



NORTHWEST ASSOCIATED CONSULTANTS, INC.

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MEMORANDUM

TO: Sunfish Lake Mayor and City Council
Sunfish Lake Planning Commission

FROM: Michelle Barness

DATE: December 10, 2014

RE: Sunfish Lake – SAC Wireless/AT&T; CUP for a Personal Wireless Service
Antenna Located at St. Anne's Episcopal Church

FILE: 211.01 – 14.14

1/6/15 CC Mtg.
**Agenda
Item
6a**

Application Received: November 17, 2014
Planning Commission Date: December 17, 2014
Tentative City Council Review: January 6, 2015
60-day Review: January 16, 2015

BACKGROUND

SAC Wireless, on behalf of AT&T, is requesting City approval of a Conditional Use Permit (CUP) for new personal wireless service antenna on an existing wireless service tower located on the St. Anne's Episcopal Church property at 2035 Charlton Road. The property is zoned INS, Institutional District and personal wireless service towers and antennas not located on a public structure are allowed in the district by CUP.

AT&T currently has nine antenna structures mounted on the wireless service tower at 65 feet. The proposed project consists of resituating existing antennas and adding three new antennas to the existing tower at the same height. The second component of the project is the addition of equipment within the existing AT&T shelter at the base of the antenna tower.

APPROVALS REQUIRED	
Conditional Use Permit	To permit co-location of a personal wireless antenna on an existing wireless service tower

Attached for reference:

Exhibit A: Equipment Plan
Exhibit B: Tower Elevation
Exhibit C: Antenna Plans
Exhibit D: Coverage Analysis
Exhibit E: Structural Analysis Findings

ISSUES AND ANALYSIS

Federal Telecommunications Act. Under the Federal Communications Act of 1996, the City has the right to make traditional land use decisions regarding the location, height and design of telecommunication structures and facilities. However, the City cannot regulate telecommunication facilities in a way that prohibits the provision of such services. The City also cannot discriminate among telecommunications providers, meaning that the City must consider applications and reasonably accommodate telecommunication facilities from all companies proposing to be located in the City.

Comprehensive Plan and Zoning. The City's Comprehensive Plan guides the subject site for Institutional Use (IN), consistent with the existing INS District zoning. Personal wireless service antennas and towers, including their necessary equipment buildings, are conditional uses in the INS District. The purpose of the INS District is to provide a district for facilities devoted to serving the general public.

Need for Additional Antennas. The applicant has submitted a capacity analysis addressing the data and voice requirements for the wireless system in Sunfish Lake. The submitted graphics indicate a need for the company to address service updates for the sector in the general region of Highway 110 and Delaware Avenue.

The City strongly encourages new personal wireless service antennas to be located on existing towers or support structures. Because the applicant is proposing to co-locate on an existing antenna, they are not required to submit information on alternative sites and reasons as to why those additional sites may not be acceptable.

Setbacks. The applicant is proposing to co-locate the antenna on an existing monopole located within a fenced-off area on the St. Anne's Episcopal Church property. Because the applicant is proposing to locate its antenna within the existing cellular antenna lease area, it will be compliant with required setbacks.

Transmitting, Receiving and Switching Equipment. The existing AT&T accessory storage structure at the base of the tower will be employed in housing new equipment for the proposed antennas. No structural modifications are proposed on the building which will continue to meet design standards, and existing screening around the base of the tower and the equipment shelter is not proposed to change.

Height. The applicant is proposing to place the new antenna at 65 feet in height on the personal wireless service tower. The tower will remain unchanged with regards to

height and setbacks, and will continue to meet the City's requirements for such structures as outlined in Section 1226 of the Zoning Ordinance. The antennas will not be than 15 ft. above the structural height of the structure to which they are attached.

Conditional Use Permit. The Planning Commission and City Council are to consider possible adverse effects of the proposed conditional use. The Planning Commission's recommendation to the City Council and the City Council's final decision shall be based upon, but not limited to, the following criteria:

1. The proposed action in relation to the specific policies and provisions of the City's Comprehensive Plan.

Comment: An additional antenna on an existing wireless service tower within the INS District is consistent with the City's Comprehensive Plan since the INS District allows for uses that will serve the public.

