

February 9, 2012  
REGULAR MEETING  
BENICIA PLANNING COMMISSION  
CITY HALL COUNCIL CHAMBERS  
AGENDA  
February 9, 2012  
7:00 P.M.

**I. OPENING OF MEETING**

**A. Pledge of Allegiance**

**B. Roll Call of Commissioners**

Reference to Fundamental Rights of Public - A plaque stating the Fundamental Rights of each member of the public is posted at the entrance to this meeting room per Section 4.04.030 of the City of Benicia's Open Government Ordinance.

**II. ADOPTION OF AGENDA**

**III. PROCLAMATION FOR BRAD THOMAS**

**IV. ELECTION OF OFFICERS (CHAIR AND VICE CHAIR)**

**V. OPPORTUNITY FOR PUBLIC COMMENT**

This portion of the meeting is reserved for persons wishing to address the Commission on any matter not on the agenda that is within the subject jurisdiction of the Planning Commission. State law prohibits the Commission from responding to or acting upon matters not listed on the agenda.

Each speaker has a maximum of five minutes for public comment. If others have already expressed your position, you may simply indicate that you agree with a previous speaker. If appropriate, a spokesperson may present the views of your entire group. Speakers may not make personal attacks on council members, staff or members of the public, or make comments which are slanderous or which may invade an individual's personal privacy.

**A. WRITTEN**

**B. PUBLIC COMMENT**

**VI. CONSENT CALENDAR**

Consent Calendar items are considered routine and will be enacted, approved or adopted by one motion unless a request for removal for discussion or explanation is received from the Planning Commission or a member of the public by submitting a speaker slip for that item. Any Item identified as a Public Hearing has been placed on the Consent Calendar because it has not generated any public interest or dissent. However, if any member of the public wishes to comment on a Public Hearing item, or would like the item placed on the regular agenda, please notify the Community Development Staff either prior to, or at the Planning Commission meeting, prior to the reading of the Consent Calendar.

**A. Approval of minutes from December 8, 2011**

**B. Approval of minutes from January 12, 2012**

**VII. REGULAR AGENDA ITEMS**

**A. UPGRADE OF EXISTING TELECOMMUNICATIONS FACILITY FOR AT&T/ERICSSON/FHMC AT 1471 PARK RD (Site Plan)**

**PROPOSAL:**

The applicant requests Use Permit approval to upgrade an existing telecommunications facility adjacent to the existing water tank at 1471 Park Road, in the northeast area of the site. The purpose of this upgrade is to provide faster and more efficient telecommunication service to the City. The facility is under a lease agreement by the City and will require that Design Review and Use Permits be obtained prior to lease renewal.

**Recommendation:**

Approve Use Permit to upgrade an existing telecommunications facility including installation of three (3) new antennas, six (6) new radio remote units (RRUS), one (1) new surge suppressor, one (1) new global positioning system (GPS) receiver, and associated conduit and cabling located at the city-owned water tank site at 1471 Park Road, based on the findings and conditions of approval set forth in the draft Resolution.

**VIII. COMMUNICATIONS FROM STAFF**

**IX. COMMUNICATIONS FROM COMMISSIONERS**

**X. ADJOURNMENT**

**Public Participation**

The Benicia Planning Commission welcomes public participation. Pursuant to the Brown Act, each public agency must provide the public with an opportunity to speak on any matter within the subject matter jurisdiction of the agency and which is not on the agency's agenda for that meeting. The Planning Commission allows speakers to speak on agenda and non-agenda matters under public comment. Comments are limited to no more than 5 minutes per speaker. By law, no action may be taken on any item raised during the public comment period although informational answers to questions may be given and matters may be referred to staff for placement on a future agenda of the Planning Commission.

Should you have material you wish to enter into the record, please submit it to the Commission Secretary.

**Disabled Access**

In compliance with the Americans with Disabilities Act (ADA), if you need special assistance to participate in this meeting, please contact the ADA Coordinator, at (707) 746-4211.

Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

**Meeting Procedures**

All items listed on this agenda are for Commission discussion and/or action. In accordance with the Brown Act, each item is listed and includes, where appropriate, further description of the item and/or a recommended action. The posting of a recommended action does not limit, or necessarily indicate, what action the Commission may take.

The Planning Commission may not begin new public hearing items after 11 p.m. Public hearing items, which remain on the agenda, may be continued to the next regular meeting of the Commission, or to a special meeting.

Pursuant to Government Code Section 65009; if you challenge a decision of the Planning Commission in court, you may be limited to raising only those issues you or someone else raised at the Public Hearing described in this notice, or in written correspondence delivered to the Planning Commission at, or prior to, the Public Hearing. You may also be limited by the

ninety (90) day statute of limitations in which to file and serve a petition for administrative writ of mandate challenging any final City decisions regarding planning or zoning. Appeals of Planning Commission decisions that are final actions, not recommendations, are considered by the City Council. Appeals must be filed in the Public Works & Community Development Department in writing, stating the basis of appeal with the appeal fee within 10 business days of the date of action.

#### Public Records

The agenda packet for this meeting is available at the City Clerk's Office, the Benicia Public Library and the Public Works & Community Development Department during regular working hours. The Public Works & Community Development Department is open Monday through Friday (except legal holidays), 8:30 a.m. to 5 p.m. (closed from noon to 1 p.m.). Technical staff is available from 8:30 - 9:30 a.m. and 1:00 - 2:00 p.m. only. If you have questions/comments outside of those hours, please call 746-4280 to make an appointment. To the extent feasible, the packet is also available on the City's web page at [www.ci.benicia.ca.us](http://www.ci.benicia.ca.us) under the heading "Agendas and Minutes." Public records related to an open session agenda item that are distributed after the agenda packet is prepared are available before the meeting at the Public Works & Community Development Department's office located at 250 East L Street, Benicia, or at the meeting held in the City Hall Council Chambers. If you wish to submit written information on an agenda item, please submit to Kathy Trinque, Administrative Secretary, as soon as possible so that it may be distributed to the Planning Commission.

 [Staff Meeting Telecommunications Facility 1471 Park Rd](#)

 [Telecommunications 1471 Park Rd Site Plan](#)

 [Proclamation.pdf](#)

 [December 8 2011-draft minutes.pdf](#)

 [January 12 2012 draft-minutes.pdf](#)

**AGENDA ITEM  
PLANNING COMMISSION MEETING  
FEBRUARY 9, 2012  
REGULAR AGENDA ITEM**

**DATE** : January 25, 2012

**TO** : Planning Commission

**FROM** : Lisa Porras, Senior Planner

**SUBJECT** : **UPGRADE OF EXISTING TELECOMMUNICATIONS FACILITY  
FOR AT&T/ERICSSON/FHMC AT 1471 PARK ROAD**

**PROJECT** : 11PLN-00072 (Use Permit)  
1471 Park Road  
APN: 080-140-670

**RECOMMENDATION:**

Approve Use Permit to upgrade an existing telecommunications facility including installation of three (3) new antennas, six (6) new radio remote units (RRUS), one (1) new surge suppressor, one (1) new global positioning system (GPS) receiver, and associated conduit and cabling located at the city-owned water tank site at 1471 Park Road, based on the findings and conditions of approval set forth in the draft Resolution.

**EXECUTIVE SUMMARY:**

The applicant requests Use Permit approval to upgrade an existing telecommunications facility adjacent to the existing water tank at 1471 Park Road, in the northeast area of the site. The purpose of this upgrade is to provide faster and more efficient telecommunication service to the City. The facility is under a lease agreement by the City and will require that Design Review and Use Permits be obtained prior to lease renewal.

**ENVIRONMENTAL ANALYSIS:**

Staff has determined that this project is categorically exempt from the State of California Environmental Quality Act pursuant to Section 15301 of the CEQA Guidelines that exempts minor alterations to existing equipment.

## **BACKGROUND:**

The property at 1471 Park Road is City-owned and has a Public and Semi-Public (PS) Zoning designation. The existing wireless facility serving AT&T received planning approvals in 1991. There are four other wireless communication facilities co-locating within the same compound: Sprint, MetroPCS, Nextel, and T-Mobile.

## **SUMMARY:**

### A. Project Description:

AT&T Wireless proposes to install three (3) new antennas, six (6) new RRUS, one (1) new surge suppressor, one (1) new GPS receiver, and associated conduit and cabling. The proposed antennas are approximately 4 ft. long by 1 ft. wide, matching the size of existing antennas. The new surge suppressor is 1 ft. wide by 1.5 ft. tall, and the RRUS are 1.5 ft. wide by 1.5 ft. tall. All of this equipment will be mounted on top of the 60 ft. tall pole and installed alongside existing equipment/antennas. The new GPS receiver will be located next to a pre-existing GPS receiver, and reach the same height, 13.5 ft. tall. Conduit and cabling will run from an existing small structure and into (up inside) the monopole.

The requested upgrade is an evolutionary improvement in the wireless industry to effect speed and clarity of both voice and data for subscribers' phones. The applicant states the upgrade will enable subscribers to download applications or browse the web at speeds that rival cable and DSL. The same technology will be used, but at a different frequency. All major carriers will likely utilize this technology in the near future, if not already. The main area to be covered is the stretch of HWY 680 that parallels the existing tower as well as the neighborhoods to the south of the site.

### B. Zoning Ordinance Consistency:

The subject property is located within the Public Semi-Public (PS) Zoning District, which allows major and minor utility uses.

Pursuant to BMC 17.70.250 H, approval of a Use Permit for a wireless facility requires the Planning Commission to determine that:

1. The proposed location of the project and the conditions under which it would be operated and maintained will not be detrimental to the health, safety, or welfare of persons residing or

working in the neighborhood or the general public, and will not be materially injurious to properties or improvements in the vicinity.

*The existing facility is located in an area of zero activity and has no interface with the public. Access to the fenced facility is restricted to authorized personnel only. In addition, all wireless facilities are required to produce a Federal Communications Commission (FCC) compliance study on radio frequency and electromagnetic fields exposure. Based on the study submitted, the radio frequency is at 1.9% the maximum permissible exposure (MPE) limits set by the FCC.*

2. Development of the proposed facility as conditioned will not significantly affect any designated visual resources, environmentally sensitive resources, community character resources; or, that there are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed wireless communications facility as conditioned (including alternative locations and/or designs) with less visual and/or other resource impacts, and that the proposed facility has been modified by conditions and/or project design to adequately minimize and mitigate its visual and other resource impacts.

*This is a pre-existing facility. The physical changes to the facility will not degrade visual nor environmentally sensitive resources. The facility is also required to be reviewed for Design Review approval. As part of the Design Review approval, original conditions requiring the monopole to be painted blue and small structures to be painted tan to blend in with the sky and match the earth, respectively, have been carried forth to ensure maintenance.*

3. The proposed facility is in compliance with all FCC regulations.

*The project's radio frequency (RF) is at 1.9% the maximum permissible exposure (MPE) limits set by the Federal Communications Commission (FCC). The general population near the antennas, including persons on the street level, in nearby open areas, and inside or on existing nearby buildings will have very low RF exposure, which is a small percentage of the MPE limit set by the FCC.*

4. The proposed location and design of the project and the conditions under which it would be operated or maintained will be consistent with all elements of the Benicia general plan, other pertinent city ordinances and with any specific plan or overlay district that has been adopted for the area.

*The subject property is located within the Public Semi-Public (PS) Zoning District, which allows major and minor utility uses. The project is also consistent with the requirements of BMC Sections BMC 17. 70.250 and 17.104.060.*

5. The proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be visually compatible with the physical design aspects including scale, height, materials, colors, and texture.

*The existing facility will not be altered in any substantial way. The overall scale, height, materials, colors and textures will not change. The upgrades do not detract from existing uses because the facility is located within the site in the northeast area and is significantly distanced from roads and structures.*

In addition to the findings above, the Planning Commission must also make the following findings, which are required for every Use Permit application:

1. That the proposed location of the use is in accord with the objectives of this title and the purposes of the district in which the site located.

*The subject property is located within the Public Semi-Public (PS) Zoning District, which allows major and minor utility uses. The project is also consistent with the requirements of BMC Sections BMC 17. 70.250 and 17.104.060.*

2. That the proposed location of the conditional use and the proposed conditions under which it would be operated or maintained will be consistent with the general plan and will not be detrimental to the public health, safety, or welfare of persons residing or working in or adjacent to the neighborhood of such use, nor detrimental to properties or improvements in the vicinity or to the general welfare of the city.

*The existing facility is located in an area of zero activity and has no interface with the public. Access to the fenced facility is restricted to authorized personnel only. In addition, all wireless facilities are required to produce a Federal Communications Commission (FCC) compliance study on radio frequency and electromagnetic fields exposure. Based on the study submitted, the radio frequency is at 1.9% the maximum permissible exposure (MPE) limits set by the FCC.*

3. That the proposed conditional use will comply with the provisions of this title, including any specific condition required for the proposed conditional use in the district in which it would be located.

*Based on the foregoing findings of approval, as well as the required findings codified in BMC Section 17. 70.250 H, the project meets this finding.*

#### D. Conclusion:

Staff recommends approval of the proposed upgrades to the existing wireless communication facility subject to the conditions of approval in the proposed Resolution.

#### **FURTHER ACTION:**

The Planning Commission's decision will be final unless appealed to the City Council within ten (10) business days.

#### **Attachments:**

- Draft Resolution
- Site Plans
- Photographs
- Federal Communications Commission (FCC) Compliance Study on Radio Frequency Electromagnetic Field Exposure

# **DRAFT RESOLUTION**

**RESOLUTION. \_\_-12 (PC)**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF BENICIA  
APPROVING A USE PERMIT FOR UPGRADES TO AN EXISTING WIRELESS  
COMMUNICATION FACILITY AT 1471 PARK ROAD (11PLN-72)**

**WHEREAS**, AT&T/ERICSSON/FHMS have requested Use Permit approval for upgrades to an existing wireless communications facility at 1471 Park Road; and

**WHEREAS**, the Planning Commission at a regular meeting on February 9, 2012 conducted a public hearing, considered all testimony and documents, and reviewed the proposed project.

**NOW, THEREFORE, BE IT RESOLVED THAT** the Planning Commission of the City of Benicia finds that:

1. The proposed location of the project and the conditions under which it would be operated and maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not be materially injurious to properties or improvements in the vicinity.

*The existing facility is located in an area of zero activity and has no interface with the public. Access to the fenced facility is restricted to authorized personnel only. In addition, all wireless facilities are required to produce a Federal Communications Commission (FCC) compliance study on radio frequency and electromagnetic fields exposure. Based on the study submitted, the radio frequency is at 1.9% the maximum permissible exposure (MPE) limits set by the FCC.*

2. Development of the proposed facility as conditioned will not significantly affect any designated visual resources, environmentally sensitive resources, community character resources; or, that there are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed wireless communications facility as conditioned (including alternative locations and/or designs) with less visual and/or other resource impacts, and that the proposed facility has been modified by conditions and/or project design to adequately minimize and mitigate its visual and other resource impacts.

*This is a pre-existing facility. The physical changes to the facility will not degrade visual nor environmentally sensitive resources. The facility is also required to be reviewed for Design Review approval. As part of the Design Review approval, original conditions requiring the monopole to be painted blue and small structures to be painted tan to blend in with the sky and match the earth, respectively, have been carried forth to ensure maintenance.*

3. The proposed facility is in compliance with all FCC regulations.

*The project's radio frequency (RF) is at 1.9% the maximum permissible exposure (MPE) limits set by the Federal Communications Commission (FCC). The general population near the antennas, including persons on the street level, in nearby open areas, and inside or on existing nearby buildings will have very low RF exposure, which is a small percentage of the MPE limit set by the FCC.*

4. The proposed location and design of the project and the conditions under which it would be operated or maintained will be consistent with all elements of the Benicia general plan, other pertinent city ordinances and with any specific plan or overlay district that has been adopted for the area.

*The subject property is located within the Public Semi-Public (PS) Zoning District, which allows major and minor utility uses. The project is also consistent with the requirements of BMC Sections BMC 17.70.250 and 17.104.060.*

5. The proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be visually compatible with the physical design aspects including scale, height, materials, colors, and texture.

*The existing facility will not be altered in any substantial way. The overall scale, height, materials, colors and textures will not change. The upgrades do not detract from existing uses because the facility is located within the site in the northeast area and is significantly distanced from roads and structures.*

6. That the proposed location of the use is in accord with the objectives of this title and the purposes of the district in which the site located.

*The subject property is located within the Public Semi-Public (PS) Zoning District, which allows major and minor utility uses. The project is also consistent with the requirements of BMC Sections BMC 17. 70.250 and 17.104.060.*

7. That the proposed location of the conditional use and the proposed conditions under which it would be operated or maintained will be consistent with the general plan and will not be detrimental to the public health, safety, or welfare of persons residing or working in or adjacent to the neighborhood of such use, nor detrimental to properties or improvements in the vicinity or to the general welfare of the city.

*The existing facility is located in an area of zero activity and has no interface with the public. Access to the fenced facility is restricted to authorized personnel only. In addition, all wireless facilities are required to produce a Federal Communications Commission (FCC) compliance study on radio frequency and electromagnetic fields exposure. Based on the study submitted, the radio frequency is at 1.9% the maximum permissible exposure (MPE) limits set by the FCC.*

8. That the proposed conditional use will comply with the provisions of this title, including any specific condition required for the proposed conditional use in the district in which it would be located.

*Based on the foregoing findings of approval, as well as the required findings codified in BMC Section 17. 70.250 H, the project meets this finding.*

**BE IT FURTHER RESOLVED** that the Planning Commission hereby approves proposed upgrades to the existing wireless communication facility subject to the following conditions:

1. City Council approved and fully executed renewal of lease agreement for the site.
2. The plans and maps submitted for approval and development of the site shall be in substantial compliance with the plans date stamped November 21, 2011 and marked Exhibit A prepared by AT&T and FMHC consisting of seven (7) sheets on file in the Public Works & Community Development Department.

3. This approval shall expire two years from the date of approval, unless made permanent by the issuance of a building permit and the commencement of work that is diligently pursued to completion. Alternatively, the time period may be extended, by the Public Works & Community Development Director, if the application for time extension is received prior to the end of the initial two year deadline and there has been no change in the City's development policies which affect the site, and there is no change in the physical circumstances nor new information about the project site which would warrant reconsideration of the approval.
4. The project shall adhere to all applicable ordinances, standard plans, and specifications of the City of Benicia.
5. Any alteration of the approved plans, including substitution of materials or changes in paint colors, shall be requested in writing for approval by the Public Works & Community Development Director or designee prior to changes being made in the field.
6. Prior to issuing a building permit, the applicant shall provide detailed photographs of the monopole and associated structures to confirm they have been painted and are in compliance with Condition #4 of the original permit (PRJ 91-1), and further show that the color of the monopole should be blue to match the sky, and associated small buildings should be tan to match landscape. If the painting is not in satisfactory condition, the applicant shall be required to paint prior to receiving a final inspection.
7. The wires and cables to the antenna panels shall be located within the support structure (pole) or flush with the pole so that they are minimally visible.
8. All appropriate permits, including an encroachment permit is required. Contact the City of Benicia Engineering Division at 746-4240 and the Building Division at 746-4230 for permit issuance and insurance requirements.
9. Antennas, support structures and related equipment shall be removed within 90 calendar days of the discontinuation of the use of a wireless communication facility and the site shall be restored to its previous condition. The applicant shall notify

the Public Works & Community Development Department in writing of the intent to remove the facility at least 30 days prior to discontinuance.

10. The applicant or permittee shall defend, indemnify, and hold harmless the City of Benicia or its agents, officers, and employees from any claim, action, or proceeding against the City of Benicia or its agents, officers, or employees to attack, set aside, void, or annul an approval of the Planning Commission, City Council, Community Development Director, or any other department, committee, or agency of the City concerning a development, variance, permit or land use approval which action is brought within the time period provided for in any applicable statute; provided, however, that the applicant's or permittee's duty to so defend, indemnify, and hold harmless shall be subject to the City's promptly notifying the applicant or permittee of any said claim, action, or proceeding and the City's full cooperation in the applicant's or permittee's defense of said claims, actions, or proceedings.

\* \* \* \* \*

On motion of Commissioner \_\_\_\_\_, seconded by Commissioner \_\_\_\_\_, the above Resolution was adopted by the Planning Commission of the City of Benicia at a regular meeting of said Commission held on February 9, 2012 by the following vote:

Ayes:

Noes:

Absent:

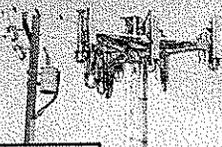
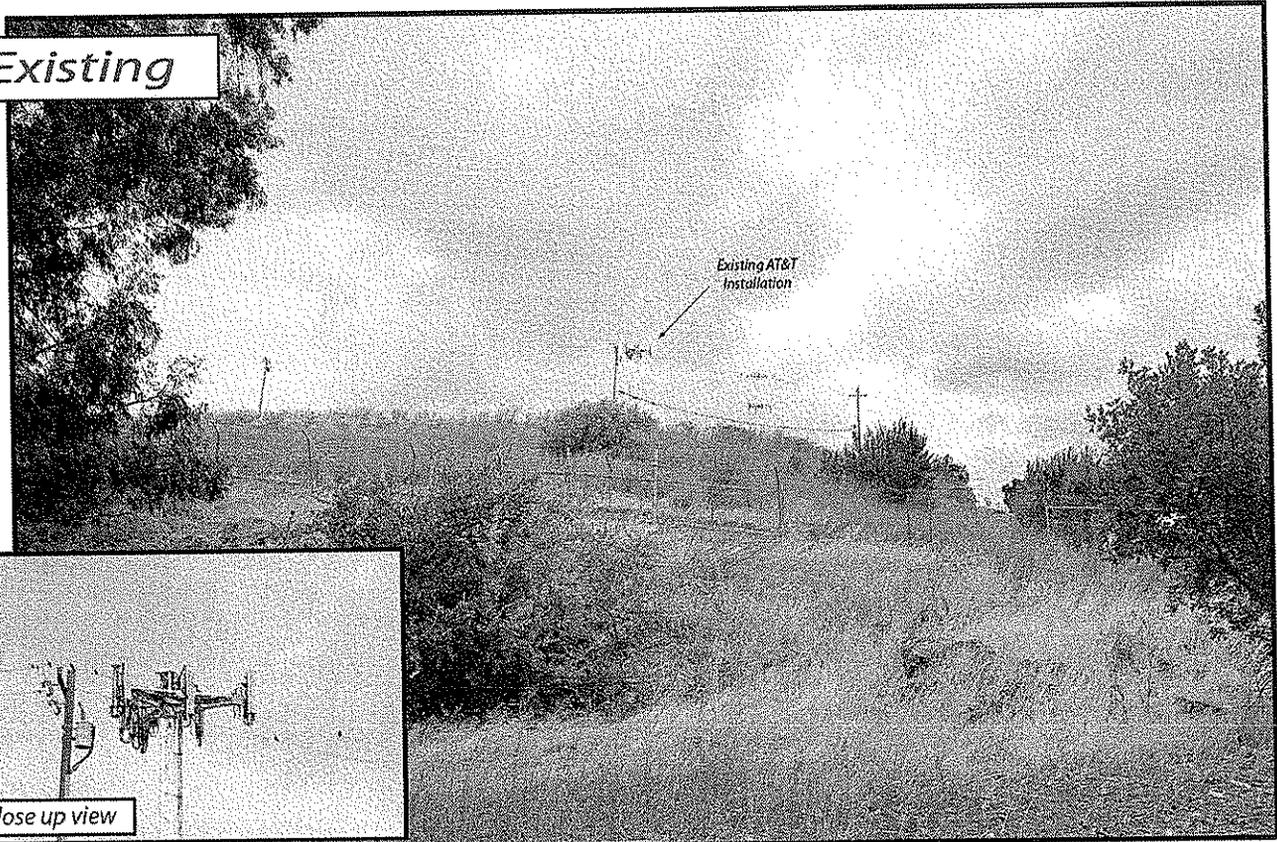
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(TBD)  
Planning Commission Chair

# **SITE PLANS**

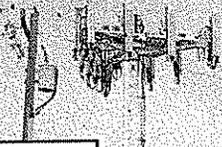
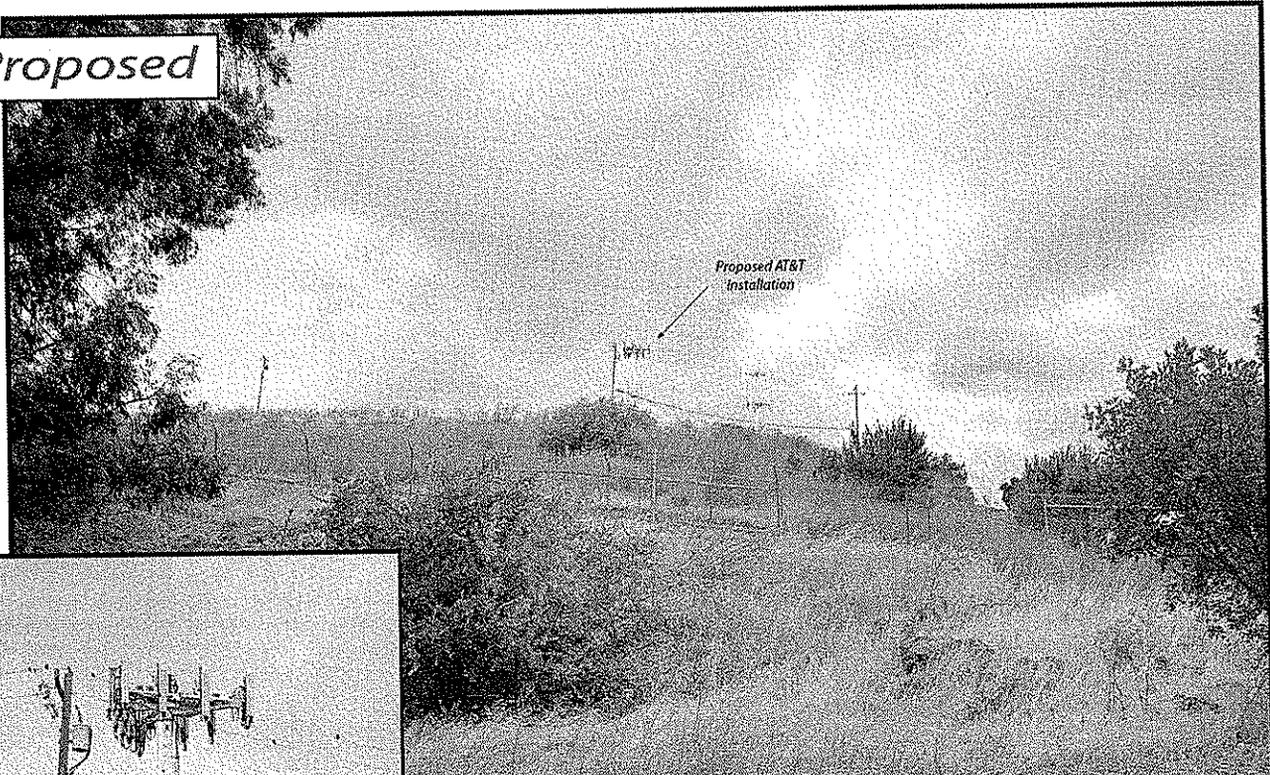
# **PHOTOGRAPHS**

