

Oakland City Planning Commission
Special Projects Committee Meeting

Telecom Workshop

Wednesday December 7, 2011

The main goals of this workshop are to:

- Ensure that there is complete understanding of the City's Telecommunications Regulations and their applicability to applications before the Commission, and, as part of that understanding, being familiar with the general limitations placed on local governments by the Telecommunications Act of 1996; and
- Ensure an understanding of the broad range of the type of Telecommunications facilities, and in what circumstances (locational, geographical, etc.) certain types of facilities are proposed; and
- Ensure that there is a complete understanding of the design review parameters to be used in decision-making such that the highest level of consistency (considering the range of facility types and technical requirements and limitations) can be achieved

Presentation format

Introduction

- Legal background
- Telecom facilities: classifications, components, locations
- Regulations
- Techniques
- Issues: community concerns, applicant limitations, staff challenges

Visual Examples

Discussion

Design review - legal background

FCC: Telecommunications Act of 1996

- local jurisdiction over design review and land use but not health concerns

CA: Sprint v. Palos Verdes Estates (2009)

- local jurisdiction over design review in public right-of-way sites

Planning Code telecom classifications

Micro

Mini

Macro

Monopole

Tower

Design Review criteria

For Macro Facilities:

1. Antennas should be painted and/or textured to match the existing structure.
2. Antennas mounted on architecturally significant structures or significant architectural detail of the building should be covered by appropriate casings which are manufactured to match existing architectural features found on the building.
3. Where feasible, antennas can be placed directly above, below or incorporated with vertical design elements of a building to help in camouflaging.
4. Equipment shelters or cabinets shall be screened from the public view by using landscaping, or materials and colors consistent with surrounding backdrop or placed underground, inside existing facilities or behind screening fences.
5. Equipment shelters or cabinets shall be consistent with the general character of the area.
6. For antennas attached to the roof, maintain a 1:1 ratio (example: ten feet high antenna requires ten feet setback from facade) for equipment setback; screen the antennas to match existing air conditioning units, stairs, or elevator towers; avoid placing roof mounted antennas in direct line with significant view corridors.
7. That all reasonable means of reducing public access to the antennas and equipment has been made, including, but not limited to, placement in or on buildings or structures, fencing, anti-climbing measures and anti-tampering devices.

Planning Code Site Location Preferences.

New wireless facilities shall generally be located on the following properties or facilities in order of preference:

- A. Co-located on an existing structure or facility with existing wireless antennas.
- B. City owned properties or other public or quasi-public facilities.
- C. Existing commercial or industrial structures in non-residential zones (excluding all HBX zones).
- D. Existing commercial or industrial structures in residential or HBX zones.
- E. Other non-residential uses in residential or HBX zones.
- F. Residential uses in non-residential zones (excluding all HBX zones).
- G. Residential uses in residential or HBX zones.

Planning Code Site Design Preferences.

New wireless facilities shall generally be designed in the following order of preference:

- A. Building or structure mounted antennas concealed from view.
- B. Building or structure mounted antennas set back from roof edge, not visible from public right-of way.
- C. Building or structure mounted antennas below roof line (façade mount, pole mount) visible from public right-of-way, painted to match existing structure.
- D. Building or structure mounted antennas above roof line visible from public right of-way.
- E. Monopoles.
- F. Towers.

Technique: screening

Antennas

- Enclosed or “concealed” (reduce size as possible)
- Open: painted and textured (“camouflaged”)

Cabinets

- Interior building placement
- Ground mounted: fences or “shelters”; landscape
- Pole mounted: camouflaged
- Underground vaulting

Issues with telecom design review in Oakland

Community concerns

- Clutter from wall mounted antennas (esp. combo of various models)
- Visual obstructions (new poles and mounted equipment; architectural attachments)

Applicant's constraints

- Integrated network requirements
- Coverage/capacity needs
- CPUC specifications

