

Posted: July 12, 2019



NOTICE AND CALL OF A MEETING OF THE
TRINIDAD PLANNING COMMISSION

The Trinidad Planning Commission will hold a regularly scheduled monthly meeting on
WEDNESDAY July 17th, 2019, AT 6:00 P.M.
in Town Hall at 409 Trinity Street.

The following items will be discussed:

- I. ROLL CALL
- II. APPROVAL OF MINUTES – June 19, 2019
– July 1, 2019
- III. APPROVAL OF AGENDA
- IV. ITEMS FROM THE FLOOR
- V. AGENDA ITEMS

Discussion / Decision / Public Hearing / Action

- 1. AT&T 2019-07: Coastal Development Permit, Use Permit and Design Review to install new, temporary cellular infrastructure, including a 20-foot by 20-foot precast concrete foundation, a 75-foot tall monopole, antennas on the monopole and a walk-in equipment cabinet. The site will replace AT&T's Trinidad Head facilities until a suitable permanent site can be found (approx. 24 months). The Use Permit is required for the requested height. Located at: 12 Berry Road; APN: 515-331-016.
- 5. General Plan Update: Discussion of status and next steps. Introduction and review of a revised draft Water Demand Assessment and discussion of water service policies and priorities.

- VI. COUNCIL REPORT

VII. STAFF REPORT

VIII. FUTURE AGENDA ITEMS

IX. ADJOURNMENT

**MINUTES OF THE REGULAR MEETING OF THE TRINIDAD PLANNING
COMMISSION
WEDNESDAY, JUNE 19, 2019**

CALL TO ORDER/ROLL CALL (6:02 pm)

Commissioners Present: Graves, Stockness, Kelly, Lake

Commissioner Absent: Johnson

City Planner Staff: Parker

City Staff: Zetter, Naffah

I. APPROVAL OF MINUTES

May 15, 2019

Motion (Kelly/Lake) to approve as submitted. Passed (3-0, 1 abstention from Stockness).

II. APPROVAL OF AGENDA

No formal motion to approve the agenda. Approval made by acclamation.

III. ITEMS FROM THE FLOOR

No items from the floor.

IV. AGENDA ITEMS

1. ASBS Stormwater Improvement Project – Phase 2: Discussion/Decision on responses to comments and whether to approve the proposed Mitigated Negative Declaration and Initial Study for this project pursuant to the California Environmental Quality Act.

Staff report

City Planner Parker confirmed that third parties/agencies did not submit written comments, as of the meeting. She acknowledged and addressed the issue of cumulative impacts brought before her by the Planning Commissioners, and spoke to the matter of what a Negative Declaration is verse an EIR (Environmental Impact Report). Parker explained that cumulative impacts were anticipated early on and incorporated into the design of the project, so she has added a discussion regarding the cumulative impacts in the Negative Declaration to provide clarification. This explanation included discussing the 2012 Geotechnical Analysis and the 2013 Groundwater Model Technical Report that were prepared to inform and evaluate the design of the ASBS Stormwater Improvement Project, as bluff stability and groundwater were concerns. Parker explained these were developed as part of Phase 1 of the project.

Parker advised that she contacted the City Engineer to find out about the possible additional construction projects that could be occurring during the summer of 2020 (i.e. Stormwater Improvement Project, the Van Wycke Bicycle and Pedestrian Connectivity Project, and the Trinidad Rancheria's parking lot improvement project for the Harbor area). Parker explained

that the cumulative impacts caused by the ASBS Stormwater Improvement Project – Phase 2 is minimal (i.e. short-term noise pollution, traffic impacts, etc.). However, Parker noted that the construction schedule is not set in stone, but did confirm that the City Engineer is coordinating the City projects. Parker advised that staff recommends approval as cumulative and other impacts have been mitigated to a less than significant level.

Commissioner Questions/Comments

Commissioner Stockness questioned if the project will cause bluff instability, and the projects impact on other scheduled projects, and the final location of the project.

Commissioner Lake questioned why the Edward's slide wasn't included in the cumulative impact analysis; she opined the project is critical. Commissioner Lake questioned the mention of costs and constraints on page 3 of 5 of the Response to Comments on Public Review Draft IS-MND. She questioned if the constraints on other alternatives were technical, cultural, or financial.

Parker reiterated that comprehensive, peer reviewed geotechnical studies and a groundwater model were performed to analyze bluff stability specifically, so it has been designed into the project. She advised that prior to breaking ground on the project, there will be time for review by staff and a coastal development permit will need to be processed. Parker again explained the final locations have not been completely finalized, but that most of the project is underground and the final project will come before the Planning Commission during late summer or fall 2019. Additionally, she stressed that a reasonable alternatives were evaluated, but could not confirm all that were considered by GHD and why each one was rejected. She noted that this project was first identified as a priority in the 2008 Trinidad-Westhaven Integrated Coastal Watershed Management Plan and has also been accepted by the Water Board as part of the City's ASBS Compliance Plan.

Commissioner Graves pointed out that the resolution title needs to be updated to include the correct project. Parker made note to make the correction. The resolution was amended to "*Resolution of the Planning Commission of the City of Trinidad Adopting a Mitigated Negative Declaration for the ASBS Stormwater Improvement Project – Phase 2.*"

Public Comment

None

Commissioner Discussion

Commissioner Lake advised she does not feel well-informed, as an EIR was not provided. She opined that coordination of the projects scheduled for the summer will be poor. Commissioner Graves advised that coordination will be completed by the City Manager and Engineering Department to ensure a smooth construction season.

Motion (Stockness/Kelly) to adopt resolution 2019-2 as amended. Motion passed unanimously (4-0).

2. Gilmour 2019-04: Design Review and Coastal Development Permit to extend an existing, approximately 8' by 22' deck by 8' to the south and 4' to the east. The finished deck will be approximately 16' x 27' and will vary in height from the ground due to the slope of the property. New stairs will provide access to the deck from the south. Located at: 824 Edwards Street; APN: 042-041-043. Continued from the May 15, 2019 agenda.

Staff report

Parker advised the property is located on the north side of Edwards St. and is zoned UR – Urban Residential. Currently the structure on the property is a 60' x 30' single-story, single-family residence on the northwestern portion of the lot. She stated the project will have minimal visual impacts, but clarified that the project requires design review, as only low decks up to 30" in height or decks inside fenced areas are exempt. Parker confirmed the proposed project will not change the square footage or impact the leachfield, and deck extension will meet all setbacks. Parker explained that the conditions of approval are relatively standard and stated that the applicant has already submitted their OWTS permit application.

Commissioner Questions/Comments

Stockness questioned the location of the septic tank, and how it is serviced. Lake questioned the drive-ability of the driveway where the septic tanks are located. Commissioner Kelly disclosed that she drove by the property, read the staff report and provided documents, and confirmed that it seems to be a reasonable request. Commissioner Graves echoed Kelly's statement.

Parker confirmed the leach field is in the front of the property, further south than the deck. She explained that the septic tank is concrete and is located underneath the driveway, and is accessible via man holes. She stated it was approved by the Health Department, so is assumedly rated for traffic; that the project will not impact the septic/leach field.

Public Comment

M. McHenry (speaking on behalf of the applicant) advised the owner has not had problems with the septic tank; the driveway is crack free and the OWTS permit was submitted last week.

Commissioners Discussion

Graves advised that the conditions of approval are relatively standard. Stockness suggested that because the property is on a main street the construction company should park in the driveway. McHenry advised the contractor works alone, and the driveway is large.

Motion (Lake/Kelly) to adopt the information and required Design Review and View Protection and other findings in the staff report and approve the project as submitted in the application and described in the staff report, and as conditioned herein. Motion passed unanimously (4-0).

3. TCLT 2019-05: Use Permit and Coastal Development Permit to remove one large (>12" DBH) non-native, holly tree that poses potential hazard to structures, City infrastructure (sidewalk) and blocks sunlight to an historic structure. A prior request to remove the tree in 2012 was approved, but the approval has expired. Located at: 490 Trinity Street; APN: 042-031-027.

Graves, Kelly, and Stockness disclosed they are TCLT donors, but they have not discussed the project and have no decision-making authority with the TCLT. Lake disclosed she once was the president of the TCLT.

Staff report

Parker advised the applicant submitted the same application in 2012, which was approved, but the tree wasn't removed prior to the permit's expiration. She explained the project is to remove a non-native, holly tree that is posing potential hazards to City infrastructure, such as streets and sidewalks as well as to the property itself. Parker advised that the removal will require a Coastal Development Permit, a use permit, and an encroachment permit. Parker confirmed that the arborist recommends a replacement of vegetation that is small, deciduous and native, and the City Engineer confirmed the removal must be completed outside of nesting season. Parker stated the structure will not be impacted, and the septic is not near the site of removal. She specified the approval is for a 1-year permit, and that if the stump is removed and soil is disturbed, a cultural monitor will need to be present.

Commissioner Questions/Comments

Commissioner Lake questioned the cost of the permit and whether or not the Land Trust understood the cultural monitoring process. Lake questioned if there were comments in 2012 about its removal. Kelly advised that there were numerous comments about keeping the tree in 2012, but was unaware that the nesting birds were a nuisance. Kelly stated that her personal preference would be to remove the stump, and may ask for a condition.

Parker confirmed the applicant is responsible for paying the City's costs of processing the permit, and the deposit is \$750, but the TCLT could potentially get a refund, because the staff report had already been written. She confirmed that there were several objections to the tree removal from members of the public during the 2012 hearing. She also explained that there is no formal process of obtaining a cultural monitor, but that the City can provide guidance.

Public Comment

B. Morehead (TCLT) advised the stump will be removed and a cultural monitor will be present; the TCLT has employed monitors in the past. Morehead confirmed the TCLT is planning on removing the tree in November 2019, post nesting season. He stated the Ned Simmons did agree to the cutting before he passed, as he was more concerned with the biological side, than the historical connection.

Commissioner Lake stated he never publically voiced it, and noted that some of the objections in 2012 were related to that.

Motion (Kelly/Stockness) to adopt the information and findings in the staff report and approve the project as conditioned. Motion passed unanimously (4-0).

4. Spiegle 2019-06: Coastal Development Permit and Design Review add approximately 508 sq. ft. to the existing 294 sq. ft. second story deck. The new deck will follow the footprint of an existing concrete patio along the west side of the residence. Located at: 895 Underwood Dr.; APN: 042-031-001.

Staff Report

Parker explained the project is located adjacent to the Trinidad State Park, a designated open space area and a public trail, so additional consideration is warranted. She confirmed the materials used to add approximately 508 sq. ft. to the second story deck will match the existing residence, and the deck will mainly consist of glass and wood. Parker advised that the existing 294 sq. ft. deck is also being replaced as part of this project, but that would be exempt from review as it falls under the repair and maintenance exemption. She confirmed square footage will not be added the house itself, the deck should have minimal visual impacts, and setbacks are met. Parker confirmed story poles were requested.

Commissioner Questions/Comments

Kelly opined that she didn't think there would be private viewshed issues with this project. Stockness voiced her concern regarding the trail located in-between the house and bluff, due to its frequent use. She also voiced her concern regarding viewshed impacts. Lake echoed Stockness' concern; she walked along Underwood and felt that the views of neighbors across the street could be impacted.

Public Comment

D. Ferguson (Discovery Design) and R. Tudor (Build's Pro) spoke on behalf of the applicant. They explained the deck only protrudes a small length on the north side adjacent to the park, and the railing is glass, thereby minimizing visual impact on the north side. They advised that story poles have been up for a week (June 13th) and no comments have been made; they had one call from a neighbor with questions. They explained that the project will not protrude past the roofline. Ferguson explained the deck is in similar scale with the neighboring decks. They advised the story poles were added for full transparency, despite the lack of an ordinance.

Commissioner Graves questioned if it would be an inconvenience if the decision was delayed. Ferguson explained it will be a problem, because they cannot wait much longer to order the doors as they must be installed during dry weather. Commissioner Lake advised she is concerned about the reflection of the glass, as it could be quite significant from the trail.

Tudor stated multiple residences have glass decks. Ferguson advised it is single pane, which is not that reflective. Commissioner Graves complimented the visual presentation.

Commissioner Discussion

By acclamation, the meeting was adjourned at 7:32 pm to visit the site.

During the site visit, Lake advised that the deck is still viewable from the street, and questioned if they considered cables instead of glass. Ferguson and Tudor reiterated single pane glass is not very reflective and explained that cables are not as stable (it was later mentioned that cables are a poor design for child safety). Commissioners walked the site and made general observations. The meeting reconvened at Town Hall at 8:04 pm.

Kelly advised it was valuable to walk the site, as she feels comfortable that the applicant has developed a design that is minimally intrusive. Graves echoed Kelly's comment. Stockness opined the glass will be visible from the park, but from the trail everything is hidden. Stockness stated she is favor of the project, as the viewshed is minimally impacted.

Motion (Kelly/Graves) to adopt the information and required Design Review and View Protection and other findings in the staff report and approve the project as submitted in the application and described in the staff report, and as conditioned herein. Motion passed unanimously (4-0).

5. General Plan Update: Discussion of next steps and scheduling.

Parker advised there is no new material to present, but staff is at a point where they can reconvene review of the General Plan. Parker presented the LCP grant schedule, and advised she would like to begin scheduling special meetings. She stated she will soon have the City and service area water demand assessment prepared. She opined there are advantages and disadvantages of annexation and the City needs to determine the prioritization of hookups. Parker advised that Patrick's Point Drive is a commercial area that is a potential revenue source. The next step is to look at a water supply and risk assessment on Luffenholtz Creek, and assessing the water rights of the watershed, while also analyzing the water rates structure. A special meeting for July 1st was scheduled to discuss the general plan update. Commissioner Graves advised the only way to approach the General Plan is to go chapter by chapter and pass each along to the Council as the Planning Commission finishes each one. Lake echoed his statement.

Parker advised she spoke to the California Coastal Commission staff and they admitted they have been remiss by not providing comments. The CCC has advised that they will be providing comments on the General Plan moving forward. Parker stated she will start meeting with the CCC and discuss the implementation plan, who will be taking a big picture approach to the General Plan. Parker requested to be notified of red flags, background studies needed, etc. The CCC will also look at organization and how to separate the Coastal Certified Element.

Lake questioned if the implementation plan and the General Plan will be reviewed concurrently. Graves advised that ideally yes, but it will not happen. Lake stated that she wants to be provided with all documents submitted to the CCC, as they are public. Parker confirmed not all documents are available to the public, depending on what stage the document is in. Lake advised she is concerned about 24 hours notice for special meetings.

Lake questioned if we are close to a water policy. Parker explained that she met with the City Manager and City Engineer to talk about scopes of work for the next studies. Parker explained City staff are working towards a water policy.

V. COUNCIL REPORT

Commissioner Graves stated the Council approved the budget for the Access Humboldt audio and video recording equipment.

Commissioner Lake questioned if the Rancheria submitted a formal connection application, where the location of the the AT&T cell tower will be, and whether a Planning Commission liaison for the Council has been determined. Lake further stated that she wants all public comments online by 2:00 pm of the meeting date. She also requested to know what the policy is for cultural monitoring and story poles, and whether there are forms.

Parker confirmed the Rancheria submitted a connection request letter, while also clarifying that it will also requires LAFCo approval. Parker confirmed that the proposed location of the cell tower is at the church on Berry Road, but clarified that it is a temporary location, because the Church does not want it indefinitely. Commissioner Graves stated he has not confirmed with Mayor Ladwig about a liaison. Parker advised that cultural monitoring protocols would be well-suited for placement in the cultural aspect of the General Plan, and the story poles could be put in the design section.

VI. STAFF REPORT

No staff report was given. A discussion regarding upcoming meetings and overall general information took place during the General Plan agenda item and the Council Report.

VII. FUTURE AGENDA ITEMS

General Plan, AT&T cell tower

VIII. ADJOURNMENT

Meeting has been adjourned at 8:59 pm. Next meeting regularly scheduled meeting is July 17, 2019. A special meeting was scheduled for July 1, 2019.

Submitted by:

Angela Zetter
Administrative Assistant

Approved by:

John Graves
Planning Commission Chair

**MINUTES OF THE SPECIAL MEETING OF THE TRINIDAD PLANNING
COMMISSION
WEDNESDAY, JULY 01, 2019**

I. CALL TO ORDER/ROLL CALL (5:00 pm)

Commissioners Present: Graves, Stockness, Kelly, Johnson
Commissioner Absent: Lake
City Planner Staff: Parker
City Staff: Zetter

II. APPROVAL OF AGENDA

Motion (Johnson/Stockness) to approve the agenda as submitted. Passed unanimously (4-0)

III. ITEMS FROM THE FLOOR

No items from the floor.

IV. AGENDA ITEMS

- a. General Plan Update: Discussion of status and next steps. Introduction and review of a draft Water Demand Assessment and discussion of water service policies and priorities.

Staff report

Parker provided background information regarding the City's water service policies. She stated that initially there was never a perceived need to change the service area or sphere of influence as part of the general plan update, but multiple situations (i.e. drought and limited water supply) have caused the City to reevaluate this issue. Parker explained that the City needs to determine if the City wants to change the boundaries of the service area and / or prioritize certain areas for possible annexation. Parker confirmed that LAFCo is the agency that makes the final determine on out of area service requests (e.g. water connections outside City limits), as well as jurisdictional boundaries for cities and including annexations, etc. She explained that LAFCo policies changed around 2000, resulting in the discontinuation of the City providing water connections outside of the City limits, but those policies have since been relaxed somewhat. An exception was made for CAL FIRE back in 2009. Parker stated that there are multiple pieces to the water puzzle, but a goal of the City is to develop more specific policies or regulations for responding to future water service requests.

Parker confirmed that with the water plant production memo prepared by GHD, and the water demand assessment she has provided, the big remaining question now is the flow

capacity of Luffenholtz Creek. She noted that while there is some potential to make improvements to the plant to increase production, the ultimate limiting factor is likely low flows on the creek. She referenced the Draft Water Demand Assessment included in the packet, stating it provides projections for build-out within the City limits and within the City's service area. She advised that the report includes conservative estimates that likely overestimate demand in order to provide a cushion. However, the report does not provide a timeframe, because buildout is likely decades into the future.

Parker confirmed that there is more developmental potential in the City than one would expect. She advised that to determine this she used a parcel by parcel assessment within City limits. She also included potential for accessory dwelling units. She confirmed that the water demand assessment examined zoning potential of both residential and commercial parcels in the service area. Parker further discussed the City's current infrastructure; advising that there is currently some water loss in the system, which GHD will be further investigating. GHD will also be assessing low flows on Luffenholtz Creek.

Commissioner Questions/Comments

Commissioner Graves asked about water losses and the accuracy of the tests at the water plant. Parker advised conducting tests at the water treatment plant for a longer period of time would be beneficial, but an answer would better be provided by the City Engineer GHD. She further stated that in regards to losses, those can be difficult to trace, and 10% to 20% is fairly normal. GHD will be examining the difference in production and what is metered in total to see where losses may be occurring.

Commissioner Stockness requested that creeks be added to the service area map and asked for clarification on maps provided. Commissioner Kelly opined that comparison of Trinidad's per capita water use to other communities would be beneficial.

Parker provided a brief explanation of the study planned for Luffenholtz Creek. She stated that one of the main components of the flow study will be an emphasis on low-flows and risks to the City's water supply from droughts and climate change. Parker further stated a model of the Trinidad's water system will be developed to determine storage capacity and how changes to the system would impact other parts of the system, such as change in pressure, etc. GHD will also be looking at alternative sources of water supply. At some point, SHN will develop an inventory of water rights in Luffenholtz Creek, so that the City can better enforce its right as needed. Furthermore, policies and procedures for responding to water service requests are being discussed between the Planner, Engineer and the City Manager.

Commissioner Johnson advised that it is unclear how the City integrates their policies with LAFCo policies that are created for service areas that are outside of City limits. He stated there needs to be a cohesive set of policies we can all agree on.

