

**PROPOSAL BY TELECOM LAW FIRM P.C.
RESPONDING TO THE CITY OF CAMARILLO'S
REQUEST FOR QUALIFICATIONS (RFQ)
FOR REVIEWING AND PROCESSING
WIRELESS COMMUNICATIONS
FACILITIES APPLICATIONS**

CONTENTS

1.0	IDENTIFICATION AND QUALIFICATIONS.....	2
2.0	DESCRIPTION OF THE SERVICES AND CURRENT AVAILABILITY	6
3.0	INSURANCE REQUIREMENTS.....	7
4.0	FEES	7
5.0	CONCLUSION.....	7

Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023

Telecom Law Firm, P.C. (“**TLF**”) appreciates the opportunity to submit this proposal in response to the City of Camarillo (“**City**”) RFQ for reviewing and processing Wireless Communications Facilities Applications.

1.0 IDENTIFICATION AND QUALIFICATIONS

a) Consultant’s Experience:

For over 25 years, TLF (and its predecessor, Kramer. Firm, Inc.) has provided local governments in California and beyond with essentially the same wireless permitting services requested in the City’s RFQ.

Below are three related projects completed in the past five years.

- **City of Simi Valley, CA**
Project Address: 1135 Mellow Lane

TLF has served the City of Simi Valley from 2015 until the present for the same type of services requested within this RFQ.

The wireless application was for a modification, requested under Section 6409(a), for an existing T-Mobile Monopole. TLF conducted a detailed analysis to determine Section 6409(a) applicability as well as assessed radio frequency (“RF”) emissions from the proposed modification to determine compliance with the FCC RF regulations.

See Exhibit A for TLF’s public record work product regarding this project.

Contact Information
City of Simi Valley, CA
Mr. Caesar Hernandez, Associate Planner
Department of Environmental Services
(805) 583-6869
chernandez@simivalley.org

- **City of Thousand Oaks, CA**
Project Address: 2525 North Moorpark Road

TLF has served the City of Thousand Oaks from 2011 until the present for the same type of services requested within this RFQ under TLF. In fact, however, our firm through its processor (Kramer. Firm, Inc.) has continuously consulted with the City of Thousand Oaks since 1987.

The wireless application was for a modification, requested under Section 6409(a) for an existing wireless site on an existing stadium light standard. Upon TLF’s initial review the application materials were deemed to be incomplete, but later when complete TLF performed a full project analysis.

See Exhibit B and Exhibit C for TLF’s public record work product regarding this project.

Contact Information:
City of Thousand Oaks, CA

**Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023**

Mr. Kelvin Parker
Community Development Director
(805) 449-2500
KParker@toaks.org

- **City of Cerritos, CA**
Project Address: 16717 Norwalk Boulevard

TLF has served the City of Cerritos since 2011 until the present for the same type of services requested within this RFQ.

The wireless application was for a modification, requested under Section 6409(a) for an existing Monopine. TLF conducted an analysis to determine Section 6409(a) feasibility, design considerations with conditions of approval as well as assessed the RF emissions from the proposed modification to determine compliance with the FCC RF regulations.

See Exhibit D for TLF's public record work product regarding this project.

Contact Information
City of Cerritos
Ms. Kristin Aguila
Director of Community Development
(562) 916-1201
kaguila@cerritos.us

Staff Experience and Organization:

We have direct experience providing the services requested in this RFQ to local public agencies in California, including for the City of Camarillo. Past experiences in Camarillo and elsewhere have taught us that wireless infrastructure deployments, especially those within residential areas and public rights-of-way, often trigger community interest and concerns. We address those interests and concerns with rigorous project analysis, respect for the community and the law, and responsiveness to public participation in the review process. TLF's professionals provide objective technical and legal perspectives municipal staff and officials depend upon to make informed planning decisions that best respond to local interests.

Below is an abbreviated but representative list of TLF's California local government clients that we have provided the same scope of services sought by the City. They include:

Agoura Hills	Glendale	Redondo Beach
Antioch	Glendora	Richmond
Artesia	Grover Beach	Santa Clarita
Bakersfield	Hillsborough	San Marcos
Berkeley	Inglewood	Santa Monica
Brentwood	Irvine	Sausalito
Burbank	La Mesa	Seaside
Calabasas	Lakewood	Sebastopol
Camarillo	Laguna Niguel	Signal Hill
Carson	Lawndale	Simi Valley

Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023

Cerritos	Madera	South Gate
Concord	Malibu	South Lake Tahoe
Costa Mesa	Monterey	Solana Beach
Danville	National City	Temecula
El Monte	Palo Alto	Thousand Oaks
Encinitas	Pleasanton	Tiburon
Fountain Valley	Rancho Palos Verdes	Yucca Valley

TLF has an extensive and successful track record assisting and advising local governments throughout California and beyond in reviewing many thousands of wireless deployment applications; applications to modify existing sites; enforcing permit condition; preparing wireless application completeness reviews; and timely delivering project review memorandums with specific permitting conditions.

TLF has reviewed and processed an upward of 7,200 wireless applications for our local government clients. We have formally and informally advised and taught wireless permitting processes to more than 1,000 public agencies throughout the U.S. on specific applications for wireless deployments, ordinances, and wireless policies.

Through our staff of wireless siting professionals and legal counsel, we guide our government clients in understanding and resolving unique issues in telecommunications facilities siting matters while striking the balance between deployment and community aesthetics that uniquely suits each community.

Unlike most law or consulting firms, TLF's professionals understand the wireless technology issues and industry practices, and the impact of those technologies and practices on local regulatory procedures.

Our founding partner, Dr. Jonathan L. Kramer, was an RF and broadband telecommunications engineer for decades before becoming an attorney, and he remains an RF and broadband telecommunications engineer to this day. Dr. Kramer holds multiple FCC licenses, as well as a California Contractors License for telecommunications systems. He has also served as an expert witness and/or trial advisor in over 40 wireless and wireline cases and is a senior or fellow member of various RF/Broadband engineering societies.

A core strength is our ability to translate wireless technical issues and practices into plain English so that our clients and the public may make informed regulatory and policy decisions, and our clients' constituents better understand the regulatory setting and limitations faced by local governments.

TLF has a core of six attorneys who practice telecommunications law and wireless siting. They are:

Dr. Jonathan Kramer (licensed in CA and NM) (Senior Partner)
Mr. Robert ("Tripp") May III (licensed in CA) (Managing Partner)
Mr. Michael Johnston (licensed in CA) (Partner) *
Mr. David Nagele (licensed in CA) (Senior Associate) *
Ms. Sophiko ("Sophie") Geguchadze (licensed in WA, OR, PA, MA) (Senior Associate) *
Mr. Justin Blackwell (licensed in CA) (Associate) *

* *Joined TLF directly from wireless siting and legal positions in the wireless industry*

Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023

TLF's non-attorney professional planning staff consists of:

Ms. Lory Kendirjian (Senior Project Manager/Lead and Senior Paralegal)
Ms. Joey Isaac (Project Manager/Coordinator)
Ms. Karen Porche (Legal Assistant)

TLF's administrative support staff includes:

Ms. Valerie Halvorsen (Business Manager)
Ms. Annette Strong (Operations Manager)

The main points of contact for the proposed engagement will be Dr. Jonathan Kramer and Ms. Lory Kendirjian. The address of TLF physical office that will service this account is:

Telecom Law Firm, P.C.
2001 South Barrington Avenue, Suite 315A
Los Angeles, CA 90025

Dr. Jonathan L. Kramer, Esq. – TLF's Lead Attorney and Planner

Jonathan L. Kramer, Esq., J.D., LL.M, LP.D is Telecom Law Firm's founder, first managing partner, and now its senior partner. He is a nationally recognized radio frequency/broadband technology engineer with over 38 years of experience. Dr. Kramer has advised and lectured to thousands of local and state government agencies—and three branches of the military—regarding issues in telecommunications infrastructure agreements, radio frequency (RF) emissions safety, broadband, fiber optic and cable television law and technology.

Over the last 25-plus years, Dr. Kramer has served as a telecommunications expert for government agencies across the United States, including more than 40 engagements as an expert witness, trial advisor, or both. Dr. Kramer co-authored and co-edited the FCC's national guidance on radio frequency emissions safety, "A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance".

A lawyer admitted to practice in California and New Mexico, and in the relevant federal district and appellate courts. Dr. Kramer also holds seven FCC licenses and certifications. He is licensed by the California Contractors License Board as a communications contractor in California (Class C7). Dr. Kramer is also licensed by the FAA as a remote pilot, and principal pilot of TLF's drone used to perform cell site inspections for our legal clients, and clients of our related wireless property management firm, Telecom Realty Corporation (where Dr. Kramer is the Broker of Record licensee with the California Department of Real Estate, and Ms. Kendirjian is the Senior Property Manager).

In addition to his Juris Doctor degree (earned *cum laude*), Dr. Kramer holds an LL.M degree (with *distinction*) in Information Technology and Telecommunications Law from the University of Strathclyde School of Law. His thesis explored the legal and planning ramifications of Section 6409(a). Furthermore, Dr. Kramer was hooded as a Doctor of Law and Policy at Northeastern University in Boston, where his thesis addressed legal and property value issues regarding cell sites near residences. Dr. Kramer has and continues to serve as a regulatory law and policy instructor at Northeastern University in Masters and Doctoral graduate level programs. Dr.

Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023

Kramer is also an FAA-licensed UAS pilot, which aids in our planning and enforcement support for local governments.

Dr. Kramer is a member of the Board of Directors of the California Lawyers Association Public Law Section (2023-2025).

Please see Dr. Kramer's CV at Exhibit E.

Ms. Lory Kendirjian, BSBA, LL.M – TLF's Lead Senior Project Manager

Ms. Lory Kendirjian holds an LL.M (with distinction) in Information Technology and Telecommunications Law and Policy. Her Masters' dissertation addressed federal and local government small wireless facility policy frameworks, including using wireless siting applications to identify and bridge competing goals and interests. She directly manages TLF's project and application review team. She holds a California real estate license and is an ABA-certificated Paralegal.

Ms. Kendirjian serves a critical role in TLF's wireless planning review projects and participates in important management decisions relating to wireless application reviews and processing. Ms. Kendirjian and her team are responsible for the timely processing and analysis of all wireless projects. Over the past 9 years at TLF, she has been involved in over 5300 wireless siting project reviews for TLF's local government clients.

Under Dr. Kramer's supervision and guidance, Ms. Kendirjian and her team evaluates and processes every wireless application tendered by our government clients for review. Those reviews include wireless application completeness; federal and state shot clock calculations; jurisdiction-specific ordinance and design guideline requirements; ADA compliance; potential inverse condemnations; power and fiber encroachment permits; fiber, T1, and microwave backhauls; alternative sites analysis; signal coverage and capacity claims; and RF safety analysis.

Ms. Kendirjian, a licensee of the California Department of Real Estate, also serves as the Senior Property Manager for our related firm, Telecom Realty Corporation.

Please see Ms. Kendirjian's CV at Exhibit F.

Dr. Kramer and Ms. Kendirjian supervise all of TLF's staff performing wireless site application reviews. Unlike some other firms that claim to perform the services sought by the City, TLF does not use any sub- or outside consultants to perform the scope of work. Only TLF employees will work with the City. Moreover, TLF is not a generalist consulting or law firm. Our focus is on telecommunications matters and the underlying technology associated with wireless deployment matters.

2.0 DESCRIPTION OF THE SERVICES AND CURRENT AVAILABILITY

(Please refer to the Description of the Services in Exhibit G)

TLF is also prepared to immediately respond to and support the City of Camarillo should AB-965 (the so-called "Broadband Permit Efficiency and Local Government Staff Solution Best Practices Act of 2023") become law. Enactment of that pending legislation will place substantial new

**Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023**

burdens on the City in terms of rapid batch intake, processing, and decision making regarding wireless and wired telecom network deployments.

TLF is ready, willing, and able to immediately begin performance once the City and TLF enter into a professional service agreement.

3.0 INSURANCE REQUIREMENTS

TLF has reviewed the City's Insurance Requirements attached and is able to agree to all the terms and conditions subject to any issues that come from the actual and final work-scope requested by the City.

4.0 FEES

(Please refer to TLF's proposed Fees shown in Exhibit H)

5.0 CONCLUSION

TLF appreciates the opportunity to respond to the City's RFQ. We hope to continue our long and supportive relationship with the City of Camarillo to serve its constituents and support City staff.

Dr. Kramer and Ms. Kendirjian, along with the rest of the TLF team stand ready to supplement this RFQ response with any additional information requested by the City, including without limitation to making ourselves available for a meeting with the City.

Respectfully submitted,

TELECOM LAW FIRM, P.C.

by


Dr. Jonathan L. Kramer, Esq.,
Senior Partner



WIRELESS PLANNING MEMORANDUM

TO: Mr. Caesar Hernandez
FROM: Dr. Jonathan Kramer *Jonathan Kramer*
DATE: July 20, 2023
RE: (W 2023-0001) Request for Modification to Existing Wireless Facility on Monopole Submitted for Approval Under 47 U.S.C. § 1455(a) located at the Water Tank Facility at 1135 Mellow Lane

Applicant: Butler Telecom LLC
Carrier: T-Mobile West LLC
Site ID: SV00347A

1. Summary

The City of Simi Valley (“**City**”) requested that Telecom Law Firm, P.C. (“**TLF**” or “**We**”) review the proposed Butler Telecom LLC (“**Applicant**”) request submitted on behalf of T-Mobile West, LLC (“**T-Mobile**”) to modify its wireless site on an existing Monopole located near 1135 Mellow Lane.

The City should conclude that (1) Section 6409(a) applies to this proposal, and (2) the project will demonstrate planned compliance with the federal radio frequency exposure guidelines if the Applicant follows all RF mitigation measures. We recommend the City condition any permit issued for this project to be subject to the conditions within this memorandum regarding RF emissions safety.

This memorandum reviews the application and related materials for regulatory, design, and technical issues specific to wireless infrastructure. Although many technical issues implicate legal issues, the analysis and recommendations contained in this memorandum do not constitute legal advice.

2. Project Background and Description

The Applicant submitted a set of plans dated July 11, 2023 (“**Plans**”). The Plans show that on the existing 30' tall Monopole T-Mobile operates antennas approximately situated at 28' AGL. Per the plans there are no other carriers collocated on the Monopole.

Per the Plans, T-Mobile currently operates nine panel antennas on the Monopole. The Alpha sector contains three antennas oriented towards 0° True North (“**TN**”), the Beta sector contains three antennas oriented towards 30° TN and the Gamma Sector contains three antennas oriented towards 280° TN. Per the Plans, T-Mobile proposes to remove and replace its antennas, and remove a total of six tower mounted amplifiers (“**TMA**s”). See Figure 1 for the existing and proposed antenna layout plan.

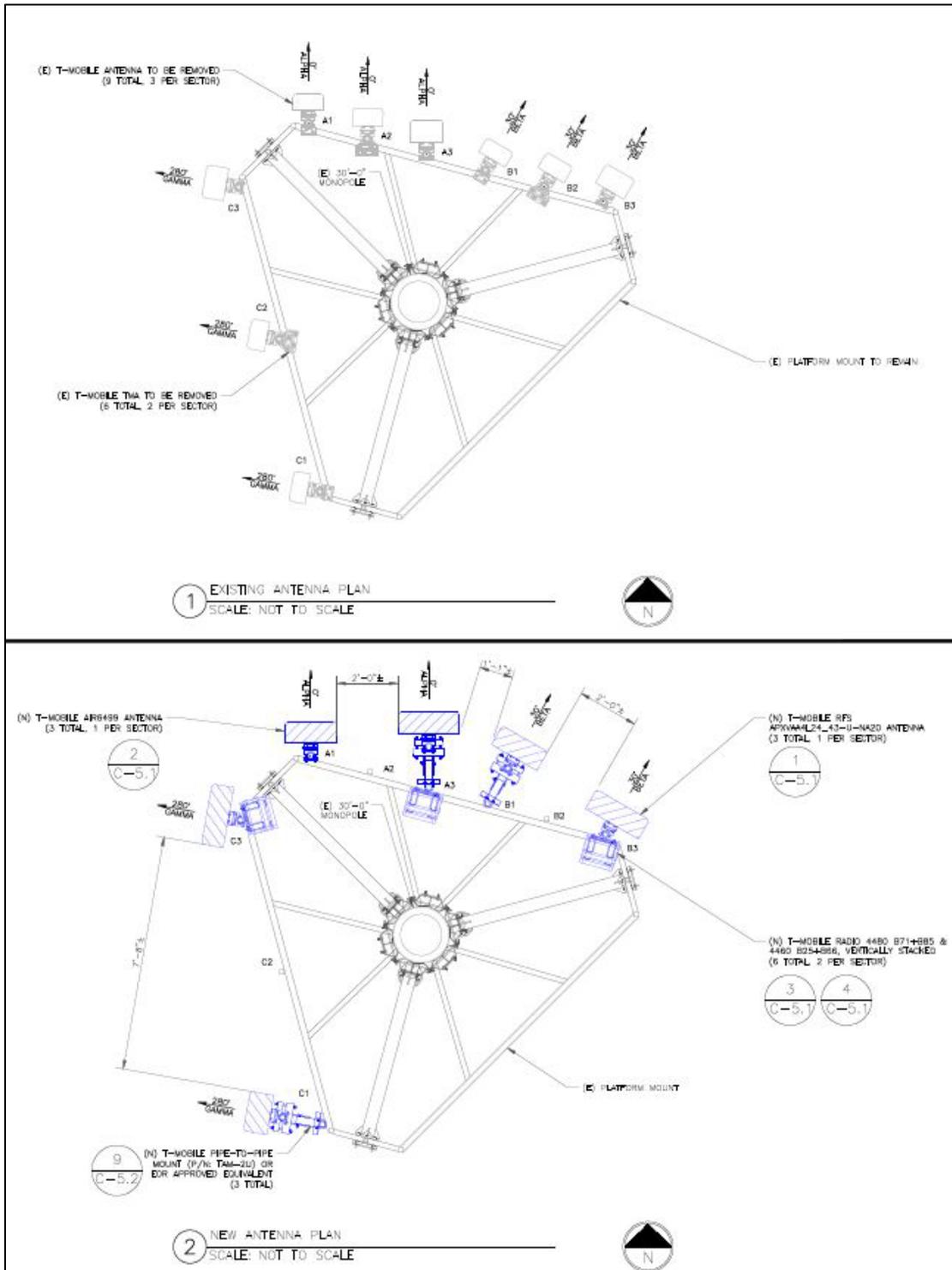


Figure 1: Existing and proposed antenna layout on the Monopole (Source: Plans, page C-3, panel 1 and panel 2).



Figure 2 shows the full scope of T-Mobile's modification request.

PROJECT DESCRIPTION

GROUND SCOPE OF WORK:

- REMOVE (3) RRUs
- REMOVE (1) BB5216
- REMOVE (3) TRIPLEXERS
- REMOVE (1) HYBRID CABLE
- INSTALL (1) 6160 EQUIPMENT CABINET
- INSTALL (1) B160 CABINET
- INSTALL (2) RP 6651
- INSTALL (3) HYBRID CABLES
- INSTALL (1) CSR IXRe V2 ROUTER

TOWER SCOPE OF WORK:

- REMOVE (9) ANTENNAS
- REMOVE (6) TMAs
- REMOVE (12) COAX CABLES
- INSTALL (6) RRUs
- INSTALL (3) PIPE TO PIPE MOUNTS
- INSTALL (6) ANTENNAS

Figure 2: Project description (Source: Plans, page T-1).

Figure 3 depicts the T-Mobile proposed antennas on the Monopole.

