

MONTEREY COUNTY ZONING ADMINISTRATOR

Meeting: January 8, 2015	Agenda Item No.: 5
Project Description: Consider a use permit to allow the construction of a new wireless communication facility consisting of a 68 foot monopole within a 2,500 square foot lease area for ground mounted equipment.	
Project Location: 40821 Cherry Ave, Greenfield	APN: 109-132-005-000
Planning File Number: PLN140428	Owner: Roy & Lara Richina Applicant: Verizon Wireless Agent: Complete Wireless Consulting
Planning Area: Central Salinas Valley Area Plan	Flagged and staked: No
Zoning Designation: F/40 [Farming, 40 acres per unit]	
CEQA Action: Statutorily Exempt from CEQA per 15270(a)	
Department: RMA-Planning	

RECOMMENDATION:

Staff recommends that the Zoning Administrator adopt a resolution (**Exhibit C**) to:

- 1) Find the project Statutorily Exempt per Section 15270(a) of the CEQA guidelines;
and
- 2) Deny PLN140428, based on the findings and evidence (**Exhibit C**)

PROJECT OVERVIEW:

This use permit application proposes a new wireless communications facility consisting of a 68 foot monopole and ancillary equipment and generators, just outside the City of Greenfield. The project objectives note the need for coverage and capacity within downtown Greenfield; however there are other alternative locations which have not been adequately analyzed. The proposed project and site alternatives analysis (**Exhibit E**) is not consistent with the objectives of Monterey County Code Section 21.64.310, Regulations for the siting, design, and construction of wireless communication facilities. The purpose of this section is to assure, by regulation of siting of wireless communication facilities, that the integrity and nature of residential, rural, commercial, and industrial areas are protected from the inappropriate proliferation of wireless communication facilities while complying with all applicable local, state, and federal regulations. For more discussion, please refer to **Exhibit B**.

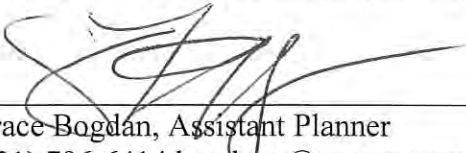
OTHER AGENCY INVOLVEMENT: The following agencies and departments reviewed this project:

- √ RMA-Public Works Department
- √ RMA-Environmental Services
- √ Environmental Health Bureau
- √ Water Resources Agency
- √ Greenfield Fire Protection District

Agencies that submitted comments are noted with a check mark ("√"). Conditions recommended by RMA-Planning & Public Works and the Environmental Health Bureau have been incorporated into the Condition Compliance/Mitigation Monitoring and Reporting Plan attached to the draft resolution (**Exhibit C**).

The project was not referred to a Land Use Advisory Committee (LUAC) because there is no designated LUAC for this portion of Monterey County.

Note: The decision on this project is appealable to the Planning Commission.



Grace Bogdan, Assistant Planner
(831) 796-6414 bogdan@co.monterey.ca.us
December 22, 2014

cc: Front Counter Copy; Zoning Administrator; Greenfield Fire Protection District; RMA-Public Works Department; RMA-Environmental Services; Environmental Health Bureau; Water Resources Agency; John Ford, RMA Services Manager; Grace Bogdan, Project Planner; Roy & Lara Richina, Owner; Verizon Wireless, Applicant, Maria Kim, Complete Wireless Consulting, Agent; The Open Monterey Project (Molly Erickson); LandWatch (Amy White); Planning File PLN140428

Attachments:	Exhibit A	Project Data Sheet
	Exhibit B	Project Discussion
	Exhibit C	Draft Resolution, including: • Site Plan and Elevations
	Exhibit D	Vicinity Map
	Exhibit E	Project Analysis, including Verizon Necessity Case, Project Support Statement, Visual Simulations, and FCC Site Compliance Report
	Exhibit F	Correspondence

This report was reviewed by John Ford, RMA Services Manager.



EXHIBIT A

Project Information for PLN140428

Application Name: Richina Roy J & Lara M (Verizon Wireless)
Location: 40821 Cherry Ave, Greenfield
Applicable Plan: Central Salinas Valley
Advisory Committee: None
Permit Type: Use Permit
Environmental Status: Categorical Exemption
Zoning: F/40
Primary APN: 109-132-005-000
Coastal Zone: No
Final Action Deadline (884): 12/23/2014
Land Use Designation: Farmlands 40 - 160 Ac Min

Project Site Data:

Lot Size: 106722
Existing Structures (sf): 2500
Proposed Structures (sf): 200
Total Sq. Ft.: 2700
Coverage Allowed: 5336
Coverage Proposed: 2700
Height Allowed: 35
Height Proposed: 68
FAR Allowed: n/a
FAR Proposed: n/a
Special Setbacks on Parcel:

Resource Zones and Reports:

Seismic Hazard Zone: II
Erosion Hazard Zone: Low
Fire Hazard Zone:
Flood Hazard Zone: X (unshaded)
Archaeological Sensitivity: low
Visual Sensitivity: None
Soils Report #: n/a
Biological Report #: n/a
Forest Management Rpt. #: n/a
Geologic Report #: LIB140366
Archaeological Report #: n/a
Traffic Report #: n/a

Other Information:

Water Source: n/a
Water Purveyor: n/a
Fire District: Greenfield FPD
Tree Removal: 0
Grading (cubic yds.): 0
Sewage Disposal (method): n/a
Sewer District Name: n/a

EXHIBIT B DISCUSSION

Project Description and Background

The project is located on an agriculturally zoned, 2.45 acre property just outside the city of Greenfield. The parcel fronts US Highway 101 and Cherry Avenue with an existing single family dwelling on the front of the property closest to the highway while the remainder of the property remains vacant. The property is lined with pine trees to the north and taller eucalyptus trees to the south. The proposed facility would be on a 2,500 square foot lease area surrounded by security fencing at the rear of the lot. The facility would include the construction of a new 68 foot high monopole with a total of 9 antennas, 30 KW diesel generator, approximately 202 square foot pre fabricated shelter and a new 15' wide access road. The applicant, Verizon Wireless, has stated that the tower will provide co-location opportunity for at least one additional user.

Verizon Wireless submitted a necessity information determination stating that the additional cell site is necessary to fulfill a lack of capacity and coverage in this area. The coverage maps clearly show outdoor coverage currently exists north of the city of Greenfield, and the project would supplement capacity and provide indoor coverage. The applicant states that the project goals are mainly to fill a lack of capacity. According to the applicant submittal, Verizon's projections for the next year show an increase of data usage and a decrease in demand for cell phone capacity. The target area for this project is to serve those users that are located in downtown Greenfield.

Project Issues

Two main issues were found during staff's review of the project: 1) inadequate site alternatives analysis and 2) visual impacts. The project as proposed would be visible from the surrounding streets including Highway 101. This project is not subject to visually sensitive or design control standards. This project, if approved, would result in visual impacts as it would contribute to the proliferation of wireless communication facilities. Section 21.64.310.H prevents the proliferation of unnecessary wireless communication facilities by ensuring the location of new wireless sites are in the most adequate, least visibly obtrusive location. During project review it was determined that there are alternatives to construction of a new wireless communication facility. According to the zoning ordinance, the use of these sites would be the most adequate and least visibly obtrusive, as they would not require the construction of a new wireless facility. This is the main reason for staff's recommendation of denial.

Site Alternatives Analysis

In June of 2013, Complete Wireless Consulting, agent for Verizon Wireless, began searching for sites within a "search ring" designating where the facility should be located to reach project objectives. Their application states co-location opportunities were sought first, and then building/facade mount opportunities; it was determined a new facility would be the best option. The site that is proposed in this application is outside of the originally designated search ring, and because of this, Verizon Wireless engineers admit they have doubts with this site; it is not the ideal location for a long term solution to capacity issues in downtown Greenfield and its probable that an additional wireless communication facility will be needed within a year of erecting this site. The engineers stated that they have serious concerns that the design of the proposed tower is too low given the clutter of the nearby trees, and that it would be more preferable to have a taller monopole or a site closer to the downtown. (See Exhibit F for letter from Verizon Wireless Radio Frequency Engineer)

The applicant submitted two alternative sites pursuant to Monterey County Code that were eventually ruled out before determining this parcel as the best location. Both sites are located within the City of Greenfield boundary and closer to the downtown, where additional capacity is necessary. One alternative location is in an existing shopping center parking lot, Santa Lucia Square, and was ruled out due to visual impacts and public access issues. The other alternative site is an existing wireless communication monopole located on the western side of 101 Highway. The monopole is 53' in height and owned by Crown Castle International (CCI), a wireless infrastructure company whose business is co-location. The application states this site was ruled out due to lack of space for equipment and an inability to agree on a contract. When staff asked Crown Castle International if a lease agreement was pursued, CCI employees stated that Complete Wireless Consulting initially reached out to CCI for site information, but there were no further conversations. CCI also stated that, with some modifications, the site is available for co-location.

Verizon Wireless has recently submitted an application request to Monterey County RMA-Planning for a new 59 foot faux water tower located 4 miles north of this proposed monopole. This is another indication that this site may not be the most adequate as Verizon is continuing to submit additional projects in the surrounding area. Additionally, staff reviewed other alternate locations near Verizon Wireless' search ring and found a potential building mounted site that was not pursued or analyzed by Complete Wireless Consulting or Verizon Wireless. This site is located at 10th St and Walnut Ave (3 blocks from downtown) and has multiple grain silos approximately 100-120 feet in height. The use of these existing co-location and building mount opportunities would better meet the intent of the Monterey County Zoning Ordinance.

Due to conflicting information, staff requested Complete Wireless Consulting supply additional analysis that concludes this co-location site is not feasible, and a letter from Crown Castle International confirming that co-location is not feasible. Complete Wireless Consulting submitted an explanation that the existing co-location site could work but that it is not optimal, and that the building mounted opportunity could work as well. Complete Wireless Consulting requested staff continue with the Zoning Administrator public hearing to state their case for the development of the proposed new wireless communication facility. At this time, staff does not have sufficient information on the record to make the necessary findings that the proposed location is the most adequate location for a wireless communication facility, as there may be an existing site or building mounted opportunity available, that would better meet the service needs of the applicant.

Environmental Review

The project is exempt per CEQA guidelines section 15270(a), which states that CEQA does not apply to projects which a public agency rejects or disapproves.

Recommendation

The intent of the Zoning Ordinance is not to restrict wireless communication facilities, but ensure that the applicant has conducted due diligence to find the most adequate site for the development of wireless facilities. This is to protect the nature and integrity of surrounding land uses and lessen visual clutter. In this case, staff does not believe the applicant or agent has thoroughly vetted alternatives to a new wireless communication facility. The Verizon Wireless RF Engineers admit the design is less than optimal. Inconsistent information has been provided by the applicant and agent without a concluding that co-location is infeasible on the existing CCI site. With modification of the CCI site, the location would achieve the coverage and capacity

sought by Verizon. According to Monterey County Zoning Ordinance this would be the most adequate site, as Monterey County discourages unnecessary development of new wireless sites. Normally, staff would recommend a continuance to allow the applicant more time to provide evidence as to why the alternative sites will not work, but in this particular case the applicant requested to move forward with the Zoning Administrator hearing. Therefore, staff recommends that the Zoning Administrator deny the project based on the findings and evidence found in Exhibit C.

**EXHIBIT C
DRAFT RESOLUTION**

**Before the Zoning Administrator in and for the
County of Monterey, State of California**

In the matter of the application of:

ROY & LARA RICHINA (PLN140428)

RESOLUTION NO. ----

Resolution by the Monterey County Hearing Body:

- 1) Finding the project Statutorily Exempt per Section 15270(a) of the CEQA guidelines; and
- 2) Denying a use permit to allow the construction of a new wireless communication facility consisting of a 68 foot monopole within a 2,500 square foot leased area for ground mounted equipment.

[PLN140428, Roy & Lara Richina, 40821 Cherry Ave, Greenfield, Central Salinas Valley Area Plan (APN: 109-132-005-000)]

The Richina application (PLN140428) came on for public hearing before the Monterey County Zoning Administrator on January 8, 2015. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Zoning Administrator finds and decides as follows:

FINDINGS

1. **FINDING:** **PROJECT DESCRIPTION** – The proposed project is a use permit to allow the construction of a new wireless communication facility consisting of a 68 foot monopole within a 2,500 square foot leased area for ground mounted equipment.

 EVIDENCE: The application, project plans, and related support materials submitted by the project applicant to Monterey County RMA-Planning for the proposed development found in Project File PLN140428.

2. **FINDING:** **INCONSISTENCY** – The Project, as designed is inconsistent with the applicable plans and policies which designate this area as appropriate for development.

