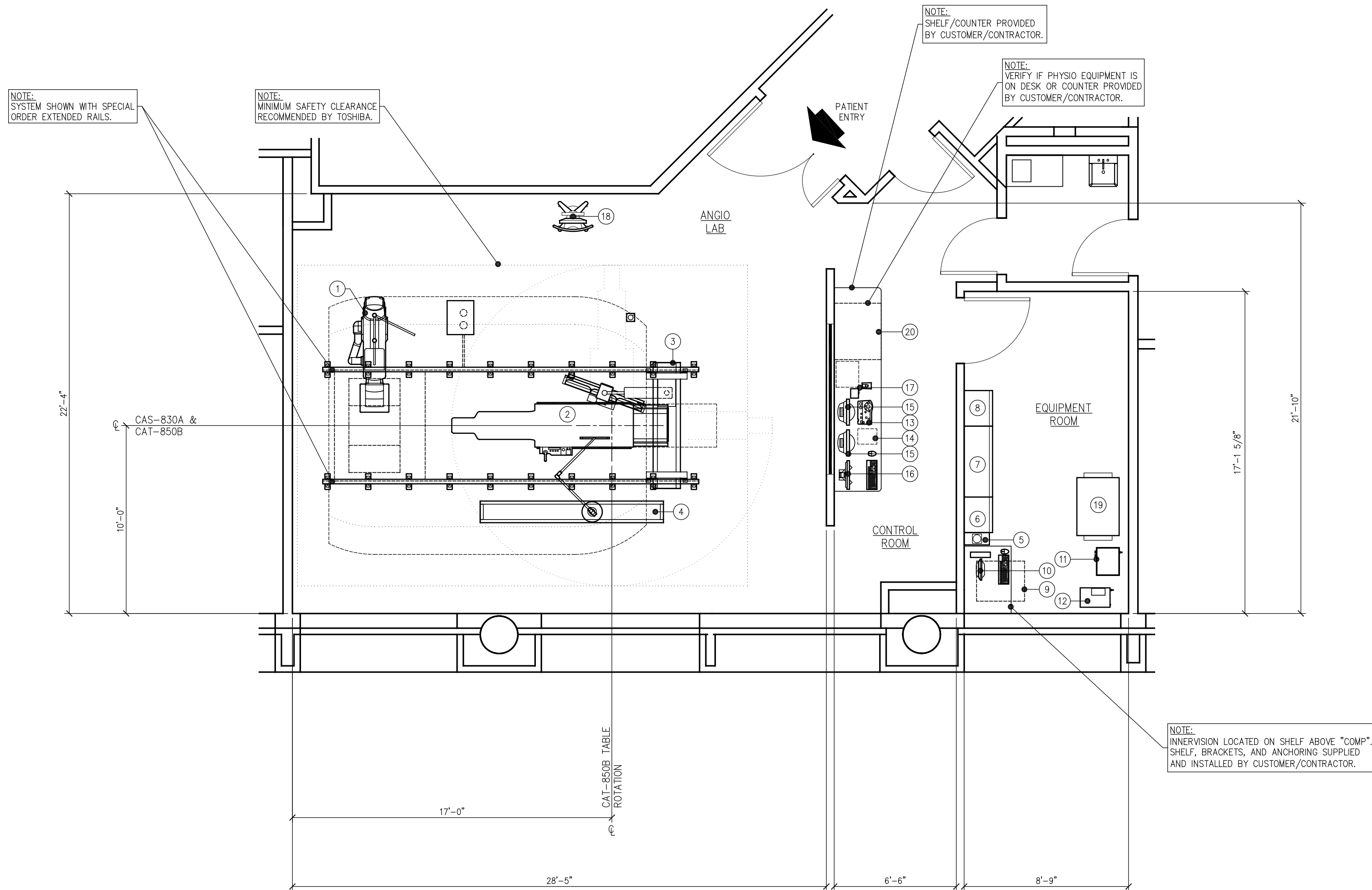


AfinixVC-i



EQUIPMENT LAYOUT

DRAWING CONTENTS

SECTION A

- A1 -- EQUIPMENT LAYOUT
- A2 -- EQUIPMENT ELEVATIONS
- A3 -- EQUIPMENT ELEVATIONS
- A4 -- EQUIPMENT SCATTER RADIATION DIAGRAMS

SECTION S

- S1 -- FLOOR STRUCTURAL LAYOUT
- S2 -- CEILING STRUCTURAL LAYOUT AND DETAILS
- S3 -- FLOOR STRUCTURAL DETAILS

SECTION E

- E1 -- ELECTRICAL LAYOUT / ELECTRICAL ISOMETRIC
- E2 -- ELECTRICAL SCHEMATIC
- E3 -- ELECTRICAL DETAILS / POWER QUALITY REQUIREMENTS
- E4 -- ELECTRICAL DUCT DETAILS

HVAC REQUIREMENTS

AMBIENT TEMPERATURE SHOULD BE 68°F - 74°F
WITH EQUIPMENT HEAT LOADS SEE LEGEND ABOVE
HUMIDITY RANGE OF 40-70% NON CONDENSING

NOTE:
A MINIMUM OF 10 AIR CHANGES PER HOUR IS SUGGESTED CONSULT LOCAL CODE.
AIR SUPPLY DUCTS SHOULD NOT BE PLACED DIRECTLY OVER EXAMINATION TABLES
FOR PATIENT COMFORT.

EQUIPMENT IN ENCLOSED SPACES SUCH AS EQUIPMENT ROOMS, TRANSFORMER
CLOSETS AND COMPUTER ROOMS MUST BE PROVIDED WITH ADEQUATE VENTILATION.
THE AIR FLOW THROUGH TOSHIBA EQUIPMENT CABINETS IS FROM BOTTOM TO TOP.
WHERE POSSIBLE A/C SUPPLY OUTLETS SHOULD BE LOCATED AT FLOOR LEVEL
WITH RETURN GRILLES IN THE CEILING. A/C SUPPLY OUTLET TO BE PROVIDED BY
CUSTOMER AT FLOOR LEVEL AT CONTROL ROOM DESK.

A THERMOSTAT IS REQUIRED IN EACH ROOM THAT CONTAINS TOSHIBA EQUIPMENT.

THE EQUIPMENT ROOM(S) THERMOSTAT REQUIRES A VISUAL AND AUDIBLE ALARM
WHEN THE TEMPERATURE REACHES 78°F.

REVISED: 01-26-10

SITE PLAN APPROVAL

IN ORDER TO USE THIS SET OF FINAL SITE PLANS, A CUSTOMER SIGNATURE IS REQUIRED
BELOW. THE CUSTOMER'S SIGNATURE DEMONSTRATES ACCEPTANCE OF THE LAYOUT SHOWN
AND ALL STATED SPECIFICATIONS.

CUSTOMER: _____ DATE: _____
SALES: _____ DATE: _____
I.P.M.: _____ DATE: _____

SYSTEM ELECTRICAL REQUIREMENTS FOR XTP-8100G WITH VRDU-100VL

SUPPLY CONFIGURATION: 3 PHASE DELTA OR WYE
125KVA
SUPPLY VOLTAGE: 480V, 100 AMP

CEILING HEIGHT

MAXIMUM CEILING HEIGHT: 9'-10 1/8"
RECOMMENDED CEILING HEIGHT: 9'-4"
MINIMUM CEILING HEIGHT: 9'-2 1/4"

NOTE:
ALL CEILING HEIGHTS OVER 9'-6 3/16" WILL REQUIRE
THE CUSTOMER PURCHASE OF ADDITIONAL SPACER KIT
(XGHA-001A).

REVISED: 12-21-05

VIBRATION REQUIREMENT

C-ARM & TABLE
ACCELERATION MUST BE 0.397" (1 CM) / S² OR LESS,
IF FREQUENCY BAND OF VIBRATION IS LESS THAN 10 HZ.
ACCELERATION MUST BE 3.9375" (10 CM) / S² OR LESS,
IF FREQUENCY BAND OF VIBRATION IS EQUAL TO OR
MORE THAN 10 HZ.

REVISED: 04-25-11

CEILING HEIGHT

MAXIMUM CEILING HEIGHT: 9'-10 1/8"
RECOMMENDED CEILING HEIGHT: 9'-4"
MINIMUM CEILING HEIGHT: 9'-2 1/4"

NOTE:
ALL CEILING HEIGHTS OVER 9'-6 3/16" WILL REQUIRE
THE CUSTOMER PURCHASE OF ADDITIONAL SPACER KIT
(XGHA-001A).

REVISED: 12-21-05

VIBRATION REQUIREMENT

C-ARM & TABLE
ACCELERATION MUST BE 0.397" (1 CM) / S² OR LESS,
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ACCELERATION MUST BE 3.9375" (10 CM) / S² OR LESS,
IF FREQUENCY BAND OF VIBRATION IS EQUAL TO OR
MORE THAN 10 HZ.

REVISED: 09-18-09

EQUIPMENT LEGEND

ROOM TYPE:
P = PROCEDURE ROOM
C = CONTROL ROOM
E = EQUIP./COMPUTER ROOM
R = REMOTELY LOCATED
O = OTHER

ITEM	ELEC. SYM.	ITEM DESCRIPTION SUPPLIED / INSTALLED BY TOSHIBA	RM	BTU / HR.	WEIGHT	REF.
1	C830	CAS-830A CEILING MOUNTED C-ARM AND RAILS	P	136.00	2,073.00	(12) A5
2	CAT	CAT-850B PATIENT TABLE (ROTARY)	P	717.00	1,059.00	(3) A2
3	MS	IDI FP-4 MONITOR SUSPENSION & (4) LCD MONITORS	P	---	308.00	(1) A5
4	RSL	3M TRACK WITH RADIATION SHIELD	P	---	250.00	(1) A5
5	CABS	XTP-8100G GENERATOR CABINETS SIDE COVER	E	---	64.00	(1) A5
6	CAS	SINGLE RACK CABINET (CAS-830A C-ARM CONTROL CABINET)	E	1,535.00	243.00	(2) A5
7	PC	DOUBLE RACK CABINET (GENERATOR POWER CABINET)	E	6,927.00	993.00	(3) A5
8	STC	SINGLE RACK CABINET (SYSTEMS POWER TRANSFORMER CABINET)	E	1,024.00	882.00	(2) A5
9	COMP	DFP-8000 COMPUTER CABINET (DIGITAL FLUOROGRAPHY SYSTEM INTERFACE BOX)	E	5,118.00	375.00	(4) A5
10	INV	INNERVISION (15" MONITOR, KEYBOARD AND PC)	E	500.00	22.00	(5) A5
11	WCU	HEX-125 WATER COOLING UNIT (WEIGHT WITHOUT WATER)	E	4,675.00	67.00	(6) A5
12	CC	FPD COOLANT CIRCULATOR (WEIGHT WITHOUT COOLANT)	E	3,753.00	91.00	(7) A5
13	CONS	DFP-8000D MAIN CONTROL CONSOLE	C	---	6.00	(8) A5
14	CCB	DFP-8000D DIGITAL FLUOROGRAPHY SYSTEMS INTERFACE BOX	C	---	49.00	(9) A5
15	LCD	LCD MONITOR WITH STAND	C	---	26.00	(10) A5
16	GUI	GUI WORK STATION (21" MONITOR, MOUSE, AND KEYBOARD)	C	---	22.00	(11) A5

OPTIONAL ITEM DESCRIPTION SUPPLIED / INSTALLED BY TOSHIBA

17	MIC	MICROPHONE AMPLIFIERS	C	---	T.B.D.	(12) A5
18	CART	XAMC-100L MONITOR CART (SINGLE MONITOR)	C	---	108.09	(14) A5

ITEM DESCRIPTION SUPPLIED BY TOSHIBA AND INSTALLED BY CUSTOMER/CONTRACTOR

19	VRDU	VRDU-100VL/VOLTAGE REGULATING DISTRIBUTION UNIT	E	11,484.00	1,392.00	(13) A5
----	------	---	---	-----------	----------	---------

OPTIONAL ITEM DESCRIPTION SUPPLIED / INSTALLED BY CUSTOMER/CONTRACTOR

20	PHY	PHYSIOLOGICAL EQUIPMENT (RECOMMENDED AREA SHOWN)	C	---	---	(1) A5
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GENERAL NOTES

CUSTOMER / CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.

GENERAL

A. TOSHIBA RESERVES THE RIGHT TO CHANGE THESE DRAWINGS AND SPECIFICATIONS WITHOUT NOTICE.

CODES AND PERMITS

B. THE CUSTOMER/CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, AND ORDINANCES ARE COMPLIED WITH.

C. THE SITE MUST BE 100% COMPLETE, CLEAN, AND FREE OF DUST, PRIOR TO EQUIPMENT DELIVERY AND INSTALLATION COMMENCEMENT. CUSTOMER/CONTRACTOR AND TOSHIBA INSTALLATION PROJECT MANAGER MUST COMPLETE A SITE WALK THROUGH 1 WEEK PRIOR TO DELIVERY TO DETERMINE ACCEPTABILITY FOR DELIVERY OF TOSHIBA EQUIPMENT.

D. SUPPLY/INSTALL ANY CABINETRY REQUIRED TO HOUSE ANCILLARY EQUIPMENT SUCH AS RECORDERS, MONITORS, AND KEYBOARDS.

E. PROVIDE ADEQUATE VENTILATION WITHIN CABINETRY AND INSTALL AXIAL FANS ON THE TOP, SIDE, OR BACK OF CABINETS, IF REQUIRED.

F. SPECIFICATIONS FOR EQUIPMENT ITEMS NOT PURCHASED THROUGH TOSHIBA MUST BE OBTAINED FROM THE VENDOR/MANUFACTURER AND INCLUDED IN THE DESIGN TOTALS.

G. DESIGN, FABRICATE, AND INSTALL MEDICAL GAS PEDESTAL, IF REQUIRED. CONSULT WITH TOSHIBA INSTALLATION PROJECT MANAGER FOR SUITABLE LOCATIONS.

H. AN OPERATING PHONE MUST BE AVAILABLE IN THE CONTROL ROOM AT THE TIME TOSHIBA EQUIPMENT INSTALLATION BEGINS.

I. PROVIDE ADEQUATE LIGHTING FOR SERVICING OF EQUIPMENT IN ALL AREAS OF THIS INSTALLATION.

J. ANY AND ALL COSTS REQUIRED FOR THE ENGINEERING AND/OR REMOVAL OF ANY HAZARDOUS MATERIALS, SUCH AS ASBESTOS. IN THE EVENT SUCH IS DISCOVERED PRIOR TO OR DURING INSTALLATION OF THIS EQUIPMENT.

K. SUPPLY/INSTALL ALL MATERIALS SPECIFIED IN THE TOSHIBA SITE PLANS, SUCH AS CASEWORK, COUNTERTOPS, CABINETS, AND SINKS.

PLUMBING

L. PLUMBING IS NOT REQUIRED FOR THIS TOSHIBA EQUIPMENT.

M. IT IS RECOMMENDED THAT A SINK BE PROVIDED FOR USE BY PERSONNEL.

SITE CONDITIONS

N. DIMENSIONS TO WALL AND OTHER ROOM FEATURES, EXCEPT FOR NOTED COLUMN AND BEAM CENTER LINES, SHALL BE FROM FINISHED SURFACES.

O. IT IS RECOMMENDED THAT CARDIO/VASCULAR EQUIPMENT REMAIN OUTSIDE 1 GAUSS FIELD OF MR EQUIPMENT.

TOSHIBA EQUIPMENT TRANSPORT REQUIREMENTS

P. EQUIPMENT INGRESS ROUTE MUST BE CHECKED TO ENSURE THE LARGEST AND HEAVIEST ITEMS OF EQUIPMENT CAN BE ACCOMMODATED, PRIOR TO EQUIPMENT DELIVERY. DIMENSIONS OF DOORWAYS SHOULD BE NO LESS THAN 4'-0" CLEAR IN WIDTH. CONTACT THE TOSHIBA INSTALLATION PROJECT MANAGER FOR DETAILS PERTAINING TO THE LARGEST AND HEAVIEST COMPONENTS FOR THIS INSTALLATION.

NETWORKING REQUIREMENTS

Q. NETWORK REQUIREMENTS WILL VARY BY SITE. TOSHIBA REPRESENTATIVE WILL REQUIRE DICOM DEVICE INFORMATION, ADDITIONAL I.P. ADDRESSES, AND I.T. DEPARTMENT CONTACT INFORMATION PRIOR TO INSTALLATION.

REVISED: 07-31-09

TOSHIBA

TOSHIBA AMERICA MEDICAL SYSTEMS INC.
www.toshiba.com/tams

VETERANS AFFAIRS
MEDICAL CENTER MINNEAPOLIS

(ANGIO LAB - INFINIX/VC)

1 VETERANS DRIVE

MINNEAPOLIS, MN 55417

THESE TOSHIBA PLANS ARE FOR
INFORMATIONAL PURPOSES ONLY
AND SHALL NOT BE USED FOR
ANY PURPOSE OTHER THAN THAT
AGREED UPON BETWEEN TOSHIBA
AND THE CUSTOMER. THESE SITE
PLANS ARE NOT TO BE USED
FOR CONSTRUCTION PURPOSES.

DATE: 05/03/12

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

DRAWN: J.A.D.

QUOTE: 113140

PROJECT NO.

120012341VLF

A1

FOR REFERENCE ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.

