

Planning Commission Agenda Report

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Files: UP 17-21

TO: PLANNING COMMISSION

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

RE: Use Permit 17-21 (MT2 Telecom Tower) 945 West 2<sup>nd</sup> Street, APN 004-037-003 (portion)

## SUMMARY

This is a request to construct and operate a 105-foot tall mono-pine multi-carrier telecommunications tower, including associated ground-mounted equipment located at 945 West 2<sup>nd</sup> Street, on the westerly portion of the block between West 2<sup>nd</sup> Street, West 3<sup>rd</sup> Street, Cedar Street and the Union Pacific Railroad. All ground-mounted equipment would be installed within a fenced area and landscaping provided around the exterior of the site. Radio frequency (RF) exposure from the new antenna array would be less than the allowable Federal standard. Because the tower site is within 1000-feet of an existing telecommunications facility (Cal Water Tank), a use permit is required. The existing Cal-Water tank has been determined to be seismically deficient, and could be decommissioned and dismantled. The applicant proposes to construct a new facility to avoid a lapse in coverage should the tank come down. The property is designated Industrial Office Mixed Use on the City of Chico General Plan diagram, and is located in a IOMU-FS (Industrial Office Mixed Use with Fraternity and Sorority overlay) zoning district. 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).

## Recommendation:

Planning staff recommends that the Planning Commission adopt Resolution No. 18-09 (**Attachment A)** approving Use Permit 17-21.

## Proposed Motion:

I move that the Planning Commission adopt Resolution No. 18-09, approving Use Permit 17-21 (MT2 Telecom), based on the required findings and subject to the conditions contained therein.

## BACKGROUND

The applicant, Riverview Management Group and MT2 Telecom, is a requesting 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 2<sup>nd</sup> Street, on the westerly portion of the block between West 2<sup>nd</sup> Street, West 3<sup>rd</sup> Street, Cedar Street and the Union Pacific Railroad (see

MT2 Telecom (UP 17-21) PC Mtg. 06/03/18 Page 2 of 8

Location Map, **Attachment B**, and Aerial Photo, **Attachment C**). The 0.5-acre site is designated Industrial Office Mixed Use on the City of Chico General Plan Land Use Diagram and is zoned IOMU-FS (Industrial Office Mixed Use with Fraternity and Sorority overlay). The site would remain under the ownership of Ronald White, and a 1,500-square foot portion of the site would be leased to the applicant for the telecommunications facility. Surrounding land uses include commercial and residential uses to the west, a recreational park to the south, a parking lot to the east and a vacant lot to the north. The property is partially developed with a commercial storage building and associated parking. The project consists of the construction of an unmanned 105-foot mono-pine telecommunications tower and associated ground-mounted equipment on the southerly 1,500 square foot portion of the property (see Plat to Accompany Use Permit 17-21, **Attachment D**).

## DISCUSSION

Pursuant to CMC 19.78.050, new telecommunications towers are allowed in the IOMU zoning district subject to the issuance of a wireless telecommunications facilities permit if all the development standards are met. If one or more of the standards cannot be met, a use permit is required. The proposed tower is subject to issuance of a use permit because there is an existing tower located within 1,000 feet. The existing tower is a California Water Service (Cal Water) storage tank located approximately 500-feet easterly from the project site. As described in the applicant's letter of submittal, (**Attachment E**), the new tower is necessary to avoid a lapse in coverage for the surrounding service area currently served by the existing Cal Water tank tower, should it be decommissioned.

The existing Cal Water tank tower currently houses several antennas owned by a variety of wireless carries. Cal Water recently determined that the tank does not meet current earthquake standards and informed the wireless carriers that the tank would eventually be decommissioned and dismantled. No application for demolition has been received by the City Building Department as of the date of this report. Pursuant to CMC 19.78.070.B.2 (Application Requirements) the applicant has acknowledged that the new tower would be "co-locatable" for other wireless carriers to mount antennas and equipment upon (see **Attachment E**, Letter of Submittal).

As required by the City's Wireless Telecommunications Facility (WTF) regulations (CMC 19.78), this application was reviewed by Sherry Miller, the City's Airport Manager. She determined that 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.

## Tower Location and Design

The applicant has sited the proposed tower on the southerly portion of a partially developed commercial site. The proposed tower would be located approximately 500-feet from the existing Cal Water tank tower located on the northwest corner of Cherry Street and West 3<sup>rd</sup> Street. The site was selected by the applicant because of its proximity to the existing water tank tower, and that the landowner was willing to enter into a lease agreement. A geographical service area map (see **Attachment F**, Service Area Map) provided by the applicant indicates that the new tower

would cover nearly the same service area as the existing water tank tower, which is currently the only tower currently serving this portion of town. This location in conjunction with the proposed height of 105-feet tall would provide equal wireless coverage to this service area, should the water tank tower be decommissioned.

The proposed mono-pine is a "stealth" design commonly used in urban areas. This type of tower has the visual appearance of a pine tree while screening antenna panels within tree branches (see **Attachment G**, Elevations). The tower antennas, or "working portion" reach 100-feet in height with an additional five-feet of "tree branches" (105-feet total) and is 21-feet shorter than the existing Cal Water tank tower that reaches 126-feet in height (see **Attachment H**, Tank Elevations). The visual simulations provided by the applicant assist in depicting the proposed mono-pine WTF and the existing water tank tower in the background (see **Attachment I**, Visual Simulation). While the mono-pine WTF is clearly visible, its tree-like appearance helps it blend in to the background.

A chain-link fence with vinyl slats and barbed-wire is proposed around the perimeter of the site. Barbed-wire is prohibited, pursuant to CMC 19.60.060 (*Fencing and screening*) unless authorized through use permit approval. The applicant did not wish to pursue a request for barbed-wire along with this use permit, so a condition of approval has been included (condition of approval #3) that precludes the use of barbed-wire and limits the fence height to six-feet in height in compliance with CMC 19.60.060.

The site plan indicates that all trees located within the project area would be removed. The location of seven existing deciduous trees and their measurement at breast height diameter (DBH) are listed, but no species name is provided. At least four trees measure greater than 6 inches at DBH and could qualify for mitigation pursuant to the City's Tree Preservation Regulations (CMC 16.66). A condition of approval is included (condition of approval #5) that would require the applicant to mitigate for any tree removal, pursuant to CMC 16.66. Various shrubs would be planted around the perimeter of the project side that would provide additional screening of ground-mounted equipment (see **Attachment J**, Planting Plan).

#### Ground Mounted Equipment and Noise

All equipment associated with the project including ground-mounted equipment cabinets, generators, back up radio batteries and air-conditioning units are located within a fenced area that includes a chain-link fence with vinyl slats and a buffer of shrubs and trees. The shelter housing the ground-mounted equipment will be fitted with an air conditioner to keep the electronic equipment at required operating temperatures. According to the manufacturers data, the noise generated by the proposed air conditioner is approximately 55.9 dB at 30-feet and 49.7 dBA at a distance of 50-feet (see **Attachment K**, AC Acoustical Information), which is well below the City's allowable noise threshold for commercial uses of 70 dBA, pursuant to CMC 9.38.040 (Noise). The nearest residential use to the proposed tower is located approximately 100-feet southwesterly of the site and staff has no concerns with noise generated by the air conditioner associated with the project.

