

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING A LICENSE AGREEMENT BETWEEN THE VILLAGE OF DOWNERS GROVE AND DENLAI SPECTRUM OPERATIONS, LLC TO INSTALL, MAINTAIN AND OPERATE AN ANTENNA ON VILLAGE PROPERTY (801 BURLINGTON AVENUE)

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 License Agreement (the “Agreement”) and accompanying Memorandum of License, between the Village of Downers Grove (the “Village”) and Denali Spectrum Operations, LLC (the “Licensee”), for the installation, maintenance and operation of an antenna on Village property located at 801 Burlington Avenue, as set forth in the form of the Agreement submitted to this meeting with the recommendation of the Village Manager, is hereby approved.

2. That the Mayor and Village Clerk are hereby respectively authorized and directed for and on behalf of the Village to execute, attest, seal and deliver the Agreement, 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 Agreement.

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 That all resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.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

LICENSE AGREEMENT BETWEEN THE VILLAGE OF DOWNERS GROVE AND DENALI SPECTRUM OPERATIONS, LLC TO INSTALL, MAINTAIN AND OPERATE AN ANTENNA ON VILLAGE PROPERTY

WHEREAS, the Village of Downers Grove (hereinafter referred to as the “Village”) is an Illinois municipal corporation and a home rule unit, pursuant to the laws of the State of Illinois; and

WHEREAS, the Village is the lessor of certain real estate located at 801 Burlington Avenue, Downers Grove, Illinois, upon which is located the Village Communication Lattice Tower (hereinafter referred to as the “Tower”); and

WHEREAS, Denali Spectrum Operations, LLC (also known as Denali Spectrum License, LLC, Denali Spectrum, LLC, Denali Spectrum Manager, LLC and Doyson, Limited)(hereinafter referred to as the “Licensee”) has requested permission to install an antenna on the top of the Tower and its related equipment on ground space near the Tower (hereinafter referred to as the “Antenna”); and

NOW, THEREFORE, in consideration of the mutual promises, covenants and conditions, the Village and the Licensee agree as follows:

1. CONTRACT DOCUMENTS:

The provisions set forth in the preamble and the following exhibits are incorporated into and made a part of this Agreement:

- a. Exhibit 1 - Site map of the Property dated, _____, 2008, and approved by the Village on _____, 2008, showing the Tower Space and Ground Space, together with the areas on the Property licensed to Licensee to provide access and utility service to the Ground Space (collectively the “Licensed Premises”) which includes location of any proposed underground utilities necessary for operation of the Antenna.
- b. Exhibit 2 - Plans and specifications dated _____, 2008, and approved by the Village on _____, 2008, for the Antenna and any cables or utility lines to be installed on the Licensed Premises and used for housing of the related Antenna equipment (collectively “Licensee’s Improvements”).

2. GRANT OF LICENSE:

The Village hereby grants to the Licensee the right, permission and authority to install, operate and maintain Licensee’s Improvements upon the terms and conditions hereinafter specified. This Agreement shall not terminate upon the sale, assignment or transfer of the property, but shall run with the land. In the event that the tower is removed, this contract shall cease and neither the Village nor the Licensee will not be responsible or liable for replacement or rent.

3. **SPECIFICATIONS:** The Licensee shall comply with the following specifications:

a. *In general:* During the term of this Agreement, there shall be no variations, modifications, or upgrades from the plans and specifications of Exhibits 1 and 2 without the prior written approval of the Village, which approval shall not be unreasonably withheld or delayed.

b. *Antenna:* The Antenna shall be for the operation of radio frequency: receive 1740 MHz; transmit 2135-2140 MHz. The Antenna shall be installed, attached to the Tower, and maintained in conformance with Exhibit 2 and any applicable State and federal requirements. The Antenna shall be located more than ten (10) feet from any existing antenna equipment and shall not exceed seventy-two (72) inches in height.

4. **CONSTRUCTION, INSTALLATION AND MAINTENANCE:**

The Licensee may install, repair, maintain, or replace the Antenna, subject to the following conditions:

a. Licensee shall obtain all required permits and authorizations from the Village, in accordance with the applicable ordinances, prior to commencing any work under this Agreement. Such work shall comply with applicable codes and regulations and shall be conducted in a workmanlike manner.

b. Licensee shall obtain all necessary approvals from any regulatory authorities for the operation of the Antenna. Further, the Licensee shall comply with all applicable laws and regulations of such regulatory authorities including, but not limited to the Federal Communications Commission.

c. All costs connected with the installation, maintenance, repair, use and removal of Licensee's Improvements and any related equipment shall be the responsibility of the Licensee.

d. Licensee shall not take any action or allow any action to be done which may impair the use of or damage the Tower.

e. The Licensee may not interfere with the use by the Village, its officers, agents and employees, of the Tower or the property on which it is located.

f. Except for emergency situations, the Village shall provide reasonable advance notice to Licensee when it conducts any Tower repair or maintenance work that affects the Antenna or function of the Antenna. Except for emergency situations, the Village shall not physically disturb Licensee's equipment without Licensee's permission. Licensee shall be entitled to access the equipment located on the Ground Space near the Tower twenty-four (24) hours a day, seven days a week. Licensee shall provide the Village reasonable advance notice when access to the antenna on top of the Tower is needed. Access to the Tower can only be obtained between the hours of 8:00 a.m. and 4:00 p.m. by calling the Water Manager at 630/434-5462, or in the event of an emergency after hours, by calling Village Operations Center at (630) 434-5706 or (630) 434-5707.

- g. The Licensee shall maintain Licensee's Improvements in good repair, and in a clean and sightly condition.
- h. Upon termination of this Agreement by either party, the Licensee shall, within thirty (30) days and at its expense, remove the Licensee Improvements and restore the Licensed Premises to substantially its original condition, reasonable wear and tear excepted.
- i. If Licensee abandons its use of Licensee's Improvements, Licensee shall, within thirty (30) days of receipt of written notice from the Village notifying the Licensee of such abandonment and at its expense, remove the Licensee's Improvements and restore the Tower to substantially its original condition. Licensee's Improvements will be presumed abandoned if it is not operated for a period of one month or more. If Licensee's Improvements are not removed within thirty (30) days, the Village may remove Licensee's Improvements and the Licensee shall reimburse the Village for the costs of such removal.

5. NON-INTERFERENCE WITH VILLAGE OPERATIONS:

Neither this Agreement nor Licensee's Improvements shall interfere or obstruct the functioning of the Village's operations and services. Licensee warrants that Licensee's Improvements shall be constructed, installed, maintained and operated in such a manner as to not interfere or obstruct any radio or electronic equipment or signals of the Village's radio and data systems. In the event such interference occurs, and the interference cannot be eliminated by Licensee after reasonable efforts, the Village may terminate this Agreement, in accordance with Paragraph 8(b) of this Agreement. Provided after notice to Licensee, the Village may immediately terminate this Agreement, or require that operation of the Antenna or any of Licensee's Improvements be immediately ceased where it determines that the Antenna or Licensee's Improvements present an immediate and serious danger to the public health, welfare or safety due to interference with the operation of the Village's radio and data systems.

6. TERM:

- a. This Agreement shall have an Initial Term of approximately five (5) years beginning upon the issuance of a building permit in 2008, and ending December 31, 2012, and two (2) five-year Extension Terms beginning January 1, 2013, and January 1, 2018, respectively. The first extension term beginning January 1, 2013, shall automatically commence. The second extension term beginning January 1, 2018, shall automatically commence unless either party provides the Village with written notice of its election not to renew the License at least one hundred and twenty (120) days prior to the expiration of the current term. The final date of the agreement shall be December 31, 2022.
- b. After February 1, 2018, Licensee may request the Village to enter into negotiations towards renewing or extending this Agreement. Any renewal or extension shall be according to terms that are mutually agreeable and the Village shall not be bound to accept any particular terms or to renew any or all of the rights granted by this Agreement.

7. COMPENSATION:

Beginning in 2008, upon the issuance of a building permit, Licensee shall pay to the Village a license fee of \$3200.00 per month in 2008. Thereafter, effective on the first day of January in the subsequent years of the agreement, the monthly license fee shall increase in an amount equal to the fee for the preceding year multiplied by 4%. The fee shall be paid to the Village of Downers Grove, Village Hall, 801 Burlington Avenue, Downers Grove, IL 60515.

8. TERMINATION:

This Agreement may be terminated as follows:

a. Licensee may terminate this Agreement at any time upon sixty (60) days written notice to the Village without further liability if Licensee does not obtain all permits or other approvals required from any governmental authority or any easements required from any third party to operate the PCS system, or if any such approval is canceled, expires or is withdrawn or terminated, or if the Village fails to have proper ownership of the site or authority to enter into this Agreement, or if Licensee, for any other reason, in its sole discretion, determines that it will be unable to use the Property, however, if Licensee terminates this Agreement without cause, it shall pay the Village a termination penalty equal to three months of the current rental amount.

b. In the event either party fails to comply with the terms of this Agreement such party shall be considered in default and the non-defaulting party may serve written notice of its intent to terminate this Agreement. Except where the public health or safety is threatened, the notice shall give the defaulting party not less than thirty (30) days to correct such non-compliance. In the event the default is not corrected within thirty (30) days of such notice, the non-defaulting party may terminate this Agreement by serving a written notice of termination. Notwithstanding the preceding, if any default cannot be cured within thirty (30) days and the defaulting party has diligently commenced and continues to take reasonable action necessary to cure the default, the defaulting party shall be entitled to a reasonable extended period of time in order to cure the default.

c. In the event the Tower is destroyed or substantially damaged so as to substantially effect Licensee's use of the property, this Agreement shall be considered terminated.

9. TOWER REPAIR/MAINTENANCE:

Upon receiving ninety (90) days notice from the Village that it intends to repair or perform maintenance to the Tower, Licensee shall, at its own expense and in such manner as the Village shall reasonably request, immediately remove, relocate, change or alter the position of Licensee's Improvements. During the term of this Agreement, the Tower may be refurbished and/or painted. Refurbishment and/or painting will take several months to complete (approximately five to eight months). Prior to beginning refurbishment and/or painting, Licensee understands that its Antenna shall be removed from the Tower upon notice from the Village and that the Antenna shall not be reinstalled until the refurbishment and/or painting is

Site name: 801 Burlington – Lattice Tower

completed and the Village has approved such reinstallation, which approval shall not be unreasonably withheld, conditioned or delayed. During such period, Licensee may, at its sole cost and expense, install the Antenna on a temporary telephone pole or bring a cell on wheels outside the shrouded area of the tower in a location approved by the Village. However, such temporary arrangement shall not interfere with the refurbishment and/or painting of the tower or with other Village operations on the site. The Village shall not be responsible for any costs of removal, relocation, and reinstallation of the Antenna as a result of the refurbishment and/or painting.

10. RESTORATION:

When the Licensee does any work on or affecting the Licensed Premises, it shall, at its own expense, restore the Licensed Premises to as good a condition as existed before the work was undertaken, unless otherwise directed by the Village. If the Licensee fails to restore the Licensed Premises, the Village may, after communications with the Licensee and after affording the Licensee a reasonable opportunity to correct the situation, restore the Licensed Premises, or remove the obstruction therefrom. No such prior written notice shall be required in the event that the Village determines that an emergency situation exists. The Licensee shall pay the Village for any reasonable costs of such restoration within fourteen (14) days after receiving a bill from the Village for such work.

11. UTILITIES:

Licensee shall be responsible for obtaining adequate utilities for operation of Licensee's Improvements, including electricity from any source available on the Property as along as the electricity for Licensee's Improvements are separately metered. Any utilities to be installed must be underground and at a location approved by the Village. Licensee shall pay for the electricity or any other utility it consumes in its operations at the rate charged by the servicing utility company and the Village shall not be liable for such charges.

12. TAXES:

Licensee is solely responsible for payment of taxes on the leasehold. Licensee is solely responsible to determine the taxes owed and to comply with the DuPage County payment procedures. Licensee shall reimburse the Village for any personal or real property taxes which are assessed as a result of Licensee's Improvements and directly attributable to its use of the Property under the terms of this Agreement. Licensee shall have the right, at its own expense and without expense to the Village, to contest by appropriate proceedings, conducted with due diligence and in good faith, the validity of the amount of any taxes or reassessment as applicable to the Licensed Premises or the Licensee Improvements. In the event that the Village becomes aware of any tax delinquency and that delinquency is not cured by the Licensee, the Village shall have the right to remove any of Licensee's equipment and terminate the Agreement.

13. INDEMNIFICATION:

Licensee shall indemnify, become responsible for and hold harmless the Village, its boards, committees, commissions, officers, agents and employees from any and all liability

Site name: 801 Burlington – Lattice Tower

arising out of the existence of this Agreement; the installation, existence, maintenance or repair of Licensee's Improvements; or any act or omission of Licensee, its officers, agents and employees, except for liability which arises from the Village's or its employees' or agents' negligence or intentional misconduct.

For purposes of this Agreement, the term "liability" includes, but is not limited to: actual or claimed loss or damage to property or injury to or death of persons; actual or claimed responsibility for such loss, damage, injury or death; and any and all judgments, decrees, costs and expenses of every sort and kind of incident to such loss, damage, injury, death or responsibility, including, but not limited to, court costs, fines and attorney's fees.

14. INSURANCE:

At all times while this Agreement remains in effect, and in recognition of the indemnification provided in the foregoing Paragraph 13, the Licensee shall, at its own cost and expense, maintain a program of third party liability insurance and/or self-insurance to protect the Village, its officers, employees and agents from any liability for bodily injury, death, and property damage occasioned by the activities of the Licensee under this Agreement.

a. During the Term of the Agreement. Licensee shall procure, pay for and maintain in full force and effect during the entire term of the agreement (i) worker's compensation insurance as required by law and which insures Village against worker's compensation claims arising out of Licensee's activities on the Tower; (ii) fire and casualty insurance covering Licensee's Improvements in an amount not less than one hundred percent (100%) of their actual replacement cost; and (iii) commercial general liability insurance, including broad form property damage insurance, for bodily injuries and property damage, in amounts not less than One Million Dollars (\$1,000,000.00) per occurrence and One Million Dollars (\$1,000,000.00) in the aggregate covering bodily injuries or property damage occurring on the Tower.

b. During Construction/Installation. During construction/installation, Licensee's contractor shall also maintain and provide Village with evidence of each of the insurance coverages specified in subparagraph (a) and in the amounts so specified. In addition, the contractor shall provide builder's risk insurance on an "all risks" basis for one hundred percent (100%) of the insurable value of all construction work in place or in progress from time to time, insuring the project, including materials in storage and while in transit, against loss or damage by fire or other casualty, with extended coverage, vandalism and malicious mischief coverage, bearing a replacement cost agreed amount endorsement.

c. Policies. The policy or policies of insurance required by subparagraphs (a) and (b) shall be underwritten by a company or companies authorized to do business in the State of Illinois, shall be reasonably satisfactory to Village, shall name Village as an additional insured and shall be delivered to the Village, together with evidence of the payment of the premiums, prior to the commencement of the term of this Agreement. Licensee or, where applicable, Licensee's contractors shall furnish Village with a written notice of any cancellation, reduction or modification of insurance required under this Section.

15. LIENS:

Licensee agrees that it will not permit or suffer any lien to be put upon or arise or accrue against the Property in favor of any person or persons, individual or corporate, furnishing either labor or material in any work herein proposed, and the Licensee further covenants and agrees to hold the Village and its property free from any and all liens, or rights or claim of lien, which may or might arise or accrue under or be based upon any mechanic's lien law of the State of Illinois. If any such lien or claim for lien is filed or recorded against the Property, the Village shall give Licensee notice thereof and demand that Licensee remove the same, or post adequate security to insure the removal of the same following the resolution of any dispute between Licensee and the lienholder, within thirty (30) days after such notice. Nothing in this provision shall restrict Licensee from granting a security interest in all or any part of Licensee's Improvements and to file of record UCC financing statements and/or fixture filings to perfect the same.

