Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 031132

This is to certify that Sprint Spectrum Lp/n/a

has permission to Installation of 6 panel antenn[illegible]nd a 12[illegible].

AT ~~0~~ 503-525 Presumpscot St [illegible] 415 B006002

provided that the person or persons, [illegible]m or [illegible]on a[illegible]pting this permit shall comply with all of the provisions of the Statutes of M[illegible]ne and of the O[illegible]nces of the City of Portland regulating the construction, maintenance and u[illegible] of buildings and [illegible]ctures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

N[illegible]ication[illegible] inspe[illegible]n must g[illegible] and w[illegible]n permis[illegible]n procu b[illegible]e this [illegible]ding or [illegible]t thereo[illegible] la[illegible]d or c[illegible]sed-in. H[illegible]R NOT[illegible]EQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. [illegible]

Health Dept. _____

Appeal Board _____

Other _____

Department Name

9/05/03

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
03-1132		419A-A-5 415 B006002

Location of Construction:	Owner Name:	Owner Address:	Phone:
507-527 Presumpscot St	Sprint Spectrum Lp	Po Box 8430	201-995-4028
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
n/a	n/a	n/a Portland	
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
n/a	n/a	Additions - Commercial	~~R5~~ I-M

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Commercial / Telecommunications Facility	Telecommunications Facility / Installation of 6 panel antennas and a 12' x 20' shelter.	$246.00	$25,000.00	2

FIRE DEPT: ☑ Approved ☐ Denied

Signature:

INSPECTION: Use Group: U Type: NA

ANTENNAE 9/28/03

Signature:

Proposed Project Description:
Installation of 6 panel antennas and a 12' x 20' shelter.

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
gg	09/15/2003

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☒ Site Plan Exempt Signed	☐ Approved	☐ Approved w/Conditions
Maj ☐ Min ☐ MM ☐	☐ Denied	☐ Denied
Date: 9/22/03	Date:	Date:

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | DATE | PHONE

All Purpose Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 503 Presumpscott St. Portland, ME		
Total Square Footage of Proposed Structure: 12'x20' Shelter (240 sq. Ft)	Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart# 415 Block# 6006 Lot# 002	Owner: Sprint Spectrum L.P.	Telephone: (201) 995-4028
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: US Cellular 482 Congress St, Suite 502 Portland, ME 04101	Cost Of Work: $25,000.00 Fee: $ 246.00

Current use: Telecommunications Facility

If the location is currently vacant, what was prior use: N/A

Approximately how long has it been vacant: N/A

Proposed use: Installation of 6 panel antennas and a 12'x20' shelter

Project description:

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
RECEIVED
SEP 15 2003

Contractor's name, address & telephone: TBD

Who should we contact when the permit is ready: Ed Shaw

Mailing address: 482 Congress St. Suite 502 Portland, ME 04101

We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a $100.00 fee if any work starts before the permit is picked up. **PHONE:** (207) 77-9992 xx call

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APROVE THIS PERMIT.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: Edward A. Shaw	**Date:** 9/15/03

This is NOT a permit, you may not commence ANY work until the permit is issued.
If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4th floor of City Hall

Sprint Sites USA
535 E. Crescent Avenue
Ramsey, NJ 07446
NJRAMA0101
Voice 201 995 4033
Fax 201 995 4001

VIA FACSIMILE (207) 771-9993 AND US MAIL

August 26, 2003

Matthew Boles
LCC, International
482 Congress Street
Suite 502
Portland, ME 04101

Re: Sprint Sites USA (SSUSA) Site Number: NM03XC068-07
Carrier Site ID: 853337
Site Address: Presumpscot Street, Portland, ME 04101

Dear Mr. Boles:

Please be advised that Florida RSA #8, LLC, a Delaware limited liability company d/b/a U. S. Cellular is hereby authorized to act as applicant to file with the City of Portland for the necessary approvals and permits required for co-location on the above-referenced tower location.

Authorization to Act as Applicant

I, Michael N. Jones, Implementation Manager of Sprint Sites USA - Northeast Region, representing SprintCom, Inc. (property owner) authorize Florida RSA #8, LLC d/b/a U.S. Cellular and Matthew Boles to act as applicant, representing us before the County of Cumberland, Maine Planning/ Zoning Board (governing jurisdiction) to obtain zoning approval for any permit required for zoning compliance. Nevertheless, Florida RSA #8 d/b/a U.S. Cellular and Matthew Boles shall not be authorized to make any concessions or commitments to the County of Cumberland, Maine Planning/Zoning Board that may affect the operations or future leasing opportunities of Sprint PCS beyond what is shown on the preliminary site plan for site located on Presumpscot Street, Portland, Maine (City of Portland Tax Map 415, Block B, Lot 6) without obtaining the prior approval and consent of Sprint Sites USA, a division of SprintCom, Inc.

Should you have any questions please do not hesitate to contact David V. Weiner at 201-995-4033.

Michael N. Jones, Implementation Manager – Northeast Region Date 8/26/03

Sworn and subscribed before me this 26th day of AUGUST, 2003

State of New Jersey County of Bergen

Notary Public Signature

Notary Public Name Printed

My commission expires on

Affix Notary Seal:

David V. Weiner
Attorney At Law of
The State of New Jersey

LCC International
482 Congress Street
Suite 502
Portland, ME 04101
(207) 771-9992 (Office)
(207) 771-9993 (Fax)

September 15, 2003

Building Department
389 Congress Street
Portland, Me 04101

To Whom It May Concern:

United States Cellular Corporation (USCC) received a License authorizing them to provide service in Cumberland County. USCC has since hired LCC International to accomplish that objective. LCC is currently locating, leasing, and receiving zoning approvals and acquiring building permits for several approved locations in Portland.

The Sprint Tower located on 503 Presumpscot Street has been chosen as one of the approved locations. USCC is proposing to place (6) six cellular antennas at 135' on the tower and placing a 12' x 20' building at the base of the tower, as shown on the attached drawing.

USCC has already received an Exemption from Site Plan Review and would now like to receive a building permit to do the work as proposed.

We would appreciate consideration at the earliest possible date. In addition, I would appreciate it if you, or someone on your staff, would contact me if any additional material or information is required at this stage of the process.

Thank you for your consideration of this application.

Respectfully submitted,

Edward A. Shaw

Edward A. Shaw
LCC International Inc.
482 Congress Street
Suite 502
Portland, ME 04101

CBL: 41RA A012

Description of Proposed Development:

Place a 12'x16' Building near the base of the existing tower. (See Site Plan). Structural Analysis is in progress by Cost Engineering. Also we are placing 6 antennas on the tower

Please Attach Sketch/Plan of Proposal/Development

Criteria for Exemptions:
See Section 14-523 (4) on back side of form

		Applicant's Assessment (Yes, No, N/A)	Planning Office Use Only
a)	Within Existing Structures; No New Buildings, Demolitions or Additions		✓
b)	Footprint Increase Less Than 500 Sq. Ft.	Yes	✓
c)	No New Curb Cuts, Driveways, Parking Areas	Yes	✓
d)	Curbs and Sidewalks in Sound Condition/Comply with ADA	Yes	✓
e)	No Additional Parking/ No Traffic Increase	Yes	✓
f)	No Stormwater Problems	Yes	✓
g)	Sufficient Property Screening	Yes	✓
h)	Adequate Utilities	Yes	✓

Planning Division Use Only

Exemption Granted ✓ Partial Exemption _____ Exemption Denied _____

Planner's Signature _____ Date 4/13/12

White - Planning Office Pink - Inspections Yellow - Applicant

INDEX OF SHEETS

* = DENOTES SHEETS WHICH MAY CONTAIN FIELDWORK

NOTE: NOT ALL SHEETS LISTED ABOVE ARE INCLUDED IN "CUSTOMER" SET

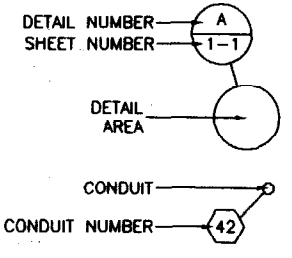
DESIGN PARAMETERS

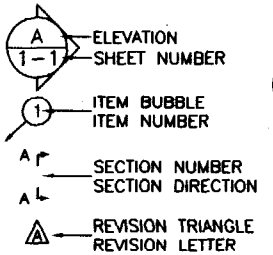
ROOF LIVE LOAD: 93 PSF
FLOOR LIVE LOAD: 208 PSF
GROUND SNOW LOAD: 150 PSF
WIND SPEED: 150 MPH/EXPOSURE C
SEISMIC ZONE FOR SBC & UBC: 4
SEISMIC DESIGN CATEGORY FOR IBC: D
OBC: USE GROUP - III; SITE CLASS - D
CONCRETE f'c: 5000 PSI AT 28 DAYS
CONCRETE UNIT WEIGHT: 110 PCF
MODEL MAY BE MIRROR IMAGE
SEE SHEET 0-1 FOR CODE SUMMARY

PHYSICAL PROPERTIES

SHELTER DIMENSIONS: 11'-3"w X 19'-4"l
SHIPPING DIMENSIONS: 11'-11"w X 20'-0"l X 10'-6 1/2"h
INTERIOR DIMENSIONS: 10'-2 1/4"w X 18'-3 1/2"l X 9'-5"h
SHELTER WEIGHT: 47,500 lbs

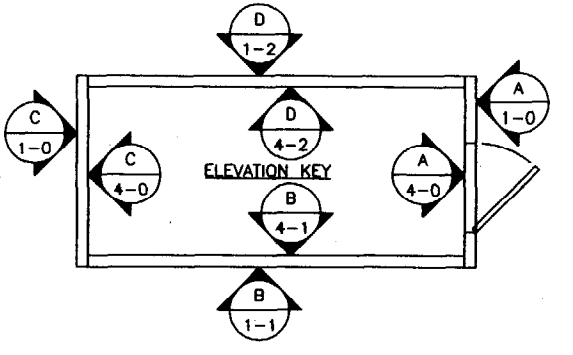
SYMBOLS





ABBREVIATIONS

A	AMPS
@	AT
BCW	BARE COPPER WIRE
BLK	BLACK
BLU	BLUE
BRN	BROWN
BLDG	BUILDING
BOCA	BUILDING OFFICIALS CODE ADMINISTRATION
℄	CENTERLINE
C/C	CENTER TO CENTER
CKT	CIRCUIT
CONC	CONCRETE
CU YD	CUBIC YARD
DIA/ø	DIAMETER
DIM	DIMENSION
DP	DOUBLE POLE
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DT	DOUBLE THROW
DWG	DRAWING
EA	EACH
EGR	EQUIPMENT GROUND RING
ELEC	ELECTRIC/ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRICAL NON-METALLIC TUBING
ELEV	ELEVATION
EQUIP	EQUIPMENT
EXT	EXTERIOR
FMLC	FLEXIBLE METALLIC LIQUID TIGHT CONDUIT
FNLC	FLEXIBLE NON-METALLIC LIQUID TIGHT CONDUIT
FND	FOUNDATION
FRP	FIBERGLASS REINFORCED POLYESTER
FS	FIRE SUPPRESSION
GALV	GALVANIZED
GEN	GENERATOR
GRN	GREEN
GND	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HOR	HORIZONTAL
IAW	IN ACCORDANCE WITH
IN	INCH
ID	INSIDE DIAMETER/INSIDE DIMENSION
INSUL	INSULATION
INT	INTERIOR
IMC	INTERNATIONAL MECHANICAL CODE
IPC	INTERNATIONAL PLUMBING CODE
IG	ISOLATED GROUND
JB	JUNCTION BOX
KW	KILOWATT
KO	KNOCKOUT
L	LEFT
LH	LEFT HAND
LTG	LIGHT/LIGHTNING
LL	LIVE LOAD
LV	LOW VOLTAGE
MFG	MANUFACTURER
MISC	MISCELLANEOUS
NEC	NATIONAL ELECTRIC CODE
NEG	NEGATIVE
NEMA	NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
NOM	NOMINAL
NO	NOMINALLY OPEN
NC	NOMINALLY CLOSED
NTS	NOT TO SCALE
OR	ORANGE
OD	OUTSIDE DIAMETER/OUTSIDE DIMENSION
OSB	ORIENTED STRAND BOARD
P	POLE
PDC	POWER DISTRIBUTION CABINET
POS	POSITIVE
LB	POUND (S)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
QTY	QUANTITY
RECPT	RECEPTACLE
RCPT	RECEIVER
REBAR	REINFORCING STEEL BAR
REQ'D.	REQUIRED
REV	REVISION
R	RIGHT
RH	RIGHT HAND
SHT	SHEET
1ø	SINGLE PHASE
SPDT	SINGLE POLE DOUBLE THROW
SPST	SINGLE POLE SINGLE THROW
SW	SINGLE POLE SWITCH
SQ FT	SQUARE FEET
SQ IN	SQUARE INCH
STD	STANDARD
SBC	STANDARD BUILDING CODE
SW	SWITCH
TEMP	TEMPERATURE
TSTAT	THERMOSTAT
3ø	THREE PHASE
3P	THREE POLE
3W	THREE WIRE
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES INC.
UBC	UNIFORM BUILDING CODE
UMC	UNIFORM MECHANICAL CODE
VENT	VENTILATION
V	VOLT
W	WATTS
WP	WEATHER PROOF
WLD	WELDED
WWF	WELDED WIRE FABRIC
WHT	WHITE
W/	WITH
W/O	WITHOUT
YEL	YELLOW



REV	BY	DATE	DESCRIPTION	APP.BY	DATE
A	BMW	1/10/03	ADDED SHEETS 2-1, AND 2-2 TO INDEX OF SHEETS	VGH	1/10/03

ENGINEER SEAL

CellXion Wireless Industry
Solutions for the
Corporate Office & Manufacturing Facility
5031 Hazel Jones Road
Bossier City, LA 71111
(voice) 318-213-2900 (fax) 318-213-2910
www.cellxion.com

CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
COVER SHEET

FILENAME: USC71/SUSC710-0	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/7/03
CHK. BY: V. HASSELL	DATE: 1/7/03
ENG. BY: K. BARNETT	DATE: 1/7/03
APP. BY: S. COLVIN	DATE: 1/7/03
SHEET NO./PART NO.: 0-0	
DRAWING NO.: SUSC71	REV: E

STATE	CODE SUMMARY	USE GROUP	CONST. TYPE
ALABAMA	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 1998 NATIONAL ELECTRICAL CODE	S-2	V-B
ALASKA	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2002 NATIONAL ELECTRICAL CODE	S-2	V-B
ARIZONA	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-N
ARKANSAS	1997 STANDARD BUILDING CODE 1997 STANDARD MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	VI-UNP
CALIFORNIA	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE CALIFORNIA TITLE 25	S-2	V-N
COLORADO	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	S-2	V-N
CONNECTICUT	1996 BOCA NATIONAL BUILDING CODE 1996 CT BASIC BUILDING CODE SUPPLEMENT 1996 INTERNATIONAL MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	B	5B
DELAWARE	1996 BOCA NATIONAL BUILDING CODE 1996 BOCA MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	B	5B
DISTRICT OF COLUMBIA	1996 BOCA NATIONAL BUILDING CODE 1996 INTERNATIONAL MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	B	5B
FLORIDA	2001 FLORIDA BUILDING CODE 1999 NATIONAL ELECTRICAL CODE	S-2	IV-UNP VI-UNP
GEORGIA	2000 STANDARD BUILDING CODE WITH GA AMEND. 2000 STANDARD MECHANICAL CODE WITH GA AMEND. 2002 NATIONAL ELECTRICAL CODE	S-2	VI-UNP
IDAHO	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2002 NATIONAL ELECTRICAL CODE	S-2	V-B
ILLINOIS	1996 BOCA NATIONAL BUILDING CODE 1996 INTERNATIONAL MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	B	5B
INDIANA	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2002 NATIONAL ELECTRICAL CODE	S-2	V-B
IOWA	1994 UNIFORM BUILDING CODE 1994 UNIFORM MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	S-2	V-N
KANSAS	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-N
KENTUCKY	2002 KENTUCKY BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2002 NATIONAL ELECTRICAL CODE	B	5B
LOUISIANA	1994 STANDARD BUILDING CODE 1994 STANDARD MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	VI-UNP

STATE	CODE SUMMARY	USE GROUP	CONST. TYPE
MAINE	1993 BOCA NATIONAL BUILDING CODE 1993 BOCA MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	B	5B
MARYLAND	2000 INTERNATIONAL BUILDING CODE W/ MOD. 2000 INTERNATIONAL MECHANICAL CODE 2000 INTERNATIONAL PLUMBING CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-B
MASSACHUSETTS	6TH MA STANDARD BUILDING CODE 2002 MA ELECTRICAL CODE	S-2	V-B
MICHIGAN	2000 MICHIGAN BUILDING CODE 2000 MICHIGAN MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	U	V-B
MINNESOTA	2003 MINNESOTA STATE BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2002 NATIONAL ELECTRICAL CODE	S-2	V-B
MISSISSIPPI	1997 STANDARD BUILDING CODE 1997 STANDARD MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	S-2	VI-UNP
MISSOURI	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-B
MONTANA	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-B
NEBRASKA	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2002 NATIONAL ELECTRICAL CODE	S-2	V-B
NEVADA	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	S-2	V-N
NEW HAMPSHIRE	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2002 NATIONAL ELECTRICAL CODE	B	5B
NEW JERSEY	1996 BOCA NATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	B	5B
NEW MEXICO	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-N
NEW YORK	2002 BUILDING CODE OF NEW YORK STATE 2002 MECHANICAL CODE OF NEW YORK STATE 2002 ELECTRICAL CODE OF NEW YORK STATE	S-2	V-B
NORTH CAROLINA	2002 NORTH CAROLINA BUILDING CODE 2002 NORTH CAROLINA MECHANICAL CODE 2002 NORTH CAROLINA ELECTRICAL CODE	S-2	V-B
NORTH DAKOTA	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-N
OHIO	2002 OHIO BUILDING CODE 2002 OHIO MECHANICAL CODE 2002 NATIONAL ELECTRICAL CODE	S-2	5B
OKLAHOMA	1998 BOCA NATIONAL BUILDING CODE 1998 BOCA MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	B	5B

STATE	CODE SUMMARY	USE GROUP	CONST. TYPE
OREGON	1997 UNIFORM BUILDING CODE W/ AMEND. 1998 INTERNATIONAL MECH. CODE W/ AMEND. 1999 NATIONAL ELECTRICAL CODE 1998 OREGON STRUCTURAL SPECIALTY CODE 1999 OREGON STATE MECHANICAL CODE	S-2	V-N
PENNSYLVANIA	1996 BOCA NATIONAL BUILDING CODE 1996 INTERNATIONAL MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	B	5B
RHODE ISLAND	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2000 IECC WITH 2001 SUPPLEMENT 2002 NATIONAL ELECTRICAL CODE	S-2	V-B
SOUTH CAROLINA	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-B
SOUTH DAKOTA	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-N
TENNESSEE	1998 STANDARD BUILDING CODE (SBC) 1997 STANDARD MECHANICAL CODE (SMC) 2000 FIRE PROTECTION CODE (NFPA) 2000 NATIONAL ELECTRICAL CODE (NEC)	S-2	VI-UNP
TEXAS	2000 INTERNATIONAL BUILDING CODE 2000 INTERNATIONAL MECHANICAL CODE 2000 IECC WITH 2001 SUPPLEMENT 1999 NATIONAL ELECTRICAL CODE	S-2	V-B
UTAH	1997 UNIFORM BUILDING CODE 1998 INTERNATIONAL MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-N
VERMONT	1996 BOCA NATIONAL BUILDING CODE 1996 BOCA NATIONAL MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	B	5B
VIRGINIA	1996 BOCA NATIONAL BUILDING CODE 1996 INTERNATIONAL MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	B	5B
WASHINGTON	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1998 NATIONAL ELECTRICAL CODE	B	V-N
WEST VIRGINIA	1998 BOCA NATIONAL BUILDING CODE 1996 INTERNATIONAL MECHANICAL CODE 1996 NATIONAL ELECTRICAL CODE	B	5B
WISCONSIN	2000 INTERNATIONAL BUILDING CODE W/ AMEND. 2000 INTERNATIONAL MECH. CODE W/ AMEND. 1999 NATIONAL ELECTRICAL CODE	S-2	V-B
WYOMING	1997 UNIFORM BUILDING CODE 1997 UNIFORM MECHANICAL CODE 1999 NATIONAL ELECTRICAL CODE	S-2	V-N

NOTES

1. THIS SHELTER NOT INTENDED FOR HUMAN HABITATION
2. OCCUPANT LOAD = 0, OHIO = 2
3. SPECIAL CONDITIONS: N/A
4. PERMISSIBLE TYPES OF GASES: N/A
5. SHELTER IS DESIGNED TO MEET HIGHER SNOW AND WIND LOADS. SHELTER HAS NO COUNTY PLACEMENT RESTRICTION IN THE STATE OF MARYLAND.
6. STATE INSIGNIA LABEL/DECAL IS LOCATED NEAR MAIN ELECTRICAL SERVICE PANEL.
7. DOOR MUST BE MINIMUM 90 MINUTE FIRE RATED IF USED IN 2 HOUR FIRE RATED SHELTER.
8. ENERGY CODE EVALUATION BASE ON 2000 INTERNATIONAL ENERGY CONSERVATION CODE WITH 2001 SUPPLEMENT.
9. NOT SUBJECT TO FLORIDA FIRE SAFETY CODE.
10. SHELTER HAS BEEN DESIGNED IN ACCORDANCE WITH THE CITY OF CHICAGO MUNICIPAL CODE.

