



PLANNING COMMISSION

**ISD #15 DISTRICT OFFICE BUILDING
4115 AMBASSADOR BLVD.**

November 15, 2017

7:00 PM

AGENDA

1. Call to Order/Pledge of Allegiance
2. Roll Call
3. Adopt Agenda
4. Approve Minutes October 18, 2017
5. Public Comment
6. Public Hearings
 - a. Conditional Use Permit/Interim Use Permit– Verizon Wireless
7. Regular Business Items
8. Discussion by Planning Commissioners
9. Adjournment

There may be a quorum of St. Francis Council Members present at this meeting.

**CITY OF ST. FRANCIS
ST. FRANCIS, MN
PLANNING COMMISSION MINUTES
October 18, 2017**

1. **Call to Order:** The Planning Commission meeting was called to order at 7:00 pm by Chairman Steinke.
2. **Roll Call:** Present were Ray Steinke, Brittney Berndt, Julie Morin and William Murray. Absent: Todd Gardner, Greg Zutz, Joel Olson
3. **Adopt Agenda:** Motion by Berndt second by Murray to approve the agenda. Motion carried 4-0.
4. **Approve Minutes:** Motion by Berndt, second by Murray to approve the September 20, 2017 minutes. Motion carried 4-0.
5. **Public Comment:** None
6. **Public Hearing:**

a. Conditional Use Permit for Verizon Wireless

Reviewed Application packet, be aware of Section 332 (c)(7). Nine standards apply and this applicant meets those standards. Engineering has reviewed the application and it has met the qualifications.

City Code requires that the applicant request an IUP for the height requirement and will be presenting that application at the November Planning Commission meeting.

City Code requires equipment related to towers to address screening and fencing. Proposal does not include a building, City can recommend building aesthetics and fencing.

Discussion: There are at least two existing cell towers in the city. Code requires we review within a one mile radius, there are no towers within that area. Lighting was discussed, Verizon clarified that lighting is not required on structures under 200' and that towers are registered with the FAA. This tower does not require lighting. The lease agreement with this tower is between a private land owner and Verizon, this is not on City property.

Public Hearing – Open 7:12 p.m.

Eddie Buell – Verizon Wireless

The lease for this tower is 25 years but towers are designed to last decades. This location was found through a coverage search, this is a vacant lot and the tower is tucked into the tree line. Soil borings and geotechnical studies were completed along with a NEPA Phase 1 and wetland review. No issues were found. This tower will serve Verizon customers along with the ability to service two other carriers. In the event there is damage to the tower, severe storms, etc., the tower is built on a hinged frame in which it would collapse onto itself verses fall as a whole. Verizon looked at going further west but with the incline of the property there are concerns about access and snow removal for maintenance and service needs. If this tower is required to move greater than 20' in any direction it will force the project back to the beginning and delay construction for up to a year. Verizon is requesting approval of this application based on the location proposed.

Glen Westphal – 23450 Variolite St NW

This tower is very close in proximity to his house and buildings. Has no issues with the tower but instead with the location. No other neighbors are expressing concern about the tower, but he is in the closest proximity to the actual tower. It will not make his property useless or inaccessible but it will create a visual impact that will be looked at in the event of a future sale. He would like to see an example of what this will look like from his property and home. Verizon agreed to provide photos and examples to Mr. Westphal.

Ray Jones – 23723 Nacre St NW

The negotiations between Mr. Jones and Verizon began three years ago. Ray spoke to a few neighbors and they felt as Verizon customers this would be a benefit for service. He compared the tower to an existing silo on the property which is 80' before attachments.

Public Hearing Closed 7:33 p.m.

Murray – is aware of other towers in high end neighborhoods and there are not concerns and once it is there people get used to it.

Steinke – people have asked for improved service on the west side of town since the original towers came to town.

Morin – does not feel the cost and time that Verizon would have to address a better location for the tower is an issue.

Berndt – would like to also see photos of the tower and how it will look from Mr. Westphal property before she will make a decision. This tower is 100' away from his house but there are 26 acres of vacant land.

Berndt made a motion to table this item and request additional information, Second by Morin, 4-0 Motion passed.

b. Ordinance for Solar Energy Systems

Packet reviewed, update on ordinances presented and approved last summer. This will allow for an easier process for residents looking to include solar and allow larger scale projects to move forward.

Question in regards to Definitions and there being two LEPGP terms. Staff will review which is correct and remove the other.

Public Hearing Opened at 7:43 p.m., no comments received, Closed at 7:43 p.m.

Berndt made a Motion to recommend approval of the Ordinance changes for Solar Energy Systems. Second by Morin, 4-0 Motion passed.

7. Regular Business Items:

- a. Upcoming date for Comprehensive Plan
- b. Reminder for upcoming November and December Planning Commission dates as there are agenda items for those meetings

8. Planning Commission Discussion:

Discussed outstanding projects

- 9. Adjournment:** Motion by Berndt second by Morin to adjourn. Motion carried 4-0. Meeting adjourned at 7:55 p.m.

DATE APPROVED:

City of St Francis Planning Commission Agenda Item
Executive Summary

Title of Item: **CONDITIONAL USE & INTERIM USE PERMITS:** A request from Verizon Wireless to construct a personal wireless service tower with antennas on an unaddressed property within the A-2 (Rural Estate Agriculture) zoning district – PID 33-34-25-21-0001

Meeting Date: **11-15-17**

Staff Reporting: **Ben Gozola, City Planner**

Summary: The applicant is proposing to construct a 100 foot tall telecommunications (cell) tower with antennas and related equipment. The applicants have provided sufficient engineering documentation to justify both the proposed location and height, and the plans have been shown to meet City standards provided a number of conditions of approval are followed. An interim use permit will be needed to authorize the proposed height above 75 feet.

Recommendations:

- **Staff believes both the CUP and IUP can be approved with conditions.**
- **Template motions, recommended findings, and suggested conditions can be found on pages 11-13**

List of Attachments:

- A) *Staff Report*
- B) *Engineering Memo*
- C) *Applicant's submittals*

City of St. Francis Planning Department
CUP & IUP Report

To: **Planning Commission**
From: Ben Gozola, City Planner
Meeting Date: **11-3-17**
Applicant: **Verizon Wireless**
Property Owner: Raymond H Jones Trustee
Location: Unaddressed property to the SW of Hill and Dale Drive & Variolite St NW
(see page 2)
Zoning: **A-2: Rural Estate Agriculture**

Introductory Information

Project: The applicant is proposing to construct a 100 foot tall telecommunications (cell) tower with antennas and related equipment.

CUP& IUP Request(s): The proposed tower and antennas will require the following permits:

1. A conditional use permit to allow a personal wireless service tower with antennas and related equipment.
2. An interim use permit to allow the proposed personal wireless service tower to exceed the 75 foot height maximum,

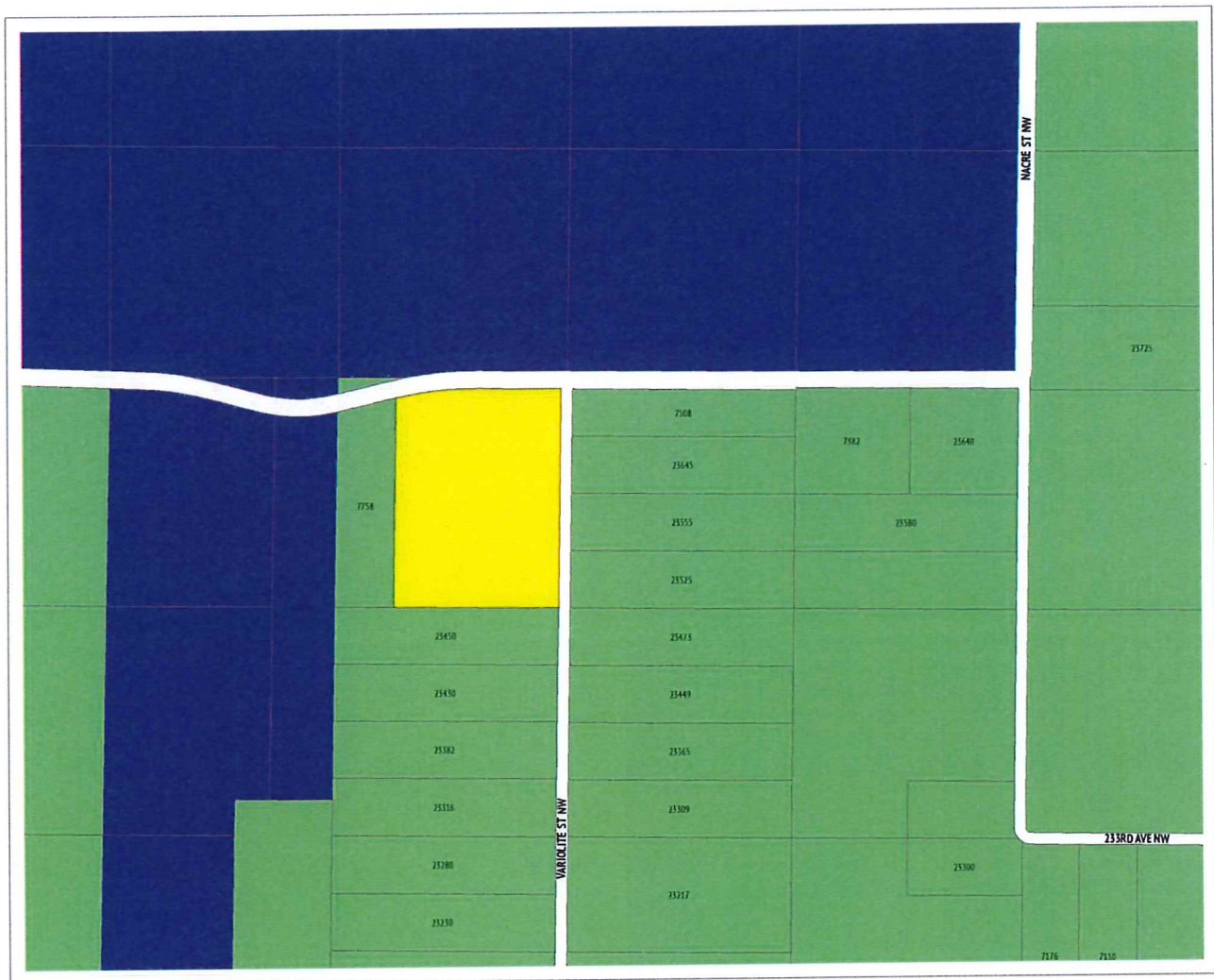
Background/Update

On October 18, 2017 the St. Francis Planning Commission held a public hearing on a conditional use permit request by Verizon Wireless to allow a cell tower as described above. The Commission elected to table the item to the November 15, 2017 Commission meeting in order to: 1) allow the applicant additional time to address concerns raised by the property owner to the south regarding visual impacts; and 2) allow the applicant to make application for an interim use permit (IUP) to allow for a tower installation of greater than 75 feet in height.

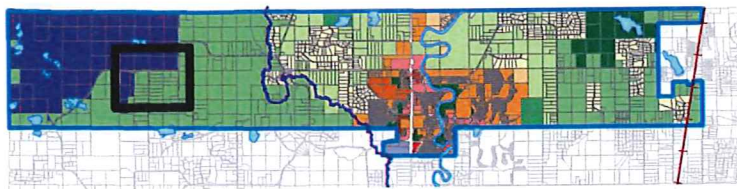
Findings

Site Data:

- Lot Size $\approx$ 26.71 acres
- Existing Use – Agricultural land (vacant)
- Existing Zoning – A-2 Rural Estate Agriculture
- Property Identification Number (PID): 33-34-25-21-0001



**Unaddressed Vacant Property
PID: 33-34-25-21-0001**



Location within the City of St Francis



SITE IDENTIFICATION MAP



Application Review:

Applicable Code Definitions:

CONDITIONAL USE: A use which, because of special problems of control the use presents, requires reasonable, but special, unusual and extraordinary limitations peculiar to the use for the protection of the public welfare and the integrity of the City Comprehensive Plan.

CONDITIONAL USE PERMIT: A permit issued by the City Council in accordance with procedures specified in this Ordinance, as a flexibility device to enable the City Council to assign dimensions to a proposed use or conditions surrounding it after consideration of adjacent uses and their functions and the special problems which the proposed use presents.

INTERIM USE: A temporary use of property until a particular date, until the occurrence of a particular event, or until zoning regulations no longer allow it.

INTERIM USE PERMIT: A permit issued in accordance with procedures specified in this Ordinance, as a flexible device to enable the City Council to assign time limits and conditions to a proposed use after consideration of current or future adjacent uses and their functions.

PERSONAL WIRELESS SERVICE: A device consisting of metal, carbon fiber, or other electromagnetically conductive rods or elements, usually arranged in a circular array on a single supporting pole or other structure, and used for the transmission and reception of wireless communication radio waves including cellular, personal communication service (PCS), enhanced specialized mobilized radio (ESMR), paging and similar services and including the support structure thereof.

