

Initial Study and Mitigated Negative Declaration Telecommunication Facility at 923 S. Fitch Mountain Road City of Healdsburg, Sonoma County, California

Prepared for:



City of Healdsburg
Building & Planning Department
401 Grove Street
Healdsburg, CA 95448
707.473.4463

Contact: Kraig Tambornini, Senior Planner

Prepared by:

FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597
925.357.2562

Contact: Jason Brandman, Project Director
Elizabeth Johnson, Project Manager

Date: July 13, 2017

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Section 1: Introduction	1
1.1 - Purpose.....	1
1.2 - Project Location.....	1
1.3 - Site Description	1
1.4 - Project Description	2
1.5 - Required Discretionary Approvals.....	11
1.6 - Intended Uses of this Document.....	11
Section 2: Environmental Checklist and Environmental Evaluation	13
1. Aesthetics	14
2. Agriculture and Forestry Resources	17
3. Air Quality.....	20
4. Biological Resources	23
5. Cultural Resources	26
6. Geology and Soils	28
7. Greenhouse Gas Emissions	32
8. Hazards and Hazardous Materials	34
9. Hydrology and Water Quality.....	37
10. Land Use and Planning	42
11. Mineral Resources	44
12. Noise.....	45
13. Population and Housing	49
14. Public Services	51
15. Recreation	54
16. Transportation/Traffic.....	55
17. Utilities and Service Systems	58
18. Mandatory Findings of Significance	61
Section 3: List of Preparers.....	63
Section 4: Source References	65
Section 5: Applicant’s Mitigation Agreement statement.....	67

Appendix A: Visual Simulations

Appendix B: Radio Frequency Study

List of Exhibits

Exhibit 1: Regional Location Map	3
Exhibit 2: Local Vicinity Map, Aerial Base.....	5
Exhibit 3: Site Plan	7
Exhibit 4: Project Elevation.....	9

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to identify any potential environmental impacts from implementation of the Telecommunication Facility at 923 S. Fitch Mountain Road in Healdsburg, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of Healdsburg is the Lead Agency for the preparation of this IS/MND and any additional environmental documentation required for the project. The City has discretionary authority over the project. The intended use of this document is to determine the level of environmental analysis required to comply with CEQA and to provide the basis for input from public agencies, organizations, and interested members of the public.

The remainder of this section provides a brief description of the project location and the characteristics of the project. Section 2 includes an environmental checklist giving an overview of the potential impacts that may result from project implementation. Section 2 elaborates on the information contained in the environmental checklist, along with justification for the responses provided in the environmental checklist.

1.2 - Project Location

The project site is generally located in the southeastern portion of the City of Healdsburg, east of the downtown area and west of Fitch Mountain, in the County of Sonoma; refer to Exhibit 1. Specifically, the site is a 3.4-acre city-owned property that abuts the northwest corner of Tayman Park Golf Course parking lot, at the end of Marsh Drive and north of Fitch Mountain Road, at 923 S. Fitch Mountain Road (APN: 002-361-003); refer to Exhibit 2.

1.3 - Site Description

The project site is visible from South Fitch Mountain Road to the south, which is identified as a scenic roadway, beginning near the entry to the site at Marsh Drive and then heading eastward toward Fitch Mountain (refer to Healdsburg 2030 General Plan, Figure 9. The subject site is also on a major scenic ridgeline that runs from the east (Fitch Mountain) to the west, through the golf course property and subject site; refer to Healdsburg 2030 General Plan Figure 8.

The site is heavily wooded with mature oak trees and contains former and new water storage tanks. Oak Mount Cemetery and residential neighborhoods are visible to the north, south and east. Tayman Park Golf Course runs along the east side boundary of the project site. The development area has been previously graded and developed with existing (abandoned) and new water storage tank facilities, located on an upsloping trending portion of the ridgeline.

The project site elevation is approximately 230 feet. The crest of the ridge continues rising to the west to the top of a knoll at an elevation approximately 10 to 20 feet higher than the project. The

remaining hillside slopes gently away from the project site to the north, east, and south. The City Zoning District designation for the subject property, adjacent cemetery and golf course is Public (P).

1.4 - Project Description

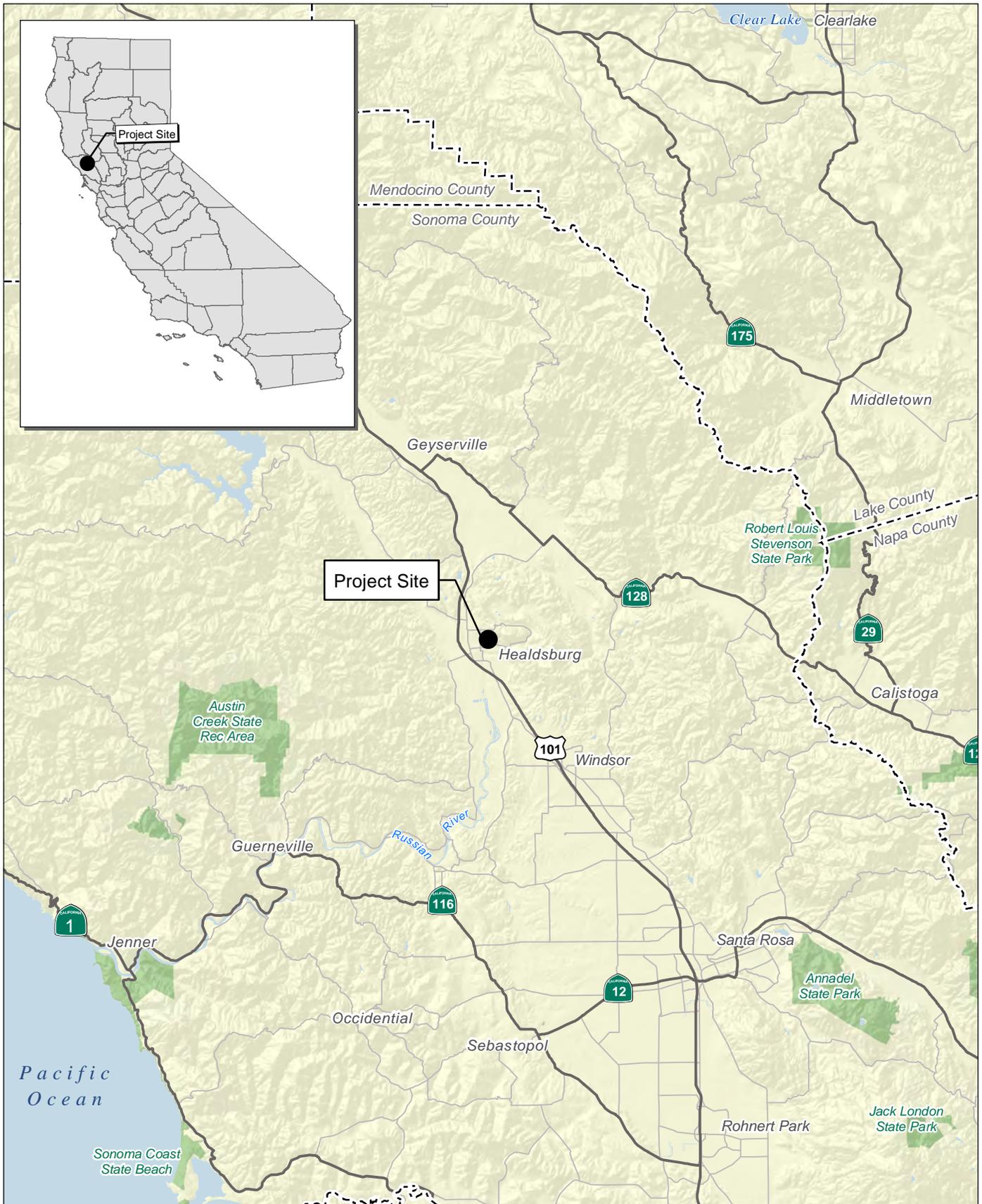
Verizon proposes to install a telecommunication tower with nine “Andrew Model SBNHH-1D65B” directional panel antennas and one microwave dish with associated tower mounted equipment on a new 69-foot pole, configured to resemble a faux tree (overall height of 76 feet above grade) (Exhibit 3 and Exhibit 4). Its placement would be within a 30-foot by 50-foot lease area, secured by a 6 foot-tall chain link fence with barbed top wire strands and green privacy slats, and sited on a hilltop area located at 923 S. Fitch Mountain Road in Healdsburg; adjacent to Tayman Park Golf Course. A small facility informational sign would be installed at the access gate. The lease area would include a 30-kilowatt standby diesel generator with a 132-gallon fuel tank, and equipment cabinets, mounted on a concrete pad, with power and telephone communication connections brought to the facility from nearby lines running along the east boundary line of the property. A 25-foot access and utility easement is proposed along the existing paved Marsh Drive access road that serves the site. The facility would be located less than 100 feet from the golf course property boundary line, including the edge of paved parking lot and cart pathway. The nearby golf tees and fairways are located more than 100 feet from the facility.

The antennas would measure 8 feet in height and would be concealed within a stealth “sock” intended to blend with the faux tree branches. The antennas would employ no downtilt, mounted at an effective height of about 60 feet above ground, and would be oriented in groups of three, to provide services in all directions. The faux tree “branches” would extend at least 6 feet from the pole, just past the antenna support arms, and 10 feet in length for the lower branches. Coaxial cabling is not identified, but it is assumed that it will be run through the pole. Equipment would be painted flat green.

The maximum effective radiated power in any direction would be 10,520 watts, representing simultaneous operation at 4,460 watts for advanced wireless services (AWS), 4,160 watts for personal communication services (PCS), and 1,900 watts for 100 MHz service; no operation on cellular frequencies is presently proposed from this site. There are no other reported wireless telecommunications base stations at the site or in the immediate vicinity.

An analysis was prepared by Hammet & Edison, Inc. Consulting Engineers to verify that the site would comply with Federal Communication Commission (FCC) guidelines limiting public exposure to radio-frequency (RF) energy; see Verizon Wireless, “Proposed Base Station Site No 296599 Healdsburg HS 800 Powell Avenue Healdsburg, California.” The report calculates that the facility operation, worst-case assumption scenario would result in energy levels of 2.8 percent of the applicable exposure limit, and 0.37 percent of the public exposure limit of the nearest residence, which is at least 400 feet from the site. This result complies with prevailing standards for limiting public exposure and does not require implementation of any special site mitigation.

The facility would substantially improve service coverage to the immediate Healdsburg neighborhood areas surrounding the site, which are in very hilly terrain. Three other sites are located within 1 mile of the project site, and the nearest Verizon facility is 1.21 miles away.