Stockness questioned whether the CCC has to approve connections/annexations. Parker advised that the CCC must approve annexations, because new areas and new zoning would be added to the City's LCP. But the CCC would not need to approve individual service connections. However, Parker explained the City needs to determine who to service first. She clarified there could be individual approvals for connection, which do not require annexation at the time of connection. While further stating, some individuals may not want to be annexed. However, Parker advised that annexation of commercial areas would be financially beneficial for the City but annexing residential areas can have benefits too.

Commissioner Graves questioned whether the City has reviewed water usage of Short Term Rentals in City limits. Parker responded that STRs were not reviewed as part of this current water demand assessment, but that the City has studied that in the past. She notes that, on average STRs use a little more water than a long-term residence, but that the highest residential water users are not STRs.

Commissioner Kelly requested a comparison of water usage with other cities in the area, such as Arcata and Eureka, to compare per capita use, as per capita Trinidad citizens appear to be frugal. Kelly advised that she would like to know how usage is being tracked and forecasted down the road, and that per capita water use could be used to predict future water use based on population growth. Parker advised that a comparison with surrounding cities could be difficult, as the service area is not a census tract, so the population is unknown; the only option may be to examine trends over time and parcel-by-parcel water use. Parker also notes that parcel size and landscaping play a large role in water use patterns.

Johnson questioned ADUs and their impact on bluff saturation/stability. Johnson further questioned if the spreadsheet can be used to perform the "what if" scenarios. Johnson opined it would be beneficial to both the Commission and public if the City Engineer/Planner provided a tutorial at the meeting, as the assumptions made are important for the future of the City. Parker responded that the City's groundwater model has indicated that there are certain areas of the City where water infiltration is not a limiting factor, but that there is a limit to how much water can be infiltrated in other areas. She also stated that it would be fairly easy to make changes to the assumptions in the spreadsheet and review how that changes the water demand real-time.

Commissioners Johnson and Graves questioned tables and figures provided. Parker provided explanations and clarifications, many being geared toward the Rancheria's water usage. Parker confirmed the Rancheria will be included in the total amount of usage for out of service areas, and confirmed that she has performed a comparison of water usage of the Rancheria versus other service area properties. Parker clarified that there are multiple uses at some of the Rancheria properties. Graves requested the total

amount of water usage for the Rancheria. Johnson requested a map of the City and outside City limits be provided on the projector at the next meeting.

Public Comment

D. Grover (Trinidad Resident and City Council member) advised that the Council approved the scope of services for GHD to perform the five tasks listed above, so many of the questions being asked will be answered. Grover also read from the General Plan.

S. Madrone (Greater Trinidad Area Resident and County Supervisor) stated that the basis for previous low flow estimates for Luffenholtz was in the summer of 1977, but it wasn't a hundred-year drought. Madrone stated it was unclear why the Council voted to spend a substantial amount of money from the water reserve fund on a low-flow study, as there was a recent study of Luffenholtz Creek related to the Moss subdivision. Madrone, however, opined that the alternative water study is important. He mentioned the spring concept that he brought forward to the City, which would allow the City to reduce its chemical usage and limit staff time. He also brings up rainwater catchment.

E. Weinreb (Greater Trinidad Area Resident) stated the documents library on the City's website is confusing and the documents were hard to find.

D. Hankin (President of the Westhaven CSD Board) stated Westhaven's water usage peak is generally in August. Hankin stated that a tiered rate system, as recommended in the report is illegal. He advised there is a lot of water loss within the Trinidad system.

S. Laos (Trinidad Rancheria) clarified that there are some parcels that have two homes on the Rancheria, but two homes on one meter is not allowed. She advised that if requested, she can obtain more information and provide it to the City Planner.

D. Cox (Trinidad Resident) questioned the allowance and assessment of ADUs in the report. She stated that ADUs are impacting the area, and if they are allowed, there will be too many people.

V. Sackville (Trinidad Resident) questioned what the commercial verses residential usage is. She stated commercial locations are using more water.

Commissioner Discussion

In response to data requests, Parker advised that not all of the water account information is available to the public, due to privacy laws. In response to D. Hankin, Parker advised that according to the City Engineer, multiple cities use tiered water systems.

Johnson questioned what is done for fire suppression. Parker confirmed the City does have a few storage tanks and GHD is conducting studies to determine how much the City

has for fire flow capacity. Parker clarified it is possible that the City does not meet the current standards.

Stockness discussed the benefit of rain catchment for future water service and build out demand. Commissioner Kelly questioned if there are state grant programs.

Public Comment

S. Madrone (Greater Trinidad Area Resident) stated there is grant funding for rain catchment, especially because it incentivizes less usage.

S. Laos (Trinidad Rancheria) stated she and her sister are advocating to the Rancheria for rain catchment systems. He also suggests that the City look into the possibility of constructing storage ponds in the upper Luffenholtz Creek watershed.

Commissioner Discussion

The Commissioners did not have additional comments and questions on the water demand assessment, so they moved on to a general discussion of the general plan update, including the status and next steps. Parker advised that she wants to revisit the introduction section and vision statement, which Commissioner Kelly has done some work on. She discussed that previously the drafts were from the early 2000s and then 2012. She recommended not reviewing the General Plan page by page, because that has already been done, but instead update information as needed and get the elements back to the City Council. Parker further stated that she wants to incorporate the CCC's comments, which she expects soon. Upon final review, each element will be provided to the Council for their review.

Commissioner Graves requested a copy of what has been updated so far. Parker advised she will get as much as she can for the next agenda. Parker confirmed the General Plan and the implementing ordinances must be submitted to the CCC at the same time. Graves stated Parker's institutional knowledge helps the City immensely.

V. STAFF REPORT

Graves made a note to again reach out to Mayor Ladwig to discuss a liaison. Johnson commented that there is no reason why the Planning Commission and City Council cannot have a joint meeting.

VI. ADJOURNMENT

Meeting has been adjourned at 6:42 pm. Next meeting is July 17, 2019.

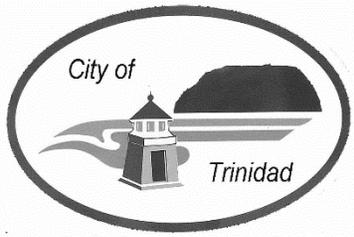
Submitted by:

**Angela Zetter
Administrative Assistant**

Approved by:

**John Graves
Planning Commission Chair**

DRAFT



Filed: May 29, 2019
Staff: Trever Parker
Staff Report: July 3, 2019
Commission Hearing Date: July 17, 2019
Commission Action:

STAFF REPORT: CITY OF TRINIDAD

APPLICATION NO: 2019-07
APPLICANT / AGENT: Gordon Bell, J5 Infrastructure Partners for AT&T
OWNER: Assemblies of God Inc.
PROJECT LOCATION: 12 Berry Road
PROJECT DESCRIPTION: Coastal Development Permit, Design Review and Use Permit to install new, temporary cellular infrastructure, including a 20-foot by 20-foot precast concrete foundation, a 75-foot tall monopole, antennas on the monopole and a walk-in equipment cabinet. The site will replace AT&T's Trinidad Head facilities until a suitable permanent site can be found.

ASSESSOR'S PARCEL NUMBER: 515-331-016
ZONING: PR - Public & Religious
GENERAL PLAN DESIGNATION: PR - Public & Religious

ENVIRONMENTAL REVIEW:
Categorically Exempt from CEQA per § 15303 of the CEQA Guidelines exempting new construction or conversion of small structures, and/or §15304 exempting minor alterations to land, and/or §15332 exempting in-fill development projects.

APPEAL STATUS:
Planning Commission action on a Coastal Development Permit, Variance, Conditional Use Permit, and/or Design Review approval application will become final 10 working days after the date that the Coastal Commission receives a "Notice of Action Taken" from the City unless an appeal to the City Council is filed in the office of the City Clerk at that time. Furthermore, this project is / **is not X** appealable to the Coastal Commission per the City's certified LCP, but may be appealable per Section 30603 of the Coastal Act.

SITE CHARACTERISTICS:

The property is located on the southeast side of Berry Road, near its intersection with Frontage Road. It is currently developed with an approximately 60 ft. x 35 ft. (2,100 sq. ft.) church with an approximately 30 ft. x 30 ft. (900 sq. ft.) residence attached. Access is provided from Berry Road. A large gravel parking area exists at the front (west end) of the lot. The existing septic system is located to the east of the church and residence. The western portion of the lot is generally flat; the eastern half of the lot is forested and slopes towards the southeast. Surrounding land uses are almost exclusively residential, though the surrounding lands have a mix of zoning designations including, SR - Suburban Residential, PR - Public and Religions, C- Commercial, and PD - Planned Development.

STAFF COMMENTS:

Referrals were sent to the Building Inspector, City Engineer, Public Works, and the County Division of Environmental Health (DEH). Neither Public Works staff or DEH has any issues with or comments on the project. The City Engineer and Building Inspector had comments regarding the type of plans, reports, calculations, etc. that would be required as part of the building permit process. These requirements have been included as conditions of approval.

AT&T is one of the three cellular providers that currently have facilities at the Trinidad Head site. Sprint and AT&T antennas are co-located on one of the wooden monopoles; AT&T also has an equipment cabinet located on a concrete slab. The property is owned by the City, and Verizon is the primary leaseholder, subletting to the other two carriers. The City has indicated its intention to not renew the lease when it expires in September of this year. Therefore, the cellular providers have been working towards establishing new sites to replace the one being lost on Trinidad Head. Staff is not sure at this point what the progress has been of the other two providers. However, Verizon has recently indicated that they will not be ready to go offline with the Trinidad Head facility by September 1. In addition, they have not submitted the necessary permit applications to remove the facilities, and so the Council will be discussing whether to extend the lease for a limited period of time.

AT&T is seeking to establish a permanent replacement site, likely outside of City limits, that will provide more complete coverage, but that is still in the planning stages will not be on-line for some time. In addition, the property owner of this temporary site has indicated that they do not want a permanent cellular facility on their property. Therefore, AT&T is proposing this temporary site until a new, permanent site can be permitted and constructed. Originally, AT&T was planning on a mobile tower located on a trailer. According to the applicant however, all of those are now being employed in

burned areas where equipment was destroyed. Therefore, the current proposal includes installation of a concrete pad to support the pole. A condition has been included that the approval is for a two-year period and that the applicant must submit a demolition / removal plan at least three months prior to the expiration to be approved by City staff. Several of the findings that are required for this project have been made based on the facility being temporary. Should the situation change, and AT&T want to pursue a permanent facility at this location, additional mitigation, particularly related to aesthetic impacts, would likely be required in order to make the necessary findings.

Potential Conflicts of Interest

None known.

ZONING ORDINANCE / GENERAL PLAN CONSISTENCY

The property where the project is located is zoned PR – Public and Religious. As its name implies, this zone is intended for public and religious uses and ownerships, including schools, public parking areas, utility substations, fire stations, public buildings and cemeteries. Section 17.48.010 of the zoning ordinance states that: *“any public and religious facility should be compatible with nearby uses and be located on streets which offer convenient access.”* Principally permitted uses (§17.48.020) include: *“E. Utility substations, corporation yards, reservoirs, storage tanks, radio and TV transmission facilities, caretaker residences.”* The proposed cellular facility fits into this category of uses.

There is no minimum lot size or maximum density in the PR zone, except §17.48.030 requires lots to be large enough to accommodate the use, required setbacks and septic system. Surrounding SR zoned parcels have a minimum lot size of 20,000 sq. ft. The existing lot is 83,518 sq. ft. (1.92 acres). The proposed project will not change the square footage of the existing structures or lot.

The PR zone (§17.48.040) requires minimum yards of 20' for the front and 5' for the rear and side lot lines for this project (no side or rear yard setback is required if adjacent to another PR or a C (commercial) parcel, though zero setback would not meet current fire code requirements. The parcel faces Berry Road to the east. The proposed cellular facility will have an approximately 42' setback from the road right-of-way.

The maximum height allowed in the PR zone, by Zoning Ordinance §17.48.040, is 25 ft., except that a greater height may be allowed with approval of a use permit. The proposed maximum height of the cellular pole is 75', therefore, the project requires approval of a Use Permit.

Parking requirements for a church or other public gathering places are not provided in the City's Zoning Ordinance (§ 17.56.180). The City of Blue Lake requires one space for

every 6 seats and 4 employees. The City of Arcata requires a minimum of one space per 500 sq. ft. and a maximum of one space per 350 sq. ft. for public assembly uses. Therefore, Arcata would only require four to six spaces, which seems low. Based on recommendations for sizing churches that can be found online, the maximum recommended seating capacity is one person per 15 sq. ft. That would equate to a maximum capacity of 60 people at this small church. That is likely an overestimate, but would equate to 10 parking spaces using Blue Lake's standard. Trinidad's Zoning Ordinance requires each parking space to be 18 ft. long and 8.5 ft. wide. The existing, large driveway accommodates more than ten parking spaces. (There are seven spaces across the front of the church building, at least four in the driveway alongside it, and at least another five along the north side of the parking area, not including the proposed lease area, for a minimum total of 16 spaces.)

The Trinidad General Plan and Zoning Ordinance protect public views of the coastline from roads, trails, and vista points and private views from inside residences located uphill from a proposed project. Due to the location of the structure in relation to surrounding structures, trees and vegetation, there is very little potential to block coastal views from the road or from residences located uphill from the structure. However, there is the potential for aesthetic impacts when looking towards the site. The applicant has provided photo simulations of the proposed cellular pole from two locations on Hwy 101. Since most of the town of Trinidad is at a lower elevation than Hwy 101, visual impacts from town would be less than what is indicated in the photo simulations. Neighbors have been notified so they can have a chance to provide input.

I did not request a story pole as high as the proposed tower to be placed on the site. Without engineering and reinforcement, that would be a safety hazard. However, I did request that the proposed location of the concrete pad be outlined with stakes and flagging, but the applicant did not have a local contact who could reliably do that within the timeframe of this meeting. The location can be fairly easily discerned based on the site plan overlaid on an aerial photo that is attached. For perspective, the adjacent group of redwoods is approximately 100 ft. tall. The pole consists of galvanized steel, so will be grey in color.

No excavation will be required to place the concrete pad, because the site is already mostly level. The site will need some minor scarification / leveling, which will not entail more than 6 inches of elevation change.

This site is already connected to services and utilities, but the cellular facility will require a new electrical connection; no other utilities are required. No lighting is proposed at the site. Equipment in the cabinet will have small fans, but noise generation will be minimal.

DESIGN REVIEW / VIEW PROTECTION FINDINGS:

Because the project proposes a new structure and is not exempt (§17.72.070.C) from a CDP, §17.60.030 requires Design Review and View Preservation Findings to be made. The required findings are written in a manner to allow approval, without endorsing the project. However, if public hearing information is submitted or public comment received indicating that views, for instance, may be significantly impacted, or the structure proposed is obtrusive, the findings should be reworded accordingly.

Design Review Criteria

- A. *The alteration of natural landforms caused by cutting, filling, and grading shall be minimal. Structures should be designed to fit the site rather than altering the landform to accommodate the structure.* **Response:** The site is already fairly level, with one foot or less of elevation change across the concrete pad site. A minor amount of scaping will be required to place the precast concrete foundation with a maximum depth of disturbance of approximately 6 inches.
- B. *Structures in, or adjacent to, open space areas should be constructed of materials that reproduce natural colors and textures as closely as possible.* **Response:** The project is not located adjacent to an area zoned open space. Most of the project property is undeveloped and forested though. Colors and materials do not necessarily blend with the surroundings, but the existing trees and other vegetation on the site will help screen the proposed development. Cellular poles can be made to resemble trees, which could be appropriate in this location if it were a permanent site. However, because it is temporary, that can be found to be unnecessary and unfeasible due to the added expense.
- C. *Materials and colors used in construction shall be selected for the compatibility both with the structural system of the building and with the appearance of the building's natural and man-made surroundings. Preset architectural styles (e.g. standard fast food restaurant designs) shall be avoided.* **Response:** Materials used in construction are primarily determined by structural requirements. The pole consists of galvanized steel, which is grey in color. Approval is for a two-year period, and the material and color are not inconsistent with surrounding and nearby development, which includes Hwy 101 immediately to the west.
- D. *Plant materials should be used to integrate the manmade and natural environments to screen or soften the visual impact of new development, and to provide diversity in developed areas. Attractive vegetation common to the area shall be used.* **Response:** No changes in landscaping are proposed at this time. Existing onsite vegetation will be retained. The proposed pole will be within the dripline of a group of adjacent redwood trees that are approximately 100 ft. tall, which will help screen the development. The approval is only for a two-year period, so additional screening vegetation would be

impractical, because it wouldn't have time to grow. A condition of approval has been included that prohibits tree removal and major pruning.

- E. *On-premise signs should be designed as an integral part of the structure and should complement or enhance the appearance of new development.* Response: No signs are proposed as part of this project.
- F. *New development should include underground utility service connections. When above ground facilities are the only alternative, they should follow the least visible route, be well designed, simple and unobtrusive in appearance, have a minimum of bulk and make use of compatible colors and materials.* Response: The church is currently served by an overhead electrical line from an adjacent utility pole on Berry Rd. The cellular facility is proposed to be connected to a new overhead line adjacent to the existing one. Because the approval is only for a two-year period, it is not practical or to require an underground electrical connection due to the added expense and increased impacts from soil disturbance.
- G. *Off-premise signs needed to direct visitors to commercial establishments, as allowed herein, should be well designed and be clustered at appropriate locations. Sign clusters should be a single design theme.* Response: No off-premise signs are proposed as part of this project.
- H. *When reviewing the design of commercial or residential buildings, the committee shall ensure that the scale, bulk, orientation, architectural character of the structure and related improvements are compatible with the rural, uncrowded, rustic, unsophisticated, small, casual open character of the community. In particular:*
- 1. Residences of more than two thousand square feet in floor area and multiple family dwellings or commercial buildings of more than four thousand square feet in floor area shall be considered out of scale with the community unless they are designed and situated in such a way that their bulk is not obtrusive.* Response: The square footage of the existing church and residence are not being changed. The proposed cellular facility will be only 400 sq. ft.
 - 2. Residential and commercial developments involving multiple dwelling or business units should utilize clusters of smaller structures with sufficient open space between them instead of a consolidated structure.* Response: The square footage of the existing church and residence are not being changed. The proposed cellular facility will be only 400 sq. ft.

View Protection

- A. *Structures visible from the beach or a public trail in an open space area should be made as visually unobtrusive as possible.* Response: The project is not readily visible from any beach or trail or from any areas zoned open space. The closest trail to the project site

is the CA Coastal Trail, which may have a view of the site from near the intersection of Main and Scenic/Patrick's Point Drive. But due to the distance, elevation difference, surrounding development, and vegetation, the cellular pole would not stand out. The applicant has provided photo simulations of the proposed pole.

- B. *Structures, including fences over three feet high and signs, and landscaping of new development, shall not be allowed to significantly block views of the harbor, Little Trinidad Head, Trinidad Head or the ocean from public roads, trails, and vista points, except as provided in subdivision 3 of this subsection. Response: Due to the size of the project and its orientation in relation to the site and adjacent trees, it has minimal or no potential to block public views of the coast.*
- C. *The committee shall recognize that owners of vacant lots in the SR and UR zones, which are otherwise suitable for construction of a residence, are entitled to construct a residence of at least fifteen feet in height and one thousand five hundred square feet in floor area, residences of greater height as permitted in the applicable zone, or greater floor area shall not be allowed if such residence would significantly block views identified in subdivision 2 of this subsection. Regardless of the height or floor area of the residence, the committee, in order to avoid significant obstruction of the important views, may require, where feasible, that the residence be limited to one story; be located anywhere on the lot even if this involves the reduction or elimination of required yards or the pumping of septic tank wastewater to an uphill leach field, or the use of some other type of wastewater treatment facility; and adjust the length-width-height relationship and orientation of the structure so that it prevents the least possible view obstruction. Response: The project will not be located on a vacant lot, nor is it likely to affect private views of the coastline.*
- D. *If a residence is removed or destroyed by fire or other means on a lot that is otherwise usable, the owner shall be entitled to construct a residence in the same location with an exterior profile not exceeding that of the previous residence even if such a structure would again significantly obstruct public views of important scenes, provided any other nonconforming conditions are corrected. Response: There was no residence that was removed or destroyed by fire associated with this project.*
- E. *The Tsurai Village site, the Trinidad Cemetery, the Holy Trinity Church and the Memorial Lighthouse are important historic resources. Any landform alterations or structural construction within one hundred feet of the Tsurai Study Area, as defined in the Trinidad general plan, or within one hundred feet of the lots on which identified historical resources are located shall be reviewed to ensure that public views are not obstructed and that development does not crowd them and thereby reduce their distinctiveness or subject them to abuse or hazards. Response: The proposed project is not within 100 feet of the Holy Trinity Church, the Memorial Lighthouse, the Tsurai Study Area or the Cemetery.*

USE PERMIT FINDINGS:

As described above, §17.48.050 provides a maximum height in the PR zone of 25 ft., but it also allows a greater height with approval of a Use Permit. Pursuant to §17.72.040, a Use Permit may be granted using the findings listed below. As with the Design Review findings, these have been written in a manner to allow approval. But if the Planning Commission disagrees, or other evidence is submitted to the contrary, then the findings should be reworded accordingly. Note that, as with design review, some of the findings are based on the fact that the approval is for a two-year period, which has been included as a condition of approval.

