



## City of Seattle

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Department of Planning and Development

D. M. Sugimura, Director

### CITY OF SEATTLE ANALYSIS AND DECISION OF THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND DEVELOPMENT

**Application Number:** 3014133

**Applicant Name:** Sarah Telschow, Realcom Associates, LLC, for T-Mobile

**Address of Proposal:** 1000 E. Boston Street

#### **SUMMARY OF PROPOSED ACTION**

Land Use Application to expand an existing minor communication utility (T-Mobile) by replacing three existing antennas and installing six new panel antennas on the rooftop of an existing residential building (Bostonian Apartments). Project includes relocating three existing panel antennas and installing six new antennas into two new antenna shrouds. Existing canister shrouds are to be removed.

The following approvals are required:

- **ACU – Administrative Conditional Use** – to allow the replacement of three existing panel antennas and the addition of six panel antennas and two antenna shrouds at an existing minor communication utility in a residential, multifamily, Lowrise 2 (LR2) zone (Chapter 23.57, Seattle Municipal Code).
- **SEPA - Environmental Determination** – (Chapter 25.05, Seattle Municipal Code)

**SEPA DETERMINATION:**  Exempt  DNS  MDNS  EIS  
 DNS with conditions  
 DNS involving non-exempt grading or demolition or involving another agency with jurisdiction.

#### **BACKGROUND INFORMATION**

##### Site and Vicinity Description

The subject property is located on the hillside above Lake Union and Interstate-5 at the north end of Capitol Hill. The subject property is zoned Lowrise 2 (LR2), and is currently developed with the Bostonian Apartments, a three-story residential building approximately forty-five by eighty

feet, located on an 8,000 square-foot lot at the northeast corner of the intersection of E. Boston Street and 10<sup>th</sup> Avenue E. North of the site, 10<sup>th</sup> Avenue E. slopes slightly downwards. To the west of the subject site, across the intersection with 10<sup>th</sup> Avenue E., E. Boston Street slopes a bit more precipitously toward Broadway E. and the incised block-wide cut for Interstate 5. Immediately to the east and abutting the site, and across E. Boston Street to the south is a large area of single-family zoning (SF5000), built out largely with vintage single family dwellings. A block to the north is a portion of a block zoned L3 which in turn lies south of a small swath of land bordering on the I-5, SR 520 on ramp that is zoned NC1-40. A long narrow strip of land, starting one-half block to the west and roughly paralleling I-5 south of E. Boston Street, is zoned LR1.

### Proposal Description

The applicant, T-Mobile, proposes to replace /upgrade three (3) existing rooftop panel antennas with three new antennas of a similar type and to add six (6) new antennas. The nine antennas are to be enclosed in two rooftop panel antenna shrouds on a building that accommodates an existing T-Mobile minor telecommunication facility at 1000 E. Boston Street.

The height of the proposed antennas and shrouds exceeds the 30-foot height limit of the zone, but the overall height of 46'-1" will not exceed the height of the rooftop telecommunication facility previously approved. According to the applicant, the height is the minimum necessary for the effective functioning of the minor communication utility.

The proposed screening shrouds are the minimum necessary size to conceal the increased number of antennas, mounting apparatus and ancillary equipment at three sectors. The proposed screening at the south end of the building will consolidate six (6) antennas at two sectors. The tubular, stovepipe-shaped shrouds screening the existing antennas will be removed.

The purpose of the proposed replacement, according to the applicant, is to remedy existing coverage gaps, facilitate improved telephone service and provide wireless capacity for data services to the company's subscribers.

Upgrades will be made to the equipment cabinet which will continue to be located in the basement, parking area of the building.

### Public Notice

Public Notice of the proposal application was published on December 20, 2012, and a public comment period ended on January 2, 2013. No comment letters were received by the Department during the public comment period.