*Existing*



*close up view*

*Proposed*



*close up view*

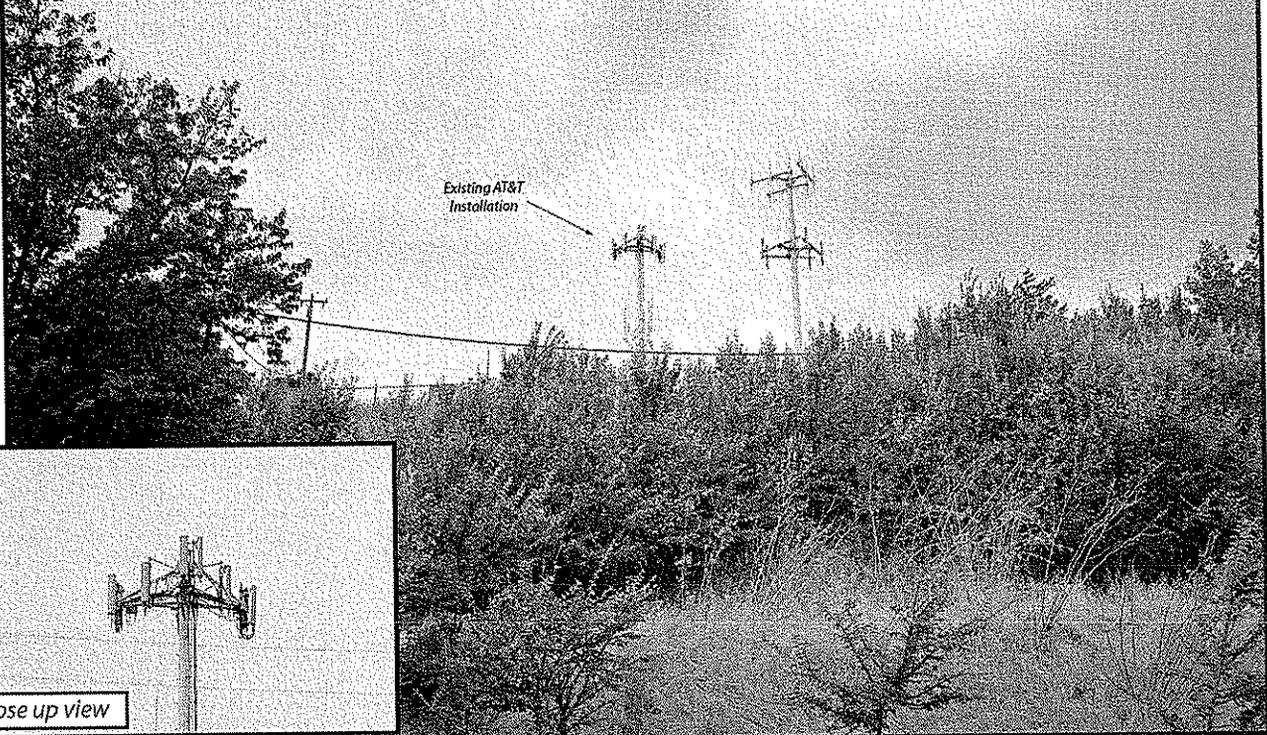
*view from Park Road looking north at site*



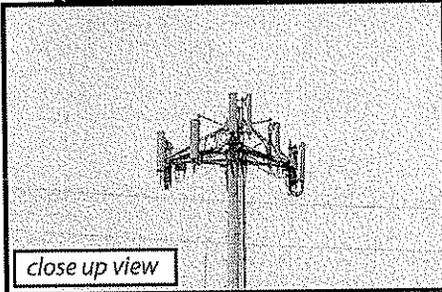
**AT&T Wireless**

CNU0347 Benica Monopole  
1471 Park Road, Benicia, CA

**Existing**



Existing AT&T Installation

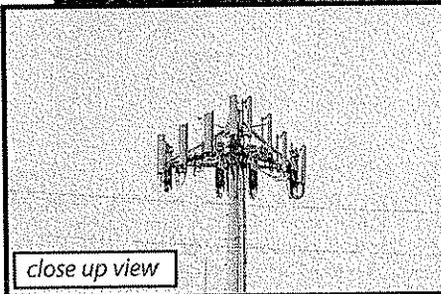


close up view

**Proposed**



Proposed AT&T Installation



close up view

view from Park Road looking west at site



**Existing**

Existing AT&T  
Installation

close up view

**Proposed**

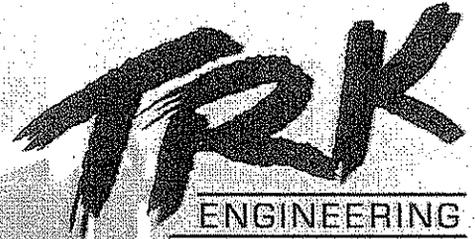
Proposed AT&T  
Installation

close up view

view from Oak Road looking southwest at site

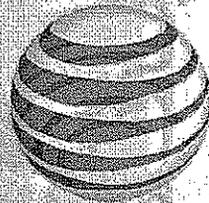


**Federal Communications Commission  
(FCC) Compliance Study on Radio  
Frequency Electromagnetic Field  
Exposure**



**FEDERAL COMMUNICATIONS COMMISSION (FCC)  
COMPLIANCE STUDY ON  
RADIO FREQUENCY  
ELECTROMAGNETIC FIELDS EXPOSURE**

Prepared for:



**at&t**

**CNU0347  
BENICIA  
1471 PARK ROAD  
BENICIA  
CA 94510**

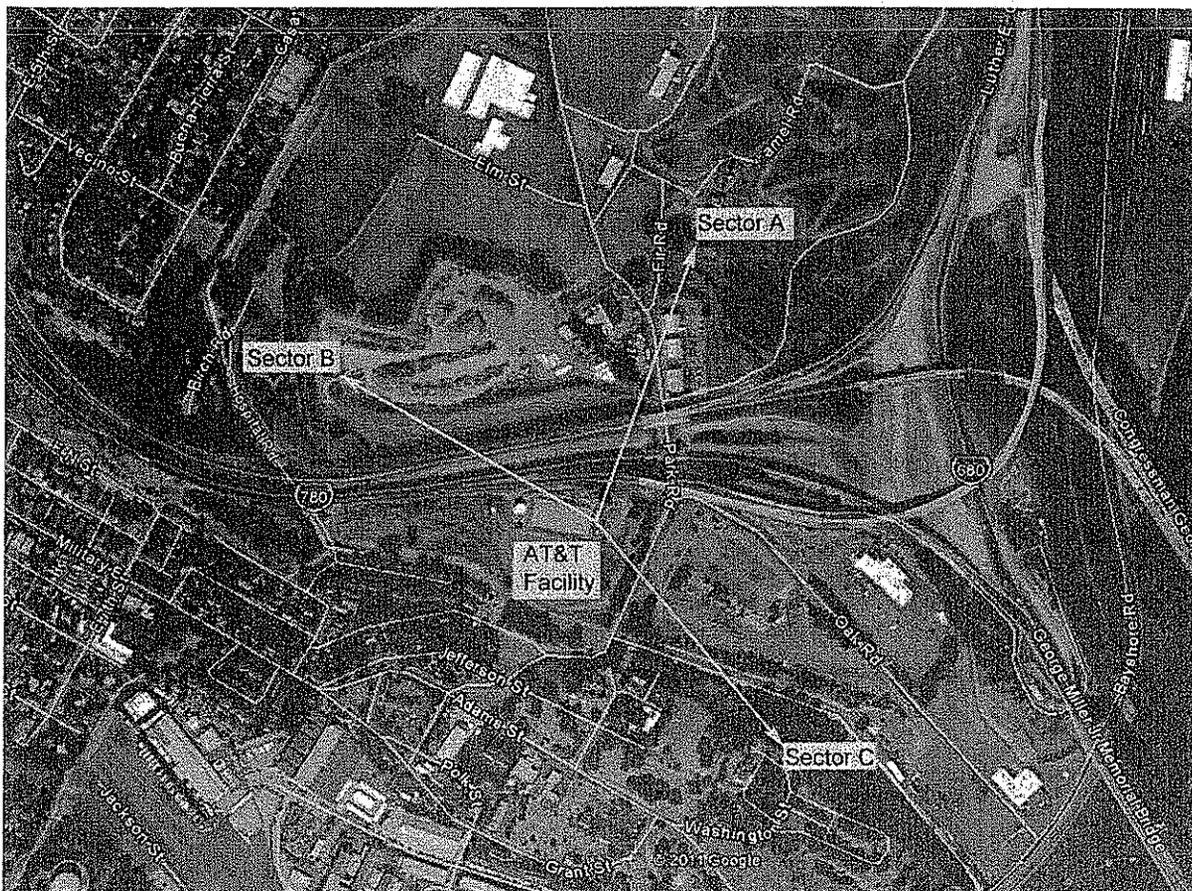
**October 16/2011, REV. 0**

**SITE DESCRIPTION:**

<b>Carrier:</b>	AT&T		
<b>Site Address:</b>	1471 Park Road, Benicia, CA 94510		
<b>Type of Service:</b>	i) GSM	ii) UMTS	iii) LTE
<b>Sectors:</b>	3 (20°, 300°, 140°)		
<b>Antenna Type:</b>	i) Kathrein 742-264	ii) TBXLHB-6565A-VTM	
	iii) Kathrein 80010764		
<b>Number of Antennas:</b>	12 (4 per sector)		
<b>Frequencies (MHz):</b>	i) & ii) 850/1900		iii) 700/AWS
<b>Maximum Power (ERP):</b>	i) 630/1000 W	ii) 1260/2000 W	iii) 950/1500 W
<b>Antenna Height:</b>	57' -9"± (radiation center AGL)		

**Table 1. AT&T RF summary**

AT&T is proposing to modify a wireless communication facility at the above address (Figure 1). Three new LTE antennas will be installed on the existing monopole in addition to the nine existing antennas. Access to the fenced facility is restricted to authorized personnel only.



**Figure 1. Facility and surrounding area**

There are four other existing wireless communication facilities co-locating within the same compound. The RF summaries for the facilities are shown in the following Tables.

<b>Carrier:</b>	Sprint
<b>Type of Service:</b>	1900 MHz CDMA (Broadband PCS)
<b>Antenna Quantity:</b>	EMS RR65-18-XXDPL2 ( <i>typical</i> )
<b>Antenna Type:</b>	3 (1 per sector)
<b>Maximum Power:</b>	1000 W ( <i>Maximum ERP per sector</i> )
<b>Antenna Height:</b>	45'± ( <i>Radiation center AGL</i> )

**Table 2.** Sprint RF summary

<b>Carrier:</b>	MetroPCS
<b>Type of Service:</b>	1900 MHz CDMA
<b>Antenna Quantity:</b>	9 (3 per sector)
<b>Antenna Type:</b>	Kathrein 742-211
<b>Maximum Power:</b>	500 W ERP ( <i>Maximum ERP per sector, typical</i> )
<b>Antenna Height:</b>	66'± ( <i>Radiation center AGL</i> )

**Table 3.** MetroPCS RF summary

<b>Carrier:</b>	Nextel
<b>Type of Service:</b>	850 MHz EMSR
<b>Antenna Quantity:</b>	9 (3 per sector)
<b>Antenna Type:</b>	Decibel DB844H80E-XY
<b>Maximum Power:</b>	500 W ERP ( <i>Maximum ERP per sector, typical</i> )
<b>Antenna Height:</b>	25'± ( <i>Radiation center AGL</i> )

**Table 4.** Nextel RF summary

<b>Carrier:</b>	T-Mobile
<b>Type of Service:</b>	1900 GSM / UMTS
<b>Antenna Quantity:</b>	9 (3 per sector)
<b>Antenna Type:</b>	RFS APXV18-206516S-C-A20
<b>Maximum Power:</b>	1100 W ERP ( <i>Maximum ERP per sector, typical</i> )
<b>Antenna Height:</b>	40'± ( <i>Radiation center AGL</i> )

**Table 5.** T-Mobile RF summary

**PROTOCOL:**

This study, and the calculations performed therein, is based on OET Bulletin 65<sup>1</sup> which adopts ANSI C95.1-1992 and NCRP standards. In particular, equation 10 from section 2 of the guideline is used as a model (in conjunction with known antenna radiation patterns) for calculating the power density at different points of interest. This information will be used to judge the RF exposure level incident upon the general population, and any employee present in the area. It should be noted that ground reflection of RF waves has been taken into account.

<sup>1</sup> Cleveland, Robert F, et al. Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. OET Bulletin 65, Edition 97-01, August 1997.

**ENVIRONMENTAL EVALUATION:**

According to Table 2 in Appendix A of Bulletin 65, a wireless communication facility is subject to routine environmental evaluation if the height above ground level to the lowest point on a non-building mounted antenna is less than 10 m, **and** the total power of all channels in a given sector is in excess of 2000 W ERP. The height above ground level to the lowest point of the antenna in question is 55'-6" (16.9 m); therefore, this facility is exempt from routine environmental evaluation.

**FCC'S MAXIMUM PERMISSIBLE EXPOSURE (MPE) LIMIT:**

In order to evaluate the RF exposure level, the power densities at different locations of interest have been examined. Equation 10 from Bulletin 65 is reproduced here as equation 1:

$$S = \frac{33.4F^2 ERP}{R^2} \quad (1)$$

- Where:
- $S$  = Power density [ $\mu W/cm^2$ ]
  - ERP = Effective radiated power [W]
  - R = Distance [m]
  - F = Relative field factor (relative numeric gain)

**Scenario 1: Standing near the facility on ground level**

The RF exposure level of a six-foot tall person standing on ground level close to the facility is evaluated. For the worst-case scenario, we assume that all the antennas are transmitting the maximum number of channels at the same time, with each channel at its maximum power level. In addition, the antenna azimuths of all carriers are assumed to be in the directions of the studied locations. Please refer to scenario 1 in appendix A for the complete geometry and analysis. The highest exposure location is found to be approximately 53' from the monopole. The calculations of maximum cumulative power density are summarized in Table 6.

Service	Max. ERP	F <sup>2</sup>	R (m)	S ( $\mu W/cm^2$ ) (from eq. 1)	MPE %
AT&T 850 UMTS	1260 W	-19 dB (0.0126)	22.7	1.0290	0.1774
AT&T 1900 UMTS	2000 W	-20 dB (0.0100)	22.7	1.2964	0.1296
AT&T 850 GSM	630 W	-11 dB (0.0794)	22.7	3.2423	0.5590
AT&T 1900 GSM	1000 W	-15 dB (0.0316)	22.7	2.0482	0.2048
AT&T LTE 700	950 W	-18 dB (0.0158)	22.7	0.9729	0.2074
AT&T LTE AWS	1500 W	-18 dB (0.0158)	22.7	1.5362	0.1536
Nextel	500 W	0 dB (1.0000)	98.6	1.7178	0.2962
T-Mobile	1100 W	-6 dB (0.2512)	99	0.9416	0.0942
Metro PCS	500 W	-20 dB (0.0100)	22.5	0.3299	0.0330
Sprint	1000 W	-23 dB (0.005)	18.2	0.5042	0.0504
Total					1.9056

**Table 6.** Worst-case predicted power density values for scenario 1.

The Maximum Permissible Exposure (MPE) limit for 1900 MHz and 2100 MHz facilities<sup>2</sup> for general population/uncontrolled exposure is 1000  $\mu\text{W}/\text{cm}^2$ , 580  $\mu\text{W}/\text{cm}^2$  for 850 MHz facilities<sup>3</sup>, and 469  $\mu\text{W}/\text{cm}^2$  for 700 MHz facilities<sup>4</sup>. The maximum cumulative power density for the proposed antennas is calculated to be 1.9% of the MPE limit.

Scenario 2: Nearby building rooftops

There are various types of buildings in the surrounding area. The RF exposure levels on nearby rooftops are evaluated. We assume again, all antennas within a sector are transmitting with maximum power level. Please refer to scenario 2 in appendix A for the analysis. The highest exposure location is on the rooftop of the nearest building north of the facility. The calculations for the maximum possible power density are summarized in Table 7.

Service	Max. ERP	F <sup>2</sup>	R (m)	S ( $\mu\text{W}/\text{cm}^2$ ) (from eq. 1)	MPE %
AT&T 850 UMTS	1260 W	-1 dB (0.7943)	188.3	0.9428	0.1626
AT&T 1900 UMTS	2000 W	-5 dB (0.3162)	188.3	0.5957	0.0596
AT&T 850 GSM	630 W	-1 dB (0.7943)	188.3	0.4714	0.0813
AT&T 1900 GSM	1000 W	-5 dB (0.3162)	188.3	0.2979	0.0298
AT&T LTE 700	950 W	-1 dB (0.7943)	188.3	0.7108	0.1516
AT&T LTE AWS	1500 W	-3 dB (0.5012)	188.3	0.7082	0.0708
Nextel	500 W	0 dB (1.000)	229.8	0.3162	0.0545
T-Mobile	1100 W	-2 dB (0.631)	230	0.4382	0.0438
Metro PCS	500 W	-3 dB (0.5012)	178.5	0.2627	0.0263
Sprint	1000 W	-3 dB (0.5012)	177.8	0.5295	0.0530
Total					0.7333

**Table 7.** Worst-case predicted power density values for scenario 2.

The maximum cumulative power density for the AT&T antennas and the existing antennas is calculated to be 0.7% of the MPE limit. There is a relatively low level of RF energy directed either above or below the horizontal plane of the antennas, and there are no locations in the surrounding areas near the facilities that will have RF exposure levels close to the MPE limit.

Conclusion:

Under “worst-case” conditions, the calculations shown above predict that the maximum possible RF exposure is 1.9% of the MPE limit for general population/uncontrolled exposure. There will be less RF exposure on the ground level or nearby buildings as a person moves away from the site. Therefore, the proposed modifications to the AT&T facility will comply with the general population/uncontrolled limit.

**RF SAFETY SIGNS:**

An Information Sign and a Notice Sign as shown in the appendix should be maintained at the access to the facility as well as at the monopole.

<sup>2</sup> Ibid., page 67. are shown  
<sup>3</sup> Ibid., page 67.  
<sup>4</sup> Ibid., page 67.

FCC COMPLIANCE:

The general population/uncontrolled exposure near the antennas, including persons on the street level, in nearby open areas, and inside or on existing nearby buildings will have RF exposure much lower than the "worst-case" scenario, which is only a small percentage of the MPE limit.

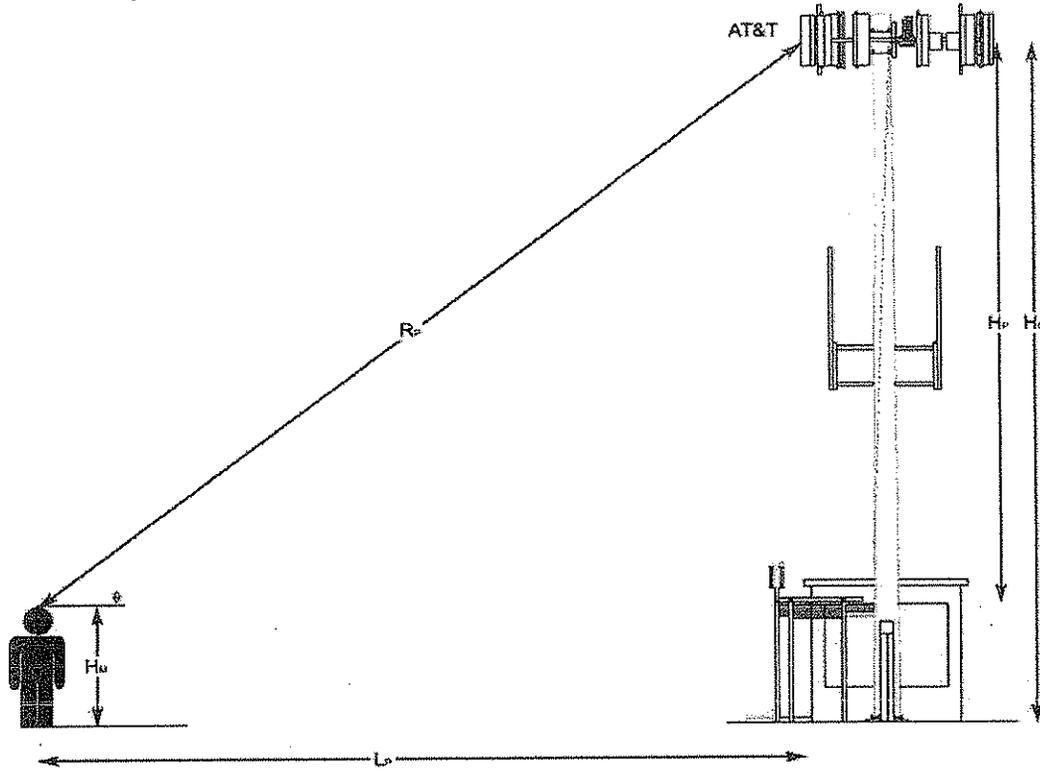
As for trained persons or transient workers, they will be made fully aware of the potential for RF exposure and can choose to exercise control over their exposure that is within the occupational/controlled limits.