- A. *The proposed use at the site and intensity contemplated and the proposed location will provide a development that is necessary or desirable for and compatible with the neighborhood or the community.* Response: The intent of the cellular facility is to provide cellular service to AT&T users in the community during interim period between the cellular site on Trinidad Head being discontinued and establishment of a new permanent replacement site. The applicant has submitted coverage maps showing that there would be no coverage at all in the Trinidad area without either the existing Trinidad Head site or this proposed temporary site. Cellular coverage is a necessary service to many people.
- B. *Such use, as proposed, will not be detrimental to the health, safety, convenience, or general welfare of persons residing or working in the vicinity or injurious to property improvements or potential development in the vicinity with respect to aspects including but not limited to the following:*
1. *The nature of the proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;* Response: The proposed site is small, and will be located within an existing gravel parking area. Structures will be appropriately engineered for safety.
 2. *The accessibility of the traffic patterns for persons and vehicles, and the type and volume of such traffic, and the adequacy of proposed off-street parking and loading;* Response: The proposed cellular facility will not significantly affect traffic. There will be some additional vehicles during construction. After construction, the facility will not generate any traffic other than occasional (generally monthly) maintenance. Some of the existing parking area will be taken up by the proposed facility, but, as described above, ample parking for the existing uses will remain.
 3. *The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;* Response: People are often concerned about radio frequency emissions from cellular equipment. The applicant has submitted a Radio Frequency Emissions Compliance Report prepared by a licensed electrical engineer. The report shows that emissions will be significantly below FCC standards. Section 332(c)(7) of the federal Communications Act prohibits local jurisdictions from denying cellular projects based on radio frequency emissions if

the project is in compliance with FCC rules, which this site is. The proposed facility will not include any lighting or glare. The equipment inside the cabinet has small fans similar in size to those found on a desktop computer, and so will not generate substantial noise. A generator will be installed onsite for use during power outages. It will only be used in emergencies, and for about 15 minutes for testing each month.

4. *Treatment given, as appropriate, to such aspects as landscaping, screening, open space, parking and loading areas, service areas, lighting and signs;* Response: No changes to landscaping, open space, lighting, signs, or loading areas are proposed. There will be loss of some of the existing parking, but the existing gravel parking area will still provide enough parking for the existing church and caretaker residence. Although no lighting is proposed, a condition has been included to minimize lighting.
- C. *That such use or feature as proposed will comply with the applicable provisions of this title, will be consistent with the policies and programs of the general plan and will assist in carrying out and be in conformity with the Trinidad coastal program.* Response: As discussed above, under the “Zoning Ordinance / General Plan Consistency” section, the proposed project can be found to be consistent with the City’s Zoning Ordinance, General Plan and Local Coastal Program.
- D. *That the proposed use or feature will have no significant adverse environmental impact or there are no feasible alternatives, or feasible mitigation measures, as provided in the California Environmental Quality Act, available which would substantially lessen any significant adverse impact that the actions allowed by the conditional use permit may have on the environment.* Response: There will be no significant adverse environmental impact. The project is categorically exempt from CEQA per §15303 of the CEQA Guidelines exempting new construction of small structures and/or §15304 exempting minor alterations to land, and/or § 15332 exempting in-fill development projects. None of the exceptions to the exemptions apply.
- E. *When the subject property is located between the sea and the first public road paralleling the sea or within three hundred feet of the inland extent of any beach or of the mean high tide line where there is no beach, whichever is the greater, that:* Response: The is not located between the sea and first public roadway and will not interfere with coastal access, so the following findings are not applicable.
1. *The development provides adequate physical access or public or private commercial use and does not interfere with such uses.*
 2. *The development adequately protects public views from any public road or from a recreational area to, and along, the coast.*
 3. *The development is compatible with the established physical scale of the area.*
 4. *The development does not significantly alter existing natural landforms.*
 5. *The development complies with shoreline erosion and geologic setback requirements.*

SLOPE STABILITY:

The project site is not mapped as being “unstable” or of “questionable stability” on Plate 3 of the General Plan. The southwest corner of the property is within an Alquist-Priolo Fault Hazard Zone, but the proposed project location is outside of the zone. Therefore, the finding can be made that no geologic study is required by the Zoning Ordinance. The City Engineer did note that a soils/geotechnical report will be required as part of the building permit application to ensure structural stability of the foundation, which has been included as a condition of approval.

SEWAGE DISPOSAL:

The existing septic system is located to the east of the church building. It is an older system, constructed in 1978, but it is a standard system, consisting of an 1,800 gallon tank and six 50-ft. leachlines. The property owner has not submitted an inspection report or application for an OWTS operating permit. However, the applicant is leasing only a small portion of the site from the property owner, and the proposed project will generate no wastewater. The applicant has no authority or control over the septic system. Therefore, compliance with the City's OWTS Management Program has not been included as a condition of approval of the project.

LANDSCAPING AND FENCING:

This project does not involve any new landscaping. The facility will be protected by a chain-link fence.

STAFF RECOMMENDATION

Based on the above analysis, the project can be found to be consistent with the City's Zoning Ordinance, General Plan, Coastal Act, and other applicable policies and regulations. Therefore, the necessary findings for granting approval of the project can be made. If the Planning Commission agrees with staff's analysis, a proposed motion might be similar to the following:

Based on application materials, information and findings included in this Staff Report, and based on public testimony, I move to adopt the information and required Design Review and View Protection, Use Permit, and other findings in this staff report and approve the project as submitted in the application and described in this staff report, and as conditioned herein.

PLANNING COMMISSION ALTERNATIVES

If the Planning Commission does not agree with staff's analysis, or if information is presented during the hearing that conflicts with the information contained in the staff report, the Planning Commission has several alternatives.

- A. Alter the proposed conditions of approval to address any specific concerns on the part of the Commission or the public.
- B. Delay action / continue the hearing to obtain further information.
 - In this case, the Planning Commission should specify any additional information required from staff or the applicant and / or suggestions on how to modify the project and / or conditions of approval.
- C. Denial of the project.
 - The Planning Commission should provide a motion that identifies the Finding(s) that cannot be made and giving the reasons for the inability to make said Finding(s).

CONDITIONS OF APPROVAL

1. The applicant is responsible for reimbursing the City for all costs associated with processing the application. *Responsibility: City Clerk prior to building permits being issued.*
2. This approval is for a two-year (24 month) period, unless an extension is granted by the Planning Commission in the form of an amendment to this permit. At least 3 months prior to the approval expiration, the applicant is responsible for submitting a demolition and restoration plan for the proposed improvements and associated lease area. The demolition and restoration plan shall be approved by the Building Inspector, City Engineer and City Planner. *Responsibility: Applicant within two years of this project approval.*
3. As part of the Building Permit application, the applicant shall provide a construction schedule and a tentative facility removal plan. Applicant shall submit plans identifying staging and stockpiling areas, limits of grading and vegetation removal, and stormwater BMPs. Additional design information (e.g. structural calculations and geotechnical report) shall be submitted as part of the building permit. *Responsibility: Building Inspector prior to building permits being issued.*
4. A complete engineering package for the foundation and pole are required to be submitted as part of the building permit application, including site plans and elevations. All general electric work must be shown, noted and addressed (e.g.

panels, main service, lights, general AC circuits). Two sets of all plans are required.
Responsibility: Building Inspector prior to building permits being issued.

5. Recommended conditions of the City Building Inspector shall be required to be met as part of the building permit application submittal. Grading, drainage and street improvements will need to be addressed at the time of building permit application. *Responsibility: Building Inspector prior to building permits being issued.*
6. Construction related activities are to occur in a manner that will not impact the integrity of the septic system. The leachfield area shall remain fenced or be staked and flagged to keep equipment off the area. Alternatively, a written description of techniques/timing to be utilized to protect the system will be required from the contractor. If the system area is impacted by construction activities, an immediate Stop-Work Order will be placed on the project. The contractor will be required to file a mitigation report for approval by the City and DEH prior to permitting additional work to occur. *Responsibility: Building Inspector to verify prior to building permits being issued and during construction.*
7. With the exception of any FAA required safety features, the monopole shall not include any reflectors, beacons or lighting. Any exterior lighting at the site shall be within the fenced area, and will be the minimum necessary for the safe ingress and egress of the site and structures, and shall be low-wattage, non-reflective, shielded, and have a directional cast downward such that no light will shine beyond the boundaries of the subject parcel. *Responsibility: Building Inspector prior to building permits being issued.*
8. Unless diseased, as evidenced by a report from a licensed arborist, or dying, or posing a fire or other safety hazard, no tree removal or major pruning is authorized by this permit. No branches or tops more than 4 inches in diameter will be removed to accommodate project construction without an amendment to this permit. *Responsibility: Applicant during construction.*
9. The applicant shall make any extra telecommunications capacity on the tower available for lease to licensed public or private telecommunication providers.
Responsibility: Applicant during the term of this permit.

ATTACHMENTS

- Plans and elevations (five 11" x 17" pages)
- Site plan overlaid on aerial photo (1 page)
- Photo simulations (2 pages)
- RF emissions report (4 pages)
- Coverage maps (5 pages)

GENERAL NOTES

- DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, AND THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANYTHING ELSE DEEMED NECESSARY TO COMPLETE INSTALLATIONS AS DESCRIBED HEREIN.
- PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT, WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS, FIELD CONDITIONS AND CONFIRM THAT THE PROJECT MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY ERRORS, OMISSIONS, OR DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER, AND PROJECT MANAGER, (C.C.)
- THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/ CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/ VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL WORK PERFORMED ON PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
- GENERAL CONTRACTOR SHALL PROVIDE AT THE PROJECT SITE A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT, STAMPED ORIGINALS SHALL NOT BE USED FOR REDLINE PURPOSES.
- THE STRUCTURAL COMPONENTS OF THIS PROJECT SITE/FACILITY ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
- DETAILS INCLUDED HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK.
- SEAL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.
- PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA DURING CONSTRUCTION.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- CONTRACTOR SHALL ENSURE THAT GENERAL WORK AREA IS KEPT CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE, SITE SHALL BE SECURED, SAFE AND CLEAN UPON COMPLETION OF WORK EACH DAY.
- THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.



SITE NUMBER: CCL01172
SITE NAME: CLARK RD & WAGSTAFF RD
SITE ADDRESS: - 12 BERRY ROAD, TRINIDAD, CA 95570

LEGEND

- A — ANTENNA CABLE (ABOVE GROUND)
- T — TELEPHONE SERVICE (ABOVE GROUND)
- E — POWER SERVICE (ABOVE GROUND)
- G — GROUND RING (ABOVE GROUND)
- A --- ANTENNA CABLE (BURIED)
- T --- TELEPHONE SERVICE (BURIED)
- E --- POWER SERVICE (BURIED)
- G --- GROUND RING (BURIED)
- ==== PROPERTY BOUNDARY LINE
- INTERNAL PROPERTY LOT LINE

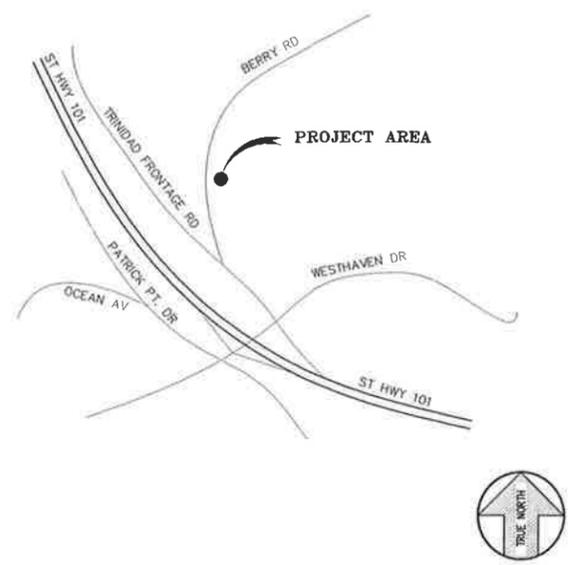
PROJECT SUMMARY

SITE NAME: CLARK RD & WAGSTAFF RD
SITE NUMBER: CCL01172
SITE ADDRESS: 12 BERRY ROAD, TRINIDAD, CA 95570
PROPERTY OWNER: ASSEMBLES OF GOD INC.
OWNER ADDRESS: PO BOX 396, TRINIDAD, CA 95570
APPLICANT: AT&T MOBILITY
APPLICANT'S ADDRESS: 5001 EXECUTIVE PARKWAY, 4W5501, SAN RAMON, CA 94583
ASSESSOR'S PARCEL NUMBER: 515-331-016-000
LATITUDE: N 41.093811°
LONGITUDE: W 124.139596°
CONSTRUCTION TYPE: Y-B
OCCUPANCY: U-2
ZONING JURISDICTION: HUMBOLDT COUNTY
BUILDING JURISDICTION: HUMBOLDT COUNTY

SHEET INDEX

- T-1 TITLE SHEET
- C-1 SITE SURVEY
- A-1 ENLARGED SITE PLAN
- A-2 SOUTH ELEVATION
- E-1 ELECTRICAL PLAN

VICINITY MAP



CONTACTS

APPLICANT:
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 5001 EXECUTIVE PARKWAY
 SAN RAMON, CA 94583

AT&T PROJECT MANAGER:
 AT&T
 5001 EXECUTIVE PARKWAY, 4W5501
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SITE ACQUISITION PROJECT MANAGER:
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 (530) 885-6160

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- 2016 CALIFORNIA BUILDING CODE
- 2016 CALIFORNIA FIRE CODE
- 2016 CALIFORNIA ELECTRICAL CODE
- 2016 CALIFORNIA PLUMBING CODE
- 2016 CALIFORNIA MECHANICAL CODE
- 2016 CALIFORNIA HEALTH AND SAFETY CODE

ACCESSIBILITY REQUIREMENTS:
 THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2016 CALIFORNIA BUILDING CODE, CHAPTER 11B, EXCEPTION SECTION 11B-203.5

DESIGN CRITERIA - ANSI/TIA-222-G
 ASCE 7-16 ULTIMATE WIND SPEED (NO ICE) 92 MPH
 WIND SPEED (ICE) 0 MPH
 DESIGN ICE THICKNESS 0.00 IN
 STRUCTURE CLASS II
 RISK CATEGORY II
 EXPOSURE CATEGORY C
 TOPOGRAPHIC CATEGORY 1

PROJECT DESCRIPTION

AT&T MOBILITY PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY. THESE MODIFICATIONS WILL CONSIST OF THE FOLLOWING:

- INSTALL NEW TEMP. PRECAST CONC. FOUNDATION
- INSTALL NEW TEMP. 75' TALL MONOPOLE
- INSTALL NEW TEMP. ANTENNAS ON NEW MONOPOLE
- INSTALL NEW TEMP. WALK IN CABINET

CLIENT:

5001 EXECUTIVE PARKWAY
 SAN RAMON, CA 94583

DESIGN ENGINEER:

Peek Site-Com
 12852 Earhart Ave. Suite 101
 Auburn, California 95602
 Phone (530) 885-6160
 E-Mail info@peeksitocom.com

PROJECT INFORMATION:

CCL01172
 12 BERRY ROAD
 TRINIDAD, CA 95570

REV. DATE DESCRIPTION BY

| | | | |
|---|---------|-------------------|-----|
| 1 | 4-22-19 | PRELIMINARY PLANS | AMP |
| 2 | 5-20-19 | PRELIMINARY PLANS | AMP |
| | | | |
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| | | | |

SEAL:

SITE: CCL01172
 CHK: AMP
 DRAWN BY: AMP

SHEET TITLE: **TITLE SHEET**

SHEET NUMBER: **T-1** REVISION: **0**

PROPRIETARY INFORMATION. THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PECK SITE-COM IS STRICTLY PROHIBITED.

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OF SERVICE, ARE THE EXCLUSIVE PROPERTY OF GEIL ENGINEERING AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE AND CARRIER FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM GEIL ENGINEERING. TITLE TO THESE PLANS AND/OR SPECIFICATIONS SHALL REMAIN WITH GEIL ENGINEERING WITHOUT PREJUDICE AND VISUAL CONTACT WITH THEM SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING A GRAPHIC DEPICTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED. PROPERTY LINES AND LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED. NO PROPERTY MONUMENTS WERE SET.

LEGEND

- PARCEL BOUNDARY
- - - NEIGHBORING PARCEL BOUNDARY
- - - LEASE AREA BOUNDARY
- UTILITIES
- (E) EASEMENTS
- (P) EASEMENTS
- FENCE LINE
- JP JOINT UTILITY POLE
- TP TELEPHONE POLE
- EP ELECTRICAL POLE
- 6" OAK TREE WITH DIAMETER BREAST HEIGHT (DBH)
- W WATER VALVE
- W WATER BOX
- SSMH SANITARY SEWER MANHOLE
- SDMH STORM DRAIN MANHOLE
- DI DROP INLET

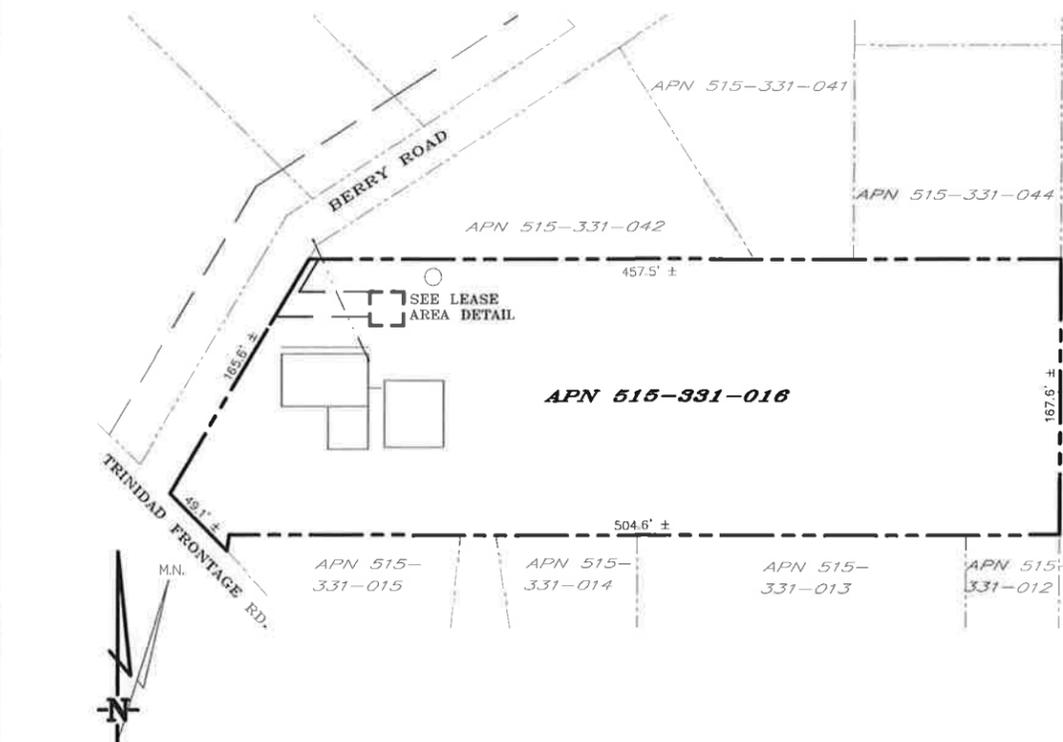
CVL03217 Hwy 5 & Forest Ave
Lease Area Description

All that certain lease area being a portion of that certain 2.0 Acre parcel delineated on the plat filed in Book 17 of Surveys, Page 44, Humboldt County, California Records and being more particularly described as follows:

Equipment Lease Area
Commencing at the Northwest most corner of the aforementioned parcel of land; thence along the North boundary thereof, East 57.75 feet; thence leaving said North boundary South 20.00 feet to the True Point of Beginning; thence from said point of beginning South 20.33 feet; thence West, 20.33 feet; thence North, 20.33 feet; thence East, 20.33 feet to the point of beginning.