1 INFINIX CCI / VCI SYSTEM

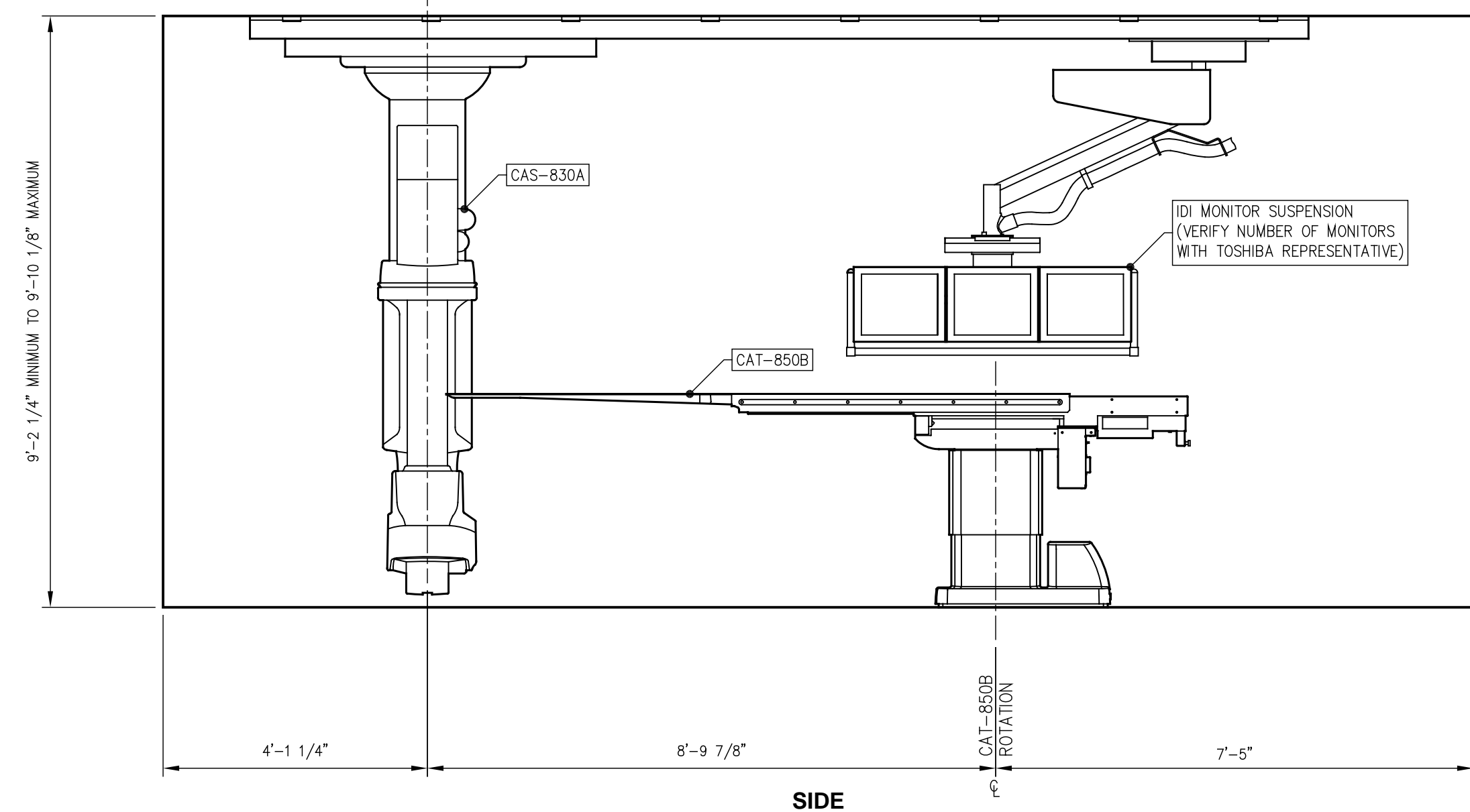
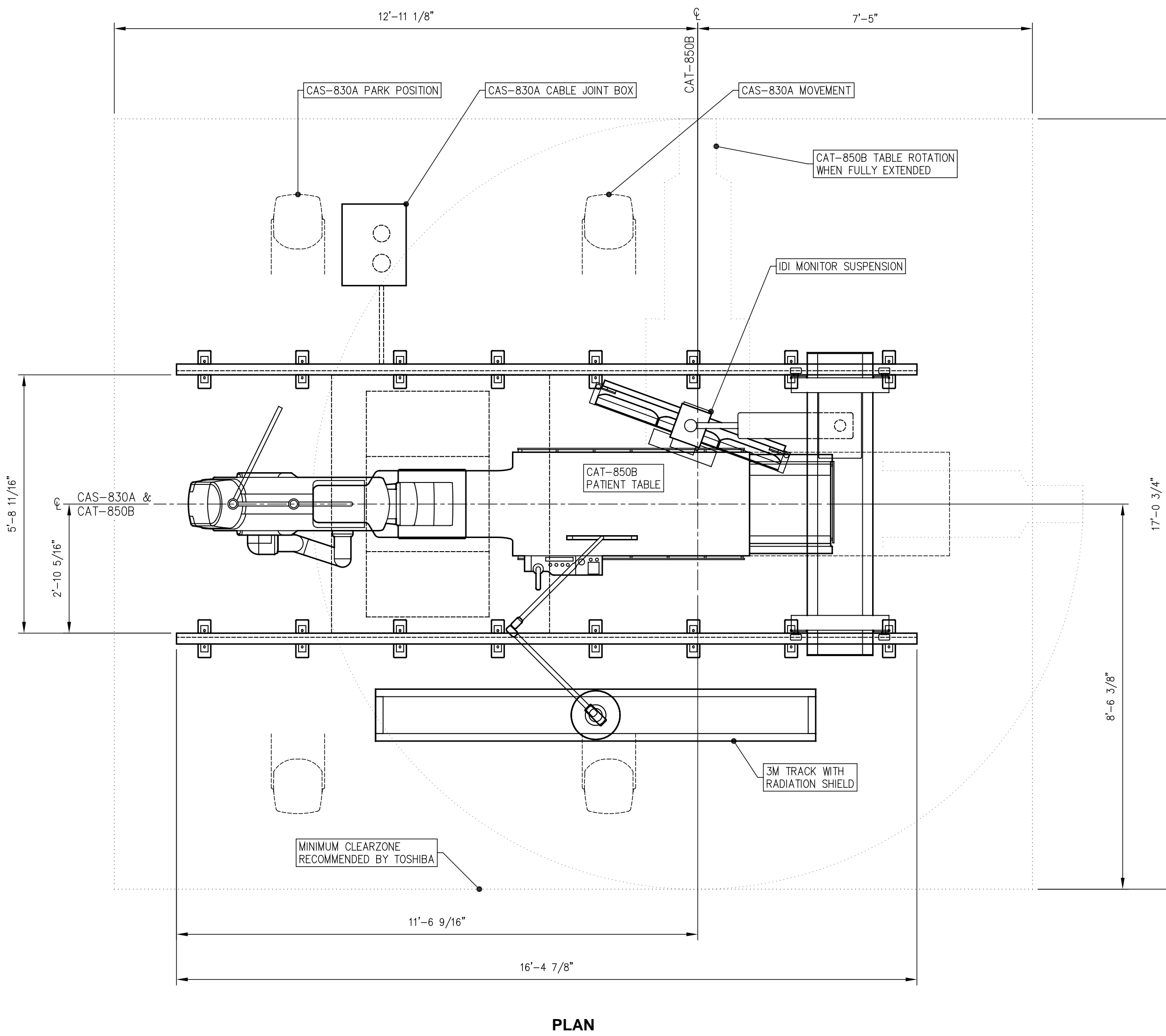
SCALE: 1/2" = 1'-0"

REVISED: 09-19-11

3 CAT-850B PATIENT TABLE (ROTARY)

SCALE: 1/2" = 1'-0"

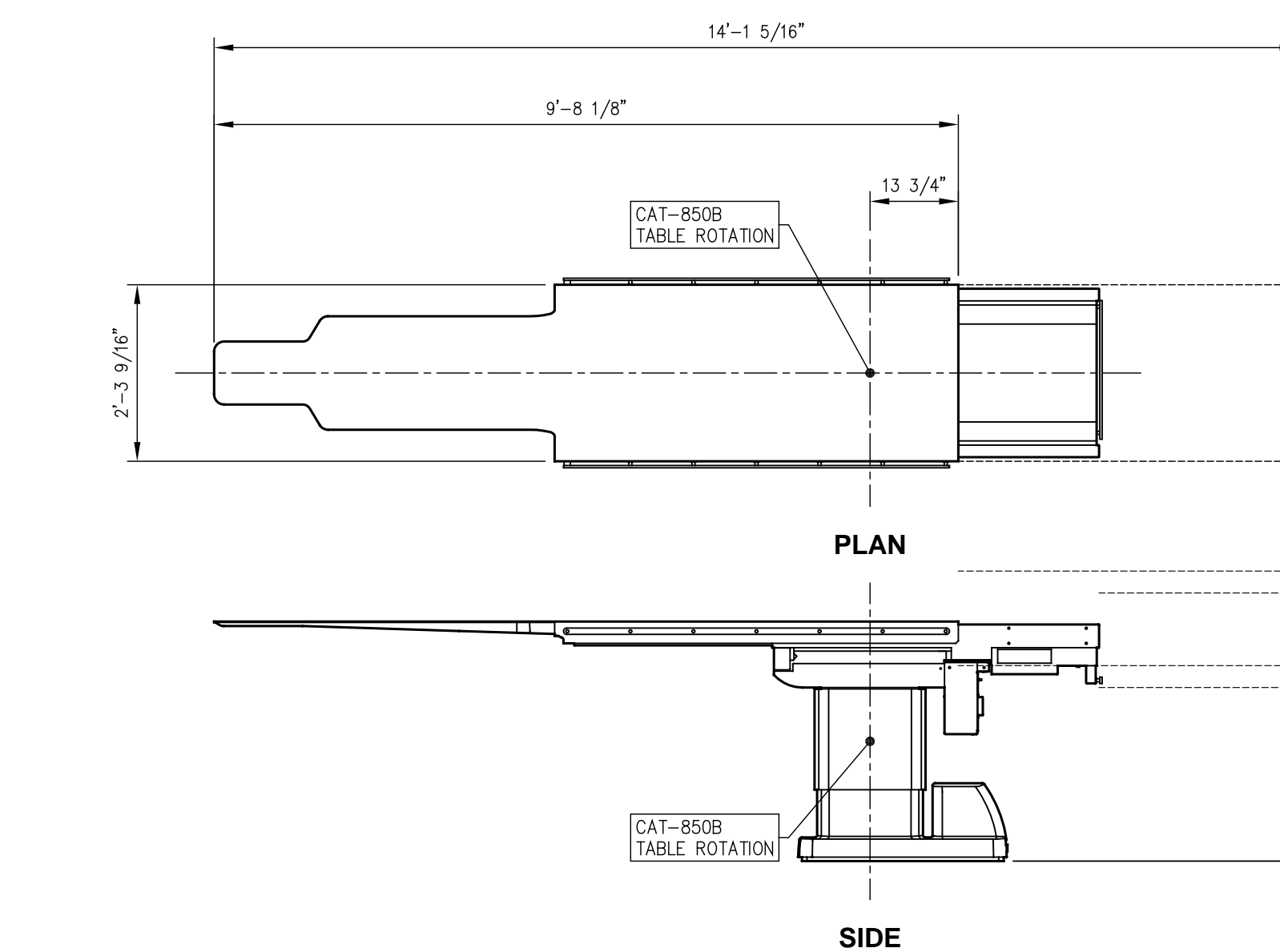
REVISED: 06/27/11



2 CAS-830A CEILING MOUNTED C-ARM

SCALE: 1/2" = 1'-0"

REVISED: 06-27-07



CAT
HEAT OUTPUT (BTU'S)
717.00
WEIGHT (LBS)
1,059.00

C830
HEAT OUTPUT (BTU'S)
136.00
WEIGHT (LBS)
2,073.00

VETERANS AFFAIRS
MEDICAL CENTER MINNEAPOLIS

(ANGIO LAB - INFINIX/VCI)
1 VETERANS DRIVE
MINNEAPOLIS, MN 55417

DATE: 05/03/12

SCALE: AS NOTED

DRAWN: J.A.D.

QUOTE: 113140

PROJECT NO.
120012341VLF

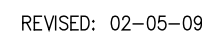
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REV.	DATE	DESCRIPTION	INT.

TOSHIBA
TOSHIBA AMERICA MEDICAL SYSTEMS INC.
www.toshiba.com/tams

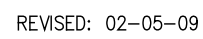
FOR REFERENCE ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.

(A) C-ARM ROTATION ANGLE LAO/RAO/CRA/CAU = 0°, 100 cm ABOVE THE FLOOR



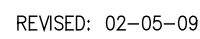
SCALE: $1/4" = 1'-0"$

(B) C-ARM ROTATION ANGLE LAO/RAO/CRA/CAU = 0°, 150 cm ABOVE THE FLOOR



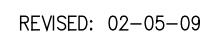
SCALE: $1/4" = 1'-0"$

(C) C-ARM ROTATION ANGLE LAO = 90°, CRA/CAU = 0°, 100 cm ABOVE THE FLOOR



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

(D) C-ARM ROTATION ANGLE LAO = 90°; CRA/CAU = 0°; 150 cm ABOVE THE FLOOR



SCALE: 1/4" = 1'-

(ANGIO LAB – INFINIX/VCI)
1 VETERANS DRIVE
MINNEAPOLIS, MN 55417

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DATE: 05/03/12

SCALE: AS NOTED

DRAWN: J.A.D.

QUOTE: 113140

PROJECT NO.

120012341VLF

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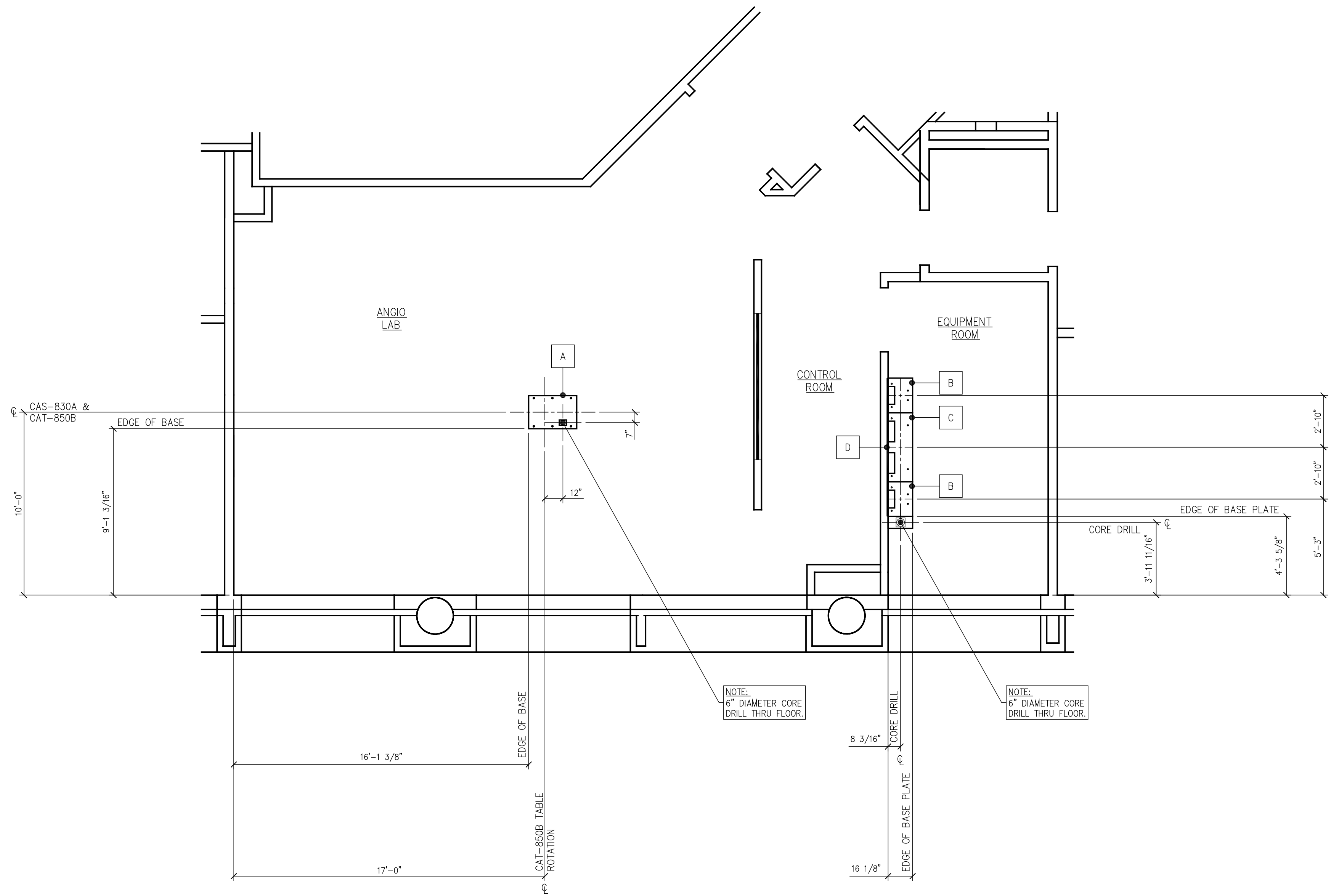
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P

TOSHIBA

TOSHIBA AMERICA MEDICAL SYSTEMS INC.
www.toshiba.com/tams

FOR REFERENCE ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.



FLOOR SUPPORT LAYOUT

NOTE:
CUSTOMER/CONTRACTOR TO SUPPLY/INSTALL ALL
ANCHORS PER STRUCTURAL ENGINEER OF RECORD
SPECIFICATIONS.

