



City of Seattle

Department of Planning and Development

Diane M. Sugimura, Director

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

**Application Number:** 3009791  
**Applicant Name:** Gary Abrahams for T-Mobile  
**Address of Proposal:** 1907 East Highland Drive

**SUMMARY OF PROPOSED ACTION**

Land Use Application to install a minor communication utility (T-Mobile) consisting of three panel antennas each located within one faux chimney on the rooftop of a multifamily structure. Equipment cabinets will be located in basement.

The following approvals are required:

**Administrative Conditional Use Review** - to allow a minor communication utility in a Single Family 5,000 Residential (SF 5000) zone pursuant to SMC 23.57.010.C.

**SEPA - Environmental Determination** pursuant to SMC 25.05.

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

\*\*Early Notice DNS published March 5, 2009.

**BACKGROUND DATA**

**Site and Vicinity Description**

The subject property is located on the south side of East Highland Drive, in the 1900 block, between 19<sup>th</sup> Avenue East to the west and 20<sup>th</sup> Avenue East to the east, in the Capitol Hill neighborhood. The site is an interior lot with right-of-way frontages along one street; East Highland Drive to the north and an alley adjacent to the east property line. The development site occupies a total land area of approximately 4,000 square feet, and is located in a Residential, Single

Family 5,000 (SF 5000) zone. The site is currently developed with a residential (apartment) use. The three-story building as viewed from East Highland Drive was constructed in 1928, and is nonconforming to current single family development standards, if not otherwise allowed by code. And as such, any new development activity is limited in increasing the extent of the existing nonconformity.

The site is fully developed with an existing three-story building and one-story accessory structure occupying a significant portion of the development site. Landscaping and paved surfaces fill out the remaining area. The subject lot moderately slopes upward from its northwest to southeast corners, approximately eight feet over a distance of 94 feet. This multifamily building is one of a limited number of buildings in the area which is out of character in the neighborhood. Except for the abutting property to the west, surrounding structures are smaller in scale and design. Primary pedestrian access to the apartment building is taken off East Highland Drive. Vehicle access to the development site is obtained thru the abutting alley to the east. The street frontage is fully improved with concrete sidewalks, curbs, and gutters. Additionally, the abutting alley surface is paved.



To the west, abutting the subject lot is a similarly designed apartment building. To the east across the alley and abutting the subject lot to the south is single family residential structures. The subject site is located within a large residential zone (SF 5000), with one small (approximately 160 feet by 152 feet) Neighborhood Commercial One zone, with a 40 foot height limit (NC1-30) located at the end of the block, at the corner of 19<sup>th</sup> Avenue East and East Prospect Street. Nineteenth Avenue East, is a collector arterial oriented along the north/south axis. Located approximately four blocks to the west is a narrow Multifamily, Lowrise Three (L-3) zoning band. There is an assortment of residential uses, from one and two-story single family structures to multifamily apartment complexes in this area, with densely populated mature tree canopy. This single family area is expansive and truly reflects urban residential living – other development in this area includes; Seattle Public Stevens Elementary School, Seattle Parks and Recreation’s Volunteer Park and Conservatory. Topographically, the area is further defined by its sloping landscapes, located near the east crest at the north end of Capitol Hill.

### Proposal Description

A Master Use Permit Application proposes to establish the use of a minor communication utility (T-Mobile) on the roof of an existing apartment building (1907 East Highland Drive). The proposal consists of installing 3 panel antennas on the roof of an existing apartment building. The new antennas will be located within a faux brick chimney shroud assembly near the mid-portion of the roof top area, extending approximately 8.5 feet above the roof top. The coaxial cable will run along the outside of the apartment building, screened by a covering that will match the siding and color of the existing building’s west facade. Additionally, the applicant has proposed to place equipment cabinets in the basement within a screened enclosure.

The highest portion of the proposed minor communication utility and screening is proposed to be 38.6 feet above existing average elevation grade (as established at the building's northeast corner). The height limit for the Single Family zone is 30 feet above grade, and may extend higher under strict application of Land Use Code exceptions. With an exception for minor communication utilities and accessory communication devices said equipment can be permitted to exceed regulated height limits, if the requested height is demonstrated to be the minimum necessary for the effective functioning of the utility<sup>1</sup>. An Administrative Conditional Use (ACU) permit is required to exceed the zone height.

