

REV	DESCRIPTION	DATE/DRAFTER
PA1	CREATED PA1 BASED ON PM'S EMAILS. ROOM GEOMETRY FROM CUSTOMER LATEST ZIPPED CAD FILE.	02. 26. 2014 LABARR
PA2	CREATED PA2 BASED ON PM'S SKETCH.	04. 10. 2014 FERRERI
PF1	CREATED PF1 BASED ON PM'S EMAIL & SKETCH.	04. 15. 2014 FERRERI



THESE DRAWINGS ARE CONCEPTUAL UNTIL CARESTREAM RECEIVES A PURCHASE ORDER. DRAWINGS ARE SUBJECT TO CHANGE UNTIL A POST PURCHASE ORDER ON-SITE KICK OFF MEETING IS HELD BETWEEN A CARESTREAM PROJECT MANAGER AND CUSTOMER CONSTRUCTION TEAM. CARESTREAM PROVIDES THESE DRAWINGS AS A CUSTOMER COURTESY AND ARE NOT TO BE USED AS OFFICIAL ARCHITECTURAL OR CONSTRUCTION DOCUMENTS. CARESTREAM ACCEPTS NO LIABILITY OR IMPLIES ANY WARRANTY FOR THE ACCURACY OF THE SITE WHERE THE EQUIPMENT WILL BE STORED OR USED.

CUSTOMER SIGNATURE:	DRAWN BY:	LABARR
	DATE:	02. 26. 2014
DATE:	PROJECT MGR:	CLELAND
	CHECKED BY:	CLELAND
	DATE:	04. 23. 2014

PROJECT:	SHINERS HOSPITALS FOR CHILDREN RAD ROOM 1 1900 RICHMOND ROAD LEXINGTON, KY 40502	SHT. C 1
		REV. PF 1

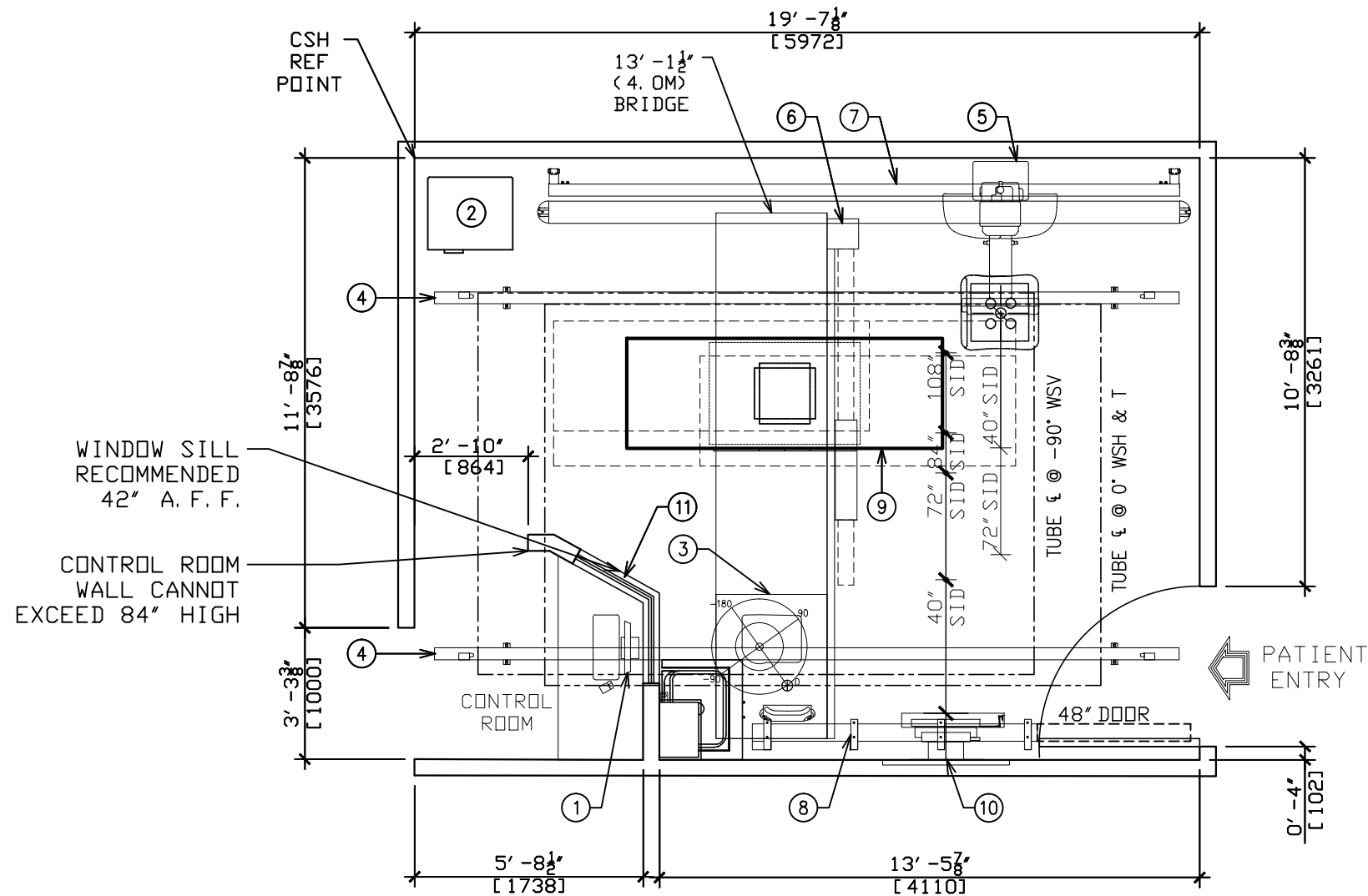
SIZE:	B	TITLE:	DRX-EVOLUTION
SCALE:	SEE DRAWING SCALE	SHEET:	1 OF 8

DOCUMENT SET INDEX:

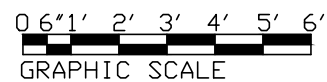
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THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED



EQUIPMENT LAYOUT



EQUIPMENT LEGEND

NO	ITEM	SUPPLIED/INSTALLED BY CARESTREAM HEALTH	WEIGHT LB	WIDTH IN	DPTH IN	HGHT IN
①	CTRL	X-RAY CONTROL, COMPUTER & CONTROL BOX, I/F	100.00	29.89	23.00	38.62
②	GEN	DRX-E GENERATOR	634.00	25.40	22.70	54.70
③	DTC	OVERHEAD TUBE CRANE (DTC, BRIDGE, TUBE, COLLIMATOR AND RAILS = 1,380 LBS)	1082.00			
④	RAIL	DTC CEILING RAILS 19'-8" (6m) RAILS STANDARD	SEE ITEM 3			
⑤	WS	CSH PREMIUM WALL STAND	75.00			
⑥	RAIL	WALL STAND FLOOR RAIL				
⑦	RAIL	WALL STAND CEILING RAIL				
⑧	IGUS	IGUS CHAIN				
⑨	TBL	TABLE	553.00	94.50	33.00	32.00
⑩	LLIC	CR-LLI				

ITEM SUPPLIED & INSTALLED BY CUSTOMER OR CONTRACTOR

⑪	LED	LEAD LINED GLASS PARTITIONS				
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ENVIRONMENTAL REQUIREMENTS FOR DRX-E
 SYSTEM TOTAL-ENERGY CONSUMPTION:
 STANDBY PER HOUR FOR WALL STAND ONLY: 2972.00 BTU
 STANDBY PER HOUR FOR DUAL BUCKY SYSTEM: 3090.00 BTU
 OPERATING ROOM TEMPERATURE: 64-86°F (18-30°C)
 RELATIVE HUMIDITY: 30-65% (NON-CONDENSING)
 MAXIMUM GRADIENT: 9° (5°C) TEMPERATURE MUST REMAIN CONSTANT AND STABLE.

