



City Council Memorandum

To: Mayor Fasbender & City Council Members
From: Nick Egger – Public Works Director
Date: July 2, 2020
Item: Approve Replacement Lease Agreement for Wireless Carrier Equipment Installation – AT & T

COUNCIL ACTION REQUESTED

Council is requested to approve a lease agreement with AT & T for its equipment installation at the Industrial Park water tower site. Council is also requested to authorize the Mayor's and City Clerk's signatures on the agreement.

BACKGROUND

AT & T has had wireless cell/data equipment installed at the City's Industrial Park tower site originally beginning in 2000, and the corresponding lease agreement for that installation has run to the end of all allowable automatic renewal periods. With each wireless carrier having similar installations also having slightly somewhat different agreement language and terms, the City has made it a priority to introduce a uniform template and agreement language terms that will apply to any wireless provider's lease at such time that their existing lease expires. The replacement lease agreement will allow continued residence of AT & T's wireless equipment at the Industrial Park site for up to twenty additional years. The initial term is five years, and the agreement allows up to three automatic renewals of five years a piece, for a total of up to 20 years.

FINANCIAL IMPACT

AT & T's rent amount for the 2020 lease year is as follows:

- Industrial Park Tower = \$36,858.30

The agreement contains a rent escalator of 5% annually, which is the same amount as in prior agreements. For instance, the rent for 2021 will be 5% higher than for 2020, the 2022 lease amount will be 5% higher than for 2021, and so on. The agreements also provide consideration for increases to the lease amounts in the event that AT & T would add facilities in a way that results in their equipment occupying additional space beyond their current footprint, with the incremental rent amount being negotiated between parties and final outcome memorialized in an agreement amendment that would also be brought before the Council for approval.

AT & T's lease at the West 4th Street water tower site expires in the early 2030's and we would apply the same approach to renewing the agreement at that time.

ATTACHMENTS

A copy of the agreement has been attached for reference. Please note that it is retroactive to February 23, 2020, but lease payments have been continued to be made by AT & T via a provision in the existing agreement that allows the its terms to continue forward should no new agreement be in place. The amount of the 2020 lease is also identical to where the old lease left off. Essentially, this processing of the new lease document is seamless.

STAFF RECOMMENDATION

Staff is recommending that the Council approve the agreement and authorize the Mayor and City Clerk to apply their signatures.

City of Hastings, State of Minnesota
AMENDED AND RESTATED SITE LEASE AGREEMENT

THIS AMENDED AND RESTATED SITE LEASE AGREEMENT (“Lease”), made effective as of the 23rd day of February, 2020 (the “Effective Date”) between City of Hastings, a Minnesota municipal corporation (“Landlord”), and New Cingular Wireless PCS, LLC, a Delaware limited liability company (“Tenant”).

Whereas, Landlord and Tenant are parties to a certain Site Lease Agreement dated February 22, 2000 (the “Existing Lease”) concerning the leasing of a certain portion of Landlord’s Property (as defined below); and

Whereas, the parties hereto desire to amend and restate the Existing Lease in its entirety with this Lease.

Now, therefore, the parties agree to amend and restate the Existing Lease in its entirety as follows:

FOR GOOD AND VALUABLE CONSIDERATION, the parties agree as follows:

1. **Leased Premises.** Subject to the terms and conditions of this Lease, Landlord hereby leases to Tenant and Tenant leases from Landlord a portion of Landlord's property, consisting of approximately 345 square feet, located at 2500 Enterprise Avenue in the City of Hastings, County of Dakota, State of Minnesota, legally described in Exhibit A attached hereto ("Landlord's Property"), subject to any and all existing easements, and a portion of the water tower or other structures ("Structure"), as more particularly shown in Exhibit B attached hereto, on which Tenant’s telecommunications equipment will be attached and located, the exact location of each to be reasonably approved by Landlord's Director of Public Works, together with non-exclusive appurtenant easements required to run utility lines and cables, and a non-exclusive appurtenant easement across Landlord's Property for access to the Antenna Facilities (as hereinafter defined), such easements located in or upon Landlord's Property, all as described on Exhibit C attached hereto ("Leased Premises").
2. **Rent.**
 - a. **Initial Rent Amount, Adjustments.** As consideration for this Lease, Tenant shall pay Landlord an annual rent in the amount of \$36,858.30 for the initial year which shall be increased each year on January 1, by five percent (5.0%) of the previous year’s annualized rental. Tenant shall pay additional rent in an amount as may be negotiated between the parties at the Landlord’s discretion, increased annually by the escalator rate set forth in the previous sentence, for equipment attached to the Structure by Tenant (in accordance with the terms and conditions hereof) in addition to those approved by Landlord at commencement of this Lease and set forth on Exhibit B. The rent amounts shall never decrease.
 - b. **Time of Payment, Taxes.** Landlord shall communicate all rental increases to the Tenant in writing by the preceding December 1 of each year. The annual rent shall be paid in four (4) quarterly installments on January 1, April 1, July 1 and October 1, provided that for the first quarter of use of the first year, the rental shall be prorated through the end of

such quarter and shall be paid to Landlord after all conditions precedent in accordance with paragraph 3 are met and at such time as installation of Tenant's Antenna Facilities are completed. Tenant shall pay a late fee in the amount of five hundred dollars (\$500.00) per month if any rent is not paid within ten (10) days of the due date.

- c. In addition to the annual rental, Tenant agrees to timely pay its share of any personal property taxes or payments(s) in lieu of taxes, which are assessed because of Tenant's Antenna Facilities (as hereinafter defined) upon the Leased Premises. In the event Landlord receives a notice of assessment with respect to which taxes or assessments are imposed on Tenant's Antenna Facilities, Landlord shall provide Tenant with copies of each such notice immediately upon receipt, but in no event later than thirty (30) days after the date of such notice of assessment. If Landlord does not provide such notice or notices to Tenant in a timely manner and Tenant's rights with respect to such taxes are prejudiced by the delay, Landlord shall reimburse Tenant for any increased costs directly resulting from the delay. For any tax amount for which Tenant is responsible under this Agreement, Tenant shall have the right to contest, in good faith, the validity or the amount thereof using such administrative, appellate or other proceedings as may be appropriate in the jurisdiction, and may defer payment of such obligations, pay same under protest, or take such other steps as permitted by law.
- d. Lease Administration Fee. Within thirty (30) days following full execution of this Lease by Landlord and Tenant, Tenant shall pay Landlord a onetime administrative fee of \$2,500.00, and a onetime reimbursement of survey and equipment verification costs in the amount of \$1,500.00.
- e. Sublease. The Tenant shall not be allowed to sublease space on the tower to additional telecommunications providers. Separate lease agreements for additional ground and antenna space shall be with the Landlord, not the Tenant.
- f. Site Restoration Escrow. Per paragraph 16(d) of this Lease, Landlord acknowledges that the Tenant shall, upon the commencement of this Amended and Restated Lease, deposit with Landlord the sum of \$25,000.00, which shall be fully refunded to Tenant upon the timely removal of the equipment shelter, all antennas, facilities, and related equipment, and the repair and restoration of the site to the condition existing prior to installation of the facilities, reasonable wear and tear excepted. In lieu of the required cash escrow Tenant may provide Landlord with a performance bond in the manner provided in paragraph 16(d).
- g. Miscellaneous. Tenant shall pay for all reasonable costs of Landlord's inspections and installation project management costs for this project within sixty (60) days after Landlord sends an invoice along with reasonable supporting documentation for such fees to Tenant. In addition to consulting and engineering inspection costs, Tenant shall reimburse Landlord for all reasonable costs associated with reviewing this Lease and approving Tenant's application, including but not limited to all reasonable attorney's fees, staff and administrative review time and third party consultant fees and expenses. All fees and invoices must be paid within sixty (60) days after Landlord sends Tenant an invoice together with reasonable supporting documentation for the same. If requested by Tenant, Landlord shall provide to Tenant in advance a reasonable estimate for the required consulting and engineering inspection costs required under this subparagraph 2(f) and subparagraphs 5(c), 5(d), 5(f) and 5(i) but Tenant

shall remain obligated to pay Landlord for the actual costs incurred, even if they exceed the estimate.

3. **Governmental Approval Contingency.**

- a. **Tenant Application.** Tenant's right to use the Leased Premises is expressly made contingent upon its obtaining all the certificates, permits, zoning and other approvals that may be required by any federal, state, or local authority. This shall include the engineering studies specified in subparagraphs 3(b) and 3(c) below on the Structure to be conducted at Tenant's expense provided that if the Tenant's Antenna Facilities, as defined in subparagraph 5(b) and as they exist on the Effective Date, have previously been subject to and approved for installation and operation in prior engineering studies of the types specified in subparagraphs 3(b) and 3(c) below, no new studies shall be required. Landlord shall cooperate with Tenant in its efforts to obtain and retain such approval and shall take no action that would adversely affect the status of the Leased Premises with respect to the Tenant's proposed use thereof. Tenant shall not consider this Lease, or the negotiations to enter into a lease, as alleviating the Tenant from any and all requirements for Tenant to obtain needed certificates, permits, zoning, and other approvals including conditional use permits or other special approvals required by City, County, State or Federal governments.
- b. **Interference Study.** Before obtaining a building permit, Tenant must pay for the reasonable cost of (i) a radio frequency interference study, carried out by an independent and qualified professional selected by the Tenant and approved by the Landlord, which approval shall not be unreasonably withheld, showing that Tenant's intended use will not interfere with any existing communications facilities, and (ii) an engineering study, carried out by an independent and qualified professional selected by the Landlord and approved by the Tenant, which approval shall not be unreasonably withheld, showing that the Structure is able to support the Tenant's Antenna Facilities, as defined in subparagraph 5(b), without materially adversely affecting Landlord's use of the Structure or the use of the Structure by a pre-existing tenant. If the study finds that there is a potential for interference that cannot be reasonably remedied or for material adverse effect to the Structure which cannot be remedied by reasonable modifications to the Structure, Landlord may prohibit the improvement, expansion or replacement. The requirements of this subparagraph 3(b) shall not require a new interference study if the Tenant's Antenna Facilities, as defined in subparagraph 5(b) and as they exist on the Effective Date, have previously been subject to and approved for installation and operation in one or more prior engineering studies of the type specified in this subparagraph 3(b). Improvements, expansions or replacements of Tenant's Antenna Facilities may require a new or updated technical study as required pursuant to subparagraphs 5(c) and 5(i).
- c. **Structural Engineering Certification.** Before obtaining a building permit, Tenant must pay for the reasonable cost of an engineering study carried out by a qualified engineer, showing that the Structure is able to support the Tenant's Antenna Facilities as shown on Exhibit D. If the study finds that the proposed structure is inadequate to support the proposed antenna loads, and the Landlord and Tenant cannot agree to reasonable modifications to the Structure to accommodate the proposed antenna loads, Landlord may prohibit the improvement, expansion or replacement. The requirements of this subparagraph 3(c) shall not require a new

structural engineering study and certification if the Tenant's Antenna Facilities, as defined in subparagraph 5(b) and as they exist on the Effective Date, have previously been subject to and approved for installation and operation in one or more prior structural engineering studies and certifications of the type specified in this subparagraph 3(c). Improvements, expansions or replacements of Tenant's Antenna Facilities may require a new or updated technical study as required pursuant to subparagraphs 5(c) and 5(i).

- d. **Non-Approval.** In the event that any application necessary under subparagraph 3(a) above is finally rejected or any certificate, permit, license, or approval issued to Tenant is canceled, expires, lapses, or is otherwise withdrawn or terminated by government authority so that Tenant, in its sole discretion, will be unable to use the Leased Premises for its intended purposes, or if an interference or engineering study, whether conducted pursuant to subparagraph 3(b) and 3(c) above or otherwise, should indicate, in Tenant's sole discretion, that the Leased Premises are unsatisfactory for Tenant's intended use, Tenant shall have the right to terminate this Lease and be reimbursed for any rental payment previously made but not any other cost payments. Notice of Tenant's exercise of its right to terminate pursuant to this subparagraph shall be given to Landlord in writing as provided in accordance with paragraph 26, Notices, of this Lease. Except as required under subparagraph 16(d) below, upon such termination, this Lease shall become null and void and the parties shall have no final obligation to each other except for those obligations which are expressly identified herein as surviving the termination of this Lease.
4. **Term and Renewal.** The "Initial Term" of this Lease shall commence on the date set forth in the first paragraph of this Lease ("Effective Date") and end on December 31, 2024. Subject to the terms and conditions of this Lease, Tenant shall have the right to extend this Lease for three (3) additional five (5) year renewal periods (each a "Renewal Term") commencing on January 1 following the expiration date of the Initial Term or of any subsequent Renewal Term. This Lease shall be automatically renewed for each successive Renewal Term unless Tenant sends written notice of non-renewal to Landlord no later than one hundred eighty (180) days prior to the expiration of the Initial term or any Renewal Term, such notice to be provided in accordance with paragraph 26 of this Lease.
5. **Tenant Use.**
 - a. **User Priority.** Tenant agrees that the following priorities of use, in descending order, shall apply in the event of communication interference or other conflict while this Lease is in effect, and Tenant's use shall be subordinate accordingly:
 - i. Landlord;
 - ii. Public safety agencies, including law enforcement, fire, and ambulance services that are not part of the Landlord;
 - iii. Other governmental agencies where use is not related to public safety; and
 - iv. Tenant and other government-regulated entities whose antenna offer a service to the general public for a fee in a manner similar to public utility, such as long distance and cellular telephone, not including radio or television broadcasters and pre-existing tenants.

- b. Purposes. Tenant shall use the Leased Premises only for the purpose of installing, maintaining, and operating Landlord-approved (which approval shall not be unreasonably withheld, conditioned or delayed) communications Antenna Facilities (as hereinafter defined), equipment, cabinets and an accessory building, and uses incidental thereto for providing wireless telecommunications services which Tenant is legally authorized to provide to the public. Landlord grants Tenant the right to enter upon Landlord's Property to conduct Tenant's engineering/technical feasibility studies prior to installation of Tenant's Antenna Facilities (as hereinafter defined) on the Leased Premises. This use shall be non-exclusive, and Landlord specifically reserves the right to allow the Landlord's Property, except the Leased Premises, to be used by other parties and to make additions, deletions, or modifications to its own facilities on the Leased Premises except as set forth in subparagraph 5(n) herein. Tenant's communications antenna facility shall consist of antennas at a Landlord-approved location (which approval shall not be unreasonably withheld, conditioned or delayed), along with cables and appurtenances connected to an accessory building or cabinet located on the Leased Premises ("Antenna Facilities"). Tenant's installation, maintenance and operation of the Antenna Facilities shall at all times comply with all applicable ordinances, statutes and regulations of local, state and federal governmental agencies. Tenant shall have exclusive use of its Antenna Facilities.
- c. Construction. Tenant may erect and operate an antenna array in accordance with its submitted application (Exhibit B) and its plans and specifications (Exhibit D). Tenant agrees that it will install only antennas that Tenant knows will not interfere with existing antennas or with antennas with higher priority. If Tenant seeks to increase the number of antennas, and such installation shall exceed the requirements or standard discussed in the engineering study as required by subparagraph 3(c), then, it must first pay the reasonable cost of an evaluation carried out by an independent and qualified professional selected by the Tenant and approved by the Landlord, which approval shall not be unreasonably withheld, conditioned or delayed demonstrating that (i) each additional antenna will not interfere with existing antennas, and that (ii) the Structure can structurally support the additional antennas. The Tenant must pay the cost of each evaluation within sixty (60) days after receiving written notice of the cost together with reasonable supporting documentation. Tenant must obtain Landlord's consent prior to installation of additional antennas; however, such consent will not be unreasonably withheld, conditioned or delayed. An increase in the number of antennas from the original installation shall increase the annualized rental as provided in subparagraph 2(a).
- d. Construction Plans. For the initial installation of all Antenna Facilities and for any and all subsequent revisions and/or modifications thereof, or additions thereto, Tenant shall provide Landlord and Landlord's Water Tower Construction Engineer ("Construction Engineer") each with a copy of electronically-formatted (PDF) as-built drawings ("Construction Plans") of the equipment and improvements installed on the Leased Premises consisting of the following and any additional information reasonably requested in writing by the Landlord:
- 1) line or CAD drawings showing the actual physical location of all planned installations plus materials and construction methods;
 - 2) specifications for all planned installations;

- 3) diagrams of proposed Antenna Facilities;
- 4) a complete and detailed inventory of all equipment and personal property of Tenant actually placed on the Leased Premises. Landlord retains the right to survey the installed equipment.

As-built drawings shall be easily readable and subject to prior written approval by the Construction Engineer, which shall not be withheld, conditioned or delayed without cause. Landlord shall have thirty (30) business days to review the as-built drawings ("Construction Plans"). If Landlord fails to either approve the Construction Plans or provide written request for changes of said Construction Plans to Tenant within the thirty (30) day period, the Construction Plans will be deemed approved.

Tenant shall be solely responsible for all commercially reasonable costs associated with said review and approval of Construction Plans by the Construction Engineer.

For any new project or supplemental installations, Tenant shall provide Landlord, within thirty (30) days after Tenant's activates the Antenna Facilities, with a site plan in electronic file format compatible with the Landlord's record file system as Exhibit B consisting of as-built drawings of the Antenna Facilities and the improvements installed on the Leased Premises, which show the actual location of all equipment and improvements. Said drawings shall be accompanied by a complete and detailed site survey of the property, inventory of all equipment, personal property, and Antenna Facilities.

- e. Contractor Approval. Any contractor chosen by Tenant to carry out construction, installation, maintenance or any other work on the water tower must be pre-approved by the Landlord prior to the pre-construction meeting. Contractor information to include at the minimum:
 - Name and contact information
 - Experience (with water storage tank installations)
 - OSHA violations within the previous three years.

The Landlord retains sole discretion and reserves the right to reject any and all contractors the Tenant may choose for the installation work as determined to be in the best interests of the Landlord and to waive any informalities.

- f. Inspection. Consulting engineering inspection will be provided beginning with the pre-construction conference and continuing through installation/construction/punch-list and verification of as-builts at project completion as determined solely by Landlord, at Tenant's expense. Landlord will not arbitrarily require more inspection than is reasonably necessary to insure the continued delivery of service and security of Landlord's property. Tenant shall pay for all commercially reasonable costs of Landlord's inspections/installation project management costs related to the installation or modification of Antenna Facilities within sixty (60) days after Landlord sends an invoice for such fees together with reasonable supporting documentation evidencing such fees to Tenant. In addition to consulting and engineering inspection costs, Tenant shall reimburse Landlord for all commercially reasonable costs associated with reviewing this Lease and approving Tenant's application, including but not limited to all reasonable attorney's fees, staff and administrative review time and third party consultant fees and expenses. All fees and invoices must be paid within sixty (60) days after Landlord sends Tenant an invoice for the same together with reasonable supporting documentation evidencing such fees. Prior to energizing Tenant's system (start-

up); all punch list items related to installation must be substantially complete (the exception may be weather related finish painting, etc. as determined by Landlord).

- g. Operation. Tenant shall have the right, at its sole expense, to operate and maintain the Antenna Facilities on the Leased Premises in accordance with good engineering practices and with all applicable FCC rules and regulations. Tenant's installation of all Antenna Facilities shall be done according to plans approved by Landlord, which approval shall not be unreasonably withheld, conditioned or delayed. Any damage done by Tenant, its employees or agents to the Leased Premises or other Landlord Property including the Structure during installation or during operations, shall be repaired by Tenant at Tenant's expense within thirty (30) days after notification of damage. The Antenna Facilities shall remain the exclusive property of the Tenant, unless otherwise provided in the Lease. Landlord waives any and all lien rights it may have, statutory or otherwise, concerning the Antenna Facilities or any portion thereof.
- h. Maintenance, Improvement Expenses. All modifications to the Leased Premises and all improvements made for Tenant's benefit shall be at the Tenant's expense and such improvements, including antenna, facilities and equipment, shall be maintained in a good state of repair, at least equal to the standard of maintenance of the Landlord's facilities on or adjacent to the Leased Premises, and secured by Tenant. If Tenant's Antenna Facilities are mounted on the Structure they shall, at all times, be painted, at Tenant's expense, the same color as the Structure. The Landlord reserves the right to require or waive this requirement as it pertains to feed line, jumpers, brackets, connectors, and other ancillary equipment on a case by case basis depending on the installation configuration.
- i. Improvements or Replacements. Replacements of equipment with different equipment type, configuration, larger size, heavier weight, or location may require technical review and approval. Before the Tenant may update or replace the Antenna Facilities, Tenant must notify and provide a detailed proposal to Landlord. Tenant shall submit to Landlord a detailed proposal for any such replacement facilities and any other information reasonably requested by Landlord of such requested update or replacement, including but not limited to a technical study, carried out at Tenant's expense. Notwithstanding the foregoing, Tenant may make direct replacements of items of the same type of equipment, with the same or smaller size, the same or lighter weight, and the same location as the equipment previously approved and documented in Exhibit B and all necessary repairs, modifications, improvements or alterations to the internal portions of equipment and to all ground-based equipment without submission of plans or proposals, provided such alterations, modifications or improvements do not significantly change the exterior appearance of the Antenna Facilities or increase the amount of physical space or volume occupied by the Tenant's equipment.
- j. Drawings. Unless duplicative of previous specifications and drawings submitted to Landlord, Tenant shall provide Landlord with as-built drawings of the equipment and improvements installed on the Leased Premises, which show the actual location of all Antenna Facilities. Said drawings shall be accompanied by a complete and detailed inventory of all equipment, personal property, and Antenna Facilities actually placed on the Leased Premises (see item d. Construction Plans).