### ANALYSIS AND CRITERIA -- ADMINISTRATIVE CONDITIONAL USE

Section 23.57.011.B of the Seattle Municipal Code (SMC) provides that a minor communication utility may be permitted in a Multi-family Zone with the approval of an administrative conditional use permit subject to the requirements of this section enumerated below:

- 1. The proposal shall not be significantly detrimental to the residential character of the surrounding residentially zoned areas, and the facility and the location proposed shall be the least intrusive facility at the least intrusive location consistent with effectively*

*providing service. In considering detrimental impacts and the degree of intrusiveness, the impacts considered shall include but not be limited to visual, noise, compatibility with uses allowed in the zone, traffic, and the displacement of residential dwelling units.*

The entire coverage area consists of a mixture of residential uses, with portions of the area zoned multifamily ( LR1, LR2, LR3) and SF5000. The replaced and new antennas will be fully contained and screened in enclosures in order to minimize visual impacts. These enclosures will be rectangular in shape and be designed to resemble rooftop features (stair and elevator over-runs or penthouses) that are typical features of apartments and multi-family structures.

The applicant proposes the modification of an existing base station, one already established through the administrative conditional use process. The location of the existing and proposed replacement antennas is the rooftop of a residential apartment building. The proposed replacement of the three existing antennas and addition of six antennas should not constitute any significant change in the character of the area. Operation of the slightly expanded facility on the site will not create additional traffic or noise, and will not displace residential units. The visual impact is minimal and has been mitigated to the greatest extent possible.

The subject minor communication utility is already in operation and replacement/relocation and addition of new antennas is intended to provide needed additional call and data-transmission capacity as well as coverage penetration for the surrounding area.

According to Director's Rule 8-2004, "least intrusive location" means the location of a minor communications utility must comply within a hierarchy of preferences, with multifamily zones on arterials the fifth highest of priorities. The existing minor communication utility has earlier demonstrated that none of the higher priority zones exist in the immediate vicinity of the existing base station. Furthermore, DR 8-2004 specifies that a proposed minor communication utility and its associated equipment, including additions to that equipment should be designed and placed in a manner that would result in the least amount of visual and neighborhood character impacts. No viable alternatives were found and the location of the existing minor communication facility on the rooftop of a residential structure, in this case the Bostonian Apartments, the fourth highest location priority, has been previously approved. Documents detailing the search for alternative locations have been submitted with this application for replacement of three existing antennas and the addition of six antennas to an existing minor telecommunication facility.

A Non-Ionizing Electromagnetic Exposure Analysis & Engineering Certification, dated November 1, 2012, has been prepared by B. J. Thomas, P.E. Based on calculations in the analysis, the proposed Wireless Communications Facility (WCF) will comply with current FCC and county guidelines for human exposure to radiofrequency electromagnetic fields. According to the certification, the replacement of existing antennas and the introduction of new antennas and associated equipment will not be the source of detrimental impacts to the surrounding residentially zoned area.

- 2. The visual impacts that are addressed in Section 23.57.016 shall be mitigated to the greatest extent practicable.*

The existing and proposed antennas subject to this application will be enclosed within two rectangular shrouds designed to resemble rooftop features (stair and elevator over-runs) that are typical features on apartment buildings. The proposed shrouds will be painted to match the

colors of the host building and in size will be the minimum necessary to conceal the antennas and ancillary equipment at three sectors of coverage, as confirmed by plans and photo simulations submitted to the Department. The shrouds are located away from the edges of the rooftop so as to generally lessen the visual impact of those close to the building. The location of the apartment building near the crest of the hillside will help to minimize visual impacts of residential neighbors with longer range views of this building. The proposed location of the antennas and mounting hardware behind the proposed screening will provide adequate mitigation and reduce their visual impacts.

An existing equipment cabinet is located in the basement of the apartment building, and completely screened by the building itself, providing both visual and noise mitigation.

3. *Within a Major Institution Overlay District, a Major Institution may locate a minor communication utility or an accessory communication device, either of which may be larger than permitted by the underlying zone, when:*
- i. *the antenna is at least one hundred feet (100') from a MIO boundary; and*
  - ii. *the antenna is substantially screened from the surrounding neighborhood's view.*

The proposed site is not located within a Major Institution Overlay; therefore this provision is not applicable.