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#### Radio Frequency (RF) Emissions

Exposure to radio frequency (RF) emissions, also known as electromagnetic field (EMF) emissions, is associated with the operation of Wireless Telecommunications Facilities (WTFs). RF emissions from WTFs are regulated by the Federal Communications Commission (FCC), pursuant to the Telecommunications Act of 1996 (TCA). Existing City regulations require an analysis by a qualified RF engineer showing that the cumulative emissions of all proposed facilities comply with FCC standards concerning RF emissions. Information regarding measuring human exposure to radiofrequency energy can be found in **Attachment L** (Safety and Interference Potential at Wireless Communications Sites). The standards established by the FCC are based on recommendations from the Environmental Protection Agency, Food and Drug Administration, Occupational Health and Safety Act of 1970 and the National Institute for Occupational Safety and Health, and are set at a level many times lower than that which may pose a health risk.

In this case, the required radio frequency emissions compliance report prepared by Waterford Consultants, LLC for AT&T mobility, (see **Attachment M**, RF Report) shows that for accessible areas at ground level, the maximum predicated power density levels and cumulative power density levels resulting from all AT&T mobility operations is significantly less than the FCC General Population limits (1.64% of 100% exposure limit). The project complies with the standard by a wide margin. Waterford Consultants, LLC recommends posting RF alerting signage with contact information at the base of the proposed mono-pine to inform authorized climbers of potential conditions near the antennas. As such, a condition of approval has been included to require this signage.

With the exception of being located within 1000 feet of an existing telecommunications facility, the tower would comply with all City standards for new towers (**Attachment N**, Development Standards). The primary purpose of the project is to provide a new tower for wireless carriers to co-locate their antennas, and to avoid a lapse in coverage should the Cal Water tank tower be decommissioned, but no new service would be provided as a result of the new tower. As such, it is not legally necessary to approve this project to comply with the requirements of the TCA. However, the project will result in continued and uninterrupted signal coverage in this portion of Chico.

## GENERAL PLAN

The Industrial Office Mixed Use General Plan designation for the site is intended for a wide range and combination of light industrial and office development with commercial and other support services integrated vertically and horizontally. The following General Plan goals, policies and programs should be considered when reviewing this project:

Policy ED-1.6 (Enhanced Wireless Telecommunication) – Encourage the provision of wireless telecommunications services throughout the urban area at a level greater than the minimum required by the Telecommunications Act for improved business development, access to information, and public safety.

Policy LU-2.4 (Land Use Compatibility) – Promote land use compatibility through use restrictions, development standards, environmental review and special design considerations.

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Policy LU-4.4 (Positive Contributions) – Encourage infill development that provides missing neighborhood elements, such as neighborhood retail, enhance architectural quality, and circulation improvements for pedestrians, bicycles and vehicles, or that otherwise contributes positively to existing neighborhoods.

Action S-1.1.2 (Emergency Response Awareness) - Promote community preparedness for hazards and awareness of emergency notification methods.

## 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, its proximity to a nearby tower site which is proposed to be removed, 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 19.24 (Use Permits).

Construction of a new wireless telecommunications facility which does not meet all development standards, (i.e, a minimum 500-foot distance between elementary and secondary schools and residential zones, all new towers shall be unlit unless otherwise required by the FAA and new towers shall generally not be permitted within 1,000 feet of an existing telecommunications tower) is allowed in the IOMU zoning district, subject to issuance of a use permit. 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 radio frequency emissions compliance report prepared by Waterford Consultants, LLC for AT&T mobility shows that for accessible areas at ground level, the maximum predicated power density levels and cumulative power density levels resulting from all AT&T mobility operations is significantly less than the FCC General Population limits (1.64% of 100% exposure limit). The project complies with the standard by a wide margin. The project will not result in any significant noise impacts. The proposed tower 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 should the existing tower be decommissioned. 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 unstaffed facility would not generate vehicle traffic other than during installation and periodic maintenance. Access to the site is provided by an existing driveway located on W. 2<sup>nd</sup> Street and would not require additional public improvements. 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 would provide continued and uninterrupted wireless service to users in the service area and avoid a possible lapse in coverage should the existing tower be decommissioned. 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 ground lease area represents a very small portion of the property, and will be compatible with existing and future uses of the facility. As required by CMC 19.78, the tower would be available for other wireless carriers to co-locate their equipment upon, minimizing the overall number of towers in the area. With its mono-pine design, the project will be moderately camouflaged to resemble a tree and blend into and recede into the background of the urban tree canopy.

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 radio frequency emissions compliance report prepared by Waterford Consultants, LLC for AT&T mobility shows that for accessible areas at ground level, the maximum predicated power density levels and cumulative power density levels resulting from all AT&T mobility operations is significantly less than the FCC General Population limits. The project therefore 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.

CMC 19.78.120 states "*if the telecommunications tower is more than 100 feet in height, it must be designed at the minimum height functionally required.*" The overall height of the tower is 105-feet tall, however, the functional height of the tower is 100-feet tall, as antennas are mounted at mounted on the tower at 67-feet, 77-feet, 87-feet, and 97-feet high The additional 5-feet in height is to provide for the top-most 'point' of the tree and is decorative in nature. The tower has been designed at a height similar to the Cal Water tank tower to match existing coverage for the service area.

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

As required by the City's Wireless Telecommunications Facility (WTF) regulations, this application was reviewed by Sherry Miller, the City's Airport Manager. She determined that 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.

Additional findings for new telecommunications facility tower which is proposed to be located within 1,000 feet of an existing tower:

1. The cumulative visual impacts are not significant.

Ground-mounted equipment would be properly screened from view through a combination of fencing with vinyl slats and a heavy landscape buffer around the perimeter of the project site. The visual simulations provided by the applicant assist in depicting the proposed monopine WTF and the existing water tank tower in the background (see **Attachment I**, Visual Simulation). While the mono-pine WTF is clearly visible, its tree-like appearance helps it blend in to the background.

2. Location within 1,000 feet of the existing tower is technically necessary to provide services not possible with co-location on an existing tower or structure in the service area.

Cal Water recently determined that the water tank that currently houses several antennas owned by multiple wireless carriers and provides wireless service to the area, does not meet current earthquake standards and informed the wireless carriers that the tank would eventually be decommissioned and dismantled. The proposed tower is necessary in order to provide continued and uninterrupted wireless service to the surrounding service area.

