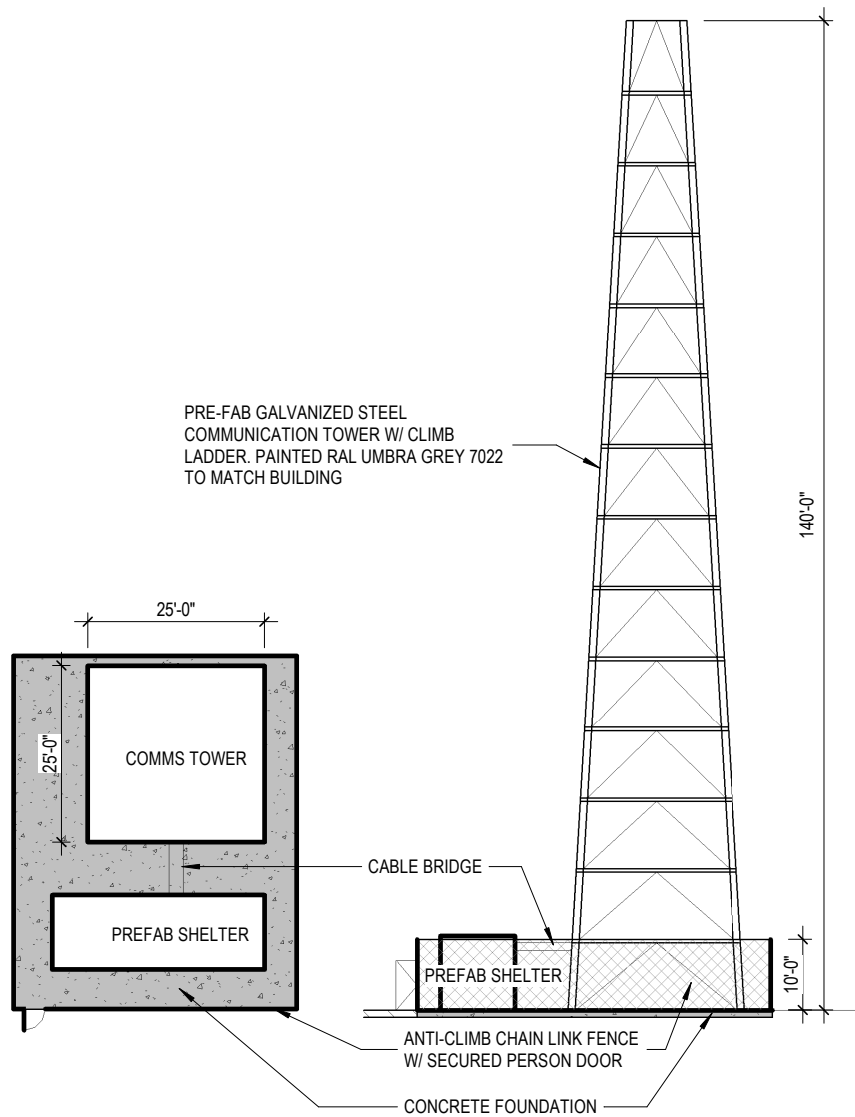


Portland General Electric INTEGRATED OPERATIONS CENTER

Section 1: Conditional Use and Variance Findings



April 18th, 2019

Prepared by



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In Collaboration with

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General Information

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Location: 12150 SW Tualatin-Sherwood Road

State ID No.: 2S1 27C 0701, 2S1 27C 0500

Zoning: Manufacturing Business Park (MBP)

Case Type: Conditional Use, Variance

Procedure: Type III Review

Pre-Application Mtg: February 13, 2019

Proposal: Construct a wireless communication facility, in association with Integrated Operations Center building, for electric utility. Variances for WCF height and adjacent fence setback.

SECTION 1: CONDITIONAL USE AND VARIANCES

The IOC includes the corporate office / operations building and accessory uses, including the WCF (the tower), parking and circulation, outdoor mechanical and electrical equipment, security fencing, landscaping, and an emergency helipad. The consolidated land use application has four land use reviews:

1. Architectural review (AR) for the entire IOC (including the WCF),
2. Conditional use review for WCF,
3. Height variance for the WCF and
4. Setback variance for the security fence southwest of the tower, near the SW Blake Street extension.

This consolidated application is divided into three sections.

1. The **Introduction** includes background information and findings that apply to both the AR and the CU/VAR applications. The Introduction includes an overview of the consolidated application, identifies IOC design principles, describes the proposed program for development and site plan. This section also contains findings to demonstrate compliance with base zone use and development standards, since they apply to all development on the site.
2. **Section 1** (this document) addresses conditional use and variance criteria related to the WCF. Wireless communications facilities are a conditional use in the MBP zone. Conditional uses and variances are reviewed by the Tualatin Planning Commission. Two variances are requested:
 - Tower height: The height variance is necessary to allow the proposed IOC WCF to securely communicate with other PGE towers. As documented in the Radio Frequency Report (Appendix D), the proposed WCF must be a minimum of 140 feet high, taller than allowed in the MBP zone.
 - Fence setback: A second variance is necessary to allow a security fence within 50 feet of the SW Blake Street and SW 124th Avenue rights-of-way (ROW). The perimeter security fence is proposed at 20 feet from SW Blake Street and SW 124th Avenue at its closest point. The purpose of the setback variance is to preserve existing trees and better screen the tower from public view.
3. **Section 2** focuses on the AR application and demonstrates compliance with the TDC Chapters 73A through 73F – including site development and design standards related to the IOC. It also addresses the design components of the tower. This application will be reviewed by the ARB.

WCFs are a conditional use¹ in the MBP zone (TDC Table 64-1). Therefore, the proposed use requires a decision from the Tualatin Planning Commission. In addition, two variances relating to the tower are requested. Variances are also a decision of the Planning Commission (TDC Table 32-1).

Wireless Communication Facility

PGE proposes a WCF in association with the proposed IOC. This tower is southwest of the main IOC building, on a rise within an existing grove of trees. As explained in the Introduction Section, the WCF is critical to the operation of the proposed IOC, which would not be possible without it. Constant monitoring of the regional electrical grid requires the site have uninterrupted communications capabilities for its control center and data center. The IOC and its WCF will become part of PGE's regional microwave radio network. The proposed tower is a "wireless communications facility" that is not attached to a building, according to city code (TDC 39.650 and TDC 31.060).



BALD PEAK – Tower view

Figure 1. Example WCF Tower

¹ In the MP, MG, and ML zones, WCFs are allowed outright, if they comply with siting and design standards. The MBP zone is the only manufacturing zone that makes this use conditional.

The tower is separate from the main building, and is a self-supporting, four-legged, lattice-type, 140-foot-tall, steel structure. The tower is located inside the perimeter security fence to maintain a high level of security.

To maintain a direct line-of-sight path to other WCFs within PGE's network, the proposed WCF must be at least 140-feet tall, as documented by the Radio Frequency Report that is included in Appendix D. This exceeds the allowed height in the zone. Consequently, a variance to exceed the height limit is requested. Additionally, to better screen the WCF, and to preserve trees on the site, the applicant requests a variance to reduce a fence setback. This setback would be reduced from 50 feet from the ROW to 20 feet in areas south and west of the tower (abutting SW Blake Street and SW 124th Avenue).

Conditional Use

Quotes from the TDC are presented in *italic font* followed by findings demonstrating compliance.