TOWER: A self-supporting lattice, guyed or monopole structure constructed from grade which supports personal wireless service antennas. The term antenna tower shall not include amateur radio operators' equipment, as licensed by the FCC.

Applicable City Codes:

- **Chapter 10, Section 6: Conditional Use Permits**
Outlines the general standards required of all conditionally permitted uses within the City of St. Francis.
- **Chapter 10, Section 7: Administration – Interim Use Permits**
Describes the purpose, procedures, criteria, performance standards and termination provisions for interim uses in the city.
- **Chapter 10, Section 22: Antennas**
Outlines the general standards required for all cell towers and antennas within the City.

(cont.)

▪ **Chapter 10, Section 52: A-2 Rural Estate Agriculture District**

Outlines the allowed uses and other general development restrictions within the A-2 zoning district.

Staff Comment:

- The four above referenced city code sections together provide the framework for the establishment and regulation of personal wireless service antennas (PWSA's) and associated support structures in the city.
- The City's zoning code provides for PWSA's on public (and quasi-public) structures and private structures. The code is structured to minimize the number of these structures in the city by encouraging use of public structures and/or co-location on existing structures where feasible.
- New privately owned wireless antennas are allowed in most districts throughout the city as conditional uses, including all agricultural, residential and industrial districts as well as the city's business park district. Privately mounted antennas are allowed on monopole type structures only which are limited to not more than 75 feet in height in all districts except industrial districts where a monopole of 150 feet is allowed.
- In all districts where the 75 foot height limit is proscribed, the PWSA provisions allow for a height increase "as may be allowed by approval of an interim use permit". Additional height restrictions or conditions are not specified in the PWSA code, or differentiated by zoning district.

***Federal
Communications
Commission
Regulations:***

Section 332(c)(7) of the Communications Act preserves state and local authority over zoning and land use decisions for personal wireless service facilities, but sets forth specific limitations on that authority. Specifically, a state or local government may not unreasonably discriminate among providers of functionally equivalent services, may not regulate in a manner that prohibits or has the effect of prohibiting the provision of personal wireless services, must act on applications within a reasonable period of time, and must make any denial of an application in writing supported by substantial evidence in a written record. The statute also preempts local decisions premised directly or indirectly on the environmental effects of radio frequency (RF) emissions, assuming that the provider is in compliance with the Commission's RF rules.

Staff Comment:

Although local jurisdictions are somewhat limited by FCC regulations, the conditional use permitting process allows for local review and oversight of telecommunication facilities, including the imposition of reasonable standards and

(cont.)	conditions to ensure that the health, safety and general welfare of the community is taken into consideration.
Cell Tower Performance Standards:	Section 22 of the Zoning Code (Antennas) establishes specific standards that all cell phone towers must adhere to within the City of St. Francis. The following is a summary of those requirements as they relate to the subject application. <i>(A) General Standards (10-22-2): A number of general standards can be met by via conditions attached to any approval including:</i> ○ <i>Antennas and/or obsolete equipment must be removed within twelve (12) months of cessation of operation at the site.</i> ○ <i>All building and electrical codes must be met, and all applicable permits must be obtained both now and in the future.</i> ○ <i>Structure must be constructed per the manufacture's specifications, and shall be verified and approved by a structural engineer.</i> ○ <i>No advertising message shall be affixed to the antenna structure or tower.</i> ○ <i>Antennas shall not be artificially illuminated unless otherwise required by law or other governmental agency.</i> ○ <i>The tower shall be painted a non-contrasting color consistent with the surrounding area such as: blue, gray, brown, or silver, or have a galvanized or oxidized finish to reduce visual impact.</i> <u>Staff Comment:</u> The city's zoning approval provisions in Section 10-3-5 include a requirement for a Performance Agreement upon approval of a conditional use permit. Performance agreements are intended to guarantee conformance and compliance with the conditions of the approval and codes of the city. The attached conditions of approval include these general standards. Criteria addressed. <i>(B) The height of the antenna shall be the minimum necessary to function satisfactorily, as verified by an engineer or other qualified professional.</i> <u>Staff Comment:</u> The applicant is proposing a monopole design as required by code. The proposed height of the pole is 100 feet plus a nine foot lightning rod. The applicant has provided an engineering analysis which addresses the need for the proposed height in order to provide adequate coverage to the surrounding area. The City Engineer has reviewed the analysis and finds the proposed height is indeed justified to provide the desired service to this area of the City. Criteria met

- (cont.) (C) *If a new tower is to be constructed, it shall be designed structurally, electrically, and in all respects, to accommodate both the applicant's antennas and comparable antennas for at least one additional use, including, but not limited to, other cellular communication companies, local police, fire and ambulance companies. Towers shall be designed to allow for future rearrangement of antennas upon the tower and to accept antennas mounted at varying heights.*

Staff Comment:

The purpose of this provision is to reduce the number of these types of structures due to their visual impact on the environment and to promote economic efficiencies. The applicant is proposing a monopole with an attached Verizon antennae array mounted at the top of the pole at 96 feet above grade. Two additional colocation positions on the pole are being made available for future users below the Verizon antenna installation. **Criteria met.**

- (D) *Documentation or studies utilized to determine the necessary location and height of the antenna shall be provided*

Staff Comment:

The applicant has provided an engineering study documenting the need for an installation at this location and at the proposed height. As stated, the City Engineer has reviewed the analysis and finds the proposed location is needed to provide better cellular service within the community, and again, the proposed height is necessary to maximize effectiveness of the new tower. **Criteria met.**

- (E) *In addition to the information required elsewhere in this Ordinance, development applications for towers, excluding amateur radio towers, shall include the following supplemental information:*

- *A letter of intent committing the tower owner and their successors to allow the shared use of the tower if an additional use agrees in writing to meet reasonable terms and conditions for shared use.*
- *A copy of the relevant portions of a signed lease which requires the applicant to remove the tower and associated facilities when they are abandoned, unused or become hazardous shall be submitted to the City.*

Staff Comment:

The applicant has provided a letter acknowledging the city's shared use requirement and agreeing to allow additional users in the future. Also, an excerpt from the lease agreement which provides for the removal of the improvements upon expiration or termination of the lease has also been submitted. Pending city attorney review and approval; **criteria met.**

- (cont.) (F) *Tower Design (10-22-3): General wireless communication towers shall be of a monopole design unless the City Council determines that an alternative design requested by the applicant would better blend into the surrounding environment.*

Staff Comment:

The applicant is proposing a monopole design as required by code. **Criteria met.**

- (G) *Co-Location Requirement (10-22-4): A new tower shall not be approved unless the City finds that the antennas cannot be accommodated on an existing or approved tower, building, or structure within one (1) mile search radius due to a listed reason in code.*

Staff Comment:

Verizon has supplied an analysis of the need for the proposed tower consistent with code provisions. According to the submission, the applicant has demonstrated that location of the antenna, as proposed, is necessary to provide adequate coverage and capacity to areas in the vicinity which cannot be adequately served by locating the antennas in a less restrictive district or an existing structure. Note that trade secret information provided as part of the capacity analysis is classified as non-public data pursuant to Minnesota Statute 13.37. **Criteria Met.**

- (H) *Setbacks (10-22-5): Towers shall meet the principal structure setbacks of the base zoning district*

Staff Comment:

The proposed tower location meets the setback requirements of the A-2 district. **Criteria met.**

- (I) *Personal Wireless Service Antennas (10-22-9): The specific standards for Personal Wireless Service Antennas for Agricultural and Residential Districts, including the subject site's A-2, Rural Estate Agricultural District zoning are as follows:*

10-22-9(A)(2): Antennas Not Located Upon a Public Structure or Existing Tower: Personal wireless service antenna not located upon a public or quasi-public structure or existing tower shall require the processing of a conditional use permit and shall comply with the following standards:

(cont.)

- 1) *The applicant shall demonstrate by providing a coverage/ interference analysis and capacity analysis prepared by a qualified engineer that location of the antennas as proposed is necessary to meet the frequency reuse and spacing needs of the wireless system and to provide adequate portable coverage and capacity to areas which cannot be adequately served by locating the antennas in a less restrictive district.*

Staff Comment:

The required analysis was submitted and deemed acceptable by the City Engineer. To achieve the desired coverage in this portion of the community, there is not believed to be a location in a less restrictive zoning district.

Criteria met.

- 2) *If no existing structure which meets the height requirements for the antennas is available for mounting purposes, the antennas may be mounted on a single ground-mounted pole provided that:*
 - a) *The pole does not exceed seventy-five (75) feet in height, except as may be allowed by approval of an interim use permit.*
 - b) *The setback of the pole from the nearest residential property line is not less than the height of the antenna. Exceptions to such setback may be granted if a qualified engineer specifies in writing that any collapse of the pole will occur within a lesser distance under all foreseeable circumstances.*

Staff Comment:

The applicant has demonstrated that no existing (height appropriate) structure is available for colocation within the specified one-mile radius. The proposal is for a 100 foot high monopole with a 9-foot lighting rod would be placed atop the pole bringing the total height to 109 feet. The proposed setback of the pole from the closest property line (to the south) matches the height of the pole. **Setback Criteria Met.**

Subsequent to the October Planning Commission meeting, Verizon has made application for an interim use permit to allow for the height of the monopole to exceed the 75 foot standard established for most districts (to allow for the proposed 109 foot pole height). The PWSA code citation referenced above allows for a height increase as may be allowed by an interim use permit. The IUP zoning provisions provide cross reference to both the conditional use permit approval criteria and performance standards. Therefore, the additional IUP provisions, as they relate to the increased height issue, do not significantly change the standards of approval or the performance standards previously outlined for the Verizon CUP.

(cont.)

As previously pointed out, the IUP provisions for cell towers as currently constructed are unusual and ambiguous. The requirement that an “interim use permit” be procured as a subset of an over-riding conditional use permit in order to approve a height in excess of 75 feet should be analyzed. Staff is recommending the City examine this (and similar) provisions in the future as the requirement seems to make little sense. One of the main goals of St. Francis (and most communities) when it comes to cell towers is to limit the number of installations throughout the community. To ensure this happens, cities require engineering studies to show the location is necessary to address a coverage gap, and that the proposed monopole height is justified to maximize the tower’s effectiveness. It is hard to imagine a scenario under which a community would determine a certain height was necessary to maximize effectiveness of the installation, and then later require the pole be lowered thereby (potentially) requiring another monopole be erected in a (relatively) nearby location.

- 3) *Transmitting, receiving and switching equipment shall be housed within an existing structure whenever possible. If a new equipment building is necessary for transmitting, receiving and switching equipment, it shall be situated in the rear yard of the principal use and shall be screened from view by landscaping where appropriate.*
- 4) *At the discretion of the City, a security fence not greater than eight (8) feet in height with a maximum opacity of fifty (50) percent shall be provided around the support structure.*
- 5) *The interim use permit provisions of Chapter 7 of this Ordinance are considered and determined to be satisfied.*

Staff Comment:

The applicant’s proposal does not currently include a building to contain the ancillary ground mounted equipment associated with this type of installation. Should the CUP be approved, staff is recommending a number of conditions which include a requirement for an architecturally appropriate building to house the equipment, and an eight foot high security fence with screening slats and landscaping to buffer the installation. **Criteria Met with conditions for 3 and 4 above.**

Condition 5 above requires that the interim use provisions of Chapter 7 be considered and satisfied. Chapter 7 utilizes the same procedures, criteria, and performance standards as proscribed for a conditional use. Therefore, much of the analysis already completed for the Verizon CUP applies to the IUP.

(cont.)

Additional performance standards as specified for an IUP are as follows:

- a) The date or event that will terminate the use can be identified with certainty.
- b) The use will not impose additional unreasonable costs on the public.
- c) The user agrees, in writing, to any conditions that the City Council deems appropriate for permission of the use, including the specified termination date or event.
- d) The use is specifically allowed as an interim use in the respective zoning district.

Chapter 7 also specifies events of termination for an IUP as:

- a) The date or event stated in the permit.
- b) Upon violation of conditions under which the permit was issued.
- c) The property is redeveloped to a permitted or conditional use allowed in the respective zoning district.

In the case of the subject property, the potential for urbanization in the near future is remote. Even if urbanization was eminent, cell towers are increasingly common in urban settings and the proposed height of 100 feet is not uncommon in the metropolitan area. In order to address the IUP termination performance standards, we are simply recommending that the termination of the use be specified in the permit as coterminous with the Verizon lease term provisions including any extensions. Furthermore, any violations of the conditional or interim use permits could also trigger a revocation procedure by the City as provided for by ordinance. Lastly, the General Standards (10-22-2) of the City's Antenna ordinance requires removal of "all obsolete and unused antennas ...within twelve months of cessation of operation at the site". This stipulation is included in the attached conditions of approval and will be incorporated into the proposed development agreement as a shared responsibility of the applicant and the fee owner of the property.

**CUP & IUP
Standards
Review:**

Issuance of a CUP and IUP requires an analysis of the proposed use against the specific review criteria established in code. Staff has reviewed the City's criteria as they pertain to the proposed cell phone tower, and we offer the following analysis for consideration:

(cont.)

