SUSPENSION REQUIRES 102 LBS/BOLT SUPPORT. METHODS OF SUPPORT THAT WILL PERMIT ATTACHMENT TO STRUCTURAL STEEL OR THROUGH BOLTS IN CONCRETE CONSTRUCTION SHOULD BE FAVORED. DO NOT USE SCREW ANCHORS IN DIRECT TENSION.
3	HATCHED AREA INDICATES MONITOR BRIDGE BEARING BLOCK PATH.
4	UNISTRUT OR EQUIVALENT SUPPORT IN CEILING FOR FASTENING CEILING SUPPORTED EQUIPMENT. SUPPORTS TO 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 THE FINISHED CEILING. RAILS ARE MOUNTED TO THESE SUPPORTS EVERY 2'-2" AND REQUIRE 950 LBS. (<597 LBS. IN SEISMIC REGIONS) PER BOLT LOAD. METHODS OF SUPPORT THAT PERMIT ATTACHMENT TO STRUCTURAL STEEL OR THROUGH BOLTS IN CONCRETE SHOULD BE FAVORED. DO NOT USE SCREW ANCHORS IN DIRECT TENSION.
5	>>COMPONENTS FLUSH WITH CEILING<< UNISTRUT OR EQUIVALENT SUPPORT IN CEILING FOR FASTENING CABLE TRAPE RAIL. SUPPORTS TO 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 THE FINISHED CEILING. RAILS ARE MOUNTED TO THESE SUPPORTS EVERY 2'-2" AND REQUIRE 50 LBS. PER BOLT LOAD. METHODS OF SUPPORT THAT PERMIT ATTACHMENT TO STRUCTURAL STEEL OR THROUGH BOLTS IN CONCRETE SHOULD BE FAVORED. DO NOT USE SCREW ANCHORS IN DIRECT TENSION. TO ORDER, CALL UNISTRUT WISCONSIN AT 262-796-8710.
6	AREA OCCUPIED BY GE SUPPLIED POSITIONER BASEPLATE
7	AREA OCCUPIED BY GE SUPPLIED OMEGA TABLE BASE
8	MOUNT XR BUZZER BRACKET ON WALL ABOVE CEILING
9	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S115, FOR UPS INTERFACE BOX.
10	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S107, FOR MAIN DISCONNECT CONTROL.

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 AUXILIARY 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"

SHEET TITLE: STRUCTURAL LAYOUT

MODALITY TYPE: OPTIMA CL3231

THIS PLAN IS SUBMITTED TO SUPPORT 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 TO DETAILS AND DIMENSIONS SHOWN ON DRAWINGS AND TO THE ACTUAL CONSTRUCTION. GE HEALTHCARE ACCEPTS NO LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
INTERVENTIONAL RADIOLOGY - OPTIMA
TYPICAL FINAL LAYOUT

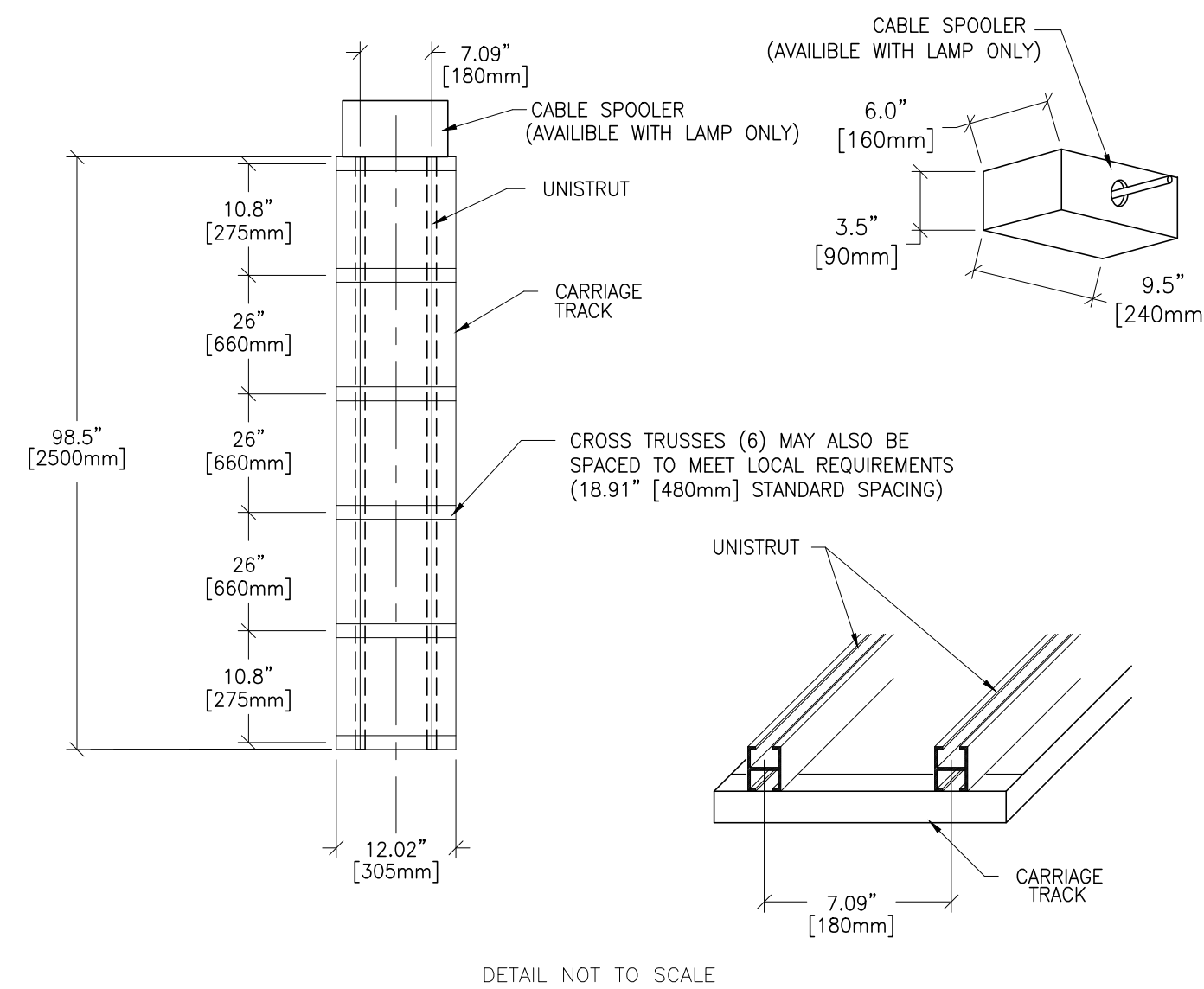
PROJECT	REVISION
4-80F	00
DATE:	18.Dec.13
DRAWN BY:	JPH
CHECKED BY:	TST

REVISION HISTORY:

SHEET
S1

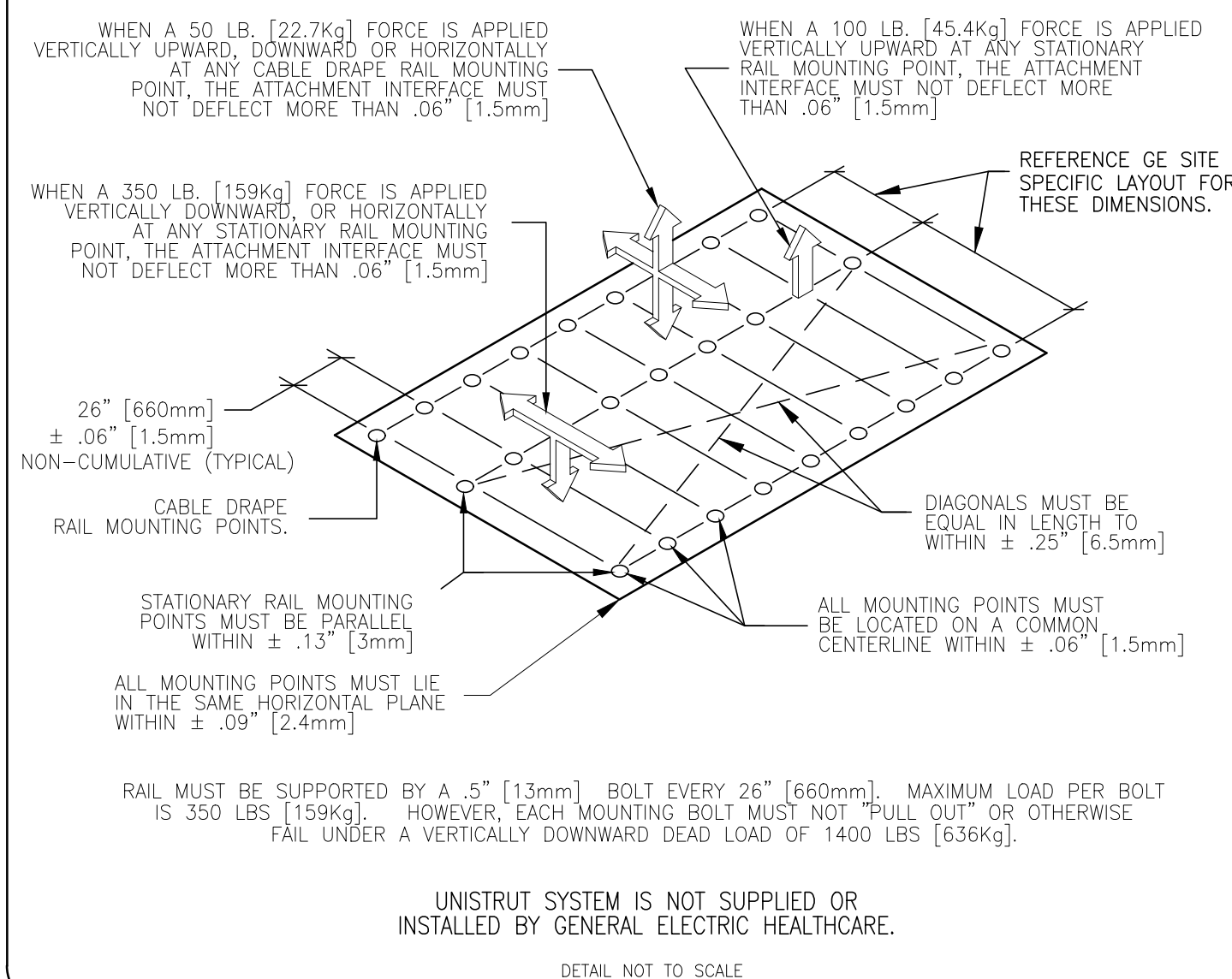
SUPPORT DETAIL
MAVIG CEILING TRACK MOUNTING

B50-31F
REV. 00: 05/09/05



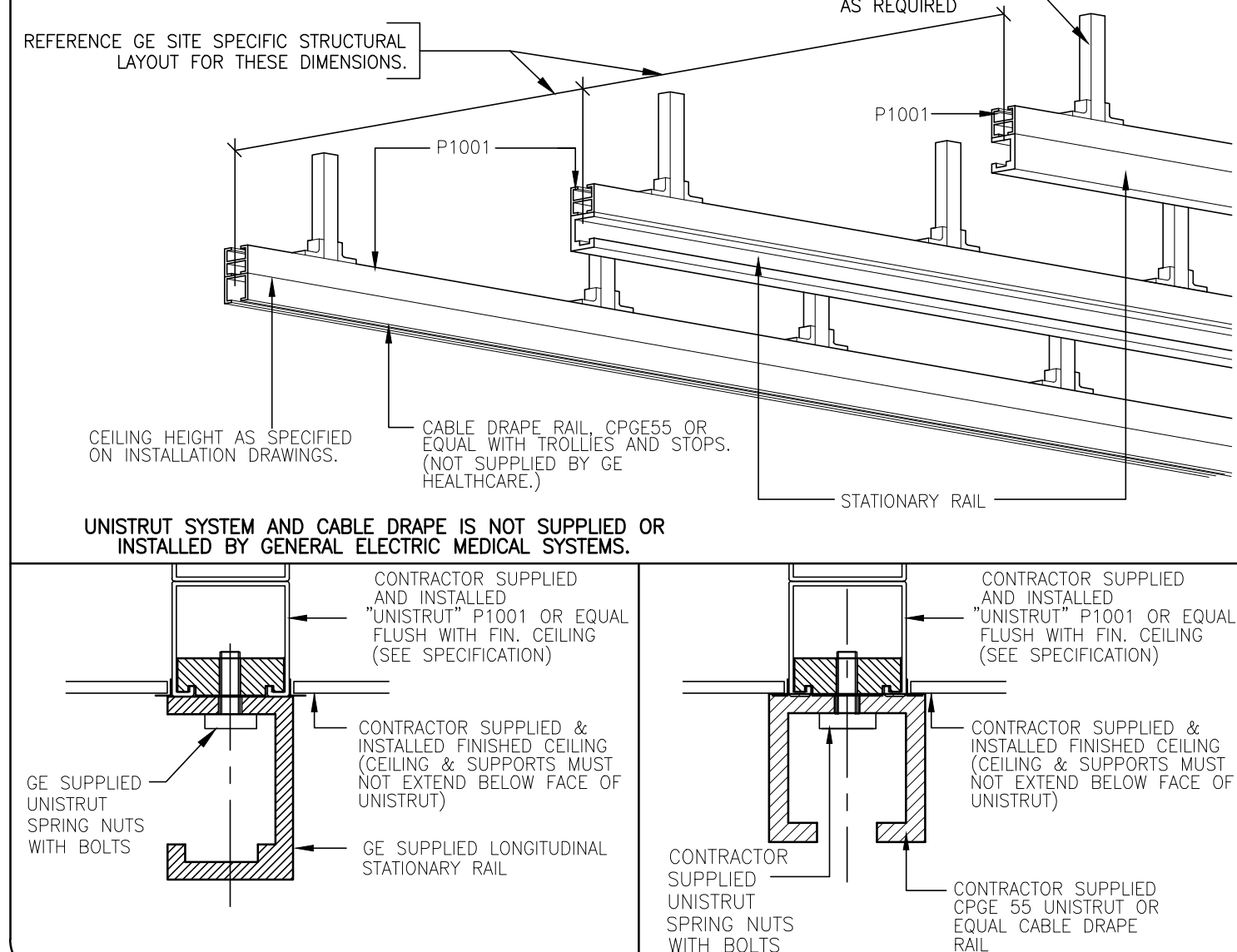
SUPPORT DETAIL

XT RADIOGRAPHIC SUSPENSION, INBOARD MOUNTING
B20-078
REV. DATE: 11.Jun.12



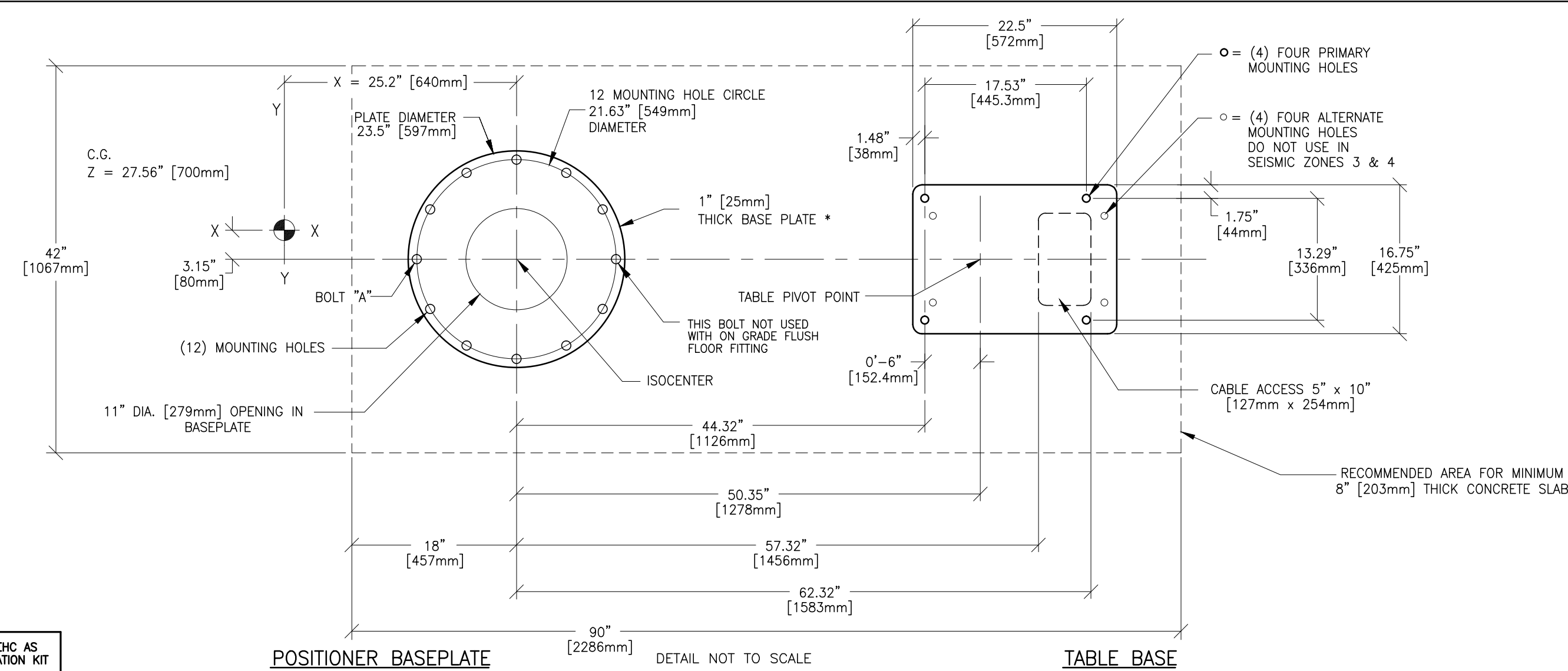
SUPPORT DETAIL

XT RADIOGRAPHIC SUSPENSION, INBOARD MOUNTING
B20-042
REV. DATE: 11.Jun.12



FLOOR MOUNTING : ALL INNOVA (UNITY AND HARMONY) SYSTEMS/OMEGA V LONG TABLE (NO IQ TILT TABLE BASEPLATE) INSTALLATION (TEMPLATE NO. 2127792)