 EVIDENCE: a) During the course of review of this application, the project has been reviewed for consistency with the text, policies, and regulations in:
 - 2010 Monterey County General Plan;
 - Central Salinas Valley Area Plan;
 - Monterey County Zoning Ordinance (Title 21);Conflicts within the project application were found during the course of review indicating inconsistencies with the Monterey County Zoning Ordinance, Section 21.64.310 Regulations for the siting, design, and

construction of wireless communication facilities.

- b) The property is located at 40821 Cherry Ave, Greenfield (Assessor's Parcel Number 109-132-005-000), Central Salinas Valley Area Plan. The parcel is zoned F/40, which allows wireless communication facilities subject to approval of a use permit (Chapter 21.30.050.II of Monterey County Code). Therefore, the project could be approved at this location provided it complies with MCC Section 21.64.310.
- c) Monterey County Code Section 21.64.310, Regulations for the siting, design, and construction of wireless communication facilities, seeks to protect the nature and integrity of residential, rural, commercial, and industrial areas from the indiscriminate and inappropriate proliferation of wireless communication facilities while complying with state and federal laws.
- d) The approval of this project would contribute to the proliferation of new wireless communication facilities which is inconsistent with Monterey County Code Section 21.64.310. This section requires the proposed project to be located in the most adequate location possible to prevent the inappropriate proliferation of wireless communication facilities. During project review it was determined that there are alternatives to construction of a new wireless communication facility. One alternative is the utilization of an existing wireless communication facility available for co-location that, with modifications, could achieve Verizon Wireless' project objectives. A second alternative is the use of existing grain silos located at Walnut Ave and 10th St in downtown Greenfield for building mounted antennas. Utilization of these alternatives would better achieve MCC section 21.64.310 because these sites would not result in the proliferation of new wireless communication facilities.
- e) Section 21.64.310.H.b of the Monterey County Zoning Ordinance encourages co-location of Wireless Communication Facilities when co-location will not cause an increase in visual impact. There is an existing wireless communications facility in the project's site alternatives analysis that is available for co-location. Co-location on an existing wireless facility would be the least visual impact as it would not require the construction of a new wireless communication facility. Therefore this project is not consistent with the General Development Standards for wireless communication facilities.
- f) The project planner conducted a site inspection on November 7, 2014 to verify that the project on the subject parcel conforms to the plans listed above.
- g) The project was not referred to a Land Use Advisory Committee (LUAC) for review because this project is located within the Central Salinas Valley Area Plan, which does not have an established Land Use Advisory Committee.
- h) The application, project plans, and related support materials submitted by the project applicant to Monterey County RMA-Planning for the proposed development found in Project File PLN140428.

3. **FINDING:** **SITE SUITABILITY** – The site is physically unsuitable for the use proposed.

EVIDENCE: a) Monterey County Code Section 21.64.310 requires the applicant to

demonstrate this site is the most adequate location possible for a new wireless communication facility. The applicant has not submitted sufficient evidence demonstrating this site to be the most suitable and adequate for a new wireless communication facility.

- b) The proposed facility is located in the rear of the parcel in a 2,500 square foot leased area, surrounded by utility poles and trees to provide some screening. The leased area will be accessed by a new 15 foot access and utility easement. The parcel is considered prime farmland but is not currently being used for row crops, or under Williamson Act contract. The monopole would be visible from Highway 101 and surrounding streets, but existing trees and utility poles would provide minimal screening.
- c) Staff conducted a site inspection on November 7, 2014 to verify that the site is suitable for this use. At that time, staff discovered other wireless communication facilities and building mounted opportunities in the near surroundings.
- d) Monterey County Code Section 21.64.310 requires the applicant to demonstrate that the proposed site is the most adequate for the provision of services. There is an existing wireless communications facility in the project's site alternatives analysis that is available for co-location. The applicant states that, with modifications, could achieve Verizon Wireless' project objectives. Therefore this project is inconsistent with of Monterey County Code.
- e) See preceding findings for supporting evidence.

4. **FINDING:** **FEDERAL TELECOMMUNICATION ACT** – The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof shall not 1) unreasonably discriminate among providers of functionally equivalent services; and 2) prohibit or have the effect of prohibiting the provision of personal wireless services.

EVIDENCE: a) The denial of the subject application does not unreasonably discriminate against Verizon Wireless or any other provider. The basis for denial is due to the lack of site alternatives analysis. The information received by the County concludes that there is an existing wireless communication facility site that could be modified to achieve Verizon Wireless' project goals. In addition, The County has approved various other wireless communication sites for Verizon Wireless including the following:

- PLN120492: Central Coast Baptist Association – 45 Sill Rd, Royal Oaks, CA 95076
- PLN120605: Campos Jimenez Investments – 11600 Merritt St, Castroville, CA 95012
- PLN130338: 502 Echo Valley Rd, Prunedale, CA 93908
- PLN130705: 66915 Sargents Rd, San Ardo, CA 93450

No unreasonable discrimination or prejudice against Verizon Wireless or any other wireless provider has been exercised by the County. See Finding 8 for additional evidence.

- b) The denial of the subject application does not prohibit or have the effect of prohibiting the provision of personal wireless services. The coverage maps submitted by Verizon Wireless indicate that good coverage for

outdoor use currently exists just north of the site and good indoor/outdoor coverage currently exists within the City of Greenfield. Without this site, Verizon Wireless would maintain existing good outdoor coverage north of Greenfield and good indoor/outdoor coverage within the City of Greenfield; therefore this site is not required to maintain minimum levels of coverage in the Greenfield area. Exhibit E to the January 8, 2014 staff report shows the existing and proposed coverage maps submitted by the applicant.

- c) Preceding findings and supporting evidence for PLN140428.

5. **FINDING:** **CEQA (Exempt):** - The project is statutorily exempt from environmental review and no unusual circumstances were identified to exist for the proposed project.

- EVIDENCE:**
- a) California Environmental Quality Act (CEQA) Guidelines Section 15270(a) states that CEQA does not apply to projects which a public agency rejects or disapproves.
 - b) See preceding findings for supporting evidence.

6. **FINDING:** **WIRELESS COMMUNICATION FACILITIES** – The development of the proposed wireless communications facility is not consistent with the County’s desire to minimize the proliferation of wireless telecommunication sites. The applicant has not demonstrated that it is the most adequate for the provision of services as required by the Federal Communications Commission. The proposed wireless communication facility does not comply with all the applicable requirements of Monterey County Code section 21.64.310 as it is not the least visibly obtrusive location and is not the most adequate site for the project.

- EVIDENCE:**
- a) Site Alternatives: Two alternative sites were analyzed pursuant to Section 21.64.310.E.1 of the Zoning Ordinance: 1) Santa Lucia Square Shopping Center parking lot and 2) an existing monopole owned by Crown Castle International. The first site was ruled out due to a high potential of visual impacts and access issues. The applicant states the second site was ruled out due to limited lease space and an inability to mutually agree on a lease agreement. Crown Castle International stated that, with modifications, the site is available for co-location. Inconsistent information has been provided by the applicant and the County has no record confirming that the existing Crown Castle International site is infeasible.

- b) Visual Simulations: Visual simulations of the proposed project design and design alternatives were submitted to RMA-Planning. These simulations were taken from the following locations:

- 1. Southbound Highway 101
- 2. Walnut Ave and 3rd Street
- 3. Pine Ave and 3rd Street

The proposed project would be visible from all locations, however existing trees and utility poles aid in screening.

- c) Section 21.64.310.C.4 requires the project to be sited in the least visibly

obtrusive location possible. There are alternatives to the construction of a new wireless communication facility. One is a co-location opportunity, and another is the use of existing grain silos located at Walnut Ave and 10th St in downtown Greenfield for building mounted antennas. Both of these alternatives would be less obtrusive as they would not require the construction of a new wireless communication facility.

- d) An FCC compliance report, certified by a professional engineer, was submitted. The report concludes that the project site will be compliant with FCC RF Emission regulations. Therefore, the project will not affect the health, safety, or welfare of persons either residing or working in the neighborhood.
- e) The project does not penetrate a FAR Part 77 Imaginary Surface or any Airport Approaches Zoning (Chapter 21.86, Monterey County Code) since the project is not located within the vicinity of an airport.
- f) See preceding findings for supporting evidence.

7. **FINDING:** **APPEALABILITY** - The decision on this project may be appealed to the Planning Commission.
- EVIDENCE:** a) Section 21.80.040 of the Monterey County Zoning Ordinance states that the proposed project is appealable to the Planning Commission.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Zoning Administrator does hereby:

- 1. Find the project Statutorily Exempt per Section 15270(a) of the CEQA guidelines;
- 2. Deny PLN140428, based on the findings and evidence.

PASSED AND ADOPTED this 8 day of January, 2015 upon motion of xxxx, seconded by xxxx, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Jacqueline Onciano, Zoning Administrator

COPY OF THIS DECISION MAILED TO APPLICANT ON

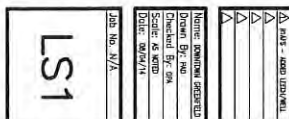
THIS APPLICATION IS APPEALABLE TO THE PLANNING COMMISSION

IF ANYONE WISHES TO APPEAL THIS DECISION, AN APPEAL FORM MUST BE COMPLETED AND SUBMITTED TO THE SECRETARY OF THE PLANNING COMMISSION ALONG WITH THE APPROPRIATE FILING FEE ON OR BEFORE

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.



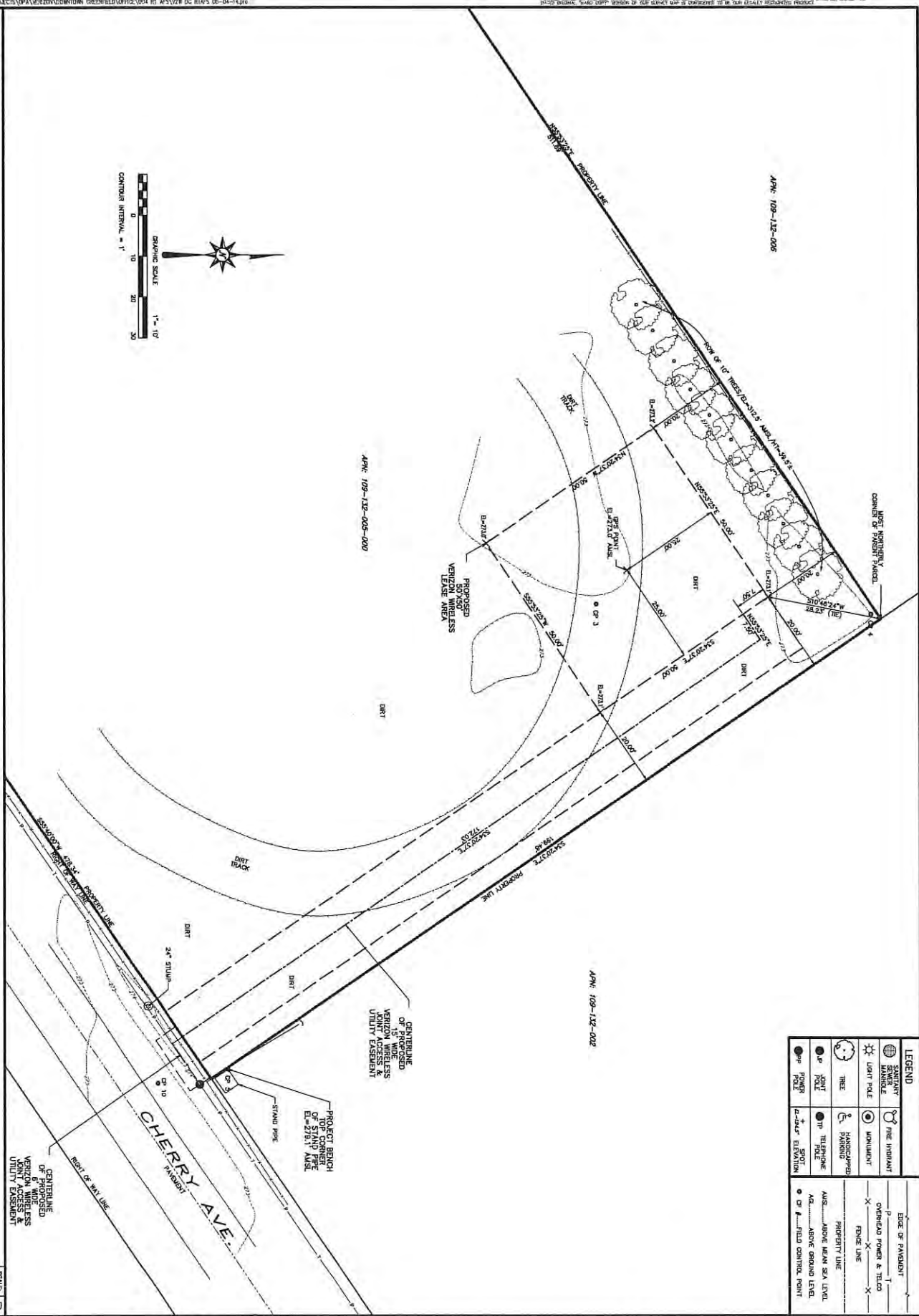
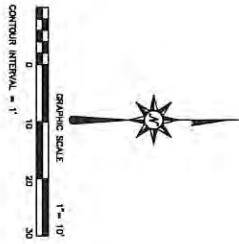
101