CEILING HEIGHT RANGE: 8'-11" - 9'-6" (107"-114") 2.7m-2.9m
 EXISTING CEILING HEIGHT: -----

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	PROJECT MGR: CLELAND
DATE:	CHECKED BY: CLELAND
	DATE: 04.23.2014

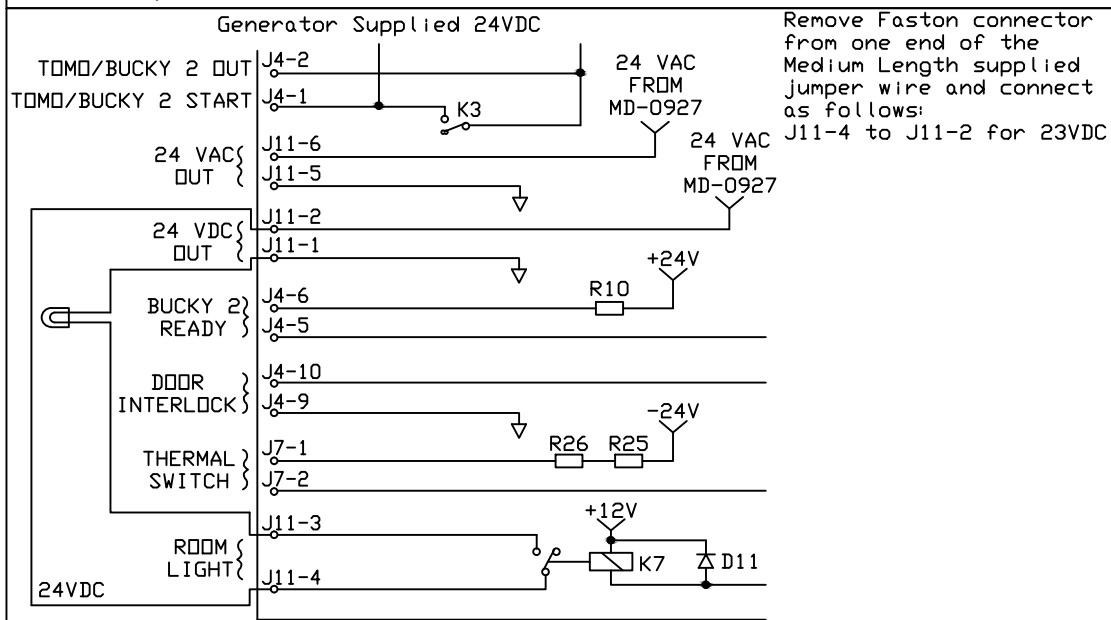
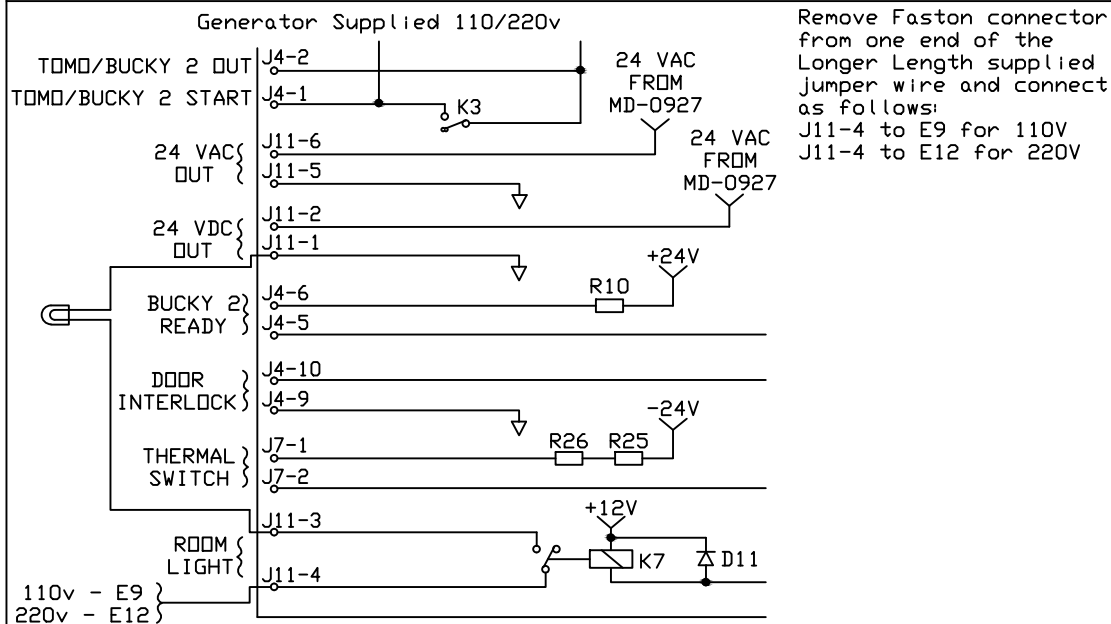
PROJECT: SHINERS HOSPITALS FOR CHILDREN RAD ROOM 1 1900 RICHMOND ROAD LEXINGTON, KY 40502	SHT. A1 REV. PF1
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SIZE: B	TITLE: DRX-EVOLUTION
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SCALE: SEE DRAWING SCALE	SHEET: 2 OF 8
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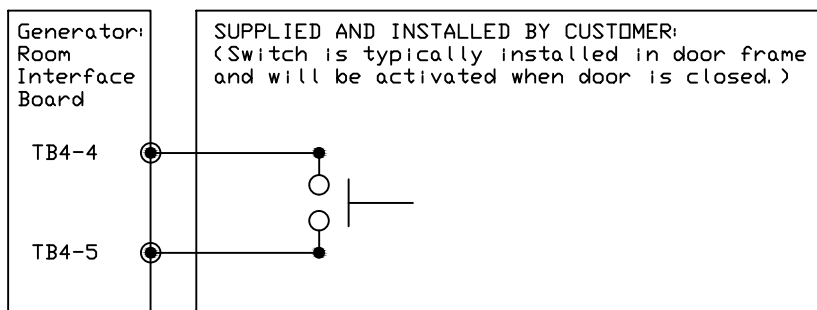
"X-RAY IN USE" LIGHT WIRING DIAGRAMS
SUPPLIED AND INSTALLED BY CUSTOMER:



CONDUIT CONVERSION CHART

#	Location	Cable Tray	Conduits	Size
R1	Behind Generator	10" x 3 1/2"	4	(2) 3" (2) 2 1/2"
R2	Control Room	10" x 3 1/2"	2	2 1/2"
R3	OTC	10" x 3 1/2"	3	2" - 3" 1" - 2 1/2"
TBL	Table	---	2	2 1/2"
WS	Wall Stand	10" x 3 1/2"	1	2 1/2"

DOOR SWITCH FOR X-RAY INTERLOCK



NOTES:
*The above illustration shows a recommended installation and application for a door interlock.
*The above illustration shows a mechanical type switch, although various types of switches can be used to provide the same function
*All wiring required to operate the door switch is supplied by customer in a way that can be connected to the Generator.
*Customer must provide enough wire to get to the Generator and provide a satisfactory "Service Tail" to allow Generator to be moved without having to disconnect the wiring.
*Multiple switch connections shall be in series.
*No voltage is to be present on door switch connections at any time.

ELECTRICAL POWER REQUIREMENTS FOR DRX-E

ALL ELECTRICAL CONNECTIONS SHOULD CONFORM TO N. E. C. AND TO STATE AND LOCAL CODES.
MAIN POWER REQUIREMENT VOLTAGE: 400/480V AC, 60 HZ, 3 PHASE WYE OR DELTA.
MAX. LINE VOLTAGE VARIATION: ±10%
MAX. PHASE IMBALANCE: ±2%
MAX. LINE IMPEDANCE: 0.1 Ohms @ 400V, 0.15 OHMS @480V
RECOMMENDED DISTRIBUTION POWER: INCOMING APPARENT POWER: 105kVA
LOCKABLE CIRCUIT DISCONNECT OR TIME DELAYED FUSES:
100A, 480V, TIME DELAY (TYPE FRS-R), CURRENT LIMITING.
MAX. WIRE: SIZED PER CODE FROM MAIN DISCONNECT TO X-RAY CONTROL (MAX. 1/0 AWG)

MAIN POWER INTERCONNECTIONS AND WIRE SIZE

NOTE: ALL CABLES TERMINATE AT MAIN CONNECTION POINT FOR EACH MAJOR ASSEMBLY UNLESS SHOWN OTHERWISE.

RUN (#)	CABLE RUN (POINT TO POINT)	CABLE LENGTH (FT.)	MAX. CONDUIT LENGTH (FT.)	MAX. CONNCT'R SIZE (INCH)	MIN. CONDUIT SIZE (INCH)
(H)	HOSPITAL'S NETWORK TO CONTROL DESK	PER CODE	PER CODE	PER CODE	PER CODE
(H)	HOSPITAL'S MAIN TO PDU	PER CODE	PER CODE	PER CODE	PER CODE
(1)	PDU TO CONTROL	65' -0"	50' -0"	2 1/8"	3"
(2)	PDU TO OTC	38' -0"	33' -0"	2"	3"
(2*)	E-OTC TO JB (CSH)	31' -0"	30' -0"	1 1/8"	3"
(3)	CONTROL TO OTC	50' -0"	45' -0"	RJ45	3"
(4)	PDU TO WALL STAND	62' -0"	57' -0"	RJ45	N/A
(4*)	E-WS TO JB(CSH)	29' -0"	28' -0"	RJ45	N/A
(5)	PDU TO TABLE	57' -0"	50' -0"	RJ45	2.5"
(5*)	E-TABLE TO JB(CSH)	44' -0"	43' -0"	RJ45	2.5"

H=HOSPITAL
E=EMERGENCY STOP COMMUNICATION CABLE
OCTOBER, 07, 2009

CUSTOMER SIGNATURE:	DRAWN BY: LABARR
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DATE:	PROJECT MGR: CLELAND
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	DATE: 04.23.2014
PROJECT: SHINERS HOSPITALS FOR CHILDREN RAD ROOM 1 1900 RICHMOND ROAD LEXINGTON, KY 40502	SHT. E2 REV. PF1
SIZE: B	TITLE: DRX-EVOLUTION
SCALE: SEE DRAWING SCALE	SHEET: 4 OF 8



CABLING MATRIX

OTC CABLES

Manuf.	Manuf. Part No.	CSH Part No.	Cable Name	Cable Rating	Applied Voltage	From	To	Usable Length	Function
L-Com	TC2599	2G3721	SCB to PDU Ethernet	300	12 VDC	SCB P11	PDU	12.055 m (38.58 ft)	Communication
Various	N/A	2G4120	GND - Electronics Assy to PDU	600	N/A	Electronics Assy G4	PDU Ground	15.855 m (50.74 ft)	Ground
Various	N/A	2G4121	GND - Tube to PDU	600	N/A	Tube	PDU Tank Ground	12.605 m (40.34 ft)	Ground
Electri-Cord	Q57712 JCR2	2G4200	Power 240 VAC	600	240 V	PDU	Electronics AY PS	15.833 m (50.74 ft)	OTC Power
Claymount	13650	2G4201	Tube High Voltage	75k VDC	75k VDC	PDU	Tube	12.730 m (40.74 ft)	Anode Cathode X-ray Tube
Alpha	65C07C4	2G4202	Tube Stator	600	290	PDU	Tube	12.505 m (40.02 ft)	Stator X-ray Tube
Alpha	5006C	2G4275	Console Estop/Auto Position to TMC	300	24 VDC	Console J1	TMC Board P23/J26000	15.805 m (50.58 ft)	Emergency Stop
Belden	8442	2G3790	OTC Echain Out	300	24 VDC	Junction Box	WS/Table Echain in	9.705 m (31.06 ft)	Emergency Stop
L-Com	7C2592	2G3799	OTC Can Out	300	12 VDC	Junction Box	WS/Table Can in	10.055 m (32.18 ft)	Communication

