Planning Commission Agenda Report Meeting Date 5/2/2019

Files: Modification 19-02
UP 17-21

DATE: March 19, 2019

TO: PLANNING COMMISSION

FROM: Shannon Costa, Associate Planner (879-6807, shannon.costa@chicoca.gov)

RE: Modification of Use Permit 17-21 (MT2 Telecom Tower)
945 West 2nd Street, APN 004-037-003 (portion)

SUMMARY

At its June 7, 2018 meeting, the City of Chico Planning Commission voted to approve a use permit to allow the applicant to construct and operate a 105-foot tall mono-pine multi-carrier telecommunications tower, including associated ground-mounted equipment. The project site is located at 945 West 2nd Street, on the westerly portion of the block between West 2nd Street, West 3rd Street, Cedar Street and the Union Pacific Railroad. The applicant is seeking modification of the use permit to allow the mono-pine to extend an additional 10-feet to an overall height of 115-feet tall. The applicant has indicated that the need for the additional height is to accommodate all cellular carrier equipment at the necessary height to prevent a loss in coverage within the service area.

Recommendation:

Planning staff recommends that the Planning Commission adopt Resolution No. 19-05 (**Attachment A)** approving a modification to Use Permit 17-21.

Proposed Motion:

I move that the Planning Commission adopt Resolution No. 19-05, approving a Modification to Use Permit 17-21 (MT2 Telecom), based on the required findings and subject to the conditions contained therein.

BACKGROUND

This is a request to modify an existing use permit that allows the applicant, Riverview Management Group and MT2 Telecom, to construct and operate a 105-foot tall mono-pine multi-carrier telecommunications tower and associated ground-mounted equipment. The site is located at 945 West 2nd Street, on the westerly portion of the block between West 2nd Street, West 3rd Street, Cedar Street and the Union Pacific Railroad (see Location Map, **Attachment B**). The requested modification would allow the applicant to extend the overall height of the mono-pine to 115 feet tall, to accommodate additional cellular carrier equipment at the necessary height to prevent a loss in coverage within the service area.

On June 7, 2018, the City of Chico Planning Commission voted to conditionally approve Use Permit 17-21 (MT2 Telecom) to allow a 105-foot-tall mono-pine telecommunications facility (5-1-1, Arim-Law opposed, Tuchinsky absent). The modification request involves only an increase in height for the previously approved tower; no other modifications or changes to the conditions of approval are requested.

DISCUSSION AND ANALYSIS

On March 5, 2019, the applicant submitted a request to extend the height of the mono-pine an additional ten feet, for an overall height of 115 feet tall (see **Attachment C**, Extension Elevation and **Attachment D**, Photo Simulations). At the time of the original application approval, the applicant had secured several wireless carriers to co-locate on the proposed mono-pine. Subsequent to approval, an additional carrier (Verizon Wireless) disclosed its desire to co-locate on the approved mono-pine. Verizon Wireless indicated that in order to maintain its existing coverage in the west Chico area, the carrier would need to place antennas at a height of between 100-feet and 115-feet tall.

Pursuant to Chico Municipal Code 19.78.120.A.7, if a proposed telecommunications tower exceeds 100-feet in height, it shall be designed at the minimum height functionally required. The applicant has provided coverage maps of the service area for Verizon Wireless (see **Attachment E**, Coverage Maps). The coverage maps indicate that should the service provider install equipment at a height below 100-feet, customers would experience a loss in wireless coverage.

Pursuant to CMC 19.78.010.C, the Purpose of the Wireless Telecommunications Facilities Chapter is intended to encourage the co-location of wireless telecommunication facilities to protect and promote the aesthetic quality of the City, while providing opportunities for service providers to provide service in an effective and efficient manner. The requested height extension would result in continued and uninterrupted signal coverage in this portion of Chico. No other aspects of the previously approved mono-pine tower would be modified and all previous conditions of approval would remain in effect.

Aesthetics

The previously approved mono-pine is a “stealth” design, having the visual appearance of a pine tree while screening antenna panels within tree branches (see **Attachment F,** Previously Approved Mono-Pine Elevations). Antennas for the previously approved mono-pine were proposed at a maximum height of 100-feet, with an additional five-feet of non-functional “tree branches” to soften the tree appearance (105-feet total). The proposed addition would result in an actual increase of ten feet of functional area to accommodate Verizon Wireless equipment, and five feet of non-functional “tree branches” (115-feet total).

At its June 7, 2018 meeting, the Planning Commission discussed the aesthetics of the proposed mono-pine at length (see **Attachment G**, 6/7/2018 Minutes). Commissioners had concerns regarding the aesthetics of the mono-pine and requested confirmation that the mono-pine would be of greater quality. A condition of approval was included that required that applicant to submit manufacturer information to Planning staff prior to building plan submittal to ensure a higher aesthetic quality. On August 17, 2018, the applicant submitted sample elevations and manufacturer information to Planning staff, depicting a product that would feature more “branches

per square foot" than other mono-pine models, resulting in a higher-quality mono-pine. The proposed 10-foot addition to the tower would result in minor aesthetic change to the previously approved mono-pine, allowing an additional row of antennas to be placed within the tree branches. To accommodate the proposed extension, the 'tree branches' for the previously approved tower would be 'feathered' and blended into the extension to create a more natural tree appearance.

Radio Frequency (RF) Emissions

An updated radio frequency emissions compliance report prepared by Waterford Consultants, LLC for AT&T mobility, (see **Attachment H**, RF Report) shows that for accessible areas at ground level, the maximum predicted power density levels and cumulative power density levels resulting from all AT&T mobility operations, including the proposed extension, is significantly less than the Federal Communications Commission General Population limits (2.44% of 100% exposure limit). The project complies with the standard by a wide margin.

ENVIRONMENTAL REVIEW

This project is categorically exempt from further environmental review pursuant to Section 15303 of the California Environmental Quality Act Guidelines (New Construction or Conversion of Small Structures) based on this project's size and scope, and the lack of unusual circumstance evidencing a significant effect on the environment. The project consists of new construction less than 2,500 square feet in floor area on an existing developed property in an urban area zoned for the use, does not involve significant amounts of hazardous substances, all necessary public facilities and services are available, and the surrounding area is not environmentally sensitive.

FINDINGS

Following a public hearing, the Planning Commission may approve a use permit application, with or without conditions, only if all of the following findings can be made:

Use Permit Findings

1. *The proposed use is allowed within the subject zoning district and complies with all of the applicable provisions of Chapter (Use Permits).*

   Pursuant to CMC 19.78.120.7, if a proposed telecommunications tower exceeds 100 feet in height, it shall be designed at the minimum height functionally required. The requested height extension would allow the service provider to maintain its existing coverage and avoid a loss in coverage that would result from antennas placed below 100-feet in height. This permit has been processed in accordance with Chapters 19.24 (Use Permits) and 19.78 (Wireless Telecommunications Facilities).

2. *The proposed use would not be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the proposed use.*

   The updated radio frequency emissions compliance report prepared by Waterford Consultants, LLC for AT&T mobility shows that for accessible areas at the ground level, the

maximum predicted power density levels and cumulative power density levels resulting from all AT&T mobility operations is significantly less than the FCC General Population limits (2.44% of 100% exposure limit). The project complies with the standard by a wide margin. The proposed tower extension would not result in any significant noise impacts. The proposed tower extension would provide an overall benefit to the community and those residing or working in the neighborhood because its presence would avoid a lapse in wireless coverage. No other impacts have been identified that would be detrimental to persons residing or working in the area.

3. *The proposed use would not be detrimental and/or injurious to property and improvements in the neighborhood of the proposed use, as well as the general welfare of the City.*

   The project will comply with all applicable building and improvement regulations and standards. The project will not cause any damage or otherwise be injurious to property or improvements in the neighborhood and will not be detrimental to the general welfare of the City.

4. *The proposed entitlement is consistent with the General Plan, any applicable specific plan, and any applicable neighborhood or area plan.*

   Industrial Office Mixed Use General Plan Designation allows a variety of uses, including telecommunications facilities. The proposed tower extension would provide continued and uninterrupted wireless service to users in the service area and avoid a possible lapse in coverage. Wireless service availability implements General Plan goals and policies that encourage public safety notification methods.

5. *The design, location, size, and operating characteristics of the proposed use are compatible with the existing and future land uses in the vicinity.*

   The proposed design complies with CMC Section 19.78, which governs wireless telecommunications facilities. The proposed 10-foot extension would result in only a minor aesthetic change from the previously approved mono-pine and would not result in incompatibilities with existing and future land uses in the vicinity.

Additional findings for WTF Use Permit:

1. *The facility to be permitted will not generate EMF/RF radiation in excess of the FCC adopted standards for human exposure.*

   The updated radio frequency emissions compliance report prepared by Waterford Consultants, LLC for AT&T mobility shows that for accessible areas at the ground level, the maximum predicted power density levels and cumulative power density levels resulting from all AT&T mobility operations is significantly less than the Federal Communications Commission General Population limits (2.44% of 100% exposure limit). The project complies with the standard by a wide margin.

2. *If the height of the facility exceeds the standards set forth in Section 19.78.120, that the facility has been designed to minimize its height and other visual effects.*

Pursuant to CMC 19.78.120.7, if a proposed telecommunications tower exceeds 100 feet in height, it shall be designed at the minimum height functionally required. The requested height extension would allow the service provider to maintain its existing coverage and avoid a loss in coverage that would result from antennas placed below 100-feet in height.

3. *The facility does not encroach into navigable airspace as defined by Part 77 of Title 14 of the Code of Federal Regulations.*

   The proposed facility does not encroach into navigable airspace as defined by part 77 of Title 14 of the Code of Federal Regulations (which begins at 200 feet above ground level when not in the immediate vicinity of an airport). Therefore, special painting or lighting for aircraft identification is not required, and is specifically prohibited (pursuant to CMC 19.78.120.A.2) to minimize visual impacts.