OFFICIAL USE ONLY

SEAL

I hereby certify that this engineering document was prepared by me or my direct supervision and that I am a duly licensed professional Engineer under the laws of the State of Iowa.

signature date

Printed or typed name

My license renewal date is December 31, _____

Pages or sheets covered by my seal: _____

Date issued: _____

ENGINEER SEAL

CellXion
Solutions for the Wireless Industry
Corporate Office & Manufacturing Facility
5031 Hazel Jones Road
Bossier City, LA 71111
(voice) 318-213-2800 (fax) 318-213-2919
www.cellxion.com

CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
CODE SUMMARY

FILENAME: USC71/SUSC710-1	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/7/03
CHK. BY: V. HASSELL	DATE: 1/7/03
ENG. BY: K. BARNETT	DATE: 1/7/03
APP. BY: S. COLVIN	DATE: 1/7/03
SHEET NO./PART NO.: 0-1	
DRAWING NO.: SUSC71	REV: E

ITEM LIST

NO.	QTY	U/M	PART NO.	DESCRIPTION
1	1	EA.	900002	LOADCENTER, 30 SP., 200A, M.V.-FER, TVSS, NORTHERN TECHNOLOGIES
2	2	EA.	410205	POWER ENTRY, 2" X 8" GALVANIZED RIGID NIPPLE
3	1	EA.	400022	GENERATOR RECEPTACLE, 100A, 3W3P, CROUSE HINDS #AR1031-S22
4	1	EA.	410276	1 1/4" X 8" EMT NIPPLE CAP #170084 ON EXTERIOR
5	2	EA.	–	FLOOR BLOCKOUT, 8" X 25 1/2"
6	1	EA.	430084	INTERIOR LIGHT SWITCH, SPST, W/ 4" X 4" JB
7	1	EA.	540183	TELCO GROUND BAR, 2" X 14" X 1/4", TINNED
8	4	EA.	430034	DUPLEX RECEPTACLE, 20A, 125V
9	1	EA.	430033	GFCI RECEPTACLE, 20A, 120V, WITH 2" X 4" WP JB, W/ COVER 430384
10	1	EA.	CUSTOMER	TOWER LIGHT CONTROLLER, OPTIONAL, SUPPLIED BY CUSTOMER
11	1	EA.	470003	EXTERIOR LIGHT FIXTURE, 100W HPS WITH PHOTOCELL
12	2	EA.	470057	INT. LIGHT FIXTURE, 4', DUAL BULB, FLUOR., T8, W/BULB PN 470058, W/ELECT. BALLAST
13	1	EA.	530010	WAVEGUIDE ENTRY PORT, 16 PORT, 4"
14	1	EA.	520100	HVAC #2, 3 TON, 10 KW, EUBANK
15	1	EA.	520101	HVAC #1, 3 TON, 10 KW, WITH ECONOMIZER, EUBANK
16	2	EA.	460100	THERMOSTAT, SINGLE STAGE, HEAT/COOL
17	1	EA.	460101	LOW TEMPERATURE ALARM, DAYTON 2E206
18	1	EA.	460101	HIGH TEMPERATURE ALARM, DAYTON 2E206
19	1	EA.	490000	MAGNETIC DOOR ALARM CONTACTS
20	1	EA.	490005	SMOKE DETECTOR, 24V, PHOTOELECTRIC, SENTROL
21	1	EA.	CUSTOMER	ALARM BLOCK, CUSTOMER SUPPLIED
22	1	EA.	350008	TELCO BOARD, 3/8" X 4'-0" X 4'-0" CDX, WITH FRP COVER
23	2	EA.	510011	HAT BRACKET, TO MOUNT ITEM 52 TO WALL
24	1	EA.	500008	3670 DOOR, FRAME, & HARDWARE
25	1	EA.	570006	DOOR CANOPY, COMPOSITE, 2' X 4'
26	1	EA.	504503	DOOR LOCKSET, DEADBOLT, BEST BRAND
27	176	FT.	400050	HALO RING AND DROPS, #2 STRANDED GREEN COPPER WIRE
28	7	EA.	170004	GROUNDING PENETRATIONS, 1 1/4" SCH 40 PVC CAST @ 45°
29	1	EA.	480000	LETTER TRAY
30	1	EA.	400009	DOOR GROUND STRAP, 1/2" BRAIDED, 14" LONG
31	58	FT.	510000	CABLE TRAY, 12", ZINC CHROMATE
32	3	FT.	410119	CONDUIT, 1" LFMC
33	9	EA.	510069	CABLE TRAY HANGING ASSEMBLY, 12"
34	1	EA.	410155	CONNECTOR, LFMC, 1", 45°
35	1	EA.	170002	TELCO ENTRY, 4" SCH 40 PVC COUPLING
36	7	EA.	430005	JUNCTION BOX, 4" X 4"
37	1	EA.	410207	4" X 4" JB W/1/2" X 8" RIGID NIPPLE
38	2	EA.	410201	JUNCTION BOX, 4" X 4", W/ 1/2" X 8 1/2" RIGID NIPPLE
39	2	EA.	410182	JUNCTION BOX, 4" X 4", WITH 3/4" X 8 1/2" RIGID NIPPLE
40	4	EA.	510003	CABLE TRAY WALL MOUNTING ANGLE, 1 3/4" X 1 3/4", PAINTED
41	2	EA.	540182	GROUND BAR, 4" X 20" X 1/4" COPPER, TINNED
42	1	EA.	593017	ICE SHIELD, 2" X 2" X 1/4" ANGLE
43	8	FT.	400050	EQUIPMENT DROPS, #2 GREEN STRANDED COPPER WIRE
44	65	FT.	400073	GROUND JUMPERS, #4 GREEN STRANDED COPPER WIRE
45	3	FT.	510001	CABLE TRAY, 6", GOLD CHROMATE
46	1	EA.	410184	4" X 4" JB, W/ 1/2" X 7 1/2" RIGID NIPPLE
47	1	EA.	410112	CONDUIT, 1/2" LFMC
48	3	EA.	410111	CONDUIT, 3/4" LFMC, 8' LENGTHS
49	1	EA.	410146	CONNECTOR, 1/2" LFMC, 45°
50	3	EA.	410128	CONNECTOR, 3/4" LFMC, 45°
51	1	EA.	510085	CABLE TRAY, HORIZONTAL 90° BEND
52	1	EA.	510100	CABLE TRAY, VERTICAL 90° BEND
53	2	EA.	510084	CABLE TRAY, Y-JUNCTION
54	2	EA.	430034	DUPLEX RECEPTACLE, 20A, 125V
55	1	EA.	410224	1 1/2" X 8" RIGID NIPPLE W/CAP #170083
56	1	EA.	CUSTOMER	FIRE EXTINGUISHER, 10lb, DRY CHEMICAL, CUSTOMER SUPPLIED
57	4	EA.	400099	GROUND BAR DROPS, #2 SOLID TINNED CAD WELDED, 15'-0"
58	2	EA.	400099	WAVEGUIDE GROUND STRAP, #2 SOLID TINNED CAD WELDED, 8"
59	1	EA.	430008	BOX, 6" X 6" X 4", SCREW COVER, NEMA 1, FOR RECTIFIERS
60	1	EA.	410280	1/2" X5 1/2" RIGID NIPPLE
61	2	EA.	470057	INT. LIGHT FIXTURE, 4', DUAL BULB, FLOUR., T8, W/BULB PN 470058, W/ELECT. BALLAST
62	1	EA.	470084	INTERIOR LIGHT SWITCH, SPST, W/4" X4" JB
63		EA.		
64		EA.		
65		EA.		
66		EA.		
67		EA.		
68		EA.		
69		EA.		
70		EA.		

OPTIONAL ITEM LIST

NO.	QTY	U/M	PART NO.	DESCRIPTION
28	1	EA.	504506	LOCKSET, ELECTRONIC, SUPRA WITH LEVER HANDLE
		EA.		
		EA.		
		EA.		
		EA.		
		EA.		
		EA.		
		EA.		
		EA.		
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		EA.		
		EA.		
		EA.		
		EA.		
		EA.		
		EA.		
		EA.		
		EA.		
		EA.		

REV	BY	DATE	DESCRIPTION	APP.BY	DATE
D	BMW	3/27/03	REVISED PER MARKUP	VGH	3/27/03
B	BMW	1/24/03	CHG #55 TO 1 1/2" NIPPLE	VGH	1/24/03

ENGINEER SEAL

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5031 Hazel Jones Road
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(voice) 318-213-2900 (fax) 318-213-2919
www.cellxion.com

CUSTOMER:
U.S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
ITEM LIST

FILENAME: USC71\SUSC710-2

SCALE:	TOLERANCE:
NTS	
DRWN. BY: V. HASSELL	DATE: 01/07/03
CHK. BY: V. HASSELL	DATE: 01/07/03
ENG. BY: K. BARNETT	DATE: 01/07/03
APP. BY: S. COLVIN	DATE: 01/07/03

SHEET NO./PART NO.: 0-2

DRAWING NO.:	REV:
SUSC71	E

DOOR HARDWARE SCHEDULE

QTY	U/M	PART NO.	DESCRIPTION
3	EA.	504000	DOOR HINGES, 98
1	EA.	504100	CLOSER, SARGENT 1104, ALUM.
1	EA.	504113	HOLD OPEN, T-LATCH, 6" SS
1	EA.	504102	BUMPER, RUBBER STOP, BROWN
1	SET	504200	WEATHER STRIPPING, MAGNETIC
1	EA.	504201	SWEEP, WEATHER STRIPPING, 42"
1	EA.	504300	LOCKGUARD, 10", SS
1	SET	504401	THRESHOLD, 48", 2 PCS, ALUMINUM
1	EA.	504503	PULL HANDLE, CHROME
1	EA	570000	DOOR CANOPY, 48" PAINTED TO MATCH TRIM
1	EA.	504411	DRIP CAP, 42"

FINISH SCHEDULE

EXTERIOR			
	WALLS		EXPOSED AGGREGATE
	ROOF		LATEX ROOF COATING
	METALS		PPG, URETEK PAINT, CUSTOM COLOR MATCH
INTERIOR			
	WALLS		
		INSULATION	1 1/2" R-MAX NAILABLE BASE-TX
		WOOD	7/16" OSB SHEATHING
		EXPOSED	5/32" WOOD PANELING
	CEILING		
		INSULATION	2" R-MAX NAILABLE BASE-TX
		WOOD	7/16" OSB SHEATHING
		EXPOSED	5/32" WOOD PANELING
	FLOOR		
		EXPOSED	.100 VINYL TILE, CONGOLEUM CX-14, COLOR "WHITE/LIGHT PEBBLE"

EQUIPMENT LABEL SCHEDULE

QTY	U/M	PART NO.	DESCRIPTION
1	EA.	420006	LABEL, "GFCI"
1	EA.	420007	LABEL, "ALARM BLOCK"
1	EA.	420008	LABEL, "INTERIOR LIGHT"
1	EA.	420010	LABEL, "AC PANEL"
1	EA.	420011	LABEL, "LOW TEMP"
1	EA.	420012	LABEL, "THERMOSTAT #1"
1	EA.	420013	LABEL, "THERMOSTAT #2"
1	EA.	420015	LABEL, "HIGH TEMP"
1	EA.	420017	LABEL, "HVAC #2"
1	EA.	420018	LABEL, "HVAC #1"
1	EA.	420023	LABEL, "TRANSFER SWITCH"
1	EA.	420037	LABEL, "TVSS"
1	EA.	420025	LABEL, BRASS GREEN, 6" X 12"

BREAKER SCHEDULE

QTY	U/M	PART NO.	DESCRIPTION
2	EA.	400077	BREAKER, SQ D, 2P, 60A, PLUG IN
6	EA.	400076	BREAKER, SQ D, 2P, 30A, PLUG IN
3	EA.	400080	BREAKER, SQ D, 1P, 20A, PLUG IN
1	EA.	400181	BREAKER, SQ D, 1P, 15A, PLUG IN
	EA.		
	EA.		
	EA.		
	EA.		
	EA.		

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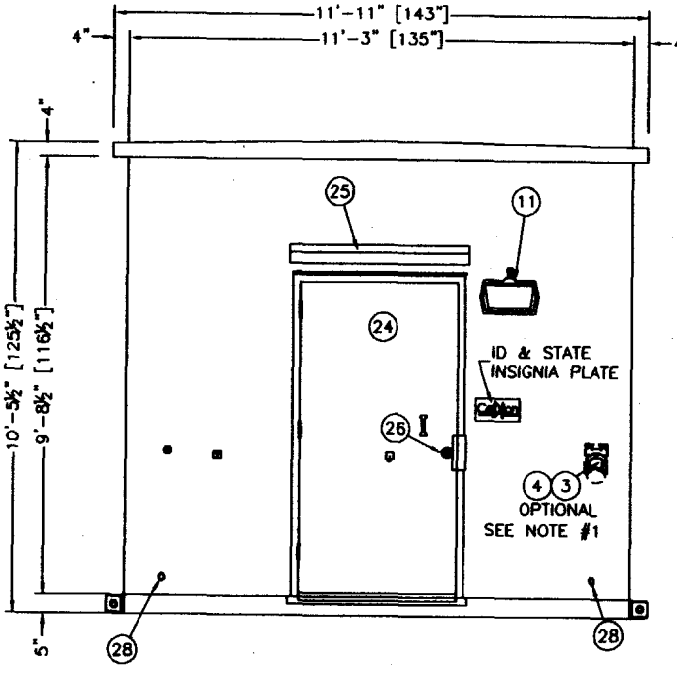
www.cellxion.com

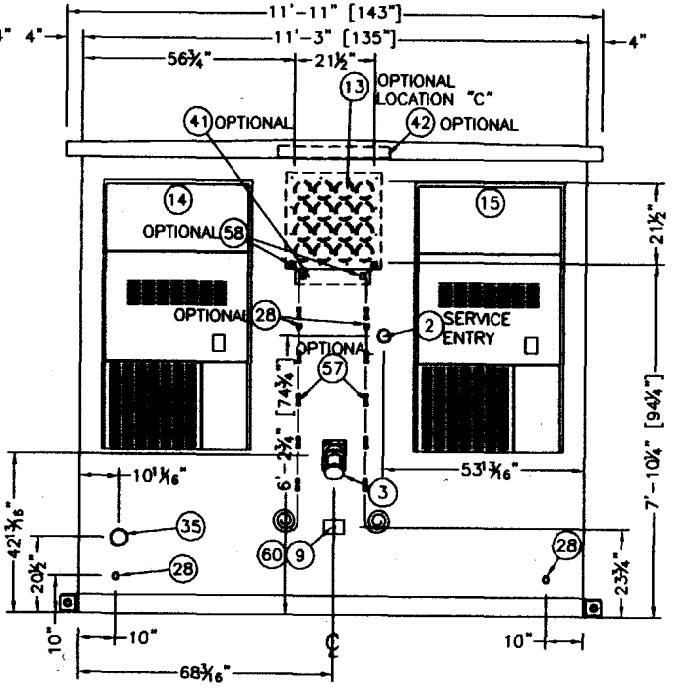
CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
SCHEDULES

FILENAME: USC71/SUSC710-3	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: G. BRINKMAN	DATE: 1/7/03
CHK. BY: V. HASSELL	DATE: 1/7/03
ENG. BY: K. BARNETT	DATE: 1/7/03
APP. BY: S. COLVIN	DATE: 1/7/03
SHEET NO./PART NO.: 0-3	
DRAWING NO.: SUSC71	REV: E



EXTERIOR ELEVATION "A"



EXTERIOR ELEVATION "C"

NOTE:

1. INSTALL ITEM #4 WHEN ITEM #3 IS NOT REQUIRED.

REV	BY	DATE	DESCRIPTION	APP.BY	DATE
D	BMW	3/25/03	MOVED 3" PVC UP 1 1/2"	VGH	3/25/03
C	BMW	2/6/03	UPDATED HVAC BLOCKS	VGH	2/6/03
B	BMW	1/23/03	CHG. FUTURE TO OPTIONAL & MADE #3 OPTIONAL ON A.E.	VGH	1/23/03

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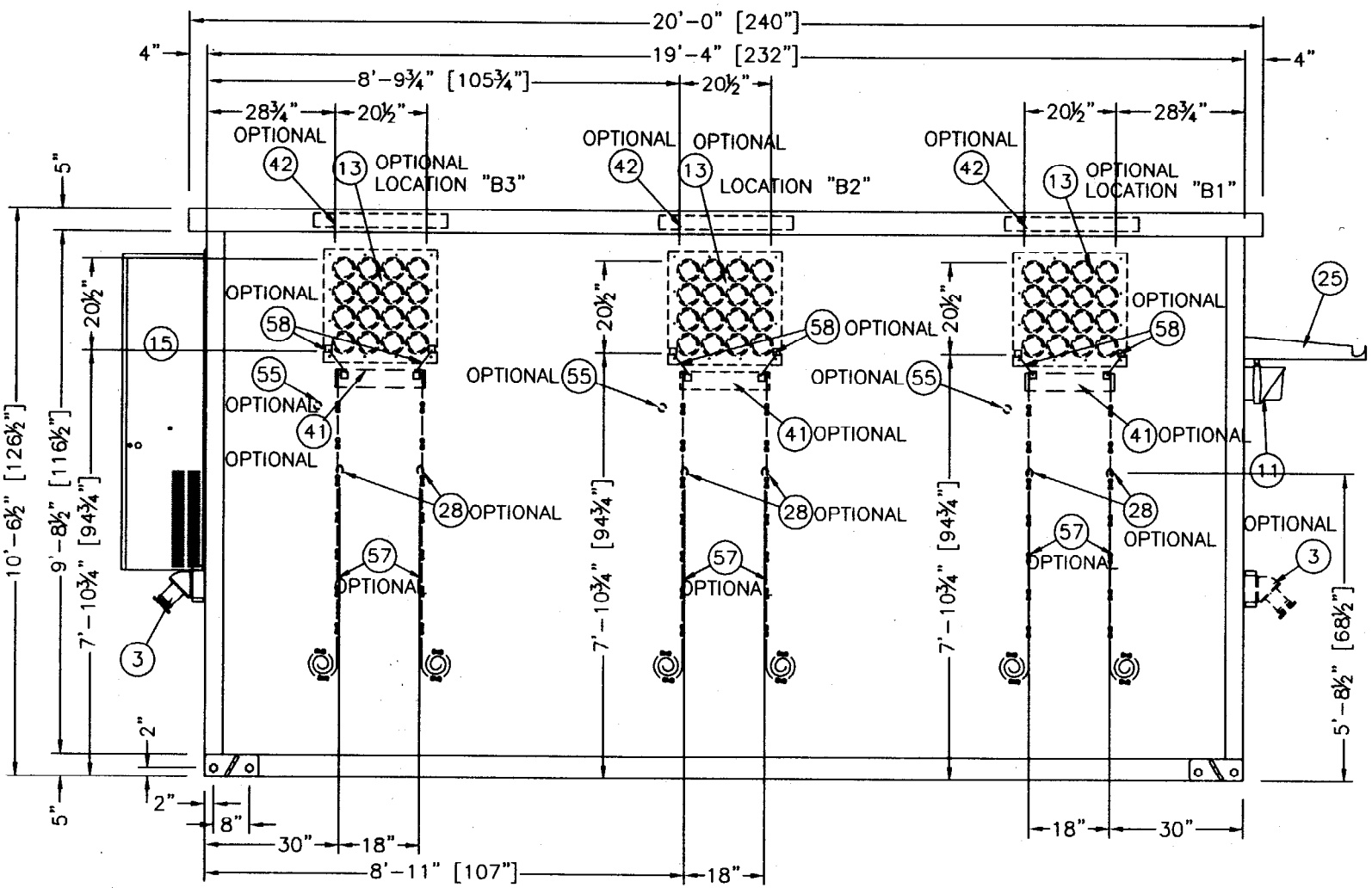
CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
EXTERIOR ELEVATIONS
PANELS "A & C"

FILENAME: USC71/SUSC711-0	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: G. BRINKMAN	DATE: 1/7/03
CHK. BY: V. HASSELL	DATE: 1/7/03
ENG. BY: K. BARNETT	DATE: 1/7/03
APP. BY: S. COLVIN	DATE: 1/7/03
SHEET NO./PART NO.: 1-0	
DRAWING NO.: SUSC71	REV: E



EXTERIOR ELEVATION "B"

REV	BY	DATE	DESCRIPTION	APP.BY	DATE
C	BMW	2/6/03	UPDATED HVAC BLOCK	VGH	2/6/03
B	BMW	1/23/03	CHG. FUTURE TO OPTIONAL	VGH	1/23/03

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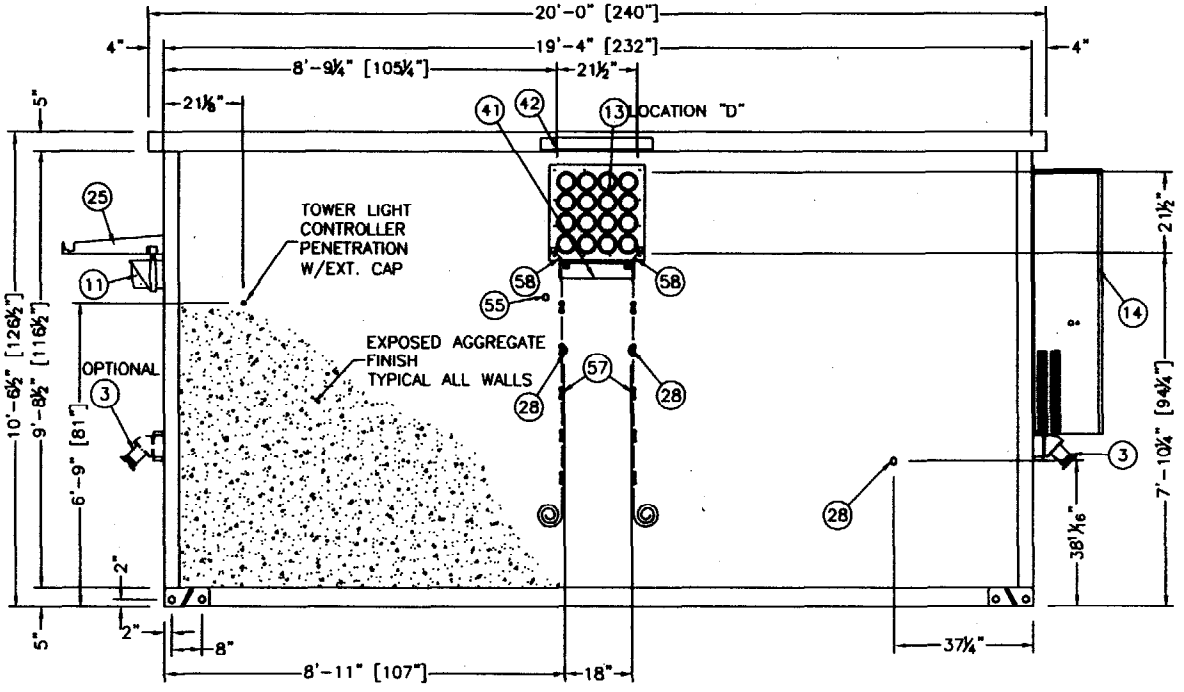
CUSTOMER: U. S. CELLULAR

PROJECT: 11'-3" X 19'-4" CONCRETE SHELTER EXTERIOR ELEVATION PANEL "B"

FILENAME: USC71/SUSC711-1	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/7/03
CHK. BY: V. HASSELL	DATE: 1/7/03
ENG. BY: K. BARNETT	DATE: 1/7/03
APP. BY: S. COLVIN	DATE: 1/7/03
SHEET NO./PART NO.: 1-1	
DRAWING NO.: SUSC71	REV: E



EXTERIOR ELEVATION "D"

REV.	BY	DATE	DESCRIPTION	APP.BY	DATE
C	BMW	2/6/03	UPDATED HVAC BLOCK	VGH	2/6/03
B	BMW	1/24/03	MADE #3 OPTIONAL TO A WALL	VGH	1/24/03

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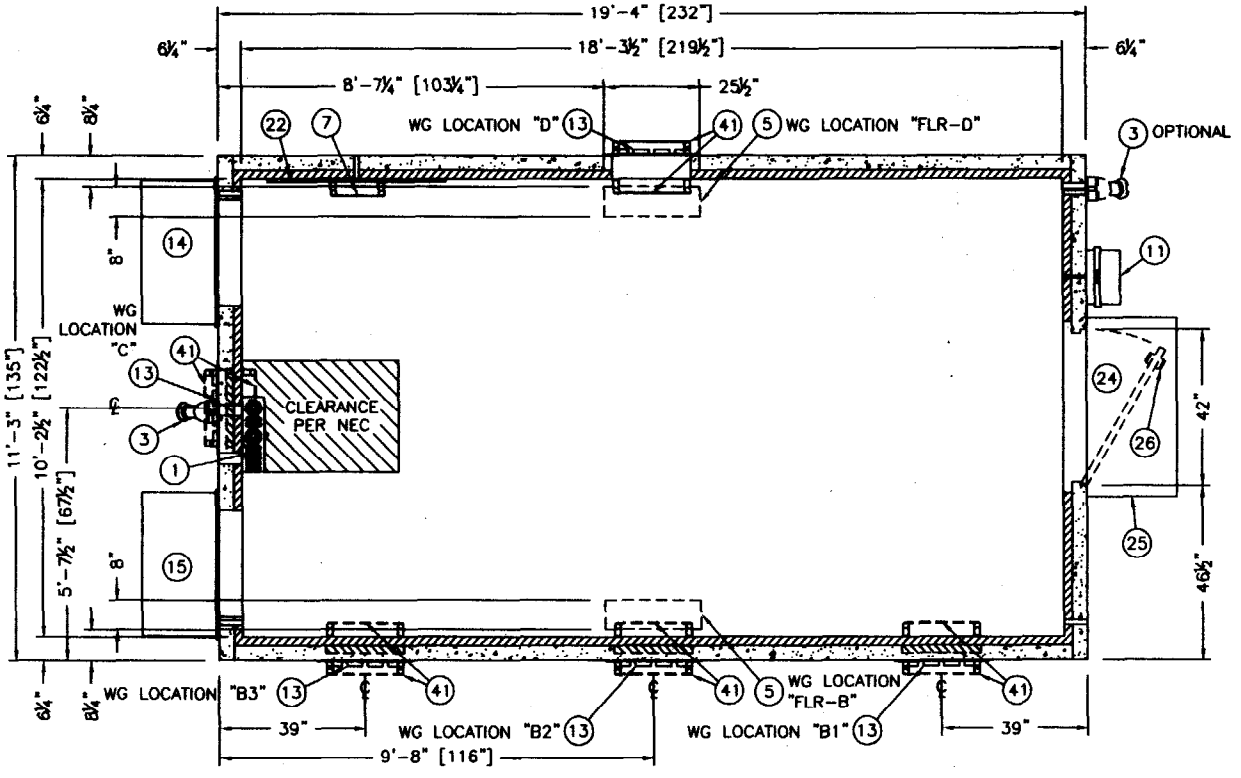
CUSTOMER: U. S. CELLULAR

