

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING EXECUTION OF A FIRST AMENDMENT TO LICENSE AGREEMENT BETWEEN THE VILLAGE OF DOWNERS GROVE AND SPRINTCOM, INC. TO INSTALL, MAINTAIN AND OPERATE ANTENNA EQUIPMENT ON VILLAGE PROPERTY

BE IT RESOLVED by the Village Council of the Village of Downers Grove, DuPage County, Illinois as follows:

1. That the form and substance of a certain First Amendment ("Amendment No. 1"), between the between the Village of Downers Grove ("Landlord") and SprintCom, Inc. ("Tenant") for a license agreement to install, maintain and operate antenna equipment on Village property located at 6705 Main Street (67th Street Water Tank), Downers Grove, IL, as set forth in Amendment No. 1 submitted to this meeting with the recommendation of the Village Manager, is hereby approved.

2. That the Village Manager and Village Clerk are hereby respectively authorized and directed for and on behalf of the Village to execute, attest, seal and deliver Amendment No. 1, substantially in the form approved in the foregoing paragraph of this Resolution, together with such changes as the Manager shall deem necessary.

3. That the proper officials, agents and employees of the Village are hereby authorized and directed to take such further action as they may deem necessary or appropriate to perform all obligations and commitments of the Village in accordance with the provisions of the Amendment No. 1.

4. That all resolutions or parts of resolutions in conflict with the provision of this Resolution are hereby repealed.

5. That this Resolution shall be in full force and effect from and after its passage as provided by law.

Mayor

Passed:

Attest: _____

Village Clerk

Site Name: 67th Street Water Tank

Site ID #: CH60XC391 / CH01YC944

AMENDMENT NO. 1

LICENSE AGREEMENT BETWEEN THE VILLAGE OF DOWNERSGROVE AND SPRINTCOM, INC. TO INSTALL, MAINTAIN AND OPERATE ANTENNA EQUIPMENT ON VILLAGE PROPERTY

This Amendment No. 1 to "License Agreement" ("**Amendment**"), effective as of the date last signed below ("**Effective Date**"), amends a certain "License Agreement" between SprintCom, Inc., a Kansas Corporation ("**Licensee**"), and the Village of Downers Grove, an Illinois municipal corporation, (**the "Village"**) dated June 20, 2004. (**the "Agreement"**)

BACKGROUND

Licensee desires to modify its installation on the Site by adding equipment to the Facilities within existing entitlements, as more particularly described in Exhibit B-1 annexed hereto. In consideration for such modifications, the Rent shall be increased pursuant to the terms and conditions set forth below. Licensee also desires to allow its affiliates or joint venture partners to use some portion of Site.

License and the Village therefore desire to modify the provisions of the Agreement as provided below.

AGREEMENT

For good and valuable consideration the receipt and sufficiency of which is acknowledged, the Village and Licensee agree as follows:

1. **Modification to the Facilities.** Exhibit B of the Agreement is amended to include the revised Exhibit B-1, consisting of license drawings labeled T-1, N-1, C-1, C-2, A-1, A-2, A-3, GR-1 and WT-1, a copy of which is attached and made a part hereof. Upon full execution of this Amendment, Licensee is permitted to do all work necessary to prepare, maintain and alter the to install, modify or otherwise relocate the Facilities, all as more fully described and contemplated in Exhibit B-1.
2. **Expiration or Termination of Sublease.** If Licensee's sublessee or sublicensee (i) does not to install, construct or add equipment to the Site, or (ii) installs equipment, but later removes the equipment, then upon written notice to the Village, Licensee may terminate this Amendment. After terminating the Amendment, the terms and conditions of the Agreement as they existed immediately prior to the Effective Date of this Amendment shall be deemed ratified, and shall continue in full force and effect. Rent shall revert to the amount in effect immediately prior to the Effective Date of this Amendment, plus any rental increases, including annual escalators or rent increases due to other site modifications made by Licensee, which occurred during the period of time between the Effective Date of this Amendment and the termination date of this Amendment.
3. **Modification to Rent.** In consideration for the revisions contemplated by this Amendment, effective upon the first day of the month following the Effective Date, the monthly rent will be increased by \$500.00

4. **Village and Licensee Notice Address.** The Village's and Licensee's notice address in Section 21 of the License Agreement is hereby deleted in its entirety and replaced with the following:

Any notice or demand required to be given herein shall be made by certified or registered mail, return receipt requested, or reliable overnight courier to the address of the respective parties set forth below:

Village: Village Manager
Village of Downers Grove
Civic Center
801 Burlington Avenue
Downers Grove, IL 60515-4779

Licensee: Sprint/Nextel Property Services
Mailstop KSOPHT0101-Z2650
6391 Sprint Parkway
Overland Park, Kansas 66251-2650

With a mandatory copy to: Sprint/Nextel Law Department
Mailstop KSOPHT0101-Z2020
6391 Sprint Parkway
Overland Park, Kansas 66251-2020
Attn.: Real Estate Attorney

5. **General Terms and Conditions.**

- (a) All capitalized terms used in this Amendment, unless otherwise defined herein, will have the same meaning as the terms contained in the Agreement.
- (b) In case of any inconsistencies between the terms and conditions contained in the Agreement and the terms and conditions contained in this Amendment, the terms and conditions herein will control. Except as set forth below, all provisions of the Agreement are ratified and remain unchanged and in full force and effect.
- (c) This Amendment may be executed in duplicate counterparts, each of which will be deemed an original.
- (d) Each of the parties represent and warrant that they have the right, power, legal capacity and authority to enter into and perform their respective obligations under this Amendment.

*****SIGNATURES ON FOLLOWING PAGE*****

The parties have executed this Amendment as of the Effective Date.

Village:
VILLAGE OF DOWNERS GROVE,
an Illinois municipal corporation

Licensee:
SPRINTCOM, INC.
a Kansas corporation

By: _____

By: _____

Date: _____

Date: _____

Title: _____

Title: _____

Tax ID: _____

Exhibit B-1

[Attached]

SITE NAME:
IL7844

CLEAR WIRELESS SITE ID:
IL-CHI5944

HOST:
CHO1

SITE ADDRESS:
**6705 SOUTH MAIN STREET
DOWNERS GROVE, IL 60516**

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NOTES

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LING & DETAILS
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ED IN CONFORMANCE WITH
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AINED AND CONTRACTOR
NGINEER IMMEDIATELY.

ALL PLANS AND (EX)
ON THE JOB SITE &
THE ENGINEER IN WRITING
ARE PROCEEDING WITH
FILE FOR SAME.

SIZE AND ARE SCALABLE
RE NOT REDUCED IN SIZE.