CONSOLE PC

Manuf.	Manuf. Part No.	CSH Part No.	Cable Name	Cable Rating	Applied Voltage	From	To	Usable Length	Function
Various	N/A	8H1109	Table GRND	600	N/A	PDU	Console	---	Ground
Various	N/A	6H1305	Console Ground	600	N/A	PDU	Console	20 m (65.6 ft)	Ground
Various	N/A	8H1107	Control	300	12 VDC	PDU	Console	20 m (65.6 ft)	Communication
Electri-Cord	Q57712 JCR	8H1110	PC Power	600	240 VAC	PDU	PC	20 m (65.6 ft)	PC Power
Electri-Cord	Q57712 JCR	8H1111	Monitor Power	600	240 VAC	PDU	Monitor	20 m (65.6 ft)	Monitor Power
Various	N/A	8H1108	Communication	300	12 VDC	PDU	PC	20 m (65.6 ft)	Communication
L-Com	TC259	8H2554	Communication	300	12 VDC	PDU	PC	20 m (65.6 ft)	Communication

WALL STAND

Manuf.	Manuf. Part No.	CSH Part No.	Cable Name	Cable Rating	Applied Voltage	From	To	Usable Length	Function
Various	N/A	2G4177	WS GND - PDU to PS/TMC	600	N/A	PDU	TMC Board G3	19.65 m (62.99 ft)	Ground
Alpha	6347	2G4178	WS AEC - PDU to WS Bucky	300	12 VDC	PDU	AEC	22.015 m (70.45 ft)	AEC
Electri-Cord	Q57712 JCR	2G4179	WS AEC - PDU to WS Power Supply	600	240 VAC	PDU	WS - Power Supply	19.5 m (62.4 ft)	Wall Stand Power
L-Com	TC2599	2G4190	WS Ethernet - PDU to Detector	300	12 VDC	PDU	Detector	22.015 m (70.45 ft)	Communication
L-Com	TC2592	2G4156	WS CAN in	300	12 VDC	Junction Box	WS TMC P18	9.3 m (29.76 ft)	Communication
L-Com	TC2592	2G4157	WS CAN out	300	12 VDC	Junction Box	WS TMC P17	9.3 m (29.76 ft)	Communication
Belden	8442	2G4158	WS Echain in	300	24 VDC	Junction Box	WS TMC J25	9.35 m (29.97 ft)	Emergency Stop
Belden	8442	2G4159	WS Echain Out	300	24 VDC	Junction Box	WS TMC J24	9.35 m (29.97 ft)	Emergency Stop

TABLE

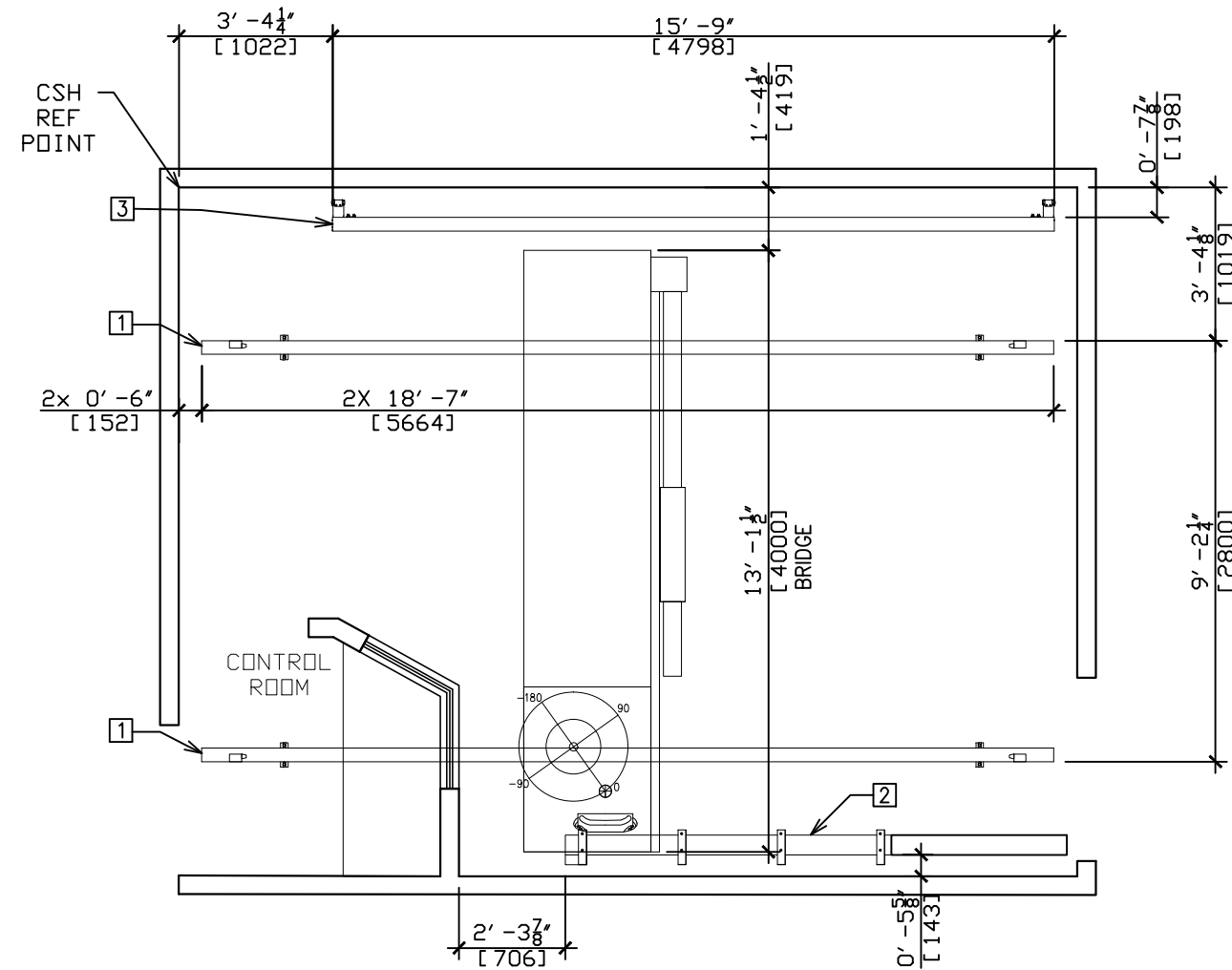
Manuf.	Manuf. Part No.	CSH Part No.	Cable Name	Cable Rating	Applied Voltage	From	To	Usable Length	Function
Various	N/A	2G4447	Table GND - PDU to Table PS/DNC	600	N/A	PDU	DMC Board	18 m (57.6 ft)	Ground
Alpha	6347	2G4178	Table AEC - PDU to Table Bucky	300	12 VDC	PDU	AEC	24 m (56.8 ft)	AEC
Electri-Cord	Q57712 JCR	2G4449	Table Power - PDU to Table Power Supply	600	240 VAC	PDU	Power Supply	18 m (57.6 ft)	Table Power
L-Com	TC2599	2G4450	Table Ethernet - PDU to Detector	300	12 VDC	PDU	Detector	18 m (57.6 ft)	Communication
Belden	8442	2G3791	Table Echain in	300	24 VDC	Junction Box	DMC Board P17	14 m (44.8 ft)	Emergency Stop
L-Com	TC2592	2G3800	Table Can in	300	12 VDC	Junction Box	DMC Board J14	14 m (44.8 ft)	Communication

CUSTOMER SIGNATURE:		DRAWN BY: LABARR	
DATE:		02.26.2014	
PROJECT MGR: CLELAND		CHECKED BY: CLELAND	
DATE:		04.23.2014	
PROJECT: SHINERS HOSPITALS FOR CHILDREN RAD ROOM 1 1900 RICHMOND ROAD LEXINGTON, KY 40502			SHT. E3
SIZE: B			REV. PF1
TITLE: DRX-EVOLUTION			
SCALE: SEE DRAWING SCALE		SHEET: 5 OF 8	



STRUCTURAL LEGEND

ITEM	COMPONENT DESCRIPTION: SUPPLIED AND INSTALLED BY CARESTREAM HEALTH INC.
①	DTC CEILING RAIL
②	IGUS CHAIN
③	WALL STAND CEILING RAIL