## **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

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

## ATTACHMENTS:

- A. Resolution No. 18-09 Exhibit I - Conditions of Approval
- B. Location Map
- C. Aerial Photo
- D. Plat to Accompany Use Permit 17-21 (2)
- E. Letter of Submittal
- F. Service Area Map
- G. Elevations
- H. Tank Elevations
- I. Visual Simulations (3)
- J. Planting Plan
- K. AC Unit Acoustical Information
- L. Safety and Interference Potential at Wireless Communications SitesM. RF Report
- N. Excerpt of CMC 19.78.120.A., Development Standards for New Telecommunications Towers

## RESOLUTION NO. 18-09 RESOLUTION OF THE CITY OF CHICO PLANNING COMMISSION APPROVING USE PERMIT 17-21 (MT2 Telecom)

WHEREAS, applications have been received for a use permit to construct and operate a 105foot mono-pine multi-carrier telecommunications tower, including associate ground-mounted equipment located at 945 West 2<sup>nd</sup> Street, on the westerly portion of the block between West 2<sup>nd</sup> Street, West 3<sup>rd</sup> Street, Cedar Street and the Union Pacific Railroad, further identified as Assessor's Parcel No. 004-037-003, (the "Project"); and

WHEREAS, Mr. Ronald White, the owner of the property, and lease a 1,500-square foot portion of the site to the applicant, Riverview Management Group and MT2 Telecom, for the use and operation of the telecommunications facility;

WHEREAS, the Planning Commission considered the Project, and staff report at a noticed public hearing held on June 7, 2018; 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, its proximity to a nearby tower site which is proposed to be removed, 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. Construction of a new telecommunications tower which does not meet all development standards is allowed in the IOMU zoning district, subject to issuance of a use permit. This permit has been processed in accordance with Chapters 19.24 (Use Permits) and 19.78 (Wireless Telecommunications Facilities).
- B. The project complies with Federal Communications Commission's radio frequency emission standards by a wide margin. The project will not result in any significant noise impacts. The proposed tower would provide an overall benefit to the community and those

Attachment A Page 1 of 4 residing or working in the neighborhood because its presence would avoid a lapse in wireless coverage should the existing tower be decommissioned. 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 unstaffed facility would not generate vehicle traffic other than during installation and periodic maintenance. Access to the site is provided by an existing driveway located on W. 2<sup>nd</sup> Street and would not require additional public improvements. 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 would provide continued and uninterrupted wireless service to users in the service area and avoid a possible lapse in coverage should the existing tower be decommissioned. Wireless service availability implements General Plan goals and policies that encourage public safety notification and communication.
- E. The proposed design complies with CMC Section 19.78, which governs wireless telecommunications facilities. The ground lease area represents a very small portion of the property, and will be compatible with existing and future uses of the facility. As required by CMC 19.78, the tower would be available for other wireless carriers to co-locate their equipment upon, minimizing the overall number of towers in the area. With its mono-pine design, the project will be moderately camouflaged to resemble a tree and blend into and recede into the background of the urban tree canopy.

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

A. The radio frequency emissions compliance report shows that for accessible areas at ground level, the maximum predicated power density levels and cumulative power density levels resulting from all AT&T mobility operations is significantly less than the FCC General Population limits. The project therefore complies with the standard by a wide margin.

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- B. The overall height of the tower is 105-feet tall, however, the functional height of the tower is 100-feet tall. The additional 5-feet in height is to provide for the top-most 'point' of the tree and is decorative in nature. The tower has been designed at a height similar to the Cal Water tank tower to match existing coverage for the service area.
- C. As required by the City's Wireless Telecommunications Facility (WTF) regulations, this application was reviewed by Sherry Miller, the City's Airport Manager. She determined that 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 prohibited (pursuant to CMC 19.78.120.A.2) to minimize visual impacts.
- 3. With regard to additional findings for a new telecommunications facility which is proposes to be located with 1,000 feet of an existing tower, the Planning Commission finds that;
  - A. Ground-mounted equipment would be properly screened from view through a combination of fencing with vinyl slats and a heavy landscape buffer around the perimeter of the project site. Visual simulations provided by the applicant assist in depicting the proposed monopine WTF and the existing water tank tower in the background; while the mono-pine WTF is clearly visible, its tree-like appearance helps it blend in to the background.
  - B. Cal Water recently determined that the water tank that currently houses several antennas owned by multiple wireless carriers and provides wireless service to the area, does not meet current earthquake standards and informed the wireless carriers that the tank would eventually be decommissioned and dismantled. The proposed tower is necessary in order to provide continued and uninterrupted wireless service to the surrounding service area.

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

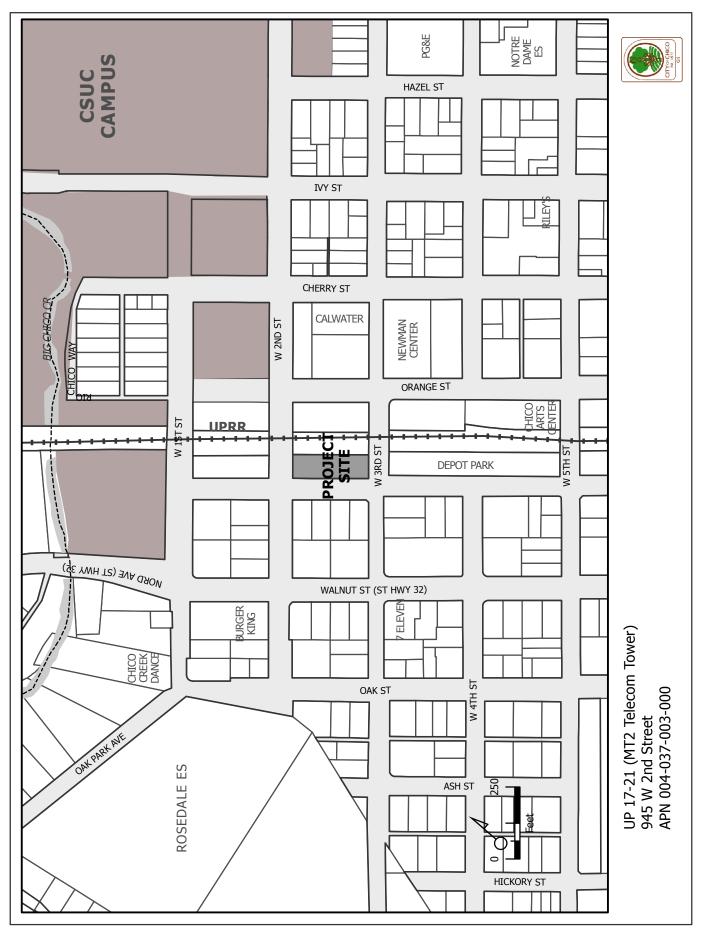
5. The Planning Commission hereby specifies that the materials and documents which constitute the record of proceedings upon which its decision is based are located at and under the custody of the City of Chico Community Development Department.

Attachment A Page 3 of 4

1	THE FOREGOING RESOLUTION V meeting held on June 7, 2018, by the	WAS ADOPTED by the Planning Commission at its following vote:
2	AYES:	
3	NOES:	
4	ABSENT:	
5	ABSTAINED:	
6	DISQUALIFIED:	
7	ATTEST:	
8	APPROVED AS TO FORM:	
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12		
13	Brendan Vieg Planning Commission Secretary	Andrew L. Jared, Assistant City Attorney*
14		*Pursuant to the Charter of the City of Chico, Section 906(E)
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		Attachment A Page 4 of 4