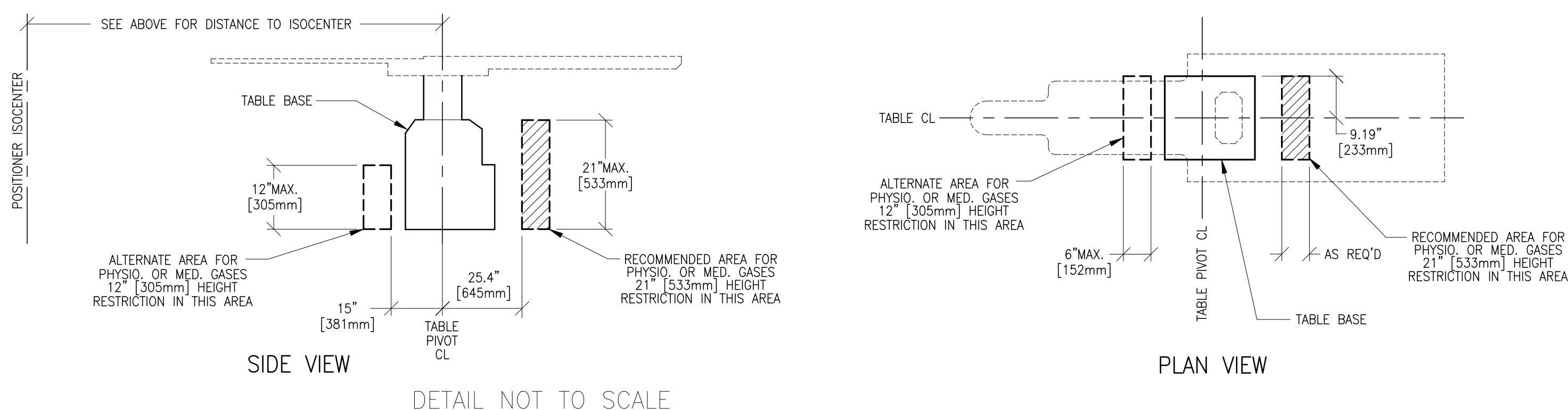
B5049M
REV. DATE: 06/04/09



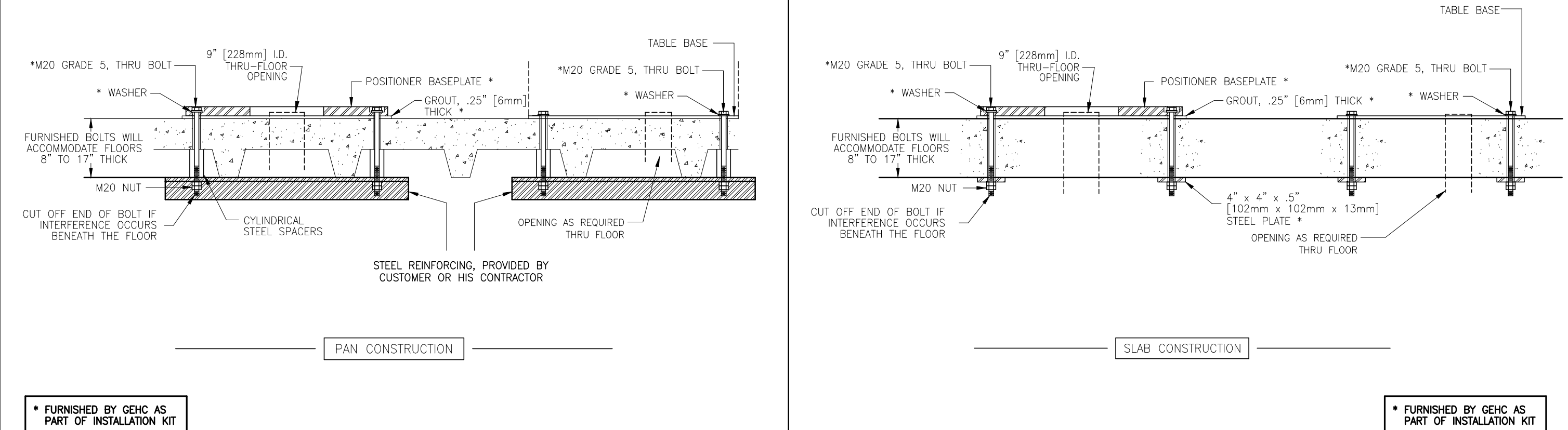
WARNING!! THE RELATIONSHIP BETWEEN THE TABLE BASE AND THE POSITIONER BASEPLATE IS CRITICAL.

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.

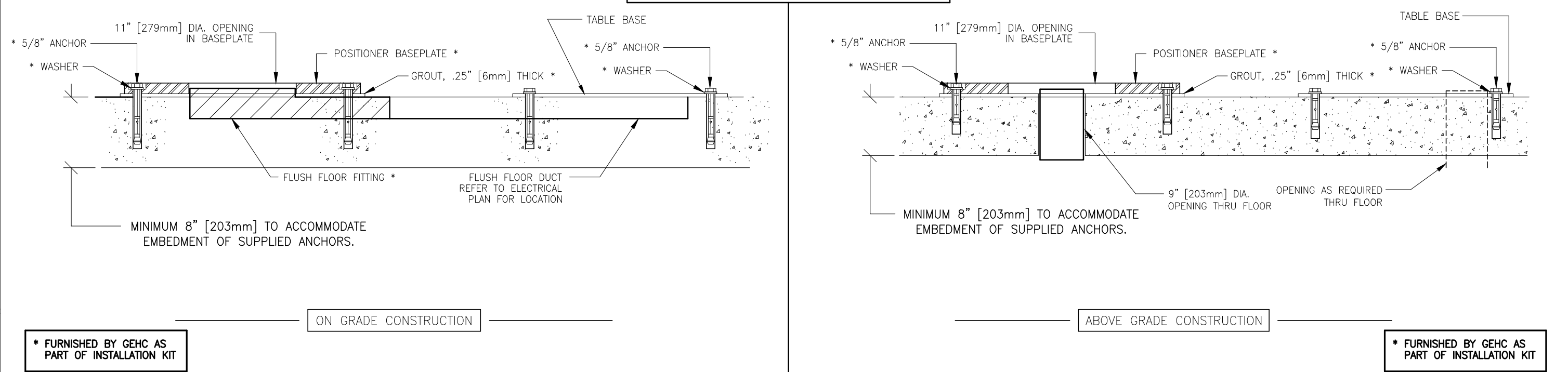
MEDICAL GAS FLOOR EXIT LOCATIONS



THROUGH-BOLT MOUNTING OPTIONS



ANCHOR BOLT MOUNTING OPTIONS



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	BOLT TENSION (AT BOLT "A")
HORIZONTAL ACCELERATION = 625 lbs. [284 Kg]	MAXIMUM TENSION = 881 lbs. [400 Kg]
VERTICAL ACCELERATION = 209 lbs. [95 Kg]	BOLT SHEAR (U-ARM LOCKED)
	MAXIMUM SHEAR = 120 lbs. [54 Kg]/BOLT

OMEGA TABLE BOLT FORCES FOR WORST CASE CONDITIONS

LOADS	BOLT TENSION	BOLT SHEAR
	MAXIMUM TENSION = 1938 lbs. [880 Kg]/BOLT	MAXIMUM SHEAR = 407 lbs. [185 Kg]/BOLT

SHEET TITLE: STRUCTURAL DETAILS
MODALITY TYPE: OPTIMA CL3231

PROJECT TITLE:
INTERVENTIONAL RADIOLOGY - OPTIMA
TYPICAL FINAL LAYOUT

PROJECT REVISION
4-80F 00
DATE: 18.Dec.13
DRAWN BY: JPH
CHECKED BY: TST

REVISION HISTORY:

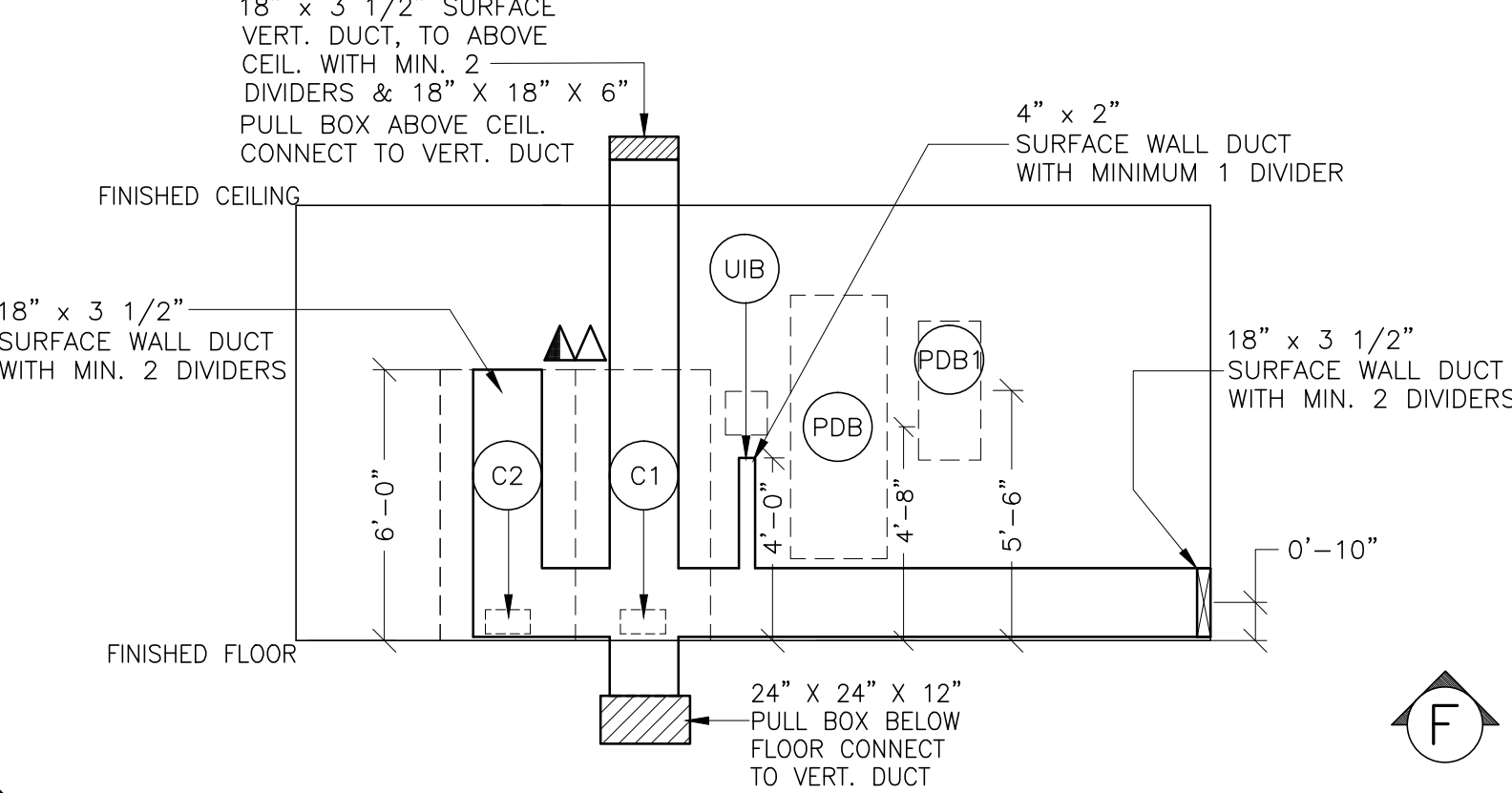
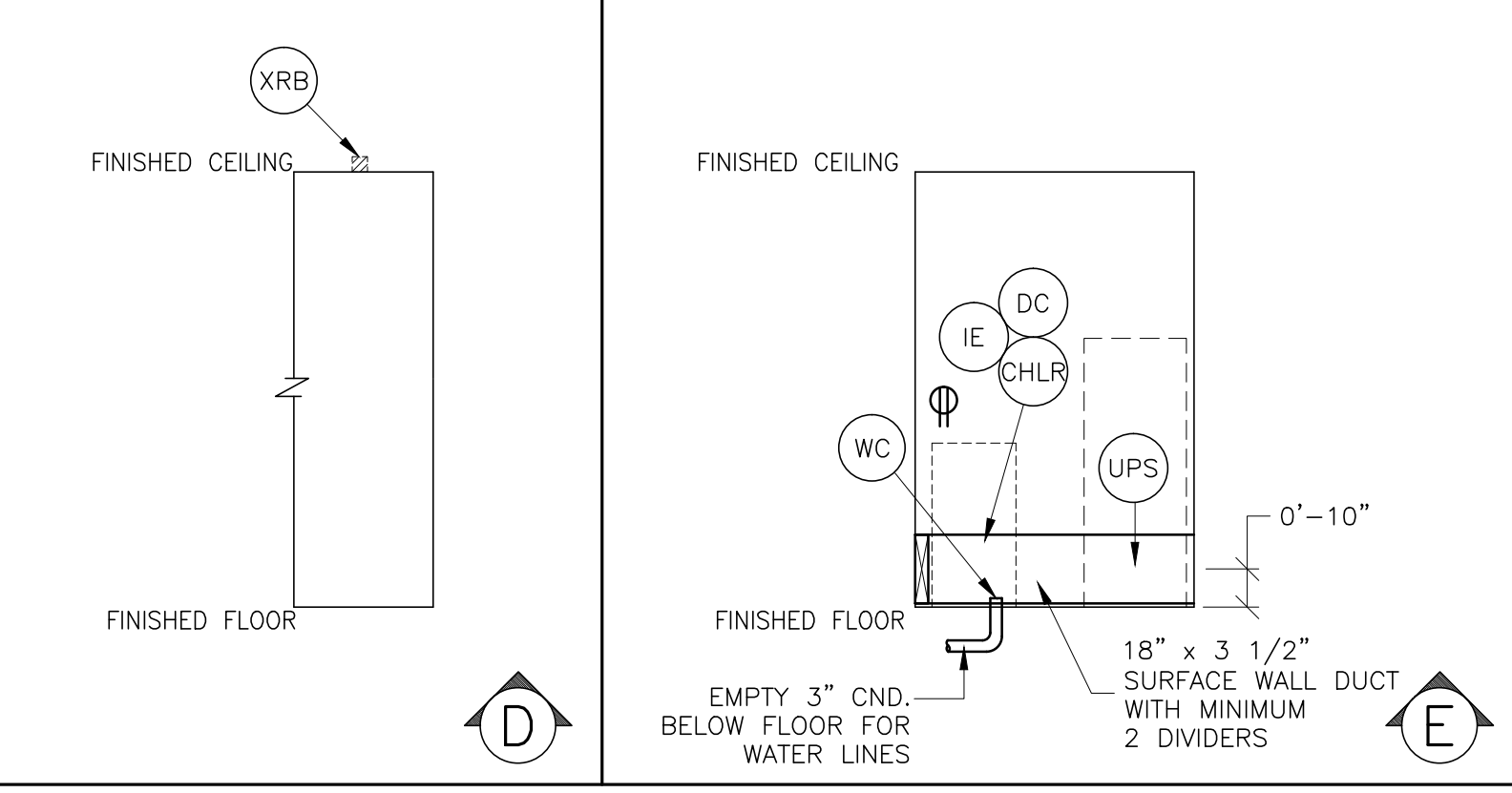
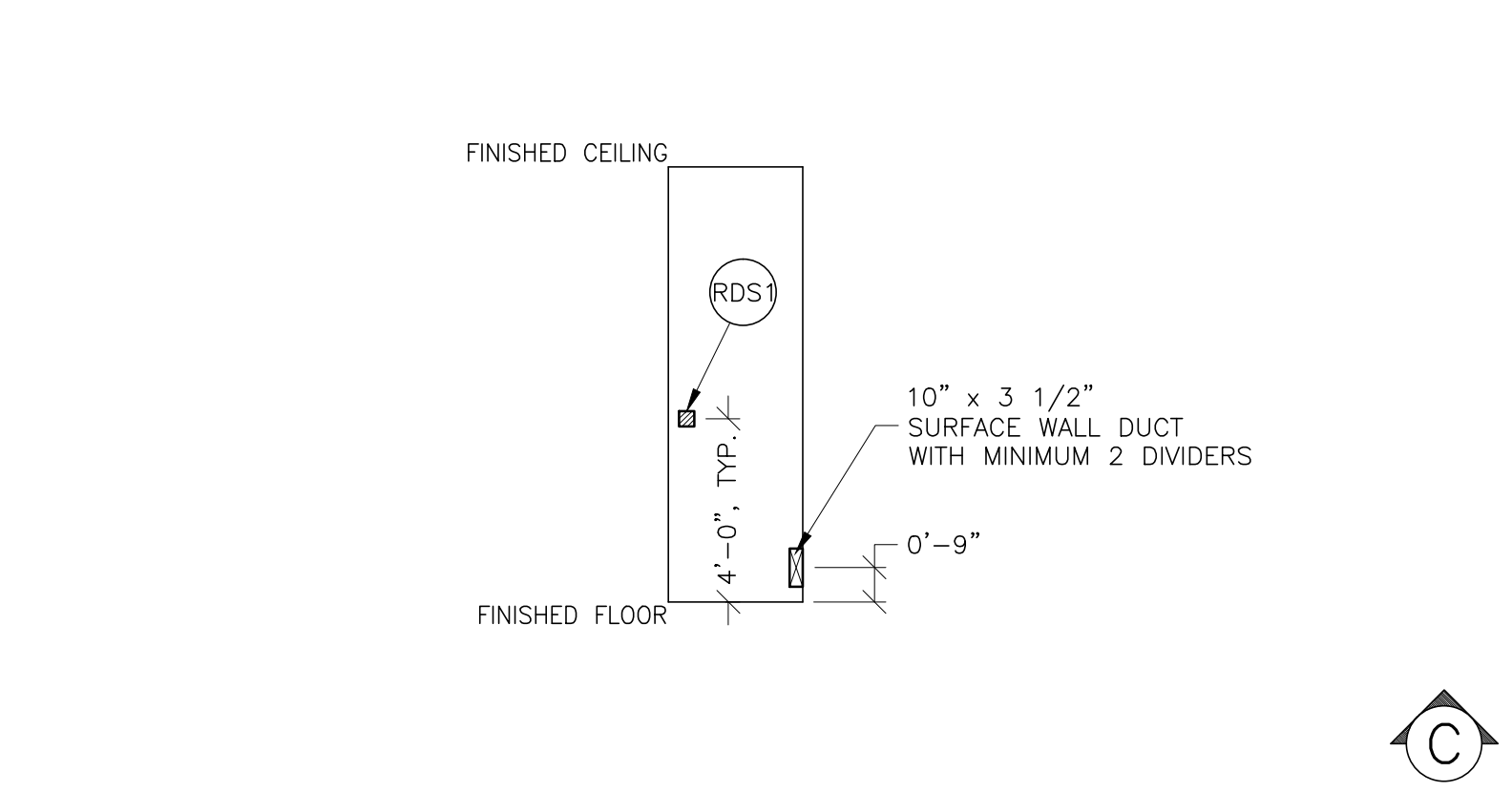
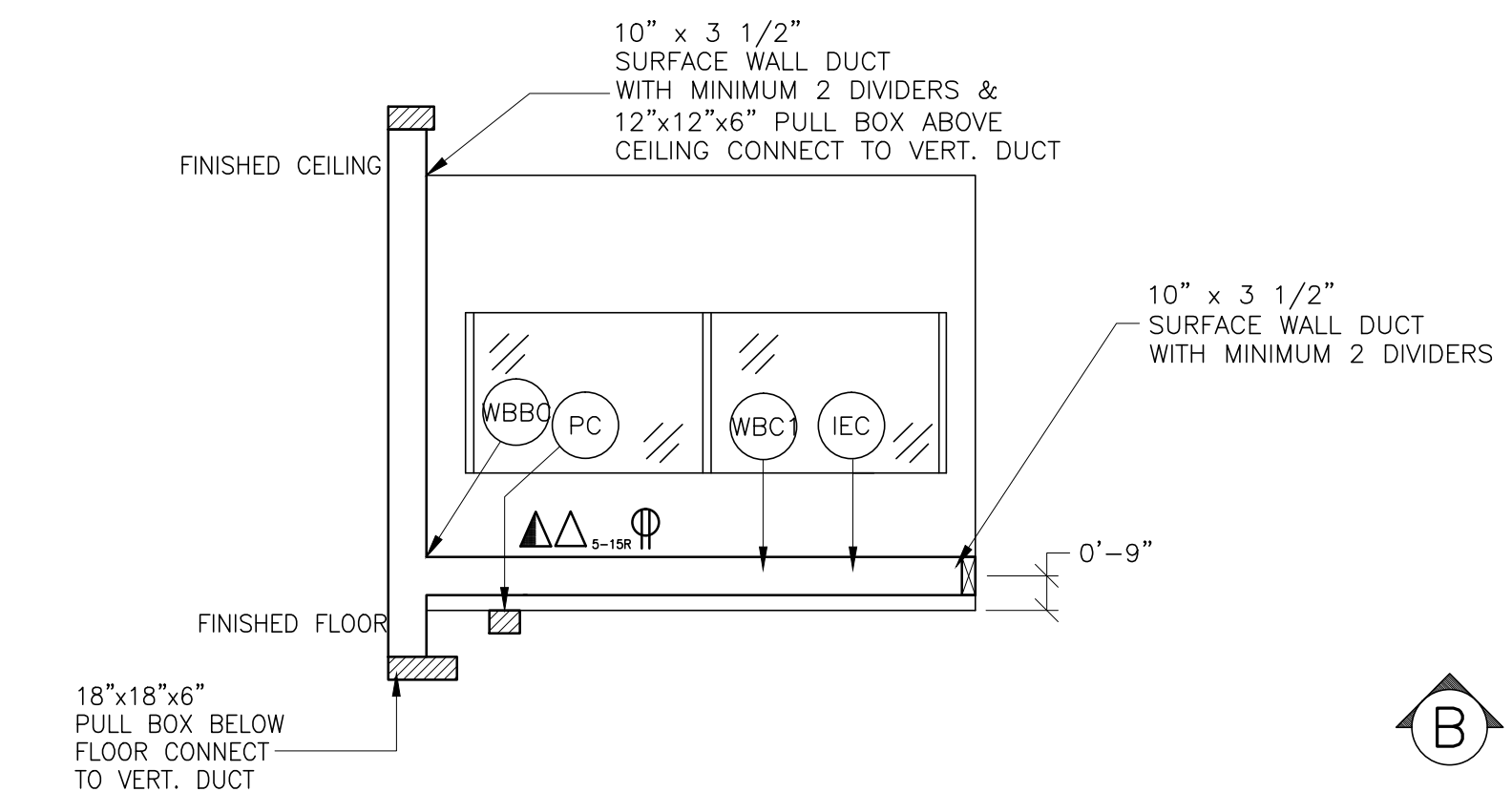
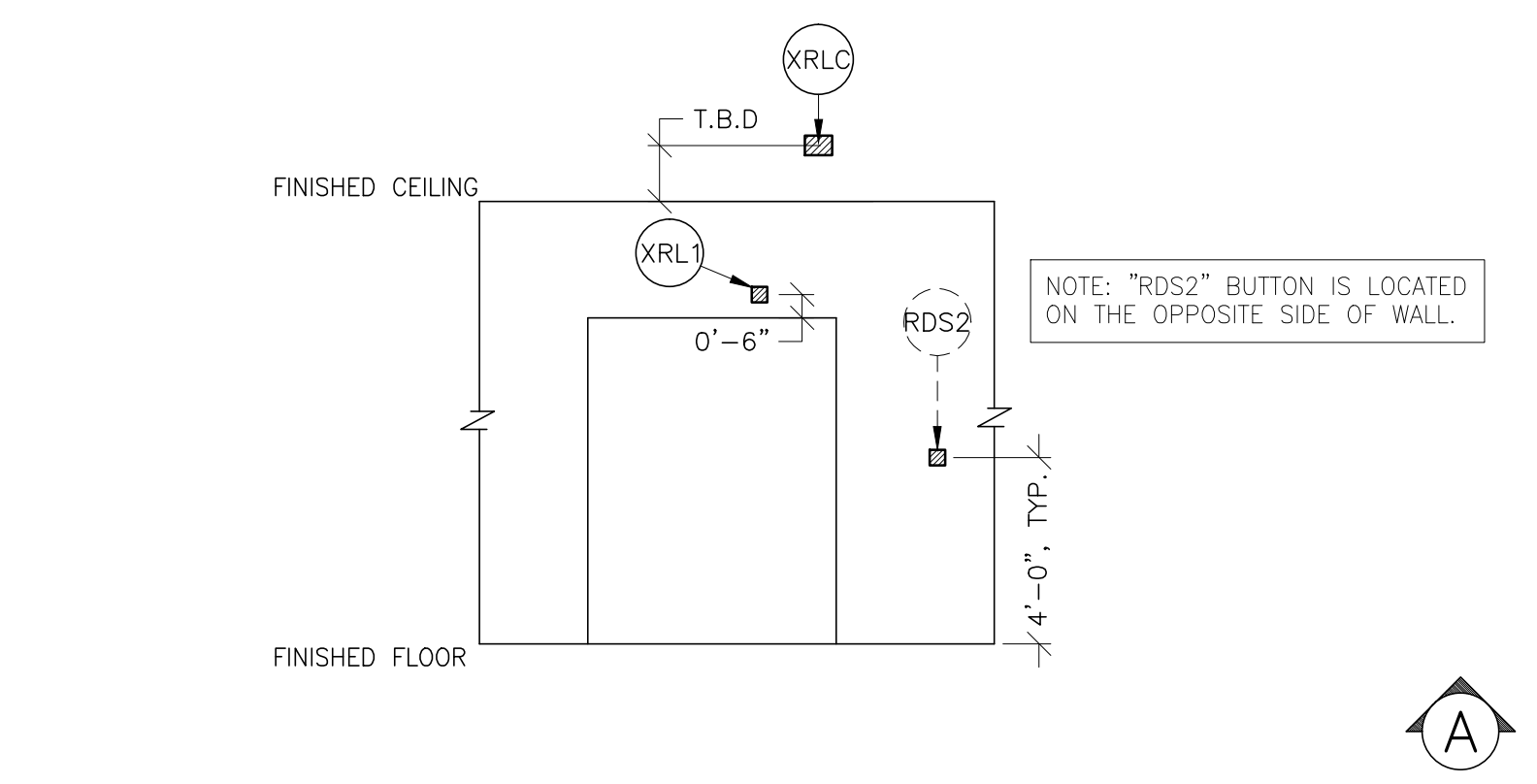
SHEET
S2

