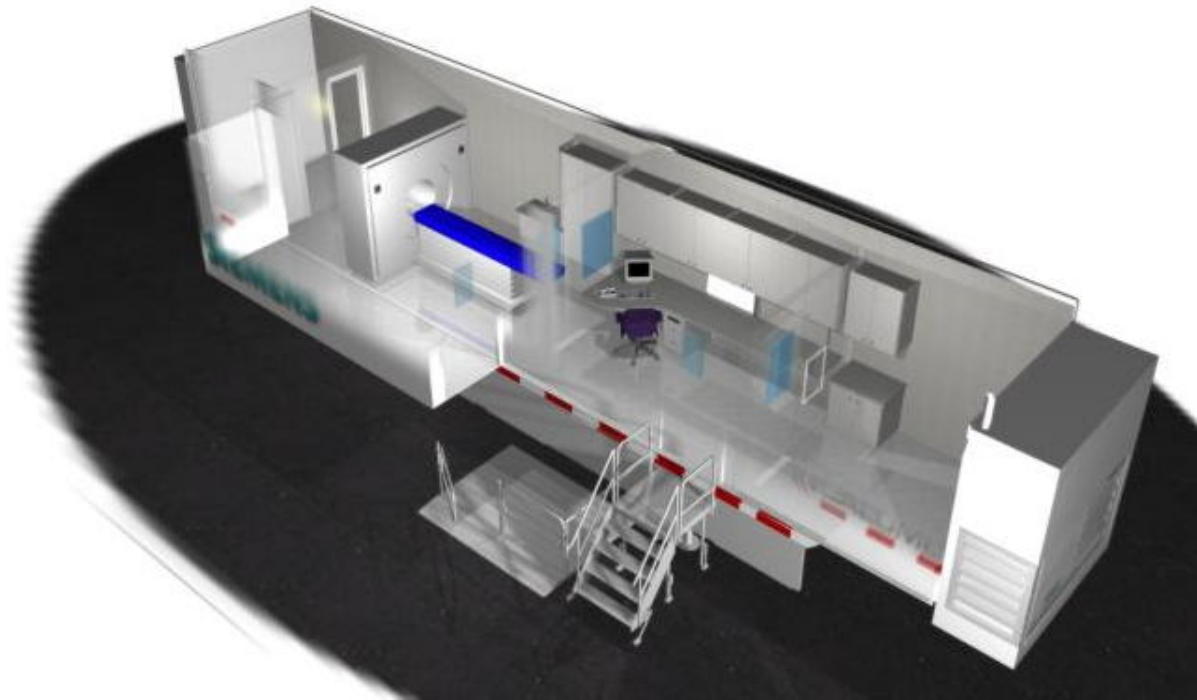


Site Planning Guide

Marconi CT System 48' US Unit



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North America

Corporate Headquarters
Calumet Coach Company
2150 E. Dolton Road
Calumet City, IL
60409-1411
USA
708.868.5070

Europe

Calumet Coach Company, Ltd.
Unit 17, Nelson Way
Tuscum Trading Estate,
Camberly, Surrey
GU15 3DH
United Kingdom
(44) 01276.64490

Asia Pacific

Calumet Coach Company
Unit 3520, Xin Da Du Hotel
26 Chegongzhuang Street
Xicheng District
Beijing, 100044
PR China
(86) 10.683.19988 Ext. 3520

South America

Calumet Coach (Brasil) Ltda.
Rua Clarence, 387
Sao Paulo,
SPO4727.040
Brazil
(55) 11.5641.1899

LIST OF REVISIONS

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Notice

In accordance with our policy of continued product improvement, Calumet Coach Company reserves the right to make changes in the equipment, design, specifications and materials of the product described herein. Any problems or questions related to the components or systems covered in this booklet may be directed to:

Calumet Coach Company
Attn: Service Department
2150 E. Dolton Road
Calumet City, Illinois
60409-1411 USA

Telephone: 800-839-0630 (24/7 Service)
Fax: 708-868-5101

<http://www.calumetcoach.com>

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Support Pad Requirements

Marconi CT System 48' US Unit

The following is a list of recommendations and requirements for a concrete support pad. However, due to varying site conditions, the actual pad design should be prepared by an appropriately licensed structural or architectural engineer.