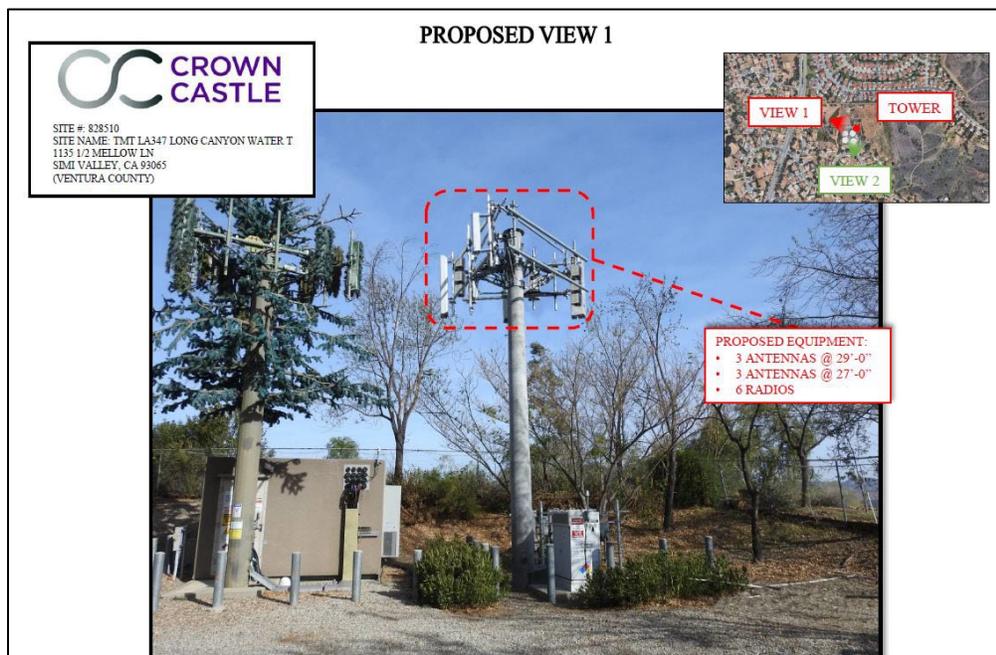


Figure 3: Overall view of proposed antennas on the Monopole (Source: Photo simulations; annotation in original).



Figure 4 shows the elevation of the Monopole.

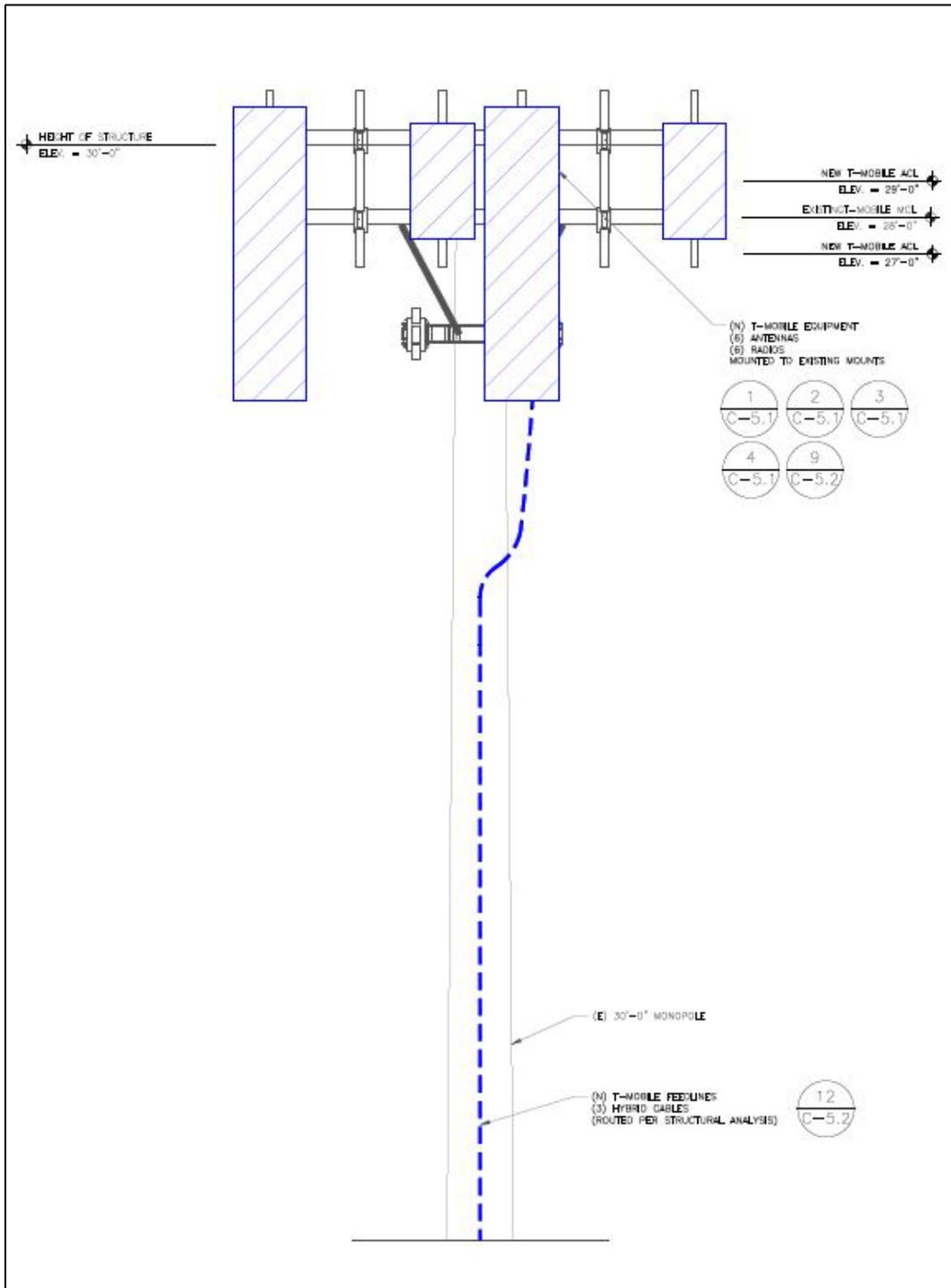


Figure 4: The elevations of the proposed antennas on the Monopole (Source: Plans Page C-2.1 Panel 2).



3. Section 6409(a) Analysis

As a threshold matter, the City must determine whether federal law mandates approval for this permit application. Section 6409(a) of the Middle-Class Tax Relief and Job Creation Act of 2012 requires that State and local governments “may not deny, and shall approve” an “eligible facilities request” so long as the proposal does not result in a “substant[ial] change.”¹ The applicant bears the burden to prove that its proposal qualifies.

3.1. Eligible Facilities Request

Section 6409(a)(2) defines an “eligible facilities request” as a request to collocate, remove or replace transmission equipment on an existing wireless tower or base station.² The FCC defines “collocation” as “[t]he mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.”³ Unlike the traditional definition, a collocation for Section 6409(a) purposes does not necessarily mean two wireless sites at a shared location—it more accurately means simply “to add” transmission equipment.

The term “transmission equipment” encompasses virtually all equipment found at facilities that transmit communication signals over the air. The FCC defines transmission equipment as:

[e]quipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.⁴

A “tower” means any structure built solely or primarily to support transmission equipment.⁵ Towers typically include Monopoles (or mono-variants), lattice towers and other free-standing structures such as commercial signs when designed and constructed primarily to support wireless

¹ See Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156. (Feb. 22, 2012) (codified as 47 U.S.C. § 1455(a)).

² See 47 U.S.C. § 1455(a)(2).

³ See 47 C.F.R. § 1.40001(b)(2). The rules further define an “eligible support structure” as a short-hand reference to an existing wireless tower or base station at the time an applicant files a permit application. See *id.* § 1.40001(b)(4).

⁴ See *id.* § 1.40001(b)(8).

⁵ See *id.* § 1.40001(b)(9).



equipment. A tower need not actually support wireless equipment but must have been legally constructed under the applicable regulations at the time it was built or modified.

In contrast, a “base station” means a non-tower structure at a fixed location and the validly permitted or approved associated transmission equipment that enables FCC-licensed or authorized wireless communications between user equipment and a communications network.⁶ The term can include DAS and small cells.⁷ The structure must also currently support transmission equipment under a valid permit or other approval.⁸

The Monopole qualifies as a “tower” because it was built primarily to support FCC-licensed or authorized equipment. T-Mobile proposes to collocate “transmission equipment” because the antennas and the associated equipment are normally associated with wireless facilities.

It appears to TLF that the existing site is constructed in accordance with City permits. The next step is to evaluate whether the proposed modification will cause a substantial change.

3.2. Substantial Change Thresholds for Towers

Section 6409(a) does not mandate approval merely because it qualifies as an eligible facilities request. The applicant must show that the proposed project will not “substantially change the physical dimensions of such existing wireless tower or base station.”⁹

The FCC created a six-part test to determine whether a “substantial change” occurs or not. The test involves thresholds for height increases, width increases, new equipment cabinets, new excavation, changes to concealment elements and permit compliance. A project that exceeds any one threshold causes a substantial change. Additionally, the FCC considers a substantial change to occur when the project replaces the entire support structure or violates a generally applicable law or regulation reasonably related to public health and safety. State and local jurisdictions cannot consider any other criteria or threshold for a substantial change.

3.2.1. Height Increases

An increase in height causes a substantial change when it increases the tower height 10% or the height of an additional antenna array with separation from the nearest array not to exceed 20

⁶ See *id.* § 1.40001(b)(1).

⁷ See *id.* § 1.40001(b)(1)(ii).

⁸ See 47 C.F.R. § 1.40001(b)(1)(iii), (iv).

⁹ See 47 U.S.C. § 1455(a).



feet (whichever is greater).¹⁰ The FCC does not elaborate on how to measure the separation between the modification and the “nearest array.”

The height limit is a *cumulative* limit.¹¹ For almost all towers, the cumulative limit is measured from the original discretionary approval because the equipment will be vertically separated.¹² Any height increase above the cumulative limit allowed under 6409(a) as interpreted by the FCC amounts to a substantial change.

Here, the proposed modification will not substantially increase the overall height of the Monopole.

3.2.2. Width Increases

An increase in width causes a substantial change when it adds an appurtenance that protrudes from the support structure more than 20 feet or the tower width at the appurtenance (whichever is greater).¹³ Unlike height increases, no cumulative limit applies to width increases.

Here, the proposed modification will not cause an increase in the width.

3.2.3. Additional Equipment Cabinets

A collocation or modification causes a substantial change when it adds more than the standard number of equipment cabinets for the technology involved (not to exceed four).¹⁴ The FCC does not define an “equipment cabinet” or indicate how to determine the “standard number” for a given technology.

Here, the proposed modification does not exceed the FCC’s four equipment cabinet threshold. T-Mobile plans to install fewer than four new cabinets, not exceeding the FCC’s cabinet limit for 6409(a) treatment.

3.2.4. New Excavation

A collocation or modification causes a substantial change when it involves excavation outside the leased or owned area, which includes access and utilities easements.¹⁵

¹⁰ See 47 C.F.R. § 1.40001(b)(7)(i).

¹¹ See 47 C.F.R. § 1.40001(b)(7)(i)(A); see also *Infrastructure Order* at ¶ 95.

¹² See 47 C.F.R. § 1.40001(b)(7)(i)(A).

¹³ See 47 C.F.R. § 1.40001(b)(7)(ii).

¹⁴ See 47 C.F.R. § 1.40001(b)(7)(iii).

¹⁵ See 47 C.F.R. § 1.40001(b)(7)(iv); see also 47 C.F.R. § 1.40001(b)(6).



Here, the modification does not propose any new ground disturbance. All proposed changes will either occur on the Monopole or within the existing ground lease space.

3.2.5. Changes to Concealment Elements

A collocation or modification causes a substantial change when it would “defeat the concealment elements of the support structure.”¹⁶ Although the FCC does not provide much guidance on what change might “defeat” a concealment element, the regulations suggest that the applicant must do at least as much to conceal the new equipment as it did to conceal the originally-approved equipment.¹⁷

The existing site is not camouflaged (except for silver paint). The proposed modifications appear to match the paint of the underlying Monopole and the existing antennas and associated equipment. Therefore, the modification does not appear to defeat the concealment elements of the Monopole.

3.2.6. Permit Compliance

Lastly, a collocation or modification causes a substantial change when it would violate a prior condition attached to the original site approval, so long as the condition does not conflict with the thresholds for a substantial change in height, width, excavation or equipment cabinets (but not concealment).¹⁸

It appears to TLF that the existing T-Mobile antennas and associated equipment are built per the City issued plans.

3.2.7. Section 6409(a) Conclusion

This project appears to fall within the scope of Section 6409(a). As such, the City ‘may not deny and shall approve’ the request.

4. Planned RF Compliance Evaluation

Even when an eligible facilities request does not exceed the FCC’s thresholds for a substantial change, all wireless sites remain subject to generally applicable regulations for public health and

¹⁶ See 47 C.F.R. § 1.40001(b)(7)(v).

¹⁷ See *Infrastructure Order* at ¶ 99.

¹⁸ See 47 C.F.R. § 1.40001(b)(7)(vi).



safety. Specifically, collocations and modifications must conform to the federal guidelines for radiofrequency (“**RF**”) exposure.

Under the Telecommunications Act of 1996, State and local governments cannot regulate wireless sites based on the environmental effects from RF emissions to the extent that such emissions comply with applicable FCC regulations.¹⁹ The FCC occupies the field with respect to RF emissions regulation with comprehensive rules for maximum permissible exposure (collectively, the “**FCC Rules**”).²⁰ State and local governments cannot establish their own RF standards—whether more strict, more lenient or even the same. However, State, and local governments may require an applicant to demonstrate “planned compliance” with the FCC Rules.²¹

Wireless antennas generally operate at relatively low power, and do not require an in-depth environmental analysis when virtually inaccessible to the general public.²² The FCC Rules “categorically exclude” wireless antennas for “cellular radiotelephone services” when mounted (1) on a structure constructed solely to support wireless antennas and (2) more than ten meters above ground.²³

TLF notes that the FCC Rules do not categorically exclude the T-Mobile antennas because even though the antennas are mounted on a Monopole—a structure solely or primarily built to support wireless antennas—not all of the transmitting antennas are at least 10 meters above ground level (“**AGL**”). Accordingly, the FCC Rules categorically exclude this site from the need for routine compliance demonstrations.

T-Mobile submitted a Radio Frequency Report conducted by Site Safe and dated July 3, 2023, (“**RF Report**”). Based on the frequency and transmitter power, the T-Mobile antennas will create a controlled access zone of approximately 122 feet for each sector extending outwards. All sector emissions will be from the face of the T-Mobile antennas at roughly the height of the center point of the antennas.

¹⁹ See 47 U.S.C. § 332(c)(7)(B)(iv).

²⁰ See 47 C.F.R. § 1.1307 *et seq.*; see also FCC Office of Engineering and Technology Bulletin 65.

²¹ See In re Procedures for Reviewing Requests for Relief from State and Local Regulations Pursuant to Section 332(c)(7)(B)(iv) of the Communications Act of 1934, *Report and Order*, 15 FCC Rcd. 22821, 22828–22829 (Nov. 13, 2000) (declining to adopt rules that limit demonstrations of compliance).

²² See generally Human Exposure to Radio Frequency Fields: Guidelines for Cellular and PCS Sites, *Consumer Guide*, FCC (Oct. 22, 2014), available at <https://www.fcc.gov/guides/human-exposure-rf-fields-guidelines-cellular-and-pcs-sites> (discussing in general terms how wireless sites transmit and how the FCC regulates the emissions).

²³ See 47 C.F.R. § 1.1307(b)(1).



The FCC Rules require T-Mobile to affirmatively prevent unknowing access to areas where the emissions exceed the maximum permissible limits.

See Figure 5 for the overview of emissions from the T-Mobile antennas.

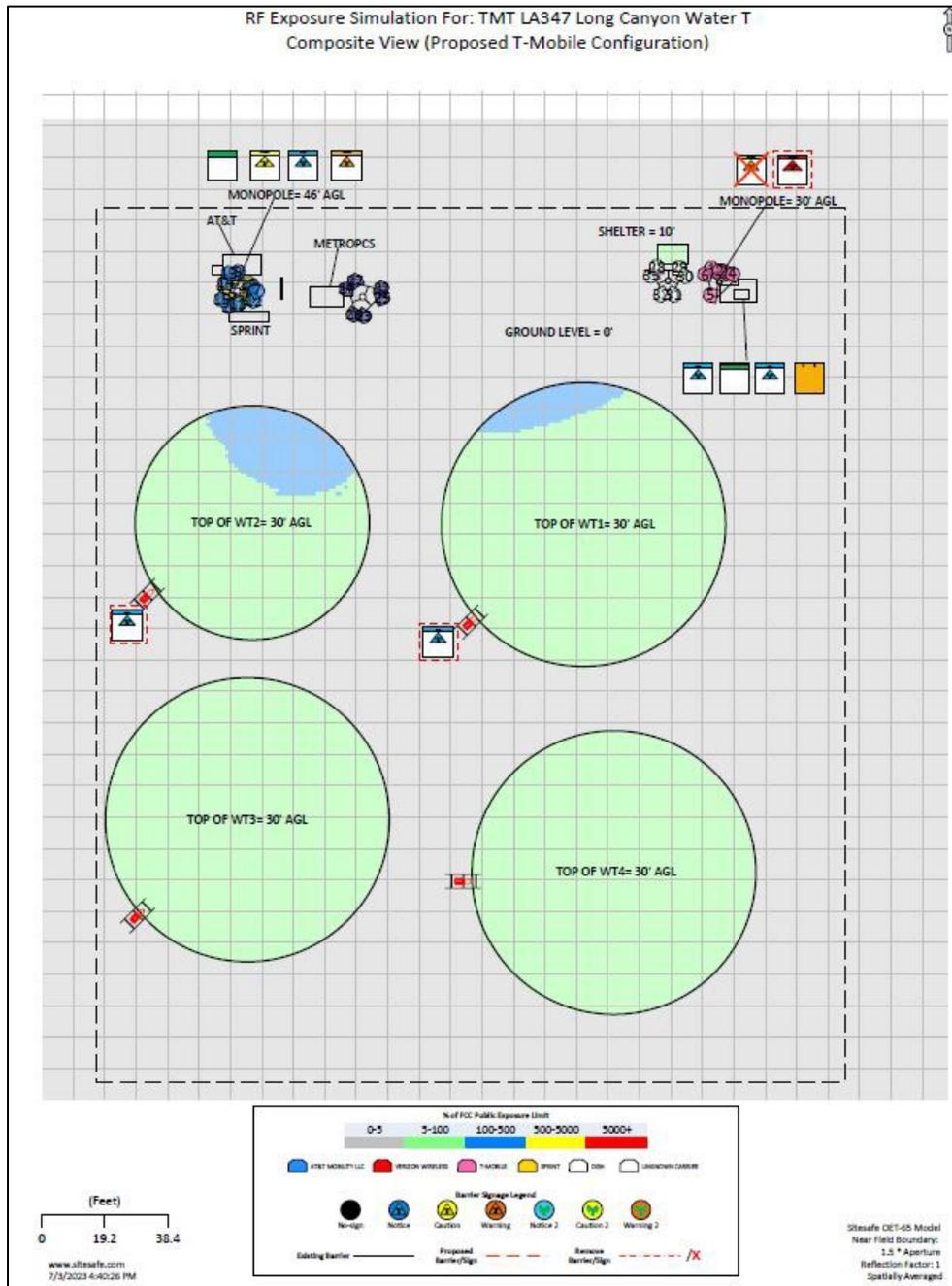


Figure 5: Emissions from the T-Mobile antennas (Source: RF Report).



See Figure 6 for the elevation of the emissions from the T-Mobile Monopole.