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

ELECTRICAL PLAN

RECOMMENDED CEILING HEIGHT = 9'-6"

JUNCTION POINT DESCRIPTIONS



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

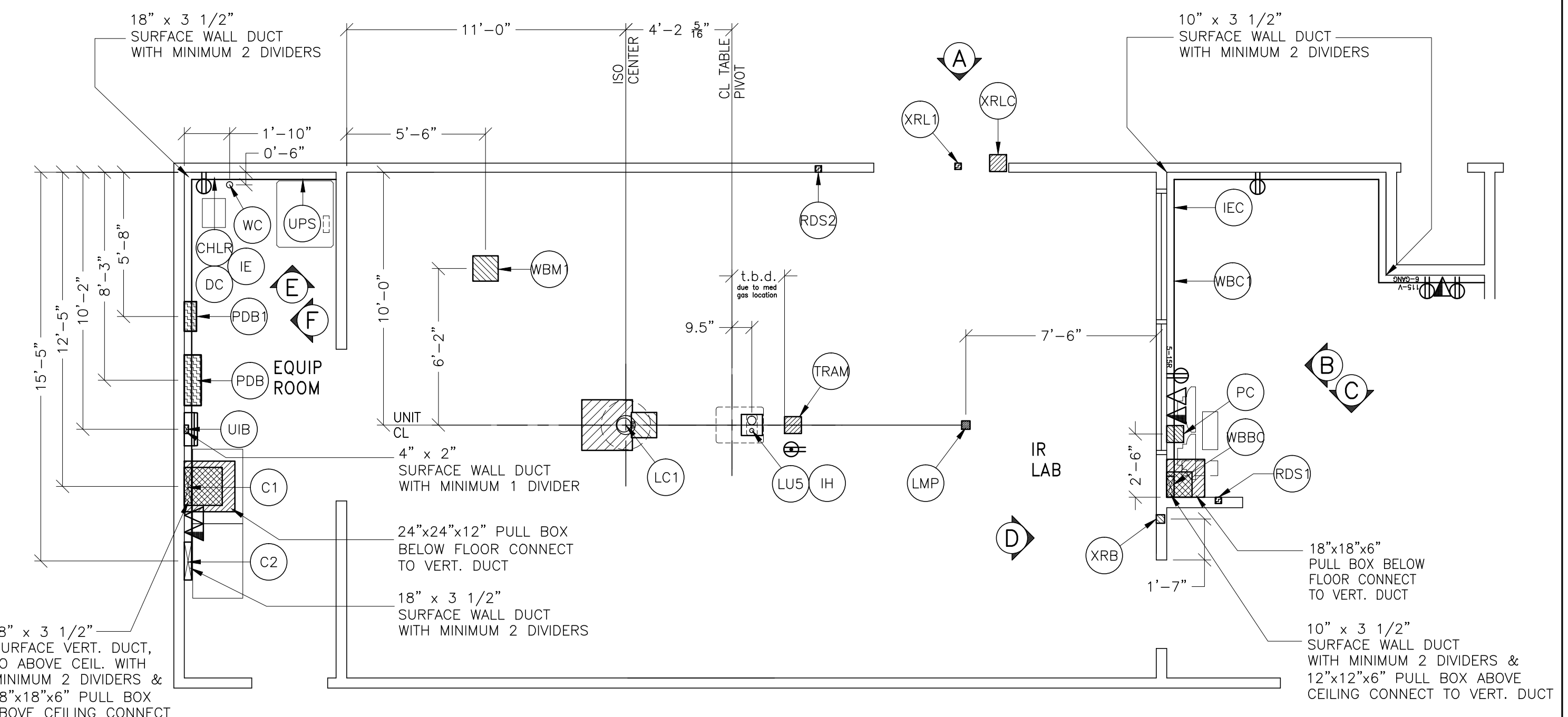
- ⊕ DUPLEX HOSPITAL GRADE, DEDICATED WALL OUTLET 120-V, SINGLE PHASE POWER
- ⚡ DEDICATED TELEPHONE LINE(S) (SEE ELECTRICAL DETAIL ELEC-1 OR ELEC-67)
- ⊕ NETWORK OUTLET (SEE ELECTRICAL DETAILS ELEC-83 AND ELEC-84 OR ELEC-87)
- ⊕ DUPLEX HOSPITAL GRADE, DEDICATED OUTLET 120-V EMERGENCY, SINGLE PHASE POWER, 15A
- ⊕ 5-15R NEMA RECEPTACLE, DEDICATED OUTLET 120-V, SINGLE PHASE POWER
- ⊕ 6-GANG HOSPITAL GRADE, DEDICATED WALL OUTLET 115-V, SINGLE PHASE POWER

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 CUSTOMER'S 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:
 - DUCTWORK SHALL BE METAL WITH DIVIDERS AND HAVE REMOVABLE, ACCESSIBLE COVERS.
 - DUCTWORK SHALL BE CERTIFIED/RATED FOR ELECTRICAL POWER PURPOSES.
 - DUCTWORK SHALL BE ELECTRICALLY AND MECHANICALLY BONDED TOGETHER IN AN APPROVED MANNER.
 - 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 CUSTOMER'S CONTRACTOR.
- GENERAL CONTRACTOR TO INSERT PULL CORDS FOR ALL CABLE RUN CONDUITS BETWEEN THE EQUIPMENT ROOM AND THE OPERATORS CONTROL ROOM.
- 10 FOOT PITGALS 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.

CONDUITS REQUIRED FROM POINT "WBM1" (CONDUITS ARE LOCATED ABOVE CEILING)

REV DATE: 04/06/09

- (12) WBM1 TO C1 TWO 2 1/2" CNDS. AND ONE 3 1/2" CND. USABLE CABLE LENGTH UP TO 40 FT.
- (13) WBM1 TO WBC1 ONE 2 1/2" CND. USABLE CABLE LENGTH 40 FT.

CONDUITS REQUIRED FROM POINT "WC" (CONDUIT IS LOCATED IN OR BELOW FLOOR)

REV DATE: 04/06/09

- (14) WC TO LC1 ONE EMPTY 3" CND. (FOR WATER LINES) (NOTE: CHECK WITH 120V/240V BOX AT LC1 OR CHECK WITH 120V/240V BOX AT LC1) USABLE CABLE LENGTH UP TO 60 FT.

CONDUITS REQUIRED FROM POINT "PDB" (CONDUITS ARE LOCATED ABOVE CEILING)

REV DATE: 04/06/09

- (15) PDB TO UPS TWO CNDS. AS REQ'D.
- (16) PDB TO IEC ONE 1 1/2" CND. USABLE CABLE LENGTH 70 FT.
- (17) PDB TO RDS1 ONE 1/2" CND.
- (18) PDB TO RDS2 ONE 1/2" CND.
- (19) PDB TO C1 TWO 2 1/2" CNDS. FOR FOUR CUSTOMER SUPPLIED POWER/GROUND RUNS (AND GE SUPPLIED WIRES) CABLE LENGTH 19 FT.
- (20) PDB TO C1 ONE 1" CND. FOR TWO GE SUPPLIED SIGNAL CABLES CABLE LENGTH 19 FT.
- (21) PDB TO PDB1 ONE CND. AS REQ'D.
- (22) PDB1 TO 480-V 3Ø POWER CND. AS REQ'D.
- (23) PDB TO IE (INJECTOR POWER) CONSULT MFG. (RUN IN DUCT/ CONDUIT SYSTEM)

CONDUITS REQUIRED FROM POINT "XRLC" (CONDUITS ARE LOCATED ABOVE CEILING)

REV DATE: 10/01/08

- (4) XRLC TO XRL1 ONE 1/2" CND.
- (6) XRLC TO C2 ONE 1/2" CND.
- (7) XRLC TO 120-V 1Ø POWER CND. AS REQ'D.

CONDUITS REQUIRED FROM POINT "WBB" (CONDUITS ARE LOCATED BELOW FLOOR)

REV DATE: 10/01/08

- (8) WBB TO LU5 ONE 2 1/2" CND. CABLE LENGTH 88 FT.

CONDUITS REQUIRED FROM POINT "XRB" (CONDUITS ARE LOCATED ABOVE CEILING)

REV DATE: 10/01/08

- (9) XRB TO POWER STRIP IN CONTROL AREA ONE 3/4" CND.

CONDUITS REQUIRED FROM POINT "LMP" (CONDUITS ARE LOCATED ABOVE CEILING)

REV DATE: 10/01/08

- (11) LMP TO 120-V 1Ø POWER CND. AS REQ'D.

CONDUITS REQUIRED FOR MAC LAB

REV DATE: 10/01/08

- (52) PC TO WBM1 ONE 3" CND. (LOCATED ABOVE CEILING)
- (53) PC TO TRAM TWO 3" CNDS. (LOCATED IN/BELOW FLOOR)

FEEDER TABLE REV. DATE: 12/22/10

• 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, OR MEET LOCAL CODE REQUIREMENTS, WHICHEVER IS LARGER.
 • THIS GROUND WILL RUN FROM THE EQUIPMENT BACK TO THE POWER SOURCE/MAN DISCONNECT 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		342-418		360-440		378-462		396-484		414-506		432-528	
	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND
90	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)	2/0	(2)	2/0	(2)	1/0	(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)	250M	(2)	250M	(2)	4/0	(2)
400	700M	(2)	600M	(2)	500M	(2)	400M	(2)	350M	(2)	300M	(2)	300M	(2)

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-3 ELEC-6
C2	ATLAS CABINET	1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER	ELEC-3 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	
LC1	INNOVA LC	1	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 1 GE SUPPLIED FITTING 1 1/2 X 1/2 X 6 IN. BOX BUSHING 1 IN. DIA. BUSHING 1 IN. DIA.	ELEC-100 ELEC-177
LMP	SURGICAL LAMP	1	4 X 4 X 4 IN. BDX COVERPLATE 1 1/2 IN. DIA. CHASE NIPPLE	ELEC-8
LUS	OMEGA TABLE	1	COVERPLATE 1 1/2 X 12 X 6 IN. BDX 4 IN. DIA. BUSHING & LOCKNUT	ELEC-9 ELEC-48
PC	MAC LAB	1	COVERPLATE 1 1/2 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER 1 1/2 X 12 X 6 IN. BDX 4 IN. DIA. CHASE NIPPLE	ELEC-13 ELEC-48
PDB	MAIN DISCONNECT	1	150-AMP PANEL INCLUDED IN ORDER	ELEC-161
PDB1	LOCAL SERVICE DISCONNECT (CUSTOMER SUPPLIED)	1	150-AMP LOCAL SERVICE DISCONNECT (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
TRAM	REMOTE ACQUISITION UNIT	1	COVERPLATE 1 1/2 X 12 X 6 IN. FLOOR BOX 3 IN. DIA. CHASE NIPPLE	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	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER AND CONNECTORS	ELEC-5 ELEC-6
WBB	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	COVERPLATE 2 1/2 IN. DIA. CHASE NIPPLE 1 1/2 X 12 X 6 IN. FLUSH CEILING BOX	ELEC-8
WC	WATER CHILLER HOSE OUTLET	1	3 IN. CONDUIT STUBBED 2 IN. ABOVE FLOOR	ELEC-9
XRB	XR BUZZER (LOCATED ABOVE CEILING)	1	COVERPLATE 1 1/2 X 4 X 4 IN. BDX 3/4 IN. DIA CHASE NIPPLE	ELEC-8
XRL1	WARNING LIGHT	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

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
<22> 3 PHASE > PDB1	3-BLACK, 1-WHITE, 1-GREEN (REFER TO FEEDER TABLE)
<21> PDB1 > PDB	3-BLACK, 1-WHITE, 1-GREEN (REFER TO FEEDER TABLE)
<19> PDB > C1 <JEDI>	3-1/0 BLACK, 1-1/0 GREEN
<19> PDB > C1 <PDU>	2-ND. 10 BLACK, 1-ND. 10 GREEN
<19> PDB > C2	3-ND. 8 BLACK, 1-ND. 8 GREEN
<19> PDB > CHLR	3-ND. 10 BLACK, 1-ND. 10 GREEN
<15> PDB > UPS	6-ND. 6 BLACK, 1-ND. 6 WHITE, 2-ND. 6 GREEN
<17> PDB > RDS1	2-ND. 14 BLACK, 2-ND. 14 WHITE, 1-ND. 14 GREEN
<18> PDB > RDS2	2-ND. 14 BLACK, 2-ND. 14 WHITE, 1-ND. 14 GREEN
<7> XRLC > 1 PHASE	1-ND. 14 BLACK, 1-ND. 14 WHITE, 1-ND. 14 GREEN
<6> XRLC > C2	2-ND. 14 BLACK, 2-ND. 14 WHITE, 1-ND. 14 GREEN
<4> XRL1 > XRLC	1-ND. 14 BLACK, 1-ND. 14 WHITE, 1-ND. 14 GREEN
<11> 120-V > LMP	1-BLACK, 1-WHITE, 1-GREEN - (SIZE AS REQUIRED)

GE Healthcare
Healthcare Project Implementation - Design Center
Madison, Wisconsin

SHEET TITLE: ELECTRICAL LAYOUT
MODALITY TYPE: OPTIMA CL323i

THIS PLAN IS SUBMITTED TO SUPPORT THE LOCATION OF HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM TO ALL APPLICABLE CODES AND REGULATIONS. THE USER OF THIS PLAN SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL INFORMATION AND ASSUMING ALL LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE: INTERVENTIONAL RADIOLOGY - OPTIMA
TYPICAL FINAL LAYOUT