The proposed antennas will be mounted at the designated heights in order to provide adequate service coverage to the surrounding area while avoiding building roof edge interference.

### Public Comment

Date of Notice of Application: March 5, 2009  
Date End of Comment Period: April 1, 2009<sup>2</sup>  
# Letters 6

Of the six comment letters received by DPD during the comment period two addressed public health risks associated with the installation of antennas. The Federal Government has taken jurisdiction to evaluate public health concerns associated with these utilities, which supersedes the department's authority to evaluate health related issues (for additional comments see SEPA section). Several letters cited the proposal was not the least intrusive location possible. One letter supported the project which would increase reliability of service in the area.

### ADMINISTRATIVE CONDITIONAL USE

Seattle Municipal Code (SMC) 23.57.010C provides that a minor communication utility, as regulated pursuant to SMC 23.57.002, may be permitted in a Single Family zone as an Administrative Conditional Use when it meets the development standards of SMC 23.57.010E and the following criteria, as applicable.

- 1. The project shall not be substantially detrimental to the residential character of surrounding residentially zoned area, 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 applicant's plans depict a thoughtful integration of the telecommunication facility into the architectural design on the roof top of the existing building. By proposing a screening technique that employs a faux chimney surface that is compatible to the existing architectural treatment throughout the building's exterior, the applicant has succeeded in designing a cohesive relationship to the existing architectural integrity of the existing building.

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<sup>1</sup>Refer to SMC 23.57.010.C.2.d

<sup>2</sup> At public request the comment period was extended an additional two weeks from March 18, 2009 to April 1, 2009.

Architecturally, this screening technique effectively harmonizes with the building's existing façade treatment. A total of three separate antennas are proposed to be arrayed near the roof's center, mounted to a free standing pole, no closer than 10 feet to the building's edges and 20 feet to a neighboring property. All antennas are proposed to be encased within an antenna shroud assembly resembling a brick chimney that will extend approximately 8.5 feet above roof elevation and approximately 38 feet above (northeast corner) grade. The accessory equipment cabinet will be located at below grade within an enclosed area within the basement.

As viewed from abutting properties through the photo simulations, the proposed free standing screening shroud (faux brick chimney) housing the panel antennas, on face appearance will look and appear to function like a chimney. Views from neighboring residential structures would not be substantially altered by the presence of the facility. With the exception of the adjacent property to the east, the applicant has provided photographic evidence suggesting that the visual intrusion would be minor. The adjacent property to the east currently enjoys partially unobstructed views to the west that will be directly impacted. However, the proposed chimneys would be in scale and over time its visual impact would reseed into the background.

Though the subject site is located within a SF 5000 zone on a non-arterial street, the host residential development site occupies the least intrusive facility in a residential area that includes SF 5000, Lowrise Three (L-3), and Neighborhood Commercial One zones with a height limit of Thirty and Forty feet respectively (NC1-30 & NC1-40). Providing service to an area with a significant presence of mature trees and sloping topography leaves few options. The applicant seeks to expand the operational capability on an existing building in the dense residential SF 5000 zone. With the addition of the proposed antennas the applicant has demonstrated build-out of service coverage area in a least intrusive location.

The applicants provided supplemental documentation confirming alternative sites on roof tops within the Neighborhood Commercial zones and within public rights-of-way, were not available to provide effective coverage for the target area, if allowed at all. Once all commercial structures were taken out of the equation the applicant solicited King County Metro and Seattle City Light. All utilities poles were off limits in the two commercial zones at the intersection of East Prospect and 19<sup>th</sup> Avenue East (NC1-30), and East Aloha Street and 19<sup>th</sup> Avenue East (NC1-40).

The abutting apartment building to the west, commonly owned property with the development site, has frontage along 19<sup>th</sup> Avenue East, a collector arterial which would otherwise represent a least intrusive location. There is a four to five foot top of roof elevation difference between the two buildings, with the subject site sitting higher. The subject site's roof performs at a higher level to achieve its coverage. In addition, a Third Party Review was requested and on October 8, 2009, David J. Pinion, Hatfield and Dawson Consulting Electrical Engineers, concluded that the proposed minor communication utility would be the "least intrusive facility" at the "least intrusive location" consistent with "effectively providing service."

