



**City of St. Helena
Planning Commission
Regular Meeting
Tuesday, October 16, 2018 @ 6:00 PM
Vintage Hall Board Room - Second Floor
465 Main Street, St. Helena**

PLEASE NOTE: Any person who wishes to speak regarding an item on the agenda or make a comment under the "Oral Communication" portion of the agenda may do so, but please observe the time limit of four minutes.

Page

1. PLEDGE OF ALLEGIANCE
2. CALL TO ORDER AND ROLL CALL
Chairperson: Lester Hardy
Vice Chair: David Knudsen
Commissioners: Bobbi Monnette and John Ponte
City staff present at the meeting will be noted in the minutes.
3. PUBLIC FORUM:
This is an opportunity for the public to address the Commission on items of interest to the public that are NOT listed on the agenda. Because of restrictions imposed by the Brown Act, the Commission may not engage in discussion nor take action on matters not described on the agenda. **Please observe the time limit of four minutes.**
4. CONSENT ITEMS
Members of the Commission or the public may ask that any items be considered individually for purposes of considering alternative action, for extended discussion, or for public comment. Unless that is done, one motion may be used to adopt all recommended actions. (Roll Call Vote)
 - 4.1. Approval of Minutes: October 2, 2018 5 - 9
[Commission Minutes 10-02-18](#)
5. PUBLIC HEARINGS
 - 5.1. Request by Brian Moore on behalf of Verizon Wireless for adoption of a resolution granting use permit and design review approval in order to place a 12 foot high addition on an existing PG&E tower to accommodate 6 new panel antennas and associated equipment on the property located near the 1600 block of Grayson Avenue in the A-20 zoning district. 11 - 94

CEQA Determination: The project is exempt from the requirements of CEQA pursuant to Section 15301 and 15303.
Prepared By: Aaron Hecock, Senior Planner
Recommendation:
For the reasons described above, staff recommends that the Planning Commission:
 1. Determine that the project is exempt from the requirements of

- CEQA pursuant to Section 15301 and 15303; and
2. Consider the required findings enumerated in SHMC Sections 17.164.030 and 17.168.050 and adopt a resolution to approve, modify or deny a use permit and design review for the proposed addition of wireless antennas on the existing PG&E tower located near the 1600 block of Grayson Avenue.

[Staff Report - 1600 block of Grayson Ave.](#)

6. SCHEDULED MATTERS

7. DEPARTMENT REPORTS

This is an opportunity for staff to report on or update the Commission on any relevant matters.

8. AGENDA FORCAST

Below is a link to a list of pending and upcoming projects which may be of interest to the community.

This is also an opportunity for the Commission as a whole to request items be placed on future agendas for discussion. These items should be consistent with, and work to implement adopted Council Goals.

A list of all current planning projects is available on our city website in the link below:

http://www.cityofsthenana.org/projects?term_node_tid_depth=21

Please contact the assigned project Planner for additional questions.

9. ADJOURNMENT

The next Regular Planning Commission meeting is scheduled for November 6, 2018, at 6:00 p.m. in the Vintage Hall Board Room located at 465 Main Street.

This agenda was posted at City Hall, 1480 Main Street, and at Vintage Hall, 465 Main Street, St. Helena, California on October 5, 2018.



Noah Housh, Planning Director

Appeal. A person who is dissatisfied with a decision of the Planning Commission may appeal that decision to the City Council pursuant to Municipal Code Section 17.08.180, Appeal procedure. Actions of the Planning Commission will be listed on the City Council agenda the following Tuesday to give the City Council opportunity to review the Planning Commission's decision. Absent of an appeal by the City Council or by a citizen, the appeal period will terminate two weeks after the Planning Commission hearing.

Special Assistance for the Disabled. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call the City Clerk's Office (707) 967-2792. Notification 48

hours prior to the meeting will enable City to make reasonable arrangements to ensure accessibility to this meeting (28 CFR35.102-35.104 ADA Title II). However, City staff will attempt to assist at any time with accessibility. The City Clerk has equipment to assist those with a hearing impairment.

PUBLIC TESTIMONY PROCEDURES

Pursuant to the Government Code Section 54954.3, the public may address the Commission on each agenda item during the Commission's consideration of that item. Each speaker has the option to state his or her name for the record before testifying. Depending on the number of speakers or the interest of the item, the Planning Commission Chairman may also restrict, at his/her discretion, the speaker's time to three minutes. The

Chairman may also restrict public comments if they become irrelevant to the agenda item or repetitious of prior comments. All persons interested may appear and be heard or submit written statements prior to the Planning Commission meeting. Please note that if you challenge the City's decision on any of these matters in court, you may be limited to raising only those issues you or someone else raised at the meeting or in written correspondence delivered to the City at, or prior to, the meeting.

CHALLENGING DECISIONS OF CITY ENTITIES

The time limit within which to commence any lawsuit or legal challenge to any quasi-adjudicative decision made by the City of St. Helena is governed by Section 1094.6 of the Code of Civil Procedure, unless a shorter limitation period is specified by any other provision, including without limitation Government Code section 65009 applicable to many land use and zoning decisions, Government Code section 66499.37 applicable to the Subdivision Map Act, and Public Resources Code section 21167 applicable to the California Environmental Quality Act (CEQA). Under Section 1094.6, any lawsuit or legal challenge to any quasi-adjudicative decision made by the City must be filed no later than the 90th day following the date on which such decision becomes final. Any lawsuit or legal challenge, which is not filed within that 90-day period, will be barred. Government Code section 65009 and 66499.37, and Public Resources Code section 21167, impose shorter limitations periods and requirements, including timely service in addition to filing.

If a person wishes to challenge the above actions in court, they may be limited to raising only those issues they or someone else raised at the meeting described in this notice, or in written correspondence delivered to the City of St. Helena, at or prior to the meeting. In addition, judicial challenge may be limited or barred where the interested party has not sought and exhausted all available administrative remedies.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Planning Commission regarding any item on this Agenda, after the posting of the Agenda, will be available for public review in the Planning Department's Office located at 1480 Main Street, St. Helena, California, during normal business hours. In addition, such writings or documents will be made available on the City's web site at <http://cityofsthenana.org> and will be available for public

review at the respective meeting.

MINUTES
City of St. Helena
Planning Commission Meeting
Tuesday, October 2, 2018 @ 6:00 PM
Vintage Hall Board Room - Second Floor
465 Main Street, St. Helena

A complete video recording of this meeting, except for closed session, can be found at <https://sthenela.civicweb.net/Portal/> or by calling the City Clerk at (707) 967-2792. The City Council video is the official record of the Council meeting.

Present: Chair Lester Hardy, Vice Chair David Knudsen, Commissioner Bobbi Monnette, and Commissioner John Ponte

Absent: None

Staff Present: Noah Housh, Planning & Community Improvement Director and Xinia Gamero, Administrative Assistant

1. PLEDGE OF ALLEGIANCE

2. CALL TO ORDER AND ROLL CALL

3. PUBLIC FORUM:

No public comment received.

4. CONSENT ITEMS

Commissioner Monnette pulled item 4.2 on the Consent Calendar.

4.1 ~~Approval of Minutes: September 18, 2018~~

- 4.2** Request for Design Review Exemption to allow the construction of a 500 square foot carport trellis and two appurtenant 110 square foot storage areas (with a maximum height of approximately 10-feet) at 890 Fulton Lane in the A-20 zoning district.

Recommendation:

It is recommended by the Planning and Community Improvement Department that the Planning Commission:

1. Find that the proposed project is exempt from the requirements of CEQA as a Class 3 Categorical Exemption under CEQA Section 15303; and
2. Adopt a resolution to approve a Design Review Exemption to allow the proposed construction of a 500 square foot carport trellis and two appurtenant 110 square foot storage areas (with a maximum height of approximately 10-feet) at 890 Fulton Lane in the A-20 zoning district.

Planning and Community Improvement Director Noah Housh reported on the item.

No public comment received.

Chair Hardy re-opened public comment.

Applicant, Rees Purcell addressed the Planning Commission.

Chair Hardy closed public comment.

Commissioner John Ponte moved to continue item to a date certain of October 16, 2018. The motion was seconded by Vice-Chair David Knudsen and on roll call carried by the following vote:

AYES: Lester Hardy, David Knudsen, Bobbi Monnette, and John Ponte

NOES: None

ABSENT: None

ABSTAIN: None

RECUSE: None

4.1 Approval of Minutes: September 18, 2018

Commissioner John Ponte moved to approve the minutes of September 18, 2018. The motion was seconded by Commissioner Bobbi Monnette and on roll call carried by the following vote:

AYES: Lester Hardy, David Knudsen, Bobbi Monnette, and John Ponte

NOES: None

ABSENT: None

ABSTAIN: None

RECUSE: None

5. PUBLIC HEARINGS

- 5.1 Request by Tomoko Simons for a Use Permit to establish an aesthetician business in an existing tenant spaces located at 1119 Hunt Avenue, Ste. B, in the CB: Central Business district.

CEQA Determination: Exempt from the requirements of CEQA pursuant to Section 15301, Class 1, which exempts the operation, leasing, or minor alteration of existing facilities.

Prepared By: Lilly Bianco, Contract Planner

Recommendation:

Staff recommends that the Planning Commission:

1. Determine that the project is exempt from the requirements of CEQA pursuant to Section 15301, Class 1, which exempts the operation, leasing, or minor alteration of existing facilities; and

2. Accept the required findings and approve a Use Permit for a new aesthetician business at 1119 Hunt Avenue, Suite B.

Planning and Community Improvement Director Noah Housh reported on the item.

Chair Hardy opened public comment.

Applicant, Tomoko Simons addressed the Commission.

Chair Hardy closed public comment.

Vice-Chair David Knudsen moved to approve staff recommendation. The motion was seconded by Commissioner John Ponte and on roll call carried by the following vote:

AYES: Lester Hardy, David Knudsen, Bobbi Monnette, and John Ponte

NOES: None

ABSENT: None

ABSTAIN: None

RECUSE: None

- 5.2 Review (and recommendation to the City Council) of an Ordinance amending and restating St. Helena Municipal Code (SHMC) Chapter 17.136.050 Temporary Uses, to create a Temporary Use Permit and an administrative review process for such permits, citywide.

CEQA Determination: The proposed Ordinance to amend St. Helena Municipal Code Title 17 is exempt from the requirements of CEQA pursuant to Guidelines Sections 15301, 15303, and 15304 as Class 1, Class 3 and Class 4 Categorical Exemptions in that these modifications create an administrative process for the temporary use, conversion or minor alteration of existing properties, which may include the construction, modification or conversion of "Small Structures" as defined in the statute, however only for temporary and set periods of time for the use of the land; that the proposed text amendments are consistent with the environmental impact analysis of the 1993 General Plan and Zoning Code EIR, given their intent to facilitate operation of temporary activities at existing facilities, and that the proposed changes are exempt from the requirements of CEQA, under Section 15061(b)(3) in that it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, and therefore, the activity is not subject to CEQA.

Prepared By: Noah Housh, Planning & Community Improvement Director

Recommendation:

It is recommended by the Planning and Community Improvement Department that the Planning Commission:

1. Find that the proposed Ordinance to amend St. Helena Municipal Code Title 17 is exempt from the requirements of CEQA pursuant to Guidelines Sections 15301, 15303, and 15304 as Class 1, Class 3 and Class 4 Categorical Exemptions in that these modifications create an administrative process for the temporary use, conversion or minor alteration of existing properties, which may include the construction, modification or conversion of "Small Structures" as defined in the statute, however only for temporary and set periods of time for the use of the land; that the proposed text amendments are consistent with the environmental impact analysis of the 1993 General Plan and Zoning Code EIR, given their intent to facilitate operation of temporary activities at existing facilities, and that the proposed changes are exempt from the requirements of CEQA, under Section 15061(b)(3) in that it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, and therefore, the activity is not subject to CEQA; and

2. Review, comment on and make a recommendation to the City Council on the proposed Ordinance making changes to Chapter 17.136.050 of the St. Helena Municipal Code.

Planning and Community Improvement Director Noah Housh provided a presentation to the Planning Commission.

No public comment received.

Commissioner John Ponte moved to approve staff recommendation and forward the proposed amendments to the City Council for approval. The motion was seconded by Commissioner Bobbi Monnette and on roll call carried by the following vote:

AYES: Lester Hardy, David Knudsen, Bobbi Monnette, and John Ponte

NOES: None

ABSENT: None

ABSTAIN: None

RECUSE: None

6. SCHEDULED MATTERS

6.1 None

7. DEPARTMENT REPORTS

Planning Director Noah Housh reported on the item.

8. AGENDA FORCAST

9. ADJOURNMENT

Chair Hardy adjourned the meeting at **8:15 P.M.**

The October 2, 2018 minutes were amended and approved at the _____
Planning Commission meeting.

APPROVED:

ATTEST:

Lester Hardy, Planning Commission Chair

Noah Housh, Planning and Community
Improvement Director



PLANNING COMMISSION REPORT
Planning Commission Meeting of October 16, 2018

AGENDA SECTION: Public Hearing

FILE NUMBER: PL18-005

SUBJECT: Request by Brian Moore on behalf of Verizon Wireless for adoption of a resolution granting use permit and design review approval in order to place a 12 foot high addition on an existing PG&E tower to accommodate 6 new panel antennas and associated equipment on the property located near the 1600 block of Grayson Avenue in the A-20 zoning district.

PREPARED BY: Aaron Hecock, Senior Planner

REVIEWED BY: Noah Housh, Planning & Community Improvement Director

APPROVED BY: Noah Housh, Planning & Community Improvement Director

APPLICATION FILED: 01/11/18

ACCEPTED AS COMPLETE: 06/06/18

LOCATION OF PROPERTY: 1600 Block Grayson Avenue

APN: 009-280-041

GENERAL PLAN/ZONING: Agriculture (AG) / Twenty-Acre Agriculture (A-20)

APPLICANT: Verizon Wireless

PHONE: (510) 480-5574

BACKGROUND

This application was originally presented at the June 19, 2018 meeting of the City of St. Helena Planning Commission where it was continued to a date certain (July 3, 2018) in order for the applicant and City to come to agreement on the wording of several conditions of approval. Additionally, the Planning Commission expressed a desire for alternative antenna designs to lessen the aesthetic impact of the tower addition. At the July 3, 2018 Planning Commission meeting a public hearing was opened where no one commented on the project and the item was again continued at the applicant's request

to a date certain (July 19, 2018). At the publicly noticed July 19, 2018 Planning Commission meeting, a public hearing was opened where one member of the public spoke in support of the proposed project due to existing coverage dead zones and the need for immediate information and alerts in situations like the 2017 wildfires. Subsequently, this item has been continued several other times in order for the applicant and City to address aesthetic and process issues. This meeting (October 16, 2018) was duly noticed in the newspaper and to all neighbors within 500 feet.

As a result of aesthetic concerns voiced by neighbors and the Planning Commission, the applicant considered alternative design solutions including lowering the antennas and moving antennas from the corners of the extensions to the middle portions of the extensions, however they consider these options unviable as they would not achieve the desired coverage objective and would become even more noticeable according to the applicant. Alternatively, the applicant is proposing to install 3M concealment film on the antennas (see attached spec sheet for more information on the film). According to the applicant, the concealment film mirrors its surroundings, in this case the sky, thereby making the antennas "virtually invisible".

As discussed at a previous meeting, the filing of an initial application for a new Wireless Communications Facility (WCF) commences a 150-day deadline for the City to make a decision whether to grant the application. If the City fails to rule on an application within this period of time, and the provider has served the requisite public notices and notified the agency that the timeline has passed, the application will be deemed approved. As such, the City and Verizon Wireless have entered into a second tolling agreement thereby "pausing" the shot-clock until November 30, 2018 (the original tolling agreement expired on October 1, 2018).

It should also be noted that a series of 80+ feet tall PG&E lattice towers traverse the City of St. Helena in an east/west direction. The property on which the existing lattice tower is located is approximately 11.27 acres and is currently planted with vineyards. Furthermore, the City has no standalone telecommunications ordinance, therefore the City is utilizing existing relevant code sections and Federal law to analyze the project (discussed below).

PROJECT DESCRIPTION

The applicant wishes to install a 12 foot extension on an existing 83'1" PG&E lattice tower in order to accommodate 6 new wireless panel antennas and associated equipment including remote radio units (RRUS), raycaps (surge protection), cables, etc. The antennas would be wrapped in a 3M concealment film in order to reduce their visual impact. The proposed project includes a 13' x 13' concrete pad that would be enclosed with a 6' high wood fence in order to house equipment cabinets, meters, a transformer and possibly an emergency generator (if approved by PG&E). This 169 square foot area would be located within the footprint of the existing lattice tower (essentially directly underneath the tower itself).

Primary access to the site would be from existing access roads via Grayson Avenue. The site can also be reached by several vineyard maintenance roads that connect to Charter Oak Avenue.

ANALYSIS

Federal Communications Commission (FCC)

Communication Act Section 332(C)(7) - Regulatory Treatment of Mobile Services

Preservation of Local Zoning Authority

(A) General authority

Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

(B) Limitations

(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof:

(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

(iii) Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

(C) Definitions for purposes of this paragraph:

(i) the term "personal wireless services" means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(ii) the term “personal wireless service facilities” means facilities for the provision of personal wireless services; and

(iii) the term “unlicensed wireless service” means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v) of this title).

Staff Response: As noted above, Section 332(C)(7) of the Communications Act preserves state and local authority over zoning and land use decisions for personal wireless service facilities, but sets forth specific limitations on that authority. Specifically, a state or local government may not unreasonably discriminate among providers of functionally equivalent services, may not regulate in a manner that prohibits or has the effect of prohibiting the provision of personal wireless services, must act on applications within a reasonable period of time, and must make any denial of an application in writing supported by substantial evidence in a written record. The statute also preempts local decisions premised directly or indirectly on the environmental effects of radio frequency (RF) emissions, assuming that the provider is in compliance with the Commission's RF rules. Allegations that a state or local government has acted inconsistently with Section 332(C)(7) are to be resolved exclusively by the courts.

The 9th Circuit has acknowledged that the Act itself does not provide the legal basis for denial, the authority for denial must be found in the local agency's laws (MetroPCS, Inc. v. City of San Francisco, 400 F.3d 715, 723-724 (9th Cir. 2005). Thus, if the municipal code allows for consideration and denial of an application based on factors such as aesthetic impacts, views, or specific goals, aesthetics, height, etc., then there may be grounds for denying the application but the record must provide substantial evidence for the denial through clear findings supported by evidence in the record and/or testimony.

With respect to prohibiting or effectively prohibiting the provision of personal wireless services, if the applicant can show that the proposed cell tower would fill a significant gap in the applicant's cell coverage and that the proposed wireless facility is the least intrusive means of filling that significant gap in coverage, then the local government must allow the wireless facility under the Act (MetroPCS v. San Francisco (9th Cir. 2005) 400 F.3d 715.).

CEQA

The project is exempt from the requirements of CEQA pursuant to Section 15301 which exempts the operation, permitting, leasing, licensing or minor alteration of existing public or private structures including minor additions to existing structures and Section 15303 which exempts the new construction or conversion of small structures.

GENERAL PLAN

The subject property exhibits a General Plan Land Use designation of Agriculture (AG). The AG designation provides for agricultural uses, wineries, single-family residences, and public and quasi-public uses. The AG designation is applied to extensive areas of the valley floor that surround the urban core area. With the exception

of those hillside areas designated Woodlands and Watershed (WW), all lands outside the Urban Limit Line are designated AG regardless of their actual size or actual use. General Plan Policies applicable to the proposed project include the following:

- 2.6.1 - *New development should be required to occur in a logical and orderly manner within well-defined boundaries, and be consistent with the ability to provide urban services.*
- 4.3.4 - *Strengthen community identity by appropriate building design, size, and site landscaping.*
- 4.6.1 - *Retain key undeveloped open space areas where views to the vineyard or hills can be maintained. Require that these areas be planted in vines or other low vegetation.*

Staff Response: Staff has concluded that the proposed project is consistent with the General Plan policies listed above in that in that the antennas would be located on an existing PG&E tower in an area designated for agricultural uses, is above the visual plane of most viewers and does not expand on the foot print of the existing development or otherwise impact the agricultural use or plantings.

ZONING

Consistent with the Agricultural Land Use Designation, the site exhibits a zoning designation of Twenty-Acre Agriculture (A-20). The A-20 designation provides for agricultural and residential uses. With the exception of those hillside areas designated woodlands and watershed, and wineries designated winery, all lands outside the urban limit line are designated A-20 regardless of their size or use. The purpose of the A-20 district is to promote and implement the policies of the general plan to preserve agricultural land uses and provide for future orderly development as the urban limit line is adjusted to accommodate urban growth. This district restricts the density of residential use and stipulates the location and area of residential development to promote preservation of agricultural land use and reduce impacts to the provision of infrastructure as the urban area of the city expands.

As noted above, the City has no standalone telecommunications ordinance, and while the existing PG&E lattice tower is not subject to city land use authority, SHMC §17.112.080(B) requires use permit approval in order to exceed height limitations for the following: radio and television transmitting antennas pursuant to SHMC §17.136.020; electric power transmission and distribution lines, poles and towers; and other buildings and structures which, in the opinion of the Planning Commission, are similar to those types of buildings and structures. As the project proposes to add additional height on to an existing electric power transmission tower in order to add wireless antennas, it can be argued that the proposed project fits into each of the categories listed as requiring a use permit. It should also be noted, SHMC §17.136.020(B)(8) states that *"No antenna shall be allowed directly under power lines and shall maintain at least ten (10) feet of horizontal clearance from the power lines"*; which could limit design alternatives when placing an antenna on an existing tower.

