Oakland City Planning Commission STAFF REPORT

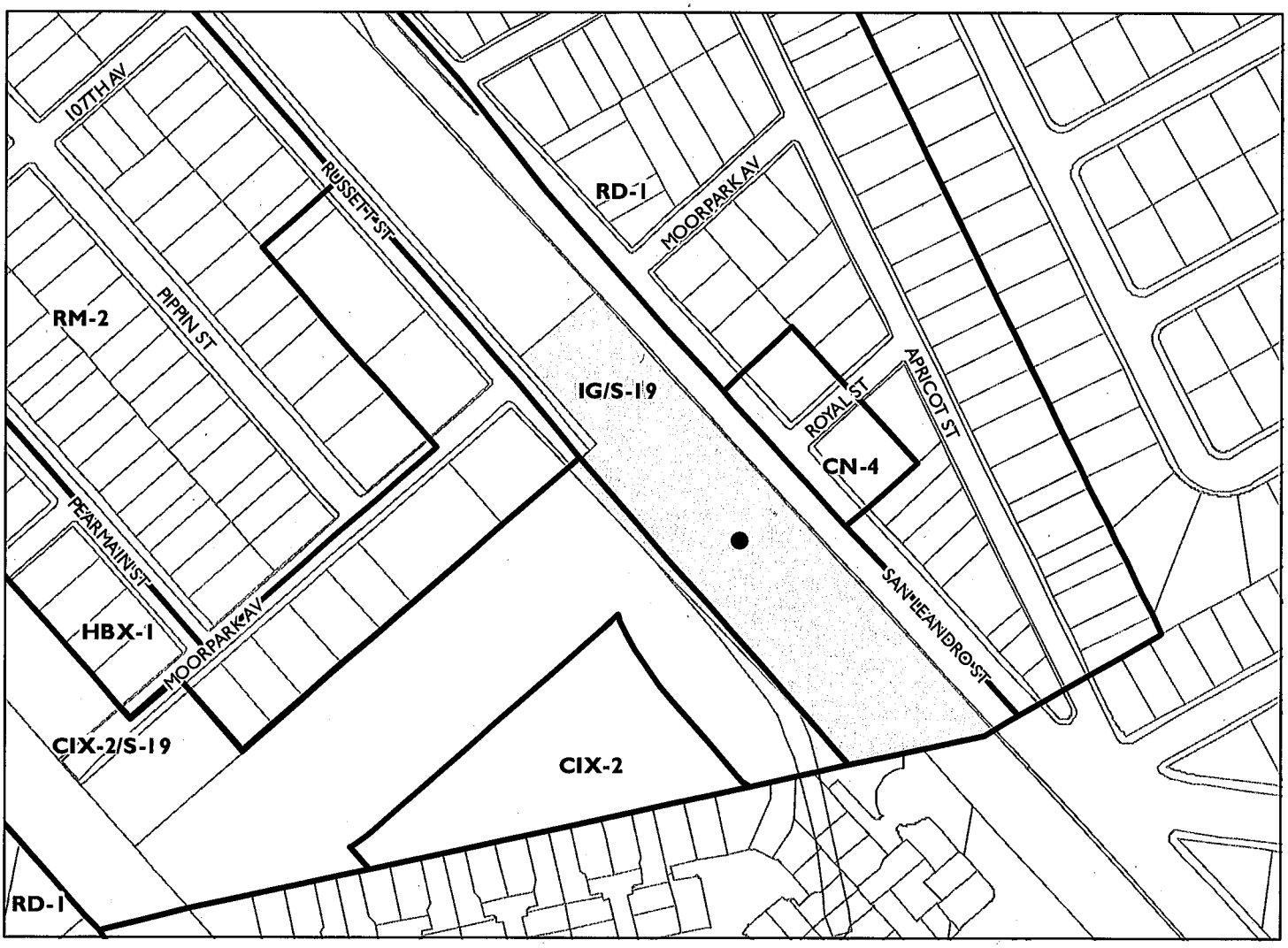
Case File Number PLN14290 **December 17, 2014**

Location:	**10998 Russet Street**
Assessors Parcel Numbers:	045 -5257-011-00
Proposal:	Modification to existing telecommunication facility (Monopole and associated Telecommunication facilities and equipment) to add 9 new antennas, 9 new Remote radio heads (RRH' s) at the 45-foot height level.
Applicant:	Complete Wireless Consulting, Inc. on behalf of Verizon Wireless
Owner:	Union pacific Railroad Company
Planning Permits Required:	Major Conditional Use Permit and Regular Design review to establish new telecommunication facility (adding 9 new un-concealed panel antennas and 9 RRH' s on an existing Monopole for a total allowance of 24 antennas and 24 RRU' s) within 300 feet of a residential zone.
Case File Number	PLN14290
General Plan:	Detached Unit Resident
Zoning:	IG, General industrial and S-19 Health and safety Protection Combining Zone
Environmental Determination:	Exempt, Section 15301, State CEQA Guidelines, Existing Facilities, Exempt, Section 15303, State CEQA Guidelines, New Small Structures, Exempt, Section 15183 of the State CEQA Guidelines: Projects consistent with a community plan, general plan or zoning
Historic Status:	Non-Historic Property
Service Delivery District:	6
City Council District:	7
Finality of Decision	Appealable to the City Council within 10 days
Date Filed:	September 26, 2014
Staff recommendation:	Decision based on staff report
For further information:	Contact case planner **Moe Hackett, 238-3973 or** mhackett@oaklandnet.com

SUMMARY

Complete Wireless Consulting, Inc. on behalf of Verizon Wireless has submitted a Major Conditional Use Permit and Regular Design Review application for the modification of an existing 60' monopole which is approved to be expanded to 70' by a Major Conditional Use Permit (CMD13-299) in 2013. That expansion has not yet been done. The site also contains the equipment enclosure and is otherwise vacant industrial land. The proposal would, if approved, create a new antenna mount (sometimes called a "standoff") with 9 new antennas, 9 new RRH's, and a surge protector attached. The proposal also includes a new 11 ½' by 17' approximately 10 ½ equipment shelter located below the monopole inside of an existing fenced in and screened equipment compound. The existing 60' monopole has been approved to allow for up to 18 antennas and 15 radio Remote Units (total) on two mounting armatures, and a height increase to 70'. The existing mounting armature is located at the 51' level and the approved but not yet constructed mount would be at the 64' level. The new antennas proposed here would be located at a lower 45' height (at the antennas vertical center). The new armature antennas would not be wider horizontally than the previously approved antennas and mounts (approved at 18' in diameter). The Zoning Code currently allows for monopole facilities in the industrial zones up to a maximum height of 80', upon the granting of regular design review. This proposal does not increase the approved 70' height, and can be mounted on ether the approved 70' tall pole or the existing 60' tall pole.

CITY OF OAKLAND PLANNING COMMISSION



Case File: PLN14290
Applicant: Verizon Wireless c/o Complete Wireless Consulting
Address: 10998 Russet Street
Zone: IG / S-19

As proposed the addition of 9 new antennas (and 9 RRH's) represents a major expansion of the facility and therefore cannot be considered as a simple modification to an existing facility. This project will not alter, and is not dependent on the previous approvals (CMD13-299). As such, regardless of any extension to or completion of CMD13-299, this projects entitlements, if approved; will exist concurrent to and independent of CMD13-299s entitlements.

PROJECT DESCRIPTION

The applicant seeks to significantly modify an existing telecommunication facility (Monopole and associated telecommunication facilities and equipment) to add 9 new antennas, 9 new RRH' s, and to create a new equipment shelter. The poles mounting configurations (either existing or as previously approved) would be altered in order to achieve this goal. The project would create additional visual impacts to several residential properties in the abutting residential zone on and near Royal Street. With regard to these alterations, the proposed new antennas would be located at the 45' level which is the lowest usable portion of that pole. This location would create the fewest visual impacts even while more than doubling the number of (existing) antennas. As recommended by staff with specific conditions (Condition # 15) this overall expansion will be compatible with and complimentary to the area and neighborhoods that it currently serves.

PROPERTY DESCRIPTION

The existing otherwise vacant industrially zoned parcel is currently owned by Union Pacific Railroad. Its primary function is that of a heavy rail arterial that is currently used by the Bay Area Rapid Transit System (BART) as a corridor for elevated Bart tracks and for the existing 30-foot by 100-foot fenced compound containing a 60' tall monopole, and is approved for a 70' tall monopole .The currently existing monopole has six (6) antennas that are all located on a 3 armed mounting aperture that is approximately 18' in diameter and has a height (at the top of the antennas) of 57'. The project site is immediately abutted by a commercial and a residential zone within 300 feet.

Below is a table of the most recent approvals to explain how this site came to be. (Included are the changes proposed by this application)

A 60' M onopole with a total of three (3) panel antennas was established by case Number V10-169.
Replacements and additions resulting in a total of six (6) antennas were established by DR13-111. (This is the number of antennas and pole height currently existing on the site.)
Allowance for a 70' Monopole with twelve (12) new panel antennas, & fifteen (15) RRU's was entitled by case number CMD13-299.
PLN14290 proposes the addition of nine (9) new panel antennas, & fifteen (9) new RRH's.
The total number of antennas existing at this time is six (6) on a 60' tall pole. If approved the total number of antennas and RRU/ RRH's allowed would be ether 15 antennas and 15 RRH's on the 60'tall pole, or 27 antennas and 24 RRU/ RRH's on a 70' tall pole.

GENERAL PLAN ANALYSIS

The subject property is located within General Industrial General Plan designation which allows for wide variety of businesses and related commercial and industrial activities in an area The General Industrial and transportation classification is intended to recognize, preserve, and enhance areas of the City for a

wide variety of businesses and related establishments that may have the potential to create off-site impacts such as noise/ glare, truck traffic, and odor.

The proposed unmanned wireless telecommunication facility as recommended with specific Condition #15 will only minimally affect and detract from the residential or commercial characteristics of the abutting neighborhood. Per Condition # 15 the antennas proposed in this project will be mounted on the lowest level of the monopole in a pattern with a projection length of approximately 14 1/2' in diameter, which is generally the same as the existing array of antennas. General Plan Policy N5.2 states that residential areas should be buffered and reinforced from conflicting uses through the establishment of performance-based regulation, the removal of non-conforming uses, and other tools. The Zoning code includes elements that specifically address the intent of the General Plan through design review and Conditional Use permit requirements. As recommended with conditions this facility can meet the intent which is to avoid unnecessary mass and bulk associated with horizontal expansion, and would improve and expand telecommunication services provided to the community and surrounding areas.

ZONING ANALYSIS

The subject property is located within the IG, General Industrial Zone, and the S-19 Health and Safety Protection Combining Zone. The intent of these zones is to create, preserve and enhance areas of the City that are appropriate for a variety of business and related commercial and industrial establishments and to (with regard to the S-19) promote the public health, safety and welfare. Section 17.128.025C establishes a boundary separation in which residential areas are recognized and for which the impacts of the telecommunication facilities (which are not fully concealed) would be addressed through the Major Conditional Use and Design Review Permitting process. Staff recognizes that this is an existing Monopole in an industrial zone and that it can be modified within the limitations and intent of the current zoning 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, 15303, projects resulting in the construction of new small structures, and 15183, projects consistent with a community plan, general plan or zoning.

KEY ISSUES AND IMPACTS

DESIGN REVIEW – Consistent Dimensions of Armatures & Brackets

Staff understands the needs and requirements of the telecommunication industries with regard to clear and unobstructed transmission paths. It is to this end that the Zoning Code crafted specific allowances for monopoles with the intention of protecting the quality of life for residents who would be in visual range of such installations. In this case, Staff has identified a set of specific conditions (Specific Condition # 15) which when applied, would allow this project to meet the required Findings for Approval. These conditions would allow for this facilities design that is less bulky and massive by repeating the aperture design dimensions. As such, Staff recommends approval of the project subject to the provisions of the attached conditions.

CONCLUSION

The proposed addition of new panel antennas on the lower level of the proposed 70' tall monopole with no additional horizontal expansion will not severely impact the quality of life of the nearby residential communities, and with the implementation of Specific Condition # 15 Staff recommends approval of the project subject to the plans and other attached conditions.

RECOMMENDATIONS:

1. Affirm staff's environmental determination.
2. Approve the Major Conditional Use Permit and Design Review subject to the attached Findings and Conditions of Approval.

Prepared by: MOE HACKETT
Planner II

Approved by:

SCOTT MILLER
Zoning Manager

DARIN RANELLETTI, DEPUTY DIRECTOR
Department of Planning and Building

ATTACHMENTS:

A. Findings
B. Conditions of Approval
C. Project Plans, Photo Simulations, and Radio Frequency Report

ATTACHMENT A

This proposal meets all the required findings under Design Review criteria for 17.134.050 and 17.128.080C -General Use Permit Criteria and General Use Permit Criteria Monopoles, and Section 17.136.070B and 17.128080B -Non-Residential Design Review Criteria and Design Review Criteria for Monopoles 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 CRITERIA:

1. **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 proposal involves the expansion of a wireless telecommunications monopole facility on an otherwise vacant industrial lot located less than 300 feet from a residential zone. Specifically, it would provide for 9 new antennas and 9 Radio Remote Head's (RRH's) on a new mounting aperture (standoff) at approximately the 45'height level of an existing 60' or proposed 70' tall monopole. The proposal would result in maximum allowable total of 27 antennas, 24 RRU's & RRH's, and create a new self-contained equipment shelter /shed within an existing fenced in ground level compound. With the implementation of Specific Condition # 15 the project will be compatible with the nearby residential neighborhood, and will not pose a hazard to the public. There is a clear benefit to colocation on the monopole at this location and that with the Conditions of Approval the addition would be acceptable. The site is located next to Bart tracks, railroad right of way, and other industrial areas and has served the community well with little or few impacts for a number of years.

2. **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 expansion/ collocation of a wireless telecommunications facility in an industrial zone, at a location surrounding by a vacant industrial open space in the vicinity of an elevated Bart track and nearby residential neighborhoods would increase services. However, in order to reduce negative aesthetic impacts to the area this proposal must adhere to Specific Condition # 15 make the additional armatures consistent dimensionally to the proposed armature on the monopole to reduce the overall visual bulk of the facility.

3. **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 expansion / collocation of a wireless telecommunications site will increase services for residents, commercial patrons, and visitors to the City.

4. **That the proposal conforms to all applicable design review criteria set forth in the design review procedure at Section 17.136.070.**
As approved with the provisions of Specific Condition # 15 the proposal will conform to Design Review findings which are included in this attachment below.