CEILING PLAN LAYOUT INSTALLED BY CSH

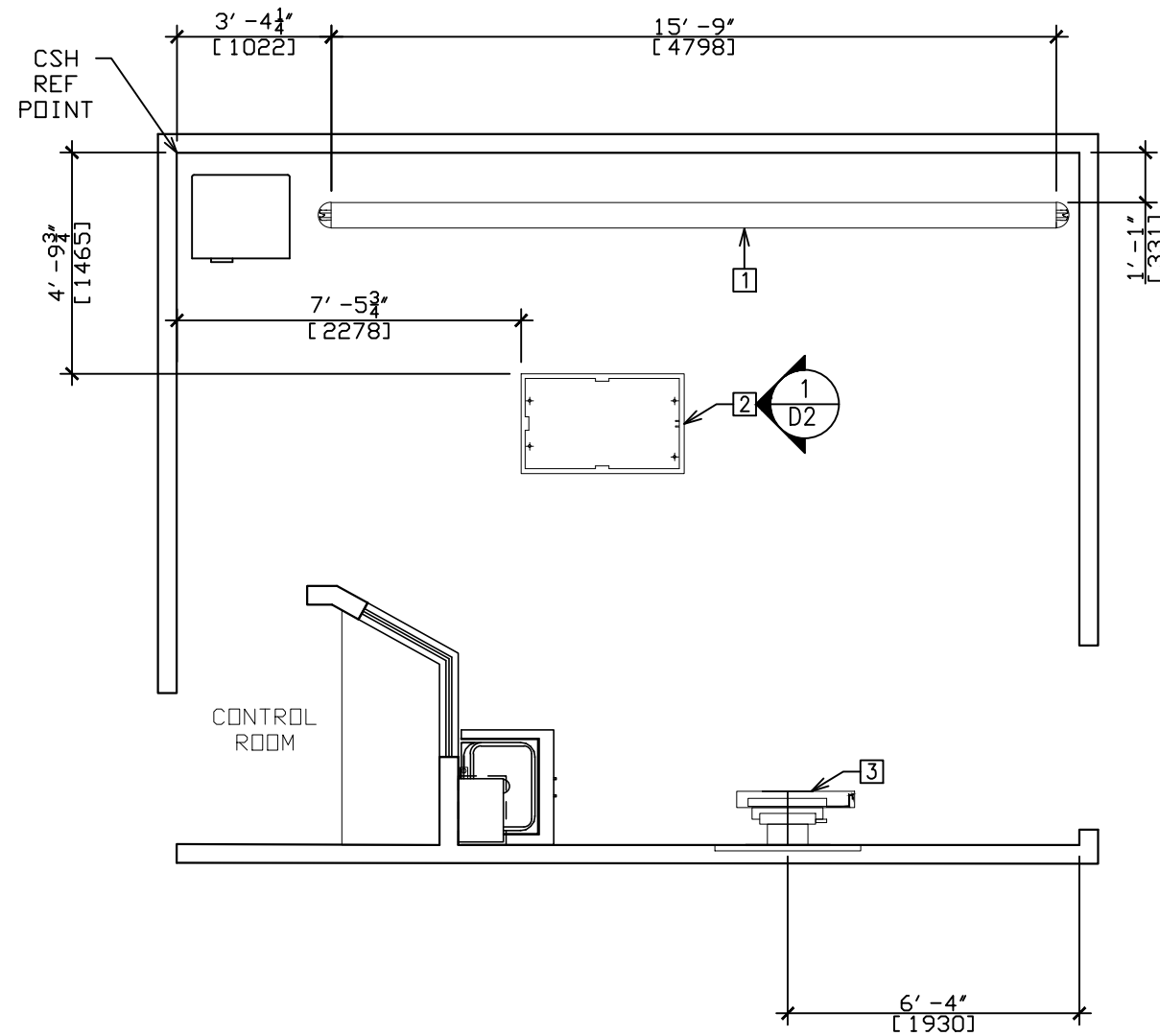


CUSTOMER SIGNATURE:	DRAWN BY: LABARR	DATE: 02.26.2014
PROJECT MGR: CLELAND	CHECKED BY: CLELAND	DATE: 04.23.2014
PROJECT: SHINERS HOSPITALS FOR CHILDREN RAD ROOM 1 1900 RICHMOND ROAD LEXINGTON, KY 40502	SHT. S2	REV. PF 1
SIZE: B	TITLE: DRX-EVOLUTION	SCALE: SEE DRAWING SCALE
SHEET: 7 OF 8		



STRUCTURAL LEGEND

ITEM	COMPONENT DESCRIPTION: SUPPLIED AND INSTALLED BY CARESTREAM HEALTH INC.
①	WALL STAND FLOOR RAIL
②	TABLE BASE
③	CR-LLI



FLOOR PLAN LAYOUT INSTALLED BY CSH



CUSTOMER SIGNATURE:	DRAWN BY: LABARR	DATE: 02.26.2014	PROJECT MGR: CLELAND
DATE:	CHECKED BY: CLELAND	DATE: 04.23.2014	
PROJECT: SHINERS HOSPITALS FOR CHILDREN RAD ROOM 1 1900 RICHMOND ROAD LEXINGTON, KY 40502	SHT. S3	REV. PF 1	
SIZE: B	TITLE: DRX-EVOLUTION	SCALE: SEE DRAWING SCALE	SHEET: 8 OF 8



REV	DESCRIPTION	DATE/DRAFTER
PA1	CREATED PA1 BASED ON PM'S EMAILS. ROOM GEOMETRY FROM CUSTOMER LATEST ZIPPED CAD FILE.	02. 26. 2014 LABARR
PA2	CREATED PA2 BASED ON PM'S SKETCH.	04. 10. 2014 FERRERI
PF1	CREATED PF1 BASED ON PM'S EMAIL & SKETCH.	04. 21. 2014 FERRERI



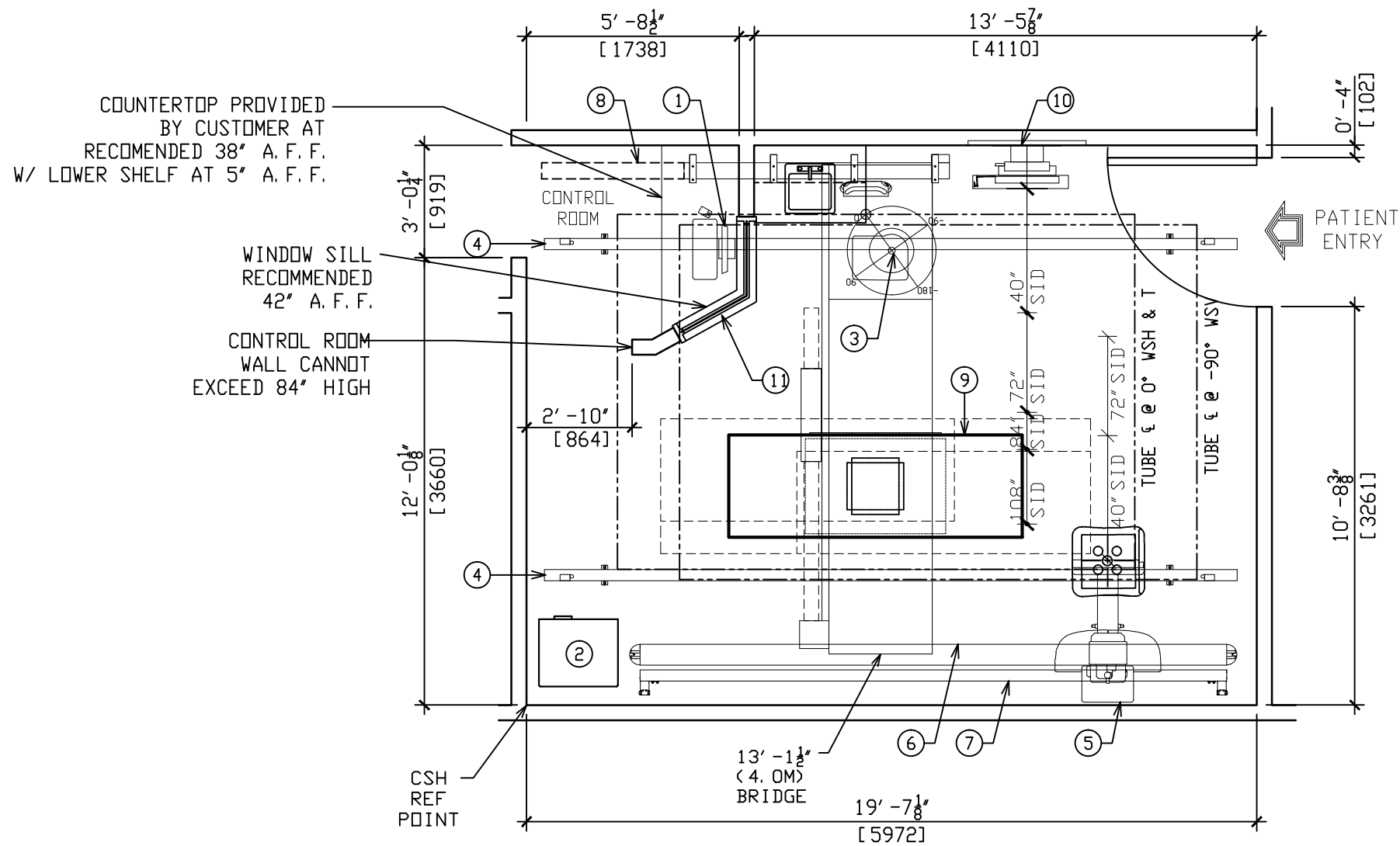
DOCUMENT SET INDEX:

COVER SHEET.....	C1
EQUIPMENT LAYOUT	A1
ELECTRICAL LAYOUT	E1
ELECTRICAL LAYOUT	E2
ELECTRICAL LAYOUT	E3
STRUCTURAL LAYOUT	S1
STRUCTURAL LAYOUT	S2
STRUCTURAL LAYOUT	S3

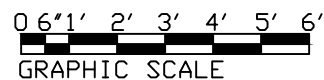
CUSTOMER SIGNATURE:		DRAWN BY: LABARR
DATE:		02. 26. 2014
PROJECT MGR:		CLELAND
DATE:	CHECKED BY:	CLELAND
	DATE:	04. 23. 2014
PROJECT: SHRINERS HOSPITALS FOR CHILDREN RAD ROOM 2 1900 RICHMOND ROAD LEXINGTON, KY 40502		SHT. C1
		REV. PF1
SIZE: B	TITLE: DRX-EVOLUTION	
SCALE: SEE DRAWING SCALE	SHEET: 1 OF 8	



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



EQUIPMENT LAYOUT



EQUIPMENT LEGEND

NO	ITEM	SUPPLIED/INSTALLED BY CARESTREAM HEALTH	WEIGHT LB	WIDTH IN	DPTH IN	HGHT IN
①	CTRL	X-RAY CONTROL, COMPUTER & CONTROL BOX, I/F	100.00	29.89	23.00	38.62
②	GEN	DRX-E GENERATOR	634.00	25.40	22.70	54.70
③	OTC	OVERHEAD TUBE CRANE (OTC, BRIDGE, TUBE, COLLIMATOR AND RAILS = 1,380 LBS)	1082.00			
④	RAIL	OTC CEILING RAILS 19'-8" (6m) RAILS STANDARD	SEE ITEM 3			
⑤	WS	CSH PREMIUM WALL STAND	75.00			
⑥	RAIL	WALL STAND FLOOR RAIL				
⑦	RAIL	WALL STAND CEILING RAIL				
⑧	IGUS	IGUS CHAIN				
⑨	TBL	TABLE	553.00	94.50	33.00	32.00
⑩	LLID	CR-LLI				

ITEM SUPPLIED & INSTALLED BY CUSTOMER OR CONTRACTOR

⑪	LED	LEAD LINED GLASS PARTITIONS				
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ENVIRONMENTAL REQUIREMENTS FOR DRX-E