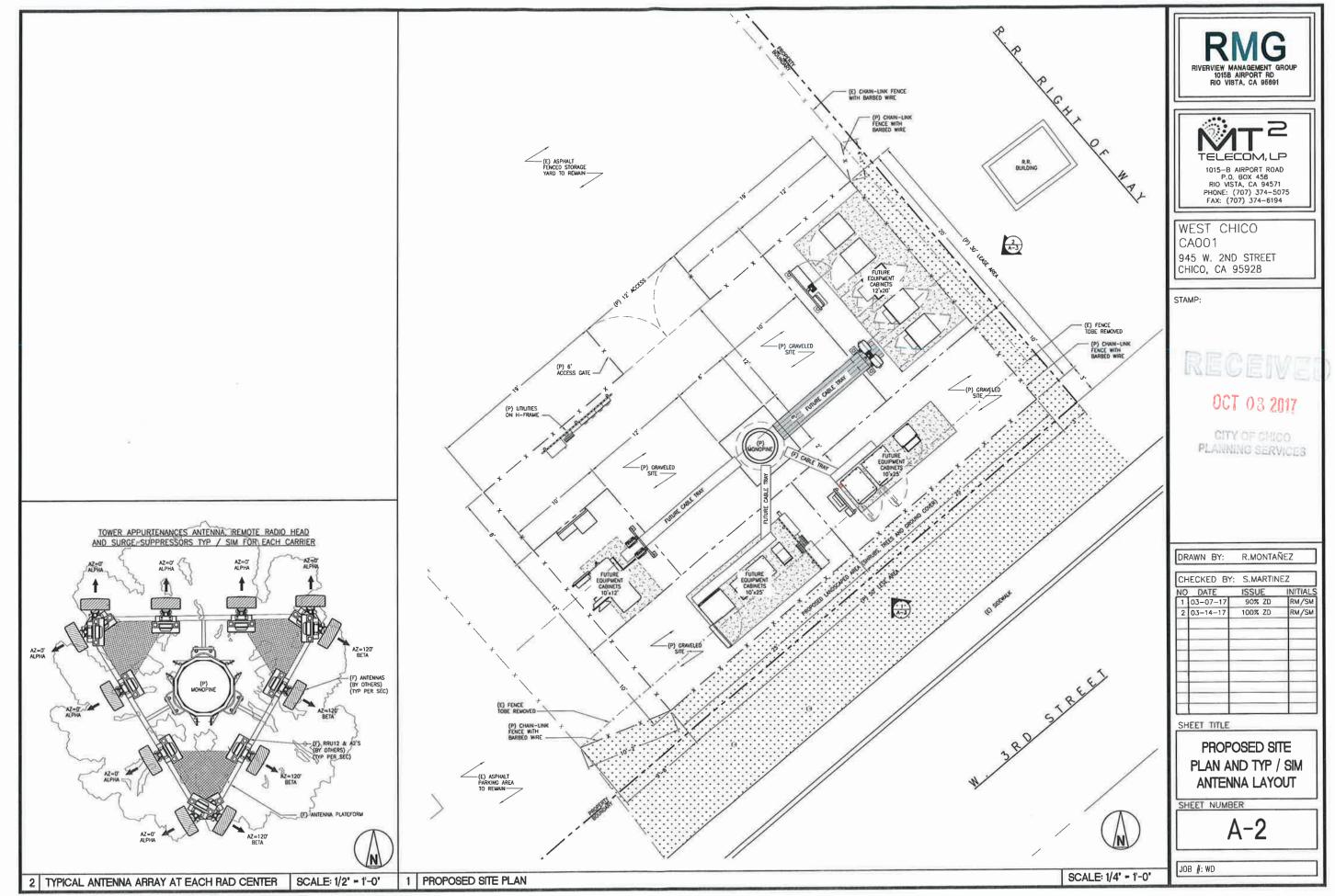
## EXHIBIT "I" CONDITIONS OF APPROVAL New Wireless Telecommunications Facility Tower MT2 Telecom (UP 17-21)

- 1. Use Permit 17-21 authorizes the construction and operation of a 105-foot tall mono-pine multi-carrier telecommunications tower, including associated ground-mounted equipment located at 945 West 2<sup>nd</sup>, in substantial accord with the "Site Plan to Accompany Use Permit 17-21 (MT2 Telecom)" and in compliance with all other conditions of approval.
- 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.

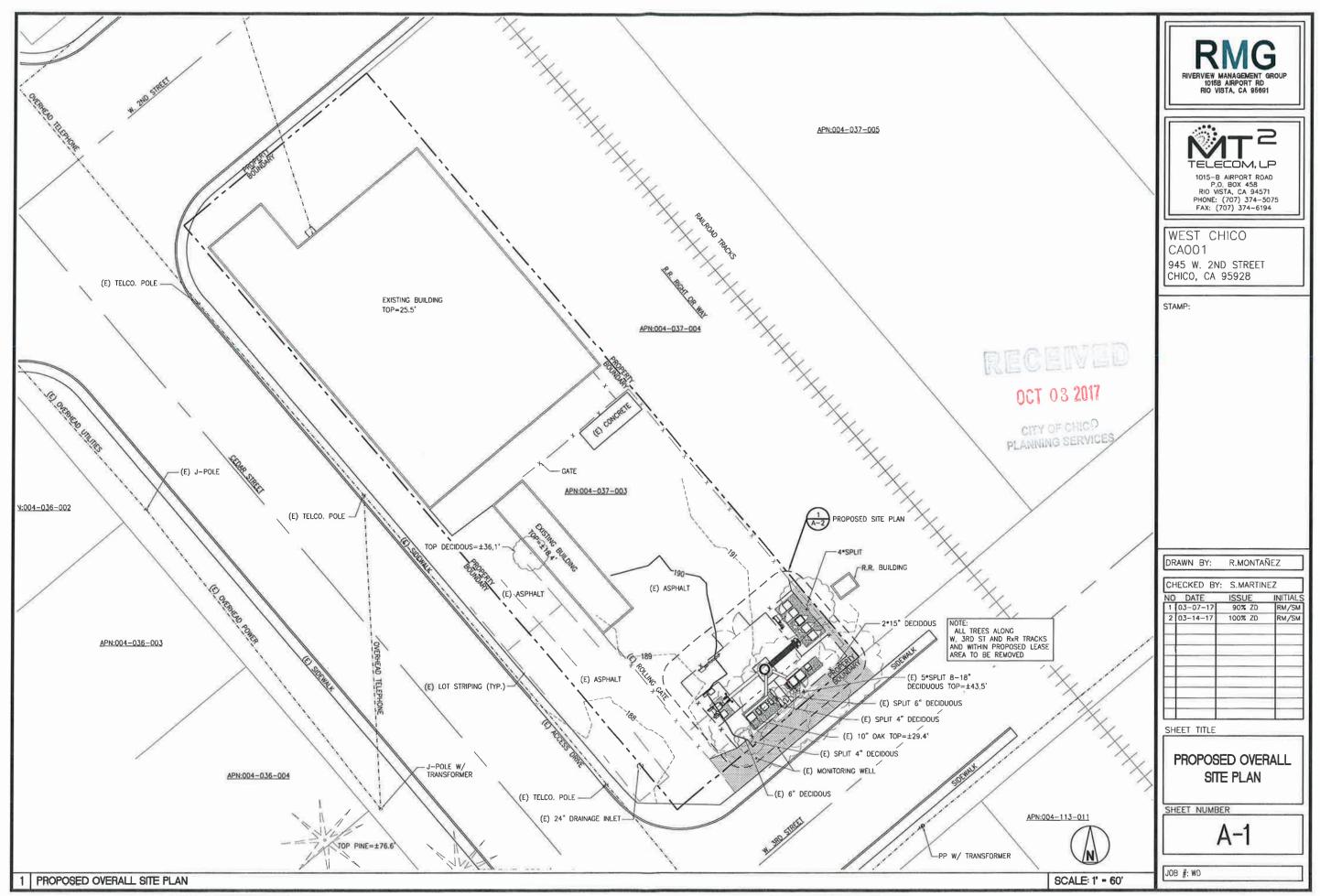


Attachment B





**Attachment D** 



**Attachment D** 



March 10, 2017

Shannon Costa Community Development Technician City of Chico 411 Main Street Chico, CA 95927 Direct 530-879-6506 / Fax 530-895-4726