Section 33.040 – Conditional Use Permit

(1) Purpose. It is the intent of this chapter to provide a set of procedures and standards for conditional uses of land or structures which, because of their unique characteristics relative to locational features, design, size, operation, circulation and public interest or service, require special consideration in relation to the welfare of adjacent properties and the community as a whole. It is the purpose of the regulations and standards set forth below to:

(a) Allow practical latitude for utilization of land and structures, while maintaining adequate provision for the protection of the health, safety, convenience and general welfare of the community and adjacent properties; and

(b) Provide machinery for periodic review of conditional use permits to provide for further conditions to more adequately assure conformity of such uses to the public welfare.

(c) Provide siting criteria for the conditional uses specified herein and guidelines for the imposition of conditions to the end that such uses will:

(i) Be consistent with the intent and purpose of the zone in which it is proposed to locate such use, meet the requirements of the Tualatin Community Plan with regard to providing benefit to the general welfare of the public, and fill a probable need of the public which can best be met by a conditional use at this time and in this place; and

(ii) Comply with the requirements of the zone within which the conditional use is proposed and in accordance with conditions attached to such use under the authority of this chapter.

Finding: Although the purposes of a conditional use are not in themselves approval criteria, the proposed WCF is consistent with the purposes stated above. The proposed WCF is a conditional use in the MBP zone and is reviewed under Type III procedure. The dedicated tower fulfills a public need because it is necessary for the functioning of

the regional power grid and serves hundreds of thousands of customers, including some in Tualatin.

Allowing such a facility at the interior of a 43-acre property, in an industrial area at the far western edge of city limits, is a practical use of the land. For reasons stated below, the careful location and design of the structure adequately protects the community and adjacent properties from adverse impacts. As documented in Section 2 (Architectural Review) of this application, the proposed tower complies with applicable siting and design criteria for WCFs, except for base zone height standard for all structures. A variance is requested for that standard, to allow the WCF to be tall enough to be functional.

*(2) **Applicability.** A request for a conditional use, modification of an existing conditional use permit, or a review of an existing conditional use permit may be initiated by a property owner or the owner's authorized agent.*

*(3) **Procedure Type.** Conditional use permits are processed in accordance with the Type III review procedures in Chapter 32.*

Finding: The proposed conditional use request is a request submitted by the owner of the property, PGE, through its agent, Winterbrook Planning. This proposal is a Type III review, and follows the procedures in Chapter 32.

*(4) **Specific Submittal Requirements.** In addition to the general submittal requirements in TDC 32.140 (Application Submittal), the applicant must submit the following additional information and materials:*

(a) Project title;

(b) The architect, landscape architect and engineer;

(c) A site plan, drawn to scale, showing the dimensions and arrangement of the proposed development;

(d) A Service Provider Letter from Clean Water Services (CWS) indicating that a "Stormwater Connection Permit Authorization Letter" will likely be issued; and

(e) If a railroad-highway grade crossing provides or will provide the only access to the subject property, the applicant must indicate that fact in the application and the City must notify the ODOT Rail Division and the railroad company that the application has been received.

Finding: The project, identified on the application drawings, is the "PGE Integrated Operations Center." The project architect and landscape designer is SERA Architects, the project engineer is Kpff. The submitted plans show the overall site plan for the IOC development – the building, parking, fencing, landscaping, and utility infrastructure. Additional drawings provided within this section show details of the tower location.

A Service Provider Letter from CWS is included with the materials. The primary access to the site will be from SW Blake Street, and it does not cross any rail tracks.

(5) Approval Criteria. The applicant must provide evidence substantiating that all the requirements of this Code relative to the proposed use are satisfied and demonstrate that the proposed use also satisfies the following criteria:

(a) The use is listed as a conditional use in the underlying zone;

Finding: The proposed use is a wireless communications facility. According to Table 64-1 in the MBP zone chapter, “Conditional uses limited to: Wireless Communication Facility, Subject to maximum height and minimum setback standards defined by TDC Chapter 73F.” Chapter 73F design standards are addressed in Section 2: Architectural Review Findings and will be reviewed separately by the ARB.

(b) The characteristics of the site are suitable for the proposed use, considering size, shape, location, topography, existence of improvements and natural features;

Finding: The site characteristics make it suitable for the proposed wireless communications facility in several ways.

- First, the size of the site supports the presence of the WCF use because it may be located deep into the property and therefore away from any neighboring property that could be affected by its impacts. The tower is 160 feet from SW Blake Street, the closest public ROW. Also, the tower is 260 feet from SW 124th Avenue, 960 feet from the nearest occupied building (notch property), 1,200 feet from the nearest commercial/industrial building, and 3,700 feet from the nearest residentially-zoned property. Sheer distance mitigates any perceived impacts from the tower.
- Second, PGE chose this site for the IOC and tower after an extensive review of other potential metropolitan locations. As documented in the Introduction, site security and neighborhood compatibility were major consideration in PGE’s decision. The site was recently annexed into the city of Tualatin and is at the far western edge of the city. Abutting properties are largely manufacturing or industrial. Land to the south and east shares the same zoning designation as the subject site and includes an active gravel quarry use. North of the site, opposite SW Tualatin-Sherwood Road, land is zoned General Manufacturing (MG). Several businesses occupy this land: a heavy-duty truck parts supplier and a packaging supply business. The proposed WCF is 1,200 feet from the nearest of these buildings. West of the site, across SW 124th Avenue, is a large undeveloped parcel outside city limits in unincorporated Washington County. Because of its location on the fringe of the city in an industrial/manufacturing area with few neighbors that could be impacted, the site is suitable for a new wireless communications facility.

- Finally, the topography and natural features of the site also make the site suitable for the use. The exact location of the tower within the site is driven by two imperatives, a slightly higher elevation that allows for a shorter tower, and a grove of mature trees that will mitigate visual impacts of the tower from ground level. The absence of other surrounding development or buildings creates the flexibility of siting the tower in the best location to support its technological function. The existence of these two factors together – elevation for the tower and trees to screen it – make the property ideal for the proposed WCF use.

(c) The proposed development is timely, considering the adequacy of transportation systems, public facilities, and services existing or planned for the area affected by the use;

Finding: The proposed development is timely, because it can be supported by existing and planned levels of public infrastructure in the surrounding area. The tower itself does not generate vehicle trips (except for semi-annual maintenance), or demand for water, police, fire or other public facilities infrastructure. The concrete pad on which the tower will be located generates stormwater runoff, which will be managed on site with the rest of the stormwater from IOC development. An engineering report for the entire development, including the tower, demonstrates the adequacy of public facilities (See Public Facilities Narrative, Appendix F).

The transportation and other public facilities impacts from the IOC use itself (office building, parking lot, etc.) are addressed in Section 2: Architectural Review.

(d) The proposed use will not alter the character of the surrounding area in any manner that substantially limits, impairs, or precludes the use of surrounding properties for the primary uses listed in the underlying zone; and

Finding: The standard is met as documented below:

- The character of the surrounding area is large-lot manufacturing and industrial, and the proposed IOC – which is dependent on the WCF – conforms with TDC 7.040(4) district objectives and standards.
- The IOC (regional office headquarters) and WCF (an essential accessory use) are appropriate for a large site in the MBP zone.
- The existence of a WCF on the PGE site will have no effect on whether any surrounding properties can develop for uses allowed by the MBP zone – recognizing that similar zones with similar uses allow WCFs outright.
- As documented below, the only potential impact identified by the project team is visual. As discussed below, visual impacts will be mitigated with tower placement on the site, material designs, and existing/proposed screening.