SURVEY SHEET

Phil Auer Surveying
14407 Curie Lejos
Bakersfield, CA 93314
Phone: (805) 567-6120
Mobile: (505) 714-7224
E-mail: ls5075@earthlink.net

DETAIL "B"



LEGEND	
	SURVEY POINT
	FIRE HYDRANT
	LIGHT POLE
	MONUMENT
	TREE
	HANDICAPPED
	POWER POLE
	SPOT POLE
	ELEVATION
	EDGE OF PARCEL
	OVERHEAD POWER & TELECOM
	EASEMENT
	PROPERTY LINE
	MEAN SEA LEVEL
	ABOVE GROUND LEVEL
	FIELD CONTROL POINT

LS2

DATE: 08/21/14

DRAWN BY: N/A

CHECKED BY: N/A

DATE: 08/21/14



verizon WIRELESS

DOWNTOWN GREENFIELD
APN 109-132-005-000
GREENFIELD, CA

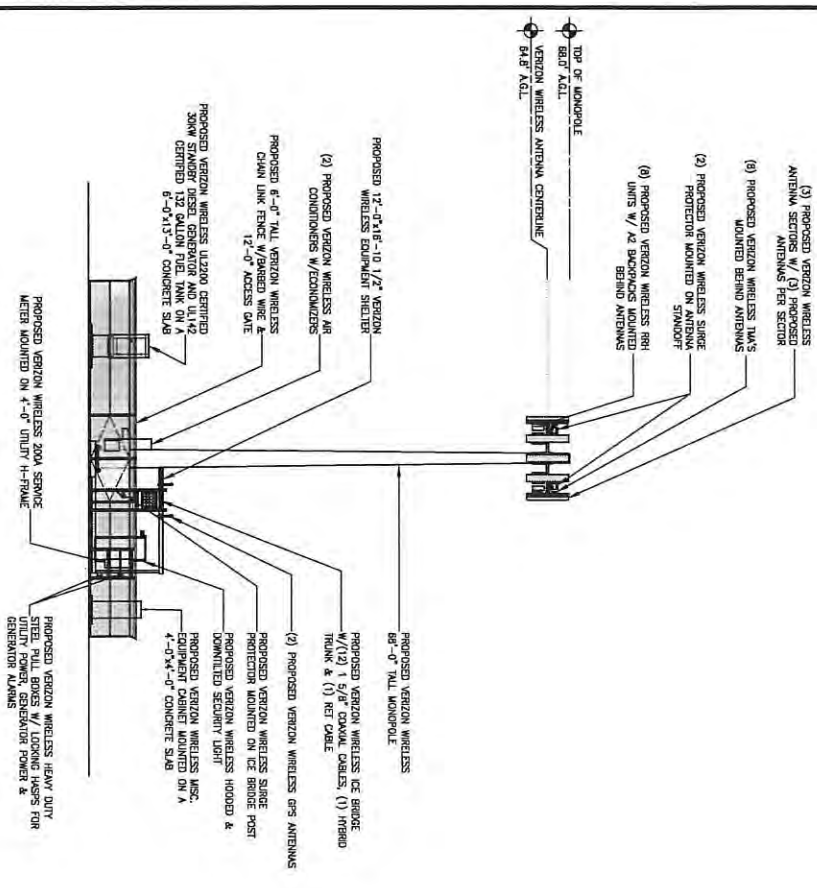
SHEET TITLE:
SURVEY SHEET

Phil Auer Surveying

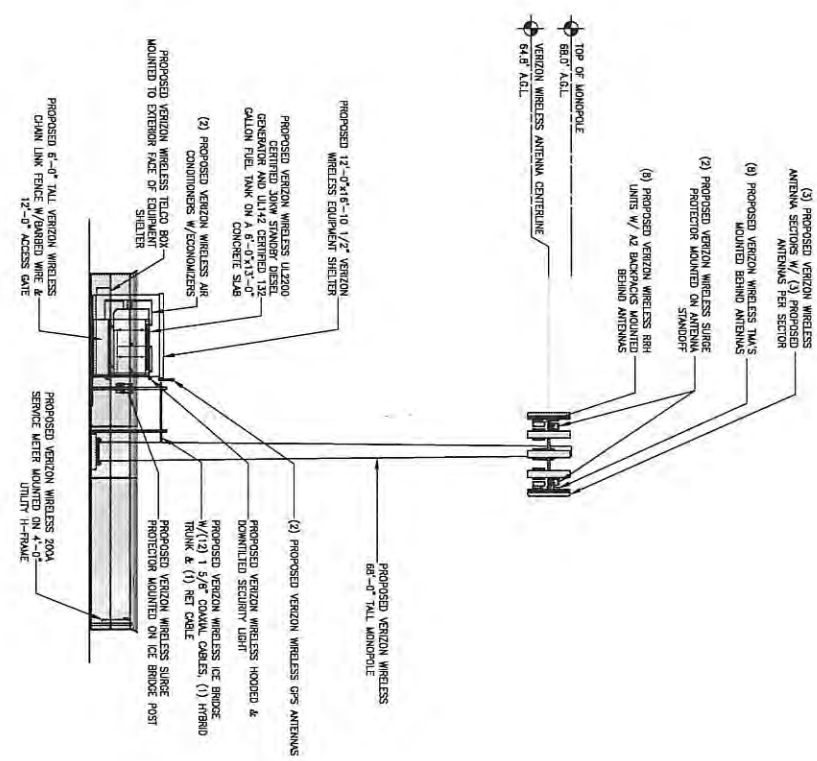
14407 Curtis Lane
Bakersfield, CA 93314
Phone: (805) 507-6129
Mobile: (805) 744-7884
E-mail: la0070@earthlink.net



A1.1	Job No. 10248	Verizon WIRELESS	DOWNTOWN GREENFIELD 40821 CHERRY AVENUE GREENFIELD, CA 93927	MST ARCHITECTS 801 Adventure Blvd., Suite 2, Sacramento, CA 95818 PH 916 381-0400 • FX 916 381-0400 email@mstarchitects.com	COMPLETE Wireless Consulting, Inc.
	Sheet Title: OVERALL SITE PLAN	The design and construction of this project is the responsibility of the architect. The architect is not responsible for the design of the building or the construction of the building.	The design and construction of this project is the responsibility of the architect. The architect is not responsible for the design of the building or the construction of the building.	The design and construction of this project is the responsibility of the architect. The architect is not responsible for the design of the building or the construction of the building.	The design and construction of this project is the responsibility of the architect. The architect is not responsible for the design of the building or the construction of the building.



2 NORTHEAST ELEVATION
 A1 SCALE 1/8" = 1'-0"



1 SOUTHEAST ELEVATION
 A1 SCALE 1/8" = 1'-0"

DOWNTOWN GREENFIELD
 40821 CHERRY AVENUE
 GREENFIELD, CA 93927

SHEET TITLE:

PROJECT ELEVATIONS

MST ARCHITECTS
 801 Alhambra Blvd., Suite 2, Rosemead, CA 91066
 PH 626 261-0000 • FX 626 261-0000
www.mstarchitects.com

COMPLETE
 Wireless Consulting, Inc.

Job No. 10248

DATE: 04/27/11

DESIGNED BY: JTB

CHECKED BY: JTB

DATE: 04/27/11

THE DESIGN ALLIANCE
 40821 CHERRY AVENUE
 GREENFIELD, CA 93927
 TEL: 530.938.1111

A3.1

CENTRAL SALINAS VALLEY

EXHIBIT D

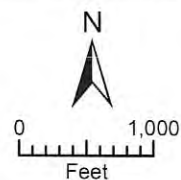


APPLICANT: RICHINA (VERIZON WIRELESS)

APN: 109-132-005-000

FILE # PLN140428

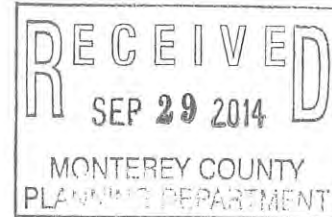
 2500' Limit  300' Limit  City Limits



PLANNER: BOGDAN

**PROJECT SUPPORT STATEMENT
VERIZON WIRELESS**

Site Name: Downtown Greenfield
Location: 40821 Cherry Avenue, Greenfield, CA 93927
APN: 109-132-005-000



Introduction

Verizon Wireless is undertaking a large expansion project to improve communications services and to increase coverage and capacity for residential and business users in and around Monterey County. More specifically, Verizon proposes to provide capacity offload in the Community of Greenfield by offloading Soledad and Hwy 101/Greenfield along Highway 101. Verizon maintains a strong customer base in Monterey County and strives to increase and improve coverage for both current and potential customers. This network development will also serve to increase public safety within the area. Presently, this section of the County suffers from poor signal strength due to a high volume of usage and distance between existing Verizon sites.

Project Location & Description

Verizon proposes a new wireless telecommunications site (Proposed Facility) at 40821 Cherry Avenue in Downtown Greenfield to aid the surrounding areas with their call volume and coverage. To achieve this, Verizon proposes a new 68' monopole at the above-referenced address.

Map Location of Proposed Project Site



The Proposed Facility is approximately 2.45 acres in size and is zoned Farmland District (F/40-D). In addition to the monopole, the facility will consist of a 40'x 40' lease area, (9) antennas, (three sectors of three antennas per sector at a centerline of 65') and associated antenna equipment,

a 11’6” x 10’1/2” outdoor equipment shelter, a standby diesel generator with a 132-gallon fuel tank on a 6’x13’ concrete slab, and an underground power & Telco to the site.

Search Area Objectives

The objective of the proposed facility is both to fill in a gap in coverage in the Greenfield area, as well as to provide support capacity to the existing overloaded facilities in Monterey County. In order to achieve this service objective, Verizon identified a potential candidate “Search Ring.” A Search Ring is a circle on a map that is determined by Verizon’s Radio Frequency Engineer (RF engineer). The circle identifies the geographic area within which the proposed telecommunications site must be located to satisfy the intended service objective. In creating the Search Ring, the RF engineer takes into account many factors, such as topography, proximity to existing structures, current coverage areas, existing obstructions, etc. A visual representation of the Search Ring is below.

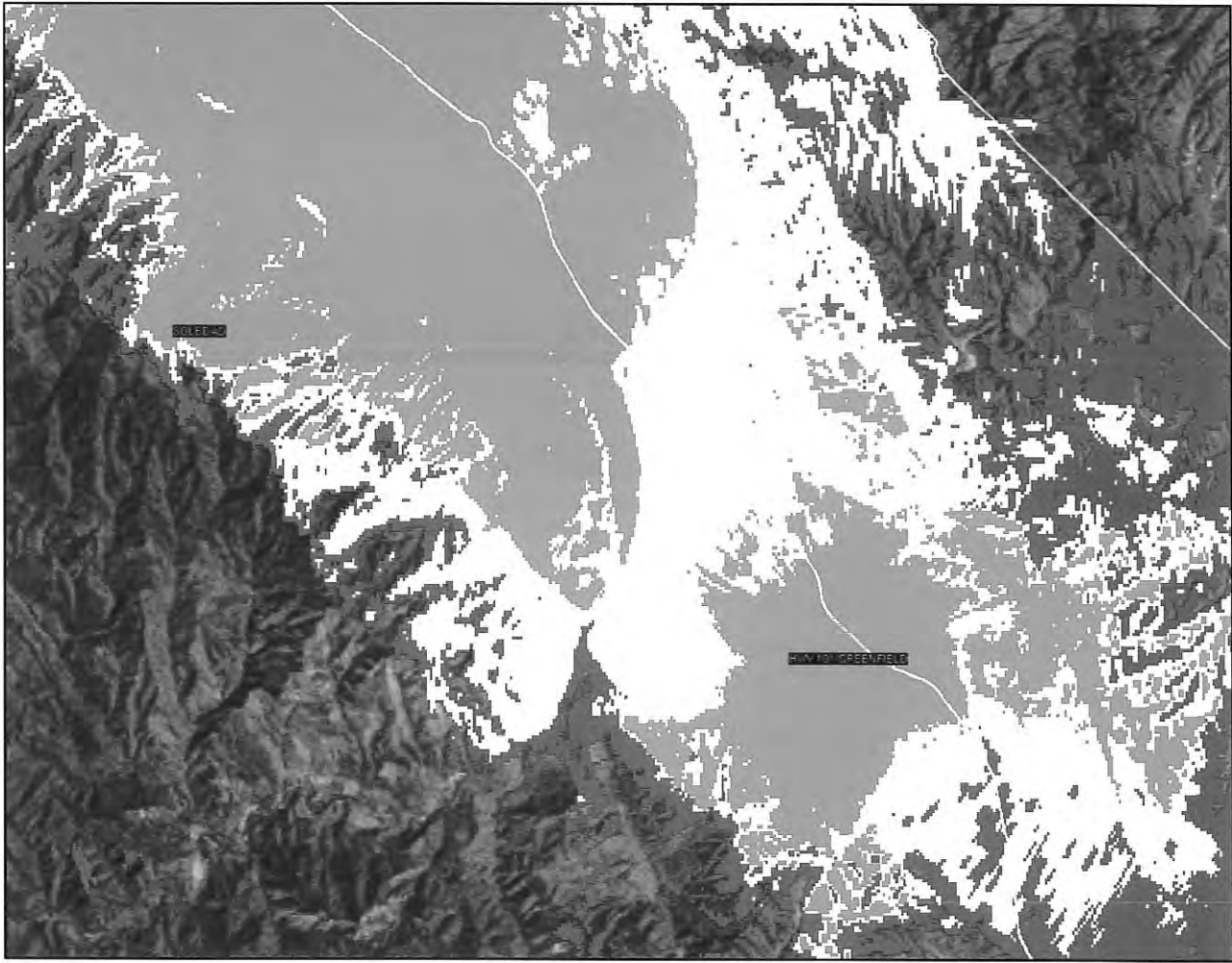
Search Ring (Aerial)