Together with easement for access and utility purposes, over and across the West 6.00 feet of the North 20.0 feet of the aforementioned parcel of land.

Together with easement for access and utility purposes, over and across the South 15.0 feet of the North 35.0 feet West of the aforementioned parcel of land, excepting therefrom the East 420.0 feet.

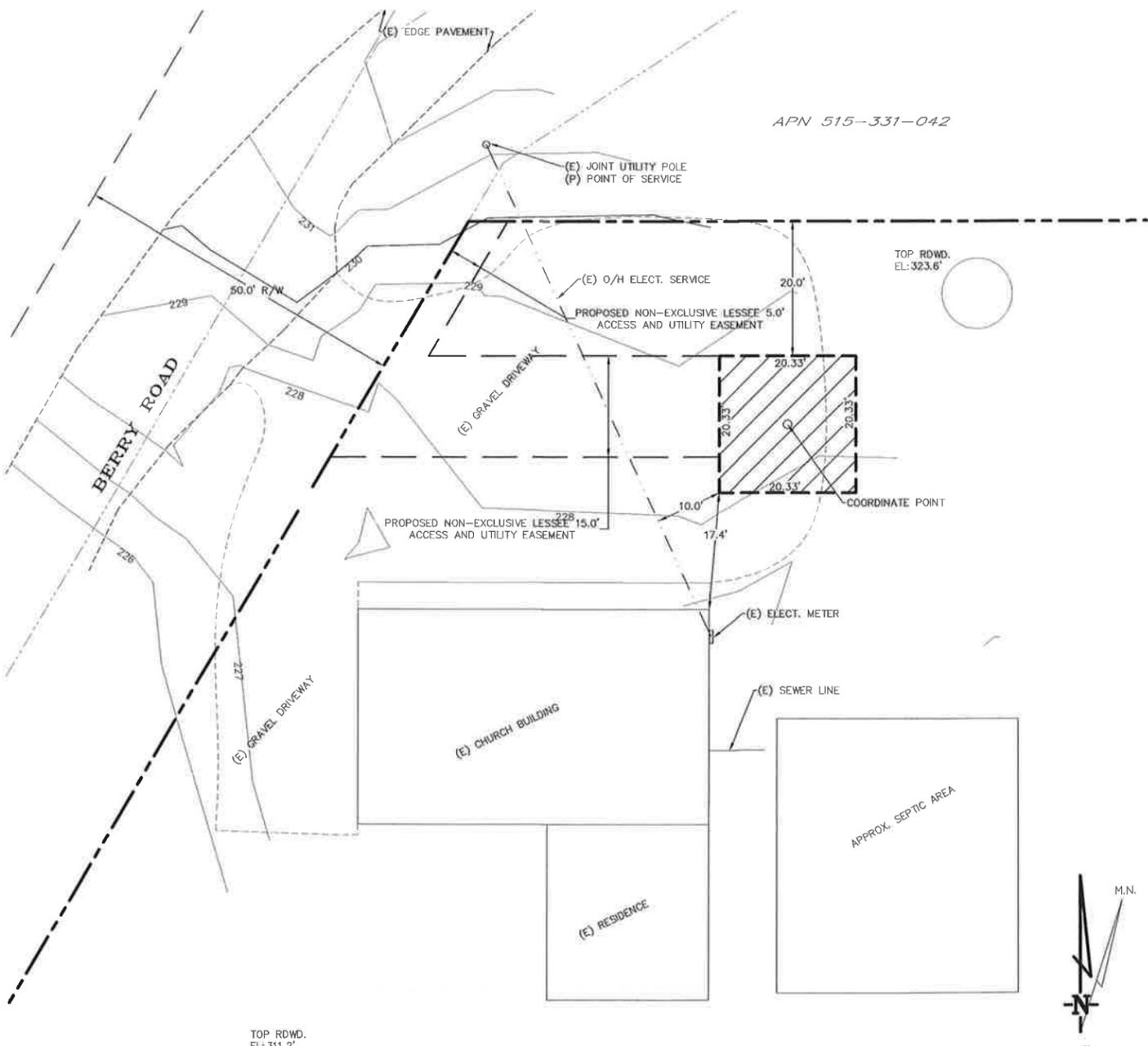
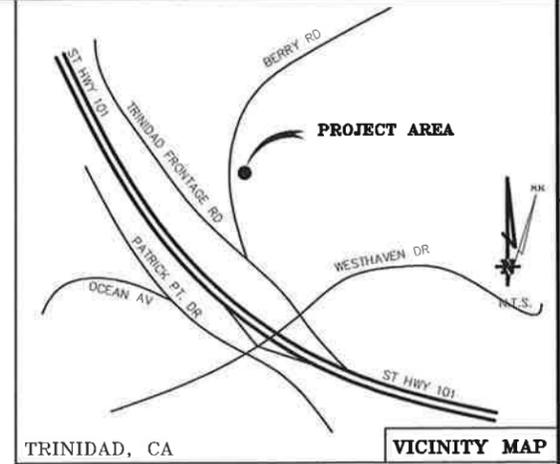


SCALE 1" = 50'

OVERALL PROJECT AREA

DATE OF SURVEY: 04-16-19
 SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, RCE 14803
 LOCATED IN THE COUNTY OF HUMBOLDT, STATE OF CALIFORNIA
 BEARINGS SHOWN ARE BASED UPON MONUMENTS FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY.
 ELEVATIONS SHOWN ON THIS PLAN ARE BASED UPON U.S.G.S., N.A.V.D. 88 DATUM, ABOVE MEAN SEA LEVEL UNLESS OTHERWISE NOTED.
 N.G.V.D. 1929 CORRECTION: SUBTRACT 3.35' FROM ELEVATIONS SHOWN.
 FEMA FIRM: FLOOD ZONE X PER FIRM 06023C0485G, DATED 06-21-2017.
 CONTOUR INTERVAL: 1 ft.
 ASSESSOR'S PARCEL NUMBER: 515-331-016
 LANDLORD(S): X
 X
 X

Project Name: CCL01172 Berry Road Temp. Site
 Project Site Location: 12 Berry Road, Trinidad, CA 95570, Humboldt County
 Date of Observation: 04-16-19
 Equipment/Procedure Used to Obtain Coordinates: Trimble Geo XT post processed with Pathfinder Office software.
 Type of Antenna Mount: Proposed Temporary Tower
 Coordinates:
 Latitude: N 41°03'49.70" (NAD83) N 41°03'50.26" (NAD27)
 Longitude: W 124°08'21.98" (NAD83) W 124°08'17.73" (NAD27)
 Latitude: N 41.063806° (NAD83) N 41.063961° (NAD27)
 Longitude: W 124.139439° (NAD83) W 124.138258° (NAD27)
 ELEVATION of Ground at Structure (NAVD88) 228.5' AMSL



TOP RDWD.
E1: 311.7'

SCALE 1" = 20'
LEASE AREA DETAIL

| DEPT | APPROVED | DATE |
|--------|----------|------|
| A&C | | |
| RE | | |
| INT | | |
| EE/IN | | |
| OPS | | |
| EE/OUT | | |

Surveyor
GEIL ENGINEERING
 ENGINEERING • SURVEYING • PLANNING
 1808 BERRY STREET
 TRINIDAD, CALIFORNIA 95503
 Phone: (530) 885-0428
 Fax: (530) 885-1808

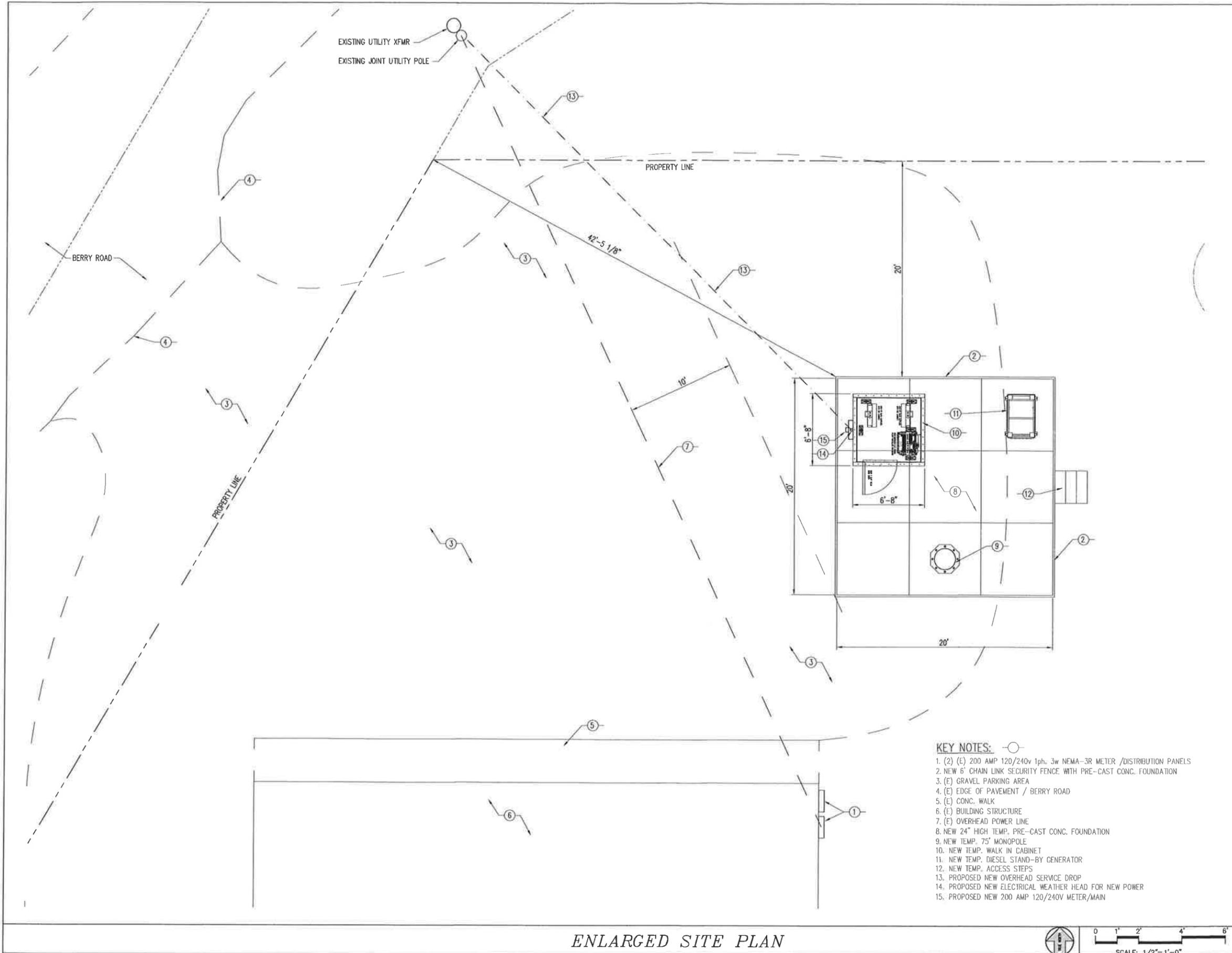


**CCL01172 Berry Rd.
Temp Site**
 12 Berry Road
 Trinidad, CA 95570
**PLOT PLAN AND
SITE TOPOGRAPHY**

| REVISIONS |
|------------------------------|
| 04-24-19 Preliminary Drawing |
| 05-20-19 rev. lease |

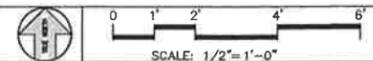
Sheet
C-1

PROPRIETARY INFORMATION: THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PEAK SITE-COM IS STRICTLY PROHIBITED.



- KEY NOTES:**
- 1. (2) (E) 200 AMP 120/240v 1ph, 3w NEMA-3R METER /DISTRIBUTION PANELS
 - 2. NEW 6\" CHAIN LINK SECURITY FENCE WITH PRE-CAST CONC. FOUNDATION
 - 3. (E) GRAVEL PARKING AREA
 - 4. (E) EDGE OF PAVEMENT / BERRY ROAD
 - 5. (E) CONC. WALK
 - 6. (E) BUILDING STRUCTURE
 - 7. (E) OVERHEAD POWER LINE
 - 8. NEW 24\" HIGH TEMP. PRE-CAST CONC. FOUNDATION
 - 9. NEW TEMP. 75' MONOPOLE
 - 10. NEW TEMP. WALK IN CABINET
 - 11. NEW TEMP. DIESEL STAND-BY GENERATOR
 - 12. NEW TEMP. ACCESS STEPS
 - 13. PROPOSED NEW OVERHEAD SERVICE DROP
 - 14. PROPOSED NEW ELECTRICAL WEATHER HEAD FOR NEW POWER
 - 15. PROPOSED NEW 200 AMP 120/240V METER/MAIN

ENLARGED SITE PLAN



CLIENT:



5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

DESIGN ENGINEER:

Peek Site-Com
12852 Earhart Ave. Suite 101
Auburn, California 95602
Phone (530) 885-6160
E-Mail info@peeksitocom.com

PROJECT INFORMATION:

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TRINIDAD, CA 95570

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| 2 | 5-20-19 | PRELIMINARY PLANS | AMP |
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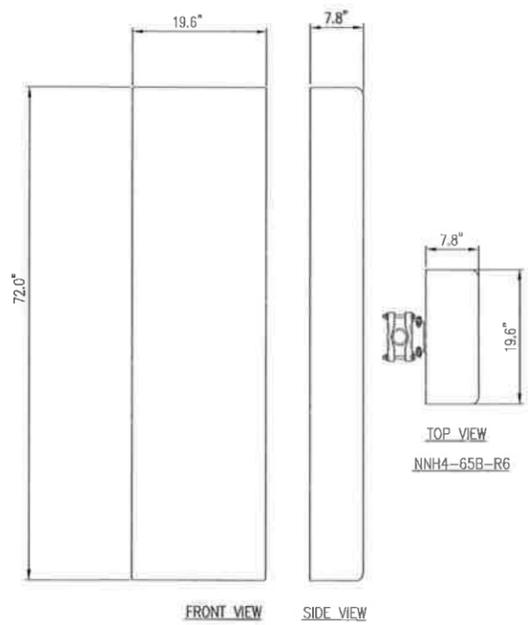
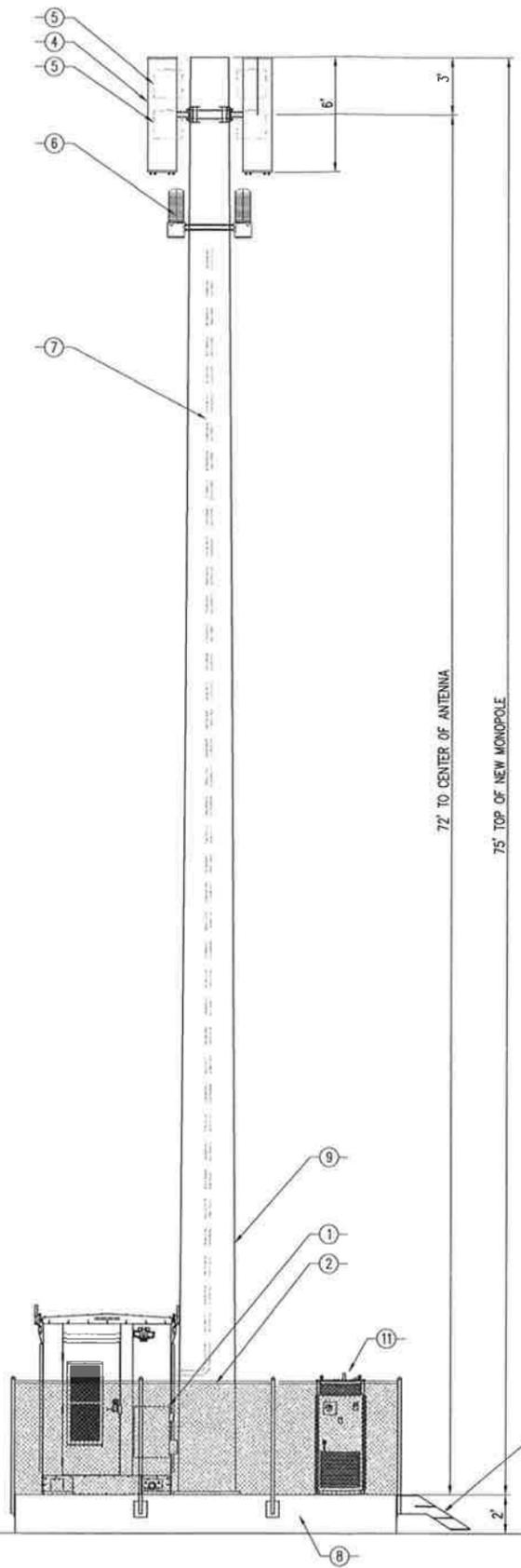
SEAL:

| | | |
|--------------|-------|-----------|
| SITE #: | CHK.: | DRAWN BY: |
| CCL01172 | ... | AMP |
| SHEET TITLE: | | |

ENLARGED SITE PLAN

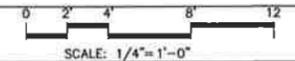
| | |
|---------------|-----------|
| SHEET NUMBER: | REVISION: |
| A-1 | 0 |

PROPRIETARY INFORMATION THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PECK SITE-COM IS STRICTLY PROHIBITED.



