

EXHIBIT B

ESEE ANALYSIS FOR THE PROPOSED MAP AMENDMENTS REGULATING THE POST OFFICE SITE IN COUCH'S ADDITION¹ TO THE CITY OF PORTLAND

July 7, 2017

1. INTRODUCTION

The purpose of this Economic, Social, Environmental and Energy (ESEE) Analysis is to update and amend the *Union Station Clock Tower-Related FAR and Height Limitations* study produced by the City of Portland in 2000. The study included an ESEE analysis for the views of the Union Station Clock Tower from different viewpoints including NW Johnson Street and NW 16th Avenue, Eastbank Esplanade, historic Red Lion site, Steel Bridge and Broadway Bridge.

This ESEE evaluates the trade-offs associated with building envelope entitlements for the 14-acre Central United States Post Office ("Post Office Site") at 715 NW Hoyt Street in the Pearl District and the potential impacts of development on significant scenic resources identified in the 2000 Union Station Clock Tower report.

This ESEE includes detailed descriptions of the issues that should be considered for each of the four topics: economic, social, environmental and energy. The analysis explores the consequences of various building development heights and massing that could have an adverse impact upon significant scenic resources.

The ESEE is a qualitative decision-making tool that relies upon existing information, which is presented in the narrative below and illustrated with viewpoint studies. For primary views, each of the six sections below describes the consequences of allowing, limiting or prohibiting conflicting uses and development allowances.

The final section includes a recommended decision that describes to what extent the different building envelope entitlements should be limited to protect significant scenic resources and provides programmatic tools that could be used to implement the decision.

1.a. Scope of This ESEE Analysis

This analysis looks at potential conflicts between allowing increased building envelope entitlements and protecting the scenic resource on the basis of economic, social, environmental and energy consequences as required by the State of Oregon Administrative Rule for Statewide Planning Goal 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces). This is accomplished by examining the uses and the proposed building development standards in the underlying zoning district to determine if they create a conflicting use, as defined by Administrative rule (OAR 660-015-0000(5)), which could affect the identified scenic resource adversely.

According to Goal 5, conflicting uses can be allowed despite the possible adverse impacts upon the scenic resource if the ESEE analyses "demonstrate that the conflicting use is of sufficient importance related to

¹ Blocks 113 & 114 & 129-132 & 147 & 148 & 192 & 193 & T & Z of Couch's Addition and vacated portions of SW Irving Street, NW Johnson Street, and NW Kearney Street.

the site, and must indicate why measures to protect the resource to some extent should not be provided” [660-23-045(5)(A)]. If the conflicting use and the resource are determined to be of comparable importance, then the conflicting use “should be allowed in a way that protects the site to a desired extent” [660-23-040(5)(b)]. If the ESEE Analysis determines that “the conflicting uses are so detrimental to the identified resource, then the conflicting use can be prohibited” [660-23-040(5)(c)].

1.b. Geographic Scope of the ESEE Analysis

The ESEE Analysis is being performed for 12 contiguous blocks and vacated streets in the Pearl District. Bounded by NW Broadway and NW 9th Avenues between NW Hoyt and NW Lovejoy Streets, the 14-acre site contains United States Post Office central facilities and vehicle yard, which for purposes of this ESEE analysis it is assumed will be redeveloped in the near future. This site lies within the River District Subdistrict of the Central City Plan District and is zoned Central Employment (EX) with the Design (“d”) overlay.

1.c. Building Development Standards under Analysis

The ESEE considers the existing FAR and height allowances applied to the site and the proposed FAR and height:

Table 1: Existing and Proposed Maximum FAR and Height

	FAR	HEIGHT*
Existing	4:1	75'
Proposed	7:1	250'/400'**

*The analysis is based on the maximum allowed building height.

**250' south of NW Johnson Street and 450' north of NW Johnson Street.

The proposal is to increase the maximum FAR from 4:1 to 7:1. The maximum floor area ratio (FAR) within the Central City is determined according to 33.510.205 for the purpose of:

...coordinating private development with public investments in transportation systems and other infrastructure, limiting and stepping down building bulk to the Willamette River, residential neighborhoods, and historic districts. While consistent with these purposes, the floor area ratios are intended to be the largest in the Portland area. (33.510.205.A)

