

Case File Number: CMD13-337

April 16, 2014

<b>Location:</b>	<b>9801 Macarthur Boulevard (See map on reverse)</b>
<b>Assessor's Parcel Numbers:</b>	<b>(046-54902002-00)</b>
<b>Proposal:</b>	New Macro Telecommunications Facilities to replace three (3) existing rooftop antennas in an unscreened radome, the addition of three new antennas for a total of six (6) antennas and six (total) Tower Mounted Amplifiers (TMA's) all within two new rooftop screening devices.
<b>Applicant:</b>	Patrick Cruzen / Metro PCS
<b>Contact Person/ Phone Number:</b>	Patrick Cruzen (510)677-1428
<b>Owner:</b>	Quach, Lan Qui
<b>Case File Number:</b>	CMD13-337
<b>Planning Permits Required:</b>	Major Conditional Use Permit and Regular Design Review for Macro-telecommunication facility within 100 feet of a residential zone.
<b>General Plan:</b>	Neighborhood Commercial
<b>Zoning:</b>	CN-3 Zone Regulations
<b>Environmental Determination:</b>	Exempt, Section 15301 of the State CEQA Guidelines; minor additions and alterations to an existing facility Exempt, Section 15183 of the State CEQA Guidelines; projects consistent with a community plan, general Plan or zoning.
<b>Historic Status:</b>	Not a Potential Designated Historic Property; Survey rating: X
<b>Service Delivery District:</b>	6
<b>City Council District:</b>	7
<b>Date Filed:</b>	12/4/13
<b>Finality of Decision:</b>	Appealable to City Council within 10 days
<b>For Further Information:</b>	Contact case planner <b>Moe Hackett</b> at (510) 238-3973 or mhackett@oaklandnet.com

## SUMMARY

The proposed project is for the expansion of an existing unmanned wireless telecommunication facility located on the roof of an existing one story commercial building with an associated equipment cabinet located in the basement. The project site already contains 3 unconcealed telecommunication antennas and associated basement located equipment cabinets and this project would add three (3) additional antennas (with two new screening devices) and three (3) tower mounted amplifiers (TMA's). All of the antennas and TMA's would be concealed within the new screening devices and other rooftop equipment such as cables would be placed below the building parapet wall. The new screening tower would be located 10' from the primary (Macarthur Blvd.) frontage and 8 ½' from the rear wall. They would rise to a height of 6 ½' and 8 ½' above the tops of their respective parapet walls, and achieve a greater than 1:1 setback from the rooftop parapet walls as is required. Given the new antennas would be screened, and the location of the equipment cabinets which will continue to be in the basement this Macro Telecommunications Facility would represent vast improvement over the existing unscreened

# CITY OF OAKLAND PLANNING COMMISSION



0 125 250 500 750 1,000 Feet



Case File: CMD13337  
Applicant: Patrick Cenzen / Metro PCS  
Address: 9801 MacArthur Boulevard  
Zone: CN-3

rooftop facilities. This penthouse expansion will be painted and textured to match the existing building.

## **TELECOMMUNICATIONS BACKGROUND**

### **Limitations on Local Government Zoning Authority under the Telecommunications Act of 1996**

Section 704 of the Telecommunications Act of 1996 (TCA) provides federal standards for the siting of "Personal Wireless Services Facilities." "Personal Wireless Services" include all commercial mobile services (including personal communications services (PCS), cellular radio mobile services, and paging); unlicensed wireless services; and common carrier wireless exchange access services. Under Section 704, local zoning authority over personal wireless services is preserved such that the FCC is prevented from preempting local land use decisions; however, local government zoning decisions are still restricted by several provisions of federal law.

Under Section 253 of the TCA, no state or local regulation or other legal requirement can prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.

Further, Section 704 of the TCA imposes limitations on what local and state governments can do. Section 704 prohibits any state and local government action which unreasonably discriminates among personal wireless providers. Local governments must ensure that its wireless ordinance does not contain requirements in the form of regulatory terms or fees which may have the "effect" of prohibiting the placement, construction, or modification of personal wireless services.

Section 704 also preempts any local zoning regulation purporting to regulate the placement, construction and modification of personal wireless service facilities on the basis, either directly or indirectly, on the environmental effects of radio frequency emissions (RF) of such facilities, which otherwise comply with FCC standards in this regard. See, 47 U.S.C. 332(c)(7)(B)(iv) (1996). This means that local authorities may not regulate the siting or construction of personal wireless facilities based on RF standards that are more stringent than those promulgated by the FCC.

Section 704 mandates that local governments act upon personal wireless service facility siting applications to place, construct, or modify a facility within a reasonable time. 47 U.S.C.332(c)(7)(B)(ii). See FCC Shot Clock ruling setting forth "reasonable time" standards for applications deemed complete.

Section 704 also mandates that the FCC provide technical support to local governments in order to encourage them to make property, rights-of-way, and easements under their jurisdiction available for the placement of new spectrum-based telecommunications services. This proceeding is currently at the comment stage.

For more information on the FCC's jurisdiction in this area, contact Steve Markendorff, Chief of the Broadband Branch, Commercial Wireless Division, Wireless Telecommunications Bureau, at (202) 418-0640 or e-mail "smarkend@fcc.gov".

## **PROJECT DESCRIPTION**

The applicant is proposing a co-location that will add three (3) new antennas and three (6) TMA's within new screening devices (sometimes referred to as penthouses) on the roof top of an

existing one story commercial building (site of Macarthur Coin Laundry and Macarthur 98 cent Store). The new rooftop screening structure will expand massing horizontally on the roof top but will lower the overall height of the existing antennas facility, and will contain all of these appurtenances within a uniformly dimensioned and colored structure. The new screening structures will cover an area of 6' X 6 and 4' X 4'. This stealth roof-top penthouse structure expansion will be painted and textured to match the existing building walls. Through the proposal's design, the antennas shall be fully enclosed in a screened per **Specific Condition # 13** which will ensure that they remain painted and textured to match the existing building and are kept free of graffiti. The proposal would locate the equipment cabinet in the basement of the building. All proposed antennas and associated equipment will not be accessible to the public.

### **PROPERTY DESCRIPTION**

The subject property is a corner lot of approximately 5,206 square feet, with frontages on 98<sup>th</sup> Avenue and Macarthur Boulevard. The subject property contains one building and is one story tall with a basement. The building measures approximately 72' in length by 45' in width and has parking access from 98<sup>th</sup> Avenue. Currently there are 3 approved Macro Telecommunication facilities in an unscreened roof top radome with equipment cabinets all located within in the basement.

### **GENERAL PLAN ANALYSIS**

The subject property is located within the Neighborhood Center General Plan designations. The Neighborhood Center land use classifications are intended to identify, create, maintain and enhance mixed use commercial centers. These centers are typically characterized by smaller scale pedestrian-oriented, continuous street frontages with a mix of retail, housing, office, and personal and business services, etc. The proposed unmanned wireless telecommunication facility will not adversely affect and detract from the commercial or residential characteristics of the neighborhood. The antennas will be mounted on the existing commercial building and visual impacts will be mitigated since the antennas will be enclosed within a rooftop penthouse. **Specific Condition # 13** will require the penthouse to be painted and textured to match the existing building. General Plan Policy N9.9 states that the City encourages rehabilitation efforts which respect the architectural integrity of a building's original style. The proposed project will have very minimal effect on the existing building.