General review Criteria (10-6-3):

1. *The proposed action has been considered in relation to the specific policies and provisions of and has been found to be consistent with the Official City Comprehensive Plan.*

Staff Comment:

Cell towers are recognized as an important contributor to public safety, and the applicants have demonstrated a need for the equipment in the proposed location. The plans have also been considered in relation to the specific policies and provisions of code as outlined above. **Criteria met.**

2. *The proposed use is or will be compatible with present and future land uses of the area.*

Staff Comment:

Personal wireless service towers with antennas and related equipment are conditionally permitted in the A-2 zoning district, and required standards for such are designed to ensure compatibility with present and future land uses throughout the City. Provided the applicant demonstrates compliance with the performance standards outlined in code, we find this **criteria is met.**

3. *The proposed use conforms with all performance standards contained in this Ordinance.*

Staff Comment:

The performance standards for personal wireless service antennas and towers, and related equipment were reviewed on pages 4 – 10 of this report. Along with the attached conditions of approval; **Criteria met.**

4. *The proposed use can be accommodated with existing public services and will not overburden the City's service capacity.*

Staff Comment:

The proposed facility can be accommodated by existing public services and will pose no unique burden on the City's service capacities. If anything, improved cell coverage will be important for emergency responders in the area, so services may improve. **Criteria met.**

- (cont.) 5. **Traffic generation by the proposed use is within capabilities of streets serving the property.**

Staff Comment:

As the use will not generate more than a few trips per year, there is no concern about traffic in the area being impacted by the requested CUP. **Criteria met.**

Additional Information:

- Verizon's plan sets and submitted information follow this report.

Engineering Report:

- City Engineer review of the plans and technical requirements are provided in the attached memo to the city dated October 11, 2017.

Public Comment:

- At the October 18, 2017 Planning Commission meeting, the neighbor to the south of the subject property expressed concern over the proximity of the tower to his property. Verizon has agreed to provide further analysis of the visual impact of the facility for consideration at the November 15, 2017 commission meeting.

Conclusion:

The following is a summary of the requested conditional use and interim use permits along with staff's recommendations.

- **Request for a conditional use permit** to authorize a "wireless telecommunications service antennae and support structure" on the unaddressed property to the SW of Hill and Dale Drive & Variolite St. NW.
- **Request for an interim use permit** to allow a tower to exceed 75 feet in height (for a total height of 100 feet plus a 9' lightning rod).
- **Recommendation: APPROVAL of both the CUP and IUP with combined conditions**, based on the fact that the provided plans with proposed conditions are in conformity to City standards required for telecommunications service antennae and support facilities.

Commission Options:	The Planning Commission has the following options: A) RECOMMEND APPROVAL OF THE REQUEST based on the applicant's submittals and findings of fact. B) RECOMMEND DENIAL OF THE REQUEST based on the applicant's submittals and findings of fact. C) TABLE THE ITEM and request additional information. ▪ Based on an application date of 09/18/2017, the 60-day review period for the CUP application expires on 11/17/2017. This deadline has been extended an additional 60 days to allow for additional analysis of the visual impacts of the project as requested by the Planning Commission, and to allow for the applicant's request for an IUP to be considered concurrently with the CUP at the November 15, 2017 Planning Commission meeting. As extended, the final deadline for a decision on the CUP is 1/16/18.
Template Denial Motion: <i>(not recommended)</i>	▪ "I move that we recommend the City Council deny the requested conditional and interim use permits based on the following findings of fact:" ○ <i>(provide findings to support your conclusion)</i>
Template Approval Motion: RECOMMENDED	▪ "I move we recommend the City Council approve the requested conditional and interim use permits based on the findings of fact in the staff report, and subject to the conditions listed on pages 14 through 16 as may have been amended here tonight."
Suggested Findings of Fact:	1. The proposal is consistent with the Agricultural designation in the City's Comprehensive Plan as telecommunication uses are a conditional use in the city's agricultural zoning districts. 2. The city acknowledges the need for telecommunications facilities in the community to provide service to residents and businesses. 3. The Verizon proposal is necessary for continued adequate service for area users and that the need for the facility cannot be met through colocation on other existing towers or facilities in the immediate area. 4. The proposed monopole tower and antennae are designed to minimize the visual impact to the area.

- (cont.)
5. The proposed tower, appurtenant equipment and enclosure design when modified consistent with the conditions recommended by the City's Planning Commission, will not have a significant detrimental impact on the surrounding neighborhood.
 6. With the recommended conditions attached to the approval of the conditional and interim use permits, the site will maintain safe and healthful conditions.

***Recommended
Conditions:***

1. All obsolete and unused antennas shall be removed by the property owner within twelve (12) months of cessation of operation at the site.
2. All antennas shall be in compliance with all City building and electrical code requirements and as applicable shall require related permits.
3. Structural design, mounting and installation of the antenna shall be in compliance with manufacturer's specifications, and as may be necessary as determined by the Zoning Administrator and Building Official, shall be verified and approved by a structural engineer.
4. Written authorization for antenna erection shall be provided by the property owner.
5. No advertising message shall be affixed to the antenna structure, tower or other site improvements.
6. Tower shall be painted a non-contrasting color consistent with the surrounding area such as: blue, gray, brown, or silver, or have a galvanized or oxidized finish to reduce visual impact.
7. All application materials plans and specifications are incorporated by reference and made part of the conditional use permit.
8. Transmitting, receiving and switching equipment shall be housed within a new equipment building. Architectural design to be approved by the city prior to receiving a building permit.
9. The proposed security enclosure will be constructed with an eight foot chain link fence and gate equipped with tubular vinyl slats. Final design to be approved by city staff prior to building permitting.

(cont.)

10. The proposed landscape plan will include a 20 foot buffer zone between the installation and the property to the south. In addition, the plan will include red maple trees, with a minimum size of 2-1/2 inch, balled and burlap stock, with consideration given to screening from all sides.
11. No lighting will be allowed on the proposed pole unless required by another governmental agency.
12. The applicant to satisfy the city engineer's requirements for an acceptable grading and storm water pollution prevention plan.
13. Adequate erosion control shall be in place throughout the duration of the project.
14. Ground cover shall be established with final landscaping as quickly as possible following final grades and completion of construction activities.
15. Damage to adjacent roadways caused by construction activities or deliveries related to this project shall be repaired at the applicant's expense.
16. The applicant and property owner both agree to enter into a development agreement with the city and to be equally responsible for decommissioning the site and removing all improvements when the lease expires and/or the facility becomes abandoned.
17. The applicant and property owner will enter into a development agreement which specifies and incorporates the terms and conditions of the conditional use permit and interim use permit approvals.
18. A financial security (or securities), will be provided to the city to ensure the installation of enhancements including; proposed equipment building, landscaping, grading and stormwater management improvements, the screening fence enclosure and for the final decommissioning of the site.
19. The applicant shall sign a consent agreement from the City of St. Francis agreeing:
 - a. *That the applicant, owner, operator, tenant and/or user has no entitlement to future re-approvals of the Interim Use Permit;*
 - b. *That the interim use will not impose additional cost on the public if it is necessary for the public to fully or partially take the property in the future;*
and

(cont.)

- c. *That the applicant, owner, operator, tenant and/or user will abide by conditions of approval attached to the Interim Use Permit.*
- 20. The interim use shall terminate upon an event of either a violation of the conditions of the conditional use permit, or upon expiration of the original lease term including any extensions thereto.
- 21. In the event the interim use is discontinued, the permit shall lapse by non-use six (6) months after notice from the City.

cc: Applicant-Verizon Agent; Eddie Buell, Buell Consulting

MEMORANDUM

TO: Ben Gozola, City Planner

FROM: Shane Nelson, Assistant City Engineer

CC: Craig Jochum, City Engineer
Joe Kohlmann, City Administrator
Kate Thunstrom, Community Development Director
Paul Teicher, Public Works Director
Eddie Buell, Applicant's Representative

DATE: October 11, 2017

RE: Engineering Review of Verizon – Minc Spring Hill

We have received and reviewed the plans for the above-referenced project, 11-01-16 revision, prepared by Design 1, and would offer the following engineering comments:

1. The plans depict a new driveway onto Variolite Street NW, which is a city street. The applicant shall obtain a Driveway Permit from the city for the construction of this connection.
2. The driveway shall be in accordance with City Standard Detail 1-501 (attached), which requires 8" minimum thickness aggregate and 15" minimum diameter driveway culvert (10-19-4.B.5). Revise plans in accordance with city standard detail.
3. It is recommended that the portion of the driveway within the city right-of-way be paved to prevent runoff of gravel into the city street. Revise plans to depict paving within right-of-way.
4. Given the proximity of the driveway within the 20' wide easement, it is recommended that the driveway is sloped to the north and provisions for drainage along said north side of driveway be incorporated into the plans to prevent runoff of gravel into the city street. Revise plans to depict shallow swale on north side of the driveway, extending a minimum of 100' west from the right-of-way.
5. During construction, silt fence and a rock construction entrance will be required. Depict locations of silt fence and rock construction entrance on the plans.



Buell Consulting, Inc.

1360 Energy Park Drive, Suite 210
Saint Paul, Minnesota 55108
(651) 361-8110
www.buellconsulting.com

*Site Acquisition
Permitting
Established 1991*

July 20, 2017

City of St. Francis
23340 Cree Street NW
St. Francis, MN 55070
Attn: Planning and Zoning

**RE: CUP Application for Proposed Verizon Wireless Telecommunication Tower
(VZW ref. MIN Spring Hill)**

This tower is being proposed to help strengthen the coverage and capacity for Verizon customers in the City of St. Francis and surrounding area. The proposed tower is a 100' monopole tower with a 9' lightning rod. The tower is designed to accommodate a total of 3 carriers, so future collocators can utilize the tower for their equipment.

I have contacted with Anoka County to confirm that no other governmental agencies have authority over the property in questions.

Enclosed you will find the following items:

- Check for \$2,350 (\$350 for CUP fee and \$2,000 for escrow).
- Completed CUP Application and questionnaire answers
- Zoning drawings showing a scaled and dimensioned site plan including survey
- Map showing the lands within 350' of the boundaries of the property

If you have any questions regarding this application, please feel free to contact me at 651-361-8113.

Regards,

Eddie Buell

Buell Consulting Inc., on behalf of Verizon Wireless
1360 Energy Park Dr, Suite 210
St. Paul, MN 55108
651-361-8113
ebuell@buellconsulting.com

Application Date:	
Fee: \$350	Escrow: \$2000

PERMIT APPLICATION

PERMIT YOU ARE REQUESTING:

☒ **CONDITIONAL USE**

☐ **INTERIM USE**

PROPERTY INFORMATION If multiple properties, attach separate sheet	PARCEL ID #: 33-34-25-21-0001		COMP PLAN FUTURE LAND USE:	
	LEGAL DESCRIPTION: Attached as separate sheet		ZONING DISTRICT: A2 - Rural Estate Ag	
			LOT SIZE: 26.71 acres	
	PROJECT ADDRESS: No assigned address. Variolite Street NW, St. Francis, MN			
OWNER INFORMATION	NAME: Raymond Jones			
	ADDRESS: 23725 Nacre Street NW			
	CITY: Elk River	STATE: MN	ZIP: 55330	
	PHONE: 763-441-2437	EMAIL: N/A		
APPLICANT If different than owner	NAME: Eddie Buell		PHONE: 651-361-8113	
DESCRIPTION OF REQUEST	Verizon Wireless is proposing a 100' tall monopole tower with a 9' lightning rod. This tower is designed to accommodate a total of 3 carriers.			
REASON FOR REQUEST	Verizon is seeking to improve coverage and capacity for Verizon customers in the City of St. Francis and surrounding area. More people are using cell phones as their only phone line and the demand for increased capacity has been recognized.			
ORDINANCE REQUIREMENT	This tower meets all requirements listed in Chapter 22 of the City Code.			

Submittal Materials

The following materials must be submitted with your application in order to be considered complete. A complete application must be made by the application deadline for the Planning Commission meeting for which you wish to be heard. If you have any questions or concerns regarding the necessary materials, please contact the Community Development Department.

MATERIALS

Survey, site plan, and development plans. Three (3) sets of large scale drawings; one **legible** set of 8 1/2" x 11" or 11" x 17" reductions. Additional sizes and copies may be requested and required by the City for application completion. The following information must be included:

- ☐ Map or plat showing the lands proposed for the conditional use permit and all land within 350 feet of the boundaries of the property.
- ☐ Survey of the property showing all property lines, topography, existing and proposed structures (including dimensions and distances to property lines and other buildings), existing streets, alley, private roads, and fire lanes and easements.
- ☐ Access points, driveways, and parking areas including striping and number of spaces.
- ☐ Landscaping and ground cover including existing to be retained, existing to be removed, and proposed – all identified by size, type species, and quantity.
- ☐ Grading, drainage, and stormwater plans with existing and proposed topography prepared by a professional civil engineer registered in the state and adopted.
- ☐ Utility plans prescribing locations for city water, sewer, fire hydrants, manholes, power, telephone, and cable lines, natural gas mains, and other service facilities prepared by a professional civil engineer registered in the state and adopted.
- ☐ General floor plans and elevations for all existing and proposed structures.
- ☐ Proposed signage.
- ☐ Site lighting.
- ☐ A legend identifying the legal description, size of parcel, use(s) and square footage, number of units and density of residential, building height, floor area ratio, ground floor area ratio, impervious surface ratio, setbacks on all sides, graphic scale, north point, and usable open space.

