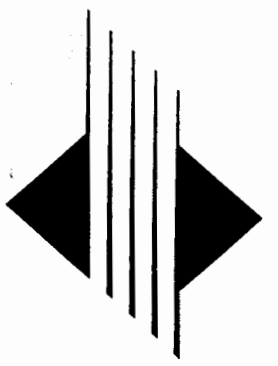
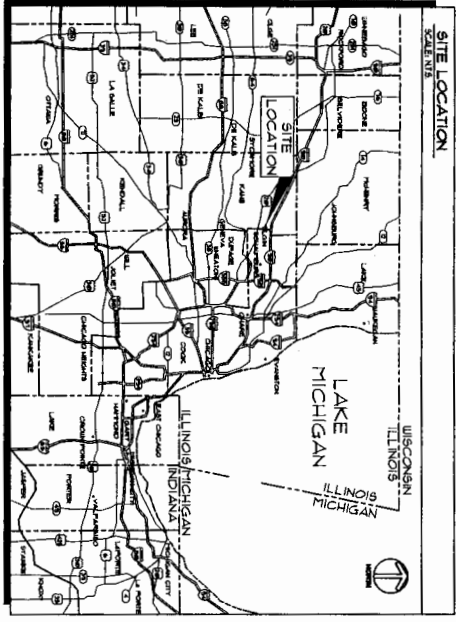


DIRECTIONS TO SITE
 DEPART ONTO HIGHWAY 111 (N. 340)
 HEAD ON EAST TOWARD ONTO (1.35 MILE TURN
 RIGHT ONTO US-30 87P. BEAR LEFT (W) ONTO
 R. ADE AVE. BEAR RIGHT (W) ONTO US 30 85A (E
 ONTO CENTER ST. BEAR RIGHT (W) ONTO
 LEFT (N) ONTO CENTER ST. ARRIVE AT SITE.

SITE COORDINATES
 LATITUDE: N 42° 01' 56"
 LONGITUDE: W 88° 50' 50"
 ELEVATION: 84' 275L



Sprint

SITE NAME

SHERMAN HOSPITAL ROOFTOP

SITE NUMBER
CH60XC028-C

SITE ADDRESS
 934 CENTER ST,
 ELGIN, IL 60120

PROJECT TYPE
 ROOFTOP & NEW CABINETS IN EXISTING BUILDING

PROJECT CONSULTANTS	
 Fullerton Engineering Consultants, Inc. 600 NEW SERVICE DEPT. PHONE: (800) 754-4444	ENGINEERING CONSULTANT FULLERTON ENGINEERING CONSULTANTS, INC. SUITE 600 600 NEW SERVICE DEPT. ROBERTSON, IL 60009 CONTACT: JACOB FALTER PHONE: (815) 382-8700 FAX: (815) 382-8700 E-MAIL: jfalter@fullereng.com
POWER COVERED BUILDER SERVICES DEPT. PHONE: (800) 835-3531	TELEPHONE 600 NEW SERVICE DEPT. PHONE: (800) 754-4444

SHEET INDEX	
NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	SITE PLAN
C-2	BLANKED SITE PLAN
C-3	SITE ELEVATION
C-4	EQUIPMENT DETAILS
C-5	ANTENNA DETAILS
C-6	BILL OF MATERIALS LCC
E-1	UTILITY SITE PLAN & NOTES
E-2	SHIELD LINE DIAGRAM & DETAILS
EG-1	SITE GROUNDING PLAN & NOTES
EG-2	GROUNDING DETAILS
EG-3	GROUNDING DETAILS

PROJECT SUMMARY	
SITE NO.	CH60XC028-C
SITE NAME	SHERMAN HOSPITAL ROOFTOP
SITE ADDRESS	934 CENTER ST. ELGIN, IL 60120
COUNTY	KANE
JURISDICTION	CITY OF ELGIN
ZONING	R-1 RESIDENTIAL
PROPERTY OWNER	SHERMAN HOSPITAL ASSOC. ELGIN, IL 60120
DESIGNER	BILL KELTNER PHONE: (847) 475-0653
APPLICANT	SPRINT TALINDA KOTT-REI 6550 SPRINT PLAZA OVERLAND PARK, KS 66201 PHONE: (913) 784-3335
LCC	HEBNA KAPADIA 1100 N. WASHINGTON ST. ELGIN, IL 60120 E-MAIL: hebnak@fullereng.com

APPROVALS	
DATE	04/02/04
OPERATIONS	
DATE	
SPRINT ENGINEER	
DATE	
SPRINT PROJECT	
DATE	
ZONING	

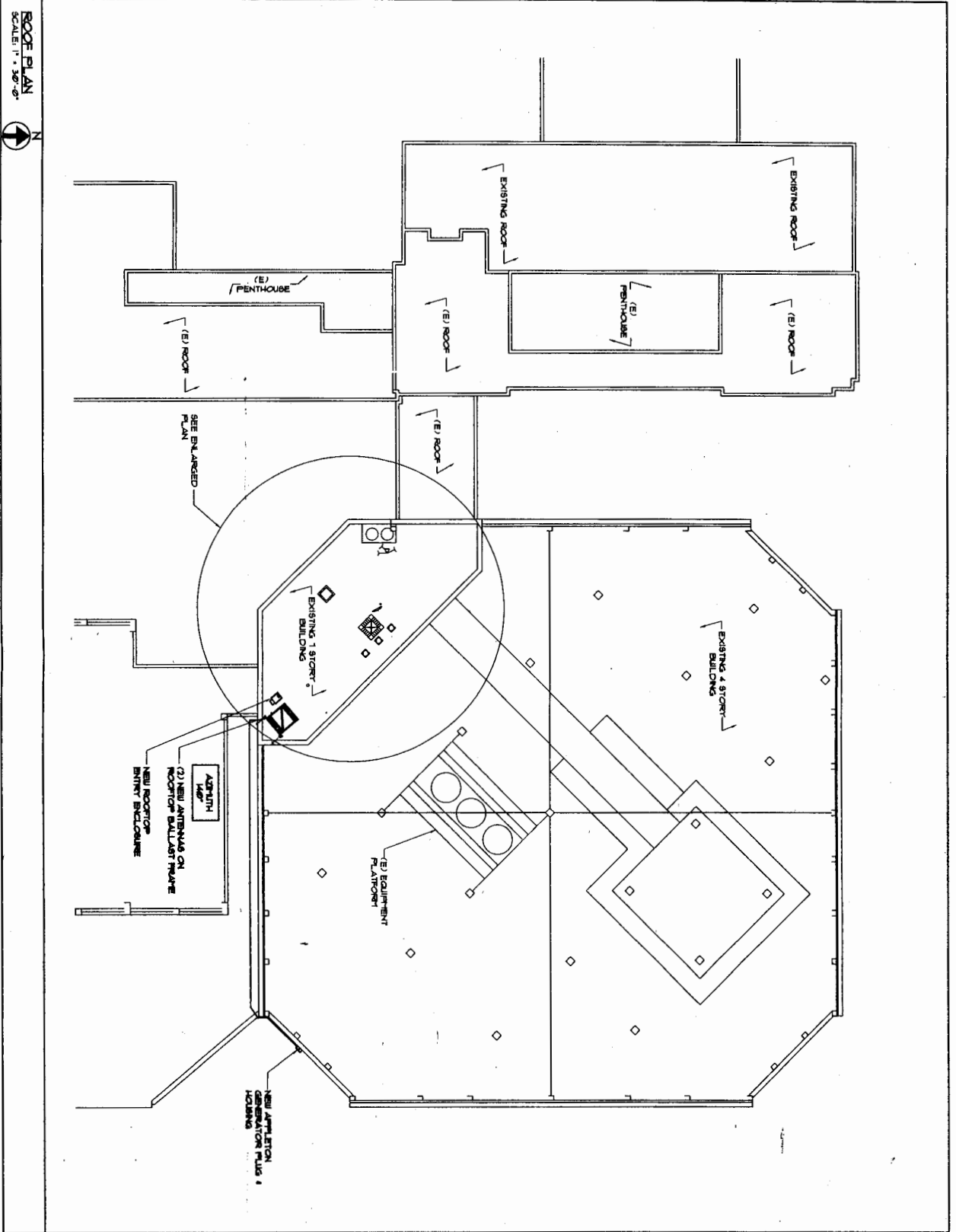
4550 SPRINT PARKWAY
 OVERLAND PARK, KS 66201
 TEL: 817-757-0100
 FAX: 817-757-0700