2. The proposed use's compatibility with present and future land uses of the area.

Comment: The site is bounded by Highway 110 to the north and Charlton Road to the east, Bethel Baptist Church to the west and residential properties to the south. These existing transportation corridors, as well as the large lot sizes within the City, provide separation between the proposed cellular antenna and adjacent residential areas. The proposed antenna will be placed on an existing cellular tower that sits approximately 300 feet away from the single family home on church property and about 500 feet from the next closest home.

3. The proposed use's conformity with all performance standards contained herein.

Comment: The proposed antenna is in conformance with performance standards, provided that all conditions of approval are met.

4. The proposed use's effect on the area in which it is proposed.

Comment: The proposed antenna will not be detrimental to the public health, safety or welfare. Telecommunication antennas do not emit hazardous radio waves, nor do they create noise, glare or vibrations.

5. The proposed use's impact upon property values in the area.

Comment: Although no study has been conducted, the proposed antenna is not anticipated to have a negative effect on property values in the area.

6. The traffic generated by the proposed use is in relation to the capabilities of streets serving the property.

Comment: The proposed antenna will require routine, but infrequent, site visits for maintenance purposes. It is not anticipated that this will create much

additional traffic and vehicles will be able to access the antenna and related equipment via an existing access drive off the church parking lot.

7. The proposed use's impact upon existing public services and facilities including parks, schools, streets and utilities and the City's service capacity.

Comment: The proposed antenna is accessible to emergency vehicles in the unlikely event that the site became subject to a fire or other emergency. No service personnel will be permanently stationed at the facility and no water, sewage, drainage or other utilities are necessary for its operation.

City Engineer Comments. The City Engineer has reviewed the request and has recommended approval with no additional conditions or recommendations.

CONCLUSION/RECOMMENDATION

Based on the Telecommunications Act of 1996, review of the Comprehensive Plan and applicable Zoning Ordinance requirements, planning staff recommends approval of the CUP for co-location of a personal wireless service antenna by SAC Wireless/AT&T as described on the submitted site plans.

- c. Cathy Iago
Tim Kuntz
Mike Andrejka
Don Sterna/Tom Voll
Jim Naves
Christopher Rohr, SAC Wireless