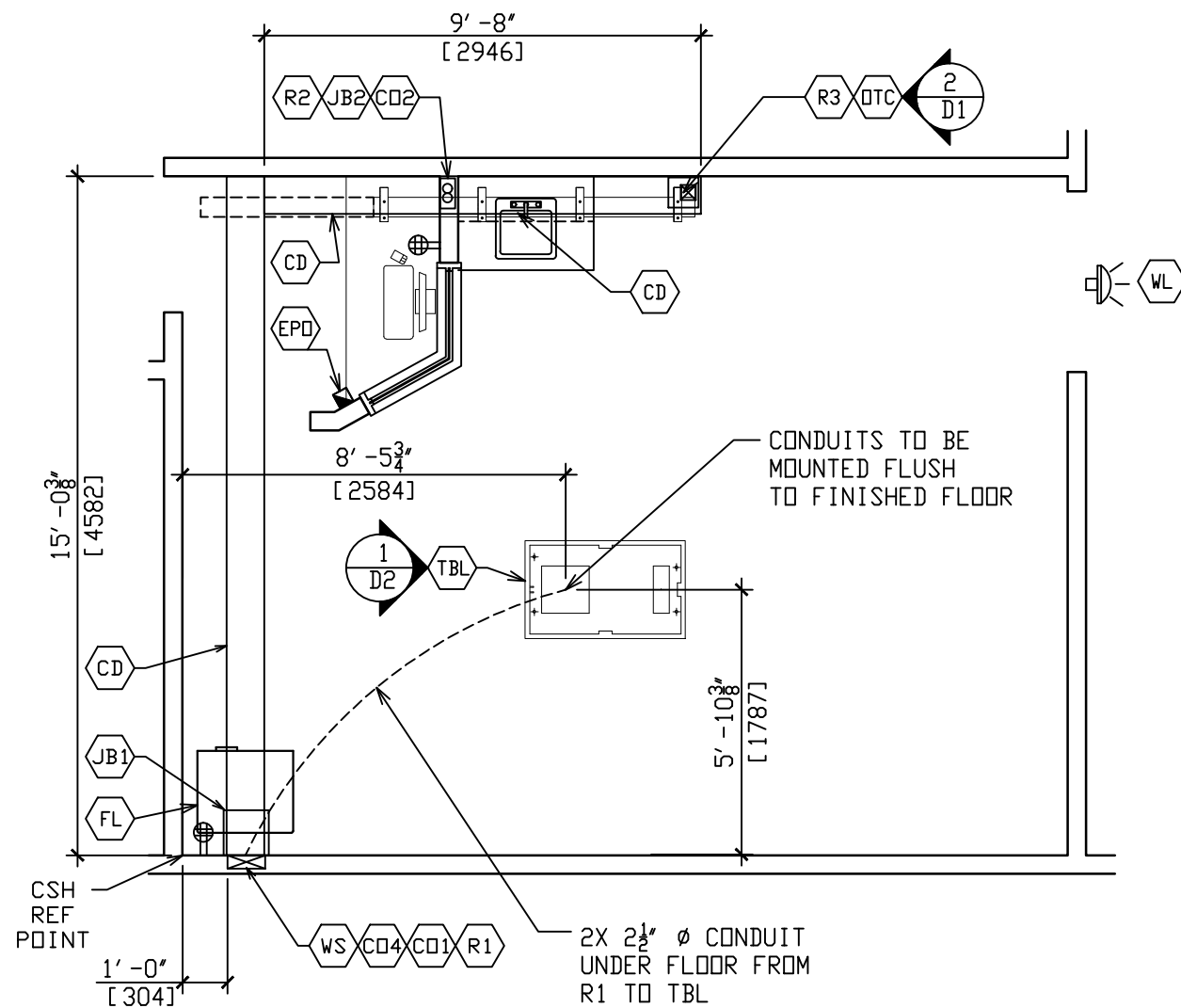
SYSTEM TOTAL-ENERGY CONSUMPTION:
 STANDBY PER HOUR FOR WALL STAND ONLY: 1,670.13 BTU
 STANDBY PER HOUR FOR DUAL BUCKY SYSTEM: 1,931.98 BTU
 OPERATING ROOM TEMPERATURE: 64-86°F (18-30°C)
 RELATIVE HUMIDITY: 30-65% (NON-CONDENSING)
 MAXIMUM GRADIENT: 9° (5°C) TEMPERATURE MUST REMAIN CONSTANT AND STABLE.
 VENTILATION: ONE COMPLETE AIR CHANGE EVERY 6 MINUTES.
 CEILING HEIGHT RANGE: 8'-11" - 9'-6" (107"-114") 2.7m-2.9m
 EXISTING CEILING HEIGHT: -----

CUSTOMER SIGNATURE:	DRAWN BY:	LABARR
	DATE:	02.26.2014
	PROJECT MGR:	CLELAND
DATE:	CHECKED BY:	CLELAND
	DATE:	04.23.2014

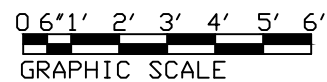
PROJECT:	SHRINERS HOSPITALS FOR CHILDREN RAD ROOM 2 1900 RICHMOND ROAD LEXINGTON, KY 40502	SHT. A1
		REV. PF 1

SIZE:	TITLE:	DRX-EVOLUTION
B		
SCALE:	SEE DRAWING SCALE	SHEET: 2 OF 8





ELECTRICAL LAYOUT



ELECTRICAL LEGEND

ITEM	SUPPLIED AND INSTALLED BY CUSTOMER'S CONTRACTOR
(R1)	10" X 3 1/2" RISER FLUSH MOUNTED WITH REMOVABLE COVERS FROM CD TO FINISHED FLOOR.
(R2)	2X 2 1/2" Ø CONDUIT FROM CD TO JB2.
(R3)	SEE DETAIL 2, SHEET D1 - IF CD IS INSTALLED GREATER THAN 6" ABOVE FINISHED CEILING.
(JB1)	12" X 12" JUNCTION BOX PROVIDED BY CSH SURFACE MOUNTED BELOW FINISHED CEILING.
(JB2)	8" X 8" JUNCTION BOX FLUSH MOUNTED IN CONTROL ROOM WALL, 24" A. F. F.
(CO1)	4" GROMMETED SPACE IN COVER PLATES OF R1 FOR GENERATOR POWER CABLES, 30" A. F. F.
(CO2)	4" Ø GROMMETED KNOCK OUT ON FACE OF JB2 FOR CONSOLE POWER CABLES.
(CO4)	3" Ø GROMMETED KNOCKOUT ON FACE OF R1, 6" BELOW FINISHED CEILING.
(WL)	"X-RAY IN USE" LIGHT PER CODE. CUSTOMER TO PROVIDE FIXTURE AND 2 DRY CONTACTS TO RISER BEHIND CSH GENERATOR. SEE DETAIL ON E2.
(EPD)	OPTIONAL EPD SWITCH. EXACT LOCATION PER LOCAL CODES OR BY CUSTOMER.
(CD)	10" X 3 1/2" CEILING DUCT ABOVE FINISHED CEILING WITH REMOVABLE COVERS. PROVIDE DIVIDERS PER LOCAL CODE.
(OTC)	CARESTREAM OTC CABLE EXIT TO CD. SEE DETAIL 2, SHEET D1.
(TBL)	CARESTREAM HEALTH TABLE.
(WS)	CABLE ENTRANCE FOR CARESTREAM HEALTH WALL STAND.
(FL)	CUSTOMER PROVIDED, 1 1/2" Ø SEAL-TIGHT, INCLUDE FITTINGS TO 480 VAC MAIN SUPPLY CABLES TO CARESTREAM GENERATOR. WIP LENGTH TO BE 6FT. OR PER LOCAL CODE. INSTALLED BY CUSTOMER ELECTRICIAN WHEN CONNECTING 480 VAC MAIN POWER TO CARESTREAM GENERATOR.