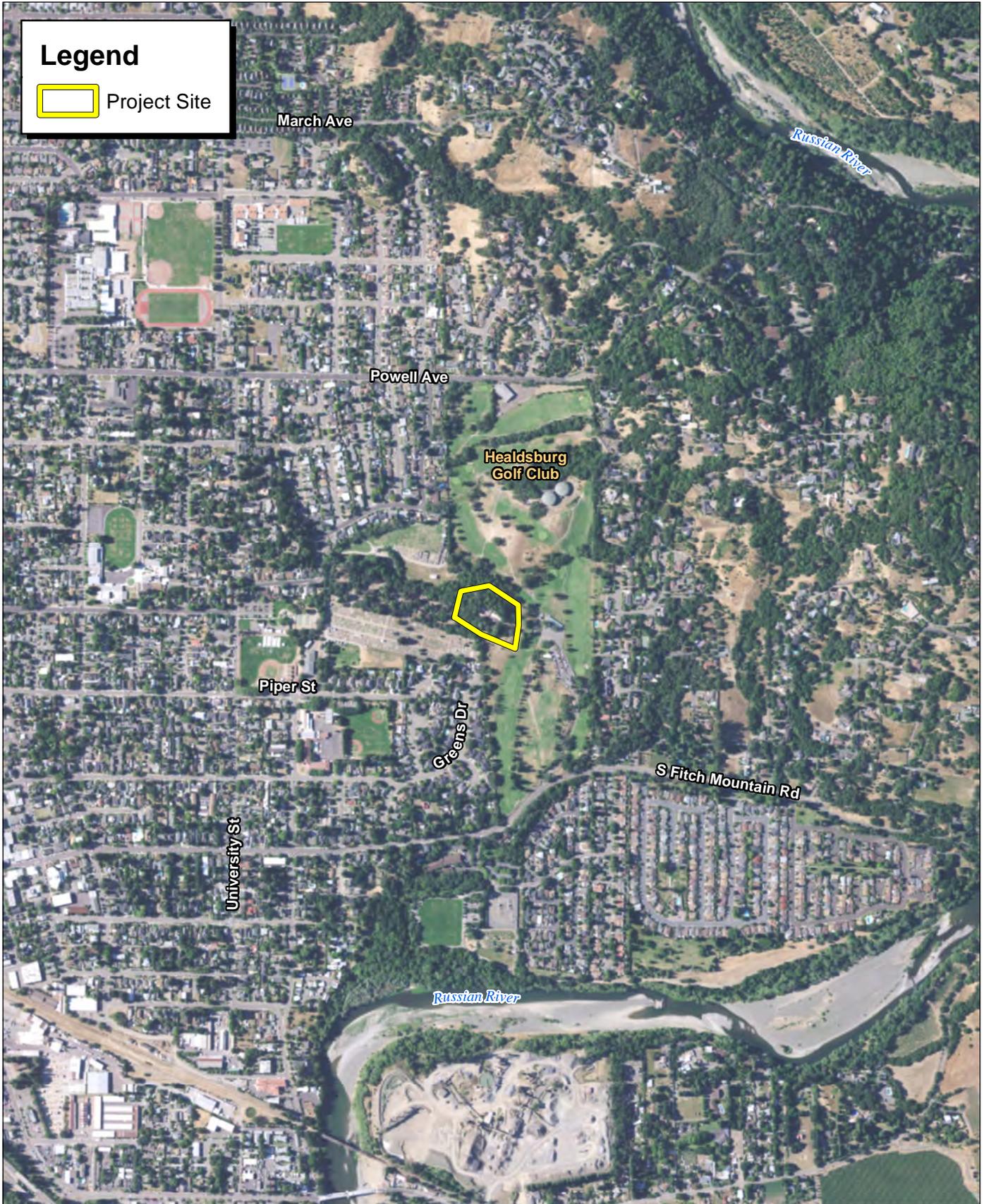


Source: Census 2000 Data, The CaSIL, FCS GIS 2016.



Exhibit 1 Regional Location Map

THIS PAGE INTENTIONALLY LEFT BLANK



Source: ESRI Imagery, 2015

Exhibit 2

Local Vicinity Map

Aerial Base

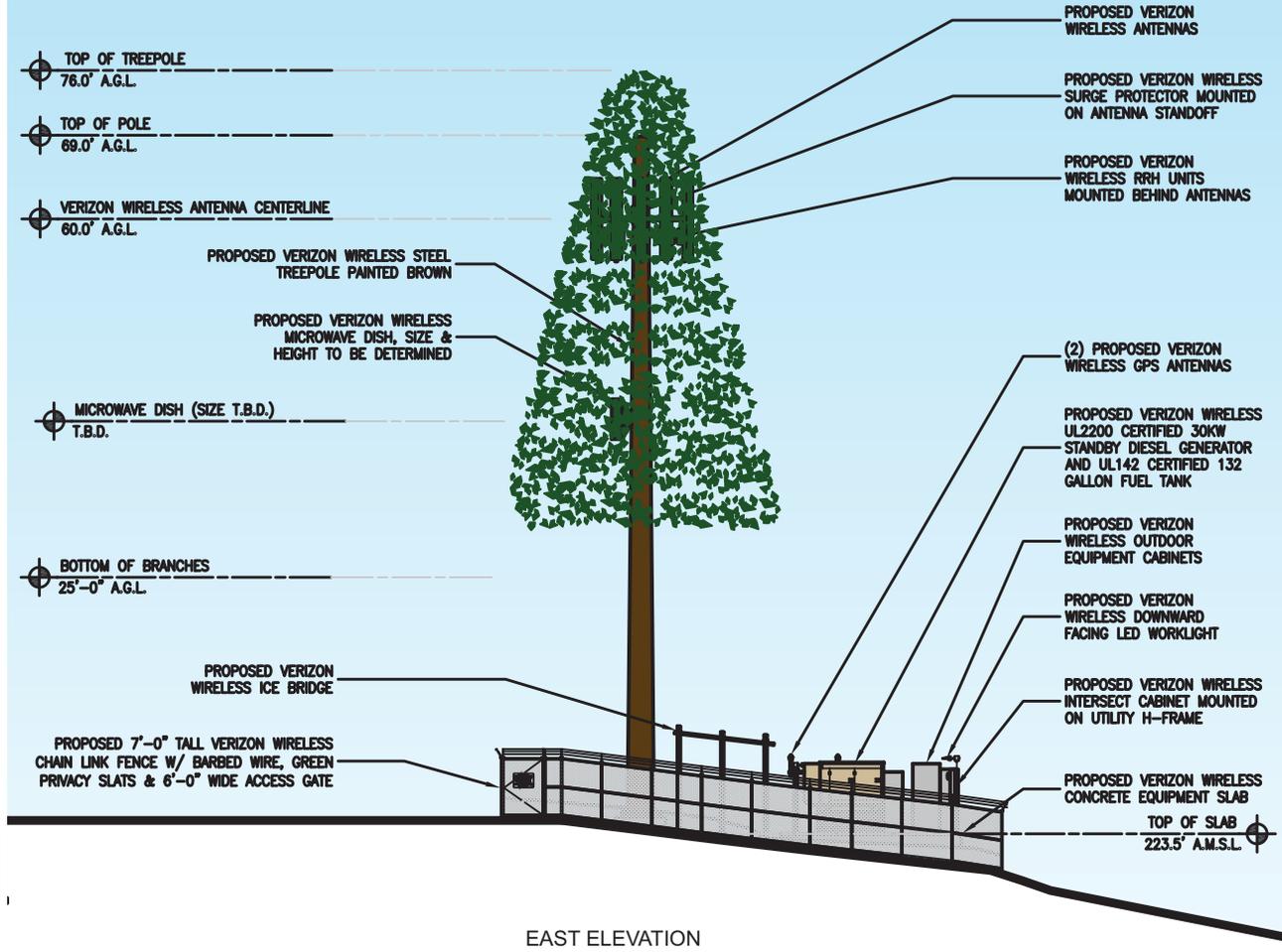


THIS PAGE INTENTIONALLY LEFT BLANK

THIS PAGE INTENTIONALLY LEFT BLANK

NOTE: BRANCHES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE

NOTE: VERIZON WIRELESS TO INSTALL "LEAF SOCKS" ON ALL PROPOSED PANEL ANTENNAS, RRH UNITS & MICROWAVE DISH. ALL ANTENNAS & EQUIPMENT TO BE PAINTED FLAT GREEN



EAST ELEVATION

Source: MST Architects, 2017

FIRSTCARBON
SOLUTIONS™

Exhibit 4
Project Elevation

THIS PAGE INTENTIONALLY LEFT BLANK

Verizon installs standby generator and batteries at all of its cell sites to provide for service in an emergency or disaster, to run the site for roughly 8 hours before needing recharge by the backup generator. The site is unmanned and would be serviced by a technician once per month. The generator would operate approximately 15 minutes each week for maintenance reasons. The facility must operate within the FCC rules governing construction and operating requirements, including maximum exposure of workers and the general public to radio-frequency radiation emissions.

The project may include removal of at least two mature oak trees. However, efforts would be made to locate the facility in an existing graded pad area that would allow all existing trees to be preserved. Tree preservation recommendations have been provided by Foothill Associates in its report for the project dated August 9, 2016. The project would not involve removal of any heritage oak trees with a diameter of 30 inches or more measured at 2 feet above ground level.

1.5 - Required Discretionary Approvals

The proposed project would require the following discretionary approvals from the City of Healdsburg, pursuant to Healdsburg Land Use Code Section 20.20.080:

- Conditional Use Permit, Planning Commission, for a Major Telecommunication Facility consisting of a new tower structure more than 35 feet to 100 feet in height (City Application No. CUP2016-07).
- Design Review, Planning Commission, for Major Site Development (City Application No. DR2016-06).
- Variance, Planning Commission, for Major Setback Reduction from Outdoor Recreation Area (City Application No. V2017-01).

1.6 - Intended Uses of this Document

This Draft has been prepared to disclose the potential environmental impacts resulting from development of the project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be available for a period of 20 days, during which comments concerning the analysis contained in the Draft IS/MND should be sent to:

Kraig Tambornini, Senior Planner
City of Healdsburg
Building & Planning Department
401 Grove Street
Healdsburg, CA 95448
Phone: 707.473.4463
Email: ktambonini@ci.healdsburg.ca.us

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected			
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.			
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input type="checkbox"/> Air Quality	
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology/Soils	
<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards/Hazardous Materials	<input type="checkbox"/> Hydrology/Water Quality	
<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise	
<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation	
<input type="checkbox"/> Transportation/Traffic	<input type="checkbox"/> Utilities/Services Systems	<input type="checkbox"/> Mandatory Findings of Significance	

Environmental Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: 7/5/17 Signed: 

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Aesthetics <i>Would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area. The project site is bounded by Healdsburg Golf Club at Tayman Park and Oak Mound Cemetery, and is surrounded by trees and wild vegetation. According to the Healdsburg General Plan, the location of the proposed project is located on and bounded by Public/Quasi Public land. Figure IV.B-3 of the General Plan EIR shows that the project site is approximately 0.27 mile north of South Fitch Mountain Road, which is designated a scenic roadway in this area. The project photo-simulations show that the site would be partially in view of this scenic roadway, appearing as part of the backdrop of the wooded site (see Appendix A). The proposed project would be designed to mimic the outward appearance of a tree and would be integrated into the existing landscape, consistent with General Plan EIR Policy D-2.1, “Building forms and masses shall be scaled to the natural topography and shall complement the natural ridgelines.” As shown on Page 1 of Appendix A, the project would add a faux tree telecommunication tower into an area that is predominantly covered with trees of various heights. Because the faux tree would blend the new telecommunication tower into the surrounding trees, views along S. Fitch Mountain Road would not be affected. Therefore, as proposed, project implementation would have less than a significant impact to the existing scenic vista/viewshed as observed from public vantage points, including South Fitch Mountain Road.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

Less than significant impact. According to the California Scenic Highway Mapping System for Sonoma County, the proposed project is not located within the viewshed of a scenic highway. The nearest officially designated scenic highway is State Route 116 (located approximately 19 miles south of the project site). Distance to the project site precludes impacts to scenic resources within a designated state scenic highway. View impacts from the local South Fitch Mountain Scenic Road would be less than significant as discussed in Impact 1a above. Thus, impacts would be less than significant.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than significant impact. The project site is located in a predominately urbanized setting, comprising Public/Quasi Public land, and it is bounded by Healdsburg Golf Club at Tayman Park and Oak Mound Cemetery. Figure 8 of the City of Healdsburg 2030 General Plan identifies the site as located on a major scenic ridgeline that runs east to west through the golf course and City-owned parcels overlooking Oak Mount Cemetery. Furthermore, Policy NR-C-5 states that “[m]ajor scenic ridgelines designated on General Plan Figure 8 and highly visible hillsides shall be protected from visually obtrusive development. Implementing Measure NR-10 requires a visual analysis for new structures within 200 feet of a major scenic ridge; and stipulates that only development shown to be unobtrusive based on this analysis may be approved; and that projections above the ridgeline shall not be allowed unless it can be demonstrated that existing natural features will screen the projection.