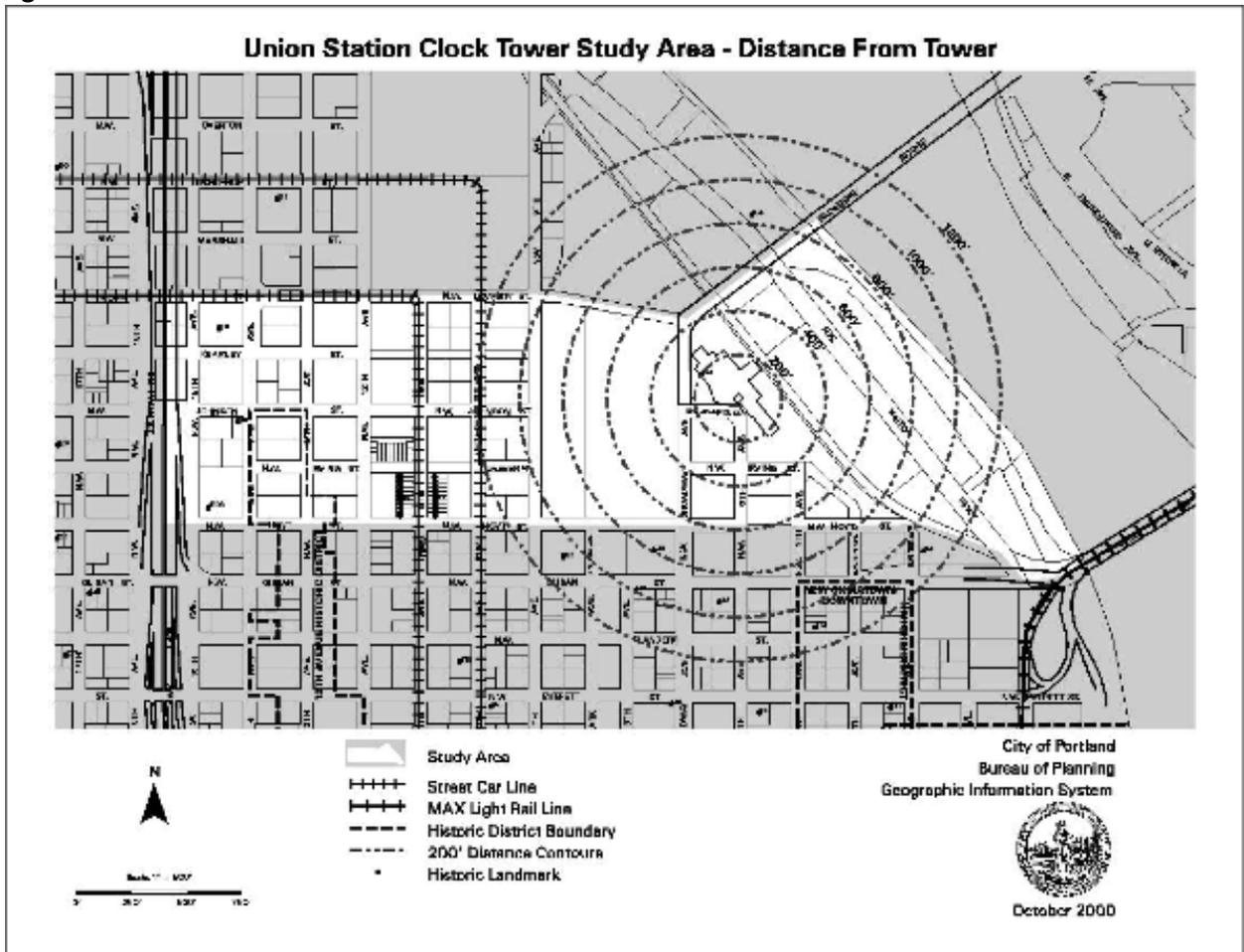
Figure 1: Existing Map 510-2 Maximum FAR



area for this designated scenic resource (See Figure 3). Completed in 1896, the station has been a prominent landmark in downtown Portland for over 120 years. Due to the orientation of the station at an angle to the street grid, the station “faces” downtown and its 150’ Clock Tower is aligned with NW 6th Avenue. In its 1989 *Scenic Resources Inventory* (SRI), the City recognized the tower as viewed from NW 6th Avenue as a “significant scenic resource”, identifying it as a primary feature of the Central City. Other views of the tower from specific vantage points have been protected since the 1990 adoption of the *Scenic Resources Protection Plan*, including looking eastward along NW Johnson Avenue. These designated views were re-evaluated in 2000, resulting in updated regulations based on the *Union Station Clock Tower-related FAR and Height Limitations Study*. Based on the findings of the 2000 study, amendments were adopted to limit the allowed maximum FAR and heights surrounding the Union Station Clock Tower; these amendments were implemented through Maps 510-2 and 510-3 of the Portland Zoning Code.

Through the *Central City 2035 Plan*, (CC2035) the Bureau of Planning and Sustainability (BPS) is proposing to update the scenic resources protection plan that forms the basis of current protection of views of the Union Station Clock Tower. This proposed *Central City Scenic Resources Protection Plan* (CCSRPP) was recommended by the Planning and Sustainability Commission on May 23, 2017. The Portland City Council will hear testimony on the CCSRPP in the fall of 2017 and is expected to adopt the full CC2035 Plan in winter of 2017.

Figure 3: Distance Arcs from the Union Station Clock Tower



Because the Draft CCSRPP has not been adopted, this ESEE is proposing updates and amendments to the 2000 Clock Tower Study and the 1990 scenic resources plan. However, this ESEE does use up-to-date information and analysis as presented in the Draft CCSRPP.

1.e. Key Views Relative to the Post Office Site

The *Union Station Clock Tower-Related FAR and Height Limitations Study* (2000) provides an overview of policy and inventory documents that locate key views of the historic Union Station Clock Tower. The primary view down NW 6th Avenue is not affected by development on the Post Office Site, therefore, only the following are relevant to the location of the Post Office Site in the potential view-shed:

- NW Johnson Street – View from NW 16th Avenue looking east; the position of the Clock Tower is off-center, to the north, of the NW Johnson Street public right-of-way.
- Steel Bridge – In the 1990 and 2000 studies it was identified at CCPV28; in the CCSRPP it is identified as CC-NW19.
- Broadway Bridge – In the 1990 and 2000 studies it was identified at CCPV30; in the CCSRPP it is identified as CC-NW12.
- East Bank of the Willamette – This viewpoint is from the east bank of the Willamette River on N Thunderbird Way. In the 1990 and 2000 studies it was identified as VC 24-47; in the CCSRPP it is identified as CC-N14.