Surrounding Area

One way to define the “surrounding area” as it applies to this criterion is the 1,000 foot notification area for Type III land use reviews, identified in TDC 33.120(5)(b)(i) and TDC 33.230(3)(a)(ii). Figure 2 shows properties within 1,000 feet of the proposed development site. Because of the nature of this development and the accompanying 140-foot tall WCF, Tualatin city staff suggested that the impact area be flexible based on the type of impact. This application therefore considers a wider impact area for visual impacts, but will hold the 1,000 foot notification area as the “surrounding” area for all other impacts.

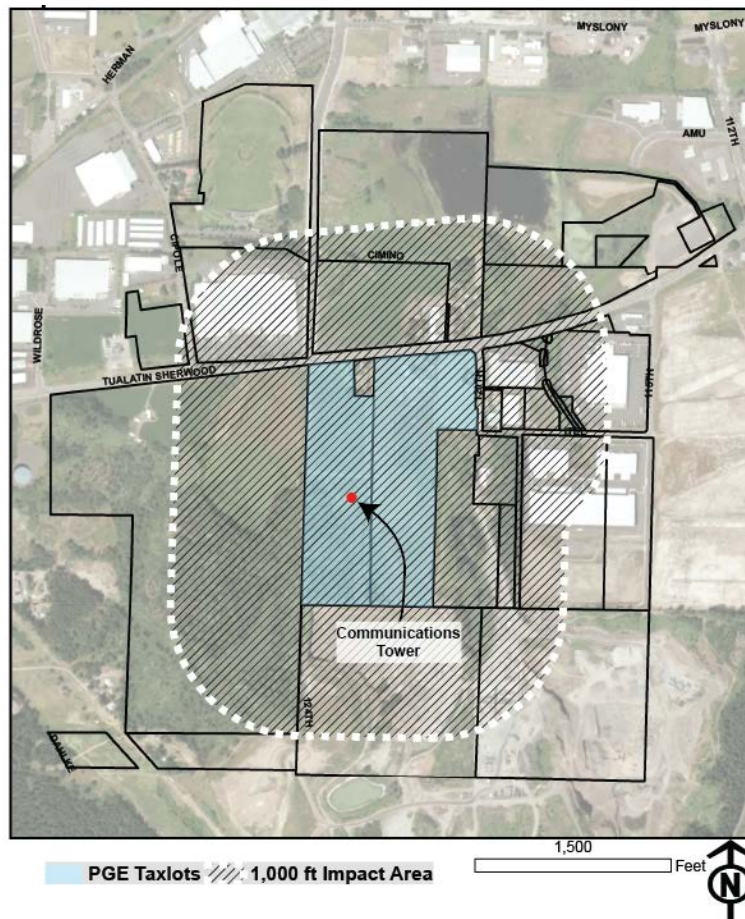


Figure 2. 1,000 Foot Impact Area

This area likely overestimates the area surrounding the use where potential impacts could occur, since the tower is near the center of a 43-acre site. The white line shown in the image above is 1,000 feet from the site’s property line, but a degree of buffering is provided by land within the site that is between the tower and the edge of the property. In some cases, this distance is significant. For example, the tower itself is 1,100 feet from the north edge of the site, along SW Tualatin-Sherwood Road.

The character of the surrounding area may be reasonably described as large-lot manufacturing and industrial.

- Land to the south and east shares the same Manufacturing Business Park (MBP) zoning as the subject site, as does the “notch” property that fronts Tualatin-Sherwood Road.
- Tigard Sand and Gravel occupies land east and south of the site. Much of this land is an active gravel quarry.
- North of the site, opposite SW Tualatin-Sherwood Road, land is zoned General Manufacturing (MG). Several businesses occupy this land: a heavy-duty parts specialist and a manufacturing company, and a packaging and corrugated box manufacturer.
- Farther east of the property, all the city land is also zoned MG. Existing uses include a small commercial center with an indoor soccer facility, a machinist, a flour supplier, a window and door manufacturer, and a furniture warehouse.
- The undeveloped land west of the site, across SW 124th Avenue, is outside city limits in unincorporated Washington County.



Figure 3. Aerial photo showing impact area

Because the site and much of the land within the impact area is zoned MBP, the TDC’s description of the MPB zone is instructive in defining the character of the area. TDC 7.040(4) states that the district objectives are to have “a mix of light industrial and high-

tech uses in a corporate campus setting, consistent with MBP Planning District development standards". The proposed IOC, of which the tower is a critical component, has this combination of uses. Manufacturing zones abut the site on all sides and across SW Tualatin-Sherwood Road from the site. Residential uses, except for caretaker dwellings associated with industrial uses, are prohibited in these zones.

The TDC describes area objectives this way:

The district is intended to provide for an esthetically attractive working environment with campus-like grounds, attractive buildings, ample employee parking and other amenities appropriate to an employee oriented activity. It also is intended to protect existing and future sites for such uses by maintaining large lot configurations, a cohesive planned-development design and limiting uses to those that are of a nature that will not conflict with other industrial uses or nearby residential areas of the City.

As a description of the area's character, this could apply broadly even to adjacent and nearby properties with other manufacturing/industrial zoning designations. As documented in Section 2 of this narrative, the proposed IOC creates an attractive working environment with campus-like grounds; the tower is necessary to carry out the operational and emergency response objectives of the proposed WCF.

WCF Does Not Alter Character of Area

The tower is an essential component of the IOC's use and is appropriate for a large site in a manufacturing zoning district. The IOC, including its tower, needs the space, security, and extensive infrastructure connections that will be part of the development. The MBP zone, and this area of the city generally, allows a large-scale infrastructure development of which a WCF is one example. There is no reason to believe that the height of the proposed WCF will be inconsistent with or would alter the area's character. The lack of opposition expressed in the neighborhood meeting, as summarized in the meeting materials included in Appendix A, indicates local agreement with this assertion.

Furthermore, there is no reason to believe that the presence of a tower on the IOC site could "substantially limit, impair, or preclude the use of surrounding properties for the primary uses listed in the underlying zone." As shown on project plans, the closest surrounding property from the tower is to the west, opposite SW 124th Avenue. That property is 300 feet away, outside city limits in unincorporated Washington County, undeveloped, and is a proposed site for Tualatin's Water District's regional water treatment facility, another large-scale use.



Figure 4. Aerial view of site from west

Another way to gauge potential impacts of a WCF is to consider the allowances of the adjacent and comparable General Manufacturing (MG) district, which allows WCFs without conditional use review. The MG zone applies to all the land across SW Tualatin-Sherwood Road from the site and some land east of the site.

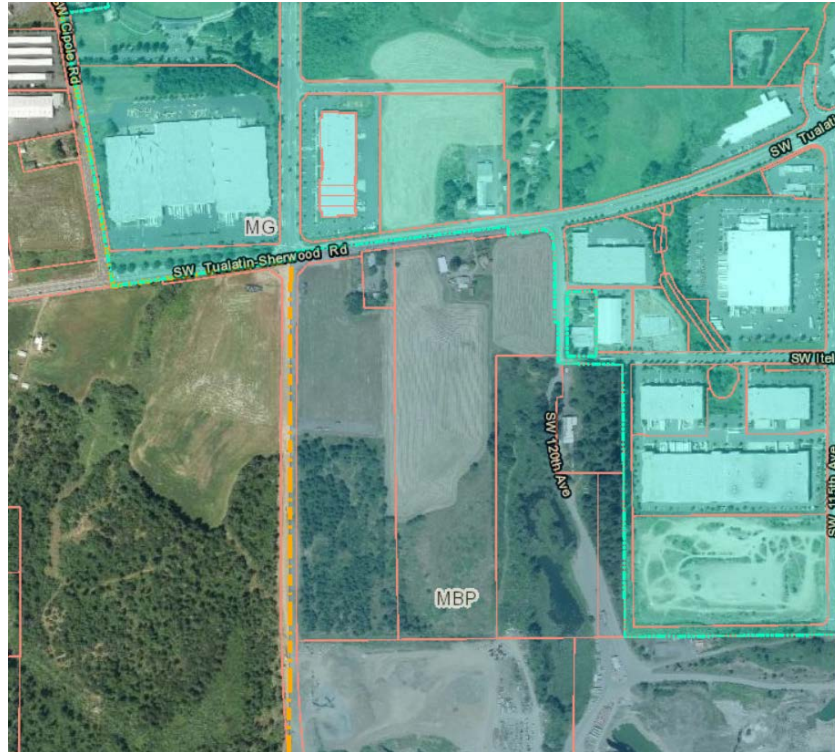


Figure 5. Area zoning, showing MG zone to north and east of site

Logically, a use on the PGE property cannot be inconsistent with its neighbors if the same use is allowed outright in those areas. It is reasonable therefore to conclude that a WCF use, located on a neighboring property, does not substantially limit uses on MG-zoned land.