Minimum Support Pad Requirements

A front pad measuring 9'-0" x 4'-0" and a rear pad measuring 9'-0" x 15'-0" located as shown on [Figure 1](#), and [Figure 2](#) will provide the minimum requirements. The smallest cross-hatching represents the minimum support pad.

Recommended Support Pad

A full pad measuring 9'-0" x 40'-0", located as shown on [Figure 1](#) and [Figure 2](#) as the crosshatching, is the recommended support pad.

Recommended Service Pad

A full pad measuring 21'-0" x 55'-6", located as shown on [Figure 1](#) and [Figure 2](#) is recommended to provide a service access.

Support Pad Depth

Recommendations for the width and length of the pad are given above. Based upon the weight distribution information given on [Figure 2](#) and existing site conditions, the depth should be determined by a local contractor.

Support Pad Levelness

The support pad must be level to ensure proper operation of the Marconi CT system. The pad must not exceed .125" deviation in 10'-0". If the minimum support pads are selected, rather than the recommended single pad, they must also meet this specification.

Vehicle Access

A firm, level surface is required around the mobile unit to provide access to the site, patient access to the mobile unit, and servicing of the mobile unit.

Customer Power Requirements

Marconi CT System 48' US Unit

Electrical Service

480 Volt A.C., 3 Phase, fused at 150 Amps

Configuration

Three phase wye connection, with neutral and ground.

Frequency

- 60 Hz \pm 0.5 Hz
- Phase Balance: 2% max of lowest phase-to-phase voltage.
- Maximum voltage variation: \pm 5% from nominal steady state (under the worst case conditions of line voltage)

Connector Type

The unit is supplied with a 35-foot (useable) cable and male connector. The connector is a Russell Stoll 200 Amp plug #DS2504MP.

Customer Facility

The facility must have the matching receptacle as specified in [Figure 3](#) and [Figure 4](#). The receptacle is a Russell Stoll #DF2504FRAB.

Voltage Surges

Transient voltage variations caused by external loads must not:

- exceed + 5%
- exceed five cycles duration
- occur more than ten times an hour.

Customer Power Requirements

Marconi CT System 48' US Unit

Ground Conductor

An insulated ground conductor is provided in the unit power cord equal in size to the incoming power wires. The customer shall provide an additional grounding rod at the trailer pad. A 50' # 1/0 AWG conductor is provided for the grounding rod mentioned. The conductor terminates in the main panel-grounding terminal. Both grounds protect all devices and components contained within the unit.

NOTE:

The standard connector for the unit is a Russell Stoll #DS2504MP. If an existing site currently implements a different connector or connector configuration, please contact Calumet Coach Company to arrange for a compatible power connector before the unit leaves the facility.

Mobile Grounding Requirements

Marconi CT System 48' US Unit

NOTE: For the associated drawing please refer to Figure 5

- All work is to be done in accordance with local and national electrical codes.
- Information shown here is only a recommendation and must be verified local site codes and national site codes.
- Ground wires inside enclosures are to be taped green for the entire visual length for identification.
- If a separately derived secondary system transformer is used, a bonding jumper between the grounded conductor (neutral) and the equipment – grounding conductor must be used.

Grounding

The ground for our system shall originate at the system power source (transformer) or first access point of power into the facility, and be continuous to our system power disconnect in the room. This ground can be spliced with “High Compression Fittings” and should be terminated at each distribution panel it passes through. When it is broken for a connection to a panel, it shall be connected into an approved grounding block with the incoming and outgoing ground in the same grounding block. This grounding block is then connected to the steel panel. Never use the steel or any other material of the panel as the grounding block. The connection at the power source shall be at the grounding point of the “Neutral – Ground” if a “WYE” transformer is being used, or at the typical grounding points of a separately derived system. In the case of an external facility, it shall be bonded to the facility ground point at the service entrance.