The project site currently contains several trees, and has no present structures. As illustrated on Exhibits 3 and 4 and in photo-simulations prepared for the project (Appendix A), the proposed telecommunication tower would mimic the outward appearance of a tree and integrated into the existing landscape, thereby preserving the visual character of the site and its surroundings (Appendix A). The faux tree would blend into the existing vegetation as viewed from drivers or pedestrians in passing and looking toward the site from South Fitch Mountain Road. Therefore, implementation of the proposed project would have a less than significant impact on the existing visual character and quality of the site and its surroundings.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact. The proposed project’s design does not include any architectural elements or materials that would produce substantial glare on-site, such as large or reflective windows, and would not introduce new sources of lighting. The proposed project site is not surrounded by buildings, which would produce sources of light or glare, and would retain existing light conditions. Therefore, the proposed project would have no impact related to light or glare, which would adversely affect day or nighttime views in the area.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>2. Agriculture and Forestry Resources <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</i> Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project;

and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

No impact. The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP)¹ identifies the project site and the immediate project area as Urban and Built-up Land. The nearest property designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) is a parcel designated as Prime Farmland located approximately 0.89 mile southeast of the project site along Bailhache Avenue and south of the Russian River. Because of the distance between the project site and this property, the proposed project would not impact existing Prime Farmland, Unique Farmland, or Farmland in the project area, and would not result in conversion of such property to non-agricultural uses. Therefore, no impacts associated with conversion of Important Farmland would occur.

- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

No impact. The California Department of Conservation's Williamson Act Map² identifies the project site and the project area as Non-Williamson Act Land, Urban and Built-up Land. The closest property under Williamson Act contract is located several miles southeast of the project site along Bailhache Avenue and the Russian River. Additionally, the City of Healdsburg's Zoning Map identifies the project site as Public/Quasi Public (PQP) land, and no parcels zoned as Agricultural (A1) are identified in the project area. Therefore, no impacts associated with agricultural zoning or Williamson Act contracts would occur.

- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

No impact. The California Department of Forestry and Fire Protection (Cal Fire) Land Cover Map does not identify the project site or the project area as either forest land or timberland. The nearest forested areas are located approximately 0.5 mile east of the project site. Therefore, no impacts associated with forest land or timberland zoning would occur.

- d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

No impact. Neither the project site nor the project area contains any land identified by Cal Fire as forest land. The project site plans do not propose the removal of nearby trees, as the project would

¹ The California Department of Conservation Farmland Mapping and Monitoring Program. Website: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/son12.pdf>. Accessed July 28, 2016.

² The California Department of Conservation's Williamson Act Map ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Sonoma_13_14_WA.pdf.

mimic the outward appearance of a tree and would be integrated into the existing landscape. Therefore, no impacts associated with the loss of forest land or conversion of forest land to non-forest use would occur.

- e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

No impact. The project site is identified as Urban and Built-up Land by the California Department of Conservation FMMP. The closest property designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance³ (Farmland) is a parcel designated as Prime Farmland located approximately 0.89 mile southeast of the project site. Based on this distance and the nature of the proposed project, the project would not result in the conversion of this Prime Farmland property to non-agricultural use. Therefore, no impacts associated with the conversion of farmland or forest land would occur.

Mitigation Measures

No mitigation measures are required.

³ California Department of Forestry and Fire Protection's Fire and Resource Assessment Program Website: <http://frap.fire.ca.gov/>. Accessed July 28, 2016.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Air Quality <i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.</i> <i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Where available, the significance criteria established or recommended by the Northern Sonoma County Air Pollution Control District (NSCAPCD) was used to make the following determinations. The NSCAPCD has not adopted standards of significance for operational activities and instead suggests the use of the Bay Area Air Quality Management District (BAAQMD) thresholds and mitigation measures.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No impact. The project is located in the North Coast Air Basin (Air Basin), where air quality is regulated by the NSCAPCD. The Air Basin is in attainment for all federal ambient air quality standards. The NSCAPCD is not required to prepare or implement an air quality plan, thus there is no applicable air quality plan. Therefore, no impacts would occur.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant impact. This impact relates to localized and regional criteria pollutant impacts. Potential localized or regional impacts would be exceedances of state or federal standards for particulate matter (PM₁₀), or carbon monoxide (CO). PM₁₀ is of concern during construction because of the potential to emit fugitive dust during earth-disturbing activities (construction fugitive dust). However, construction activities for installation of the single pole would be negligible. Any fugitive dust would be minimal, and would remain localized near the project site. Additionally, the project would be subject to local Air Quality Management District rules and regulations, thereby reducing any potential impacts related to fugitive dust emissions.

CO emissions are typically of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion. However, the project is not anticipated to increase on-road vehicle congestion, as the project would not generate any vehicle trips beyond minimal construction trips and occasional trips for repairs or maintenance once operational. Thus, no impacts would occur.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

Less than significant impact. The Air Basin is in attainment for federal standards for criteria pollutants. However, the Air Basin is in nonattainment for state standards for ozone, PM₁₀, and PM_{2.5} standards. Non-attainment pollutants of concern for this impact are ozone, PM₁₀ and PM_{2.5}. As discussed previously, the NSCAPCD does not have established thresholds of significance. Emissions from construction-related activities are generally short-term in duration. The project would generate less than significant emissions from construction equipment exhaust, worker travel, and fugitive dust. The project consists of a telecommunications facility that would generate negligible maintenance vehicle trips. Thus, the project is not anticipated to generate any operational pollutants, such as reactive organic gases (ROG), oxides of nitrogen (NO_x), PM₁₀, and PM_{2.5}. Impacts related to cumulative emissions would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. A sensitive receptor is defined as the following: “Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas.” There areas surrounding the project site location are designated as Public/Quasi Public land. The nearest residential building to the project site is located 0.07 mile south of the project site.

The proposed project would generate negligible emissions from construction equipment and therefore would not have any potential impacts to nearby receptors. Residents located adjacent to

the project site and within the vicinity would not be exposed to operational emissions, which would consist only of occasional vehicle trips for maintenance and repairs.

The project does not include significant sources of toxic air contaminant (TAC) emissions and would not exceed any California Air Resources Board recommendations for siting sensitive receptors near sources of TAC emissions. Therefore, the project would result in a less than significant impact on sensitive receptors.

e) Create objectionable odors affecting a substantial number of people?

No impact. As stated in the BAAQMD 2010 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard, and the ability to detect odors varies considerably among the populations and overall is subjective.

The BAAQMD does not have a recommended odor threshold for construction activities. However, BAAQMD recommends screening criteria that are based on distance between types of sources known to generate odor and the receptor. For projects within the screening distances, the BAAQMD has the following threshold for project operations:

An odor source with five (5) or more confirmed complaints per year averaged over three years is considered to have a significant impact on receptors within the screening distance shown in Table 3-3 [of the BAAQMD's guidance].

Diesel exhaust and vapors from paint and other coatings would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and would therefore not create objectionable odors affecting a substantial number of people. As such, construction odor impacts would be less than significant.

Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The project does not contain land uses typically associated with emitting objectionable odors. Therefore, the project would not place sensitive receptors near a location of substantial objectionable odor, and no operational odor impacts would occur.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Biological Resources <i>Would the project:</i>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Less than significant impact with mitigation incorporated. The project site contains limited ornamental landscaping and a limited number of trees within the general vicinity. Although no active migratory bird nests were observed, it is possible that nesting bird species could utilize the site due to the presence of various tree and shrub species. Nesting birds are protected under the regulations of the Migratory Bird Treaty Act (MBTA) and CDFW Code. Migratory birds nest seasonally from approximately February through August of each year. Therefore, if ground disturbance would occur during this timeframe, a pre-construction survey for nesting birds would be required in advance of site disturbance to confirm whether any birds are present. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce impacts related to candidate, sensitive, or special status species to less than significant.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

No impact. There are no riparian habitats or other sensitive natural communities located within the project area identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). Therefore, there would be no impacts to any of these habitat types.

- c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No impact. According to the USFWS, wetlands are transitional lands between terrestrial and aquatic systems where the water table is at or near the surface or the land is covered by shallow water. No drainage features are located on the project site, and a review of the U.S. Geological Survey's Healdsburg Quadrangle 7.5 minute topographical map confirms that no "blue line" features occur on-site. Thus, no jurisdictional waters of the State or U.S. are expected to traverse the project site. Therefore, no impacts associated with federal protected wetlands would occur.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?**

No impact. The project site is located in a predominantly urbanized setting and is generally bound by roadways and existing development. No habitat that may potentially support significant wildlife

species occurs directly adjacent to the project site, and thus, the site is not currently designated as a wildlife corridor. Therefore, no impacts associated with wildlife corridors would occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. Several trees are currently located on the project site. However, the proposed project would not require the removal of these trees. Therefore, impacts associated with tree preservation ordinances and other local ordinances would be less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No impact. The City of Healdsburg is not within the jurisdiction of an adopted Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, project implementation would not conflict with the provisions of an approved local, regional, or state habitat conservation plan.

Mitigation Measures

MM BIO-1 To avoid any direct and/or indirect impacts to resident and/or migratory birds, project-related construction activities should occur outside of the avian nesting season (February–August). If construction activities must occur within the nesting season, a qualified biologist shall perform a pre-construction survey to determine the presence or absence of nesting birds and nesting raptors on or within 500 feet of the construction area. The pre-construction survey shall be conducted no more than 10 calendar days prior to the commencement of construction. If no active nests are detected or project activities occur outside of the avian nesting season, no further action is necessary and construction activities may proceed without biological monitoring requirements.