In conclusion, the proposed tower will not alter the character of the area generally, because no impacts will be perceived at distances beyond 1,000 feet. The WCF does not emit noise, or generate traffic (outside of some annual service trips), or produce odor or dust. The only potential impact outside this area is visual, which are discussed below.

Potential Visual Impacts

At the proposed height, the tower is visible from surrounding industrial and commercial properties. However, the applicable standard is not whether the tower can be seen. Rather, the standard requires that the use, including potential visual impacts, not alter the character of the area in way that negatively affects permitted uses on other properties. The tower viewed from any surrounding property at a considerable distance does not preclude, impair, or limit activities on those properties. This is especially true because the closest properties, which have the greatest perception of its size, are in manufacturing districts where residential uses (other than caretaker dwellings) are not

Moreover, residential views of the tower will be buffered by intervening forested land, an active rail corridor, and multiple commercial and industrial uses. The photograph in Figure 7 shows the prospective view of the tower from the closest residentially-zoned property on a clear day in winter. This view is obscured by a stand of evergreen trees.



Figure 7. View towards proposed tower from east

Thus, visual impacts from residential areas are minor and would not interfere with allowed uses.

In summary, the proposed WCF use is consistent with surrounding development and zoning designations. The character of the area will be unaffected by the presence and operation of this use, and the new tower will not in any way preclude, impair, or limit allowed uses on surrounding properties.

(e) The proposal satisfies those objectives and policies of the Tualatin Community Plan that are applicable to the proposed use.

Finding: The Tualatin Community Plan (TCP) is incorporated into the development code as Chapters 1 through 30. TDC 7.040(4) states that the district objectives are to have “a mix of light industrial and high-tech uses in a corporate campus setting, consistent with MBP Planning District development standards”. The tower is a critical component of the proposed IOC, and together the two create exactly this combination of uses.

The TDC goes on to describe area objectives this way:

The district is intended to provide for an esthetically attractive working environment with campus-like grounds, attractive buildings, ample employee

parking and other amenities appropriate to an employee oriented activity. It also is intended to protect existing and future sites for such uses by maintaining large lot configurations, a cohesive planned-development design and limiting uses to those that are of a nature that will not conflict with other industrial uses or nearby residential areas of the City.

The MBP zone, and this western edge of the city generally, allows larger-scale infrastructure development of which a WCF is one example. The WCF is an essential component of the IOC use. In that sense, the proposed WCF satisfies the plan objectives.

TDC 8.080 addresses Wireless Communication Facilities. It identifies six objectives for WCFs:

- (1) To minimize the visual impacts associated with wireless communication facilities.*
- (2) To provide a wide range of locations for wireless communication facilities.*
- (3) To encourage creative approaches in locating wireless communication facilities that will blend with their surroundings.*
- (4) To coordinate the review of new wireless communication facilities with the Federal Communication Commission, Federal Aviation Administration and Oregon Department of Transportation Aeronautics Division.*
- (5) To comply with the requirements of the 1996 Federal Telecommunications Act.*
- (6) To encourage co-location of wireless communication facilities to reduce the number of facilities in the community.*

The proposed WCF is consistent with these objectives. By complying with the design standards of Chapter 73F, screening the base of the tower with fencing and mature trees (which would be further enabled by granting the fence setback variance), locating the facility toward the center of a 43-acre site, and designing the metal, lattice-type tower to be visually light and semi-transparent, subsection (1) and (3) are satisfied. All these design decisions contribute to minimizing the visual impacts of the tower and creatively blending it in with its surroundings.

Regarding its location per subsection (2), the WCF is located in a MBP zone, where it is allowed conditionally. Other manufacturing zones near the proposed site allow WCFs by-right, if they meet development and design standards. The TDC allows for a wide range of locations for WCFs, and this IOC site is one of those.

Regarding subsections (4) and (5), the proposed WCF complies with local codes and federal law governing communication facilities. The project team carefully reviewed applicable Federal Energy Regulatory Commission (FERC), Federal Communications

Commission (FCC) and Federal Aviation Administration (FAA) in the design of the proposal before the Planning Commission.

Regarding co-location per subsection (6), the proposed WCF is dedicated to the PGE use for system security. This is one way for the WCF to comply with federal security requirements for protection of critical infrastructure (CIP-014). Co-location is not an option for security reasons. Secondly, the functionality of the proposed tower cannot be replicated on other towers, which are typically not tall enough to create a direct line-of-sight needed for this WCF's purpose. This is explained in more detail in the Radio Frequency Report (Appendix D). Lastly, Tualatin's nearest existing or permitted tower is 2,750 feet from the proposed site. The tower is not close enough, or at the right elevation to provide any kind of comparable service.

In short, the proposed WCF complies with the community plan objectives and policies that are applicable to its use.

(6) Conditions of Approval. The Hearing Body may impose, in addition to the regulations and standards expressly specified in this chapter, other conditions found necessary to protect the best interests of the surrounding property or neighborhood or the City as a whole. In no event will this Chapter be used as a means to exclude multi-family housing from the City.

Finding: The Planning Commission may impose conditions of approval as necessary to address significant identified impacts. The project team believes that any potential adverse impacts from the tower at the proposed location will be satisfactorily addressed by compliance with applicable WCF design review standards to be reviewed by the ARB.

(7) Compliance with Conditions and Revocations.

(a) Any previously granted conditional use permit may be revoked by the Planning Commission, after a hearing conducted in the manner required for approval of a conditional use permit initially, upon the following grounds:[...]

(b) Revocations initiated under TDC 33.040(7)(a)(i) or (ii) above must not be initiated for at least 6 months after approval of the conditional use permit. Revocations initiated under TDC 33.040(7)(a)(i), (ii) and (iii) above has the effect of making the previously granted conditional use permit void until a new application is submitted and granted. Revocations initiated under TDC 33.040(7)(a)(iv) above has the effect of making the previously granted conditional use a nonconforming use.

Finding: The site has no previously granted conditional use permits, nor are any revocations anticipated as a result of this process.

(8) Automatic Termination of Conditional Use; Request for Extension.

(a) Unless otherwise provided by the Planning Commission in the written decision granting approval of the conditional use permit, a conditional use permit automatically is null and void two (2) years after the effective date upon which it was granted, unless the applicant, or successor in interest, has done one of the following within two (2) years of the effective date of the conditional use permit:

(i) Secured a building permit and commenced construction of the building or structure in conformance of the building permit and conditional use permit.

(ii) Commenced the activity or installation of the facility or structure authorized by the conditional use permit.

