



City of Orange
Application for an Eligible Facilities Request (EFR)
6409 Colocation, on the Rooftop of an Existing
Base Station

Project Information and Justification

AT&T is requesting approval of an Eligible Facilities Request (EFR), consistent with Section 6409 (a) of the Middle Class Tax Relief Act, to allow for the colocation of new AT&T wireless equipment on the rooftop of an existing building/base station. The proposed Wireless Telecommunications Facility is for the operation and construction of an unmanned, stealth, wireless telecommunications facility and presents the following project information for your consideration.

Project Name: CLL01157

Project Location

Address: 211 East Chapman Avenue
Orange, CA 92866
APN: 039-252-07
Land Use: Orange Elks Lodge Building Association
Zone: OTMU-15S
General Plan: OTMIX
Site Coordinates: 33.788236, -117.851778

Authorized Project Representative

Sonal Thakur, Eukon Group
65 Post, Suite 1000
Irvine, CA 92618
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Property Owner

Orange Elks Lodge Building Association
POC: Robert Wilson, Vice President
211 East Chapman Avenue
Orange, CA 92866
wilsonNb@aol.com

EukonGroup

Corporate Offices:
65 Post, Irvine, CA 92618
949-55-EUKON Office

New Cingular Wireless PCS, LLC d/b/a AT&T Mobility (“AT&T”) is proposing to collocated a new wireless telecommunications facility (“WTF”) on the rooftop of the Elks Lodge building, to serve residents and businesses in this portion of the community. The presence of this AT&T wireless facility will address a long standing gap in coverage in this portion of the City of Orange, by improving signal quality and capacity within AT&T’s existing wireless network. The wireless facility will help AT&T provide and improve critical wireless services in this area.

AT&T estimates that since introduction of the iPhone in 2007, mobile data usage has increased 360,000% on its network. AT&T forecasts its customers’ growing demand for mobile data services to continue. Customer needs require AT&T to design and maintain its network to provide and improve wireless signal quality and to increase data rates sufficient to stream video. Areas that do not meet this minimal standard, or where wireless service is otherwise compromised, represent service issues that must be addressed.

Specifically, this proposed WTF will help improve AT&T’s wireless services by improving primary coverage and offloading network traffic carried by existing facilities in the area. In addition, faster data rates allow customers to get on and off the network quickly, which produces more efficient use of AT&T’s limited spectrum. By placing the WTF in areas where AT&T’s existing wireless telecommunications facilities are constrained and where AT&T experiences especially high network traffic, AT&T can address the existing and forecasted demand and support 5G speeds in the near future.

Improving signal quality and Increasing data speed is critical to providing the mobile experience customers demand and to manage the unprecedented increase in mobile data usage on AT&T’s network. The Center for Disease Control and Prevention (CDC) tracks the rates at which American households are shifting from landlines to wireless telecommunications. According to the CDC’s latest Wireless Substitution Report, more than 70 percent of Americans rely exclusively or primarily on wireless communications in their homes.¹ In addition, the FCC estimates that 70 percent of all 911 calls are made from wireless devices.² And with AT&T’s selection by FirstNet as the wireless service provider to build and manage the nationwide first responder wireless network, each new or modified facility will help strengthen first responder communications.

AT&T selected the proposed facility as the best available means to address its service objectives in this portion of the City of Orange. The overall site location and design will comply with applicable code provisions, General Plan, and other published siting guidelines. In addition, the proposed facility fully complies with applicable design criteria. The project will involve the placement of panel antennas and associated equipment on a building rooftop behind FRP screening, which will be painted and textured to match the existing building, existing Verizon and T-Mobile facilities. It will not adversely affect the surrounding properties and will have a minimal physical and aesthetic footprint in this area.

¹ See *Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January-June 2018*, available at <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201812.pdf>.

² See *911 Wireless Services*, available at <https://www.fcc.gov/consumers/guides/911-wireless-services>.