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

The project is consistent with the following Policy of the Oakland General Plan's Land Use & Transportation Element (adopted 1998):

Policy I/C4.2 Minimizing Nuisances
The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential land uses should be minimized through appropriate siting and efficient implementation and enforcement of environmental and development controls.

The proposal to expand a wireless telecommunications facility at an industrial site located within 300 feet of a Residential Zone by raising the height, adding new antennas and RRH's, and creating new associated equipment will reduce the need for new monopole facilities in the area by adding on to a facility that is appropriately located adjacent to rail right of way and partially screened by the BART aerial tracks. In addition, the project possesses a satisfactory emissions report. Adherence to Specific Condition of Approval #15 will minimize the visual impacts of the facility.

SECTION 17.128.070(C) – CONDITIONAL USE PERMIT CRITERIA FOR MONOPOLE FACILITIES.

In addition to the conditional use criteria listed in Chapter 17.134, the following specific additional criteria must be met before a conditional use permit can be granted:

1. **The project must meet the special design review criteria listed in subsection B of this section.**

The proposal conforms to Design Review findings which are included in this attachment below.

2. **Monopoles should not be located any closer than one thousand five hundred (1,500) feet from existing monopoles unless technologically required or visually preferable.**

By adding new armatures and antennas onto an approved monopole, the potential future need for additional monopoles within 1,500 feet would be reduced.

3. **The proposed project must not disrupt the overall community character.**

The addition of 9 additional antenna panels and 9 RRH's at the lowest level of an existing 60' or approved 70' tall monopole will not alter or disrupt the current overall character of the community. With implementation of the design provisions contained in Specific Condition # 15, the visual mass of the facility would be reduced.

SECTION 17.128.080(B) – DESIGN REVIEW CRITERIA FOR MONOPOLE FACILITIES
In addition to the design review criteria listed in Chapter 17.136, the following specific additional criteria must be met when design review is required before an application can be granted:

1. Collocation is to be encouraged when it will decrease visual impact and collocation is to be discouraged when it will increase negative visual impact.

The 9 new antennas and 9 new RRH's will be collocated at the 45' (center height) level of an existing 60' or previously approved 70' tall monopole (with potential future design review allowances to vertically extend the monopole up to 80' in height). The 9 new antennas will be added to the existing or approved antennas, along with 9 new RRH's. New equipment shelter will be located on the ground level in an existing fenced and screened compound directly beneath the monopole. The entire Facility would be painted in a matching "sky gray" color as existing. To reduce the visual impacts of the facility the project will adhere to the provisions of Specific Condition # 15 which states that each armature shall not extend more than 9 feet from the pole, which would give a diameter of 18 feet. The maximum diameter of the antennas and mounts will be 14 ½' (as measured from the center of the pole). The new antenna layout will not create any more visual mass per pole extension azimuth as the existing or proposed pole configurations with are approximately 18 feet in diameter. The relatively equal distribution of antennas and equipment is to address Section(s) 17.128.080 and 17.128.025C intention to reducing the obvious impacts that monopoles can have on residential zones. Specific Condition # 15 is intended to protect livability and value of the nearby residential zones. The colocation reduces the need for additional monopole facilities and specific Conditions of Approval would achieve a reduced visual impact from the facility.

2. Monopoles should not be sited to create visual clutter or negatively affect specific views.

The antennas would be attached to the lowest mounting point on the Monopole and the entire Facility would be located in an industrial zoned location. Per **Specific Condition #15** the entire monopole, antennas, equipment and equipment shelter shall be designed and painted to fade into the open space when viewed from the surrounding flat area adjacent to railroad tracks and the Bart aerial that doesn't have any specific views and Condition of Approval #15 would reduce visual impacts.

3. Monopoles shall be screened from the public view wherever possible.

The antennas would be attached to or replace an existing Monopole (Or its previously approved 70' tall alternative) and the entire Facility would be painted to fade into the horizon when viewed from the surrounding areas. The existing monopole represents an established visual element at this location.

4. Equipment shelter or cabinet must be concealed from public view or made compatible with the architecture of the surrounding structures or placed underground. The shelter or cabinet must be regularly maintained.

The Equipment shelter will be new, but will be sited within and existing fenced in compound. Cabinets and equipment will be concealed within this new shelter. Per **Specific Condition # 16** the facilities will be maintained in good condition.

5. Site location and development shall preserve the preexisting character of the surrounding buildings and land uses and the zone district as much as possible. Wireless communication towers

shall be integrated through location and design to blend in with the existing characteristics of the site to the extent practical. Existing on-site vegetation shall be preserved or improved, and disturbance of the existing topography shall be minimized, unless such disturbance would result in less visual impact of the site to the surrounding area. Equipment shelters or cabinets shall be consistent with the general character of the area.

The proposal calls for new self-contained equipment shelter and alterations to the monopole. The shelter provided is consistent with the general character of the area (industrial and rail corridor). The new ground level equipment located within the existing compound to be sufficiently screened. As required by **Specific Condition #16** the monopole and antennas and ground level equipment shall be modified with regard to painted color and screening requirements to better reduce the visual impacts of the facility.

6. 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.

Antennas will be attached to a monopole within an existing fenced in compound, out of reach to the public.

17.136.070B - NON-RESIDENTIAL DESIGN REVIEW CRITERIA:

A. 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, ad 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 17.102.030 (Special Regulations for Designated Landmarks).

The proposed expanded Monopole and its associated equipment shelter are located in an industrial area on a rail corridor. Due to the location and nature of the site the proposal would not create a negative visual impact from the directions northwest to southeast on Russet or San Leandro Streets, or to the immediate west of the pole . However, the site is adjacent to existing residential properties and Zones both to the east and to the south (in the City of San Leandro). With the implementation of the attached Conditions, the addition of new antennas and mounting apparatus at the lower 45-foot level of the pole is appropriate given the location adjacent to rail right of way and immediate screening from BART aerial. The proposed design will reduce visual impacts by maintaining the existing basic dimensions of the existing pole projections.

B. 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 would enhance the operation of the surrounding area by improving essential communication services for the community. The Specific Conditions of Approval's will reduce visual impacts by maintaining the existing basic dimensions of the existing pole projections..

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

The proposed Monopole wireless facility in the General Industrial General Plan (Note: a city computer mapping error represents the General plan as Detached Unit Residential, however it is intended to be and is consistent with General Industrial.) The subject property is located within General Industrial General Plan designation which allows for wide variety of businesses and related commercial and industrial activities in an area The General Industrial and transportation classification is intended to recognize, preserve, and enhance areas of the City for a wide variety of businesses and related establishments that may have the potential to create off-site impacts such as noise/ glare, truck traffic, and odor.

ATTACHMENT B

The proposal is hereby approved subject to the following Conditions of Approval:

1. **Approved Use**

Ongoing

a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, staff Report, and the plans dated July 25, 2014 and submitted on September 26, 2014, 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 require 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: Approval of the expansion of an existing Monopole (at 60 feet in height) or of a previously approved 70-foot tall monopole (CMD13-299) to allow for up to 27 (total) antennas and up to 30 (total) RRU /RRH units, and the creation of a new equipment shelter within an existing compound, under Oakland Municipal code sections 17.134.050 General Use Permit, Section 17.128.080(C) Conditional Use Permit Criteria for Monopoles, Section 17.128.080(B) Design Review Criteria for Monopoles, 17.136.080B Non-residential Design Review

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, and vegetation management for preventing fires and soil erosion.

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) The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved plans may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension or other corrective action.

c) Violation of any term, Conditions or project description relating to the Approvals 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 if it is found that there is violation of any of the Conditions 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**

With submittal of a demolition, grading, and building permit

A copy of the approval letter and Conditions 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 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 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, and if one or more of such

conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid conditions consistent with achieving the same purpose and intent of such Approval.

10. **Job Site Plans**

Ongoing throughout demolition, grading, and/or construction

At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval, shall be available for review at the job site at all times.

11. **Special Inspector/Inspections, Independent Technical Review, Project Coordination and Management**

Prior to issuance of a demolition, grading, and/or construction permit

The project applicant may be required to pay for on-call third-party special inspector(s)/inspections as needed during the times of extensive or specialized plancheck review or construction. The project applicant may also be required to cover the full costs of independent technical review and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval. The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

12. **Construction Emissions**

Prior to issuance of a demolition, grading or building permit

To minimize construction equipment emissions during construction, the project applicant shall require the construction contractor to:

a) Demonstrate compliance with Bay Area Air Quality Management District (BAAQMD) Regulation 2, Rule 1 (General Requirements) for all portable construction equipment subject to that rule. BAAQMD Regulation 2, Rule 1 provides the issuance of authorities to construct and permits to operate certain types of portable equipment used for construction purposes (e.g., gasoline or diesel-powered engines used in conjunction with power generation, pumps, compressors, and cranes) unless such equipment complies with all applicable requirements of the "CAPCOA" Portable Equipment Registration Rule" or with all applicable requirements of the Statewide Portable Equipment Registration Program. This exemption is provided in BAAQMD Rule 2-1-105.

b) Perform low- NOx tune-ups on all diesel-powered construction equipment greater than 50 horsepower (no more than 30 days prior to the start of use of that equipment). Periodic tune-ups (every 90 days) shall be performed for such equipment used continuously during the construction period.

13. **Hazards Best Management Practices**

Prior to commencement of demolition, grading, or construction

The project applicant and construction contractor shall ensure that construction of Best Management Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

a) Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction;
b) Avoid overtopping construction equipment fuel gas tanks;
c) During routine maintenance of construction equipment, properly contain and remove grease and oils;
d) Properly dispose of discarded containers of fuels and other chemicals.
e) Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to

determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.

f) If soil, groundwater or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notification of regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

PROJECT SPECIFIC CONDITIONS FOR TELECOMMUNICATIONS FACILITIES

14. **Emissions Report**
Prior to a final inspection
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 that may be subsequently authorized to establish such standards.

15. **Antenna and Monopole and Appurtenances Visual Impact Minimizations**
Prior to issuance of a demolition, grading or building permit
Final building plans shall be approved by the Zoning Manager prior to the start of construction. These plans shall include but may not be limited to the following provisions.

1. The height of the pole for this approval shall be raised to as much as the 70'. Additional height limits allowed by Section 17.128.080A(6) shall require a Revision.
2. The mounting arrays/ apertures /pole extensions shell be consistent dimensionally with the existing ones, which shall be shown in the building permit plan sets. The limit for projection of the armatures shall be 9' maximum, which will be no more than an 18' diameter. As approved the antennas shall be mounted at the lowest level of the pole (45' height level at antenna center) and shall not be more than 14 1/2/ feet in diameter as measured from the center of the pole. This approval includes only the 9 proposed new antennas, the 15 RRH units, and a surge protector to be mounted on the standoff.
3. All antenna cables and cable attachments shall be located and otherwise concealed within the monopole and armatures where possible to lessen unnecessary visual clutter. Upon the discretion or request of the Zoning Manager the monopole and antennas shall be painted in different color(s) as the need to camouflage becomes necessary. The color of the monopole shall be shown on plans. The painted pole and antennas shall be maintained in good condition and partially or wholly repainted as needed.

16. **Equipment Cabinets, Fence**
Prior to a final inspection
The existing wrought iron fence and semi-solid screening wall shall be retained. All fencing and screening shall be maintained in good condition and painted or replaced as needed. Graffiti shall be removed or painted over (in uniform color) as needed. Upon the discretion or request of the Zoning

Manager the fencing, screening wall and equipment cabinets shall be painted in different color(s) as the need for greater camouflaging becomes necessary.

17. **On-site Clean-up and Site Maintenance Plan**
Prior to a final inspection and ongoing
The applicant shall clear litter and debris for a distance of 80 feet (approximately) from perimeter of the fence enclosure and to the edge of the road way. The litter and debris shall be removed from the area and disposed of at an appropriate collection facility. The applicant shall submit for review and approval by the Planning and Zoning Division, a Site Maintenance Plan. The site maintenance plan shall identify procedures, practices and personnel to ensure appropriate site maintenance to keep the site and surrounding areas free of trash and debris.

APPROVED BY:
City Planning Commission:_____(date)_____(vote)
City Council:_____(date)_____(vote)

ATTACHMENT C

ZD DRAWING SIGN-OFF

DATE: TIME: % CWC-PLEASE RETURN BY:

	SIGNATURE	DATE
SITE ACQUISITION:		
PLANNING:		
CONSTRUCTION:		
MANAGEMENT:		

	SIGNATURE	DATE
CONSTRUCTION:		
REAL ESTATE:		
RF ENGINEER:		
EQUIPMENT ENGINEER:		
MW ENG./TRANSPORT:		

OTHER (IF APPLICABLE)

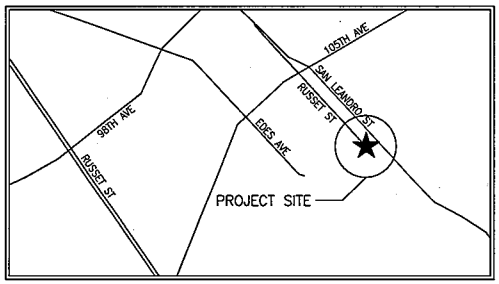
SIGNATURE	DATE

verizon WIRELESS

2785 Mitchell Drive, Walnut Creek, CA 94598

STONEHURST

10998 RUSSET ST OAKLAND, CA 94603
APN: 045-5257-011
LOCATION #: 286677



OAKLAND, CA

LOCATION PLAN

DIRECTIONS

FROM VERIZON OFFICE @ 2785 MITCHELL DRIVE, WALNUT CREEK, CA 94598:

1. HEAD NORTHEAST ON MITCHELL DR TOWARD OAK GROVE RD
2. TURN RIGHT ONTO OAK GROVE RD
3. TAKE THE 2ND RIGHT ONTO YGNACIO VALLEY RD
4. CONTINUE ONTO HILLSIDE AVE
5. TAKE THE RAMP ONTO CA-24 W
6. MERGE ONTO CA-24 W
7. TAKE THE EXIT TOWARD HAYWARD/CALIFORNIA 13 S
8. MERGE ONTO CA-13 S
9. MERGE ONTO I-580 E
10. TAKE THE GOLF LINKS RD/98TH AVE EXIT
11. MERGE ONTO 98TH AVE
12. TURN LEFT ONTO SAN LEANDRO ST
13. SLIGHT RIGHT TO STAY ON SAN LEANDRO ST
14. CONTINUE ONTO RUSSET ST