PROJECT: 4-80F
REVISION: 00

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

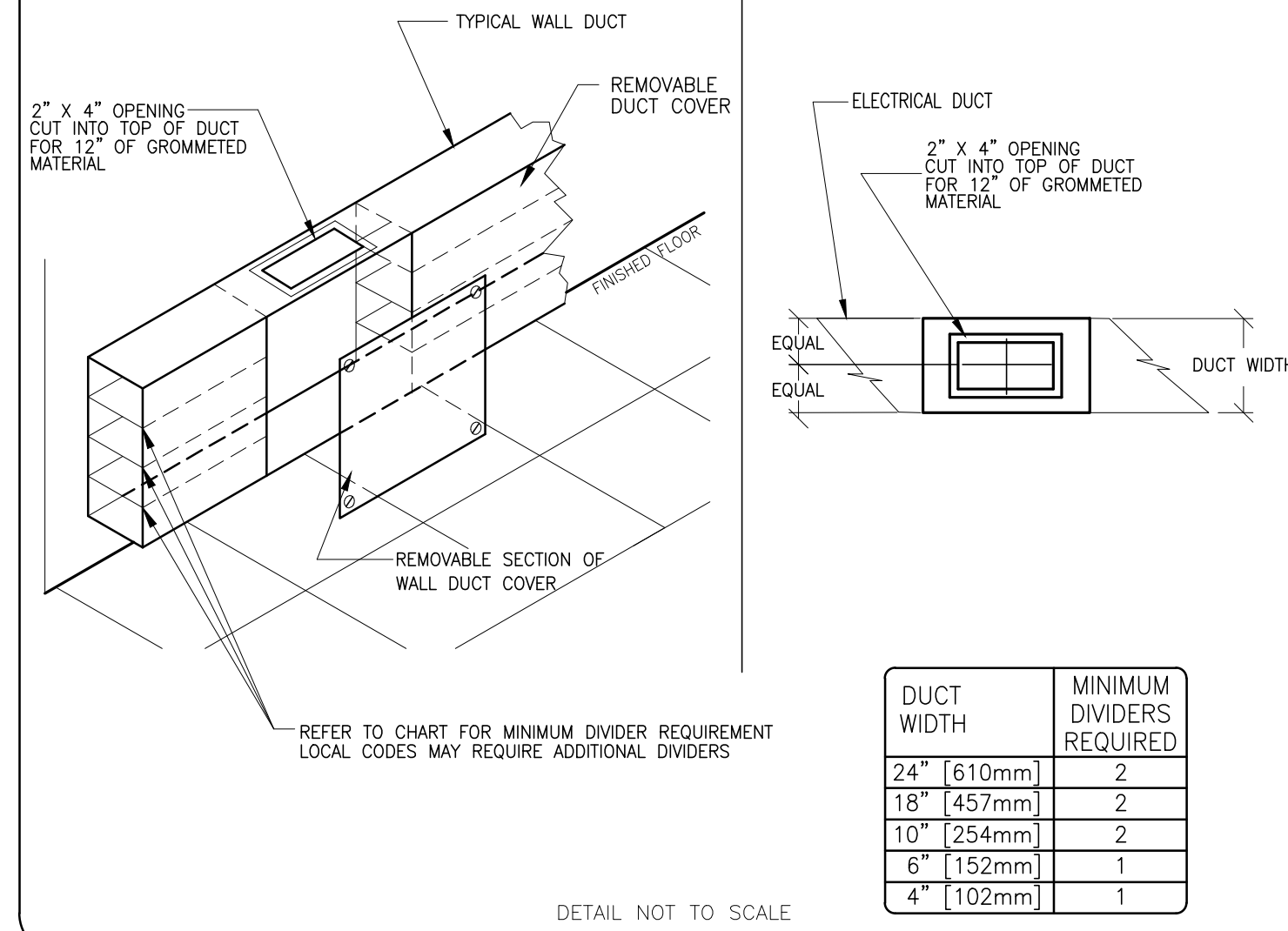
REVISION HISTORY:

SHEET E1

PIM R3
RQ - 140193

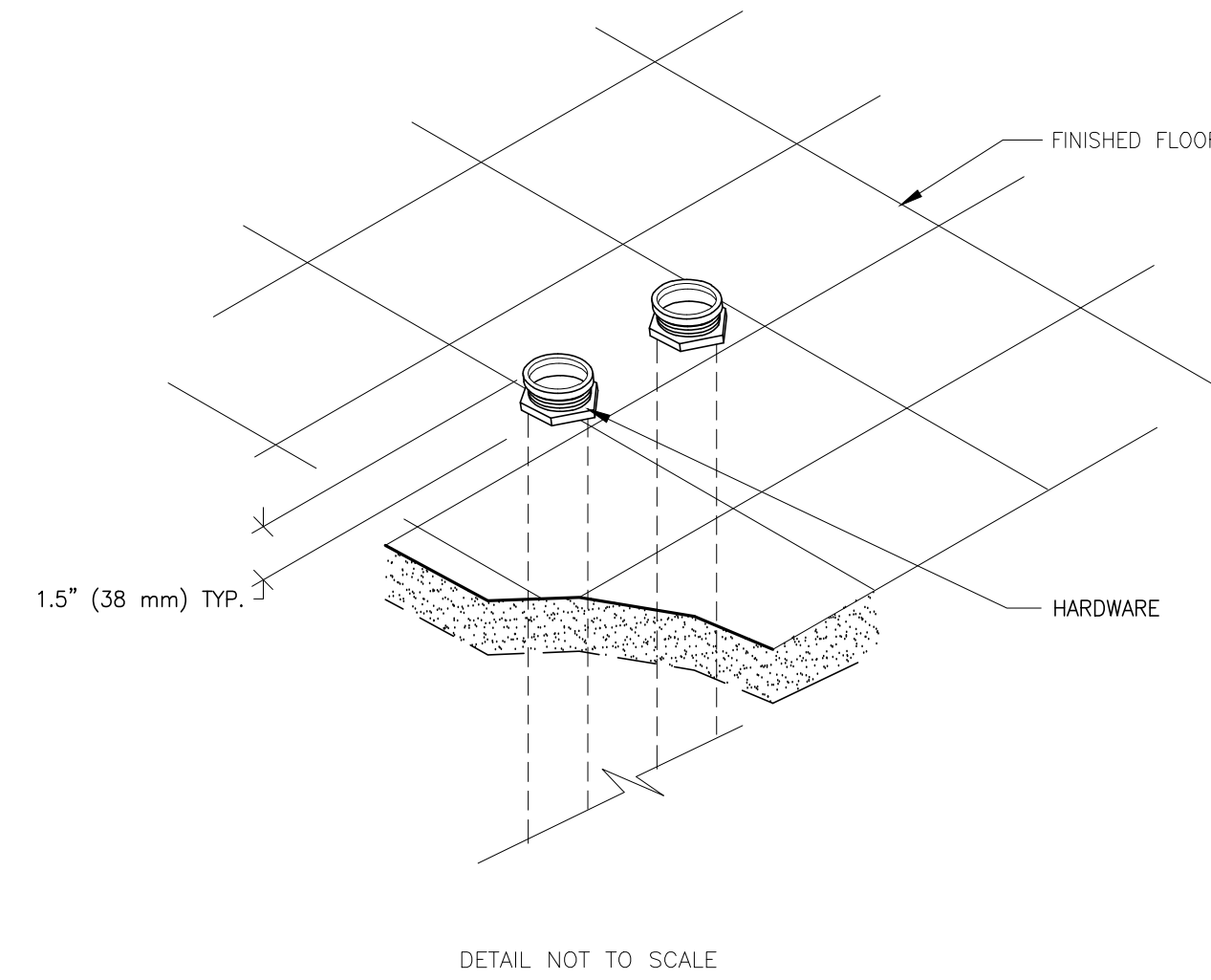
ELECTRICAL DETAIL
HORIZONTAL WALL DUCT (TYPICAL)

ELEC-5A
REV. DATE: 06/16/08



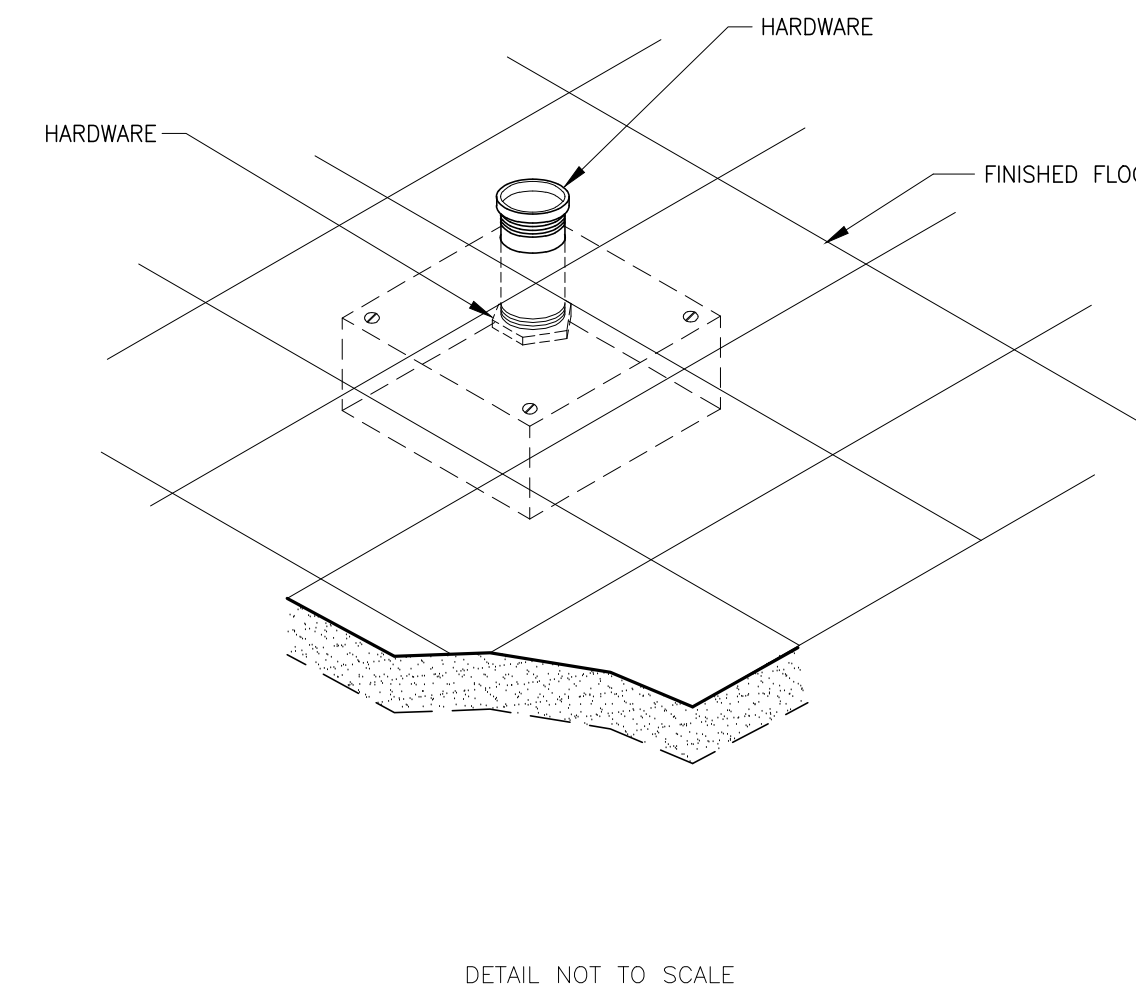
ELECTRICAL DETAIL
CONDUITS THRU-FLOOR (TYPICAL)

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



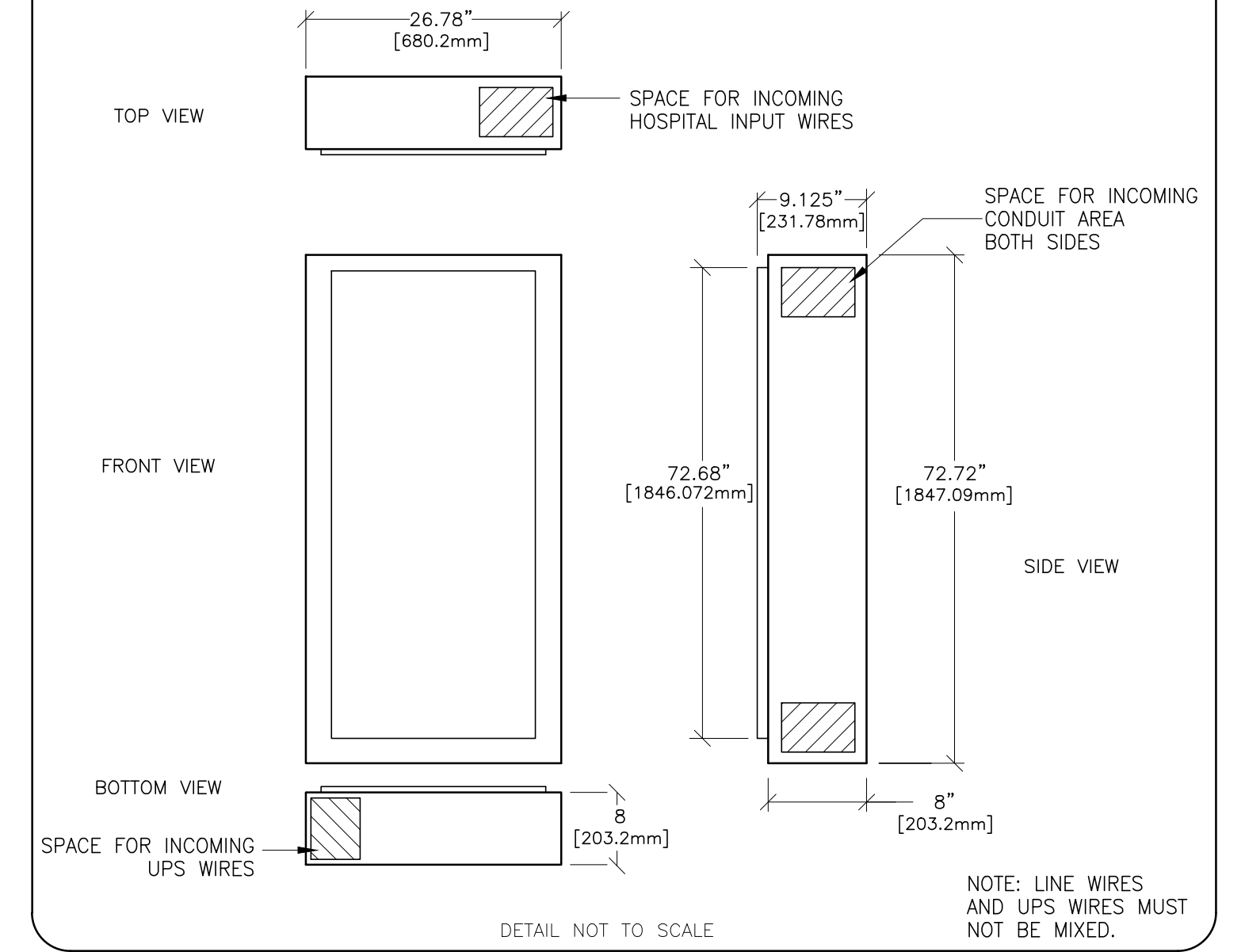
ELECTRICAL DETAIL
TABLE INTERCONNECTION - BOX BELOW FLOOR

ELEC-48
REV. DATE: 01/04/96



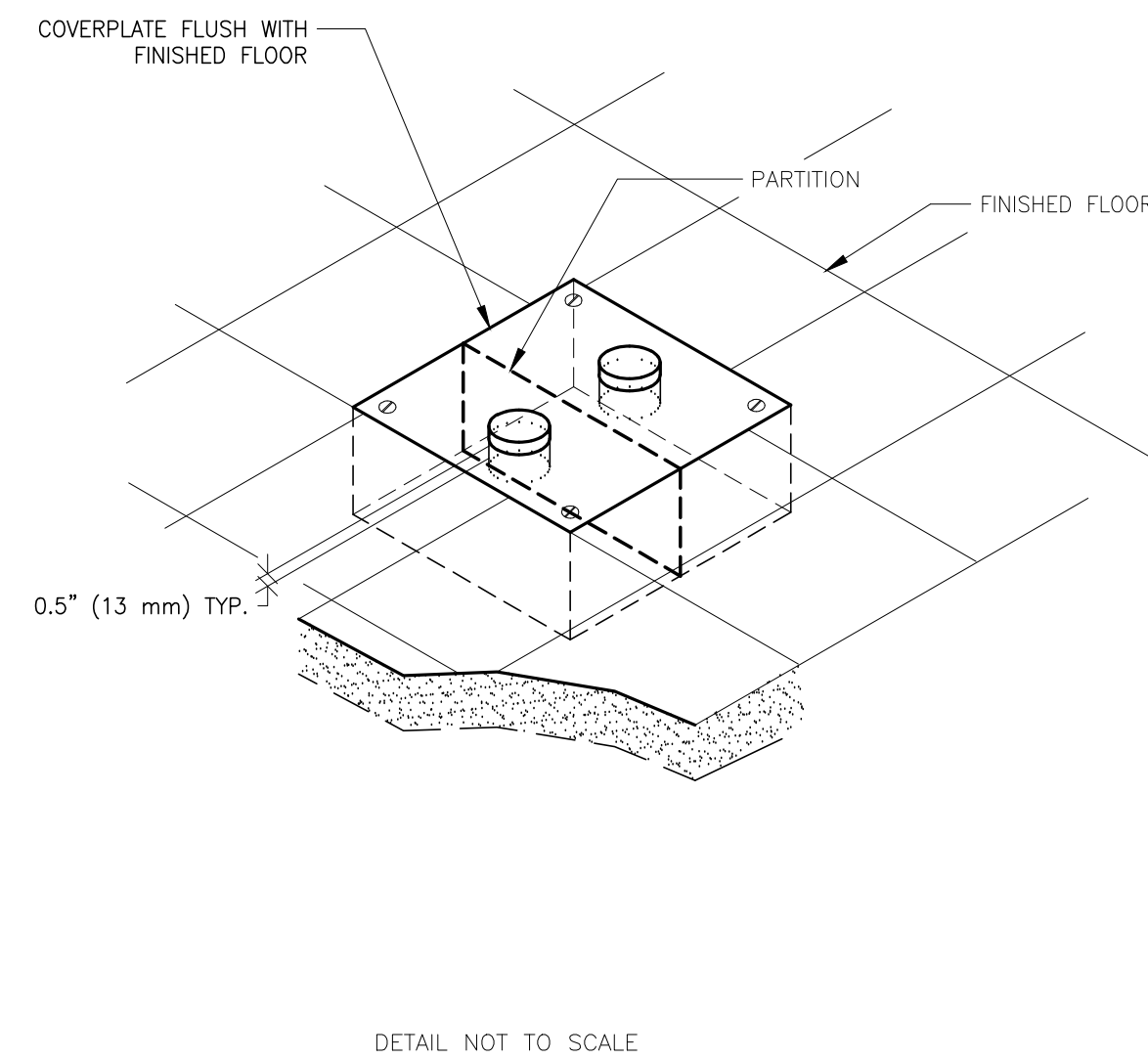
ELECTRICAL DETAIL
INNOVA PLUS MAIN DISCONNECT PANEL

ELEC-161
REV. DATE: 09/27/10



ELECTRICAL DETAIL
FLOOR BOX WITH NIPPLES (TYPICAL)