Re: CUP / WTFC Letter of Submittal

## Shannon,

The proposed Co-locatable Wireless Telecommunications Facility is being submitted with the following design elements and coverage parameters:

- ▶ Geographical service area to be similar to the existing site to be decommissioned. (Item 8)
- The site is being placed on property that has the appropriate zone designation and surrounding most conducive to this type of installation. (Item 9)
- In large part similar and more technologically and environmentally advance cabinets will be installed at this facility to replace the equipment being decommissioned. (Item 10)
- The Facility as stated above will be co-locatable and will be able to house the carriers at the site being decommissioned. (Item 11)
- The site will meet the required FCC regulations in similar fashion as the existing site and shall not exceed the allowable EMF/RF allowed by the regulatory standards. (Item 12)
- The parcel that we will be placing the replacement candidate on is presently developed in a manner that the environment is not inhabitable by sensitive habitats and rare, threatened or endangered species. (Item 13)

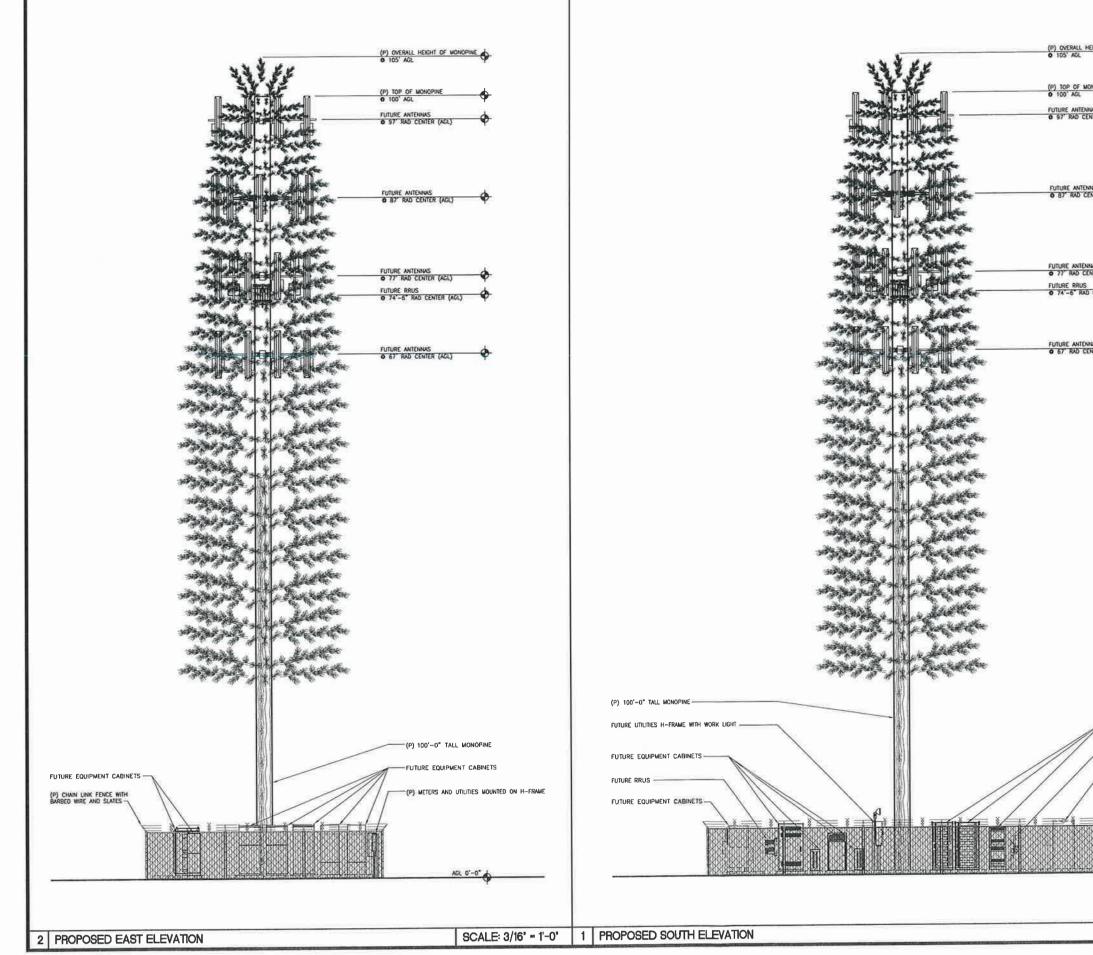
Please feel free to call with any questions or comments.

Salomon Martínez Jr Engineering Manager (209) 601-3781 Mob.