STRUCTURAL LEGEND

ITEM	DESCRIPTION SUPPLIED / INSTALLED BY TOSHIBA	REF.
A	CAT-850B TABLE BASE	1&2 S3
ITEM	DESCRIPTION SUPPLIED BY TOSHIBA AND INSTALLED BY CUSTOMER / CONTRACTOR	REF.
B	BASE PLATE FOR XTP-8100G SINGLE RACK CABINETS, VERIFY LOCATION W/TOSHIBA REP.	4 S3
C	BASE PLATE FOR XTP-8100G DOUBLE RACK CABINETS, VERIFY LOCATION W/TOSHIBA REP.	7 S3
ITEM	DESCRIPTION SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR	REF.
D	BACKING PLATE FOR XTP-8100G GENERATOR CABINETS, VERIFY LOCATION W/TOSHIBA REP.	5 S3

STRUCTURAL NOTES

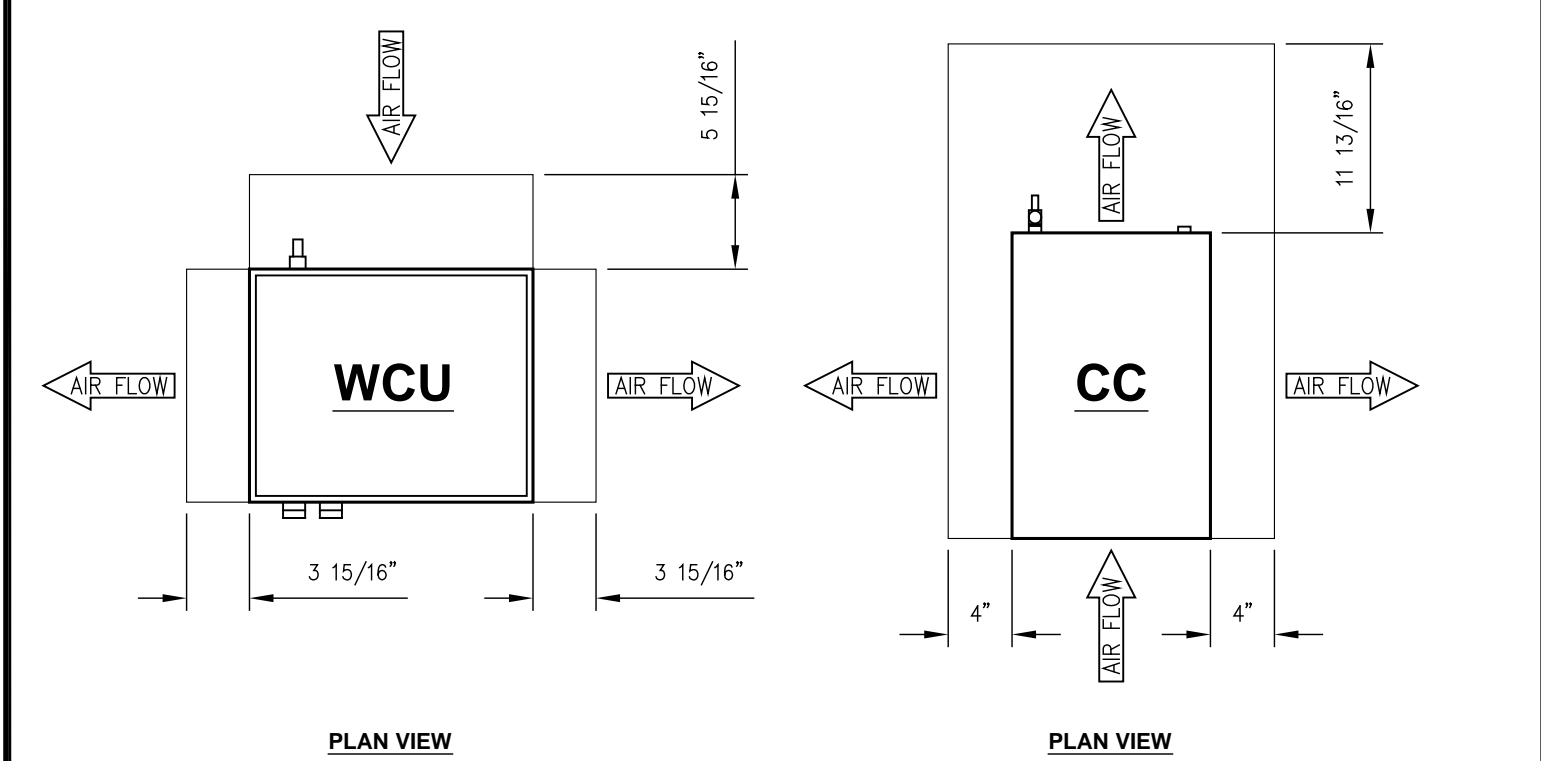
CUSTOMER / CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.

- GENERAL
- A. THESE SITE PLANS ARE INTENDED TO DEPICT ONLY A CONCEPT OF THE STRUCTURE REQUIRED FOR THE TOSHIBA EQUIPMENT. THE DESIGN OF ALL STRUCTURAL ELEMENTS MUST BE SPECIFIED BY A LICENSED STRUCTURAL ENGINEER IN ACCORDANCE WITH TOSHIBA SPECIFICATIONS AND ALL APPLICABLE CODES.
- B. THE CUSTOMER/CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED DIMENSIONS AND SITE CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. THE TOSHIBA INSTALLATION PROJECT MANAGER SHALL BE NOTIFIED IN WRITING OF ANY FIELD CONDITIONS ENCOUNTERED WHICH ARE CONTRADICTORY TO THOSE SHOWN IN THE TOSHIBA SITE PLANS.
- C. THE DEMOLITION, FABRICATION, AND ERECTION OF SUPPORT STRUCTURES AS WELL AS ANCHORING AND THRU-BOLTING FOR TOSHIBA EQUIPMENT SHALL BE PERFORMED BY THE CUSTOMER/CONTRACTOR IN ACCORDANCE WITH THE DESIGN AND SPECIFICATIONS SET FORTH BY THE STRUCTURAL ENGINEER OF RECORD.
- D. DUE TO THE DYNAMIC NATURE OF THE LOAD, BOTH HORIZONTAL AND VERTICAL ACCELERATIONS SHOULD BE INCLUDED IN THE DESIGN CALCULATIONS FOR THE SUPPORT STRUCTURE AS WELL AS ANCHORING AND THRU-BOLTING FOR THE TOSHIBA EQUIPMENT.
- E. IN THE INTEREST OF SAFETY TOSHIBA RESERVES THE RIGHT TO DELAY INSTALLATION COMMENCEMENT UNTIL STRUCTURAL DESIGN DRAWINGS STAMPED BY THE STRUCTURAL ENGINEER OF RECORD HAVE BEEN PROVIDED.
- CEILING STRUCTURAL SYSTEMS
- F. IN ORDER TO AVOID COLLISION WITH MOVEABLE TOSHIBA CEILING MOUNTED EQUIPMENT, ALL CEILING FIXTURES SUCH AS LAMPS, SMOKE DETECTORS, SPRINKLERS, ETC. MUST BE FLUSH MOUNTED.
- UNISTRUT NOTES
- G. CEILING UNISTRUT SUPPORT STRUCTURES TO BE DESIGNED BY OTHERS BASED ON SPECIFICATIONS SHOWN ON TOSHIBA SITE PLANS (IF APPLICABLE).
- H. UNISTRUT OR EQUIVALENT CHANNEL SUPPORT SYSTEM TO BE SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR (IF APPLICABLE).
- I. UNISTRUT ARE TO BE P1001 OR P5001 OR EQUIVALENT, MOUNTED FLUSH WITH FINISHED CEILING. ALL UNISTRUT ARE TO BE MOUNTED PARALLEL AND LEVEL WITH A MAXIMUM DEVIATION OF 1/16". UNISTRUT IS TO BE CAPABLE OF SUPPORTING LOAD REQUIREMENTS OF TOSHIBA EQUIPMENT. UNISTRUT LOAD REQUIREMENTS AND DESIGN ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD.
- REVISED: 08-13-09

COOLING UNIT NOTES

CUSTOMER / CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.

- A. THE WATER COOLING UNIT(S) AND COOLANT CIRCULATOR(S) ARE SELF CONTAINED UNITS TO BE FILLED AND MAINTAINED BY TOSHIBA. PLUMBING IS NOT REQUIRED.
- B. VENTILATION CLEARANCES AROUND WATER COOLING UNIT(S) AND COOLING CIRCULATOR(S) MUST BE MAINTAINED.
- C. COOLANT CIRCULATOR(S) MUST NOT BE STACKED.
- D. HOSES TO THE WATER COOLING UNIT(S) AND COOLANT CIRCULATOR(S) CANNOT BE RUN IN AREAS WHERE THE TEMPERATURE DROPS BELOW 40F. IF CONDUITS ARE RUN BENEATH SLAB OR EARTH, ENSURE GROUND TEMPERATURE DOES NOT DROP BELOW 40F.
- E. DUE TO HEAT GENERATED BY THE WATER COOLING UNIT(S) AND COOLING CIRCULATOR(S) ADDITIONAL VENTILATION RETURN/FAN(S) SHOULD BE LOCATED IN THE VICINITY.
- REVISED: 06/27/11



1 WATER COOLING UNIT AND COOLANT CIRCULATOR UNIT CLEARANCE DETAIL
SCALE: 1" = 1'-0"
REVISED: 06/27/11

VETERANS AFFAIRS
MEDICAL CENTER MINNEAPOLIS

(ANGIO LAB - INFINIX/VCI)
1 VETERANS DRIVE
MINNEAPOLIS, MN 55417

THESE TOSHIBA PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN THAT AGREED UPON BETWEEN TOSHIBA AND THE CUSTOMER. THESE SITE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DATE: 05/03/12

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

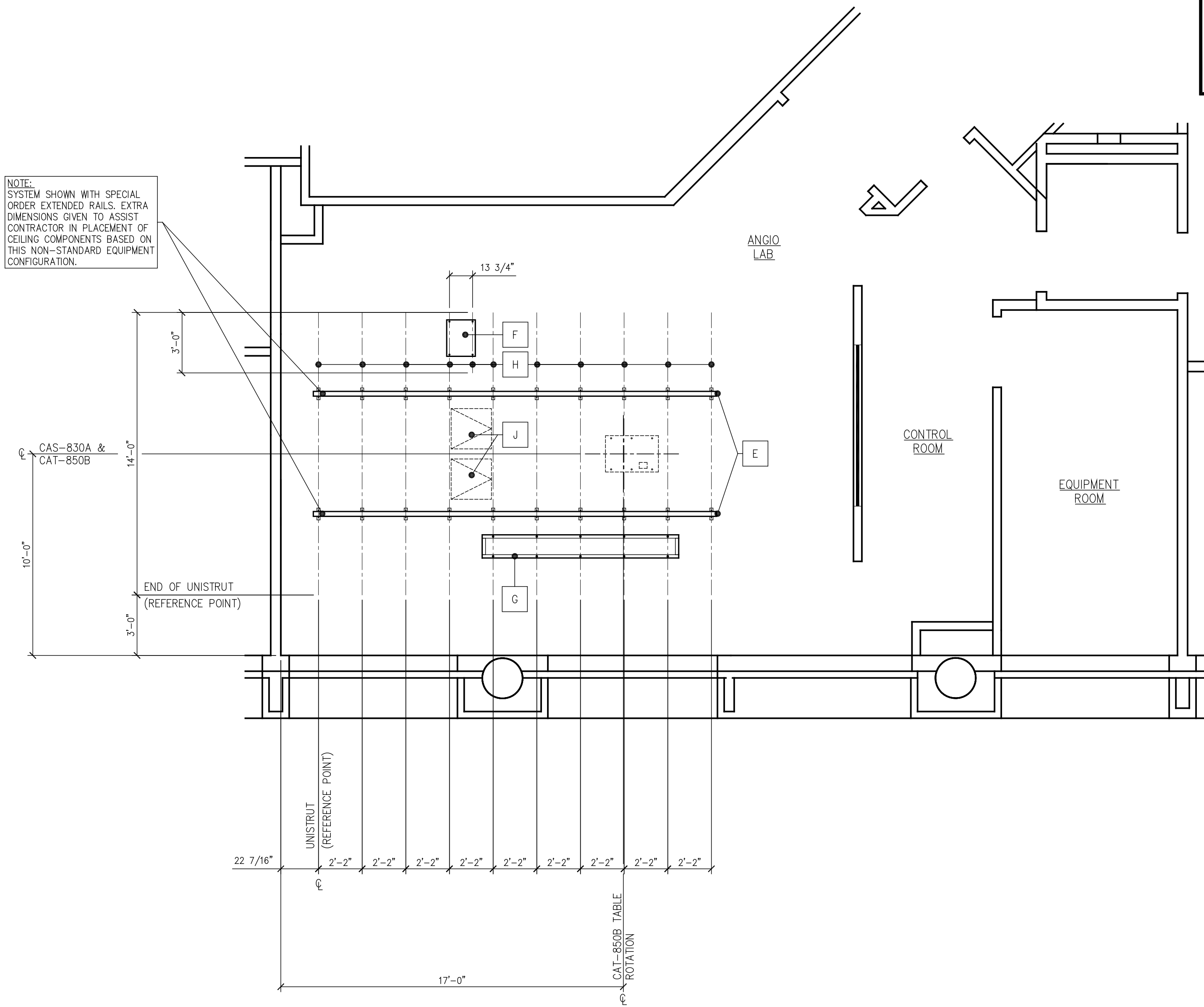
DRAWN: J.A.D.

QUOTE: 113140

PROJECT NO.
120012341VLF

S1

FOR REFERENCE ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.



CEILING SUPPORT LAYOUT

STRUCTURAL LEGEND

ITEM	ITEM DESCRIPTION SUPPLIED / INSTALLED BY TOSHIBA	REF.
E	CAS-830A CEILING RAILS	2/82
F	CAS-830A CEILING BOX COVER	2/82
G	CEILING RAILS FOR RADIATION SHIELD	2/82

ITEM	ITEM DESCRIPTION SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR	REF.
H	P1001 UNISTRUT OR EQUIVALENT	2/82
J	(2) 24" X 24" ACCESS PANELS FOR CAS-830A, VERIFY LOCATION WITH TOSHIBA REP.	2/82

CEILING STRUCTURAL NOTES

CUSTOMER / CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.

GENERAL

A. THESE SITE PLANS ARE INTENDED TO DEPICT ONLY A CONCEPT OF THE STRUCTURE REQUIRED FOR THE TOSHIBA EQUIPMENT. THE DESIGN OF ALL STRUCTURAL ELEMENTS MUST BE SPECIFIED BY A LICENSED STRUCTURAL ENGINEER IN ACCORDANCE WITH TOSHIBA SPECIFICATIONS AND ALL APPLICABLE CODES.

B. THE CUSTOMER/CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED DIMENSIONS AND SITE CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. THE TOSHIBA INSTALLATION PROJECT MANAGER SHALL BE NOTIFIED IN WRITING OF ANY FIELD CONDITIONS ENCOUNTERED WHICH ARE CONTRADICTORY TO THOSE SHOWN IN THE TOSHIBA SITE PLANS.

C. THE DEMOLITION, FABRICATION, AND ERECTION OF SUPPORT STRUCTURES AS WELL AS ANCHORING AND THRU-BOLTING FOR TOSHIBA EQUIPMENT SHALL BE PERFORMED BY THE CUSTOMER/CONTRACTOR IN ACCORDANCE WITH THE DESIGN AND SPECIFICATIONS SET FORTH BY THE STRUCTURAL ENGINEER OF RECORD.

D. DUE TO THE DYNAMIC NATURE OF THE LOAD, BOTH HORIZONTAL AND VERTICAL ACCELERATIONS SHOULD BE INCLUDED IN THE DESIGN CALCULATIONS FOR THE SUPPORT STRUCTURE AS WELL AS ANCHORING AND THRU-BOLTING FOR THE TOSHIBA EQUIPMENT.

E. IN THE INTEREST OF SAFETY TOSHIBA RESERVES THE RIGHT TO DELAY INSTALLATION COMMENCEMENT UNTIL STRUCTURAL DESIGN DRAWINGS STAMPED BY THE STRUCTURAL ENGINEER OF RECORD HAVE BEEN PROVIDED.

CEILING STRUCTURAL SYSTEMS

F. IN ORDER TO AVOID COLLISION WITH MOVEABLE TOSHIBA CEILING MOUNTED EQUIPMENT, ALL CEILING FIXTURES SUCH AS LAMPS, SMOKE DETECTORS, SPRINKLERS, ETC. MUST BE FLUSH MOUNTED.

G. CONTRACTOR TO SUPPLY M10 UNISTRUT NUTS.

UNISTRUT NOTES

H. CEILING UNISTRUT SUPPORT STRUCTURES TO BE DESIGNED BY OTHERS BASED ON SPECIFICATIONS SHOWN ON TOSHIBA SITE PLANS.

I. UNISTRUT OR EQUIVALENT CHANNEL SUPPORT SYSTEM TO BE SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR.

J. UNISTRUT ARE TO BE P1001 OR P5001 OR EQUIVALENT, MOUNTED FLUSH WITH FINISHED CEILING. ALL UNISTRUT ARE TO BE MOUNTED PARALLEL AND LEVEL WITH A MAXIMUM DEVIATION OF 1/16". UNISTRUT IS TO BE CAPABLE OF SUPPORTING LOAD REQUIREMENTS OF TOSHIBA EQUIPMENT. UNISTRUT LOAD REQUIREMENTS AND DESIGN ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD.

K. CUSTOMER/CONTRACTOR TO SUPPLY AND INSTALL UNISTRUT P2751 TROLLEYS OR EQUIVALENT. CONTACT THE TOSHIBA INSTALLATION PROJECT MANAGER FOR APPLICABILITY AND QUANTITY OF TROLLEYS. UNISTRUT TROLLEYS SHOULD HAVE VINYL WHEELS.

ACCESS NOTE

L. CUSTOMER/CONTRACTOR TO PROVIDE TWO 24" X 24" CEILING ACCESS PANELS FOR SERVICING OF CEILING MOUNTED EQUIPMENT. A MINIMUM CLEARANCE OF 36" ABOVE FINISHED CEILING IS REQUIRED IN THE AREA OF THE ACCESS PANELS.

REVISED: 07-31-09

NO CEILING FIXTURE OR LIGHTING ALLOWED IN AREA DESIGNATED ABOVE.

ONLY FLUSH MOUNTED CEILING FIXTURES OR LIGHTING WITHIN AREA DESIGNATED ABOVE.

REVISED: 04-22-10

1 CAS-830A W/ CAT-850B OR CAT-880B CEILING CLEARZONE

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

DESIGNED, SUPPLIED, & INSTALLED BY CUSTOMER/CONTRACTOR

SCALE: 2" = 1'-0"

CONSULT INSTALLATION PROJECT MANAGER IF INSTALLING SYSTEM IN A SEISMIC ZONE.

(2) 24" X 24" CEILING ACCESS PANELS FOR CAS-830A (RECOMMENDED LOCATION SHOWN)

CEILING RAD SHIELD

UNISTRUT (REFERENCE POINT)

22 7/16"

15'-2" (8) UNISTRUT @ 26" O.C. TYPICAL

10'-11 3/16"

9'-9"

19 1/2"

12"

34 5/16"

5'-8 11/16"

11'-6 9/16"

16'-4 7/8"

13 3/4" O.C.

TABLE

TABLE BASE

USE (32) M10 BOLTS (CONTRACTOR TO SUPPLY M10 UNISTRUT NUTS)

ADDITIONAL UNISTRUT REQ'D FOR MOUNTING CAS-830A CEILING BOX COVER.

CAS-830A CEILING BOX COVER

TABLE

7'-0"

14'-0"

3'-0"

4 5/16"

8 1/2"

7 9/16"

4 1/4"

UNISTRUT CHANNEL

FINISHED CEILING

MOUNTING BLOCK COVER

MOUNTING BLOCK

LONGITUDINAL RAIL

C-ARM OR OMEGA-ARM GANTRY

MONITOR SUSPENSION BRIDGE

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

2 CAS-830A W/ CAT-850B OR CAT-880B CEILING STRUCTURAL DETAIL

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

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REV.	DATE	DESCRIPTION	INT.

