



City of Costa Mesa

Inter Office Memorandum

TO: CITY COUNCIL, PLANNING COMMISSION
CC: TOM HATCH, BARRY CURTIS, AND JENNIFER LE
FROM: WILLA BOUWENS-KILLEEN, ZONING ADMINISTRATOR *WBR*
DATE: NOVEMBER 9, 2017
SUBJECT: ZONING ADMINISTRATOR DECISION(S)

This is to advise you of the following decision(s) made by the Zoning Administrator within the last week. Project descriptions have been kept brief for this notice. Please feel free to contact me by e-mail at willa.bouwens-killeen@costamesaca.gov if you have any questions or would like further details.

ZA-16-40 **1151 GLENEAGLES TERRACE**

A request to build three modular retaining block walls within the 10-foot setback from the bluff crest line. The terraced block walls are 3 feet, 3 feet, and 4 feet in height and are located 15.3 feet, 20.3 feet, and 25.3 feet respectively from the bluff crest. The design of the block walls will mimic the natural color of the existing landscape comprised of drought tolerant plants.

Approved, subject to conditions of approval.

Comments received: None.

ZA-17-40 **400 MERRIMAC WAY**

A request to install a small cell network on top of a Southern California Edison streetlight pole with RRUs and antennas inside a radome that is 48 inch in height and 18 inch in diameter. The installation will require the removal and replacement of the existing pole and an underground utility pull box for fiber and power to the new pole.

Approved, subject to conditions of approval.

Comments received: None.

ZA-17-41

2600 HARBOR BOULEVARD

A request to install a small cell network on top of a Southern California Edison streetlight pole with RRUs and antennas inside a radome that is 48 inch in height and 18 inch in diameter. The installation will require the removal and replacement of the existing pole and an underground utility pull box for fiber and power to the new pole.

Approved, subject to conditions of approval.

Comments received: None.



CITY OF COSTA MESA

P.O. BOX 1200 • 77 FAIR DRIVE • CALIFORNIA 92628-1200

DEVELOPMENT SERVICES DEPARTMENT

November 9, 2017

Lea and William Lowe
1151 Gleneagles Terrace
Costa Mesa, CA 92627

**RE: ZONING APPLICATION ZA-16-40
MINOR CONDITIONAL USE PERMIT TO BUILD THREE MODULAR
RETAINING WALLS WITHIN THE 10-FOOT SEBACK FROM THE BLUFF
CREST
1151 GLENEAGLES TERRACE, COSTA MESA**

Dear Mr. and Mrs. Lowe:

City staff's review of your zoning application for the above-referenced project has been completed. The application, as described in the attached project description, has been approved, based on the findings and subject to the conditions of approval and code requirements (attached). The decision will become final at 5:00 p.m. on November 16, 2017, unless appealed by an affected party, including filing of the necessary application and payment of the appropriate fee, or called up for review by a member of the Planning Commission or City Council.

If you have any questions regarding this letter, please feel free to contact the project planner, Johnwilly Aglupos, at either johnwilly.aglupos@costamesaca.gov or 714.754.5692.

Sincerely,

WILLA BOUWENS-KILLEEN
Zoning Administrator

Attachments: Project Description, Analysis, Findings, Conditions of Approval, Code Requirements, Applicant Letter, and Plans.

cc: Engineering
Fire Protection Analyst
Building Safety Division

PROJECT DESCRIPTION

Location

The property is zoned R1 (Single-Family Residential) and has a General Plan land use designation of Low Density Residential. Abutting the property and across Gleneagles Terrace and Aviemore Terrace are residentially zoned and developed properties. The site contains a single family residence with an existing deck and other improvements that extend past the bluff crest, overlooking Talbert Regional Park and the Pacific Ocean.

Proposed Project

The applicant requests to build three modular retaining walls within the 10-foot setback from the bluff crest. The retaining wall heights are shown to be 3 feet, 3 feet, and 4 feet, located 15.3 feet, 20.3 feet, and 25.3 feet away from the bluff crest, respectively. The design of the retaining walls will mimic the natural color of the proposed drought tolerant landscaping.

The applicant has submitted this application because, according to the applicant, the ice plant and ivy that existed on the slope when they purchased the house was messy and provided refuge for rats and ground squirrels. The applicant was required to install plant materials that would help screen and soften the previously approved deck and improvements but was unsuccessful because the soil quality failed to support the plants. Therefore, terracing the slope and replacing the soil, as proposed, will allow an appropriate growing environment for the required landscaping.

Pursuant to Municipal Code Title 13, Section 13-34, a minor conditional use permit is required to construct closer than 10 feet from a bluff crest provided that the building or structure does not (a) endanger the stability of the slope, (b) substantially interfere with access for fire protection; and (c) detract from the visual identity and integrity of the bluffs.

ANALYSIS

Slope Stability

To ensure that proposed retaining walls have sufficient structural support that will not endanger the stability of the slope, a geotechnical study was required by staff and produced by a third party, Geo Environ. This study provides site specific recommendations to address the necessary support structures for the new retaining walls. According to the geotechnical engineer, the plan construction and development of the site is considered feasible in that:

- a. The surface and subsurface soil will be adequate for the support of the structure and any fill soils proposed for the site;

- b. The proposed structure, grading and development will not cause adverse safety hazards or instability to the adjacent properties or structures;
- c. The site has very expansion potential in accordance to a laboratory expansion test;
- d. The impacting site is grossly and surficially stable; and
- e. The site is not susceptible to liquefaction.

As conditioned, the applicant and contractor shall adhere to the geotechnical study recommendations including but not limited to the method, dimensions, and any stipulations of the presence of experts on site during construction.

Fire Protection

Access for fire protection will not be compromised since a minimum five-foot setback is shown on one side of the property with a three-foot setback on the other side and there is access from Aviemore Terrace to the rear of the property. A condition of approval is included to require that the side setbacks remain free and clear from obstruction on both sides of the home so that emergency responders have clear and open access to the back of the residence as well as the bluffs.

Design

Planning staff worked with the applicant to provide a design that allows for a compatible and harmonious relationship between the proposed retaining walls and the existing bluff, so that the retaining walls do not detract from the visual identity and integrity of the bluffs. Currently, the existing bluff slope is approximately 2:1 (50%); consequently, the proposed height and number of walls in conjunction with their placement will be a 1:1 (45%) slope which will closely mirror the existing bluff slope. In addition, the proposed walls will minimize the amount of cut and fill done to the site and allows replacement of soil between the retaining walls to increase the likelihood of plant life thriving. (See site cross section attached).

To further complement the retaining walls and provide a colorful and attractive bluff, the applicant is proposing drought tolerant and California native flowering plants. Plants and groundcovers, such Mexican Bird of Paradise, *Grindela stricta venulosa*, *Erigeron glaucus* 'Wayne Roderick' daisy, and *Salvia* 'Dara's Choice', will grow up against or cascade down the wall.

Conditions of approval are included limiting the maximum exposed wall height along the finished grade to no more than four feet; that the retaining walls be spaced according to the site plan; and that the area between the retaining walls shall only be used as planting areas – no other activity may occur in the slope area. Additionally, plant materials are limited to decorative materials – no food crops are permitted -- and activity in this area is limited to only that necessary to install and maintain the plants. Therefore, the placement,

height, and color of the walls accompanied by the proposed plant palette will not detract from the visual identity and integrity of the bluffs.

General Plan Consistency

The City's 2015-2035 General Plan ensures that development decisions and improvements to public and private infrastructures are consistent with the goals, objectives, and policies of the City.

- *CD-5.1 Preserve and optimize natural views and open spaces in Costa Mesa.*
- *CD-5.2 Control the visual impacts of new development on natural views of the coast and the wetlands.*

While the project is requesting to encroach over the bluff crest, the applicant has proposed appropriate wall placements, height, and color as well as plant selections per City's Landscape standards to minimize any aesthetic and view impacts.

FINDINGS

A. The information presented complies with Costa Mesa Municipal Code Section 13-29(e) in that:

1. There will be a compatible and harmonious relationship between the proposed improvements and the site development, and use(s), and the building and site developments, and uses that exist or have been approved for the general neighborhood by proposing appropriate wall placements, height, and color to closely mimic the existing bluff slope; introducing plants to further screen the walls; and prohibiting any use of the area either than as a passive planting area.
2. Safety and compatibility of the design of buildings, parking area, landscaping, luminaries, and other site features which may include functional aspects of the site development such as automobile, emergency personnel, and pedestrian circulation have been considered and will not be affected by the new structure.
3. The structure complies with performance standards described elsewhere in the Zoning Code. All development standards are met and the proposed improvements will be appropriately landscaped.
4. The proposed additions are consistent with the General Plan, specifically Community Design Element Objectives: CD-5.1 and CD-5.2.
5. This zoning application is for a project-specific case and is not to be construed to be setting a precedent for future development.

B. The information presented complies with Costa Mesa Municipal Code Section 13-29(g)(2) in that:

1. The proposed retaining walls are compatible and harmonious to the surrounding developments and will not be materially detrimental to other developments within the area because the retaining walls will maintain the same bluff topography; will be landscaped with appropriate plant materials; and will not hinder the neighboring structures.
2. Granting the Minor Conditional Use Permit will neither be detrimental to the health, safety and general welfare of the public within the immediate vicinity nor will it endanger the stability of the slope because the new structures will be required to comply with all requirements of the California Building Code and the proposed recommendations within the geotechnical engineering investigation. Additionally, adequate access will remain available so that access for fire protection is maintained.
3. Granting the minor conditional use permit will not allow a use, density or intensity which is not in accordance with the General Plan designation for the property. The retaining walls will not alter the density or intensity of the site.

C. The project has been reviewed for compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the City environmental procedures, and has been found to be exempt under Section 15301, Existing Facilities, of the CEQA Guidelines.

CONDITIONS OF APPROVAL

- Plng
1. The project shall be limited to the type of improvements as described in this staff report and in the attached plans. Any change in the use, size, or design and / or location of the walls shall require review by the Planning Division and may require an amendment to the Minor Conditional Use Permit.
 2. The maximum exposed wall height along the finished grade shall be no more than 4 feet and the walls shall be spaced according to the site plan
 3. The space between retaining walls shall not be intended for any use other than passive, decorative landscaping. No food crops shall be permitted and any activity, other than maintenance of the area, is prohibited.
 4. The geotechnical study and recommendations, provided by Geo Environ, to address the necessary support structures for the new block walls shall be adhered to.
 5. The applicant shall contact the Planning Division to arrange for planning inspection of the site prior to Building final inspection. This inspection is to confirm that the conditions of approval and Code requirements have been satisfied.
 6. All construction-related activity shall be limited to between the hours of 7 a.m. and 8 p.m., Monday through Friday, and 8 a.m. to 6 p.m. Saturday. Construction is prohibited on Sundays and federal holidays.

Exceptions may be made for activities that will not generate noise audible from off-site, such as painting and other quiet exterior work.

7. The applicant shall defend, indemnify, and hold harmless the City, its elected and appointed officials, agents, officers and employees from any claim, action, or proceeding (collectively referred to as "proceeding") brought against the City, its elected and appointed officials, agents, officers or employees arising out of (1) City's approval of the project, including but not limited to any proceeding under the California Environmental Quality Act. The indemnification shall include, but not be limited to, damages, fees and/or costs awarded against the City, if any, and cost of suit, attorney's fees, and other costs, liabilities and expenses incurred in connection with such proceeding whether incurred by the applicant, the City and/or the parties initiating or bringing such proceeding. This indemnity provision shall include the applicant's obligation to indemnify the City for all the City's costs, fees, and damages that the City incurs in enforcing the indemnification provisions set forth in this section.
8. If any section, division, sentence, clause, phrase or portion of this approval is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions.
- Bldg 9. Provide soils report. The soils report shall address the manner of how to protect the slop from erosions and maintain ground stabilization.
10. Provide structural analysis and plans prepared by a license California Civil Engineer.
11. Direction of existing drainage shall not be altered unless plans have been submitted and approved.
12. All site plans shall include an accurate and precise drawing of all building footprints and property line locations for the entire project site. All buildings shall be annotated with its corresponding address and suites if applicable.

CODE REQUIREMENTS

The following list of federal, state, and local laws applicable to the project has been compiled by staff for the applicant's reference. Any reference to "City" pertains to the City of Costa Mesa.

- | | |
|--------------|--|
| Plng | <ol style="list-style-type: none">1. Approval of the zoning application is valid for <u>one</u> year from the effective date of this approval (November 16, 2017) and will expire at the end of that period (November 16, 2018) unless applicant establishes the use by one of the following actions: 1) obtains building permits for the authorized construction and initiates construction; and/or 2) obtains a business license and/or legally establishes the business. If the applicant is unable to establish the use/obtain building permits within the one-year time period, the applicant may request an extension of time. The Planning Division must receive a written request for the time extension prior to the expiration of the zoning application.2. Permits shall be obtained for all signs according to the provisions of the Costa Mesa Sign Ordinance.3. The side setbacks shall remain clear and unobstructed on both sides so that emergency responders have clear and open access to the bluffs below. |
| Bldg | <ol style="list-style-type: none">4. Comply with the requirements of the following adopted codes: 2016 California Building Code, 2016 California Electrical code, 2016 California Mechanical code, 2016 California Plumbing code and 2016 California Energy Code (or the applicable adopted, California Building code California Electrical code, California Mechanical code California Plumbing Code and California Energy Code at the time of plan submittal or permit issuance) and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa. Requirements for accessibility to sites, facilities, buildings and elements by individuals with disability shall comply with chapter 11B of the 2016 California Building Code. |
| Eng. | <ol style="list-style-type: none">5. A Construction Access Permit and deposit of \$730 will be required by City of Costa Mesa, Engineering Division prior to start of any on-site work, necessary during construction for street sweeping and to guarantee replacement costs in case of damage to existing public improvements. |
| Fire | <ol style="list-style-type: none">6. Comply with all Fire Code requirements. |
| Bus.
Lic. | <ol style="list-style-type: none">7. All contractors and subcontractors must have valid business licenses to do business in the City of Costa Mesa. Final inspections, final occupancy and utility releases will not be granted until all such licenses have been obtained. |

Landscape by Hiro, Inc.

www.landscapebyhiro.com

Lic. #738264

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Huntington Beach, CA 92646

(714) 968-0601

FAX: (714) 968-1337

e-mail:landscapebyhiro@yahoo.com

November 2, 2017

PROJECT DESCRIPTION

Location

1151 Gleneagles Ter.
Costa Mesa, Ca. 92627

This property is located at 1151 Gleneagles Terrace and is backed up onto Aviemore Terrace. This is an R1 (single family residential) zone with an existing one-story single-family residence and attached garage. The property is sided by single-family single-story properties also zoned R1 that also abut Aviemore Terrace.

Proposed Project

We are proposing to build a retaining block wall (4'H) and two (2) terraced block walls (3'H) within the owner's property lines and within the 10-foot setback from the bluff crest. Code requires a minor conditional use permit to build any structure closer than 10 feet from the bluff crest.

We will not be endangering the stability of the slope, substantially interfering with access for fire protection, nor detract from the visual identity and integrity of the bluffs.

The proposed walls will be built using structurally engineered plans with materials that will complement the existing deck overhead. Walls will be accented with California Native drought tolerant planting.

Sincerely,

Hiro Kawachi

Hiro Kawachi

Landscape by Hiro, Inc.

02 November 2017

John Willy Aglupos
Assistant Planner
City of Costa Mesa
P.O. Box 1200
77 Fair Drive
Costa Mesa, CA 92628

My wife and I are requesting the City of Costa Mesa's approval to remodel our rear yard. The rear portion of our property is a slope that extends to the road below us, Avimore Terrace, and has proven to be difficult to maintain attractive plants. We have lived in this house since 1999 and have accomplished several modifications to the house since moving in. We added a third car garage, remodeled the kitchen, the bathrooms, and the living room, as well as adding a patio and outside living area. When we moved in, the rear yard was covered with a mixture of ice plant and ivy. These plants were messy and provided refuge for rats and ground squirrels.

We have repeatedly attempted to grow shrubs at the top of the bluff and on the slope to conform to the city's approval of landscaping for our deck and outdoor living area, but the poor soil caused the plants to fail. The soil is hard pack clay at the top with porous sandy soil extending from the mid-point to the bottom of the slope.

To provide an appropriate growing medium for plants on the slope, we wish to terrace the slope and replace much of the current poor soil with better soil. Terracing will also provide better control of the soil to prevent slippage on the slope. Plants being considered will consist of drought-tolerant plants like those on the submitted planting list. Every effort will be made to provide a colorful and attractive planting, including planting Mexican Bird of paradise which will grow vertically upon the wall.

The proposed wall would be approximately 4 feet in height and set back from the street approximately 5 feet. The height of the wall and the set-back is to clear the city's easement along the edge of the street (approximately 4 feet wide) and the width of the storm drain vault. The second terrace wall would be located approximately 5 feet above the first wall and would be approximately 3 feet in height. The third terrace wall would be located approximately 5 feet above the second wall and would be approximately 3 feet in height.

The terrace walls would extend from the property's western boundary to approximately 6 feet from the property's eastern boundary. This would provide a required access path for emergency personnel along the eastern boundary of the property and provide service access to the buried electrical and telephone lines located in this area.

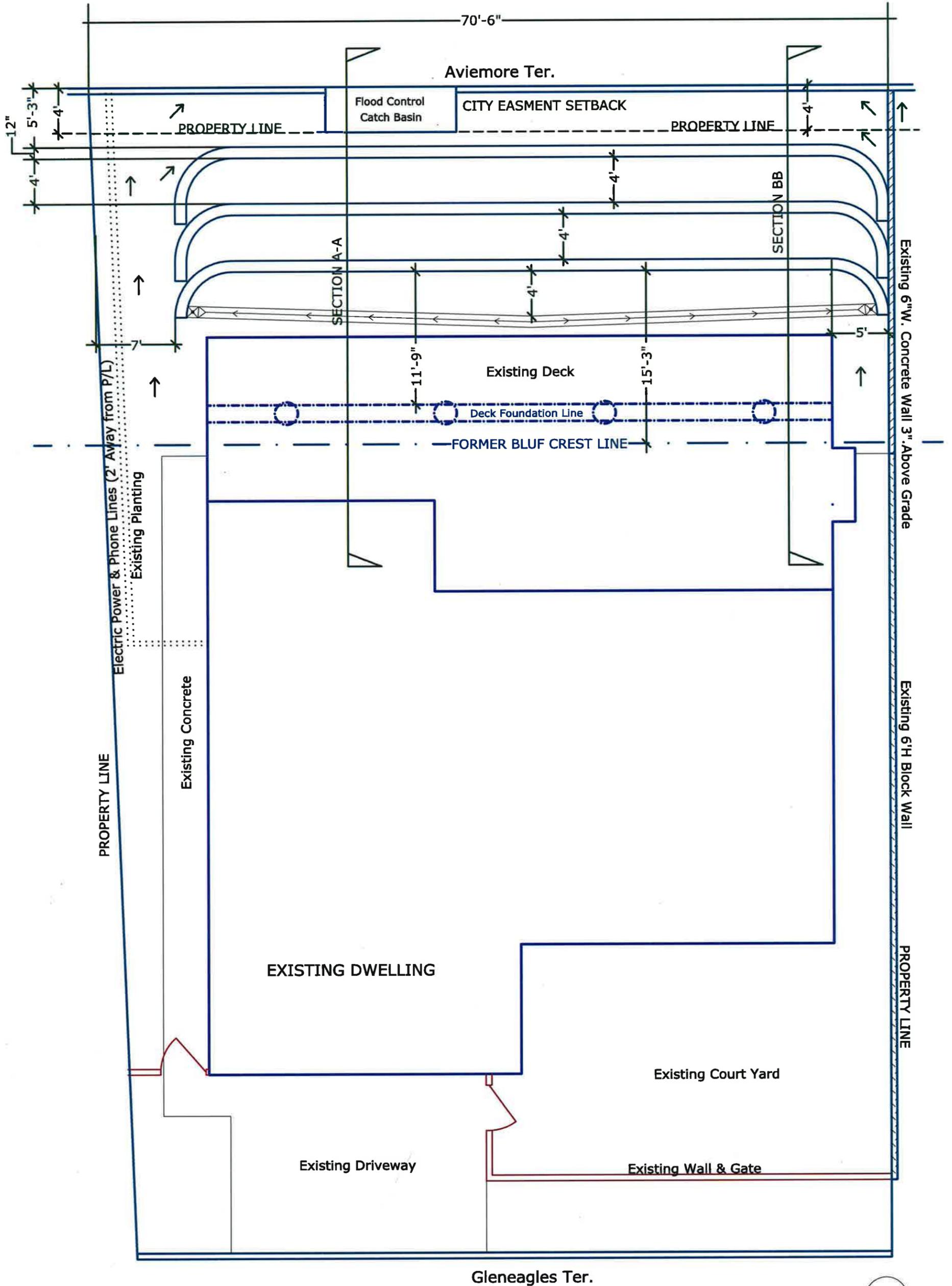
We could replant the slope with ice plant and/or ivy and be identical to the other houses in the tract, but these plants do not provide good soil retention and harbor pests as previously noted. We wish to provide a colorful, attractive appearance for our neighbors as well as for our enjoyment.

We hope that the city will concur with our request and provide authorization for the remodel requested. If additional information is desired and/or required, please contact us.

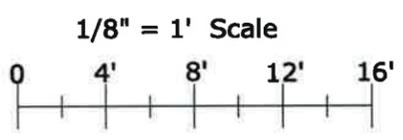
Thank you for your consideration of our request,

Bill & Lea Lowe

Bill and Lea Lowe
1151 Gleneagles Terrace
Costa Mesa, CA 92627-4030
949-631-8630
wwlowe@earthlink.net



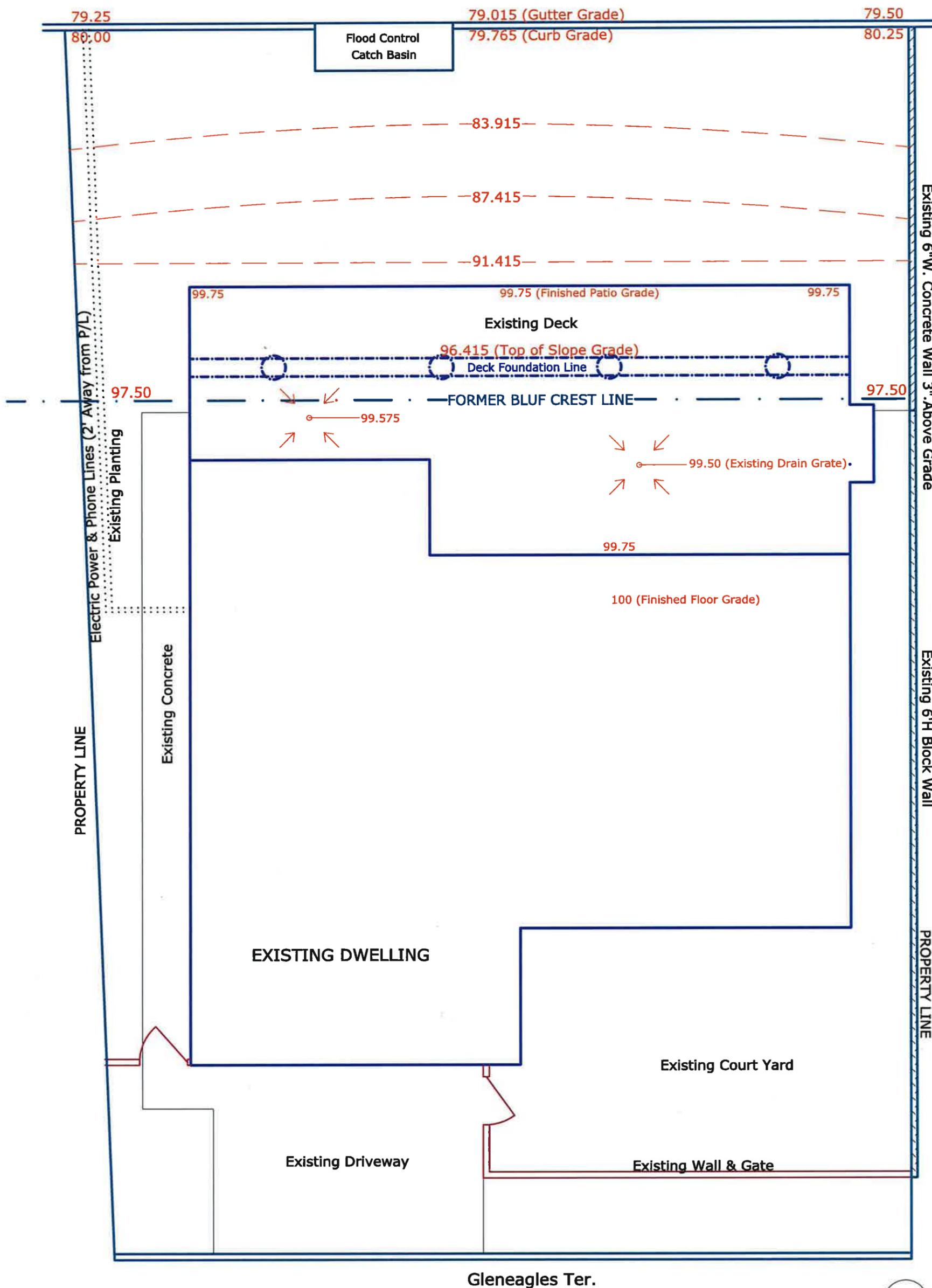
SITE PLAN



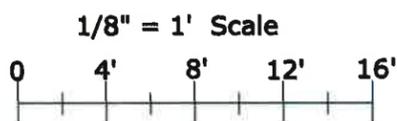
Low Residence
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Aviemore Ter.



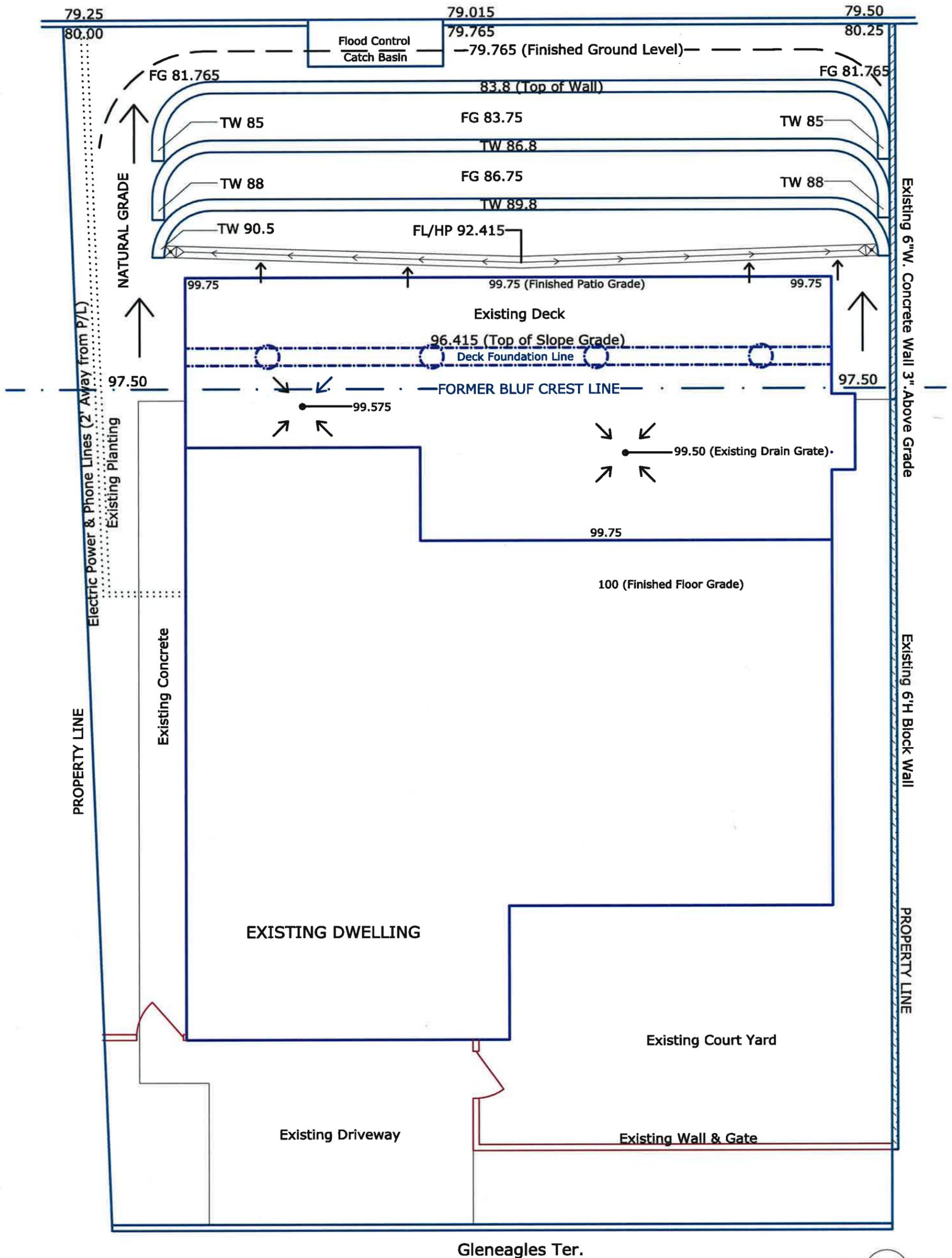
EXISTING GRADING PLAN



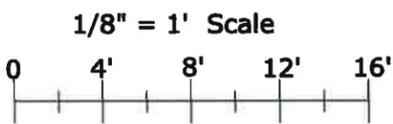
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Aviemore Ter.