MM BIO-2 If an active nest is located during pre-construction surveys, U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), as appropriate shall be notified regarding the status of the nest. Construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or the agencies deem disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and a 50-foot radius around an active migratory bird nest) or alteration of the construction schedule. A biological monitor shall be present during construction activities to maintain the exclusion zones and minimize construction impacts and ensure that no nest is removed or disturbed until all young have fledged.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
5. Cultural Resources <i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

Less than significant impact. The project site is located in a predominantly developed setting and currently contains sparse vegetation and trees. There are no known historical resources on-site. Review of the project site shows that the modern ground surface has been previously disturbed because of prior development activity, such as the nearby golf course. Historical cultural resources exposed on the modern ground surface are unlikely to survive intact under these conditions. It is possible, although unlikely, that buried archaeological resources could be uncovered during grading, and any subsurface construction activity. Compliance with state and federal guidelines regarding inadvertent finds would reduce any potential impacts to historical resources. Thus, potential impacts to historical resources would be less than significant.

- b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

Less than significant impact. Review of the project site shows that the modern ground surface has been previously disturbed by prior development activity. Archaeological cultural resources exposed on the modern ground surface are unlikely to survive intact under these conditions. Since the proposed project would include installation of nine directional panel antennas on a new 76-foot faux tree communication tower, construction of the project would require moderate earthmoving activity to lay down a foundation for the site. It is possible, although unlikely, that buried archaeological

resources could be uncovered during grading, excavation, and other subsurface construction activity. Compliance with state and federal guidelines regarding inadvertent finds would reduce any potential impacts to archaeological resources. Therefore, impacts relating to the substantial adverse change in the significance of an archaeological resource would be less than significant.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No impact. The project area is not located in an area that is considered likely to have paleontological resources present and the site does not contain any unique geologic features such as rock outcroppings. According to the General Plan, fossils of plants, animals, or other organisms of paleontological significance have not been discovered at the project site itself, as paleontological resources found in the City are Rocks of the Franciscan Assemblage, which is located in the northern portion of the City. The type of depositional environment at the project area typically does not present favorable conditions for the discovery of paleontological resources. Therefore, the proposed project would have no impacts to paleontological resources or unique geologic features.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact. It is unlikely that human remains would be encountered during construction-related grading. Records indicate that no human remains have ever been found on or near the project site, and the chance that human remains could be encountered during grading is extremely low, due to previous disturbance. As noted in the description above and during field observations, the site has been previously graded and developed with water lines and water storage tank structures. Given the substantial amount of previous site disturbance, it is unlikely that further site work and excavation would result in an inadvertent discovery. Furthermore, compliance with state and federal guidelines regarding inadvertent discovery of human remains would reduce any potential impacts to human remains. Thus, impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. Geology and Soils <i>Would the project:</i>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: <ul style="list-style-type: none"> <li data-bbox="282 577 812 806">i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <li data-bbox="282 823 812 850">ii) Strong seismic ground shaking? 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <li data-bbox="282 865 812 934">iii) Seismic-related ground failure, including liquefaction? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li data-bbox="282 949 812 976">iv) Landslides? 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

- a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:**
- i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

No impact. Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. Ground rupture is most likely along active faults, and typically occurs during earthquakes of magnitude five or higher. Ground rupture only affects the area immediately adjacent to a fault.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Alquist-Priolo (AP) Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet).

According to the map, "State of California Special Studies Zones, Healdsburg Quadrangle," dated July 1, 1986, the project site is not located within an Alquist-Priolo Special Studies Zone. The nearest potentially active fault is the Alexander-Redwood Hill Fault located, which is located approximately 1.28 miles west of the project site.⁴ No faults are known to occur on or within the immediate vicinity of the project site. Therefore, there would be no impacts related to the rupture of a known earthquake fault.

- ii) **Strong seismic ground shaking?**

Less than significant impact. According to Table 45 in the City of Healdsburg's General Plan, faults are listed which have the potential to affect the City. It notes that the Healdsburg-Rodgers Creek, Maacama, San Andreas, Hunting Creek, West Napa, Concord-Green Valley, Cordelia, Hayward, and San Gregorio faults are located within the City and up to 52 miles from the City. These faults have the potential to produce earthquakes between 6.5 and 7.9 magnitude on the Richter Scale.

As previously addressed in Impact 6a-i, the project site is not located within an earthquake fault zone. In addition, the project would involve a single monopole structure and would not involve the construction or occupancy of any habitable structures. Furthermore, no habitable structures are

⁴ California Department of Conservation Special Studies Website: <ftp://ftp.consrv.ca.gov/pub/dmg/pubs/fer/233/Maps/FIG2B.pdf>. Accessed: August 2, 2016.

located on or near the proposed project site. Therefore, impacts related to strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. Liquefaction describes the behavior of soils that, when loaded, suddenly suffer a transition from a solid state to a liquefied state, or having the consistency of a heavy liquid. Liquefaction can occur during vibratory conditions such as those induced by seismic event, under saturated conditions in soils, such as sand, in which the strength is purely frictional. A low relative density and loose consistency of the granular materials, shallow groundwater table, long duration and high acceleration of seismic shaking are some of the factors that can cause liquefaction.

Presence of predominately cohesive or fine-grained materials and/or absence of saturated conditions can preclude liquefaction. As indicated in Figure 18 of the Healdsburg General Plan, the project site is located within a designated area subject to potential liquefaction hazards. The General Plan notes that although liquefaction often causes severe damage to structures, the risk to public safety is relatively low as structural collapse is uncommon. Structures can be protected from liquefaction with the use of special foundations. The project would involve construction of a single monopole and would not involve the construction of any habitable structures. The foundation for the monopole would be constructed in accordance with geotechnical recommendations based on the specific site soils. Therefore, impacts associated with this seismic-related ground failure and liquefaction would be less than significant.

iv) Landslides?

No impact. The Seismic Hazard Zones Map illustrates the earthquake-induced landslide zones⁵, which are areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation would be required. According to the Seismic Hazard Zones Map—Healdsburg Quadrangle (California Department of Conservation Released July 1, 1986), the project site is not located in an earthquake-induced landslide zone of required investigation. Therefore, project implementation would not expose people or structures to potential substantial adverse effects involving landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. Implementation of the proposed project would not result in substantial soil erosion or the loss of topsoil. Figure IV.C-2 of the General Plan EIR notes that the project site is located on land that is composed of Clough gravelly loam with 15 to 30 percent slopes north and west of the project site. Most of the site is sparsely vegetated which serves to limit erosion. With the addition of one telecommunications pole, soil exposed by construction activities during the development of the proposed project is unlikely to result in erosion if exposed to heavy rain, winds, or other storm events.

⁵ California Department of Conservation Landslide Map. Website:
ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_120/SR_120_Plate3A.pdf. Accessed August 2, 2016.

The project would not disturb more than 1 acre of soils, which would result in a less than significant impact involving soil erosion or the loss of topsoil.

- c) **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

No impact. As discussed in preceding sections, the project is not located on an unstable geologic unit. Thus, the project site is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Therefore, no impacts are expected to occur from soil failure.

- d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Expansive soils expand or contract with changes in the moisture content. Some of the geologic units in the City, including both surficial soils and bedrock, have fine-grained components that are moderate to highly expansive. According to the USDA NRCS Web Soil Survey, on-site samples of clough gravelly loam soil located in the area were found to have a low expansion potential. Thus, impacts relating to expansive soil would be less than significant.

- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

No impact. The project does not propose the use of septic tanks. Therefore, no impacts to soils due to the use of septic systems are anticipated.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Greenhouse Gas Emissions <i>Would the project:</i>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than significant impact. The project is located in the Northern Sonoma County Air Basin, where air quality is regulated locally by the Northern Sonoma County Air Pollution Control District (NSCAPCD). NSCAPCD is one of 35 California air districts established to regulate the emissions of air pollution from “stationary sources” that could be detrimental to public health, safety and welfare. The District’s legal mandate originates from the federal Clean Air Act and the California Health and Safety Code. Oversight is provided by the federal Environmental Protection Agency and the California Air Resources Board.

The NSCAPCD does not have any rules, regulations, or evaluation policies that pertain to greenhouse gas emissions. The NSCAPCD relies on methods used in the neighboring San Francisco Bay Area Air Basin, which is regulated by the Bay Area Air Quality Management District (BAAQMD). The BAAQMD suggests applying greenhouse gas efficiency thresholds to projects with emissions of 1,100 metric tons of carbon dioxide equivalent (MTCO₂e) or greater. For projects that have annual emissions below this threshold, the effect is considered less than significant.

The project would generate negligible greenhouse gas emissions during construction activities such as site grading, on-site heavy-duty construction vehicle use, vehicles hauling materials to and from the project site, and construction worker trips. These emissions are considered temporary or short-term.

The BAAQMD does not have a recommended screening level or a threshold of significance for construction-related greenhouse gas emissions. The project is proposed to install nine directional panel antennas on a single 69-foot pole within a 76-foot faux tree. As such, the project would

produce negligible emissions from vehicles and equipment used during maintenance activities. Thus, impacts are less than significant.

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

No impact. The Sonoma County Community Climate Action Plan (CAP) adopted in October 2008 applies to the County and participating cities, including the City of Healdsburg. The CAP includes a goal of reducing county greenhouse gas emissions by 25 percent below 1990 levels by 2015, but it has no mandatory provisions that would be applied to the proposed unmanned wireless communications facility project, which would not produce any significant greenhouse gas emissions given its minimal energy and operating requirements and service needs. As such, the project would not conflict with the Sonoma County CAP and regulations adopted by the State of California to reduce greenhouse gas emissions.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
8. Hazards and Hazardous Materials <i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the project:

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Less than significant impact. These uses would not involve the regular use, storage, transport, or disposal of significant amounts of hazardous materials. Construction and operation of the project would involve the minor routine transport and handling of hazardous substances such as diesel fuels, lubricants, solvents, asphalt, pesticides, and fertilizers. Handling and transportation of these materials could result in the exposure of workers to hazardous materials. However, the project would not create a significant hazard to the public or the environment, because project construction and operation activities would be minimal, and would be in compliance with applicable federal, state, and local laws pertaining to the safe handling and transport of hazardous materials. Impacts would be less than significant.

- b) **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Less than significant impact. As addressed in Impact 8a) above, any handling, storing, or dispensing activities associated with hazardous or potentially materials would comply with all applicable federal, state, and local agencies and regulations. Adherence with the applicable policies and programs of these agencies would ensure that any interaction with hazardous materials would occur in the safest possible manner, reducing the opportunity for the accidental release of hazardous materials into the environment. Any handling of hazardous materials would be limited in both quantities and concentrations. Thus, impacts would be less than significant.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Less than significant impact. The nearest school to the project site is Healdsburg Elementary School, which is located approximately 0.28 mile southwest of the project site. The potentially hazardous materials used on-site would be negligible, and the distance from the site precludes impacts to Healdsburg Elementary school. Therefore, Impacts from the project to an existing or proposed school are less than significant.