The proposed minor communication utility is not likely to result in significant change to the pedestrian or residential character in the area. Neighbors and tenants of the host building will not likely be impacted by the utility, in terms of its land use, streetscape, and visual intrusion. Once it is constructed cell phone coverage in the area will be improved which will likely be beneficial to many residents and visitors to the neighborhood.

Traffic will not be affected by the presence of the constructed facility. The antennas will not emit noise, and any noise associated with the equipment cabinet will be marginalized and shielded by its basement location. No dwelling units will be displaced in conjunction with this application. Thus, the proposal will not be substantially detrimental to the residential character of nearby residentially zoned areas and would represent the “least intrusive facility” at the “least intrusive location” consistent with “effectively providing service.”

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

According to the plans submitted, the proposed antennas will be entirely screened from view and will be inconspicuous, within the parameters of the SMC, while remaining functionally effective. The propose three roof top mounted chimney shrouds will provide screening for three panel antennas, near the roof’s center approximately 20 feet from the north, 13 feet from the east, 42 feet from the south, and 20 feet from the west property lines. Therefore, the proposal complies with this criterion.

*23.57.016 Visual Impacts and Design Standards:*

- A. *Telecommunication facilities shall be integrated with the design of the building to provide an appearance as compatible as possible with the structure. Telecommunication facilities, or methods to screen or conceal facilities, shall result in a cohesive relationship with the key architectural elements of the building.*

The applicant’s plans depict a thoughtful integration of a screening device into the architectural design of the existing building by proposing screening techniques picking up on the brick façade treatments of the existing structure that generally match the color and pattern of the host building. The screening device will be sympathetic in materials and design to that of a typical chimneys designed for residential buildings. Therefore, the proposal complies with this criterion. (See applicant’s declarations and submitted plans)

- B. *Not Applicable.*

- C. *If mounted on a flat roof, screening shall extend to the top of communication facilities except that whip antennas may extend above the screen as long as mounting structures are screened. Said screening shall be integrated with architectural design, material, shape and color. Facilities in a separate screened enclosure shall be located near the center of the roof, if technically feasible. Facilities not in a separate screened enclosure shall be mounted flat against existing stair and elevator penthouses or mechanical equipment enclosures shall be no taller than such structures.*

The plans illustrate locating the antennas near the roof’s center to maximize coverage in the lower density residential zone. The shroud assembly shielding the antennas will extend approximately 8.5 feet above the roof. Integration of the screening facility into the architectural design of the existing building is proposed via screen shapes similar to that of brick chimneys and by using screening colors and patterns that generally blend with the texture of the host building.

*D. Facilities that are side-mounted on buildings shall be integrated with architectural elements such as window design or building decorative features, or screened by siding or other materials matching the building exterior, or otherwise be integrated with design, material, shape, and color so as to not be visibly distinctive.*

The proposed coax shroud will be mounted vertically down the west façade connecting roof top antennas to the basement level accessory equipment room. The color and texture of the shroud is proposed to match the weathered look and texture of the brick building. The new proposal depicts an integration of the screening facility into the architectural design of the existing building through use of color. The coax shroud will be conditioned to match the color of the host building. Screening of coax cables running along the north façade will be sympathetic in color, and design of the host building. Therefore, the proposal complies with this criterion.

*E. Not Applicable.*

*F. Not Applicable.*

*G. Not Applicable.*

*H. Not Applicable.*

*I. Not Applicable.*

*J. Not Applicable.*

*K. Not Applicable.*

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:*
- a.) the antenna is at least one hundred feet (100') from a MIO boundary, and*
  - b.) the antenna is substantially screened from the surrounding neighborhood's view.*

The proposed site is not located within a Major Institution Overlay District. Therefore, this criterion does not apply to the subject proposal.

4. *If the proposed minor communication utility is proposed to exceed the zone height limit, the applicant shall demonstrate the following:*
- a) the requested height is the minimum necessary for the effective functioning of the minor communication utility, and*
  - b) Construction of the network of minor communication utilities that consists of a greater number of smaller less obtrusive utilities is not technically feasible.*

The applicant's RF engineer has provided evidence (Letter and reports from Kevin S. Durning, Lead Design Engineer) that the proposed antenna height, 8.5 feet above the top of roof, is the minimum height necessary to ensure the effective functioning of the utility in the most inconspicuous manner possible.