PROJECT: 11'-3" X 19'-4" CONCRETE SHELTER EXTERIOR ELEVATION PANEL "D"

FILENAME: USC71/SUSC71	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/7/03
CHK. BY: V. HASSELL	DATE: 1/7/03
ENG. BY: K. BARNETT	DATE: 1/7/03
APP. BY: S. COLVIN	DATE: 1/7/03
SHEET NO./PART NO.: 1-2	
DRAWING NO.: SUSC71	REV: E



FLOOR PLAN

217.50 SQ. FT. EXTERIOR

186.72 SQ. FT. INTERIOR

REV	BY	DATE	DESCRIPTION	APP.BY	DATE
C	BMW	2/6/03	UPDATED HVAC BLOCK	VCH	2/6/03

ENGINEER SEAL

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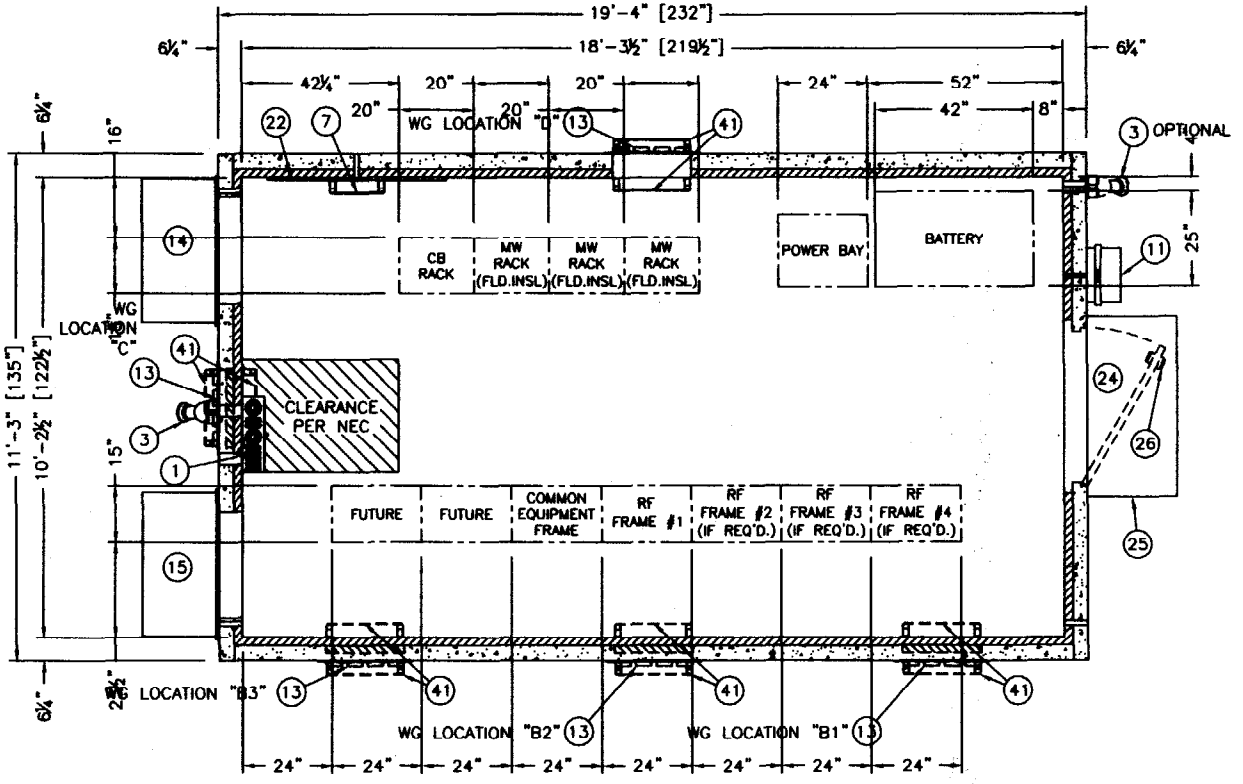
CUSTOMER: U.S. CELLULAR

PROJECT: 11'-3" X 19'-4" CONCRETE SHELTER FLOOR PLAN

FILENAME: USC71\SUSC712-0	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: V. HASSELL	DATE: 01/07/03
CHK. BY: V. HASSELL	DATE: 01/07/03
ENG. BY: K. BARNETT	DATE: 01/07/03
APP. BY: S. COLVIN	DATE: 01/07/03
SHEET NO./PART NO.: 2-0	
DRAWING NO.: SUSC71	REV: E



FLOOR PLAN

217.50 SQ. FT. EXTERIOR

186.72 SQ. FT. INTERIOR

ENGINEER SEAL

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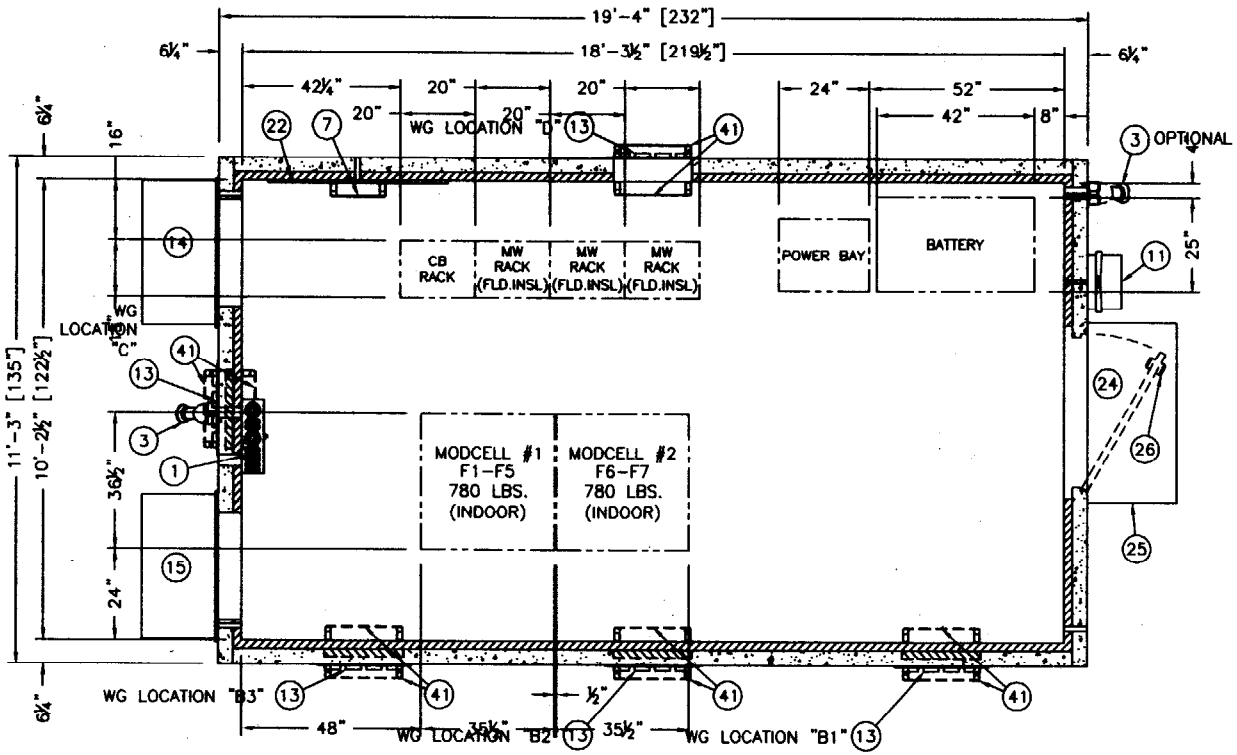
CUSTOMER: U.S. CELLULAR

PROJECT: 11'-3" X 19'-4" CONCRETE SHELTER FLOOR PLAN EQUIPMENT LAYOUT #1

FILENAME: USC71\SUSC712-1	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: V. HASSELL	DATE: 01/07/03
CHK. BY: V. HASSELL	DATE: 01/07/03
ENG. BY: K. BARNETT	DATE: 01/07/03
APP. BY: S. COLVIN	DATE: 01/07/03
SHEET NO./PART NO.: 2-1	
DRAWING NO.: SUSC71	REV: E



FLOOR PLAN – EQUIPMENT LAYOUT #2

ENGINEER SEAL

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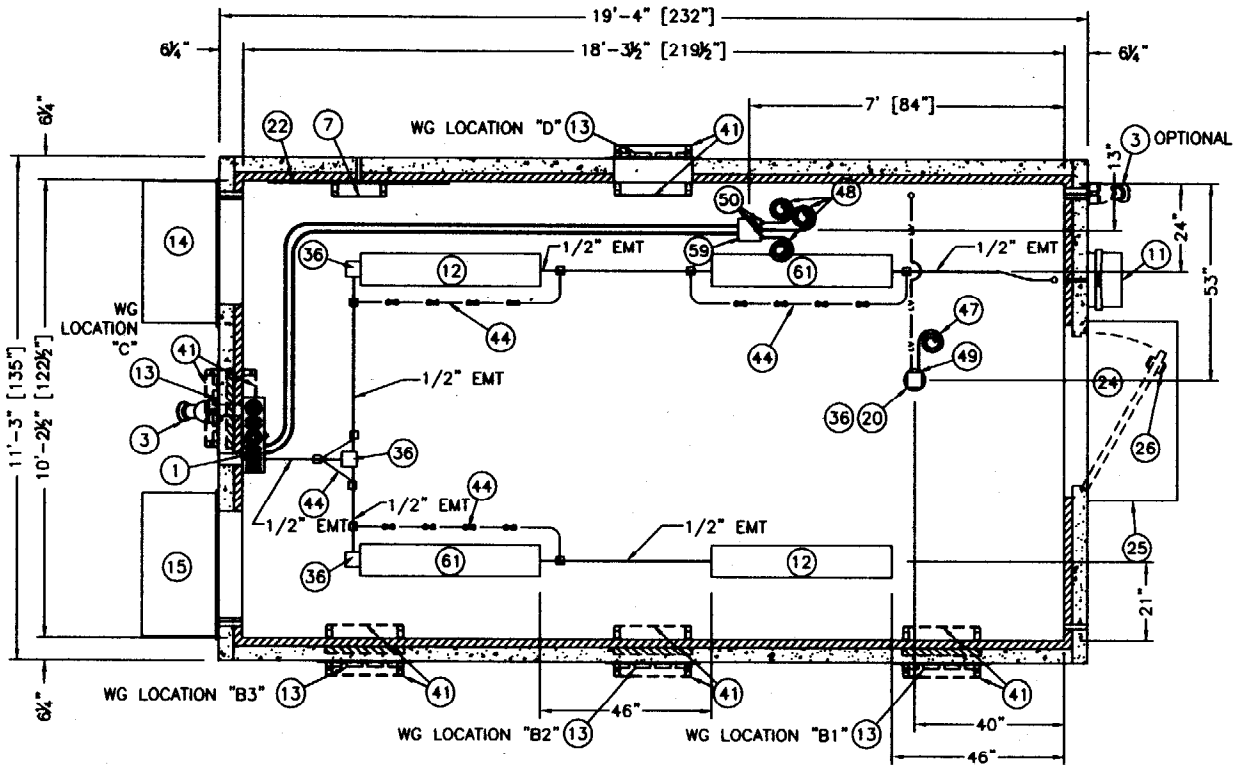
CUSTOMER:
U.S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
FLOOR PLAN
EQUIPMENT LAYOUT #2

FILENAME: USC71\SUSC712-2	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: V. HASSELL	DATE: 01/07/03
CHK. BY: V. HASSELL	DATE: 01/07/03
ENG. BY: K. BARNETT	DATE: 01/07/03
APP. BY: S. COLVIN	DATE: 01/07/03
SHEET NO./PART NO.: 2-2	
DRAWING NO.: SUSC71	REV: E



REFLECTED CEILING VIEW
ELECTRICAL

NOTES:

1. ALL CONDUIT TO BE 3/4" EMT, UNLESS OTHERWISE NOTED.

2. PLACEMENT OF ELECTRICAL EQUIPMENT TO BE DETERMINED BY AVAILABILITY OF PREMADE KNOCK-OUTS OR PENETRATION REQUIREMENTS.

LEGEND:

1. —w— = LOW VOLTAGE CONDUIT TO BE 1/2" EMT UNLESS OTHERWISE NOTED.

2. —▪▪— = HALO GROUND WIRE AND DROPS TO BE #2 STRANDED GREEN COPPER WIRE, EQUIPMENT DROPS TO BE #2 STRANDED GREEN COPPER WIRE AND JUMPERS TO BE #4 STRANDED GREEN COPPER WIRE.

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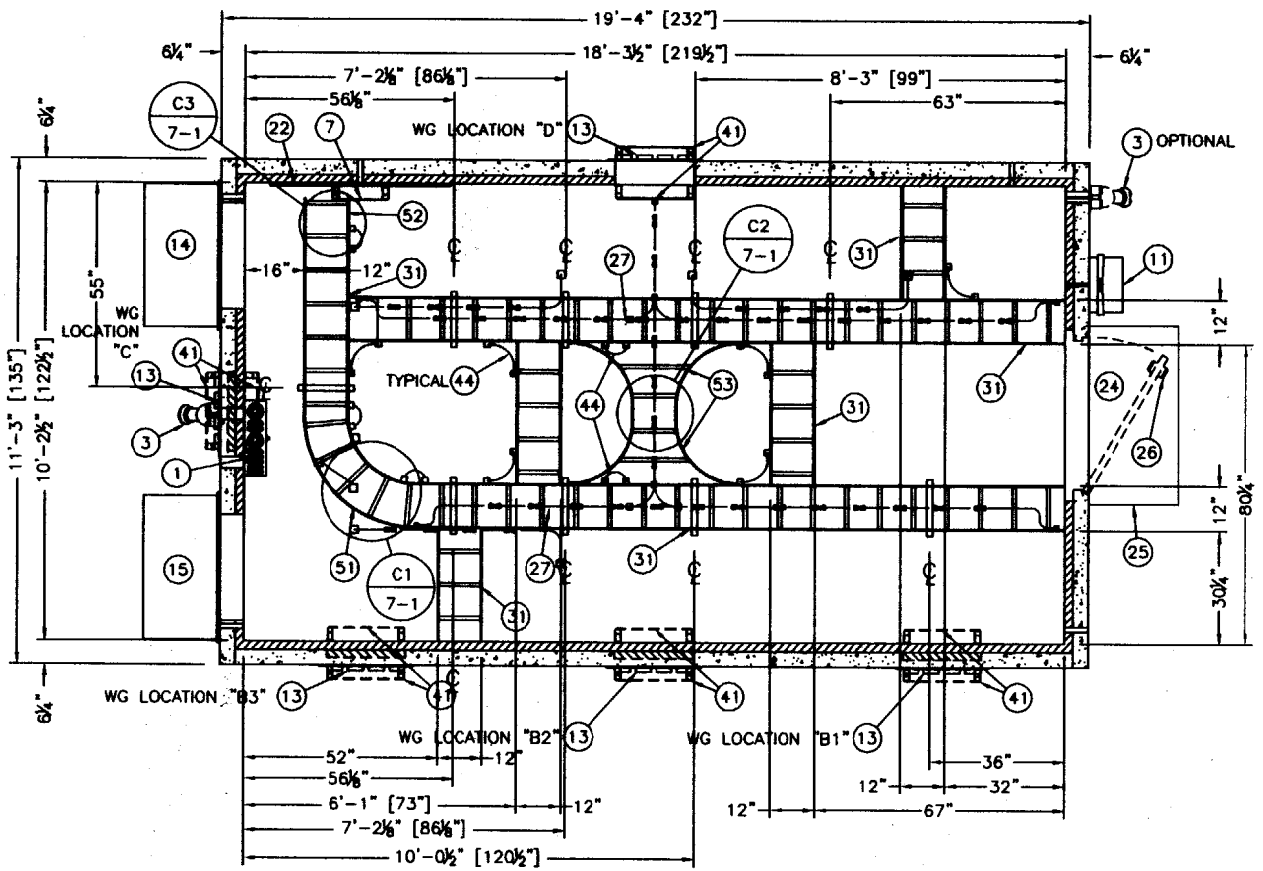
CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
REFLECTEDCEILING VIEW
ELECTRICAL

FILENAME: USC71/SUC713-0	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/7/03
CHK. BY: V. HASSELL	DATE: 1/7/03
ENG. BY: K. BARNETT	DATE: 1/7/03
APP. BY: S. COLVIN	DATE: 1/7/03
SHEET NO./PART NO.: 3-0	
DRAWING NO.: SUSC71	REV: E



REFLECTED CEILING VIEW
MECHANICAL

NOTES:

1. ALL CONDUIT TO BE 3/4" EMT, UNLESS OTHERWISE NOTED.

2. PLACEMENT OF ELECTRICAL EQUIPMENT TO BE DETERMINED BY AVAILABILITY OF PREMADE KNOCK-OUTS OR PENETRATION REQUIREMENTS.

LEGEND:

1. —∞— = HALO GROUND WIRE AND DROPS TO BE #2 STRANDED GREEN COPPER WIRE, EQUIPMENT DROPS TO BE #2 STRANDED GREEN COPPER WIRE AND JUMPERS TO BE #4 STRANDED GREEN COPPER WIRE.

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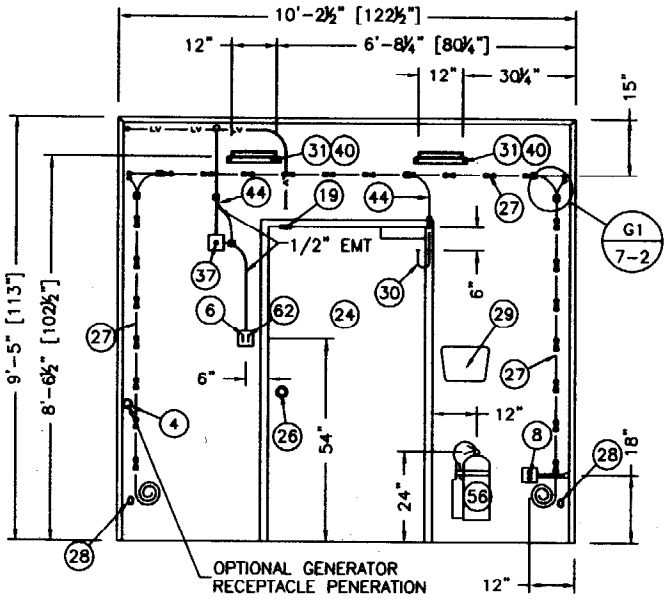
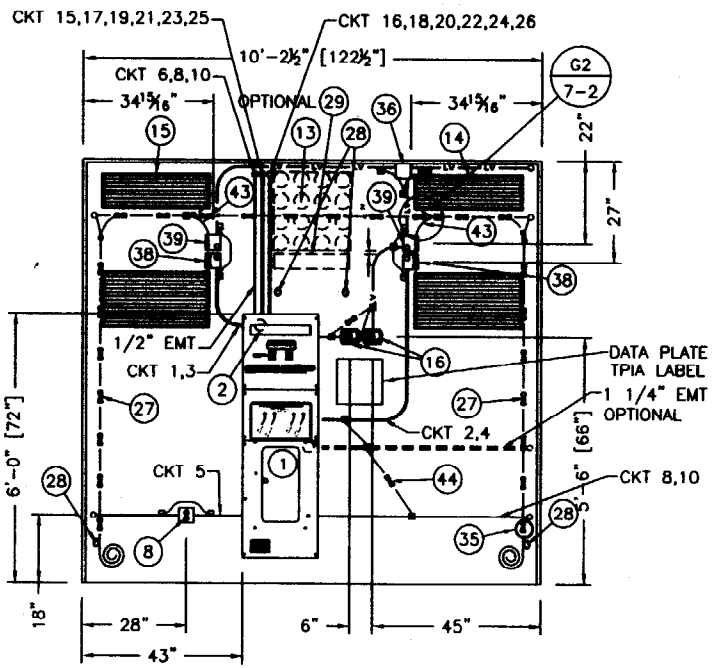
CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
REFLECTED CEILING VIEW
MECHANICAL

FILENAME: USC71/SUSC713-1	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/1/03
CHK. BY: V. HASSELL	DATE: 1/1/03
ENG. BY: K. BARNETT	DATE: 1/1/03
APP. BY: S. COLVIN	DATE: 1/1/03
SHEET NO./PART NO.: 3-1	
DRAWING NO.: SUSC71	REV: E



INTERIOR ELEVATION "A"



INTERIOR ELEVATION "C"

NOTES:

1. ALL CONDUIT TO BE 3/4" EMT, UNLESS OTHERWISE NOTED.
2. PLACEMENT OF ELECTRICAL EQUIPMENT TO DETERMINED BY AVAILABILITY OF PREMADE KNOCK-OUTS OR PENETRATION REQUIREMENTS.

LEGEND:

1. —LV— = LOW VOLTAGE CONDUIT TO BE 1/2" EMT UNLESS OTHERWISE NOTED.
2. —•— = HALO GROUND WIRE AND DROPS TO BE #2 STRANDED GREEN COPPER WIRE, EQUIPMENT DROPS TO BE #2 STRANDED GREEN COPPER WIRE AND JUMPERS TO BE #4 STRANDED GREEN COPPER WIRE.

REV	BY	DATE	DESCRIPTION	APP.BY	DATE
E	BMW	5/7/03	CHG. CONDUIT FROM LV	VGH	5/7/03
D	BMW	3/25/03	MOVED 3" PVC UP 1 1/2", & PANEL OVER 1"	VGH	3/25/03
C	VGH	02/04/03	REVISED PRINT; CHANGE HVAC PENERATIONS & JB	VGH	02/04/03

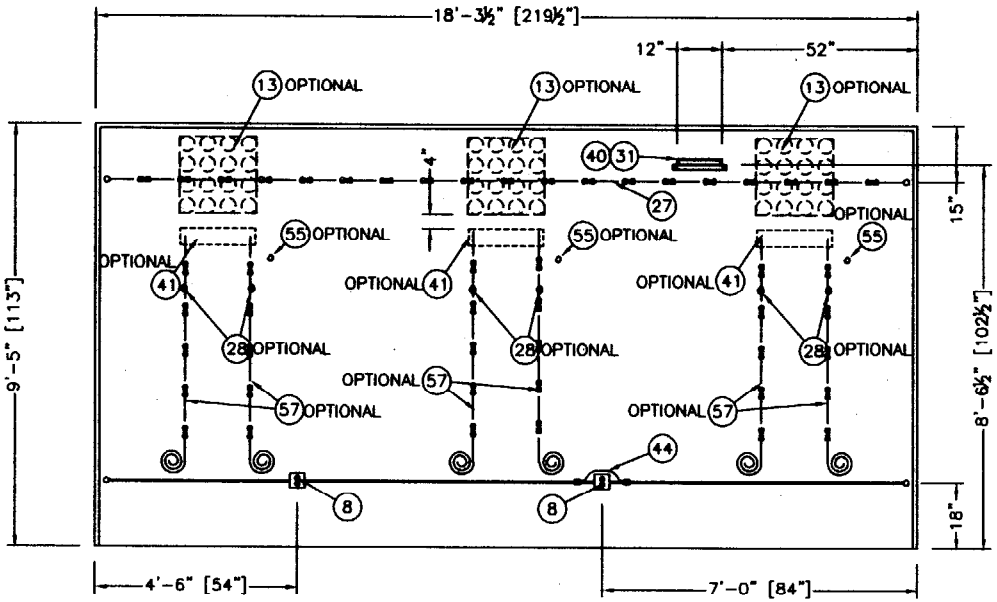
ENGINEER SEAL

CellXion Wireless Industry
Solutions for the
Corporate Office & Manufacturing Facility
5031 Hazel Jones Road
Bossier City, LA 71111
(voice) 318-213-2900 (fax) 318-213-2919
www.cellxion.com

CUSTOMER:
U.S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
INTERIOR ELEVATIONS
"A & C"

FILENAME: USC71/SUSC714-0	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 01/07/03
CHK. BY: V. HASSELL	DATE: 01/07/03
ENG. BY: K. BARNETT	DATE: 01/07/03
APP. BY: S. COLVIN	DATE: 01/07/03
SHEET NO./PART NO.: 4-0	
DRAWING NO.: SUSC71	REV: E



INTERIOR ELEVATION "B"

NOTES:

1. ALL CONDUIT TO BE 3/4" EMT, UNLESS OTHERWISE NOTED.
2. PLACEMENT OF ELECTRICAL EQUIPMENT TO DETERMINED BY AVAILABILITY OF PREMADE KNOCK-OUTS OR PENETRATION REQUIREMENTS.