ELEC-13
REV. DATE: 09/30/94



GE Healthcare
Healthcare Project Implementation - Design Center
Manufacture, Wisconsin

SHEET TITLE: ELECTRICAL DETAILS
MODALITY TYPE: OPTIMA CL3231

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE LATEST NATIONAL ELECTRICAL CODES AND THE COMPANY CANNOT ACCEPT LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

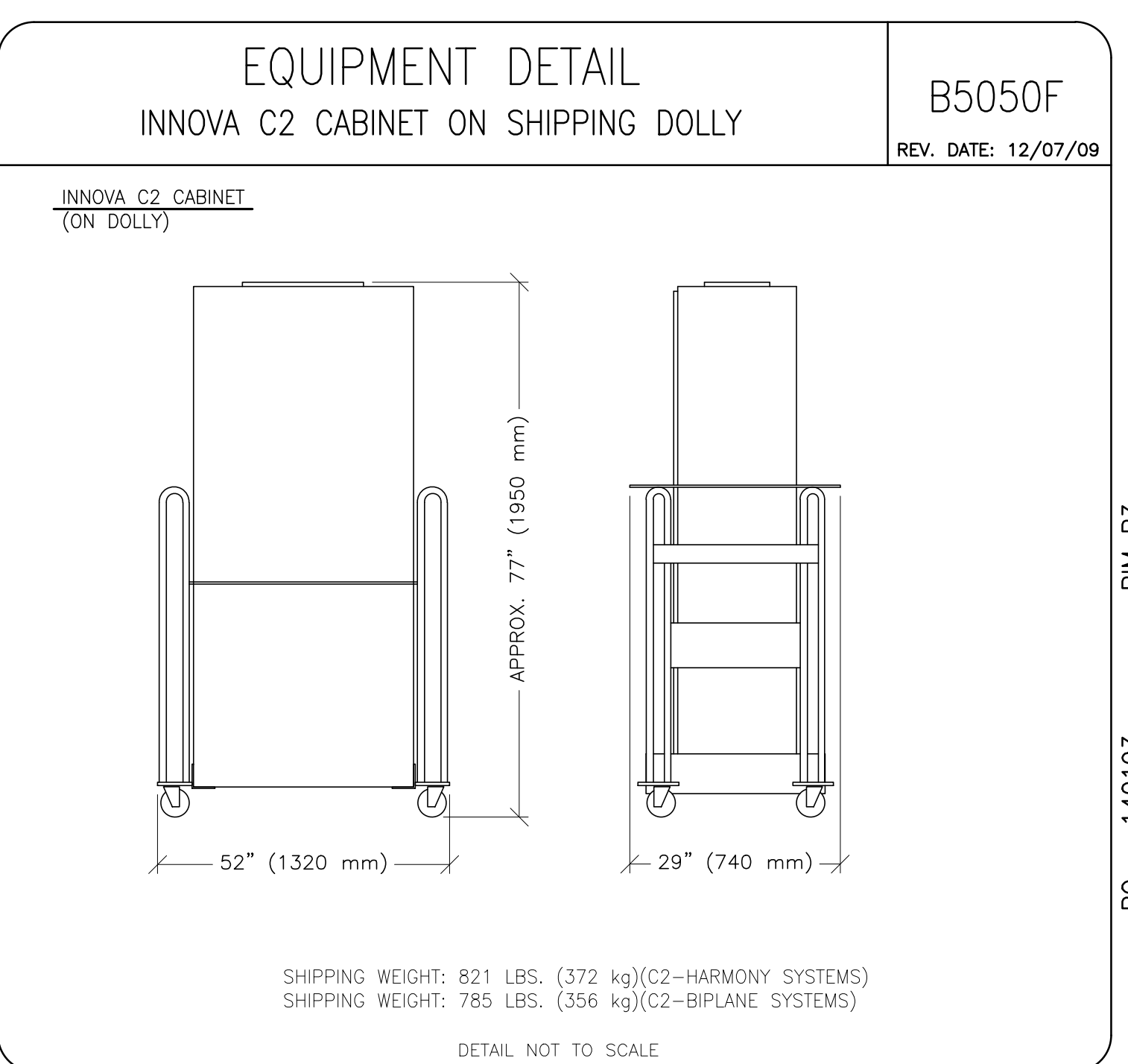
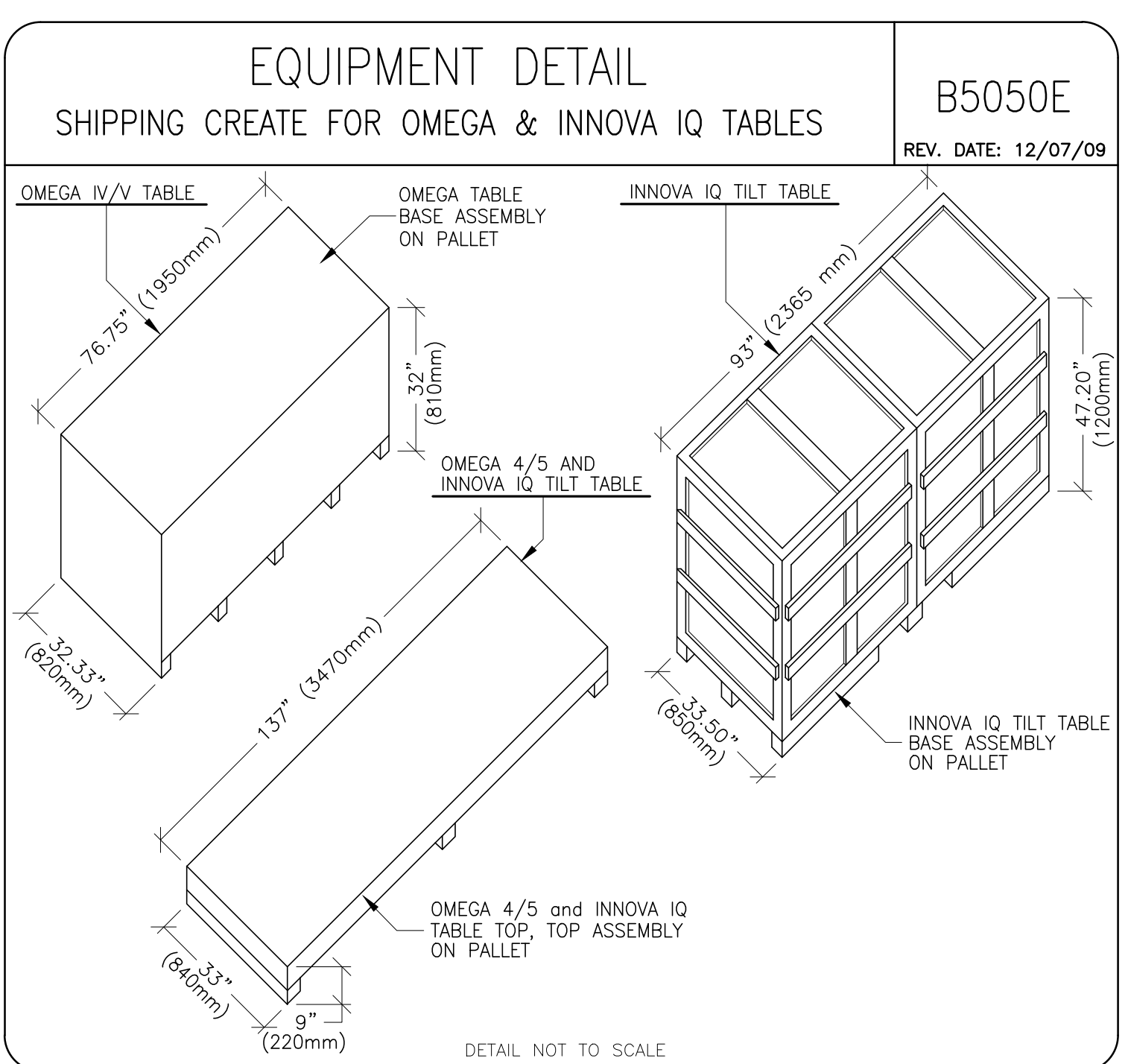
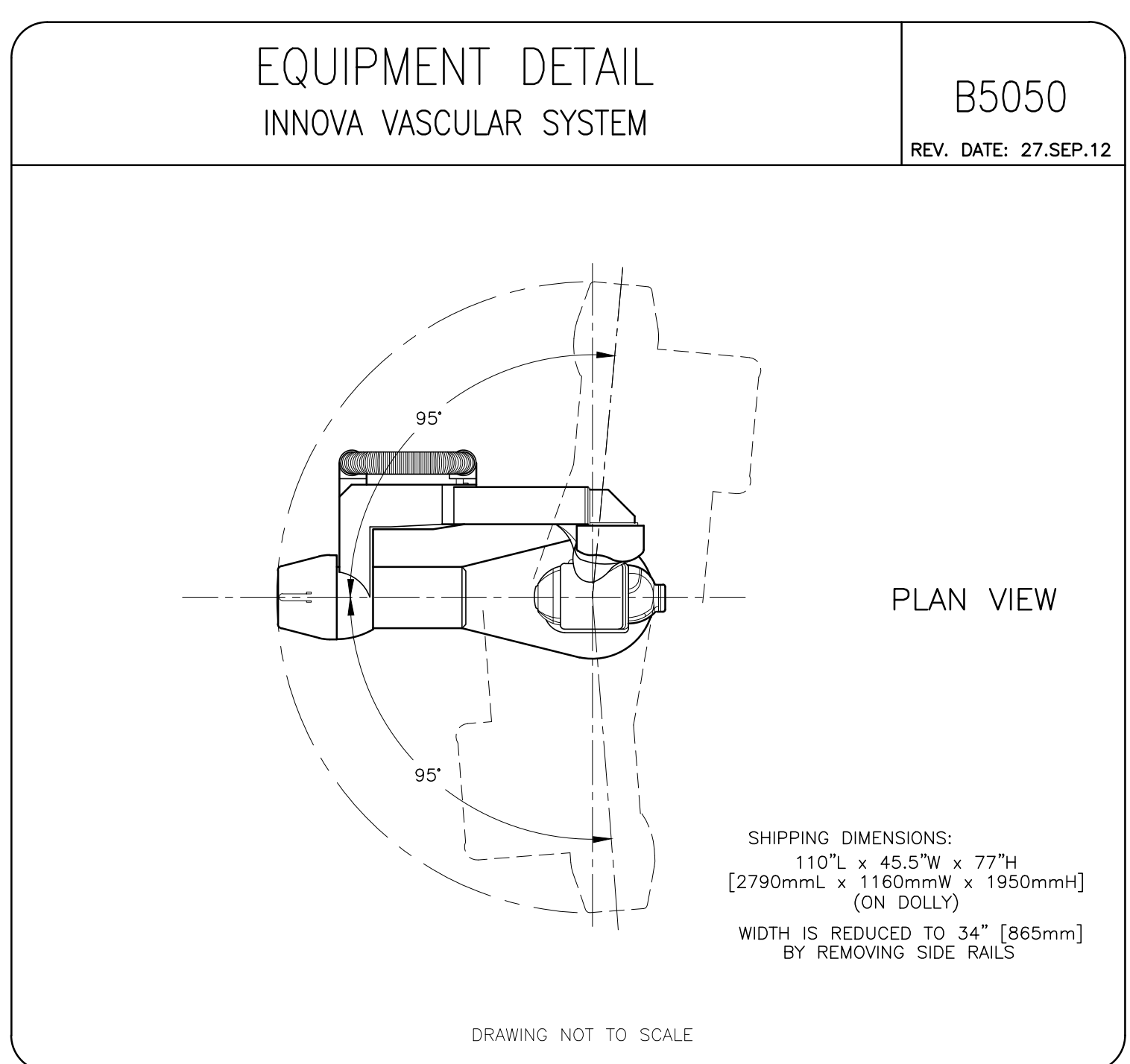