INDEX OF DRAWINGS

PROJECT DIRECTORY

APPLICANT:
VERIZON WIRELESS
2785 MITCHELL DRIVE
WALNUT CREEK, CA 94598

PROPERTY OWNER:
SBA TOWERS
5900 BROKEN SOUND PKWY NW
BORA RATON, FL 33487

ARCHITECT:
MANUEL S. TSIHLAS
MST ARCHITECTS, INC.
1520 RIVER PARK DRIVE
SACRAMENTO, CA 95815
916-567-9630
manuel@mstarchitects.com

CONSTRUCTION MANAGER:
MARK CASEY
COMPLETE WIRELESS CONSULTING, INC
2009 V STREET
SACRAMENTO, CA 95818
916-508-7945
mcasey@completewireless.net

PROJECT SUMMARY

ASSESSOR'S PARCEL NUMBER:	045-5257-011
JURISDICTION:	CITY OF OAKLAND
OCCUPANCY:	S-2 (UNMANNED TELECOMMUNICATIONS FACILITY) U (TOWER)
TYPE OF CONSTRUCTION:	V-B
ZONING:	IG/S-19

CODE COMPLIANCE

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

1. 2013 CALIFORNIA ADMINISTRATIVE CODE (CAC) (INCL. TITLE 24 & 25)
2. 2013 CALIFORNIA BUILDING CODE (CBC)
3. 2013 CALIFORNIA RESIDENTIAL BUILDING CODE
4. 2013 CALIFORNIA ELECTRICAL CODE (CEC)
5. 2013 CALIFORNIA MECHANICAL CODE (CMC)
6. 2013 CALIFORNIA PLUMBING CODE (CPC)
7. 2013 CALIFORNIA ENERGY CODE (CENC)
8. 2013 CALIFORNIA HISTORICAL BUILDING CODE
9. 2013 CALIFORNIA FIRE CODE (CFC)
10. 2013 CALIFORNIA EXISTING BUILDING CODE
11. 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen CODE)
12. 2013 CALIFORNIA REFERENCE STANDARDS CODE
13. LOCAL COUNTY OR CITY ORDINANCES
14. PRE-FABRICATED EQUIPMENT SHELTER IS STATE OF CALIFORNIA INSPECTED AND APPROVED, NOT FOR LOCAL INSPECTION.

ACCESSIBILITY REQUIREMENTS: THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY NOT REQUIRED IN ACCORDANCE WITH THE 2013 CBC 11B-203.5, AND 11B-202.4 EXCEPTION 7.

PROJECT DESCRIPTION

PROPOSED VERIZON WIRELESS UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING:

- A 18'-0"x29'-0" LEASE AREA.
- A FENCE @ LEASE AREA PERIMETER.
- A PRE-FABRICATED EQUIPMENT SHELTER.
- POWER & TELCO UTILITIES BROUGHT TO FACILITY.
- A STANDBY GENERATOR.
- A CABLE ICE BRIDGE.
- (9) ANTENNAS W/ASSOCIATED TOWER MOUNTED EQUIPMENT MOUNTED ON AN EXISTING 60.2' TALL MONOPOLE.

PROJECT MILESTONES

07/25/2014	90% ZONING DOCUMENTS
09/25/2014	100% ZONING DOCUMENTS
11/20/2014	100% ZONING DOCUMENTS REV 1
XX/XX/XXXX	90% CONSTRUCTION DOCUMENTS
XX/XX/XXXX	100% CONSTRUCTION DOCUMENTS

STONEHURST
10998 RUSSET ST
OAKLAND, CA 95603

verizon WIRELESS

SHEET TITLE: TITLE SHEET, LOCATION PLAN, PROJECT DATA

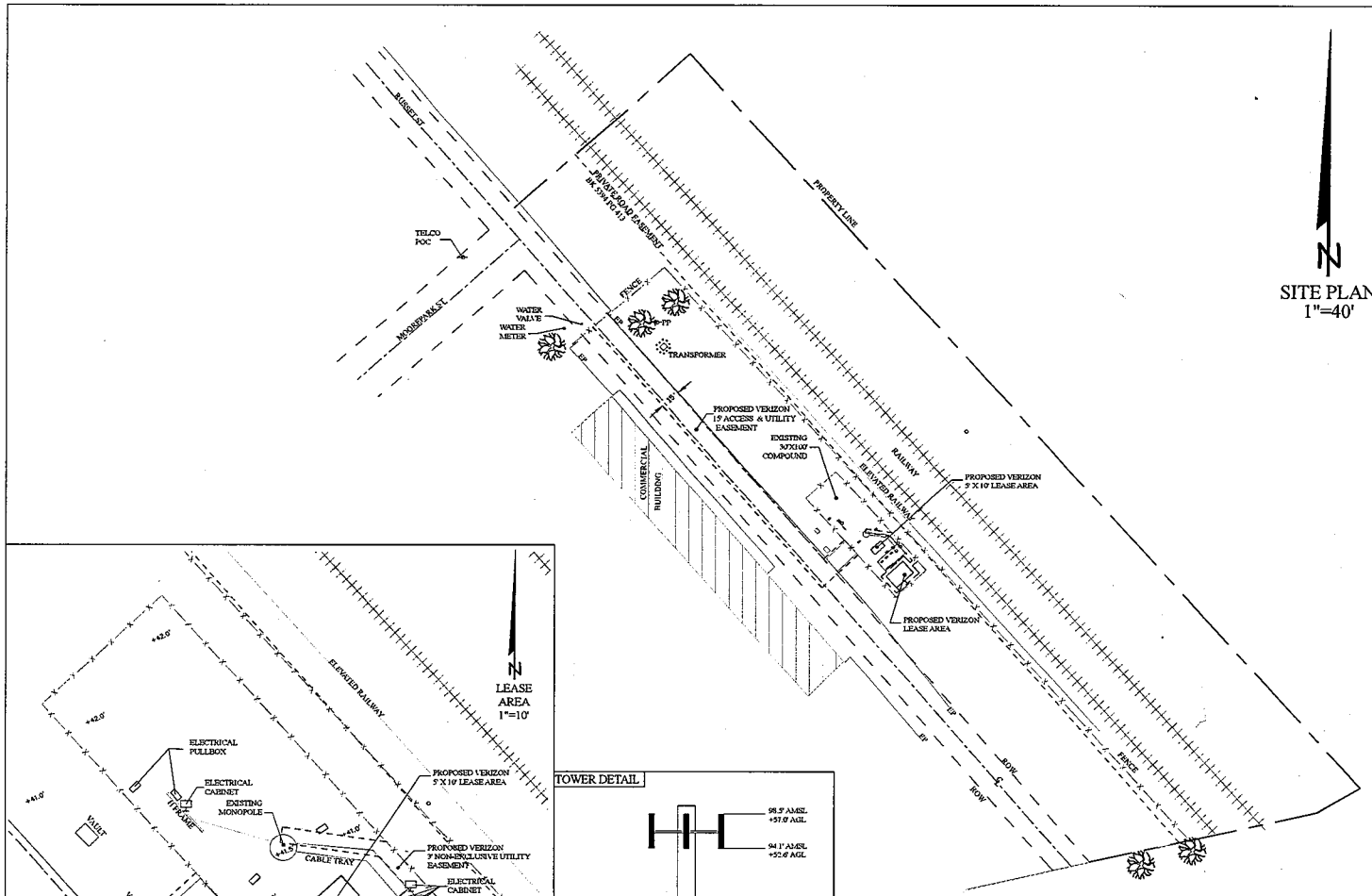
Not valid unless signed in ink by licensee.

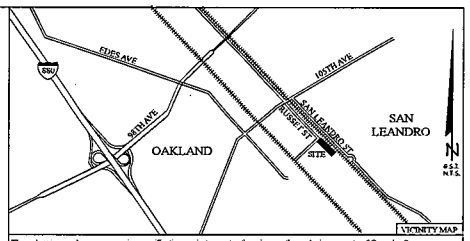
Revisions:
1 --
2 --
3 --
4 --
5 --

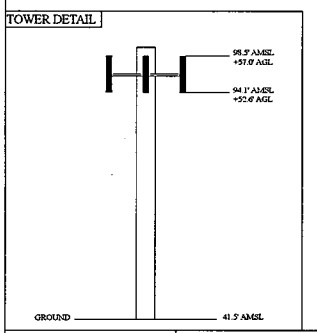
File: 162.1201_T1.dwg
Drawn By: AME
Checked By: MST
Scale: AS NOTED
Date: 07/25/14

Job No. 162.1201

T1.1







These drawings and or accompanying specifications as instruments of service, are the exclusive property of Gonzales Surveys, Inc. and their use and publication shall be restricted to the original site and carrier for which they are prepared. Reuse, reproduction or publication by any method, whole and in part, is prohibited except by written permission from Gonzales Surveys, Inc. Title to these plans and or specifications shall remain with Gonzales Surveys, Inc. without prejudice and visual contact with them shall constitute Prima Facie evidence of acceptance of these restrictions.

The boundary shown is based on found monumentation and record information. This is not a boundary survey. This is a specialized topographic map with property lines and easements being a graphic depiction based on information gathered from various sources of record and available monumentation found during the field survey. No easements were researched or plotted. Property lines and lines of title were not investigated nor surveyed except as shown on this plan. No property monuments were set.

This Survey does not constitute a title search by Gonzales Surveys, Inc. to determine ownership or easements of record. For all information regarding easements and title, Gonzales Surveys, Inc. relied upon Preliminary Title Report Order # 3420-4660015, with an effective date of May 22nd, 2014 7:30 am, prepared by First American Title Company.

Exceptions 1-3 reference tax items. Referenced items are beyond the expertise of the surveying profession.

Exception 4: An easement for private roadway purposes. No negative effect on proposed Verizon Wireless improvements and its access and utilities easements.

Exception 5: An easement right of way for rapid transit facilities and incidental purposes. No negative effect on proposed Verizon Wireless improvements and its access and utilities easements.

Exception 6: An easement right of way for pipelines and incidental purposes. No negative effect on proposed Verizon Wireless improvements and its access and utilities easements.

Exception 7: An unrecorded lease dated November 2,2010 executed by SBA Towers LLC. No negative effect on proposed Verizon Wireless improvements and its access and utilities easements.

Exception 8: The fact that the land lies within the boundaries of the Coliseum Redevelopment Project Area. Referenced items are beyond the expertise of the surveying profession.

Exception 9: Rights of the public in and to that portion of the land lying within any Road, Street, alley or Highway. No negative effect on proposed Verizon Wireless improvements and its access and utilities easements.

Exception 10: Water rights. There is no visual evidence of water rights with any negative effect on proposed Verizon Wireless improvements and its access and utilities easements.

Exception 11: Rights of parties in possession. There is no visual evidence of its parties in possession of the Verizon Wireless premises and its access and utilities easements.

Date of Survey: 6/25/2014
Surveyed by or under the direction of Ryan L. Ming P.L.S 8469

Located in the City of Oakland, County of Alameda, State of California

Bearings shown are based upon monuments found and record information.
This is not a Boundary Survey.

Elevations shown are based upon U.S.G.S. N.A.V.D. 88 Datum.

Contour interval: NA

Contractor is responsible to verify lease area prior to construction.

Assessors Parcel Number (APN): 045-5257-011

Current Zoning: Utility Owned

Site Owners: SBA Towers
5900 Broken Sound Pkwy NW
Boca Raton, FL 33487

REVISIONS
REV
REV
REV
REV

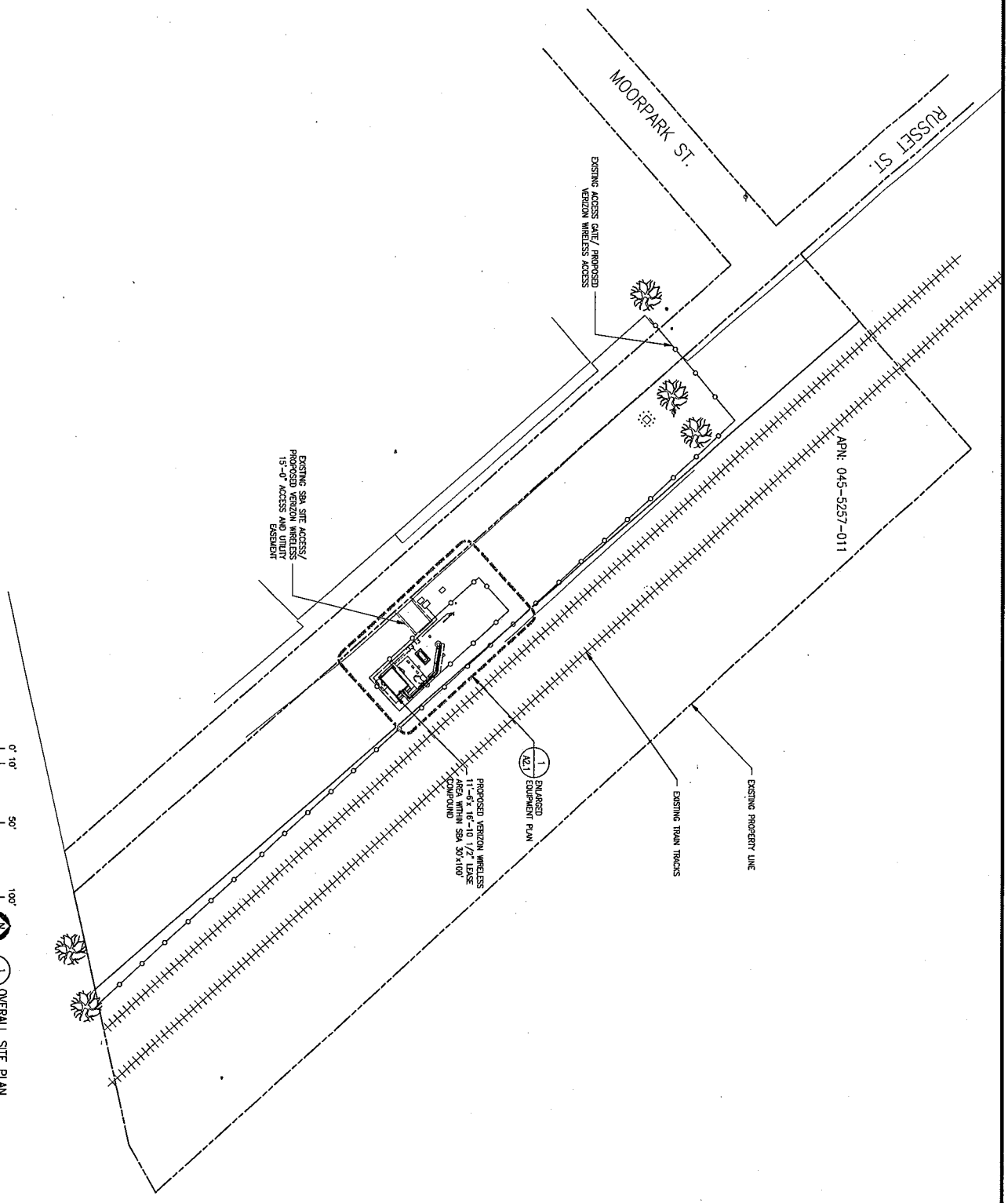
STONEHURST
10911 RUSSET STREET
OAKLAND, CA 94603