LEGEND:

1. —LV— = LOW VOLTAGE CONDUIT TO BE 1/2" EMT UNLESS OTHERWISE NOTED.
2. —▬— = HALO GROUND WIRE AND DROPS TO BE #2 STRANDED GREEN COPPER WIRE, EQUIPMENT DROPS TO BE #2 GREEN STRANDED COPPER WIRE AND JUMPERS TO BE #4 STRANDED GREEN COPPER WIRE.

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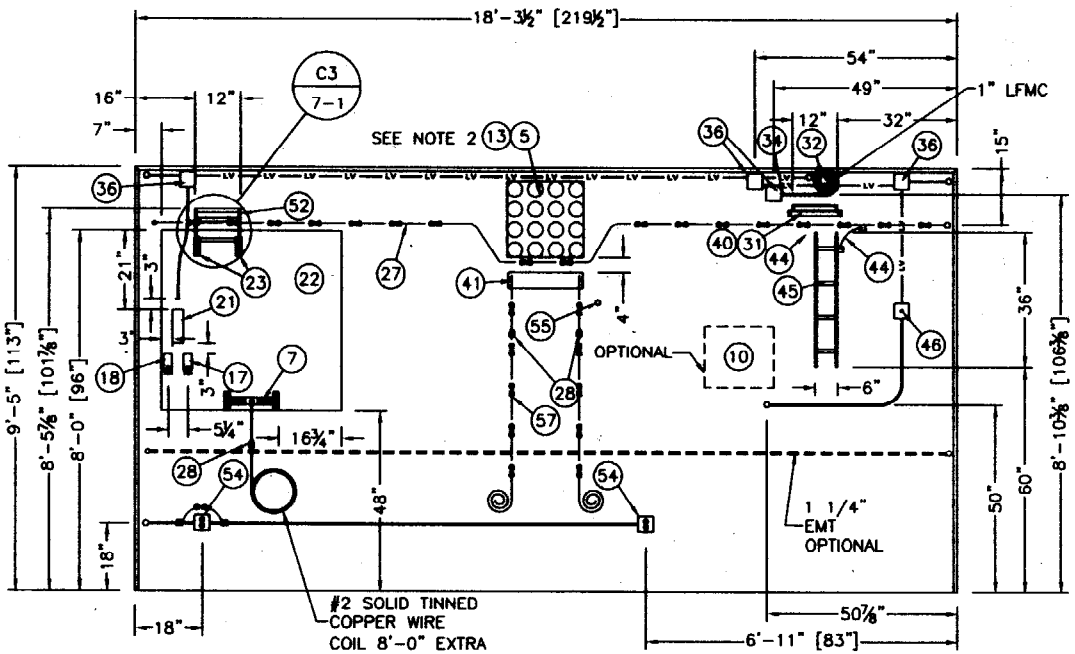
CUSTOMER: U. S. CELLULAR

PROJECT: 11'-3" X 19'-4" CONCRETE SHELTER INTERIOR ELEVATION PANEL "B"

FILENAME: USC71/SUSC714-1	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: 4-1	
DRAWING NO.: SUSC71	REV: E



INTERIOR ELEVATION "D"

NOTES:

1. ALL CONDUIT TO BE 3/4" EMT, UNLESS OTHERWISE NOTED. 2. PLACEMENT OF ELECTRICAL EQUIPMENT TO DETERMINED BY AVAILABILITY OF PREMADE KNOCK-OUTS OR PENETRATION REQUIREMENTS.
2. FOR WALL D WAVEGUIDE CONFIGURATION, MOUNT ITEMS 13 AND 41. MOUNT ITEM 5 CENTER WALL D.

LEGEND:

1. —LV— = LOW VOLTAGE CONDUIT TO BE 1/2" EMT UNLESS OTHERWISE NOTED.
2. —▪▪— = HALO GROUND WIRE AND DROPS TO BE #2 STRANDED GREEN COPPER WIRE, EQUIPMENT DROPS TO BE #2 GREEN STRANDED COPPER WIRE AND JUMPERS TO BE #4 STRANDED GREEN COPPER WIRE.

REV	BY	DATE	DESCRIPTION	APP.BY	DATE
D	BMW	3/27/03	CHG NOTES	VGH	3/27/03
B	BMW	1/22/03	REMOVED GROUNDING RUN TO LV	VGH	1/22/03

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CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
INTERIOR ELEVATION
PANEL "D"

FILENAME: USC71/SUSC714-2	
SCALE: 3/8"=1'-0"	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: 4-2	
DRAWING NO.: SUSC71	REV: E

NOTES:

1. CONDUCTOR COLORS ARE AS FOLLOWING:
   120/240 SINGLE PHASE
   PHASE "A" = BLACK
   PHASE "B" = RED
   NEUTRAL = WHITE
   120/208 THREE PHASE
   PHASE "A" = BLACK
   PHASE "B" = RED
   PHASE "C" = BLUE
   NEUTRAL = WHITE
   277/480 THREE PHASE
   PHASE "A" = YELLOW
   PHASE "B" = BROWN
   PHASE "C" = ORANGE
   NEUTRAL = GRAY

   ALL ELECTRICAL GROUND = GREEN
   ALL ISOLATED GROUND = GREEN/YELLOW STRIPE
   ALL SWITCHED = VIOLET

2. ALL CONDUCTORS (UNLESS OTHERWISE NOTED) TO BE STRANDED THHN, THWN OR THW.

3. ALL CONDUIT TO BE 3/4" EMT UNLESS OTHERWISE NOTED.

4. ALL CONDUCTOR AMPACITIES ARE BASED ON TABLE 310-16 NATIONAL ELECTRICAL CODE.

5. CONDUIT FILL BASED ON CHAPTER 9 - NATIONAL ELECTRICAL CODE.

6. PLACEMENT OF ELECTRICAL COMPONENTS TO BE DETERMINED BY THE AVAILABILITY OF PRE-MADE KNOCKOUTS AND/OR PENETRATION REQUIREMENTS.

7. DASHED LINES (------) DENOTE FIELD WORK.

8. ALL CIRCUITS ON 25 AMP THROUGH 60 AMP BREAKER MUST USE #10 GROUND CONDUCTOR PER NEC TABLE 1996: 250-95; 1999: 250-122; 2002: 250.122.

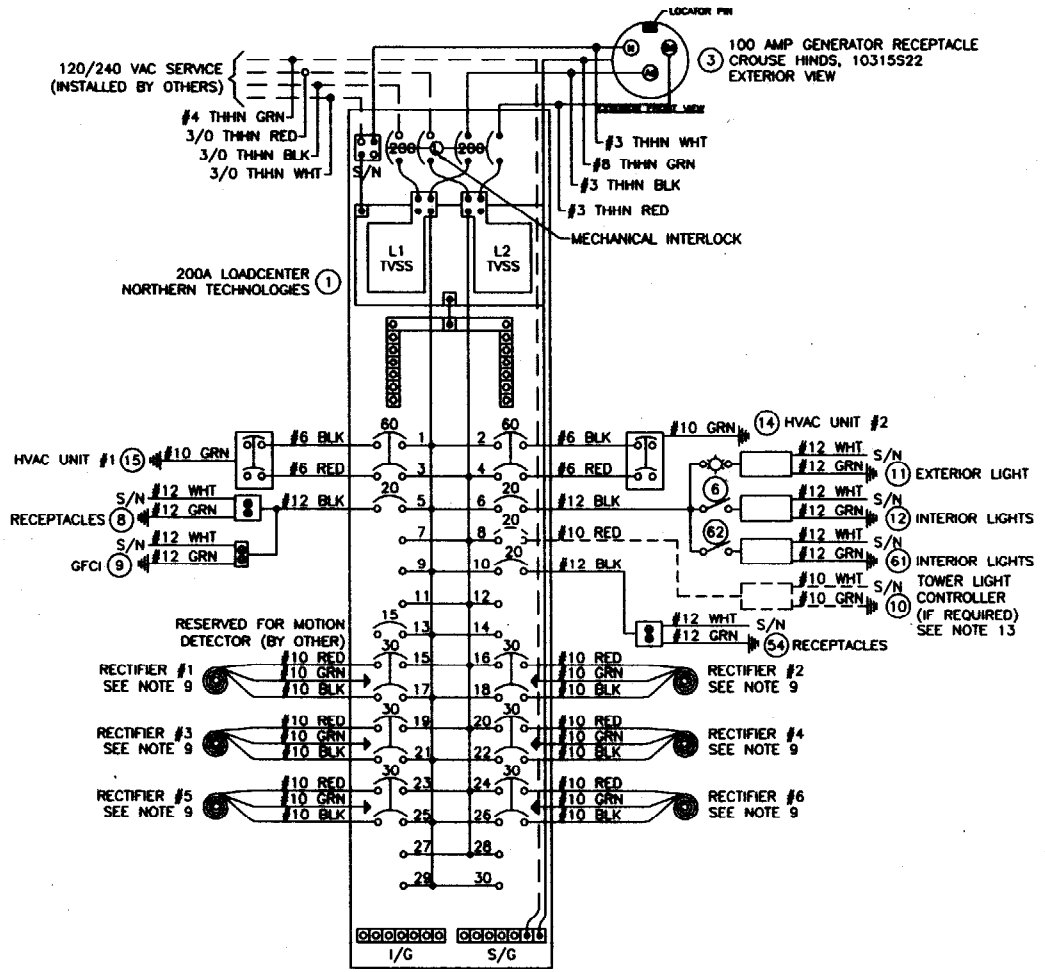
9. CONDUCTORS SMALLER THAN 4 AWG MUST HAVE CORRECT COLOR INSULATION. CONDUCTORS 4 AWG AND LARGER MAY BE RE-IDENTIFIED BY COLORED TAPE. BLACK INSULATED CONDUCTOR SHALL BE THE ONLY COLOR TO BE RE-IDENTIFIED. IF CONDUCTORS ARE RE-IDENTIFIED, IDENTIFICATION MUST BE APPLIED IN THREE INCH (3") WRAPS, MINIMUM EVERY THREE FEET (3'-0"). RE-IDENTIFICATION SHALL BE VISIBLE BY OPENING ANY ENCLOSURE. WHITE, GRAY AND GREEN CONDUCTORS SHALL NOT BE RE-IDENTIFIED.

10. PULL RECTIFIER CONDUCTORS TO ITEM 48 ON CEILING. COIL AND TAG 4'-0" EXTRA AT END OF CONDUIT. RECTIFIER #1,2 CONDUITORS BE PULL IN ONE CONDUIT. RECTIFIERS #3, 4 CONDUITORS TO BE PULLED IN ONE CONDUIT. RECTIFIER #5, 6 CONDUCTORS TO BE PULLED IN ONE CONDUIT.

11. SERVICE GROUND CONDUCTORS TO GENERATOR RECEPTACLE TO BE TERMINATED TO GROUND SCREW LOCATED ON RECEPTACLE HOUSING.

12. TRANSFER TO EMERGENCY POWER MUST BE DONE MANUALLY. BEFORE TRANSFER, PANEL LOAD MUST BE REDUCED TO LESS THAN 100 AMPS.

13. PULL CONDUCTORS TO ITEM 54 CLOSEST TO ITEM 10. COIL AND TAG 6" EXTRA FOR FUTURE USE.



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www.cellxion.com

CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
ELECTRICAL SCHEMATIC

FILENAME: USC71/SUSC715-0	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: G. BRINKMAN	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K.BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: 5-0	
DRAWING NO.: SUSC71	REV: E

DOOR INTRUSION ALARM
THE MAGNETIC DOOR ALARM IS WIRED NORMALLY CLOSE. CONTACTS CLOSE UPON DOOR CLOSURE. WHEN DOOR IS OPEN, CONTACTS OPEN SENDING AN ALARM.

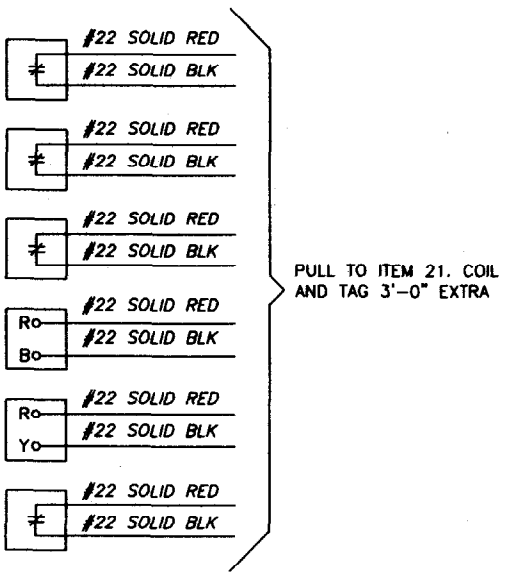
HVAC #1 FAIL
WHEN HIGH PRESSURE OR LOW PRESSURE SWITCHES ACTIVATE THE LOCK OUT RELAY, THE ALARM CONTACTS WILL OPEN SENDING AN ALARM.

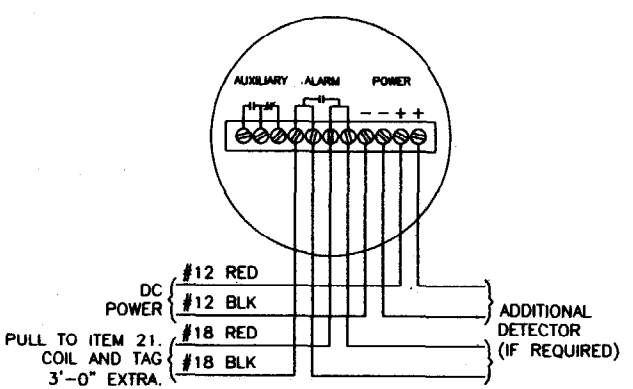
HVAC #2 FAIL
WHEN HIGH PRESSURE OR LOW PRESSURE SWITCHES ACTIVATE THE LOCK OUT RELAY, THE ALARM CONTACTS WILL OPEN SENDING AN ALARM.

HIGH TEMPERATURE ALARM
THE HIGH TEMP. ALARM IS SET TO OPEN ON TEMPERATURE INCREASE (OR RISE). SET POINT = 85° F

LOW TEMPERATURE ALARM
THE LOW TEMP. ALARM IS SET TO OPEN ON TEMPERATURE DECREASE (OR FALL). SET POINT = 45° F

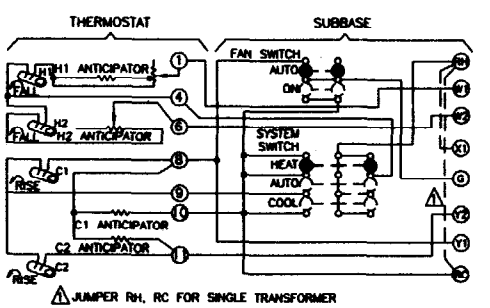
TVSS PANEL
FOR SURGE ARRESTER ALARM, CONNECT TO COMMON AND NORMALLY CLOSED TERMINAL BLOCKS. NORMALLY CLOSED CONTACTS WILL BE CLOSED IN NORMAL POWER CONDITIONS. CONTACTS WILL OPEN IF TVSS PANEL FAILS.





SMOKE DETECTOR, 24V PHOTOELETRIC SENTROL

(20)



THERMOSTAT, SINGLE STAGE HEAT/COOL

(16)

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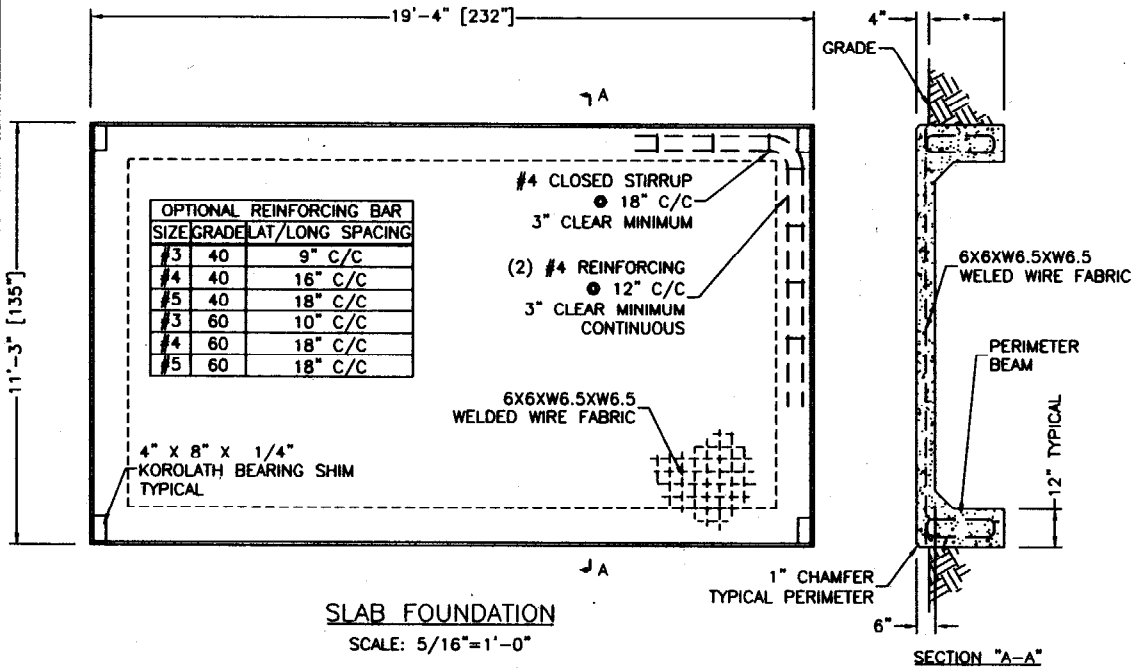
CUSTOMER:
U.S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
LOW VOLTAGE WIRING

FILENAME: USC71/SUSC715-1	
SCALE: 1" = 1"	TOLERANCE:
DRWN. BY: G. BRINKMAN	DATE: 02/27/03
CHK. BY: V. HASSELL	DATE: 02/27/03
ENG. BY: K. BARNETT	DATE: 02/27/03
APP. BY: S. COLVIN	DATE: 02/27/03
SHEET NO./PART NO.: 5-1	
DRAWING NO.: SUSC71	REV: E



OPTIONAL REINFORCING BAR		
SIZE	GRADE	LAT/LONG SPACING
#3	40	9" C/C
#4	40	16" C/C
#5	40	18" C/C
#3	60	10" C/C
#4	60	18" C/C
#5	60	18" C/C

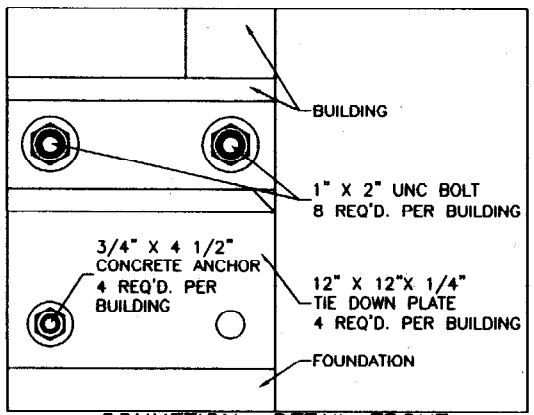
SLAB FOUNDATION

SCALE: 5/16"=1'-0"

SECTION "A-A"

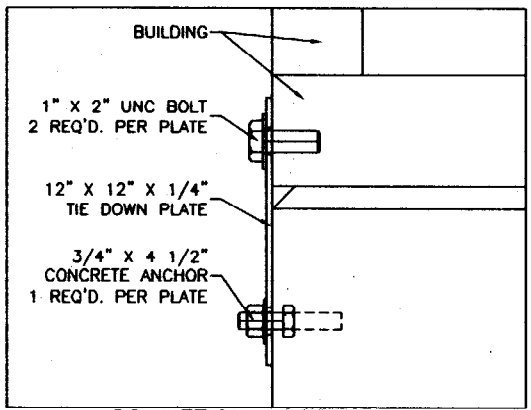
NOTES:

1. WELDED WIRE FABRIC OR OPTIONAL REINFORCING BAR MAY BE USED AS AVAILABLE. SEE CHART FOR SIZE, GRADE, AND SPACING OF REBAR.
2. * = 24" MINIMUM, BUT MAY VARY AS REQUIRED PER: LOCAL CODE, FROST LINE, AND/OR SOIL BEARING CAPACITY.
3. FINAL FOUNDATION DESIGN IS THE RESPONSIBILITY OF THE SITE CONTRACTOR.
4. SLAB TOLERANCE IS ±1/4"
5. ADDITIONAL ENGINEERING REVIEW IS REQUIRED IF THE SHELTER FOUNDATION IS PLACED ON SOIL WITH A BEARING CAPACITY LESS THAN 2000 PSF.
6. ALL REBAR TO BE GRADE 40 MINIMUM UNLESS OTHERWISE SPECIFIED.
7. W6.5 AS SPECIFIED FOR THE WWF HAS 0.288" DIAMETER.
8. WWF IS 60 KSI MINIMUM.
9. OVERLAP SPLICES ARE ALLOWED FOR REINFORCING BAR, USE 18" MINIMUM LAP.
10. ALL REQUIRED TIE DOWN PLATES, SHIMS, BOLTS, AND ANCHORS SHALL BE PLACED INSIDE SHELTER PRIOR TO SHIPMENT FROM MANUFACTURER.
11. CONCRETE STRENGTH, F'c = 3000 PSI @ 28 DAYS.



