



# REPORT TO COUNCIL

## City of Sacramento

915 I Street, Sacramento, CA 95814-2604  
www. CityofSacramento.org

# 29

Public Hearing  
**June 5, 2008**

Honorable Mayor and  
Members of the City Council

**Title:** Appeal of Metro PCS at Washington Plaza (P08-003)

**Location/Council District:** 1318 E Street (002-0124-006,-007,-008) / Council District 4

**Recommendation:** Conduct a public hearing and upon conclusion 1) adopt a **Resolution** approving the Environmental Exemption per the California Environmental Quality Act. Section 15332; and 2) adopt a **Resolution** denying the appeal of the Planning Commission approval for a request to install six (6) façade mounted cellular panel antennas on the elevator penthouse atop a nine story apartment complex on approximately 0.45 acres in the Multi-Family (R-3A) zone.

**Contact:** Jason Hone, Planner, (916) 808-5749; Stacia Cosgrove, Senior Planner, (916) 808-7110

**Presenters:** Jason Hone, Planner, 808-5749

**Department:** Development Services

**Division:** Planning

**Organization No:** 4885

### Description/Analysis

**Issue:** At its public hearing on April 24, 2008, the Planning Commission approved the project. Staff recommended that the Planning Commission approve the request based on the conclusion that the project was compatible with adjacent development, was consistent with General Plan policies on land use and telecommunications facilities, and was consistent with the Housing Authority Guiding Principle to seek creative partnerships with the private sector. On April 24, 2008, Mr. Mark Blackburn, an adjacent property owner, submitted written testimony in opposition to the project (Attachment 5).

The project is before the City Council for hearing on a third party appeal by Mr. Blackburn. Mr. Blackburn's appeal form and related information is included in this staff report as Attachment 4. Staff's response to the appeal is included on page 5 in the Background section of this report (Attachment 1). Under section

17.200.030(L) of Sacramento City Code, this hearing before the City Council on the appeal is de novo, and the hearing is to be conducted in the same manner that the Planning Commission heard the matter in the first instance.

**Policy Considerations:** The proposal is consistent with General Plan Policy which promotes improving and providing communication and utility services to all areas of the City (Section 7-10). While the City's General Plan is being updated, the City Council has adopted a vision for the future of the City, as well as several guiding principles to help guide the update and achieve this vision. This was done to ensure that new developments submitted during the ongoing update comply with the goals and policies that are being incorporated into the General Plan through the update. The applicable guiding principles with which this proposal complies include:

- Promote the City as the civic, cultural, and economic hub of the region and the Central Valley;
- Provide quality public services, facilities, and infrastructure that are distributed equitably throughout the City; and
- Promote joint-use of public facilities to optimize the use of public funds.

Telecommunication Policies: The City has developed telecommunication policies concerning siting preferences and facility location and design. A primary objective of these policies is to reduce or minimize the number and visibility of telecommunication facilities. Staff believes that this proposal is consistent with the intent of the Telecommunication Policy to prevent the proliferation of new monopolies in the City of Sacramento. The proposed project is also consistent with the siting preference of utilizing existing structures (public or private) that allow a facade mounted antenna.

The facility location and design guidelines emphasize minimizing the visibility of new telecommunication facilities through construction and design techniques. This project is consistent with the design guidelines in that the panel antennas will be painted to match the structure and the related equipment will be screened by a masonry wall matching the finish of the existing structure.

In August of 2007 the Sacramento Housing Authority approved Guiding Principles to address repositioning of its public housing asset. One of those principles directs the Housing Authority to seek creative partnerships with private sector sponsors. Staff finds that leasing space to Metro PCS is an example of just such a creative partnership.

**Environmental Considerations:** The proposed project is exempt from environmental review pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15332 as an infill development.

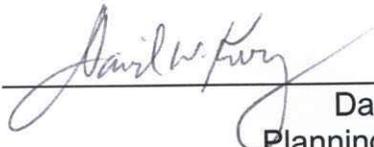
**Commission/Committee Action:** On April 24, 2008 the City of Sacramento Planning Commission heard and considered evidence regarding the project and by a vote of eight ayes with one recusal, approved the project. No public

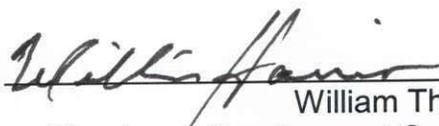
comments were given at the hearing. The Commission was provided with Mr. Blackburn's written comments in opposition to the project.

**Rationale for Recommendation:** The City Planning Commission approved the proposed project. This staff report reflects this decision and the resolution contains findings for approval of project entitlements.

**Financial Considerations:** This project has no fiscal considerations.

**Emerging Small Business Development (ESBD):** No goods or services are being purchased under this report.

Respectfully Submitted by:   
David Kwong  
Planning Manager

Approved by:   
William Thomas  
Director of Development Services

Recommendation Approved:

  
Ray Kerridge  
City Manager

**Table of Contents:**

Report	Pg 1
<b>Attachments</b>	
1 Background	Pg 5
2 Vicinity Map	Pg 9
3 Land Use and Zoning Map	Pg 10
4 Appeal Form (Filed 5/5/08)	Pg 11
5 Written Opposition from Mr. Blackburn (Submitted 4/24/08)	Pg 17
6 Radio Frequency Emissions Analysis Report of Findings	Pg 20
7 E-mail from Mr. Wright (President of Alkali and Mansion Flats Historic Neighborhood Association)	Pg 34
8 Letter from Mr. Wright in Response to the Appeal	Pg 35
9 Preservation File PB07-167 Certificate of Appropriateness	Pg 36
10 Resolution – CEQA Exemption	Pg 37
11 Resolution – Approving the project	Pg 38
Exhibit A: Site Plan	Pg 41

Exhibit B: Equipment Enclosure Details	Pg 42
Exhibit C: North Elevation	Pg 43
Exhibit D: West Elevation	Pg 44
Exhibit E: Antennae Photo-Simulation from 13th St.	Pg 45
Exhibit F: Antennae Photo-Simulation from E St.	Pg 46
Exhibit G: Equipment Enclosure Photo-Simulation	Pg 47

**ATTACHMENT 1****Background****Appeal of Planning Commission Approval and Staff Response:**

On April 24, 2008 the City of Sacramento Planning Commission heard and considered evidence regarding the project and by a vote of eight ayes with one recusal, approved the project. No public comments were given at the hearing. On April 24, 2008, Mr. Blackburn (property owner of an adjacent parcel at 1312 E Street) submitted written comments in opposition to the project. Staff transmitted Mr. Blackburn's written comments as well as the "Radio Frequency Emissions Analysis Report of Findings" provided by the applicant. These two items were included in a "Supplemental Material" packet that was provided to the City Planning Commission at the hearing. Mr. Blackburn's written opposition was based on a concern for the health effects of cell antenna emissions. Mr. Blackburn's April 24, 2008 comments are included in this staff report as Attachment 5. The report provided by the applicant (Metro PCS), which indicates that the antennas will comply with the Federal Communications Commission (FCC) guidelines for human exposure to radiofrequency electromagnetic fields, is included in this staff report as Attachment 6.

Mr. Blackburn's appeal (Attachment 4) is primarily based on the concern for the health effects of cell antenna emissions he raised in his written testimony provided to the Planning Commission on April 24, 2008. In response to the appeal, staff would note that the applicant has demonstrated compliance with FCC guidelines for human exposure to radiofrequency electromagnetic fields. The details of the site's compliance with FCC guidelines, as well as a standard RF safety plan, can be found in the *Radio Frequency Emissions Analysis Report of Findings* (Attachment 6). Conclusions of that report can be found on page 30 of this staff report. Under the Telecommunications Act of 1996, local agencies are prevented from imposing more restrictive standards related to radiofrequency electromagnetic fields from cellular telephone equipment than what is specified by the FCC.

Although Mr. Blackburn was not able to attend the hearing, he indicated that his wife would. Staff mistakenly informed Mr. Blackburn that the hearing would be held in the Second Floor Hearing Room of the Historic City Hall when it was in fact held in Council Chambers. On April 25<sup>th</sup>, the day after the Planning Commission hearing, Mr. Blackburn communicated to staff that his wife attempted to attend the hearing in order to provide public testimony but was told by security guards, at both the Historic City Hall and New City Hall, there was no public hearing. However, the public notice mailed to all property owners within 500 feet of the project site (in accordance with Sacramento City Code 17.200.010(C)) indicated the correct hearing location. There were no public comments given at the hearing.

**Project Summary:** The applicant is proposing to install six (6) façade-mounted panel antennas on the exterior of the elevator penthouse and to locate the appurtenant equipment on a nine (9) by ten (10) foot concrete pad at the foot of the north elevation of the existing structure. The proposed equipment enclosure will be screened by a masonry/stucco wall to match the exterior of the existing building. Staff received

neighborhood comments in response to early notification of this project. Those comments and resulting actions are described in the "Public/Neighborhood Outreach and Comments" section below.

<b>Table 1: Project Information</b>
<b>General Plan designation:</b> High Density Residential (30+ dwelling units per net acre)
<b>Central City Community Plan designation:</b> Multi-Family Residential
<b>Historic Preservation:</b> Washington Historic District (non-contributing resource)
<b>Existing zoning of site:</b> R-3A (Multi-Family zone)
<b>Existing use of site:</b> Nine-story SHRA Apartment Building ( <i>Washington Plaza</i> )
<b>Property area:</b> 0.45 gross acres (3 parcels)

**Previous Planning Entitlements:** There is no record of prior planning applications affecting this property. The proposed project has undergone concurrent staff-level preservation review (PB07-167) and was approved on January 9, 2008. The certificate of appropriateness is attached to this staff report as Attachment 9. Preservation staff supports the proposal to screen the related equipment with a painted masonry/stucco wall designed to match the finish of the existing building.

**Public/Neighborhood Outreach and Comments:** Staff sent early project notification to the Washington Park Historic Neighborhood Association as well as the Alkali and Mansion Flats Historic Neighborhood Association. The Washington Park Historic Neighborhood Association had no comments on the project. Staff was contacted by Sean Wright of the Alkali and Mansion Flats Historic Neighborhood Association regarding concerns with the equipment enclosure as it was initially proposed. The applicant initially proposed a wrought-iron enclosure to match existing fencing on the site. The applicant revised the equipment enclosure to include a masonry/stucco wall in order to address Mr. Wright's concerns regarding the visual impact of the equipment. An e-mail from Mr. Wright indicating support of the proposed screening is included in this staff report as Attachment 7.

**Environmental Considerations:** The Development Services Department, Environmental Planning Services Division has reviewed this project and determined that it is exempt from the provisions of CEQA (the California Environmental Quality Act) under Class 32, Section number 15332. Projects exempted under Class 32, Section number 15332 consists of a project that is consistent with the General Plan, is located within the City limits, is located within an area not greater than five acres in size with no habitat value, will not have significant effects relating to traffic, noise, air quality, or water quality and can be adequately served by utilities and public services.

**Project Design:**

Land Use

The applicant proposes to install six (6) façade-mounted panel antennas on the exterior of the elevator penthouse atop an existing nine-story apartment building and to locate the appurtenant equipment on a nine (9) foot by ten (10) foot concrete pad at the foot of the north elevation of the existing building. The site is located in the Multi-Family (R-3A) zone. Section 17.24.050(58)(d)(ii)(2) of the zoning code states that a Planning Commission special permit may be issued to allow for a building façade-mounted panel antenna and related equipment in a residential zone on multi-family structures. In evaluating special permit proposals of this type, the Commission is required to make the following findings:

A. A special permit shall be granted upon sound principles of land use.

In this case, staff finds that the proposed use is allowed in this zone subject to a Special Permit and that the project as conditioned is compatible with adjacent developments in the area. Façade-mounted panel antennas are a preferred alternative to the proliferation of new monopoles in the region.

B. A special permit shall not be granted if it will be detrimental to the public health, safety or welfare, or if it results in the creation of a nuisance.

Staff finds that the proposed façade-mounted panel antennas and related equipment as conditioned will not be detrimental to public health, safety or welfare nor will it result in the creation of a nuisance. The applicant has demonstrated that the antennas will comply with the Federal Communications Commissions guidelines for human exposure to radiofrequency electromagnetic fields. The antennae, painted to match the building and located on the elevator penthouse will be minimally visible and not accessible to the public. The related equipment is adequately screened and does not inhibit pedestrian access to the building, it does not impact use of the open space amenities on site, and it will have locked access.

C. A special permit use must comply with the objectives of the general or specific plan for the area in which it is to be located.

The proposed project is consistent with the General Plan Policy of promoting and supporting communications facilities within the City as well as the Guidelines for Telecommunications Facilities (GP Section 7-10).

