COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

3015 H Street, Eureka CA 95501
Phone: (707)445-7541 Fax: (707) 268-3792

Hearing Date: July 1, 2021

To: Humboldt County Planning Commission

From: Melanie Halajian & Brian Millar, Contract Planners

Subject: Consideration of two new Wireless Telecommunications Facilities in the Arcata Bottoms area.
New Cingular Wireless PCS, Special Permit for New 100-Foot Tall Faux Water Tower and PWM, Inc. Use Permit for New 130-Foot Tall Lattice Tower
Record Number PLN-2020-16754 (New Cingular Wireless)
Record Number PLN-2021-17005 (PWM, Inc.)
Assessor's Parcel Numbers (APN) 505-151-006 (New Cingular Wireless)
Assessor's Parcel Numbers (APN) 506-231-010 (PWM, Inc.)
Foster Avenue, Arcata Bottoms area

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Please contact Melanie Halajian by phone at (559) 612-7606 or by email at: melanie@landlogistics.com, if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL 1A

Hearing Date	Subject	Contact
July 1, 2021	Special Permit for New 100-Foot Tall Faux Water Tower	Melanie Halajian

Project Description: The project is a Special Permit application proposing the construction of a new 100-foot tall faux water tower with ground-mounted equipment. The tower would be able to host up to two different wireless carriers.

Project Location: The project is located in the Arcata Bottoms area, on the north side of Foster Avenue, approximately 100 feet east from the intersection of Foster Ave and Janes Road on the property known as Assessor Parcel Number 505-151-006.

Present Plan Land Use Designation: Residential Estates (RE) 2.5

Present Zoning: Agricultural Exclusive (AE) and Agricultural General (AG – proposed tower location)

Assessor Parcel Number: 505-151-006

Record Number: PLN-2020-16754

Applicant	**Owners**	**Agent**
New Cingular Wireless PCS (At&T Mobility) Taylika Logan Banks 5001 Executive Parkway, 4W550E San Ramon, CA 94583	Shirley Butler 886 Spring Street Arcata, CA 95521	EPIC Wireless Group, LLC Ashley Smith 605 Coolidge Drive, Suite 100 Folsom, CA 95630

Environmental Review: Categorical Exemption, Class 3

Major Issues: General Plan Consistency (Visual Clutter and Co-location)

State Appeal Status: Project is not appealable to the California Coastal Commission.

AGENDA ITEM TRANSMITTAL 1B

Hearing Date	Subject	Contact
July 1, 2021	Use Permit for New 130-Foot Tall Lattice Tower	Melanie Halajian

Project Description: The project is a Use Permit application proposing the construction of a new 130-foot tall freestanding lattice tower, to be located on a concrete foundation and with ground-mounted equipment. The tower would be able to host up to four different wireless carriers.

Project Location: The project is located in the Arcata Bottoms area, on the east side of Foster Avenue, approximately 100 feet east from the intersection of Forster Ave and Dolly Vardon Road, on the property known as Assessor Parcel Number 506-231-010.

Present Plan Land Use Designation: Agricultural Exclusive (AE) Density: 20 to 60 acres per unit. Slope Stability: Relatively Stable (0)

Present Zoning: Agricultural Exclusive (AE); Heavy Industrial (MH) Qualified (Q)

Assessor Parcel Number: 506-231-010

Record Number: PLN-2021-17005

Applicant	**Owners**	**Agent**
PWM, Inc. Thomas McMUrray, Jr. PO Box 1032 Eureka, CA 95502	Arcata Land Company Leendert Devries 3160 Upper Bay Road Arcata, CA 95502	Same as Applicant

Environmental Review: Categorical Exemption, Class 3

Major Issues: General Plan Consistency (Visual Clutter and Co-location)

State Appeal Status: Project is not appealable to the California Coastal Commission.

Consideration of the Cingular Wireless and the PWM, Inc. new wireless communications facilities in the Arcata Bottoms area

Recommended Commission Action

1. Describe the application as part of the Public Hearing Agenda.
2. Request Staff to present the project.
3. Open the public hearing and receive public testimony; and
4. Close the public hearing and direct staff to prepare appropriate resolutions; and
5. Continue the items to the July 15th Planning Commission Meeting

Executive Summary:

This item is the consideration of two separately filed permit applications for new wireless communications facilities located in the same general area within the Arcata Bottoms area. Both are proposed along Foster Avenue, approximately 2,500 feet apart. Both include a demonstration of the need for cellular facilities in this area to expand wireless service to residents of Humboldt County. Planning staff is bringing these applications forward to the Planning Commission as one item because the Humboldt County General Plan requires towers to be designed to minimize the visual clutter of multiple towers through screening and co-location. Staff's recommendation is that the Planning Commission approve only one of these applications.

AERIAL MAP

PROPOSED NEW CINGULAR WIRELESS PCS
SPECIAL PERMIT
ARCATA AREA
PLN-2020-16754
APN: 505-151-006
T06N R01E S20 & 29 HB&M (Arcata North)

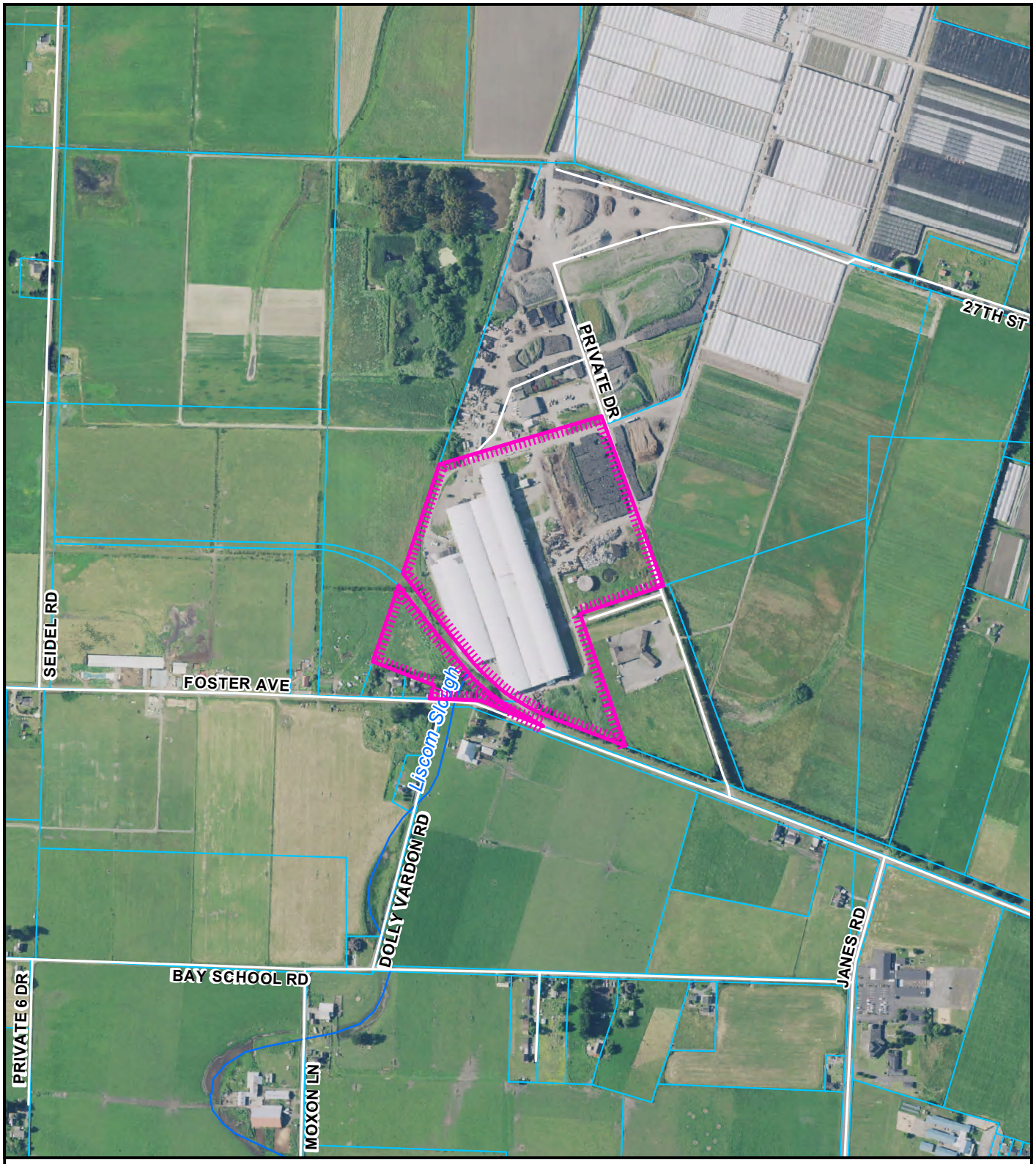
Project Area =

Coastal Zone Boundary

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

N

0 100 200 300 Feet



AERIAL MAP
PROPOSED CELL TOWER ARCATA LAND CO
ARCATA BOTTOMS AREA
PLN-2021-17005
APN: 506-231-010
T06N R01E S19; S30 HB&M (ARCATA NORTH)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 875 1,750 Feet

Project 1A
New Cingular Wireless Inc., Special Permit
Record Number: PLN-2020-16754
Assessor's Parcel Number: 505-151-006

This application was filed on October 29, 2020, nearly three months before the PWM, Inc. application. The proposed project consists of a Special Permit application for the construction of a new 100-foot tall, freestanding faux water tower, to be located on a concrete foundation and with ground-mounted equipment. The tower would be able to host up to two different wireless carriers. The tower facility would be located within a 40 x 45-ft ground-lease area, located approximately 60 feet north of the property line along Foster Avenue, and 45 feet from the west property line. The current use of the site is agricultural (grazing). Access to the tower facility would be from a gated all-weather gravel driveway connection to Foster Avenue, opposite its intersection with Janes Road. The tower would be 100 feet in height, using a freestanding lattice tower design, with the upper 24 feet of the tower having a faux water tank. The water tank would be 24 ft high (sitting between elevations 76 and 100 ft), and 17 feet wide, and constructed of a rustic-finish wood siding. All wireless facility antennas (a total of 24, capable of supporting two wireless providers) would be mounted inside the faux water tank. with a series of mounted antennas (consisting of 12 antenna panels per grouping) placed at mounting heights of 85 feet, 100 feet, 115 feet and 130 feet. The 40 x 45-ft ground-lease area would be enclosed with a proposed 6-ft tall chain link fence. The tower would be located in the fenced area, along with equipment cabinets and equipment pads, fuel tank and a standby future generator (will only run during routine testing or during an emergency loss of power).

The applicant states that the new tower will help address existing gaps in wireless coverage for the area.

Several issues were analyzed in developing the staff recommendation for this project.

Issue #1: Tower Height, Aesthetics, and Coverage Objectives

The applicant submitted a coverage map showing the areas for which the proposed facility would improve in-building service for some locations within the Arcata area. The 100-foot tall faux water tower would accommodate co-location involving two different wireless providers. The tower is not located within the view of a scenic highway; although no highways in the County are "officially designated" as California State Scenic Highways, several state highways could be eligible for official designation, including Highway 101 and Highway 299 from Arcata to Willow Creek. Highway 101 is located approximately one mile to the east, and 1 mile to the junction of Highway 101 and 299 to the northeast, and would not be visually impacted by the construction of the proposed tower. But the proposed tower would be directly or partially visible from several locations to the north, south, east and west because of generally flat terrain, the proposed tower height and proximity to the western portion of the City of Arcata, approximately 1,500 ft from the project site. The closest off-site residences are located approximately 400 ft southwest from the proposed tower location. Additionally, the tower would be located approximately 550 ft north of the Saint Mary Roman Catholic Church and Fuente Nueva Charter School. These locations would have views of the tower, which would only have partial screening by trees along roadway edges.

The County has previously been supportive of both stealthed and un-stealthed facilities include several co-locators. The applicant has submitted the project with a stealth design in using a faux water tower. All antennas would be mounted within the faux water tank atop the tower. The tank would be built of a "rustic" dark wood material and color. The supporting tower structure would be built of galvanized steel and with a dark finish color. Staff supports

the proposed use of the faux tower design, which is intended to better blend with the general agricultural setting by attempting to blend in as an accessory agricultural structure (water tank tower), given visibility of the tower from off-site residences and the nearby church and school. Unfortunately the proposed site does not have any significant vegetation or existing structures that would help to visually buffer the tower from off-site residence and the nearby church and school.

The County's Telecommunications Element of the General Plan requires an alternative analysis shall be provided at the time of application that documents why the project as proposed is the best way to accomplish project alternatives while minimizing project impacts. In response, the applicant analyzed potential use of existing towers in the general area, as well as three alternative tower locations, south and southwest of the project site. The analysis determined that further co-location on existing towers was not feasible because it is too far away (on the south side of Arcata) and would not provide necessary wireless coverage in the project area. The alternative sites were deemed to result in higher visibility of the new tower structure and closer to more populated areas. Details of this analysis and area coverage maps are attached to this report. This analysis did not include the proposed PWM wireless facility located approximately 2,500 feet to the northwest as it was not permitted or in review at the time of this application.

The applicant for New Cingular Wireless (PLN-2020-16754) also states that, regarding coverage objectives and tower height, "To meet AT&T's coverage objectives, AT&T needs to construct a new wireless communications facility. Wireless telecommunication is a line-of-sight technology, and AT&T's antennas need to be high enough to propagate an effective signal throughout the service gap area. To meet its coverage objectives for this gap area, AT&T proposes to build a 100-foot-tall tower with antennas installed at a centerline height of 90 feet above ground level. Denial of this proposed facility or a reduction in height would materially inhibit AT&T's ability toprovide and improve wireless services in this portion of the county…" and if the proposed faux water tank tower was restricted in height it would significantly reduce the target coverage area, and fail to close the service coverage gap leading to limited wireless service for the local community and surrounding area as proposed and identified in the AT&T propagation maps. Additionally, a reduced tower height would limit space for colocation opportunity for other service providers increasing the need for more celltowers in this portion of the County."

Issue #2: Compliance with FCC RF Exposure Limits

To evaluate possible significant impacts to public exposure from Radio Frequency- Electromagnetic Energy (RF-EME), the County has typically required that applicants show that RF-EME from the facility are within adopted Federal standards.

The applicant prepared a study, with summary findings noting the following:
"Based on information provided by AT&T Mobility and predictive modeling, the Arcata 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 at the base of the Water Tank and restricting access 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."

Project 1B
PWM, Inc., Use Permit
Record Number: PLN-2021-17005
Assessor's Parcel Number: 506-231-010

Background

The project site is developed with industrial uses, including warehouses. In 1990, the County Board of Supervisors approved Ordinance 1890, which changed the zoning on the property from Agriculture Exclusive (AE) to Heavy Industrial/Qualified (MH/Q). The Ordinance allowed for the continued use of the existing wood products processing facilities consistent with past vehicular traffic generation levels, and that "all other uses" may be permitted subject to obtaining Use Permit approval.

Current Project

The proposed project consists of a Use Permit application for the construction of a new 130-foot tall, freestanding lattice tower, to be located on a concrete foundation and with ground-mounted equipment. The tower would be able to host up to four different wireless carriers. The tower facility would be located within a 50 x 60-ft ground-lease area, located approximately 520 feet from the west property line and 800 feet north of Foster Avenue, and just west of existing warehouses, in an area currently developed and used for equipment parking. Access to the tower facility would be from an existing driveway at the site. The tower would be 130 feet in height, with a series of mounted antennas (consisting of 12 antenna panels per grouping) placed at mounting heights of 85 feet, 100 feet, 115 feet and 130 feet. Each antenna panel grouping would be able to support a separate wireless carrier. The 50 x 60-ft ground-lease area would be enclosed with a proposed 6-ft tall chain link fence. The tower would be located in the fenced area, along with equipment, including 4 equipment cabinets and equipment pads (for each wireless carrier), propane tank and a standby future generator (will only run during routine testing(day-time hours) or during an emergency loss of power). The applicant states that the new tower "will improve, extend and provide wireless service to Arcata, Valley West Shopping Center, Giuntoli Lane, US 101 North-McKinleyville, Highway 299 and the surrounding areas."

Several issues were analyzed in developing the staff recommendation for this project.

Issue #1: Tower Height, Aesthetics, and Coverage Objectives

The applicant submitted a coverage map showing the areas for which the proposed facility would improve in-building service for some locations within the Arcata area. The 130-foot lattice tower is tall enough to accommodate co-location involving four different wireless providers. The lattice tower is not located within the view of a scenic highway; although no highways in the County are "officially designated" as California State Scenic Highways, several state highways could be eligible for official designation, including Highway 101 and Highway 299 from Arcata to Willow Creek. Highway 101 is located approximately 1.25 miles to the east, and 1.4 miles to the junction of Highway 101 and 299 to the northeast, and would not be visually impacted by the construction of the proposed tower. But the proposed tower could be directly or partially visible from several locations to the north, south, east and west because of generally flat terrain and the proposed tower height. Partial visual obstruction of the tower would occur due to presence of stands of trees and shrubs along edges of area roadways, and, as seen from the south and east, the existing warehouse structures.

The closest off-site residences are on parcels adjoining the project site, located approximately 650 feet south from the proposed tower location. These residences would have partial views of the upper portion of the tower, screened by a row of trees and shrubs at their northerly property line. The tower would have partial visibility from lands in the Arcata area to the east; the closest lands in the City are approximately 3,500 feet away. Views of the tower from City vantage points would be partially

obscured by the adjoining warehouses to the east (the tallest structure being approximately 45 ft), trees along roadway edges in various locations, and as a factor of overall distance from the project site. The applicant has provided a photographic simulation analysis that depicts visibility of the proposed tower from several locations in the area (attached to this staff report).

The County has previously been supportive of both stealthed and un-stealthed facilities that are less than 130 feet tall and include several co-locators. It is staff's opinion that the tower should be manufactured or painted so that the color matches the predominant open sky background, either a gray or off-white, to further ensure compliance with the General Plan Chapter 6.5 E and F, which require the stealthing design of towers, use of monopoles or painting to achieve a minimized visual profile in order to assure compatibility with the surrounding area. This is addressed as a condition of project approval.

The County's Telecommunications Element of the General Plan requires an alternative analysis shall be provided at the time of application that documents why the project as proposed is the best way to accomplish project alternatives while minimizing project impacts. In response, the applicant analyzed ten area sites "to assess their compatibility. Six potential locations were identified and did not meet the visual criteria, coverage requirements, were too close to areas used by the public, were not suitable for four carriers, or the landowner was not interested in a Lease. Four existing sites were assessed and were not suitable for four carriers or did not meet the coverage and capacity needs." Details of the analysis are provided as attachments to this staff report. Details of this analysis and area coverage maps are attached to this report. This analysis did not include the proposed New Cingular Wireless facility currently under review.

Issue #2: Compliance with FCC RF Exposure Limits

To evaluate possible significant impacts to public exposure from Radio Frequency- Electromagnetic Energy (RF-EME), the County has typically required that applicants show that RF-EME from the facility are within adopted Federal standards. The applicant has noted that "the site will receive a Non-Ionizing Electromagnetic Exposure Analysis and Engineering Certification by a Registered Professional Engineer/ Radio Engineer," and that they would be providing RF-EME studies to the County with each additional wireless provider that utilizes the tower. Included within the project conditions of the approval is a requirement that a cumulative RF analysis be performed addressing each of the four planned wireless provider facilities.

General Plan Considerations

The Telecommunications Element of the Humboldt County General Plan (HCGP) requires that new communication facilities achieve reliable access while preserving the County's rural character and protecting the existing scenic, natural and cultural resources (Goal T-G4, Chapter 6 HCGP) and to design new facilities to minimize visibility and visual clutter (Policy T-P3, Chapter 6 HCGP). The General Plan requires that sites be located adjacent to, on, or incorporated into existing or proposed buildings, towers or other structures and to require new facilities to accommodate future co-location to the maximum extent feasible. Both of these applications have submitted evidence of the need for additional wireless coverage in this area, however the need can be met through the installation of a single tower with co-location capabilities. For this reason Planning staff does not support approval of both of the proposed wireless facilities.

The following are applicable policies and standards of the Telecommunications Element of the Humboldt County General Plan and a brief discussion of the two proposals consistency with these policies and standards:

Section 6.5C requires "new facilities to accommodate future co-location to the maximum extent feasible." The proposed PWM, Inc. tower will be taller than the proposed New Cingular Wireless tower which helps to allow them to co-locate up to four carriers on the tower. The New Cingular Wireless tower would allow co-location of up to two carriers.

Section 6.5 E.1) When designing and siting towers, screening should be used, if possible, to minimize visual impacts.

The proposed PWM, Inc. tower is sited behind a large industrial building which will help to screen it from view. The New Cingular Wireless facility would be approximately 60 feet from Foster Avenue but would be located behind some existing trees and vegetation that will help to screen it from view.

Section 6.5 E.2) Stealth siting methods should be used, if possible, within views of scenic highways, public parks, cultural facilities and coastal scenic areas.

Neither site is within a designated coastal scenic area or within views from a scenic highway. The proposed PWM, Inc. facility would be significantly screened from the view from the road, the nearby public parks, and nearby residential neighborhoods. The New Cingular Wireless facility would be located on the southwest corner of the property so that it is located as far away from the adjacent public park, school property and residential neighborhood, however it would be visible.

Section 6.5 E.3) Stealthing and/or setbacks shall be used to ensure community compatibility.

The location of the Proposed PWM, Inc. project is partially shielded by trees, adjoining existing building heights, and is generally difficult to see from most public roads, developed areas of the City of Arcata, and surrounding improvements. The proposed New Cingular Wireless tower utilizes a stealth design and the maximum setback possible on the site to better blend with the surrounding agricultural area and to reduce visual intrusiveness of the tower from off-site residences, and the church and school located south of the project site. However, the tower will likely be visibly prominent for residences in the area, the adjacent city park, and the nearby church and school property. The PWM, Inc. Wireless facility would be over half a mile further away from all of these uses.

Section 6.5 F.1) Support structures shall be designed and painted to minimize visibility with a preference towards each of the following in the order so listed: 1) use of existing structures, 2) stealth designs for concealment, and 3) monopoles.

As a Self-Support Lattice Tower, the PWM, Inc. tower will be located immediately adjacent to an existing large industrial building which will help screen the tower from residences and other viewers, and will be able to accommodate four (4) wireless carriers. The proposed New Cingular Wireless tower utilizes a stealth design, faux water tower, to better blend with the surrounding agricultural area. The tower will be able to accommodate two wireless carriers.

Section 6.5 F.2) Component parts, equipment cabinets, buildings and security fencing shall be designed to achieve a minimum profile through painting, screening, landscaping, and architectural compatibly with surrounding structures. The New Cingular Wireless Facility would utilize a stealth design (faux water tower). The ground-mounted equipment would be located within a fenced enclosure (six-ft tall chain link fence, with vinyl slats) to minimize views of the equipment area from off-site. The PWM, Inc. is located adjacent to, on and incorporated into existing buildings and structures.

Section 6.5 F.3) Photo simulations or balloon tests with views form various vantage points shall be used to show visual impact of the proposed facility.
Seven photo simulations for both proposals created after a balloon test are furnished in the attachments.

RECOMMENDATION:

Planning staff believes that the wireless needs of Humboldt County citizens can be met with a single facility in this area capable of co-locating different carriers. Staff recommends that the Commission review the two proposed projects, consider public testimony, and determine which proposed facility would be less likely to adversely affect the various users of the Arcata Bottoms area, including off-site residences and recreational users of the Bottoms area. Direction should then be given to Planning staff to prepare appropriate resolutions for action on the two projects, and the items should be continued to the hearing of July 15th for consideration of the resolutions.

Alternative: The Planning Commission could direct staff to prepare resolutions for approval of both projects if the Commission finds that they are both consistent with the Humboldt County General Plan.

ATTACHMENT 1A
New Cingular Wireless

Applicant's Evidence in Support of the Required Findings

Attachment 1A includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

- Application Form (in file)
- Applicant Project Statement (**Attached**)
- Project Plans (**Attached**)
- Photographic Simulations (**Attached**)
- Alternatives Analysis (**Attached**)
- Wireless Coverage Analysis (**Attached**)

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

On Behalf Of

at&t

Humboldt County - Planning & Building
3015 H Street
Eureka, CA 95501

Re: Proposed New AT&T Wireless Facility (cell site) Site Ref# CCL02143/ Arcata
Address: Foster Ave, Arcata CA 95521 **APN:** 505-151-006-000
Date: 10/20/2020

Height Justification Statement

AT&T is proposing to install a new wireless telecommunication facility at the above referenced property. The project consists of installing a new 100ft faux water tank tower to close a service coverage gap that is caused by inadequate wireless infrastructure in the area.

To meet AT&T's coverage objectives, AT&T needs to construct a new wireless communications facility. Wireless telecommunication is a line-of-sight technology, and AT&T's antennas need to be high enough to propagate an effective signal throughout the service gap area. To meet its coverage objectives for this gap area, AT&T proposes to build a 100-foot-tall tower with antennas installed at a centerline height of 90 feet above ground level. Denial of this proposed facility or a reduction in height would materially inhibit AT&T's ability to provide and improve wireless services in this portion of the county.

The proposed tower height of 100ft is essential for this site in order to reach as many homes in the area as possible, and provide clear, consistent indoor outdoor wireless coverage and broadband internet service to those who live, travel, and do business from home in the local area.

If the proposed faux water tank tower was restricted in height it would significantly reduce the target coverage area, and fail to close the service coverage gap leading to limited wireless service for the local community and surrounding area as proposed and identified in the AT&T propagation maps. Additionally, a reduced tower height would limit space for colocation opportunity for other service providers increasing the need for more cell towers in this portion of the County.

Should you have any questions or comments please do not hesitate to reach to my office directly.

Thank you,

Ashley Smith
Site Acquisition Specialist
Epic Wireless Group LLC
605 Coolidge Drive, Suite 100, Folsom, CA 95630
(916) 936-5430 ashley.smith@epicwireless.net

605 Coolidge Drive Suite 100
Folsom, CA. 95630
Fax (916) 781-5927

SITE NUMBER: CCL02143

SITE NAME: ARCATA

FOSTER AVENUE
ARCATA, CA 95521
JURISDICTION: HUMBOLDT COUNTY
APN: 505-151-006

FA CODE: 14863296
USID#: 276950

SITE TYPE: PREMANUFACTURED WALK-IN CABINET / FAUX WATER TOWER

PROJECT DESCRIPTION

NEW SITE BUILD UNMANNED TELECOMMUNICATIONS FACILITY.

1. BRING POWER / TELCO / FIBER TO SITE LOCATION.
2. INSTALL AT&T APPROVED PREMANUFACTURED WALK-IN CABINET AND ASSOCIATED INTERIOR EQUIPMENT.
3. ADD STANDBY GENERATOR WITH FUEL TANK.
4. PROPOSED AT&T FAUX WATER TOWER WITH ANTENNAS & ASSOCIATED TOWER-MOUNTED EQUIPMENT.
5. PROPOSED AT&T GPS ANTENNA.

PROJECT INFORMATION

PROPERTY INFORMATION:

SITE NAME:	ARCATA
SITE NUMBER:	CCL02143
SITE ADDRESS:	FOSTER AVENUE ARCATA, CA 95521
A.P.N. NUMBER:	505-151-006
CURRENT ZONING:	AE (AGRICULTURE EXCLUSIVE)
JURISDICTION:	HUMBOLDT COUNTY
LATITUDE:	N40° 52' 52.55" NAD 83
LONGITUDE:	W124° 06' 00.74" NAD 83
GROUND ELEVATION:	24.5 FT. AMSL

PROPERTY OWNER:
SHIRLEY BUTLER TRUST
886 SPRING STREET
ARCATA, CA 95521

POWER AGENCY:
PG&E
77 BEALE STREET
SAN FRANCISCO, CA 94105

PROJECT TEAM

APPLICANT / LESSEE:
AT&T
2600 CAMINO RAMON
SAN RAMON, CA 94583

CONSTRUCTION MANGER:
EPIC WIRELESS
605 COOLIDGE DRIVE, SUITE 100
FOLSOM, CA
CONTACT: PETE MANAS
EMAIL: pete.manas@epicwireless.net

RF ENGINEER:
AT&T
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583
CONTACT: HAKAN ATKAS
EMAIL: ha3021@att.com
PH: (925) 520-5760

SURVEYOR:
GEIL ENGINEERING
1226 HIGH STREET
AUBURN, CA 95603
CONTACT: DAN GEIL
PH: (530) 885-0426

ARCHITECT / ENGINEER:
MST ARCHITECTS INC.
1520 RIVER PARK DRIVE
SACRAMENTO, CA 95815
CONTACT: MANUEL S. TSIHLAS
EMAIL: manuel@mstarchitects.com
PH: (916) 567-9630

SITE ACQUISITION:
EPIC WIRELESS
605 COOLIDGE DRIVE, SUITE 100
FOLSOM, CA
CONTACT: ASHLEY SMITH
EMAIL: ashley.smith@epicwireless.net

ZONING MANAGER:
EPIC WIRELESS
605 COOLIDGE DRIVE, SUITE 100
FOLSOM, CA
CONTACT: ASHLEY SMITH
EMAIL: ashley.smith@epicwireless.net

CIVIL VENDOR:
VINCULUMS
4620 NORTHGATE BLVD., SUITE 120
SACRAMENTO, CA 95834
CONTACT: FLOYD GREEN
EMAIL: fgreen@vinculums.com
PH: (480) 528-1927

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CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS 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.

1) 2016 CALIFORNIA ADMINISTRATIVE CODE, CHAPTER 10, PART 1, TITLE 24 CODE OF REGULATIONS
2) 2016 CALIFORNIA BUILDING CODE (CBC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2015 IBC (PART 2, VOL 1-2)
3) 2016 CALIFORNIA RESIDENTIAL CODE (CRC) WITH APPENDIX H, PATIO COVERS, BASED ON THE 2015 IRC (PART 2.5)
4) 2016 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11) (AFFECTED ENERGY PROVISIONS ONLY)
5) 2016 CALIFORNIA FIRE CODE (CFC), BASED ON THE 2015 IFC, WITH CALIFORNIA AMENDMENTS (PART 9)
6) 2016 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2015 UMC (PART 4)
7) 2016 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2015 UPC (PART 5)
8) 2016 CALIFORNIA ELECTRICAL CODE (CEC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2015 NEC (PART 3)
9) 2016 CALIFORNIA ENERGY CODE (CEC)
10) ANSI / EIA-TIA-222-G
11) 2015 NFPA 101, LIFE SAFETY CODE
12) 2016 NFPA 72, NATIONAL FIRE ALARM CODE
13) 2016 NFPA 13, FIRE SPRINKLER CODE

OCCUPANCY AND CONSTRUCTION TYPE

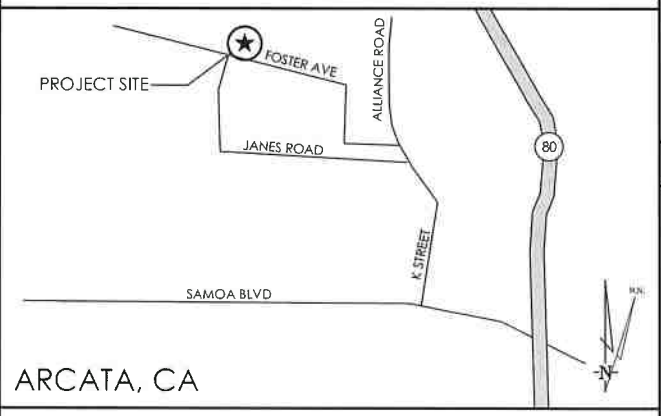
OCCUPANCY: S-2 (UNMANNED TELECOMMUNICATIONS FACILITY), U (TOWER)

CONSTRUCTION TYPE: V-B

HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY ACCESS AND REQUIREMENTS ARE NOT REQUIRED, IN ACCORDANCE WITH CALIFORNIA STATE ADMINISTRATIVE CODE, PART 2, TITLE 24, SECTION 1103B.1, EXCEPTION 1 & SECTION 1134B.2.1, EXCEPTION 4.

VICINITY MAP



DIRECTIONS FROM AT&T

DIRECTIONS FROM AT&T'S OFFICE AT 2600 CAMINO RAMON, SAN RAMON, CA

1. MERGE ONTO I-680 NORTH
2. CONTINUE ON I-680 NORTH
3. TAKE EXIT 58A ONTO I-780 WEST
4. TURN LEFT ONTO MARE ISLAND CAUSEWAY
5. TURN RIGHT ONTO RAILROAD AVENUE
6. MERGE ONTO CA-37 WEST
7. TURN RIGHT ONTO LAKEVILLE HIGHWAY
8. MERGE ONTO US-101 NORTH
9. TURN LEFT ONTO R STREET / CA-255 NORTH
10. TURN LEFT ONTO V STREET
11. TURN RIGHT ONTO VAISSADE ROAD
12. TURN LEFT ONTO JANES ROAD
13. CONTINUE STRAIGHT ONTO SITE ACCESS ROAD
    SITE WILL BE ON THE RIGHT

APPROVALS

APPROVED BY:	INITIALS:	DATE:
AT&T:		
VENDOR:		
R.F.:		
LEASING / LANDLORD:		
ZONING:		
CONSTRUCTION:		
POWER / TELCO:		
PG&E:		

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 24" x 36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOBSITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME.

Issued For:
CCL02143
ARCATA
FOSTER AVENUE
ARCATA, CA 95521

PREPARED FOR
at&t
2600 Camino Ramon
San Ramon, California 94583

Vendor:
EPIC WIRELESS GROUP LLC
Connecting a Wireless World
PROJECT NO: 14863296

AT&T SITE NO:	CCL02143
PROJECT NO:	219.0105
DRAWN BY:	TLS
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	12/04/19	100% ZD
	11/18/19	90% ZD

Licensee:

Architect:
MST ARCHITECTS
1520 River Park Drive
Sacramento, California 95815

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

July 1.2021
New Cingular Wireless & PWM, Inc
PLN-2020-16754 & PLN-2021-17005

GENERAL CONSTRUCTION NOTES:

1. PLANS ARE INTENDED TO BE DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
2. THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 227-2600, FOR UTILITY LOCATIONS, 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
4. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CBC / UBC'S REQUIREMENTS REGARDING EARTHQUAKE RESISTANCE, FOR, BUT NOT LIMITED TO, PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS, AND MECHANICAL EQUIPMENT. ALL WORK MUST COMPLY WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
6. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWINGS, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT / ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT / ENGINEER.
7. THE BUILDING DEPARTMENT ISSUING THE PERMITS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK, OR AS OTHERWISE STIPULATED BY THE CODE ENFORCEMENT OFFICIAL HAVING JURISDICTION.
8. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
9. ALL EXISTING UTILITIES, FACILITIES, CONDITIONS, AND THEIR DIMENSIONS SHOWN ON THE PLAN HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ARCHITECT / ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR THE ACCURACY OF THE INFORMATION SHOWN ON THE PLANS, OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTORS SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.
10. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, BOTH HORIZONTAL AND VERTICALLY, PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ARCHITECT / ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT / ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE.
11. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
12. ANY DRAIN AND/OR FIELD TILE ENCOUNTERED / DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO IT'S ORIGINAL CONDITION PRIOR TO COMPLETION OF WORK. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON "AS-BUILT" DRAWINGS BY GENERAL CONTRACTOR, AND ISSUED TO THE ARCHITECT / ENGINEER AT COMPLETION OF PROJECT.
13. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
14. INCLUDE MISC. ITEMS PER AT&T SPECIFICATIONS

APPLICABLE CODES, REGULATIONS AND STANDARDS:

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION.

THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRICAL EQUIPMENT.
-IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS TELCORDIA GR-63 NETWORK EQUIPMENT-BUILDING SYSTEM (NEBS): PHYSICAL PROTECTION
TELCORDIA GR-347 CENTRAL OFFICE POWER WIRING
TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS
TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS

ANY AND ALL OTHER LOCAL & STATE LAWS AND REGULATIONS

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

A.B.	ANCHOR BOLT
ABV.	ABOVE
ACCA	ANTENNA CABLE COVER ASSEMBLY
ADD'L	ADDITIONAL
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
ALUM.	ALUMINUM
ALT.	ALTERNATE
ANT.	ANTENNA
APPRX.	APPROXIMATE(LY)
ARCH.	ARCHITECT(URAL)
AWG.	AMERICAN WIRE GAUGE
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.N.	BOUNDARY NAILING
BTCW.	BARE TINNED COPPER WIRE
B.O.F.	BOTTOM OF FOOTING
B/U	BACK-UP CABINET
CAB.	CABINET
CANT.	CANTILEVER(ED)
C.I.P.	CAST IN PLACE
CLG.	CEILING
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION(OR)
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
d	PENNY (NAILS)
DBL.	DOUBLE
DEPT.	DEPARTMENT
D.F.	DOUGLAS FIR
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DWG.	DRAWING(S)
DWL.	DOWEL(S)
EA.	EACH
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMT.	ELECTRICAL METALLIC TUBING
E.N.	EDGE NAIL
ENG.	ENGINEER
EQ.	EQUAL
EXP.	EXPANSION
EXST.(E)	EXISTING
EXT.	EXTERIOR
FAB.	FABRICATION(OR)
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
FIN.	FINISH(ED)
FLR.	FLOOR
FDN.	FOUNDATION
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
F.S.	FINISH SURFACE
FT.(')	FOOT (FEET)
FTG.	FOOTING
G.	GROWTH (CABINET)
GA.	GAUGE
GI.	GALVANIZE(D)
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER
GLB. (GLU-LAM)	GLUE LAMINATED BEAM
GPS	GLOBAL POSITIONING SYSTEM
GRND.	GROUND
HDR.	HEADER
HGR.	HANGER
HT.	HEIGHT
ICGB.	ISOLATED COPPER GROUND BUS
IN. (")	INCH(ES)
INT.	INTERIOR
LB.(#)	POUND(S)
L.B.	LAG BOLTS
L.F.	LINEAR FEET (FOOT)
L.	LONG(ITUDINAL)
MAS.	MASONRY
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MTL.	METAL
(N)	NEW
NO.(#)	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OPNG.	OPENING
P/C	PRECAST CONCRETE
PCS	PERSONAL COMMUNICATION SERVICES
PLY.	PLYWOOD
PPC	POWER PROTECTION CABINET
PRC	PRIMARY RADIO CABINET
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PWR.	POWER (CABINET)
QTY.	QUANTITY
RAD.(R)	RADIUS
REF.	REFERENCE
REINF.	REINFORCEMENT(ING)
REQ'D/	REQUIRED
RGS.	RIGID GALVANIZED STEEL
SCH.	SCHEDULE
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATIONS
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STRUC.	STRUCTURAL
TEMP.	TEMPORARY
THK.	THICK(NESS)
T.N.	TOE NAIL
T.O.A.	TOP OF ANTENNA
T.O.C.	TOP OF CURB
T.O.F.	TOP OF FOUNDATION
T.O.P.	TOP OF PLATE (PARAPET)
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.G.	UNDER GROUND
U.L.	UNDERWRITERS LABORATORY
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
W	WIDE (WIDTH)
w/	WITH
WD.	WOOD
W.P.	WEATHERPROOF
WT.	WEIGHT
℄	CENTERLINE
ℙ	PLATE, PROPERTY LINE

SYMBOLS LEGEND

- BLDG. SECTION (1/A-301 / 1/A-301)
- WALL SECTION (A5/A-310)
- DETAIL (D5/A-501)
- ELEVATION (C1/A-113, A4/A-113, C4/A-113, A1/A-113)
- DOOR SYMBOL (001)
- WINDOW SYMBOL (10)
- TILT-UP PANEL MARK (2)
- PROPERTY LINE
- CENTERLINE
- ELEVATION DATUM (10')
- GRID/COLUMN LINE (A)
- KEYNOTE, DIMENSION ITEM (3)
- KEYNOTE, CONSTRUCTION ITEM (2)
- WALL TYPE MARK (W-3)
- ROOM NAME / ROOM NUMBER (OFFICE 101)
- GROUT OR PLASTER
- (E) BRICK
- (E) MASONRY
- CONCRETE
- EARTH
- GRAVEL
- PLYWOOD
- SAND
- PLYWOOD
- SAND
- (E) STEEL
- MATCH LINE
- GROUND CONDUCTOR
- OH — OVERHEAD SERVICE CONDUCTORS
- TELEPHONE CONDUIT
- POWER CONDUIT
- COAXIAL CABLE
- CHAIN LINK FENCE
- WOOD FENCE
- (P) ANTENNA
- (P) RRU
- (P) DC SURGE SUPRESSION
- (F) ANTENNA
- (F) RRU
- (E) EQUIPMENT

Issued For:

CCL02143
ARCATA

FOSTER AVENUE
ARCATA, CA 95521

PREPARED FOR

at&t

2600 Camino Ramon
San Ramon, California 94583

Vendor:

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

PROJECT NO: 14863296

AT&T SITE NO:	CCL02143
PROJECT NO:	219.0105
DRAWN BY:	TLS
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	12/04/19	100% ZD
	11/18/19	90% ZD

Licensee:

Architect:

MST ARCHITECTS
1520 River Park Drive
Sacramento, California 95815

SHEET TITLE:
GENERAL NOTES, ABBREVIATIONS, & LEGEND

SHEET NUMBER:
GN-1

July 1.2021
New Cingular Wireless & PWM, Inc
PLN-2020-16754 & PLN-2021-17005

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.