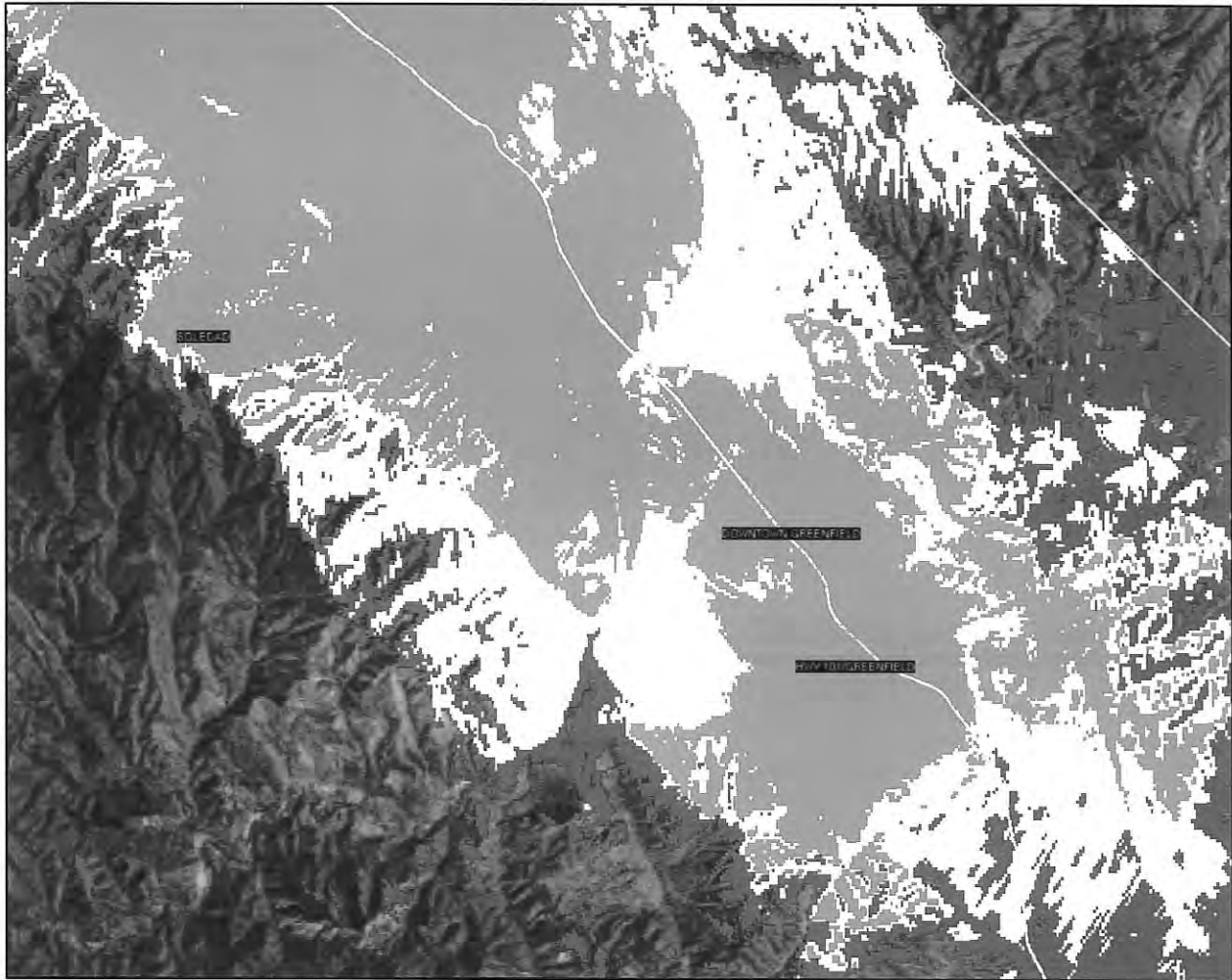
Coverage Analysis

Also included are coverage maps that visually depict the improved coverage to be provided by the proposed telecommunications site. The first map represents Verizon's existing coverage conditions in the area. The second map represents Verizon's coverage conditions given approval of the proposed telecommunications site. The green areas on both maps represent areas with good indoor/outdoor coverage. The yellow areas on both maps below represent areas with good outdoor coverage. The red portions of the maps represent areas with poor outdoor coverage.

Existing Coverage



Proposed Coverage



Compliance with County Development Regulations

Under § 21.64.310 (C), the following regulations apply to all telecommunications facilities in all zoning districts.

1. Wireless communication facilities shall comply with all applicable goals, objectives and policies of the general plan, area plans, zoning regulations and development standards.

The property is located in the Farming District (F/40-D) zone. Under Monterey County Code § 21.30.010 the purpose of the F/40-D zone is to “to preserve and enhance the use of the prime, productive and unique farmlands in the County of Monterey while also providing opportunity to establish necessary support facilities for those agricultural uses.” There is a 40-acre minimum in this area. Here, the Proposed Facility seeks to provide coverage and capacity for the surrounding residences and businesses as well as emergency in the area.

Under § 21.30.060, while structures in the F/40-D zone have a maximum height requirement of 35’ tall, “towers, poles, water tanks, and similar structures may be erected to a

greater height than the limit established for the district in which they are to be located, subject to securing a Use Permit.” Section 21.62.030 (Height). Here, the Use Permit for the Proposed Facility states that the monopole is 68’ tall with an antenna centerline that is 65’ tall in order to meet Verizon’s coverage and capacity objectives.

2. Wireless communication facilities shall comply with all FCC rules, regulations, and standards.

Verizon complies with all FCC rules governing construction requirements, technical standards, interference protection, power and height limitations, and radio frequency standards.

3. Wireless communication facilities shall comply with all applicable criteria from the Federal Aviation Administration (FAA) and shall comply with the requirement of all Comprehensive Airport Land Use Plans adopted by the Monterey County Airport Land Use Commission (ALUC) unless the Board of Supervisors has overruled the adoption of said plans pursuant to the California Public Utility Code section 21676.

Verizon complies with all FAA rules on site location and operation.

4. Wireless communication facilities shall be sited in the least visually obtrusive location possible pursuant to Sections 20.64.310G and 20.64.310H1.

Due to the Proposed Facility’s location on a low-volume rural road and being outside any noticeable visually sensitive area, the Proposed Facility may not be subject to this guideline. The Proposed Facility is not within 1,000’ of a designated scenic highway or within any County defined view corridor.

5. Visual simulation of the wireless communication facility shall be provided together with a written report from an installer showing all locations where an unimpaired signal can be received.

Please see attached Photosimulations and Coverage Maps.

6. Where the wireless communication facility is proposed to be located within a designated historic resource site or district, the applicant shall comply with the regulations for historic resources pursuant to Chapter 20.54 and Chapters 18.25 and 18.26.

The Proposed Facility is not located within a designated historic resource site or district. This requirement is not applicable.

7. Where a wireless communication facility exists on the proposed site location, co-location shall be pursued to the maximum extent feasible. If a co-location agreement cannot be met, documentation of the effort and the reasons why co-location was not possible shall be submitted and reviewed by the Director of Planning and Building Inspection.

Please see Alternative Site Analysis below.

General Development Standards

Under § 21.64.310 (H), the Proposed Facility complies with the following site location and design review development standards.

1. Site Location

- a. Site location and development of wireless communications facilities shall preserve the visual character and aesthetic values of the specific parcel and surrounding land uses. Facilities shall be integrated to the maximum extent feasible to the existing characteristics of the site.

Verizon has carefully chosen a location that will minimize any visual impact to the surrounding area. The Proposed Facility will be located on a 2.45-acre parcel currently being used as a crop farm with pastures. Additionally, the lease area is recessed to the furthest corner of the parcel, ensuring the maximum distance possible from Hwy 101. Lastly, the monopole will not disturb the visual character because the area has similarly tall structures, such as lamp posts, utility poles, and tall trees that line the roads and properties in the area.

- b. Co-location is encouraged when it will decrease visual impact and discouraged in cases when it will increase visual impact.

The Proposed Facility has been designed in a manner that will structurally accommodate additional antennas and/or future collocation. Verizon welcomes other carriers to collocate on their facilities whenever possible. Additional space is available within Verizon’s lease area for at least one additional future carrier. Please see Alternative Site Analysis for more information on why co-location was not feasible for the Proposed Facility.

- c. Wireless communications facilities, to every extent possible, should not be sited to create visual clutter or negatively affect specific views.

A slim line monopole was chosen in this area, specifically to create less visual impact in the area, particularly from the roadways. The area has similarly tall structures, such as lamp posts, utility poles, and tall trees that line the roads and properties in the area. Lastly, the density of the buildings directly around the Proposed Facility, combined with the foliage of the other trees in the parcels adjacent, make visibility from the public rights-of-way insignificant. Please see attached Photosimulations for additional information.

- d. In designated visually sensitive areas, scenic corridors or areas of high visibility, telecommunication facilities shall be sited below the ridge line or designed to minimize their visual impact.

This requirement is not applicable.

- e. Wireless communications facilities shall be screened from any public viewing areas to the maximum extent feasible.

All ground equipment will be completely screened from public viewing from any public rights-of-way. All equipment is locked and surrounded by a 6' tall chain link fence with barbed wire around the perimeter. Furthermore, the foliage of the trees and the neighboring buildings naturally buffer the Proposed Facility from public viewing.

- f. Disturbance of existing topography and on-site vegetation shall be minimized, unless such disturbance would substantially reduce the visual impacts of the facility.

Topography and site vegetation will not be disturbed. This requirement is not applicable.

- g. Any exterior lighting, except as required for FAA regulations for airport safety, shall be manually operated and used only during night maintenance checks or in emergencies. The lighting shall be constructed or located so that only the intended area is illuminated and off-site glare is fully controlled.

There is no lighting provided at Proposed Facility other than a hooded and downward-angled security light at entry of equipment shelter.

- h. No telecommunication facility shall be installed at a location where special painting or lighting will be required by the FAA regulations unless the applicant has demonstrated to the Director of Planning, location for the provision of services as required by the FCC.

The Proposed Facility is not within a location that requires special painting or lighting. This requirement is not applicable.

- i. No telecommunication facility shall be installed within the safety zone of any airport within Monterey County or any helipad unless the airport owner/operator indicates that it will not adversely affect the operation of the airport or helipad.

The facility is not within a safety zone or runway protection zone of any airport nor a helipad within Monterey County.

- j. No telecommunication facility shall be located in an environmentally sensitive habitat.

The Proposed Facility is not within an environmentally sensitive habitat within Monterey County. This requirement is not applicable.

2. Design Review Criteria

- a. Towers and monopoles shall be constructed of metal or other non-flammable material, unless specifically conditioned by the County to be otherwise.

The proposed monopole is constructed of non-flammable material.

- b. Support facilities (i.e. vaults, equipment rooms, utilities, and equipment enclosures) shall be constructed of non-flammable, non-reflective materials and shall be placed in underground vaults, unless otherwise approved by the County.

The proposed equipment shelter is a pre-fabricated, non-flammable material with a 30kw standby diesel generator that is surrounded by a 6' tall chain link fence with barbed wire around the perimeter. Please see (f) under Site Location.

