ESCONDIDO
City of Choice

PLANNING COMMISSION

Agenda Item No.: H.2
Date: April 10, 2012

CASE NUMBER: PHG 11-0008

APPLICANT: AT&T

LOCATION: On the southern side of E. Valley Parkway, east of Citrus Avenue, addressed as 2525 E. Valley Parkway (APN 231-110-41).

TYPE OF PROJECT: Conditional Use Permit

PROJECT DESCRIPTION: A modification to a previously approved Conditional Use Permit (City File No. 2005-79-CUP) for AT&T to add six additional panel antennas onto an existing, approximately 35-foot-high wireless communication facility designed to resemble a broad-leaf tree.

STAFF RECOMMENDATION: Approval

GENERAL PLAN DESIGNATION/TIER: Urban II, East Grove Neighborhood, Tier 2A

ZONING: R-1-6 (Single-Family Residential, 6,000 SF min. lot size).

BACKGROUND/SUMMARY OF ISSUES:

A Conditional Use Permit was approved in 2005 for AT&T (formerly Cingular Wireless) to install an approximately 35'-high simulated broad-leaf tree with up to six, 6'-7" wireless communication panel antennas mounted onto the tree. AT&T has submitted a request to modify the previous CUP to add an additional six new 6'-4" panel antennas on the tree for a total of twelve panel antennas. The panels would be mounted in a triangle type array around the central trunk with four panel antennas per sector. In order to support the new antennas small remote radio units (RRUs), tower mounted amplifier units (TMAs) and surge protectors also would be installed on the antenna panel support poles and upper area of the tree trunk. The tree is proposed to be modified to accommodate the additional antennas, which includes re-branching the tree with additional and longer branches in order to properly integrate and screen the larger antenna array. The additional antennas are requested to support AT&T's new 4G network. Any additional electrical data racks, equipment cabinets and other related equipment would be placed within the existing equipment building.

LEGAL REQUIREMENTS: In 1996, the U.S. Congress added a section to the Communications Act of 1934 to promote the expansion of personal wireless communications service, adding section 332(c)(7). This section preserves local zoning authority over the "placement, construction, and modification" of wireless facilities, while imposing certain federal requirements. Specifically, Section 332(c)(7) requires that state or local government decisions regarding wireless service facilities must not: 1) unreasonably discriminate between one cellular provider and another; or 2) prohibit or have the effect of prohibiting the provision of personal wireless services; or 3) be founded on "the environmental effects of radio frequency (RF) emissions ***to the extent that such facilities comply*** with the FCC's regulations" (emphasis added).

In summary, once the Commission is satisfied the project's RF emissions are within the federal thresholds, then the review must be based on otherwise applicable local zoning criteria. A denial of a proposed facility must not run afoul of the federal restrictions set forth as 1), 2) and 3) above.

1. Whether the additional panel antennas can be appropriately integrated into the existing faux tree.

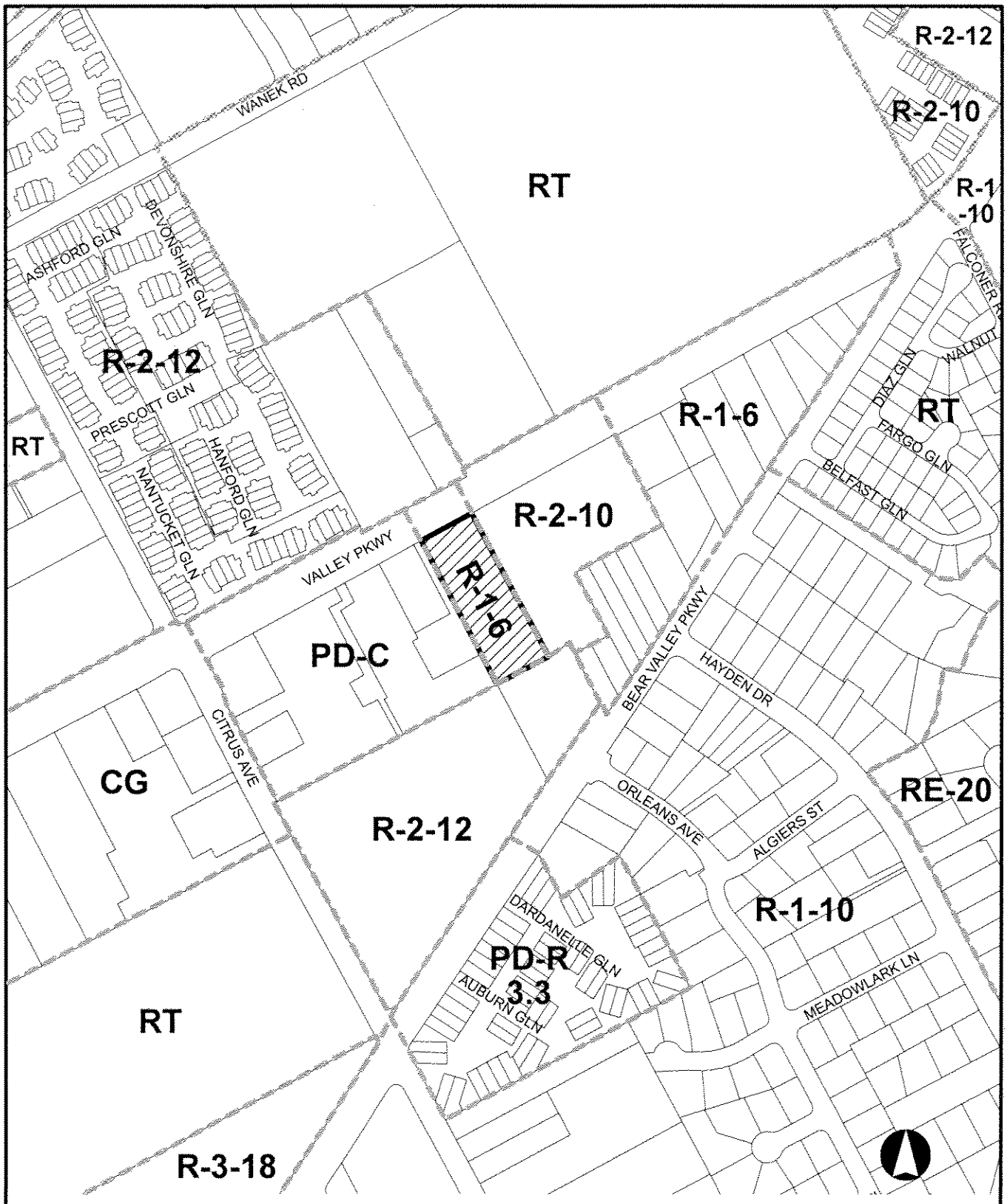
REASONS FOR STAFF RECOMMENDATION:

1. The proposed project would be consistent with the Communication Antennas Ordinance since the antenna panels would be located onto an existing simulated tree that was designed to accommodate wireless facilities and is a stealthy design that blends in with the surrounding environment. The additional antennas would not create an adverse visual impact since the tree would be modified to adequately integrate the new panel antennas into the existing tree and additional specimen-sized trees would be planted to provide appropriate screening from adjacent residential views. The faux tree also would be in conformance with the height requirements for the residential zone.

2. Staff feels the proposed facility would not result in potential health hazards to nearby residents since the Radio Frequency (RF) study prepared for the proposed project indicates the facility would be within maximum permissible exposure (MPE) limits and Federal Communication Commission (FCC) standards.