DATE OF SURVEY: 11-06-19

SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, R.C.E. 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.

N.G.V.D. 1929 CORRECTION: SUBTRACT XXX' FROM ELEVATIONS SHOWN.

CONTOUR INTERVAL: n.a.

CONTRACTOR IS RESPONSIBLE TO VERIFY LEASE AREA PRIOR TO CONSTRUCTION.

ASSESSOR'S PARCEL NUMBER: 505-151-006-000

OWNER(S): SHIRLEY BUTLER TRUST

Lease Area Description

All that certain lease area being a portion of that certain parcel as is described in Grant Deed filed for record at Document No. 1998-9211-3, Official Records of Humboldt County, California; being a portion of Sections 20 and 29, Township 6 North, Range 1 East, Humboldt Meridan, County of Humboldt, State of California and being more particularly described as follows:

Commencing at brass cap monument stamped SL #8 as is shown on those certain Records of Survey filed for record at Book 12 of Surveys at Page 13 (Referenced as Point #8) and Book 64 of Surveys at Page 111 (Referenced as Point #14), from which a similar monument bears South xxx feet; thence from said point of commencement North 71°22'30" East 65.82 feet to the True Point of Beginning; thence from said True Point of Beginning South 70°05'57" East 45.00 feet; thence South 19°54'03" West 40.00 feet; thence North 70°05'57" West 45.00 feet; thence North 19°54'03" East 20.00 feet to a point hereafter referred to as Point A; thence continuing North 19°54'03" East 20.00 feet to the point of beginning.

Together with a non-exclusive easement for access and utility purposes twenty feet in width the centerline of which is described as follows: beginning at a the above described Point "A"; thence from said point of beginning North 70°05'57" West 4.23 feet; thence along a curve to the left having a radius of 25.0 feet and a chord of South 77°27'33" West 26.82 feet; thence South 45°01'03" West 7.30 more or less to the public right of way.

Also together with a non-exclusive easement for access and utility purposes, over and across the Westerly 10.0 feet of the aforementioned parcel of land.

Geil Engineering
Engineering * Surveying * Planning
1226 High Street
Auburn, California 95603-5015
Phone: (530) 885-0426 * Fax: (530) 823-1309

A.T.& T. Mobility

Project No./Name: CCL02143 / ARCATA

Project Site Location: Foster Avenue
Arcata, CA 95521
Humboldt County

Date of Observation: 11-06-19

Equipment/Procedure Used to Obtain Coordinates: Trimble Pathfinder Pro XL post processed with Pathfinder Office software.

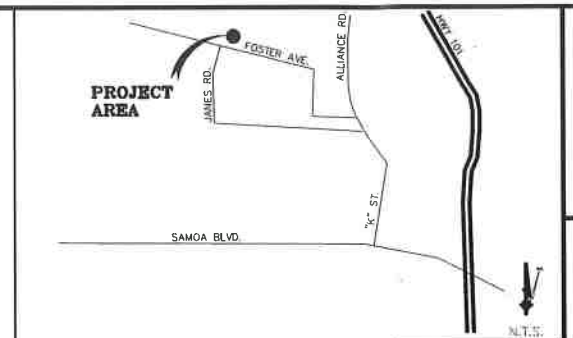
Type of Antenna Mount: Proposed Monopine

Coordinates (Center Lease Area)
Latitude: N 40° 52' 52.55" (NAD83) N 40° 52' 53.09" (NAD27)
Longitude: W 124° 06' 00.74" (NAD83) W 124° 06' 56.51" (NAD27)

ELEVATION of Ground at Structure (NAVD88) 24.5' AMSL

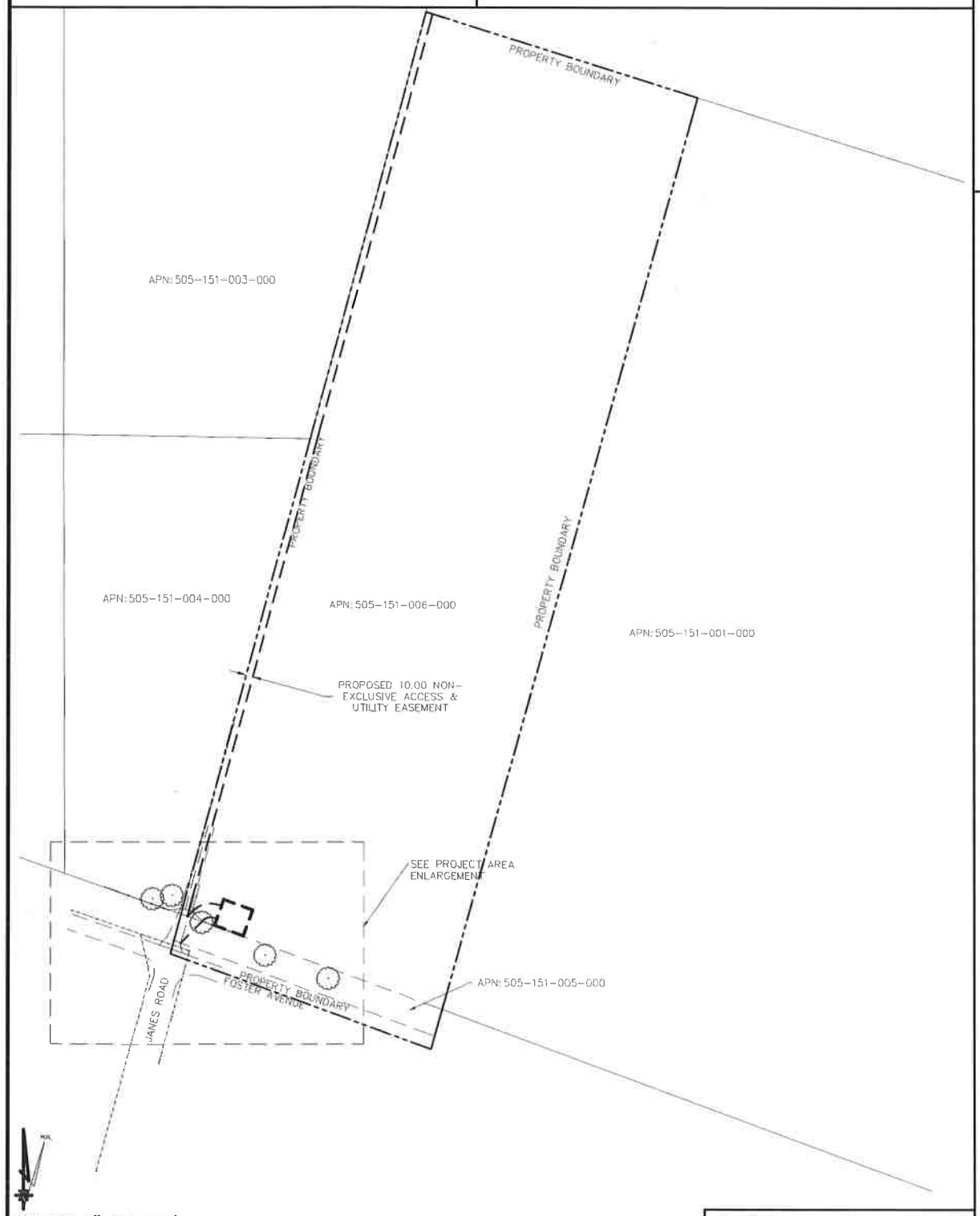
CERTIFICATION: I, the undersigned, do hereby certify elevation listed above is based on a field survey done under my supervision and that the accuracy of those elevations meet or exceed 1-A Standards as defined in the FAA ASAC Information Sheet 91:003, and that they are true and accurate to the best of my knowledge and belief.

Kenneth D. Geil California RCE 14803



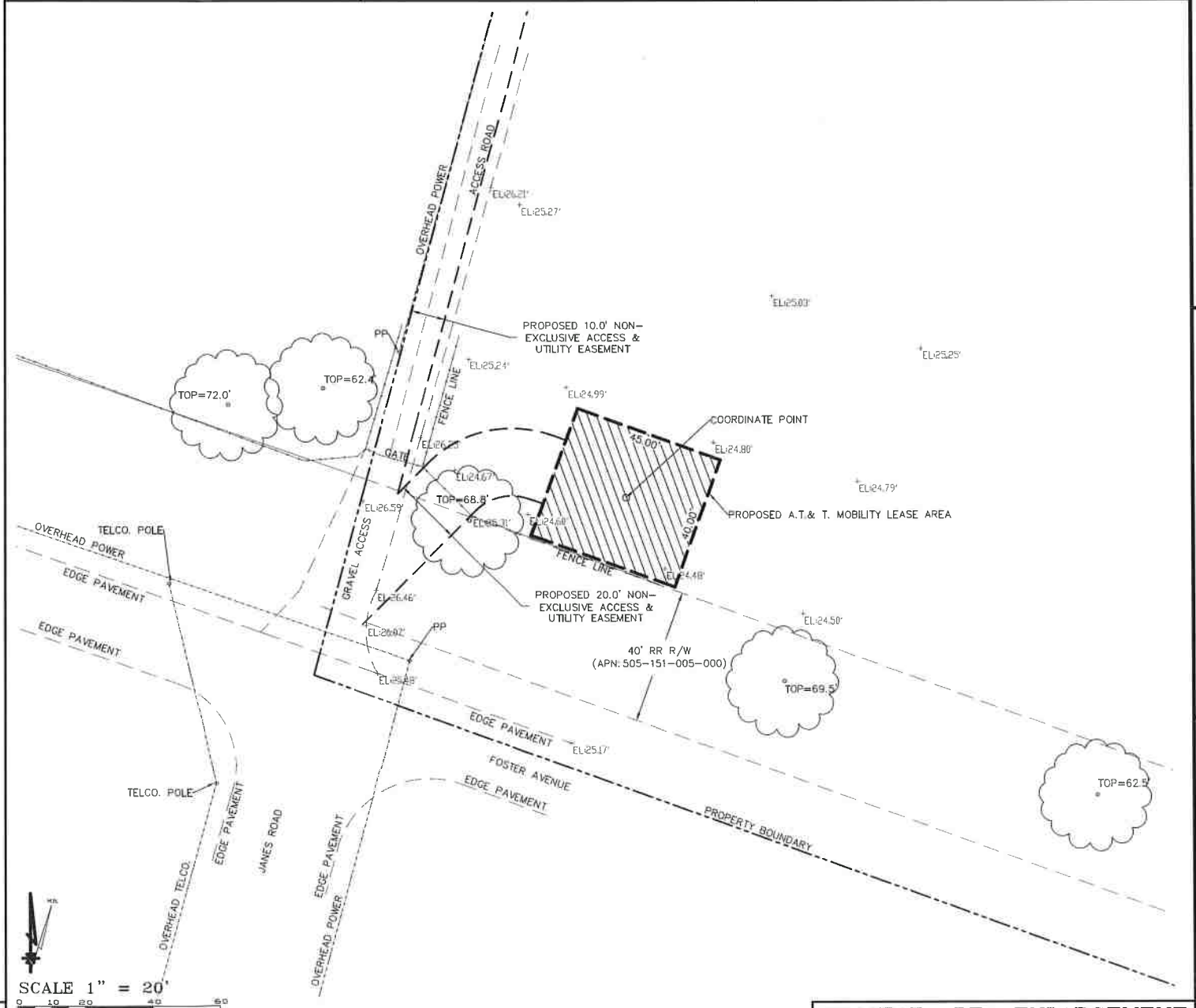
ARCATA, CA

VICINITY MAP



SCALE 1" = 100'

OVERALL SITE PLAN



SCALE 1" = 20'

PROJECT AREA ENLARGEMENT

DEPT | APPROVED | DATE
A&C
RE
RF
INT
E&LVN
OPS
E&LVOUT

Surveyor
GEIL ENGINEERING
ENGINEERING * SURVEYING * PLANNING
1226 HIGH STREET
AUBURN, CALIFORNIA 95603
PHONE: (530) 885-0426
FAX: (530) 823-1309

at&t MOBILITY

CCL02143
ARCATA
FOSTER AVENUE
ARCATA, CA 95521
PLOT PLAN AND
SITE TOPOGRAPHY

REVISIONS			
REV	11-11-19	N. ROHDE	DRAWING SUBMITTAL
REV	11-18-19	dg	esmts added
REV			
REV			
REV			

Sheet
C-1

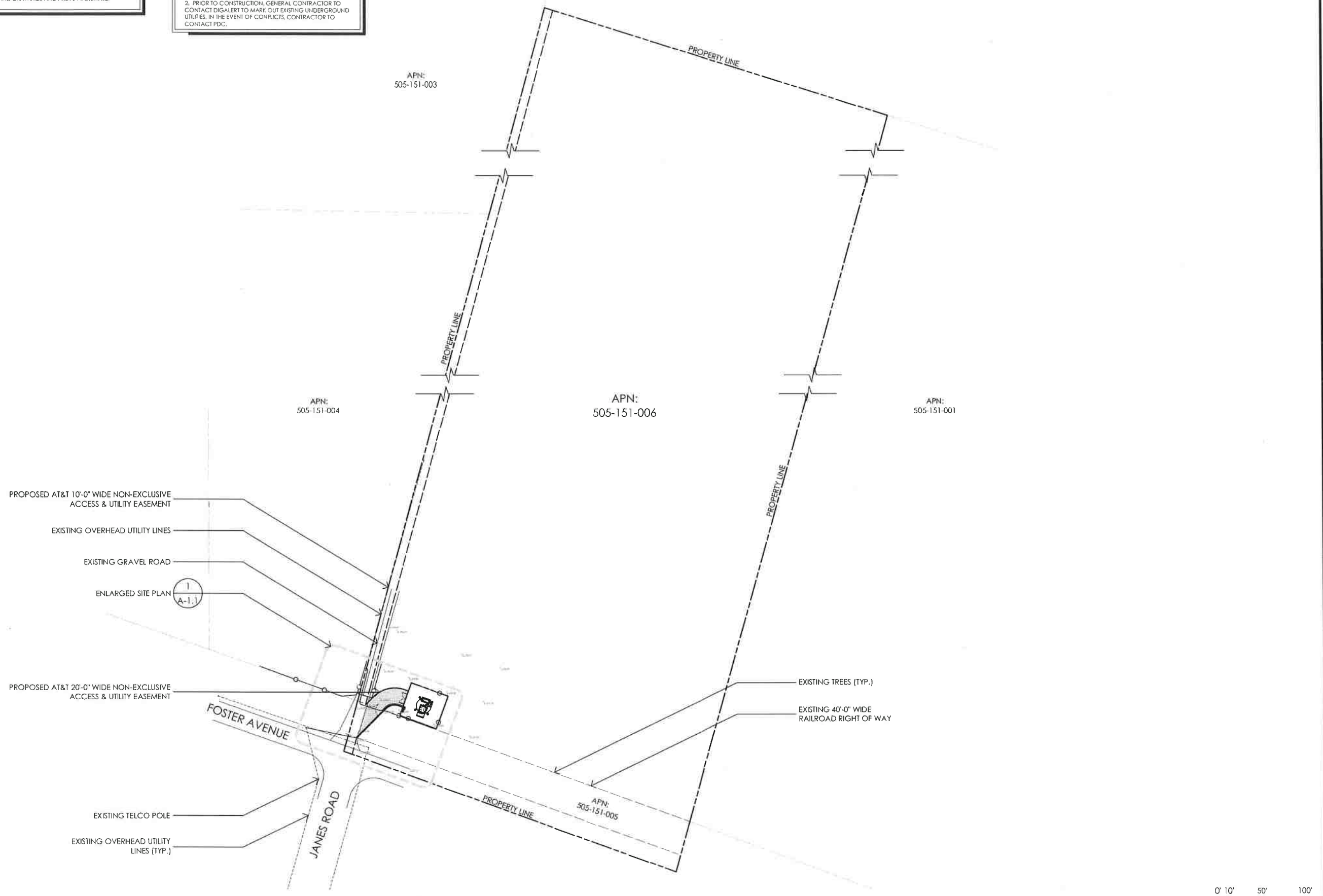
THIS IS NOT A SITE SURVEY

ALL PROPERTY BOUNDARIES, ORIENTATION OF TRUE NORTH AND STREET HALF-WIDTHS HAVE BEEN OBTAINED FROM A TAX PARCEL MAP AND EXISTING DRAWINGS AND ARE APPROXIMATE.

NOTES:

1. NO GRADING OR PERMANENT CONSTRUCTION SHALL OCCUR WITHIN DRIP LINES OF TREES THAT ARE TO REMAIN WITHOUT ARBORIST APPROVAL.

2. PRIOR TO CONSTRUCTION, GENERAL CONTRACTOR TO CONTACT DIGALERT TO MARK OUT EXISTING UNDERGROUND UTILITIES. IN THE EVENT OF CONFLICTS, CONTRACTOR TO CONTACT PDC.



1 OVERALL SITE PLAN
1"=50'

Issued For:

CCL02143
ARCATA

FOSTER AVENUE
ARCATA, CA 95521

PREPARED FOR

at&t

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Sacramento, California 95815

SHEET TITLE:

OVERALL SITE PLAN

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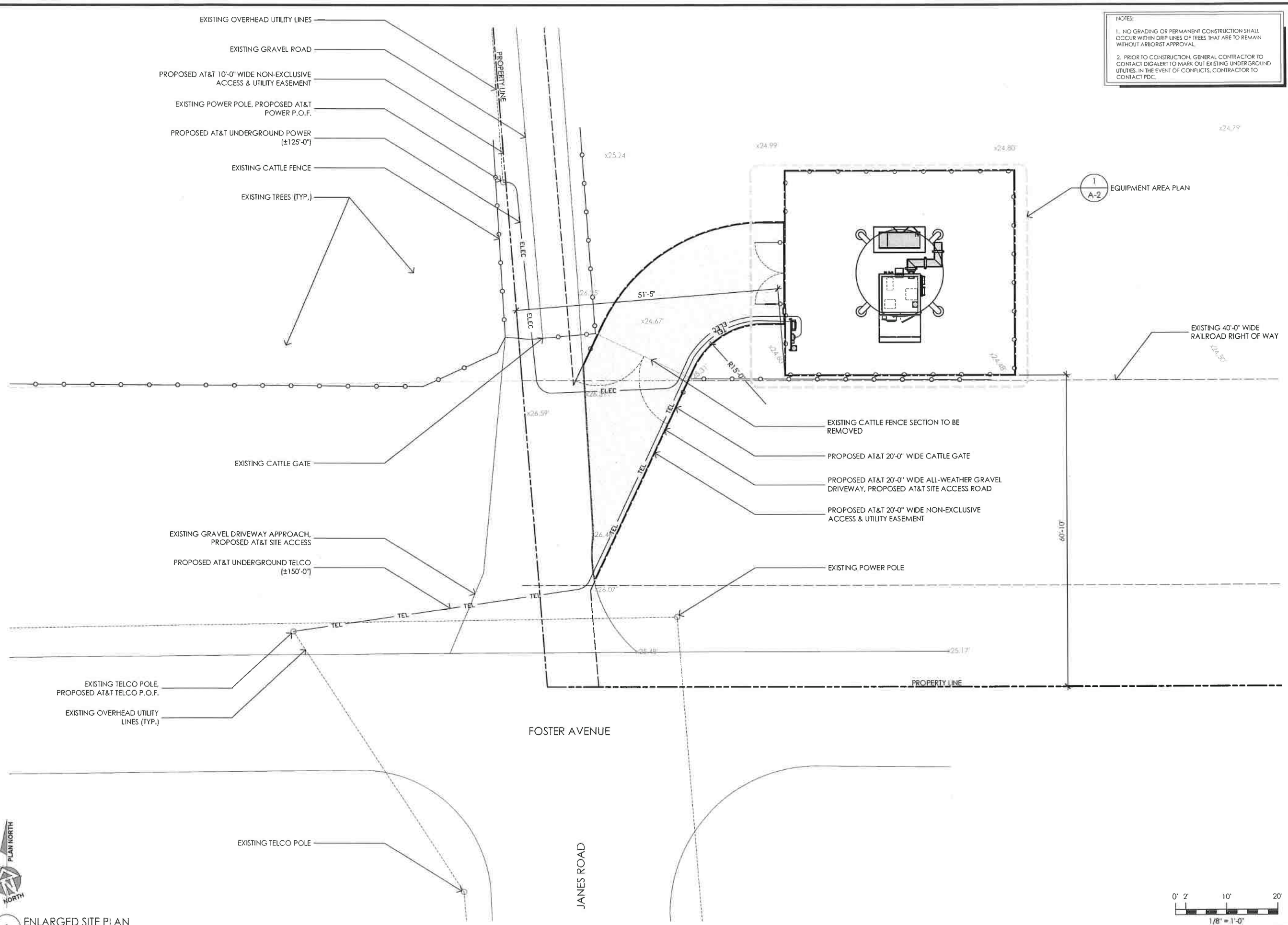
A-1



1 ENLARGED SITE PLAN
1/8" = 1'-0"

NOTES:

1. NO GRADING OR PERMANENT CONSTRUCTION SHALL OCCUR WITHIN DRIP LINES OF TREES THAT ARE TO REMAIN WITHOUT ARBORIST APPROVAL.

2. PRIOR TO CONSTRUCTION, GENERAL CONTRACTOR TO CONTACT DIGALERT TO MARK OUT EXISTING UNDERGROUND UTILITIES. IN THE EVENT OF CONFLICTS, CONTRACTOR TO CONTACT PDC.

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SHEET TITLE:

ENLARGED SITE PLAN

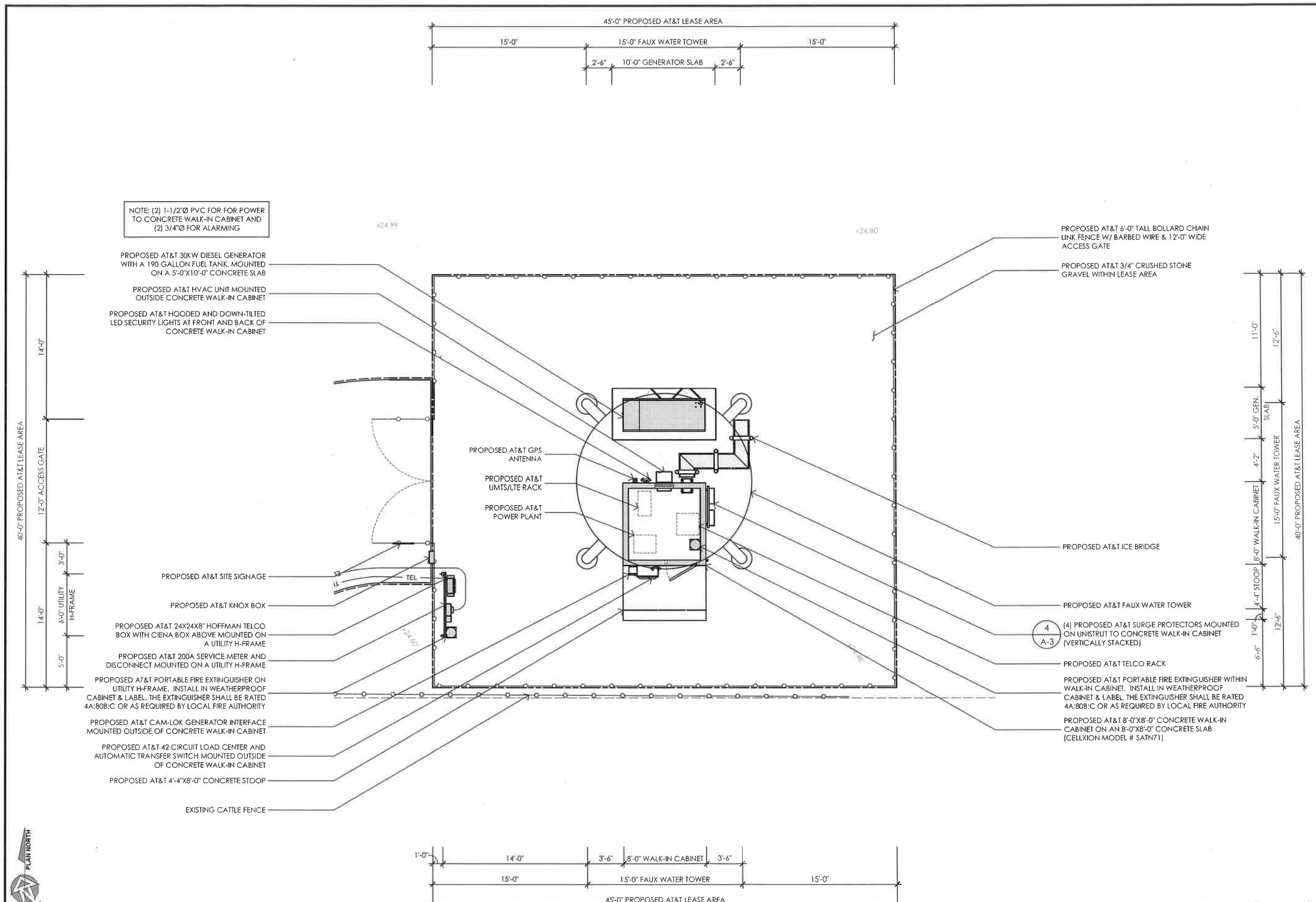
SHEET NUMBER:

A-1.1

July 1.2021

New Cingular Wireless & PWM, Inc

PLN-2020-16754 & PLN-2021-17005



1 EQUIPMENT AREA PLAN
1/4" = 1'-0"

Issued For:

CCL02143
ARCATA

FOSTER AVENUE
ARCATA, CA 95521

PREPARED FOR

at&t

2600 Camino Ramon
San Ramon, California 94583

Vendor:

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

PROJECT NO: 14863296

AT&T SITE NO:	CCL02143
PROJECT NO:	219.0105
DRAWN BY:	TLS
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	12/04/19	100% ZD
	11/18/19	90% ZD

Licensee:

Architect:

MST ARCHITECTS
1520 River Park Drive
Sacramento, California 95815

SHEET TITLE:

EQUIPMENT AREA PLAN

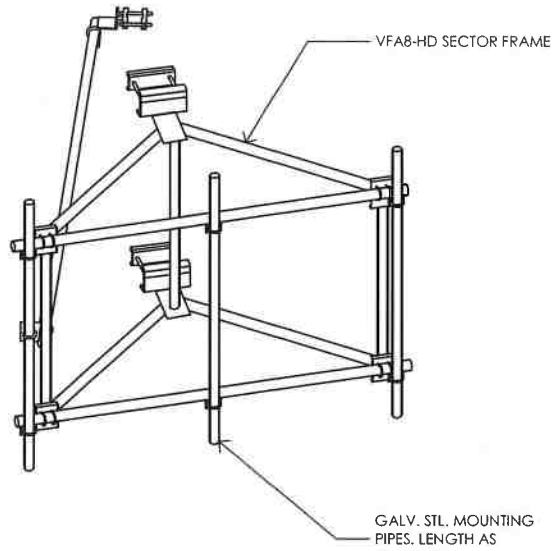
SHEET NUMBER:

A-2

July 1, 2021

New Cingular Wireless & PWM, Inc

PLN-2020-16754 & PLN-2021-17005



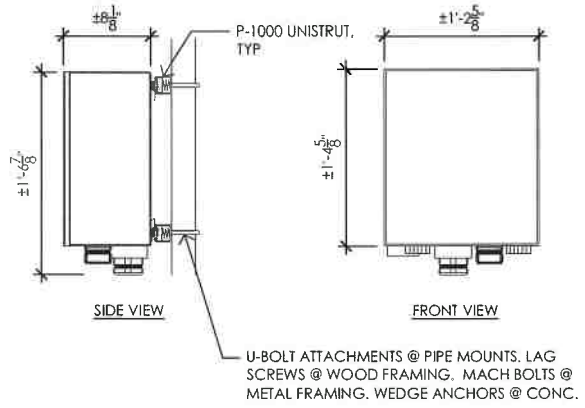
6 SITEPRO SECTOR FRAME VFA8-HD
NO SCALE

RAYCAP DC9-48-60-24-PC16-EV DC POWER CONNECTION

COLOR: LIGHT GRAY

DIMENSIONS: 16.34" WIDE X 16.57" TALL X 8.19" DEEP

WIEGHT: +/- 35 LBS. (INCLUDING MOUNTING HARDWARE)



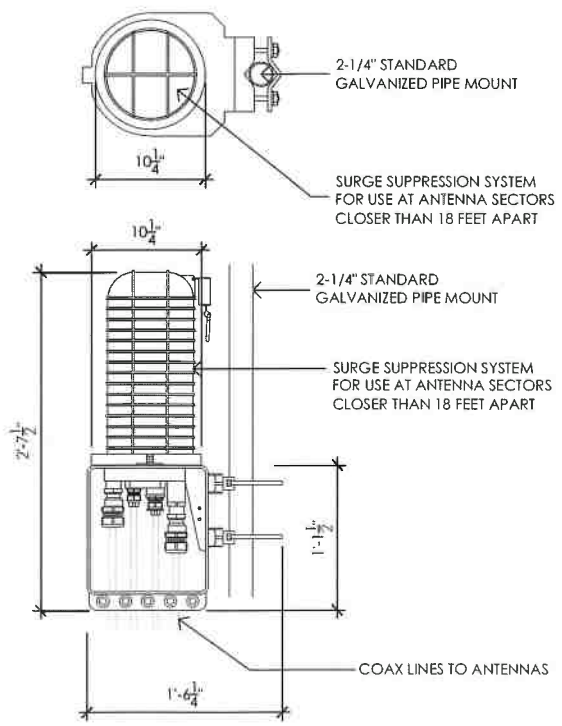
4 DC9 POWER CONNECTION
1-1/2"= 1'-0"

RAYCAP DC9-48-60-24-8C-EV SURGE SUPPRESSION SOLUTION

COLOR: BLACK/SILVER

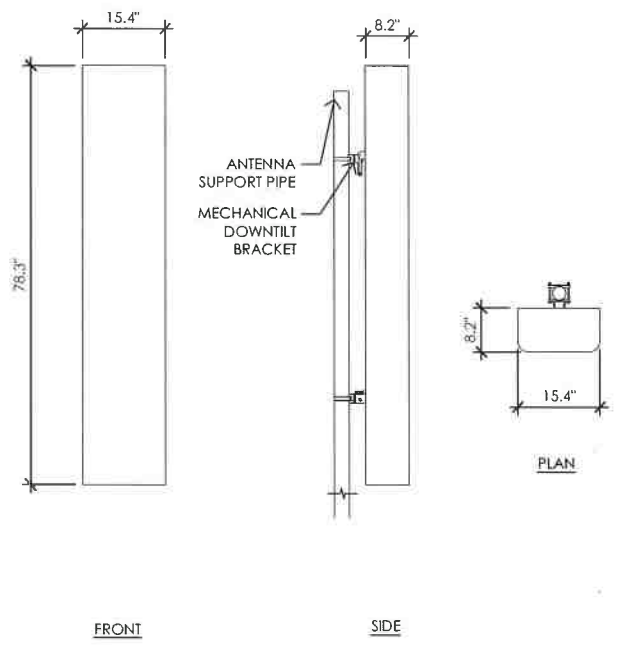
DIMENSIONS: 10.25" DIA X 2'-7.5" TALL W/ 1'-1.5' BASE

WEIGHT: 26.2 LBS.±



5 DC SURGE SUPPRESSION (SQUID)
1-1/2"= 1'-0"

EQUIPMENT SUBJECT TO CHANGE



ANTENNA = CCI (TPA-45R-KU6AA-K)
WEIGHT = 55.9 LBS
DIMENSIONS = 78.3" (H) x 15.4" (W) x 8.2" (D)

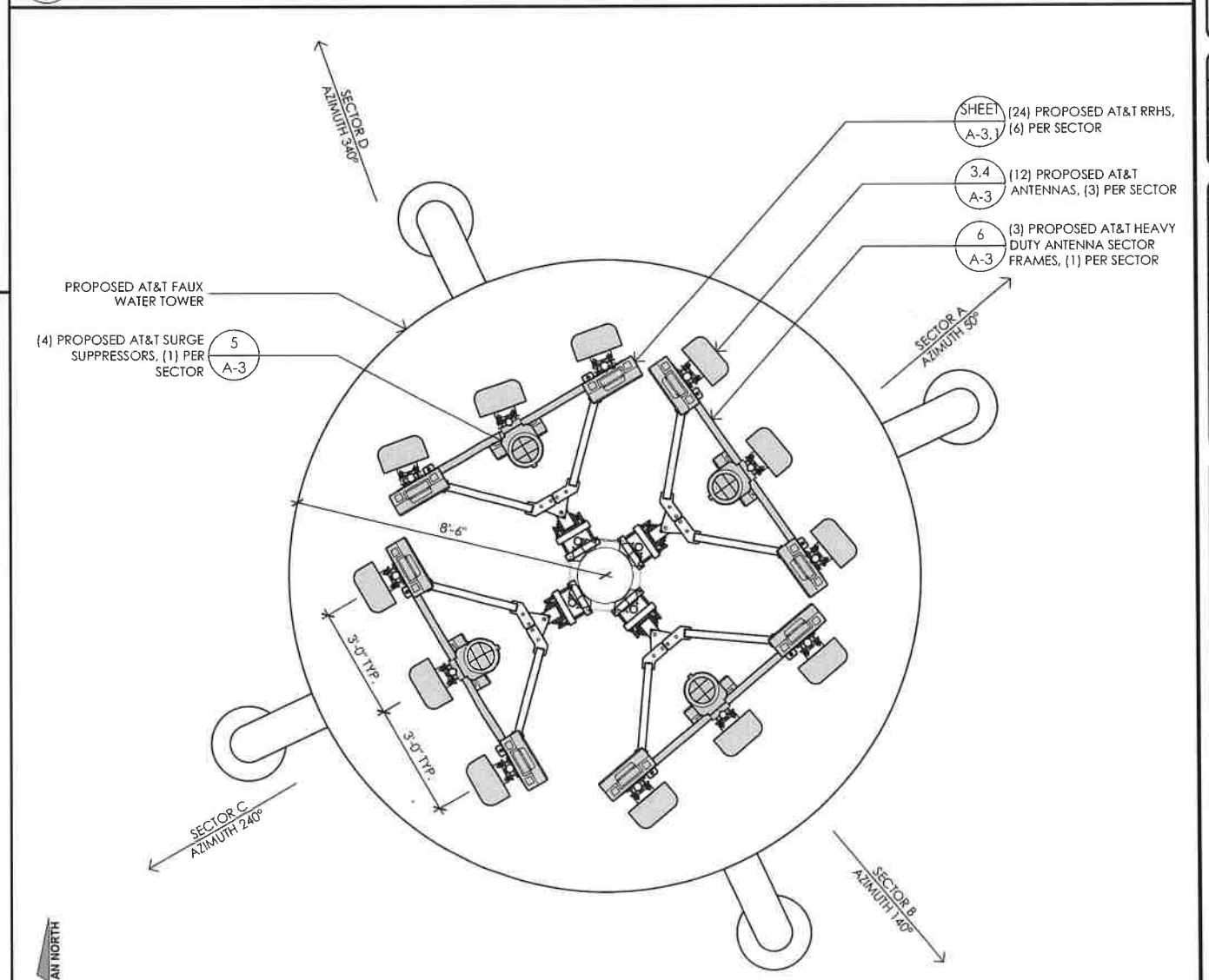
3 PROPOSED ANTENNA SPEC
3/4"= 1'-0"

RF DATA SHEET v1.00.0 DATED 11/12/2019 NOTE: ANTENNA POSITIONS ARE LEFT TO RIGHT FROM FRONT OF ANTENNA EQUIPMENT IS PRELIMINARY AND SUBJECT TO CHANGE.

