

SMALL CELL DEPLOYMENT

STREET LIGHTS & JOINT UTILITY POLES

Planning & Economic Development Department

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SMALL CELL DEPLOYMENT

Background

- Past Council Discussions
- Macro vs. Small Cell

Installations

- Current Deployment
- Permitting Status Map

Joint Pole Installations

- Permitting Process
- What can the City require?

Fifth Generation Network (5G)

- Status

Solutions

- Code Amendments
- Increasing Local Control



PAST COUNCIL ACTIONS

Council Policy 300-04

- Adopted in July of 2000
- Generally tailored for large macro cell sites

Amendment to Policy 300-04 – February 2017

- Small cell deployments on city owned infrastructure in right-of-way
 - Master License agreement
 - Site license agreement for each individual location
 - Annual license fee
 - Execution authority to City Manager or designee

PAST COUNCIL ACTIONS

Council Study Sessions

March 6, 2018

June 5, 2018

December 10, 2019

Small Cells

Summary

Pole Types

- City owned streetlights and PG&E owned wooded poles

Approval Process

- Differs based on pole type and code applicability

Legal Framework

- Federal and State regulations

Deployment Status

- Locations of permitted wooden pole sites

Testing Process

- Radio Frequency (RF) Analysis



Small Cells

Community Concerns



Residential Area Concerns

- Health risks – RF exposure
- Aesthetics
 - Loss of property value
 - Scenic impacts
- Saturation
- Lack of notification
- Environmental impact – back up batteries

Solutions

Code Amendments

Code Amendments and Alignment

- Maintain consistency across Chapters 13 and 20 of the City Code and the Council Policy 300-04
- Expand design guidelines and standards to address small cells on both City owned and joint poles
- Align and improve noticing and public participation
- Streamline and improve review process for both macro and small cells

Expand Placement Options

- Allow limited deployments on City street lights in non-residential areas
 - 6 locations for each provider



Deployment Update

City Owned Poles

- Proposed license agreements are under legal review
- 5 AT&T encroachment permits submitted for City pole sites
- City staff working with service providers on design elements
- Modifying locations to increase residential buffer
 - Verizon location on Mendocino Ave may shift to Farmers Lane south of Highway 12



Deployment Update

Joint Utility Poles

- 7 new AT&T sites
- Residential and commercial areas
- Applicant has provided notification to the surrounding residents
- City staff has received resident feedback on 5 of the 7 proposed sites
 - Community concerns were predominately associated with RF exposure