Statement acknowledging that you have contacted the other governmental agencies such as Watershed Districts, County Departments, State Agencies, or others that may have authority over your property for approvals and necessary permits.

Names, addresses, and signatures of all owner(s), and any other person having legal interest, of the property.

Permit application form completed, including questionnaire answers.

Permit Request Supplement

Paid application fee \$350 and escrow \$650

MATERIALS THAT MAY BE REQUIRED UPON THE REQUEST OF THE CITY

Survey of the property: An official survey, by a licensed surveyor, must be submitted with the application. The survey shall be scalable and in an 11" x 17" or 8 1/2" x 11" format.

Electronic copy of all submittal documents

Any other materials as deemed necessary to help in the review of the application

I, the undersigned, hereby apply for the considerations described above and declare that the information and materials submitted in support of this application are in compliance with adopted City policy and ordinance requirements are complete to the best of my knowledge. I further understand that the IUP application will be processed in accordance with the established City review procedures and Minnesota Statutes 15.99 as amended, at such times as it is determined to be complete. Pursuant to Minnesota Statutes 15.99, the City will notify the applicant within fifteen (15) business days from the filing date of any incomplete or other information necessary to complete the application. Failure on my part to supply all necessary information as required by the City may be cause for denying this application.

This application must be signed by all owners of the subject property or an explanation given why this is not the case.

We, the undersigned, have read and understand the above.



Signature of Applicant

7/20/17

Date

Signature of Applicant

Date

Office Use Only:

Planning/Zoning Meeting Date: _____

Council Meeting Date: _____

Signature of Owner (if different than Applicant)

Date

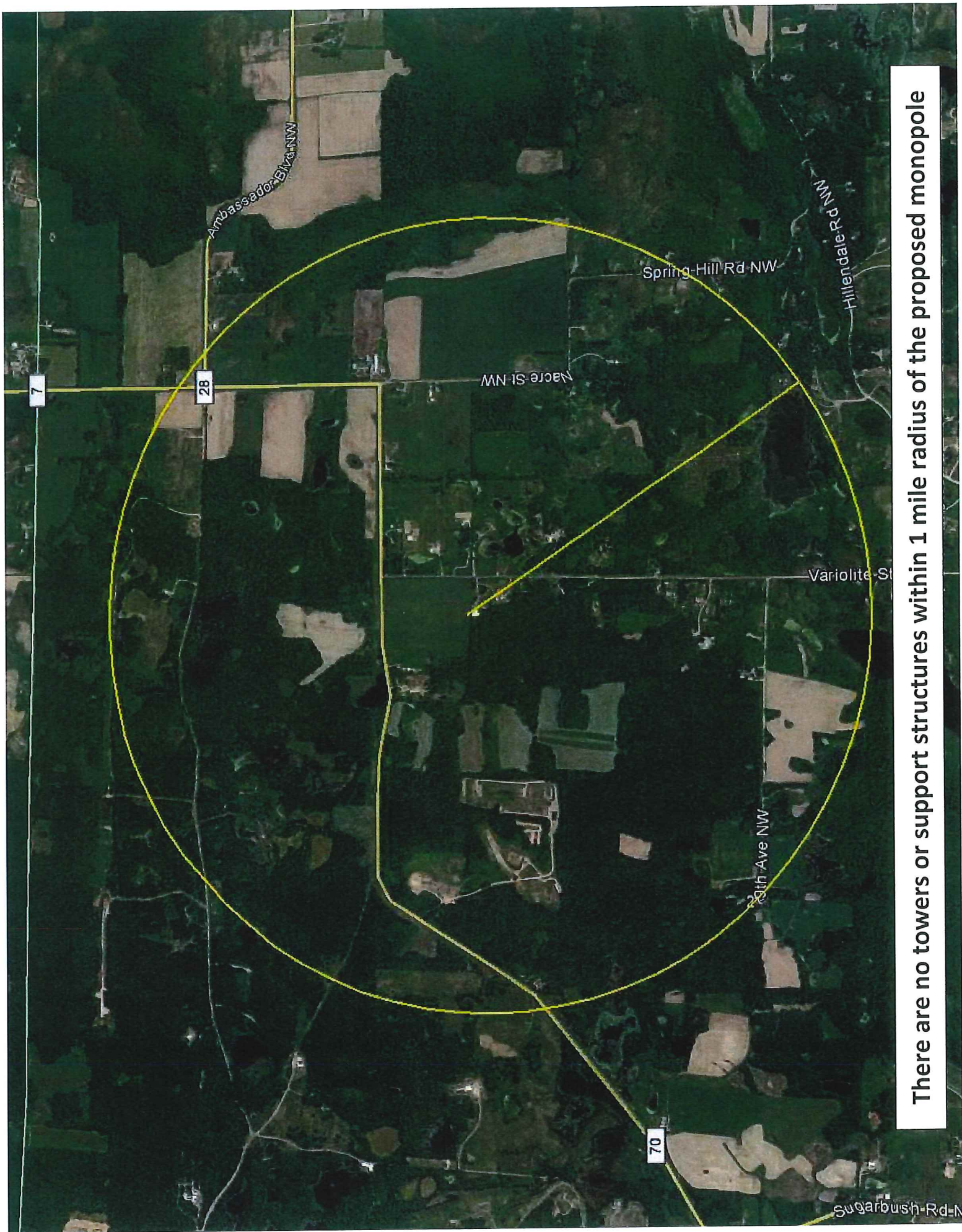
QUESTIONNAIRE

1. Existing use of the property? – **agriculture, empty lot**
2. Description of proposed use of the property that requires the application for a CUP or IUP? **Location of a new telecommunications tower**
 - a. The situation on the site which necessitates the request for the CUP or IUP – **All towers require CUP in A2 district**
 - b. Hours of operation, including dates, times (if applicable) – **N/A tower will not be manned**
 - c. Duration of the proposed use – **lease with landowner is for 25 years with options to extend**
 - d. Date or event that will terminate the use – **After 25 years the landowner can terminate the lease if they don't wish to extend**
3. Type of Conditional or Interim use permit requested? – **CUP for new tower**
4. Describe how you believe the requested CUP or IUP Use fits the City's Comprehensive Plan. – **this CUP will allow Verizon to construct a new telecommunications tower that will increase coverage and capacity in the City of St. Francis and surrounding area. The tower is designed to accommodate a total of 3 carriers.**
5. Describe any physical or hydraulic impacts this project will have on water resources. Will the project involve the alteration of any surface water? – **this project should not affect any water resources.**
6. Provide an estimate of the acreage to be graded or excavated and the amount of soil to be moved. – **the proposed 12' wide gravel access road will run approx. 550' to the tower location where a 26' x 38' lease area will be prepared for the tower and base station equipment. Total area of road and tower site is 7,588 SF or 0.17 acres.**
Describe any steep slopes or highly erodible soils and what measures will be used to minimize erosion. – **there are no steep slopes within the project area.**
7. Is this project in proximity to designated parks, trails recreation areas, wildlife preserves or other unique resources? – **No, this location was selected due to its proximity to the I3 district and other more rural properties while still being close enough to improve service in the City of St. Francis.**
8. Provide any additional information that would be helpful for the Planning Commission when reviewing this application. – **More people are abandoning their land lines and using cell phones as their solitary phone line. This has created the need for additional towers closer to residential areas. These towers are often shorter and are designed to improve capacity and allow more users the ability to utilize internet accessibility and other smart phone features.**
9. Does the request meet the criteria necessary to grant approval? (refer to the City Code) – **Yes, this application meets all the setbacks and collocation requirements listed in Chapter 22 of the City Code.**

Map of property and surrounding area



Legal Description: The Northeast Quarter of the Northwest Quarter of Section 33, Township, 34, Range 25, Anoka County, Minnesota, EXCEPT the West 334.60 feet thereof.



There are no towers or support structures within 1 mile radius of the proposed monopole

MIN SPRING HILL RF DOCUMENTATION

Jordan Alstad

RF Engineer – Verizon Wireless

9-18-2017

This document will supply the requested documentation to justify the need for and the proposed design of a new Verizon Wireless cell site in St. Francis – Project name MIN SPRING HILL. It will provide three different items. The first item is a set of comparative coverage maps utilizing the RF measurement of Reference Signal Received Power (RSRP), measured in dBm. RSRP is used to determine the strength of the RF signal that a cellular device will receive from nearby cell sites, compared to a reference level. Various RSRP levels signify different capabilities for the device to establish and maintain a reliable connection, so simulating areas where RSRP is insufficient allows us to determine where to put new cell sites.

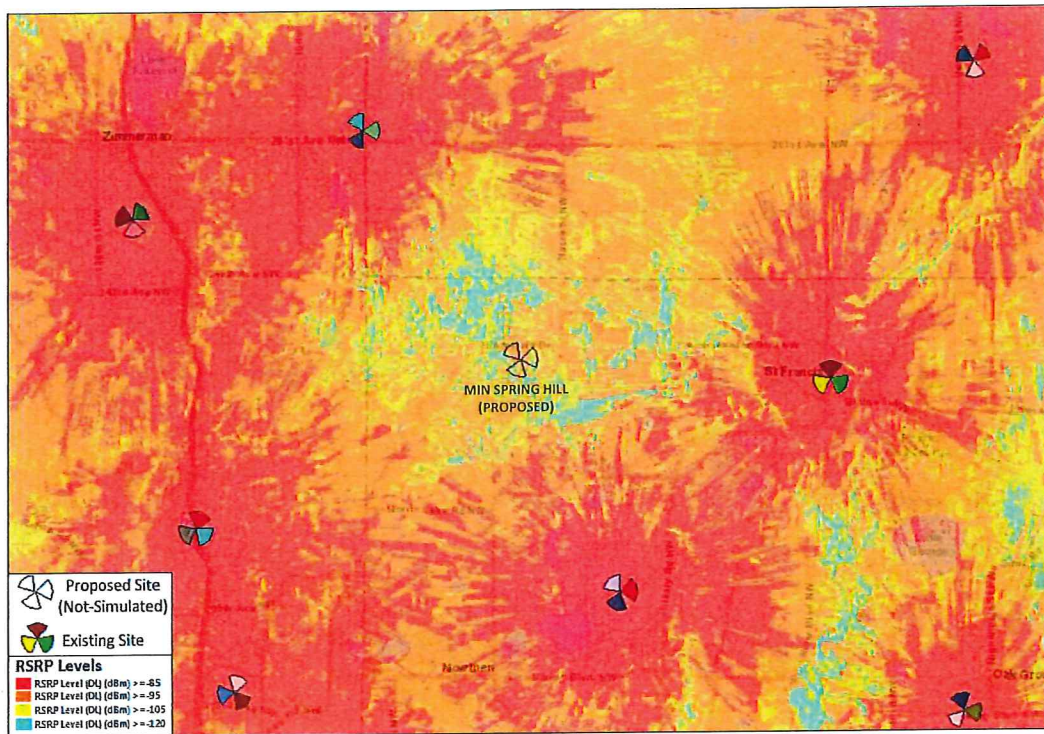
The second item this document will provide is to show why the proposed centerline of 96' is necessary for the antennas. Centerline is a critical design component of cell site design, as higher centerlines allow for line of sight to a larger area. Comparative maps of the proposed design will demonstrate that as the centerline is simulated to be lower, the proposed coverage degrades.

The third and final item will explain how this location was chosen. An excerpt from the coverage maps will highlight the area where RSRP coverage is insufficient, and this area generally overlaps with the search ring that was submitted when the project was started.