RF SCHEDULE

SECTOR		ANTENNA MODEL NO.	AZIMUTH	CENTERLINE	RRH	TMA	FIBER LENGTH	COAX LENGTH	JUMPER TYPE	RRU NO.	DC FEED NO.
ALPHA	A1	CCI - TPA-45R-KU6AA-K	50°	± 90'-0"	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 110'-0"	-	LDF4	(2)	(4)
	A2	CCI - TPA-45R-KU6AA-K	50°	± 90'-0"	(1) 4478 B14 / (1) 4415 B25	-	± 110'-0"	-	LDF4	(2)	(2)
	A3	CCI - TPA-45R-KU6AA-K	50°	± 90'-0"	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 110'-0"	-	LDF4	(2)	(2)
	A4	-	-	-	-	-	-	-	-	-	-
BETA	B1	CCI - TPA-45R-KU6AA-K	140°	± 90'-0"	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 110'-0"	-	LDF4	(2)	(4)
	B2	CCI - TPA-45R-KU6AA-K	140°	± 90'-0"	(1) 4478 B14 / (1) 4415 B25	-	± 110'-0"	-	LDF4	(2)	(2)
	B3	CCI - TPA-45R-KU6AA-K	140°	± 90'-0"	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 110'-0"	-	LDF4	(2)	(2)
	B4	-	-	-	-	-	-	-	-	-	-
GAMMA	C1	CCI - TPA-45R-KU6AA-K	240°	± 90'-0"	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 110'-0"	-	LDF4	(2)	(4)
	C2	CCI - TPA-45R-KU6AA-K	240°	± 90'-0"	(1) 4478 B14 / (1) 4415 B25	-	± 110'-0"	-	LDF4	(2)	(2)
	C3	CCI - TPA-45R-KU6AA-K	240°	± 90'-0"	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 110'-0"	-	LDF4	(2)	(2)
	C4	-	-	-	-	-	-	-	-	-	-
DELTA	D1	CCI - TPA-45R-KU6AA-K	340°	± 90'-0"	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 110'-0"	-	LDF4	(2)	(4)
	D2	CCI - TPA-45R-KU6AA-K	340°	± 90'-0"	(1) 4478 B14 / (1) 4415 B25	-	± 110'-0"	-	LDF4	(2)	(2)
	D3	CCI - TPA-45R-KU6AA-K	340°	± 90'-0"	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 110'-0"	-	LDF4	(2)	(2)
	D4	-	-	-	-	-	-	-	-	-	-
										TOTAL:	(32)

2 RF SCHEDULE
NO SCALE



1 ANTENNA LAYOUT PLAN
1/2"= 1'-0"

Issued For:

CCL02143
ARCATA

FOSTER AVENUE
ARCATA, CA 95521

PREPARED FOR

at&t

2600 Camino Ramon
San Ramon, California 94583

Vendor:

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

PROJECT NO: 14863296

AT&T SITE NO:	CCL02143
PROJECT NO:	219.0105
DRAWN BY:	TLS
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	12/04/19	100% ZD
	11/18/19	90% ZD

Licensee:

Architect:

MST ARCHITECTS
1520 River Park Drive
Sacramento, California 95815

SHEET TITLE:
ANTENNA PLAN, SCHEDULE, & DETAILS

SHEET NUMBER:
A-3

July 1.2021

New Cingular Wireless & PWM, Inc

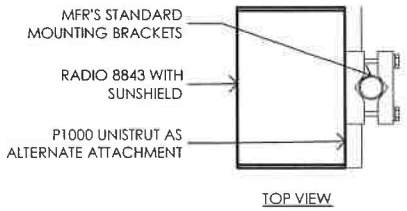
PLN-2020-16754 & PLN-2021-17005

ERICSSON RADIO 8843 REMOTE RADIO UNIT

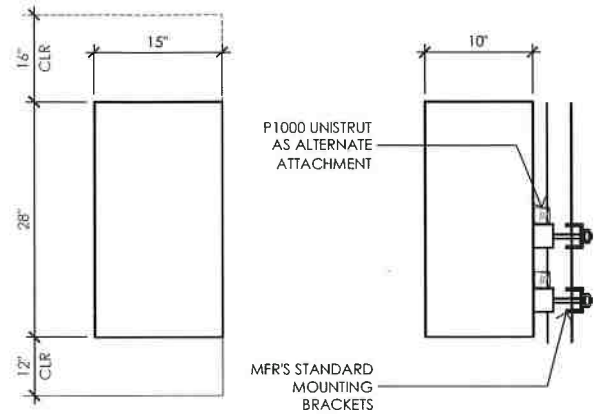
COLOR: WHITE

DIMENSIONS: 28" TALL X 15" WIDE X 10" DEEP (INCLUDING SUNSHIELD)

WEIGHT: 85 LBS.± (INCLUDING MOUNTING HARDWARE)



TOP VIEW



FRONT VIEW SIDE VIEW

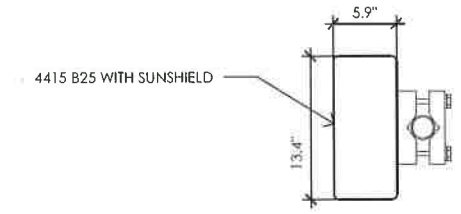
4 ERICSSON RADIO 8843 REMOTE RADIO UNIT
1-1/2"= 1'-0"

ERICSSON RADIO 4415 B25 REMOTE RADIO UNIT

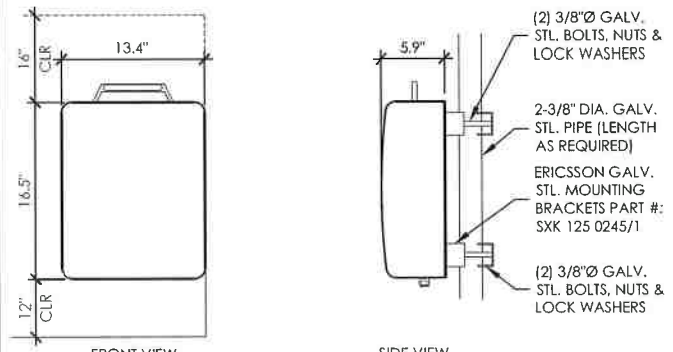
COLOR: WHITE

DIMENSIONS: 16.5" TALL X 13.4" WIDE X 5.9" DEEP (INCLUDING SUNSHIELD)

WEIGHT: +/- 50 LBS. (INCLUDING MOUNTING HARDWARE)



TOP VIEW



FRONT VIEW SIDE VIEW

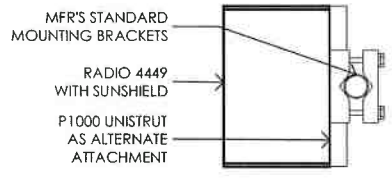
2 ERICSSON RADIO 4415 B25/B30 REMOTE RADIO UNIT
1-1/2"= 1'-0"

ERICSSON RADIO 4449 REMOTE RADIO UNIT

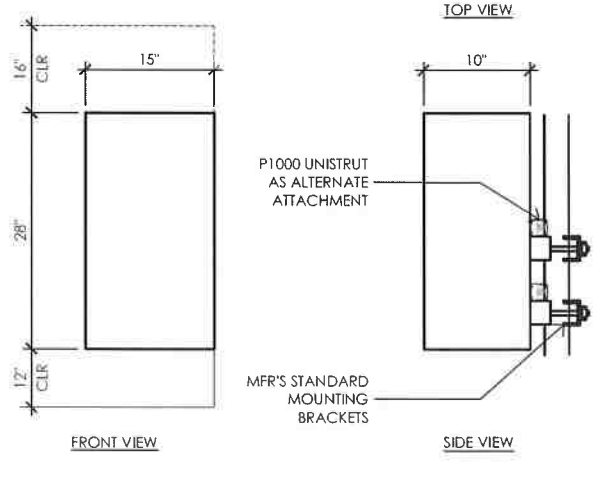
COLOR: WHITE

DIMENSIONS: 28" TALL X 15" WIDE X 10" DEEP (INCLUDING SUNSHIELD)

WEIGHT: 85 LBS± (INCLUDING MOUNTING HARDWARE)



TOP VIEW



FRONT VIEW SIDE VIEW

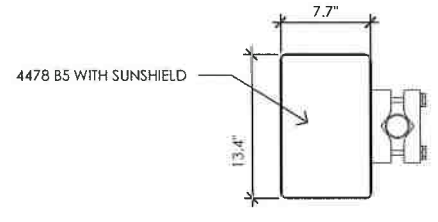
5 ERICSSON RADIO 4449 REMOTE RADIO UNIT
1-1/2"= 1'-0"

ERICSSON RADIO 4478 B5 REMOTE RADIO UNIT

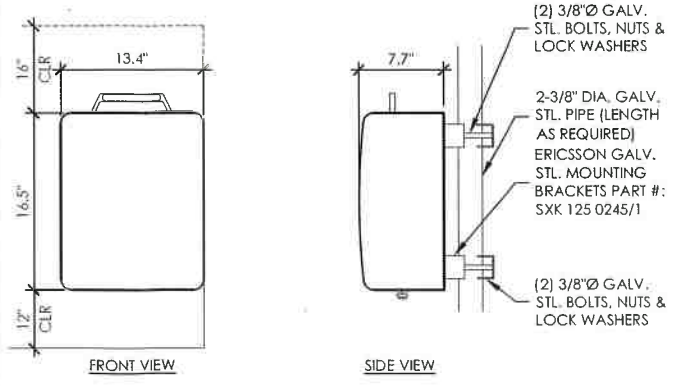
COLOR: WHITE

DIMENSIONS: 16.5" TALL X 17" WIDE X 7.7" DEEP (INCLUDING SUNSHIELD)

WEIGHT: +/- 59.9 LBS. (INCLUDING MOUNTING HARDWARE)



TOP VIEW



FRONT VIEW SIDE VIEW

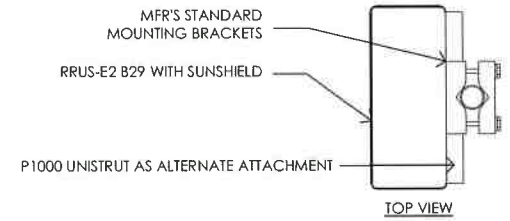
3 ERICSSON RADIO 4478 B14 REMOTE RADIO UNIT
1-1/2"= 1'-0"

ERICSSON RRUS-E2 B29 REMOTE RADIO UNIT

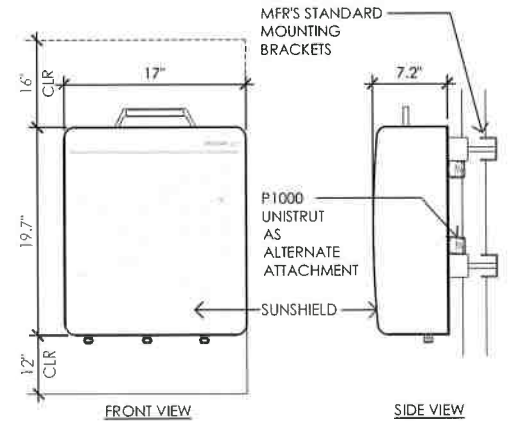
COLOR: WHITE

DIMENSIONS: 19.7" TALL X 17" WIDE X 7.2" DEEP (INCLUDING SUNSHIELD)

WEIGHT: +/- 50 LBS. (INCLUDING MOUNTING HARDWARE)



TOP VIEW



FRONT VIEW SIDE VIEW

1 ERICSSON RRUS-E2 B29 REMOTE RADIO UNIT
1-1/2"= 1'-0"

Issued For:

CCL02143
ARCATA

FOSTER AVENUE
ARCATA, CA 95521

PREPARED FOR

at&t

2600 Camino Ramon
San Ramon, California 94583

Vendor:

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

PROJECT NO: 14863296

AT&T SITE NO:	CCL02143
PROJECT NO:	219.0105
DRAWN BY:	TLS
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	12/04/19	100% ZD
	11/18/19	90% ZD

Licensee:

Architect:

MST ARCHITECTS
1520 River Park Drive
Sacramento, California 95815

SHEET TITLE:

RRH DETAILS

SHEET NUMBER:

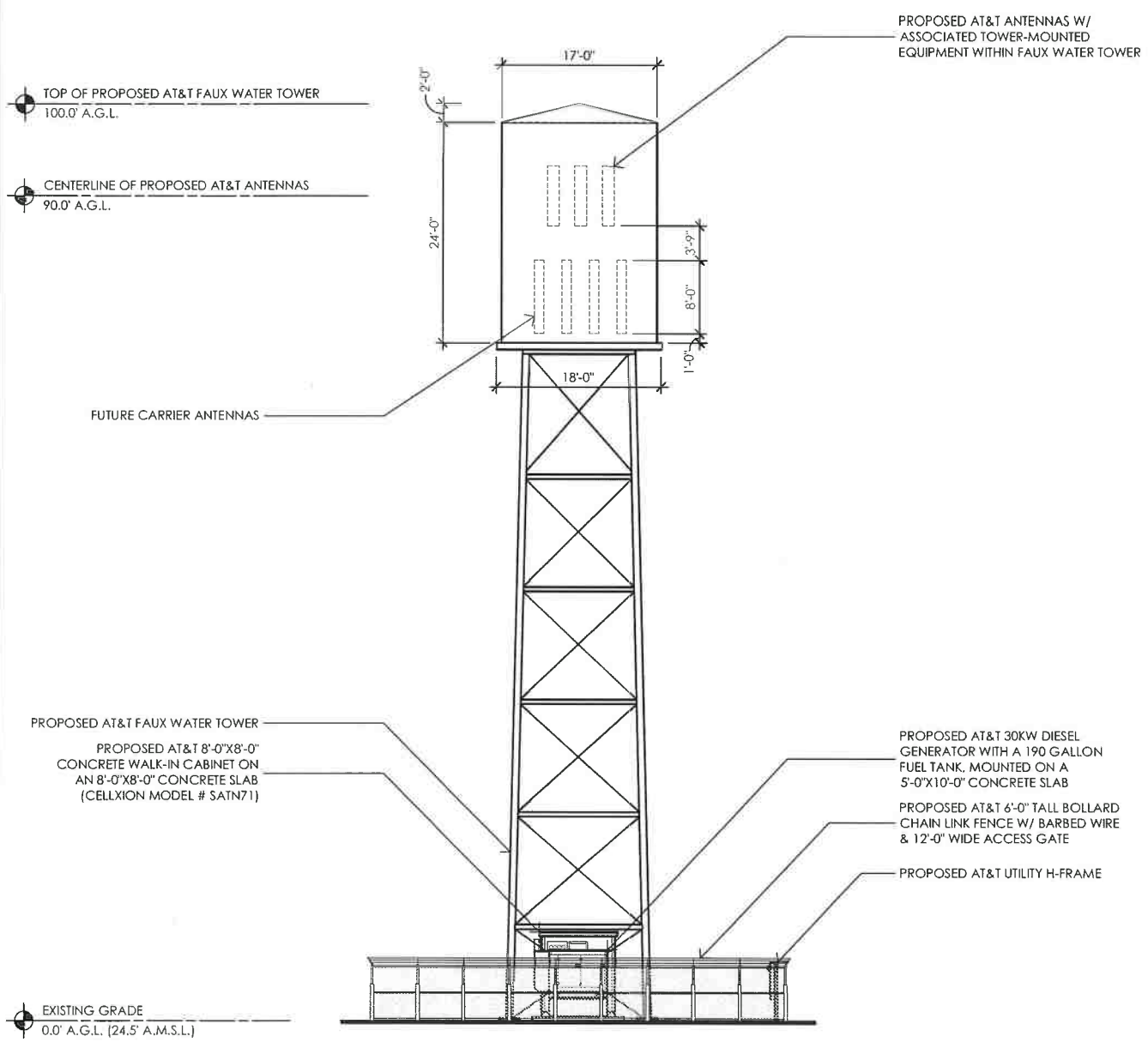
A-3.1

July 1.2021

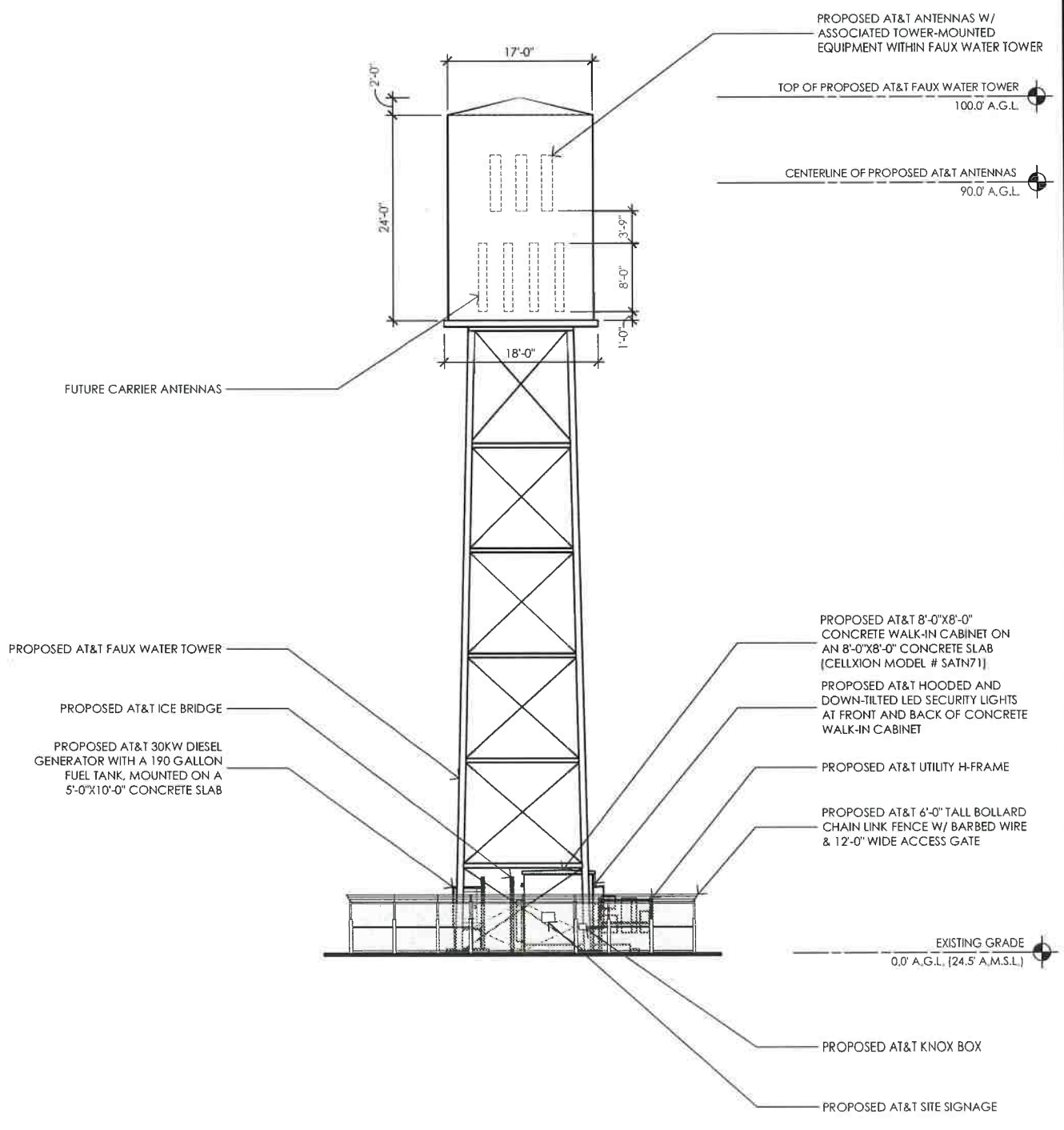
New Cingular Wireless & PWM, Inc

PLN-2020-16754 & PLN-2021-17005

NOTE: FAUX WATER TOWER TO BE STRUCTURALLY ENGINEERED FOR A TOTAL OF (2) WIRELESS CARRIERS



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



1 NORTHWEST ELEVATION
1/8" = 1'-0"

Issued For:

CCL02143
ARCATA

FOSTER AVENUE
ARCATA, CA 95521

PREPARED FOR

at&t

2600 Camino Ramon
San Ramon, California 94583

Vendor:

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

PROJECT NO: 14863296

AT&T SITE NO:	CCL02143
PROJECT NO:	219.0105
DRAWN BY:	TLS
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	12/04/19	100% ZD
	11/18/19	90% ZD

Licensee:

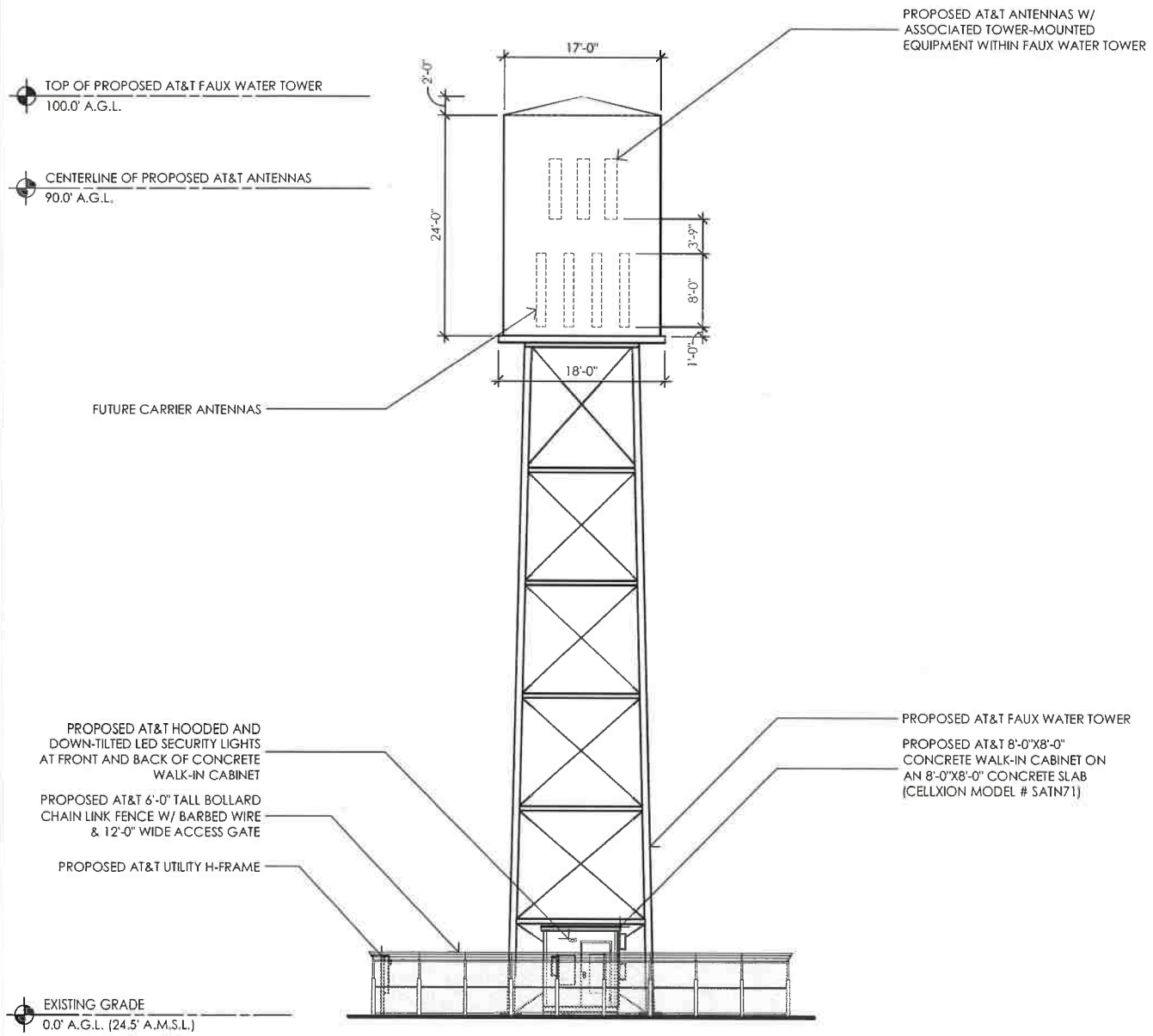
Architect:

MST ARCHITECTS
1520 River Park Drive
Sacramento, California 95815

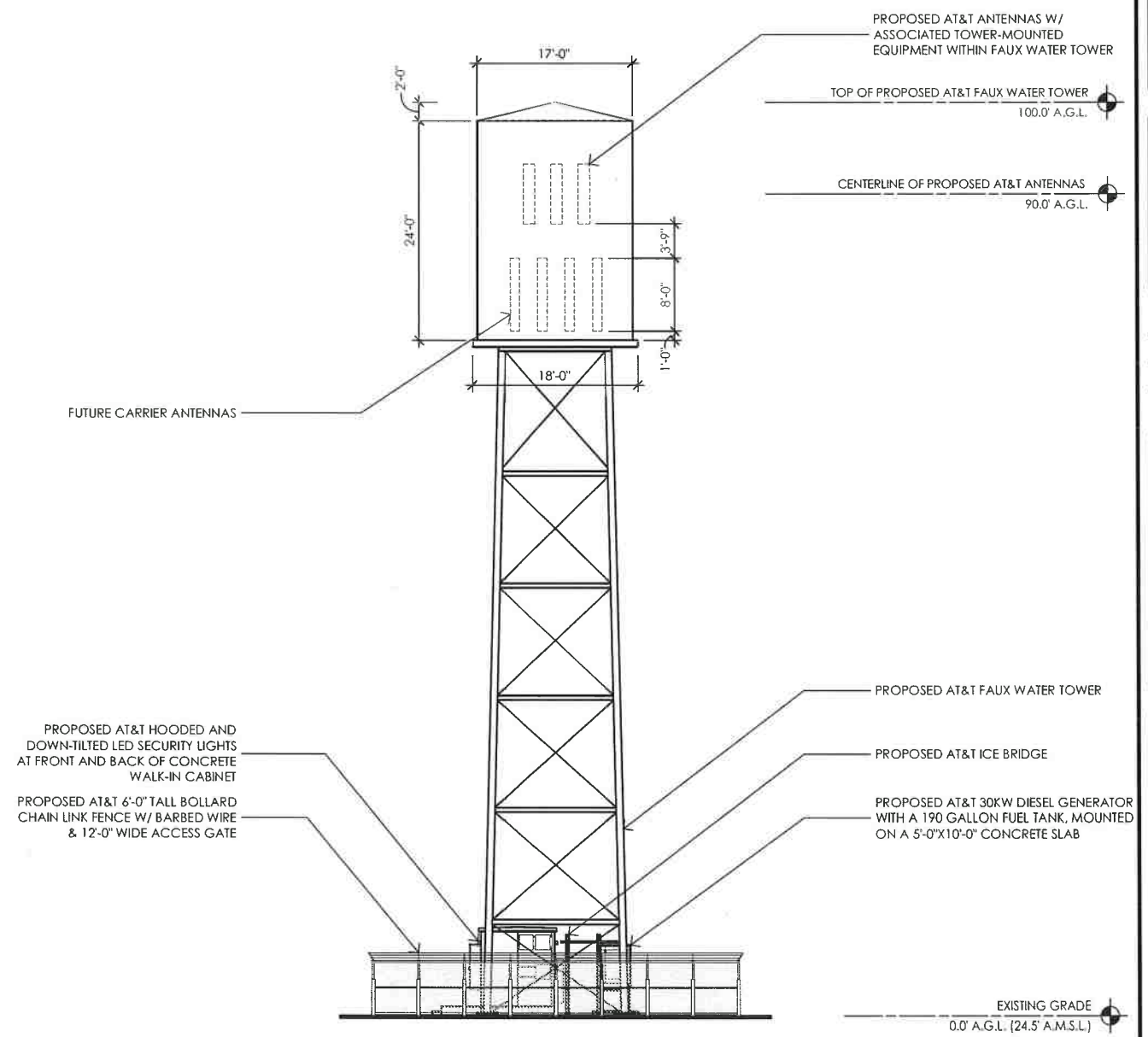
SHEET TITLE:
PROPOSED ELEVATIONS

SHEET NUMBER:
A-4.1

NOTE: FAUX WATER TOWER TO BE STRUCTURALLY ENGINEERED FOR A TOTAL OF (2) WIRELESS CARRIERS



2 SOUTHWEST ELEVATION
1/8" = 1'-0"



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

Issued For:

CCL02143
ARCATA

FOSTER AVENUE
ARCATA, CA 95521

PREPARED FOR

at&t

2600 Camino Ramon
San Ramon, California 94583

Vendor:

EPIC WIRELESS GROUP LLC
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PROJECT NO: 14863296

AT&T SITE NO:	CCL02143
PROJECT NO:	219.0105
DRAWN BY:	TLS
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REV	DATE	DESCRIPTION
	12/04/19	100% ZD
	11/18/19	90% ZD

Licensee:

Architect:

MST ARCHITECTS
1520 River Park Drive
Sacramento, California 95815

SHEET TITLE:

PROPOSED ELEVATIONS

SHEET NUMBER:

A-4.2

July 1.2021

New Cingular Wireless & PWM, Inc

PLN-2020-16754 & PLN-2021-17005


04/14/2021


05/07/2020


05/07/2020

WATERFORD

Radio Frequency Emissions Compliance Report For Verizon Wireless

Site Name:	**Arcata**	**Site Structure Type:**	**Water Tank**
Address:	**Foster Avenue**	**Latitude:**	**40.88129**
	Arcata, CA 95521	**Longitude:**	**-124.100108**
Report Date:	**December 5, 2019**	**Project:**	**New Build**

Compliance Statement

Based on information provided by Verizon Wireless and predictive modeling, the Arcata installation proposed by Verizon Wireless 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 Water Tank 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 C. Cotton, Jr., 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.

REGISTERED PROFESSIONAL ENGINEER DAVID CHARLES COTTON, JR. NO. 18838 ELECTRICAL STATE OF CALIFORNIA

David Charles Cotton, Jr.
Registered Professional Engineer (Electrical)
State of California, 18838
Date: 2019-December-08

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.

RECEIVED OCT 29 2020 Humboldt County PLANNING

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

Table 1: FCC Limits

Frequency (MHz)	*Limits for General Population/ Uncontrolled Exposure*		*Limits for Occupational/ Controlled Exposure*	
	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:

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

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

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

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 that 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

Verizon Wireless proposes the following installation at this location:

- Install twelve (12) AT&T antennas

The antennas will be mounted on a 100-foot water tank with centerlines 90 feet above ground level. Proposed antenna operating parameters are listed in Appendix A. 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 Verizon Wireless operations is 4.1798% of the FCC General Population limits. Incident at adjacent

Appendix A: Operating Parameters Considered in this Analysis

Antenna #:	Carrier:	Manufacturer	Pattern:	Band (MHz):	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	EIRP (W):	Rad Center (ft):
1	AT&T	CCI	TPA45R-KU6A 02DT	700	50	0	50	6.5	40	4	0	11.15	2085	3421	90
1	AT&T	CCI	TPA45R-KU6A 03DT	1900	50	0	45	6.5	40	4	0	13.85	3883	6370	90
1	AT&T	CCI	TPA45R-KU6A 03DT	2100	50	0	39	6.5	40	4	0	14.95	5002	8206	90
2	AT&T	CCI	TPA45R-KU6A 02DT	700	50	0	50	6.5	40	4	0	11.15	2085	3421	90
2	AT&T	CCI	TPA45R-KU6A 03DT	1900	50	0	45	6.5	40	4	0	13.85	3883	6370	90
3	AT&T	CCI	TPA45R-KU6A 02DT	700	50	0	50	6.5	40	2	0	11.15	1043	1710	90
3	AT&T	CCI	TPA45R-KU6A 03DT	2300	50	0	45	6.5	25	4	0	14.25	2661	4365	90
4	AT&T	CCI	TPA45R-KU6A 02DT	700	140	0	50	6.5	40	4	0	11.15	2085	3421	90
4	AT&T	CCI	TPA45R-KU6A 03DT	1900	140	0	45	6.5	40	4	0	13.85	3883	6370	90
4	AT&T	CCI	TPA45R-KU6A 03DT	2100	140	0	39	6.5	40	4	0	14.95	5002	8206	90
5	AT&T	CCI	TPA45R-KU6A 02DT	700	140	0	50	6.5	40	4	0	11.15	2085	3421	90
5	AT&T	CCI	TPA45R-KU6A 03DT	1900	140	0	45	6.5	40	4	0	13.85	3883	6370	90
6	AT&T	CCI	TPA45R-KU6A 02DT	700	140	0	50	6.5	40	2	0	11.15	1043	1710	90
6	AT&T	CCI	TPA45R-KU6A 03DT	2300	140	0	45	6.5	25	4	0	14.25	2661	4365	90
7	AT&T	CCI	TPA45R-KU6A 02DT	700	240	0	50	6.5	40	4	0	11.15	2085	3421	90
7	AT&T	CCI	TPA45R-KU6A 03DT	1900	240	0	45	6.5	40	4	0	13.85	3883	6370	90
7	AT&T	CCI	TPA45R-KU6A 03DT	2100	240	0	39	6.5	40	4	0	14.95	5002	8206	90
8	AT&T	CCI	TPA45R-KU6A 02DT	700	240	0	50	6.5	40	4	0	11.15	2085	3421	90
8	AT&T	CCI	TPA45R-KU6A 03DT	1900	240	0	45	6.5	40	4	0	13.85	3883	6370	90
9	AT&T	CCI	TPA45R-KU6A 02DT	700	240	0	50	6.5	40	2	0	11.15	1043	1710	90
9	AT&T	CCI	TPA45R-KU6A 03DT	2300	240	0	45	6.5	25	4	0	14.25	2661	4365	90
10	AT&T	CCI	TPA45R-KU6A 02DT	700	340	0	50	6.5	40	4	0	11.15	2085	3421	90
10	AT&T	CCI	TPA45R-KU6A 03DT	1900	340	0	45	6.5	40	4	0	13.85	3883	6370	90
10	AT&T	CCI	TPA45R-KU6A 03DT	2100	340	0	39	6.5	40	4	0	14.95	5002	8206	90
11	AT&T	CCI	TPA45R-KU6A 02DT	700	340	0	50	6.5	40	4	0	11.15	2085	3421	90
11	AT&T	CCI	TPA45R-KU6A 03DT	1900	340	0	45	6.5	40	4	0	13.85	3883	6370	90
12	AT&T	CCI	TPA45R-KU6A 02DT	700	340	0	50	6.5	40	2	0	11.15	1043	1710	90

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12	AT&T	CCI	TPA45R-KU6A 03DT	2300	340	0	45	6.5	25	4	0	14.25	2661	4365	90

Colocated antenna parameters based on industry standards

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ATTACHMENT 1B
PWM, Inc.

Applicant's Evidence in Support of the Required Findings

Attachment 1B includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

- Application Form (in file)
- Applicant Project Statement (**Attached**)
- Project Plans (**Attached**)
- Photographic Simulations (**Attached**)
- Alternatives Analysis (**Attached**)
- Wireless Coverage Analysis (**Attached**)

Proposed Wireless Facility

- March 9, 2021
- Project Applicant: PWM, Inc.
- Project Name: Sun Valley Group
- APN: 506-231-010
- Project Location: 3160 Upper Bay Road
  Arcata, CA 95521

Humboldt County General Plan

Telecommunications §6.5 A., Telecommunication Siting Standards:

"Siting of new telecommunications facilities shall comply with standards contained in a Telecommunicaitons Facilities Ordinance that Incorporates the Following:"[3]

CHAPTER 6 Telecommunications

§6.5 A: Tiered Permitting: "Utilize permit processes that vary depending upon the physical characteristics of the facility, its location, and its compliance with specific development and performance standards"

→PWM, Inc. has a track record of following all permitting procedures to build co-location facilities in compliance with specific development and performance standards within Humboldt County

§6.5 B., Performance Standards: "Standards for siting design, visibility, construction impacts, on-going operation, and other characteristics that affect the compatibility and environmental and safety impacts of proposed facilities."

→A developed industrial site with existing roads, power facilities, previously graded and improved. Any excess soil will be stored on the property.

HUMBOLDT COUNTY GENERAL PLAN CHAPTER 6 TELECOMMUNICATIONS

§6.5 C: Site Co-Location. "When feasible, telecommunications facilities shall be located adjacent to, on, or incorporated into existing or proposed buildings, towers or other structures. The County shall require new facilities to accommodate future co-location to the maximum extent feasible."

→The site is located adjacent to, on, and incorporated into existing buildings and structures

→The four-legged self-support lattice design accommodates a total of four (4) Wireless Carries for co-location to the maximum extent feasible. The proposed tower has the loading capacity to allow each carrier: 12 Antennas, 24 RRUs, 2 Surge Protectors and the associated mounts and cabling.

→The size of the site ground space, existing access roads and available on-site power, will permit ongoing operations without additional infrastructure requirements.

§6.5 D: Public Health and Safety. "Applicants shall demonstrate that proposed facilities operate within Federal Communications Commission (FCC) emission regulations and guidelines."

→The site will receive a Non-Ionizing Electromagnetic Exposure Analysis and Engineering Certification by a Registered Professional Engineer/ Radio Engineer.

HUMBOLDT COUNTY GENERAL PLAN CHAPTER 6 TELECOMMUNICATIONS

- **§6.5 E., Location and siting:**

1) Avoid siting along ridgelines unless screened from public view
2) Avoid siting within views of scenic highways, public parks, recreation or cultural facilities or other public lands and coastal scenic or view areas
3) Setbacks shall be required between telecommunication facilities and residential dwelling units, public or private schools, and child daycare facilities.

The location of the Proposed Sun Valley Group Site, is shielded by trees, building heights and difficult to see from most public roads, developed areas of the City of Arcata, and surrounding improvements.

HUMBOLDT COUNTY GENERAL PLAN CHAPTER 6 TELECOMMUNICATIONS

§6.5 E., Location and siting:

4) An alternative analysis shall be provided at the time of application that documents why the project as proposed is the best way to accomplish project alternatives while minimizing project impacts

Ten sites were analyzed to assess their compatibility. Six potential locations were identified and did not meet the visual criteria, coverage requirements, were too close to areas used by the public, were not suitable for four carriers, or the landowner was not interested in a Lease. Four existing sites were assessed and were not suitable for four carriers or did not meet the coverage and capacity needs.

HUMBOLDT COUNTY GENERAL PLAN
CHAPTER 6 TELECOMMUNICATIONS

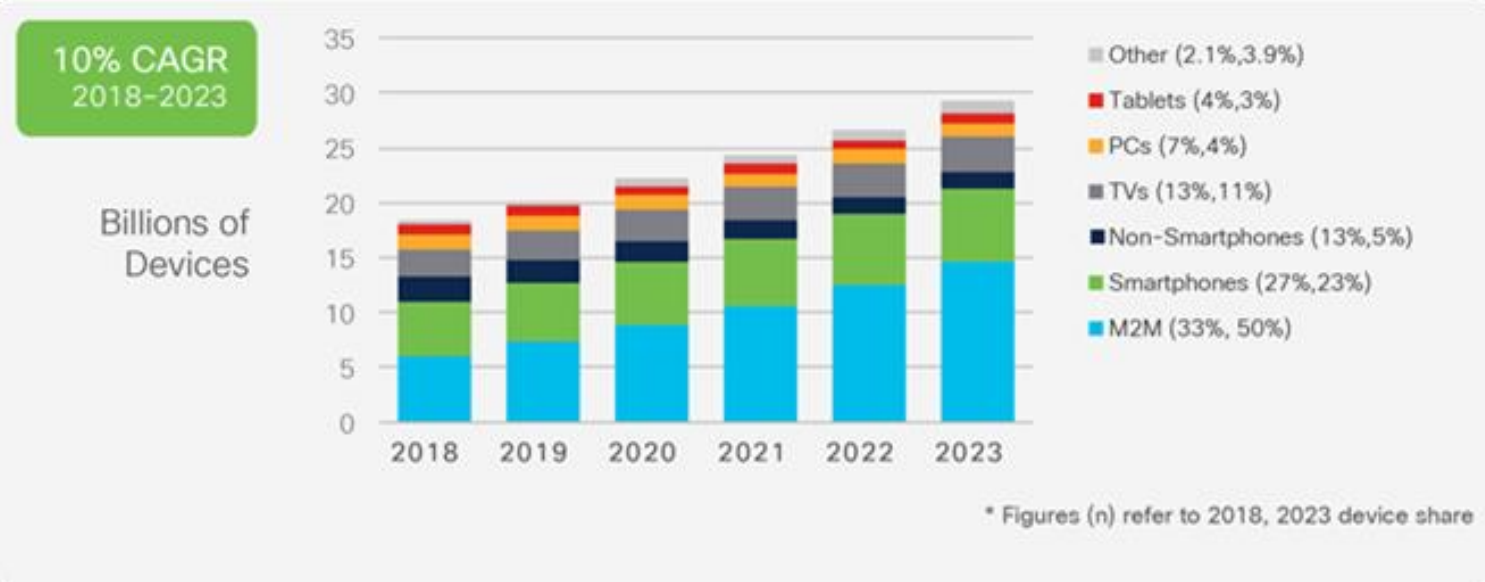
§6.5 F: Design and Screening.

1) Support structures shall be designed and painted to minimize visibility with a preference towards each of the following in the order so listed: 1) use of existing structures, 2) stealth designs for concealment, and 3) monopoles.
   →As a Self-Support Lattice Tower, it will be able to accommodate four (4) carriers.
2) Component parts, equipment cabinets, buildings and security fencing shall be designed to achieve a minimum profile through painting, screening, landscaping, and architectural compatibly with surrounding structures.
   →The site is located adjacent to, on and incorporated into existing buildings and structures.
3) Photo simulations or balloon tests with views form various vantage points shall be used to show visual impact of the proposed facility.
   →Seven photo simulations created after a balloon test are furnished in the attachments.