- d) **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

No impact. According to a records search using the California Department of Toxic Substances Control's (DTSC) EnviroStor database, the project site is not identified as a hazardous materials site

(DTSC 2016).⁶ Additionally, no such site is located adjacent to the project site or within the general project area. Therefore, no impacts associated with hazardous materials sites would occur.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

No impact. The project site is not located within a public or private use airport land use plan (City of Healdsburg 2015). The nearest airport to the project site is the Healdsburg Municipal Airport and the Sonoma County Airport, located approximately 3.5 miles northwest and 7.6 miles southeast of the project site, respectively. The airports are more than 2 miles from the project site. Therefore, the project would not create a safety hazard to the people residing or working in the project area, and no impacts would occur.

- f) **For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

No impact. There are no private airstrips located within the project vicinity. Therefore, no impact associated with private airstrip hazards would occur.

- g) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Less than significant impact. Although not specifically identified in an emergency evacuation plan in the General Plan, South Fitch Mountain Road is expected to serve as an evacuation route in the event of an emergency or disaster and turned into a one-way road.⁷ The proposed project does not propose or require any modifications to South Fitch Mountain Road that would impair or interfere with emergency response or evacuation (permanent road closures, lane narrowing, etc.). Therefore, impacts associated with emergency response or evacuation would be less than significant.

- h) **Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

No impact. According to the City of Healdsburg General Plan EIR Wildland fire Hazard Zone Map, the project site is not located in area designated as a fire hazard area. Therefore, no impacts associated with wildland fires would occur.

Mitigation Measures

No mitigation measures are required.

⁶ Department of Toxic Substances Control. Website: http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=&x=-119&y=37&zl=18&ms=640,480&mt=m&findaddress=True&city=923%20s%20fitch%20mountain%20road&zip=&county=&federal_superfund=true&state_response=true&voluntary_cleanup=true&school_cleanup=true&ca_site=true&tiered_permit=true&evaluation=true&military_evaluation=true&school_investigation=true&operating=true&post_closure=true&non_operating=true. Accessed August 1, 2016.

⁷ Fitch Mountain Fire Information. Website: <http://www.ci.healdsburg.ca.us/DocumentCenter/View/395>. Accessed August 1, 2016.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. Hydrology and Water Quality <i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Information gathered for this section is based on the City of Healdsburg's Urban Water Management Plan (UWMP) from 2010, which was last amended in 2015. The City of Healdsburg has completed a Draft 2015 UWMP, but it has not yet been finalized or formally adopted.

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less than significant impact. The Porter-Cologne Water Quality Control Act established the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) as the principal state agencies having primary responsibility for coordinating and controlling water quality in California. The Porter-Cologne Water Quality Control Act defines water quality objectives as “. . . the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area” (Water Code Section 13050(h)). It also requires the RWQCB to establish water quality objectives, while acknowledging that water quality changes are possible, to some degree, without unreasonably affecting beneficial uses.

The Clean Water Act (CWA) has nationally regulated the discharge of pollutants to the waters of the U.S. from any point source since 1972. In 1999, the SWRCB adopted a Construction General Permit, and a National Pollution Discharge Elimination System permit that implements Section 402(p)(2)(B) of the CWA. Construction activities are regulated by the RWQCB and are subject to the permitting requirements of the Construction General Permit. The RWQCB established the General Construction Permit program to reduce surface water impacts from construction activities. The General Construction Permit requires the preparation and implementation of a Stormwater Pollution Prevention Plan for construction activities.

The project would construct nine directional panel antennas on a new 76-foot faux tree telecommunication tower, and would disturb less than one acre, which precludes the need to comply with the Construction General Permit or prepare a Storm Water Pollution Prevention Plan. Impacts from the site would be incremental and *de minimis*. Therefore, there would be no impacts to water quality.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No impact. According to the City of Healdsburg's 2010 Urban Water Management Plan (UWMP), the City of Healdsburg depends on groundwater from three well fields to supply 100 percent of its total water supply. The UWMP contains existing and projected water supplies and demands for the City of Healdsburg during normal and dry-year scenarios. The project would not create any new significant demand for potable water. Therefore, no impacts to groundwater would occur.

- c) **Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

Less than significant impact. There are no streams or rivers on-site, thereby precluding impacts from the alteration of a stream or river. The proposed project is expected to utilize existing drainage facilities within the vicinity of the project site. Furthermore, the project site currently contains trees that would mitigate water flow. No substantial soil disturbance would occur on-site that could have the potential to result in significant erosion or siltation on- or off-site. Therefore, impacts would be less than significant.

- d) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

No impact. The proposed project would not substantially alter the existing drainage pattern of the site or area, nor alter the course of a stream or river. No alteration of the course of any stream or river would occur. Runoff generated by the project would not result in significant impacts from the 100-year storm flows downstream. Accordingly, runoff would be managed in a manner that would not contribute to downstream flooding and there would be no impacts to surface runoff or potential flooding.

- e) **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Less than significant impact. The project would be served by the City's stormwater drainage system. Construction activities such as grading and paving could introduce additional pollutants and sediment into water runoff and flow into nearby storm drains. However, the foundation for the monopole would be relatively small. The foundation would therefore not introduce a significant amount of impervious surfaces to the project site, and would not alter the existing stormwater drainage patterns or rates.

Finally, continuous use and operation of the site would not create or contribute runoff water that would exceed the capacity of existing stormwater drainage systems. Therefore, impacts would be less than significant.

- f) **Otherwise substantially degrade water quality?**

Less than significant impact. Construction activities related to the development of the project could introduce pollutants and sediment into water runoff from the site. The project would be required to fulfill C.3 requirements regarding the provision of site design measures, source controls, LID treatment measures, hydromodification management, and construction Best Management Practices that are appropriate for the type and size of the project to control stormwater pollution. Implementation of these requirements would ensure water quality impacts would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No impact. According to the Federal Emergency Management Agency’s (FEMA) Flood Rate Insurance Map (FIRM) FEMA Flood Insurance Rate Map for the project area (FIRM Community Panel Number 06097C0551E),⁸ the project site is located within Zone X, which has been determined by FEMA to be outside of both the 100-year and 500-year floodplains. Additionally, the proposed project does not include any residential development. Therefore, no impacts associated with placing housing within a 100-year flood hazard area would occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No impact. The FEMA FIRM for the project area shows the project site as being located within Zone X, which has been determined by FEMA to be outside of both the 100-year and 500-year floodplains. Therefore, no impacts associated with placing structures within a 100-year flood hazard area would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less than significant impact. According to the City of Healdsburg’s General Plan, failure of Warm Springs Dam and Coyote Dam could potentially produce flooding within the City. However, as addressed previously, the project site is located outside of both the 100-year and 500-year floodplains, as determined by FEMA. The Healdsburg General Plan also notes that the United States Army Corps of Engineers has developed evacuation plans in the event of dam failure. Therefore, impacts associated with flooding are less than significant.

j) Inundation by seiche, tsunami, or mudflow?

Less than significant impact. A seiche is an earthquake or slide-induced wave that can be generated in an enclosed body of water. There is no enclosed body of water in the project vicinity.

A tsunami is a sea wave generated by an earthquake, landslide, volcanic eruption, or even by a large meteor hitting the ocean. An event such as an earthquake creates a large displacement of water resulting in a rise or mounding at the ocean surface that moves away from this center as a sea wave. Tsunamis generally affect coastal communities and low-lying (low-elevation) river valleys in the vicinity of the coast. Buildings closest to the ocean and near sea level are most at jeopardy. Because the City of Healdsburg and the project site are located approximately 24 miles east of the Pacific Ocean, tsunamis are not considered a risk.

The Healdsburg General Plan EIR Slope Hazard Zones map shows that the proposed project site is located in a marginally stable zone, being subject to slight to moderate landslide risk. However, the existing topography of the site would be maintained as part of the project and there would be no substantial change to drainage patterns on-site.

⁸ FEMA Flood Map Service Center Website. Accessed August 1, 2016.

Therefore, project implementation would not expose people or structures to potential hazards from inundation by seiche, tsunami, or mudflow, and impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. Land Use and Planning <i>Would the project:</i>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

a) Physically divide an established community?

No impact.

The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local bridge that would impact mobility within an existing community of between a community and outlying area. The project does not involve any such features, and would neither remove any means of access nor impact mobility. Therefore, the project would not physically divide an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is designated as “Public/Quasi Public” by the City of Healdsburg’s General Plan.⁹ The project site is designated as a “P” (Public) District on the City’s Zoning Map.¹⁰ Pursuant to Healdsburg’s Land Use code 20.28015, the project applicant will submit an application for a Conditional Use Permit in conjunction with this IS/MND as the project is within a scenic ridgeline

⁹ City of Healdsburg General Plan Land Use Map. Website: <http://www.ci.healdsburg.ca.us/DocumentCenter/Home/View/635>. Accessed July 28, 2016.

¹⁰ City of Healdsburg Zoning Map. Website: <http://www.ci.healdsburg.ca.us/DocumentCenter/View/836>. Accessed July 28, 2016.

designated by the General Plan, and will require an exemption. The Conditional Use Permit process will ensure that there are no other conflicts with the adopted General Plan and Zoning Ordinance. Therefore, project impacts would be less than significant.

c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?

No impact. The project site is not located within the boundary of any Habitat Conservation Plan, Natural Community Conservation Plan, or any other approved habitat conservation plan. Therefore, no impacts associated with conservation plans would occur.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Mineral Resources <i>Would the project:</i>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

The primary mineral resources of the area are aggregate, sand, and gravel. The State Mines and Geology Board designates sand and gravel deposits that are of regional significance pursuant to the California Surface Mining and Reclamation Act of 1975. The State has designated the terrace mining pits along Russian River, including those of Kaiser Sand and Gravel of Syar, as regionally significant because of their commercial value to Sonoma County.

Would the project:

- a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No impact. The project site does not contain any known mineral resources. The City Healdsburg’s General Plan identifies a single Mineral Resource Zone, MRZ-2, in the City, which is located approximately 0.5 mile south from the project site. Therefore, no impacts associated with mineral resources would occur.

- b) **Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

No impact. The project site is not identified by the City of Healdsburg’s General Plan Land Use Map or the City’s Zoning Map as a mineral recovery site. Therefore, no impacts associated with locally important mineral resources would occur.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Noise <i>Would the project result in:</i>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Characteristics of Noise. Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The standard unit of measurement of the loudness of sound is the decibel (dB). The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments, while a change of 5 dBA is considered to be the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was derived to relate noise to the sensitivity of humans. The scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Furthermore, the A-weighted sound level is the basis for a number of various sound level metrics, including the day/night sound level (L_{dn}).¹¹

Existing Land Uses and Sensitive Receptors

The project site is located in the City of Healdsburg, California. Oak Mound Cemetery is located immediately to the west of the site. Single-family homes occur immediately east of the site, and Healdsburg Golf Course at Tayman Park is located along the southern and eastern portions of the project site.

Regulatory Framework

The project site is located in the City of Healdsburg. The site is designated in the Healdsburg General Plan as Public/Quasi Public. The City has established land use noise compatible thresholds for new land use development. According to the City of Healdsburg's General Plan Policy Document, community noise exposures of less than 75 dBA L_{dn} are considered "normally acceptable"¹² for projects located on golf course or cemetery lands. In addition, the City has established an exterior noise standard of 60 dBA L_{dn} .