Staff's challenges

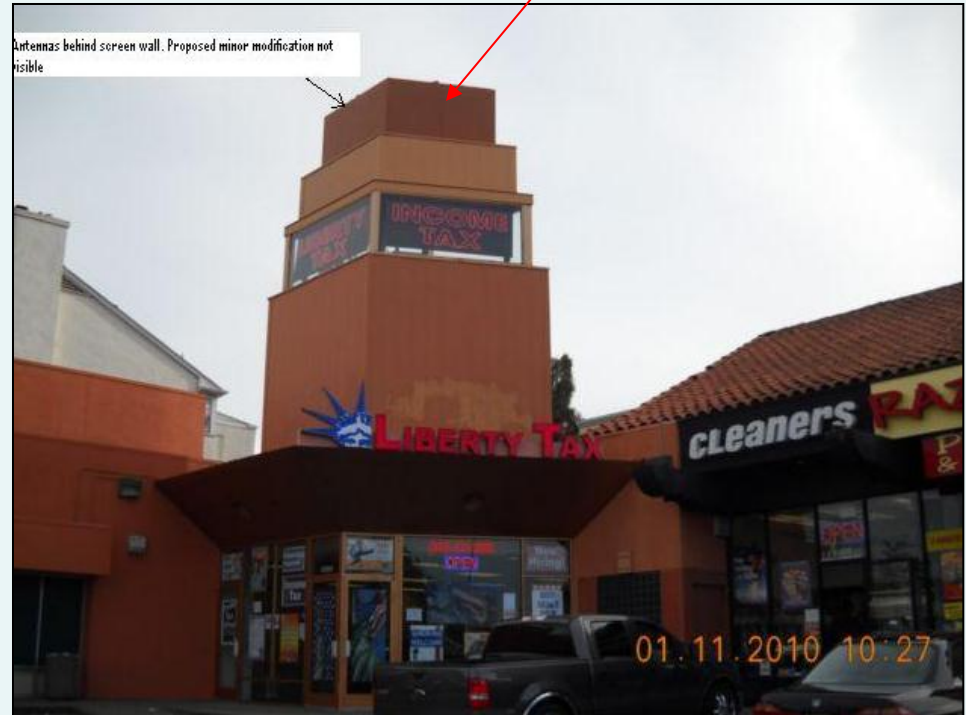
- JPA sites approved prior to Design Review authority
- Permitting upgrades/additions to approved sites
- Permitting new types of sites

Visual examples

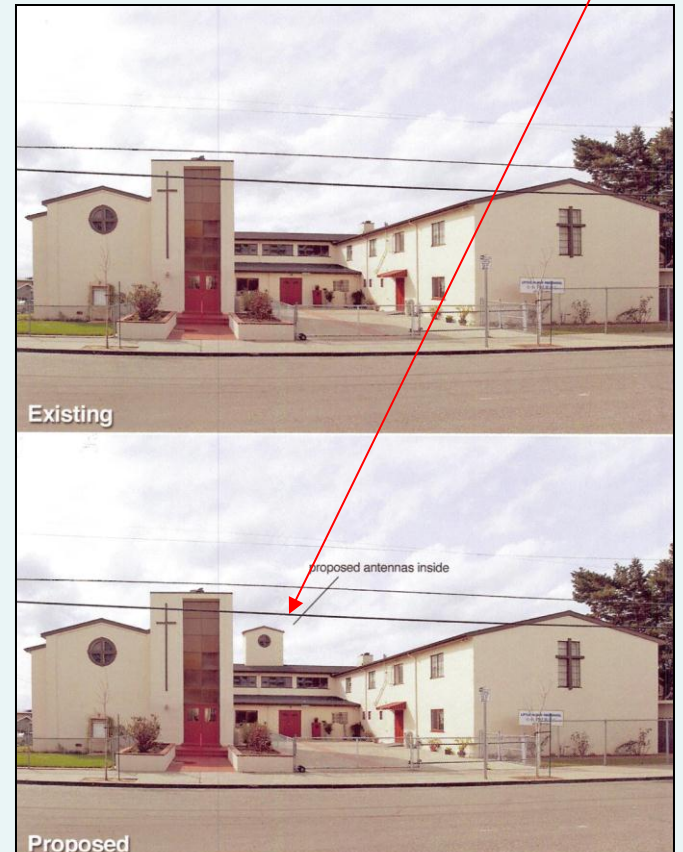
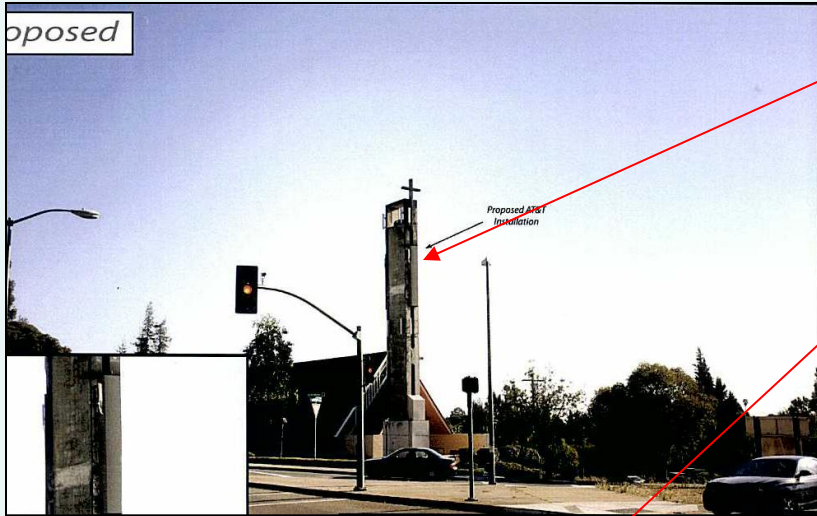
Contents