Respectfully submitted,

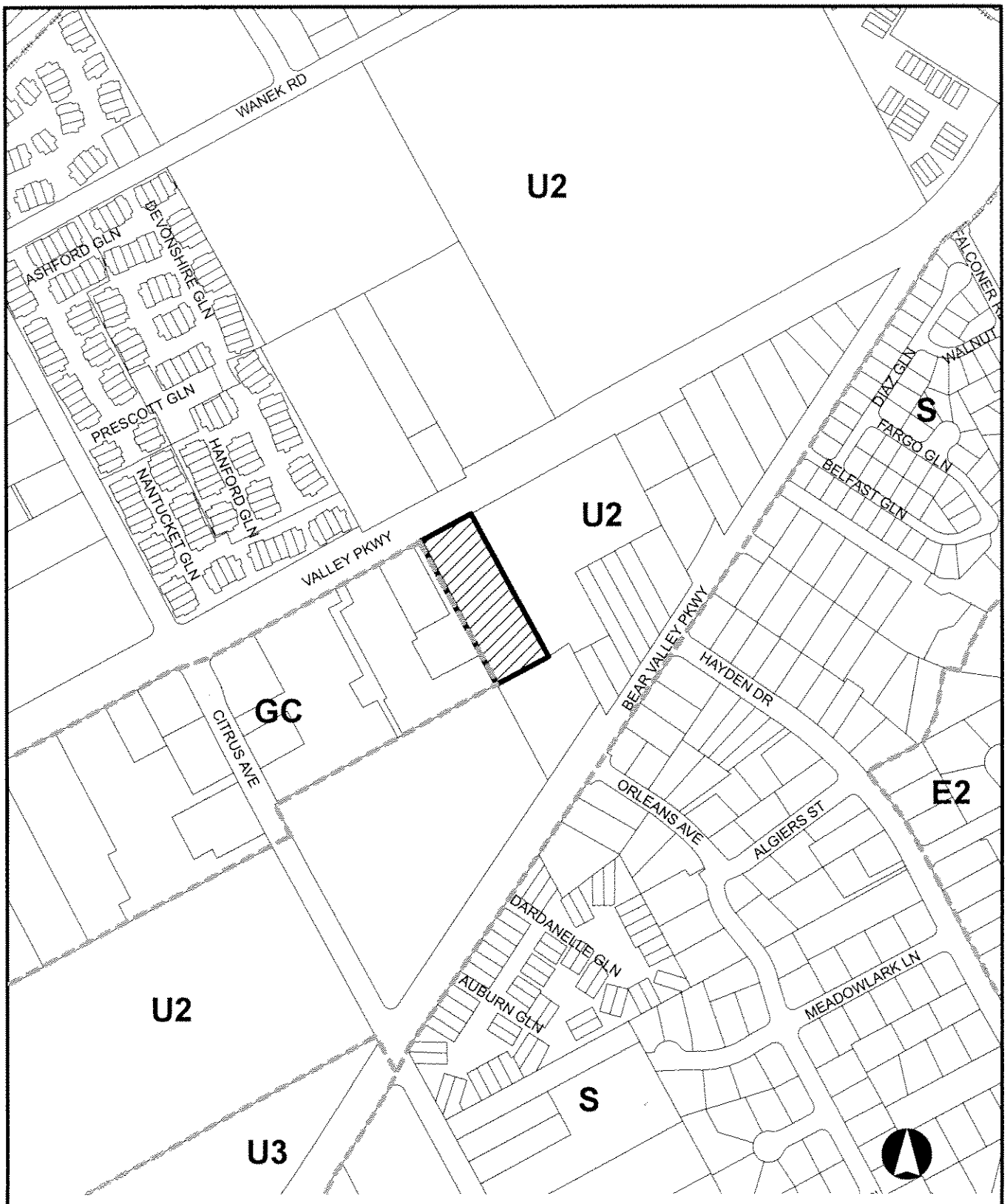
Jay Paul
Associate Planner



PROPOSED PROJECT
PHG 11-0008

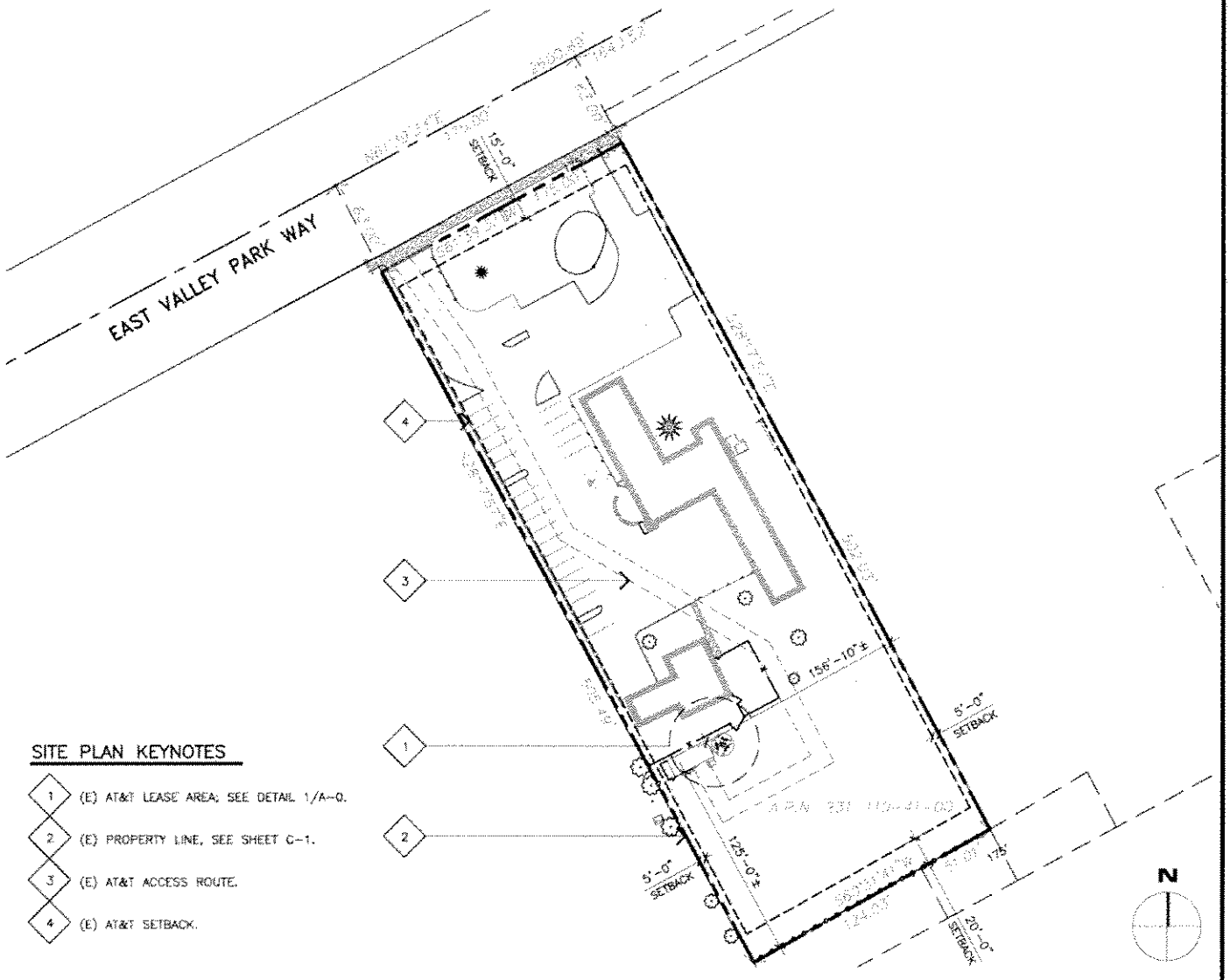
L

LOCATION/ZONING



PROPOSED PROJECT
PHG 11-0008

GP
GENERAL PLAN

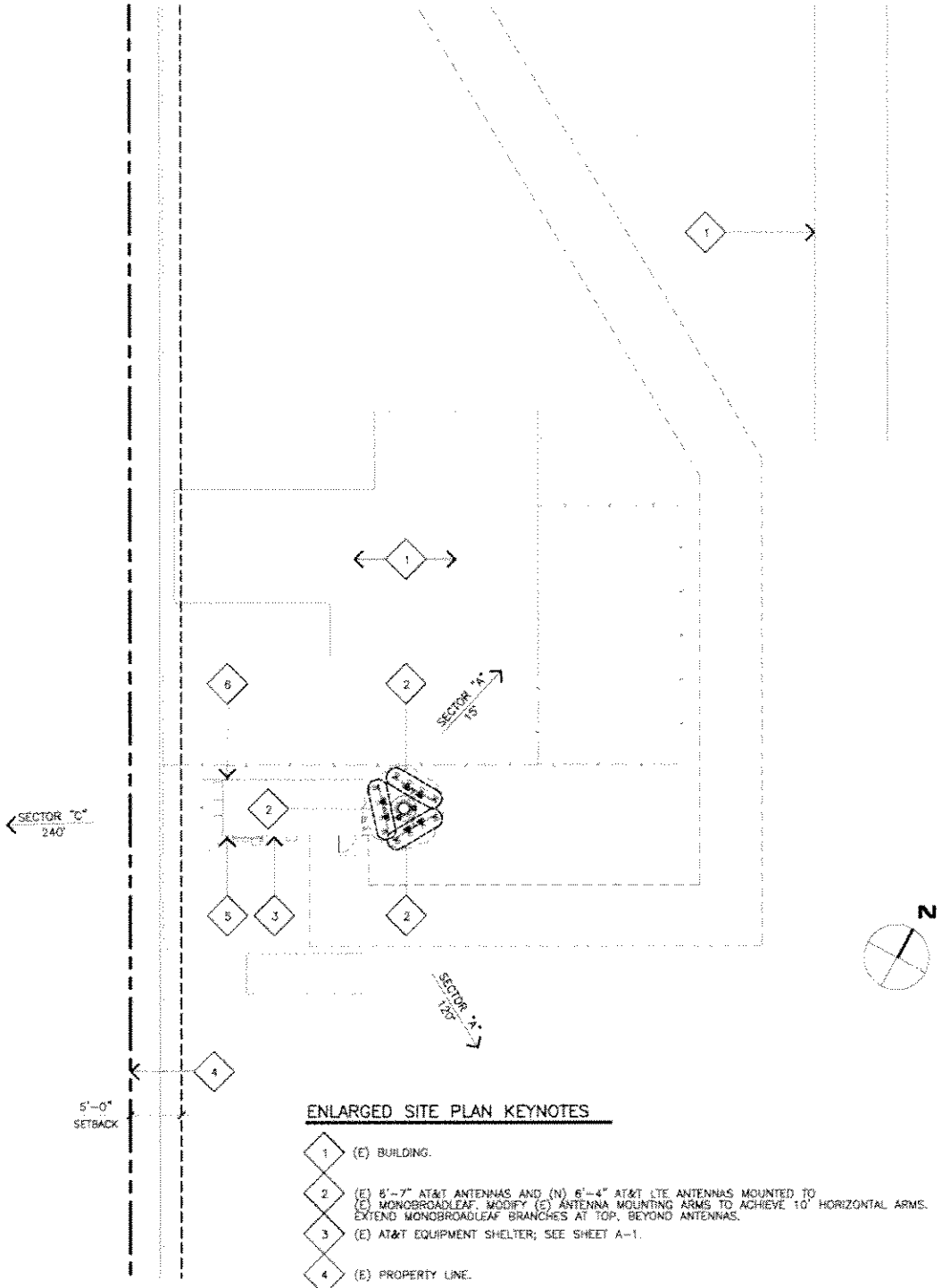


SITE PLAN

PROPOSED PROJECT
PHG 11-0008

S

SITE PLAN



ENLARGED SITE PLAN KEYNOTES

1. (E) BUILDING.
2. (E) 6'-7" AT&T ANTENNAS AND (N) 6'-4" AT&T LTE ANTENNAS MOUNTED TO (E) MONOBROADLEAF. MODIFY (E) ANTENNA MOUNTING ARMS TO ACHIEVE 10" HORIZONTAL ARMS. EXTEND MONOBROADLEAF BRANCHES AT TOP, BEYOND ANTENNAS.
3. (E) AT&T EQUIPMENT SHELTER; SEE SHEET A-1.
4. (E) PROPERTY LINE.
5. (E) AT&T GPS ANTENNA.
6. (E) AT&T LTE GPS ANTENNA.