WLOC
 International, Inc.
 909 ROOSEVELT RD.
 BUILDING A SUITE 75
 ELGIN, ILLINOIS 60120
 TEL: 815-750-5800 FAX: 815-750-3800

Fullerton Engineering Consultants, Inc.
 9300 R. ADE AVE. SUITE 600
 ROBERTSON, ILLINOIS 60009
 TEL: 815-382-8700
 FAX: 815-382-8700

APPROVED BY	DATE	REVISION	BY

SHEET SUMMARY	
SITE NAME	SHERMAN HOSPITAL ROOFTOP
SITE ADDRESS	934 CENTER ST. ELGIN, IL 60120
SITE NUMBER	CH60XC028-C
SHEET NAME	TITLE SHEET
SHEET NUMBER	T-1



ROOF PLAN
SCALE: 1" = 30'-0"

<p>4500 SPRINT PARKWAY OVERLAND PARK, KS 66134</p>	<p>MLCC International, Inc. 1000 W. 102ND ST., SUITE 100 OVERLAND PARK, KS 66150 TEL: 913-786-0500 FAX: 913-786-0505</p> <p>Pullertown Engineering Consultants, Inc. 1700 W. 102ND ST., SUITE 100 OVERLAND PARK, KS 66150 TEL: 913-786-0500 FAX: 913-786-0505</p>	<p>THIS DRAWING IS THE PROPERTY OF PULLERTOWN ENGINEERING CONSULTANTS, INC. AND IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF PULLERTOWN ENGINEERING CONSULTANTS, INC. © 2005</p>	<table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHKD</th> </tr> </thead> <tbody> <tr> <td>05-18-04</td> <td>ISSUE REVIEW</td> <td>STP</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	DATE	DESCRIPTION	BY	CHKD	05-18-04	ISSUE REVIEW	STP														<p>DATE REVISION: _____</p> <p>SITE NAME: SHERIDAN HOSPITAL ROOFTOP</p> <p>SITE ADDRESS: 304 CENTER ST. OVERLAND PARK, KS 66150</p> <p>SITE NUMBER: CH00XC02B-C</p>	<p>SHEET NAME: SITE PLAN</p> <p>SHEET NUMBER: C-1</p>
DATE	DESCRIPTION	BY	CHKD																						
05-18-04	ISSUE REVIEW	STP																							



4400 SPRING PARKWAY
OVERLAND PARK, KS 66204



ZULCC
LTC International, Inc.
400 ROBERTSON RD.
4315 BELTON, IL 61811
TEL: 630-790-5981 FAX: 630-790-5983

Fullerton
Engineers
Consultants, Inc.
7300 W. HICKORY RD., SUITE 800
ROSELAND, ILLINOIS 60068
TEL: 630-790-5983 FAX: 630-790-5983

THIS DRAWING IS THE PROPERTY OF FULLERTON ENGINEERS CONSULTANTS INC. CONSULTANTS, INC. AND SHALL REMAIN THE PROPERTY OF FULLERTON ENGINEERS CONSULTANTS INC. IF REPRODUCED WITHOUT THE WRITTEN CONSENT OF FULLERTON ENGINEERS CONSULTANTS INC. IT IS PROHIBITED.

NO.	DATE	DESCRIPTION	BY	CHKD BY
01	01-10-04	ISSUE FOR PERMIT	STP	

DATE ISSUED: _____
SHEETS: 1 OF 3
SHEETS: 1 OF 3
SHEETS: 1 OF 3

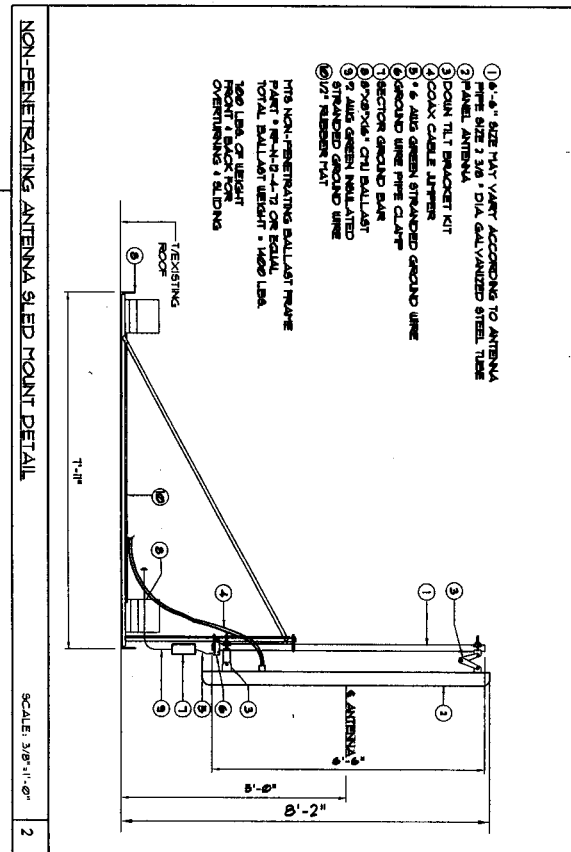
SITE NAME
SHERIDAN HOSPITAL ROOFTOP

SITE NUMBER
CHK0XC023-C

SITE ADDRESS
594 CENTER ST. ELGIN, IL 60120

SHEET NAME
ENLARGED SITE PLAN

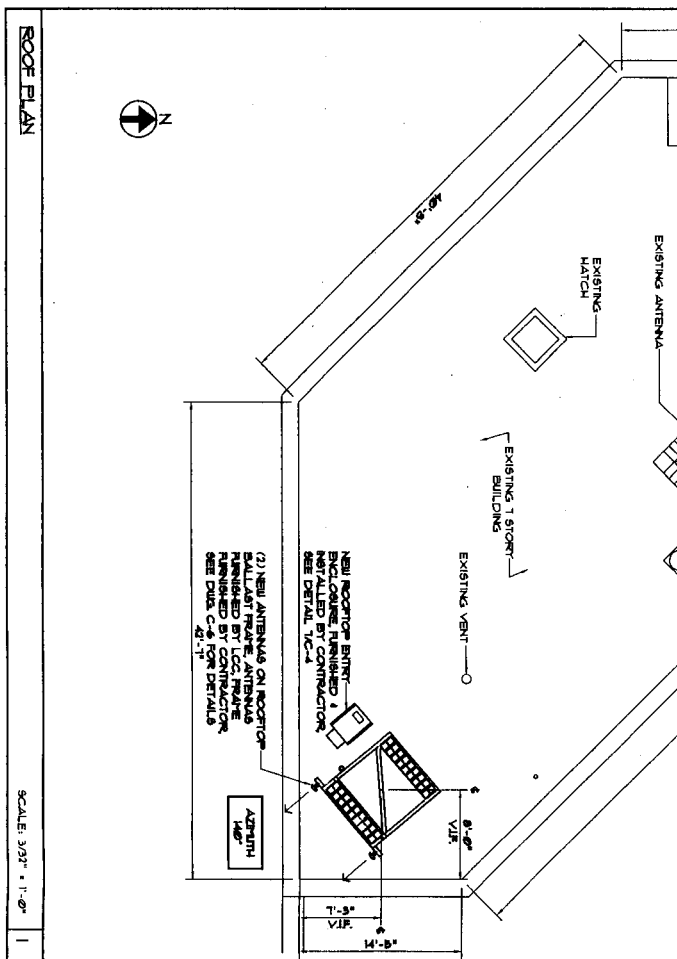
SHEET NUMBER
C-2



- 1 1/2" - 8" SIZE HAT VENT ACCORDING TO ANTENNA PIPE SIZE 2 3/8" DIA GALVANIZED STEEL TUBE
 - 2 PANEL ANTENNA
 - 3 DOWN TILT BRACKET KIT
 - 4 COAX CABLE ALTERNATE
 - 5 4" AIS GREEN STRANDED GROUND WIRE
 - 6 GROUND WIRE PIPE CLAMP
 - 7 SECTION GROUND BAR
 - 8 1/2" DIA 1/4" THK BALLAST
 - 9 7" AIS GREEN MILLATED STRANDED GROUND WIRE
 - 10 1/2" RISER BRACKET
- THIS NON-PENETRATING BALLAST FRAME SHALL BE 1/2" X 1/2" X 1/2" OR EQUAL TOTAL BALLAST WEIGHT = 1000 LBS. NO. LINE OF WEIGHT CONTAINING 1 BUILDING