In addition, SHMC §17.164.050 (design review applicability) states that design review applies to *"(A)any new building or structure or for exterior addition to, alteration of, or modification of any existing structure or building as regulated by each of the established*

zoning districts". Therefore, as a proposed modification of existing structure design review approval shall be required in addition to a use permit as described above.

Staff Response: In the absence of a telecommunications ordinance, evaluation of the proposed project is reliant on SHMC §17.112.080(B), §17.136.020 and §17.164.050 within the limitations set by Federal Law. Under Federal law (the Telecommunications Act of 1996 and controlling Ninth Circuit cases), once an applicant has shown both that (a) a significant gap in coverage exists and (b) the proposed installation will be the least intrusive means of filling that gap, then the City must approve the proposed installation through its normal processes. In defining the "least intrusive means," the Ninth Circuit has ruled that the manner is the least intrusive on the community values sought to be protected by a potential denial. Here, given that the installation would be mounted on a PG&E tower and segregated from residential and commercial uses, the primary community value sought to be protected is the aesthetic value associated with the viewshed in the area.

The applicant has revised the proposed project to respond to the aesthetic concerns associated with its earlier submittals, and given the location of the coverage gap it appears that the proposed installation in its current form is now the least intrusive means of filling that significant gap. While the City does not have direct land use authority over the placement of or construction of PG&E towers, the City does have the power under Municipal Code §17.112.080 to authorize an electric power transmission tower to exceed normal height limitations and under §17.164.050 to consider design related concerns. This authority is important for situations such as this one, where the height exceedance is required not because of the power transmission activity but because of the placement of another facility on the tower. The permit application before the Commission, then, represents the City using its normal processes to permit the applicant to fill an existing coverage gap through the least intrusive means (as stated by the applicant).

USE PERMIT

The purpose of a use permit is to allow the proper integration in the City of essential or desirable uses which may be suitable only in certain locations or zoning districts, or to ensure that such uses are designed or arranged on the site in a particular manner. In its review of applications for use permits, the Planning Commission shall evaluate each proposed use in order to consider its impact on the city. Pursuant to Municipal Code Section 17.168 050, no use permit shall be granted unless the following findings can be made:

1. That the proposed use would not generate odors, fumes, dust, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community.
2. That the proposed use would not generate levels of noise that adversely affect the health, safety, or welfare of neighboring properties or uses.
3. That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan.

4. That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection, and fire protection.
5. That the proposed use would provide adequate ingress and egress to and from the proposed location.
6. That allowing the proposed use would not conflict with the City's goal of maintaining the economic viability of a local serving economy.
7. That the proposed use would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located.
8. That the proposed use would not be in conflict with the City's General Plan.
9. That the proposed use would not be injurious to public health, safety, or welfare.
10. That granting the use permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the City or would be in conflict with the General Plan.
11. That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long term parking needs of employees and business owners and customers is available.
12. That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed use.

Staff Response: The proposed addition of wireless antennas on the existing lattice tower would represent a minimal change in use from what currently exists and would result in relatively minor impacts associated with this change in use. The location, height, and distance of the antennas reduce their overall visibility to the general public. Co-locating the wireless antennas on an existing PG&E tower in a predominately agricultural area prevents the need of erecting antennas in neighborhoods or adjacent Main Street. Furthermore, additional wireless antennas on the valley floor will increase communication capabilities which could be advantageous in the event of a natural disaster. For these reasons, staff believes that the proposed project is consistent with the required use permit findings listed above.

DESIGN REVIEW

The purpose of design review is to, among other things, promote the qualities that bring value to the community and foster attractiveness and functional utility of the community as a place to live and work. Pursuant to Municipal Code Section 17.164.030, the following design criteria should be considered by the Planning Commission in review of this application:

1. Consistency and compatibility with applicable elements of the general plan;
2. Compatibility of design with the immediate environment of the site;
3. Relationship of the design to the site;
4. Determination that the design is compatible in areas considered by the board as having a unified design or historical character;

5. Whether the design promotes harmonious transition in scale and character in areas between different designated land uses;
6. Compatibility with future construction both on and off the site;
7. Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;
8. Whether the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;
9. Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;
10. Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;
11. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;
12. Whether natural features are appropriately preserved and integrated with the project;
13. Whether the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions;
14. In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character;
15. Whether the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site;
16. Whether plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena;
17. Whether sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials.

Staff Response: The applicant has demonstrated that the proposed antennas will help fill a coverage need and the placement of antennas on an existing tower is far less intrusive and disruptive than erecting a new tower somewhere else in town. The proposed addition of wireless antennas on the existing lattice tower would be a minimal visual change as the site is largely agricultural area where existing lattice towers are part of the existing visual character. Additionally, the location, height, and distance of the antennas reduce their overall visibility. Co-locating the wireless antennas on an existing PG&E tower in a predominately agricultural area is a better design alternative to erecting antennas in neighborhoods and/or adjacent Main Street. Furthermore, additional wireless antennas on the valley floor will increase communication capabilities

which could be advantageous in the event of a natural disaster. For these reasons, staff believes that the proposed project may be consistent with the required design review findings listed above.

HISTORIC RESOURCES

The existing PG&E tower is not listed on the City's Historic Resources Master List nor is the property located in one of the City's three historic districts as described in the 1993 General Plan.

Staff Response: For the reasons stated above, construction associated with the proposed project will not detract from or be incompatible with existing historic districts or structures.

ISSUES

With respect to radio frequency emissions, a local government may not consider the environmental effects of those emissions in making its decision (see *AT&T Wireless v. City of Carlsbad* (S.D. Cal. 2003) 308 F.Supp.2d 1148). This means that a local government cannot base its decision on the direct environmental effects of radio frequency emissions, or on any indirect effects radio frequency emissions may cause. Indirect effects include any effects radio frequency emissions may have on property values or public health. While the city may undoubtedly hear residents' concerns over the health effects of RF emissions, such concerns do not constitute a legitimate basis to deny an application. The attached RF report notes that the proposed antennas would have an RF exposure level at approximately 1% of the applicable public exposure limit.

Also, as previously noted, the City and Verizon Wireless have entered into a Tolling Agreement thereby "pausing" the FCC shot-clock until November 30, 2018. If the City fails to rule on this application by that date, and the provider has served the requisite public notices and notified the agency that the timeline has passed, the application will be deemed approved.

CORRESPONDENCE

Staff received four (4) comment letters related to this application (3 are from 1 individual) that are attached to the end of this report. One commenter expresses general concern about height, visual mass, and potential radiation exposure. The second commenter requests that any additional antennas be reviewed (this would be required) and that obsolete/unused antennas be removed. A condition of approval has been added requiring that obsolete and/or unused antennas be removed within 60 days.

STAFF RECOMMENDATION

For the reasons described above, staff recommends that the Planning Commission:

1. Determine that the project is exempt from the requirements of CEQA pursuant to Section 15301 and 15303; and

2. Consider the required findings enumerated in SHMC Sections 17.164.030 and 17.168.050 and adopt a resolution to approve, modify or deny a use permit and design review for the proposed addition of wireless antennas on the existing PG&E tower located near the 1600 block of Grayson Avenue.

ATTACHMENTS

[Resolution of Approval](#)

[APN Map](#)

[Applicant Package 7.27.18](#)

[Applicant's Use Permit Statement](#)

[Plan Set 7.27.18](#)

[RF Report](#)

[Public Comments](#)

**CITY OF ST. HELENA PLANNING COMMISSION
RESOLUTION NO.
GRANTING USE PERMIT AND DESIGN REVIEW APPROVAL TO
1600 BLOCK GRAYSON AVENUE (File No. PL18-005)**

PROPERTY OWNER: Pacific Gas & Electric (PG&E)

APN: 009-280-041

Recitals

1. On January 11, 2018 Brian Moore on behalf of Verizon Wireless submitted an application for design review approval in order to place a 12 foot high addition on an existing PG&E tower to accommodate 6 new panel antennas and associated equipment on the property located near the 1600 block of Grayson Avenue in the A-20 zoning district;
2. A Notice of Application was sent to all residents and property owners within 500 feet of the subject parcel on February 2, 2018 informing them of the design review application and notifying them that they may submit written comments on the application;
3. A public notice was published in the Napa Valley Register and mailed to residents and occupants within 300 feet of the project site in compliance with state and local law for the public hearings held on June 19, 2018; July 19, 2018; September 4, 2018 and October 16, 2018;
4. The Planning Commission of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on June 19, 2018 where the item was continued to a date certain (July 3, 2018); on July 3, 2018 the item was again continued to a date certain (July 17, 2018); on July 17, 2018 the item was continued to a date uncertain; at a duly noticed public hearing on September 4, 2018 the item was continued to a date certain (September 18, 2018); on September 18, 2018 the item was again continued to a date uncertain.
5. On July 10, 2018, the City of St. Helena and Verizon Wireless entered into a Tolling Agreement extending the FCC shot clock to October 1, 2018.
6. On September 5, 2018, the City of St. Helena and Verizon Wireless entered into a Tolling Agreement extending the FCC shot clock to November 30, 2018.
7. On October 1, 2018 the applicant filed the requisite application for a Use Permit.
8. The Planning Commission of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on October 16, 2018 where they formally voted to adopt a resolution to grant design review approval as requested by Verizon Wireless; and
9. Now, therefore let it be found that, the Planning Commission approves the Use Permit and Design Review permit and authorizes the modifications contained in said plans based on the findings below and subject to the conditions of approval enumerated herein.

1600 Block Grayson Avenue
Use Permit & Design Review - Approval
October 16, 2018

Resolution

- A. In making the findings in this Resolution, the Planning Commission relied upon and hereby incorporates by reference all of the documents referenced in this Resolution and the associated staff reports, City files for this matter, correspondence, presentations and other materials.

- B. The Planning Commission hereby finds that the project is exempt from the requirements of CEQA pursuant to Section 15301 which exempts the operation, permitting, leasing, licensing or minor alteration of existing public or private structures including minor additions to existing structures and Section 15303 which exempts the new construction or conversion of small structures.

- C. In accordance with Municipal Code Section 17.168.050, the Planning Commission makes the following use permit findings to support the motion to approve the use permit:
 - 1. *That the proposed use would not generate odors, fumes, dust, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community in that the project is the addition of wireless antennas on an existing lattice tower in an area designated for agricultural uses and the proposed antennas would have an RF exposure level at approximately 1% of the applicable public exposure limit.*
 - 2. *That the proposed use would not generate levels of noise that adversely affect the health, safety, or welfare of neighboring properties or uses in that the addition of wireless antennas on an existing lattice tower is not anticipated to generate increases in noise, traffic or other external activities on-site.*
 - 3. *That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan as the addition of wireless antennas on an existing lattice tower will not generate additional traffic noise.*
 - 4. *That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection, and fire protection given that the project consists of the addition of wireless antennas on an existing lattice tower.*
 - 5. *That the proposed use would provide adequate ingress and egress to and from the proposed location as ingress and egress would not change due to the addition of antennas on the existing lattice tower.*
 - 6. *That allowing the proposed use would not conflict with the City's goal of maintaining the economic viability of a local serving economy in that the proposed antennas would provide greater and more reliable communication capabilities.*
 - 7. *That the proposed use would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located as the proposed use would occur on an existing lattice tower in an area designated for agricultural uses and no agricultural uses would be affected by the addition of wireless antennas on an existing lattice tower.*

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8. *That the proposed use would not be in conflict with the City's General Plan in that the addition of wireless antennas on an existing lattice tower in an area designated for agricultural uses would be minimally visually impactful and could add to the City's communication capabilities in the event of a natural disaster.*
 9. *That the proposed use would not be injurious to public health, safety, or welfare in that the project is the addition of wireless antennas on an existing lattice tower in an area designated for agricultural uses and the proposed antennas would have an RF exposure level at approximately 1% of the applicable public exposure limit.*
 10. *That granting the use permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the City or would be in conflict with the General Plan in that this use permit only applies to this property and to these specific uses; future applications are reviewed on a case-by-case basis subject to the constraints of each site and the specific operational characteristics proposed with each application.*
 11. *That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long term parking needs of employees and business owners and customers is available in that a parking plan is not required nor necessary at the project consists of adding wireless antennas to an existing lattice tower in an area designated for agricultural uses and no parking employees, owners, or customers is necessary.*
 12. *That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed use in that the proposed use will occur on an existing lattice tower, will generate very little traffic and can adequately be served by existing streets.*
- D. In accordance with the design review criteria identified in Municipal Code Section 17.164.030, the Planning Commission finds that the project demonstrates the following:
1. *Consistency and compatibility with applicable elements of the general plan in that the project consists of constructing wireless antennas on an existing lattice tower in an agriculturally zoned area;*
 2. *Compatibility of design with the immediate environment of the site in that the proposed addition of wireless antennas on the existing lattice tower would be a minimal visual change as the site is largely agricultural area where existing lattice towers are part of the existing visual character;*
 3. *Relationship of the design to the site in that the project consists of constructing wireless antennas on an existing lattice tower in an agriculturally zoned area;*
 4. *That the design is compatible in areas considered by the board as having a unified design or historical character in that the proposed location is not located in a historical area nor in an area of with a unified design;*
 5. *That the design promotes harmonious transition in scale and character in areas between different designated land uses in that the project is the addition of*

wireless antennas on an existing lattice tower in an area designated for agricultural uses;

- 6. Compatibility with future construction both on and off the site in that the project consists of the addition of wireless antennas on an existing lattice tower in an area designated for agricultural uses;*
- 7. That the architectural design of structures and their materials and colors are appropriate to the function of the project in that the antennas will be attached to an existing lattice tower;*
- 8. That the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community in that the wireless antennas will be attached to an existing lattice tower;*
- 9. That the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures in that the addition of wireless antennas to the existing lattice tower will not affect any open space or landscaping.*
- 10. Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept in that the addition of wireless antennas on an existing lattice tower in an area designated for agricultural uses;*
- 11. That access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles in that access to the site will remain via Grayson Avenue and several other vineyard access roads;*
- 12. That natural features are appropriately preserved and integrated with the project in that the addition of wireless antennas to the existing lattice tower will not affect any natural features;*
- 13. That the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structures and functions in that the wireless antennas will be attached to an existing lattice tower;*
- 14. In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character in that the proposed location is not located in an historical area nor in an area of with a unified design;*
- 15. That if the applicant incorporates a landscape design concept for the site, then the relationship of plant masses, open space, scale, plant forms and foliage textures and colors should create a desirable and functional environment and demonstrate that the landscape concept depicts an appropriate unity with the various buildings on the site;*
- 16. That if the applicant incorporates a landscape design concept for the site, plant material used is suitable and adaptable to the site, capable of being properly*

maintained on the site, and is of a variety which is suitable to the climate of St. Helena in that no landscaping is proposed or will be affected by the addition of wireless antennas to the existing lattice tower;

17. *That sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials in that project related construction is required to meet all California Building Codes and City of St. Helena development standards.*

Planning Department Conditions of Approval

- E. The Planning Commission approves design review for the above-described project with the following conditions of approval. The conditions noted below are particularly pertinent to this permit and shall not be construed to permit violation of other laws and policies not so listed.
 1. The project shall be in conformance with all city ordinances, rules, regulations and policies in effect at the time of issuance of a building permit.
 2. The design review shall be vested within one (1) year from the date of final action. A building permit for the use allowed under this approval shall have been obtained within one (1) year from the effective date of this action or the approval shall expire, provided however that the approval may be extended for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.130, Extension of Permits and Approvals.
 3. Any request for an extension of this approval shall be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.
 4. The approvals shall not become effective until fourteen (14) calendar days after approval, providing that the action is not appealed by the City Council or any other interested party within that 14-day period.
 5. All required fees, including planning fees, development impact fees, residential in-lieu housing fees, building fees, toilet retrofit fees, and St. Helena Unified School District fees shall be paid prior to issuance of a building permit. Fees shall be those in effect at the time of the issuance of the building permit.
 6. Pursuant to City Council Resolution 2003-65, the owner and applicant are informed of the following:

In recognition of the need for additional affordable housing, and to mitigate the effects of this development on the supply and demand of affordable housing, the permittee shall be subject to a Housing Impact Fee, an inclusionary requirement, an in-lieu fee, and/or similar fair and appropriate mechanisms, to provide funds for or to develop additional affordable housing. Pursuant to City Code Chapter 17.146.040, the Housing Impact Fee for telecommunications facilities are determined on a case by case basis. The fee, if applicable will be determined by the Building Department upon submittal of a building permit application.

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7. Compliance with all permit conditions shall occur in accordance with specific regulations but in all cases no later than prior to occupancy or initiation of use unless another time is set by law or by this approval. Occupancy or final inspection of a project may be withheld if all conditions, including payment of fees for services rendered by the City, are not met.
8. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind, so long as the City reasonably promptly notifies the applicant of any such claim, action, or proceedings and the City cooperates fully in the defense of the action or proceedings.
9. Provided they are in general compliance with this approval, minor modifications may be approved by the Planning Director.
10. Pursuant to St. Helena Municipal Code Section 17.08.110, this permit shall run with the land and shall be binding upon all parties having any right, title or interest in the real property or any part thereof, their heirs, successors and assigns, and shall inure to their benefit and benefit of the City of St. Helena.
11. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The property owners or their designee shall be responsible for meeting with the Building Official, Fire Inspector and or Public Works Department to review compliance with Building Codes, Fire Codes and specific Public Works Standards including fire protection systems and any applicable accessibility standards of Title 24.
12. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on October 16, 2018, except as modified herein.
13. During construction, the project site shall be adequately fenced and secured to prevent trespassing.
14. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
15. The equipment screening fence directly below the lattice tower shall be constructed of wood; chain-link or other materials are not permitted.
16. Should any installed antennas become obsolete or are no longer used they must be removed with 6 months of their last day of use.
17. The antennas must be wrapped in 3M Concealment Film.
18. Prior to receiving a final building permit, the applicant must file for an address addition with the City of St. Helena Building Department so that the Fire Department can locate the property in an expeditious manner should they need to respond to the site.
19. To reduce disturbance of residents in the project vicinity, construction activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through

Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3) other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The City Engineer must be notified and give approval in advance of such work. No construction activities shall occur on Sundays or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.

Public Works Department Conditions of Approval

20. Approval of this project shall be subject to the requirements of, and all improvements shall be designed and constructed in accordance with, the most current version at the time of improvement plan submittal, Caltrans Standards and Specifications, the City of St. Helena Municipal Code, the St. Helena Water and Sewer Standards, the St. Helena Street, Storm Drain and Sidewalk Standards, and all current federal, state and county codes governing such improvements.
21. Erosion and sediment control best management practices shall conform to the latest State and City codes at a minimum.
22. There are City water and sewer utility mainline and service laterals located on Grayson Avenue. The applicant shall provide plans showing all these utilities prior to issuance of their building permit.
23. The applicant shall field verify all utility locations in close proximity of the project prior to construction and notify the City Public Works Department immediately when City utility conflicts are encountered.
24. All proposed utility junction boxes located within the public right of way will be traffic-rated.
25. The applicant shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards prior to Certificate of Occupancy.
26. Existing streets being cut by new utility services will require edge grinding and an A.C. overlay per City standards, extent to be determined by the Public Works Department.
27. An encroachment permit shall be required for any work performed in the public right of way.

Building Department Conditions of Approval

28. A building permit is required for all onsite demolition, construction and/or change of occupancy.
29. The applicant will be required to comply with the codes adopted at the time the applicant applies for a building permit. At this time the City of St. Helena utilizes the 2016 Title 24 codes.

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30. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.
31. The applicant shall provide a construction waste management plan with the building permit application.
32. The plans for construction shall include a checklist for compliance with the California Green Buildings Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.
33. When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.
34. Building Permit application materials and plans shall include any documentation pertaining to special loads applicable to the design and the specified section of the code that addresses the condition; special inspections for any systems or components requiring special inspection; requirements for seismic resistance; and a complete list of deferred submittals at time of application. Any deferral of the required submittal items shall have prior approval of the Building Official however deferral of fire sprinkler design is not allowed.