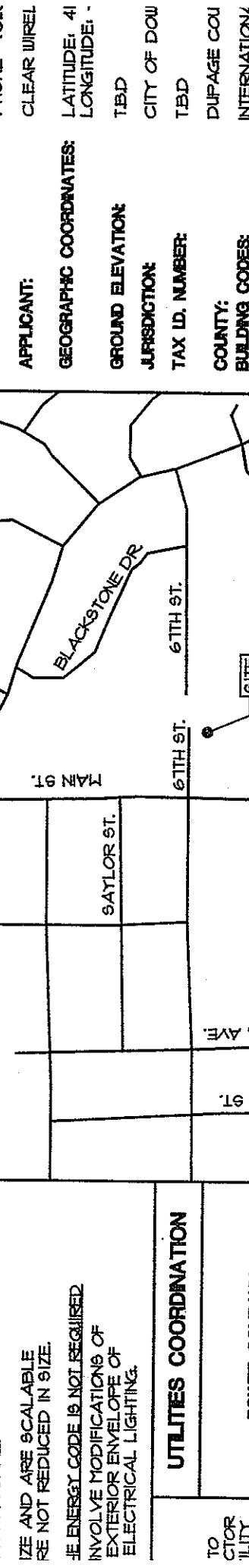
HE ENERGY CODE IS NOT REQUIRED
INVOLVE MODIFICATIONS OF
EXTERIOR ENVELOPE OF
ELECTRICAL LIGHTING.

UTILITIES COORDINATION

TO
CTOR
ILITY
OCATE
ID

POWER COMPANY:
COMED
PHONE: 866-639-3532

TELEPHONE COMPANY:
AT&T
PHONE: 800-251-0902



DIRECTIONS

DIRECTIONS FROM CLEAR WIRELESS OFFICE AT 5600 N RIVER RD. ROSEMONT, IL 60018,
DEPART 5600 N RIVER RD (SOUTH), TURN RIGHT (WEST) ONTO BALMORAL AVE. TURN LEFT
(SOUTH) ONTO RAMP. MERGE ONTO I-294. TURN RIGHT ONTO RAMP. MERGE ONTO I-88
(EAST-WEST TOLLWAY). TURN RIGHT ONTO RAMP. KEEP LEFT TO STAY ON RAMP. ROAD NAME
CHANGES TO BUTTERFIELD RD. TURN LEFT (SOUTH) ONTO CR-9 (HIGHLAND AVE). ROAD NAME
CHANGES TO MAIN ST. ROAD NAME CHANGES TO CR-9 (MAIN ST). ARRIVE 6105 MAIN ST,
DOWNERS GROVE, IL

PROJECT

SCOPE OF WORK:
NEW CLEAR U
INSTALLED W
CLEAR WIREL
WATER TANK.

SITE NAME:
IL 7844

CLEAR WIRELESS SITE ID:
IL-CHI5944

HOST SITE ID:
CHO1C944

SITE ADDRESS:
6105 SOUTH
DOWNERS GR

TOWER OWNER:
CITY OF DOW

SITE CONTACT:
DOWNERS GR
PHONE * (62)

APPLICANT:
CLEAR WIREL

GEOGRAPHIC COORDINATES:
LATITUDE: 41
LONGITUDE: -

GROUND ELEVATION:
T.B.D

JURISDICTION:
CITY OF DOW

TAX ID. NUMBER:
T.B.D

COUNTY:
DUPAGE COU

BUILDING CODES:
INTERNATION
NATIONAL EL

CONSUL.:

PROFESSIONAL ENGINEER:
W-T COMMUNICATION DESIGN GROUP, LLC
2615 PRATTUM AVE.
HOFFMAN ESTATES, IL 60192
TEL: (224) 293-6333
FAX: (224) 293-6444

FLOW

3 (ASTM)

OCIATION (NEMA)

APP A)

WITH REGULATIONS OF:

ANSI C-2)

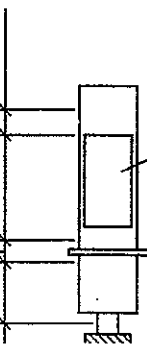
UNDED USING LOCKNUTS AND BONDING ON CONDUCTOR, RECEPTACLES AND EQUIPMENT A FULL-SIZED EQUIPMENT GROUNDING

-COATED OR CADMIUM PLATED STEEL NOT LESS E SERVICE AND OUTLET. OUTLET AND JUNCTION BELEED WITH BRANCH CIRCUIT BREAKER NUMBER WIRELESS LLC. PANELBOARD WITH PHENOLIC

N ENT UNLESS NOTED OTHERWISE. OUTDOOR GALVANIZED STEEL UNLESS NOTED OTHERWISE LISTED COMPRESSION FITTINGS. NO SET SCREW

RAYED LABEL ON THE CLEAR WIRELESS LLC.

1/8" MIN. 1/4" MIN.



WEATHERPROOF LABEL OR "DO NOT DISCONNECT" TAG ON ALL GROUND BAR INTERCONNECTS AND EQUALIZERS

4. ALL HARDWARE IS 304 STAINLESS STEEL INCLUDING BELLEVILLE COAT ALL SURFACES WITH "KOPR-SHIELD" BEFORE MATING.

5. FOR GROUNDING BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH "KOPR-SHIELD".

6. NO BLOTTED HOLES ON BUS BAR OR LUGS ARE PERMITTED.

7. ALL LUG SHANKS AND LEAD JOINTS SHALL

DE

CONNECTION

1

WIRELESS LLC

SURFACES TO SHINY METAL. WHERE GROUND WIRES ARE CADWELDED TO GALVANIZED SURFACES, SPRAY CADWELD WITH GALVANIZING PAINT.

5. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 8" RADIUS. PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETTS KOPR-SHIELD (TM OF JET LUB INC.) PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR-SHIELD OR EQUAL.

6. PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN TO SHINY METAL. FOLLOWING CONNECTION, APPLY APPROPRIATE ANTI-OXIDIZATION PAINT.

7. GROUNDING WIRE CONNECTIONS SHALL BE 3-CRIMP C-TAP COMPRESSION TYPE. SPLIT BOLTS ARE NOT ACCEPTABLE.

8. CONNECTORS SHALL BE CRIMPED USING HYDRAULIC CRIMPING TOOLS. SURFACE CONNECTIONS SHALL BE MADE TO BARE METAL. PAINTED SURFACES SHALL BE FILED TO ENSURE PROPER CONTACT. APPLY NON-OXIDIZING AGENT TO CONNECTIONS.

9. COPPER BUSSES SHALL BE CLEANED, POLISHED AND A NON-OXIDIZING AGENT APPLIED. NO FINGERPRINTS OR DISCOLORED COPPER WILL BE PERMITTED. GROUNDING CONDUCTORS SHALL BE RUN THROUGH PVC SLEEVE WHERE ROUTED THROUGH WALLS, FLOORS, AND CEILING. ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.