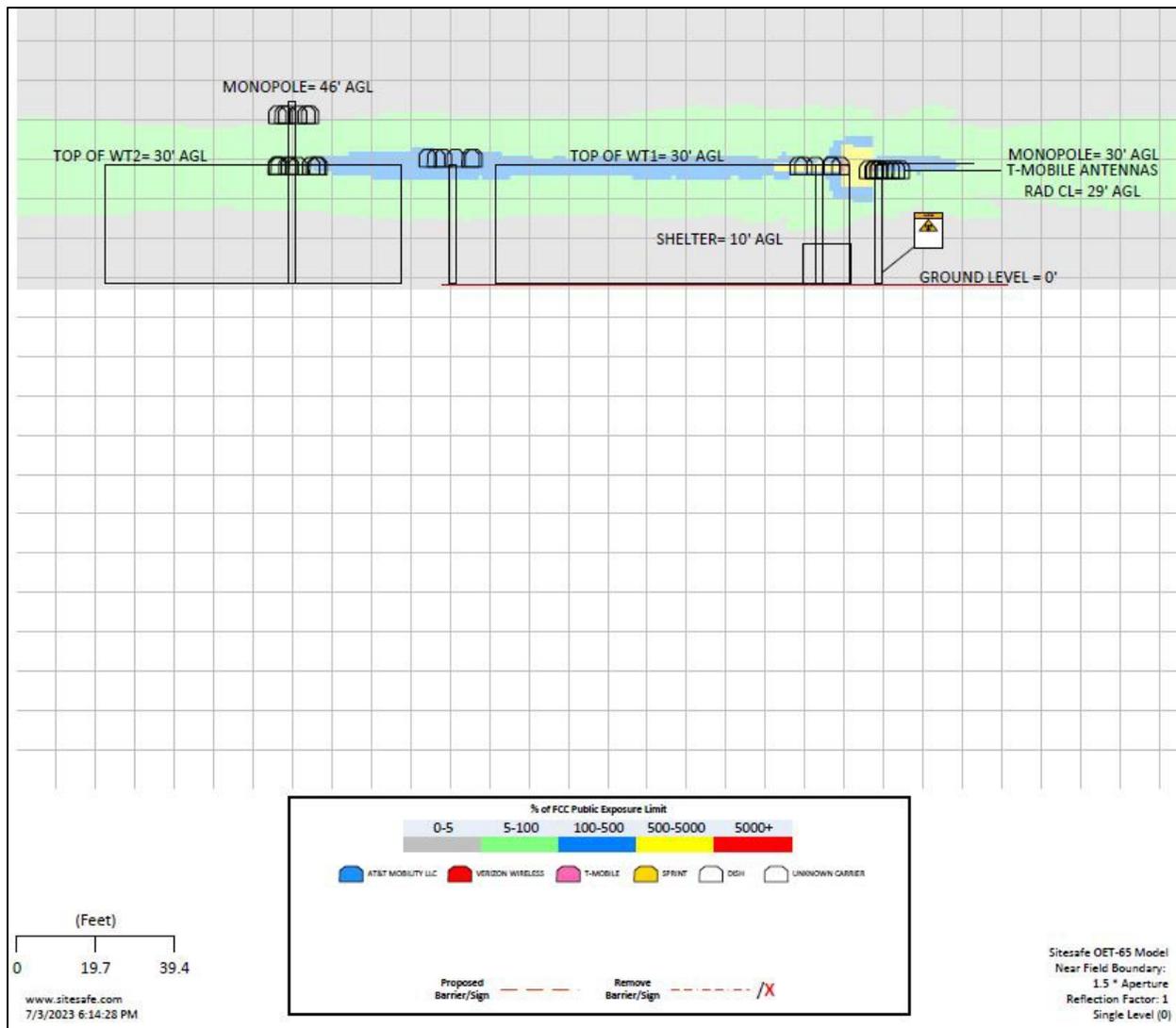


Figure 6: Emissions from the Monopole in elevation view (Source: RF Report).

TLF notes that there are multiple structures, including an adjacent water tank, to the Monopole. Based on the Plans, the antennas are approximately at 28 feet AGL and the height of the water tank is at 30 feet AGL. There are fairly high RF emissions on two of the adjacent water tanks. See the emissions from Figure 5 and Figure 6. TLF recommends that the City ensure that the Applicant and the owner of the water tanks get into a written agreement to ensure that RF signage and RF instructions are posted at the base of the water tank (at each fifteen feet) indicating high RF exposures at the elevated parts and accessible areas on the water tank. Prior to any work to be



carried out on the water tank, the Applicant and T-Mobile need to be informed to ensure that the emissions are powered down.

Figure 7 depicts the mitigation measures for T-Mobile.

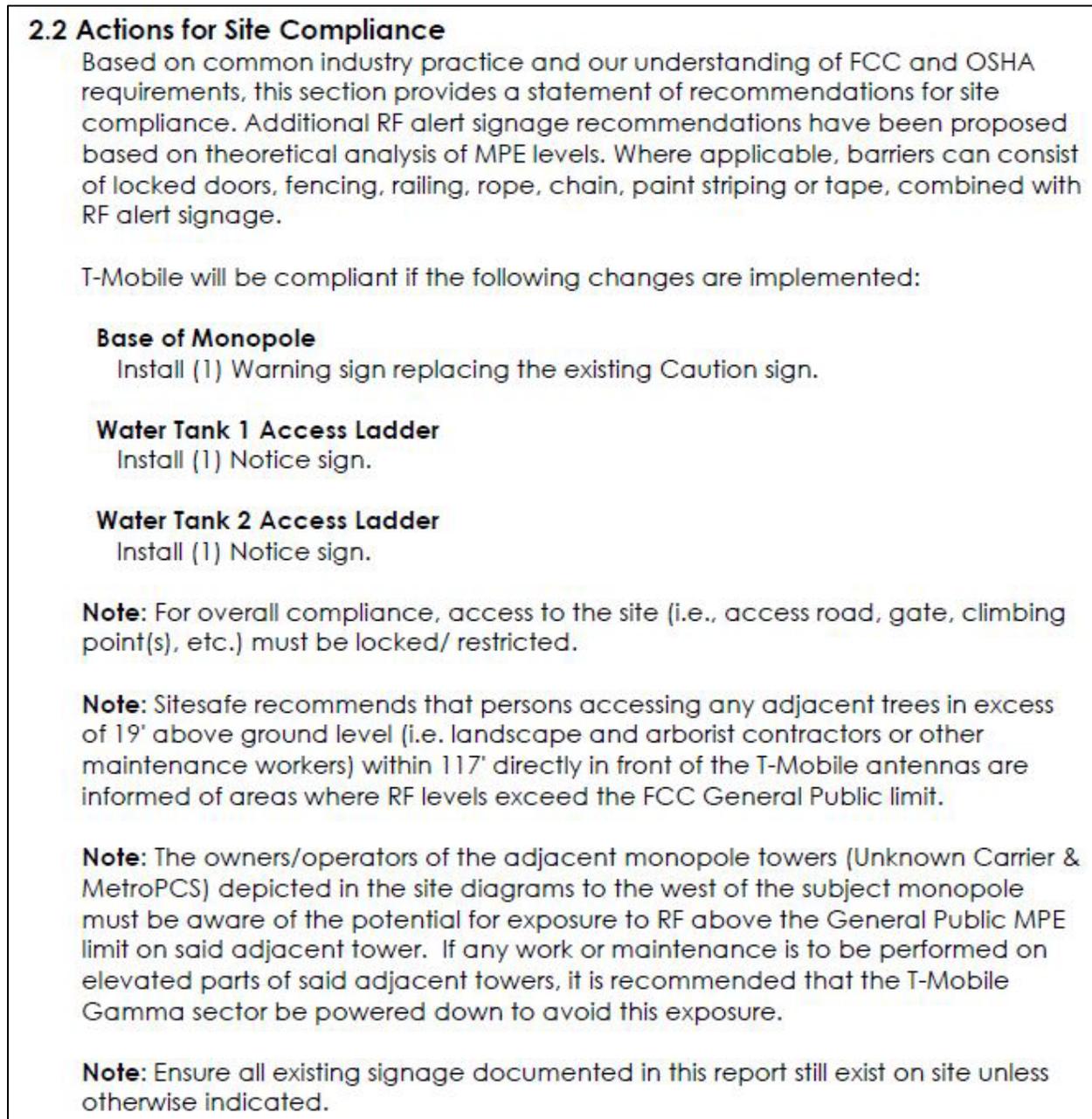


Figure 7: Site Compliance Actions (Source: RF Report).



Figure 8 depicts the adjacent wireless site next to the T-Mobile Monopole.



Figure 8: Wireless Site adjacent to the existing T-Mobile Monopole (Source: RF Report).

Per the RF Report (see Figure 7) the emissions from the Gamma sector must be powered down when work or maintenance is performed on the top parts and accessible areas of the adjacent wireless facility.

To promote compliance with these mitigation measures, the City should require the following conditions of approval:

1. Permittee shall keep its base station equipment enclosures/cabinets closed and locked at all times except when active maintenance is performed on the equipment.



2. Permittee shall ensure that all necessary RF signage and instructions are posted at the adjacent water tank as indicated above. The Applicant and the water tank owner need to enter into a written agreement to ensure that notice and instructions relating to the high RF emissions are posted on the water tank.
3. Permittee shall follow all the site compliance action items within Figure 7.
4. Permittee shall ensure that all federally required radio frequency signage be installed and maintained at all times in good condition. All such radio frequency signage be constructed of hard materials and be UV stabilized. All radio frequency signage must comply with the sign colors, sign sizes, sign symbols, and sign panel layouts in conformance with the most current versions of ANSI Z535.1, ANSI Z535.2, and ANSI C95.2 standards. All such radio frequency signage, or additional signage immediately adjacent to the radio frequency signage, shall provide a working local or toll-free telephone number to its network operations center that reaches a live person who can exert transmitter power-down control over this site as required by the FCC.
5. In the event that the FCC changes any of radio frequency signage requirements that are applicable to the project site approved herein or ANSI Z535.1, ANSI Z535.2, and ANSI C95.2 standards that are applicable to the project site approved herein are changed, Permittee, within 30 days of each such change, at its own cost and expense, shall replace the signage at the project site to comply with the then current standards.

/JLK





APPLICATION INCOMPLETE MEMORANDUM

TO: Ms. Adrienne Sosner
FROM: Dr. Jonathan Kramer *Jonathan Kramer*
DATE: June 12, 2023
RE: (WCF 2023-70024) Application Completeness Review –Proposed Modification to Wireless Facility located at 2525 N. Moorpark Road Submitted for Approval Under 47 U.S.C. § 1455(a)

APPLICANT: Crown Castle, Inc.
CARRIER: T-Mobile West, LLC

1. Summary:

Telecom Law Firm, PC (“TLF” or “We”) has reviewed and concluded that the City of Thousand Oaks (“City”) deem the Crown Castle, Inc. (“Applicant’s”) application submittal incomplete and issue an incomplete notice regarding the items more fully discussed within the list of incomplete items in this memorandum.

TLF recommends that the City send the incomplete notice by email and on the same day also sends it by First Class or Certified U.S. Mail postage prepaid.

The incomplete items in this memo contains TLF’s observations. If the City is aware of other incomplete items, the City should include those other items in its incomplete notice letter that also transmits this memorandum to the Applicant.

The completeness review timeline is 30-days and the overall timeline for the project to be processed is 60 days.

The observations and the conclusions within this memorandum apply only to the project identified above and do not, in any way, apply to other project proposals regardless of how similar any other project may seem.

2. Discussion:

The Applicant on behalf of T-Mobile West, LLC (“T-Mobile”), submitted wireless site application materials to the City. The City requested that TLF review the Applicant’s application on behalf of T-Mobile to modify its existing wireless site located at 2525 North Moorpark Road.

This memorandum reviews the Applicant’s application materials to determine whether the Applicant submitted a complete and responsive application.

The Applicant submitted construction drawings dated November 28, 2022 (“Plans”) that show T-Mobile is proposing to remove and replace its existing antennas on a stadium light standard. See Figure 1 for a written summary describing the scope of work.

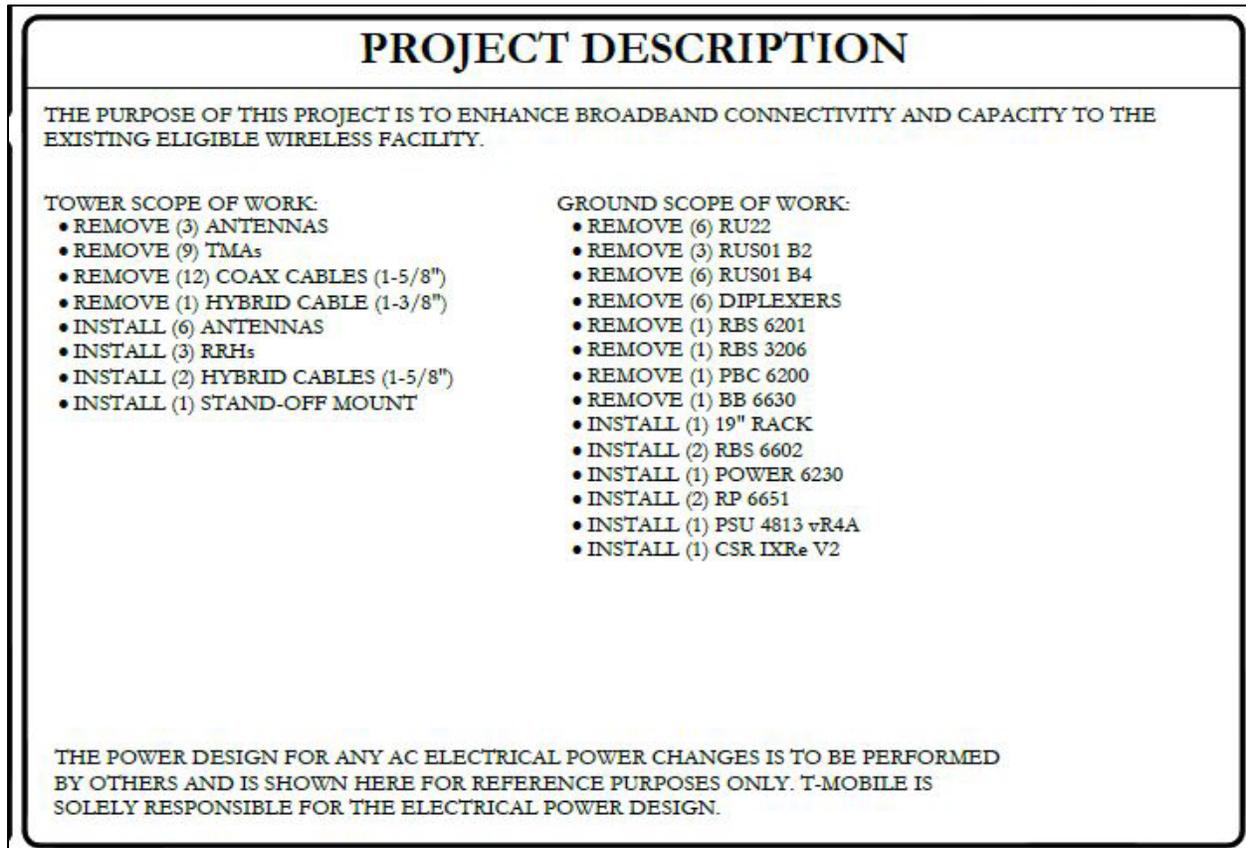


Figure 1: Applicant’s proposed scope of work (Source: Plans, Page T-1).

[Balance of Page Intentionally Left Blank]



T-Mobile's existing and proposed antenna configuration is shown in Figure 2.

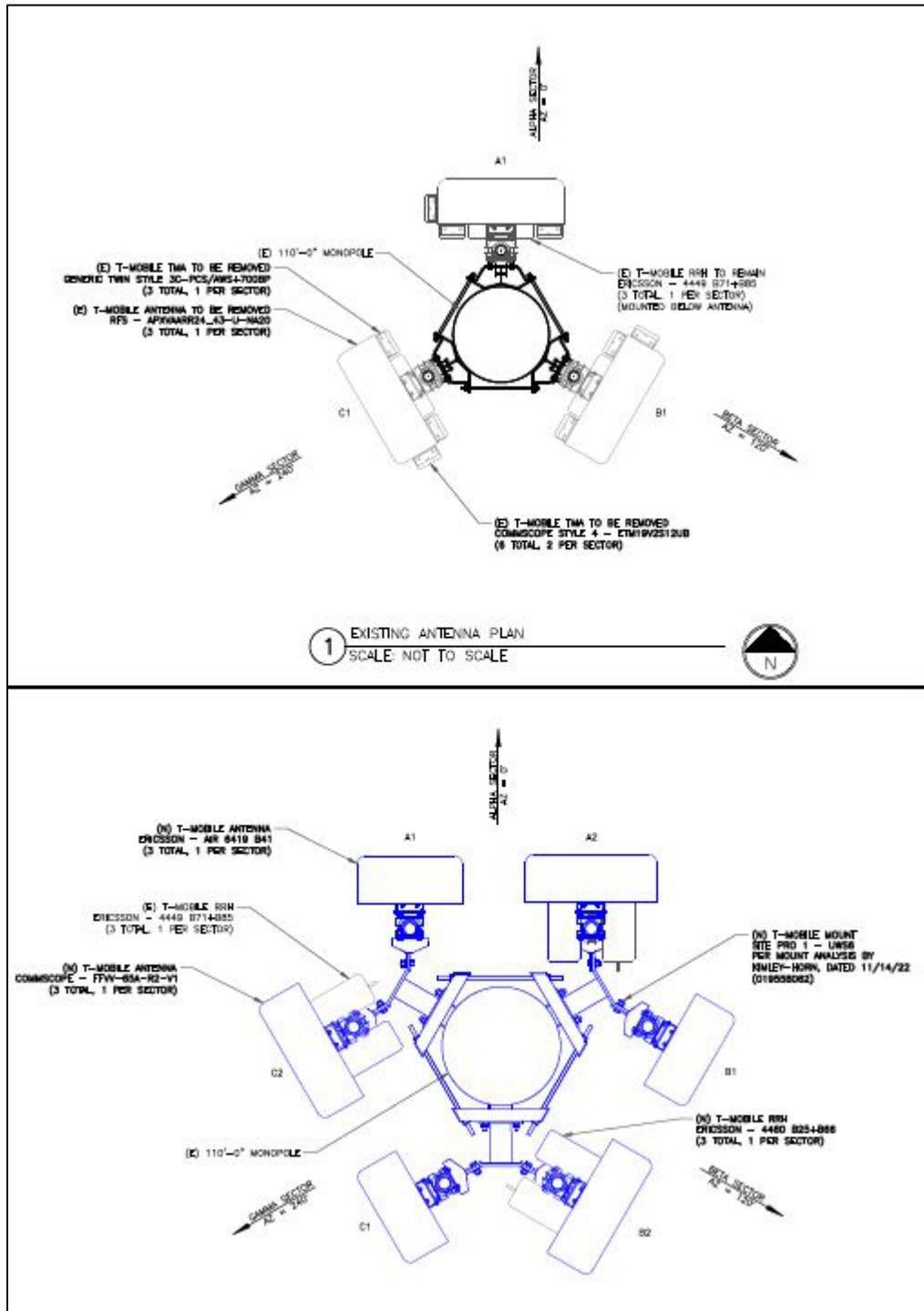


Figure 2: Existing antenna layout (Source: Plans, page C-3 panels 1 and 2).



See Figure 3 for the existing and proposed views in elevation view.

