



Z O N I N G A D J U S T M E N T S B O A R D S T A F F R E P O R T

FOR BOARD ACTION
APRIL 25, 2013

1632 University Avenue

Use Permit #12-1000057 to establish a new wireless telecommunication facility for AT&T including twelve antennas concealed within Radio Frequency Transparent screens on the rooftop of a three story mixed-use building and install related equipment in a basement lease space.

I. Application Basics

A. Land Use Designations:

- General Plan: AC Avenue Commercial
- Zoning: C-1 General Commercial

B. Zoning Permits Required:

- Use Permit to establish a telecommunication facility, under BMC Section 23C.17.100.A.2

C. CEQA Determination: Categorically exempt pursuant to Section 15301 of the CEQA Guidelines ("Existing Facilities").

D. Parties Involved:

- Applicant AT&T c/o Thomas C. McIver, On Air, 465 First St., West, Suite 101, Sonoma, CA 95476
- Property Owner Yuval Bobrovitch, 1632 University Ave., Berkeley, CA 94703

Figure 1: Elevation

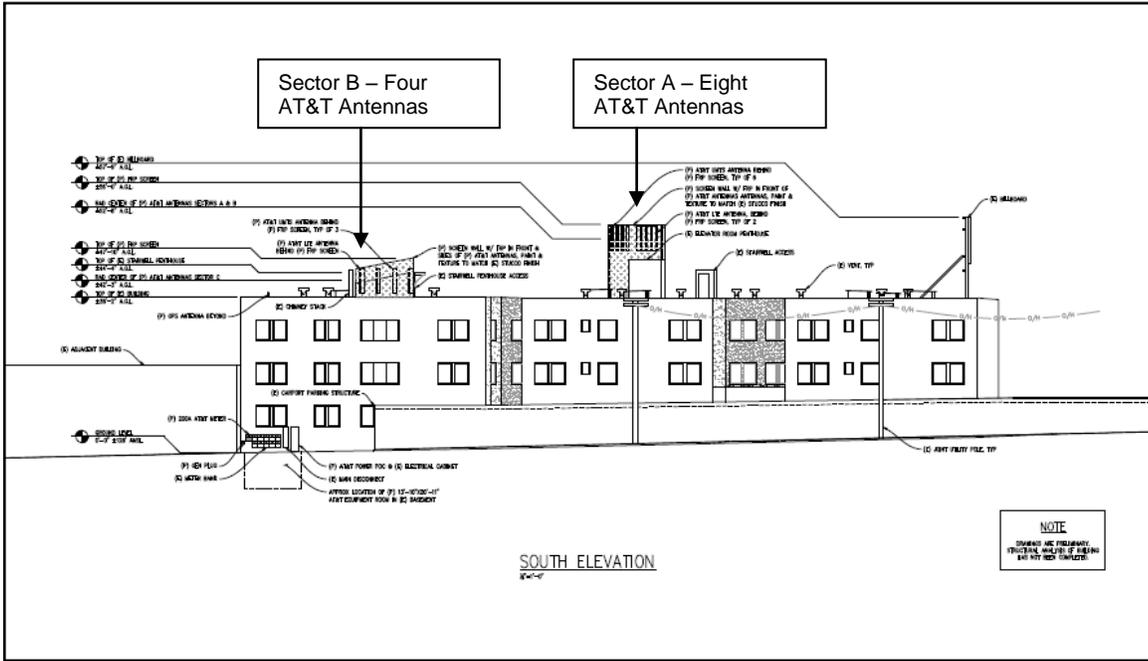


Figure 2: Vicinity Map

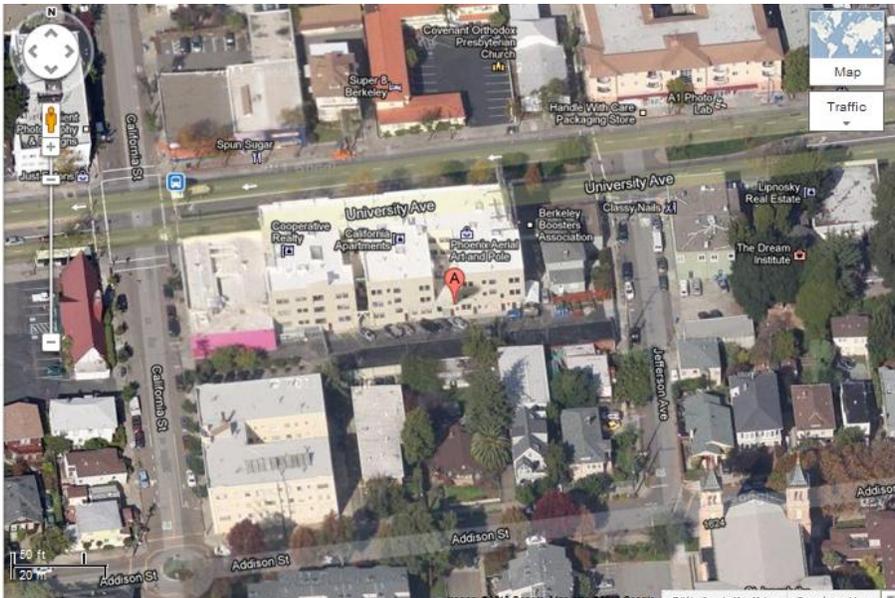
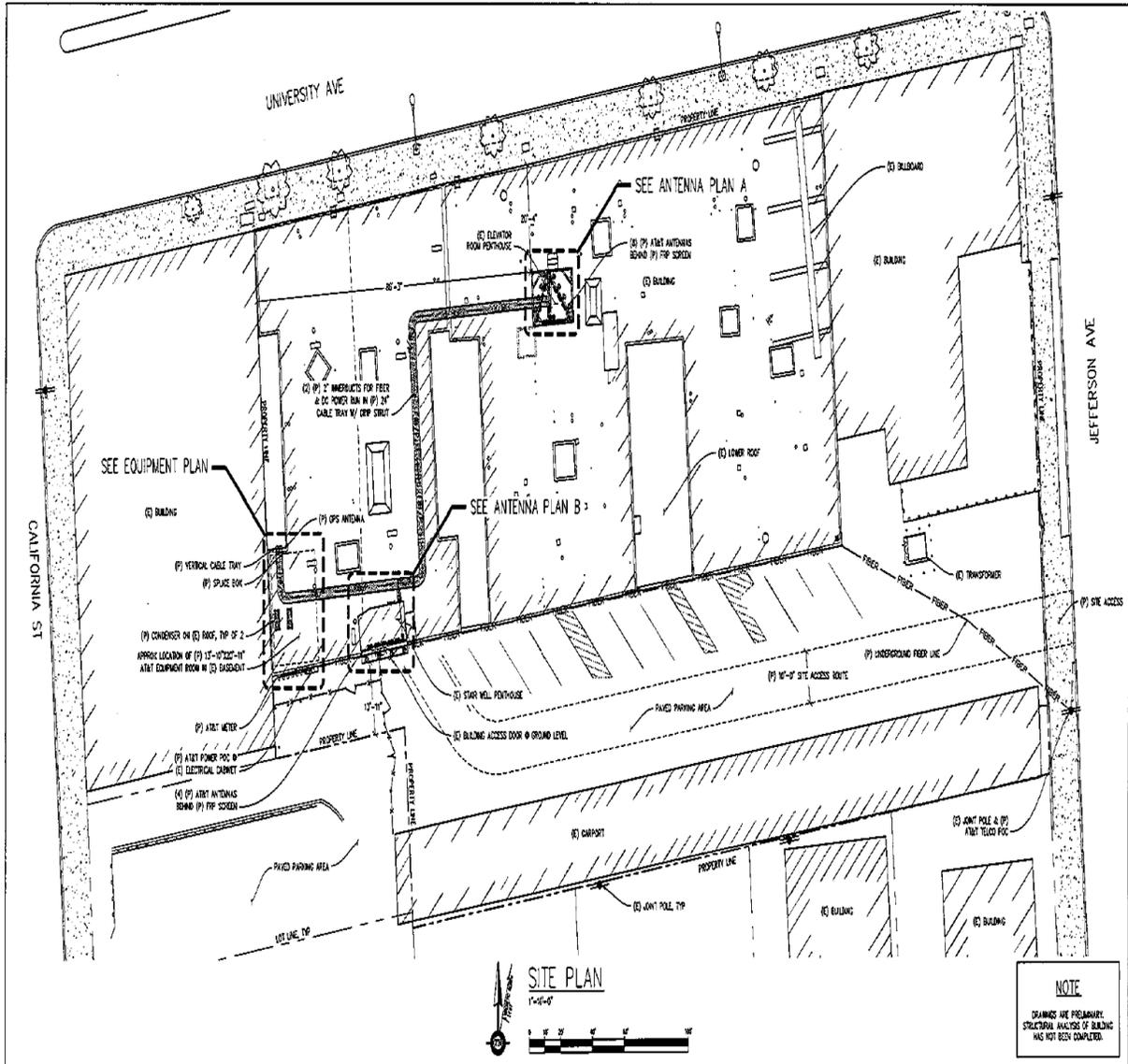


Figure 3: Site Plan



NOTE
 DRAINGS ARE PRELIMINARY.
 STRUCTURAL ANALYSIS OF BUILDING
 HAS NOT BEEN COMPLETED.