For this ESEE analysis, images have been created to illustrate the potential building envelopes at the existing maximum height 75', and the proposed maximum heights of 400'/250'. The proposed maximum heights would be achieved by increasing maximum FAR. The images are used to determine the degree and nature of adverse impacts of increased FAR and heights on the preservation of the scenic views of the Clock Tower. However, the figures only show the possible building envelope, not allowable building outlines.

1.f. Brief Description of the Post Office site within the Broadway Corridor Framework Plan

Although this ESEE does not consider a particular proposed use, the possible redevelopment of the Post Office Site consistent with the *Broadway Corridor Framework Plan* is used as an example of potential uses on the site. Subject to master plan and design review approval, the new development would consist of approximately 3.8 million gross square feet (gsf) of development with a mix of employment and residential uses with substantial public benefits in the form of an extension of the North Park Blocks, a new street with bike and pedestrian connections, and affordable housing. With 14 acres of developable land, the Post Office Site is the largest contiguous site available for redevelopment within the 24-acre Broadway Corridor that also contains the historic Union Station. With an average FAR of 6.7:1, the plan provides substantial public benefits by creating a dense, inter-connected gateway neighborhood that would capture a significant amount of the additional jobs and downtown housing over the next 20 years while stimulating growth within the adjacent Old Town/Chinatown Neighborhood and improving connections between existing parks and open space. The preferred development concept includes signature architecture on the north end of the site where it would define the terminus of the extended North Park Blocks and the Broadway Bridgehead. Smaller buildings would then surround the new parks and multi-modal transportation connections would re-integrate the site, which heretofore has been physically isolated, with surrounding development.

2. Conflicting Use Analysis

Conflicting uses are those uses allowed through the zoning code that may have negative impacts on the significant resource. In this case, the conflicting uses are the existing and proposed maximum building heights and massing allowed at the site. These uses may have negative impacts to some extent on the views of the Union Station Clock Tower from four different viewpoints. Other potential conflicting uses include landscaping, particularly trees, and infrastructure including street lights and signs.

Table 2: Summary of Proposed Regulatory Changes

	EXISTING		PROPOSED	
	N of Johnson	S of Johnson	N of Johnson	S of Johnson
Maximum Height	75'	75'	400'	250'
Maximum FAR	3:1	3:1	7:1	7:1

The allowed uses (e.g., retail, office, housing) on the Post Office Site do not have a direct impact on the scenic resource per se, but the buildings constructed within the proposed development envelope must be analyzed to determine their potential adverse impact upon identified key views of the Union Station Clock Tower. In turn, the determination of “conflicting uses” for the purposes of the ESEE Analysis then include potential uses in the additional FAR made available by the proposed expansion of the building envelope. These scenarios include an FAR increase of 3:1 (from 4:1 to 7:1), and access to an additional height from 75’ up to 400’/250’.²

2.b. Conflicting Use Impacts

Potential conflicting uses are:

- Reduction in the visibility of the Clock Tower from an identified view corridor.
- Building height and mass adjacent to or behind the Clock Tower that could make it less prominent.
- Right-of-way improvements, including trees, street lights and signs that could partially block view of the Clock Tower.

The following key views are illustrated in the following figures and a matrix provided that classifies whether the resulting building envelope constitutes a conflicting use. It is worth noting that the figures show allowable building envelopes, not possible building articulation. However, in some cases, conceptual buildings have been placed within the envelopes to demonstrate possible articulations of buildings on the site at the proposed FAR and height.

View Corridor along NW Johnson Street. In Figure 4 (View 1), the existing four-story Central Post Office facility has been removed and the proposed additional building heights and FAR are articulated to preserve views of the Clock Tower along NW Johnson Street by maintaining sufficient air space around the focal terminus of the view. The Clock Tower is not precisely aligned with the orientation of NW Johnson Street; therefore, a thoughtful urban design will be necessary to determine the precise location of transportation connections through the site. Tall buildings flanking the corridor have the potential to create a minor conflict with the scenic resource, but can also successfully frame the Clock Tower if buildings are set back and the width of public space along the corridor is increased. Future development that is consistent with the *Broadway Corridor Framework Plan* will be reviewed through the Central City

² That is, 400’ north of NW Johnson Street and 250’ south of NW Johnson Street. ROW through the site.

Master Plan and Design Review processes and will have to incorporate superblock and street connectivity regulations that will secure the maintenance of the necessary view corridor along this street. Street landscaping, lighting and signs also might create a minor conflict with the scenic resource and will also need to be designed, reviewed and maintained in a manner that does not conflict with the view down the new street. Any conflict between the use and the scenic resource is minor with an FAR of 7:1 and heights of 400' and 250' to the north and south of NW Johnson Street, respectively, given that the smaller-scale Clock Tower still retains its unique architectural prominence in this view corridor.

Center of the Steel Bridge looking Northwest. Any development on the Post Office Site will be prominent from this viewpoint, and increasingly so as the building height increases, but will not block the view of the Clock Tower. In the CCSRPP Draft ESEE, it is noted that a view of the Central City skyline is not a view of any particular building but rather a view of the entire panorama within which the buildings may change over time. In the panorama shown in Figure 5 (View 2), the additional height proposed for the site provides for buildings that balance the tall towers either recently completed or under construction in the River District north of Union Station. This results in a conflict in the proposed use at both 7:1 FAR and 400'/250' and the visual prominence of the Clock Tower within the view.