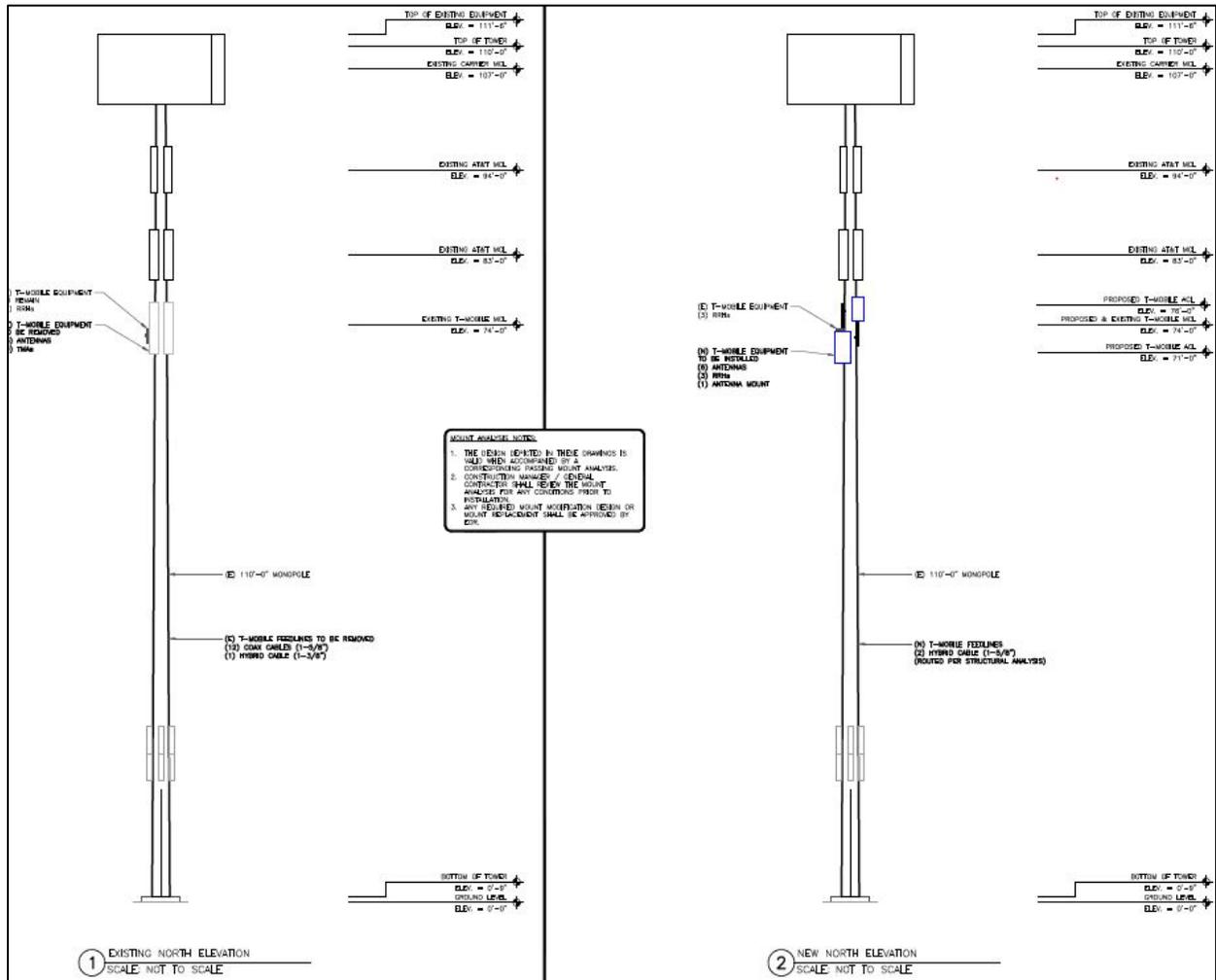


Figure 3: Existing and Proposed stadium light standard in elevation views (Source: Plans, page C2.2 panel 1 and panel 2).

Figure 4 depicts the site based on a Google street view capture.

[Balance of Page Intentionally Left Blank]





Figure 4: Existing antennas on Stadium light standard (Source: Google Maps street view, January 2021).



3. Application Completeness Review

Based on the City's Wireless Communication Facilities Application (“**Application**”) and TLF's review of the Applicant's application submittal, TLF recommends that the City deem the Applicant's application submittal incomplete by June 30, 2023. Accordingly, the City should issue to the Applicant an incomplete notice regarding the items more fully discussed within this incomplete memorandum, and any other application-incomplete items known to the City.

- **Entitlements:** Incomplete. The application materials did not contain copies of the entitlement approval for the existing facility.
- **Certification of Compliance:** Incomplete. The application materials did not contain proof that the existing facility complies with the previous conditions of approval and all applicable building codes. Also, certification is missioned that the existing facility has not been altered in any manner without approval by the Community Development Department.
- **Radio Frequency (RF) Report:** Incomplete. TLF notes that the Applicant submitted the LSGAC forms, however, the LSGAC had box 16 for categorical exclusion checked off. This is incorrect since the underlying stadium light structure was not primarily constructed for wireless purposes. The Applicant needs to submit an RF Report. TLF recommends the Applicant submits a detailed RF emissions report with the actual frequency and power levels in watts effective radiated power (ERP) for all of the proposed antennas as well as the collocated antennas on the stadium light standard. The location and the orientation of the transmitting antennas and their emissions need to be identified and the emissions need to be demonstrated.

/JLK



WIRELESS PLANNING MEMORANDUM

TO: Mr. Wilfredo Chua
FROM: Dr. Jonathan Kramer 
DATE: July 24, 2023
RE: (WCF 2023-70024) Technical Review for Proposed Modifications to a Wireless Site Mounted on a Stadium Light Pole located near 2525 North Moorpark Road Submitted for Approval Under 47 U.S.C. § 1455(a)

Applicant: Crown Castle, Inc. on behalf of T-Mobile West LLC
Site ID: SV00595A/Toaks Oak Park

1. Summary

The City of Thousand Oaks (the “**City**”) requested that Telecom Law Firm, PC (“**TLF**”) review the Crown Castle Inc. (“the **Applicant**”) application submitted on behalf of T-Mobile West LLC (“**T-Mobile**”) to modify its existing wireless site located on a stadium light standard (“**Pole**”) located near 2525 North Moorpark Road.

It appears that the current modification proposal will qualify for Section 6409(a), this is because T-Mobile proposed a modification that appears to be an eligible facility that does not cause a substantial change. Accordingly, this project is subject to a 60-day shot clock.

T-Mobile’s proposed modification will demonstrate planned compliance with the FCC’s RF emission guidelines if the necessary RF signage and notifications are posted and maintained. Any redesign of this project that changes the antennas, locations, or emissions will necessitate a re-review of the planned emissions.

This memorandum reviews the application and related materials for technical and regulatory issues specific to wireless infrastructure. Although many technical issues implicate legal issues, the analysis and recommendations contained in this memorandum do not constitute legal advice.

2. Project Background and Description

The Applicant submitted application materials that show T-Mobile is seeking approval to modify its existing wireless site pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012.¹ Accordingly, this memorandum focuses its review to the initial questions: (1) whether Section 6409(a) applies to this proposal, and (2) whether the project demonstrates planned compliance with the FCC’s radio frequency exposure guidelines.

¹ See Section 6409(a) of the Middle-Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156. (Feb. 22, 2012) (codified as 47 U.S.C. § 1455(a)).

The submitted project plans dated June 16, 2023 (“Plans”) show that T-Mobile currently operates a wireless facility comprised of three panel antennas mounted on the Pole. Additionally, T-Mobile operates nine tower mounted amplifiers (“TMAs”) and three remote radio heads (“RRHs”). The remaining associated equipment for the wireless site is housed within a ground level equipment area.

Through the Plans T-Mobile is now proposing modify its wireless site by removing the existing antennas and replacing them with six new antennas and removing the TMAs. A summary of the proposed modification is described in Figure 1.

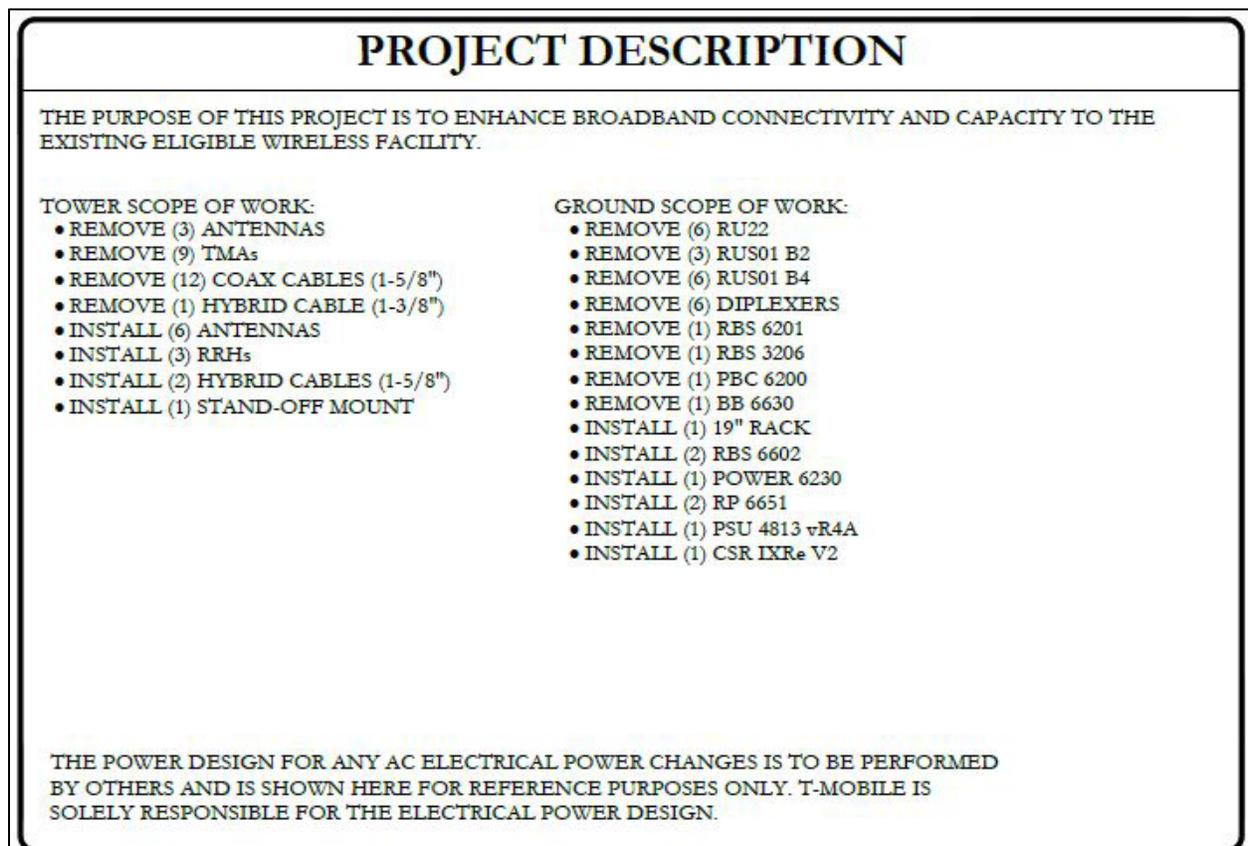


Figure 1: Summary of proposed modification (Source: Plans, Page T-1).

A simulated view of T-Mobile’s proposed modifications on the Pole are depicted in Figure 2.



Figure 2: Simulated view of project on Pole (Source: Photo Simulations).

The Pole stands at the height of 111' above ground level (“AGL”) and the proposed antennas will be mounted with a centerline height at 74' AGL. The Pole with details can be seen in elevation view in Figure 3.



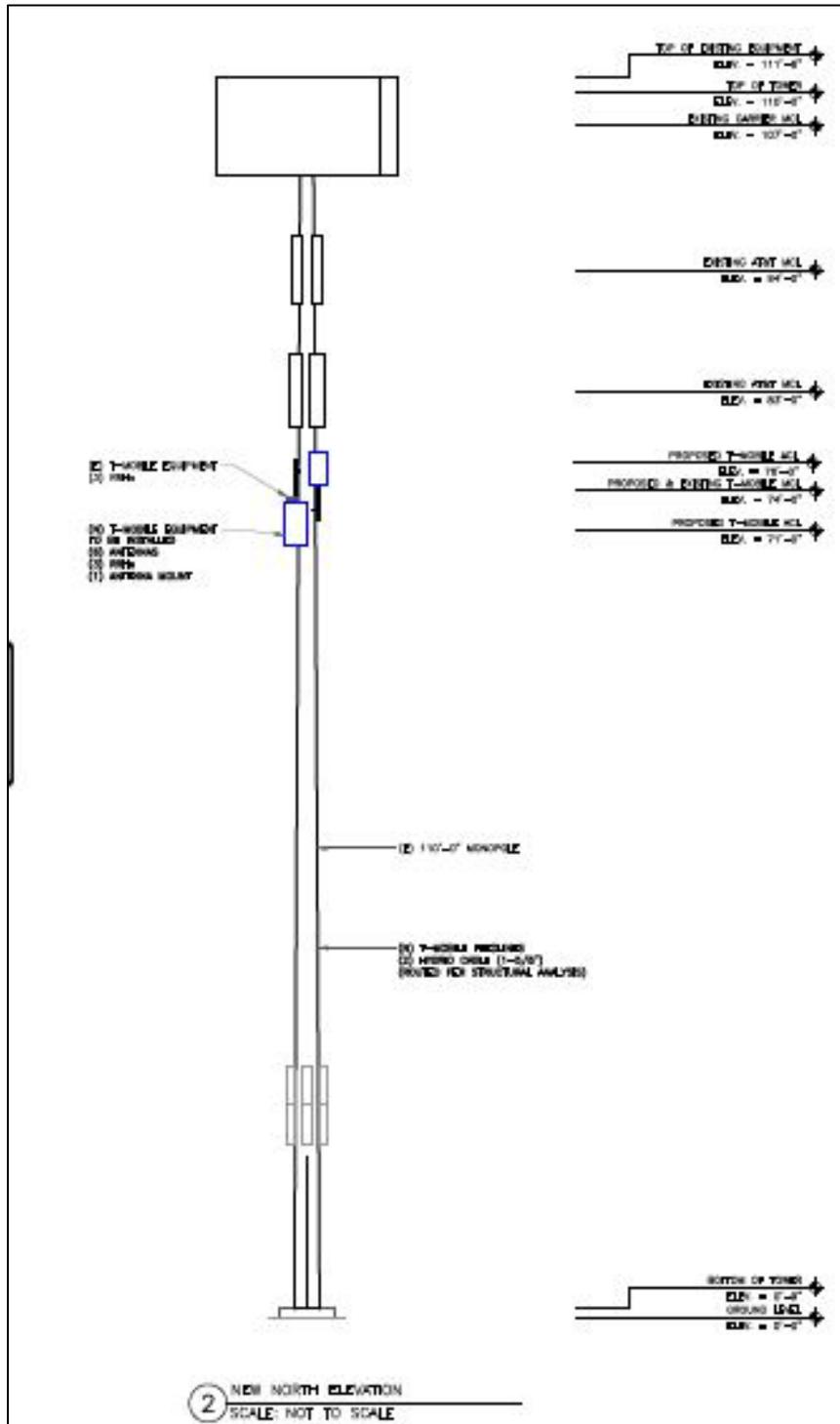


Figure 3: Elevation view of T-Mobile's proposed wireless site. (Source: Plans, page C-2.2, panel 1).

Figure 4 shows the existing and proposed antenna configurations.

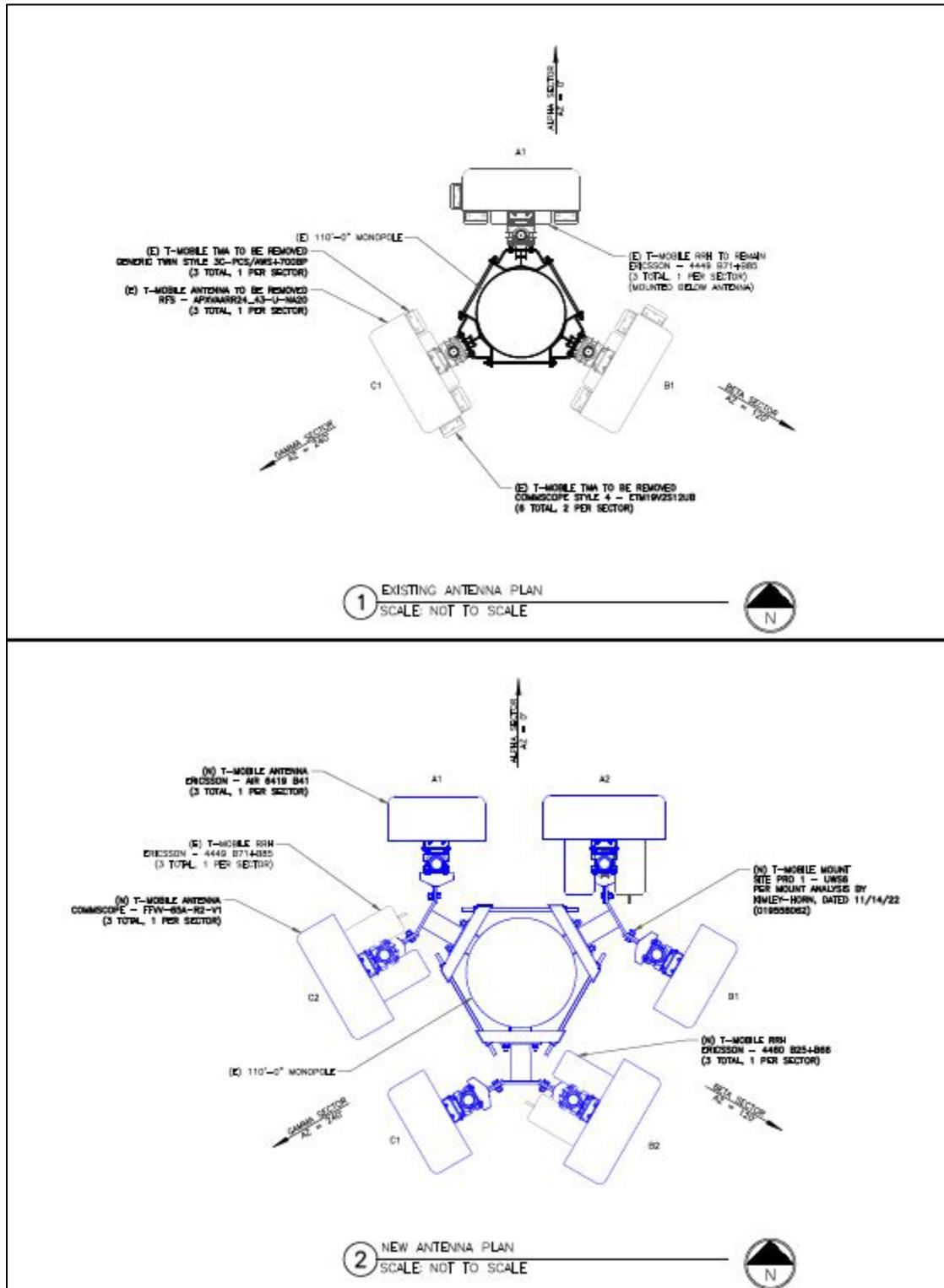


Figure 4: Existing and proposed antenna configuration (Source: Plans, page C-3, panels 1 and 2).

3. Section 6409(a) Evaluation

Section 6409(a) requires that a State or local government “may not deny, and shall approve” any “eligible facilities request” for a wireless site collocation or modification so long as it does not cause a “substant[ial] change in [that site’s] physical dimensions.”² FCC regulations interpret key terms in this statute and impose certain substantive and procedural limitations on local review.³ Localities must review applications submitted for approval pursuant to Section 6409(a), but the applicant bears the burden to show it qualifies for mandatory approval.