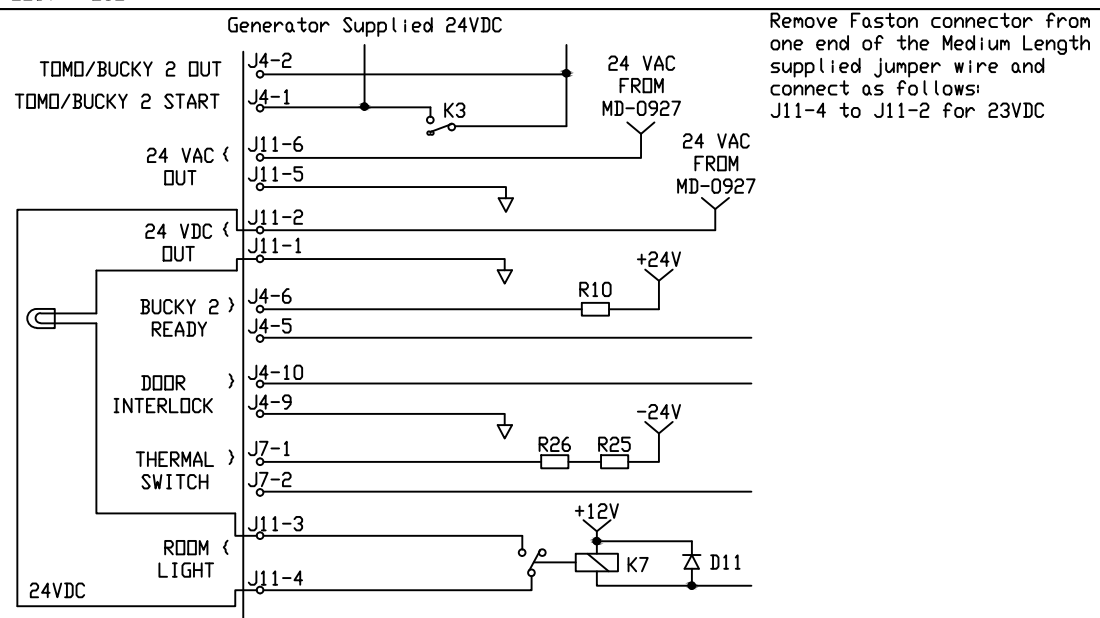
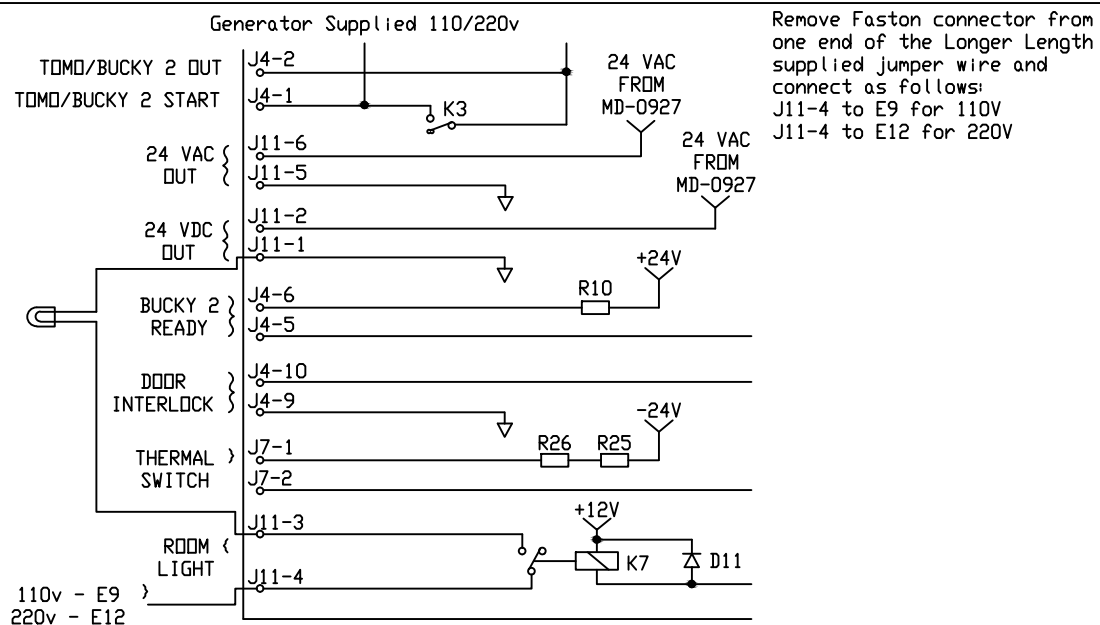
NOTE: ALL ELECTRICAL DUCTS AND CONNECTIONS MUST CONFORM TO THE N. E. C. CODES, IN ADDITION TO STATE AND LOCAL REGULATIONS FOR THE COUNTRY OR LOCALITY IN WHICH THE EQUIPMENT IS INSTALLED. SITE MUST DETERMINE NUMBER OF DIVIDERS IN CABLE TROUGH PER CODE.

- (NW) NETWORK DROP
- (⊕) 120 VAC DUPLEX FOR DRX1 BATTERY CHARGER, AND ONE IN CONTROL FOR SERVICE LAPTOPS.

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SIZE: B	TITLE: DRX-EVOLUTION	
SCALE: SEE DRAWING SCALE	SHEET: 3 OF 8	



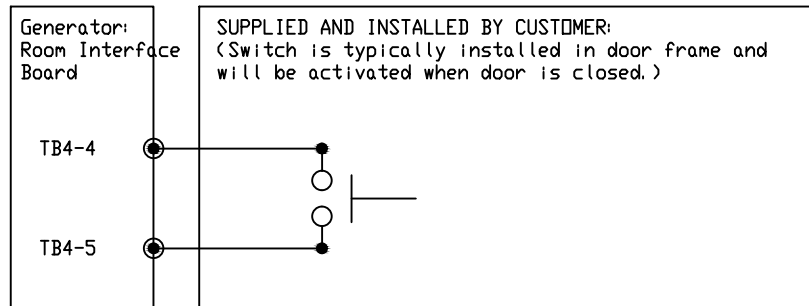
"X-RAY IN USE" LIGHT WIRING DIAGRAMS
SUPPLIED AND INSTALLED BY CUSTOMER:



CONDUIT CONVERSION CHART

#	Location	Cable Tray	Conduits	Size
R1	Behind Generator	10' x 3½'	4	(2) 3" (2) 2½"
R2	Control Room	10' x 3½'	2	2½"
R3	DTC	10' x 3½'	3	2" - 3" 1" - 2½"
TBL	Table	---	2	2½"
WS	Wall Stand	10' x 3½'	1	2½"

DOOR SWITCH FOR X-RAY INTERLOCK



NOTES:

- *The above illustration shows a recommended installation and application for a door interlock.
- *The above illustration shows a mechanical type switch, although various types of switches can be used to provide the same function
- *All wiring required to operate the door switch is supplied by customer in a way that can be connected to the Generator.
- *Customer must provide enough wire to get to the Generator and provide a satisfactory 'Service Tail' to allow Generator to be moved without having to disconnect the wiring.
- *Multiple switch connections shall be in series.
- *No voltage is to be present on door switch connections at any time.

ELECTRICAL POWER REQUIREMENTS FOR DRX-E

ALL ELECTRICAL CONNECTIONS SHOULD CONFORM TO N. E. C. AND TO STATE AND LOCAL CODES.
 MAIN POWER REQUIREMENT VOLTAGE: 400/480V AC, 60 HZ, 3 PHASE WYE OR DELTA.
 MAX. LINE VOLTAGE VARIATION: ±10%
 MAX. PHASE IMBALANCE: ±2%
 MAX. LINE IMPEDANCE: 0.1 Ohms @ 400V, 0.15 OHMS @480V
 RECOMMENDED DISTRIBUTION POWER: INCOMING APPARENT POWER: 105kVA
 LOCKABLE CIRCUIT DISCONNECT OR TIME DELAYED FUSES:
 100A, 480V, TIME DELAY (TYPE FRS-R), CURRENT LIMITING.
 MAX. WIRE: SIZED PER CODE FROM MAIN DISCONNECT TO X-RAY CONTROL (MAX. 1/0 AWG)

MAIN POWER INTERCONNECTIONS AND WIRE SIZE

NOTE: ALL CABLES TERMINATE AT MAIN CONNECTION POINT FOR EACH MAJOR ASSEMBLY UNLESS SHOWN OTHERWISE.

RUN (#)	CABLE RUN (POINT TO POINT)	CABLE LENGTH (FT.)	MAX. CONDUIT LENGTH (FT.)	MAX. CONNCT'R SIZE (INCH)	MIN. CONDUIT SIZE (INCH)
(H)	HOSPITAL'S NETWORK TO CONTROL DESK	PER CODE	PER CODE	PER CODE	PER CODE
(H)	HOSPITAL'S MAIN TO PDU	PER CODE	PER CODE	PER CODE	PER CODE
(1)	PDU TO CONTROL	65'-0"	50'-0"	2 1/8"	3"
(2)	PDU TO DTC	38'-0"	33'-0"	2"	3"
(2')	E-DTC TO JB (CSH)	31'-0"	30'-0"	1 1/8"	3"
(3)	CONTROL TO DTC	50'-0"	45'-0"	RJ45	3"
(4)	PDU TO WALL STAND	62'-0"	57'-0"	RJ45	N/A
(4')	E-WS TO JB(CSH)	29'-0"	28'-0"	RJ45	N/A
(5)	PDU TO TABLE	57'-0"	50'-0"	RJ45	2.5"
(5')	E-TABLE TO JB(CSH)	44'-0"	43'-0"	RJ45	2.5"

H=HOSPITAL
 E=EMERGENCY STOP COMMUNICATION CABLE
 OCTOBER. 07. 2009

CUSTOMER SIGNATURE:	DRAWN BY: LABARR
	DATE: 02.26.2014
	PROJECT MGR: CLELAND
DATE:	CHECKED BY: CLELAND
	DATE: 04.23.2014
PROJECT: SHRINERS HOSPITALS FOR CHILDREN RAD ROOM 2 1900 RICHMOND ROAD LEXINGTON, KY 40502	SHT. E2 REV. PF1
SIZE: B	TITLE: DRX-EVOLUTION
SCALE: SEE DRAWING SCALE	SHEET: 4 OF 8



CABLING MATRIX

OTC CABLES

Manuf.	Manuf. Part No.	CSH Part No.	Cable Name	Cable Rating	Applied Voltage	From	To	Usable Length	Function
L-Com	TC2599	2G3721	SCB to PDU Ethernet	300	12 VDC	SCB P11	PDU	12.055 m (38.58 ft)	Communication
Various	N/A	2G4120	GND - Electronics Assy to PDU	600	N/A	Electronics Assy G4	PDU Ground	15.855 m (50.74 ft)	Ground
Various	N/A	2G4121	GND - Tube to PDU	600	N/A	Tube	PDU Tank Ground	12.605 m (40.34 ft)	Ground
Electric-Cord	Q57712 JCR2	2G4200	Power 240 VAC	600	240 V	PDU	Electronics AY PS	15.833 m (50.74 ft)	OTC Power
Claymount	13650	2G4201	Tube High Voltage	75k VDC	75k VDC	PDU	Tube	12.730 m (40.74 ft)	Anode Cathode X-ray Tube
Alpha	65C07C4	2G4202	Tube Stator	600	290	PDU	Tube	12.505 m (40.02 ft)	Stator X-ray Tube
Alpha	5006C	2G4275	Console Estop/Auto Position to TMC	300	24 VDC	Console J1	TMC Board P23/J26000	15.805 m (50.58 ft)	Emergency Stop
Belden	8442	2G3790	OTC Echain Out	300	24 VDC	Junction Box	WS/Table Echain in	9.705 m (31.06 ft)	Emergency Stop
L-Com	7C2592	2G3799	OTC Can Out	300	12 VDC	Junction Box	WS/Table Can in	10.055 m (32.18 ft)	Communication