Center of the Broadway Bridge looking Southwest. As illustrated Figure 6 (View 3), the additional height proposed in the immediate proximity to the Clock Tower may make the tower somewhat less prominent because the scale of larger nearby buildings creates a frame around the smaller-scale tower itself. North of NW Johnson Street, new development will not lie behind the Clock Tower and, therefore, there are fewer potential conflicts. South of NW Johnson Street, the master plan process can be used to approve appropriate conceptual massing of the buildings and articulation of the open space, right-of-ways and pedestrian corridors that results in the building blending in among other River District buildings in the background behind the tower; appropriate implementation can best be accomplished through mandatory design review for on a project-by-project basis. There will result in a minor conflict in the proposed use at both 7:1 FAR and 400'/250' in terms of the "scenic panorama".

View from the Old Thunderbird Site. In Figure 7 (View 4), development on the Post Office Site appears directly behind the Clock Tower and may make the tower somewhat less prominent because the scale of larger nearby buildings create a frame around the smaller-scale tower itself. The master plan process can be used to approve appropriate conceptual massing of the buildings and articulation of the open space, right-of-ways and pedestrian corridors that results in the new development blending in among other River District buildings in the background behind the tower; appropriate implementation can best be accomplished through mandatory design review for on a project-by-project basis. There will result in a minor conflict in the proposed use at both 7:1 FAR and 400'/250' in terms of the "scenic panorama".

Figure 4 (View 1): NW Johnson Street Looking East

view corridor 1:
NW Johnson St. at Jamison Park

key plan



existing



massing analysis

- buildable volume
- 7:1 FAR massing



Figure 5 (View 2): Center of the Steel Bridge Looking Northwest

view corridor 2:
center of steel bridge

key plan



existing



massing analysis

- buildable volume
- 7:1 FAR massing



Figure 6 (View 3): Center of the Broadway Bridge Looking Southwest

view corridor 3:
center of Broadway bridge

key plan



existing



massing analysis

- buildable volume
- 7:1 FAR massing



USPS Redevelopment View Corridors & Shading Studies **DRAFT** / July 6, 2017 /ZGF Architects

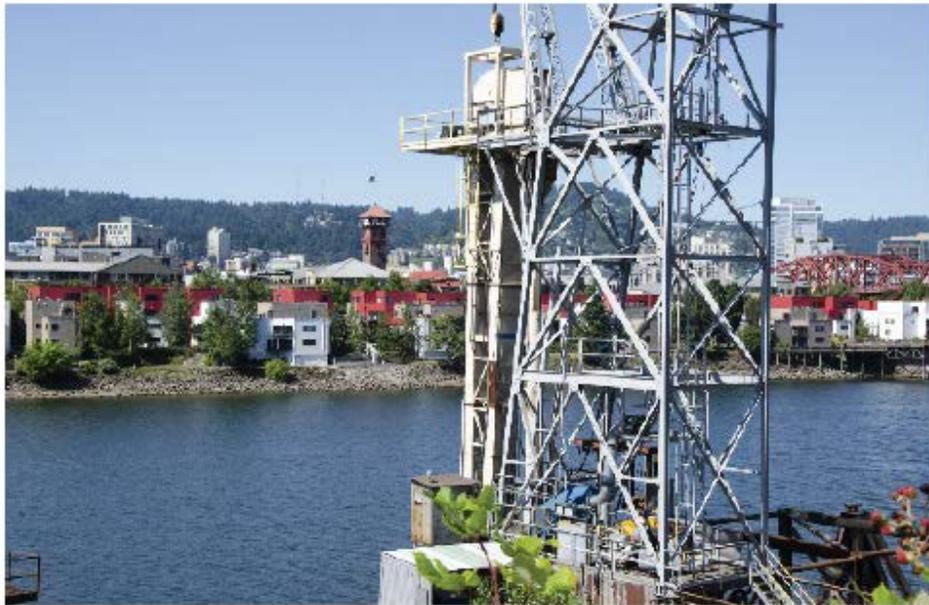
Figure 7 (View 4): View from the Old Thunderbird Site

view corridor 4:
Old Thunderbird Motel Site

key plan



existing



massing analysis

- buildable volume
- 7:1 FAR massing



Table 3: Conflicting Uses

KEY VIEWS	MAXIMUM HEIGHT 75' AND FAR 4:1	MAXIMUM HEIGHT 400'/250' AND FAR 7:1
Steel Bridge	None	Negative
Broadway Bridge	None	Minor
Old Thunderbird Site	None	Negative
NW Johnson Street	Minor	Minor

The 2000 Clock Tower study finds that the heights of new buildings should be limited so as not adversely affect the Clock Tower’s prominence. This proposal seeks to allow taller buildings by increasing the allowed development capacity through increases in FAR and maximum height. As illustrated in the figures and summarized in the table above, additional FAR of 3:1 and increased heights of 400’/250’ will reduce the prominence of the Clock Tower as the focal feature of the view from the key viewpoints. Therefore, for the purposes of this ESEE Analysis, the use of the site consistent with the base zone and Central City Plan District with the proposed increased FAR and building heights is conflicting uses when measured against maintaining the identified scenic resource. As noted below, there are significant economic, social, environmental and energy benefits that outweigh the visual impact on the Clock Tower from the four identified key views.

3. Economic Analysis

This section examines the economic consequences of allowing, limiting or prohibiting the previously-identified conflicting uses for the Post Office Site relative to protecting the Union Station Clock Tower, an identified scenic resource.