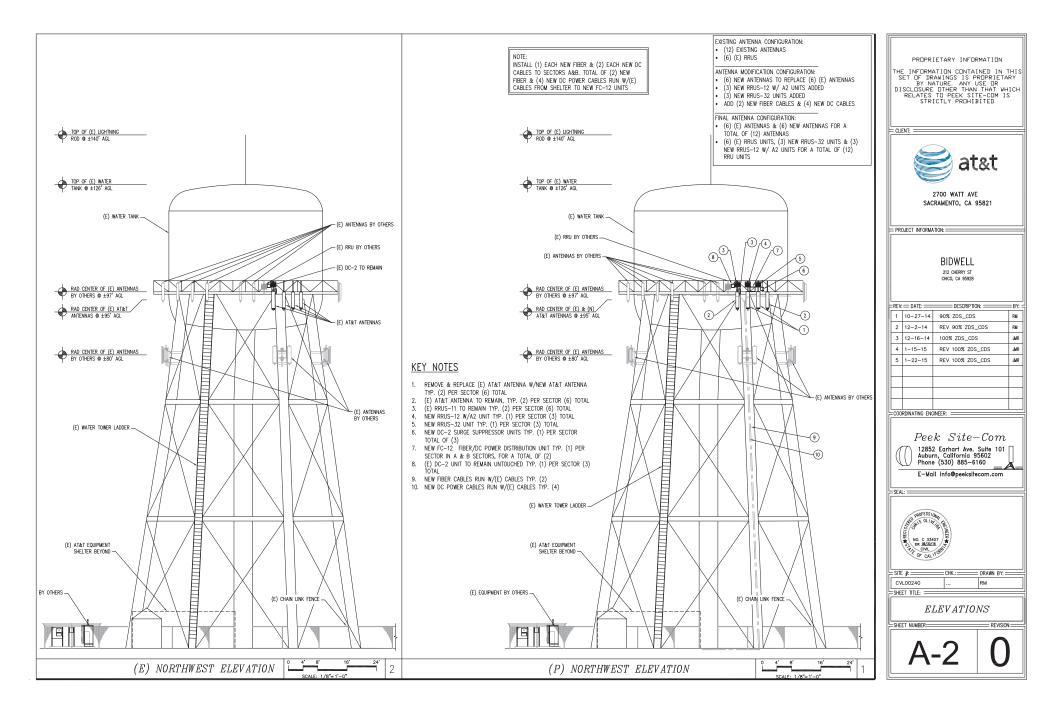
## Attachment E

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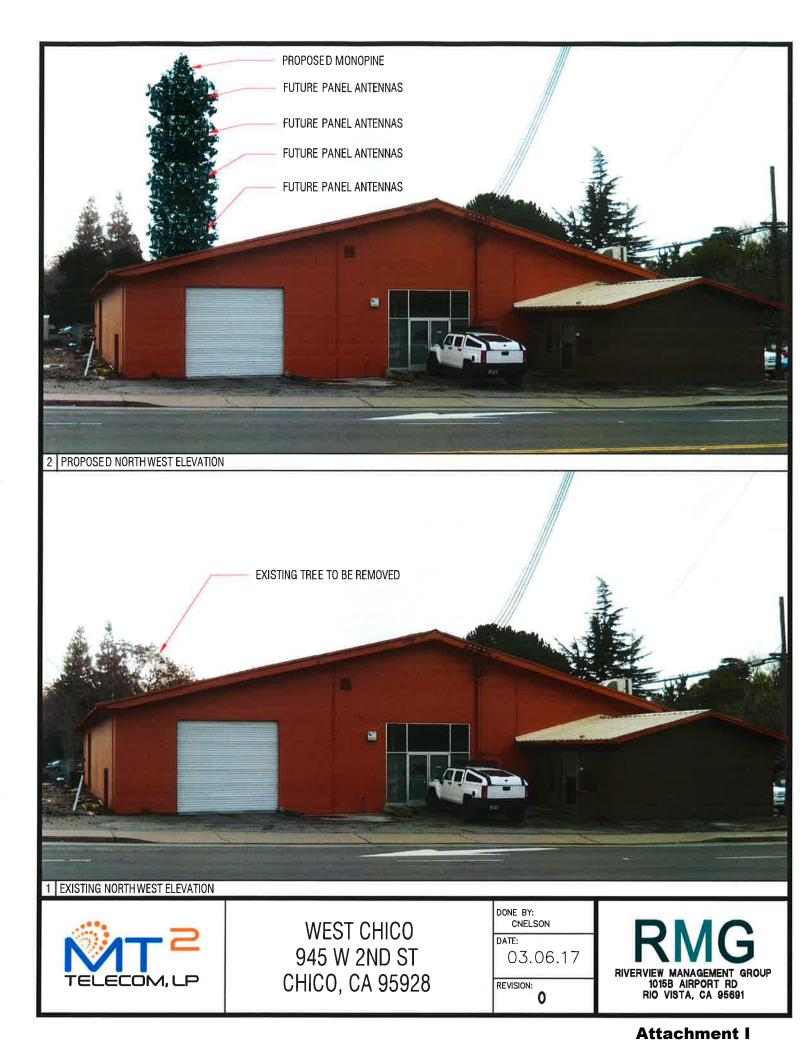
NOPINE	RIVERVIEW MANAGEMENT GROUP 10168 AIRPORT RD RIO VIBTA, CA 96691		
NAS	TELECOM, LP 1015-B AIRPORT ROAD P.O. BOX 458 RIO VISTA, CA 94571 PHONE: (707) 374-5075		
US NTER (AGL)	FAX: (707) 374-6194 WEST CHICO CAOO1 945 W. 2ND STREET CHICO, CA 95928		
CENTER (AGL)	STAMP:		
RECEIVI Oct 03 2017	0		
CITY OF CHICO PLAINING SERVICE			
	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		
FUTURE EQUIPMENT CABINETS	SHEET TITLE		
(P) CHUN UNK FENCE WITH BARBED WIRE AND SLATES	ELEVATIONS		
AGL 0'-0"	SHEET NUMBER		
SCALE: 3/16' - 1'-0'	JOB #: WD		



## **Attachment H**



#### Attachment I





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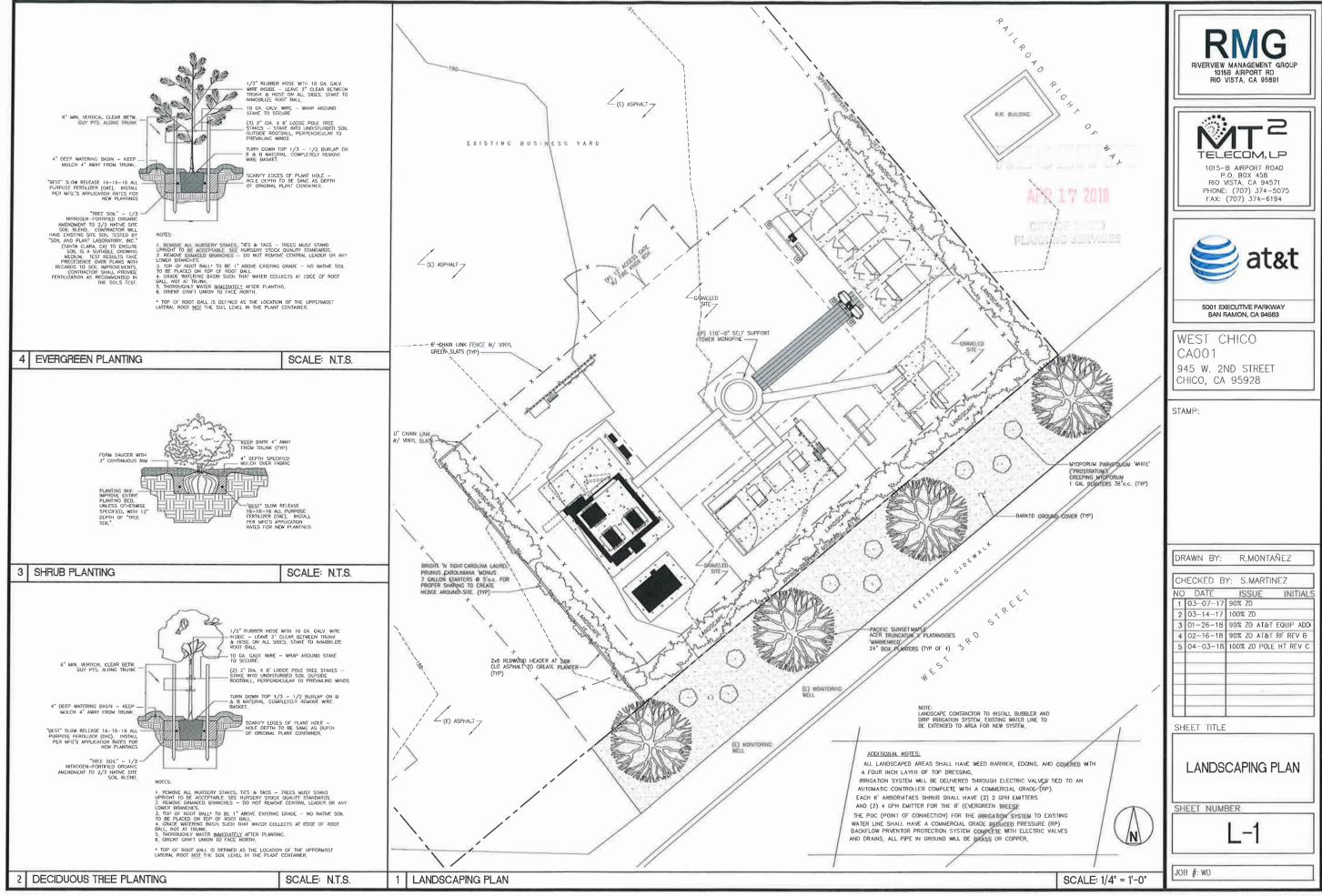
West Chico Site # CA001

4/13/18

945 W. 2nd Street Chico, CA Looking Southwest from Parking Garage

View #1 Applied Imagination 510 914-0500

## **Attachment I**



**Attachment J** 

# Marvair

156 Seedling Drive Cordele, Georgia 31015 229-273-0753

Distance From	Model Number			
Unit (Feet)	ECUA12AC			
5	66.2			
10	60.3			
20	55.9			
30	52.9			
40	50.8			
50	49.7			

Notes:

(2) Background Sound Level: 30-36 dBA

(3) Sound Level Meter 5.5 Ft Above Ground Directly in Line with Outdoor Coil



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#### Safety and Interference Potential at Wireless Communications Sites

Service providers build new communication sites in order to address customer need for coverage and capacity offered by wireless networks. Sites consist of radio equipment that is located at ground level or mounted near antennas and are designed to provide service to specific areas in the community. Common concerns relating to the siting of tower sites is the potential impact on human health as well as interference to existing services and near-by electrical devices.