  
  
October 21, 2011

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APPENDIX A

Scenario 1: Surrounding Area of the Facility



person's height ( $H_u$ ) = 6 ft  
 Monopole elevation 188 ft

Horizontal distance from monopole  $L_p$  is 9 ft at  $\Theta = 80^\circ$  Elevation above sea level: 189 feet

Service Provider	Height $H_G$ , ft	Height $H_P$ , ft	Max. ERP	Angle $\Theta$	$F^2$	$R_p(m)$	$S$ ( $\mu W/cm^2$ )	MPE%	
AT&T 850 MHz UMTS	57.75	50.75	1260.0	$\Theta = 80^\circ$	-27 dB ( 0.0020 )	15.7	0.3415	0.0589	
AT&T 1900 MHz UMTS	57.75	50.75	2000.0	$\Theta = 80^\circ$	-31 dB ( 0.0008 )	15.7	0.2168	0.0217	
AT&T 850 MHz GSM	57.75	50.75	630.0	$\Theta = 80^\circ$	-22 dB ( 0.0063 )	15.7	0.5378	0.0927	
AT&T 1900 MHz GSM	57.75	50.75	1000.0	$\Theta = 80^\circ$	-17 dB ( 0.0200 )	15.7	2.7100	0.2710	
AT&T LTE 700	57.75	50.75	950.0	$\Theta = 80^\circ$	-34 dB ( 0.0004 )	15.7	0.0515	0.0110	
AT&T LTE AWS	57.75	50.75	1500.0	$\Theta = 80^\circ$	-23 dB ( 0.0050 )	15.7	1.0163	0.1016	
<b><math>L_p</math> is 313 ft</b>									
Nextel	25.00	17.00	500.0	$\Theta = 3^\circ$	0 dB ( 1.0000 )	95.6	1.8273	0.3151	
T-Mobile	40.00	32.00	1100.0	$\Theta = 6^\circ$	-6 dB ( 0.2512 )	95.9	1.0035	0.1004	
<b><math>L_p</math> is 69 ft</b>									
Metro PCS	66.00	53.00	500.0	$\Theta = 38^\circ$	-15 dB ( 0.0316 )	26.5	0.7515	0.0752	
Sprint	45.00	32.00	1000.0	$\Theta = 25^\circ$	-21 dB ( 0.0079 )	23.2	0.4902	0.0490	
<b>Total</b>								<b>1.0966</b>	

Horizontal distance from monopole  $L_p$  is 19 ft at  $\Theta = 70^\circ$  Elevation above sea level: 188 feet

Service Provider	Height $H_G$ , ft	Height $H_P$ , ft	Max. ERP	Angle $\Theta$	$F^2$	$R_p(m)$	$S$ ( $\mu W/cm^2$ )	MPE%	
AT&T 850 MHz UMTS	57.75	51.75	1260.0	$\Theta = 70^\circ$	-28 dB ( 0.0016 )	16.8	0.2386	0.0411	
AT&T 1900 MHz UMTS	57.75	51.75	2000.0	$\Theta = 70^\circ$	-25 dB ( 0.0032 )	16.8	0.7574	0.0757	
AT&T 850 MHz GSM	57.75	51.75	630.0	$\Theta = 70^\circ$	-22 dB ( 0.0063 )	16.8	0.4697	0.0810	
AT&T 1900 MHz GSM	57.75	51.75	1000.0	$\Theta = 70^\circ$	-16 dB ( 0.0251 )	16.8	2.9703	0.2970	
AT&T LTE 700	57.75	51.75	950.0	$\Theta = 70^\circ$	-32 dB ( 0.0006 )	16.8	0.0675	0.0144	
AT&T LTE AWS	57.75	51.75	1500.0	$\Theta = 70^\circ$	-18 dB ( 0.0158 )	16.8	2.8046	0.2805	
<b><math>L_p</math> is 315 ft</b>									
Nextel	25.00	18.00	500.0	$\Theta = 3^\circ$	0 dB ( 1.0000 )	96.2	1.8045	0.3111	
T-Mobile	40.00	33.00	1100.0	$\Theta = 6^\circ$	-6 dB ( 0.2512 )	96.6	0.9890	0.0989	
<b><math>L_p</math> is 62 ft</b>									
Metro PCS	66.00	54.00	500.0	$\Theta = 41^\circ$	-16 dB ( 0.0251 )	25.1	0.6653	0.0665	
Sprint	45.00	33.00	1000.0	$\Theta = 28^\circ$	-21 dB ( 0.0079 )	21.4	0.5762	0.0576	
<b>Total</b>								<b>1.3238</b>	

Horizontal distance from monopole Lp is 30 ft at  $\Theta = 60^\circ$  Elevation above sea level: 188 feet

Service Provider	Height $H_G$ , ft	Height $H_P$ , ft	Max. ERP	Angle $\Theta$	$F^2$	$R_p$ (m)	S ( $\mu W/cm^2$ )	MPE%	
AT&T 850 MHz UMTS	57.75	51.75	1260.0	$\Theta = 60^\circ$	-28 dB ( 0.0016 )	18.2	0.2033	0.0351	
AT&T 1900 MHz UMTS	57.75	51.75	2000.0	$\Theta = 60^\circ$	-26 dB ( 0.0025 )	18.2	0.5042	0.0504	
AT&T 850 MHz GSM	57.75	51.75	630.0	$\Theta = 60^\circ$	-24 dB ( 0.0040 )	18.2	0.2541	0.0438	
AT&T 1900 MHz GSM	57.75	51.75	1000.0	$\Theta = 60^\circ$	-24 dB ( 0.0040 )	18.2	0.4033	0.0403	
AT&T LTE 700	57.75	51.75	950.0	$\Theta = 60^\circ$	-31 dB ( 0.0008 )	18.2	0.0766	0.0163	
AT&T LTE AWS	57.75	51.75	1500.0	$\Theta = 60^\circ$	-24 dB ( 0.0040 )	18.2	0.6050	0.0605	
Lp is 317 ft									
Nextel	25.00	18.00	500.0	$\Theta = 3^\circ$	0 dB ( 1.0000 )	96.8	1.7822	0.3073	
T-Mobile	40.00	33.00	1100.0	$\Theta = 6^\circ$	-6 dB ( 0.2512 )	97.2	0.9768	0.0977	
Lp is 56 ft									
Metro PCS	66.00	54.00	500.0	$\Theta = 44^\circ$	-17 dB ( 0.0200 )	23.7	0.5946	0.0595	
Sprint	45.00	33.00	1000.0	$\Theta = 31^\circ$	-24 dB ( 0.0040 )	19.8	0.3408	0.0341	
<b>Total</b>								0.7450	

Horizontal distance from monopole Lp is 53 ft at  $\Theta = 45^\circ$  Elevation above sea level: 187 feet

Service Provider	Height $H_G$ , ft	Height $H_P$ , ft	Max. ERP	Angle $\Theta$	$F^2$	$R_p$ (m)	S ( $\mu W/cm^2$ )	MPE%	
AT&T 850 MHz UMTS	57.75	52.75	1260.0	$\Theta = 45^\circ$	-19 dB ( 0.0126 )	22.7	1.0290	0.1774	
AT&T 1900 MHz UMTS	57.75	52.75	2000.0	$\Theta = 45^\circ$	-20 dB ( 0.0100 )	22.7	1.2964	0.1296	
AT&T 850 MHz GSM	57.75	52.75	630.0	$\Theta = 45^\circ$	-11 dB ( 0.0794 )	22.7	3.2423	0.5590	
AT&T 1900 MHz GSM	57.75	52.75	1000.0	$\Theta = 45^\circ$	-15 dB ( 0.0316 )	22.7	2.0482	0.2048	
AT&T LTE 700	57.75	52.75	950.0	$\Theta = 45^\circ$	-18 dB ( 0.0158 )	22.7	0.9729	0.2074	
AT&T LTE AWS	57.75	52.75	1500.0	$\Theta = 45^\circ$	-18 dB ( 0.0158 )	22.7	1.5362	0.1536	
Lp is 323 ft									
Nextel	25.00	19.00	500.0	$\Theta = 3^\circ$	0 dB ( 1.0000 )	98.6	1.7178	0.2962	
T-Mobile	40.00	34.00	1100.0	$\Theta = 6^\circ$	-5 dB ( 0.2512 )	99.0	0.9416	0.0942	
Lp is 49 ft									
Metro PCS	66.00	55.00	500.0	$\Theta = 48^\circ$	-20 dB ( 0.0100 )	22.5	0.3299	0.0330	
Sprint	45.00	34.00	1000.0	$\Theta = 35^\circ$	-23 dB ( 0.0050 )	18.2	0.5042	0.0504	
<b>Total</b>								1.9056	

Horizontal distance from monopole Lp is 81 ft at  $\Theta = 35^\circ$  Elevation above sea level: 183 feet

Service Provider	Height $H_G$ , ft	Height $H_P$ , ft	Max. ERP	Angle $\Theta$	$F^2$	$R_p$ (m)	S ( $\mu W/cm^2$ )	MPE%	
AT&T 850 MHz UMTS	57.75	56.75	1260.0	$\Theta = 35^\circ$	-25 dB ( 0.0032 )	30.2	0.1477	0.0255	
AT&T 1900 MHz UMTS	57.75	56.75	2000.0	$\Theta = 35^\circ$	-15 dB ( 0.0316 )	30.2	2.3145	0.2315	
AT&T 850 MHz GSM	57.75	56.75	630.0	$\Theta = 35^\circ$	-19 dB ( 0.0126 )	30.2	0.2907	0.0501	
AT&T 1900 MHz GSM	57.75	56.75	1000.0	$\Theta = 35^\circ$	-20 dB ( 0.0100 )	30.2	0.3662	0.0366	
AT&T LTE 700	57.75	56.75	950.0	$\Theta = 35^\circ$	-15 dB ( 0.0316 )	30.2	1.0994	0.2344	
AT&T LTE AWS	57.75	56.75	1500.0	$\Theta = 35^\circ$	-25 dB ( 0.0032 )	30.2	0.1758	0.0176	
Lp is 332 ft									
Nextel	25.00	23.00	500.0	$\Theta = 4^\circ$	0 dB ( 1.0000 )	101.5	1.6210	0.2795	
T-Mobile	40.00	38.00	1100.0	$\Theta = 7^\circ$	-11 dB ( 0.0794 )	101.9	0.2809	0.0281	
Lp is 54 ft									
Metro PCS	66.00	59.00	500.0	$\Theta = 48^\circ$	-20 dB ( 0.0100 )	24.4	0.2805	0.0281	
Sprint	45.00	38.00	1000.0	$\Theta = 35^\circ$	-23 dB ( 0.0050 )	20.1	0.4134	0.0413	
<b>Total</b>								0.9727	

Horizontal distance from monopole Lp is 143 ft at  $\Theta = 25^\circ$  Elevation above sea level: 173 feet

Service Provider	Height $H_G$ , ft	Height $H_P$ , ft	Max. ERP	Angle $\Theta$	$F^2$	$R_p$ (m)	S ( $\mu W/cm^2$ )	MPE%	
AT&T 850 MHz UMTS	57.75	66.75	1260.0	$\Theta = 25^\circ$	-16 dB ( 0.0251 )	48.2	0.4547	0.0784	
AT&T 1900 MHz UMTS	57.75	66.75	2000.0	$\Theta = 25^\circ$	-18 dB ( 0.0158 )	48.2	0.4543	0.0454	
AT&T 850 MHz GSM	57.75	66.75	630.0	$\Theta = 25^\circ$	-14 dB ( 0.0398 )	48.2	0.3605	0.0622	
AT&T 1900 MHz GSM	57.75	66.75	1000.0	$\Theta = 25^\circ$	-23 dB ( 0.0050 )	48.2	0.0719	0.0072	
AT&T LTE 700	57.75	66.75	950.0	$\Theta = 25^\circ$	-11 dB ( 0.0794 )	48.2	1.0844	0.2312	
AT&T LTE AWS	57.75	66.75	1500.0	$\Theta = 25^\circ$	-22 dB ( 0.0063 )	48.2	0.1359	0.0136	
Lp is 360 ft									
Nextel	25.00	33.00	500.0	$\Theta = 5^\circ$	0 dB ( 1.0000 )	110.2	1.3752	0.2371	
T-Mobile	40.00	48.00	1100.0	$\Theta = 8^\circ$	-17 dB ( 0.0200 )	110.7	0.0600	0.0060	
Lp is 98 ft									
Metro PCS	66.00	69.00	500.0	$\Theta = 35^\circ$	-16 dB ( 0.0251 )	36.5	0.3146	0.0315	
Sprint	45.00	48.00	1000.0	$\Theta = 26^\circ$	-21 dB ( 0.0079 )	33.3	0.2379	0.0238	
<b>Total</b>								0.7364	

Horizontal distance from monopole Lp is 208 ft at  $\Theta = 20^\circ$  Elevation above sea level: 164 feet

Service Provider	Height H <sub>g</sub> , ft	Height H <sub>p</sub> , ft	Max. ERP	Angle $\Theta$	F <sup>2</sup>	R <sub>p</sub> (m)	S (μW/cm <sup>2</sup> )	MPE%
AT&T 850 MHz UMTS	57.75	75.75	1260.0	$\Theta = 20^\circ$	-17 dB ( 0.0200 )	67.5	0.1847	0.0318
AT&T 1900 MHz UMTS	57.75	75.75	2000.0	$\Theta = 20^\circ$	-19 dB ( 0.0126 )	67.5	0.1847	0.0185
AT&T 850 MHz GSM	57.75	75.75	630.0	$\Theta = 20^\circ$	-15 dB ( 0.0316 )	67.5	0.1459	0.0252
AT&T 1900 MHz GSM	57.75	75.75	1000.0	$\Theta = 20^\circ$	-28 dB ( 0.0016 )	67.5	0.0117	0.0012
AT&T LTE 700	57.75	75.75	950.0	$\Theta = 20^\circ$	-12 dB ( 0.0631 )	67.5	0.4394	0.0937
AT&T LTE AWS	57.75	75.75	1500.0	$\Theta = 20^\circ$	-27 dB ( 0.0020 )	67.5	0.0220	0.0022
Lp is 397 ft								
Nextel	25.00	42.00	500.0	$\Theta = 6^\circ$	0 dB ( 1.0000 )	121.7	1.1275	0.1944
T-Mobile	40.00	57.00	1100.0	$\Theta = 8^\circ$	-17 dB ( 0.0200 )	122.3	0.0491	0.0049
Lp is 159 ft								
Metro PCS	66.00	78.00	500.0	$\Theta = 26^\circ$	-18 dB ( 0.0158 )	54.0	0.0905	0.0091
Sprint	45.00	57.00	1000.0	$\Theta = 20^\circ$	-16 dB ( 0.0251 )	51.5	0.3161	0.0316
Total								0.4126

Horizontal distance from monopole Lp is 309 ft at  $\Theta = 15^\circ$  Elevation above sea level: 157 feet

Service Provider	Height H <sub>g</sub> , ft	Height H <sub>p</sub> , ft	Max. ERP	Angle $\Theta$	F <sup>2</sup>	R <sub>p</sub> (m)	S (μW/cm <sup>2</sup> )	MPE%
AT&T 850 MHz UMTS	57.75	82.75	1260.0	$\Theta = 15^\circ$	-11 dB ( 0.0794 )	97.5	0.3515	0.0606
AT&T 1900 MHz UMTS	57.75	82.75	2000.0	$\Theta = 15^\circ$	-16 dB ( 0.0251 )	97.5	0.1764	0.0176
AT&T 850 MHz GSM	57.75	82.75	630.0	$\Theta = 15^\circ$	-13 dB ( 0.0501 )	97.5	0.1109	0.0191
AT&T 1900 MHz GSM	57.75	82.75	1000.0	$\Theta = 15^\circ$	-16 dB ( 0.0251 )	97.5	0.0882	0.0088
AT&T LTE 700	57.75	82.75	950.0	$\Theta = 15^\circ$	-14 dB ( 0.0398 )	97.5	0.1328	0.0283
AT&T LTE AWS	57.75	82.75	1500.0	$\Theta = 15^\circ$	-20 dB ( 0.0100 )	97.5	0.0527	0.0053
Lp is 465 ft								
Nextel	25.00	49.00	500.0	$\Theta = 6^\circ$	0 dB ( 1.0000 )	142.6	0.8213	0.1416
T-Mobile	40.00	64.00	1100.0	$\Theta = 8^\circ$	-17 dB ( 0.0200 )	143.1	0.0359	0.0036
Lp is 254 ft								
Metro PCS	66.00	85.00	500.0	$\Theta = 19^\circ$	-16 dB ( 0.0251 )	81.7	0.0628	0.0063
Sprint	45.00	64.00	1000.0	$\Theta = 14^\circ$	-16 dB ( 0.0251 )	79.9	0.1313	0.0131
Total								0.3043

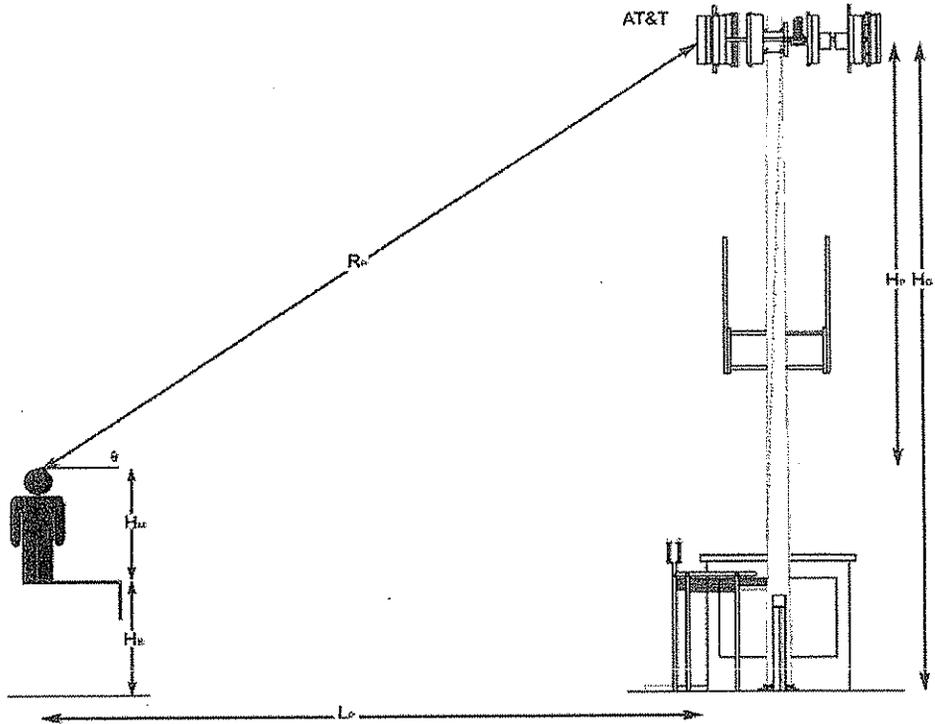
Horizontal distance from monopole Lp is 492 ft at  $\Theta = 10^\circ$  Elevation above sea level: 153 feet

Service Provider	Height H <sub>g</sub> , ft	Height H <sub>p</sub> , ft	Max. ERP	Angle $\Theta$	F <sup>2</sup>	R <sub>p</sub> (m)	S (μW/cm <sup>2</sup> )	MPE%
AT&T 850 MHz UMTS	57.75	86.75	1260.0	$\Theta = 10^\circ$	-3 dB ( 0.5012 )	152.3	0.9093	0.1568
AT&T 1900 MHz UMTS	57.75	86.75	2000.0	$\Theta = 10^\circ$	-13 dB ( 0.0501 )	152.3	0.1443	0.0144
AT&T 850 MHz GSM	57.75	86.75	630.0	$\Theta = 10^\circ$	-4 dB ( 0.3981 )	152.3	0.3611	0.0623
AT&T 1900 MHz GSM	57.75	86.75	1000.0	$\Theta = 10^\circ$	-14 dB ( 0.0398 )	152.3	0.0573	0.0057
AT&T LTE 700	57.75	86.75	950.0	$\Theta = 10^\circ$	-4 dB ( 0.3981 )	152.3	0.5446	0.1161
AT&T LTE AWS	57.75	86.75	1500.0	$\Theta = 10^\circ$	-19 dB ( 0.0126 )	152.3	0.0272	0.0027
Lp is 397 ft								
Nextel	25.00	53.00	500.0	$\Theta = 8^\circ$	-1 dB ( 0.7943 )	122.1	0.8898	0.1534
T-Mobile	40.00	68.00	1100.0	$\Theta = 10^\circ$	-5 dB ( 0.3162 )	122.8	0.7704	0.0770
Lp is 435 ft								
Metro PCS	66.00	89.00	500.0	$\Theta = 12^\circ$	-10 dB ( 0.1000 )	135.4	0.0911	0.0091
Sprint	45.00	68.00	1000.0	$\Theta = 9^\circ$	-13 dB ( 0.0501 )	134.2	0.0929	0.0093
Total								0.6068

Horizontal distance from monopole Lp is 1106 ft at  $\Theta = 5^\circ$  Elevation above sea level: 143 feet

Service Provider	Height H <sub>g</sub> , ft	Height H <sub>p</sub> , ft	Max. ERP	Angle $\Theta$	F <sup>2</sup>	R <sub>p</sub> (m)	S (μW/cm <sup>2</sup> )	MPE%
AT&T 850 MHz UMTS	57.75	96.75	1260.0	$\Theta = 5^\circ$	0 dB ( 1.0000 )	338.4	0.3675	0.0634
AT&T 1900 MHz UMTS	57.75	96.75	2000.0	$\Theta = 5^\circ$	-4 dB ( 0.3981 )	338.4	0.2322	0.0232
AT&T 850 MHz GSM	57.75	96.75	630.0	$\Theta = 5^\circ$	-1 dB ( 0.7943 )	338.4	0.1460	0.0252
AT&T 1900 MHz GSM	57.75	96.75	1000.0	$\Theta = 5^\circ$	-3 dB ( 0.5012 )	338.4	0.1462	0.0146
AT&T LTE 700	57.75	96.75	950.0	$\Theta = 5^\circ$	0 dB ( 1.0000 )	338.4	0.2771	0.0591
AT&T LTE AWS	57.75	96.75	1500.0	$\Theta = 5^\circ$	-2 dB ( 0.6310 )	338.4	0.2761	0.0276
Lp is 1182 ft								
Nextel	25.00	63.00	500.0	$\Theta = 3^\circ$	0 dB ( 1.0000 )	360.9	0.1282	0.0221
T-Mobile	40.00	78.00	1100.0	$\Theta = 4^\circ$	-2 dB ( 0.6310 )	361.1	0.1778	0.0178
Lp is 1044 ft								
Metro PCS	66.00	99.00	500.0	$\Theta = 5^\circ$	-1 dB ( 0.7943 )	319.7	0.1298	0.0130
Sprint	45.00	78.00	1000.0	$\Theta = 4^\circ$	-1 dB ( 0.7943 )	319.2	0.2604	0.0260
Total								0.2920

Scenario 2: Nearby Buildings/Rooftop



person's height ( $H_M$ ) = 6 ft

Location 1: Nearest building surface within Sector A

$H_b = 17.0$  ft,  $L_p$  is 614 ft

Elevation above sea level: 156 feet

Service Provider	Height $H_G$ , ft	Height $H_p$ , ft	Max. ERP	Angle $\Theta$	$F^2$	$R_p(m)$	$S$ ( $\mu W/cm^2$ )	MPE%
AT&T 850 MHz UMTS	57.75	66.75	1260.0	$\Theta = 6^\circ$	-1 dB ( 0.7943 )	188.3	0.9428	0.1626
AT&T 1900 MHz UMTS	57.75	66.75	2000.0	$\Theta = 6^\circ$	-5 dB ( 0.3162 )	188.3	0.5957	0.0596
AT&T 850 MHz GSM	57.75	66.75	630.0	$\Theta = 6^\circ$	-1 dB ( 0.7943 )	188.3	0.4714	0.0813
AT&T 1900 MHz GSM	57.75	66.75	1000.0	$\Theta = 6^\circ$	-5 dB ( 0.3162 )	188.3	0.2979	0.0298
AT&T LTE 700	57.75	66.75	950.0	$\Theta = 6^\circ$	-1 dB ( 0.7943 )	188.3	0.7108	0.1516
AT&T LTE AWS	57.75	66.75	1500.0	$\Theta = 6^\circ$	-3 dB ( 0.5012 )	188.3	0.7082	0.0708
Lp is 753 ft								
Nextel	25.00	33.00	500.0	$\Theta = 3^\circ$	0 dB ( 1.0000 )	229.8	0.3162	0.0545
T-Mobile	40.00	48.00	1100.0	$\Theta = 4^\circ$	-2 dB ( 0.6310 )	230.0	0.4382	0.0438
Lp is 581 ft								
Metro PCS	66.00	69.00	500.0	$\Theta = 7^\circ$	-3 dB ( 0.5012 )	178.5	0.2627	0.0263
Sprint	45.00	48.00	1000.0	$\Theta = 5^\circ$	-3 dB ( 0.5012 )	177.8	0.5295	0.0530
<b>Total</b>								<b>0.7333</b>

Location 2: Nearest building surface within Sector B

$H_b = 32.0$  ft,  $L_p$  is 278 ft

Elevation above sea level: feet

Service Provider	Height $H_G$ , ft	Height $H_p$ , ft	Max. ERP	Angle $\Theta$	$F^2$	$R_p(m)$	$S$ ( $\mu W/cm^2$ )	MPE%
AT&T 850 MHz UMTS	57.75	207.75	1260.0	$\Theta = 37^\circ$	-24 dB ( 0.0040 )	105.8	0.0150	0.0026
AT&T 1900 MHz UMTS	57.75	207.75	2000.0	$\Theta = 37^\circ$	-16 dB ( 0.0251 )	105.8	0.1498	0.0150
AT&T 850 MHz GSM	57.75	207.75	630.0	$\Theta = 37^\circ$	-15 dB ( 0.0316 )	105.8	0.0594	0.0102
AT&T 1900 MHz GSM	57.75	207.75	1000.0	$\Theta = 37^\circ$	-21 dB ( 0.0079 )	105.8	0.0236	0.0024
AT&T LTE 700	57.75	207.75	950.0	$\Theta = 37^\circ$	-16 dB ( 0.0251 )	105.8	0.0711	0.0152
AT&T LTE AWS	57.75	207.75	1500.0	$\Theta = 37^\circ$	-22 dB ( 0.0063 )	105.8	0.0282	0.0028
Lp is 125.88 ft								
Nextel	25.00	174.00	500.0	$\Theta = 54^\circ$	-26 dB ( 0.0025 )	65.5	0.0097	0.0017
T-Mobile	40.00	189.00	1100.0	$\Theta = 56^\circ$	-32 dB ( 0.0006 )	69.2	0.0046	0.0005
Lp is 330 ft								
Metro PCS	66.00	210.00	500.0	$\Theta = 32^\circ$	-19 dB ( 0.0126 )	119.2	0.0148	0.0015
Sprint	45.00	189.00	1000.0	$\Theta = 30^\circ$	-22 dB ( 0.0063 )	115.9	0.0157	0.0016
<b>Total</b>								<b>0.0535</b>

# INFORMATION

AT&T Mobility operates telecommunications antennas at this location. Remain at least 3 feet away from any antenna and obey all posted signs.

Contact the owner(s) of the antenna(s) before working closer than 3 feet from the antenna.

Contact AT&T Mobility at 800-438-2522 prior to performing any maintenance or repairs near AT&T antennas.

This is AT&T Mobility Site # \_\_\_\_\_

Contact the management office if this door/hatch/gate is found unlocked.

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# INFORMACIÓN

En esta propiedad se ubican antenas de telecomunicaciones operadas por AT&T Mobility. Favor mantener una distancia de no menos de 3 pies y obedecer todos los avisos.

Comuníquese con el propietario o los propietarios de las antenas antes de trabajar o caminar a una distancia de menos de 3 pies de la antena.

Comuníquese con AT&T Mobility 800-438-2522 antes de realizar cualquier mantenimiento o reparaciones cerca de las antenas de AT&T.

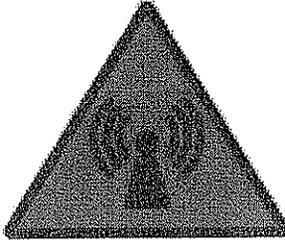
Esta es la estación base número \_\_\_\_\_

Favor comunicarse con la oficina de la administración del edificio si esta puerta o compuerta se encuentra sin cerrada.

Sign # \_\_\_\_\_      www.att.com      AT&T Mobility

**Information Sign 1**

# NOTICE



**Beyond This Point** you are entering an area where RF Emissions may exceed the FCC General Population Exposure Limits

Follow all posted signs and site guidelines for working in an RF environment.