4300 MARKET POINT DRIVE
BLOOMINGTON, MN 55435



1501 E. WOODFIELD ROAD, SUITE #000E
SCOTTSDALE, AZ 85261
WWW.SDCW.COM
847-944-1000



LETS America, Inc.
112 S. KYRE RD. SE. 1
CHANDLER, AZ 85226
ARIZONA 480-981-9151

SITE ID: MNL03187

DRAWN BY: LETS

CHECKED BY: MK

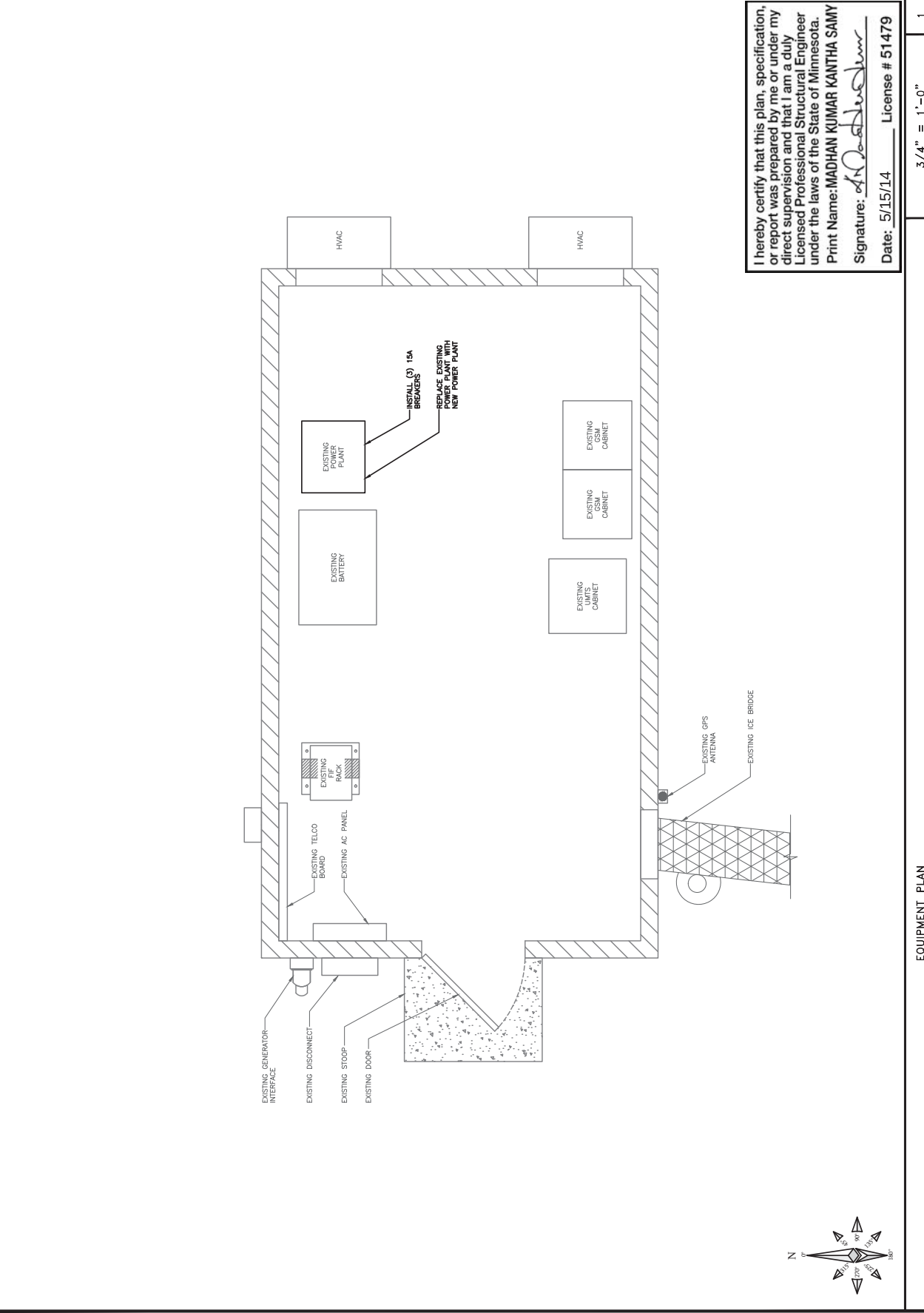
REV	DATE	DESCRIPTION
0	05/14/14	ISSUED FOR CONSTRUCTION
B	05/13/14	ISSUED FOR REVIEW
A	03/19/14	ISSUED FOR REVIEW

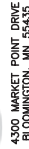
IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS SPECIFICALLY AUTHORIZED BY A LICENSED PROFESSIONAL ENGINEER TO SIGN THIS DOCUMENT.

3511561479
MNL03187_10102819
HWY 110 AND DELAWARE
1897 DELAWARE AVENUE
W SAINT PAUL, MN 55118
LTE 2C

SHEET TITLE
EQUIPMENT PLAN

SHEET NUMBER
A2





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1501 E. WOODFIELD ROAD, SUITE #300E
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LETS
LETS America, Inc.

112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151

SITE ID: MNJ 03197

DRAWN BY: LETS

CHECKED BY: MK

11

[illegible]

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER,

3511561479
MN03187_10102819
HWY 110 AND DELAWARE
1897 DELAWARE AVENUE
W SAINT PAUL, MN 55118
LTE 2C

SHEET TITLE

TOWER ELEVATION

SHEET NUMBER

EXHIBIT B

[illegible]

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 Structural Engineer under the laws of the State of Minnesota.

Signature: AK Dastgheer

Date: 5/15/14 License # 51479

$$1/8'' = 1'-0''$$

1

$$1/8'' = 1'-0''$$

PROPOSED TOWER ELEVATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.