- k. No Interference. Tenant shall, at its own expense, maintain any equipment on or attached to the Leased Premises and owned by Tenant in a safe condition, in good repair and in a manner reasonably suitable to Landlord so as not to conflict with the use of the surrounding Landlord's Property by Landlord. Tenant shall not unreasonably interfere with the operations of any prior tenant using the Structure and shall not interfere with the working use of the water storage facilities thereon or to be placed thereon by Landlord.
 - l. Access. Tenant, at all times during this Lease, shall have exclusive access to its Antenna Facilities located on the Leased Premises and non-exclusive access to the Structure in order to install, operate, repair, remove and maintain its Antenna Facilities. Tenant shall request access to the Structure twenty-four (24) hours in advance, except in an emergency, to the Public Works Department office located at 1225 Progress Drive, Hastings, MN 55033. In an emergency situation the Public Works Department may be contacted at (651) 248-3271 or such other number as provided by the Landlord in advance. The Tenant shall reimburse the Landlord for costs associated with providing after-hours access to the Structure and surrounding areas. The Tenant shall reimburse the Landlord at the current after-hours hourly rate paid to the employee providing after-hours access with a minimum billable time of three (3) hours. All reimbursement shall be paid within sixty (60) days from the date of the Landlord's invoice to the Tenant, together with reasonable supporting documentation evidencing such costs. Access to antenna equipment on the Leased Premises elevated water tank shall be with prior notice, Tenant's employee's identification and in the presence of a City of Hastings Water Department employee. Both the Water Department and the Tenant shall maintain a written record of all site visits, including the name of all personnel.
 - m. Payment of Utilities. Landlord makes no representations that utilities adequate for Tenant's use of the Leased Premises are available. Tenant shall separately meter charges for the consumption of electricity and other utilities associated with its use of the Leased Premises and shall be responsible to promptly pay all costs associated therewith. Landlord will cooperate with Tenant in Tenant's efforts to obtain utilities from any location provided by the servicing utility.
 - n. Quiet Enjoyment. Tenant, upon paying the rent shall peaceably and quietly have, hold and enjoy the Leased Premises and shall not be disturbed in its possession, use and enjoyment of the Leased Premises. Landlord shall not cause or permit any use of the Landlord's Property that interferes with or impairs (a) the integrity of the Structure to which the Antenna Facilities are attached or (b) the quality of the communication services being rendered by Tenant from the Leased Premises. Except in cases of emergency, Landlord shall not have access to the Antenna Facilities ground level equipment building on the Leased Premises unless accompanied by Tenant's personnel.
6. Emergency Facilities. In the event of a natural or manmade disaster, in order to protect the health, welfare, and safety of the community, Tenant may erect additional Antenna Facilities and install additional equipment on a temporary basis on the Leased Premises to assure continuation of service. Such temporary operation shall not exceed (90) days unless Tenant obtains written approval from the Landlord.

7. **Additional Maintenance Expenses.** Upon notice from Landlord, Tenant shall promptly pay to Landlord all reasonable increases in Landlord expenses incurred in maintaining the Leased Premises, including painting of the Leased Premises, which are directly caused by Tenant's occupancy of the Leased Premises within sixty (60) days from the date of the Landlord's invoice to the Tenant, together with reasonable supporting documentation evidencing such costs.
8. **Advances in Technology.** As technology advances and improved antennas are developed which are routinely used in Tenant's business, Landlord may request the replacement of existing antennas with the improved antennas if the new antennas are more aesthetically pleasing or otherwise foster a public purpose provided it shall be in the sole and exclusive discretion of the Tenant to determine if the installation and use of the improved antennas are practical and technically feasible at this location.
9. **Additional Buildings.** Tenant acknowledges that Landlord may permit additional equipment shelters to be constructed on Landlord's Property. At such time as this may occur, Landlord will permit said equipment shelters to be placed immediately adjacent to Tenant's building and Tenant will allow "attachments" to its equipment shelter so as to give the appearance that all equipment shelters are a connected facility. Said attachments will be made at no cost to Landlord or Tenant, will not compromise the structural integrity of Tenant's equipment shelter, and will not unreasonably interfere with the operation and maintenance of other Tenant's Antenna Facilities.
10. **Structure Reconditioning and Repairs.** Tenant shall remove its Antenna Facilities at Tenant's cost, upon reasonable notice to allow maintenance, repair, repainting, restoration or other activity as required by Landlord. There may be scheduled interruptions in use of the Antenna Facilities. Except in the case of an emergency, Landlord shall give Tenant one-hundred eighty (180) days' notice of repair, repainting or restoration. In case of emergency, Tenant shall immediately remove Tenant's Antenna Facilities upon reasonable notification to Tenant until such time as there is no longer an emergency, but if Tenant does not remove Tenant's Antenna Facilities within a reasonable time after receipt of notice, based on the circumstances created by the emergency, Landlord may apply for an immediate court order to remove Tenant's Antenna Facilities taking all reasonable precautions to prevent damage to the same. An "emergency" shall be deemed to exist only in those situations which constitute an immediate threat to the health or safety of the public or immediate danger of substantial damage to the Landlord's Property. Tenant's 24 hour duty contact number is 800 638-2822. Prior to any change or termination of Tenant's 24 hour duty contact number, Tenant shall provide Landlord with the updated 24 hour duty contact number such that at all times, Tenant keeps Landlord informed of an active 24 hour duty contact number. In the event the use of Tenant's Antenna Facilities is interrupted, Tenant shall have the right to maintain mobile cellular equipment on the Landlord's Property. Oldest tenants will have priority if space is limited. If Landlord's Property will not accommodate mobile equipment, it is Tenant's responsibility to locate auxiliary sites.

11. **Additional Maintenance Expenses.** Upon notice from the Landlord, Tenant shall promptly pay to Landlord all additional Landlord expenses incurred in maintaining the Leased Premises that are caused by Tenant's occupancy of the Leased Premises.
12. **Defenses and Indemnification.**
 - a. **General.** Landlord and Tenant each indemnify the other against and hold the other harmless from any and all costs (including reasonable attorneys' fees and expenses) and claims, actions, damages, obligations, liabilities and liens which arise out of (i) the breach of the Lease by the indemnifying party; and (ii) the use and/or occupancy of the Landlord's Property, except for any claims, actions, damage, obligations, liabilities and liens arising from any negligent or intentional misconduct of the indemnified party. This provision shall survive the termination to this Lease.
 - b. **Hazardous Materials.** Without limiting the scope of subparagraph 12(a) above, Tenant will be solely responsible for and will defend, indemnify, and hold Landlord, its agents, elected officials and employees harmless from and against any and all claims, cost, and liabilities, including reasonable attorneys' and costs, arising out of or in connection with the cleanup or restoration of the Leased Premises associated with the Tenant's use of Hazardous Materials. This defense and indemnification shall not apply to claims, costs, and liabilities arising from Landlord's negligence or willful misconduct. Without limiting the scope of subparagraph 12(a) above, Landlord will be solely responsible for and will defend, indemnify, and hold Tenant, its agents, and employees harmless from and against any and all claims, cost, and liabilities, including reasonable attorneys' and costs, arising out of or in connection with the cleanup or restoration of Landlord's Property associated with the Landlord's use of Hazardous Materials. This defense and indemnification shall not apply to claims, costs, and liabilities arising from Tenant's negligence or willful misconduct. For the purposes of this Lease "Hazardous Materials" shall be interpreted broadly and specifically includes, without limitation, asbestos, fuel, batteries or any hazardous substance, waste, or material as defined in any federal, state or local environmental or safety laws or regulation including, but not limited to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
 - c. **Tenant's Warranty.** Tenant represents and warrants that the use of the Leased Premises will not generate and Tenant will not store or dispose of on the Lease Premises, nor transport to or over the Leased Premises, any Hazardous Materials, unless Tenant specifically informs Landlord thereof in writing twenty-four (24) hours prior to such storage, disposal or transport, or otherwise as soon as Tenant becomes aware of the existence of Hazardous Material on the Leased Premises; Tenant shall provide initial and annual updates of Material Safety Datasheets (MSD) on all hazardous materials that are part of, or necessary to, the operation of the antenna system and maintenance thereof. Landlord acknowledges Tenant's use of sealed batteries for emergency backup, a fire suppression system, and electronics described in Exhibits B and D. The obligations of this subparagraph 12(c) shall survive the expiration or other termination of this Lease.
 - d. **Landlord's Warranty.** An analysis of the Structure's paint content of Lead and Chromium is provided in Exhibit E. Landlord represents and warrants that it is not aware of the existence of any other Hazardous Materials on the Leased Premises, the Structure, or the

Landlord's Property. The obligations of the subparagraph 12(d) shall survive the expiration or other termination of this Lease.

13. **Insurance.**

- a. **Workers' Compensation.** The Tenant must maintain Workers' Compensation insurance in compliance with all applicable statutes. The policy shall also provide Employer's Liability coverage with limits of \$500,000.00 bodily injury each accident, \$500,000.00 bodily injury by disease, policy limit, and \$500,000.00 bodily injury by disease, each employee.
- b. **General Liability.** The Tenant must maintain an occurrence form Commercial General Liability Coverage on ISO CGL form 00 01 or broader. Such coverage shall provide for third party bodily injury and property damage arising out of the use, maintenance or operation of the Lease Premises and Antenna Facilities. The Tenant must maintain aforementioned Commercial General Liability Coverage with limits of liability of \$1,000,000.00 each occurrence; \$1,000,000.00 personal and advertising injury, \$2,000,000.00 general aggregate, and \$2,000,000.00 products and completed operations aggregate. These limits may be satisfied by the Commercial General Liability Coverage or in combination with an Umbrella or Excess Liability Policy, provided coverage afforded by the Umbrella or Excess Policy is no less than the underlying Commercial General Liability Coverage's.
- c. **Automobile Liability.** The Tenant must carry Commercial Automobile Liability coverage. Coverage shall afford total combined single limits in the amount of \$1,000,000.00 per accident. The liability limits may be afforded under the Commercial Automobile Liability Policy, or in combination with an Umbrella or Excess Liability Policy provided coverage afforded by the Umbrella or Excess Policy is no less than the underlying Commercial Automobile Liability Coverage. Coverage shall be provided for third party bodily injury and property damage arising out of the ownership, use, maintenance or operation of all owned, non-owned and hired automobiles. Unless rejectable by State law, The Commercial Automobile Policy shall include at least statutory personal injury protection.
- d. **Tenant Property Insurance.** The Tenant must keep in force for the duration of the Lease insurance or self-insure covering damages to its property at the Leased Premises. The amount of coverage shall be sufficient to replace the damaged property, loss of use and comply with any ordinance or law requirements.
- e. **Landlord's Insurance.** Landlord shall maintain Municipal General Liability Insurance insuring landlord against liability for personal injury, death or damage arising out of Landlord's ownership, use or management of the Leased Premises or Structure by Landlord, its employees or agents, with combined single limits of \$1,000,000.00. Landlord shall also maintain fire and extended coverage insurance or self-insurance covering the Structure for its replacement value (subject to reasonable deductibles).
- f. **Adjustment of Insurance Coverage Limits.** Notwithstanding the foregoing insurance requirements, Tenant agrees to periodically review and adjust insurance coverage limits in accordance with then-current market and industry standards during the Initial Term and Renewal Terms.

- g. **Additional Insured - Certificate of Insurance.** The Tenant shall provide, prior to tenancy, evidence of the required insurance in the form of a Certificate of Insurance issued by companies eligible to transact business in Minnesota and who hold a current rating of not less than A-, VII according to A.M. Best, which includes all coverages required in this paragraph 13. Tenant will include Landlord as an additional insured on the required Commercial General Liability and Commercial Automobile Liability Policies but only to the extent allowed in paragraph 12, Defense and Indemnification, of this Lease. Tenant shall provide at least thirty (30) days prior written notice to Landlord of cancellation of any required coverage that is not replaced.
- h. Notwithstanding the forgoing, Tenant may, in its sole discretion, self-insure any of the required insurance under the same terms as required by this Agreement. In the event Tenant elects to self-insure its obligation under this Agreement to include Landlord as an additional insured, the following conditions apply: (i) Landlord shall promptly and no later than thirty (30) days after notice thereof provide Tenant with written notice of any claim, demand, lawsuit, or the like for which it seeks coverage pursuant to this Section and provide Tenant with copies of any demands, notices, summonses, or legal papers received in connection with such claim, demand, lawsuit, or the like; (ii) Landlord shall not settle any such claim, demand, lawsuit, or the like without the prior written consent of Tenant; such consent not to be unreasonably withheld, conditioned or delayed, and (iii) Landlord shall fully cooperate with Tenant in the defense of the claim, demand, lawsuit, or the like.
14. **Damage or Destruction.** Landlord will provide notice to Tenant of any casualty or other harm affecting the Structure or Leased Premises within twenty-four (24) hours of the casualty or other harm. If any part of the Landlord's Property is damaged by casualty or other harm as to render the Leased Premises unsuitable, in Tenant's sole determination, then Tenant may terminate this Agreement by providing written notice to Landlord, which termination will be effective as of the date of such casualty or other harm. Upon such termination, Landlord shall reimburse Tenant for any prepaid rent on a pro rata basis. If space is reasonably available, Landlord agrees to permit Tenant to place temporary transmission and reception facilities on the Landlord's Property, but only until such time as Tenant is able to activate a replacement transmission facility at another location; notwithstanding the termination of this Agreement, such temporary facilities will be governed by all of the terms and conditions of this Agreement, including rent. If Landlord or Tenant undertakes to rebuild or restore the Structure and/or the Antenna Facilities, as applicable, Landlord agrees to permit Tenant to place temporary transmission and reception facilities on the Landlord's Property at no additional rent until the reconstruction of the Structure and/or the Antenna Facilities is completed. If Landlord determines not to rebuild or restore the Structure, Landlord will notify Tenant of such determination within thirty (30) days after the casualty or other harm. Landlord agrees that the rent shall be abated until the Landlord's Property and/or the Leased Premises are rebuilt or restored, unless Tenant places temporary transmission and reception facilities on the Landlord's Property.
15. **Intentionally Omitted.**
16. **Lease Termination.**

- a. Events of Termination. Except as otherwise provided herein, this Lease may be terminated by either party upon sixty (60) days' written notice to the other party, provided in accordance with paragraph 26, Notices, of this Lease, as follows:
- i. By either party upon a default of any covenant or term hereof by the other party, which default is not cured within sixty (60) days of receipt of written notice of default to the other party (without, however, limiting any other rights of the parties pursuant to any other provision hereof), except that this Lease shall not be terminated if the default cannot reasonably be cured within such sixty (60) day period and the defaulting party has commenced to cure the default within such sixty (60) day period and diligently pursues the cure to completion; or
 - ii. By Tenant for cause if it is unable to obtain or maintain any license, permit or other governmental approval necessary for the construction and/or operation of the Antenna Facilities or Tenant's business; or
 - iii. By Tenant for cause if the Leased Premises are or become unusable under Tenant's design or engineering specifications for its Antenna Facilities, or the communications system to which the Antenna Facilities belong or for technological reasons including without limitation shadowing or interference under Tenant's Antenna Facilities; or
 - iv. Tenant's transmission is interfered with by Landlord or its other tenants' equipment. Such right to terminate shall become void if Landlord cures such interference within thirty (30) days of receipt of written notice; or
 - v. By Landlord if an independent engineer engaged by Landlord determines that the Structure is structurally unsound, including, but not limited to, consideration of age of Structure, damage or destruction of all or part of the structure on the Leased Premises from any source or factors relating to condition of the Leased Premises; or
 - vi. After the Initial Term, upon twelve (12) month's prior written notice by the Landlord to Tenant if its City Council decides, for any reason, to redevelop the Landlord's Property in a manner inconsistent with continued use of the Leased Premises by Tenant; or
 - vii. By Landlord if it reasonably determines that a potential user with a higher priority under subparagraph 5(a) above cannot find another adequate location, or the Antenna Facilities unreasonably interfere with another user with a higher priority, regardless of whether or not such an interference was predicted in the initial interference study that was part of the application process following written notice to Tenant of such interference and after expiration of a thirty (30) day cure period provided that during that cure period, Tenant shall discontinue the operation of the Tenant's Antenna Facilities or the portion thereof causing the interference until such cure is completed; or
 - viii. By Landlord if it reasonably determines that Tenant has failed to comply with applicable ordinances or state or federal law, or any conditions attached to government approvals granted thereunder following written notice to Tenant of such failure and after expiration of a thirty (30) day cure period, except that this Lease

shall not be terminated if the failure cannot reasonably be cured within such thirty (30) day period and the Tenant has commenced to cure the failure within such thirty (30) day period and diligently pursues the cure to completion.

- b. Notice of Termination. In accordance with paragraph 26, Notices, the parties shall give notice of termination in writing by certified mail, return receipt requested. Such notice shall be effective upon receipt as evidenced by the return receipt. Except as set forth herein, all rent paid for the Lease prior to said termination date shall be retained by Landlord.
- c. Tenant's Liability for Early Termination. If Tenant terminates this Lease other than for cause or of right as provided in this Lease, Tenant shall pay to Landlord as liquidated damages for early termination, 150% of the annual rent for the year in which Tenant terminates, unless Tenant terminates during the last year of any Term under paragraph 4 and Tenant has paid the annual rental for that year.
- d. Site Restoration. In the event that this Lease is terminated or not renewed, Tenant shall have ninety (90) days from the termination or expiration date to remove its Antenna Facilities and related equipment from the Leased Premises, repair the affected site and restore the surface of the Structure to the condition existing prior to installation of the facilities, reasonable wear and tear excepted. Should this situation occur during the winter season, the sixty-day period shall commence at the start of weather permissible to the quality of workmanship required by Landlord. Such time period shall be agreeable to Landlord and Tenant. In the event that Tenant's Antenna Facilities and related equipment are not removed to the reasonable satisfaction of the Landlord, they shall be deemed abandoned and become the property of the Landlord, and Tenant shall have no further rights thereto. Landlord acknowledges that upon the commencement of this Amended and Restated Lease, Tenant shall deposit with Landlord the sum of \$25,000.00, which shall be fully refunded to Tenant upon the timely removal of the Antenna Facilities, and related equipment, and the repair of the site to the reasonable satisfaction of the Landlord. In lieu of the required cash escrow Tenant may provide Landlord with a performance bond covering faithful performance of Tenant's site restoration obligations in the amount of \$25,000.00 during the Initial Term and each Renewal Term, as applicable. Any bonds shall be issued by a United States Department of Treasury listed corporate surety, accompanied by current powers of attorney, on a form reasonably acceptable to Landlord. In the event that Tenant's Antenna Facilities, and related equipment are not removed to the reasonable satisfaction of the Landlord, the Landlord shall have the option to take the following actions:
 - 1. Fully decommission the Antenna Facilities, have the Antenna Facilities removed, and repair the site and restore the property, and bill the Tenant for the cost of such actions. If Landlord removes the Antenna Facilities or related equipment, Landlord must give written notice to any mortgagee of Tenant at the addresses provided, informing them that Antenna Facilities or related property have been removed and will be deemed abandoned if not claimed and the storage fees and other reasonable costs paid within sixty (60) days; or
 - 2. Take full ownership of the Antenna Facilities.