#### Access, Circulation and Parking

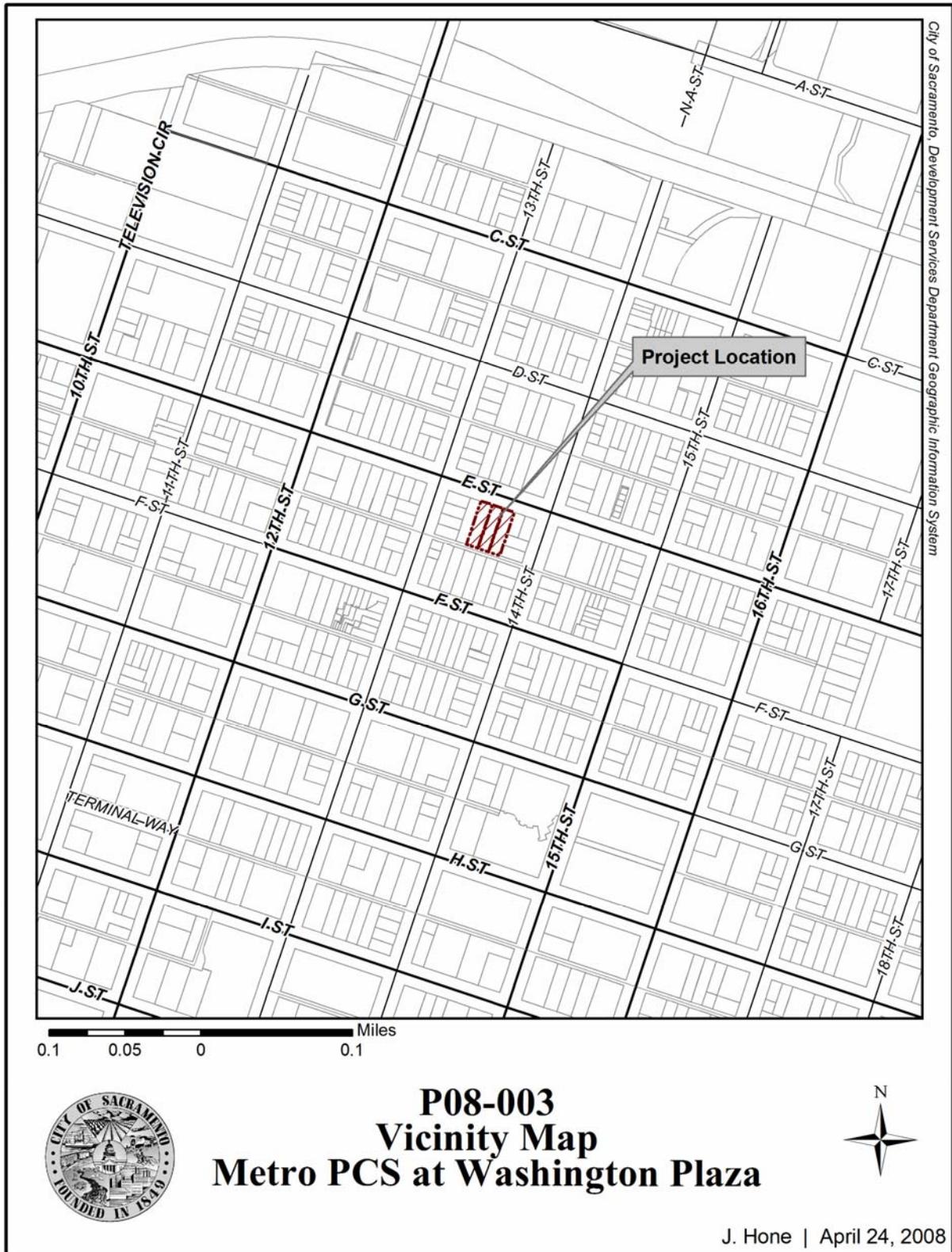
The proposed project will not affect the existing access, circulation or parking on the site. The proposed façade-mounted panel antennas are located on the roof of the existing nine-story apartment building and are not publicly accessible. The proposed equipment enclosure is to be constructed in a space that will not inhibit pedestrian access to the building nor to the open space amenities located on the site and it will be locked at all times.

#### Building Design, Signage and Landscaping

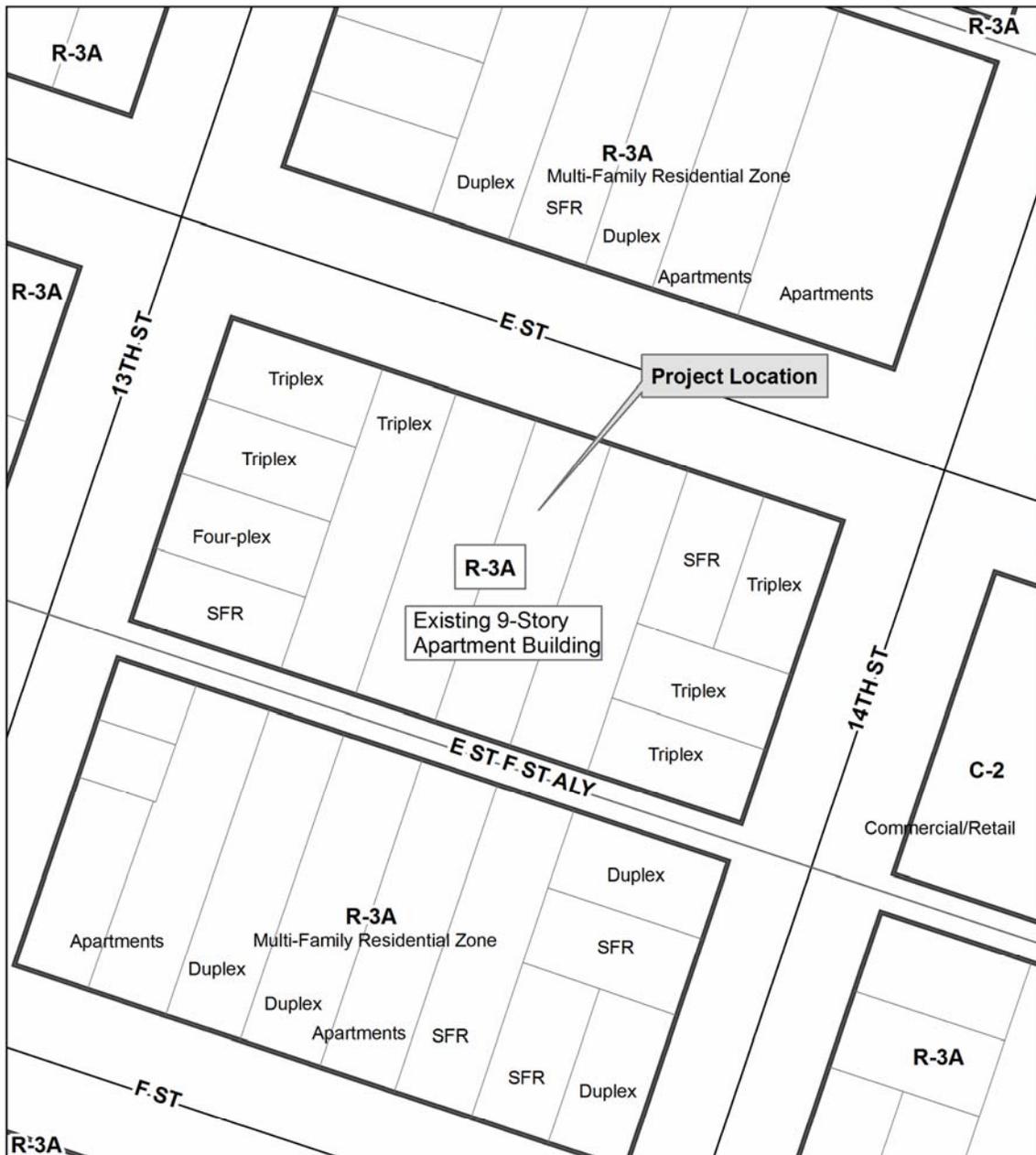
No signage is proposed. The addition of the façade-mounted panel antennas will have a negligible impact on the design of the existing building. The antenna will be painted to

match the structure at the point of attachment as will any cables or cable trays. The visibility of the proposed antenna is minimal. The related equipment will be located on a nine (9) foot by ten (10) foot concrete pad at the base of the north elevation of the existing building. The equipment will be enclosed behind a painted masonry/stucco wall designed to match the finish of the existing building.

**ATTACHMENT 2**



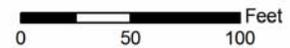
**ATTACHMENT 3**



City of Sacramento, Development Services Department Geographic Information System



**P08-003  
Land Use Map  
Metro PCS at Washington Plaza**



April 24, 2008

ATTACHMENT 4

Appeal Form



**Development Services Department**  
 300 Richards Boulevard 3rd Floor Sacramento, CA 95811  
 Help Line: (916) 808-5656  
 www.cityofsacramento.org/dsd



**Appeal Decision**  
**City of Sacramento Planning Commission**

Date: 5/4/08

To the Planning Director:

I do hereby make application to appeal the decision of the City Planning Commission on APRIL 24, 2008 (date), for project number P 08-003.

<input checked="" type="checkbox"/> Special Permit	for	<u>Facade mounted panel antennas in a residential zone.</u>
<input type="checkbox"/> Variance	for	_____
<input type="checkbox"/> "R" Review	for	_____
<input type="checkbox"/> Other _____	for	_____

Granted by the City Planning Commission  
 Denied by the City Planning Commission

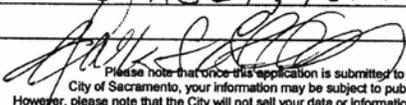
Property Location: 1318 E STREET

Grounds For Appeal: (explain in detail, you may attach additional pages)  
SEE ATTACHED

---

Appellant: MARK S. BLACKBURN (please print) Daytime Phone: (916) 444-6500

Address: 1312 E STREET, 1310 E ST, 1315 F ST. 95814

Appellant's Signature: 

Please note that once this application is submitted to the City of Sacramento, your information may be subject to public record. However, please note that the City will not sell your data or information for any purposes.

THIS BOX FOR OFFICE USE ONLY

Filing Fee Received: Applicant (\$596) _____	Or Third Party (\$298) <input checked="" type="checkbox"/>
Received By: <u>Jason Nunez</u>	Date: <u>5/5/08</u>
Distribute Copies to: Planning Director _____	Zoning Administrator _____
Planning Commission Clerical Support Staff _____	Original & Receipt in File _____

• (916) 808-5656  我們講中文 • Hablamos español • Мы говорим на русском • מְדַבְּרִים עִבְרִית וְעִבְרִית • Peh hais lus Hmooh • Chúng tôi nói tiếng Việt •

DSD-0065 Rev. 02/2008

**Grounds for Appeal**

Project number P08-003 (MetroPCS Antenna System at Washington Plaza 1318 E St)

**By Mark Blackburn**

May 5, 2008

I am the owner of 1312 E Street, which is next door to Washington Plaza at 1318 E. My building is a legal triplex and I have rented to families since I bought the building 10 years ago. As an ethical and responsible real estate investor and landlord I oppose adding the proposed Metro PCS cell phone antenna system for a variety of reasons.

1. There are over 500 legal dwelling units within 1000 feet of the proposed electromagnetic nuisance, supporting a population of at least 1000 individuals. I estimate that there are at least 50 different landlords within 1000 feet of your proposed EMR (electro magnetic radiation) nuisance. So far, there is only 1 other landlord I have spoken to who is aware of this stealth project. Today I spoke with another 3 other landlords who own rental buildings within 500 feet of your proposed nuisance and none of them have received notification of it. I believe this may be a violation of the planning commission's regulations for such a project, and request at the very least that the process be re-started with the proper notifications being made to all property owners within the statutory radius. About 80% of the dwelling units within 1000 feet are rented out by landlords like me. Under California Real Estate Law we are legally required to disclose to all current and prospective tenants any potential health threats including mold, asbestos, pesticide residues, and electromagnetic radiation (EMR). Already, I have two tenants who are threatening to leave due to the proposed cell antennas. I have a unit that will be vacated at the end of this month. How will I ever be able to rent it out? How much should I discount the rent to entice them to live in an EMR hot zone? If I can't re-rent the unit, will MetroPCS and SHRA pay my mortgage for me? My wife and I live within 500 feet in a rented apartment directly behind Washington Plaza on F Street, where we have rented for over 5 years. We love our apartment, but we will definitely move away from this health hazard, if approved, at tremendous personal expense. And, what of our landlord? What will you do to compensate our Landlord who will legally have to disclose why we left the apartment, and may be unable to rent out our apartment. Let's just suppose that MetroPCS will pay \$2000 in rent to place the hazard on Washington Plaza's roof. What if in a 1000 foot radius there are suddenly 50 apartments that can no longer be rented because nobody wants to live under a cell tower?  $50 \times$  average rent of \$700 = \$35,000. Does SHRA hope to cost nearby property owners \$35,000 so they can pocket \$2000? What is the public interest in that?

If you inform the many property owners within the statutory radius, maybe some of them will show up at the public meeting (if it will be open to the public)! I am working out of town presently and I sent my wife, Sharoll Blackburn, to the April 24 public hearing for this project and although she tried every entrance to both the old & new portions of city hall she was turned away at all entrances, being assured that there were no public hearings at city hall that day. I therefore assume there was not one property owner or local resident present to oppose the nuisance. Since virtually none of them claim to have

been notified, it does not surprise me that no one came to oppose the proposal. Yet, I am aware of a number of people on the block that are very concerned.