- Zones and locations
- Attachment (building / ground / pole)
- Visual impact (concealed / camouflaged)
- Other Issues
- Redesigns

Antenna screening – industrial and commercial buildings



New antenna enclosure at civic buildings



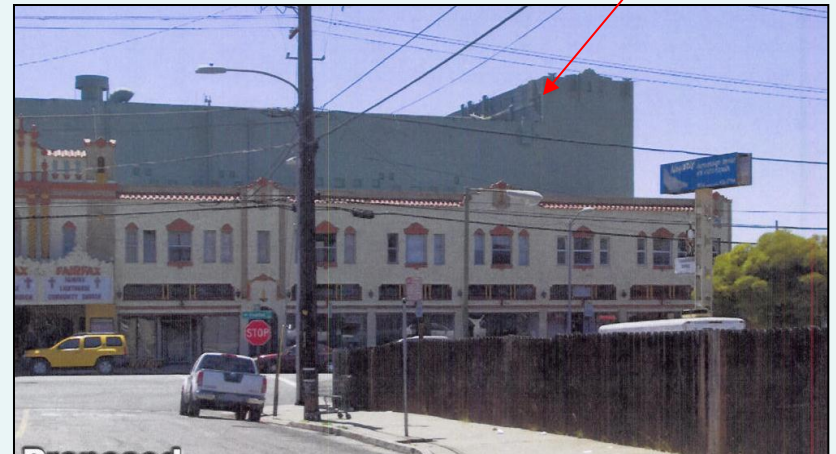
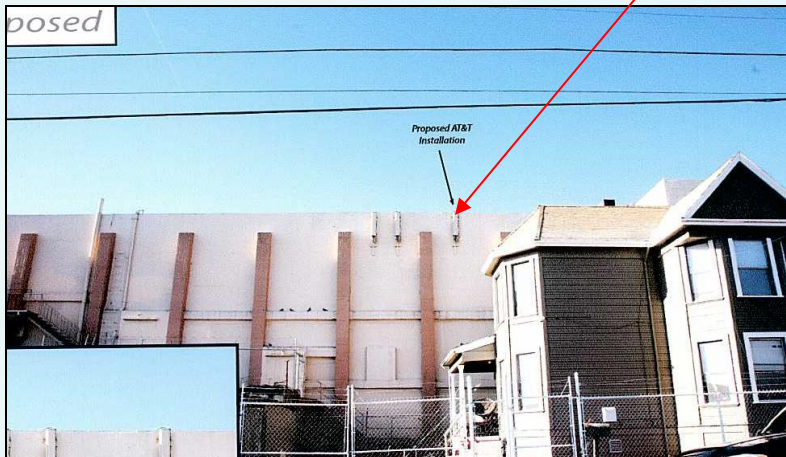
Apartment building rooftop screening