(iii) Submitted a request for an extension of time on the conditional use permit to avoid the permit's becoming null and void.

(b) A request for an extension must be submitted prior to the expiration date of the conditional use permit, as established by the Planning Commission in granting the conditional use permit.

(c) Upon receipt of the request for an extension of time, the Planning Commission will hear the matter under the quasi-judicial procedures in TDC 32.230. The Planning Commission may grant or deny the extension of time, provided the extension of time does not exceed two (2) years.

Finding: The applicant anticipates commencing the construction of the WCF soon after land use approvals are granted – and well within two years of conditional use approval.

Variations

Two variations are proposed, both related to the proposed Wireless Communications Facility (WCF). Both are to development standards in the base MBP zone.

The proposed WCF is 140 feet high. This height is required for the tower to function, as supported by testimony from the telecommunications experts in the Radio Frequency Report (Appendix D). The WCF uses microwave radio signals to maintain a constant, uninterrupted connection with other PGE WCFs in the region, which requires an unobstructed line of sight. At this location, the analysis concluded that a height of 140 feet is the minimum necessary to establish a connection to these other facilities. The maximum structure height in the MBP zone is 85 feet. Therefore, a height variance is required.

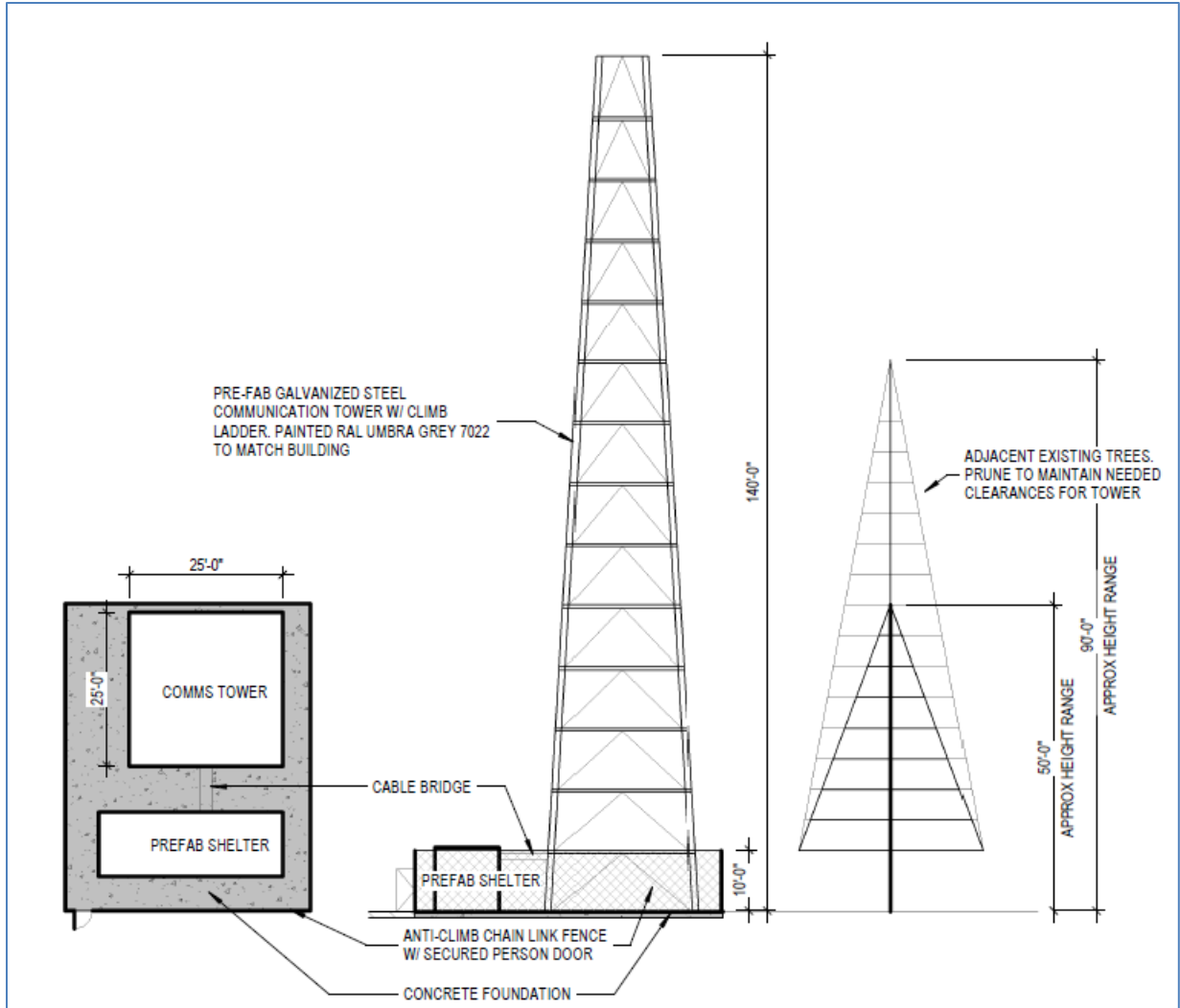


Figure 8. Plan and elevation of WCF

A fence around the perimeter of the development area is required to maintain site security and protect critical electrical system infrastructure. The fence is a permitted accessory use. The base MBP zone has a fence setback requirement of 50 feet along public ROWs. The applicant has proposed a fence line closer to the SW Blake Street and SW 124th Avenue property lines, up to 20 feet.



Figure 9. Excerpt from site plan showing proposed fence line around WCF

If it were placed 50 feet back from the right of way, the necessary security fence would require removal of 25 additional trees from a mature stand around the proposed WCF – which would have the unintended consequence of reducing tower screening. The TDC encourages WCFs to be built in the least obtrusive way. Using natural site conditions to do so reduces visual impacts from the road and from nearby properties. Moreover, granting the variance increases the distance between the security fence and the tower. This increased distance is a “resiliency or security measure” that supports the federal CIP-014 standards, specifically CIP-014-1.B.R5 (5.1).

Section 33.120 – Variances and Minor Variances

(1) *Purpose.* To establish a procedure for the granting of Variance and Minor Variances to the standards of the Tualatin Development Code. Exceptions:

(a) *Variances to the requirements of TDC Chapter 70 (Floodplain District) must be in accordance with TDC Chapter 70.*

(b) *Sign variances must be in accordance with Section 33.080.*

(2) *Applicability.* Variances may be granted to the requirements of the TDC as provided in this Section when it can be shown that, owing to special and unusual circumstances related to a specific piece of property, the literal interpretation of the TDC would cause an undue or unnecessary hardship.

(a) *Variances may be requested for the following:*

(i) *Standards in TDC Chapters 40-69 and 71-73A through 73F.*

(b) *Minor variances may be requested for the following:*

(i) *In Residential Low Density Zone (RL) except for Small Lot Subdivisions:*

(A) *Up to a 10% variation from the required lot area, and/or*

(B) Up to a 20% variation from the required lot width, building coverage, setbacks, projections into required yards and structure height development standards for permitted uses.

(ii) For single family dwellings in Small Lot Subdivisions in Residential Low Density (RL) and Residential Medium to Low Density Zone (RML):

Up to a 10% variation from the required lot area; and/or

Up to a 20% variation from the required lot width, building coverage, setbacks, projections into required yards and structure height development standards.

Finding: Two variances are requested, both from development standards in TDC Section 64.300, Table 64-2.

- The first variance is for the height limitation in the MBP zone, which is 85 feet for all structures. The proposed tower is 140 feet tall. A variance from a development standard in the base zone may be requested per section (2)(a)(i) above.
- The second variance is to allow the perimeter security fence to encroach into the 50-foot setback from public ROWs required in the MBP zone. The proposed fence setback is 20 feet from the ROW at locations indicated on site plans. This variance request is also allowed per section (2)(a)(i) above.