 Streamline Engineering Civil & Survey Inc. 8440 Sierra College Blvd., Suite E, Dublin, CA 94568 Contact: Larry Houghton Phone: 916-475-4180 E-Mail: larry@streamlineeng.com Fax: 916-450-1941	 440 ROSEWOOD DR. BLDG 3, 6TH FLOOR PLEASANTON, CA 94566	UNIVERSITY AVENUE & MCGEE AVENUE CN4988 1632 UNIVERSITY AVE REDWOOD CITY, CA 94061	ISSUE STATUS		SHEET TITLE																												
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Table 1: Land Use Information

Location		Existing Use	Zoning District	General Plan Designation
Subject Property		Mixed-Use	C-1	General Commercial
Surrounding Properties	North	Motel, Church	C-1	General Commercial
	South	Single- and Multi-Family Residential	R-2	Low Medium Density Residential
	East	Retail	C-1	General Commercial
	West	Retail	C-1	General Commercial

Table 2: Project Chronology

Date	Action
November 30, 2012	Application submitted
April 11, 2013	Public hearing notices mailed/posted
April 15, 2013	Application deemed complete
April 18, 2013	DRC Review
April 25, 2013	ZAB hearing
June 14, 2013	PSA deadline ¹

1. Project must be approved or denied within 60 days after being determined to be exempt from CEQA, or 60 days after adoption of a negative declaration, or 180 days after adoption of an EIR (Govt. Code Section 65950).

II. Project Setting

A. Neighborhood/Area Description:

The project site is located mid-block on the south side of University between Jefferson Avenue and California Street surrounded by a mixture of retail, restaurant uses, and residential to the rear (south of the site).

B. Site Conditions:

The project site is a developed site consisting of a three story mixed use building with ground floor commercial uses and apartment units above. The subject site is located within the Avenue Strategic Plan Overlay where the height limit is 40'. Section 23C.17.060.C (Height Requirements) allows roof-mounted antennas to extend up to 15' above the height limit of the District. AT&T proposes to install twelve telecommunication antennas on the roof-top of the building, 55' from grade at the highest, and is therefore allowed under this Section.

There are no existing telecommunication facilities at this location.

III. Project Description

AT&T proposes to install twelve antennas on the rooftop and related equipment in a basement lease space. The proposal involves four main elements:

- 1) Install eight AT&T antennas concealed within a new 17' tall, 12'11" wide Radio Frequency Transparent screen, painted to match the existing building at the northern section of the roof;
- 2) Install four AT&T antennas concealed within a new 9'5" tall, 14' wide Radio Frequency Transparent Screen, painted to match the existing building at the southern section of the roof;
- 3) Install cable trays on the rooftop and along the west side of the building; and
- 4) Install six equipment cabinets in a basement lease space.

IV. Community Discussion

A. Neighbor/Community Concerns:

Prior to submitting the application to the City, a pre-application poster was erected by the applicant in November, 2012. On April 11, 2013, the City posted a Notice of Public Hearing at the site and at two locations in the vicinity and mailed notices to property owners and occupants within a 300' radius, and to interested neighborhood organizations. As of writing this staff report, staff has not received correspondence regarding the AT&T proposal.

B. Committee Review:

The Design Review Committee (DRC) reviewed the project on April 18, 2013. The DRC gave the project a favorable recommendation to ZAB (7-0-0-0) with the following specific direction for Final Design Review deferred to Staff with Committee assistance as necessary: (1) The south wall of the antenna screen on the stair extension to be relocated in line with exterior wall below. Four antennas on this wall to be façade-mounted and painted to match the existing building and screen color; (2) Stair extension shall have a simple rectilinear profile and finish detail at the top. These conditions have been incorporated into Attachment 1 Findings and Conditions, number 12.

V. Issues and Analysis

A. Key Issues:

1. Compliance with FCC Regulations: Section 704 of the Telecommunications Act of 1996 (47 U.S.C. §332(c)) prohibits local governments from regulating proposed wireless service facilities on the basis of the environmental effects of radio frequency emissions if the facilities comply with the Federal Communication

Commission's (FCC) regulations. Berkeley Zoning Ordinance Section 23C.17.100.B.1 requires the Zoning Adjustments Board to make a finding that the facility will comply with these regulations.