2. A casual amount of research will show that many people, especially the elderly are put at grave risk by living close to cell antennas. [www.mercola.com](http://www.mercola.com) is the 2<sup>nd</sup> largest medical site on the web. Dr. Joseph Mercola has an article describing the horrible experience with a similar apartment building for the elderly that erected a cell phone tower:

**Orange mobile phone company agreed to remove its cell phone mast - dubbed the "Tower of Doom" -- from the top of a five-story London apartment building after seven of its residents got cancer.**

**The cancer rate among those living on the top floor, where residents from five of the eight flats were affected, is 20 percent -- 10 times the national average.**

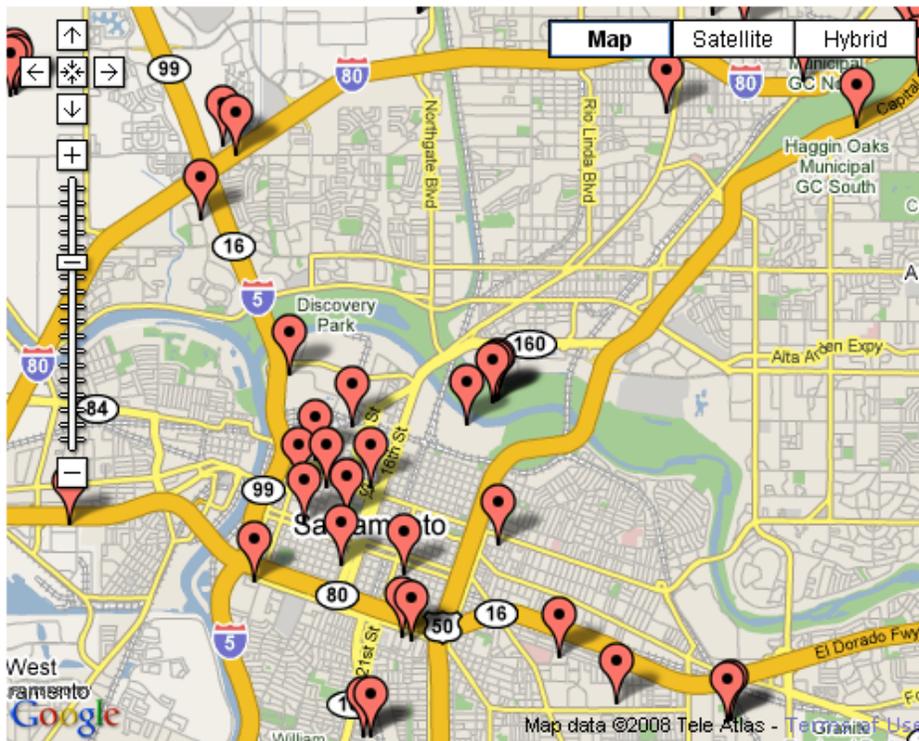
**The mast, along with a second mast owned by Vodafone, was put up in 1994. Since then, residents have battled cancer, headaches and other health problems they say are caused by radiation from the masts. Three residents have died from cancer, while another four are still fighting the disease.**

**In August 2007, after a long legal battle, Orange agreed to move the mast from the building -- to another area near homes, a public library and a primary school.**

3. Most people understand cell phone technology is new and we don't know the full risks. Do you know this? Did you know that in the 1940s many government doctors were touting occasional cigarette smoking as beneficial for the lungs? (How much did the tobacco companies pay them)? Our parents blindly bought into the fraudulent test results that calmed concerns of the health risks of asbestos, nuclear energy, silicone implants and tobacco. When the brain tumors and cancers start forming 15 years from now, which industry leader or government official will take responsibility? Today, cell phone use remains in its infancy and is very convenient. But, the long-term effects are not known. Government studies show conclusive physical harm from long term exposure to electromagnetic energy. For this reason it is illegal to place a cell transmitter at or near a high school in California. This is an appropriate law because A study by Dr. Bruce Hocking in Australia found that children living near three TV and FM broadcast towers (similar to cell towers) in Sydney had more than twice the rate of leukemia than children living more than seven miles away. Yet, the occupants of Washington Plaza are frankly more vulnerable than high school students and deserve the same protection. The residents of Washington Plaza are among the most unhealthy, weak, vulnerable, and disenfranchised citizens in Sacramento. Was this population targeted because of this? Because they are too weak to resist? Like the residents of the London building these seniors remain in their apartments nearly 24x7. This means they get constant

bombardment with EMR. I'd think it better to place this on top of the Attorney General's office. Those guys are there a scant 8 hours a day and take tons of vacation. Why pick on the most vulnerable? MetroPCS makes millions of dollars per year. Washington Plaza residents make what, less than \$18k? Are they just expendable? Are the big corporations controlling every decision?

4. What safeguards are in place? What guarantees does SHRA make that another "Tower of Doom" scenario will not occur? Who will examine and track the health of the residents of Washington Plaza over the next few years? Have proper baseline health examinations already been made? Can the city afford the potential economic burden of lawsuits arising from a building of 100 sick and dying people and their dying neighbors? Will SHRA become known as the '[Dorthea Puente](#)' of the 2000s?
  
5. I have had newborn infants as tenants. I do not want to rent to tenants knowing they may be getting cancer due to Washington Plaza's ability to pull in \$2000 or so a month rent from MetroPCS. I appreciate Washington Plaza's unique height and location, but there are many other areas less populated that could serve much the same cell zones. There is a cell tower at 15<sup>th</sup> & D. Cell towers can be shared by different companies. They do not all have to have their own individual towers. There are central locations near the train tracks that could be exploited that are not near homes, families, and vulnerable children. I am including a map of the registered cell towers in downtown. Do you not notice that downtown is already very well-saturated with cell towers compared to other parts of Sacramento?



[http://www.cellreception.com/towers/towers.php?city=sacramento&state\\_abr=ca](http://www.cellreception.com/towers/towers.php?city=sacramento&state_abr=ca)

*The above map shows the downtown area is loaded with cell towers already, especially when compared to other high-density areas like East Sac, Arden, Natomas or West Sac. Why do we need to destroy the rental income of 50-odd landlords to add another? Why can't MetroPCS do a cooperative sharing with another existing tower? Or, locate slightly away from such a densely populated quadrant of downtown? What about the rail yards? And, why does East Sac not have any towers? Is it because they are richer and more influential and don't want cell towers close to their homes?*

6. As an ethical & law-abiding landlord, I have to disclose to all current and prospective tenants the health risks that potentially exist in my home. Up to now, there have been no such risks to disclose. I spend considerable effort when renting an empty unit. I have worked very diligently to attract good people and tenants to the neighborhood. Now, what kind of people will I be able to recruit as tenants? Only the trashy druggies who make a sport of killing themselves. These are the type of people we have worked so hard to get rid of on E Street!
7. The proposed hazard and the health risk it will create will certainly cause me to lose rental income and double the considerable effort I take to locate and rent to good tenants. Already, I have two tenants threatening to leave over the cell fiasco. Will MetroPCS or SHRA be there to make up the shortfall due to their actions? I'm struggling with an adjustable rate mortgage already. I have maximized my rental income to pay the mortgage. But, if MetroPCS makes it impossible to rent my home out, and other nearby homes, the neighborhood will become blighted again as homes are foreclosed upon. Or, what if my tenants develop cancer and sue me? Will MetroPCS and SHRA be there to pay? I don't think a public agency like SHRA should undertake the enormous potential liability for harm to it's thousands of neighbors.
8. My home is a commercial entity. As such its valuation is directly apportioned by my rental income. Will MetroPCS and SHRA make up the losses in equity valuation of my home? What of all the homes on the surrounding blocks?
9. The following property owners within 500' of the proposed EMR hazard were never notified of the planning commission project:

**Tom Kiltz (owns 8 units at closest corner of 13<sup>th</sup> & F)**  
**Tim Parkinson (owns triplex on 13<sup>th</sup> between E & F)**  
**Mary Morant (owns 1315 F Street)**

**There are many more names I could add to this list, but I spoke with these three on May 4, 2008.**

10. I will be speaking with other neighbors trying to determine if any of them are aware of the project. So far I know of one who IS. All others are in the dark. I am sure that the city would intend for a decision like this be made with input from residents and property owners. I suspect that proper (and possibly legal) notification has not yet been made.

11. What I want: I believe the planning department's efforts to inform local residents of this project has fallen short of normally expected outcomes. Were procedures followed properly? If so, are the dismal results (2 property owners on the block know of the project) indicative that the public interest in this matter was not served? I believe it might be appropriate to re-open the matter to hearing. Given sufficient advance notice I believe a number of residents and property owners would like to weigh in on the matter. This project may have considerable downstream affect on a marginal neighborhood that is struggling to mainstream itself. I believe there are many reasons why approving this project will really pull the neighborhood down. Most nearby properties are rental units. Having this EMR Hazard on the block will make renting properties very difficult. Homes will go to foreclosure. Blight will occur. Seeing the cell map I have included I cannot imagine that yet another downtown cell tower is necessary. I don't doubt for a minute that the planning commission has worked tirelessly on this project. Upon every inquiry I have been dealt with professionally and courteously, and I really appreciate it. Please, however, I would ask the commission to re-examine:

1. Is the antenna system necessary? Why?
2. Are there alternate locations in less populated areas nearby?
3. Who will be responsible for health issues that may arise in the neighborhood?
4. Have WP residents been advised to even notice if they begin to feel sick, and have they been given a method to report nausea, headaches, etc.? To whom?
5. Is there a health statistics system in place to track what happens with residents of WP if the EMR (electro magnetic radiation) hazard is installed?
6. What relief will SHRA make to nearby landlords who cannot rent properties?
7. Will the city or SHRA buy back homes that cannot be rented and therefore have no value?
8. What is the amount of rent that MetroPCS has offered to pay SHRA?
9. What other sites were considered?

Respectfully submitted,

Mark S Blackburn  
(916) 444-6500  
1315 F Street #2  
Sacramento, CA  
95814

**ATTACHMENT 5****Written Opposition to the Project from Mr. Blackburn**

Submitted via e-mail to staff on 4/24/08 and transmitted to the City Planning Commission at the 4/24/08 Hearing

Page 1 of 3

**Jason Hone - Statement of Opposition to Cell Phone EMFs at Washington Plaza Property from a neighbor**

---

**From:** "Mark Blackburn, MBA" <mark\_blackburn@yahoo.com>  
**To:** <JHone@cityofsacramento.org>  
**Date:** 4/24/2008 1:59 PM  
**Subject:** Statement of Opposition to Cell Phone EMFs at Washington Plaza Property from a neighbor  
**CC:** <emailsean@msn.com>, "Sharoll Looi" <lovelythunder67@yahoo.com>

---

Jason,

Thank you for facilitating the communications on this issue while I am out of town. I apologize for a poorly formatted note, but I did this on a lunch hour....

-Mark Blackburn

To: Sacramento Planning Commission:

I am the owner of 1312 E Street, next door to Washington Plaza a 1318 E. My building is a legal triplex and I have rented to families since I bought the building 10 years ago. As an ethical and responsible real estate investor and landlord I oppose adding the proposed Metro PCS cell phone for a variety of reasons.

1. A casual amount of research will show that many people, especially the elderly are put at grave risk or killed outright by living close to cell antennas. Mercola.com is the 2<sup>nd</sup> largest medical site on the web. Dr. Joseph Mercola has an article describing the horrible experience with a similar apartment building that erected a cell phone tower:

***Orange mobile phone company agreed to remove its cell phone mast -- dubbed the "Tower of Doom" -- from the top of a five-story London apartment building after seven of its residents got cancer.***

***The cancer rate among those living on the top floor, where residents from five of the eight flats were affected, is 20 percent -- 10 times the national average.***

***The mast, along with a second mast owned by Vodafone, was put up in 1994. Since then, residents have battled cancer, headaches and other health problems they say are caused by radiation from the masts. Three residents have died from cancer, while another four are still fighting the disease.***

***In August 2007, after a long legal battle, Orange agreed to move the mast from the building -- to another area near homes, a public library and a primary school.***

2. I understand cell phone technology is new and we don't know the full risks. Do you know this? Did you know that in the 1940s many government doctors were touting occasional cigarette smoking as beneficial for the lungs? (How much did the tobacco companies pay them)? Our parents blindly bought into the fraudulent test results that calmed concerns of the health risks of asbestos, nuclear energy, silicone implants and tobacco. When the brain tumors and cancers start forming 15 years from now, which industry leader or government official will take responsibility? Today, cell phone use remains in its infancy and is very convenient. But, the long-term effects are not known. Government studies show conclusive physical harm from long term exposure to electromagnetic energy. For this reason it is illegal to place a cell transmitter at or near a high school in California. This is an appropriate law because a study by Dr. Bruce Hocking in Australia found that children living near three TV and FM broadcast towers (similar to cell towers) in Sydney had more than twice the rate of leukemia than children living more than seven miles away. Yet, the occupants of Washington Plaza are frankly more physically vulnerable than high school students and deserve the same protection.

I have had newborn infants as tenants. I do not want to rent to tenants knowing they may be getting cancer due to Washington Plaza's ability to pull in \$2000 or so a month rent from MetroPCS. I appreciate Washington Plaza's unique height and providential location, but there are many other areas less populated that could serve much the same cell zones.