4300 MARKET POINT DRIVE
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ENGINEERING GROUP
1501 E. WOODFIELD ROAD, SUITE 500E
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847-944-1600



LETS America, Inc.
112 S. KYRE RD. SE. 1
CHANDLER, AZ 85226
ARIZONA 480-981-2151

SITE ID: MN03187
DRAWN BY: MK
CHECKED BY: MK

REV	DATE	DESCRIPTION
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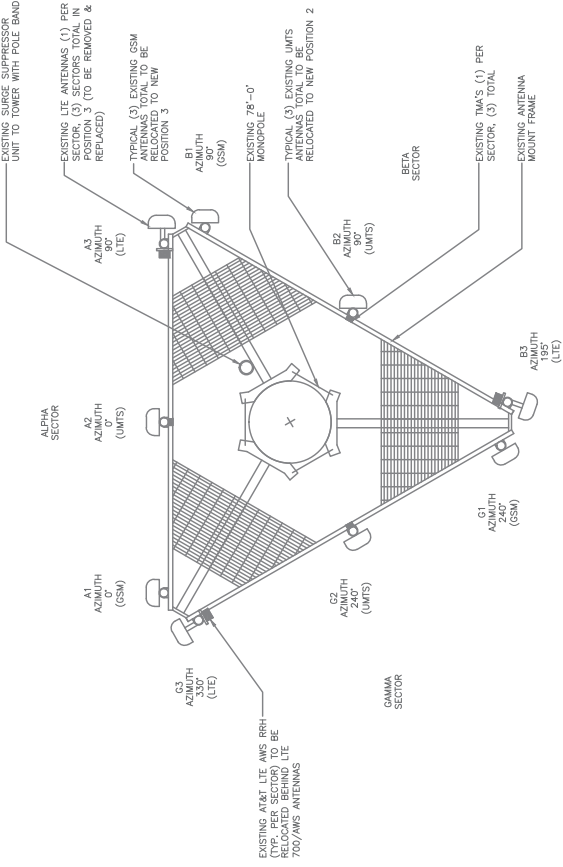
THIS IS A NOTATION OF WORK FOR ANY PERSON
UNLESS IT IS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER
IN THE STATE OF MINNESOTA.

3511561479
MN03187_10102819
HWY 110 AND DELAWARE
1897 DELAWARE AVENUE
W SAINT PAUL, MN 55118
LTE 2C

SHEET TITLE
ANTENNA &
COAX PLANS

SHEET NUMBER
A4

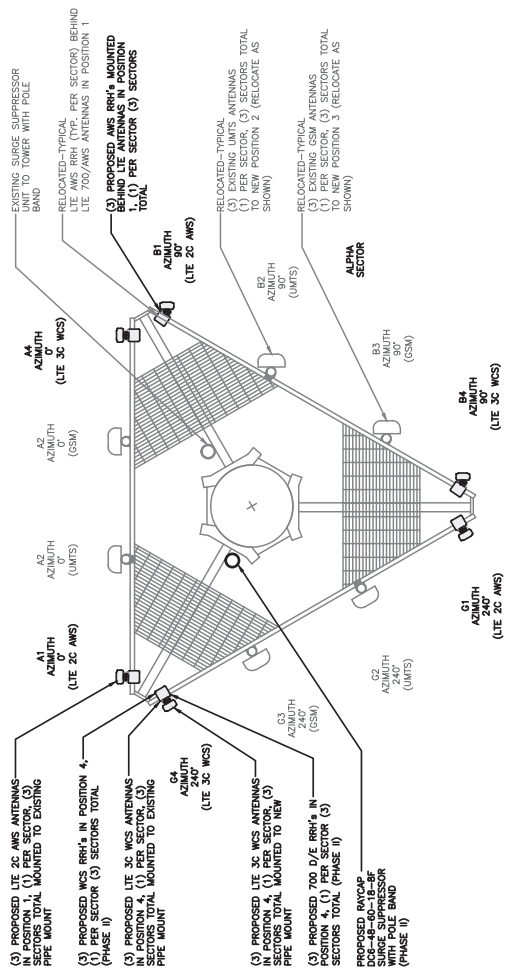
EXHIBIT C



EXISTING ANTENNA LAYOUT PLAN

1/4" = 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 Structural Engineer under the laws of the State of Minnesota.
Print Name: MADHAN KUMAR KANTHA SAMY
Signature: *[Signature]*
Date: 5/15/14 License # 51479