CONSOLE PC

Manuf.	Manuf. Part No.	CSH Part No.	Cable Name	Cable Rating	Applied Voltage	From	To	Usable Length	Function
Various	N/A	8H1109	Table GRND	600	N/A	PDU	Console	---	Ground
Various	N/A	6H1305	Console Ground	600	N/A	PDU	Console	20 m (65.6 ft)	Ground
Various	N/A	8H1107	Control	300	12 VDC	PDU	Console	20 m (65.6 ft)	Communication
Electric-Cord	Q57712 JCR	8H1110	PC Power	600	240 VAC	PDU	PC	20 m (65.6 ft)	PC Power
Electric-Cord	Q57712 JCR	8H1111	Monitor Power	600	240 VAC	PDU	Monitor	20 m (65.6 ft)	Monitor Power
Various	N/A	8H1108	Communication	300	12 VDC	PDU	PC	20 m (65.6 ft)	Communication
L-Com	TC259	8H2554	Communication	300	12 VDC	PDU	PC	20 m (65.6 ft)	Communication

WALL STAND

Manuf.	Manuf. Part No.	CSH Part No.	Cable Name	Cable Rating	Applied Voltage	From	To	Usable Length	Function
Various	N/A	2G4177	WS GND - PDU to PS/TMC	600	N/A	PDU	TMC Board G3	19.65 m (62.99 ft)	Ground
Alpha	6347	2G4178	WS AEC - PDU to WS Bucky	300	12 VDC	PDU	AEC	22.015 m (70.45 ft)	AEC
Electric-Cord	Q57712 JCR	2G4179	WS AEC - PDU to WS Power Supply	600	240 VAC	PDU	WS - Power Supply	19.5 m (62.4 ft)	Wall Stand Power
L-Com	TC2599	2G4190	WS Ethernet - PDU to Detector	300	12 VDC	PDU	Detector	22.015 m (70.45 ft)	Communication
L-Com	TC2592	2G4156	WS CAN in	300	12 VDC	Junction Box	WS TMC P18	9.3 m (29.76 ft)	Communication
L-Com	TC2592	2G4157	WS CAN out	300	12 VDC	Junction Box	WS TMC P17	9.3 m (29.76 ft)	Communication
Belden	8442	2G4158	WS Echain in	300	24 VDC	Junction Box	WS TMC J25	9.35 m (29.97 ft)	Emergency Stop
Belden	8442	2G4159	WS Echain Out	300	24 VDC	Junction Box	WS TMC J24	9.35 m (29.97 ft)	Emergency Stop

TABLE

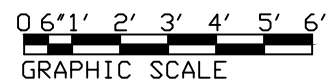
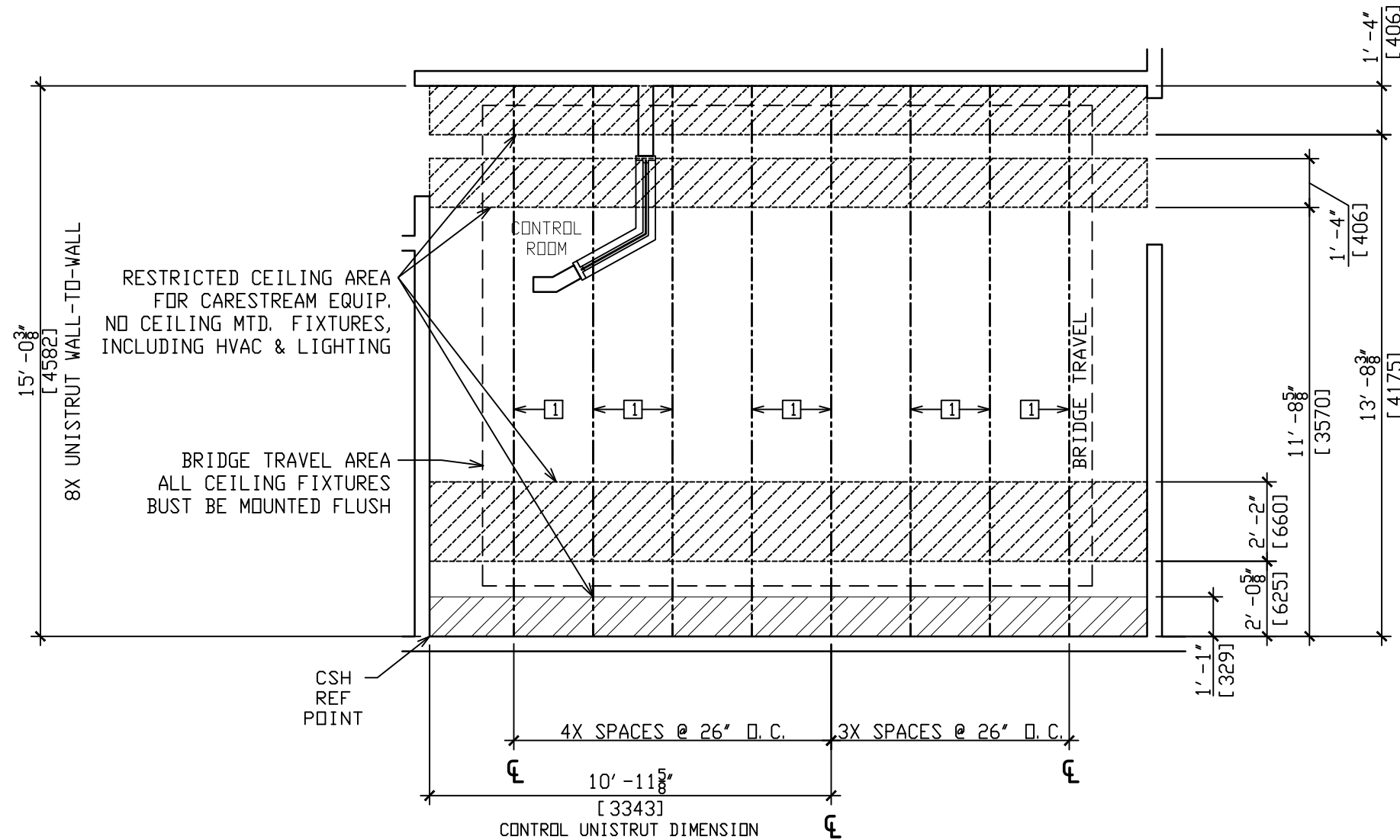
Manuf.	Manuf. Part No.	CSH Part No.	Cable Name	Cable Rating	Applied Voltage	From	To	Usable Length	Function
Various	N/A	2G4447	Table GND - PDU to Table PS/DNC	600	N/A	PDU	DMC Board	18 m (57.6 ft)	Ground
Alpha	6347	2G4178	Table AEC - PDU to Table Bucky	300	12 VDC	PDU	AEC	24 m (56.8 ft)	AEC
Electric-Cord	Q57712 JCR	2G4449	Table Power - PDU to Table Power Supply	600	240 VAC	PDU	Power Supply	18 m (57.6 ft)	Table Power
L-Com	TC2599	2G4450	Table Ethernet - PDU to Detector	300	12 VDC	PDU	Detector	18 m (57.6 ft)	Communication
Belden	8442	2G3791	Table Echain in	300	24 VDC	Junction Box	DMC Board P17	14 m (44.8 ft)	Emergency Stop
L-Com	TC2592	2G3800	Table Can in	300	12 VDC	Junction Box	DMC Board J14	14 m (44.8 ft)	Communication

CUSTOMER SIGNATURE:		DRAWN BY: LABARR	
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PROJECT MGR: CLELAND		CHECKED BY: CLELAND	
DATE: 04.23.2014		SHT. E3	
PROJECT: SHRINERS HOSPITALS FOR CHILDREN RAD ROOM 2 1900 RICHMOND ROAD LEXINGTON, KY 40502		REV. PF1	
SIZE: B	TITLE: DRX-EVOLUTION		
SCALE: SEE DRAWING SCALE		SHEET: 5 OF 8	



NOTES:

1. CEILING TILES MUST NOT BE LOWER THAN UNISTRUT AT FINISHED CEILING.
2. REFLECTED CEILING PLAN REFERENCES LOCATION OF CARESTREAM CEILING MOUNTED EQUIPMENT NOT TO INTERFERE WITH LIGHTS, DIFFUSERS AND SPRINKLER HEADS.
3. WIRELESS ANTENNAS SHOULD NOT BE MOUNTED TO THE CEILING INSIDE/WITHIN THE CSH "BRIDGE TRAVEL" AREA.



UNISTRUT LAYOUT AND REFLECTED CEILING PLAN

STRUCTURAL LEGEND

ITEM	COMPONENT DESCRIPTION: SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR
[1]	NEW UNISTRUT: FLUSH MOUNTED WITH FINISHED CEILING. UNISTRUT P1000 SERIES OR EQUIVALENT REQUIRED.

STRUCTURE SUPPORT NOTES FOR DRX-E:

THE FACILITY STRUCTURE SUPPORTING ALL EQUIPMENT LOADS MUST BE VERIFIED BY CUSTOMER'S STRUCTURAL ENGINEER OF RECORD. THIS INCLUDED LOADS FOR WALLS, CEILING AND FLOOR.

SUPPORT STRUCTURE MUST BE LEVELED AT FINISHED CEILING HEIGHT WITHIN 0.0313 INCH (0.795MM).

THE EQUIPMENT WILL ATTACH TO SUPPORT STRUCTURE RAILS THAT ARE PARALLEL WITH EACH OTHER TO WITHIN 0.0313 INCH (0.795MM).

FLOORING MUST BE ASBESTOS FREE.

FLOOR MUST BE FLAT AND LEVEL WITHIN 0.2 INCH (5MM) IN BOTH DIRECTIONS OVER THE ENTIRE EQUIPMENT AREA.

FLOORING MUST BE CAPABLE OF SUPPORTING THE OPERATING WEIGHT OF THE EQUIPMENT.

A MINIMUM SAFETY FACTOR OF 2 TIMES IS REQUIRED FOR SUPPORT STRUCTURES.