### **ZONING ANALYSIS**

The subject property is located within the CN-3 Zone. The CN-3 zone is intended to create, improve, or enhance areas neighborhood commercial centers that have a compact vibrant pedestrian environment. The surrounding zones range from RU-4 on MacArthur, RD-1 abutting in the rear, and RM-3 across 98<sup>th</sup> Avenue. The project is a revision of a previously approved Macro Telecommunication Facility (CD04426 and DS120271). The previous approvals at this site totaled 3 antennas and 2 microwave dishes.

The proposal requires a Major Conditional Use Permit for proximity within 100 feet of a residential zone which is required to meet the findings in both the Section 17.134.050 – General Use permit Criteria and the additional findings in section 17.128.070C for Macro Telecommunications Facilities, and Regular Design Review which is required to meet both the

Section 17.136.050B - Non-Residential Design Review Findings and the Section 17.128.070 Macro Telecommunications findings of the Planning Code.

## **ENVIRONMENTAL DETERMINATION**

The California Environmental Quality Act (CEQA) Guidelines lists the projects that qualify as categorical exemptions from environmental review. The proposed project is categorically exempt from the environmental review requirements pursuant to Section 15301, additions and alterations to existing facilities, and 15183, projects consistent with a community plan, general plan or zoning.

## **KEY ISSUES AND IMPACTS**

### **1. Rooftop Penthouses**

The key issues identified by Staff's review deal with bulk related design concerns. As proposed the design removes the existing "monopole like" radome which currently has a height of 24' and replaces it with two screening penthouses of a nature that has been routinely approved for these types of macro facilities and is considered by Staff to be generally unobtrusive. The new penthouses will be setback from the front edge of the building to allow for minimal visibility for pedestrians and will not add significant visual clutter for the residential building across the street because of the non-descript uniformity of the two screening structures and the matching paint color. Overall this design offers an improvement to the building's rooftop profile by softening obvious telecommunications appearance that the currently radome creates. The antennas cable trays and other equipment will be located within the screen or placed below the parapet wall (as seen from street level). The equipment cabinets will remain in the basement.

Staff has not identified any other major concerns or issues and finds that the facility is appropriately designed for the nature of its use.

### **2. Project Site**

Section 17.128.110 of the City of Oakland Telecommunication Regulations indicate that new wireless facilities shall generally be located on designated properties or facilities in the following order of preference:

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

Facilities locating on an A, ranked preference does not require a site alternatives analysis.

Since the proposed project involves co-locating the installation of new antennas and associated equipment cabinets on an existing facility, the proposed project meets (A) co-locating on an existing structure or facility with existing wireless antennas.

#### **4. Project Design**

Section 17.128.120 of the City of Oakland Telecommunications Regulations indicates that new wireless facilities shall generally be designed in the following order of preference:

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

Facilities designed to meet an A or D ranked preferences do not require a site design alternatives analysis.

Facilities designed to meet a C through F ranked preference, inclusive, must submit a site design alternatives analysis as part of the required application materials. A site design alternatives analysis shall, at a minimum, consist of:

- a. Written evidence indicating why each higher preference design alternative cannot be used. Such evidence shall be in sufficient detail that independent verification could be obtained if required by the City of Oakland Zoning Manager. Evidence should indicate if the reason an alternative was rejected was technical (e.g. incorrect height, interference from existing RF sources, inability to cover required area) or for other concerns (e.g. inability to provide utilities, construction or structural impediments).

City of Oakland Planning staff have reviewed and determined that the site selected is conforming to all other telecommunication regulation requirements. The project has met design criteria (A) since the antennas and/or dishes shall be mounted completely concealed behind an enclosure with paint and texture to match the existing building. Furthermore, to mitigate visual impacts the antennas will be mounted at approximately the same height and rooftop location above the public right of way. The associated equipment cabinet will have no visual impact since the equipment will be placed in the basement of the building.

#### **5. Project Radio Frequency Emissions Standards**

Section 17.128.130 of the City of Oakland Telecommunication Regulations requires that the applicant submit the following verifications including requests for modifications to existing facilities:

- a. With the initial application, a RF emissions report, prepared by a licensed professional engineer or other expert, indicating that the proposed site will operate within the current

acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.

b. Prior to commencement of construction, a RF emissions report indicating the baseline RF emissions condition at the proposed site.

c. Prior to final building permit sign off, an RF emissions report indicating that the site is actually operating within the acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.

The applicant states that the proposed project meets the radio frequency (RF) emissions standards as required by the regulatory agency. Submitted with the initial application was a RF emissions report, prepared by EBI Consulting (**Attachment D**). The report states that the proposed project will comply with the Site Safety Plan for limiting public exposure to radio frequency energy and, therefore, will not cause a significant impact on the environment. Additionally, staff recommends that prior to the final building permit sign off, the applicant submits certified RF emissions report stating that the facility is operating within acceptable thresholds established by the regulatory federal agency.


## **CONCLUSION**

The addition of new antennas to existing Telecommunications facilities as a Revision of a previously approved design is common, and such co-locations are often encouraged. Staff believes that the findings for approval can be made to support the Conditional Use Permit, Minor Variance, and Design Review. City of Oakland planning staff recommends the Planning Commission approve the project.

## **RECOMMENDATIONS:**

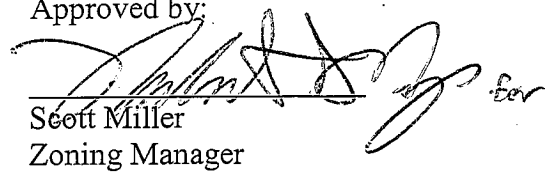
1. Affirm staff's environmental determination and
2. Approve Conditional Use Permit and Design Review application CMD13-337 subject to the attached findings and conditions of approval.

Prepared by:

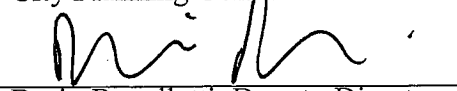
A handwritten signature in black ink, appearing to read 'Moe Hackett', with a stylized flourish at the end.

Moe Hackett  
Planner II

Approved by:

  
Scott Miller  
Zoning Manager

Approved for forwarding to the  
City Planning Commission

  
Darin Ranelletti, Deputy Director  
Planning and Building Department

**ATTACHMENTS:**

- A. Findings
- B. Conditions of Approval
- C. Project Plans & Photo simulations
- D. Radio Frequency – MetroPCS MacArthur –SF1205 Radio Frequency (RF) Compliance Report



**ATTACHMENT A**

**FINDINGS FOR APPROVAL:**

This proposal meets all the required findings under Sections 17.134.050(General Use Permit criteria), 17.136.050.B(Non-Residential Design Review criteria) 17.128.070.B, (Design Review criteria for Macro Facilities),17.128.070.C (Conditional Use Permit criteria for Macro Facilities); as set forth below and which are required to approve your application. Required findings are shown in **bold type**; reasons your proposal satisfies them are shown in normal type.

**SECTION 17.134.050 – GENERAL USE PERMIT FINDINGS:**

**A. That the location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development.**

The proposed telecommunications antennas (and TMA's) will be located within two new penthouses on the roof top of an existing building. It will not adversely affect the operating characteristic or livability of the existing area. The facility will be unmanned and will not create additional vehicular traffic in the area. The minor expansion of the existing telecommunications operations within new penthouse screening device /structure will not create any noticeable or adverse impacts.