Wireless Growth

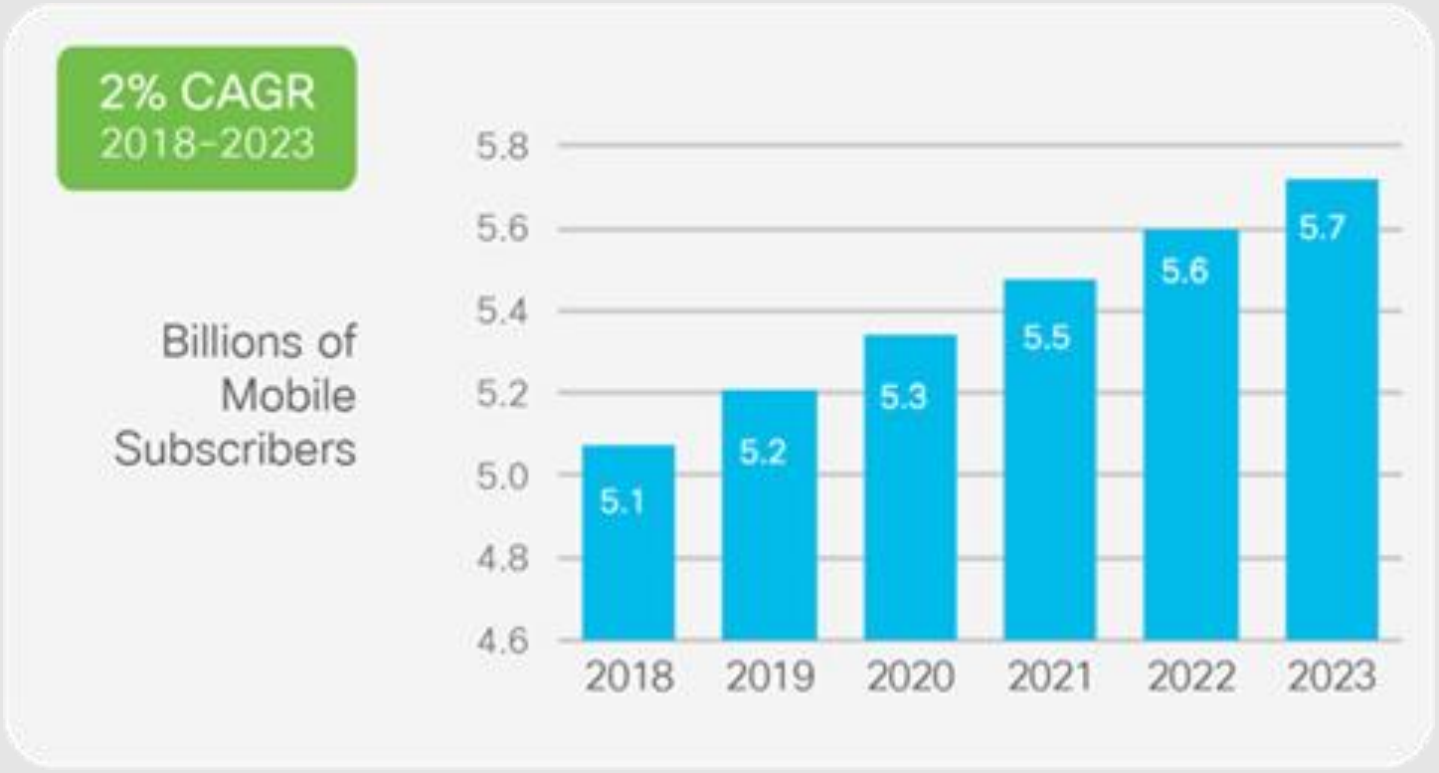
- As of June 2020: 96% of Americans now own a cell phone.[1]
- As of June 2020: 81% of Americans own a Smartphone, up from 35% in 2011.[1]
- One-in-five Americans are “smartphone-only” internet users and rely solely on their smartphone and do not subscribe to a traditional home broadband service[1].
- An average of 600,000 9-1-1 calls are made per day. 80% of them are from mobile devices or approx. 480,000 wireless 9-1-1 calls per day.[6]
- FirstNet, by AT&T, is a network using the FirstNet Band 14 spectrum and is dedicated to public safety. It prioritizes first responders in crisis and avoids congestion, allowing Emergency workers communication during these times of congestion.[5]

Changes in Types and Uses of Connected Devices



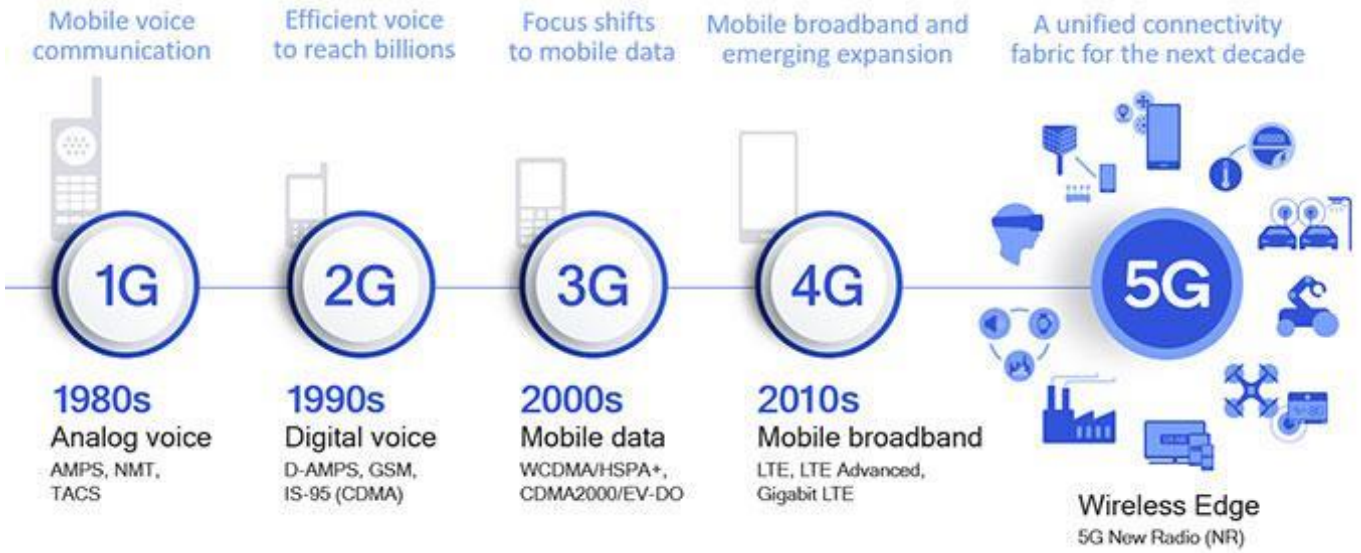
- The fastest growing mobile device category is M2M followed by smartphones. [2]
- Machine-To-Machine (M2M) connects will grow from 33% in 2018 to 50% by 2023 with 14.7 billion M2M connections by 2023.
- Internet of Things (IoT) connected with connected home applications having the largest share and connected car will be the fastest growing application type.[2]

Growth in Mobile Usage and Speed



- 313 Million mobile subscribers in 2018[2]
- 329 Million projected mobile subscribers by 2023[2]
- Cellular Speeds will more than triple by 2023.
  - 13.2Mbps in 2018
  - 43.9 Mbps by 2023
- Wi-Fi speeds from mobile devices will triple by 2023
  - 30Mbps in 2018
  - 92 Mbps by 2023
- 5G devices and connections will be over 10% of global mobile devices by 2023[2]

5G & DISH Network Rollout



- 5G relies on fast, short millimeter wave signals within a dense network.
- Operating at higher frequencies allows faster download speed with less interference, but these waves have a shorter range.[3]
- "The new spectrum allows better connectivity but will require a large number of cell sites."[3]
- "Many Rural or less densely populated cities are offering accelerated permit processes and other business incentives to entice carriers to prioritize upgrades in those locations" [3]
- DISH plans to rollout their wireless Network beginning next year. PWM has executed an NDA with DISH to co-locate on existing towers and add sites to extend coverage.
- In addition to co-locating on existing cell sites, it is estimated that DISH will need to build 65,000 new towers to achieve nationwide coverage.[7]

PWM INC.

Arcata California Tower Site Coverage Comparison (Sun Valley Grp / CCL02143 ARCATA) ATOLL 3.4.1

Further Enterprise Solutions

Engineering - Radio Access Network - Hetnet Systems - Fixed Network - Compliance – Network Monitoring Deployment
Site Development - Installation and Commissioning - Field Services

February 23, 2021

PLN-2020-16754 & PLN-2021-17005 New Cingular Wireless & PWM, Inc July 1,2021

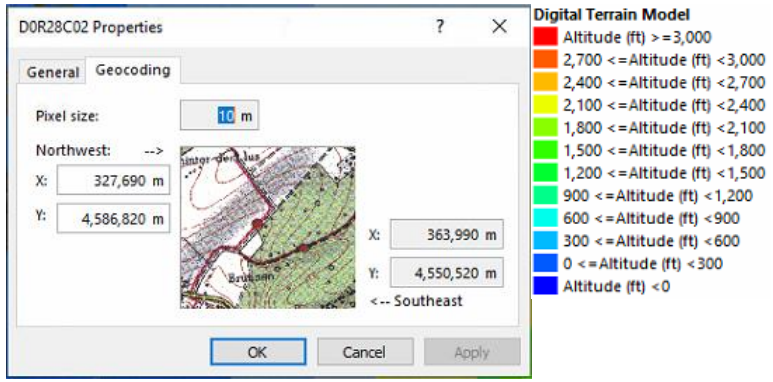
Executive Summary

- Site 1
  - Sun Valley Group, 3160 Upper Bay Rd., Arcata, CA 95521
  - Lattice tower on concrete foundation, 130 ft
- Site 2
  - CCL02143 ARCATA, Foster Ave., Arcata, CA 95521
  - Premanufactured walk-in cabinet / faux water tower, 100 ft

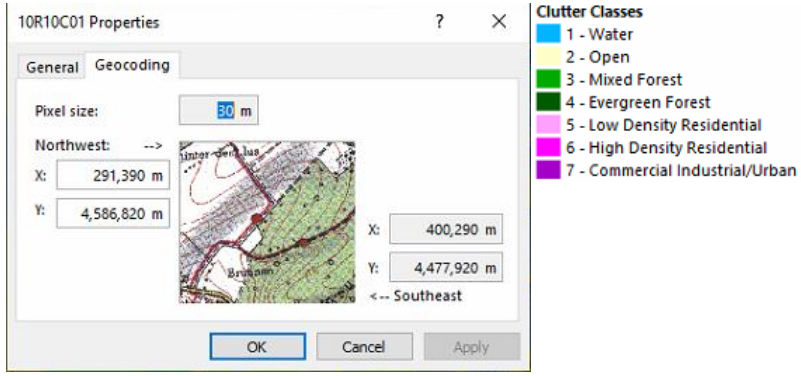
- The two (2) sites were simulated in ATOLL planning tool and LTE prediction plots were generated based on the radio network settings/assumptions shown on slide 3 & 4
- As seen on the LTE prediction plots, Site 1 (Sun Valley Grp) appears to provide better coverage to the Arcata area compared to Site 2 (CCL02143 ARCATA)
- Site 1 has the advantage in height and location over Site 2 since the site 1 proposed tower is located in a central open location with good LOS to the Arcata target coverage area
- Better services for 911 and 1st responders for site 1 than site 2. Site 1 covers more new area than site 2.
- Site 1 also has a slightly better position over Site 2 in terms of extended coverage to the northern and southern portions of the Arcata target coverage area
- Please refer to the LTE700 and LTE2100 prediction plots on slides 5 to 8
- Please refer to the Site 1 & Site 2 overlay plots and coverage statistics on slides 9 & 10

ATOLL Planning Tool Inputs and Assumptions

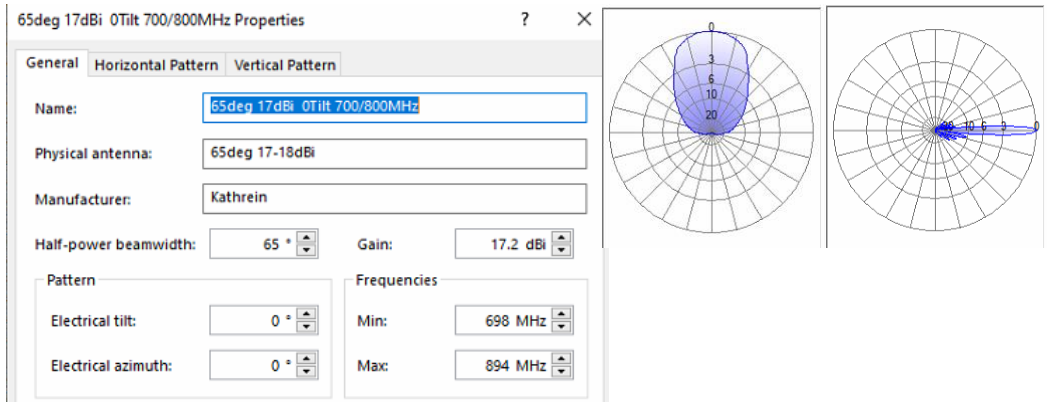
- Geodata
  - Digital Terrain Model, UTM Zone 10N, 10m resolution

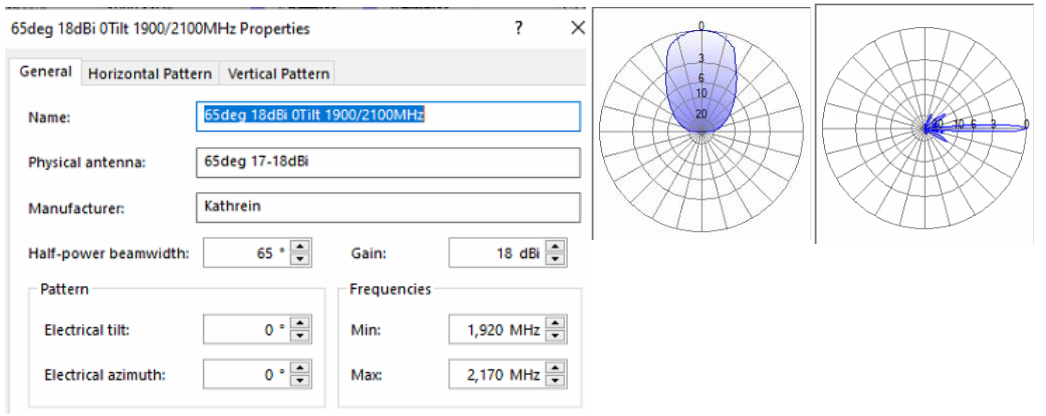


  - Clutter Classes, UTM Zone 10N, 30m resolution



- Antennas





- Propagation Model used were recommended versions of ATOLL Standard Propagation Model for 700 & 2100 MHz
- Please refer to the individual ATOLL site details in the next slides 4 & 5

Site 1 (Sun Valley Grp) & Site 2 (CCL02143) Site Data (ATOLL)

Name	Longitude	Latitude	Support Height (ft)	Support Type	Comments	Alias
Site1	-124.108503	40.885283	130	Microwave Tower	3160 Upper Bay Rd, Arcata CA 95521	Sun Valley Group
Site2	-124.100206	40.881264	100	Water Tower	Foster Ave, Arcata CA 95521	CCL02143 ARCATA

Site 1 (Sun Valley Grp) LTE700 Transmitter & Cell Data (ATOLL Settings/Assumptions)

Site	Transmitter	Antenna	Longitude	Latitude	Height (ft)	Azimuth (°)	Mechanical Downtilt (°)	Transmission losses (dB)	Reception losses (dB)	Noise Figure (dB)	Frequency Band	Radio Access Technology	Layer
Site1	Site1_1_L7	65deg 17dBi 0Tilt 700/800MHz	-124.108503	40.885283	130	10	4	4.5	2	5	n17 / E-UTRA 17	LTE	Macro Layer
Site1	Site1_2_L7	65deg 17dBi 0Tilt 700/800MHz	-124.108503	40.885283	130	100	2	4.5	2	5	n17 / E-UTRA 17	LTE	Macro Layer
Site1	Site1_3_L7	65deg 17dBi 0Tilt 700/800MHz	-124.108503	40.885283	130	200	4	4.5	2	5	n17 / E-UTRA 17	LTE	Macro Layer

Transmitter	Name	Order	Carrier	Max Power (dBm)	Layer	Cell Type	Min RSRP (dBm)	Diversity Support (DL)	Diversity Support (UL)	Traffic Load (DL) (%)	Traffic Load (UL) (%)
Site1_1_L7	Site1_1_L7(1)	1	10 MHz - EARFCN 5730	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100
Site1_2_L7	Site1_2_L7(1)	1	10 MHz - EARFCN 5770	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100
Site1_3_L7	Site1_3_L7(1)	1	10 MHz - EARFCN 5810	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100

Site 1 (Sun Valley Grp) LTE2100 Transmitter & Cell Data (ATOLL Settings/Assumptions)

Site	Transmitter	Antenna	Longitude	Latitude	Height (ft)	Azimuth (°)	Mechanical Downtilt (°)	Transmission losses (dB)	Reception losses (dB)	Noise Figure (dB)	Frequency Band	Radio Access Technology	Layer
Site1	Site1_1_L21	65deg 18dBi 0Tilt 1900/2100M	-124.108503	40.885283	130	10	4	4.5	2	5	n4 / E-UTRA 4	LTE	Macro Layer
Site1	Site1_2_L21	65deg 18dBi 0Tilt 1900/2100M	-124.108503	40.885283	130	100	2	4.5	2	5	n4 / E-UTRA 4	LTE	Macro Layer
Site1	Site1_3_L21	65deg 18dBi 0Tilt 1900/2100M	-124.108503	40.885283	130	200	4	4.5	2	5	n4 / E-UTRA 4	LTE	Macro Layer

Transmitter	Name	Order	Carrier	Max Power (dBm)	Layer	Cell Type	Min RSRP (dBm)	Diversity Support (DL)	Diversity Support (UL)	Traffic Load (DL) (%)	Traffic Load (UL) (%)
Site1_1_L21	Site1_1_L21(1)	1	20 MHz - EARFCN 1950	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100
Site1_2_L21	Site1_2_L21(1)	1	20 MHz - EARFCN 2150	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100
Site1_3_L21	Site1_3_L21(1)	1	20 MHz - EARFCN 2350	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100

Site 2 (CCL02143 ARCATA) LTE700 Transmitter & Cell Data (ATOLL Settings/Assumptions)

Site	Transmitter	Antenna	Longitude	Latitude	Height (ft)	Azimuth (°)	Mechanical Downtilt (°)	Transmission losses (dB)	Reception losses (dB)	Noise Figure (dB)	Frequency Band	Radio Access Technology	Layer
Site2	Site2_1_L7	65deg 17dBi 0Tilt 700/800MHz	-124.100206	40.881264	100	0	2	4.5	2	5	n17 / E-UTRA 17	LTE	Macro Layer
Site2	Site2_2_L7	65deg 17dBi 0Tilt 700/800MHz	-124.100206	40.881264	100	120	0	4.5	2	5	n17 / E-UTRA 17	LTE	Macro Layer
Site2	Site2_3_L7	65deg 17dBi 0Tilt 700/800MHz	-124.100206	40.881264	100	240	2	4.5	2	5	n17 / E-UTRA 17	LTE	Macro Layer

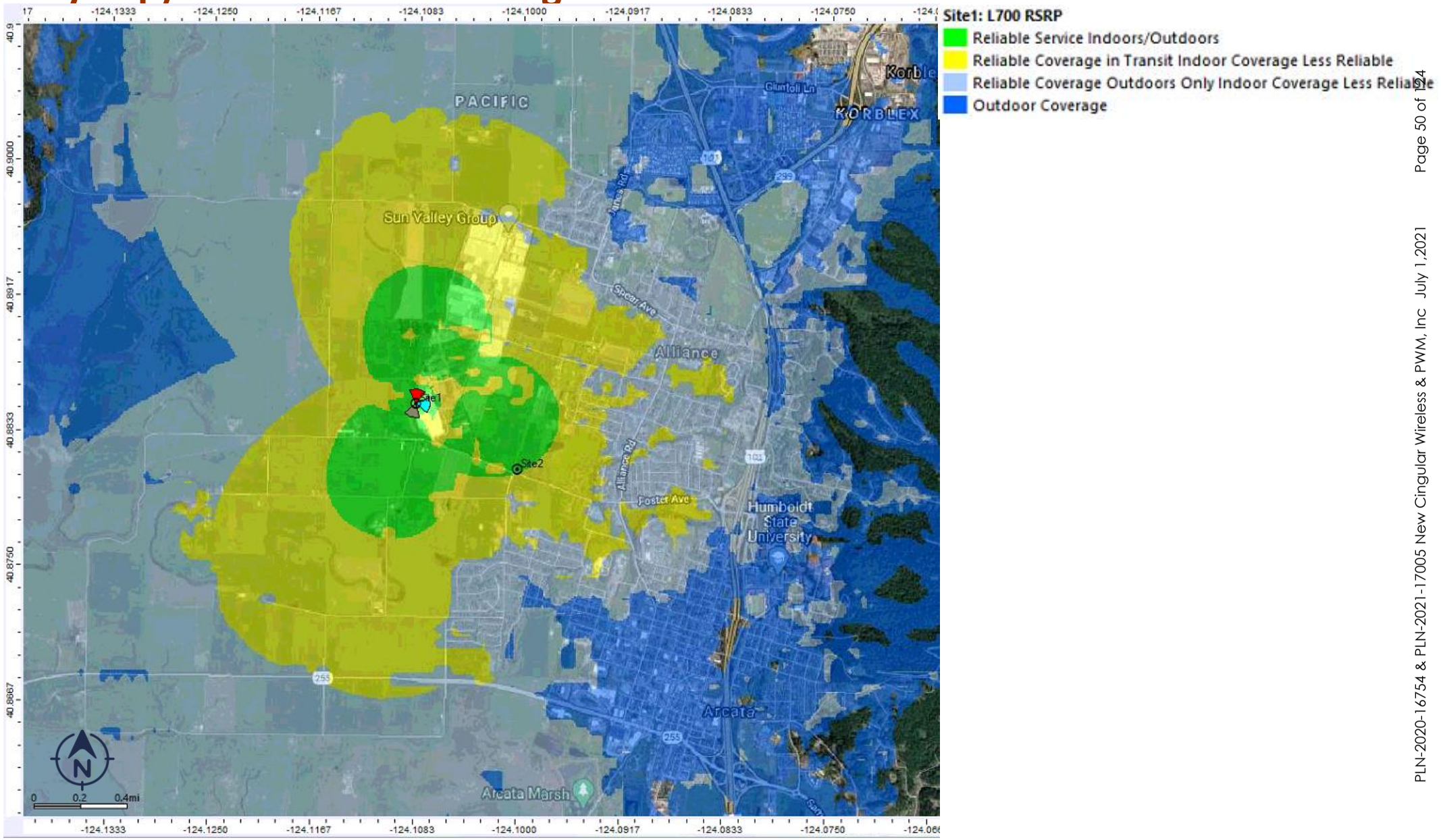
Transmitter	Name	Order	Carrier	Max Power (dBm)	Layer	Cell Type	Min RSRP (dBm)	Diversity Support (DL)	Diversity Support (UL)	Traffic Load (DL) (%)	Traffic Load (UL) (%)
Site2_1_L7	Site2_1_L7(1)	1	10 MHz - EARFCN 5730	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100
Site2_2_L7	Site2_2_L7(1)	1	10 MHz - EARFCN 5770	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100
Site2_3_L7	Site2_3_L7(1)	1	10 MHz - EARFCN 5810	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100

Site 2 (CCL02143 ARCTA) LTE2100 Transmitter & Cell Data (ATOLL Settings/Assumptions)

Site	Transmitter	Antenna	Longitude	Latitude	Height (ft)	Azimuth (°)	Mechanical Downtilt (°)	Transmission losses (dB)	Reception losses (dB)	Noise Figure (dB)	Frequency Band	Radio Access Technology	Layer
Site2	Site2_1_L21	65deg 18dBi 0Tilt 1900/2100M	-124.100206	40.881264	100	0	2	4.5	2	5	n4 / E-UTRA 4	LTE	Macro Layer
Site2	Site2_2_L21	65deg 18dBi 0Tilt 1900/2100M	-124.100206	40.881264	100	120	0	4.5	2	5	n4 / E-UTRA 4	LTE	Macro Layer
Site2	Site2_3_L21	65deg 18dBi 0Tilt 1900/2100M	-124.100206	40.881264	100	240	2	4.5	2	5	n4 / E-UTRA 4	LTE	Macro Layer

Transmitter	Name	Order	Carrier	Max Power (dBm)	Layer	Cell Type	Min RSRP (dBm)	Diversity Support (DL)	Diversity Support (UL)	Traffic Load (DL) (%)	Traffic Load (UL) (%)
Site2_1_L21	Site2_1_L21(1)	1	20 MHz - EARFCN 1950	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100
Site2_2_L21	Site2_2_L21(1)	1	20 MHz - EARFCN 2150	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100
Site2_3_L21	Site2_3_L21(1)	1	20 MHz - EARFCN 2350	47	Macro Layer	LTE;LTE-A PCell	-140	Transmit Diversity;SU-MIMO;MU-MIMO	Receive Diversity;SU-MIMO;MU-MIMO	100	100

Site 1 (Sun Valley Grp) LTE700 RSRP Coverage Plot



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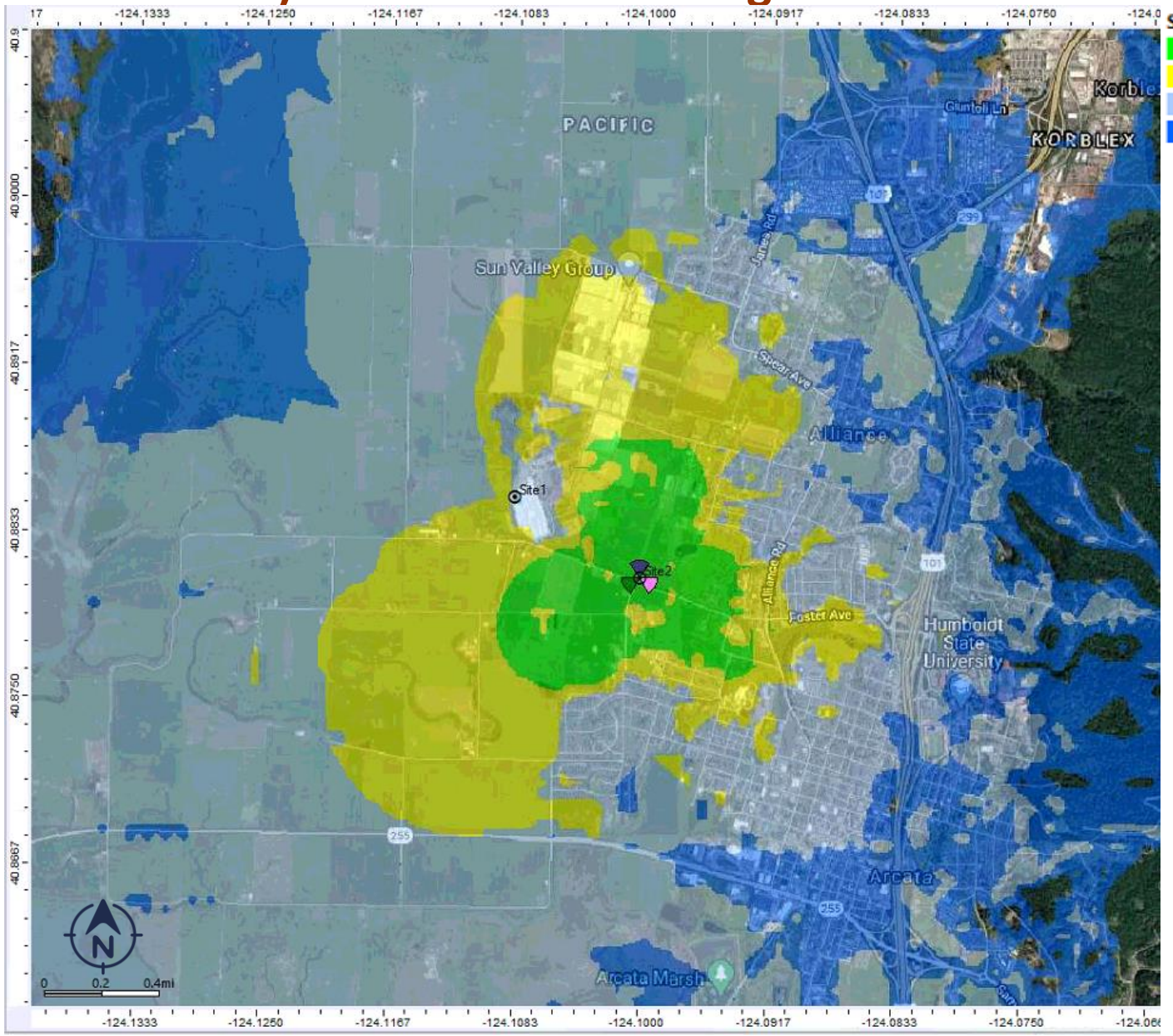
Site 2 (CCL02143 ARCATA) LTE700 RSRP Coverage Plot



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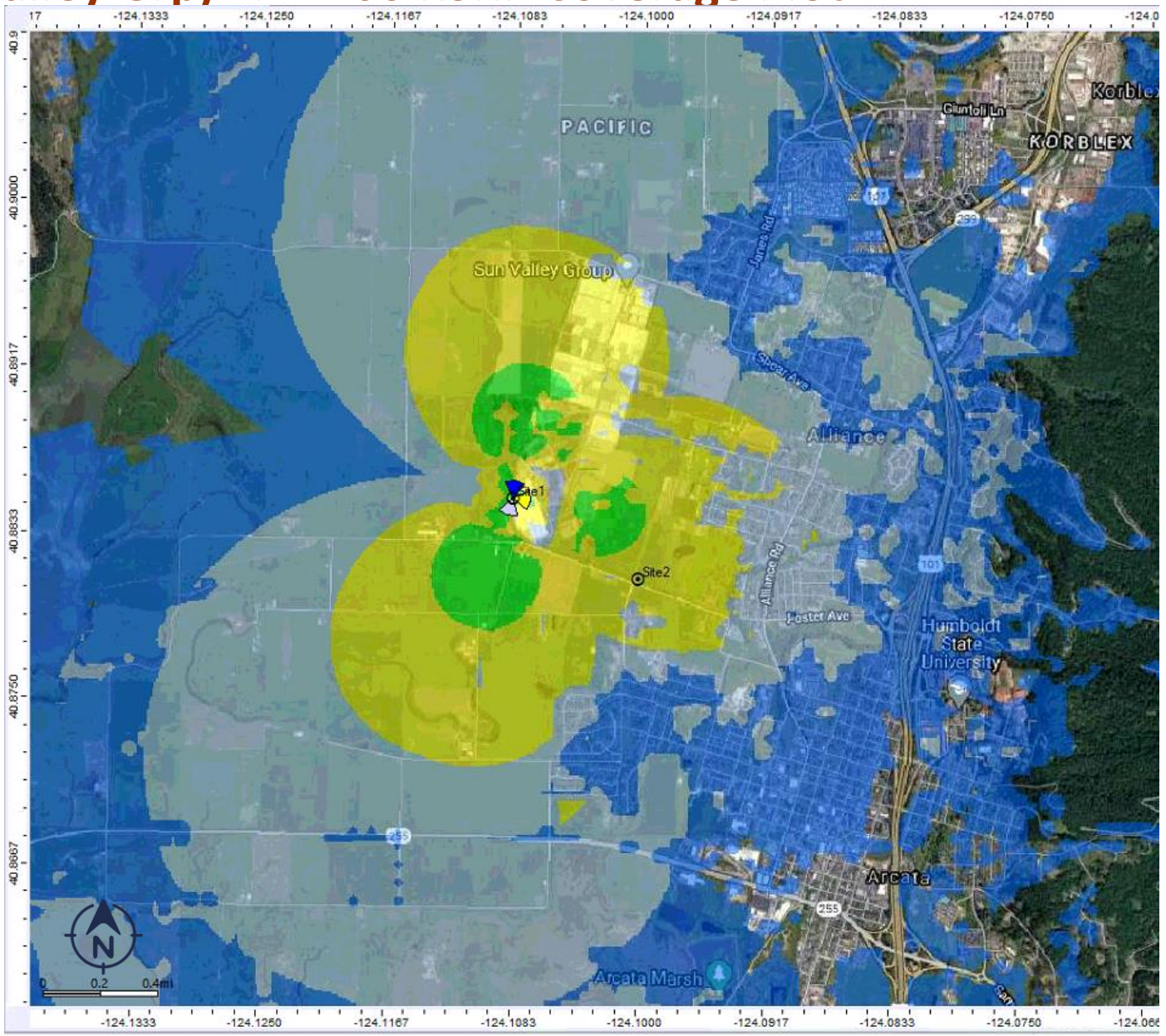
Site 1 (Sun Valley Grp) LTE2100 RSRP Coverage Plot



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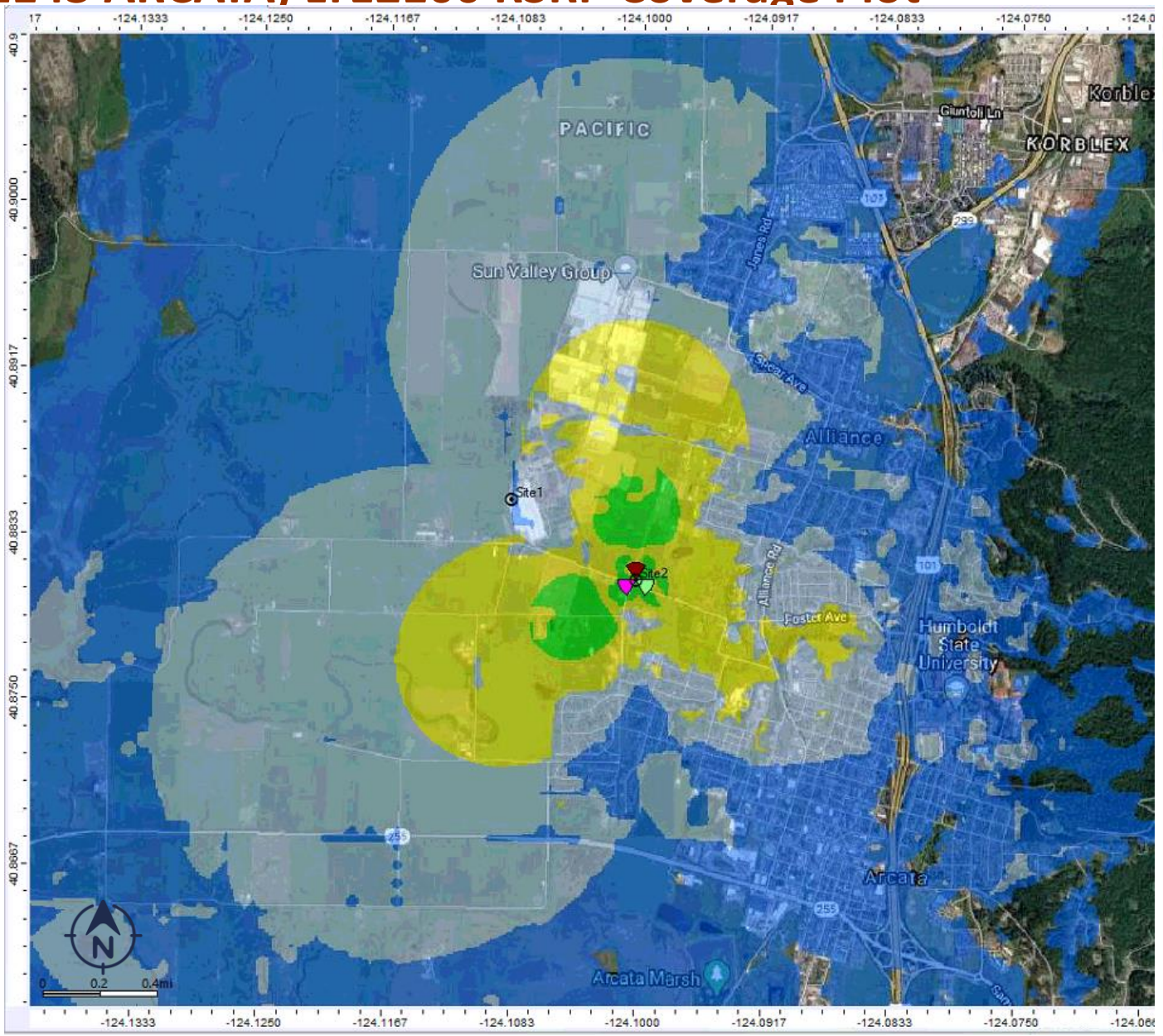
Site 2 (CCL02143 ARCATA) LTE2100 RSRP Coverage Plot



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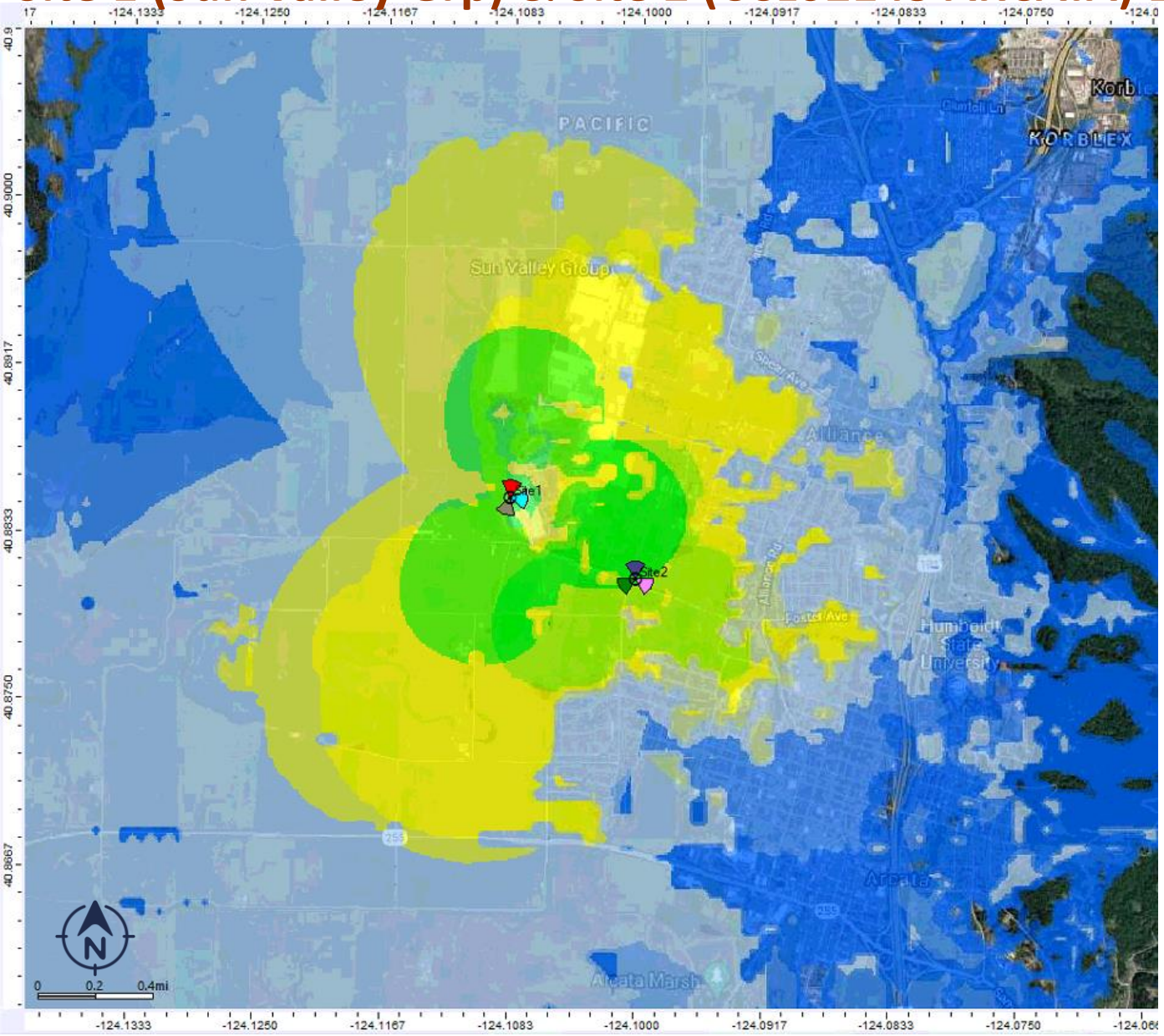
Site 1 (Sun Valley Grp) & Site 2 (CCL02143 ARCATA) LTE700 RSRP Overlay Plots



Site1: L700 RSRP
- Reliable Service Indoors/Outdoors
- Reliable Coverage in Transit Indoor Coverage Less Reliable
- Reliable Coverage Outdoors Only Indoor Coverage Less Reliable
- Outdoor Coverage

Site2: L700 RSRP
- Reliable Service Indoors/Outdoors
- Reliable Coverage in Transit Indoor Coverage Less Reliable
- Reliable Coverage Outdoors Only Indoor Coverage Less Reliable
- Outdoor Coverage

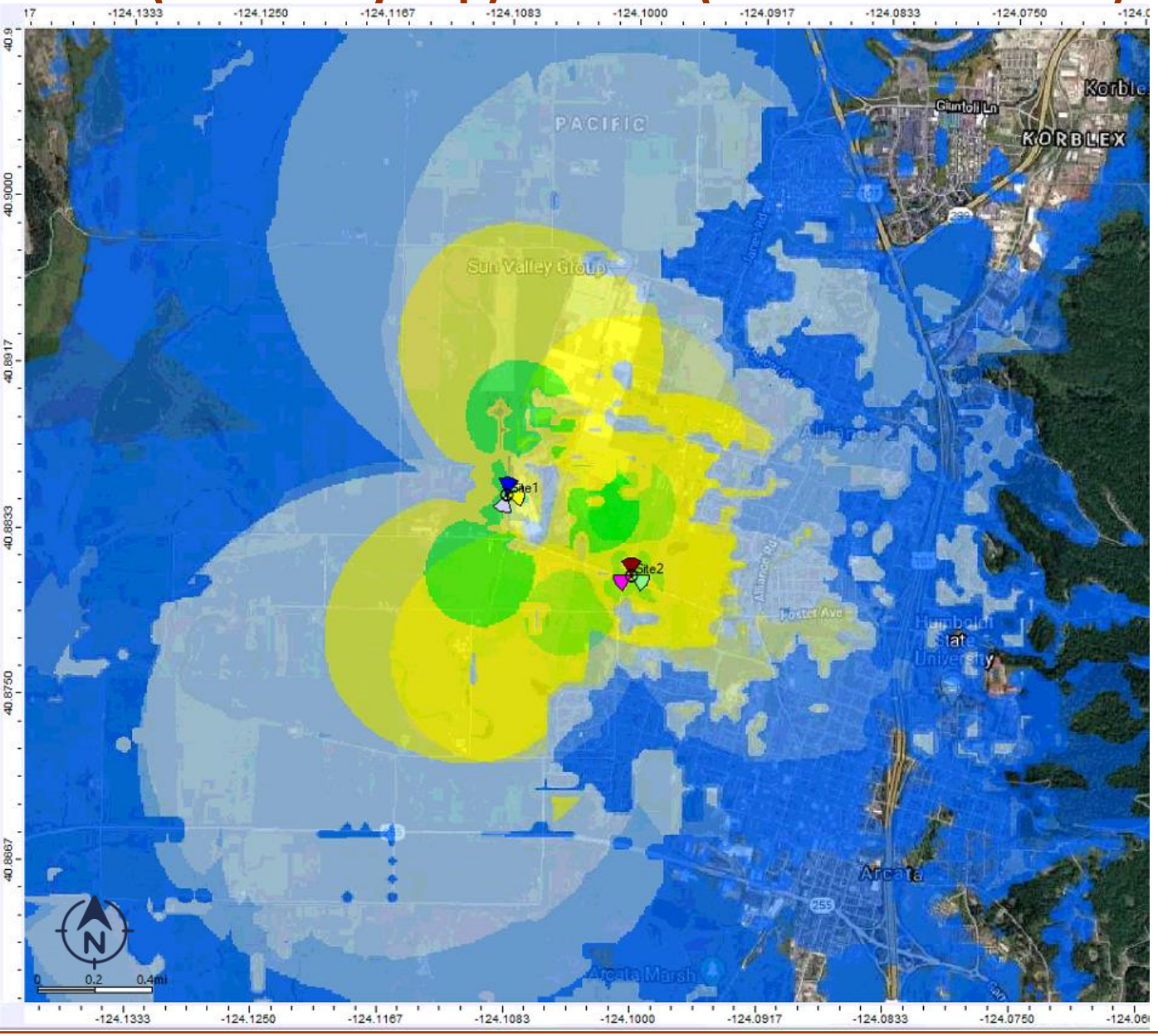
LTE700

Sun Valley Grp has a bigger total coverage area compared to CCL02143 with slightly larger Reliable Indoors/Outdoors, Transit and Outdoor Coverage service areas. Please refer to the tables below for details.