The three proposed antennas will be located on the rooftop of the existing building. The proposed minor communication utility extending approximately 8.5 feet above the roof top would be taller than the base height limit for single family 5000 zones because the top of roof is over the height limit. However, the additional height may be granted through an administrative conditional use permit.

Due to the operational characteristics of the proposed facility, a clear line of site from the antennas in the system throughout the intended coverage area is necessary to ensure the quality of the transmission of the T-Mobile system. Settling on the subject site represents a culmination of exploring alternative locations to meet coverage shortfalls within an expansive residential SF 5000 zone. Among other locations the applicant explored siting the minor communication facility at the adjacent lot to the east (addressed 1903 East Highland Drive). The roof height of the similarly designed adjacent apartment building is approximately 4 feet below the subject lot. Test drive data was presented to illustrate a significant coverage gap between the two structures, with antenna height extending 8.5 foot above the roof top. The applicant seeks to provide wireless services for the intended coverage area, which extends west towards 16<sup>th</sup> Avenue East, north to East Interlaken Street, east towards 22<sup>nd</sup> Avenue East, and south to East Roy Street. The site was chosen because of its elevation, height of the existing building, and location which is uniquely suited to serve an expansive residential area. No commercial properties were identified with sufficient elevation height to provide the coverage needed to meet the service objectives in the single family zone. At the end of the block to the south, the search ring which included NC1-30 zoned properties could not reach the attended coverage area without extending the antennas well above the zoned height limit. Other sites were considered, however, these sites were deemed inadequate or inaccessible to meet optimum service level parameters. The applicant chose to locate on the host building after an exhaustive search in the immediate area. The additional height above the underlying zone height development standard is the minimum required to obtain sufficient coverage. The additional increase in bulk, view blockage and shadow impacts are not anticipated impacts surrounding properties except one from the extra 8.5 feet extension of the proposed three antennas within each chimney shroud. The three antennas shrouded within a chimney structure will have an impact on views of the neighboring property to the east. The encased antennas will occupy an area measuring 1.33 feet in width by 1.33 feet in depth and 8.5 feet in height.

According to the applicant, the literal interpretation and strict application of the Land Use Code would be that T-Mobile could not meet its federal mandate of its FCC license to provide high speed wireless internet access throughout the Seattle metropolitan area. This proposal site at this elevation is a vital link in the planned network for the Seattle Metropolitan area. Given these alternatives, the height limit extension is a minimal impact. Thus, this criterion is satisfied.

- 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 minor communication utility will not be a new freestanding transmission tower. Therefore, this criterion does not apply to the subject proposal.

6. *If the proposed minor communication utility is for a personal wireless facility and it would be the third separate utility on the same lot, the applicant shall demonstrate that it meets the criteria contained in subsection [23.57.009 A](#), except for minor communication utilities located on a freestanding water tower or similar facility.*

The proposed minor communication utility will be the only wireless facility at the subject lot. Therefore, this criterion does not apply to the subject proposal.

### 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. The facility is minor in nature and will not be detrimental to the surrounding area while providing needed and beneficial wireless communications service to the area.

The proposed project will not require the expansion of public facilities and services for its construction, operation and maintenance. The site will be unmanned and therefore will not require waste treatments, water or management of hazardous materials. 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**

The Conditional Use application is **CONDITIONALLY APPROVED** as noted below.

### **SEPA ANALYSIS**

Environmental review resulting in a Threshold Determination is required pursuant to the State Environmental Policy Act (SEPA), WAC 197-11, and the Seattle SEPA Ordinance (Seattle Municipal Code Chapter 25.05).

The SEPA Overview Policy (SMC 25.05.665 D) clarifies the relationship between codes, policies, and environmental review. Specific policies for each element of the environment, certain neighborhood plans, and other policies explicitly referenced may serve as the basis for exercising substantive SEPA authority. The Overview Policy 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. Under such limitations/circumstances (SMC 225.05.665 D1-7) mitigation can be considered.

The initial disclosure of the potential impacts from this project was made in the environmental checklist submitted by the applicant and dated March 2, 2009. The information in the checklist, public comment, and the experience of the lead agency with review of similar projects forms the basis for this analysis and decision.