3.a. Development/Uses

- I. Employment and Economic Services.** As the underlying zoning allows a wide variety of uses, the potential conflicting uses presented by increased development capacity has a variety of employment outcomes. If developed with a mix of retail, office and institutional uses in combination with housing, the reduced development capacity that associated from limiting or prohibiting the uses would have an impact upon employment growth in the Central City. As a neighborhood adjacent to the Central Business District, the Pearl District has long suffered from disproportionately fewer jobs than expected given its proximity to the CBD’s regional retail, business, institutional and governmental centers and highly-developed transportation networks.

By way of example, the potential development identified in the *Broadway Corridor Framework Plan* would result in up to 4,000 new jobs on the site. Limiting or prohibiting the conflicting use would at a minimum reduce the number of jobs, but also might result in the inability of Prosper Portland³ to develop the site in a manner that provides the expected public benefits associated with new parks, streets and affordable housing.

³ Formerly the Portland Development Commission.

ii. Economic efficiencies due to location. Designated for intense development, this site is located within a critical distance of the CBD-focused economic center of activity that makes additional building capacity for non-residential uses nearby extremely beneficial. There are numerous economic benefits generated by the close proximity of commercial activities, institutions, and industries. For client-focused industries such as retail uses, the Post Office Site is close to a variety of transit options – bus, streetcar and light rail transit (LRT) – and high-density housing would provide significant locational advantages, permitting residents to work near their jobs. Limiting or prohibiting increased conflicting uses on the Post Office Site would reduce the potential economic benefits from these economic efficiencies and collaborative opportunities.

iii. Property values and rents. By increasing the FAR and height limits, the resulting development of the conflicting uses at higher densities would increase property values and provide additional rent and property tax revenues, the latter supporting the extension and maintenance of critical public infrastructure and services. It is also anticipated that the redevelopment of the Post Office Site at higher densities would increase neighboring property values and rents. Limiting or prohibiting the conflicting uses would likely reduce this anticipated increase.

iv. Multiplier effect of development within district. If developed with housing, the increased capacity resulting from adoption of the proposed amendment would result in more residents in the Pearl District, in turn generating greater demand for nearby retail, educational, cultural, recreational and entertainment services. For office, retail and industrial uses, there is often a corresponding multiplier effect on job creation associated with economic stimulus and collaborative opportunities. For example, if the goals of the *Broadway Corridor Framework Plan* were realized on the site, it is estimated that 4,000 jobs would be attracted directly to the site that potentially would result in an additional 3,000 jobs created nearby. Limiting or prohibiting the conflicting uses would then necessarily reduce both the jobs directly created on the subject site as well as jobs in the area resulting from this multiplier effect.

3.b. Views and Tourism

In Portland, a significant amount of economic activity in the downtown neighborhoods is generated by tourism, so that protection of scenic resources is a critical component in maintaining a desirable and attractive Central City. In particular, the Union Station Clock Tower is an iconic historical structure and its prominence along several view corridors and contribute to the River District's neighborhood identity. As identified above, the primary view from NW Johnson Street would not be affected by allowing additional building capacity on the Post Office Site to the south, provided that the extended public right-of-way for the street is aligned properly to maintain a view of the Clock Tower and that street landscaping, lighting and signs are designed to reduce visual clutter in the foreground.

Three other vantage points, from the Steel and Broadway Bridges and the east side of the Willamette, River, respectively, will be affected by the additional height allowances. However, these views are panoramic views of large portions of the Downtown and River Districts, with the West Hills as a backdrop. Regardless of the use of any building and its height at this location, proposed development will be subject to Title 33 Super Block regulations and River District Right-of-Way Standards which will proscribe pedestrian and street connectivity through the site. Such corridors through the proposed development will be part of the mandatory Design Review, which by its nature is concerned with scale, design aesthetics and scenic and other amenities.

4. Social

This section examines the social consequences of allowing, limiting or prohibiting conflicting uses for the Post Office Site.

4.a. Development/Uses

- i. **Employment.** As noted above, the proposed increase in development capacity, would support a projected 4,000 new jobs on the site and an additional 3,000 jobs nearby, increasing social benefits by increasing wages earned, some of which will be spent in the neighborhood, boosting local businesses. The social benefits that accrue from an increased concentration of jobs within this portion of the Central City in proximity to a well-developed multi-modal transportation network include, but are not limited to, reduced commute times, more opportunities for living close to work, more time for family and friends, and increased access to other entertainment, cultural and recreational opportunities in downtown Portland. Limiting or prohibiting the conflicting uses that result from expansion of the building envelope will, in turn, limit the accrual of these social benefits.
- ii. **Housing.** It is estimated that the adoption of the proposed amendment will result in the creation of 2,400 housing units, housing up to 3,100 more residents. Prosper Portland is committed to insuring that at least 25% of these units are affordable. The increased development capacity on the site will both increase housing availability and housing diversity. Significant social benefits follow from providing a variety of housing types at varied income profiles. Limiting or prohibiting the conflicting uses that result from expansion of the building envelope will, in turn, limit the ability to provide affordable and diverse housing options with associated social benefits.
- iii. **Services provided and relationship to location.** Maximizing the intensity of development in locations well-served by Central City transit has been a cornerstone of the City's multiple planning efforts including the current update of the Comprehensive Plan. In addition to accommodating up to 4,000 new jobs, the redevelopment at the proposed density could generate housing for up to 3,100 new residents, including options for work-force and affordable housing. Additional housing adjacent to and within the Central City and/or creating new employment concentrations of office and institutional activities facilitate fuller use of the existing transportation infrastructure as well as provide increased opportunities to walk and bike. Additional activation of nearby retail, entertainment and related services would likely result from concentrations of employees on the site. Limiting the conflicting uses that result from increased development capacity reduces the social benefits ascribed to increased density in the Central City, potentially increasing home-to-work commutes and reducing recreation and family time.
- iv. **Security and safety.** Bringing 4,000 workers and 3,100 residents to this location would increase the "24-hour city", including street-level pedestrian activity and the "eyes on the street" that contribute to overall public safety by providing natural surveillance of the surrounding spaces. Additionally, reconnecting the 14-acre superblock to the surrounding neighborhoods by extending parks, streets and pedestrian/bike paths into the site would increase the flow in and through the area. Limiting or prohibiting the conflicting uses would reduce the building capacity and result in fewer users, potentially reducing security and safety in the area.