PUBLIC CONTACT

A 10-day public hearing notice was mailed to all landowners and residents within 1,000 feet of the site. A legal notice was also placed in the Chico Enterprise Record. As of the date of this report, no additional inquiries regarding this project had been received by City staff.

DISTRIBUTION:
PC Distribution
Riverview Management Group/MT2 Telecom c/o Salomon Martinez Jr., 1015B Airport Road, Rio Vista, CA 94571
AP Costa

ATTACHMENTS:
A. Resolution No. 19-05
   Exhibit I - Conditions of Approval
B. Location Map
C. Extension Elevation
D. Photo Simulations
E. Coverage Maps
F. Previously Approved Mono Pine Elevations
G. 6/7/18 Minutes
H. RF Report

RESOLUTION NO. 19-05

RESOLUTION OF THE CITY OF CHICO PLANNING COMMISSION APPROVING A MODIFICATION OF USE PERMIT 17-21 FOR A WIRELESS TELECOMMUNCATIONS FACILITY (MT2 Telecom)

WHEREAS, the applicant is seeking modification of use permit 17-21 (MT2 Telecom) to operate a 105-foot mono-pine multi-carrier telecommunications tower, including associate ground-mounted equipment, to allow the mono-pine to extend an additional 10-feet to an overall height of 115-feet; and

WHHEREAS, the site is located at 945 West 2nd Street, on the westerly portion of the block between West 2nd Street, West 3rd Street, Cedar Street and the Union Pacific Railroad, further identified as Assessor's Parcel No. 004-037-003, (the "Project"); and

WHEREAS, the requested modification would allow the applicant to extend the overall height of the mono-pine to 115-feet-tall, to accommodate additional cellular carrier equipment at the necessary height to prevent a loss in coverage within the service area; and

WHEREAS, the modification request involves only an increase in height for the previously approved tower; no other modifications or changes to the conditions of approval are authorized; and

WHEREAS, the Planning Commission considered the Project, and staff report at a noticed public hearing held on May 2, 2019; and

WHEREAS, the Project has been determined to be exempt pursuant to California Environmental Quality Act Guidelines (Section 15303 New Construction or Conversion of Small Structures) based on this project's size and scope, and the lack of unusual circumstance evidencing a significant effect on the environment;

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Chico as follows:

1. With regard to the use permit Planning Commission finds that:

   A. Pursuant to CMC 19.78.120.7, if a proposed telecommunications tower exceeds 100 feet in height, it shall be designed at the minimum height functionally required. The requested

height extension would allow the service provider to maintain its existing coverage and avoid a loss in coverage that would result from antennas placed below 100-feet in height. This permit has been processed in accordance with Chapters 19.24 (Use Permits) and 19.78 (Wireless Telecommunications Facilities).

B. The updated radio frequency emissions compliance report prepared by Waterford Consultants, LLC for AT&T mobility shows that for accessible areas at ground level, the maximum predicted power density levels and cumulative power density levels resulting from all AT&T mobility operations is significantly less than the Federal Communications Commission General Population limits (2.44% of 100% exposure limit). The project complies with the standard by a wide margin. The proposed tower extension would not result in any significant noise impacts. The proposed tower extension would provide an overall benefit to the community and those residing or working in the neighborhood because its presence would avoid a lapse in wireless coverage. No other impacts have been identified that would be detrimental to persons residing or working in the area.

C. The project will comply with all applicable building and improvement regulations and standards. The project will not cause any damage or otherwise be injurious to property or improvements in the neighborhood and will not be detrimental to the general welfare of the City.

D. Industrial Office Mixed Use General Plan Designation allows a variety of uses, including telecommunications facilities. The proposed tower extension would provide continued and uninterrupted wireless service to users in the service area and avoid a possible lapse in coverage. Wireless service availability implements General Plan goals and policies that encourage public safety notification methods.

E. The proposed design complies with CMC Section 19.78, which governs wireless telecommunications facilities. The proposed 10-foot extension would result in only a minor aesthetic change from the previously approved mono-pine and would not result in incompatibilities with existing and future land uses in the vicinity.

2. With regard to additional findings for Wireless Telecommunications Facility Use Permit, the Planning Commission finds that:

A. The updated radio frequency emissions compliance report prepared by Waterford Consultants, LLC for AT&T mobility shows that for accessible areas at ground level, the maximum predicted power density levels and cumulative power density levels resulting from all AT&T mobility operations is significantly less than the Federal Communications Commission General Population limits (2.44% of 100% exposure limit). The project complies with the standard by a wide margin.

B. Pursuant to CMC 19.78.120.7, if a proposed telecommunications tower exceeds 100 feet in height, it shall be designed at the minimum height functionally required. The requested height extension would allow the service provider to maintain its existing coverage and avoid a loss in coverage that would result from antennas placed below 100-feet in height.

C. The proposed facility does not encroach into navigable airspace as defined by part 77 of Title 14 of the Code of Federal Regulations (which begins at 200 feet above the ground level when not in the immediate vicinity of an airport). Therefore, special painting or lighting for aircraft identification is not required and is specifically prohibited (pursuant to CMC 19.78.120.A.2) to minimize visual impacts.

3. Based on all of the above, the Planning Commission hereby approves the Project subject to the conditions set forth in Exhibit I attached hereto.

4. The Planning Commission hereby specifies that the materials and documents which constitute the record of proceedings upon which its decision is based are located at and under the custody of the City of Chico Community Development Department.

THE FOREGOING RESOLUTION WAS ADOPTED by the Planning Commission at its meeting held on May 2, 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

DISQUALIFIED:

ATTEST:

APPROVED AS TO FORM:

_____

Brendan Vieg
Planning Commission Secretary

_____

Andrew L. Jared, Assistant City Attorney*

*Pursuant to the Charter of the City of Chico, Section 906(E)

EXHIBIT "I"
CONDITIONS OF APPROVAL
New Wireless Telecommunications Facility Tower
Modification of MT2 Telecom (UP 17-21)

1. Use Permit 17-21 authorizes the construction and operation of a 115-foot tall mono-pine multi-carrier telecommunications tower, including associated ground-mounted equipment located at 945 West 2nd, in substantial accord with the "Site Plan to Accompany Use Permit 17-21 (MT2 Telecom)" and in compliance with all other conditions of approval.

2. The permittee shall comply with all other State and local Code provisions, including those of the Building Division, Public Works Department, Fire Department, and Butte County Environmental Health. The permittee is responsible for contacting these offices to verify the need for permits.

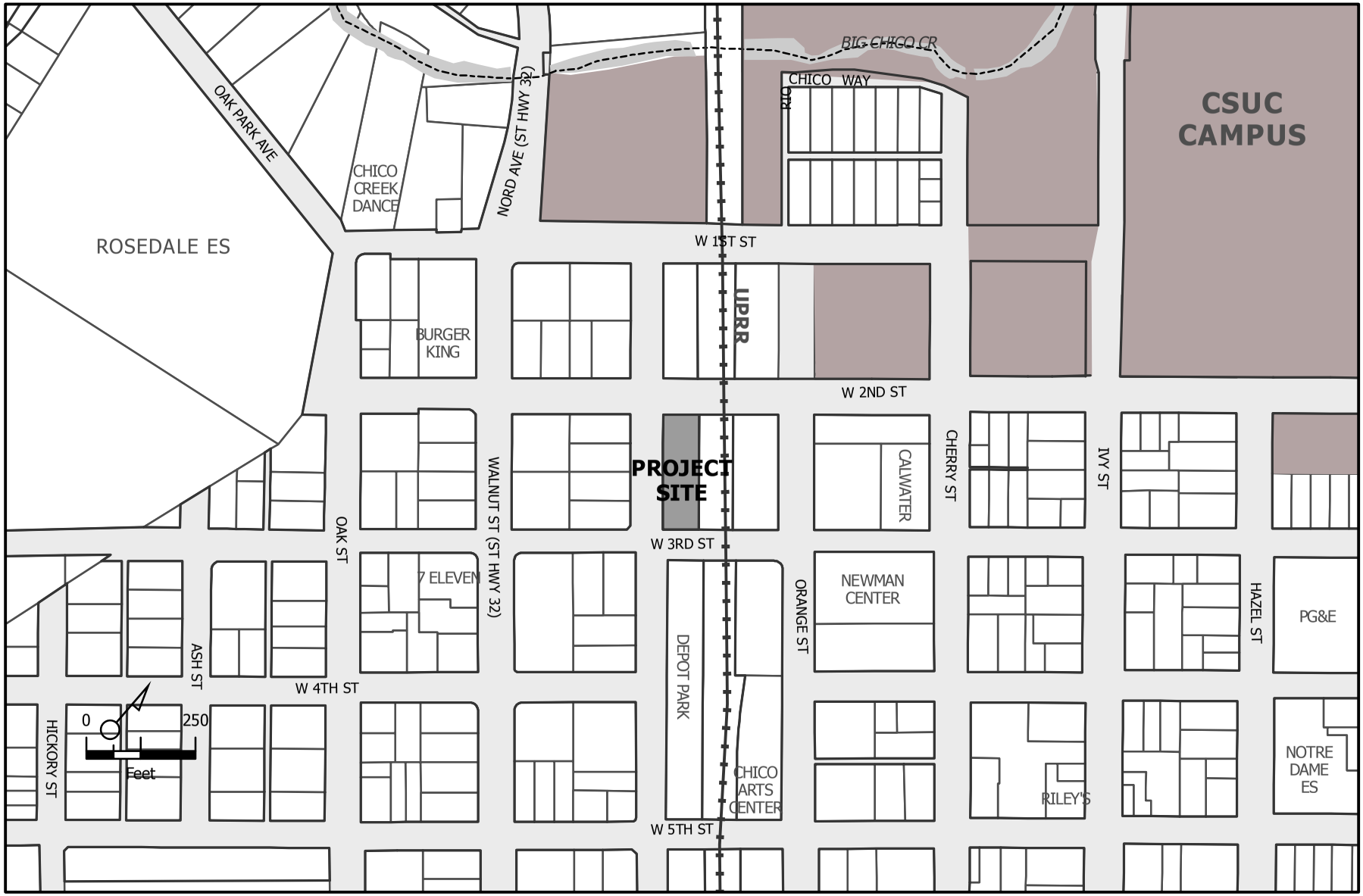
3. All fencing and screening of the site shall be in compliance with CMC 19.60.060 (*Fencing and Screening).* The minimum fence height shall be no greater than six-feet tall and razor/barbed wire is prohibited.