- c. All ancillary buildings, poles, towers, antenna supports, antennas, and other components of telecommunication facilities shall be of a color approved by the Appropriate Authority.

The monopole, the antennas, and ground equipment are made of non-flammable materials and a basic metal color.

- d. Special design of the telecommunication facilities may be required to mitigate potentially significant adverse visual impacts.

The proposed design was chosen with regards to the least visually intrusive considering the rural, farmland area.

Alternative Site Review

The candidate review process for this site began in June of 2013. In identifying the most preferred site location and design, Verizon begins its process by identifying a search area and a required centerline height. (Please see Search Ring Analysis above.) Verizon then looks to local codes and general plans to identify the values significant to the local community for the siting/locating of wireless facilities.

In addition to the above mentioned location and height attributes, each proposed site must meet certain minimum requirements, such as the following:

- a willing landlord,
- feasible construction,
- road access,
- available telephone and electrical utilities,
- satisfaction of coverage objectives, and
- compliance with local zoning requirements.

During the candidate review process, Verizon first looked for collocation opportunities within the Search Ring. This particular search ring does have an existing wireless communication tower, however that would provide a co-location opportunity. Next Verizon looked for feasible facade mount and roof mount opportunities. Since no feasible co-location, facade mount, or roof mount opportunities exist within this search ring, Verizon determined that a new facility was the most appropriate option.

Alternative Candidate #1

The existing Crown Castle International (CCI) compound was not sufficient to accommodate Verizon’s outdoor equipment cabinets, fit its outdoor diesel generator, or fulfill its service needs. In addition, Verizon and CCI could not assent to a mutually agreed upon contract.



Alternative Candidate #2

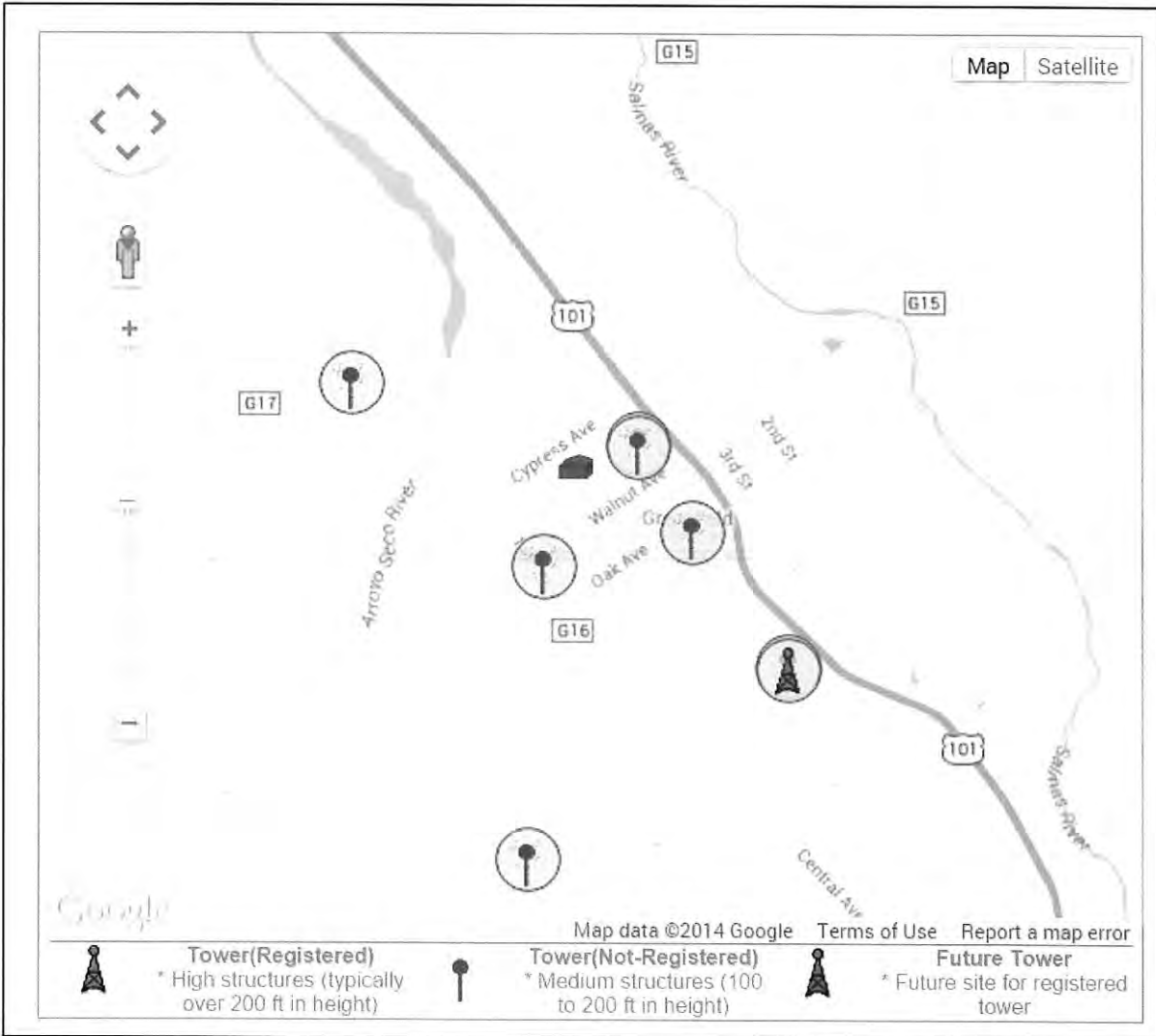
Santa Lucia Square was not a favorable site since it is located in the center of town in the parking lot of a shopping center. At this location and height, Verizon would be unable to meet its coverage objectives. Lastly, any visual impact would be greatly increased to the centrality of the location and access from the public.



The Proposed Facility location and design represents a thorough and responsible investigation of alternative sites and co-location possibilities performed over the last few months. After an exhaustive review of the available properties and the applicable zoning law, Verizon has determined that the proposed site is the best available location for a wireless telecommunications facility to meet the coverage objective.

Wireless Telecommunications Facilities

The following map shows all other existing wireless telecommunications facilities in a four (4) mile radius of the Proposed Facility.



Tower Type	ID Num	Site Owner	Height	Dist
Registered	(1)	<u>American Towers, Llc</u>	155 feet	2.63 miles
Not Registered	(1)	<u>Pacific Bell Mobile Services</u>	64 feet	.61 miles
	(2)	<u>Pacific Bell Mobile Services</u>	100 feet	.63 miles
	(3)	<u>Anita L. Levine</u>	300 feet	.83 miles
	(4)	<u>Falcon Cable Tv</u>	60 feet	1.17 miles
	(5)	<u>Communication Systems Development Inc</u>	140 feet	2.62 miles
	(6)	<u>Blank</u>	250 feet	2.69 miles
	(7)	<u>Family Stations I Nc</u>	98 feet	3.26 miles

Safety Benefits of Improved Wireless Service

Verizon offers its customers multiple services such as voice calls, text messaging, mobile email, picture/video messaging, mobile web, navigation, broadband access, V CAST, and E911 services. Mobile phone use has become an extremely important tool for first responders and serves as a back-up system in the event of a natural disaster. Verizon will install a standby generator at this telecommunications site to ensure quality communication for the surrounding community in the event of a natural disaster or catastrophic event. This generator will be fully contained within the equipment shelter and will provide power to the telecommunications site in the event that local power systems are offline.

Standby Generator Testing

Verizon installs a standby generator and batteries at all of its cell sites. The generator and batteries serve a vital role in Verizon’s emergency and disaster preparedness plan. In the event of a power outage, Verizon’s communications equipment will first transition over to the backup batteries. The batteries can run the site for a roughly 8 hours, depending upon the demand placed upon the equipment. Should the power outage extend beyond the capacity of the batteries, the backup generator will automatically start and recharge the batteries. This two state backup plan is an extremely important component of every Verizon communications site. As one of the nation’s largest wireless companies, Verizon is the mobile phone service of choice to many Federal, State, and Local public safety agencies. While many public safety agencies employ their own two-way radio systems for intra-agency communications, Verizon phones are often the link to other agencies and the outside world. Backup batteries and generators allow Verizon’s communications sites to continue providing valuable communications services in the event of a power outage, natural disaster or other emergency.

Operations & Maintenance

Visitation to the site by a service technician for routine maintenance typically occurs on an average of once per month. The proposed site is entirely self-monitored and connected directly to a central office where sophisticated computers alert personnel to any equipment malfunction. Because the wireless facility is unmanned, there is no regular hours of operation and no impacts to existing local traffic patterns. No water or sanitation services will be required.

Noise

The standby generator is operated for approximately 10-15 minutes per week for maintenance purposes. During construction of the facility, which typically lasts around two months, acceptable noise levels will not be exceeded.

Hazardous Materials

A Hazardous Material Business Plan was submitted upon project completion, and it is stored on site for reference.

Compliance with FCC Standards

Verizon complies with all FCC rules governing construction requirements, technical standards, interference protection, power and height limitations and radio frequency standards. In addition, Verizon complies with all FAA rules on site location and operation.

This project will not interfere with any TV, radio, telephone, satellite, or any other signals. Any interference would be against the Federal Law and would be a violation Verizon’s FCC License.

Notice of Actions Affecting This Development Permit

In accordance with California Government Code Section 65945(a), Verizon requests notice of any proposal to adopt or amend the: general plan, specific plan, zoning ordinance, ordinance(s) affecting building or grading permits that would in any manner affect this development permit. Any such notice may be sent to 2009 V Street, Sacramento, CA 95818.



Existing

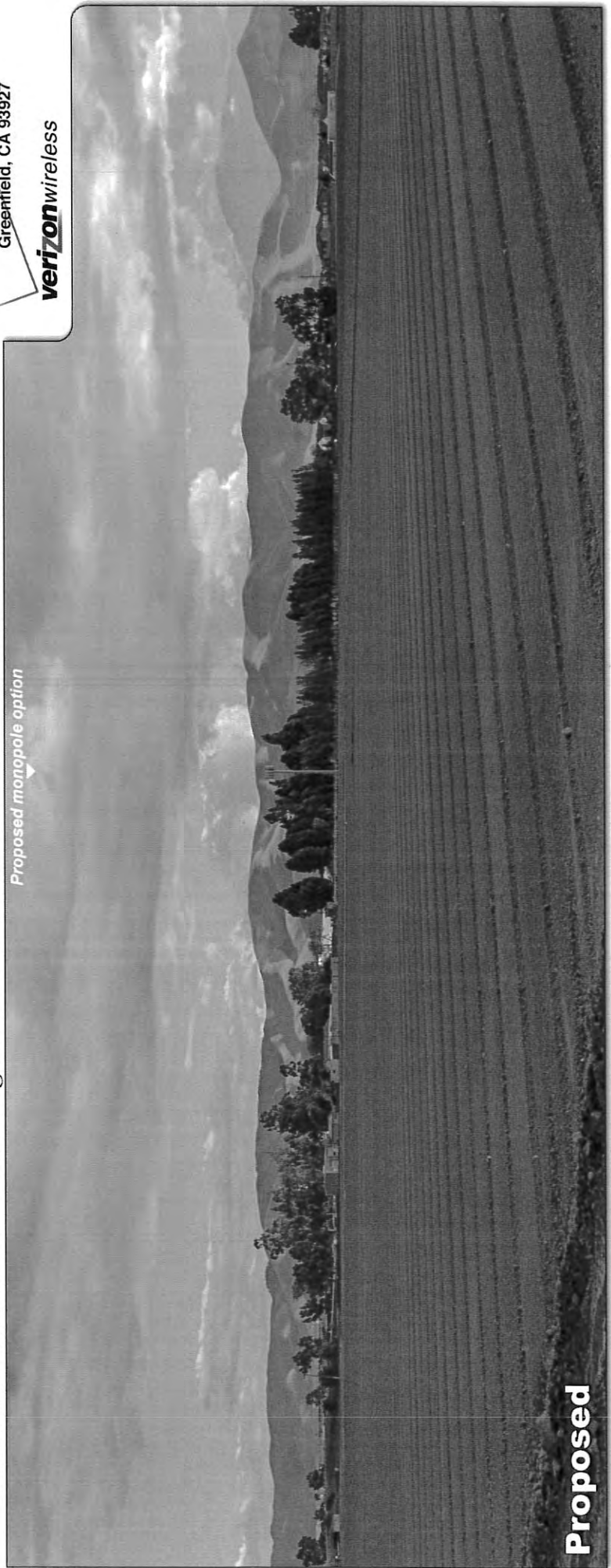
Photosimulation of the view looking south from the intersection of Pine Ave and 3rd Street.