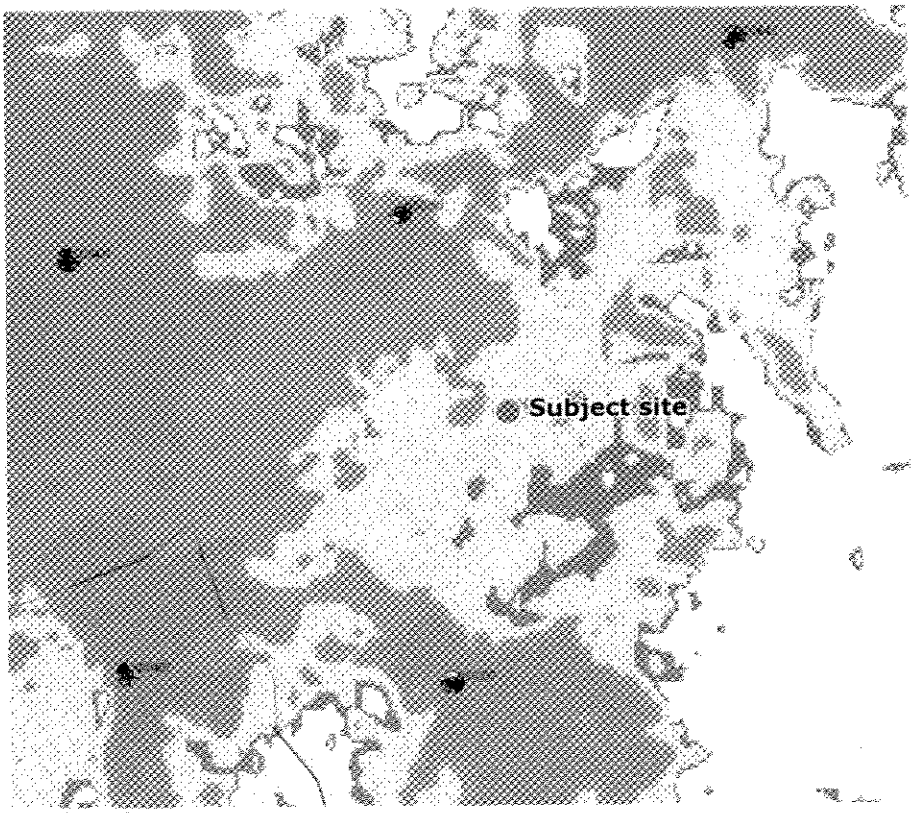
ENLARGED SITE PLAN

PROPOSED PROJECT
PHG 11-0008

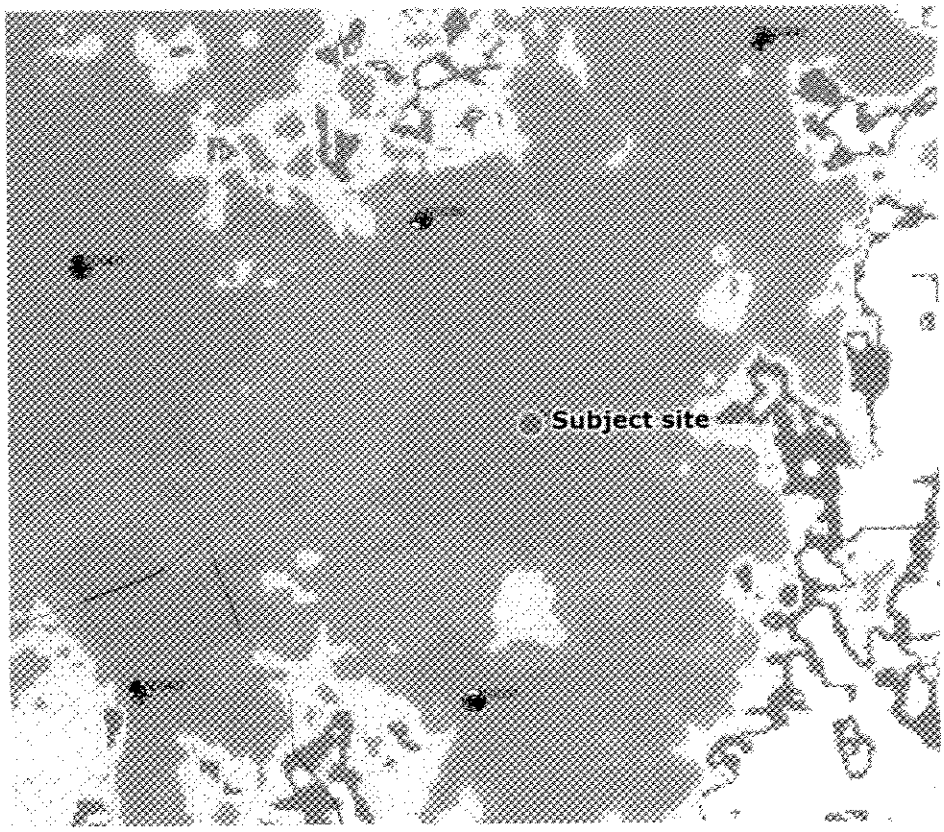
S

SITE PLAN

SD0779 LTE Overlay
East Valley Parkway & Citrus Avenue
2525 East Valley Pkwy
Escondido, CA 92027



Existing coverage

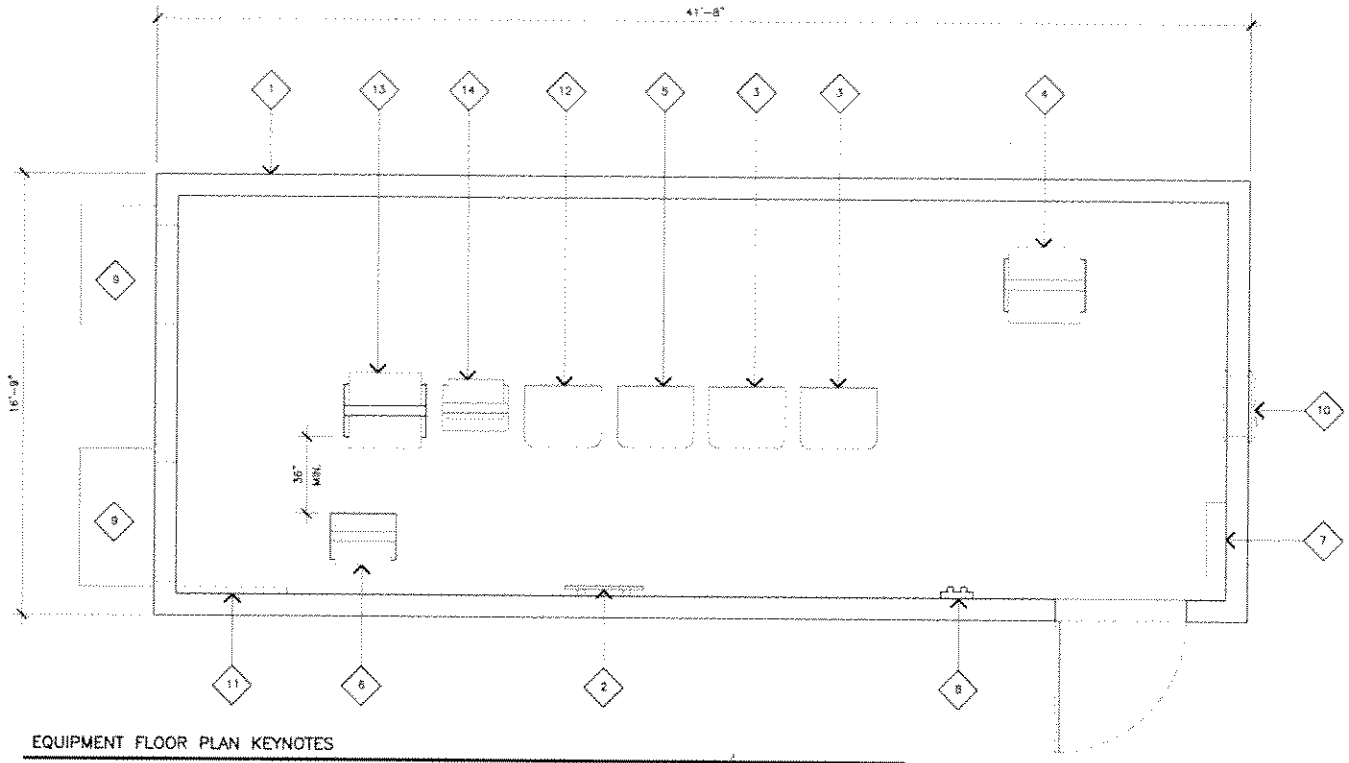


Proposed coverage

Coverage Levels:

- Excellent
- Variable
- Poor
- No Coverage

PH6 11-0008



EQUIPMENT FLOOR PLAN KEYNOTES

1. (E) AT&T TENANT IMPROVEMENT.
2. (E) AT&T WALL MOUNTED MAIN GROUND BUS BAR (MGB).
3. (E) AT&T INDOOR 2206 GSM EQUIPMENT CABINET.
4. (E) AT&T INDOOR 24VDC ARGUS RECTIFIER CABINET WITH (12) MARATHON BATTERIES, 26.04 GALLONS.
5. (E) AT&T INDOOR 3206 UMTS CABINET.
6. (E) AT&T INDOOR DATA RACK.
7. (E) AT&T ELECTRICAL PANEL.
8. (E) AT&T EYE WASH STATION.
9. (E) A/C UNITS.
10. (E) AT&T COAX WAVEGUIDE ENTRY PORT.
11. (E) AT&T TELCO BACKBOARD.
12. (E) AT&T INDOOR 3206 UMTS EQUIPMENT CABINET.
13. (E) 23" AT&T INDOOR 48VDC CONVERTER AND DISTRIBUTION RACK.
14. (E) 19" AT&T INDOOR LTE EQUIPMENT RACK WITH SURGE SUPPRESSOR.

EQUIPMENT FLOOR PLAN

PROPOSED PROJECT
PHG 11-0008

FLOOR PLAN

PROPOSED PROJECT
PHG 11-0008

ELEVATIONS

PROPOSED PROJECT
PHG 11-0008

ELEVATIONS

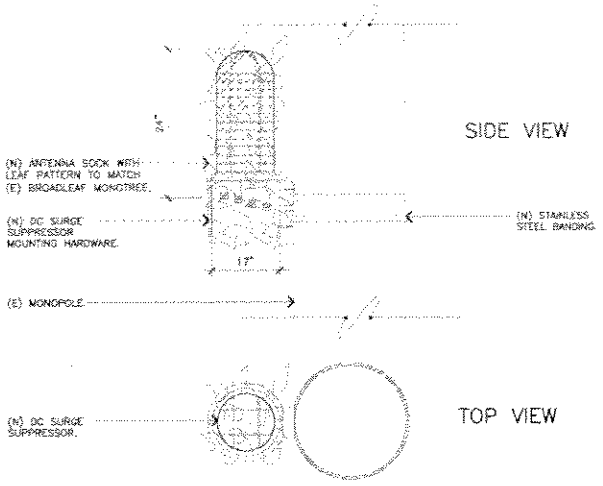
SURGE SUPPRESSOR COLOR: LIGHT GRAY

DIMENSIONS, HxWxD: (10"H x24")

WEIGHT, WITH PRE-MOUNTED BRACKETS: 32.8 lbs

WIND LOAD, FRONTAL/LATERAL/REAR
SIDE 149.8 mph, Cd=1: N/A lbs

CONNECTOR: (4) 1/2 DIN FEMALE



DC SURGE SUPPRESSOR

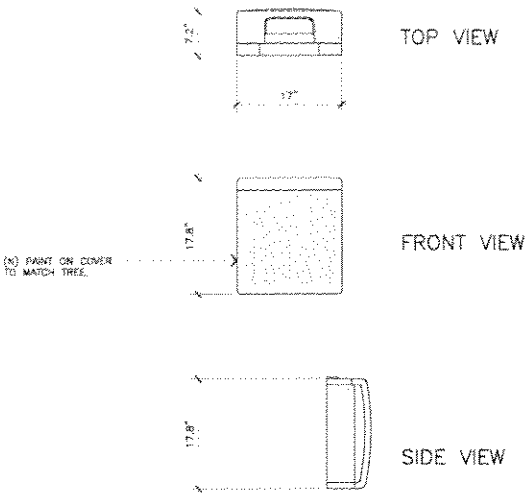
RRU COLOR: LIGHT GRAY

DIMENSIONS, HxWxD: (17"x17.8"x7.2")

WEIGHT, WITH PRE-MOUNTED BRACKETS: 55 lbs

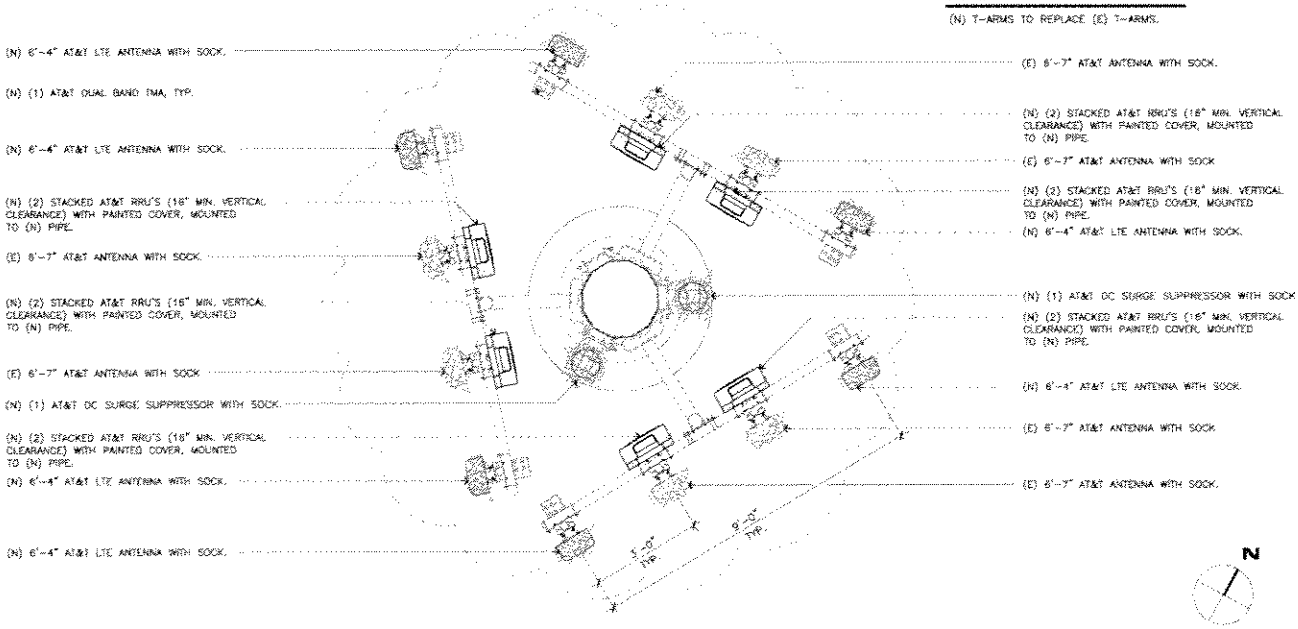
WIND LOAD, FRONTAL/LATERAL/REAR
SIDE 149.8 mph, Cd=1: N/A lbs

CONNECTOR: (4) 1/2 DIN FEMALE



RRU CABINET

NOTE:
(N) T-ARMS TO REPLACE (E) T-ARMS.