Per FCC 47CFR 1.1307(a)      AT&T Mobility

**Notice Sign**

65° Dualband Directional Antenna

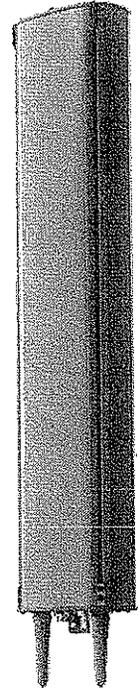
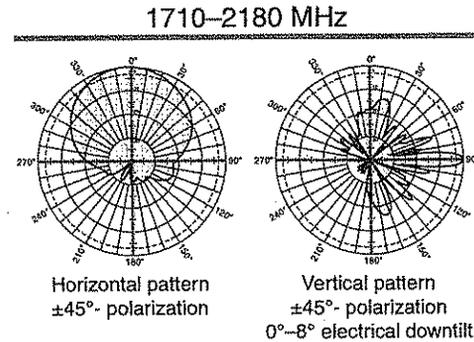
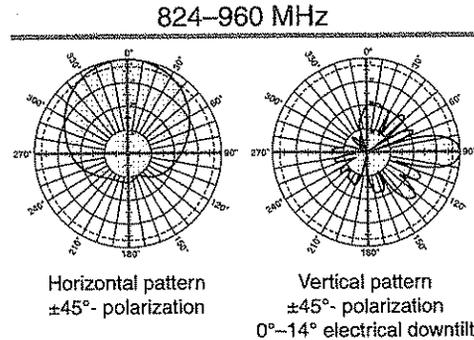
Kathrein's dual band antennas are ready for 3G applications, covering all existing wireless bands as well as all spectrum under consideration for future systems, AMPS, PCS and 3G/UMTS. These cross-polarized antennas offer diversity operation in the same space as a conventional 800 MHz antenna, and are mountable on our compact sector brackets.

- Wide band operation.
- Exceptional intermodulation characteristics.
- Remote control ready.
- Various gain, beamwidth and downtilt ranges.
- AISG compatible.
- High strength pultruded fiberglass radome.

**General specifications:**

Frequency range	824–960 MHz 1710–2180 MHz
Impedance	50 ohms
VSWR	<1.5:1
Intermodulation (2x20w)	IM3: -150 dBc
Polarization	+45° and -45°
Connector	4 x 7/16 DIN female (long neck)
Isolation intrasystem	>30 dB
intersystem	>50 dB (824–960 // 1710–2180 MHz)
Weight	36.4 lb (16.5 kg)
Dimensions	51.8 x 10.3 x 5.5 inches (1316 x 262 x 139 mm)
Equivalent flat plate area	4.13 ft <sup>2</sup> (0.384 m <sup>2</sup> )
Wind survival rating*	120 mph (200 kph) sustained 150 mph (240 kph) in a 3 second burst
Shipping dimensions	63.6 x 11.9 x 7.6 inches (1615 x 302 x 192 mm)
Shipping weight	45 lb (20.4 kg)
Mounting	Fixed mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.

*See reverse for order information.*



Specifications:	824–894 MHz	870–960 MHz	1710–1880 MHz	1850–1990 MHz	1920–2180 MHz
Gain	14 dBi	14 dBi	16.5 dBi	16.8 dBi	17 dBi
Front-to-back ratio	>26 dB (co-polar)	>26 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)
Maximum input power per input	500 watts (at 50°C)	500 watts (at 50°C)	250 watts (at 50°C)	250 watts (at 50°C)	250 watts (at 50°C)
total power	1000 watts (at 50°C)			500 watts (at 50°C)	
+45° and -45° polarization horizontal beamwidth	68° (half-power)	65° (half-power)	65° (half-power)	65° (half-power)	63° (half-power)
+45° and -45° polarization vertical beamwidth	16° (half-power)	14.5° (half-power)	7.8° (half-power)	7.3° (half-power)	6.8° (half-power)
Electrical downtilt continuously adjustable	0°–14°	0°–14°	0°–8°	0°–8°	0°–8°
Sidelobe suppression for first sidelobe above main beam	0° 7° 14° T 14 14 13 dB	0° 7° 14° T 14 14 13 dB	0° 4° 8° T 14 14 14 dB	0° 4° 8° T 16 16 15 dB	0° 4° 8° T 15 16 15 dB
Cross polar ratio Main direction	0° 20 dB (typical)	20 dB (typical)	16 dB (typical)	18 dB (typical)	20 dB (typical)
Sector ±60°	>10 dB	>10 dB	>10 dB	>10 dB	>10 dB

\* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.

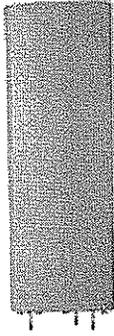


# Product Specifications



## TBXLHB-6565A-VTM

DualPol® Tri-band Antenna, 824–960 MHz and 1710–2170 MHz, 65° horizontal beamwidth, RET compatible variable electrical tilt



- Three DualPol® antennas under one radome
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Each antenna is independently capable of field adjustable electrical tilt
- Fully compatible with Andrew remote electrical tilt system
- Tri-band with one band at 824–960 MHz and two bands at 1710–2170 MHz, three independent DualPol® antennas under one radome

## CHARACTERISTICS

### General Specifications

Antenna Type DualPol® tri-band  
 Brand DualPol® | Teletilt®  
 Operating Frequency Band 1710 – 2170 MHz | 824 – 960 MHz

### Electrical Specifications

Frequency Band, MHz	824–896	870–960	1710–1880	1850–1990	1920–2170
Beamwidth, Horizontal, degrees	65	65	65	64	63
Gain, dBd	11.9	11.9	14.4	14.7	14.9
Gain, dBi	14.0	14.0	16.5	16.8	17.0
Beamwidth, Vertical, degrees	15.5	15.0	7.0	6.5	6.0
Beam Tilt, degrees	0–15	0–15	0–8	0–8	0–8
Upper Sidelobe Suppression (USLS), typical, dB	15	15	15	15	15
Front-to-Back Ratio at 180°, dB	25	25	25	25	25
Isolation, dB	28	30	30	30	30
VSWR   Return Loss, db	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0
Intermodulation Products, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150
Input Power, maximum, watts	250	250	250	250	250
Polarization	±45°	±45°	±45°	±45°	±45°
Impedance, ohms	50	50	50	50	50
Lightning Protection	dc Ground				

# Product Specifications

TBXLHB-6565A-VTM



## Mechanical Specifications

Color	Light gray
Connector Interface	7-16 DIN Female
Connector Location	Bottom
Connector Quantity	6
Wind Area, maximum	0.6 m <sup>2</sup>   6.7 ft <sup>2</sup>
Wind Loading, maximum	1169.9 N @ 100 mph   263.0 lbf @ 100 mph
Wind Speed, maximum	241.4 km/h   150.0 mph

## Dimensions

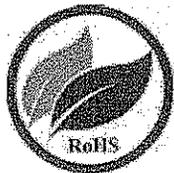
Depth	157.5 mm   6.2 in
Length	1325.9 mm   52.2 in
Width	464.8 mm   18.3 in
Net Weight	20.0 kg   44.0 lb

## Remote Electrical Tilt (RET) Information

Model with Factory Installed Actuator TBXLHB-6565A-R2M  
RET System Teletilt®

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2002/95/EC	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)



## Included Products



### DB5083

Downtilt Mounting Kit for 4.5 in (114.3 mm) OD round members



### DB380

Pipe Mounting Kit for 4.5 in (114.3 mm) OD round members

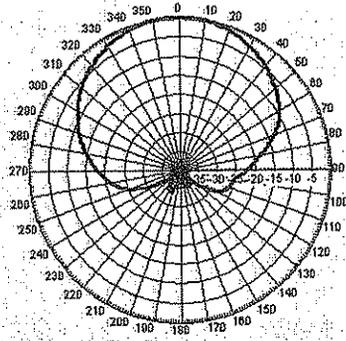
# Product Specifications

TBXLHB-6565A-VTM

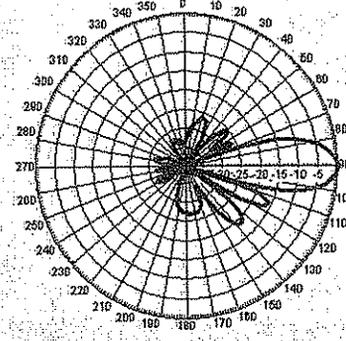


## Horizontal Pattern

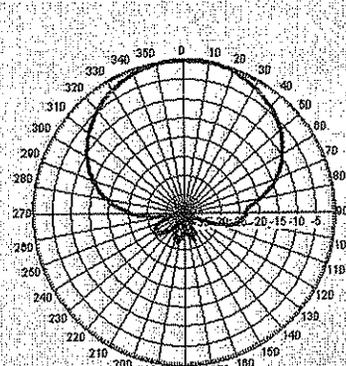
## Vertical Pattern



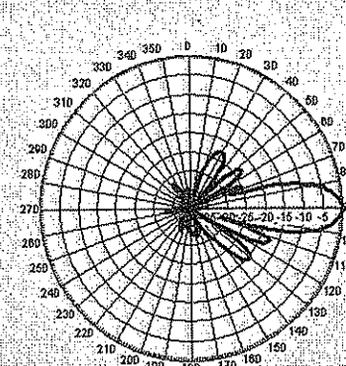
Freq: 850 MHz, Tilt: 0



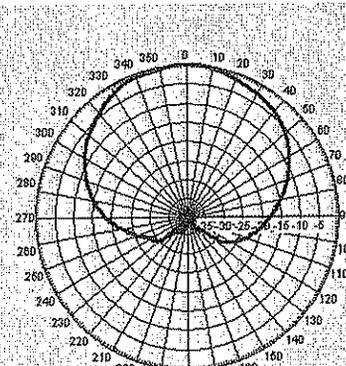
Freq: 850 MHz, Tilt: 0



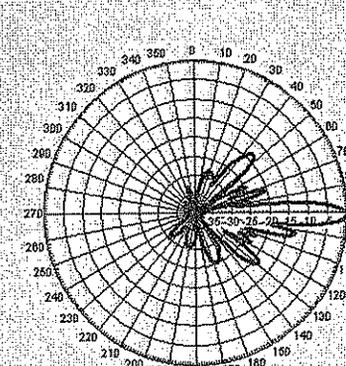
Freq: 940 MHz, Tilt: 0



Freq: 940 MHz, Tilt: 0



Freq: 1785 MHz, Tilt: 0



Freq: 1785 MHz, Tilt: 0

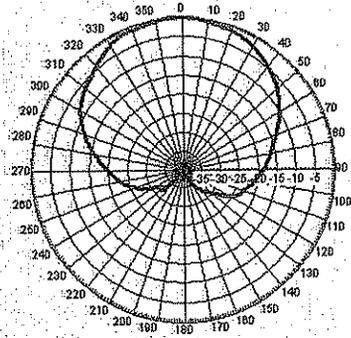
From North America, toll free  
Telephone: 1-800-255-1479  
Fax: 1-800-349-5444

Outside North America  
Telephone: +1-708-873-2307  
Fax: +1-779-435-8579

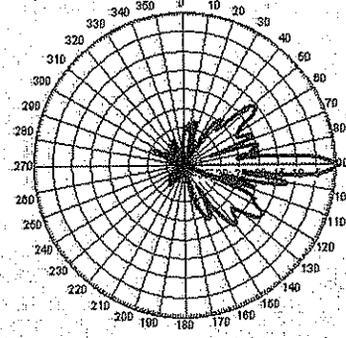
© 2008 CommScope, Inc. All rights reserved.  
All specifications are subject to change. Please see [www.andrew.com](http://www.andrew.com)  
for the most current information.

# Product Specifications

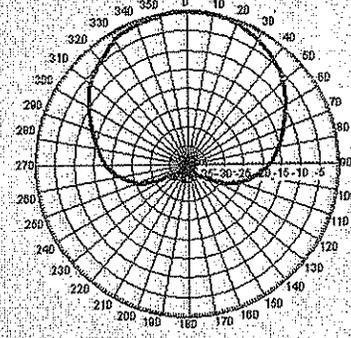
TBXLHB-6565A-VTM



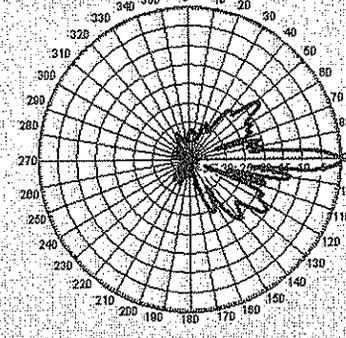
Freq: 1920 MHz, Tilt: 0



Freq: 1920 MHz, Tilt: 0



Freq: 2110 MHz, Tilt: 0



Freq: 2110 MHz, Tilt: 0

Kathrein's X-polarized antennas are designed for use in digital polarization diversity systems.

- X-polarized (+45° and -45°).
- UV resistant fiberglass radomes.
- Wideband vector dipole technology.
- DC Grounded metallic parts for impulse suppression.
- RET motor housed inside the radome and field replaceable.

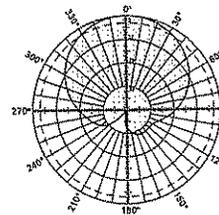
### General specifications:

Frequency range	698–894 MHz // 1710–2170 MHz
Impedance	50 ohms
VSWR	<1.5:1
Intermodulation (2x20w)	IM3:< -150 dBc
Polarization	+45° and -45°
Connector	4 x 7-16 DIN female (long neck)
Isolation	Intrasystem >30 dB // intersystem >35 dB
<i>See reverse for order information.</i>	

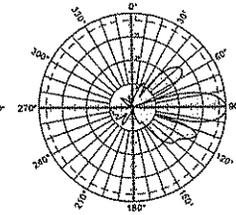
### IRT specifications:

Logical interface ex factory <sup>1)</sup>	AISG 1.1
Protocols	AISG 1.1 and 3GPP/AISG 2.0 compliant
Hardware interface <sup>2)</sup>	2 x 8pin connector acc. IEC 60130-9; according to AISG: – RCUin (male): Control / Daisy chain in – RCUout (female): Daisy chain out
Power supply	10–30 V
Power Consumption	<1 W (standby); <8.5 W (motor activated)
Adjustment time (full range)	40 seconds
Adjustment cycles	>50,000
Certification	FCC 15.107 Class B Computing Devices

### 698–894 MHz

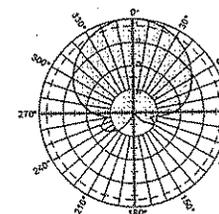


Horizontal pattern  
±45°- polarization

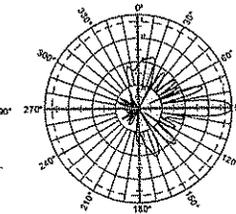


Vertical pattern  
±45°- polarization  
0°–16° electrical downtilt

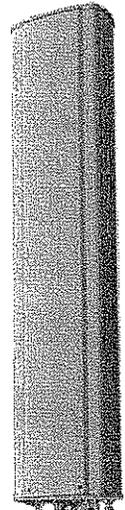
### 1710–2170 MHz



Horizontal pattern  
±45°- polarization



Vertical pattern  
±45°- polarization  
0°–10° electrical downtilt



<sup>1)</sup> The protocol of the logical interface can be switched from AISG 1.1 to 3GPP/AISG 2.0 and vice versa with a vendor specific command. Start-up operation of the RCU 86010149 is possible in an RET system supporting AISG 1.1 or supporting 3GPP/AISG 2.0 after performing a layer 2 reset before address assignment. The protocol can also be changed as follows: AISG 1.1 to 3GPP: Enter "3GPP" into the additional data field "Installer's ID" and perform a layer 7 reset or a power reset. 3GPP to AISG 1.1: Enter "AISG 1" into the additional datafield "Installer's ID" and perform a layer 2 reset or a power reset. After switching the protocol any other information can be entered into the "Installer's ID" field.

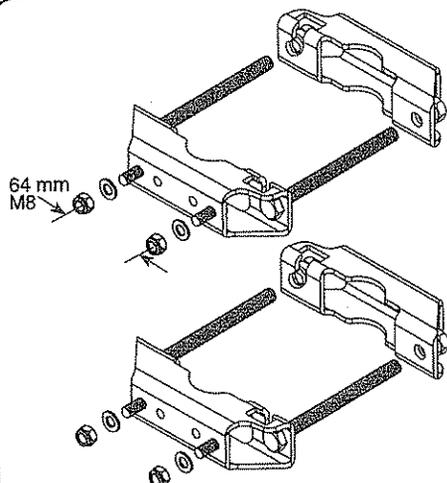
<sup>2)</sup> The tightening torque for fixing the connector must be 0.5 – 1.0 Nm ("hand-tightened"). The connector should be tightened by hand only!

Specifications:	698–806 MHz	824–894 MHz	1710–1755 MHz	1850–1990 MHz	2110–2170 MHz
Gain	14.3 dBi	14.8 dBi	17.3 dBi	17.5 dBi	17.3 dBi
Front-to-back ratio	>30 dB (co-polar) 32 dB (average)	>27 dB (co-polar) 30 dB (average)	>30 dB (co-polar) 34 dB (average)	>30 dB (co-polar) 34 dB (average)	>30 dB (co-polar) 34 dB (average)
Maximum input power per input	500 watts (at 50°C)	500 watts (at 50°C)	300 watts (at 50°C)	300 watts (at 50°C)	300 watts (at 50°C)
+45° and -45° polarization horizontal beamwidth	68° (half-power)	65° (half-power)	61° (half-power)	60° (half-power)	61° (half-power)
+45° and -45° polarization vertical beamwidth	15° (half-power)	13.5° (half-power)	7.5° (half-power)	7.5° (half-power)	7.5° (half-power)
Electrical downtilt continuously adjustable	0°–16°	0°–16°	0°–10°	0°–10°	0°–10°
Min sidelobe suppression for first sidelobe above main beam average	0° 8° 16° T 17 16 16 dB 19 19 18 dB	0° 8° 16° T 18 16 16 dB 22 20 20 dB	0° 5° 10° T 18 18 17 dB 20 20 20 dB	0° 5° 10° T 18 18 17 dB 20 20 20 dB	0° 5° 10° T 18 18 17 dB 20 20 20 dB
Cross polar ratio	25 dB (typical)				
Main direction Sector	0° ±60° >10 dB, 15 dB (avg)	>8 dB, 14 dB (avg)	>8 dB, 14 dB (avg)	>10 dB, 16 dB (avg)	>8 dB, 14 dB (avg)
Tracking	1.5 db	1.5 db	2.0 db	1.0 db	2.0 db
Squint	±2.5°	±4°	±4°	±1.5°	±4°

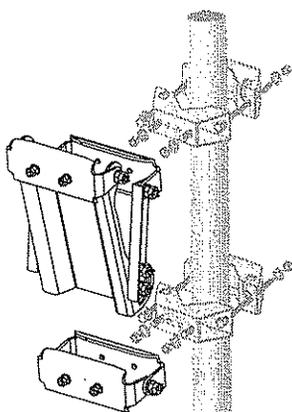


11223-D Feb 25, 2011  
936.4133





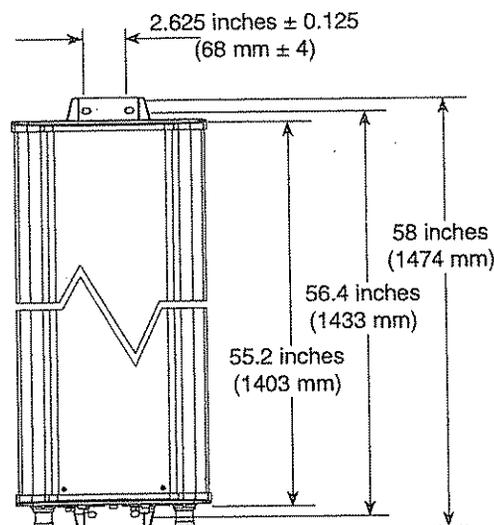
**Mounting Brackets**  
for use with 2-point mount antennas  
Mast dia. 2-4.5 inches (50-115 mm)  
Weight: 4.4 lb (2 kg)



**Mechanical Tilt Brackets**  
for use with 2-point mount antennas  
Weight: 13 lb (5.9 kg)  
(Model 850 10007)

**Mechanical specifications:**

Weight	40.8 lb (18.5 kg)
Dimensions	55.2 x 11.8 x 6 inches (1403 x 300 x 152 mm)
Wind load Front/Side/Rear	at 93 mph (150kph) 156 lbf / 59 lbf / 160 lbf (690 N) / (260 N) / (710 N)
Mounting category	M (Medium)
Wind survival rating*	150 mph (240 kph)
Shipping dimensions	64.8 x 12.6 x 7.5 inches (1646 x 322 x 190 mm)
Shipping weight	50 lb (22.7 kg)
Mounting	Mounting hardware included for 2 to 4.6 inch (50 to 115 mm) OD masts.

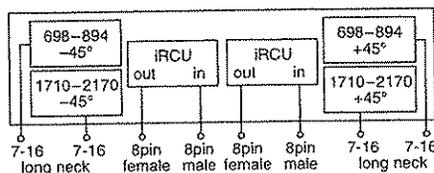
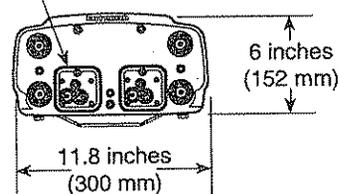


KATHREIN 860 10149

**FC** Tested To Comply With FCC Standards

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: Refer to part number 860 10149 for the specifications of the remote control actuator.



**Order Information:**

Model	Description
800 10764	Dualband antenna with mounting bracket 0°-16° // 0°-10° electrical downtilt
800 10764 K	Dualband antenna with mounting bracket and mechanical tilt bracket 0°-16° // 0°-10° electrical downtilt

\* Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.

All specifications are subject to change without notice. The latest specifications are available at [www.kathrein-scala.com](http://www.kathrein-scala.com).

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991  
Email: [communications@kathrein.com](mailto:communications@kathrein.com) Internet: [www.kathrein-scala.com](http://www.kathrein-scala.com)



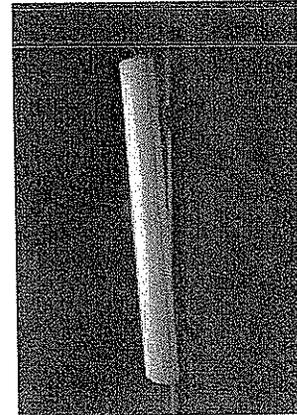
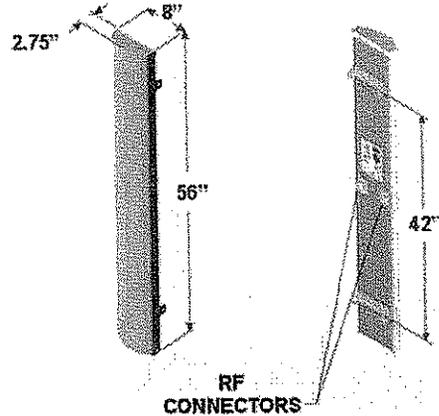
## RR65-18-XXDPL2

DualPol® Polarization  
1850 MHz - 1990 MHz

OptiRange™  
Suppressor™

### Electrical Specifications

Azimuth Beamwidth (-3 dB)	65°
Elevation Beamwidth(-3 dB)	6°
Elevation Sidelobes (Upper)	≥ 18 dB
Gain	17.5 dBi (15.4 dBd)
Polarization	Dual Linear Slant (± 45°)
Port-to-Port Isolation	≥ 30 dB
Front-to-Back Ratio	≥ 30 dB
Electrical Downtilt Options	0°, 2°, 4°, 6°
VSWR	1.35:1 Max
Connectors	2; 7-16 DIN (female)
Power Handling	250 Watts CW
Passive Intermodulation	≤ -150 dBc [2 x 20 W (+ 43 dBm)]
Lightning Protection	Chassis Ground



### Mechanical Specifications

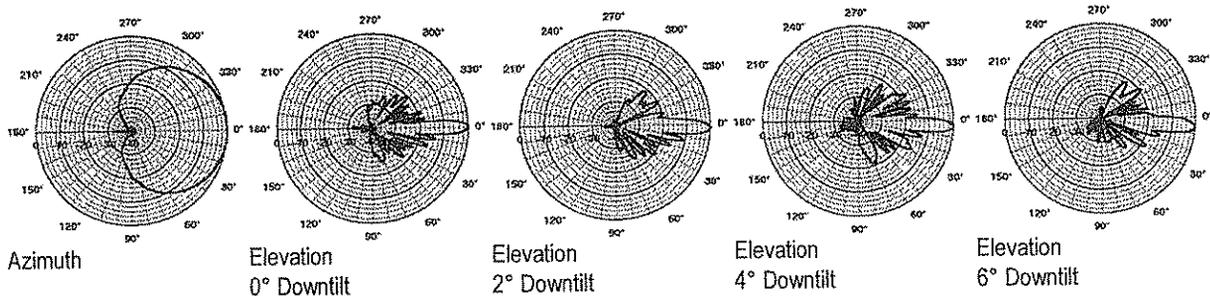
Dimensions (L x W x D)	56 in x 8 in x 2.75 in (142 cm x 20.3 cm x 7.0 cm)
Rated Wind Velocity	150 mph (241 km/hr)
Equivalent Flat Plate Area	3.1ft <sup>2</sup> (.29 m <sup>2</sup> )
Front Wind Load @ 100 mph (161 kph)	90 lbs (400 N)
Side Wind Load @ 100 mph (161 kph)	31 lbs (139 N)
Weight	18 lbs (8.2 kg)

### Mounting Options

MTG-P00-10, MTG-S02-10, MTG-DXX-20\*, MTG-CXX-10\*, MTG-C02-10, MTG-TXX-10\*

Note: \*Model number shown represents a series of products. See Mounting Options section for specific model number.

### Patterns



Revised 04/05/02

Kathrein's X-polarized adjustable electrical downtilt antennas offer the wireless carrier the ability to tailor polarization diversity sites for optimum performance. Using variable downtilt, only a few models need be procured to accommodate the needs of widely varying conditions. Remotely controlled downtilt is available as a retrofitable option.

- 0-10° downtilt range.
- UV resistant pulltruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt Control.
- Will accommodate future 3G / UMTS applications.