10. HARDWARE (IE. NUTS, BOLTS, WASHERS, ETC) IS TO BE STAINLESS STEEL. EXOTHERMIC WELDS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

11. THE ENTIRE SYSTEM SHALL BE SOLIDLY GROUNDED USING LOCKNUTS, AND BONDING NUTS ON CONDUITS AND PROPERLY BONDED GROUND CONDUCTORS. RECEPTACLES AND EQUIPMENT BRANCH CIRCUITS SHALL BE GROUNDED WITH A FULL SIZED EQUIPMENT GROUNDING CONDUCTOR RUN IN THE CIRCUIT'S CONDUIT.

12. INSTALL GROUND BUSHINGS ON ALL METALLIC CONDUITS AND BOND TO THE EQUIPMENT GROUND BUS IN THE PANEL BOARD.

13. GROUND BARS (SECTOR COLLECTOR and MASTER) SHALL BE BARE 1/4"x4" COPPER, LARGE ENOUGH TO ACCOMMODATE THE REQUIRED NUMBER OF GROUND CONNECTIONS. THE HARDWARE SECURING THE MIBS SHALL ELECTRICALLY INSULATE THE MIBS FROM ANY STRUCTURE TO WHICH IT IS FASTENED.

14. APPLY THE KOPR-SHIELD OR APPROVED EQUAL PRIOR TO MAKING MECHANICAL CONNECTIONS. CONNECTIONS SHALL BE MADE WITH STAINLESS STEEL BOLTS, NUTS, AND LOCK WASHERS 3/8" DIAMETER MIN. WHERE GALVANIZING IS REMOVED FROM METAL IT SHALL BE PAINTED OR TOUCHED UP WITH 'GALYONOX' OR EQUAL.

15. ALL TERMINATIONS AT EQUIPMENT ENCLOSURES, PANELS, FRAMES OR EQUIPMENT AND WHERE EXPOSED FOR GROUNDING CONDUCTOR TERMINATION SHALL BE PERFORMED UTILIZING TWO HOLE BOLTED TONGUE COMPRESSION TYPE WITH STAINLESS STEEL SELF-TAPPING SCREWS.

16. ALL CLAMPS AND SUPPORTS USED TO SUPPORT THE GROUNDING SYSTEM CONDUCTORS AND PVC CONDUITS SHALL BE PVC TYPE (NON-CONDUCTIVE). DO NOT USE METAL BRACKETS OR SUPPORTS WHICH WOULD FORM A COMPLETE RING AROUND ANY GROUNDING CONDUCTOR.

17. ALL BOLTS, WASHERS AND NUTS USED ON GROUNDING CONNECTIONS SHALL BE STAINLESS STEEL.

18. THE CONTRACTOR SHALL ENGAGE AN INDEPENDENT ELECTRICAL TESTING FIRM TO TEST AND VERIFY THAT RESISTANCE TO EARTH DOES NOT EXCEED 50 OHMS. PROVIDE A COPY OF TESTING REPORT, INCLUDING THE METHOD AND INSTRUMENTS USED TO VERIFY RESISTANCE TO CLEAR WIRELESS LLC REPRESENTATIVE

3. REDLINED AS-BUILT LLC REPRESENTATIVE

4. PROVIDE TWO COPIE THREE-RING BINDER

5. FURNISH AND INSTAL SYSTEM AND THE G DRAWINGS.

6. ALL WORK SHALL BE APPLICABLE BUILD IN A NEAT MANNER A WIRELESS LLC. REPR

7. CONDUCT A PRE-CO CONDITIONS AFFECT DISCREPANCIES FOR CONSTRUCTION.

8. PROTECT ADJACENT REPAIR TO ORIGINAL

9. REMOVE DEBRIS ON TIMELY FASHION WILL RESPONSIBLE SUBC REMOVAL OF DEBRIS REPRESENTATIVE, DI AND DISPOSED OF I PROHIBITED.

10. CONTRACTOR TO CC PEDESTAL AND ADV CURRENT LEVEL.

11. IF PEDESTAL DOES I SUBMIT COST QUOTA SUBMITTED COST GAU SERVICE AND/OR UP ELECTRODE GROUND

12. CONTRACTOR SHALL COMPANY ELECTRIC COMPANY, LOCAL CI MANUFACTURER'S SF

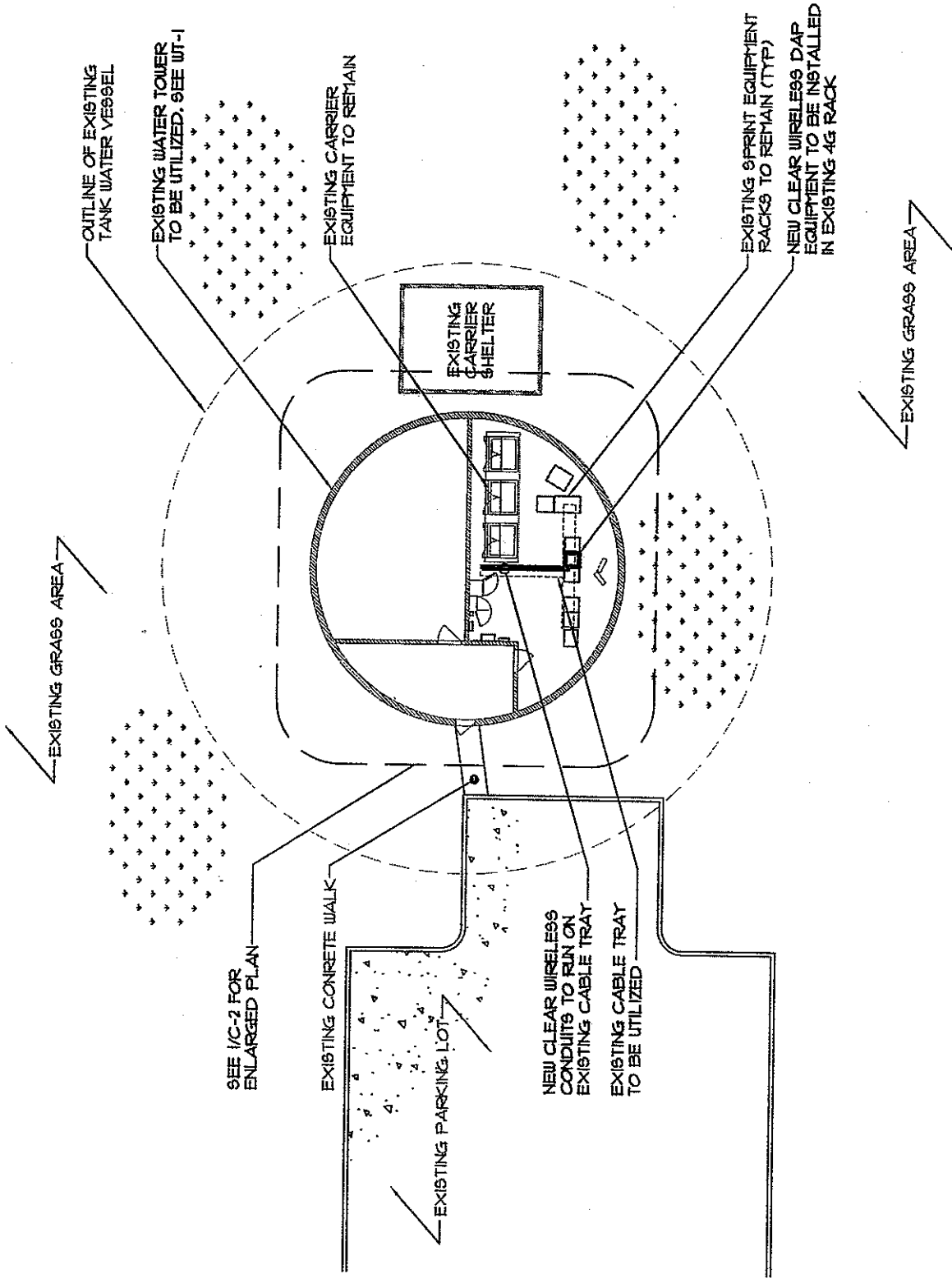
13. CONTRACTOR SHALL ENTRANCE DISCONN PEDESTAL MUST NOT EXCEEDS THIS VALU UTILITY COMPANY AN OF AN ADDITIONAL E SET FOR THE NEW LC ARTICLE 230-2(B).