3.1 Eligible Facilities Request

Section 6409(a)(2) defines an “eligible facilities request” as a request to collocate, remove or replace transmission equipment on an existing wireless tower or base station. FCC regulations define the term “collocation” as “[t]he mounting or installation of transmission equipment on an [existing wireless tower or base station]” and the term “transmission equipment” broadly includes “equipment that facilitates transmission for any [FCC]-licensed or authorized wireless communication service.”⁴ A “tower” means any structure built solely or primarily to support transmission equipment, whether it actually supports any equipment or not.⁵ In contrast, a “base station” means a non-tower structure in a fixed location approved for use as a wireless support by the local jurisdiction that actually supports transmission equipment at the time a collocation or modification request is submitted.⁶

The FCC also provides that whether a tower or base station “exists” depends on both its *physical* and *legal* status.⁷ Section 6409(a) does not mandate approval for collocations and modifications when the support structure was constructed or deployed without proper local review, was not required to undergo local review, or involves equipment that was not properly approved.⁸ This rule attempts to preserve the local government’s authority to review wireless facilities in the first instance and withhold statutory benefits under Section 6409(a) in cases where the site operator deployed equipment without all required prior approvals.

² See 47 U.S.C. § 1455(a).

³ See In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, *Report and Order*, 29 FCC Rcd. 12865 (Oct. 17, 2014) (codified as 47 C.F.R. §§ 1.40001, *et seq.*) [hereinafter “*Infrastructure Order*”].

⁴ See 47 C.F.R. §§ 1.40001(b)(2), (8); see also *Infrastructure Order* at ¶¶ 158–60 (describing examples for transmission equipment) and ¶¶ 178–81 (discussion what constitutes a collocation under Section 6409).

⁵ 47 C.F.R. § 1.40001(b)(9); see also *Infrastructure Order* at ¶ 166.

⁶ See 47 C.F.R. § 1.40001(b)(1); see also *Infrastructure Order* at ¶ 166. The term “base station” can include DAS and small cells. See 47 C.F.R. § 1.40001(b)(1)(ii).

⁷ See 47 C.F.R. § 1.40001(b)(5); see also *Infrastructure Order* at ¶ 174.

⁸ See *Infrastructure Order* at ¶ 174 (“[I]f a tower or base station was constructed or deployed without proper review, was not required to undergo siting review, or does not support transmission equipment that received another form of affirmative State or local regulatory approval, the governing authority is not obligated to grant a collocation application under Section 6409(a).”).



In situations where an applicant submits an application for approval pursuant to Section 6409(a) but the local jurisdiction finds that the application does not qualify for mandatory approval, the FCC recommends that the local jurisdiction convert the project into one governed under the traditional standards in the Telecommunications Act.⁹

Here, T-Mobile's application materials appear to establish that the proposed modification is an eligible facilities request because T-Mobile plans to install its equipment at a physically existing wireless base station.

The installation is a "collocation" on a "base station" because T-Mobile would add its equipment on a stadium light that currently supports wireless equipment but was not originally and solely constructed for wireless use. The antennas and the RRHs constitute transmission equipment under the FCC's definitions because T-Mobile deploys each item to transmit and receive wireless communications signals to provide its services.

It appears to TLF that the site has been maintained based on the City issued permits. For the purposes of moving to the next steps of our memorandum, we presume that T-Mobile has deployed its current site in accordance with all City permits. The next step is to evaluate whether the proposed modifications will cause a substantial change.

3.2 Substantial Change Thresholds for Base Stations

Section 6409(a) does not mandate approval for all eligible facilities requests. The Applicant must still show that its eligible facilities request will not cause a substantial change.¹⁰

The FCC created a six-part test to determine whether a "substantial change" occurs or not. The test involves thresholds for height increases, width increases, new equipment cabinets, new excavation, changes to concealment elements and permit compliance. A project that exceeds any one threshold causes a substantial change. Additionally, the FCC considers a substantial change to occur when the project replaces the entire support structure or violates a generally applicable law or regulation reasonably related to public health and safety. State and local jurisdictions cannot consider any other criteria or threshold for a substantial change.

3.2.1 Height Increases

An increase in height causes a substantial change to a base station when it increases the support structure height 10% or 10 feet (whichever is greater).¹¹ The height limit is a *cumulative* limit.¹²

⁹ See *Infrastructure Order* at ¶ 220.

¹⁰ See 47 U.S.C. § 1455(a).

¹¹ See 47 C.F.R. § 1.40001(b)(7)(i).

¹² See *id.* § 1.40001(b)(7)(i)(A); see also *Infrastructure Order* at ¶ 196.



For almost all base stations, the cumulative limit is measured from the original structure height because the equipment will be horizontally separated.¹³

Here, the proposed modification will not cause an increase in the height of the Pole, therefore not triggering a substantial change.

3.2.2 Width Increases

An increase in width causes a substantial change to a base station when it adds an appurtenance that protrudes more than six feet from the support structure.¹⁴ This threshold concerns additions *appurtenant to* the support structure, such as new building-mounted equipment that protrudes from the facade.¹⁵

Unlike height increases, no cumulative limit applies to width increases. Each increase in width must be assessed on its own and without regard to any prior increases in width or new appurtenances from the support structure.

Here, the proposed width of the Pole will not increase and will not cause a substantial change.

3.2.3 Additional Equipment Cabinets

A collocation or modification causes a substantial change when it adds (1) more than the standard number of equipment cabinets for the technology involved (not to exceed four), (2) any new equipment cabinets when no ground-mounted equipment cabinets exist at the current structure or (3) additional ground cabinets more than 10% taller or more voluminous than any current ground cabinets.¹⁶

Here, T-Mobile's proposal does not add more than four equipment cabinets to cause a substantial change.

¹³ See 47 C.F.R. § 1.40001(b)(7)(i)(A); see also *Infrastructure Order* at ¶ 197.

¹⁴ See 47 C.F.R. § 1.40001(b)(7)(ii); see also *Infrastructure Order* at ¶ 194.

¹⁵ See *Infrastructure Order* at ¶ 194. Although the FCC's regulations are not explicitly clear on what constitutes an "appurtenance" for this purpose, the *Infrastructure Order* limits its discussion to articles such as cross arms on a utility pole, screen boxes on a building facade or mounts on a tower. See *id.* Accordingly, these criteria most likely do not involve new deployments adjacent to the support structure, such as a new ground-mounted cabinet, even though such deployments may be technically "appurtenant" to the support structure due to interconnection with power and fiber lines. The FCC dealt with these new changes elsewhere in its regulations. See 47 C.F.R. § 1.40001(b)(7)(iv), (b)(6); see also *Infrastructure Order* at ¶ 198–99.

¹⁶ See 47 C.F.R. § 1.40001(b)(7)(iii).



3.2.4 New Excavation

A collocation or modification causes a substantial change to a base station when it involves excavation or deployments outside the “site” or “area in proximity to the structure and to other transmission equipment already deployed on the ground.”¹⁷ The FCC defines “site” as the leased or owned areas and associated easements for access and utilities, but does not define “proximity” for this purpose.¹⁸

Here, the proposed modification would not cause any ground disturbance, thus this specification for substantial change is inapplicable to the instant project.

3.2.5 Changes to Concealment Elements

A collocation or modification causes a substantial change when it would “defeat the concealment elements of the support structure.”¹⁹ Although the FCC does not provide clear guidance on what change might “defeat” a concealment element, the regulations suggest that the applicant must do at least as much to conceal the new equipment as it did to conceal the originally-approved equipment.²⁰ Moreover, “the [*Infrastructure*] Order permits States and localities to condition a facility modification request on compliance with concealment measures and generally applicable building and safety codes.”²¹

Here, the proposed modification will not defeat the concealment elements because the antennas and associated equipment are proposed to be painted to match the underlying Pole.

3.2.6 Permit Compliance

Lastly, of the six elements that could cause a request to fall out of Section 6409(a), a collocation or modification causes a substantial change when it would violate a prior condition attached to the original site approval or any modification approval, so long as the condition does not conflict with the thresholds for a substantial change in height, width, excavation or equipment cabinets (but not concealment).²²

¹⁷ See 47 C.F.R. § 1.40001(b)(7)(iv), (b)(6); see also *Infrastructure Order* at ¶ 198–99.

¹⁸ See 47 C.F.R. § 1.40001(b)(6).

¹⁹ See 47 C.F.R. § 1.40001(b)(7)(v).

²⁰ See *Infrastructure Order* at ¶ 99.

²¹ See Brief for Respondent at 20, *Montgomery Cnty. v. FCC*, 811 F.3d 121 (4th Cir. 2015) (No. 15-1240); see also *id.* at 41 (stating that “the Order preserves the authority of States and localities to enforce concealment conditions”). The FCC provided the following example to further elaborate this point: “...[W]here an existing tower is concealed by a tree line and its location below the tree line was a consideration in its approval, an extension that would raise the height of the tower above the tree line would constitute a substantial change, and a zoning authority could impose conditions designed to conceal the modified facility.” *Id.* at 41.

²² See 47 C.F.R. § 1.40001(b)(7)(vi).



It does not appear that any unpermitted changes have been made by T-Mobile on the Pole. Accordingly, it does not appear that a permit condition violation will form an independent basis to find that a substantial change would occur.

3.3 Section 6409(a) Conclusion

This project, as proposed, appears to qualify for Section 6409(a) treatment and should be subject to a 60-day shot clock.

4. Planned Compliance with RF Exposure Regulations

Under the federal Telecommunications Act, the FCC completely occupies the field with respect to RF emissions regulation. The FCC established comprehensive rules for human exposure to RF emissions (the “**FCC Guidelines**”).²³ State and local governments cannot regulate wireless facilities based on environmental effects from RF emissions to the extent that the emissions comply with the FCC Guidelines.²⁴

Although localities cannot establish their own standards for RF exposure, local officials may require wireless applicants to demonstrate compliance with the FCC Guidelines.²⁵ Such demonstrations usually involve a predictive calculation because the site has not yet been built.

4.1 FCC Guidelines

FCC Guidelines regulate *exposure* rather than *emissions*.²⁶ Although the FCC establishes a maximum permissible exposure (“**MPE**”) limit, it does not mandate any specific limitations on power levels applicable to all antennas and requires the antenna operator to adopt exposure-mitigation measures only to the extent that certain persons might become exposed to the emissions. Thus, a relatively low-powered site in proximity to the general population might require more comprehensive mitigation measures than a relatively high-powered site in a remote location accessible only to trained personnel.

²³ See 47 U.S.C. § 332(c)(7)(B)(iv); see also 47 C.F.R. § 1.1307 *et seq.*; FCC Office of Engineering and Technology, *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*, OET Bulletin 65, ed. 97-01 (1997).

²⁴ See 47 U.S.C. § 332(c)(7)(B)(iv).

²⁵ See *In re Procedures for Reviewing Requests for Relief from State and Local Regulations Pursuant to Section 332(c)(7)(B)(iv) of the Communications Act of 1934*, *Report and Order*, 15 FCC Rcd. 22821, 22828–22829 (Nov. 13, 2000) (declining to adopt rules that limit local authority to require compliance demonstrations).

²⁶ See generally *Human Exposure to Radio Frequency Fields: Guidelines for Cellular and PCS Sites*, *Consumer Guide*, FCC (Oct. 22, 2014), available at <https://www.fcc.gov/guides/human-exposure-rf-fields-guidelines-cellular-and-pcs-sites> (discussing in general terms how wireless sites transmit and how the FCC regulates the emissions).



The MPE limit also differentiates between “general population” and “occupational” classes. Most people fall into the general population class, which includes anyone who either does not know about potential exposure or knows about the exposure but cannot exert control over the transmitters.²⁷ The narrower occupational class includes persons exposed through their employment and able to exert control over their exposure.²⁸ The MPE limit for the general population is five times lower than the MPE limit for the occupational class.

Lastly, the FCC “categorically excludes” certain antennas from routine environmental review when either (1) the antennas create exposures in areas virtually inaccessible to humans or (2) the antennas operate at extreme low power. As a general rule, a wireless site qualified for a categorical exclusion when mounted on a structure built solely or primarily to support FCC-licensed or authorized equipment (*i.e.*, a tower) and such that the lowest point on the lowest transmitter is more than 10 meters (32.8 feet) above ground.²⁹

Categorical exclusions establish a presumption that the emissions from the antennas will not significantly impact humans or the human environment. Such antennas are exempt from routine compliance evaluations but not exempt from actual compliance. Under some circumstances, such as a heavily collocated tower or when in close proximity to general population members, even a categorically excluded site will require additional analysis.

4.2 Planned Compliance Evaluation and Recommendations

The FCC does not categorically exclude T-Mobile’s facility from routine compliance review because the underlying structure was constructed for illumination purposes for the park and not for the primary use for wireless services.

To demonstrate planned compliance with the FCC Guidelines, T-Mobile submitted a Radio Frequency Compliance Report conducted by Site Safe LLC dated July 18, 2023, (“**Site Safe RF Report**”). The Site Safe RF Report contained sufficient emissions information to allow an independent planned-compliance analysis. TLF notes that there is a collocated carrier, AT&T, on the same Pole (situated above the T-Mobile antennas).

Based on the transmitter frequencies and power levels disclosed in the Site Safe RF Report, the T-Mobile emissions will create a “controlled access zone” that extends approximately 115 feet horizontally from the face of the antennas at the midpoint height above ground for each transmitting antenna. The antennas emissions will transmit at the height of 70' AGL, see the emissions in Figure 5.

²⁷ See 47 C.F.R. § 1.1310, Note 2.

²⁸ See *id.*

²⁹ See *id.* § 1.1307(b)(1).



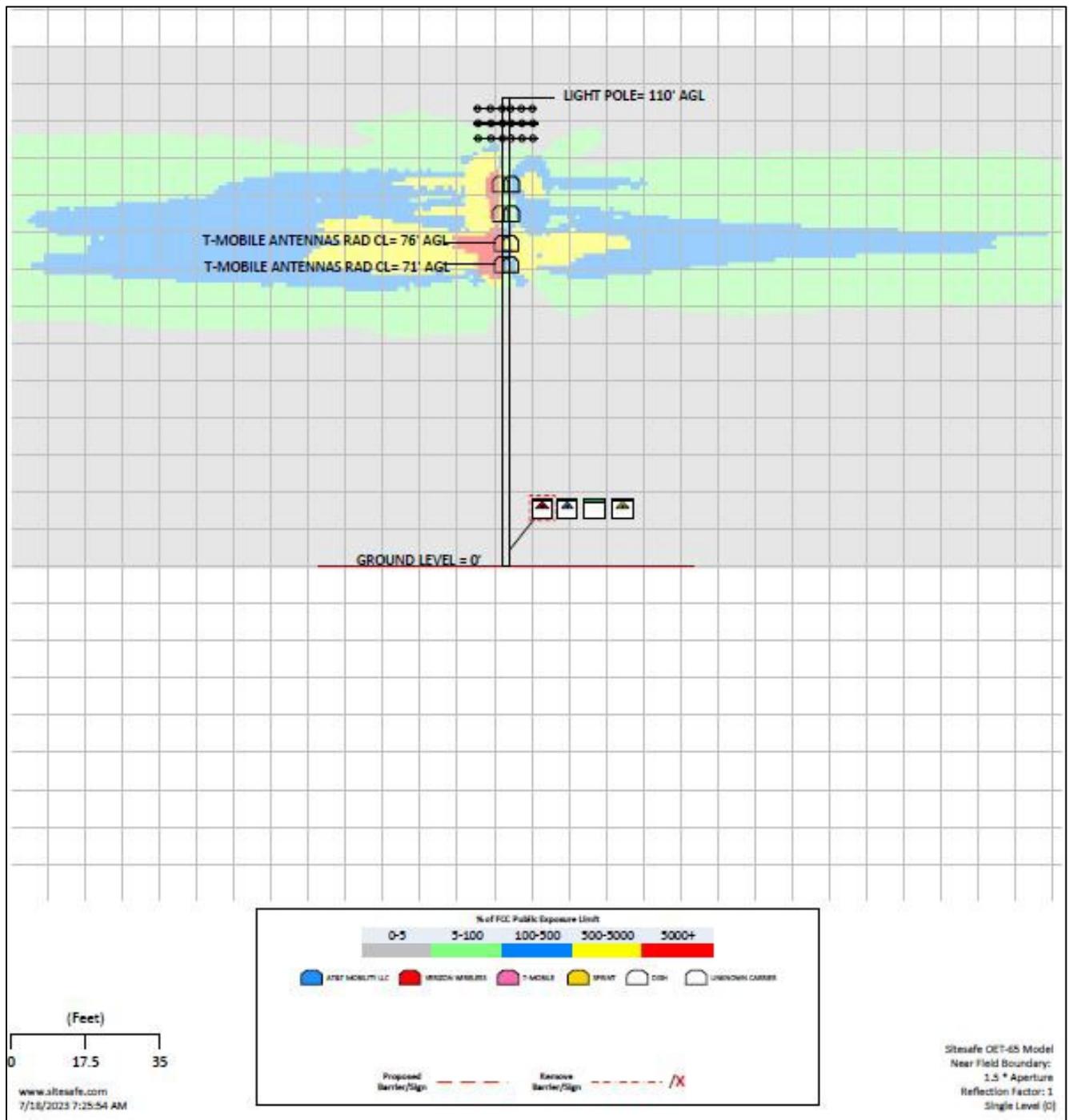


Figure 5: T-Mobile’s antenna emissions (Source: Site Safe RF Report).

TLF agrees with the Site Safe RF Report’s recommendation of signage mitigation measures for the Pole, see Figure 6.

T-Mobile will be compliant if the following changes are implemented:

Base of Light Pole
(1) Warning sign required.

Note: For overall compliance, access to the site (i.e., access road, gate, climbing point(s), etc.) must be locked/restricted.

Note: Ensure all existing signage documented in this report still exists on site unless otherwise indicated.

Figure 6: RF signage plans (Source: Site Safe RF Report).

The fact that the emissions will create a controlled access zone does not mean that the facility will violate the FCC Guidelines. Rather, a controlled access zone means that the carrier must affirmatively restrict public access to that area so that members of the general population (including trespassers and utility workers) cannot unknowingly enter and be exposed to radio frequency emissions in excess of those allowed by the FCC.

To promote planned compliance with the FCC Guidelines, the City should now plan on requiring the following conditions of approval for this project:

1. Permittee shall always keep the access doors and hatches to the equipment area locked, except when active maintenance is performed on the equipment.
2. Permittee shall ensure that all federally-required radio frequency signage be installed and maintained at all times in good condition. All such radio frequency signage be constructed of hard materials and be UV stabilized. All radio frequency signage must comply with the sign colors, sign sizes, sign symbols, and sign panel layouts in conformance with the most current versions of ANSI Z535.1, ANSI Z535.2, and ANSI C95.2 standards. All such radio frequency signage, or additional signage immediately adjacent to the radio frequency signage, shall provide a working local or toll-free telephone number to its network operations center that reaches a live person who can exert transmitter power-down control over this site as required by the FCC.
3. In the event that the FCC changes any of radio frequency signage requirements that are applicable to the project site approved herein or ANSI Z535.1, ANSI Z535.2, and ANSI C95.2 standards that are applicable to the project site approved herein are changed, Permittee, within 30 days of each such change, at its own cost and expense, shall replace the signage at the project site to comply with the then current standards.