- e. If Landlord elects to terminate this Lease in order to demolish or otherwise remove from service the elevated water tank on Leased Premises and construct a new water tower on or in the vicinity of the Leased Premises then:
- i. If requested by Tenant, subject to compliance with all requirements of paragraph 3 of this agreement, Landlord shall make a good faith effort to accommodate the relocation of Tenant's equipment to the new elevated tank at Tenant's sole cost and expense upon completion of the new elevated tank; and
 - ii. Tenant may continue to occupy the existing elevated tank until thirty (30) days after Landlord notifies Tenant that the new elevated tank is complete and that Tenant may relocate their equipment to the new tank; and
 - iii. Upon relocation of Tenant's equipment on the new tank, this Lease shall be deemed a lease of the space to be occupied by Tenant on the new tank and the parties shall amend the Lease exhibits in order to identify the new tank site and Tenant's equipment locations thereon.

17. **Limitation of Liability.** If Landlord terminates this Lease other than for cause as of right as provided in this Lease, or Landlord or Landlord's employees, agents, representatives or contractors cause interruption of the business of Tenant, or for any other Landlord breach of this Lease, Landlord's liability for damages to Tenant shall be limited to the actual and direct costs of the replacement of this site in Tenant's network including, without limitation, equipment removal, relocation or repair, and all cost associated with the identification of a new site for Tenant's replacement communications facility, the negotiation of its purchase or lease, applying for any necessary governmental approvals, and the cost of constructing a new antenna support structure, including without limitation, surveys, designs, foundation, steel, and erection of the structure and supporting facilities, but not including the Tenant's own communications equipment, and shall specifically exclude any recovery for value of the business of Tenant as a going concern, future expectation of profits, loss of business or profit or related damage to Tenant. Except for the indemnity obligations set forth in this Agreement, and otherwise notwithstanding anything to the contrary in this Agreement, Tenant and Landlord each waives any claims that each may have against the other with respect to consequential, incidental or special damages, however caused, based on any theory of liability.

18. **Temporary Interruptions of Service.** If Landlord reasonably determines that continued operation of Tenant's Antenna Facilities would cause or contribute to an immediate threat to public health and/or safety (except for any issues associated with human exposure to radio frequency emissions, which is regulated by the federal government), Landlord may order Tenant to discontinue its operation. Tenant shall immediately comply with such order. Service shall be discontinued only for the period that the immediate threat exists. Landlord shall not be liable to Tenant or any other party for any interruption in Tenant's service or interference with Tenant's operation of its Antenna Facilities except as may be caused by the negligence or willful misconduct of the Landlord, its employees or agents. If the discontinuance extends for a period great than three (3) days, either consecutively or cumulatively, Tenant shall have the right to terminate this Lease within its sole discretion for cause and without payment for a termination

fee. Further, Tenant shall be entitled to a reimbursement of prepaid rent covering the period subsequent to the date of service discontinuance.

19. **Tenant Interference.**

- a. **With Structure.** In the performance of its approved use, Tenant shall at its own expense, maintain any equipment on or attached to the Leased Premises in a safe condition, in good repair and in a manner suitable to Landlord so as not to conflict with the use of the surrounding premises by Landlord. Tenant shall not materially interfere with Landlord's use of the Structure and agrees to cease all such actions that unreasonably and materially interfere with Landlord's use there-of no later than three (3) business days after receipt of written notice of the interference from Landlord. In the event that Tenant's cessation of action is material to Tenant's use of the Leased Premises and such cessation frustrates Tenant's use of the Leased Premises, within Tenant's sole discretion, Tenant shall have the immediate right to terminate this Lease for cause and without payment of a termination fee. Further, Tenant shall be entitled to a reimbursement of prepaid rent covering the period subsequent to the date of interference from Landlord.
- b. **With Higher Priority Users.** If Tenant's Antenna Facilities cause impermissible interference with higher priority users as set forth under subparagraph 5(a) above or with the equipment of pre-existing tenants installed as of the Effective Date or prior to the interfering facilities of Tenant installed after the Effective Date, Tenant shall take all measures necessary to correct and eliminate the interference. If the interference cannot be eliminated within forty-eight (48) hours after receiving Landlord's written notice of the interference, Tenant shall immediately cease operating its Antenna Facilities and shall not reactivate operation, except intermittent operation for the purpose of testing, until the interference has been eliminated. If the interference cannot be eliminated within thirty (30) days after Tenant received Landlord's written notice, Landlord or Tenant may at its option terminate this Lease immediately.
- c. **Interference Study - New Occupants.** Upon written notice by Landlord that it has a bona fide request from any other party to lease an area in close proximity to the Leased Premises ("Leased Premises Area"), Tenant shall provide to Landlord within sixty (60) days the radio frequencies currently in operation or anticipated by Tenant to be operated in the future of each transmitter and receiver installed and operational on the Leased Premises at the time of such request. Landlord may then have an independent, registered professional engineer of Landlord's choosing perform the necessary interference studies to determine if the new applicant's frequencies will cause harmful radio interference to Tenant. Landlord shall require the new applicant to pay for such interference studies.
- d. **Interference - New Occupants.** Landlord agrees that it will not grant a future lease in the Leased Premises Area to any party who is of equal or lower priority to Tenant, or allow such party to add additional equipment to the Structure, if such party's use is reasonably anticipated to interfere with Tenant's operation of its Antenna Facilities. Landlord agrees further that any future lease of the Leased Premises Area will prohibit a user of equal or lower priority from interfering with Tenant's Antenna Facilities. Landlord agrees that it will require any subsequent occupants of the Leased Premises Area of equal or lower priority to Tenant to provide Tenant these same assurances against interference. Landlord shall have the obligation to eliminate, within forty-eight (48) hours or as soon as

reasonably possible with Landlord taking all reasonable steps to expedite the termination of the interference after receiving Tenant's written notice any interference with the operation of Tenant caused by such subsequent occupants or other prior occupants, whose equipment has been subsequently modified or is malfunctioning; and if such interference is not eliminated, it shall be an event of default and Tenant shall have the right to immediately seek injunctive relief against the interfering occupant, at Tenant's expense. If such interference is not cured within thirty (30) days, Tenant shall have the right to terminate this Lease.

20. **Noise.** All wireless service facilities shall be constructed and operated in such a manner as to minimize the amount of noise impacts to residents of nearby homes and the users of recreational areas, such as public parks and trails. Noise attenuation measures shall be required for all air-conditioning units. Backup generators shall only be operated during power outages and for testing and maintenance purposes. At any time, noise attenuation measures may be required by the City of Hastings when deemed necessary. Testing and maintenance activities of wireless service facilities which generate audible noise shall occur between the hours of eight o'clock (8:00) A.M. and five o'clock (5:00) P.M., weekdays (Monday through Friday, non-holiday) excluding emergency repairs, unless allowed at other times by the City of Hastings. Testing and maintenance activities that do not generate audible noise may occur at any time, unless otherwise restricted by the City of Hastings.
21. **Installation of a Generator.** Tenant shall not install or replace any generator on the Landlord's Property without Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, Tenant shall be permitted to place an emergency generator within its Leased Premises for a period up to seven (7) days in the event of a power failure to the Antenna Facilities. In the event that Landlord grants approval for the placement of a generator on the Landlord's Property, or Tenant is permitted to place a generator within its Leased Premises due to an emergency power failure, Tenant agrees to maintain or repair any such generator within its Leased Premises, as located on Exhibit B. Tenant further agrees that Landlord may limit the noise level at the Landlord's Property that may prohibit the use of the generator and that the installation of any generator must fall within the noise level limits set by local ordinance. In the event that Tenant exceeds the noise level set forth by such local ordinance, Tenant shall take all such steps reasonably requested by Landlord in writing to reduce the sound levels to the level required by such ordinance, including, but not limited to, installing additional mufflers, or any other requirements that may be requested by Landlord in writing, including but not limited to ceasing all operations of the generator. All sound reduction measures requested by Landlord shall be performed at Tenant's sole cost and expense. If Tenant fails to immediately comply with the local noise ordinances following written notice by Landlord to Tenant, Landlord may take any and all measures to stop the use of the generator. Tenant shall further repair any and all damage caused by the use of the generator upon the Landlord's Property. All expenses incurred by Landlord hereunder, including reasonable attorneys' fees, shall be paid by Tenant to Landlord within sixty (60) days after Landlord sends to Tenant an invoice together with reasonable supporting documentation evidencing such expenses.
22. **Assignment.** Tenant will have the right to assign this Lease and its rights herein, in whole or in part, to affiliates without Landlord's consent. This Lease, or rights thereunder, may not be

sold, assigned, or transferred at any time by Tenant, except to Tenant's affiliates, without the written consent of the Landlord, such consent not to be unreasonably withheld. For purposes of this paragraph, an "affiliate" means an entity that acquires, controls, is controlled by, or is under common control with Tenant. Landlord hereby consents to the assignment by Tenant of its rights under this Lease as collateral to any entity that provides financing for the purchase of equipment used by Tenant in connection with the provision of wireless telecommunication services.

23. **Condemnation.** In the event the whole of the Leased Premises is taken by eminent domain, this Lease shall terminate as of the date title to the Leased Premises vests in the condemning authority, and Landlord shall reimburse Tenant for any prepaid rent. In the event a portion of the Leased Premises is taken by eminent domain, either party shall have the right to terminate this Lease as of the said date of title transfer, by giving thirty (30) days written notice to the other party. In the event of taking under the power of eminent domain, Tenant shall not be entitled to any portion of the reward paid for the taking and the Landlord shall receive full amount of such award. Tenant hereby expressly waives any right or claim to any portion thereof. Although all damages, where awarded as compensation for diminution value in of the leasehold or to the fee of the Leased Premises, shall belong to Landlord, Tenant shall have the right to claim and recover from the condemning authority, but not from the Landlord, such compensation as may be separately awarded or recoverable by Tenant on account of any and all damage to Tenant's business and any costs or expenses incurred by Tenant in moving/removing its equipment, personal property, Antenna Facilities and leasehold improvements.
24. **Disputes.** In the event any claim, controversy or dispute arising out of this Lease is not resolved within thirty (30) days following notice of the dispute, the parties shall in good faith first engage in face-to-face negotiations to resolve such claim, controversy or dispute. If the parties are unable to resolve the matter following face-to-face negotiations, it shall be submitted promptly to mediation. Each party shall bear its own cost of mediation. If mediation does not result in settlement within forty-five (45) days after the matter was submitted to mediation, either party may file a claim in arbitration in accordance with the following subsections:
- a. Except as set forth in subsection (c) below, all controversies arising out of or relating to this Lease or any related instruments shall be resolved by submission to final and binding arbitration administered by the American Arbitration Association ("AAA"), and any arbitration hearings or proceedings shall take place in the county in which Landlord's Property is located. Such arbitration shall be conducted in accordance with the then-most recent version of the AAA's Commercial Arbitration Rules and Mediation Procedures ("Rules") before a single arbitrator selected according to the Rules. . The award rendered by the arbitrator may be entered as a judgment in any court having jurisdiction thereof.
 - b. The aggrieved party shall initiate arbitration by sending written notice of its intention to arbitrate to the other party to this Lease and to AAA. Such notice shall contain a description of the dispute, the amount in controversy, and the remedy sought. The parties shall execute any and all documents and statements required by AAA for the arbitration or settlement of the dispute in accordance with the Rules. In no event shall any demand

for arbitration be made after the date when institution of a legal or equitable proceeding based on such claim would be barred by the applicable statute of limitations.

- c. The parties agree that punitive damages may not be awarded, and the arbitrator shall enforce this agreement to the same extent that a court would do so under applicable law. Nor may the arbitrator award any relief other than on an individual basis and that could not be awarded by a court or other tribunal of competent jurisdiction. Notwithstanding the foregoing, the arbitrator shall have the right and power to award costs and expenses, including but not limited to attorneys' fees, pursuant to Section 25.
- d. The arbitration shall be conducted in the county where the Leased Premises are located. Arbitration shall be the exclusive remedy of the parties. Either party may apply to the arbitrator seeking injunctive relief, until the arbitration award is rendered or the controversy is otherwise resolved.

Notwithstanding the foregoing provisions of this Section 24 requiring submission of disputes to mediation and arbitration, either party shall be entitled to obtain immediate equitable relief, without waiving any remedy under this Agreement, from any court of competent jurisdiction, to prevent any violation of any of the covenants, conditions or provisions contained in this Lease. If Landlord remains in default beyond any applicable cure period, Tenant will have any and all other rights available to it under law and equity.

- 25. **Enforcement and Attorneys' Fees.** In the event that either party to this Lease shall bring a claim to enforce any rights hereunder, the prevailing party shall be entitled to recover cost and reasonable attorneys' fees and other reasonable enforcement cost and expenses incurred as a result to such claim.
- 26. **Notices.** All notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested, or by courier services, addressed as follows (or any other address that the party to be notified may have designated to the sender by like notice):

If to Landlord:

City of Hastings
 Attn: City Administrator
 101 East 4th Street
 Hastings, MN 55033

If to Tenant:

New Cingular Wireless PCS, LLC
 Attn: Network Real Estate Administration
 Re: Cell Site: # MI114; Cell Site Name: HASTINGS (MN)
 Fixed Asset No.:10081824
 1025 Lenox Park Blvd NE, 3rd Floor
 Atlanta, GA 30319

With a required copy of the notice sent to the address above to AT&T Legal at:
 New Cingular Wireless PCS, LLC
 Attn: AT&T Legal Department
 Re: Cell Site #: MI114; Cell Site Name HASTINGS (MN)

Fixed Asset No: 10081824
208 S. Akard Street
Dallas, Texas, 75202-4206

27. **Authority.** Each of the individuals executing this Lease on behalf of the Tenant or the Landlord represents to the other party that such individual is authorized to do so by requisite action of the party to this Lease.
28. **Binding Effect.** This Lease shall run with the Leased Premises. This Lease shall extend to and bind the heirs, personal representatives, successors and assigns of the parties hereto.
29. **Complete Lease; Amendments.** This Lease constitutes the entire agreement and understanding of the parties and supersedes all offers, negotiation, and other agreements of any kind. There are no representations or understandings of any kind not set forth herein. Any modification of or amendment to this Lease must be in writing and executed by both parties hereto. Exhibits A, B, C, ~~and D~~ and E are incorporated into this Lease by reference.
30. **Governing Law.** This lease shall be construed in accordance with the laws of the State of Minnesota.
31. **Severability.** If any term of this Lease is found to be void or invalid, such invalidity shall not affect the remaining terms of this Lease, which shall continue in full force and effect.
32. **Memorandum.** Upon request by either party, the parties agree to promptly execute and deliver a recordable memorandum of this Lease in a form acceptable to both parties, which may be recorded by the party requesting the memorandum of lease.
33. **Counterparts.** This Lease may be signed in counterpart by the parties hereto, each of which shall be deemed an original, but all of which when taken together, shall constitute a single instrument.
34. **Cooperation.** The parties hereby agree to cooperate with each other and their authorized representatives regarding any reasonable request made subsequent to execution of this Lease, to correct any clerical errors contained in this Lease and to provide any and all additional documentation deemed necessary by either party to effectuate the transaction contemplated by this Lease. The parties further agree that "to cooperate" as used in this Lease includes but is not limited to, the agreement by the parties to execute or re-execute any documents that either party reasonably deems necessary and desirable to carry out the intent to this Lease. As a condition precedent to payment, Landlord agrees to provide Tenant with a completed IRS Form W-9, or its equivalent, upon execution of this Agreement and at such other times as may be reasonably requested by Tenant, including any change in Landlord's name or address.
35. **Compliance with Law.** Tenant agrees to comply with all federal, state and local laws, orders, rules and regulations ("Laws") applicable to Tenant's use of the Antenna Facilities on the Landlord's Property. Landlord agrees to comply with all Laws relating to Landlord's

ownership and use of the Landlord's Property and any improvements on the Landlord's Property.

IN WITNESS WHEREOF, the parties hereto have caused this Lease to be executed as of the date and year first above written.

LANDLORD

Dated: _____, 2020

**CITY OF HASTINGS,
a Minnesota municipal corporation**

By: _____
Mary Fasbender, Its Mayor

(SEAL)

By: _____
Julie A. Flaten, City Clerk

TENANT

Dated: _____, 2020

**NEW CINGULAR WIRELESS PCS, LLC
a Delaware limited liability company**

**By: AT&T Mobility Corporation
Its: Manager**

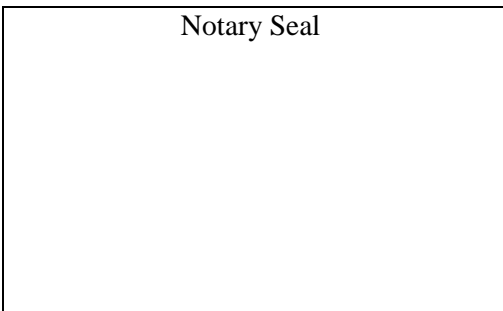
By: _____
Name: _____
Title: _____

LANDLORD ACKNOWLEDGEMENT

STATE OF _____)
) SS.
COUNTY OF _____)

I certify that I know or have satisfactory evidence that **Mary Fasbender** is the person who appeared before me, and said person acknowledged that said person signed this instrument, on oath stated that said person was authorized to execute the instrument and acknowledged it as the **Mayor** of the **City of Hastings**, a Minnesota municipal corporation, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: _____.



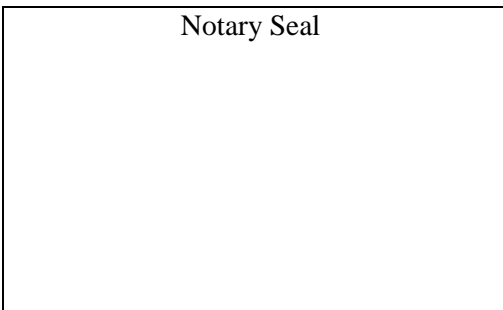
(Signature of Notary)

(Legibly Print or Stamp Name of Notary)
Notary Public in and for the State of _____
My appointment expires: _____

STATE OF _____)
) SS.
COUNTY OF _____)

I certify that I know or have satisfactory evidence that **Julie A. Flaten** is the person who appeared before me, and said person acknowledged that said person signed this instrument, on oath stated that said person was authorized to execute the instrument and acknowledged it as the **City Clerk** of the **City of Hastings**, a Minnesota municipal corporation, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: _____.



(Signature of Notary)

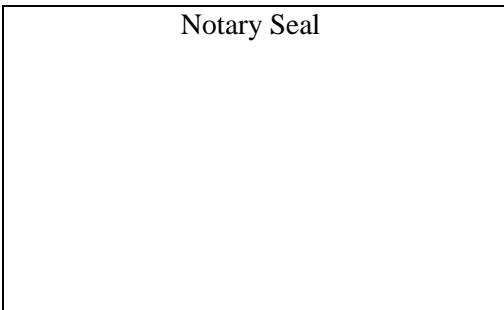
(Legibly Print or Stamp Name of Notary)
Notary Public in and for the State of _____
My appointment expires: _____

TENANT ACKNOWLEDGEMENT

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/she signed this instrument, on oath stated that he/she was authorized to execute the instrument and acknowledged it as the _____ of AT&T Mobility Corporation, the Manager of **New Cingular Wireless PCS, LLC, a Delaware limited liability company**, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: _____.



(Signature of Notary)

(Legibly Print or Stamp Name of Notary)

Notary Public in and for the State of _____

My appointment expires: _____

LIST OF EXHIBITS

- Exhibit "A": Legal Description of the Property
- Exhibit "B": Depiction of Water Tower
- Exhibit "C": Site Plans
- Exhibit "D": Equipment List
- Exhibit "E": Analysis of Paint Content

EXHIBIT "A"

Legal Description of the Property

Street Address: 2500 Enterprise Avenue, Hastings, MN 55033

Parcel #: 19-03500-60-011

That certain Leased Premises (and access and utility easements) on a portion of the real property described as follows:

The North One Half of the Northwest Quarter of the Southwest Quarter of Section 35, Township 115N., Range 17W., Dakota County, Minnesota.