16. ASSIGNMENT AND SUBLEASING:

This Agreement may not be assigned or transferred without the express written consent of the Village, which shall not be unreasonably withheld, conditioned or delayed. The Village agrees to respond to any such request within thirty (30) days from receipt of the request. Any assignment or transfer without such written consent shall, at the option of the Village, be deemed to be void and of no effect. Provided, however, this Agreement may be assigned or transferred to Licensee's parent or an subsidiary, successor legal entity or other affiliate of Licensee without the Village's written consent as long as the Village is given written notice of the assignment or transfer within 30 days thereof. The Village must approve any sublease and shall be entitled to 50% of any sublease in addition to the rental fee as described in Section 7, above.

17. HAZARDOUS SUBSTANCES:

a. The Village represents and warrants that it has no knowledge of any hazardous substance existing on the Property in violation of any applicable federal, State or local law, regulation or ordinance. The Village further agrees to hold Licensee harmless from and indemnify Licensee against any damage, loss or expense or liability resulting from the existence on the Property of any such hazardous substance, including all attorney's fees and consultant fees, costs and penalties, incurred as a result thereof, unless caused by Licensee or any of its employees or agents.

b. Licensee represents and warrants that its use of the Licensed Premises will not generate any hazardous substance, and that it will not store or dispose on the Licensed Premises, nor transport to or over the Licensed Premises, any hazardous substance in violation of any applicable federal, State or local law, regulation or ordinance. Licensee further agrees to hold the Village harmless from and against and indemnify the Village against any release of such hazardous substance and any damage, loss, or expense or liability resulting from such release, including attorney's fees and consultant fees, costs and penalties, incurred as a result thereof, which was caused by Licensee or any of its employees or agents.

Site name: 801 Burlington – Lattice Tower

c. “Hazardous Substance” as used herein shall mean any substance or material defined or designated as hazardous or toxic waste, hazardous or toxic materials, hazardous or toxic radioactive substance, or other similar term by any federal, State or local environmental law, regulation or ordinance presently in effect or promulgated in the future.

18. COST OF ENFORCEMENT:

The prevailing party in any action or proceeding in court or mutually agreed upon arbitration proceeding to enforce the terms of this Agreement shall be entitled to receive its reasonable attorney’s fees and other reasonable enforcement costs and expenses from the non-prevailing party.

19. INVALIDITY:

If any section, paragraph, clause or provision of this Agreement shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this Agreement.

20. FORCE MAJEURE:

Neither party shall be deemed in violation of this Agreement for the delay in performance or failure to perform in whole or in part its obligations under this Agreement due to strike, war or act of war (whether an actual declaration is made or not), insurrection, riot, act of public enemy, fire, flood or other act of God or by other events to the extent that such events are caused by circumstances beyond such party's control.

21. NOTICES:

Unless otherwise specified herein, all notices under this agreement shall be made in writing and delivered to:

Village Manager
Village of Downers Grove
801 Burlington Avenue
Downers Grove, IL 60515-4776

And: Denali_Spectrum_Operations,_LLC
10307 Pacific Center Court
San Diego, CA 92121
Attn: Legal Department

In the event the Licensee moves, consolidates, merges, splits or otherwise reorganizes or moves its offices, it is the duty and obligation of the Licensee to provide written notification to the Village within thirty (30) days of any change.

22. GOVERNING LAW:

Site name: 801 Burlington – Lattice Tower

This Agreement shall be governed by the laws of the State of Illinois.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the ____ day of _____, 2008.

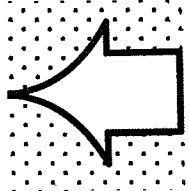
LICENSEE:

Denali Spectrum Operations, LLC
A Delaware Limited Liability Company
Denali Spectrum License, LLC
Its Sole Member
Denali Spectrum, LLC
Its Sole Member
Denali Spectrum Manager, LLC
Its Manager
Doyson, Limited
Its Manager

VILLAGE OF DOWNERS GROVE

By:

Mayor



ATTEST:

Village Clerk

WITNE

By: *Travis Root*

Title: *Operations Manager*

Subscribed and sworn to
this 15 day of May, 2008.

Donna L. Vece
Notary Public



PROJECT INFORMATION

SCOPE OF WORK
COLLOCATION
SELF-SUPPORT

CURRENT USE
UNWANNED TELECOMMUNICATIONS FACILITY

PROPOSED USE
UNWANNED TELECOMMUNICATIONS FACILITY

UTILITY CONTACTS
ELECTRIC COVERED
CONTACT TSD
PHONE TSD

TELEPHONE: 800
CONTACT TSD
PHONE TSD

PROPERTY OWNER
LANDLORD: OTHER
CONTACT ANNE-MARIE PEREZ
PHONE: NA
GATE CODE: NA

SITE INFORMATION
SUBDIVISION: DU PAGE COUNTY
CONSTRUCTION TYPE: UNWANNED
PLN. & NA
LATITUDE: 41° 47' 44.67" N (NAD 83)
LONGITUDE: 88° 0' 52.04" W (NAD 83)

NOTE:
48 HOURS PRIOR TO DEPARTURE, ALL UNDERGROUND UTILITIES

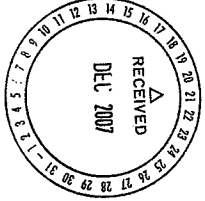
CALL YOUR LOCAL UNDERGROUND UTILITY SERVICE OF ILLINOIS

JULIE:
(800) 892-0123



DRAWING INDEX

- T-1 TITLE SHEET
- C-1 BUNGLED SITE PLAN & TOWER ELEVATION
- C-2 ICE BRIDGE DETAILS
- C-3 EQUIPMENT LAYOUT
- C-4 ICE SHIELD DETAILS
- A-1 ANTENNA SCHEDULE & DETAILS
- A-2 ANTENNA DETAILS
- E-1 ELECTRIC & TELCO PLAN
- E-2 ELECTRIC & TELCO RIBBER DIAGRAM
- E-3 ELECTRIC & TELCO DETAILS
- E-4 PFC DETAILS
- GR-1 GROUNDING SITE PLAN
- GR-2 GROUNDING RIBBER DIAGRAM
- GR-3 GROUNDING DETAILS
- GR-4 SPECIFICATIONS
- GR-5 SPECIFICATIONS



cricket

DENALI SPECTRUM OPERATIONS LLC.

VILLAGE OF DOWNERS GROVE LATTICE 2

ORD-314-A

801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

PROPOSED COMMUNICATION SITE ON EXISTING 200'-0" SELF-SUPPORT TOWER WITH NEW EQUIPMENT AT GRADE LEVEL

APPLICABLE BUILDING CODES AND STANDARDS

APPLICABLE BUILDING CODES AND STANDARDS

918 CONTRACTORS WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (LAW) FOR THE LOCATION THE EDITION OF THE ASU ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

919 CONTRACTORS WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
AMERICAN CONCRETE INSTITUTE (ACI) 308, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 360, AISC 360, NINTH EDITION
TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
TIA 601, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

920 NOTE: FOR ELECTRICAL AND ELECTRONICS ENGINEERS (EES) & GUIDE FOR THE ASSURANCE AGAINST RESISTIVITY, GROUND FOLDS AND GROUNDING OF ELECTRONIC EQUIPMENT
ESEE 62601, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS FROM LOCATION CATEGORIES "C3" AND "HIGH STRIKE" EXPOSURE

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES

921 ALSO TIA FOR TELECOM - DC POWER SYSTEMS - TELECOM ENVIRONMENTAL PROTECTION

922 FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN, WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

923 EQUIPMENT AREA IS UNWANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS AND PLUMBING FACILITIES ARE NOT REQUIRED.

924 BUILDING CODES
INTERNATIONAL BUILDING CODE 2000
WITH DCA. AMENDMENTS

925 ELECTRICAL CODES
NATIONAL ELECTRICAL CODE 2002
WITH DCA. AMENDMENTS

926 INTERNATIONAL PROPERTY MAINTENANCE CODE 2000
WITH DCA. AMENDMENTS

APPROVED

DOWNERS GROVE CODE SERVICES

DATE: 12/12/07 INITIAL: M. POIRIER

SITE DESIGN PARTICIPANTS

TEAM	NAME	COMPANY	NUMBER
A/E	RYAN BLAKE	LLT COMMUNICATION DESIGN GROUP, LLC	(724) 239-6430
SITE A/C	DONNA VECE	FTHC	(847) 316-8283
CON. MGR.	TREVOR MOORE	CRICKET COMMUNICATIONS	(404) 944-0146

DEVELOPER: ABBEYROAD, IL 60401

PROPERTY OWNER: RYAN BLAKE

CON. MGR.: DONNA VECE

OPERATIONS: TREVOR MOORE

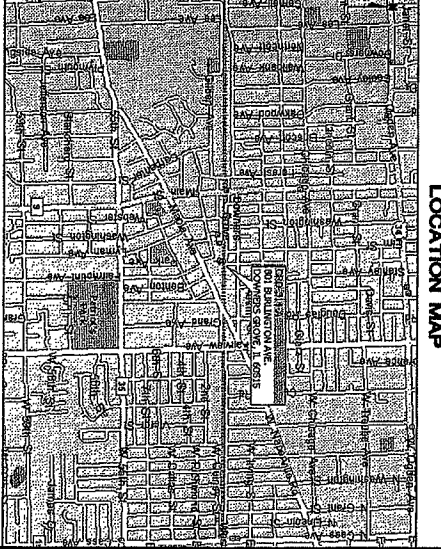
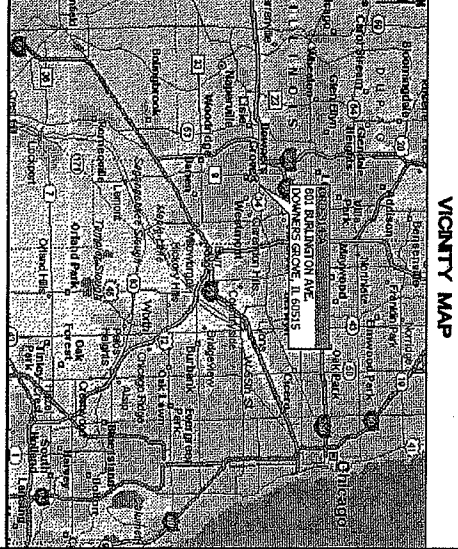
DATE: 12/12/07 INITIAL: M. POIRIER

fmhc
8600 W. BRYN MAWR AVENUE
CHICAGO, IL 60631
TELEPHONE (773) 380-3800

WT
W.T. COMMUNICATIONS
801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

SCOTT K. BRUBAKER
Professional Engineer
No. 053-038308
State of Illinois

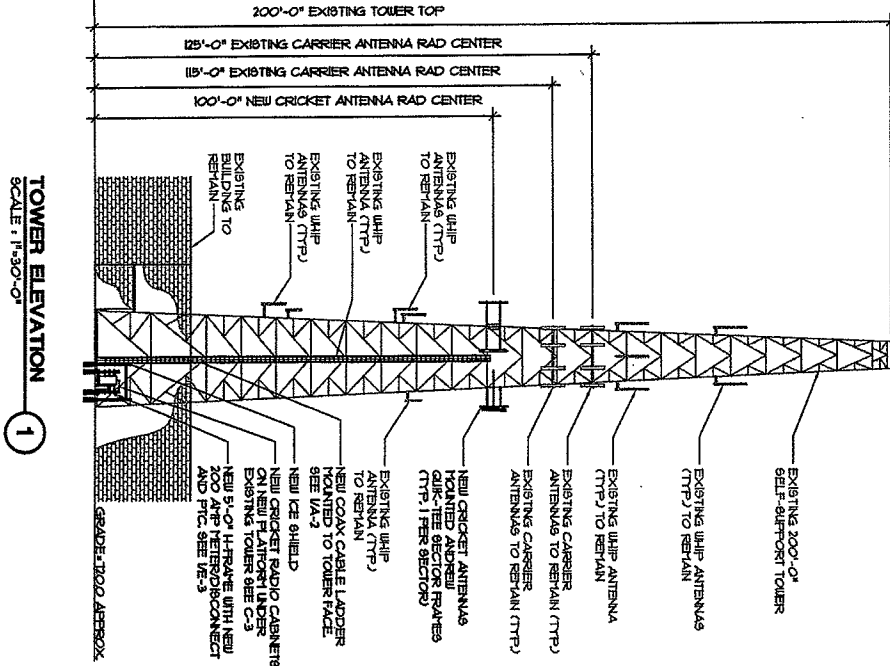
DATE: 12/12/07 INITIAL: M. POIRIER



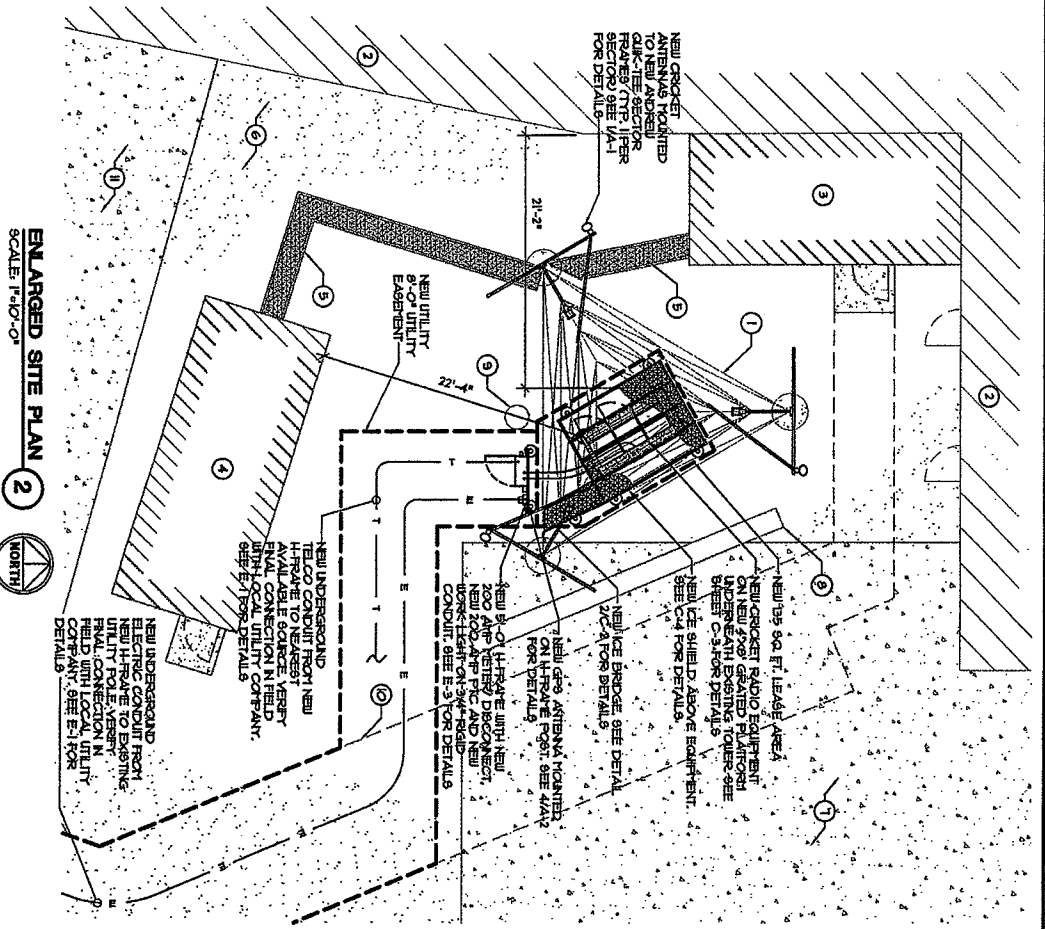
NO.	DATE	REVISIONS	ISSUED BY	DESIGNED BY
1	12/17/07	PER REVISIONS	JPC	RSB
2	11/09/07	FOR CONSTRUCTION	JPC	RSB
3	11/07/07	PER CLIENT COMMENTS	JPC	RSB
4	10/25/07	SITE REVIEW	JPC	RSB
5		REVISIONS	JPC	RSB

PROJECT NUMBER: 7071/127
DRAWING TITLE: TITLE SHEET
DRAWING NUMBER: T-1

NOTE TO GENERAL CONTRACTOR
 NO WORK IS TO BE PERFORMED ON THIS SITE UNLESS THE GENERAL CONTRACTOR HAS BEEN ADVISED BY THE ENGINEER. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY. THE GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING AT NO LATER THAN 48 HOURS BEFORE ANY WORK IS TO BE PERFORMED. THE GENERAL CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES.