4. *If the minor communication utility is proposed to exceed the permitted height of the zone, the applicant shall demonstrate that the requested height is the minimum necessary for the effective functioning of the minor communication utility.*

The height limit of the zone is 30 feet. The height of the rooftop of the Bostonian Apartment building is 31 feet 7 inches. The top of the proposed antennas and shroud is 46 feet 1 inch, a height that does not exceed that which previously was approved for the facility height.

By moving the antennas away from the edge of the rooftop, the building creates a “shadow” that the antennas must overcome. The closer to the edge the antennas are moved, the lower they would need to be. Conversely, the further from the edge the antennas are placed, the higher they need to be to clear the edge of the roof. The current proposal for the antennas of slightly under fifteen feet in height above the existing rooftop is the minimum necessary to clear the upper edge of the building and still give sufficient coverage.

If an antenna is mounted on a structure of insufficient height, a base station will not fully cover its service area. If mounted too high, interference in the service area of other base stations may result. Antenna height is a critical design parameter in providing a coordinated operation with multiple base stations that must provide seamless transfer of calls and data as the cell phone user travels from the service area of one base station to another. In order to provide effective wireless services transmission from the base station antennas to the primary coverage area must be predominantly line-of-site.

5. *If the proposed minor communication utility is proposed to be a new freestanding transmission tower, the applicant shall demonstrate that it is not technically feasible for the proposed facility to be on another existing transmission tower or on an existing building in a manner that meets the applicable development standards. The location of a facility on a building on an alternative site or sites, including construction of a network that consists of a greater number of smaller less obtrusive utilities, shall be considered.*

The proposed expansion of the minor communication utility is modification of a base station with antennas roof-mounted on an apartment building, which location was previously approved by administrative conditional use. Studies presented to the Department for that approval have been resubmitted as documentation of the present proposal and show that all other properties within the search ring are lower in elevation (and therefore lower in possible antenna height) . The existing T-Mobile facility is located at the highest available location and zoning within the area that provides the needed antenna heights. There are no other buildings in the immediate vicinity that would provide T-Mobile the antenna heights that are needed to meet the coverage objectives in the area.

### **SUMMARY**

The proposed project is consistent with the Administrative Conditional Use criteria of the City of Seattle Municipal Code as it applies to wireless communication utilities in multifamily zones. The expansion of the utility is minor in nature and will not be detrimental to the surrounding area while providing adequate service to the area.

The proposed project will not require the expansion of public facilities and services for its construction, operation and maintenance. Once installation of the facility has been completed, approximately one visit per month would occur for routine maintenance. No other traffic would be associated with the project.

### **DECISION - ADMINISTRATIVE CONDITIONAL USE PERMIT**

The application for an administrative conditional use is **CONDITIONALLY GRANTED.**

### **ANALYSIS - SEPA**

The initial disclosure of the potential impacts from this project was made in the environmental checklist submitted by the applicant and dated November 16, 2012. Information in the checklist was supplemented by the other materials. The information in the checklist, supplemental information, and the experience of the lead agency with the review of similar projects form the basis for this analysis and decision.

The SEPA Overview Policy (SMC 25.05.665) states, in part, "*where City regulations have been adopted to address an environmental impact, it shall be presumed that such regulations are adequate to achieve sufficient mitigation*" subject to some limitations. Thus, the mitigation that may be required pursuant to SEPA authority is limited. A discussion of likely adverse impacts and how they may be appropriately mitigated follows below.

## Short-term Impacts

### Construction and Noise Impacts

Construction activities including construction worker comments, truck trips, the operation of construction equipment and machinery, and the manufacture of the construction materials themselves result in increases in carbon dioxide and other green house gas emissions which adversely impact air quality and contribute to climate change and global warming. While these impacts are adverse, they are not expected to be significant.