(c) Prohibited. Variances and minor variances are not allowed:

(i) To permit a use of land that is not permitted or conditionally permitted in a zone.

(ii) For Level I (Clear and Objective) Single-family Architectural Review standards referenced in TDC 40.140 and 41.130 and set forth in TDC 73A.110.

Finding: The proposed variance is related to TDC dimensional standards – not to uses allowed in the MBP zone. The variance would not permit a use that is not allowed in the MBP zone. WCFs are listed as a conditional use in the MBP zone, and a fence is a permitted accessory use. The variance is also not related to single-family architectural review standards. This section does not apply.

(3) Procedure Type.

(a) Applications for a Minor Variance are subject to Type II review in accordance with TDC Chapter 32.

(b) Applications for a Variance are subject to Type III review in accordance with TDC Chapter 32.

Finding: The proposed variances are subject to a Type III review in accordance with TDC Chapter 32.

(4) Specific Submittal Requirements. In addition to the general submittal requirements in TDC 32.140 (Application Submittal), an applicant must submit the following additional information:

(a) The name, addresses and telephone numbers of the architect, landscape architect and engineer; and

(b) If requesting a variance to lot width, building coverage, setbacks, projections into required yards and structure height then a property survey stamped by a qualified professional is required.

Finding: The contact information for SERA (the architect and landscape architect) and Kpff (civil engineer) are included with the application materials. The application information includes information about the project architect as identified above, and a property survey as described in subsection (b).

(5) Approval Criteria for Granting a Minor Variance. A minor variance must not be granted unless the application shows the following approval criteria are met:[...]

Finding: The first proposed variance is for the height of a Wireless Communication Facility, which has its own criteria under subsection (7). The second variance is for a minimum fence setback from public ROW, in the area of the proposed WCF. Neither of these qualify as minor variances. This section is not applicable.

(6) Approval Criteria for Granting a Variance that is not a Minor Variance or for a Wireless Communication Facility. A variance must not be granted unless it can be shown that criterion (a) is met and three of the four approval criteria (b)-(e) are met for non-sign requests:

Finding: Two variances are requested. Both are from development standards listed in TDC 64.300, Table 64-2.

- The first variance is a height variance for the proposed WCF. The height variance has a unique and separate set of variance criteria in subsection (7). Subsection 7, the height variance, will be addressed first.
- The second variance is for a fence setback and is subject to Subsection 6. Subsection 6 will be addressed after the height variance.

WCF Height Variance

(7) Approval Criteria for Granting a Variance for a Wireless Communication Facility. A variance to the separation or height requirements for wireless communication facilities must not be granted unless it can be shown that the following criteria are met. The criteria for granting a variance to the separation or height requirements for wireless communication facilities is limited to this section, and does not include the standard variance criteria of Section TDC 33.120(6), Approval Criteria for Granting a Variance that is not for a Wireless Communication Facility.

Finding: The proposed variance is for the height of the proposed WCF. As stated under subsection (7): “The criteria for granting a variance to the separation or height requirements for wireless communication facilities...does not include the standard

variance criteria of Section TDC 33.120(6).” In other words, the WCF height variance does not need to address both sets of variance criteria, only those of subsection (7).

(a) *The City may grant a variance from the provisions of TDC 73F, which requires a 1,500 foot separation between WCFs, providing the applicant demonstrates compliance with (i) or (ii) below.[...]*

Finding: As shown in Figure 10, the nearest WCF in Tualatin is more than 1,500 feet from the one proposed. As such, the separation standard is met and no variance is required.

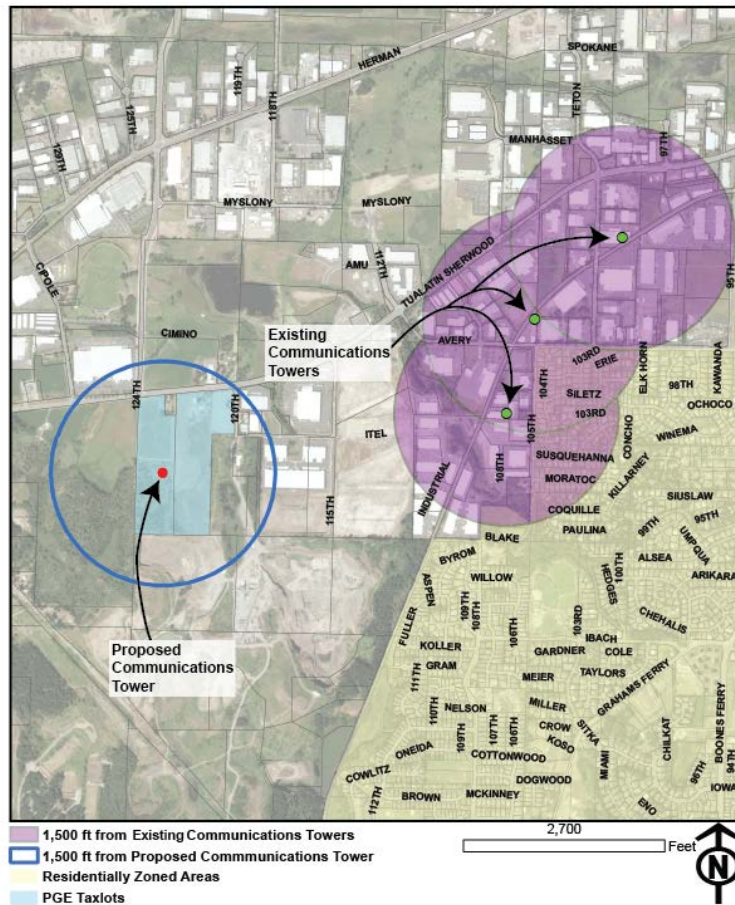


Figure 10. Nearest existing Tualatin WCFs

(b) *The City may grant a variance to the maximum allowable height for a WCF if the applicant demonstrates:*

(i) *It is technically not practicable to provide the needed capacity or coverage the tower is intended to provide at a height that meets the TDC requirements. The needed capacity or coverage must be documented with a Radio Frequency report; and*

Finding: As a regional IOC that is meant to centralize PGE’s communications network – especially during emergencies – the site location was extensively researched before selection. Development of 12150 SW Tualatin-Sherwood Road is the optimal location for a WCF to work effectively during an emergency. The WCF will use microwave towers to communicate with three other regional towers: Bald Peak, Mt. Scott, and Raleigh Hills. These regional facilities range from 9 to 14 miles away from the proposed WCF location. Microwave communications use line-of-sight connections and require transmission paths that are direct and unobstructed.

The technical analysis of the required height and location of the WCF concludes 140 feet is the minimum tower height to achieve direct and unobstructed communications to all three tower connections. The Radio Frequency Report (Appendix D) considers a wealth of variables, including antenna type, elevation, terrain, path orientations, and economic efficiency. If the tower were limited to the maximum 85-foot height permitted in the zone, microwave communications with its three sister towers would be impossible. The proposed WCF, and therefore the entire IOC as an emergency headquarters, is ineffective without direct line-of-sight communications between the proposed WCF and its three regional counterparts.

In conclusion, the WCF height variance is justified by the included Radio Frequency Report (Appendix D). Co-location with other WCFs is not feasible due to security concerns, inadequate height of other towers, and the lack of any other WCFs within 1,500 feet of the proposed tower location.