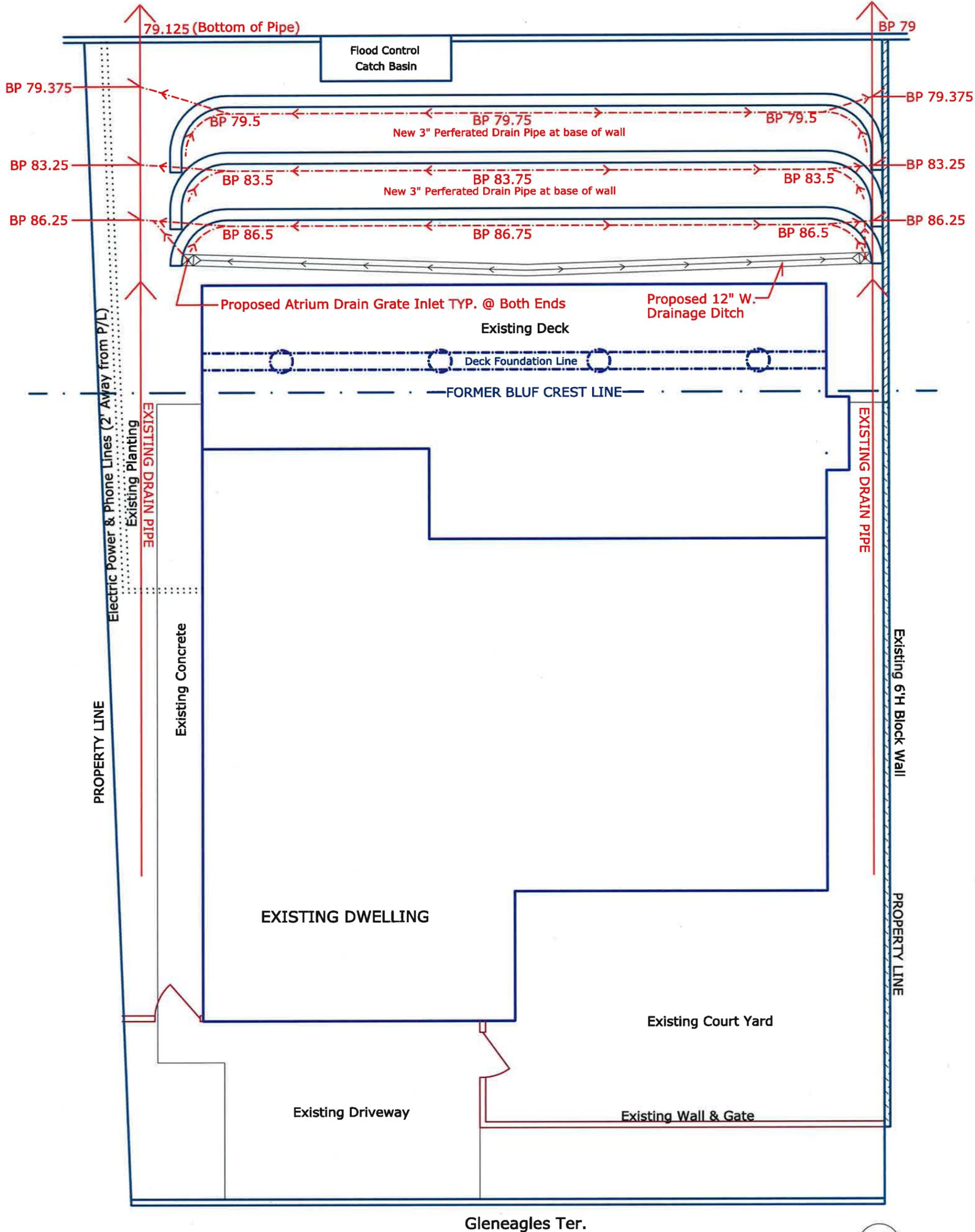
FINAL GRADING PLAN



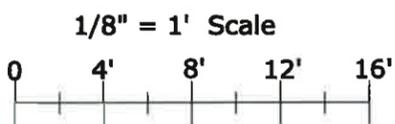
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Aviemore Ter.



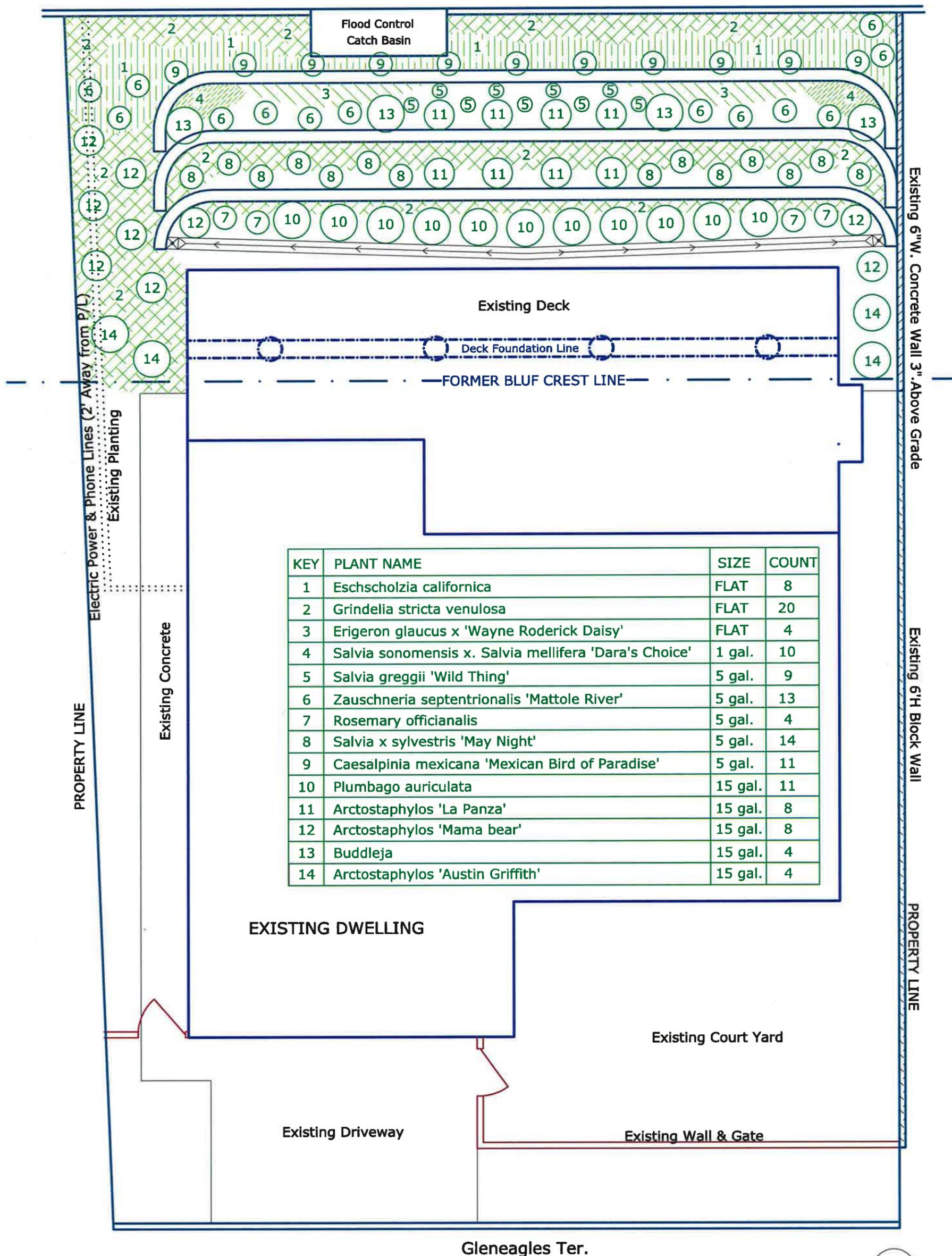
DRAINAGE & GRADING PLAN



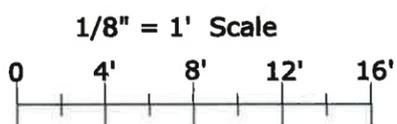
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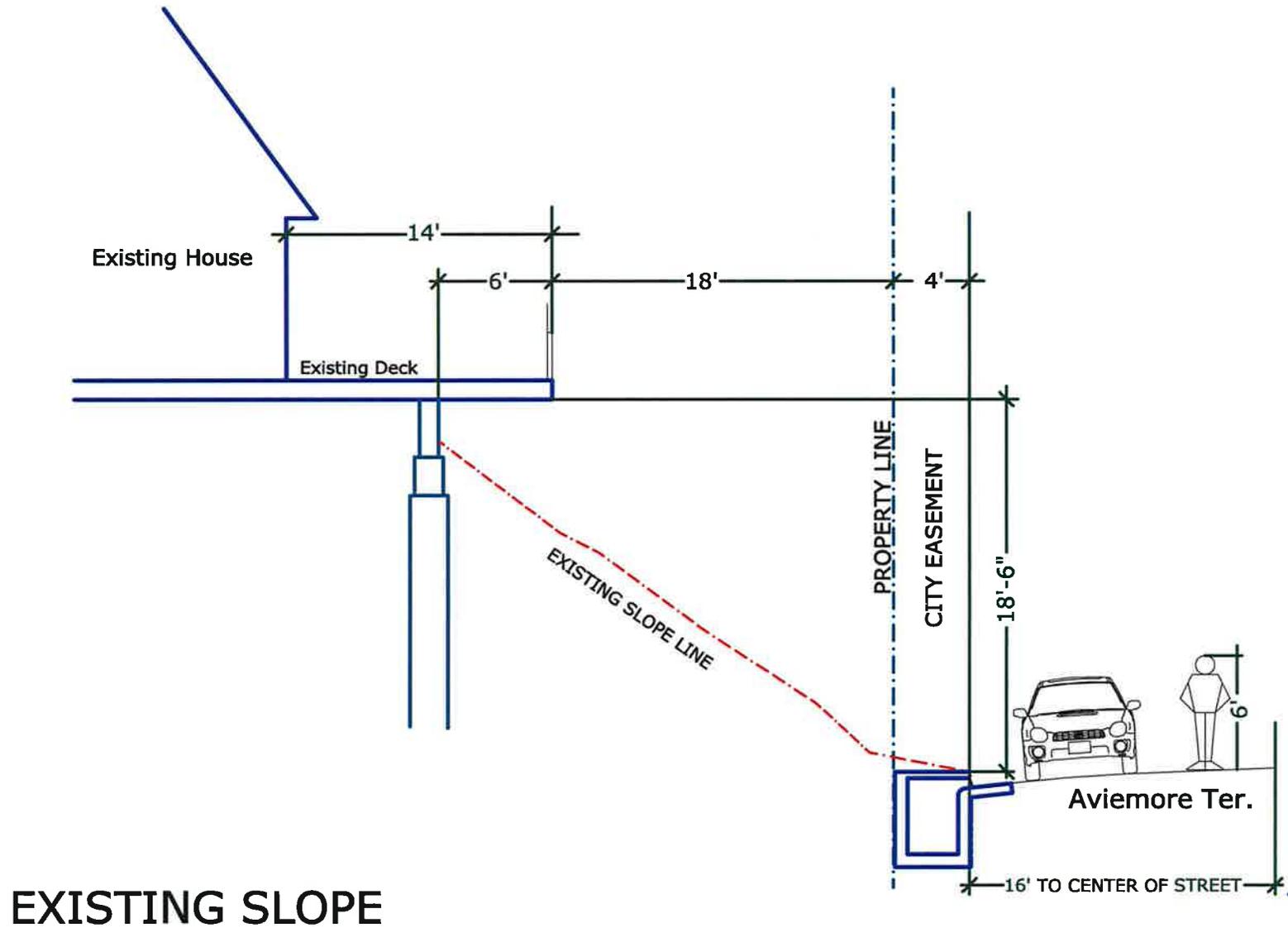


PLANTING PLAN

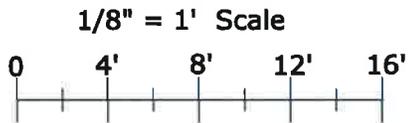


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EXISTING SLOPE

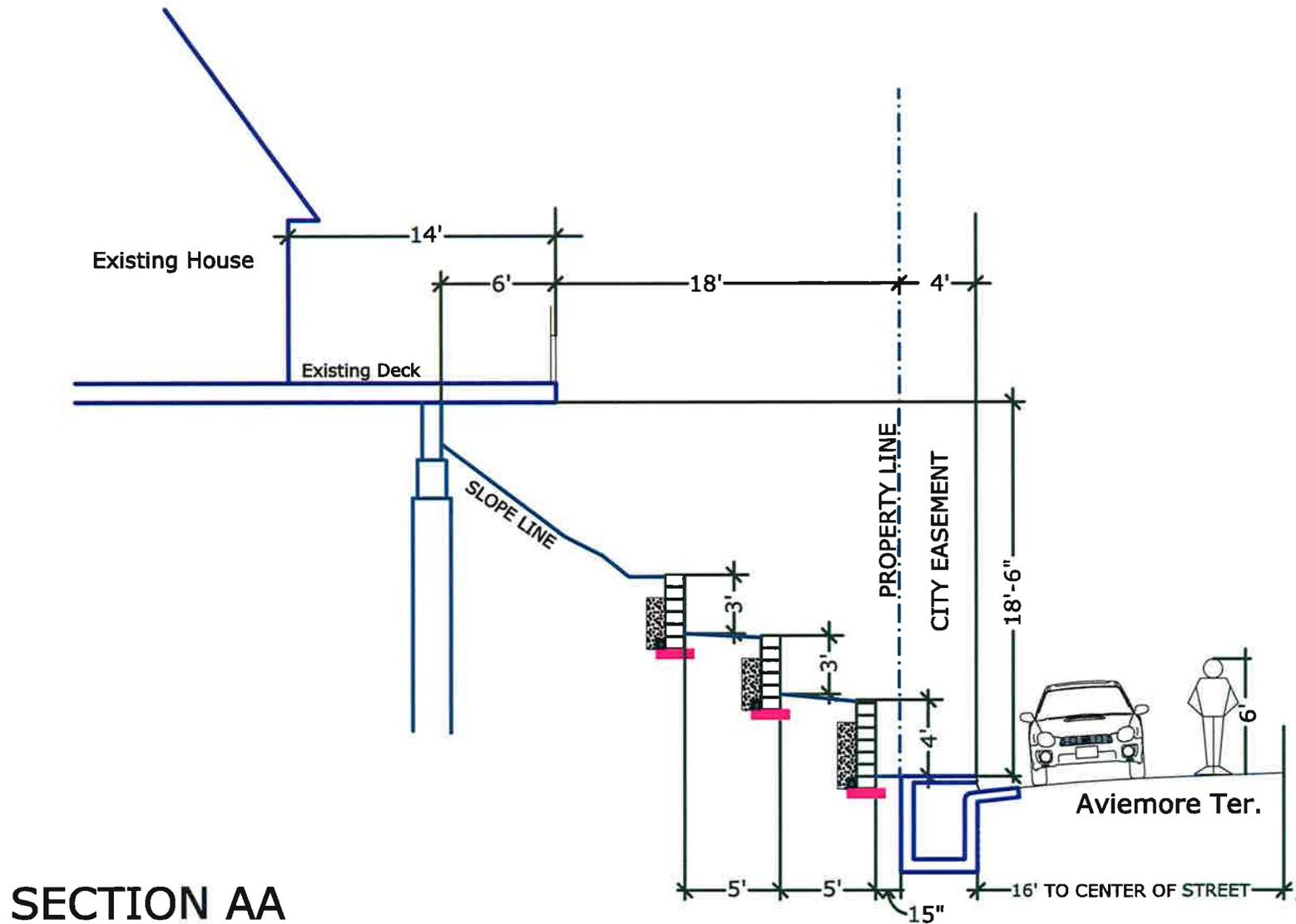


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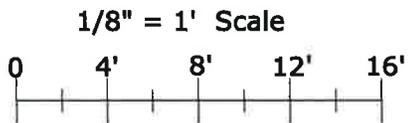
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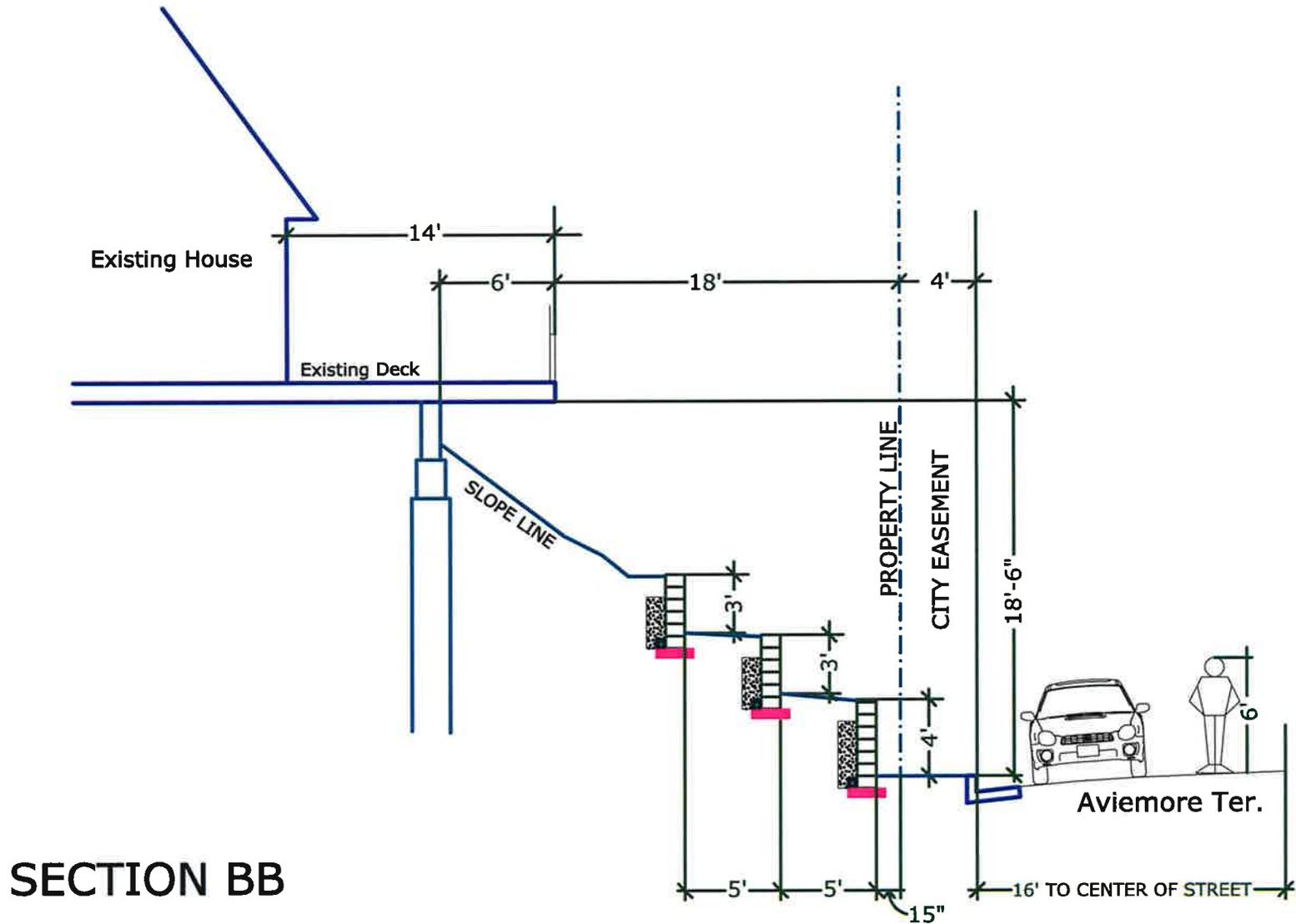


SECTION AA

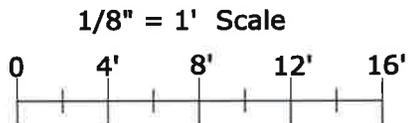


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SECTION BB

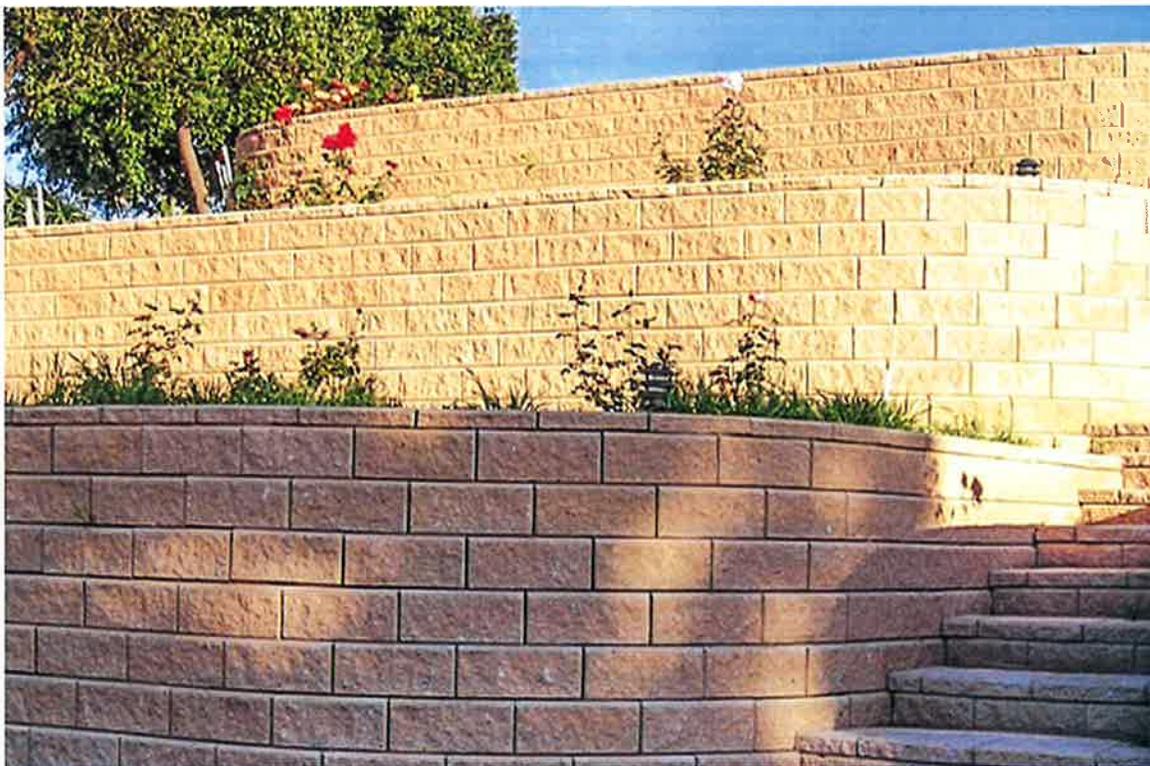


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WALL EXAMPLE



1
Eschscholzia californica



2
Grindelia stricta venulosa



3
Erigeron glaucus x 'Wayne Roderick Daisy'



4
Salvia sonomensis x Salvia mellifera 'Dara's Choice'



5
Salvia greggii 'Wild Thing'



6
Zauschneria septentrionalis 'Mattole River'



7
Rosemary Officianalis



8
Salvia x sylvestris 'May night'



9
Caesalpinia mexicana 'Mexican Bird of Paradise'



10
Plumbago auriculata



11
Arctostaphylos 'La Panza'



12
Arctostaphylos 'Mama Bear'



13
Buddleja



14
Arctostaphylos 'Austin Griffin'



CITY OF COSTA MESA

P.O. BOX 1200 • 77 FAIR DRIVE • CALIFORNIA 92628-1200

DEVELOPMENT SERVICES DEPARTMENT

November 9, 2017

Nancy Sheridan
200 Spectrum Center Drive
Suite 1800
Irvine, CA 92618

**RE: ZONING APPLICATION ZA-17-40
MINOR CONDITIONAL USE PERMIT TO INSTALL A SMALL CELL
FACILITY ON TOP OF A STREETLIGHT POLE
400 MERRIMAC WAY, COSTA MESA**

Dear Ms. Sheridan:

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If you have any questions regarding this letter, please feel free to contact the project planner, Johnwilly Aglupos, at either johnwilly.aglupos@costamesaca.gov or 714.754.5692.

Sincerely,

WILLA BOUWENS-KILLEEN, AICP
Zoning Administrator

Attachments: Project Description, Findings, Conditions of Approval, Code Requirements, Intent Letter, SCE consent letter, SCE Letter of Authorization, Disconnect Letter, SCE Streetlight Authorization Form, FCC, CPUC, Rendering, and Plans.

cc: Engineering
Transportation

PROJECT DESCRIPTION

The applicant requests approval of a minor conditional use permit (MCUP) to install a small cell facility on top of a Southern California Edison (SCE) streetlight pole adjacent to 400 Merrimac Way. The facility will include two RRUs and antennas inside a radome that is 48 inches in height and 18 inches in diameter. The installation will require the removal and replacement of the existing pole and an underground utility pull box for fiber and power to the new pole. The site is surrounded by apartment projects with proximity to commercially-zoned and institutionally-zoned and developed properties.

The telecommunication industry is in constant growth and expansion. This includes an introduction of "Small Cell" facilities placed on light poles, traffic signals, or on new poles within the public right-of-way to support increased demand and capacity. "Small Cell" facilities (also referred to as "nodes") are a lower-power facility that will complement and supplement broader macro cell facilities, filling gaps in coverage from the macro facilities.

Pursuant to Municipal Code Title 19, Section 19-15(c)(2), a minor conditional use permit is required to establish and operate a wireless communication facility within the public right-of-way if: (1) the antenna is greater than 26 inches in length, (2) the volume of the radio box exceeds two cubic feet, (3) the facility requires an above ground cabinet/equipment, and (4) the facility is located within a 500-foot radius of a residentially zoned property. The applicant is requesting to deviate from the required antenna height by 22 inches (antenna is proposed at 48 inches in height) and to locate within a 500-foot radius of residentially zoned properties; remaining requirements are proposed to be satisfied.

ANALYSIS

Design and Location

The existing and replacement streetlight poles are owned by SCE. The SCE design criteria dictates the height and material of the replacement pole while the supporting small cell equipment varies in size and location in accordance to the carrier's technology (see Table 1 below). The applicant has provided an SCE letter of authorization regarding the approved Carrier's preliminary plans. Per U.S.C. 332(c)(7)(B)(i)(II), the City may not regulate the placement, construction or modification of wireless service facilities in a manner that prohibits the provision of personal wireless services; however, the law does not prohibit local government from asking the applicant to provide a design that allows for a compatible and harmonious relationship between the proposed facility and the surrounding area.

TABLE 1			
Comparison			
	Existing	Proposed	City Requirement
Top of Pole	29'-0"	29'-3"	N/A
Top of Light	30'-0"	29'-9"	N/A
Overall Height	30'-0"	33'-3"	35'-0"
Antenna Length	N/A	48"	26"
Diameter	Varies	11.8"	N/A
Color	Gray, lightly exposed aggregate	Gray, lightly exposed aggregate	N/A

The additional antenna height is proposed to allow the incorporation of the RRUs into the same shroud (radome) as the antenna itself, providing a more streamlined design. Although the actual antenna height exceeds the City's maximum requirement, the overall streetlight pole height will not exceed the City's maximum allowable height of 35 feet. The meter pedestal will be placed underground. In addition, the standard SCE pole will be in the same color and finish as the existing pole. The location, height, supporting small cell equipment, and color/finish of the replacement pole will be the least intrusive means of supporting coverage. Therefore, the design balances visual impact and coverage with adequate spacing of the facilities to effectively relay signal with minimum number of node locations, and utilizes existing vertical elements to minimize the net number of vertical intrusions in the public right-of-way.

The selected location maximizes the coverage of the small cell facility and minimizes the overlap with other facilities of the system, which results in a lower overall number of proposed facilities within the public right-of-way. However, if necessary, this proposal allows for collocation by multiple carriers within the shroud to avoid proliferation of other small cell facilities in the immediate area.

To avoid any street light outage during the replacement process and to keep compatible spacing between the existing streetlight poles, the proposed pole will be installed three feet from the existing pole; the existing pole will be removed as soon as the new pole is activated.

Health and Safety

Pursuant to Mobile Services U.S.C 332(c)(7)(B)(iv), no state or local government may regulate the site of wireless telecommunication facilities on the basis of the perceived health effects of radio frequency (RF) emissions to the extent that the proposed facility complies with FCC regulations concerning such emissions. The applicant submitted a detailed report regarding the RF emission. Based on FCC Rules and Regulations, the applicant will be compliant provided recommendations(s) are implemented; conditions of approval requiring compliance are included.

General Plan Consistency

The City's 2015-2035 General Plan ensures that development decisions and improvements to public and private infrastructures are consistent with the goals, objectives, and policies of the City.

- Policy CD-1.5: *Encourage electric and communication lines to be placed underground and electrical substations and telephone facilities to be screened to minimize visual impacts from sidewalks, streets, and adjacent properties. Support utility undergrounding through conditions of project approval, preparation of undergrounding plans, and the formation of assessment districts.*
- Policy C-1.2: *Allow for flexible use of public rights-of-way to accommodate all users of the street system while maintaining safety standards.*

Approval of the facility will meet the growing demand of the City's telecommunication needs while ensuring that the facility will not hinder the City's aesthetic and circulation of the public right-of-way. The proposal is in keeping with the intent of the City ordinance in that:

- The facility and support equipment are designed, textured, and painted to match existing streetlight poles;
- The facility uses the latest technology to reduce the bulk of the equipment;
- The design screens any supporting electrical and communication lines; and
- Placing all utilities underground allows flexible use of the sidewalk while maintaining safety standards.

FINDINGS

- A. The information presented complies with Costa Mesa Municipal Code Section 13-29(e) in that:
1. As proposed and conditioned, the small cell facility is compatible and harmonious to the surrounding existing facilities by locating the replacement pole as close as possible to the existing pole and using an approved SCE pole that is closely similar to the existing SCE poles.
 2. The proposed streetlight pole is engineered to withstand the weight of the equipment, the small cell will be compliant with FCC's radio frequency emissions, and the location of the replacement pole is close to the existing location which will not impede the pedestrian and automobile's path of travel. Therefore, granting the minor conditional use permit will not be detrimental to the health, safety and general welfare of the public or otherwise injurious to property or improvements within the immediate neighborhood.
 3. The proposed small cell facility complies with the maximum height of a telecommunication facility allowed within the public right-of-way.

4. The proposed small cell facility meets Policy CD-1.5 and Policy C-1.2 of the City's General Plan.
- B. The information presented complies with Costa Mesa Municipal Code Section 13-29(g)(2) in that:
1. The proposed small cell facility is compatible and harmonious to the surrounding facilities that exist on site and will not be materially detrimental to other facilities within the area. The facility and support equipment will be designed, textured, and painted to match the existing streetlight poles.
 2. Granting the minor conditional use permit will not be materially detrimental to the health, safety and general welfare of the public within the immediate neighborhood because it will be compliant with FCC's radio frequency emissions and meets SCE's design and structural standards.
 3. Granting the minor conditional use permit will not allow a use, density, or intensity which is not in accordance with the General Plan designation since the facility will be of the smallest size possible while incorporating all equipment within a single shroud/radome.
- C. The project has been reviewed for compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the City environmental procedures, and has been found to be exempt under Section 15303(d), New Construction or Conversion of Small Structures, of the CEQA Guidelines.

CONDITIONS OF APPROVAL

- Plng
1. The small cell mounted on SCE's streetlight pole shall be mounted as shown on the attached conceptual plan with appropriate treatments to minimize visual impacts to surrounding properties and uses. Any support cabinet(s) shall be installed underground.
 2. Any wireless device colocating on the facility shall fit within the proposed shroud; the shroud shall remain the same size as approved.
 3. All electrical and antenna wiring shall be encased within the street light pole itself.
 4. Any substantial modifications to the physical dimension of the equipment or antennas shall be done with the prior approval of Planning Staff and may require filing and approval of a minor conditional use permit to ensure compliance with applicable City codes.
 5. Applicant shall defend, indemnify and hold harmless the City, its officials and employees, against all legal actions filed challenging City's approval of the applicant's project and/or challenging any related City actions supporting the approval. City shall have the right to select the attorney defending it, if it elects to do so.
 6. If any section, division, sentence, clause, phrase or portion of this approval is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions.
 7. The replacement pole will be placed as close as possible to the existing pole. The existing pole shall be immediately removed upon the activation of the new pole.
 8. The replacement pole shall be of the same materials and as close as possible to the same diameter as the existing street light poles in the vicinity.
 9. The Small Cell shall comply with Title 47 - FCC's rules and regulations, including those related to FCC Radio Frequency Safety Guidelines.