ARCHITECT

SURVEYOR 6/25/14
Gonzales Surveys, Inc.
6240 WEST 6TH STREET
RIO LINDA,CA 95673
(916)-704-5952
www.gonzalessurveys.com

DEPT. APPROVED DATE

SHEET
C-1



A1.1

Job No. 162.1201

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Drawn By: AMC
Checked By: MST
Scale: AS NOTED
Date: 07/25/14

Revisions:
1 --
2 --
3 --
4 --

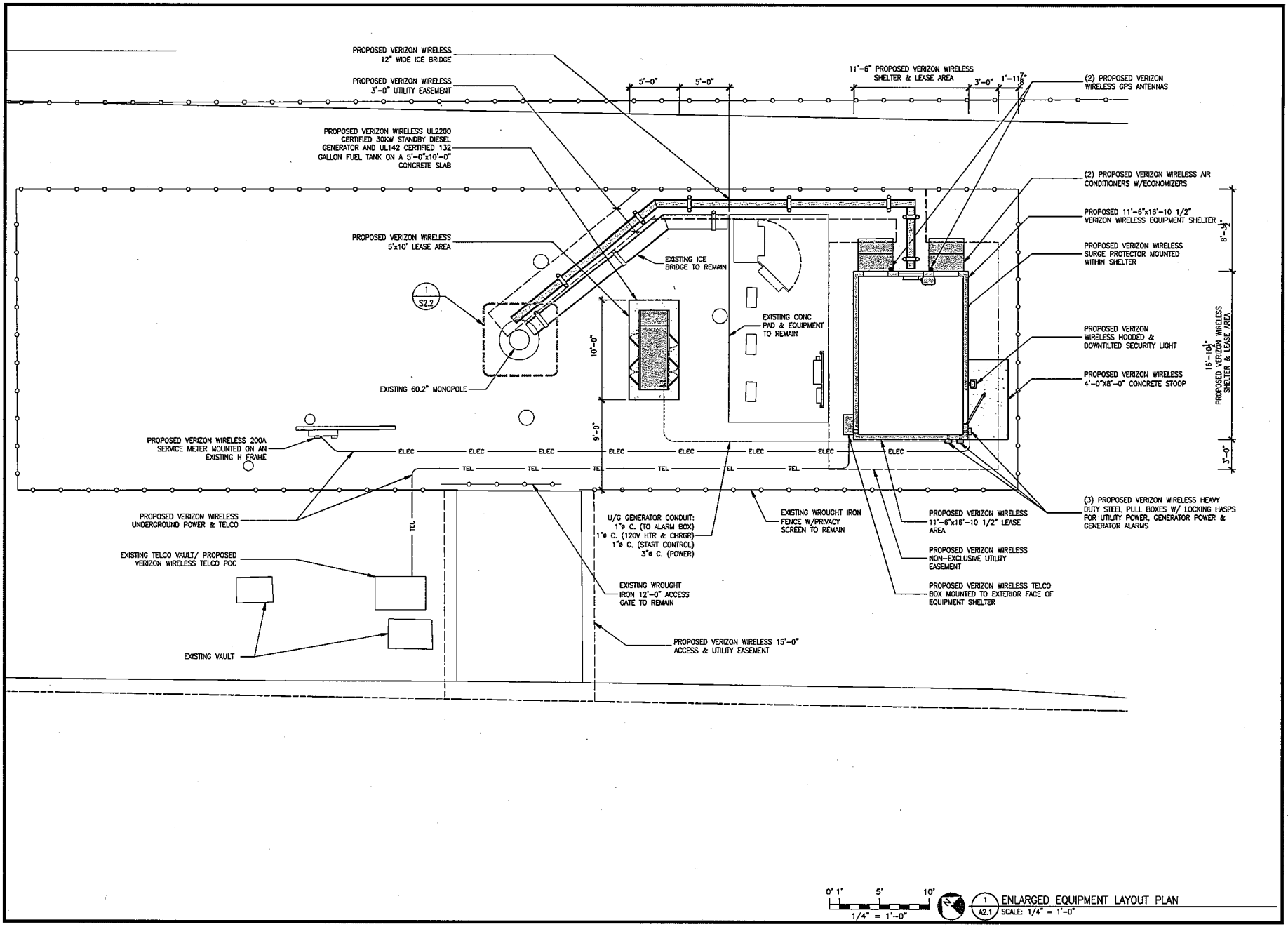
verizon WIRELESS

STONEHURST
10998 RUSSET ST
OAKLAND, CA 95603

SHEET TITLE:
OVERALL SITE PLAN

MST ARCHITECTS
1520 River Park Drive, Sacramento, CA 95815
916-567-9630
www.MSTArchitects.com

COMPLETE Wireless Consulting, Inc.



1 / A2.1 ENLARGED EQUIPMENT LAYOUT PLAN
SCALE: 1/4" = 1'-0"

MST ARCHITECTS
3333 River Park Drive, Sacramento, CA 95815
916.565.4800
www.MSTArchitects.com
COMPLETE WIRELESS CONSULTING, Inc.

STONEHURST
10998 RUSSET ST
OAKLAND, CA. 95603

verizon WIRELESS

SHEET TITLE: ENLARGED EQUIPMENT PLAN

Revisions:
1 ---
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3 ---
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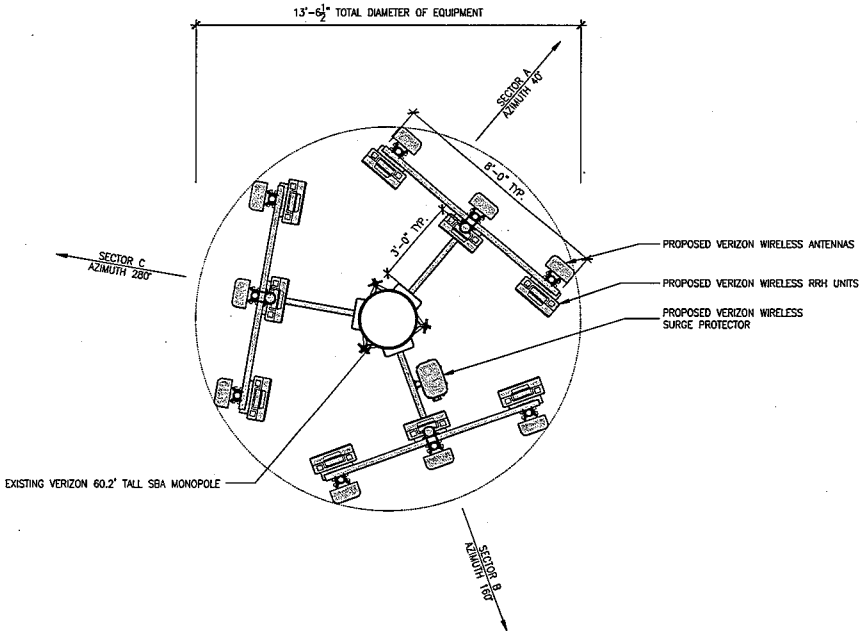
File: 162.1201_A21.dwg
Drawn By: MME
Checked By: MST
Scale: AS NOTED
Date: 07/25/14

Job No. 162.1201

A2.1

EQUIPMENT SCHEDULE					
EQUIPMENT	DESCRIPTION	QUANTITY			TOTAL
		SECTOR A	SECTOR B	SECTOR C	
ANTENNA	TO BE DETERMINED	3	3	3	9
RRH	RRUS12 W/ A2	3	3	3	9
TMA OR DIPLEXER	N/A	0	0	0	0
SURGE PROTECTOR/HYBRID	RAYCAP DC1064 / HYBRID TRUNK CABLE		2/2		2/2
COAXIAL CABLE	7/8" DIAMETER COAX	0	0	0	0
RET CABLE	N/A		0		0



0' 1' 5' 10'
1/2" = 1'-0"

1 A2.2 ENLARGED ANTENNA LAYOUT PLAN
SCALE: 1/2" = 1'-0"

MST ARCHITECTS
1510 River Park Drive, Sacramento, CA 95815
916.646.9565
www.MSTArchitects.com
COMPLETE Wireless Consulting, Inc.

verizon WIRELESS

STONEHURST
10998 RUSSET ST
OAKLAND, CA 95603

SHEET TITLE: ENLARGED ANTENNA PLAN

Revisions:
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3 --
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5 --

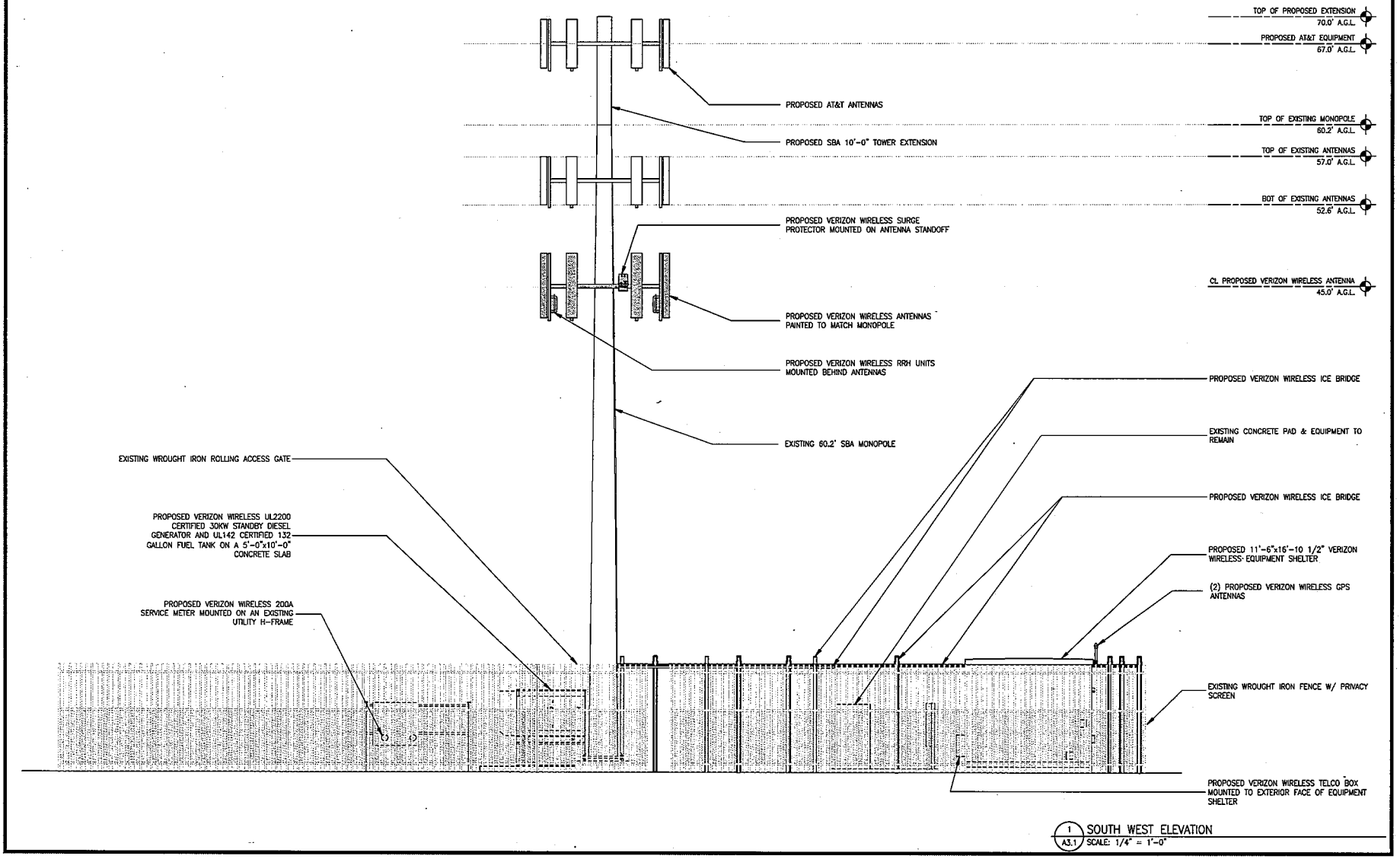
File: 162.1201A02.dwg
Drawn By: AME
Checked By: MST
Scale: AS NOTED
Date: 07/25/14

Job No. 162.1201

A2.2

NOTE: FAA APPROVALS TO 80' AGL.

PAINT AND/OR TEXTURE PROPOSED ANTENNAS AND ASSOCIATED EQUIPMENT TO MATCH EXISTING MONOPOLE



1 / A3.1 SOUTH WEST ELEVATION
SCALE: 1/4" = 1'-0"

MST ARCHITECTS
1333 Howe Park Drive, Sacramento, CA 95815
916.929.1481 FAX 916.929.1883
www.MSTArchitects.com
COMPLETE WIRELESS CONSULTING, Inc.