Fence Setback Variance

The proposed fence setback variance is to allow the perimeter security fence to be located up to 20 feet from the right of way on SW Blake Street and SW 124th Avenue. This is a setback requirement specific to fences in the MBP zone, which must be 50 feet “from public right of way” (Table 64-2, TDC 64.300).

In addition, there is a “front” setback that also applies generally to all structures. This limitation is listed in the same table as “30-50 feet”. Based on the code definitions of “front lot line” in TDC 31.060, both SW Blake and SW 124th may be interpreted as the front lot line and therefore subject to this setback. Staff has informed the applicant that approval of a variance from the code standard for fences would also apply to the more general front setback, because the fence standard is more restrictive (50 feet, versus 30-50 feet) and more specific (fences, versus any structure). Therefore, these findings specifically address the 50 foot setback for fences, but they apply equally to the front setback standard for all structures.

(6) Approval Criteria for Granting a Variance that is not a Minor Variance or for a Wireless Communication Facility. A variance must not be granted unless it can be shown that criterion (a) is met and three of the four approval criteria (b)-(e) are met for non-sign requests:

Finding: The applicable criteria for the fence setback variance are listed below in *italic font* – followed by an explanation as to how each criterion is met. Because only three of four criteria are needed for approval, the applicant chooses not to respond to criterion (c).

(a) A hardship is created by exceptional or extraordinary conditions applying to the property that do not apply generally to other properties in the same zone or vicinity and the conditions are a result of lot size or shape, topography, or other physical circumstances applying to the property over which the applicant or owner has no control.

Finding: The existing physical conditions of the site and the unique requirements of the proposed development together create a hardship for the applicant when applying the required fence setback along SW Blake Street and SW 124th Avenue. The unique physical conditions of the site include: the dense grove of existing trees on site that are a key site feature for screening, and SW Blake Street’s predetermined location by the City of Tualatin’s Transportation Plan (TSP). The unique development requirements are driven by federal security requirements and include: perimeter fencing that must protect both the WCF and IOC, the required height and location of the WCF on the site, and the TDC requirement to minimize adverse visual impacts of the tower. These conditions and requirements are not within PGE’s control. Moreover, excessive tree removals would result with the strict application of a 50-foot setback standard. More detail is given below.

Site Condition – Existing Trees

If the proposed development were to strictly adhere to the required setbacks along Blake Street and 124th Avenue, 14 trees between Blake Street and the tower and 11 trees between 124th Avenue and the tower would need to be removed for the security fence to be constructed at least 50 feet from the ROW.

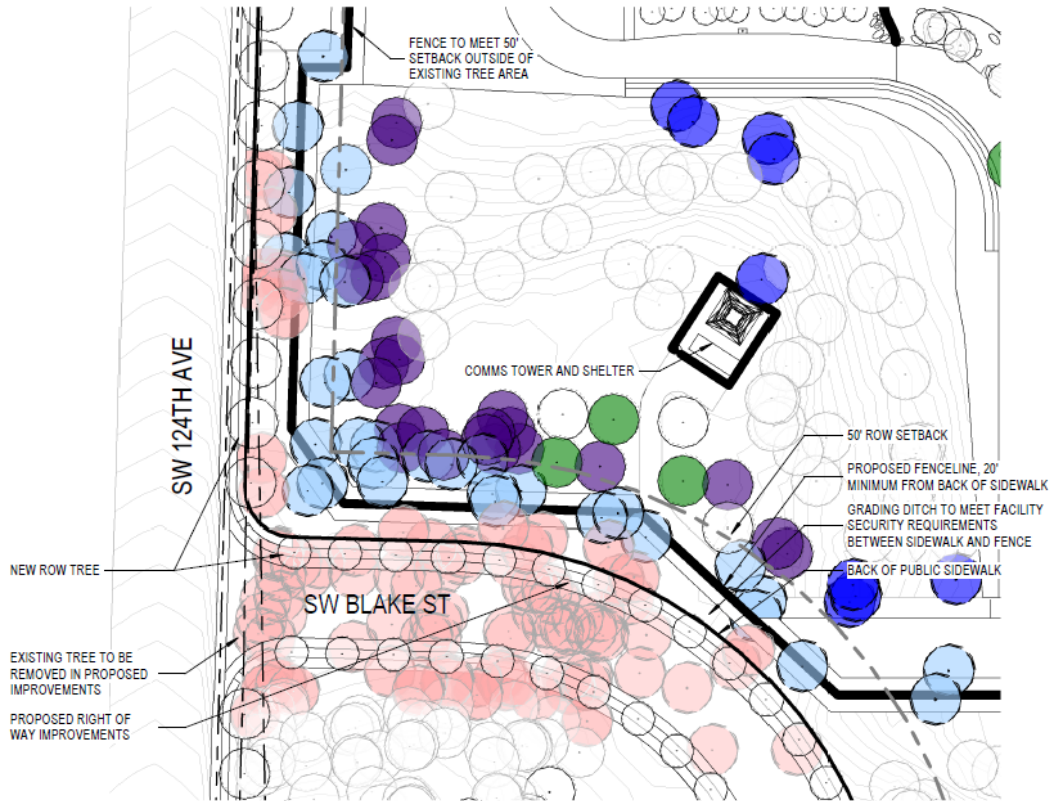


Figure 11. Tree removal diagram, showing (in purple) trees removed with strict application of 50 foot setback standard

The removal of these mature trees would increase tower visibility from public ROW and nearby properties, thus undermining an objective of TDC 73F.010.2 to use natural features to screen WCFs. Reducing the fence setbacks to 20 feet would allow for 25 additional trees to be saved, thereby maintaining the characteristics of the site that provide the least obtrusive tower impacts.

Site Condition – SW Blake Street

The Tualatin TSP requires PGE to dedicate SW Blake Street public ROW on the site at this location. The TSP shows Blake Street extending south and east to connect to SW 115th Ave. Without the SW Blake Street extension, or if this street were located further south, there would be no need for a variance from the 50-foot fence setback standard along the SW Blake Street frontage. The proposed ROW location allows for safe travel and increased connectivity for future development and therefore provides a substantial public benefit.

Development Requirement – Perimeter Fencing

Because the IOC is critical infrastructure that requires protection under CIP-014, increased security measures are necessary to protect the tower from outside threats. As critical infrastructure, security requirements for the integrated operations center and the WCF include a perimeter fence that is optimally at least 150 feet from the base of the tower – according to the regulatory guidelines. The WCF is setback 160 feet from Blake Street and 260 feet from 124th Avenue. A 20-foot setback would allow for 140 feet of separation between the WCF and the security fence, close to CIP-014 guidelines.

Development Requirement – WCF Location

The proposed IOC requires a WCF for operational and emergency response purposes. The WCF is positioned on a wooded knoll to efficiently transmit communications while minimizing visual impacts. The site and the location of the WCF provide the least obstructive path for microwave communications given its elevation and clear sight lines to other PGE WCFs. The proposed WCF is nestled in an existing grove of mature trees which supports objectives of TDC 73F.010.2 E through G, and it supports Site Design Standard D of TDC 73F.030. Thus, the variance is necessary to meet TDC conditional use and design requirements for WCFs.

Conclusion: Considering existing site conditions and the unique requirements of the critical infrastructure development that are out of the applicant’s control, a hardship would be incurred if the 50-foot standard setback along SW Blake Street and SW 124th Avenue were strictly applied.

(b) The hardship does not result from actions of the applicant, owner or previous owner, or from personal circumstances or financial situation of the applicant or owner, or from regional economic conditions.