SITE PHOTO



PROJECT: LTE 4C/5C, RETROFIT
SITE NUMBER: MNL03114
FA NUMBER: 10081824
PTN NUMBER: 3511A0BQ6J/3511A0BQXS/3511A0BRWG
PACE NUMBER: MRUMW021178/MRUMW021032/MRUMW021200
SITE NAME: HASTINGS
SITE ADDRESS: 2500 ENTERPRISE AVENUE
 HASTINGS, MN 55033
JURISDICTION: HASTINGS

SHEET INDEX

SHEET	DESCRIPTION
T1	TITLE SHEET
SP1	NOTES AND SPECIFICATIONS
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SCOPE OF WORK

REDLINED AS-BUILTS 8/27/2018
 LTE 4C/5C/RETROFIT INSTALL
 MERIDIAN BLUE CONSTRUCTION, KAYLA AMUNDSON, PROJECT MANAGER
 INSTALLED:
 (3) NEW LTE 4C/5C PANEL ANTENNAS - MOUNTED IN POS 2
 (3) NEW 2C B66 RRH'S - INSTALLED IN POS 3
 (3) NEW 4C B25 RRH'S - INSTALLED IN POS 2
 (3) NEW 5C B14 RRH'S - INSTALLED IN POS 2
 (12) NEW 8FT RF JUMPERS - INSTALLED FROM THE B66 RRH'S TO THE ANTENNA IN POS 3
 (12) NEW 8FT RF JUMPERS - INSTALLED FROM THE B25 RRH'S TO THE ANTENNA IN POS 2
 (12) NEW 8FT RF JUMPERS - INSTALLED FROM THE B14 RRH'S TO THE ANTENNA IN POS 2
 (4) NEW 15FT RF JUMPERS - INSTALLED FROM THE ALPHA & BETA UMTS TMA TO THE POS 2 ANT FOR THE 1900 UMTS
 (2) NEW 8FT RF JUMPERS - INSTALLED FROM THE GAMMA UMTS TMA TO THE POS 2 ANT FOR THE 1900 UMTS
 (6) NEW 20FT RF JUMPERS - INSTALLED FROM THE TMA'S TO THE TO THE ANTENNA IN POS 1 FOR THE 850 UMTS
 (2) NEW 18FT DC JUMPERS - INSTALLED FROM THE ALPHA B25 & B14 RRH'S TO THE ANT IN POS 2
 (2) NEW 15FT DC JUMPERS - INSTALLED FROM THE BETA B25 & B14 RRH'S TO THE ANT IN POS 2
 (2) NEW 18FT DC JUMPERS - INSTALLED FROM THE GAMMA B25 & B14 RRH'S TO THE ANT IN POS 2
 (1) NEW 10FT DC SECTOR TRUNK - INSTALLED FROM THE ALPHA DC2 TO THE FC12
 (1) NEW 8FT DC SECTOR TRUNK - INSTALLED FROM THE BETA DC2 TO THE FC12
 (1) NEW 20FT DC SECTOR TRUNK - INSTALLED FROM THE GAMMA DC2 TO THE FC12
 (3) NEW DC2'S
 (1) NEW FC12
 (2) NEW 210FT DC TRUNKS - INSTALLED FROM THE FC12 TO THE RACK MOUNTED DC12
 (1) NEW DC12 RACK MOUNTED RAYCAP - INSTALLED IN THE EXISTING FIF RACK
 (12) NEW 26FT RUNS OF TELCOFLEX - INSTALLED FROM THE DC12 TO THE POWER PLANT
 (9) NEW DC BREAKERS - INSTALLED IN THE EX POWER PLANT
 DECOMED:
 (3) EX PANEL ANTENNAS
 (6) EX TMA'S
 (3) DIPLEXERS
 (3) EX AWS RRH'S

CHECKED BY:	RI		
APPROVED BY:	DS		
#	DATE	DESCRIPTION	INT.
A	10/23/17	1st SET SAC REVIEW	AA
B	11/30/17	2nd SET SAC REVIEW	AA
O	12/20/17	1st SET AT&T APPROVAL	AA
1	4/6/18	REVISION	AA

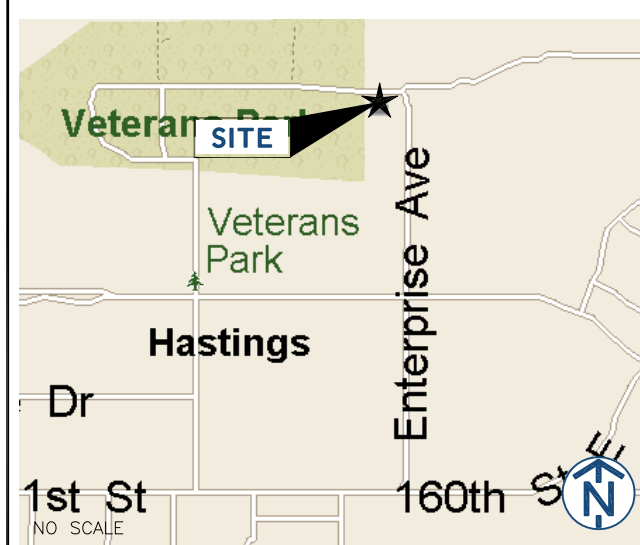
PROJECT INFORMATION

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PACE NUMBER: MRUMW021178/MRUMW021032/MRUMW021200
USID NUMBER: 1760 MRUMW021200
APPLICANT: AT&T WIRELESS, 901 S. MARQUETTE AVE., MINNEAPOLIS, MN 55402
PROPERTY OWNER: CITY OF HASTINGS PUBLIC WORKS, 1225 PROGRESS DRIVE, HASTINGS, MN 55033, NICK EGGER, (651) 480-2370
TOWER OWNER: CITY OF HASTINGS PUBLIC WORKS, 1225 PROGRESS DRIVE, HASTINGS, MN 55033
JURISDICTION: HASTINGS
COUNTY: DAKOTA
SITE COORDINATES FROM (RFDS):
LATITUDE: 45.0417781°/45° 2' 30.4008"
LONGITUDE: -93.1952221°/-93° 11' 42.7992"
GROUND ELEV.: 845'
PROPOSED USE: TELECOMMUNICATIONS FACILITY
AT&T PROJECT MANAGER: PETER MCENERY, (952) 258-9629, PM753T@ATT.COM
AT&T CONST. MANAGER: ANTHONY J SANTI, (763) 203-3915, AS539A@ATT.COM
 NOTE: DRAWING SCALES ARE FOR 11"x17" SHEETS UNLESS OTHERWISE NOTED.

VICINITY MAP



LOCAL MAP



CODE COMPLIANCE

- 2015 MINNESOTA STATE BUILDING CODE
- 2017 NATIONAL ELECTRICAL CODE
- TIA/EIA-222-G

REFERENCE MATERIALS

- THESE DRAWINGS ARE BASED ON AT&T SCOPING DOCUMENT DATED 09/21/2017
- CONTRACTOR TO USE LATEST VERSION OF THE RFDS DATED 06/05/2015 WITH THE CONSTRUCTION DRAWINGS PER SCOPE OF WORK

SPECIAL NOTES

- ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH CURRENT AT&T CONSTRUCTION INSTALLATION GUIDE.
- EXISTING CONDITIONS WILL BE CHANGED & VERIFIED IN FIELD.
- IF SIGNIFICANT DEVIATIONS OR DETERIORATION ARE ENCOUNTERED AT THE TIME OF CONSTRUCTION, A REPAIR PERMIT WILL BE OBTAINED AND CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
- THESE DRAWINGS ARE FULL SIZE & SCALEABLE ON 11"x17" SHEET SIZE.
- STATEMENT THAT COMPLIANCE WITH THE ENERGY CODE IS NOT REQUIRED.
- SCOPE OF WORK DOES NOT INVOLVE MODIFICATIONS TO EXTERIOR ENVELOPE OF BUILDING, HVAC SYSTEMS OR ELECTRICAL LIGHTING.

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.

PROJECT CONSULTANTS

PROJECT MANAGER: SAC WIRELESS, 540 W. MADISON ST. 17TH FLOOR, CHICAGO, IL 60661
CONTACT: AMY HUTCHINGS, amy.hutchings@sacw.com
SITE ACQUISITION: SAC WIRELESS, 540 W. MADISON ST. 17TH FLOOR, CHICAGO, IL 60661
CONTACT: PETER TESSLER, peter.tessler@sacw.com
ENGINEER/ARCHITECT: FULLERTON ENGINEERING, 1100 E. WOODFIELD RD., SUITE 500, SCHAUMBURG, IL 60173
CONTACT: HILDA ALLAWIRDI, (847) 908-8413, hallawirdi@fullertonengineering.com
CONSTRUCTION: SAC WIRELESS, 540 W. MADISON ST. 16TH FLOOR, CHICAGO, IL 60661
CONTACT: RITA STOLZ, rita.stolz@sacw.com

DRIVING DIRECTIONS

DEPART FROM 901 MARQUETTE AVENUE, MINNEAPOLIS, MN 55402:
 TURN RIGHT (EAST) ONTO S 6TH ST [6TH ST S]
 TAKE RAMP ONTO I-94 [US-12]
 MERGE ONTO I-35E [I-94]
 KEEP RIGHT ONTO I-94 [US-12]
 AT EXIT 244, TURN LEFT ONTO RAMP
 ROAD NAME CHANGES TO US-10 [US-61]
 KEEP STRAIGHT ONTO US-61 [POINT DOUGLAS DR S]
 TURN LEFT (EAST) ONTO MN-316 [RED WING BLVD]
 TURN LEFT (EAST) ONTO SPIRAL BLVD
 TURN LEFT (NORTH) ONTO ENTERPRISE AVE
 TURN LEFT (SOUTH) ONTO LOCAL ROAD(S)
 ARRIVE AT SITE.



TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN MINNESOTA, CALL GOPHER STATE ONE CALL

TOLL FREE: 1-800-252-1166 OR FAX A LOCATE: 1-800-236-4967

www.gopherstateonecall.org

MINNESOTA STATUTE REQUIRES MIN OF 48 HOURS NOTICE BEFORE YOU EXCAVATE

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FA NUMBER	LTE 4C/5C, RETROFIT 10081824
SITE ADDRESS	2500 ENTERPRISE AVENUE HASTINGS, MN 55033
SHEET NAME	TITLE SHEET
SHEET NUMBER	T1



901 S. MARQUETTE AVENUE
MINNEAPOLIS, MN 55402



WIRELESS
540 W. MADISON ST. 17TH FLOOR
CHICAGO, IL 60661



1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173
TEL: 847-908-8400
www.FullertonEngineering.com

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1	4/6/18	REVISION	AA

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Daniel W Smith
license # 52398

SITE NAME

HASTINGS

FA NUMBER

**LTE 4C/5C, RETROFIT
10081824**

SITE ADDRESS

2500 ENTERPRISE AVENUE
HASTINGS, MN 55033

SHEET NAME

**NOTES AND
SPECIFICATIONS**

SHEET NUMBER

SP1

GENERAL CONSTRUCTION

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR/CM – SAC WIRELESS
OWNER – AT&T WIRELESS
- ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.
- GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFIRM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
- GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
- ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
- SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. CONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
- WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.

- THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
- THE GENERAL CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
- ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
- ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
- CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
- CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.
- THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).
- OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
- NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
- ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING". IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
- CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
- CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- NO WHITE STROBE LIGHTS ARE PERMITTED. LIGHTING IF REQUIRED, WILL MEET FAA STANDARDS AND REQUIREMENTS.

ANTENNA MOUNTING

- DESIGN AND CONSTRUCTION OF ANTENNA SUPPORTS SHALL CONFORM TO CURRENT ANSI/TIA-222 OR APPLICABLE LOCAL CODES.

- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS NOTED OTHERWISE.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS NOTED OTHERWISE.
- DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM A780.
- ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH LOCK NUTS, DOUBLE NUTS AND SHALL BE TORQUED TO MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL INSTALL ANTENNA PER MANUFACTURER'S RECOMMENDATION FOR INSTALLATION AND GROUNDING.
- ALL UNUSED PORTS ON ANY ANTENNAS SHALL BE TERMINATED WITH A 50-OHM LOAD TO ENSURE ANTENNAS PERFORM AS DESIGNED.
- PRIOR TO SETTING ANTENNA AZIMUTHS AND DOWNTILTS, ANTENNA CONTRACTOR SHALL CHECK THE ANTENNA MOUNT FOR TIGHTNESS AND ENSURE THAT THEY ARE PLUMB. ANTENNA AZIMUTHS SHALL BE SET FROM TRUE NORTH AND BE ORIENTED WITHIN +/- 5% AS DEFINED BY THE RFDS. ANTENNA DOWNTILTS SHALL BE WITHIN +/- 0.5% AS DEFINED BY THE RFDS. REFER TO ND-00246.
- JUMPERS FROM THE TMA'S MUST TERMINATE TO OPPOSITE POLARIZATION'S IN EACH SECTOR.
- CONTRACTOR SHALL RECORD THE SERIAL #, SECTOR, AND POSITION OF EACH ACTUATOR INSTALLED AT THE ANTENNAS AND PROVIDE THE INFORMATION TO AT&T.
- TMA'S SHALL BE MOUNTED ON PIPE DIRECTLY BEHIND ANTENNAS AS CLOSE TO ANTENNA AS FEASIBLE IN A VERTICAL POSITION.

TORQUE REQUIREMENTS

- ALL RF CONNECTIONS SHALL BE TIGHTENED BY A TORQUE WRENCH.
- ALL RF CONNECTIONS, GROUNDING HARDWARE AND ANTENNA HARDWARE SHALL HAVE A TORQUE MARK INSTALLED IN A CONTINUOUS STRAIGHT LINE FROM BOTH SIDES OF THE CONNECTION.
A. RF CONNECTION BOTH SIDES OF THE CONNECTOR.
B. GROUNDING AND ANTENNA HARDWARE ON THE NUT SIDE STARTING FROM THE THREADS TO THE SOLID SURFACE. EXAMPLE OF SOLID SURFACE: GROUND BAR, ANTENNA BRACKET METAL.

FIBER & POWER CABLE MOUNTING

- THE FIBER OPTIC TRUNK CABLES SHALL BE INSTALLED INTO CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY. WHEN INSTALLING FIBER OPTIC TRUNK CABLES INTO A CABLE TRAY SYSTEM, THEY SHALL BE INSTALLED INTO AN INTER DUCT AND A PARTITION BARRIER SHALL BE INSTALLED BETWEEN THE 600 VOLT CABLES AND THE INTER DUCT IN ORDER TO SEGREGATE CABLE TYPES. OPTIC FIBER TRUNK CABLES SHALL HAVE APPROVED CABLE RESTRAINTS EVERY (60) SIXTY FEET AND SECURELY FASTENED TO THE CABLE TRAY SYSTEM. NFPA 70 (NEC) ARTICLE 770 RULES SHALL APPLY.
- THE TYPE TC-ER CABLES SHALL BE INSTALLED INTO CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY AND SHALL BE SECURED AT INTERVALS NOT EXCEEDING (6) SIX FEET. AN EXCEPTION; WHERE TYPE TC-ER CABLES ARE NOT SUBJECT TO PHYSICAL DAMAGE, CABLES SHALL BE PERMITTED TO MAKE A TRANSITION BETWEEN CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY WHICH ARE SERVING UTILIZATION EQUIPMENT OR DEVICES, A DISTANCE (6) SIX FEET SHALL NOT BE EXCEEDED WITHOUT CONTINUOUS SUPPORTING. NFPA 70 (NEC) ARTICLES 336 AND 392 RULES SHALL APPLY.
- WHEN INSTALLING OPTIC FIBER TRUNK CABLES OR TYPE TC-ER CABLES INTO CONDUITS, NFPA 70 (NEC) ARTICLE 300 RULES SHALL APPLY.

COAXIAL CABLE NOTES

- TYPES AND SIZES OF THE ANTENNA CABLE ARE BASED ON ESTIMATED LENGTHS. PRIOR TO ORDERING CABLE, CONTRACTOR SHALL VERIFY ACTUAL LENGTH BASED ON CONSTRUCTION LAYOUT AND NOTIFY THE PROJECT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
- CONTRACTOR SHALL VERIFY THE DOWN-TILT OF EACH ANTENNA WITH A DIGITAL LEVEL.
- CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION.
- ALL JUMPERS TO THE ANTENNAS FROM THE MAIN TRANSMISSION LINE SHALL BE 1/2" DIA. LDF AND SHALL NOT EXCEED 6'-0".

- ALL COAXIAL CABLE SHALL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE, IN AN APPROVED MANNER, AT DISTANCES NOT TO EXCEED 4'-0" OC.
- CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING BOTH THE INSTALLATION AND GROUNDING OF ALL COAXIAL CABLES, CONNECTORS, ANTENNAS, AND ALL OTHER EQUIPMENT.
- CONTRACTOR SHALL GROUND ALL EQUIPMENT. INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES, AND RET CONTROL CABLES AS A COMPLETE SYSTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED WIREMEN IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATION AND RECOMMENDATION.
- CONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND RET CONTROL CABLES. CABLE STRAIN-RELIEFS AND CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- CONTRACTOR TO VERIFY THAT EXISTING COAX HANGERS ARE STACKABLE SNAP IN HANGERS. IF EXISTING HANGERS ARE NOT STACKABLE SNAP IN HANGERS THE CONTRACTOR SHALL REPLACE EXISTING HANGERS WITH NEW SNAP IN HANGERS IF APPLICABLE.

GENERAL CABLE AND EQUIPMENT NOTES

- CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ANTENNA, TMA'S, DIPLEXERS, AND COAX CONFIGURATION, MAKE AND MODELS PRIOR TO INSTALLATION.
- ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL REFERENCE THE TOWER STRUCTURAL ANALYSIS/DESIGN DRAWINGS FOR DIRECTIONS ON CABLE DISTRIBUTION/ROUTING.
- ALL OUTDOOR RF CONNECTORS/CONNECTIONS SHALL BE WEATHERPROOFED, EXCEPT THE RET CONNECTORS, USING BUTYL TAPE AFTER INSTALLATION AND FINAL CONNECTIONS ARE MADE. BUTYL TAPE SHALL HAVE A MINIMUM OF ONE-HALF TAPE WIDTH OVERLAP ON EACH TURN AND EACH LAYER SHALL BE WRAPPED THREE TIMES. WEATHERPROOFING SHALL BE SMOOTH WITHOUT BUCKLING. BUTYL BLEEDING IS NOT ALLOWED.
- IF REQUIRED TO PAINT ANTENNAS AND/OR COAX:
A. TEMPERATURE SHALL BE ABOVE 50° F.
B. PAINT COLOR MUST BE APPROVED BY BUILDING OWNER/LANDLORD.
C. FOR REGULATED TOWERS, FAA/FCC APPROVED PAINT IS REQUIRED.
D. DO NOT PAINT OVER COLOR CODING OR ON EQUIPMENT MODEL NUMBERS
- ALL CABLES SHALL BE GROUNDED WITH COAXIAL CABLE GROUND KITS. FOLLOW THE MANUFACTURER'S RECOMMENDATIONS.
A. GROUNDING AT THE ANTENNA LEVEL.
B. GROUNDING AT MID LEVEL, TOWERS WHICH ARE OVER 200'-0", ADDITIONAL CABLE GROUNDING REQUIRED.
C. GROUNDING AT BASE OF TOWER PRIOR TO TURNING HORIZONTAL.
D. GROUNDING OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT.
E. GROUNDING INSIDE THE EQUIPMENT SHELTER AT THE ENTRY PORT.
- ALL PROPOSED GROUND BAR DOWNLEADS ARE TO BE TERMINATED TO THE EXISTING ADJACENT GROUND BAR DOWNLEADS A MINIMUM DISTANCE OF 4'-0" BELOW GROUND BAR. TERMINATIONS MAY BE EXOTHERMIC OR COMPRESSION.