4. The applicant shall post Radio Frequency (RF) alerting signage with contact information at the base of the proposed mono-pine to inform authorized climbers of potential conditions near the antennas.

5. As required by CMC 16.66, trees removed shall be replaced as follows:
   a. On-site. For every six inches in DBH removed, a new 15-gallon tree shall be planted on-site. Replacement trees shall be of similar species, unless otherwise approved by the urban forest manager, and shall be placed in areas dedicated for tree plantings. New plantings' survival shall be ensured for three years after the date of planting and shall be verified by the applicant upon request by the director. If any replacement trees die or fail within the first three years of their planting, then the applicant shall pay an in-lieu fee as established by a fee schedule adopted by the City Council.
   b. Off-site. If it is not feasible or desirable to plant replacement trees on-site, payment of an in-lieu fee as established by a fee schedule adopted by the City Council shall be required.
   c. Replacement trees shall not receive credit as satisfying shade or street tree requirements otherwise mandated by the municipal code.
   d. Tree removal shall be subject to the in-lieu fee payment requirements set forth by Chico Municipal Code (CMC) 16.66 and fee schedule adopted by the City Council.
   e. All trees not approved for removal shall be preserved on and adjacent to the project site. A tree preservation plan, including fencing around drip lines and methods for excavation within the drip lines of protected trees to be preserved shall be prepared by the project developer pursuant to CMC 16.66.110 and 19.68.060 for review and approval by planning staff prior to any ground-disturbing activities.

6. The applicant, as indicated at the Planning Commission meeting, shall construct a tower of the highest aesthetic quality in substantial conformance with the elevations provided as attachment "G" of the staff report.

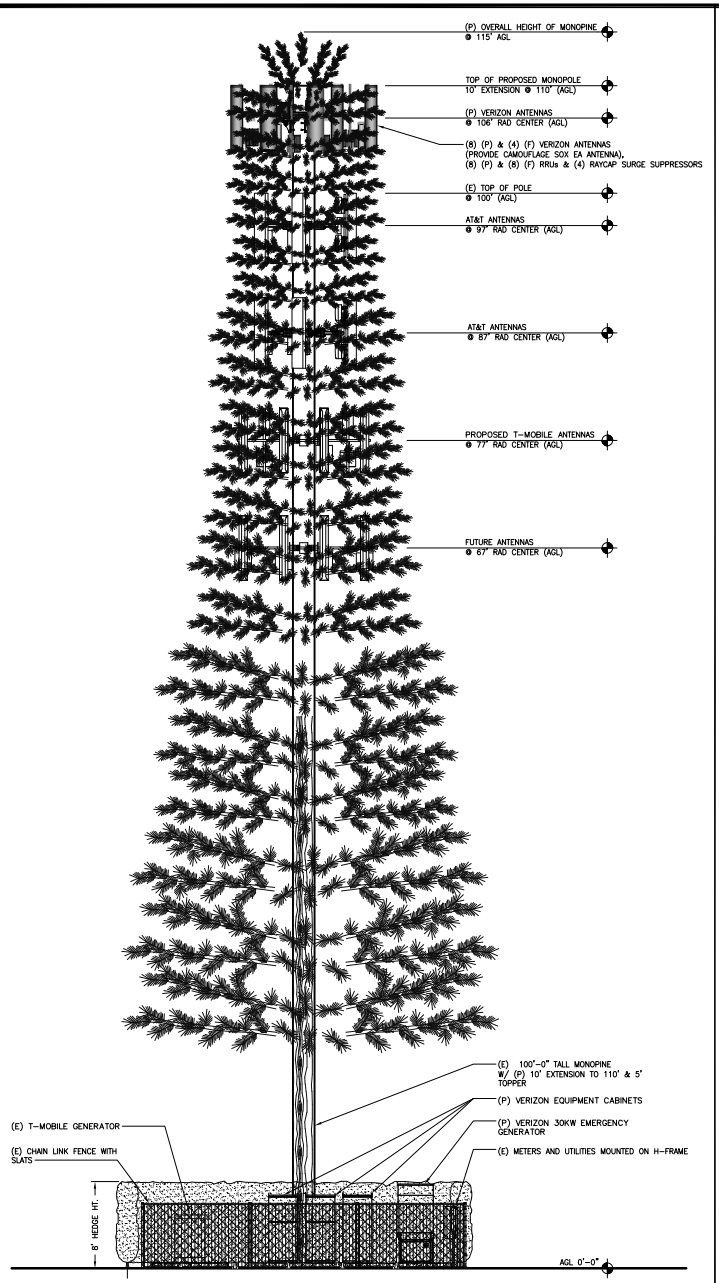
7. Prior to building plan submittal, the applicant shall submit drawings and illustrative materials from the manufacturer of the mono-pine telecommunications facility for Planning staff review. Planning staff shall verify the tower is in substantial conformance with the drawings submitted as “Attachment G” to the staff report to best achieve the highest aesthetic quality for installation at the approved communications facility. Examples of high-quality manufacturers, as indicated by the applicant, include Valmont, Steelhead, Sabre or Larson Camouflage.



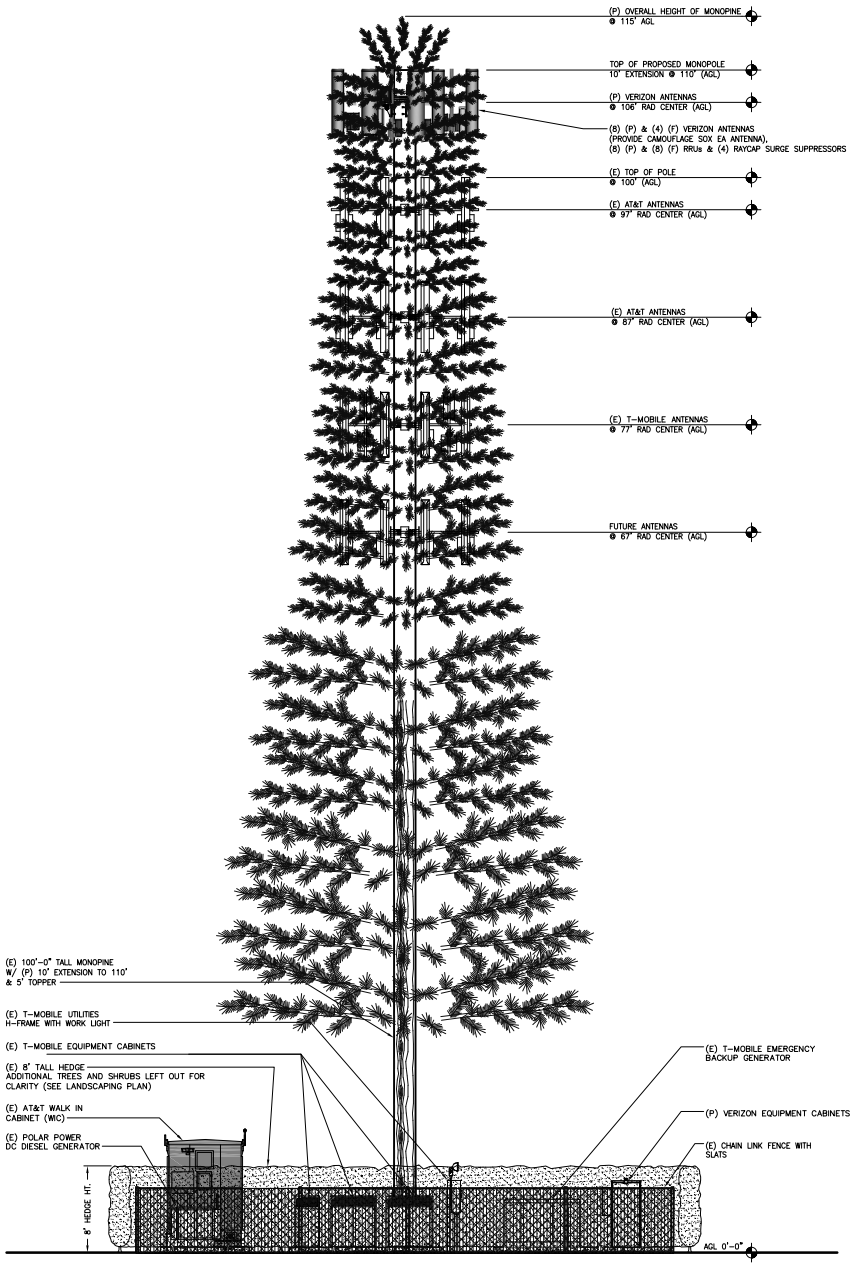
Modification UP 17-21 (MT2 Telecom Tower)
945 W 2nd Street
APN 004-037-003-000

Attachment B

ATTACHMENT C



2 PROPOSED EAST ELEVATION — SCALE: 3/16" = 1'-0"



1 PROPOSED SOUTH ELEVATION — SCALE: 3/16" = 1'-0"

RMG
RIVERVIEW MANAGEMENT GROUP
1015B AIRPORT RD
RIO VISTA, CA 95691

MT2 TELECOM, LP
1015-B AIRPORT ROAD
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RIO VISTA, CA 94571
PHONE: (707) 374-5075
FAX: (707) 374-6194

verizon
295 PARKSHORE DR
FOLSOM, CA 95630
PHONE: (916) 984-5924

DOWNTOWN CHICO RELO
PSL439143
960 W. 3RD STREET
CHICO, CA 95928

STAMP:

LICENSED ARCHITECT
GILBERT R. LABRIE
No. C 7880
Ren. 08/19
STATE OF CALIFORNIA

DRAWN BY: SMJR

CHECKED BY: JM

NO	DATE	ISSUE
1	02.05.19	90% ZD
2	02.22.19	100% ZD
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SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-2

JOB #: WD

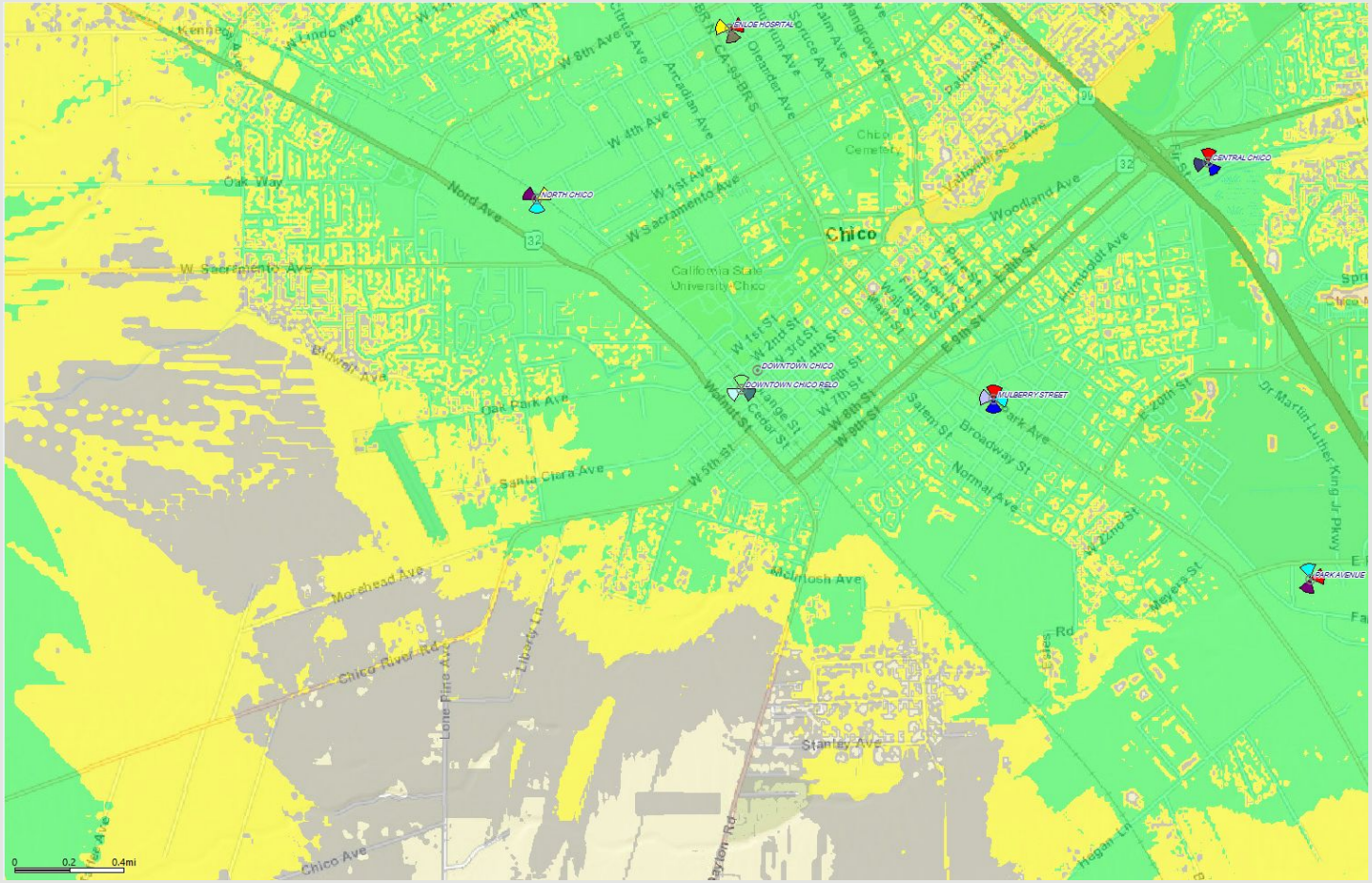
LARSON

A valmont COMPANY

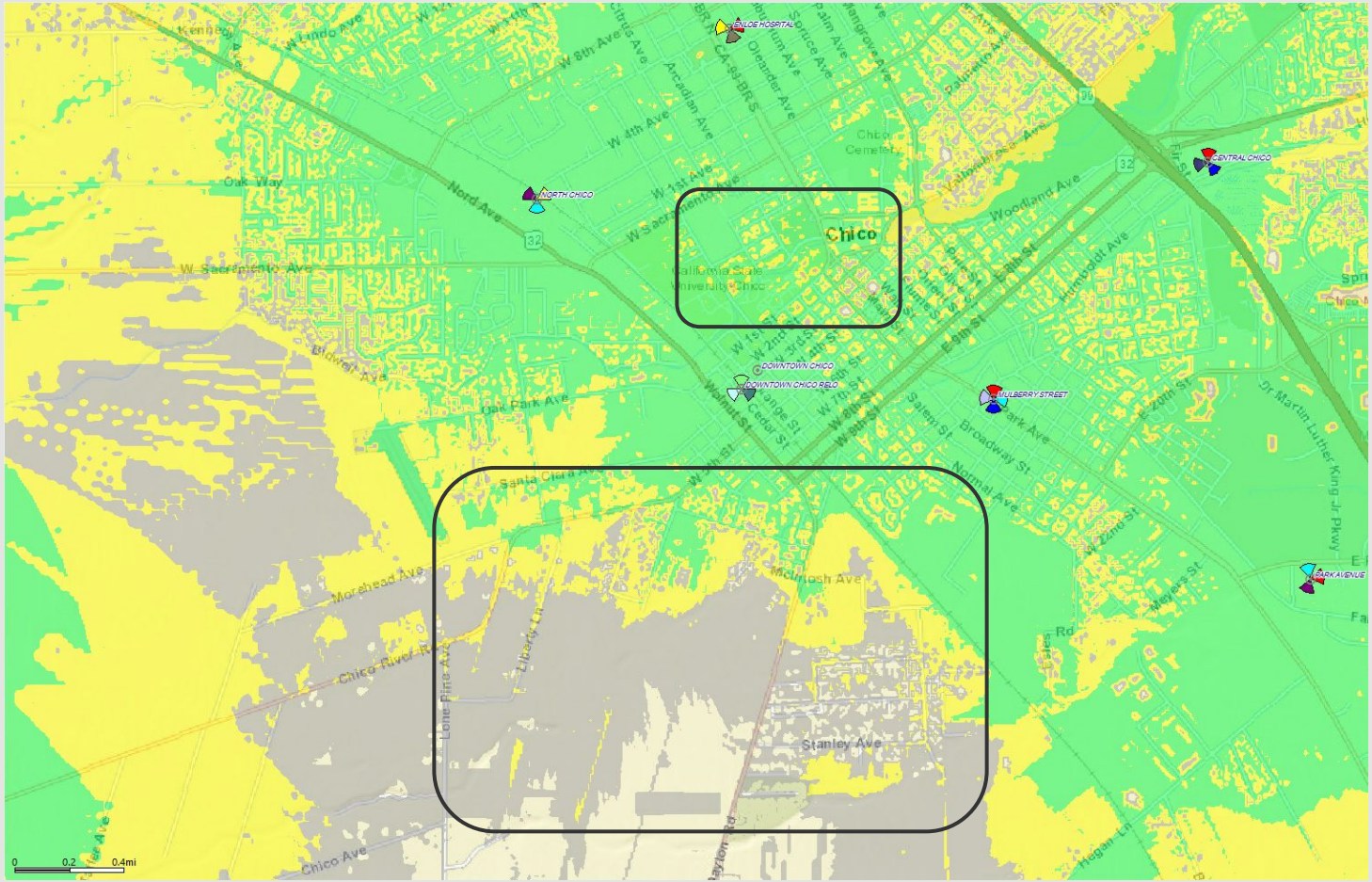
ATTACHMENT D

Downtown Chico Relo
RAD Comparison

Attachment E



This coverage is for the 700 LTE frequency. This slide shows the maintained coverage of the site with Verizon installing their antennas at the 105' elevation.