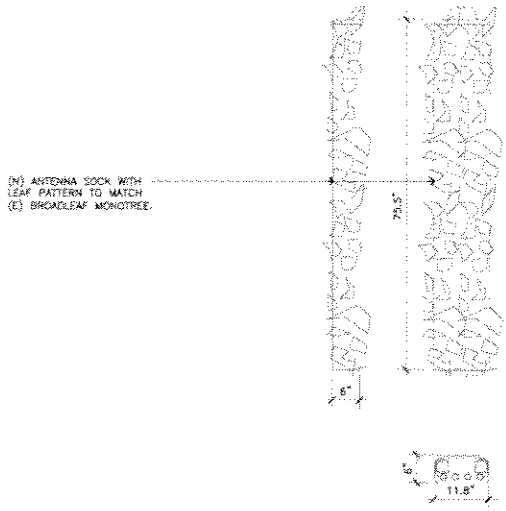


ANTENNA PLAN

PROPOSED PROJECT
PHG 11-0008

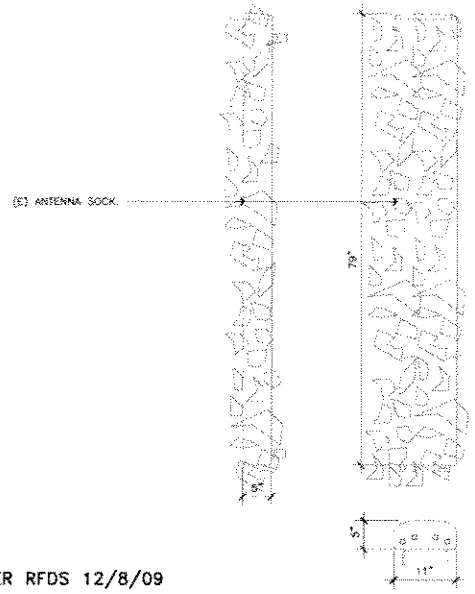
DETAILS

ANTENNA MATERIAL:	GRP
ANTENNA COLOR:	LIGHT GREY
DIMENSIONS, HxWxD:	1918x300x152mm (75.5"x11.8"x6")
WEIGHT:	51.8 lbs
WIND LOAD, FRONTAL/LATERAL/REAR 221 lbf/81 lbf/ 230 lbf	
CONNECTOR:	7/16 DIN FEMALE



(N) LTE ANTENNA SPECIFICATION

ANTENNA COLOR:	LIGHT GREY
DIMENSIONS, HxWxD:	2033x280x125mm (6'7"x11"x5")
WEIGHT, WITH PRE-MOUNTED BRACKETS:	44 lbs
WIND LOAD, FRONTAL/LATERAL/REAR SIDE 42 m/s, Cd=1.0 (N):	628
CONNECTOR:	(4) 7/16 DIN FEMALE



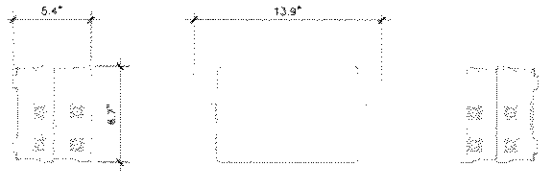
PER RFDS 12/8/09

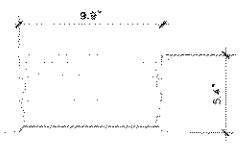
(E) ANTENNA SPECIFICATION

WEIGHT. <8KG (<18LBS)

RF CONNECTORS; DIN 7/16 FEMALE

DIMENSIONS: 9.9"XR.7"X5.4"





DUAL BAND TMA

PROPOSED PROJECT
PHG 11-0008

DETAILS

ANALYSIS

A. LAND USE COMPATIBILITY/SURROUNDING ZONING

NORTH: R-2-12 zoning (Multi-Family Residential, 12 du/ac) and RT (Residential Mobilehome) – A single-family residence and associated home-based commercial business, along with a mobilehome park is located north of the church site across E. Valley Parkway.

SOUTH: R-2-12 zoning (Multi-Family Residential, 12 du/ac) - A two-story, multi-family residential/condominium development is located south of the church site. A wooden fence separates the two properties.

EAST: R-2-12 zoning (Multi-Family Residential, 12 du/ac) – A two-story multi-family residential development is located to the east of the church site. A masonry block wall is located along the property boundary. A row of mature trees are located along the property boundary on the residential side of the wall.

WEST: PD-C zoning (Planned Development-Commercial) - A commercial shopping center and parking is located to the west. A masonry block wall is located along the property boundary. Mature eucalyptus trees are located long the commercial side of the property boundary.

B. AVAILABILITY OF PUBLIC SERVICES

1. Effect on Police Service -- The Police Department expressed no concern regarding the proposed project and their ability to serve the site.

2. Effect on Fire Service -- The Fire Department indicated that adequate services can be provided to the site and the proposed project would not impact levels of service.

3. Traffic – The Engineering Department indicated the project would not have any impacts to existing traffic or circulation within the area.

4. Utilities – Water and sewer is available from existing mains in the adjoining streets or easements. The Engineering Department indicated the project would not result in a significant impact to public services or utilities.

5. Drainage – The Engineering Department has determined the project would not materially degrade the levels of service of the existing drainage facilities.

C. ENVIRONMENTAL STATUS

The proposal is exempt from the requirements of the California Environmental Quality Act in conformance with CEQA Section 15301, "Existing Facilities," and a Statement of Exemption was prepared for the proposed project. In staff's opinion, the request does not have the potential for causing a significant effect on the environment since the project involves an upgrade to an existing wireless facility that is designed to accommodate the proposed additional antennas. The subject area does not contain any sensitive vegetation, nor would the project encroach into native vegetation areas. The project would be in compliance with FCC rules and regulations for RF emissions. In staff's opinion, no significant issues remain unresolved through compliance with code requirements and the recommended conditions of approval.

D. GENERAL PLAN ANALYSIS:

General Plan – The requested Conditional Use Permit is consistent with the Urban II designation of the General Plan since wireless facilities are allowed when they are in conformance with the Communication Antennas Ordinance, underlying zoning requirements, and are compatible with the surrounding properties and built environment. The project is in substantial compliance with any relevant General Plan criteria and underlying R-1-6 zone standards, and also is in conformance with the Personal Wireless Service Facilities Guidelines as discussed in the analysis section below and project findings.

E. PROJECT ANALYSIS

Whether the Proposed Wireless Facility is in Conformance with the Communication Antennas Ordinance and Wireless Service Facilities Guidelines.

The existing AT&T facility consists of six, 6'-7" panel antennas mounted to an approximately 35-foot-high pole designed to resemble a broad leaf tree. The existing facility is situated towards the rear portion of an existing church/school facility and surrounded by a mix of commercial and multi-family residential development. The applicant has submitted a request to added six additional antennas to the faux tree, which would enlarge the size of the upper triangle array. Staff initially recommended the number of panels be limited to nine and the size of the panels reduced from eight feet to six feet in order to reduce the bulk of the upper array since it is visible from adjacent residences to the east and south. The Design Review Board considered the proposed project on August 11, 2011 and also recommended the number of antennas panels be reduced to nine instead of twelve, and to increase the height of the branches above the antennas in order for the tree to appear more realistic. The size of the antennas were reduced from eight feet to six feet in height, but the applicant feels that the variety of technologies that are used to support the network that are being added to the tree necessitate they use twelve panel antennas. They also indicated that twelve antennas is the standard design/configuration and feel the proposed re-branching of the tree would appropriately integrate the larger array into the facility. In addition, the installation of the additional specimen-sized trees would provide the proper context for the modified tree and provide additional visual screening for the adjacent residences to the east and south. Staff feels the existing tree could be properly modified to support up to twelve antenna panels with the addition of the specimen sized trees, provided a sufficient number of new branches are included in the final design. The project has been conditioned accordingly.

As conditioned, the project would be consistent with the Communication Antennas Ordinance since it incorporates a stealthy design which would not result in any adverse visual impacts. The facility is located on a non-residential site within a residential zone that provides the appropriate context for the simulated tree to blend in with the surrounding area. Appropriate setbacks would be provided from the adjacent residential development to the east and south to provide a sufficient landscape buffer. Staff received one phone call from a nearby resident concerned with possible interference with television reception from the additional antennas. The project contains a condition that requires the carrier to investigate and respond to any interference issues with electronic equipment. Therefore, staff is recommending approval of the proposed design with up to twelve panel antennas.

Operation of the facility would generate electromagnetic emissions (RF radiation). A RF study was prepared for the project by Telnet Inc. to determine whether the proposed communication facility complies with the FCC Rules and Regulations for RF emissions for "General Public" classifications. The study concluded the project site would be compliant with FCC rules and regulations. The proposed AT&T upgrade is predicted to contribute approximately 6.5% maximum permissible exposure (MPE) based on theoretical modeling. A copy of the study has been attached with this report.

SUPPLEMENT TO STAFF REPORT/DETAILS OF REQUEST

A. PHYSICAL CHARACTERISTICS

The project site fronts onto and takes access from East Valley Parkway. The site is developed with a church building towards the front portion of the property and a classroom/storage building towards the rear of the site. The site is relatively level (less than 5% slope). Masonry block walls are located along the eastern and western perimeter of the property, and a wood fence along the southern boundary. The site also contains mature trees and ornamental landscaping. There is no native vegetation on the site.