NON-PENETRATING ANTENNA SLED MOUNT DETAIL

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

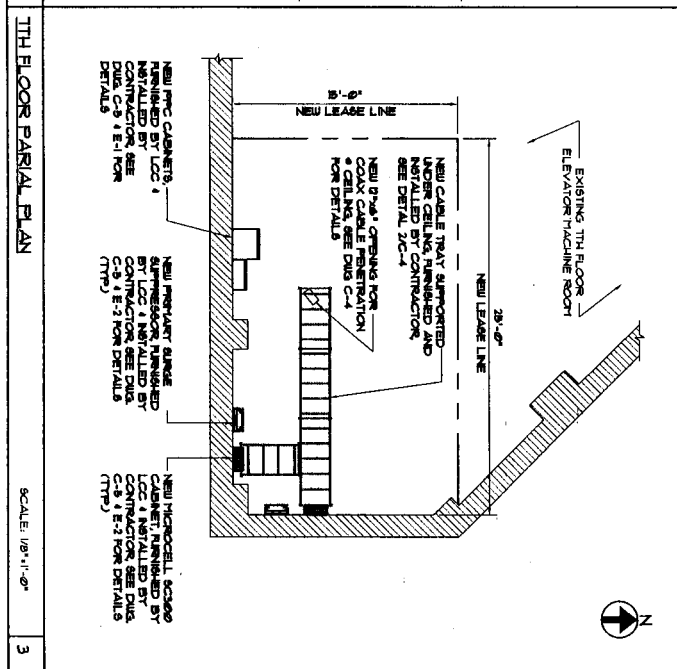


(2) NEW ANTENNAS ON ROOFTOP BALLAST FRAME ANTENNAS PROVIDED BY CONTRACTOR. SEE DETAILED FOR DETAILS.

NEW ROOFTOP BRACKET ENCLOSURE PROVIDED & INSTALLED BY CONTRACTOR. SEE DETAILED FOR DETAILS.

ROOF PLAN

SCALE: 3/32" = 1'-0"



NEW DUCT OPENING FOR COAX CABLE PENETRATION FOR DETAILS

NEW PERMANENT RANGE NEW PERMANENT RANGE SHALL BE PROVIDED BY CONTRACTOR. SEE DETAILED FOR DETAILS.

NEW HORIZONTAL SCOPES NEW HORIZONTAL SCOPES SHALL BE PROVIDED BY CONTRACTOR. SEE DETAILED FOR DETAILS.

THIRD FLOOR PARIAL PLAN

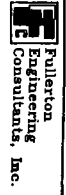
SCALE: 1/8" = 1'-0"



4500 GERRARD AVENUE
OVERLAND PARK, KS 66204



WVCC International, Inc.
1800 N. WYOMING ST.
SUITE 100
OVERLAND PARK, KS 66204
TEL: 620-795-5901 FAX: 620-795-5903



Pulverton
Engineering
Consultants, Inc.
1500 N. WOODS RD. SUITE 600
ROCKY HILL, IL 60670
TEL: 630-797-0700
FAX: 630-797-0705

THIS DRAWING IS THE PROPERTY OF WVCC INTERNATIONAL, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF WVCC INTERNATIONAL, INC. IS PROHIBITED.

NO.	DATE	DESCRIPTION	BY
1	05-18-04	S&B REVISED	WVCC

DATE REVISION: _____

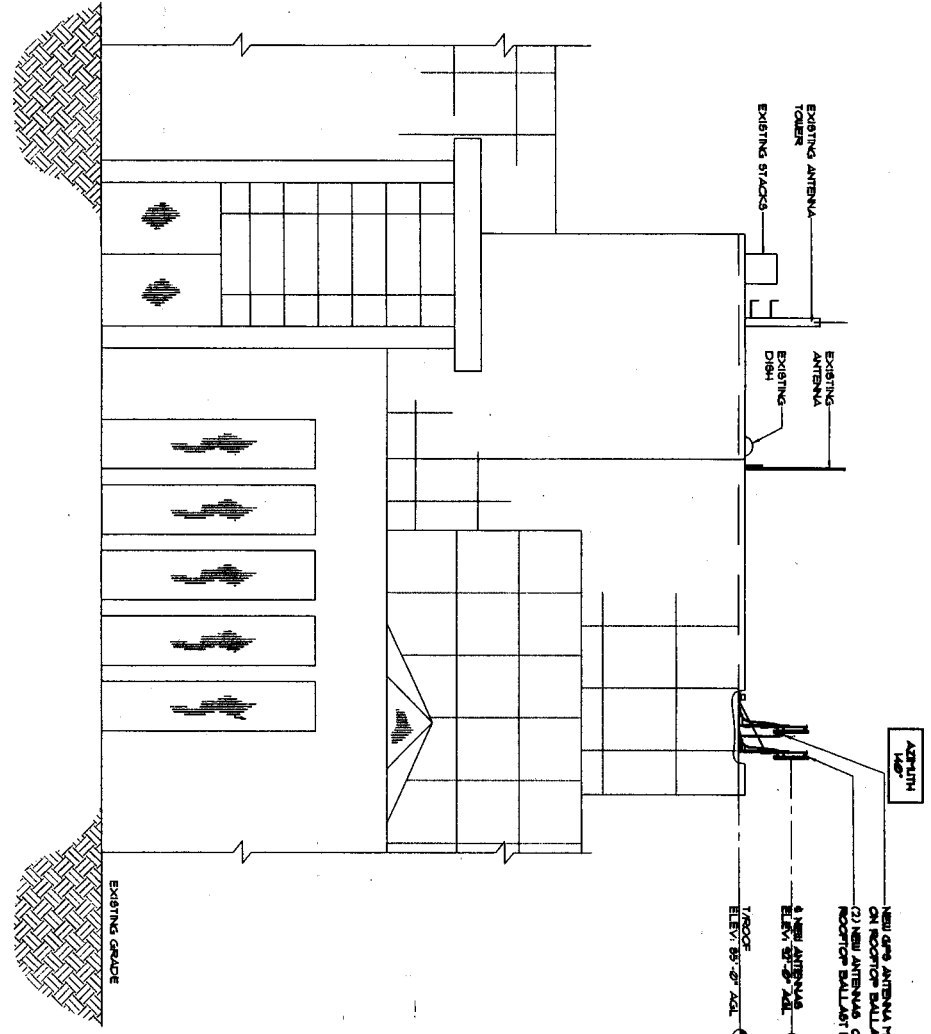
SITE NAME:
**SHERIDAN
HOSPITAL
ROOFTOP**