Item 1: Comparative Coverage Maps

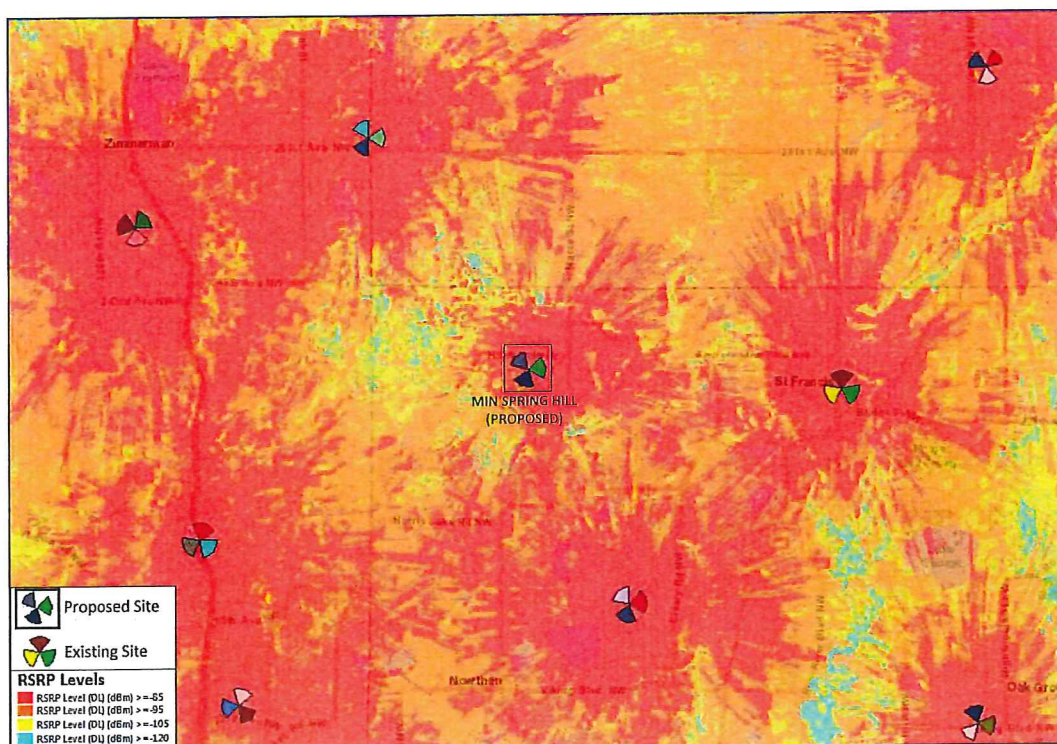
The map on the following page shows the existing RSRP coverage in the St. Francis and surrounding area. For this map, the proposed site is not simulated. The different levels of RSRP of concern are shown on the legend. Red areas (RSRP $\geq$ -85 dBm) show where the signal will be more than sufficient to establish and maintain connections between the device and the network, in almost all surrounding environments. Orange areas (RSRP between -85 and -95 dBm) show where the signal will typically be sufficient to establish and maintain connections to the network, though in certain environments (lower floors of buildings or uneven terrain, etc.) some connections may be degraded. Yellow areas (RSRP between -95 and -105 dBm) show where signal will be sufficient in many cases, but is very dependent on the surrounding environment. Blue areas (RSRP $<$ -105 dBm) show where signal may be sufficient in a few cases, but establishing and maintaining a connection will be very unreliable. As part of maintaining a reliable network, it is these areas in particular that we need to avoid as much as possible. As will be seen on the map, the location of the new cell site is surrounded by several yellow and blue areas that need to be addressed.

Existing RSRP Coverage in St. Francis and Surrounding Area



As previously stated, the blue areas on the map are areas where a reliable connection is very difficult to achieve. While a device may still operate in these areas, the connection may be slow and inconsistent, and moving through one of these areas may lead to dropped calls or connections. The next map shows how the new site will address many of these areas. As can be seen, there are still some blue areas near the proposed site, but they are much smaller and will have a significantly decreased negative impact on users in the area. This will be discussed further as part of item 2.

Proposed RSRP Coverage in St. Francis and Surrounding Area

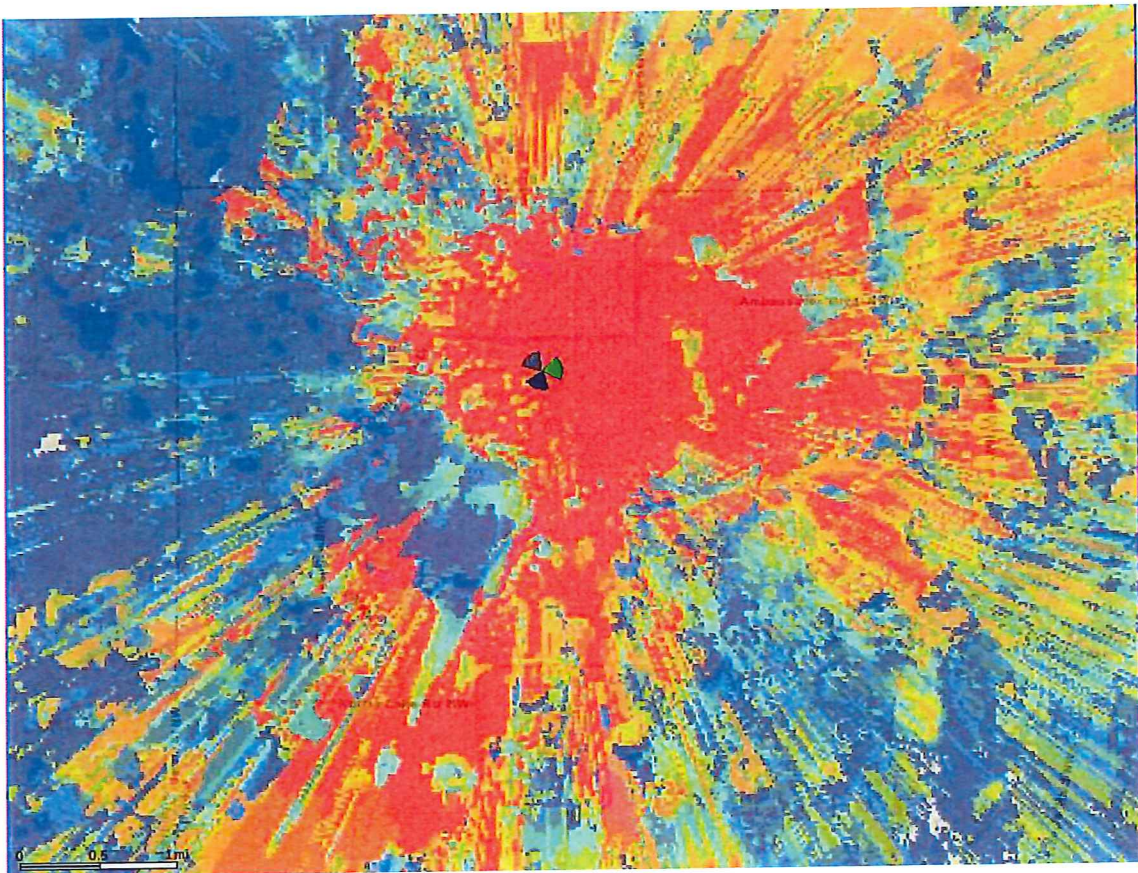


Item 2: Needed Centerline

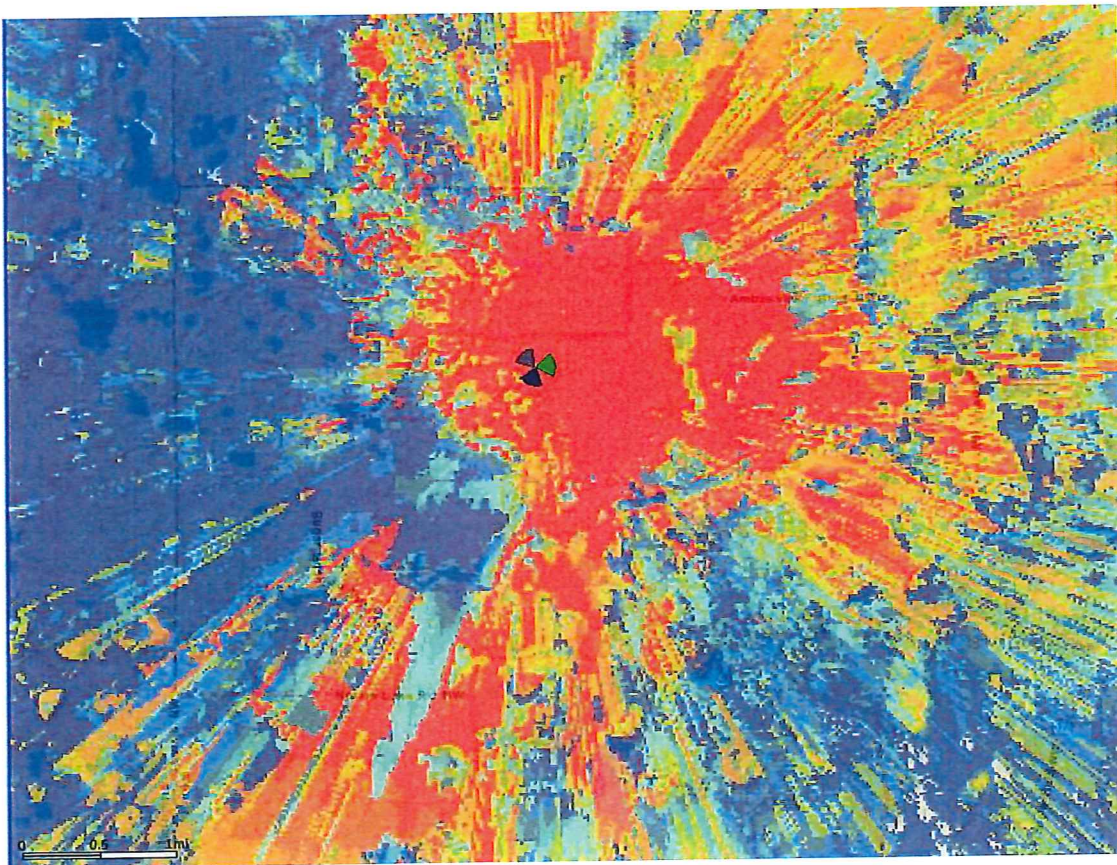
The next item will show why the proposed centerline of 96' is necessary. The biggest challenge with this area is that there is a large (several square miles) area with poor coverage (yellow or blue areas on the map). Typical tower height for new towers in similar situations is between 120 and 150 feet tall. Due to zoning restrictions in the area, 96' centerline, which results in a 100' antenna tip height, was what we were able to achieve with this candidate. As the previous maps have shown, this centerline will greatly improve the coverage, though as with most new towers, there will remain small areas of poor coverage. These areas could be served better with a higher centerline, but at the very least, the proposed centerline of 96' is needed.

The two maps on the following page show a zoomed in version of the previous maps, showing just the RSRP contribution of the proposed site, at 2 different centerline levels, 96' and 86'. The RSRP from the proposed site at 96' extends farther to the west and southwest than the proposed site at 86', and while the difference doesn't seem too significant at a glance, it is for three main reasons: First, the modeling doesn't completely account for the variations in terrain in the area, as it can only approximate the effects of trees, hills, foliage, and buildings, etc. Hence, minor differences in the modeling can often mean significant differences in the real user experience. Secondly, in addition to providing improved coverage in areas where the existing coverage is poor, the proposed site is also intended to take on traffic currently served by surrounding cell sites, which are currently overloaded. So any area that is not served well by the proposed site will remain as a contributor to traffic for the surrounding sites which in many cases means that new solutions will need to be developed quicker to provide additional offload. And third, as designed, this site will be capable of collocating other carriers at lower centerlines in the future. However, with a typical separation between carriers on towers being between 10-15', lowering the top centerline with Verizon's antennas to even 10' lower could result in a second or third carrier being 20-30' lower than the top centerline, which will make the tower much less usable for those carriers, and cause them to seek building new towers elsewhere.

RSRP Contribution of Proposed Site at 96' Centerline



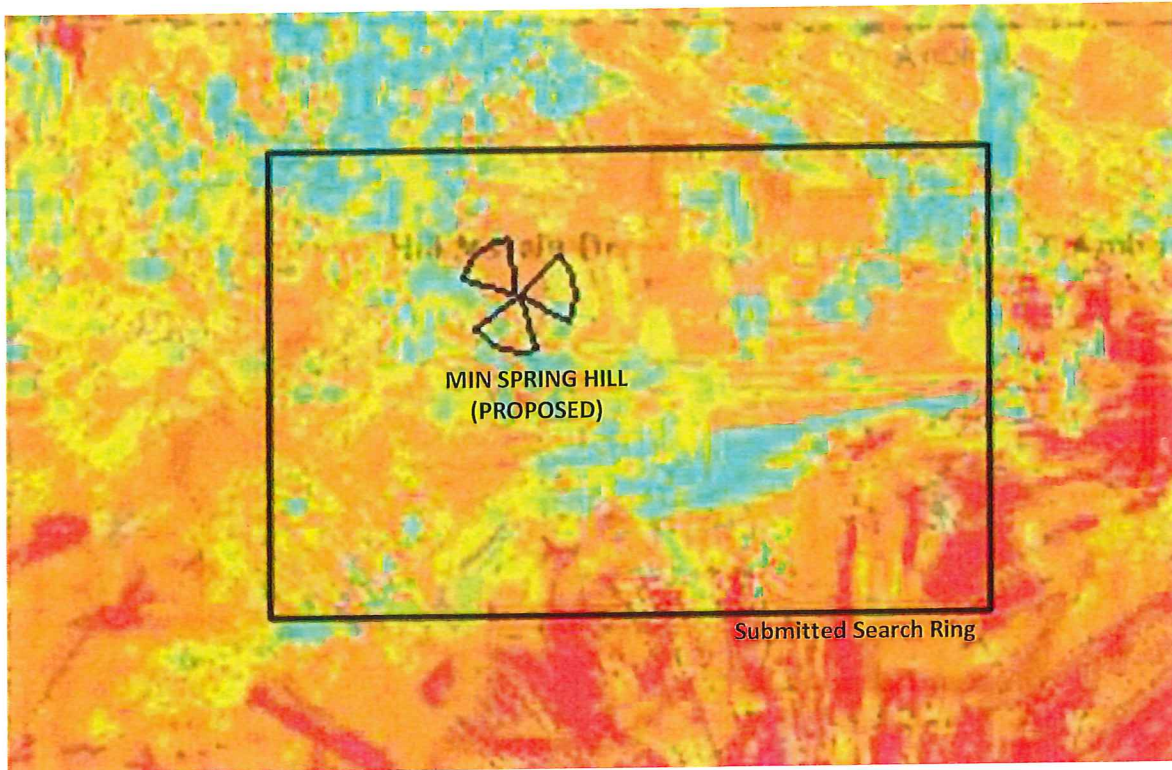
RSRP Contribution of Proposed Site at 86' Centerline



Item 3: Location Selection

The search ring map was developed in response to the noticeable coverage hole surrounding the proposed site, as shown in the first map of item 1. The map below is an excerpt from that map, showing the search ring that was submitted:

Location of Search Ring Map Imposed on Excerpt of RSRP Map



Analysis determined that any location within that ring would have satisfied the requirements of the site, with more central locations being preferred, so as to better serve the whole area. Of the 3 candidates presented to Verizon based on the search ring, the proposed location was best able to serve the area in question.