Ground Wire

The ground wire shall be copper wire and the same size as the disconnect feeders. The ground wire impedance from our system disconnect, including the ground rod, shall not have an impedance greater than 2 ohms to earth as measured by one of the applicable techniques described in Section 4 of ANSI/IEEE Standard 142-1982.

Special Grounding Note

The unit must have an earth driven ground rod within five (5) feet of the hospital power receptacle. A grounding cable of a minimum #1/0 AWG must be connected between the grounding rod and the grounding pin of the hospital power receptacle, and another cable to be kept as short as possible, and must not exceed 8 feet in length. A separate grounding conductor must still be run with the phase conductors to the source of power from the grounding pin of the hospital power receptacle in accordance with NEC. Article 250-23.

Telephone and Data Service Requirements

Marconi CT System 48' US Unit

Telephone Service

- The unit is supplied with three telephone connections.
- The connector type that is used is a model Hubbell PH-6595 (inlet), supplied by Calumet Coach.
- Two Hubbell PH-6599 50 foot telephone-connecting cables are included with the unit. If a third cable is needed, it must be purchased by the customer.
- The customer is required to purchase and install three Hubbell phone connectors, model PH-6597 (weatherproof phone outlets) for use at the site.

Data Service

An adapter to connect the medical system is required if a site plans to use existing 10Base2 (coax) Ethernet connections. The adapter will convert between a 10Base2 coaxial connector and a 100BaseT RJ-45 type connector. The mobile unit requires an RJ-45 type connector.

- The unit is supplied with three data line connections.
- The customer is required to purchase the data connection cables. The data connections utilize a 50'-0" UTP CAT 5 cable with an RJ-45 connector.

Water Requirements

Marconi CT System 48' US Unit

Humidifier Water Fill

The unit contains a water storage tank for the humidifier. This tank is located in the rear utility room and must always contain water. There are two options for filling the tank:

- A ¾" I.P.S. male threaded hose connection is located in the utility room of the unit.
- A fill port is located in the humidifier for manual fill capability.

Potable Water Supply Requirements (option)

A cold water supply line is required, with a flow rate of 5 gallons per minute, 45-60 psi and a maximum temperature of 70 degrees Fahrenheit. The unit will be supplied with a ¾" diameter, 20' long hose terminated with a ¾" I.P.S. male threaded hose connector. The facility is to provide a ¾" female connector to connect to the units 20' long hose.

Waste Water Connections (sink option)

The unit is supplied with a 20' long 1½" diameter drain hose terminated with a 1½" male threaded connector for sanitary wastewater drainage. The facility must provide means of sanitary wastewater drainage from the system that comply with locally applicable codes.