Project Description

The proposed unmanned, AT&T wireless telecommunications facility is on the rooftop of the existing Elks Lodge building, located in Historic Old Towne/The Plaza. The Elks Lodge building previously had three separate wireless carriers operating from the rooftop, all with land use entitlements formally approved by the City of Orange. Sprint, Verizon and T-Mobile were all operating on the subject building's rooftop. On April 1, 2020, T-Mobile officially completed its merger with Sprint. T-Mobile then was tasked with auditing and reviewing all of the Sprint and T-Mobile wireless site portfolios, to determine which sites would be modified, retained, and which would be decommissioned. The Sprint rooftop facility on the Elks Lodge building decommissioned in 2023, and T-Mobile would continue to operate on the rooftop.

AT&T's signal strength and network coverage in the Old Town Plaza area, and associated outskirts is poor. According to AT&T's RF Engineers, AT&T has been attempting to provide coverage to this area of town for over a decade. However, it has been challenging to find a viable candidate to locate and construct a macro site in this area of the City, due to various issues, including, but not limited to, landlord interest, construction feasibility, City easement approvals, and AT&T RF Engineering approval (meeting RF engineering coverage objectives).

Due to the T-Mobile and Sprint merger, Sprint gave the Elks Lodge notice that they would be decommissioning their equipment (T-Mobile would continue to operate on the rooftop). The Elks Lodge therefore reached out to AT&T Mobility management, directly, to advise that Sprint would be vacating their lease area. Several Elks Lodge members, visitors and residents of the Old Town and Orange area are AT&T customers. They have noticed they are not able to get a strong signal and coverage in the area, compared to other Elks Lodge members, friends and colleagues who are Verizon and T-Mobile customers, and are able to obtain strong reliable coverage in the Plaza and larger Old Town/City area. This is directly due to the presence of Verizon and T-Mobile having macro facilities on the Elks Lodge building.

Old Town is a major destination place that generates a lot of vehicular and foot traffic, from residents, businesses, Chapman University students, and other visitors. Aside from the daily draw and appeal of the Historic Old Town restaurants and shops, annual festivals and events like the Orange Plaza Rotary Annual Classic Car Show, City of Orange Treats in the Streets and Christmas Tree Lighting Ceremony, and the International Street Fair, continue to generate extremely large volumes of people visiting the Plaza and this area of the City of Orange. AT&T, being one of the major wireless carriers, therefore needs to have strong coverage and signal in their network, to be able to meet the demands of the customers visiting this area of the City.

With Sprint's departure and decommission from the Elks Lodge, with three wireless carriers operating, AT&T is now able to locate equipment where Sprint was previously operating. Sprint equipment was screened behind FRP material, at the middle of the rooftop. Verizon's equipment is behind FRP screening at the south east portion of the roof; T-Mobile's equipment is at the northwest corner/end of the building's rooftop.

AT&T is proposing to locate equipment in the vacated Sprint location. Additionally, AT&T proposes to expand the FRP screened lease area by an additional 3'x3', to match size and dimensions of the the expanded lease area that T-Mobile was approved for (and currently has constructed and on-air), at the northeast corner of the Elks Lodge building rooftop.

This proposed rooftop colocation, that utilizes the lease area of a previously operating carrier, now decommissioned, employs the least intrusive means of providing much needed coverage and signal to the AT&T network, and this area of the City. AT&T's RF Engineers are able to obtain a great line of sight at this rooftop elevation and location, and are allowed the same/equitable rights to develop and advance their network, as the City currently entitled to the two other major wireless carriers: Verizon and T-Mobile.

AT&T WIRELESS PROPOSES TO INSTALL A WIRELESS COMMUNICATIONS FACILITY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- REMOVE AND REPLACE (1) EXISTING FRP SCREEN ON ROOFTOP
- (6) PROPOSED AT&T PANEL ANTENNAS ON ROOFTOP
- (6) PROPOSED AT&T RRUS ON ROOFTOPS
- (6) PROPOSED RRUS AT BASEMENT LEVEL
- (1) PROPOSED AT&T DC50 SURGE SUPPRESSORS AT BASEMENT LEVEL
- (3) PROPOSED AT&T DC9 SURGE SUPPRESSORS AT ANTENNAS
- (1) PROPOSED AT&T GPS ANTENNAS ON ROOF TOP
- (1) PROPOSED AT&T POWER PLANT AT BASEMENT LEVEL
- (1) PROPOSED AT&T BATTERY CABINET AT BASEMENT LEVEL
- (2) PURCELL CABINETS AT BASEMENT LEVEL
- (1) CIENA PANEL AT BASEMENT LEVEL
- (1) TELCO BOX AT BASEMENT LEVEL
- (1) ELECTRICAL PANEL AT BASEMENT LEVEL