STONEHURST
10998 RUSSET ST
OAKLAND, CA 95603

verizon WIRELESS

SHEET TITLE: PROJECT ELEVATIONS

Revisions:
1 --
2 --
3 --
4 --
5 --

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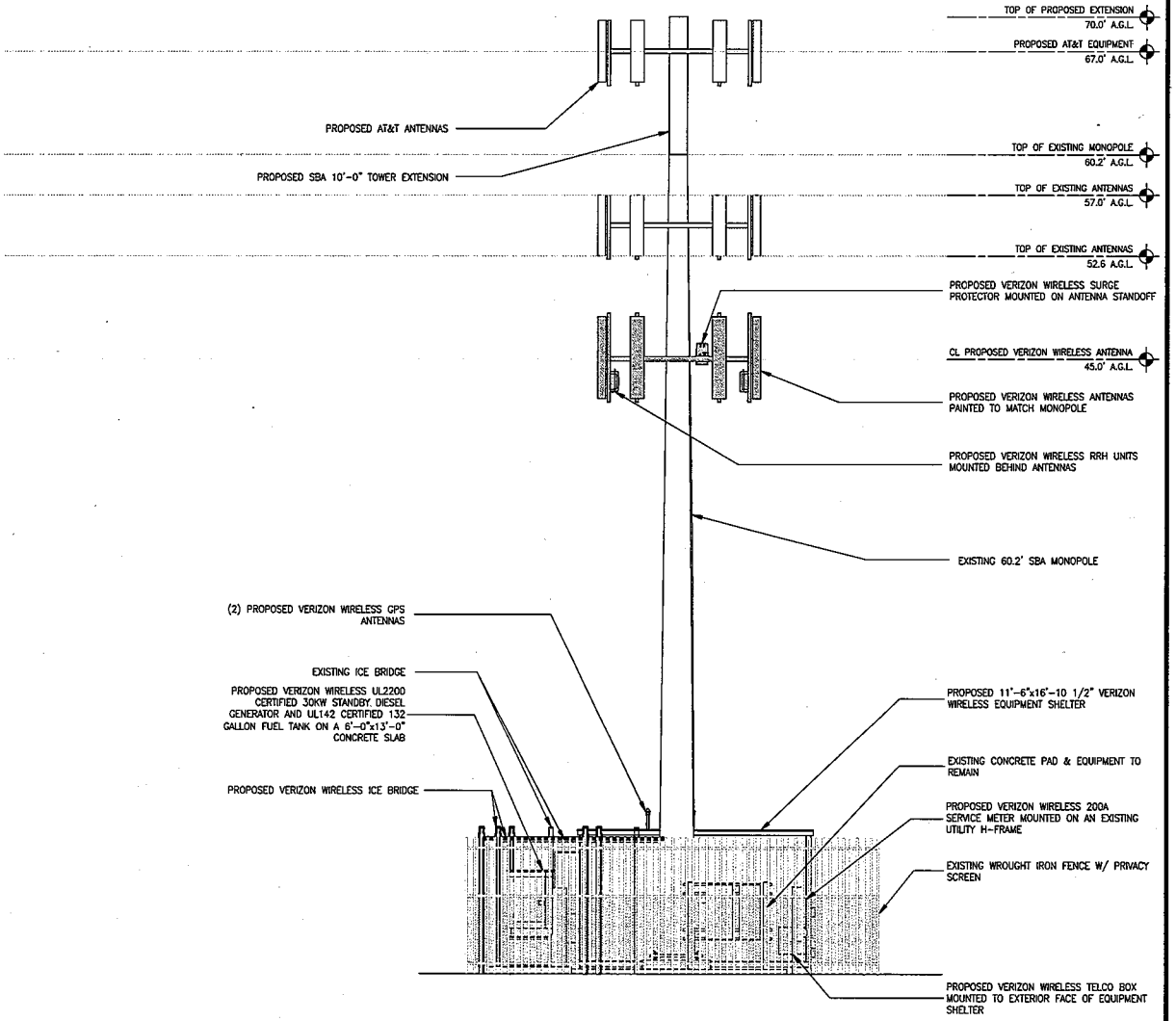
Checked By: MST
Scale: AS NOTED
Date: 07/25/14

Job No. 162.1201

A3.1



1 / A3.2 NORTH WEST ELEVATION
SCALE: 1/4" = 1'-0"

MST ARCHITECTS
1510 River Park Drive, Sacramento, CA 95815
916.565.4566
www.MSTArchitects.com

COMPLETE WIRELESS CONSULTING, Inc.

STONEHURST
10998 RUSSET ST
OAKLAND, CA 95603

verizon WIRELESS

SHEET TITLE: PROJECT ELEVATIONS

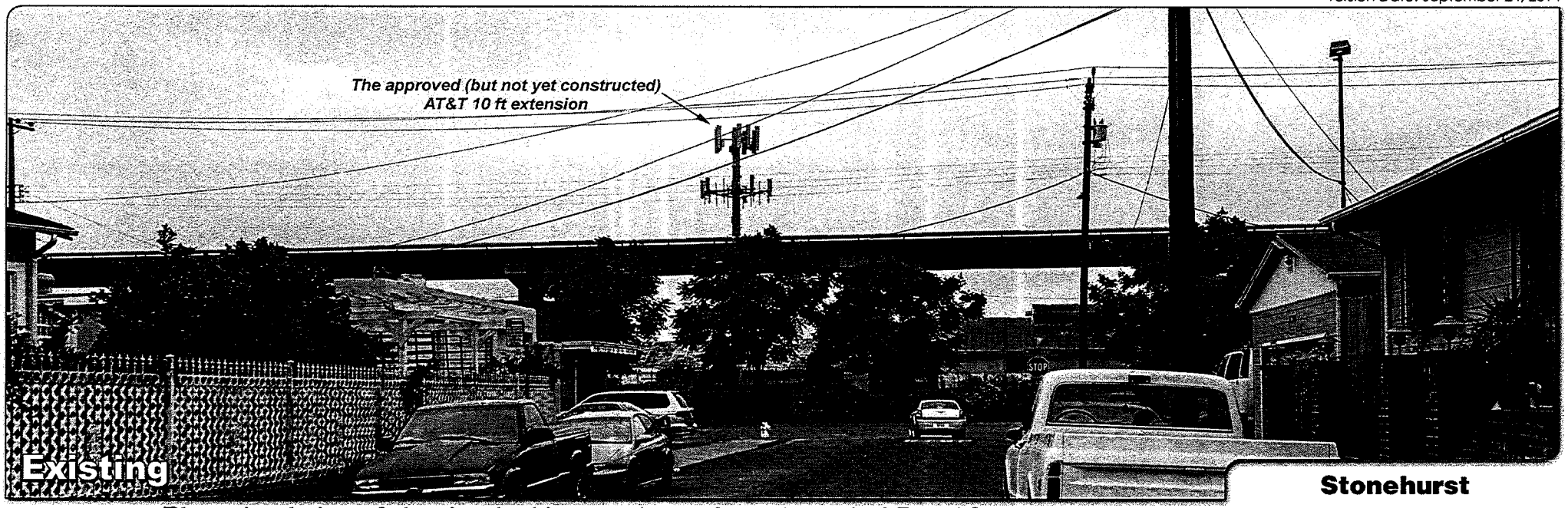
Revisions:
1 --
2 --
3 --
4 --
5 --

File: 162.1201A31.dwg
Drawn By: AME
Checked By: MST
Scale: AS NOTED
Date: 07/25/14

Job No. 162.1201

A3.2

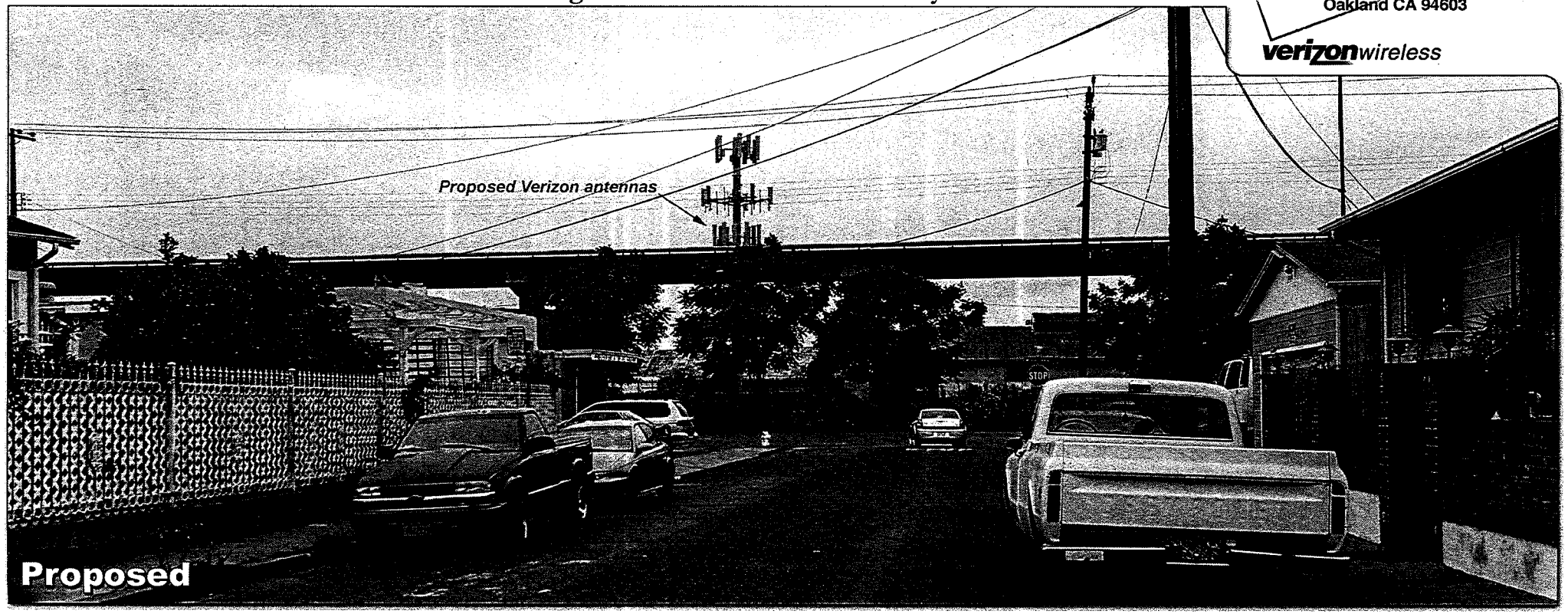
Version Date: September 24, 2014



Photosimulation of the view looking southwest from the end of Royal Street.

Stonehurst
10998 Russet St
Oakland CA 94603

verizonwireless



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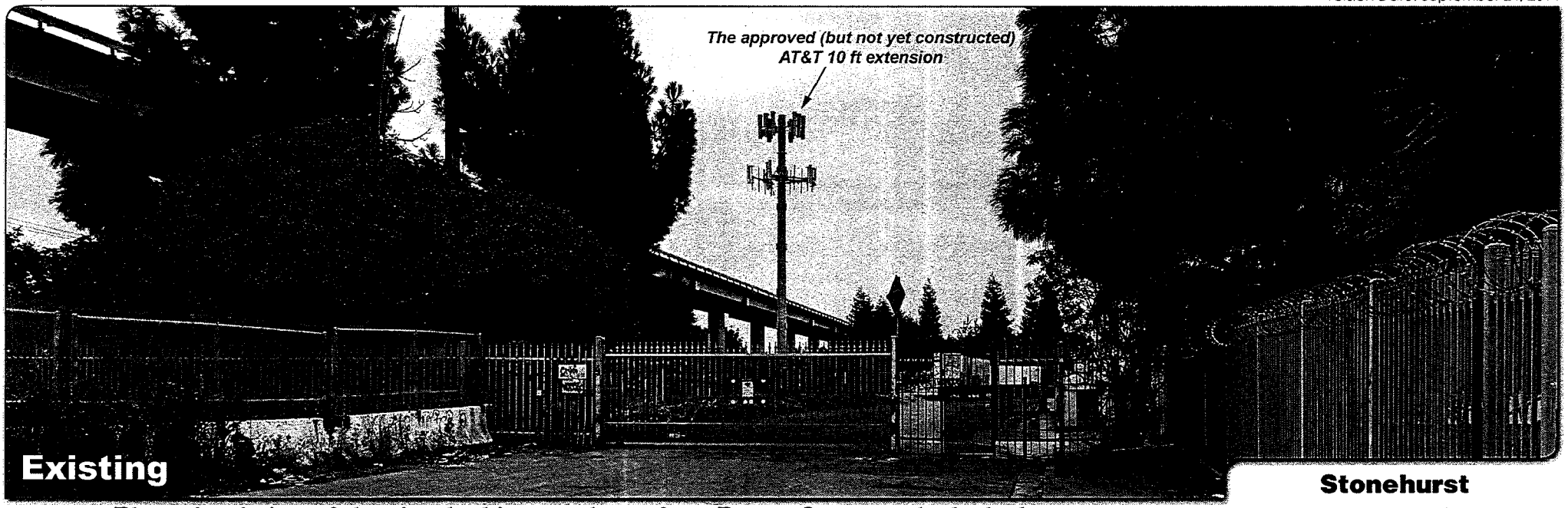
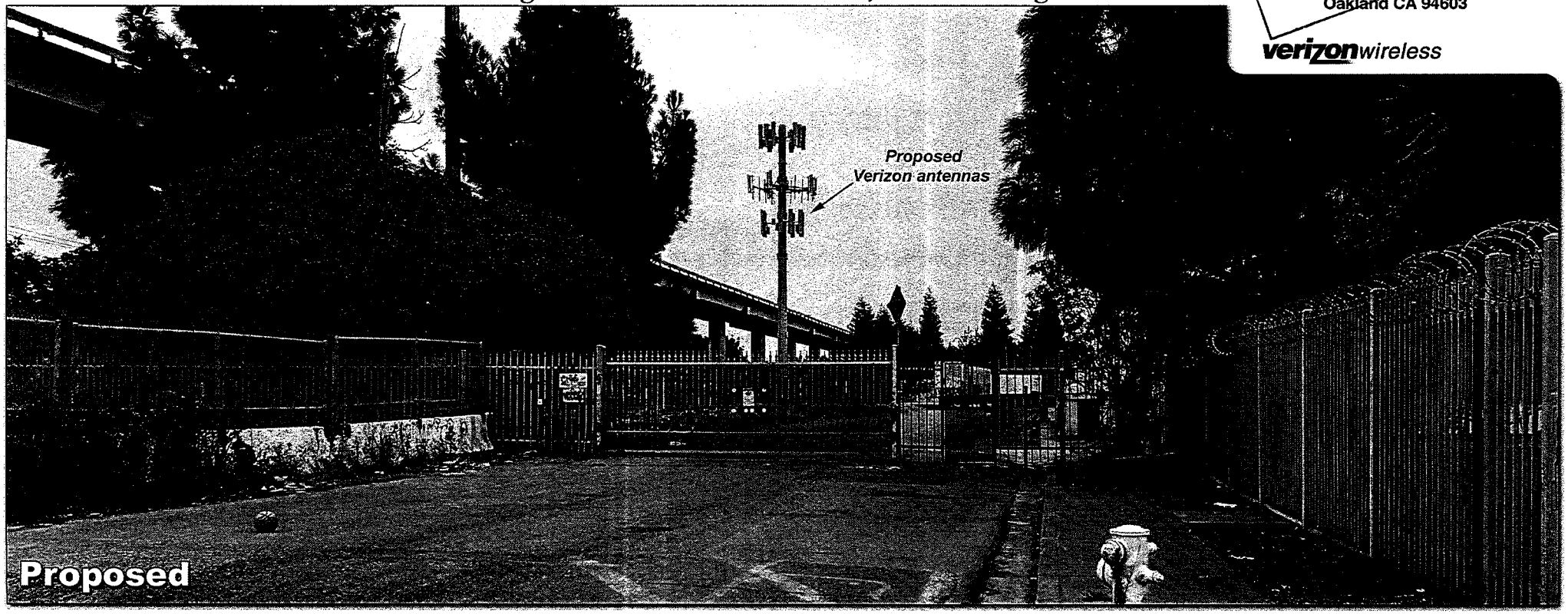


Stonehurst

10998 Russet St
Oakland CA 94603

verizonwireless

Photosimulation of the view looking southeast from Russet Street, at the locked gate.