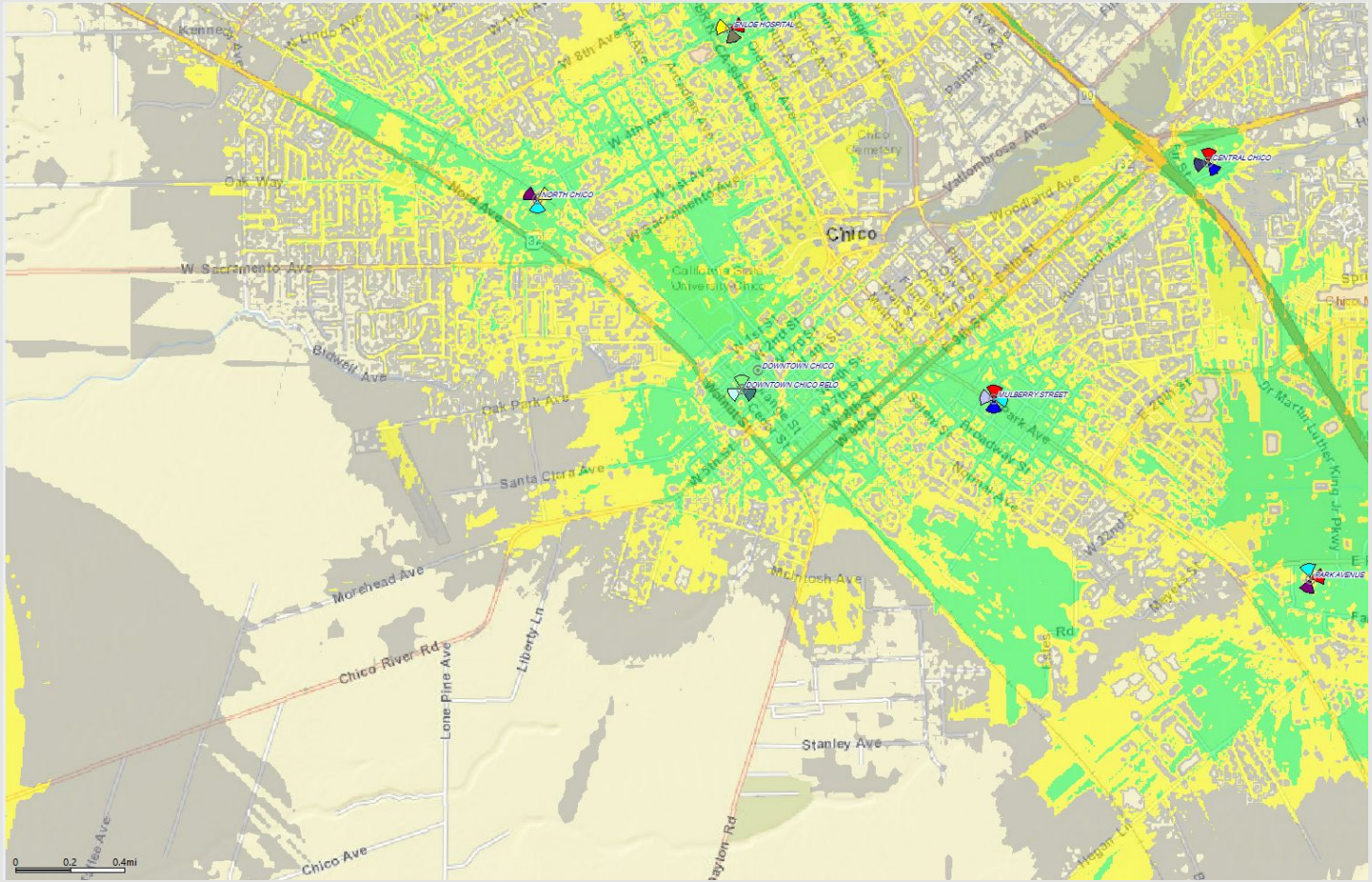
Legend

700 LTE: RSRP 67'RAD

- Best Signal Level (dBm) >=-85
- Best Signal Level (dBm) >=-95
- Best Signal Level (dBm) >=-105

This coverage is for the 700 LTE frequency. This slide shows the coverage deficiencies in the black boxes if Verizon was to install their antennas at the 67' elevation on the tower.

Attachment E



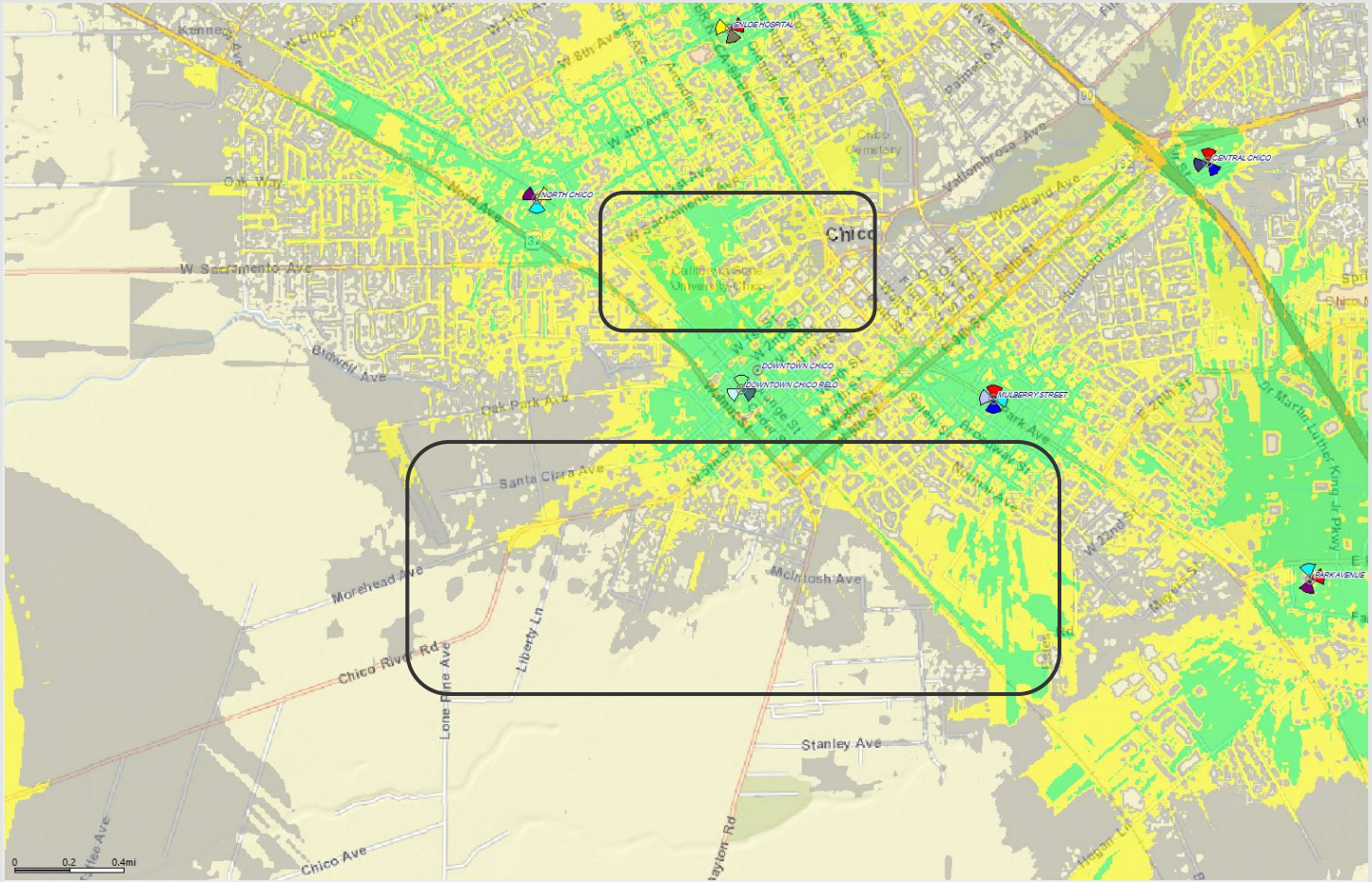
Legend

AWS LTE: RSRP 105'RAD

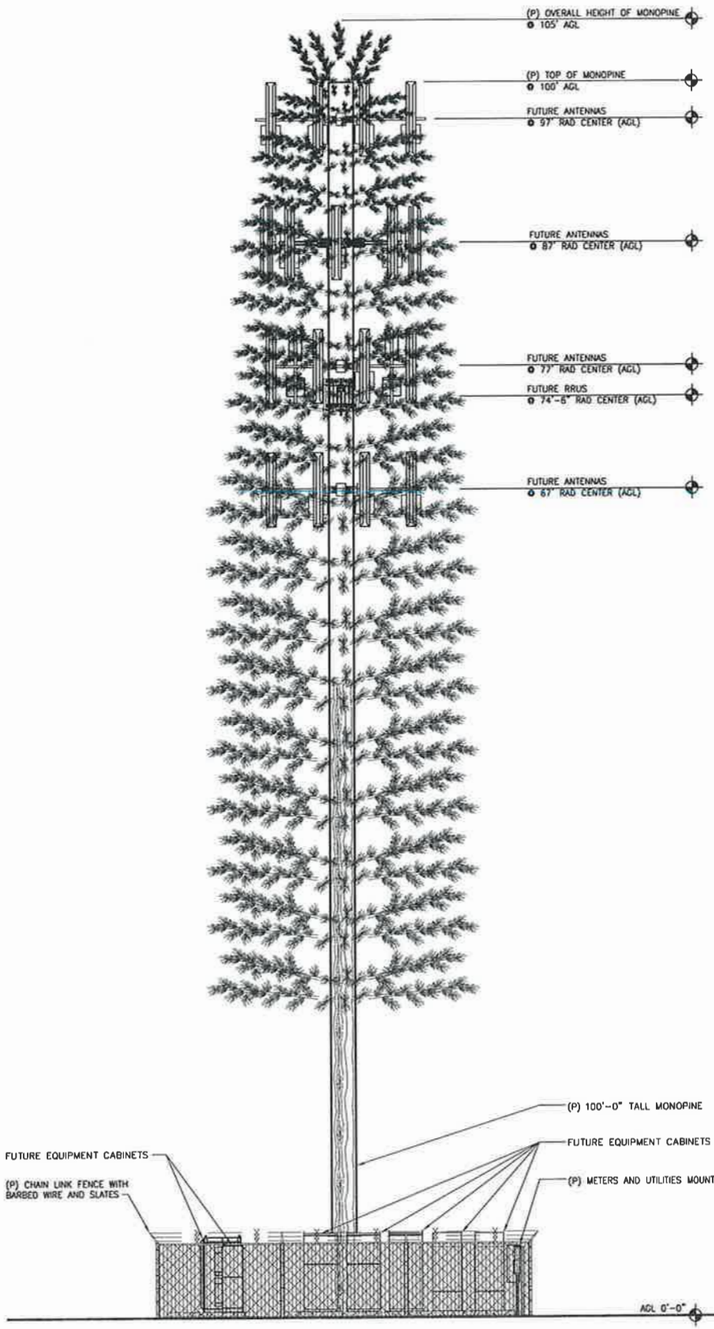
- Best Signal Level (dBm) >=-85
- Best Signal Level (dBm) >=-95
- Best Signal Level (dBm) >=-105

This coverage is for the AWS LTE Frequency. This slide shows the maintained coverage of the site with Verizon installing their antennas at the 105' elevation.