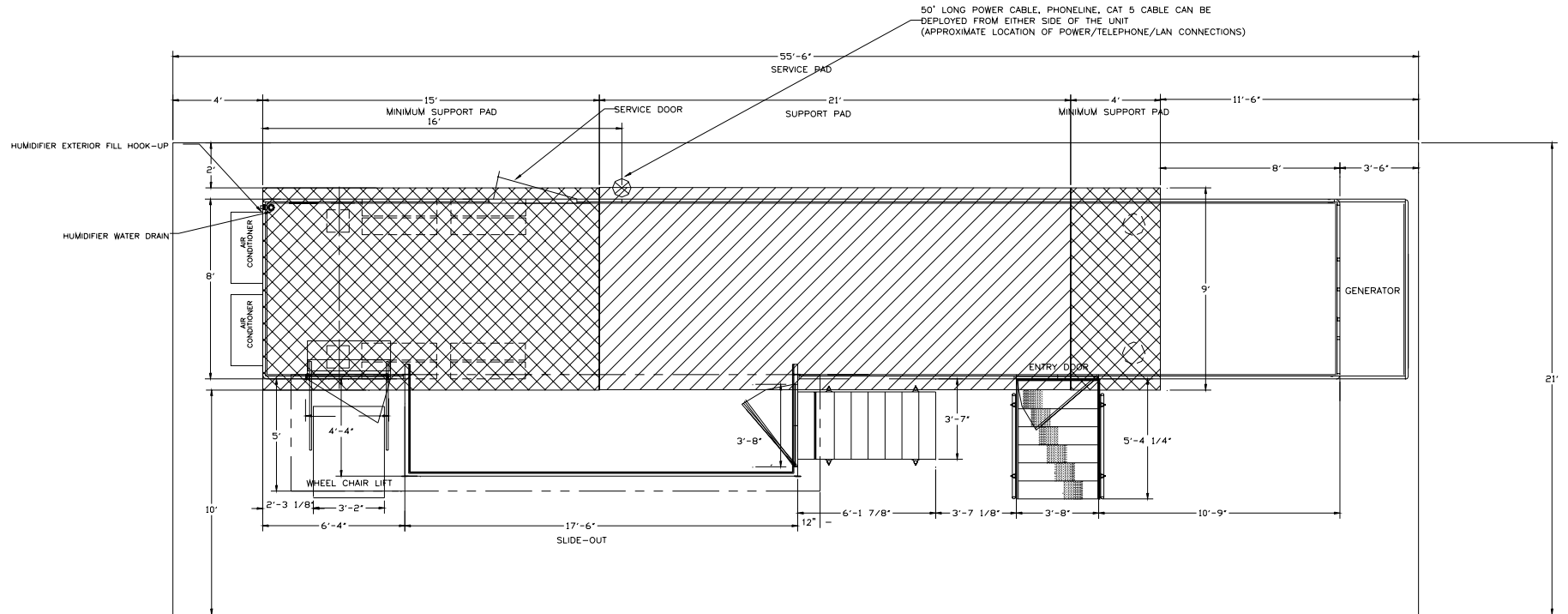


Figure 1: Pad Layout