/JLK





WIRELESS PLANNING MEMORANDUM

TO: Mr. Wyman Wong
FROM: Dr. Jonathan Kramer *Jonathan Kramer*
DATE: June 14, 2022
RE: (MP 1744) Technical Review for Proposed Modification to Existing Wireless Facility on Existing Monopine located at 16717 Norwalk Boulevard

Applicant: The Derna Group
Carrier: Verizon Wireless

1. Summary

The City of Cerritos (the “City”) requested that Telecom Law Firm, PC (“TLF”) review the Derna Group (“the Applicant”) application submitted on behalf of Verizon Wireless (“Verizon”) to modify its existing wireless site located at 16717 Norwalk Boulevard.

The project appears to fall within the scope of Section 6409(a). This is because Verizon has proposed a modification that appears to be an eligible facility which does not cause a substantial change, therefore the overall shot clock for this project is 60 calendar days. The City should condition that the Applicant install and maintain all the necessary camouflage elements on the Monopine. See Section 4.

TLF recommends that the City ensure that the City permits are renewed by the Applicant.

Verizon’s proposed facility will be in planned compliance with the FCC RF emissions guidelines. The City should condition any permit issuance for this project to be subject to the conditions proposed in this memorandum regarding RF emissions safety.

This memorandum reviews the application and related materials for technical and regulatory issues specific to wireless infrastructure. Although many technical issues implicate legal issues, the analysis and recommendations contained in this memorandum do not constitute legal advice.

2. Project Background and Description

Subject to the provisions of Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012¹ as interpreted by the FCC, the Applicant has requested the City’s approval of the instant project. Accordingly, this memorandum reviews: (1) whether Section 6409(a) applies to this

¹ See Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156. (Feb. 22, 2012) (codified as 47 U.S.C. § 1455(a)).

proposal, and (2) whether the project demonstrates planned compliance with the federal radio frequency exposure guidelines.

The Applicant submitted a set of plans dated March 24, 2022, (“Plans”) that show Verizon currently operates a wireless facility situated on an 51' above ground level (“AGL”) tower camouflaged as Monopine tree (“Monopine”) on the property located at 16717 Norwalk Boulevard.

Verizon’s existing site consists of twelve panel antennas divided into three sectors. Sector Alpha has three antennas oriented toward 90° True North (“TN”), Sector Beta has three antennas oriented toward 210° TN and Sector Gamma has three antennas oriented toward 350° TN. See Figure 1 for a view of the existing antenna layout.

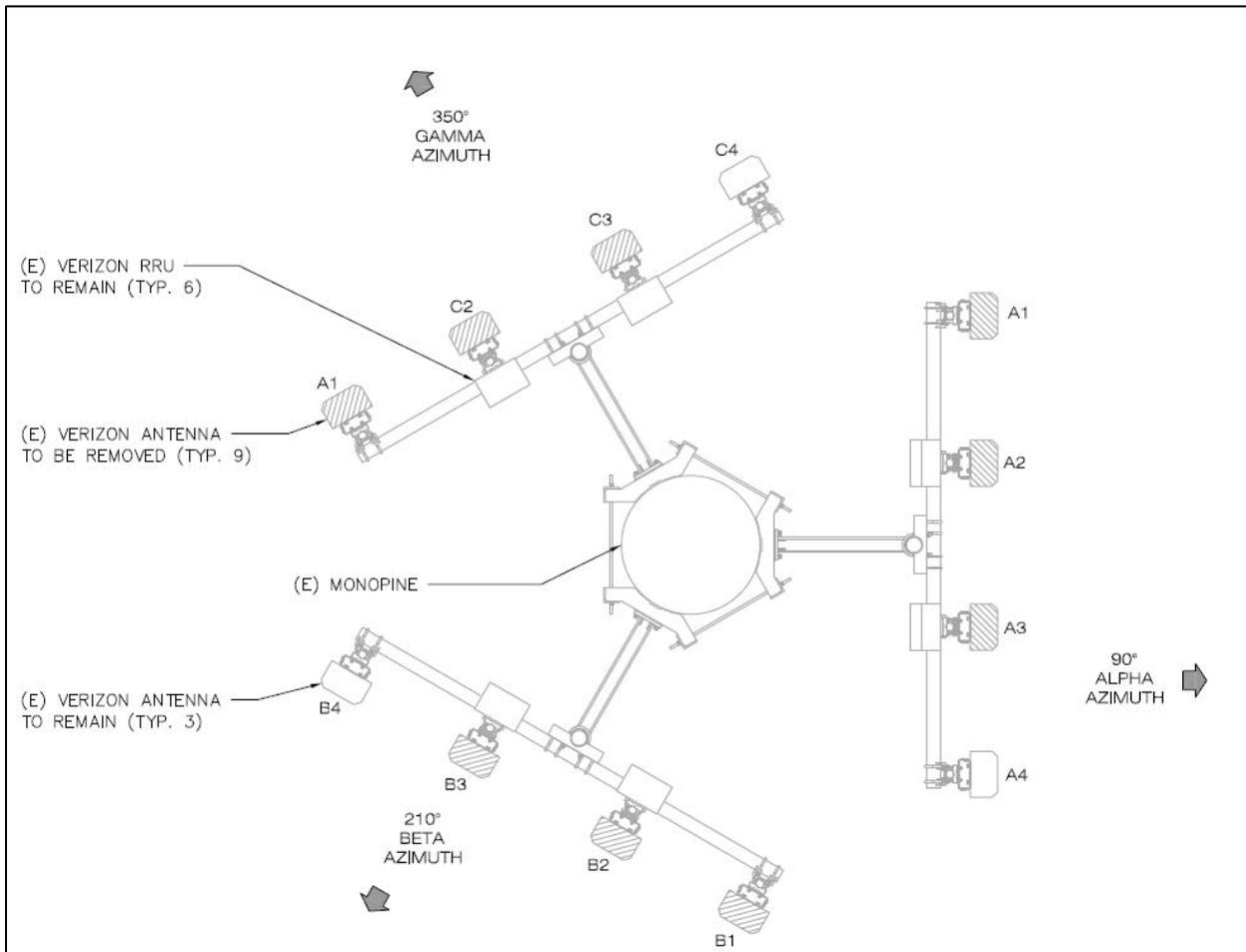


Figure 1: Existing antenna layout on the Monopine (Source: Plans, page A-3).



The Plans also show that Verizon is proposing to modify its antenna configuration on the Monopine as described in the written summary, Figure 2.

PROJECT DESCRIPTION	
MODIFICATION TO AN EXISTING VERIZON WIRELESS COMMUNICATIONS UNMANNED SUBSTATION TO CONSIST OF THE FOLLOWING:	
1. REMOVE NINE (9) PANEL ANTENNA(S). (3 PER SECTOR)	
2. INSTALL NINE (9) NEW PANEL ANTENNA(S). (3 PER SECTOR)	
3. INSTALL THREE (3) DUAL MOUNT(S). (1 PER SECTOR)	
4. INSTALL THREE (3) OVP @ TOWER LEVEL.	
5. INSTALL THREE (3) 6X12 HYBRID CABLE	
6. INSTALL THREE (3) OVP @ GROUND LEVEL.	
7. RETAIN THREE (3) ANTENNAS(S). (1 PER SECTOR)	
8. RETAIN SIX (6) RRU(S) @ ANTENNA LOCATION	

Figure 2: Project description (Source: Plans, page T-1).

The antenna sector azimuths will remain unchanged after the modification. See the proposed antenna layout in Figure 3.

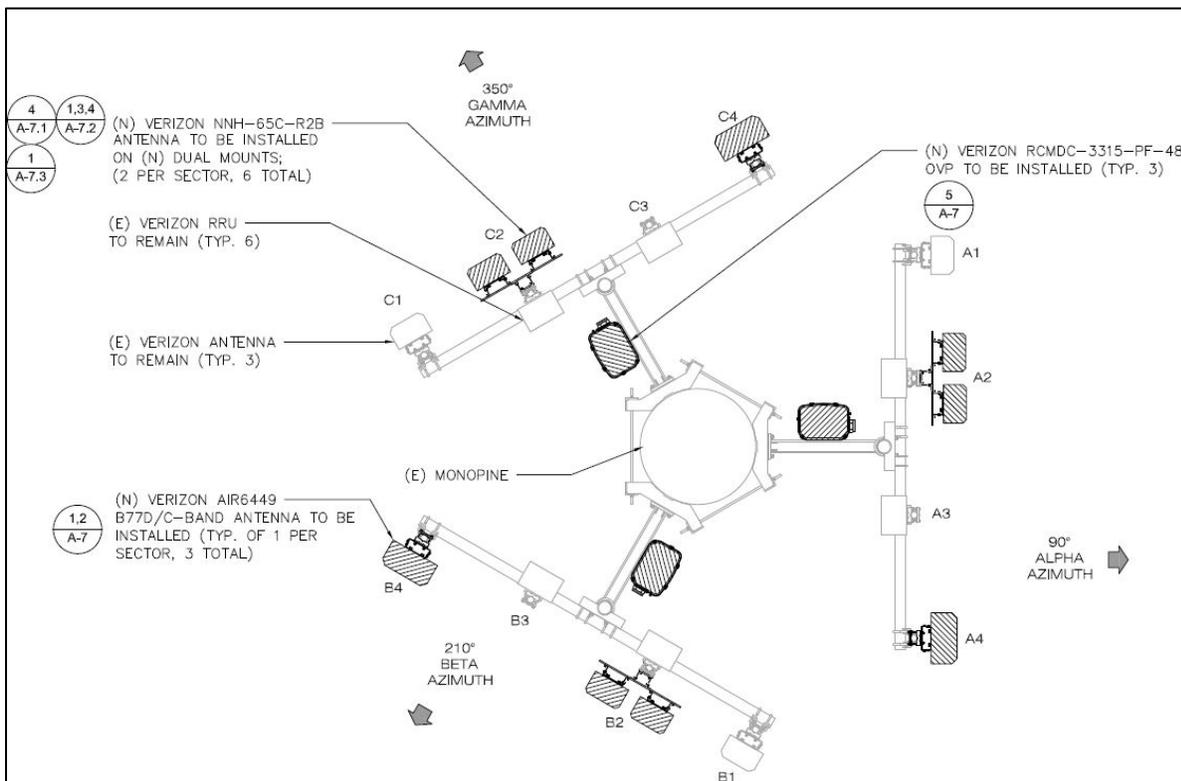


Figure 3: Proposed antenna layout plan on Monopine (Source: Plans, page A-3).



The modification is depicted in elevation view with details in Figure 4.

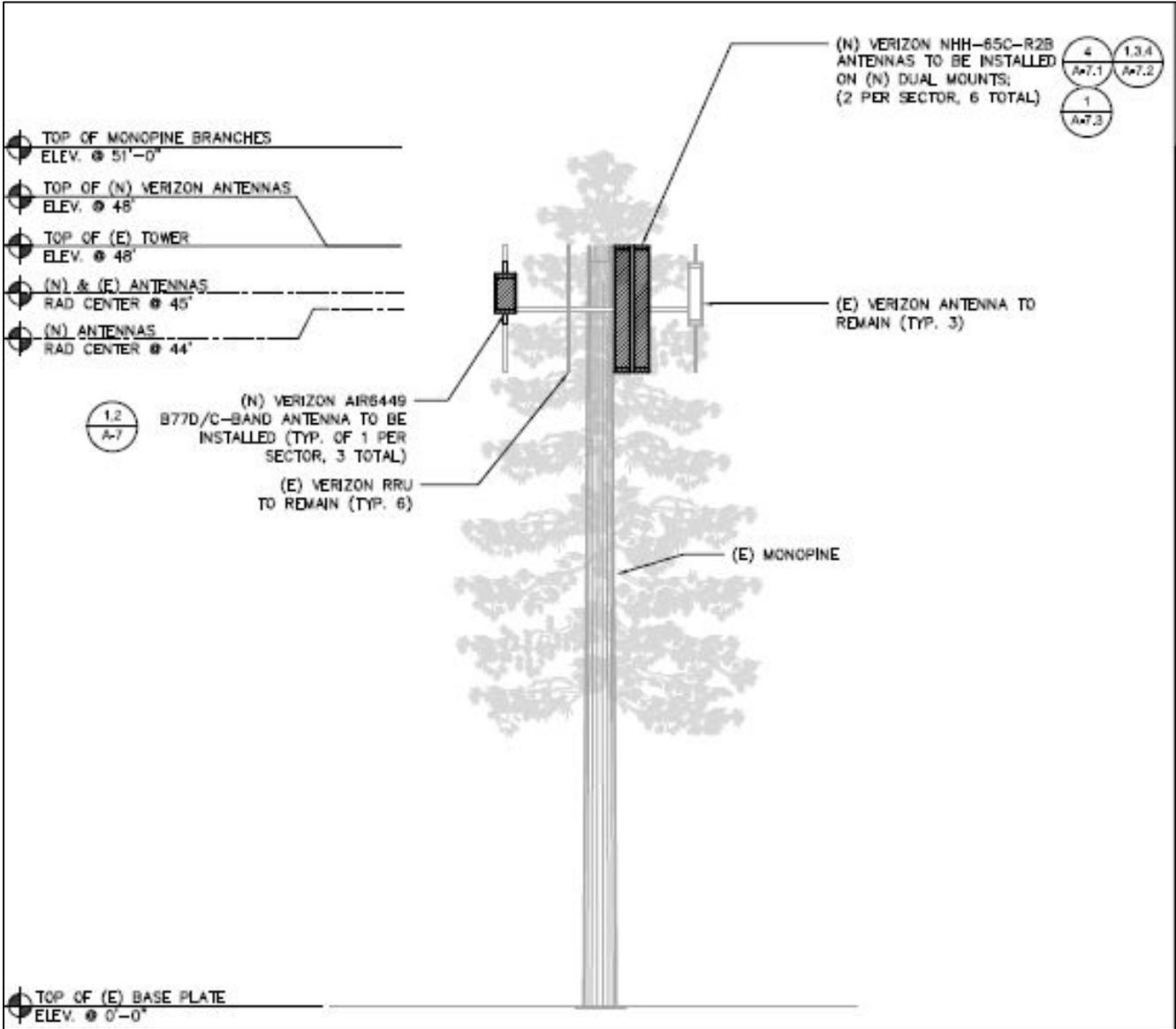


Figure 4: Elevation view of proposed modifications to Monopine (Source: Plans, page A-4).



A photo simulation of Verizon's project is shown in Figure 5.

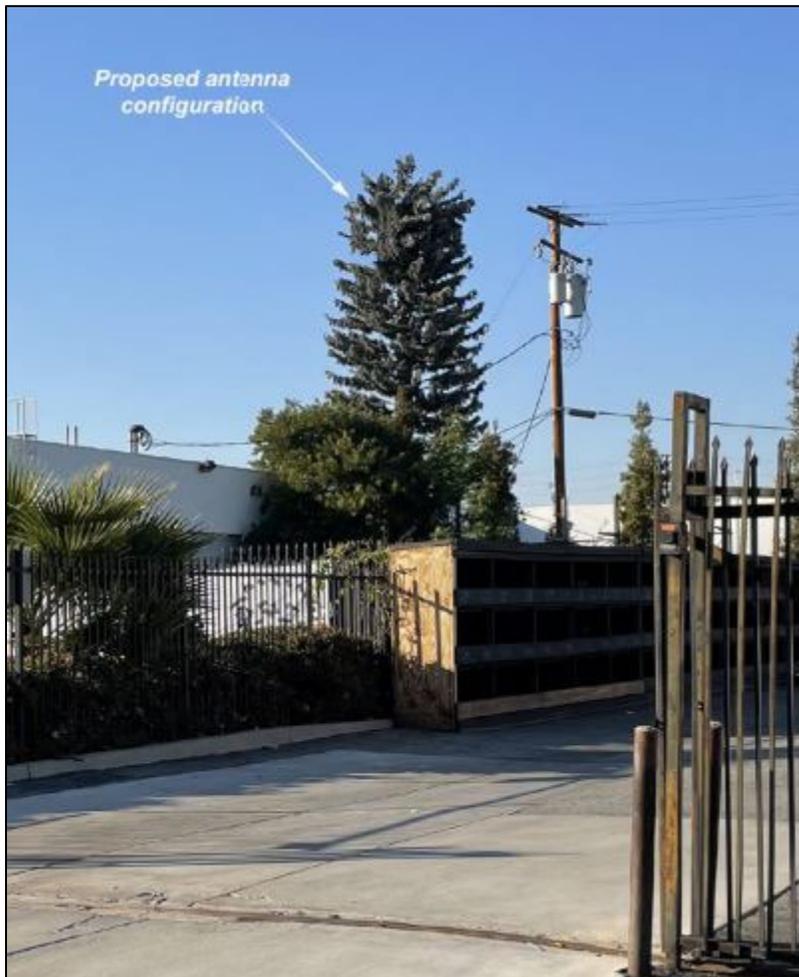


Figure 5: Simulated view of Monopine (Source: Photo Simulations; annotations in original).

3. Section 6409(a) Analysis

As a threshold matter, the City must determine whether federal law mandates approval for this permit application. Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012 requires that State and local governments “may not deny, and shall approve” an “eligible facilities request” so long as the proposal does not result in a “substant[ial] change.”² The applicant bears the burden to prove that its proposal qualifies.

² See Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156. (Feb. 22, 2012) (codified as 47 U.S.C. § 1455(a)).



3.1. Eligible Facilities Request

Section 6409(a)(2) defines an “eligible facilities request” as a request to collocate, remove or replace transmission equipment on an existing wireless tower or base station.³ The FCC defines “collocation” as “[t]he mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.”⁴ Unlike the traditional definition, a collocation for Section 6409(a) purposes does not necessarily mean two wireless sites at a shared location—it more accurately means simply “to add” transmission equipment.

The term “transmission equipment” encompasses virtually all equipment found at facilities that transmit communication signals over the air. The FCC defines transmission equipment as:

[e]quipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.⁵

A “tower” means any structure built solely or primarily to support transmission equipment.⁶ Towers typically include monopoles (or mono-variants), lattice towers and other free-standing structures such as commercial signs when designed and constructed primarily to support wireless equipment. A tower need not actually support wireless equipment but must have been legally constructed under the applicable regulations at the time it was built or modified.

In contrast, a “base station” means a non-tower structure at a fixed location and the validly permitted or approved associated transmission equipment that enables FCC-licensed or authorized wireless communications between user equipment and a communications network.⁷ The term can include DAS and small cells.⁸ The structure must also currently support transmission equipment under a valid permit or other approval.⁹

³ See 47 U.S.C. § 1455(a)(2).

⁴ See 47 C.F.R. § 1.40001(b)(2). The rules further define an “eligible support structure” as a short-hand reference to an existing wireless tower or base station at the time an applicant files a permit application. See *id.* § 1.40001(b)(4).

⁵ See *id.* § 1.40001(b)(8).

⁶ See *id.* § 1.40001(b)(9).

⁷ See *id.* § 1.40001(b)(1).

⁸ See *id.* § 1.40001(b)(1)(ii).

⁹ See 47 C.F.R. § 1.40001(b)(1)(iii), (iv).



The Monopine qualifies as a “tower” because it was built primarily to support FCC-licensed or authorized equipment. Verizon proposes to collocate “transmission equipment” because the antennas and the RRUs are normally associated with wireless facilities.

Based on the documents submitted, it does not appear, but TLF cannot confirm, that there have been any unpermitted changes to the Monopine. For the purposes of moving to the next steps of our memorandum, we presume but do not conclude that the existing site is constructed in accordance with of all City permits.

The next step is to evaluate whether the proposed modification will cause a substantial change.

3.2. Substantial Change Thresholds for Towers

Section 6409(a) does not mandate approval merely because it qualifies as an eligible facilities request. The applicant must show that the proposed project will not “substantially change the physical dimensions of such existing wireless tower or base station.”¹⁰

The FCC created a six-part test to determine whether a “substantial change” occurs or not. The test involves thresholds for height increases, width increases, new equipment cabinets, new excavation, changes to concealment elements and permit compliance. A project that exceeds any one threshold causes a substantial change. Additionally, the FCC considers a substantial change to occur when the project replaces the entire support structure or violates a generally applicable law or regulation reasonably related to public health and safety. State and local jurisdictions cannot consider any other criteria or threshold for a substantial change.