- KEY NOTES:**
1. (2) (E) 200 AMP 120/240v 1ph. 3w NEMA-3R DISTRIBUTION PANEL
 2. NEW 6' CHAIN LINK SECURITY FENCE WITH PRE-CAST CONC. FOUNDATION
 3. (E) GRAVEL PARKING AREA
 4. NEW TEMP. ANTENNAS (2) PER SECTOR FOR A TOTAL OF (6)
 5. NEW RRUS TYP. OF (4) PER SECTOR FOR A TOTAL OF (12)
 6. NEW TEMP. DC-6 SURGE SUPPRESSORS TYP. OF (2)
 7. (4) NEW DC POWER TRUNKS AND (2) FIBER TRUNKS RUN UP INSIDE MONOPOLE IN (2) INNER DUCTS
 8. NEW 24" HIGH TEMP. PRE-CAST CONC. FOUNDATION
 9. NEW TEMP. 75' MONOPOLE
 10. NEW TEMP. WALK IN CABINET
 11. NEW TEMP. DIESEL STAND-BY GENERATOR
 12. NEW TEMP. ACCESS STEPS

PROPOSED SOUTH ELEVATION



CLIENT:

5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

DESIGN ENGINEER:

Peek Site-Com

12852 Earhart Ave. Suite 101
Auburn, California 95602
Phone (530) 885-6160
E-Mail info@peeksitocom.com

PROJECT INFORMATION:

CCL01172

12 BERRY ROAD
TRINIDAD, CA 95570

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| | | | |
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SEAL

| | | |
|--------------|-------|-----------|
| SITE #: | CHK.: | DRAWN BY: |
| CCL01172 | ... | AMP |
| SHEET TITLE: | | |

SOUTH ELEVATION

| | |
|---------------|-----------|
| SHEET NUMBER: | REVISION: |
| A-2 | 0 |

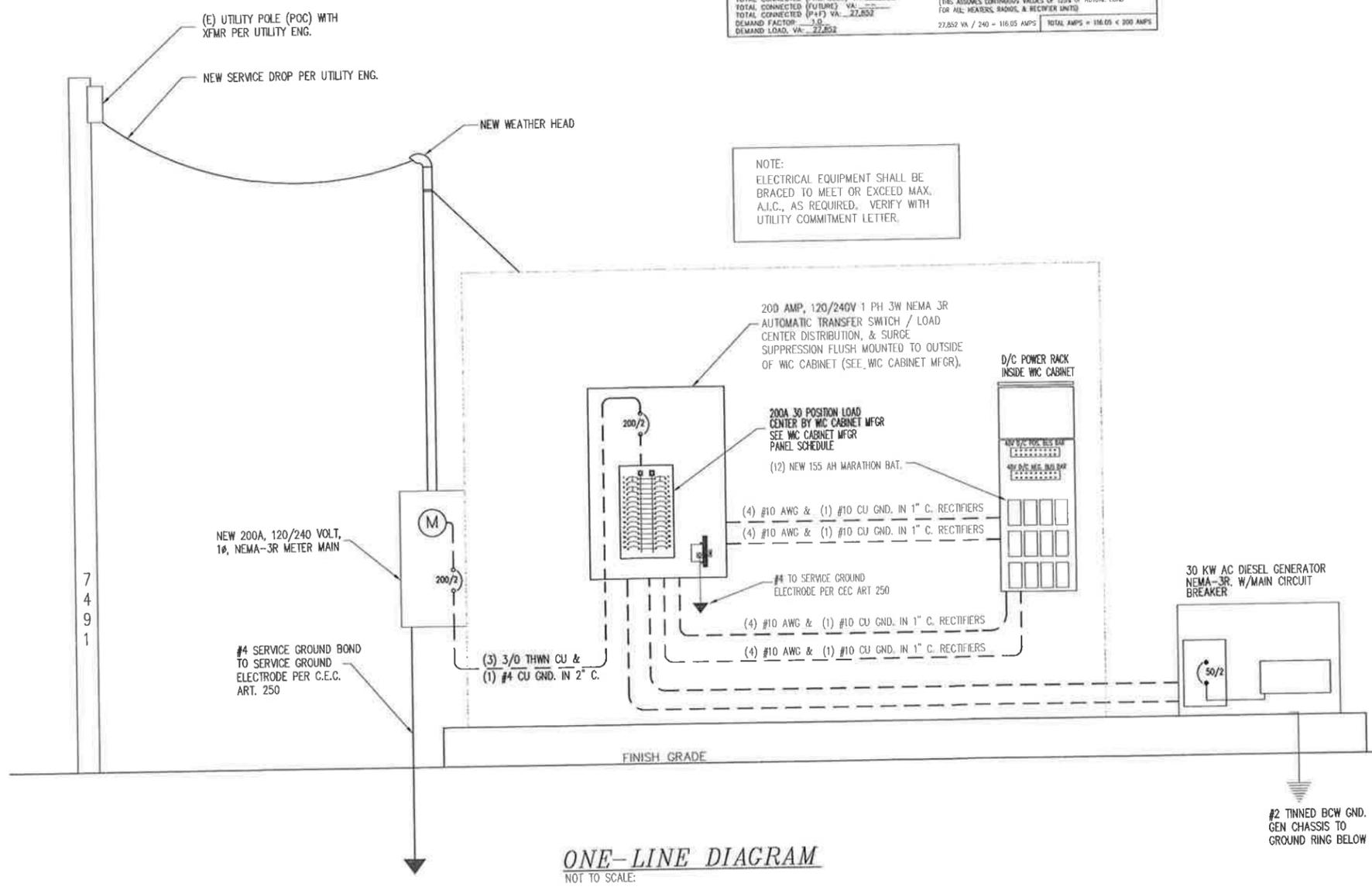
PROPRIETARY INFORMATION - THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PEAK SITE-CON IS STRICTLY PROHIBITED.

| AT&T LOAD CENTER PANEL SCHEDULE | | | | | | | | | | | |
|---------------------------------|------------------|---------------|----|----------|----------|--------|-----|------------------|-----|-------------|--|
| PANEL DESIGNATION | | 120/240 VOLTS | | 1 PHASE | | 3 WIRE | | SURFACE MOUNTING | | MAIN BUS: X | |
| WITH SEPARATE GROUND BUS | | | | | | | | | | | |
| | LOAD DESCRIPTION | ØA | ØB | AMP/POLE | AMP/POLE | ØA | ØB | LOAD DESCRIPTION | NO. | | |
| 1 | RECTIFIER #1 | 1821 | | 30/2 | 30/2 | 1821 | | RECTIFIER #4 | 2 | | |
| 3 | | | | | | | | | 4 | | |
| 5 | RECTIFIER #2 | 1821 | | 30/2 | 30/2 | 1821 | | RECTIFIER #5 | 6 | | |
| 7 | | | | | | | | | 8 | | |
| 9 | RECTIFIER #3 | 1821 | | 30/2 | 30/2 | 1821 | | RECTIFIER #6 | 10 | | |
| 11 | | | | | | | | | 12 | | |
| 13 | | | | | | | | | 14 | | |
| 15 | | | | | | | | | 16 | | |
| 17 | | | | | | | | | 18 | | |
| 19 | | | | | | | | | 20 | | |
| 21 | | | | | | | | | 22 | | |
| 23 | | | | | | | | | 24 | | |
| 25 | HVAC #1 | | | 25/2 | | 20/1 | 500 | GFI RECEPTACLE | 26 | | |
| 27 | | | | | | | | EXT. LIGHTS | 28 | | |
| 29 | RECEPTICAL | | | 20/1 | | | | | 30 | | |

| | | |
|-------------------------------|--------|--|
| TOTAL CONNECTED (PROPOSED) VA | 27,852 | (THIS ASSUMES CONTINUOUS VALUES OF 100% OF ACTUAL LOAD FOR ALL HEATERS, BATTERIES & RECTIFIER UNITS) |
| TOTAL CONNECTED (FUTURE) VA | | |
| TOTAL CONNECTED (P+F) VA | 27,852 | |
| DEMAND FACTOR | 0.8 | |
| TOTAL AMP | 116.05 | < 300 AMPS |

ELECTRICAL LEGEND

| | | |
|-----|----------|---|
| NEW | EXISTING | |
| ■ | ▨ | PANEL BOARD, SURFACE MOUNTED |
| ⊞ | | DRY TYPE TRANSFORMER |
| ⊞ | | METER |
| ⊞ | | CIRCUIT BREAKER |
| ⊞ | | NON-FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F. |
| ⊞ | | FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F. |
| ⊞ | | TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH BUILT-IN FUSES, SURFACE MOUNTED |
| ⊞ | | DUPLEX OUTLET, SURFACE MOUNTED, 20 AMPS, 125 VOLTS, SINGLE PHASE |
| ⊞ | | JUNCTION BOX, SURFACE MOUNTED 18" A.F.F. |
| ⊞ | | KEYED SWITCH, SURFACE MOUNTED |
| ⊞ | | WALL MOUNTED, ENCLOSED, AND GASKETED INDUSTRIAL INCANDESCENT FIXTURE WITH ONE 100 AMP LAMP MOUNT 72" A.F.F. |
| ⊞ | | EXPOSED WIRING |
| ⊞ | | HOME RUNS, MINIMUM 2#10 + 1#10G IN 3/4" CONDUIT U.O.N. |
| ⊞ | | ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED |
| ⊞ | | WEATHERPROOF |
| ⊞ | | GROUND FAULT INTERRUPTER |



- ### ELECTRICAL NOTES
- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
 - ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PRODUCED PER SPECIFICATION REQUIREMENTS.
 - THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION, INCLUDING INCIDENTAL WORK, TO PROVIDE COMPLETE, OPERATING AND APPROVED ELECTRICAL SYSTEM.
 - CONTRACTOR SHALL PAY FEES FOR PERMITS, AND BE RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
 - ELECTRICAL AND TELCO WIRING INSIDE A BUILDING SHALL RUN IN EMT OR SCHEDULE 40 PVC, PER PLAN. (AS PERMITTED BY CODE)
 - ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATERTIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND, WHERE REQUIRED, IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
 - BURIED CONDUIT SHALL BE SCHEDULE 40 PVC, U.O.N.
 - ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THHN INSULATION, (PER PLAN).
 - RUN ELECTRICAL CONDUIT BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND VERIZON WIRELESS CELL SITE ELECTRICAL PANEL/PEDESTAL AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPES. COORDINATE INSTALLATION WITH UTILITY COMPANY.
 - RUN TELCO CONDUITS BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND VERIZON WIRELESS CELL SITE TELCO SERVICE CABINET AND EQUIPMENT CABINET(S) AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPES AND TRUE TAPE IN INSTALLED CONDUITS.
 - WHERE CONDUIT BETWEEN EQUIP. AND WIRELESS CELL SITE ELECTRICAL PEDESTAL AND BETWEEN EQUIP. AND WIRELESS CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND, USE PVC SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE FLEXIBLE CONDUIT.
 - ALL EQUIPMENT SHALL HAVE NEMA 3R ENCLOSURE.
 - WHERE APPLICABLE, POWER PEDESTAL IS SUPPLIED BY WIRELESS CARRIER.
 - CALL U.S.A. 1-800-642-2444 24 HOURS PRIOR TO COMMENCING ELECTRICAL OR TELCO WORK.
 - CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQ. AND CONSTRUCT TO UTILITY COMPANY ENGINEERING PLAN AND SPECIFICATIONS ONLY.
 - CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, PULLWIRES, CABLE PULLBOXES, CONDUIT ENCASEMENT OF CONDUIT (IF REQ.), TRANSFORMER PAD, BARRIERS, POLE RISERS, TRENCHING, BACKFILL, AND INCLUDE ANY UTILITY COMPANY REQ. IN SCOPE OF WORK.

CLIENT:

5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

DESIGN ENGINEER:

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12852 Earhart Ave. Suite 101
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| 1 | 4-22-19 | PRELIMINARY PLANS | AMP |
| 2 | 5-20-19 | PRELIMINARY PLANS | AMP |

SEAL:

SITE #: CCL01172 CHK: DRAWN BY: AMP

SHEET TITLE: **ELECTRICAL PLAN**

SHEET NUMBER: **E-1** REVISION: **0**

Existing

06.03.2019



CCL01172 Clark Rd & Wagstaff Rd
12 Berry Road, Trinidad, CA 95570

Proposed

proposed AT&T temporary site



Existing

06.03.2019



CCL01172 Clark Rd & Wagstaff Rd
12 Berry Road, Trinidad, CA 95570

Proposed

proposed AT&T temporary site



Photo simulation as seen looking east from US 101

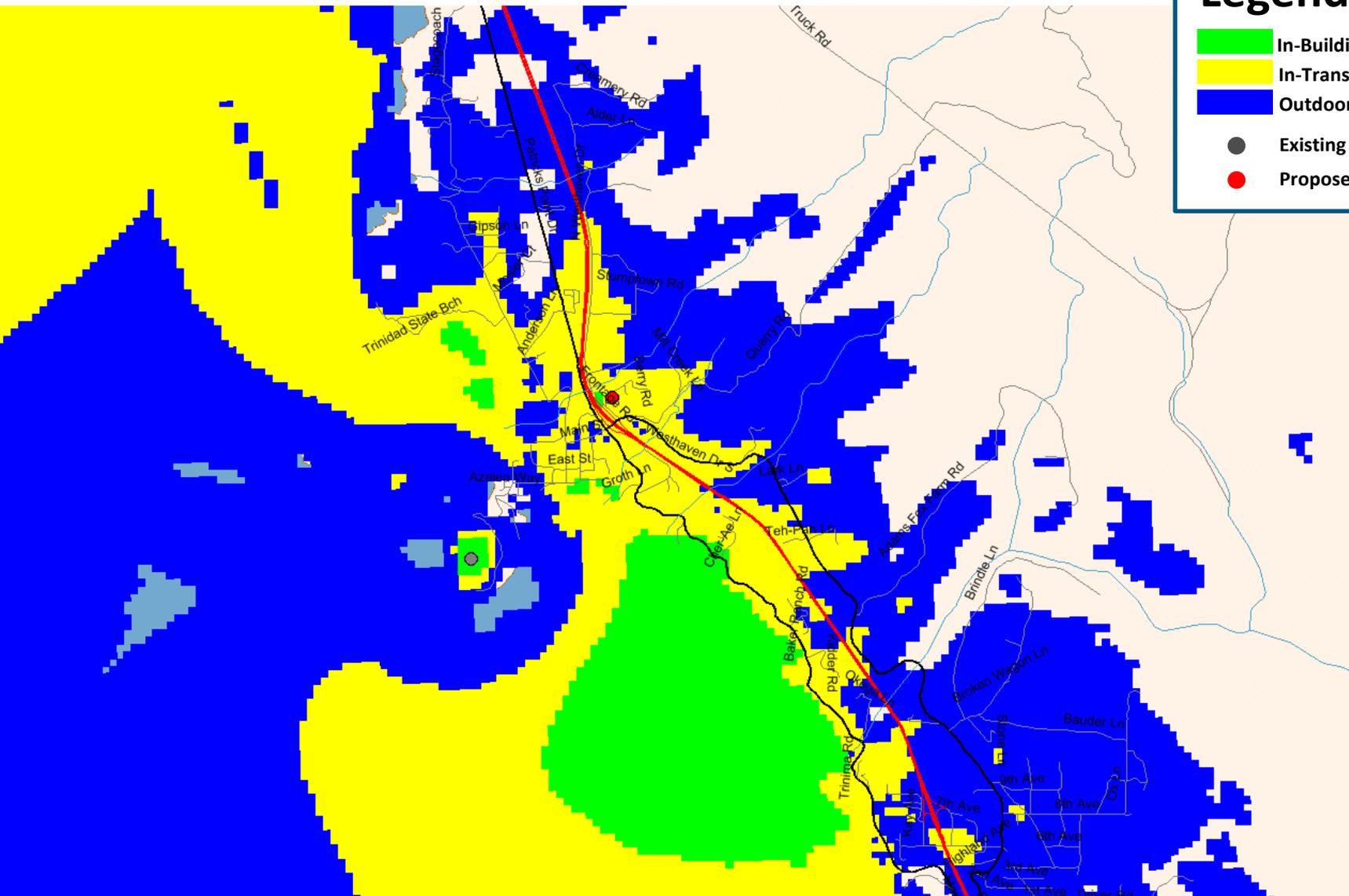
CCL01172 Zoning Propagation Map

June 3, 2019

Existing UMTS 1900 Coverage

Legend

- In-Building Service
- In-Transit Service
- Outdoor Service
- Existing site
- Proposed site



UMTS 1900 Coverage without CNU0257

Legend

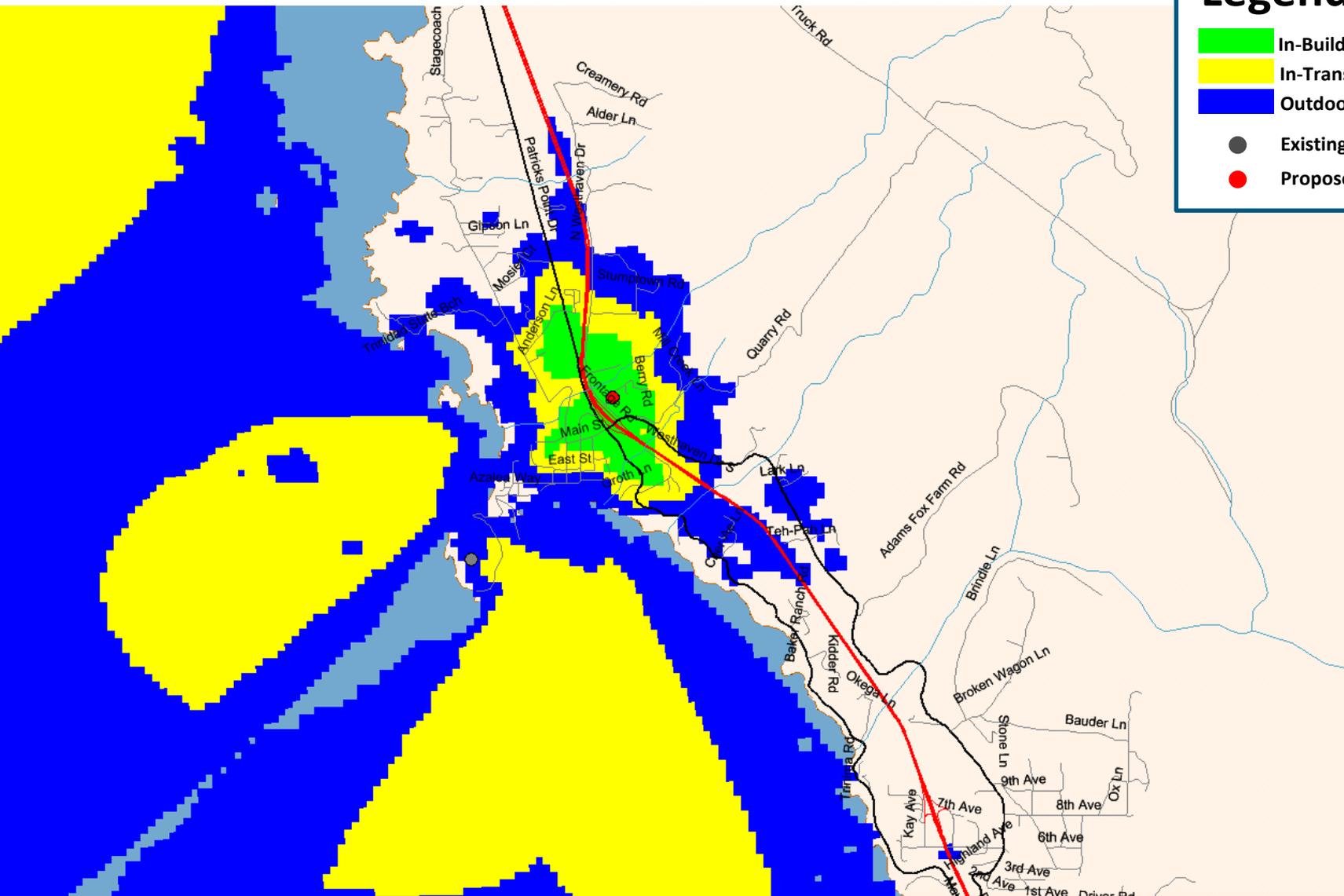
-  In-Building Service
-  In-Transit Service
-  Outdoor Service
-  Existing site
-  Proposed site



Proposed UMTS 1900 Coverage - CCL01172 @ (RC = 72ft)