VETERANS AFFAIRS MEDICAL CENTER MINNEAPOLIS

(ANGIO LAB - INFINIX/VC)

1 VETERANS DRIVE
MINNEAPOLIS, MN 55417

THESE TOSHIBA PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN THAT AGREED UPON BETWEEN TOSHIBA AND THE CUSTOMER. THESE SITE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DATE: 05/03/12

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

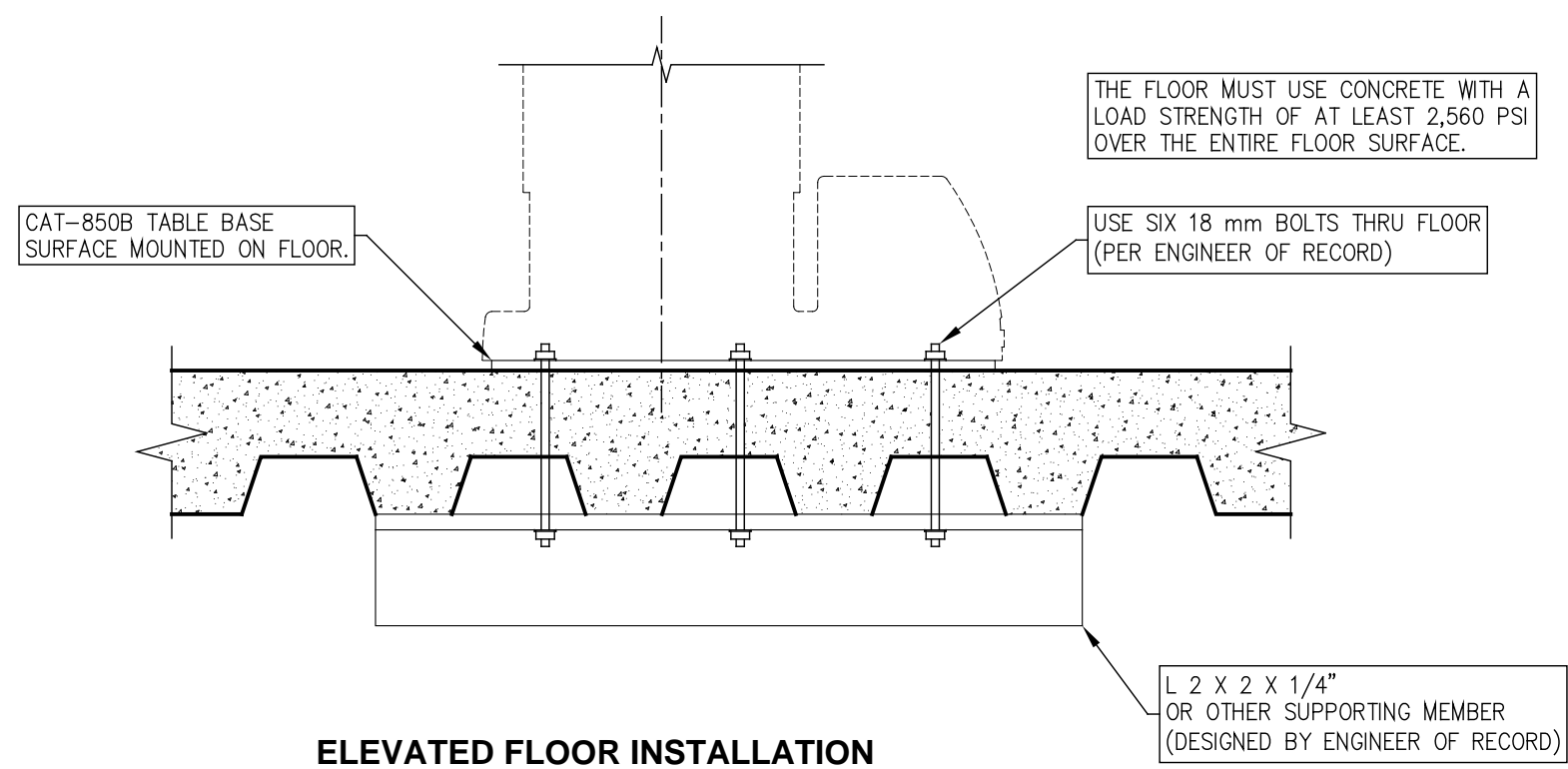
DRAWN: J.A.D.

QUOTE: 113140

PROJECT NO.
120012341VLF

S2

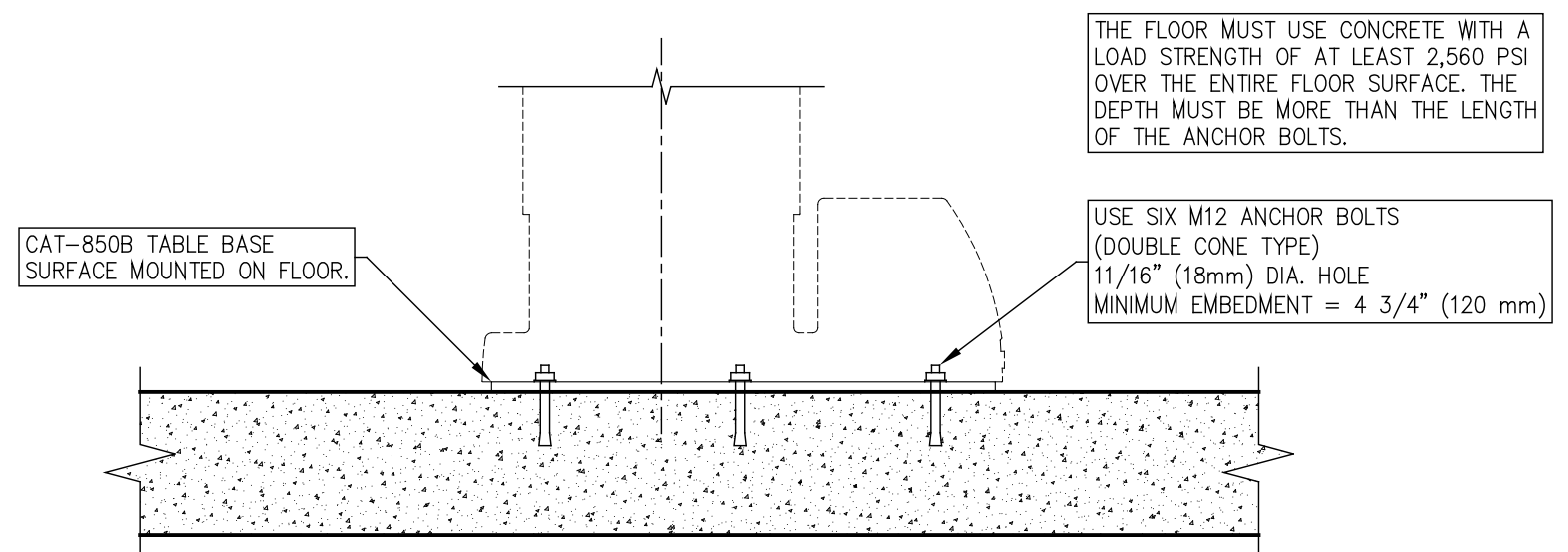
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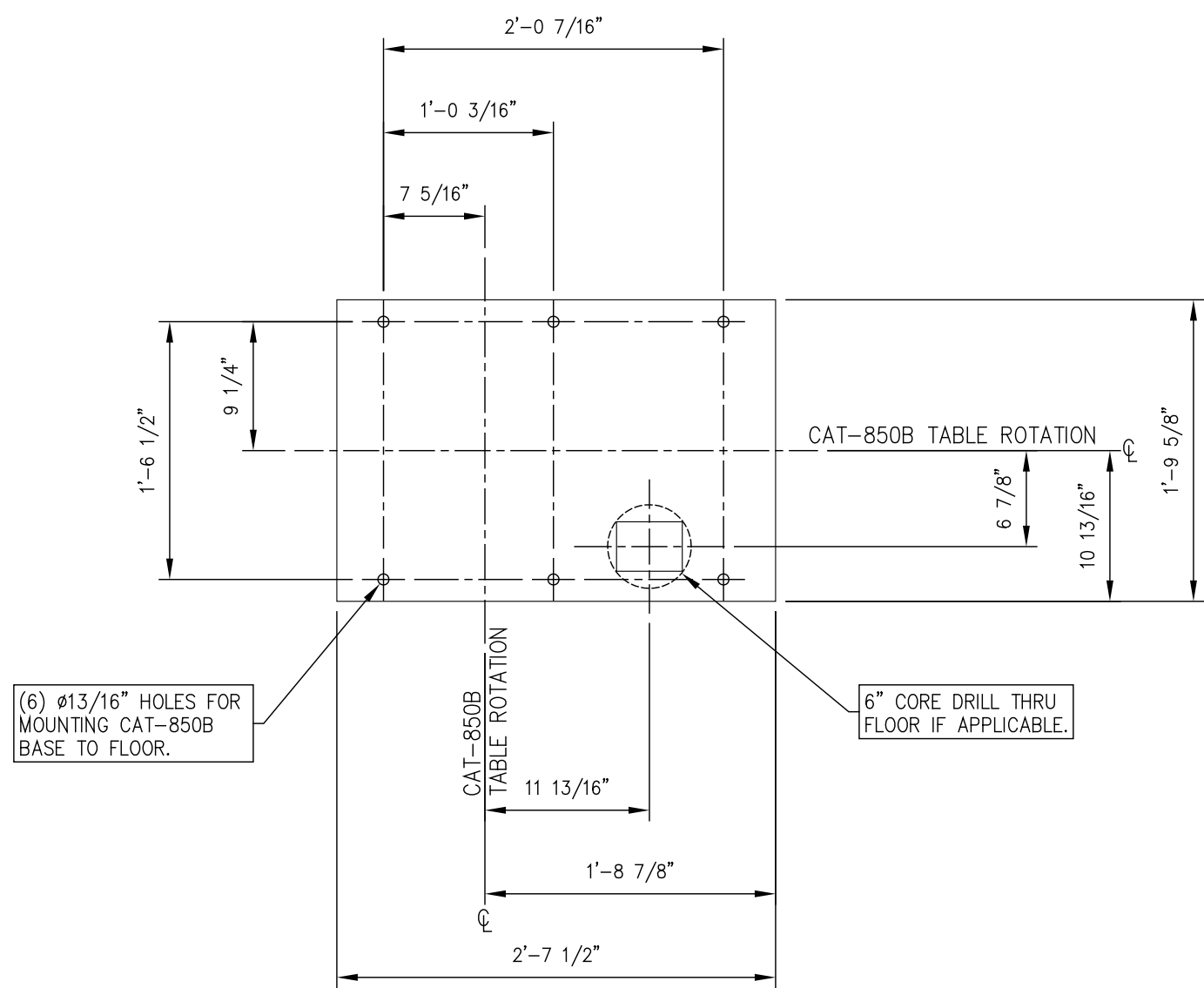
ELEVATED FLOOR INSTALLATION

ALL MOUNTING HARDWARE IS TO BE SUPPLIED BY CUSTOMER/CONTRACTOR.

CONSULT INSTALLATION PROJECT MANAGER IF INSTALLING SYSTEM IN A SEISMIC ZONE.



SLAB ON GRADE INSTALLATION

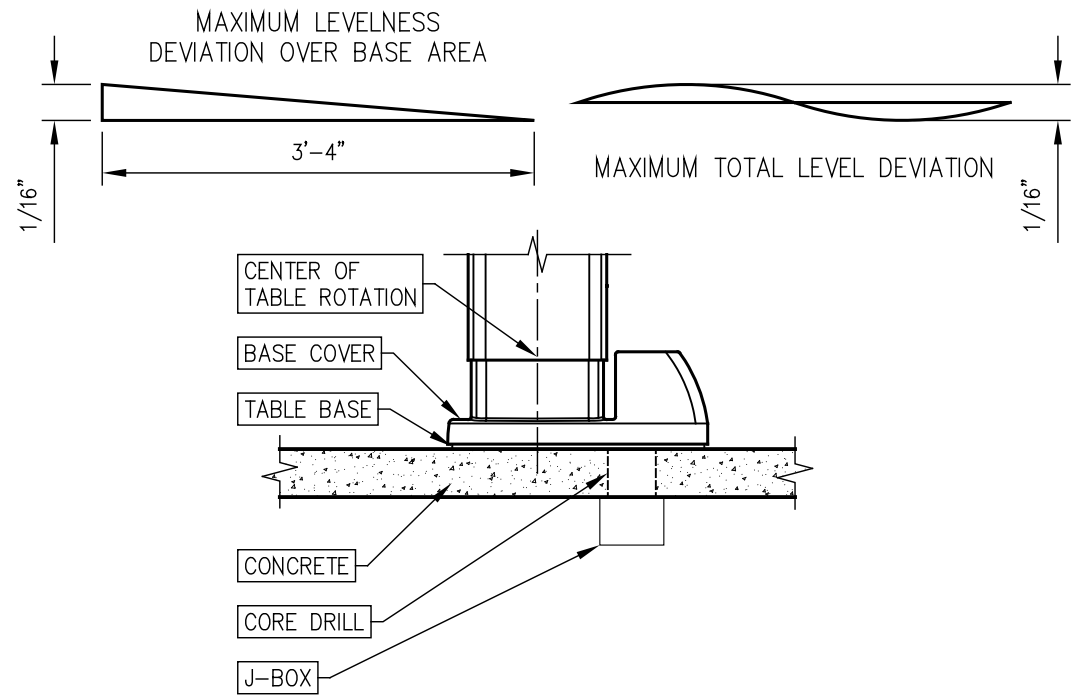


2 TYPICAL FLOOR MOUNTING OF CAT-850B

SCALE: 1" = 1'-0"

REVISED: 02-13-09

NOTE: CUSTOMER'S CONTRACTOR IS RESPONSIBLE FOR FLOOR AREA AROUND BASE PLATE TO BE LEVEL TO WITHIN 1/16" RISE OVER 3'-4" RUN. MAXIMUM TOTAL DEVIATION IN LEVEL AT BASE AREA 1/16".

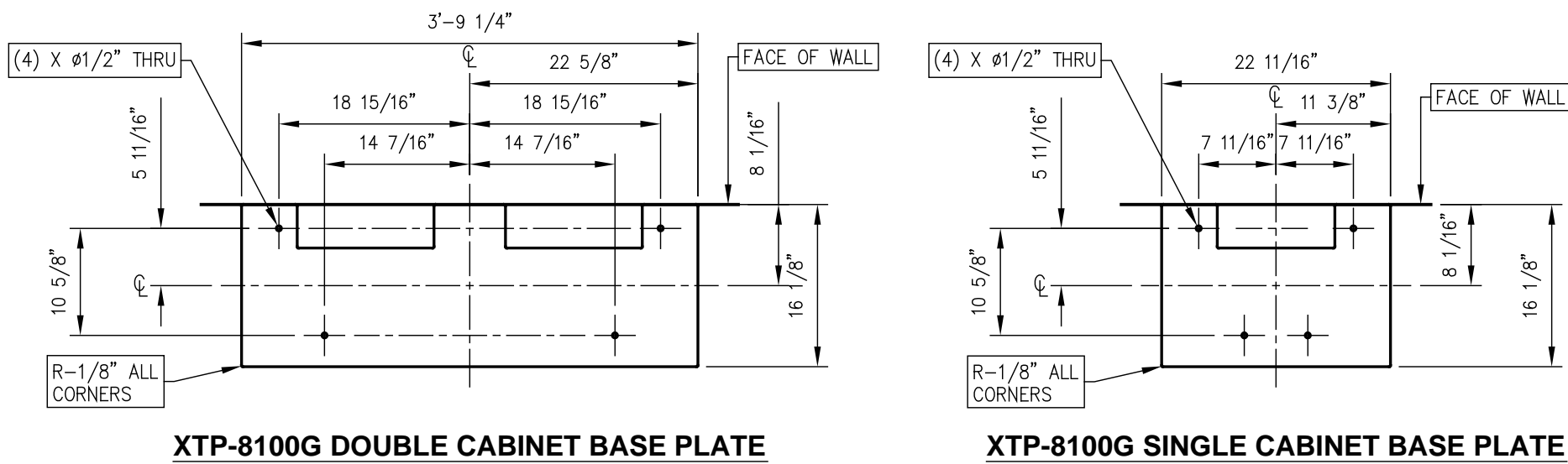


SURFACE MOUNTED ON FLOOR WITH OPTIONAL CORE DRILL THROUGH FLOOR

1 TYPICAL FLOOR MOUNTING OF CAT-850B

SCALE: 1" = 1'-0"

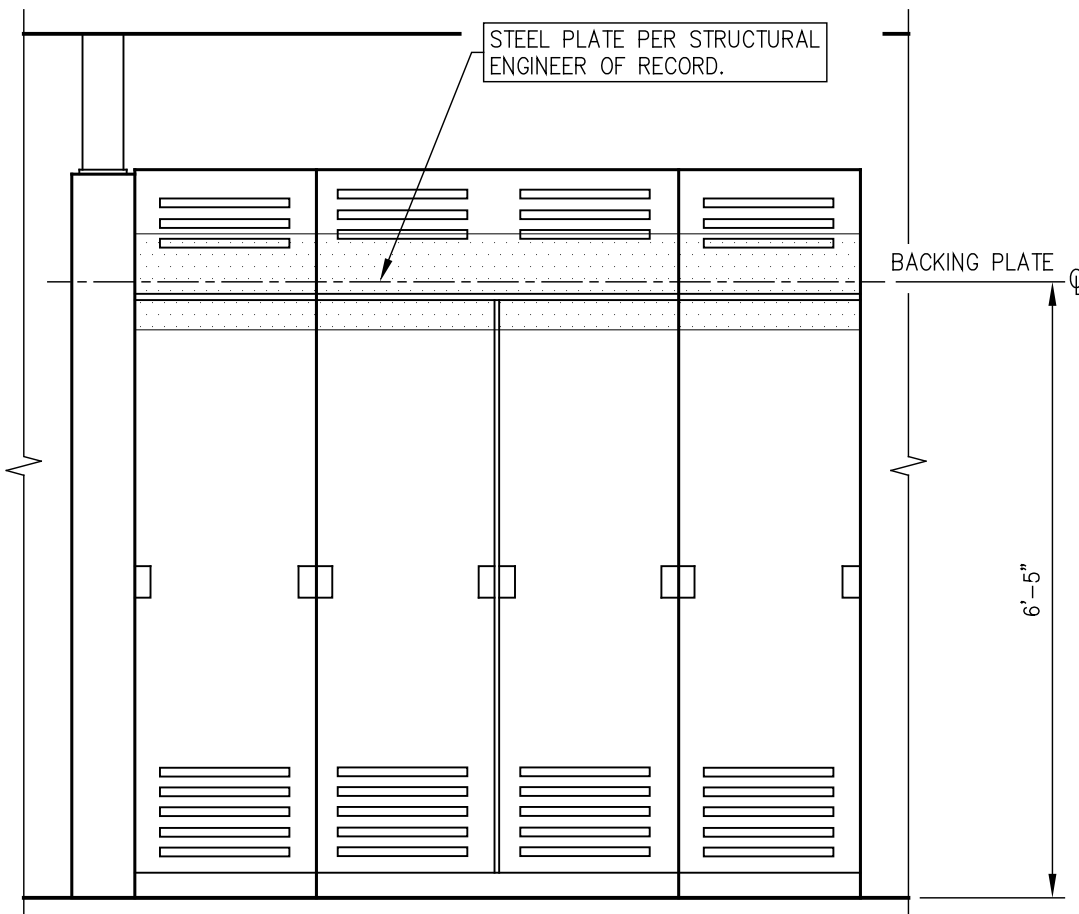
REVISED: 05-07-09



XTP-8100G DOUBLE CABINET BASE PLATE

XTP-8100G SINGLE CABINET BASE PLATE

NOTE: 1. FLOOR AREA AROUND BASE PLATE TO BE LEVEL TO WITHIN A 1/16" RISE OVER 3'-4" OF RUN. 2. BOLT FORCES TO BE COORDINATED BY TOSHIBA INSTALLATION COORDINATOR W/STRUCTURAL ENGINEER OF RECORD.