Codes and development regulations applicable to this proposal will provide sufficient mitigation for most impacts. The initial installation of the antennas and the equipment may include loud equipment and activities. This construction activity may have an adverse impact on nearby residences. Due to the close proximity of nearby residences, the Department finds that the limitations of the Noise Ordinance are inadequate to appropriately mitigate the adverse noise impacts associated with the proposal. The SEPA Construction Impacts policies, (SMC 25.05.675.B) allow the Director to limit the hours of construction to mitigate adverse noise and other construction-related impacts. Therefore, the proposal is conditioned to limit construction activity to non-holiday weekday hours between 7:00 a.m. and 6:00 p.m.

## Long-term Impacts

### Environmental Health

The applicant has submitted a “Statement of Federal Communication Commission Compliance for Personal Wireless Service Facility” and an accompanying “Affidavit of Qualification and Certification” for this proposed facility giving the calculations of radiofrequency power density at roof and ground levels expected from this proposal and attesting to the qualifications of the Professional Engineer who made this assessment. This complies with the Seattle Municipal Code Section 25.10.300 that contains Electromagnetic Radiation standards with which the proposal must conform. The City’s experience with review of this type of installation is that the EMR emissions constitute a small fraction of that permitted under both Federal standards and the standards of SMC 25.10.300 and therefore pose no threat to public health.

The Federal Communications Commission (FCC) has pre-empted state and local governments from regulating personal wireless service facilities on the basis of environmental effects of radio frequency emissions. As such, no mitigation measures are warranted pursuant to the SEPA Overview Policy (SMC 25.05.665).

Operational activities, primarily vehicular trips associated with the project and the project’s energy consumption, are expected to result in increases in carbon dioxide and other greenhouse gas emissions which may adversely impact air quality and may contribute to climate change and global warming. While these impacts maybe adverse, they are not expected to be significant. No mitigation is warranted.

## Summary

In conclusion, while there may be several adverse effects on the environment resulting from the proposed development, they would be minor in scope and would be appropriately regulated by existing codes and ordinances, short term construction impacts notwithstanding. No conditions or mitigating measures pursuant to SEPA policies are warranted for long term impacts.

**DECISION - SEPA**

This decision was made after review by the responsible official on behalf of the lead agency of a completed environmental checklist and other information on file with the responsible department. This constitutes the Threshold Determination and form. The intent of this declaration is to satisfy the requirement of the State Environmental Policy Act (RCW 43.21.C), including the requirement to inform the public of agency decisions pursuant to SEPA.

- [X] Determination of Non-Significance. This proposal has been determined to not have a significant adverse impact upon the environment. An EIS is not required under RCW 43.21C.030(2)(C).
- [ ] Determination of Significance. This proposal has or may have a significant adverse impact upon the environment. An EIS is required under RCW 43.21C.030(2)(C).

**CONDITIONS - ADMINISTRATIVE CONDITIONAL USE PERMIT**

*For the Life of the Permit*

1. The required screening shall be maintained as long as the permitted cellular antennas and ancillary equipment (Minor Communication Utility) are functioning on the property.

**CONDITIONS – SEPA**

*During Construction*

The following condition to be enforced during construction shall be posted at the site in a location on the property line that is visible and accessible to the public and to construction personnel from the each street right-of-way and the alley. The conditions will be affixed to placards prepared by DPD. The placards will be issued along with the building permit set of plans. The placards shall be laminated with clear plastic or other waterproofing material and shall remain posted on-site for the duration of the construction.

2. In order to further mitigate the noise impacts during construction, the hours of construction activity shall be limited to non-holiday weekdays between the hours of 7:00 a.m. and 6:00 p.m. This condition may be modified by DPD to allow work of an emergency nature, but only after approval from the Land Use Planner.

Signature: \_\_\_\_\_ (signature on file) Date: May 2, 2013  
Michael Dorcy, Senior Land Use Planner  
Department of Planning and Development

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