TOWER ELEVATION
 SCALE: 1" = 30'-0"

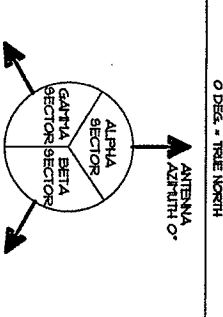


ENLARGED SITE PLAN
 SCALE: 1" = 10'-0"

- SITE NOTES**
- EXISTING 200'-0" SELF-SUPPORT TOWER TO BE UTILIZED.
 - EXISTING BUILDING TO REMAIN.
 - EXISTING PERSONAL EQUIPMENT SHELTER TO REMAIN.
 - EXISTING AIR-T EQUIPMENT SHELTER TO REMAIN.
 - EXISTING ICE BRIDGE TO REMAIN (TYP).
 - EXISTING ASPHALT AREA TO REMAIN.
 - EXISTING CONCRETE AREA TO REMAIN.
 - EXISTING GARAGE RAIL TO REMAIN.
 - EXISTING DRIVEWAY TO REMAIN.
 - EXISTING UTILITY EXISTENCE TO BE UTILIZED.
 - EXISTING CONCRETE DOOR RAMP TO REMAIN.

NOTE:
 EXISTING EASEMENT AND LEGAL DOCUMENTATION AT THE OF DESIGN. IF EXISTING EASEMENTS ARE TO BE UTILIZED, LEGAL DOCUMENTATION MUST BE PROVIDED. NEW EASEMENTS CAN BE CREATED, BUT WILL REQUIRE LEGAL DISPOSITIONS AND DOCUMENTATION.

O DWS - TRUE NORTH



GENERAL NOTES

- CONTRACTOR SHALL REPAIR AND REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION.
- CONTRACTOR SHALL VERIFY ALL EXISTING EASEMENTS AND OVERHEAD UTILITIES PRIOR TO ALL DAMAGED UTILITIES. THE CONTRACTOR AND COORDINATE ANY REPAIRS WITH RESPECTIVE UTILITY COMPANY.
- ALL SOIL REPAIRATION EITHER SEED OR GROUND SHALL BE UNTERED DAILY UNTIL GROWTH PAST 12 MONTHS (IF NEEDED).

fmcnc
 fmcnc COMMUNICATIONS
 8800 W. BRUNN LAVER AVENUE
 CHICAGO, IL 60631
 TELEPHONE: (773) 380-3500

WT
 W-T COMMUNICATION DESIGN GROUP, LLC
 2013 Franklin Avenue
 WIRELESS INFRASTRUCTURE
 CHICAGO, IL 60641
 TEL: (773) 380-3500
 WWW.WTDESIGN.COM

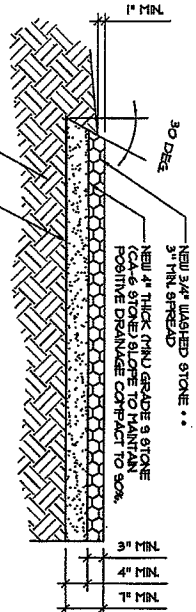
SCOTT & TRAPHAGEN
 REGISTERED PROFESSIONAL ENGINEERS
 891 341/483
 801 BURLINGTON AVE.
 DOWNERS GROVE, IL 60515

VILLAGE OF DOWNERS GROVE LATTICE 2
 ORD-314-4
 801 BURLINGTON AVE.
 DOWNERS GROVE, IL 60515
 DU PAGE COUNTY

cricket
 801 W. BRUNN LAVER
 CHICAGO, IL 60631
 OFFICE: (414) 305-3311
 FLS: (773) 300-3043

NO.	DATE	REVISIONS	DESIGNED BY	CHECKED BY
1	12/17/07	PER REVISIONS		
2	11/17/07	FOR CONSTRUCTION		
3	11/17/07	FOR CONSTRUCTION		
4	10/25/07	FOR CONSTRUCTION		
5	10/25/07	FOR CONSTRUCTION		
6	10/25/07	FOR CONSTRUCTION		
7	10/25/07	FOR CONSTRUCTION		
8	10/25/07	FOR CONSTRUCTION		
9	10/25/07	FOR CONSTRUCTION		
10	10/25/07	FOR CONSTRUCTION		

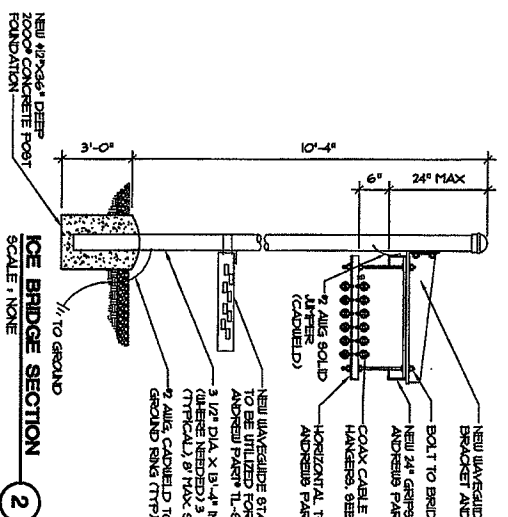
ENLARGED SITE PLAN AND TOWER ELEVATION
 DRAWING NUMBER: C-1
 PROJECT NUMBER: TD71127



NOTE:
SUITABLE UNDISTURBED SUBGRADE REMOVE ALL ORGANIC MATERIAL OR UNSUITABLE MATERIAL, COMPACT TO 90% (TYP)
NEW 6" THICK (18" DIA) STONE LAYER
NEW 6" THICK (18" DIA) STONE LAYER
NEW 6" THICK (18" DIA) STONE LAYER

YARD PAVEMENT
SCALE: 1"=10'

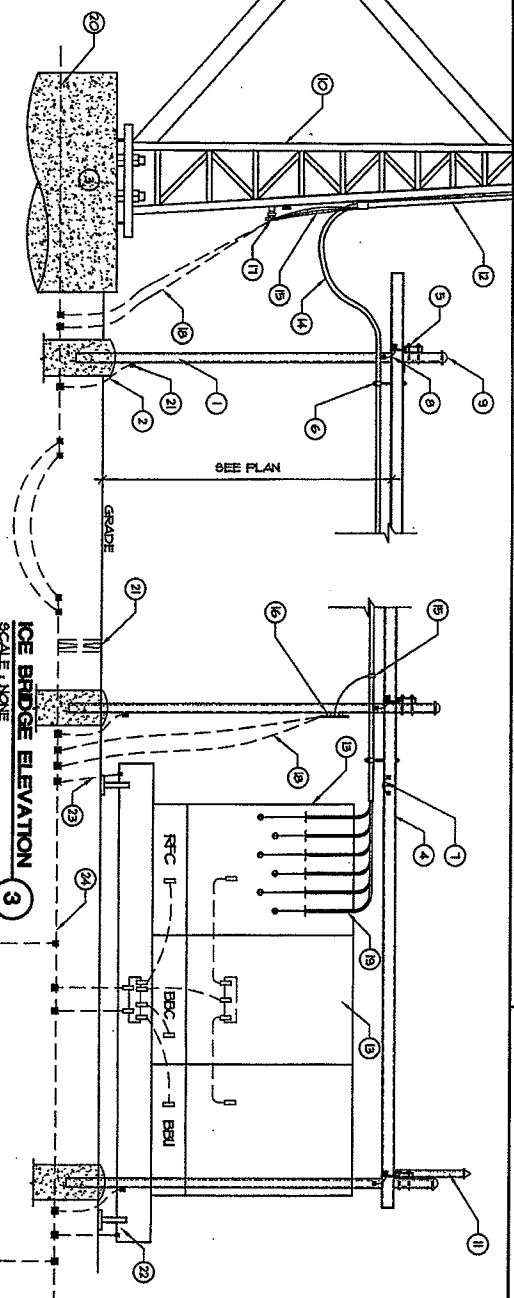
1



NOTE:
NEW 6" DIA. X 18" HIGHER (WHERE NEEDED) 3/4" DIA. (TYPICALLY) 8" DIA. SPACING
NEW 3/4" DIA. X 18" HIGHER (WHERE NEEDED) 3/4" DIA. (TYPICALLY) 8" DIA. SPACING
NEW 3/4" DIA. X 18" HIGHER (WHERE NEEDED) 3/4" DIA. (TYPICALLY) 8" DIA. SPACING

ICE BRIDGE SECTION
SCALE: 1"=10'

2



- KEY NOTES**
1. NEW ICE BRIDGE PIPE SUPPORT FOUNDATION IS 12" STANDARD GALVANIZED STEEL POST WITH 42" X 36" DEEP 2000 PSI CONCRETE FOUNDATION
 2. 2" ALIG SOLID GROUND WIRE FROM ICE RINGS
 3. EXISTING TOWER FOUNDATION
 4. NEW 24" WIDE SAFETY GRATED/GRAFFITI-RESISTANT UNWEARABLE DRAINAGE CHANNEL, FIELD ADJUST FITCH OR ANDREWS PART # UB-K310-B
 5. NEW UNWEARABLE BRIDGE SUPPORT BRACKET ANDREWS PART # UB-K310-B
 6. NEW COAX SWAY-NS AS REQUIRED, ANDREWS PART # 884-B6
 7. 1/2" DIA. X 18" HIGHER (WHERE NEEDED) 3/4" DIA. (TYPICALLY) 8" DIA. SPACING
 8. 2" ALIG SOLID GROUND WIRE FROM ICE RINGS
 9. NEW 24" WIDE SAFETY GRATED/GRAFFITI-RESISTANT UNWEARABLE DRAINAGE CHANNEL, FIELD ADJUST FITCH OR ANDREWS PART # UB-K310-B
 10. NEW UNWEARABLE BRIDGE SUPPORT BRACKET ANDREWS PART # UB-K310-B
 11. NEW COAX SWAY-NS AS REQUIRED, ANDREWS PART # 884-B6
 12. 1/2" DIA. X 18" HIGHER (WHERE NEEDED) 3/4" DIA. (TYPICALLY) 8" DIA. SPACING
 13. NEW CRICKET EQUIPMENT CABINETS, SEE C-3
 14. DRIP LOOP (3/4" MIN)
 15. COAX GROUNDING KIT (TYP) SUPER X KIT AT EVERY COAX BEND GREATER THAN 90 DEGS.
 16. NEW COLLECTOR GROUND BAR MOUNTED TO ICE BRIDGE POST, SEE GR-2
 17. 2" ALIG SOLID GROUND LEADS FROM GROUND BAR AT TOWER
 18. NEW 24" WIDE SAFETY GRATED/GRAFFITI-RESISTANT UNWEARABLE DRAINAGE CHANNEL, FIELD ADJUST FITCH OR ANDREWS PART # UB-K310-B
 19. NEW 18" ALIFERS, PROVIDE SUPPORT AT 24" O.C. PER MANUFACTURER'S RECOMMENDATIONS
 20. EXISTING TOWER GROUND RING, SEE GR-1
 21. NEW GROUND TEST WELL, SEE ZGR-3
 22. NEW EQUIPMENT LOAD FRAME, SEE C-3
 23. NEW 2" ALIG SOLID TO GROUND RING CABLED TO OPPOSITE LEGS OF PLATFORM
 24. NEW EQUIPMENT GROUND RING, SEE GR-1 AND 2

ICE BRIDGE ELEVATION
SCALE: 1"=10'

3

fmhc
Adding height to new heights
8800 W. BRUNN LAVER AVENUE
CHICAGO, IL 60631
TELEPHONE: (773) 390-3900

W-T
W-T COMMUNICATIONS GROUP, LLC
2675 Franklin Avenue
Morton Grove, IL 60053
Phone: (847) 222-7000
Fax: (847) 222-4444
www.wt.com
11. Laramie Ave., Madison, WI 53706

SCOTT R. TRAMER, P.E.
REGISTERED PROFESSIONAL ENGINEER
NO. 017-000017
1801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY
OFFICE: (708) 385-4311
FAX: (708) 385-3013

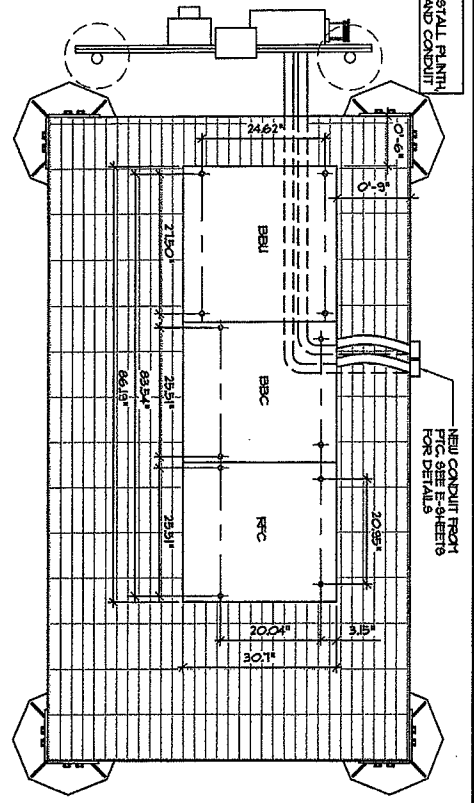
cricket
8819 W. BRUNN LAVER
SITE 85
GROUNDS, IL 60631
OFFICE: (708) 385-4311
FAX: (708) 385-3013

NO.	DATE	REVISIONS	BY	CHKD BY
1	12/17/05	PER REVISIONS	JTC	REB
2	11/09/05	PER CONSTRUCTION	JTC	REB
3	11/09/05	PER COMMENTS	JTC	REB
4	11/02/05	PER REVISIONS	JTC	REB
5	11/02/05	PER REVISIONS	JTC	REB