Prediction	Legend	Surface (ft²)	% of Covered Area
Site1: L700 RSRP		**1,290,864,125**	**100**
	Reliable Service Indoors/Outdoors	17,245,939	1.3
	Reliable Coverage in Transit Indoor Coverage Less Reliable	66,471,454	5.1
	Reliable Coverage Outdoors Only Indoor Coverage Less Reliable	364,720,040	28.3
	Outdoor Coverage	842,426,738	65.3

Prediction	Legend	Surface (ft²)	% of Covered Area
Site2: L700 RSRP		**1,129,171,903**	**100**
	Reliable Service Indoors/Outdoors	12,404,330	1.1
	Reliable Coverage in Transit Indoor Coverage Less Reliable	44,944,710	4
	Reliable Coverage Outdoors Only Indoor Coverage Less Reliable	292,966,737	25.9
	Outdoor Coverage	778,856,166	69

Site 1 (Sun Valley Grp) & Site 2 (CCL02143 ARCATA) LTE2100 RSRP Overlay Plots



Site1: L2100 RSRP
- Reliable Service Indoors/Outdoors
- Reliable Coverage in Transit Indoor Coverage Less Reliable
- Reliable Coverage Outdoors Only Indoor Coverage Less Reliable
- Outdoor Coverage

Site2: L2100 RSRP
- Reliable Service Indoors/Outdoors
- Reliable Coverage in Transit Indoor Coverage Less Reliable
- Reliable Coverage Outdoors Only Indoor Coverage Less Reliable
- Outdoor Coverage

LTE2100

Sun Valley Grp has a bigger total coverage area compared to CCL02143 with slightly larger Reliable Indoors/Outdoors, Transit and Outdoor Coverage service areas. Please refer to the tables below for details.

Prediction	Legend	Surface (ft²)	% of Covered Area
Site1: L2100 RSRP		**779,363,106**	**100**
	Reliable Service Indoors/Outdoors	6,619,805	0.8
	Reliable Coverage in Transit Indoor Coverage Less Reliable	40,202,129	5.2
	Reliable Coverage Outdoors Only Indoor Coverage Less Reliable	151,216,796	19.4
	Outdoor Coverage	581,324,329	74.6

Prediction	Legend	Surface (ft²)	% of Covered Area
Site2: L2100 RSRP		**662,870,696**	**100**
	Reliable Service Indoors/Outdoors	3,803,966	0.6
	Reliable Coverage in Transit Indoor Coverage Less Reliable	26,977,588	4.1
	Reliable Coverage Outdoors Only Indoor Coverage Less Reliable	113,625,999	17.1
	Outdoor Coverage	518,463,128	78.2

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

Views

SURROUNDING VIEWS AND ACCESS ROADS

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information	**FOSTER AVE** **WEST VIEW** PG&E POLES AND TREE LINE PHOTO SIMULATION #1	**PWM INC.**
Sun Valley Group- PWM 3160 Upper Bay Road, Arcata, CA 95521 APN: 506-231-010 Lattice Tower Height: 130' Site Elevation 23'		P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net

Site Information Sun Valley Group- PWM 3160 Upper Bay Road, Arcata, CA 95521 APN: 506-231-010 Lattice Tower Height: 130’ Site Elevation 23’	**SEIDEL RD.** **SOUTH VIEW** TREE LINE VIEW PHOTO #2	**PWM INC.** P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130’
Site Elevation 23’

SEIDEL RD.

NORTH VIEW

TREE LINE

VIEW PHOTO #3

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information	UPPER BAY ROAD WEST SOUTH WEST VIEW TREE LINE VIEW PHOTO #5	PWM INC.
Sun Valley Group- PWM 3160 Upper Bay Road, Arcata, CA 95521 APN: 506-231-010 Lattice Tower Height: 130' Site Elevation 23'		P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net

Site Information	JANES RD & VAISSADE RD. INTERSECTION	PWM INC.
Sun Valley Group- PWM	**NORTH VIEW**	P.O. Box 1032, Eureka, CA 95502
3160 Upper Bay Road, Arcata, CA 95521	PG&E POLES	Contact: Tom McMurray
APN: 506-231-010	VIEW PHOTO #6	Cell: (707) 499-0901
Lattice Tower Height: 130’		Email: tjmacjr@pacbell.net
Site Elevation 23’		

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

JANES RD. &11TH ST. INTERSECTION

EAST VIEW

PG&E INFRASTRUCTURE

VIEW PHOTO #7

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

Map View

ALTERNATIVE SITE ANALYSIS

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Name	Date modified	Type	Size
2727 Bay School Rd. Aerial View	9/29/2016 3:09 PM	Adobe Acrobat Document	175 KB
Arcata Bottom APN Map 9-13-16	9/29/2016 3:09 PM	Adobe Acrobat Document	571 KB
Arcata Bottom Map 9-13-16	9/29/2016 3:09 PM	Adobe Acrobat Document	336 KB
Arcata Bottom Ownership 9-13-16	9/29/2016 3:09 PM	Adobe Acrobat Document	426 KB
Arcata Bottom Parcel Map 9-13-16	9/29/2016 3:09 PM	Adobe Acrobat Document	240 KB
Arcata Bottom Site	9/12/2016 12:40 PM	Adobe Acrobat Document	1,263 KB
Arcata Bottoms Map 1 of 2	4/17/2017 2:00 PM	Adobe Acrobat Document	560 KB
Arcata Bottoms Map 2 of 2	4/17/2017 2:00 PM	Adobe Acrobat Document	418 KB
Arcata Bottoms Property Owners 4-7-17	4/7/2017 1:19 PM	Adobe Acrobat Document	493 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16(PWM 11-7-16)pg.7	11/7/2016 12:25 PM	Microsoft Word Document	17 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16(PWM Redlines 11-7-16)	11/7/2016 12:26 PM		502 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16(PWM Redlines Pg.7)(11-7-16)	11/7/2016 12:38 PM		18 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16	10/17/2016 1:09 PM		502 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16	10/17/2016 1:10 PM		499 KB
Arcata Bottoms-Property Owners	4/17/2017 3:32 PM		439 KB
Arcata Sun Valley Farms Site	1/11/2018 2:26 PM		,507 KB
Arcata Sun Valley Farms	1/11/2018 2:15 PM		,605 KB
Butler (1)	6/12/2017 2:06 PM		,651 KB
Butler Left Side	6/12/201[illegible] 2:06 PM		,300 KB
Butler	6/12/2017 2:06 PM		,608 KB
Fulton (1)	6/12/2017 2:06 PM		,882 KB
Fulton (2)	6/12/2017 2:06 PM		,692 KB
Fulton	6/12/2017 2:06 PM	JPG File	4,464 KB
Moxon	6/12/2017 2:06 PM	JPG File	3,877 KB
PWM Fulton (2)	6/12/2017 2:06 PM	JPG File	3,520 KB
PWM Fulton Site_4765	6/12/2017 2:06 PM	JPG File	4,810 KB
PWM Maxon (2)	6/12/2017 2:06 PM	JPG File	4,304 KB
PWM Maxon Site	6/12/2017 2:06 PM	JPG File	4,210 KB
PWM Mxon (1).	6/12/2017 2:06 PM	JPG File	6,062 KB
St. Mary School (1)	6/12/2017 2:06 PM	JPG File	499 KB
St. Mary School (2)	6/12/2017 2:06 PM	JPG File	683 KB
St. Mary School	6/12/2017 2:06 PM	JPG File	418 KB

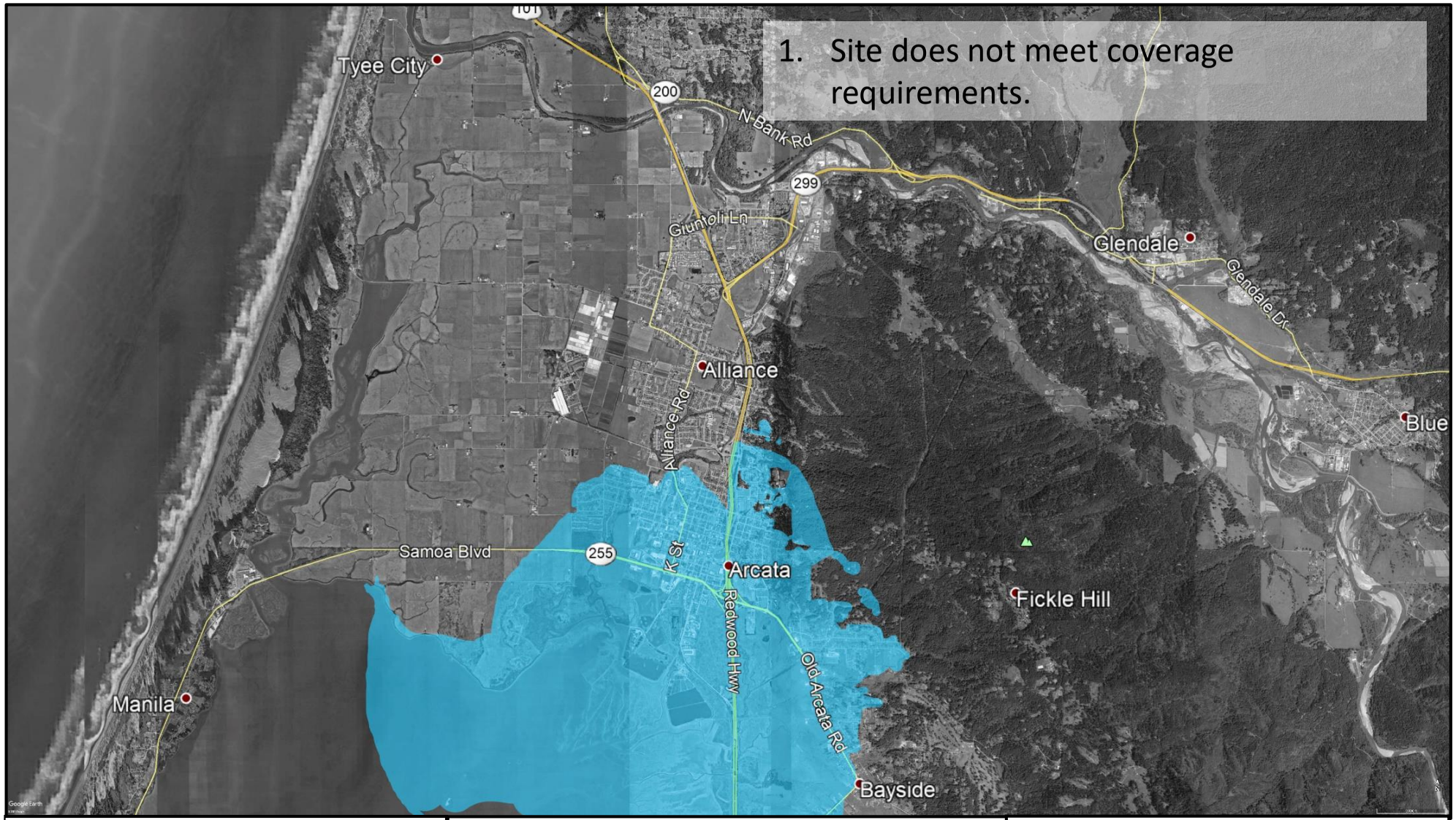
PWM has been assessing potential sites since 2015. These files represent work achieved from options pursued.

Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

ALTERNATIVE SITE ANALYSIS

HISTORICAL FILES SURROUNDING AREA

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net



Site Information Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	**ALTERNATIVE SITE ANALYSIS** #1 EXISTING ARCATA 100' TOWER	**PWM INC.** P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net

1. Site does not meet coverage requirements, as evidenced by an existing carrier's proposal for an Arcata Bottoms Site.
2. Dense limb attachments to pole limits additional mount locations and limits additional antennas.
3. AT&T, Verizon, T-Mobile, and USCC are co-located on the HSU Monopole.
4. Due to the conditions, in 2005 Clearwire determined it was not an appropriate location.

View from HSU tower looking out

Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

ALTERNATIVE SITE ANALYSIS

#2 HSU EXISTING TOWER

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

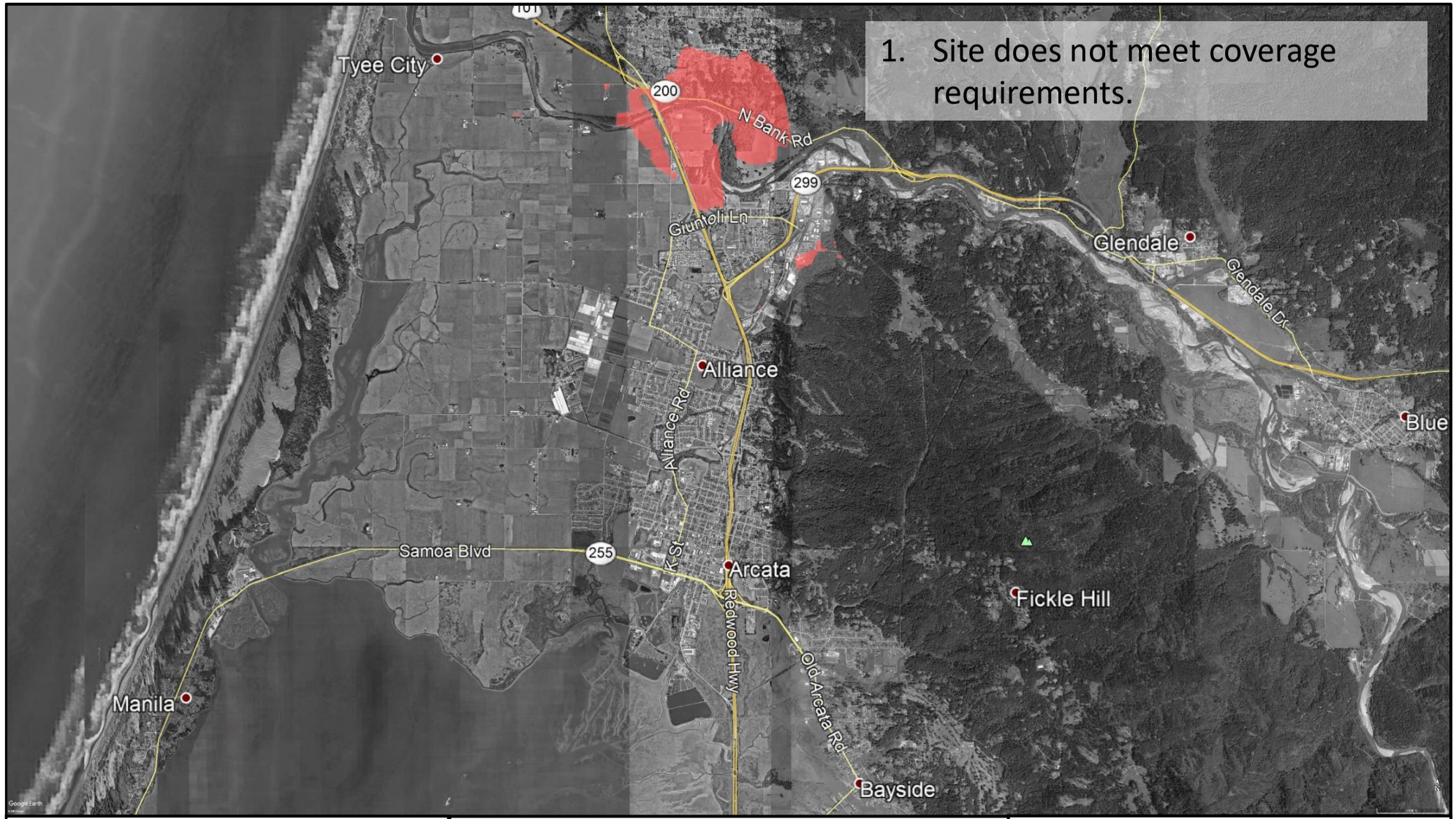
1. Site does not meet coverage requirements due to shadowed areas along Alliance Road.
2. Site is not suitable for four carriers

Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

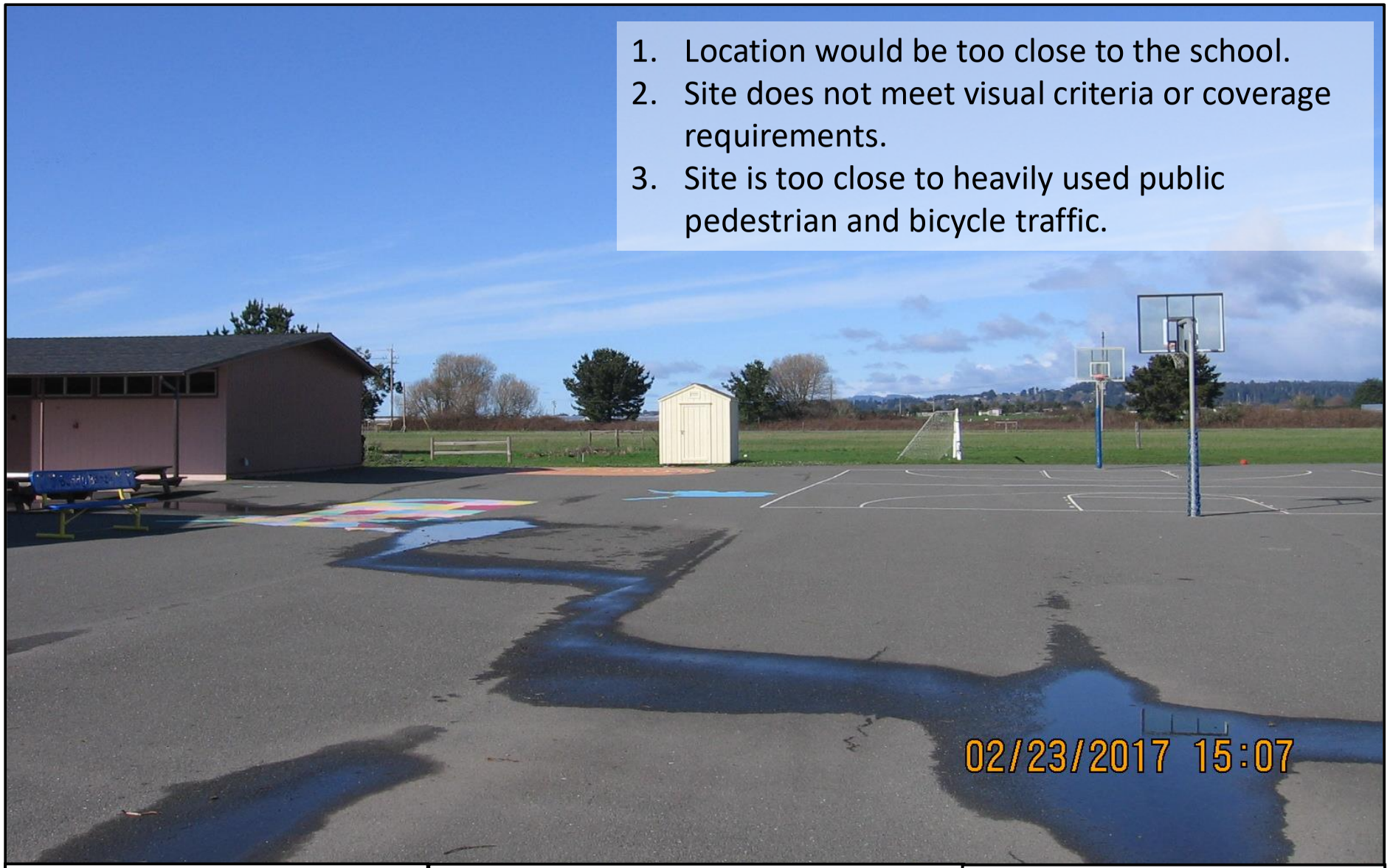
ALTERNATIVE SITE ANALYSIS

#3 EXISTING HSU ROOFTOP TOWER

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net



Site Information Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	**ALTERNATIVE SITE ANALYSIS** #4 EXISTING NORTH BANK 130' TOWER	**PWM INC.** P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net



Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

ALTERNATIVE SITE ANALYSIS

#5 ST. MARY'S SCHOOL

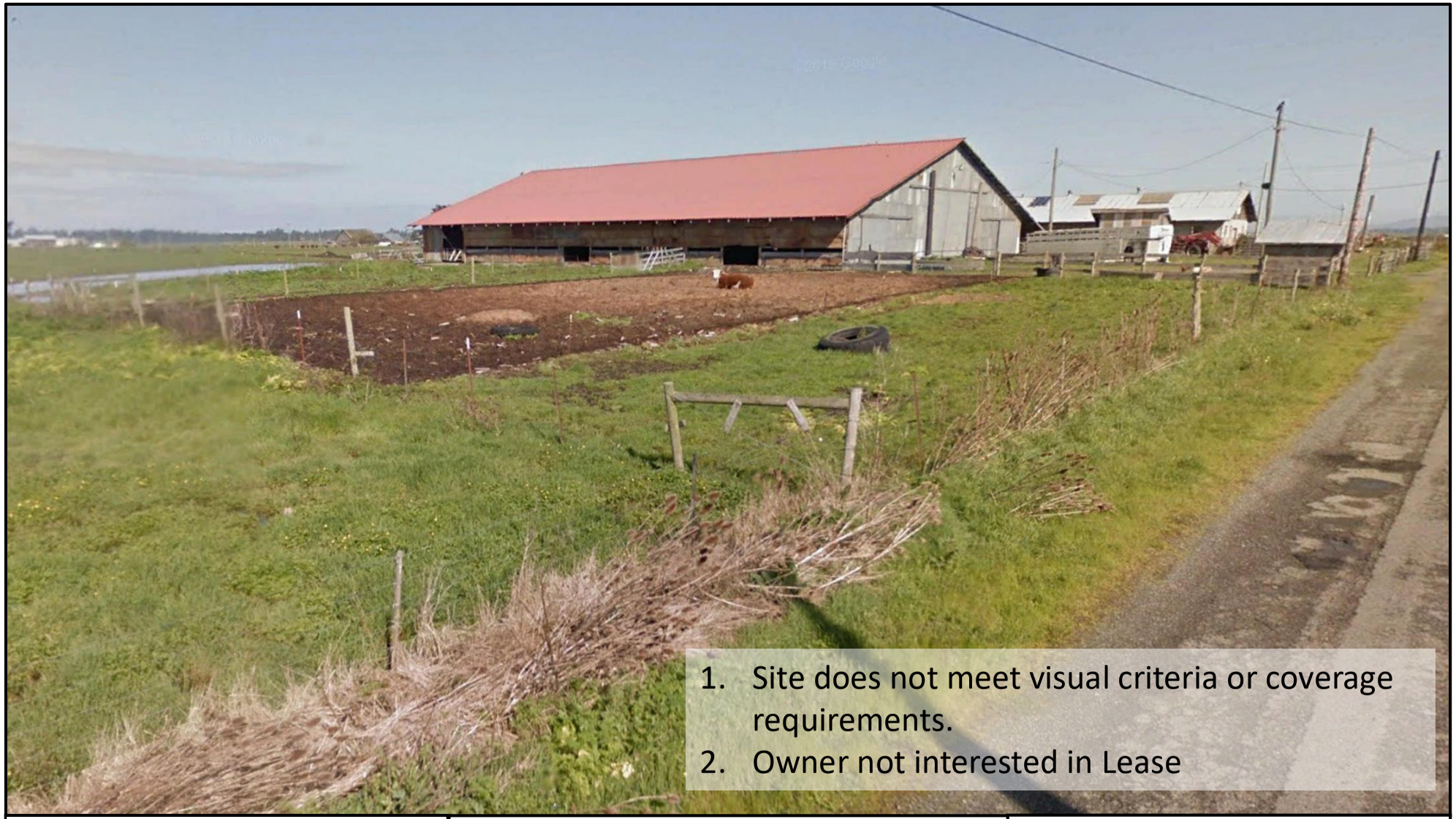
PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

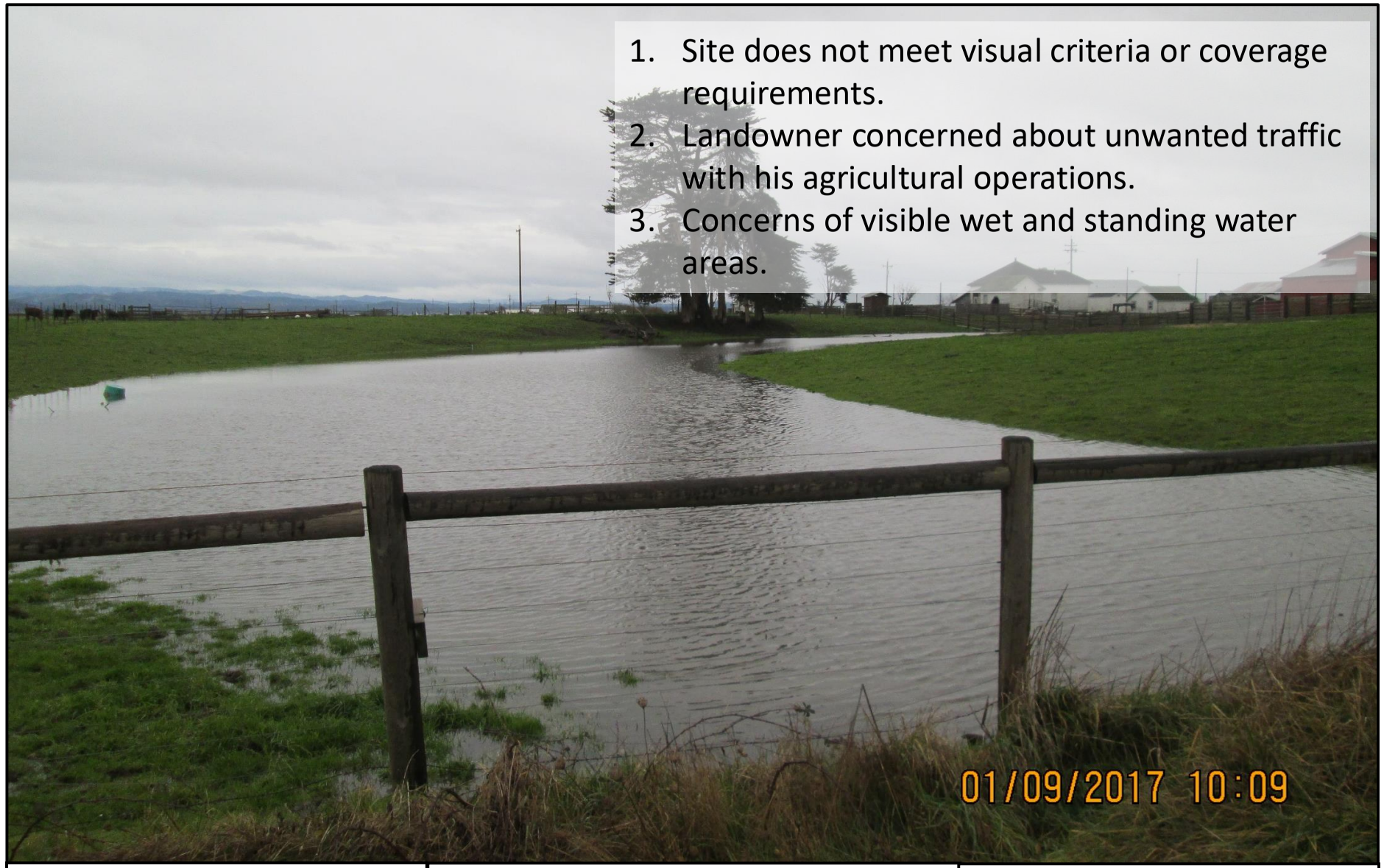
ALTERNATIVE SITE ANALYSIS

#6 INTERSECTION OF DOLLY VARDEN AND BAY SCHOOL ROAD

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net



Site Information	ALTERNATIVE SITE ANALYSIS	PWM INC.
Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	#7 MAXON SITE ON MAXON LANE	P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net



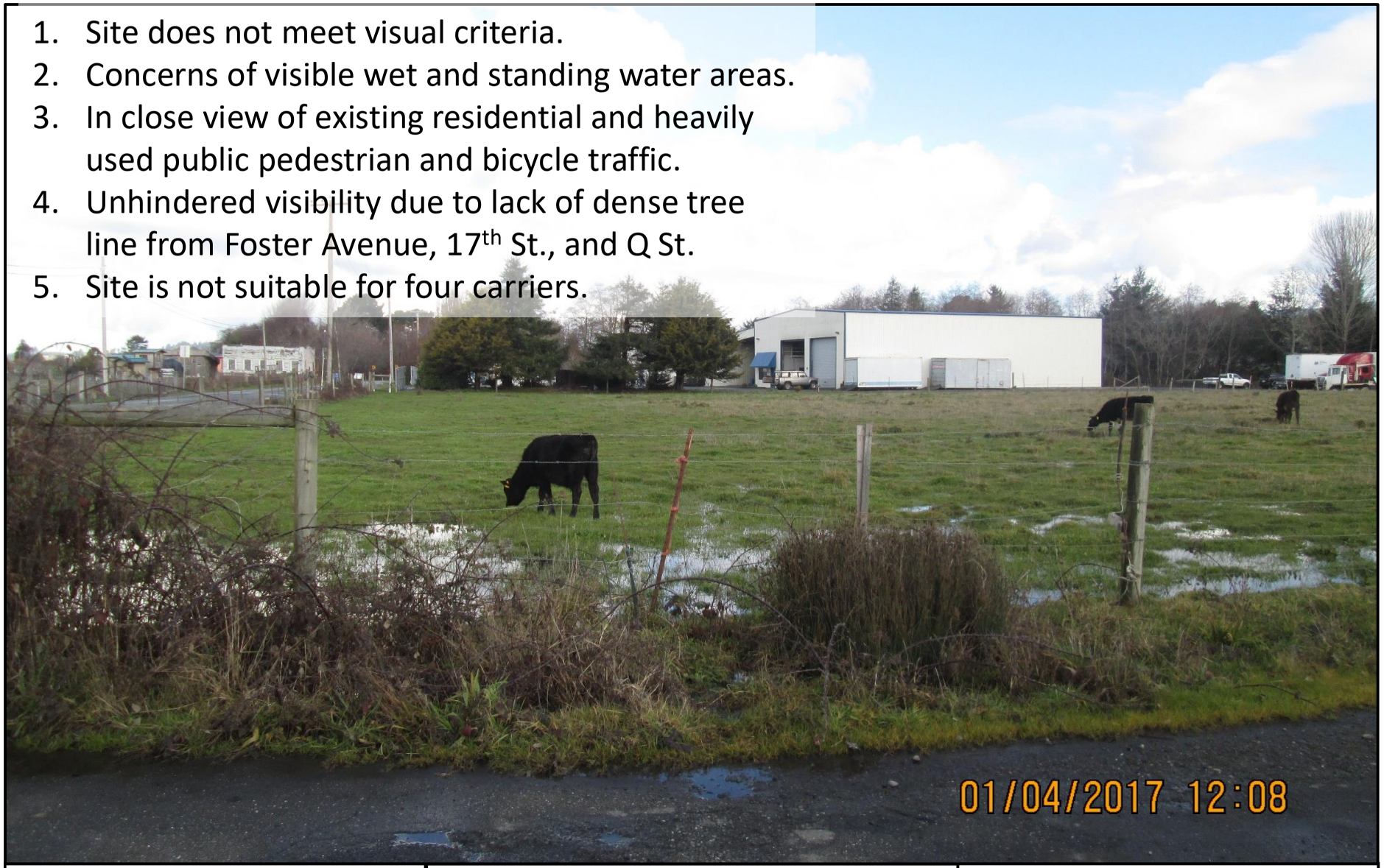
Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

ALTERNATIVE SITE ANALYSIS

#8 FULTON SITE VIEW

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

1. Site does not meet visual criteria.
2. Concerns of visible wet and standing water areas.
3. In close view of existing residential and heavily used public pedestrian and bicycle traffic.
4. Unhindered visibility due to lack of dense tree line from Foster Avenue, 17th St., and Q St.
5. Site is not suitable for four carriers.



Site Information	ALTERNATIVE SITE ANALYSIS	PWM INC.
Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	#9 BUTLER SITE ON FOSTER AVENUE	P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

ALTERNATIVE SITE ANALYSIS

#10 DAIRY RANCH ON MAXON LANE AND VAISSADE ROAD

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group - PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

Map View

PHOTO SIMULATIONS

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

JANES ROAD NORTHWEST VIEW

PHOTO SIMULATION #1

#1 ST. MARY'S CHURCH PARKING LOT

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

JANES ROAD NORTHWEST VIEW

PHOTO SIMULATION #2

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

FOSTER AVENUE EAST VIEW

PHOTO SIMULATION #3

FOSTER AVENUE AND SEIDEL ROAD

INTERSECTION

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

SEIDEL RD & LANPHERE RD. INTERSECTION

SOUTH EAST VIEW

PHOTO SIMULATION #4

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

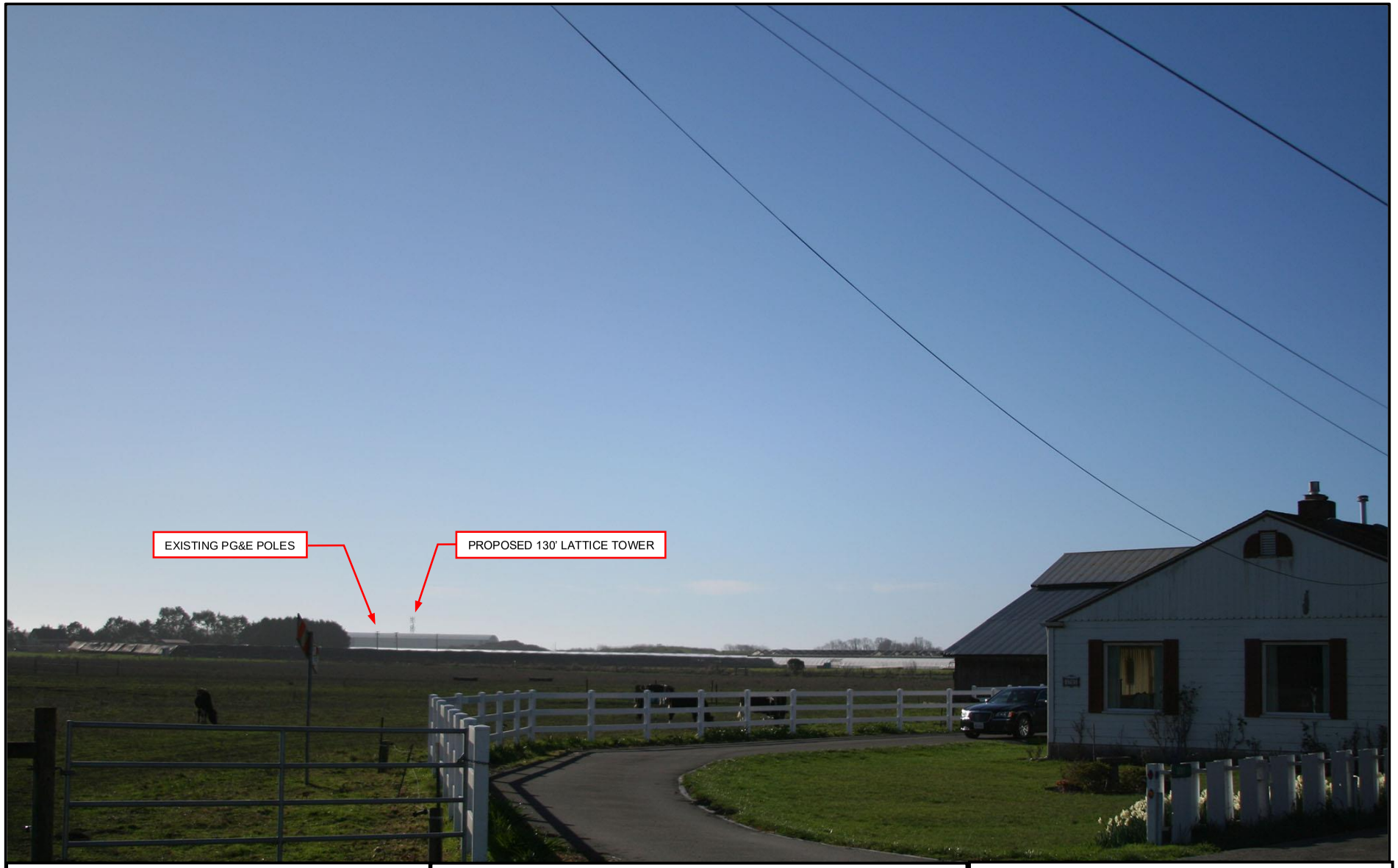
Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

UPPER BAY ROAD NEAR UPPER BAY RD & MAD RIVER RD. INTERSECTION

SOUTH VIEW

PHOTO SIMULATION #5

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net



Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

CORNER OF JANES RD. & SPEAR AVE.