SITE NUMBER:
CH60XC028-C

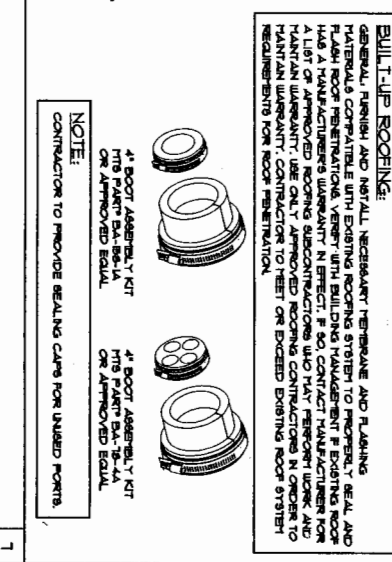
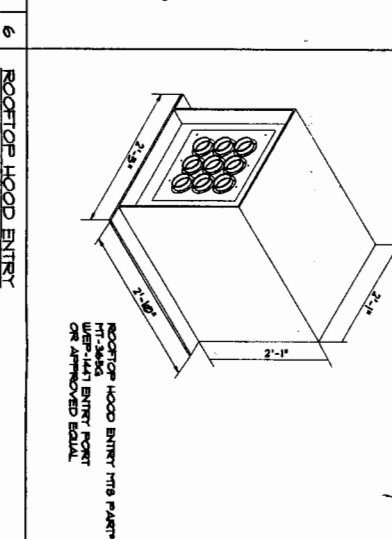
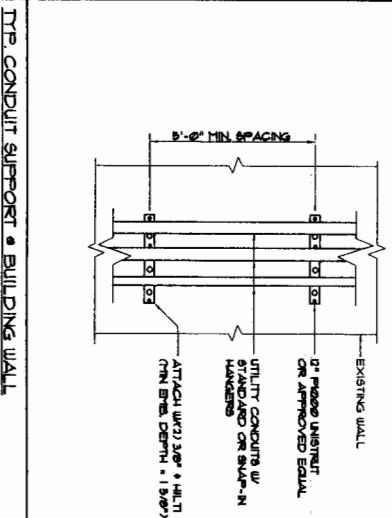
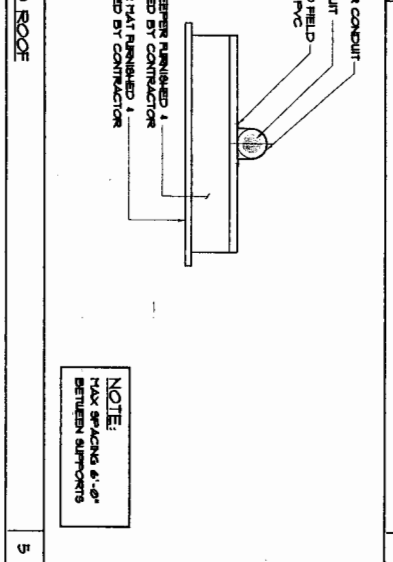
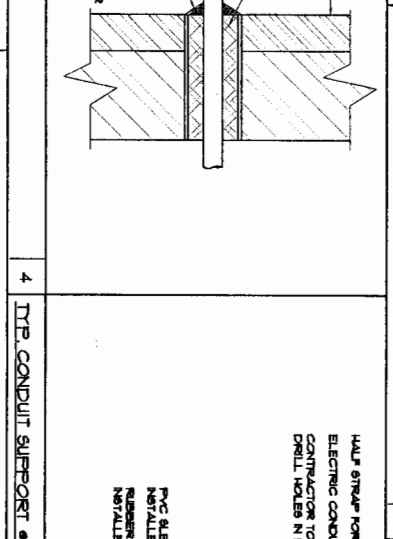
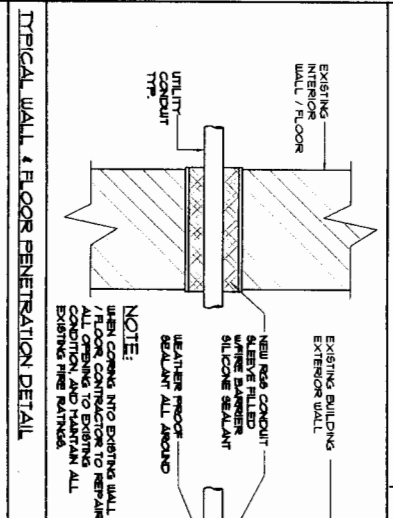
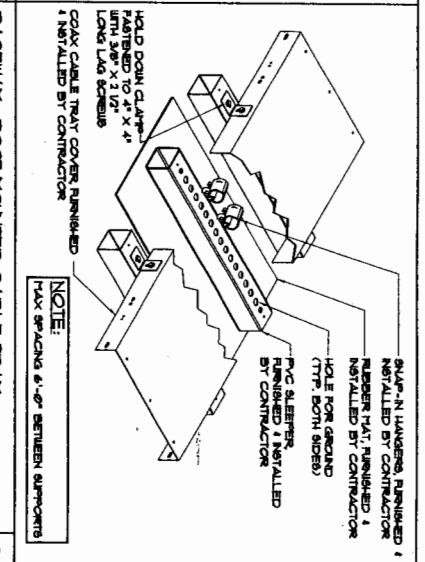
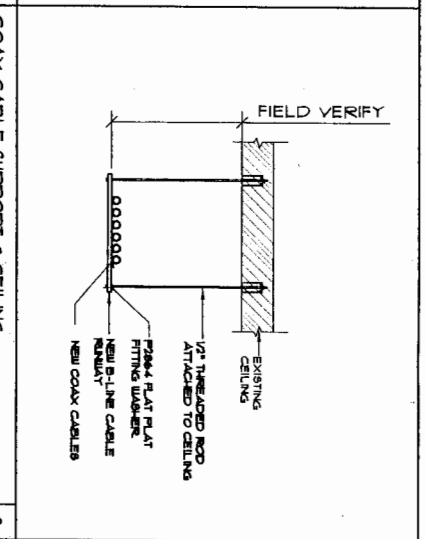
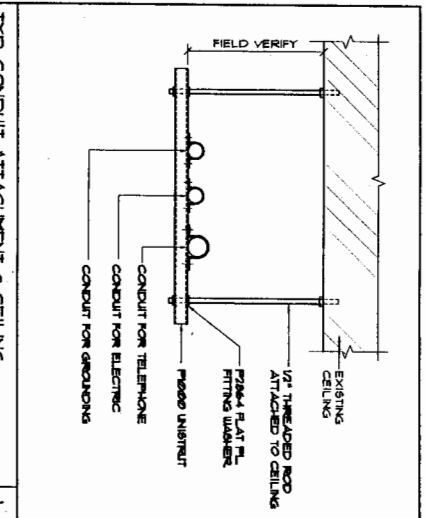
SITE ADDRESS:
**504 CENTER ST.
ELAN, IL 60020**

SHEET NAME:
**SITE
ELEVATION**

SHEET NUMBER:
C-3



EAST ELEVATION
SCALE: 3/32" = 1'-0"



1	2	3	4	5	6	7
TYP. CONDUIT ATTACHMENT • CEILING	COAX CABLE SUPPORT • CEILING	FACEWAY - ROOF MOUNTED CABLE TRAY	TYP. WALL & FLOOR PENETRATION DETAIL	TYP. CONDUIT SUPPORT • ROOF	TYP. CONDUIT SUPPORT • BUILDING WALL	ROOF TOP HOOD ENTRY

4500 SPRING PARKWAY
OVERLAND PARK, KS 66204

WALCO
The Warehouse and more than that.

LLC International, Inc.
400 ROOSEVELT RD.
BUILDING A SUITE 210
OLDFIELD LANE ROAD
TEL: 630-786-2800 / FAX: 630-786-3880

Fullerton
Engineering
Consultants, Inc.
5700 W. HICKING RD. SUITE 4000
ROSEMONT, ILLINOIS 60069
TEL: 631-757-0700
FAX: 631-757-0705

THE STANDARD & SHERMAN
ATTORNEYS AT LAW
110 N. WASHINGTON ST. SUITE 1100
CHICAGO, ILLINOIS 60602
TEL: 312-577-4000
FAX: 312-577-4001
WWW.STANDARD-AND-SHERMAN.COM

DATE ISSUED: _____

TITLE: SHERMAN
SHERMAN
HOSPITAL
ROOFTOP

SITE NUMBER:
CH60XC028-C

SITE ADDRESS:
54 CENTER ST.
BLAIN, IL 60009

SHEET NAME:
SITE DETAILS

SHEET NUMBER:
C-4



4000 PARKWAY
OVERLAND PARK, KS 66209



YLCC
LCC International, Inc.
660 ROOSEVELT RD.
CHICAGO, IL 60605
TEL: 312-796-5000 FAX: 312-796-5000

Pullerton
Engineering
Consultants, Inc.
1500 N. MICHIGAN RD. SUITE 400
ROOSEVELT, ILLINOIS 60608
TEL: 847-521-0700
FAX: 847-521-0705

THIS DRAWING IS THE PROPERTY OF PULLERTON ENGINEERING CONSULTANTS, INC. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF PULLERTON ENGINEERING CONSULTANTS, INC. IS PROHIBITED.