3.2.1. Height Increases

An increase in height causes a substantial change when it increases the tower height 10% or the height of an additional antenna array with separation from the nearest array not to exceed 20 feet (whichever is greater).¹¹ The FCC does not elaborate on how to measure the separation between the modification and the “nearest array.” The height limit is a *cumulative* limit.¹² For almost all towers, the cumulative limit is measured from the original discretionary approval because the equipment will be vertically separated.¹³ Any height increase above the cumulative limit allowed under 6409(a) as interpreted by the FCC amounts to a substantial change.

Here, Verizon’s proposal will not substantially increase the overall height of the Monopine.

¹⁰ See 47 U.S.C. § 1455(a).

¹¹ See 47 C.F.R. § 1.40001(b)(7)(i).

¹² See 47 C.F.R. § 1.40001(b)(7)(i)(A); see also *Infrastructure Order* at ¶ 95.

¹³ See 47 C.F.R. § 1.40001(b)(7)(i)(A).



3.2.2. Width Increases

An increase in width causes a substantial change when it adds an appurtenance that protrudes from the support structure more than 20 feet or the tower width at the appurtenance (whichever is greater).¹⁴ Unlike height increases, no cumulative limit applies to width increases.

Here, the proposed modification will not increase the width, therefore no substantial change to this element will occur.

3.2.3. Additional Equipment Cabinets

A collocation or modification causes a substantial change when it adds more than the standard number of equipment cabinets for the technology involved (not to exceed four).¹⁵ The FCC does not define an “equipment cabinet” or indicate how to determine the “standard number” for a given technology.

Here, the proposed modification does not add any equipment cabinets, therefore not triggering a substantial change to this element.

3.2.4. New Excavation

A collocation or modification causes a substantial change when it involves excavation outside the leased or owned area, which includes access and utilities easements.¹⁶

Here, the proposed modification does not trigger the excavation threshold because Verizon does not propose any new ground disturbance. The proposed changes will occur only on the Monopine at the antenna level.

3.2.5. Changes to Concealment Elements

A collocation or modification causes a substantial change when it would “defeat the concealment elements of the support structure.”¹⁷ Although the FCC does not provide much guidance on what change might “defeat” a concealment element, the regulations suggest that the applicant must

¹⁴ See 47 C.F.R. § 1.40001(b)(7)(ii).

¹⁵ See 47 C.F.R. § 1.40001(b)(7)(iii).

¹⁶ See 47 C.F.R. § 1.40001(b)(7)(iv); see also 47 C.F.R. § 1.40001(b)(6).

¹⁷ See 47 C.F.R. § 1.40001(b)(7)(v).



do at least as much to conceal the new equipment as it did to conceal the originally-approved equipment.¹⁸

Here, the modification does not defeat the existing concealment elements.

We recommend the City condition Verizon to follow the Design Comments and Recommendations discussed in Section 4 within this memo and request that the Applicant maintain the Monopine accordingly.

3.2.6. Permit Compliance

Lastly, a collocation or modification causes a substantial change when it would violate a prior condition attached to the original site approval, so long as the condition does not conflict with the thresholds for a substantial change in height, width, excavation or equipment cabinets (but not concealment).¹⁹

It appears to TLF that the wireless facility is in operation. Based on the documents submitted TLF cannot confirm if any unpermitted changes have occurred on the Monopine by Verizon. However, TLF recommends that the City review the previously approved conditions to determine whether a permit condition violation will form an independent basis that will cause a substantial change.

3.2.7. Section 6409(a) Conclusion

This project appears to fall within the scope of Section 6409(a). As such, the City ‘may not deny and shall approve’ the request.

4. Design Comments and Recommendations

TLF recommends the following design conditions as conditions of approval for the project:

1. Monopine branches should extend at least two feet beyond all the antennas and tree-mounted transmission equipment, and three feet above the top of the pole (the Monopine’s trunk).
2. Permittee shall design, update, and always maintain all branches in a way which results in the natural projection of a pine tree with natural canopy.

¹⁸ See *Infrastructure Order* at ¶ 99.

¹⁹ See 47 C.F.R. § 1.40001(b)(7)(vi).



3. All panel antennas, cables, transmission equipment including without limitation to RRUs, and DC/fiber cabinets and antenna supports affixed to the Monopine shall be painted a camouflage pattern of brown and green as approved by the City.
4. All panel antennas shall always be covered with mock pine needle antenna socks consistent with the needles on the Monopine branches.
5. All branches shall be maintained at all times. All broken or discolored branches need to be repaired or replaced.
6. All antennas, RRUs and associated equipment shall be within the canopy of branches on the Monopine.
7. All cables shall be inside the trunk of the Monopine tree except at the cable exits at the top and bottom of the Monopine trunk.

5. Planned RF Compliance Evaluation

Under the Telecom Act, the FCC completely occupies the field with respect to RF emissions regulation. The FCC established comprehensive rules for human exposure to RF emissions (the “**FCC Guidelines**”).²⁰ State and local governments cannot regulate wireless facilities based on environmental effects from RF emissions to the extent that the emissions comply with the FCC Guidelines.²¹

Although localities cannot establish their own standards for RF exposure, local officials may require wireless applicants to demonstrate compliance with the FCC Guidelines.²² Such demonstrations usually involve a predictive calculation because the site has not yet been built.

²⁰ See 47 U.S.C. § 332(c)(7)(B)(iv); see also 47 C.F.R. § 1.1307 *et seq.*; FCC Office of Engineering and Technology, *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*, OET Bulletin 65, ed. 97-01 (1997).

²¹ See 47 U.S.C. § 332(c)(7)(B)(iv).

²² See *In re Procedures for Reviewing Requests for Relief from State and Local Regulations Pursuant to Section 332(c)(7)(B)(iv) of the Communications Act of 1934*, *Report and Order*, 15 FCC Rcd. 22821, 22828–22829 (Nov. 13, 2000) (declining to adopt rules that limit local authority to require compliance demonstrations).



a. FCC Guidelines, Categorical Exclusions and Exposure Mitigation Measures

FCC Guidelines regulate *exposure* rather than *emissions*.²³ Although the FCC establishes a maximum permissible exposure (“MPE”) limit, it does not mandate any specific limitations on power levels applicable to all antennas and requires the antenna operator to adopt exposure-mitigation measures only to the extent that certain persons might become exposed to the emissions.

The FCC “categorically excludes” certain antennas from routine environmental review when either (1) the antennas create exposures in areas virtually inaccessible to humans or (2) the antennas operate at extreme low power. As a general rule, a wireless site qualifies for a categorical exclusion when mounted on a structure built solely or primarily to support FCC-licensed or authorized equipment (*i.e.*, a tower) and such that the lowest point on the lowest transmitter is more than 10 meters (32.8 feet) above ground.²⁴ Categorical exclusions establish a presumption that the emissions from the antennas will not significantly impact humans or the environment.

b. Planned Compliance Evaluation and Recommendations

Here, the FCC Rules categorically exclude the Verizon antennas because the antennas are mounted on a Monopine—a structure solely or primarily built to support wireless antennas—and all of the transmitting antennas are at least 10 meters AGL. The lowest point of the Verizon antennas is approximately at 40 feet AGL.

Accordingly, the FCC Rules categorically exclude this site from the need for routine compliance demonstrations. A categorical exclusion does not exempt a transmitter from *actual* compliance. The FCC Rules still require Verizon to affirmatively prevent unknowing access to areas where the emissions exceed the maximum permissible limits.

In this case, Verizon can demonstrate planned compliance with the FCC rules through the following recommended conditions:

1. Permittee shall keep its base station equipment enclosures/cabinets closed and locked at all times except when active maintenance is performed on the equipment.

²³ See generally Human Exposure to Radio Frequency Fields: Guidelines for Cellular and PCS Sites, *Consumer Guide*, FCC (Oct. 22, 2014), available at <https://www.fcc.gov/guides/human-exposure-rf-fields-guidelines-cellular-and-pcs-sites> (discussing in general terms how wireless sites transmit and how the FCC regulates the emissions).

²⁴ See *id.* § 1.1307(b)(1).



2. Permittee shall ensure that all federally required radio frequency signage be installed and maintained at all times in good condition. All such radio frequency signage be constructed of hard materials and be UV stabilized. All radio frequency signage must comply with the sign colors, sign sizes, sign symbols, and sign panel layouts in conformance with the most current versions of ANSI Z535.1, ANSI Z535.2, and ANSI C95.2 standards. All such radio frequency signage, or additional signage immediately adjacent to the radio frequency signage, shall provide a working local or toll-free telephone number to its network operations center that reaches a live person who can exert transmitter power-down control over this site as required by the FCC.
3. In the event that the FCC changes any of radio frequency signage requirements that are applicable to the project site approved herein or ANSI Z535.1, ANSI Z535.2, and ANSI C95.2 standards that are applicable to the project site approved herein are changed, Permittee, within 30 days of each such change, at its own cost and expense, shall replace the signage at the project site to comply with the then current standards.

/JLK



CURRICULUM VITÆ OF DR. JONATHAN L. KRAMER, ESQ.



Founder and Senior Partner

Telecom Law Firm, P.C.

Direct Tel: CA (310) 405-7333 – Email: Kramer@TLF.Law – Web site: TLF.Law



**San Diego, CA Area
and Main Office**

3570 Camino del Rio N. #102
San Diego, CA 92108
Tel: (619) 272-6200

**Los Angeles, CA
Area Office**

2708 Wilshire Blvd. #330
Santa Monica, CA 90403
Tel: (310) 312-9900

**Boston, MA
Area Office**

258 Harvard St. #200
Brookline, MA 02446
Tel: (360) 727-1300

Employment History

- 2006 – Present Telecom Law Firm, P.C. (Los Angeles, CA) (www.TLF.Law)
Founding Attorney and Senior Partner (July 2019 - Present)
Founding Attorney and Managing Partner (November 2006 - June 2019)
- 2021 – Present Telecom Realty Corporation (Los Angeles, CA) (www.TelecomRE.com).
President/Supervising Broker. Telecom Realty Corp., which is not a law
firm, provides wireless site management and contract inspection services to
California cell site landlords. TRC also provides real estate brokerage
services in California for properties containing cell sites.
- 2018 – Present Instructor, Regulatory Law and Policy (Doctoral and Master levels)
Northeastern University (Boston, MA and Seattle, WA campuses)
- 1999 – 2015 Kramer.Firm, Inc., Principal Technologist (Los Angeles, CA)
- 1987 – 1999 Communications Support Corp., President (El Toro, CA; Los Angeles, CA)
- 1984 – 1987 CommuniCable Consultants, Owner (El Toro, CA)
- 1982 – 1984 Storer Communications, Regional Technical Manager (Southern California)
- 1982 – 1982 Western Cable Services, Inc., Engineering Manager (Ventura, CA)
- 1979 – 1982 Warner Cable of Malibu, System Engineer (Malibu, CA)
- 1976 – 1978 Motorola Communications & Electronics Area F Project Management,
Field Technician, (CA, NV, AZ, and NM)

Post Graduate Education

**Curriculum Vitæ of
Dr. Jonathan L. Kramer, Esq.**

Doctor of Law and Policy (LP.D). Status: Earned Degree. Northeastern University, Boston, Massachusetts (Degree conferred September 2016). Thesis title: “Cell Towers, Community Perspectives, and Hedonic Price Modeling: Utility, Limitations, and Localism”.

Master of Law (LL.M). Information Technology and Telecommunications Law. Status: Earned Degree *with distinction*. University of Strathclyde, Glasgow, Scotland (Degree conferred May 2013). Dissertation title: “Section 6409(a) of the Middle-Class Tax Relief and Job Creation Act of 2012: Potential Impacts on Ninth Circuit Wireless Siting Jurisprudence Under the Telecommunications Act of 1996.”

Juris Doctor (JD). Status: Earned Degree *cum laude*. Abraham Lincoln University School of Law, Los Angeles, California (Degree conferred October 2001).

State Bar And Other Licensure

Attorney and Counselor at Law admitted in the State of California:
California State Bar Registration No. 244074.

FCC General Radiotelephone Operator License with Ship Radar endorsement.
License No. PG11-35289.

California Contractors State License Board. Class C7 Low Voltage Communications.
License No. 433113. Licensed since 1982.

California Department of Real Estate. Real Estate Broker. License No. 00698460.
Licensed since 2021.

Selected Representative Clients

The following is a partial list of the over 1,000 governments, public agencies and private entities that have relied upon Dr. Kramer's broadband and/or radio-telecommunications advice as a telecommunications technology advisor/inspector/expert witness since 1984, and/or as an attorney since 2006:

Cities, Counties, and Tribal Associations

Addison, IL	Anaheim, CA	Avon, OH
Agoura Hills, CA	Antioch, CA	Azusa, CA
Aiken County, SC	Apache Junction, AZ	Bakersfield, CA
Alameda, CA	Arcadia, CA	Baldwin Park, CA
Alameda County, CA	Artesia, CA	Barrington, IL
Albany, CA	Arvada, CO	Bartlett, IL
Albuquerque, NM	Aurora, CO	Beaverton, OR
Alcoa, TN	Aurora, IL	Bellbrook, OH
Aliso Viejo, CA	Austin, TX	Bellflower, CA

**Curriculum Vitæ of
Dr. Jonathan L. Kramer, Esq.**

Bellingham, WA	Chula Vista, CA	Elmhurst, IL
Benicia, CA	Cincinnati, OH	Encinitas, CA
Berkeley, CA	Clarendon Hills, IL	Enfield, CT
Bethel, AK	Cleveland Heights, OH	Escondido, CA
Beverly Hills, CA	Clinton, CT	Essex, CT
Big Bear Lake, CA	Cobb County, GA	Everett, WA
Big Cypress Indian Resv., FL	Colchester, CT	Fairfax, CA
Birmingham, AL	Colma, CA	Federal Way, WA
Bloomington, IL	Colton, CA	Flora, IL
Blount County, TN	Columbia Heights, MI	Fort Wayne, IN
Bolingbrook, IL	Commerce, CA	Fountain Valley, CA
Bozrah, CT	Concord, CA	Franklin, CT
Branford, CT	Cornwall, CT	Franklin, KY
Brentwood, CA	Corona, CA	Fremont, CA
Brighton Indian Resv., FL	Coronado, CA	Fresno, CA
Bronxville, NY	Costa Mesa, CA	Fullerton, CA
Buena Park, CA	Culver City, CA	Galena, IL
Buffalo Grove, IL	Cupertino, CA	Garden Grove, CA
Burleson, TX	Cypress, CA	Gardena, CA
Burlingame, CA	Darien, CT	Germantown, OH
Burr Ridge, IL	Darien, IL	Gilbert, AZ
Butte County, CA	Davis, CA	Glen Ellyn, IL
Calabasas, CA	Decatur, AL	Glendale Heights, IL
Calimesa, CA	Deep River, CT	Glendale, CA
Camarillo, CA	Deerfield Beach, FL	Glenwood, IL
Campbell, CA	Denver, CO	Goleta, CA
Canandaigua, NY	Diamond Bar, CA	Goshen, CT
Canton, MI	Donna, TX	Granby, CT
Capitola, CA	Downers Grove, IL	Greenfield, WI
Carlsbad, CA	Duarte, CA	Greenville, IL
Carmel-by-the-Sea, CA	Dublin, CA	Greenwich, CT
Carson, CA	Dubuque, Iowa	Greenwood Village, CO
Carol Stream, IL	DuPage County, IL	Griffith, IN
Casper, WY	Durango, CO	Grover Beach, CA
Carson, CA	Durham, CT	Guilford, CT
Cedar Lake, IN	Dyer, IN	Hacienda Heights, CA
Centerville, OH	Eagan, MI	Haddam, CT
Cerritos, CA	East Granby, CT	Half Moon Bay, CA
Cincinnati, OH	East Haven, CT	Hanover Park, IL
Chelan, WA	East Windsor, CT	Hartland, CT
Cheshire, CT	Eastchester, NY	Haverhill, FL
Chester, CT	Easton, CT	Hermiston, OR
Chico, CA	El Monte, CA	Hermosa Beach, CA
Chino Hills, CA	Elburn, IL	Hesperia, CA
Chino, CA	Elk Grove Village, IL	Hidden Hills, CA

**Curriculum Vitæ of
Dr. Jonathan L. Kramer, Esq.**

Highland Park, IL	Lompoc, CA	Napa, CA
Highland, CA	Lone Tree, CO	Naperville, IL
Highland, IN	Long Beach, CA	National City, CA
Hillsborough, CA	Longmont, CO	New Canaan, CT
Hinsdale, IL	Los Alamos, CA	New Castle County, DE
Hobart, IL	Los Alamos County, NM	New Haven, CT
Hoffman Estates, IL	Los Altos, CA	New Martinsville, WV
Hollywood, FL	Los Angeles County, CA	New Orleans, LA
Homewood, AL	Los Angeles, CA	Newport Beach, CA
Homewood, IL	Louisville, CO	Newton Falls, OH
Huntington Beach, CA	Loveland, CO	Niles, IL
Hunts Point, WA	Lowell, IN	No. Branford, CT
Immokalee Indian Resv., FL	Lynchburg, VA	No. Haven, CT
Indian Wells, CA	Mackinaw Island, MI	Norfolk, VA
Inglewood, CA	Madera, CA	North Aurora, IL
Irvine, CA	Madison, CT	Norwalk, CT
Itasca, IL	Malibu, CA	Norwich, CT
Kettering, OH	Manhattan Beach, CA	Novato, CA
Killingworth, CT	Maryville, TN	Oak Brook, IL
King County, WA	McKenney, TX	Oak Park, IL
La Canada Flintridge, CA	McMinnville, OR	Oakbrook Terrace, IL
La Grange, IL	Mentor, OH	Oakwood, OH
La Habra Heights, CA	Merced, CA	Oceanside, CA
La Mesa, CA	Meriden, CT	Ojai, CA
La Puente, CA	Merrillville, IN	Old Saybrook, CT
La Quinta, CA	Miamisburg, OH	Olean, NY
Lacy, WA	Michigan City, IN	Olympia, WA
Lafayette, CA	Middlebury, CT	Opelika, AL
Laguna Beach, CA	Milpitas, CA	Orange County, CA
Laguna Niguel, CA	Minooka, IL	Orange, CA
Lake County, IL	Mission Viejo, CA	Orinda, CA
Lake County, IN	Modesto, CA	Oroville, CA
Lake Oswego, OR	Monrovia, CA	Oxnard, CA
Lake Station, IN	Monterey, CA	Paducah, KY
Lakewood, OH	Monterey County, CA	Palo Alto, CA
Las Cruces, NM	Moorpark, CA	Palm Springs, CA
Las Vegas, NM	Moreno Valley, CA	Palos Verdes Estates, CA
Lawndale, CA	Morris, CT	Paris, IL
Lemont, IL	Mount Carmel, IL	Park Forest, IL
Lisbon, CT	Mount Orab, OH	Pasadena, CA
Lisle, IL	Mount Prospect, IL	Payson, AZ
Litchfield, CT	Mountain View, CA	Peoria County, IL
Live Oak, TX	Mundelein, IL	Petaluma, CA
Livermore, CA	Munster, IN	Pismo Beach, CA
Lombard, IL	Murrieta, CA	Philadelphia, PA