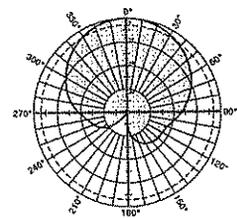
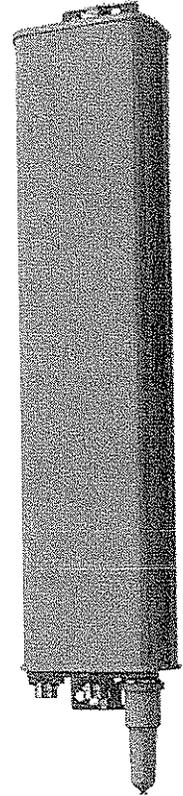
**General specifications:**

Frequency range	1710–2170 MHz
Impedance	50 ohms
VSWR	< 1.4:1
Intermodulation (2x20w)	IM3: < -150 dBc
Polarization	+45° and -45°
Front-to-back ratio	>30 dB (co-polar) >25 dB (total power)
Maximum input power	300 watts per input (at 50°C)
Electrical downtilt continuously adjustable	0–10 degrees
Connector	2 x 7/16 DIN female
Isolation	>30 dB
Cross polar ratio	
Main direction 0°	25 dB (typical)
Sector ±60°	>10 dB
Weight	9.9 lb (4.5 kg)
Dimensions	26.1 x 6.1 x 2.7 inches (662 x 155 x 69 mm)
Equivalent flat plate area	1.54 ft² (0.143 m²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	36.4 x 6.8 x 3.6 inches (924 x 172 x 92 mm)
Shipping weight	13.2 lb (6 kg)
Mounting	Fixed mount options are available for 2 to 5.7 inch (50 to 145 mm) OD masts.

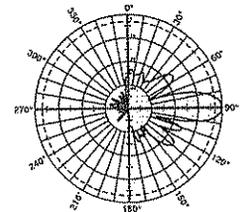
See reverse for order information.

Specifications:	1710–1880 MHz	1850–1990 MHz	1920–2170 MHz
Gain	14.7 dBi	15 dBi	15.2 dBi
+45° and -45° polarization horizontal beamwidth	69° (half-power)	67° (half-power)	64° (half-power)
+45° and -45° polarization vertical beamwidth	14.5° (half-power)	14° (half-power)	13° (half-power)
Vertical Pattern—sidelobe suppression for first side-lobe above main beam	0° 4° 8° 10° T 18 16 15 15 dB	0° 4° 8° 10° T 18 18 18 18 dB	0° 4° 8° 10° T 18 18 18 16 dB

\*Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



Horizontal pattern  
±45°- polarization



Vertical pattern  
±45°- polarization



10644-E  
936.2108g

**DECIBEL<sup>®</sup>**  
Base Station Antennas

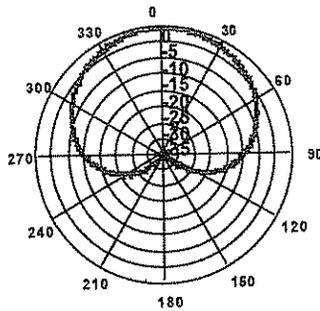
**DB844H80E-XY**

12.5 dBd, Directed Dipole Antenna  
806-896, 870-960 MHz

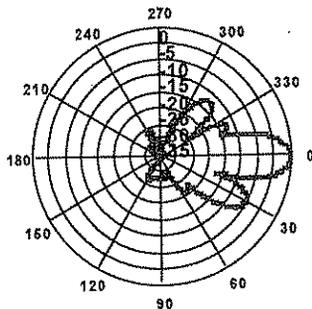
806-896 MHz  
870-960 MHz

- Excellent azimuth roll-off, 15-20% reduction in cell to cell overlap
- Superior front to back ratio
- Low profile, low wind load for easy zoning
- Outstanding field record, with thousands of units deployed, world wide

800



Horizontal 835 MHz (Tilt=0)



Vertical 835 MHz (Tilt=0)



**ELECTRICAL**

**MECHANICAL**

Frequency (MHz):	806-896	870-960
Polarization:	Vertical	Vertical
Gain (dBd/dBi):	12.5/14.6	12.8/14.9
Azimuth BW:	80°	80°
Elevation BW:	15°	15°
Beam Tilt:	0°	0°
USLS* (dB):	>15	>15
Front-to-Back Ratio* (dB):	40	40
VSWR:	<1.5:1	<1.5:1
Impedance:	50 Ohms	50 Ohms
Max Input Power:	500 Watts	500 Watts
Lightning Protection:	DC Ground	DC Ground
Opt Electrical Tilt:	6°	6°

Weight:	14 lbs (6.4 kg)
Dimensions (LxWxD):	48 X 6.5 X 8 in (1219 X 165 X 203 mm)
Max. Wind Area:	1.08 ft <sup>2</sup> (0.10 m <sup>2</sup> )
Max. Wind Load (@ 100mph):	59 lbf (262 N)
Max. Wind Speed:	125 mph (201 km/h)
Radiator Material:	Brass
Reflector Material:	Aluminum
Radome Material:	ABS, UV Resistant
Mounting Hardware Material:	Galvanized Steel
Connector Type:	7-16 DIN - Female (Back)
Alt. Connectors:	N Type - Female
Color:	Light Gray
Standard Mounting Hardware:	DB380 Pipe Mount Kit, included
Downtilt Mounting Hardware:	DB5083, optional
Opt. Mounting Hardware:	DB5084-AZ Azimuth Wall Mount



Andrew Corporation  
8635 Stemmons Freeway  
Dallas, Texas U.S.A 75247-3701  
Tel: 214.631.0310

Fax: 214.631.4706  
Toll Free Tel: 1.800.676.5342  
Fax: 1.800.229.4706  
www.andrew.com

Date: 4/23/2004  
\* - Indicates Typical Values

dbtech@andrew.com



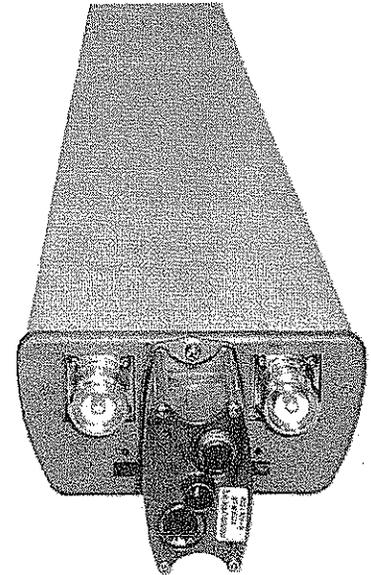
Optimizer® Panel Dual Polarized Antenna equipped with AISG 2.0 ACU motor

### Product Description

This X-Polarized variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features a wide downtilt range. This antenna is optimized for performance across the entire AWS frequency band (1710-2155 MHz). The antenna comes pre-connected with one antenna control unit (ACU).

### Features/Benefits

- Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10 deg.
- High Suppression of all Upper Sidelobes (Typically <-18dB).
- Gain tracking - difference between AWS UL (1710-1755 MHz) and DL (2110-2155 MHz) <1dB.
- Azimuth horizontal beamwidth difference <6deg between AWS UL (1710-1755 MHz) and DL (2110-2155 MHz)
- Low profile for low visual impact.
- Dual polarization; Broadband design.
- Includes AISG 2.0 Compatible ACU-A20-N antenna control unit



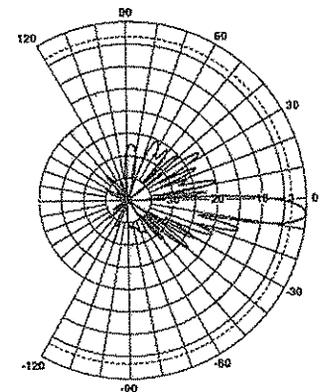
### Technical Specifications

#### Electrical Specifications

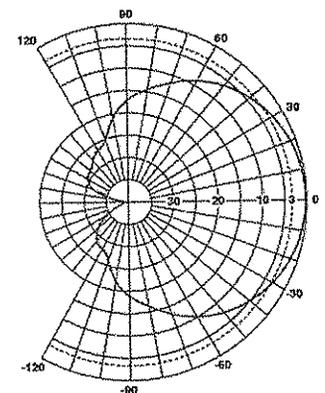
Frequency Range, MHz	1710-2170
Antenna Type	Panel Dual Polarized
Electrical Down Tilt Option	Variable
Gain, dBi (dBd)	18.4 (16.3)
Electrical Downtilt, deg	0-10, 0-10
Horizontal Beamwidth, deg	65
VSWR	< 1.5:1
Vertical Beamwidth, deg	5.9 to 7.7
1st Upper Sidelobe Suppression, dB	> 18
Upper Sidelobe Suppression, dB	> 18 all
Polarization	Dual pol +/-45°
Front-To-Back Ratio, dB	>26 (typically 28)
Maximum Power Input, W	300
Isolation between Ports, dB	> 30
Lightning Protection	Direct Ground
3rd Order IMP @ 2 x 43 dBm, dBc	> 150 (155 Typical)

#### Mechanical Specifications

Rated Wind Speed, km/h (mph)	160 (100)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.29 (2.9)
Maximum Thrust @ Rated Wind, N (lbf)	380 (185)
Front Thrust @ Rated Wind, N (lbf)	380 (185)
Reflector Material	Aluminum
Radiating Element Material	Brass
Radome Material	Fiberglass
Connector Type	(2) 7-16 DIN Female
Connector Location	Bottom
Mount Type	Downtilt
Mounting Hardware	APM40-2
Weight w/o Mtg Hardware, kg (lb)	8.5 (18.7)
Packing Dimensions, HxWxD, mm (in)	1439 x 237 x 260 (56.6 x 9.3 x 10.3)
Dimensions - HxWxD, mm (in)	1349 x 175 x 80 (53.1 x 6.9 x 3.15)
Shipping Weight, kg (lb)	14.5 (31.9)



Vertical Pattern



Horizontal Pattern

\* This data is provisional and subject to change.

RFS The Clear Choice™

APXV18-2065165-C-A20

Print Date: 21.2.2007

All information contained in the present datasheet is subject to confirmation at time of ordering.

Please visit us on the internet at <http://www.rfsworld.com>

Radio Frequency Systems

DO NOT SCALE DRAWINGS  
 CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME



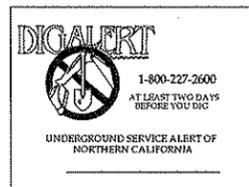
# SITE: CNU0347 BENICIA (MONOPOLE) EXISTING TELECOMMUNICATIONS FACILITY MODIFICATION

1471 PARK RD  
 BENICIA, CA 94510

at&t  
 4430 ROSEWOOD DRIVE  
 PLEASANTON, CALIFORNIA 94588



8600 W. BRYN MAWR  
 CHICAGO, IL 60631  
 TEL: 773-380-3800  
 FAX: 773-693-0850



### PROJECT DESCRIPTION

UPGRADE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY. PROJECT INCLUDES INSTALLATION OF THREE (3) NEW ANTENNAS, SIX (6) NEW RRUS, ONE (1) NEW SURGE SUPPRESSOR, ONE (1) NEW GPS RECEIVER, AND ASSOCIATED CONDUIT AND CABLING.

### PROJECT INFORMATION

SITE NAME:	BENICIA	LATITUDE:	38.04973500 N
COUNTY:	SOLANO	LONGITUDE:	-122.13582500 W
APN:	O80-140-67	GROUND ELEVATION:	180 FT (ASL)
SITE ADDRESS:	1471 PARK RD BENICIA, CA 94510	JURISDICTION:	CITY OF BENICIA
CURRENT ZONING:	PUBLIC/SEMI PUBLIC	TELEPHONE:	AT&T
		POWER:	PG&E
CURRENT USE:	UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY		
PROPOSED USE:	UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY		
PROPERTY OWNER:	CITY OF BENICIA		
APPLICANT:	AT&T / ERICSSON / FMHC 4430 ROSEWOOD DRIVE PLEASANTON, CA 94588 CONTACT REPRESENTATIVE: AARON KOLOTKIN 367 CIVIC DRIVE, SUITE 7 PLEASANT HILL, CA 94523 PHONE: 925-798-6100 ext: 3319 E-MAIL: okolotkin@fmhc.com	DESIGN:	FMHC CORP. 367 CIVIC DRIVE, SUITE 7 PLEASANT HILL, CA 94523 ARCHITECT: CHARLES TRENBETH MARKET CONTACT: ED BUENO PHONE: (925) 798-6100 ext: 3311 E-MAIL: EBUENO@fmhc.com
SITE ACQUISITION AND ZONING CONTACT:	FMHC CORP. 367 CIVIC DRIVE, SUITE 7 PLEASANT HILL, CA 94523 CONTACT REPRESENTATIVE: AARON KOLOTKIN PHONE: 925-798-6100 ext: 3319 E-MAIL: okolotkin@fmhc.com		

### VICINITY MAP / SITE PLAN



### APPROVAL

AT&T REPRESENTATIVE:

AT&T RF ENGINEER:

SITE ACQUISITION:

CONSTRUCTION MANAGER:  
(AT&T & ERICSSON)

SITE ACQUISITION MANAGER:  
(ERICSSON)

LANDLORD:

### SHEET INDEX

SHEET	DESCRIPTION
T1	TITLE SHEET, SITE INFORMATION AND VICINITY MAP
SP1	NOTES AND SPECIFICATIONS
A0	COMPOUND PLAN
A1	ANTENNA PLANS AND ELEVATIONS
A2	DETAILS
A3	SINGLE LINE DIAGRAMS AND DETAILS
A4	EQUIPMENT CUT-SHEETS

DRAWN BY: LP, JH  
 APPROVED BY: AA

9/15/11 100% CD  
 5/23/11 90% CD  
 6/16/11 IR CD

**SITE # CNU0347  
 BENICIA  
 1471 PARK RD  
 BENICIA, CA 94510**

SHEET TITLE  
**TITLE SHEET**

SHEET NUMBER  
**T1**

PROJECT NUMBER: 8021

### CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

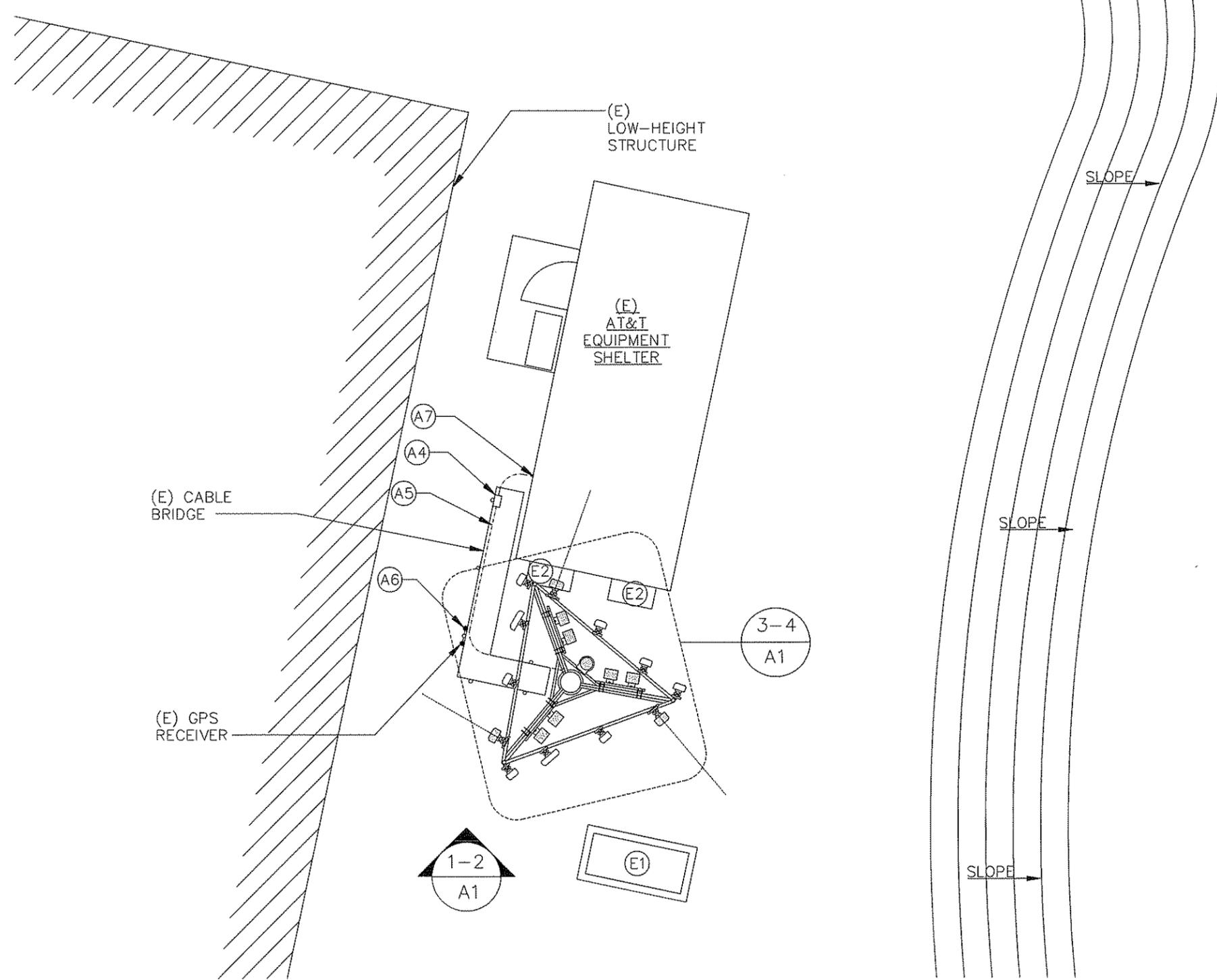
- CALIFORNIA CODE OF REGULATIONS
- 2007 CALIFORNIA BUILDING CODE
- 2007 CALIFORNIA MECHANICAL CODE
- 2007 CALIFORNIA PLUMBING CODE
- 2007 CALIFORNIA ELECTRIC CODE
- ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
- CITY/COUNTY ORDINANCES

HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2, TITLE 24, CHAPTER 11B, SECTION 1103B.

### DRIVING DIRECTIONS

- FROM AT&T OFFICE, PLEASANTON, CA
- HEAD EAST ON ROSEWOOD DR
  - MAKE A U-TURN
  - TURN RIGHT ONTO OWENS DR
  - TURN RIGHT ONTO HACIENDA DR
  - MERGE ONTO I-580 W VIA THE RAMP TO OAKLAND
  - TAKE EXIT 44B TO MERGE ONTO I-580 N TOWARD SACRAMENTO PARTIAL TOLL ROAD
  - TAKE EXIT 58B FOR BAYSHORE RD
  - TURN LEFT ONTO BAYSHORE RD
  - TAKE THE 1ST LEFT ONTO PARK RD DESTINATION WILL BE ON THE RIGHT
  - ARRIVE AT: 1471 PARK RD, BENICIA, CA 94510





- ANTENNA NOTES**
1. ADJUST ANTENNA MOUNTS AS REQUIRED TO ACHIEVE THE AZIMUTHS SPECIFIED AND LIMIT SHADOWING.
  2. VERIFY TYPE AND SIZE OF TOWER LEG PRIOR TO ORDERING ANY ANTENNA MOUNT.
  3. UNLESS NOTED OTHERWISE THE CONTRACTOR MUST PROVIDE ALL MATERIAL NECESSARY.
  4. EACH LINE OF COAX OR JUMPERS SHALL BE LABELED PURSUANT TO THE COLOR CODING SCHEDULE PROVIDED BY AT&T AT (2) TWO LOCATIONS AT THE ANTENNA AND THE EXTERIOR OF THE EQUIPMENT. COLOR CODING METHOD IS BY MEANS OF A 1" WIDE COLORED ELECTRICAL TAPE WRAPPED AROUND THREE TIMES TO PRODUCE A STRIPE (IE, TWO RED WILL HAVE TWO STRIPES) (3M SCOTCH SUPER 88 ELECTRICAL TAPE, ALL WEATHER, HEAVY DUTY, ABRASION RESISTANT, FAST BUILD UP, UV RESISTANCE TAPE - 1" WIDE.)
  5. ANTENNA AZIMUTHS ARE DEGREES OFF OF TRUE NORTH, BEARING CLOCKWISE, IN WHICH ANTENNA FACE IS DIRECTED. ALL ANTENNAS (AND SUPPORTING STRUCTURES AS PRACTICAL) SHALL BE ACCURATELY ORIENTED IN THE SPECIFIED DIRECTION.
  6. CONTRACTOR SHALL VERIFY ALL RF INFORMATION PRIOR TO CONSTRUCTION.
  7. SWEEP TEST SHALL BE PERFORMED BY GENERAL CONTRACTOR AND SUBMITTED TO AT&T CONSTRUCTION SPECIALIST. TEST SHALL BE PERFORMED PER AT&T STANDARDS.
  8. CONTRACTOR SHALL VERIFY THE HEIGHT OF THE ANTENNAS WITH THE AT&T WIRELESS PROJECT MANAGER.
- STRUCTURAL NOTES:**
1. STRUCTURAL CALCULATIONS AND/OR MODIFICATIONS HAVE BEEN PREPARED BY OTHERS. CONTRACTOR TO OBTAIN A COPY FROM THE CONSTRUCTION MANAGER
  2. CONTRACTOR TO VERIFY THAT ANY NEW INSTALLATION OF ANTENNAS, EQUIPMENT, AND CABLING ON THE EXISTING STRUCTURE MATCHES THE STRUCTURAL LOADING ANALYSIS. REFER TO STRUCTURAL ANALYSIS AND / OR DESIGN DOCUMENTS FOR ADDITIONAL LOADS. IF A CONFLICT OCCURS BETWEEN THESE DRAWINGS AND THE STRUCTURAL LOADING ANALYSIS THE CONTRACTOR IS TO CONTACT THE CONSTRUCTION MANAGER FOR DIRECTIVE BEFORE PROCEEDING WITH THE WORK.
  3. NO ERECTION OR MODIFICATION OF THE STRUCTURE DIFFERENT FROM THAT INDICATED ON THE STRUCTURAL DESIGN SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE CONSTRUCTION MANAGER AND / OR STRUCTURAL ENGINEER OF RECORD.