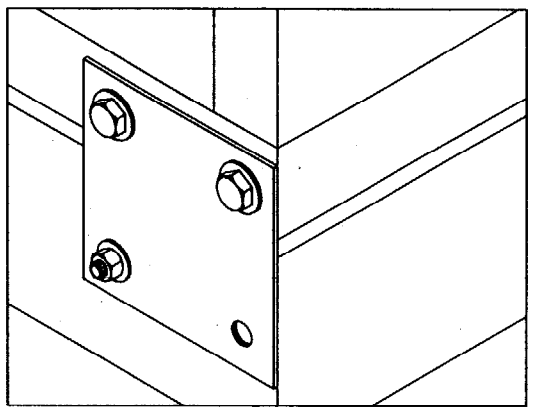
CONNETION DETAIL FRONT

SCALE: 3/16 = 1"



CONNETION DETAIL SIDE

SCALE: 3/16 = 1"



CONNETION DETAIL ISOMETRIC

SCALE: 3/16 = 1"

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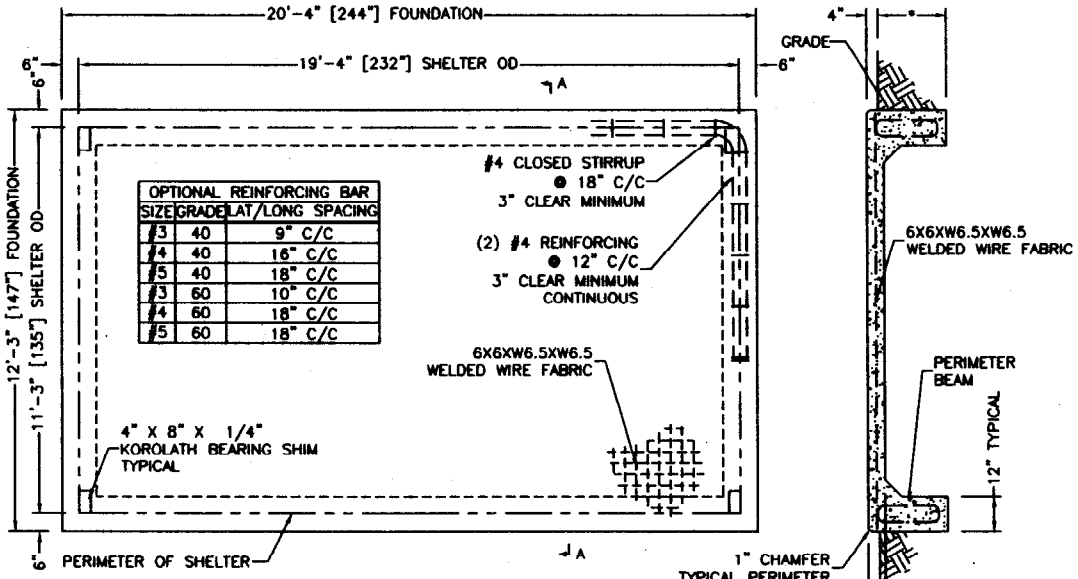
www.cellxion.com

CUSTOMER: U. S. CELLULAR

PROJECT: 11'-3" X 19'-4" CONCRETE SHELTER FOUNDATION PLAN

FILENAME: USC71/SUSC716-0	
SCALE: NOTED	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: 6-0	
DRAWING NO.: SUSC71	REV: E



OPTIONAL REINFORCING BAR		
SIZE	GRADE	LAT/LONG SPACING
#3	40	9" C/C
#4	40	16" C/C
#5	40	18" C/C
#3	60	10" C/C
#4	60	18" C/C
#5	60	18" C/C

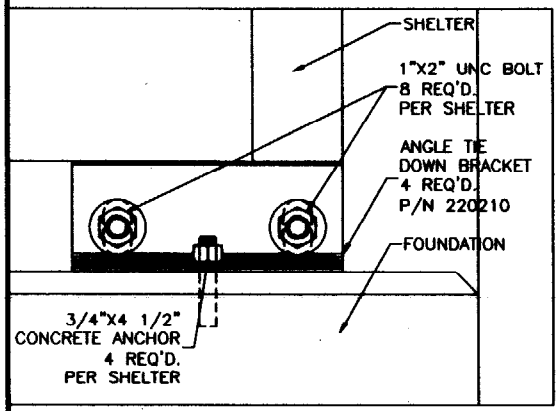
SLAB FOUNDATION

SCALE: 5/16"=1'-0"

SECTION "A-A"

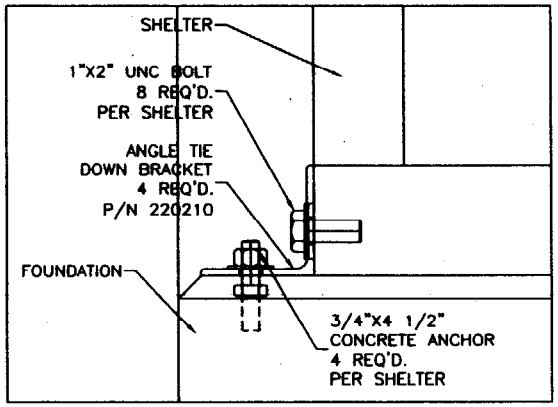
NOTES:

1. WELDED WIRE FABRIC OR OPTIONAL REINFORCING BAR MAY BE USED AS AVAILABLE. SEE CHART FOR SIZE, GRADE, AND SPACING OF REBAR.
2. * = 24" MINIMUM, BUT MAY VARY AS REQUIRED PER: LOCAL CODE, FROST LINE, AND/OR SOIL BEARING CAPACITY.
3. FINAL FOUNDATION DESIGN IS THE RESPONSIBILITY OF THE SITE CONTRACTOR.
4. SLAB TOLERANCE IS ±1/4"
5. ADDITIONAL ENGINEERING REVIEW IS REQUIRED IF THE SHELTER FOUNDATION IS PLACED ON SOIL WITH A BEARING CAPACITY LESS THAN 2000 PSF.
6. ALL REBAR TO BE GRADE 40 MINIMUM UNLESS OTHERWISE SPECIFIED.
7. W6.5 AS SPECIFIED FOR THE WWF HAS 0.288" DIAMETER.
8. WWF IS 60 KSI MINIMUM.
9. OVERLAP SPLICES ARE ALLOWED FOR REINFORCING BAR, USE 18" MINIMUM LAP.
10. ALL REQUIRED TIE DOWN PLATES, SHIMS, BOLTS, AND ANCHORS SHALL BE PLACED INSIDE SHELTER PRIOR TO SHIPMENT FROM MANUFACTURER.
11. CONCRETE STRENGTH, F'c = 3000 PSI @ 28 DAYS.



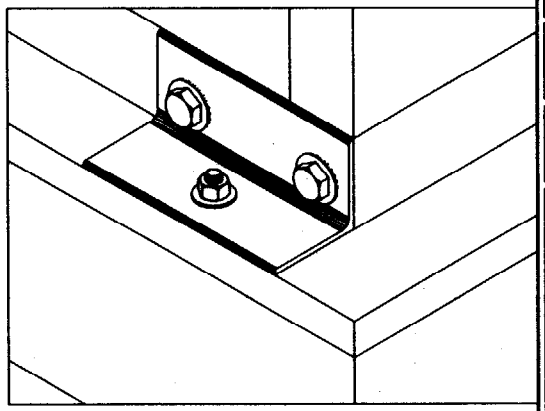
CONNECTION DETAIL FRONT

SCALE: 3/16 = 1'



CONNECTION DETAIL SIDE

SCALE: 3/16 = 1'



CONNECTION DETAIL ISOMETRIC

SCALE: 3/16 = 1'

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www.cellxion.com

CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
FOUNDATION PLAN
(12'-3" X 20'-4")

FILENAME: USC71/SUSC716-1	
SCALE: NOTED	TOLERANCE:
DRWN. BY: V. HASSELL	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: 6-1	
DRAWING NO.: SUSC71	REV: E

MATERIAL LIST

ITEM NO.	DESCRIPTION	PART NO.
1	CABLE TRAY (SIZE VARIES)	VARIES
2	3/8" X 2" LAG SCREW	164263
3	#6 X 1 1/4" GALV. SCREW	168022
4	5/8" SPRING LESS TWIRL NUT	168048
5	5/8" SQ. YELLOW ZINC WASHER	510012
6	5/8" HEX YELLOW ZINC NUT	510013
7	HANGING BRACKET	510011
8	5/8" ALL-THREAD CAP	510021
9	5/8" ZINC PLATED ALL-THREAD	168025
10	3/8" X 2 1/4" BOLT	510010
11	STRAIGHT CLAMP	510010
12	3/8" X 1 1/2" BOLT	510002
13	CORNER CLAMP	510002
14	1/4" X 2 1/4" J-BOLT	510004
15	3/8" FLAT WASHER	168038
16	WALL ANGLE (SIZE VARIES)	VARIES
17	3/8" HEX NUT	168039
18	WALL S CLAMP	510014
19	CLOSING BAR	VARIES
20	1/4" X 1" FENDER WASHER	168052
21	CABLE LADDER, FLOOR BRACKET	510074
22	SLEEVE ANCHOR, 5/16"X1 1/2"	168055
23		
24		
25		

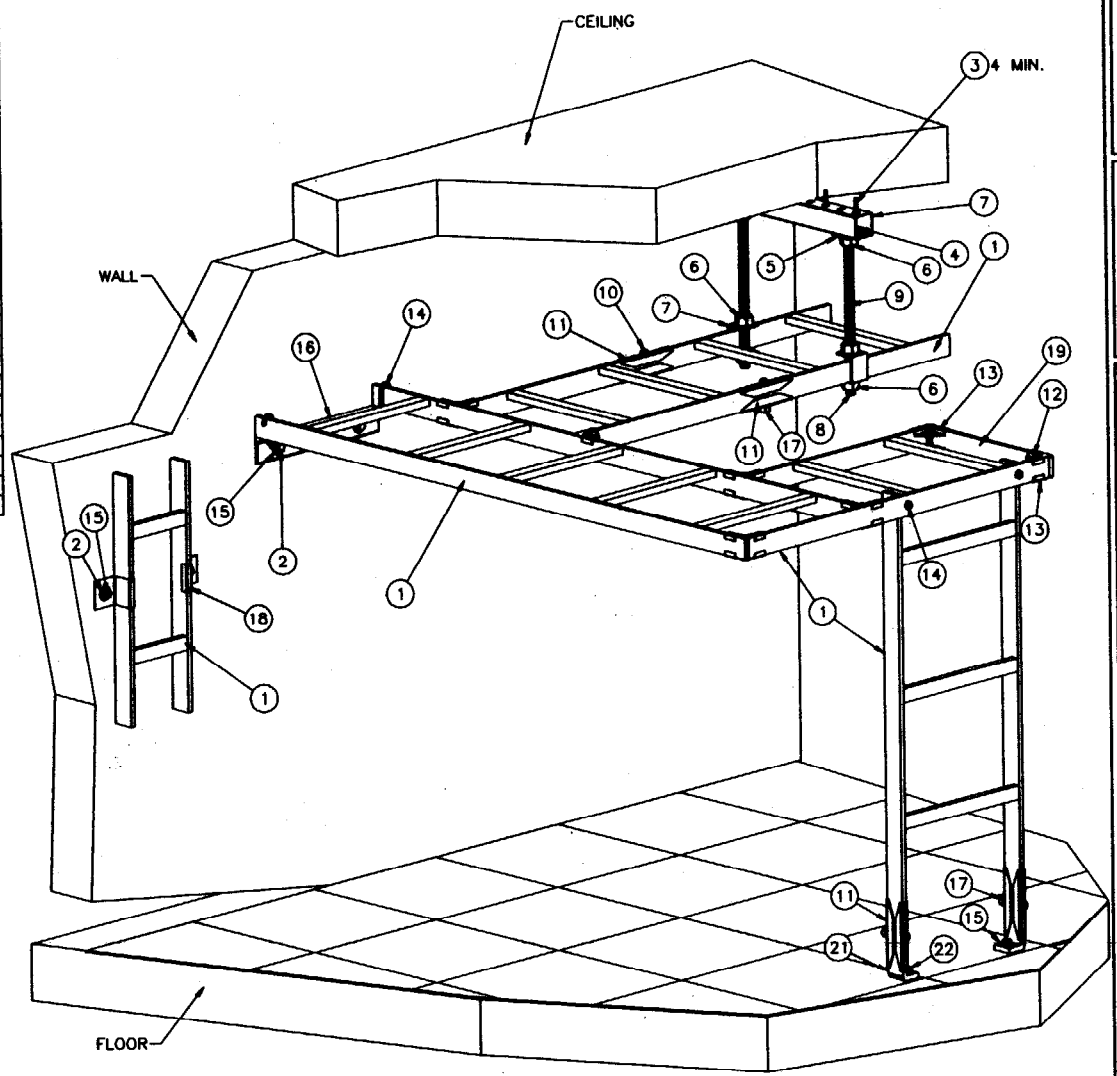
NOTES:

1. PARTS AND DETAILS SHOWN ARE TYPICAL. SOME PARTS AND DETAILS MAY BE OMITTED FROM SHELTER.

2. CABLE TRAY FINISH, SIZES AND LOCATION MAY VARY. REFER TO CEILING VIEW, INTERIOR ELEVATIONS AND/OR ITEM LIST FOR LOCATIONS AND SIZES.

3. HANGING BRACKET ASSEMBLY MAY VARY IN LOCATION.

4. CLOSING BARS ARE USED TO TERMINATED CABLE TRAY RUN AS REQUIRED.



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www.cellxion.com

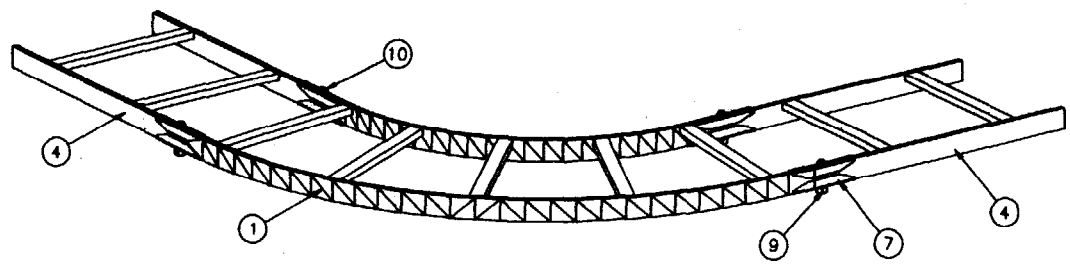
CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
CABLE TRAY DETAILS

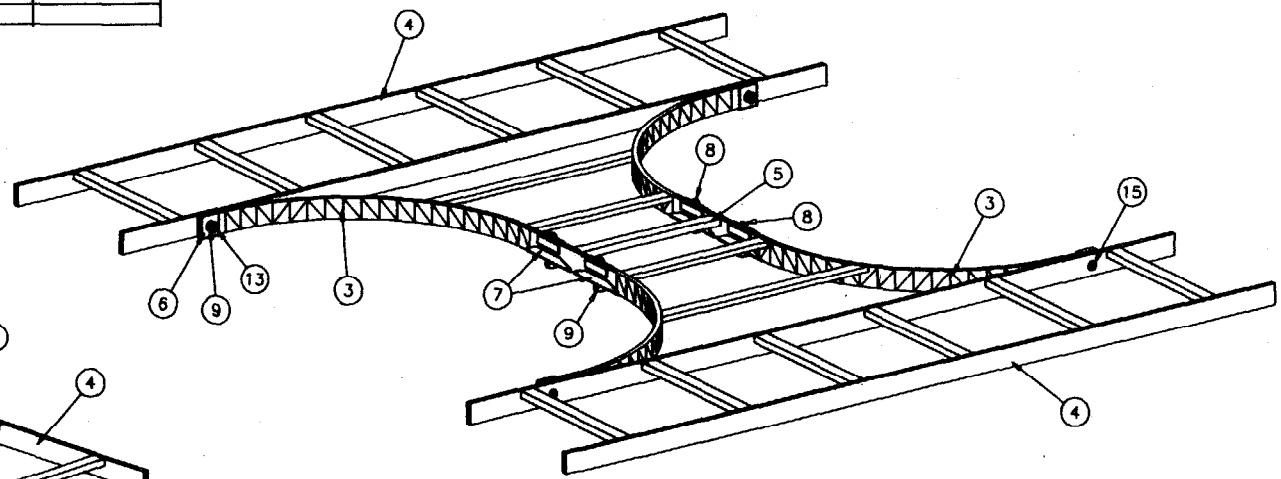
FILENAME: USC71/SUSC717-0	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/8/03
CHK. BY: V. MASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: 7-0	
DRAWING NO.: SUSC71	REV: E

MATERIAL LIST

ITEM NO.	DESCRIPTION	PART NO.
1	CT, HORIZONTAL 90° BEND, 12"	900007
2	CT, VERTICAL 90° BEND, 12"	900008
3	CT, Y-JUNCTION, 12"	900009
4	CABLE TRAY, 12"	510000
5	CABLE TRAY, 12", CUT TO FIT	510000
6	AUXILIARY CLIP	510027
7	STRAIGHT CLAMP	510010
8	BOLT, 3/8" X 2 1/4"	510010
9	HEX NUT, 3/8"	168039
10	HANGING BARCKET	510011
11	HEX NUT, 5/8", YELLOW ZINC	510013
12	HEX BOLT, 5/8" X 3"	168028
13	ALL-THREAD CAP, 5/8"	510021
14	HAT BRACKET	510016
15	BOLT, 3/8" X 1 1/2"	510002
16		
17		
18		
19		
20		
21		
22		



DETAIL "C1"



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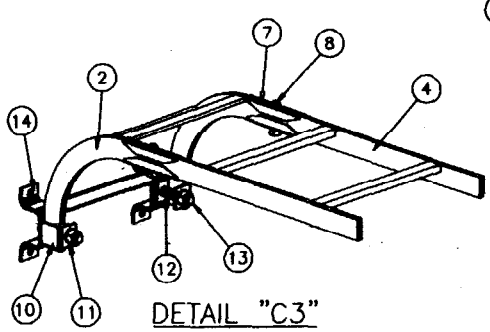


DETAIL "C3"

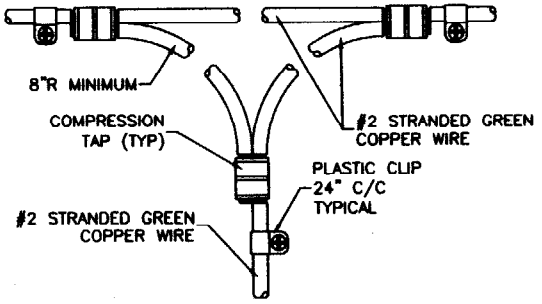
ENGINEER SEAL

CellXion
Wireless Industry
Solutions for the
Corporate Office &
Manufacturing Facility
5031 Hazel Jones Road
Bossier City, LA 71111
(voice) 318-213-2900 (fax) 318-213-2919
www.cellxion.com

CUSTOMER:
U. S. CELLULAR

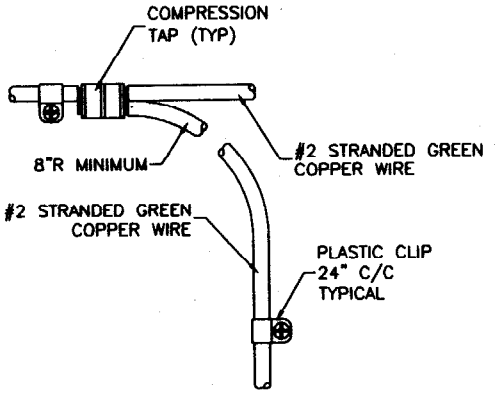
PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
CURVED CABLE
TRAY DETAILS

FILENAME: USC71/SUSC717-1	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: 7-1	
DRAWING NO.: SUSC71	REV: E



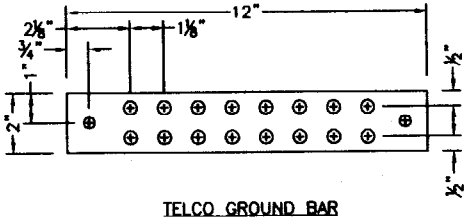
DETAIL "G1"

N.T.S.

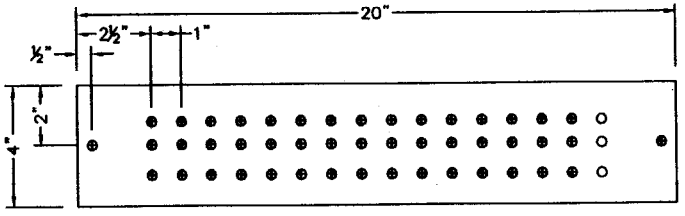


DETAIL "G2"

N.T.S.



TELCO GROUND BAR



INTERIOR & EXTERIOR GROUND BAR

GROUND BAR DETAILS

3"=1'

ENGINEER SEAL

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Wireless Industry
Solutions for the
Corporate Office & Manufacturing Facility
5031 Hazel Jones Road
Bossier City, LA 71111
(voice) 318-213-2800 (fax) 318-213-2819
www.cellxion.com

CUSTOMER: U. S. CELLULAR

PROJECT: 11'-3" X 19'-4" CONCRETE SHELTER GROUNDING AND GROUND BAR DETAILS

FILENAME: USC71/SUSC717-2	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: 7-2	
DRAWING NO.: SUSC71	REV: E

GENERAL NOTES:

1.) ALL STEEL FABRICATION AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL AND AWS D1.1 SPECIFICATIONS.

2.) ALL WELDING SHALL BE MIG TYPE WITH THE FOLLOWING OPERATING SETTINGS.

WIRE SIZE	0.35
WIRE FEED SPEED (in/min)	5
VOLTAGE, DC (+)	18.5
AMPERAGE, DC	140
TRAVEL SPEED (in/min)	10-12
SHIELDING GAS	75/25

3.) STRUCTURAL STEEL SPECIFICATIONS:

STEEL DECK AND COLD FORMED SHAPES ASTM A446 GRADE D
STRUCTURAL SHAPES ASTM A36
HIGH STRENGTH BOLTS, ASTM A325
OTHER BOLTS, SAE J429 GRADE 5
STRUCTURAL TUBING ASTM A500 GRADE B

4.) ALL CONCRETE WORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (A.C.I.) BUILDING CODES 318 & 211, AND ASTM STANDARDS C-172, C-31, C-39, AND PROVISIONS OF C-94.

5.) ALL PRECAST STRUCTURAL LIGHTWEIGHT CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.

6.) ALL REINFORCING STEEL BARS SHALL BE DOMESTIC, NEW BILLET STEEL CONFORMING TO ASTM A-615 GRADE 60 SPECIFICATIONS.

7.) CONCRETE COVERAGE OVER ALL REINFORCING STEEL SHALL BE A MINIMUM OF 3/4".

8.) ALL REBAR SHALL BE TIED 100% AT THE PERIMETER, AND 50% ELSEWHERE.

9.) ALL REBAR WIRE TIES TO BE 16 GAUGE.

10.) FIBROUS REINFORCED LIGHTWEIGHT CONCRETE MAY BE USED IN THE ROOF AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS. FIBER REINFORCEMENT MAY BE USED IN THE FLOOR IF DESIRED. IN ORDER TO MAKE BATCHING OPERATION MORE EFFICIENT.

11.) CELLXION CONCRETE EQUIPMENT SHELTERS ARE DESIGNED TO CONTAIN COMMUNICATION EQUIPMENT AND ARE INTENDED TO BE UNMANNED.

12.) WELD PLATE CONNECTIONS SHALL BE SPACED AT 4'-8" MAXIMUM ON THE FLOOR AND ROOF PANELS. THIS DIMENSION SHALL BE MAINTAINED EXCEPT IN CASES WHERE OPENINGS PROHIBIT.

13.) TOLERANCES SHALL BE AS FOLLOWS:
PANEL THICKNESS - ±1/8"
PANEL SIZE - ±1/16"
PANEL SQUARENESS - ±1/8" AGREEMENT ON DIAGONALS
LOCATION OF BLOCKOUTS & PVC'S - ±1/4"
BLOCKOUT DIMENSIONS - +1/4", -0"
PVC SIZE - USE TRADE SIZE AS LISTED ON PROJECT DRAWINGS

14.) SECTIONS & DETAILS MAY BE FOUND ON THE FOLLOWING SHEETS.

GENERAL:	THESE REBAR SIZES AND SPACINGS REPRESENT THE MINIMUM AMOUNT FOR ALL CASTING PLANS. PROJECT DRAWINGS MAY REQUIRE REINFORCEMENT IN ADDITION TO CELLXION STANDARDS.
ROOF PANEL:	#4 (SHORT AXIS) 12" O.C. AND #4 (LONG AXIS) AT 18" O.C.
WALL PANEL:	#4 AT PERIMETER AND 4x4-W4.5xW4.5 MESH THROUGHOUT.
WALL OPENINGS:	SEE DETAIL P & Q (SHEET NO. 6)
FLOOR:	(2)-#6 (SHORT AXIS) EACH RIB, #6 (LONG AXIS) EACH RIB AND AT PERIMETER. DECK: 4x4-W4.5xW4.5 MESH.
WELD PLATES :	1/4"x3"x3", A36 STEEL.