The other primary method of noise control is through enforcement of the City's Municipal Noise Code Section 9.32.010. The section is designed to control unnecessary, excessive and annoying sounds generated on one piece of property from affecting an adjacent property, and to protect residential areas from noise sources other than transportation sources.

The City provides certain exemptions from these operational noise standards, including noise associated with construction activities that take place between the hours of 6:30 a.m. and 7:00 p.m.; any mechanical device, apparatus or equipment used, related to, or connected with any emergency, public land or utility maintenance (Healdsburg Municipal Code Section 9.32.060).

Would the project result in:

- a) **Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less than significant impact. The closest receptors to the project site are the Oak Mount Cemetery west of the project site, and the Healdsburg Golf Club at Tayman Park, which surrounds the proposed project area in all other directions. These areas would be impacted by short-term noise levels associated with project construction activities. These activities would include noise generated by the transport of workers and movement of construction materials to and from the project site,

¹¹ L_{dn} is the 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m. Source: Harris, Cyril M. 1998. Handbook of Acoustical Measurement and Noise Control.

¹² Specified land use is satisfactory based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

and from ground clearing, grading, excavation, and general building activities. However, compliance with the Noise Ordinance restricting construction hours would reduce any potential impacts related to noise during the construction phase.

Because of the proposed project's site plan and size, the exposure of persons to generation of noise levels in excess of standards established in the local general plan is unlikely. Therefore, impacts would remain less than significant.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include construction activities such as blasting, pile driving, and operating heavy earthmoving equipment.

Because of the distance from any potential sensitive receptors and the minimal nature of construction activities, any construction vibration impacts would be considered less than significant.

Upon completion of construction, the project would not include any permanent sources of groundborne vibrations. As such, implementation of the proposed project would not expose persons within the project vicinity to excessive groundborne vibration levels. Therefore, project-related groundborne vibration impacts would be considered less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact. Permanent increases and noise relate to project operation. Neither the CEQA Guidelines nor the City's General Plan defines numeric values for what constitutes a "substantial permanent increase in ambient noise levels"; however, the Caltrans Technical Noise Supplement provides guidance that can be used to define substantial changes in noise levels attributable to a project. The thresholds below generally apply to transportation noise that is usually expressed in terms of average noise exposure during a 24-hour period, such as the day-night average noise level (L_{dn}) or CNEL. Project-generated increases in noise levels that exceed those outlined in the thresholds below and that affect existing noise-sensitive land uses (receptors) are considered substantial; therefore, they would constitute a significant noise impact. The proposed project would create a significant noise impact if it would:

- Increase noise levels by 5 dB or more where the without project noise level is less than 65 dB.
- Increase noise levels by 3 dB or more where the without project noise level is 65-70 dB.
- Increase noise levels by 1.5 dB or more where the without project noise level is greater than 70 dB.

Another characteristic of noise is that a doubling of sound sources with equal strength is required to result in even a perceptible increase (defined to be a 3 dBA or greater increase) in noise level. Implementation of the project would not result in a doubling of traffic volumes along any roadway segment in the project vicinity. Thus, implementation of the project is not expected to result in even a perceptible increase (defined to be a 3 dBA or greater increase) in traffic noise levels on local roadways in the project vicinity. Therefore, project-related traffic noise impacts on off-site receptors would be less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact. Implementation of the project would result in short-term increases in ambient noise levels that are due to construction activities. Construction noise impacts were analyzed in the discussion in Impact 12a). Although there would be intermittent noise exposure during construction, the effect on hourly or daily ambient noise levels would be negligible. Therefore, impacts on sensitive receptors in the project vicinity on a temporary basis would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact. The project site is not located within a public or private use airport land use plan. It is not within two miles of a public airport or public use airport, as the nearest airport, Healdsburg Municipal Airport, is located approximately 3 miles northwest of the project site. Therefore, no impacts associated with public airport noise would occur.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No impact. No private airstrips are located within the vicinity of the project site or in the City of Healdsburg. This condition limits the potential for the project to expose people residing or working in the project area to excessive noise levels. Therefore, no impacts associated with private airstrip noise would occur.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Population and Housing <i>Would the project:</i>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

- a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Less than significant impact. The proposed project does not include any land uses that typically induce population growth. A temporary labor force would be required to construct the proposed project. The short-term nature of this temporary construction workforce would not induce substantial population growth. Additionally, a nominal permanent labor force may be needed to conduct routine maintenance activities for proposed project once operational, and would not induce substantial population growth. Therefore, impacts associated with population growth would be less than significant.

- b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No impact. There are currently no structures on-site which support residential uses. The proposed project site has a land use designation of Public/Quasi Public according to the City of Healdsburg’s General Plan. Therefore, no impacts would occur related to the displacement of housing.

- c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No impact. As addressed in Impact 13b), above, there are no existing residential buildings or individuals living on-site. Therefore, there would be no impacts related to the displacement of people and construction of replacement housing elsewhere.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Public Services				
<i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

No impact. The Healdsburg Fire Department (HFD) provides fire protection and emergency medical services to the City, which includes fire prevention and suppression, protecting its community from hazardous materials incidents, providing emergency first aid response to medical emergencies, and rescue and extrication.¹³ The HFD also maintains and supports programs in disaster preparedness, fire prevention, public education, fire prevention, and weed abatement. The department performs all duties with an organization consisting of 13 pair personnel and 22 Reserve Fighters.¹⁴ The department consistently trains and uses two Type 1 fire engines, one ladder truck, one Type 1 water tender, one Type 3 engine, and three utility pickup trucks, all operating out of one fire station. The station is located approximately 1.1 miles west of the project site.

The General Plan states that the HFD maintains a standard response goal of less than 5 minutes and averages a 4-minute response time for medical and fire emergencies within the city limits.¹⁵ The project does not propose new or physically altered fire protection facilities. The project involves the installation of nine Andrew Model SBNHH-1D65B directional panel antennas on a single, new 76-foot

¹³ City of Healdsburg Fire Department Emergency Response. Website: <http://www.ci.healdsburg.ca.us/270/Emergency-Response> Accessed July 28, 2016.

¹⁴ City of Healdsburg Fire Department. Website: <http://www.ci.healdsburg.ca.us/248/Fire-Department>. Accessed: July 28, 2016.

¹⁵ City of Healdsburg 2030 General Plan Amended in 2015.

faux tree on land that is designated as Public/Quasi Public. However, project implementation is not anticipated to require construction of new or physically altered fire protection facilities due to the lack of habitable structures. Therefore, there are no impacts to fire protection.

b) Police protection?

No impact. The Healdsburg Police Department (HPD) provides police protection services to the City from their headquarters located at 238 Center Street and is located approximately 1.1 miles southwest from the project site. The HPD is composed of four divisions: Administrative; Communications; Investigations; and Operations.¹⁶ According to the Healdsburg 2030 General Plan, the HPD currently employs 18 sworn officers, including the Chief of Police, and 12 civilian employees. The HPD has one detective, one school resources officer, one downtown foot-patrol officer, one administrative sergeant, four patrol sergeants, and ten patrol officers. The HPD currently maintains an officer-to-population ratio of 1:644. It maintains an emergency response time of 2 to 3 minutes throughout the Urban Service Areas for emergency calls using mobile units.

The project does not propose new or physically altered police protection facilities, nor would the project introduce new occupants to the project site or create an environment generally associated with unlawful activities requiring increased law enforcement services. The project involves the installation of nine Andrew Model SBNHH-1D65B directional panel antennas on a new 76-foot faux tree telecommunication tower on land that is designated as Public/Quasi Public land. However, project implementation is not anticipated require construction of new or physically altered police protection facilities. Therefore, there are no impacts to police protection.

c) Schools?

No impact. The project site is located within the Healdsburg Unified School District (HUSD) (grades K through 12). The project site is located in the Healdsburg Elementary (grades K through 2), Healdsburg Charter School (grades K through 2), Fitch Mountain Campus (grades 3 through 5), Healdsburg Junior High School (grades 6 through 8), Healdsburg High School (grades 9 through 12), and Marce Becerra Academy service areas,¹⁷ with school enrollments of approximately 1,700 students¹⁸.

The proposed project does not include any land uses that would induce population growth. The project does not propose new or physically altered school facilities. Since there would not be a population increase, HUSD schools would not need to accommodate additional students. Thus, there would be no impacts to school facilities.

¹⁶ City of Healdsburg Police Department 2016 Department Division Organization. Website: <http://www.ci.healdsburg.ca.us/209/Department-Organization>. Accessed July 28, 2016.

¹⁷ Healdsburg Unified School District School. Website: https://healdsburgusd-ca.schoolloop.com/cms/page_view?d=x&piid=&vpid=1389179946364. Accessed: July 28, 2016.

¹⁸ Healdsburg Unified School District School. "Who We Are." Website: <https://healdsburgusd-ca.schoolloop.com/whoweare>. Accessed July 28, 2016.

d) Parks?

Less than significant impact. There are approximately 43.32 acres of parkland in the City, including 13 neighborhood and community parks¹⁹ as well as Healdsburg Plaza, West Plaza Park, Carson Warner Memorial Skate Park, and the County’s Veterans Memorial Beach, but excluding the Healdsburg Golf Club at Tayman Park, Villa Chanticleer, Healdsburg Swim Center, and Healdsburg Senior Center. A joint use agreement with the HUSD also provides another 25 acres of school athletic fields that are available for limited community use.²⁰

The project does not propose new or physically altered park facilities. The project involves the installation of nine Andrew Model SBNHH-1D65B directional panel antennas on a new 76-foot faux tree communication tower on land that is designated as Public/Quasi Public land. As the project site does not contain any formal parkland and would not introduce any new residential dwelling units, the proposed development would have less than significant parkland impacts.

e) Other public facilities?

No impact. The project does not propose new or physically altered public facilities, such as libraries. As there would be no population growth associated with the project, construction of new or physically altered public facilities would not be required. As such, there are no impacts.

Mitigation Measures

No mitigation measures are required.

¹⁹ Healdsburg Parks. Website: <http://www.ci.healdsburg.ca.us/287/Parks>. Accessed July 28, 2016.

²⁰ City of Healdsburg 2030 General Plan Amended in 2015.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No impact. The proposed project does not include any land uses that would induce population growth, and would not require a substantial temporary or permanent labor force. Thus, the proposed project would not generate a substantial increase in the residential population or the number of residents who would patronize recreation facilities. Therefore, no impacts associated with recreational facilities would occur.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

No impact. The project involves the installation of nine Andrew Model SBNHH-1D65B directional panel antennas on a new 76-foot faux tree communication tower on land that is designated as Public/Quasi Public. The proposed project, however, would not include recreational facilities. Additionally, the proposed project does not include any land uses that typically induce population growth, and would not require a substantial temporary or permanent labor force.