#### Potential for Hazardous Exposure to Radiofrequency Energy

The Federal Communications Commission (FCC) requires licensees to ensure that new and existing wireless operations do not expose people to hazardous levels of radio frequency (RF) electromagnetic energy. Service providers consider compliance with these rules when designing new sites or modifying existing operations that could change the RF environment.

These FCC rules are based on exposure limits established by scientific and engineering organizations that review human health research in this field. At RF frequencies, the electromagnetic waves utilized by cellular sites represent non-ionizing radiation which can be absorbed by the human body. The FCC limits include a 50-fold safety factor above exposure levels where adverse thermal effects may result. By contrast, the energy available in ionizing radiation (e.g. X-rays) is higher and has the ability to permanently damage tissue cells at the molecular level. Unlike ionizing radiation, exposure to non-ionizing radiation does not have cumulative effects and the FCC limits are based on the body's thermoregulation capabilities.

The FCC radiofrequency radiation exposure compliance requirements are set forth in 47 C.F.R. §§1.1307(b) and 1.1310. The limits are defined by maximum Specific Absorption Rate (SAR) values of the human body for 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. The first tier, 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. The second tier, 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 these criteria, the FCC limits for the General Population are associated with continuous exposure conditions and exposure levels below these limits are not hazardous.

As a practical method of evaluating compliance in deployment scenarios, the FCC has set forth Maximum Permissible Exposure (MPE) limits which are derived from the whole-body SAR limits. Specified in terms of electric field strength, magnetic field strength and equivalent plane-wave power density, compliance may be evaluated through computational or measurement methods provided in the FCC Office of Engineering & Technology (OET) Bulletin 65, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields" (OET-65). Factors that determine exposure conditions include frequency, operating power, distance and directivity of the antenna. Cellular operators utilize these guidelines to design communications sites that maintain safe environmental conditions.

Compliance involves consideration of the cumulative contributions of all wireless operations. The power density resulting from an RF source may be expressed as a percentage of the frequency-specific FCC limits. In scenarios involving multiple RF emitters, the percentage of the FCC limits from each source are summed to determine if 100% of the exposure limit has been exceeded at a given location. An evaluation of existing environmental conditions may be performed through predictive modeling as set forth in OET-65 or collecting broadband measurements. The impact of new or modified wireless operations must be assessed in this cumulative scenario and any area that is accessible to members of the General Population must be compliant.





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At wireless sites, antennas may support transmit or receive operations. Receive antennas and other tower appurtenances are not sources of RF emissions. RF energy decreases significantly with distance from any antenna. The panel-type antennas typically employed at a site are highly directional by design and emissions below and behind the antenna are 1000x less than emissions in front. The antenna directivity serves to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. When antennas are mounted on monopole, lattice or guyed towers, this directivity and the mounting height result in RF exposure conditions at ground-level that are well below the FCC General Population limits (typically less than 2% MPE) even when multiple wireless service providers share a tower.

Additional information is available at the following link: https://transition.fcc.gov/bureaus/oet/info/documents/bulletins/oet56/oet56e4.pdf

#### Potential for Interference to Electronic Devices

The technical equipment to be installed by wireless service providers represents the state of the art and has been carefully designed to preclude the possibility of interference to other services and home/business equipment, including the transmission and reception of broadcast AM, FM, and Television services. Interference may occur when a device receives unwanted energy from a nearby source. Wireless service provider equipment designs meet or exceed all FCC emission requirements to suppress RF energy outside of the allocated band of frequencies.

As radio signals and electrical noise are always present, any electronic equipment should be designed to minimize susceptibility to this energy while performing its function. Some cases of interference to cable television signals from cellular signals have been reported. In this scenario, the operating frequencies of the broadcast channel within the cable and wireless systems were similar (700 MHz) and involved mobile phones in close proximity to the cable box or low-quality cable. Phones may be actively exchanging signaling or application data between voice conversations. While it is possible that a similar pathway exists for wireless base station signals to enter the cable system, this scenario is far less likely due to the lower signal power present within the home.

Cellular equipment is designed to prevent interference with other wireless communications services, such as police, fire, utility and other public safety and public service facilities as well as private communications installations, such as cordless telephones, and Citizen's Band and Radio Amateur stations. Site designs involve consideration of antenna placement near existing antennas to ensure sufficient isolation is available between systems to accommodate frequency plans and avoid interference.

In summary, the design of equipment to be installed at a communications site and consideration of existing nearby radio operations serves to minimize the potential for interference to these systems or residential electrical devices.

2018.05.15 12:43:28 -04'00'



## Radio Frequency Emissions Compliance Report For AT&T Mobility

Site Name:	Cal Water Chico Relo
Address:	945 West Second Street
	Chico, CA
<b>Report Date:</b>	April 28, 2018

Site Structure Type:	Monopine
Latitude:	39.72433
Longitude:	-121.8478
Project:	New Build

## General Summary

AT&T Mobility has contracted Waterford Consultants, LLC to conduct a Radio Frequency Electromagnetic Compliance assessment of the proposed Cal Water Chico Relo site located at 945 West Second Street, Chico, CA. This report contains information about the radio telecommunications equipment to be installed at this site and the surrounding environment with regard to RF Hazard compliance. This assessment is based on installation designs and operational parameters provided by AT&T Mobility.

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.

	Limits for General Populat	ion/ Uncontrolled Exposure	Limits for Occupational/ Controlled Exposure		
Frequency (MHz)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)	Power Density (mW/cm <sup>2</sup> )	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 particular location given the spatial orientation and operating parameters of multiple RF sources. These theoretical results represent worst-case predictions as 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

AT&T Mobility proposes the following installation at this location:

- Install (6) antennas at 97' rad center
- Install (6) antennas at 87' rad center

The antennas will be mounted on a proposed 105-foot monopine with centerlines at 97 feet and 87 feet above ground level. The antennas will be oriented toward 0, 120 and 240 degrees. The Effective Radiated Power (ERP) in any direction from all AT&T Mobility operations will not exceed 46,754 Watts. Other appurtenances such as GPS antennas, RRUs and hybrid cable are not sources of RF emissions. From this site, AT&T Mobility will enhance voice and data services to surrounding areas in licensed 700, 850, 1900, 2100 and 2300 MHz bands. Panel antennas have been installed on a nearby water tanks by other wireless operators. Assumed operating parameters for these antennas are listed in Appendix A.