5 XTP-8100G BACKING PLATE

SCALE: 1/2" = 1'-0"

REVISED: 03-03-09

4 XTP-8100G FLOOR PLATES

SCALE: 3/4" = 1'-0"

REVISED: 06-27-07

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DATE: 05/03/12

SCALE: NOT TO SCALE

DRAWN: J.A.D.

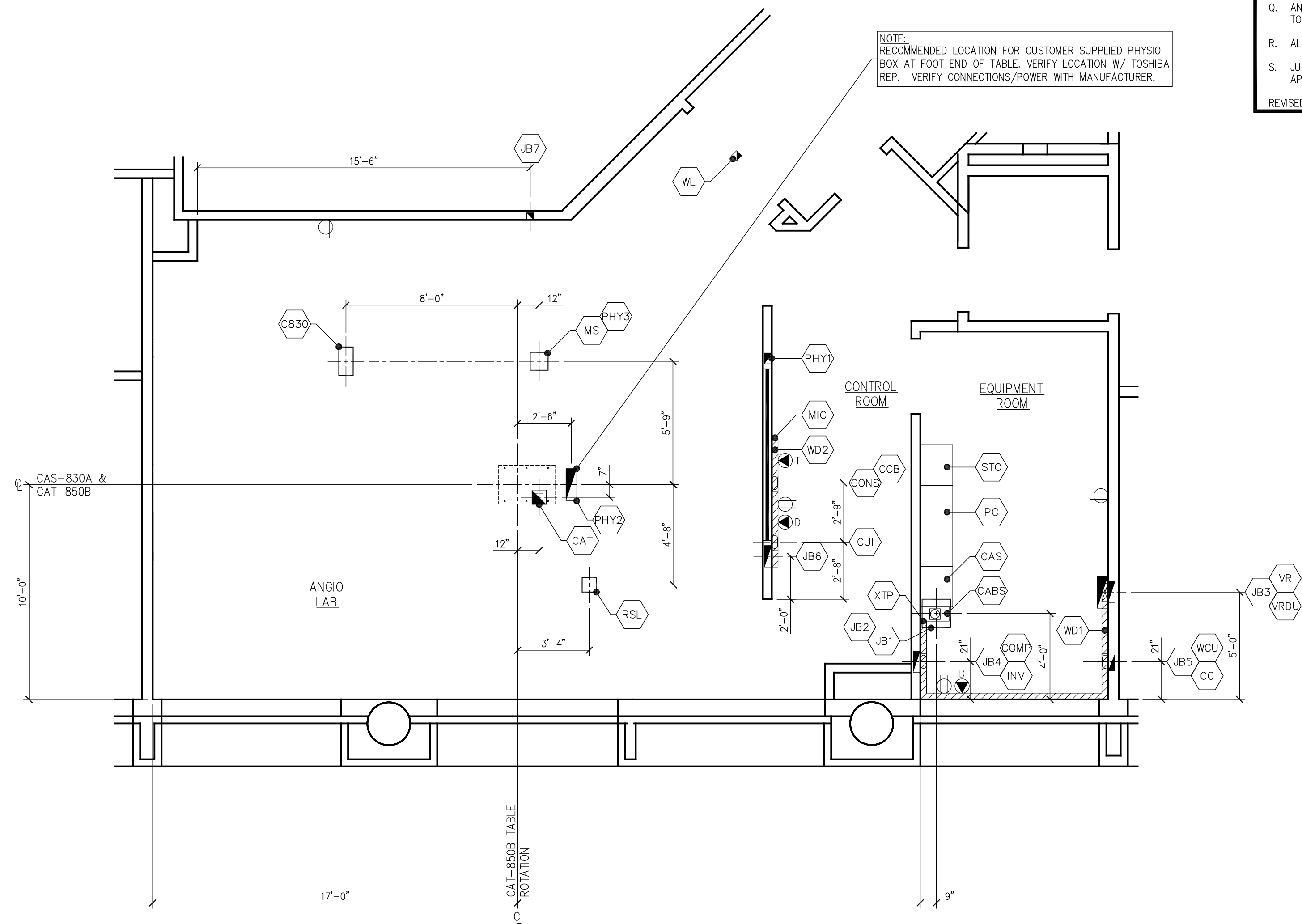
QUOTE: 113140

PROJECT NO.
120012341VLF

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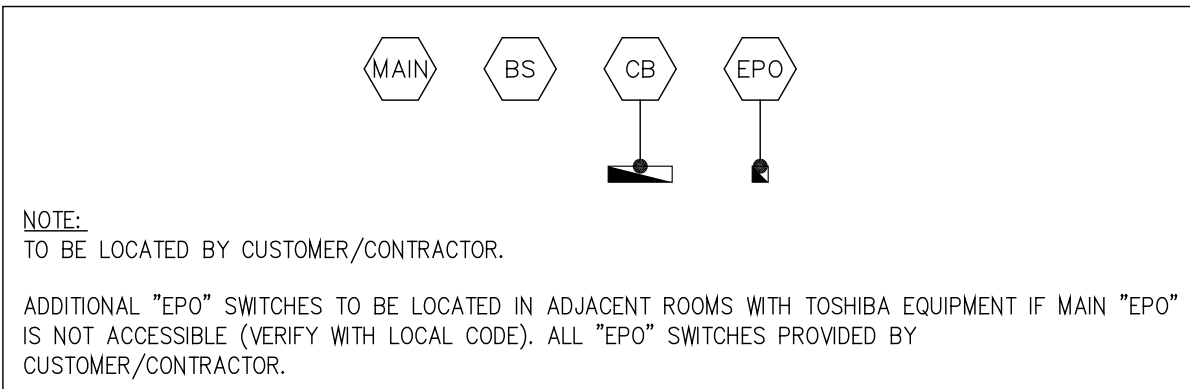
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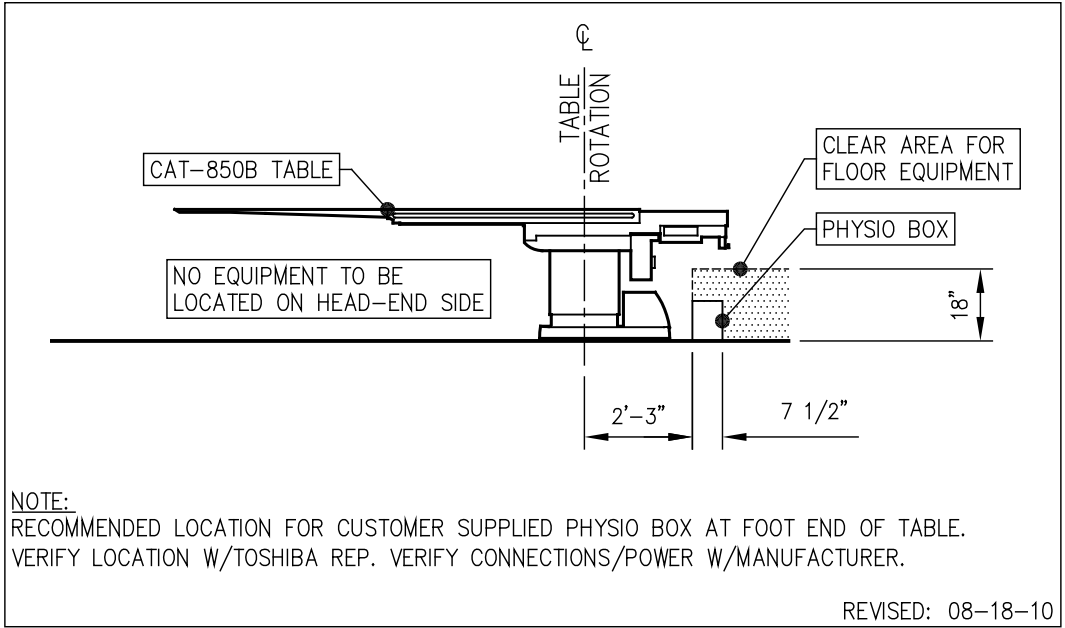


ELECTRICAL LAYOUT

- ELECTRICAL NOTES**
- CUSTOMER / CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.
- A. THESE SITE PLANS ARE INTENDED TO DEPICT ONLY A CONCEPT OF THE ELECTRICAL REQUIREMENTS FOR TOSHIBA EQUIPMENT. THE DESIGN OF ALL ELECTRICAL ELEMENTS MUST BE SPECIFIED BY A LICENSED ELECTRICAL ENGINEER IN ACCORDANCE WITH TOSHIBA SPECIFICATIONS AND ALL APPLICABLE CODES.
 - B. IN ACCORDANCE WITH N.E.C. ARTICLE 517-72(B), THE EQUIPMENT CIRCUIT BREAKER(S) DISCONNECT MUST BE LOCATED SO THAT THEY SHALL BE OPERABLE FROM A LOCATION READILY ACCESSIBLE FROM THE CONTROL AREA. IF THIS IS IMPOSSIBLE OR IMPRACTICAL, THE USE OF A SHUNT TRIP TYPE BREAKER WILL BE NECESSARY TO SATISFY THIS REQUIREMENT. THE EMERGENCY POWER OFF BUTTON FOR THE SHUNT TRIP SHOULD BE LOCATED IN THE CONTROL AREA.
 - C. THE CUSTOMER/CONTRACTOR IS TO SUPPLY AND INSTALL ALL CIRCUIT BREAKERS, CONDUITS, JUNCTION BOXES, DUCTS, ETC. SPECIFIED HEREIN.
 - D. THE TOSHIBA SITE PLANS DO NOT SPECIFY ELECTRICAL REQUIREMENTS FOR EQUIPMENT NOT SOLD BY TOSHIBA.
 - E. TOSHIBA WILL SUPPLY INTERCONNECTING CABLES FOR THE TOSHIBA EQUIPMENT. TOSHIBA WILL INSTALL IF LOCAL TRADE LABOR PERMITS.
 - F. EXCEPT FOR THEIR USE IN POWER LINE CONNECTIONS TO EQUIPMENT CABINETS, FLEXIBLE CONDUIT SHALL NOT BE USED IN THIS INSTALLATION. ONLY FACTORY CONDUIT ELBOWS SHALL BE USED. DUCT WORK SHALL BE PROVIDED WITH SWEEP ELBOWS.
 - G. ALL JUNCTION BOXES AND DUCTS THAT PENETRATE THE FLOOR SHALL BE WATERPROOF TYPE AND PROVIDED WITH GASKETED WATERPROOF COVERS. ALL FLOOR JUNCTION BOXES AND DUCT COVERS SHALL BE CAPABLE OF SUPPORTING 200 LBS OF CONCENTRATED LOAD.
 - H. GROMMETED OPENINGS ARE SHOWN FOR REFERENCE PURPOSES ONLY. VERIFY SIZE AND LOCATION WITH TOSHIBA REPRESENTATIVE. ALL GROMMETED OPENINGS SHALL HAVE NO SHARP EDGES.
 - I. ALL CHASE & GROMMETED OPENINGS SHALL HAVE PLASTIC BUSHINGS.
 - J. ALL DUCT WORK SHALL HAVE A MINIMUM OF THREE COMPARTMENTS WITH TRANSITIONS FROM HORIZONTAL TO VERTICAL WALL DUCT OR JUNCTION BOXES. LOCAL CODES MAY REQUIRE THE USE OF CROSS-OVER TUNNELS OR OTHER SUCH DEVICES TO MAINTAIN CABLE SEPARATION.
 - K. ALL DUCTS AND CONDUITS SHALL BE ELECTRICALLY BONDED AS A GROUNDING PATH IN ACCORDANCE WITH N.E.C. ARTICLE 517-13(B).
 - L. CUSTOMER/CONTRACTOR SHALL SUPPLY AND INSTALL GREENLEE NYLON MEASURING PULL STRING OR EQUIVALENT IN ALL CONDUITS AND CLOSED DUCT WORK.
 - M. CONDUIT RUNS SHOWN ARE FOR REFERENCE ONLY. ALL CONDUIT RUNS MUST TAKE THE SHORTEST MOST DIRECT ROUTE POSSIBLE. CONDUIT RUNS MAY HAVE A MAXIMUM OF (3) 90 DEGREE BENDS.
 - N. 110 VAC GROUNDED OUTLETS SHALL BE PROVIDED ON WALLS NEAR TOSHIBA EQUIPMENT FOR USE DURING EQUIPMENT SERVICE.
 - O. CUSTOMER/CONTRACTOR MUST SUPPLY AND INSTALL ALL INCOMING POWER CABLES FROM CIRCUIT BREAKER(S) TO TOSHIBA EQUIPMENT CONNECTION POINT. CABLE TYPE MUST BE MTW MULTI-STRAND COPPER - NO ALUMINUM IS PERMITTED. CABLE SIZE MUST BE IN ACCORDANCE WITH POWER QUALITY REQUIREMENTS SPECIFICATIONS (SEE PAGE E3).
 - P. CUSTOMER/CONTRACTOR IS TO SUPPLY AND INSTALL ALL NECESSARY HARDWARE TO ENCLOSE INCOMING POWER CABLES IN WATER TIGHT CONDUIT FROM CIRCUIT BREAKER(S) TO TOSHIBA EQUIPMENT CABINET(S).
 - Q. ANY CHANGES IN THE LOCATION OR TYPE OF CONDUIT, DUCT WORK, JUNCTION BOXES, ETC. MUST BE SUBMITTED IN WRITING TO THE TOSHIBA INSTALLATION PROJECT MANAGER FOR APPROVAL.
 - R. ALL DUCT WORK MAKING A 90 DEGREE ANGLE MUST BE CHAMFERED FOR CABLE ACCESS.
 - S. JUNCTION BOX SIZES MAY BE INCREASED AS NEEDED (WITH EXCEPTION OF THE "PCDU" / "VRDU" / OR "PDU" JUNCTION BOX IF APPLICABLE.)
- REVISED: 07-31-09



- NOTE:
J-BOX SIZES MAY BE INCREASED AS NEEDED WITH EXCEPTION TO THE "VRDU" J-BOX.
- NOTE:
CUSTOMER HAS THE OPTION TO FURR OUT WALL TO ACCOMMODATE FLUSH MOUNTED WALL DUCT IF DESIRED.



ELECTRICAL LEGEND

ITEM	ITEM DESCRIPTION SUPPLIED / INSTALLED BY CUSTOMER/CONTRACTOR	REF.
MAIN	MAIN SERVICE ENTRANCE PANEL.	1 E3
CB	THREE PHASE CIRCUIT BREAKER PER TOSHIBA POWER SPECIFICATIONS (SEE DETAIL) CIRCUIT BREAKER LOCATION PER CODE REQUIREMENTS BY ELECTRICAL CONTRACTOR.	1A8 E3
VRDU	18" W X 6" H X 6" D, J-BOX SURFACE MOUNTED 29" A.F.F. TO BOTTOM OF BOX. OPEN TO "VR".	1A8 E3
EPO	4" STD. J-BOX FOR REMOTE OFF SWITCH. LOCATED BY CUSTOMER/CONTRACTOR. DPDT, NORMALLY OPEN MUSHROOM HEAD PUSH BUTTON.	1 E3
WL	4" STD. J-BOX FOR "X-RAY ON" OR WARNING LIGHT MOUNTED ABOVE PATIENT ENTRY DOOR.	4 E3
BS	BUILDING STEEL.	
CB30	8" W X 16" L X 8" D, J-BOX FLUSH MOUNTED IN FINISHED CEILING.	4 E4
CAT	8" W X 8" L X 6" D, J-BOX MOUNTED UNDER FLOOR W/ 6" CORE DRILL THRU FLOOR.	5 E4
RSL	8" W X 8" L X 8" D, J-BOX FLUSH MOUNTED IN FINISHED CEILING.	2 E4
MS	10" W X 10" L X 6" D, J-BOX FLUSH MOUNTED IN FINISHED CEILING.	4 E4
CCB	SHARED 8"W X 3"H GROMMETED OPENING IN WALL DUCT "WD2".	2 E4
CONS	8"W X 3"H GROMMETED OPENING IN WALL DUCT "WD2".	2 E4
GUI	8"W X 3"H GROMMETED OPENING IN END OF WALL DUCT "WD2".	2 E4
MIC	SHARED 8"W X 3"H GROMMETED OPENING IN WALL DUCT "WD1".	2 E4
WCU	8"W X 3"H GROMMETED OPENING IN WALL DUCT "WD1".	2 E4
CC	GROMMETED OPENING AT END OF WALL DUCT, "WD1". OPEN TO XTP-8100G GENERATOR CABINETS.	4 E4
COMP	16" W X 16" L X 8" D, J-BOX FLUSH MOUNTED IN FINISHED CEILING, CONNECTED TO "CABS" XTP-8100G END CABINET VIA 6" CONDUIT OR FLEX HOSE.	5 E4
XTP	16" W X 16" L X 6" D, J-BOX MOUNTED UNDER FLOOR, W/ 6" CORE DRILL THRU FLOOR.	1 E4
JB1	10" W X 10" H X 4" D, J-BOX FLUSH MOUNTED IN FINISHED WALL, 27" A.F.F. TO BOTTOM OF BOX. OPEN TO "VRDU".	2 E4
JB2	12" W X 12" H X 4" D, J-BOX FLUSH MOUNTED IN FINISHED WALL, 12" A.F.F. TO BOTTOM OF BOX. OPEN TO "WD1". FOR CONNECTIONS TO "COMP".	3 E4
JB3	10" W X 10" H X 4" D, J-BOX FLUSH MOUNTED IN FINISHED WALL, 24" A.F.F. TO BOTTOM OF BOX.	2 E4
JB4	12" W X 12" H X 4" D, J-BOX MOUNTED IN FINISHED WALL, 11" A.F.F. TO BOTTOM OF BOX. OPEN TO "WD2".	3 E4
JB5	4" W X 4" H X 4" D, J-BOX FLUSH MOUNTED IN FINISHED WALL, 12" A.F.F. TO BOTTOM OF BOX.	
JB6	LOCATED ON SHELF ABOVE "COMP".	
JB7	6" W X 6" H X 4" D, J-BOX FLUSH MOUNTED IN FINISHED WALL, FOR CUSTOMER SUPPLIED PHYSIO EQUIPMENT IN CONTROL ROOM. VERIFY CONNECTIONS/POWER WITH MANUFACTURER.	
INV	18" W X 6" L X 4" D, J-BOX FOR CUSTOMER SUPPLIED PHYSIO EQUIPMENT AT TABLE BASE. VERIFY CONNECTIONS/POWER WITH MANUFACTURER.	
PHY1	CUSTOMER SUPPLIED PHYSIO MONITOR ON MONITOR SUSPENSION. VERIFY CONNECTIONS/POWER WITH MANUFACTURER.	
PHY2	110V ELECTRICAL OUTLETS FOR SYSTEM EQUIPMENT AND/OR SERVICE EQUIPMENT. OUTLETS TO BE LOCATED IN EACH ROOM WHERE SYSTEM EQUIPMENT IS LOCATED.	
PHY3	RJ45 CONNECTOR, CAT5 CABLE TO BE USED FOR DATA CONNECTION FOR NETWORKING.	
	DEDICATED PHONE LINE SUPPLIED/INSTALLED BY CUSTOMER/CONTRACTOR.	