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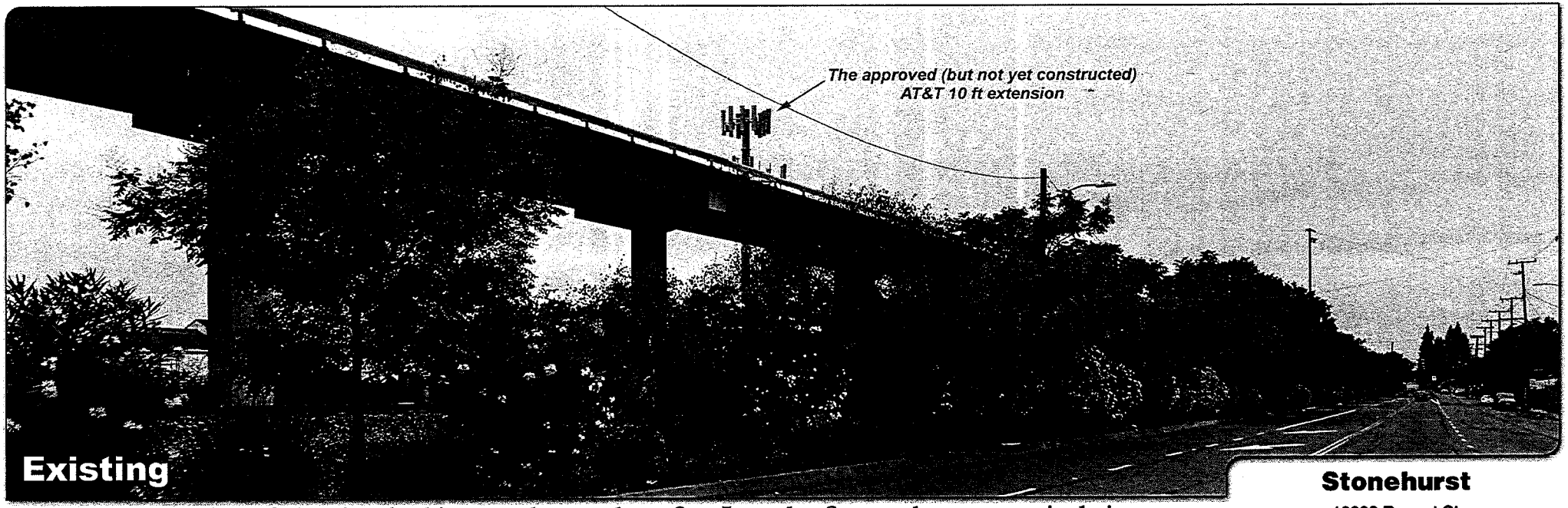
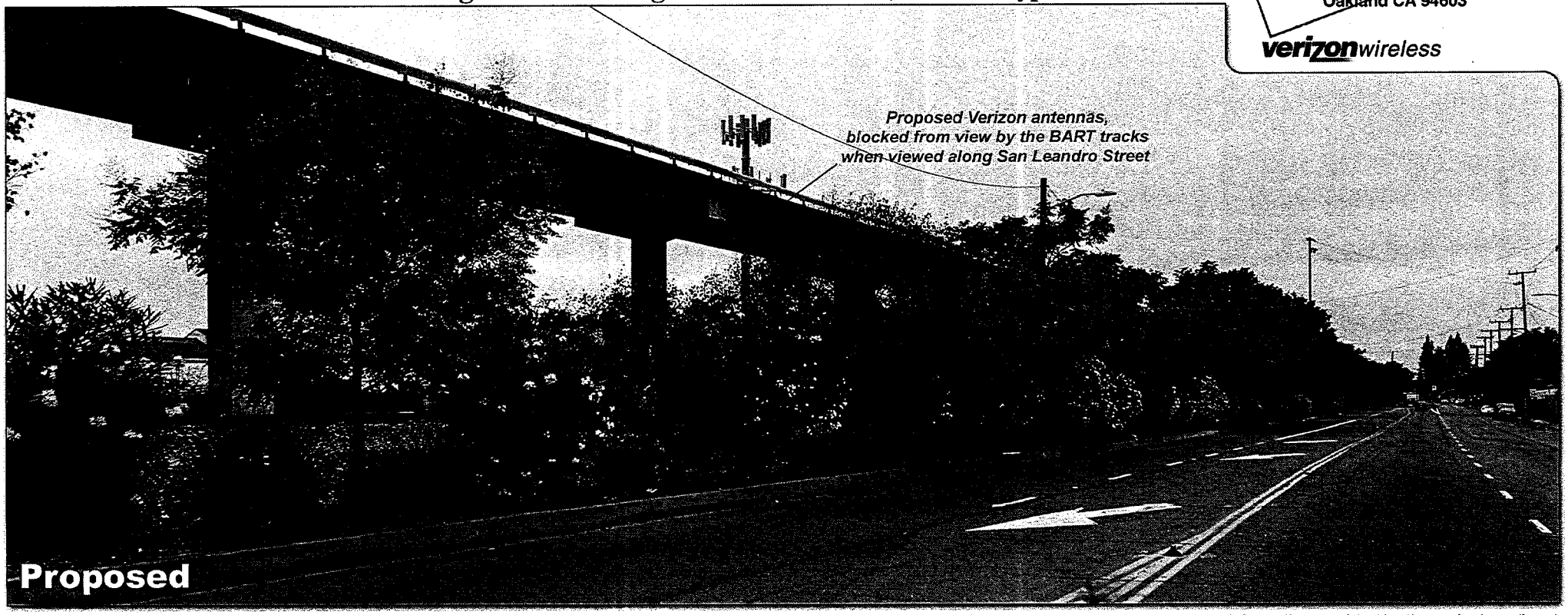


Photosimulation of the view looking northwest along San Leandro Street, the most typical view.

Stonehurst
10998 Russet St
Oakland CA 94603

verizonwireless

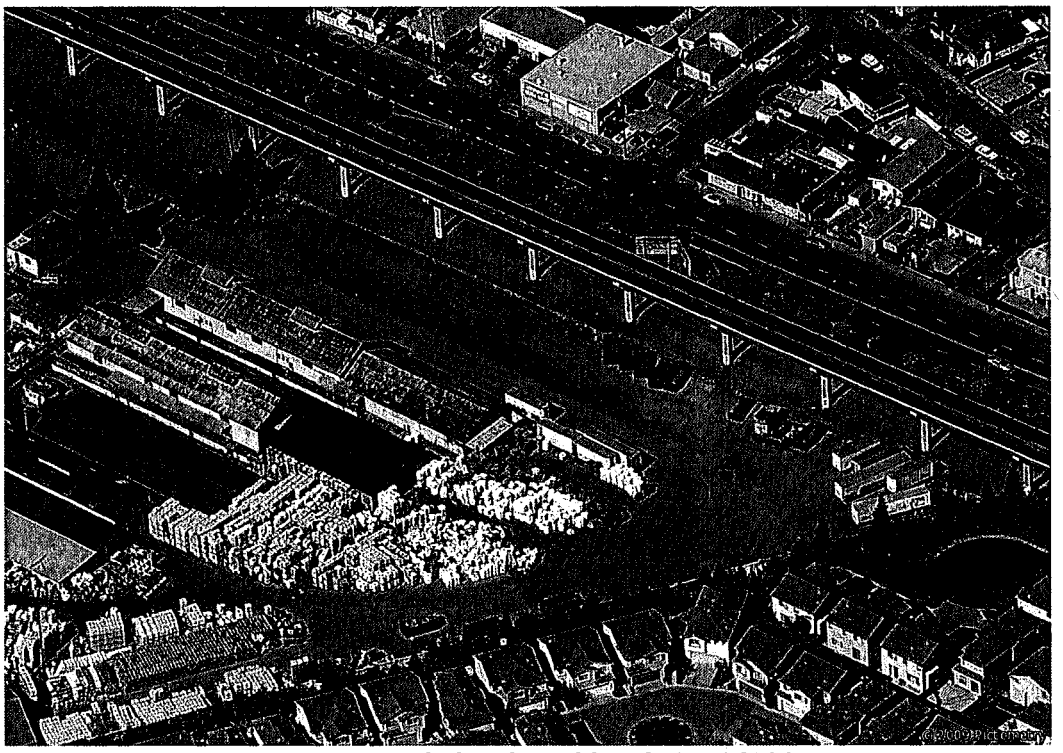


sitesafe
rf compliance experts

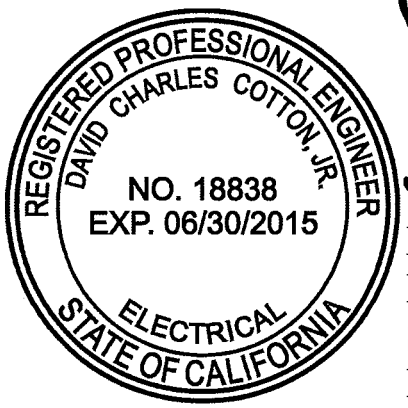
verizonwireless

Sitesafe, Inc.
200 N. Glebe Rd, Suite 1000, Arlington, VA 22203-3728
703-276-1100 info@sitesafe.com www.sitesafe.com

286677 - Stonehurst
Radio Frequency (RF) Site Compliance Report



10998 Resset Street, Oakland, CA 94603



David Charles Cotton, Jr.
Registered Professional Engineer (Electrical)
State of California, 18838
Date: 2014-September-02

Sitesafe, Inc.
200 N. Glebe Rd, Suite 1000, Arlington, VA 22203-3728
703-276-1100 info@sitesafe.com www.sitesafe.com

sitesafe
rf compliance experts

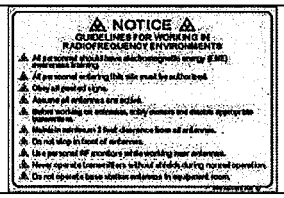
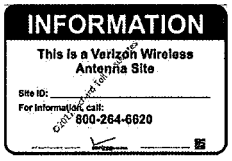
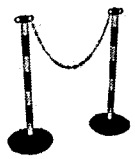
verizonwireless

Sitesafe, Inc.
200 N. Glebe Rd, Suite 1000, Arlington, VA 22203-3728
703-276-1100 info@sitesafe.com www.sitesafe.com

Radio Frequency Exposure Pre-Installation FCC Compliance Assessment

Site Specific Information			
Site Name	**Stonehurst**	**Categorically Excluded?**	**Yes**
Street Address	**10998 Resset Street**	**5% Contributor To Areas Requiring Mitigation?**	**Yes**
City, State, Zip	**Oakland, CA 94603**		
Multi-Licensee Facility	**Yes**	**Verizon's Max % MPE (Predictive – Occupational)**	**2.4% Occupational**
Structure Type	**Monopole**	**Verizon's Max % MPE (Measured –Occupational)**	**N/A**
Broadcast Equipment	**No**	**Assessment Date**	**September 2, 2014**
# of Access Points	**1**	**Assessment Purpose**	**NEW SITE BUILD**
Compliance Status		**MITIGATION REQUIRED**	

X	Verizon's Worst-case RF power density levels are BELOW the MPE for General Population/Uncontrolled Environments in accessible areas.
☐	Verizon's Worst-case RF power density levels are ABOVE the MPE for General Population/Uncontrolled Environments but BELOW the MPE for Occupational/Controlled environments.
☐	Verizon's Worst-case RF power density levels are ABOVE the MPE for Occupational/Controlled Environments but BELOW 10x the MPE for Occupational/Controlled environments.
☐	Verizon's Worst-case RF power density levels are ABOVE 10x the MPE for Occupational/Controlled environments.

Compliance Requirements						
	Guidelines	**Notice**	**Caution**	**Warning**	**NOC Information**	**Barrier/Marker**
Equipment Shelter	☐ [#]	☐ [#]	☐ [#]	☐ [#]	X [1]	☐
Access Points	X [1]	☐ [#]	X [1]	☐ [#]	☐ [#]	☐
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐

Additional Compliance Requirements(s):			
Access to the tower to remain restricted to the general public.			
Consultant Legal Name	Sitesafe, Inc.	**Phone/Fax**	703-276-1100
Address	200 North Glebe Road, Suite 1000 Arlington, VA 22203-3728		

Sitesafe, Inc.
200 N. Glebe Rd, Suite 1000, Arlington, VA 22203-3728
703-276-1100 info@sitesafe.com www.sitesafe.com

Contents

Sitesafe, Inc.
200 N. Glebe Rd, Suite 1000, Arlington, VA 22203-3728
703-276-1100 info@sitesafe.com www.sitesafe.com

1. Executive Summary

Verizon Wireless has contracted with Sitesafe, Inc., an independent Radio Frequency consulting firm, to conduct a Radio Frequency Exposure (RFE) Compliance **Pre-Installation Assessment** of the Stonehurst cell site. The following report contains a detailed summary of the Radio Frequency environment as it relates to Federal Communications Commission (FCC) and Occupational Safety & Health Administration (OSHA) Rules and Regulations for all individuals.

The **Verizon Wireless antenna data** was provided by:

Name	Lucy M Sarkisyan
Title	Assistant Planner
Date	September 2, 2014
Region	West

This **Pre-Installation** compliance assessment and report has been **prepared** and **reviewed** by:

	Preparer	**Reviewer**
Name	Kevin Smith	(See PE signature on title page)
Title	EME Report Writer	Professional Engineer
Date	9/2/2014	9/2/2014

This report utilizes the following **for predictive modeling of the ambient RF environment**:
MPE Modeling Program: SitesafeTC
Required Modeling Assumptions: 100% Duty Cycle and Maximum Total Power Output.