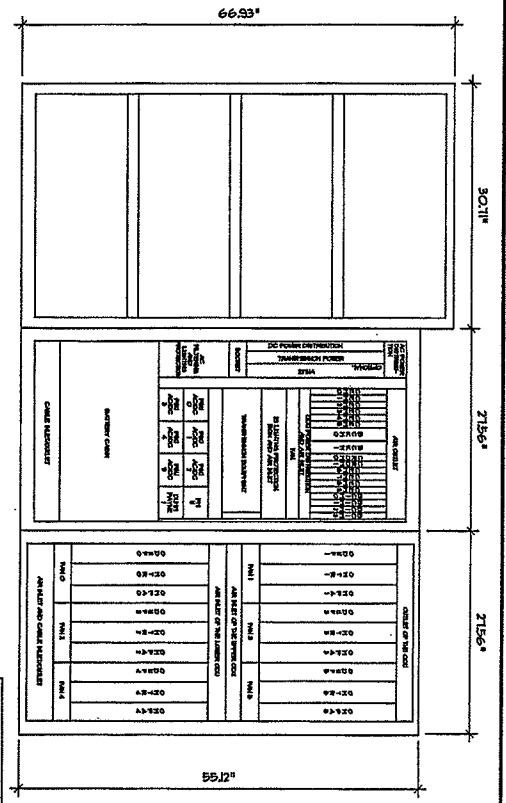
NO.	DATE	REVISIONS	BY	CHKD BY
1	12/17/05	PER REVISIONS	JTC	REB
2	11/09/05	PER CONSTRUCTION	JTC	REB
3	11/09/05	PER COMMENTS	JTC	REB
4	11/02/05	PER REVISIONS	JTC	REB
5	11/02/05	PER REVISIONS	JTC	REB

PRODUCT NUMBER
1071127
DRAWING TITLE
ICE BRIDGE DETAILS
DRAWING NUMBER
C-2

NOTE: CONTRACTOR TO INSTALL PLUMBING, CABINETS, AND CONDUIT BASES, CABINETS, AND CONDUIT



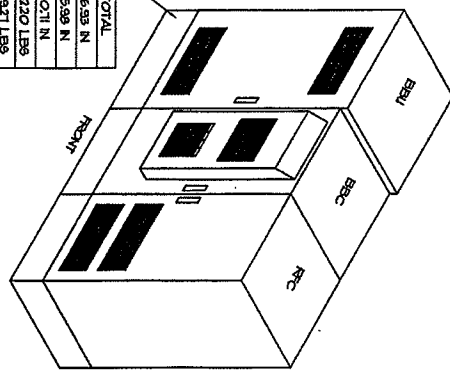
EQUIPMENT BOLT PATTERN (CABINET BASE) 1
SCALE: NONE



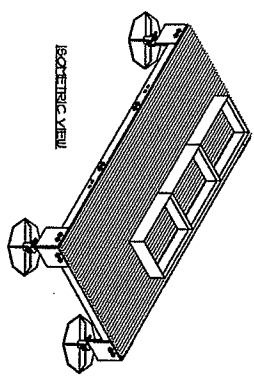
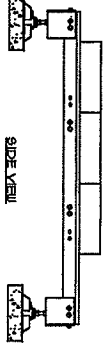
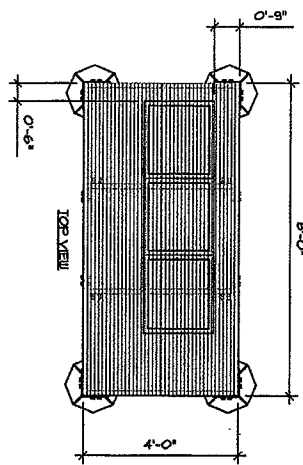
CABINET CONFIGURATION 2
SCALE: NONE

SEE EQUIPMENT MANUFACTURER DOCUMENTATION FOR ADDITIONAL INFORMATION

HEIGHT	RFC	BBC	BBU	TOTAL
9512 IN	9512 IN	6693 IN	6693 IN	6693 IN
2156 IN	2156 IN	3011 IN	6693 IN	6693 IN
2156 IN	2156 IN	3011 IN	3011 IN	3011 IN
DEPTH	RFC	BBC	BBU	TOTAL
60181 LB9	54023 LB9	2400 LB9	354420 LB9	354420 LB9
78541 LB9	46325 LB9	39015 LB9	109921 LB9	109921 LB9
VOLUME	10V/20V AC	10V/20V AC	50V/15V AC	
4090 W	4090 W			



EQUIPMENT LAYOUT (ISOMETRIC) 3
SCALE: NONE



EQUIPMENT LOAD FRAME DETAIL 4
SCALE: NONE

NOTE: CONCRETE PAVERS TO BE INSTALLED AND FURNISHED BY GENERAL CONTRACTOR

NOTE: CONTRACTOR TO INSTALL PLUMBING, CABINETS, AND CONDUIT

fmhc
making solutions to new markets
8800 W. BERN MARIN AVENUE
CHICAGO, IL 60631
TELEPHONE: (773) 390-3990

WT
W-T COMMUNICATION DESIGN GROUP, LLC
WIRELESS INFRASTRUCTURE
3571 Power Avenue
Chicago, IL 60642
Tel: (773) 390-3990
Fax: (773) 390-3990
www.wtcomm.com

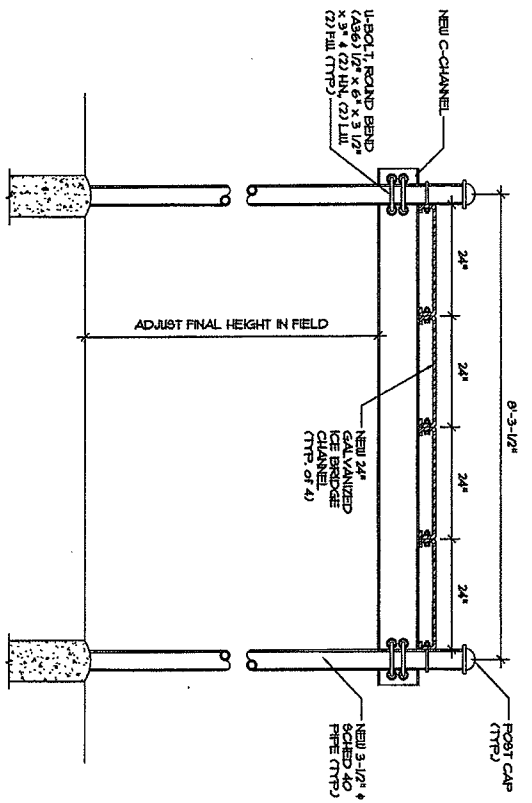
SCOTT R. THOMPSON
REGISTERED PROFESSIONAL ENGINEER
No. 042-000000
Professional Seal
State of Illinois
Professional Seal
State of Illinois

VILLAGE OF DOWNERS GROVE
LATTICE 2
ORD-314-A
801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

cricket
895 W. BERN MARIN
CHICAGO, IL 60631
OFFICE: (947) 315-4311
FAX: (773) 390-3013

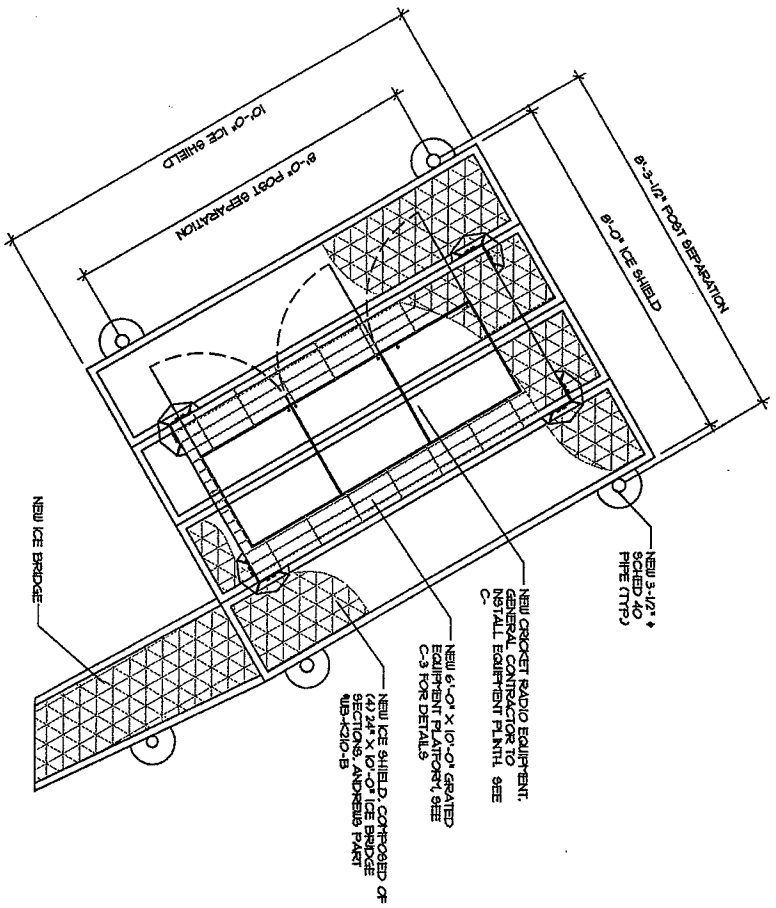
DATE	DESCRIPTION	BY	CHECKED BY
1/24/17/07	PER REVISIONS	JFC	RES
01/19/07/07	PER CONSTRUCTION	JFC	RES
01/17/07/07	PER DESIGN COMMENTS	JFC	RES
10/22/07/07	PER DESIGN REVIEW	JFC	RES
DATE	DESCRIPTION	BY	CHECKED BY

Product Number: 1071127
Drawing Title: EQUIPMENT LAYOUT
Drawing Number: C-3



- NOTES:
1. POSTS ARE INSTALLED ON BOTH SIDES OF BRIDGE.
 2. FIELD TRIM VERTICAL PIPES IF NECESSARY.
 3. GALVANIZE ANY EXPOSED METAL.
 4. FLAT WASHERS SHALL BE PLACED OVER ALL SLOTTED HOLES.

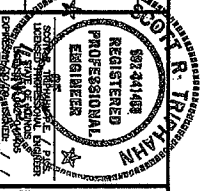
TYPICAL CHANNEL CONNECTION
SCALE: NONE



ICE SHIELD FRAMING PLAN
SCALE: 3/8\"/>

fmhnc
Helping Telecom to new heights
8600 W. BRYN MAWR AVENUE
CHICAGO, IL 60631
TELEPHONE: (773) 380-3600

W-T
W-T COMMUNICATION DESIGN GROUP, LLC
WIRELESS INFRASTRUCTURE
3075 Parkway Drive
Suite 200
Ft. Lauderdale, FL 33309
Tel: (754) 328-0333 Fax: (754) 328-3444
L. Lawson, P.E. (407) 591-1400
Copyright © 2007 W-T COMMUNICATION DESIGN GROUP, LLC



VILLAGE OF
DOWNERS GROVE
LATTICE 2
ORD-314-A
801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

cricket
DEVELOPMENT OPERATIONS, LLC
801 W. BRYN MAWR
SUITE 200
CHICAGO, IL 60631
OFFICE: (973) 315-4311
FAX: (773) 309-3013

NO.	DATE	DESCRIPTION	ISSUED BY	DATE
1	10/27/07	REV. RESPONSE	W-T	10/27/07
2	11/09/07	REV. CONSTRUCTION	W-T	11/09/07
3	11/09/07	REV. GENERAL COMMENTS	W-T	11/09/07
4	10/26/07	REV. RESPONSE	W-T	10/26/07

PROJECT NUMBER: 1071127
DRAWING TITLE: ICE SHIELD DETAILS
DRAWING NUMBER: C-4

- ANTENNA NOTES**
1. CONTRACTOR SHALL PROVIDE PROJECT A WRITTEN REQUEST FOR AMOUNT OF COAX (L & R FEET) AS DETERMINED FROM DRAWINGS AND BID WALK.
 2. ANTENNAS SHALL BE INSTALLED IN ACCORDANCE WITH CRCKET STANDARDS.
 3. ANTENNAS SHALL BE PLACED AND AT AZIMUTH INDICATED IN ANTENNA SCHEDULE.
 4. CONTRACTOR TO PROVIDE ANTENNA SERIAL NUMBERS ON FIELD DRAWINGS.
 5. AZIMUTHS ARE ORIENTED CLOCKWISE FROM TRUE NORTH.
 6. CONTRACTOR TO CONSENT ANTENNA DOWN TILT AZIMUTH WITH CRCKET ENGINEER PRIOR TO CONSTRUCTION.
 7. SECTORS SHALL BE DEREGULATED IN A CLOCKWISE MANNER. SECTOR ALPHA TO ZERO DEGREE (NORTH), SECTOR BETA & GAMMA FOLLOW CLOCKWISE THEREAFTER.

COAXIAL CABLE

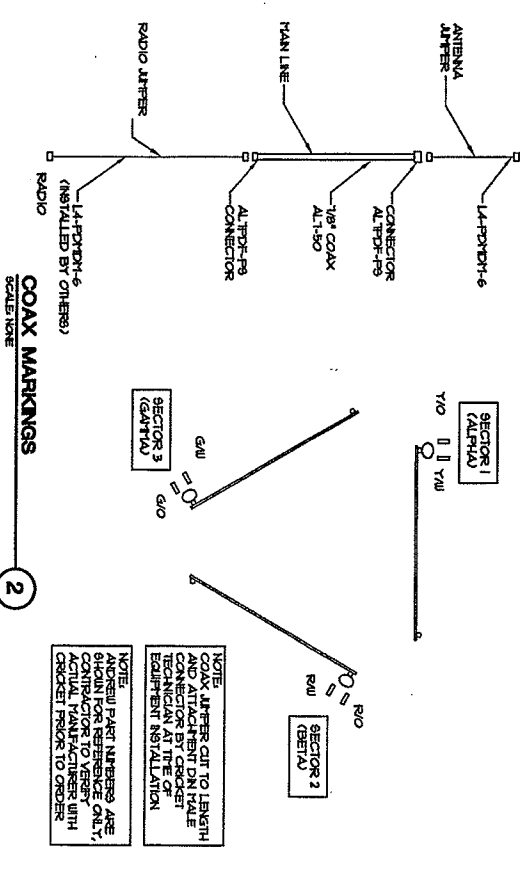
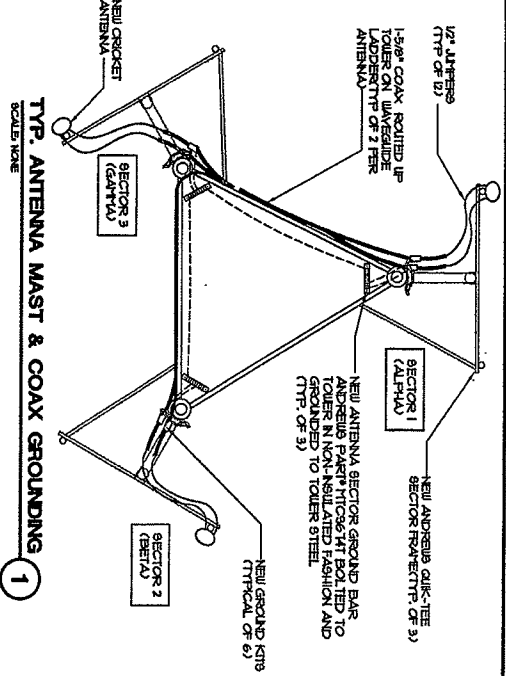
1. CONTRACTOR SHALL NOT EXCEED CABLE LENGTHS AS INDICATED IN SCHEDULE WITHOUT RE-APPROVAL.
2. CONTRACTOR TO AS-BUILT CABLE LENGTHS ON SITE, NO PRE-FABRICATION OF CABLE LENGTHS PERMITTED UNLESS FACTORY ORDERED TO LENGTH.
3. CONTRACTOR TO MAINTAIN ANTENNA HANGING BRACE STANDARDS.
4. AVOID EXCESSIVE DRIP LOOPS.

NOTE: ACTUATOR TO BE PROVIDED BY CRCKET PROJECT MANAGER.