Legend

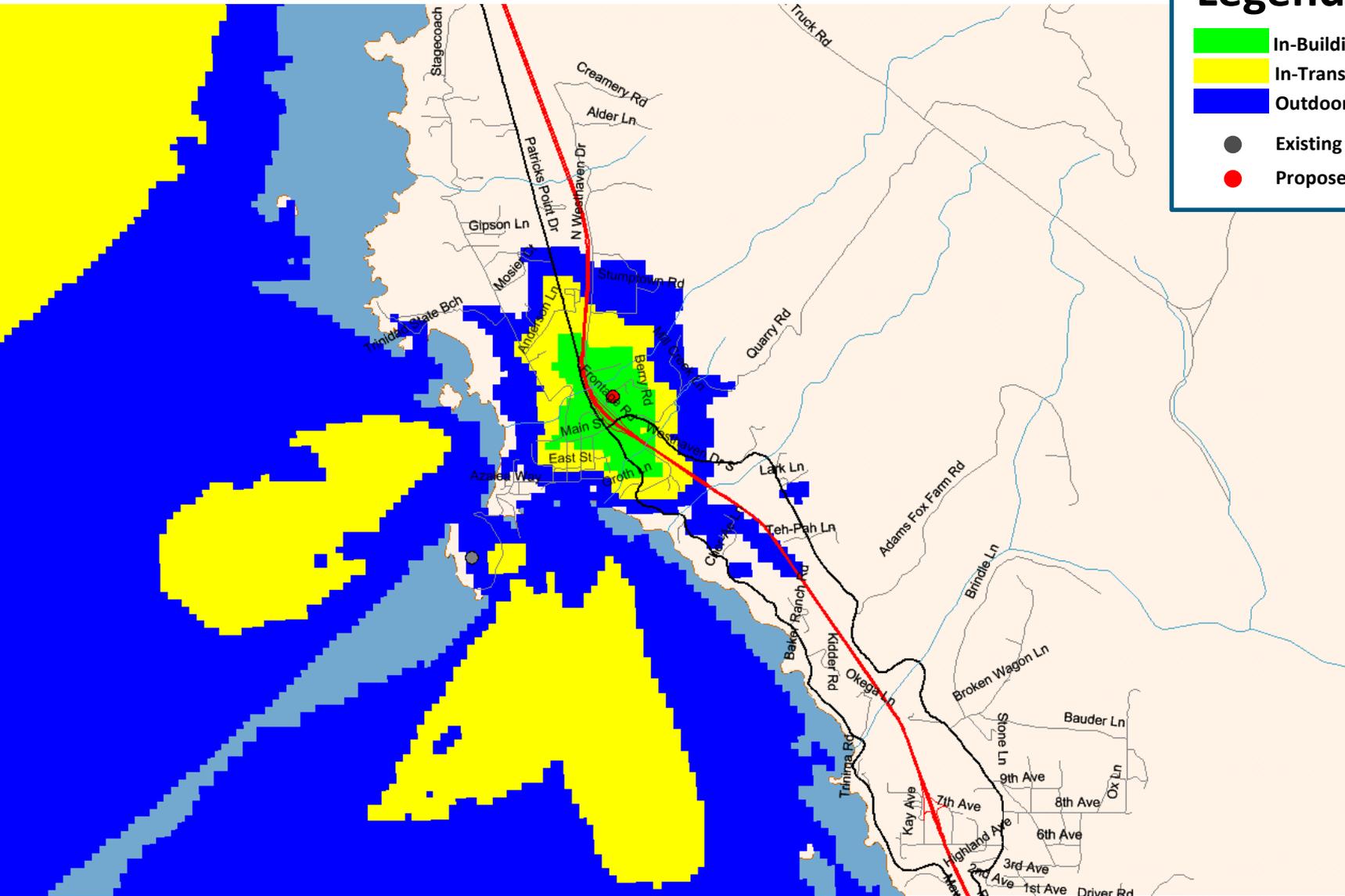
-  In-Building Service
-  In-Transit Service
-  Outdoor Service
-  Existing site
-  Proposed site



Proposed UMTS 1900 Coverage - CCL01172 @ (RC = 48ft)

Legend

- In-Building Service
- In-Transit Service
- Outdoor Service
- Existing site
- Proposed site



Radio Frequency Emissions Compliance Report For AT&T Mobility

| | | | |
|--------------|---|----------------------|--------------|
| Site Name: | Clark Road and Wagstaff Road | Site Structure Type: | Monopole |
| Address: | 12 Berry Street Trinidad, California | Latitude: | 41.063767 |
| Report Date: | May 10, 2019 | Longitude: | -124.139408 |
| | | Project: | Modification |

Compliance Statement

Based on information provided by AT&T Mobility and predictive modeling, the Clark Road and Wagstaff Road installation proposed by AT&T Mobility will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. RF alerting signage and restricting access to the monopole to authorized climbers that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

Certification

I, David H. Kiser, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.



General Summary

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure. Based on the criteria for these classifications, the FCC General Population limit is considered to be a level that is safe for continuous exposure time. The FCC General Population limit is 5 times more restrictive than the Occupational limits.

Table 1: FCC Limits

| Frequency (MHz) | <i>Limits for General Population/ Uncontrolled Exposure</i> | | <i>Limits for Occupational/ Controlled Exposure</i> | |
|-----------------|---|--------------------------|---|--------------------------|
| | Power Density (mW/cm ²) | Averaging Time (minutes) | Power Density (mW/cm ²) | Averaging Time (minutes) |
| 30-300 | 0.2 | 30 | 1 | 6 |
| 300-1500 | f/1500 | 30 | f/300 | 6 |
| 1500-100,000 | 1.0 | 30 | 5.0 | 6 |

f=Frequency (MHz)

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any location given the spatial orientation and operating parameters of multiple RF sources. The power density in the Far Field of an RF source is specified by OET-65 Equation 5 as follows:

$$S = \frac{EIRP}{4 \cdot \pi \cdot R^2} \text{ (mW/cm}^2\text{)}$$

where EIRP is the Effective Radiated Power relative to an isotropic antenna and R is the distance between the antenna and point of study. Additionally, consideration is given to the manufacturers' horizontal and vertical antenna patterns as well as radiation reflection. At any location, the predicted power density in the Far Field is the spatial average of points within a 0 to 6-foot vertical profile that a person would occupy. Near field power density is based on OET-65 Equation 20 stated as

$$S = \left(\frac{180}{\theta_{BW}} \right) \cdot \frac{100 \cdot P_{in}}{\pi \cdot R \cdot h} \text{ (mW/cm}^2\text{)}$$

where P_{in} is the power input to the antenna, θ_{BW} is the horizontal pattern beamwidth and h is the aperture length.

Some antennas employ beamforming technology where RF energy allocated to each customer device is dynamically directed toward their location. In the analysis presented herein, predicted exposure levels are based on all beams at full utilization (i.e. full power) simultaneously focused in any direction. As this condition is unlikely to occur, the actual power density levels at ground and at adjacent structures are expected to be less than the levels reported below. These theoretical results represent worst-case predictions as all RF emitters are assumed to be operating at 100% duty cycle.

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

Analysis

AT&T Mobility proposes the following installation at this location:

- Install (6) new panel antennas
- Install (9) new RRUs

The antennas will be mounted on a 72-foot monopole with centerlines 72 feet above ground level. The antennas will be oriented towards 155, 220 and 345 degrees. The radio equipment to be operated at this location is capable of a maximum of 40W per 3G channel at 1900 MHz, 40W per 4G channel at 700 MHz, 40W per 4G channel at 1900 MHz, and 40W per 4G channel at 2100 MHz. Other appurtenances such as GPS antennas, RRUs and hybrid cable below the antennas are not sources of RF emissions. No other antennas are known to be operating in the vicinity of this site.

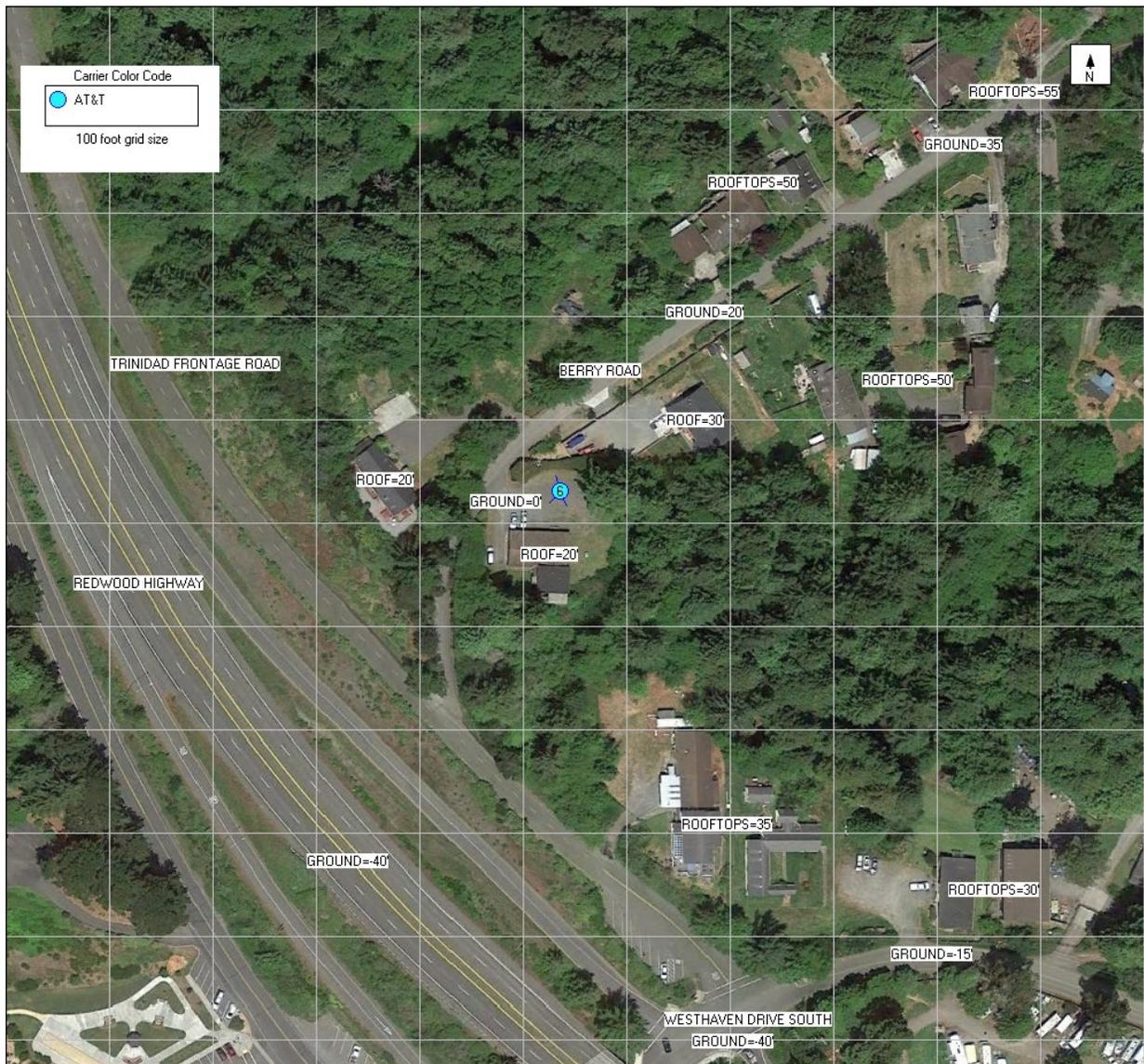


Figure 1: Antenna Locations

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serves to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.4192% of the FCC General Population limits. Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 4.0602% of the FCC General Population limits. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

Waterford Consultants, LLC recommends posting RF alerting signage with contact information (Caution 2B) at the base of the monopole to inform authorized climbers of potential conditions near the antennas. These recommendations are depicted in Figure 2.

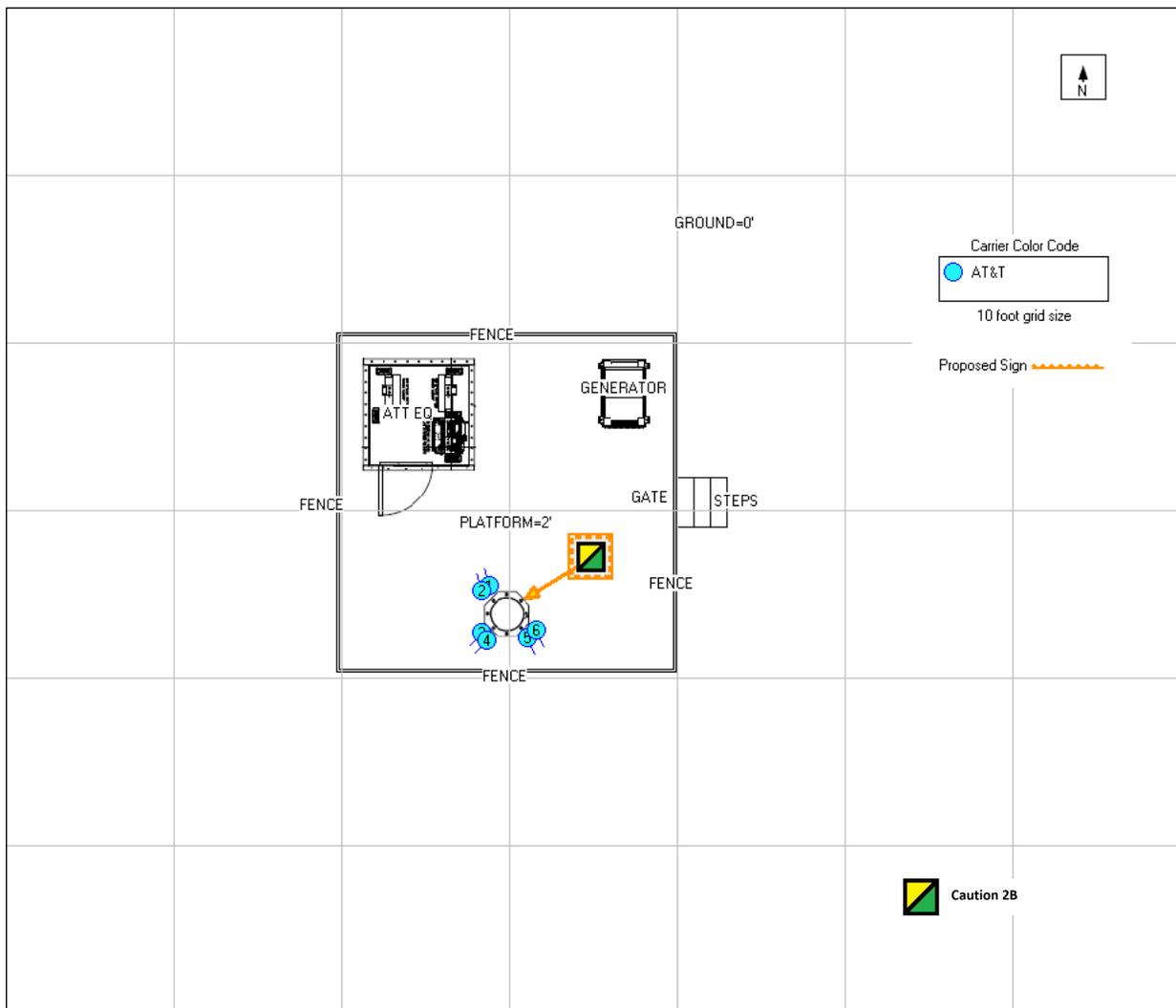


Figure 2: Mitigation Recommendations (Caution 2B sign required at base of monopole)



MEMORANDUM

TO: Trinidad Planning Commission

FROM: Trever Parker, City Planner

DATE: July 9, 2019

RE: General Plan Update – Water Production Rate Analysis and Demand Assessment Continued

I have made revisions to the Water Demand Assessment to address comments and questions that came up at the July 1 meeting. However, there were several issues that came up that do not fit within that document, but I wanted to respond to some of those issues and questions anyway.

Comparison of Per Capita Water Use

This isn't as straightforward as it might seem. Calculating system-wide per capita water use is fairly easy, but is not that comparable across different cities, because it varies considerably depending on how much industry, agriculture, tourism, etc. that the city has. So, residential water use is a better comparison. But even that should be viewed with caution, because most cities have denser development than Trinidad (e.g. multi-family apartments), which would use less water, because they generally have less landscaping. In addition, in a City as small as Trinidad, a small population difference can substantially change the per capita average. The U.S. Census data is now almost 10 years old, and more recent estimates tend to have a large margin of error in a small city like Trinidad, to the point of being unusable. For example, when I looked at the 2017 ACS (American Community Survey, which is the best data other than the census), I was surprised to find that it estimated a current population of 199 in 200 housing units, because in 2012, when we updated the Housing Element and last looked at this data in detail, the ACS population estimate was 274 and 252 housing units.

Further, residential water use is difficult to calculate in Trinidad, because so many people live in non-residential zones, including PD and VS, and there are a number of STRs and second homes in the residential zones. The best current (2018) population estimate from the census is 257, and the average household size in 2010 was 1.96. Total (system-wide) per capita water use within City limits, is 102 gallons per day, and 162 gpd in July. Looking at water use within just the UR and SR zones and dividing by the total population results in a per capita annual average water use of 64 gpd and an

average of 103 gpd in July. Using household size and multiplying by the number of accounts in the UR and SR zones yields a population of 327, which then equates to an average annual per capita water use of 69 gpd and a use of 113 gpd in July.

For comparison, I did find some data on per capita water use in other cities, as well as the region and state as a whole. But specific numbers aren't always easy to find. For example, the attached water use summary tables from the Pacific Institute (California Urban Water Use Data) only allow you to look at monthly data, not annual. Looking at July, per capita residential water use in Trinidad is quite a bit higher than that in the City of Arcata, but also lower than the statewide average, and slightly higher than the North Coast region average in 2018, but about the same as the 2013 average.

Capacity of Luffenholtz Creek

Supervisor Madrone mentioned that Luffenholtz Creek is already fully allocated. That is correct, but refers to allocated water rights, not necessarily actual use. The flow study that was done for the Moss subdivision estimated the lowest potential return flow (100-year return low flow) based on the 1977 flow, which is considered the lowest flow on record. However, I do not know where that flow data came from. In addition, there was no analysis as to whether that really is the 100-year return flow. (Note that a 100-year event, whether it is a flood flow or a low flow, actually means that it has a 1% chance of occurring in any year, not that it occurs once every 100 years.) And there was no analysis of whether that assumed low-flow could change due to climate change.

The flow analysis for the Moss subdivision cited a letter from Winzler & Kelly in 1995, which in turn referenced two older flow studies, one from 1969 and another from 1980, which predicted 100 year return low flows, assumedly at the water plant, of 290 gallons per minute (gpm) and 300 gpm respectively. The City's water right allows a maximum diversion of 251 gpm (361,440 gpd). As part of the City's water right, CDFW requires a minimum bypass flow for downstream aquatic life of 112 gpm in a regular water year, and 67 gpm in a dry year. Plus, there is 3 gpm worth of downstream water rights. At a low flow of 290 gpm, and a required bypass flow of 70 gpm, there would be less water in the creek than the City's water right. Based on just that little bit of information, it can be seen that the creek is actually over-allocated in terms of total water rights. However, the City doesn't actually withdraw anywhere near that amount of water.

It appears that water demand and production have been significantly higher in the past. For example, the 2009 peak day demand was approximately 150,000 gpd. However, per capita water use has been decreasing statewide over the last few decades due to increased efficiency and better awareness. In addition, the new standards for potable water means that the plant can't produce as much water as it may have in the past.

Rainwater Catchment and Water Tanks

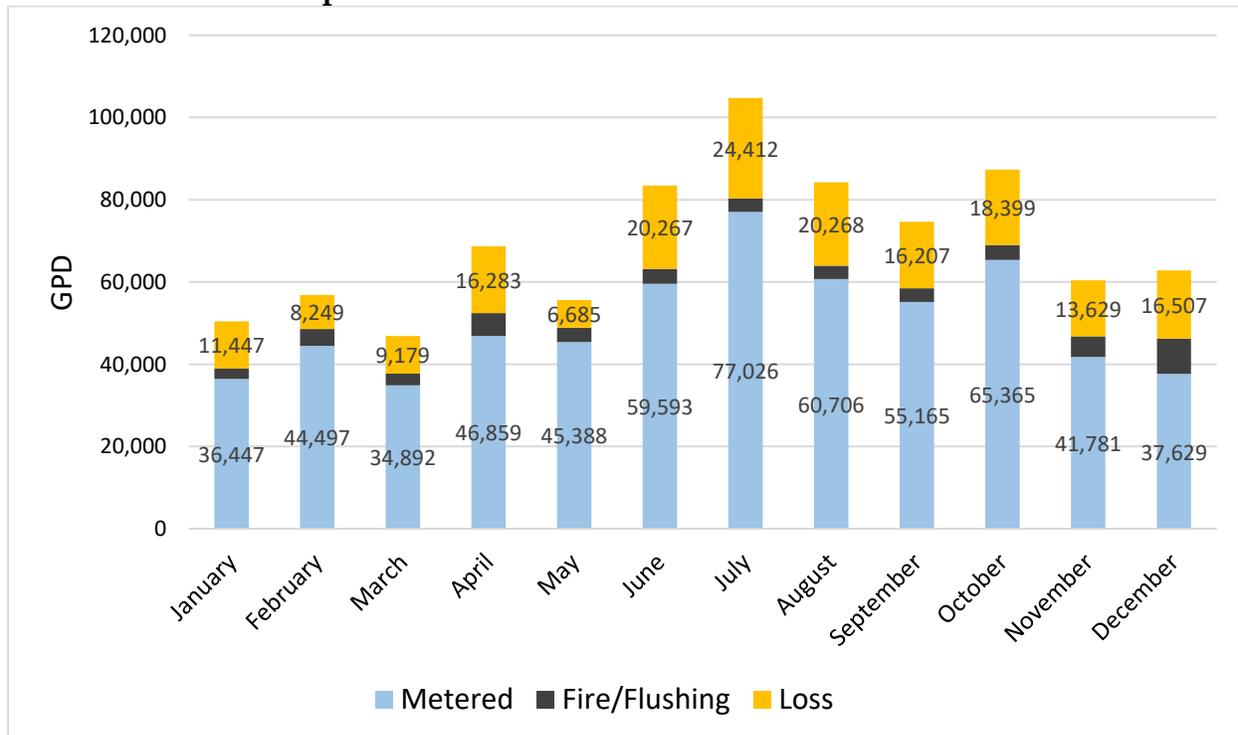
A 5,000-gallon water tank that could be used for rainwater catchment would be something like 8.5 ft. in diameter and 12.5 ft. tall. A water tank could be considered an

accessory structure that would be exempt from Design Review in certain circumstances. However, it would require a Building Permit and engineering plans for the pad, soils and anchoring. A full 5,000 gallon tank would weigh around 42,500 lbs, depending on the weight of the tank itself, and that doesn't include the concrete pad. If the City wanted to encourage these, a pre-approved engineering package for specific tank(s) could be pre-approved, though site plan and soils review would still have to be done on a case-by-case basis.