Downtown Greenfield

40821 Cherry Avenue
Greenfield, CA 93927

verizonwireless

Proposed monopole option



Proposed



Existing

Photosimulation of the view looking east from the travel lanes of southbound Hwy 101.

Downtown Greenfield

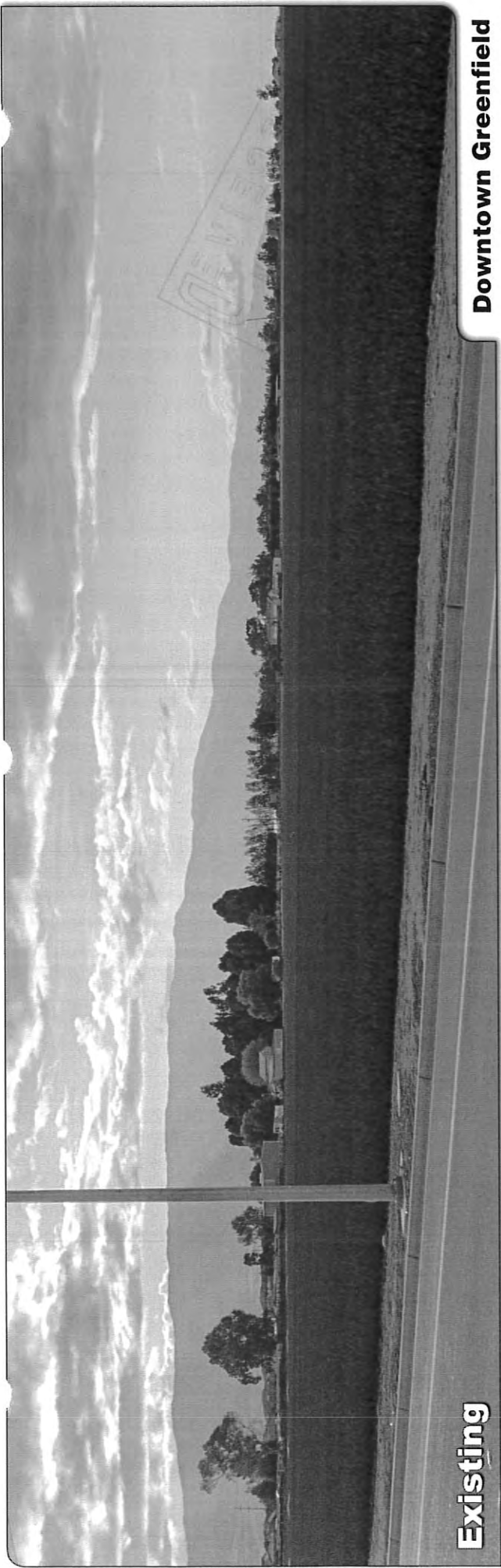
40821 Cherry Avenue
Greenfield, CA 93927

verizonwireless

Proposed monopole option



Proposed



Existing

Photosimulation of the view looking west from Walnut Ave, just west of 3rd Street.

Proposed monopole option

Downtown Greenfield

40821 Cherry Avenue
Greenfield, CA 93927

verizonwireless

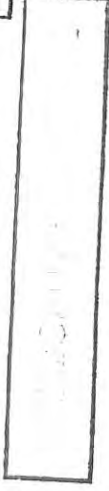


Proposed



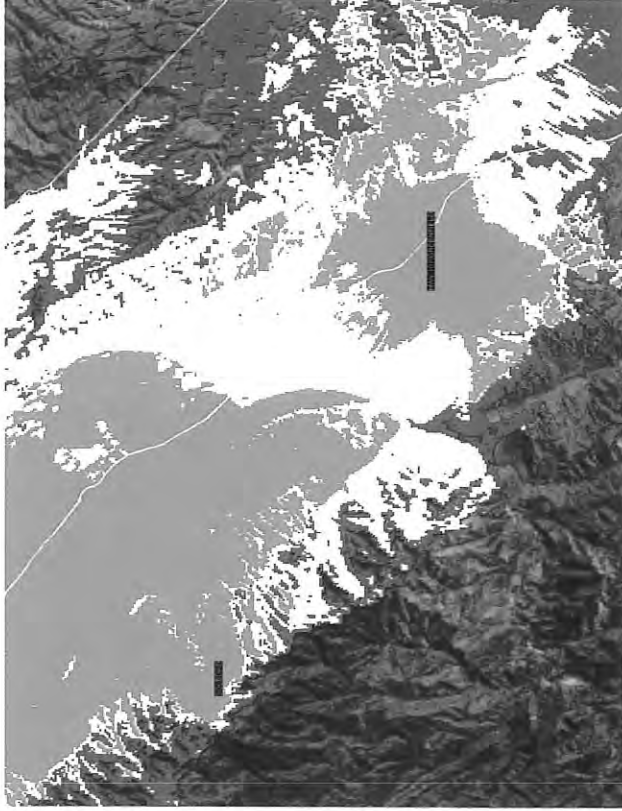
EXHIBIT

5

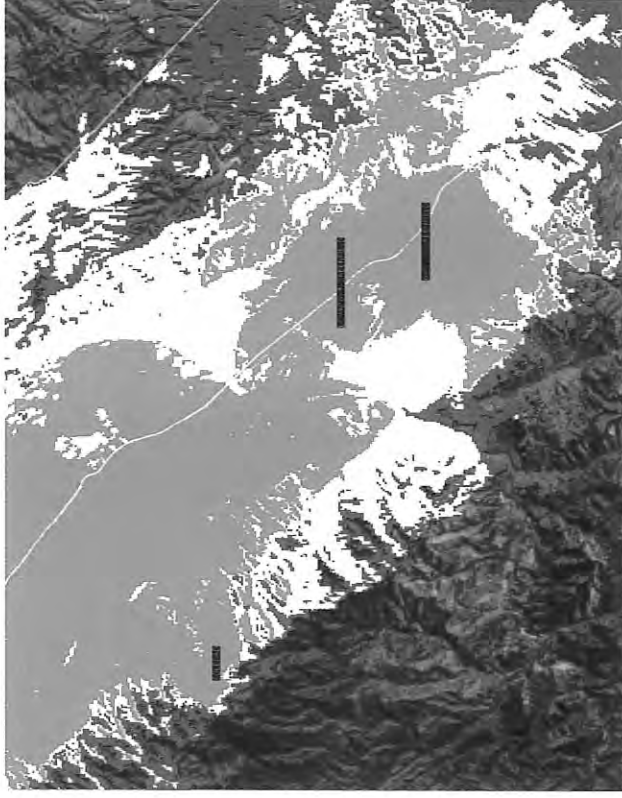


Need Case for: Downtown Greenfield

Before:



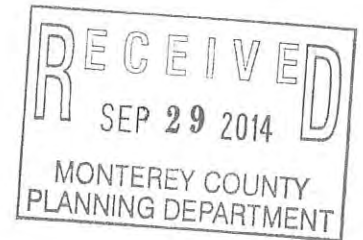
After:



The above before/after plots show the improvement in coverage realized from Downtown Greenfield. The site is a combination of coverage and capacity site offloading the entire Greenfield by taking traffic from residential and agricultural areas along HWY 101..

Radio Frequency- Electromagnetic Energy (RF-EME) Compliance Report

Site No. 270013
Downtown Greenfield
40821 Cherry Avenue
Greenfield, California 93927
Monterey County
36.333206; -121.245956 NAD83



EBI Project No. 62142244
April 7, 2014



Prepared for:
Verizon Wireless
c/o Complete Wireless Consulting Inc.
2009 V Street
Sacramento, CA 95818

Prepared by:



TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1.0 INTRODUCTION.....2

2.0 SITE DESCRIPTION 2

3.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS.....3

4.0 WORST-CASE PREDICTIVE MODELING 5

5.0 MITIGATION/SITE CONTROL OPTIONS 7

6.0 SUMMARY AND CONCLUSIONS.....7

7.0 LIMITATIONS 7

APPENDICES

- APPENDIX A CERTIFICATIONS
- APPENDIX B RADIO FREQUENCY ELECTROMAGNETIC ENERGY SAFETY / SIGNAGE PLANS
- APPENDIX C ROOFVIEW® EXPORT FILES

EXECUTIVE SUMMARY

Purpose of Report

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by Verizon Wireless to conduct radio frequency electromagnetic (RF-EME) modeling for Verizon Site 270013 located at 40821 Cherry Avenue in Greenfield, California to determine RF-EME exposure levels from proposed Verizon wireless communications equipment at this site. As described in greater detail in Section 2.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

Statement of Compliance

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

As presented in the sections below, based on worst-case predictive modeling, there are no modeled areas on any accessible ground-level walking/working surface related to the proposed antennas that exceed the FCC's occupational or general public exposure limits at this site.

Recommended control measures are outlined in Section 5.0 and within a Site Safety Plan (attached); this plan includes instructions to shut down and lockout/tagout this wireless equipment in accordance with Verizon's standard operating protocol.

1.0 INTRODUCTION

Radio frequency waves are electromagnetic waves from the portion of the electromagnetic spectrum at frequencies lower than visible light and microwaves. The wavelengths of radio waves range from thousands of meters to around 30 centimeters. These wavelengths correspond to frequencies as low as 3 cycles per seconds (or hertz [Hz]) to as high as one gigahertz (one billion cycles per second).

Personal Communication (PCS) facilities used by Verizon in this area operate within a frequency range of 746-2100 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed a distance above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of in areas in the immediate vicinity of the antennas.

MPE limits do not represent levels where a health risk exists, since they are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size or health.

2.0 SITE DESCRIPTION

This project site includes twelve (12) wireless telecommunication antennas (at four sector locations) on a monopole located at 40821 Cherry Avenue in Greenfield, California.

Verizon Antenna Information (proposed Configuration)									
Antenna# and Model	Frequency (MHz)	# of Transmitters	Transmit Power (Watts)	Azimuth	Gain (dBd)	Feet above Ground (CL)	X	Y	Z
A1 Unknown	850	8	16	40°	12	65 ft AGL	33	34	62
A2 Unknown	746 2100	2 2	60 60	40°	12 16	65 ft AGL	35	32	62
A3 Unknown	1900	2	60	40°	16	65 ft AGL	37	30	62
B1 Unknown	850	8	16	165°	12	65 ft AGL	38	25	62
B2 Unknown	746 2100	2 2	60 60	165°	12 16	65 ft AGL	35	24	62
B3 Unknown	1900	2	60	165°	16	65 ft AGL	32	23	62
C1 Unknown	850	8	16	225°	12	65 ft AGL	30	23	62
C2 Unknown	746 2100	2 2	60 60	225°	12 16	65 ft AGL	28	25	62

C3 Unknown	1900	2	60	225°	16	65 ft AGL	26	27	62
D1 Unknown	850	8	16	300°	12	65 ft AGL	26	29	62
D2 Unknown	746 2100	2 2	60 60	300°	12 16	65 ft AGL	28	31	62
D3 Unknown	1900	2	60	300°	16	65 ft AGL	30	33	62

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general population/uncontrolled exposure limits for members of the general public that may be exposed to antenna fields. While access to this site is considered controlled, the analysis has considered exposures with respect to both controlled and uncontrolled limits as an untrained worker may access adjacent rooftop locations. Additional information regarding controlled/uncontrolled exposure limits is provided in Section 3.0. Appendix B presents a site safety plan that provides a plan view of the monopole with antenna locations.

3.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure 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 public/uncontrolled limits (see below), 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.

General public/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

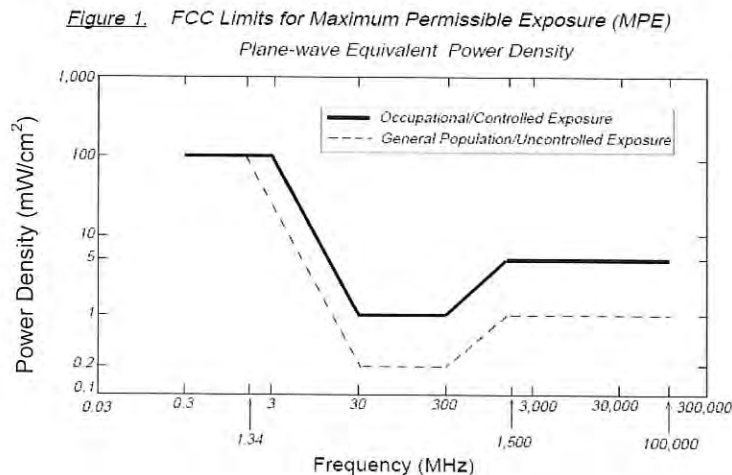
Table I and Figure I (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a particular facility and are "time-averaged" limits to reflect different durations resulting from controlled and uncontrolled exposures.