As an ethical & law-abiding landlord, I have to disclose to all current and prospective tenants the health risks that potentially exist in my home. Up to now, there have been no such risks to disclose. I spend considerable effort when renting an empty unit. I have worked very diligently to attract good people and tenants to the neighborhood. Now, what kind of people will I be able to recruit as tenants? Only the trashy druggies we have worked so hard to get rid of on E Street, that's who!

The tower and the health risk it will create will certainly cause me to lose rental income and double the considerable effort of renting my triplex. Already, I have two tenants threatening to leave over this issue. Will MetroPCS or SHRA be there to make up the shortfall due to their actions? I'm struggling with an adjustable rate mortgage already. I have maximized my rental income to pay the mortgage. But, if MetroPCS makes it impossible to rent my home out, and I (and others) are forced to abandon our homes, the neighborhood will become blighted again. Or, what if my tenants develop cancer and sue me? Will MetroPCS and SHRA be there to pay? I don't think a public agency like SHRA should undertake the enormous potential liability for harm to its neighbors for 30 pieces of silver.

My home is a commercial entity. As such its valuation is directly apportioned to my rental income. Will MetroPCS and SHRA make up the losses in equity valuation of my home? What of all the homes on the surrounding blocks?

I have friends and neighbors in the audience who will convey your answers to me.

Respectfully yours,

Mark S Blackburn, MBA  
Business Analyst  
[www.markblackburn.org](http://www.markblackburn.org)  
916.444.6500

**ATTACHMENT 6**



**SVC Technologies, Inc.**  
Electrical Engineering & Consulting  
1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
Phone: 916-367-7505 Fax: 800-838-5495

---

## **Radio Frequency Emissions Analysis Report of Findings**



### **Washington Park Site**

**Metro PCS  
Site No. SAC-432-A**

**Washington Plaza  
1318 E Street, Sacramento, CA 95814**

**March 21, 2008**





**SVC Technologies, Inc.**  
Electrical Engineering & Consulting  
1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
Phone: 916-367-7505 Fax: 800-838-5495

---

## 1. Project Summary

Metro PCS proposes the installation of a Personal Communications Service communications facility atop the Washington Plaza residential building at 1318 E Street in Sacramento, CA. The site will utilize antennas mounted on the penthouse mechanical structure with an outdoor ground-mount BTS complex.

Federal Communications Commission rules require the analysis of radio engineering parameters for proposed emitters at the facility. Licensees are required by law to determine if federal standards for power densities are exceeded. SVC Technologies is under contract with Metro PCS to perform the analysis. The findings are summarized in this report.

During the analysis a site visit was conducted to verify the surrounding site usages against the proposed site plans. The proposed Metro PCS radio frequency engineering data was evaluated for compliance with Federal Communications Commission guidelines for human exposure to radiofrequency electromagnetic fields. A general finding of compliance with a standard RF safety plan is attached.

## 2. Site Description

The facility's general location and site plan are depicted in the site plans dated October 29, 2007. Site photos taken on March 17, 2008 are included in this report.

The proposed site will be a three-sector configuration utilizing CMDA at PCS frequencies with a maximum effective radiated power of 398 Watts, including growth. Three sectors of panel antennas will be mounted on the north, east, and west sides of the penthouse at approximately 15 feet centerline above roof level with orientations of 0, 120, and 240 degrees with respect to true north.

Equipment cabinets housing radio and ancillary equipment would be located at ground level on the north side of the building inside a securely fenced area. The coax routes directly above the BTS equipment to the roof, and then traverses the roof to the penthouse area.

The project is located atop a residential building. A locked access door controlled by facility management was observed leading to the roof area. The penthouse roof is accessed via permanent ladder to the south side, or via temporary ladders on the side. The interior of the penthouse is accessed via access door on the south side. The antennas will not be located on the side of the penthouse containing the permanent ladder or the access door.



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

**Site Photos**



**View East**



**View Northwest**



**View South**



**View North**

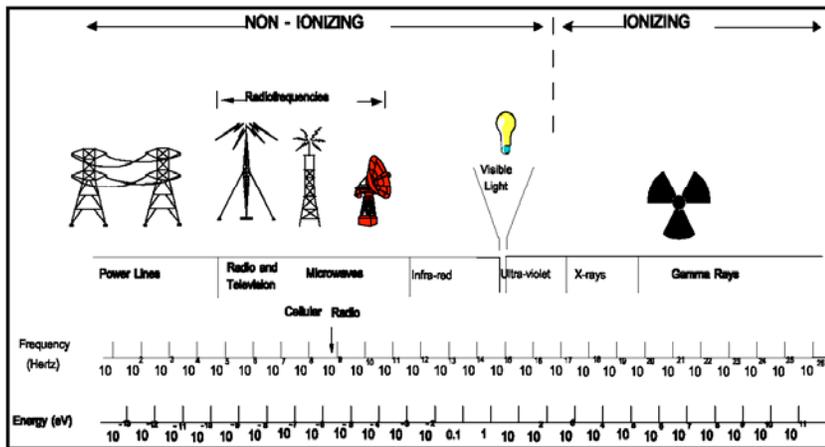
**3. Radio Frequency Emissions Described**

Radio frequency (RF) emissions are electromagnetic energy commonly used to transmit information to distant locations. This emission is quantified in terms of energy, radiation, or fields. Electromagnetic radiation consists of electric and magnetic energy moving together as resonating waves through space created by the movement of electrical charges. Moving charges in a conductor such as an antenna generates this energy. For example, moving charges (current) in an antenna used by a broadcast station or a wireless base station generate electromagnetic waves that radiate away from the transmitter’s antenna. This energy is absorbed by a receiver’s antenna some location. The magnitude of the RF energy at that given location can be quantified in units of  $mW/cm^2$ .



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

Electromagnetic wavelength decreases with an increase in frequency. The electromagnetic spectrum includes electromagnetic emissions from extremely low frequency (ELF) energy with very long wavelengths to X-rays and gamma ray of very high frequencies and correspondingly short wavelengths. Between these extremes lie radio waves, microwaves, infrared radiation, visible light, and ultraviolet radiation, in that order. A visual representation of the electromagnetic spectrum is presented below.



*The Electromagnetic Spectrum*

**Ionizing radiation**, present with x-rays and gamma rays (nuclear radiation), produces damage via cell destruction and DNA manipulation. These emissions impart destructive power via extremely short wavelengths, and penetrate skin with little to no resistance. These types of emissions act directly on the structure of atoms in the body.

The frequencies used for terrestrial wireless communications impart **non-ionizing radiation**. Non-ionizing radiation is composed of energy in wavelengths magnitudes longer than ionizing radiation. At these relatively lower frequencies, the body more easily attenuates non-ionizing radiation. Non-ionizing radiation been identified as producing localized heating of the skin at high levels.



**SVC Technologies, Inc.**  
Electrical Engineering & Consulting  
1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
Phone: 916-367-7505 Fax: 800-838-5495

---

#### 4. FCC Radio Frequency Emissions Standards

In the past two decades a rapid expansion of personal wireless services in the US resulted in radio sites being constructed in virtually every major and minor metropolitan center in the United States and much of the industrialized world. Expansion of these networks to provide additional customers, services, and capacity requires carriers to construct additional sites. Tower heights are being progressively lowered to mitigate radio interference and capacity concerns and to comply with stricter zoning requirements. These lower tower heights require sites closer to the population centers they serve.

The 1990's saw much debate and research regarding safe levels of radio frequency exposure for humans for several reasons. There was an unprecedented increase in the number of persons regularly using handheld mobile phones leading to a huge increase in general dependence on radio frequency devices resulting from advances in technology. This trend led to a corresponding jump in the number of radio sites being constructed.

In 1996 the FCC adopted a standard for safe human exposure levels to RF fields. The history leading to adoption of the standards, published in 47 CFR § 1.1301, *et seq.*, and detailed technically in FCC OET 65<sup>1</sup>, are best described by the FCC in an excerpt from FCC OET 56<sup>2</sup>.

In 1985, the FCC adopted the 1982 ANSI guidelines for purposes of evaluating exposure due to RF transmitters licensed and authorized by the FCC. This decision was in response to provisions of the National Environmental Policy Act of 1969 requiring all Federal Government agencies to evaluate the impact of their actions on the "quality of the human environment."<sup>3</sup> In 1992, ANSI adopted the 1991 IEEE standard as an American National Standard (a revision of its 1982 standard) and designated it ANSI/IEEE C95.1-1992.<sup>4</sup>

In 1993, the FCC proposed to update its rules and adopt the new ANSI/IEEE guidelines. After a lengthy period to allow for the filing of comments and for deliberation the FCC decided, in 1996,

---

<sup>1</sup> FCC Office of Engineering Technology Bulletin No. 65.

<sup>2</sup> FCC Office of Engineering Technology Bulletin No. 56.

<sup>3</sup> The National Environmental Policy Act of 1969, 42 USC Section 4321, *et seq.*

<sup>4</sup> ANSI/IEEE C95.1-1992 (originally issued as IEEE C95.1-1991), "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz".



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

to adopt a modified version of its original proposal.<sup>5</sup> The FCC's action also fulfilled requirements of the Telecommunications Act of 1996 for adopting new RF exposure guidelines.<sup>6</sup>

The FCC considered a large number of comments submitted by industry, government agencies and the public. In particular, the FCC considered comments submitted by the EPA, FDA, NIOSH and OSIA, which have primary responsibility for health and safety in the Federal Government. The guidelines the FCC adopted were based on the recommendations of those agencies, and they have sent letters to the FCC supporting its decision and endorsing the FCC's guidelines as protective of public health.

In its 1996 Order, the FCC noted that research and analysis relating to RF safety and health is ongoing and changes in recommended exposure limits may occur in the future as knowledge increases in this field. In that regard, the FCC will continue to cooperate with industry and with expert agencies and organizations with responsibilities for health and safety in order to ensure that the FCC's guidelines continue to be appropriate and scientifically valid.

The FCC's guidelines are based on recommended exposure criteria issued by the NCRP and ANSI/IEEE. The NCRP exposure guidelines are similar to the ANSI/IEEE 1992 guidelines except for differences in recommended exposure levels at the lower frequencies and higher frequencies of the RF spectrum. Both ANSI/IEEE and NCRP recommend two different tiers of exposure limits. The NCRP designates one tier for occupational exposure and the other for exposure of the general population while ANSI/IEEE designates exposure tiers in terms of "environments," one for "controlled" environments and the other for "uncontrolled" environments. Over a broad range of frequencies, NCRP exposure limits for the public are generally one-fifth those for workers in terms of power density.<sup>7</sup>

The NCRP and ANSI/IEEE exposure criteria identify the same threshold level at which harmful biological effects may occur, and the values for Maximum Permissible Exposure (MPE) recommended for electric and magnetic field strength and power density in both documents are based on this threshold level.<sup>8</sup> In addition, both the ANSI/IEEE and NCRP guidelines are

<sup>5</sup> See *Report and Order* and *Second Memorandum Opinion and Order and Notice of Proposed Rulemaking*, ET Docket 93-62. In 1997, the FCC released a technical bulletin entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields," OET Bulletin 65 that contains detailed information on methods for compliance with FCC guidelines. These documents can be accessed at the FCC's Web site: <http://www.fcc.gov/oet/rfsafety>.

<sup>6</sup> The Telecommunications Act of 1996, enacted on February 8, 1996, required that: "Within 180 days after the enactment of this Act, the Commission shall complete action in ET Docket 93-62 to prescribe and make effective rules regarding the environmental effects of radio frequency emissions." See Section 704(b) of the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

<sup>7</sup> The FCC adopted limits for field strength and power density that are based on Sections 17.4.1 and 17.4.2, and the time-averaging provisions of Sections 17.4.1.1 and 17.4.3, of "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, for frequencies between 300 kHz and 100 GHz. With the exception of limits on exposure to power density above 1500 MHz, and limits for exposure to lower frequency magnetic fields, these MPE limits are also based on the guidelines developed by the IEEE and adopted by ANSI. See Section 4.1 of ANSI/IEEE C95.1-1992, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz" (Reference 3).

<sup>8</sup> These exposure limits are based on criteria quantified in terms of specific absorption rate (SAR). SAR is a measure of the rate at which the body absorbs RF energy. Both the ANSI/IEEE and NCRP exposure criteria are based on a determination that potentially harmful biological effects can occur at an



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

frequency dependent, based on findings (discussed earlier) that whole-body human absorption of RF energy varies with the frequency of the RF signal. The most restrictive limits on exposure are in the frequency range of 30-300 MHz where the human body absorbs RF energy most efficiently when exposed in the far field of an RF transmitting source. Although the ANSI/IEEE and NCRP guidelines differ at higher and lower frequencies, at frequencies used by the majority of FCC licensees the MPE limits are essentially the same regardless of whether ANSI/IEEE or NCRP guidelines are used.