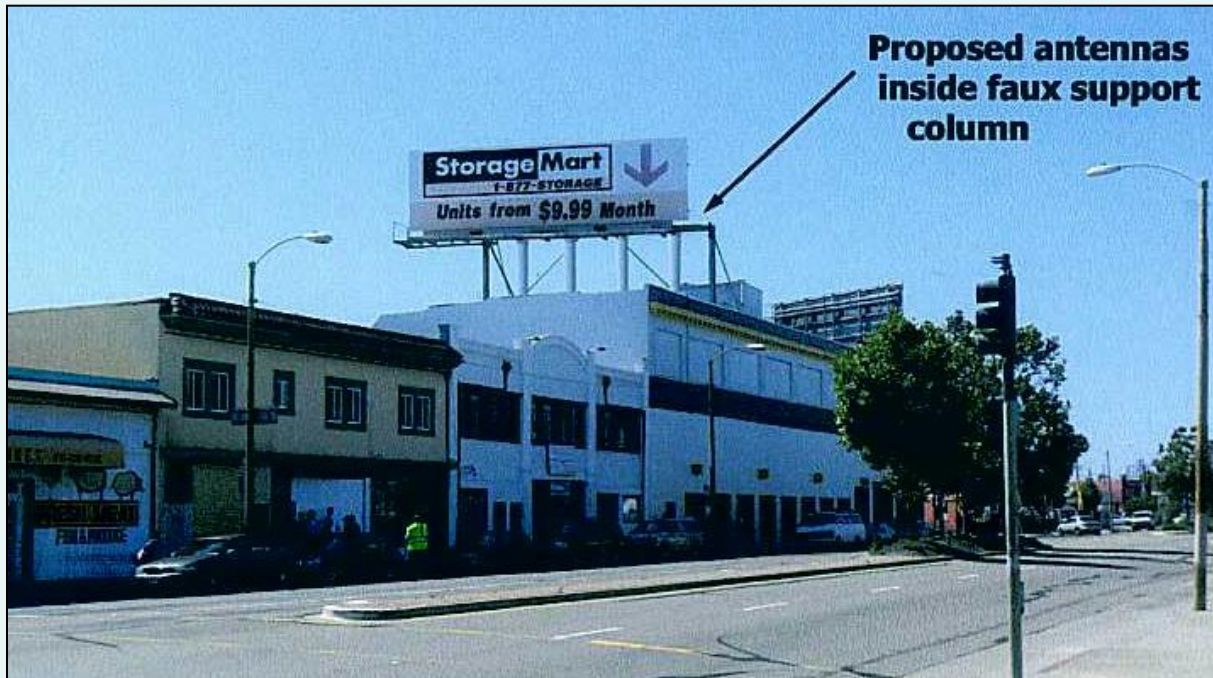
Staff worked with applicant to
reduce size of additions