B. SUPPLEMENTAL DETAILS OF REQUEST

1.	Property Size:	2.03 acres
2.	Antenna Height:	
	Existing:	35' top of antennas, 37' top of branches
	Proposed:	35' to top of existing and new antenna panels, approx. 39' feet to top of branches. Tree branches may be allowed to project above the 35' height limit of the residential zone.
3.	Material/Color:	Antenna panels painted green to blend with tree leaves and covered in faux leaves (socks). Radio Units, TMAs and Surge Protectors painted either green or brown to match tree leaves and exterior bark colors.
4.	Antennas:	
	Existing:	6 panel antennas, approx. 6'-7" in height
	Proposed:	6 additional panel antennas, approx. 6'-4" in height
5.	Radio Units and Surge Protectors:	12 Remote Radio Units (RRUs) 17.8" H x 17.8" W x 7.2" D 2 Surge Protectors 24" tall x 17" circumference 6 Dual Band Tower Mounted Amplifier Units (TMAs) 13.9" H x 6.7" W x 5.4" D mounted behind the panel antennas
6.	Equipment Enclosure:	The existing 336 SF equipment enclosure (12' x 28') is approx.10'-6" in height with a stucco finish painted to match the existing classroom building. Equipment consists of data equipment cabinets, battery racks, wireless meter and telco enclosure-panel boards located within the existing enclosure building. Air conditioning units are mounted outside on western elevation of building.
7.	Hours of Operation Wireless Facility:	24 hours, unmanned
8.	Landscaping:	Project conditions to provide three specimen-sized trees and around the exiting faux tree along with appropriate irrigation.
9.	Setbacks:	
	Rear:	112'
	Side:	Approx. 39' to west and 120' to east

EXHIBIT "A"

FINDINGS OF FACT
PHG 11-0008

Conditional Use Permit

1. General Plan Residential Policy B2.1 (page II-17) states that residential neighborhoods shall be protected from the encroachment of incompatible activities which may have a negative impact on the residential living environment. Granting this Conditional Use Permit to modify the existing AT&T personal wireless communication facility on the subject property would not conflict with this policy and would be based on sound principles of land use since the use is in response to services required by the community and the facility would enhance communication services in the city without posing a health threat to the surrounding area. The facility would incorporate a stealthy type of design in conformance with the Communication Antennas Ordinance, which would minimize potential visual impacts from adjacent views. The proposed facility would not result in a substantial alteration of the present or planned land use since the project site is developed as a church/school and contains an existing wireless facility. The proposed modification to the existing facility would not adversely affect the current operation of the site, nor any future uses of the site in conformance with the underlying residential General Plan land-use category or zoning. The facility also would not result in a potential health hazard to nearby residents since the facility would be within MPE (maximum permissible exposure) limits as indicated in the radio frequency analysis prepared for the project. The proposed facility would be in compliance with the City's Wireless Facility Guidelines, as discussed in the Planning Commission staff report.

2. The proposal would not cause deterioration of bordering land uses since the project involves the modification of an existing wireless communication facility to accommodate additional antennas. The existing facility would be modified to include additional and longer branches to screen the larger antenna array and appear more natural. Additional mature trees would be planted around the facility to provide additional screening and the appropriate context for the faux tree. The height of the proposed panels would be in conformance with the maximum height requirements for principle structures located within the R-1-6 zone and compatible with the height of surrounding vegetation. The project would not result in any adverse noise issues to surrounding properties and support electrical equipment would be located within an existing equipment building. The design and location of the proposed modifications to the existing facility would be in compliance with the City's Wireless Facility Guidelines, as discussed in the Planning Commission staff report.

3. The proposed personal wireless communication facility would not be hazardous to the health of nearby residents since the radio frequency (FR) analysis prepared for the project concluded the maximum operation levels of radiation for the facility would be within the MPE (Maximum Permissible Exposure) limit established by FCC requirements.

4. The proposal is exempt from the requirements of the California Environmental Quality Act in conformance with CEQA Section 15301, "Existing Facilities," and a Statement of Exemption was prepared for the proposed project. In staff's opinion, the request does not have the potential for causing a significant effect on the environment. The project will have a de minimis impact on fish and wildlife resources as no sensitive or protected habitat occurs within the project area or will be impacted by the proposed development.

5. The proposed Conditional Use Permit has been considered in relationship to its effect on the community, and the request would be in compliance with the General Plan Policies and the Wireless Facility Guidelines, and would not result in a negative impact to the adjacent neighborhood for the reasons stated above and detailed in the Planning Commission staff report and radio frequency analysis.

EXHIBIT "B"

CONDITIONS OF APPROVAL
PHG 11-0008

General

1. All construction shall comply with all applicable requirements of the Escondido Zoning Code and requirements of the Planning Department, Director of Building, and the Fire Chief.

2. The legal description attached to the application has been provided by the applicant and neither the City of Escondido nor any of its employees assume responsibility for the accuracy of said legal description.

3. Prior to or concurrent with the issuance of building permits, the appropriate development fees and Citywide Facility fees shall be paid in accordance with the prevailing fee schedule in effect at the time of building permit issuance, to the satisfaction of the Director of Community Development.

4. All exterior lighting shall conform to the requirements of Article 1072, Outdoor Lighting (Ordinance No. 86-75).

5. The facility shall be subject to all relevant conditions of approval and requirements of the previously approved Conditional Use Permit No. 2005-79-CUP, unless specifically modified by this use permit.

6. As proposed, the design, color and materials of the proposed facilities shall be in accordance with the staff report, exhibits and the project's Details of Request, including the following to the satisfaction of the Planning Division:

    a. RF transparent type covers (socks) shall be installed on all the antenna panels with an appropriate number of leaves to screen the antenna panels. A sufficient number of new branches shall be incorporated into the existing tree to provide appropriate visual screening and to make the tree appear fuller and more natural in appearance. The branches shall extend an appropriate distance beyond the antennas panels (typically 18") and this shall be noted on the building plans. The branches on the tree shall be extended at least four feet above the top of the antennas to make the tree appear more natural. A detailed drawing shall be provided with the building plans indicating the actual design and number of existing and branches that will be attached to the central pole, and how they will be attached/positioned to provide the appropriate depth/relief.

    b. The support poles, brackets and other support equipment shall be painted a dark olive drab green to blend in with the faux tree. This requirement shall be noted on the building plans.

7. As previously required per 2005-79-CUP, a minimum of three specimen-sized evergreen trees (minimum 25 feet in height) shall be installed around the proposed wireless facility. The type and location shall be coordinated with the Planning Division and shall be indicated on the building plans as a separate landscape exhibit. The existing irrigation lines shall be modified/extended appropriately, which also shall be indicated on the plans. The existing paved/gravel areas around the facility will need to be modified accordingly to accommodate the required trees. If this is not feasible, then additional specimen-sized trees shall be incorporated into the final design should the trees be located around the outside of the paved areas rather than closer to the existing wireless facility as previously proposed with 2005-79-CUP. All required landscaping shall be permanently maintained in a flourishing manner. All irrigation shall be maintained in fully operational condition. The trees shall not be removed unless approved in writing by the Planning Division.

8. AT&T Wireless, or any subsequent operator/lease holder of the wireless facility, agrees to investigate any complaints related to possible interference with electronic equipment in the surrounding area to determine the cause of the interference. Any interference shall be resolved in a timely manner to the satisfaction of the Director of Community Development. If the facility is determined to be the cause of the electronic interference, AT&T shall solve the problem in a timely manner to the satisfaction of the complainant and the Director of Community Development. In addition, any interference with public safety communications shall be corrected immediately, to the satisfaction of the City of Escondido.

9. All project generated noise shall conform to the City's Noise Ordinance (Ordinance 90-08).

10. If requested by the City of Escondido, AT&T, or any subsequent operator/lease holder of the facilities shall permit co-location of other wireless providers on its facility (subject to City of Escondido Approval) if it can be demonstrated that there would be no adverse effect on the existing facilities/operations.

11. AT&T shall coordinate with the City of Escondido to select a qualified, independent third party consultant to conduct an actual power density measurement of the facility within 90 days after installation and under full operation of the facility. The results of the study shall be submitted to the Director of Community Development so that the theoretical power density study can be compared to the actual output.

12. AT&T or any subsequent operator/lease holder of the wireless facility shall be responsible for all maintenance of the facility, including the antennas and supporting equipment to ensure the condition of the facility does not appear weathered.

13. All communication facilities on the site shall be promptly removed upon non use of the facilities, to the satisfaction of the Planning Division and Building Department.

14. Any permanent, temporary or stand-by emergency generators must be in conformance with the City's Ordinance and regulations regarding electric generating facilities.

15. All new utilities and utility runs shall be underground.

16. No additional antennas or expansion of this facility shall be permitted without a modification of the Conditional Use Permit and a public hearing before the Planning Commission. Minor changes within the approved size and design parameters may be permitted by the Community Development Director after review by the Design Review Board.

17. A sign conforming to ANSI C95.2 color, symbol and content, and other markings as appropriate, should be placed close to the antennas with appropriate contact information in order to alert maintenance or other workers approaching the antennas to the presence of RF transmissions and to take precautions to avoid exposures in excess of FCC limits. The requirement for the appropriate signage/notice shall be indicated on the building plans.

18. The Conditional Use Permit shall be null and void if not utilized within twelve months of the effective date of approval.

19. This item may be referred back to the Planning Commission upon recommendation of the Director of Community Development for review and possible revocation or modification of the Conditional Use Permit upon receipt of nuisance complaints regarding the facility or non-compliance with the Conditions of Approval.

20. The City of Escondido hereby notifies the applicant that the County Clerk's Office requires a documentary handling fee of $50.00 in order to file a Notice of Exemption for the project (environmental determination for the project). In order to file the Notice of Exemption with the County Clerk, in conformance with California Environmental Quality Act (CEQA) Section 15062, the applicant should remit to the City of Escondido Planning Division, within two working days of the final approval of the project (the final approval being the date of this letter) a certified check payable to the "County Clerk" in the amount of $50.00. The filing of a Notice of Exemption and the posting with the County Clerk starts a 35 day statute of limitations period on legal challenges to the agency's decision that the project is exempt from CEQA. Failure to submit the required fee within the specified time noted above will result in the Notice of Exemption not being filed with the County Clerk, and a 180 day statute of limitations will apply.