**B. That the location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant.**

The proposal is a Telecommunications Facility on the roof of a residential building. It meets this finding by screening the existing use and by allowing for the possible co-location of future carriers, reducing the need for more telecommunications facilities on other nearby properties. The equipment and antennas have been screened to match the building and such screening will help this facility blend in with the building and surroundings and make this facility more attractive than unscreened antennas or the existing unscreened radome.

**C. That the proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region.**

The proposed development will enhance the successful operation of the surrounding area in its basic community function and will provide an essential service to the community or region. This will be achieved by improving the functional use of the site by providing a regional telecommunication facility for the community and will be available to police, fire, public safety organizations and the general public.

**D. That the proposal conforms to all applicable design review criteria set forth in the DESIGN REVIEW PROCEDURE of Chapter 17.136 of the Oakland Planning Code.**

The proposal conforms to all significant aspects of the design review criteria set forth in Chapter 17.136 of the Oakland Planning Code, as outlined below.

**E. That the proposal conforms in all significant respects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council.**

The proposal conforms in all significant aspects with the Oakland General Plan and with any other applicable plan or zoning maps adopted by the City of Oakland. The proposed macro-telecommunication facility in the Community Commercial General Plan designation will enhance and improve communication service for a mixture of residential, civic, commercial and institutional uses in the area.

**17.136.050(B) – NONRESIDENTIAL DESIGN REVIEW CRITERIA:**

**1. That the proposal will help achieve or maintain a group of facilities which are well related to one another and which, when taken together, will result in a well-composed design, with consideration given to site, landscape, bulk, height, arrangement, texture, materials, colors, and appurtenances; the relation of these factors to other facilities in the vicinity; and the relation of the proposal to the total setting as seen from key points in the surrounding area. Only elements of design which have some significant relationship to outside appearance shall be considered, except as otherwise provided in Section 17.136.060;**

The proposal is the addition to a macro telecommunications facility which includes the addition of three (3) new panel antennas, three (3) TMA's, and removal and replacement of three (3) other antennas. These six (6) new panel antennas (the total number of on this roof top) TMA's will be located within two new penthouses and associated equipment and cables below the parapet tops of the building. The modified equipment cabinets will remain located in the basement. The proposed screening devices are consistent and well related to the surrounding area in scale, bulk, height, materials, and textures. The two new screening structures will be located 10' from the front parapet wall on Macarthur Boulevard, 8 ½' from the rear wall, and between (approximately) 24' and 9' from the parapet walls on 98<sup>th</sup> Avenue, and cover an area of 6' X 6 and 4' X 4' respectively. The parapet wall rises 2' above the bottom of the structure effectively creating a screened visual heights of 8' and 6' as seen from the sidewalk / public right of way, and resulting in roof top setback that are well within the 1:1 foot requirement.

**2. That the proposed design will be of a quality and character which harmonizes with, and serves to protect the value of, private and public investments in the area;**

The proposal protects and preserves the surrounding neighborhood context by adding additional wireless telecommunication antennas to a commercial and residential area. The antennas will be

concealed from public view and will improve the existing visual impact on the neighborhood by removing the existing rooftop radome and moving the antennas into an enclosure.

**3. That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.**

The proposal conforms with the City of Oakland Comprehensive General Plan meeting specific General Plan policies and the Supplemental Report and Recommendations on Revisions to the Citywide Telecommunications Regulations. The proposal will conform to performance standards for noise set forth in Section 17.120.050 for decibels levels in residential areas for both day and nighttime use. The Project conforms to all macro-facility definitions set forth in Section 17.128.070 and meets all design review criteria to minimize all impacts throughout the neighborhood

**17.128.070(B) - DESIGN REVIEW CRITERIA FOR MACRO FACILITIES**

**1. Antennas should be painted and/or textured to match the existing structure:**

The proposed antennas will be completely concealed from public view behind a screening enclosure painted and textured to match the existing structure and located at the roof top of an existing building.

**2. Antennas mounted on architecturally significant structures or significant architectural details of the building should be covered by appropriate casings which are manufactured to match existing architectural features found on the building:**

The addition of the antennas to the existing building will be mounted behind screening enclosures on the roof with the size, placement, configuration, materials, texture, and color to match the existing finishes (See **Specific Condition # 13**).

**3. Where feasible, antennas can be placed directly above, below or incorporated with vertical design elements of a building to help in camouflaging:**

The proposed antennas shall be mounted behind enclosures designed with regard to the size, placement, and configuration to match the existing design. Per **Specific Condition # 13**, the materials, texture, and color will match that of the existing structure prior to the issuance of a building permit. The cable trays shall be painted to match the color of the building. (See **Specific Condition # 13**)

**4. Equipment shelters or cabinets shall be screened from the public view by using landscaping, or materials and colors consistent with surrounding backdrop:**

The equipment will be in the basement of the building and will not be visible from the street.

- 5. Equipment shelters or cabinets shall be consistent with the general character of the area.**

The equipment will be located in the basement and will not be visible from the street.

- 6. For antennas attached to the roof, maintain a 1:1 ratio for equipment setback; screen the antennas to match existing air conditioning units, stairs, or elevator towers; avoid placing roof mounted antennas in direct line with significant view corridors.**

The proposed antennas will be co-located on the roof top in newly created penthouses designed to screen the facilities. The penthouse location will be greater than the required setbacks on the building's roof and shall further benefit in this requirement by the existing height of the parapet wall (allowing for a 2' clearance by height). The penthouses will be textured and painted to match the existing building. Due to the depth of the rooftop setback, the shape of the building, and the stealth design characteristics the proposal will not alter or degrade sight lines or view corridors.

- 7. That all reasonable means of reducing public access to the antennas and equipment has been made, including, but not limited to, placement in or on buildings or structures, fencing, anti-climbing measures and anti-tampering devices.**

The antennas will be mounted to the roof and will not be accessible to the public due to its location. The equipment will be located in the basement of the building and will not be visible or accessible to the public.

**Section 17.128.070(C) - CONDITIONAL USE PERMIT (CUP) FINDINGS FOR MACRO FACILITIES**

- 1. The project must meet the special design review criteria listed in subsection B of this section (17.128.070B):**

The proposed project meets the special design review criteria listed in section 17.128.070B.

- 2. The proposed project must not disrupt the overall community character:**

Due to the proposed screening elements these telecommunication antennas and equipment will only make slight modifications to an existing rooftop character, and it will not disrupt the overall community character.

ATTACHMENT BCONDITIONS OF APPROVALSTANDARD CONDITIONS:**1. Approved Use***Ongoing*

a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, plans submitted on **December 4, 2013** and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans, will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall required prior written approval from the Director of City Planning or designee.

b) This action by the City Planning Commission ("this Approval") includes the approvals set forth below. This Approval includes: **The proposal to alter and establish macro telecommunications facility located on the roof of an existing building at 9801 Macarthur Boulevard (APN: 046-5490-002-00), under Oakland Municipal Code 17.128, 17.136, and 17.134.**

**2. Effective Date, Expiration, Extensions and Extinguishment***Ongoing*

Unless a different termination date is prescribed, this Approval shall expire **two calendar years** from the approval date, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired.

**3. Scope of This Approval; Major and Minor Changes***Ongoing*

The project is approved pursuant to the **Planning Code** only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

**4. Conformance with other Requirements***Prior to issuance of a demolition, grading, P-job, or other construction related permit*

a) The project applicant shall comply with all other applicable federal, state, regional and/or local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the City's Public Works Agency. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition of Approval #3.

- b) The applicant shall submit approved building plans for project-specific needs related to fire protection to the Fire Services Division for review and approval, including, but not limited to automatic extinguishing systems, water supply improvements and hydrants, fire department access, elevated walking pathways, safety railings, emergency access and lighting.