CODE REQUIREMENTS

The following list of federal, state, and local laws applicable to the project has been compiled by staff for the applicant's reference. Any reference to "City" pertains to the City of Costa Mesa.

- Plng. 1. The approval of the zoning application shall be valid for a ten-year period from the date of approval (November 16, 2027), unless otherwise indicated in a condition imposed at the time of granting the application or unless otherwise exempted under federal or state law. Prior to the expiration of the permit, the applicant may apply for a ten-year extension of time. If notice was required for the original application, and a public hearing on the extension is allowed under federal and state law, notice of the public hearing for a time extension shall be given according to the procedures set forth in this section.
2. The antenna and all support equipment shall comply with all requirements of CMMC 19-15.
- Bldg 3. Comply with the requirements of the following adopted codes: 2016 California Building Code, 2016 California Electrical code, 2016 California Mechanical code, 2016 California Plumbing code and 2016 California Energy Code (or the applicable adopted, California Building code California Electrical code, California Mechanical code California Plumbing Code and California Energy Code at the time of plan submittal or permit issuance) and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa. Requirements for accessibility to sites, facilities, buildings and elements by individuals with disability shall comply with chapter 11B of the 2016 California Building Code.
- Bus. 4. All contractors and subcontractors must have valid business licenses to do business in the City of Costa Mesa. Final inspections, final occupancy and utility releases will not be granted until all such licenses have been obtained.
- Lic.
- Eng. 5. Obtain an Encroachment Permit from the Engineering Division for work in the City public right-of-way. Pay required permit fee and cash deposit or surety bond to guarantee construction of off-site street improvements at time of permit per section 15-31 & 15-32, C.C.M.M.C. as approved by City Engineer. Cash deposit or surety bond amount to be determined by City Engineer.



Crown Castle
200 Spectrum Center Drive
Suite 1800
Irvine, CA 92618

September 7, 2017

Willa Bouwens-Killeen
Zoning Administrator
City of Costa Mesa Planning Department
77 Fair Drive
Costa Mesa, CA 92626

Re: Minor Conditional Use Permit for Facilities within the Public Right of Way (SOC275)

Dear Ms. Bouwens-Killeen:

Crown Castle NG West LLC (“Crown Castle”) is submitting a Minor Conditional Use Permit application to place an antenna node on a streetlight in the Right of Way in accordance with your code, ordinances and regulations. Please be advised the Federal Communications Commission (FCC) has adopted Rules and Regulations that impact how you must process this application. In addition, state law also limits your regulation of Crown Castle’s access to the public rights of way.

Crown Castle’s Deployment:

Crown Castle provides telecommunications services to its wireless carrier customers. It does so via telecommunications networks installed in the public rights of way that integrate elements including fiber optic cables as well as personal wireless services facilities, such as antennas and related equipment. Crown Castle’s networks are sometimes referred to as distributed antenna systems (“DAS”) or Small Cell networks. The specific equipment sought to be installed by Crown Castle in this case is set forth in the accompanying permit application.

Pursuant to the California Public Utilities Commission, Crown Castle has been granted a Certificate of Public Convenience and Necessity (“CPCN”) to provide such services. As a result, Crown Castle must be granted access to the public rights of way in the same manner and on the same terms applicable to other certificated telecommunications providers and utilities.¹ (copy enclosed)

Federal and State Regulations Applicable To This Application:

¹ See CA Pub. Util. Code, §§ 7901 and 7901.1

Federal law and the FCC's rules implementing the law require that this permit application be processed to a final decision by this jurisdiction without undue delay. Specifically, this application proposes to attach new equipment on a replaced streetlight in the public rights of way, this application must be acted on within ninety (90) days from its submission, today.² Further, pursuant to recently passed California AB 57, if the City "fails to approve or disapprove" this application within that timeframe, it "shall be deemed approved."³

Moreover, pursuant to FCC regulations, this application is deemed complete 30 days after today unless you provide written notice to Crown Castle.⁴ If you contend that the application is incomplete, within the next 30 days you must provide written notice specifying any items you claim are missing to make the application complete.⁵ For each item alleged to be missing, you must specify the code provision, ordinance, application instruction, or otherwise publicly-stated procedure that requires the submission of the information.⁶

Please send all written requests for additional information regarding this application to:

Nancy Sheridan
Network Real Estate
Crown Castle
200 Spectrum Center Drive, Suite 1800
Irvine, CA 92618

Sincerely,


CROWN CASTLE NG WEST LLC

Nancy Sheridan

² *In re Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review*, Declaratory Ruling, 24 FCC Rcd. 13994 ¶¶ 32, 45-46 (2009) ("FCC Shot Clock Order"); *In the matter of Acceleration of Broadband Deployment By Improving Wireless Facilities Siting Policies*, Report and Order, FCC 14-153, WT Docket No. 13-238, ¶272 (FCC Oct. 21, 2014) ("Wireless Infrastructure Order") (clarifying that DAS nodes that involve installation of new poles trigger the 150 day shot clock).

³ See CA Government Code Section 65964.1.

⁴ *Wireless Infrastructure Order* at ¶¶ 257, 259.

⁵ *Id.* ¶¶ 259-260.

⁶ *Id.*



Brian P. Ryan
Principle Manager
Telephone: 909-274-1949
Brian.Ryan@sce.com

August 9, 2017

To Whom It May Concern:

Since 1994, Southern California Edison (SCE) has assisted wireless service providers in expanding their networks to meet customers' needs for telecommunications service. SCE makes available existing structures that can be used to co-locate the wireless service providers' equipment, while lessening the visual impacts on the community and constituency that is served. This letter requests that you help us in this endeavor.

In an effort to minimize the potential clutter that new vertical structures would produce, many California cities have adopted ordinances and policies encouraging wireless facilities to be mounted on street light poles within the public rights of way.

As you are aware, SCE owns and maintains street light poles in your city pursuant to our LS-1 tariff. In order to accommodate the increasing demand for micro-cell site locations, SCE has agreed to allow wireless service providers to attach their antennas to some of these streetlight poles, and contractually requires the wireless service provider to comply with certain requirements, including a requirement that the facility will not impact SCE's ability to provide street lighting service.

Costa Mesa has and retains full control over the entitlement and permitting process for these and future sites. The wireless service providers also pay for electrical usage resulting from their sites. This electrical service is metered and billed separately, and the City is not impacted.

While SCE believes this approach benefits local governments as well as their constituency, we would not engage in this solution if doing so resulted in extra costs to SCE. We would therefore appreciate you confirming that Costa Mesa consents to use of its public rights of way for the purpose of licensing space on an SCE Streetlight Pole # 1729117E located at: 368-398 Merrimac Way. Crown Castle Site number: SOC0275.

Please sign this letter to indicate your consent and return it to me at the below address. If you have any questions, please feel free to call Scott Haney (909) 274-1961.

Regards,

A handwritten signature in black ink that reads "Brian P. Ryan".

Brian P. Ryan

Signature _____
Name _____
Title _____
Date: _____



Brian Ryan
Principal Manager Telecom Sales
Edison Carrier Solutions
e-mail: Brian.Ryan@sce.com

August 9, 2017

Costa Mesa Planning Department

To Whom It May Concern:

Re: Letter of Authorization

SCE streetlight identified as – SCE Streetlight Pole # 1729117E located adjacent: 368-398 Merrimac Way. Crown Castle Site Number: SOC0275.

Southern California Edison Company (SCE) is the owner of the Light Pole, located in Costa Mesa, CA. Crown Castle "Carrier" has requested that SCE replace the existing Light Pole so that it can be used for operating a wireless communications facility, ("Site").

SCE has reviewed Carrier's preliminary plans for this Site and believe these plans are compatible with SCE's use of this Light Pole. Thus, as a representative of SCE, I hereby authorize Carrier, and its representatives, to seek and secure all right(s), including any environmental review associated with granting such rights, that are needed from the Jurisdiction to use the Light Pole and other property for this purpose as long as there are no costs to SCE.

Notwithstanding this authorization, SCE reserves the right to reject Carrier's request for use of its Light Pole for any reason, including imposed conditions or required changes to the light pole by the Jurisdiction, are unacceptable to SCE.

All correspondence and/or notices regarding use of SCE's Light Pole by Carrier, or any later requests by the Carrier for authorizations or approvals needed for construction, operation or maintenance of an approved Site, should include a copy to SCE.

If you have any questions concerning this project, please contact Scott Haney @ 626-688-9344.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian P. Ryan", with a stylized flourish at the end.

Brian P. Ryan

PLEASE TRANSFER LETTER TO CITY LETTERHEAD

Date

Brian Ryan
Southern California Edison
Carrier Solutions Division
2 Innovation Way 1st Floor
Pomona, Ca 91768

Dear Mr. Ryan:

This letter authorizes Southern California Edison (SCE) to disconnect the SCE streetlight identified as – SCE Streetlight Pole #1729117E located adjacent: 368-398 Merrimac Way. Crown Castle Site number: SOC0275 so that work can be performed to replace the existing Streetlight.

Crown Castle (Wireless Carrier) has requested that SCE replace the Southern California Edison streetlight with a new streetlight that will be used for operating the wireless communications facility identified as SCE Light Pole #1729117E located adjacent: 368-398 Merrimac Way. Crown Castle Site number: SOC0275.

Please coordinate the disconnecting of the streetlight directly with Costa Mesa, (please provide County Contact, Name, Phone) so that the light will be out only for the above referenced work to be completed.

If you have any questions, please do not hesitate to call me.

Sincerely,

Name
Public Agency

SOUTHERN CALIFORNIA EDISON STREETLIGHT AUTHORIZATION

DEVELOPER/APPLICANT MUST PROVIDE THIS FORM
COMPLETED BY THE PUBLIC AUTHORITY
FOR ANY SCE-OWNED STREETLIGHT INSTALLATION, REMOVAL OR CHANGE REQUESTS
Incomplete forms will be returned and not processed

PUBLIC AUTHORITY NAME: _____

Builder/Developer Name: Crown Castle NG West Phone #: _____

Tract/Ref # SCE Pole No. 1729117E Streetlight Location 368-398 Merrimac Way, Costa Mesa 33.668161°, -117.916245°

Please Check one: Installation Removal Change

Number of Lamp(s)	Lamp Size	Lamp Type
_____	_____	_____
_____	_____	_____
_____	_____	_____

New Installations

Public Authority Responsibility for Streetlight Monthly Billing

Please Check one and fill out applicable dates:

___ Upon Energizing

If Public Authority is collecting Builder/Developer Advanced Energy Payment, indicate date collected. (_____)

Monthly Billing: ___ Establish new Service Account (SA) Use existing SA # _____

___ Commitment Date-

Date Agreed upon by SCE and Public Authority (_____) or no later than 36 months from first streetlight energized whichever is earlier.

Monthly Billing: ___ Establish new Service Account (SA) Use existing SA # _____

___ Public Authority is not responsible

HOA Area Name _____ Other Entity (please define) _____

Public Authority Notes:

Authorized Public Authority Agent

_____ Print name _____ Date _____ Signature _____

Phone # _____ Title _____

TO BE COMPLETED BY SCE

ACTION: ENTER TRACT/REF# ON DM PROGRAM NAME FIELD.

District _____ Planning AOR _____ PLANNER NAME (PRINT) _____

DM SR # _____ Product # _____ (one per SLA)

RADIO FREQUENCY ELECTROMAGNETIC FIELDS EXPOSURE REPORT

Prepared for Crown Castle

Site Name: Scenario
Site Type: Min. Height AGL of 18' or Greater - Light Pole
Report By: Christopher Stollar, P.E.
Report Date: 1/24/2017

Based on FCC Rules and Regulations, Crown Castle is compliant.

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1.0 EXECUTIVE SUMMARY

Dtech Communications, LLC (“Dtech”) has been retained by Crown Castle to determine whether its wireless communications facility complies with the Federal Communications Commission (“FCC”) Radio Frequency (“RF”) Safety Guidelines. This report contains a computer-simulated analysis of the Electromagnetic Fields (“EMF”) exposure resulting from a typical, minimum antenna height above ground level (“AGL”) of 18-feet, light pole facility. The analysis also includes assessment of existing wireless carriers on site, where information is provided. The table below summarizes the result at a glance:

Table 1: EMF Summary

Crown Castle	Summary
Access Type	Walk-Up
Access to antennas locked	NA
RF Sign(s) @ access point(s)	None
RF Sign(s) @ antennas	Information (Optional)
Barrier(s) @ sectors	NA
Max Cumulative EMF level for Crown Castle on Ground	7.2% General Population
Max Cumulative EMF level for Crown Castle @ Antenna Level	80.1% General Population (16.0% Occupational)
General Population Exclusion Zone (At Antenna Elevation)	NA
Occupational Exclusion Zone (At Antenna Elevation)	NA

2.0 SITE DESCRIPTION

The wireless telecommunication facility is located on the ground. The facility consists of 1 wireless carrier(s) or operator(s): Crown Castle – T-Mobile. For this scenario, Crown Castle’s antennas are mounted on a light pole and connected to the equipment via cables (see Appendix E).

2.1 Antenna Inventory

Technical specifications in the table below are provided by our clients or gathered from physical field surveys where applicable and/or possible. Conservative estimates are used where information is not provided or available.

Table 2: Site Technical Specifications

Antenna ID	Operator	Antenna Mfg	Antenna Model	Type	Frequency (MHz)	Technology	Orientation (°T)	Horizontal BWidth (°)	Antenna Aperture (ft)	Antenna Gain (dBd)	Total ERP (Watts)	Bottom Tip Height Above Ground (Z) (ft)	Bottom Tip Height Ant Level (Z) (ft)
A1	T-Mobile	Ericsson	6503	Directional	1900	LTE	330	85	0.7	6.9	21.6	19.3	1.3
A2	T-Mobile	Ericsson	6503	Directional	2100	LTE	330	74	0.7	7.9	27.2	18.0	0.0
Total											48.8		

3.0 ANALYSIS

3.1 Emission Predictions

Figure 1: Plan (bird's eye) view map of results compared to FCC's General Population MPE (Maximum Permissible Exposure) Limits. Gray represents areas where exposure levels are calculated to be at or below 5%; Green- between 5% & 100% (below MPE limits); blue, yellow & red – greater than 100% (exceeds MPE limits).

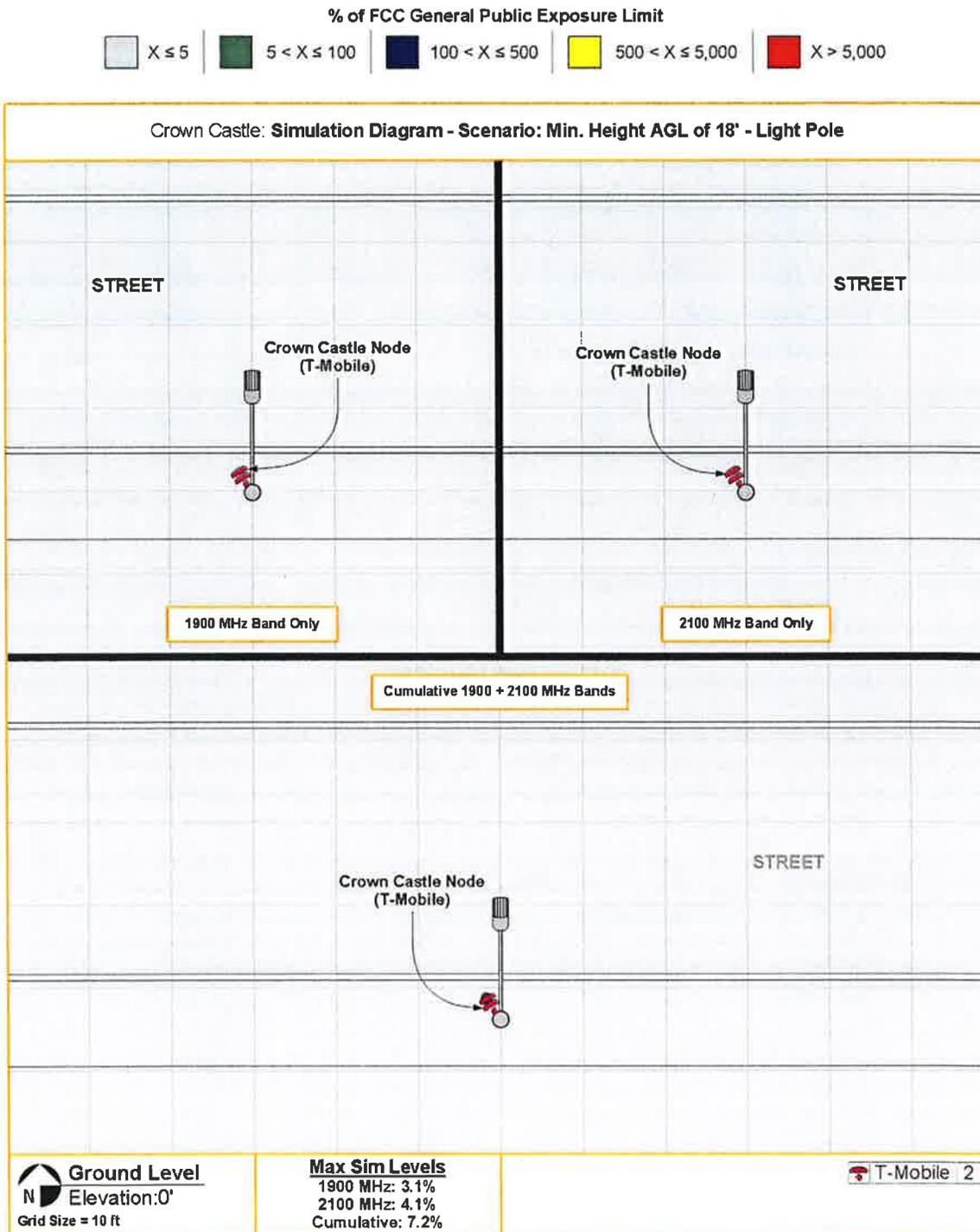
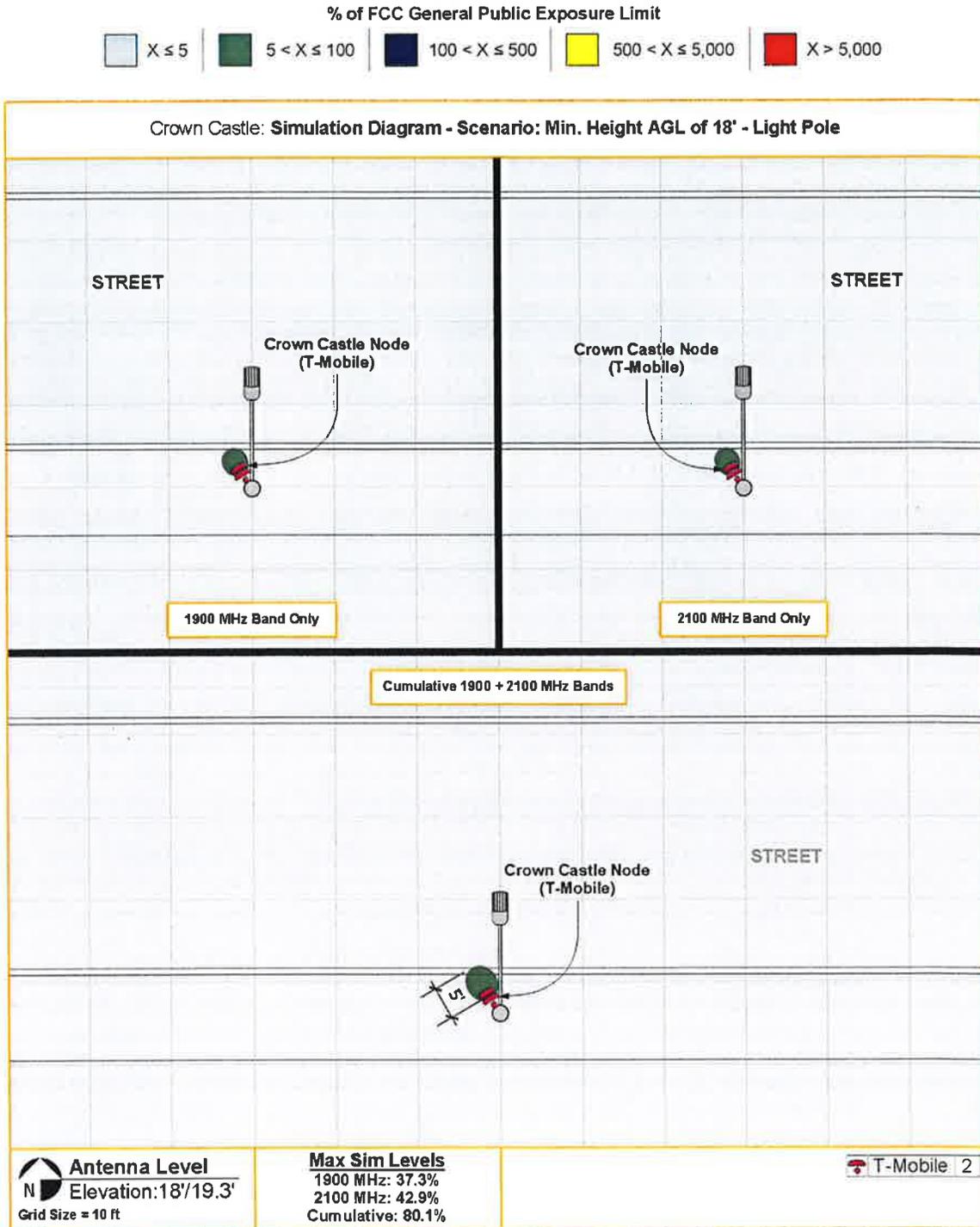


Figure 2: Plan (bird's eye) view map of results compared to FCC's General Population MPE (Maximum Permissible Exposure) Limits. Gray represents areas where exposure levels are calculated to be at or below 5%; Green- between 5% & 100% (below MPE limits); blue, yellow & red – greater than 100% (exceeds MPE limits).



4.0 CONCLUSION

4.1 Results

For a person standing on the ground, calculations for Crown Castle's site (at a minimum height AGL of 18-feet) resulted in exposure levels no higher than 7.2% of the applicable FCC's General Population MPE Limits (see figure 1). If the antennas are located higher than the minimum height AGL of 18-feet, the exposure levels on the ground would consequently be lower. The results on the ground are well below the applicable FCC's General Population MPE Limits, and members of the general public can safely occupy all areas on the ground for an indefinite amount of time.

At antenna elevation, the highest calculated exposure level is also below the FCC's General Population MPE Limits near the Crown Castle antennas (see figure 2). If the antennas are located higher than the minimum height AGL of 18-feet, the exposure levels at antenna elevation would be the same. The green areas represent exposure levels that are calculated to be between 5% and 100%, which is below the FCC's General Population MPE Limits. The green exposure area extends 5-feet from the front face of the Crown Castle antenna(s). Beyond 5-feet (areas represented in gray), exposure calculations would be at or below 5%, which are considered ambient levels. Individuals can safely occupy any areas in gray and green for an indefinite amount of time.

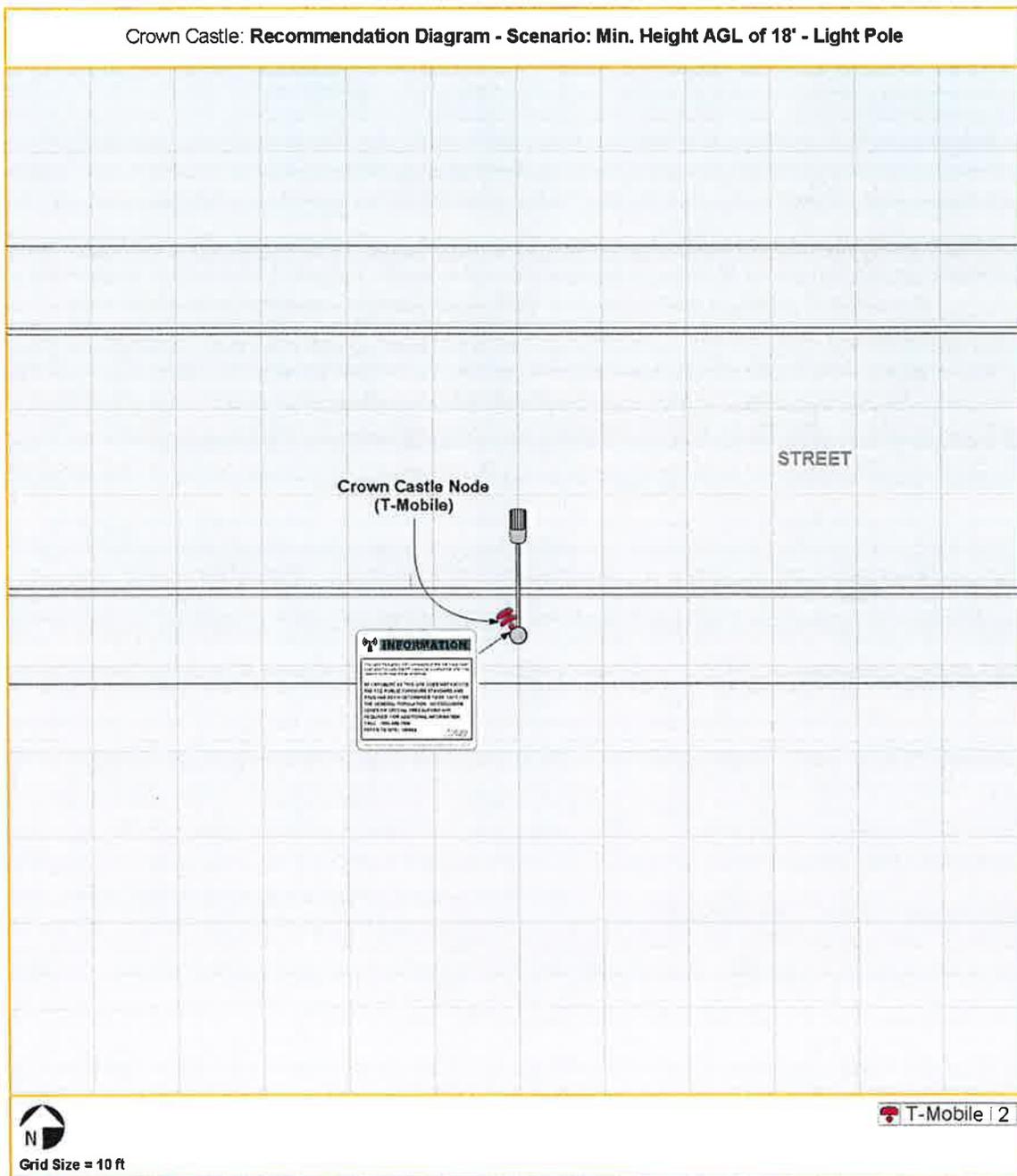
*Note: The actual MPE results of this analysis are only applicable to the specific antenna make/model, minimum heights, line/cable losses, total power output, and frequencies. Compliance is the same even if the antennas are raised above the minimum height AGL of 18-feet.

4.2 Recommendation(s)

The following conservative action(s) are recommended in accordance with the FCC's RF Safety Guidelines (see figure 3):

- 1) As a courtesy, install INFORMATION Sign(s) on or near the antenna(s). Signage should be placed high on the pole and away from public view.

Figure 3: Recommendation(s)



4.3 Statement of Compliance

Based on the above results, analysis and recommendation(s), it is the undersigned's professional opinion that Crown Castle's site is compliant with the FCC's RF Safety Guidelines.

4.4 Engineer Certification

This report has been prepared by or under the direction of the following Registered Professional Engineer: Darang Tech, holding California registration number 16000. I have reviewed this report and believe it to be both true and accurate to the best of my knowledge.


Darang Tech, P.E.



Appendix A: Background

Dtech uses the FCC’s guidelines described in detail in Office of Engineering & Technology, Bulletin No. 65 (“OET-65”) “Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields”. The table below summarizes the current Maximum Permissible Exposure (“MPE”) safety limits classified into two groups: General population and Occupational.

Table 3: FCC MPE Limits (from OET-65)

Frequency (Mhz)	General Population/ Uncontrolled MPE (mW/cm ²)	Averaging Time (minutes)	Occupational/ Controlled MPE (mW/cm ²)	Averaging Time (minutes)
30 - 300	0.2	30	1.0	6
300 - 1500	Frequency (Mhz)/1500 (0.2 – 1.0)	30	Frequency (Mhz)/300 (1.0 – 5.0)	6
1500 - 100,000	1.0	30	5.0	6

General population/uncontrolled limits apply in situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment, and may not be fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public always fall under this category when exposure is not employment-related.

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment, and those persons have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

It is important to understand that the FCC guidelines specify *exposure* limits not *emission* limits. For a transmitting facility to be out of compliance with the FCC’s RF safety guidelines an area or areas where levels exceed the MPE limits must, first of all, be in some way *accessible* to the public or to workers. When accessibility to an area where excessive levels is appropriately restricted, the facility or operation can certify that it complies with the FCC requirements.

Appendix B: Measurement and/or Computer Simulation Methods

Spatial averaging measurement technique is used. An area between 2 and 6 feet, approximately the size of an average human, is scanned in single passes from top to bottom in multiple planes. When possible, measurements were made at very close proximity to the antennas and inside the main beam where most of the energy is emitted. The spatial averaged values were recorded.

Dtech uses an industry standard power density prediction computer Model¹ to assess the worse-case, cumulative EMF impact of the surrounding areas of the subject site. The Model does not take into account losses due to buildings. Its methodologies are conservative enough to account for typical down-tilts deployed in wireless communications. In addition, the analysis is performed at 100% duty cycle-all transmitters are active at all times and transmitting at maximum power. For purposes of a cumulative study, nearby transmitters are included where possible. The result is a surrounding area map color-coded to percentages of the applicable FCC's MPE Limits. A result higher than 100% exceeds the Limits.

Appendix C: Limitations

Dtech performed this analysis based on data provided by our clients that Dtech believes to be true and correct. Estimates where noted, are based on common industry practices and our best interpretation of available information. As mobile technologies continuously change, these data and results may also change. Therefore, Dtech disclaims all other warranties either expressed or implied. Any use of this document constitutes an agreement to hold Dtech and its employees harmless and indemnify it for any and all liability, claims, demands, litigation expenses and attorneys fees arising from such use. This is a technical document and may contain minor grammatical and/or spelling errors.