Electromagnetic Energy ("EME")
Site Compliance Report

TELNET

Prepared for

at&t

Site Information

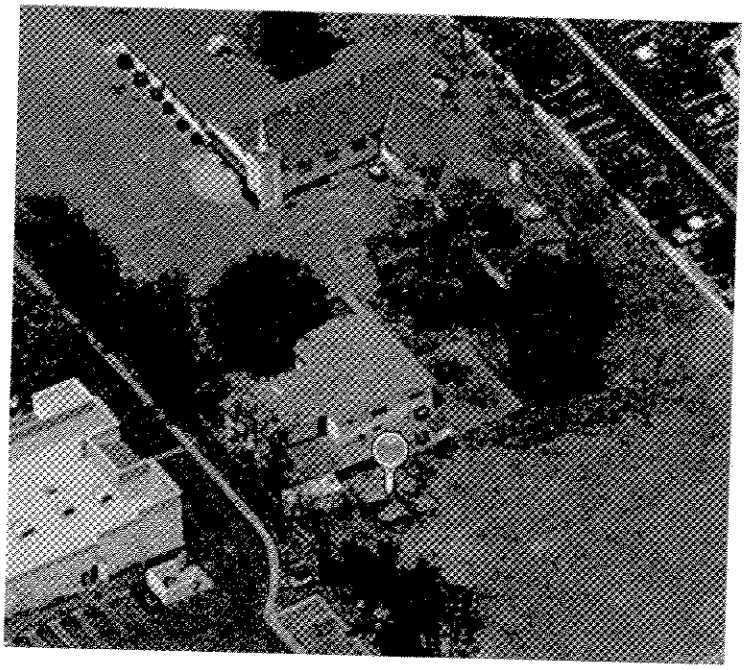
US ID:	83163
Site Name:	E VALLEY PKWY & CITRUS AVE
Address:	2525 EAST VALLEY PARKWAY, ESCONDIDO, CA, 92025

Report Date: March 03, 2011
CASPR#: 3601003324

M-RFSC: Hector Manmano
Site Type: Monopole

AT&T

US ID: 83163 - Site Name: E VALLEY PKWY & CITRUS AVE
Electromagnetic Energy ("EME")
Measurement and Site Compliance Report



2525 EAST VALLEY PARKWAY, ESCONDIDO, CA, 92025

TABLE OF CONTENT

1 Summary

1.1 Introduction

AT&T has installed RF transmitting antennas at the following location (the "wireless telecommunications facility"):

Street Address: 2525 EAST VALLEY PARKWAY, ESCONDIDO, CA, 92025

US ID: 83163

Latitude / Longitude: 33.14103 / -117.04125

Telnet, Inc performed an RF computational analysis of the RF environment surrounding the facilities installed by AT&T at this location. The facility is located on a Monopole.

AT&T is licensed by the Federal Communications Commission ("FCC") to provide wireless communications services. As required by the FCC, wireless system operators perform an assessment of the potential human exposure to radio frequency emissions emanating from transmitting antennas at the site.

Antenna specifications presented herein are based on direct evidence from information from the site manager or building manager, information from the licensees, educated estimates by the field technician or a combination of some or all of these sources.

1.2 Statement of Compliance

A site is considered in compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards. Per AT&T's corporate policy, the FCC's general population limits are applicable to all rooftop sites, regardless of the level of access control. As presented in the sections below, based on worst-case predictive modeling, the worst-case emitted power density may not exceed the FCC's general public limit.

1.3 Safety Recommendations & Site Compliance Actions

Since AT&T contributes less than 5% of the MPE, should this site be non-compliant for any reason, all other operators who contribute greater than 5 % would all be liable to bring the site into compliance.

Areas that require that action in order to meet AT&T corporate policy are listed below. No action means the location is compliant with AT&T policy. The RF hazard mitigation proposed for installation at this site complies with AT&T's RF exposure policy and therefore complies with FCC and OSHA requirements

Site Access Locations

Mount a Green Information 1 Sign at the site gate
Mount a Yellow Caution Sign at the tower's base

Alpha Sector Location

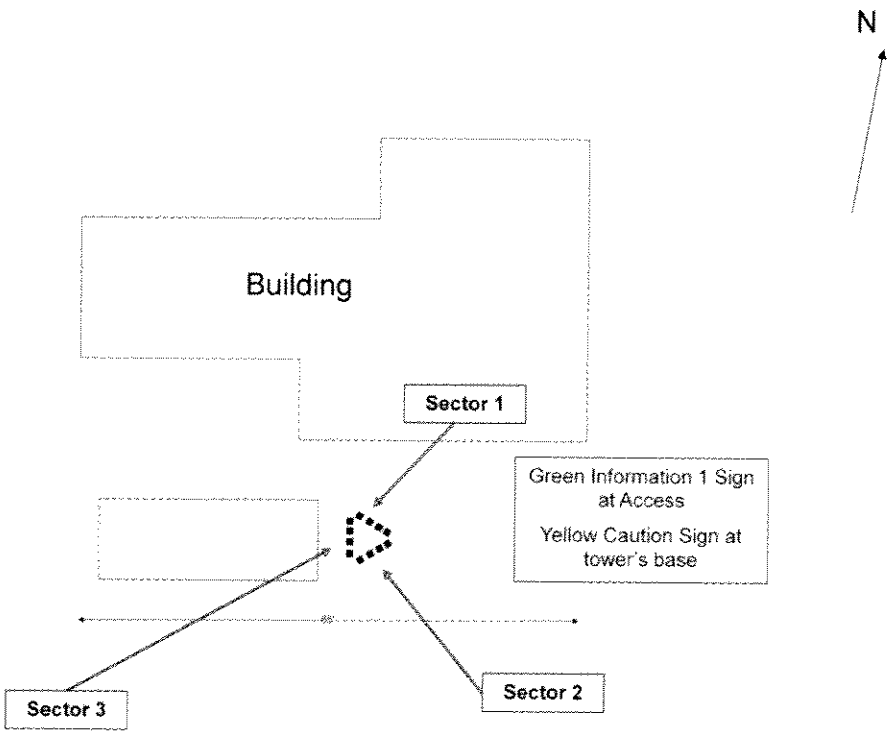
No Action Required

Beta Sector Location

No Action Required

Gamma Sector Location

No Action Required



Signage Diagram

1.3.1 Lockout/Tagout Procedures for Antenna, Transmission Line and Power Amplifier Maintenance

Whenever anyone is working on an antenna, transmission line, high power amplifier (HPA), or multi-channel power amplifier (MCPA), the transmitter (power amplifier) MUST be turned off. This can be accomplished either locally by flipping a circuit breaker(s) or remotely by command from the NMC/NOC.

The person initiating or requesting the transmitter shutdown is the ONLY person authorized to restore the transmitter to service. This person is responsible for making sure that ALL work has been completed, that ALL cables have been properly reconnected, and that EVERYONE is clear of the work area before the transmitter is reactivated. Generally, this person is considered to be the one actually performing the work. In the case of a contractor working at an active site, the FE/Technician may initiate the request on behalf of the contractor.

1.3.2 Lockout/Tagout Procedure, Local Shutdown

After securing permission to shut the transmitter down, the Field Engineer (FE)/Field Technician (FT) will turn off the circuit breaker and verify that the correct transmitter was deactivated. The FE/FT will then place a locking device(s) over the circuit breaker(s) to prevent accidental activation by an unauthorized person and place a TAG on, or in the immediate vicinity of, the circuit breaker(s). The tag should state "Do Not Operate." At the NMC/NOC the same note, including date and time and location, must be entered in the computer or a tag must be placed on the monitor frame in such a manner that the console operator will be made aware that the transmitter can not be activated without permission from the person who initiated the maintenance request.

The FE/FT will turn the key(s) over to the person performing the work. Upon completion of the work, this person performing the task will return the key(s). As a precautionary measure, prior to reactivating the transmitter, the FE/FT MUST verify, to the extent possible, that all connections have been made and that the work area is clear of personnel.

1.3.3 Lockout/Tagout Procedure, Remote Shutdown

After requesting the NMC/NOC to shut the transmitter down, the FE/FT will verify that the correct transmitter was deactivated. The FE/FT will then place a TAG on or in the immediate vicinity of transmitter. The tag should state "Do Not Operate." At the NMC/NOC the same note, including date/time, must be entered in the computer or a tag must be placed on the monitor frame in such a manner that the console operator will be made aware that the transmitter can not be activated unless the following conditions are met: 1) The tag has been removed by the person performing the work; and 2) Permission is provided by the person who initiated the maintenance request.

Upon completion of the work, the person performing the task will remove the tag and notify the FE/FT that the work is completed. As a precautionary measure, prior to requesting reactivation of the transmitter, the FE/FT MUST verify, to the extent possible, that all connections have been made and that the work area is clear of personnel.

Note: Even though normal procedures call for a remote shutdown, if it is possible to turn off the circuit breaker without causing a software reload or other similar problems the FE/FT should follow the local shut down procedure

1.4 Site Drawing

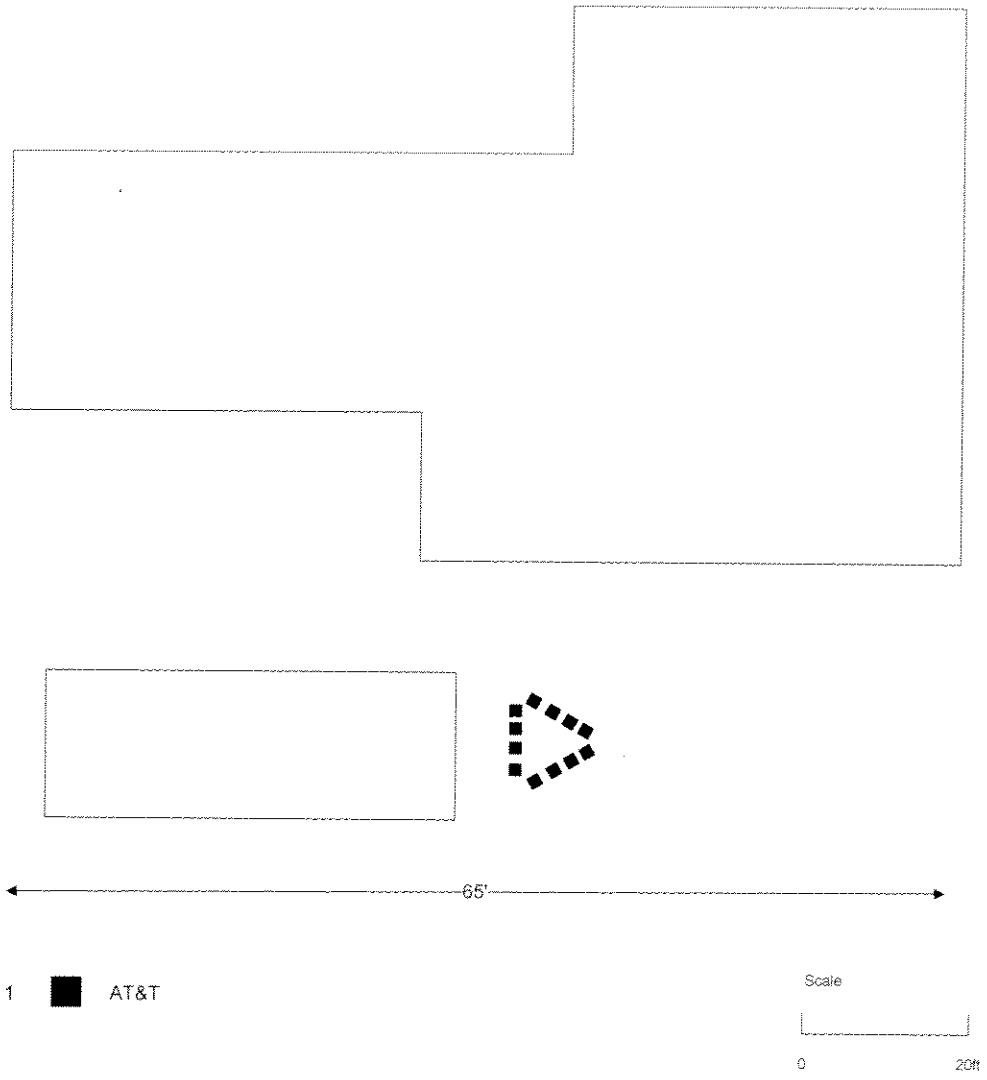


Figure 1
Site Drawing

1.5 RF Modeling

The modeling calculations assume that the antennas are operating at 100% capacity; that all antenna channels are transmitting simultaneously and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the measurement conclusions.