XTP-8100G GENERATOR SYSTEM COMPONENTS SUPPLIED AND INSTALLED BY TOSHIBA

CABS	XTP-8100G GENERATOR CABINETS SIDE COVER	PC	XTP-8100G GENERATOR POWER CABINET
CAS	CAS-830A C-ARM CONTROL CABINET	STC	XTP-8100G GENERATOR SYSTEMS POWER SUPPLY TRANSFORMER CABINET

ELECTRICAL DUCT LEGEND

ITEM	ITEM DESCRIPTION SUPPLIED / INSTALLED BY CUSTOMER/CONTRACTOR	REF.
WD1	18" W X 3 1/2" D, SURFACE/FLUSH MOUNTED METAL WALL DUCT W/(3) EQUAL PARTITIONED COMPARTMENTS THROUGHOUT & REMOVABLE ACCESS COVERS. MOUNTED 6" A.F.F. TO BOTTOM OF DUCT.	2 E4
WD2	10" W X 3 1/2" D, SURFACE/FLUSH MOUNTED METAL WALL DUCT W/(3) EQUAL PARTITIONED COMPARTMENTS THROUGHOUT & REMOVABLE ACCESS COVERS. MOUNTED 12" A.F.F. TO BOTTOM OF DUCT.	2 E4
VR	10" W X 3 1/2" D, SURFACE MOUNTED METAL RISER DUCT W/(3) EQUAL PARTITIONED COMPARTMENTS THROUGHOUT & REMOVABLE ACCESS COVERS. CONNECTING "VRDU" TO "WD1".	1 E4

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DESCRIPTION

DATE

REV.

VETERANS AFFAIRS
MEDICAL CENTER MINNEAPOLIS

(ANGIO LAB - INFINIX/VCI)

1 VETERANS DRIVE
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DATE: 05/03/12

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

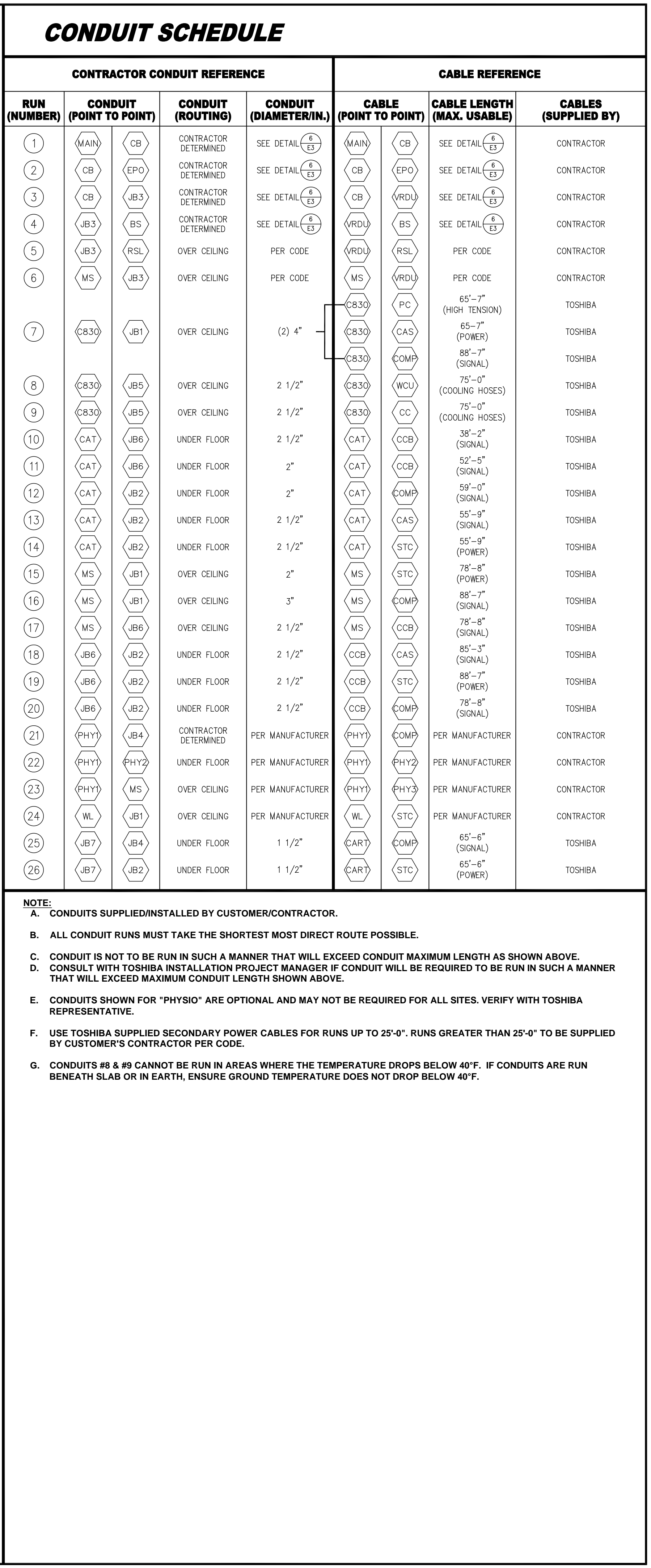
DRAWN: J.A.D.

QUOTE: 113140

PROJECT NO.
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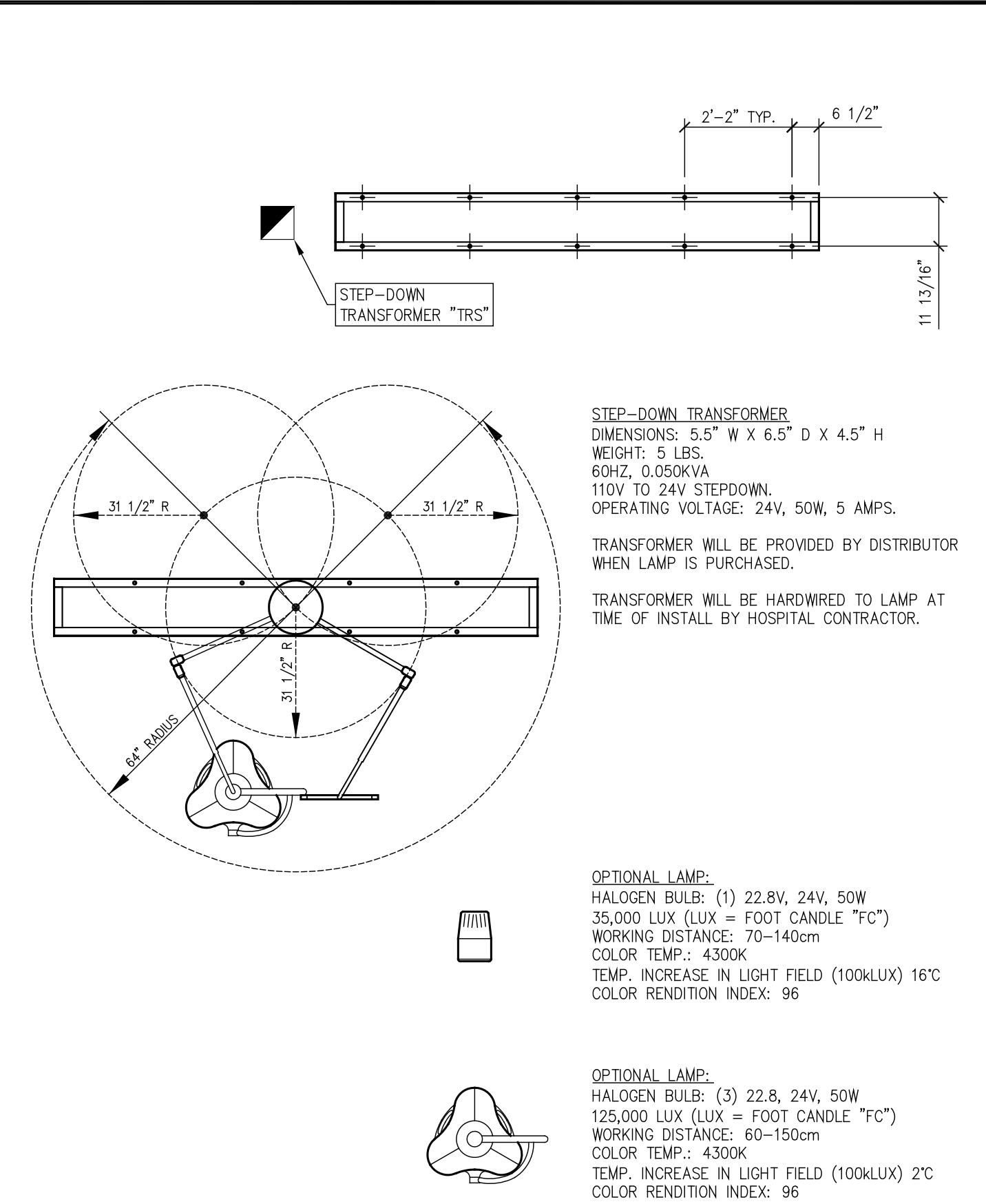
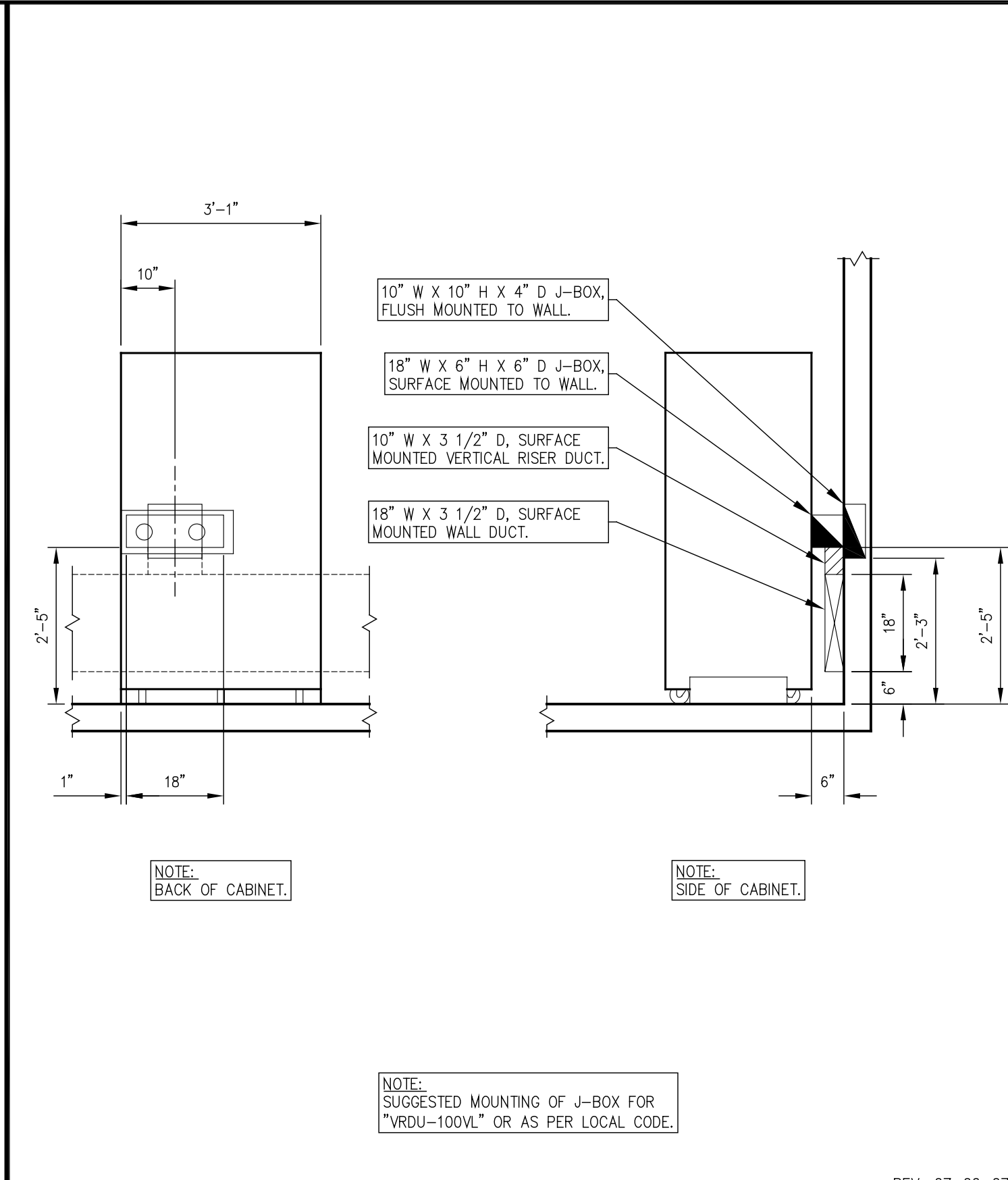
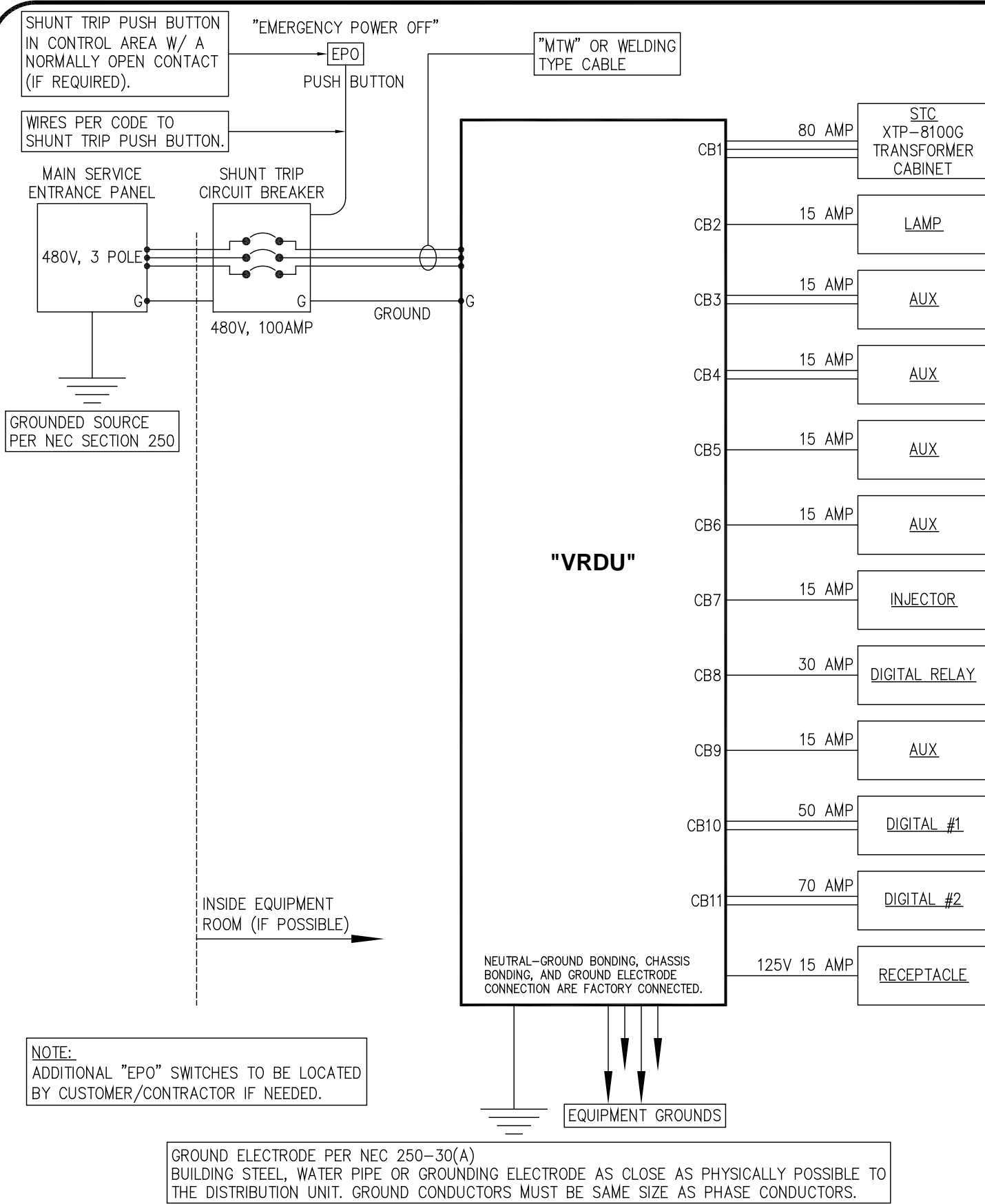
E1