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. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 1.64% of the FCC General Population limits. Based on the operating parameters in Appendix A, the cumulative power density level at this location from all antennas is 2.03% of the FCC General Population limits. Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 2.71% of the FCC General Population limits. Based on the operating parameters in Appendix A, the cumulative power density level at this location from all antennas is 3.10% 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 at adjacent buildings by 5% of the General Population limits.

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



Figure 1: Antenna Locations

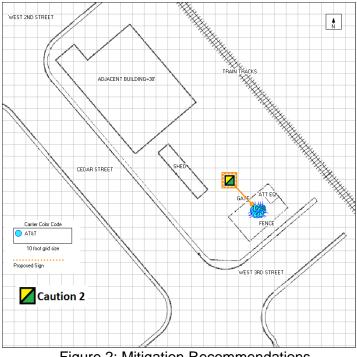


Figure 2: Mitigation Recommendations

## **Compliance Statement**

Based on information provided by AT&T Mobility, predictive modeling and the mitigation to be implemented by AT&T Mobility, the installation proposed by AT&T Mobility at 945 West Second Street, Chico, CA 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.

## 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.



Ant Num	Name	Freq (MHz)	ERP (W)	Туре	Rad Center (ft AGL)	Gain (dbd)	Orientation (Deg)	Horizontal Beam Width (Deg)
17	T-Mobile	700	1400	PANEL 00DT	77	11.3	0	66
17	T-Mobile	1900	2255	PANEL 00DT	77	14.7	0	65
18	T-Mobile	1900	1524	PANEL 00DT	77	14.7	0	65
18	T-Mobile	2100	2377	PANEL 00DT	77	14.7	0	62
19	T-Mobile	700	1400	PANEL 00DT	77	11.3	120	66
19	T-Mobile	1900	2255	PANEL 00DT	77	14.7	120	65
20	T-Mobile	1900	1524	PANEL 00DT	77	14.7	120	65
20	T-Mobile	2100	2377	PANEL 00DT	77	14.7	120	62
21	T-Mobile	700	1400	PANEL 00DT	77	11.3	240	66
21	T-Mobile	1900	2255	PANEL 00DT	77	14.7	240	65
22	T-Mobile	1900	1524	PANEL 00DT	77	14.7	240	65
22	T-Mobile	2100	2377	PANEL 00DT	77	14.7	240	62
23	Verizon	700	5500	PANEL 00DT	97	11.3	0	66
23	Verizon	850	2900	PANEL 00DT	97	11.5	0	61
24	Verizon	1900	914	PANEL 00DT	97	14.7	0	65
25	Verizon	1900	6217	PANEL 00DT	97	14.7	0	65
26	Verizon	2100	7071	PANEL 00DT	97	14.7	0	62
27	Verizon	700	5500	PANEL 00DT	97	11.3	120	66
27	Verizon	850	2900	PANEL 00DT	97	11.5	120	61
28	Verizon	1900	914	PANEL 00DT	97	14.7	120	65
29	Verizon	1900	6217	PANEL 00DT	97	14.7	120	65
30	Verizon	2100	7071	PANEL 00DT	97	14.7	120	62
31	Verizon	700	5500	PANEL 00DT	97	11.3	240	66
31	Verizon	850	2900	PANEL 00DT	97	11.5	240	61
32	Verizon	1900	914	PANEL 00DT	97	14.7	240	65
33	Verizon	1900	6217	PANEL 00DT	97	14.7	240	65
34	Verizon	2100	7071	PANEL 00DT	97	14.7	240	62

# Appendix A: Assumed Parameters for Antennas Installed at Water Tank by Other Operators

#### 19.78.120 Development standards.

A. New Telecommunications Towers.

1. No new telecommunications tower shall be located within 500 feet of any elementary or secondary school or within 500 feet of any residential zone.

2. Unless otherwise required by the Federal Aviation Administration (FAA), or unless stealthing has been required, telecommunications towers located in all non- airport zones shall be painted a single, neutral, non-glossy color designed to minimize visual impacts. New telecommunications towers located in any airport zone shall be painted and lit with a beacon in accordance with FAA standards.

3. All telecommunications towers in non-airport zones shall be unlit unless lighting is required pursuant to FAA regulations or the planning commission finds that lighting should be required to prevent the tower from becoming a hazard to aircraft. When lighting is required, it shall be shielded or directed in such a manner as to minimize the amount of light that falls onto nearby properties.

4. New telecommunications towers shall generally not be permitted within 1,000 feet of an existing telecommunications tower. New telecommunications towers otherwise permitted with a wireless telecommunications facilities permit, but which are proposed to be located within 1,000 feet of an existing telecommunications tower, shall require a use permit which may be granted upon a finding that cumulative visual impacts are not significant and that the tower is necessary to provide services not possible with co-location on an existing telecommunications tower or structure in the service area.

5. Ground-mounted equipment shall be undergrounded or screened from view.

6. Parking and access shall be on an improved surface.

7. If the telecommunications tower is more than 100 feet in height, it must be designed at the minimum height functionally required. This determination shall be based on the alternative height analysis submitted as part of the application for the facility or on an independent analysis obtained by the City pursuant to section 19.78.070.

8. No facility or combination of facilities shall generate EMF/RF in excess of the FCC adopted standards for human exposure.

9. Each telecommunications tower shall be identified by a sign placed on or near the tower, or any accessory building, which sets forth the name, address and a 24-hour telephone number of the facility's operator.

10. Telecommunications towers for which a wireless telecommunications facilities permit is issued shall be set back from all property lines by at least 25 feet. Setbacks for telecommunications towers subject to a use permit shall be determined by the planning commission as part of the use permit approval.

B. Additional facilities to be co-located on an existing telecommunications tower.

1. The original telecommunications tower was constructed and is operating in accordance with the requirements of the wireless telecommunications facilities or use permit originally issued for that facility.

2. The type and size of the new antennas are consistent with the requirements of the original wireless telecommunications facilities or use permit.

3. The new antenna array does not exceed the height of the existing telecommunications tower.

4. The width of the proposed array does not exceed the width of the existing array or arrays.

5. The combined level of EMF/RF radiation for all arrays does not exceed the maximum permissible exposure level set by the FCC.

C. Building-mounted antennas. Building mounted antennas shall be located and designed to appear an integral part of the structure. To this end, they must comply with the following standards.

The lowest part of the antenna shall be a minimum of 15 feet above grade.

2. The antenna and mountings shall not project more than 18 inches from the building surface to which it is mounted.

3. Antennas, connections and supports shall be treated to match the color scheme of the building or structure to which they are attached.

4. Antennas and connections shall not project higher than the side of the building upon which it is mounted.

5. Antennas placed on water towers shall not project above the height of the side of the water tower.

6. Exterior electrical lines serving the equipment cabinet or building shall be undergrounded.

7. All equipment shelters, cabinets or other structures utilized or built in connection with the facility shall be located inside the building being utilized for the facility, on the ground outside the setback area or any required parking area, or on the roof if screened from view.

D. Roof-mounted antennas.

1. Roof-mounted antennas shall not exceed the maximum building height for the zoning district by more than 20 feet and shall be set back at least 20 feet from the front and side edges of the roof upon which it is mounted.

2. All equipment shelters, cabinets or other structures utilized or built in connection with the facility shall be located inside the building being utilized for the facility, or on the ground outside the setback area or any required parking area, or on the roof, if screened from view.

+14(Ord. 2205, Ord. 2262; Ord. 2381 §12)