SAFETY FACTORS GREATER THAN 2 TIMES MAY BE REQUIRED BY NATIONAL, STATE OR LOCAL CODES.

SEE THE GOVERNING AUTHORITIES FOR BUILDING REQUIREMENTS.

EQUIPMENT IS DESIGNED TO MEET A 4 TO 8 TIMES SAFETY FACTOR. USE MAXIMUM WEIGHTS AND WORSE LOADING CONDITIONS WHEN CALCULATING THE SAFETY FACTOR.

MAXIMUM DEFLECTION OF COMPLETE STRUCTURE IS 0.059 INCH (1.5MM).

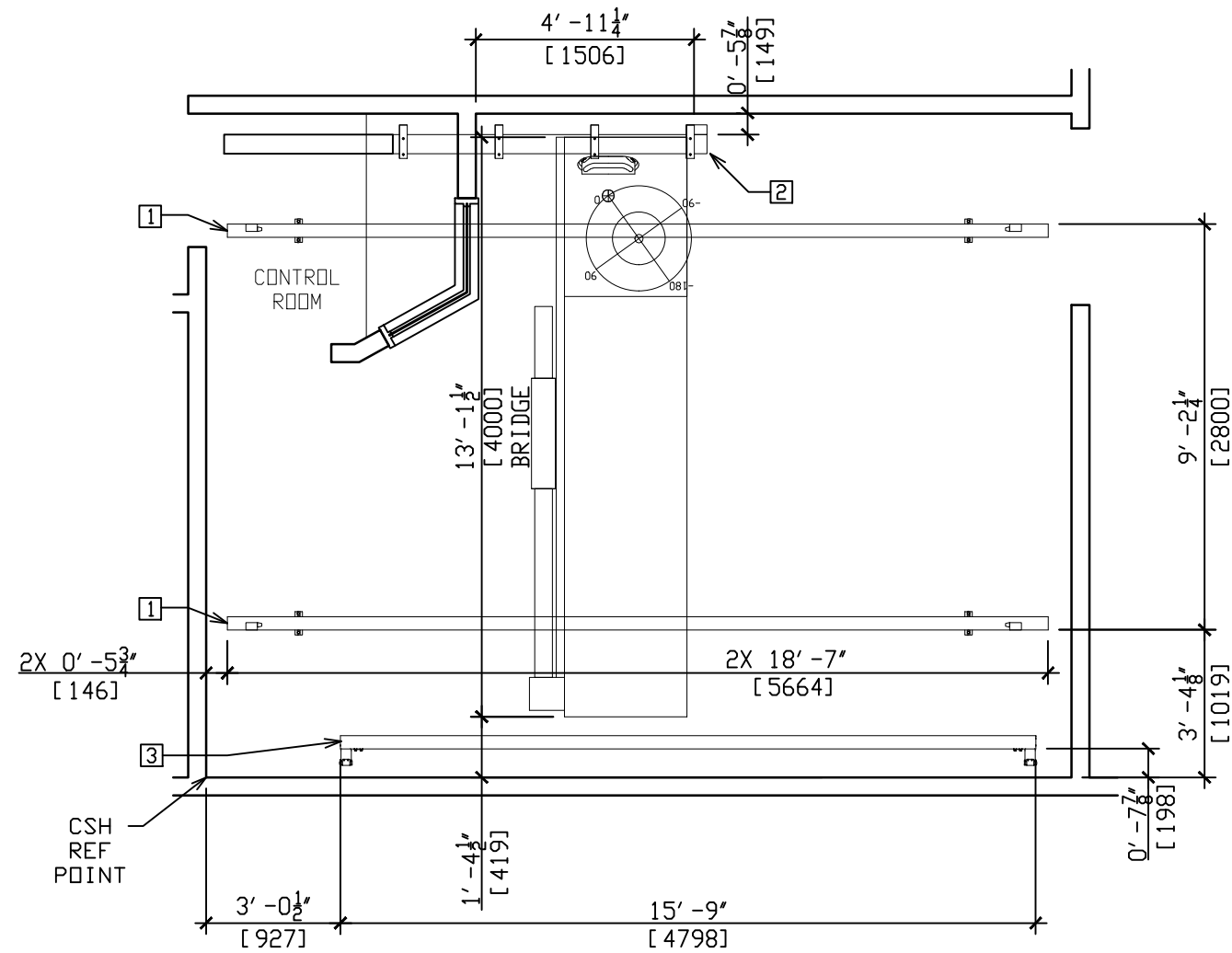
AT ANY POINT IN TIME, THE MAXIMUM LOADING ON ONE POINT OF THE UNISTRUT CAN BE 385 LBS.

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PROJECT:	SHT. S1
SHRINERS HOSPITALS FOR CHILDREN	REV. PF1
RAD ROOM 2	
1900 RICHMOND ROAD	
LEXINGTON, KY 40502	
SIZE: B	TITLE: DRX-EVOLUTION
SCALE: SEE DRAWING SCALE	SHEET: 6 OF 8



STRUCTURAL LEGEND

ITEM	COMPONENT DESCRIPTION: SUPPLIED AND INSTALLED BY CARESTREAM HEALTH INC.
1	DTC CEILING RAIL
2	IGUS CHAIN
3	WALL STAND CEILING RAIL



CEILING PLAN LAYOUT INSTALLED BY CSH

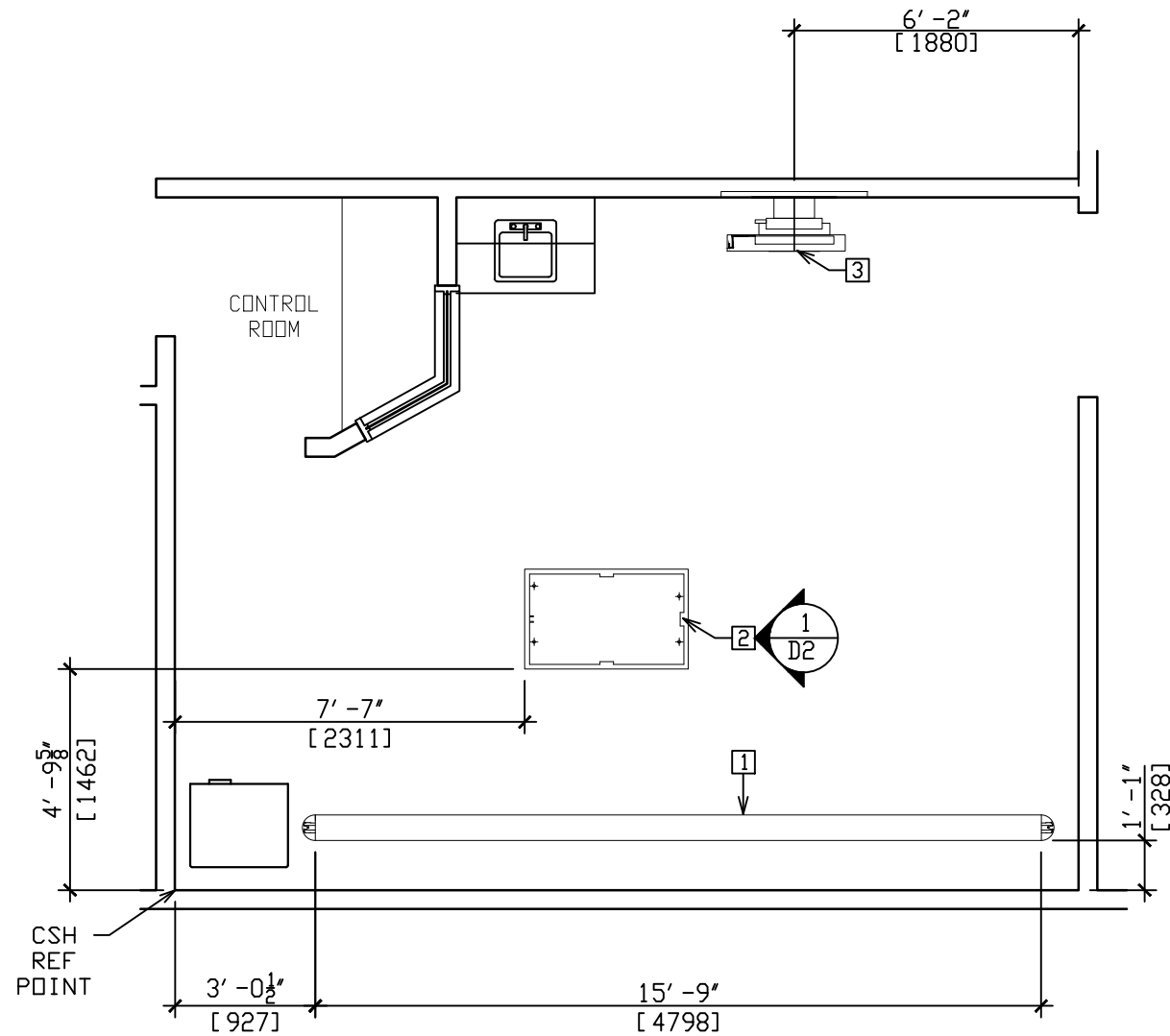


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	PROJECT MGR: CLELAND
DATE:	CHECKED BY: CLELAND
	DATE: 04.23.2014
PROJECT: SHRINERS HOSPITALS FOR CHILDREN RAD ROOM 2 1900 RICHMOND ROAD LEXINGTON, KY 40502	SHT. S2 REV. PF 1
SIZE: B	TITLE: DRX-EVOLUTION
SCALE: SEE DRAWING SCALE	SHEET: 7 OF 8



STRUCTURAL LEGEND

ITEM	COMPONENT DESCRIPTION: SUPPLIED AND INSTALLED BY CARESTREAM HEALTH INC.
1	WALL STAND FLOOR RAIL
2	TABLE BASE
3	CR-LLI



FLOOR PLAN LAYOUT INSTALLED BY CSH



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SIZE: B	TITLE: DRX-EVOLUTION
SCALE: SEE DRAWING SCALE	SHEET: 8 OF 8