Water Losses

GHD is currently taking a closer look at this. However, it came up at the last meeting, and I already had the data for the 2018 dataset that I am using (April 2018 to March 2019), so figured I would present that here, so you at least have an idea of what it looks like. The losses range from 14.5% in March to 26.3% in December. The smallest category, labeled "fire/flushing" includes water for testing hydrants and flushing lines. It also includes a small amount, averaging 1,158 gpd, that the City sells to a water truck operator, much of which is resold to residents within the service area. As you can see, the data is much more variable on an annual basis than when compared to the 5-year average production rates shown in Figure 5 of the GHD memo. It would be even more variable on a daily basis, but that can be cushioned by use of the storage tanks. The greater metered water use in October was likely primarily due to one huge leak, to the tune of 8,300 gpd, that occurred at a private residence.

Figure 1. Total system water production broken down by metered and planed uses and losses between April 2018 and March 2019.



Rancheria Water Use and Build-out

Additional information regarding the Rancheria's water use and potential build-out demand is presented in the Water Demand Assessment.

Tiered Water Rate Structure

While I have received additional information regarding tiered water rates, this is also something that GHD is working on, and it is outside the scope of the Water Demand Assessment. However, there is a policy in the draft general plan (Program CIRC-12.3.1) that recommends adoption of a progressive water rate structure. Therefore, I wanted to provide you with a little additional background, but this is not a thorough analysis. A tiered or progressive water rate structure is one that charges higher rates for higher volumes used. This means that you would pay rate X for use up to say 100 units, and price XX for 100-200 units, etc. This is a very common rate structure.

However, service charges in CA are legally required to be based on the actual costs of providing the service, and proportional to the use, but not a source of revenue for the service provider. However, those actual costs should include all costs, such as operations, maintenance, capital improvements, conservation programs (e.g. education), etc. There is a bit of ambiguity in some of the related court cases, but it seems clear that a tiered rate structure is justifiable, but the service provider must actually justify it, which likely requires an expensive study (the cost of which can potentially be passed on to users though). Staff suggests that the Planning Commission should still consider a policy to encourage conservation via some kind of tiered rate structure, but acknowledge that the pricing must be justified.

The EPA suggests several types of tiered rate structures to encourage conservation. These include:

- Increasing block rates - Using block rates or tiered pricing that increase with water usage. The per-unit charges for water increases as the amount of water used increases. The first block is charged at one rate, the next block is charged at a higher rate, and so on.
- Time of day pricing - Charging higher prices for water used during a utility's peak demand periods.
- Water surcharges - Charging a higher rate for "excessive" water use (i.e., water consumption that exceeds the local or regional average).
- Seasonal rates - Water prices rise or fall according to weather conditions and the corresponding demand for water.

Summary

The Commission should continue the discussion started at the last meeting. I did not have time to update the text of the water service section of the general plan, but you can still review it, and discuss the draft policies. Please bring materials from the last meeting.

California Urban Water Use Data



Hydrologic Region: Select All Month: July 2018

Show 25 entries

Search:

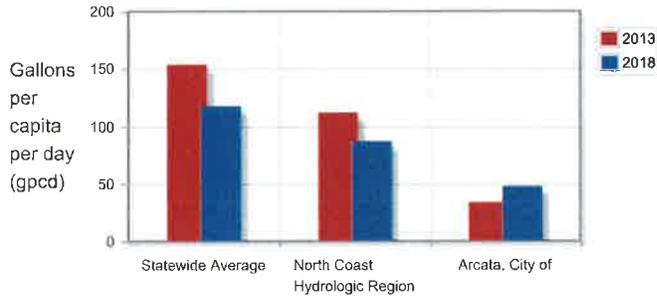
| Water Supplier Name | Population Served | System-Wide Per-Capita Water Use in July 2018 (gpcd) | Residential Per-Capita Water Use in July 2018 (gpcd) | Conservation Standard | Water Saved Since June 2015 | Met Conservation Target? | Charts | Map | | | | | | | | | | | | |
|--|-------------------|--|--|-----------------------|-----------------------------|--------------------------|-----------------------|---------------------|----------|------|------|-------------------|-----|-----|-------------------------------|-----|----|-----------------|----|----|
| Adelanto, City of | 30,081 | 167 | | | | | | Map | | | | | | | | | | | | |
| <h2>Arcata, City of</h2> <p>Population: 19,058</p> <p>System-Wide Residential</p> <p>July Water Use</p> <table border="1"> <caption>July Water Use (gpcd)</caption> <thead> <tr> <th>Category</th> <th>2013</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>Statewide Average</td> <td>155</td> <td>120</td> </tr> <tr> <td>North Coast Hydrologic Region</td> <td>115</td> <td>90</td> </tr> <tr> <td>Arcata, City of</td> <td>35</td> <td>50</td> </tr> </tbody> </table> | | | | | | | | | Category | 2013 | 2018 | Statewide Average | 155 | 120 | North Coast Hydrologic Region | 115 | 90 | Arcata, City of | 35 | 50 |
| Category | 2013 | 2018 | | | | | | | | | | | | | | | | | | |
| Statewide Average | 155 | 120 | | | | | | | | | | | | | | | | | | |
| North Coast Hydrologic Region | 115 | 90 | | | | | | | | | | | | | | | | | | |
| Arcata, City of | 35 | 50 | | | | | | | | | | | | | | | | | | |
| Alameda County Water District | 356,000 | 135 | | | | | | Map | | | | | | | | | | | | |
| Alco Water Service | 29,753 | 143 | | | | | | Map | | | | | | | | | | | | |
| Amador Water Agency | 23,347 | 201 | | | | | | Map | | | | | | | | | | | | |
| American Canyon, City of | 20,315 | 146 | | | | | | Map | | | | | | | | | | | | |
| Anaheim, City of | 362,896 | 181 | | | | | | Map | | | | | | | | | | | | |
| Anderson, City of | 11,147 | 346 | | | | | | Map | | | | | | | | | | | | |
| Antioch, City of | 113,061 | 166 | | | | | | Map | | | | | | | | | | | | |
| Apple Valley Ranchos Water Company | 62,602 | 187 | | | | | | Map | | | | | | | | | | | | |
| Arcadia, City of | 57,639 | 288 | 170 | 0% | 0% | n/a | Chart | Map | | | | | | | | | | | | |
| Arcata, City of | 19,058 | 106 | 48 | 0% | 0% | n/a | Chart | Map | | | | | | | | | | | | |
| Arroyo Grande, City of | 17,636 | 127 | 102 | 0% | 0% | n/a | Chart | Map | | | | | | | | | | | | |
| Arvin Community Services District | 21,947 | 129 | 120 | 0% | 0% | n/a | Chart | Map | | | | | | | | | | | | |
| Atascadero Mutual Water Company | 31,820 | 211 | 157 | 0% | 0% | n/a | Chart | Map | | | | | | | | | | | | |

Population: 19,058

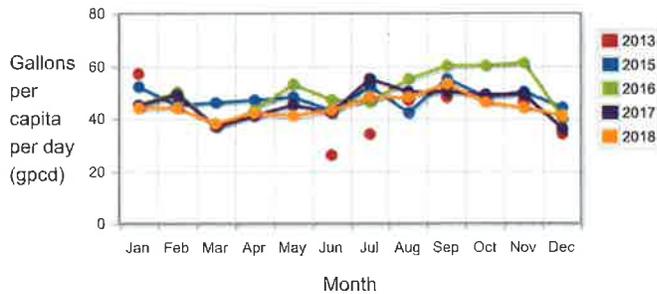
Arcata, City of

[System-Wide](#) | [Residential](#)

July Water Use



Water Use by Month



California Urban Water Use Data



Hydrologic Region: Select All Month: July 2018

Show 25 entries

Search:

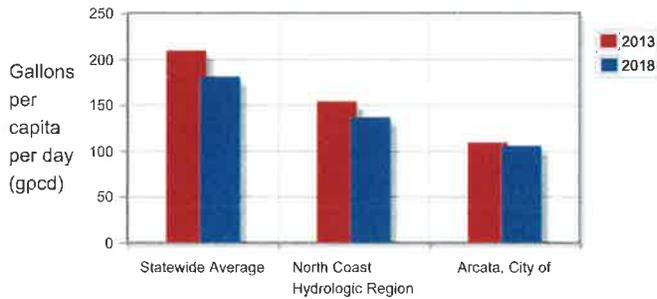
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| Category | 2013 | 2018 | | | | | | | | | | | | | | | | | | |
| Statewide Average | ~210 | ~185 | | | | | | | | | | | | | | | | | | |
| North Coast Hydrologic Region | ~155 | ~140 | | | | | | | | | | | | | | | | | | |
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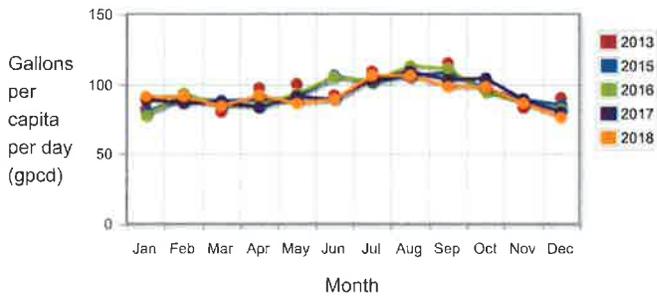
Arcata, City of

[System-Wide](#) | [Residential](#)

July Water Use



Water Use by Month



Draft Water Demand Assessment

Projections for Build-out Within the City and Within the
City's Service Area.

City of Trinidad

June 28, 2019

Revised July 11, 2019

Background

The City has designated water service area (City Service Limit as designated in the certified Local Coastal Program (LCP)) that extends well outside of City limits (Figure 1). Prior to about the year 2000, the City provided water to users outside City limits, but within the service area, when requested, without much oversight or decision-making, in order to benefit from the increased revenue. However, around 2000, the policies of the Humboldt County Local Agency Formation Commission (LAFCo) changed, and they no longer allowed service extensions to properties outside the City without annexation into the City except in cases of emergencies. Therefore, the City stopped connecting users outside City limits. But the dynamics are again changing. During the recent drought, the number of requests for City water from property owners outside of the City increased substantially. In addition, LAFCo has recently relaxed its policy requiring annexation prior to providing water. On the other hand, water supply has also become a more important issue.

Purpose

This report is being funded in part by a Local Coastal Program Update grant from the California Coastal Commission. City staff requested grant funding for this water demand assessment for several reasons. As part of the comprehensive update of the general plan, the City should assess the boundaries of the service area to ensure that they are still reasonable in the current context. In addition, the City may want to consider annexation of some of these areas in the future. Depending on the area, annexation could potentially provide tax additional revenue, or it could also be a revenue drain. But there are other potential benefits such as land use control and increasing the City population and pool of people to serve on councils, commissions and committees. Further, LAFCo is in the process of updating the City's Sphere of Influence, which is also related to the potential for annexation and service provisions.

With the Rancheria's request for City water to serve their proposed hotel, issues of water supply and future demand have become even more critical. The City needs to develop policies by which they will evaluate and prioritize requests for water service from outside City limits and consider when annexation may be required or sought. In order to do that, the City also needs to understand how much water is available, and what the future demand for water may be, both inside the City and within the service area.

These are major, broad-scope issues that City staff are currently working towards addressing. The City Engineer's office recently completed a preliminary assessment of the production capacity of the water plant. In addition, they will also be working on a flow assessment of Luffenholtz Creek with an emphasis on low-flows and the potential risks from future droughts and climate change. Planning staff has prepared this build-out demand assessment that includes potential development within both the City and the service area. Other pieces of this topic that staff will be working on are an analysis of the

storage and distribution characteristics and limitations of the physical water system, a water rights analysis for Luffenholtz Creek and an assessment of potential alternative water sources. All of this information will take time to develop, but this service area demand assessment, along with the water plan production capacity memo should provide a good starting point for some of the policy discussions.

Water Demand Within City Limits

Methods

To start, the City exported monthly water use data for all the accounts in the City for the 12-month period of April 2018 to March 2019. The meters are read monthly, so we cannot ascertain peak hourly or daily usage. However, the data does represent actual rather than assumed water use. I then separated the water accounts by rate code, or inside v. outside City limits. For the accounts within the City, I then merged the data with APNs and zoning data, and separated the water accounts by zoning designation I then calculated the average annual and peak monthly (July) water use per account for each zone. I did not do much “clean-up” or manipulation of the data. When a property changed hands, there would be multiple accounts for the same address; I combined the water usage into one line/account. There were accounts with 0 water use, which are assumedly vacant. And there were accounts with large, noticeable water leaks. However, I figured this represented the most realistic picture of actual, average water use available. There was one exception where a leak was so large (60 to 70 times the normal water use) that it skewed the data and I removed it from calculating the average water use in the SR zone.

Many of the properties that have multiple units or business have separate water accounts for each user, but not all (e.g. the 4-plex at 651 Parker Street). I did not try to divide out those extra units (except when calculating the average water use for ADUs), because I figured it was better to overestimate average water use per parcel for this analysis. But I also did not combine multiple accounts on a single parcel. That situation primarily impacts the C zone, of which there are no vacant parcels to calculate build-out. And for the PD zone, build-out demand was estimated based on the potential number of units, not the number of parcels. The City’s water billing and meter reading software present water use in cubic feet, but I converted it to gallons per day (gpd) to compare with the water system capacity information presented in GHD’s memo.

Existing Water Use

Water use varies substantially between users. But the vast majority of accounts (89.5% in the City) use less than 300 gpd, which is considered the design flow for sizing a septic system for a two-bedroom house. By far the biggest users in town, using almost twice as much water as the next highest users, are the Harbor property and Hidden Creek RV Park (1798 and 1786 gpd respectively). The next highest users are the Trinidad School (959 gpd), a mostly unoccupied vacation home (not an STR) (956 gpd) and the Eatery (890 gpd).

Murphy’s Market (881 gpd) and the Lighthouse Grill (794 gpd) are also high users. After that, the volume of use drops off.

Although requiring conservation or consideration of methods to limit water use are outside the scope of this particular report and discussion, looking at the water data in detail does bring attention to high water users and concerns about that. For example, three of the top 10 water users in town (Eatery, 570 Trinity, 4-plex) are located in the same block just behind the active slide on Edwards Street. In addition, there are several residences located near bluffs that use a significant amount of water. This information should be kept in mind when discussing water policies, and the City should also be considering ~~such things as a tiered~~ water rate structure that encourages conservation and requirements for drought tolerant landscaping, as just two examples.

The month of peak metered water use in the City is July for the data sets I have recently reviewed. The second highest month is usually September. However, anomalous data, such as a large water leak, can skew the results for some zones or months. Other factors can also affect the results. For example, the highest water user in the PR zone is Trinidad Elementary School. But since school is out in the summer, their water use is lower than average during that time. Therefore, the peak month for usage in the PR zone is September (indicated by ^ in Table 1). The peak usage in July is slightly different than the peak production at the water plant, which occurs in August. July and September tend to be the peak months outside of City limits as well, so I’m not sure why this discrepancy exists. However, for the purpose of this review, it doesn’t matter too much.

For this report, we are most interested in water use by land use. The following table shows total and average water use (gpd) by land in the City. The starred answers (*) indicate that removing one anomalous water user would substantially change the average. Note that the average shown for the VS zone divides the total volume by two, because there are two RV parks. However, Trinidad Bay Trailer Courts has three accounts, so average water use by account is much lower.

Table 1. Average and peak daily water use (July) by land use zone.

| Zone | Total gpd <u>(annual ave.)</u> | Ave. gpd <u>(per account)</u> | Total Peak gpd <u>(July average)</u> | Ave. Peak gpd <u>(per account)</u> |
|--------------|-----------------------------------|----------------------------------|---|---------------------------------------|
| C | 6,047 | 403 | <u>10,511</u> | 692 |
| VS | 2,717 | 1,358* | <u>3,145</u> | 1,572 |
| PD | 3,361 | 140* | <u>5,643</u> | 235 |
| PR | 1,490 | 166 | <u>1,475</u> | 274^ |
| SR | 6,045 | 163* | <u>7,653</u> | 211 |
| UR | 16,665 | 128 | <u>29,364</u> | 226 |
| Total | 36,325 | | <u>57,779</u> | |

Trends

I also looked at the 2017 and 2013 water data for comparison to see if water use has been changing over time. In 2018, the total metered water use in the City was 1,788,162 cubic feet, or an average of 36,645 gpd. In 2017, the total metered water use in the City was 1,722,263 cu. ft., or 35,295 gpd. And in 2013 the total metered water use in the City was 1,786,244 cu. ft., or an average of 36,606 gpd. So, water use seems to have remained fairly steady. This could be analyzed in more detail if warranted.

Build-out Demand

The City analyzed development potential of vacant lands in its draft Housing Element (December 2013), which was updated for this report. The vacant (developable) lots in the City fall into only three zoning designations – Planned Development (PD), Suburban Residential (SR), and Urban Residential (UR). Except for two Special Environment (SE) parcels, the only other vacant lots are zoned Open Space and SE and are publicly owned or held by the Trinidad Coastal Land Trust, and so are not considered developable. One of the two privately held SE parcels could potentially be developed. There are no vacant Commercial, Public and Religious, or Visitor Service zoned parcels in the City. Trinidad has no industrial or agricultural zoning designations.

In addition, the City also looked at parcels that are large enough to be subdivided. For both vacant and developed parcels, the potential number of new units/parcels was calculated based on the gross parcel area and minimum lot size for the zone (assigning the primary zone to the whole parcel). However, many parcels have limitations such as riparian corridors and steep slopes (most of those portions of the lots are zoned SE). Therefore, staff estimated a conservative “net” development potential based on the approximately developable area. In all likelihood, this net development potential overestimates the potential number of new units, because there will be other, unknown limitations. However, it is better to over-estimate future water demand than to underestimate it. In addition, Trinidad has averaged less than one new house per year over the last few decades, so this level of development would be expected to occur over a long period of time, wherein changes to the water plant, production capacity and water availability are also likely to change over that time.

Table 2 presents projected build-out demand under the current land use/zoning designations. Although the number of potential units in the PD zone was already reduced from the gross potential of one unit per 8,000 sq. ft., it is now likely substantially less, since the TCLT acquired two of those four parcels. In addition, there is one single-family residence that substantially affects the average water use in the PD zone (140 gpd v. 105 gpd annually and 235 gpd v. 173 gpd in July). Using the lower average would likely be more realistic, but as mentioned above, it is better to be conservative in this instance. It only equates to a difference of about 1,000 gpd for the potential average annual daily demand and 2,000 gpd for the peak demand anyway.