Fire Department Conditions of Approval

35. If diesel or propane fuels are to be used for an on-site generator, Fire Department review is required.

I HEREBY CERTIFY that the foregoing design review application was duly and regularly approved by the Planning Commission of the City of St. Helena at a regular meeting of said Planning Commission held on October 16, 2018 by the following roll call vote:

AYES:

NOES:

ABSENT:

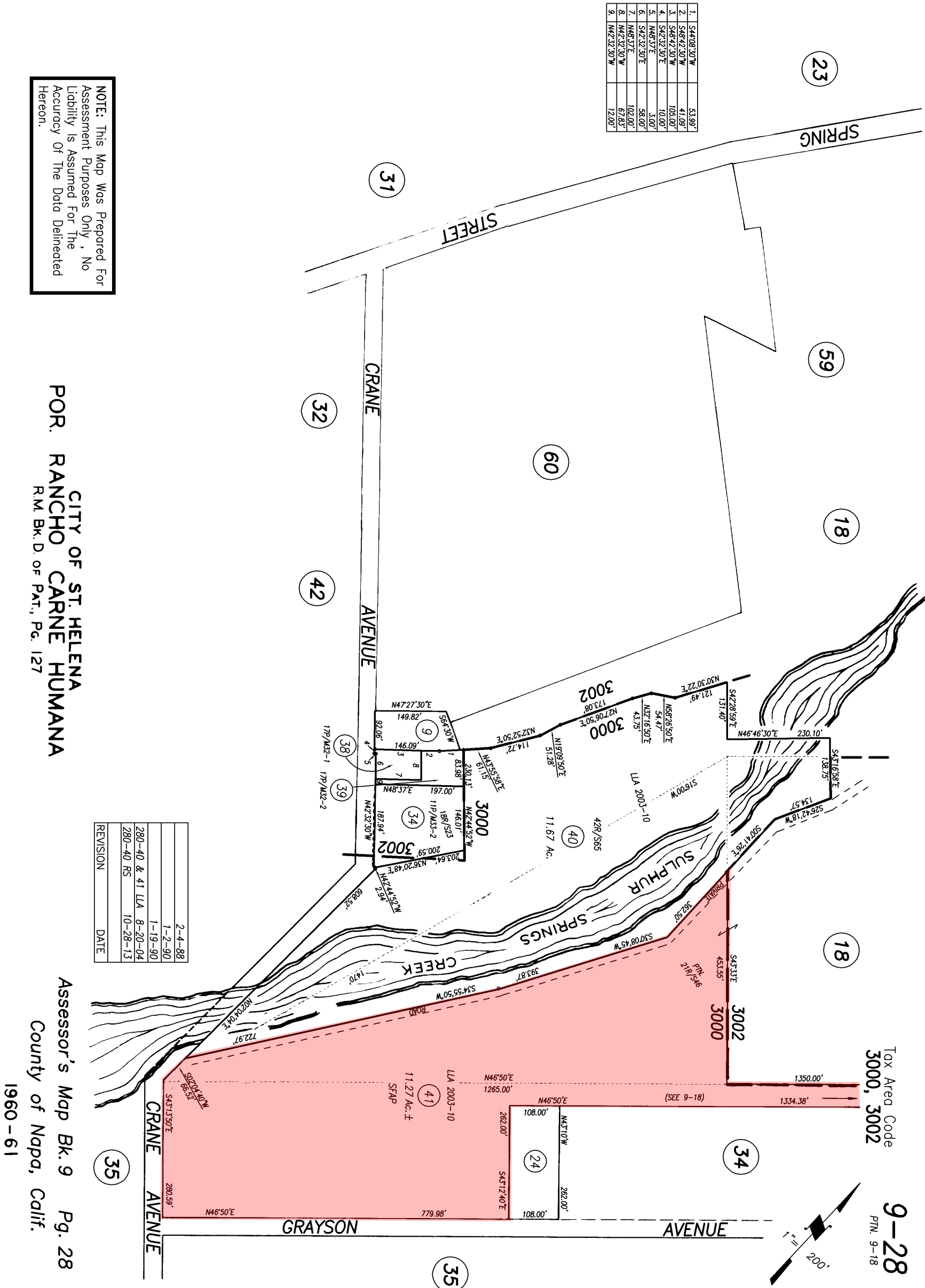
ABSTAIN:

APPROVED:

ATTEST:

Lester Hardy
Chair, Planning Commission

Noah Housh
Planning Director





Brian Moore, Project Manager
J5 Infrastructure Partners LLC
1150 Ballena Boulevard, Ste. 259
Alameda, CA 94501

July 27, 2018

Aaron Hecock, AICP
Senior Planner
City of St. Helena
1480 Main Street
St. Helena, CA 94574
707-967-2792
aaronh@cityofsthenela.org

RE: Revised Project Description in support of Verizon Wireless' installation of telecommunications facility on existing PG&E lattice tower located at 1401 Charter Oak Avenue, St. Helena, CA 94574

1. Background

Verizon Wireless ("Applicant") proposes to install and operate an unmanned wireless telecommunications ("Development") facility at 1401 Charter Oak Avenue, St. Helena, CA 94574 / APN: 009-280-041-000 ("Property") on an existing PG&E lattice tower.

On June 19, 2018, Applicant attending the scheduled Planning Commission Hearing to consider Applicant's Development. Applicant requested a continuance at the hearing to address concerns about proposed Conditions of Approval. However, Planning Staff and Applicant thought it was important to hear about the concerns expressed by neighbors of Development and Commissioners on Planning Board regarding the aesthetics of the antennas proposed to be located on top of an existing PG&E lattice tower.

Both Applicant and Planning Staff were concerned about the Shot Clock expiring, so a tolling agreement was executed between Applicant and the City of St. Helena that tolled the Shot Clock to October 1, 2018. The additional time ensured that both the City of St. Helena and Applicant could work together to address the aesthetic concerns of the Development.

2. Design Change



To address aesthetic concerns voiced by neighbors and Planning Commission, Applicant, revised the design of the Development by proposing to install concealment film on the antennas making them virtually invisible. The concealment film mirrors its surrounding. So, in this case, the antennas will be located at 95' 1" in the air. The antennas at that height would reflect the sky making them virtually invisible.

Attached are revised photo simulations (EX. A); data sheet(s) for the concealment film (EX. B); and revised site plan indicating the use of concealment film on the antennas (EX. C).

Applicant, looked at lowering the antennas, however, this option is not viable as Applicant would not achieve the desired coverage objective since Applicant would have to attach antennas below conductor only allowing for a RAD center of approximately 40'. More importantly, the antennas at a 40' RAD center would be even more visible to the neighbor adjacent to Development.

Additionally, Applicant discussed with PG&E alternative design solutions, however, the only acceptable alternative was to move antennas from the corners of the extension, to the middle portions of the extensions. See, attached photo (EX. D). However, this design is even more noticeable vs. proposed design. The proposed design takes advantage of the existing characteristics of the mass of the legs of the lattice tower whereas relocating antennas in between the legs of the extension of lattice tower stands out as nothing of similar mass or characteristic are present at these locations.

3. Current Use of Property & Proposed location of Development

The Property's current use is a vineyard and the Development is located on the Southwestern portion of Property, over 850' away from Charter Oak Avenue. Applicant proposes to install antennas on the existing PG&E lattice tower, and the equipment shelter would be situated nicely underneath the existing lattice tower surrounded by a 6' tall wooden fence. Applicant proposes to conceal antennas using a concealment film making antennas virtually invisible.

4. Coverage Objective

Applicant's coverage objective is to provide wireless phone and internet service to the Town of St. Helena. This site is part of a larger infill project designed to improve internet connectivity and voice coverage in the area as far as speed and reliant connectivity. Currently Applicant has four (4) sites as part of the larger infill project. These sites are: 1) Auberge Du Soleil located South East of proposed site; 2) Rutherford located South of proposed site; 3) Greystone located Northwest of proposed site; and 4) Angwin located North of proposed site. See, attached Coverage Map; (EX. E). The proposed site is centered in between the aforementioned four sites to mitigate the significant gap in coverage Applicant has in its network. The before and after coverage indicators on attached Coverage map illustrate the improvement of voice and data coverage the town of St. Helena will benefit from with the proposed site. Furthermore, Applicant's site selection of collocating its site on existing structure and not proposing to install a monopole is the least intrusive means since the existing structure is a lattice power tower. There will be minimal ground disturbance as the antennas



will be placed on existing tower and ancillary ground equipment will be located directly under the existing lattice tower.

5. Scope of Proposed Development

The scope of work will consist of the following:

- One (1) 12' tower extension
- Six (6) panel antennas two (2) per sector
- Six (6) RRU's at 92' on tower with two (2) per sector
- Three (3) RRU's at 22' on tower with one (1) per sector
- Two (2) Raycaps on tower
- Two (2) Raycaps in equipment area
- Two (2) Hybrid cables
- Three (3) Cabinets
- Twelve (12) 7/8" cable runs from RRU's at 22' on tower to antennas
- One (1) 13' x 13' concrete pad inside tower footprint
- One (1) 6' tall wooden fence surrounding 13' x 13' concrete pad.

6. Site Selection Process

Applicant, considered two (2) locations. First, Applicant considered 1401 Charter Oak Avenue which the property subject to this application. Second, Applicant considered a PG&E substation ("Substation") located at SE Corner of Mills Lane and Lafata Street, St. Helena, CA. The Substation did not afford a collocation opportunity and would require Applicant to erect a 70' tall mono-pine. It is Applicant's position to collocate whenever possible, and therefore Applicant selected the property at 1401 Charter Oak Avenue as it primary candidate, as there is an existing PG&E lattice tower that would allow Applicant to collocate on it minimizing impact in and around Property.

7. Existing Vegetation/Vegetation Removal

No vegetation will be removed from Property as the location of Development is underneath and within the footprint of the existing PG&E tower and/or on the tower itself and there is no vegetation at this location.



8. Site Photos

Below are photos of the following vantage points:

- Aerial
- Tower
- North
- West
- South
- East



Aerial





Tower





North





South





East





West



EX. A

Photo simulations-without 3m concealment film

Vs.

Photo simulations-3m concealment film added



INSTALL (6) NEW ANTENNAS, (6) RRU'S ON 12' TOWER EXTENSION



SET 1 - 6/24/18

ST HELENA & PINE

1600 Block of Grayson Ave St Helena CA 94574

[VIEW 1](#)



INSTALL (6) NEW ANTENNAS, (6) RRU'S ON 12' TOWER EXTENSION



SET 1 - 6/24/18

ST HELENA & PINE

1600 Block of Grayson Ave St Helena CA 94574

[VIEW 2](#)







INSTALL (6) NEW ANTENNAS, (6) RRU'S ON 12' TOWER EXTENSION



Rev 1 - 7/12/18

ST HELENA & PINE

1600 Block of Grayson Ave St Helena CA 94574

[VIEW 1](#)



INSTALL (6) NEW ANTENNAS, (6) RRU'S ON 12' TOWER EXTENSION

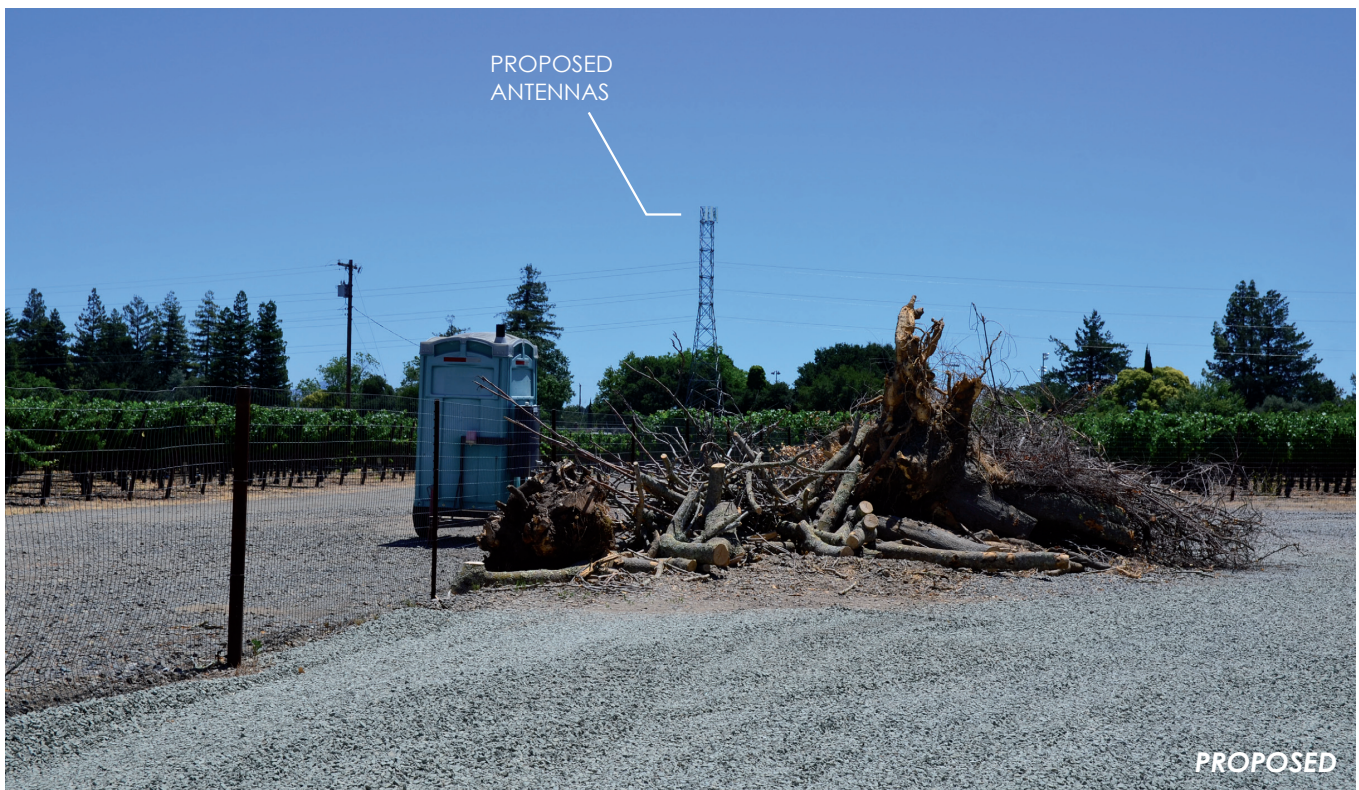


Rev 1 - 7/12/18

ST HELENA & PINE

1600 Block of Grayson Ave St Helena CA 94574

[VIEW 2](#)





EX. B

3M Concealment Film Data Sheets

The less you see, the better it looks.

New 3M™ Conceal Film is so advanced,
so revolutionary, it helps antennas blend
into their environment.

Can you spot the 3M Conceal Film?

Hint: Look right under the headline.

Not seeing is believing.



Without 3M™ Conceal Film



With 3M™ Conceal Film

New 3M™ Conceal Film utilizes 6 unique 3M technologies such as Light Management and Micro Replication to create a camouflage effect that helps reduce the visual impact of antennas. So ugly wireless infrastructure is transformed into more aesthetically pleasing landscapes.

Can you spot the business advantage?

As a result, 3M Conceal Film helps eliminate one of the main objections to cellular site acquisition—visual pollution. With the reduced visual clutter and crowding, it can help lower resistance to infrastructure expansion from building owners, municipalities and communities.

So now mobile operators can provide coverage and

Lm
Light
Management

Mr
Micro-
replication

Fi
Films

Ad
Adhesives

Pm
Polymer
Processing

We
Accelerated
Weathering

capacity their customers need with site acquisitions and antennas where they need them.

A Global Economy.

Because 3M Conceal Film is applied to wireless infrastructure, there is no need to build elaborate and expensive concealment structures such as faux trees, poles and rooftop facades.

And unlike paint, 3M Conceal Film can stand up to extreme weather conditions and has no impact on RF performance.

3M Conceal Film is currently being used around the world, from the U.S. to the U.K. From Sweden to Spain.

The less you see, the better it looks.

It's time to look at communications in a whole new way. Learn more about new 3M Conceal Film at **3M.com/ConcealFilm**.

3M



Communication Markets Division

3M™ Conceal Film

Product Description

3M™ Conceal Film is a new generation of 3M’s high performance non-metallic reflective film technology. Reflective over the full visible spectrum and RF-transmissive into the microwave range, 3M Conceal Film is specially formulated with an adhesive backing to provide long-life in outdoor environments and excellent UV irradiance stability. 3M Conceal Film is also optimized for glare reduction and contains a protective layer to provide abrasion resistance and permit mild cleaning.



3M™ Conceal Film



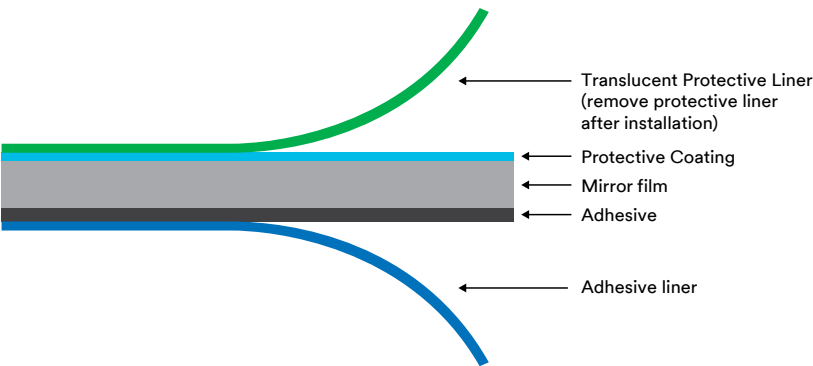
Features	Benefits
RF transparent, non-metallic	Does not affect cellular signal/RF transmission
Mirror-like surface adapts to changing weather conditions	Blends antenna into its environment, no custom color matching required
Light scattering properties	Helps reduce intensity of reflected sun glare
Expected performance life of 10 years (unwarranted period applied to a flat, vertical, outdoor surface)	Long-term outdoor performance with minimal maintenance
Abrasion resistant coating	Reduced mechanical erosion and wear
Easy, even application using 3M adhesive technology	Clean, no fuss installation
Utilizes existing mounting hardware	No change to today’s installation methods; less costly than custom solutions



Product Construction/
Material Description

3M™ Conceal Film is constructed using proprietary 3M technologies, combined to provide the ultimate in durable infrastructure concealment, while maintaining ease of installation. The core of 3M Conceal Film is a high efficiency mirror film constructed of alternating polymeric layers. It achieves broad band, high reflectivity without using any metal.

Protecting the mirror film is an overcoat that is field proven to provide years of UV protection as well as mechanical durability and abrasion resistance. The 3M Conceal Film is anchored to the object to be concealed using 3M™ Controltac™ Graphic Film with 3M™ Comply™ Adhesive system. This highly engineered adhesive provides simple, initially repositionable, bubble-free application using a “dry” application method.



3M™ Conceal Film

Property	Value
Total film thickness (with temporary protective film and adhesive liner)	16 mil (0.016 in., 0.406 mm)
Total film thickness (without temporary protective film and adhesive liner)	7 mil (0.007 in., 0.178 mm)
Construction	100% polymeric

3M™ Conceal Film Physical Properties and Performance Characteristics

Property	Method	Value
Photopic Reflectivity	ASTM E1164/E308	> 90 %
Dielectric constant	IEC 61189-2-721	2.80 @ 5.6 GHz
Dielectric loss tangent (tan δ)	IEC 61189-2-721	0.022 @ 5.6 GHz
Cold temperature exposure	IEC 60068-2-1	-55° C
Hot temperature/Dry exposure	IEC 60068-2-2	70° C
Hot temperature/Humid exposure	IEC 60068-2-78	40°C/95% RH
Adhesive		Pressure activated with air release channels
Adhesion (typical, 24 hours after application)	ASTM D3330	3 pounds/inch, FRP (fiberglass) 7 pounds/inch, PVC
Salt fog corrosion resistance	ASTM B117	5% salt solution, 720 hrs



3M, Controltac and Comply are trademarks of 3M Company.

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of 12 months from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.



Communication Markets Division
6801 River Place Blvd.
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EX. D

PG&E Alternative design

Agenda Item #5.1.