DATE	BY	DESCRIPTION
08-28-04	3008 RBV/BJW	REVISED

DATE ISSUED: _____

SITE NAME:
SHERIDAN HOSPITAL ROOFTOP

SITE NUMBER:
CH00XC02B-C

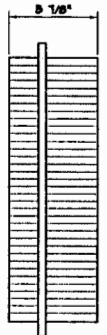
SITE ADDRESS:
**554 CENTER ST.
EAST, ILL. 60600**

SHEET NAME:
EQUIPMENT DETAILS

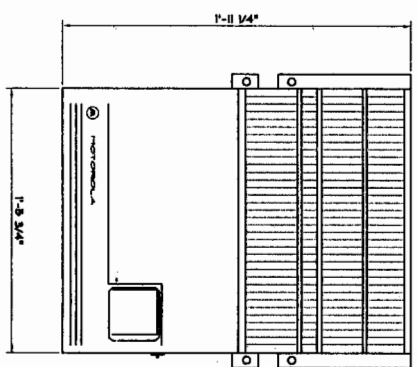
SHEET NUMBER:
C-5

4	MICROCELL UNIT
5	PRIMARY SURGE SUPPRESSOR
6	

MICROCELL CABINET
DIMENSIONS:
HEIGHT: 23.27"
WIDTH: 17.17"
DEPTH: 5.50"
WEIGHT: 92.9 LBS



TOP VIEW

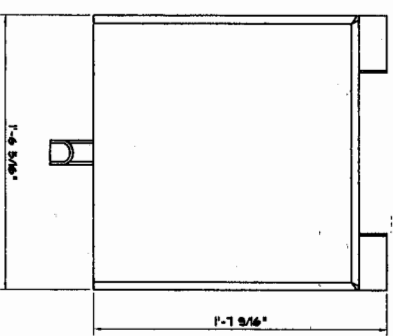


FRONT VIEW

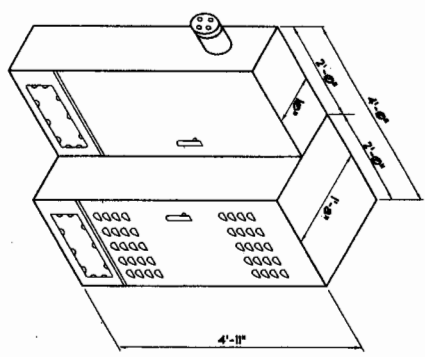
SURGE SUPPRESSOR
DIMENSIONS:
HEIGHT: 19.00"
WIDTH: 18.50"
DEPTH: 4.83"
WEIGHT: 24.26 LBS



TOP VIEW



FRONT VIEW



SPECIFICATIONS FOR EPC-MINI CABINET

POWER CABINET
DIMENSIONS:
HEIGHT: 23"
WIDTH: 17"
DEPTH: 50 LBS

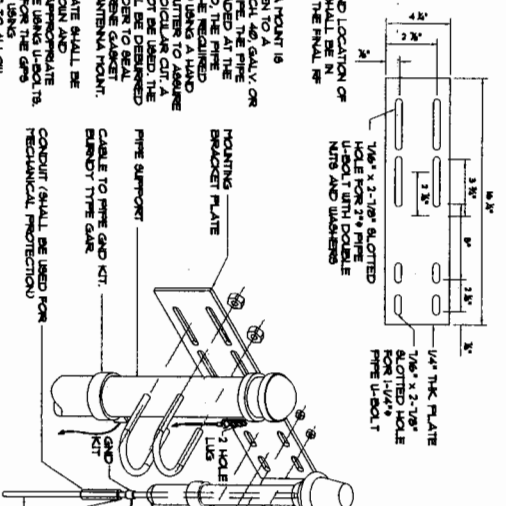
TELCO CABINET
DIMENSIONS:
HEIGHT: 29"
WIDTH: 24"
DEPTH: 18 LBS

EPC-MINI CABINET

ANTENNA	SECTOR	ANTENNA TYPE	FEED ANTENNA	LENGTH	SIZE	COLOR CODE (REFER TO SPEC'S)	THIRD RING
MICROCELL	A3711M	E75 P990-11-640P12	-1	12'x10'	1 1/2"	YELLOW (Y)	WHITE (W)
			-2	12'x10'	1 1/2"	YELLOW (Y)	WHITE (W)
			-3	12'x10'	1 1/2"	YELLOW (Y)	WHITE (W)
MICROCELL	A3711M	E75 P990-11-640P12	-1	12'x10'	1 1/2"	RED (R)	BROWN (B)
			-2	12'x10'	1 1/2"	RED (R)	BROWN (B)
			-3	12'x10'	1 1/2"	RED (R)	BROWN (B)
MICROCELL	A3711M	E75 P990-11-640P12	-1	12'x10'	1 1/2"	RED (R)	WHITE (W)
			-2	12'x10'	1 1/2"	RED (R)	WHITE (W)
			-3	12'x10'	1 1/2"	RED (R)	WHITE (W)
PRIVACY GPS ANTENNA							GRAY

NOTES:
 1. ANTENNA CABLE LENGTHS HAVE BEEN DETERMINED BASED ON THESE PLANS. CABLE LENGTHS LISTED ARE APPROXIMATE AND ARE NOT INTENDED TO BE USED FOR FABRICATION DUE TO FIELD CONDITIONS. ACTUAL ANTENNA CABLE LENGTHS REQUIRED MAY VARY FROM LENGTHS TABLED. CONTRACTORS MUST FIELD VERIFY ANTENNA CABLE LENGTHS PRIOR TO ORDER.
 2. ACTUAL COAXIAL ANTENNA CABLE DIAMETERS WILL BE DETERMINED BY SPENT PCS.
 3. ALL MAIN CABLES WILL BE COLOR CODED AT (3) THREE LOCATIONS WITH 3" COLORED TAPE
 A. AT TOP OF UTILITY
 B. BOTTOM OF UTILITY
 C. NEAR BOTTOM UTILITY
 4. CABLES TO BE INSTALLED AND SWEEP TESTED ACCORDING TO SPEC 3.0903.00201 ANTENNA TRANSMISSION LINE ACCEPTANCE TESTING FOR SPENT PCS.
 5. ALLEN ANTENNAS PER REQ# 602.
 6. THE FIRST RING IS THE CLOSEST COLOR TO END OF CABLE.

ANTENNA CABLE CONFIGURATION & CODING

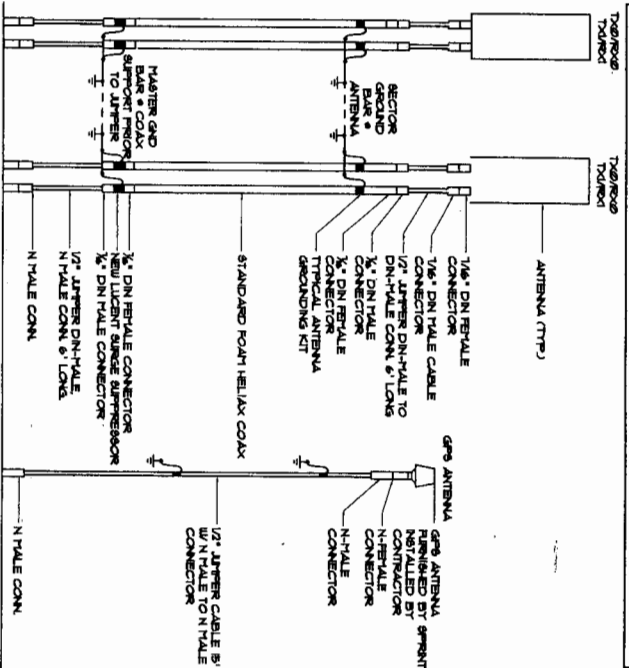


NOTE:
 1. THE ELEVATION AND LOCATION OF THE GPS ANTENNA SHALL BE IN ACCORDANCE WITH THE FINAL PER APPROVAL.
 2. THE GPS ANTENNA POINT IS DESIGNED TO FIT OVER A 3/4" STAND-AND 1/4" SOL 40 GALV OR 1/2" SOL 40 GALV. THE ANTENNA POINT END OF THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH (MIN. OF 8" DRIVING A HAND AROUND THE ANTENNA) TO MAINTAIN A 4" SPACED FERRULES. THE CUT PIPE END SHALL BE DEBURRED AND STROGN IN ORDER TO SEAL AND ATTACHED TO THE ANTENNA POINT.
 3. THE MOUNTING PLATE SHALL BE ATTACHED AS SHOWN AND THE SUPPORT STRUCTURE USING U-BOLTS. THE SUPPORT PIPE FOR THE GPS SHALL BE MOUNTED USING OVERSIZED U-BOLTS TO ALLOW FOR TILT/ADAPTATION TO THE GPS ANTENNA IS MOUNTED WITHIN 2" OF VERTICAL AND THE BASE OF THE ANTENNA IS WITHIN 2" LEVEL.
NOTE:
 OVERSIZED U-BOLT PROVIDED TO ALLOW 2" TILT/ADAPT TO ACHIEVE TOLERANCE.