14. THE EQUIPMENT/ FRG RATE HIGHER THAN I AIC RATE.

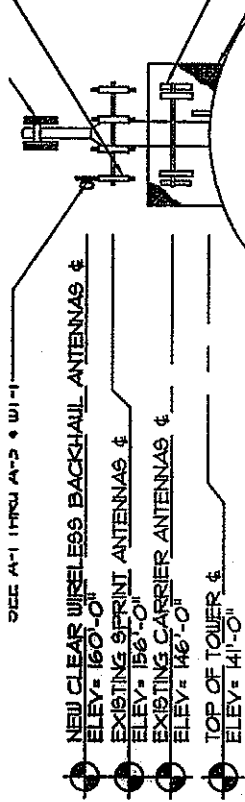
15. CONTRACTOR SHALL WIRELESS LLC.

EN FROM
 ILESS LLC.
 SHOWN HAVE
 CURRENT
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 SHALL
 ITEMS AT
 CONSTRUCTION
 SS
 TO NOT
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4 4 4 4



OVERALL SITE PLAN
 SCALE: 1" = 20'-0"
1
 NORTH



CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

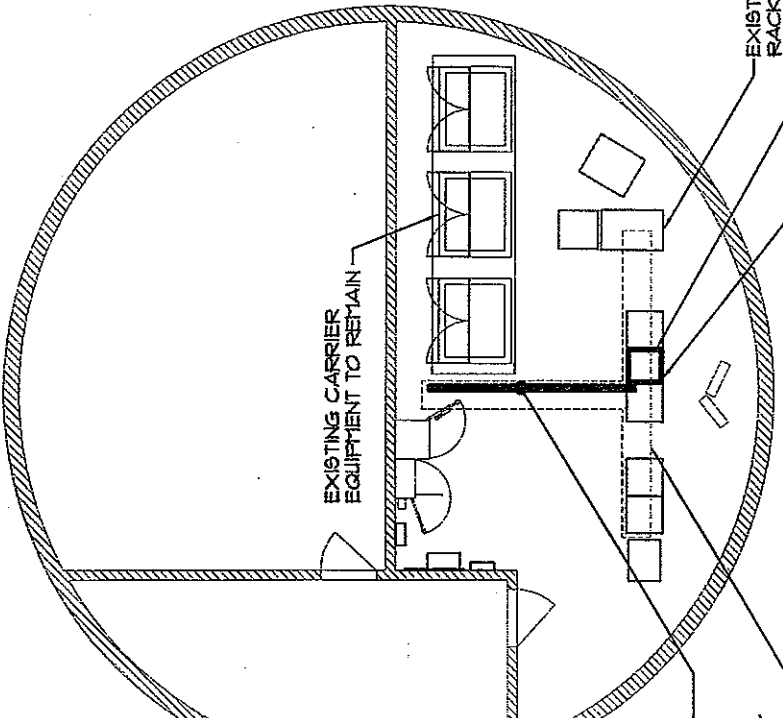
SEE STRUCTURAL REPORT FOR ANY ADDITIONAL INFORMATION REGARDING MODIFICATION AND ADDITIONS TO TOWER. NO WORK SHALL START WITHOUT THE APPROVED STRUCTURAL ANALYSIS BY OTHERS.

ELEVATION SHOWN AS DIAGNOSTIC TO ILLUSTRATE NEW ANTENNA RAD CENTERS.

PENDING STRUCTURAL ANALYSIS BY OTHERS

PANEL WITHIN EXISTING 4G POWER CABINET. PROVIDE DC BREAKER AS REQUIRED

NOTE:
GROUNDING FOR NEW CLEARWIRE BACKHAUL RADIO SHALL BE FROM EXISTING GROUND BUS WITHIN EXISTING 4G RF CABINET.



EXISTING SPRINT EQUIPMENT RACKS TO REMAIN (TYP)

NEW CLEAR WIRELESS INTEGRATED GAP AND MICROWAVE BACKHAUL EQUIPMENT TO BE INSTALLED IN EXISTING 4G RACK

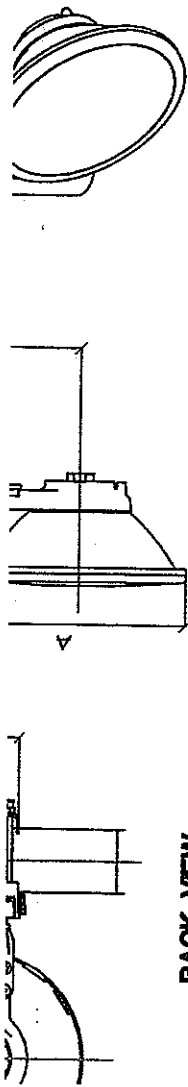
NEW RETROFIT PACKAGE TO BE INSTALLED IN EXISTING 4G RACK AS REQUIRED FOR CLEAR WIRELESS RADIO INSTALLATION

TOWER ELEVATION
SCALE: 1" = 20'-0"

ENLARGED SITE PLAN
SCALE: 1" = 10'-0"



TRIRIB



BACK VIEW

TOP VIEW

ISOMETRIC

LONG
SCHEG
3 (36)
35 (182)