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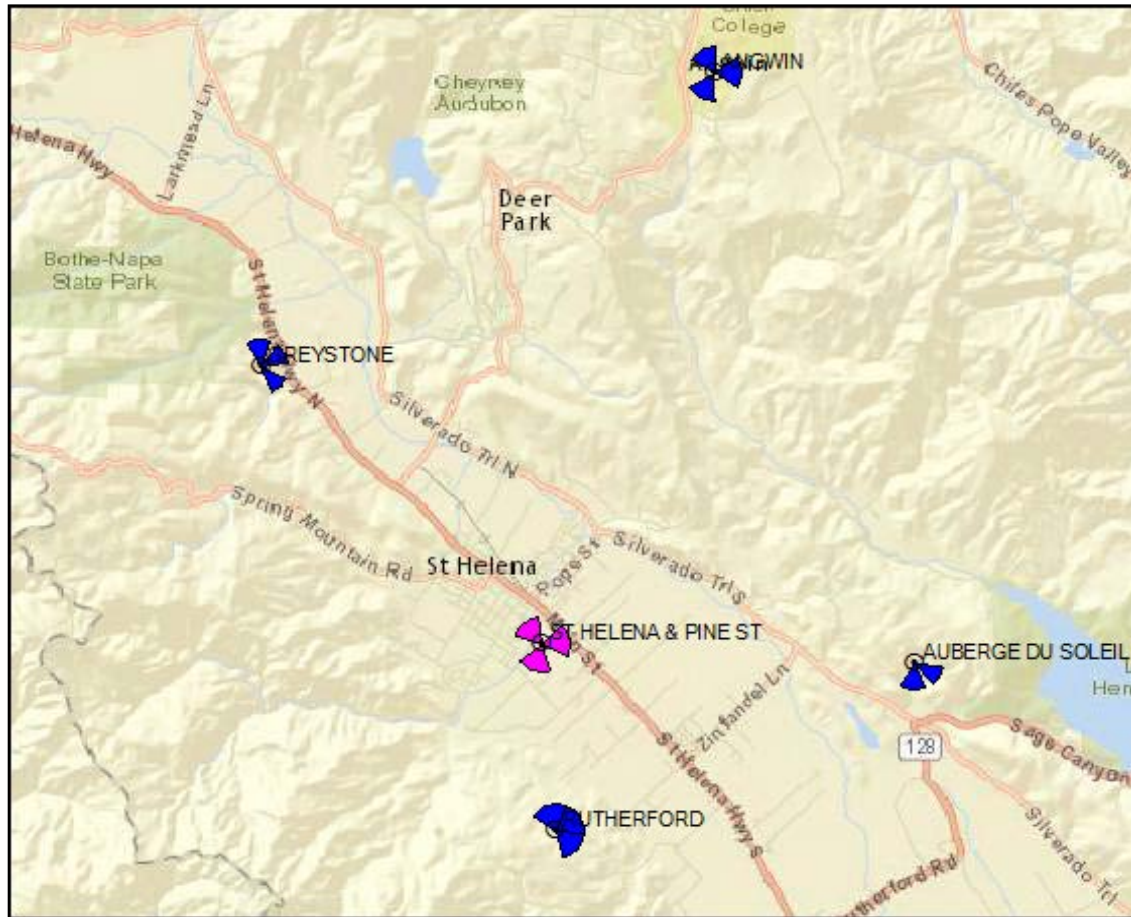
Agenda Item #5.1



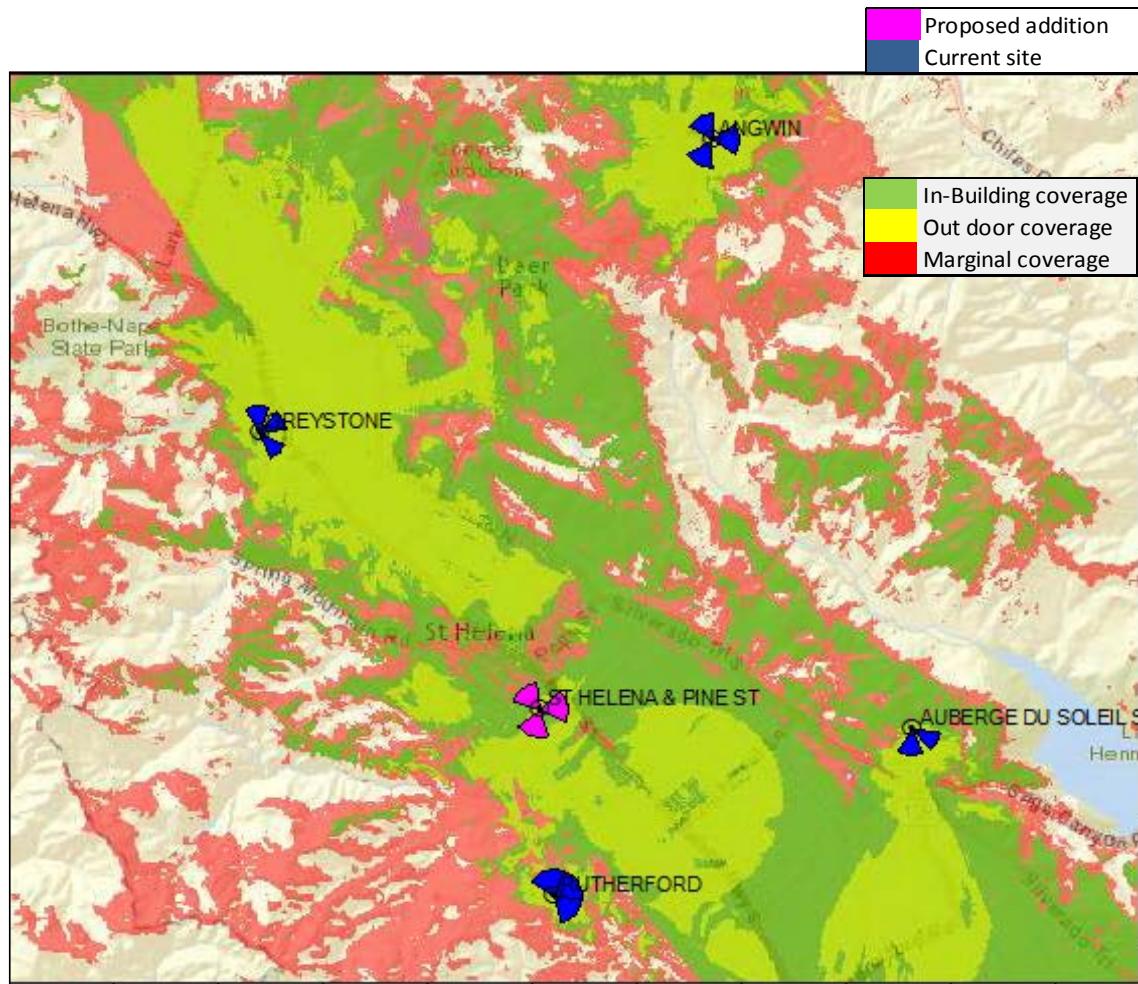
EX. E

Coverage Maps

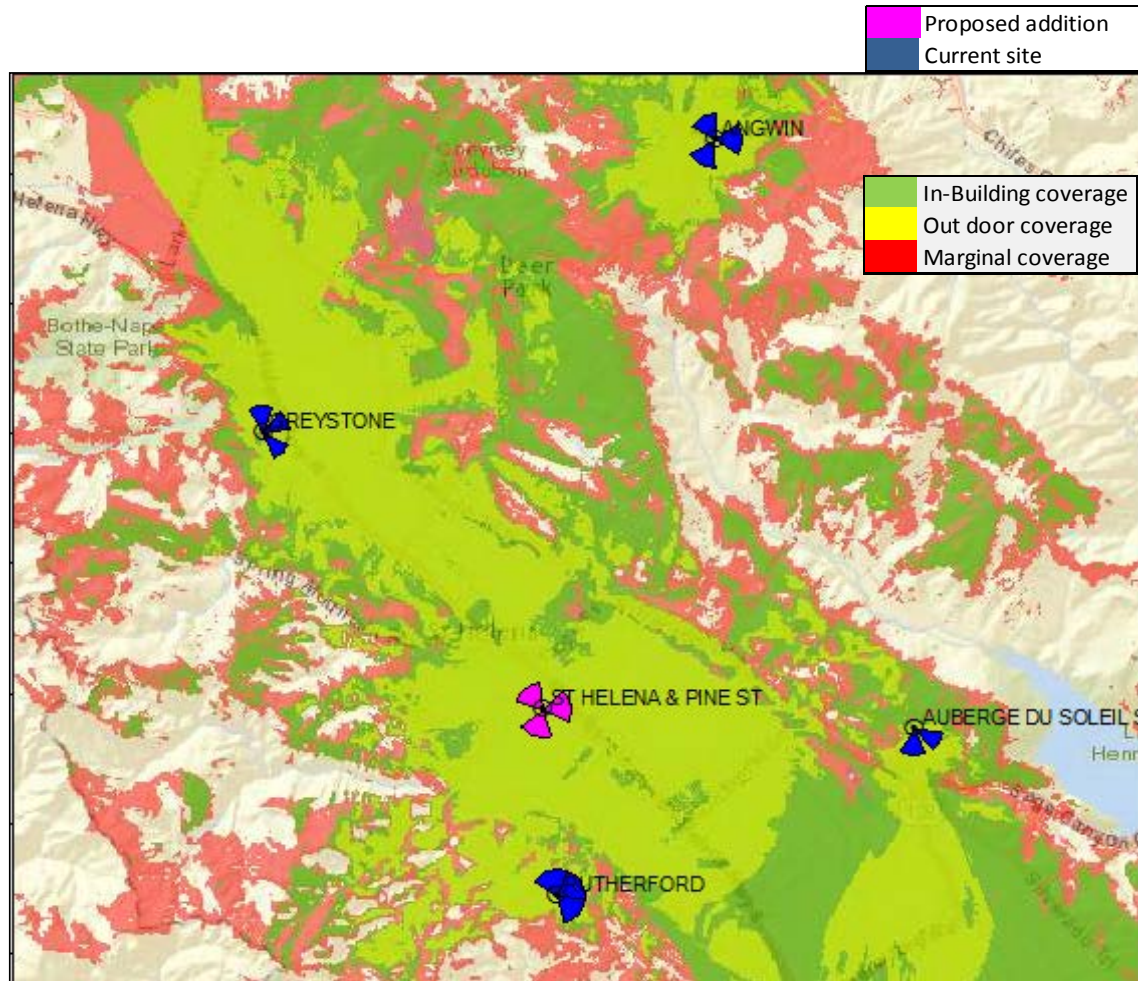
Coverage Area



Verizon Current Coverage



Verizon additional Coverage





Brian Moore, Project Manager
J5 Infrastructure Partners LLC
1150 Ballena Boulevard, Ste. 259
Alameda, CA 94501

RECEIVED
PLANNING DEPARTMENT

OCT 01 2018

City of St. Helena

September 24, 2018

Aaron Hecock, AICP
Senior Planner
City of St. Helena
1480 Main Street
St. Helena, CA 94574
707-967-2792
aaronh@cityofsthenela.org

RE: Narrative in Support of Verizon Wireless' Application for Conditional Use Permit to construct and unmanned wireless telecommunications facility located at 1600 Block of Grayson Avenue / APN #009-280-041, File #PL18-005.

Please allow the following to support Verizon Wireless' ("Applicant") application to install an unmanned wireless telecommunication facility ("Proposed Use") on top of an existing PG&E lattice tower with ancillary equipment in support of Proposed Use below the existing PG&E lattice tower located at 1600 Block of Grayson Avenue ("Property").

Development Standards for Antennas-Section 17.136.020

The height limit for buildings or structures in A-20 districts are 30 feet. See, Sec. 17.20.060(C). The 30 foot height limit may be exceeded for telecommunications facilities pursuant to Sec. 17.112.080(B)(2). Section 17.112.080(B)(2) references Section **17.136.020** where subsection B sets forth the development standards. The applicable development standards are:

Development Standards. All antennas shall be located, designed, constructed, treated and maintained in accordance with the following standards:

- 1. Antennas shall be installed and maintained in compliance with the requirements of the building code.**

Applicant will install and maintain Proposed Use in compliance with the requirements of the building code and will evidence this when Applicant submits plans for a building permit.

- 2. Antennas that are roof-mounted shall not extend higher than fifteen (15) feet above the peak of the roof: except a single-vertical-pole antenna may extend to twenty (20) feet above the peak of the roof. Roof-mounted dish antennas shall require planning commission approval.**

Applicant is not proposing a roof-mounted antenna. Rather Applicant is proposing to collocate on existing PG&E tower whereby Applicant proposes a 12' top hat extension above the conductors.



3. No more than one ground-mounted antenna exceeding forty-five (45) feet in height shall be permitted on each lot.

Applicant is not proposing a ground-mounted antenna. Applicant is proposing to collocate on existing PG&E tower whereby Applicant proposes a 12' top hat extension above the conductors.

4. Antennas shall be erected or maintained to the rear of the main building, except in those instances when the subject property is a cul-de-sac or corner lot where the side yard is larger than the rear yard, in which case the antenna may be located in the side yard. Antenna towers shall not be located in any required setback area. No portion of an antenna array shall extend beyond the property lines or into any front yard area. Guy wires shall not be anchored within any front yard area but may be attached to the building.

Applicant is proposing to collocate on existing PG&E lattice tower and the existing tower does not fall within the requisite setback 20' rear setback for the A-20 district.

5. Antennas may be roof-mounted or ground-mounted, freestanding or supported by guy wires, buildings or other structures in compliance with the manufacturer's structural specification. "Ground-mounted" antennas shall be any antenna with its base mounted directly in the ground, even if such antenna is supported or attached to the wall of a building. Fixed-guyed antenna towers shall be fascia-mounted or guyed according to approved standards. Wire antennas that are not self-supporting shall be supported by objects within the property lines but not within any front yard areas.

This section is not applicable to Proposed Use since Applicant proposes to collocate on existing PG&E lattice tower.

6. The antenna, including guy wires, supporting structures and accessory equipment, shall be located and designed so as to minimize the visual impact on surrounding properties and from public streets. Antennas should be screened through the addition of architectural features and/or landscaping that harmonize with the elements and characteristics of the property. The materials used in constructing the antenna shall not be unnecessarily bright, shiny, garish or reflective.

Applicant proposes to wrap antennas in 3m film to make antennas virtually invisible. Furthermore, the accessory equipment located within the footprint of the PG&E tower is concealed by a 6' fence. See. Pg. Z5 of Site Plan.

7. Antennas shall meet all manufacturer's specifications. The mast or tower shall be noncombustible and corrosive hardware such as brackets, turnbuckles, clips and similar type equipment subject to rust or corrosion, shall be protected with a zinc or cadmium coating by either a galvanizing or a sheradizing process after forming. These finishes are selected to guard against corrosion and to protect the elements against electrolytic action due to the use of adjoining dissimilar metals.

Applicant will comply with this section and will address and evidence when submitting for building permit.

8. Whenever it is necessary to install an antenna near power lines, or where damage would be caused by its falling, a separate safety wire must be attached to the antenna mast or tower and secured in a direction away from the hazard. No antenna shall be allowed directly under power lines and shall maintain at least ten (10) feet of horizontal clearance from the power lines. (Prior code § 27.271)



Applicant proposes to install antenna above the conductors separated by more than 10'. See. Pg. Z5 of Site Plan.

Required Finding for CUP- 17.168.050

In its review of applications for use permits, the planning commission shall evaluate each proposed use in order to consider its impact on the city. No use permit shall be granted unless all of the following general findings can be made:

A. That the proposed use would not generate odors, fumes, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community;

Proposed unmanned wireless telecommunications facility will not generate any odors, fumes, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community. See, EME Report.

B. That the proposed use would not generate levels of noise that adversely affect the health, safety or welfare of neighboring properties or uses;

Proposed unmanned wireless telecommunications facility will not generate levels of noise that adversely affect the health, safety or welfare of neighboring properties or uses. Typically, the only part of such developments that generate any noise are the emergency backup generators. However, there is no emergency backup generator being proposed as part of this application.

C. That the proposed use would not generate traffic noise in excess of the normally acceptable range identified in the general plan;

Proposed unmanned wireless telecommunications facility will not generate traffic noise in excess of the normally acceptable range identified in the general plan.

D. That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection and fire protection;

Proposed use will not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection and fire protection. The proposed unmanned wireless telecommunications facility does not use water or sewer services or infrastructure. The wireless telecommunication facility will add to the existing communication facilities by provisioning additional data capacity and coverage capacity to users. The wireless telecommunications facility has no impact on police protection nor fire protection. Lastly, the telecommunication facility has very little energy consumption and will not impact current energy supply.

E. That the proposed use would provide adequate ingress and egress to and from the proposed location;

There is an existing 10' utility access road that connect proposed location to Grayson Avenue. See, Pg. Z1, Site Plan.

F. That allowing the proposed use would not conflict with the city's goal of maintaining the economic viability of a local-serving economy;



The proposed use will not conflict with the city's goal of maintaining the economic viability of a local-serving economy. One of the central themes in the City of St. Helena's General Plan is economic viability which in part is based on heritage tourism. Most if not all people use cellular devices to communicate. In fact, U.S. mobile data usage is projected to grow nearly seven-fold from 2014 through 2019. It's part of Verizon Wireless's network strategy to provide reliable service and to stay ahead of this booming demand for wireless data. Applicant's proposed facility will help create a more robust wireless infrastructure that not only visitors can take advantage of, but residents will see an increased data speed and connectivity as well.

G. That the proposed use would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located;

Purpose of A-20 land use

Pursuant to Section 17.20.010:

"[t]he purpose of the A-20 district is to promote and implement the policies of the general plan to preserve agricultural land uses and provide for future orderly development as the urban limit line is adjusted to accommodate urban growth. This district restricts the density of residential use and stipulates the location and area of residential development to promote preservation of agricultural land use and reduce impacts to the provision of infrastructure as the urban area of the city expands."

Applicant's proposed use is in spirit and harmony to Section 17.20.010 in two ways. First, the proposed use is compatible with surrounding land uses and will not conflict with the purpose of established district within which it would be located. The existing land use for the underlying property where Applicant proposed to construct an unmanned wireless telecommunications facility on top of an existing PG&E lattice tower is Agricultural where property is currently a vineyard. The proposed use is not related to residential density or residential development which is the purpose behind restricting such developments in A-20 districts. The proposed use promotes preservation of agricultural land in that the wireless telecommunications facility will not reduce or impact in any capacity the agricultural use of the property. The current use is a vineyard and the proposed antennas are going on top of an existing PG&E tower where ancillary equipment will go underneath and in the footprint of the existing PG&E tower. There are no grape vineyards underneath the tower and certainly none on top of the tower, therefore, the proposed use preserves the existing agriculture land use.

Second, the wireless facility will add to the provisioning of infrastructure as the urban area of the city expands and not negatively impact the provisioning of the infrastructure as the urban area of the city expand by providing vital communication infrastructure for the residents and visitors of the City of St. Helena.

H. That the proposed use would not be in conflict with the city's general plan;

Chapter Nine: Public Health, Safety and Noise The Public Health, Safety and Noise Element presents a framework for minimizing risks posed by environmental and human-caused hazards that may impact St. Helena's health and welfare. This Element aims to ensure that St. Helena's residents, workers and visitors are protected from negative exposure to flooding, fires, hazardous materials, air pollution, and geologic and seismic hazards.

With the ever increasing threat of fires, wireless connectivity is becoming increasingly important. Proposed use will increase coverage and capacity for Applicant's wireless infrastructure that currently serves the residents and visitors of the City. In 2017, residents of Napa County were unable to receive updates and other communication(s) about the threat of fire due to down communications systems. The more facilities,



in place the less likelihood of communication failures due to such devastating circumstances.ⁱⁱ Often times residents rely on text messages to get up to date warnings.ⁱⁱⁱ

The general plan also stipulates that tourism is an economic driver for the local economy. As previously stated most if not all people use cellular devices to communicate. Tourist more times than not post their experiences in St. Helena to social media, text message, or use applications on their wireless device to show their experiences or find destination to explore in the City.

I. That the proposed use would not be injurious to public health, safety or welfare;

The proposed use will not be injurious to public health, safety or welfare. See, Exhibit 3, EME Report.

J. That granting the use permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the city or would be in conflict with the general plan;

The City of St. Helena has ordinance(s) in place mandating a CUP review and approval along with Design Review approval for telecommunications facilities giving the City a tremendous amount of discretion in allowing future carries if City deemed multiple carries on proposed site would have an incremental effect.

K. That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long-term parking needs of employees and business owners and customers is available;

Proposed use does not involve long-term parking. The wireless telecommunications facility is unmanned.

L. That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed use. (Prior code § 27.439)

The capacity of surrounding streets is adequate to serve the automobile and delivery truck generated by the proposed use. Namely, the only time vehicles will be accessing the site is during construction and routine maintenance. The proposed use is an unmanned wireless telecommunications facility.