Most radiofrequency safety limits are defined in terms of the electric and magnetic field strengths as well as in terms of power density. For lower frequencies, limits are more meaningfully expressed in terms of electric and magnetic field strength values, and the indicated power densities are actually "far-field equivalent" power density values. The latter are listed for comparison purposes and because some instrumentation used for measuring RF fields is calibrated in terms of far-field or plane-wave equivalent power density. At higher frequencies, and when one is actually in the "far field" of a radiation source, it is usually only necessary to evaluate power density. In the far field of an RF transmitter power density and field strength are related by standard mathematical equations.<sup>9</sup>

The exposure limits adopted by the FCC in 1996 expressed in terms of electric and magnetic field strength and power density for transmitters operating at frequencies from 300 kHz to 100 GHz are shown in **Table 1**. The FCC also adopted limits for localized ("partial body") absorption in terms of SAR that apply to certain portable transmitting devices such as hand-held cellular telephones.<sup>10</sup>

---

SAR level of 4 W/kg as averaged over the whole-body. Appropriate safety factors have been incorporated to arrive at limits for both whole-body exposure (0.4 W/kg for "controlled" or "occupational" exposure and 0.08 W/kg for "uncontrolled" or "general population" exposure, respectively) and for partial-body (localized SAR), such as might occur in the head of the user of a hand-held cellular telephone. The new MPE limits are more conservative in some cases than the limits specified by ANSI in 1982. However, these more conservative limits do not arise from a fundamental change in the SAR threshold for harm, but from a precautionary desire to add an additional margin of safety for exposure of the public or exposure in "uncontrolled" environments.

<sup>9</sup> See OET Bulletin 65 for details.

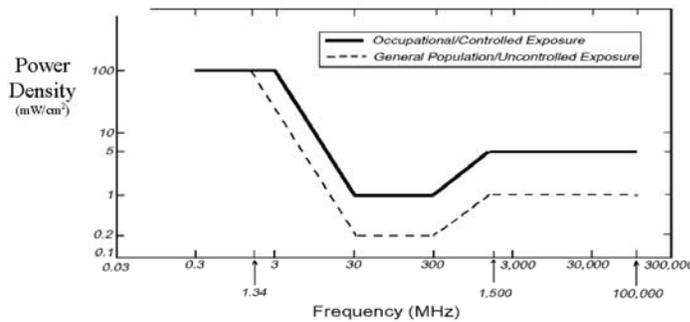
<sup>10</sup> These guidelines are based on those recommended by ANSI/IEEE and NCRP. See Sections 4.2.1 and 4.2.2 of ANSI/IEEE C95.1-1992 and Section 17.4.5 of NCRP Report No. 86. For purposes of evaluation, the FCC has designated these devices as either "portable" or "mobile" depending on how they are to be used. Portable devices are normally those used within 20 centimeters of the body and must be evaluated with respect to SAR limits. Mobile devices are normally used 20 centimeters or more away from the body and can be evaluated in terms of either SAR or field intensity. Detailed information on FCC requirements for evaluating portable and mobile devices can be found in OET Bulletin 65 and in the FCC's Rules and Regulations, 47 CFR 2.1091 and 2.1093.



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

The FCC MPE limits are surmised graphically by the FCC figure below.

**Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)**  
 Plane-wave Equivalent Power Density



A critical factor in MPE analysis is application of the “Occupational/Controlled Exposure” limit versus the “General Population/Uncontrolled Exposure” limit. The General Population/Uncontrolled MPE limit at 1950 MHz of 1.0 mW/cm<sup>2</sup> is 1/5<sup>th</sup> the level allowed for an Occupational/Controlled exposure of 5.0 mW/cm<sup>2</sup>. Occupational limits are measured over a period of 6 minutes; General Population MPE limits are measured over 30 minutes.

The maximum field values in the FCC MPE limits are derived from ANSI / IEEE research of localized tissue heating. It has been determined that potentially harmful biological effects can occur at a Specific Absorption Rate of 4.0 Watts/Kg. This value is averaged over the whole body, versus a single-point of exposure. The FCC MPE limits were selected at **one-tenth** (10%) of the 4.0 W/Kg limit for the Occupational/Controlled exposures, or 0.4 W/Kg - a very conservative safety margin. The General/Uncontrolled exposure limits were then set at **one-fifth** (20%) of the Occupational/Controlled limits.

In MPE analysis for general/uncontrolled areas, another conservative practice occurs if specific exposure time cannot be calculated for an uncontrolled environment. In cases such as in a residential area, the 30-minute General/Uncontrolled limit is eliminated if specific exposure time cannot be calculated for an uncontrolled environment. Under that assumption if a field of the General/Uncontrolled limit were *never encountered*, regardless of exposure duration, the MPE could never be reached regardless of how long a person was in the environment. Conversely, if the MPE limit were *ever reached*, data



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

on the exposure time would be required to determine if the MPE was actually exceeded for the General/Uncontrolled setting.

These MPE limits apply to all facilities, operations, and transmitters that are regulated by the FCC. All FCC applications for licenses, construction permits, renewals, equipment authorizations, or modifications to existing facilities require certification statements. The applicant must certify the facilities conform to MPE limits or will be required to file an Environmental Assessment with the FCC for further consideration. In addition to the FCC rules, OSHA regulations typically default to these MPE limits for determination of a safe workplace. Therefore, site owners and employers are responsible for conformance to MPE limits.

**5. RF Emissions Calculations**

In accordance to the standards and methods published by the FCC Office of Engineering Technology Bulletin Number 65, calculations may used to predict RF field strengths around the proposed RF sources as follows utilizing the following formula:

$$S = \frac{(P)(G)}{(\pi)(R)^2} = \frac{EIRP}{(\pi)(R)^2} ; FCC OET 65, Equation 6$$

Where:  
 S = power density (mW/cm<sup>2</sup>)  
 P = antenna input power (mW)  
 G = antenna gain (numeric) relative to isotropic radiator  
 R = distance to center of radiator (cm)  
 EIRP = 1.64 x ERP

This calculation assumes a doubling of field strength and a quadrupling of power density due to possible nearby reflections. Such assumptions deliver a worst-case value for the strongest reflections.

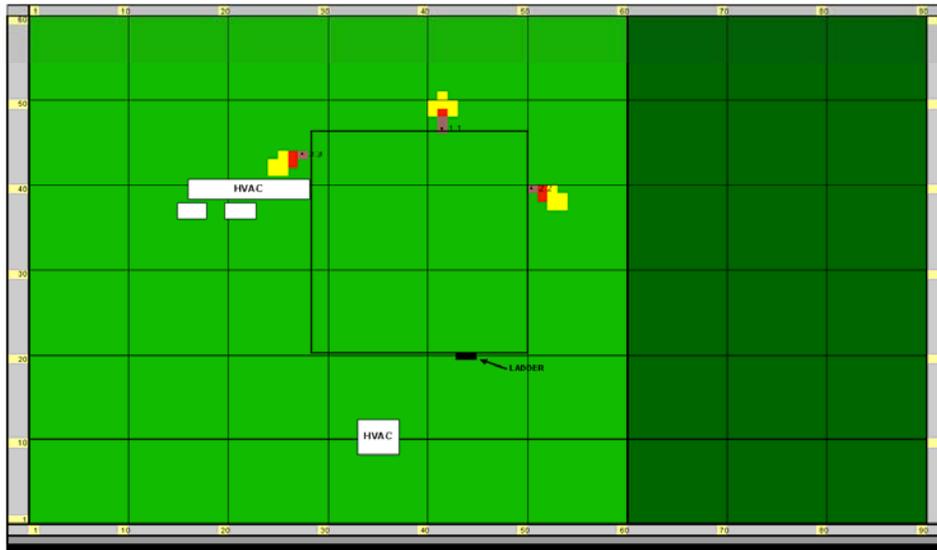
A secondary method of calculation via modeling is allowed by the FCC includes the use of RoofView®, a computer model authored by Richard Tell. Mr. Tell is highly recognized in the industry and was a key contributor in the development of FCC OET 65. An output of the modeling is attached.

The maximum power density for Metro PCS calculated directly below the antennas at 6 feet above roof elevation, 400 Watts ERP (includes future growth), was found to be approximately 219% of the existing standard for an uncontrolled environments or approximately 44% of the standard for occupational environments. This area is very small, located immediately below the antennas, and extends outward less than 3 feet then dropping dramatically. Occupied area below falls well below any limits due to distance and roof decking attenuation. It's important to note CDMA transmitters rarely emit 100% power for any length of time. In order to exceed MPE limits one must remain in very close proximity to an antenna for an extended time periods unreasonable even for most maintenance personnel to linger.



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

**RoofView® Modeling Output**



**Uptime = 100% Green <=50% Yellow <=100% Red <= 200% Purple above 200 %**

Statistical Summary		
%MPE	SQ. FT.	%SQ. FT.
0 -50	3600	100.00 % of total ROOF Area
51 - 100	3575	99.31 % of Selected Area
101 - 200	16	0.44 % of Selected Area
> 200	5	0.14 % of Selected Area
	4	0.11 % of Selected Area
<b>Roof Area 3600 sq. ft.</b> <b>Max %MPE 218.7 %</b> <b>Min %MPE 0.1 %</b> <b>Using Near/Far Spatial Avg Model</b> <b>With FCC 1997 Public Standard</b>		



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

**6. Conclusions**

Computational modeling yields the total RF power density of the proposed site to be well below the standard for the general public / uncontrolled environments for all areas except less than three feet in front of the antennas while standing on the roof and closer. The occupational standards cannot be violated while standing on the roof, but may be violated by accessing the immediate area of the antennas within three feet via a ladder. In summary, this site creates a very small RF power density value that is kept in compliance via utilizing a simple compliance plan. The plan is typical for similar sites in the industry with comparable emissions levels.

To ensure compliance with standards the following conditions should be met as part of a standard RF compliance plan:

1. Metro PCS shall ensure only authorized and properly trained persons may access the roof via the locked roof access door.
2. Persons not trained in EME awareness shall only enter the radius less than three feet forward of the transmitting antennas at roof level for no more than ten minutes in any given thirty minute period.
3. Persons seeking access areas above roof level and within a radius less than 8 feet forward of each transmitting antenna via ladder or other means shall be trained in EME awareness and will be subject to the Occupational Standard and adhere to necessary safety practices.
4. Industry standard blue "Notice" signs with standard site advisory conditions should be posted at the entrance to the roof to delineate the controlled area three feet from the antennas provide notice to trained workers.

  
 Chris Baker, PE (CA Lic. #17233)

3/21/08  
 Date





**SVC Technologies, Inc.**  
Electrical Engineering & Consulting  
1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
Phone: 916-367-7505 Fax: 800-838-5495

---

## 7. Glossary of Terms

**ANSI:** The American National Standards Institute. A private, non-profit organization that administers and coordinates the U.S. voluntary standardization and conformity assessment system.

**Antenna:** The mechanical and electrical element that converts radio frequency currents in a conductor (wire) to electromagnetic fields in space.

**BTS:** Common term for wireless base station transmitter system.

**Cellular:** FCC uses term to classify common wireless carrier licensees in the 800 MHz band.

**CFR:** Code of Federal Regulations. 47 CFR contains the FCC rules.

**FCC:** Federal Communications Commission.

**Frequency:** The measure of oscillations per second of a waveform, normally in MHz. Inversely proportional to the wavelength of the field.

**General Population/Uncontrolled Exposures:** Situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure, to RF emissions.

**IEEE:** The Institute of Electrical and Electronics Engineers. A scientific and educational professional society, directed toward the advancement of the theory and practice of electrical engineering, electronics, radio and the allied branches of engineering and the related arts and sciences.

**MPE (limit):** Maximum Permissible Exposure limit.

**MHz:** Megahertz (million cycles/second).

**PCS:** FCC classification of common wireless carrier in the 1950 MHz band.

**RF:** Radio Frequency, or the frequency of electromagnetic emissions in the radio spectrum.

**Watt:** Metric unit of power. Used to quantify the intensity of an electromagnetic field.



**SVC Technologies, Inc.**  
Electrical Engineering & Consulting  
1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
Phone: 916-367-7505 Fax: 800-838-5495

---

## 8. References

1. Federal Communications Commission (FCC), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", FCC Office of Engineering Technology Bulletin No. 65, Edition 97-01, August 1997.
2. Federal Communications Commission (FCC), "Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields", OET Bulletin Number 56, Fourth Edition, August 1999.
3. The National Environmental Policy Act of 1969, 42 USC Section 4321, *et seq.*
4. ANSI/IEEE C95.1-1992 (originally issued as IEEE C95.1-1991), "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", 1992, Institute of Electrical and Electronics Engineers, Inc., New York, N.Y.
5. Federal Communications Commission, Report and Order and Second Memorandum Opinion and Order and Notice of Proposed Rulemaking, ET Docket 93-62.
6. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).
7. National Council on Radiation Protection and Measurements (NCRP), "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, 1986. NCRP, Bethesda, MD.



**SVC Technologies, Inc.**  
 Electrical Engineering & Consulting  
 1100 Melody Lane, Suite 140 • Roseville, CA • 95678  
 Phone: 916-367-7505 Fax: 800-838-5495

**Table 1 - FCC Limits for Maximum Permissible Exposure (MPE)**

**(A) Limits for Occupational/Controlled Exposure\***

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

**(B) Limits for General Population/Uncontrolled Exposure\*\***

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

f = frequency in MHz

\*Plane-wave equivalent power density

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

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

**ATTACHMENT 7**

**E-mail from Mr. Wright to the Applicant**

**Jason Hone - Re: P08-003 [Metro PCS at Washington Plaza - SAC-432] - Alkali & Mansion Flats Historic Neighborhood Assoc.**

---

**From:** "sean wright" <emailsean@msn.com>  
**To:** "Ken Crouse" <ken.crouse@sbcglobal.net>  
**Date:** 3/25/2008 1:56 PM  
**Subject:** Re: P08-003 [Metro PCS at Washington Plaza - SAC-432] - Alkali & Mansion Flats Historic Neighborhood Assoc.  
**CC:** "NChhotu" <NChhotu@shra.org>, "Jason Hone (Sacto City Planning)" <JHone@cityofsacramento.org>

---

Ken,

Thank you for taking the time to address the visual impact concerns and making the necessary revisions. This will definitely allow your project to coexist with minimal impact to the community. I look forward to seeing the new plans and supporting your project.