**5. Conformance to Approved Plans; Modification of Conditions or Revocation**

***Ongoing***

- a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of approval, unless an earlier date is specified elsewhere.
- b) Violation of any term, **Conditions of Approval** or **project description** relating to the **Conditions of Approval** is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approvals or alter these **conditions of approval** if it is found that there is violation of any of the **Conditions of Approval** or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it; limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Conditions of Approval.

**6. Signed Copy of the Conditions of Approval**

***Ongoing***

A copy of the approval letter and **Conditions of Approval** shall be signed by the property owner, notarized, and submitted with each set of permit plans to the appropriate City agency for this project.

**7. Indemnification**

***Ongoing***

- a) To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (hereafter collectively called City) from any liability, damages, claim, judgment, loss (direct or indirect) action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to participate in the defense of said Action and the applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.
- b) Within ten (10) calendar days of the filing of any Action as specified in subsection A above, the applicant shall execute a Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Letter of Agreement shall survive termination, extinguishment or invalidation of the approval. Failure to timely execute the Letter of Agreement does not relieve the applicant of

any of the obligations contained in this condition or other requirements or Conditions of Approval that may be imposed by the City.

**8. Compliance with Conditions of Approval**

***Ongoing***

The project applicant shall be responsible for compliance with the recommendations in any submitted and approved technical report and all the Conditions of Approval set forth below at its sole cost and expense, and subject to review and approval of the City of Oakland.

**9. Severability**

***Ongoing***

Approval of the project would not have been granted but for the applicability and validity of each and every one of the specified **Conditions of Approval**, and if one or more of such **Conditions of Approval** is found to be invalid by a court of competent jurisdiction, this Approval would not have been granted without requiring other valid **Conditions of Approval** consistent with achieving the same purpose and intent of such Approval.

**10. Landscape Maintenance.**

***Ongoing***

All new landscaping shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements.

**11. Operational Noise-General**

***Ongoing.***

Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

**PROJECT SPECIFIC CONDITIONS FOR TELECOMMUNICATIONS FACILITIES**

**12. Emissions Report**

***Prior to a final inspection***

The applicant shall provide an RF emissions report to the City of Oakland Zoning Division indicating that the site is actually operating within the acceptable thresholds as established by the Federal government or any such agency that may be subsequently authorized to establish such standards.

**13. Paint Color, Texture, and Ongoing Maintenance**

***Prior to issuance of Building Permits, and ongoing***

The final color and texture of the penthouse structure shall match the existing building wall in color and texture. The structures shall be maintained in good condition and shall be partly or wholly re-painted as needed or as directed at the discretion of the Zoning Administrator. Graffiti shall be removed within 2 weeks of defacement.

**APPROVED BY:**

City Planning Commission: \_\_\_\_\_ (date) \_\_\_\_\_ (vote)

City Council: \_\_\_\_\_ (date) \_\_\_\_\_ (vote)









[illegible]

DRAWN BY:	CHK.:	APV.:
JM	SM	TR

CURRENT ISSUE DATE	12/02/13
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ISSUED FOR:

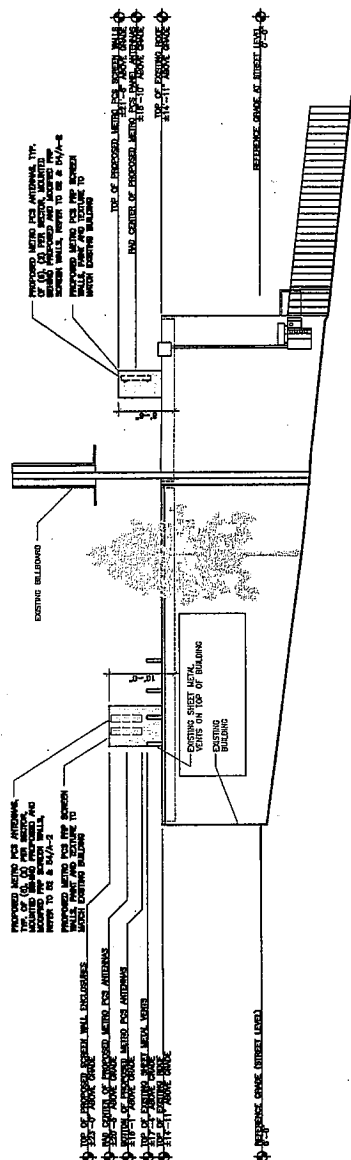
100% ZONING

**MACARTHUR**  
**SF1205**  
9801 MACARTHUR BLVD  
OAKLAND, CA 94603  
COUNTY OF ALAMEDA  
APN: 046-5490-002

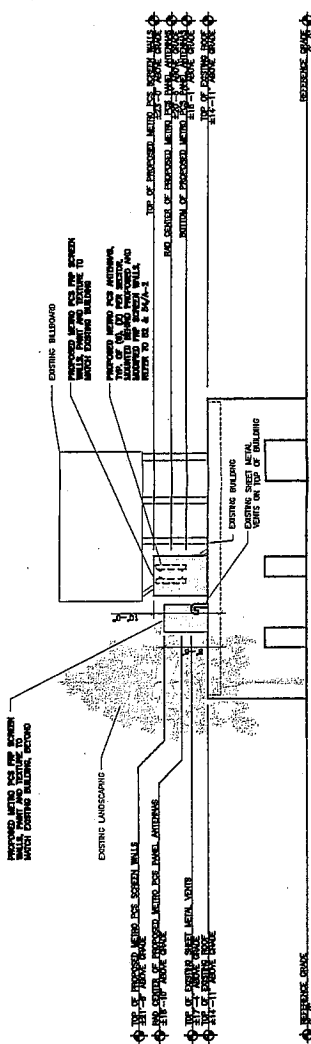
**ELEVATIONS**

**A-3**

**2017**

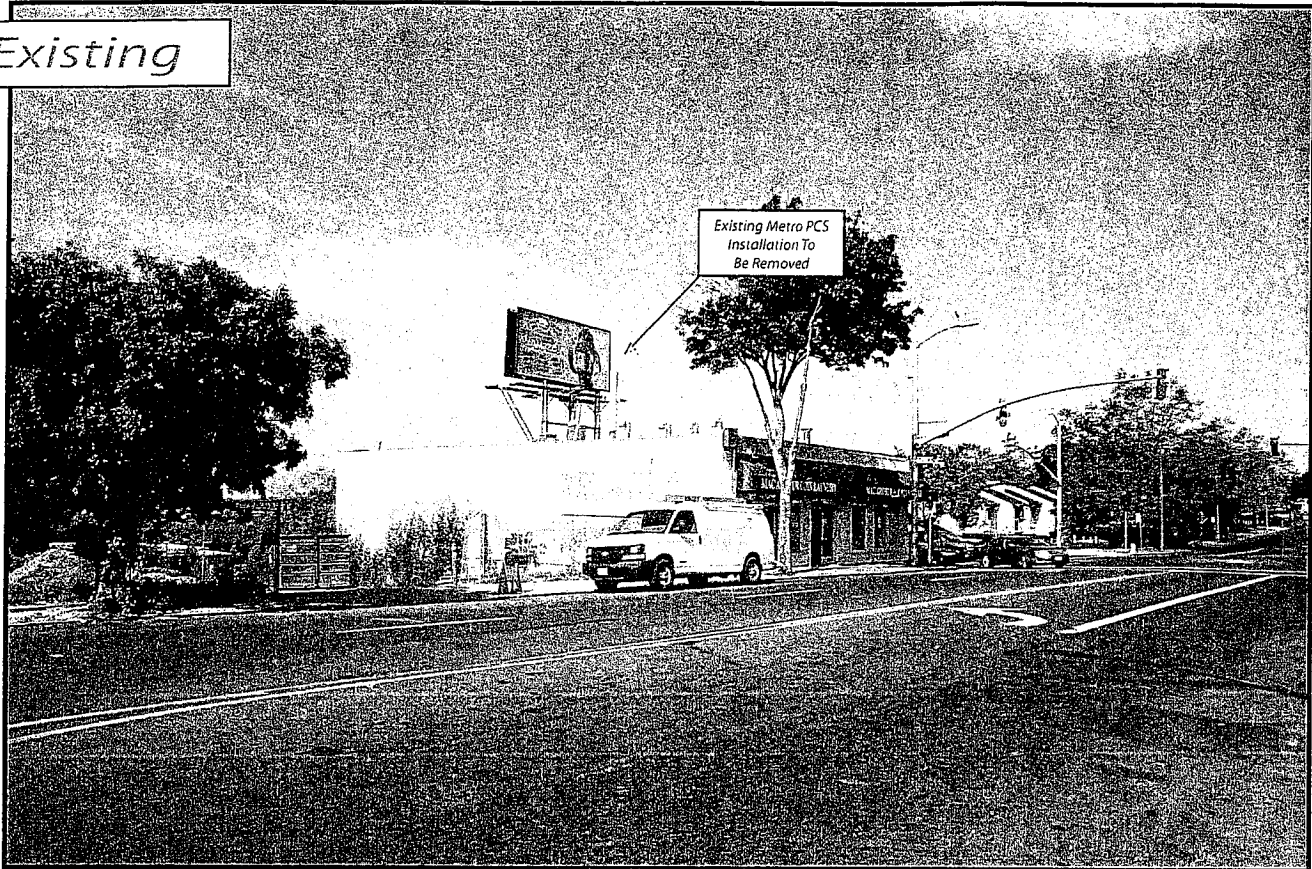


**NORTHWEST ELEVATION**

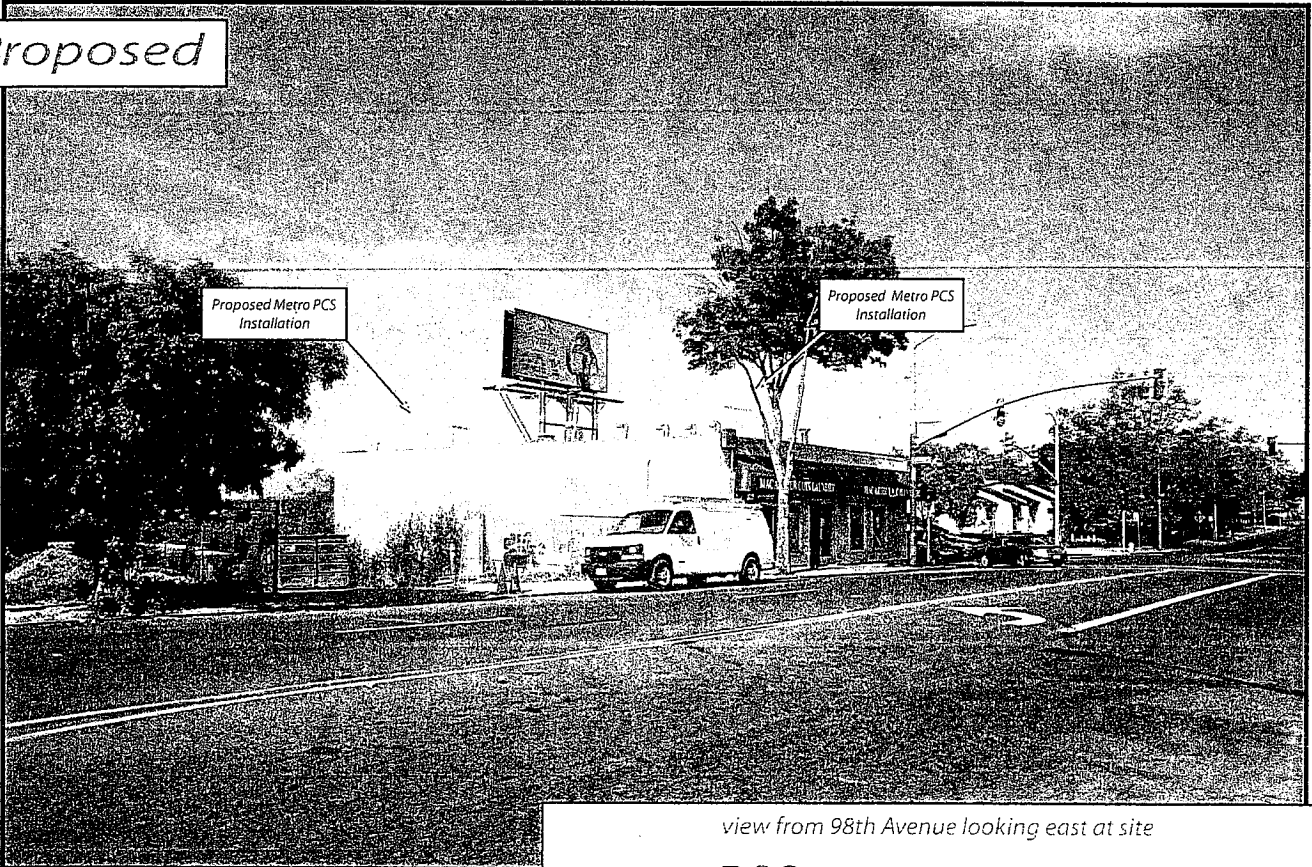


NORTHEAST ELEVATION

## Existing



## Proposed



view from 98th Avenue looking east at site

**Advances**  
 Full Simulation Services  
 Contact: 925-202-9100

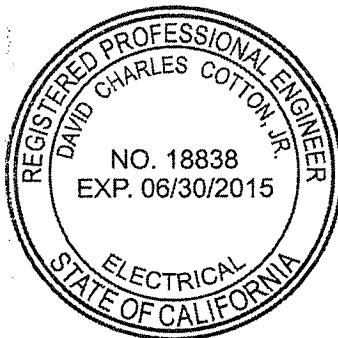
**metroPCS**

5F1205 Macarthur  
 9801 Macarthur Blvd, Oakland, CA

**MetroPCS  
MacArthur - SF1205  
Radio Frequency (RF) Site Compliance Report**



**9801 MacArthur Boulevard, Oakland, CA 94605**



*David Charles Cotton, Jr.*

**David Charles Cotton, Jr.  
Registered Professional Engineer (Electrical)  
State of California, 18838, Expires 30-June-2015  
Date: 2013-November-21**

## 1 Executive Summary

MetroPCS has contracted with Sitesafe, Inc. (Sitesafe), an independent Radio Frequency (RF) regulatory and engineering consulting firm, to determine whether the proposed communications site, SF1205 - MacArthur, located at 9801 MacArthur Boulevard, Oakland, CA, is in compliance with Federal Communication Commission (FCC) Rules and Regulations for RF emissions.

The subject site will be compliant with the pertinent FCC rules and regulations governing radio frequency emissions.