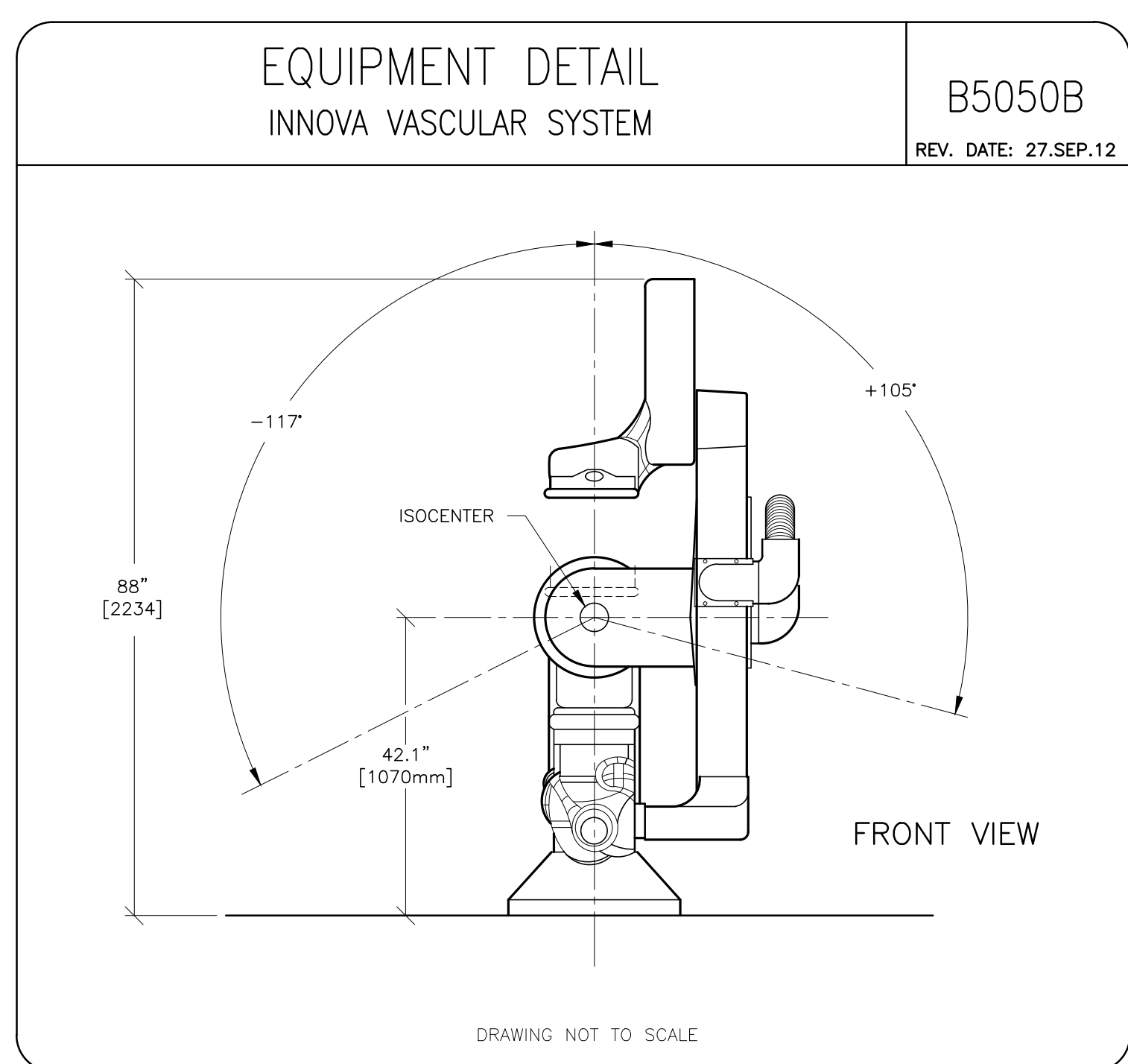
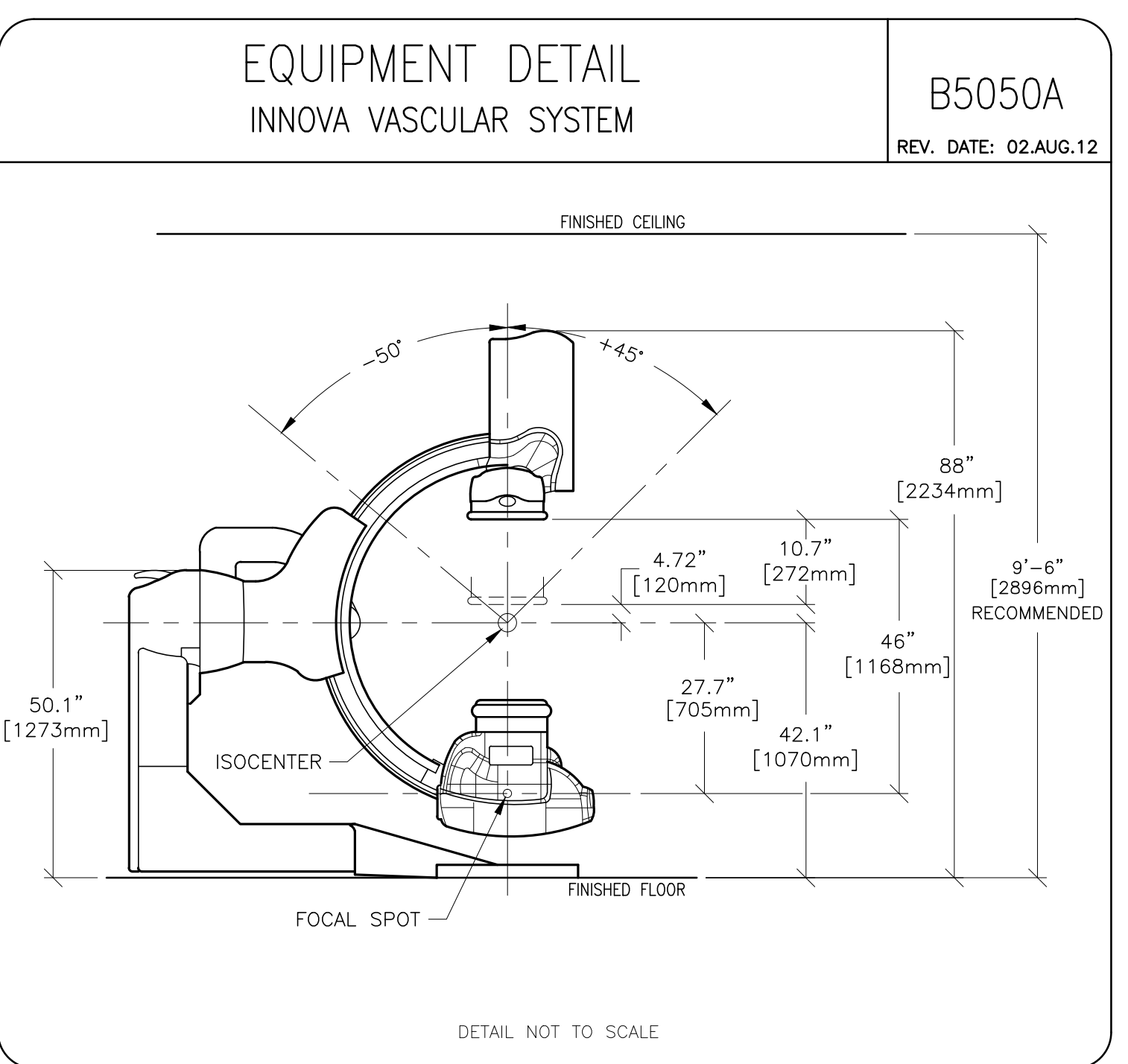
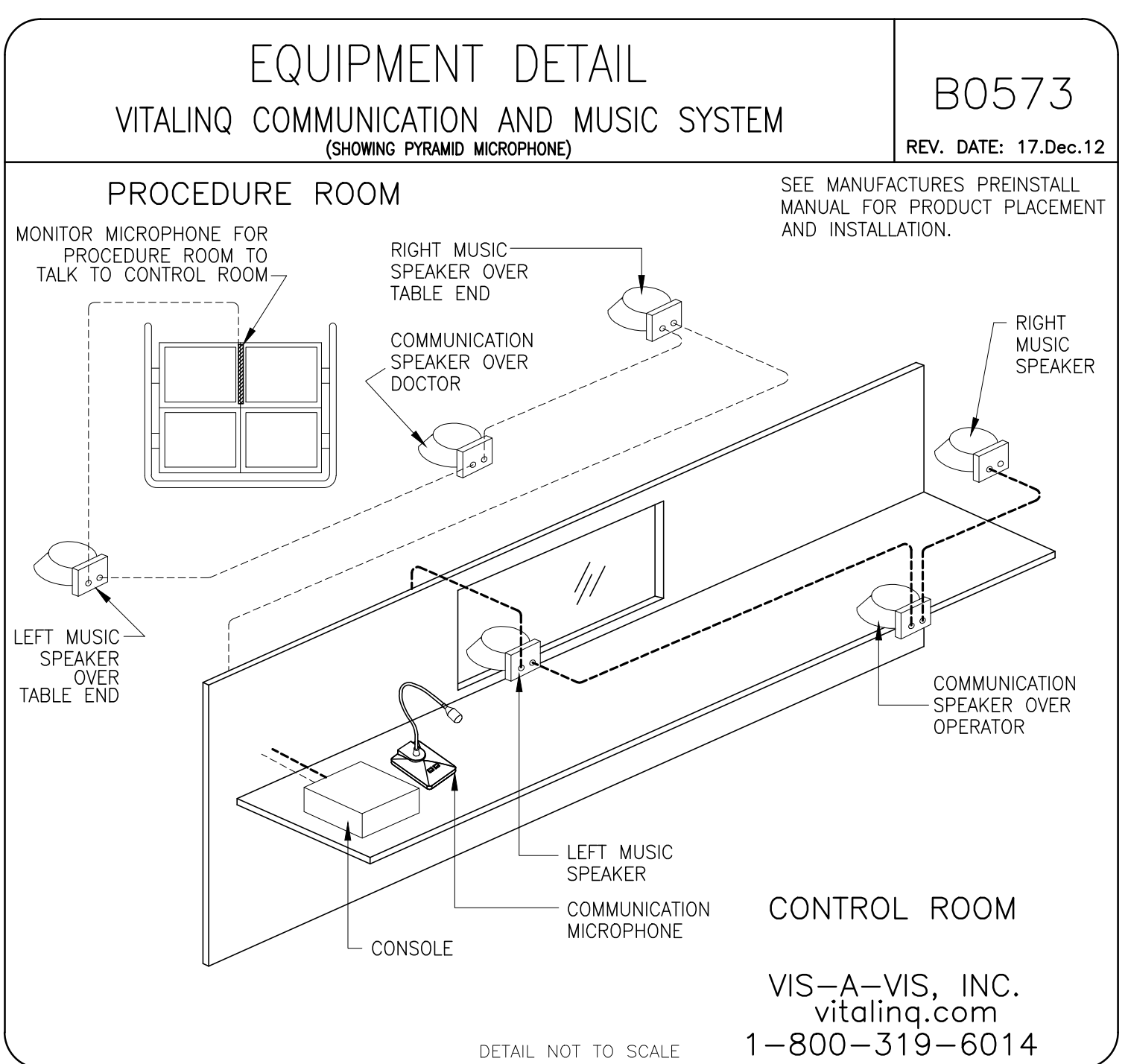
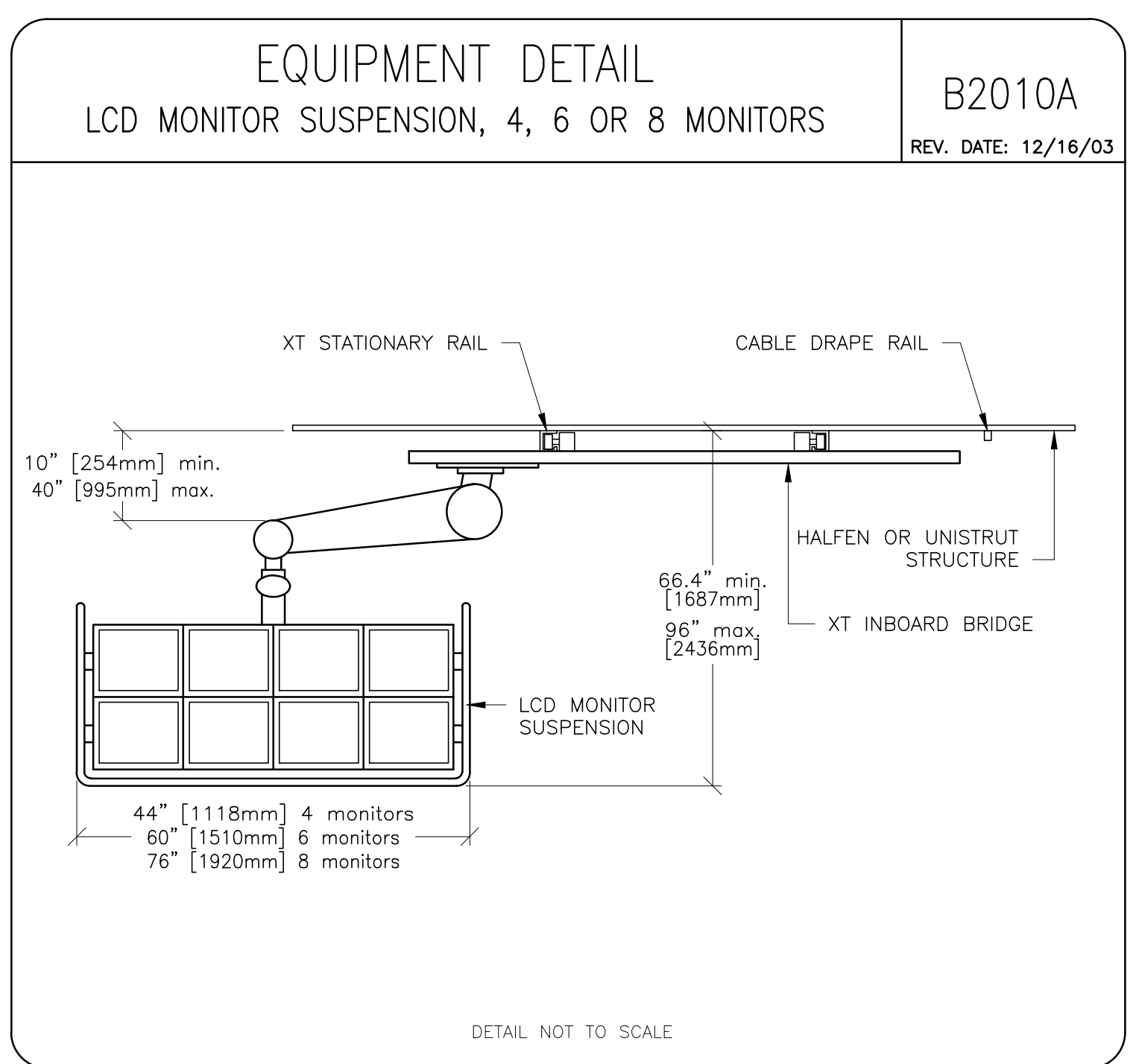
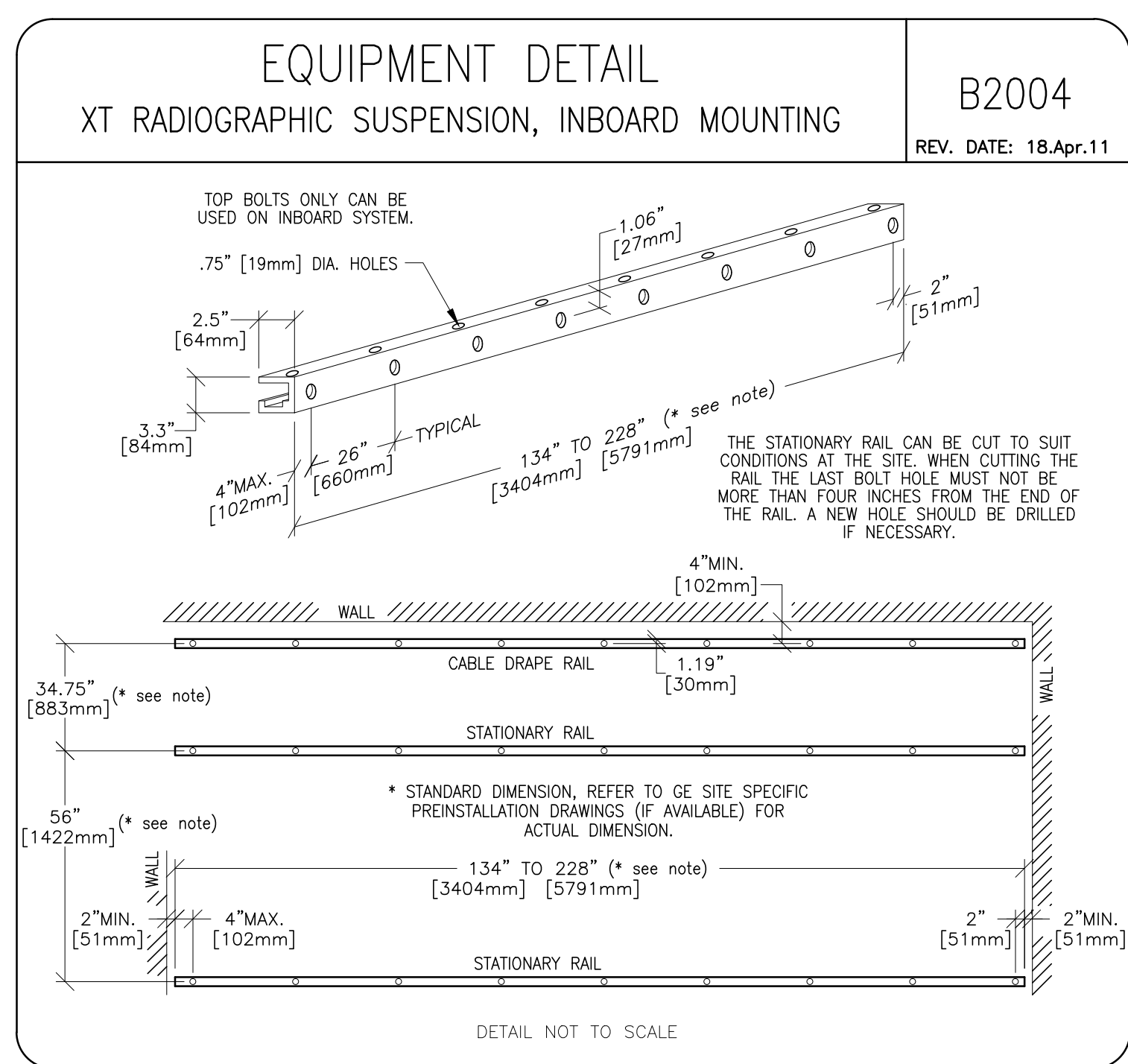
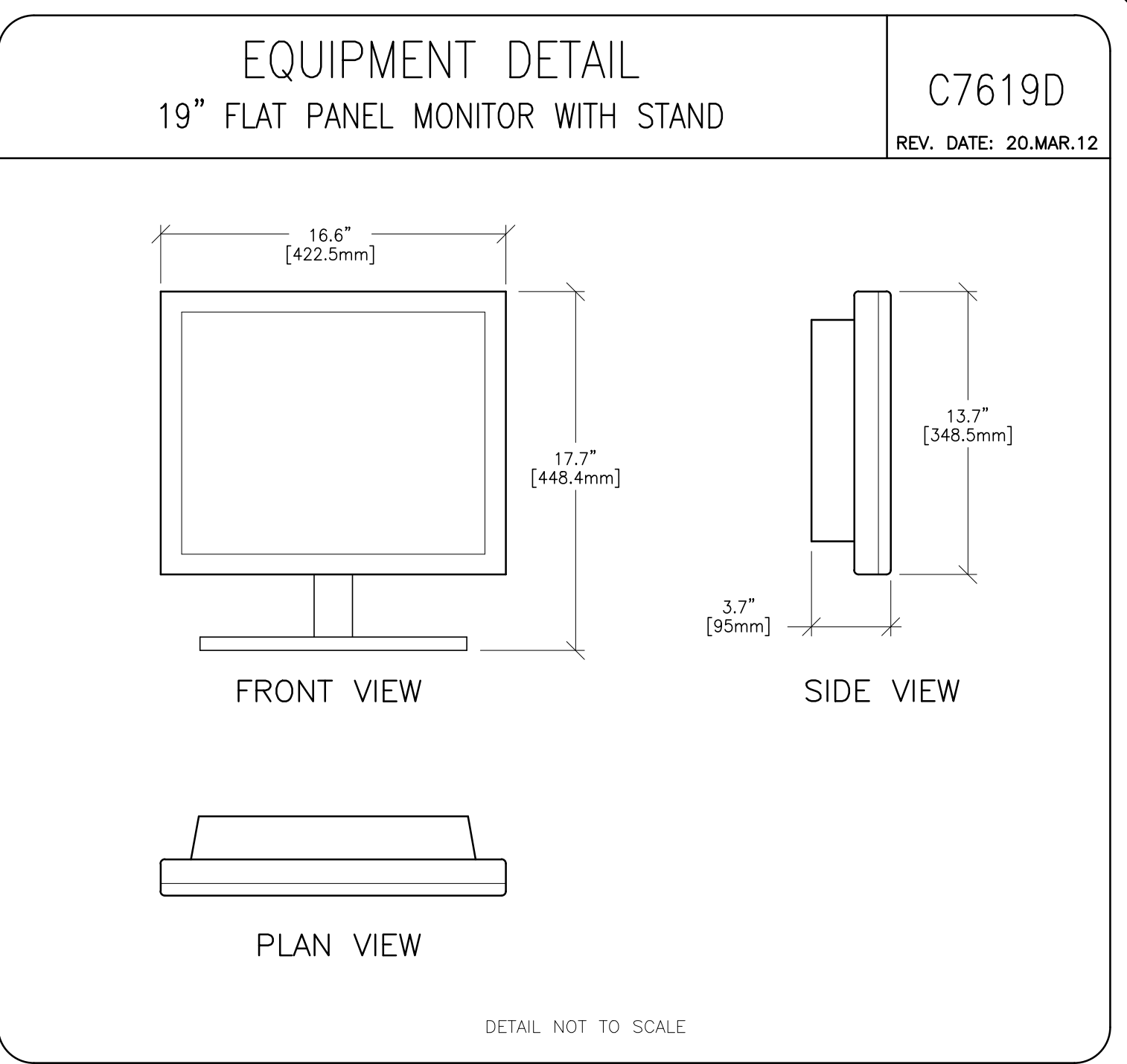
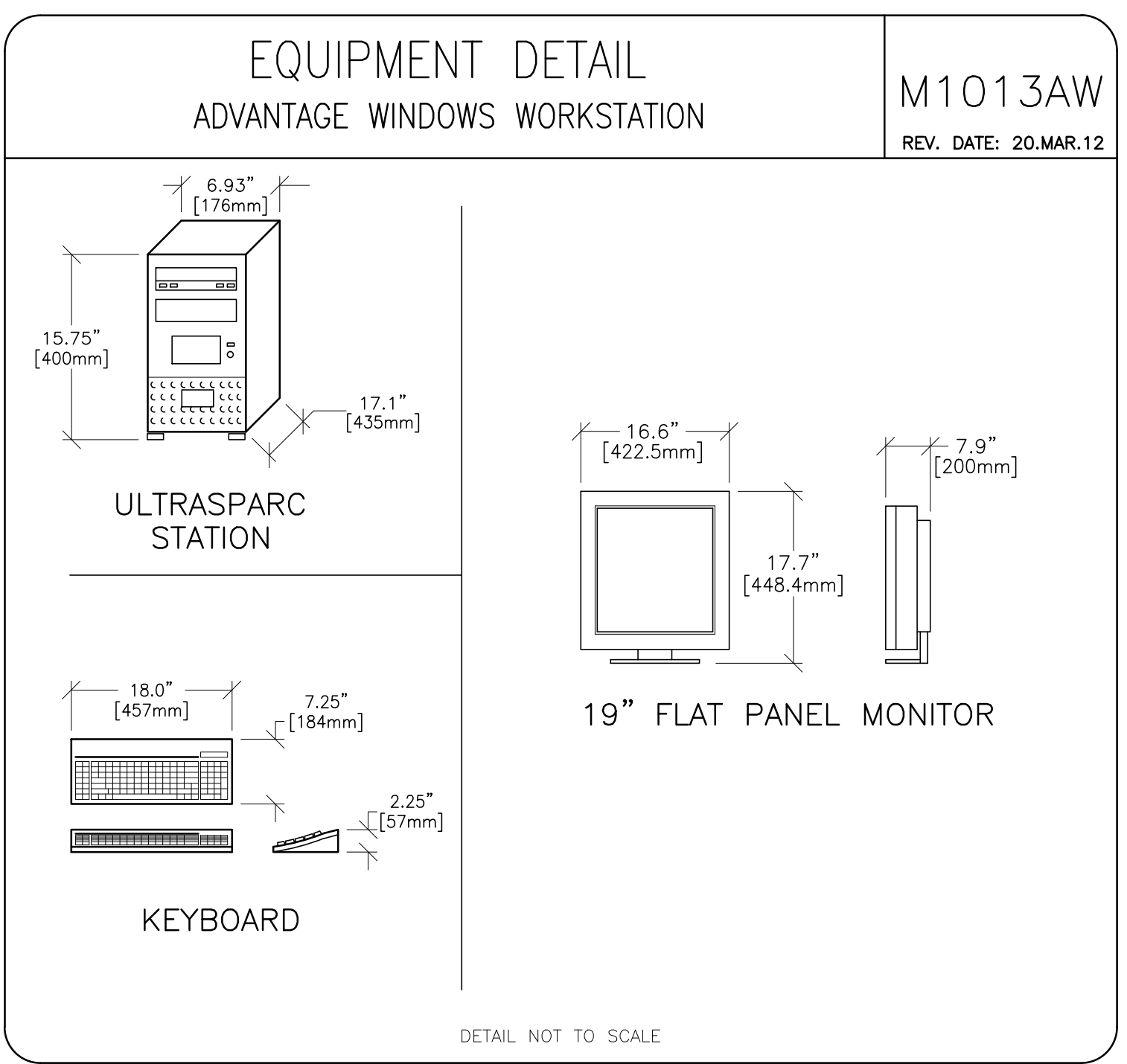
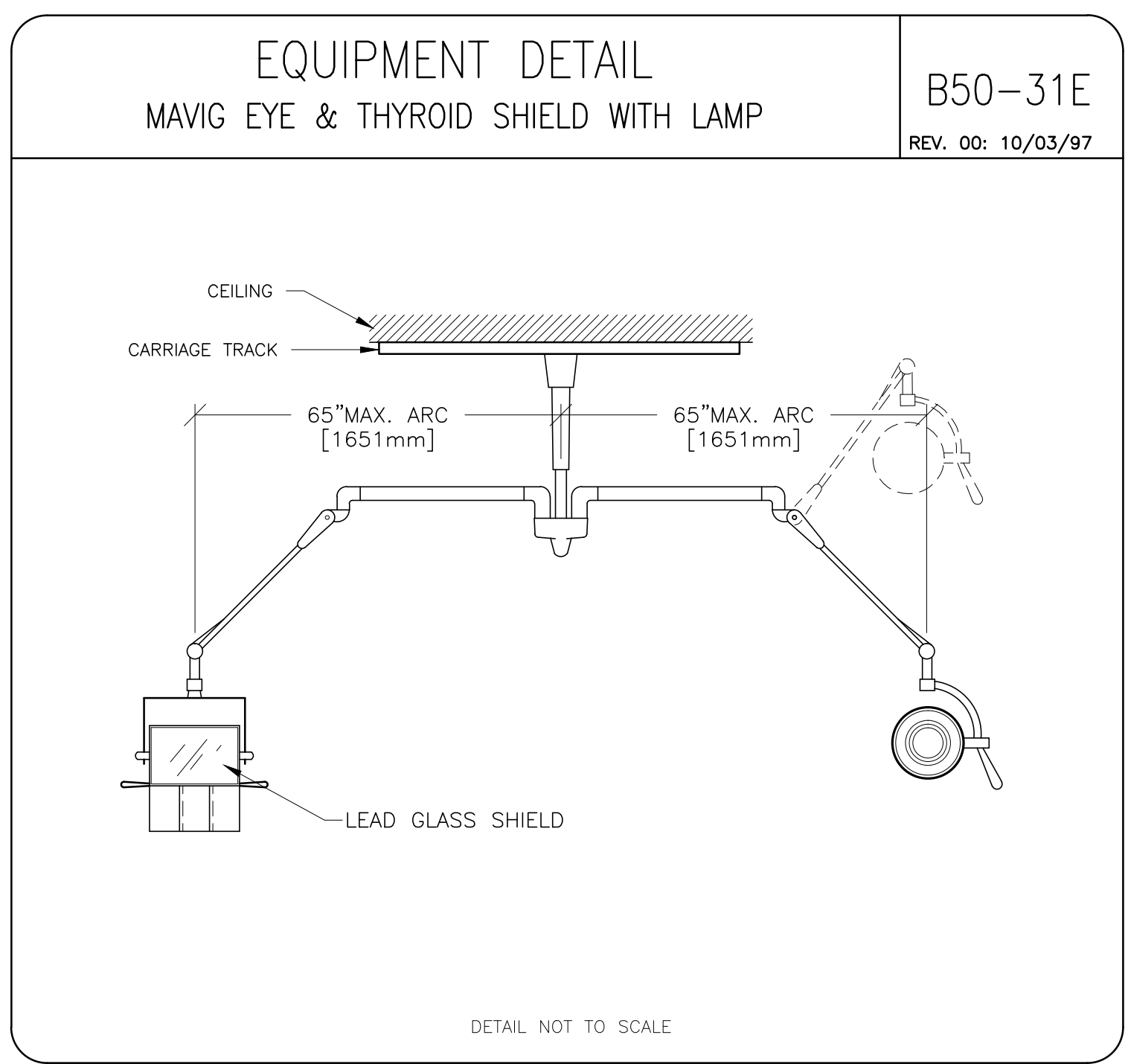
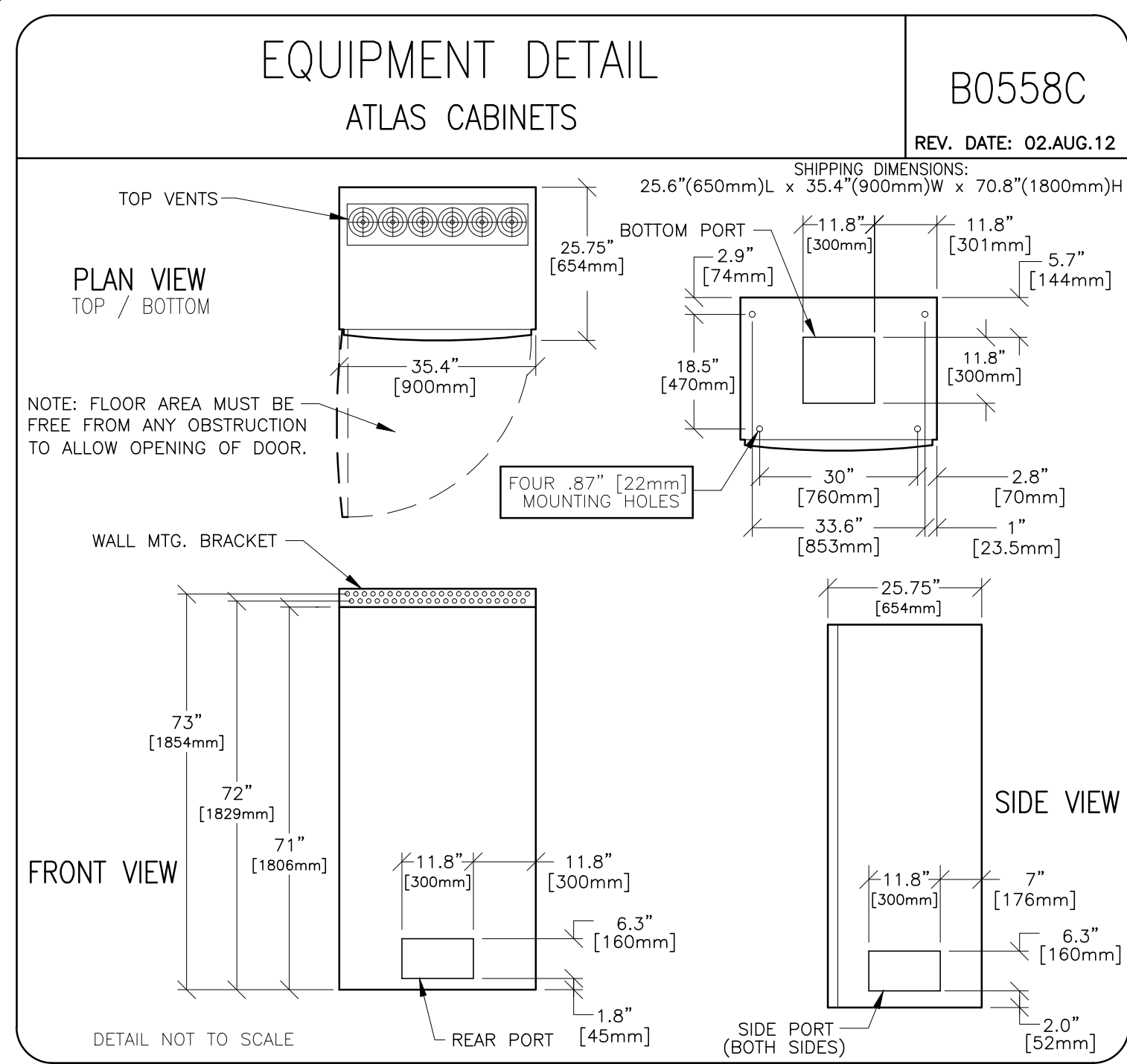
PROJECT TITLE:
INTERVENTIONAL RADIOLOGY - OPTIMA
TYPICAL FINAL LAYOUT