BACKHAUL ANTENNA DETAIL

SCALE: NONE

1

NOT USED

SCALE: NONE

2

DIA/WT	RADIO MODEL	RECEIVE SITE	PATH LENGTH IN MILES	RAD CENTER	QUAN	COAX CABLE TABLE			TOTAL CABLE QUANTITY	
						CABLE USE	RUNG	MODEL		DIA
26.17 21 LB6	AIRPAIR HP	IL-CH10022	1563	160'	1	NEW	1	COMSCOPE 8PX-500	1/2"	4'-180'
26.17 21 LB6	HC HP	IL-CHI5865	1715	160'	1	NEW	1	COMSCOPE 8PX-500	1/2"	4'-180'
TOTAL CABLE QUANTITY										4'-360'

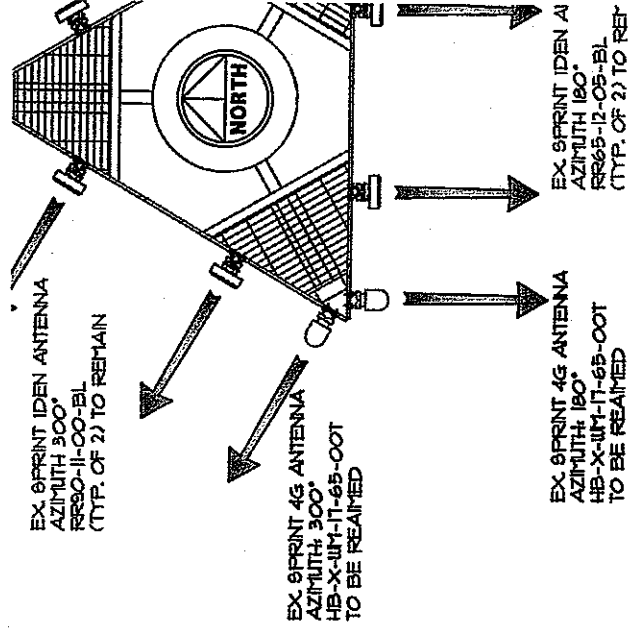
BASED FROM MICROWAVE INTERCONNECT REPORT DATED 5/1/03

BACKHAUL ANTENNA TABLE

SCALE: NONE

3

COAXIAL NOTE:
CONTRACTOR TO VERIFY CLEAR WIRELESS MARKET STANDARD PRIOR TO ORDERING COAX.



NEW ANTENNA PLAN

SCALE: 3/16" = 1'-0"

5

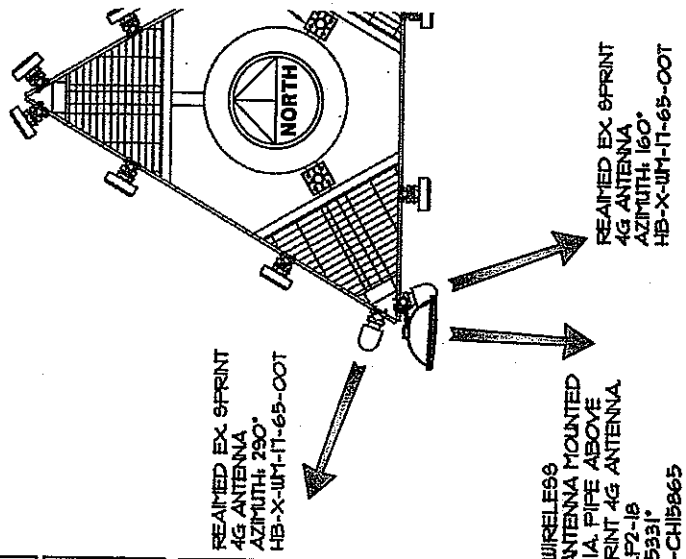
NOTE:
SEE DETAIL 4 THIS SHEET FOR EXISTING ANTENNA LAYOUT

NOTE:
PROVIDE NEW 3" DIA. MAX. PIPE & ANTENNA STABILIZER FOR NEW BACKHAUL ANTENNAS

NOTE:
CONTRACTOR SHALL MAXIMIZE ANTENNA SPACING AS FIELD CONDITIONS ALLOW

NOTE:
CONTRACTOR TO VERIFY ALL RF INFORMATION PRIOR TO CONSTRUCTION

PENDING STRUCTURAL ANALYSIS BY OTHERS



EX SPRINT IDEN A
AZIMUTH: 180°
RFS-12-05-BL
(TYP. OF 2) TO REM

EX SPRINT 4G ANTENNA
AZIMUTH: 180°
HB-X-UM-17-65-00T
TO BE REIMAGED

EX SPRINT 4G ANTENNA
AZIMUTH: 300°
HB-X-UM-17-65-00T
TO BE REIMAGED

EX SPRINT IDEN ANTENNA
AZIMUTH: 300°
RFS-12-05-BL
(TYP. OF 2) TO REMAIN

REIMAGED EX SPRINT
4G ANTENNA
AZIMUTH: 290°
HB-X-UM-17-65-00T

REIMAGED EX SPRINT
4G ANTENNA
AZIMUTH: 160°
HB-X-UM-17-65-00T

NEW CLEAR WIRELESS
BACKHAUL ANTENNA MOUNTED
ON NEW 3" DIA. PIPE ABOVE
EXISTING SPRINT 4G ANTENNA
ANDREW VHL P2-18
AZIMUTH: 182.533°
REC SITE: IL-CHI5865

CONTRACTOR TO VERIFY ACTUAL COAX CABLE REQUIREMENTS WITH CLEAR WIRELESS LLC. PRIOR TO CONSTRUCTION.

METHOD BANDS	BAND NUMBER
SECTOR 1)	SMALLEST NUMBER IN THIS SECTOR DEGREE RANGE WILL BE LABELED "R1". THE NEXT LARGER NUMBER WILL BE NAMED "R2".
SECTOR 2)	SMALLEST NUMBER IN THIS SECTOR DEGREE RANGE WILL BE LABELED "B1". THE NEXT LARGER NUMBER WILL BE NAMED "B2".
SECTOR 3)	SMALLEST NUMBER IN THIS SECTOR DEGREE RANGE WILL BE LABELED "Y1". THE NEXT LARGER NUMBER WILL BE NAMED "Y2".

ANTENNA & DISH LABELING

APPROPRIATE COLORED TAPE TO DENOTE THE ANTENNA AND MICROWAVE AROUND THE TOP AND BOTTOM OF THE SUPPORT PIPE AS DEPICTED ABOVE.