### Short-term Impacts

Construction activities including construction worker commutes, 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 greenhouse 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.

### Construction and Noise Impacts

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.

Historic and Cultural Preservation – The installation of a minor communication utility will necessitate alterations to the existing host residential structure that was constructed in 1928. The Historic Preservation Officer evaluates criteria for designation of historic landmark structures (in response to the SEPA Historic Preservation Policy (SMC 25.05.675.H.2.d)). The review of the information associated with the status of the existing structure (addressed 1907 East Highland Drive) though the building may be eligible for landmark designation, it is not necessary for the applicant to prepare a landmark nomination since no irreversible exterior alterations are currently proposed, as determined by the Landmarks Preservation Board, (LPB 65/10) in a letter dated February 26, 2010.

### Long-term Impacts

Long-term or use-related impacts are also anticipated, as a result of approval of this proposal including: increased traffic in the area and increased demand for parking due to maintenance of the facility; and increased demand for public services and utilities. These impacts are minor in scope and do not warrant additional conditioning pursuant to SEPA policies.

### Environmental 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).

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 of Seattle, in conjunction with Seattle King County Department of Public Health, has determined that Personal Communication Systems (PCS) operate at frequencies far below the Maximum Permissible Exposure standards established by the Federal Communications Commission (FCC) and therefore, does not warrant any conditioning to mitigate for adverse impacts.

The City is not aware of interference complaints from the operation of other installations from persons operating electronic equipment, including sensitive medical devices (e.g. - pacemakers). The Land Use Code (SMC 23.57.012C2) requires that warning signs be posted at every point of access to the antennas noting the presence of electromagnetic radiation. In the event that any interference was to result from this proposal in nearby homes and businesses or in clinical medical applications, the FCC has authority to require the facility to cease operation until the issue is resolved.

The information discussed above, review of literature regarding these facilities, and the experience of the Departments of Planning and Development and Public Health with the review of similar projects form the basis for this analysis and decision. The Department concludes that no mitigation for electromagnetic radiation emission impacts pursuant to SEPA policies is warranted.

The associated equipment will generate some noise; however it will be contained within the basement of the building adjacent to the existing equipment enclosure. Due to the location of the equipment no adverse noise impacts during operation are expected and the Noise Ordinance will adequately regulate any noise impacts associated with the proposal.

The long term visual impact of the change is expected to be very minor as discussed in the ACU section above. Provided that the proposal is constructed according to approved plans, no further mitigation pursuant to SEPA is warranted.

### Summary

In conclusion, several effects on the environment would result from the proposed development. The conditions imposed at the end of this report are intended to mitigate specific impacts identified in the foregoing analysis, to control impacts not adequately regulated by codes or ordinances, per adopted City policies.

### DECISION

This decision was made after review of a completed environmental checklist and other information on file with the responsible department and by the responsible official on behalf of the lead agency. 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 not to have a significant adverse impact upon the environment. An EIS is not required under RCW 43.21.030(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).

### **ADMINISTRATIVE CONDITIONAL USE CONDITION**

The owner(s) and/or responsible party(s) shall:

#### **Prior to Building Final Approval**

1. Compliance with the approved design features and elements, including exterior materials, parapets, shroud colors, shall be verified by the DPD Planner (Bradley Wilburn, tel. 206.615.0508) assigned to this project. Inspection appointments with the Planner must be made at least three working days in advance of the inspection.

### **SEPA CONDITION**

#### **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.

The owner(s) and/or responsible party(s) shall:

2. All construction activities are subject to the limitations of the Noise Ordinance. Construction activities (including but not limited to demolition, deliveries, framing, roofing, and painting) shall be limited to non-holiday weekdays from 7 a.m. to 6 p.m. Non-noisy activities, such as site security, monitoring, weather protection shall not be limited by this condition.
3. Construction activities outside the above-stated restrictions may be authorized by the Land Use Planner when necessitated by unforeseen construction, safety, or street-use related situations. Requests for extended construction hours or weekend days must be submitted to the Land Use Planner at least 3 days in advance of the requested dates in order to allow DPD to evaluate the request.

Signature: \_\_\_\_\_ (signature on file) Date: March 18, 2010  
Bradley Wilburn, Land Use Planner  
Department of Planning and Development

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