Antennas attached to building side



Antenna concealment: other examples



Redesigns



Original proposal



Final design

Public right-of-way sites

Monopoles and JPA's

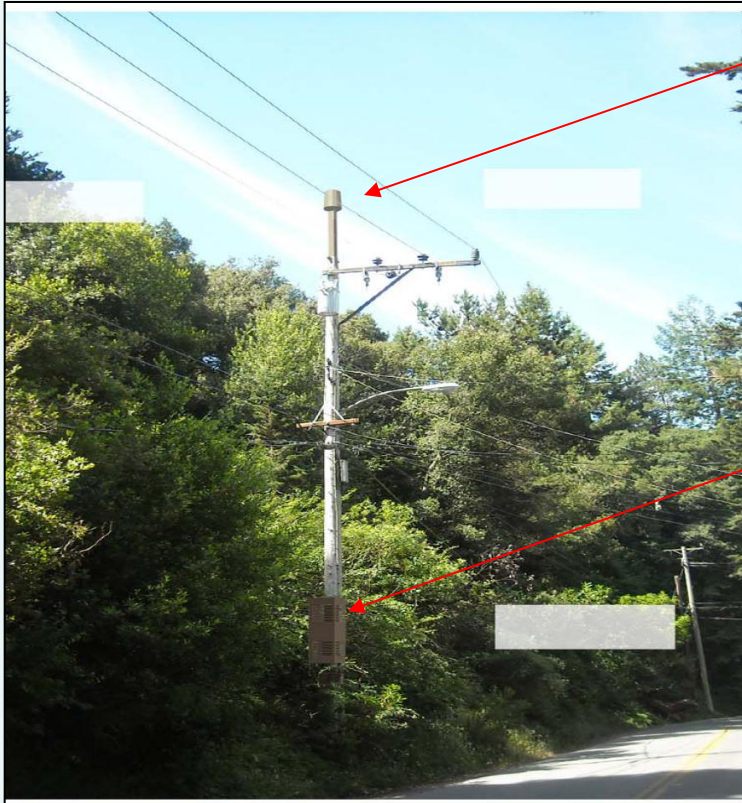
Issues

- View obstruction and visual clutter by antennas and/or equipment

Locations

- Hills and flatland

JPA poles



- Kathrein antenna and equipment painted matte brown
- Equipment contained in slim singular “shroud”