COAX CABLE LABELING

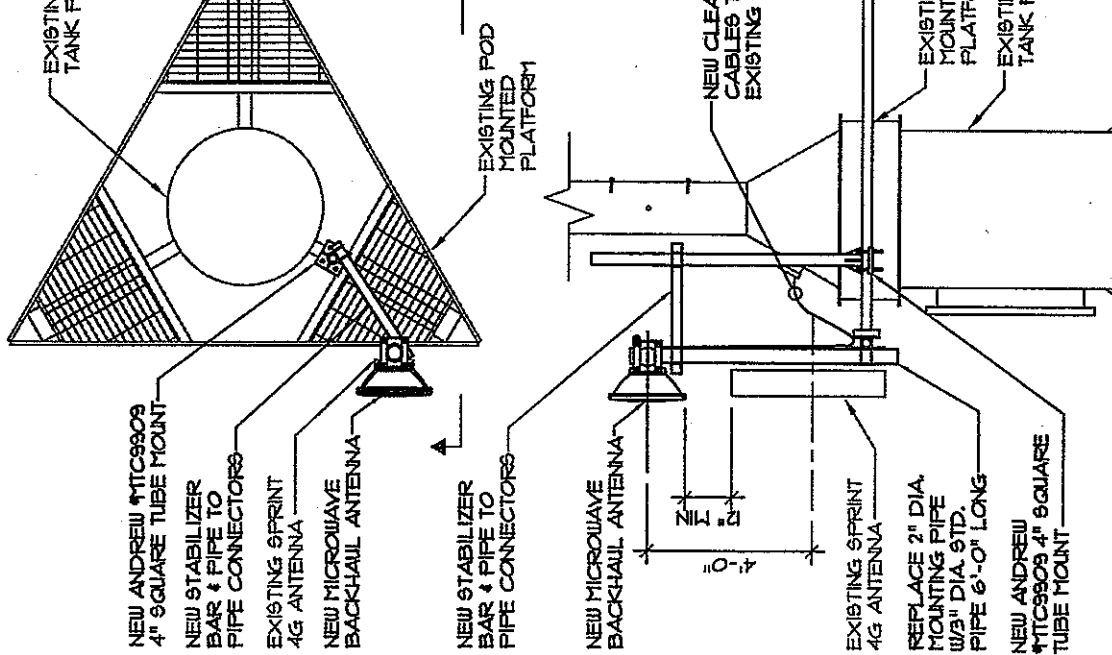
MIN 12" OF THE TERMINATION AT BOTH ENDS OF COAX, AT OR NEAR THE POINT OF ENTRY INTO THE CONDUIT OR PRIOR TO ENTRY INTO THE CONDUIT, AS WELL AS TO PREVENT THE INDUCTION OF CURRENT INTO THE CABLES, AS WELL AS TO PREVENT THE INDUCTION OF CURRENT INTO THE CABLES.

- 1) PER SITE CONDITION BY THE CONTRACTOR
- 2) PORT, SIGNED AND APPROVED BY RF ENGINEERING.
- 3) TOTAL LENGTHS OF CABLES BEFORE INSTALLATION.
- 4) THE APPROVED CUTTING TOOL FOR SAFETY AND PROTECTION.
- 5) MINIMUM CABLE SEPARATION REQUIREMENTS AS TO THE TYPE OF CABLE AND FLUX CREATED FROM POWER AND CURRENTS THROUGH THE CABLES.
- 6) DAMAGE AND SHALL HAVE THE MINIMUM BEND RADIUS FOR THE SIZE AND WEIGHT THE MINIMUM RADIUS IS 4 INCHES.
- 7) LEAVING THE EQUIPMENT TO THEIR TERMINATION POINTS.
- 8) INSTALLED IN A MANNER AS TO PROTECT THE CABLES FROM DAMAGE OF THE CABLES ARE ROUTED DOWN THE TOWER.
- 9) MINIMUM OF EVERY THREE (3) FEET EXCEPT FOR THE INSIDE MONOPOLES AND SECTOR MANUFACTURERS SUPPORT RECOMMENDATIONS SHALL BE FOLLOWED.
- 10) ALL OUTSIDE CABLES SHALL BE SLOPED AWAY FROM THE TOWER TO PREVENT WATER FROM ENTERING THROUGH THE CABLE PORT.

ORIENTATION - (3) SECTOR LABELING

1

4. ALL BOLTS TO BE TIGHTENED TO A "SNUG-TIGHT" CONDITION. "SNUG-TIGHT" CONDITION THAT EXISTS WHEN ALL FILES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ACHIEVED BY USING AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY "SPUD" WRENCH.
5. LOCATE DISH ANTENNA SO THAT THE DISH CENTERLINE IS NO MORE THAN 2'-0" FROM THE CENTERLINE OF THE TOWER.

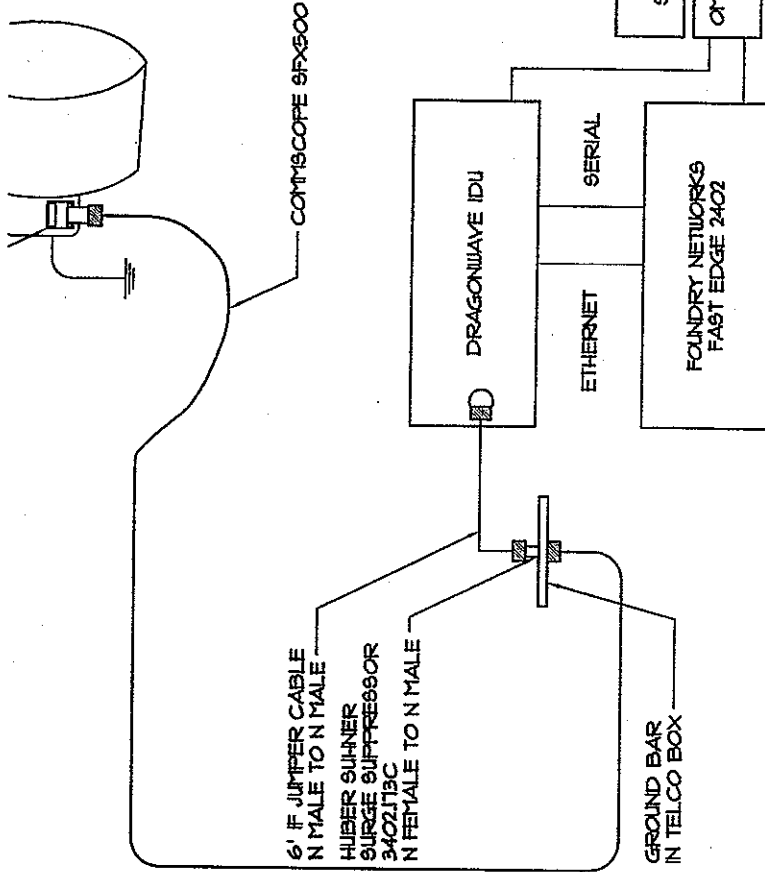


SECTION "A"