ⁱ Cisco VNI Mobile Forecast Highlights, 2014 – 2019, October 2015

ⁱⁱ <http://www.latimes.com/local/california/la-northern-california-fires-live-damaged-cell-towers-create-1507667633-htmlstory.html>

ⁱⁱⁱ <https://www.cbsnews.com/news/northern-california-wildfires-cell-towers/>



APPROVALS			
	PRINT NAME	SIGNATURE	DATE
LAND OWNER			
VZW RF ENGR			
VZW ZONING			
VZW CONSTRUCTION			
VZW EQUIPMENT			
VZW TRANSPORT			
J5IP LEASING			
J5IP ZONING			
J5IP CONSTRUCTION			

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CONSENT OF J5 INFRASTRUCTURE PARTNERS

IF YOU DIG IN ANY STATE
DIAL 811 FOR THE LOCAL
"ONE CALL CENTER" -
IT'S THE LAW

- ONE (1) NEW 12'-0" TOWER EXTENSION (DESIGNED BY OTHERS)
- SIX (6) NEW PANEL ANTENNAS (2) PER SECTOR (TO BE INSTALLED WITH 3"MM CONCEALMENT FILM)
- SIX (6) NEW RRUS UNITS @ 92' RAD (2) PER SECTOR & THREE (3) NEW RRUS UNITS @ 22' (1) PER SECTOR
- TWO (2) NEW RAYCAPS ON TOWER & TWO (2) IN EQUIPMENT AREA
- TWO (2) NEW HYBRID CABLES
- THREE (3) NEW CABINETS
- TWELVE (12) NEW 7/8" JUMPER 70' RUNS FROM NEW RRUS @ 22' RAD TO ANTENNAS
- NEW 13'x13' CONCRETE PAD INSIDE TOWER FOOTPRINT

REV	DESCRIPTION	DATE	BY	CHK
G	REVISED PER PG&E COMMENTS	10/08/17	EGW	—
F	REVISED PER PG&E & CX COMMENTS	10/18/17	EGW	—
H	REVISED PER PG&E COMMENTS	11/07/17	EGW	—
I	REVISED PER JX COMMENTS	03/22/18	EGW	—
J	REVISED PER JX COMMENTS	07/26/18	JMM	—

[illegible]

PROJECT INDEX: APPLICANT: J5 INFRASTRUCTURE PARTNERS 1150 BALLENA BLVD., UNIT 259 ALAMEDA, CA 94501 CONTACT: BRIAN MOORE PHONE: 510-480-5574 EMAIL: bmoore@j5ip.com ENGINEERS/DESIGNERS: J5 INFRASTRUCTURE PARTNERS 1150 BALLENA BLVD., UNIT 259 ALAMEDA, CA 94501 CONTACT: DANIEL DE WITTE PHONE: 949-247-7767 EXT 109 EMAIL: ddewitte@j5ip.com SURVEYOR: CALVADA SURVEYING, INC. 411 JENKS CIRCLE, SUITE 205 CORONA, CA 92880 CONTACT: RAMON GONZALES, LSIT PHONE: 915-280-9960 EXT 108 CELL: 951-268-0179 ZONING/SITE AQ: J5 INFRASTRUCTURE PARTNERS CONTACT: BRYCE NOVAK PHONE: 619-672-2066
ABBREVIATED LEGAL DESCRIPTION: TBD

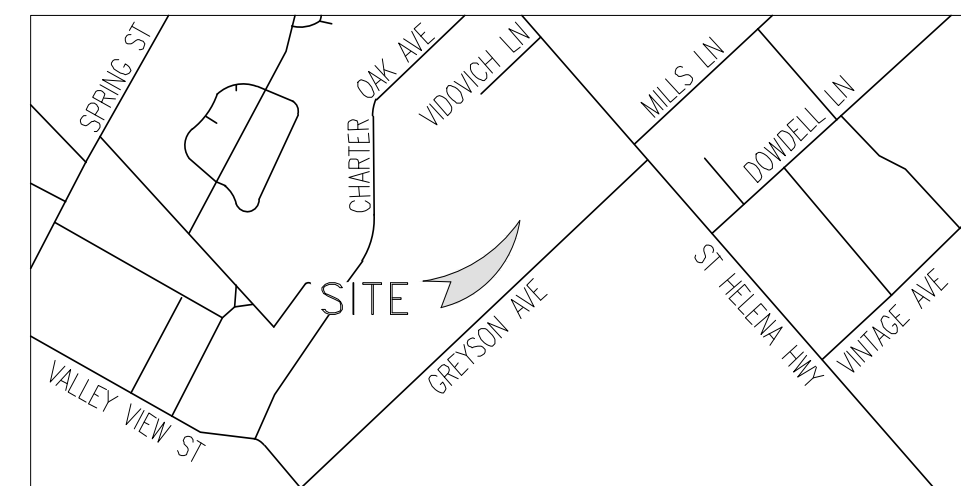
GENERAL PROJECT NOTES:	
1.	PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE SCOPE OF WORK AND ALL CONDITIONS AFFECTING THE NEW PROJECT.
2.	CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS OF THE JOB SITE AND CONFIRM THAT WORK AS INDICATED ON THESE CONSTRUCTION DOCUMENTS CAN BE ACCOMPLISHED AS SHOWN PRIOR TO COMMENCEMENT OF ANY WORK.
3.	ALL FIELD MODIFICATIONS BEFORE, DURING, OR AFTER CONSTRUCTION SHALL BE APPROVED IN WRITING BY A VERIZON WIRELESS REPRESENTATIVE.
4.	INSTALL ALL EQUIPMENT AND MATERIALS PER THE MANUFACTURER'S RECOMMENDATIONS, U.N.O.
5.	NOTIFY VERIZON WIRELESS, IN WRITING, OF ANY MAJOR DISCREPANCIES REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS, AND DESIGN INTENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATIONS FROM A VERIZON WIRELESS REPRESENTATIVE AND ADJUSTING THE BID ACCORDINGLY.
6.	CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF THE WORK UNDER THE CONTRACT.
7.	CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS AND FINISHES THAT ARE TO REMAIN. CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY OCCUR DURING THE CONSTRUCTION TO THE SATISFACTION OF A VERIZON WIRELESS REPRESENTATIVE.
8.	THE CONTRACTOR IS RESPONSIBLE FOR RED-LINING THE CONSTRUCTION PLANS TO ILLUSTRATE THE AS BUILT CONDITION OF THE SITE. FOLLOWING THE FINAL INSPECTION BY VERIZON WIRELESS, THE CONTRACTOR SHALL PROVIDE VERIZON WIRELESS WITH ONE COPY OF ALL RED-LINED DRAWINGS.
9.	VERIFY ALL FINAL EQUIPMENT WITH A VERIZON WIRELESS REPRESENTATIVE. ALL EQUIPMENT LAYOUT, SPECS, PERFORMANCE INSTALLATION AND THEIR FINAL LOCATION ARE TO BE APPROVED BY VERIZON WIRELESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS/HER WORK WITH THE WORK AND CLEARANCES REQUIRED BY OTHERS RELATED TO SAID INSTALLATIONS.

PROJECT INFORMATION:	
PROPERTY OWNER:	JOSEPH CROTTY/MARGO CROTTY BECKSTOFFER VINEYARDS P.O. BOX 405 RUTHERFORD, CA. 94573 PHONE: (707) 312-2033
JURISDICTION:	CITY OF ST. HELENA
PUBLIC RECORD PARCEL NO:	009-280-041-000
OCCUPANCY CLASSIFICATION:	AG
TYPE OF CONSTRUCTION:	TYPE II-B

DRIVING DIRECTIONS:
FROM 2785 MITCHELL DR GET ON I-680 FROM TREAT
BLVD 3.0MI, FOLLOW I-680 N TO CA-12 W IN SOLANO
COUNTY, EXIT FROM CA-12 W/I-80 W 23.8MI, CONTINUE
ONTO CA-12 W 5.7MI, TURN RIGHT ONTO CA-12
W/CA-29 N/STATE HWY 12 W (SIGNS FOR
NAPA/SONOMA) CONTINUE TO FOLLOW CA-29 N 23.7MI,
TURN LEFT ONTO CHARTER OAK AVE DESTINATION WILL BE
ON THE LEFT.

FCC COMPLIANCE:
RADIATION FROM THIS FACILITY WILL NOT INTERFERE WITH OPERATION OF OTHER COMMUNICATION DEVICES.

ADA COMPLIANCE:
THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. LANDINGS AND EXITS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES.



VICINITY MAP
SCALE: N.T.S.



PRELIMINARY FOR LEASING/ZONING	
PROJECT NAME: ST. HELENA & PINE EXISTING 83'-1" LATTICE TOWER (OVERALL HEIGHT: 83'-1" A.G.L.) RAWLAND COMMUNICATION SITE	
PROJECT ADDRESS: 1600 BLOCK OF GRAYSON AVE ST HELENA, CA 94574 NAPA COUNTY	
SHEET TITLE: TITLE SHEET	
SAVE DATE: 7/26/2018 10:33 AM	
SHEET NUMBER: T 1	

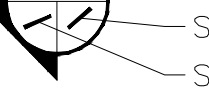
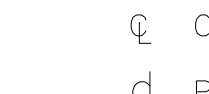
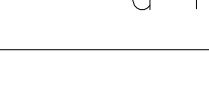
GENERAL PROJECT NOTES:	
1.	CONTRACTOR IS RESPONSIBLE FOR ERECTING TEMPORARY BARRICADES AND/OR FENCING TO PROTECT THE SAFETY OF THE PUBLIC DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY BARRIERS AND REPAIR ALL DAMAGE TO PROPERTY ON THE SITE CAUSED BY THIS CONSTRUCTION. THE COST OF REPAIR IS THE CONTRACTOR'S RESPONSIBILITY.
2.	ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
3.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE PRIOR TO ORDERING ANY MATERIALS OR CONDUCTING ANY WORK.
4.	EXCESS SOIL MATERIAL AND DEBRIS CAUSED BY THIS CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
5.	CONTRACTOR SHALL MAKE ADJUSTMENTS TO GRADING ELEVATIONS AS NECESSARY TO ENSURE A SITE FREE OF DRAINAGE PROBLEMS.
6.	CONTRACTOR SHALL COORDINATE A CONSTRUCTION LAYDOWN AREA WITH THE PROPERTY OWNER. CONSTRUCTION LAYDOWN AREA SHALL BE FENCED-IN WITH TEMPORARY (45 DAY) CONSTRUCTION FENCE. THE TEMPORARY FENCE SHALL BE CONSTRUCTED OF 6' HIGH CHAIN LINK FABRIC AND IS TO BE REMOVED AT THE END OF CONSTRUCTION. LAYDOWN AREA IS TO BE RESTORED TO ITS ORIGINAL CONDITION AFTER FENCE REMOVAL.
7.	SURVEY INFORMATION SHOWN WAS CREATED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY.
8.	THESE PLANS DO NOT ADDRESS THE SAFETY AND STABILITY OF THE STRUCTURE DURING ASSEMBLY AND ERECTION, WHICH ARE THE RESPONSIBILITY OF THE ERECTOR, BASED ON THE MEANS AND METHODS CHOSEN BY THE ERECTOR.
9.	NEW EQUIPMENT COMPOUND SHALL BE COVERED W/ 4" CRUSHED ROCK INSTALLED OVER CLIENT-APPROVED WEED BARRIER MATERIAL (IF APPLICABLE).

GENERAL CONTRACTOR NOTES:	
1.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE PROJECT SCOPE OF WORK DEFINED UNDER THE REQUEST FOR PROPOSAL (RFP) FOR THIS PROJECT AND ALL ASSOCIATED ATTACHMENTS AND DOCUMENTS PROVIDED. THE RFP AND ALL ASSOCIATED DOCUMENTS SHALL DEFINE THE COMPLETE PROJECT SCOPE OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL DOCUMENTS AND IS SOLELY RESPONSIBLE FOR ALL WORK. ALL DOCUMENTS INCLUDED WITHIN THE PROJECT REQUEST FOR PROPOSAL ARE REQUIRED FOR THE COMPLETE PROJECT SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK (EQUIPMENT, MATERIAL, INSTALLATION, TESTING, ETC.) INDICATED IN ALL DOCUMENTS. THE RFP, VERIZON WIRELESS NETWORK STANDARDS AND PROJECT ADDENDUMS AND CLARIFICATIONS ARE COMPLEMENTARY TO EACH OTHER. THE FORMAT OF THE SPECIFICATIONS AND DRAWING NUMBERING PER DISCIPLINE IS NOT INTENDED TO IMPLY SEGREGATION OF SUB CONTRACTOR WORK. CONTRACTOR SHALL ASSIGN ALL SUB CONTRACTOR WORK AND VERIZON WIRELESS WILL NOT ACCEPT ANY CHANGE ORDERS FOR INTERNAL CONTRACTOR WORK ASSIGNMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING ALL RFP DOCUMENTS TO THEIR SUB CONTRACTORS. ALL RFP DOCUMENTS ARE REQUIRED TO INDICATE THE PROJECT SCOPE OF WORK. PARTIAL SUB CONTRACTOR DOCUMENT PACKAGES ARE HIGHLY DISCOURAGED. IN THE EVENT OF A CONFLICT BETWEEN THE DRAWINGS, SPECIFICATIONS, REFERENCED STANDARDS, VERIZON WIRELESS STANDARDS, OR AGREEMENT TERMS AND CONDITIONS THE ARCHITECT/ ENGINEER SHALL BE CONTACTED FOR FORMAL INTERPRETATION OF THE REQUIREMENTS. THE CONTRACTOR SHALL BE DEEMED TO HAVE PROVIDED THE DETAILED AND EXTENSIVE INTERPRETATION. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECT/ ENGINEER INTERPRETATIONS SHALL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO VERIZON WIRELESS.
2.	ALL ANTENNAS MUST BE PIM TESTED WITHIN 48 HOURS OF THEM BEING RECEIVED BY THE INSTALLATION CONTRACTOR. THOSE RESULTS MUST BE SENT BACK TO THE VERIZON WIRELESS CONSTRUCTION ENGINEER AND EQUIPMENT ENGINEER WITHIN THE SAME 48 HOURS. IF YOU MISS THE 48HR TIMELINE AND THE ANTENNAS DO NOT PASS UPON INSTALLATION, YOUR COMPANY WILL BE CHARGED FOR THE COST OF THE ANTENNAS FOR REPLACEMENT.
3.	ALL LOADS MUST BE SECURED PROPERLY TO THE VEHICLE OR TRAILER. VERIZON WIRELESS WILL PASS ALONG THE COST OF ANY REPLACEMENTS DUE TO DAMAGE OR LOSS WHETHER IT IS NEW OR USED.
4.	ALL VENDORS ARE REQUIRED TO SHOW UP TO THE DC IN TEMPE, OR DELTA/KING COMMUNICATIONS, OR BROKEN ARROW IN NM WITH ENCLOSED TRANSPORTATION FOR ALL ELECTRONICS.

ANTENNA, MOUNTS & HARDWARE INSTALLATION NOTES:	
1.	CONTRACTOR TO INSTALL ANTENNAS, MOUNTS AND TOWER HARDWARE PER MANUFACTURER'S RECOMMENDATIONS (OR AS REQUIRED BY THE OWNER/PROVIDER).
2.	ALL BOLTS SHALL BE TIGHTENED PER AISC REQUIREMENTS (SEE STEEL NOTES).
3.	ANY GALVANIZED SURFACES THAT ARE DAMAGED BY ABRASIONS, CUTS, DRILLING OR FIELD WELDING DURING SHIPPING OR ERECTION SHALL BE TOUCHED-UP WITH TWO COATS OF COLD GALVANIZING COMPOUND MEETING THE REQUIREMENTS OF ASTM A780.
4.	ANTENNA MOUNTS SHALL NOT BE USED AS A CLIMBING DEVICE. WORKERS SHALL ALWAYS TIE OFF TO AN APPROVED CLIMBING POINT.
5.	SEE ALSO GENERAL ANTENNA NOTES ON SHEET RF1 (IF APPLICABLE).

STRUCTURAL DESIGN CRITERIA:	
ALL LOADS DERIVED FROM REQUIREMENTS OF CALIFORNIA BUILDING CODE 2016, ASCE 7-05, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" & ANSI TIA-222-G "STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS".	
BUILDING STRUCTURES:	
1.	WIND LOADS: CBC 2016 §1609 & ASCE 7-05 §6.4 (SIMPLIFIED METHOD) $V_{3s} = 90$ MPH OCCUPANCY CAT. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0
2.	SEISMIC LOADS: CBC 2016 §1613 & ASCE 7-05 §12.14 (SIMPLIFIED METHOD) OCCUPANCY CAT. = II; SITE CLASS = D $V = \frac{F(S_{Ds}W)}{R}$ $F = 1.0$ (SINGLE-STORY), 1.1 (TWO STORY), 1.2 (THREE STORY) $S_{Ds} = (2/3) S_{ms}$ $R = 1.5$ (ORDINARY PLAIN CONCRETE SHEARWALLS), 6.5 (LIGHT-FRAMED WALLS W/ WOOD STRUCTURAL PANELS), 4.0 (ORDINARY REINFORCED CONCRETE SHEARWALLS)
COMMUNICATIONS STRUCTURES:	
1.	WIND LOADS: CBC 2016 §1609, ASCE 7-05 §6.5.15 & ANSI TIA-222-G $V = 90$ MPH (3-SEC. GUST) $V = 30$ MPH ($\frac{1}{4}$ " RADIAL ICE) STRUCTURE CLASS. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0
2.	SEISMIC LOADS*: CBC 2016 §1613, ASCE 7-05 §15.6.6 & ANSI TIA-222-G *MAY BE IGNORED FOR STRUCTURE CLASS I AND/OR EARTHQUAKE SPECTRAL RESPONSE FOR SHORT PERIOD (S_s) ≤ 1.0 STRUCT. CLASS. = II; OCC. CAT. = II; SITE CLASS = D; IMPORTANCE FACTOR = 1.0 $V = \frac{S_{ds}(W)}{R}$ (EQUIVALENT LATERAL FORCE PROCEDURE (METHOD 1)) $V = \frac{\sum S_{ox}(W_x)}{R}$ (EQUIVALENT MODAL ANALYSIS PROCEDURE (METHOD 2))

CONCRETE NOTES:	
1.	ALL CONCRETE SHALL BE IN ACCORDANCE WITH CHAPTER 19 OF THE CBC & ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", LATEST EDITION & HAVE THE FOLLOWING PROPERTIES: A. MINIMUM 28-DAY COMPRESSIVE STRENGTH (f'_c) OF 4,000 PSI. B. CEMENT SHALL BE "LOW-ALKALI" TYPE IIIA (MODERATE SULFATE RESISTANCE, AIR ENTRAINING) CONFORMING TO ASTM C150. C. MAXIMUM WATER/CEMENT RATIO OF 0.45 AND AIR-ENTRAINED 4% TO 7%. D. CONCRETE PROPORTIONING SHALL BE DESIGNED BY AN APPROVED LABORATORY. TOLERANCES IN ACCORDANCE WITH ACI 117. COPIES OF CONCRETE MIX SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO PLACEMENT. E. ALL AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C33. USE ONLY AGGREGATES KNOWN NOT TO CAUSE EXCESSIVE SHRINKAGE. MAXIMUM AGGREGATE SIZE TO BE $1\frac{1}{2}$ ". F. MAXIMUM SLUMP: 3" (FOUNDATION, FOOTING, SLAB), 4" (WALL, COLUMN, BEAM)
2.	FORMWORK FOR CONCRETE SHALL CONFORM TO ACI 347. TOLERANCES FOR FINISHED CONCRETE SURFACES SHALL MEET CLASS-C REQUIREMENTS. IN NO CASE SHALL FINISHED CONCRETE SURFACES EXCEED THE FOLLOWING VALUES AS MEASURED FROM NEAT PLAN LINES AND FINISHED GRADES: $\pm \frac{1}{4}$ " VERTICAL, ± 1 " HORIZONTAL.
3.	CHAMFER ALL EXPOSED CORNERS AND FILLET ENTRANT ANGLES $\frac{3}{4}$ " U.N.O.
4.	CONCRETE FINISHING: A. FLOORS: CONCRETE FLOOR SLABS SHALL BE FINISHED IN ACCORDANCE WITH ACI 302.1 CHAPTER 8. PROVIDE CLASS 4 FINISH U.N.O. PROVIDE NON-SLIP FINISH FOR EXTERIOR SURFACES. B. OTHER SURFACES: CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH ACI 301 SECTIONS 5.3, 6.3, AND 7.3. PROVIDE ROUGH FINISH FOR ALL SURFACES NOT EXPOSED TO VIEW AND SMOOTH FINISH FOR ALL OTHERS, U.N.O.
5.	A MINIMUM OF ONE (1) SET OF CONCRETE CYLINDERS SHALL BE TAKEN (IF REQUIRED BY SPECIAL INSPECTIONS ON SHEET IN1). EACH SET SHALL CONSIST OF THREE (3) CYLINDERS. ONE (1) SHALL BE TESTED AT 7 DAYS, TWO (2) SHALL BE TESTED AT 28 DAYS. ALL CYLINDERS SHALL BE TAKEN, PREPARED AND TESTED BY A TESTING LAB IN ACCORDANCE WITH ASTM C172, C31 AND C39.