REDLINED AS-BUILTS 8/27/2018
LTE 4C/5C/RETROFIT INSTALL
MERIDIAN BLUE CONSTRUCTION
KAYLA AMUNDSON, PROJECT MANAGER



901 S. MARQUETTE AVENUE
MINNEAPOLIS, MN 55402



WIRELESS

540 W. MADISON ST. 17TH FLOOR
CHICAGO, IL 60661



1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173
TEL: 847-908-8400
www.FullertonEngineering.com

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B	11/30/17	2nd SET SAC REVIEW	AA
O	12/20/17	1st SET AT&T APPROVAL	AA
1	4/6/18	REVISION	AA

NOTE:

THE CONTRACTOR AND SUBCONTRACTORS SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER

GENERAL ABBREVIATIONS

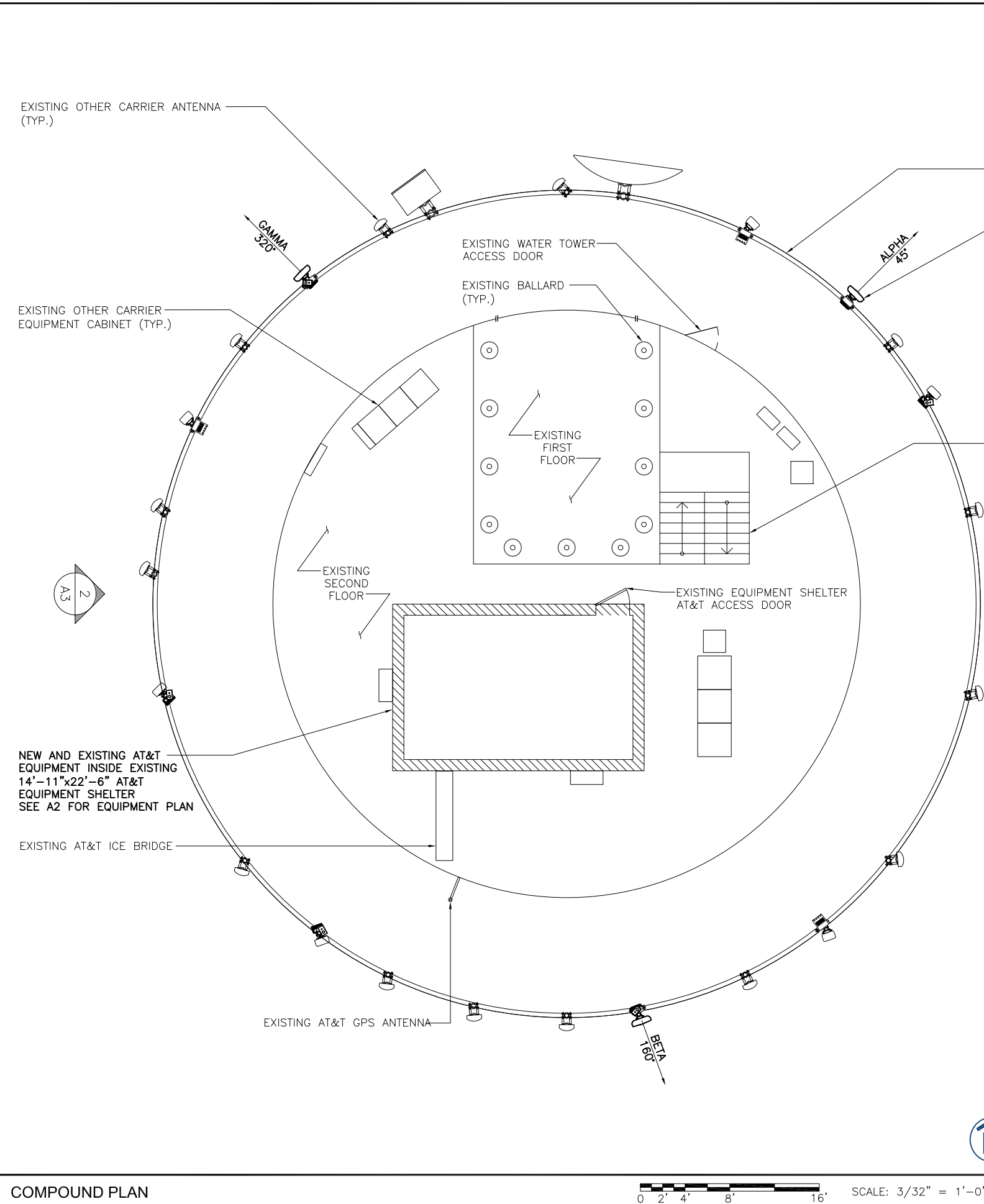
AFF	ABOVE FINISHED FLOOR
AGL	ABOVE GRADE LEVEL
AMSL	ABOVE MEAN SEA LEVEL
APPROX	APPROXIMATE
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
CL	CENTERLINE
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CND	CONDUIT
DWG	DRAWING
FT	FOOT(FEET)
EGB	EQUIPMENT GROUND BAR
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ELEV	ELEVATION
EQUIP	EQUIPMENT
(E)	EXISTING
EXT	EXTERIOR
FND	FOUNDATION
F	FIBER
GA	GAUGE
GALV	GALVANIZED
GPS	GLOBAL POSITIONING SYSTEM
GND	GROUND
LP	LIQUID PROPANE
MAX	MAXIMUM
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MTS	MANUAL TRANSFER SWITCH
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OE/OT	OVERHEAD ELECTRIC/TELCO
PPC	POWER PROTECTION CABINET
PL	PROPERTY LINE
RGS	RIGID GALVANIZED STEEL
IN	INCH(ES)
INT	INTERIOR
LB(S), #	POUND(S)
SF	SQUARE FOOT
STL	STEEL
TYP	TYPICAL
UE/UT	UNDERGROUND ELECTRIC/TELCO
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
W/	WITH
XFMR	TRANSFORMER

TELECOM ABBREVIATIONS

BTS	BASE TRANSMISSION STATION
FIF	FACILITY INTERFACE FRAME
GSM	GLOBAL SYSTEM FOR MOBILE COMMUNICATION
LTE	LONG TERM EVOLUTION
MW	MICROWAVE
ODU	OUTDOOR UNIT
RET	REMOTE ELECTRIC TILT
RRU	REMOTE RADIO UNIT
TMA	TOWER MOUNTED AMPLIFIER
UMTS	UNIVERSAL MOBILE TELECOMMUNICATION SYSTEM

SYMBOLS

	REVISION
	WORK POINT
	UTILITY POLE
	BRICK
	COMPRESSED STONE
	CONCRETE
	EARTH
	GRAVEL
	CENTERLINE
	PROPERTY LINE
	LEASE LINE
	EASEMENT LINE
	FENCE
	CHAINLINK
	WOOD
	WROUGHT IRON
	ELECTRIC OVERHEAD
	ELECTRIC UNDERGROUND
	FIBER OVERHEAD
	FIBER UNDERGROUND
	TELEPHONE OVERHEAD
	TELEPHONE UNDERGROUND
	DCPOWER



SITE PHOTO 1 SCALE: N.T.S. 2



SITE PHOTO 2 SCALE: N.T.S. 3

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Daniel W Smith
License # 52398
DWS

SITE NAME

HASTINGS

FA NUMBER

LTE 4C/5C, RETROFIT 10081824

SITE ADDRESS

2500 ENTERPRISE AVENUE HASTINGS, MN 55033

SHEET NAME

COMPOUND PLAN

SHEET NUMBER

A1

COMPOUND PLAN

0 2' 4' 8' 16' SCALE: 3/32" = 1'-0" 1



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Daniel W Smith
License # 52398

SITE NAME

HASTINGS

FA NUMBER

**LTE 4C/5C, RETROFIT
10081824**

SITE ADDRESS

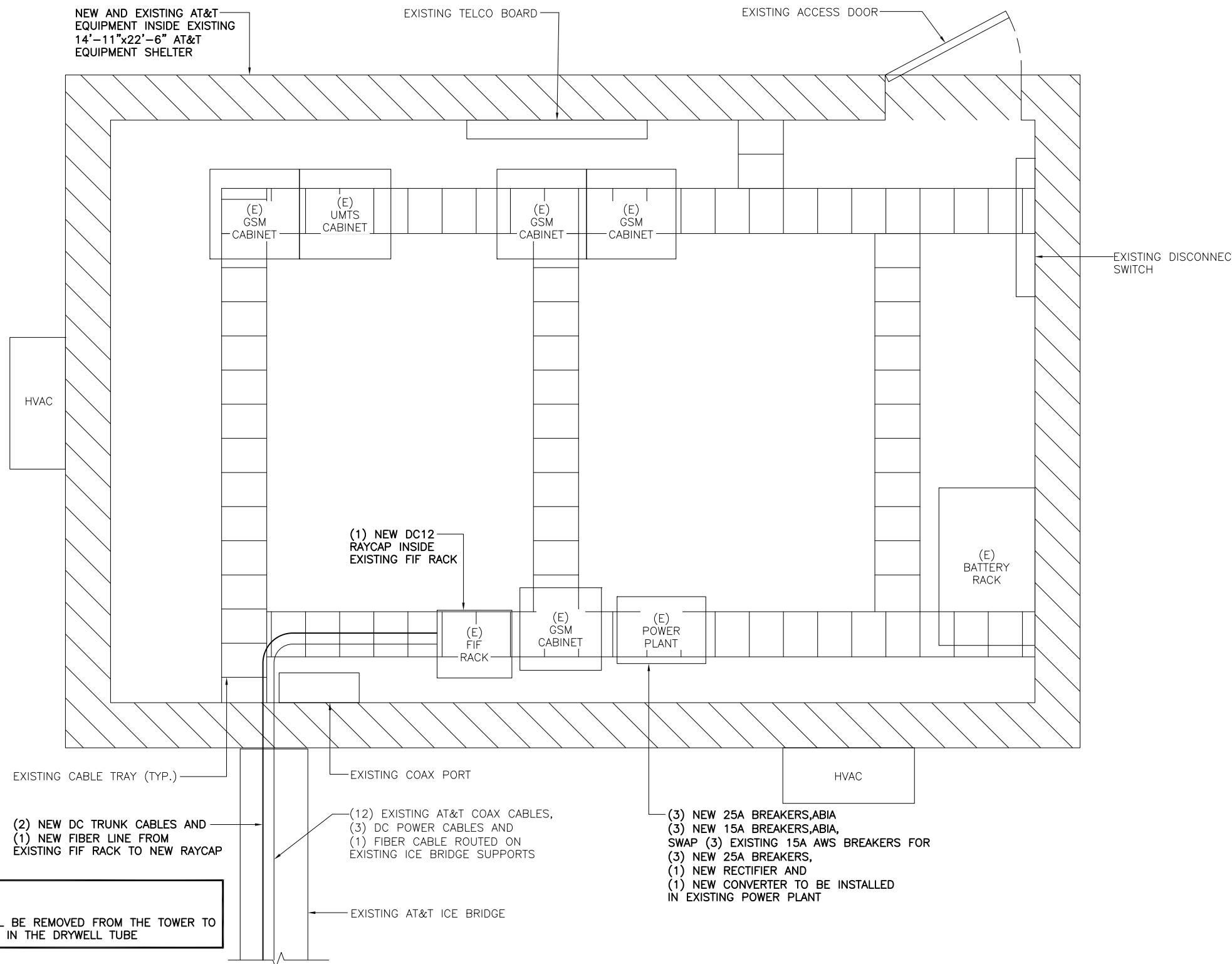
**2500 ENTERPRISE AVENUE
HASTINGS, MN 55033**

SHEET NAME

**EQUIPMENT
PLAN**

SHEET NUMBER

A2



NOTE:
UNUSED CABLES SHALL BE REMOVED FROM THE TOWER TO ELIMINATE CONGESTION IN THE DRYWELL TUBE



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

EQUIPMENT PLAN

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FA NUMBER

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10081824**

SITE ADDRESS

**2500 ENTERPRISE AVENUE
HASTINGS, MN 55033**

SHEET NAME

ELEVATIONS

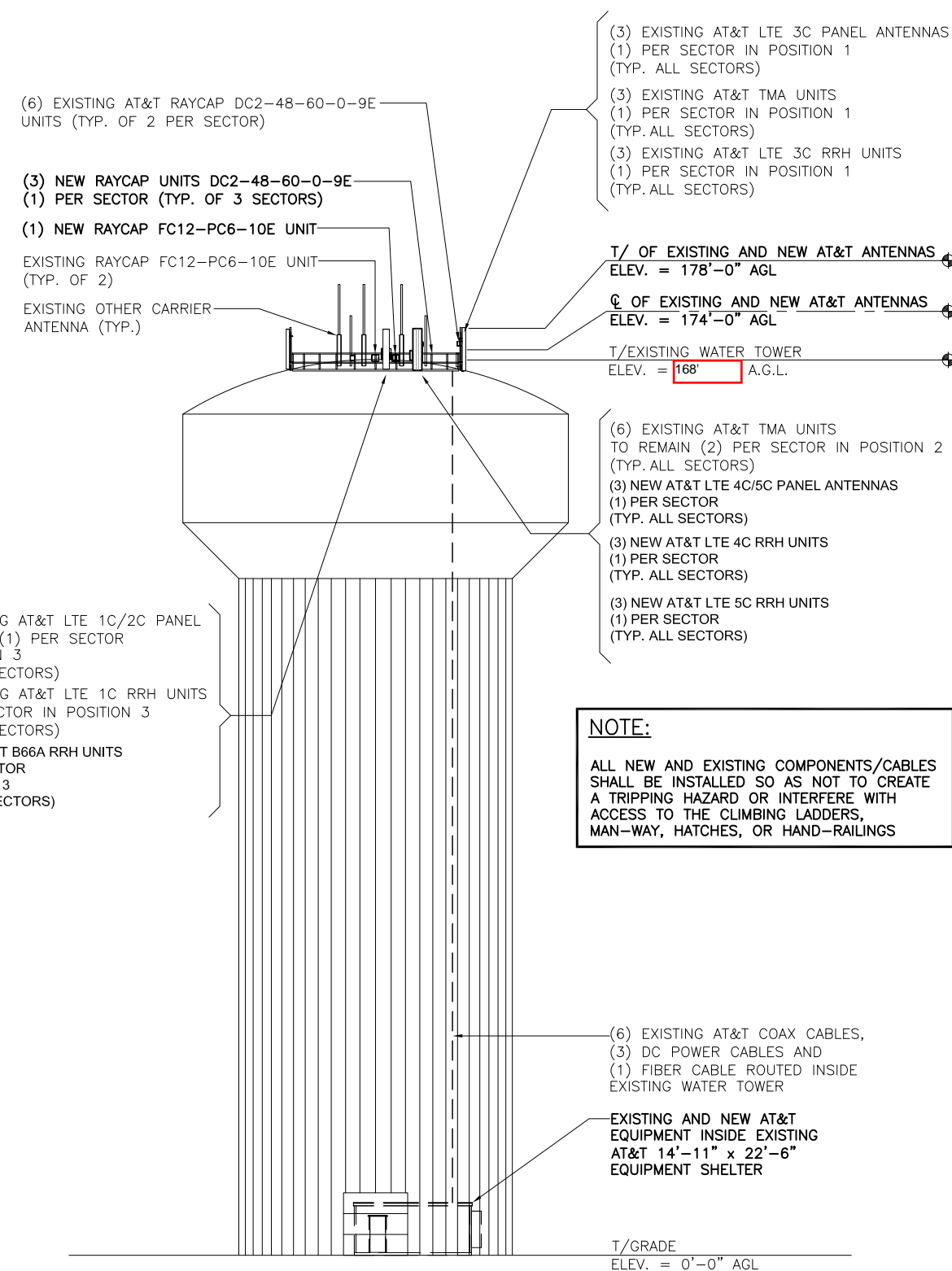
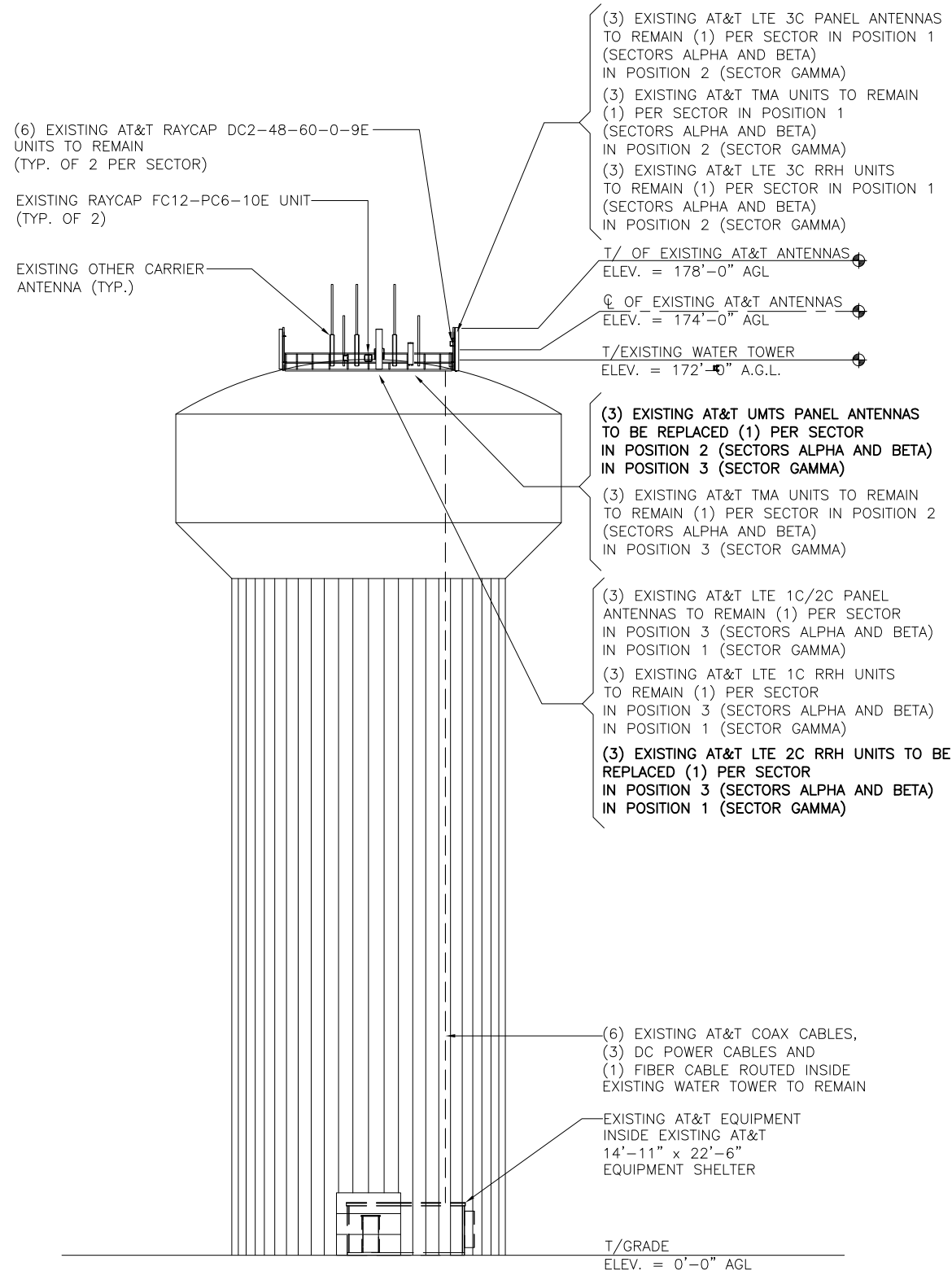
SHEET NUMBER

A3

NOTE:
ALL UNUSED COMPONENTS, CABLES, HARDWARE, ETC. SHALL BE REMOVED FROM THE SITE

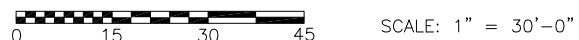
NOTES:
1. CALCULATIONS FOR THE STRUCTURE WERE PREPARED BY FULLERTON AND THOSE CALCULATIONS CERTIFY THE CAPACITY OF THE STRUCTURE TO SUPPORT THE NEW EQUIPMENT
2. CABLES NOT SHOWN FOR CLARITY

PAINT NOTE:
ALL NEW AND EXISTING ANTENNAS, MICROWAVE EQUIPMENT, AND MOUNTING HARDWARE TO BE PAINTED TO MATCH THE COLORS AND/OR SIMULATE THE MATERIALS OF THE BUILDING FACADE ON WHICH THEY ARE MOUNTED.