Additional Modeling Assumptions:

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.

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2. Existing Site Characteristics

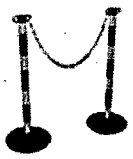
a. Structure

Physical Description	Monopole
Site Latitude (NAD 83)	N37-43-56.78
Site Longitude (NAD 83)	W122-10-17.82
Site Elevation (AMSL)	81 feet
Structure Height (AGL)	60.2 feet
Overall Structure Height	60.2 feet

b. Accessibility

Site not visited.

c. Verizon Wireless Signage

Existing Signage	 Guidelines	 Notice	 Caution	 Warning	 NOC Information	 Barrier/Marker
Access Points	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
	Existing Signage Adheres to VZW Signage & Demarcation Policy?					No

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d. Antenna Inventory

Ant ID	Operator	Antenna Make & Model	Type	TX Freq (MHz)	Az (Deg)	Hor BW (Deg)	Ant Len (ft)	Ant Gain (dBd)	Total ERP (Watts)	X	Y	Z (AGL)
1	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	751	40	68	6.5	12.32	1902	254.9'	250.1'	45'
2	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	2100	40	63	6.5	16.34	1902	256.8'	245.2'	45'
3	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	1900	40	66	6.5	15.83	4458	259'	240.6'	45'
4	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	751	160	68	6.5	12.32	1902	254.3'	233.9'	45'
5	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	2100	160	63	6.5	16.34	1902	249.1'	234.4'	45'
6	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	1900	160	66	6.5	15.83	4458	244'	234.9'	45'
7	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	751	280	68	6.5	12.32	1902	240.7'	242.6'	45'
8	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	2100	280	63	6.5	16.34	1902	243.9'	246.9'	45'
9	VERIZON WIRELESS (PROPOSED)	Andrew SBNHH-1D65B	Panel	1900	280	66	6.5	15.83	4458	246.9'	250.8'	45'
10	UNKNOWN	Generic Panel	Panel	1900	0	65	4.6	15.43	1047.4	256'	247.7'	54.8'
11	UNKNOWN	Generic Panel	Panel	1900	0	65	4.6	15.43	1047.4	257.9'	242.8'	54.8'
12	UNKNOWN	Generic Panel	Panel	1900	120	65	4.6	15.43	1047.4	251.7'	234.1'	54.8'
13	UNKNOWN	Generic Panel	Panel	1900	120	65	4.6	15.43	1047.4	246.5'	234.7'	54.8'
14	UNKNOWN	Generic Panel	Panel	1900	240	65	4.6	15.43	1047.4	242.2'	244.9'	54.8'
15	UNKNOWN	Generic Panel	Panel	1900	240	65	4.6	15.43	1047.4	245.4'	248.9'	54.8'

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 the antenna radiation center height above the ground level.** Effective Radiated Power (ERP) is provided by the operator or based on Sitesafe experience. The values used in the modeling may be greater than are currently deployed. For other operators at this site the use of "Generic" as an antenna model or "Unknown" for a wireless operator means the information with regard to operator, their FCC license and/or antenna information was not available nor could it be secured while on site. Other operator's equipment, antenna models and powers used for modeling are based on obtained information or Sitesafe experience.

Site: 286677 - STONEHURST — EME DATA SHEET

County: Alameda
Address: Resset Street
City: Oakland, CA 94603

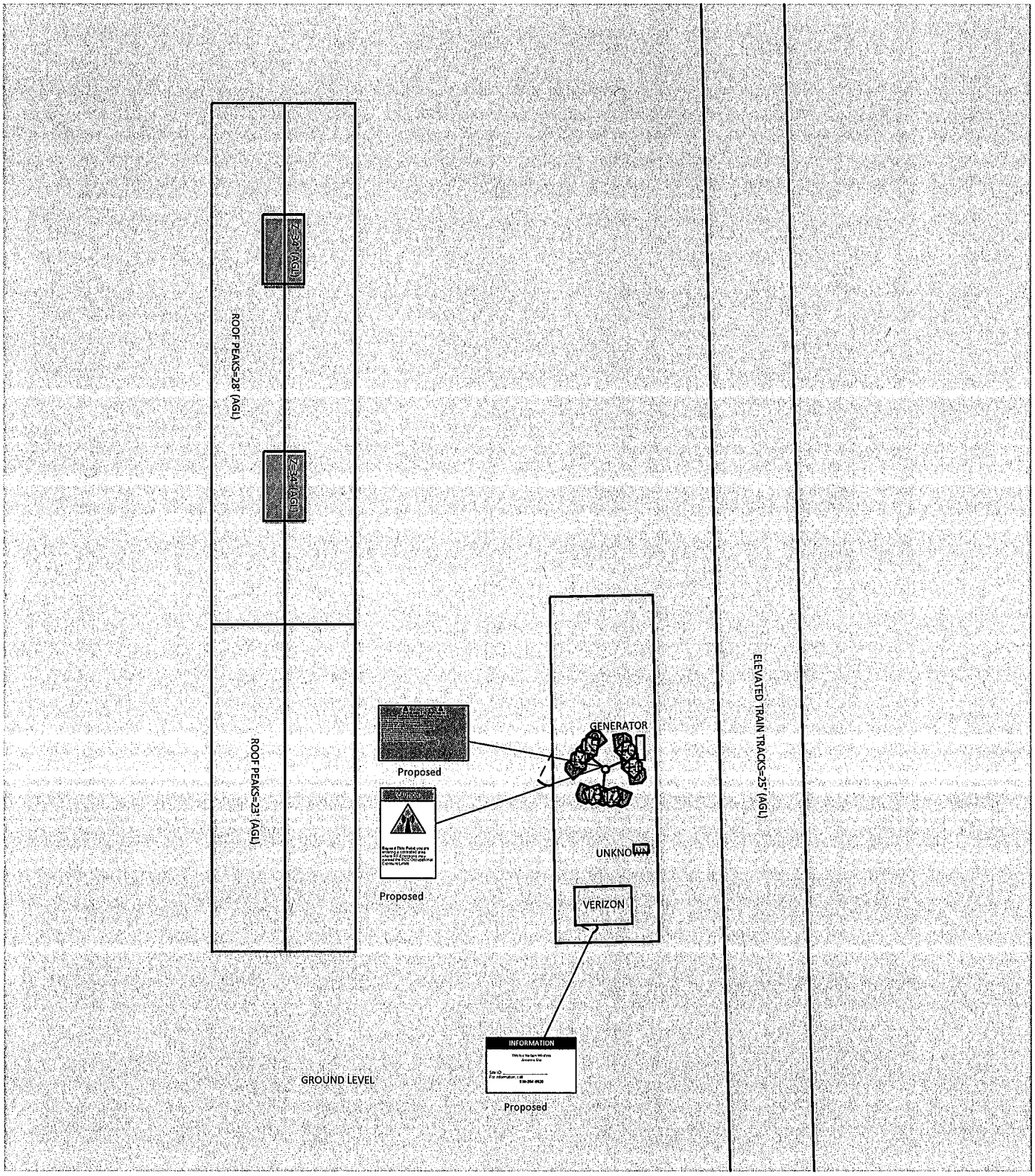
Site (V+W) Contact: #N/A #N/A
RF (V+W) Contact: #N/A #N/A
Date: 8/22/2014 NOC Label: #N/A

Actual/Max ERP: Maximum
ERP Variation:
Spectrum: Current

Pre-construction — Jurisdiction: Yes

Sector ID	Band	Technology	Block: Channel Block (Uplink)	Block: LTE Bandwidth (MHz)	Block: LTE Bandwidth (Uplink)	Physical Antenna Configuration: #	Tx Antenna Make & Model	Centerline	Length	Face Orientation	Beam Orientation	Horizontal Beamwidth	Mechanical Tilt	Electrical Tilt	Power Calculations: Antenna Gain (dBd)	Line Loss (dB)	Equipment Used	Voice Power per Channel	Data Power per Channel	Data Simultaneous Users	Channels and ERP: Voice Channels	Data Channels	ERP (W)	ERP Method
ALPHA	850	1x																							
	PCS	1x																							
	700	LTE	Upr C	10	10	1	ANDREW SBNHH-1D65B	45 ft	72 in	40°	40°	69	0	0	12.5	0.5	Ericsson eNB		60.0 W	2			1902 W	Max
	PCS	LTE	C5	5	5	1	ANDREW SBNHH-1D65B	45 ft	72 in	40°	40°	69	0	0	12.5	0.5	Ericsson eNB		60.0 W	2			1902 W	Max
	AWS	LTE	E,F	15	15	1	ANDREW SBNHH-1D65B	45 ft	72 in	40°	40°	60	0	0	16.2	0.5	Ericsson eNB		60.0 W	2			4458 W	Max
BETA	850	1x																							
	PCS	1x																							
	700	LTE	Upr C	10	10	2	ANDREW SBNHH-1D65B	45 ft	72 in	160°	160°	69	0	0	12.5	0.5	Ericsson eNB		60.0 W	2			1902 W	Max
	PCS	LTE	C5	5	5	2	ANDREW SBNHH-1D65B	45 ft	72 in	160°	160°	69	0	0	12.5	0.5	Ericsson eNB		60.0 W	2			1902 W	Max
	AWS	LTE	E,F	15	15	2	ANDREW SBNHH-1D65B	45 ft	72 in	160°	160°	60	0	0	16.2	0.5	Ericsson eNB		60.0 W	2			4458 W	Max
GAMMA	850	1x																							
	PCS	1x																							
	700	LTE	Upr C	10	10	3	ANDREW SBNHH-1D65B	45 ft	72 in	280°	280°	69	0	0	12.5	0.5	Ericsson eNB		60.0 W	2			1902 W	Max
	PCS	LTE	C5	5	5	3	ANDREW SBNHH-1D65B	45 ft	72 in	280°	280°	69	0	0	12.5	0.5	Ericsson eNB		60.0 W	2			1902 W	Max
	AWS	LTE	E,F	15	15	3	ANDREW SBNHH-1D65B	45 ft	72 in	280°	280°	60	0	0	16.2	0.5	Ericsson eNB		60.0 W	2			4458 W	Max
SECTOR 4	850	1x																							
	PCS	1x																							
	700	LTE																							
	PCS	LTE																							
	AWS	LTE																							
SECTOR 5	850	1x																							
	PCS	1x																							
	700	LTE																							
	PCS	LTE																							
	AWS	LTE																							
SECTOR 6	850	1x																							
	PCS	1x																							
	700	LTE																							
	PCS	LTE																							
	AWS	LTE																							