AT&T's minimal equipment, in the decommissioned Sprint PCS lease area location, will be screened from view and consistent with the existing and previously proposed aesthetics of the building. The minor modifications proposed to locate AT&T's equipment and screen the equipment from view do not result in negatively impacting any public views, or the existing degree and fabric of the historic Elks Lodge rooftop and overall building. It does not result in impacting the degree or level of concealment currently and previously approved for other wireless carriers (3 carriers) to operate from the building's rooftop. AT&T's proposed project scope does not require or result in any excavation, only proposes 3 cabinets, and utilizes an old existing lease area spot abandoned by Sprint PCS. The proposal is consistent with the criteria and requirements of the Eligible Facilities Request Act (Section 6409 (a)- Wireless Facility Siting, Middle Class Tax Relief Act)

This employs the least intrusive means of providing much needed signal and coverage to the AT&T network, in this area of the City of Orange. Locating on a commercial rooftop, behind FRP screening is superior to collocating on an existing monopalm tower at grade, from an aesthetic standpoint. Additionally, monopalms limit the amount of equipment that AT&T's RF engineers can install on the tower, which are needed to get the best coverage and signal possible, and work with the existing AT&T wireless facilities in the network and surrounding area- so that signal and calls can be handed off to one another seamlessly, without dropping.

The facility location was chosen to fill a specific coverage gap in AT&T's wireless network in Orange. AT&T's RF Engineers are trying to improve the existing poor signal and coverage in this tourist/destination commercial corridor of the City of Orange. Old Town Orange, which includes the Historic Plaza, as well as area outside of the plaza, generates a lot of traffic and visitors, who frequent the restaurants, commercial establishments, City Hall, Chapman University, professional

offices or the overall Old Town area surrounding the plaza. Installation of the AT&T site on the Elks Lodge rooftop (locating in the space previously utilized by Sprint PCS), will drastically improve coverage in building, in-vehicle and pedestrian level coverage levels, to the north, south, east and west. Coverage maps from AT&T's Engineering department have been submitted for the City's reference, which show the existing conditions, coverage to be provided by the proposed site, and how deployment of this site would work with the AT&T network in this part of the City, by receiving and handing off calls and signal between other AT&T sites. The installation of proposed AT&T Site CLL01157, on the Elks Lodge rooftop building would improve and strengthen coverage and signal levels at all levels: in-building, in-vehicle, and pedestrian levels. Coverage strength and levels are improved along Chapman Avenue and Glassell Street, and extend all the way to Sycamore Avenue to the north, Culver Avenue to the South, North Cypress Street to the west, and Cambridge Avenue to the East. By strengthening and filling this coverage gap in the AT&T network and city, it will also assist with seamless transferring of calls and data from one tower to another, minimizing dropped calls or signal, as AT&T customers typically experience when in or near the Orange Plaza area of the City, and the immediate fringes and outskirts. Additionally, the presence of AT&T's wireless facility on the Elks Lodge rooftop will also provide FirstNet service, which is the only network built with and for first responders, and those who support them.

Historic Preservation Design Standards (HPDS)

AT&T's third party consultant, Environmental Assessment Specialists, Inc. (EAS) submitted FCC Form 621 and required documentation, to the State of California's Department of Parks and Recreation, Office of Historic Preservation. On May 29, 2024, Julianne Polanco, State Historic Preservation Officer, reviewed AT&T's documentation showing compliance with Section 106 of the National Historic Preservation Act of 1966.