¹ Roofview® Version 4.15, Richard Tell Associates, Inc. © 1996-2000.

Appendix D: Crown Castle RF Advisory Signs



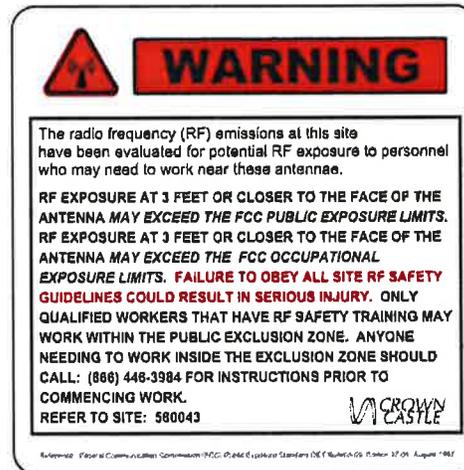
INFORMATION Sign



NOTICE Sign

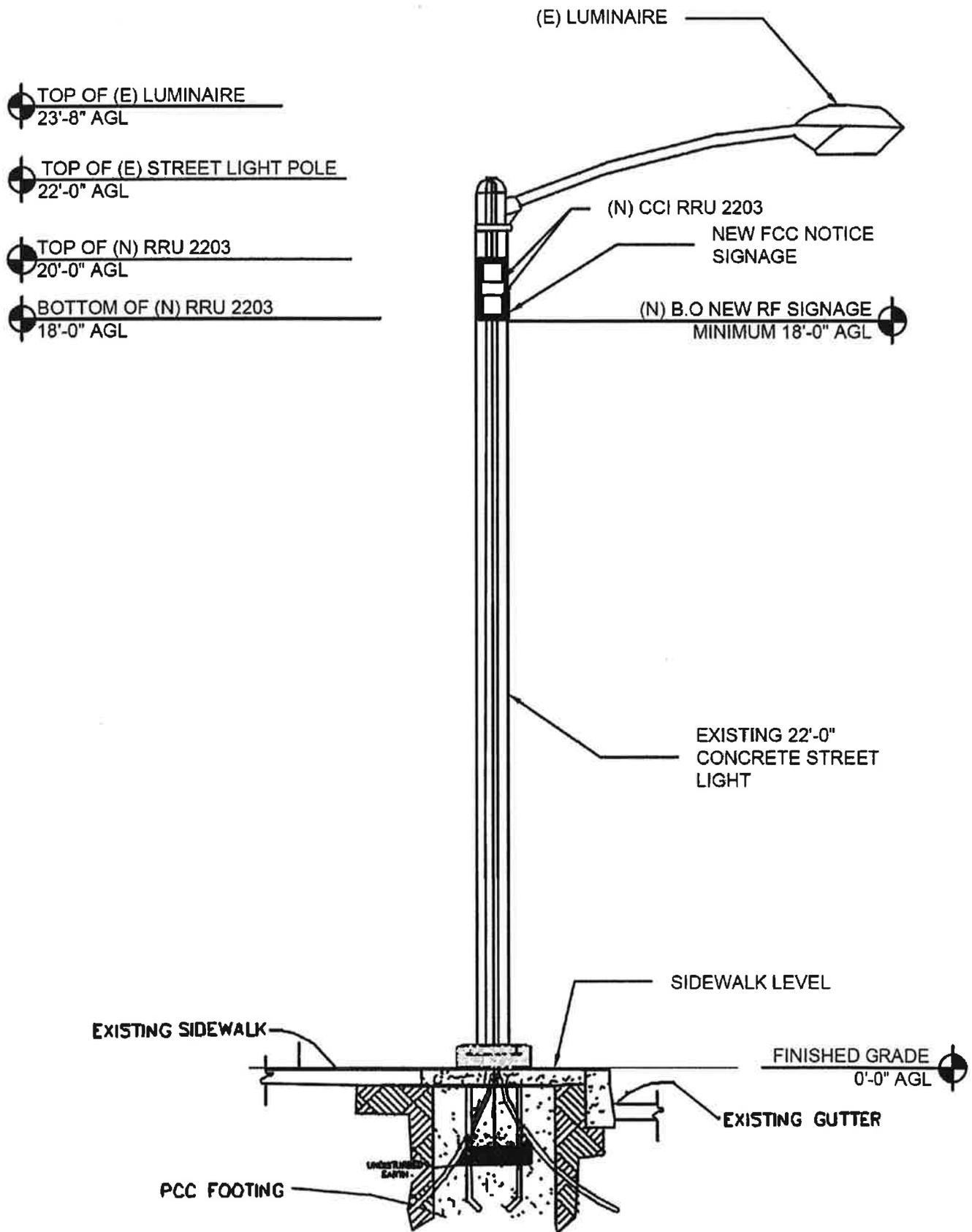


CAUTION Sign



WARNING Sign

Appendix E: Scenario - Min. Height AGL of 18' or Greater - Light Pole



CALIFORNIA PUBLIC UTILITIES COMMISSION Advice Letter Filing Summary Sheet (PAL)		(Date Filed / Received Stamp by CPUC Industry Division) <div style="text-align: right; color: red; font-weight: bold; font-size: 1.2em;">DATE - STAMP & RETURN</div> <div style="text-align: center; font-size: 1.2em;">5 PM 1:50</div> Date AL served on parties: _____	
Company Name: Crown Castle NG West LLC		CPUC Utility Number U-6745-C	
Address: 1220 Augusta Drive, Suite 500		<input type="checkbox"/> GRC-LEC <input checked="" type="checkbox"/> URF-Carrier <input type="checkbox"/> Other	
City, State, ZIP: Houston, Texas 77075		<input type="checkbox"/> Commission Resolution Requested <input type="checkbox"/> Carrier of Last Resort (See D.96-10-066)	
Filing AL #: <u>63</u> Requested Effective Date: <u>July 15, 2014</u>		AL Tier I <input checked="" type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/>	
Name:		Email Address:	
Filer	Brett P. Ferenchak Jean L. Kiddoo	brett.ferenchak@bingham.com jean.kiddoo@bingham.com	Phone No.: (202) 373-6000
Certif.	Same as above	Same as above	Fax No.: 202-373-6001
		No. Tariff Sheets: <u>N/A</u>	
(Name, email address & Phone and FAX numbers are Required for "Filer")			
Tariff Schedules: <u>N/A</u>		Keyword: <u>Carrier Information Changes</u> (see keyword list on reverse)	
For Contract Keyword, Type: Government <input type="checkbox"/> Other <input type="checkbox"/> Date Executed _____ Contract Total Rev (\$) _____			
Subject of filing: <u>Conversion and Associated Name Change</u>			
(Service(s) included)			
Authorization for filing: <u>G.O. 96-B and Telecommunications Industry Rule 7.1(1)</u>			
(Resolution #, Decision #, etc.)			
Affected services: _____			
(Other services affected, pending or replacement AL filings)			
Rate Element(s) affected <u>and</u> % change: _____			
(Non-recurring and / or recurring)			
<input type="checkbox"/> Customer Notice Required (if so, please attach)			
Notes/Comments: _____			
(Other information & reference to advice letter, etc.)			
File Protest and/or Correspondence to: Director, Communications Division 505 Van Ness Ave., San Francisco, CA 94102 <i>and if you have email capability, ALSO email to:</i> TD_PAL@cpuc.ca.gov <i>Protest also must be served on utility:</i> (see utility advice letter for more information)		GRC-LEC = Cost of Service LEC Carrier URF-Carrier = Uniform Regulatory Framework Carrier (see D.06-08-030/D.07-09-019) OTHER = Wireless (CMRS) Carrier	
(FOR CPUC USE ONLY)			
<input type="checkbox"/> Resolution Required <input type="checkbox"/> Executive Action Resolution Req'd. <input type="checkbox"/> TD Suspension on: ___ / ___ / ___ <input type="checkbox"/> Comm. Suspension on: ___ / ___ / ___ Resolution No.: T - _____ <i>Rev. 09/24/07</i>		Supv. / Analyst _____ / _____ Due Date to Supv.: _____ Analyst Completion Date: _____ Supervisor Approval Date: _____ AL / Tariff Effective Date: _____ Notes: _____	

EXISTING



NEW



COSTA MESA

HUB: **LA02429A**



CROWN CASTLE NG WEST
JURISDICTION: COSTA MESA
CLUSTER: IE10
PROPOSED SMALL CELL NODES
SCE POLE #1729117E

INDEX TO SHEETS:

- C-01. TITLE, LOCATION MAP, NODE PLACEMENT
- C-02. EQUIPMENT DETAILS
- C-03. EQUIPMENT DETAILS
- C-04. EQUIPMENT DETAILS
- C-05. LIGHT STANDARD DETAIL
- C-06. SITE PLAN & ELEVATION
- C-07. TRAFFIC CONTROL PLAN

PROJECT TEAM:

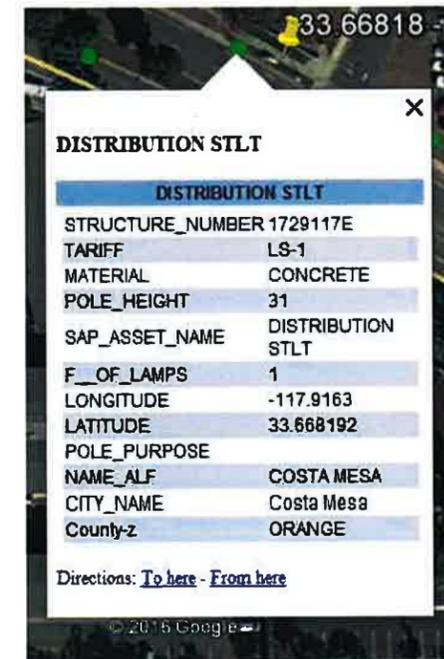
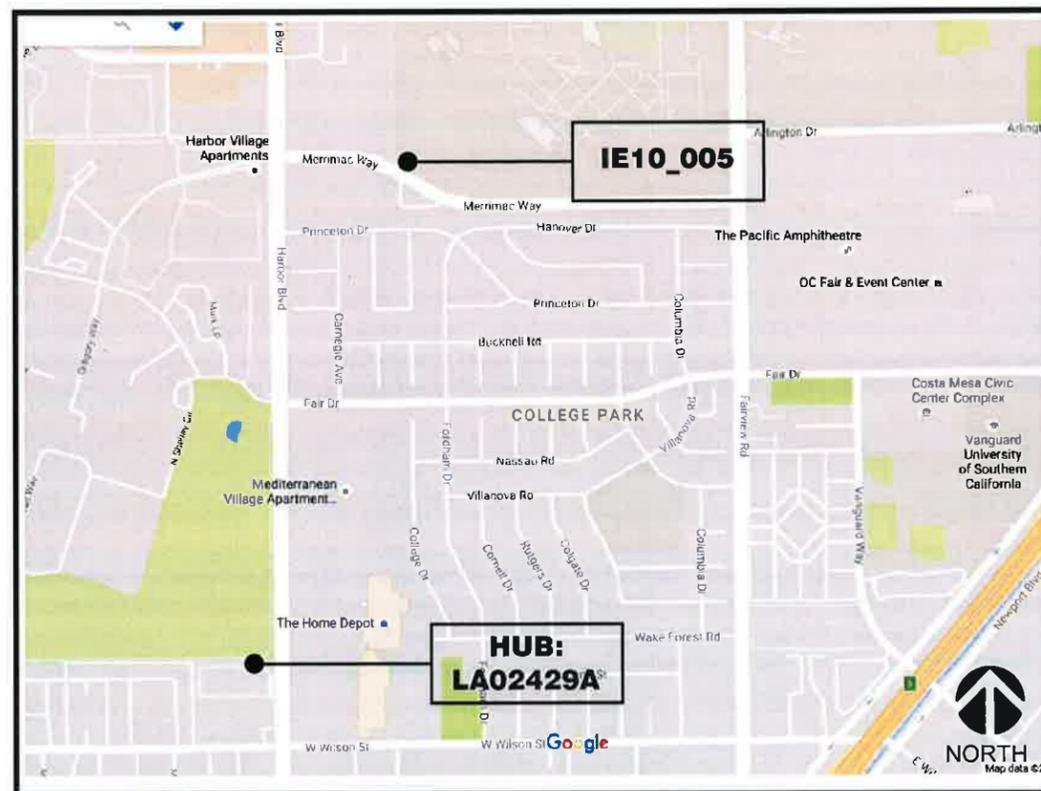
CROWN CASTLE

PROJECT MANAGER:
 CONTACT: MIKE PUHL
 PHONE: (949) 344-7811

CONSTRUCTION MANAGER:
 CONTACT: GARY HOLZER
 PHONE: (949) 697-2011

UTILITY CONTACT:
 NETWORK OPERATION:
 CONTACT: CROWN CASTLE
 PHONE: 1-800-788-7011
 POWER: SCE

NRE CONTACT:
 CONTACT: NANCY SHERIDAN
 PHONE: 1-714-362-5152



SITE: SOC275 / IE10_005
 COORDINATES: 33.66818°, -117.91622°
 ADDRESS: 400 MERRIMAC WAY
 COSTA MESA, CA 92626

LATITUDE & LONGITUDE:
 33.66818°, -117.91622°

ADDRESS:
 400 MERRIMAC WAY
 COSTA MESA, CA 92626

ENGINEER:

5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.736.3766

OWNER/DEVELOPER:

200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

REVISIONS

REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	TITLE SHEET
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: **C-01**

PROJECT DESCRIPTION:

THIS PROJECT IS FOR THE INSTALLATION AND OPERATION OF A SMALL CELL NETWORK.

SCOPE OF WORK:

- BRING UG FIBER TO LIGHT POLE VIA ENCROACHMENT PERMIT
- INSTALL RRU (REMOTE RADIO UNIT) INSIDE NEW RADOME
- INSTALL FIBER AND POWER INSIDE LIGHT POLE TO RRUs



FACING NORTHWEST



FACING SOUTHWEST



FACING SOUTHEAST

LOCATION MAP

NOT TO SCALE



Table 1 Radio 2203 Technical Data

Description	Value
Maximum nominal output power	2 x 5 W
Number of carriers	WCDMA: One to four carriers. LTE: One to three carriers Mixed mode: Two to five carriers
Description	Value
Frequency ⁽¹⁾	1920-1980 MHz uplink 2110-2170 MHz downlink B1 for WCDMA and LTE. 1710-1785 MHz uplink 1805-1880 MHz downlink B3 for WCDMA and LTE 1744.9-1784.9 MHz uplink 1839.9-1879.9 MHz downlink B3C for WCDMA and LTE 880-915 MHz uplink 925-960 MHz downlink B8 for WCDMA and LTE 1710-1780 MHz uplink 2110-2180 MHz downlink B86A for WCDMA and LTE.
Dimensions with Cover	
Height	200 mm (7-7/8" in)
Width	200 mm (7-7/8" in)
Depth	100 mm (3-15/16" in)
Dimensions with Antenna	
Height	200 mm (7-7/8" in)
Width	200 mm (7-7/8" in)
Depth of Radio 2203 B1, B3C	119 mm (4-11/16" in)
Depth of Radio 2203 B8	129 mm (5-1/16" in)
Weight with Cover	
Radio 2203	4.5 kg (9.9208 lbs.)
Weight with Antenna	
Radio 2203	4.9 kg (10.8027 lbs.)
Color	
Body	NCS S 1002-B

⁽¹⁾ Information about Instantaneous Bandwidth (IBW) can be found in RBS Configurations

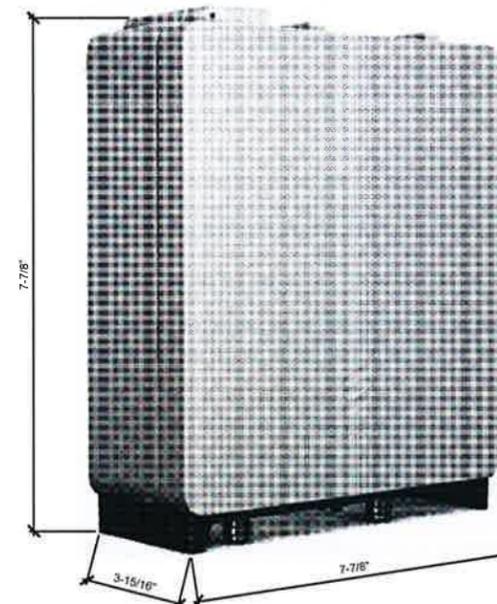


Product Overview

The radio expands coverage and performance in denser urban areas, where the use of small handheld devices demand high capacity on the operators networks. It is designed to be located in cities and in demanding radio environments.

The radio is part of a modular radio building concept that enables a variety of installation alternatives that is also easy to expand. Flexible mounting solutions are provided using rails and pole clamps. The small size of the radio together with the flexible mounting solutions reduces the site volume. The lower weight also improves the handling of the radio.

The radio can be connected in a star or cascade configuration using optical cable links. An optic cable connects the radio to the main unit, or to an expanded Radio System.



CROWN NODE ID SOC275
T-MOBILE SITE ID IE10_005
SCE POLE ID 1729117E

LATITUDE & LONGITUDE:
33.66818°, -117.91622°

ADDRESS:
400 MERRIMAC WAY
COSTA MESA, CA 92626

ENGINEER:



OWNER/DEVELOPER:



RADIO 2203 SPECS

SCALE
N.T.S. **3**

RADIO 2203 DESCRIPTION

SCALE
N.T.S. **2**

TITLE:

CROWN CASTLE NG WEST
JOB# 365238
COSTA MESA

REVISIONS

REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:
FILE NAME: EQUIPMENT DETAILS
DATE DRAWN: 09/06/2017
SCALE: AS SHOWN

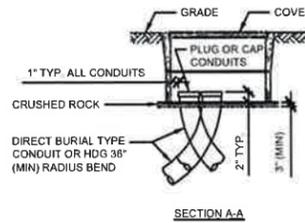
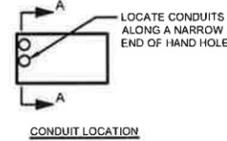
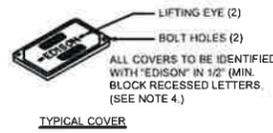
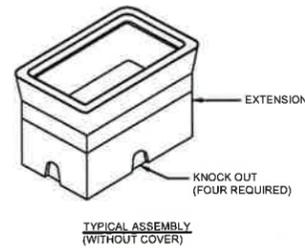
SHEET: **C-02**

NOT USED

SCALE
N.T.S. **4**

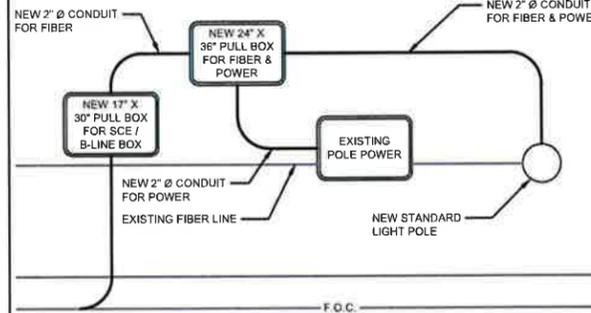
NOT USED

SCALE
N.T.S. **1**



- NOTES:
- GC TO REFER TO SCE DOCUMENT HP 200 FOR HAND HOLE REQUIREMENTS (UNDERGROUND STRUCTURES STANDARDS)
 - RADIUS ANGLES MAY BE REDUCED TO LESS THAN 90° PROVIDING THE PROJECTED CENTER LINE OF THE CONDUIT CLEARS HAND HOLE OPENING.
 - TWO HOLD DOWN DEVICES TO BE SUPPLIED WITH EACH HAND HOLE.
 - COVER SHALL BE IDENTIFIED WITH "EDISON" IN MINIMUM 2-INCH LETTERS OR LABELS PERMANENTLY SECURED TO THE LID.

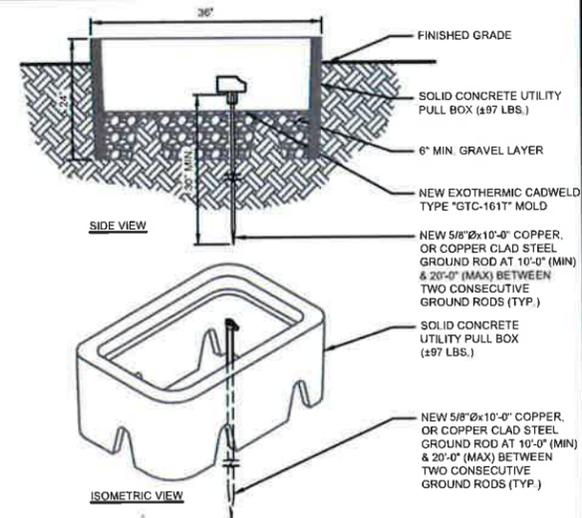
NOTE: PULL BOX & LIGHT POLE LOCATION VARIES PER LOCATION



SCALE N.T.S. 4

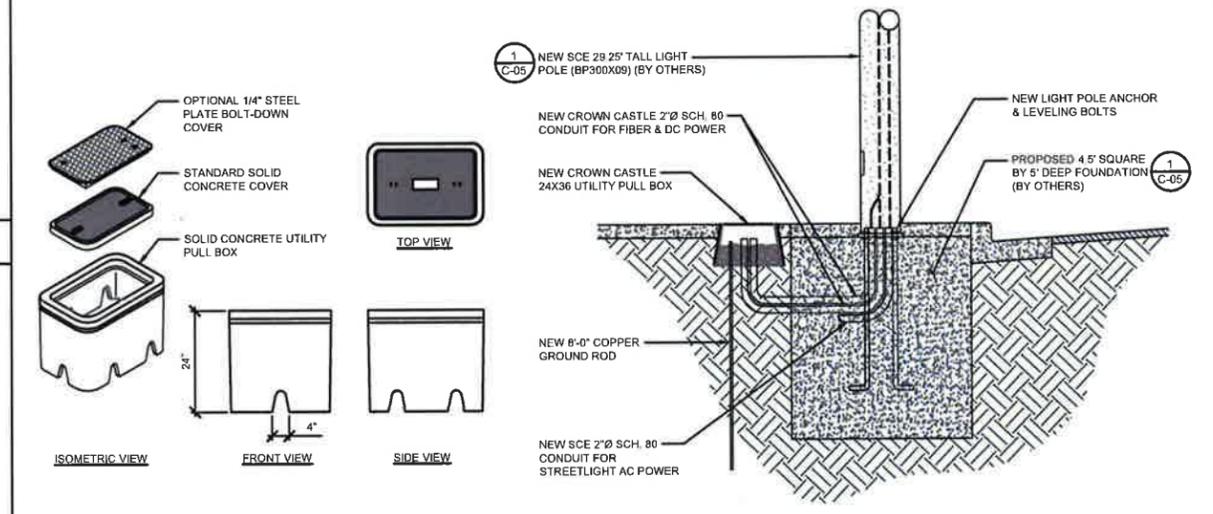
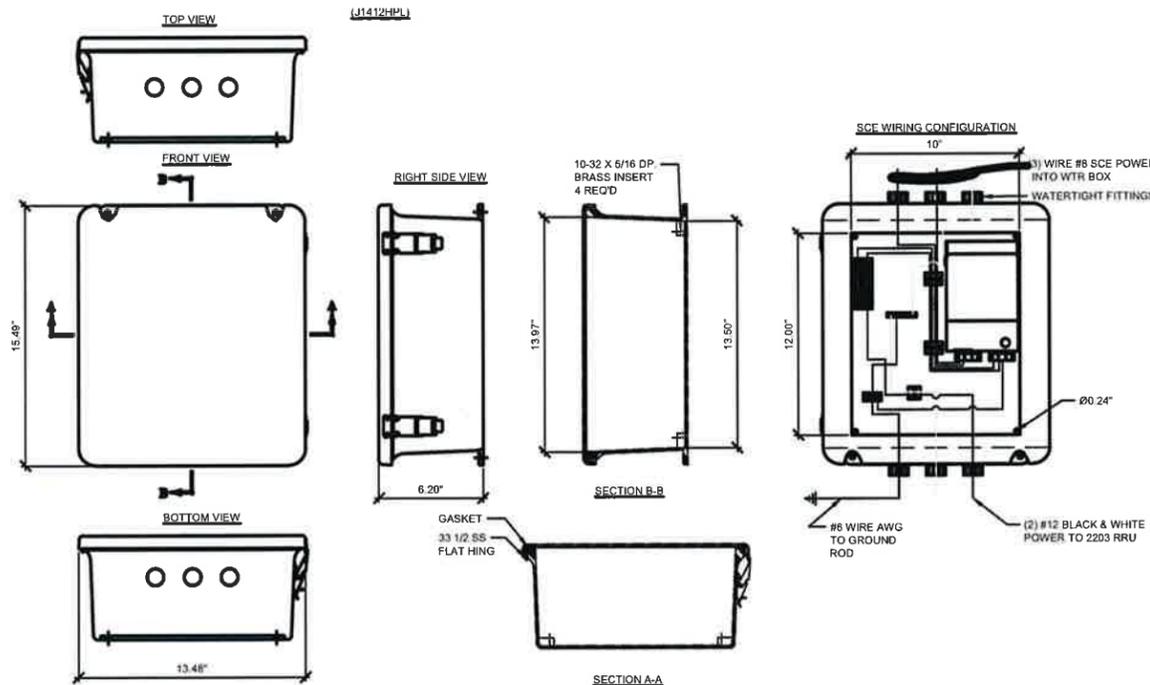
GROUNDING ROD

SCALE N.T.S. 3



17" X 30" UTILITY PULL BOX DETAIL (HH-6)

SCALE N.T.S. 6



SCALE N.T.S. 2

SCE / B-LINE BOX DETAIL

SCALE N.T.S. 5

NOT USED

SCALE N.T.S. 1

CROWN NODE ID SOC275
T-MOBILE SITE ID IE10_005
SCE POLE ID 1729117E

LATITUDE & LONGITUDE:
33.66818°, -117.91622°
ADDRESS:
400 MERRIMAC WAY
COSTA MESA, CA 92626

ENGINEER:

SAC AE DESIGN GROUP, INC.
5015 SHOREHAM PLACE, SUITE 150
SAN DIEGO, CA 92122
www.sacw.com
619.736.3766

OWNER/DEVELOPER:

CROWN CASTLE
200 SPECTRUM CENTER DRIVE, SUITE 1800
IRVINE, CA 92618

TITLE:
CROWN CASTLE NG WEST
JOB# 365238
COSTA MESA

REVISIONS			
REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	EQUIPMENT DETAILS
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: C-03

CROWN NODE ID SOC275
 T-MOBILE SITE ID IE10_005
 SCE POLE ID 1729117E

LATITUDE & LONGITUDE:
 33.66818°, -117.91622°
 ADDRESS:
 400 MERRIMAC WAY
 COSTA MESA, CA 92626

ENGINEER:

SAC AE DESIGN GROUP, INC.
 5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619 736 3766

OWNER/DEVELOPER:

CROWN CASTLE
 200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

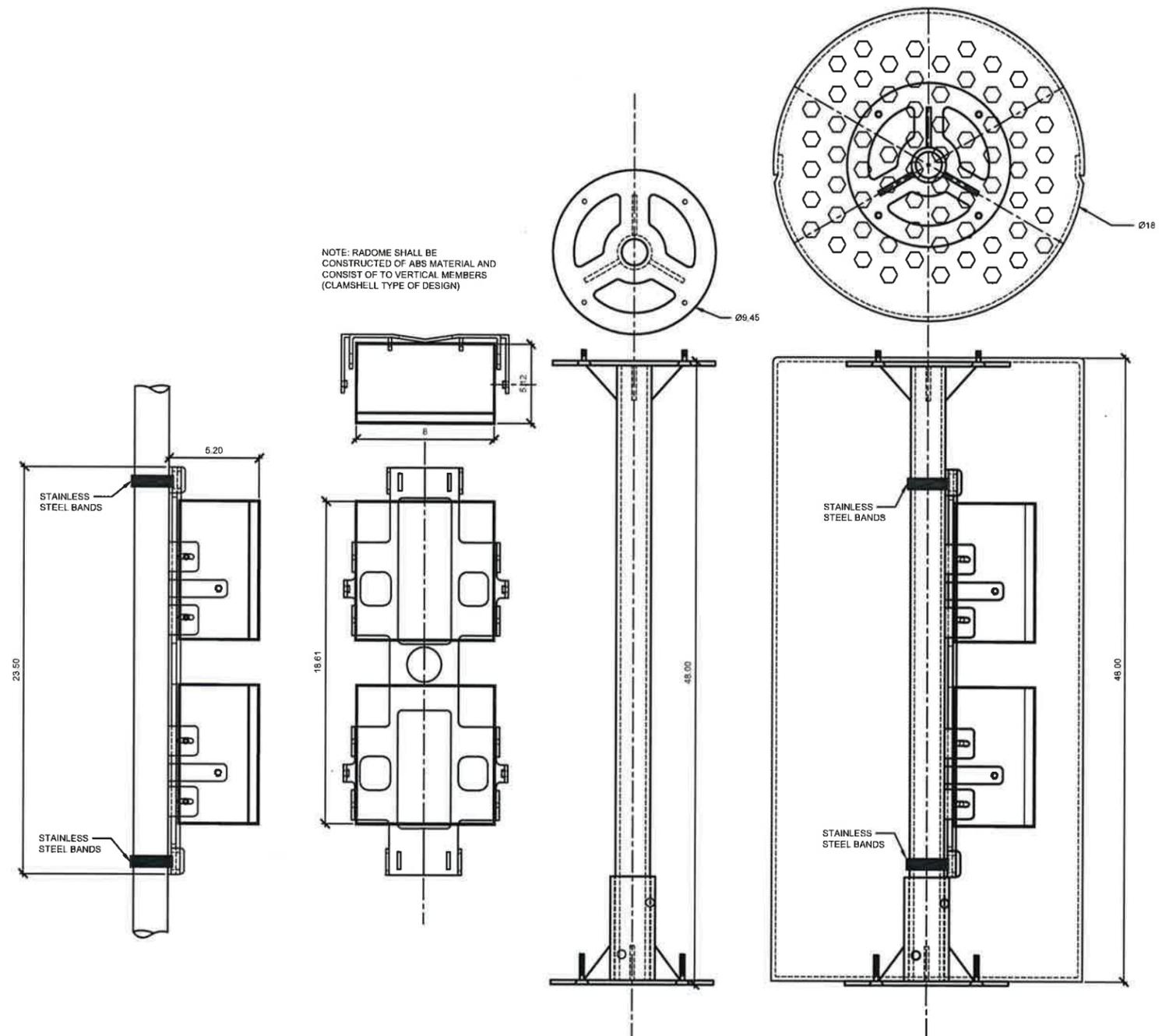
REVISIONS

REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	EQUIPMENT DETAILS
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: C-04