**Curriculum Vitæ of
Dr. Jonathan L. Kramer, Esq.**

Pico Rivera, CA	San Pablo, CA	Torrance, CA
Piedmont, CA	San Rafael, CA	Torrington, CT
Piqua, OH	San Ramon, CA	Troy, OH
Pittsburg, CA	Santa Ana, CA	Tuckahoe, NY
Placentia, CA	Santa Barbara County, CA	Tucson, AZ
Pleasant Hill, CA	Santa Barbara, CA	Tumwater, WA
Plymouth, CT	Santa Clara, CA	Tustin, CA
Plymouth, MN	Santa Clarita, CA	Union, CT
Port Townsend, WA	Santa Cruz County, CA	Vacaville, CA
Portland, OR	Santa Cruz, CA	Vail, CO
Portola Valley, CA	Santa Fe, NM	Ventura County, CA
Poway, CA	Santa Maria, CA	Vernon, CA
Preston, CT	San Mateo, CA	Victoria, Texas
Prospect, CT	Santa Monica, CA	Villa Park, CA
Raleigh, NC	Sausalito, CA	Villa Park, IL
Rancho Palos Verdes, CA	Schaumburg, IL	Virginia Beach, VA
Redding, CT	Schererville, IN	Vista, CA
Redlands, CA	Seaside, CA	Wallingford, CT
Redondo Beach, CA	Seattle, WA	Walnut Creek, CA
Rialto, CA	Sebastopol, CA	Walnut, CA
Rio Rancho, NM	Shoreham, MA	Warren, CT
Richmond, CA	Signal Hill, CA	Warrenville, IL
River Oaks, TX	Simi Valley, CA	Waterbury, CT
Riverside, CA	Sistersville, WV	Waterford, MI
Rochester, MI	Solana Beach, CA	Waterford, MN
Rolling Hills Estates, CA	Solon, OH	Watertown, CT
Rolling Meadows, IL	Somers, CT	Watsonville, CA
Roselle, IL	South Gate, CA	Wayne, IL
Roseville, MI	South Lake Tahoe, CA	West Allis, WI
Ross, CA	South Pasadena, CA	West Carrollton, OH
Salem, IL	Southington, CT	West Chicago, IL
San Anselmo, CA	Spokane, WA	West Covina, CA
San Antonio, Texas	Springboro, OH	West Frankfort, IL
San Bernardino Co., CA	St. Charles, IL	West Hollywood, CA
San Bernardino, CA	St. John, IN	West Milton, OH
San Clemente, CA	St. Louis, MO	West Palm Beach, FL
San Diego County, CA	Stafford, CT	Westbrook, CT
San Diego, CA	Sugar Grove, IL	Westmont, IL
San Francisco, CA	Sunnyvale, CA	Weston, CT
San Joaquin, CA	Sutter County, CA	Westport, CT
San Juan Capistrano, CA	Temecula, CA	Wheaton, IL
San Luis Obispo County, CA	Thousand Oaks, CA	White Plains, NY
San Luis Obispo, CA	Thurston County, WA	Willowbrook, IL
San Anselmo, CA	Tiburon, CA	Wilmette, IL
San Marcos, CA	Tipp City, OH	Wilton, CT

**Curriculum Vitæ of
Dr. Jonathan L. Kramer, Esq.**

Windsor Locks, CT
Winfield, IL

Wolcott, CT
Wood Dale, IL

Woodridge, IL
Yorba Linda, CA

**Litigation Where Dr. Kramer
Served as Trial Counsel, Trial Consultant, and/or Expert Witness**

Adelphia Cable v. City of Thousand Oaks (Retained by City)
Alaska National Insurance Co. v. GCI (Retained by Alaska National Ins.)
American Tower v. Bruno (Retained by Bruno)
Armstrong/McEachron v. Cazcom (Retained by Armstrong)
AT&T Wireless v. City of Carlsbad (Retained by City)
AT&T Wireless v. City of San Diego (Retained by City)
Bay Area Cellular v. City and County of San Francisco (Retained by City)
Booth American v. United States Army (Retained by U.S. Department of Justice)
Cox Communications Inc. v. City of Solana Beach (Retained by City)
Crown Castle v. City of Calabasas (Retained by City)
Crown Castle v. City of Malibu (Retained by City)
Crown Castle v. Town of Hillsborough (Retained by Town)
Jonathan Cruson v. TXU Electric Company (Retained by Cruson)
Cudworth v. Midcontinental Communications (Retained by Cudworth)
D.B. Cable v. Kalma Busk (Retained by Busk)
Esborg v. AT&T, et al (Retained by Esborg) CGC16-553614
Evergreen v. San Diego Gas & Electric, et al (Retained by Evergreen)
Extenet Networks v. City of Burlingame (Retained by City)
GTE Mobilnet v. City and County of San Francisco (Retained by City)
Guller v. Trow (Retained by Guller)
Illinois RSA 3 v. Peoria County, Illinois (Retained by County)
In Re: Anthony Skeen Ellsworth (Retained by Bankruptcy Trustee)
Jones Intercable v. City of Chula Vista (Retained by City)
League of California Cities, et al v. FCC (Retained by League of California Cities)
Malencon v. Cox Communications (Retained by Malencon)
Marcus Cable Associates v. City of Glendale (Retained by City)
Mejia-Gutierrez v. Comcast (Retained by intervenor Seabright Insurance Co.)
MetroPCS v. City and County of San Francisco (Retained by City)
New Cingular Wireless v. City of Simi Valley (Retained by City)
NewPath Networks v. City of Davis (Retained by City) 2:10-CV-00236
NewPath Networks v. City of Irvine (Retained by City)
Nextel v. City of San Diego (Retained by City)
NextG Networks v. City of Huntington Beach (Cases 1&2) (Retained by City)
Omnipoint Communications, Inc. v. City of Huntington Beach (Retained by City)
Omnipoint v. Garden City, Michigan (Retained by City)
Omnipoint v. City of Pasadena, CA (Retained by City)
Pacific Bell v. City of Livermore (Retained by City)
Pemerton v. New Towers, LLC (Retained by Pemerton)
People's Union LLC v. T-Mobile (Retained by People's Union LLC)

**Curriculum Vitæ of
Dr. Jonathan L. Kramer, Esq.**

People v. Arzoumanian (retained by Arzoumanian)
Playboy Enterprises v. United States (Retained by FCC and the U.S. Department of Justice)
Qwest v. City of Berkeley (Retained by City)
Qwest v. City of Santa Fe (Retained by City)
Roddy King v. AT&T (Retained by King)
Schaff Dev. Group v. S.E. Fla. Cable, Inc., dba Adelphia Cable (Retained by Schaff)
Sierra East Television v. Westar Cable (Retained by Sierra East)
Skyway Towers v. City of McKinney, Texas (Retained by City)
Skyway Towers v. North Buffalo Township (Retained by Township)
Sprint v. City of La Canada Flintridge (Retained by City)
Sprint v. City of Palos Verdes Estates (Retained by City)
Sunesys, LLC v. City of Huntington Beach (Retained by City)
TelePacific v. Covad/MegaPath (Retained by TelePacific)
T-Mobile v. Peoples Union (Retained by Peoples Union)
T-Mobile et al v. City and County of San Francisco (Retained by City)
T-Mobile v. City of Albuquerque (Retained by City) USDC 1:08 CV-01212
T-Mobile v. City of Gardena (Retained by City)
T-Mobile v. City of Huntington Beach (Cases 1&2) (Retained by City)
T-Mobile v. City of Inglewood (Retained by City) CV09-6961
T-Mobile v. City of Los Angeles (Retained by City) USDC CV-100-2523
T-Mobile v. City of Thousand Oaks (Retained by City)
T-Mobile v. County of Los Angeles (Retained by County)
T-Mobile v. Glen View Club Association (Retained by Glen View)
West Covina v. Charter Communications (Retained by City)

*[A much more complete 50+ page CV is available at
https://telecomlawfirm.com/wp-content/uploads/2018/11/Kramer.whois_.20230523.pdf]*

EXHIBIT F

LORY KENDIRJIAN

SENIOR TELECOMMUNICATIONS PROJECT MANAGER

Agile, technically savvy, and multilingual senior telecommunications project manager with a consistent track record of driving results. Over 13 years of combined technical and managerial experience and a Master of Laws in Telecommunications and IT. Successfully managed processing of 5300 wireless projects ranging from Small Wireless Facilities, Macro Cells, Micro Cells, and DAS. Ability to foster professional relationships with municipalities, wireless carriers, and wireless applicants to ensure that wireless projects get managed correctly, completely, and in a timely manner. Recognized for knowledge pertaining to Federal and State wireless laws, jurisdiction policies, and FCC wireless regulations and timelines. Inquisitive mind capable of understanding advancing technologies.

TELECOM LAW FIRM, P.C. - Los Angeles, CA

Senior Telecommunications Project Manager

August 2018 - Present

- Spearheaded 3,100 complex wireless deployments from inception to completion (40% Macros and 60% SWF)
- Successfully established, managed, and trained a high-performing wireless team within seven months
- Reviewed and approved all work product prepared by my team
- Examined 4G and 5G technology feasibilities and initiated collaboration programs with municipalities to develop winning strategies and policies to handle wireless applications and their technologies
- Mentored various CA jurisdictions on State and Federal regulations, produced and delivered presentations to various cities relating to upcoming State and Federal wireless regulations
- Devised a tracking system for wireless shot clock calculations and slashed manual labor lead time
- Orchestrated upwards of 250 pre-installation and post-installation wireless site technology inspections (including aesthetic/design requirements, ADA compliance, inverse condemnations, power and fiber encroachments, alternative sites analysis, signal capacities, Radio Frequency health and safety analysis, FCC regulatory safety compliance requirements, FAA, OSHA, and GO 95 regulations)
- Spearheaded the research on 47 CA jurisdiction wireless applications for fundamental issues, interim and long-term solutions (analyzed construction, traffic control, structural/wind-loading plans, and photo simulations)
- Prepared training materials and led training sessions for multiple CA jurisdictions on wireless matters ranging from the Spectrum Act 47 U.S. Code § 1455 Wireless Facility Deployment [Section 6409(a)] to, the 2018 FCCs 47 CFR § 1.6002 [FCC SWF Order]
- Partook in wireless expositions and conferences (ex: Wireless West, NATE, CALWA, WIA conferences, and 5G Expos)

Telecommunications Project Manager

December 2014 - August 2018

- Managed upwards of 2200 wireless projects from conception to execution
- Championed the creation of flowcharts for specific wireless processes and procedures
- Gained internal support to operate independently with limited supervision
- Developed internal and external strategies to assist the adoption of aesthetically pleasing wireless solutions while promoting public safety, bearing in mind policy considerations, and Federal and State wireless laws
- Oversaw RFP reviews and produced required responses sought by CA jurisdictions
- Leveraged wireless relationships established through engagements to promote the firm and acquire new revenue
- Engineered à la carte strategies for wireless site inspections to onboard new wireless clients
- Researched and drafted analysis on the substantive and procedural limits on local authority through the Telecommunications Act 47 U.S.C. § 332(c)(7) and 47 U.S.C. § 253
- Negotiated onboarding agreements with the internal departments of the firm and municipalities

Telecommunications Project Coordinator

May 2014 - December 2014

- Conducted independent research, and self-taught wireless processes with minimal training
- Created and updated daily/weekly/monthly project management trackers and reported on milestone achievements along with municipality engagement activities
- Collaborated and managed the day to day activities within the firm's cross-functional teams, jurisdictions, and external third-party wireless applicants, and conducted weekly team status meetings

LAW OFFICES OF VICKEN I. SIMONIAN - Pasadena, CA

Executive Project and Case Manager

March 2011 - May 2014

- Supervised three court runners for hard copy court filings and conducted E-filings
- Created forms, checklists, intake procedures, internal and external policies and procedures
Tracked timelines of all cases, managed lawyer calendars and their demands, and prioritized assignments
- Analyzed case facts, spearheaded research for pretrial motions, and devised trial strategies
- Prepared and E-filed all cases and fees with appropriate courts

EDUCATION

- **Master of Laws (LL.M) in Telecom & IT** (with distinction) **November 2019**
University of Strathclyde – *UK, Scotland*
Dissertation: Federal and Local Government Small Wireless Facilities Policy Frameworks: Using Wireless Siting Applications to Identify and Bridge Competing Goals and Interests
- **Bachelor of Science in Business Administration (B.S.B.A)** **July 2008**
Haigazian University – *Beirut, Lebanon*
Accredited University, U.S. Equivalent BSBA, Association of American International Universities

PROFESSIONAL CERTIFICATES/LICENSES

- **Real Estate Salesperson License** - California Bureau of Real Estate **October 2016**
- **Paralegal Certificate** (with distinction, ABA Approved) - Pasadena City College **December 2014**
- **Management and Leadership Certificate** - University of California Los Angeles (UCLA) **July 2012**

EXHIBIT G
DESCRIPTION OF THE SERVICES

At the direction of the City, TLF shall provide technical and regulatory advice to City concerning applications for telecommunications facilities as follows:

A. Wireless Siting Application Reviews:

1. **Application Reviews:** At the City's request and within TLF's expertise as a wireless site application reviewer, TLF will review wireless siting applications and provide the City with a written analysis as described below).

2. **Wireless Facility Site Memorandum/Memoranda Content:**

a. **Memorandum Regarding Incomplete Application.** Upon receipt of an application by TLF directly from the City, TLF will identify the regulatory classification under which the project should be processed (i.e., Section 6409(a); Small Wireless Facility; major modification; new site; etc.); and will evaluate and identify whether any items that are required in the City's wireless application that are not completed by the applicant. If there are incomplete items, TLF will send the City an "Incomplete Memorandum" by email or an attachment to an email within:

- i. nine (9) calendar days for an initial review of a wireless application that is submitted by the applicant as a small wireless facility; or
- ii. twenty-one (21) calendar days for an initial review of a wireless application that are submitted by the applicant in a category that is not a small wireless facility; or
- iii. nine (9) calendar days for a resubmittal review of a wireless application that was deemed incomplete.

b. **Project Memorandum.** Once an application is determined by the City or deemed by law to be complete, TLF will:

- i. Discuss and analyze Section 6409(a) applicability which includes an eligible facilities and substantial change analysis;
- ii. Discuss and analyze Small Wireless Facilities applicability which includes all six criteria as defined by the FCC;
- iii. Discuss design matters that may reduce the impact of the proposed site configuration;
- iv. Evaluate time, place, and manner considerations for wireless sites located in the public right-of-way;
- v. Assess the planned compliance with federal radio frequency exposure guidelines established by the Federal Communications Commission, and;

Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023

- vi. determine any other wireless site-related issues that TLF, in its experience and opinion, believes to be relevant or helpful to the City's review of the wireless application.
- vii. At City's option, without an additional fee, TLF shall prepare one revision or follow-up to the Incomplete or Project Memorandum. All additional revisions or follow-ups are charged on an hourly basis.

3. Stand-By Power Generator Reviews

a. **Incomplete Memorandum.** Upon receipt of a standby power generator application under AB 2421 by TLF directly from the City, TLF will evaluate and identify whether any items that are required in the City's standby power generator application are not completed by the applicant. If there are incomplete items, the TLF will send the City an "Incomplete Memorandum" by email or an attachment to an email within:

- i. nine (9) calendar days for an initial review of a wireless application that is submitted by the applicant as a standby power generator and TLF shall specify those parts of the application that are incomplete and shall indicate the manner in which they can be made complete, including a list and thorough description of the specific information needed to complete the application;

b. **Project Memorandum.** Once an application is determined by the City or deemed by law to be complete, TLF will:

- i. check each project element against the list of criteria specified in AB 2421 for compliance purposes.
- ii. provide any additional input that may assist the City in processing the project application.

c. **Memorandum Revision:** At City's option, without an additional fee, TLF shall prepare one revision or follow-up to the Incomplete or Project Memorandum. All additional revisions or follow-ups are charged on an hourly basis.

4. Consultation Time:

- a. TLF will provide reasonable consultation by telephone and/or through e-mail with the City per project at no additional cost for the flat fee portion of any project.
- b. For any project where hourly charges apply (i.e., after the flat fee portion of a project), hourly fees for consultations via telephone and/or email will apply.

Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023

It is understood by the parties that every wireless project is unique as to location and design, and some projects may not proceed all the way to an approval or denial, or the project, at a given location, may be moved by an applicant to a different location, which would necessitate an entirely new project review under a separate fee.

B. **Attendance at Meetings:** As requested by City and subject to TLF's prior availability, TLF will attend in-person and video meetings.

C. **General Consultation:** At the City's request, TLF will engage with the City in regard to any non-privileged communications within the competence of TLF, as determined by TLF, in any form on a time availability basis of TLF, and invoice on an hourly basis (including travel time from TLF's office to and from the City if necessary and as requested by the City).

[END OF EXHIBIT G]

EXHIBIT H FEES

TLF reminds the City that the State of California allows local governments to recoup from applicants the City cost of needed professional services. In fact, and as such, expertise rather than simply cost should be the guidance, and Camarillo constituents should not bear the cost of the wireless permitting processes that benefit for-profit communications firms that apply for City permits.

TLF consults with and is responsible to the City. The City is responsible for the collection of applicant fees and the timely payment of TLF's invoices. Payment of TLF's invoices is not contingent upon the City receiving any deposit or reimbursement from any party.

- A. **Flat Fees:** TLF shall perform the services described in Exhibit "G", Section 2, or Section 3 a fixed fee of \$2,710 per project. Project hours are not reported by TLF for the flat fee portion of any flat fee projects.

As a reminder, the FCC allows a jurisdiction to pass through its consulting costs to the applicant. In fact, most jurisdictions do exactly that so that they do not put the processing cost on their constituents, but rather place those costs on the for-profit applicants.

Due to the FCC shot clock as well as related California shot clock time limitations outside of the Permit Streamlining Act, all projects must be submitted to TLF by the City in searchable PDF document format within one (1) calendar day of receipt by the City from the Applicant; provided that if such calendar day falls on a Friday or holiday, the City shall submit such project to TLF the next business day thereafter. Accordingly, TLF urges City to enforce a wireless application requirement that obligates the applicant to tender the entire wireless application, including all exhibits and attachments, in searchable PDF format, as well as in hard copy paper form if desired by the City.

Flat fee projects are billed to the City as a single unit on the first project invoice, which is issued upon submission of TLF's first substantive project memorandum, which may include a memo regarding an incomplete application, a project review memo, or another substantive project-related memo.

The flat fee is fully earned by and payable to TLF once the TLF has provided its first substantive memorandum to the City, even when the project is subsequently cancelled, abandoned, or transferred to a different location. In the event that a project is tendered to TLF by the City but terminated for any reason prior to the issuance of TLF's first memorandum, City shall pay TLF on the hourly basis set out in this Agreement for all time spent by TLF on the project prior to TLF's receipt of City's notice of project termination.

Telecom Law Firm P.C.
Response to RFQ for Wireless Communications Facilities
Due September 15, 2023

- B. **Hourly Fees:** TLF shall perform all services described in Exhibit "G", Sections B and C beyond the initial report and one revision (included in the flat fee), and all other extra services that may not be described in Exhibit "G" but were mutually agreed upon by City and TLF, on an hourly fee basis as follows:

Personnel Rate

Per Partner or Senior Project Manager	\$	360
Per Associate/Of Counsel or Project Manager	\$	300
Per Paralegal or Senior Project Assistant	\$	220
Per Assistant or Project Assistant	\$	134

All time is billed in 0.1-hour (6 minute) units rounded up to the next 0.1-hour unit.

3. **Annual Fee Adjustments.** The flat rate and hourly fees set out in this Agreement shall automatically increase annually should the parties extend this Agreement, in an amount equal to three percent (3%) of the flat rate and hourly fees for the previous year.
4. **Expenses:** City will reimburse TLF for all ordinary costs and expenses reasonably incurred by TLF in performance of the services provided by TLF to City pursuant to this Agreement.

[End of Exhibit H]