4.b. Views

- i. **Portland's image.** Views of structures including the Union Station Clock Tower and "Go By Train" sign are part of Portland image, although the latter is not affected by this proposal. Protection of views down NW Johnson Street, from the bridges and eastern bank of the Willamette River have long been included in the City's planning efforts to maintain this urban image.. The view of the Clock Tower down NW Johnson Street can be maintained through innovative design of this public-right-way.

Building heights and massing would have a negative impact on views of the Clock Tower from the bridges. However, well-designed tall buildings in the Central City are also part of Portland's image. Limiting the conflicting uses would result in low-rise buildings that would become an integral part of the cluster of buildings behind the Clock Tower that step up to greater heights as one moves away from the scenic resource. However, allowing the conflicting uses associated with greater heights at the Broadway Bridgehead would define a secondary cluster of towers in the River District that is compatible with Central City development on this side of the Willamette River. Considering the Portland skyline in this way is consistent with attempts to broaden the understanding of a single nucleus CBD to a multiple-nodal Central City, with several defined areas of development intensity centered on transportation alignments. The CCSRPP Draft ESEE also states that the Central City skyline is a scenic resource. It goes on to say that "today one building may be a dominant feature of the skyline, but 10 years from now a different building may dominate the view. The policy of protecting views of the Central City skyline is not intended to preserve a view of any single or mix of existing buildings, but rather to protect wide views of the changing skyline." (CC2035, Volume 3A, Part 1, Recommended Draft, page 27)

- ii. **Historic and/or cultural importance.** Since its construction at the end of the 19th Century, Union Station has served as the north gateway to Portland's Central City. Situated astride the north end of NW 6th Avenue, the station serves to connect regional train passengers to the local transportation network that brought visitors directly into Downtown. Thus, the Clock Tower defined the return route. Now in the 21st Century, the increased development envelope on the Post Office site will allow for greater flexibility and create substantial public benefits, including reconnecting the site to its neighborhood. With careful design of the NW Johnson Street ROW, master planning of the site, and design review of specific projects, allowing the conflicting uses will not impact a major view of the Clock Tower down NW Johnson Street.
- iii. **Neighborhood Identity.** Although heavy rail is no longer the predominant travel mode to Portland, Union Station retains its historic and cultural importance, and, in so doing, defines the broader neighborhood as the arrival gateway. Even as many functions in the neighborhood have changed—for example, industrial and warehousing activities are no longer the leading activities—other historic activities remain. The neighborhood is still one of arrival, or stopovers, where services for those with few other options can be found. Its role as a node in various transportation networks is reinforced by the presence of the Greyhound Bus Station and several LRT and streetcar routes that connect the Central City to outlying areas. Through careful design of the NW Johnson Street ROW, allowing the conflicting uses will not impact a major view of Union Station Clock Tower while enhancing access to multi-modal transportation.
- iv. **Sense of place.** With its distinctive Clock Tower, Union Station is situated at a critical juncture of the underlying street grid, giving it a distinct presence in the urban landscape. This sense of place is reinforced by the broad deference paid to the station by adjacent development, which does not

exceed in height the 150' Clock Tower, its highest element. Allowing the conflicting uses in the Post Office Site associated with heights above 150' will shift the sense of place to incorporate taller buildings and a different skyline as a backdrop to the station. However, through careful design of the NW Johnson Street ROW, the view of the Clock Tower can be preserved as a centerpiece of the neighborhood

- v. **Way-finding.** As a prominent view from many of the bridges over the Willamette River, the Clock Tower serves as a beacon to determine one's relative location within the west side of the Central City. Allowing the conflicting uses on the Post Office Site would contribute to this orientation role as the new public spaces and street improvements would frame the Clock Tower as the terminal focal point. By designing the extension of NW Johnson Street to maintain the view of the Clock Tower, the station's most iconic structure will continue to feature prominently in views as one approaches or moves through Downtown even as nearby properties develop or redevelop.
- vi. **Air space.** As a prominent focal point from viewpoints in and around Downtown for more than a century, the Clock Tower is an important historical reminder of Union Station's historic role and continuing presence in the urban landscape. The maintenance of view streets and corridors through the Post Office Site as it redevelops will be regulated by master plan and design review processes. These reviews will insure the maintenance of the view of the Clock Tower from NW Johnson Street. There will be adverse impacts to the air space around the Clock Tower when viewed from the other viewpoints.

5. Environmental

This section examines the environmental consequences related to allowing, limiting or prohibiting conflicting uses for the Post Office site.