CROWN NODE ID SOC275
 T-MOBILE SITE ID IE10_005
 SCE POLE ID 1729117E

LATITUDE & LONGITUDE:
 33.66818°, -117.91622°
 ADDRESS:
 400 MERRIMAC WAY
 COSTA MESA, CA 92626

ENGINEER:

 SAC AE DESIGN GROUP, INC.
 5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.736.3766

OWNER/DEVELOPER:

 200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

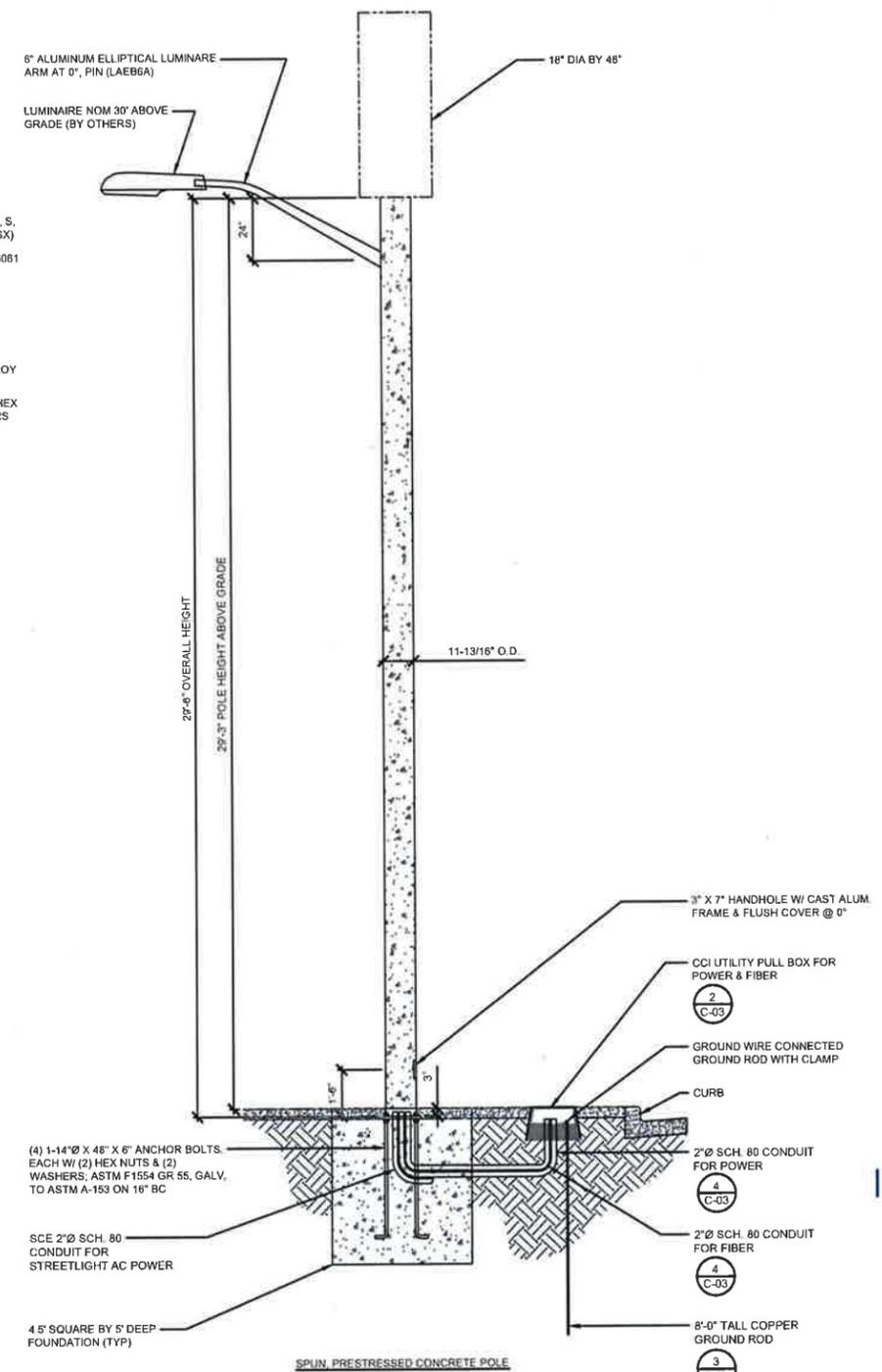
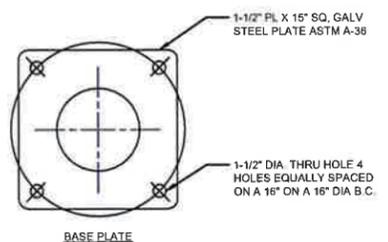
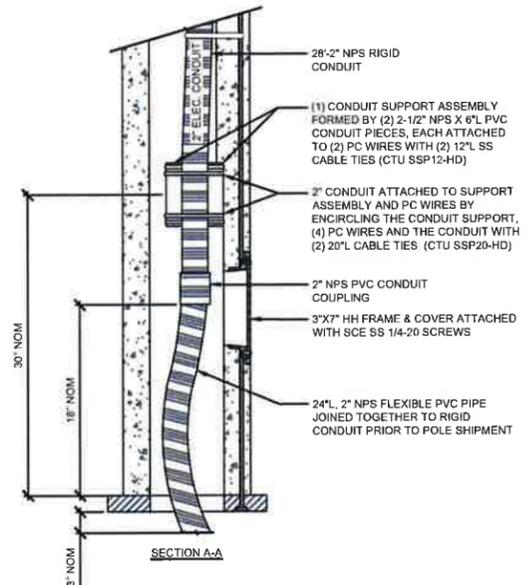
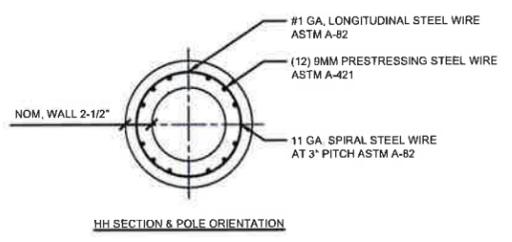
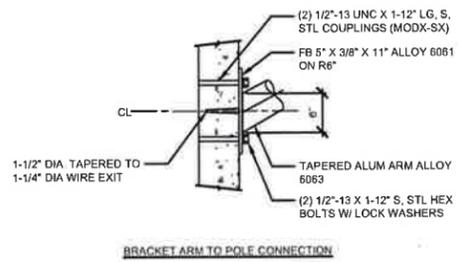
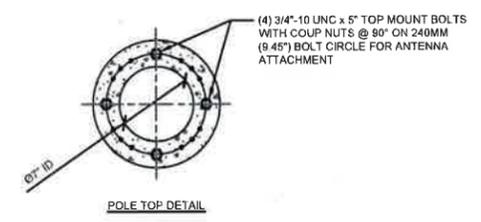
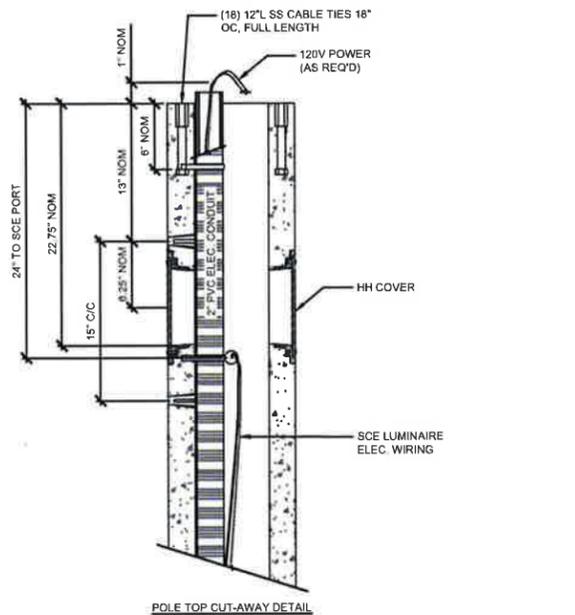
TITLE:
CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

REVISIONS

REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB
PROJECT NUMBER:		
FILE NAME:	LIGHT STANDARD DETAIL	
DATE DRAWN:	09/06/2017	
SCALE:	AS SHOWN	

SHEET: **C-05**



- NOTES:
- FINISHES: (#155), SCE BLACK & WHITE, LIGHTLY EXPOSED AGGREGATE FINISH, WITH FLAT, WATER SEALER COATING
 - ASTM C-150 TYPE III GRAY CEMENT
 - f_c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST
 - f_c @ 28 DAYS = 5,000 PSI USING ASTM C-31 CYLINDER TEST
 - POLES MANUFACTURED TO ASTM C-1089-13 SPECIFICATIONS
 - MODX, (2) 1/2"-13 X 1-1/2" COUPLINGS
 - POLE WT. 2900 LBS

CROWN NODE ID SOC275
 T-MOBILE SITE ID IE10 005
 SCE POLE ID 1729117E

LATITUDE & LONGITUDE:
 33.66818°, -117.91622°
 ADDRESS:
 400 MERRIMAC WAY
 COSTA MESA, CA 92626

ENGINEER:

WIRELESS
 SAC AE DESIGN GROUP INC
 5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.736.3766

OWNER/DEVELOPER:

CROWN CASTLE
 200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

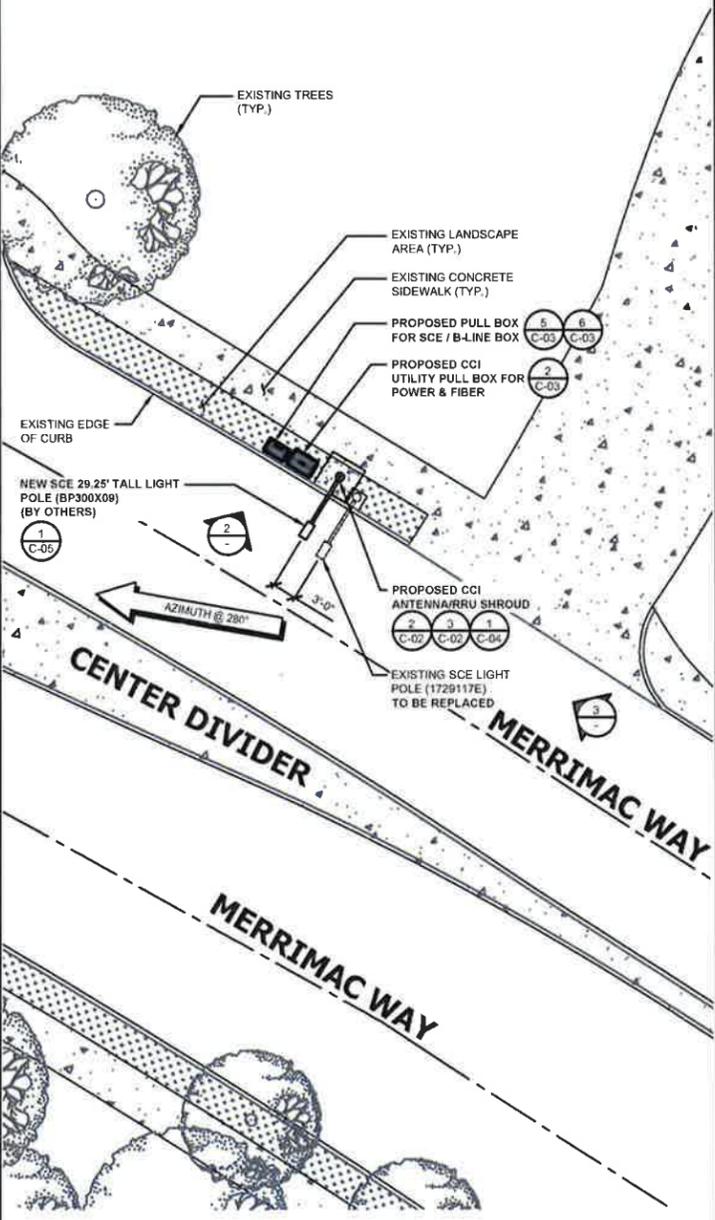
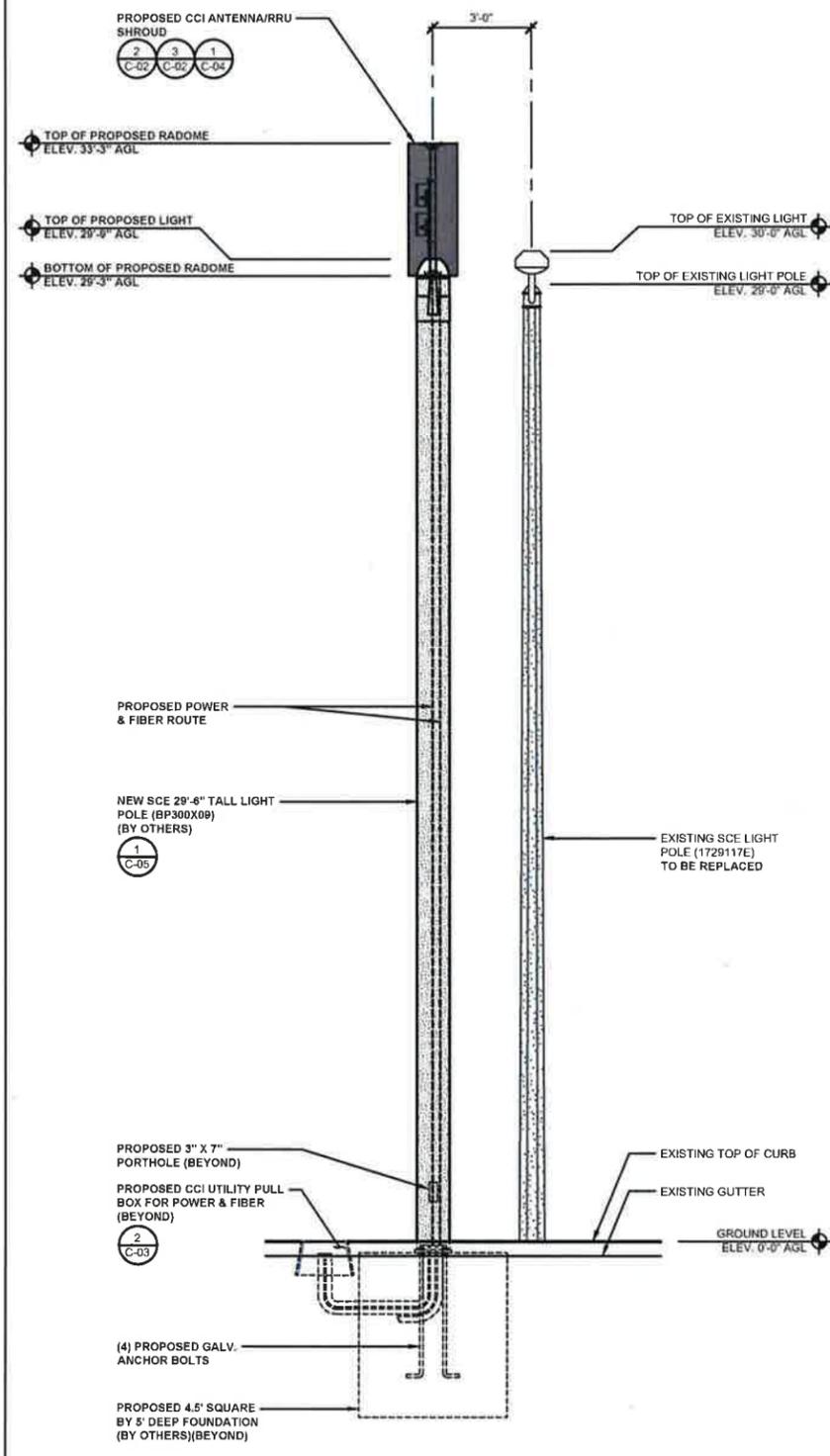
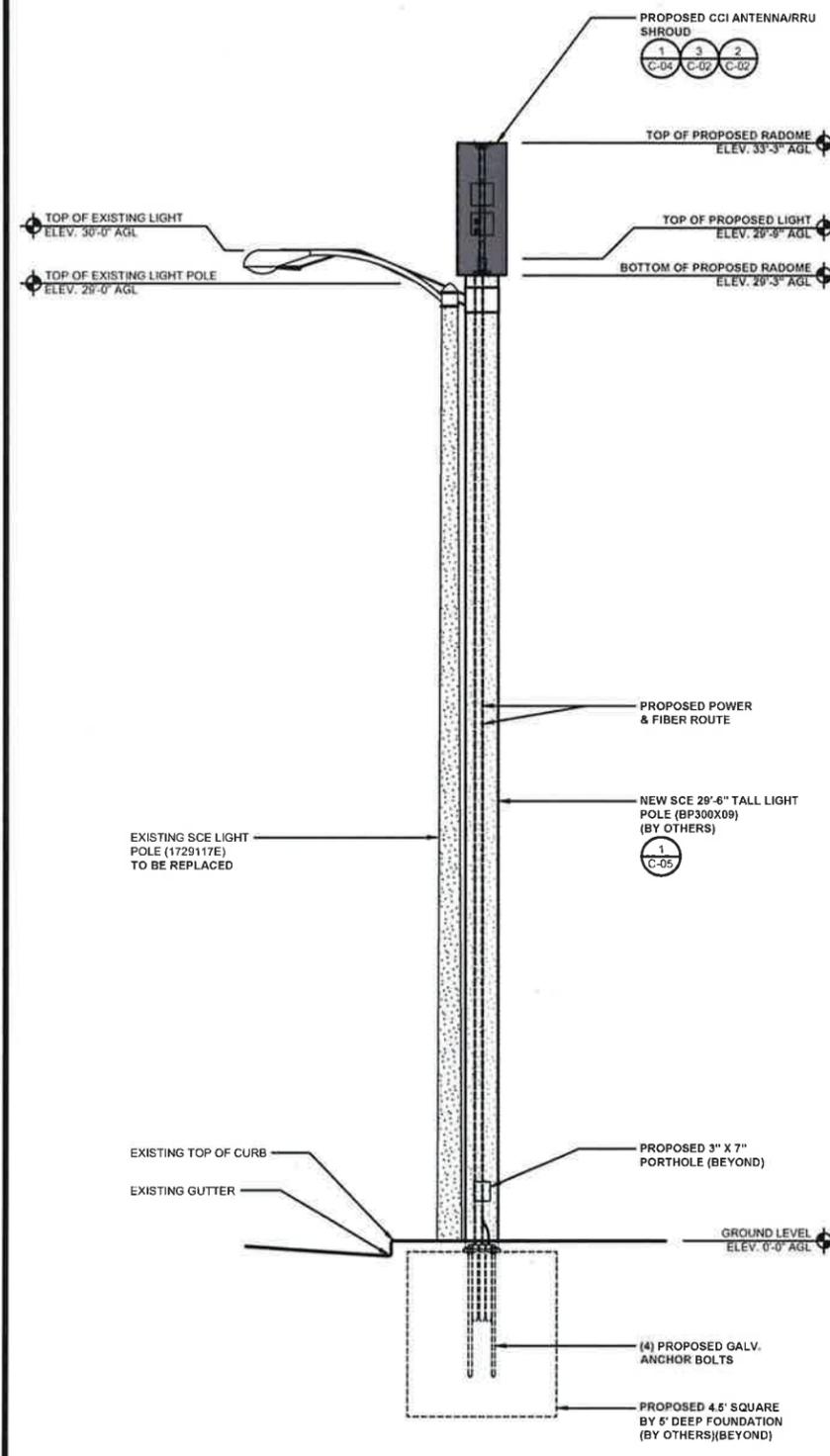
TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

REVISIONS			
REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	SITE PLAN & ELEVATION
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: C-06

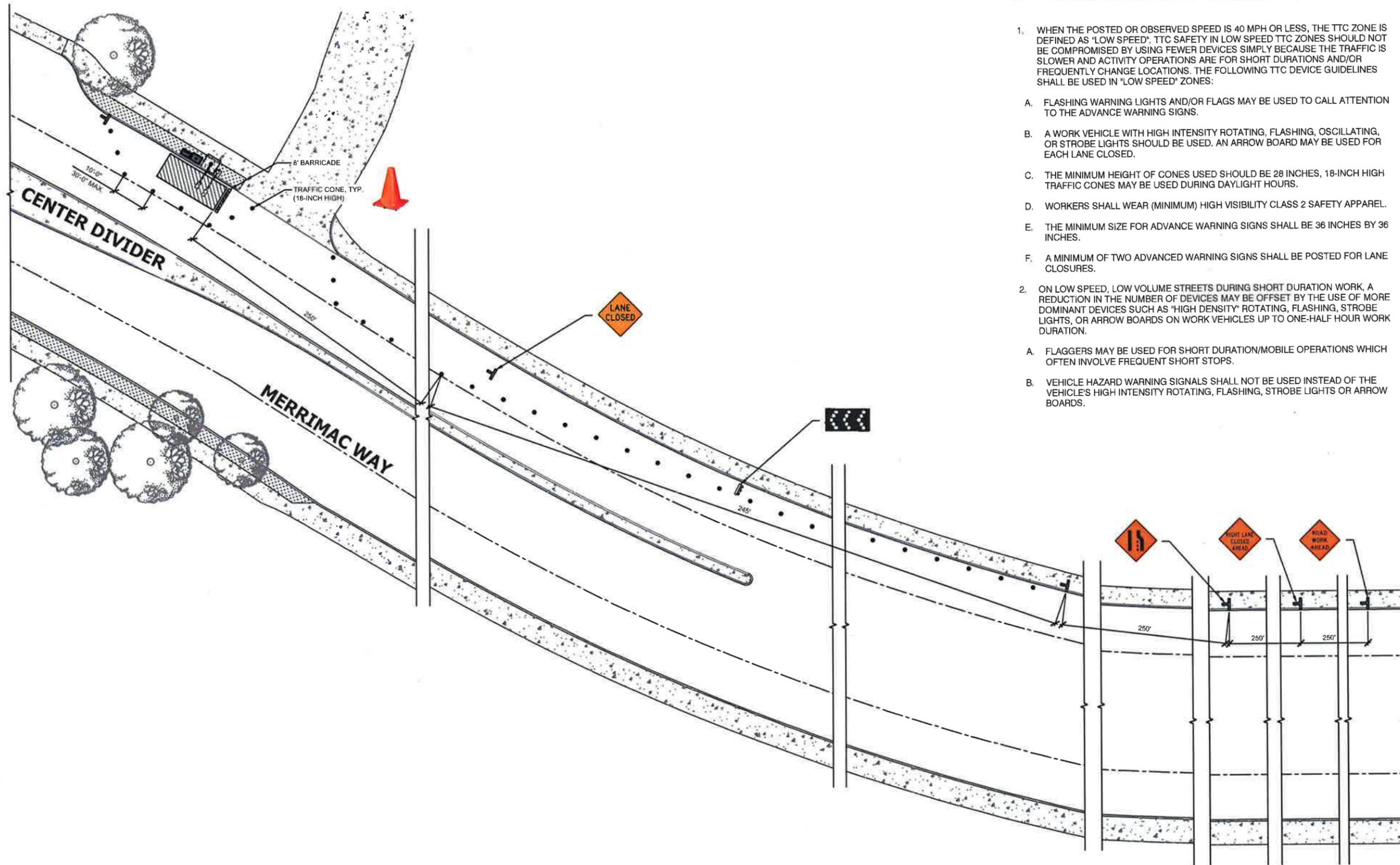


PROPOSED SOUTHEAST ELEVATION SCALE: 3/8" = 1'-0" (24x36) (OR) 3/16" = 1'-0" (11x17) **3**

PROPOSED SOUTHWEST ELEVATION SCALE: 3/8" = 1'-0" (24x36) (OR) 3/16" = 1'-0" (11x17) **2**

SITE PLAN SCALE: 3/32" = 1'-0" (24x36) (OR) 3/64" = 1'-0" (11x17) **1**





LOW SPEED TTC ZONE NOTES:

1. WHEN THE POSTED OR OBSERVED SPEED IS 40 MPH OR LESS, THE TTC ZONE IS DEFINED AS "LOW SPEED". TTC SAFETY IN LOW SPEED TTC ZONES SHOULD NOT BE COMPROMISED BY USING FEWER DEVICES SIMPLY BECAUSE THE TRAFFIC IS SLOWER AND ACTIVITY OPERATIONS ARE FOR SHORT DURATIONS AND/OR FREQUENTLY CHANGE LOCATIONS. THE FOLLOWING TTC DEVICE GUIDELINES SHALL BE USED IN "LOW SPEED" ZONES:
 - A. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ADVANCE WARNING SIGNS.
 - B. A WORK VEHICLE WITH HIGH INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS SHOULD BE USED. AN ARROW BOARD MAY BE USED FOR EACH LANE CLOSED.
 - C. THE MINIMUM HEIGHT OF CONES USED SHOULD BE 28 INCHES, 18-INCH HIGH TRAFFIC CONES MAY BE USED DURING DAYLIGHT HOURS.
 - D. WORKERS SHALL WEAR (MINIMUM) HIGH VISIBILITY CLASS 2 SAFETY APPAREL.
 - E. THE MINIMUM SIZE FOR ADVANCE WARNING SIGNS SHALL BE 36 INCHES BY 36 INCHES.
 - F. A MINIMUM OF TWO ADVANCED WARNING SIGNS SHALL BE POSTED FOR LANE CLOSURES.
2. ON LOW SPEED, LOW VOLUME STREETS DURING SHORT DURATION WORK, A REDUCTION IN THE NUMBER OF DEVICES MAY BE OFFSET BY THE USE OF MORE DOMINANT DEVICES SUCH AS "HIGH DENSITY" ROTATING, FLASHING, STROBE LIGHTS, OR ARROW BOARDS ON WORK VEHICLES UP TO ONE-HALF HOUR WORK DURATION.
 - A. FLAGGERS MAY BE USED FOR SHORT DURATION/MOBILE OPERATIONS WHICH OFTEN INVOLVE FREQUENT SHORT STOPS.
 - B. VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH INTENSITY ROTATING, FLASHING, STROBE LIGHTS OR ARROW BOARDS.

CROWN NODE ID SOC275
 T-MOBILE SITE ID IE10_005
 SCE POLE ID 1729117E

LATITUDE & LONGITUDE:
 33.66818°, -117.91622°

ADDRESS:
 400 MERRIMAC WAY
 COSTA MESA, CA 92626

ENGINEER:

SAC WIRELESS
 SAC AE DESIGN GROUP, INC.
 5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.735.3765

OWNER/DEVELOPER:

CROWN CASTLE
 200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

REVISIONS			
REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	TRAFFIC CONTROL PLAN
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: **C-07**





CITY OF COSTA MESA

P.O. BOX 1200 • 77 FAIR DRIVE • CALIFORNIA 92628-1200

DEVELOPMENT SERVICES DEPARTMENT

November 9, 2017

Nancy Sheridan
200 Spectrum Center Drive
Suite 1800
Irvine, CA 92618

**RE: ZONING APPLICATION ZA-17-41
MINOR CONDITIONAL USE PERMIT TO INSTALL A SMALL CELL
FACILITY ON TOP OF A STREETLIGHT POLE
2600 HARBOR BLVD, COSTA MESA**

Dear Ms. Sheridan:

City staff's review of your zoning application for the above-referenced project has been completed. The application, as described in the attached project description, has been approved, based on the findings and subject to the conditions of approval and code requirements (attached). The decision will become final at 5:00 p.m. on November 16, 2017, unless appealed by an affected party, including filing of the necessary application and payment of the appropriate fee, or called up for review by a member of the Planning Commission or City Council.

If you have any questions regarding this letter, please feel free to contact the project planner, Johnwilly Aglupos, at either johnwilly.aglupos@costamesaca.gov or 714.754.5692.

Sincerely,

WILLA BOUWENS-KILLEEN, AICP
Zoning Administrator

Attachments: Project Description, Findings, Conditions of Approval, Code Requirements, Intent Letter, SCE consent letter, SCE Letter of Authorization, Disconnect Letter, SCE Streetlight Authorization Form, FCC, CPUC, Rendering, and Plans.

cc: Engineering
Transportation

PROJECT DESCRIPTION

The applicant requests approval of a minor conditional use permit (MCUP) to install a small cell facility on top of a Southern California Edison (SCE) streetlight pole adjacent to 2600 Harbor Boulevard. The facility will include two RRUs and antennas inside a radome that is 48 inches in height and 18 inches in diameter. The installation will require the removal and replacement of the existing pole and an underground utility pull box for fiber and power to the new pole. The site abuts commercially zoned and developed property and is in proximity to residentially-zoned and developed properties.

The telecommunication industry is in constant growth and expansion. This includes an introduction of "Small Cell" facilities placed on light poles, traffic signals, or on new poles within the public right-of-way to support increased demand and capacity. "Small Cell" facilities (also referred to as "nodes") are a lower-power facility that will complement and supplement broader macro cell facilities, filling gaps in coverage from the macro facilities.

Pursuant to Municipal Code Title 19, Section 19-15(c)(2), a minor conditional use permit is required to establish and operate a wireless communication facility within the public right-of-way if: (1) the antenna is greater than 26 inches in length, (2) the volume of the radio box exceeds two cubic feet, (3) the facility requires an above ground cabinet/equipment, and (4) the facility is located within a 500-foot radius of a residentially zoned property. The applicant is requesting to deviate from the required antenna height by 22 inches (antenna is proposed at 48 inches in height) and to locate within a 500-foot radius of residentially zoned properties; remaining requirements are proposed to be satisfied.

ANALYSIS

Design and Location

The existing and replacement streetlight poles are owned by SCE. The SCE design criteria dictates the height and material of the replacement pole while the supporting small cell equipment varies in size and location in accordance to the carrier's technology (see Table 1 below). The applicant has provided an SCE letter of authorization regarding the approved Carrier's preliminary plans. Per U.S.C. 332(c)(7)(B)(i)(II), the city may not regulate the placement, construction or modification of wireless service facilities in a manner that prohibits the provision of personal wireless services; however, the law does not prohibit local government from asking the applicant to provide a design that allows for a compatible and harmonious relationship between the proposed facility and the surrounding area.

TABLE 1			
Comparison			
	Existing	Proposed	City Requirement
Top of Pole	29'-0"	29'-3"	N/A
Top of Light	30'-0"	29'-9"	N/A
Overall Height	30'-0"	33'-3"	35'-0"
Antenna Length	N/A	48"	26"
Diameter	Varies	11.8"	N/A
Color	Gray, lightly exposed aggregate	Gray, lightly exposed aggregate	N/A

The additional antenna height is proposed to allow the incorporation of the RRUs into the same shroud (radome) as the antenna itself, providing a more streamlined design. Although the actual antenna height exceeds the City's maximum requirement, the overall streetlight pole height will not exceed the City's maximum allowable height of 35 feet. The meter pedestal will be placed underground. In addition, the standard SCE pole will be in the same color and finish as the existing pole. The location, height, supporting small cell equipment, and color/finish of the replacement pole will be the least intrusive means of supporting coverage. Therefore, the design balances visual impact and coverage with adequate spacing of the facilities to effectively relay signal with minimum number of node locations, and utilizes existing vertical elements to minimize the net number of vertical intrusions in the public right-of-way.