ANTENNA MOUNT DETAILS & NOTES

SCALE: NONE

ANDREWS OR RADIOWAVE
BACKHAUL ANTENNA



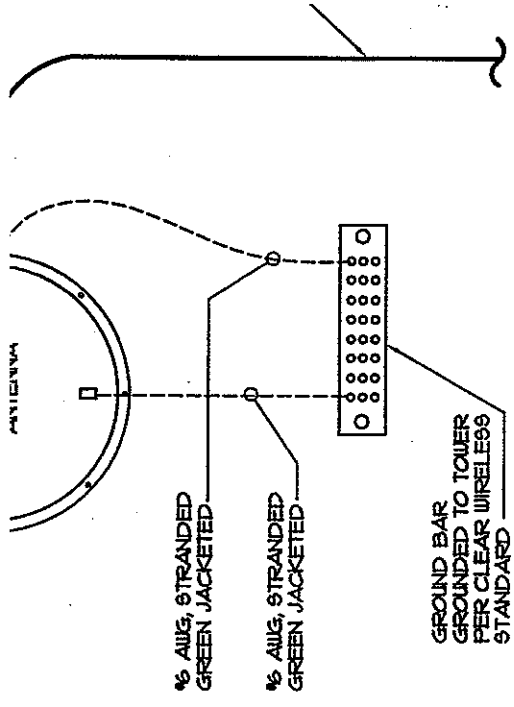
THE TOWER TOP N" FEMALE CONNECTOR
ON THE MAIN FEED LINE WILL BE OMITTED
AND REPLACED WITH AN N" MALE TO
ALLOW CONNECTION TO THE SURGE
SUPPRESSOR

EQUIPMENT	DISTANCE	MANUFACTURER	PART NUMBER
REDLINE	UP TO 300'	BELDEN	BELDEN 7919A CAT5
REDLINE	UP TO 200'	ANDREW	F9J1-15 1/4 SUPERFLEX 15 OHM
REDLINE	20" TO 300'	ANDREW	LDF4-15A 1/2 HELIAX 15 OHM
DRAGONWAVE	0' TO 250'	COMMSCOPE	9FX500
DRAGONWAVE	251' TO 350'	COMMSCOPE	FXL540
DRAGONWAVE	351" TO 100'	COMMSCOPE	FXL180
DRAGONWAVE	OVER 100'	COMMSCOPE	CONTACT ENGINEERING
MOTOROLA (ORTHOGON)	UP TO 300'	BELDEN	BELDEN 7919A CAT5

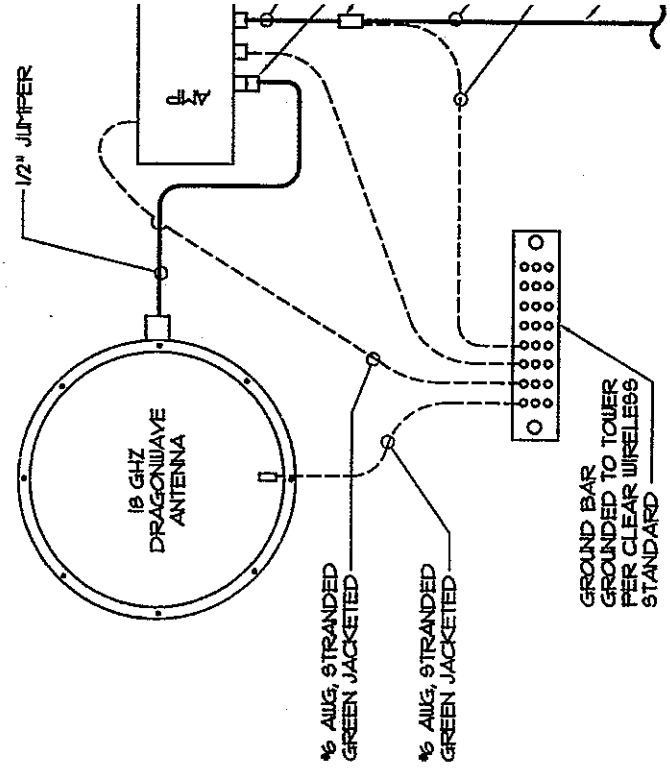
**BACKHAUL ANTENNA
INSTALLATION DETAIL**