The State Historic Preservation Officer, Julianne Polanco determined that AT&T's proposed rooftop colocation **will NOT** adversely affect historic properties.

Alternative Sites Analysis

AT&T analyzed and considered multiple parcels and locations to construct a wireless macro site that would address the AT&T network needs and objectives, for the longstanding gap in coverage in this area of the City of Orange. Several locations were not viable for one reason or another. The current proposed location to colocate (with Verizon and T-Mobile) on the Elks Lodge building is the most optimal and preferred.

- **10 Plaza Square (Masonic Lodge):** AT&T initially submitted an application to propose a wireless facility on the rooftop of this restaurant location in the plaza. However, the project was deemed to be infeasible, based on comments issued by the City's Public Works Department- Real Property Agent. A new transformer was installed on the south side of the parking lot trash enclosure. It was sized for the current needs for the restaurants at 109 and 111 South Glassell, because the owner of 10 Plaza Square did not want to partake, at the time. The Real Property Agent for the City advised that it would now, therefore need to be upsized, at the cost of the restaurant owner. A new SCE easement would be required from the transformer to a new meter for the AT&T wireless equipment, in the utility closet/meter room at 10 Plaza Square. The easement would be in the City parking lot, alley and sidewalk in the plaza. The alley is encumbered with easements,

utility lines and cannot accommodate any more easements. Additionally, the easement would need to be granted to SCE, not the property owner of 10 Plaza Square. Also, the Real Property Representative advised that no conduit would be allowed to be mounted to the building's exterior; it must be inside the building in a meter room or similar, to the roof for the cellular equipment. Given these substantial hurdles, this location was ultimately deemed to be infeasible.

- **130 N. Lemon (City Metrolink/Lemon Parking Structure):** This City owned building is not a designated historical building, but is located in the historic district. Initially, City Staff (Public Works and planning) discussed and considered preliminary designs for AT&T locating on the building's rooftop, in a faux brick staircase/elevator shaft. However, after more consideration and discussion, City of Orange Public Works and Planning staff advised that they ultimately do not want to allow any wireless facilities on this structure. They felt that it would adding to this structure could potentially open the floodgates for the rest of the buildings in Old Towne (not designated as historic) to be modified and potentially stray away from the existing historic character of the overall area. The City does not want to allow any type of additions or modifications to the City Metrolink/Lemon Parking Structure- all development types, not just wireless.
- **407 E. Chapman (City Main Library):** Dish Wireless has already taken the available cupola spot for wireless in the Main Library, and in lease negotiations with the City of Orange. This is not a viable location for AT&T. AT&T's RF Engineers asked if a second cupola could be added to the library building's rooftop. Eukon Group advised that the City would not support this, and this was further confirmed by City of Orange planning staff. The City advised they do not want a second carrier on the roof due to overcrowding and overall aesthetics. The Main Library was designed with a lot of work and forethought; the building was designed and constructed with a space for a wireless carrier to utilize. The Main Library is a prominent and noteworthy building that the City and residents have a lot of pride in. The existing architecture and design does not lend itself to colocation for a second wireless carrier, and it would not be well received and supported by the City.
- **Monoflagpole at Main Library-** AT&T's RF Engineers inquired if a stealth flag pole(s) could be installed somewhere at the Main Library. Both Eukon Group and City Staff advised that would not be appropriate and supported, in light of the existing flags at this location and the lack of space.
- **176 S. Grand Avenue (City of Orange- Old Fire Headquarters):** Eukon Group and AT&T approached the City of Orange to see if a stealth flag pole(s) could be proposed on the property of the old Fire Station Headquarters. The City advised this was not feasible, as the City is still discussing and analyzing what this building and parcel will be used for in the future. There is discussion to potentially demolish the building, but the plans for new development are still unknown and being discussed. With these unknowns, allowing any wireless or new development on this parcel will not be supported for the time being.
- **300 East Chapman Avenue (City Hall):** AT&T looked at the potential of locating stealth flag poles on the sides of the City Hall building or even in the front grass area along

Chapman Avenue. Planning Staff advised that T-Mobile is already utilizing the flags on the west side of the building, and the City would not support any additional flag poles on the property, as too many flags on the City Hall building would result in an odd aesthetic.