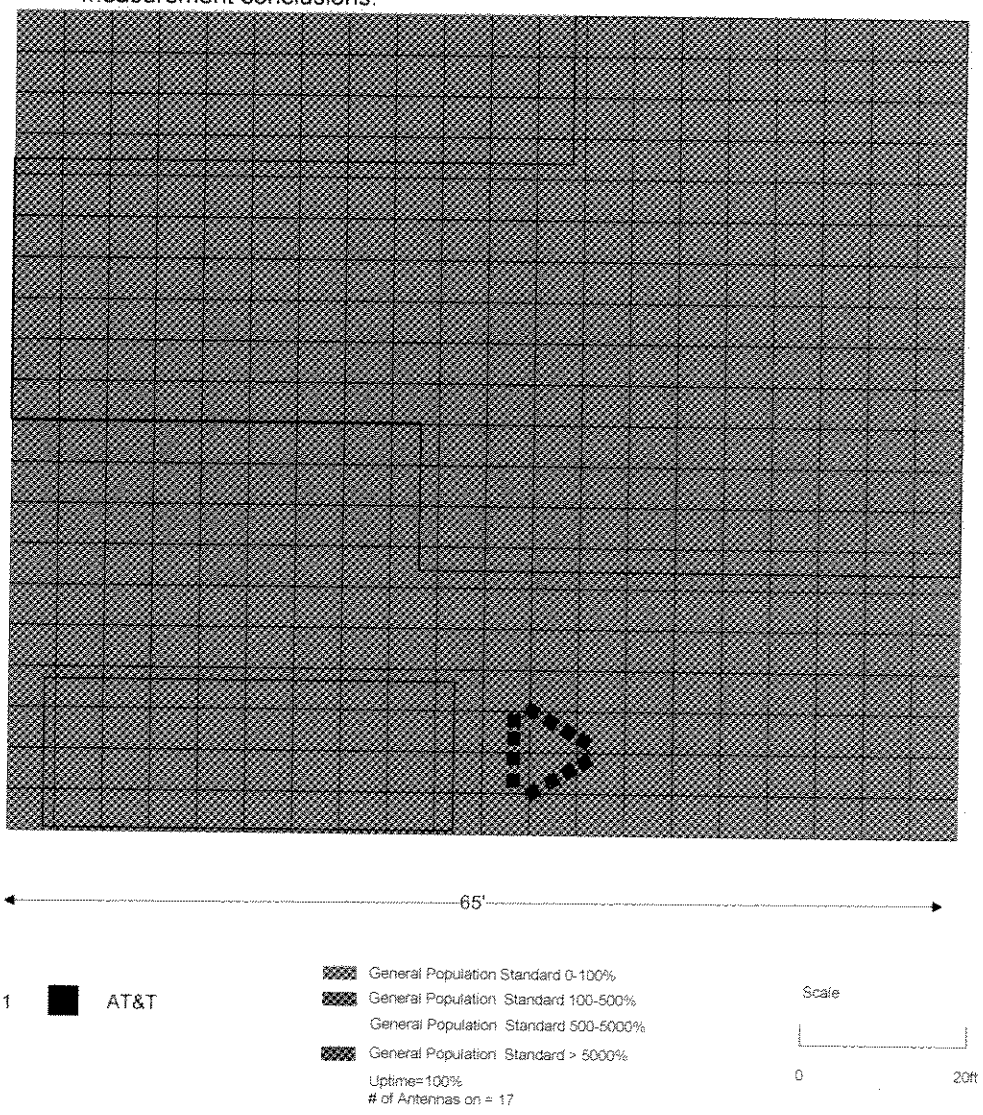


Figure 2
Percent of FCC General Population Exposure Limit

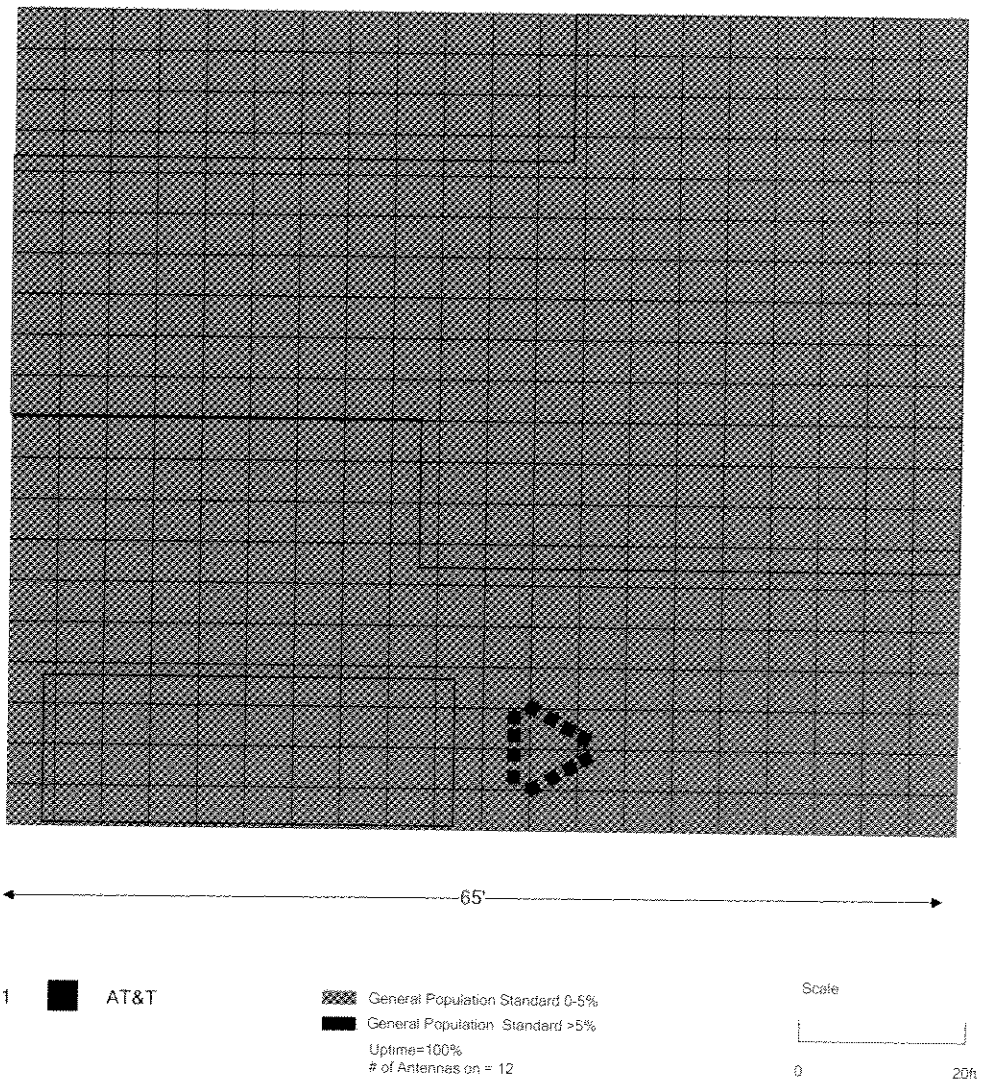


Figure 3
5% FCC Gneral Population Exposure Limit

2 Antenna Inventory

The Antenna Inventory shows all transmitting antennas on the site (see Table 1). This inventory was verified on site and was used by Telnet to perform software modeling of RF emissions . The inventory coincides with the site diagrams on this report, identifying each antennas location at the site.

For other carriers at the site, the use of "Generic" as an antenna model, or " Unknown" for an operator means the information with regard to the carrier, their FCC license and / or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.

Relevant administrative and compliance–related information about the antenna site rooftop area is summarized in the table below :

Collocation Status	Collocated
Area Classification	General Population

Antenna Number	Operator	Type	TX Freq (MHz)	ERP (Watts)	Gain (dBd)	Model	Azimuth (deg.)	Length (ft)	Radio Counts	Horizontal Beamwidth (Deg.)	X	Y	Z
1-a-1	AT&T	Panel	GSM-850	500	13.7	Powerwave 7752	15	6.5	4	71	110	31	28.4
1-a-2	AT&T	Panel	GSM-1900	500	15.2	Powerwave 7752	15	6.5	4	63	110	31	28.4
1-a-3	AT&T	Panel	GSM-850	500	13.7	Powerwave 7752	15	6.5	4	71	110	31	28.4
1-a-4	AT&T	Panel	GSM-1900	500	15.2	Powerwave 7752	15	6.5	4	63	110	31	28.4
1-a-5	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	15	8	1	68	114	29	28.4
1-a-6	AT&T	Panel	LTE-700	500	14.3	Kathrein 80010766	15	8	1	68	114	29	28.4
1-a-7	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	15	8	1	68	119	25	28.4
1-a-8	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	15	8	1	68	119	25	28.4
1-a-9	AT&T	Panel	UMTS-850	500	13.7	Powerwave 7752	15	6.5	2	71	121	21	28.4
1-a-10	AT&T	Panel	UMTS-1900	500	15.2	Powerwave 7752	15	6.5	2	63	121	21	28.4
1-a-11	AT&T	Panel	UMTS-850	500	13.7	Powerwave 7752	15	6.5	2	71	121	21	28.4
1-a-12	AT&T	Panel	UMTS-1900	500	15.2	Powerwave 7752	15	6.5	2	63	121	21	28.4
1-b-1	AT&T	Panel	GSM-850	500	13.7	Powerwave 7752	120	6.5	4	71	121	19	28.4
1-b-2	AT&T	Panel	GSM-1900	500	15.2	Powerwave 7752	120	6.5	4	63	121	19	28.4
1-b-3	AT&T	Panel	GSM-850	500	13.7	Powerwave 7752	120	6.5	4	71	121	19	28.4
1-b-4	AT&T	Panel	GSM-1900	500	15.2	Powerwave 7752	120	6.5	4	63	121	19	28.4
1-b-5	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	120	8	1	68	119	18	28.4
1-b-6	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	120	8	1	68	119	18	28.4
1-b-7	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	120	8	1	68	114	14	28.4
1-b-8	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	120	8	1	68	114	14	28.4
1-b-9	AT&T	Panel	UMTS-850	500	13.7	Powerwave 7752	120	6.5	2	71	110	10	28.4
1-b-10	AT&T	Panel	UMTS-1900	500	15.2	Powerwave 7752	120	6.5	2	63	110	10	28.4
1-b-11	AT&T	Panel	UMTS-850	500	13.7	Powerwave 7752	120	6.5	2	71	110	10	28.4
1-b-12	AT&T	Panel	UMTS-1900	500	15.2	Powerwave 7752	120	6.5	2	63	110	10	28.4
1-g-1	AT&T	Panel	GSM-850	500	13.7	Powerwave 7752	240	6.5	4	71	108	12	28.4
1-g-2	AT&T	Panel	GSM-1900	500	15.2	Powerwave 7752	240	6.5	4	63	108	12	28.4
1-g-3	AT&T	Panel	GSM-850	500	13.7	Powerwave 7752	240	6.5	4	71	108	12	28.4
1-g-4	AT&T	Panel	GSM-1900	500	15.2	Powerwave 7752	240	6.5	4	63	108	12	28.4
1-g-5	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	240	8	1	68	108	19	28.4
1-g-6	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	240	8	1	68	108	19	28.4
1-g-7	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	240	8	1	68	108	25	28.4
1-g-8	AT&T	Panel	LTE-700	250	14.3	Kathrein 80010766	240	8	1	68	108	25	28.4
1-g-9	AT&T	Panel	UMTS-850	500	13.7	Powerwave 7752	240	6.5	2	71	108	29	28.4
1-g-10	AT&T	Panel	UMTS-1900	500	15.2	Powerwave 7752	240	6.5	2	63	108	29	28.4
1-g-11	AT&T	Panel	UMTS-850	500	13.7	Powerwave 7752	240	6.5	2	71	108	29	28.4
1-g-12	AT&T	Panel	UMTS-1900	500	15.2	Powerwave 7752	240	6.5	2	63	108	29	28.4

Table 1
Antenna Inventory

3 Modeling Summary and Assumptions

3.1.1 General Model Assumptions

In this report, it is assumed that all antennas are operating at full power at all times. Software modeling was performed for all transmitting antennas located on the site. Telnet, Inc has further assumed a 100% duty cycle and maximum radiated power.