GPS MOUNTING AND GROUNDING

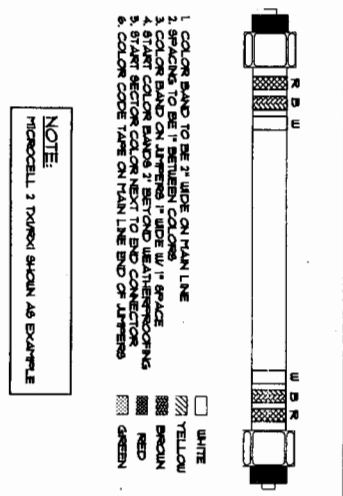
SCALE: NONE

NOTE:
 1. ALL ANTENNAS, COAXIAL CABLE AND GROUND KITS SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR.
 2. INSTALL ALL MATERIALS PER SPENT'S SPECIFICATIONS AND MANUFACTURER RECOMMENDATIONS.
 3. DO NOT INSTALL GROUND KIT ON CABLE BENDS.



TYPICAL ANTENNA AND CABLE CONFIGURATION

SCALE: NONE



NOTE:
 MICROCELL 3 TD900I SHOWN AS EXAMPLE

COAX CABLE COLOR CODE CHART



6500 Sprint Parkway
 Overland Park, KS 66151



Fullerton
 Engineers
 & Consultants, Inc.

3700 E. WOODS RD., SUITE 200
 ROSEMONT, IL 60018
 TEL: 630-253-0500
 FAX: 630-253-0700

3613 MONROE ST. THE WASHINGTON FIELD OFFICE
 NATIONAL ARCHIVING CONSULTING INC.
 4401 W. ILLINOIS ST. SUITE 100
 PHOENIX, AZ 85026
 TEL: 602-992-8877
 FAX: 602-992-8877

CHECKED BY	DATE	DISPOSITION	BY
JP			
	09-15-04	SUP REVIEW	WDS

DATE ISSUED: _____

SITE NAME:
**SHERMAN
 HOSPITAL
 ROOFTOP**

SITE NUMBER:
CH60XC02B-C

SITE ADDRESS:
 844 CENTER ST.
 ELLEN, IL 60020

SHEET NAME:
**ANTENNA
 DETAILS**

SHEET NUMBER:
C-6

NOTE:
THIS BILL OF MATERIALS SHALL BE PREPARED
BASED UPON INFORMATION PROVIDED BY SPRINT.

BILL OF MATERIALS

SITE NAME: SHERMAN HOSPITAL ROOFTOP SITE NO.: CH60XC028

ITEM#	MANUFACTURER	NAME	MANUFACTURER PART NO.	QNS NO.	QTY.	TOTAL LENGTH (FT. ORDERED)
1	RF5	1-1/4" LCF114-50J COAX CABLE FOR MAINLINE (LENGTH x 4 + 25%)	LCF114-50J	4122304955	N/A	425'
2	RF5	7/16" DIN FEMALE CONNECTOR FOR 1-1/4" LCF114-50J COAX CABLE	716F-LCF114-072	00000081416	8	N/A
3	RF5	1/2" LCF12 DIN MALE-DIN MALE 6' PREMIUM JUMPER	717M-L12-060P7	4122390093	6	N/A
4	RF5	1/2" LCF DIN-MALE N-MALE 6' PREMIUM JUMPER	815414-006	4122420093	6	N/A
5	RF5	1-1/4" SNAP-IN HANGER KIT (10)	SNAP-114	4122180093	8	N/A
6	RF5	1-1/4" GROUND KIT - 2 HOLE CRIMP LUG	GKFOR124-114	4122550093	12	N/A
7	RF5	1-1/4" HOISTING GRIP	HOIST1-114L	4122110093	N/A	N/A
8	RF5	WEATHERPROOFING KIT	WPFK-1	4122610093	12	N/A
9	RF5	1/2" LCF12-50J COAX CABLE FOR GPS	LCF12-50J	4122324955	N/A	0'
10	RF5	7/16" DIN MALE CONNECTOR FOR 1/2" LCF12-50J COAX CABLE	716M-LCF12-070	0410210093	0	N/A
11	RF5	N MALE CONNECTOR FOR 1/2" LCF12-50J	NM-LCF12-070	0410200093	0	N/A
12	RF5	1/2" SCF12-50J COAX CABLE (SUPERFLEX) FOR GPS	811026-001	4121164955	N/A	50'
13	RF5	7/16" DIN MALE CONNECTOR FOR 1/2" SCF12-50J COAX CABLE (SUPERFLEX)	734832	4121430093	N/A	N/A
14	RF5	N MALE CONNECTOR FOR 1/2" SCF12-50J COAX CABLE (SUPERFLEX)	734864	4121460093	N/A	N/A
15	HARGER	1/4" X 4" X 12" TINNED GROUND BAR	TGB1144129PFC5	0362004135	2	N/A
16	HARGER	1/4" X 4" X 24" TINNED GROUND BAR	TGB1144249PR	0362044135	2	N/A
17	HARGER	5/8" X 10" CLAD GROUND ROD	5810	0363284135	N/A	N/A
18	TRANSPECTOR	FPC-AC 4 20" TELCO CABINET	523061	XXXXX	1	N/A
19	ET6	ANTENNAS (56" X 8" X 2 1/2")	RR90-17-04DPL2	XXXXX	2	N/A

BILL OF MATERIALS

SCALE: NONE



LCC International, Inc.
4600 ROOSEVELT RD.
DUBLINOVA, VA 22029
TEL: 800-799-8001 FAX: 520-799-8003

Pullertown Engineering Consultants, Inc.
3100 E. JACOBS RD. SUITE 400
ROSELAND, ILLINOIS 60069
TEL: 847-751-0200
FAX: 847-751-0705

THIS DRAWING IS THE PROPERTY OF PULLERTOWN ENGINEERING CONSULTANTS, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE EXPRESS WRITTEN CONSENT OF PULLERTOWN ENGINEERING CONSULTANTS, INC.

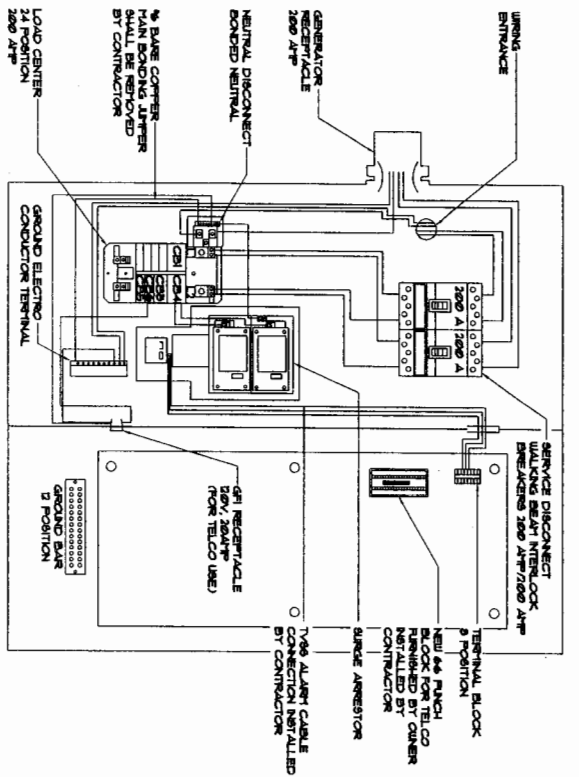
DATE	DESCRIPTION	BY
05-18-04	50% REVIEW	SPD