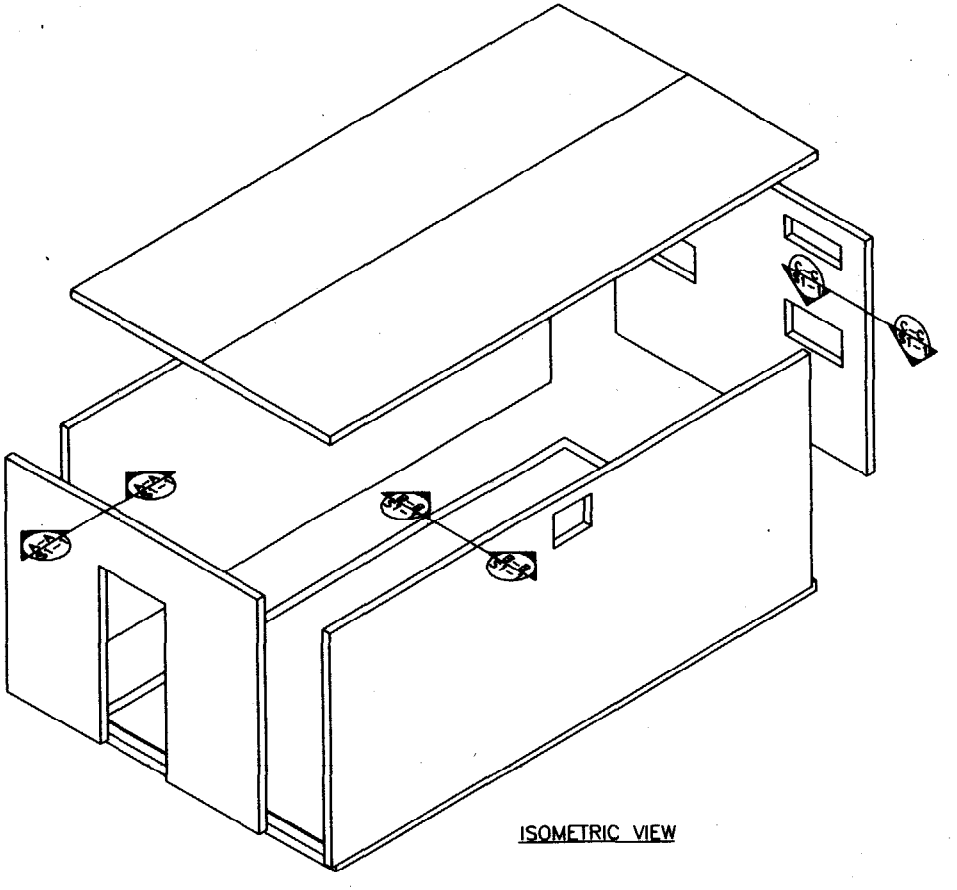
SEALANT APPLICATION

STEP 1. URETHANE SEALANT REQUIRED ON ALL JOINTS.

STEP 2. ROOF MEMBRANE
APPLY SEALER TO ROOF PER MFG. DIRECTIONS.
USE 1 GALLON PER 70 SQ. FEET.

STEP 3. APPLY AGGREGATE SEALER TO EXTERIOR WALLS.
USE 1 GALLON PER 200 SQ. FEET.

STEP 4. USE TEXTURED SEALER ON ALL SMOOTH EXPOSED SURFACES. USE CEMENTITOUS GRAY PAINT.



ISOMETRIC VIEW

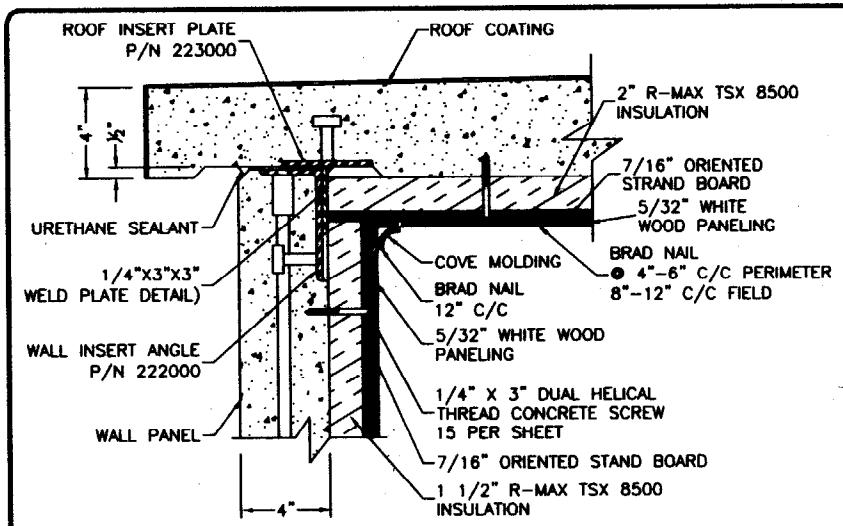
ENGINEER SEAL

CellXion
Solutions for the Wireless Industry
Corporate Office & Manufacturing Facility
5031 Hazel Jones Road
Bossier City, LA 71111
(voice) 318-213-2900 (fax) 318-213-2919
www.cellxion.com

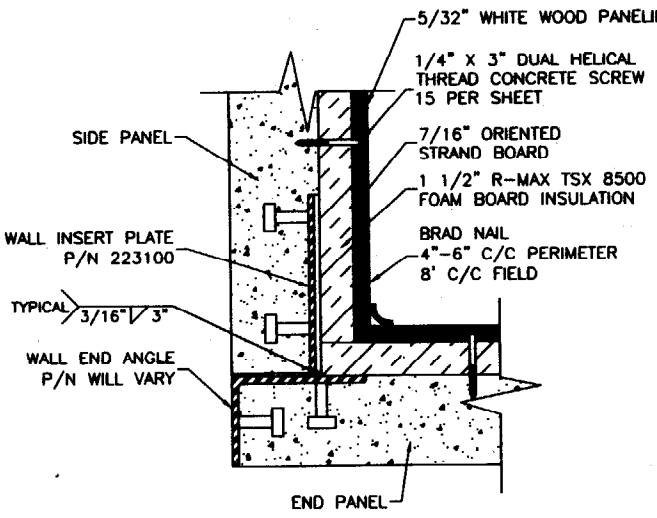
CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTE
STRUCTURAL
SPECIFICATIONS

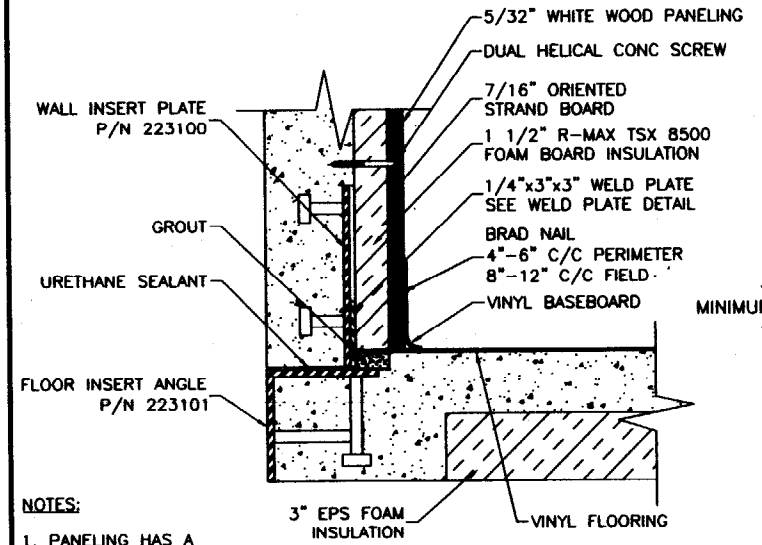
FILENAME: USC71/SUSC71S0-0	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: S0-0	
DRAWING NO.: SUSC71	REV: E



SECTION "F1"
WALL/ROOF CONNECTION



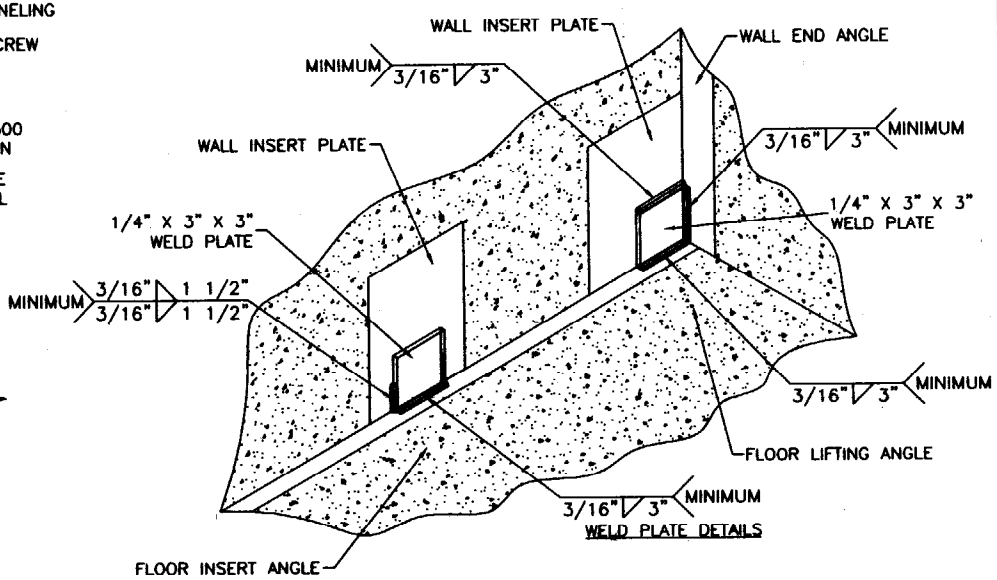
SECTION "F3"
WALL/WALL CONNECTION



SECTION "F2"
WALL/FLOOR CONNECTION

NOTES:

1. PANELING HAS A FLAMESPREAD OF 200 OR LESS.



WELD PLATE DETAILS

ENGINEER SEAL

CellXion
Wireless Industry
Solutions for the
Corporate Office & Manufacturing Facility
5031 Hazel Jones Road
Bossier City, LA 71111
(voice) 318-213-2900
(fax) 318-213-2919
Lightweight Division Manufacturing Facility
300 S.E. 15th Street
Wagoner, OK 74467
(voice) 918-485-5151
(fax) 918-485-1918
www.cellxion.com

CUSTOMER:
U. S. CELLULAR

PROJECT:
11'-3" X 19'-4"
CONCRETE SHELTER
FINISH DETAILS

FILENAME: USC71/SUSC7151-0	
SCALE: N.T.S.	TOLERANCE:
DRWN. BY: B. WELLS	DATE: 1/8/03
CHK. BY: V. HASSELL	DATE: 1/8/03
ENG. BY: K. BARNETT	DATE: 1/8/03
APP. BY: S. COLVIN	DATE: 1/8/03
SHEET NO./PART NO.: S1-0	
DRAWING NO.: SUSC71	REV: E

1047 N. 204th Avenue
Elkhorn, NE 68022
Ph: 402-289-1888
Fax: 402-289-1861

SEMAAN ENGINEERING SOLUTIONS

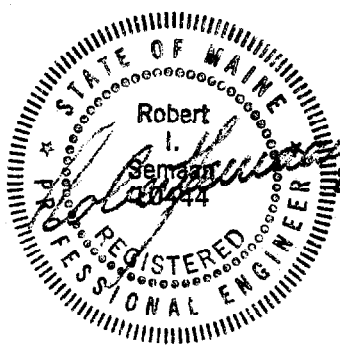
178 ft Pittsburg Monopole
Structural Analysis

853337
PORTLAND NORTH

APPROVED
8/29/03

Prepared for:
Sprint Sites USA
535 East Crescent Ave
Ramsey, NJ 07446

Site: NM03XC068
US Cellular
Portland, ME



8/28/2003

August 28, 2003

Mr. Brian Ackerson
Sprint Sites USA
535 East Crescent Ave
Ramsey, NJ 07446

Re: Site Number NM03XC068 – 503 Presumpscott St, Portland, ME.

Dear Mr. Ackerson:

We have completed the structural analysis for the existing monopole, located at the above referenced site. The purpose of this analysis is to determine that the existing monopole design is in conformance with the EIA/TIA-222-F standard and local building codes for the proposed antennae loads installation. Refer to the Review and Recommendations section at the end of this report for the analysis results.

Description of Structure:

The structure is a 178 ft Pittsburg Monopole.

Refer to Pittsburg job # 96088-117 dated December 13, 1996 for a detailed description of the structure.

Method of analysis:

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. It also treats guys as exact cable elements and therefore is ideal for guyed towers. The analysis was performed in conformance with **EIA/TIA-222-F and local building codes for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed**. Wind is applied to the structure, accessories and antennas.

Structure loading:
Per the loading sheet supplied, the analysis was performed using the following loading: (Proposed loading in bold)

Elev. (ft)	Qty.	Antennas and Mounts	Coax	Owner
180.0	12	DB978H65 Mounted On a Low Profile platform	(12) 1-5/8	Sprint
170.0	9	RV65-19-00XY Mounted On a Low Profile platform	(18) 1-5/8	VoiceStream
160.0	6	DB844H80 Mounted On (3) T-Arms	(6) 1-5/8	AT&T
160.0	3	Allgon 7262 Mounted On Same (3) T-Arms	(6) 1-5/8	AT&T
150.0	12	DB844H80 Mounted On a Low Profile platform	(12) 1-5/8	Verizon
135.0	**6**	**BSA-185065-10 Mounted On a Low Profile platform**	**(6) 1-5/8**	**US Cellular**

All new access holes shall be reinforced with welded rims that are compatible with the pole and to be sized and supplied by pole manufacturer.

All transmission lines are assumed running inside of pole shaft with the exception of those for the Nextel loading which are assumed to be strapped tightly to the outside of the pole.

Results of Analysis:
Refer to the attached Computer Summary sheets for detailed analysis results.

Structure:
The existing monopole is structurally capable of supporting the existing and proposed antennas. The maximum structure usage is: 78.4%.

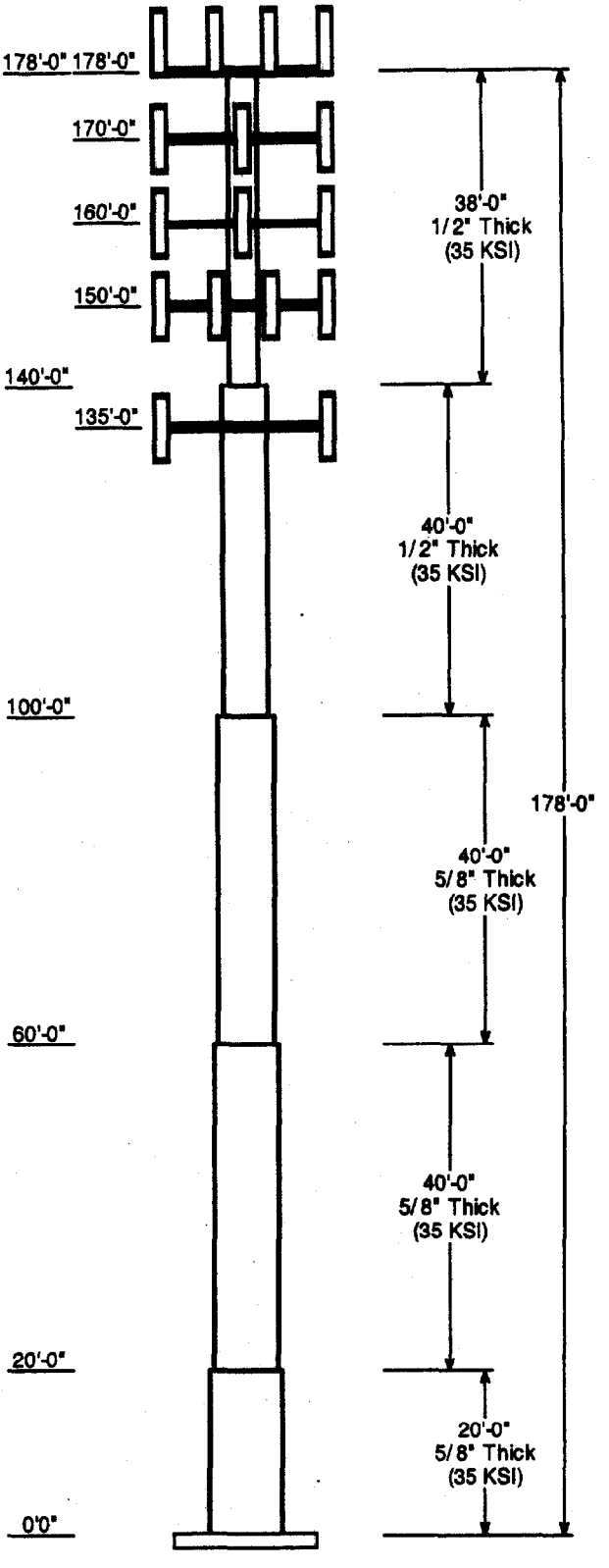
Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	2,542.00	2,950.22	116.1
Shear (kips)	23.00	24.16	105.0

The reactions calculated from the analysis exceed the ones indicated on the original structural design. However, upon reviewing the foundation documents, they were found to be adequate.

Review and Recommendations:
Based on the analysis results, the existing structure meets the requirements per the EIA/TIA-222-F standards for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed.

SEMAAN ENGINEERING SOLUTIONS
1047 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861



Job Information

Pole :	NM03XC068
Description :	
Client :	Sprint Sites USA - NJ
Location :	503 Presumpscott St, Portland, ME
Type :	Round **Base Elev (ft):** 0.00
Height :(ft)	178.00 **Taper:** 0.000000 (in/ft)

Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	20.000	60.00	60.00	0.625		0.000	0.000000	35
2	40.000	54.00	54.00	0.625	Butt Joint	0.000	0.000000	35
3	40.000	48.00	48.00	0.625	Butt Joint	0.000	0.000000	35
4	40.000	36.00	36.00	0.500	Butt Joint	0.000	0.000000	35
5	38.000	24.00	24.00	0.500	Butt Joint	0.000	0.000000	35

Discrete Appurtenance

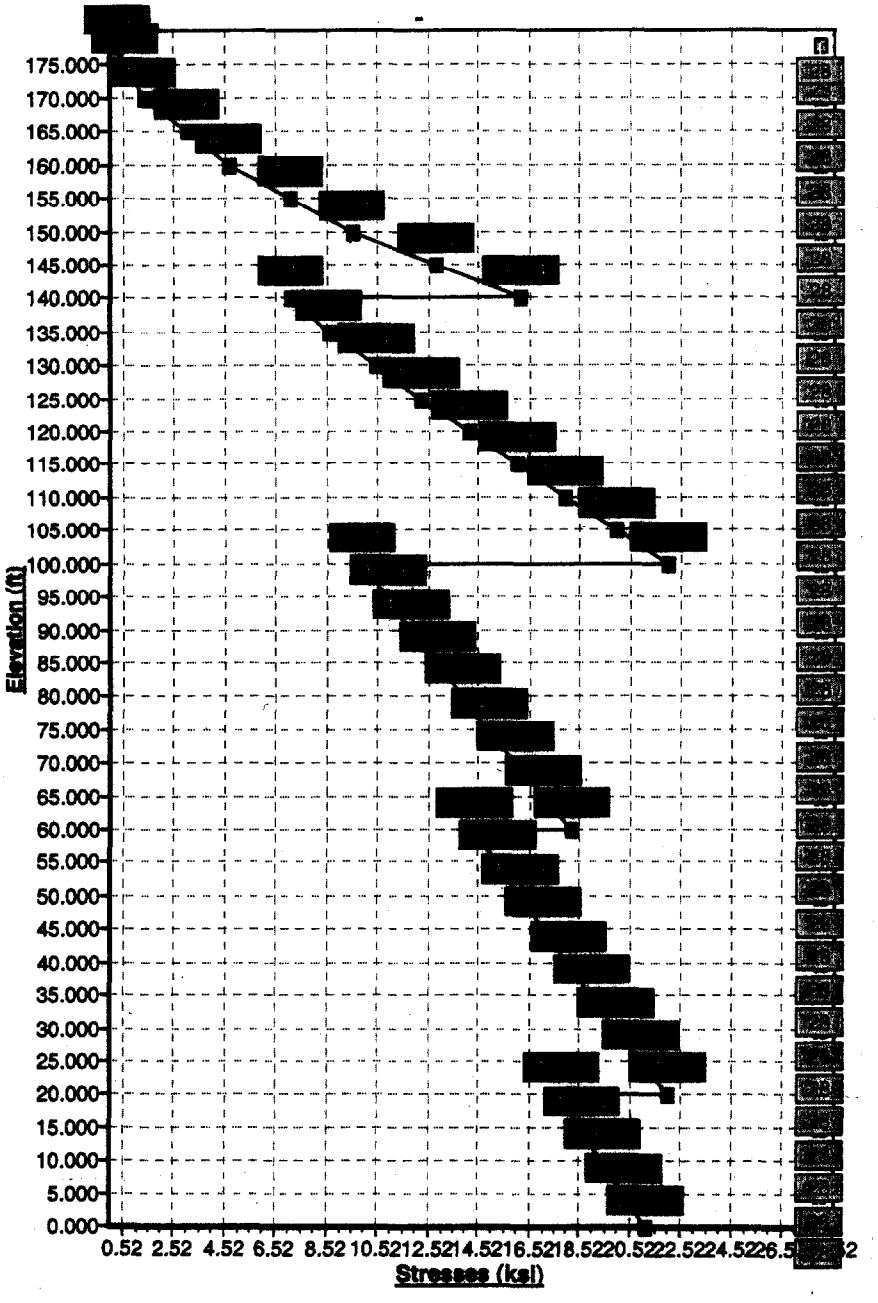
Attach Elev (ft)	Force Elev (ft)	Type	Qty	Description
178.000	178.000	Platform	1	Low Profile platform
178.000	180.000	Panel	12	DB978H65
170.000	170.000	Platform	1	Low Profile platform
170.000	170.000	Panel	9	RV65-19-00XY
160.000	160.000	Panel	3	Allgon 7262
160.000	160.000	Straight	3	T-Arms
160.000	160.000	Panel	6	DB844H80
150.000	150.000	Platform	1	Low Profile platform
150.000	150.000	Panel	12	DB844H80
135.000	135.000	Platform	1	Low Profile platform
135.000	135.000	Panel	6	BSA-185065-10

Load Cases / Deflections

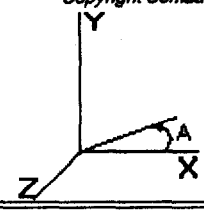
Load Case	Attach Elev (ft)	Translation (in)	Rotation (deg)
No Ice	No Ice Wind Speed = 80.00 mph w/ No Ice		
	178.000	48.42	-2.402
	170.000	44.40	-2.392
	160.000	39.44	-2.336
	150.000	34.67	-2.200
	135.000	28.13	-2.001
Ice	Ice Wind Speed = 69.28 mph w/ Ice 0.50 in Thick		
	178.000	41.82	-2.074
	170.000	38.35	-2.065
	160.000	34.07	-2.017
	150.000	29.95	-1.901
	135.000	24.29	-1.732

Reactions

Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	2,950.216	24.165	-53.948
Ice	2,523.532	20.100	-63.204


Load Case : No Ice
Elevation (ft)
175.000
170.000
165.000
160.000
155.000
150.000
145.000
140.000
135.000
130.000
125.000
120.000
115.000
110.000
105.000
100.000
95.000
90.000
85.000
80.000
75.000
70.000
65.000
60.000
55.000
50.000
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
0.52 2.52 4.52 6.52 8.52 10.52 12.52 14.52 16.52 18.52 20.52 22.52 24.52 26.5
Stresses (ksi)

Pole :	**NM03XC068**	**Sprint Sites USA - NJ**	
Location:	**503 Presumpscott St, Portland, ME**		
Height :	**178.0 (ft)**	**Base Elev : 0.000 (ft)**	
Shape :	**Round**		
Base Dia :	**60.00 (in)**	**Top Dia : 24.00 (in)**	
Taper :	**0.000000 (in/ft)**		