Composite View
RF Emissions Simulation For: Stonehurst



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

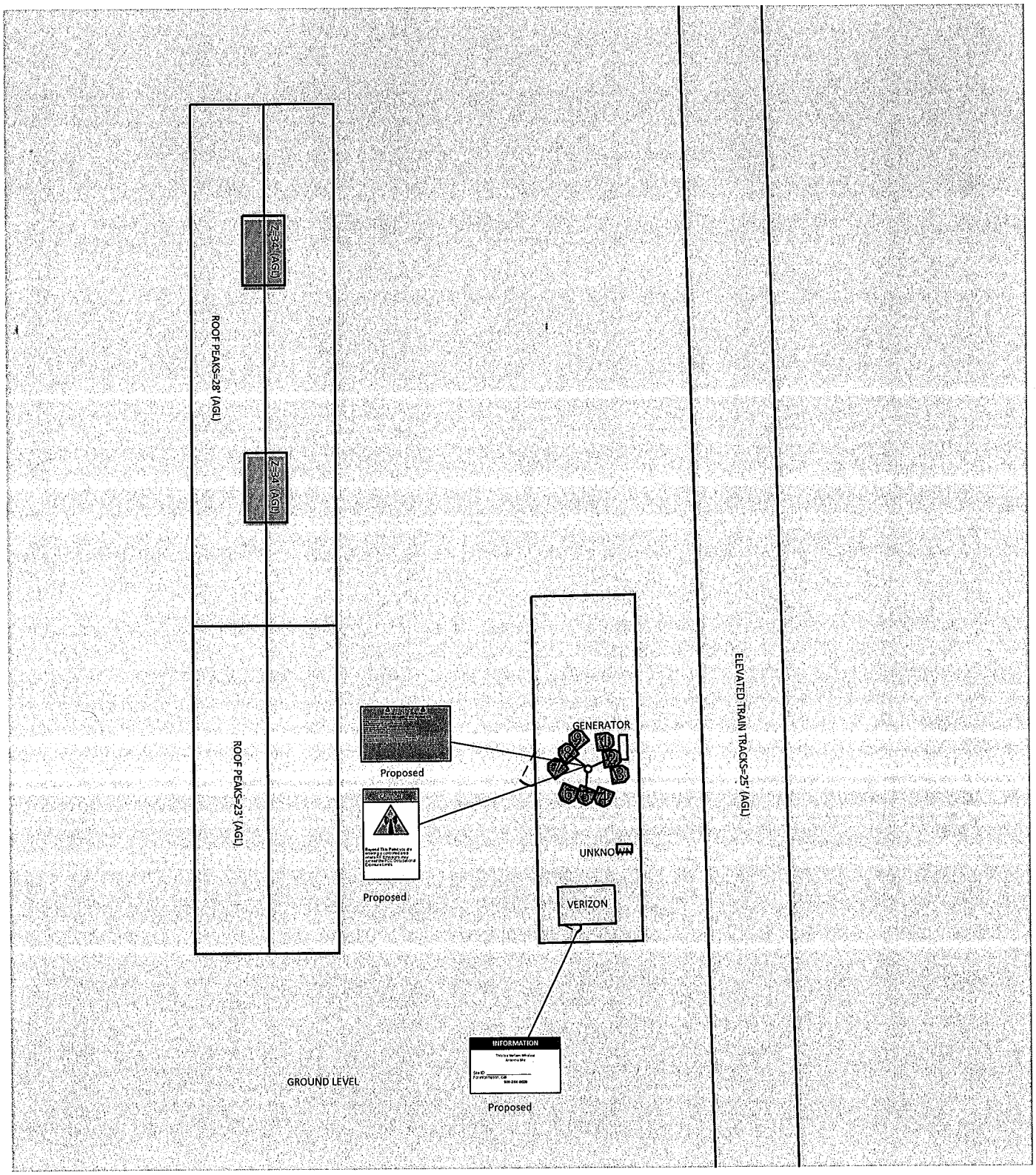
(Feet)
0 20 40

>= 5000 >= 500 >= 100 >= 5 < 5

www.sitesafe.com
Site Name:Stonehurst

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

Verizon Wireless Contribution
RF Emissions Simulation For: Stonehurst



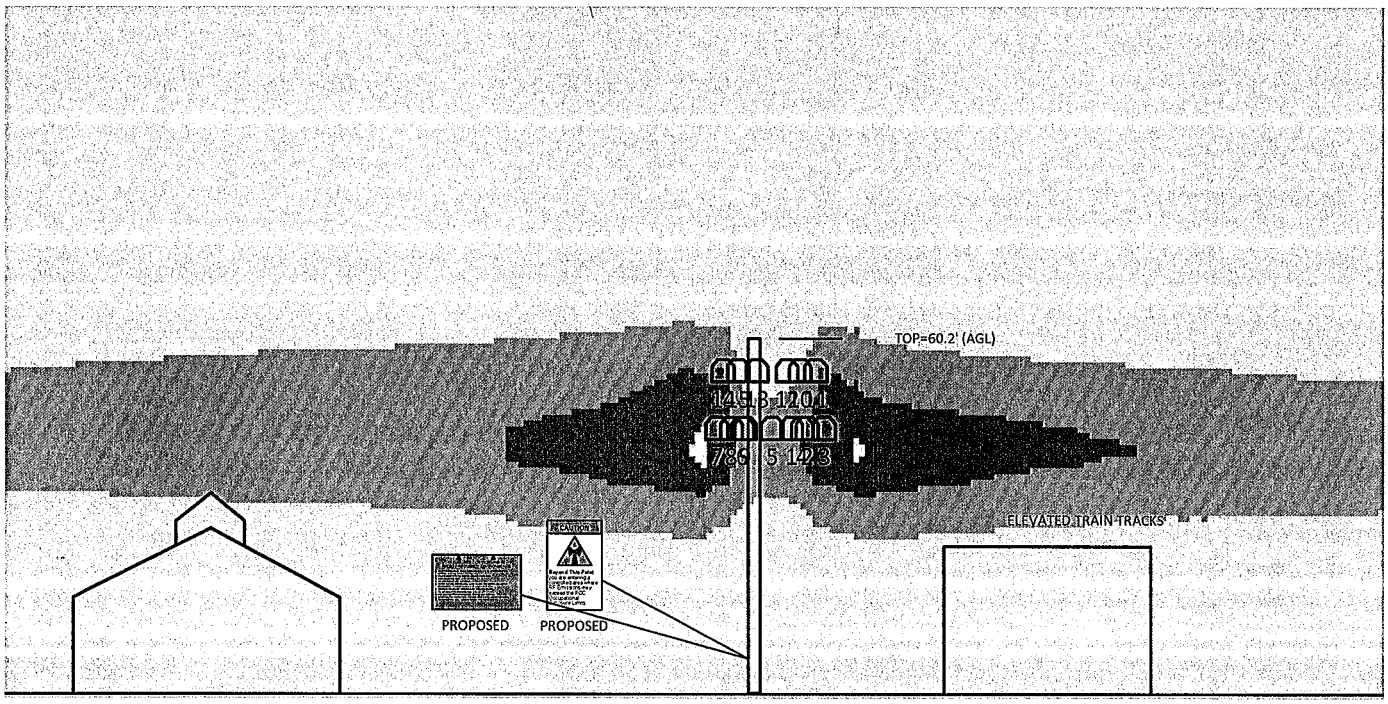
% of FCC Public Exposure Limit
Spatial average 0' - 6'

(Feet)
0 20 40
www.sitesafe.com
Site Name:Stonehurst

>= 5000 >= 500 >= 100 >= 5 < 5

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

Elevation View
RF Emissions Simulation For: Stonehurst



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

(Feet)

0 17.5 35

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Site Name:Stonehurst

>= 5000 >= 500 >= 100 >= 5 < 5

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4. Conclusion

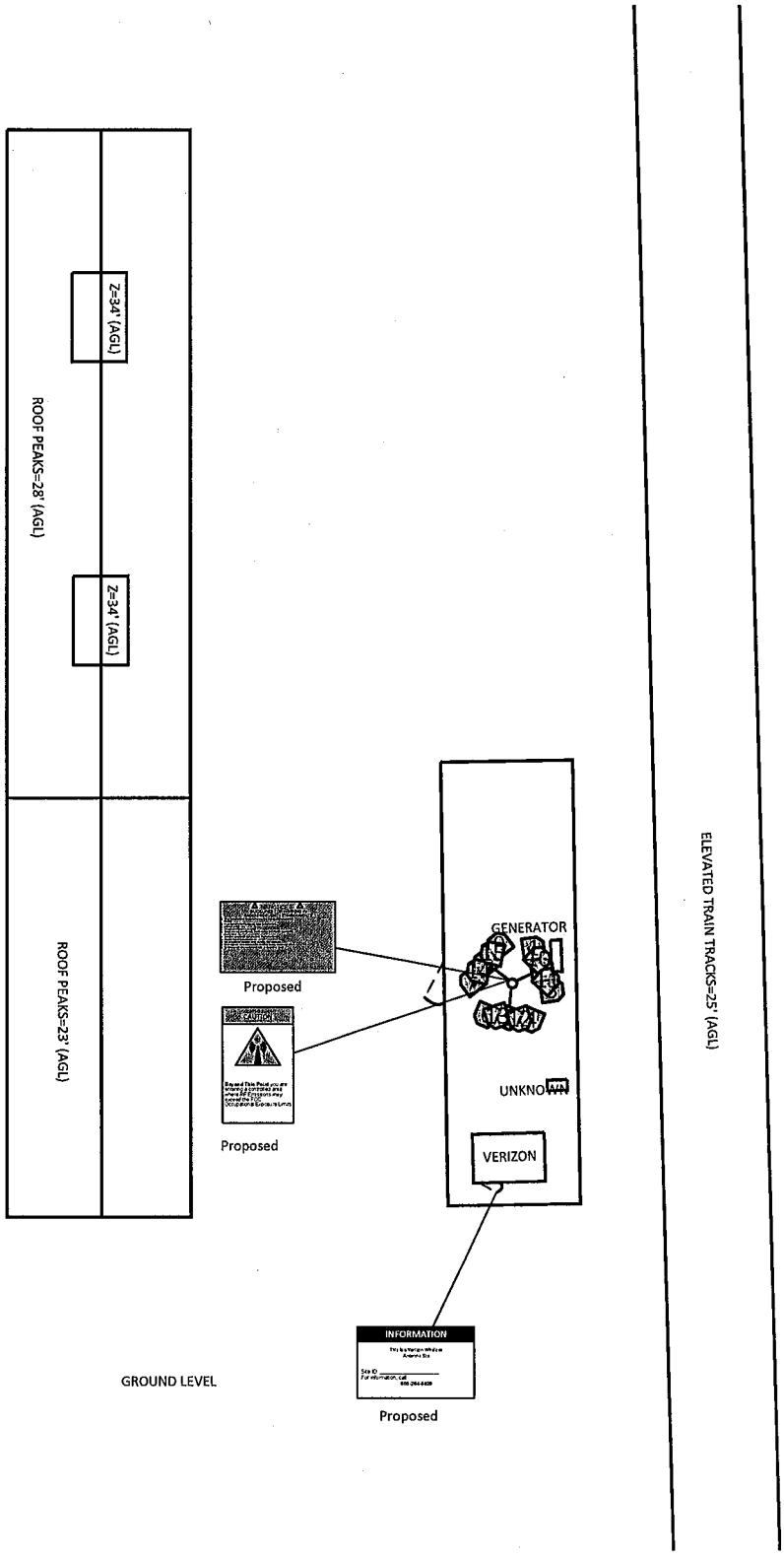
a. Conclusion Narrative

Description of MPE-Limit Exceeding Areas:

Verizon Wireless will be compliant with FCC Rules and Regulations.

The Max MPE predicted is 2.4% Occupational at Verizon Wireless Gamma sector.

Signage and Barrier Diagram



(Feet)

0 22.5 45

www.sitesafe.com
Site Name:Stonehurst

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

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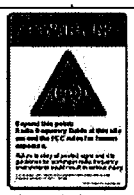
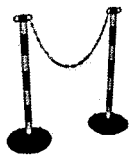
Compliance Requirements						
	Guidelines	Notice	Caution	Warning	NOC Information	Barrier/Marker
Equipment Shelter	☐ [#]	☐ [#]	☐ [#]	☐ [#]	X [1]	☐
Access Points	X [1]	☐ [#]	X [1]	☐ [#]	☐ [#]	☐
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐

Signage/Barrier Installation Detail

Equipment Shelter

- Install a NOC Information Sign (Install sign on shelter door).

Tower Access

- Access to the tower to remain locked/restricted at all times.
- Install a Yellow Caution Sign (Install sign at the base of the tower).
- Install a 10-Step Guideline Sign (Install sign at the base of the tower).

Verizon Wireless Alpha Sector

- No action required

Verizon Wireless Beta Sector

- No action required

Verizon Wireless Gamma Sector

- No action required

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5. Appendix A: RF Consultant Certifications

a. Preparer Certification

I, Kevin Smith, the preparer of this report, am familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also familiar with the Verizon Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

Kevin Smith

b. Reviewer Certification

The professional engineer whose seal appears on the cover of this document, the reviewer and approver of this report, am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I am also fully aware of and familiar with the Verizon Wireless Signage & Demarcation Policy. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

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6. Appendix B: Reference Information

a. FCC Rules & Regulations

The Federal Communications Commission (FCC) has established safety guidelines relating to RF exposure from cell sites. The FCC developed those standards, known as Maximum Permissible Exposure (MPE) limits, in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration. The standards were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The FCC explains that its standards "incorporate prudent margins of safety." The following represents explanations of the most applicable information:

Two Classifications for Exposure Limits

Occupational – Applies to situations in which persons are "exposed as a consequence of their *employment*" and are "*fully aware* of the potential for exposure and can *exercise control* over their exposure".	General Population – Applies to situations in which persons are "exposed as a consequence of their employment *may not be made fully aware* of the potential for exposure or *cannot exercise control* over their exposure". Generally speaking, those without significant and documented RF Safety & Awareness training would be in the General Population classification.

Environment Classification

Controlled – Applies to environments that are restricted or "controlled" in order to prevent access from members of the General Population classification.	Uncontrolled – Applies to environments that are unrestricted or "uncontrolled" that allow access from members of the General Population classification.

Limits for Occupational/Controlled Exposure		
Frequency Range (MHz)	**Power Density (S) (mW/cm^2)**	**Averaging Time $\|E\|^2$, $\|H\|^2$, or S (minutes)**
300-1500	f/300	6
1500-100,000	5	6
Limits for General Population/Uncontrolled Exposure		
Frequency Range (MHz)	**Power Density (S) (mW/cm^2)**	**Averaging Time $\|E\|^2$, $\|H\|^2$, or S (minutes)**
300-1500	f/1500	30
1500-100,000	1	30
f = frequency in MHz		

Significant Contribution to the RF Environment

Any carrier contributing an aggregate MPE percentage of 5 or more (to the applicable RF Environment Classification) is defined as a significant contributor. This means that if any area is determined to be out of compliance with FCC rules, all significant contributors are jointly responsible for correcting any deficiencies.

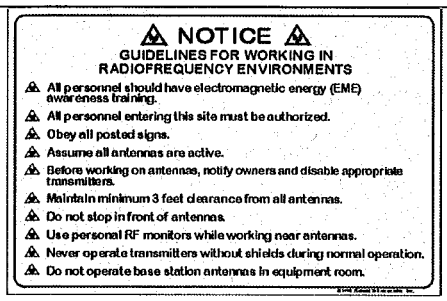
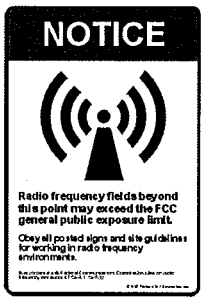
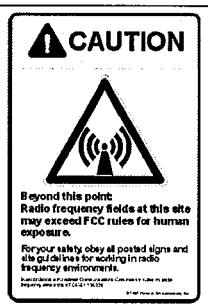
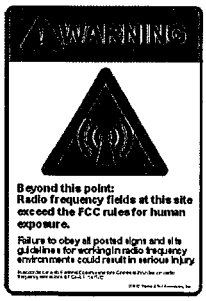
b. Occupational Safety and Health Administration (OSHA) Requirements

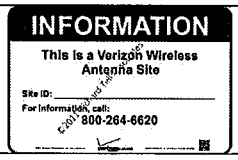
A formal adopter of FCC Standards, OSHA stipulates that those in the Occupational classification must complete training in the following: RF Safety, RF Awareness, and Utilization of Personal Protective Equipment. OSHA also provides options for Hazard Prevention and Control:

Hazard Prevention	Control
• Utilization of good equipment • Enact control of hazard areas • Limit exposures • Employ medical surveillance and accident response	• Employ Lockout/Tag out • Utilize personal alarms & protective clothing • Prevent access to hazardous locations • Develop or operate an administrative control program

c. RF Signage

Areas or portions of any transmitter site may be susceptible to high power densities that could cause personnel exposures in excess of the FCC guidelines. These areas must be demarcated by conspicuously posted signage that identifies the potential exposure. Signage MUST be viewable regardless of the viewer's position.

GUIDELINES	NOTICE	CAUTION	WARNING
This sign will inform anyone of the basic precautions to follow when entering an area with transmitting radiofrequency equipment.	This sign indicates that RF emissions may exceed the FCC General Population MPE limit.	This sign indicates that RF emissions may exceed the FCC Occupational MPE limit.	This sign indicates that RF emissions may exceed at least 10x the FCC Occupational MPE limit.
			

INFORMATION SIGN	
Information signs are used as a means to provide contact information for any questions or concerns. They will include specific cell site identification information and the Verizon Wireless Network Operations Center phone number.	

d. Physical

Physical barriers are control measures that require awareness and participation of personnel. Physical barriers are employed as an additional administration control to complement RF signage and physically demarcate an area in which RF exposure levels may exceed the FCC General Population limit.

e. Indicative Markers

Indicative markers are visible control measures that require awareness and participation of personnel, as they cannot physically prevent someone from entering an area of potential concern. Indicative markers are employed as an additional administration control to complement RF signage and visually demarcate an area in which RF exposure levels may exceed the FCC General Population limit.