NOTE:
ALL NEW AND EXISTING COMPONENTS/CABLES SHALL BE INSTALLED SO AS NOT TO CREATE A TRIPPING HAZARD OR INTERFERE WITH ACCESS TO THE CLIMBING LADDERS, MAN-WAY, HATCHES, OR HAND-RAILINGS

EXISTING ELEVATION



FINAL ELEVATION



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HASTINGS

FA NUMBER

**LTE 4C/5C, RETROFIT
10081824**

SITE ADDRESS

2500 ENTERPRISE AVENUE
HASTINGS, MN 55033

SHEET NAME

**ANTENNA
PLANS**

SHEET NUMBER

A4

NOTE:

ALL TOWER PENETRATIONS ARE REQUIRED TO BE COMPLETELY SEALED WITH THE APPROPRIATE WEATHERPROOF BOOT

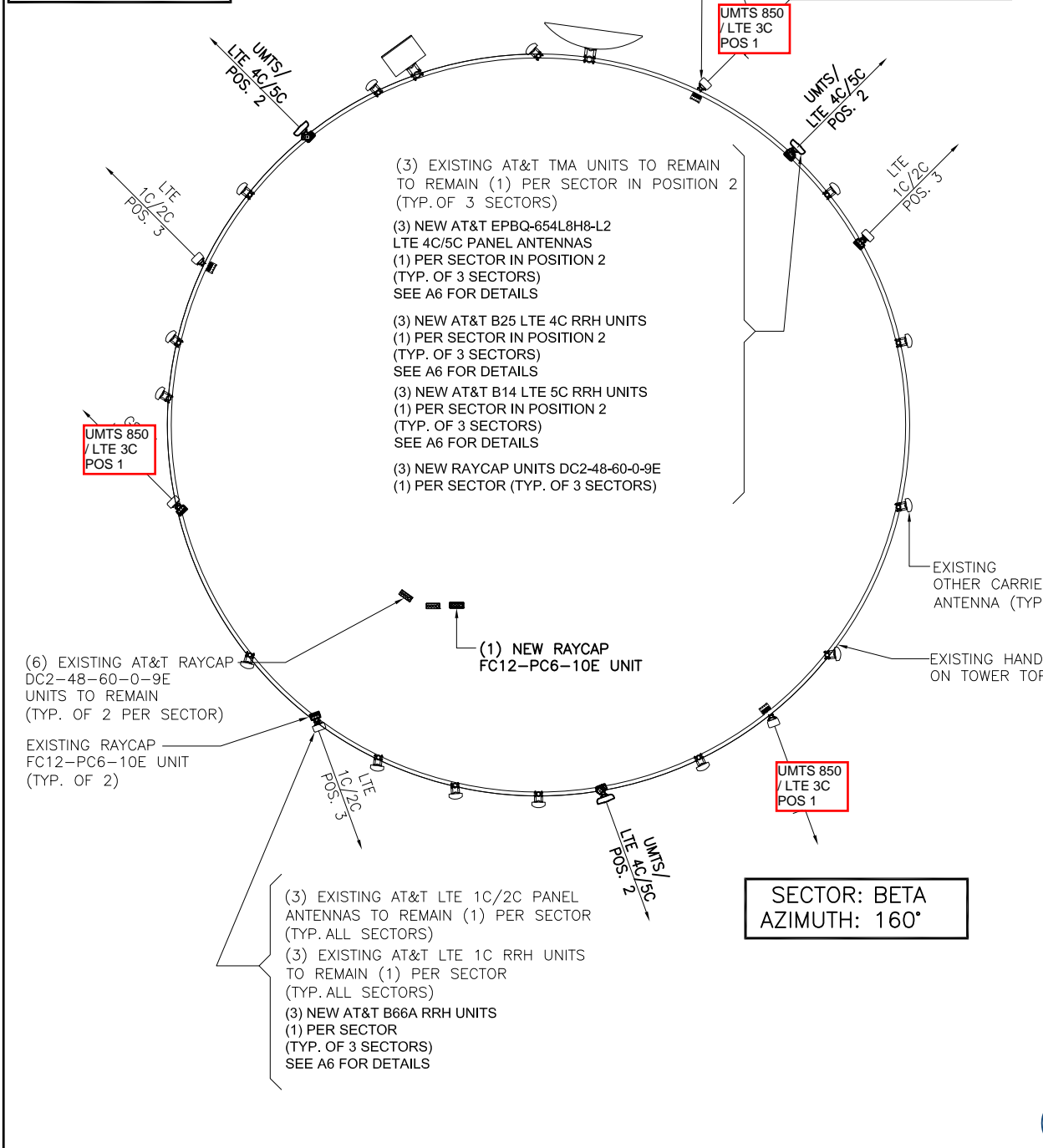
NOTE:

ALL CABLES SHALL BE MANUFACTURED OR CUT TO THE APPROPRIATE LENGTH AND INSTALLED AS DISCREETLY AS POSSIBLE

NOTE:

INCLUDE NEOPRENE, A METAL SHIM, NYLON WASHERS, AND COLORED (TO MATCH THE TOWER) TAPE AS NECESSARY BENEATH AND AROUND ALL CLAMPS, ANGLE ADAPTERS, ETC.

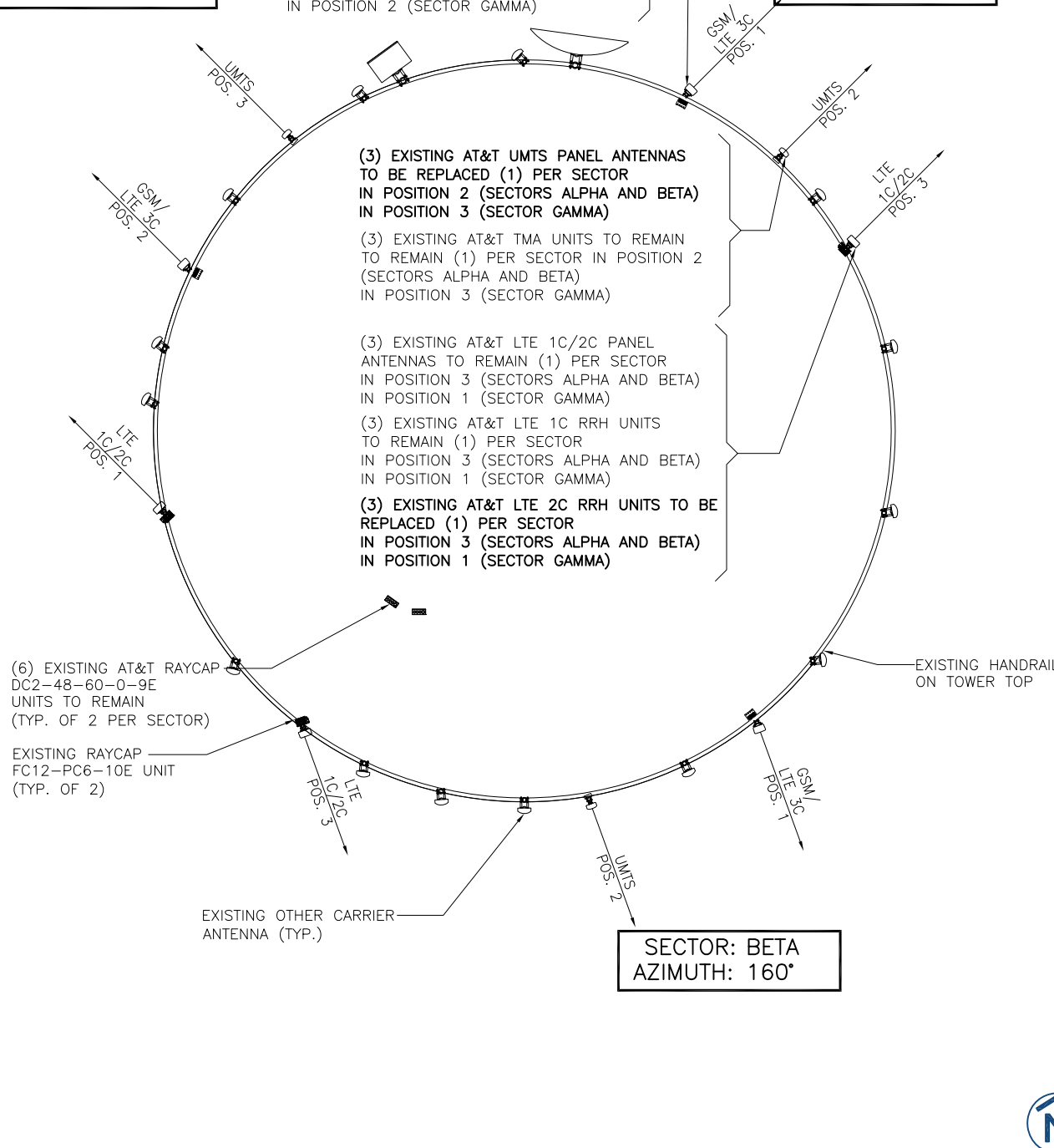
**SECTOR: GAMMA
AZIMUTH: 315°**



FINAL ANTENNA PLAN

SCALE: 1/16" = 1'-0" 2

**SECTOR: GAMMA
AZIMUTH: 315°**



EXISTING ANTENNA PLAN

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



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FA NUMBER

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10081824**

SITE ADDRESS

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HASTINGS, MN 55033

SHEET NAME

**ANTENNA
AND CABLE
CONFIGURATION**

SHEET NUMBER

A5

NOTE:
EACH COMPONENT, MOUNTING PIPE, CABLE, OR GROUP OF CABLES (IF ROUTED TOGETHER), SHOULD INCLUDE A TAG CLEARLY IDENTIFYING IT AS AT&T EQUIPMENT. CABLES SHALL BE MARKED AT THE BASE OF THE TOWER, WHERE THEY TRANSITION FROM VERTICAL TO HORIZONTAL, AND AT THE ANTENNA LOCATION

**FINAL ANTENNA CONFIGURATION AND CABLE SCHEDULE
SUPPLIED BY AT&T WIRELESS, FROM RF CONFIG. DATED (08/31/15)**

SECTOR	ANTENNA NUMBER	ANTENNA STATUS & TYPE	ANTENNA MODEL NUMBER	ANTENNA VENDOR	TMA/RRU UNIT	AZIMUTH	ANTENNA CL FROM GROUND	CABLE FEEDER		RAYCAP UNIT
								TYPE	LENGTH	
ALPHA	A-1	(X) UMTS 850/ LTE 3C	RV4X310R-V2	COMMSCOPE	(1) TT19-08BP111-001 (X) (1) LTE 3C RRU UNIT (X) RRH4x25-WCS-4R	45°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX (1) DC TRUNK LINE (X)	194'-0"	(2) (X) RAYCAP UNIT FC12-PC6-10E (6) (X) RAYCAP UNIT DC2-48-60-0-9E (1) (N) RAYCAP UNIT FC12-PC6-10E (3) (N) RAYCAP UNIT DC2-48-60-0-9E
	A-2	(N) UMTS/ LTE 4C/5C	EPBQ-654L8H8-L2	KMW	(1) RRU UNIT (N) RRH4x25-WCS FLEXI RRU 4T4R B14 160 W (2) TT19-08BP111-001 (X)	45°	174'-0"	(2) DC TRUNK LINE (N) (1) FIBER (N) (2) ANDREW LDF (X) 1-5/8" COAX	194'-0"	
	A-3	(X) LTE 1C/2C	HPA-65R-BUU-H8	CCI	(1) RRU UNIT (X) RRH2x40-07AT (1) RRU UNIT (N) B66A-RRH4x45	45°	174'-0"	(2) DC TRUNK LINE (X) (1) FIBER (X)		
BETA	B-1	(X) UMTS 850/ LTE 3C	RV4X310R-V2	COMMSCOPE	(1) TT19-08BP111-001 (X) (1) LTE 3C RRU UNIT (X) RRH4x25-WCS-4R	160°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)	204'-0"	
	B-2	(N) UMTS/ LTE 4C/5C	EPBQ-654L8H8-L2	KMW	(1) RRU UNIT (N) RRH4x25-WCS FLEXI RRU 4T4R B14 160 W (2) TT19-08BP111-001 (X)	160°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)	204'-0"	
	B-3	(X) LTE 1C/2C	HPA-65R-BUU-H8	CCI	(1) RRU UNIT (X) RRH2x40-07AT (1) RRU UNIT (N) B66A-RRH4x45	160°	174'-0"	DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)		
GAMMA	C-1	(X) UMTS 850/ LTE 3C	RV4X310R-V2	COMMSCOPE	(1) TT19-08BP111-001 (X) (1) LTE 3C RRU UNIT (X) RRH4x25-WCS-4R	315°	174'-0"	DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)		
	C-2	(N) UMTS/ LTE 4C/5C	EPBQ-654L8H8-L2	KMW	(1) RRU UNIT (N) RRH4x25-WCS FLEXI RRU 4T4R B14 160 W (2) TT19-08BP111-001 (X)	315°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)	204'-0"	
	C-3	(X) LTE 1C/2C	HPA-65R-BUU-H8	CCI	(1) RRU UNIT (X) RRH2x40-07AT (1) RRU UNIT (N) B66A-RRH4x45	315°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)	204'-0"	

LEGEND
(X) - EXISTING
(N) - NEW



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1	4/6/18	REVISION	AA

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Daniel W Smith
License # 52398

DS

SITE NAME

HASTINGS

FA NUMBER

**LTE 4C/5C, RETROFIT
10081824**

SITE ADDRESS

2500 ENTERPRISE AVENUE
HASTINGS, MN 55033

SHEET NAME

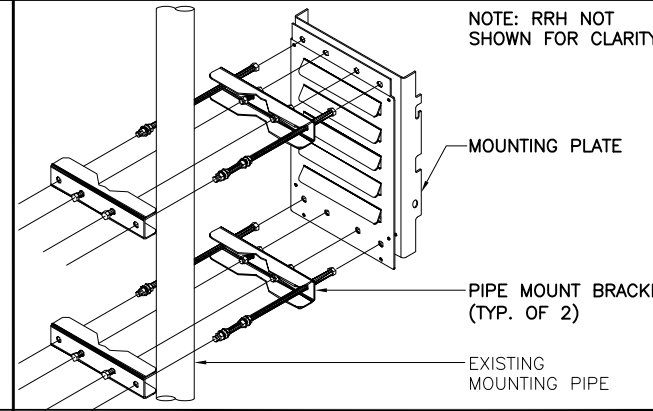
**EQUIPMENT
DETAILS**

SHEET NUMBER

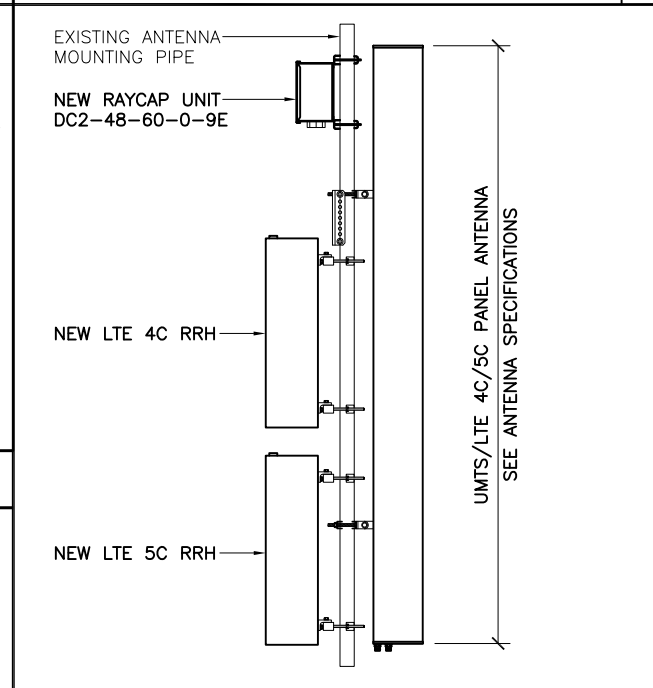
A6

PAINTING SPECIFICATIONS:

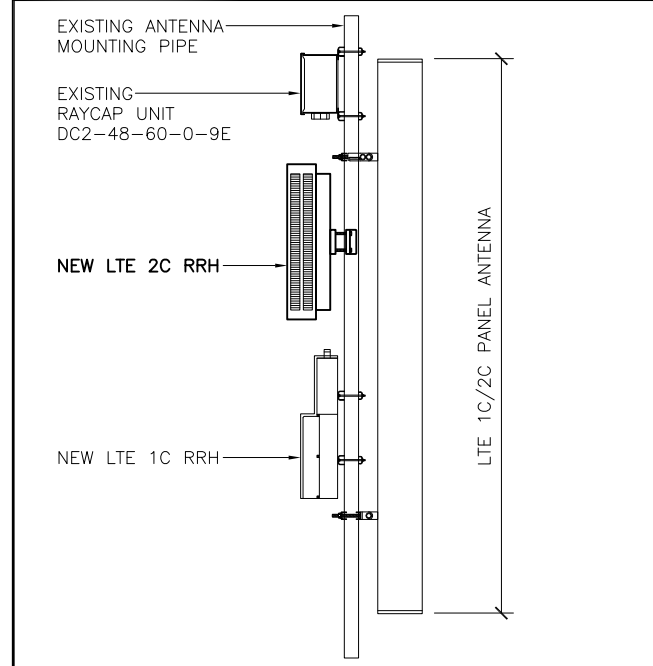
- PAINTING OF ALL NEW ITEMS, AND REPAIR OF ALL DAMAGED AREAS OF THE TOWER WILL BE REQUIRED. SURFACE PREPARATION AND PAINTING REQUIREMENTS ARE AS FOLLOWS:
- REMOVE ALL SURFACE CONTAMINANTS IN ACCORDANCE WITH SSPC-SP-1 SOLVENT CLEANING. DO NOT USE HYDROCARBON SOLVENTS ON SURFACES TO BE COATED WITH WATER BASED COATING.
- UNDER THE DIRECTION OF THE ENGINEER, SPOT REPAIR THE TANK AND TOWER SURFACES WHERE THE COATING HAS BEEN DAMAGED BY STRUCTURAL REPAIRS AND MODIFICATIONS, TO AN SSPC-SP-10 NEAR WHITE METAL BLAST CLEAN. THIS WORK INCLUDES ALL NEW ITEMS AND AT OTHER AREAS DAMAGED BY STRUCTURAL REPAIRS OR MODIFICATIONS. FEATHER EDGES OF EXISTING COATING, AT SPOT BLAST AREAS, USING SSPC-SP-3 POWER TOOL CLEANING METHODS.
- BEFORE ANY PRIMER OR COATING IS APPLIED, METAL SURFACES SHALL BE COMPLETELY DRY, DUST FREE, INSPECTED AND APPROVED BY THE ENGINEER.
- NO COATING SHALL BE PERMITTED WHEN THE RELATIVE HUMIDITY IS EXPECTED TO EXCEED 85% OR TEMPERATURE IS EXPECTED TO DROP BELOW 40 DEGREE WITHIN 8 HOURS AFTER THE APPLICATION OF THE COATING. PROCEED WITH SURFACE PREPARATION AND COATING APPLICATION ONLY WHEN AIR AND SURFACE TEMPERATURES ARE ABOVE THE MANUFACTURER'S RECOMMENDED MINIMUM SURFACE TEMPERATURE AND BELOW 100 DEGREES F, AND SURFACE TEMPERATURE IS AT LEAST 5 DEGREES ABOVE WET BULB AIR TEMPERATURE READING. COATING SHALL NOT BE APPLIED TO DUSTY, WET, OR DAMP SURFACES, AND SHALL NOT BE APPLIED IN RAIN, SNOW, FOG, OR MIST. IF WORKING CONDITIONS ARE QUESTIONABLE, THE ENGINEER SHALL MAKE THE DECISION AND THE CONTRACTOR SHALL ACCEPT THE ENGINEER'S INTERPRETATION AS FINAL AND BINDING.
- PRIME COAT MUST BE APPLIED WITHIN 8 HOURS OF ABRASIVE BLASTING.
- APPLY BY BRUSH ONE (1) ADDITIONAL COAT OF PRIMER TO ENSURE A UNIFORM COAT OF PRIMER THOROUGHLY WORKED INTO AND AROUND ALL SEAMS, WELDS, BOLT ASSEMBLIES, PLATE OVERLAP SEAMS, AND OTHER IRREGULARITIES IN THE SURFACE.
- FINISH COAT SHALL BE UNIFORM IN COLOR AND SHEEN WITHOUT STREAKS, LAPS, RUNS, SAGS OR MISSED AREAS.
- ANTENNAS, EXTERIOR COAX CABLES AND EXTERIOR JUMPERS CABLES TO BE PAINTED TO MATCH EXISTING TANK COLOR. ALL ITEMS ATTACHED DIRECTLY TO THE TANK, SUCH AS MOUNTING BRACKETS AND SUPPORTS, SHOULD BE PAINTED TO MATCH EXISTING TANK COATING SYSTEM AND COLOR. CABLES MAY REQUIRE SCARIFICATION PRIOR TO COATING.
- EXPOSED COAXIAL CABLES: PRIOR TO PRIMING, SOLVENT WIPE ALL EXPOSED CABLES WITH THE RECOMMENDED SOLVENT. PRIME THE CABLES AND JUMPERS CABLES WITH 2 COATS OF X-I-M COAX CABLE BONDER & SEALER (PRODUCT NO. 1138). AFTER PRIMING APPLY ONE FINISH COAT TO THE CABLES AS DIRECTED BY THE ENGINEER.
- IF GALVANIZED MATERIALS USED, THE GALVANIZED SURFACES MUST BE SOLVENT WIPED AND BRUSH-BLASTED PRIOR TO COATING.
- SPECIFICATIONS APPLY TO BOTH SHOP AND FIELD COATING.
- EXTERIOR SURFACE SPOT REPAIR AND RE-COATING:
 - SPOT PRIME AND FINISH COAT REPAIRED AREAS AS SPECIFIED BY MANUFACTURER. THE COATING SYSTEM SHALL MATCH THE EXISTING COATING SYSTEM ON THE TOWER. THE EXTERIOR PRIMER SHALL BE TNEPEC HI-BUILD EPOXYLINE SERIES 66 OR TNEPEC-FASCURE SERIES 161, 4.0-6.0 MILS DFT. THE EXTERIOR INTERMEDIATE COAT SHALL BE TNEPEC HI-BUILD EPOXYLINE SERIES 66 OR TNEPEC-FASCURE SERIES 161, 4.0-6.0 MILS DFT. THE DFT OF THE PRIMER PLUS THE INTERMEDIATE COAT AT ANY INDIVIDUAL SPOT MEASUREMENT LOCATION SHALL BE 9.0 MILS MINIMUM. THE EXTERIOR FINISH COAT SHALL BE TNEPEC ENDURASHIELD II SERIES 1075-COLOR TO MATCH THE TOWER, 3.0-5.0 MILS DFT. THE TOTAL DRY FILM THICKNESS INCLUDING THE PRIMER AND THE FINISH COAT SHALL BE 11 MILS MINIMUM - 17.0 MILS WITH AN AVERAGE OF 13.0 MILS DFT. THE MINIMUM DRY FILM THICKNESS OF THE COATING AT ANY INDIVIDUAL SPOT LOCATION SHALL BE 12.5 MILS. COLOR SHALL MATCH THE EXISTING COATING TO THE OWNER'S SATISFACTION. COLOR DRAWDOWNS SHALL BE OBTAINED FROM THE PAINT MANUFACTURER FOR THE RESERVOIR OWNER TO CONFIRM COLOR SELECTION(S).
 - EXTERIOR COATING SHALL BE BY BRUSH AND ROLLER ONLY.
- INTERIOR DRY SPOT REPAIR AND RE-COATING:
 - THE INTERIOR DRY COATING SYSTEM SHALL BE COMPATIBLE WITH THE EXISTING COATING SYSTEM ON THE TANK. THE INTERIOR DRY PRIMER SHALL BE TNEPEC POTA-POX PLUS SERIES N140, 4.0-6.0 MILS DRY FILM THICKNESS. THE DFT OF THE PRIMER AT ANY INDIVIDUAL SPOT MEASUREMENT LOCATION SHALL BE 2.5 MILS MINIMUM. THE INTERIOR DRY INTERMEDIATE COAT SHALL BE TNEPEC POTA-POX PLUS SERIES N140, 4.0-6.0 MILS DRY FILM THICKNESS. THE DFT OF THE PRIMER PLUS INTERMEDIATE AT ANY INDIVIDUAL SPOT MEASUREMENT LOCATION SHALL BE 6.5 MILS MINIMUM. THE INTERIOR DRY FINISH COAT SHALL BE TNEPEC POTA-POX PLUS SERIES N140, 4.0-6.0 MILS DRY FILM THICKNESS. THE TOTAL DRY FILM THICKNESS INCLUDING THE PRIMER, INTERMEDIATE AND FINISH COATS SHALL BE 10.5 MILS MINIMUM - 15.5 MILS WITH AN AVERAGE OF 13.0 MILS. THE MINIMUM DRY FILM THICKNESS OF THE COATING SYSTEM AT ANY INDIVIDUAL SPOT LOCATION SHALL BE 10.5 MILS. THE COLOR SHALL MATCH THE EXISTING INTERIOR DRY COLOR TO THE OWNER'S SATISFACTION. COLOR DRAWDOWNS SHALL BE OBTAINED FROM THE PAINT MANUFACTURER FOR THE RESERVOIR OWNER TO CONFIRM COLOR SELECTION(S).