Attachment E



This coverage is for the AWS LTE frequency. This slide shows the coverage deficiencies in the black boxes if Verizon was to install their antennas at the 67' elevation on the tower.



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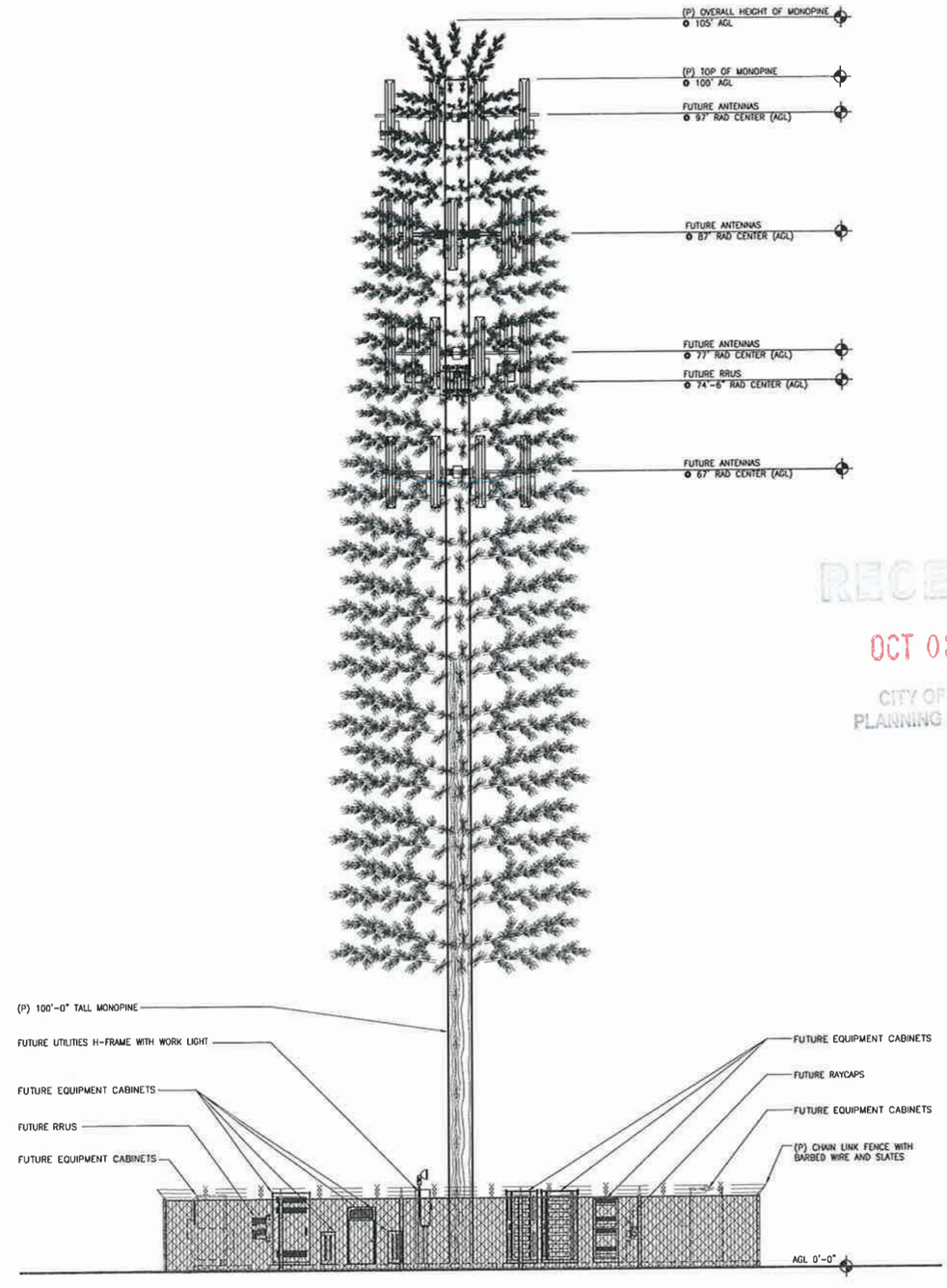

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WEST CHICO
CA001
945 W. 2ND STREET
CHICO, CA 95928

STAMP:

DRAWN BY: R.MONTAÑEZ

CHECKED BY: S.MARTINEZ

NO	DATE	ISSUE	INITIALS
1	03-07-17	90% ZD	RM/SM
2	03-14-17	100% ZD	RM/SM

SHEET TITLE

ELEVATIONS

SHEET NUMBER

A-3

JOB #: WD

ATTACHMENT F

CITY OF CHICO PLANNING COMMISSION
MINUTES OF THE REGULAR MEETING OF
June 7, 2018

Municipal Center
421 Main Street
Council Chambers

Commissioners Present:	Toni Scott, Chair Bob Evans, Vice Chair Lupita Arim-Law Cynthia Arregui Dale Bennett John Howlett
Commissioners Absent:	Evan Tuchinsky
Staff Members Present:	Brendan Vieg, Deputy Director Bruce Ambo, AICP, Principal Planner Shannon Costa, Assistant Planner Robyn Ryan, Administrative Assistant Andrew Jared, Assistant City Attorney

1. CALL TO ORDER

Chair Scott called the meeting to order at 6:00PM.

1.1 Chair Scott led the Pledge of Allegiance.

1.2 Commission members and staff were present as noted.

2. EX PARTE COMMUNICATION
None.

3. CONSENT AGENDA

3.1 ***Commissioner Evans moved to approve the minutes for the May 17, 2018, meeting. Commissioner Arim-Law seconded the motion which passed 6-0-1 (Tuchinsky absent).***

4. PUBLIC HEARING ITEMS

4.1 Use Permit UP 17-21 (MT2 Telecom); 945 W. 2nd St.; APN-004-037-003 -

Assistant Planner Shannon Costa provided the staff report and answered questions from the Commission.

Chair Scott opened the public hearing at 6:05PM.

The applicant's representative, Solomon Martinez, Jr., addressed the Commission and answered their questions regarding the project.

Michael Magliari with the Chico Heritage Association addressed the Commission in opposition of this project. He and the Chico Heritage Association have concerns with the water tower being taken down and believe the proposed project is linked to that action.

Preston Dickinson, an independent contractor with AT&T, addressed the Commission in favor of the project to provide the best wireless service with no lapse in coverage should the water tower be taken down.

With no other members of the public wishing to address the Commission, Chair Scott closed the public hearing at 6:23PM.

Assistant City Attorney Jared recommended the Commission add a condition to the resolution to include having MT2 Telecom specify the make and model of the cell tower to be installed.

Commissioner Evans moved that the Planning Commission adopt Resolution No. 18-09, approving the Use Permit 17-21 (MT2 Telecom) subject to the conditions as set forth therein and including the recently added condition recommended by the Assistant City Attorney. Including the condition for the applicant to specify the make and model of the cell tower being installed.

Commissioner Arregui seconded the motion.

Commissioner Arim-Law requested a friendly amendment to add for staff to bring back the samples of the tower for Planning Commission's approval.

This amendment failed due to lack of concurrence from either the motion maker or the second.

Further discussion continued regarding adding the amendment. Commission Howlett agreed with Commissioner Arim-Law.

Assistant City Attorney Jared interjected that this application did not specify the make and model of the cell tower being installed. The condition will be added to use a higher quality cell tower. Bringing back this item would put off the approval of this item as a whole.

Chair Scott called for a vote which passed 5-1-1 (Arim-Law opposed, Tuchinsky absent).

5. REGULAR AGENDA
None.

6. BUSINESS FROM THE FLOOR
None.

7. REPORTS & COMMUNICATIONS
Deputy Director Brendan Vieg had four updates for the Commission:

1. The Commission's Marigold Heights Subdivision approval has been appealed to the City Council by an individual who had an issue with the street connection. The appeal is

scheduled to be heard at the June 19, 2018 Council meeting and the appeal will be solely focused on that issue.

2. Stonegate Project update: The Environmental Impact Report comment period ended 2 weeks ago and staff is working with the consultant on responding to those comments and preparing the Final EIR. The project is tentatively scheduled for the Planning Commission's first meeting in August.
3. The Butte County Association of Governments is re-initiating planning for the Butte Regional Conservation Plan.
4. Land Absorption Study: staff is looking to bring the study, additional Title 19 Amendments, as well as the Sustainability Indicators Report to the Planning Commission tentatively to the second meeting in July.

8. ADJOURNMENT

There being no further business from the Commission, the meeting was adjourned at 6:57 PM to the Regular meeting of Thursday, June 21, 2018 at 6:00pm.

6/21/18
Date Approved

Bruce Ambo, Principal Planner
Community Development Department /
Planning Commission Secretary

Radio Frequency Emissions Compliance Report For Riverview Management Group, LLC

Site Name:	**Cal Water Chico Relo**	**Site Structure Type:**	**Monopine**
Address:	**945 West Second Street**	**Latitude:**	**39.72433**
	Chico, California	**Longitude:**	**-121.8478**
Report Date:	**March 15, 2019**	**Project:**	**New Build**

Compliance Statement

Based on information provided by the wireless carriers (AT&T, Verizon, & T-Mobile) and predictive modeling, the Cal Water Chico Relo installation proposed by Riverview Management Group, LLC will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. RF alerting signage and restricting access to the Monopine to authorized climbers that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

Certification

I, David H. Kiser, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

David H. Kiser, P. E. 2019.03.15 09:02:01 -04'00'

General Summary

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure. Based on the criteria for these classifications, the FCC General Population limit is considered to be a level that is safe for continuous exposure time. The FCC General Population limit is 5 times more restrictive than the Occupational limits.