5. COAXIAL CABLE TO BE SUPPORTED AT ICE BRIDGE AND SUPPORT STRUCTURE USING STAINLESS STEEL HANGERS A MINIMUM OF 36" SPACING BETWEEN HANGERS. PROVIDE ENTRIES TO SUPPORT HANGERS APPROXIMATELY 45 DEGREES EITHER SIDE WHEN THE BRACKETS ARE NOT PERMITTED.
 6. CONDUIT TERMINATION OF COAX WITH CRCKET CONSTRUCTION MANAGER.
 7. COAXIAL CABLE TO BE LABELED USING SCOTCH VINTL 35 (OR EQUAL) AT TOP & BOTTOM OF MAIN LINES, BOTH ENDS OF TOP JUNCTIONS ACCORDING TO COLORS CODED INDICATED ON SCHEDULE.
 8. CONNECTORS INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
 9. ALL CONNECTORS AND GROUND KITS ARE TO BE WEATHERPROOFED WITH MAGIC 4 LV RESISTANT ELECTRICAL TAPE.
 10. GROUND KITS TO BE ANDREW 841-1-894-1 SERIES AND PROVIDED AT THREE LOCATIONS PER ANTENNA. TOP TO GROUND BAR BOTTOM AT GROUND BAR KITS TO BE INSTALLED PARALLEL TO COAXIAL CABLE PATH.
- ELECTRICAL DOWN TILT**
1. CONTROL CABLE CONNECTED TO AIRCRAFT CABLE WITH RESERBERG CABLE STRAP KIT • 36" OZ.
 2. RESERBERG CABLE SHOULD BE LOOSED AND CLAMPED AT TOP OF SUPPORT STRUCTURE (ON HOISTING GRIP HOOK) FOR STRESS RELIEF.

NTAL BLDG. 3 EQUIPMENT CABINETS, 3 ANTENNAS, 6 COAX RUNS

ANTENNA AND COAXIAL CABLE SCHEDULE		SECTOR 1 (ALPHA)	SECTOR 2 (BETA)	SECTOR 3 (GAMMA)
ITEM DESCRIPTION	TXI	RxD	TXI	RxD
AZIMUTH	0°		120°	240°
COLOR CODE	YELLOW/BLACK	YELLOW/WHITE	RED/ORANGE	RED/WHITE
ANTENNA MODEL NUMBER	K1U-1B-X-D-18-65-00T	K1U-1B-X-D-18-65-00T	K1U-1B-X-D-18-65-00T	K1U-1B-X-D-18-65-00T
ANTENNA SIZE (D X H)	6.3 X 12 N	6.3 X 12 N	6.3 X 12 N	6.3 X 12 N
ANTENNA RAD CENTER	100'-0"	100'-0"	100'-0"	100'-0"
MECHANICAL DOWN-TILT (Deg)	0	0	0	0
ELECTRICAL DOWN-TILT (Deg)	2	2	2	2
ANTENNA JITTER (ANDREW) (LENGTH)	LAA-FD1D1-6 (6 FOOT)	LAA-FD1D1-6 (6 FOOT)	LAA-FD1D1-6 (6 FOOT)	LAA-FD1D1-6 (6 FOOT)
CABINET JITTER (ANDREW) (LENGTH)	LAA-FD1D1-6 (6 FOOT)	LAA-FD1D1-6 (6 FOOT)	LAA-FD1D1-6 (6 FOOT)	LAA-FD1D1-6 (6 FOOT)
TOP FEMALE DN CONNECTOR	ALTD1-F9 (ANDREW)	ALTD1-F9 (ANDREW)	ALTD1-F9 (ANDREW)	ALTD1-F9 (ANDREW)
BOTTOM FEMALE DN CONNECTOR	ALTD1-F9 (ANDREW)	ALTD1-F9 (ANDREW)	ALTD1-F9 (ANDREW)	ALTD1-F9 (ANDREW)
MAIN COAX (ANDREW) (LENGTH)	1/8" (25') AL1-50	1/8" (25') AL1-50	1/8" (25') AL1-50	1/8" (25') AL1-50
GPS ANTENNA	HAIJAEI			
GPS LIGHTNING ARRESTOR				



fmhnc

Adding solutions to new heights

8800 W. BRUN MAWR AVENUE
CHICAGO, IL 60651
TELEPHONE: (773) 390-3900

W-T

W-T COMMUNICATIONS
DEVELOPER GROUP, LLC

3077 Fagan Avenue
P.O. Box 2000
Chicago, IL 60616
Tel: (773) 390-3900
Fax: (773) 390-3900

SCOTT R. TRIMPAH

REGISTERED PROFESSIONAL ENGINEER

882 44th Street
Chicago, IL 60616
Tel: (773) 390-3900
Fax: (773) 390-3900

VILLAGE OF DOWNERS GROVE
LATTICE 2
ORD-314-A

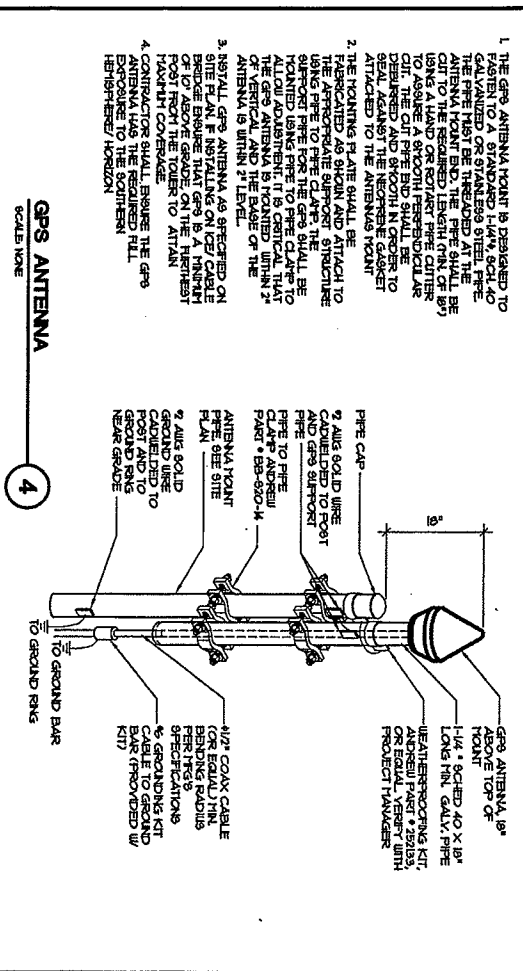
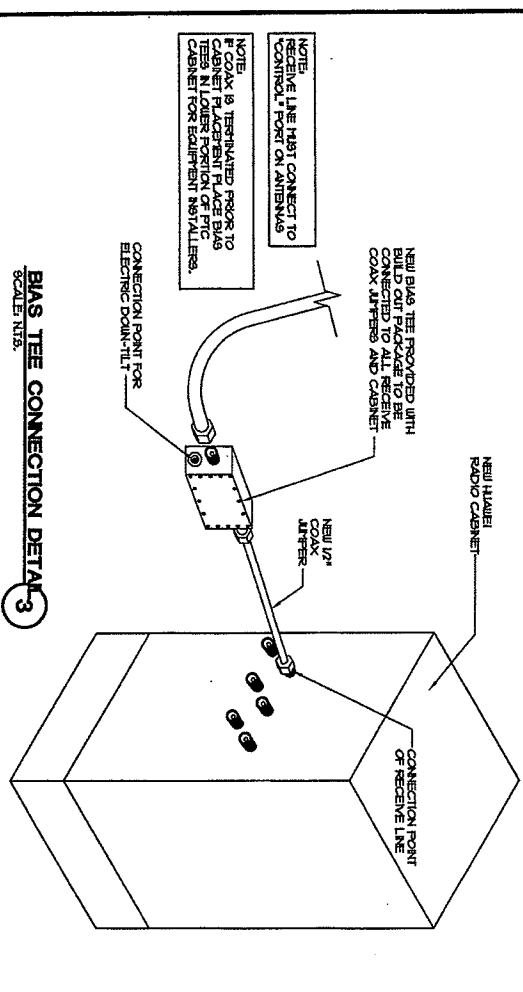
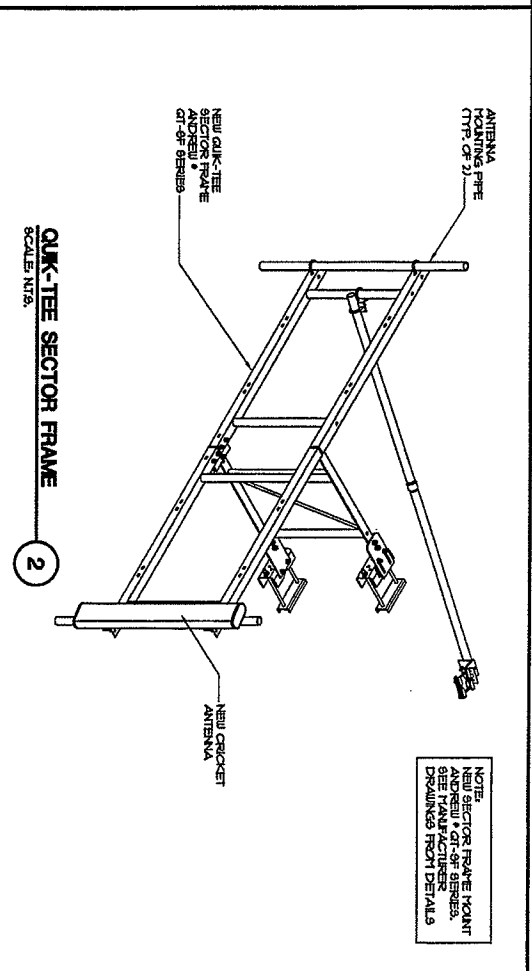
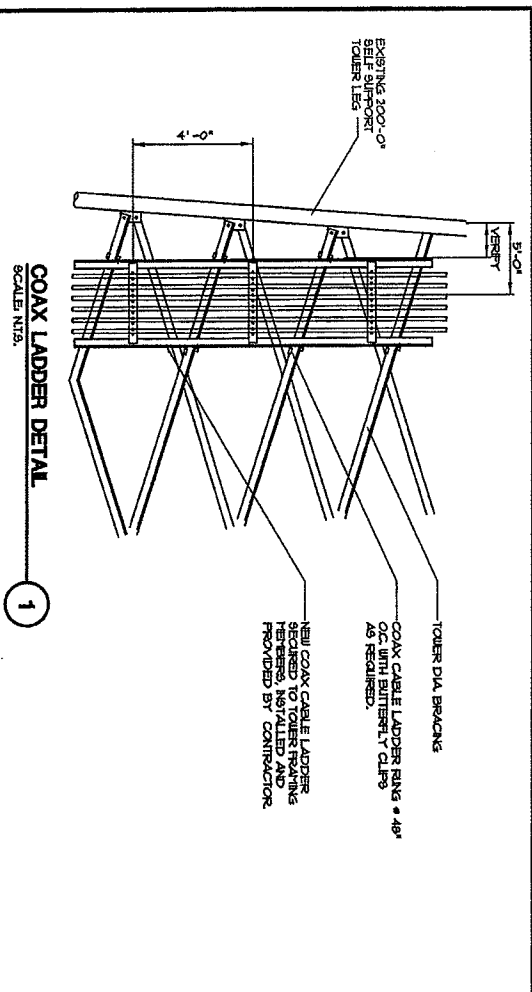
801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

cricket

809 E. BRUN MAWR
SITE 015
CHICAGO, IL 60611
OFFICE: (847) 390-4311
FAX: (773) 390-3915

DATE	DESCRIPTION	BY	CHK'D BY
11/27/07	PER RESONANCE	JTC	REB
11/29/07	PER CONSTRUCTION	JTC	REB
11/29/07	PER CENTER COMMENTS	JTC	REB
11/29/07	PER RESONANCE	JTC	REB
11/29/07	PER RESONANCE	JTC	REB

PROJECT NUMBER: 1071127
DRAWING TITLE: ANTENNA SCHEDULE AND DETAILS
DRAWING NUMBER: A-1



emhc
 Making Solutions to new heights
 8600 W. BRYN MAWR AVENUE
 CHICAGO, IL 60631
 TELEPHONE: (773) 380-3800

W-T
 W-T COMMUNICATION DESIGN GROUP, LLC
 2021 Franklin Avenue
 Lakeview, Chicago, Illinois 60657
 TEL: (773) 380-3144
 FAX: (773) 380-3144
 IL License No. 382010101 DEE-00000

REGISTERED PROFESSIONAL ENGINEER
 SCOTT R. TRIPLETT
 622.941.888
 LICENSE NO. 0021010101 DEE-00000

VILLAGE OF
 DOWNERS GROVE
 LATTICE 2
 ORD-314-A
 801 BURLINGTON AVE.
 DOWNERS GROVE, IL 60515
 DU PAGE COUNTY

cricket
 SMALL BUSINESS DEVELOPMENT LTD.
 801 K. BRN LAWR
 SUITE 215
 CHICAGO, IL 60611
 OFFICE: (407) 515-8211
 FAX: (772) 380-3033

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	12/17/07	PER REVISIONS	JFC	RSB	KAM
2	11/29/07	FOR CONSTRUCTION	JFC	RSB	KAM
3	11/29/07	FOR CLIENT COMMENTS	JFC	RSB	KAM
4	10/22/07	PER REVISIONS	JFC	RSB	KAM
5			JFC	RSB	KAM

SCALE AS SHOWN

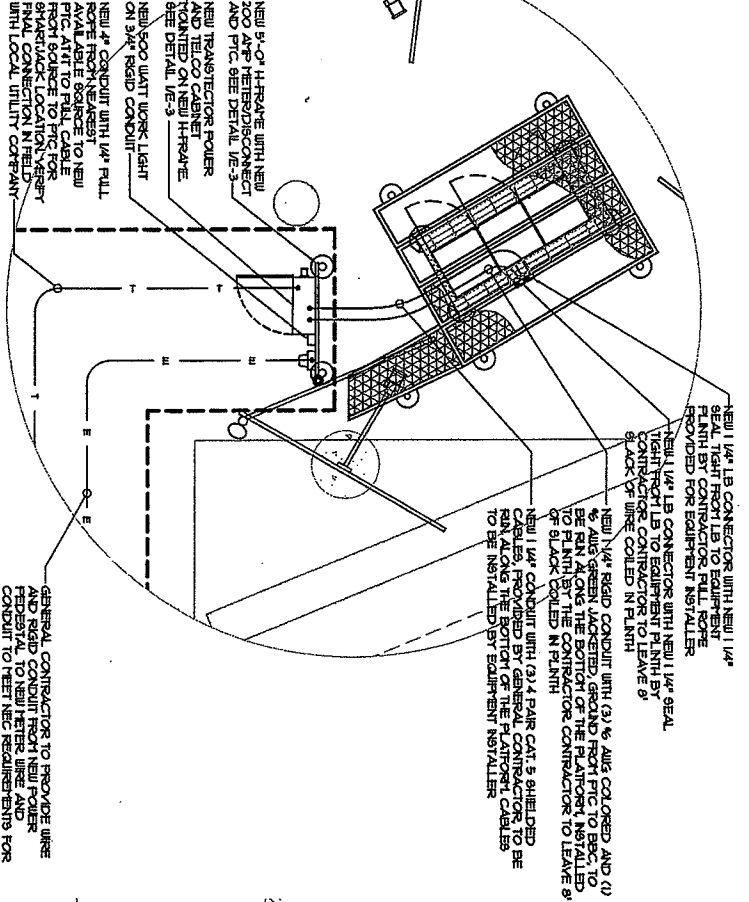
PROJECT NUMBER: 1071127
 DRAWING TITLE: ANTENNA DETAILS
 DRAWING NUMBER: A-2

REID OR INTERMEDIATE METAL CONDUIT SHALL BE USED IN ALL CONCRETE SLABS ABOVE GRADE.