The FCC's MPEs are measured in terms of power (mW) over a unit surface area (cm²). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm²) and an uncontrolled MPE of 1 mW/cm² for equipment operating in the 1900 MHz frequency range. For the Verizon equipment operating at 700 MHz or 850 MHz, the FCC's occupational MPE is 2.83 mW/cm² and an uncontrolled MPE of 0.57 mW/cm². These limits are considered protective of these populations.

Table 1: Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time [E]², [H]², or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time [E]², [H]², or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)

* Plane-wave equivalent power density



Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm ²	1.00 mW/cm ²
Cellular Telephone	870 MHz	2.90 mW/cm ²	0.58 mW/cm ²
Specialized Mobile Radio	855 MHz	2.85 mW/cm ²	0.57 mW/cm ²
Most Restrictive Freq. Range	30-300 MHz	1.00 mW/cm ²	0.20 mW/cm ²

MPE limits are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

Personal Communication (PCS) facilities used by Verizon in this area operate within a frequency range of 746-2100 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

4.0 WORST-CASE PREDICTIVE MODELING

EBI has performed theoretical modeling using RoofView® software to estimate the worst-case power density at the site ground-level resulting from operation of the antennas. RoofView® is a widely-used predictive modeling program that has been developed by Richard Tell Associates to predict both near field and far field RF power density values for roof-top and tower telecommunications sites produced by vertical collinear antennas that are typically used in the cellular, PCS, paging and other communications services. The models utilize several operational specifications for different types of antennas to produce a plot of spatially-averaged power densities that can be expressed as a percentage of the applicable exposure limit.

The modeling is based on worst-case assumptions for the number of antennas and transmitter power. The modeling assumes a maximum 14-14-14 radio configuration for Sectors A, B and C, with a power level of 43 dBm (18 watts) per transmitter for 850 frequency and 48 dBm (60 watts) per transmitter for the 746, 1900, and 2100 frequencies, in order to provide a worst-case evaluation of predicted MPE levels. The assumptions used in the modeling are based upon information provided by Verizon, and information gathered from other sources. The parameters used for the modeling are summarized in the RoofView® export files presented in Appendix C.

There are no other wireless carriers with equipment installed at this site.

Based on worst-case predictive modeling, there are no modeled areas on any accessible ground-level walking/working surface related to the proposed Verizon antennas that exceed the FCC's occupational or general public exposure limits at this site. At the nearest walking/working surfaces to the Verizon antennas, the maximum power density generated by the Verizon antennas is approximately 4.10 percent of the FCC's general public limit (0.82 percent of the FCC's occupational limit).

The Site Safety Plan also presents areas where Verizon Wireless antennas contribute greater than 5% of the applicable MPE limit for a site. A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix B. It should be noted that RoofView is not suitable for modeling microwave dish antennas; however, these units are designed for point-to-point operations at the elevations of the installed equipment rather than ground level coverage.

5.0 MITIGATION/SITE CONTROL OPTIONS

EBI's modeling indicates that there are no areas in front of the Verizon antennas that exceed the FCC standards for occupational or general public exposure. All exposures above the FCC's safe limits require that individuals be elevated above the ground. In order to alert people accessing the site, a NOC Information sign is recommended for installation at the access gate to the compound.

Barriers are recommended for installation when possible to block access to the areas in front of the antennas that exceed the FCC general public and/or occupational limits. Barriers may consist of rope, chain, or fencing. Painted stripes should only be used as a last resort. There are no barriers recommended on this site.

These protocols and recommended control measures have been summarized and included with a graphic representation of the antennas and associated signage and control areas in a RF-EME Site Safety Plan, which is included as Appendix B. Individuals and workers accessing the roof should be provided with a copy of the attached Site Safety Plan, made aware of the posted signage, and signify their understanding of the Site Safety Plan.

Implementation of the signage recommended in the Site Safety Plan and in this report will bring this site into compliance with the FCC's rules and regulations.

6.0 SUMMARY AND CONCLUSIONS

EBI has prepared a Radiofrequency – Electromagnetic Energy (RF-EME) Compliance Report for telecommunications equipment installed by Verizon Site Number 270013 located at 40821 Cherry Avenue in Greenfield, California to determine worst-case predicted RF-EME exposure levels from wireless communications equipment installed at this site. This report summarizes the results of RF-EME modeling in relation to relevant Federal Communications Commission (FCC) RF-EME compliance standards for limiting human exposure to RF-EME fields.

As presented in the sections above, based on the FCC criteria, there are no modeled areas on any accessible ground-level walking/working surface related to the proposed antennas that exceed the FCC's occupational or general public exposure limits at this site. Workers should be informed about the presence and locations of antennas and their associated fields. Recommended control measures are outlined in Section 5.0 and within a Site Safety Plan (attached); this plan includes procedures to shut down and lockout/tagout this wireless equipment in accordance with Verizon's standard operating protocol.

7.0 LIMITATIONS

This report was prepared for the use of Verizon Wireless. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

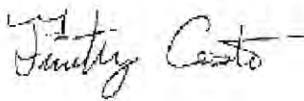
Appendix A

Certifications

Preparer Certification

I, Timothy Costa, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.



Timothy Costa

Appendix B

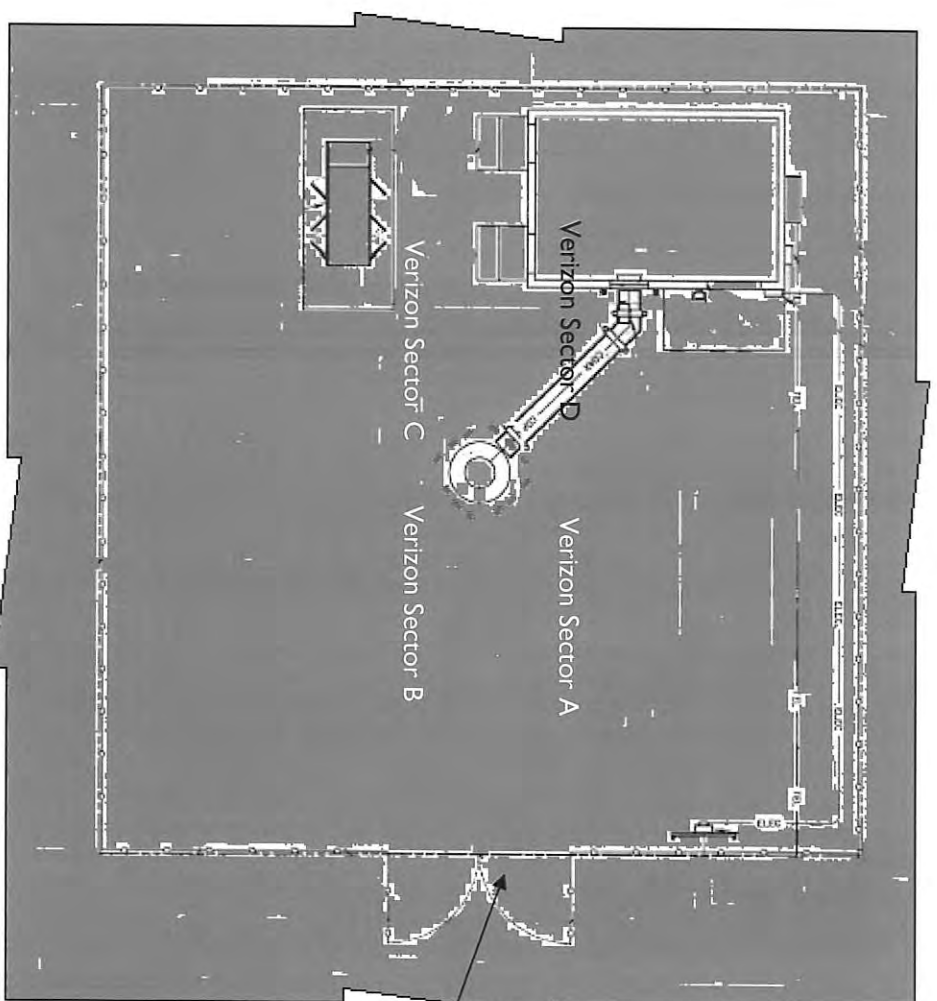
Radio Frequency Electromagnetic Energy Safety/ Signage Plans

% of FCC Public Exposure Limit

- Exposure Level >5
- Exposure Level ≤ 5

Legend

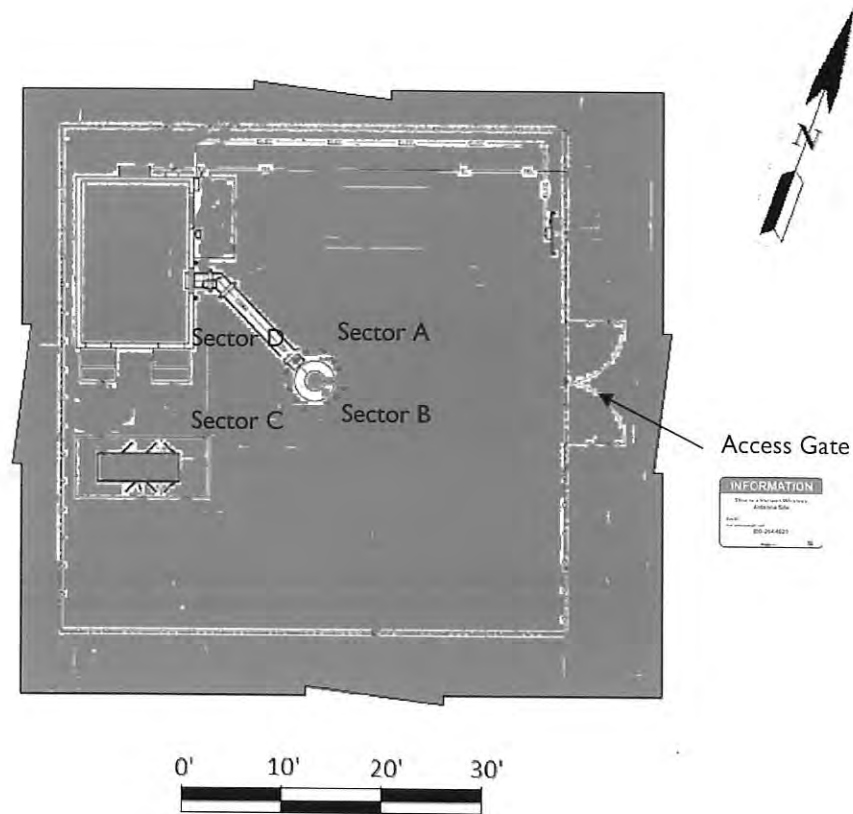
- Verizon Antennas
- Other Carrier Antennas



Roofview: Verizon Exposure Levels

Facility Operator: Verizon Wireless
Site Name: Downtown Greenfield
Verizon Site Number: 270013
Report Date: 04-07-14

Verizon Signage Plan



Sign Image	Description	Posting Instructions	Required Signage
 The image shows a rectangular sign with a header 'INFORMATION' and text: 'This is a Verizon Wireless Antenna Site', 'Site ID: 270013', and 'For information call: 800-254-4520'.	NOC Information Sign Informational sign with NOC Phone Number and Base Transceiver Station (BTS) Number	Securely post at every point of access to the site.	1 on the access gate to the compound