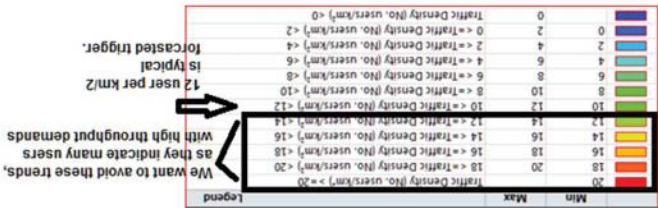


PROPOSED ANTENNA LAYOUT PLAN

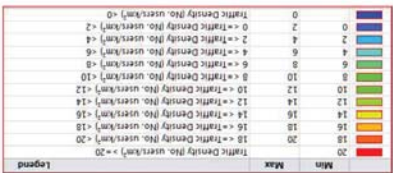
1/4" = 1'-0"

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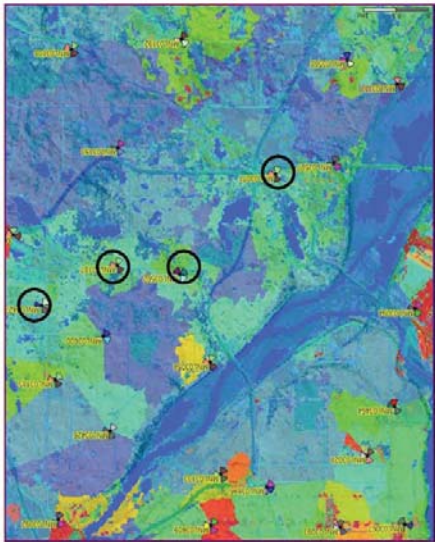
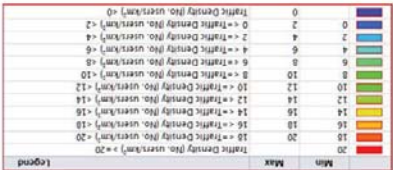
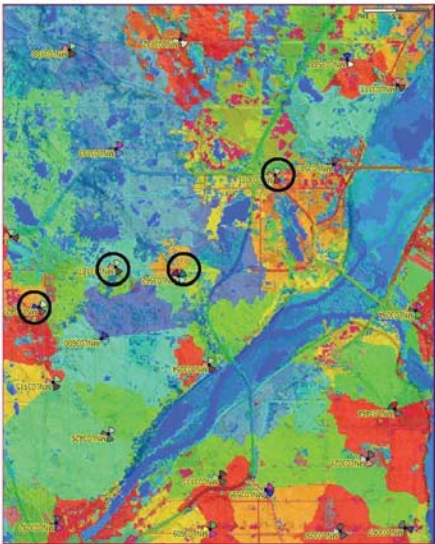
- Each thematic map represents the sites best-serving RF footprint, color-coded (see legend below) by how busy a sector is at any given moment.
- Each map is broken down by service type (DATA & VOICE). This indicates where we need to focus our service (Packet switch or Circuit switch).
- LTE 700 deployed in metro area as the 1C; LTE is for data only currently.
- AWS is to be launched for *additional Data capacity* and future VoLTE (Voice over LTE) services; AWS 'C' block is the LTE 2C.
- We also own WCS spectrum and plan to migrate UMS spectrum over to LTE equipment in the future as well.



Traffic Density (No. users/km²) DATA



Large increase in Data demands. Currently no AWS (LTE2C) spectrum is deployed.