- LEGEND - MONOPOLE**
- ABBREVIATIONS**
- (E) EXISTING (N) NEW  
 (P) PROPOSED (F) FUTURE (R) RELOCATED  
 AGL - ABOVE GRADE LEVEL
- AT&T INSTALLATION**
- (A1) LTE ANTENNA MOUNTED TO (E) SECTOR FRAME- RE: DTL#1/A2 AND CUT-SHEET ON A4 FOR SPECIFICATIONS
  - (A2) TWO (2) NEW RRUS PER LTE ANTENNA MOUNTED ON UNISTRUT TO (E) SECTOR STANDOFF ARM ANGLES- RE: DTL#2/A2 AND CUT-SHEET ON SHEET A4 FOR SPECIFICATIONS
  - (A3) RAYCAP DC5-48-60-18-8F DC SURGE SUPPRESSOR WITH MANUFACTURER SUPPLIED MOUNTING BRACKET
  - (A4) 10" SQ X 6" D JUNCTION BOX NEMA TYPE 4 ENCLOSURE (1) MOUNTED TO CABLE BRIDGE POST.
  - (A5) 2 1/2" EMT CONDUIT (PAINTED TO MATCH MONOPOLE) WITH WEATHER TIGHT FITTINGS ROUTED ALONG CABLE BRIDGE, FROM SHELTER, UP INSIDE MONOPOLE TO ANTENNA LEVEL.
  - (A6) NEW GPS RECEIVER RE: DTL#4/A3
  - (A7) CONDUIT OR INNERDUCT PENETRATION THROUGH SHELTER RE: DTL#3/A2
- EXISTING EQUIPMENT**
- (E1) EMERGENCY GENERATOR ON CONCRETE PAD
  - (E2) HVAC

4430 ROSEWOOD DRIVE  
 PLEASANTON, CALIFORNIA 94588

8500 W. BRYN MAWR  
 CHICAGO, IL 60631  
 TEL: 773-380-3800  
 FAX: 773-693-0850

DRAWN BY: LP, JH  
 APPROVED BY: AA

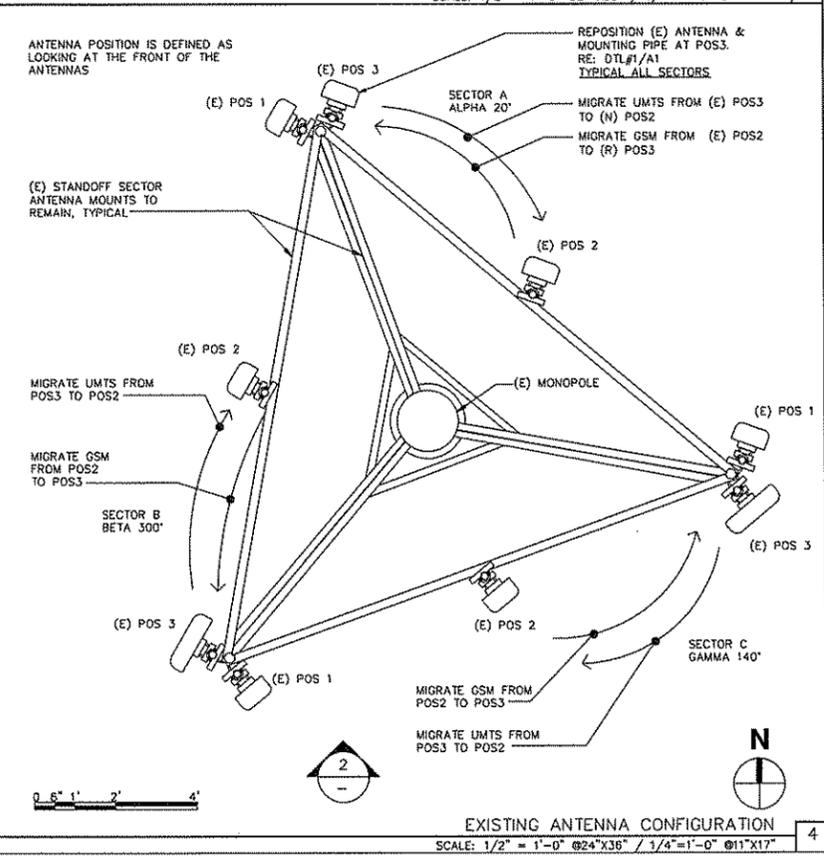
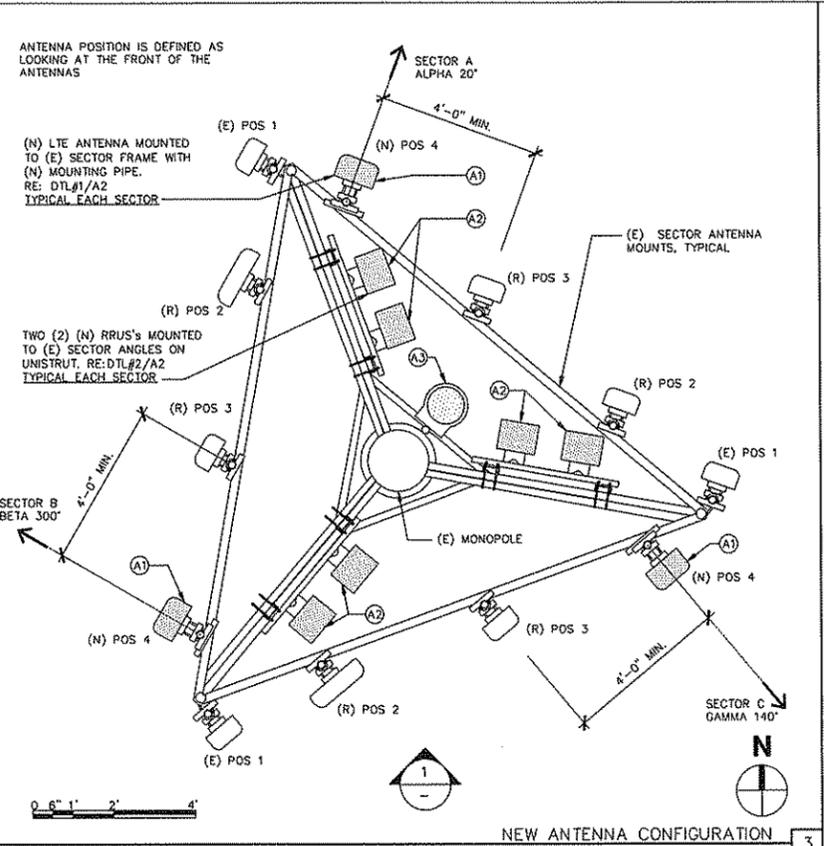
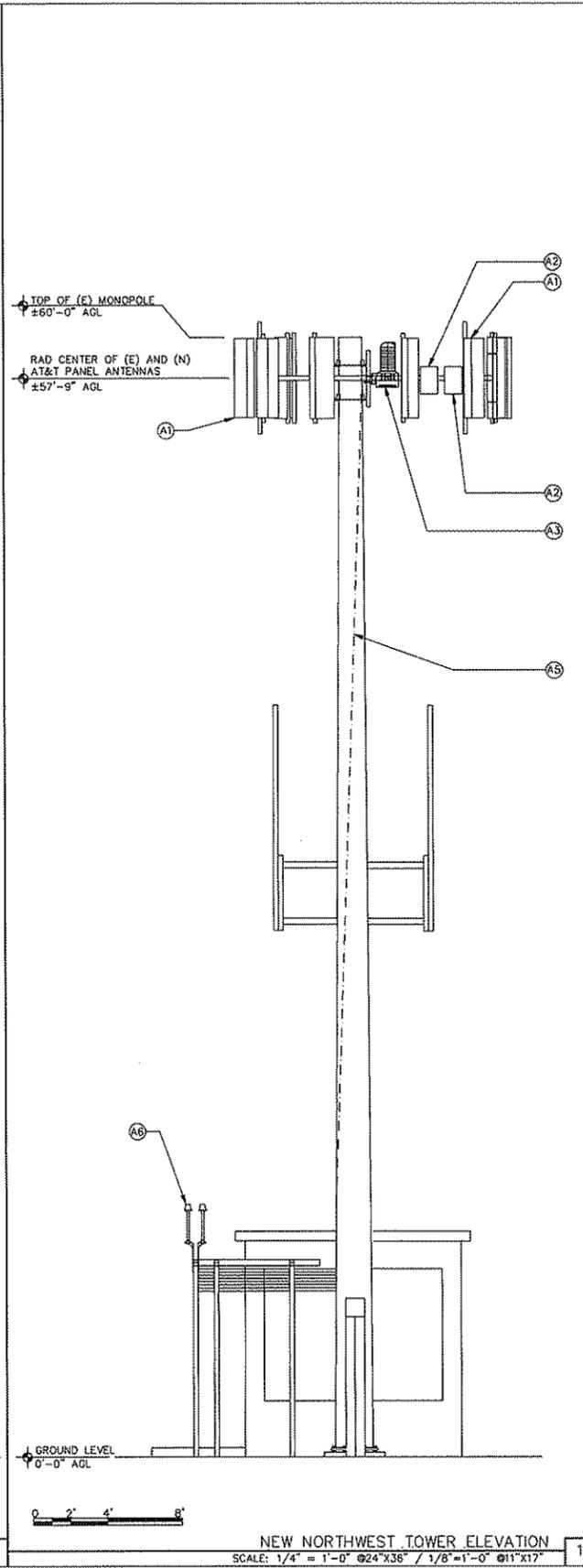
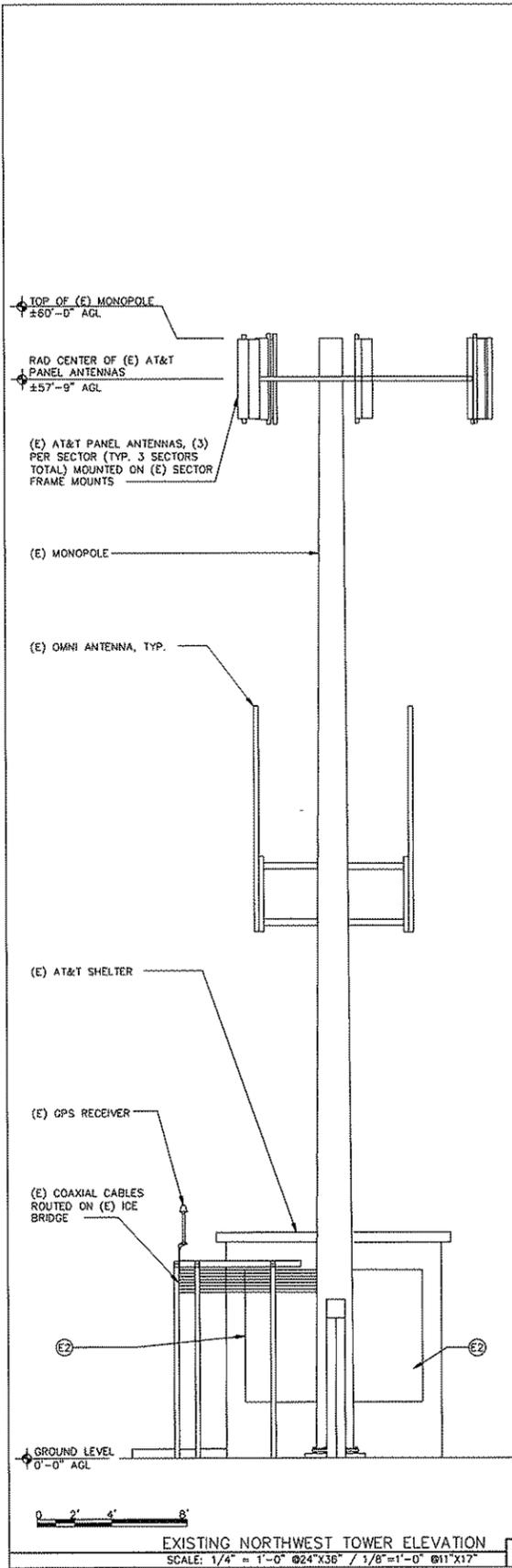
9/15/11	100% CD
5/23/11	90% CD
6/16/11	IR CD

**SITE # CNU0347**  
**BENICIA**  
 1471 PARK RD  
 BENICIA, CA 94510

SHEET TITLE  
**COMPOUND PLAN**

SHEET NUMBER  
**A0**

PROJECT NUMBER: 8021



- ANTENNA NOTES:**
- ADJUST ANTENNA MOUNTS AS REQUIRED TO ACHIEVE THE AZIMUTHS SPECIFIED AND LIMIT SHADOWING.
  - VERIFY TYPE AND SIZE OF TOWER LEG PRIOR TO ORDERING ANY ANTENNA MOUNT.
  - UNLESS NOTED OTHERWISE THE CONTRACTOR MUST PROVIDE ALL MATERIAL NECESSARY.
  - EACH LINE OF COAX OR JUMPERS SHALL BE LABELED PURSUANT TO THE COLOR CODING SCHEDULE PROVIDED BY AT&T AT (2) TWO LOCATIONS AT THE ANTENNA AND THE EXTERIOR OF THE EQUIPMENT. COLOR CODING METHOD IS BY MEANS OF A 1" WIDE COLORED ELECTRICAL TAPE WRAPPED AROUND THREE TIMES TO PRODUCE A STRIPE (IE, TWO RED WILL HAVE TWO STRIPES) (3M SCOTCH SUPER 88 ELECTRICAL TAPE, ALL WEATHER, HEAVY DUTY, ABRASION RESISTANT, FAST BUILD UP, UV RESISTANCE TAPE - 3" WIDE.)
  - ANTENNA AZIMUTHS ARE DEGREES OFF OF TRUE NORTH, BEARING CLOCKWISE, IN WHICH ANTENNA FACE IS DIRECTED. ALL ANTENNAS (AND SUPPORTING STRUCTURES AS PRACTICAL) SHALL BE ACCURATELY ORIENTED IN THE SPECIFIED DIRECTION.
  - CONTRACTOR SHALL VERIFY ALL RF INFORMATION PRIOR TO CONSTRUCTION.
  - SWEEP TEST SHALL BE PERFORMED BY GENERAL CONTRACTOR AND SUBMITTED TO AT&T CONSTRUCTION SPECIALIST. TEST SHALL BE PERFORMED PER AT&T STANDARDS.
  - CONTRACTOR SHALL VERIFY THE HEIGHT OF THE ANTENNAS WITH THE AT&T WIRELESS PROJECT MANAGER.
- STRUCTURAL NOTES:**
- STRUCTURAL CALCULATIONS AND/OR MODIFICATIONS HAVE BEEN PREPARED BY OTHERS. CONTRACTOR TO OBTAIN A COPY FROM THE CONSTRUCTION MANAGER
  - CONTRACTOR TO VERIFY THAT ANY NEW INSTALLATION OF ANTENNAS, EQUIPMENT, AND CABLING ON THE EXISTING STRUCTURE MATCHES THE STRUCTURAL LOADING ANALYSIS. REFER TO STRUCTURAL ANALYSIS AND / OR DESIGN DOCUMENTS FOR ADDITIONAL LOADS. IF A CONFLICT OCCURS BETWEEN THESE DRAWINGS AND THE STRUCTURAL LOADING ANALYSIS THE CONTRACTOR IS TO CONTACT THE CONSTRUCTION MANAGER FOR DIRECTIVE BEFORE PROCEEDING WITH THE WORK.
  - NO ERECTION OR MODIFICATION OF THE STRUCTURE DIFFERENT FROM THAT INDICATED ON THE STRUCTURAL DESIGN SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE CONSTRUCTION MANAGER AND / OR STRUCTURAL ENGINEER OF RECORD.

- LEGEND - MONOPOLE**
- ABBREVIATIONS**
- (E) EXISTING (N) NEW  
(P) PROPOSED (F) FUTURE (R) RELOCATED  
AGL - ABOVE GRADE LEVEL
- AT&T INSTALLATION**
- (A1) LTE ANTENNA MOUNTED TO (E) SECTOR FRAME - RE: DTL#1/A2 AND CUT-SHEET ON A4 FOR SPECIFICATIONS
  - (A2) TWO (2) NEW RRUS PER LTE ANTENNA MOUNTED ON UNISTRUT TO (E) SECTOR STANDOFF ARM ANGLES - RE: DTL#2/A2 AND CUT-SHEET ON SHEET A4 FOR SPECIFICATIONS
  - (A3) RAYCAP DC6-48-60-18-8F DC SURGE SUPPRESSOR WITH MANUFACTURER SUPPLIED MOUNTING BRACKET
  - (A4) 10" SQ X 6" D JUNCTION BOX NEMA TYPE 4 ENCLOSURE (1) MOUNTED TO CABLE BRIDGE POST.
  - (A5) 2 3/8" EMT CONDUIT (PAINTED TO MATCH MONOPOLE) WITH WEATHER TIGHT FITTINGS ROUTED ALONG CABLE BRIDGE, FROM SHELTER, UP INSIDE MONOPOLE TO ANTENNA LEVEL.
  - (A6) NEW GPS RECEIVER RE: DTL#4/A3
  - (A7) CONDUIT OR INNERDUCT PENETRATION THROUGH SHELTER RE: DTL#3/A2
- EXISTING EQUIPMENT**
- (E1) EMERGENCY GENERATOR ON CONCRETE PAD
  - (E2) HVAC

4430 ROSEWOOD DRIVE  
PLEASANTON, CALIFORNIA 94588

8500 W. BRYN MAWR  
CHICAGO, IL 60631  
TEL: 773-380-3600  
FAX: 773-693-0850

DRAWN BY: LP, JH  
APPROVED BY: AA

9/15/11	100% CD
5/23/11	90% CD
6/15/11	IR CD

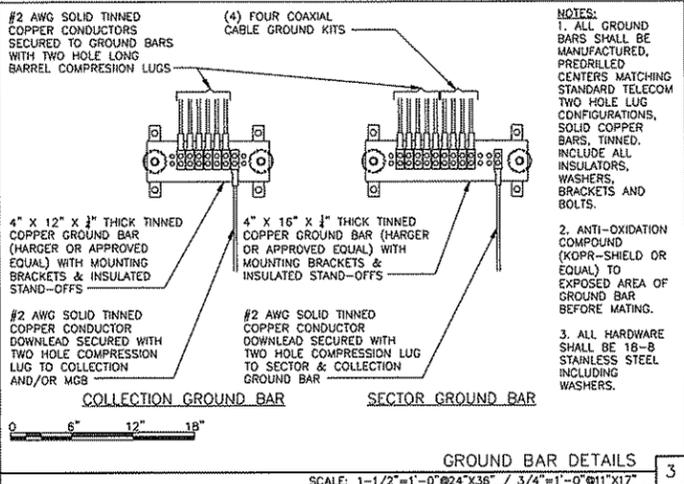
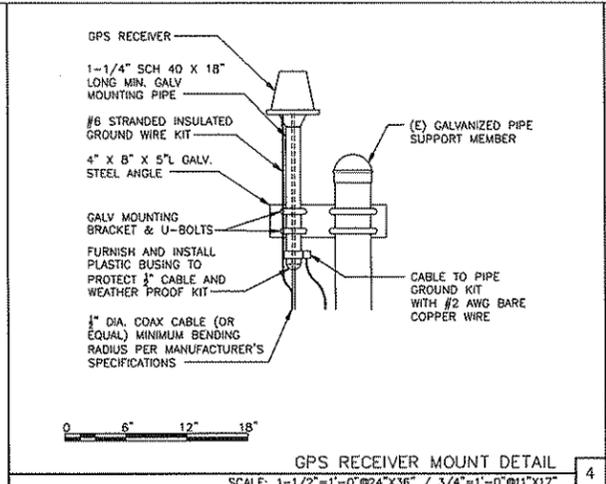
**SITE # CNU0347  
BENICIA**  
1471 PARK RD  
BENICIA, CA 94510

SHEET TITLE  
**ANTENNA PLANS  
AND ELEVATIONS**

SHEET NUMBER  
**A1**

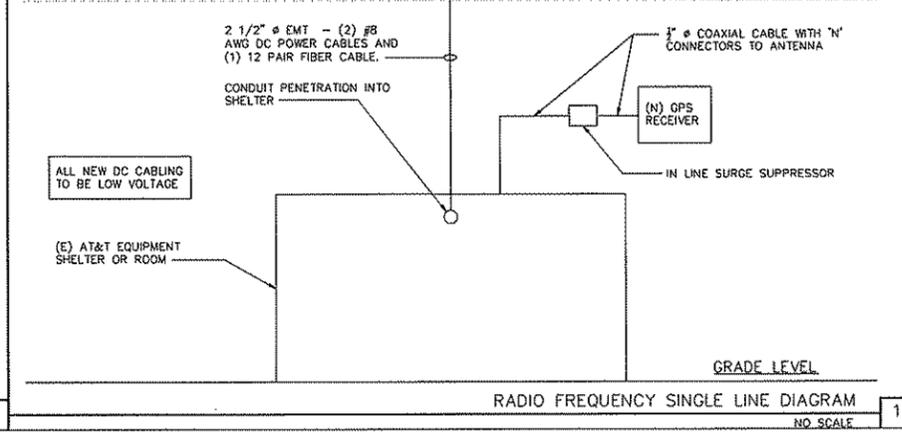
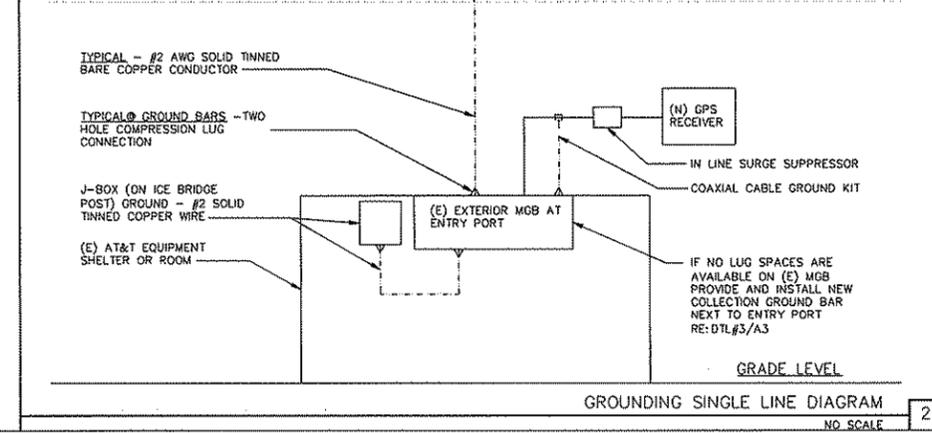
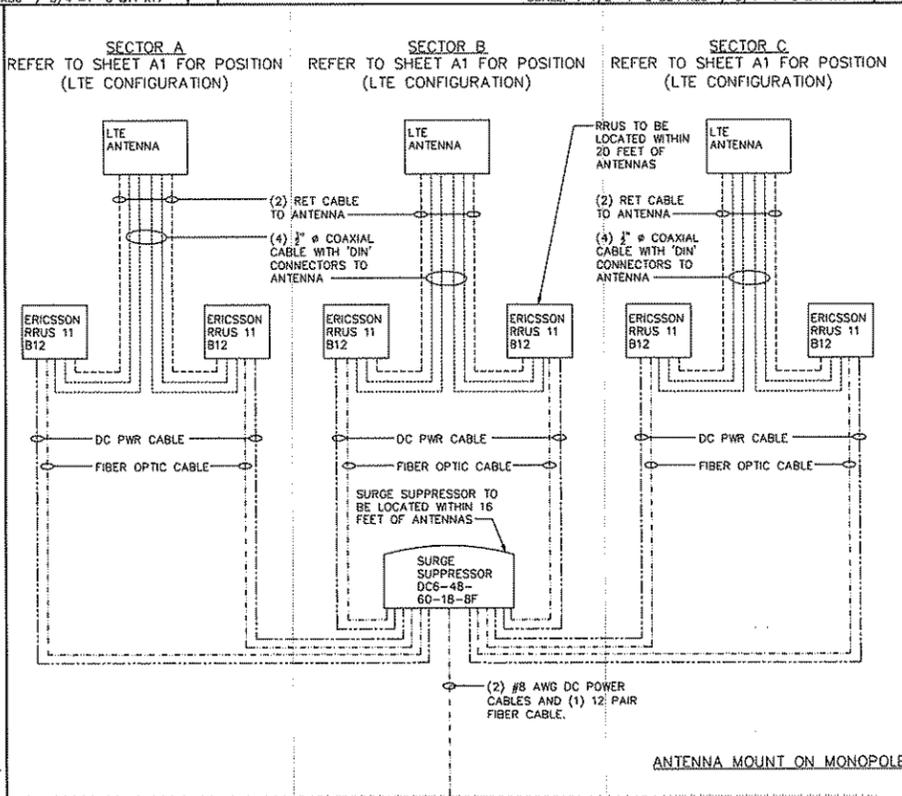
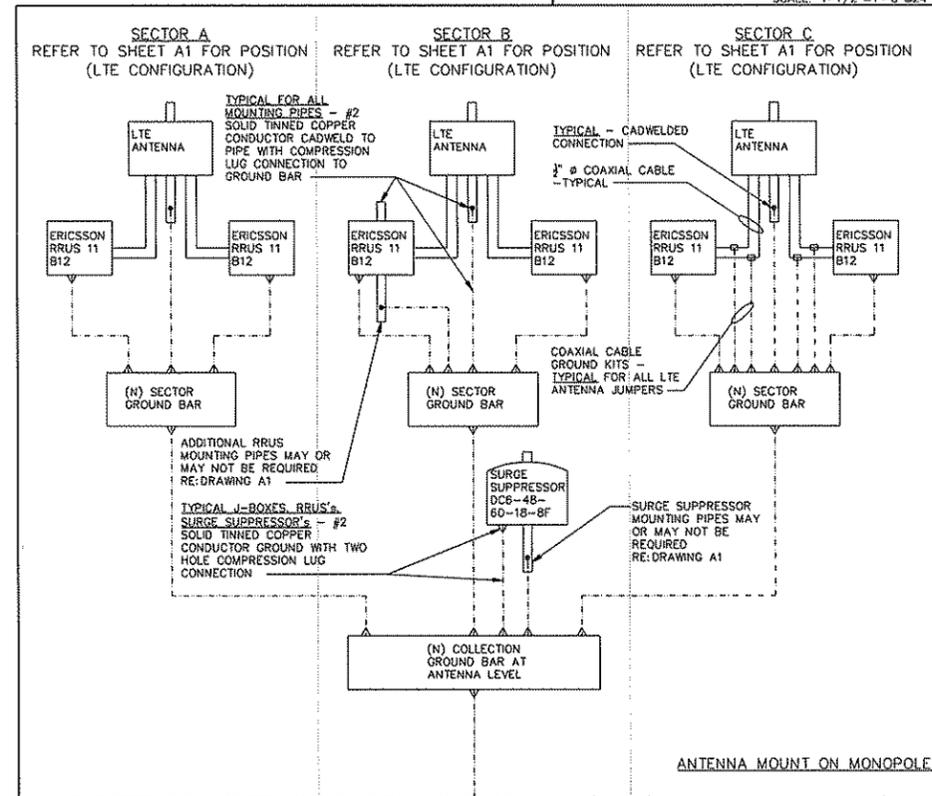
PROJECT NUMBER: 8021





4430 ROSEWOOD DRIVE  
PLEASANTON, CALIFORNIA 94588

8600 W. BRYN MAWR  
CHICAGO, IL 60631  
TEL: 773-380-3800  
FAX: 773-693-0850



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APPROVED BY: AA

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5/23/11	90% CD
5/15/11	IR CD

**SITE # CNU0347**  
**BENICIA**  
1471 PARK RD  
BENICIA, CA 94510

SHEET TITLE  
**SINGLE LINE DIAGRAMS AND DETAILS**

SHEET NUMBER  
**A3**

PROJECT NUMBER: 6021

## Product Specifications



### DBXNH-6565A-R2M

DualPort® Dual Band Antenna, 698-696 MHz and 1710-2155 MHz, 65° horizontal beamwidth, RET compatible variable electrical tilt

- Two DualPort® antennas under one radome
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Each antenna is independently capable of field adjustable electrical tilt
- Fully compatible with Andrew Teletilt® remote control system
- The RF connectors are IP67 rated and the radome is IP56 rated

### CHARACTERISTICS

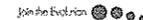
#### General Specifications

Antenna Type DualPort® dual band  
 Brand DualPort® | Teletilt®  
 Operating Frequency Band 1710 - 2155 MHz | 698 - 696 MHz

#### Electrical Specifications

	698-696	605-696	1710-1880	1850-1990	1920-2150
Beamwidth, Horizontal, degrees	68	65	65	60	60
Beamwidth, Horizontal Tolerance, degrees	47	49	47	47	46.5
Gain, dBi	11.3	12.5	14.5	15.5	15.0
Gain, dBi	13.4	14.6	16.6	17.6	17.1
Beamwidth, Vertical, degrees	19.0	17.0	7.5	7.0	6.6
Beam Tilt, degrees	0-15	0-15	0-8	0-8	0-8
Upper Sidelobe Suppression (USLS), typical, dB	16	16	15	16	15
Front-to-Back Ratio at 180°, dB	25	27	30	32	30
Front-to-Back Total Power at 180° & 20°, dB	18	21	22	29	27
Cross Polarization Ratio (CPR) at Sidesight, dB	15	14	22	22	24
Cross Polarization Ratio (CPR) at Sector, dB	9	6	10	9	8
Isolation, dB	30	28	30	30	30
Isolation, Intersystem, dB	35	33	40	40	40
VSWR   Return Loss, dB	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0
Intermodulation Products, 3rd Order, 2 x 20 W, dbc	-150	-150	-150	-150	-150
Input Power, maximum, watts	500	500	500	500	500
Polarization	45°*	45°*	45°*	45°*	45°*
Impedance, ohms	50	50	50	50	50
Lightning Protection	dc Ground				

www.andrew.com/gndbw



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Page 2 of 4  
 3/16/2010

## Product Specifications



### DBXNH-6565A-R2M

#### Mechanical Specifications

Color Light Gray  
 Connector Interface 7-16 DIN Female  
 Connector Location Bottom  
 Connector Quantity 4  
 Wind Loading, maximum 403.0 N @ 150 km/h  
 90.6 lbf @ 150 km/h  
 Wind Speed, maximum 241.0 km/h | 149.8 mph