REID OR INTERMEDIATE METAL OR REID NONMETALLIC CONDUIT SHALL BE USED UNDERGROUND.

REID OR ALUMINUM CONDUIT SHALL BE USED WHEREVER EXPOSED TO WEATHER.

NO ELECTRICAL METALLIC TUBING (EMT) IS PERMITTED OUTSIDE ONLY INSIDE OF THE STRUCTURE.



ENLARGED ELECTRIC/TELECO PLAN
SCALE 3/8\"/>



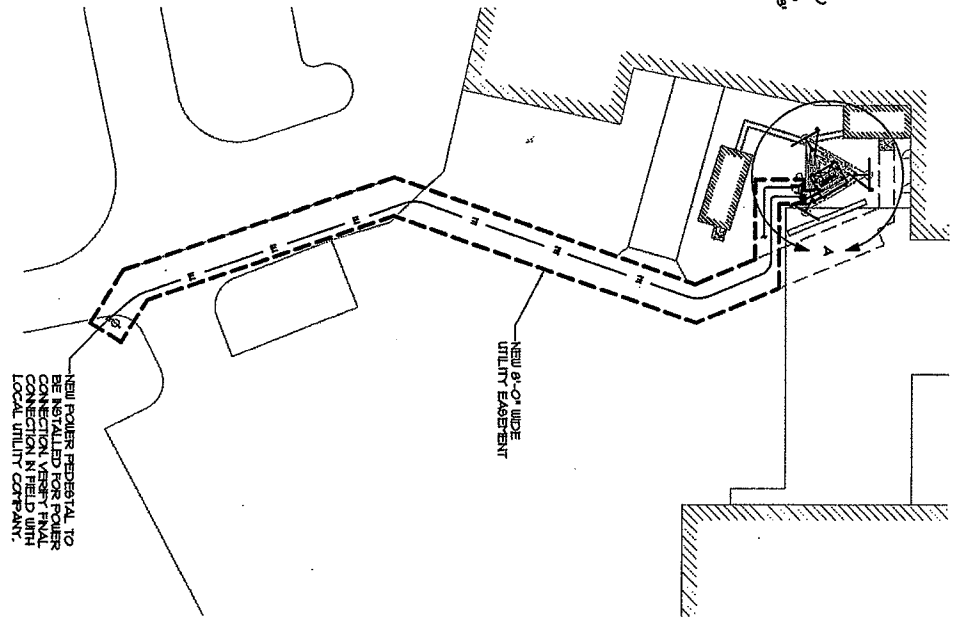
NOTE:
ALL DICKING WITHIN FENCED COURTYARD IS TO BE HAND DIG.

NOTE:
ALL RISERS TO BE HEAVY WALL CONDUIT ABOVE GROUND.

NOTE:
EXISTING GRAVEL COURTYARD TO BE RESTORED TO ORIGINAL OR BETTER CONDITION AFTER FINAL CONSTRUCTION.

NOTE:
CONTRACTOR SHALL VERIFY ALL EXISTING BURIED AND OVERHEAD UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REPAIR ALL DATED UTILITIES AT HIS OWN COST AND COORDINATE ANY REPAIRS WITH RESPECTIVE UTILITY COMPANY.

NOTE:
EXISTING EASEMENT AND LEGAL DOCUMENTATION IS NOT PROVIDED AT THE OF DESIGN. IF EXISTING EASEMENTS ARE TO BE UTILIZED, LEGAL DOCUMENTATION MUST BE OBTAINED AND MUST REQUIRE LEGAL DESCRIPTIONS AND DOCUMENTATIONS.



OVERALL ELECTRIC/TELECO PLAN
SCALE 1\"/>



Building Solutions to new heights
8600 W. BRUN LAVER AVENUE
CHICAGO, IL 60631
TELEPHONE: (773) 380-3800

W-T COMMUNICATIONS
DESIGN GROUP, LLC
VIRGENESE INFRASTRUCTURE
2015 Belmont Avenue, Suite 100
Chicago, IL 60647
Tel: (773) 380-3800 Fax: (773) 380-3800
E: [email address] Web: [website]

W. T. WILLIAMS
REGISTERED PROFESSIONAL ENGINEER
No. 031-032
STATE OF ILLINOIS

VILLAGE OF DOWNERS GROVE
LATTICE 2
ORD-314-A
801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

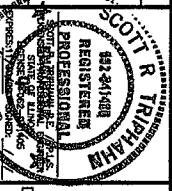
8618 W. BRUN LAVER
SUITE 518
CHICAGO, IL 60631
OFFICE: (673) 315-4311
FAX: (773) 380-3053

NO.	DATE	REVISIONS	BY	CHK
1	12/17/07	PER REVISIONS		
2	11/19/07	FOR CONSTRUCTION		
3	11/27/07	PER COMMENTS		
4	10/26/07	FOR COMMENTS		
5		FOR COMMENTS		

PROJECT NUMBER: T071127
DRAWING TITLE: ELECTRIC AND TELECO PLAN
DRAWING NUMBER: E-1

fmhnc
 Making Solutions to new Heights
 8600 W. BRUN MAHR AVENUE
 CHICAGO, IL 60631
 TELEPHONE: (773) 380-3800

W-T COMMUNICATION
DOWNERS GROVE, LLC
 WIRELESS INFRASTRUCTURE
 2075 FUTURE AVENUE
 FIVE FLOORS
 DOWNERS GROVE, IL 60521
 PH: (630) 252-2227 FAX: (630) 252-2444
 IL License No. 154-001196 Reg. 04/09/09
 CONTRACTOR'S & DESIGNER'S COMMONWEALTH REGISTRATION GROUP, LLC



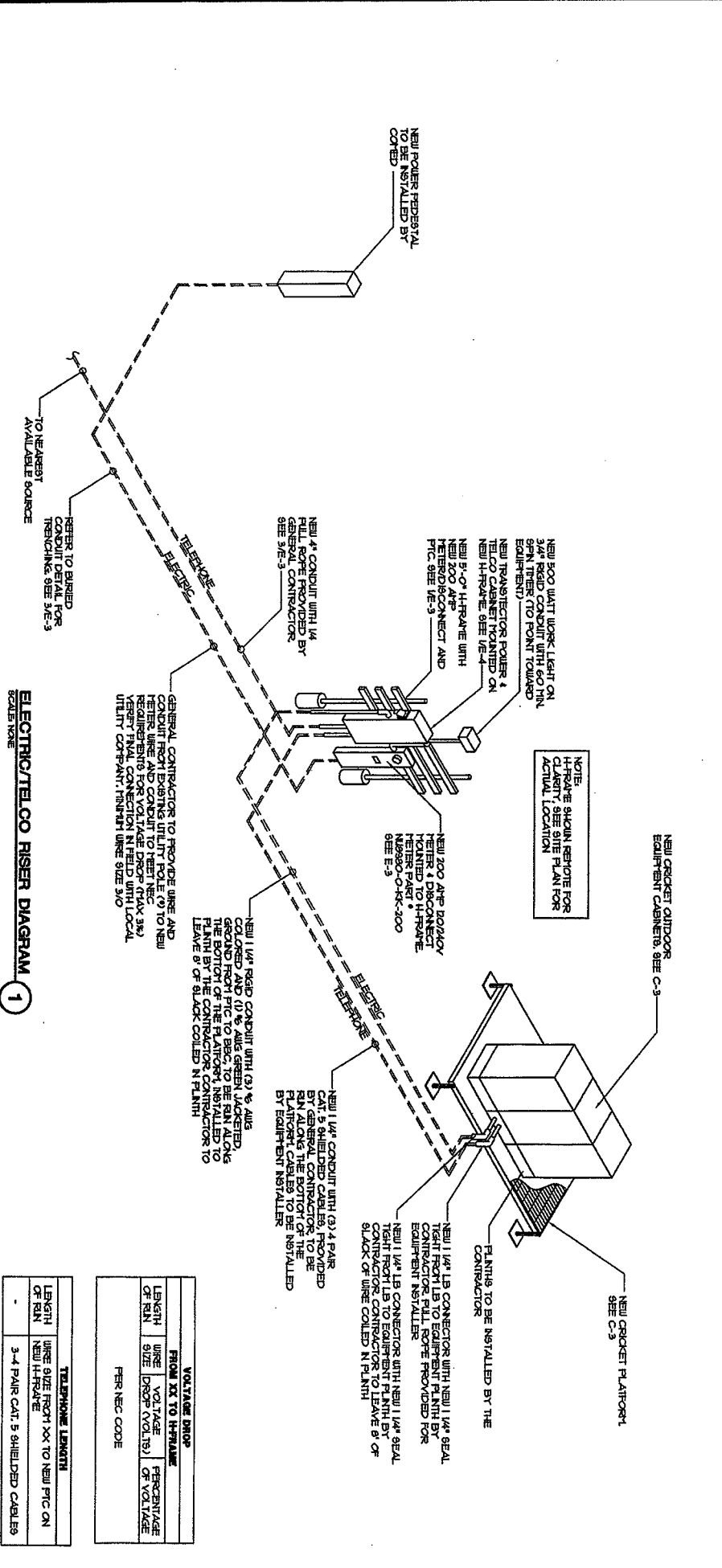
VILLAGE OF
DOWNERS GROVE
LATTICE 2
ORD-314-A
 801 BURLINGTON AVE.
 DOWNERS GROVE, IL 60515
 DU PAGE COUNTY

cricket
 SMALL BUSINESS OPERATING LTD.
 801 W. BRUN MAHR
 DOWNERS GROVE, IL 60515
 OFFICE: (630) 252-4811
 FAX: (630) 252-4815

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	12/17/07	ISS. REVISIONS			
2	11/09/07	FOR CONSTRUCTION			
3	11/09/07	FOR GROUND CONNECTIONS			
4	11/09/07	FOR NEW RISER			

SCALE: AS SHOWN
 REVISIONS BY: 103
 DRAWN BY: 270

PROJECT NUMBER	1071127
DATE	10/7/12
DESIGNED BY	ELECTRIC & TELCO
DRAWN BY	RISER DIAGRAM
DATE	10/7/12
SCALE	E-2



NOTE: CONTRACTOR SHALL VERIFY ALL EXISTING BRIBED AND OVERHEAD UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL REPAIR AND COMPENSATE ANY DAMAGES WITH RESPECTIVE UTILITY COMPANY.

NOTE: H-FRAME SHALL BE FOR CLARITY. SEE SITE PLAN FOR ACTUAL LOCATION.

NEW 300 AMP WORK LIGHT ON 3/4" RIGID CONDUIT WITH 60 MIN SPRAY THER TO POINT TOWARD EQUIPMENT.

NEW TRANSFECTOR POWER & NEW CABINET MOUNTED ON NEW H-FRAME. SEE VES-4.

NEW 5'-0" H-FRAME WITH NEW 200 AMP TRANSFECTOR AND NEW 200 AMP TRANSFECTOR POWER & NEW CABINET MOUNTED ON NEW H-FRAME. SEE VES-5.

NEW 1/4" LB CONDUIT WITH 14 NEW 500 AMP TRANSFECTOR AND GENERAL CONTRACTOR. SEE 3/E-3.

GENERAL CONTRACTOR TO REMOVE WIRE AND CONDUIT FROM EXISTING UTILITIES TO NEW RISER. REFER TO VES-2 FOR REQUIREMENTS FOR VOLTAGE DROP (MAX 3%). VERIFY FINAL CONNECTION IN FIELD WITH LOCAL UTILITY COMPANY. MINIMUM WIRE SIZE 5/0.

NEW 1/4" RIGID CONDUIT WITH (3) 4 PAIR COLLORED AND (1) 4 PAIR WIRE. WIRE TO BE RUN ALONG THE BOTTOM OF THE PLATFORM, INSTALLED TO LEAVE 8" OF BLACK COILED IN PLANT.

NEW 200 AMP TRANSFECTOR MOUNTED TO H-FRAME. REFER TO VES-5. NEW 500-0-KK-200 SEE E-3.

NEW 1/4" LB CONDUIT WITH (3) 4 PAIR CAT. 5 SHIELDED CABLES, PROVIDED BY GENERAL CONTRACTOR TO BE RUN ALONG THE BOTTOM OF THE PLATFORM TO BE INSTALLED BY EQUIPMENT INSTALLER.

NEW 1/4" LB CONNECTOR WITH NEW 1/4" SEAL TIGHT FRONT TO EQUIPMENT PLANT BY CONTRACTOR TO LEAVE 8" OF SLACK OF WIRE COILED IN PLANT.

NEW 1/4" LB CONNECTOR WITH NEW 1/4" SEAL TIGHT FRONT TO EQUIPMENT PLANT BY CONTRACTOR TO LEAVE 8" OF SLACK OF WIRE PROVIDED FOR EQUIPMENT INSTALLER.

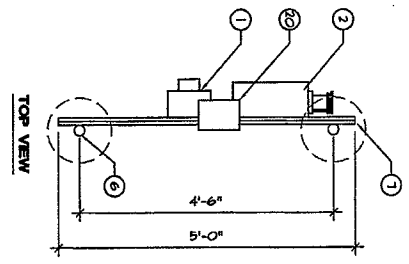
PLANTS TO BE INSTALLED BY THE CONTRACTOR.

NEW CRICKET PLATFORM SEE C-3.

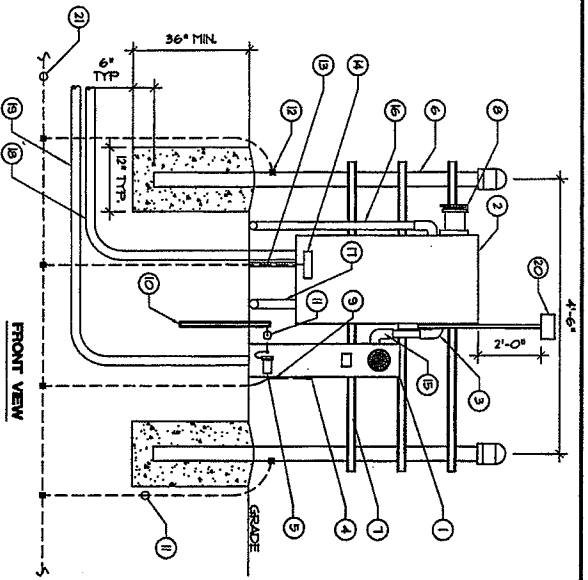
NEW CRICKET OUTDOOR EQUIPMENT CABINETS. SEE C-3.