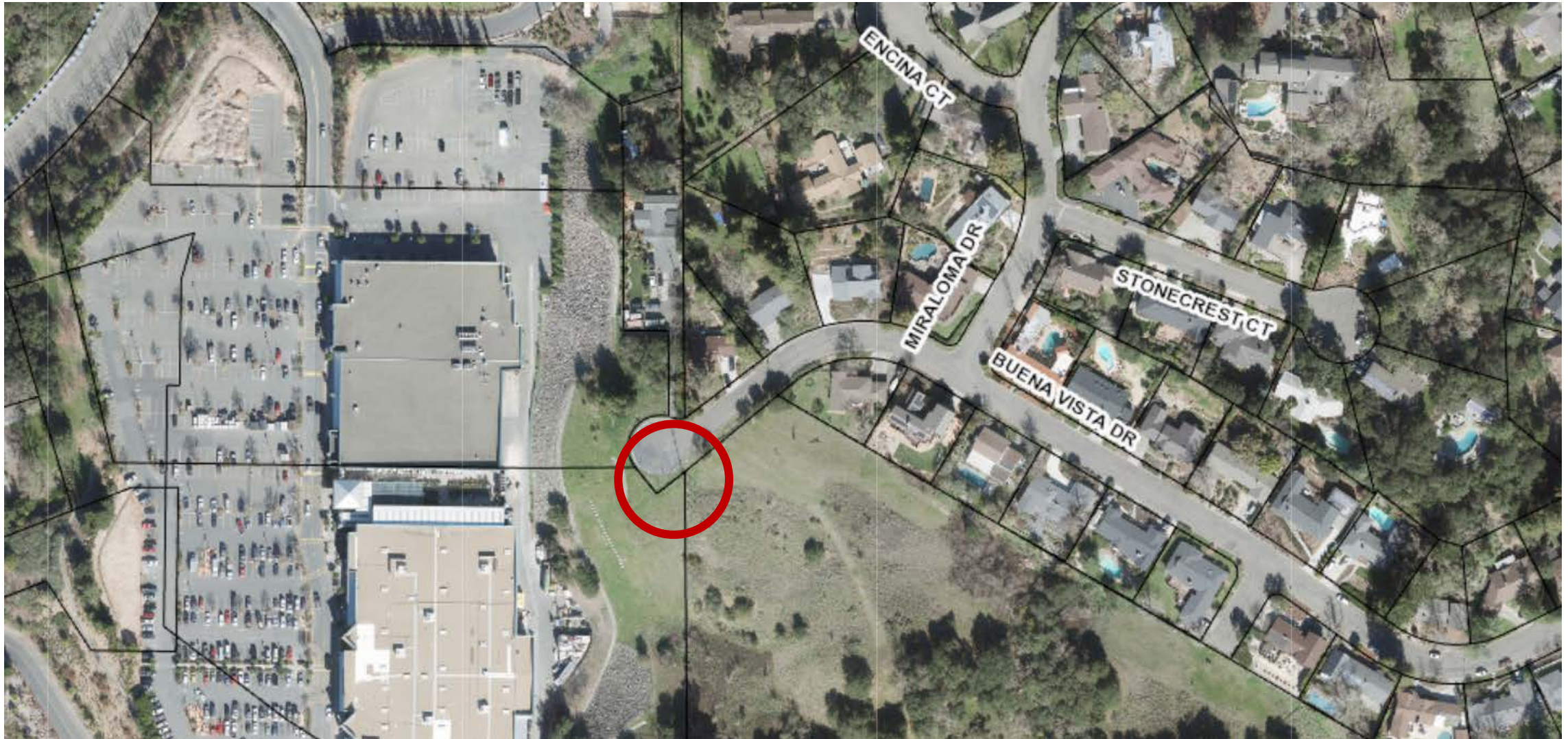
Deployment Update

AT&T Joint Utility Poles



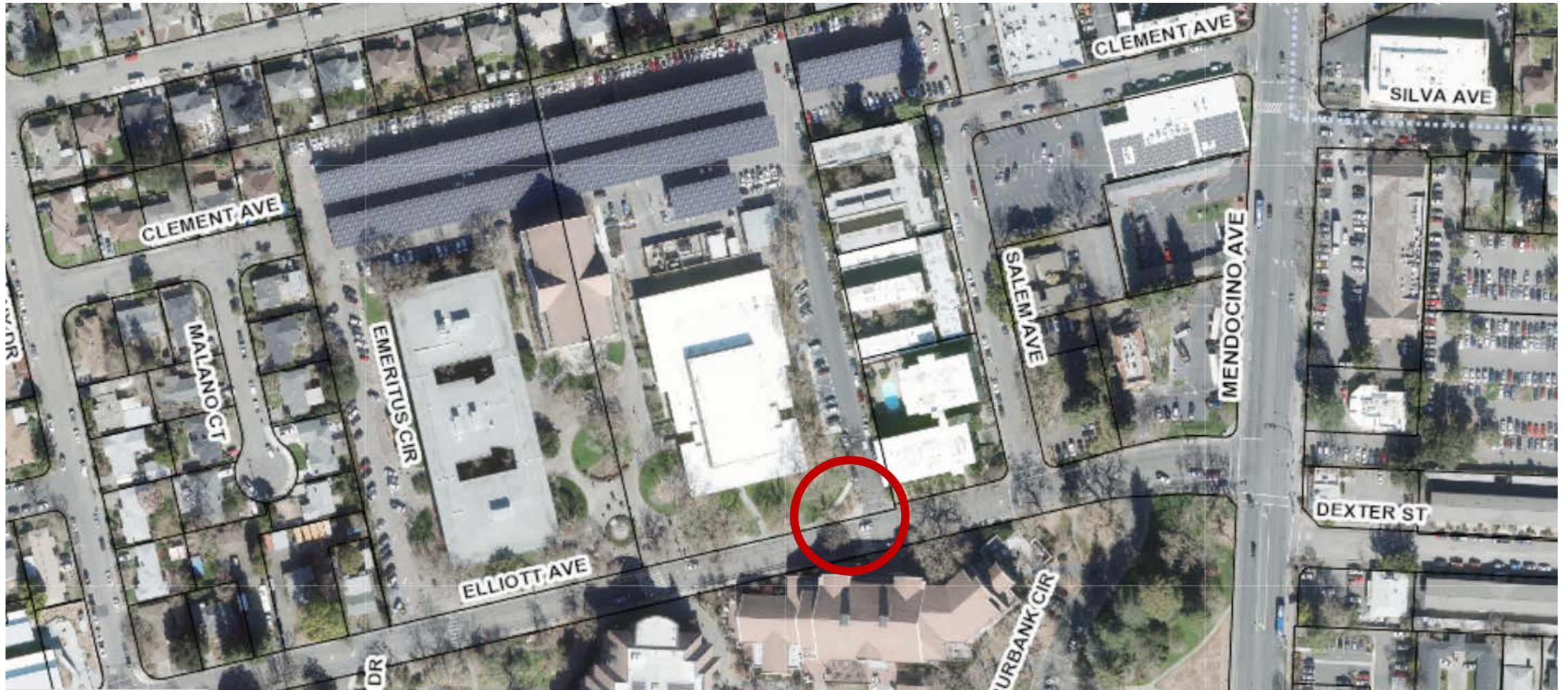
Deployment Update