DATE ISSUED: _____
SHEET NAME: SHERMAN HOSPITAL ROOFTOP
SITE NUMBER: CH60XC028-C

SITE ADDRESS:
504 CENTER ST.
ELKHART, IN 46520

SHEET NUMBER: C-7

BILL OF MATERIALS LCC



CIRCUIT BREAKER DESIGNATIONS

U	L	DESCRIPTION	CB DESIGN	LC NUMBER	CB DESIGN	DESCRIPTION	U	L
B9A		FEED (BY CONTRACTOR)	CBI	1	CBI	FEED (BY CONTRACTOR)	B9A	
B9A		AC SURGE PROTECTION	CB3	2	CB3	TOWER LIGHTS (IF NEEDED)	B9A	
60A		GENERATOR CHARGER	CB5	3	CB5	TELCO GEN/LIGHTS	60A	
30A		FEED (BY CONTRACTOR)	CB4	4	NA	20A		
30A		FEED (BY CONTRACTOR)	CB4	5	NA	20A		

PANEL PFC

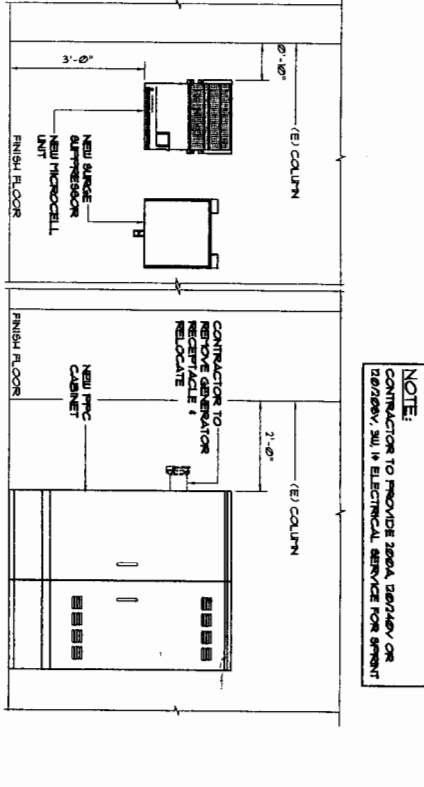
SERVICES 240V/120 PH 3W
MAIN BREAKER SIZE 200A/10P
MINIMUMS RATING 10000 AMP/8 FT6 5TH

TYPE OF LOAD	LOAD IN VOLT-AMPS	CIRCUIT BREAKER	CIRCUIT FUSE	CIRCUIT BREAKER	LOAD IN VOLT-AMPS	TYPE OF LOAD
BTS 1	1000	B9A/1P	1	B9A/1P	1000	BTS 2
GF RECEPTACLE	180	20A/1P	1	20A/1P	180	SECURITY LIGHT
FEED IN TELCO PANEL	300	30A/1P	1	30A/1P	300	AC SURGE PROTECTOR
TELCO PANEL	180	20A/1P	1	20A/1P	180	
NON-CONTINUOUS MOTOR	400	30A/1P	1	30A/1P	400	TOTALS
TOTALS	1060	1060		1060	1060	

LOAD CALCULATION

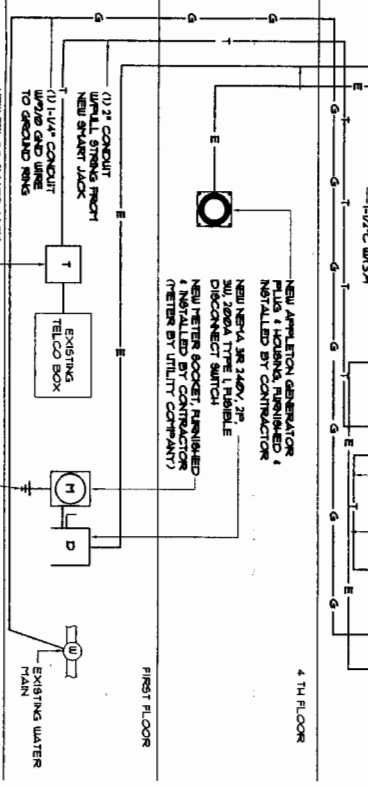
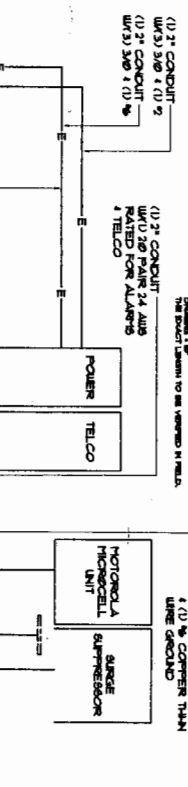
TYPE OF LOAD	NVA CONNECTED	DEMAND FACTOR	NVA DEMAND	CONNECTED	DEMAND
LIGHTING	63	1.0	63	53 AMPS	53 AMPS
RECEPTACLE (FLOOR & WALL)	81	1.0	81	69 AMPS	69 AMPS
CONTINUOUS MOTOR	204	1.0	204	175 AMPS	175 AMPS
NON-CONTINUOUS MOTOR	63	0.7	44	38 AMPS	38 AMPS
OTHER	216	1.0	216	185 AMPS	185 AMPS
TOTALS (NVA)	527		508	431 AMPS	431 AMPS
TOTALS (AMPS)				431	431

PFC CABINET POWER SPECIFICATIONS



NOTE:
CONTRACTOR TO PROVIDE 200A, 200/100V OR 100/200V, 3W 1Ø ELECTRICAL SERVICE FOR SPENT

CONDUITS SIZE & LENGTH	SERVICE	SIZE	LENGTH (FT)
1"	ELECTRIC	2 1/2"	200' ±
1"	TELCO	2 1/2"	200' ±



PFC CABINET POWER SPECIFICATIONS

ADD SPENT ABOUT OVERHEAD PANE (S) 3413

WALCO
The Way We Do It

LCC International, Inc.
800 ROOSEVELT RD
BUILDING A SUITE 210
ALLEN, TEXAS 75015
TEL: 409-750-1100 FAX: 409-750-3800

Fullerton Engineering Consultants, Inc.
5100 W. HICKORY RD. SUITE 100
ROSEBOLT, TEXAS 75089
TEL: 941-331-0700
FAX: 941-331-0705

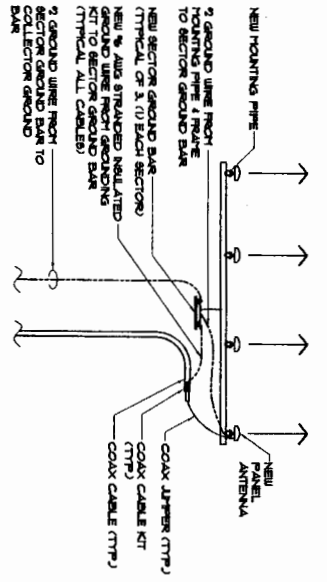
SHERIDAN HOSPITAL ROOFTOP

SITE NUMBER: **CH60XC028-C**

SITE ADDRESS: **334 CENTER ST. ELAN, IL 60020**

SHEET NAME:
SINGLE LINE DIAGRAM & DETAILS

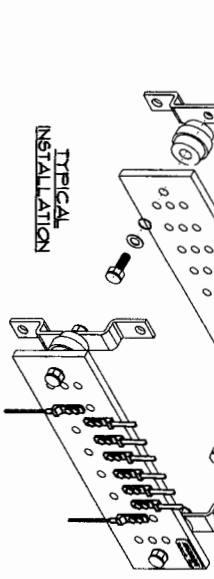
SHEET NUMBER:
E-2



TYPICAL ANTENNA SECTOR GROUNDING

LEGEND

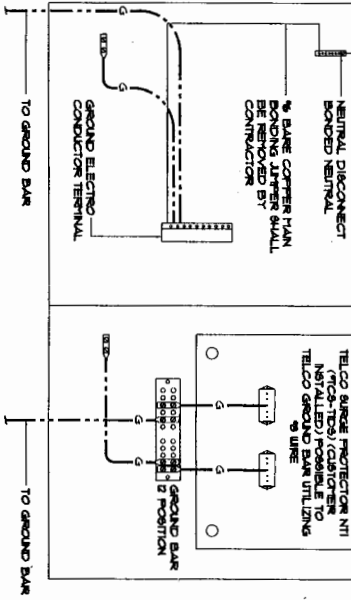
1. ALL GROUND BARS SHALL BE MANUFACTURED PER DRILLED CENTRAL MATCHING STANDARD TELECOM T110 HOLE LUGS CONNECTORS. SOLID COPPER BARS, TINED VANADIUM, INSULATORS SHALL BE NEUTRON INSULATORS CAT. # 30414 EQUAL.
2. INSULATORS.
3. 5/8" LOCKWASHERS.
4. MOUNTING BRACKET.
5. 5/8" x 1 1/2" ULCSBOLTS.
6. GROUND BAR SHALL BE SIZED TO ACCOMMODATE ALL GROUNDING CONNECTIONS REQUIRED PLUS 50% SPARE CAPACITY.
7. APPLY COPPER SHIELD TO EXPOSED AREA OF GROUND BAR.
8. ALL GROUND BARS TO BE TINED, SIZES TO BE APPROVED BY SPRINT REPRESENTATIVE.
9. ALL LEADS FROM GROUND BAR TO GROUND RINGS TO BE LABELED WITH METAL, DO NOT DISCONNECT TAGS.
10. WELDED CONNECTIONS AT GROUND BAR WILL NOT BE ACCEPTED.