The selected location maximizes the coverage of the small cell facility and minimizes the overlap with other facilities of the system, which results in a lower overall number of proposed facilities within the public right-of-way. However, if necessary, this proposal allows for collocation by multiple carriers within the shroud to avoid proliferation of other small cell facilities in the immediate area.

To avoid any street light outage during the replacement process and to keep compatible spacing between the existing streetlight poles, the proposed pole will be installed three feet from the existing pole; the existing pole will be removed as soon as the new pole is activated.

Health and Safety

Pursuant to Mobile Services U.S.C 332(c)(7)(B)(iv), no state or local government may regulate the site of wireless telecommunication facilities on the basis of the perceived health effects of radio frequency (RF) emissions to the extent that the proposed facility complies with FCC regulations concerning such emissions. The applicant submitted a detailed report regarding the RF emission. Based on FCC Rules and Regulations, the applicant will be compliant provided recommendations(s) are implemented; conditions of approval requiring compliance are included.

General Plan Consistency

The City's 2015-2035 General Plan ensures that development decisions and improvements to public and private infrastructures are consistent with the goals, objectives, and policies of the City.

- Policy CD-1.5: *Encourage electric and communication lines to be placed underground and electrical substations and telephone facilities to be screened to minimize visual impacts from sidewalks, streets, and adjacent properties. Support utility undergrounding through conditions of project approval, preparation of undergrounding plans, and the formation of assessment districts.*
- Policy C-1.2: *Allow for flexible use of public rights-of-way to accommodate all users of the street system while maintaining safety standards.*

Approval of the facility will meet the growing demand of the City's telecommunication needs while ensuring that the facility will not hinder the City's aesthetic and circulation of the public right-of-way. The proposal is in keeping with the intent of the City ordinance in that:

- The facility and support equipment are designed, textured, and painted to match existing streetlight poles;
- The facility uses the latest technology to reduce the bulk of the equipment;
- The design screens any supporting electrical and communication lines; and
- Placing all utilities underground allows flexible use of the sidewalk while maintaining safety standards.

FINDINGS

- A. The information presented complies with Costa Mesa Municipal Code Section 13-29(e) in that:
1. As proposed and conditioned, the small cell facility is compatible and harmonious to the surrounding existing facilities by locating the replacement pole as close as possible to the existing pole and using an approved SCE pole that is closely similar to the existing SCE poles.
 2. The proposed streetlight pole is engineered to withstand the weight of the equipment, the small cell will be compliant with FCC's radio frequency emissions, and the location of the replacement pole is close to the existing location which will not impede the pedestrian and automobile's path of travel. Therefore, granting the minor conditional use permit will not be detrimental to the health, safety and general welfare of the public or otherwise injurious to property or improvements within the immediate neighborhood.
 3. The proposed small cell facility complies with the maximum height of a telecommunication facility allowed within the public right-of-way.

4. The proposed small cell facility meets Policy CD-1.5 and Policy C-1.2 of the City's General Plan.
- B. The information presented complies with Costa Mesa Municipal Code Section 13-29(g)(2) in that:
1. The proposed small cell facility is compatible and harmonious to the surrounding facilities that exist on site and will not be materially detrimental to other facilities within the area. The facility and support equipment will be designed, textured, and painted to match the existing streetlight poles.
 2. Granting the minor conditional use permit will not be materially detrimental to the health, safety and general welfare of the public within the immediate neighborhood because it will be compliant with FCC's radio frequency emissions and meets SCE's design and structural standards.
 3. Granting the minor conditional use permit will not allow a use, density, or intensity which is not in accordance with the General Plan designation since the facility will be of the smallest size possible while incorporating all equipment within a single shroud/radome.
- C. The project has been reviewed for compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the City environmental procedures, and has been found to be exempt under Section 15303(d), New Construction or Conversion of Small Structures, of the CEQA Guidelines.

CONDITIONS OF APPROVAL

- Plng
1. The small cell mounted on SCE's streetlight pole shall be mounted as shown on the attached conceptual plan with appropriate treatments to minimize visual impacts to surrounding properties and uses. Any support cabinet(s) shall be installed underground.
 2. Any wireless device colocating on the facility shall fit within the proposed shroud; the shroud shall remain the same size as approved.
 3. All electrical and antenna wiring shall be encased within the street light pole itself.
 4. Any substantial modifications to the physical dimension of the equipment or antennas shall be done with the prior approval of Planning Staff and may require filing and approval of a minor conditional use permit to ensure compliance with applicable City codes.
 5. Applicant shall defend, indemnify and hold harmless the City, its officials and employees, against all legal actions filed challenging City's approval of the applicant's project and/or challenging any related City actions supporting the approval. City shall have the right to select the attorney defending it, if it elects to do so.
 6. If any section, division, sentence, clause, phrase or portion of this approval is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions.
 7. The replacement pole will be placed as close as possible to the existing pole. The existing pole shall be immediately removed upon the activation of the new pole.
 8. The replacement pole shall be of the same materials and as close as possible to the same diameter as the existing street light poles in the vicinity.
 9. The Small Cell shall comply with Title 47 - FCC's rules and regulations, including those related to FCC Radio Frequency Safety Guidelines.

CODE REQUIREMENTS

The following list of federal, state, and local laws applicable to the project has been compiled by staff for the applicant's reference. Any reference to "City" pertains to the City of Costa Mesa.

- Plng. 1. The approval of the zoning application shall be valid for a ten-year period from the date of approval (November 16, 2027), unless otherwise indicated in a condition imposed at the time of granting the application or unless otherwise exempted under federal or state law. Prior to the expiration of the permit, the applicant may apply for a ten-year extension of time. If notice was required for the original application, and a public hearing on the extension is allowed under federal and state law, notice of the public hearing for a time extension shall be given according to the procedures set forth in this section.
- 2. The antenna and all support equipment shall comply with all requirements of CMMC 19-15.
- Bldg 3. Comply with the requirements of the following adopted codes: 2016 California Building Code, 2016 California Electrical code, 2016 California Mechanical code, 2016 California Plumbing code and 2016 California Energy Code (or the applicable adopted, California Building code California Electrical code, California Mechanical code California Plumbing Code and California Energy Code at the time of plan submittal or permit issuance) and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa. Requirements for accessibility to sites, facilities, buildings and elements by individuals with disability shall comply with chapter 11B of the 2016 California Building Code.
- Bus. 4. All contractors and subcontractors must have valid business licenses to do business in the City of Costa Mesa. Final inspections, final occupancy and utility releases will not be granted until all such licenses have been obtained.
- Lic.
- Eng. 5. Obtain an Encroachment Permit from the Engineering Division for work in the City public right-of-way. Pay required permit fee and cash deposit or surety bond to guarantee construction of off-site street improvements at time of permit per section 15-31 & 15-32, C.C.M.M.C. as approved by City Engineer. Cash deposit or surety bond amount to be determined by City Engineer.



Crown Castle
200 Spectrum Center Drive
Suite 1800
Irvine, CA 92618

September 7, 2017

Willa Bouwens-Killeen
Zoning Administrator
City of Costa Mesa Planning Department
77 Fair Drive
Costa Mesa, CA 92626

Re: Minor Conditional Use Permit for Facilities within the Public Right of Way (SOC274)

Dear Ms. Bouwens-Killeen:

Crown Castle NG West LLC (“Crown Castle”) is submitting a Minor Conditional Use Permit application to place an antenna node on a streetlight in the Right of Way in accordance with your code, ordinances and regulations. Please be advised the Federal Communications Commission (FCC) has adopted Rules and Regulations that impact how you must process this application. In addition, state law also limits your regulation of Crown Castle’s access to the public rights of way.

Crown Castle’s Deployment:

Crown Castle provides telecommunications services to its wireless carrier customers. It does so via telecommunications networks installed in the public rights of way that integrate elements including fiber optic cables as well as personal wireless services facilities, such as antennas and related equipment. Crown Castle’s networks are sometimes referred to as distributed antenna systems (“DAS”) or Small Cell networks. The specific equipment sought to be installed by Crown Castle in this case is set forth in the accompanying permit application.

Pursuant to the California Public Utilities Commission, Crown Castle has been granted a Certificate of Public Convenience and Necessity (“CPCN”) to provide such services. As a result, Crown Castle must be granted access to the public rights of way in the same manner and on the same terms applicable to other certificated telecommunications providers and utilities.¹ (copy enclosed)

Federal and State Regulations Applicable To This Application:

¹ See CA Pub. Util. Code, §§ 7901 and 7901.1

Federal law and the FCC's rules implementing the law require that this permit application be processed to a final decision by this jurisdiction without undue delay. Specifically, this application proposes to attach new equipment on a replaced streetlight in the public rights of way, this application must be acted on within ninety (90) days from its submission, today.² Further, pursuant to recently passed California AB 57, if the City "fails to approve or disapprove" this application within that timeframe, it "shall be deemed approved."³

Moreover, pursuant to FCC regulations, this application is deemed complete 30 days after today unless you provide written notice to Crown Castle.⁴ If you contend that the application is incomplete, within the next 30 days you must provide written notice specifying any items you claim are missing to make the application complete.⁵ For each item alleged to be missing, you must specify the code provision, ordinance, application instruction, or otherwise publicly-stated procedure that requires the submission of the information.⁶

Please send all written requests for additional information regarding this application to:

Nancy Sheridan
Network Real Estate
Crown Castle
200 Spectrum Center Drive, Suite 1800
Irvine, CA 92618

Sincerely,

CROWN CASTLE NG WEST LLC



Nancy Sheridan

² *In re Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review*, Declaratory Ruling, 24 FCC Rcd. 13994 ¶¶ 32, 45-46 (2009) ("FCC Shot Clock Order"); *In the matter of Acceleration of Broadband Deployment By Improving Wireless Facilities Siting Policies*, Report and Order, FCC 14-153, WT Docket No. 13-238, ¶272 (FCC Oct. 21, 2014) ("Wireless Infrastructure Order") (clarifying that DAS nodes that involve installation of new poles trigger the 150 day shot clock).

³ See CA Government Code Section 65964.1.

⁴ *Wireless Infrastructure Order* at ¶¶ 257, 259.

⁵ *Id.* ¶¶ 259-260.

⁶ *Id.*



Brian P. Ryan
Principle Manager
Telephone: 909-274-1949
Brian.Ryan@sce.com

August 9, 2017

To Whom It May Concern:

Since 1994, Southern California Edison (SCE) has assisted wireless service providers in expanding their networks to meet customers' needs for telecommunications service. SCE makes available existing structures that can be used to co-locate the wireless service providers' equipment, while lessening the visual impacts on the community and constituency that is served. This letter requests that you help us in this endeavor.

In an effort to minimize the potential clutter that new vertical structures would produce, many California cities have adopted ordinances and policies encouraging wireless facilities to be mounted on street light poles within the public rights of way.

As you are aware, SCE owns and maintains street light poles in your city pursuant to our LS-1 tariff. In order to accommodate the increasing demand for micro-cell site locations, SCE has agreed to allow wireless service providers to attach their antennas to some of these streetlight poles, and contractually requires the wireless service provider to comply with certain requirements, including a requirement that the facility will not impact SCE's ability to provide street lighting service.

Costa Mesa has and retains full control over the entitlement and permitting process for these and future sites. The wireless service providers also pay for electrical usage resulting from their sites. This electrical service is metered and billed separately, and the City is not impacted.

While SCE believes this approach benefits local governments as well as their constituency, we would not engage in this solution if doing so resulted in extra costs to SCE. We would therefore appreciate you confirming that Costa Mesa consents to use of its public rights of way for the purpose of licensing space on an SCE Streetlight Pole # 1729102E located at: 2600 Merrimac Way. Crown Castle Site number: SOC0274. *HAR BDR*

Please sign this letter to indicate your consent and return it to me at the below address. If you have any questions, please feel free to call Scott Haney (909) 274-1961.

Regards,
Brian P. Ryan
Brian P. Ryan

Signature _____
Name _____
Title _____
Date: _____



A Division of SOUTHERN CALIFORNIA EDISONSM

Brian Ryan
Principal Manager Telecom Sales
Edison Carrier Solutions
e-mail: Brian.Ryan@sce.com

August 9, 2017

Costa Mesa Planning Department

To Whom It May Concern:

Re: Letter of Authorization

SCE streetlight identified as – SCE Streetlight Pole # 1729102E located adjacent: 2600 ^{HARBOR} ~~Merrimac~~ Way. Crown Castle Site Number: SOC0274.

Southern California Edison Company (SCE) is the owner of the Light Pole, located in Costa Mesa, CA. Crown Castle "Carrier" has requested that SCE replace the existing Light Pole so that it can be used for operating a wireless communications facility, ("Site").

SCE has reviewed Carrier's preliminary plans for this Site and believe these plans are compatible with SCE's use of this Light Pole. Thus, as a representative of SCE, I hereby authorize Carrier, and its representatives, to seek and secure all right(s), including any environmental review associated with granting such rights, that are needed from the Jurisdiction to use the Light Pole and other property for this purpose as long as there are no costs to SCE.

Notwithstanding this authorization, SCE reserves the right to reject Carrier's request for use of its Light Pole for any reason, including imposed conditions or required changes to the light pole by the Jurisdiction, are unacceptable to SCE.

All correspondence and/or notices regarding use of SCE's Light Pole by Carrier, or any later requests by the Carrier for authorizations or approvals needed for construction, operation or maintenance of an approved Site, should include a copy to SCE.

If you have any questions concerning this project, please contact Scott Haney @ 626-688-9344.

Sincerely,

A handwritten signature in black ink that reads "Brian P. Ryan".

Brian P. Ryan

PLEASE TRANSFER LETTER TO CITY LETTERHEAD

Date

Brian Ryan
Southern California Edison
Carrier Solutions Division
2 Innovation Way 1st Floor
Pomona, Ca 91768

Dear Mr. Ryan:

This letter authorizes Southern California Edison (SCE) to disconnect the SCE streetlight identified as – SCE Streetlight Pole #1729102E located adjacent: 2600 ~~Merrimac~~ ^{HARBOR} Way. Crown Castle Site number: SOC0274 so that work can be performed to replace the existing Streetlight.

Crown Castle (Wireless Carrier) has requested that SCE replace the Southern California Edison streetlight with a new streetlight that will be used for operating the wireless communications facility identified as SCE Light Pole #1729102E located adjacent: 2600 ~~Merrimac~~ ^{HARBOR} Way. Crown Castle Site number: SOC0274.

Please coordinate the disconnecting of the streetlight directly with Costa Mesa, (please provide County Contact, Name, Phone) so that the light will be out only for the above referenced work to be completed.

If you have any questions, please do not hesitate to call me.

Sincerely,

Name
Public Agency

SOUTHERN CALIFORNIA EDISON STREETLIGHT AUTHORIZATION

**DEVELOPER/APPLICANT MUST PROVIDE THIS FORM
COMPLETED BY THE PUBLIC AUTHORITY
FOR ANY SCE-OWNED STREETLIGHT INSTALLATION, REMOVAL OR CHANGE REQUESTS**
Incomplete forms will be returned and not processed

PUBLIC AUTHORITY NAME: _____

Builder/Developer Name: Crown Castle NG West **Phone #:** _____

Tract/Ref # SCE Pole No. 1729102E **Streetlight Location** 2600 ^{HARBOR} Merimee Way, Costa Mesa 33.668273°, -117.918753°

Please Check one: Installation Removal Change

Number of Lamp(s)	Lamp Size	Lamp Type
_____	_____	_____
_____	_____	_____
_____	_____	_____

New Installations

Public Authority Responsibility for Streetlight Monthly Billing

Please Check one and fill out applicable dates:

___ **Upon Energizing**

If Public Authority is collecting Builder/Developer Advanced Energy Payment, indicate date collected. (_____)

Monthly Billing: ___ Establish new Service Account (SA) Use existing SA # _____

___ **Commitment Date-**

Date Agreed upon by SCE and Public Authority (_____) or no later than 36 months from first streetlight energized whichever is earlier.

Monthly Billing: ___ Establish new Service Account (SA) Use existing SA # _____

___ **Public Authority is not responsible**

HOA Area Name _____ Other Entity (please define) _____

Public Authority Notes:

Authorized Public Authority Agent

_____ **Print name** _____ **Date** _____ **Signature**

Phone # _____ **Title**

TO BE COMPLETED BY SCE

ACTION: ENTER TRACT/REF# ON DM PROGRAM NAME FIELD.

District _____ **Planning AOR** _____ **PLANNER NAME (PRINT)** _____

DM SR # _____ **Product #** _____ **(one per SLA)**

RADIO FREQUENCY ELECTROMAGNETIC FIELDS EXPOSURE REPORT

Prepared for Crown Castle

Site Name: Scenario
Site Type: Min. Height AGL of 18' or Greater - Light Pole
Report By: Christopher Stollar, P.E.
Report Date: 1/24/2017

Based on FCC Rules and Regulations, Crown Castle is compliant.

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1.0 EXECUTIVE SUMMARY

Dtech Communications, LLC (“Dtech”) has been retained by Crown Castle to determine whether its wireless communications facility complies with the Federal Communications Commission (“FCC”) Radio Frequency (“RF”) Safety Guidelines. This report contains a computer-simulated analysis of the Electromagnetic Fields (“EMF”) exposure resulting from a typical, minimum antenna height above ground level (“AGL”) of 18-feet, light pole facility. The analysis also includes assessment of existing wireless carriers on site, where information is provided. The table below summarizes the result at a glance:

Table 1: EMF Summary

Crown Castle	Summary
Access Type	Walk-Up
Access to antennas locked	NA
RF Sign(s) @ access point(s)	None
RF Sign(s) @ antennas	Information (Optional)
Barrier(s) @ sectors	NA
Max Cumulative EMF level for Crown Castle on Ground	7.2% General Population
Max Cumulative EMF level for Crown Castle @ Antenna Level	80.1% General Population (16.0% Occupational)
General Population Exclusion Zone (At Antenna Elevation)	NA
Occupational Exclusion Zone (At Antenna Elevation)	NA

2.0 SITE DESCRIPTION

The wireless telecommunication facility is located on the ground. The facility consists of 1 wireless carrier(s) or operator(s): Crown Castle – T-Mobile. For this scenario, Crown Castle’s antennas are mounted on a light pole and connected to the equipment via cables (see Appendix E).

2.1 Antenna Inventory

Technical specifications in the table below are provided by our clients or gathered from physical field surveys where applicable and/or possible. Conservative estimates are used where information is not provided or available.

Table 2: Site Technical Specifications

Antenna ID	Operator	Antenna Mfg	Antenna Model	Type	Frequency (MHz)	Technology	Orientation (°T)	Horizontal BWdth (°)	Antenna Aperture (ft)	Antenna Gain (dBd)	Total ERP (Watts)	Bottom Tip Height Above Ground (Z) (ft)	Bottom Tip Height Ant Level (Z) (ft)
A1	T-Mobile	Ericsson	6503	Directional	1900	LTE	330	85	0.7	6.9	21.6	19.3	1.3
A2	T-Mobile	Ericsson	6503	Directional	2100	LTE	330	74	0.7	7.9	27.2	18.0	0.0
Total											48.8		

3.0 ANALYSIS

3.1 Emission Predictions

Figure 1: Plan (bird's eye) view map of results compared to FCC's General Population MPE (Maximum Permissible Exposure) Limits. Gray represents areas where exposure levels are calculated to be at or below 5%; Green- between 5% & 100% (below MPE limits); blue, yellow & red – greater than 100% (exceeds MPE limits).

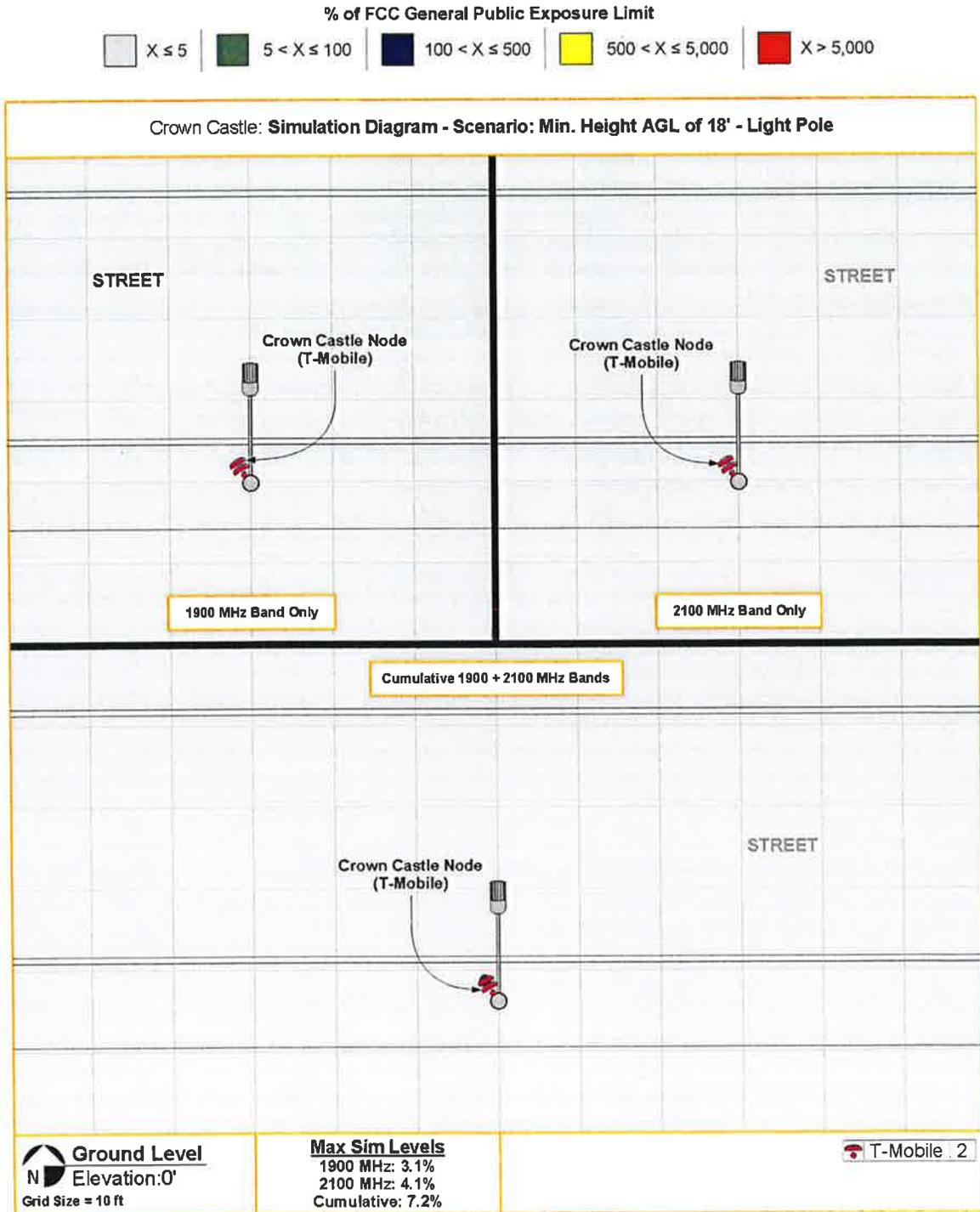
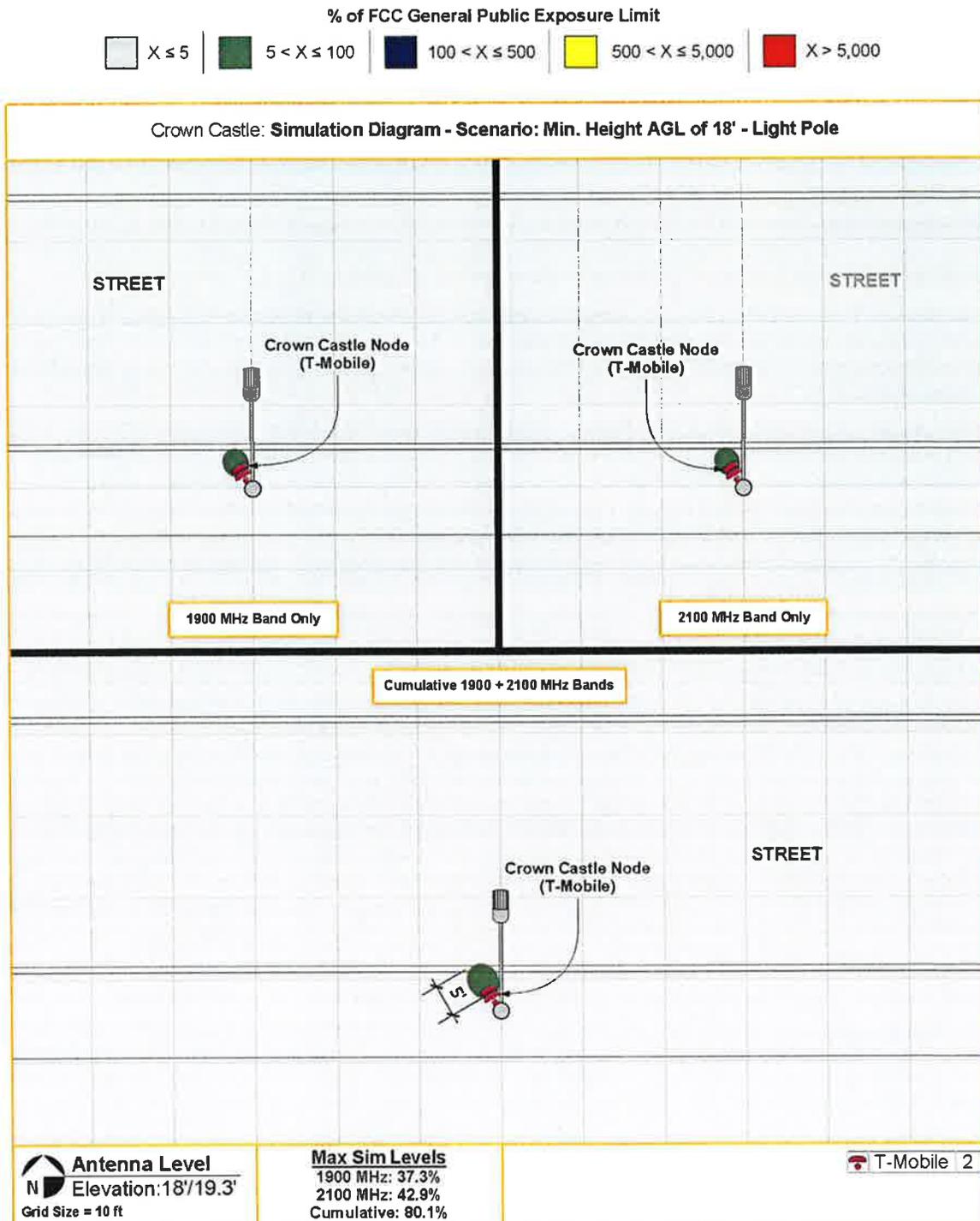


Figure 2: Plan (bird's eye) view map of results compared to FCC's General Population MPE (Maximum Permissible Exposure) Limits. Gray represents areas where exposure levels are calculated to be at or below 5%; Green- between 5% & 100% (below MPE limits); blue, yellow & red – greater than 100% (exceeds MPE limits).



4.0 CONCLUSION

4.1 Results

For a person standing on the ground, calculations for Crown Castle's site (at a minimum height AGL of 18-feet) resulted in exposure levels no higher than 7.2% of the applicable FCC's General Population MPE Limits (see figure 1). If the antennas are located higher than the minimum height AGL of 18-feet, the exposure levels on the ground would consequently be lower. The results on the ground are well below the applicable FCC's General Population MPE Limits, and members of the general public can safely occupy all areas on the ground for an indefinite amount of time.

At antenna elevation, the highest calculated exposure level is also below the FCC's General Population MPE Limits near the Crown Castle antennas (see figure 2). If the antennas are located higher than the minimum height AGL of 18-feet, the exposure levels at antenna elevation would be the same. The green areas represent exposure levels that are calculated to be between 5% and 100%, which is below the FCC's General Population MPE Limits. The green exposure area extends 5-feet from the front face of the Crown Castle antenna(s). Beyond 5-feet (areas represented in gray), exposure calculations would be at or below 5%, which are considered ambient levels. Individuals can safely occupy any areas in gray and green for an indefinite amount of time.

*Note: The actual MPE results of this analysis are only applicable to the specific antenna make/model, minimum heights, line/cable losses, total power output, and frequencies. Compliance is the same even if the antennas are raised above the minimum height AGL of 18-feet.

4.2 Recommendation(s)

The following conservative action(s) are recommended in accordance with the FCC's RF Safety Guidelines (see figure 3):

- 1) As a courtesy, install INFORMATION Sign(s) on or near the antenna(s). Signage should be placed high on the pole and away from public view.

4.3 Statement of Compliance

Based on the above results, analysis and recommendation(s), it is the undersigned's professional opinion that Crown Castle's site is compliant with the FCC's RF Safety Guidelines.

4.4 Engineer Certification

This report has been prepared by or under the direction of the following Registered Professional Engineer: Darang Tech, holding California registration number 16000. I have reviewed this report and believe it to be both true and accurate to the best of my knowledge.


Darang Tech, P.E.



Appendix A: Background

Dtech uses the FCC's guidelines described in detail in Office of Engineering & Technology, Bulletin No. 65 ("OET-65") "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields". The table below summarizes the current Maximum Permissible Exposure ("MPE") safety limits classified into two groups: General population and Occupational.

Table 3: FCC MPE Limits (from OET-65)

Frequency (Mhz)	General Population/ Uncontrolled MPE (mW/cm ²)	Averaging Time (minutes)	Occupational/ Controlled MPE (mW/cm ²)	Averaging Time (minutes)
30 - 300	0.2	30	1.0	6
300 - 1500	Frequency (Mhz)/1500 (0.2 – 1.0)	30	Frequency (Mhz)/300 (1.0 – 5.0)	6
1500 - 100,000	1.0	30	5.0	6

General population/uncontrolled limits apply in situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment, and may not be fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public always fall under this category when exposure is not employment-related.

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment, and those persons have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

It is important to understand that the FCC guidelines specify *exposure* limits not *emission* limits. For a transmitting facility to be out of compliance with the FCC's RF safety guidelines an area or areas where levels exceed the MPE limits must, first of all, be in some way *accessible* to the public or to workers. When accessibility to an area where excessive levels is appropriately restricted, the facility or operation can certify that it complies with the FCC requirements.

Appendix B: Measurement and/or Computer Simulation Methods

Spatial averaging measurement technique is used. An area between 2 and 6 feet, approximately the size of an average human, is scanned in single passes from top to bottom in multiple planes. When possible, measurements were made at very close proximity to the antennas and inside the main beam where most of the energy is emitted. The spatial averaged values were recorded.