AT&T Joint Utility Poles



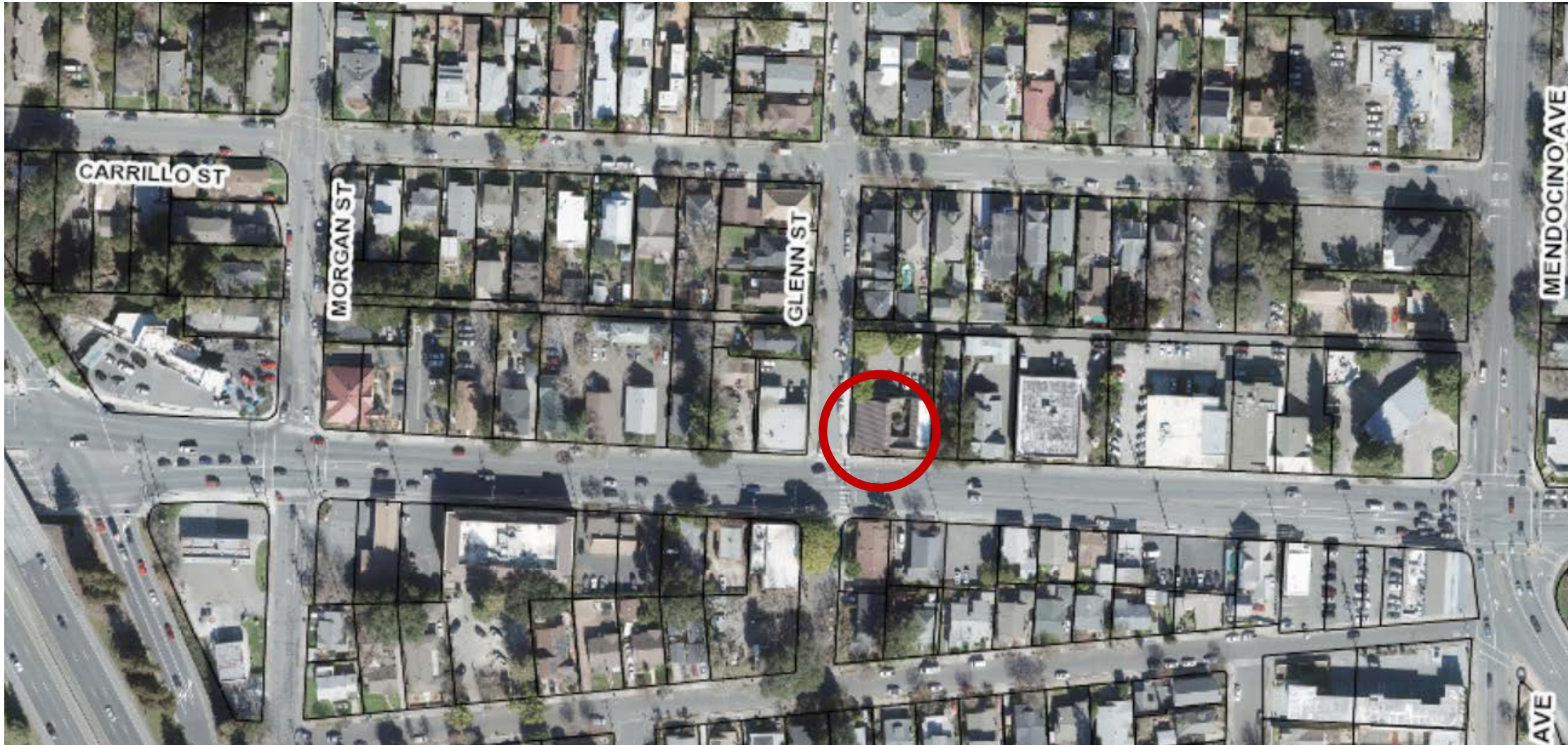
Deployment Update

AT&T Joint Utility Poles



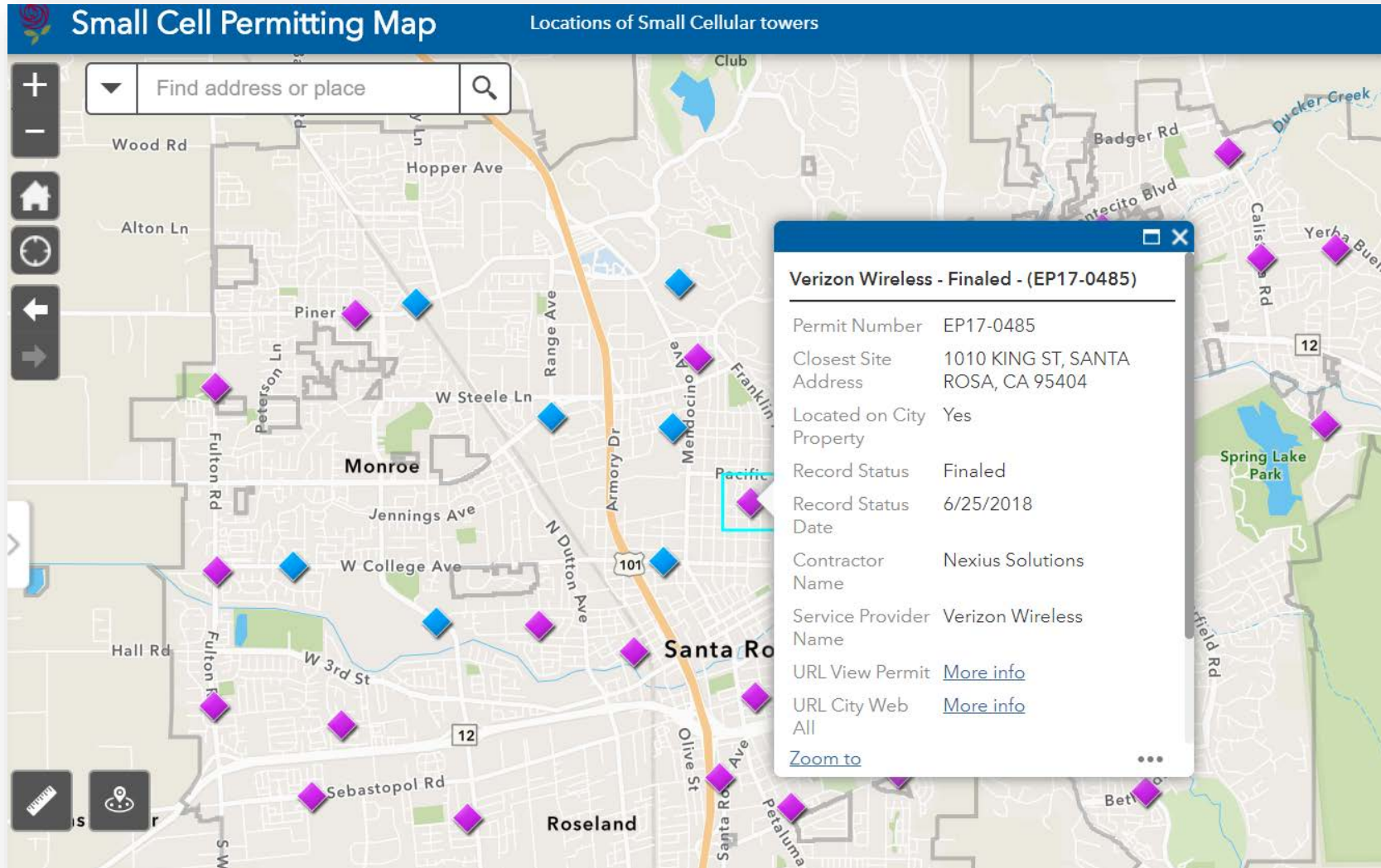
Deployment Update

AT&T Joint Utility Poles



Small Cell Permitting Map Locations of Small Cellular towers

Find address or place



Verizon Wireless - Finaled - (EP17-0485)