SOUTH WEST VIEW

PHOTO SIMULATION #6

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

ENNES PARK NEAR THE CORNER OF WYATT LN. & STUART AVE.

WEST VIEW

PHOTO SIMULATION #7

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

From: Thomas McMurray
To: Brian Millar
Cc: Johnson, Cliff; Thomas McMurray; Ainsley Parks (ainsleyparks@outlook.com); "Lisa McMurray"
Subject: RE: Sun Valley Visit
Date: Tuesday, June 22, 2021 10:14:21 AM
Attachments: Sun Valley PWM TowerCounty General Plan Guidelines.pdf
Sun Valley Group- PWM 3.9.21.pdf

Hello Brian and Cliff: We would be willing to reduce the tower height to 120 ft and still be able to do four (4) carriers. My concern is that the AT&T site is at 100 ft. for two carriers. In following the direction of the County General Plan Guidelines (attached) and past County approved projects for multiple carriers, we determined that a two carrier pole was not acceptable. If the County's decision was to have two sites in that area, we could do a 100 ft. pole/tower but that would not meet the County General Plan guidelines, Telecommunications Facilities Ordinance or provide for future Wireless growth. We are hopeful that our presentation (attached) can be reviewed by the Planning Commission. Please advise if that is possible. This site represents at least 10 years of reviewing alternative sites for a tower location in the Arcata Bottom area and a concentrated effort over the last five years as shown in our Alternative Analysis contained in our presentation Sun Valley Group-PWM 3.9.21 11 pdf 11 MB attached. I am willing to answer any further questions you may have. Thank you, Tom

Thomas J. McMurray Jr.
PWM Inc. a Pacific Coast Towers Company
P.O. Box 6660 Eureka, California 95502
2039 Williams Street-FedEx/UPS only
Phone: 707-499-0901-Direct
tmcjr@outlook.com

From: Brian Millar <brian@landlogistics.com>
Sent: Tuesday, June 22, 2021 8:59 AM
To: Thomas McMurray <tjmcjr@outlook.com>
Cc: Johnson, Cliff <CJohnson@co.humboldt.ca.us>
Subject: Re: Sun Valley Visit

Mr. McMurray,
Thank you for the messages. I wanted to ask if you would like us to include your below-noted tower design alternatives in our presentation to the Planning Commission on July 1st?
Brian Millar

From: Thomas McMurray <tjmcjr@outlook.com>

Sent: Monday, June 21, 2021 4:22 PM
To: Brian Millar <brian@landlogistics.com>; Johnson, Cliff <CJohnson@co.humboldt.ca.us>
Cc: Thomas McMurray <tjmcjr@outlook.com>
Subject: FW: Sun Valley Visit

Hello: Our proposed tower could be reduced to 100 ft. and accommodate 3 carriers, maybe four. There are four carriers that can use a site in that area with the addition of the upcoming Dish Network. Thank you, Tom

---

From: Thomas McMurray
Sent: Monday, June 21, 2021 4:08 PM
To: Brian Millar <brian@landlogistics.com>; Johnson, Cliff <CJohnson@co.humboldt.ca.us>
Cc: Me <tjmacjr@pacbell.net>
Subject: RE: Sun Valley Visit

Hello Brian: Thank you for meeting me at the site today. Please note that the building on the other side is much taller than the one next to the site in case the height is going to be an issue. This tower could be reduced by 10 ft. if necessary and still accommodate 4 carriers. I am hopeful that the Commission can see our presentation. If you need more information, please let me know. Thank you, Tom

Thomas J. McMurray Jr.
TJMAC LLC
P.O. Box 666O, Eureka, CA 95502
2039 Williams Street - FedEx/UPS only
Phone: 707-499-0901
tjmcjr@outlook.com

From: Brian Millar <brian@landlogistics.com>
Sent: Thursday, June 17, 2021 11:53 AM
To: Thomas McMurray <tjmcjr@outlook.com>
Cc: Me <tjmacjr@pacbell.net>
Subject: Re: Sun Valley Visit

Thomas,
I expect to be there at 3:00pm nest Monday - will see you at the entry gate then.
Brian Millar

From: Thomas McMurray <tjmcjr@outlook.com>
Sent: Thursday, June 17, 2021 11:49 AM
To: Brian Millar <brian@landlogistics.com>
Cc: Me <tjmacjr@pacbell.net>
Subject: Sun Valley Visit

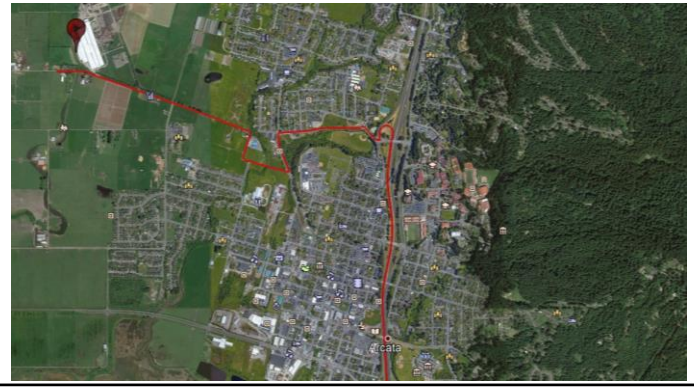
Hello Brian: If you would like to visit the site, I will have to join you there. Please let me know a time to meet you there Monday at the Foster Avenue gate entrance. Please note that there is another gate before you reach the correct one. Thank you, Tom

Thomas J. McMurray Jr.
PWM Inc. a Pacific Coast Towers Company
P.O. Box 6660 Eureka, California 95502
2039 Williams Street-FedEx/UPS only
Phone: 707-499-0901-Direct
tmcjr@outlook.com

PWM INC.

SITE NAME: SUN VALLEY GROUP
3160 Upper Bay Road, Arcata, CA 95521

CODE JURISDICTION:	COUNTY OF HUMBOLDT
LATITUDE:	N 40° 53' 07.02"
LONGITUDE:	W 124° 06' 30.61"
ELEVATION:	19 FT. APPROX.
TAX PARCEL NO:	506-231-019
ZONING:	Q- QUALIFIED
PROJECT AREA:	50' x 60' (3,000 SQ. FT.)



CONTRACTOR TO VERIFY ACTUAL NORTH ON JOBSITE

VICINITY MAP

1. BEGINNING ON US HIGHWAY 101 NORTH
2. TAKE EXIT 714B SUNSET AVE.
3. TURN LEFT ONTO SUNSET AVE. 0.2 MILES
4. AT THE TRAFFIC CIRCLE TAKE THE THIRD EXIT TO FOSTER AVE. 0.4 MILES
5. TURN LEFT ONTO ALLIANCE RD. 0.2 MILES
6. TURN RIGHT ONTO 17TH ST. 0.2 MILES
7. CONTINUE ONTO FOSTER AVE./Q ST.
8. 3160 UPPER BAY ROAD. IS LOCATED ON THE RIGHT.

CONSTRUCTION MANAGER:
PWM INC.
P.O. BOX 1032
EUREKA, CA 95502
CONTACT: TOM MCMURRAY
CELL: 707-499-0901
EMAIL: TJMCJR@OUTLOOK.COM

LEASEHOLDER:
PWM INC.
P.O. BOX 1032
EUREKA, CA 95502
CONTACT: TOM MCMURRAY
CELL: 707-499-0901
EMAIL: TJMCJR@OUTLOOK.COM

PROPERTY OWNER:
ARCATA LAND COMPANY
3160 UPPER BAY RD.
ARCATA, CA 95521

ZONING AGENT:
PWM INC.
P.O. BOX 1032
EUREKA, CA 95502
CONTACT: TOM MCMURRAY
CELL: 707-499-0901
EMAIL: TJMCJR@OUTLOOK.COM

POWER COMPANY
PG&E
CONTACT: CUSTOMER SERVICE
TEL: 800-743-5000

TOWER MANUFACTURER:
VALMONT INDUSTRIES, INC.

CODE COMPLIANCE:
ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS 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:

1. 2016 CALIFORNIA ADMINISTRATIVE CODE, CHAPTER 10, PART 1, TITLE 24 CODE OF REGULATIONS
2. 2016 CALIFORNIA BUILDING CODE (CBC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2015 IBC (PART 2. VOL 1-2)
3. 2016 CALIFORNIA RESIDENTIAL CODE (CRC) WITH APPENDIX H, PATIO COVERS, BASED ON THE 2015 IRC (PART 2.5)
4. 2016 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11) (AFFECTED ENERGY PROVISIONS ONLY)
5. 2016 CALIFORNIA FIRE CODE (CFC). BASED ON THE 2015 IFC, WITH CALIFORNIA AMENDMENTS (PART 9)
6. 2016 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2015 UMC (PART 4)
7. 2016 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2015 UPC (PART 5)
8. 2016 CALIFORNIA ELECTRICAL CODE (CEC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2015 NEC (PART 3)
9. 2016 CALIFORNIA ENERGY CODE(CEC)
10. ANSI/ EIA -TIA-222 H
11. 2015 NFPA 101, LIFE SAFETY CODE
12. 2016 NFPA 72, NATIONAL FIRE ALARM CODE
13. 2016 NFPA 13, FIRE SPRINKLER CODE
14. ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS

GENERAL NOTES:
CONTRACTOR SHALL:

1. IMPLEMENT "BEST MANAGEMENT PRACTICES" FOR EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION PHASE OF THE PROJECT.
2. RESEED/GRAVEL DISTURBED AREAS PRIOR TO WINTER RAIN.
3. TAKE ALL PRECAUTIONS NECESSARY TO AVOID THE ENCROACHMENT OF DIRT OR DEBRIS ON ADJACENT PROPERTIES.

DRIVING DIRECTIONS

1 OF 7 TITLE SHEET
2 OF 7 OVERALL SITE PLAN
3 OF 7 AERIAL SITE VIEW
4 OF 7 SITE PLAN
5 OF 7 ELEVATIONS
6 OF 7 SELF SUPPORTING TOWER
7 OF 7 LATTICE TOWER SLAB FOUNDATION

LEGEND

CL= CENTER LINE
(P) = PROPOSED
(E) = EXISTING
NTS = NOT TO SCALE
TBD = TO BE DETERMINED
UNO = UNLESS NOTED OTHERWISE
RRU/RRH = REMOTE RADIO UNIT

PROJECT DIRECTORY

THE PROPOSED DEVELOPMENT OF A NEW WIRELESS TELECOMMUNICATIONS FACILITY CONSISTING PRIMARILY OF A 130-FT. TALL LATTICE TOWER PLACED ON A CONCRETE FOUNDATION TO SUPPORT EQUIPMENT FOR UP TO FOUR CARRIERS AND THE CONSTRUCTION AND LOCATION OF THE FOLLOWING EQUIPMENT: CABINET(S) PLACED ON CONCRETE EQUIPMENT PADS, SHELTER(S) PLACED ON CONCRETE FOUNDATIONS, STANDBY PROPANE AND DIESEL GENERATOR(S) WITH ENCLOSED TANK(S), PROPANE TANK(S), H-FRAME(S) FOR UTILITIES AND ANY OTHER MISCELLANEOUS EQUIPMENT; ALL LOCATED WITHIN THE 50' x 60' (3,000 SQ. FT.) LEASE AREA. EXCAVATE EXISTING FILL AND REPLACE WITH 46 YARDS OF COMPACTED GRAVEL. COMPACTED GRAVEL FILL ON BALANCE OF SITE. UNDERGROUND UTILITIES WILL BE COMPACTED SAND AND GRAVEL. ALL EXCAVATED FILL TO BE DEPOSITED ON SITE AND AT SUN VALLEY GROUP PROPERTY. THE LEASE AREA WILL BE ENCLOSED BY A 6-FT. TALL FENCE. THE CARRIER'S EQUIPMENT WILL IMPROVE, EXTEND AND PROVIDE WIRELESS SERVICE TO ARCATA, VALLEY WEST SHOPPING CENTER- GIUNTOLI LANE, US 101 NORTH- MCKINLEYVILLE, HIGHWAY 299, AND THE SURROUNDING AREAS. PG&E UNDERGROUND FROM EXISTING WAREHOUSE. NO PLUMBING OR HUMAN OCCUPANCY REQUIRED. ACCESS TO THE LEASE AREA IS OVER AN EXISTING PAVED ROAD. NO ARTIFICIAL LIGHTING OR GUY WIRES ARE PROPOSED OR REQUIRED FOR THIS PROJECT. EQUIPMENT AND MATERIALS WILL BE STAGED ON THE EXISTING GRAVELED PARKING AREA LOCATED APPROXIMATELY 20 FT. SOUTHWEST OF THE PROPOSED SITE.

PROJECT DESCRIPTION

DRAWING INDEX

NO.	REVISIONS	DATE
B	REVISION	3/9/2021
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SITE INFORMATION

SUN VALLEY GROUP
COMMUNICATION SITE
TITLE SHEET

PAGE 1 OF 7

RECORD OF SURVEY
FOR
ARCATA LAND COMPANY LLC
IN
SECTIONS 19, 20, 29 & 30 T6N, R1E, HUMBOLDT MERIDIAN
IN THE UNINCORPORATED AREA OF HUMBOLDT COUNTY
FEBRUARY 2019 SCALE 1" = 250'

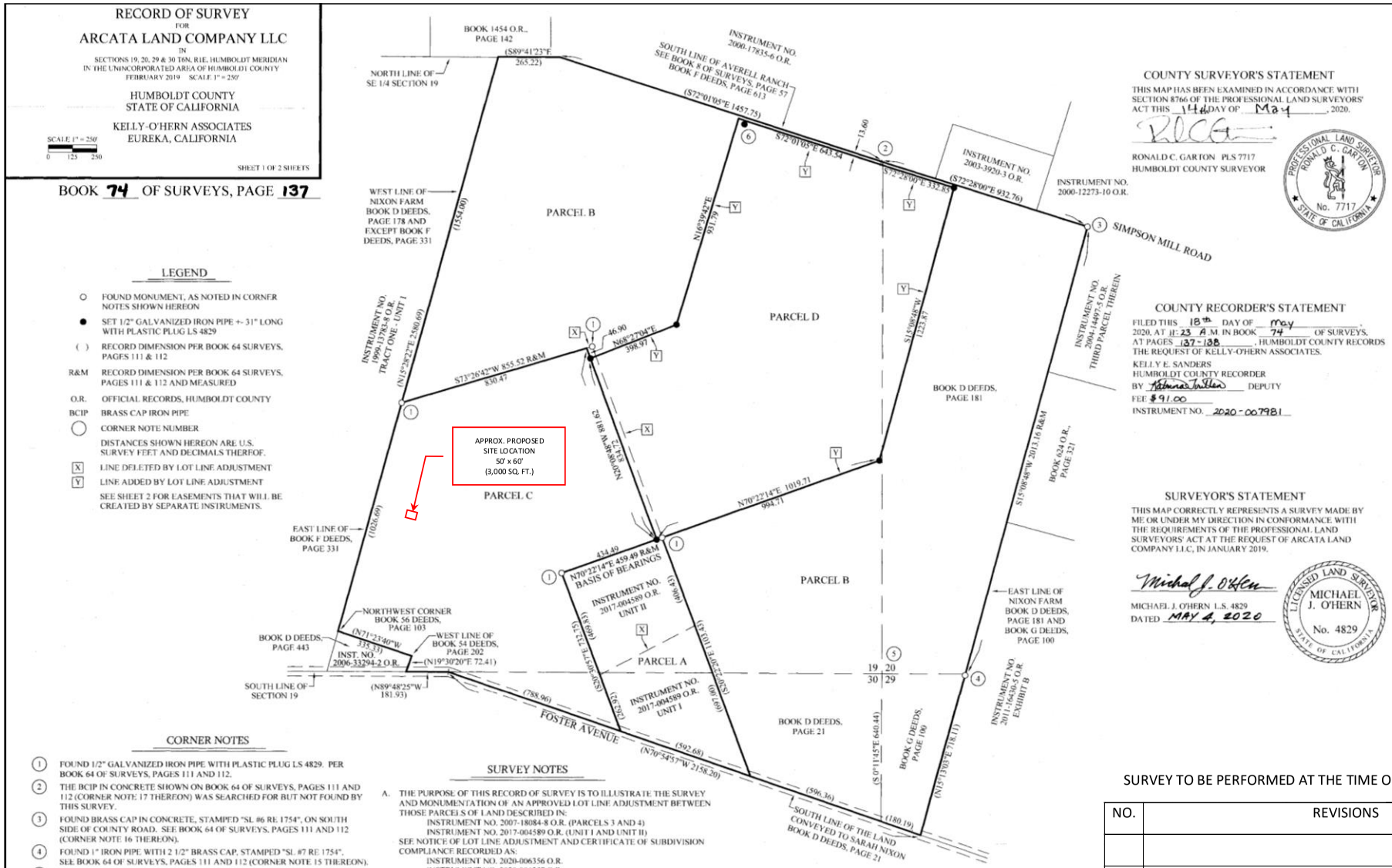
HUMBOLDT COUNTY
STATE OF CALIFORNIA

KELLY-O'HERN ASSOCIATES
EUREKA, CALIFORNIA

SCALE 1" = 250'
0 125 250

SHEET 1 OF 2 SHEETS

BOOK 74 OF SURVEYS, PAGE 137



LEGEND

- ○ FOUND MONUMENT, AS NOTED IN CORNER NOTES SHOWN HEREON
- ● SET 1/2" GALVANIZED IRON PIPE +- 31" LONG WITH PLASTIC PLUG LS 4829
- ( ) RECORD DIMENSION PER BOOK 64 SURVEYS, PAGES 111 & 112
- R&M RECORD DIMENSION PER BOOK 64 SURVEYS, PAGES 111 & 112 AND MEASURED
- O.R. OFFICIAL RECORDS, HUMBOLDT COUNTY
- BCIP BRASS CAP IRON PIPE
- ◯ CORNER NOTE NUMBER
- DISTANCES SHOWN HEREON ARE U.S. SURVEY FEET AND DECIMALS THEREOF.
- [X] LINE DELETED BY LOT LINE ADJUSTMENT
- [Y] LINE ADDED BY LOT LINE ADJUSTMENT
- SEE SHEET 2 FOR EASEMENTS THAT WILL BE CREATED BY SEPARATE INSTRUMENTS.

CORNER NOTES

1. FOUND 1/2" GALVANIZED IRON PIPE WITH PLASTIC PLUG LS 4829. PER BOOK 64 OF SURVEYS, PAGES 111 AND 112.
2. THE BCIP IN CONCRETE SHOWN ON BOOK 64 OF SURVEYS, PAGES 111 AND 112 (CORNER NOTE 17 THEREON) WAS SEARCHED FOR BUT NOT FOUND BY THIS SURVEY.
3. FOUND BRASS CAP IN CONCRETE, STAMPED "SL #6 RE 1754", ON SOUTH SIDE OF COUNTY ROAD. SEE BOOK 64 OF SURVEYS, PAGES 111 AND 112 (CORNER NOTE 16 THEREON).
4. FOUND 1" IRON PIPE WITH 2 1/2" BRASS CAP, STAMPED "SL #7 RE 1754", SEE BOOK 64 OF SURVEYS, PAGES 111 AND 112 (CORNER NOTE 15 THEREON).
5. SECTION CORNER - CALCULATED LOCATION FROM BOOK 64 OF SURVEYS, PAGES 111 & 112 SHOWN HEREON. NOT VISITED BY THIS SURVEY.
6. SET REFERENCE MONUMENT (ACTUAL CORNER FALLS IN A DITCH). ACTUAL CORNER BEARS N58°32'09"W 15.54 FEET FROM REFERENCE MONUMENT.

SURVEY NOTES

A. THE PURPOSE OF THIS RECORD OF SURVEY IS TO ILLUSTRATE THE SURVEY AND MONUMENTATION OF AN APPROVED LOT LINE ADJUSTMENT BETWEEN THOSE PARCELS OF LAND DESCRIBED IN:
INSTRUMENT NO. 2007-18084-8 O.R. (PARCELS 3 AND 4)
INSTRUMENT NO. 2017-004589 O.R. (UNIT I AND UNIT II)
SEE NOTICE OF LOT LINE ADJUSTMENT AND CERTIFICATE OF SUBDIVISION COMPLIANCE RECORDED AS:
INSTRUMENT NO. 2020-006356 O.R.
INSTRUMENT NO. 2020-006357 O.R.

B. THIS SURVEY IS BASED ON BOOK 64 OF SURVEYS, PAGES 111 AND 112.

C. ONLY THE LINES CREATED BY LOT LINE ADJUSTMENT AND THE LINES BETWEEN FOUND CORNERS NOTED HEREON HAVE BEEN SURVEYED FOR THIS MAP. ALL OTHER DIMENSIONS ARE RECORD DIMENSIONS, AS NOTED.

COUNTY SURVEYOR'S STATEMENT

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE PROFESSIONAL LAND SURVEYORS' ACT THIS 14th DAY OF May, 2020.

RONALD C. GARTON PLS 7717
HUMBOLDT COUNTY SURVEYOR

PROFESSIONAL LAND SURVEYOR RONALD C. GARTON No. 7717 STATE OF CALIFORNIA

COUNTY RECORDER'S STATEMENT

FILED THIS 18th DAY OF May 2020, AT 11: 23 A.M. IN BOOK 74 OF SURVEYS, AT PAGES 137-138, HUMBOLDT COUNTY RECORDS THE REQUEST OF KELLY-O'HERN ASSOCIATES.

KELLY E. SANDERS
HUMBOLDT COUNTY RECORDER
BY Rebecca Miller DEPUTY
FEE $91.00
INSTRUMENT NO. 2020-007981

SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS' ACT AT THE REQUEST OF ARCATA LAND COMPANY LLC, IN JANUARY 2019.

MICHAEL J. O'HERN L.S. 4829
DATED MAY 4, 2020

LICENSED LAND SURVEYOR MICHAEL J. O'HERN No. 4829 STATE OF CALIFORNIA

SURVEY TO BE PERFORMED AT THE TIME OF CONSTRUCTION

NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

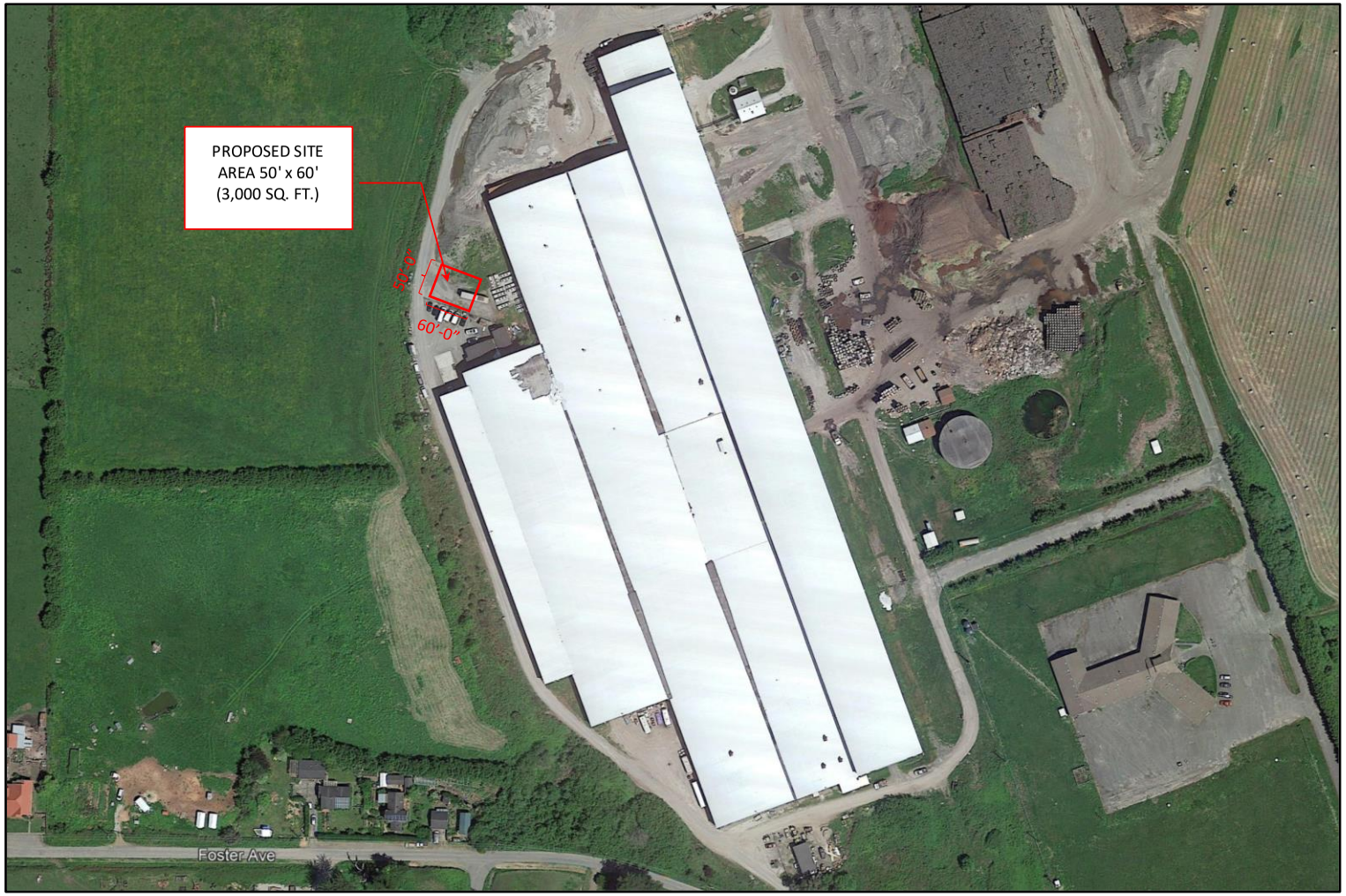
PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
OVERALL SITE PLAN

OVERALL SITE PLAN | SITE INFORMATION | PAGE 2 OF 7



NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

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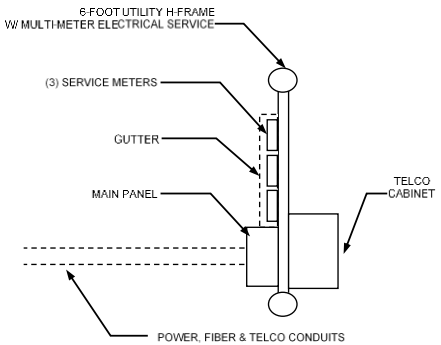
SUN VALLEY GROUP
COMMUNICATION SITE
AERIAL SITE VIEW

AERIAL SITE VIEW

SITE INFORMATION

PAGE 3 OF 7

VICINITY MAP



POWER AND TELCO H-FRAME DETAIL

GRADING (CUT & FILL):

- EXCAVATE 46 YARDS OF FILL AND REPLACE WITH 46 YARDS OF COMPACTED GRAVEL FILL.
- FILL 34 YARDS OF COMPACTED GRAVEL FILL ON BALANCE OF SITE.
- ALL EXCAVATED MATERIAL WILL REMAIN ON THE PROPERTY

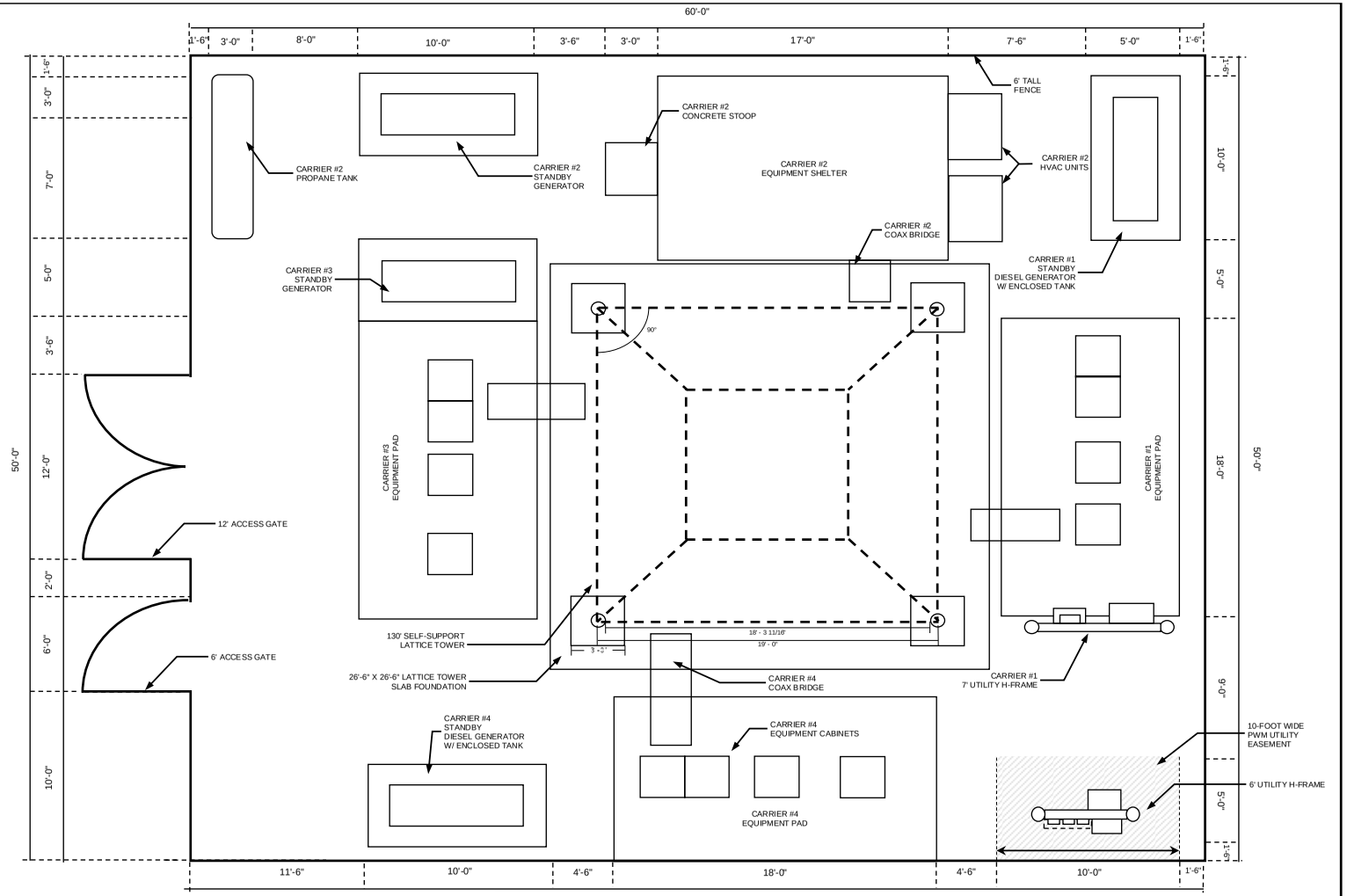
UTILITY DITCH:

- EXCAVATE 20 YARDS OF FILL MATERIAL. REPLACE WITH 20 YARDS OF COMPACTED SAND AND GRAVEL.
- ALL EXCAVATED MATERIAL WILL REMAIN ON THE PROPERTY

UTILITIES:

- PG&E AND TELCO/FIBER UNDERGROUND FROM EXISTING WAREHOUSE.

NOTES



NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
SITE PLAN

PLN-2020-16754 & PLN-2021-17005 New Cingular Wireless & PWM, Inc July 1,2021

TOP OF (P) PWM LATTICE TOWER & C.L. OF (P) CARRIER #1 ANTENNAS

ELEVATION = 130' - 0" AGL

TOP OF (P) PWM LATTICE TOWER & C.L. OF (P) CARRIER #2 ANTENNAS

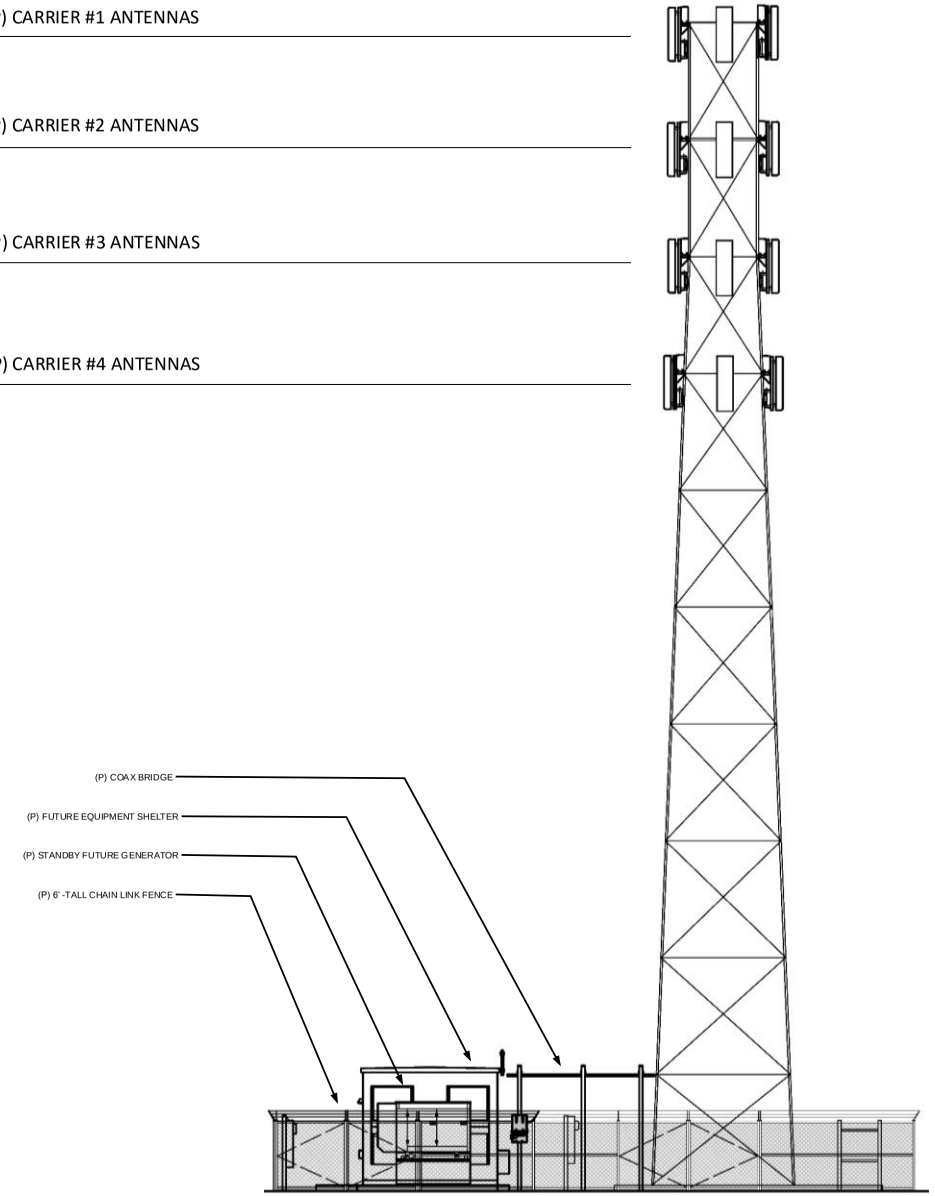
ELEVATION = 115' - 0" AGL

TOP OF (P) PWM LATTICE TOWER & C.L. OF (P) CARRIER #3 ANTENNAS

ELEVATION = 100' - 0" AGL

TOP OF (P) PWM LATTICE TOWER & C.L. OF (P) CARRIER #4 ANTENNAS

ELEVATION = 85' - 0" AGL



ANTENNA MOUNTING TABLE		
QTY.	ANTENNA TYPE & MODEL NO.	MOUNTING HEIGHT
12	CCI-TPA-45R-KU6AA-K	130 FT
4	4449 B5/B12 RRH	130 FT
4	8843 B2/B66A RRH	130 FT
4	4478 B14 RRH	130 FT
4	4415 B25 RRH	130 FT
4	RRUS-E2 B29 RRH	130 FT
4	4415 B30 RRH	130 FT
4	RAYCAP DC9-48-60-24-8C-EV SURGE SUPPRESSOR	130 FT
4	LEG MOUNTS	130 FT
6	COMMSCOPE SGNHH-1D65B (72”x12”x7”)	115 FT
6	COMMSCOPE NHH-45B-R2B (72”x18”x7”)	115 FT
8	ERICSSON RRUS -32	115 FT
8	ERICSSON 8843	115 FT
8	ERICSSON 4449	115 FT
2	RAYCAP DC6-48-60-18F SURGE SUPPRESSOR	115 FT
4	LEG MOUNTS	115 FT
6	JMA WIRELESS MX08FR0865-20 (95.3”x20”x8”)	100 FT
3	FUJITSU TA 08025- B604	100 FT
3	FUJITSU TA 08025- B605	100 FT
2	RAYCAP DC6-48-60-18F SURGE SUPPRESSOR	100 FT
4	LEG MOUNTS	100 FT
6	COMMSCOPE FFV-65C-R3-V1 OCTO (96”x25”x9”)	85 FT
6	NOKIA AEHC ACTIVE ANTENNA MASSIVE MIMO (38”x21”x8”)	85 FT
12	NOKIA AHLOA RRU	85 FT
12	NOKIA AHFIG RUU	85 FT
2	RAYCAP DC6-48-60-18F SURGE SUPPRESSOR	85 FT
4	LEG MOUNTS	85 FT

NO.	REVISIONS	DATE
B	REVISION	3/9/2021
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
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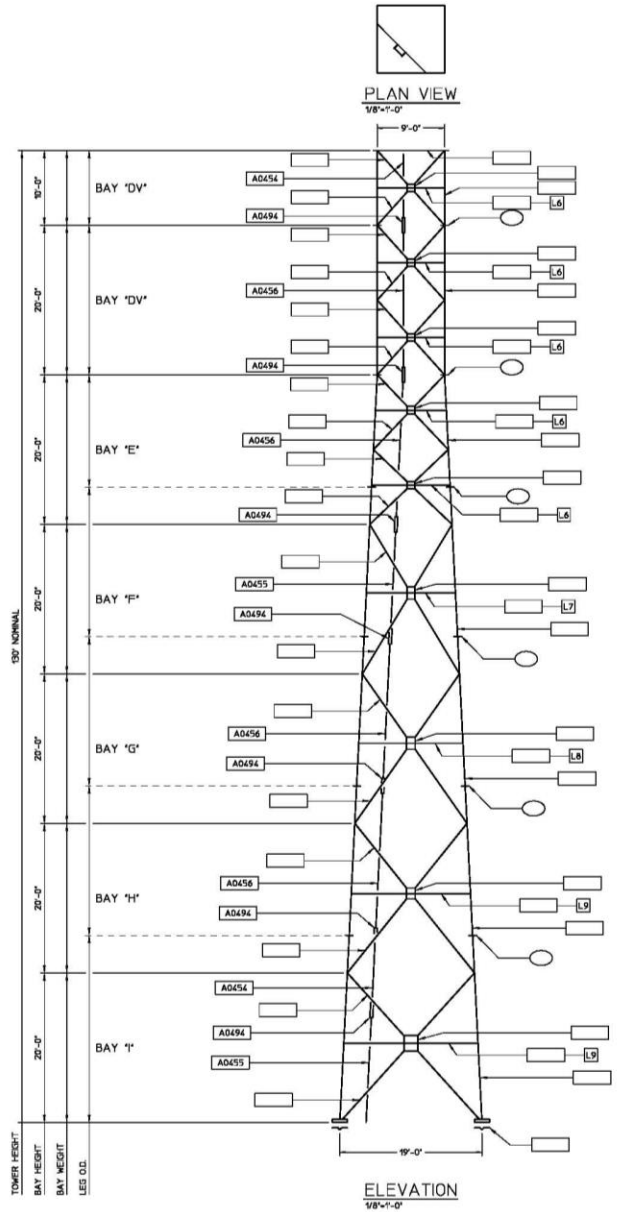
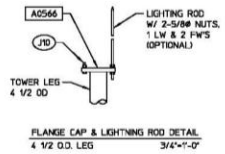
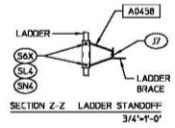
SUN VALLEY GROUP
COMMUNICATION SITE
ELEVATIONS