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<div style="text-align: center;"> TOSHIBA TOSHIBA AMERICA MEDICAL SYSTEMS INC. www.toshiba.com/tams </div>					
REV.	DATE	DESCRIPTION	INT.		
VETERANS AFFAIRS MEDICAL CENTER MINNEAPOLIS				(ANGIO LAB — INFINIX/VCI) 1 VETERANS DRIVE MINNEAPOLIS, MN 55417	
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DATE: 05/03/12					
SCALE: 1/4" = 1'-0"					
DRAWN: J.A.D.					
QUOTE: 113140					
PROJECT NO. 120012341VLF					
E2					

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POWER QUALITY REQUIREMENTS XTP-8100G GENERATOR WITH VRDU-100VL				
SUPPLY CONFIGURATION:			DELTA OR WYE	
KVA RATING:			150.00	
VOLTAGE (SEE NOTE B):			480V, 60Hz	
CALCULATED CURRENT (AMP):			180.42	
CIRCUIT BREAKER (AMP) (SEE NOTE F):			100	
% IMPEDANCE:			5.00	
LINE RESIST. SPEC.:			0.000	
MAXIMUM CURRENT (AMPS):			180.42	
VOLTAGE DROP (VOLTS):			24.00	
LINE RESIST. (OHMS):			0.133	
LINE DROP (PERCENT):			1.50	
LINE DROP (VOLTS):			7.20	
CONDUCTOR (OHMS):			0.040	
TEMPERATURE:			68°F (20°C)	
CONDUCTOR SIZES (SEE NOTE E)	OHMS PER 1000 FT.	TEMP DERATED	NEC 75 °C	LENGTH (FT.)
3 AWG	0.2540	0.2089	100	96
2 AWG	0.2010	0.1653	115	121
1 AWG	0.1600	0.1316	130	152
1/0 AWG	0.1270	0.1044	150	191
2/0 AWG	0.1010	0.0831	175	240
3/0 AWG	0.0797	0.0655	200	304
4/0 AWG	0.0626	0.0515	230	388
250 MCM	0.0535	0.0440	255	454
300 MCM	0.0446	0.0367	285	544
350 MCM	0.0382	0.0314	310	635

VRDU MAX INPUT LUG SIZE 350 MCM

1 CB / VRDU-100VL WIRING DETAIL

SCALE: NOT TO SCALE

REVISED: 06-29-10

2 TYPICAL VRDU J-BOX MOUNTING

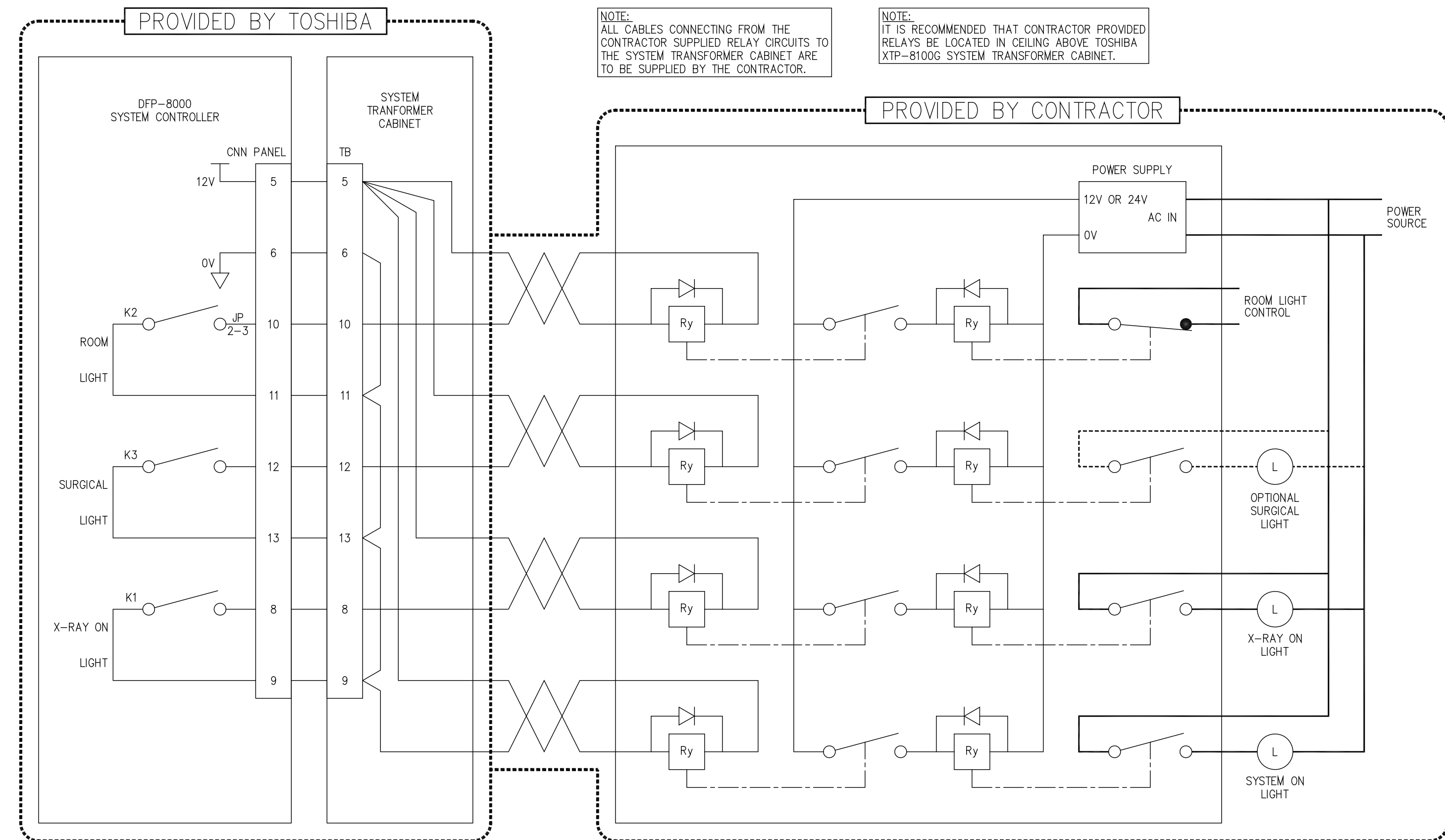
SCALE: 1/2" = 1'-0"

REV: 07-06-07

3 RAD SHIELD AND LAMP

SCALE: 3/8" = 1'-0"

REVISED: 01-26-10



CONNECTING THE RELAY TO THE DFP-8000:

A. IN THE CIRCUIT DIAGRAM ABOVE, THE EXTERNALLY CONNECTED 12V RELAY IS DRIVEN VIA THE RELAY CONTACT OF THE DFP-8000 AND THE 12V RELAY CONTROLS THE SWITCH CONNECTED TO THE POWER CIRCUIT.

B. BE SURE TO INSTALL DIODES TO THE RELAY COILS FOR ABSORBING SURGES. IF A SURGE CAUSED BY A COUNTER-ELECTROMOTIVE FORCE OCCURS, AN ERROR MAY OCCUR IN THE DFP-8000. USE A DIODE WITH A RATING OF 1000V AND 1A FOR ABSORBING SURGES AND USE A DIODE WITH A RATING OF 2000V BETWEEN THE COIL AND THE CONTACT.

PRECAUTIONS IN WIRING:

C. ISOLATE THE RELAY COIL AND THE CONTACT CABLE. THIS MAY REDUCE THE IMPACT FROM EXTERNAL NOISE AND ENSURE ELECTRICAL ISOLATION. IN ADDITION, CONNECT TWISTED-PAIR CABLES TO THE CONTACT AND THE COIL. THIS MAY ALSO REDUCE THE OCCURRENCE AND IMPACT OF NOISE.

REVISED: 01-26-10

4 ELECTRICAL LIGHTING CONNECTIONS DIAGRAM

SCALE: NOT TO SCALE

PLEASE CHECK THE FOLLOWING:		COMPLETE
1	ALL WALLS, FLOORS, AND CEILINGS FINISHED. WALLS PAINTED, FLOORS TILED, CEILING GRID WORK, AND FIXTURES INSTALLED.	___
2	MONOLITHIC OR LAY-IN CEILING? (PLEASE CIRCLE ONE)	___
3	DOORS AND WINDOWS (INCLUDING ALL LEADED DOORS AND GLASS) INSTALLED AND LOCKABLE. DOORS MUST BE REMOVED PRIOR TO DELIVERY BY CUSTOMER OR CONTRACTOR AND REINSTALLED AFTER EQUIPMENT MOVE IN.	___
4	AREA SET ASIDE FOR EQUIPMENT RIGGING AND MOVE-IN. ENVIRONMENTAL ISSUES ADDRESSED AND RESOLVED PRIOR TO EQUIPMENT DELIVERY (I.E. SURGICAL SUITE).	___
5	ALL CONDUIT, TROUGHING (WITH COVERS), AND BOXES INSTALLED (CLEAN AND DUST FREE). GROMMETED OPENINGS CHASE NIPPLES AND RACEWAY DIVIDERS, ETC. COMPLETE.	___
6	INCOMING POWER (PER POWER QUALITY REQUIREMENTS) OPERATIONAL AND CONNECTED TO ROOM BREAKER(S).	___
7	LOCATION OF ALL ELECTRICAL BREAKERS IN POWER CHAIN NOTED.	___
8	ALL CONTRACTOR-INSTALLED STRUCTURAL SUPPORT DEVICES INCLUDING UNISTRUT INSTALLED AND LEVELED ACCORDING TO T.A.M.S. SPECIFICATION ON SITE PLANS.	___
9	ROOM LIGHTING INSTALLED AND OPERATIONAL.	___
10	ENSURE THAT LIGHTING/SPRINKLER HEADS PRESENT NO CONFLICT WITH UNITS TO BE MOUNTED ON THE CEILING.	___
11	110V ROOM OUTLETS OPERATIONAL.	___
12	ALL CONTRACTOR-SUPPLIED CABLES PULLED AND TERMINATED, INCLUDING GROUND WIRE AND GROUND BUS BAR IN TROUGHING AS SPECIFIED IN THE TOSHIBA SITE PLANS.	___
13	INTERFACE FOR DIMMING OF ROOM LIGHTS (IF APPLICABLE), WARNING LIGHTS AND DOOR SWITCHES INSTALLED AND INTERFACE AVAILABLE AND CONNECTED (RELAYS, ETC.).	___
14	DUST FREE ENVIRONMENT IN ALL RELATED ROOMS.	___
15	HEATING AND AIR-CONDITIONING INSTALLED, OPERATIONAL AND STABILIZED PER TOSHIBA SITE PLANS. FILTERS TO BE CHANGED 24 HOURS BEFORE DELIVERY.	___
16	ALL MILLWORK COMPLETE AND INSTALLED.	___
17	PLUMBING COMPLETED (INCLUDING GASES, IF APPLICABLE) ACCORDING TO T.A.M.S. SPECIFICATIONS ON SITE PLANS.	___
18	OPTIONAL COMPUTER FLOOR INSTALLED (IF APPLICABLE).	___
19	THIRD PARTY VENDED ITEMS SUCH AS PROCESSORS, FILM CHANGERS, INJECTORS, GAS PEDESTALS, PHYSIOLOGICAL MONITORING EQUIPMENT, ETC., INSTALLED AND OPERATIONAL.	___
20	TELEPHONE LINES (VOICE AND OPTIONAL MODEM) INSTALLED AND OPERATIONAL. A DEDICATED PHONE LINE IS REQUIRED FOR SITES THAT ARE RECEIVING INNERVISION.	___
21	ALL UNFINISHED AREAS ARE TO BE SEALED OFF TO PREVENT DUST CONTAMINATION.	___
22	RECEPTACLE FOR TRASH AVAILABLE (LARGE ENOUGH FOR SHIPPING CRATES IF REQUIRED).	___
23	SUB BASE PLATE(S) INSTALLED (IF REQUIRED).	___
24	"PCDU" / "VRDU" / "SYSTEM UPS" INSTALLED AND OPERATIONAL (IF APPLICABLE).	___
25	SEISMIC REQUIREMENTS, ANY REQUIRED SEISMIC ANCHORING DEVICES INSTALLED (IF APPLICABLE).	___
26	NETWORK CONNECTIONS INSTALLED AND OPERATIONAL.	___
27	ALL APPLICABLE PERMITS OBTAINED.	___

NOTICE: CUSTOMER MUST COMPLETE ALL ITEMS ON THIS CHECKLIST BEFORE THE SCHEDULED DELIVERY DATE FOR THE EQUIPMENT. IF CUSTOMER FAILS TO DO SO, DELIVERY MAY BE DELAYED. FURTHERMORE, THE EQUIPMENT WARRANTY MAY BE VOIDED.

SIGNED TOSHIBA: _____

CONTRACTOR: _____

CUSTOMER: _____

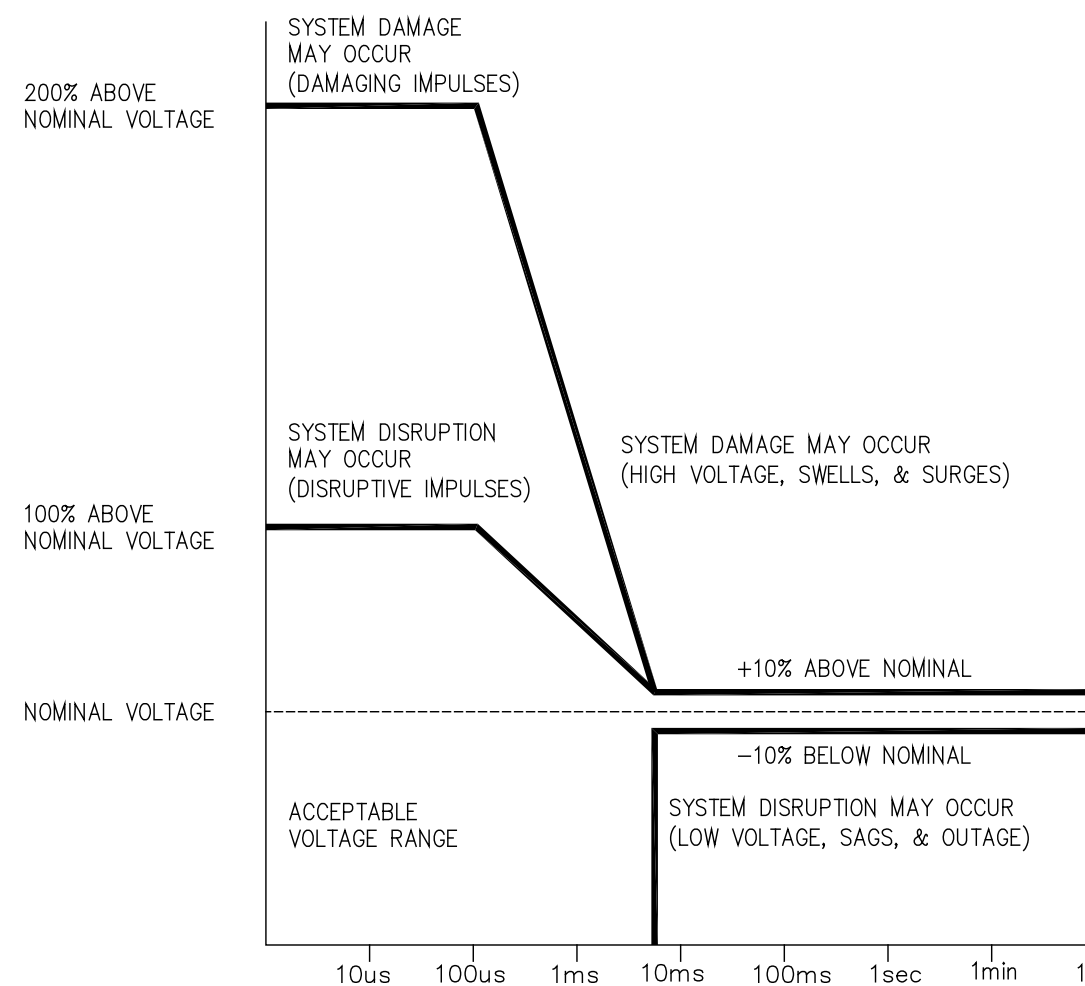
COMMENTS: _____

REVISED: 07-31-09

5 MINIMUM SITE REQUIREMENTS

STANDARD POWER QUALITY NOTES

- A. A GROUNDING NEUTRAL POWER SOURCE IS REQUIRED TO ASSURE RELIABLE EQUIPMENT OPERATION. THE NEUTRAL CONDUCTOR MAY NOT BE USED FOR A PARTICULAR SYSTEM. FLOATING OR DELTA SOURCES ARE NOT ACCEPTABLE.
- B. IN CASES WHERE MULTIPLE VOLTAGES ARE PERMITTED, THE PREFERRED SYSTEM VOLTAGE IS SPECIFIED.
- C. DUE TO THE HIGH INSTANTANEOUS POWER OF MEDICAL IMAGING SYSTEMS, USE THE HIGHEST AVAILABLE VOLTAGE SOURCE. ENSURE THAT LOWER VOLTAGE SOURCES ARE DERIVED DIRECTLY FROM THE SERVICE ENTRANCE OF THE FACILITY.
- D. GROUND CONDUCTORS MUST BE THE SAME SIZE AS THE PHASE CONDUCTORS UNLESS A LARGER SIZE IS REQUIRED BY CODE.
- E. ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS MUST BE COPPER - ALUMINUM IS NOT PERMITTED.
- F. A SHUNT TRIP BREAKER MUST BE USED IN ORDER TO COMPLY WITH N.E.C. 517-72(b). A PUSH-BUTTON TO OPERATE THE SHUNT TRIP MUST BE LOCATED IN THE CONTROL AREA.
- G. A SEPARATE CIRCUIT, FED FROM THE FACILITY RADIOLOGY PANEL OR A MAIN SERVICE PANEL IS REQUIRED. USE OF A SUB PANEL WITH LOADS SUCH AS ELEVATORS, HVAC, MOTORS, ETC., IS NOT PERMITTED.
- H. DEVICES SUCH AS UNINTERRUPTABLE POWER SUPPLIES, POWER CONDITIONERS, VOLTAGE REGULATORS, AND FILTERS MAY BE INCOMPATIBLE WITH THIS IMAGING EQUIPMENT. CONSULT YOUR TOSHIBA SERVICE REPRESENTATIVE PRIOR TO PURCHASING OR INSTALLING THESE DEVICES.