#### Dimensions

Depth 101.0 mm | 7.1 in  
 Length 1298.0 mm | 51.1 in  
 Width 301.0 mm | 11.9 in  
 Net Weight 14.5 kg | 32.0 lb

#### Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 1.1 Actuator DBXNH-6565A-R2M  
 Model with Factory Installed AISG 2.0 Actuator DBXNH-6565A-R2M  
 RET System Teletilt®

#### Regulatory Compliance/Certifications

Agency Classification  
 RoHS 2002/95/EC Compliant by Exemption  
 China RoHS SJ/T 11361-2006 Above Maximum Concentration Value (CMV)



#### INCLUDED PRODUCTS

- DB300**  
Pipe Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members
- DB503**  
Downdip Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

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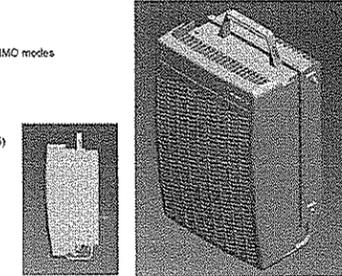
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Page 2 of 4  
 3/16/2010

NEW LTE ANTENNA CUT-SHEET  
 NO SCALE 3

## RRU-11 OUTDOOR DNB REMOTE RADIO UNIT

- Multi Technology support (GSM, WCDMA & LTE)
- Mixed Technology capable via same band
- Band 12 (700 MHz), Band 4 (1721 MHz)
- 2Tx/2Rx
- Supports all defined 3GPP modulations and MIMO modes
- 2 x 30 W MISO RF output power
- Dimensions (H x W x D):  
 - 442 x 225 x 220 mm (17.4" x 11.3" x 8.7")  
 - W/antenna, but not including top handle
- Weight: 20 Kg (44 lbs)
- Climate: -40°C to +55°C (Stent, No Fans, IP55)
- Power consumption:  
 - Typical 150 W
- Backup/Power Cables:  
 - 120-250 VAC (1 x 30 Amp Breaker)  
 - Max AC Cable Size 6 → 16 AWG  
 - 48 VDC (1 x 20 Amp Breaker)  
 - Chassis 12 AWG shielded Power Cable
- Power & Backup Support:  
 - 5VDC RS or PSC-dNB + B056-101  
 - P05C-02 & B056-300
- External Alarms  
 - Yes (do not know how many yet)
- Built in TMA / RET support
- RRU cascading
- CPR1 v4.0 Single Mode Fiber



132 & 13800209 Overview 2.4.1 | Component and Cable 1 | 1702.P22010 Rev 001 Rev 001 | Page 21 of 22

RRU CUT-SHEET  
 NO SCALE 2



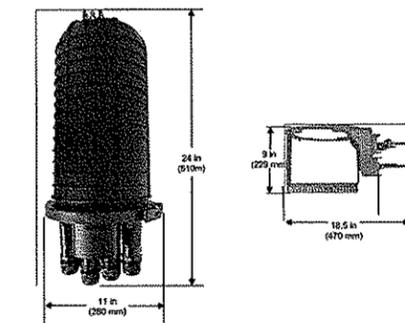
## DC6-48-60-18-8F

### DC Surge Suppression Solution

The DC6-48-60-18-8F is a dust chambered, DC surge suppression system for use in multi-circuit, Distributed Antenna Systems. The system will protect up to 6 Remote Radio Heads from voltage surges and lightning, and connect up to 18 fiber pairs. The system is enclosed in an IP 68 rated, waterproof enclosure.

#### FEATURES

- Protects up to 6 Remote Radio Heads, each with its own protection circuit.
- Flexible design allows for installation at the top of a tower for Remote Radio Head protection.
- Includes fiber connections for up to 18 pairs of fiber.
- LED Indicators on individual circuits provide visual indication of suppressor status.
- Form 'C' relays allow for remote monitoring of the suppressor status.
- Patented Strikesorb technology provides over 60 kA of surge current capacity per circuit.
- Strikesorb suppression modules are fully recognized to UL 1449-3rd Edition Safety Standard, meeting all intermediate and high current fault requirements to facilitate use in OEM applications.
- Raycap recommends that DC protection system be installed within 2 meters or 6 feet of the radio.
- Dome design is lightweight and aerodynamic providing maximum flexibility for installation on top of towers.
- Patent pending



US: Phone 208.777.1156 Toll Free: 800.650.2569 Fax: 208.777.4466  
 Europe: Tel: +30 210 6152 000 Fax: +30 210 6196 002  
 www.raycap.com/protection.com

DC6-48-60-18-8F SURGE SUPPRESSION CUT-SHEET  
 NO SCALE 1



4430 ROSEWOOD DRIVE  
 PLEASANTON, CALIFORNIA 94588



8600 N. BRYN MAWR  
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DRAWN BY: LP, JH  
 APPROVED BY: AA

9/15/11	100% CD
6/23/11	90% CD
6/16/11	IR CD

SITE # CNU0347  
 BENICIA  
 1471 PARK RD  
 BENICIA, CA 94510

SHEET TITLE  
 EQUIPMENT  
 CUT-SHEETS

SHEET NUMBER  
**A4**

PROJECT NUMBER: 8021



# PROCLAMATION

IN RECOGNITION OF THE DEDICATION AND SERVICE  
OF

## BRAD THOMAS

**WHEREAS**, Brad was appointed to the Planning Commission on September 4, 2007, and has served as Chair since March 10, 2011; and

**WHEREAS**, Brad served on the Planning Commission with honor and integrity until January 12, 2012; and

**WHEREAS**, Brad has cultivated common sense, used unbiased logic, and employed an authentic philosophy that has contributed towards sound reasoning in the decision making process; and

**WHEREAS**, Brad has donated his time because of his commitment to the City of Benicia and his belief in civic responsibility; and

**WHEREAS**, Brad was the chair of the Planning Commission, and serves and contributes to the betterment of the community in numerous ways.

**NOW, THEREFORE, BE IT RESOLVED THAT I**, Rod Sherry, on behalf of the Planning Commission, do hereby sincerely thank Brad for his years of service and dedication to improving the quality of life of the citizens of Benicia. Brad, it has been a pleasure having you serve on the City's Planning Commission. Best of Luck Always!

\_\_\_\_\_  
Rod Sherry, Vice Chair  
Planning Commission  
February 9, 2012





**DRAFT**

**BENICIA PLANNING COMMISSION  
CITY HALL COUNCIL CHAMBERS  
MEETING MINUTES**

**Thursday, December 8, 2011  
7:00 p.m.**

**I. OPENING OF MEETING**

**A. Pledge of Allegiance**

**B. Roll Call of Commissioners**

**Present:** Commissioners Don Dean, Rick Ernst, George Oakes, Rod Sherry, Lee Syracuse and Chair Brad Thomas.

**Absent:** Commissioner Belinda Smith (excused)

**Staff Present:** Kat Wellman, Contract Attorney  
Mark Rhoades, Interim Land Use and Engineering Manager  
Lisa Porras, Senior Planner  
Kathy Trinqué, Administrative Secretary

**C. Reference to Fundamental Rights of Public** - A plaque stating the Fundamental Rights of each member of the public is posted at the entrance to this meeting room per Section 4.04.030 of the City of Benicia's Open Government Ordinance.

**II. ADOPTION OF AGENDA**

On motion of Commissioner Syracuse, seconded by Commissioner Ernst, the agenda was adopted by the following vote:

**Ayes:** Commissioners Dean, Ernst, Oakes, Sherry, Syracuse and Chair Thomas

**Noes:** None

**Absent:** Commissioner Smith

**Abstain:** None

**III. OPPORTUNITY FOR PUBLIC COMMENT**

**A. WRITTEN**

None.

**B. PUBLIC COMMENT**

Toni Haughey announced that the Camel Barn Holiday Tree Lot will be open until December 24 or until all the trees are sold. This is a fund raising event for the Camel Barn Museum.

**IV. CONSENT CALENDAR**

**A. Approval of Minutes of September 8, 2011**

On motion of Commissioner Sherry, seconded by Commissioner Ernst, the Consent Calendar was adopted by the following vote:

Ayes: Commissioners Dean, Ernst, Oakes, Sherry, Syracuse and Chair  
Thomas  
Noes: None  
Absent: Commissioner Smith  
Abstain: None

**V. REGULAR AGENDA ITEMS**

**A. AN APPEAL OF THE HPRC'S DENIAL OF A DESIGN REVIEW REQUEST TO REPLACE THREE WOOD WINDOWS WITH VINYL WINDOWS ON THE FRONT FAÇADE OF THE EXISTING SINGLE-FAMILY RESIDENCE LOCATED AT 410 WEST J STREET**

11PLN-00064 Design Review Appeal  
410 West J Street  
APN: 0089-031-090

**PROJECT SUMMARY:**

The applicant requested design review approval to replace three wood windows with new, paintable custom vinyl windows on the existing single-family residence located at 410 West J Street, a contributing structure within the Downtown Historic Overlay District. The HPRC has a longstanding policy of NOT allowing wood windows to be replaced with vinyl. The HPRC approved the replacement of the two windows (one on each side of the house) but they denied the change on the front facade.

Staff recommended that the HPRC approve this request based on a number of factors including that the windows are not the most prominent

façade feature of the residence and that the replacement windows are high quality and nearly identical in dimension to the existing windows and frames.

**Staff Recommendation:**

Consider the appeal of the Historic Preservation Review Commission's (HPRC's) denial of a request by Julian and Claudia Fraser for a minor exterior modification (replacement of wood windows with vinyl) to the front façade of the existing residence located at 410 West J Street. The HPRC approved the request for the side windows, but denied the request for the front windows. Note that staff's recommendation was to approve the whole design review request.

Mark Rhoades, Interim Land Use and Engineering Manager, presented an overview of this item. Mr. Rhoades pointed out that the HPRC decision disagreed with staff's recommendation. Included in this packet are draft minutes of the HPRC meeting to provide the Planning Commission with some idea of the discussion that was held at that meeting. He reviewed the policy of HPRC regarding window replacement. The HPRC did approve the applicant's request to replace the side wood windows with vinyl windows but not the front façade windows located inside the arched porch.

**Questions from Commissioners:**

Commissioner Sherry asked if the 2 side elevation windows that were approved by HPRC to become vinyl were originally wood. He asked if the State Historic guidelines allow that.

Mr. Rhoades responded yes, the side windows were wood and while the State Historic guidelines have strong language concerning wood windows, location is considered as well as how prominent a feature they are on the residence.

Commissioner Dean asked to clarify the number of windows being discussed and their location. Was the existing vinyl window proposed to be changed. Are there a total of 7 windows, 5 of which were wood? What is the City's policy about "replacing in kind"? He read from the Downtown Historic Conservation Plan, pg 61 regarding replacement of vinyl windows with wood. What is HPRC's purview?

Mr. Rhoades responded that this is under HPRC's purview but they do not have the authority to require Design Review in all cases because "in kind replacement" is allowed.

Ms. Wellman, Contract Attorney, clarified that if the proposed window size changed (enlarged or reduced in size) then the "in kind procedure" could not be utilized.

Commissioner Dean requested clarification on the decision before the Planning Commission. He asked if the Planning Commission could change any requirements.

Mr. Rhoades responded that the decision before the Planning Commission is either to grant the appeal in whole or in part, or deny the appeal.

Ms. Wellman explained that the replacement of the 3 front wood windows with vinyl windows requires a decision. This appeal requires a de novo decision.

Commission Ernst asked how or when the large front vinyl window was replaced.

Mr. Rhoades responded that City records do not show a specific date, but that it was likely replaced before the current requirements were in place.

### **Opened for Public Comment.**

Claudia Fraser, 410 West J Street, property owner and appellant, expressed frustration with the City's process. She desires to replace the old single-pane windows with updated energy efficient vinyl windows. She stated she has a permit for this work and the windows are paid for. The existing front vinyl window was put in years ago. It has cost them \$8,000 for the new windows. They would not have purchased them had then known they would have to go through this process. She stated her desire is that all the windows have a similar look.

Julian Fraser, 410 West J Street, property owner and appellant, stated that the City documents listing his property in the Historic District are incorrect.

His house was built in the late 1940's. He stated that HPRC does not have jurisdiction over his house. His contractor has a permit to install the new vinyl windows. He wants to have all the windows in the house match and expressed his desire to have the windows he purchased installed.

### **Commissioner questions.**

Commissioner Sherry asked if the replacement windows have the same framing or will the molding be removed?

Mr. Fraser responded that the new windows are paintable and will pop into the same size window opening.

Chair Thomas asked if the new windows are in a narrower frame and close in size to the existing wood windows.

Mr. Fraser responded that they will match the other windows in the house.

### **Public Comment.**

Jon Van Landschoot, an HPRC Commissioner, stated he is not representing the HPRC Commission but offered only his opinion as a resident, and was not in favor of the appeal. Mr. Van Landschoot commented that the HPRC minutes have not yet been approved. The Downtown Historic Conservation Plan does apply to this residence and it is therefore under the jurisdiction of the HPRC. The applicant, Mr. Fraser, was not present at the last HPRC meeting so the HPRC did not know that the new windows had been purchased, nor if the applicant knew about the requirement for staff review. Mr. Van Landschoot further described the HPRC process and guidelines. He indicated that if there was a staff mistake, as indicated by Mr. Fraser, the City could have some liability.

Mr. Rhoades responded that there was no mistake made by Building and Planning staff. He explained that the Frasers' contractor came to the office for permits to replace the windows. The contractor told staff that all existing windows on the house were vinyl. There was an extensive conversation held with staff and staff noted in the computer system that the old windows being replaced were the same material as the new ones. When it came to staff's attention that the existing windows were wood and not vinyl, staff left a note at the house asking the Frasers to contact City staff. Their contractor apparently misrepresented the facts.

Mr. Fraser stated that the HPRC rules are subjective and arbitrary. His contractor went to get the permit and then the new windows were purchased.

Toni Haughey, an HPRC Commissioner, spoke against granting the appeal. She stated that the house was built in 1943 and is historic. Regarding the replacement of 3 windows from wood to vinyl, she has a difference of opinion with her fellow Commissioners. Her opinion is that all the vinyl windows should be replaced with wood windows. The HPRC was trying to compromise with the applicant. The HPRC would like to see the applicant keep the 3 original wood windows and repair them. If they cannot be repaired, then they should be replaced "in kind." Ms. Haughey voted against the motion at the HPRC meeting. She further stated that all the front windows should be wood.

Leann Taagepera, an HPRC Commissioner, began speaking and was interrupted by Mr. Frasier.

Leann Taagepera stated that she is not representing the HPRC, and that she is also a historic homeowner in Benicia. She spoke against granting the appeal. Ms. Taagepera summarized her letter and its attachments that had been distributed to the Commission and were available at the side table for members of the public. She stated that the HPRC did approve replacing the existing wood windows (on the front elevation) with wood windows. Wood windows can be made exactly like those that are currently there. This is the first appeal of HPRC since she has been on the Commission. The vinyl windows permitted are not in view from the street so it doesn't harm the historic district by the HPRC on the side elevations.

Mr. Fraser interrupted Ms. Taagepera.

Chair Thomas asked Mr. Fraser to return to his seat.

Commissioner Dean asked if the 3 wood windows were to be replaced with vinyl windows would that be a violation of SHPO standards and not allowed with a CEQA exemption?

**Public Comment Closed.**

Chair Thomas expressed his desire to proceed with providing his comments on this item. He stated that he studied the SHPO Standards, and looked at the property prior to the meeting. His opinion is that the replacement windows are consistent with SHPO standards based on the following:

1. The SHPO standard is not a black/white document. If the issue is visibility from the street, the side windows (that were approved by HPRC to be replaced with vinyl windows) are equally visible. The front prominent window is vinyl. The 3 recessed windows are visible but only slightly more visible than those on the side of the house.
2. He reviewed the documents and the house is considered historic, but the windows were not mentioned. One can't tell from the street if the existing windows are wood except for one decorative piece on the trim. The windows are not significant.
3. The new vinyl windows will look more like the wood windows than vinyl. Most citizens would not be able to tell the difference.
4. These 3 windows are not an important feature of the house. If the test is visibility from the street, one really cannot see the recessed front windows; they are just as difficult to see from the street and the side windows.

Commissioner Sherry stated that he agrees with Chair Thomas. He also visited the site and agrees with the HPRC about holding to a visual standard, but could argue that the materials may not appear to be that different.

Commissioner Dean stated that he spoke with Jon Van Landschoot and Toni Haughey before the Planning Commission meeting about this project. He was on the original HPRC and spent a number of meetings working on a window policy. Regarding the visual issue, the spirit is about keeping original materials to maintain original integrity of the structure. There is a balance of liveability while maintaining the historic integrity of the residence. At the time he served on the HPRC, the policy was that all wood windows must be replaced with wood, not just those visible from the street. His opinion is the wood window policy should be maintained. He supports the HPRC decision and would like to see the Planning Commission uphold it.

Commissioner Ernst asked about a difference of statements between staff and the applicant about what happened at the permit counter. He agrees with upholding the HPRC decision to require wood windows.

Mr. Rhoades restated and emphasized that City staff did not make a mistake regarding issuing the building permit because at the time of issuance the contractor stated all the existing windows were vinyl. It states on the building permit that the applicant is replacing vinyl with "in kind" (vinyl) windows. The only reason the permit was issued and approved was based on the contractor's statement that all existing windows were vinyl.

Commissioner Oakes stated that he supports staff's decision. The conversation at the HPRC is holistic and the reality is that materials change over time. These windows have an insignificant impact to the historic quality of this residence.

Chair Thomas commented that 75% of the windows on this residence are now vinyl and 25% wood.

Commissioner Syracuse asked if the Planning Commission could request that the City Council offer the applicant an offset for their financial loss.

Commissioner Ernst commented that maybe the contractor should reimburse the applicant for the extra cost since the contractor misrepresented the facts to the City.

On a motion made by Commissioner Ernst and seconded by Commissioner Dean that the Planning Commission uphold the HPRC's decision denying a request by Julian and Claudia Fraser for replacement of 3 front wood windows with vinyl, failed by the following (tied) vote:

Ayes: Commissioners Dean, Ernst and Syracuse  
Noes: Commissioners Oakes, Sherry and Chair Thomas  
Absent: Commissioner Smith  
Abstain: None

The motion failed for lack of a majority.

The Commissioners and City Attorney discussed the above action.

On a motion made by Commissioner Sherry and seconded by Commissioner Oakes, that the Planning Commission continue discussion of this item and vacate the previous vote, and adopted by the following vote:

Ayes: Commissioners Dean, Ernst, Oakes, Sherry and Chair Thomas  
Noes: None  
Absent: Commissioner Smith

Abstain: None

Commissioners continued their discussion -- key points include: the HPRC goals and how a change of materials affects historic integrity, and vinyl windows will look very similar (Sherry); if all were wood windows, then wood windows should be required. In this case 75% of the windows are vinyl, including the most prominent front window, therefore it is not significant in this case compared to the burden on the resident (Thomas).

Commissioner Oakes began a motion to adopt staff's recommendation.

Commissioner Ernst asked for clarification of staff's recommendation.

Mr. Rhoades and Ms. Wellman explained what a "yes" or "no" decision on staff's recommendation would mean.

Commissioners discussed and considered if this decision would set a precedent that may apply to other projects.

Ms. Wellman commented that the Commission is able to determine what's appropriate on a case by case basis.

On a motion made by Commissioner Sherry and seconded by Commissioner Oakes, the Planning Commission hereby grants the appeal and approves the appellants' request to replace the 3 front wood windows with vinyl windows to the building at 410 West J Street, adopted by the following vote:

Ayes: Commissioners Ernst, Oakes, Sherry, Syracuse and Chair Thomas.

Noes: Commissioner Dean

Absent: Commissioner Smith

Abstain: None

**B. USE PERMIT FOR AN INDOOR ARCHERY RANGE AT 3001 BAYSHORE ROAD, UNIT #9**

3001 Bayshore Road, Unit #9

APN: 0080-340-020

11PLN-67 Use Permit for Commercial Recreation and Entertainment

**PROJECT SUMMARY:**

In accordance with the Benicia Municipal Code Section 17.32.020, the applicant requests approval of a Use Permit for the establishment of an indoor archery range at 3001 Bayshore Road of approximately 4,500 square feet. The archery range will have regular business hours of Monday through Friday 12:00pm – 9:00pm and Saturday 9:00am – 5:00pm.

**Staff's Recommendation:**

Approve a Use Permit for an indoor archery range (Commercial Recreation and Entertainment) located at 3001 Bayshore Road, Unit #9, based on the findings, and subject to the conditions listed in the attached resolution and as discussed during the public hearing.

Commissioner Ernst recused himself due to a conflict of interest.

Mr. Rhoades reviewed the application and proposed project. The new proposed indoor archery range would be located in an existing multi-tenant building in the industrial park. The space is in the back of the building and allows for 24 participants. Staff prepared an informal parking survey to assist with evaluating whether this additional use would create a parking problem at this location.

**Questions from Commissioners.**

Commissioner Sherry asked for a more detailed explanation of the parking survey used for this project.

Mr. Rhoades responded that the City parking requirements for this type of use are not specified in the code and that a Use Permit process addresses the use on a case by case basis. There are lots of spaces available during their business hours. The purpose of the survey was to make sure there would be no conflict with the current industrial use. After review, staff has determined that there should be plenty of parking spaces available for this business.

**Opened for Public Comment.**

Carl Massey, applicant, revealed his background, and discussed the proposed business and use. He taught archery for eleven years and wants to provide a place for children and youth to learn and practice this sport. No other archery is located in town. Their busiest hours are from 6 to 9 pm and Saturday mornings.

Commissioner Dean asked how the lanes are organized, if there are partitions and will rental equipment be available.

Mr. Massy answered that there will be a partition wall and all activities are organized for safety. Yes, rental equipment will be available.

Commissioner Sherry asked if there would be any retail space; he also expressed concern about safety – such as, could an arrow pierce the roof; and is there an emergency response procedure.

Mr. Massey responded that yes they may repair and sell bows, arrows and other equipment. Arrows would not pierce through the metal roof – they have blunt tips. He will provide first aid kits and instructors are CPR/first aid certified. He will have insurance and he has never seen an accident in his experience.

**Other public comment.**

A resident spoke in favor of the applicant. She is an archery coach and has taught at Benicia Middle School. She supports this business applicant. This sport is very safe for youth and children.

**Public Comment closed.**

Commissioner Dean spoke in favor of this applicant. It is an opportunity to fill more space in the industrial park.

On motion of Commissioner Syracuse and seconded by Commissioner Sherry, the Planning Commission approved a Use Permit for an indoor archery range at 3001 Bayshore Road, adopted by the following vote:

Ayes: Commissioners Dean, Oakes, Sherry, Syracuse and Chair Thomas  
Noes: None  
Absent: Commissioner Smith  
Abstain: Commissioner Ernst

**C. GENERAL PLAN CONFORMANCE ASSOCIATED WITH VACATION OF PORTION OF ACCESS EASEMENT ADJACENT TO 532 CAMBRIDGE DRIVE**

**PROJECT SUMMARY:**

To allow the property owner of 532 Cambridge Drive to purchase a pie-shaped portion of an existing easement along his east property line. The portion is approximately 40' wide at the north edge of the subject property, tapering easterly to 20' at the south property boundary. The change still allows for a wide access to the open space area that is approximately 38 feet wide along Cambridge Drive, and remains 25'

wide at the open space boundary. Consistent with the Benicia Municipal Code, staff recommends Commission approval of a General Plan Conformance to vacate the approximately 2,340 square feet of existing access easement adjacent to 532 Cambridge Drive. The proposed request is that the Planning Commission determines that the vacation of a portion of an existing open space access easement on the east edge of the property at 532 Cambridge Drive is consistent with the General Plan. A 25+ foot wide strip would be retained for public access.

**Staff's Recommendation:**

Approve a General Plan Conformance to vacate an access easement along the east side of the property at 532 Cambridge Drive consistent with the goals, objectives and policies of the General Plan and based on the findings set forth in the attached resolution.

Mr. Rhoades presented a brief overview of the item. The adjacent resident wishes to purchase at fair market value the access easement adjacent to his property. It's a triangular shape parcel and leaves 25 feet for open space access. It is zoned residential, not open space.

**Commissioner Questions.**

Commissioner Ernst asked if the City sells this easement, will there be 25' access for fire trucks. This parcel is wider at the street and narrower at the back.

Commissioner Sherry commented that it is not an open space easement but a parcel deeded to the City. He noted that staff should take the topography into account, which makes the open space access narrower. Will the property owner fence this in? The existing pole with sign (shown in the staff report) may need to be relocated. The City may want to install a post and chain to allow foot and bicycle access to the remaining access easement but prevent vehicles from using it. He asked if that could be added as a condition.

Mr. Rhoades responded that we can forward those comments to the City Council and check with Public Works staff on the cost to relocate the sign.

Commissioner Syracuse asked if this additional square footage would provide enough room to build another house.

Mr. Rhoades responded that no, it falls short of that size.

Commissioner Ernst referred to Commissioner Smith's written comment that 25' may not be enough room for fire access. Has the Fire Dept been asked to comment.

Mr. Rhoades responded that he will forward those concerns to City Council.

Commissioner Sherry commented that the access at the back of the access parcel is closer to 20' because of the slope.