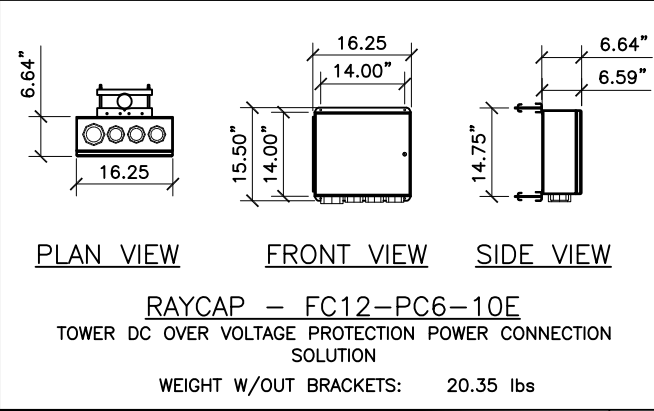
MOUNTING DETAIL SCALE: N.T.S. 7



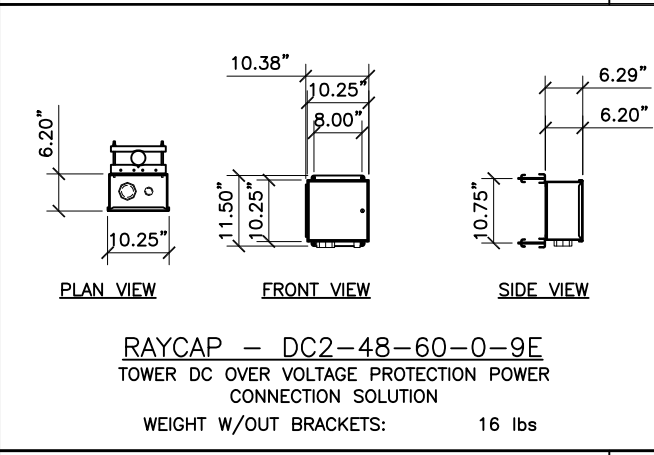
LTE 4C/5C ANTENNA & RRH MOUNTING DETAILS SCALE: 3/8" = 1'-0" 8



LTE 1C/2C ANTENNA & RRH MOUNTING DETAILS SCALE: 3/8" = 1'-0" 9



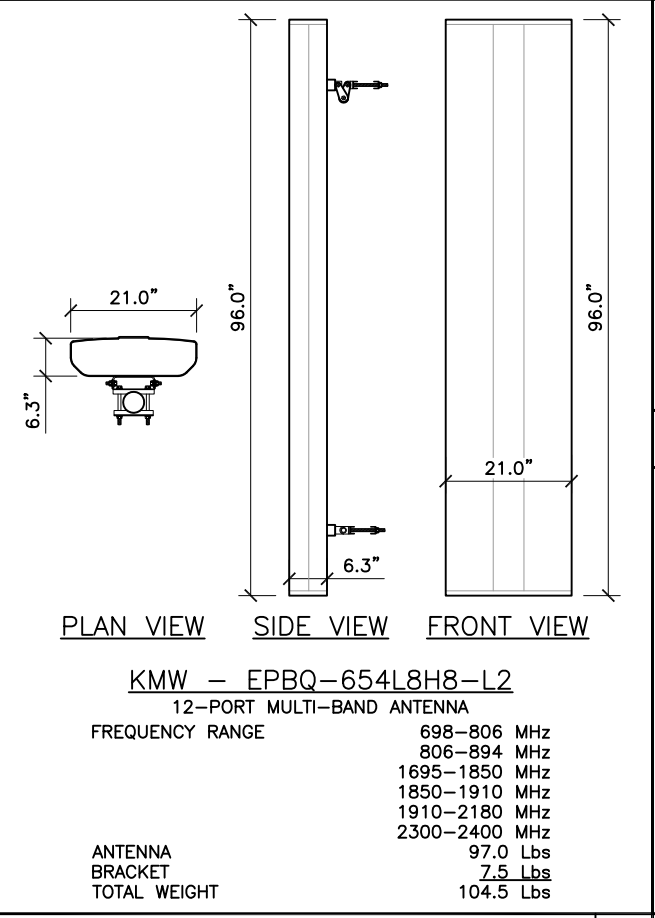
RAYCAP SPEC SCALE: N.T.S. 4



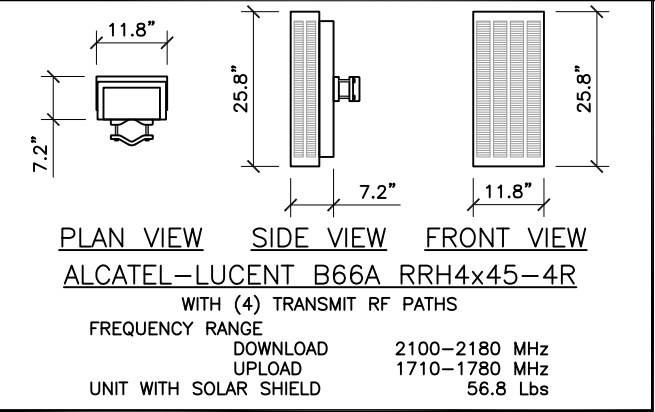
RAYCAP SPEC SCALE: N.T.S. 5



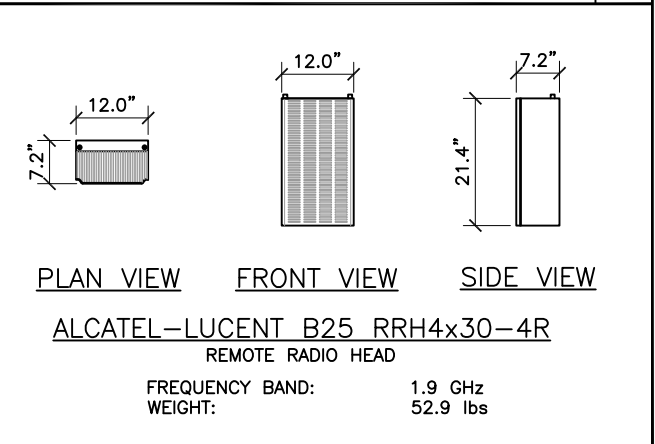
LTE 5C RRH SPEC SCALE: N.T.S. 6



ANTENNA SPEC SCALE: N.T.S. 1



LTE 2C RRH SPEC SCALE: 3/8" = 1'-0" 2



LTE 4C RRH SPEC SCALE: 3/8" = 1'-0" 3

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LTE 4C/5C/RETROFIT INSTALL
MERIDIAN BLUE CONSTRUCTION
KAYLA AMUNDSON, PROJECT MANAGER



901 S. MARQUETTE AVENUE
MINNEAPOLIS, MN 55402



540 W. MADISON ST. 17TH FLOOR
CHICAGO, IL 60661



1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173
TEL: 847-908-8400
www.FullertonEngineering.com

CHECKED BY: RI
APPROVED BY: DS

#	DATE	DESCRIPTION	INT.
A	10/23/17	1st SET SAC REVIEW	AA
B	11/30/17	2nd SET SAC REVIEW	AA
O	12/20/17	1st SET AT&T APPROVAL	AA
1	4/6/18	REVISION	AA

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Daniel W Smith
License # 52398

SITE NAME

HASTINGS

FA NUMBER

**LTE 4C/5C, RETROFIT
10081824**

SITE ADDRESS

2500 ENTERPRISE AVENUE
HASTINGS, MN 55033

SHEET NAME

**CABLE NOTES
AND COLOR
CODING**

SHEET NUMBER

A7

- CONTRACTOR IS TO REFER TO AT&T'S MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION.
- THE SIZE, HEIGHT, AND DIRECTION OF THE ANTENNAS SHALL BE ADJUSTED TO ACHIEVE THE AZIMUTHS SPECIFIED AND LIMIT SHADOWING AND TO MEET THE SYSTEM REQUIREMENTS.
- CONTRACTOR SHALL VERIFY THE HEIGHT OF THE ANTENNA WITH THE AT&T WIRELESS PROJECT MANAGER.
- VERIFY TYPE AND SIZE OF TOWER LEG PRIOR TO ORDERING ANY ANTENNA MOUNT.
- UNLESS NOTED OTHERWISE THE CONTRACTOR MUST PROVIDE ALL MATERIAL NECESSARY.
- ANTENNA AZIMUTHS ARE DEGREES OFF OF TRUE NORTH, BEARING CLOCKWISE, IN WHICH ANTENNA FACE IS DIRECTED. ALL ANTENNAS (AND SUPPORTING STRUCTURES AS PRACTICAL) SHALL BE ACCURATELY ORIENTED IN THE SPECIFIED DIRECTION.
- CONTRACTOR SHALL VERIFY ALL RF INFORMATION PRIOR TO CONSTRUCTION.
- SWEEP TEST SHALL BE PERFORMED BY GENERAL CONTRACTOR AND SUBMITTED TO AT&T WIRELESS CONSTRUCTION SPECIALIST. TEST SHALL BE PERFORMED PER AT&T WIRELESS STANDARDS.
- CABLE LENGTHS WERE DETERMINED BASED ON THE DESIGN DRAWING. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK.
- CONTRACTOR TO USE ROSENBERGER FIBER LINE HANGER COMPONENTS (OR ENGINEER APPROVED EQUAL).

ANTENNA AND CABLING NOTES

SCALE: N.T.S. 1

RF, DC, & COAX CABLE MARKING LOCATIONS TABLE	
NO	LOCATIONS
1	EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS.
2	EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP-JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
3	CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER.
4	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.
5	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.

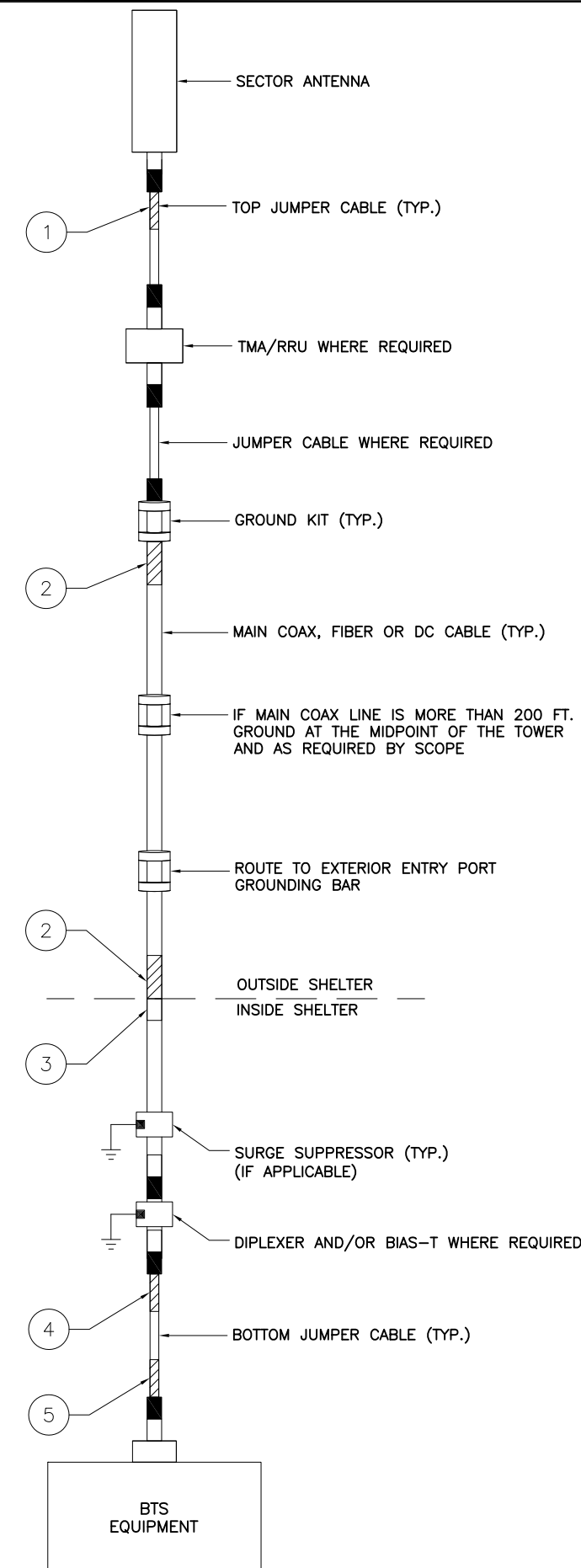
CABLE MARKING DIAGRAM

SCALE: N.T.S. 2

- THE ANTENNA SYSTEM COAX SHALL BE LABELED WITH VINYL TAPE.
- THE STANDARD IS BASED ON EIGHT COLORED TAPES-RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE, AND VIOLET. THESE TAPES MUST BE 3/4" WIDE & UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR CONTRACTOR ON SITE.
- USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR AND CABLE NUMBER AS SHOWN ON "CABLE COLOR CHART".
- WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN TECHNOLOGIES IS ENCOUNTERED, THE CONTRACTOR SHALL REMOVE THE EXISTING COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING STANDARD. IN THE ABSENCE OF AN EXISTING COLOR CODING AND TAGGING SCHEME, OR WHEN INSTALLING PROPOSED COAXIAL CABLES, THIS GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
- ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) THREE WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
- ALL COLOR BANDS INSTALLED AT THE TOP OF THE TOWER SHALL BE A MINIMUM OF 3" WIDE, AND SHALL HAVE A MINIMUM OF 3/4" OF SPACE BETWEEN EACH COLOR.
- ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE-TO-SIDE.
- IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE NEW TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

CABLE MARKING NOTES

SCALE: N.T.S. 3



CABLE COLOR CODING DIAGRAM

SCALE: N.T.S. 4



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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