Table 1: FCC Limits

Frequency (MHz)	*Limits for General Population/ Uncontrolled Exposure*		*Limits for Occupational/ Controlled Exposure*	
	Power Density (mW/cm^2)	**Averaging Time (minutes)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any location given the spatial orientation and operating parameters of multiple RF sources. The power density in the Far Field of an RF source is specified by OET-65 Equation 5 as follows:

$$S = \frac{EIRP}{4 \cdot \pi \cdot R^2} \ (\mathrm{mW/cm^2})$$

where EIRP is the Effective Radiated Power relative to an isotropic antenna and R is the distance between the antenna and point of study. Additionally, consideration is given to the manufacturers' horizontal and vertical antenna patterns as well as radiation reflection. At any location, the predicted power density in the Far Field is the spatial average of points within a 0 to 6-foot vertical profile that a person would occupy. Near field power density is based on OET-65 Equation 20 stated as

$$S = \left(\frac{180}{\theta_{BW}}\right) \cdot \frac{100 \cdot P_{in}}{\pi \cdot R \cdot h} \ (\mathrm{mW/cm^2})$$

where P_{in} is the power input to the antenna, θ_{BW} is the horizontal pattern beamwidth and h is the aperture length.

Some antennas employ beamforming technology where RF energy allocated to each customer device is dynamically directed toward their location. In the analysis presented herein, predicted exposure levels are based on all beams at full utilization (i.e. full power) simultaneously focused in any direction. As this condition is unlikely to occur, the actual power density levels at ground and at adjacent structures are expected to be less that the levels reported below. These theoretical results represent worst-case predictions as all RF emitters are assumed to be operating at 100% duty cycle.

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

Analysis

The following installation is proposed for this location:

- Riverview Management Group, LLC
  - Install 12 new antennas
    - 6 new antennas at 97'
    - 6 new antennas at 87'
- Verizon Wireless
  - Install 8 new antennas at 106'
- T-Mobile
  - Install 9 new antennas at 77'

The antennas will be mounted on a 115-foot Monopine with centerlines as noted above Other appurtenances such as GPS antennas, RRUs and hybrid cable below the antennas are not sources of RF emissions. Assumed operating parameters for all antennas are listed in Appendix A.

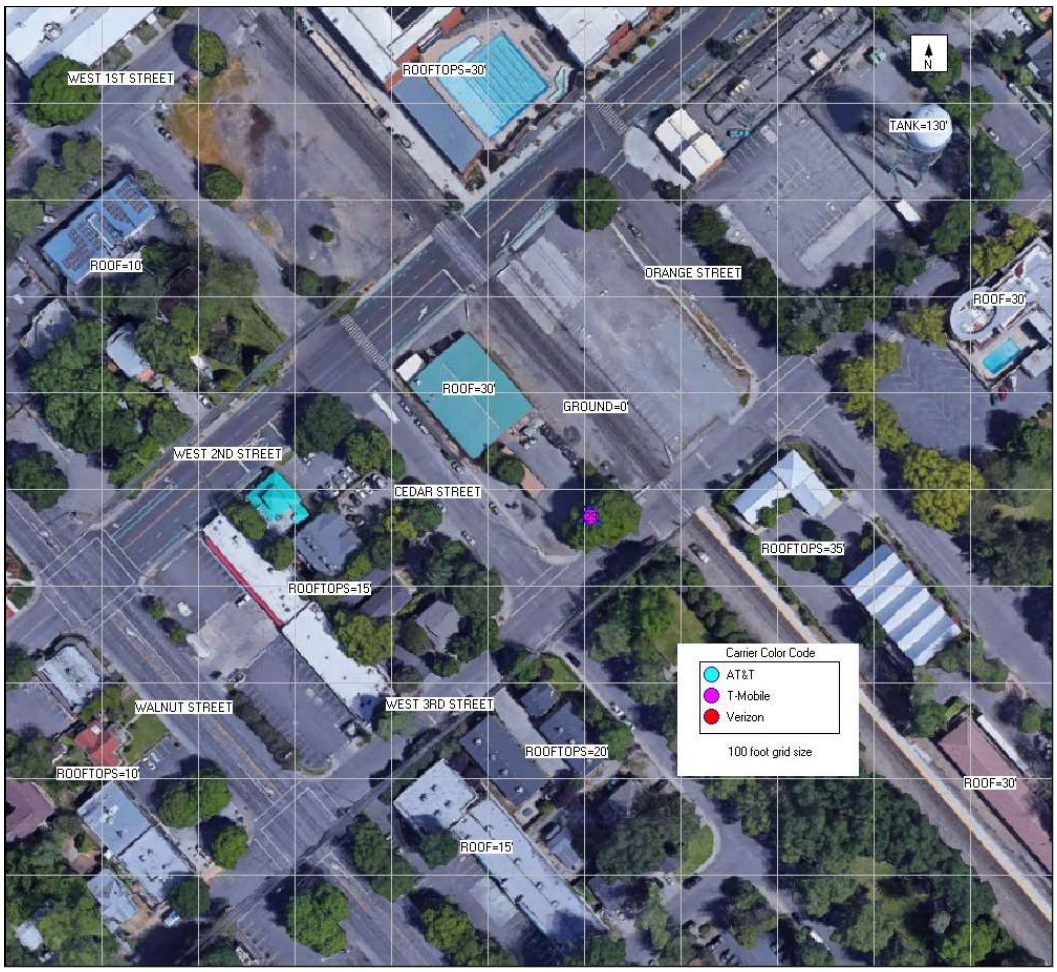

Figure 1: Antenna Locations

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serve to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. Based on the operating parameters in Appendix A, the cumulative power density level at the

ground level from all antennas is 2.4456% of the FCC General Population limits. Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all operations is 3.7176% of the FCC General Population limits. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

Waterford Consultants, LLC recommends posting RF alerting signage with contact information (Caution 2B) at the base of the Monopine to inform authorized climbers of potential conditions near the antennas. These recommendations are depicted in Figure 2.