Thus, the proposed project would not generate a substantial increase in the residential population or the number of residents who would patronize recreational facilities. As a result, the construction of new or the expansion of current recreational facilities would not be required. Therefore, no impacts associated with recreational facilities would occur.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Transportation/Traffic <i>Would the project:</i>				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

- a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

No impact. The project is not anticipated to generate any traffic following construction, other than occasional vehicle trips for repairs or maintenance. The project does not meet the minimum criteria for a Traffic Impact Analysis for either daily or peak-hour trip generation as defined in the County of Sonoma *Guidelines for Traffic Studies*. As such, the project is not expected to contribute any traffic to any study area intersection, and no further analysis is required.

- b) **Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

No impact. The Sonoma County Transportation Authority (SCTA) acts as the countywide planning and programming agency for transportation related issues. The project is not anticipated to generate any traffic following construction, other than occasional vehicle trips for repairs or maintenance. As such, the project does not conflict with SCTA or any other applicable congestion management program.

- c) **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

No impact. The proposed project does not include any facilities that would impact air traffic patterns. The nearest airport to the project site is Healdsburg Municipal Airport, which is located approximately 4 miles to the northwest.

- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

No impact. The project is located north of South Fitch Mountain Road. South Fitch Mountain Road at Almond Way is an east-west oriented, 2-lane undivided roadway. The project does not propose to modify any roadways. Therefore, the project is not anticipated to alter any design features that would potentially increase hazards.

- e) **Result in inadequate emergency access?**

No impact. This facility would continue to be accessible to all emergency vehicles and there would be no change to existing access. The proposed project does not propose any alterations to existing roadways that could potentially impair or impede emergency access (permanent road closures, road

narrowing, unusual traffic control devices, etc.). As such, there are no impacts related to the adequacy of emergency access.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No impact. The project would not hinder alternative transportation policies/programs or remove alternative transportation facilities. As such, the project would have no impacts on alternative transportation facilities.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
17. Utilities and Service Systems <i>Would the project:</i>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Information gathered for this section is based on the City of Healdsburg's Urban Water Management Plan (UWMP) from 2010, which was last amended in 2015. The City of Healdsburg has completed a Draft 2015 UWMP, but it has not yet been finalized or formally adopted.

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No impact. The City's Wastewater Treatment, Reclamation, and Disposal Facility (WWTF) is owned and operated by the City of Healdsburg. Treatment of wastewater is conducted through influent screening and grit removal; biological removal of chemical oxygen demand (BOD) and nitrogen in aerobic, anoxic, and pre-anoxic basins; membrane bioreactor (MBR) filtration, and ultra-violet (UV) disinfection. The WWTF is designed to treat up to 1.6 million gallons per day (mgd) of wastewater, average dry weather flow, and 4.0 mgd (maximum peak flow).²¹ Effluent discharges into a 25 million gallon storage pond or to the Basalt Pond. The WWTF also maintains a 15 million gallon emergency storage site. The existing wastewater treatment facility has the capacity to serve planned uses consistent with the City's General Plan. The project is not anticipated to create any wastewater and, therefore, would not cause the WWTF to exceed applicable requirements set by the Regional Water Quality Board. Thus, there are no impacts.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No impact. The project involves the installation of nine Andrew Model SBNHH-1D65B directional panel antennas on a new 76-foot faux tree on land that is designated as Public/Quasi Public. However, the project would not require water resources, and would not cause the WWTF to exceed its permitted capacity. Therefore, there would be no impacts associated with wastewater treatment facilities.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No impact. The runoff generated by the potential project would not result in a substantial increase in stormwater flows downstream. The proposed project is expected to utilize existing drainage facilities within the vicinity of the project site. Furthermore, the project site currently contains trees that would mitigate water flow. Therefore, the project would have no impacts to storm drainage facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No impact. The project would not require the regular use of water supply resources, as it would not include the construction of any habitable structures or require water for ongoing operations. If needed, the project would rely on the City's existing, available water supplies. The proposed project would connect to the City's water facilities, similar to the existing recreational uses near the site. Therefore, the project would have no impacts on water supply resources.

²¹ City of Healdsburg 2010 UWMP Adopted in 2015.

- e) **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

No impact. The proposed project would not be introducing new commercial, industrial or residential uses. As such, there would not be an increase in projected demand for the City's wastewater services. Therefore, there would be no impacts upon the wastewater treatment provider and the provider's existing commitments.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

Less than significant impact. Solid waste from Healdsburg is currently transferred first to the one of Sonoma County's five transfer stations, and then transported to landfill sites located outside of the County where adequate capacity exists. Landfills outside of Sonoma County include Redwood Sanitary Landfill near Novato, Potrero Hills Sanitary Landfill near Suisun City, and Altamont Landfill near Livermore. Collectively, these disposal facilities have more than 100 million cubic yards of remaining capacity. Construction of the project would not generate a significant amount of solid waste, as no demolition activities are proposed. Likewise, operation of the project would not generate solid waste. Impacts to landfills would be less than significant.

- g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

Less than significant impact. Project construction would not include the removal of structures, therefore any construction waste would be minimal. Given the project characteristics, no further recycling or waste reduction requirements would be applicable to the proposed project. Impacts related to solid waste state statutes and regulations would be less than significant.

Mitigation Measures

No mitigation measures are required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. Mandatory Findings of Significance				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

- a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

Less than significant impact with mitigation incorporated. As discussed in the preceding environmental checklist, the proposed project would not result in any significant impacts associated with aesthetics, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, noise, population/housing, public services, and utilities/services systems. Impacts to biological resources would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-2. Because the project area would retain many aspects of its current condition, the proposed project has an insubstantial potential to degrade the quality of the environment in and around the project site itself.

- b) **Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Less than significant impact. All impacts related to aesthetics, biological resources, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, noise, population/housing, public services, and utilities/services systems are less than significant and do not require mitigation. Impacts to biological resources would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-2. Since the project proposes to potentially construct nine antennas on a 76-foot faux tree communication tower, impacts would be *de minimis* and would not result in cumulatively considerable impacts on these areas. Impacts would be less than significant.

- c) **Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less than significant impact. As described throughout the preceding environmental checklist, all impacts identified in this IS/MND are either less than significant or have no impact. As such, the project would not result in substantial environmental effects on human beings either directly or indirectly. Impacts would be less than significant.

SECTION 3: LIST OF PREPARERS

FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597
Phone: 925.357.2562
Fax: 925.357.2572

Project Director Jason Brandman
Project Manager Elizabeth Johnson
Assistant Project Manager..... Cecilia So
Environmental Analyst..... Philip Vuong
Editor Ed Livingston
GIS/Graphics John De Martino
Word Processor Ericka Rodriguez
Reprographics..... Octavio Perez

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 4: SOURCE REFERENCES

City of Healdsburg 2030 General Plan. 2015. Website: <http://www.ci.healdsburg.ca.us/354/General-Plan>.

City of Healdsburg Municipal Code. Website: <http://www.codepublishing.com/CA/Healdsburg/>.

MST Architects. 2017. Project Elevations & Site Plans.____

Previsualist, Inc. 2017. Photo-simulations.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 5: APPLICANT'S MITIGATION AGREEMENT STATEMENT

Pursuant to CEQA Guidelines 15369.5;

I _____, project sponsor agree to incorporate the following mitigation measures, identified in this initial study/mitigated negative declaration, as a part of my project:

MM BIO-1 To avoid any direct and/or indirect impacts to resident and/or migratory birds, project-related construction activities should occur outside of the avian nesting season (February–August). If construction activities must occur within the nesting season, a qualified biologist shall perform a pre-construction survey to determine the presence or absence of nesting birds and nesting raptors on or within 500 feet of the construction area. The pre-construction survey shall be conducted no more than 10 calendar days prior to the commencement of construction. If no active nests are detected or project activities occur outside of the avian nesting season, no further action is necessary and construction activities may proceed without biological monitoring requirements.

MM BIO-2 If an active nest is located during pre-construction surveys, U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), as appropriate shall be notified regarding the status of the nest. Construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or the agencies deem disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and a 50-foot radius around an active migratory bird nest) or alteration of the construction schedule. A biological monitor shall be present during construction activities to maintain the exclusion zones and minimize construction impacts and ensure that no nest is removed or disturbed until all young have fledged.

Date: _____ Signed: _____

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix A: Visual Simulations

THIS PAGE INTENTIONALLY LEFT BLANK



Existing

Photosimulation of the view looking north from the entrance to the golf course on S Fitch Mountain Rd.

Healdsburg HS

923 S. Fitch Mountain Road
Healdsburg, CA 95448

2

verizon✓



Proposed



Existing

Photosimulation of the view looking northwest from the golf course parking lot.

Healdsburg HS

923 S. Fitch Mountain Road
Healdsburg, CA 95448

3

verizon✓



Proposed



Existing

Photosimulation of the view looking west from Hidden Acres Road.

Healdsburg HS

923 S. Fitch Mountain Road
Healdsburg, CA 95448

4

verizon



Proposed



Existing

Photosimulation of the view looking east from the Oak Mound Cemetery.

Healdsburg HS

923 S. Fitch Mountain Road
Healdsburg, CA 95448

verizon[✓]