SCALE : NONE

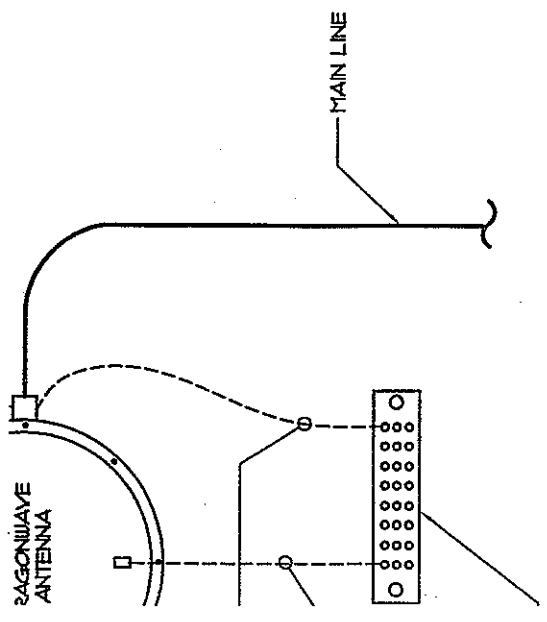
1



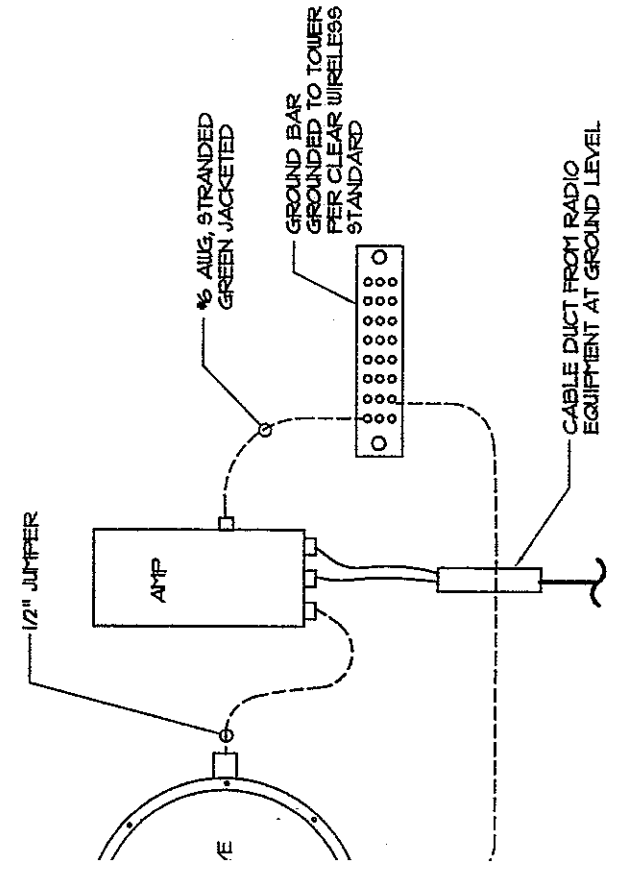
24 GHz DRAGONWAVE GROUNDING
SCALE: NONE



ANDREW GROUNDING
SCALE: NONE



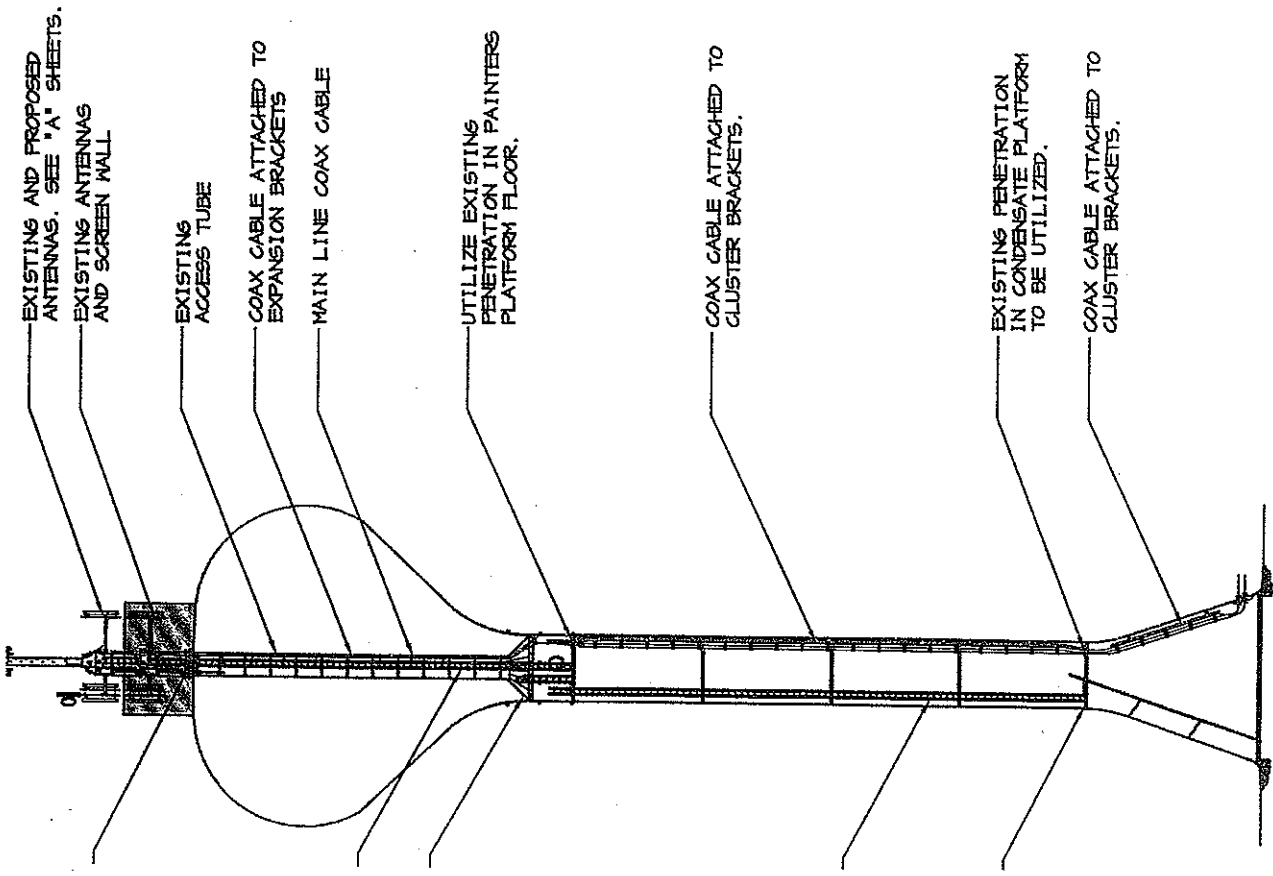
DRAGONWAVE GROUNDING 1
SCALE: NONE



DRAGONWAVE AMP GROUNDING 3
SCALE: NONE

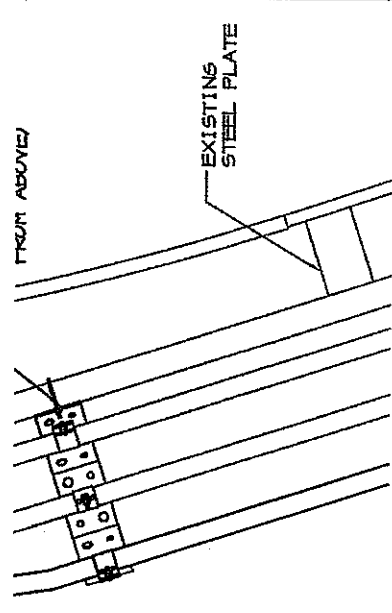
TRIPLEX

DATE: 11/11/11



SECTION 1

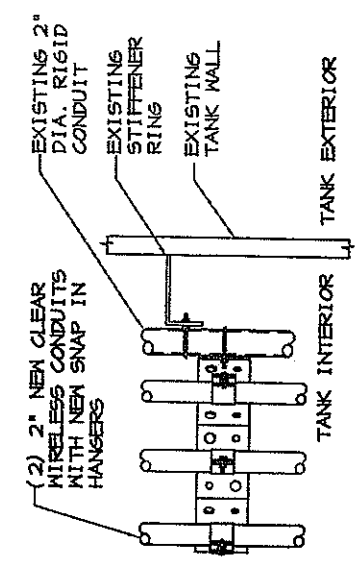
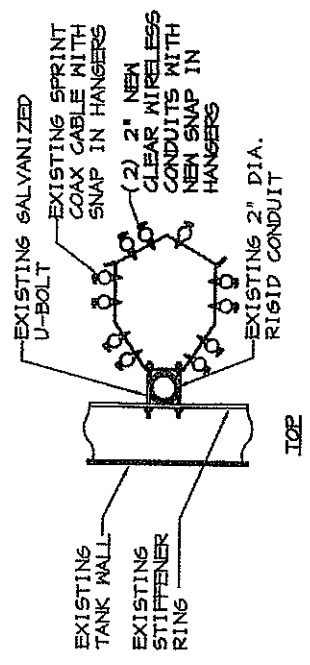
SCALE: NONE



MESSENGER PIPE

SCALE: NONE

2



COAX CLUSTER MOUNT

SCALE: NONE

3

SIDE

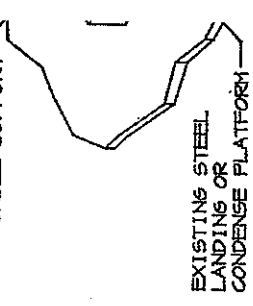
1/4
1/4

EXISTING TOE BOARD PENETRATION TO BE UTIL. NEW LACE-UP HOISTING OF

EXISTING TOE BOARD PENETRATION TO BE UTILIZED-

NEW 3/8" J-HOOK

3/8" J-HOOK COAX CABLE SUPPORT



J-HOC

SCALE: NC

CITY MARKET, IN WALL