September 11, 2017

City of St. Francis
23340 Cree St NW
St. Francis, MN 55070
Attn: Planning and Zoning

RE: Proposed Wireless Communications Facility
Site Address: Variolite St NW, St. Francis, MN
(VZW Ref. "MIN Spring Hill")

Dear Mr. Gozola:

Pursuant to the Code of Ordinances of the City of St. Francis, Minnesota, Section 10-22-2(L)(1)
– Additional Submittal Requirements, I acknowledge the following statement to be true:

Verizon Wireless and its successors will allow the shared use of the wireless communications tower that is to be located along Variolite St NW in St. Francis, Minnesota, if an additional user agrees in writing to meet reasonable terms and conditions for shared use.

Sincerely,

A handwritten signature in black ink, appearing to read "Katie Poser", with a long horizontal flourish extending to the right.

Katie Poser, Verizon Wireless
Great Plains Real Estate Manager



MINC SPRING HILL NEW BUILD

PROJECT INFORMATION

SITE NAME: MINC SPRING HILL
SITE ADDRESS: VARIOLITE STREET NW
ST. FRANCIS, MN 55330
COUNTY: ANOKA
LATITUDE: N45° 23' 45.67" (NAD83)
LONGITUDE: W92° 27' 43.73" (NAD83)
DRAWING BASED ON: 09-15-16
SITE DATA FORM DATED: 11B
BUILDING TYPE: 25' X 38' = 888 S.F.
SITE AREA:

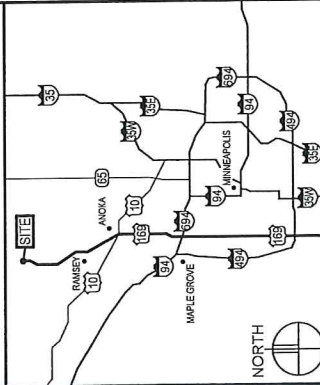
ISSUE SUMMARY

REV.	DESCRIPTION	SHEET OR DETAIL
A	ISSUED FOR REVIEW 08-21-16	ALL
B	ISSUED FOR APPROVAL 11-01-16	ALL

SHEET INDEX

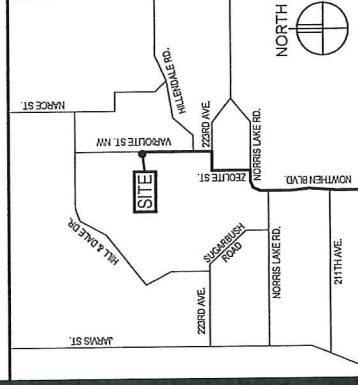
SHEET	SHEET DESCRIPTION
T-1	PROJECT INFORMATION, TOWER ELEVATION, & SHEET INDEX
A-1	SITE PLAN & DETAIL INDEX
A-1-1	CONTOUR PLAN
A-2	ENLARGED SITE PLAN
A-3	COAX & ANTENNA KEY
A-4	ANTENNA MOUNTING DETAIL AND CABLE BRIDGE PLAN
A-5	OUTLINE SPECIFICATIONS
G-1	GROUNDING NOTES
G-2	GROUNDING PLAN & GROUNDING DETAIL INDEX
U-1	SITE UTILITY PLANS & NOTES
-	SURVEY

AREA MAP



HEAD NORTH ON 100 FOR APPROX. 2.74 MILES. CONTINUE ON 100 FOR APPROX. 0.4 MILES. TURN RIGHT ON 223RD AVE. NW. TURN LEFT ON VARIOLITE ST. NW FOR APPROX. 1.12 MILES. SITE WILL BE ON THE WEST SIDE OF VARIOLITE ST.

VICINITY MAP



DEPARTMENTAL APPROVALS

	NAME	DATE
RF ENGINEER	JORDAN ALSTAD	09-26-16
OPERATIONS MANAGER	RON SIMMONS	09-26-16
CONSTRUCTION ENGINEER	STEVE COLLIN	10-19-16

LESSOR / LICENSOR APPROVAL

SIGNATURE	PRINTED NAME	DATE

LESSOR / LICENSOR: PLEASE CHECK THE APPROPRIATE BOX BELOW
☐ NO CHANGES. ☐ CHANGES NEEDED. SEE COMMENTS.

CONTACTS

LESSOR / LICENSOR: RAYMOND H. JONES TRUSTEE
23725 NACRE STREET NW
ELK RIVER, MN 55330
RAY JONES (763) 441-2437

LESSEE: VERIZON WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
RON REITER (612) 720-0662

POWER UTILITY COMPANY CONTACT: CONNEXUS ENERGY
14601 RAMSEY BOULEVARD
MINNETONKA, MN 55345
RANDY C. AMUNDSON (763) 329-2632
KARL SCHWARZKOPF - ENGINEER
(763) 323-2695

T.B.D.

TELCO UTILITY COMPANY CONTACT:

ARCHITECT: DESIGN 1 OF EDEN PRAIRIE, LLC.
EDEN PRAIRIE, MN 55344
(952) 933-9259

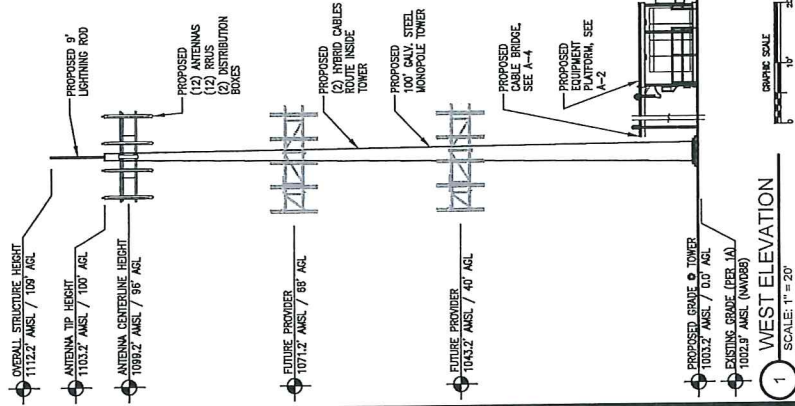
SURVEYOR: WILSON SMITH SURVEYING
810 FILLMORE STREET, PO BOX 1028
ALEXANDRIA, MN 55306-1028
320-762-8149

STRUCTURAL ENGINEER: N/A

GEOTECHNICAL ENGINEER: T.B.D.

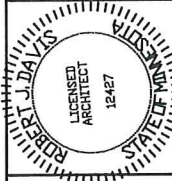
TOWER ELEVATION

NOTE:
1.) TOWER TO BE ERRECTED AND INSTALLED IN ACCORDANCE WITH TOWER MANUFACTURER'S DRAWINGS NOT INCLUDED WITH THIS PACKAGE. DISCREPANCIES BETWEEN TOWER DRAWINGS AND ARCHITECTURAL DRAWINGS TO BE REPORTED TO VERIZON WIRELESS AND THE ARCHITECT IMMEDIATELY.
2.) TOWER FOUNDATION, PLATFORM FOUNDATION AND THE ACCESS DRIVE TO BE EXCAVATED AND CONSTRUCTED IN ACCORDANCE WITH RECOMMENDATIONS AND SPECIFICATIONS OF THE GEOTECHNICAL REPORT WHICH IS NOT INCLUDED IN THIS PACKAGE. DISCREPANCIES BETWEEN THE REPORT AND THE OTHER DOCUMENTS TO BE IMMEDIATELY REPORTED TO VERIZON WIRELESS AND THE ARCHITECT.
3.) CONTRACTOR TO ENSURE TIP OF ANTENNAS DO NOT EXCEED TOWER HEIGHT.



WEST ELEVATION

SCALE: 1" = 20'



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 in the State of Minnesota.
ROBERT J. DAVIS, Reg. No. 12427

Signature: *Robert J. Davis*
Date: 11-01-16



PROJECT: 20161343979
LOC. CODE: 404974

MINC
SPRING HILL

VARIOLITE STREET NW
ST. FRANCIS, MN 55330

SHEET CONTENTS:
PROJECT SUMMARY
ISSUE INDEX
DEPARTMENTAL APPROVALS
LESSOR APPROVAL
PROJECT INFORMATION
GENERAL NOTES

DRAWN BY: JUP
DATE: 09-14-16
CHECKED BY: TRD
REV. A: 08-21-16
REV. B: 11-01-16

T-1



12.1 METER PEDESTAL DETAIL (DETAIL 2)

A circular professional seal for Robert J. Davis, a Licensed Architect in the State of Minnesota. The seal features the text "ROBERT J. DAVIS" around the top inner edge, "STATE OF MINNESOTA" around the bottom inner edge, "LICENSED ARCHITECT" in the center, and the license number "12427" below the center text.

Signed: Pharad Jones
11-01-16
Date: _____



MINC
SPRING HILL

VARIOLITE STREET NW
ST. FRANCIS, MN 55330

SHEET CONTENTS:
SITE PLAN
DETAIL INDEX

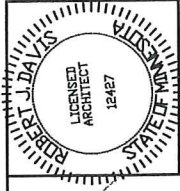
DRAWN BY:	JJ
DATE:	09-14-1
CHECKED BY:	TR
REV. A	09-21-1
REV. B	11-01-1

A-1



GRAPHIC SCALE

1 SITE PLAN
SCALE: 1" = 50'-0"



I hereby certify that this plan, specification and report were prepared by me or under my direct supervision and that I am a duly licensed professional engineer in the State of Minnesota.
ROBERT J. DAVIS, Reg. No. 12427