Dtech uses an industry standard power density prediction computer Model¹ to assess the worse-case, cumulative EMF impact of the surrounding areas of the subject site. The Model does not take into account losses due to buildings. Its methodologies are conservative enough to account for typical down-tilts deployed in wireless communications. In addition, the analysis is performed at 100% duty cycle-all transmitters are active at all times and transmitting at maximum power. For purposes of a cumulative study, nearby transmitters are included where possible. The result is a surrounding area map color-coded to percentages of the applicable FCC's MPE Limits. A result higher than 100% exceeds the Limits.

Appendix C: Limitations

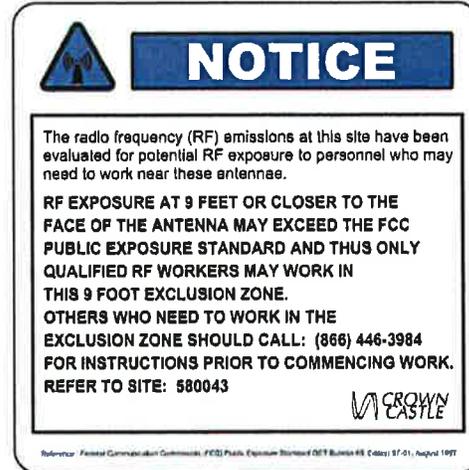
Dtech performed this analysis based on data provided by our clients that Dtech believes to be true and correct. Estimates where noted, are based on common industry practices and our best interpretation of available information. As mobile technologies continuously change, these data and results may also change. Therefore, Dtech disclaims all other warranties either expressed or implied. Any use of this document constitutes an agreement to hold Dtech and its employees harmless and indemnify it for any and all liability, claims, demands, litigation expenses and attorneys fees arising from such use. This is a technical document and may contain minor grammatical and/or spelling errors.

¹ Roofview® Version 4.15, Richard Tell Associates, Inc. © 1996-2000.

Appendix D: Crown Castle RF Advisory Signs



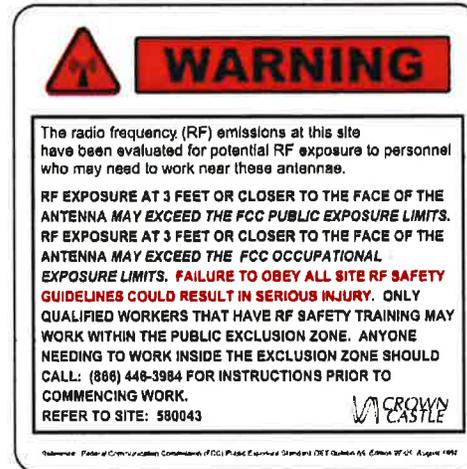
INFORMATION Sign



NOTICE Sign

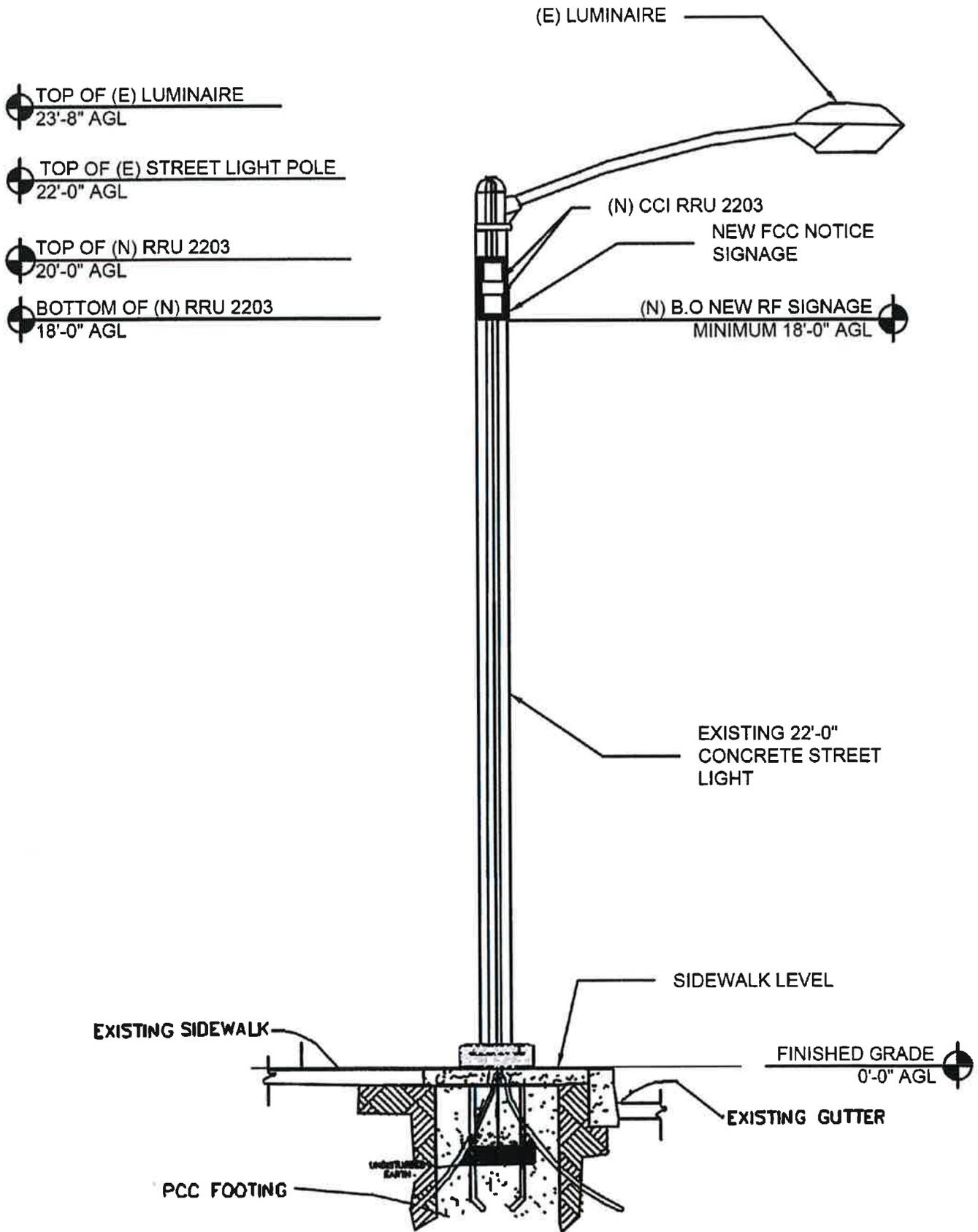


CAUTION Sign



WARNING Sign

Appendix E: Scenario - Min. Height AGL of 18' or Greater - Light Pole



**CALIFORNIA PUBLIC UTILITIES
COMMISSION**
Advice Letter Filing Summary Sheet
(PAL)

(Date Filed / Received Stamp by CPUC Industry Division)

DATE - STAMP & RETURN

5 PM 1:50

Date AL served on parties: _____

Company Name: Crown Castle NG West LLC		CPUC Utility Number U-6745-C	
Address: 1220 Augusta Drive, Suite 500		<input type="checkbox"/> GRC-LEC <input checked="" type="checkbox"/> URF-Carrier <input type="checkbox"/> Other	
City, State, ZIP: Houston, Texas 77075		<input type="checkbox"/> Commission Resolution Requested <input type="checkbox"/> Carrier of Last Resort (See D.96-10-066)	
Filing AL #: <u>63</u> Requested Effective Date: <u>July 15, 2014</u>		AL Tier I <input checked="" type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/>	
Name:		Email Address:	
Brett P. Ferenchak Jean L. Kiddoo		brett.ferenchak@bingham.com jean.kiddoo@bingham.com	
Phone No.:		Fax No.:	
(202) 373-6000		202-373-6001	
Same as above		Same as above	
Same as above		No. Tariff Sheets: <u>N/A</u>	

(Name, email address & Phone and FAX numbers are Required for "Filer")

Tariff Schedules: N/A Keyword: Carrier Information Changes
(see keyword list on reverse)

For Contract Keyword, Type: Government Other Date Executed _____ Contract Total Rev (\$) _____

Subject of filing: Conversion and Associated Name Change
(Service(s) included)

Authorization for filing: G.O. 96-B and Telecommunications Industry Rule 7.1(1)
(Resolution #, Decision #, etc.)

Affected services: _____
(Other services affected, pending or replacement AL filings)

Rate Element(s) affected and % change: _____
(Non-recurring and / or recurring)

Customer Notice Required (if so, please attach)

Notes/Comments: _____
(Other information & reference to advice letter, etc.)

2011 JUL 15 PM 1:50
DIRECTOR'S OFFICE

File Protest and/or Correspondence to: Director, Communications Division 505 Van Ness Ave., San Francisco, CA 94102 <u>and if you have email capability, ALSO email to:</u> TD_PAL@cpuc.ca.gov Protest also must be served on utility: <small>(see utility advice letter for more information)</small>	GRC-LEC = Cost of Service LEC Carrier URF-Carrier = Uniform Regulatory Framework Carrier <small>(see D.06-08-030/D.07-09-019)</small> OTHER = Wireless (CMRS) Carrier
--	---

(FOR CPUC USE ONLY)

<input type="checkbox"/> Resolution Required <input type="checkbox"/> Executive Action Resolution Req'd. <input type="checkbox"/> TD Suspension on: ___ / ___ / ___ <input type="checkbox"/> Comm. Suspension on: ___ / ___ / ___ Resolution No.: T - _____ <small>Rev. 09/24/07</small>	Supv. / Analyst _____ / _____ Due Date to Supv.: _____ Analyst Completion Date: _____ Supervisor Approval Date: _____ AL / Tariff Effective Date: _____ Notes: _____
---	---

EXISTING

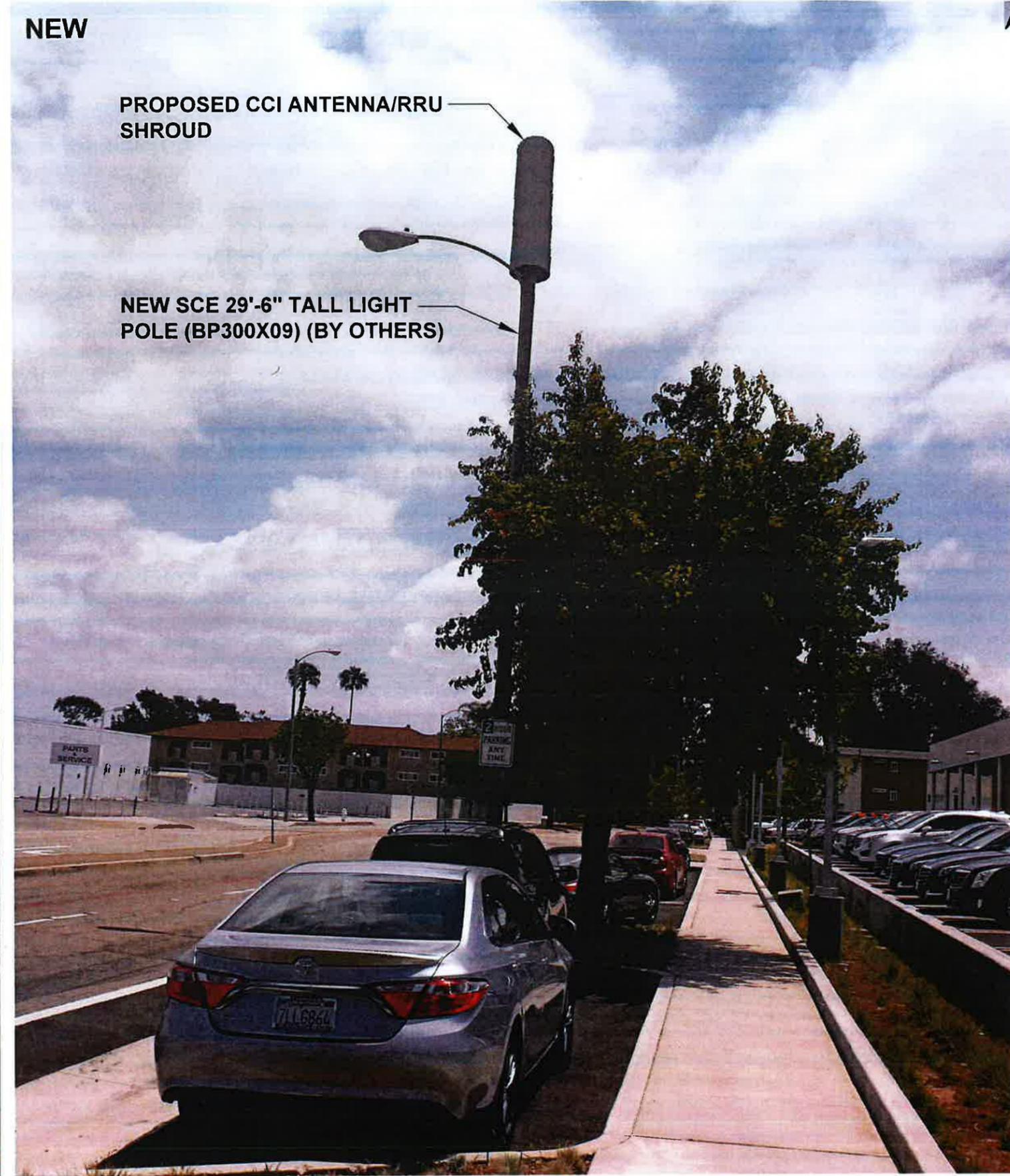
EXISTING SCE LIGHT POLE
(1729191E) TO BE REMOVED



NEW

PROPOSED CCI ANTENNA/RRU
SHROUD

NEW SCE 29'-6" TALL LIGHT
POLE (BP300X09) (BY OTHERS)



COSTA MESA

HUB: **LA02429A**



CROWN CASTLE NG WEST
JURISDICTION: COSTA MESA
CLUSTER: IE10
PROPOSED SMALL CELL NODES
SCE POLE #1729102E

INDEX TO SHEETS:

- C-01. TITLE, LOCATION MAP, NODE PLACEMENT
- C-02. EQUIPMENT DETAILS
- C-03. EQUIPMENT DETAILS
- C-04. EQUIPMENT DETAILS
- C-05. LIGHT STANDARD DETAIL
- C-06. SITE PLAN & ELEVATION
- C-07. TRAFFIC CONTROL PLAN

CROWN NODE ID SOC274
 T-MOBILE SITE ID IE10_004
 SCE POLE ID 1729102E

PROJECT TEAM:

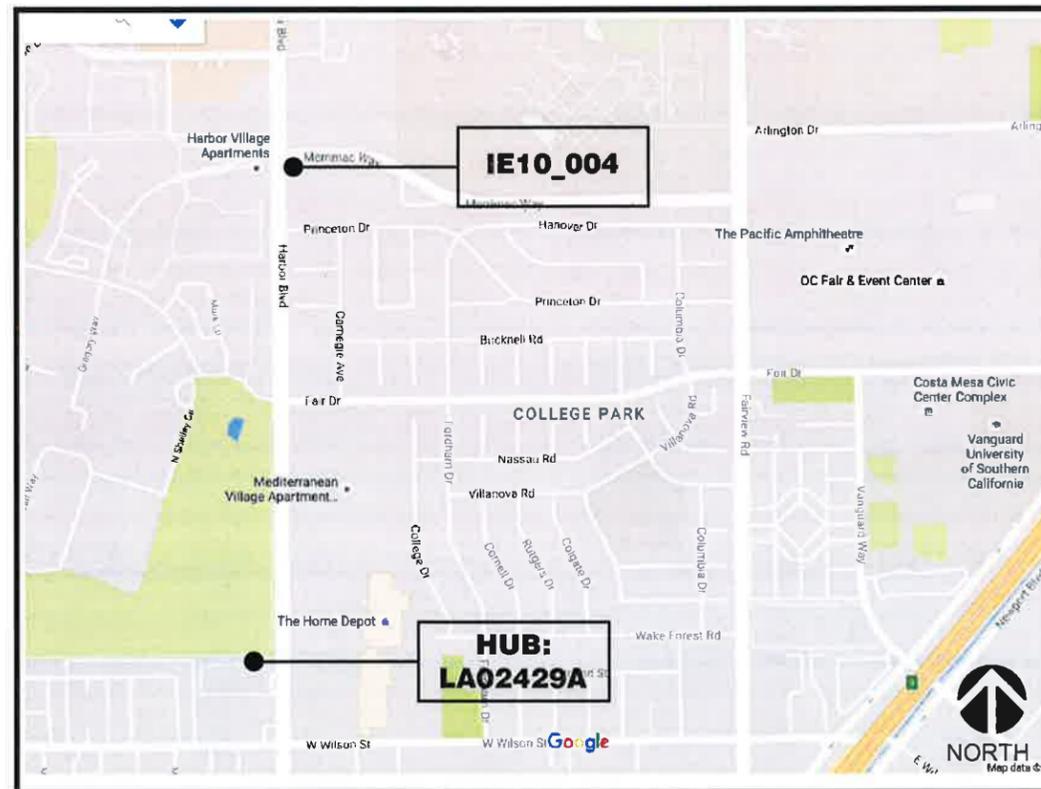
CROWN CASTLE

PROJECT MANAGER:
 CONTACT: MIKE PUHL
 PHONE: (949) 344-7811

CONSTRUCTION MANAGER:
 CONTACT: GARY HOLZER
 PHONE: (949) 697-2011

UTILITY CONTACT:
 NETWORK OPERATION:
 CONTACT: CROWN CASTLE
 PHONE: 1-800-788-7011
 POWER: SCE

NRE CONTACT:
 CONTACT: NANCY SHERIDAN
 PHONE: 1-714-362-5152



LOCATION MAP

NOT TO SCALE



SITE: SOC274 / IE10_004
 COORDINATES: 33.66828°, -117.91875°
 ADDRESS: 2600 HARBOR BLVD
 COSTA MESA, CA 92626

LATITUDE & LONGITUDE:
 33.66828°, -117.91875°

ADDRESS:
 2600 HARBOR BLVD
 COSTA MESA, CA 92626

ENGINEER:

5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.736.3766

OWNER/DEVELOPER:

200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

REVISIONS			
REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	TITLE SHEET
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: **C-01**

PROJECT DESCRIPTION:

THIS PROJECT IS FOR THE INSTALLATION AND OPERATION OF A SMALL CELL NETWORK.

SCOPE OF WORK:

- BRING UG FIBER TO LIGHT POLE VIA ENCROACHMENT PERMIT
- INSTALL RRU (REMOTE RADIO UNIT) INSIDE NEW RADOME
- INSTALL FIBER AND POWER INSIDE LIGHT POLE TO RRUS



FACING SOUTH



FACING NORTH



Table 1 Radio 2203 Technical Data

Description	Value
Maximum nominal output power	2 x 5 W
Number of carriers	WCDMA: One to four carriers. LTE: One to three carriers Mixed mode: Two to five carriers
Description	Value
Frequency ⁽¹⁾	1920-1980 MHz uplink 2110-2170 MHz downlink B1 for WCDMA and LTE. 1710-1785 MHz uplink 1805-1880 MHz downlink B3 for WCDMA and LTE 1744.9-1784.9 MHz uplink 1839.9-1879.9 MHz downlink B3C for WCDMA and LTE 880-915 MHz uplink 925-960 MHz downlink B8 for WCDMA and LTE 1710-1780 MHz uplink 2110-2180 MHz downlink B86A for WCDMA and LTE.
Dimensions with Cover	
Height	200 mm (7-7/8" in)
Width	200 mm (7-7/8" in)
Depth	100 mm (3-15/16" in)
Dimensions with Antenna	
Height	200 mm (7-7/8" in)
Width	200 mm (7-7/8" in)
Depth of Radio 2203 B1, B3C	119 mm (4-11/16" in)
Depth of Radio 2203 B8	129 mm (5-1/16" in)
Weight with Cover	
Radio 2203	4.5 kg (9.9208 lbs.)
Weight with Antenna	
Radio 2203	4.9 kg (10.8027 lbs.)
Color	
Body	NCS S 1002-B

⁽¹⁾ Information about Instantaneous Bandwidth (IBW) can be found in RBS Configurations

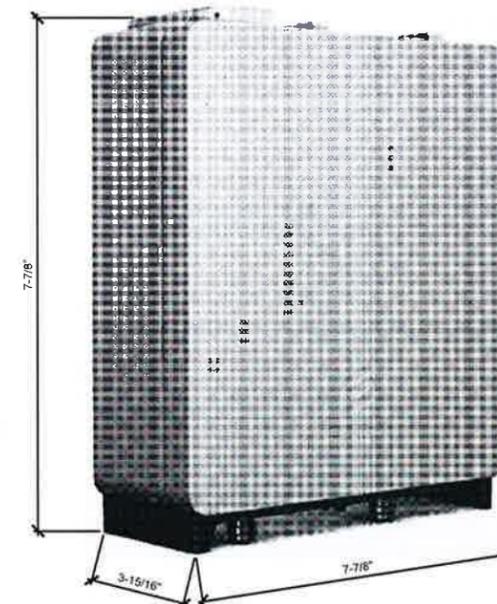


Product Overview

The radio expands coverage and performance in denser urban areas, where the use of small handheld devices demand high capacity on the operators networks. It is designed to be located in cities and in demanding radio environments.

The radio is part of a modular radio building concept that enables a variety of installation alternatives that is also easy to expand. Flexible mounting solutions are provided using rails and pole clamps. The small size of the radio together with the flexible mounting solutions reduces the site volume. The lower weight also improves the handling of the radio.

The radio can be connected in a star or cascade configuration using optical cable links. An optic cable connects the radio to the main unit, or to an expanded Radio System.



CROWN NODE ID SOC274
T-MOBILE SITE ID IE10_004
SCE POLE ID 1729102E

LATITUDE & LONGITUDE:
33.66828°, -117.91875°

ADDRESS:
2600 HARBOR BLVD
COSTA MESA, CA 92626

ENGINEER:

SAC AE DESIGN GROUP, INC.
5015 SHOREHAM PLACE, SUITE 150
SAN DIEGO, CA 92122
www.sacw.com
619.736.3766

OWNER/DEVELOPER:

200 SPECTRUM CENTER DRIVE, SUITE 1800
IRVINE, CA 92618

RADIO 2203 SPECS

SCALE
N.T.S. **3**

RADIO 2203 DESCRIPTION

SCALE
N.T.S. **2**

TITLE:
CROWN CASTLE NG WEST
JOB# 365238
COSTA MESA

REVISIONS

REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:
FILE NAME: EQUIPMENT DETAILS
DATE DRAWN: 09/06/2017
SCALE: AS SHOWN

SHEET: C-02

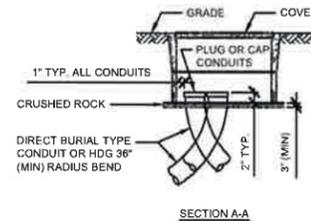
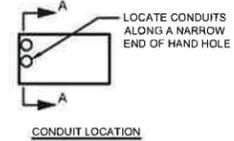
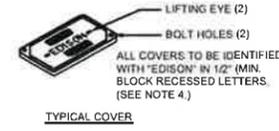
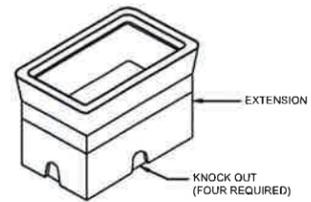
NOT USED

SCALE
N.T.S. **4**

NOT USED

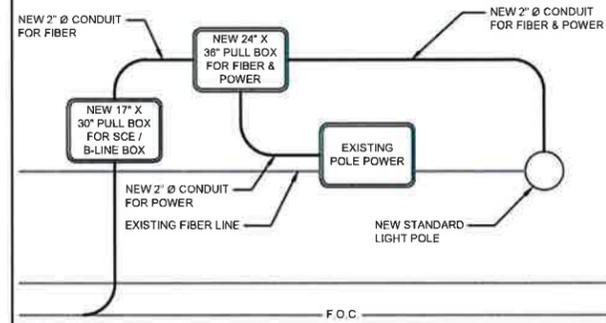
SCALE
N.T.S. **1**

CROWN NODE ID SOC274
 T-MOBILE SITE ID IE10_004
 SCE POLE ID 1729102E

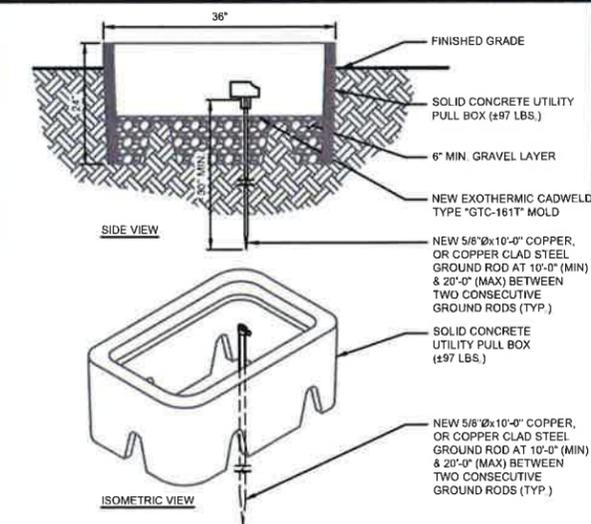


- NOTES:
- GC TO REFER TO SCE DOCUMENT HP 200 FOR HAND HOLE REQUIREMENTS (UNDERGROUND STRUCTURES STANDARDS)
 - RADIUS ANGLES MAY BE REDUCED TO LESS THAN 90° PROVIDING THE PROJECTED CENTER LINE OF THE CONDUIT CLEARS HAND HOLE OPENING.
 - TWO HOLD DOWN DEVICES TO BE SUPPLIED WITH EACH HAND HOLE
 - COVER SHALL BE IDENTIFIED WITH "EDISON" IN MINIMUM 2-INCH LETTERS OR LABELS PERMANENTLY SECURED TO THE LID

NOTE: PULL BOX & LIGHT POLE LOCATION VARIES PER LOCATION



SCALE N.T.S. **4**



SCALE N.T.S. **3**

LATITUDE & LONGITUDE: 33.66828°, -117.91875°

ADDRESS: 2600 HARBOR BLVD COSTA MESA, CA 92626

ENGINEER:

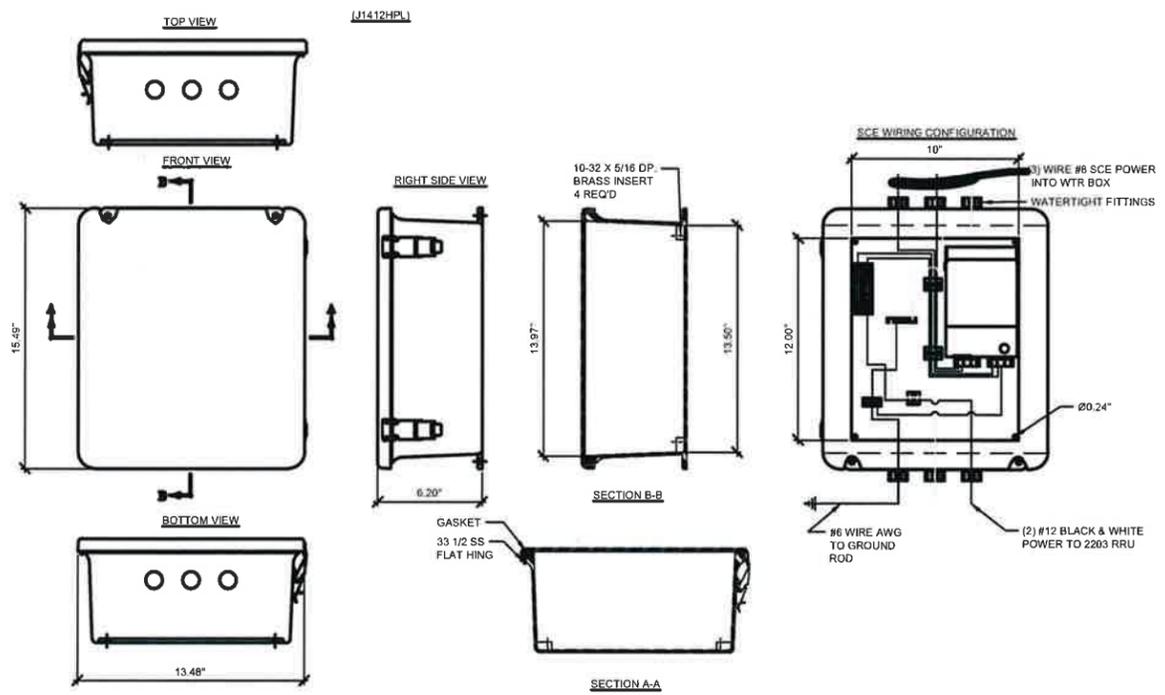
5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.736.3786

OWNER/DEVELOPER:

200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

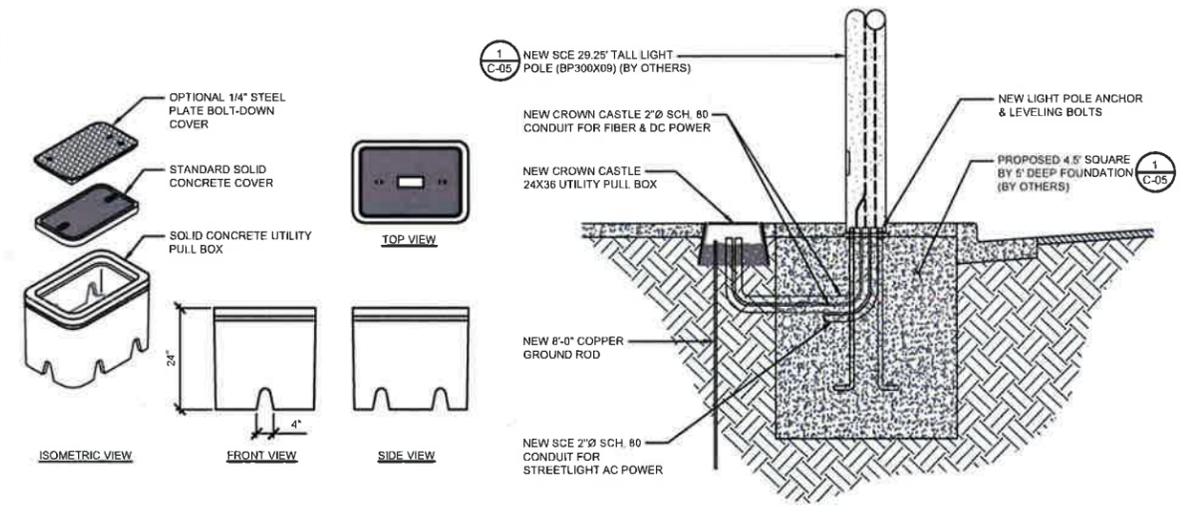
17" X 30" UTILITY PULL BOX DETAIL (HH-6)