If you have any questions regarding RF safety and regulatory compliance, please do not hesitate to contact Sitesafe's Customer Support Department at (703) 276-1100.

## 2 Site Compliance

### 2.1 Site Compliance Statement

Upon evaluation of the cumulative RF emission levels from all operators at this site, Sitesafe has determined that:

This **site will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65.

The compliance determination is based on theoretical modeling, RF signage placement recommendations, proposed antenna inventory and the level of restricted access to the antennas at the site. Any deviation from the MetroPCS's proposed deployment plan could result in the site being rendered non-compliant.

### 2.2 Actions for Site Compliance

Based on common industry practice and our understanding of FCC and OSHA requirements, this section provides a statement of recommendations for site compliance. RF alert signage recommendations have been proposed based on theoretical analysis of MPE levels. Barriers can consist of locked doors, fencing, railing, rope, chain, paint striping or tape, combined with RF alert signage.

This site will be compliant with the FCC rules and regulations.

Sitesafe found one or more issues that led to our determination. The site will be made compliant if the following changes are implemented:

- Restricted access to the site (by lock, alarm or sign-in sheet), preventing anyone from the general public access to the site;

**Site Access Location**

Put lock on site access point.

**Note:** Based on photos and CD's, could not identify a access ladder, door or hatch.

**MetroPCS Proposed Alpha Sector Location**

Yellow caution sign required.

**MetroPCS Proposed Beta Sector Location**

Yellow caution sign required.

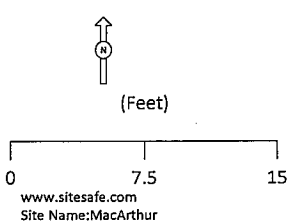
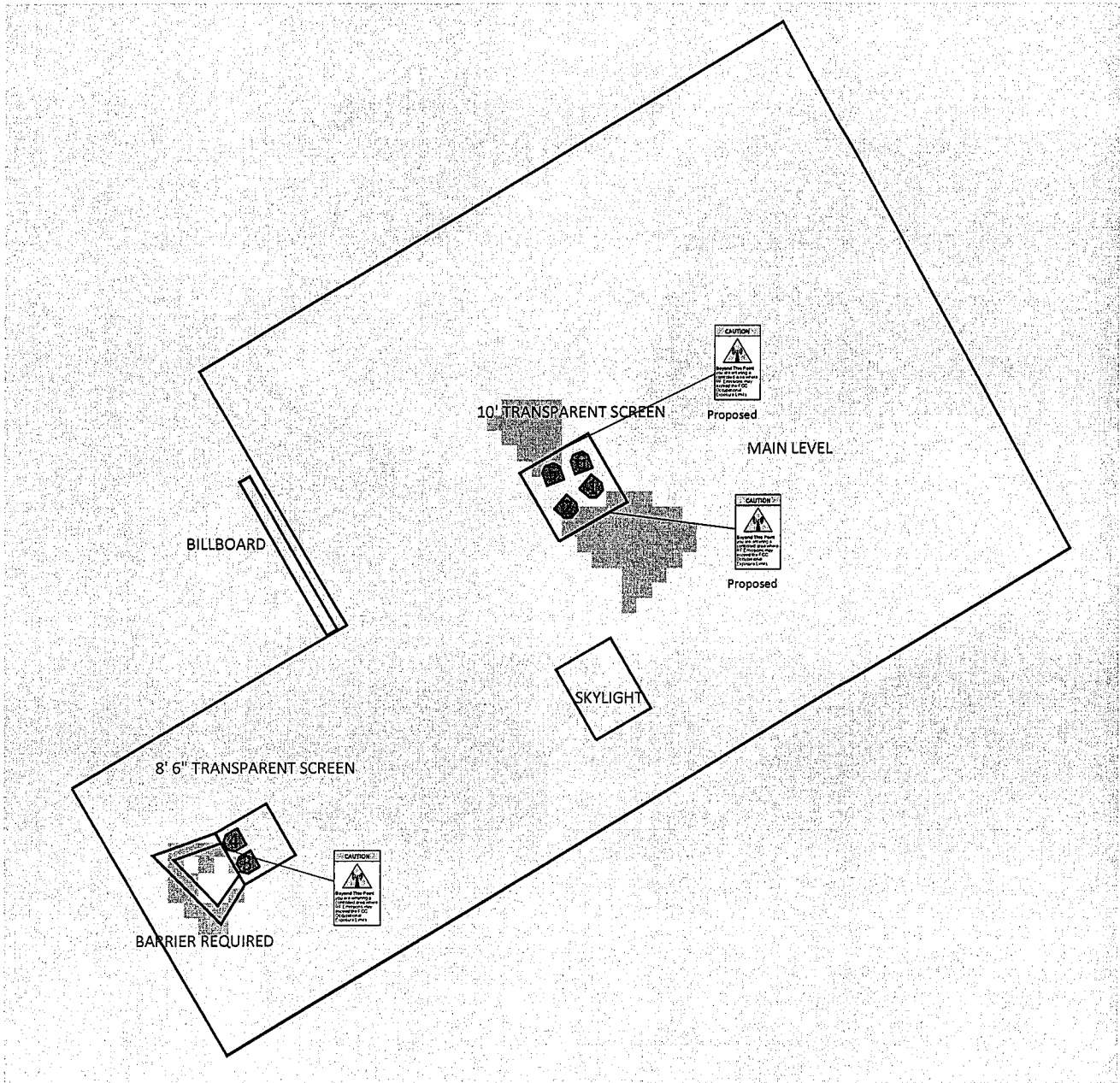
Rope or chain barrier or fencing or painted or tape stripes required

**MetroPCS Proposed Gamma Sector Location**

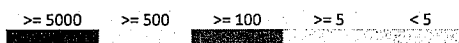
Yellow caution sign required.



### 3. RF Emissions Simulation For: MacArthur



% of FCC Public Exposure Limit  
Spatial average 0' - 6'



AT&T MOBILITY LLC	VERIZON WIRELESS	T-MOBILE	SPRINT-NEXTEL	METROPCS	CRICKET COMMUNICATIONS	CLEARWIRE

Sitesafe Inc. assumes no responsibility for modeling results not verified by Sitesafe personnel.  
Contact Sitesafe Inc. for modeling assistance at (703) 276-1100  
SitesafeTC Version: 1.0.0.0  
11/21/2013 10:25:58 AM

## 4 Antenna Inventory

The Antenna Inventory shows all transmitting antennas at the site. This inventory was provided by the customer, and was utilized by Sitesafe to perform theoretical modeling of RF emissions. The inventory coincides with the site diagrams in this report, identifying each antenna's location at SF1205 - MacArthur. The antenna information collected includes the following information:

- Licensee or wireless operator name
- Frequency or frequency band
- Transmitter power – Effective Radiated Power ("ERP"), or Equivalent Isotropic Radiated Power ("EIRP") in Watts
- Antenna manufacturer make, model, and gain

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

The following antenna inventory, on this and the following page, were provided by the customer and were utilized to create the site model diagrams:

Table 3: Antenna Inventory										
Ant #	Operated By	TX Freq (MHz)	ERP (Watts)	Antenna Gain (dBd)	Az (Deg)	Antenna Model	Ant Type	Len (ft)	Horizontal Half Power Beamwidth (Deg)	Location X Y Z
1	METROPCS (Proposed)	1900	1932.9	15.37	130	Ericsson AIR	Panel	4.7	65	51.4' 52.2' 6.3'
1	METROPCS (Proposed)	1900	690.3	15.37	130	Ericsson AIR	Panel	4.7	65	51.4' 52.2' 6.3'
2	METROPCS (Proposed)	2100	690.3	15.37	130	Ericsson AIR	Panel	4.7	65	49.8' 50.9' 6.3'
2	METROPCS (Proposed)	2135	690.3	15.37	130	Ericsson AIR	Panel	4.7	65	49.8' 50.9' 6.3'
3	METROPCS (Proposed)	1900	1932.9	15.37	240	Ericsson AIR	Panel	4.7	65	28.7' 27.5' 4'
3	METROPCS (Proposed)	1900	690.3	15.37	240	Ericsson AIR	Panel	4.7	65	28.7' 27.5' 4'
4	METROPCS (Proposed)	2100	690.3	15.37	240	Ericsson AIR	Panel	4.7	65	27.9' 29' 4'
4	METROPCS (Proposed)	2135	690.3	15.37	240	Ericsson AIR	Panel	4.7	65	27.9' 29' 4'
5	METROPCS (Proposed)	1900	1932.9	15.37	340	Ericsson AIR	Panel	4.7	65	48.8' 53.1' 6.3'
5	METROPCS (Proposed)	1900	690.3	15.37	340	Ericsson AIR	Panel	4.7	65	48.8' 53.1' 6.3'
6	METROPCS (Proposed)	2100	690.3	15.37	340	Ericsson AIR	Panel	4.7	65	50.7' 53.9' 6.3'
6	METROPCS (Proposed)	2135	690.3	15.37	340	Ericsson AIR	Panel	4.7	65	50.7' 53.9' 6.3'

NOTE: X, Y and Z indicate relative position of the antenna to the origin location on the site, displayed in the model results diagram. Specifically, the Z reference indicates antenna height above the main site level unless otherwise indicated. ERP values provided by the client and used in the modeling may be greater than are currently deployed. For other carriers at this site the use of "Generic" as an antenna model or "Unknown" for a wireless operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.



## **5 Engineer Certification**

The professional engineer whose seal appears on the cover of this document hereby certifies and affirms that:

I am registered as a Professional Engineer in the jurisdiction indicated in the professional engineering stamp on the cover of this document; and

That I am an employee of Sitesafe, Inc., in Arlington, Virginia, at which place the staff and I provide RF compliance services to clients in the wireless communications industry; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission (FCC) as well as the regulations of the Occupational Safety and Health Administration (OSHA), both in general and specifically as they apply to the FCC Guidelines for Human Exposure to Radio-frequency Radiation; and

That I have thoroughly reviewed this Site Compliance Report and believe it to be true and accurate to the best of my knowledge as assembled by and attested to by Scott Hoy.

November 21, 2013

## **Appendix A – Statement of Limiting Conditions**

Sitesafe will not be responsible for matters of a legal nature that affect the site or property.

Due to the complexity of some wireless sites, Sitesafe performed this analysis and created this report utilizing best industry practices and due diligence. Sitesafe cannot be held accountable or responsible for anomalies or discrepancies due to actual site conditions (i.e., mislabeling of antennas or equipment, inaccessible cable runs, inaccessible antennas or equipment, etc.) or information or data supplied by MetroPCS, the site manager, or their affiliates, subcontractors or assigns.

Sitesafe has provided computer generated model(s) in this Site Compliance Report to show approximate dimensions of the site, and the model is included to assist the reader of the compliance report to visualize the site area, and to provide supporting documentation for Sitesafe's recommendations.

Sitesafe may note in the Site Compliance Report any adverse physical conditions, such as needed repairs, observed during the survey of the subject property or that



Sitesafe became aware of during the normal research involved in performing this survey. Sitesafe will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because Sitesafe is not an expert in the field of mechanical engineering or building maintenance, the Site Compliance Report must not be considered a structural or physical engineering report.

Sitesafe obtained information used in this Site Compliance Report from sources that Sitesafe considers reliable and believes them to be true and correct. Sitesafe does not assume any responsibility for the accuracy of such items that were furnished by other parties. When conflicts in information occur between data provided by a second party and physical data collected by Sitesafe, the physical data will be used.

## **Appendix B – Assumptions and Definitions**

### **General Model Assumptions**

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

The site has been modeled with these assumptions to show the maximum RF energy density. Sitesafe believes this to be a *worst-case* analysis, based on best available data. Areas modeled to predict emissions greater than 100% of the applicable MPE level may not actually occur, but are shown as a *worst-case* prediction that could be realized real time. Sitesafe believes these areas to be safe for entry by occupationally trained personnel utilizing appropriate personal protective equipment (in most cases, a personal monitor).

Thus, at any time, if power density measurements were made, we believe the real-time measurements would indicate levels below those depicted in the RF emission diagram(s) in this report. By modeling in this way, Sitesafe has conservatively shown exclusion areas – areas that should not be entered without the use of a personal monitor, carriers reducing power, or performing real-time measurements to indicate real-time exposure levels.

### **Use of Generic Antennas**

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



Where the frequency is unknown, Sitesafe uses the closest frequency in the antenna's range that corresponds to the highest Maximum Permissible Exposure (MPE), resulting in a conservative analysis.



## Definitions

**5% Rule** – The rules adopted by the FCC specify that, in general, at multiple transmitter sites actions necessary to bring the area into compliance with the guidelines are the shared responsibility of all licensees whose transmitters produce field strengths or power density levels at the area in question in excess of 5% of the exposure limits. In other words, any wireless operator that contributes 5% or greater of the MPE limit in an area that is identified to be greater than 100% of the MPE limit is responsible taking corrective actions to bring the site into compliance.

**Compliance** – The determination of whether a site is safe or not with regards to Human Exposure to Radio Frequency Radiation from transmitting antennas.

**Decibel (dB)** – A unit for measuring power or strength of a signal.

**Duty Cycle** – The percent of pulse duration to the pulse period of a periodic pulse train. Also, may be a measure of the temporal transmission characteristic of an intermittently transmitting RF source such as a paging antenna by dividing average transmission duration by the average period for transmission. A duty cycle of 100% corresponds to continuous operation.

**Effective (or Equivalent) Isotropic Radiated Power (EIRP)** – The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

**Effective Radiated Power (ERP)** – In a given direction, the relative gain of a transmitting antenna with respect to the maximum directivity of a half wave dipole multiplied by the net power accepted by the antenna from the connecting transmitter.

**Gain (of an antenna)** – The ratio of the maximum intensity in a given direction to the maximum radiation in the same direction from an isotropic radiator. Gain is a measure of the relative efficiency of a directional antennas as compared to an omni directional antenna.

**General Population/Uncontrolled Environment** – Defined by the FCC, as an area where RFR exposure may occur to persons who are **unaware** of the potential for exposure and who have no control of their exposure. General Population is also referenced as General Public.

**Generic Antenna** – For the purposes of this report, the use of "Generic" as an antenna model means the antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use our industry specific knowledge of antenna models to select a worst case scenario antenna to model the site.

**Isotropic Antenna** – An antenna that is completely non-directional. In other words, an antenna that radiates energy equally in all directions.



**Maximum Measurement** – This measurement represents the single largest measurement recorded when performing a spatial average measurement.

**Maximum Permissible Exposure (MPE)** – The rms and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities associated with these fields to which a person may be exposed without harmful effect and with acceptable safety factor.

**Occupational/Controlled Environment** – Defined by the FCC, as an area where Radio Frequency Radiation (RFR) exposure may occur to persons who are **aware** of the potential for exposure as a condition of employment or specific activity and can exercise control over their exposure.