Robert J. Davis
Signature
11-01-18
Date

DESIGN 1
6973 VALLEY VIEW RD.
COON PRairie, MN 55344
PH: 952.461.1111
WWW.DESIGN1EP.COM

verizon
13001 BUSH LAKE ROAD
BLOOMINGTON, MN 55436
(612) 726-2622

PROJECT
20161343979
LOG. CODE: 404974

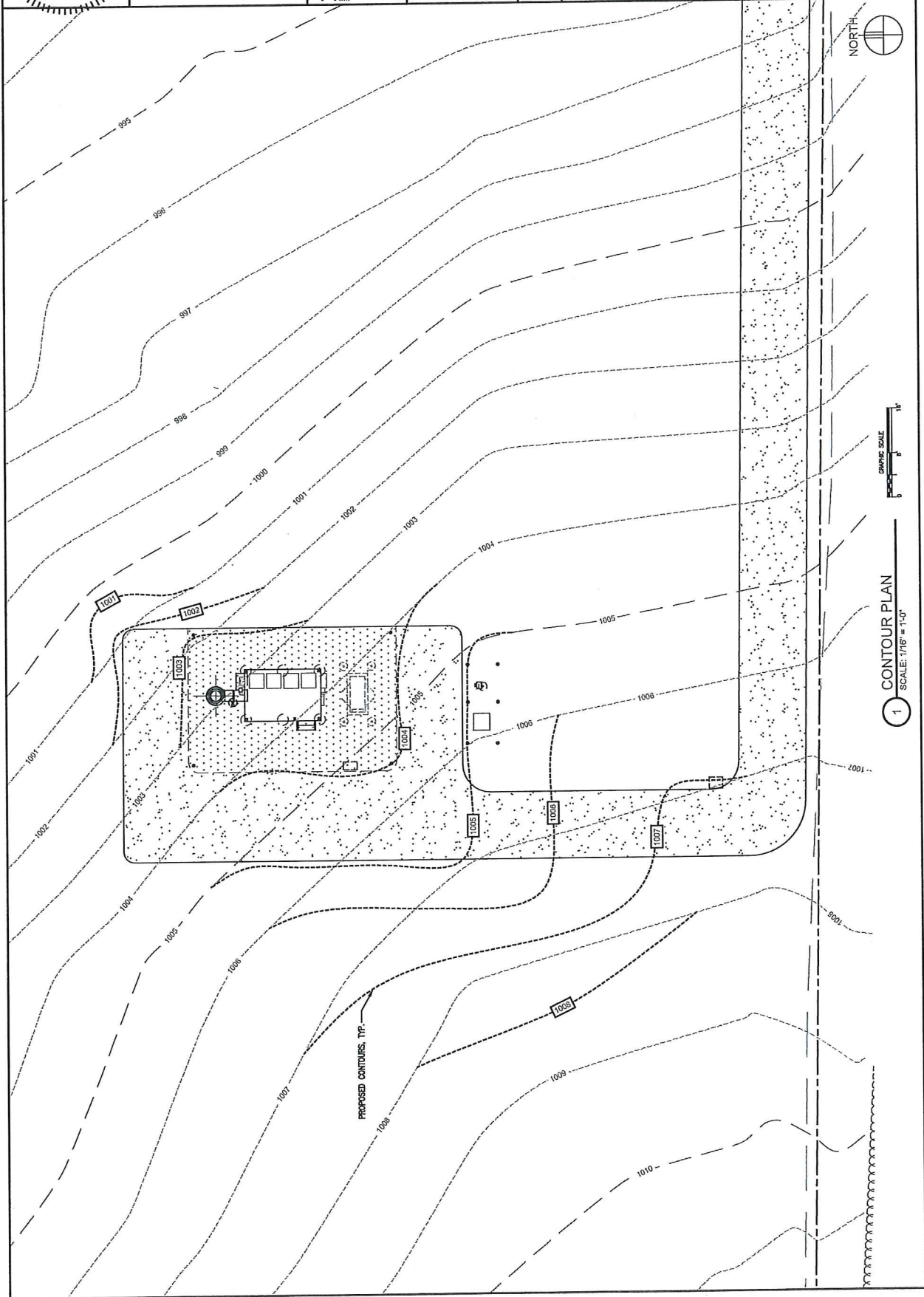
MINC
SPRING HILL

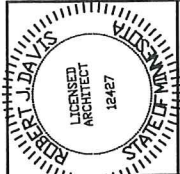
VARIOLITE STREET NW
ST. FRANCIS, MN 55330

SHEET CONTENTS:
CONTOUR PLAN

DRAWN BY:	J.P.
DATE:	08-14-18
CHECKED BY:	T.R.D.
REV. A	08-21-18
REV. B	11-01-18

A-1.1





I hereby certify that this plan, prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer in the State of Minnesota, and that I am the Engineer of Record for this project.

ROBERT J. DAVIS, P.E., No. 12427

Signature: *Robert J. Davis*
Date: 11-01-16



PROJECT
20161343979
LOC. CODE: 404874

MINC
SPRING HILL

VARIOLITE STREET NW
ST. FRANCIS, MN 55330

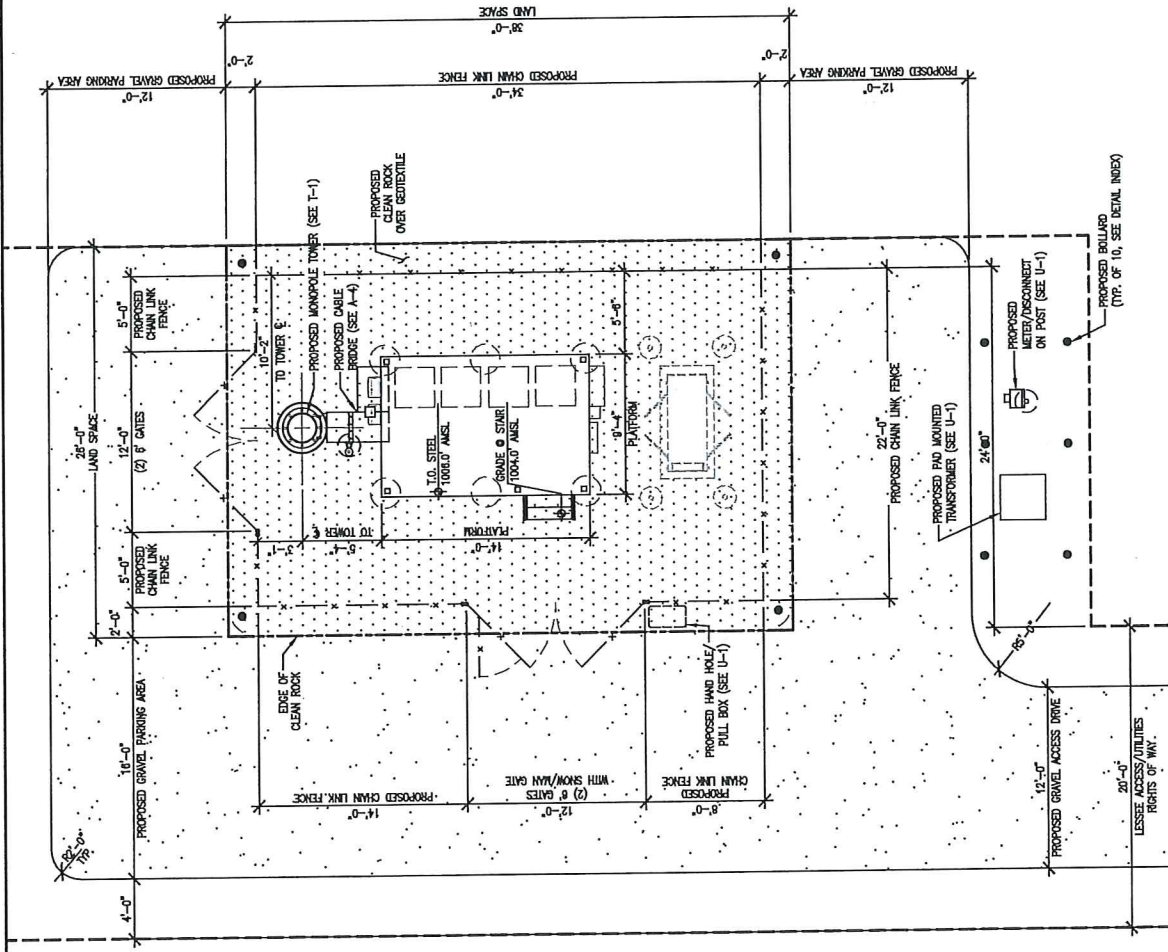
SHEET CONTENTS:
ENLARGED SITE PLAN

DESIGNED BY:	J.P.
DATE:	08-24-16
CHECKED BY:	T.R.D.
REV. A:	08-24-16
REV. B:	11-01-16

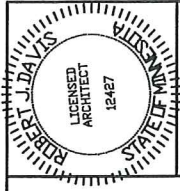
A-2

NOTE:
CONTRACTOR TO COORDINATE PUBLIC AND PRIVATE UTILITY LOCATES PRIOR TO CONSTRUCTION START. NOTIFY THE ARCHITECT AND THE VCA CONSTRUCTION ENGINEER IMMEDIATELY OF ANY UTILITY LINE ISSUES.

NOTE:
SEE DRAWING A1.1 FOR PROPOSED CONTOURS



1 ENLARGED SITE PLAN
SCALE: 1/8" = 1'-0"



I hereby certify that this plan, prepared by me or under my direct supervision, and that I am a duly registered Architect under the laws of the State of Minnesota.
ROBERT J. DAVIS, Reg. No. 12427

Robert J. Davis
SIGNED: 11-01-15
DATE:



9873 VALLEY VIEW RD.
SUITE 100
MINNETONKA, MN 55344
WWW.DESIGN1PC.COM



PROJECT
20161343979
LOC. CODE: 404974

MINC
SPRING HILL

VARIOLITE STREET NW
ST. FRANCIS, MN 55330

SHEET CONTENTS:
COAX & ANTENNA KEY

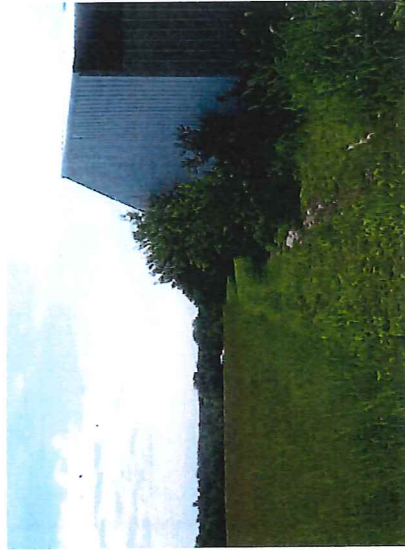
DRAWN BY: JLP
DATE: 08-14-16
CHECKED BY: TRD
REV. A: 08-22-16
REV. B: 11-01-16

A-3

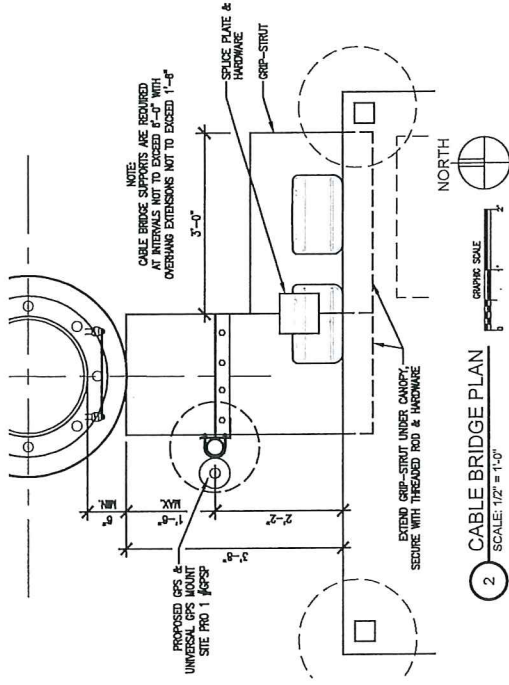
ANTENNA KEY										EQUIPMENT/CABLE KEY									
ANTENNA LENGTH	ANTENNA TIP	ANTENNA CENTER	MOD TYPE	MODEL	QTY	MANUFACTURER	POSITION	FUNCTION	QTY	MANUFACTURER	MODEL	MOD TYPE	ANTENNA LENGTH	ANTENNA TIP	ANTENNA CENTER	ELEC DOWNHILL	MCH DOWNHILL		
X SECTOR	3207	1.1	SPARE	1	CSS	X700P-86-BBS-WRO	SPARE	95'	100.0'	95.0'	0'	0'			TERMINATE WITH MATCHED LOAD				
	-	1.2	SPARE			2ND PORT									TERMINATE WITH MATCHED LOAD				
	-	1.3	TX/RX			700LITE 445									TERMINATE WITH MATCHED LOAD				
	-	1.4	TX/RX			4TH PORT	700LITE 445								TERMINATE WITH MATCHED LOAD				
	-	1.5	SPARE			5TH PORT	SPARE								TERMINATE WITH MATCHED LOAD				
	-	1.6	SPARE			6TH PORT	SPARE								TERMINATE WITH MATCHED LOAD				
	3207	2.1	TX/RX	1	CSS	X700P-86-BBS-WRO	PSCLITE 445	95'	100.0'	95.0'	0'	0'			ROSENBERGER HU-712015 HYBRID				
	-	2.2	TX/RX			2ND PORT	PSCLITE 445								ROSENBERGER HU-712015 HYBRID				
	-	2.3	TX/RX			3RD PORT	PSCLITE 445								ROSENBERGER HU-712015 HYBRID				
	-	2.4	TX/RX			4TH PORT	PSCLITE 445								ROSENBERGER HU-712015 HYBRID				
Y SECTOR	-	2.5	RX2			5TH PORT	PSCLITE 445								TERMINATE WITH MATCHED LOAD				
	-	2.6	RX3			6TH PORT	PSCLITE 445								TERMINATE WITH MATCHED LOAD				
	3207	3.1	TX/RX	1	CSS	X700P-86-BBS-WRO	AMSLITE 445	95'	100.0'	95.0'	0'	0'			ROSENBERGER HU-712015 HYBRID				
	-	3.2	TX/RX			2ND PORT	AMSLITE 445								ROSENBERGER HU-712015 HYBRID				
	-	3.3	RX2			3RD PORT	AMSLITE 445								ROSENBERGER HU-712015 HYBRID				
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	-	3.5	SPARE			5TH PORT	AMSLITE 445								TERMINATE WITH MATCHED LOAD				
	-	3.6	SPARE			6TH PORT	AMSLITE 445								TERMINATE WITH MATCHED LOAD				
	3207	4.1	SPARE	1	CSS	X700P-86-BBS-WRO	SPARE	95'	100.0'	95.0'	0'	0'			ROSENBERGER HU-712015 HYBRID				
	-	4.2	SPARE			2ND PORT	SPARE								ROSENBERGER HU-712015 HYBRID				
Z SECTOR	-	4.3	RX2			3RD PORT	SPARE								TERMINATE WITH MATCHED LOAD				
	-	4.4	RX3			4TH PORT	SPARE								TERMINATE WITH MATCHED LOAD				
	-	4.5	SPARE			5TH PORT	SPARE								TERMINATE WITH MATCHED LOAD				
	-	4.6	SPARE			6TH PORT	SPARE								TERMINATE WITH MATCHED LOAD				
	807	1.1	SPARE	1	CSS	X700P-86-BBS-WRO	SPARE	95'	100.0'	95.0'	0'	0'			ROSENBERGER HU-712015 HYBRID				
	-	1.2	SPARE			2ND PORT	SPARE								ROSENBERGER HU-712015 HYBRID				
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	-	3.2	TX/RX			2ND PORT	AMSLITE 445								ROSENBERGER HU-712015 HYBRID				
Z SECTOR	-	3.3	RX2																