LEGEND OF SYMBOLS:	
	REFERENCE LETTER OR NUMBER
	SCALE:
	SHEET WHERE DRAWN
	SHEET WHERE TAKEN
	SECTION LETTER
	SHEET WHERE DRAWN
	SHEET WHERE TAKEN
	DETAIL NUMBER
	SHEET WHERE DRAWN
	SHEET WHERE TAKEN
	¢ CENTERLINE
	d PENNY
	EQUIPMENT OR FIXTURE NUMBER
	KEYED NOTE
	T.C. 1631.33 F.L. 1631.00 SPOT ELEVATION
	TOP OF WALL 1639.00 CONTROL OR DATUM POINT
	PROPERTY LINE
	-1631- EXISTING CONTOUR
	-1631- NEW CONTOUR
	∅ ROUND/DIAMETER
	~ APPROXIMATELY

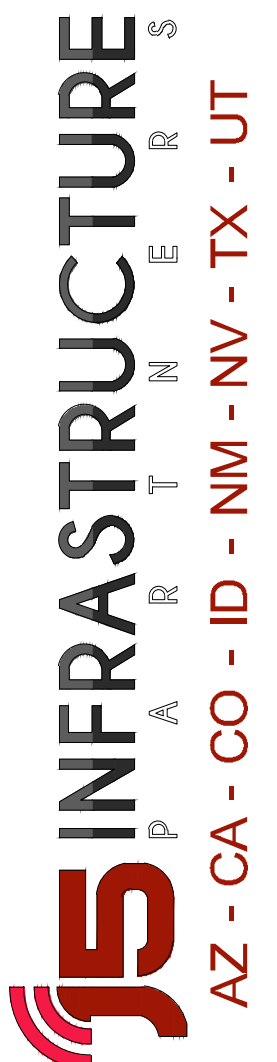
DESIGNED FOR:



2785 MITCHELL DR.
WALNUT CREEK, CALIFORNIA 94598

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DESIGNED BY:



AZ - CA - CO - ID - NM - NV - TX - UT

REV	DESCRIPTION	DATE	BY	CHK
F	REVISED PER PG&E COMMENTS	10/06/17	ECV	-
C	REVISED PER PG&E & CY COMMENTS	10/18/17	ECV	-
H	REVISED PER PG&E COMMENTS	11/07/17	ECV	-
I	REVISED PER JX COMMENTS	03/22/18	ECV	-
J	REVISED PER JX COMMENTS	07/26/18	JNM	-

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:

ST. HELENA & PINE
EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:

1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SHEET TITLE:

SPECIFICATION SHEET

SAVE DATE:

7/26/2018 10:33 AM

SHEET NUMBER:

SP1



AERIAL VIEW OF NEW SITE LOCATION



VIEW OF NEW LICENSE AREA

DESIGNED FOR:
verizon
2785 MITCHELL DR.
WALNUT CREEK, CALIFORNIA 94598

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DESIGNED BY: J5 INFRASTRUCTURE PARTNERS
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REV	DESCRIPTION	DATE	BY	CHK
F	REVISED PER PG&E COMMENTS	10/06/17	EGV	—
G	REVISED PER PG&E & CY COMMENTS	10/18/17	EGV	—
H	REVISED PER PG&E COMMENTS	11/07/17	EGV	—
I	REVISED PER JX COMMENTS	03/22/18	EGV	—
J	REVISED PER JX COMMENTS	07/26/18	JMM	—

PRELIMINARY
FOR LEASING/ZONING

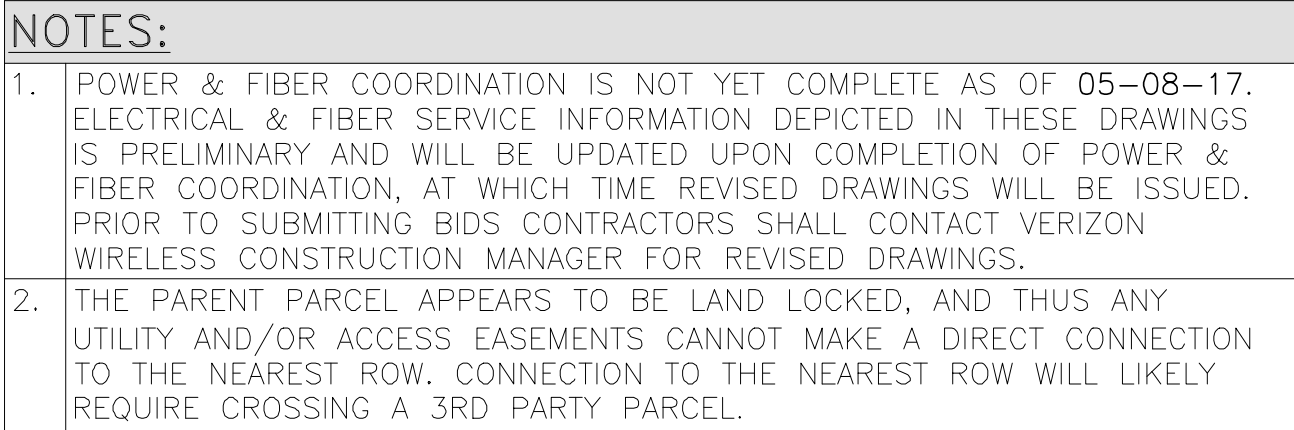
PROJECT NAME:
ST. HELENA & PINE
EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:
1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SHEET TITLE:
PHOTO SHEET

SAVE DATE:
7/26/2018 10:33 AM

SHEET NUMBER:
PS1



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CONSENT OF J5 INFRASTRUCTURE PARTNERS

IONED BY: **J5 INFRASTRUCTURE PARTNERS**
AZ - CA - CO - ID - NM - NV - TX - UT

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PRELIMINARY
FOR LEASING/ZONING

ST. HELENA & PINE
EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

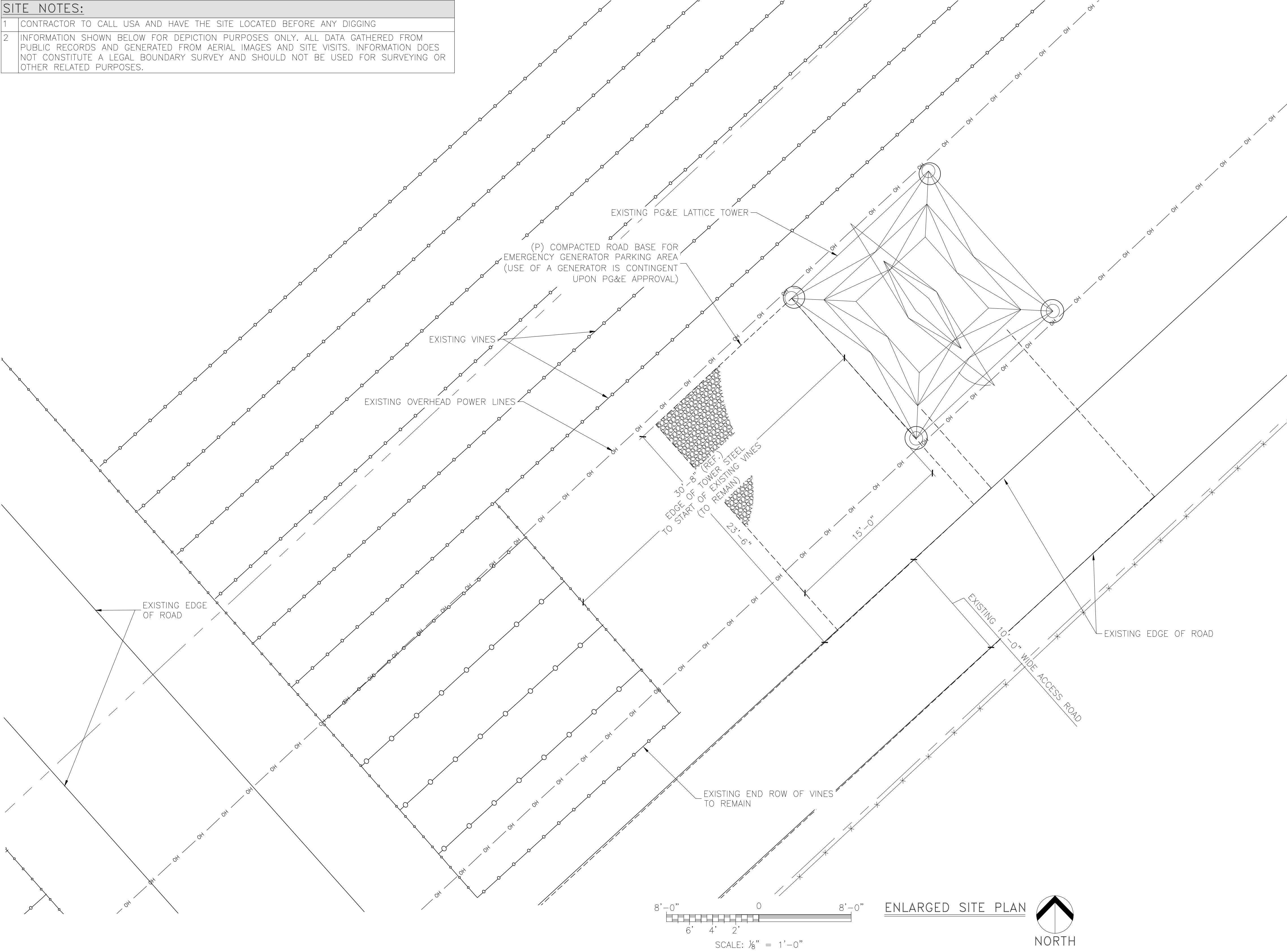
1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SITE PLAN

7/26/2018 10:33 AM

Z1

SITE NOTES:	
1	CONTRACTOR TO CALL USA AND HAVE THE SITE LOCATED BEFORE ANY DIGGING
2	INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.

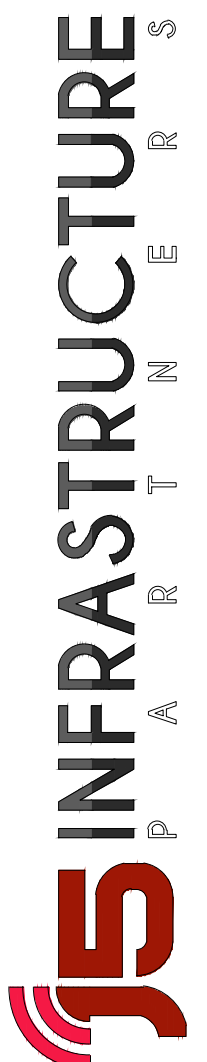


DESIGNED FOR:


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WALNUT CREEK, CALIFORNIA 94598

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REV	DESCRIPTION	DATE	BY	CHK
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I	REVISED PER JX COMMENTS	03/22/18	EGV	-
J	REVISED PER JX COMMENTS	07/26/18	JMM	-

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:

ST. HELENA & PINE
EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:

1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SHEET TITLE:

ENLARGED DEMO/EXISTING
SITE PLAN

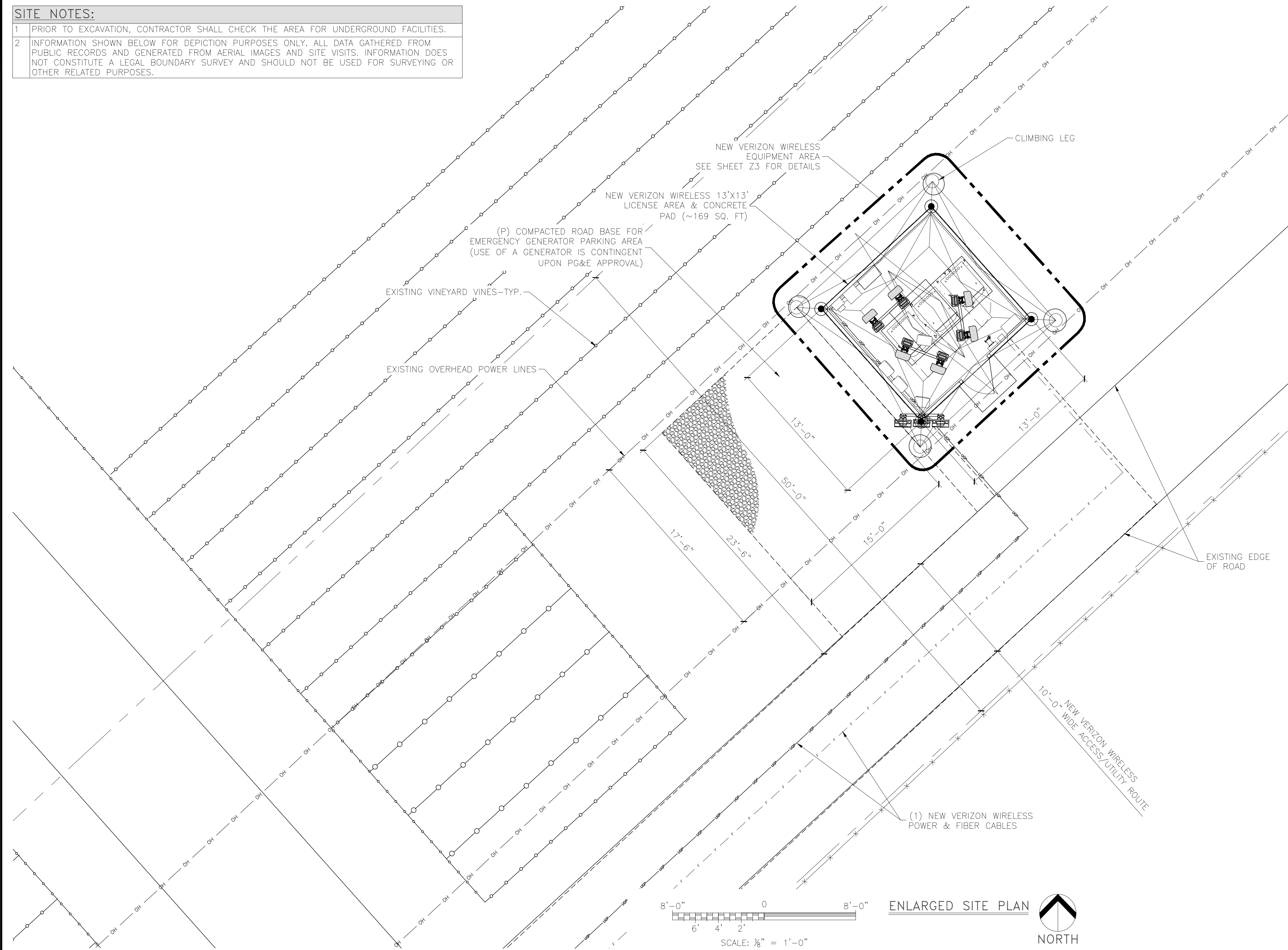
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7/26/2018 10:33 AM

SHEET NUMBER:

Z2

SITE NOTES:	
1	PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.
2	INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.



DESIGNED FOR:



2785 MITCHELL DR.
WALNUT CREEK, CALIFORNIA 94598

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REV	DESCRIPTION	DATE	BY	CHK
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G	REVISED PER PG&E & CY COMMENTS	10/18/17	EGV	—
H	REVISED PER PG&E COMMENTS	11/07/17	EGV	—
I	REVISED PER JX COMMENTS	03/22/18	EGV	—
J	REVISED PER JX COMMENTS	07/26/18	JMM	—

DESIGNED BY:

J5 INFRASTRUCTURE PARTNERS

AZ - CA - CO - ID - NM - NV - TX - UT



PROJECT NAME:

ST. HELENA & PINE
EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:

1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SHEET TITLE:

PROPOSED ENLARGED
SITE PLAN

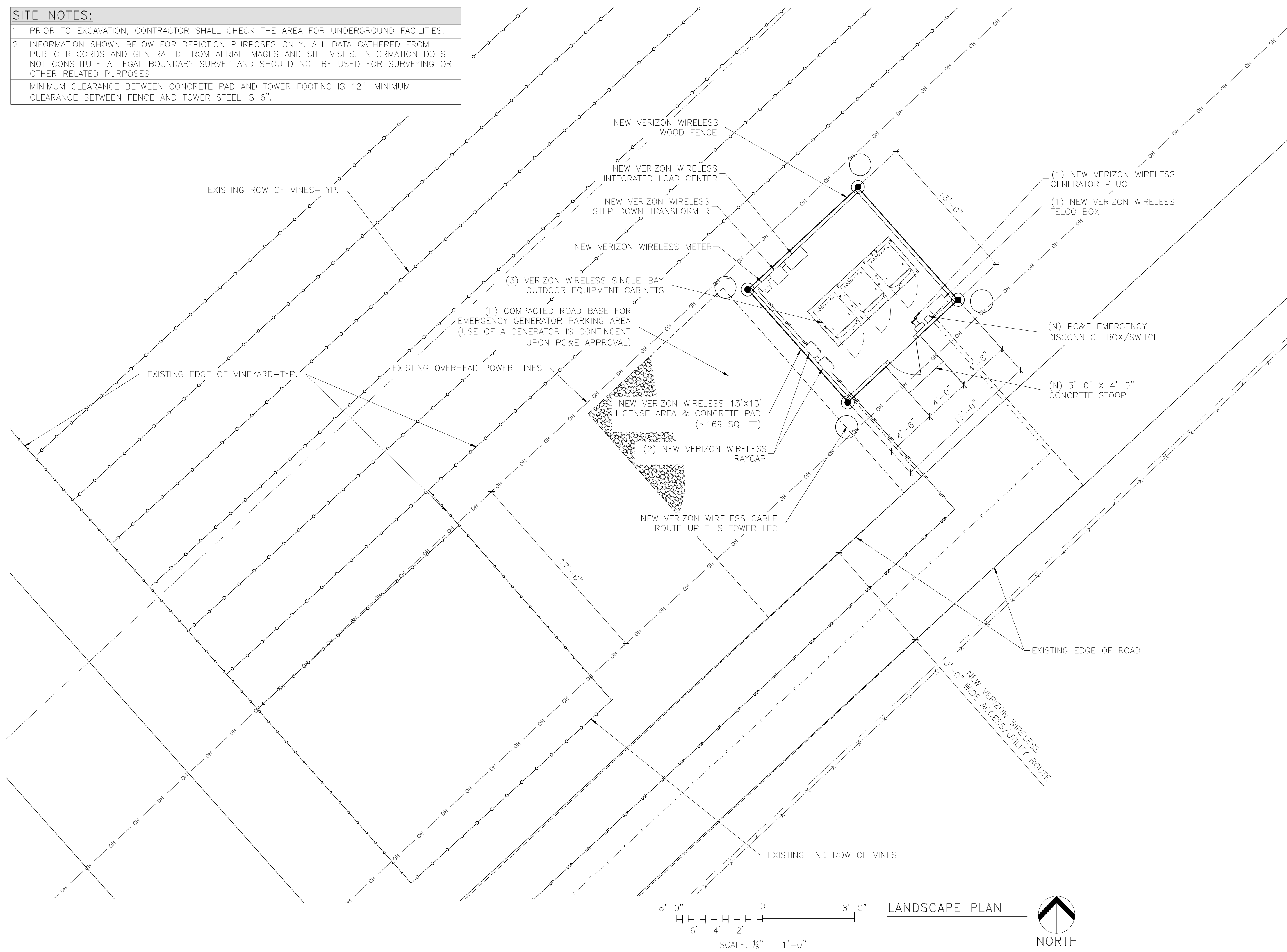
SAVE DATE:

7/26/2018 10:33 AM

SHEET NUMBER:

Z2.1

SITE NOTES:	
1	PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.
2	INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.
	MINIMUM CLEARANCE BETWEEN CONCRETE PAD AND TOWER FOOTING IS 12". MINIMUM CLEARANCE BETWEEN FENCE AND TOWER STEEL IS 6".



2785 MITCHELL DR.
WALNUT CREEK, CALIFORNIA 94598

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J	REVISED PER JX COMMENTS	07/26/18	JMM	-

DESIGNED BY: J5 INFRASTRUCTURE PARTNERS

AZ - CA - CO - ID - NM - NV - TX - UT

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:

ST. HELENA & PINE
EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:

1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SHEET TITLE:

LANDSCAPE
PLAN

SAVE DATE:

7/26/2018 10:33 AM

SHEET NUMBER:

Z3

GENERAL ANTENNA NOTES:									
1.	CONTRACTOR TO VERIFY MECHANICAL DOWNTILT WITH FINAL RFDS/RF ENGINEER.								
2.	DUAL POLAR ANTENNAS REQUIRE TWO RUNS OF COAX PER ANTENNA.								
3.	CONTRACTOR TO VERIFY ALL ACTUAL LENGTHS IN FIELD PRIOR TO INSTALLATION AND NOTIFY THE FIELD ENGINEER FOR VERIFICATION OF SIZES OF CABLES.								
4.	CONTRACTOR TO PROVIDE AS BUILT FOR THE LENGTH OF CABLES UPON COMPLETION OF INSTALLATION.								
5.	CONTRACTOR TO PROVIDE FINAL CABLE LENGTHS AND RETURN LOSSES FOR ALL CABLES.								
6.	ALL AZIMUTHS REFERENCE TRUE NORTH. CONSULT REQUIRED QUADRANGLE MAP FOR NECESSARY MECHANICAL DECLINATION.								