Finding: The applicant has no control over the existing site conditions: the location of the Blake Street extension or the location of the grove of trees at the high point of the property. The federal requirement to protect critical infrastructure requires a security fence around the WCF; the need to communicate directly with other PGE towers dictates the absolute height of the WCF; and location of the WCF on a knoll is necessary to address TDC requirements to minimize tower height. This hardship is not a result from the actions of the applicant or their personal circumstances but rather results from the natural site features, a street location directed by the Tualatin TSP, and requirements in the code to lessen visual impacts from the tower by saving trees and minimizing tower height.

(c) The variance is necessary for the preservation of a property right of the applicant or owner substantially the same as is possessed by owners of other property in the same zone or vicinity.

Finding: The applicant needs only to meet three of the four criteria in section (b) through (e) and has chosen not to respond to (c).

(d) The variance must not be detrimental to the applicable objectives of the Tualatin Community Plan and must not be injurious to property in the zone or vicinity in which the property is located.

Finding: The request for alleviation from the setback requirement along Blake Street and SW 124th Avenue is not detrimental to the applicable objectives of the TCP, and in fact supports several key objectives.

Allowing the security fence to locate closer to SW Blake Street and SW 124th Avenue will reduce tree removals thereby increasing tower screening. This variance request would lessen development impacts on site and allow a mature tree grove to remain as habitat.

The TCP is integrated within the TDC as Chapters 1 through 30. The variance supports the following TCP Objectives:

- **TDC 7.040 Manufacturing Planning District Objectives (4)**

As noted previously in the Conditional Use findings, TDC 7.040 defines the district to have “a mix of light industrial and high-tech uses in a corporate campus setting”. The WCF and IOC are co-dependent and together create this exact expression of desired uses.

- **TDC 8.080 – Wireless Communication Facilities**

(1) To minimize the visual impacts associated with wireless communication facilities. [...]

(3) To encourage creative approaches in locating wireless communication facilities that will blend with their surroundings.”

The request for this variance supports objectives (1) and (3) of the TDC’s chapter on Wireless Communication Facilities. The site was uniquely chosen for its natural characteristics and its ability to reduce visual impacts associated with the communications tower. Since the communications facility must have a clear path for transmission to other towers in the region, the elevation and natural vegetation on this parcel, and at this location within the site, reduce the adverse impacts incurred from the proposed height of the tower. Strict adherence to the setback standards along SW Blake Street and SW 124th Avenue would increase visual impacts associated with the tower by removing 25 mature trees from the base. Granting the fence variance would give the applicant the ability to utilize existing natural features on site to blend the communications facility more seamlessly into its surroundings.

- **TDC 10.020 – Design Objectives**

(3) *“Promote the City's natural beauty and visual character and charm by insuring that structures and other improvements are properly related to their sites, and to surrounding sites and structures, with due regard to the esthetic qualities of the natural terrain and landscaping, and that proper attention is given to exterior appearances of structures and other improvements.”*

Placing the security fence along SW Blake Street and SW 124th Avenue 20 feet from the ROW instead of the required 50 feet would result in the removal of only 32 trees as opposed to 57 removed. Six trees will be planted to increase screening in areas where trees are removed under either scenario. Fewer tree removals helps to screen the proposed tower and promotes the City’s natural beauty by maintaining natural viewsheds along SW 124th. This variance would support this design objective as it maintains the esthetic quality of the mature grove of trees, using the natural terrain as an existing buffer.

- **TDC 10.050 – Tree Preservation and Street Tree Objectives**

(1) *“Develop a program for tree conservation within the City, including control over tree removal, in order to protect and enhance the esthetic character of Tualatin, protect and improve air and water quality, provide and protect buffering and screening between land uses, and provide and protect habitat for wildlife, in order to create and preserve a desirable community in which to live, work, and invest.”*

Preserving 25 trees with the modification of SW Blake Street and SW 124th Avenue’s setback requirements is in support of Tualatin’s tree conservation programs. This tree conservation program is detailed in the Tualatin Development Code objectives of the Landscaping Chapter.

- **TDC 11.610 – Transportation Goals and Objectives**

(7) *“Goal 6: Health/Environment. Provide active transportation options to improve the health of citizens in Tualatin. Ensure that transportation does not adversely affect public health or the environment. [...] (e) Consider positive and negative effects of potential solutions on the natural environment (including wetlands and habitat areas).”*

The Tualatin Community Plan Transportation Objective (e) provides decision makers the opportunity to weigh potential impacts on the natural environment from transportation related activities. Considering the exceptional circumstances of the proposed development, the request to reduce the setback requirements along SW Blake Street and SW 124th Avenue is expressly proposed because of the positive environmental effects. This variance request inherently supports this transportation objective because a strict application of the development standard would produce a negative impact on the natural environment – unnecessary tree removals, less habitat

area, and exposing the proposed tower to users along SW 124th Avenue. An exception to this setback requirement would minimize environmental disturbances.

(e) The variance is the minimum remedy necessary to alleviate the hardship.

Finding: The applicant is bound by a set of extraordinary conditions that other properties do not generally experience – the location of existing mature trees, city-dictated SW Blake ROW, critical development requirements for fencing and the WCF – and the requested variance is the minimum remedy necessary to alleviate the hardship. The fence has been moved only as close to the road as is necessary to avoid the densest area of trees while meeting the separation requirement identified in CIP-14. Placing the fence closer to the ROW edge as shown saves 25 trees. Where it is not necessary to avoid tree removal north of the existing grove, the fence line will be set back at least 50 feet from SW 124th Avenue and SW Tualatin-Sherwood Road.

Note that the reduced setback proposed for SW Blake and part of SW 124th is still greater than the setback requirements of the city’s General Manufacturing Zone (MG), which surrounds the site to the north and east. In that zone, fences are only required to be set back 10 feet from the ROW. Since the location of Blake Street and the location of the trees are not within the applicant’s control, and given the unique location requirements of the tower on site and the required security fencing, reducing the fence setbacks from 50 to 20 feet in the locations shown on the plan is the only reasonable option to alleviate the hardship. A 20-foot setback adjustment is the minimum necessary to preserve 25 trees.

(ii) The collocation report, required as part of the Architectural Review submittal, must document that existing WCFs, or a WCF for which an application has been filed and not denied, cannot be modified to provide the capacity or coverage the tower is intended to provide.

Finding: Currently, there are no other existing or pending applications for WCFs in Tualatin within 4,000 feet of the site. Collocation is impossible at this location while providing the communications capacity the WCF requires. Specifically, the proposed WCF requires a direct line-of-sight to three other towers in the region to be effective. The proposed WCF is unique in this regard. Other WCFs in Tualatin do not need or have the height required to obtain that clear and unobstructed channel.

Additionally, given the increasing regulatory requirements for the protection, safety and reliability of the nation’s electrical grid, the proposed WCF needs to remain independent of all other WCFs. This tower is essential to the operation of PGE’s current privately-operated microwave network that exists throughout much of Oregon and SW Washington. WCF security and resiliency in the face of an emergency are primary objectives for effective PGE operations. Because of these factors, current WCFs cannot be modified to provide the capacity, coverage, or security that this tower requires.

Conclusion

The proposed WCF is subject to a conditional use review, and two variances related to it, for its height and a nearby fence setback. With regard to the conditional use, the findings above demonstrate that the proposed use is consistent with surrounding development and does not negatively impact the largely industrial area in which it is located. The tower is consistent with city plans and objectives.

With regard to the variances, the findings also demonstrate a clear technical need for additional height to support the operation of the WCF, which is documented in a Radio Frequency Report (Appendix D). To better screen the tower and save 25 mature trees on the site, the findings also support the proposal to reduce the required fence setback from adjacent rights of way.