The applicant provided a report prepared by William F. Hammett, P.E., of Hammett & Edison, Inc. Consulting Engineering, an electrical and mechanical engineer registered with the State of California, as required by Berkeley Zoning Ordinance Section 23C.17.040.F (see Attachment 4). Hammett & Edison evaluated the proposed AT&T antenna installation for compliance with appropriate guidelines limiting human exposure to radio frequency (RF) electromagnetic fields. The March 28, 2013 report states that the antennas are designed to concentrate their energy towards the horizon and that very little energy is directed toward the sky or the ground and that due to the short wavelength of the frequencies assigned by the FCC for this wireless service, the antennas require line-of-sight paths for their signals to provide adequate coverage. The Hammett & Edison report states that based on "worst-case" assumptions, the maximum RF exposure level at the ground is calculated to be 4.1% of the applicable public exposure limit, and the maximum calculated level at the roof of the subject building is calculated to be 58% of the applicable public exposure limit.

The AT&T antennas will not be accessible to the general public; therefore, Hammett & Edison states that there are no mitigation measures necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures that might occur during such activities as building maintenance, the Hammett & Edison report recommends that explanatory warning signs be posted at the roof access doors, on the view screen enclosure in front of the antennas, on the elevator penthouse, and at the antennas on the stairwell penthouse. Such signs should be readily visible from any angle of approach to persons who might need to work within that distance. These requirements are included in the conditions of approval (see Attachment 1).

In summary, the Hammett & Edison report concludes that the proposed AT&T antenna installation and facility will comply with the prevailing FCC Standards for limiting public exposure to radio frequency energy and will not cause a significant impact on the environment and that the highest calculated level in publicly accessible areas is less than the prevailing standards allowed for exposures of unlimited duration.

RCC reviewed and evaluated the submitted RF report (see Issue #4 Facility Need) and concurs with its analysis and conclusion that the proposed antenna installation will comply with the FCC guidelines for radio frequency emissions.

2. Visibility: Under Berkeley Zoning Ordinance Section 23C.17.100.B.2, the Zoning Adjustments Board must make a finding that the facility will either: (1) not be readily visible; or (2) that it is not feasible to incorporate additional measures that would make the facility not readily visible.

The design incorporates a number of features to ensure that the facility would not be readily visible (see photo simulations Attachment 6), including:

- i. Support equipment cabinets will be located in a basement lease space and will not be visible to the general public;
 - ii. Cable trays will be located on the rooftop and along the side of the building, painted to match the building and will resemble a downspout from the roof of the building; and
 - iii. Antennas will be screened in “antenna boxes”, constructed of Radio Frequency Transparent material, painted and textured to match the existing building.
3. Certification of Facilities: Under Berkeley Zoning Ordinance Section 23C.17.100.4, in order to approve a new or modified wireless facility, the Board must find that the operator (AT&T) has submitted the following information for all its facilities within the City of Berkeley: (1) within 45 days of initial operation or modification of a telecommunications facility, written certification by a licensed engineer that the facility’s radio frequency emissions are in compliance with the approved application and any required conditions, as well as a determination that the facility meets the FCC requirements; and (2) annual written certification by an authorized representative for the wireless carrier that each of its facilities within the City is being operated in accordance with the approved local and federal permits.

AT&T has submitted the required facility compliance reports to staff. The reports indicate that all AT&T facilities within the City are operating in compliance with the approved conditions and are FCC compliant. AT&T has also submitted written certification that all AT&T facilities within the City are being operated in accordance with approved local and federal permits (see Attachment 8).

4. Facility Need: Under Berkeley Zoning Ordinance Section 23C.17.100.B.3, the Board must find that the facility is necessary to prevent or fill a significant gap in coverage or capacity shortfall in the applicant’s service area and that the proposed installation is the least intrusive means of doing so.

The City commissioned a peer review prepared by RCC Consultants to independently review the AT&T proposal to verify the need for the facility (see Attachment 5).

Based on the coverage maps, drive data, and network data provided by AT&T, RCC states that AT&T demonstrated a gap in in-transit and in-building coverage

in its network area bounded by Cedar Street to the north, Channing Way to the south, Acton Street to the west and Milvia Street to the east. RCC states that there exists outdoor coverage, however, the adjacent existing AT&T sites are too far removed from the intended coverage area to provide reliable in-transit and in-building coverage. RCC concludes that AT&T has demonstrated a coverage gap in its network in the area for in-transit and in-building service, and that this gap will be substantially mitigated by the activation of AT&T service from the proposed installation.