Project Objectives

To close a Significant Gap in this area, any combination of the following reasons may apply:

- Coverage: No Service, or insufficient Service in the area (Good, Average, or Marginal) and can apply specifically to the type of service provided (Voice or Data – GSM, 3G, 4G). Specifically, this proposed location addresses the following needs:
 - Upgrading LTE coverage from predominantly Marginal levels to Good signal levels.
 - Reducing the incidence of poor call quality or dropped calls when moving from an outdoor setting to an indoor setting.

- Capacity: Existing service is insufficient to meet existing demand by customers in and traversing through the area. Existing facilities servicing the area are overloaded preventing service, dropped calls or complete denial of service during peak usage hours.

- Quality: Service exists but strength of signal is weak, scarce or inadequate for use.

All the points above establish a Significant Gap in the coverage of service provided by AT&T. In this specific case, this location was selected because AT&T Radio Frequency (RF) engineers have identified a capacity gap in the area around the intersection of Chapman Avenue and Glassell Street, in the Old Town Plaza. AT&T's RF engineers seek to provide coverage to the surrounding commercial, residential and amusement park areas. The proposed site seeks to reduce network stress on the existing AT&T network. As a high-traffic area in commercial, amusement park, destination place corridor, and residential neighborhood, this area is experiencing an unusually high demand for service, as shown on the RF Coverage Maps. Currently there is lack of consistent Good and Average levels of coverage, which means the user experience is poor and/or spotty in the area. This new wireless telecom facility is the least intrusive option that will give relief to surrounding facilities and improve overall service in the area for both Data and Phone service. Because of the centrality of the coverage gap, and the specific distance requirements needed to prevent signal interference, AT&T selected the present site as the least-intrusive means of addressing the capacity gap.

The current existing levels of coverage in this area of the city are at poor and marginal levels. With the deployment of the proposed monopine tower, coverage and signal will be dramatically improved, such that strong coverage and signal is achieved at all levels of service. A strong signal will be provided to pedestrians outdoors, drivers in their vehicles, and individuals indoors in their houses, offices or other buildings. Coverage maps showing the existing signal and coverage,

compared with levels that will be provided after installation of the wireless facility have been submitted as part of this application.

Safety – RF Emissions FCC Compliance

The FCC regulates RF emissions to ensure public safety. Standards have been set based on peer-reviewed scientific studies and recommendations from a variety of oversight organizations, including the National Council on Radiation Protection and Measurements (NCRP), American National Standards Institute (ANSI), Institute of Electrical and Electronics Engineers (IEEE), Environmental Protection Agency (EPA), Federal Drug Administration (FDA), Occupational Safety and Health Administration (OSHA), and National Institute for Occupational Safety and Health (NIOSH).

Although the purview of the public safety of RF emissions by the FCC was established by the Telecommunications Act of 1996, these standards remain under constant scrutiny. All AT&T cell sites operate well below these standards, and the typical urban cell site operates hundreds or even thousands of times below the FCC's limits for safe exposure. AT&T has submitted an RF Certification Letter and EME Report (prepared by an independent third party RF consultant) confirming the proposed project site will be compliant with the FCC guidelines and standards regarding all health and safety regulations.

The proposed AT&T stealth, rooftop colocation (EFR 6409) is well designed, utilizes the decommissioned Sprint PCS location and the least intrusive means of providing wireless coverage to the AT&T network and City of Orange. On June 6, 2022, AT&T submitted this project to the City of Orange, for Preliminary Application Review (MNSP 1170-24). On June 22, 2024, the City's Planning Division deemed the application complete, and advised that an application for a Minor Site Plan Review Design Review Committee.

We respectfully request the City of Orange approve the submitted project, and look forward to working with you towards its successful completion and approval.

Sincerely,

Sonal Thakur
Authorized AT&T Representative

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EukonGroup

an SFC Communications, Inc. company