Table 2. Estimated Maximum Additional Water Use After Build-Out in Trinidad

| Zoning | Potential Number of New Units After Build-out | Average Daily Water Use Per Unit (gpd) | Potential Additional Average Daily Water Use (gpd) | Average Peak Daily Water Use Per Unit (gpd) | Potential Additional Peak Daily Water Use (gpd) |
|--------------|---|--|--|---|---|
| UR | 20 | 128 | 2,560 | 226 | 4,520 |
| SR | 39 | 143* | 5,577 | 211 | 8,229 |
| PD | 32 | 140 | 4,480 | 235 | 7,520 |
| Total | | | 12,617 | | 20,269 |

* In general, leaks were not removed from the dataset, because they are part of the normal situation. However, there was one that was so large and obvious (on the order of 60 to 70 times their normal water use) that it significantly skewed the data, and so was not used in calculating the average for the SR zone. The leak did not affect the July average.

Accessory Dwelling Units (ADUs)

The State requires cities to provide their fair share of housing, and generally requires second units to be allowed on residential properties by right. However, because Trinidad is in the Coastal Zone, and its land use ordinances are governed by the Coastal Act and the Coastal Commission, the requirements are more nuanced. In addition, development in Trinidad is limited by the use of septic systems, and potentially water availability. The City has expressed interest in allowing ADUs and even passed an ADU ordinance, but it was never certified by the Coastal Commission. One of the reasons was because Coastal Commission staff wanted more information showing that the City has the water available to serve potential ADUs.

The State does not allow impact fees to be charged for ADUs, which makes it harder to find information related to how much water one would be expected to use. (Impact fees are fees charged to developers to offset the increased costs of serving the new development (e.g. providing water, police, street maintenance, etc.)) And the City doesn't have a complete record of all the existing ADUs in town. However, I looked at water use for those that are known, and water use was generally very low. The highest per unit residential use was the 4-plex at 651 Parker at 140 gpd average per unit (461 Ocean had a higher average water use, but that was due to an obvious leak one month, and 308 Ocean also had a higher water use, but that unit operates as a day care). On average, multi-unit residential properties utilized approximately 80 gpd per unit and 138 gpd in July.

It is difficult to estimate the development potential for ADUs, because the number, size and type vary significantly depending on market conditions and local regulations. Trinidad should carefully regulate the establishment of ADUs in order to minimize wastewater, groundwater and water supply impacts. In the 2019 Groundwater Model Addendum (Trinidad ASBS Stormwater Project) prepared by GHD, they ran the model with assumed build-out of the City. There was an increase in groundwater levels in the area of the horse pasture, based on the gross potential build-out. GHD also ran the model

infiltrating all stormwater onsite. That model indicated saturated conditions and slope instability, showing that there is a limit to the amount of water that can be infiltrated in Trinidad.

At this time, it is unknown how ADUs will be regulated in Trinidad; currently, they would not be allowed on most parcels. The ADU ordinance that was passed by the City in 2010 (but never certified by the Coastal Commission) does not include a minimum parcel size for ADUs, though it does require a code OWTS, which necessarily limits the lot size that can accommodate an ADU. However, with better information regarding water and groundwater and slope stability limitations, it would make sense to limit ADUs based on lot size and/or location (e.g. based on GHDS January 2019 Groundwater Model Addendum for LID Zoning).

As a starting point, staff calculated the number of parcels that are large enough to meet the current minimum lot size for their zone. There are 87 UR zoned parcels that are at least 8,000 sq. ft., 44 SR zoned parcels that are at least 20,000 sq. ft., and 12 PD zoned parcels that are at least 8,000 sq. ft. If one quarter of those parcels constructed ADUs, that would be 36 parcels. As noted above, parcels with ADUs use approximately 80 gpd of water on average, and 138 gpd in July. That equates to an additional 2,880 gpd of water use on average, or 4,968 gpd during the peak month of July. Again, that is a conservative estimate that likely overestimates potential water use, but a conservative approach is appropriate in this case due to uncertainties and the potential for droughts and climate change to reduce the available supply of water in Luffenholtz Creek. Adding the ADU demand to the build out demand would equate to an average of 15,497 gpd and a peak demand of 25,237 gpd within City limits.

Service Area Descriptions and Build-out Demand Potential

Below I have provided a brief summary of the characteristics of each area and subarea within the Service Limit as shown on the attached Figure 1. This information is provided in order to aid in the discussion of which portions of the service area, if any, should be a priority for future service and annexation and which areas should be eliminated from the service area. For example, the more development potential there is in an area, the more financial sense it could make for annexation, because the County keeps some of the tax revenue from existing development. [Table 3 presents existing water use within the service area and the Rancheria.](#)

A few parcels that are within the existing service area were eliminated from the analysis due to several reasons. The parcels east of Area B and north of Area D are owned by the company that operates the quarry and / or are zoned or proposed to be zoned AE or TPZ, which are very restrictive zones that should not be provided community water. A couple of large parcels that stick out from the bulk of Area E were eliminated just because they didn't seem to make a lot of sense and were not adjacent to a main line. In Area F, the

parcels seaward of Scenic Drive were eliminated from the analysis due to the substantial development limitations on those parcels.

Methods

A spreadsheet was created of all the parcels within the existing City Service Limit. Included in the spreadsheet was data from the County Assessor's office and the County GIS. This information includes such things as the existing use, improvement value, size, zoning and general plan designations. Whether the property is currently served by City water was also included in the spreadsheet.

I then divided up the service area into smaller areas, designated by letters, and sometimes broke those into even smaller subareas. These divisions were somewhat arbitrary, but are areas that might make sense as future annexation units if the City wants to expand. In addition, it is not likely that the City will ever provide water service to the entire service area. With this break-down, the characteristics of each area can be reviewed, and the merits of including it in the service area, considered separately.

Staff reviewed both existing zoning and the proposed zoning updates currently being discussed by the County. Those changes will only affect properties outside of the Coastal Zone (CZ). The development potential of each property was estimated based on the minimum lot size according to zoning and subdivision potential. There is minimal subdivision potential on properties within the service area, but there is some. It is likely that there are physical and other factors that would limit the subdivision potential, but once again, this is a conservative estimate that likely overestimates potential demand somewhat. In addition, ADUs are allowed on almost any lot in the service area with approval of a special permit and allowed by right on some parcels.

Water use data for accounts within the service area was treated and analyzed similar to the water use data for properties within City limits. The primary difference is that all the parcels are residential except for some of the Rancheria connections. I separated the Rancheria parcels for the purposes of calculating average water use. This is because some of the connections are for commercial and office use, and because it does not seem like all the connections are all serving individual parcels or homes.

I did not try to match the service area property characteristics spreadsheet with the City's water accounts. This is because we are trying to forecast potential future water use. And because owners, family structures, landscaping, number of bedrooms, etc. can all change in the future, an average water use is a better predictor than actual current water use.

Overall, average water use within the Service Area is substantially lower than residential water use in the City, with an average of only 94 gpd including the three accounts with zero water use (the average in the City also included accounts with zero water use) and 98 gpd excluding them. Average water use per account on the Rancheria is closer to the City

residential averages at 14455 gpd annual average and 17289 gpd during July (without the casino). Therefore, I went ahead and averaged all the accounts, including the Rancheria parcels, but excluding the casino, to use in the calculations for potential service area demand for residential areas. This equated to an average of 109 gpd with a peak of 166 gpd in July. [See Table 3 for additional information.](#)

Table 3. Existing water use within the City service area and the Rancheria.

| <u>Area</u> | <u>Average Daily Water Use (per account)</u> | <u>Total Daily Water Use (annual ave.)</u> | <u>Average Peak Daily Water Use (July)</u> | <u>Total Peak Daily Water Use (July)</u> |
|---|--|--|--|--|
| <u>Rancheria (w/out Casino)</u> | <u>144</u> | <u>3,370</u> | <u>172</u> | <u>4,133</u> |
| <u>Casino</u> | <u>2,644</u> | <u>2,644</u> | <u>2,724</u> | <u>2,724</u> |
| <u>Service Area (not including Rancheria)</u> | <u>94.2</u> | <u>7,156</u> | <u>158</u> | <u>12,000</u> |
| <u>Water Truck</u> | <u>1,158</u> | <u>1,158</u> | <u>2,064*</u> | <u>2,064</u> |
| <u>Total</u> | | <u>14,328</u> | | <u>20,921</u> |

For potential ADUs, I used a multiplier of 0.25 to account for up to a quarter of properties constructing ADUs (not including existing ones) for parcels where a special permit is required and 0.5 where they are allowed by right (again, likely an overestimate). I used the same average water demand for both primary residences and ADUs, since the average is already fairly low. Each parcel got a multiplier based on whether they are already served by City water or not, whether the parcel has subdivision potential and whether an ADU is allowed by right or special permit. A potential average and peak water demand were calculated for each parcel and totaled for the subarea. The full potential for subdivision was included in the water demand calculations, though, as mentioned above, approval of all those subdivisions is unlikely.

For Area C, I took a different approach. The potential water demand for this area is difficult to estimate, because different commercial and recreational uses can vary significantly in their water requirements. For example, one parcel contains a mini-storage business, which likely uses very little water. On the other hand, the RV parks use a significant amount of water, particularly in the summer. Restaurants use a lot of water, but a hardware store would not. Therefore, a simple average did not seem to be an adequate approach.

At first, I did apply the average water use from the RV parks in Trinidad to the parcels in Area C, multiplying it based on lot size and subdivision potential. However, the resulting totals seemed unreasonably high. Therefore, I went ahead and called several of the businesses that operate within the area, including all three of the RV parks and Ocean Grove. I was able to speak to the owners or operators of these businesses to get an idea of how much water they actually use. However, they primarily gave me estimates of the

highest peak day usage (e.g. 4th of July), which would be substantially more than the daily average over the entire month. Therefore, I did not use the full peak in estimating water demand over the entire month or year. Regardless, it became clear that to serve this entire area would require a significant amount of water (see more below). There is potential for using City water and existing onsite sources of water to serve this area, but that is outside the scope of this report.

A Note About Zoning

Areas A, B, D, E and F include almost exclusively residential zoning designations, whereas Area C is exclusively commercial zoning. The vast majority of parcels within the service area are zoned RA (rural residential agriculture), or are proposed to be RA in the County's update. And many are also zoned RS (residential single-family in the coastal zone). The number after the zoning designation (e.g. RA-2.5) indicates the minimum lot size, usually in acres, and an X means no additional subdivision is allowed. Although these zoning designations are primarily residential, they do allow a fairly wide variety of uses with approval of a use permit. Such uses include neighborhood commercial, public and private recreation, bed and breakfasts, stables, agriculture and timber production. However, staff is not aware of many of these other types of uses having been established, likely because most of the lots are relatively small and would have septic limitations. There are also a number of combining zones (such as for wetlands, riparian areas, fault hazards, design review requirements, etc.).

Trinidad Rancheria

Based on the Rancheria's Comprehensive Community-based Plan (June 2011), there does not appear to be any plans for additional residential development within the main Rancheria boundaries. Instead, the Rancheria has, and will continue to, purchase individual parcels to provide housing for Rancheria members. For example, the Rancheria has purchased several parcels on the west side of Hwy 101 along Westhaven Drive, as well as parcels in McKinleyville. In general, these parcels are already residential. And most have been, or eventually will be, transferred into Tribal Trust status. The Rancheria's community plan does call for additional commercial and institutional development, potentially replacing existing housing. The potential development envisioned in the community plan includes the hotel, an RV park, gas station, mini-mart, retail and incubator space, and a cultural/community center. However, most of that development is currently speculative, and it is outside the scope of this report to assess the potential water demand from build-out of the Rancheria.

Area A

Area A consists of 15 parcels covering an area of 24.1 acres, all within the Coastal Zone (CZ). The average parcel size is 1.61 acres, ranging from 0.44 acres to 6.21 acres. Nine of the parcels are currently served by City water, and 6 parcels are unserved. Four of the

parcels are vacant, and one is minimally developed (< \$30,000 improvement value). All the parcels are residentially zoned; one parcel has a mobile home and one has multiple units. The parcels are all zoned RS-20 - Residential Single-family, 20,000 sq. ft. minimum lot size. However, the County's minimum lot size when OWTS are used (and community water) is one acre. At that size (one acre), there is potential for 4 parcels to be subdivided into a total of 13 parcels. Second dwelling units are allowed with a Special Permit. This area is estimated to have a potential additional average annual demand of 2,289 gpd and a potential additional peak demand of 3,486 gpd during the month of July.

Area B

Area B consists of 43 parcels covering an area of 59.4 acres. The average parcel size is 1.41 acres, ranging from 0.19 acres (8,276 sq. ft.) to 4.14 acres. Twenty-three of the parcels are outside the CZ, 15 are inside the CZ and 5 are split. Twenty-two of the parcels are served by City water, and 21 are unserved. At least 13 parcels are vacant with five more that have minimal improvement value (< \$30,000). All the parcels are zoned residential (RA-2.5 inland and RS/SM or RA-2 and RA-2.5 coastal). Three of the parcels could be subdivided into a total of six parcels. Twenty-four of the parcels can construct an ADU by right, and the other 19 would require a special permit. This area is estimated to have a potential additional average annual demand of 4,524 gpd and a potential additional peak demand of 7,014 gpd during the month of July.

Area B1 contains 28 parcels totaling 30.59 acres, averaging 1.13 acres, and ranging in size from 0.19 acres to 1.27 acres. There is no subdivision potential in this subarea. None of the parcels are in the CZ, but one is split by it. Eleven of the parcels are currently served by City water, and 17 are not. Eight of the parcels are vacant, and three have minimal improvement value. All 28 parcels can construct an ADU by right. This subarea is estimated to have a potential additional average annual demand of 2,698 gpd and a potential additional peak demand of 4,183 gpd in July.

Area B2 contains 15 parcels totaling 28.78 acres, averaging 1.92 acres, and ranging in size from 0.33 (14,375 sq. ft.) acres to 4.14 acres. Three of the parcels could be subdivided into a total of six parcels. Twelve of the parcels are in the CZ, two are outside and one is split by it. Five of the parcels are currently served by City water, and 10 are not. Five of the parcels are vacant, and two have minimal improvement value. Two of parcels can construct an ADU by right and 13 would require a special permit. This subarea is estimated to have a potential additional average annual demand of 1,826 gpd and a potential additional peak demand of 2,831 gpd in July.

Area C

Area C consists of 12.5 parcels (one parcel is split by the service area boundary) covering an area of approximately 56 acres. The average parcel size is 4.54 acres, with a range of 0.73 acres to 11.23 acres. Ten of the parcels are within the CZ, and three are split. None of

this area is currently served with City water. Only one parcel is wholly vacant, but three other parcels are mostly vacant (either with minimal improvements or unused). All of the parcels have commercial designations; five are zoned Commercial General, and the other 8 are zoned Commercial Recreation. However, three parcels are currently utilized for residential purposes. In addition, one of the three RV parks caters to permanent residents (minimum 30-day stay). As mentioned in the methods section above, estimating demand in this area is difficult, because it can be highly variable. The estimated potential water demand of this area is somewhere on the order of 15,000 to 20,000 gpd average during the low season and an average of 35,000 to 40,000 gpd during the peak season.

Area D

Area D consists of 49 parcels covering an area of 121.4 acres. The average parcel size is 2.48 acres, with parcels ranging from 0.23 acres (10,019 sq. ft.) to 11.74 acres. Thirty-six of the parcels are in the CZ, two are outside the CZ and 11 are split. Sixteen of the parcels are served by City water, and 33 are unserved. At least nine parcels are vacant with six more that have minimal improvement value (< \$30,000). All the parcels are zoned residential (generally RA-2.5, RA-2 and RA-X). Six of the parcels could be subdivided into a total of 14 parcels. Only two of the parcels can construct an ADU by right, and the other 47 would require a special permit. This area is estimated to have a potential additional average annual demand of 6,077 gpd and a potential additional peak demand of 9,255 gpd during the month of July.

Area D1 contains 16 parcels totaling 35.19 acres, averaging 2.20 acres, and ranging in size from 0.25 acres to 6.89 acres. There is one parcel that could potentially be split into two parcels within this subarea. All of the parcels are in the CZ. Seven of the parcels are currently served by City water, and nine are not. Four of the parcels are vacant, and three have minimal improvement value. All 16 parcels can construct an ADU with approval of a special permit. This subarea is estimated to have a potential additional average annual demand of 1,553 gpd and a potential additional peak demand of 2,366 gpd in July.

Area D2 contains 17 parcels totaling 25.51 acres, averaging 1.50 acres, and ranging in size from 0.23 acres to 6.67 acres. There is one parcel that could potentially be split into two parcels within this subarea. Fifteen of the parcels are in the CZ and two are split. Seven of the parcels are currently served by City water, and 10 are not. Three of the parcels are vacant, and one has minimal improvement value. All 16 parcels can construct an ADU with approval of a special permit. This subarea is estimated to have a potential additional average annual demand of 1,690 gpd and a potential additional peak demand of 2,573 gpd in July.

Area D3 contains 16 parcels totaling 60.67 acres, averaging 3.79 acres, and ranging in size from 1.01 acres to 11.74 acres. There are four parcels that could potentially be split into 10 parcels within this subarea. Four of the parcels are in the CZ, three are outside and nine are split. Only two of the parcels are currently served by City water, and 14 are not. Two of

the parcels are vacant, and one has minimal improvement value. Two of the parcels can construct an ADU by right, and the other 14 would require approval of a special permit. This subarea is estimated to have a potential additional average annual demand of 2,834 gpd and a potential additional peak demand of 4,316 gpd in July.

Area E

Area E consists of 36 parcels covering an area of 99.54 acres. The average parcel size is 2.77 acres, ranging from 0.14 acres (6,098 sq. ft.) to 6.64 acres. All 36 parcels are in the CZ. Eighteen of the parcels are served by City water, and 22 are unserved. At least five parcels are vacant with three more that have minimal improvement value (< \$30,000). All the parcels are zoned residential (the vast majority are RA-2.5, with one RA-X and one RA-5). Six of the parcels could be subdivided into a total of 15 parcels. All of the parcels would require a special permit to construct an ADU. This area is estimated to have a potential additional average annual demand of 3,761 gpd and a potential additional peak demand of 5,727 gpd during the month of July.

Area F

Area F consists of 25 parcels covering 80.78 acres. The average parcel size is 3.51, ranging from 0.47 acres to 15.8 acres. All 25 parcels are in the CZ. This area is not currently served with City water at all. There are only three vacant parcels in this area. All the parcels are zoned residential (RA-2.5, with numerous special combining zones). Four of the parcels could be subdivided into a total of 11 parcels. All of the parcels would require a special permit to construct an ADU. This area is estimated to have a potential additional average annual demand of 4,360 gpd and a potential additional peak demand of 6,640 gpd during the month of July. Because this area currently has no water lines, and it would never make sense for the City to annex this area, staff is proposing that it be eliminated from the City's Service Area, regardless of how much water may be available.

Summary

Table 43 provides a summary of additional potential build-out demand within City limits and the various parts of the City's service area. Note that these numbers do not include the existing water use within the City or the service area. Therefore, the totals should be compared to the surplus production numbers in the GHD memo, which equate to existing additional capacity. As can be seen in the table, the City only has about half the capacity needed to serve build-out in the City and the service area, not including the hotel. Therefore, the City is going to have to prioritize future service and should consider adjusting the service area boundaries.

Table 43. ~~Total~~ Potential Additional Build-out Water Demand within the City and within the City Service Area

| Area | Average Demand (gpd) | Peak Demand (gpd) |
|-----------------------|----------------------|-------------------|
| City build-out | 12,617 | 20,269 |
| ADUs w/in City | 2,880 | 4,968 |
| Area A | 2,289 | 3,486 |
| Area B1 | 2,698 | 4,183 |
| Area B2 | 1,826 | 2,831 |
| Area B | 4,524 | 7,014 |
| Area C | 20,000 | 35,000 |
| Area D1 | 1,553 | 2,366 |
| Area D2 | 1,690 | 2,573 |
| Area D3 | 2,834 | 4,316 |
| Area D | 6,077 | 9,255 |
| Area E | 3,761 | 5,727 |
| Area F | 4,360 | 6,640 |
| Total | 56,508 | 92,359 |