5.a. Development/Uses

- i. **Efficiencies to due to location.** Concentrating development activity in a location in the Central City provides a number of environmental benefits related to creating efficiencies in transportation, public infrastructure, and building heating and cooling. In contrast, limiting or prohibiting the conflicting uses either limits the desirability of the site for redevelopment altogether or results in a limited amount of development that does not have the same level of efficiency. Additionally, it has often been suggested that the trade-off for protecting environmental resources within the regional Urban Growth Boundary (UGB) is increased intensity of development in the Central City and other regional centers. Any reduction in the development capacity of Post Office Site must necessarily increase development pressures in locations less ideally situated in the urban area. For example, the trade-off articulated in the *Central City 2035 Plan* is that a similar development at lower densities located at the urban fringe would require 400 acres of land and \$105 million of public infrastructure investment compared to only \$40 million for the Post Office Site.
- ii. **Heat Island.** The hard-scape of buildings in a predominately paved urban environment combined with combustion engines and building heating/cooling systems creates a net increase in ambient temperatures referred to as a "heat island". Potentially, larger buildings with a larger, if more efficient, heating and cooling system will result in a larger contribution to overall heat island in the Central City. However, allowing the conflicting uses that result from access to building height would be more likely to make the construction of eco-roofs more economically viable; such roofs help to

mitigate the heat-island effect by limiting the reflectivity of roof-top surface materials. The required plantings actively cool the immediate environment through evapo-transpiration.

- iii. **Stormwater.** Stormwater management is required of all new developments, but allowing the conflicting uses that result from access to additional height and FAR would encourage the use of eco-roofs that also serve as a stormwater facilities, slowing down and reducing the flow of roof-top-collected stormwater into the City's stormwater system. Limiting or prohibiting the conflicting uses would result in smaller scale development. Development that could provide equivalent jobs and housing would be dispersed, putting more burden on the stormwater infrastructure.

5.b. Views

The following section discusses environmental components of the aesthetic experience of views.

- i. **Shadow.** The most significant environmental consequence of allowing larger buildings would be potential effects of shadow on neighboring properties, particularly public parks or viewpoints. As shown in Figures 5A and 5B, on June 21st and December 21st, the summer solstice when the sun is at its furthest southern and northern orientation, respectively, the shadow from buildings up to 400' in height built on the developable portion of the Post Office Site and up to 250' on the southern portion, would not diminish the experience of any public open space or viewpoints in the area. If the long access of the buildings is oriented north-south, the southern façade will be reduced and, therefore, the long shadows created at the Summer and Winter Solstice will be very thin. When future development and the North Park Blocks extension are designed a shadow analysis should be required as a part of the mandatory design review to mitigate the consequences on the parks.

Figures 8A: Shadow Analyses, Summer Solstices

shadow analysis:

summer solstice, June 21st
sunrise: 5:22 am sunset: 9:03 pm

- existing shadows
- 7:1 FAR shadows
- buildable volume shadows
- property line



Figures 8B: Shadow Analyses, Winter Solstices

shadow analysis:

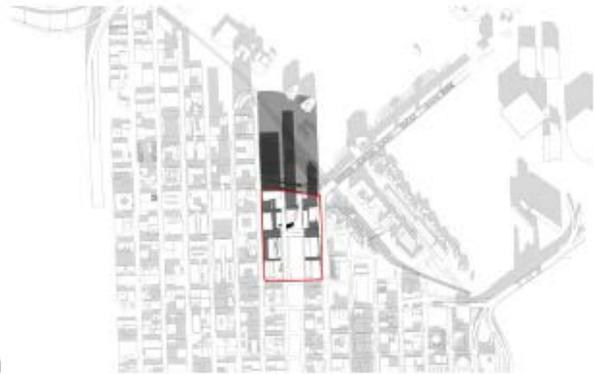
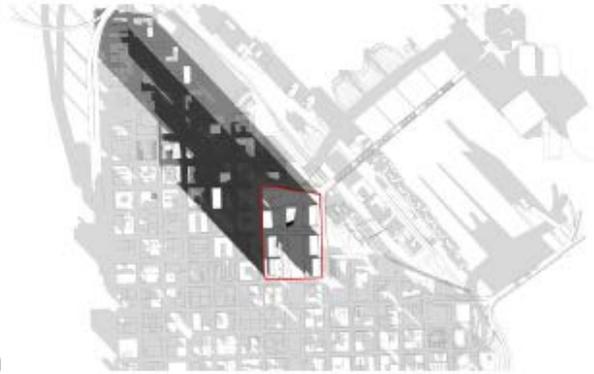
winter solstice, December 21st
sunrise: 7:47 am sunset: 4:30 pm

- existing shadows
- 7:1 FAR shadows
- buildable volume shadows
- property line

9 am

12 pm

3 pm



- ii. **Glare.** The proposed increase in FAR and height allowances would increase the area of exterior building wall, that if clad in materials with high reflectivity could result in an increase in glare. These effects could be reduced by limiting or prohibiting the conflicting uses, but could be equally mitigated through the mandated design review process that will insure careful consideration of exterior materials.
- iii. **Wind-tunnel effect.** Tall buildings in downtown locations often direct and funnel air currents creating a wind-tunnel effect. In this location at the edge of the area of the Central City where greater building heights are allowed, there would be little additional development of tall buildings that would reinforce the direction of air currents and affecting pedestrians in the area. This impact can also be addressed during the mandatory design review process.

6. Energy

This section examines the energy-related consequences from allowing, limiting or prohibiting conflicting uses for the Post Office site.