VOLTAGE DROP FROM XX TO H-FRAME	LENGTH OF RAN	WIRE SIZE	VOLTAGE DROP (VOLTS)	PERCENTAGE OF VOLTAGE	PER NEC CODE

TELEPHONE LENGTH	LENGTH OF RAN	WIRE SIZE	PERCENTAGE OF VOLTAGE	PER NEC CODE



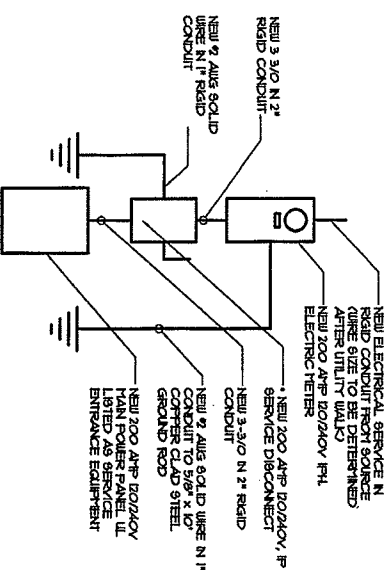
H-FRAME DETAIL
SCALE: NONE



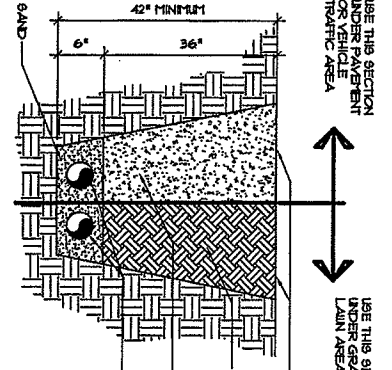
KEY NOTES

1. NEW 200 AMP METER PART • NUB90-O-4K-200 WITH 200 AMP BREAKER PART • UDF7400
2. NEW TRANSFORMER POLE AND TELCO CABINET
3. LB MECHANICAL CONNECTION TO CHASSIS
4. BURS BAR
5. (2) NEW 3 1/2" X 1/2" X 1/2" SCHED. 40 GALVANIZED PIPE WITH CAP
6. (3) 1 1/2" X 1 1/2" X 1/2" GALVANIZED STEEL STRUT (3-LINE #822) FASTEN TO WASHERS, AND NUTS AT EACH POST (TTP)
7. NEW 1" CONDUIT WITH GROUND BUSHING
8. NEW 1/2" CONDUIT WITH GROUND ROD
9. NEW 5/8" X 1/2" COFFER GROUND ROD 2" ABOVE GRADE PER NEC REQUIREMENT
10. AWC SOLID TINED TO NEUTRAL BAR
11. CAPBULE TO POST (TTP)
12. AWC SOLID TO BE CONNECTED TO TELCO GROUND BAR INSIDE NEW PFC
13. NEW LR CONNECTION
14. NEW 1 1/4" RIGID CONDUIT WITH (3) AWC COFFER AND (3) AWC GREEN THEN 2" OF SEAL TAPE AND 6" OF WIRE BEYOND CONNECT TO BACK OF BISC PLUMB BY CONTRACTOR
15. NEW 1 1/4" CONDUIT WITH (3) 4 PAIR CAT. 5 SHIELDED CABLES, PROVIDED BY GENERAL CONTRACTOR TO BE RUN FROM PFC TO BISC CONDUIT DONE BY CONTRACTOR AND CAT. 5 DONE BY INSTALLER
16. NEW 4" TELCO FEED FROM SOURCE TO METER
17. NEW 300 WATT WORK LIGHT ON 3/4" RIGID CONDUIT WITH 60 MIN. 9FT. THER TO POINT TOWARD EQUIPMENT
18. NEW ELEC-RIBBET GROUND RING, SEE DR-1 AND 2

NOTE: POSITIONS TO BE WURED INTO THE NEUTRAL BAR



ELECTRIC DIAGRAM
SCALE: NONE



BURIED CONDUIT DETAIL
SCALE: NONE

RESTORE SURFACE TO ORIGINAL CONDITION PRIOR TO WORK

RETURN ORIGINAL MATERIAL TO TRENCH CONTRACT AS NOTED IN SPECIFICATIONS

GRADE 3" (CA-6) GRANUL STANDARD PROCTOR

FOR NEW ELECTRICAL AND TELEPHONE SERVICES AND SITE PLANS REQUIRED AND COORDINATE INSTALLATION WITH ALL UTILITY COMPANIES FOR INTERFACING AT TERMINATION POINTS. PROVIDE FULL LENGTH PULL BOXES (TTP)

fmhnc
Building Substation to new heights
8600 W. BRUN MAWR AVENUE
CHICAGO, IL 60631
TELEPHONE: (773) 390-3500

W-T
W-T COMMUNICATION DESIGN GROUP, LLC
2875 Fremont Avenue
Naperville, IL 60563
Tel: (630) 334-3333 Fax: (630) 334-3344
www.wtgroup.com
11. Lombard, Ill. 60148-1119

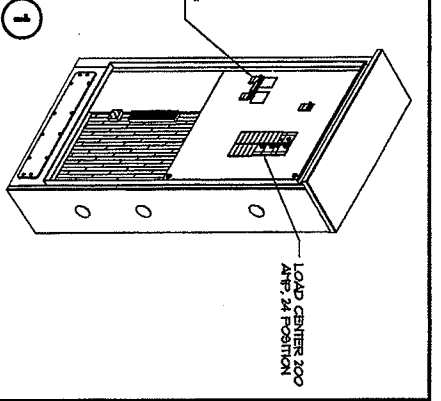
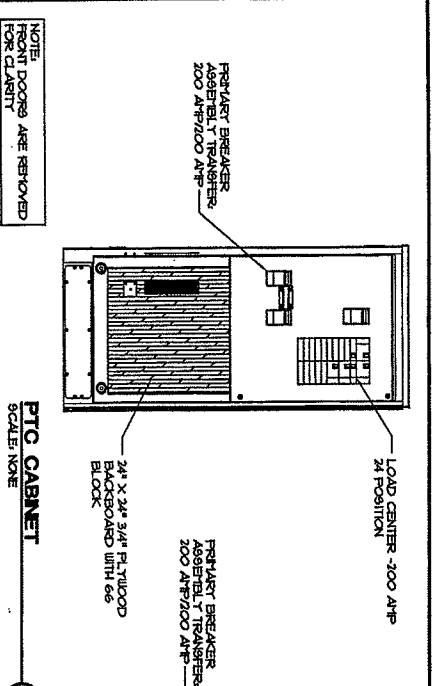
SCOTT B. KAPPANAN
REGISTERED PROFESSIONAL ENGINEER
No. 027-041488
Professional Seal
No. 027-041488
No. 027-041488
No. 027-041488

VILLAGE OF DOWNERS GROVE
LATTICE 2
ORD-314-A
801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

cricket
COMMUNICATION OPERATIONS, LLC
8818 W. BRUN MAWR
SUITE 315
CHICAGO, IL 60631
OFFICE: (647) 355-4311
FAX: (773) 390-3013

NO.	DATE	ISSUED BY	REVISION	ISSUED BY	DATE	ISSUED BY	REVISION
1	12/17/02	SPR	REVISIONS	JTC	RES	RES	RES
2	11/09/02	PER	CONSTRUCTION	JTC	RES	RES	RES
3	11/09/02	PER	CONSTRUCTION	JTC	RES	RES	RES
4	10/25/02	PER	CONSTRUCTION	JTC	RES	RES	RES
5		PER	CONSTRUCTION	JTC	RES	RES	RES

PROJECT NUMBER: 1071127
DRAWING TITLE: ELECTRIC AND TELCO DETAILS
DRAWING NUMBER: E-3



- NOTES**
- CONTRACTOR SHALL COORDINATE METER SOCKET LOCATION AND TYPE WITH POWER COMPANY
 - CONTRACTOR SHALL INSTALL CONDUIT AND WIRE FROM PTC TO POWER CABINET. COIL WIRES, SEAL CONDUIT WIRE ENDS FROM HOUSING INFILTRATION LEAVE WIRE TO TERMINATE AT POWER CABINET PANEL, (MINIMUM OF 10 FEET)
 - NEW GROUND WIRE SHALL BE BONDED TO PTC AND TO SITE GROUNDING SYSTEM
 - ANY 80 VOLT OUTLET LOCATED ON THE PTC SHALL HAVE GFCI PROTECTION PER NEC SECTION 210.8
 - CONTRACTOR MAY MODIFY knockout HOLES IN EQUIPMENT CABINETS TO ACCOMMODATE THE REQUIRED CONDUIT SIZES
 - SERVICE PWR SHALL BE (120/208VAC, 3Ø/4 W, 1 Ø/4 SINGLE PHASE)
 - 200 AMP METER BASE SHALL BE INSTALLED WHERE IT IS ACCESSIBLE FOR READING. THE NUMBER OF LANS IN THE METER SOCKET AND THEIR ARRANGEMENT DEPENDS ON THE VOLTAGE SERVICE CONTRACTOR TO COORDINATE WITH POWER COMPANY
 - CABLE SIZES SHALL BE ADJUSTED TO COMPENSATE FOR VOLTAGE DROP IF LONGER THAN 180FT. VERIFY CONDUIT SIZE WHEN CHANGING CABLE SIZE
 - FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO VENDOR PRINTS PROVIDED BY PTC MANUFACTURER
 - PORT NAME ON METER SOCKET EQUIPMENT
 - ALL WIRE SHALL BE TYPE THHN UNLESS OTHERWISE SPECIFIED
 - CONTRACTOR TO PROVIDE UNDERGROUND CONDUIT WITH FULL WIRE BETWEEN TELEPHONE COMPANY DEMARCATION POINT AND PTC ON H-FRAME. CONTRACTOR SHALL PROVIDE HANG FROM FEDERAL TO PTC WITH PENETRATION FITTING
 - CONTRACTOR TO PROVIDE UNDERGROUND CONDUIT WITH WIRE BETWEEN ELECTRICAL UTILITY COMPANY DEMARCATION POINT AND RHT METER BASE ON H-FRAME. CONTRACTOR SHALL PROVIDE HANG FROM POWER CABINET TO EQUIPMENT

PTC CABINET
SCALE: NONE

INSTALL NEW TRANSIENT VOLTAGE SURGE SUPPRESSOR UNIT BELOW SERVICE PANEL. SUBJECT TO ELECTRICAL ENGINEER FOR APPROVAL.

NOTES:

- ALL WIRE TO BE #2 OR GREATER THAN WITHIN UNLESS NOTED OTHERWISE
- ALL WORK TO CONFORM TO NEC, LATEST EDITION
- LABEL SERVICE DISCONNECT WITH A RED TAG

POWER PANEL
SCALE: NONE

2

PANEL CIRCUIT AND LOAD SCHEDULE

LOAD DESCRIPTION	WIRE SIZE	LOAD FOR PHASE		SERVICES	METER	METER	METER	METER	METER	METER	METER	METER	METER	METER	METER
		A	B												
1. SHED PROTECTION	400	0	0	X	2										
2. ON COM. RESPT	400	X	1	X	2										
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															
11.															
12.															
13.															
14.															
15.															
16.															
17.															
18.															
19.															
20.															
21.															
22.															
23.															
VOLTAGE BOARD															
MAIN BREAKERS	300 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP
TRANS.	300 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP	120 AMP

cricket

801 W. BERN LAUR
CHICAGO, IL 60631
OFFICE (800) 335-5011
FAX (773) 585-5013

801 W. BERN LAUR
CHICAGO, IL 60631
OFFICE (800) 335-5011
FAX (773) 585-5013

PROJECT NUMBER: 1071127

DATE: 07/11/27

PTC DETAILS

SCALE AS SHOWN

fmhnc

Building Solutions to new heights
8600 W. BERN LAUR AVENUE
CHICAGO, IL 60631
TELEPHONE: (773) 380-3800

W-T

2051 Franklin Avenue
Chicago, IL 60646
PHONE (773) 292-0535 FAX (773) 292-0444
TEL (773) 975-1300 FAX (773) 975-1300

SCOTT K. TRISHMAN

REGISTERED PROFESSIONAL ENGINEER
No. 080708337

VILLAGE OF DOWNERS GROVE
LATICE 2
ORD-314-A
801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

GROUNDING NOTES

- GROUNDING CONNECTIONS SHALL BE EXOTHERMIC TYPE COMPALED TO FENCE POSTS, MONOPOLE TOWER AND THE GROUND RODS. REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSED FITTINGS.
- GROUND COAXIAL CABLE SHIELDS AT BOTH ENDS WITH ANDREWS ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE EXCEPT AS OTHERWISE INDICATED. ALWAYS LEADS SHOULD NEVER BE BENT AT RIGHT ANGLES AT 90 DEGREES WHEN NECESSARY.
- CONTRACTOR TO PROVIDE GROUND RODS AND GROUND RINGS AS SHOWN ON ELECTRICAL SITE PLAN AND GROUNDING RIBBER DIAGRAM. NOTIFICATION SHALL BE MADE TO THE FIELD OFFICE SUPERVISOR BEFORE ANY WORK IS DONE. THE GROUNDING RIBBER DIAGRAM SHALL BE UNREVISIONED BY THE OWNER'S REPRESENTATIVE.
- GROUNDING CONDUCTORS SHALL BE COPPER OR ALUMINUM. GROUND EITHER SOLID OR STRANDED CONDUCTORS ARE PERMITTED. ALL EXTERNAL CONDUCTORS WITH THE EXCEPTION FOR GROUND WIRE BETWEEN THE TOP AND THE BOTTOM OF THE ANTENNA TOWER MUST BE BARE. EQUIPMENT GROUND LEADS IN SOLID TINED WIRE SHALL BE USED. ALL WIRES MUST BE 2 AWG MIN. UNLESS OTHERWISE SPECIFIED.
- THE GROUND ELECTRICAL SYSTEM SHALL CONSIST OF PIPER GROUND RODS IMPROPERLY SPACED AROUND CELL SITE. THE GROUND RODS SHALL BE 5/8" DIA. OF COPPER CLAD STEEL. THE TINED COPPER GROUND WIRE BARRIED 4" BELOW THE SURFACE OF THE SOIL THROUGH DISTANCE BETWEEN GROUND RODS - 10' LONG IS 20'
- ALL CADWELDS ABOVE FINISHED GRADE SHALL BE PAINTED WITH BONDIC. UNPAVED AND BARRIED PAINT TO MATCH COLOR OBJECT BOUND TO.
- PROVIDE 2" HOLE, LONG BARREL, TINED SOLID COPPER WIRE. CHARACTERISTICS ARE SHOWN BELOW. 1/2" DIA. PREFERRED WITH BARRIED WIRE. 4" BARRIED WIRE. 1/2" DIA. BARRIED WIRE. BARRIED WIRE. CRIMP CONNECTOR IS REQUIRED.
- ALL CRIMP CONNECTIONS MUST BE MADE USING HYDRAULIC TOOL AND THREE POINT MECHANICAL CONNECTION FOLDS ON LONG BARREL WIRE.
- ALL MECHANICAL CONNECTIONS MUST BE MADE USING TIGHTENING TORQUE SPECIFICATIONS. ALL SURFACES BEFORE CONNECTING COAT ALL SURFACES BEFORE CONNECTING.
- ALL WAREHOUSE IS A STAINLESS STEEL INCLUDING SPLIT COAT.
- FOR GROUNDING BOND TO STEEL ON 1/2" ROBERT A DRAGON WITH 1/2" FORK-SHIELD.
- ALL LIS SWANKS AND LEAD JOINTS SHALL HAVE HEAT SHRINK MATERIAL.
- DOUBLE CRIMP ALL LONG BARREL WIRE.

fpmhc
 Selling solutions to new heights
 8600 W. BRYN MAWR AVENUE
 CHICAGO, IL 60631
 TELEPHONE: (773) 380-3800

WT
 W-T COMMUNICATION
 WIRELESS INFRASTRUCTURE
 3055 S. WILSON AVENUE
 CHICAGO, IL 60631
 TEL: (773) 232-6222 FAX: (773) 232-6444
 L. DENNIS HO, 15400119, REG. ENGINEER