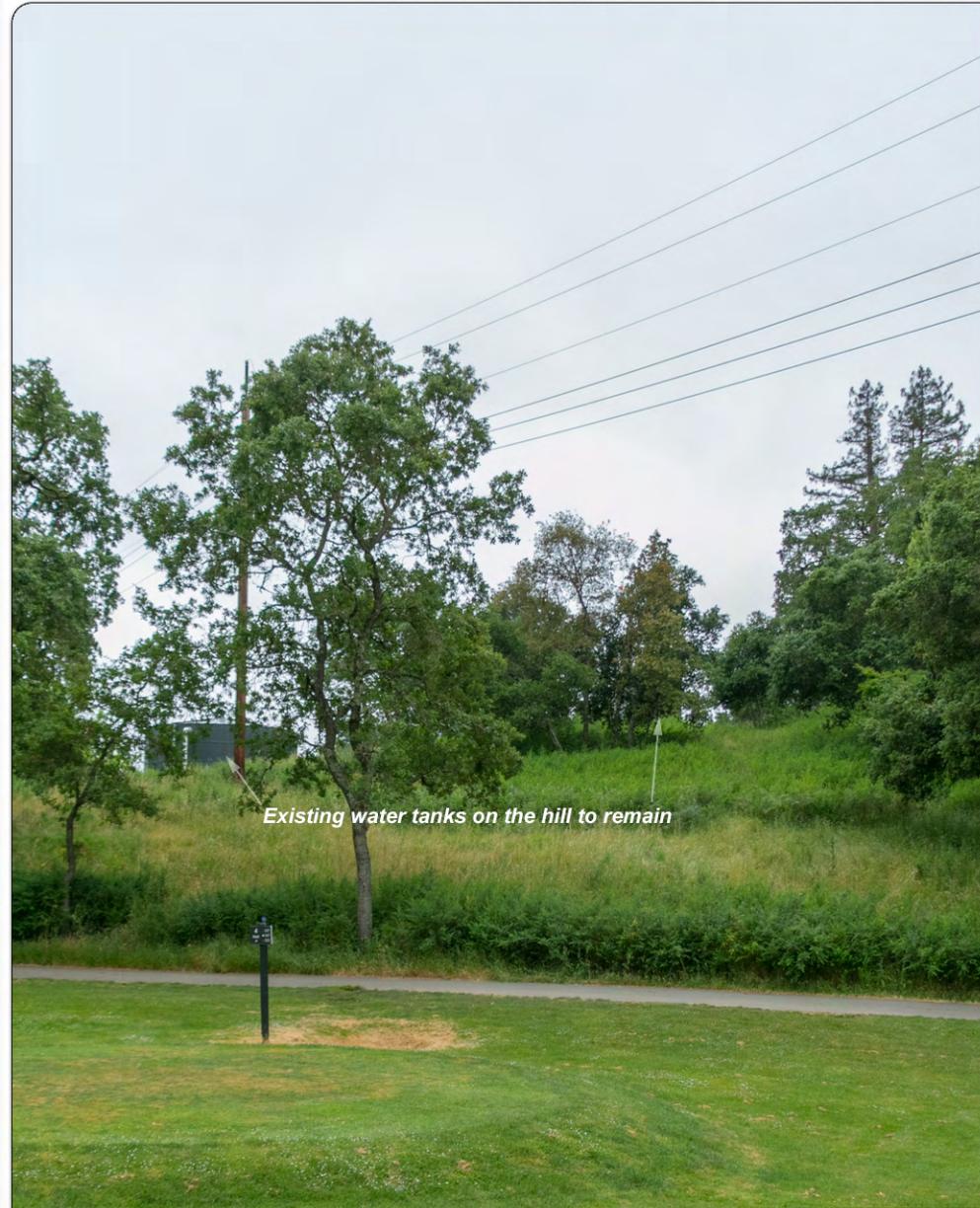
1



Proposed

Location of the proposed 76 ft treepole,
not visible in this view

Photosimulation of the view looking south from the 4th tee, representing a golfer's view.



Existing water tanks on the hill to remain



Proposed 76 ft treepole

Existing

Healdsburg HS

923 S. Fitch Mountain Road
Healdsburg, CA 95448

verizon✓

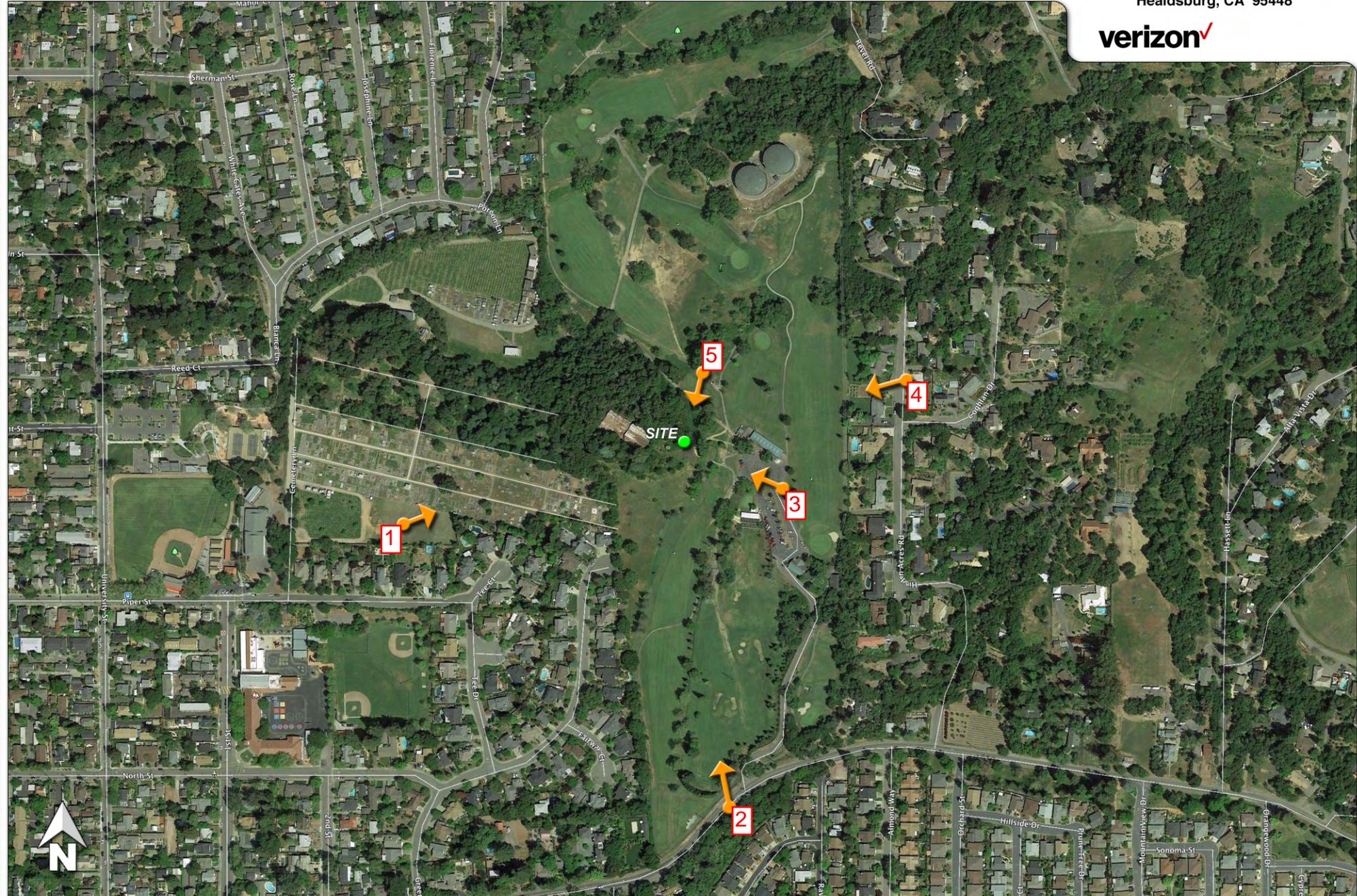
5

Proposed

Aerial photograph showing the viewpoints for the photosimulations.

Healdsburg HS

923 S. Fitch Mountain Road
Healdsburg, CA 95448



**Appendix B:
Radio Frequency Study**

THIS PAGE INTENTIONALLY LEFT BLANK

**Verizon Wireless • Proposed Base Station (Site No. 296599 “Healdsburg HS”)
923 South Fitch Mountain Road • Healdsburg, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 296599 “Healdsburg HS”) proposed to be located at 923 South Fitch Mountain Road in Healdsburg, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Executive Summary

Verizon proposes to install directional panel antennas on a tall pole, configured to resemble a tree, to be sited at 923 South Fitch Mountain Road in Healdsburg. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission (“FCC”) evaluate its actions for possible significant impact on the environment. A summary of the FCC’s exposure limits is shown in Figure 1. 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. The most restrictive FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

<u>Wireless Service</u>	<u>Frequency Band</u>	<u>Occupational Limit</u>	<u>Public Limit</u>
Microwave (Point-to-Point)	5–80 GHz	5.00 mW/cm ²	1.00 mW/cm ²
WiFi (and unlicensed uses)	2–6	5.00	1.00
BRS (Broadband Radio)	2,600 MHz	5.00	1.00
WCS (Wireless Communication)	2,300	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called “radios” or “channels”) that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables. A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky.



**Verizon Wireless • Proposed Base Station (Site No. 296599 “Healdsburg HS”)
923 South Fitch Mountain Road • Healdsburg, California**

Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, “Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation,” dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna’s radiation pattern is not fully formed at locations very close by (the “near-field” effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the “inverse square law”). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Verizon, including zoning drawings by MST Architects, Inc., dated January 12, 2017, it is proposed to install nine Andrew Model SBNHH-1D65B directional panel antennas on a new 57-foot steel pole, configured to resemble a tree, to be sited in place of the old concrete water tank on a hill at the west side of the municipal golf course at Tayman Park in Healdsburg. The antennas would employ no downtilt, would be mounted at an effective height of about 50 feet above ground, and would be oriented in groups of three toward 40°T, 150°T, and 280°T, to provide service in all directions. The maximum effective radiated power in any direction would be 10,520 watts, representing simultaneous operation at 4,460 watts for AWS, 4,160 watts for PCS, and 1,900 watts for 700 MHz service; no operation on cellular frequencies is presently proposed from this site. There are reported no other wireless telecommunications base stations at the site or nearby.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.047 mW/cm², which is 4.7% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building* is 2.1% of the public exposure limit. The maximum calculated level at the second-floor elevation of any nearby residence† is 0.57% of the public exposure limit. It should be noted that these results include several

* Located at least 70 feet to the northwest, based on photographs from Google Maps.

† Located at least 370 feet to the southwest, based on photographs from Google Maps.



**Verizon Wireless • Proposed Base Station (Site No. 296599 “Healdsburg HS”)
923 South Fitch Mountain Road • Healdsburg, California**

“worst-case” assumptions and therefore are expected to overstate actual power density levels from the proposed operation.

No Recommended Mitigation Measures

Due to their mounting locations and height, the Verizon antennas would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that Verizon will, as an FCC licensee, take adequate steps to ensure that its employees or contractors receive appropriate training and comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

Conclusion

Based on the information and analysis above, it is the undersigned’s professional opinion that operation of the base station proposed by Verizon Wireless at 923 South Fitch Mountain Road in Healdsburg, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.



William F. Hammett

William F. Hammett, P.E.

707/996-5200

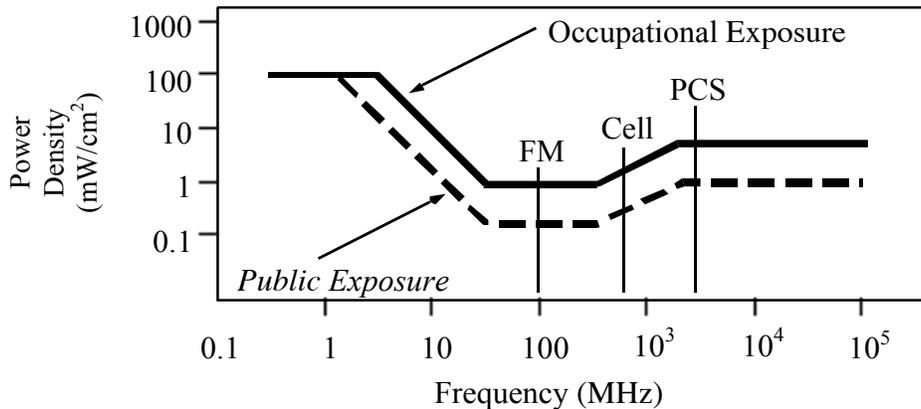
March 6, 2017

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements (“NCRP”). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm ²)	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f²</i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f ²	<i>180/f²</i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	f/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

- where θ_{BW} = half-power beamwidth of the antenna, in degrees, and
 P_{net} = net power input to the antenna, in watts,
 D = distance from antenna, in meters,
 h = aperture height of the antenna, in meters, and
 η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

- where ERP = total ERP (all polarizations), in kilowatts,
RFF = relative field factor at the direction to the actual point of calculation, and
D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.



THIS PAGE INTENTIONALLY LEFT BLANK