6.a. Development/Uses

- i. **Efficiencies due to location.** Greater building capacity at the Post Office Site, which is well-served by transit and near significant concentrations of jobs, services, and housing would increase energy efficiency. By way of example, the potential development identified in the Broadway Corridor Plan would accommodate 4,000 jobs and 3,100 residents on the site. Limiting or prohibiting the conflicting use would at a minimum reduce the efficiencies of concentrating a large number of jobs and housing in a Central City location, but might result in the inability of Prosper Portland to develop the site to provide the required public open space, affordable housing and transportation improvements because of the reduced economic viability.
- ii. **Construction and building materials.** Increasing building height and, therefore, building area on a site increases the amount of building materials required but maximizes the efficient use of structural elements and building services. Limiting or prohibiting uses in conflict with scenic views would reduce this efficiency.
- iii. **Heating and cooling.** Similarly, the returns to scale of heating and cooling larger buildings result in greater energy efficiency. Limiting or prohibiting uses in conflict with scenic views would reduce this efficiency.

7. Recommendations

7.a. Recommended ESEE Decision

As demonstrated above, the conflicting uses between development with FAR of 7:1 and a height of 400' to the north and 250' to the south of NW Johnson Street will have an adverse impact upon preservation of scenic views of the Union Station Clock Tower. The largest potential impact would occur if the NW Johnson Street extension does not take into consideration the exact location of the Union Station Clock Tower that is currently slightly off-center, to the north, of the designated ROW. It is recommended that conflicting uses be limited by designing NW Johnson Street extension and nearby buildings to preserve views of the Clock Tower from NW Johnson Street. This will preserve the benefits of the Clock Tower to sense of place, neighborhood identity, Portland imageability and way finding.

The views of the Clock Tower from the other viewpoints – Steel and Broadway Bridges and the Old Thunderbird Site – would be impacted by additional FAR and building heights. The new buildings would be located behind and be much taller than the Clock Tower, so that the latter would no longer be the prominent feature within these view corridors. These visual impacts upon the Clock Tower’s prominence are mitigated by the provision of significant compensating social-, economic-, environmental- and energy-related benefits that fall within the scope of this analysis including jobs, housing, public infrastructure and efficiencies due to location.

For example, in the *Broadway Corridor Framework Plan*, it is estimated that with the approved increases in maximum FAR and height, a total of 3.8 million gsf of new development that could be accommodated on this 14-acre site with a corresponding \$40 million public/private investment in public infrastructure including transportation and open space improvements. It is estimated that the same amount of development at a lower-density area at the urban fringe would require 400 acres of land and \$105 million in public infrastructure investment⁴.

In addition, the CCSRPP Draft ESEE states that the Central City skyline is a scenic resource. It goes on to say “today one building may be a dominant feature of the skyline, but 10 years from now a different building may dominate the view. The policy of protecting views of the Central City skyline is not intended to preserve a view of any single or mix of existing buildings, but rather to protect wide views of the changing skyline.” (CC2035, Volume 3A, Part 1, Recommended Draft, page 27) It is recommended that the conflicting uses be allowed within the views from the Steel Bridge, Broadway Bridge and Old Thunderbird Site.

7.b. Implementation Tools

The ESEE recommendation can be implemented using existing regulations and land use review procedures. The amendment of Map 510-2, Maximum FAR, and Map 510-3, Maximum Height, of the Zoning Code for the site will permit an increase the FAR to 7:1 and limit the height of development to 250’ south and 400’ north of NW Johnson Street with mitigation of the increased density through provisions requiring the extension of the North Park Blocks; expansion of street and pedestrian/bicycle networks, and provision of affordable housing. To insure that development at the proposed densities is compatible, the proposed development plan will be subject to Central City Master Plan (CCMP) review and individual projects to Design Review (DR) processes.

⁴ *Broadway Corridor Framework Plan (October 2015) Page 1.*

Referenced Documents

Broadway Corridor Framework Plan. Adopted by City Council November 5, 2015. Resolution No. 37165
Central City 2035 Concept Plan. Adopted by City Council October 24, 2012. Resolution No. 36970
Central City 2035 West Quadrant Plan. Adopted by City Council March 5, 2015. Resolution No. 37115
Central City Plan (1988)
Central City 2035 Plan (2017) (Approved by Portland Planning and Sustainability Commission May 2017)
Encroachments in the Public Right-of-Way City-Wide Policy (1982)
River District Right-of-Way Standards (1996), Updated in 2004 and 2012. Adopted by City Council.
Ordinance No. 1851222
Scenic Resources Protection Plan (Adopted 1990)
Scenic Resources Inventory: Central City (Spring 2017) – not yet adopted by City Council
Scenic Views, Sites, and Drives Inventory (1989)
Scenic Views, Sites, and Corridors (1991)
Union Station Clock Tower-Related FAR and Height Limitations Study (2000)

Maps

Map of Site Location
Map of Scenic Resource and View Corridors

Figures and Views

Figure 1: Map 510-2 Maximum FAR
Figure 2: Map 510-3 Maximum Height
Figure 3: 200' distance arcs from Union Station Clock Tower
Figure 4: Key Viewpoint Studies
View 1: NW Johnson Street looking East
View 2: Center of the Steel Bridge looking NW
View 3: Center of the Broadway Bridge looking SW
View 4: View from the Old Thunderbird Site
Figures 5A and 5B: Shadow Analysis at Summer and Winter Solstices