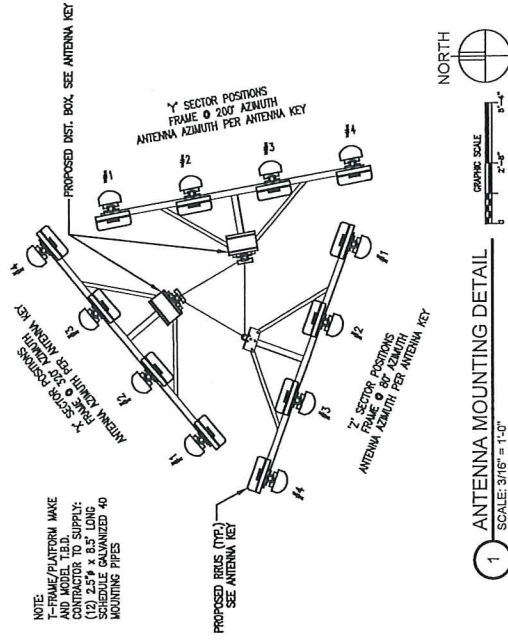
3 EXISTING SITE - COMPOUND LOCATION
SCALE: LOOKING NORTHEAST



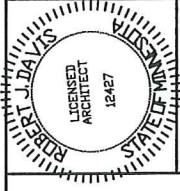
4 EXISTING SITE - VIEW FROM EXISTING SHED
SCALE: LOOKING EAST



2 CABLE BRIDGE PLAN
SCALE: 1/2" = 1'-0"



1 ANTENNA MOUNTING DETAIL
SCALE: 3/16" = 1'-0"



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 in the State of Minnesota.
ROBERT J. DAVIS, Reg. No. 12427

Signature: *Robert J. Davis*
Date: 11-01-18

DESIGN
8973 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
WWW.DESIGNEP.COM

verizon
1801 BUSH LAKE ROAD
BLOOMINGTON, MN 55428
(612) 754-5252

PROJECT
20161343979
LOC. CODE: 404974

MINC
SPRING HILL

VARIOLITE STREET NW
ST. FRANCIS, MN 55330

SHEET CONTENTS:
CABLE BRIDGE PLAN
ANTENNA MOUNTING DETAIL
PHOTOS

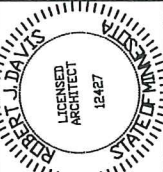
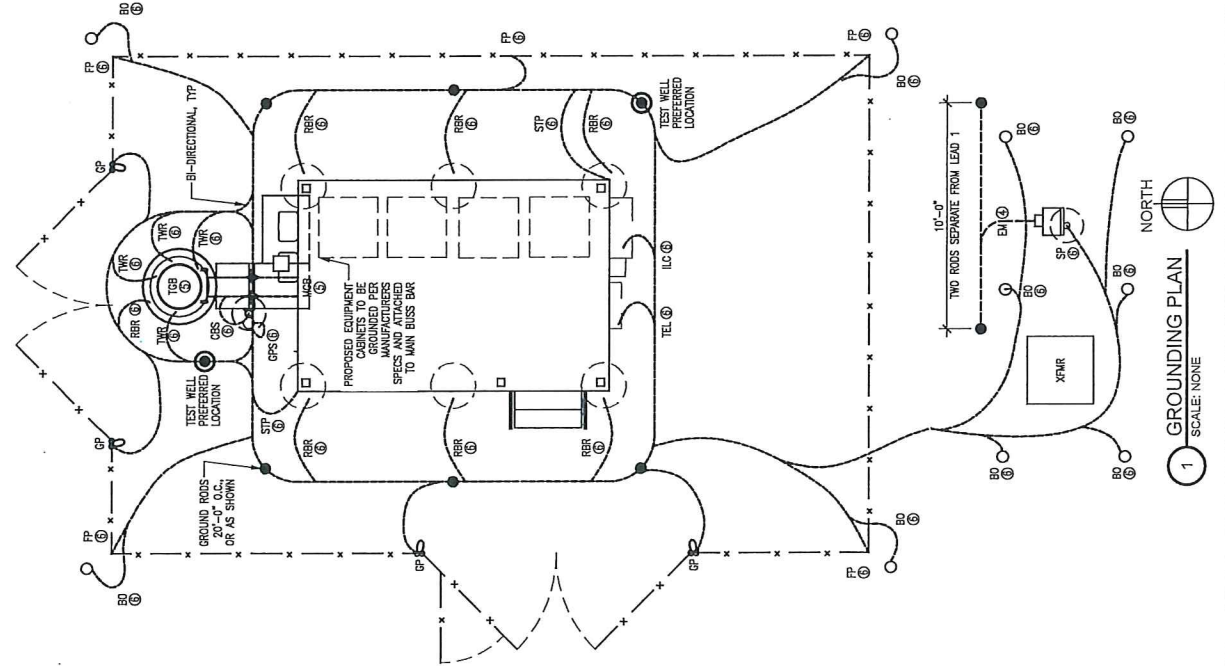
DRAWN BY: JLP
DATE: 09-14-18
CHECKED BY: TRD
REV. A: 02-21-18
REV. B: 11-01-18

A-4

GENERAL CONDITIONS 00 0001 PERMITS Construction Permit shall be secured by or in the name of Verizon Wireless, to be returned to the City of St. Francis, Minnesota upon completion of the project. 00 0002 SURVEY FEES Survey shall be provided by the Architect. Layout Staking shall be coordinated with the Surveyor per Request for Quote's (RFQ). 01 0010 INSURANCE & BONDS Contractor shall provide evidence of insurance and subcontractors. 01 0011 TEMPORARY PROTECTION Contractor shall provide all required bonding. Contractor agrees to warranty the project for (1) one year after completion. 01 0403 SUPERVISION & COORDINATION Contractor shall provide supervision throughout the Project, coordinating the work of the Subcontractors, and delivery & installation of Owner-furnished items. Contractor's responsibilities include managing & unloading of Underground Utilities Locates. Contractor shall comply with municipal, county, state and/or federal codes, including OSHA. 01 0600 TESTING Contractor is responsible for providing Agencies with sufficient notice to arrange for Test Samples (i.e., Concrete Cylinders), and for Special Inspections. 01 0000 MEETINGS Contractor shall make themselves aware of, and attend, meetings with the Owner and/or Architect. Contractor is to attend a Pre-Construction Meeting of all parties involved, prior to the start of construction. 01 5100 TEMPORARY UTILITIES Contractor shall maintain the job site in a clean and orderly fashion, providing temporary sanitary facilities, waste disposal, and security (fence area or trailer module). 01 5300 EQUIPMENT RENTAL Contractor shall furnish equipment, necessary to expedite work. 01 5500 FIELD OFFICES & SHEDS Contractor shall provide security (fence area or trailer module) for tools and materials that remain overnight on site. 01 7000 CLEAN UP & CLOSE OUT Complete the items listed on the Site to the satisfaction of Owner. Contractor shall complete the items listed on the Owner's Punch List, and shall sign and return the L&T to the Owner. Contractor shall maintain a set of drawings during the job, on which changes shall be noted in red ink. A full set of revised drawings (A-B-Basis) are to be given to the Architect at Job completion and submit construction work complete memo to Construction Engineer. 01 8000 TRUCKS & MILDAGE Contractor shall provide transportation for their own personnel. 01 8300 TRAVEL, TIME & PER DIEM Contractor shall provide room and board for their own personnel, and reasonable time for traveling to & from job site. 01 8200 TAXES Contractor shall pay sales and/or use tax on materials and taxable services.	SPECIAL CONSTRUCTION 13 1200 CABLE BRIDGE, CANOPY Contractor shall furnish & install materials for the Cable Bridge as indicated on the Equipment Platform. Contractor shall supply Equipment Platform Manufacturer. Contractor shall install canopy components shipped loose with the Equipment Platform. 13 1400 ANTENNA INSTALL Contractor shall install Owner's antennas and feed lines during erecting. Contractor shall test and certify feed lines per current VLF standards. 13 3423 TRANSPORT AND SET EQUIPMENT PLATFORM Contractor shall provide crane(s) and/or truck for transporting, setting and erecting Equipment Platform per RFQ. Contractor shall install items shipped loose with the Equipment Platform including, but not limited to, the following: centering plate(s); air conditioning; exterior lighting; computer; generator; and fuel tank. 13 3513 TRANSPORT AND ERECT TOWER/ANTENNA MOUNTS Contractor shall schedule delivery of Owner-furnished Tower, and provide cranes for unloading and erecting. Contractor to install antenna mounts. Contractor shall ensure the existence of a 3/8" cable safety climb (OSB/Sole or equal) on the tower.	MATERIALS 15 4000 PLUMBING N/A 15 5000 HVAC N/A ELECTRICAL 16 5000 LIGHTING AND ELECTRICAL Contractor shall provide labor and materials as necessary to complete the work shown on Drawings including items shipped loose with the Equipment Platform assembly. 16 5000 GROUNDING Contractor shall provide themselves familiar with and follow the current grounding STANDARDS OF VERIZON WIRELESS. Contractor shall perform work as shown on Grounding Plans. Any site-specific grounding issues not covered by the GROUNDING STANDARDS are to be addressed by the Contractor to the Owner.	OWNER-FURNISHED EQUIPMENT & FEES EQUIPMENT PLATFORM MINIPOLE TOWER ANTENNA T-FRAMES CABINETS CDAX AND/OR CABLES ANTENNAS & DOWNWILL BRACKETS BUILDING FRAME FEES MATERIALS TESTING FEES SPECIAL INSPECTIONS FEES	CONTRACTOR-FURNISHED EQUIPMENT POWER TO SITE CABLE BRIDGE CONNECTORS, BOOTS, & RELATED HARDWARE OPS MOUNTING SCOPE OF WORK CONTRACTOR SHALL PROVIDE MATERIALS, LABORS, TOOLS, TRANSPORTATION, SUPERVISION, ETC. TO FULLY EXECUTE WORK. REQUIREMENTS ARE DETAILED ON THE DRAWINGS AND SPECIFICATIONS AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS: SITE PREPARATION SITE WORK & ROAD CONSTRUCTION EQUIPMENT PLATFORM & TOWER FOUNDATIONS SET EQUIPMENT PLATFORM & ERECT TOWER ROUTING OF GROUND, POWER, FIBER & ALARM SITE GROUNDING ELECTRICAL & TELEPHONE SERVICES	VERIZON PROJECT: 20161343979 LOC. CODE: 404974 MINC SPRING HILL VARIOLITE STREET NW ST. FRANCIS, MN 55330 SHEET CONTENTS: OUTLINE SPECIFICATIONS JLP DATE: 09-14-16 CHECKED BY: TRD REV. A 09-23-16 REV. B 11-01-16
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GROUNDING DETAIL INDEX

DETAIL	DETAIL DESCRIPTION
PLATFORM	8'-4" X 14'-0" PLATFORM W/ CANOPY GROUNDING ELEVATIONS
11.1	TEST WELL DETAIL GROUND RING & ROD DETAIL
11.3	REBAR GROUNDING DETAIL
11.4	CONDUIT DETAIL
11.5	TYPICAL GROUNDING CABLE BRIDGE DETAIL
11.6	TYPICAL TOWER GROUNDING DETAIL



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 in the State of Minnesota.
ROBERT J. DAVIS, Reg. No. 12427

Robert J. Davis
Signed: _____
11-01-16
Date: _____

DESIGN
9973 VALLEY VIEW RD.
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verizon
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BLOOMINGTON, MN 55438
(612) 434-9352

PROJECT
20161343979
LOC. CODE: 404974

MINC
SPRING HILL

VARIOLITE STREET NW
ST. FRANCIS, MN 55330

SHEET CONTENTS:
GROUNDING PLAN
GROUNDING DETAIL INDEX

DRAWN BY: JJP
DATE: 09-24-16
CHECKED BY: TRB
REV. A: 09-24-16
REV. B: 11-01-16

G-2