TYPICAL GROUND BAR DETAILS

GASWELDED CONNECTIONS OR APPROVED EQUAL		BUSHBY CONNECTIONS OR APPROVED EQUAL	
	PARALLEL HORIZONTAL CONDUCTORS. PARALLEL THROUGH CONNECTION OF HORIZONTAL TYPE #1.		HORIZONTAL STEEL SURFACE TO FLAT STEEL SURFACE OR PIPE TYPE #1.
	HORIZONTAL SPLICE. SPlice OF HORIZONTAL CABLES.		VERTICAL STEEL SURFACE CABLE DOWN AT TOP OF GROUND SURFACE INCLUDING PIPE TYPE #6.
	VERTICAL PIPE. CABLE DOWN AT TOP OF GROUND SURFACE INCLUDING PIPE TYPE #6.		ROD JOINTS. FIELD MANUFACTURED THROUGH LONG BARREL LENGTH TYPE #A-1.

TYPICAL WELDING CONNECTION



TYPICAL SINGLE LINE DIAGRAM

Lead from Sprint
Ground Plan to 04714

MLCC International, Inc.
600 ROOSEVELT RD.
DUNELAND, NJ 08028
TEL: 609-261-5897 FAX: 609-261-5893

3700 W. MADISON RD. SUITE 500
ROSEMONT, ILLINOIS 60068
TEL: 631-751-0700
FAX: 631-751-0705

THE DRAWING IS THE PROPERTY OF PULLETON ENGINEERING CONSULTANTS, INC. IT IS TO BE EXCLUDED USE OF THIS DRAWING FOR ANY OTHER PROJECT WITHOUT THE COMBINED WRITTEN CONSENT OF PULLETON ENGINEERING CONSULTANTS, INC. IS PROHIBITED.		
DESIGNED BY:	JR	
APPROVED BY:	ML	
DATE:	08-28-04	
DESCRIPTION:	90% RF/TELE	3170
SHEET NUMBER		

DATE ISSUED: _____

SITE NAME: **SHERMAN HOSPITAL ROOFTOP**

SITE NUMBER: **CH0XCC078-C**

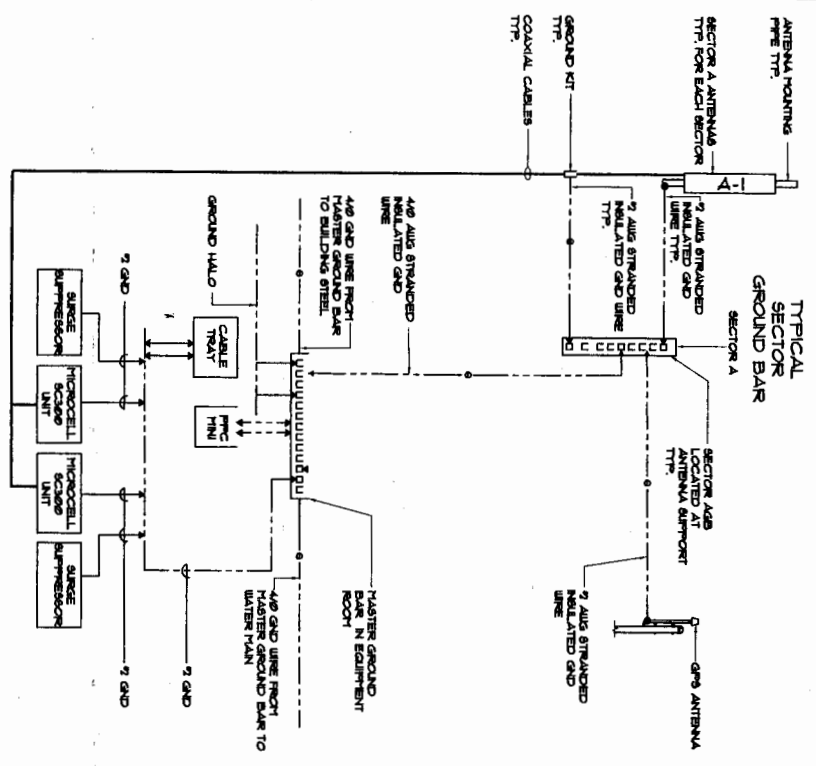
SITE ADDRESS: **534 CENTER ST. ELKHART, IN 46020**

SHEET NAME: **GROUNDING DETAILS**

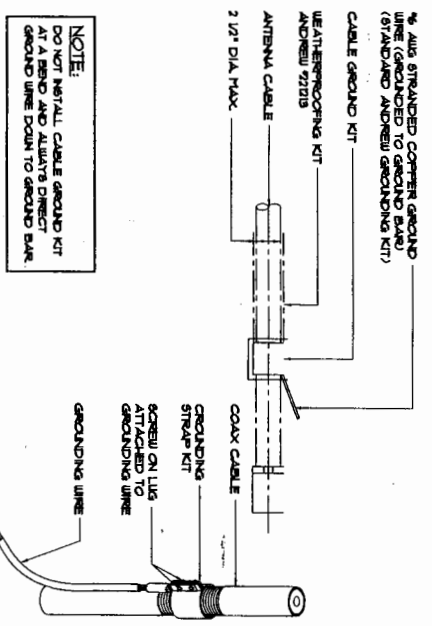
SHEET NUMBER: **EG-2**

NOTE:
 ONLY ONE ANTENNA FROM NON-DRAINING
 CLASST. GROUNDING FOR ALL ANTENNAS
 IN ALL SECTORS IS TYPICAL, AS SHOWN

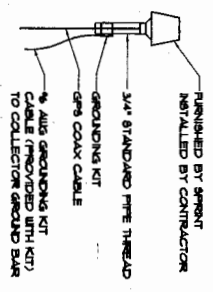
□ GROUND KIT ■ SOLDER CONNECTION
 ▲ MECHANICAL CONNECTION ● CAD WELD CONNECTION



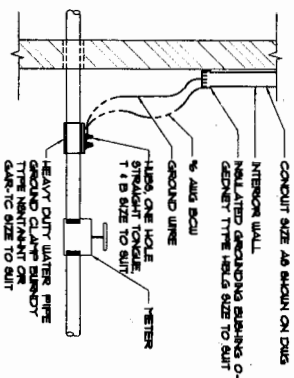
TYPICAL GROUNDING RISER DIAGRAM



NOTE:
 DO NOT INSTALL CABLE GROUND KIT
 ON A WALL. ALWAYS GROUND
 GROUND LINE DOWN TO GROUND BAR



GPS ANTENNA DETAIL



GROUNDING WATER MAIN

Sprint
 4440 Sprint Parkway
 Overland Park, KS 66204

YLCC
 LDC International, Inc.
 1000 West 10th Street
 Suite 200
 Overland Park, KS 66204
 TEL: 620-780-9871 FAX: 620-780-9883

Fullerton Engineering Consultants, Inc.
 5700 E. Hickam Road, Suite 8600
 Overland Park, KS 66209
 TEL: 913-241-8800 FAX: 913-241-8805

DESIGNED BY	SP
APPROVED BY	NS
DATE	DESCRIPTION
02-15-04	ISSUE

DATE REVISED: _____

SHEET NAME: SHERIDAN HOSPITAL ROOFTOP

SITE NUMBER: CH60XC026-C

SITE ADDRESS: 344 CENTER ST. ELKAN T. BROWN

SHEET NAME: GROUNDING DETAILS

SHEET NUMBER: EG-3