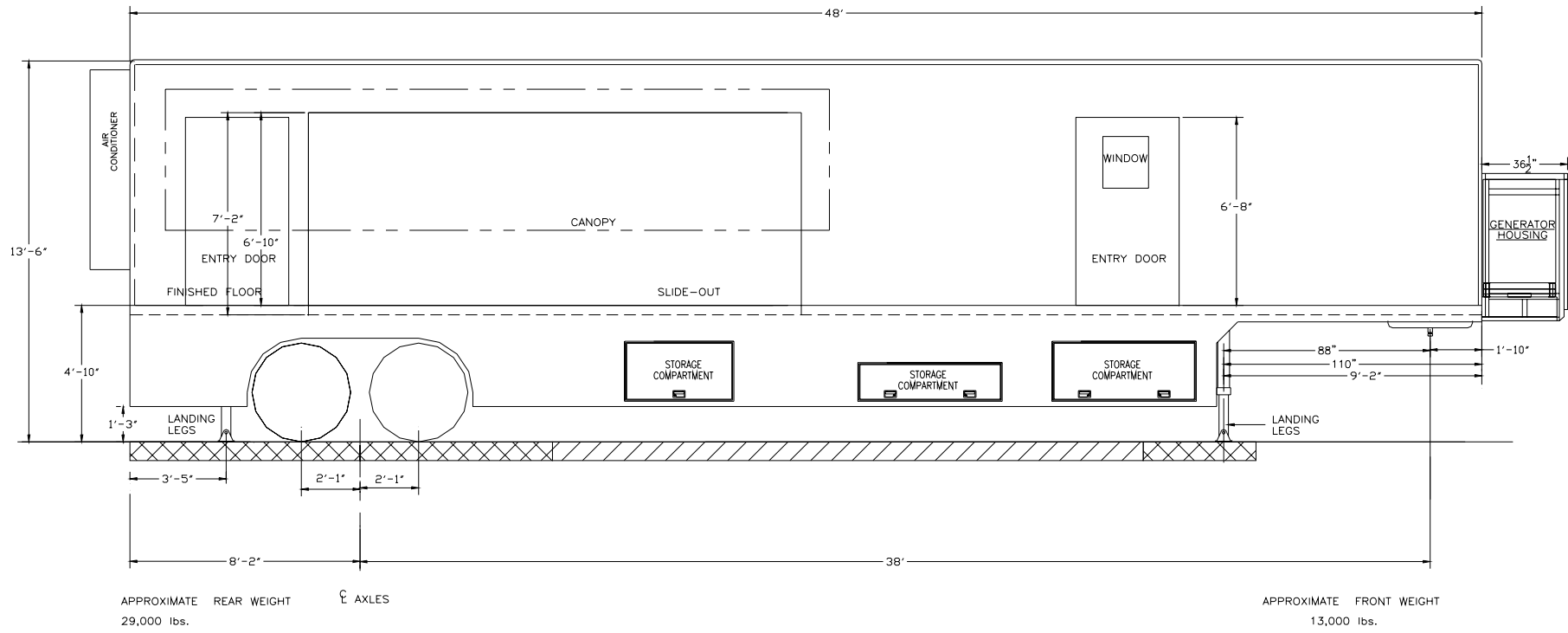
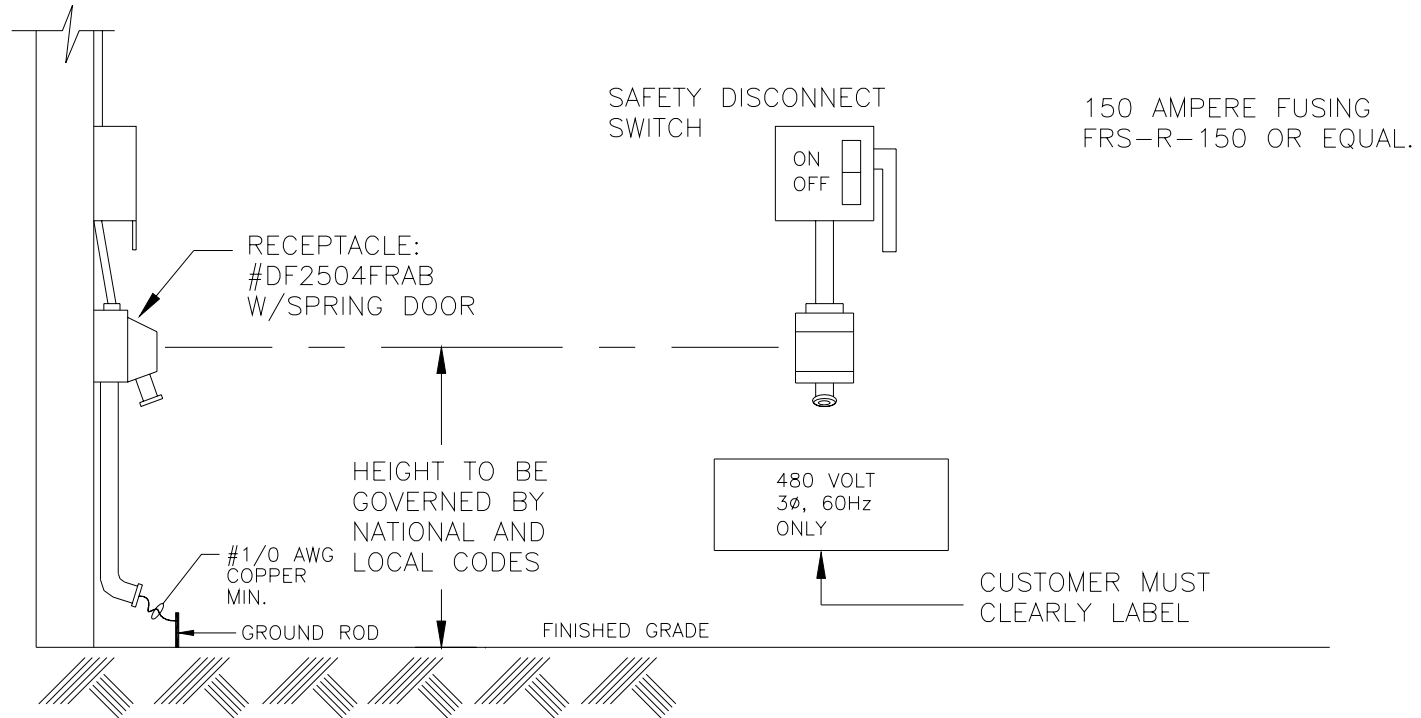