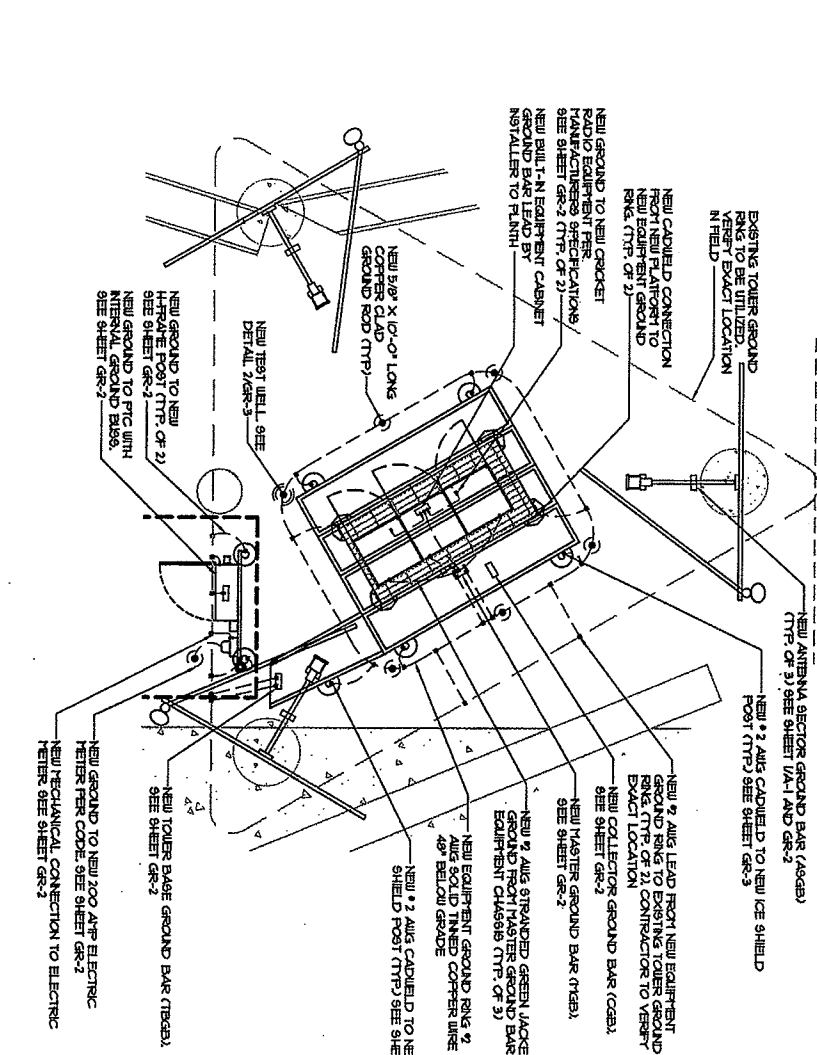
SCOTT W. HATHAWAY
 REGISTERED PROFESSIONAL ENGINEER
 891 941 408
 801 BURLINGTOPE AVE.
 DOWNERS GROVE, IL 60515
 DU PAGE COUNTY

cricket
 CRICKET COMMUNICATIONS LLC
 801 W. BRYN MAWR
 SUITE 600
 CHICAGO, IL 60631
 OFFICE: (847) 316-4311
 FAX: (773) 265-5035

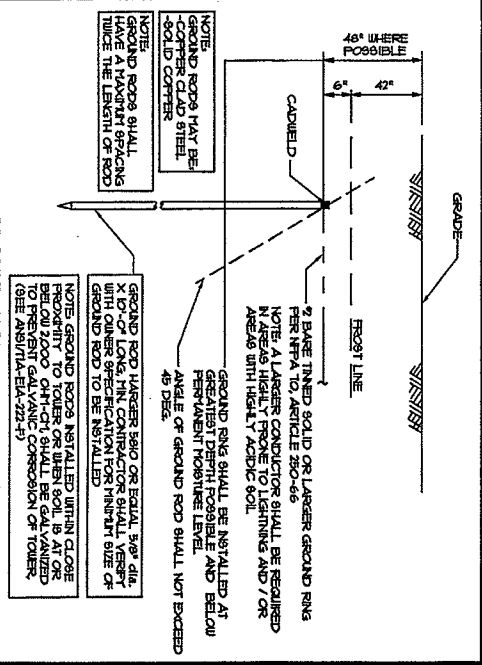
NO.	DATE	REVISIONS	BY	CHK	APP
1	11/27/07	REV. REVISIONS			
2	11/29/07	REV. REVISIONS			
3	11/29/07	REV. REVISIONS			
4	10/26/07	REV. REVISIONS			

DESIGNED BY: PROJECT NUMBER: 1071127
 DRAWING TITLE: GROUNDING SITE PLAN
 DRAWN BY: GR-1

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

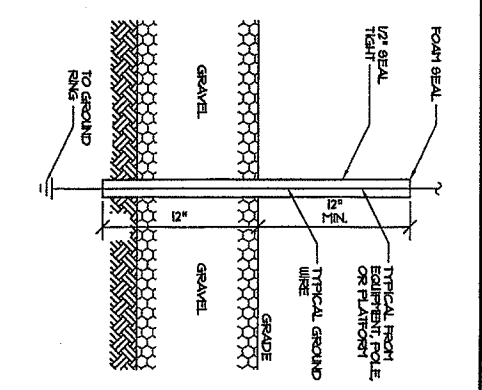


NEW TEST WELL SEE SHEET GR-2
 NEW GROUND TO NEW H-FRAME POST (TTP, OF 2)
 NEW GROUND TO PFC WITH INTERVAL GROUND BARS. SEE SHEET GR-2
 NEW 2 AWG LEAD FROM NEW EQUIPMENT GROUND RING TO EXISTING TOWER GROUND EXACT LOCATION. CONTRACTOR TO VERIFY. SEE SHEET GR-2
 NEW 2 AWG STRANDED GREEN JACKETED GROUND FROM MASTER GROUND BAR TO EQUIPMENT CHASSIS (TTP, OF 3)
 NEW EQUIPMENT GROUND RING & 48\"/>



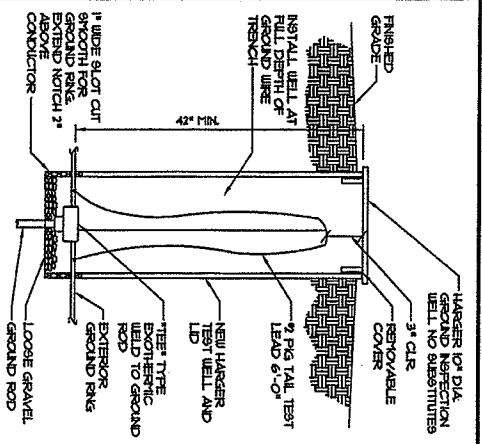
GROUND ROD
SCALE: NONE

1



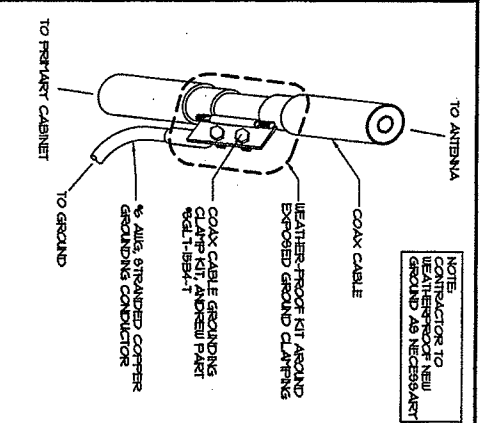
PIPE SLEEVE
SCALE: NONE

2



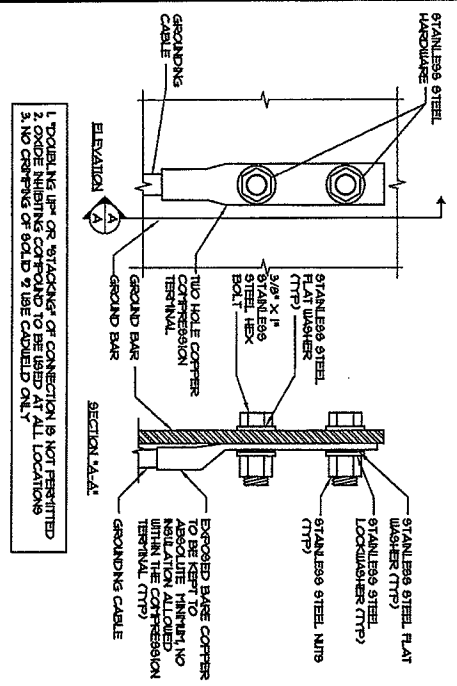
TEST WELL
SCALE: NONE

3



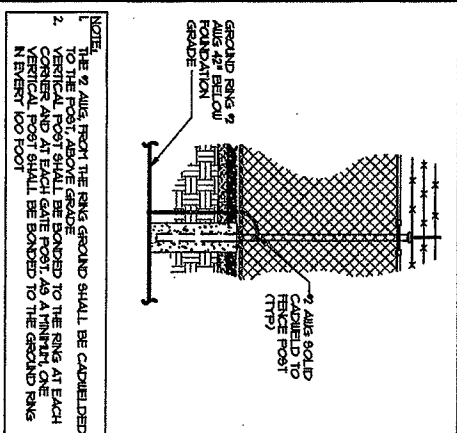
COAX CABLE GROUNDING KIT
SCALE: NONE

4



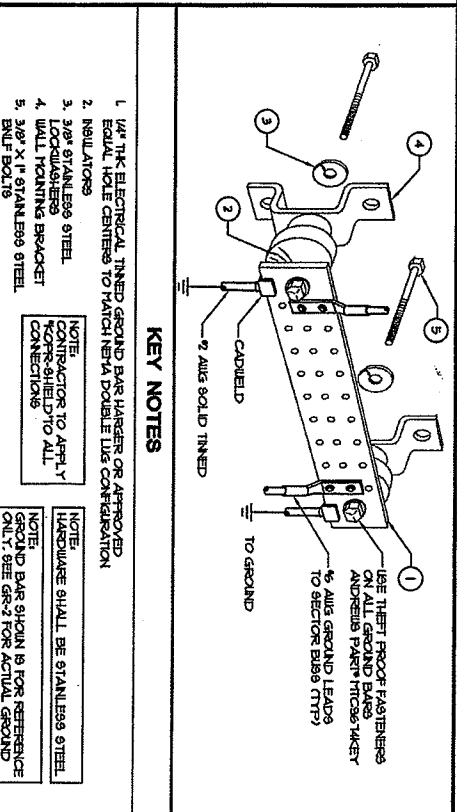
GROUND BAR CONNECTION
SCALE: NONE

5



FENCE GROUND DETAIL
SCALE: NONE

6



GROUND BAR DETAIL
SCALE: NONE

7

emhc
making solutions to new challenges
8800 W. BROWN LAVER AVENUE
CHICAGO, IL 60631
TELEPHONE: (773) 390-3900

W-T
W-T COMMUNICATION DESIGN GROUP, LLC
WIRELESS INFRASTRUCTURE
2011 Federal Avenue
Naperville, IL 60563
Tel: (630) 241-1100
Fax: (630) 241-1101
www.wtgroup.com

SCOTT K. THOMPSON
REGISTERED PROFESSIONAL ENGINEER
No. 001200000
Professional Seal

VILLAGE OF DOWNERS GROVE
LATTICE 2
ORD-314-A
801 BURLINGTON AVE.
DOWNERS GROVE, IL 60515
DU PAGE COUNTY

cricket
810 N. BROWN LAVER
SITE 05
CHICAGO, IL 60631
OTHER: (973) 352-2311
FAX: (773) 390-3903

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	12/17/07	PER REVISIONS	JFC	REJ	MM
2	11/09/07	PER CONSTRUCTION	JFC	REJ	MM
3	11/09/07	PER CLIENT COMMENTS	JFC	REJ	MM
4	10/23/07	538 REVIEW	JFC	REJ	MM
5	10/23/07	538 REVIEW	JFC	REJ	MM
6	10/23/07	538 REVIEW	JFC	REJ	MM

GROUNDING DETAILS
PROJECT NUMBER: 1071127
DRAWING TITLE: GROUNDING DETAILS
DRAWN BY: GR-3

AFTER RECORDING, PLEASE RETURN TO:

**Cricket Communications, Inc.
10307 Pacific Center Court
San Diego, CA 92121
Attn: Legal Department**

**Property Tax ID Number: 09-08-211-001
County: DuPage
ORD-314-A**

Memorandum of License

Village of Downers Grove ("Licensor") and Denali Spectrum Operations, LLC, a Delaware corporation ("Licensee") entered into a Site Lease dated _____, 2008 ("Agreement") regarding a portion of the real property located at 801 Burlington Avenue, Downers Grove, IL 60515 as more particularly described in the attached Exhibit A ("Property").

The Agreement is for a term of five (5) years and will commence on the date as set forth in the Agreement ("Commencement Date") and shall terminate at midnight on December 31, 2012. Tenant shall have the right to extend this Agreement for two (2) additional five (5) year terms.

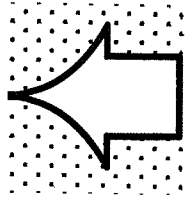
IN WITNESS WHEREOF, the parties hereto have executed this memorandum effective as of the date of the last party to sign.

(SIGNATURES ON FOLLOWING PAGE)

IN WITNESS WHEREOF, the parties hereto have executed this memorandum effective as of the date of the last party to sign.

LICENSOR: VILLAGE OF DOWNERS GROVE,
a municipal corporation

By: _____
Printed Name: _____
Its: _____



LICENSEE: DENALI SPECTRUM OPERATIONS, LLC
a Delaware limited liability company

By: Denali Spectrum License, LLC
Its sole member
By: Denali Spectrum, LLC
Its sole member
By: Denali Spectrum Manager, LLC
Its manager
By: Doyon, Limited
Its manager

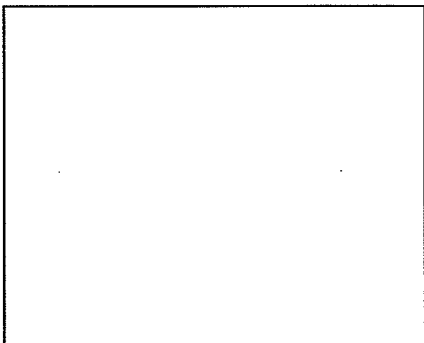
By: *Brian Root*
Brian Root: Brian Root
Title: Operations Manager

LICENSOR:

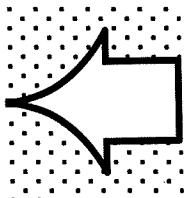
STATE OF _____)
) ss.
COUNTY OF _____)

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the _____ of the Village of Downers Grove to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____.



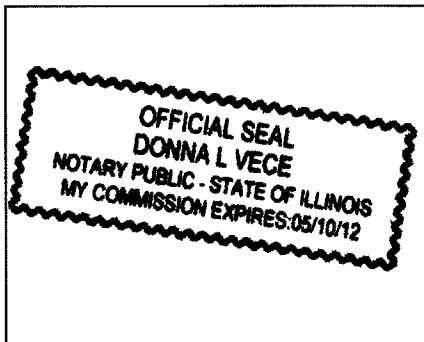
Notary Public
Print Name _____
My commission expires _____



LICENSEE:

STATE OF Illinois)
) ss.
COUNTY OF Cook)

I certify that I know or have satisfactory evidence that Brian Root is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as its Operations Manager, of Denali Spectrum Operations, LLC, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.



Donna L. Vece
Notary Public
Print Name Donna L. Vece
My commission expires 5-10-12

EXHIBIT A
Legal Description

The Property is legally described as follows:

So much of the Southwest Quarter of the Northeast Quarter (SW1/4 NE1/4) of Section 8, Township 38 North, Range 11 East of the Third Principal Meridian in DuPage County, Illinois, described as follows: Commencing at a point on the South line of 100-foot wide right of way of Burlington Northern Inc., 336.6 feet Eastward (measured on said South line) from the intersection of the North and South center line of said Section 8 with said South line to the place of beginning; thence south 9° West (magnetic bearing), 20.14 feet; thence Eastward, parallel to said South right of way line and 20 feet distant there from, 425.9 feet; thence North 64° East (magnetic bearing), 42.3 feet to said South right of way line; thence Westward on said South right of way line, 459.5 feet to the place of beginning.