Commissioner Dean asked about General Plan consistency, and whether there are any polices on the sale of public property. Is there a public benefit by the sale?

Mr. Rhoades responded that the action before the Planning Commission is to determine General Plan consistency. The parcel will be sold at fair market value and an appraisal is being conducted. There is no loss of open space to the public, which is a City policy.

**Public Comment Opened.**

Robin Stewart, owner of 532 Cambridge Drive and applicant, stated that this request was made 3 years ago. She and her husband have been in touch with Fire Department staff and they have no concerns about the easement purchase. There are other access points the Fire Staff can use and 20' is ample width. The parcel will look no different than it does now other than they it will be fenced.

No questions from Commissioners.

**Public Comment closed.**

On motion made by Commission Ernst and seconded by Commissioner Syracuse, the Planning Commission hereby finds the vacation of a portion

of open space access easement in conformance with the goal, policies and programs of the General Plan, and directs staff to forward Planning Commission's recommendations to City Council concerning adding a post and chain across the open space access and moving the existing sign, and adopted by the following vote:

Ayes: Commissioners Dean, Ernst, Oakes, Sherry, Syracuse and Chair Thomas  
Noes: None  
Absent: Commissioner Smith  
Abstain: None

## **VI. COMMUNICATION FROM STAFF**

Mr. Rhoades informed the Commission of the 2012 Meeting Calendar memorandum distributed to Commissioners at the beginning of the meeting. The next regular meeting of the Planning Commission is January 12, 2012. The rest of the 2012 meeting calendar will be agendaized at the next meeting for Commission approval.

Mr. Rhoades informed the Commission that the New Harbor Church (on Blake Ct) project is moving forward. The applicant has agreed to present their site plan and staff's diagram plans to the HPRC and Planning Commission at a joint workshop. Mr. Rhoades asked if Commissioners would prefer a date of 1/12 (before the regular meeting) or on 1/26 (the HPRC regular meeting).

The Commissioners decided on the January 12 meeting date.

Mr. Rhoades informed the Commission that regarding the 410 West J Street project, a new procedure has been added to the building permit application process. The new procedure will require the applicant to sign a statement specifying the materials of existing features and specifications for new features in order to determine if the modification is "in-kind" or requires Design Review approval. Staff will inspect the property before the permit is finalized.

## **VII. COMMUNICATION FROM COMMISSIONERS**

Commissioner Dean commented on surplus property sales and Planning Commission determining General Plan conformance. He stated that it feels like the Commission is "bending some lines" to make the points needed. The Commission is looking at one narrow issue and the General Plan conformance is

one sub-set of that, which is frustrating. Isn't the real issue "is the property sale a good idea or not?"

Ms. Wellman read from Gov. Code Section 65402 which requires the Planning Commission to find that the sale of public property is in conformance and consistent with the City's General Plan. There are a number of actions that require the Planning Commission to make these findings before the City Council can act.

Commissioner Dean asked for any recommendations or what is the mechanism for a Commissioner.

Ms. Wellman advised the Commission to pass along comments with your findings, but it does not weigh in on the vote.

## **VII. ADJOURNMENT**

Meeting was adjourned at 9:45 pm.



**DRAFT**

**BENICIA PLANNING COMMISSION AND  
BENICIA HISTORIC PRESERVATION REVIEW COMMISSION  
CITY HALL COUNCIL CHAMBERS  
SPECIAL JOINT WORKSHOP MINUTES**

**Thursday, January 12, 2012  
6:00 p.m.**

**I. OPENING OF MEETING**

**A. Pledge of Allegiance**

**B. Roll Call of Commissioners**

**Present:** Planning Commissioners: Don Dean, Rick Ernst, George Oakes, Rod Sherry, Belinda Smith, Lee Syracuse and Chair Brad Thomas.

HPRC Commissioners: Chuck Mang, Steve McKee, Jon Van Landschoot, Mike White and Chair David Crompton.

**Absent:** Commissioners Toni Haughey and Leann Taagepera (both excused)

**Staff Present:** Kat Wellman, Contract Attorney  
Charlie Knox, Public Works & Community Development Director  
Mark Rhoades, Interim Land Use and Engineering Manager  
Lisa Porras, Senior Planner  
Kathy Trinque, Administrative Secretary

**C. Reference to Fundamental Rights of Public** - A plaque stating the Fundamental Rights of each member of the public is posted at the entrance to this meeting room per Section 4.04.030 of the City of Benicia's Open Government Ordinance.

**II. OPPORTUNITY FOR PUBLIC COMMENT**

**A. WRITTEN**

None.

**B. PUBLIC COMMENT**

None.

### III. SPECIAL MEETING AGENDA ITEM

#### A. WORKSHOP – NEW HARBOR COMMUNITY CHURCH, NEW FACILITY PROPOSED AT 882 BLAKE COURT AT ROSE DRIVE.

##### PROJECT PROPOSAL:

The City of Benicia is processing an application from New Harbor Community Church to construct a new 20,244 sq. ft., multi-use, two-story church at the terminus of Blake Court, east of Rose Drive. Pursuant to a prior agreement with the City in June 2001, the land was dedicated to a church to be selected by the Benicia Council of Churches. New Harbor Community Church was the selected recipient of this land. However, the Church will still need to get Use Permit approval from the Planning Commission since the location is in the City's Single Family Zone District. In addition, the project's overall site plan and building disposition requires Design Review approval by the Historic Preservation Review Commission (HPRC). Finally, because the project in its current form provides less than the required landscaping, a Variance will also need to be approved by the Planning Commission. This project was previously presented to a joint workshop of the Planning Commission and HPRC on September 10, 2009. City staff has been working with the applicant on overall site design to address the concerns that were raised at the previous workshop. Several schematic drawings will be presented at this workshop.

The purpose of this meeting was to receive feedback and input from citizens and Commissioners regarding new conceptual site designs produced by staff.

##### **Recommendation:**

Staff recommended that the Planning Commission and Historic Preservation Review Commission review alternative site design concepts for the proposed two-story 20,244 sq. ft. New Harbor Church at 882 Blake Court, at Rose Drive, and direct the applicant to draw upon staff's suggested conceptual site plan (Diagram 4) and continue processing the application.

Lisa Porras, Senior Planner, presented the proposed project. No formal action by either Commission is requested or required, this item is for discussion and comments from commissioners and members of the public. Commissioners are requested to provide direction to the applicant so the project may proceed for approval separately and at future dates.

Ms. Porras continued with a power point presentation that reviewed the site history, project description, building overview, lot size, parking, aerial view, architectural rendering and the current site plan. The building shown in the center of the site does not meet findings for design review and use permits. Ms. Porras read the necessary findings and explained staff's review process. Staff has expressed these concerns to the Church (applicant) and outlined the findings needed for the project to be approved.

Ms. Porras presented 4 rough sketches prepared by staff of possible site plans and explained each. The number of required parking spaces is determined by the size of the worship building (that also contains a basketball court). The applicant asked to hear from the community and the HPRC and Planning Commissions before spending additional funds on additional design or environmental review of the project.

In conclusion, Ms. Porras stated that the purpose of the meeting is to hold a discussion focused on the proposed site design. The goal is to bring a project forward that can meet the necessary findings. Staff will continue to work with the applicant and bring their project back for formal approval. First, design review approval from HPRC will be scheduled and second, Use Permit approval will be scheduled for the Planning Commission.

HPRC and Planning Commissioners asked staff for clarification regarding: average square footage of surrounding single family homes, quantity of site grading required, number of required parking spaces, playground placement, history of how site was selected for a religious use, if number of parking spaces is reduced if the basketball court was removed from the worship building.

Kat Wellman, Contract Attorney, advised Commissioners that the City must be careful not to discriminate toward a religious facility at this location. She explained that the religious use for this site was decided in 2002 by the City Council. The City can condition the number of services, activities, traffic issues, etc., but not the use. She also clarified that the federal Religious Land Use and Institutionalized Persons Act (RLUIPA) applies to an application for a religious facility. In that regard the City may not treat this use differently than similar uses. Commissioners are not making a decision for the applicant to move forward with this site design at this meeting, rather giving direction to the applicant of how best to meet the needs of the community.

Commissioners asked staff for additional clarification on why the view of Blake Court from Rose Drive is important, the number of community use facilities in the city, landscaping requirements, child care program details, sustainability goals, why open space does not mitigate landscaping requirements, square footage of the main worship building, potential for landslides in the open space area and whether the basketball court should be included in the worship center.

Chair Thomas opened the meeting for public comment, with a reminder to focus on the site and design and not to discuss whether or not the project should be built.

**Public Comment:**

David Bowie, attorney for the applicant, stated that this project has previously been presented to the City. The project has been well described by staff. The applicant is sensitive to the neighborhood's concerns and asks the City to balance the needs of all parties. Regarding the basketball court, the applicant is flexible about its inclusion in the worship building. The applicant has hired a new project architect to develop a new site design and is interested in hearing comments from everyone. The original design does fit the site and he understands there are parking and traffic concerns from the neighborhood. The EIR will be completed soon. The church currently conducts multiple services and does hope to grow its congregation. Any overflow traffic and parking issues can be addressed. The applicant is open to conditions to make this project work for the neighborhood.

Kerry Degavre, of 869 Rose Drive, spoke in opposition of the proposed site plan and project. She said that she represents 98% of the neighbors and she has spent many hours collecting signatures and researching this project. She is not in favor of the size of this church.

Rick Allen, of 917 Bradford Ct, spoke in opposition of the proposed site plan and project. He stated that 450 neighbors do not want the church built. Rose Drive is dangerous with many accidents. Police reports confirm the number of accidents at the intersection of Bolton Circle and Rose Drive. An error was made when this decision was made.

Marguerita Hunt, of 890 Rose Dr., spoke in opposition of the proposed site plan and project. She stated that the plan is overly optimistic about the

number of required parking spaces – 75 is not enough to accommodate various activities that would be held at this church. The density of the church is greater than that of surrounding single-family homes.

Victoria Johnston, of 880 Rose Dr., spoke in opposition of the proposed site plan and project. She stated that this is not an appropriate site for a large church due to the traffic safety from the hill on Rose Drive. She expressed concern about cars exiting Blake Ct onto Rose Drive when more cars are entering for the next worship service. She loves the existing open space and chose her current residence for that reason.

Patricia Everhart, of 878 Channing Circle, spoke in opposition of the proposed site plan and project. She stated that the church should be one story to blend in with the residential neighborhood. The church should be as low impact as possible to the neighbors. Additional services and parking will impact neighbors and lower property values.

Buck Cabral, of 851 Clifton Ct, spoke in opposition of the proposed site plan and project. He stated that this project is like putting a square peg in a round hole. The City shouldn't force things. The traffic at the intersection of Rose Drive at Blake Ct is too busy and he would like a traffic signal installed. The police can't handle all the traffic issues here. He does not think this project is a good idea.

A resident of 945 Rose Drive stated that a 20,000 sq ft facility is too big and would have too much of a traffic impact on Rose Drive. Rose Drive traffic is bad now without it. Rose Drive traffic won't stop to let residents back out of their driveways. He wants the size of the facility reduced to reduce the impact on the neighborhood.

A resident of 763 Rose Drive spoke in opposition of the proposed site plan and project. Rose Drive traffic is horrible – cars drive 50 mph. He stated that he did not know about this project until he saw a yard sign about it. The church should be a small facility with limited parking.

Chair Thomas asked Ms. Wellman, Contract Attorney, about a limit to the number of speakers heard during public comment.

Ms. Wellman advised Chair Thomas that he may state if the public has anything new to add to the comments that have already been made, please do so, otherwise you may simply state that you agree with

previous comments. Also the Chair may state that public comment will be limited to a certain number of additional speakers.

Chair Thomas stated that due to time constraints the Commission will limit public comment to 3 more speakers.

Mike Spangler, of 928 Bradford Way, spoke in opposition of the proposed site plan and project. He expressed concern about traffic from Columbus Parkway, if the church provides daycare. A two-story structure is too big for the neighborhood. He has a major concern about the design, day care and traffic.

Jerry Beckman, of 884 Rose Dr, spoke in opposition of the proposed site plan and project. He wants the building scaled down so it is not so dominant and the parking lot gated and locked. He also expressed concern about traffic from Columbus Parkway backing up.

Tom Percival, of 914 Bolton Circle, spoke in opposition of the proposed site plan and project. He stated that the building is too large – a 1-story design would be better and to make sure the lighting on building and in parking areas is low.

Peggy Kooley, of 949 Rose Drive, spoke in favor of the proposed project. She stated that she wants to have a church on this site. She lives next to low income housing on Rose Drive. She wants the church to work with the community on this project.

**Public Comment closed.**

**Comments from HPRC Commissioners:**

HPRC Chair, David Crompton:

1. The landscaping requirement should be more than minimum standard.
2. The building design should be compatible with the neighborhood – i.e., break up the wall (less than 30 ft) that faces the residences.
3. Additional landscaping would break up the mass of the building.
4. No basketball court inside.
5. Liked staff's suggestion to locate the parking behind the church.
6. Break up the church building into a number of smaller buildings.

Commissioner Mike White:

1. The proposed trees located between the building and the neighborhood are the wrong type. Would rather see small redwoods or require the Church to work with the neighbors and plant what they would like.
2. Agrees with Chair Compton – also likes staff’s proposed site plan sketch #4.
3. The childcare should be moved away from the neighbors.
4. The windows on the building facing residences should be placed higher or use opaque glass to preserve the privacy of the neighbors.

Commissioner Jon Van Landschoot:

1. The building is too large and it violates all HPRC rules.
2. Install a traffic signal at Blake Ct/Rose Drive intersection.
3. 1 or 2 buildings on the site/no more than 1 story high.
4. This project is not a community center.
5. If offices are needed, build one on the north side and one on the south side.
6. No day care.
7. No basketball court.
8. Trees should be evergreen.
9. Worship services should be spaced 1 ½ hours apart.
10. No windows facing backyard of residences or use opaque glass.

Commissioner Steve McKee:

He expressed appreciation for the church’s willingness to be flexible and that a new architect has been hired.

1. He is unsure that Blake Ct should extend into the parking lot.
2. He is OK with a one-story church that is visible from the street.
3. He is OK without a basketball court and a smaller worship building.
4. Maybe the church could include some future parking spaces.
5. Would like to see the building mass at the back but keep the site line to open space open.
6. Is the lighthouse feature necessary?
7. Wants to see the traffic issues worked out.

8. Wants to see a site plan that is significantly different than the current one.

Commissioner Chuck Mang:

1. He agrees that it is OK to see the church from the street.
2. The elevation height on the worship building should be kept toward the rear.
3. The childcare should be in the rear and to the south.
4. This is a good project for the neighborhood.

### **Comments from Planning Commissioners:**

Commissioner Dean:

1. Agrees with other comments made by HPRC Commissioners  
The building is too large – either build it smaller or build multi-buildings to blend in with neighborhood and be less intrusive.
2. Don't agree that parking should be behind the building.
3. Push building back to give more space with the neighborhood.
4. Parking impacts
5. Work with neighbors on landscaping and parking.

Commissioner Ernst:

1. Agrees with HPRC Commissioners and Commissioner Dean.  
He would like the building re-designed as 1-story.
2. Prefers circular parking plan around the building.  
Feels sorry about possible impacts to Rose Drive residents.  
Is against the project and would like to see residents contact the City Council to keep this area as open space.

Commissioner Smith:

She recalled that there was a similar discussion with the neighborhood before the new Community Center was built and now the new Center is considered as asset to the neighborhood.

1. She agrees with the other commissioner's comments regarding the second story windows.
2. Move parking away from backyards of neighbors.

3. The building doesn't need to be a second story structure – reduce massing.
4. The lighting should not be intrusive for neighbors.
4. She asked for clarification on the open space – is it City property or the church's property.

Ms. Porras responded that the church owns the open space, but the City owns the open space easement.

Commissioner Sherry:

He summarized public and Commissioner concerns that he agrees with as follows:

1. The traffic and vehicle speed on Rose Drive needs to be mitigated.
2. Parking and overflow – church should maximize onsite parking.
3. Reduce the size of the building – limit occupancy load.
4. Shadow problem from building – restrict building height and move it away from the neighbors.
5. Access to parking during off-hours – add a gate across the parking lot.
6. Sound – likes staff's sketch #4 – the sound can be mitigated with landscaping and a soundwall.
7. Landscaping – the trees should not be too tall.

Chair Thomas adjourned the workshop by stating that this is a good project. He encouraged all parties that he believes the benefits of this project will outweigh the burdens to the neighborhood.

#### **IV. ADJOURNMENT**

The Special Meeting was adjourned at 7:50 pm.

**REGULAR MEETING  
BENICIA PLANNING COMMISSION  
CITY HALL COUNCIL CHAMBERS  
January 12, 2012  
Meeting Minutes  
7:45 pm (meeting started 8:00 pm)**

#### **I. OPENING OF MEETING**

**A. Pledge of Allegiance**

**B. Roll Call of Commissioners**

**Present:** Commissioners Don Dean, Rick Ernst, George Oakes, Rod Sherry, Belinda Smith, Lee Syracuse and Chair Brad Thomas.

**Absent:** None

**Staff Present:** Kat Wellman, Contract Attorney  
Charlie Knox, Public Works & Community Development Director  
Mark Rhoades, Interim Land Use and Engineering Manager  
Lisa Porras, Senior Planner  
Kathy Trinque, Administrative Secretary

**C. Reference to Fundamental Rights of Public** - A plaque stating the Fundamental Rights of each member of the public is posted at the entrance to this meeting room per Section 4.04.030 of the City of Benicia's Open Government Ordinance.

**II. ADOPTION OF AGENDA**

**III. OPPORTUNITY FOR PUBLIC COMMENT**

**A. WRITTEN**

None.

**B. PUBLIC COMMENT**

None.

**IV. CONSENT CALENDAR**

**A. Approval of the 2012 Planning Commission Calendar Identifying Hearing Dates**

On motion of Commissioner Oakes, seconded by Commissioner Sherry, the Consent Calendar was adopted by the following vote:

Ayes: Commissioners Dean, Ernst, Oakes, Sherry, Smith, Syracuse and Chair Thomas

Noes: None

Absent: None

Abstain: None

**V. REGULAR AGENDA ITEMS**

**A. USE PERMIT APPLICATION FOR A LARGE FAMILY DAY CARE AT 130 GILL WAY**

**PROPOSAL:**

In accordance with the Benicia Municipal Code Section 17.24.020, the applicant requested approval of a Use Permit to establish a large family day care facility at 130 Gill Way. The applicant currently operates a large family day care facility at 216 Eaton Court, but will be moving and requested use permit approval to operate the large family day care, maximum of 14 children, at this new location. The applicant requested hours of operation from 6:00 a.m. to 5:00 a.m., seven days a week.

**Recommendation:**

Approve a Use Permit request to allow a large family day care facility at 130 Gill Way based on the findings, and subject to the conditions listed in the resolution.

Lisa Porras, Senior Planner, provided an overview of the proposed project and the reviewed the action before the Planning Commission at this meeting. She read the Zoning Administrator's conditions included in the staff report and those conditions recommended by staff.

Mark Rhoades, Interim Land Use and Engineering Manager, provided a brief overview as he conducted the Zoning Administrator's hearing on November 23, 2011. He briefly explained that the State has made family day care facilities a priority and it is to be considered a residential use. The applicant has operated a large family day care at her previous residence at 216 Eaton Court without neighborhood complaints. There is another large family day care operating as a legal non-conforming use two doors away from the 130 Gill Way. The Zoning Administrator's conditions are rather conservative and the other day care has stated that they will comply with the same standards,

Commissioners held a discussion with staff regarding the following: terms of the use permit and termination date (use permit in effect until vacated or revoked based on complaints); why is there a legal non-conforming use (established prior to the zoning ordinance and allowed unless there are the City holds nuisance proceedings from complaints); how many children are allowed (up to 14, per State law); operating hours are 6:00 to 5:00 am? (Staff is recommending that hours be limited to 6:00 am to 8:00 pm); does the Zoning Ordinance regulate how close family day care centers can be to each other? (no); is the 23/hour per day operating hours typical? (yes).

**Opened for Public Comments**

Applicant, Claudia Claverie, 130 Gill Court, explained that the reason she requested 23 hour/day operating hours is to provide emergency daycare for families when needed. She stated that she has been a licensed day care provider since 1976. She provides quality childcare. She has a degree in early child development and her business is accredited and meets or exceeds all licensing laws.

Ms. Claverie answered questions from Commissioners regarding the number of children she cares for at one time and how her schedule works (she does not have 14 children at one time – the number of children on site varies throughout the day); if she is comfortable with the restricted operating hours (she stated that she prefers the 23 hr/day operating hours); how long is her lease (not sure at this point).

Becky Billing, of 2064 Havenhill Dr, resident and Coordinator for Solano County Childcare Planning Council, spoke in favor of the proposed Use Permit. She stated that Solano County has a huge need to infant/toddler care. She knows Claudia, that she has both a degree in child care and a quality program.

Gerry Raycraft, Childcare Facility Coordinator of Childcare Network, spoke in favor of the proposed Use Permit. He explained how family childcare functions. He stated that the average enrollment in Solano County is 7.25 children and in Benicia it is just less than 7 children. Outside playtime is part of a residential use. Ms. Claverie won't have all 14 children playing outside every day at 8:00 am. He requested that the Commission remove the 9:00 am restriction on outside play.

David Pillsbury, of 139 Gill Way, spoke in opposition to the Use Permit. He is opposed to day care use in this neighborhood. There is already 1 day care which causes noise and additional traffic. He wants the conditions to limit hours from 6:00 am to 6:00 pm, five days per week.

Leslie McFadden, of 132 Gill Way, spoke in opposition to the Use Permit. She lives just below 130 Gill Way and can hear everything. There is no fence across the backyard. She is retired and fighting cancer. She wants peace and quiet.

Carrie Peterson, of 132 Gill Way, spoke in opposition to the Use Permit. She stated that they already have a large family day care on the block and she knows what the neighborhood impacts are. She does not want two on the

same street with one house in between. She wants peace and quiet. The proposed Use Permit is an unfair burden to the neighborhood.

Karl Hellevick, of 135 Gill Way, spoke in opposition to the Use Permit. He is concerned about additional traffic, noise, pollution and parking. He is also concerned that his house will lose value. The area should be tested for radon and asbestos because there are many residents with cancer.

**Public Comment closed.**

Commissioner Ernst asked if the daycare at 130 Gill Way was operating now.

Mr. Rhoades responded no, the existing daycare at the other Gill Way residence is operating.

Chair Thomas asked about the lack of a backyard fence.

Ms. Claverie responded that she plans to construct a new back yard fence once the Use Permit is approved. She will also supervise children playing in the backyard.

Commissioner Smith asked for clarification on the conditions of approval and findings. She finds some conditions onerous unless applied to all day care providers.

Commissioner Ernst stated concern about re-directing traffic onto White Chapel, which may create a nuisance for other neighbors. He also agrees with Commissioner Smith that some conditions need to be removed.

Commissioner Sherry stated that he also agrees with Commissioner Smith. Gill Way is a narrow street and White Chapel is steep. He would like to see the applicant leave 1 parking space in the driveway open so parents could pull into the driveway and park there. Also agrees that some conditions need to be removed or modified.

Commissioner Dean stated that he wants to remove #3 in the resolution so that no parent has to be without childcare in an emergency. He asked staff for further clarification on #6 and #13. He would like to remove the "3 strikes" since the City has an enforcement mechanism. He stated support for the Use Permit.

Commissioner Oakes stated that he is opposed to granting this Use Permit because he does not agree with having two day care facilities this close together in the same neighborhood.

Commissioners reviewed and discussed the conditions of approval listed in the proposed resolution.

Mr. Rhoades read the conditions and revisions were made as Commissioners reached consensus.

Commissioners reviewed each condition listed in the resolution with the applicant, Claudia Claverie. Ms. Claverie concurred that she would be able to operate her day care facility under the revised conditions of approval.

Commissioner Ernst made a motion to approve the Use Permit and it was seconded by Commissioner Syracuse.

Commissioners Smith commented that she sympathizes with the neighbors, but she is obligated to support the Zoning Ordinance and Municipal Code which contains nothing that would prohibit this Use Permit.

Commissioner Ernst made some additional comments concerning noise impacts in his neighborhood.

Commissioner Oakes asked for a point of order.

Ms. Wellman explained that if the Commission is adopting the resolution, the findings and conditions are also being adopted.

Commissioner Oakes expressed frustration that the Commission has not determined that this Use Permit is detrimental to the health and safety of the public. He further stated that the Commission has not mitigated the health issue. He has no problem with the day care facility except that it is in the wrong location.

Commissioner Sherry responded that while this is inconvenient to the neighborhood, those issues have been mitigated by the conditions of approval.

On motion of Commissioner Ernst and seconded by Commissioner Syracuse, the proposed resolution, with amended conditions of approval, was adopted by the Planning Commission of the City of Benicia at the regular meeting of said Commission held on the 12<sup>th</sup> day of January 2012 and adopted by the following vote:

Ayes: Commissioners Dean, Ernst, Sherry, Smith, Syracuse and Chair Thomas.

Noes: Commissioner Oakes

Absent: None

Abstain: None

**VI. COMMUNICATIONS FROM STAFF**

None.

**VII. COMMUNICATIONS FROM COMMISSIONERS**

Commissioner Dean asked staff when agendas are posted on the City's website are attachments also posted.

Kathy Trinique, Administrative Secretary, responded yes, however, sometimes due to technical issues, it is necessary to scroll to the bottom of the agenda page and click on the document icon to view them.

Commissioner Smith asked when the Commission would be reviewing the work program.

Chair Thomas responded that he understood that it would be agendized according to workload.

Commissioner Smith stated that she would like to see Planning policies scheduled at an upcoming meeting.

Commissioner Dean asked if staff would email a current department organizational chart to Commissioners.

**VIII. ADJOURNMENT**

The meeting was adjourned at 10:10 pm.