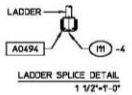
SELF-SUPPORTING LATTICE TOWER ELEVATION

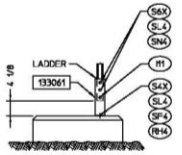
SITE INFORMATION

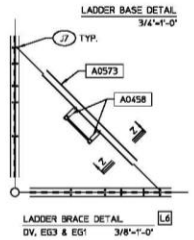


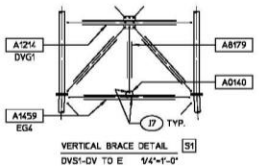


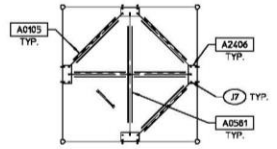


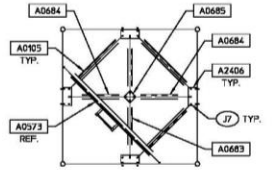


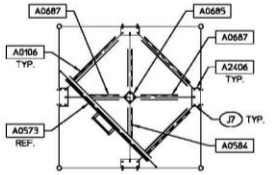


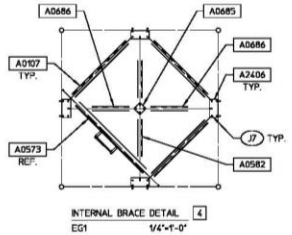


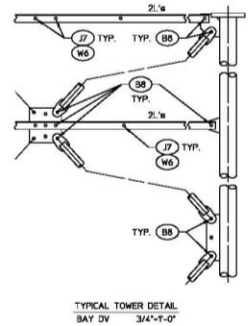


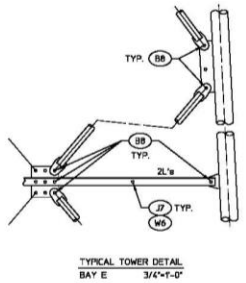


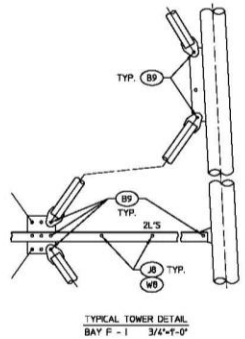












NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PROPOSAL DRAWING: 108-M830-130
SITE: SUN VALLEY GROUP, CA
PWM

valmont MICROFLECT

BY JG | CK MF | D-151248
DATE 03DEC20
S.O. Q502337-01 | SHEET: 1 OF 1

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

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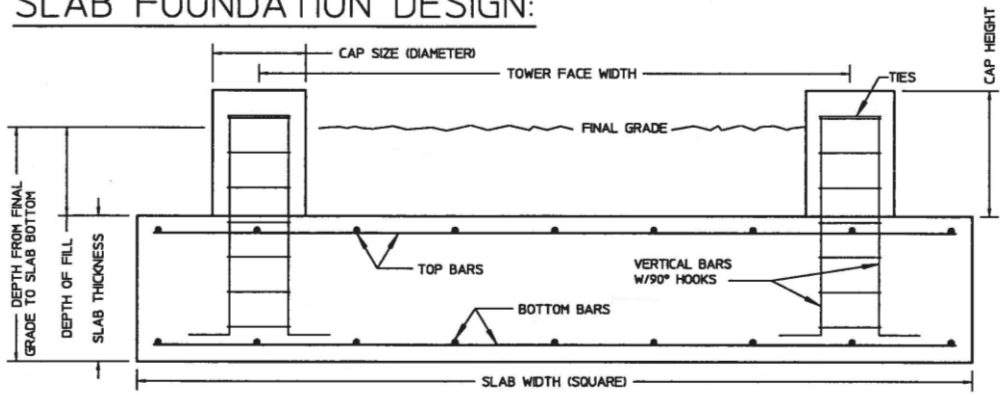
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
SELF-SUPPORTING LATTICE TOWER

SLAB FOUNDATION DESIGN:



DIMENSIONS:

- Slab width = 26.5 feet
- Slab thickness = 24.0 inches
- Cap height = 30.0 inches
- Cap size = 30.0 inches
- Tower face width = 19.0 feet
- Number of tower legs = 4
- Depth of fill = 24.0 inches
- Depth from final grade = 4.00 feet to slab bottom

TOWER BASE REACTIONS:

- Overturning moment = 4500 ft-kips
- Total tower shear = 50.0 kips
- Maximum leg shear = 25.0 kips
- Tower weight = 45.0 kips

OUTPUT SUMMARY:

- Stability ratio = 1.01 OK
- Net soil bearing pressure = 3.1 ksf OK
- Volume of concrete = 54.3 cu. yds.
- Slab two-way shear: OK
- Slab beam shear: OK

PRELIMINARY

DO NOT USE

FOR CONSTRUCTION

MATERIAL PARAMETERS:

- Ultimate net soil bearing pressure = 6.00 ksf

- Concrete compressive strength = 4000 psi
- Rebar yield strength = 60000 psi
- Density of concrete = 0.150 kcf
- Density of soil = 0.100 kcf
- Density of fill = 0.100 kcf
- Allowable stress increase factor = 1.00

REINFORCEMENT REQUIREMENTS: (ASTM A615 Gr. 60)

Top bars:	Use 35-#8 (each way) @ 9.18 inch spacing, length = 26.00 ft., total weight = 4859 lbs.
Bottom bars:	Use 35-#8 (each way) @ 9.18 inch spacing, length = 26.00 ft., total weight = 4859 lbs.
Circular hoops:	Use 7-#4 Hoops, 24 in. diam. @ 12 in. spc. (per pier), double @ top.
Vertical bars:	Use 13 -#6 Vertical bars w/90 degree hooks (per pier).

DWG NO. 0502337 SHEET 1 OF 1

STRESS ANALYSIS
PWM
SITE: SUN VALLEY GROUP, CA

valmont MICROFLECT
1-877-467-4763 Plymouth, IN
1-800-547-2151 Salem, OR

BY	JG
CK	MF
DATE	02DEC20
S.O.	0502337

NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
SLAB FOUNDATION

References:

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2. Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, *2015-2020 White Paper*, February 1, 2016; available at: http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/mobile-white-paper-c11-520862.html
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4. Commission, Planning. "Chapter 6 Telecommunications." *Humboldt County General Plan*, Part2, Chapter 6, 20 Nov. 2008, humboldtgov.org/DocumentCenter/View/2067/Chapter-6-Telecommunications-Element-PDF?bidI.
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6. NENA. (2020, January 2). *nena.org.* Https://Www.Nena.Org/. https://www.nena.org/
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8. SignalBoosters.com. *"What Is DBm and How Does It Relate to Cell Signal?"* SignalBoosters, SignalBoosters.com, 9 Feb. 2021, www.signalboosters.com/blog/what-is-dbm.

PWM INC.

SITE NAME: SUN VALLEY GROUP
3160 Upper Bay Road, Arcata, CA 95521

CODE JURISDICTION:	COUNTY OF HUMBOLDT
LATITUDE:	N 40° 53' 07.02"
LONGITUDE:	W 124° 06' 30.61"
ELEVATION:	19 FT. APPROX.
TAX PARCEL NO:	506-231-019
ZONING:	Q- QUALIFIED
PROJECT AREA:	50' x 60' (3,000 SQ. FT.)

CONTRACTOR TO VERIFY ACTUAL NORTH ON JOBSITE

VICINITY MAP

1. BEGINNING ON US HIGHWAY 101 NORTH
2. TAKE EXIT 714B SUNSET AVE.
3. TURN LEFT ONTO SUNSET AVE. 0.2 MILES
4. AT THE TRAFFIC CIRCLE TAKE THE THIRD EXIT TO FOSTER AVE. 0.4 MILES
5. TURN LEFT ONTO ALLIANCE RD. 0.2 MILES
6. TURN RIGHT ONTO 17TH ST. 0.2 MILES
7. CONTINUE ONTO FOSTER AVE./Q ST.
8. 3160 UPPER BAY ROAD. IS LOCATED ON THE RIGHT.

CONSTRUCTION MANAGER:
PWM INC.
P.O. BOX 1032
EUREKA, CA 95502
CONTACT: TOM MCMURRAY
CELL: 707-499-0901
EMAIL: TJMCJR@OUTLOOK.COM

LEASEHOLDER:
PWM INC.
P.O. BOX 1032
EUREKA, CA 95502
CONTACT: TOM MCMURRAY
CELL: 707-499-0901
EMAIL: TJMCJR@OUTLOOK.COM

PROPERTY OWNER:
ARCATA LAND COMPANY
3160 UPPER BAY RD.
ARCATA, CA 95521

ZONING AGENT:
PWM INC.
P.O. BOX 1032
EUREKA, CA 95502
CONTACT: TOM MCMURRAY
CELL: 707-499-0901
EMAIL: TJMCJR@OUTLOOK.COM

POWER COMPANY
PG&E
CONTACT: CUSTOMER SERVICE
TEL: 800-743-5000

TOWER MANUFACTURER:
VALMONT INDUSTRIES, INC.

CODE COMPLIANCE:
ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS 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:

1. 2016 CALIFORNIA ADMINISTRATIVE CODE, CHAPTER 10, PART 1, TITLE 24 CODE OF REGULATIONS
2. 2016 CALIFORNIA BUILDING CODE (CBC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2015 IBC (PART 2. VOL 1-2)
3. 2016 CALIFORNIA RESIDENTIAL CODE (CRC) WITH APPENDIX H, PATIO COVERS, BASED ON THE 2015 IRC (PART 2.5)
4. 2016 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11) (AFFECTED ENERGY PROVISIONS ONLY)
5. 2016 CALIFORNIA FIRE CODE (CFC). BASED ON THE 2015 IFC, WITH CALIFORNIA AMENDMENTS (PART 9)
6. 2016 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2015 UMC (PART 4)
7. 2016 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2015 UPC (PART 5)
8. 2016 CALIFORNIA ELECTRICAL CODE (CEC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2015 NEC (PART 3)
9. 2016 CALIFORNIA ENERGY CODE(CEC)
10. ANSI/ EIA -TIA-222 H
11. 2015 NFPA 101, LIFE SAFETY CODE
12. 2016 NFPA 72, NATIONAL FIRE ALARM CODE
13. 2016 NFPA 13, FIRE SPRINKLER CODE
14. ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS

GENERAL NOTES:
CONTRACTOR SHALL:

1. IMPLEMENT "BEST MANAGEMENT PRACTICES" FOR EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION PHASE OF THE PROJECT.
2. RESEED/GRAVEL DISTURBED AREAS PRIOR TO WINTER RAIN.
3. TAKE ALL PRECAUTIONS NECESSARY TO AVOID THE ENCROACHMENT OF DIRT OR DEBRIS ON ADJACENT PROPERTIES.

DRIVING DIRECTIONS

PROJECT DIRECTORY

THE PROPOSED DEVELOPMENT OF A NEW WIRELESS TELECOMMUNICATIONS FACILITY CONSISTING PRIMARILY OF A 130-FT. TALL LATTICE TOWER PLACED ON A CONCRETE FOUNDATION TO SUPPORT EQUIPMENT FOR UP TO FOUR CARRIERS AND THE CONSTRUCTION AND LOCATION OF THE FOLLOWING EQUIPMENT: CABINET(S) PLACED ON CONCRETE EQUIPMENT PADS, SHELTER(S) PLACED ON CONCRETE FOUNDATIONS, STANDBY PROPANE AND DIESEL GENERATOR(S) WITH ENCLOSED TANK(S), PROPANE TANK(S), H-FRAME(S) FOR UTILITIES AND ANY OTHER MISCELLANEOUS EQUIPMENT; ALL LOCATED WITHIN THE 50' x 60' (3,000 SQ. FT.) LEASE AREA. EXCAVATE EXISTING FILL AND REPLACE WITH 46 YARDS OF COMPACTED GRAVEL. COMPACTED GRAVEL FILL ON BALANCE OF SITE. UNDERGROUND UTILITIES WILL BE COMPACTED SAND AND GRAVEL. ALL EXCAVATED FILL TO BE DEPOSITED ON SITE AND AT SUN VALLEY GROUP PROPERTY. THE LEASE AREA WILL BE ENCLOSED BY A 6-FT. TALL FENCE. THE CARRIER'S EQUIPMENT WILL IMPROVE, EXTEND AND PROVIDE WIRELESS SERVICE TO ARCATA, VALLEY WEST SHOPPING CENTER- GIUNTOLI LANE, US 101 NORTH- MCKINLEYVILLE, HIGHWAY 299, AND THE SURROUNDING AREAS. PG&E UNDERGROUND FROM EXISTING WAREHOUSE. NO PLUMBING OR HUMAN OCCUPANCY REQUIRED. ACCESS TO THE LEASE AREA IS OVER AN EXISTING PAVED ROAD. NO ARTIFICIAL LIGHTING OR GUY WIRES ARE PROPOSED OR REQUIRED FOR THIS PROJECT. EQUIPMENT AND MATERIALS WILL BE STAGED ON THE EXISTING GRAVELED PARKING AREA LOCATED APPROXIMATELY 20 FT. SOUTHWEST OF THE PROPOSED SITE.

PROJECT DESCRIPTION

1 OF 7 TITLE SHEET
2 OF 7 OVERALL SITE PLAN
3 OF 7 AERIAL SITE VIEW
4 OF 7 SITE PLAN
5 OF 7 ELEVATIONS
6 OF 7 SELF SUPPORTING TOWER
7 OF 7 LATTICE TOWER SLAB FOUNDATION

DRAWING INDEX

CL= CENTER LINE
(P) = PROPOSED
(E) = EXISTING
NTS = NOT TO SCALE
TBD = TO BE DETERMINED
UNO = UNLESS NOTED OTHERWISE
RRU/RRH = REMOTE RADIO UNIT

LEGEND

NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
TITLE SHEET

SITE INFORMATION

PAGE 1 OF 7

RECORD OF SURVEY
FOR
ARCATA LAND COMPANY LLC
IN
SECTIONS 19, 20, 29 & 30 T6N, R1E, HUMBOLDT MERIDIAN
IN THE UNINCORPORATED AREA OF HUMBOLDT COUNTY
FEBRUARY 2019 SCALE 1" = 250'

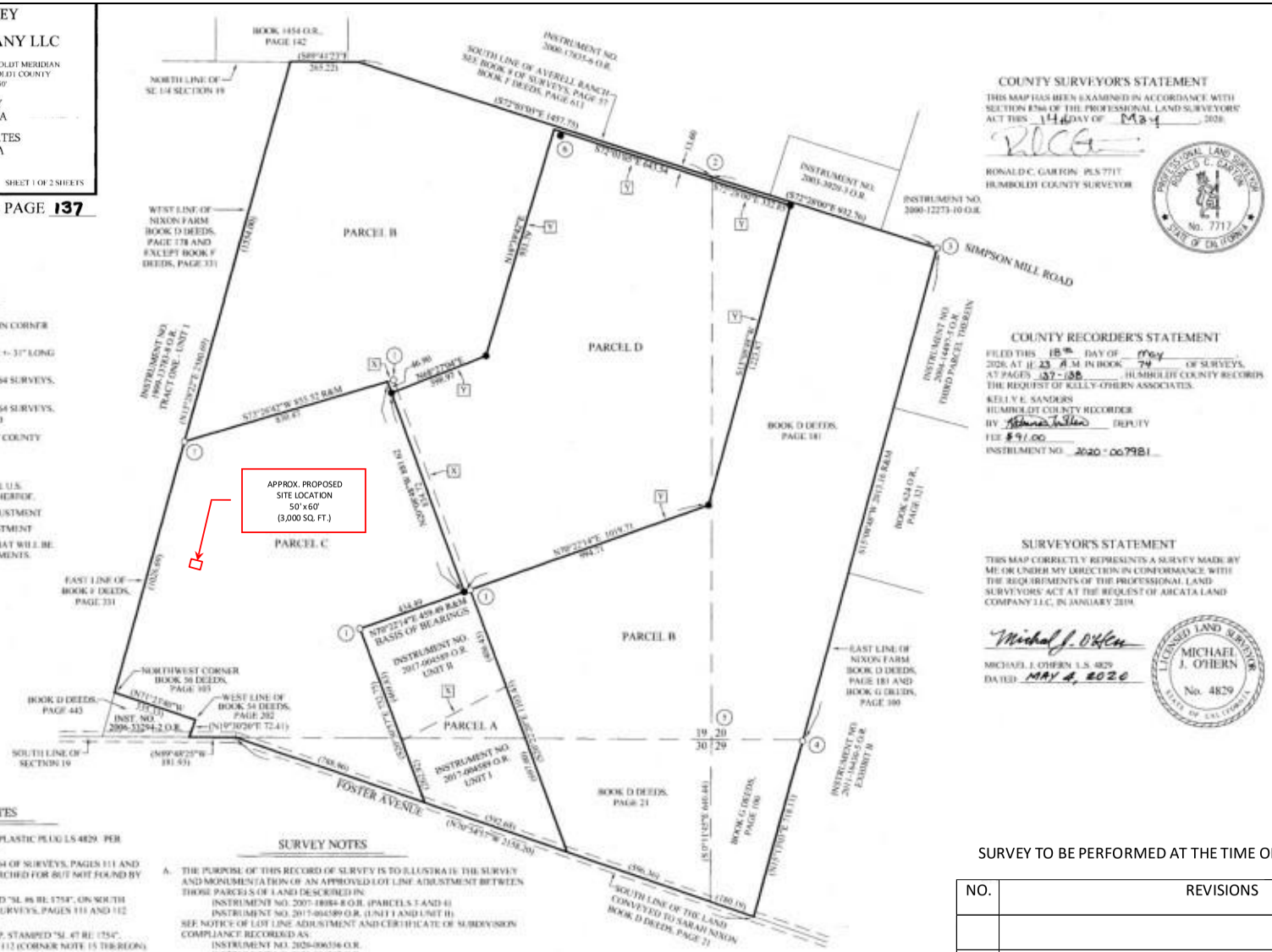
HUMBOLDT COUNTY
STATE OF CALIFORNIA

KELLY-O'HERN ASSOCIATES
EUREKA, CALIFORNIA

SCALE 1" = 250'
0 125 250

SHEET 1 OF 2 SHEETS

BOOK 74 OF SURVEYS, PAGE 137



LEGEND

- ○ FOUND MONUMENT, AS NOTED IN CORNER NOTES SHOWN HEREON
- ● SET 1/2" GALVANIZED IRON PIPE +- 31" LONG WITH PLASTIC PLUG LS 4829
- ( ) RECORD DIMENSION PER BOOK 64 SURVEYS, PAGES 111 & 112
- R&M RECORD DIMENSION PER BOOK 64 SURVEYS, PAGES 111 & 112 AND MEASURED
- O.R. OFFICIAL RECORDS, HUMBOLDT COUNTY
- BCIP BRASS CAP IRON PIPE
- ◯ CORNER NOTE NUMBER

DISTANCES SHOWN HEREON ARE U.S. SURVEY FEET AND DECIMALS THEREOF.

[X] LINE DELETED BY LOT LINE ADJUSTMENT
[Y] LINE ADDED BY LOT LINE ADJUSTMENT

SEE SHEET 2 FOR EASEMENTS THAT WILL BE CREATED BY SEPARATE INSTRUMENTS.

CORNER NOTES

1. FOUND 1/2" GALVANIZED IRON PIPE WITH PLASTIC PLUG LS 4829 PER BOOK 64 OF SURVEYS, PAGES 111 AND 112.
2. TIE BCIP IN CONCRETE SHOWN ON BOOK 64 OF SURVEYS, PAGES 111 AND 112 (CORNER NOTE 17 THEREON) WAS SEARCHED FOR BUT NOT FOUND BY THIS SURVEY.
3. FOUND BRASS CAP IN CONCRETE, STAMPED "SL 46 BL 1754", ON SOUTH SIDE OF COUNTY ROAD. SEE BOOK 64 OF SURVEYS, PAGES 111 AND 112 (CORNER NOTE 16 THEREON).
4. FOUND 1" IRON PIPE WITH 2 1/2" BRASS CAP, STAMPED "SL 47 BL 1754". SEE BOOK 64 OF SURVEYS, PAGES 111 AND 112 (CORNER NOTE 15 THEREON).
5. SECTION CORNER - CALCULATED LOCATION FROM BOOK 64 OF SURVEYS, PAGES 111 & 112 SHOWN HEREON. NOT VISITED BY THIS SURVEY.
6. SET REFERENCE MONUMENT (ACTUAL CORNER FALLS IN A DITCH). ACTUAL CORNER BEARS N58°32'09"W 15.54 FEET FROM REFERENCE MONUMENT.

SURVEY NOTES

A. THE PURPOSE OF THIS RECORD OF SURVEY IS TO ILLUSTRATE THE SURVEY AND MONUMENTATION OF AN APPROVED LOT LINE ADJUSTMENT BETWEEN THOSE PARCELS OF LAND DESCRIBED IN:
INSTRUMENT NO. 2007-18084-8 O.R. (PARCELS 3 AND 4)
INSTRUMENT NO. 2017-004589 O.R. (UNIT I AND UNIT II)
SEE NOTICE OF LOT LINE ADJUSTMENT AND CERTIFICATE OF SUBDIVISION COMPLIANCE RECORDED AS:
INSTRUMENT NO. 2020-006536 O.R.
INSTRUMENT NO. 2020-006537 O.R.

B. THIS SURVEY IS BASED ON BOOK 64 OF SURVEYS, PAGES 111 AND 112.

C. ONLY THE LINES CREATED BY LOT LINE ADJUSTMENT AND THE LINES BETWEEN FOUND CORNERS NOTED HEREON HAVE BEEN SURVEYED FOR THIS MAP. ALL OTHER DIMENSIONS ARE RECORD DIMENSIONS, AS NOTED.

COUNTY SURVEYOR'S STATEMENT

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE PROFESSIONAL LAND SURVEYORS' ACT THIS 14th DAY OF May 2020.

RONALD C. GARTON PLS 7717
HUMBOLDT COUNTY SURVEYOR

PROFESSIONAL LAND SURVEYOR RONALD C. GARTON No. 7717 STATE OF CALIFORNIA

COUNTY RECORDER'S STATEMENT

FILED THIS 18th DAY OF May 2020, AT H. 23 A.M. IN BOOK 74 OF SURVEYS, AT PAGES 137-138 HUMBOLDT COUNTY RECORDS AT THE REQUEST OF KELLY-O'HERN ASSOCIATES.

KELLY E. SANDERS
HUMBOLDT COUNTY RECORDER
BY _____ DEPUTY
FEE $91.00
INSTRUMENT NO. 2020-006981

SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS' ACT AT THE REQUEST OF ARCATA LAND COMPANY LLC, IN JANUARY 2019.

MICHAEL J. O'HERN L.S. 4829
DATED MAY 4, 2020

LICENSED LAND SURVEYOR MICHAEL J. O'HERN No. 4829 STATE OF CALIFORNIA

SURVEY TO BE PERFORMED AT THE TIME OF CONSTRUCTION

NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
OVERALL SITE PLAN

NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

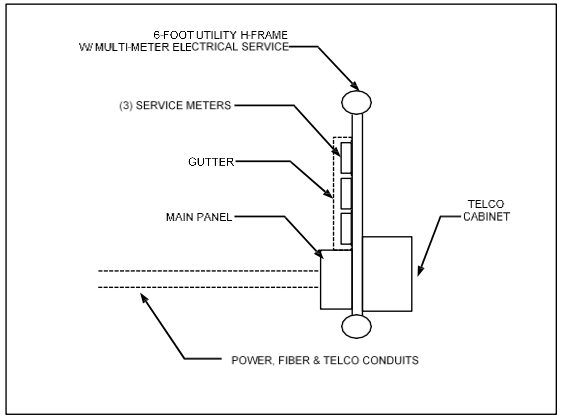
SUN VALLEY GROUP
COMMUNICATION SITE
AERIAL SITE VIEW

AERIAL SITE VIEW

SITE INFORMATION

PAGE 3 OF 7

VICINITY MAP



POWER AND TELCO H-FRAME DETAIL

GRADING (CUT & FILL):

- EXCAVATE 46 YARDS OF FILL AND REPLACE WITH 46 YARDS OF COMPACTED GRAVEL FILL.
- FILL 34 YARDS OF COMPACTED GRAVEL FILL ON BALANCE OF SITE.
- ALL EXCAVATED MATERIAL WILL REMAIN ON THE PROPERTY

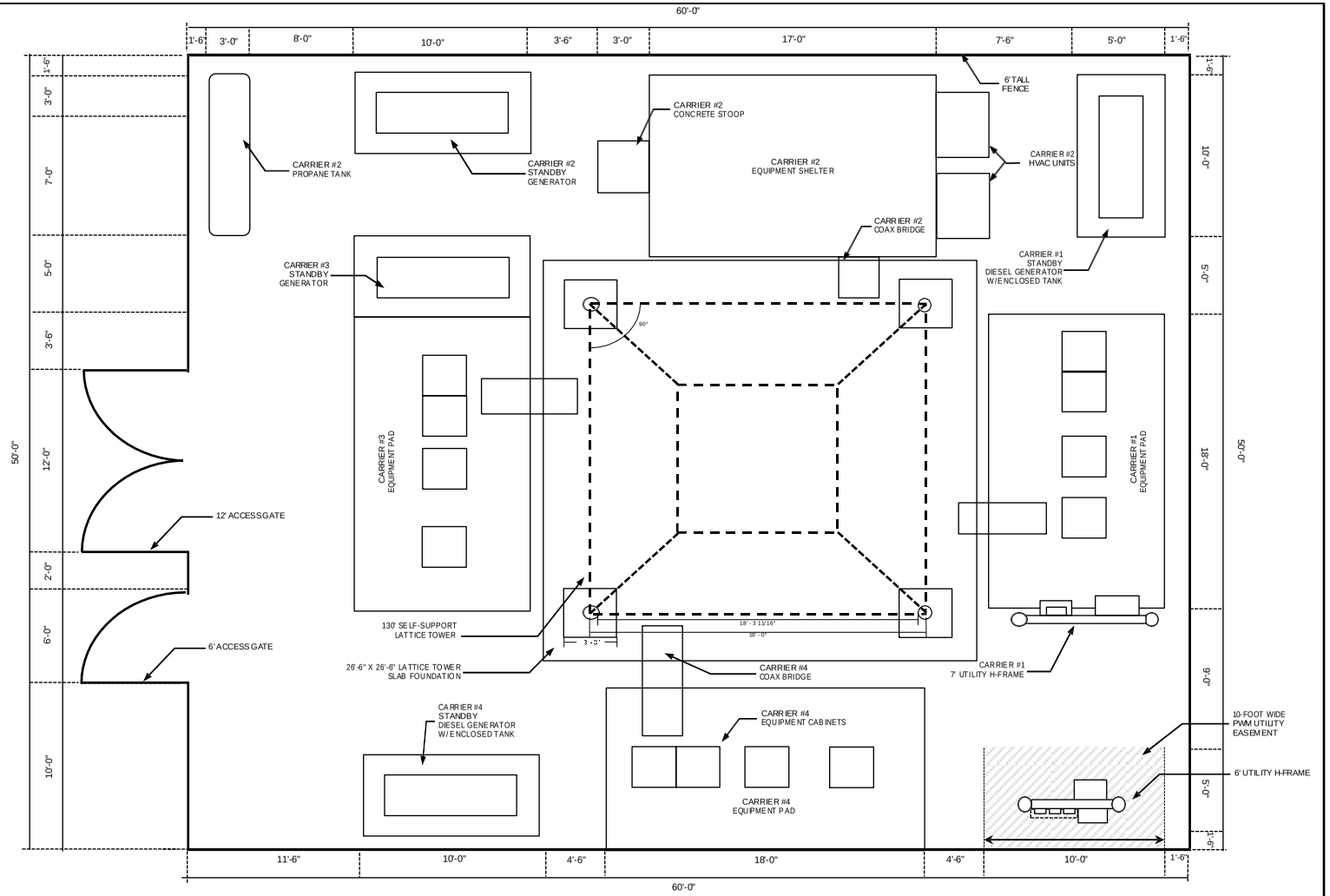
UTILITY DITCH:

- EXCAVATE 20 YARDS OF FILL MATERIAL. REPLACE WITH 20 YARDS OF COMPACTED SAND AND GRAVEL.
- ALL EXCAVATED MATERIAL WILL REMAIN ON THE PROPERTY

UTILITIES:

- PG&E AND TELCO/FIBER UNDERGROUND FROM EXISTING WAREHOUSE

NOTES



NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
SITE PLAN

PLN-2020-16754 & PLN-2021-17005 New Cingular Wireless & PWM, Inc July 1, 2021

TOP OF (P) PWM LATTICE TOWER & C.L. OF (P) CARRIER #1 ANTENNAS

ELEVATION = 130' - 0" AGL

TOP OF (P) PWM LATTICE TOWER & C.L. OF (P) CARRIER #2 ANTENNAS

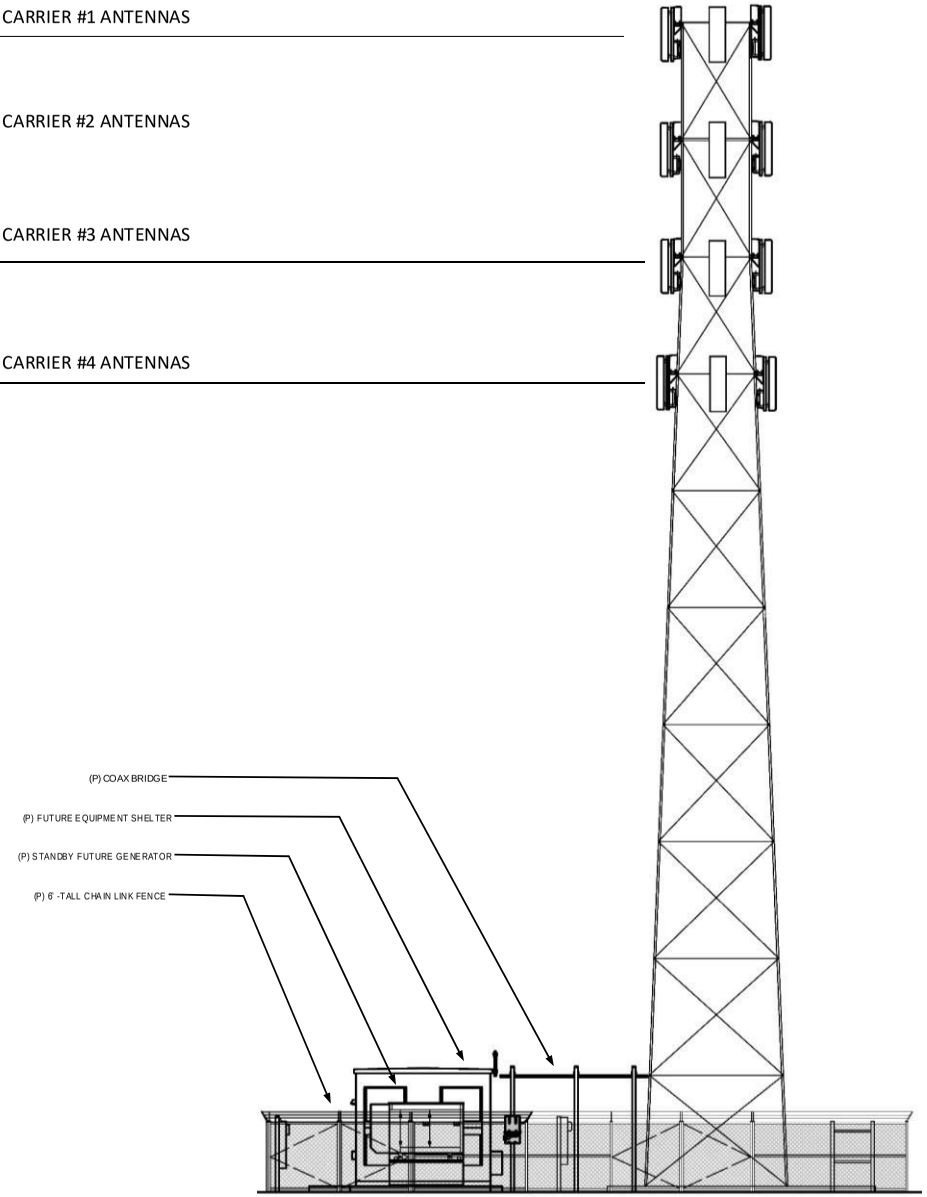
ELEVATION = 115' - 0" AGL

TOP OF (P) PWM LATTICE TOWER & C.L. OF (P) CARRIER #3 ANTENNAS

ELEVATION = 100' - 0" AGL

TOP OF (P) PWM LATTICE TOWER & C.L. OF (P) CARRIER #4 ANTENNAS

ELEVATION = 85' - 0" AGL



ANTENNA MOUNTING TABLE

QTY.	ANTENNA TYPE & MODEL NO.	MOUNTING HEIGHT
12	CCI-TPA-45R-KU6AA-K	130 FT
4	4449 B5/B12 RRH	130 FT
4	8843 B2/B66A RRH	130 FT
4	4478 B14 RRH	130 FT
4	4415 B25 RRH	130 FT
4	RRUS-E2 B29 RRH	130 FT
4	4415 B30 RRH	130 FT
4	RAYCAP DC9-48-60-24-8C-EV SURGE SUPPRESSOR	130 FT
4	LEG MOUNTS	130 FT
12	PANEL ANTENNAS (8' x 1' x 7')	115 FT
12	RRUS-12	115 FT
12	RRUS – A2	115 FT
2	RAYCAP DC6-48-60-18F SURGE SUPPRESSOR	115 FT
4	LEG MOUNTS	115 FT
12	PANEL ANTENNAS (8' x 1' x 7')	100 FT
12	RRUS-12	100 FT
12	RRUS – A2	100 FT
2	RAYCAP DC6-48-60-18F SURGE SUPPRESSOR	100 FT
4	LEG MOUNTS	100 FT
12	PANEL ANTENNAS (8' x 1' x 7')	85 FT
12	RRUS-12	85 FT
12	RRUS – A2	85 FT
2	RAYCAP DC6-48-60-18F SURGE SUPPRESSOR	85 FT
4	LEG MOUNTS	85 FT

NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

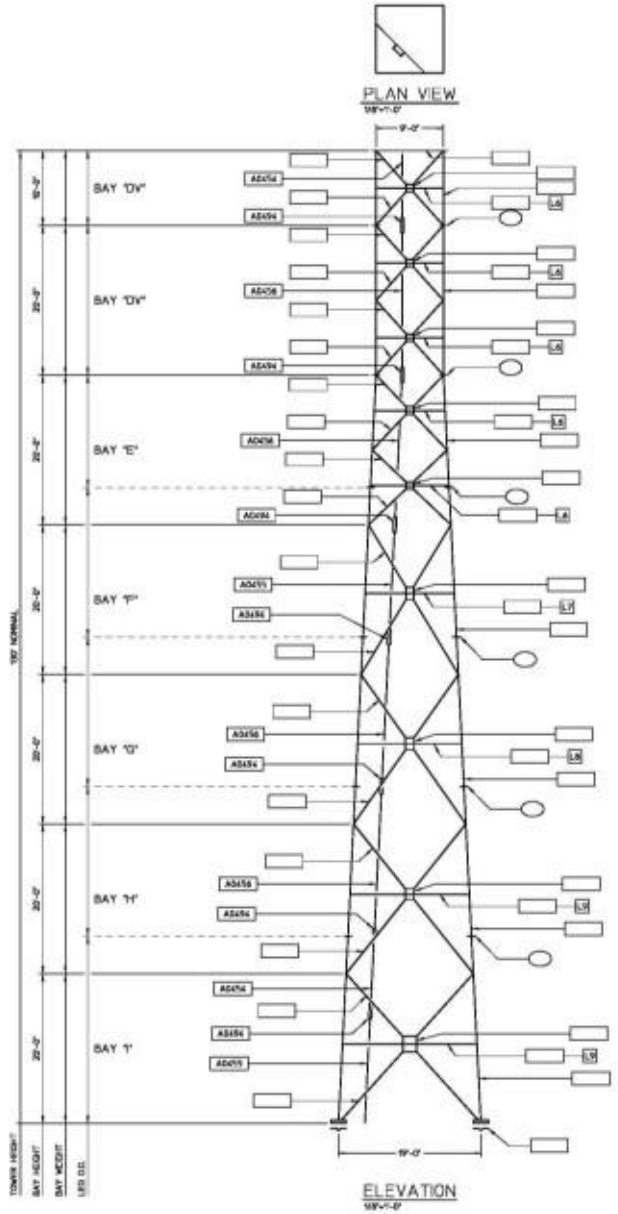
PWM INC.