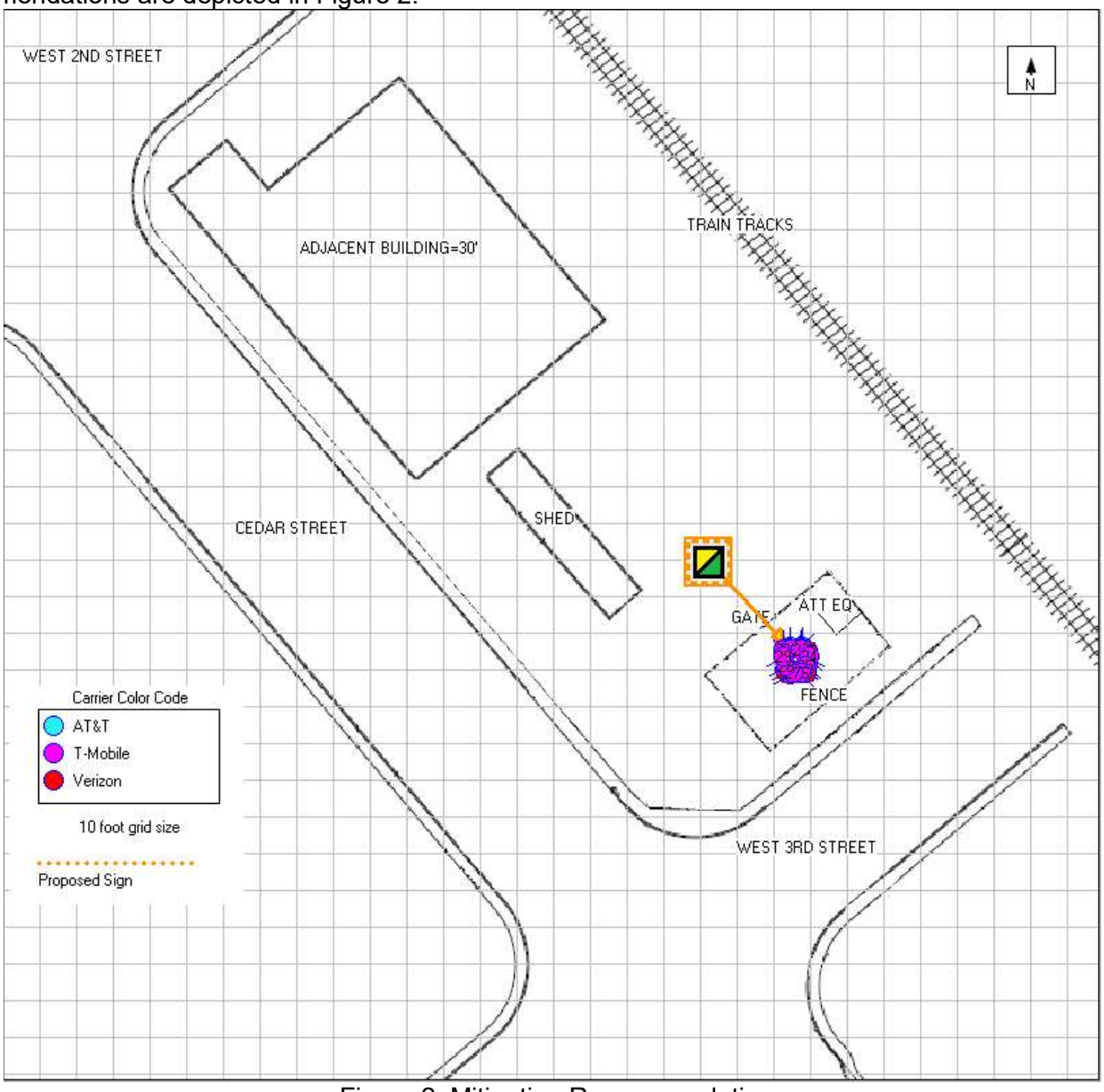

Figure 2: Mitigation Recommendations

Caution 2B

Appendix A: Assumed Parameters for Proposed Antennas

Antenna #:	Carrier:	Manufacturer	Pattern:	Band:	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (m):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	EIRP (W):	Rad Center (ft):
1	AT&T	CCI	BSA-M65R-BUU-H6 04DT LEFT	700	0		35	1.83	30	2	0	14.05	1525	2501	97
1	AT&T	CCI	BSA-M65R-BUU-H6 02DT LEFT	1900	0		28	1.83	40	4	0	16.25	6747	11069	97
1	AT&T	CCI	BSA-M65R-BUU-H6 04DT RIGHT	700	0		33	1.83	30	2	0	14.55	1711	2806	97
1	AT&T	CCI	BSA-M65R-BUU-H6 02DT RIGHT	1900	0		30	1.83	40	4	0	15.75	6013	9866	97
2	AT&T	CCI	BSA-M65R-BUU-H6 04DT LEFT	700	0		35	1.83	40	4	0	14.05	4066	6670	97
2	AT&T	CCI	BSA-M65R-BUU-H6 04DT LEFT	850	0		32	1.83	40	1	0	14.85	1222	2005	97
2	AT&T	CCI	BSA-M65R-BUU-H6 02DT LEFT	2100	0		26	1.83	60	4	0	16.45	10598	17386	97
2	AT&T	CCI	BSA-M65R-BUU-H6 04DT RIGHT	700	0		35	1.83	40	4	0	14.05	4066	6670	97
2	AT&T	CCI	BSA-M65R-BUU-H6 04DT RIGHT	850	0		32	1.83	40	1	0	15.55	1436	2355	97
2	AT&T	CCI	BSA-M65R-BUU-H6 02DT RIGHT	2100	0		27	1.83	60	4	0	16.55	10845	17791	97
3	AT&T	CCI	BSA-M65R-BUU-H6 04DT LEFT	850	0		32	1.83	40	4	0	14.85	4888	8019	87
3	AT&T	CCI	BSA-M65R-BUU-H6 04DT LEFT	1900	0		28	1.83	40	4	0	16.25	6747	11069	87
3	AT&T	CCI	BSA-M65R-BUU-H6 04DT RIGHT	850	0		32	1.83	40	4	0	15.55	5743	9421	87
3	AT&T	CCI	BSA-M65R-BUU-H6 04DT RIGHT	1900	0		29	1.83	40	4	0	15.95	6297	10330	87
4	AT&T	CCI	BSA-M65R-BUU-H6 04DT LEFT	850	0		32	1.83	40	4	0	14.85	4888	8019	87
4	AT&T	CCI	BSA-M65R-BUU-H6 02DT LEFT	2300	0		25	1.83	25	4	0	16.25	4217	6918	87
4	AT&T	CCI	BSA-M65R-BUU-H6 04DT RIGHT	850	0		32	1.83	40	4	0	15.55	5743	9421	87

4	AT&T	CCI	BSA-M65R-BUU-H6 02DT RIGHT	2300	0		25	1.83	25	4	0	16.45	4416	7244	87
5	AT&T	KATHREIN	80010965 04DT	700	240		63.6	2.00	30	2	0	12.05	962	1578	97
5	AT&T	KATHREIN	80010965 04DT	850	240		60	2.00	40	2	0	13.55	1812	2972	97
5	AT&T	KATHREIN	80010965 2.5DT	1900	240		63.8	2.00	40	4	0	15.65	5877	9641	97
6	AT&T	KATHREIN	80010965 04DT	700	240		63.6	2.00	40	2	0	12.05	1283	2104	97
6	AT&T	KATHREIN	80010965 04DT	850	240		60	2.00	40	2	0	13.55	1812	2972	97
6	AT&T	KATHREIN	80010965 2.5DT	2100	240		58.2	2.00	60	4	0	16.45	10598	17386	97
7	AT&T	KATHREIN	80010965 04DT	700	240		63.6	2.00	40	2	0	12.05	1283	2104	87
7	AT&T	KATHREIN	80010965 04DT	850	240		60	2.00	40	1	0	13.55	906	1486	87
7	AT&T	KATHREIN	80010965 2.5DT	2300	240		59.2	2.00	25	4	0	15.85	3846	6310	87
8	AT&T	KATHREIN	80010965 04DT	700	240		63.6	2.00	40	2	0	12.05	1283	2104	87
8	AT&T	KATHREIN	80010965 2.5DT	2300	240		59.2	2.00	40	4	0	15.85	6153	10095	87
9	AT&T	KATHREIN	80010965 04DT	700	120		63.6	2.00	30	2	0	12.05	962	1578	97
9	AT&T	KATHREIN	80010965 04DT	850	120		60	2.00	40	2	0	13.55	1812	2972	97
9	AT&T	KATHREIN	80010965 2.5DT	1900	120		63.8	2.00	40	4	0	15.65	5877	9641	97
10	AT&T	KATHREIN	80010965 04DT	700	120		63.6	2.00	40	2	0	12.05	1283	2104	97
10	AT&T	KATHREIN	80010965 04DT	850	120		60	2.00	40	2	0	13.55	1812	2972	97
10	AT&T	KATHREIN	80010965 2.5DT	2100	120		58.2	2.00	60	4	0	16.45	10598	17386	97
11	AT&T	KATHREIN	80010965 04DT	700	120		63.6	2.00	40	2	0	12.05	1283	2104	87
11	AT&T	KATHREIN	80010965 04DT	850	120		60	2.00	40	1	0	13.55	906	1486	87
11	AT&T	KATHREIN	80010965 2.5DT	2300	120		59.2	2.00	25	4	0	15.85	3846	6310	87
12	AT&T	KATHREIN	80010965 04DT	700	120		63.6	2.00	40	2	0	12.05	1283	2104	87
12	AT&T	KATHREIN	80010965 2.5DT	2300	120		59.2	2.00	40	4	0	15.85	6153	10095	87
13	Verizon	COMMSCOPE	NHH-65C-R2B 00DT	700	40	0	65	2.44	80	2	0	13.20	3343	5484	106
13	Verizon	COMMSCOPE	NHH-65C-R2B 00DT	1900	40	0	66	2.44	40	4	0	15.17	5262	8632	106
14	Verizon	COMMSCOPE	NHH-45C-R2B 00DT	850	40	0	43	2.44	20	8	0	15.96	6311	10354	106
14	Verizon	COMMSCOPE	NHH-45C-R2B 00DT	2100	40	0	41	2.44	40	4	0	17.51	9018	14795	106
15	Verizon	COMMSCOPE	NHH-65C-R2B 00DT	700	140	0	65	2.44	80	2	0	13.20	3343	5484	106
15	Verizon	COMMSCOPE	NHH-65C-R2B 00DT	1900	140	0	66	2.44	40	4	0	15.17	5262	8632	106
16	Verizon	COMMSCOPE	NHH-45C-R2B 00DT	850	140	0	43	2.44	20	8	0	15.96	6311	10354	106

16	Verizon	COMMSCOPE	NHH-45C-R2B 00DT	2100	140	0	41	2.44	40	4	0	17.51	9018	14795	106
17	Verizon	COMMSCOPE	NHH-65C-R2B 00DT	700	240	0	65	2.44	80	2	0	13.20	3343	5484	106
17	Verizon	COMMSCOPE	NHH-65C-R2B 00DT	1900	240	0	66	2.44	40	4	0	15.17	5262	8632	106
18	Verizon	COMMSCOPE	NHH-45C-R2B 00DT	850	240	0	43	2.44	20	8	0	15.96	6311	10354	106
18	Verizon	COMMSCOPE	NHH-45C-R2B 00DT	2100	240	0	41	2.44	40	4	0	17.51	9018	14795	106
19	Verizon	COMMSCOPE	NHH-65C-R2B 00DT	700	330	0	65	2.44	80	2	0	13.20	3343	5484	106
19	Verizon	COMMSCOPE	NHH-65C-R2B 00DT	1900	330	0	66	2.44	40	4	0	15.17	5262	8632	106
20	Verizon	COMMSCOPE	NHH-45C-R2B 00DT	850	330	0	43	2.44	20	8	0	15.96	6311	10354	106
20	Verizon	COMMSCOPE	NHH-45C-R2B 00DT	2100	330	0	41	2.44	40	4	0	17.51	9018	14795	106
21	T-Mobile	COMMSCOPE	F-65C-R1 02DT	600	0	0	60	2.44	30	4	0	13.57	2730	4479	77
22	T-Mobile	ERICSSON	AIR 21 00DT	1900	0	0	62	1.39	30	4	0	15.54	4297	7050	77
23	T-Mobile	ERICSSON	AIR 32 00DT	2100	0	0	61.6	1.39	30	4	0	15.75	4510	7399	77
24	T-Mobile	COMMSCOPE	F-65C-R1 02DT	600	140	0	60	2.44	30	4	0	13.57	2730	4479	77
25	T-Mobile	ERICSSON	AIR 21 00DT	1900	140	0	62	1.39	30	4	0	15.54	4297	7050	77
26	T-Mobile	ERICSSON	AIR 32 00DT	2100	140	0	61.6	1.39	30	4	0	15.75	4510	7399	77
27	T-Mobile	COMMSCOPE	F-65C-R1 02DT	600	240	0	60	2.44	30	4	0	13.57	2730	4479	77
28	T-Mobile	ERICSSON	AIR 21 00DT	1900	240	0	62	1.39	30	4	0	15.54	4297	7050	77
29	T-Mobile	ERICSSON	AIR 32 00DT	2100	240	0	61.6	1.39	30	4	0	15.75	4510	7399	77
1	AT&T	CCI	BSA-M65R-BUU-H6 04DT LEFT 700.ant		0		35	1.83	30	2	0	14.05	1525	2501	97