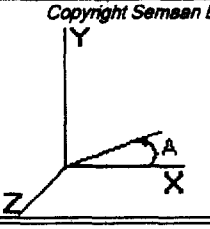
Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (sqin)	Bottom Ix (in^4)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (sqin)	Top Ix (in^4)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1	20.000	0.6250	35		0.00	7,934	60.00	0.000	116.	51414.2	0.00	96.00	60.00	20.00	116.	51414.2	0.00	96.00	0.00000
2	40.000	0.6250	35	Butt Joint	0.00	14,265	54.00	20.00	104.	37349.6	0.00	86.40	54.00	60.00	104.	37349.6	0.00	86.40	0.00000
3	40.000	0.6250	35	Butt Joint	0.00	12,661	48.00	60.00	93.02	26116.8	0.00	76.80	48.00	100.0	93.02	26116.8	0.00	76.80	0.00000
4	40.000	0.5000	35	Butt Joint	0.00	7,590	36.00	100.0	55.76	8791.2	0.00	72.00	36.00	140.0	55.76	8791.2	0.00	72.00	0.00000
5	38.000	0.5000	35	Butt Joint	0.00	4,773	24.00	140.0	36.91	2550.2	0.00	48.00	24.00	178.0	36.91	2550.2	0.00	48.00	0.00000
				Shaft Weight		47,223													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Distance From Face (ft)	X Angle (deg)	Vert Ecc (ft)
178.0	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
178.0	DB978H65	12	7.00	2.650	0.67	23.00	3.130	0.67	0.000	0.00	2.000
170.0	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
170.0	RV65-19-00XY	9	23.00	5.867	0.67	52.00	6.556	0.67	0.000	0.00	0.000
160.0	Allgon 7262	3	12.24	2.960	1.00	21.80	3.400	1.00	0.000	0.00	0.000
160.0	T-Arms	3	336.00	10.540	0.67	412.00	14.460	0.67	0.000	0.00	0.000
160.0	DB844H80	6	10.00	2.900	1.00	37.00	3.400	1.00	0.000	0.00	0.000
150.0	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
150.0	DB844H80	12	10.00	2.900	1.00	37.00	3.400	1.00	0.000	0.00	0.000
135.0	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
135.0	BSA-185065-10	6	4.49	3.912	0.67	28.00	9.100	0.67	0.000	0.00	0.000
	Totals	55	6742.64			11279.40			Number of Loadings :		11

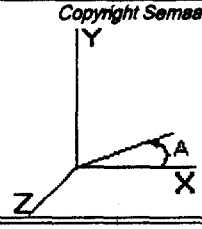
Pole : NM03XC068 Sprint Sites USA - NJ
Location: 503 Presumpscott St, Portland, ME
Height : 178.0 (ft) Base Elev : 0.000 (ft)
Shape : Round
Base Dia : 60.00 (in) Top Dia : 24.00 (in)
Taper : 0.000000 (in/ft)



Segment Properties (Max Len : 5 ft)

Seg Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Fa (ksi)	Weight (lb)
0.00		0.6250	60.000	116.583	51,414.2	0.00	96.00	35	28	28	0.0
5.00		0.6250	60.000	116.583	51,414.2	0.00	96.00	35	28	28	1,983.5
10.00		0.6250	60.000	116.583	51,414.2	0.00	96.00	35	28	28	1,983.5
15.00		0.6250	60.000	116.583	51,414.2	0.00	96.00	35	28	28	1,983.5
20.00	Top - Section 1	0.6250	60.000	116.583	51,414.2	0.00	96.00	35	28	28	1,983.5
20.00	Bot - Section 2	0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	
25.00		0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	1,783.1
30.00		0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	1,783.1
35.00		0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	1,783.1
40.00		0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	1,783.1
45.00		0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	1,783.1
50.00		0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	1,783.1
55.00		0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	1,783.1
60.00	Top - Section 2	0.6250	54.000	104.802	37,349.6	0.00	86.40	35	28	28	1,783.1
60.00	Bot - Section 3	0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	
65.00		0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	1,582.6
70.00		0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	1,582.6
75.00		0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	1,582.6
80.00		0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	1,582.6
85.00		0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	1,582.6
90.00		0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	1,582.6
95.00		0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	1,582.6
100.00	Top - Section 3	0.6250	48.000	93.021	26,116.8	0.00	76.80	35	28	28	1,582.6
100.00	Bot - Section 4	0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	
105.00		0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	948.8
110.00		0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	948.8
115.00		0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	948.8
120.00		0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	948.8
125.00		0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	948.8
130.00		0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	948.8
135.00		0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	948.8
140.00	Top - Section 4	0.5000	36.000	55.763	8,791.2	0.00	72.00	35	28	28	948.8
140.00	Bot - Section 5	0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	
145.00		0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	628.0
150.00		0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	628.0
155.00		0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	628.0
160.00		0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	628.0
165.00		0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	628.0
170.00		0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	628.0
175.00		0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	628.0
178.00		0.5000	24.000	36.914	2,550.2	0.00	48.00	35	28	28	376.8
											47,223.0

Pole : NM03XC068 Sprint Sites USA - NJ
Location: 503 Presumpscott St, Portland, ME
Height : 178.0 (ft) Base Elev : 0.000 (ft)
Shape : Round
Base Dia : 60.00 (in) Top Dia : 24.00 (in)
Taper : 0.000000 (in/ft)



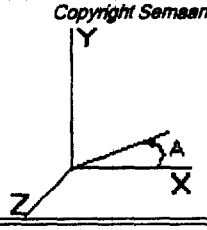
Load Case: No Ice 80 mph - No Ice 21 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	16.38	27.68	400.00	0.590	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	16.38	27.68	400.00	0.590	5.00	25.000	14.750	408.41	0.00	1,983.5
10.00		1.00	16.38	27.68	400.00	0.590	5.00	25.000	14.750	408.41	0.00	1,983.5
15.00		1.00	16.38	27.68	400.00	0.590	5.00	25.000	14.750	408.41	0.00	1,983.5
20.00	Top - Section 1	1.00	16.38	27.68	400.00	0.590	5.00	25.000	14.750	408.41	0.00	1,983.5
25.00		1.00	16.38	27.68	360.00	0.590	5.00	22.500	13.275	367.57	0.00	1,783.1
30.00		1.00	16.38	27.68	360.00	0.590	5.00	22.500	13.275	367.57	0.00	1,783.1
35.00		1.01	16.66	28.15	363.04	0.590	5.00	22.500	13.275	373.80	0.00	1,783.1
40.00		1.05	17.31	29.25	370.03	0.590	5.00	22.500	13.275	388.34	0.00	1,783.1
45.00		1.09	17.90	30.25	376.31	0.590	5.00	22.500	13.275	401.63	0.00	1,783.1
50.00		1.12	18.44	31.17	382.02	0.590	5.00	22.500	13.275	413.90	0.00	1,783.1
55.00		1.15	18.95	32.04	387.25	0.590	5.00	22.500	13.275	425.33	0.00	1,783.1
60.00	Top - Section 2	1.18	19.43	32.84	392.10	0.590	5.00	22.500	13.275	436.04	0.00	1,783.1
65.00		1.21	19.88	33.60	352.54	0.590	5.00	20.000	11.800	396.55	0.00	1,582.6
70.00		1.24	20.31	34.32	356.29	0.590	5.00	20.000	11.800	405.04	0.00	1,582.6
75.00		1.26	20.71	35.00	359.82	0.590	5.00	20.000	11.800	413.10	0.00	1,582.6
80.00		1.28	21.10	35.66	363.15	0.590	5.00	20.000	11.800	420.79	0.00	1,582.6
85.00		1.31	21.46	36.28	366.31	0.590	5.00	20.000	11.800	428.14	0.00	1,582.6
90.00		1.33	21.82	36.88	369.31	0.590	5.00	20.000	11.800	435.19	0.00	1,582.6
95.00		1.35	22.16	37.45	372.18	0.590	5.00	20.000	11.800	441.97	0.00	1,582.6
100.00	Top - Section 3	1.37	22.49	38.00	374.92	0.590	5.00	20.000	11.800	448.49	0.00	1,582.6
105.00		1.39	22.80	38.54	283.15	0.590	5.00	15.000	8.850	341.09	0.00	948.8
110.00		1.41	23.11	39.05	285.04	0.590	5.00	15.000	8.850	345.66	0.00	948.8
115.00		1.42	23.40	39.55	286.86	0.590	5.00	15.000	8.850	350.07	0.00	948.8
120.00		1.44	23.69	40.04	288.61	0.590	5.00	15.000	8.850	354.36	0.00	948.8
125.00		1.46	23.97	40.51	290.29	0.590	5.00	15.000	8.850	358.51	0.00	948.8
130.00		1.48	24.24	40.96	291.93	0.590	5.00	15.000	8.850	362.55	0.00	948.8
135.00	Appertunance(s)	1.49	24.50	41.41	293.50	0.590	5.00	15.000	8.850	366.48	0.00	948.8
140.00	Top - Section 4	1.51	24.75	41.84	295.03	0.590	5.00	15.000	8.850	370.31	0.00	948.8
145.00		1.52	25.00	42.26	197.68	0.590	5.00	10.000	5.900	249.36	0.00	628.0
150.00	Appertunance(s)	1.54	25.25	42.67	198.64	0.590	5.00	10.000	5.900	251.79	0.00	628.0
155.00		1.55	25.49	43.07	199.57	0.590	5.00	10.000	5.900	254.16	0.00	628.0
160.00	Appertunance(s)	1.57	25.72	43.47	200.48	0.590	5.00	10.000	5.900	256.48	0.00	628.0
165.00		1.58	25.94	43.85	201.36	0.590	5.00	10.000	5.900	258.74	0.00	628.0
170.00	Appertunance(s)	1.59	26.17	44.23	202.22	0.590	5.00	10.000	5.900	260.96	0.00	628.0
175.00		1.61	26.38	44.59	203.06	0.590	5.00	10.000	5.900	263.13	0.00	628.0
178.00	Appertunance(s)	1.61	26.51	44.81	203.55	0.590	3.00	6.000	3.540	158.64	0.00	376.8
					Totals:		178.00			12,999.42	0.00	47,223.0

Pole :	**NM03XC068**	**Sprint Sites USA - NJ**	
Location:	**503 Presumpscott St, Portland, ME**		
Height :	**178.0 (ft)**	**Base Elev :**	**0.000 (ft)**
Shape :	**Round**		
Base Dia :	**60.00 (in)**	**Top Dia :**	**24.00 (in)**
Taper :	**0.000000 (in/ft)**		



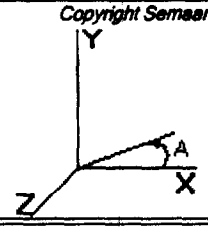
Load Case: No Ice — 80 mph - No Ice — 21 Iterations

Gust Response Factor : 1.69 — **Effective Wind Speed :** 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
135.00	Low Profile platform	1	24.50	41.41	25.550	1.000	0.000	0.0	0.0	1058.04	0.00	0.00	0.00	0.00	1300.0
135.00	BSA-185065-10	6	24.50	41.41	15.656	0.667	0.000	0.0	0.0	648.32	0.00	0.00	0.00	0.00	26.9
150.00	Low Profile platform	1	25.25	42.67	25.550	1.000	0.000	0.0	0.0	1090.37	0.00	0.00	0.00	0.00	1300.0
150.00	DB844H80	12	25.25	42.67	34.800	1.000	0.000	0.0	0.0	1485.13	0.00	0.00	0.00	0.00	120.0
160.00	Allgon 7262	3	25.72	43.47	8.880	1.000	0.000	0.0	0.0	386.02	0.00	0.00	0.00	0.00	36.7
160.00	T-Arms	3	25.72	43.47	21.090	0.667	0.000	0.0	0.0	916.80	0.00	0.00	0.00	0.00	1008.0
160.00	DB844H80	6	25.72	43.47	17.400	1.000	0.000	0.0	0.0	756.39	0.00	0.00	0.00	0.00	60.0
170.00	Low Profile platform	1	26.17	44.23	25.550	1.000	0.000	0.0	0.0	1130.07	0.00	0.00	0.00	0.00	1300.0
170.00	RV65-19-00XY	9	26.17	44.23	35.220	0.667	0.000	0.0	0.0	1557.76	0.00	0.00	0.00	0.00	207.0
178.00	Low Profile platform	1	26.51	44.81	25.550	1.000	0.000	0.0	0.0	1145.02	0.00	0.00	0.00	0.00	1300.0
178.00	DB978H65	12	26.60	44.95	21.211	0.667	0.000	2.0	0.0	953.59	0.00	0.00	0.00	1907.18	84.0
										11,127.5	0.00				6,742.6

Pole :	NM03XC068	Sprint Sites USA - NJ	
Location:	503 Presumpscott St, Portland, ME		
Height :	178.0 (ft)	Base Elev : 0.000 (ft)	
Shape :	Round		
Base Dia :	60.00 (in)	Top Dia : 24.00 (in)	
Taper :	0.000000 (in/ft)		



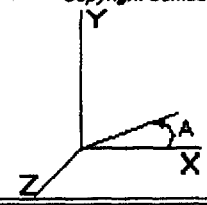
Load Case: No Ice — 80 mph - No Ice — 21 Iterations

Gust Response Factor : 1.69 — Effective Wind Speed : 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	408.41	1,983.52	0.00	0.00	0.00	0.00
10.00	0.00	0.00	408.41	1,983.52	0.00	0.00	0.00	0.00
15.00	0.00	0.00	408.41	1,983.52	0.00	0.00	0.00	0.00
20.00	0.00	0.00	408.41	1,983.52	0.00	0.00	0.00	0.00
25.00	0.00	0.00	367.57	1,783.08	0.00	0.00	0.00	0.00
30.00	0.00	0.00	367.57	1,783.08	0.00	0.00	0.00	0.00
35.00	0.00	0.00	373.80	1,783.08	0.00	0.00	0.00	0.00
40.00	0.00	0.00	388.34	1,783.08	0.00	0.00	0.00	0.00
45.00	0.00	0.00	401.63	1,783.08	0.00	0.00	0.00	0.00
50.00	0.00	0.00	413.90	1,783.08	0.00	0.00	0.00	0.00
55.00	0.00	0.00	425.33	1,783.08	0.00	0.00	0.00	0.00
60.00	0.00	0.00	436.04	1,783.08	0.00	0.00	0.00	0.00
65.00	0.00	0.00	396.55	1,582.64	0.00	0.00	0.00	0.00
70.00	0.00	0.00	405.04	1,582.64	0.00	0.00	0.00	0.00
75.00	0.00	0.00	413.10	1,582.64	0.00	0.00	0.00	0.00
80.00	0.00	0.00	420.79	1,582.64	0.00	0.00	0.00	0.00
85.00	0.00	0.00	428.14	1,582.64	0.00	0.00	0.00	0.00
90.00	0.00	0.00	435.19	1,582.64	0.00	0.00	0.00	0.00
95.00	0.00	0.00	441.97	1,582.64	0.00	0.00	0.00	0.00
100.00	0.00	0.00	448.49	1,582.64	0.00	0.00	0.00	0.00
105.00	0.00	0.00	341.09	948.75	0.00	0.00	0.00	0.00
110.00	0.00	0.00	345.66	948.75	0.00	0.00	0.00	0.00
115.00	0.00	0.00	350.07	948.75	0.00	0.00	0.00	0.00
120.00	0.00	0.00	354.36	948.75	0.00	0.00	0.00	0.00
125.00	0.00	0.00	358.51	948.75	0.00	0.00	0.00	0.00
130.00	0.00	0.00	362.55	948.75	0.00	0.00	0.00	0.00
135.00	0.00	0.00	2,072.85	2,275.67	0.00	0.00	0.00	0.00
140.00	0.00	0.00	370.31	948.75	0.00	0.00	0.00	0.00
145.00	0.00	0.00	249.36	628.05	0.00	0.00	0.00	0.00
150.00	0.00	0.00	2,827.30	2,048.05	0.00	0.00	0.00	0.00
155.00	0.00	0.00	254.16	628.05	0.00	0.00	0.00	0.00
160.00	0.00	0.00	2,315.68	1,732.77	0.00	0.00	0.00	0.00
165.00	0.00	0.00	258.74	628.05	0.00	0.00	0.00	0.00
170.00	0.00	0.00	2,948.79	2,135.05	0.00	0.00	0.00	0.00
175.00	0.00	0.00	263.13	628.05	0.00	0.00	0.00	0.00
178.00	0.00	0.00	2,257.26	1,760.83	0.00	0.00	0.00	1,907.18
	Totals:		24,126.94	53,965.68	0.00	0.00	0.00	1,907.18

Pole : NM03XC068 Sprint Sites USA - NJ
Location: 503 Presumpscott St, Portland, ME
Height : 178.0 (ft) Base Elev : 0.000 (ft)
Shape : Round
Base Dia : 60.00 (in) Top Dia : 24.00 (in)
Taper : 0.000000 (in/ft)



Load Case: No Ice 80 mph - No Ice 21 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	24.165	53.948	0.000	0.000	0.000	2,950.216	0.000	0.000	0.000	0.000
5.00	23.826	51.933	0.000	0.000	0.000	2,829.393	-0.043	0.000	0.043	-0.080
10.00	23.479	49.919	0.000	0.000	0.000	2,710.266	-0.168	0.000	0.168	-0.157
15.00	23.124	47.908	0.000	0.000	0.000	2,592.874	-0.372	0.000	0.372	-0.230
20.00	22.761	45.899	0.000	0.000	0.000	2,477.257	-0.650	0.000	0.650	-0.300
25.00	22.443	44.088	0.000	0.000	0.000	2,363.454	-1.001	0.000	1.001	-0.367
30.00	22.126	42.275	0.000	0.000	0.000	2,251.242	-1.432	0.000	1.432	-0.455
35.00	21.794	40.464	0.000	0.000	0.000	2,140.616	-1.954	0.000	1.954	-0.539
40.00	21.440	38.656	0.000	0.000	0.000	2,031.648	-2.560	0.000	2.560	-0.618
45.00	21.065	36.851	0.000	0.000	0.000	1,924.451	-3.248	0.000	3.248	-0.693
50.00	20.671	35.048	0.000	0.000	0.000	1,819.128	-4.013	0.000	4.013	-0.765
55.00	20.258	33.248	0.000	0.000	0.000	1,715.775	-4.850	0.000	4.850	-0.832
60.00	19.829	31.451	0.000	0.000	0.000	1,614.484	-5.755	0.000	5.755	-0.895
65.00	19.444	29.851	0.000	0.000	0.000	1,515.339	-6.725	0.000	6.725	-0.955
70.00	19.049	28.250	0.000	0.000	0.000	1,418.121	-7.768	0.000	7.768	-1.035
75.00	18.640	26.652	0.000	0.000	0.000	1,322.875	-8.893	0.000	8.893	-1.110
80.00	18.217	25.057	0.000	0.000	0.000	1,229.675	-10.092	0.000	10.092	-1.179
85.00	17.781	23.464	0.000	0.000	0.000	1,138.590	-11.362	0.000	11.362	-1.244
90.00	17.333	21.874	0.000	0.000	0.000	1,049.686	-12.696	0.000	12.696	-1.303
95.00	16.873	20.287	0.000	0.000	0.000	963.023	-14.090	0.000	14.090	-1.358
100.00	16.402	18.702	0.000	0.000	0.000	878.661	-15.540	0.000	15.540	-1.408
105.00	16.063	17.738	0.000	0.000	0.000	796.653	-17.039	0.000	17.039	-1.454
110.00	15.727	16.767	0.000	0.000	0.000	716.337	-18.628	0.000	18.628	-1.576
115.00	15.378	15.801	0.000	0.000	0.000	637.705	-20.338	0.000	20.338	-1.686
120.00	15.019	14.840	0.000	0.000	0.000	560.814	-22.156	0.000	22.156	-1.783
125.00	14.649	13.883	0.000	0.000	0.000	485.721	-24.069	0.000	24.069	-1.867
130.00	14.271	12.930	0.000	0.000	0.000	412.475	-26.064	0.000	26.064	-1.940
135.00	12.131	10.715	0.000	0.000	0.000	341.122	-28.129	0.000	28.129	-2.001
140.00	11.735	9.771	0.000	0.000	0.000	280.468	-30.252	0.000	30.252	-2.051
145.00	11.475	9.137	0.000	0.000	0.000	221.792	-32.423	0.000	32.423	-2.092
150.00	8.585	7.182	0.000	0.000	0.000	164.415	-34.673	0.000	34.673	-2.200
155.00	8.314	6.555	0.000	0.000	0.000	121.490	-37.021	0.000	37.021	-2.279
160.00	5.935	4.912	0.000	0.000	0.000	79.919	-39.439	0.000	39.439	-2.336
165.00	5.652	4.293	0.000	0.000	0.000	50.246	-41.905	0.000	41.905	-2.372
170.00	2.618	2.281	0.000	0.000	0.000	21.984	-44.401	0.000	44.401	-2.392
175.00	2.329	1.665	0.000	0.000	0.000	8.894	-46.911	0.000	46.911	-2.401
178.00	2.257	0.000	0.000	0.000	0.000	1.907	-48.419	0.000	48.419	-2.402

Pole : NM03XC068 Sprint Sites USA - NJ

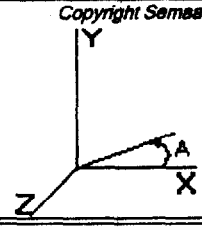
Location: 503 Presumpscott St, Portland, ME

Height : 178.0 (ft) Base Elev : 0.000 (ft)

Shape : Round

Base Dia : 60.00 (in) Top Dia : 24.00 (in)

Taper : 0.000000 (in/ft)



Load Case: No Ice 80 mph - No Ice 21 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)	Allowable Stress (Fa) (ksi)	Stress Ratio
0.00	0.463	0.415	0.000	0.000	0.000	20.657	21.132	28.0	28.0	0.755
5.00	0.445	0.409	0.000	0.000	0.000	19.811	20.269	28.0	28.0	0.724
10.00	0.428	0.403	0.000	0.000	0.000	18.977	19.418	28.0	28.0	0.694
15.00	0.411	0.397	0.000	0.000	0.000	18.155	18.579	28.0	28.0	0.664
20.00	0.394	0.391	0.000	0.000	0.000	17.346	17.752	28.0	28.0	0.634
20.00	0.438	0.435	0.000	0.000	0.000	21.490	21.941	28.0	28.0	0.784
25.00	0.421	0.429	0.000	0.000	0.000	20.502	20.936	28.0	28.0	0.748
30.00	0.403	0.422	0.000	0.000	0.000	19.529	19.946	28.0	28.0	0.712
35.00	0.386	0.416	0.000	0.000	0.000	18.569	18.969	28.0	28.0	0.678
40.00	0.369	0.409	0.000	0.000	0.000	17.624	18.007	28.0	28.0	0.643
45.00	0.352	0.402	0.000	0.000	0.000	16.694	17.060	28.0	28.0	0.609
50.00	0.334	0.395	0.000	0.000	0.000	15.781	16.129	28.0	28.0	0.576
55.00	0.317	0.387	0.000	0.000	0.000	14.884	15.216	28.0	28.0	0.543
60.00	0.300	0.379	0.000	0.000	0.000	14.005	14.320	28.0	28.0	0.511
60.00	0.338	0.427	0.000	0.000	0.000	17.804	18.157	28.0	28.0	0.649
65.00	0.321	0.418	0.000	0.000	0.000	16.710	17.047	28.0	28.0	0.609
70.00	0.304	0.410	0.000	0.000	0.000	15.638	15.958	28.0	28.0	0.570
75.00	0.287	0.401	0.000	0.000	0.000	14.588	14.891	28.0	28.0	0.532
80.00	0.269	0.392	0.000	0.000	0.000	13.560	13.846	28.0	28.0	0.495
85.00	0.252	0.383	0.000	0.000	0.000	12.556	12.825	28.0	28.0	0.458
90.00	0.235	0.373	0.000	0.000	0.000	11.575	11.828	28.0	28.0	0.422
95.00	0.218	0.363	0.000	0.000	0.000	10.620	10.856	28.0	28.0	0.388
100.00	0.201	0.353	0.000	0.000	0.000	9.689	9.909	28.0	28.0	0.354
100.00	0.335	0.589	0.000	0.000	0.000	21.589	21.948	28.0	28.0	0.784
105.00	0.318	0.576	0.000	0.000	0.000	19.574	19.917	28.0	28.0	0.711
110.00	0.301	0.564	0.000	0.000	0.000	17.600	17.928	28.0	28.0	0.640
115.00	0.283	0.552	0.000	0.000	0.000	15.668	15.980	28.0	28.0	0.571
120.00	0.266	0.539	0.000	0.000	0.000	13.779	14.076	28.0	28.0	0.503
125.00	0.249	0.526	0.000	0.000	0.000	11.934	12.217	28.0	28.0	0.436
130.00	0.232	0.512	0.000	0.000	0.000	10.135	10.404	28.0	28.0	0.372
135.00	0.192	0.435	0.000	0.000	0.000	8.381	8.607	28.0	28.0	0.307
140.00	0.175	0.421	0.000	0.000	0.000	6.891	7.104	28.0	28.0	0.254
140.00	0.265	0.636	0.000	0.000	0.000	15.837	16.140	28.0	28.0	0.576
145.00	0.248	0.622	0.000	0.000	0.000	12.524	12.817	28.0	28.0	0.458
150.00	0.195	0.465	0.000	0.000	0.000	9.284	9.513	28.0	28.0	0.340
155.00	0.178	0.451	0.000	0.000	0.000	6.860	7.081	28.0	28.0	0.253
160.00	0.133	0.322	0.000	0.000	0.000	4.513	4.679	28.0	28.0	0.167
165.00	0.116	0.306	0.000	0.000	0.000	2.837	3.001	28.0	28.0	0.107
170.00	0.062	0.142	0.000	0.000	0.000	1.241	1.326	28.0	28.0	0.047
175.00	0.045	0.126	0.000	0.000	0.000	0.502	0.589	28.0	28.0	0.021
178.00	0.000	0.122	0.000	0.000	0.000	0.108	0.238	28.0	28.0	0.008