Figure 2: Curbside Elevation



3 PHASES + GROUND AC 480V 150A SERVICE

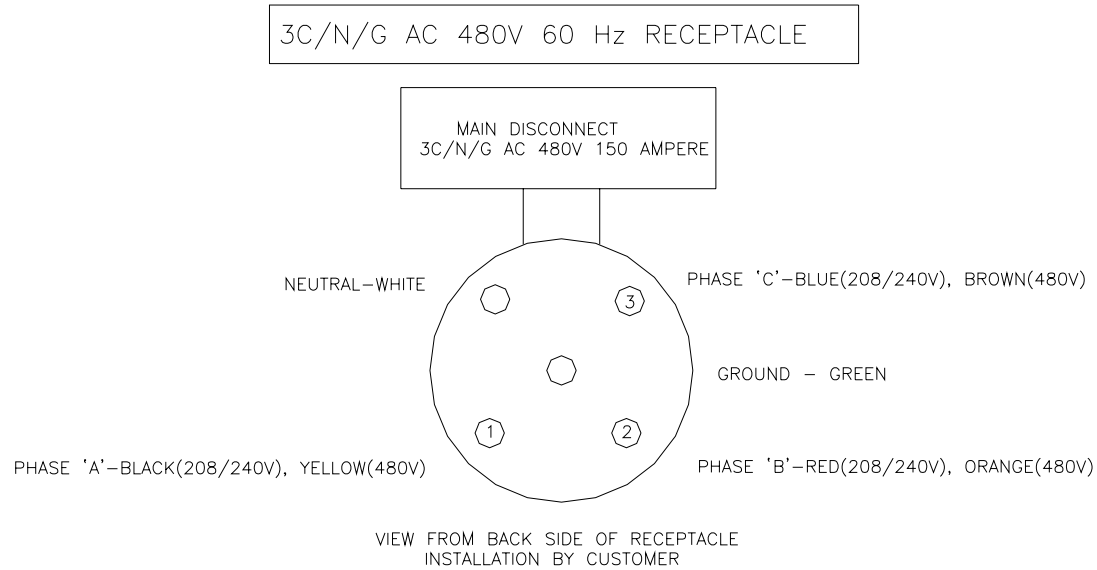
WARNING:

HOSPITAL RECEPTACLE WIRING AND MOBILE UNIT PLUG WIRING MUST BE INITIALLY CHECKED FOR PROPER CONTINUITY BY A QUALIFIED ELECTRICIAN

NOTE:

THE INFORMATION CONTAINED IN THIS DIAGRAM IS RECOMMENDED TO MEET THE REQUIREMENTS OF THE EQUIPMENT OPERATED AND IS SUBJECT TO LOCAL CODE APPROVAL.

Figure 3: Russell Stoll Service Outlet



WIRING CHART			
AMPS/WIRE	DESCRIPTION		RECEPTACLE
	WIRES	POLES	PART NUMBER
MAXIMUM WIRE SIZE AS REQUIRED BY LOCAL CODES	5	5	480 VOLT (200 AMP) 5 WIRE RUSSELLSTOLL RECEPTACLE #DF 2504 FRAB THIS RECEPTACLE MUST BE WATERPROOF
480 VOLT AC	3 PHASE	WYE CONNECTION 150 AMP TOTAL 3 Ø-NEUTRAL & GROUND	

ABBREVIATIONS:

3C-PHASE CONDUCTORS
N - NEUTRAL
G - GROUND

Figure 4: Russell Stoll Chart

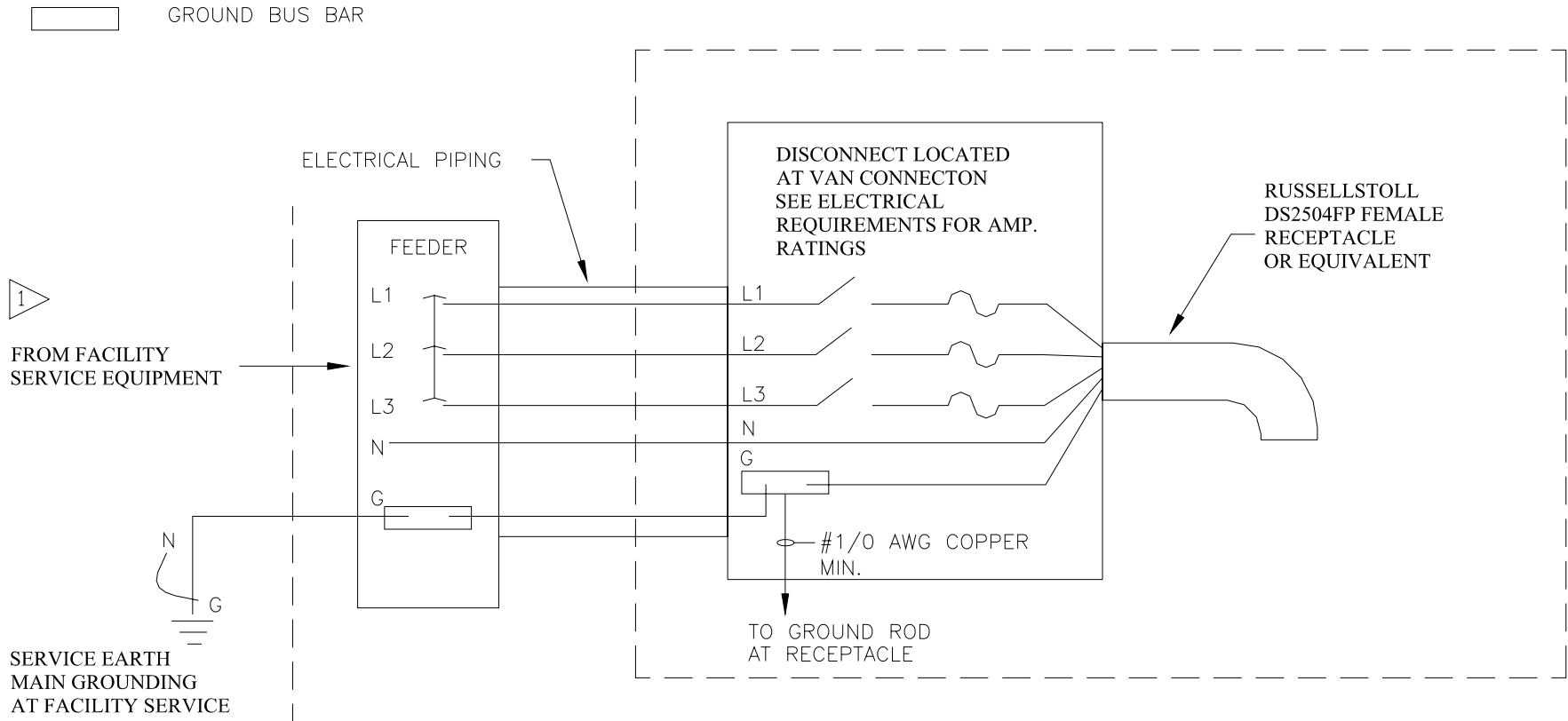


Figure 5: Mobile Grounding Requirements Chart

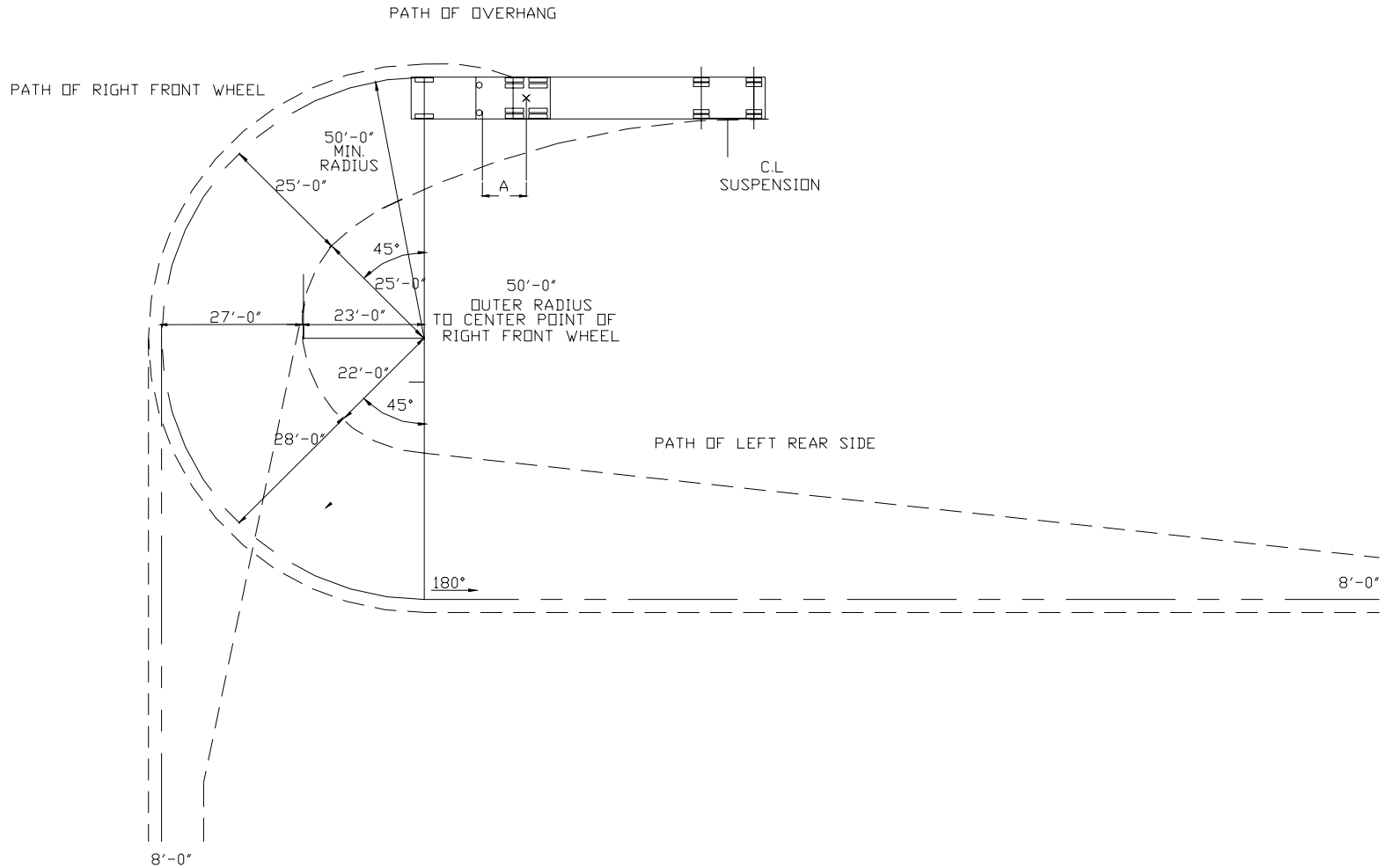


Figure 6: Turning Requirements

A minimum "A" dimension of 92" is required from rearmost projection to centerline of tandem suspension. This provides swing clearance for generator set which is mounted on the front of the trailer. Hospital is responsible to ensure the access route is clear of obstructions when the trailer is scheduled to arrive or depart. The 50' minimum outside turning radius shown here has been calculated using an international harvester (Navistar) tractor Model COF-9670 with a 161" wheelbase. Turning radius will vary with towing tractor. Customer must confirm the turning radius on their tractor and prepare each site with adequate space to accommodate it.