5. Noise: The Land Use Planning Division has found that equipment cabinets required to support wireless antennas can generate noise exceeding the limits of the City's Noise Ordinance outlined in Chapter 13.40 of the Berkeley Municipal Code. For this reason, the City of Berkeley requested that AT&T submit a noise study performed by an acoustical, mechanical, or electrical engineer. AT&T retained the services of Illingworth and Rodkin, Acoustics and Air Quality Consultants. Illingworth and Rodkin submitted an acoustical report to the City dated March 22, 2013 (see Attachment 9).

Illingworth and Rodkin conducted a noise monitoring survey from February 25, 2013 to February 27, 2013 to quantify the existing noise environment at nearby noise sensitive receivers located in the Residential District south of 1632 University. The survey included a long-term and a short-term measurement. The report states noise levels measured at the site were primarily the result of traffic from University Avenue and that the long-term hourly average noise levels ranged from 53 to 60 dBA during the day and from 48 to 53 dBA at night, and the short-term hourly average noise levels were 53 dBA.

In its conclusion, Illingworth and Rodkin state that the existing ambient noise levels generated by traffic on University exceed the limits in the City's Noise Ordinance, Section 13.40, and the noise exposure found during the noise monitoring survey is the standard used for the current ambient noise levels. Based on review of the manufacturing specifications for the proposed equipment for the AT&T facility, Illingworth and Rodkin found that the equipment is not expected to generate audible noise levels and would not contribute to the ambient noise environment.

The Land Use Planning Division has contracted with the firm of Illingworth and Rodkin, Inc. to review and analyze submitted noise studies for wireless facilities. The noise analysis was prepared by the City's third party noise consultant, therefore staff did not submit the noise study for additional review.

B. Conclusion:

Based on information provided to the City, Staff believes that the proposed project would enhance wireless connectivity in the area while not posing a threat to public

health, or result in a structure that is detrimental to views or creates excessive noise based on the following reasons:

- Design Review Committee Preliminary Design Review approval;
- The applicant's narrative statements;
- The RF report prepared by a certified electrical engineer;
- The report by the City's RF engineer verifying the necessity of the facility upgrade;
- The Certification of AT&T Facilities operating in Berkeley; and
- The report by Illingworth and Rodkin, Acoustics and Air Quality Consultants concluding that the proposed equipment would not have any detrimental noise impacts.

C. General and Area Plan Consistency:

General Plan Policy Analysis: The 2002 General Plan contains several policies applicable to the project, including the following:

1. Policy LU-7–Neighborhood Quality of Life, Action A: Require that new development be consistent with zoning standards and compatible with the scale, historic character, and surrounding uses in the area.
2. Policy UD-16–Context: The design and scale of new or remodeled buildings should respect the built environment in the area, particularly where the character of the built environment is largely defined by an aggregation of historically and architecturally significant buildings.
3. Policy UD-24-Area Character: Regulate new construction and alterations to ensure that they are truly compatible with and, where feasible, reinforce the desirable design characteristics of the particular area they are in.

Staff Analysis: The proposed design incorporates reasonable measures to reduce the visibility of the facility and to match the architecture of the existing building. The design was reviewed and Preliminary Design Review approval granted.

VI. Recommendation

Because of the project's consistency with the Zoning Ordinance and General Plan, and minimal impact on surrounding properties, Staff recommends that the Zoning Adjustments Board:

APPROVE Use Permit #12-10000057 pursuant to Section 23B.32.040 and subject to the attached Findings and Conditions (see Attachment 1).

Attachments:

1. Findings and Conditions
2. Project Plans, received January 15, 2013
3. Applicant Statement and Analysis of Alternative sites, received November 30, 2013
4. Engineering Report on Radio Frequency Analysis prepared by William F. Hammett, P.E., dated March 28, 2013 (not included in the packet; see agenda online at <http://www.ci.berkeley.ca.us/zoningadjustmentboard/>)
5. Third Party Wireless Facility Application Review prepared by Dieter J. Preiser, PMP, RCC Consultants, dated and January 9, 2013 (not included in the packet; see agenda online at <http://www.ci.berkeley.ca.us/zoningadjustmentboard/>)
6. Photos Simulations (Existing and Proposed)
7. Coverage Maps (Existing and Proposed)
8. AT&T Certification (not included in the packet; see agenda online at <http://www.ci.berkeley.ca.us/zoningadjustmentboard/>)
9. Acoustical Study prepared by Jordan L. Roberts, Staff Consultant, Illingworth and Rodkin, Inc., dated March 22, 2013 (not included in the packet; see agenda online at <http://www.ci.berkeley.ca.us/zoningadjustmentboard/>)
10. Notice of Public Hearing

Staff Planner: Pamela Johnson, pjohnson@ci.berkeley.ca.us, (510) 981-7410