The site has been modeled with these assumptions to show the maximum RF energy density. Telnet Inc believes this to be a worst case analysis, based on best available data.

If at any time power density measurements were to be made, Telnet Inc believes the real time measurements would indicate levels below those shown in this report. By modeling in this way, we have conservatively shown exclusion areas (areas not to be entered without a personal RF monitor, carriers reducing power or performing real time measurements to show real time exposure levels).

3.1.2 Use of Generic Antennas

For the purposes of this report, the use of 'Generic' as an antenna model, or 'Unknown' for a wireless carrier, means that the information about the carrier, their FCC license and/ or antenna information was not provided and could not be obtained while on site. In the event of unknown information, Telnet will use our industry specific knowledge of equipment, antenna models and transmit power to model the site. If more specific information can be obtained for the unknown measurement criteria, remodeling of the site is recommended. If no information is available regarding the transmitting service associated with an unidentified antenna, using the antenna manufacturer's published data regarding the antenna's physical characteristics makes more conservative assumptions.

3.1.3 Statistical Summary

Statistical Summary		
%MPE	SQ. FT	%SQ. FT.
	40000	100.00 % of total ROOF Area
0-100	40000	100.00 % of Selected Area
101-500	0	0.00 % of Selected Area
501-5000	0	0.00 % of Selected Area
> 5000	0	0.00 % of Selected Area
Roof Area 40000 sq. ft.		
Max %MPE 6.5 %		
Min %MPE 0.1 %		
Using Near/Far Spatial Avg Model		
With FCC 1997 Public Standard		

Table 2 Percent of FCC General Population Exposure Limit

Statistical Summary		
%MPE	SQ. FT	%SQ. FT.
	40000	100.00 % of total ROOF Area
0-5	39992	99.98 % of Selected Area
6-500	8	0.02 % of Selected Area
501-5000	0	0.00 % of Selected Area
> 5000	0	0.00 % of Selected Area
Roof Area 40000 sq. ft.		
Max %MPE 6.5 %		
Min %MPE 0.1 %		
Using Near/Far Spatial Avg Model		
With FCC 1997 Public Standard		

Table 3 Percent of FCC General Population Exposure Limit

4 Analysis and Computation

Based on emission patterns of the antennas at this location most of the energy emitted is spread towards the horizon. This assumes the antennas have a zero downtilt. If a mechanical downtilt other then zero is applied to the antennas then the maximum energy emitted will need to be calculated using the information below.

The following formulas can be used for calculating the power density.

Power density is calculated by dividing the surface area of the sphere or the unit area normal to the direction of the propagation. This information is usually shown in units of microwatts per square centimeter (uW/cm2), milliwatt per square centimeters (mW/cm2), or watts per square meter (W/m2).

4.1 Analysis

$$S = \frac{(P \times KFact)}{(2\pi Rh)}$$

where :

S = power density (mW/cm²)

P = total power input to the antenna (mW)

K = antenna correction factor / numeric factor for antenna discrimination

R = straight line distance of the antenna from a 6 ft. human (cm)

h = distance between the roof level and the bottom of the antenna (cm) o r the vertical distance from the tip of the antenna to the roof level where a 6 ft. human being is assumed standing directly from the antenna (also equal to R at 0)

MPE% = Calculated exposure level, as a percentage of the FCC MPE limit for continuous exposure of the general population

5 FCC Limits for MPE

The FCC guidelines for human exposure to RF electromagnetic fields were derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurements ("NCRP") and the Institute of Electrical and Electronics Engineers ("IEEE"). The exposure guidelines are based on thresholds for known adverse effects and they incorporate appropriate margin of safety. The federal health and safety agencies such as: the Environmental Protection Agency ("EPA"), the Food and Drug Administration ("FDA"), the National Institute on Occupational Safety and Health ("NIOSH") and the Occupational Safety and Health Administration ("OSHA") have also been actively involved in monitoring and investigating issues related to RF exposure.

The FCC's MPE limits are based on exposure limits over a wide range of frequencies recommended by the NCRP and the exposure limits developed by the IEEE and adopted by the American National Standards Institute ("ANSI") to replace the 1982 ANSI guidelines. The limits for localized absorption are based on the recommendations of both the ANSI/IEEE and the NCRP. The potential hazard associated with the RF electromagnetic fields is discussed in OET Bulletin No. 56 "Questions and Answers about the Biological Effects and Potential Hazards of RF Electromagnetic Fields". This document can be obtained on the FCC website at http://www.fcc.gov.

Sections 7.1, 7.2 and 7.3 represent the FCC limits for both occupational and general population exposures to different radio frequencies:

5.1 (A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

5.2 (B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	$(180/f^2)$*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz *Plane-wave equivalent power density

NOTE 1: ***Occupational/controlled*** limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: ***General population/uncontrolled*** exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

5.3 Controlled and Uncontrolled Exposure Limits

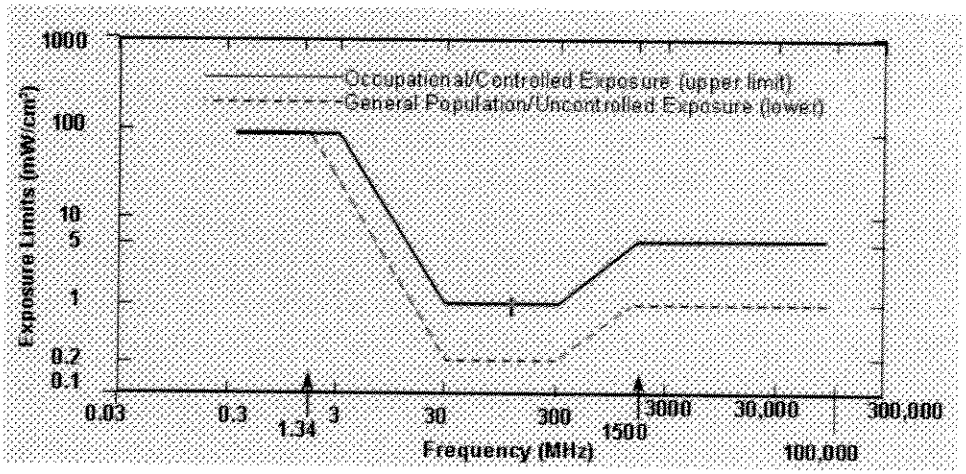


Figure 4

6 FCC Standard Certification

This report certifies that the site E VALLEY PKWY & CITRUS AVE – 83163 is in compliance with the FCC rules and regulations under FCC OET Bulletin 65. Signage is recommended at the site as presented in Section 1.3.

Prepared by:
Fady Rizk
RF Engineer
Telnet Inc.

Date: 04/05/11

Reviewed by:
Boris Lublinsky
Project Manager, EMF Specialist
Telnet Inc.

Date: 04/05/11

7 Glossary of Terms

1. *Electromagnetic Field (energy density)* – the electromagnetic energy contained in an infinitesimal volume divided by that volume.
2. *Exposure* – Exposure occurs whenever and wherever a person is subjected to electric, magnetic or electromagnetic fields other than those originating from physiological processes in the body and other natural phenomena.
3. *General Population / Uncontrolled Exposure* – applies to human exposure to RF fields when the general public is exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public always fall under this category when exposure is not employment-related.
4. *Maximum Permissible Exposure (MPE)* – the rms and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities associated with these fields to which a person may be exposed without harmful effect and with an acceptable safety factor.
5. *Occupational / Controlled Exposure* – applies to human exposure to RF fields when persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/controlled limits.
6. *Power Density (S)* – Power per unit area normal to the direction of propagation, usually expressed in units of watts per square meter (W/m^2) or, for convenience, units such as milliwatts per square centimeter (mW/cm^2) or microwatts per square centimeter ($\mu W/cm^2$).
7. *Ionization* – a process by which electrons are stripped from atoms and molecules. This process can produce molecular changes that can lead to damage in biological tissue, includes effect on DNA, the genetic material. This process requires interaction with high levels of electromagnetic energy.
8. *Non-Ionizing radiation* – a type of emission that is not great enough to cause ionization of atom and molecules. "RF and Microwave Emissions" are low-level energy which are not capable of ionization.

CITY OF ESCONDIDO
PLANNING DIVISION
201 NORTH BROADWAY
ESCONDIDO, CA 92025-2798
(760) 839-4671

Notice of Exemption

To: San Diego County Recorder's Office
Attn: Vanessa Esquivel
P.O. Box 121750
San Diego, CA 92112-1750

From: City of Escondido
201 North Broadway
Escondido, CA 92025

Project Title/Case No.: PHG 11-0008

Project Location – Specific 2525 E. Valley Parkway (APN 231-110-41).

Project Location - City: Escondido, **Project Location - County**: San Diego

Description of Project: A modification to a previously approved Conditional Use Permit (City File No. 2005-79-CUP) for AT&T to add six additional panel antennas onto an existing, approximately 35-foot-high wireless communication facility designed to resemble a broad-leaf tree.

Name of Public Agency Approving Project: City of Escondido

Name of Person or Agency Carrying Out Project:

Name AT&T (Kerrigan Diehl-Plancom Inc. agent for AT&T) Telephone (760) 587-3003

Address 302 State Place, Escondido, CA 92029

☒ Private entity ☐ School district ☐ Local public agency ☐ State agency ☐ Other special district

Exempt Status: Categorical Exemption. Section 15301 "Existing Facilities."

Reasons why project is exempt:

1. The project only involves a modification to a previously approved Conditional Use Permit (2005-79-CUP) to added six panel antennas to an existing 35-foot-high wireless communication facility located on a site developed with a church/school. No physical expansion of the footprint of the facility is proposed.
2. The site is in an area where all public services and facilities are available to allow for the proposed use.
3. The site is within an area that currently is developed with a church facility and related structures/infrastructure. The proposed development/lease area is not in an area that is environmentally sensitive and the project would not have any direct impacts to any sensitive or protected resources since there are no resources located on the site.
4. The proposed facility would not be hazardous to the health of nearby residents or the general public since the facility would be within maximum permissible exposure (MPE) limits and Federal Communication Commission (FCC) standards.

Lead Agency Contact Person: Jay Paul, Planning Division Area Code/Telephone/Extension (760) 839-4537

Signature: _____ March 26, 2012
Jay Paul, Associate Planner Date

☒ Signed by Lead Agency Date received for filing at OPR: N/A