Sincerely,  
Sean Wright

**ATTACHMENT 8**

**Letter from Mr. Wright in Response to the Appeal**

**Alkali & Mansion Flats  
Historic Neighborhood Association**



Board of Directors

Sean Wright,  
President

Wendy Carter  
Vice President

Phillip Cunningham  
Secretary

Amber Wood  
Treasurer

Dan Frankfield  
Director

Luis Sumpter  
Director

Laura Lough,  
Director

Todd Souder  
Director

Gary Ferderer  
Director

May 19, 2008

The City of Sacramento  
Planning Division  
300 Richards Blvd.  
Sacramento, CA 95814

Re: Metro PCS at Washington Plaza  
File # P08-003

To whom it may concern,

Our association has reviewed Mr. Mark Blackburn's request to appeal the recent decision to approve the installation of 6 cellular antennas at 1318 E Street (Washington Plaza). We support his right to appeal and ask that you address all of his concerns.

Please notify Mr. Blackburn, adjacent residents and property owners of the time and place of the appeal hearing. Thank you for considering this request.

Respectfully,

Sean Wright

**712 12th Street, 95814**

**ATTACHMENT 9**

**Preservation File PB07-167 Certificate of Appropriateness**



DEVELOPMENT SERVICES DEPARTMENT  
(916) 808-5656 PHONE  
(916) 808-5543 FAX

**CITY OF SACRAMENTO**  
CALIFORNIA

NEW CITY HALL  
915 I STREET, 3rd FLOOR  
SACRAMENTO, CA 95814-2998

**CERTIFICATE OF APPROPRIATENESS**

<b>FILE NUMBER:</b>	PB07-167	<b>DATE FILED:</b>	NOVEMBER 29, 2007
<b>APPLICANT:</b>	KEN CROUSE	<b>DATE APPROVED:</b>	JANUARY 9, 2008
<b>ADDRESS:</b>	1318 E ST	<b>STAFF CONTACT:</b>	JASON HONE, 808-5749
<b>APN:</b>	002-0124-006, 002-0124-007, 002-0124-008		
<b>CLASSIFICATION:</b>	WASHINGTON HISTORIC DISTRICT		

**DESCRIPTION:** INSTALLATION OF SIX FLUSH-MOUNTED PANEL ANTENNAS AND ASSOCIATED MECHANICAL EQUIPMENT ON THE SITE OF A NON-CONTRIBUTING RESOURCE.

Findings of the Preservation Office: Preservation Staff has determined the project to be consistent with the Secretary of Interior's Standards for the Treatment of Historic Properties and the goals and policies of Chapter 17.134 of Title 17 of the Sacramento City Code.

Preservation Staff has reviewed the proposed project, and approves it with the following conditions of approval:

1. The antenna panels, cable tray and all mounting hardware shall be painted to match the structure at the point of attachment.
2. The mechanical equipment at ground level will be painted to match the structure and shall be enclosed in a 6' high wrought iron fence similar to that which encloses the portion of the property fronting on E Street.
3. Any portion of the cable tray which runs from the equipment cabinets to the side of the building shall be at or below ground level.
5. All other existing exterior features such as windows, doors, trim, siding etc. shall remain in place.
6. NO OTHER EXTERIOR WORK IS ALLOWED.
7. This approval shall expire in three years from the approval date.
8. All work shall also comply with the conditions of approval for Planning Commission file P08-003.

  
\_\_\_\_\_  
Jason Hone, Junior Planner

\_\_\_\_\_  
Date: 01/09/2008

THIS IS NOT A PERMIT TO COMMENCE WORK OR CHANGE OF OCCUPANCY. PERMITS FROM THE BUILDING DIVISION (AND ANY OTHER APPROPRIATE AGENCIES) MUST BE SECURED BEFORE WORK IS STARTED OR OCCUPANCY IS CHANGED.

**ATTACHMENT 10**

**RESOLUTION NO. 2008-**

Adopted by the Sacramento City Council

**DETERMINING PROJECT EXEMPT FROM REVIEW UNDER  
THE CALIFORNIA ENVIRONMENTAL QUALITY ACT  
(METRO PCS AT WASHINGTON PLAZA (P08-003))**

**BACKGROUND**

- A. On April 24, 2008, the City Planning Commission conducted a public hearing on and approved the Metro PCS at Washington Plaza project (hereafter referred to as "Project").
- B. On June 5, 2008, the City Council conducted a public hearing, for which notice was given pursuant to Sacramento City Code Section 17.200.010(C)(2)(d) (posting and mail), and received and considered evidence concerning the Project.

**BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL  
RESOLVES AS FOLLOWS:**

Section 1. Based on the determination and recommendation of the City's Environmental Planning Services Manager and the oral and documentary evidence received at the hearing on the Project, the City Council finds that the Project is exempt from review under Section 15332 of the California Environmental Quality Act Guidelines as follows:

- a. The Project complies with all applicable policies of the General Plan and Central City Community Plan, as well as with the applicable zoning regulations;
- b. The Project is within City limits on a project site of no more than five (5) acres substantially surrounded by urban uses;
- c. The Project site has no value as habitat for endangered, rare or threatened species;
- d. Approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality; and
- e. The site can be adequately served by all required utilities and public services.

**ATTACHMENT 11**

**RESOLUTION NO. 2008-**

Adopted by the Sacramento City Council

**APPROVING THE METRO PCS AT WASHINGTON PLAZA PROJECT  
(APN:002-0124-006, -007, & -008) (P08-003)**

**BACKGROUND**

- A. On April 24, 2008, the Planning Commission conducted a public hearing on and approved the Metro PCS at Washington Plaza project. On May 5, 2008, Mr. Blackburn appealed the Planning Commission's decision to the City Council in accordance with Section 17.200.030(G); and
- B. On June 5, 2008, the City Council conducted a public hearing, for which notice was given pursuant to Sacramento City Code sections 17.200.030(K) and 17.200.010(C)(2)(d)(posting and mail), and received and considered evidence concerning the Metro PCS at Washington Plaza Project.

**BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:**

**Section 1.** Based on the verbal and documentary evidence received at the hearing on the Metro PCS at Washington Plaza Project, the City Council approves the Project based on the findings of fact as set forth below.

**Section 2.** The City Council approves the Project entitlements based on the following findings of fact:

**A. Special Permit:** The Special Permit to allow for building façade mounted panel antennas and related equipment in a residential zone is approved subject to the following Findings of Fact and Conditions of Approval:

- 1. The project is based upon sound principles of land use in that:
  - a. the proposed use is allowed in the Multi-Family (R-3A) zone subject to a Special Permit;
  - b. the project as conditioned is compatible with adjacent developments in the area; and
  - c. Façade-mounted panel antennas are a preferred alternative to the proliferation of new monopoles.
- 2. The proposed use would not be detrimental to the public health, safety and welfare, nor result in a public nuisance in that:
  - a. the applicant has demonstrated that the antennas will comply with the Federal

Communications Commissions guidelines for human exposure to radiofrequency electromagnetic fields;

- b. the antennae, painted to match the building and located on the elevator penthouse will be minimally visible and not accessible to the public; and
- c. the related equipment is adequately screened and does not inhibit pedestrian access to the building, it does not impact use of the open space amenities on site, and it will have locked access.

3. The proposed project is consistent with the General Plan Policy of promoting and supporting communications facilities within the City as well as the Guidelines for Telecommunications Facilities (GP Section 7-10).

**Section 3.** The City Council approves the **Special Permit** to allow for building façade mounted panel antennas and related equipment in a residential zone subject to the following conditions of approval:

Planning

- A1. Applicant shall obtain all necessary building permits prior to commencing construction.
- A2. The project shall be constructed in accordance with the attached plans (Exhibits 1A-1D) and shall match the finish of the existing structure as indicated in the attached photo-simulations (1E-1G).
- A3. Any modification to the project shall be subject to review and approval by Planning Department staff prior to the issuance of building permits.
- A4. The applicant shall comply with all Preservation conditions of approval (PB07-167) except that the equipment shall be screened as described in condition B5 rather than by a wrought-iron fence.
- A5. The equipment shall be screened with a painted six-foot masonry/stucco wall finished to match color and texture of the existing building and shall be accessible via a wrought-iron gate as shown on the approved plans.
- A6. The antenna panels, cable tray and all mounting hardware shall be painted to match the structure at the point of attachment.

Advisory Notes:

- A7. Provide appropriate Knox padlock for 6' wrought iron gate.

**Table of Contents:**

- Exhibit A – Site Plan
- Exhibit B – Equipment Enclosure Details
- Exhibit C – North Elevation

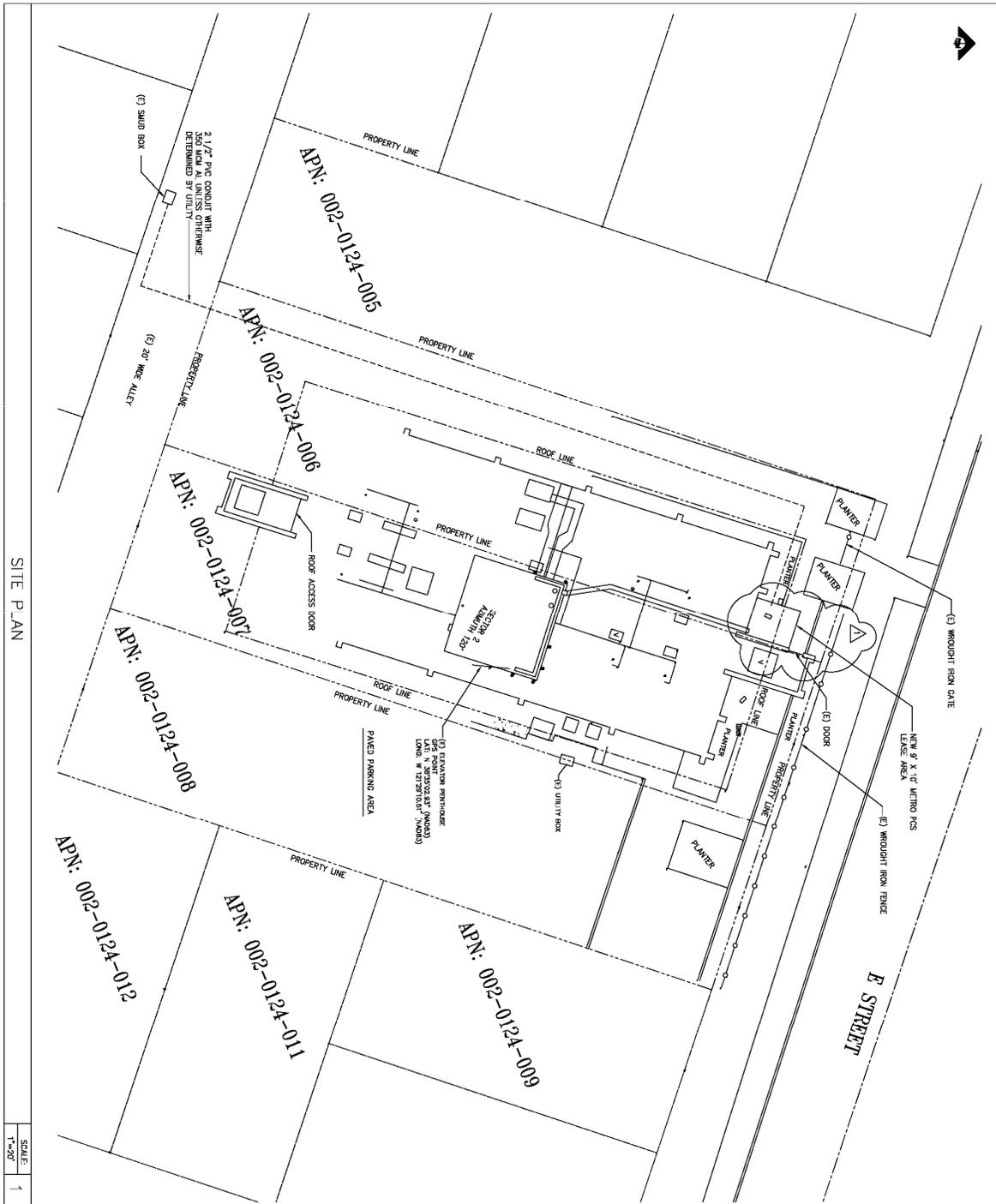
Exhibit D – West Elevation

Exhibit E – Antennae Photo-Simulation from 13th St.

Exhibit F – Antennae Photo-Simulation from E St.