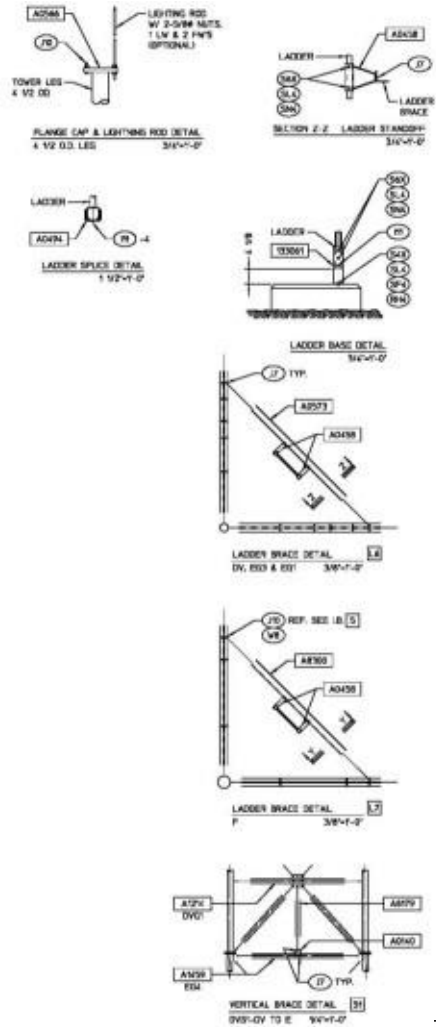
3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

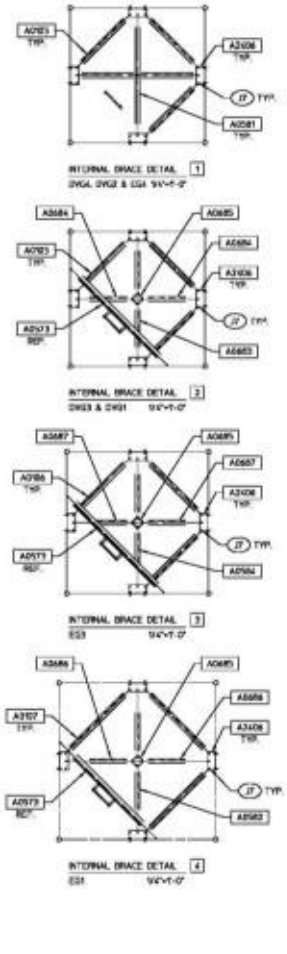
SUN VALLEY GROUP
COMMUNICATION SITE
ELEVATIONS

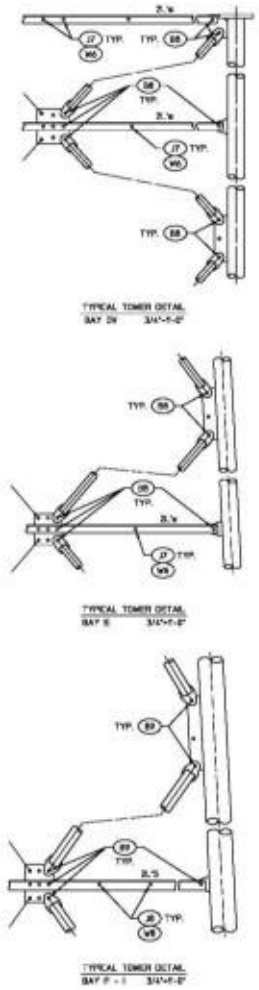
SELF-SUPPORTING LATTICE TOWER ELEVATION

SITE INFORMATION









PROPOSAL DRAWING: 108-M830-130
SITE: SUN VALLEY GROUP, CA
PWM

valmont MICROFLECT

BY	JG	CK	MF	D-151248
DATE	03DEC20			
S.O.	Q502337-01	SHEET:	1 OF 1	

NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

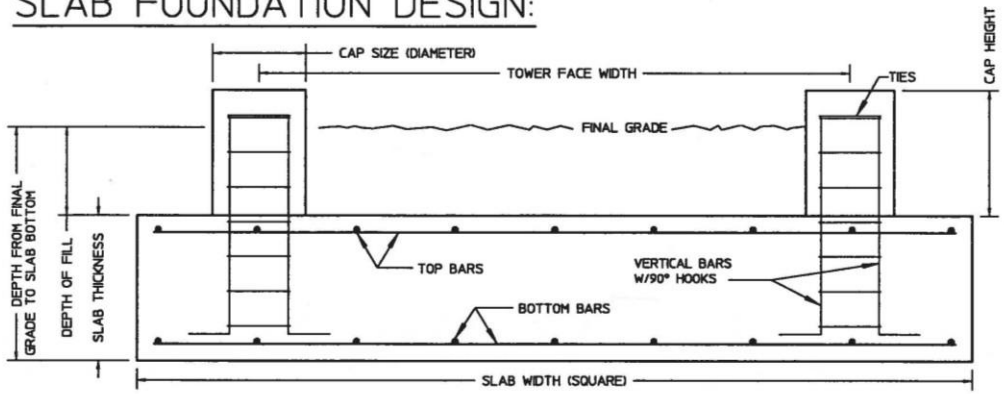
PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
SELF-SUPPORTING LATTICE TOWER

SLAB FOUNDATION DESIGN:



DIMENSIONS:

- Slab width = 26.5 feet
- Slab thickness = 24.0 inches
- Cap height = 30.0 inches
- Cap size = 30.0 inches
- Tower face width = 19.0 feet
- Number of tower legs = 4
- Depth of fill = 24.0 inches
- Depth from final grade = 4.00 feet to slab bottom

TOWER BASE REACTIONS:

- Overturning moment = 4500 ft-kips
- Total tower shear = 50.0 kips
- Maximum leg shear = 25.0 kips
- Tower weight = 45.0 kips

OUTPUT SUMMARY:

- Stability ratio = 1.01 OK
- Net soil bearing pressure = 3.1 ksf OK
- Volume of concrete = 54.3 cu. yds.
- Slab two-way shear: OK
- Slab beam shear: OK

****PRELIMINARY****

DO NOT USE

FOR CONSTRUCTION

MATERIAL PARAMETERS:

Ultimate net soil bearing pressure = 6.00 ksf

Concrete compressive strength = 4000 psi
Rebar yield strength = 60000 psi
Density of concrete = 0.150 kcf
Density of soil = 0.100 kcf
Density of fill = 0.100 kcf
Allowable stress increase factor = 1.00

REINFORCEMENT REQUIREMENTS: (ASTM A615 Gr. 60)

Top bars:	Use 35-#8 (each way) @ 9.18 inch spacing, length = 26.00 ft., total weight = 4859 lbs.
Bottom bars:	Use 35-#8 (each way) @ 9.18 inch spacing, length = 26.00 ft., total weight = 4859 lbs.
Circular hoops:	Use 7-#4 Hoops, 24 in. diam. @ 12 in. spc. (per pier), double @ top.
Vertical bars:	Use 13 -#6 Vertical bars w/90 degree hooks (per pier).

DWG NO. 0502337 | SHEET 1 OF 1

STRESS ANALYSIS
PWM
SITE: SUN VALLEY GROUP, CA

valmont MICROFLECT
1-877-467-4763 Plymouth, IN
1-800-547-2151 Salem, OR

BY	JG
CK	MF
DATE	02DEC20
S.O.	0502337

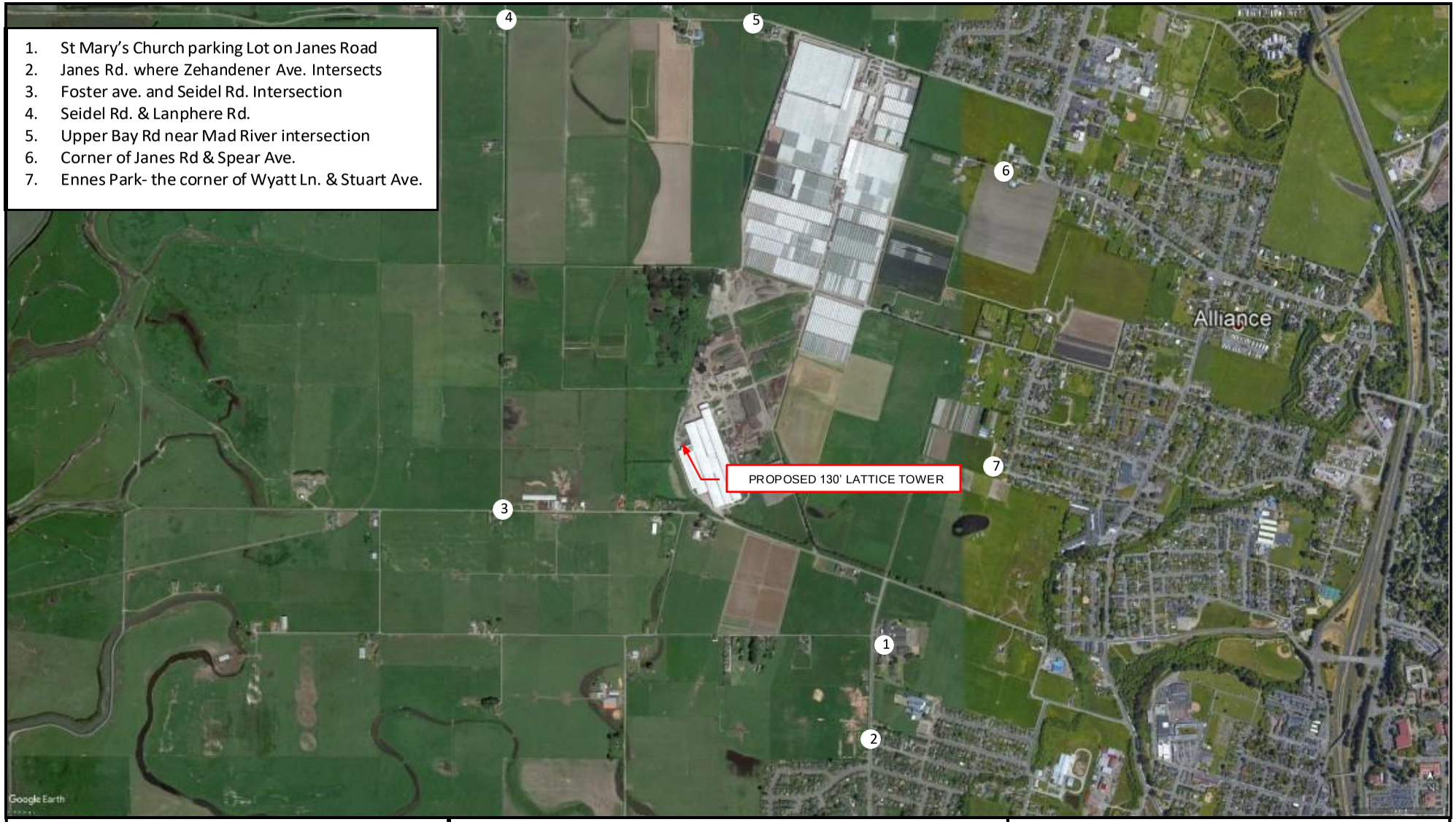
NO.	REVISIONS	DATE
A	PRELIMINARY ZONING DRAWINGS	12/10/2020

PRELIMINARY PLANS. MEASUREMENTS AND QUANTITY OF FACILITIES ARE SUBJECT TO CHANGE

PWM INC.

3160 UPPER BAY RD., ARCATA, CA 95521
APN: 506-231-019
40° 53' 07.02"N 124° 06' 30.61"W
ELEVATION: 19 FT. AMSL

SUN VALLEY GROUP
COMMUNICATION SITE
SLAB FOUNDATION



Site Information
Sun Valley Group - PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

Map View

PHOTO SIMULATIONS

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

JANES ROAD NORTHWEST VIEW

PHOTO SIMULATION #1

#1 ST. MARY'S CHURCH PARKING LOT

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

JANES ROAD NORTHWEST VIEW

PHOTO SIMULATION #2

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

FOSTER AVENUE EAST VIEW

PHOTO SIMULATION #3

FOSTER AVENUE AND SEIDEL ROAD

INTERSECTION

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

SEIDEL RD & LANPHERE RD. INTERSECTION

SOUTH EAST VIEW

PHOTO SIMULATION #4

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

UPPER BAY ROAD NEAR UPPER BAY RD & MAD RIVER RD. INTERSECTION

SOUTH VIEW

PHOTO SIMULATION #5

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

CORNER OF JANES RD. & SPEAR AVE.

SOUTH WEST VIEW

PHOTO SIMULATION #6

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group- PWM
3160 Upper Bay Road, Arcata, CA 95521
APN: 506-231-010
Lattice Tower Height: 130'
Site Elevation 23'

ENNES PARK NEAR THE CORNER OF WYATT LN.

& STUART AVE.

WEST VIEW

PHOTO SIMULATION #7

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
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Site Elevation: 23 ft.

Map View

ALTERNATIVE SITE ANALYSIS

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

PLN-2020-16754 & PLN-2021-17005 New Cingular Wireless & PWM, Inc July 1, 2021

Name	Date modified	Type	Size
2727 Bay School Rd. Aerial View	9/29/2016 3:09 PM	Adobe Acrobat Document	175 KB
Arcata Bottom APN Map 9-13-16	9/29/2016 3:09 PM	Adobe Acrobat Document	571 KB
Arcata Bottom Map 9-13-16	9/29/2016 3:09 PM	Adobe Acrobat Document	336 KB
Arcata Bottom Ownership 9-13-16	9/29/2016 3:09 PM	Adobe Acrobat Document	426 KB
Arcata Bottom Parcel Map 9-13-16	9/29/2016 3:09 PM	Adobe Acrobat Document	240 KB
Arcata Bottom Site	9/12/2016 12:40 PM	Adobe Acrobat Document	1,263 KB
Arcata Bottoms Map 1 of 2	4/17/2017 2:00 PM	Adobe Acrobat Document	560 KB
Arcata Bottoms Map 2 of 2	4/17/2017 2:00 PM	Adobe Acrobat Document	418 KB
Arcata Bottoms Property Owners 4-7-17	4/7/2017 1:19 PM	Adobe Acrobat Document	493 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16(PWM 11-7-16)pg.7	11/7/2016 12:25 PM	Microsoft Word Document	17 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16(PWM Redlines 11-7-16)	11/7/2016 12:26 PM		502 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16(PWM Redlines Pg.7)(11-7-16)	11/7/2016 12:38 PM		18 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16	10/17/2016 1:09 PM		502 KB
Arcata Bottoms-Fulton-PWM Lease Option & Ground Lease 10-17-16	10/17/2016 1:10 PM		499 KB
Arcata Bottoms-Property Owners	4/17/2017 3:32 PM		439 KB
Arcata Sun Valley Farms Site	1/11/2018 2:26 PM		,507 KB
Arcata Sun Valley Farms	1/11/2018 2:15 PM		,605 KB
Butler (1)	6/12/2017 2:06 PM		,651 KB
Butler Left Side	6/12/201[illegible]:06 PM		,300 KB
Butler	6/12/2017 2:06 PM		,608 KB
Fulton (1)	6/12/2017 2:06 PM		,882 KB
Fulton (2)	6/12/2017 2:06 PM		,692 KB
Fulton	6/12/2017 2:06 PM	JPG File	4,464 KB
Moxon	6/12/2017 2:06 PM	JPG File	3,877 KB
PWM Fulton (2)	6/12/2017 2:06 PM	JPG File	3,520 KB
PWM Fulton Site_4765	6/12/2017 2:06 PM	JPG File	4,810 KB
PWM Maxon (2)	6/12/2017 2:06 PM	JPG File	4,304 KB
PWM Maxon Site	6/12/2017 2:06 PM	JPG File	4,210 KB
PWM Mxon (1).	6/12/2017 2:06 PM	JPG File	6,062 KB
St. Mary School (1)	6/12/2017 2:06 PM	JPG File	499 KB
St. Mary School (2)	6/12/2017 2:06 PM	JPG File	683 KB
St. Mary School	6/12/2017 2:06 PM	JPG File	418 KB

PWM has been assessing potential sites since 2015. These files represent work achieved from options pursued.

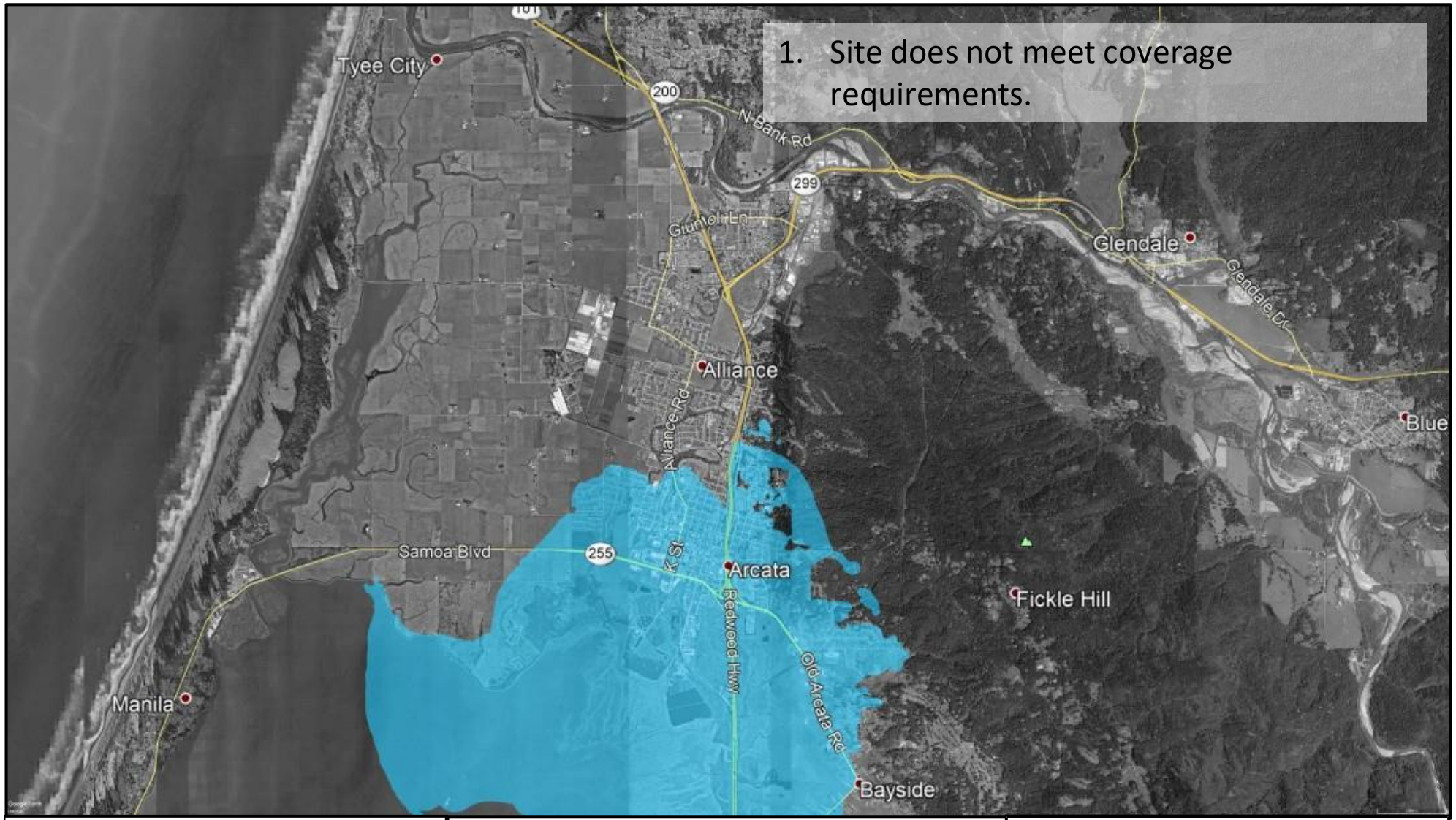
Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

ALTERNATIVE SITE ANALYSIS

HISTORICAL FILES SURROUNDING AREA

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

PLN-2020-16754 & PLN-2021-17005 New Cingular Wireless & PWM, Inc July 1, 2021



Site Information Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	**ALTERNATIVE SITE ANALYSIS** #1 EXISTING ARCATA 100' TOWER	**PWM INC.** P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net

1. Site does not meet coverage requirements, as evidenced by an existing carrier's proposal for an Arcata Bottoms Site.
2. Dense limb attachments to pole limits additional mount locations and limits additional antennas.
3. AT&T, Verizon, T-Mobile, and USCC are co-located on the HSU Monopole.
4. Due to the conditions, in 2005 Clearwire determined it was not an appropriate location.

View from HSU tower looking out

Site Information
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Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

ALTERNATIVE SITE ANALYSIS

#2 HSU EXISTING TOWER

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

1. Site does not meet coverage requirements due to shadowed areas along Alliance Road.
2. Site is not suitable for four carriers

Site Information
Sun Valley Group - PWM
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42° 03' 09.96"N 124° 06' 30.61"W
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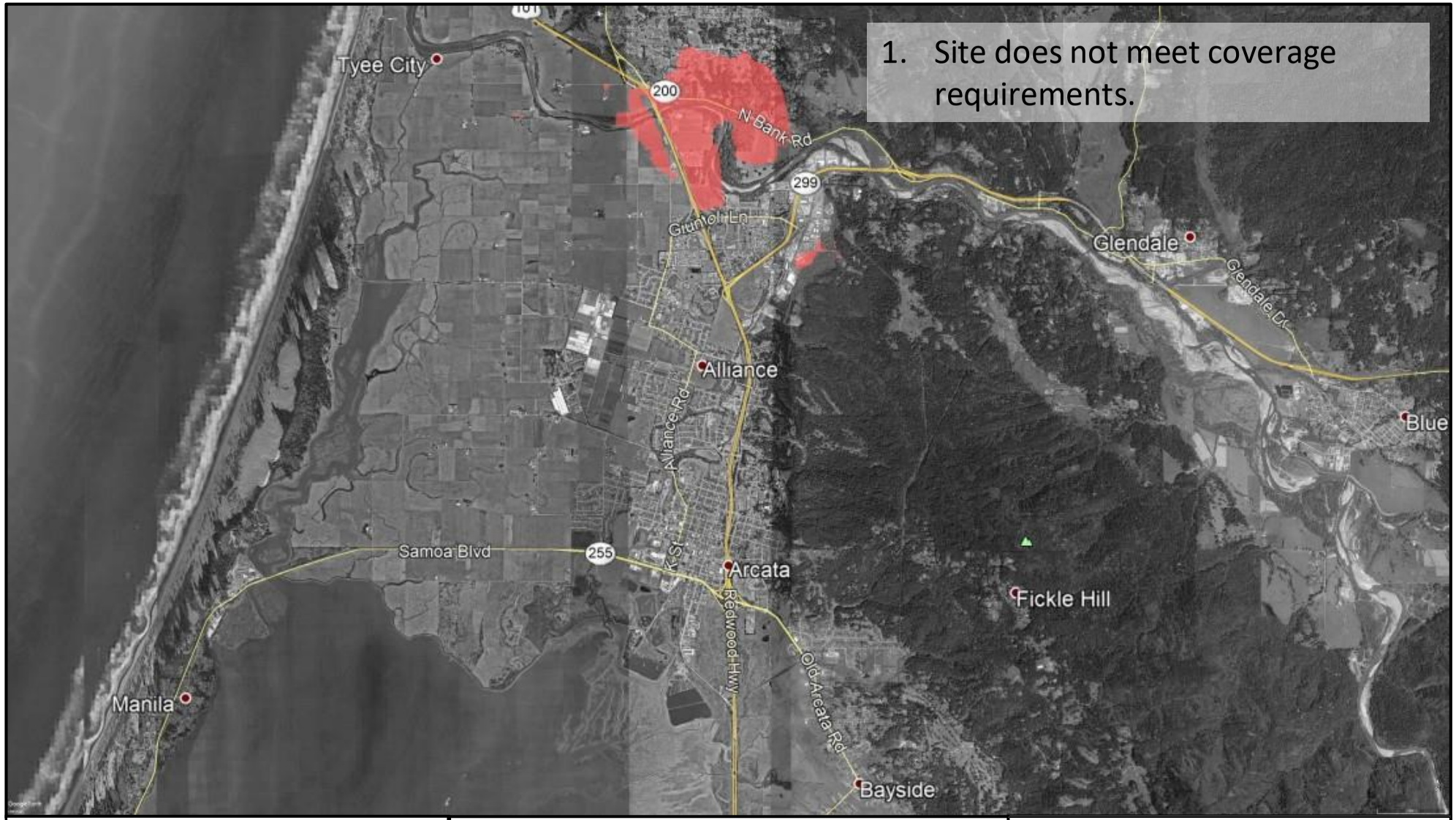
Site Elevation: 23 ft.

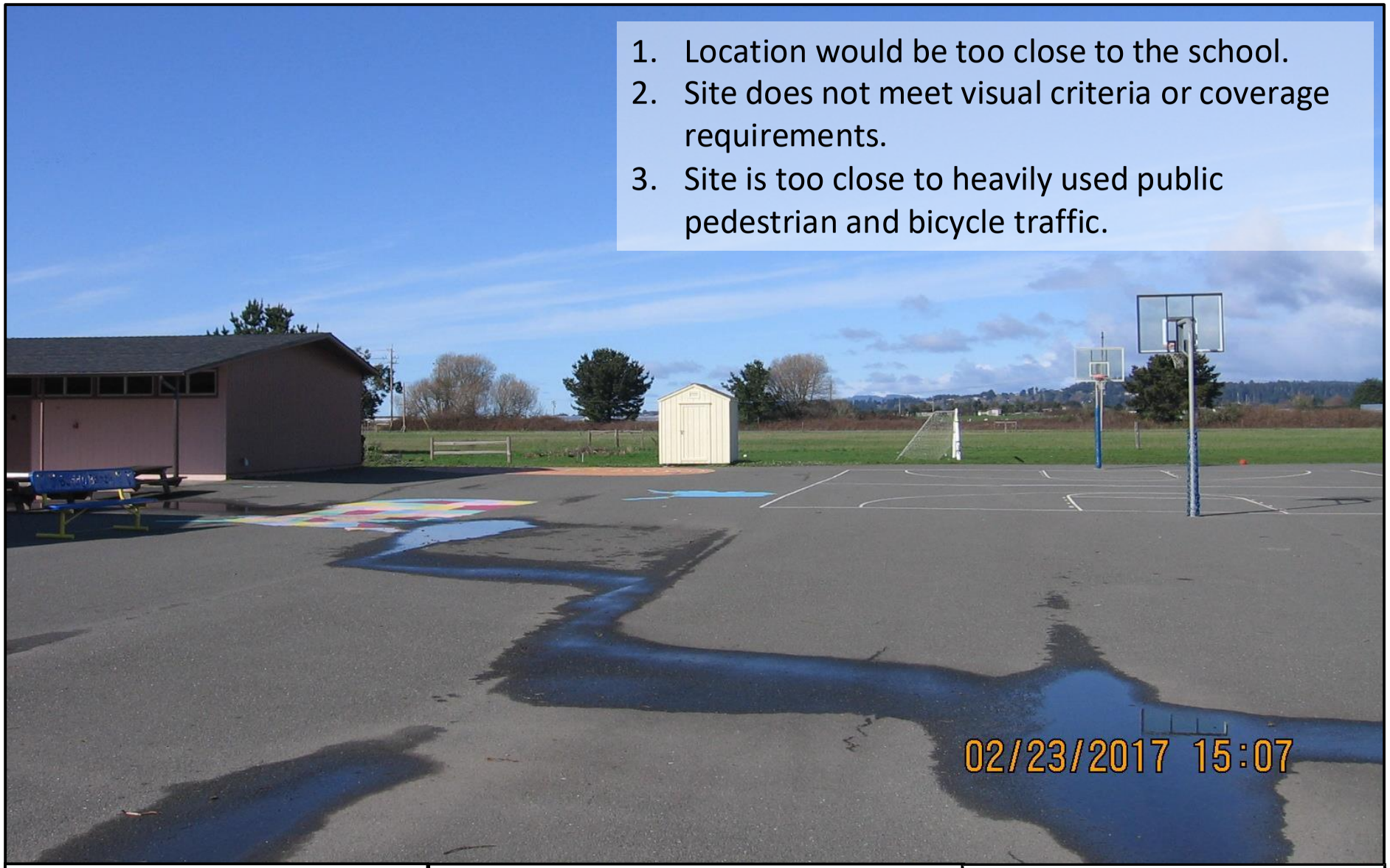
ALTERNATIVE SITE ANALYSIS

#3 EXISTING HSU ROOFTOP TOWER

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net



Site Information Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	**ALTERNATIVE SITE ANALYSIS** #4 EXISTING NORTH BANK 130' TOWER	**PWM INC.** P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net



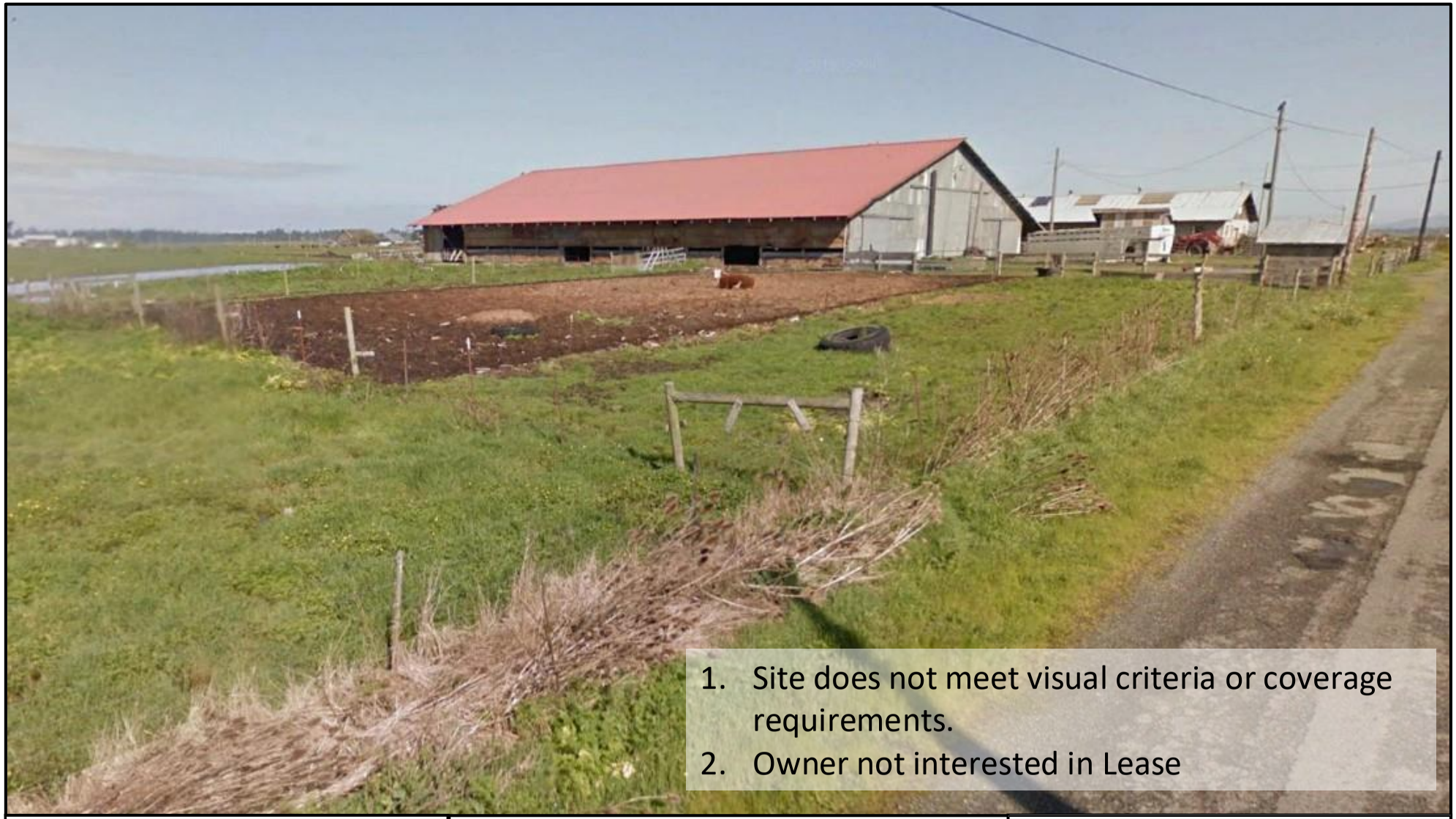
Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
APN: 506-231-010
42° 03' 09.96"N 124° 06' 30.61"W
Lattice Tower Height: 130 ft.
Site Elevation: 23 ft.

ALTERNATIVE SITE ANALYSIS

#5 ST. MARY'S SCHOOL

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Site Information	ALTERNATIVE SITE ANALYSIS	PWM INC.
Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	#6 INTERSECTION OF DOLLY VARDEN AND BAY SCHOOL ROAD	P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net



Site Information
Sun Valley Group - PWM
3160 Upper Bay Road., Arcata, CA 95521
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42° 03' 09.96"N 124° 06' 30.61"W
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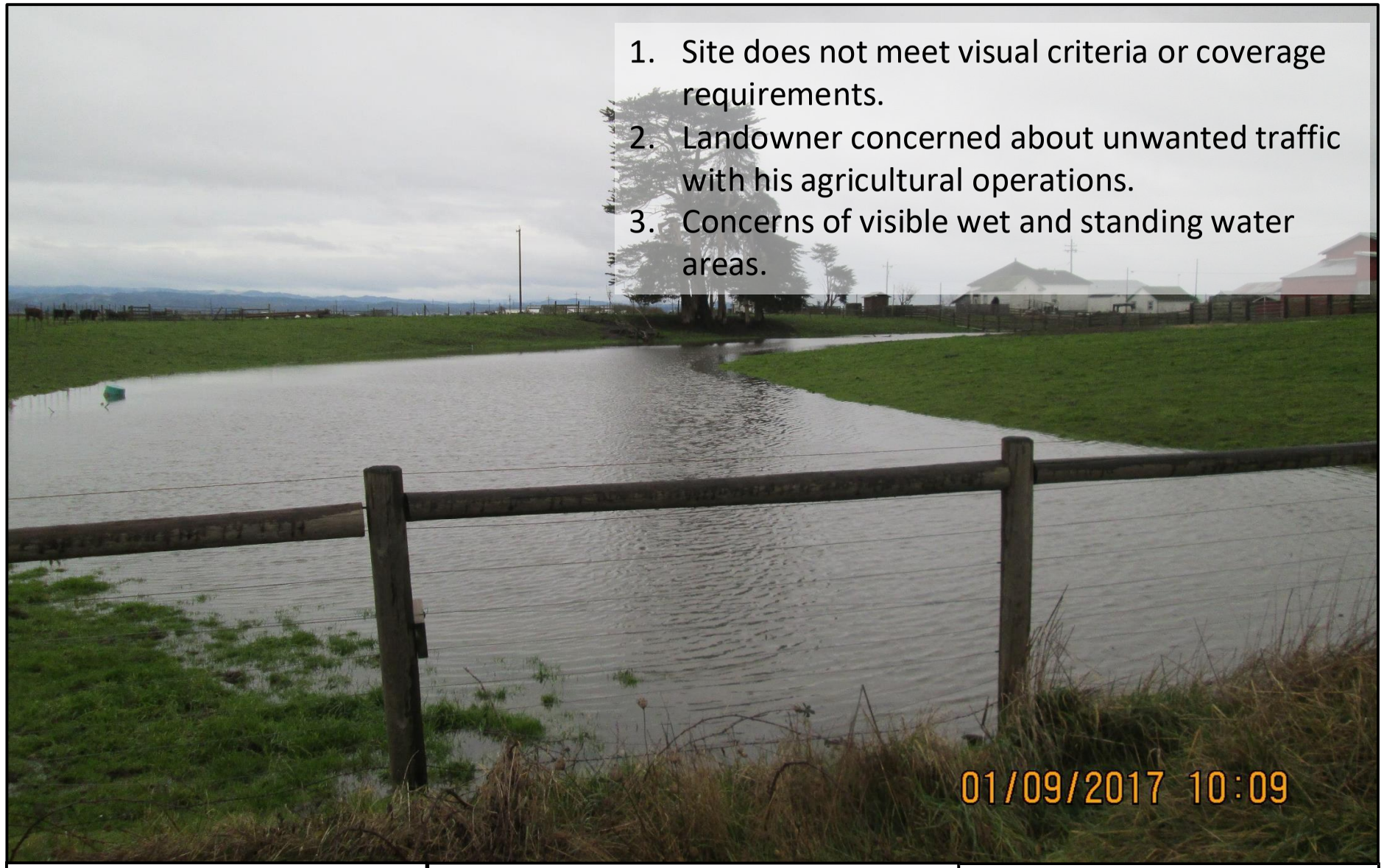
ALTERNATIVE SITE ANALYSIS

#7 MAXON SITE ON MAXON LANE

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net



Site Information Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	**ALTERNATIVE SITE ANALYSIS** #8 FULTON SITE VIEW	**PWM INC.** P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net

1. Site does not meet visual criteria.
2. Concerns of visible wet and standing water areas.
3. In close view of existing residential and heavily used public pedestrian and bicycle traffic.
4. Unhindered visibility due to lack of dense tree line from Foster Avenue, 17th St., and Q St.
5. Site is not suitable for four carriers.

Site Information	ALTERNATIVE SITE ANALYSIS	PWM INC.
Sun Valley Group - PWM 3160 Upper Bay Road., Arcata, CA 95521 APN: 506-231-010 42° 03' 09.96"N 124° 06' 30.61"W Lattice Tower Height: 130 ft. Site Elevation: 23 ft.	#9 BUTLER SITE ON FOSTER AVENUE	P.O. Box 1032, Eureka, CA 95502 Contact: Tom McMurray Cell: (707) 499-0901 Email: tjmacjr@pacbell.net

1. Site does not meet visual criteria or coverage requirements.
2. Landowner concerned about interruptions to agricultural operations.
3. Concerns of visible wet and standing water areas.

Site Information
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ALTERNATIVE SITE ANALYSIS

#10 DAIRY RANCH ON MAXON LANE AND VAISSADE ROAD

PWM INC.
P.O. Box 1032, Eureka, CA 95502
Contact: Tom McMurray
Cell: (707) 499-0901
Email: tjmacjr@pacbell.net

Attachment 2A
New Cingular Wireless

Referral Agency Comments and Recommendations

Referral Agency	Response	Recommendation	On File	Attached
County Building Inspection Division				
County P/W, Land Use Division	✓	Approval	✓	
Division of Environmental Health	✓	Approval	✓	
California Coastal Commission				
City of Arcata – Fire Department	✓	Approval	✓	
City of Arcata				
California Department of Fish and Wildlife				
U.S. Fish and Wildlife Service				
Bear River Band (Tribal)				
Blue Lake Rancheria (Tribal)	✓	Inadvertent Discovery	✓	
Wiyot Tribe	✓	Inadvertent Discovery	✓	
Northwest Information Center	✓	Conditional	✓	

Attachment 2B
PWM, Inc.

Referral Agency Comments and Recommendations

Referral Agency	Response	Recommendation	On File	Attached
County Building Inspection Division				
County P/W, Land Use Division	✓	Approval	✓	
Division of Environmental Health	✓	Approval	✓	
California Coastal Commission				
City of Arcata – Fire Department	✓	Approval	✓	
City of Arcata				
California Department of Fish and Wildlife				
U.S. Fish and Wildlife Service				
Bear River Band (Tribal)				
Blue Lake Rancheria (Tribal)	✓	Inadvertent Discovery	✓	
Wiyot Tribe	✓	Inadvertent Discovery	✓	
Northwest Information Center	✓	Conditional	✓	

ATTACHMENT 5

Public Comments

From: Brian Millar
To: Johnson, Cliff
Cc: Moxon, Delilah
Subject: Fw: proposed cell towers in the Arcata Bottom
Date: Sunday, June 20, 2021 7:55:55 PM

Cliff and Delilah,
Email below is from a neighboring property owner for the PWM project...can this be included in the Planning Commission packet?
Do you have details on the previous project for a cell tower that is referenced from 2002, and should such information be included as background in the staff report? Lastly, is it OK for me to provide the AT&T plans to the neighbor as requested?
Thank you.
Brian Millar
Land Logistics

From: Ramona Fair <msmadrone@gmail.com>
Sent: Saturday, June 19, 2021 6:57 PM
To: Brian Millar <brian@landlogistics.com>
Subject: proposed cell towers in the Arcata Bottom

Hello Brian Millar,

I spoke with you briefly on the phone the other day about the proposed cell towers in the Arcata Bottom- I'm the closest neighbor to the property. I stopped by Planning and got a copy of the site plan for PLN-2021-17005 but they couldn't find PLN-2020-16754.
Are you able to please send me a site plan and/or more info on that one, specifically Where exactly the proposed site is?

As I said on the phone, I am Adamantly Against these, or Any towers going up out here. I've talked to neighbors, numerous people walking/jogging/etc. by here, the schools nearby, etc.- Nobody is ok with cell towers going up out here! We fought this Very Same battle back in 2002 and Won! Look it up. It's even the same front man again- Tom McDonald, trying to sneak these things in again out here. There is No need to put those things out here- cell service is great. They will be an eyesore And a hazard- it's proven that the EMF radiation Is harmful to people, especially constant exposure as those would be causing. There are exhaustive amounts of data if you Care to read it. There are many families with children that live out here and many farm animals. Can you or Humboldt County Planning guarantee that no harm would come to us by the radiation from said towers?? No you cannot.
Honestly, this is just another attempt on the part of Sun Valley/aka Arcata Land Group to profit from something that is a bad idea for the community & neighborhoods.
Anyways, I wanted to give you my opinion. I've forwarded the information on to local folks whose job it is to protect Arcatas' open ag land & spaces and the health & safety of its' community.

I'd appreciate any other info you have to share on the matter.
Thanks,
Ramona Fair