Pole : NM03XC068 Sprint Sites USA - NJ

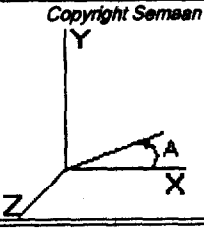
Location: 503 Presumpscott St, Portland, ME

Height : 178.0 (ft) Base Elev : 0.000 (ft)

Shape : Round

Base Dia : 60.00 (in) Top Dia : 24.00 (in)

Taper : 0.000000 (in/ft)



Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 21 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)

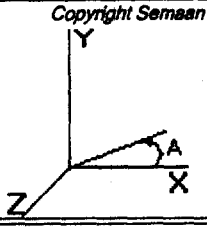
Dead Load Factor : 1.00

Wind Load Factor : 1.00

Shaft Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	12.28	20.76	346.40	0.590	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	12.28	20.76	346.40	0.590	5.00	25.417	14.996	311.40	0.00	2,168.2
10.00		1.00	12.28	20.76	346.40	0.590	5.00	25.417	14.996	311.40	0.00	2,168.2
15.00		1.00	12.28	20.76	346.40	0.590	5.00	25.417	14.996	311.40	0.00	2,168.2
20.00	Top - Section 1	1.00	12.28	20.76	346.40	0.590	5.00	25.417	14.996	311.40	0.00	2,168.2
25.00		1.00	12.28	20.76	311.76	0.590	5.00	22.917	13.521	280.77	0.00	1,949.5
30.00		1.00	12.28	20.76	311.76	0.590	5.00	22.917	13.521	280.77	0.00	1,949.5
35.00		1.01	12.49	21.11	314.39	0.590	5.00	22.917	13.521	285.53	0.00	1,949.5
40.00		1.05	12.98	21.93	320.45	0.590	5.00	22.917	13.521	296.63	0.00	1,949.5
45.00		1.09	13.42	22.69	325.88	0.590	5.00	22.917	13.521	306.78	0.00	1,949.5
50.00		1.12	13.83	23.38	330.83	0.590	5.00	22.917	13.521	316.16	0.00	1,949.5
55.00		1.15	14.21	24.02	335.36	0.590	5.00	22.917	13.521	324.89	0.00	1,949.5
60.00	Top - Section 2	1.18	14.57	24.63	339.56	0.590	5.00	22.917	13.521	333.06	0.00	1,949.5
65.00		1.21	14.91	25.20	305.30	0.590	5.00	20.417	12.046	303.59	0.00	1,730.7
70.00		1.24	15.23	25.74	308.55	0.590	5.00	20.417	12.046	310.09	0.00	1,730.7
75.00		1.26	15.53	26.25	311.60	0.590	5.00	20.417	12.046	316.26	0.00	1,730.7
80.00		1.28	15.82	26.74	314.49	0.590	5.00	20.417	12.046	322.15	0.00	1,730.7
85.00		1.31	16.10	27.21	317.23	0.590	5.00	20.417	12.046	327.78	0.00	1,730.7
90.00		1.33	16.36	27.65	319.83	0.590	5.00	20.417	12.046	333.18	0.00	1,730.7
95.00		1.35	16.62	28.09	322.31	0.590	5.00	20.417	12.046	338.36	0.00	1,730.7
100.00	Top - Section 3	1.37	16.86	28.50	324.68	0.590	5.00	20.417	12.046	343.36	0.00	1,730.7
105.00		1.39	17.10	28.90	245.21	0.590	5.00	15.417	9.096	262.91	0.00	1,060.2
110.00		1.41	17.33	29.29	246.85	0.590	5.00	15.417	9.096	266.43	0.00	1,060.2
115.00		1.42	17.55	29.66	248.42	0.590	5.00	15.417	9.096	269.83	0.00	1,060.2
120.00		1.44	17.76	30.02	249.93	0.590	5.00	15.417	9.096	273.13	0.00	1,060.2
125.00		1.46	17.97	30.38	251.40	0.590	5.00	15.417	9.096	276.34	0.00	1,060.2
130.00		1.48	18.17	30.72	252.81	0.590	5.00	15.417	9.096	279.45	0.00	1,060.2
135.00	Appertunance(s)	1.49	18.37	31.05	254.17	0.590	5.00	15.417	9.096	282.48	0.00	1,060.2
140.00	Top - Section 4	1.51	18.56	31.38	255.50	0.590	5.00	15.417	9.096	285.43	0.00	1,060.2
145.00		1.52	18.75	31.69	171.19	0.590	5.00	10.417	6.146	194.80	0.00	702.8
150.00	Appertunance(s)	1.54	18.93	32.00	172.02	0.590	5.00	10.417	6.146	196.70	0.00	702.8
155.00		1.55	19.11	32.30	172.83	0.590	5.00	10.417	6.146	198.55	0.00	702.8
160.00	Appertunance(s)	1.57	19.29	32.60	173.61	0.590	5.00	10.417	6.146	200.36	0.00	702.8
165.00		1.58	19.46	32.88	174.38	0.590	5.00	10.417	6.146	202.13	0.00	702.8
170.00	Appertunance(s)	1.59	19.62	33.17	175.12	0.590	5.00	10.417	6.146	203.86	0.00	702.8
175.00		1.61	19.79	33.44	175.85	0.590	5.00	10.417	6.146	205.56	0.00	702.8
178.00	Appertunance(s)	1.61	19.88	33.60	176.28	0.590	3.00	6.250	3.687	123.93	0.00	421.7
					Totals:		178.00			9,986.84	0.00	51,937.1

Pole :	NM03XC068	Sprint Sites USA - NJ	
Location:	503 Presumpscott St, Portland, ME		
Height :	178.0 (ft)	Base Elev : 0.000 (ft)	
Shape :	Round		
Base Dia :	60.00 (in)	Top Dia : 24.00 (in)	
Taper :	0.000000 (in/ft)		



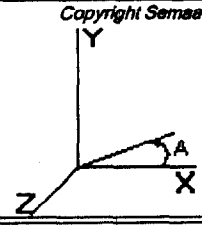
Load Case: Ice — 80 mph - With Ice - Ice Thickness = 0.5 in — 21 Iterations

Gust Response Factor : 1.69 — Effective Wind Speed : 69.28 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
135.00	Low Profile platform	1	18.37	31.05	27.320	1.000	0.000	0.0	0.0	848.45	0.00	0.00	0.00	0.00	2100.0
135.00	BSA-185065-10	6	18.37	31.05	36.416	0.667	0.000	0.0	0.0	1131.01	0.00	0.00	0.00	0.00	168.0
150.00	Low Profile platform	1	18.93	32.00	27.320	1.000	0.000	0.0	0.0	874.38	0.00	0.00	0.00	0.00	2100.0
150.00	DB844H80	12	18.93	32.00	40.800	1.000	0.000	0.0	0.0	1305.82	0.00	0.00	0.00	0.00	444.0
160.00	Allgon 7262	3	19.29	32.60	10.200	1.000	0.000	0.0	0.0	332.53	0.00	0.00	0.00	0.00	65.4
160.00	T-Arms	3	19.29	32.60	28.934	0.667	0.000	0.0	0.0	943.29	0.00	0.00	0.00	0.00	1236.0
160.00	DB844H80	6	19.29	32.60	20.400	1.000	0.000	0.0	0.0	665.06	0.00	0.00	0.00	0.00	222.0
170.00	Low Profile platform	1	19.62	33.17	27.320	1.000	0.000	0.0	0.0	906.22	0.00	0.00	0.00	0.00	2100.0
170.00	RV65-19-00XY	9	19.62	33.17	39.356	0.667	0.000	0.0	0.0	1305.45	0.00	0.00	0.00	0.00	468.0
178.00	Low Profile platform	1	19.88	33.60	27.320	1.000	0.000	0.0	0.0	916.20	0.00	0.00	0.00	0.00	2100.0
178.00	DB978H65	12	19.95	33.71	25.053	0.667	0.000	2.0	0.0	844.69	0.00	0.00	0.00	1689.38	276.0
										10,075.1	0.00				11,279.4

Pole :	NM03XC068	Sprint Sites USA - NJ	
Location:	503 Presumpscott St, Portland, ME		
Height :	178.0 (ft)	**Base Elev :** 0.000 (ft)	
Shape :	Round		
Base Dia :	60.00 (in)	**Top Dia :** 24.00 (in)	
Taper :	0.000000 (in/ft)		



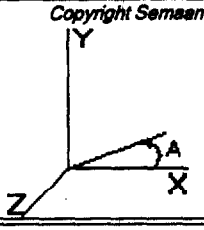
Load Case: Ice — 80 mph - With Ice - Ice Thickness = 0.5 in — 21 Iterations

Gust Response Factor : 1.69 — **Effective Wind Speed :** 69.28 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	311.40	2,168.22	0.00	0.00	0.00	0.00
10.00	0.00	0.00	311.40	2,168.22	0.00	0.00	0.00	0.00
15.00	0.00	0.00	311.40	2,168.22	0.00	0.00	0.00	0.00
20.00	0.00	0.00	311.40	2,168.22	0.00	0.00	0.00	0.00
25.00	0.00	0.00	280.77	1,949.46	0.00	0.00	0.00	0.00
30.00	0.00	0.00	280.77	1,949.46	0.00	0.00	0.00	0.00
35.00	0.00	0.00	285.53	1,949.46	0.00	0.00	0.00	0.00
40.00	0.00	0.00	296.63	1,949.46	0.00	0.00	0.00	0.00
45.00	0.00	0.00	306.78	1,949.46	0.00	0.00	0.00	0.00
50.00	0.00	0.00	316.16	1,949.46	0.00	0.00	0.00	0.00
55.00	0.00	0.00	324.89	1,949.46	0.00	0.00	0.00	0.00
60.00	0.00	0.00	333.06	1,949.46	0.00	0.00	0.00	0.00
65.00	0.00	0.00	303.59	1,730.70	0.00	0.00	0.00	0.00
70.00	0.00	0.00	310.09	1,730.70	0.00	0.00	0.00	0.00
75.00	0.00	0.00	316.26	1,730.70	0.00	0.00	0.00	0.00
80.00	0.00	0.00	322.15	1,730.70	0.00	0.00	0.00	0.00
85.00	0.00	0.00	327.78	1,730.70	0.00	0.00	0.00	0.00
90.00	0.00	0.00	333.18	1,730.70	0.00	0.00	0.00	0.00
95.00	0.00	0.00	338.36	1,730.70	0.00	0.00	0.00	0.00
100.00	0.00	0.00	343.36	1,730.70	0.00	0.00	0.00	0.00
105.00	0.00	0.00	262.91	1,060.18	0.00	0.00	0.00	0.00
110.00	0.00	0.00	266.43	1,060.18	0.00	0.00	0.00	0.00
115.00	0.00	0.00	269.83	1,060.18	0.00	0.00	0.00	0.00
120.00	0.00	0.00	273.13	1,060.18	0.00	0.00	0.00	0.00
125.00	0.00	0.00	276.34	1,060.18	0.00	0.00	0.00	0.00
130.00	0.00	0.00	279.45	1,060.18	0.00	0.00	0.00	0.00
135.00	0.00	0.00	2,261.95	3,328.18	0.00	0.00	0.00	0.00
140.00	0.00	0.00	285.43	1,060.18	0.00	0.00	0.00	0.00
145.00	0.00	0.00	194.80	702.84	0.00	0.00	0.00	0.00
150.00	0.00	0.00	2,376.90	3,246.84	0.00	0.00	0.00	0.00
155.00	0.00	0.00	198.55	702.84	0.00	0.00	0.00	0.00
160.00	0.00	0.00	2,141.24	2,226.24	0.00	0.00	0.00	0.00
165.00	0.00	0.00	202.13	702.84	0.00	0.00	0.00	0.00
170.00	0.00	0.00	2,415.52	3,270.84	0.00	0.00	0.00	0.00
175.00	0.00	0.00	205.56	702.84	0.00	0.00	0.00	0.00
178.00	0.00	0.00	1,886.83	2,797.70	0.00	0.00	0.00	1,689.38
	Totals:		20,061.94	63,216.53	0.00	0.00	0.00	1,689.38

Pole : NM03XC068 Sprint Sites USA - NJ
Location: 503 Presumpscott St, Portland, ME
Height : 178.0 (ft) Base Elev : 0.000 (ft)
Shape : Round
Base Dia : 60.00 (in) Top Dia : 24.00 (in)
Taper : 0.000000 (in/ft)



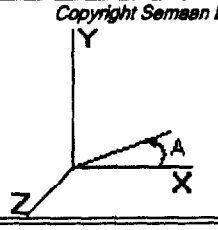
Load Case: Ice — 80 mph - With Ice - Ice Thickness = 0.5 in — 21 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	20.100	63.204	0.000	0.000	0.000	2,523.532	0.000	0.000	0.000	0.000
5.00	19.859	61.013	0.000	0.000	0.000	2,423.034	-0.037	0.000	0.037	-0.068
10.00	19.609	58.823	0.000	0.000	0.000	2,323.742	-0.144	0.000	0.144	-0.134
15.00	19.353	56.635	0.000	0.000	0.000	2,225.697	-0.318	0.000	0.318	-0.197
20.00	19.089	54.449	0.000	0.000	0.000	2,128.936	-0.557	0.000	0.557	-0.257
25.00	18.859	52.479	0.000	0.000	0.000	2,033.494	-0.857	0.000	0.857	-0.315
30.00	18.632	50.507	0.000	0.000	0.000	1,939.200	-1.228	0.000	1.228	-0.391
35.00	18.391	48.537	0.000	0.000	0.000	1,846.044	-1.675	0.000	1.675	-0.463
40.00	18.132	46.569	0.000	0.000	0.000	1,754.091	-2.197	0.000	2.197	-0.531
45.00	17.855	44.603	0.000	0.000	0.000	1,663.433	-2.788	0.000	2.788	-0.596
50.00	17.562	42.639	0.000	0.000	0.000	1,574.159	-3.446	0.000	3.446	-0.658
55.00	17.254	40.677	0.000	0.000	0.000	1,486.349	-4.166	0.000	4.166	-0.716
60.00	16.932	38.716	0.000	0.000	0.000	1,400.079	-4.946	0.000	4.946	-0.771
65.00	16.643	36.972	0.000	0.000	0.000	1,315.421	-5.781	0.000	5.781	-0.823
70.00	16.349	35.227	0.000	0.000	0.000	1,232.205	-6.680	0.000	6.680	-0.892
75.00	16.041	33.484	0.000	0.000	0.000	1,150.462	-7.650	0.000	7.650	-0.957
80.00	15.722	31.743	0.000	0.000	0.000	1,070.258	-8.685	0.000	8.685	-1.018
85.00	15.391	30.004	0.000	0.000	0.000	991.651	-9.781	0.000	9.781	-1.074
90.00	15.049	28.267	0.000	0.000	0.000	914.699	-10.933	0.000	10.933	-1.126
95.00	14.697	26.532	0.000	0.000	0.000	839.457	-12.138	0.000	12.138	-1.173
100.00	14.336	24.798	0.000	0.000	0.000	765.973	-13.391	0.000	13.391	-1.217
105.00	14.081	23.726	0.000	0.000	0.000	694.296	-14.687	0.000	14.687	-1.257
110.00	13.830	22.648	0.000	0.000	0.000	623.894	-16.061	0.000	16.061	-1.364
115.00	13.568	21.573	0.000	0.000	0.000	554.746	-17.541	0.000	17.541	-1.459
120.00	13.295	20.503	0.000	0.000	0.000	486.908	-19.114	0.000	19.114	-1.543
125.00	13.013	19.435	0.000	0.000	0.000	420.433	-20.771	0.000	20.771	-1.617
130.00	12.721	18.370	0.000	0.000	0.000	355.369	-22.498	0.000	22.498	-1.679
135.00	10.374	15.103	0.000	0.000	0.000	291.763	-24.286	0.000	24.286	-1.732
140.00	10.066	14.045	0.000	0.000	0.000	239.894	-26.123	0.000	26.123	-1.775
145.00	9.864	13.337	0.000	0.000	0.000	189.566	-28.001	0.000	28.001	-1.810
150.00	7.397	10.159	0.000	0.000	0.000	140.246	-29.947	0.000	29.947	-1.901
155.00	7.185	9.456	0.000	0.000	0.000	103.259	-31.976	0.000	31.976	-1.969
160.00	4.972	7.302	0.000	0.000	0.000	67.336	-34.065	0.000	34.065	-2.017
165.00	4.748	6.605	0.000	0.000	0.000	42.476	-36.195	0.000	36.195	-2.048
170.00	2.217	3.423	0.000	0.000	0.000	18.736	-38.349	0.000	38.349	-2.065
175.00	1.987	2.728	0.000	0.000	0.000	7.650	-40.516	0.000	40.516	-2.072
178.00	1.887	0.000	0.000	0.000	0.000	1.689	-41.818	0.000	41.818	-2.074

Pole : NM03XC068 Sprint Sites USA - NJ
Location: 503 Presumpscott St, Portland, ME
Height : 178.0 (ft) Base Elev : 0.000 (ft)
Shape : Round
Base Dia : 60.00 (in) Top Dia : 24.00 (in)
Taper : 0.000000 (in/ft)



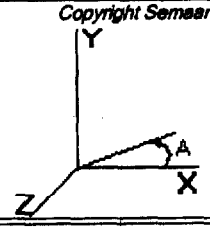
Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 21 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)	Allowable Stress (Fa) (ksi)	Stress Ratio
0.00	0.542	0.345	0.000	0.000	0.000	17.670	18.222	28.0	28.0	0.651
5.00	0.523	0.341	0.000	0.000	0.000	16.966	17.499	28.0	28.0	0.625
10.00	0.505	0.337	0.000	0.000	0.000	16.271	16.785	28.0	28.0	0.600
15.00	0.486	0.332	0.000	0.000	0.000	15.584	16.080	28.0	28.0	0.574
20.00	0.467	0.328	0.000	0.000	0.000	14.907	15.384	28.0	28.0	0.549
20.00	0.520	0.364	0.000	0.000	0.000	18.468	18.998	28.0	28.0	0.679
25.00	0.501	0.360	0.000	0.000	0.000	17.640	18.152	28.0	28.0	0.648
30.00	0.482	0.356	0.000	0.000	0.000	16.822	17.315	28.0	28.0	0.618
35.00	0.463	0.351	0.000	0.000	0.000	16.014	16.488	28.0	28.0	0.589
40.00	0.444	0.346	0.000	0.000	0.000	15.216	15.672	28.0	28.0	0.560
45.00	0.426	0.341	0.000	0.000	0.000	14.430	14.867	28.0	28.0	0.531
50.00	0.407	0.335	0.000	0.000	0.000	13.655	14.074	28.0	28.0	0.503
55.00	0.388	0.329	0.000	0.000	0.000	12.894	13.294	28.0	28.0	0.475
60.00	0.369	0.323	0.000	0.000	0.000	12.145	12.527	28.0	28.0	0.447
60.00	0.416	0.364	0.000	0.000	0.000	15.439	15.868	28.0	28.0	0.567
65.00	0.397	0.358	0.000	0.000	0.000	14.506	14.916	28.0	28.0	0.533
70.00	0.379	0.352	0.000	0.000	0.000	13.588	13.980	28.0	28.0	0.499
75.00	0.360	0.345	0.000	0.000	0.000	12.687	13.060	28.0	28.0	0.466
80.00	0.341	0.338	0.000	0.000	0.000	11.802	12.158	28.0	28.0	0.434
85.00	0.323	0.331	0.000	0.000	0.000	10.935	11.272	28.0	28.0	0.403
90.00	0.304	0.324	0.000	0.000	0.000	10.087	10.406	28.0	28.0	0.372
95.00	0.285	0.316	0.000	0.000	0.000	9.257	9.558	28.0	28.0	0.341
100.00	0.267	0.308	0.000	0.000	0.000	8.447	8.730	28.0	28.0	0.312
100.00	0.445	0.514	0.000	0.000	0.000	18.820	19.285	28.0	28.0	0.689
105.00	0.425	0.505	0.000	0.000	0.000	17.059	17.506	28.0	28.0	0.625
110.00	0.406	0.496	0.000	0.000	0.000	15.329	15.759	28.0	28.0	0.563
115.00	0.387	0.487	0.000	0.000	0.000	13.630	14.042	28.0	28.0	0.502
120.00	0.368	0.477	0.000	0.000	0.000	11.963	12.359	28.0	28.0	0.441
125.00	0.349	0.467	0.000	0.000	0.000	10.330	10.709	28.0	28.0	0.383
130.00	0.329	0.457	0.000	0.000	0.000	8.731	9.095	28.0	28.0	0.325
135.00	0.271	0.372	0.000	0.000	0.000	7.169	7.467	28.0	28.0	0.267
140.00	0.252	0.361	0.000	0.000	0.000	5.894	6.178	28.0	28.0	0.221
140.00	0.380	0.546	0.000	0.000	0.000	13.546	13.959	28.0	28.0	0.499
145.00	0.361	0.535	0.000	0.000	0.000	10.704	11.104	28.0	28.0	0.397
150.00	0.275	0.401	0.000	0.000	0.000	7.919	8.224	28.0	28.0	0.294
155.00	0.256	0.390	0.000	0.000	0.000	5.831	6.124	28.0	28.0	0.219
160.00	0.198	0.270	0.000	0.000	0.000	3.802	4.027	28.0	28.0	0.144
165.00	0.179	0.257	0.000	0.000	0.000	2.398	2.616	28.0	28.0	0.093
170.00	0.093	0.120	0.000	0.000	0.000	1.058	1.169	28.0	28.0	0.042
175.00	0.074	0.108	0.000	0.000	0.000	0.432	0.539	28.0	28.0	0.019
178.00	0.000	0.102	0.000	0.000	0.000	0.095	0.201	28.0	28.0	0.007

Pole :	**NM03XC068**	**Sprint Sites USA - NJ**	
Location:	**503 Presumpscott St, Portland, ME**		
Height :	**178.0 (ft)**	**Base Elev : 0.000 (ft)**	
Shape :	**Round**		
Base Dia :	**60.00 (in)**	**Top Dia : 24.00 (in)**	
Taper :	**0.000000 (in/ft)**		



Load Case: No Ice — 80 mph - No Ice — 21 Iterations

Gust Response Factor : 1.69 — **Effective Wind Speed :** 80.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Analysis Summary

	Reactions						Max Stresses			
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	24.165	0.000	53.948	0.000	0.000	2,950.216	21.941	28.0	20.000	0.784
Ice	20.100	0.000	63.204	0.000	0.000	2,523.532	19.285	28.0	100.00	0.689