Exhibit G – Equipment Enclosure Photo-Simulation

**EXHIBIT A**



SITE PLAN

SCALE: 1"=20'

<p>PROJECT NAME &amp; NO. <b>WASHINGTON PARK</b> SAC-432-A</p>																									
<p>SITE ADDRESS 1118 E STREET SHERMANTON, CA 95814</p>																									
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CONST DOCS 90%</td> <td>11/29/07</td> <td>MF</td> </tr> <tr> <td>2</td> <td>CONST DOCS 100%</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>3</td> <td>SP</td> <td>02/07/08</td> <td>MF</td> </tr> <tr> <td>4</td> <td>SP</td> <td>02/07/08</td> <td>MF</td> </tr> <tr> <td>5</td> <td>SP</td> <td>02/26/08</td> <td>MF</td> </tr> </tbody> </table>		NO.	DESCRIPTION	DATE	BY	1	CONST DOCS 90%	11/29/07	MF	2	CONST DOCS 100%	12/10/07	MF	3	SP	02/07/08	MF	4	SP	02/07/08	MF	5	SP	02/26/08	MF
NO.	DESCRIPTION	DATE	BY																						
1	CONST DOCS 90%	11/29/07	MF																						
2	CONST DOCS 100%	12/10/07	MF																						
3	SP	02/07/08	MF																						
4	SP	02/07/08	MF																						
5	SP	02/26/08	MF																						
<p>PREPARED FOR:</p> <p><b>metro PCS</b> 785 ORCHARD DRIVE FOLSOM, CA 95630 PHONE: (916) 704-0898 FAX: (916) 994-3281</p>																									
<p>DESIGNED BY:</p> <p><b>SINGLE SOURCE</b> 22972 SOUTH 113 STREET, OLSEN, OREGON, AZ 85042 PHONE: 602-910-6030 FAX: 480-778-1271</p>																									
<p>DATE: 10/24/07</p> <p>SCALE: AS NOTED</p> <p>PROJECT NO: SAC-432-A</p> <p>CONTRACT NO: 000 FLS AC</p> <p>DATE: 10/24/07</p> <p>SCALE: AS NOTED</p> <p>PROJECT NO: A-1</p> <p>SHEET 1 OF 1</p>																									



**EXHIBIT C**

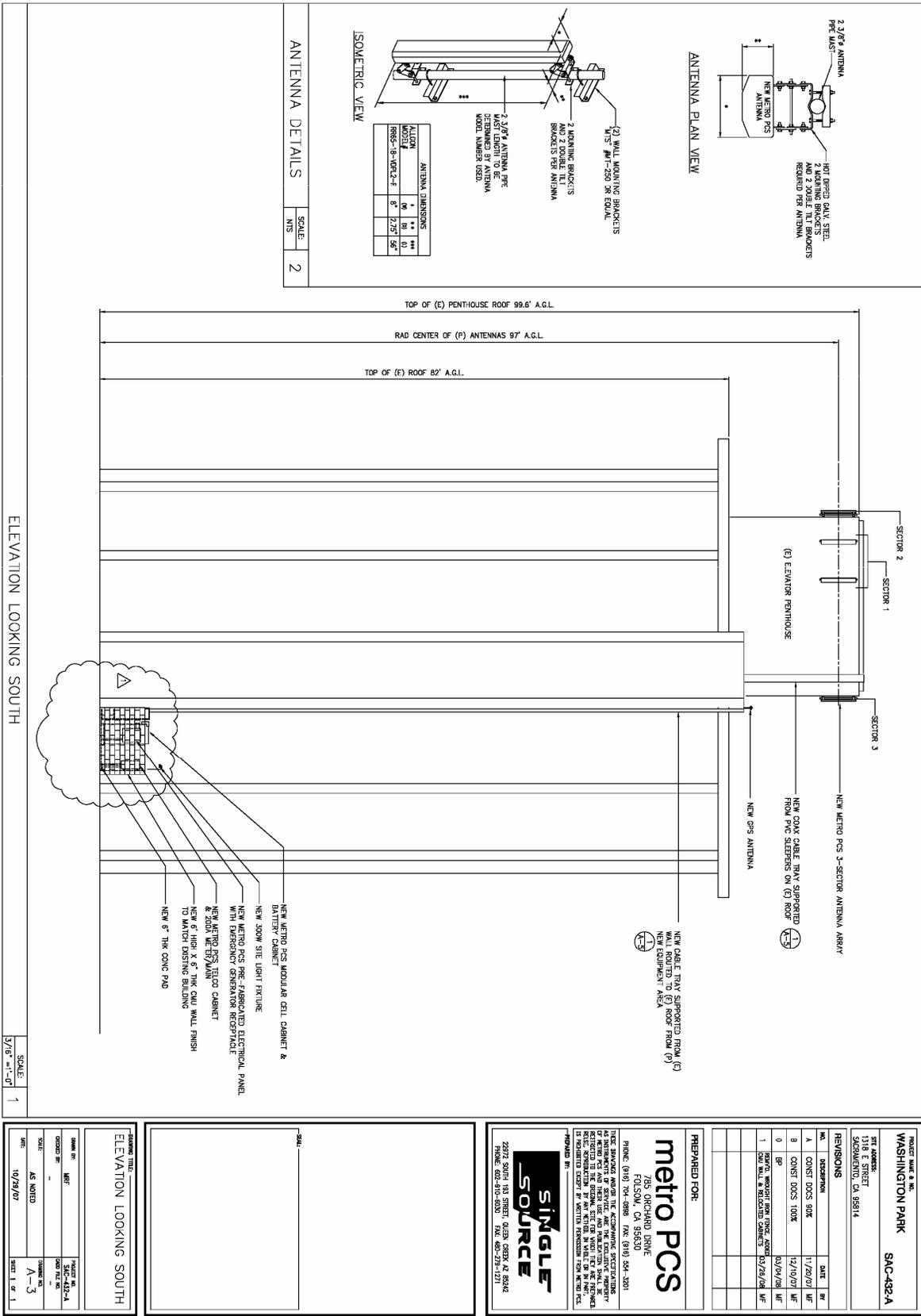
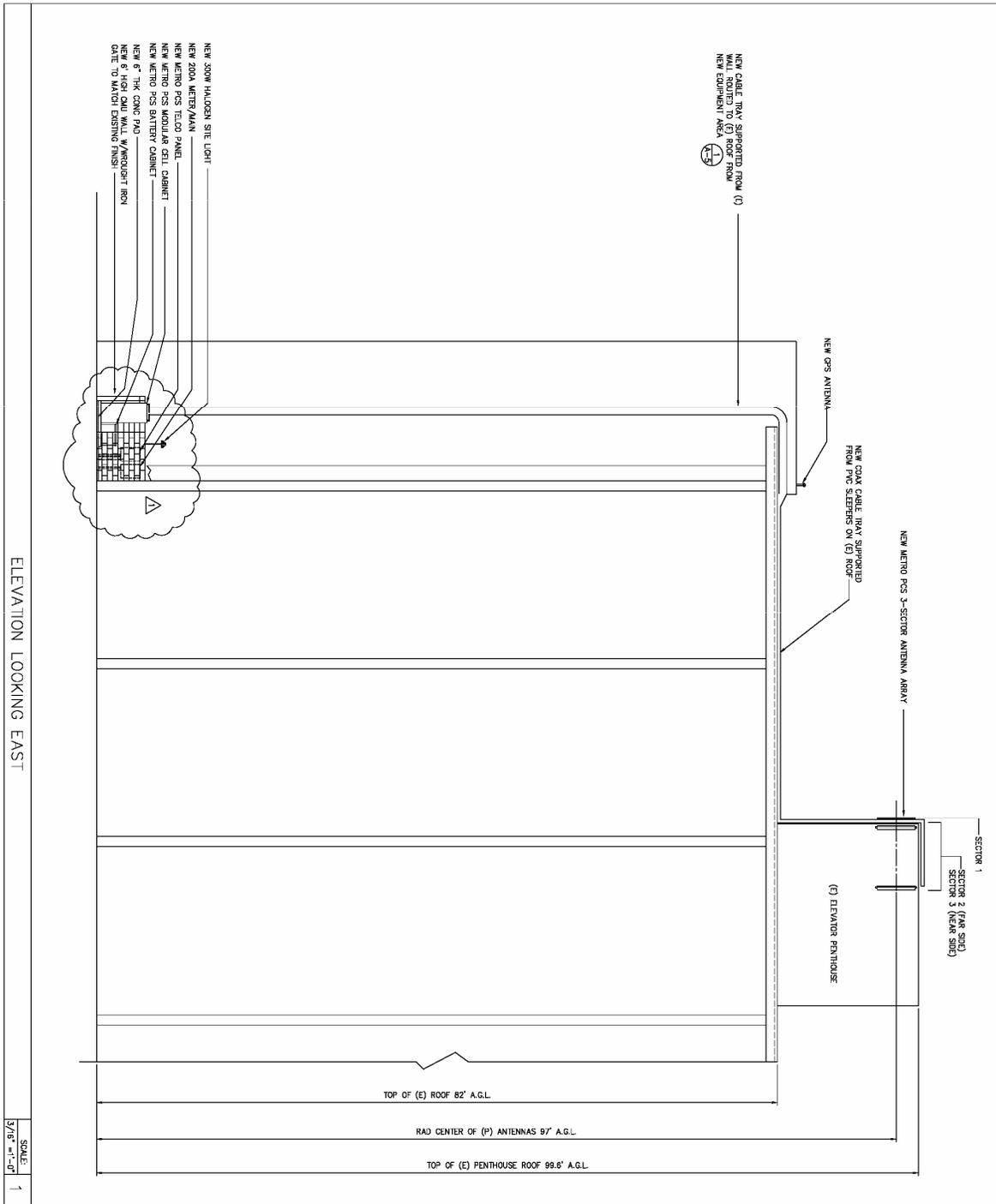


EXHIBIT D



ELEVATION LOOKING EAST

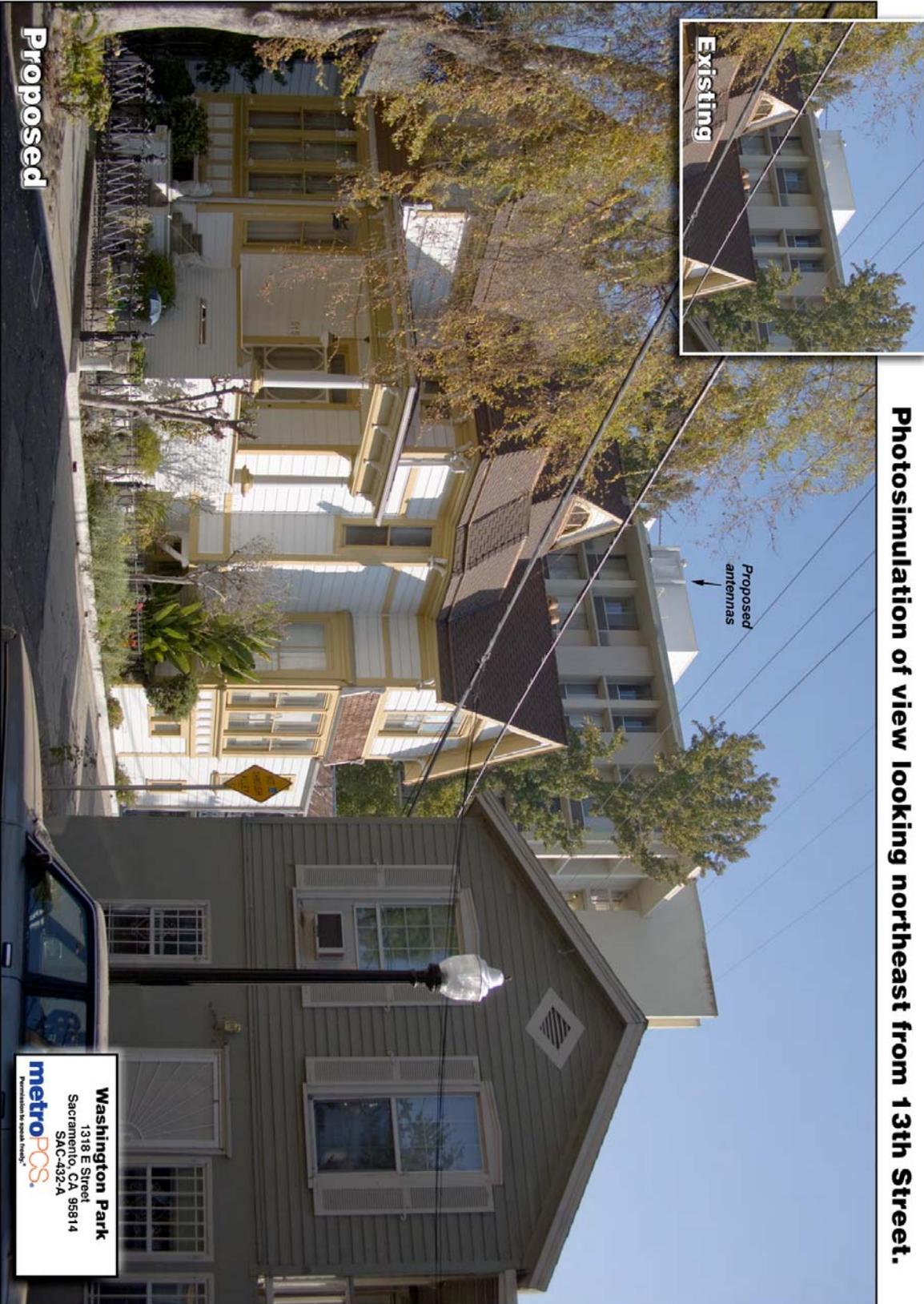
SCALE: 1/8" = 1'-0"