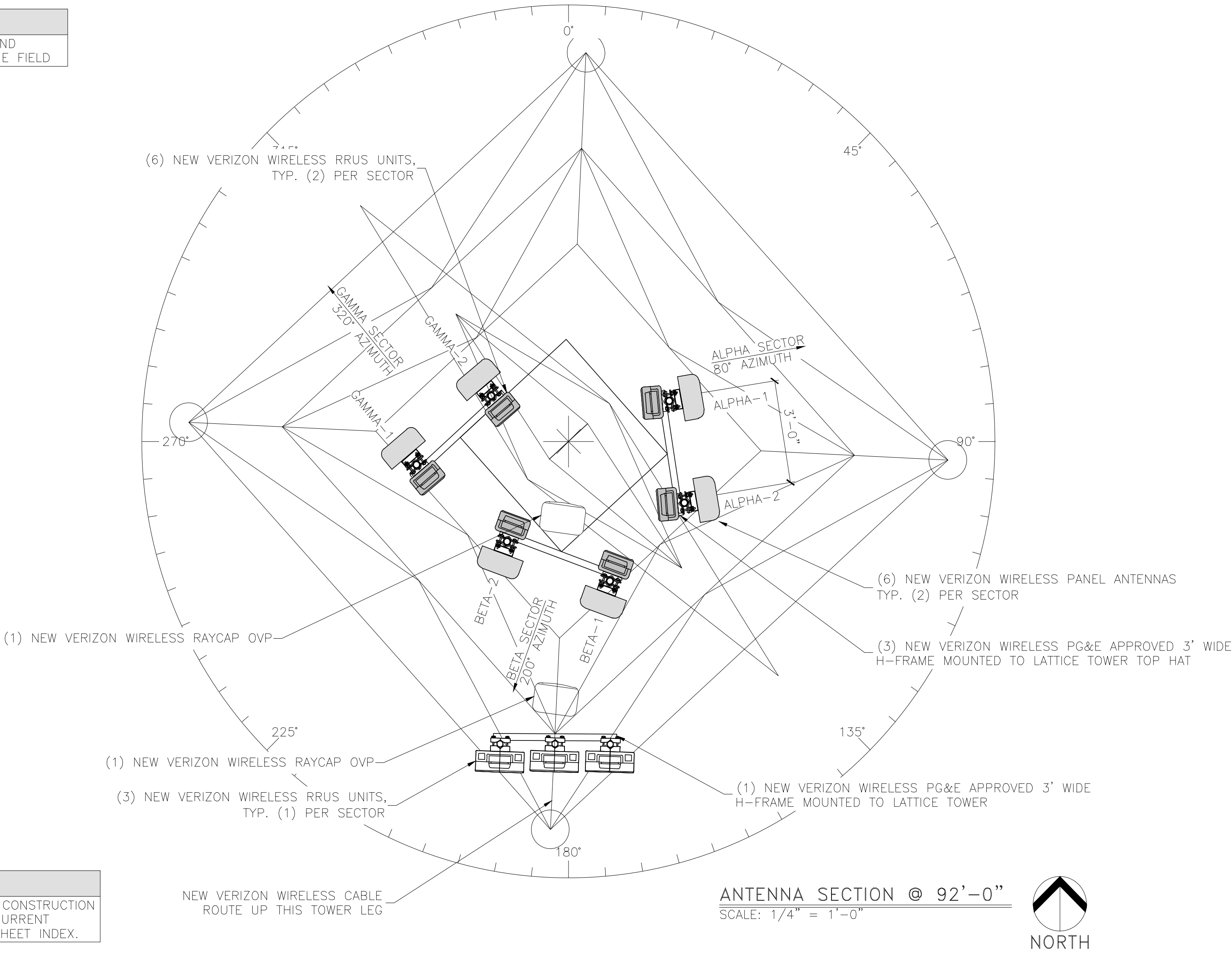
NEW VERIZON WIRELESS ANTENNA SCHEDULE:									
SECTOR	MANUFACTURER	MODEL	QUANTITY	AZIMUTH (TN)	DOWNTILT	C/L (FT)	# OF LINES	JUMPER CABLES	ESTIMATED JUMPER CABLE LENGTH
ALPHA	COMMSCOPE	6' PANEL ANTENNA	2	80°	0,0,0	92'-1"	-	12	70'-0"
BETA	COMMSCOPE	6' PANEL ANTENNA	2	200°	0,0,0	92'-1"			
GAMMA	COMMSCOPE	6' PANEL ANTENNA	2	320°	0,0,0	92'-1"			
OTHER	ERICSSON	RRU	9	-	-	-	-	-	-
OTHER	RAYCAP	MOVP	2	-	-	-	2	HYBRID	-
NOTES:									
1. FOR EXACT ANTENNA INFORMATION REFER TO THE RF DESIGN.									
2. ALL NEW COAX SHALL BE INSTALLED ON SOUTHEAST LEG OF PG&E LATTICE TOWER									

GENERAL ATTACHMENT NOTE:
ACTUAL ATTACHMENT METHOD AND LOCATION OF RRUS AND SURGE PROTECTORS TO BE DETERMINED BY PG&E IN THE FIELD

ANTENNA COLOR CODE:	
ANTENNA FUNCTION	COLOR
CDMA-800 B-BAND	RED
CDMA-800 A-BAND	WHITE
PCS-1900	YELLOW
LTE-700	PURPLE
ANTENNA SECTOR	
ALPHA	GREEN
BETA	ORANGE
GAMMA	BROWN

ANTENNA COLOR CODE:				
SECTOR	ANTENNA LOCATIONS	FIRST STRIPE (PCS) OR (LTE) OR (A-BAND) OR (B-BAND)	SECOND STRIPE	THIRD STRIPE
ALPHA	1	RED OR WHITE OR YELLOW OR PURPLE	GREEN	—
	2			GREEN
	3			
	4			
BETA	1	RED OR WHITE OR YELLOW OR PURPLE	ORANGE	—
	2			ORANGE
	3			
	4			
GAMMA	1	RED OR WHITE OR YELLOW OR PURPLE	BROWN	—
	2			BROWN
	3			
	4			

ANTENNA MOUNT SCHEDULE:		
QUANTITY	DESCRIPTION	PART NUMBER(S)
3	PG&E APPROVED 3' WIDE H-FRAME	C10-856
NOTE: ALL PRODUCTS ARE FROM "SABRE SITE SOLUTIONS"		
PHONE: (866) 428-6937 / (712) 293-1964 WWW.SABRESITESOLUTIONS.COM		



NOTICE:
1. CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.

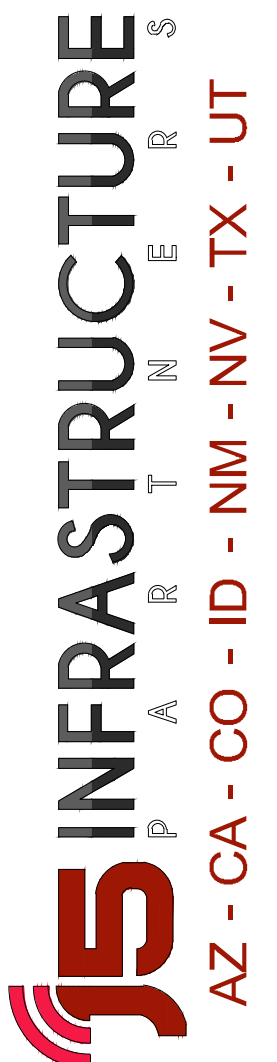
DESIGNED FOR:



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WALNUT CREEK, CALIFORNIA 94598

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DESIGNED BY:



AZ - CA - CO - ID - NM - NV - TX - UT

REV	DESCRIPTION	DATE	BY	CHK
F	REVISED PER PG&E COMMENTS	10/06/17	ESV	-
G	REVISED PER PG&E & CY COMMENTS	10/18/17	ESV	-
H	REVISED PER PG&E COMMENTS	11/07/17	ESV	-
I	REVISED PER JX COMMENTS	03/22/18	ESV	-
J	REVISED PER JX COMMENTS	07/26/18	JMM	-

PROJECT NAME:

ST. HELENA & PINE

EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:

1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SHEET TITLE:

ANTENNA INFORMATION

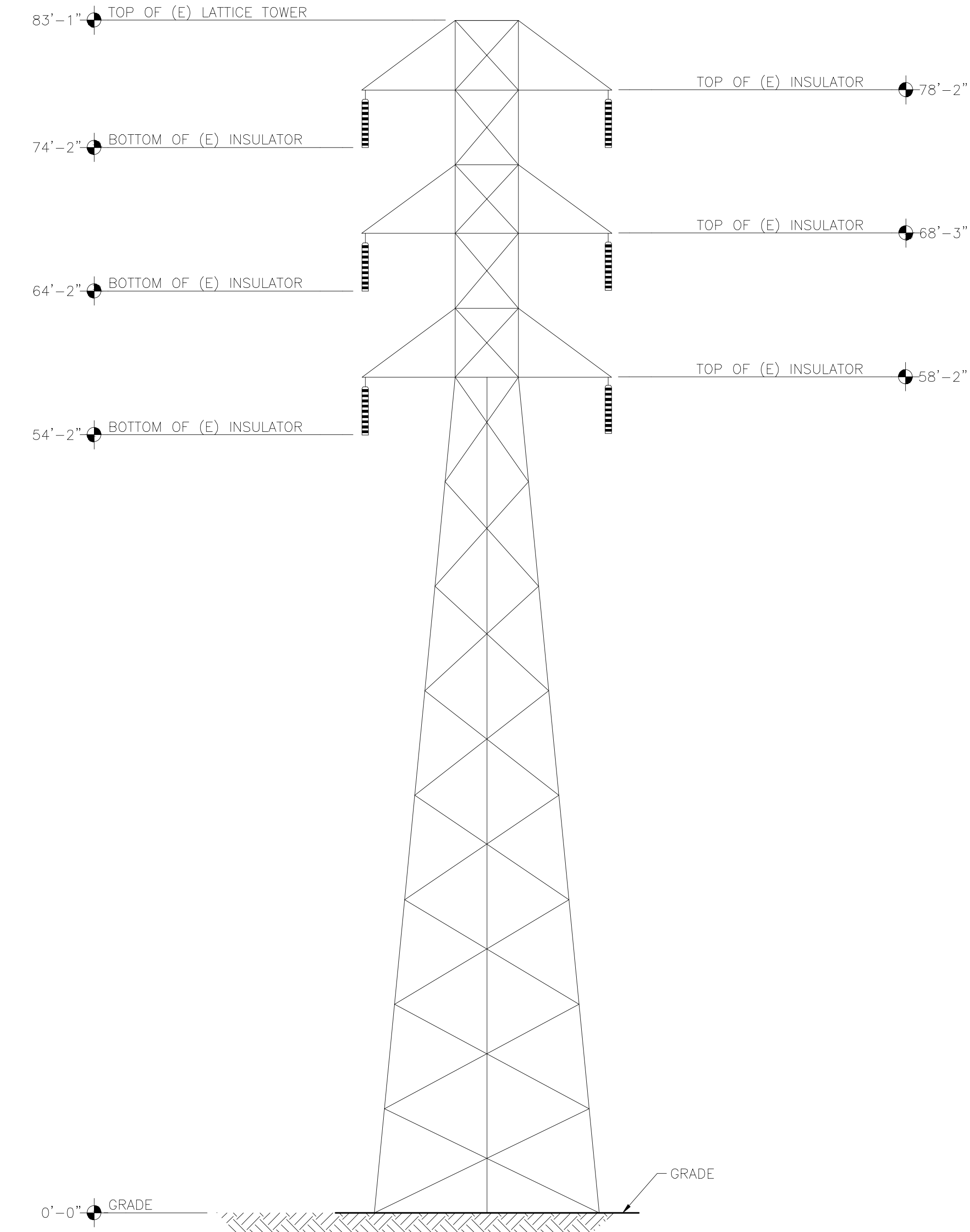
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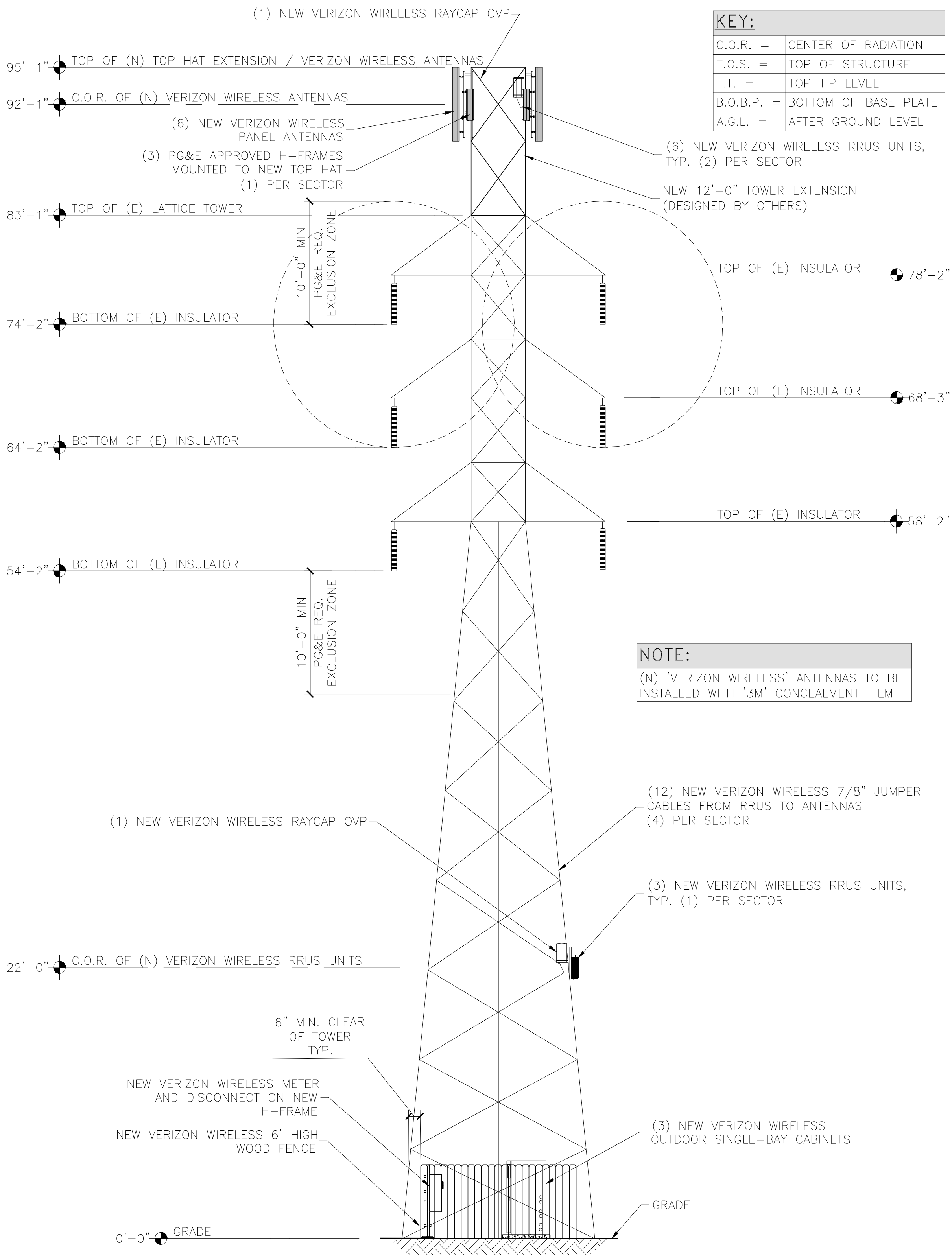
SHEET NUMBER:

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GENERAL ATTACHMENT NOTE:
ACTUAL ATTACHMENT METHOD AND LOCATION OF RRUS AND SURGE PROTECTORS TO BE DETERMINED BY PG&E IN THE FIELD
MINIMUM CLEARANCE BETWEEN CONCRETE PAD AND TOWER FOOTING IS 12". MINIMUM CLEARANCE BETWEEN FENCE AND TOWER STEEL IS 6".



EXISTING SOUTHWEST ELEVATION
SCALE: 3/32" = 1'-0"



KEY:	
C.O.R. =	CENTER OF RADIATION
T.O.S. =	TOP OF STRUCTURE
T.T. =	TOP TIP LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE
A.G.L. =	AFTER GROUND LEVEL

NOTE:
(N) 'VERIZON WIRELESS' ANTENNAS TO BE INSTALLED WITH '3M' CONCEALMENT FILM

DESIGNED FOR:

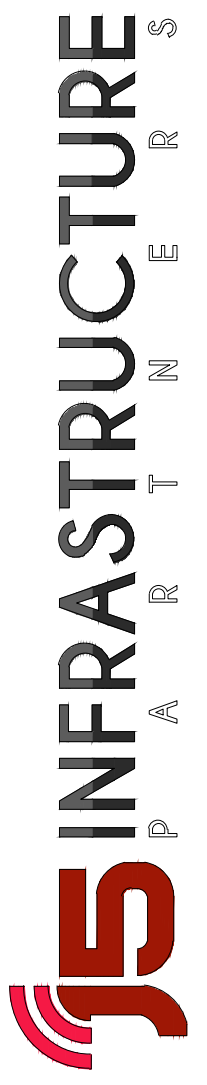


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I	REVISED PER UX COMMENTS	03/22/18	EGV	-
J	REVISED PER UX COMMENTS	07/26/18	JMM	-

DESIGNED BY:



AZ - CA - CO - ID - NM - NV - TX - UT

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:
ST. HELENA & PINE
EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

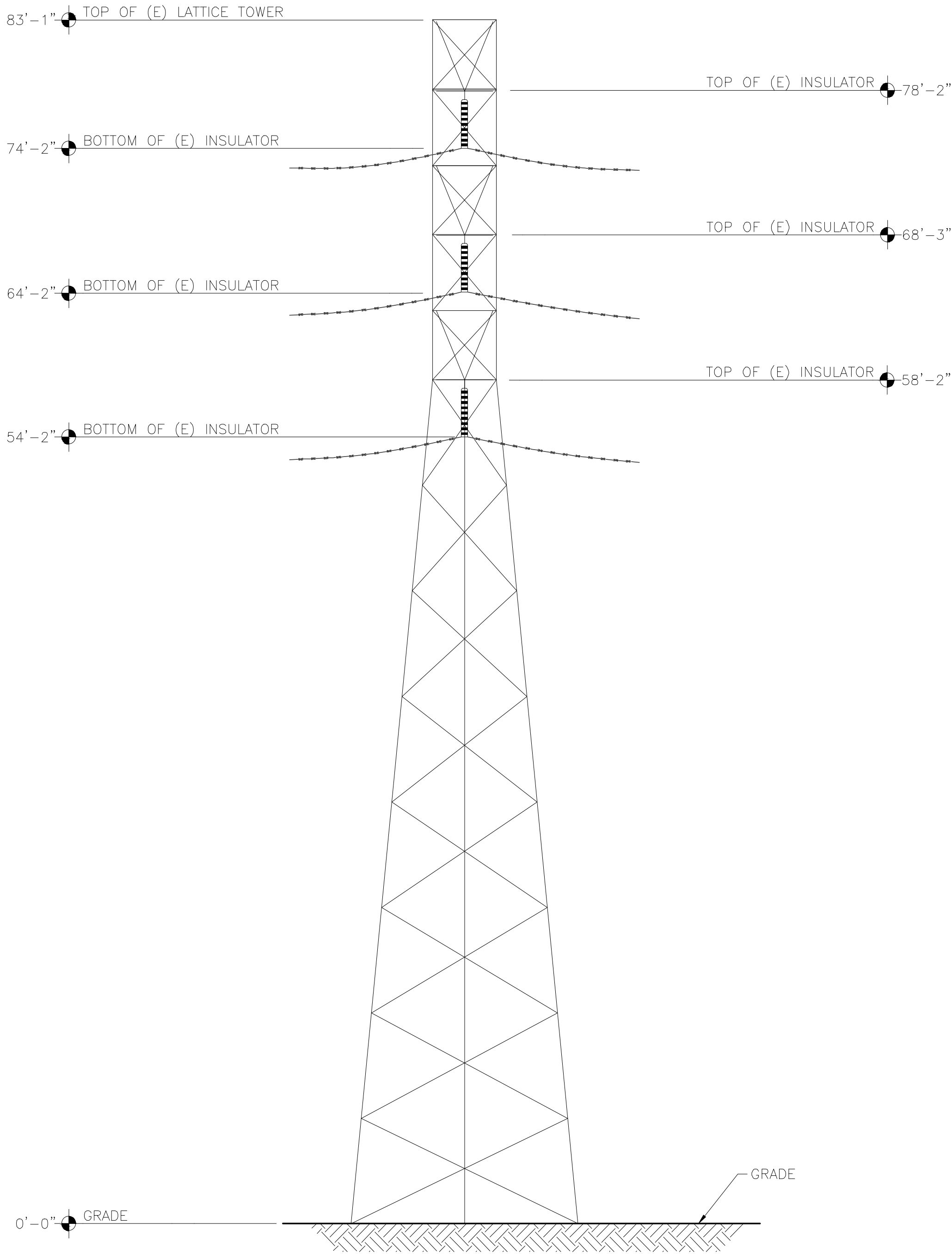
PROJECT ADDRESS:
1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SHEET TITLE:
ELEVATIONS

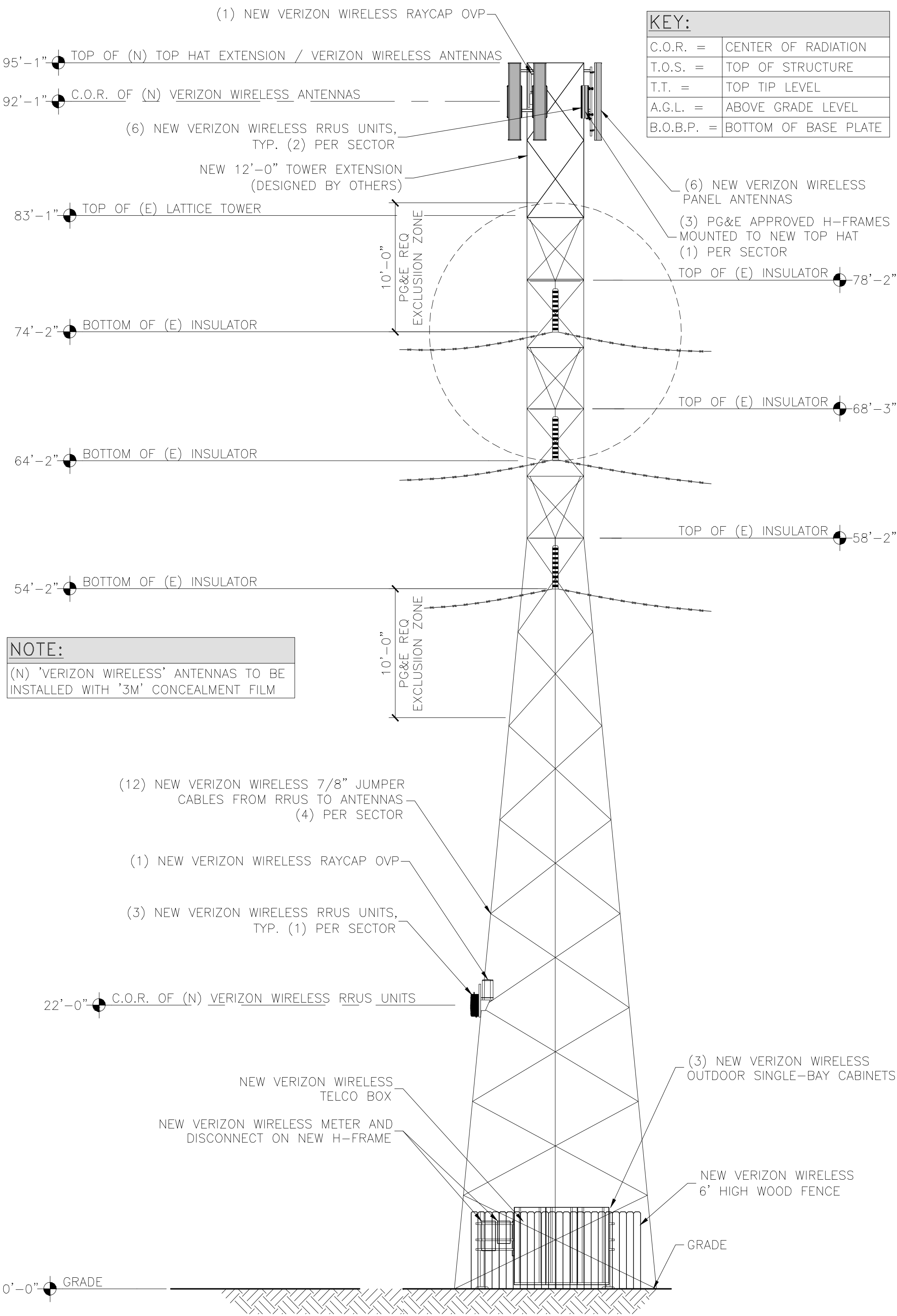
SAVE DATE:
7/26/2018 10:33 AM

SHEET NUMBER:
Z5

GENERAL ATTACHMENT NOTE:
ACTUAL ATTACHMENT METHOD AND LOCATION OF RRUS AND SURGE PROTECTORS TO BE DETERMINED BY PG&E IN THE FIELD
MINIMUM CLEARANCE BETWEEN CONCRETE PAD AND TOWER FOOTING IS 12". MINIMUM CLEARANCE BETWEEN FENCE AND TOWER STEEL IS 6".