PROJECT	REVISION
4-80F	00

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

REVISION HISTORY:

SHEET
E4



EQUIPMENT DETAIL

SHIPPING DOLLY FOR INNOVA LC POSITIONER

B5050G
REV. DATE: 12/07/09

INNOVA LC POSITIONER (ON DOLLY)

110" (2790mm) (maximum)
34" (865mm)
11.5" (290mm)
77" (1950mm)
10" (250mm)
86.22" (2190mm) (minimum)
13.78" (350mm)

NOTE: BOTH ENDS OF THE DOLLY CAN BE REMOVED WHICH WILL SHORTEN LC GANTRY DOLLY DONE TO 86.22" (2190mm) RECOMMEND ONLY ONE SIDE BE REMOVED WHEN DELIVERY THROUGH HOSPITAL.

SHIPPING WEIGHT: 2340 lbs. (1060 kg)

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

INNOVA C1 & C3 CABINETS ON SHIPPING DOLLY

B5050H
REV. DATE: 12/07/09

INNOVA C1 CABINETS (ON DOLLY)

APPROX. 77" (1950 mm)
52" (1320 mm)
29" (740 mm)

SHIPPING WEIGHT: 1277 lbs (579 kg) C1-HARMONY SYSTEMS
SHIPPING WEIGHT: 1052 lbs (477 kg) C1 FRONTAL - BIPLANE SYSTEMS
SHIPPING WEIGHT: 866 lbs (393 kg) C3 LATERAL - BIPLANE SYSTEMS

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

LP AND LC GANTRY DELIVERY PATH

B5050J
REV. DATE: 12/07/09

CORRIDOR WIDTH (FOR GANTRY DELIVERY)	DOOR SIZE (FOR GANTRY DELIVERY)
8'-0" WIDE	4'-0" OPENING
7'-0" WIDE	5'-0" OPENING
6'-0" WIDE	6'-0" OPENING
5'-0" WIDE	7'-0" OPENING
4'-0" WIDE	8'-0" OPENING

NOTE: WHEN DELIVERING GANTRY FROM CORRIDOR TO CORRIDOR THE SAME HOLDS TRUE AS CORRIDOR TO DOOR SIZE.

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

INNOVA RADIATION SCATTER PLOTS

B5050P
REV. DATE: 27.SEP.12

UNITS: RELATIVE AIR KERMA: $\mu\text{Gy}/\mu\text{Gym}^2$
DISTANCES: RADIUS AT 1, 2 AND 3 METERS

NOTE: FOR REFERENCE ONLY. PLEASE REFER TO OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

LATERAL 1 METER
LATERAL 1.5 METERS

4-4-4 GANTRY IN LATERAL POSITION - DOSE AT 1.5 METER FROM GROUND
4-4-3 GANTRY IN LATERAL POSITION - DOSE AT 1 METER FROM GROUND

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

INNOVA RADIATION SCATTER PLOTS

B5050R
REV. DATE: 27.SEP.12

UNITS: RELATIVE AIR KERMA: $\mu\text{Gy}/\mu\text{Gym}^2$
DISTANCES: RADIUS AT 1, 2 AND 3 METERS

NOTE: FOR REFERENCE ONLY. PLEASE REFER TO OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

VERTICAL 1 METER
VERTICAL 1.5 METERS

4-4-2 GANTRY IN VERTICAL POSITION - DOSE AT 1.5 METER FROM GROUND
4-4-3 GANTRY IN LATERAL POSITION - DOSE AT 1 METER FROM GROUND

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

TRAM-RAC 4A

B5047
REV. DATE: 05/26/04

5.7" [145mm]
15.1" [384mm]
9" [229mm]

TABLE RAIL MOUNT
FLOOR MOUNT

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

INJECTOR REMOTE CONTROL AND ELECTRONICS

B50-28

REMOTE CONTROL
7.5" [191mm]
14.5" [368mm]
3.25" [83mm]
ELECTRONICS
10.5" [267mm]
17" [432mm]
12.75" [324mm]

DRAWING NOT TO SCALE

EQUIPMENT DETAIL

INJECTOR ON TABLE RAIL

B50-30A

PLAN VIEW
SIDE VIEW

DRAWING NOT TO SCALE

EQUIPMENT DETAIL

OMEGA V TABLE

B5061
REV. DATE: 09.MAR.12

SHIPPING DIMENSIONS: TABLE BASE 84.2" (2140mm) D x 38" (960mm) W x 45" (1140mm) H
SHIPPING DIMENSIONS: TABLE TOP 33" (840mm) D x 137" (3470mm) W x 9" (220mm) H

122.4" [3108mm]
75.9" [1928mm]
42.5" [1080mm]
30.7" [780mm]
12" MAX [305mm]
15" [381mm]
21" MAX [533mm]
25.4" [644mm]
15" [381mm]
6" MAX [152mm]
8" [203mm]
8" [203mm]
26.28" [667mm]
28.6" [727mm]
39.45" [1007mm]
131.2" [3336mm]
12" MAX [305mm]
21" MAX [533mm]

RECOMMENDED AREA FOR ELECTRICAL OUTLETS, PHYSIO. OR MED. GASES 21" (533mm) HEIGHT RESTRICTION IN THIS AREA

ALTERNATE AREA FOR ELECTRICAL OUTLETS, PHYSIO. OR MED. GASES 12" (305mm) HEIGHT RESTRICTION IN THIS AREA

AS REQ'D.

RECOMMENDED AREA FOR ELECTRICAL OUTLETS, PHYSIO. OR MED. GASES 21" (533mm) HEIGHT RESTRICTION IN THIS AREA

ALTERNATE AREA FOR ELECTRICAL OUTLETS, PHYSIO. OR MED. GASES 12" (305mm) HEIGHT RESTRICTION IN THIS AREA

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

XR-BUZZER BRACKET

B5150H
REV. 00: 10/30/08

.62" [16.3mm]
.31" [8.5mm]
5 Ø5
3.12" [80mm]
.25" [7mm]
.37" [10mm]
.56" [15mm]

NOTE: XR-BUZZER BRACKET IS MOUNTED ON WALL, ABOVE CEILING. PLACE SPEAKER ABOVE GRILLED CEILING TILE FOR SOUND PENETRATION.

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

UPS INTERFACE BOX

E4502IB
REV. DATE: 07/11/05

BOTTOM VIEW
PLAN VIEW
FRONT VIEW
FRONT VIEW (COVER OFF)

4.3" [111mm]
(4) MOUNTING HOLES
27" [7mm]
.31" [8mm]
11.3" [288mm]
9.0" [230mm]
11.0" [280mm]

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

INNOVA PLUS MAIN DISCONNECT PANEL

E4502M
REV. DATE: 04/30/09

TOP VIEW
FRONT VIEW
SIDE VIEW
BOTTOM VIEW

26.78" [680.2mm]
9.1" [231.78mm]
16.25" [412.75mm]
72.68" [1846.02mm]
72.72" [1847.09mm]

PREFERRED LOCATION FOR TOP FEED
SPACE FOR INCOMING CONDUIT AREA BOTH SIDES
MAX NEC CIRCUIT BREAKER MOUNTING IS 6"-7" (2.0M) FROM FLOOR TO CENTERLINE OF RAISED GRIP BREAKER HANDLE (NEC 404.8)
PREFERRED LOCATION FOR BOTTOM MAIN FEED

DETAIL NOT TO SCALE

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

GE Healthcare
Healthcare Project Implementation - Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT DETAILS
MODALITY TYPE: OPTIMA CL323i

THIS PLAN IS SUBMITTED TO SURVEY 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 TO THE ACTUAL CONSTRUCTION DETAILS AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
INTERVENTIONAL RADIOLOGY - OPTIMA
TYPICAL FINAL LAYOUT

PROJECT	REVISION
4-80F	00

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

REVISION HISTORY:

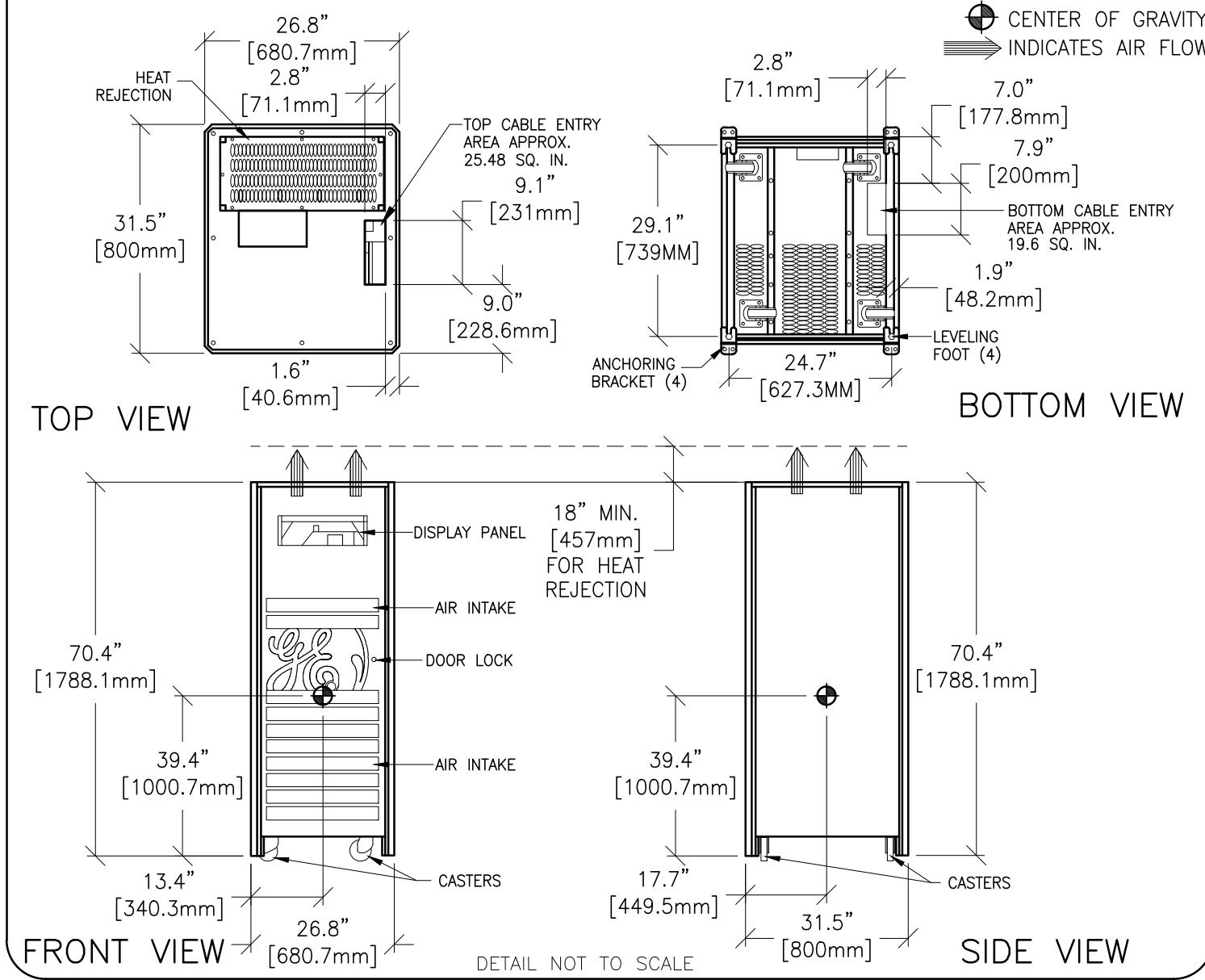
SHEET
D2

PIM R3
RQ - 140193

EQUIPMENT DETAIL
DIGITAL ENERGY SG SERIES 10-20kVA UPS

E4502SG

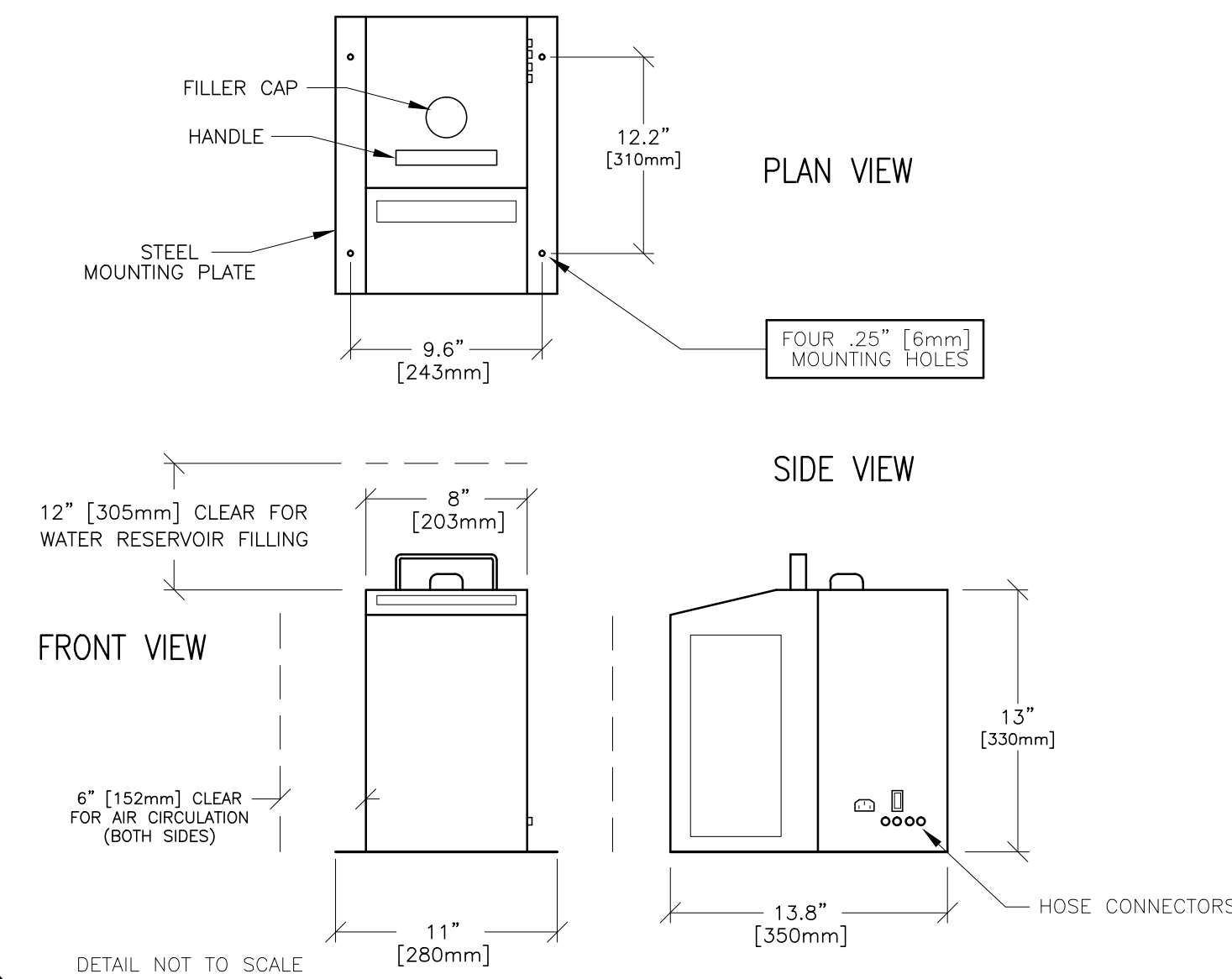
REV. DATE: 05/10/05



EQUIPMENT DETAIL
INNOVA DETECTOR COOLER

B5049F

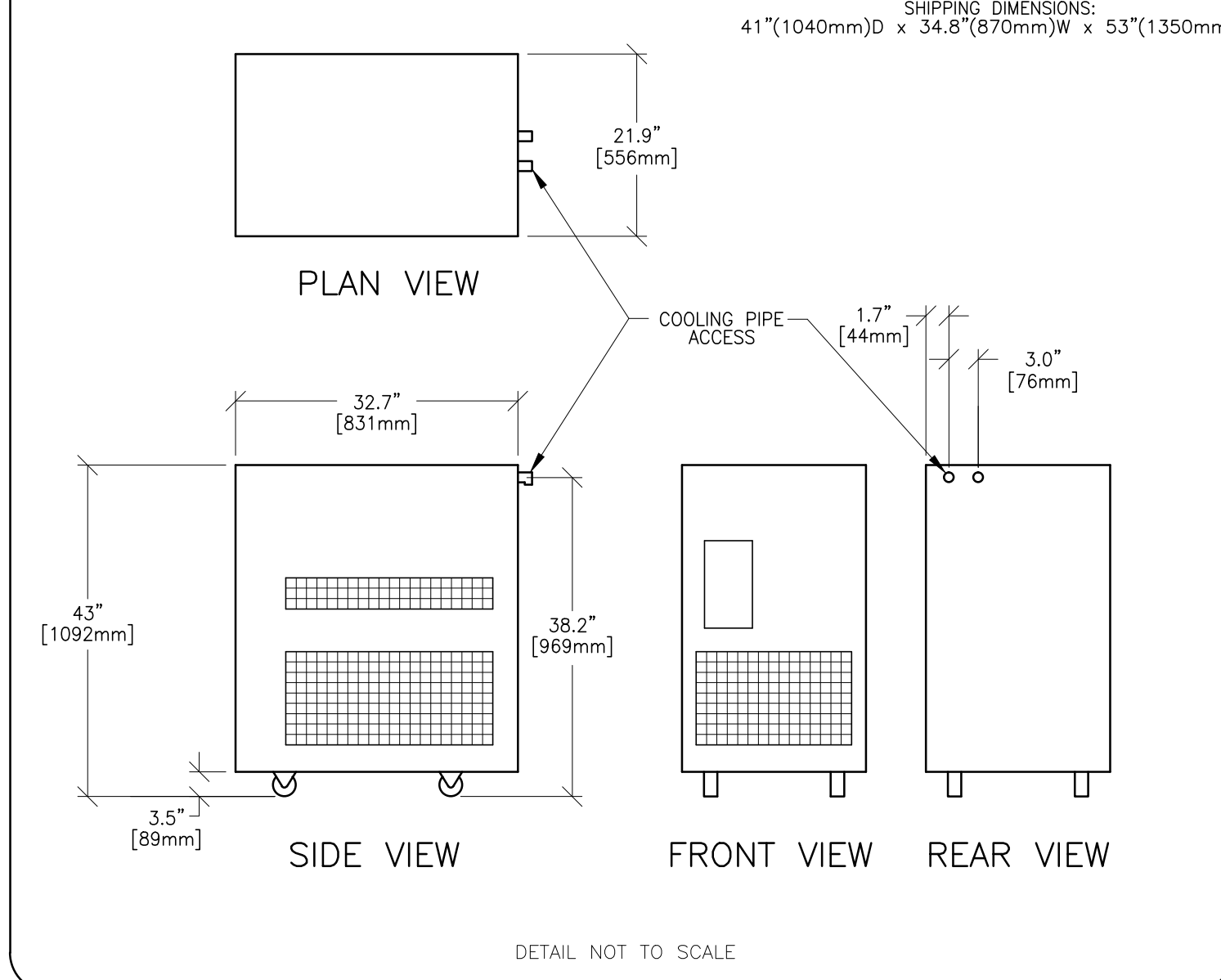
REV. DATE: 8/01/00



EQUIPMENT DETAIL
COOLIX 4000 RECIRCULATING CHILLER

M0917B

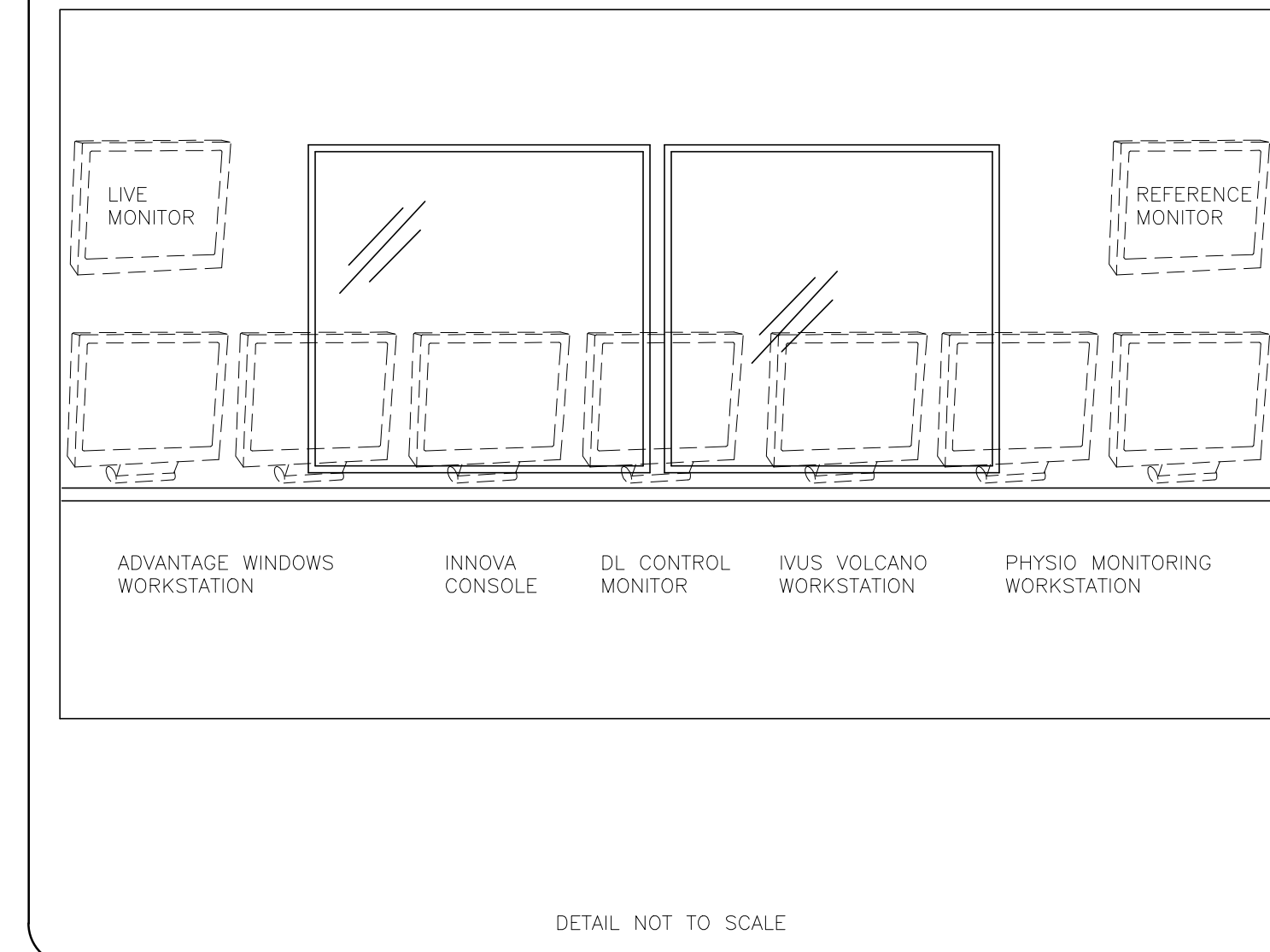
REV. DATE: 05/17/05



TYPICAL CONTROL ROOM
INNOVA SINGLE PLANE

B5050C

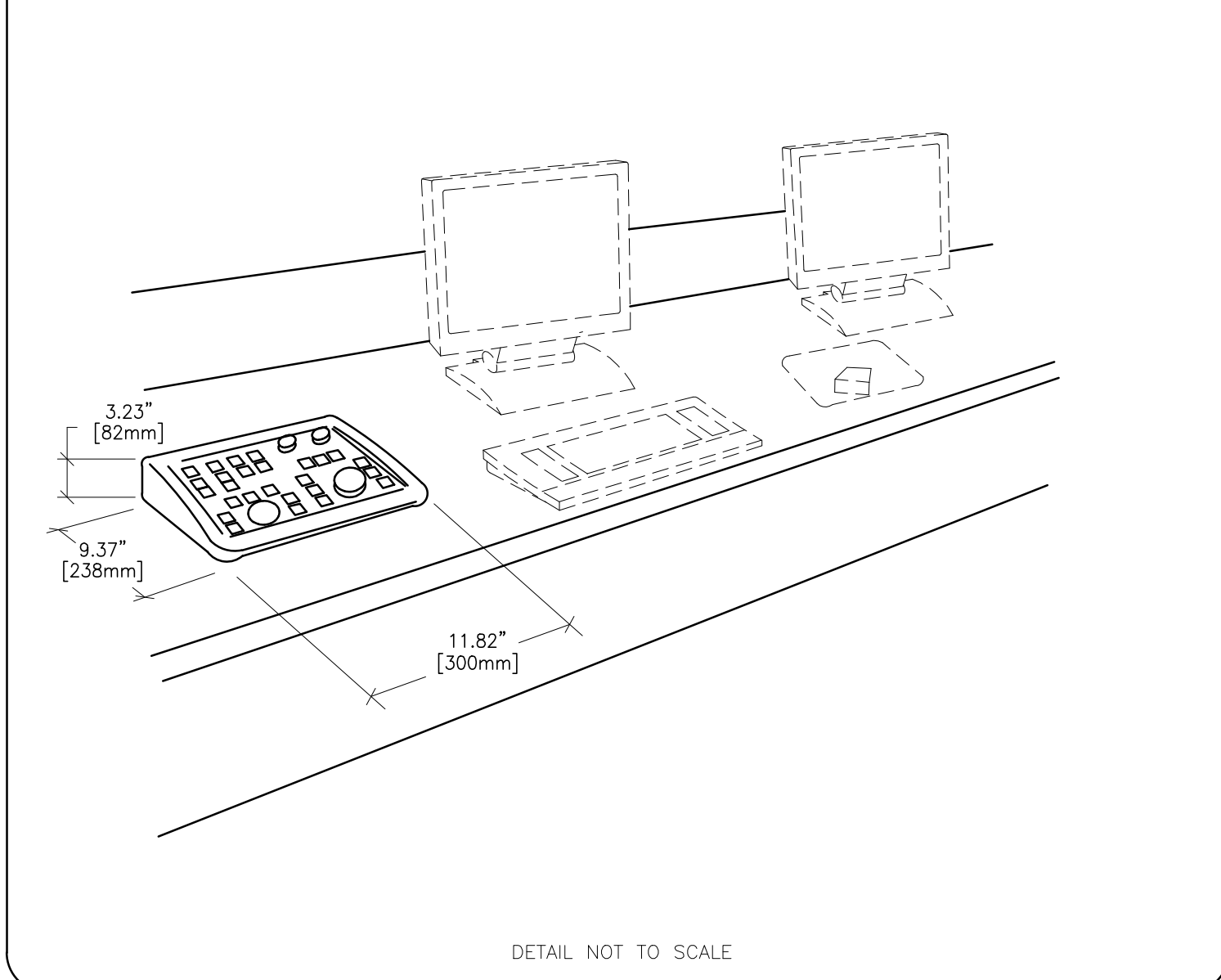
REV. DATE: 08/26/08



EQUIPMENT DETAIL
DL KEYPAD

C7412H

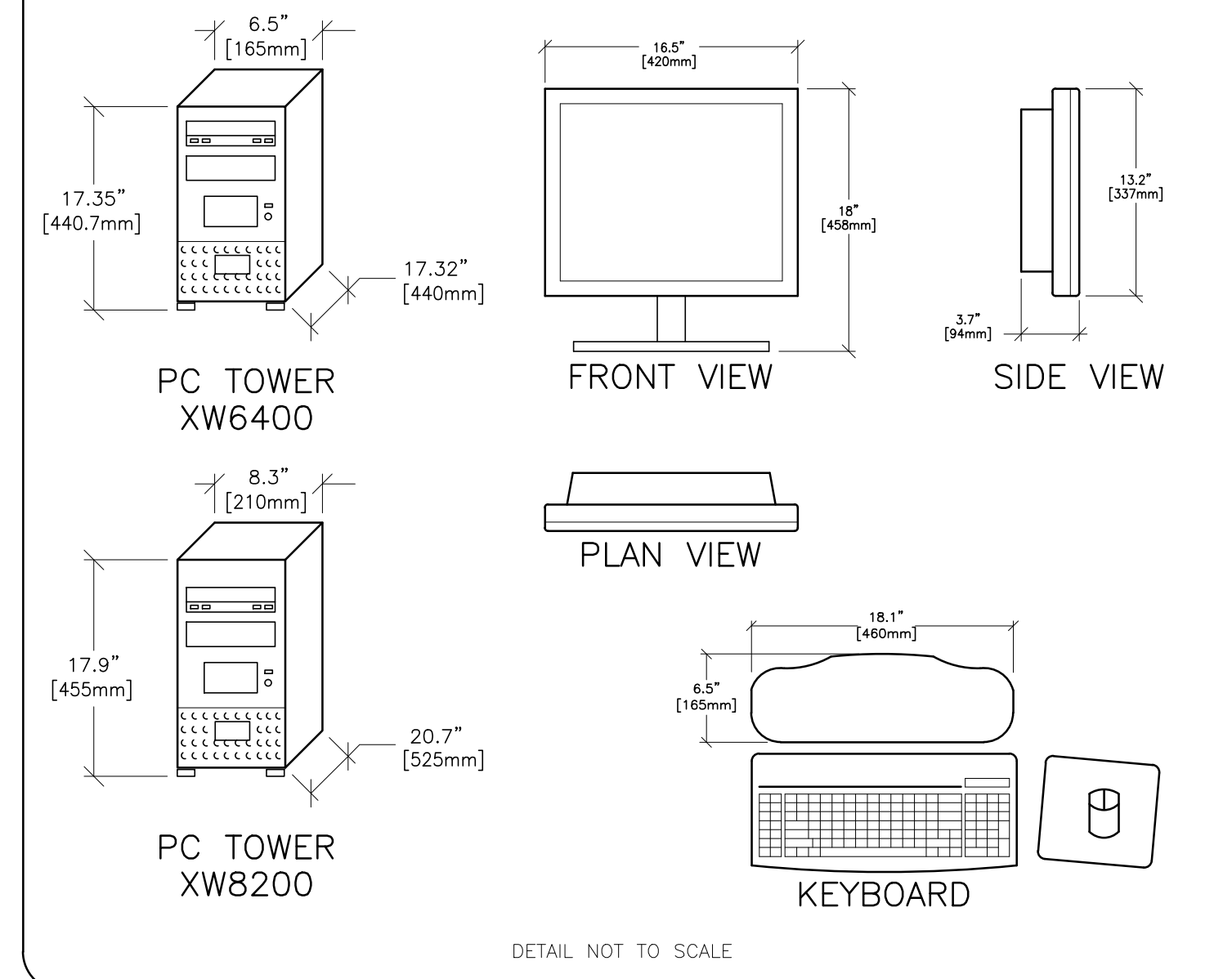
REV. DATE: 02.AUG.12



EQUIPMENT DETAIL
RCIM WITH DL KEYBOARD CONSOLE

C75-02

REV. DATE: 10/25/10



SHEET TITLE: EQUIPMENT DETAILS
MODALITY TYPE: OPTIMA CL3231

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 TO DETAILS OF THE MANUFACTURER'S LATEST CATALOGUES AND DRAWINGS. THE COMPANY CANNOT ACCEPT LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
INTERVENTIONAL
RADIOLOGY - OPTIMA
TYPICAL FINAL LAYOUT

PROJECT	REVISION
4-80F	00
DATE:	18.Dec.13
DRAWN BY:	JPH
CHECKED BY:	TST

REVISION HISTORY:

SHEET
D3