<b>PROJECT NAME &amp; NO.</b> WASHINGTON PARK SAC-432-A 1118 E STREET SHREVEPORT, LA 70514																																																																																																																																																																																																													
<b>REVISIONS</b> <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CONSTR DOCS 90%</td> <td>11/29/07</td> <td>MF</td> </tr> <tr> <td>2</td> <td>CONSTR DOCS 100%</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>3</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>4</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>5</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>6</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>7</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>8</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>9</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>10</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>11</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>12</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>13</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>14</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>15</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>16</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>17</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>18</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>19</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>20</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>21</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>22</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>23</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>24</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>25</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>26</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>27</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>28</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>29</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>30</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>31</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>32</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>33</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>34</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>35</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>36</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>37</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>38</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>39</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>40</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>41</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>42</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>43</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>44</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>45</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>46</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>47</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>48</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>49</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> <tr> <td>50</td> <td>ISP</td> <td>12/10/07</td> <td>MF</td> </tr> </tbody> </table>		NO.	DESCRIPTION	DATE	BY	1	CONSTR DOCS 90%	11/29/07	MF	2	CONSTR DOCS 100%	12/10/07	MF	3	ISP	12/10/07	MF	4	ISP	12/10/07	MF	5	ISP	12/10/07	MF	6	ISP	12/10/07	MF	7	ISP	12/10/07	MF	8	ISP	12/10/07	MF	9	ISP	12/10/07	MF	10	ISP	12/10/07	MF	11	ISP	12/10/07	MF	12	ISP	12/10/07	MF	13	ISP	12/10/07	MF	14	ISP	12/10/07	MF	15	ISP	12/10/07	MF	16	ISP	12/10/07	MF	17	ISP	12/10/07	MF	18	ISP	12/10/07	MF	19	ISP	12/10/07	MF	20	ISP	12/10/07	MF	21	ISP	12/10/07	MF	22	ISP	12/10/07	MF	23	ISP	12/10/07	MF	24	ISP	12/10/07	MF	25	ISP	12/10/07	MF	26	ISP	12/10/07	MF	27	ISP	12/10/07	MF	28	ISP	12/10/07	MF	29	ISP	12/10/07	MF	30	ISP	12/10/07	MF	31	ISP	12/10/07	MF	32	ISP	12/10/07	MF	33	ISP	12/10/07	MF	34	ISP	12/10/07	MF	35	ISP	12/10/07	MF	36	ISP	12/10/07	MF	37	ISP	12/10/07	MF	38	ISP	12/10/07	MF	39	ISP	12/10/07	MF	40	ISP	12/10/07	MF	41	ISP	12/10/07	MF	42	ISP	12/10/07	MF	43	ISP	12/10/07	MF	44	ISP	12/10/07	MF	45	ISP	12/10/07	MF	46	ISP	12/10/07	MF	47	ISP	12/10/07	MF	48	ISP	12/10/07	MF	49	ISP	12/10/07	MF	50	ISP	12/10/07	MF
NO.	DESCRIPTION	DATE	BY																																																																																																																																																																																																										
1	CONSTR DOCS 90%	11/29/07	MF																																																																																																																																																																																																										
2	CONSTR DOCS 100%	12/10/07	MF																																																																																																																																																																																																										
3	ISP	12/10/07	MF																																																																																																																																																																																																										
4	ISP	12/10/07	MF																																																																																																																																																																																																										
5	ISP	12/10/07	MF																																																																																																																																																																																																										
6	ISP	12/10/07	MF																																																																																																																																																																																																										
7	ISP	12/10/07	MF																																																																																																																																																																																																										
8	ISP	12/10/07	MF																																																																																																																																																																																																										
9	ISP	12/10/07	MF																																																																																																																																																																																																										
10	ISP	12/10/07	MF																																																																																																																																																																																																										
11	ISP	12/10/07	MF																																																																																																																																																																																																										
12	ISP	12/10/07	MF																																																																																																																																																																																																										
13	ISP	12/10/07	MF																																																																																																																																																																																																										
14	ISP	12/10/07	MF																																																																																																																																																																																																										
15	ISP	12/10/07	MF																																																																																																																																																																																																										
16	ISP	12/10/07	MF																																																																																																																																																																																																										
17	ISP	12/10/07	MF																																																																																																																																																																																																										
18	ISP	12/10/07	MF																																																																																																																																																																																																										
19	ISP	12/10/07	MF																																																																																																																																																																																																										
20	ISP	12/10/07	MF																																																																																																																																																																																																										
21	ISP	12/10/07	MF																																																																																																																																																																																																										
22	ISP	12/10/07	MF																																																																																																																																																																																																										
23	ISP	12/10/07	MF																																																																																																																																																																																																										
24	ISP	12/10/07	MF																																																																																																																																																																																																										
25	ISP	12/10/07	MF																																																																																																																																																																																																										
26	ISP	12/10/07	MF																																																																																																																																																																																																										
27	ISP	12/10/07	MF																																																																																																																																																																																																										
28	ISP	12/10/07	MF																																																																																																																																																																																																										
29	ISP	12/10/07	MF																																																																																																																																																																																																										
30	ISP	12/10/07	MF																																																																																																																																																																																																										
31	ISP	12/10/07	MF																																																																																																																																																																																																										
32	ISP	12/10/07	MF																																																																																																																																																																																																										
33	ISP	12/10/07	MF																																																																																																																																																																																																										
34	ISP	12/10/07	MF																																																																																																																																																																																																										
35	ISP	12/10/07	MF																																																																																																																																																																																																										
36	ISP	12/10/07	MF																																																																																																																																																																																																										
37	ISP	12/10/07	MF																																																																																																																																																																																																										
38	ISP	12/10/07	MF																																																																																																																																																																																																										
39	ISP	12/10/07	MF																																																																																																																																																																																																										
40	ISP	12/10/07	MF																																																																																																																																																																																																										
41	ISP	12/10/07	MF																																																																																																																																																																																																										
42	ISP	12/10/07	MF																																																																																																																																																																																																										
43	ISP	12/10/07	MF																																																																																																																																																																																																										
44	ISP	12/10/07	MF																																																																																																																																																																																																										
45	ISP	12/10/07	MF																																																																																																																																																																																																										
46	ISP	12/10/07	MF																																																																																																																																																																																																										
47	ISP	12/10/07	MF																																																																																																																																																																																																										
48	ISP	12/10/07	MF																																																																																																																																																																																																										
49	ISP	12/10/07	MF																																																																																																																																																																																																										
50	ISP	12/10/07	MF																																																																																																																																																																																																										
<b>PREPARED FOR:</b> metro PCS 785 ORCHARD DRIVE FOLSOM, CA 95630 PHONE: (916) 704-0888 FAX: (916) 994-3261																																																																																																																																																																																																													
PREPARED BY: <b>SINGLE SOURCE</b> 29772 SOUTH 143 STREET, OLDSHAW, OKLAHOMA 73162 PHONE: 405-230-8030 FAX: 405-273-1271																																																																																																																																																																																																													
<b>STANDARD TITLE:</b> ELEVATION LOOKING EAST																																																																																																																																																																																																													
SCALE: 1/8" = 1'-0"																																																																																																																																																																																																													
DATE: 10/24/07																																																																																																																																																																																																													

**EXHIBIT E**

**Photosimulation of view looking northeast from 13th Street.**

November 2, 2007



**Proposed**

**Existing**

Proposed antennas

**Washington Park**  
 1318 E Street  
 Sacramento, CA 95814  
 SAC-432-A

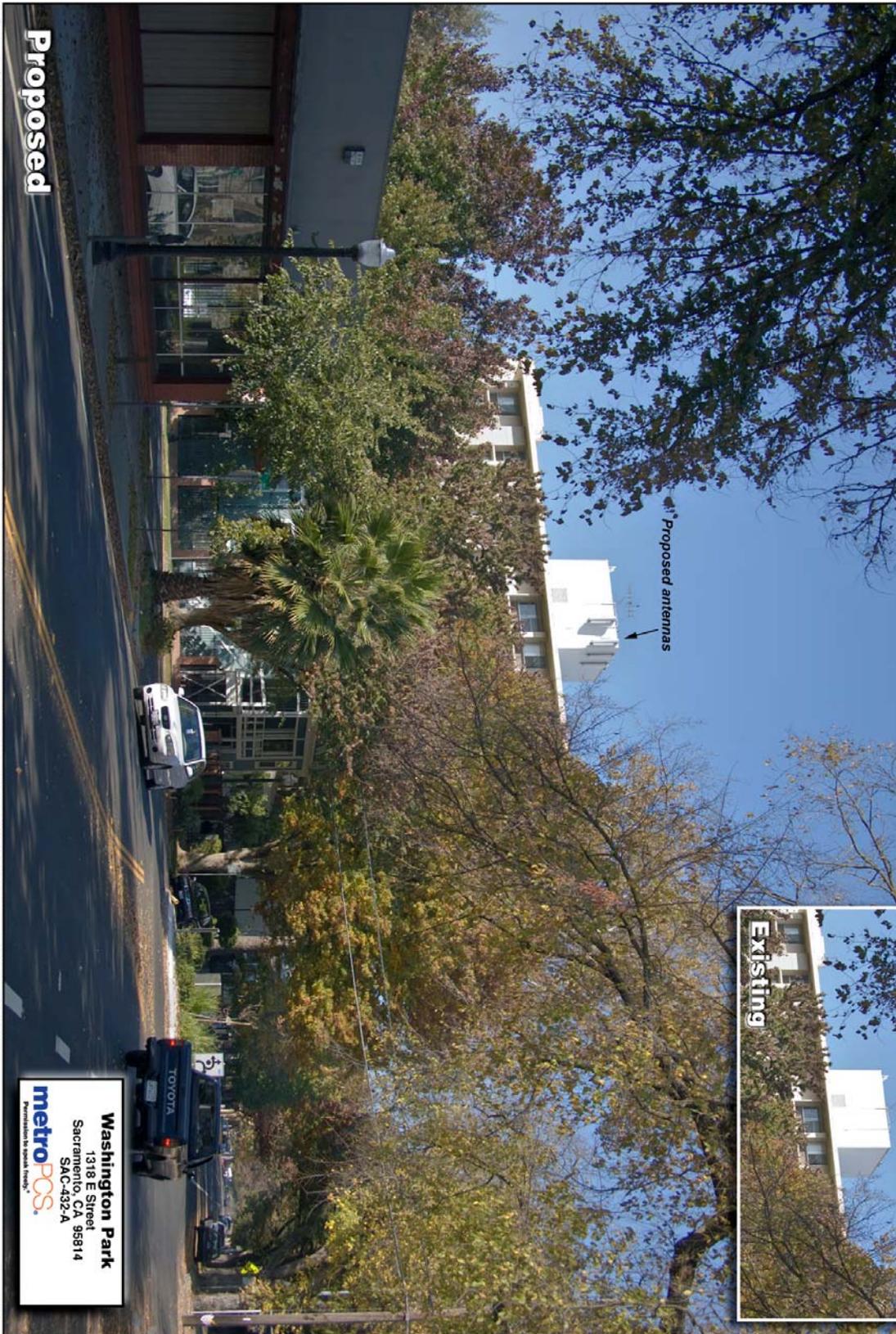
**metro PCS**  
Permitted by Social Franchise

© Copyright 2007, Previsualists Inc., all rights reserved. Accuracy of this photosimulation based upon information provided by project applicant. Questions? Call 1.877.799.3210 or visit [WWW.PHOTOSIM.COM](http://WWW.PHOTOSIM.COM)

**Previsualists**  
Custom Computer Graphics, Inc.

**EXHIBIT F**

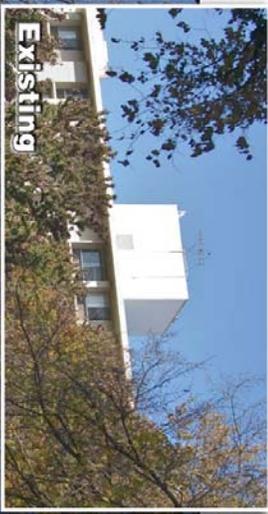
**Photosimulation of view looking west along E Street.**



November 2, 2007

© Copyright 2007, Previsualists Inc., all rights reserved. Accuracy of this photosimulation based upon information provided by project applicant. Questions? Call 1.877.799.3210 or visit [WWW.PHOTOSIM.COM](http://WWW.PHOTOSIM.COM)

**Proposed**



**Washington Park**  
1318 E Street  
Sacramento, CA 95814  
SAC-432-A

**metro PCS**  
Permitted to Social Share

**Previsualists**  
Custom Computer Graphics, Inc.

**EXHIBIT G**

**Photosimulation of view looking south from directly in front of the building.**

March 28, 2008