SCALE N.T.S. **6**



24" X 36" UTILITY PULL BOX DETAIL

SCALE N.T.S. **2**



SCE / B-LINE BOX DETAIL

SCALE N.T.S. **5**

NOT USED

SCALE N.T.S. **1**

TITLE: CROWN CASTLE NG WEST JOB# 365238 COSTA MESA

REVISIONS			
REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	EQUIPMENT DETAILS
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: **C-03**

CROWN NODE ID SOC274
 T-MOBILE SITE ID IE10_004
 SCE POLE ID 1729102E

LATITUDE & LONGITUDE:
 33.66828°, -117.91875°
 ADDRESS:
 2600 HARBOR BLVD
 COSTA MESA, CA 92626

ENGINEER:

 SAC AE DESIGN GROUP, INC.
 5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619 735 3786

OWNER/DEVELOPER:

 200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

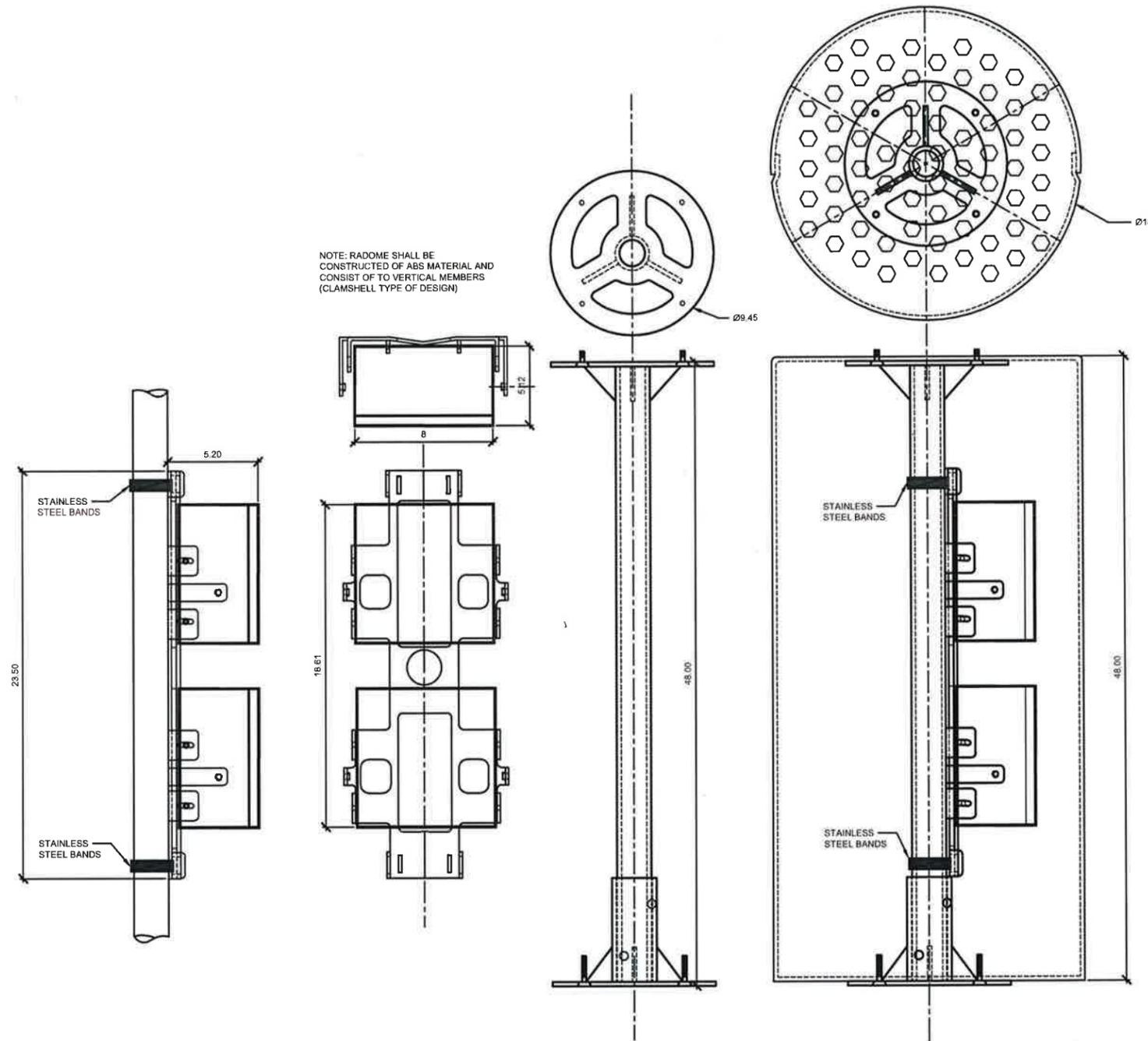
TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

REVISIONS			
REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	EQUIPMENT DETAILS
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: C-04



CROWN NODE ID SOC274
 T-MOBILE SITE ID IE10_004
 SCE POLE ID 1729102E

LATITUDE & LONGITUDE:
 33.66828°, -117.91875°
 ADDRESS:
 2600 HARBOR BLVD
 COSTA MESA, CA 92626

ENGINEER:

 SAC AE DESIGN GROUP, INC.
 5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.736.3765

OWNER/DEVELOPER:

 200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

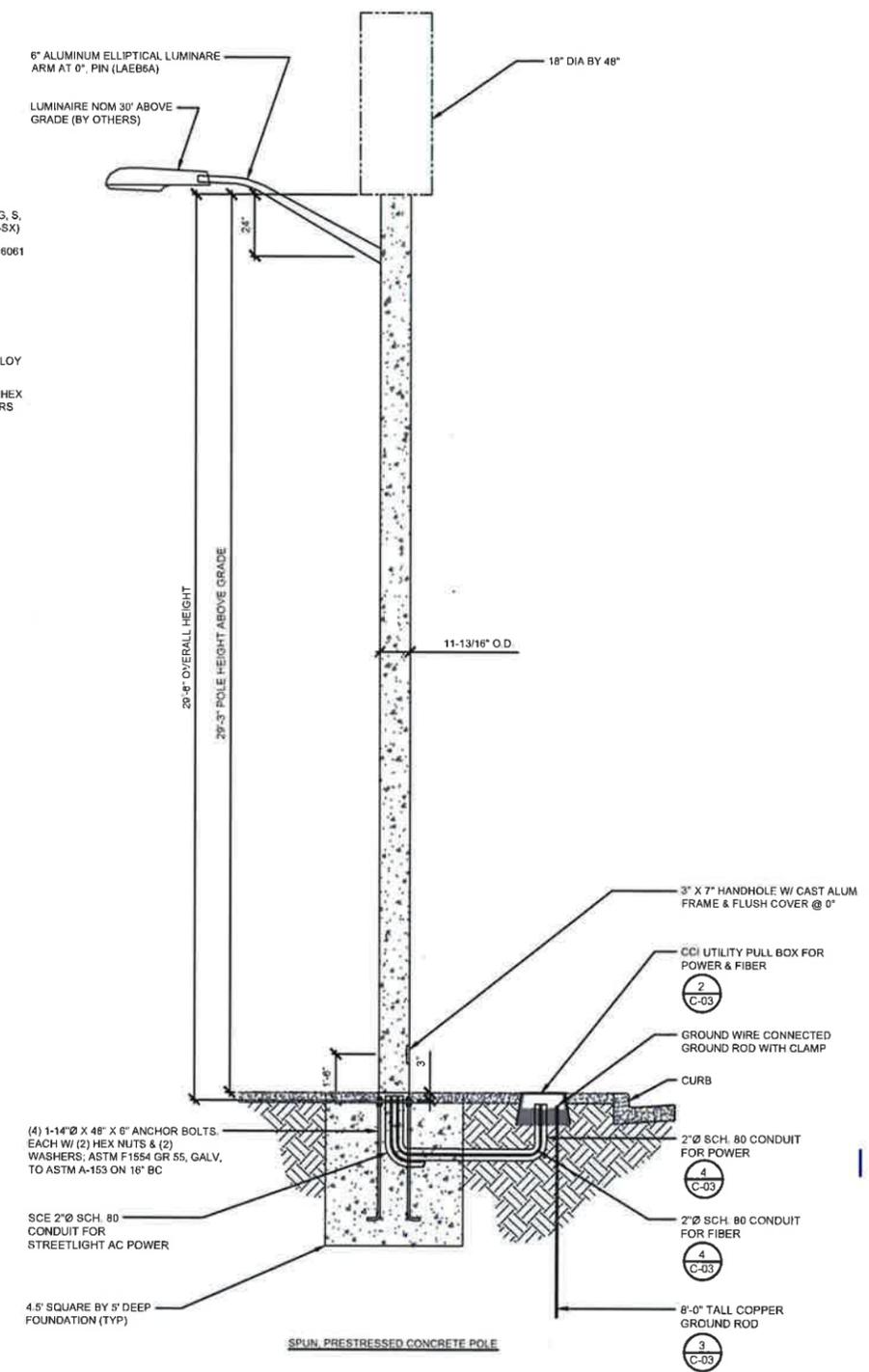
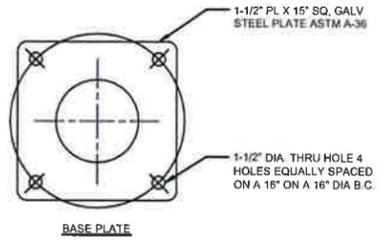
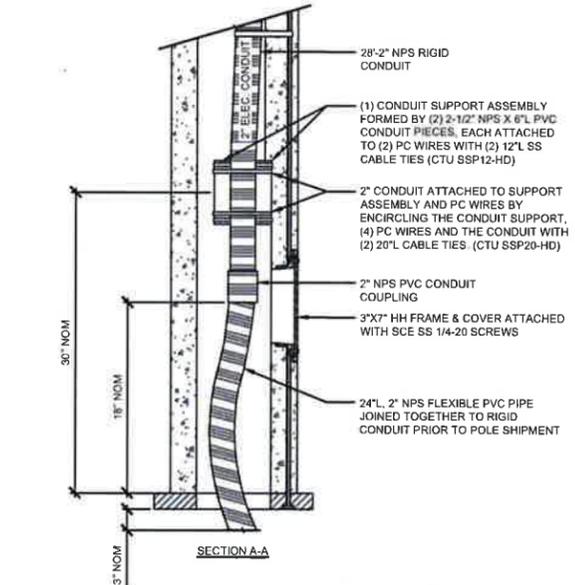
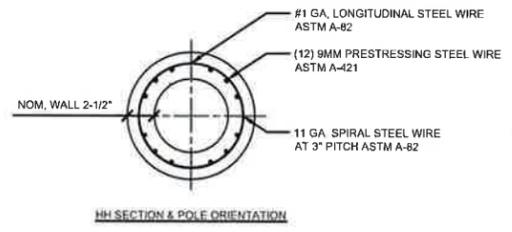
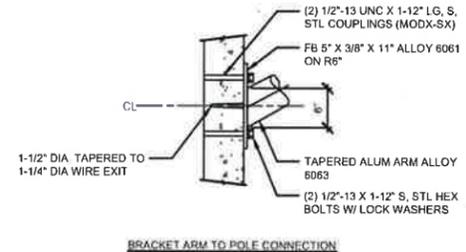
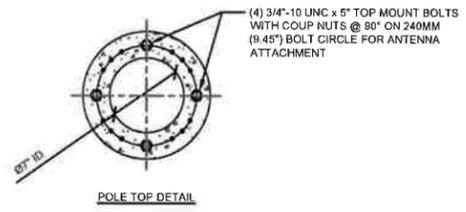
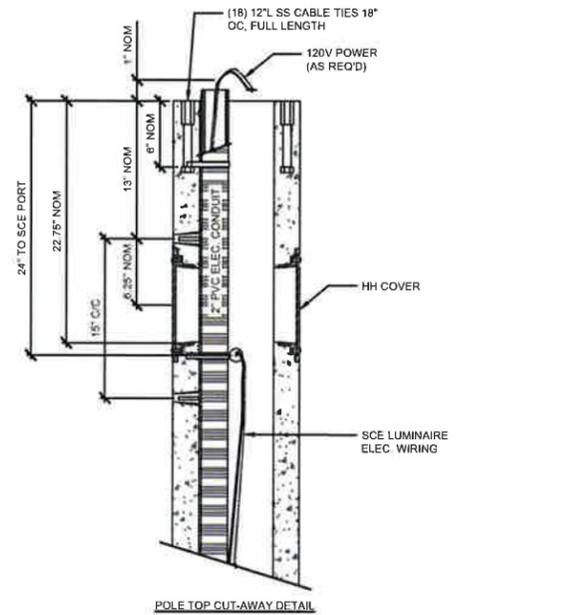
TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

REVISIONS			
REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	LIGHT STANDARD DETAIL
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET:	C-05
--------	------



- NOTES:
- FINISHES: (#155), SCE BLACK & WHITE, LIGHTLY EXPOSED AGGREGATE FINISH, WITH FLAT, WATER SEALER COATING
 - ASTM C-150 TYPE III GRAY CEMENT
 - f_c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST
 - f_c @ 28 DAYS = 5,000 PSI USING ASTM C-31 CYLINDER TEST
 - POLES MANUFACTURED TO ASTM C-1089-13 SPECIFICATIONS
 - MODX, (2) 1/2"-13 X 1-12" COUPLINGS
 - POLE WT. 2900 LBS

CROWN NODE ID SOC274
 T-MOBILE SITE ID IE10_004
 SCE POLE ID 1729102E

LATITUDE & LONGITUDE:
 33.66828°, -117.91875°
 ADDRESS:
 2600 HARBOR BLVD
 COSTA MESA, CA 92626

ENGINEER:

 SAC AE DESIGN GROUP, INC.
 5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.736.3766

OWNER/DEVELOPER:

 200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

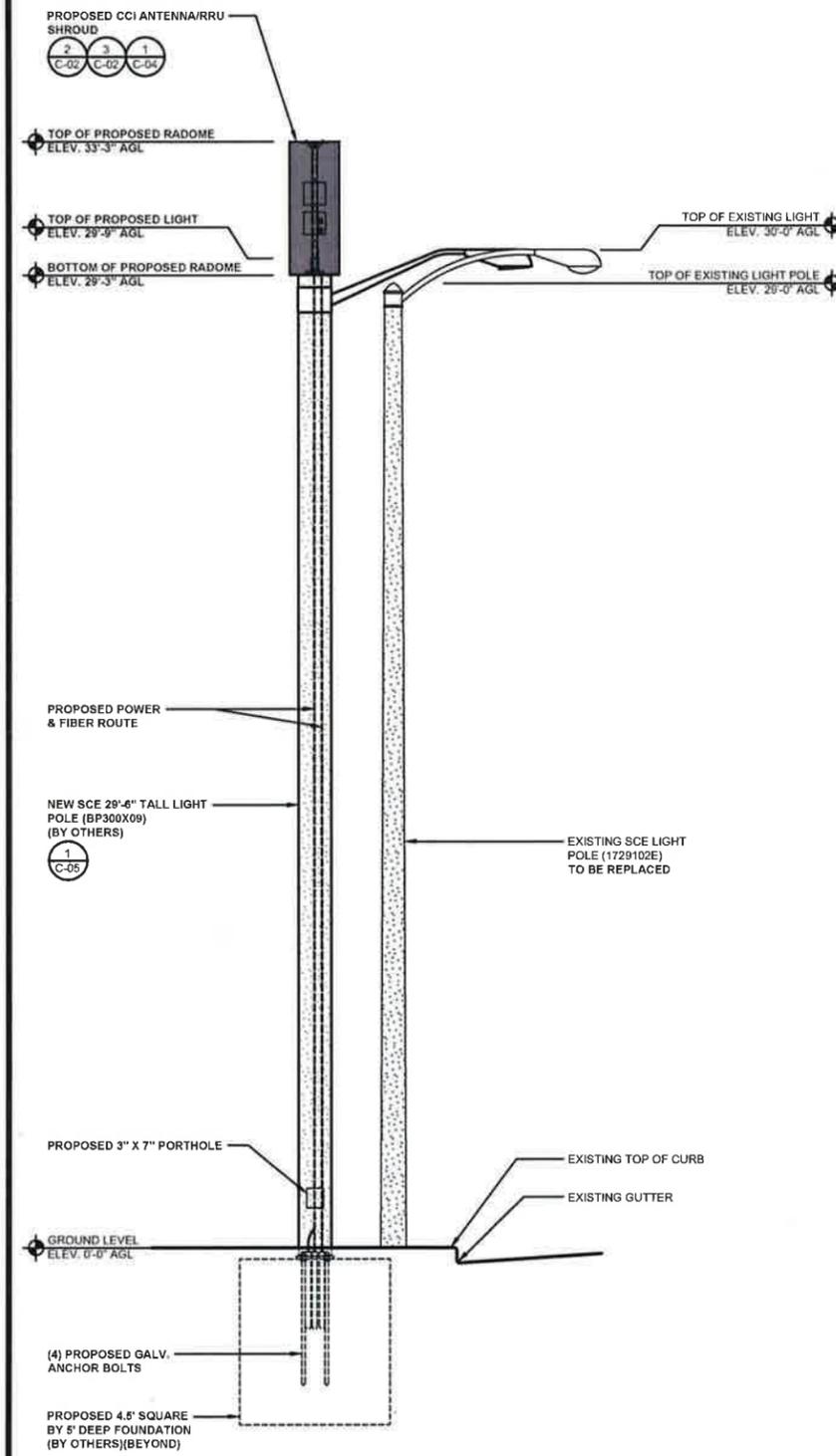
REVISIONS

REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	SITE PLAN & ELEVATION
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

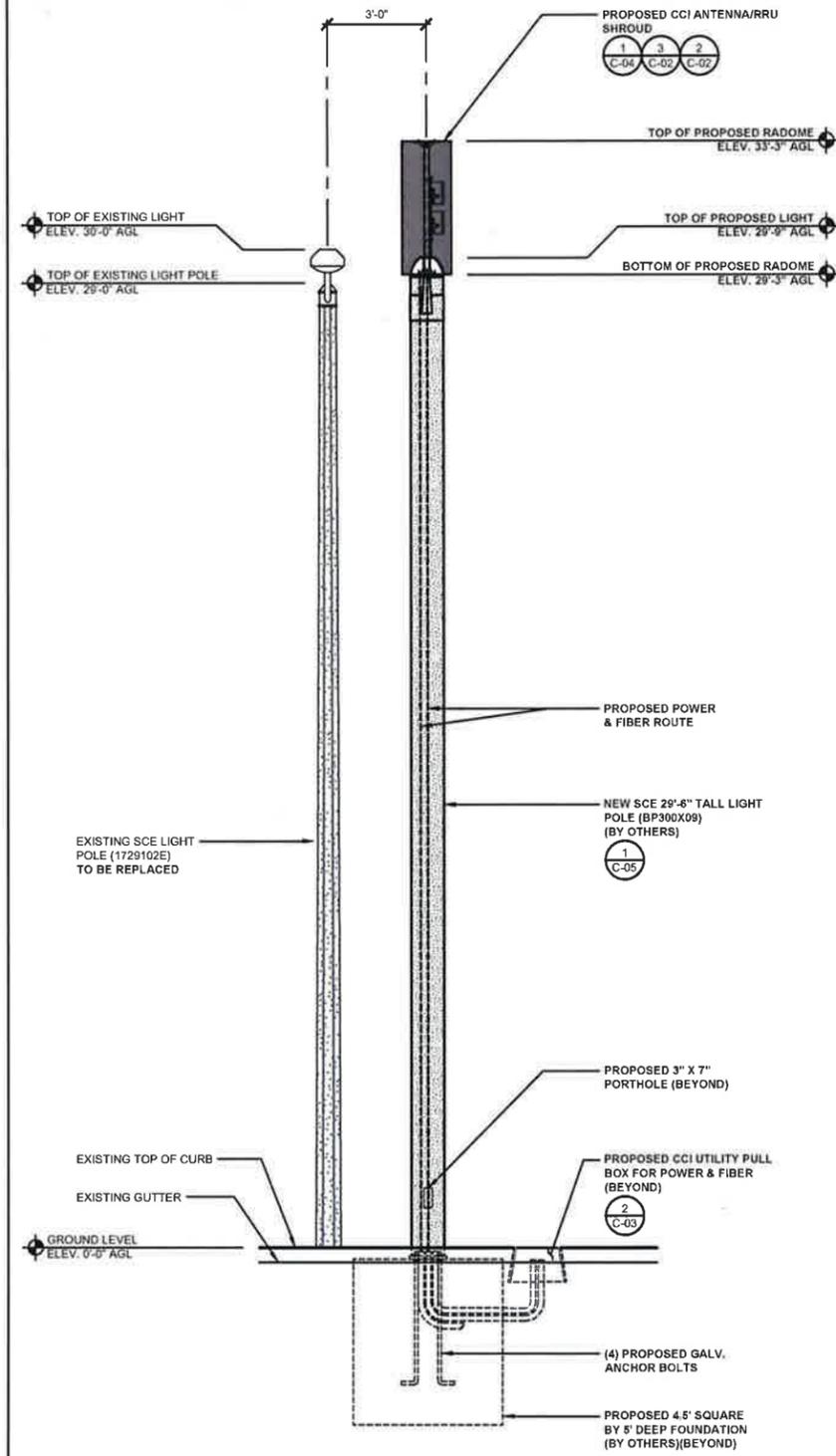
SHEET: C-06



PROPOSED EAST ELEVATION

SCALE: 3/8" = 1'-0" (24x36)
 (OR) 3/16" = 1'-0" (11x17)

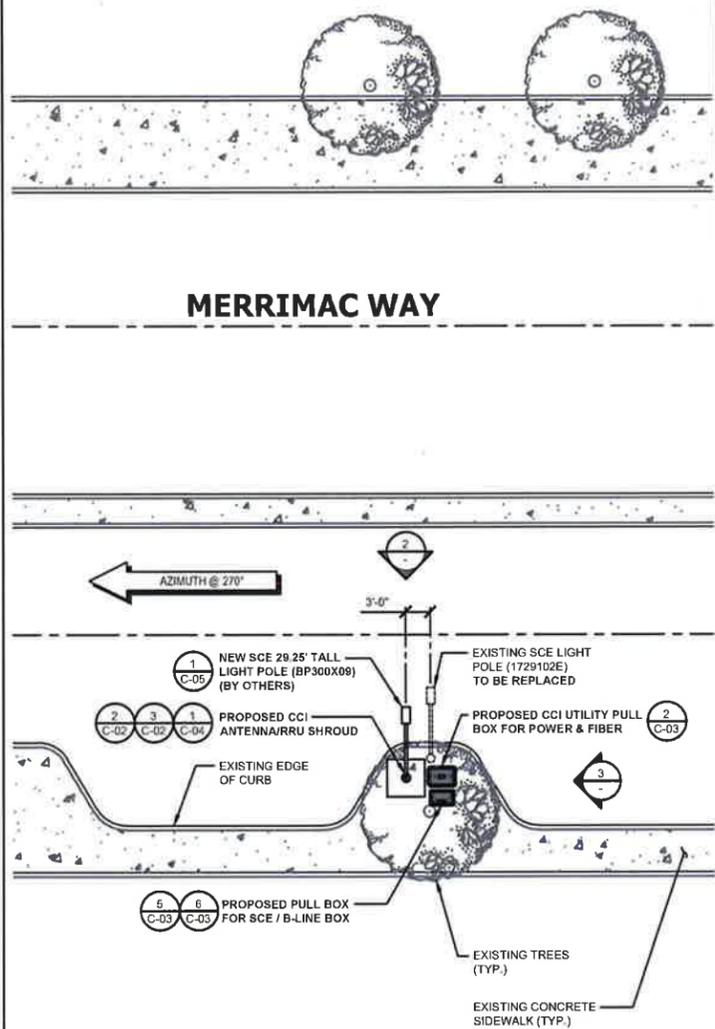
3



PROPOSED NORTH ELEVATION

SCALE: 3/8" = 1'-0" (24x36)
 (OR) 3/16" = 1'-0" (11x17)

2



SITE PLAN

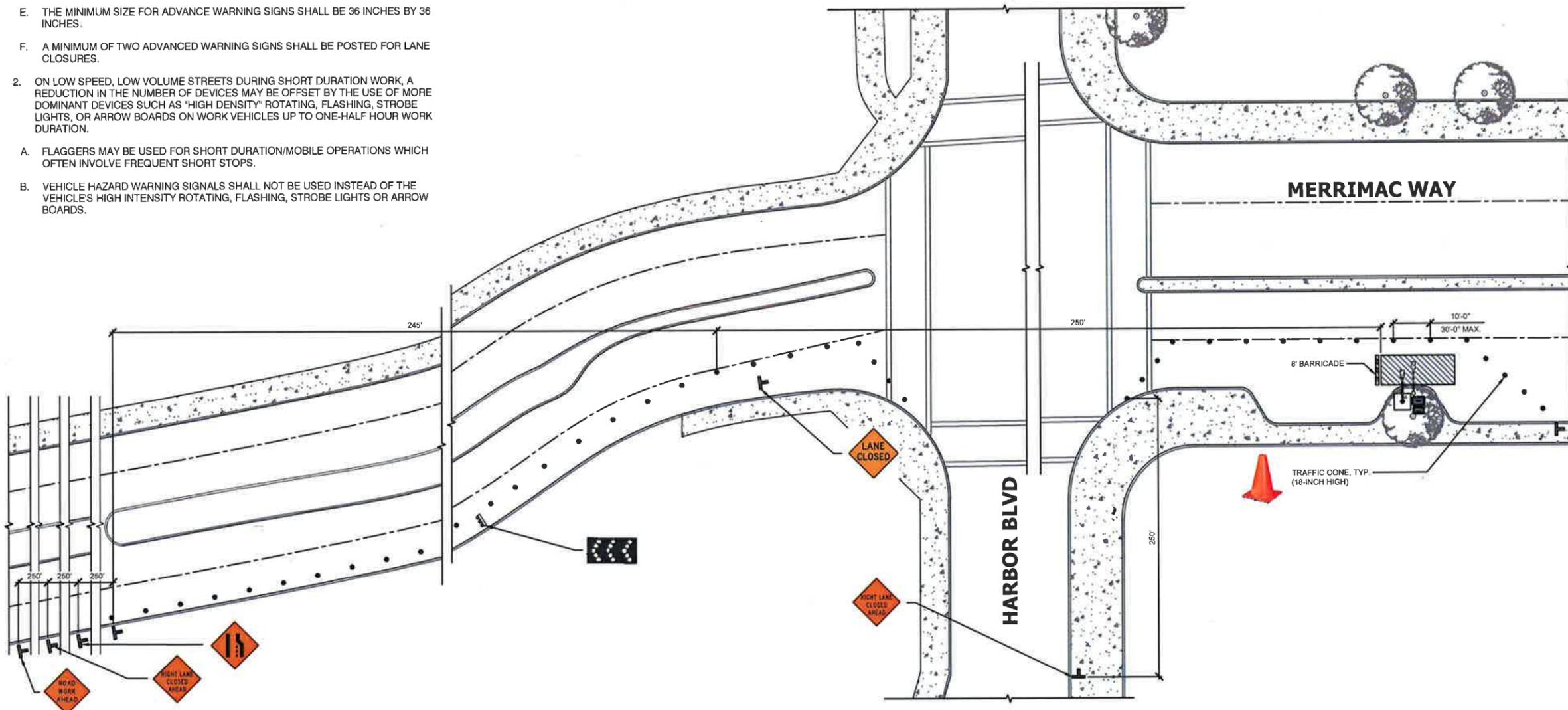
SCALE: 3/32" = 1'-0" (24x36)
 (OR) 3/64" = 1'-0" (11x17)

1



LOW SPEED TTC ZONE NOTES:

1. WHEN THE POSTED OR OBSERVED SPEED IS 40 MPH OR LESS, THE TTC ZONE IS DEFINED AS "LOW SPEED". TTC SAFETY IN LOW SPEED TTC ZONES SHOULD NOT BE COMPROMISED BY USING FEWER DEVICES SIMPLY BECAUSE THE TRAFFIC IS SLOWER AND ACTIVITY OPERATIONS ARE FOR SHORT DURATIONS AND/OR FREQUENTLY CHANGE LOCATIONS. THE FOLLOWING TTC DEVICE GUIDELINES SHALL BE USED IN "LOW SPEED" ZONES:
 - A. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ADVANCE WARNING SIGNS.
 - B. A WORK VEHICLE WITH HIGH INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS SHOULD BE USED. AN ARROW BOARD MAY BE USED FOR EACH LANE CLOSED.
 - C. THE MINIMUM HEIGHT OF CONES USED SHOULD BE 28 INCHES. 18-INCH HIGH TRAFFIC CONES MAY BE USED DURING DAYLIGHT HOURS.
 - D. WORKERS SHALL WEAR (MINIMUM) HIGH VISIBILITY CLASS 2 SAFETY APPAREL.
 - E. THE MINIMUM SIZE FOR ADVANCE WARNING SIGNS SHALL BE 36 INCHES BY 36 INCHES.
 - F. A MINIMUM OF TWO ADVANCED WARNING SIGNS SHALL BE POSTED FOR LANE CLOSURES.
2. ON LOW SPEED, LOW VOLUME STREETS DURING SHORT DURATION WORK, A REDUCTION IN THE NUMBER OF DEVICES MAY BE OFFSET BY THE USE OF MORE DOMINANT DEVICES SUCH AS "HIGH DENSITY" ROTATING, FLASHING, STROBE LIGHTS, OR ARROW BOARDS ON WORK VEHICLES UP TO ONE-HALF HOUR WORK DURATION.
 - A. FLAGGERS MAY BE USED FOR SHORT DURATION/MOBILE OPERATIONS WHICH OFTEN INVOLVE FREQUENT SHORT STOPS.
 - B. VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH INTENSITY ROTATING, FLASHING, STROBE LIGHTS OR ARROW BOARDS.



CROWN NODE ID SOC274
 T-MOBILE SITE ID IE10_004
 SCE POLE ID 1729102E

LATITUDE & LONGITUDE:
 33.66828°, -117.91875°

ADDRESS:
 2600 HARBOR BLVD
 COSTA MESA, CA 92626

ENGINEER:



SAC AE DESIGN GROUP, INC.
 5015 SHOREHAM PLACE, SUITE 150
 SAN DIEGO, CA 92122
 www.sacw.com
 619.736.3766

OWNER/DEVELOPER:



CROWN CASTLE
 200 SPECTRUM CENTER DRIVE, SUITE 1800
 IRVINE, CA 92618

TITLE:
 CROWN CASTLE NG WEST
 JOB# 365238
 COSTA MESA

REVISIONS			
REV	DATE	DESCRIPTION	BY
00	09/06/2017	SUBMITTAL	NB

DRAWN BY:	CHECKED BY:	APPROVED BY:
NB	NB	NB

PROJECT NUMBER:	
FILE NAME:	TRAFFIC CONTROL PLAN
DATE DRAWN:	09/06/2017
SCALE:	AS SHOWN

SHEET: C-07