REVISED: 04-22-11

6 INFINIX POWER REQ. WITH VRDU

VETERANS AFFAIRS MEDICAL CENTER MINNEAPOLIS

(ANGIO LAB - INFINIX/VC)

1 VETERANS DRIVE
MINNEAPOLIS, MN 55417

THESE TOSHIBA PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN THAT AGREED UPON BETWEEN TOSHIBA AND THE CUSTOMER. THESE SITE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DATE: 05/03/12

SCALE: NOT TO SCALE

DRAWN: J.A.D.

QUOTE: 113140

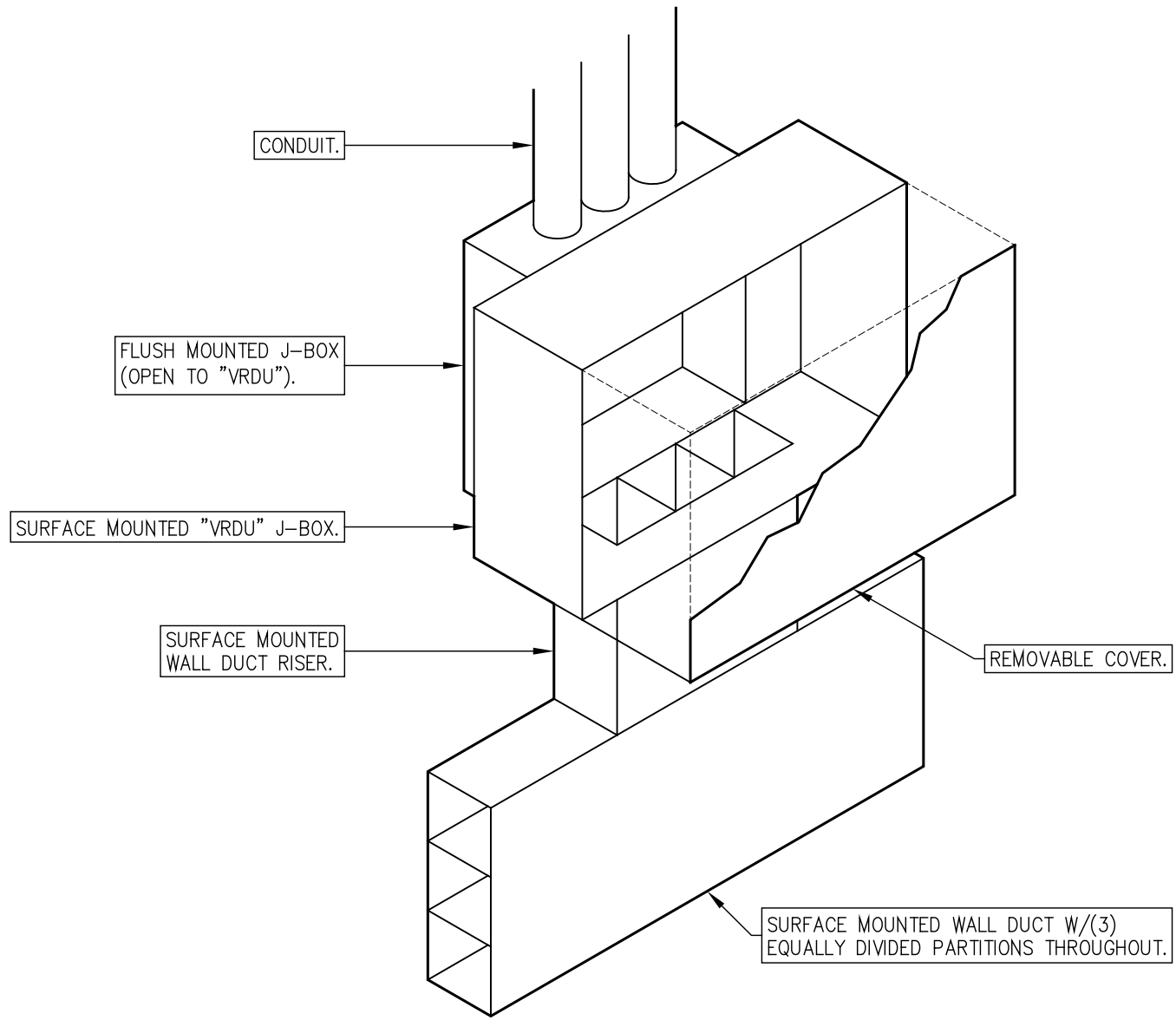
PROJECT NO.
120012341VLF

E3

REV.	DATE	DESCRIPTION	INT.

TOSHIBA
TOSHIBA AMERICA MEDICAL SYSTEMS INC.
www.toshiba.com/tams

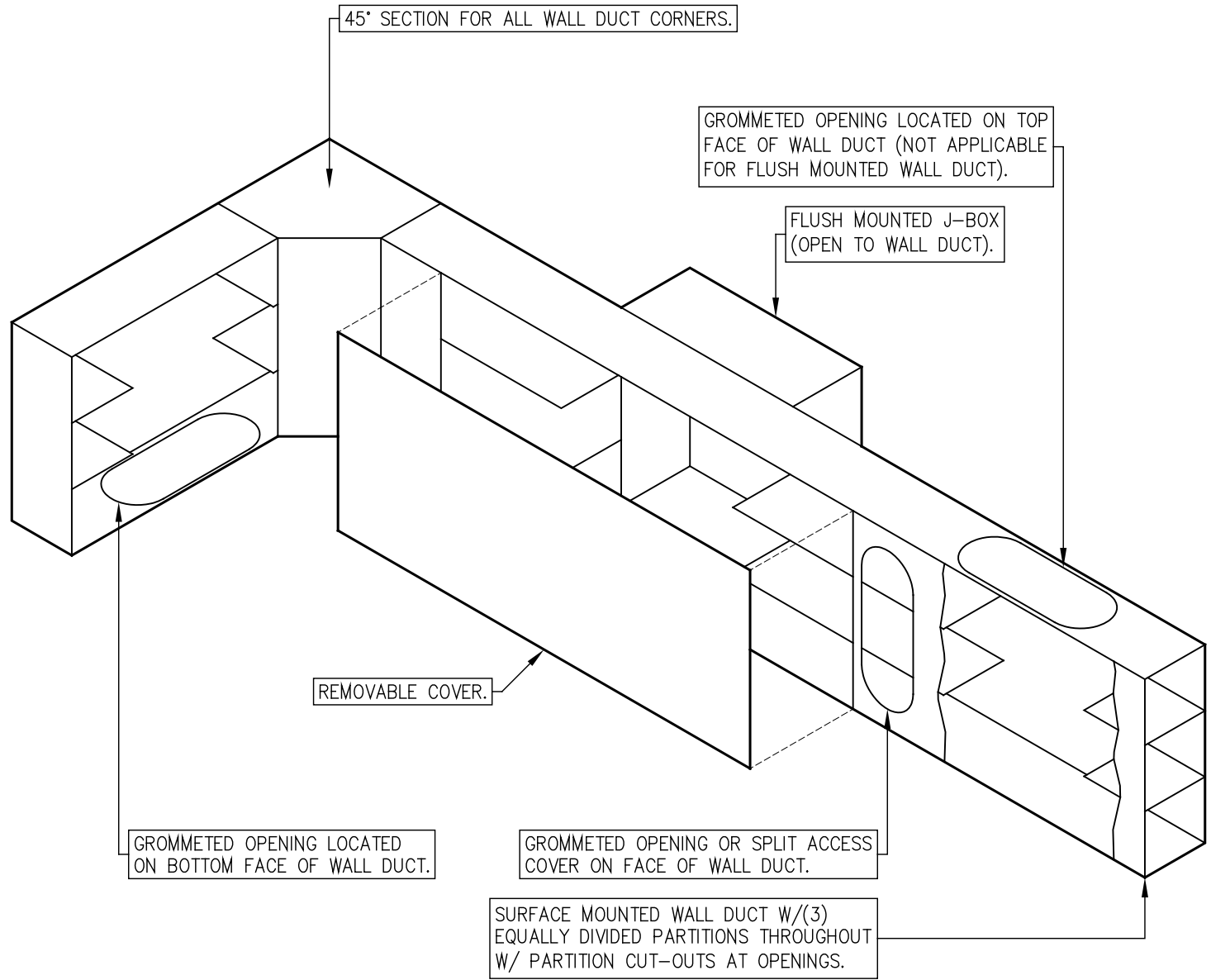
FOR REFERENCE ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.



1 TYPICAL VRDU J-BOX W/ CONDUIT J-BOX

SCALE: NOT TO SCALE

REVISED: 06/27/11

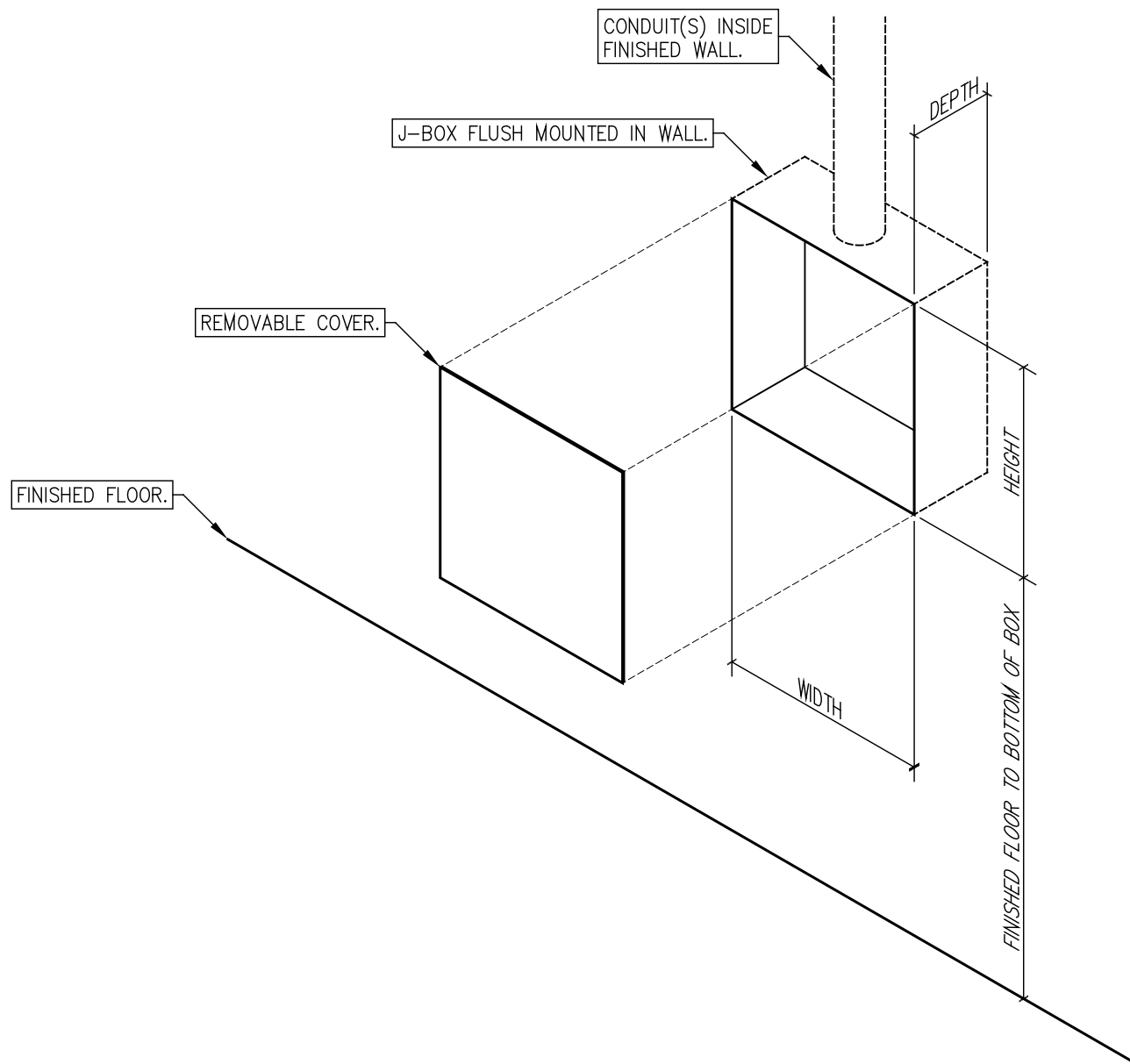


2 TYPICAL WALL DUCT WITH J-BOX

SCALE: NOT TO SCALE

REVISED: 04-15-10

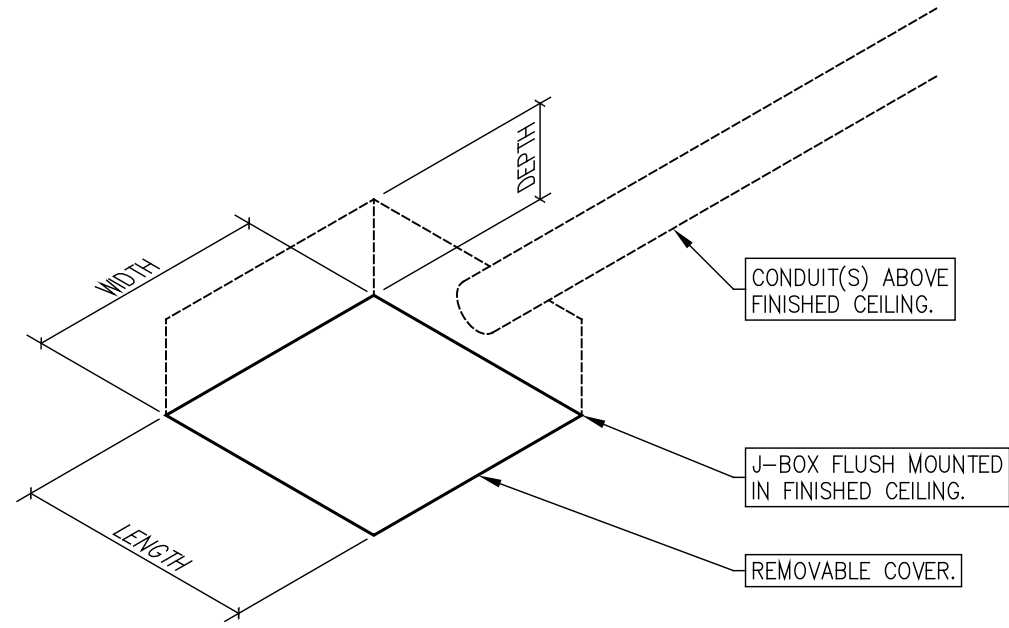
NOTE:
CUSTOMER'S CONTRACTOR TO VERIFY LOCATION OF J-BOX(ES) FOR CABLE PULL TO WALL DUCT.
CUSTOMER'S CONTRACTOR TO VERIFY LOCATION OF GROMMETED OPENINGS IN WALL DUCT W/ TOSHIBA REP.



3 TYPICAL J-BOX FLUSH MOUNTED IN WALL

SCALE: NOT TO SCALE

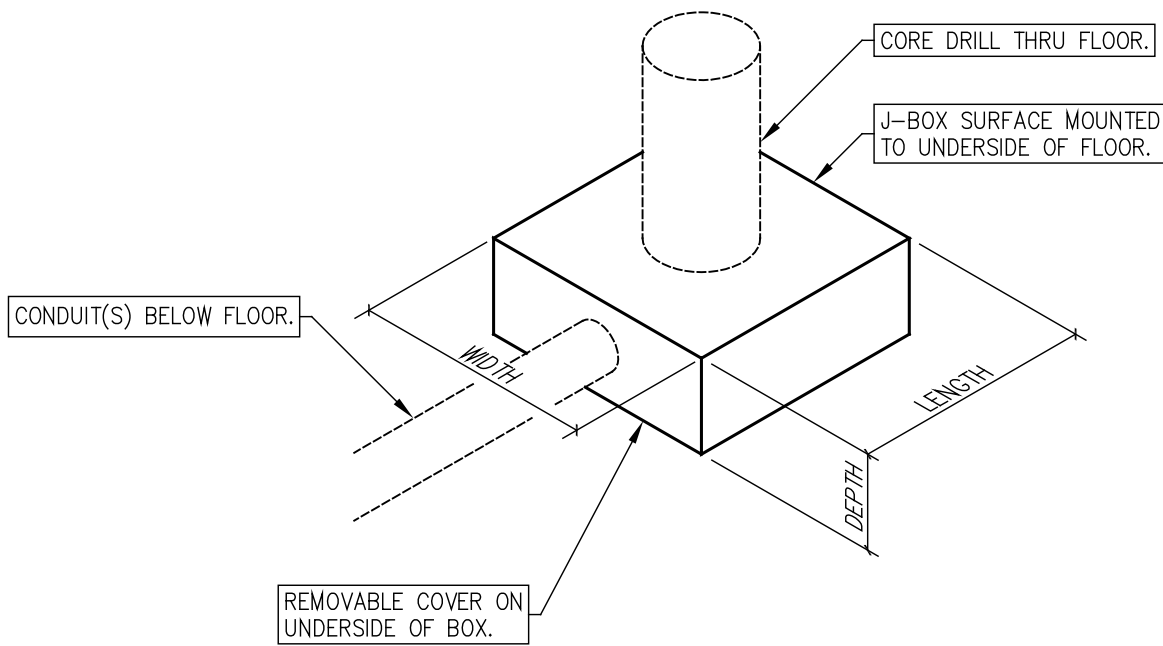
REVISED: 04-15-10



4 TYPICAL J-BOX FLUSH MOUNTED IN FINISHED CEILING

SCALE: NOT TO SCALE

REVISED: 04-15-10



5 TYPICAL J-BOX SURFACE MOUNTED UNDER FLOOR

SCALE: NOT TO SCALE

REVISED: 04-15-10

VETERANS AFFAIRS
MEDICAL CENTER MINNEAPOLIS

(ANGIO LAB - INFINIX/VCI)
1 VETERANS DRIVE
MINNEAPOLIS, MN 55417

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DATE: 05/03/12

SCALE: NOT TO SCALE

DRAWN: J.A.D.

QUOTE: 113140

PROJECT NO.
120012341VLF

E4

REV.	DATE	DESCRIPTION	INT.