Monopoles

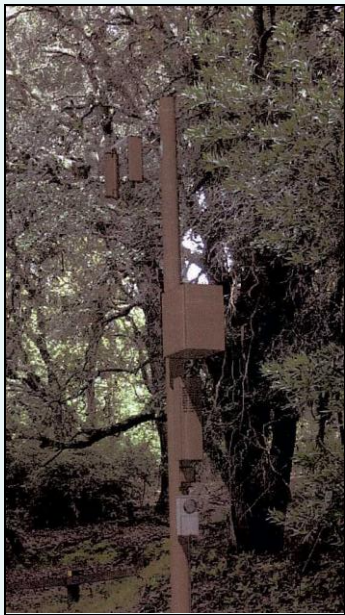
City light pole solutions



More monopoles: revised designs

Staff and applicant worked together on redesigns to reduce height and bulk

Original

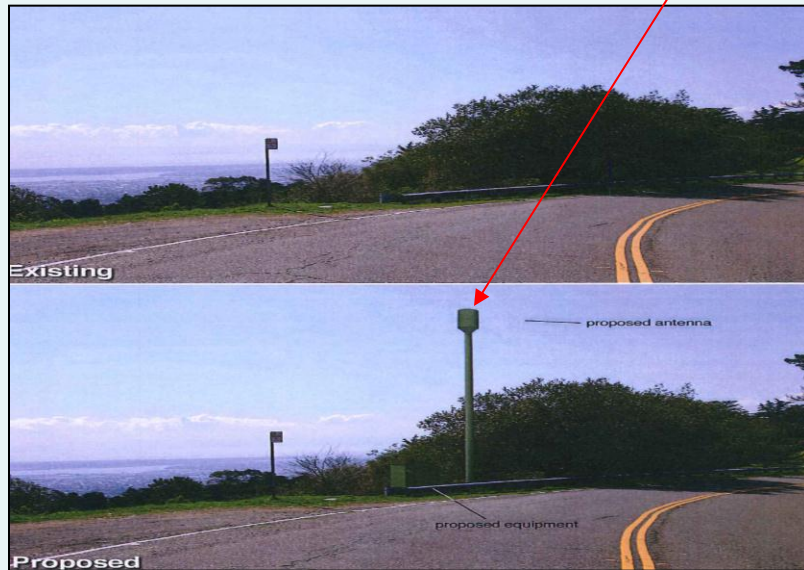


Revised

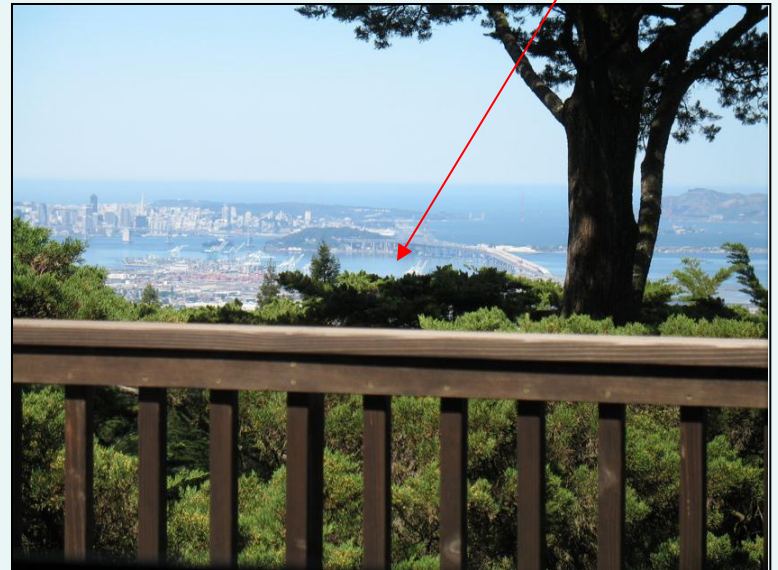


Views

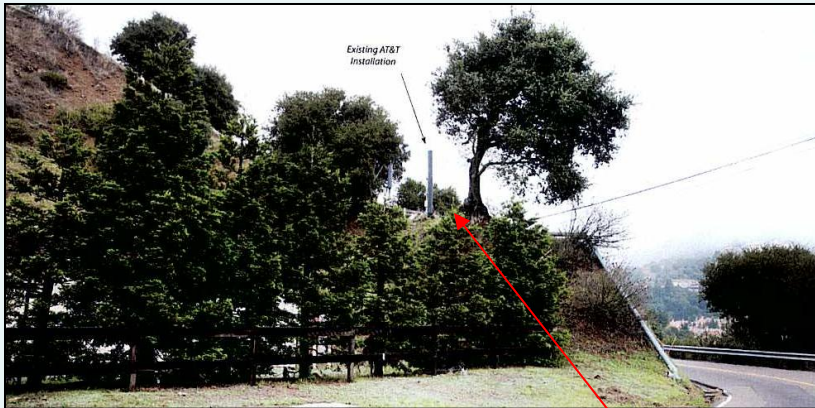
Proposed monopole



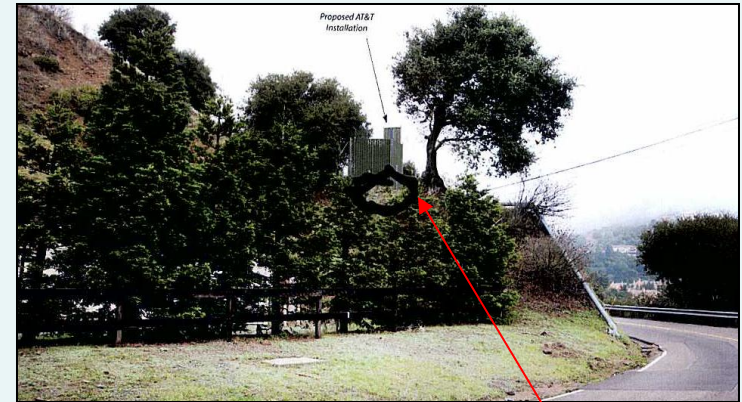
Proposed JPA



Screening



Without fence



With fence

Cabinets: ground level equipment shelters



Landscaping was required to allow a future expansion

Numerous shelters collocated with inconsistent designs



Older shelter does not fully screen cabinets from street – same carrier provides opportunity for making improvements to entire array of cabinets



Other telecom examples: Monopines



Monopine located among trees vs. monopine located in semi open location

Additional stealth solutions



Cactus antenna (not for Oakland)



Pine tips obscure antenna

Discussion

- Understand issues: existing conditions, regulations, techniques, constraints, concerns
- Discuss criteria and policies as necessary