Signage Plan

Facility Operator: Verizon Wireless

Site Name: Downtown Greenfield

Verizon Site Number: 270013

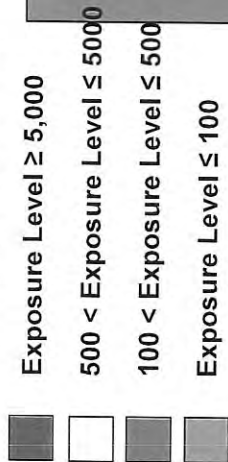
Report Date: 04-07-14



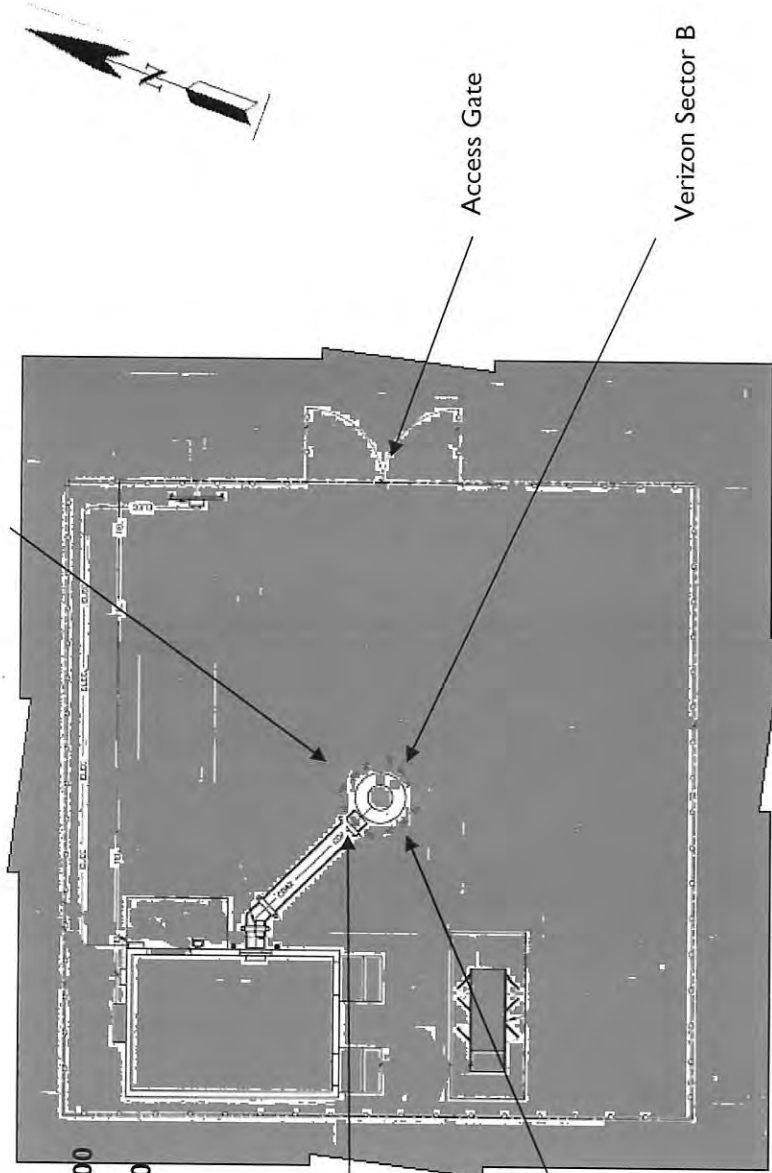
Appendix C

Roofview® Export File

% of FCC Public Exposure Limit



Verizon Sector A



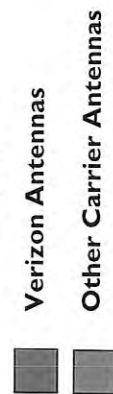
Verizon Sector D

Verizon Sector C

Verizon Sector B

Access Gate

Legend



Roofview: Composite Exposure Levels

Facility Operator: Verizon Wireless

Site Name: Downtown Greenfield

Verizon Site Number: 270013

Report Date: 04-07-14

EXHIBIT F



Verizon Wireless
2785 Mitchell Drive
Walnut Creek, CA
94598

Verizon Wireless
Dewayne Bonham – RF Engineer
2785 Mitchell Drive
Walnut Creek, CA 94598
November 18, 2014

Monterey County Planning Department
168 W. Alisal St.
2nd Floor
Salinas, CA 93901

This is in regards to our project (Downtown Greenfield) cell site project that is before your department for consideration. I have been asked to provide plots showing why we cannot get away with a lower tower height. Plots are not an effective tool for determining tower height in this situation. The tool assumes that the engineer is designing a site that is above the nearby ground clutter. Ground clutter being obstructions near the antennas that are too individualized to be shown in a topography model. The proposed location is surrounded by trees which would cause serious RF shadows. Since Radio Waves work much like light, trees, buildings, or other obstructions near the tower can severely inhibit the radio waves much like burying a flood light in your backyard within a shrub. Due to this, I already have serious concerns that this tower is too low given the height of the surrounding trees.

While this location is not ideal, we have tried to propose a project that will help meet our needs while being respectful of the community. From a technical perspective I would have liked a tower about 20' higher than the existing trees to give us a cleaner shot over the trees at town. While this would be a much better design we were not confident that this would get zoning approval so we proposed a tower at a minimum we felt would achieve our objective.

Our objective for this project is to improve the capacity in the city of Greenfield by offloading the existing site on a mountain top to the west and our existing site south of town. As smart phone technology has exploded over the past 5 years, we have seen the old hill top sites we used for voice coverage become overwhelmed with high use from residential areas. More and more people are dropping home phone and home internet to save money and relying on our service for their voice and data needs. This is requiring us to build cells that are much closer to the residential areas they serve. With data use growing by 70-100% a year and the existing sites already in overload, we need to get this cell completed as quickly as possible. This is a big part of the reason for our less than optimal design.



Verizon Wireless
2785 Mitchell Drive
Walnut Creek, CA
94598

I hope this answers some of your questions. If not, please feel free to give me a call and I will do my best to share with you the reasons we are proposing this project.

Sincerely,

Dewayne Bonham 11/17/2014

Dewayne Bonham
RF Engineer
Verizon Wireless

Bogdan, Grace x6414

From: Maria Kim [MKim@completewireless.net]
Sent: Thursday, December 18, 2014 4:04 PM
To: Bogdan, Grace x6414
Subject: PLN140428 - Downtown Greenfield

Dear Grace,

Per our last conversation, we will not be able to obtain a letter from CCI. Its current 53' monopole is too small to accommodate the coverage and capacity needs for the Greenfield area. This pole was permitted and built as a slender, short monopole without the facilitation of future colocations by other providers in mind. This is shown by the fact that the height of the monopole, the size of the lease area, and the location of the monopole to the adjacent roof are all problems.

Verizon's proposed monopine on Cherry Avenue will be built, from the start of the process, to accommodate future colocations all along the trunk. Additionally, it will already be stealthed and camouflaged as a pine tree.

I am still willing to move forward on this item on January 8th.

Sincerely,
Maria

Maria Kim, Project Manager
Complete Wireless Consulting

(916) 247-6087
(916) 313-3730 fax
MKim@completewireless.net
2009 V Street
Sacramento, CA 95818

Bogdan, Grace x6414

From: Maria Kim [MKim@completewireless.net]
Sent: Wednesday, December 10, 2014 10:04 AM
To: Bogdan, Grace x6414
Subject: RE: PLN140428 - Downtown Greenfield

Dear Grace,

I contacted Monterey County's Public Works Department regarding the height of the water tank on Walnut and 10th Street. According to Arturo Felix, that tank is 35' tall, which is too short to achieve Verizon's coverage objectives even though this location is within the search ring.

Sincerely,
Maria

***Maria Kim, Project Manager
Complete Wireless Consulting***

(916) 247-6087
(916) 313-3730 fax
MKim@completewireless.net
2009 V Street
Sacramento, CA 95818

From: Bogdan, Grace x6414 [mailto:BogdanG@co.monterey.ca.us]
Sent: Monday, December 8, 2014 9:54 AM
To: Maria Kim
Subject: RE: PLN140428 - Downtown Greenfield

Maria,

Thanks for the information, but due to the conflicting information that we've received from CCI, we are still requesting a written statement from Crown Castle that these indeed are the issues present at their site. Have you reached out to the City of Greenfield about the 'water tank' site? I think that location is actually Corr. Nuts Inc, and it sounds like this is a feasible location. Do you know how tall the tanks are?

Thanks,

Grace

From: Maria Kim [mailto:MKim@completewireless.net]
Sent: Thursday, December 04, 2014 4:32 PM
To: Bogdan, Grace x6414
Subject: RE: PLN140428 - Downtown Greenfield

Dear Grace,

We met as a team and ended up calling in Dewayne again since he has been the engineer for this project since its inception. According to Dewayne, we can collocate antennas on grounded water tanks, I had never seen it done before on an existing tower. Anyway, here's the information he provided to me. Please let me know what else you need.

1. CCI Colocation on Cherry Ave. and El Camino Real.

While the location of this tower is about equal to the existing site, it is not optimal but could work. There are a number of issues: the existing tower is not sufficient to hold tower mounted radios and more antennas, it is too short and multiple carriers on the site would create EME hot zones on the roof that is only a few feet away. This could require EME barriers and signage on the sloped roof that would be very visible. This would be a ugly site once upgraded to modern standards.

2. Monopine available for co-location at Pine Ave. and El Camino Real.

This site is too far north of the area we are trying to provide capacity to. The capacity a site can carry is a function of how close it is to the user base and how well the traffic is dispersed around the site. In this case the traffic is too far away and almost all the traffic would be in a single antenna sector of the site. We would need a new site closer to town within 1 year.

3. Water tanks on Walnut Ave and 10th St.

This is actually an acceptable location within the search ring; however, water tank is shorter than desired, will require antennas mounted to the very top of the tank, and there is shadowing from the grain silos to the southwest.

Sincerely,
Maria

Maria Kim, Project Manager
Complete Wireless Consulting

(916) 247-6087
(916) 313-3730 fax
MKim@completewireless.net
2009 V Street
Sacramento, CA 95818

From: Bogdan, Grace x6414 [<mailto:BogdanG@co.monterey.ca.us>]
Sent: Monday, December 1, 2014 5:47 PM
To: Maria Kim
Subject: RE: PLN140428 - Downtown Greenfield

Maria-

- 1) I reached out to Joanne Gundermann at Crown Castle International. She said that CWC initially reached out to her about a year ago but that there were no further talks about using this site. She also stated that this site would be suitable for co-location with the ability to extend the height at least another 10 feet. Due to this conflicting information, we will need a signed letter from Crown Castle International stating that Verizon and CCI were unable to come to an agreement and why, pursuant to Monterey County Code Section 21.64.310.C.7. You can reach Ms. Gundermann at (925)737-1007
- 2) Yes, the monopine is at Pine and El Camino Real. It is 83' in height. This site is not in the search ring you submitted to us, however neither is the proposed location at 40821 Cherry Avenue
- 3) Could you explain how the shape is incorrect for building mounted antenna? The photo simulation you sent was for a new tower, but the tanks at 10th and Walnut Ave would be a building mount opportunity not requiring an additional tower.

As I said on the phone, it would be best to continue this item from the ZA hearing to provide time for you to obtain this additional material. As it stands right now, it seems there is an existing feasible co-location opportunity at the CCI site, which means the proposed location is not the most suitable site for this project.

Thanks,

Grace

From: Maria Kim [<mailto:MKim@completewireless.net>]

Sent: Monday, December 01, 2014 1:47 PM

To: Bogdan, Grace x6414

Subject: RE: PLN140428 - Downtown Greenfield

Dear Grace,

I have no additional information on the alternative sites other than the information I originally prepared for you.

1. CCI Colocation.

CCI would not lease a sufficient enough space/area to accommodate Verizon's outdoor equipment cabinets, fit its outdoor diesel generator, or fulfill its service needs. Additionally, this structure is a full 15' shorter than the monopole (22' shorter than the monopine structure) needed for coverage objectives.

2. Monopine available for co-location at Cherry Ave and El Camino Real.

We looked at the colocation opportunity on El Camino Real and Pine, which is not in the search ring anymore. Could you please provide more information about this site, including the height of the monopine? I'm fairly certain we are talking of the same structure here.

3. Water tanks on Walnut Ave and 10th St.

These tanks were eliminated early from the process based on their shape. We use lattice water towers, like in the alternate design photosimulations I previously sent to you.

I've also attached the affidavit for the public hearing notices with photos.

Please let me know what other information you need.

Sincerely,

Maria

Maria Kim, Project Manager
Complete Wireless Consulting

(916) 247-6087

(916) 313-3730 fax

MKim@completewireless.net

2009 V Street

Sacramento, CA 95818

From: Bogdan, Grace x6414 [<mailto:BogdanG@co.monterey.ca.us>]

Sent: Monday, December 1, 2014 10:30 AM

To: Maria Kim

Subject: PLN140428

Hi Maria,

In order to complete my staff report I need you to fill in some information on the alternative analysis you prepared. Crown Castle is a wireless infrastructure company, it seems strange that they would not account for the needs of multiple wireless carriers on this site. What exactly is the limitation? On the basis of our ordinance requirements, and state and federal law, this is a site that would meet your coverage needs and is designed for co-location so it should be the preferred site. I need to explain that in spite of those facts the site will not work. Also, there is an existing monopine available for co-location at Cherry Ave and El Camino Real, was this looked at or not? I've previously asked for discussion as to why this site was not suitable. There are also existing water tanks at Walnut Ave and 10th St that would provide a building mounted opportunity closer to downtown, were these looked at? I've contacted the City of Greenfield and these sites did not seem to be of a concern to them. Bottom line, my staff report has to make findings that this is the best location consistent with state and federal law. The information we've received to date does not justify this finding but instead leaves questions about the other potential sites. If you have this information available and can provide it to me today, I can complete my staff report. Otherwise we should continue this item to allow time to gather this information. As it stands now I would only recommend the Zoning Administrator require you provide this additional information. If it is Verizon's desire to continue with the December 11th date, the staff report will conclude that we can't make the findings with the current information.

Please feel free to call me to talk this over, I will be in and out of meetings today so email may be best.

Thanks,

Grace Bogdan, Assistant Planner
RMA, Planning Department
Monterey County
(831) 796-6414
bogdang@co.monterey.ca.us