Permit Number	EP17-0485
Closest Site Address	1010 KING ST, SANTA ROSA, CA 95404
Located on City Property	Yes
Record Status	Finaled
Record Status Date	6/25/2018
Contractor Name	Nexius Solutions
Service Provider Name	Verizon Wireless
URL View Permit	More info
URL City Web All	More info
Zoom to	

Radio Frequency Exposure

Under Federal law (1996 Telecommunications Act), the City is prohibited from denying a permit to construct a wireless facility based on health concerns over radio frequency emissions provided that the emissions from the facility comply with Federal Communications Commission requirements.



Response to Resident Inquiries

- Describe Federal requirements and City's authority level
- Provide resources associated with the development and application of RF standards
- Provide RF reports
- Connect resident with the service provider

Joint Utility Pole

Review Process



PG&E Review

- Agency determines pole eligibility based on code requirements
- Code requirements ensure that the installation does not affect ability to maintain power infrastructure
- Requirements significantly reduce number of available poles

City Review – Encroachment Permit

- Ministerial application
- Reviewed against objective standards – Chapter 13 of the City Code
- Application cannot be denied if the proposal meets published standards

Joint Utility Pole

Encroachment Permit Review Process

What can be required under the current codes?

-Items identified in Chapter 13 of the City Code

Submittal requirements – section 13-04.060

- "...complete and descriptive information including plats, plans, specifications and analyses the City Engineer may require describing the work and it's effect on the right-of-way, including the mode of operation, maintenance and use;"
- The written order or consent to work thereunder, where required by law, issued by the California Public Utilities Commission or any other public district, agency or body having jurisdiction.
 - California Public Utilities Commission Decision 16-01-046

Wireless Facilities

Can codes be amended to add additional requirements?

-Yes, if the requirements are consistent with State and Federal laws

- State and local governments cannot effectively prohibit wireless services
- Local control on design and development standards
 - No prohibition on wireless communications services
 - Must be reasonable and treat providers equally
 - No more burdensome than those imposed on other infrastructure
 - Objective
 - Published prior to application submittal
 - Denials cannot be based on RF concerns

Wireless Facilities

What can be added or changed with a code amendment?

-Design and development standards for all wireless facility types.

- Distance buffers between wireless facilities, residential structures, schools
- Screening
- Equipment size and placement
- Reducing right-of-way impacts – undergrounding ground mounted equipment
- Allowing or restricting new utility poles
- Siting requirements that are too restrictive can constitute a ban
 - Siting requirements may involve exemptions if provider can prove that placement in restricted zones is needed to address gap in coverage

Wireless Facilities

What can be added or changed with a code amendment?

-Application requirements and review process.

- Define required permit types
- Public review process and noticing
- Define appeal process
- Modify submittal requirements
 - Master deployment plans
 - Alternate site analysis
 - Proof of coverage gaps

Wireless Facilities

How are new or existing applications treated during the code amendment process?

-Current published codes apply.

- Applications must be reviewed against codes published prior to date of application submittal
- FCC order places review of applications under shot clocks
- Local agency cannot create moratoria (delay review or refuse to accept applications)

5G Network Upgrade



- All current installations are supporting 4G networks
- No timelines associated with 5G upgrades
- Infrastructure upgrades may be needed for 4G build out
 - Fiber expansion
- Existing small cell sites will require equipment modifications or software upgrades to support 5G
 - Upgrade on existing sites occurs with little to no local control
- New sites required for deployment of next generation networks
- 5G deployments will be required to meet FCC requirements associated with RF exposure

National Environmental Policy Act (NEPA)

- Small cells are subject to NEPA
- Most locations fall with a categorical exclusion and deemed to have minimal or no impact on the environment
- The City has no obligation under Federal law to ensure compliance with NEPA as part of the encroachment permit review
- City staff are working with the cellular providers to address public concerns regarding review process

Solutions

Code and Policy Consistency



Code Amendment

- Align all codes and polices associated with telecommunications facilities
- Revise submittal requirements
- Create uniform notification and public participation processes
- Develop design standards for small cells and modify macro site standards
- Codify RF testing procedures – City control

Amendment Process

- 9 to 12 month timeline
- Timeline varies based on level of environmental review and community engagement
- Code development process may benefit from the use of professional services
- Priority setting

Questions?

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