**OET Bulletin 65** – Technical guideline developed by the FCC's Office of Engineering and Technology to determine the impact of Radio Frequency radiation on Humans. The guideline was published in August 1997.

**OSHA (Occupational Safety and Health Administration)** – Under the Occupational Safety and Health Act of 1970, employers are responsible for providing a safe and healthy workplace for their employees. OSHA's role is to promote the safety and health of America's working men and women by setting and enforcing standards; providing training, outreach and education; establishing partnerships; and encouraging continual process improvement in workplace safety and health. For more information, visit [www.osha.gov](http://www.osha.gov).

**Radio Frequency Radiation** – Electromagnetic waves that are propagated from antennas through space.

**Spatial Average Measurement** – A technique used to average a minimum of ten (10) measurements taken in a ten (10) second interval from zero (0) to six (6) feet. This measurement is intended to model the average energy an average sized human body will absorb while present in an electromagnetic field of energy.

**Transmitter Power Output (TPO)** – The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load.

## Appendix C – Rules & Regulations

### Explanation of Applicable Rules and Regulations

The FCC has set forth guidelines in OET Bulletin 65 for human exposure to radio frequency electromagnetic fields. Specific regulations regarding this topic are listed in Part 1, Subpart I, of Title 47 in the Code of Federal Regulations. Currently, there are two different levels of MPE - General Public MPE and Occupational MPE. An individual classified as Occupational can be defined as an individual who has received appropriate RF training and meets the conditions outlined below. General Public is defined as anyone who does not meet the conditions of being Occupational. FCC and OSHA Rules and Regulations define compliance in terms of total exposure to total RF energy, regardless of location of or proximity to the sources of energy.





It is the responsibility of all licensees to ensure these guidelines are maintained at all times. It is the ongoing responsibility of all licensees composing the site to maintain ongoing compliance with FCC rules and regulations. Individual licensees that contribute less than 5% MPE to any total area out of compliance are not responsible for corrective actions.

OSHA has adopted and enforces the FCC's exposure guidelines. A building owner or site manager can use this report as part of an overall RF Health and Safety Policy. It is important for building owners/site managers to identify areas in excess of the General Population MPE and ensure that only persons qualified as Occupational are granted access to those areas.

### **Occupational Environment Explained**

The FCC definition of Occupational exposure limits apply to persons who:

- are exposed to RF energy as a consequence of their employment;
- have been made aware of the possibility of exposure; and
- can exercise control over their exposure.

OSHA guidelines go further to state that persons must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

In order to consider this site an Occupational Environment, the site must be controlled to prevent access by any individuals classified as the General Public. Compliance is also maintained when any non-occupational individuals (the General Public) are prevented from accessing areas indicated as Red or Yellow in the attached RF Emissions diagram. In addition, a person must be aware of the RF environment into which they are entering. This can be accomplished by an RF Safety Awareness class, and by appropriate written documentation such as this Site Compliance Report.

All MetroPCS employees who require access to this site must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

### **Appendix D – General Safety Recommendations**

The following are *general recommendations* appropriate for any site with accessible areas in excess of 100% General Public MPE. These recommendations are not specific to this site. These are safety recommendations appropriate for typical site management, building management, and other tenant operations.

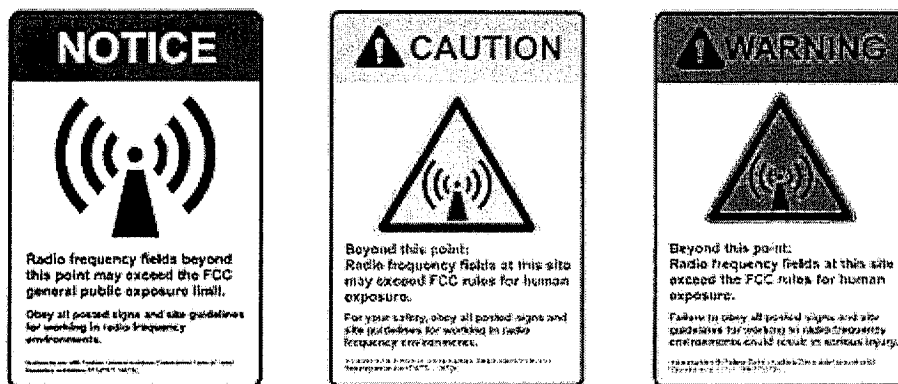
1. All individuals needing access to the main site (or the area indicated to be in excess of General Public MPE) should wear a personal RF Exposure monitor, successfully complete proper RF Safety Awareness training, and have and be trained in the use of appropriate personal protective equipment.

2. All individuals needing access to the main site should be instructed to read and obey all posted placards and signs.

3. The site should be routinely inspected and this or similar report updated with the addition of any antennas or upon any changes to the RF environment including:

- adding new antennas that may have been located on the site
- removing of any existing antennas
- changes in the radiating power or number of RF emitters

4. Post the appropriate **NOTICE**, **CAUTION**, or **WARNING** sign at the main site access point(s) and other locations as required. Note: Please refer to RF Exposure Diagrams in Appendix B, to inform everyone who has access to this site that beyond posted signs there may be levels in excess of the limits prescribed by the FCC. The signs below are examples of signs meeting FCC guidelines.



5. Ensure that the site door remains locked (or appropriately controlled) to deny access to the general public if deemed as policy by the building/site owner.

6. For a General Public environment the four color levels identified in this analysis can be interpreted in the following manner:

- Gray represents area at below 5% of the General Public MPE limits or below. This level is safe for a worker to be in at any time.
- Green represents areas predicted to be between 5% and 100% of the General Public MPE limits. This level is safe for a worker to be in at any time.
- Blue represents areas predicted to be between 100% and 500% of the General Public MPE limits. This level is safe for a worker to be in at any time.
- Yellow represents areas predicted to be between 500% and 5000% of the General Public MPE limits. This level is safe for a worker to be in.
- Red areas indicated predicted levels greater than 5000% of the General Public MPE limits. This level is not safe for the General Public to be in.

7. For an Occupational environment the four color levels identified in this analysis can be interpreted in the following manner:

- Areas indicated as Gray are at 5% of the Occupational MPE limits or below. This level is safe for a worker to be in at any time.
- Green represents areas predicted to be between 5% and 20% of the Occupational MPE limits. This level is safe for a worker to be in at any time.



- Yellow represents areas predicted to be between 20% and 100% of the Occupational MPE limits. Only individuals that have been properly trained in RF Health and Safety should be allowed to work in this area. This is not an area that is suitable for the General Public to be in.
- Red areas indicated predicted levels greater than 100% of the Occupational MPE limits. This level is not safe for the Occupational worker to be in for prolonged periods of time. Special procedures must be adhered to such as lock out tag out procedures to minimize the workers exposure to EME.

8. Use of a Personal Protective Monitor: When working around antennas, Sitesafe strong recommends the use of a Personal Protective Monitor (PPM). Wearing a PPM will properly forewarn the individual prior to entering an RF exposure area.

Keep a copy of this report available for all persons who must access the site. They should read this report and be aware of the potential hazards with regards to RF and MPE limits.

#### **Additional Information**

Additional RF information is available by visiting both [www.Sitesafe.com](http://www.Sitesafe.com) and [www.fcc.gov/oet/rfsafety](http://www.fcc.gov/oet/rfsafety). OSHA has additional information available at: <http://www.osha-slc.gov/SLTC/radiofrequencyradiation>.