EXISTING NORTHWEST ELEVATION
SCALE: 3/32" = 1'-0"



NOTE:
(N) "VERIZON WIRELESS" ANTENNAS TO BE INSTALLED WITH '3M' CONCEALMENT FILM

NEW NORTHWEST ELEVATION
SCALE: 3/32" = 1'-0"

KEY:	
C.O.R. =	CENTER OF RADIATION
T.O.S. =	TOP OF STRUCTURE
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE

DESIGNED FOR:



2785 MITCHELL DR.
WALNUT CREEK, CALIFORNIA 94598

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J5 INFRASTRUCTURE PARTNERS		AZ - CA - CO - ID - NM - NV - TX - UT	
REV	DESCRIPTION	DATE	BY
F	REVISED PER PG&E COMMENTS	10/06/17	EGV
G	REVISED PER PG&E & CX COMMENTS	10/18/17	EGV
H	REVISED PER PG&E COMMENTS	11/07/17	EGV
I	REVISED PER JX COMMENTS	03/22/18	EGV
J	REVISED PER JX COMMENTS	07/26/18	JMM

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:
ST. HELENA & PINE
EXISTING 83'-1" LATTICE TOWER
(OVERALL HEIGHT: 83'-1" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:
1600 BLOCK OF GRAYSON AVE
ST HELENA, CA 94574
NAPA COUNTY

SHEET TITLE:
ELEVATIONS

SAVE DATE:
7/26/2018 10:33 AM

SHEET NUMBER:
Z6

**Verizon Wireless • Proposed Base Station (Site No. 297508 “St. Helena & Pine”)
1401 Charter Oak Avenue • St. Helena, 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. 297508 “St. Helena & Pine”) proposed to be located near 1401 Charter Oak Avenue in St. Helena, 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 the tall PG&E lattice tower sited near 1401 Charter Oak Avenue in St. Helena. 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:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
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

Power line frequencies (60 Hz) are well below the applicable range of these standards, and there is considered to be no compounding effect from simultaneous exposure to power line and radio frequency fields.



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**Verizon Wireless • Proposed Base Station (Site No. 297508 “St. Helena & Pine”)
1401 Charter Oak Avenue • St. Helena, California**

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. 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 J5 Infrastructure Partners, dated October 6, 2017, it is proposed to install six CommScope Model SBNHH-1D65B directional panel antennas on a 12-foot extension to be added above the 83-foot PG&E lattice tower sited near the south edge of the agricultural property located south of 1401 Charter Oak Avenue in St. Helena, north of the residences on Grayson Avenue. The antennas would employ no downtilt, would be mounted at an effective height of about 92 feet above ground, and would be oriented in pairs at about 120° spacing, to provide service in all directions. The maximum effective radiated power in any direction would be 13,160 watts, representing simultaneous operation at 5,780 watts for AWS, 5,300 watts for PCS, and 2,080 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.



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**Verizon Wireless • Proposed Base Station (Site No. 297508 “St. Helena & Pine”)
1401 Charter Oak Avenue • St. Helena, California**

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.010 mW/cm², which is 1.0% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby residence* is 0.27% of the public exposure limit. It should be noted that these results include several “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 location 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 PG&E already takes adequate precautions to ensure that there is no unauthorized access to its tower. To prevent exposures in excess of the occupational limit by authorized PG&E workers, it is expected that they will adhere to appropriate safety protocols adopted by that company.

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 1401 Charter Oak Avenue in St. Helena, 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.

* Located at least 160 feet away, based on photographs from Google Maps.

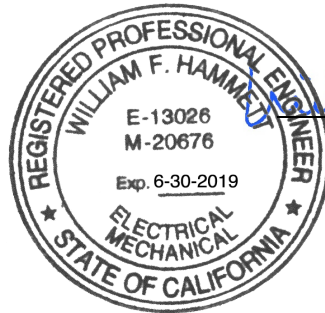


**Verizon Wireless • Proposed Base Station (Site No. 297508 “St. Helena & Pine”)
1401 Charter Oak Avenue • St. Helena, California**

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, 2019. 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.

November 9, 2017



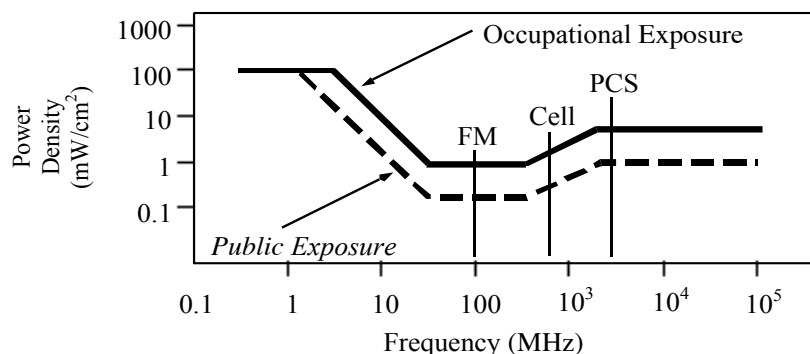
William F. Hammett
 William F. Hammett, P.E.
 707/996-5200

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	$3.54\sqrt{f}$	<i>$1.59\sqrt{f}$</i>	$\sqrt{f}/106$	<i>$\sqrt{f}/238$</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.



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FCC Guidelines
Figure 1

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:

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

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.



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Methodology
 Figure 2

Aaron Hecock

From: Rodney Friedrich <rodney.friedrich@gmail.com>
Sent: Tuesday, February 20, 2018 7:20 PM
To: Aaron Hecock
Cc: Noah Housh
Subject: Re: Verizon Wireless Antenna Project file application (file No. PL18-005)

Aaron,

Here are my comments to the Verizon Tower extension application off of Grayson Ave. near the St. Helena High School and within the Beckstoffer Vineyard:

- That a new application be filed if more than the initial 6 antennas (filed under this application), are wanted.
 - o The purpose is for the public to determine the sight views of what is installed in order to determine if more antennas are visually appropriate.
- That if any of the antennas become obsolete and/or no longer used, that they be removed.

Rodney

Rodney Friedrich

PO Box 392
St. Helena, CA.
94574
707-486-7070

www.friedrichcompany.com
www.vinelandstation.com

On Wed, Feb 14, 2018 at 8:11 AM, Aaron Hecock <ahecock@cityofsthelena.org> wrote:

Good Morning Rodney,

As stated in the Notice of Application, the project file and plans are available to review here at City Hall. They can also be found at the following link:

http://cityofsthelena.org/projects?term_node_tid_depth=21

Aaron Hecock

From: John Chen <jkchen22@comcast.net>
Sent: Monday, February 12, 2018 10:12 AM
To: Aaron Hecock
Cc: Cathrine Chen
Subject: Fwd: Cell Tower Extension off of Grayson

Dear Aaron,

My apologies for the large file size. I have resampled the mock up photo to a lower resolution and smaller file size. Please let me know if this one works better. Over the weekend, we communicated with our next door neighbors who are also concerned about the tower extension and I will speak to their neighbors later this week or this weekend. Hopefully, you will hear from them as well.

I would like to add one more concern to my original email - if this Verizon request is approved and the tower goes in, the infrastructure will be in place for other carriers to potentially add to the existing tower, thus increasing visual mass and radio transmission power, making the situation even worse (the slippery slope problem). Over the weekend we also noted that if something has to go on top of one of these high tension towers, there are other locations along the easement that are not as close to homes, especially down Mills Lane, which is mostly industrial in nature and would be on the far side of vineyards away from other neighborhoods. Below is a Google Earth view of the tower location with a circle of approximately 150 ft radius (slightly further than my original estimate of 100 feet), further illustrating how close the proposed location is to a number of homes.

Best regards,
John



Begin forwarded message:

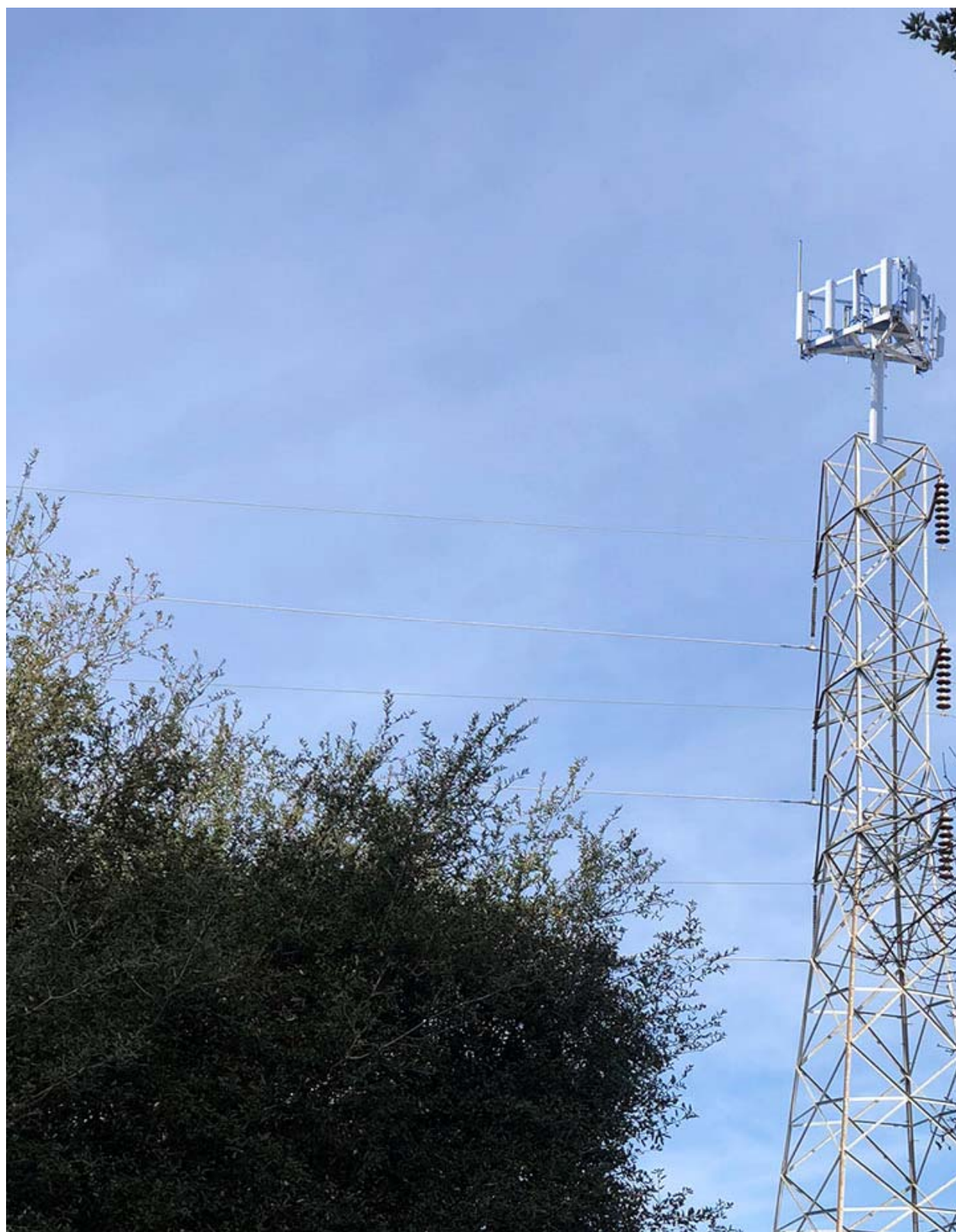
From: John Chen <jkchen22@comcast.net>
Subject: Cell Tower Extension off of Grayson
Date: February 10, 2018 at 11:56:55 AM PST
To: ahecock@cityofsthelena.org
Cc: Cathrine Chen <cathrineg1@comcast.net>

Dear Mr Hecock,

We received the notice of application regarding Verizon's plan to add a cell tower extension to the PG&E lattice tower in the 1600 block of Grayson Avenue. While we have not reviewed the actual application, we do have several concerns about this plan, as listed below:

1. While we have accepted the high tension lattice towers, of which the one in question is directly behind our property, we are concerned about the additional height and visual mass that this extension will cause. During on our nearly 17 years owning this home in St Helena, I don't recall a place in town where there is such a visually obvious cell tower that is placed at the

proposed height. Based on the specifications and without knowing the exact formation of the cellular array, I have put together a mock up of how this may look once completed. The original photo is taken from the back deck of our home. Despite any differences the actual proposed extension may have in look to this mock up, such a large and prominent cellular tower located close to any other residential areas in town would also likely generate significant concerns.



2. Our second concern, which we feel may be more controversial in nature, is the proximity of additional radiation generating elements so close to our home. This cellular array will be within 100 feet of us, and neighbors to the east a a bit to the west of us. While studies regarding the effects of long term cellular tower radiation exposure are not necessarily conclusive, we are concerned that the location of the proposed tower was chosen without regard to the residents who live in the relatively low-density housing area (from what we understand, we are zoned medium density). Also, while the location and height may be ideal for Verizon to improve its service coverage in our town, it is hard to imagine that a consideration of the chosen site included the potential to reduce public complaints due to the relatively few homes next to the tower. Granted, there are also claims that proximity to high tension power lines may itself cause excess exposure to electromagnetic radiation (a claim we have learned to dismiss as owners of our home), but the power of the cellular transmissions is likely far higher than anything coming off of the power lines.

Improving infrastructure in our town using existing resources, easements, etc. is a good overall goal for the town, but we are lodging our complaint against this particular proposed project given the points made above. If you have any additional feedback to our questions and comments, please contact us at this email address.

Best regards,
John and Cathrine Chen
1476 Grayson Ave

Aaron Hecock

From: John Chen <jkchen22@comcast.net>
Sent: Thursday, June 14, 2018 7:12 PM
To: Aaron Hecock
Cc: Cathrine Chen
Subject: Final Letter of Opposition to the Verizon Cell Tower Proposal on Grayson

Dear Aaron and the St. Helena Planning Commission,

We are sending this follow up email ahead of next Tuesday's (June 19) planning commission meeting as we will be unable to attend due to business travel. Attached are prior communications from last February when the public comment period for your reference.

Since February, we have taken notice of other cell towers attached to high tension power towers and our concerns over Verizon's proposed addition to the tower directly behind our house (see original communications below) have only grown. Attached to this latest email is a picture of a tower in Cordelia (Fairfield) just off of I680/I80 junction. In addition to the visual mass at the top of the tower caused by the cellular antennas and tower extension, the cables servicing those antennas also add a significant amount visual distraction and further amplifies the unappealing nature of the Verizon project on Grayson. Note that this example is typical of minimum installations, as we have seen a number of other instances when multiple carriers add to the same tower. As mentioned in our previous letters, approving the Verizon project sets a precedent where other carriers may be motivated to also propose adding to the same tower once infrastructure and a prior installation is in place.

Most importantly, there are no other cell towers within the town of St Helena that we know of that are this glaringly visible within neighborhoods and are located within 150 feet of homes (as far as we can tell). All other similar installations which we have seen throughout the Bay Area are also not located in neighborhoods (this one pictured in Cordelia is in an industrial area far from neighboring homes even though the power lines themselves traverse nearby housing tracts).

There are other places in town where a cellular tower, even if attached to another high tension tower, would have no impact to neighboring homes and residents. As a result, we strongly urge that the planning commission reconsider its recommendation to approve the project and instead reject the Verizon proposal.

Best regards,
 John and Cathrine Chen
 1476 Grayson Avenue



Planning Commission Public Comment for July 17, 2018 Meeting

Re: Verizon application to add cellular infrastructure to PG&E high tension tower behind our home at 1476 Grayson Ave – File number PL18-005

John and Cathrine Chen

Owners of the home at 1476 Grayson Avenue.

Thank you for allowing us to address the planning commission in writing to make a follow-up statement regarding Verizon's request to add cellular infrastructure to the PG&E high tension tower behind our home.

While we appreciate Verizon's consideration to redesign the installation to mitigate aesthetic issues, we would like to respond to a few of the comments made at the prior June 19th planning commission meeting with additional details. To reiterate our past statements, the tower in question is immediately behind our property and is visible from both our bedroom and living rooms which face towards Beckstoffer's vineyard. The easement and access road for the towers run along our property line and the tower itself is approximately 15 feet from our property and less than 150 feet from our home.

- Comments by the Verizon representative stating that the company took all steps to mitigate the obtrusiveness of the installation did not include any comments about the tower's location immediately adjacent to residential areas. In fact, the comments made indicated that the company's main interest was to fill existing service "dead zones", which, by itself, makes sense. Utilizing the PG&E tower enables the company to fulfill that particular goal without the added expense of building a stand-alone tower, but without regard to the visual impact to residents directly next to the tower. The following photograph illustrates the tower's position relative to our home and others that run nearly the entire length of the north side of Grayson Avenue and back up to the PG&E power lines and easement.



This second photo highlights our property relative to the tower in question:



- Other than the location of the tower providing a convenient location for Verizon, there is NO other infrastructure available to support the cellular installation. Both power and network connections would have to be brought in from a significant distance, likely 900 feet along the easement from the east in order to activate the antennas.
- If an existing PG&E tower must be utilized, the tower immediately east of the currently proposed tower would likely serve most of the same goals sought by Verizon. However, unlike the current location, the tower to the east is located in a primarily commercial area with J Schram Winery to the south and Tre Posti to the north. The tower's base, where supporting equipment would be housed and fenced off, is also currently partially surrounded by oleander bushes and the area is being used to store a storage container. In addition, the location is also served with existing local power lines that could be utilized for the installation, unlike the currently proposed location which includes no infrastructure other than the existing tower itself. The above-mentioned points can be seen in the following south-facing photo.



- Alternatively, a stand-alone tower located towards the north side of the vineyard and possibly disguised as a tree would likely serve the same goals but would have nearly zero visual impact. The north side of the vineyard along the industrial portion of Charter Oak (west of highway 29) currently holds the city yard and provides access to the Harold Smith and Son's rock facility. In addition, Sulphur Creek runs alongside this portion of the road and has a substantial amount of tree coverage that could also help to make a cellular tower – disguised as a tree or not – far less visible to anyone and is far enough away from all homes, including neighborhoods to the north, to cause any unsightly visual obstructions. The following photo taken from our property facing north across Beckstoffer's Dr. Crane Vineyard illustrates the tree line along Sulphur Creek as well as the absence of residential areas.



- Per the original proposal for a tower extension, the visual impact can be seen in the following two photos, taken from the perspective of our back deck. The first picture is the current view, while the second is a composite with the tower extension added via image editing software. The added antennas and tower extension are similar to the original design proposed by Verizon. Using the tower, even with significant modifications to the antenna design would result in a highly visible and unsightly change. It is important to note that the poor aesthetics result largely from the cables running up the side of the tower and the additional equipment that would be attached lower on the tower, not just from the antennas themselves.



- Finally, any agreement by Verizon to remove unused equipment and apply for additional installations does not deal with the likely possibility of other carriers requesting installation of equipment to serve their own networks (AT&T, Sprint, etc.). Approval of Verizon's requests sets a precedent and would also establish infrastructure needed to support additional equipment and would further bolster arguments from other carriers to seek their own installations.

Similar to comments made by some on the planning commission, we do agree with and support the improvement of infrastructure serving St Helena, but at the same time we obviously side with comments made regarding the concerns of those improvements creating negative aesthetic issues to residents within our small town. Being directly impacted by this proposal, we hope for and appreciate any consideration by the commission to address our concerns as part of a larger goal of preserving the residential character of neighborhoods throughout our town.

Thank you again for allowing us to voice our concerns.

Best regards,
John and Cathrine Chen