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SITE NAME

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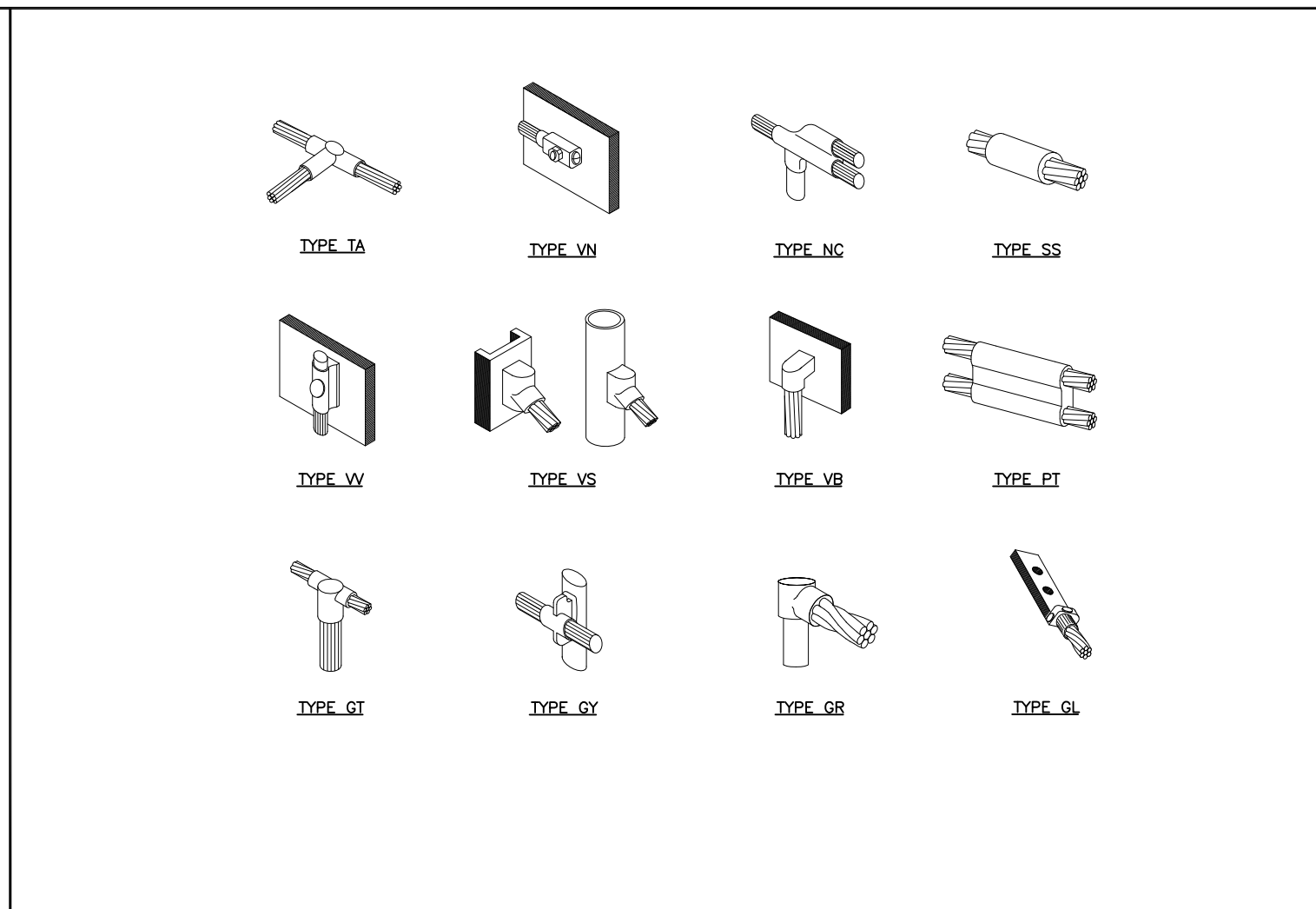
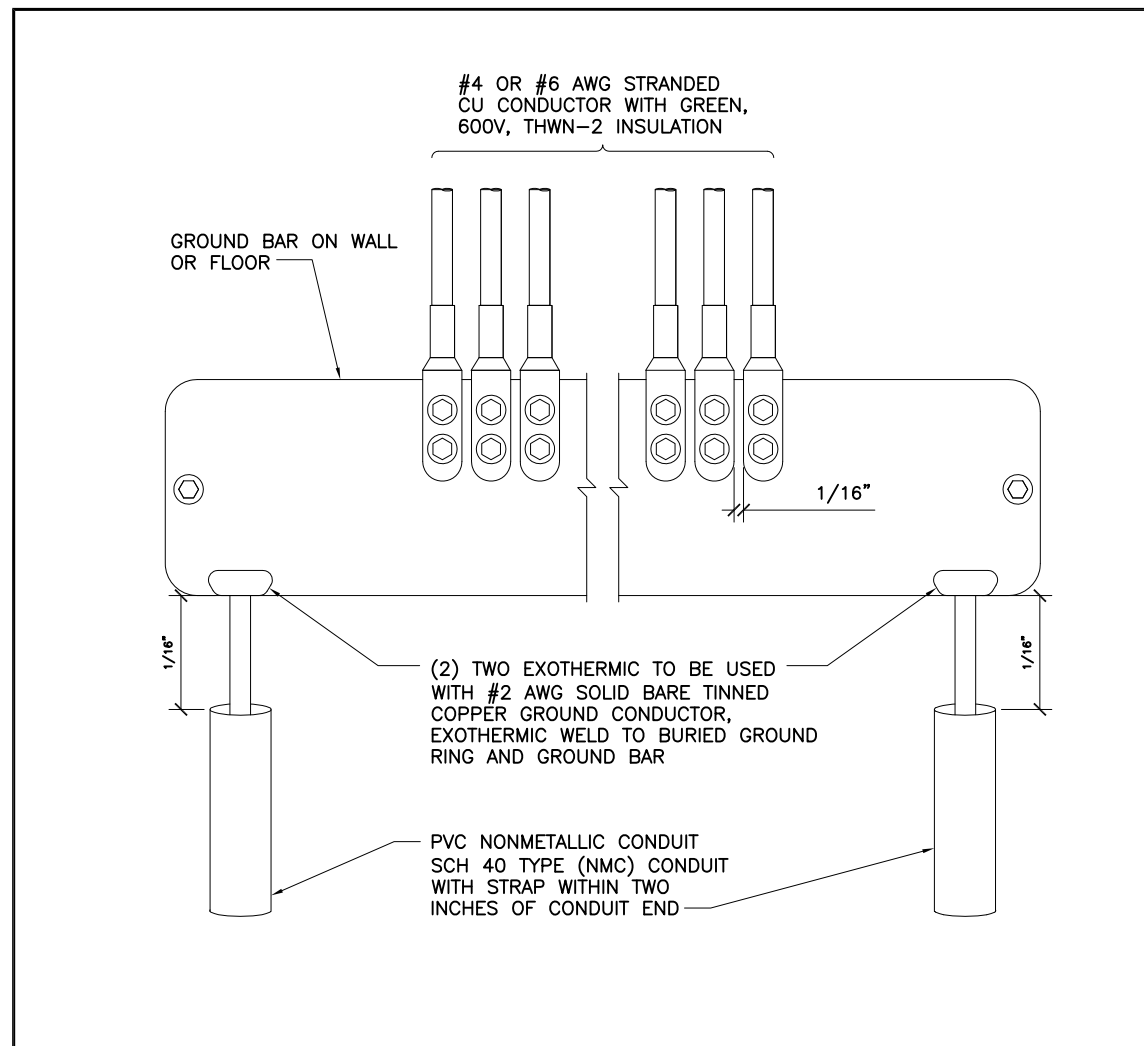
2500 ENTERPRISE AVENUE
HASTINGS, MN 55033

SHEET NAME

**GROUNDING
DETAILS**

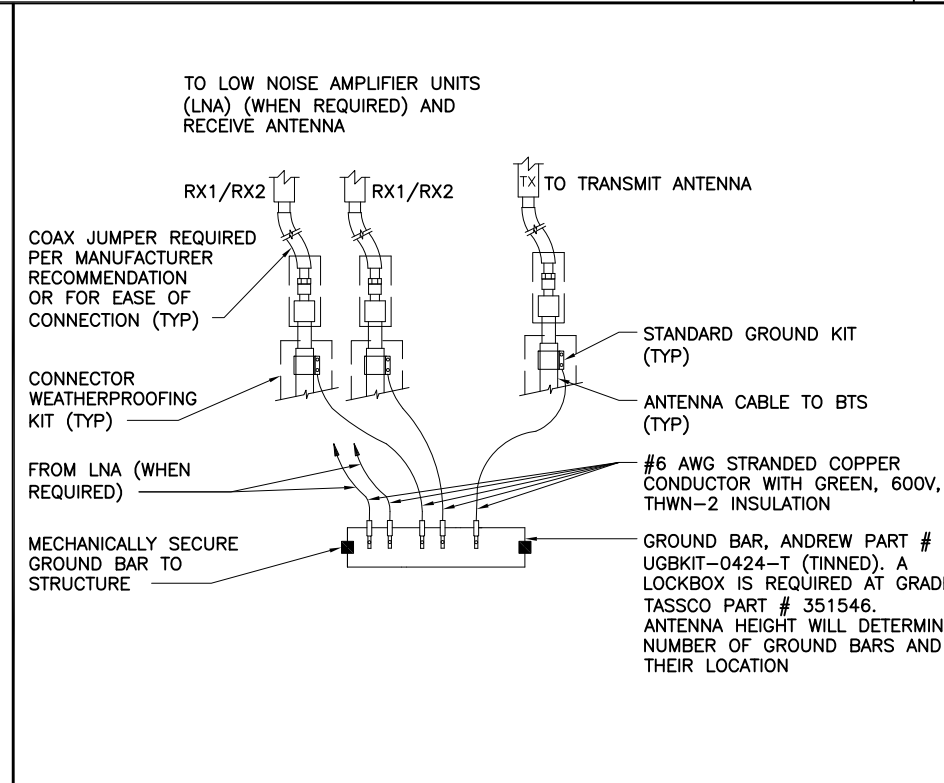
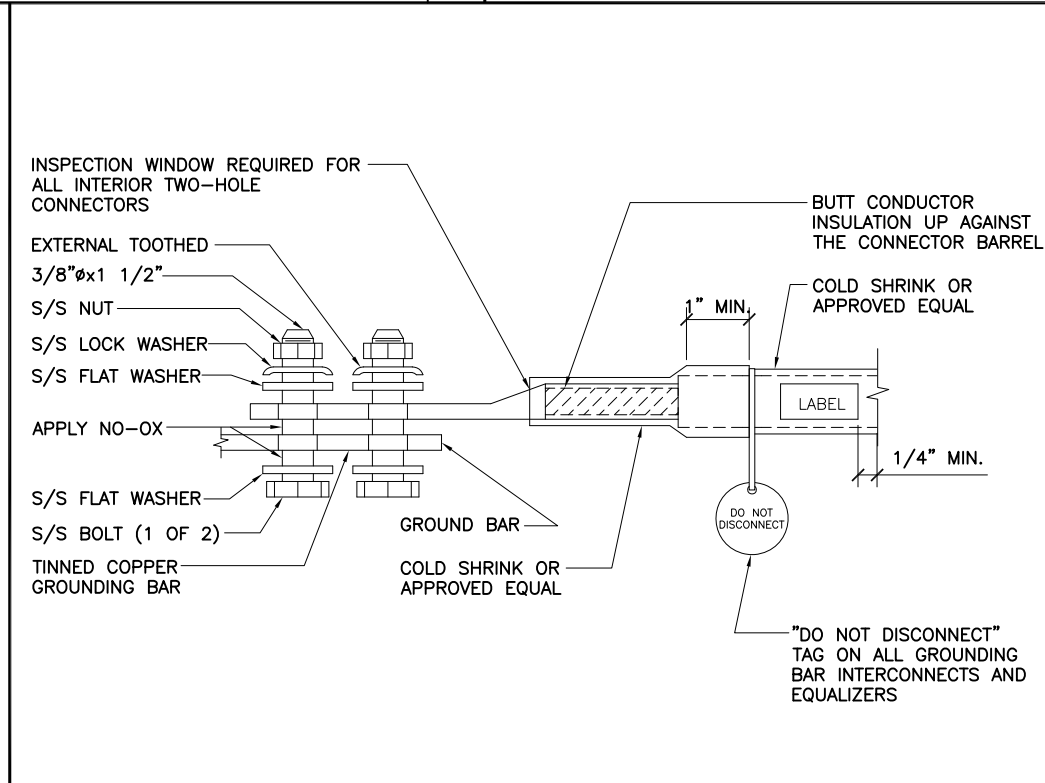
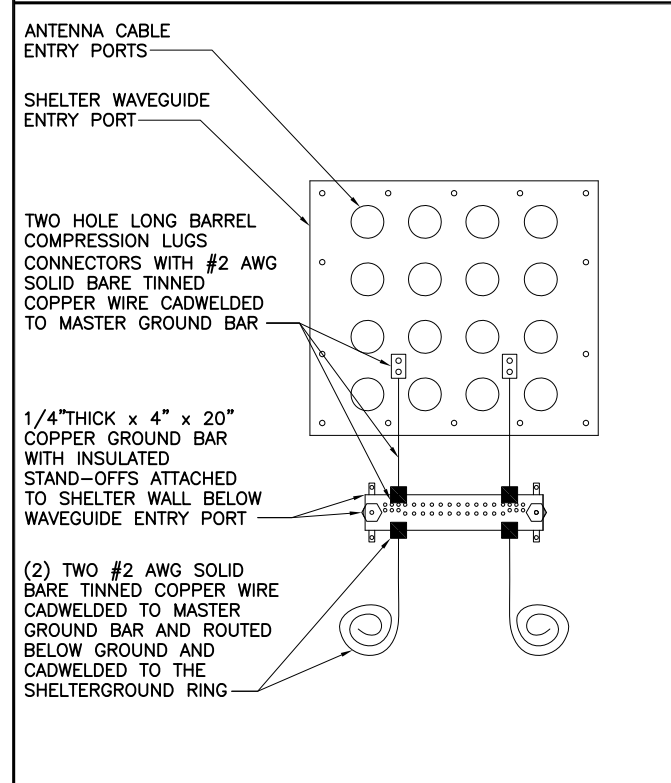
SHEET NUMBER

E1



GROUND BAR DETAILS SCALE: N.T.S. 1

CALDWELD DETAILS SCALE: N.T.S. 2



COAX GROUND KIT DETAIL SCALE: N.T.S. 3

EXTERIOR TWO HOLE LUG DETAIL SCALE: N.T.S. 4

ANTENNA GROUND BAR DETAIL SCALE: N.T.S. 5

REDLINED AS-BUILTS 8/27/2018
LTE 4C/5C/RETROFIT INSTALL
MERIDIAN BLUE CONSTRUCTION
KAYLA AMUNDSON, PROJECT MANAGER

EXHIBIT D – EQUIPMENT LIST

FINAL ANTENNA CONFIGURATION AND CABLE SCHEDULE SUPPLIED BY AT&T WIRELESS, FROM RF CONFIG, DATED (08/31/15)										
SECTOR	ANTENNA NUMBER	ANTENNA STATUS & TYPE	ANTENNA MODEL NUMBER	ANTENNA VENDOR	TMA/RRU UNIT	AZIMUTH	ANTENNA CL FROM GROUND	CABLE FEEDER		RAYCAP UNIT
								TYPE	LENGTH	
ALPHA	A-1	(X) GSM/ LTE 3C	RV4X310R-V2	COMMSCOPE	(1) TT19-08BP111-001 (X) (1) LTE 3C RRH UNIT (X) RRH4x25-WCS-4R	45°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX (1) DC TRUNK LINE (X)	194'-0"	(2) (X) RAYCAP UNIT FC12-PC6-10E (6) (X) RAYCAP UNIT DC2-48-60-0-9E (1) (N) RAYCAP UNIT FC12-PC6-10E (3) (N) RAYCAP UNIT DC2-48-60-0-9E
	A-2	(N) UMTS/ LTE 4C/5C	EPBQ-654L8H8-L2	KMW	(1) RRH UNIT (N) RRH4x25-WCS FLEXI RRH 4T4R B14 160 W (2) TT19-08BP111-001 (X)	45°	174'-0"	(2) DC TRUNK LINE (N) (1) FIBER (N) (2) ANDREW LDF (X) 1-5/8" COAX	194'-0"	
	A-3	(X) LTE 1C/2C	HPA-65R-BUU-H8	CCI	(1) RRH UNIT (X) RRH2x40-07AT (1) RRH UNIT (N) B66A-RRH4x45	45°	174'-0"	(2) DC TRUNK LINE (X) (1) FIBER (X)		
BETA	B-1	(X) GSM/ LTE 3C	RV4X310R-V2	COMMSCOPE	(1) TT19-08BP111-001 (X) (1) LTE 3C RRH UNIT (X) RRH4x25-WCS-4R	160°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)	204'-0"	
	B-2	(N) UMTS/ LTE 4C/5C	EPBQ-654L8H8-L2	KMW	(1) RRH UNIT (N) RRH4x25-WCS FLEXI RRH 4T4R B14 160 W (2) TT19-08BP111-001 (X)	160°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)	204'-0"	
	B-3	(X) LTE 1C/2C	HPA-65R-BUU-H8	CCI	(1) RRH UNIT (X) RRH2x40-07AT (1) RRH UNIT (N) B66A-RRH4x45	160°	174'-0"	DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)		
GAMMA	C-1	(X) GSM/ LTE 3C	RV4X310R-V2	COMMSCOPE	(1) TT19-08BP111-001 (X) (1) LTE 3C RRH UNIT (X) RRH4x25-WCS-4R	315°	174'-0"	DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)		
	C-2	(N) UMTS/ LTE 4C/5C	EPBQ-654L8H8-L2	KMW	(1) RRH UNIT (N) RRH4x25-WCS FLEXI RRH 4T4R B14 160 W (2) TT19-08BP111-001 (X)	315°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)	204'-0"	
	C-3	(X) LTE 1C/2C	HPA-65R-BUU-H8	CCI	(1) RRH UNIT (X) RRH2x40-07AT (1) RRH UNIT (N) B66A-RRH4x45	315°	174'-0"	(2) ANDREW LDF (X) 1-5/8" COAX DC TRUNK LINE (SHARED W/A-2) FIBER (SHARED W/A-2)	204'-0"	

- 1. FC 20 by ENGINEER Approval Only
- 2. Certify in accordance w/ 09800 1.04B

PAINT INSTRUCTIONS

1.0 SPECIFICATIONS

All materials, workmanship, surface preparation and painting shall be in accordance with SSPC PA1-latest revision, paint manufacturer's specifications, these instructions and the requirements and intent of the applicable section of the Contract Specifications. Information in these instructions may modify and take precedent over any of the above.

1.1 The Contract Specifications are as prepared by:

TOLTZ, KING, DUVALL, ANDERSON AND ASSOCIATES, INC.
 1500 PIPER JAFFRAY PLAZA
 444 CEDAR STREET
 ST. PAUL, MN 55101

APPROVED
 WITH CORRECTIONS AS NOTED

APPROVAL DOES NOT IN ANY WAY ASSUME RESPONSIBILITY FOR DETAILS OR DIMENSIONS NECESSARY FOR THE COMPLETE ASSEMBLY.

2.0 SHOP COATINGS

TOTLZ, KING, DUVALL, ANDERSON AND ASSOCIATES, INC.
 Engineers & Architects

2.1 Interior Surfaces (See Section 4.0)

BY KBJ DATE 7/3/97

2.1.1 All surfaces shall be abrasive blast cleaned per SSPC-SP10 "NEAR WHITE BLAST" followed by one (1) prime coat of TNE MEC POTA-POX 20 or FC20(Fast Cure)-1255 (Beige) applied at a recommended coverage rate of 180 sq ft per gallon (theoretical) for a DFT range of 4.0 - 6.0 mils (7.5 - 10.0 mils WFT). Recommended thinner is TNE MEC NO. 4.

2.2 Interior Dry Surfaces (See Section 4.0)

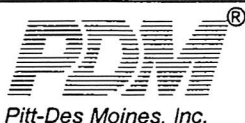
2.2.1 All surfaces shall be abrasive blast cleaned per SSPC-SP6 "COMMERCIAL BLAST" followed by one (1) prime coat of TNE MEC POTA-POX 20 or FC20(Fast Cure)-1255 (Beige) applied at a recommended coverage rate of 180 sq ft per gallon (theoretical) for a DFT range of 4.0 - 6.0 mils (7.5 - 10.0 mils). Recommended thinner is TNE MEC NO. 4.

↑ WFT

Status -

Unapproved: 6-6-97

Approved:



1000 M GALLON HYDROPILLAR 120.58' BCL
 HASTINGS, MN

IND PARK

Prepared By/Date	6-6-97				Contr.No. 57111
Prepared At/Rev.	REB	DSM 0			Page No. Pt 1

2.3 **Exterior Surfaces** (See Section 4.0)

2.3.1 All surfaces shall be abrasive blast cleaned per SSPC-SP6 "COMMERCIAL BLAST" followed by one (1) prime coat of TNE MEC POTA-POX SERIES 20 or FC20(Fast Cure)- 1255 (Beige) applied at a recommended coverage rate of 180 sq ft per gallon (theoretical) for a DFT range of 4.0 - 6.0 mils (7.5 - 10.5 mils WFT). Recommended thinner is TNE MEC NO.4.

2.4 All shop primed surfaces are to be cleaned of all grease, oily material and other foreign matter. In general, steel shot and grit mixture is used for the shop abrasive blast cleaning operation.

2.5 A four (4) inch unpainted margin shall be left at all edges to be field welded.

2.6 All surfaces cleaned on a particular day shall be painted within the same day before any evidence of rusting or discoloration. Any blast cleaned and unprimed surfaces that develop rusting due to climatic conditions or prolonged exposure shall be reblasted as required, prior to prime painting.

3.0 **FIELD COATINGS**

Note: Brush blast between shop applied coat and first field applied coat.

3.1 **Interior Surfaces** (See Section 4.0)

3.1.1 All uncoated and/or abraded surfaces shall be cleaned by abrasive blasting per SSPC-SP10 "NEAR WHITE BLAST", followed by one (1) spot prime coat of TNE MEC POTA-POX 20 or FC20(Fast Cure)-1255 (Beige) for a DFT range of 4.0 - 6.0 mils.

3.1.2 Apply one (1) complete finish coat of TNE MEC POTA-POX 20 or FC20(Fast Cure) -WH02 (Tank White) for a DFT range of 5.0 - 6.0 mils.

3.1.3 The two (2) coat ~~exterior~~ *interior* system shall have a total DFT of 9.0 - 12.0 mils.

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Page No. PI 2