Date: June 27, 2014

Peter Coppola
Crown Castle
11 Grandview Circle Suite 220
Canonsburg, PA 15317



Crown Castle
Canonsburg, PA 15317
Tulsa, OK 74119
(724) 416-2000

Subject: Structural Analysis Report

Carrier Designation: AT&T Mobility Co-Locate
Carrier Site Number: MNL03187
Carrier Site Name: HWY 110 & DELAWARE

Crown Castle Designation:
Crown Castle BU Number: 828175
Crown Castle Site Name: St. Annes Episcopal
Crown Castle JDE Job Number: 273248
Crown Castle Work Order Number: 781468
Crown Castle Application Number: 231420 Rev. 7

Engineering Firm Designation: Crown Castle Project Number: 781468

Site Data: 2035 Charlton Rd., Sunfish Lake, Dakota County, MN
Latitude 44° 52' 58.1", Longitude -93° 6' 8.2"
75 Foot - Monopole Tower

Dear Peter Coppola,

Crown Castle is pleased to submit this "Structural Analysis Report" to determine the structural integrity of the above mentioned tower. This analysis has been performed in accordance with the Crown Castle Structural 'Statement of Work' and the terms of Crown Castle Purchase Order Number 781468, in accordance with application 231420, revision 7.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC5: Existing + Proposed Equipment

Sufficient Capacity

Note: See Table 1 and Table 2 for the proposed and existing/reserved loading, respectively.

The analysis has been performed in accordance with the TIA/EIA-222-F standard and local code requirements based upon a wind speed of 80 mph fastest mile.

All equipment proposed in this report shall be installed in accordance with the attached drawings for the determined available structural capacity to be effective.

We at Crown Castle appreciate the opportunity of providing our continuing professional services to you and Crown Castle. If you have any questions or need further assistance on this or any other projects please give us a call.

Structural analysis prepared by: Raghavendra S Prabhu / Daniel Smilowitz, E.I.T.

Respectfully submitted by:

A handwritten signature in black ink, appearing to read 'A. Poot'.

Aaron C. Poot, P.E.
Manager Engineering

Professional Engineer

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.

Print Name: Aaron C. Poot

Signature:

Date:

6/27/14

License # 44466

CITY OF Sunfish Lake MINNESOTA

Planning Commission Findings of Fact & Recommendation (Approval)

Applicant's Name: SAC Wireless / AT&T

Request: The applicants request City approval of a conditional use permit to allow antenna updates on the existing wireless communication tower located on the St. Anne's Church property at 2035 Charlton Road. According to Zoning Ordinance Section 1126.04.B. personal wireless service antennas not located upon a public structure shall require the processing of a conditional use permit.

Planning Commission Meeting Date: December 17, 2014

Findings of Fact: Based on review of the application and evidence received, the Sunfish Lake Planning Commission now makes the following findings of fact and recommendation:

1. The address of the subject property is as follows:

2035 CHARLTON ROAD, SUNFISH LAKE, MN 55118
2. The Planning Report dated December 10, 2014 prepared by Northwest Associated Consultants, Inc. is incorporated herein by reference.
3. The Sunfish Lake Planning Commission reviewed the applicant's request for conditional use permit approval on December 17, 2014. Upon review of staff reports and application information the Planning Commission found that the proposed conditional use permit request for antenna updates on the subject property meets Ordinance requirements. The following findings support the Planning Commission recommendation for approval:
 - a. Personal wireless service antennas and towers, including their necessary equipment buildings, are an allowed conditional use in the INS District.
 - b. The proposed antennas, their location on the existing tower, and the related equipment housed in the existing shelter are necessary to meet the needs of the wireless communication system and provide adequate coverage for the area.
 - c. The applicants are not requesting to raise the height of the existing tower above what was previously approved by the City, nor make structural

changes to the existing equipment shelter. Both structures will continue to meet the requirements of Zoning Ordinance Section 1226.04.

- d. The applicants have provided information demonstrating that the existing tower is structurally capable of handling the additional antenna.
- e. The project satisfies the criteria for a conditional use permit provided in Section 1204.02.F of the Zoning Ordinance.

Recommendation:

Based on the foregoing considerations and applicable ordinances, the Planning Commission recommends approval of the applicant's conditional use permit to allow antenna updates on the existing wireless communication tower on the St. Anne's Church property.

Adopted by the Sunfish Lake Planning Commission this 17th day of December 2014.

City of Sunfish Lake

By: _____
Andrea McCue
Planning Commission Chair

ATTEST

Catherine Iago, City Clerk